

CHALLENGE[®]
Product Range
Technical Catalogue



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Product Range

Technical Catalogue

CHALLENGE PRODUCTS

TAPER BORE & PILOT BORE VEE PULLEYS

SYNCHRONOUS PULLEYS

TAPER BUSHES

MI-LOCK PULLEYS AND BUSHES

WEDGE AND CLASSICAL VEE BELTS

SYNCHRONOUS BELTS

TAPER BORED SPROCKETS

PILOT BORED & PLATEWHEEL SPROCKETS

FINISH BORED SPROCKETS

WELDED HUBS AND SPROCKETS

WELD-ON-HUBS AND BOLT-ON-HUBS

HRC COUPLINGS

TYRE COUPLINGS

JAW COUPLINGS

TORQUE LIMITERS

CLAMPING ELEMENTS

MOTOR MOUNTS

BEARING UNITS

LEAF CHAINS

CONVEYOR CHAINS

AGRICULTURAL CHAINS

WELDED CHAINS

SPECIAL AND ATTACHMENT CHAINS

PRECISION ROLLER CHAIN, IN STEEL, STAINLESS STEEL & ZINC/NICKEL PLATED



POWER TRANSMISSION

Challenge Power Transmission is a manufacturer of power transmission products.

Challenge Power Transmission is able to provide customers access to the most comprehensive range of power transmission and engineered products available from any one source. All products are checked, branded and packed for dispatch in our own factories. We are part of the manufacturing process and therefore guarantee our products to be of a high quality.

The company has its Head Office located in Bedford, United Kingdom and operates through a number of strategically located subsidiary companies and distributors operating worldwide.

Challenge Power Transmission Distribution Centers are wholesalers and thus only supply the trade and large OEM's. We pass all end-user enquires onto local Challenge distributors.

Bill Cody, Chairman of the Challenge Power Transmission Group, started the manufacture of power transmission components in China in 1979 and was the first Western entrepreneur to do so.

Thus, as a result of 25 years experience in manufacturing transmission components in our own production facilities, Challenge is able to overcome the normal obstacles associated with manufacturing in countries that have different languages, cultures and outlooks. We therefore have unrivalled experience in the manufacture and distribution of engineering products from the East.

The staff at Challenge Power Transmission manufacturing facilities are experienced engineers and are able to offer customers "made to order machine parts". These parts range from raw castings through to the finished product.

We distribute the complete range of Challenge branded products from Challenge companies in:-

Australia, China, Hong Kong, Ireland, Malaysia, Nigeria, Thailand, South Africa and United Kingdom

The company also has authorised Challenge distributors operating exclusively in:-

Austria, Czech Republic, Ghana and Greece.

and non-exclusively in:-

Bahrain, Belgium, Denmark, Egypt, Finland, France, Germany, Iceland, Iran, Israel, Italy, Jordan, Kenya, Norway, Kuwait, Netherlands, Pakistan, Portugal, Saudi Arabia, Spain, Sweden, United Arab Emirates and West Indies.

For the latest information on Challenge Distribution Centers and our Authorized Distributors, visit our website

www.Challengept.com



How does this affect you, our customer?

We are the manufacturer and so no "middle man" margins are involved.

- We offer the widest range of quality power transmission branded products available from one manufacturer.
- The Challenge Group highly values both quality and service.
- Technical requirements, international standards and machining tolerances are adhered to in the manufacturing process.
- Challenge is responsible for the manufacture of the full range of products offered by us and therefore you can rest assured that our quality is not and never will be compromised. This is a testament that can be verified by many of our existing customers worldwide, some of these being leaders in their respective industries.

Branding

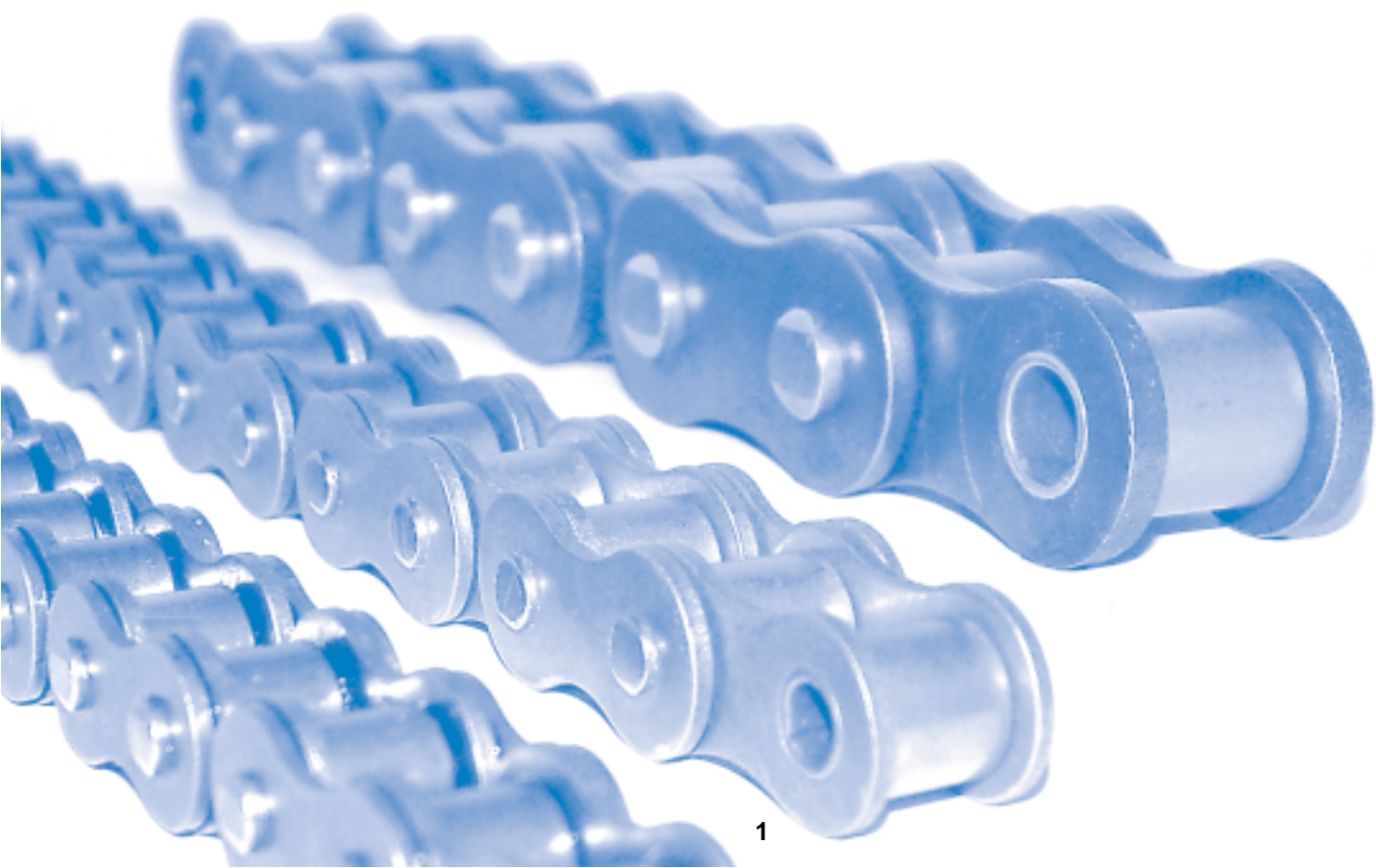
All Challenge products are branded and are thus traceable. Our iron-ware products are branded using the latest Laser technology. The advantage of this is that your staff can easily identify the product for storage and dispatch and this in turn reduces the number of packing & picking errors.



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CHAIN

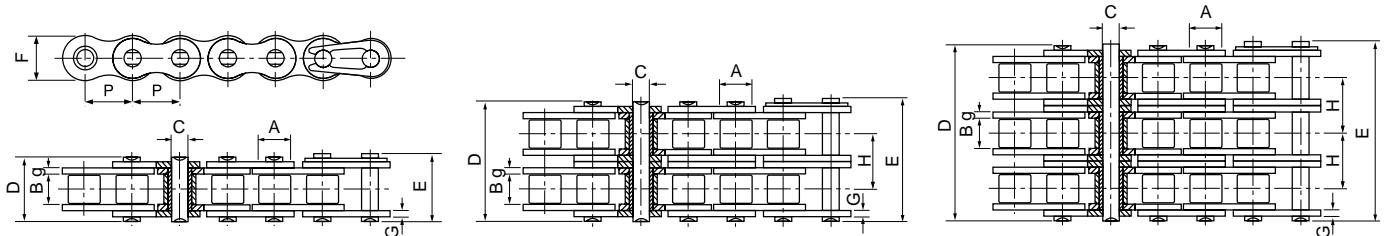


Roller Chain

British Standard Roller Chain

BS228, ISO R606, DIN 8187

Series B Roller Chain



ISO ChainNo.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	D mm	E mm	F mm	g/G mm	H mm	kN	kN	kg/m
SIMPLEX												
04B-1	6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60		3.00	3.20	0.11
05B-1	8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80		5.00	5.90	0.20
*06B-1	9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30		9.00	10.40	0.41
08B-1	12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60		18.00	19.40	0.69
10B-1	15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70		22.40	27.50	0.93
12B-1	19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85		29.00	32.20	1.15
16B-1	25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1		60.00	72.80	2.71
20B-1	31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5		95.00	106.70	3.70
24B-1	38.100	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8		160.00	178.00	7.10
28B-1	44.450	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0		200.00	222.00	8.50
32B-1	50.800	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0		250.00	277.50	10.25
40B-1	63.500	39.37	38.10	22.89	82.20	89.20	52.96	8.5/8.0		355.00	394.00	16.35
48B-1	76.200	48.26	45.72	29.24	99.10	107.00	63.80	12/10		560.00	621.60	25.00
DUPLEX												
05B-2	8.000	5.00	3.00	2.31	13.90	14.50	7.10	0.80	5.64	7.80	10.20	0.33
*06B-2	9.525	6.35	5.72	3.28	23.40	24.40	8.20	1.30	10.24	16.90	18.70	0.77
08B-2	12.700	8.51	7.75	4.45	31.20	32.20	11.80	1.60	13.92	32.00	38.70	1.34
10B-2	15.875	10.16	9.65	5.08	36.10	37.50	14.70	1.70	16.59	44.50	56.20	1.84
12B-2	19.050	12.07	11.68	5.72	42.00	43.60	16.00	1.85	19.46	57.80	66.10	2.31
16B-2	25.400	15.88	17.02	8.28	68.00	69.30	21.00	4.15/3.1	31.88	106.00	133.00	5.42
20B-2	31.750	19.05	19.56	10.19	77.80	81.50	26.40	4.5/3.5	36.45	170.00	211.20	7.20
24B-2	38.100	25.40	25.40	14.63	101.70	106.20	33.20	6.0/4.8	48.36	280.00	319.20	13.40
28B-2	44.450	27.94	30.99	15.90	124.60	129.10	36.70	7.5/6.0	59.56	360.00	406.80	16.60
32B-2	50.800	29.21	30.99	17.81	124.60	129.60	42.00	7.0/6.0	58.55	450.00	508.50	21.00
40B-2	63.500	39.37	38.10	22.89	154.50	161.50	52.96	8.5/8.0	72.29	630.00	711.90	32.00
48B-2	76.200	48.26	45.72	29.24	190.40	198.20	63.80	12/10	91.21	1000.00	1130.00	50.00
TRIPLEX												
05B-3	8.000	5.00	3.00	2.31	19.50	20.20	7.10	0.80	5.64	11.10	13.80	0.48
*06B-3	9.525	6.35	5.72	3.28	33.50	34.60	8.20	1.30	10.24	24.90	30.10	1.16
08B-3	12.700	8.51	7.75	4.45	45.10	46.10	11.80	1.60	13.92	47.50	57.80	2.03
10B-3	15.875	10.16	9.65	5.08	52.70	54.10	14.70	1.70	16.59	66.70	84.50	2.77
12B-3	19.050	12.07	11.68	5.72	61.50	63.10	16.00	1.85	19.46	86.70	101.80	3.46
16B-3	25.400	15.88	17.02	8.28	99.80	101.20	21.00	4.15/3.1	31.88	160.00	203.70	8.13
20B-3	31.750	19.05	19.56	10.19	114.20	117.90	26.40	4.5/3.5	36.45	250.00	290.00	10.82
24B-3	38.100	25.40	25.40	14.63	150.10	154.60	33.20	6.0/4.8	48.36	425.00	493.00	20.10
28B-3	44.450	27.94	30.99	15.90	184.20	188.70	36.70	7.5/6.0	59.56	530.00	609.50	24.92
32B-3	50.800	29.21	30.99	17.81	183.20	188.20	42.00	7.0/6.0	58.55	670.00	770.50	31.56
40B-3	63.500	39.37	38.10	22.89	226.80	233.80	52.96	8.5/8.0	72.29	950.00	1092.50	48.10
48B-3	76.200	48.26	45.72	29.24	281.60	289.40	63.80	12/10	91.21	1500.00	1710.00	75.00

* Straight Side Plate Chain

Standard boxed lengths are 5 meters

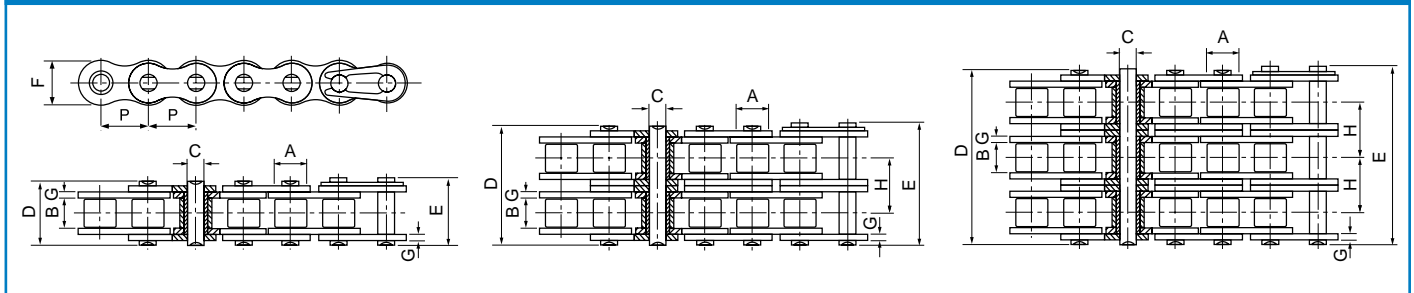
Special lengths available

Roller Chain

ANSI Standard Roller Chain

ANSI B29.1, ISO R606, DIN 8188

Series A Roller Chain



ANSI ChainNo.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	kN	kN	kg/m
SIMPLEX												
*15	4.763	2.48	2.38	1.62	6.10	6.90	4.30	0.60		1.8	2.0	0.08
*25-1	6.350	3.30	3.18	2.31	7.90	8.40	6.00	0.80		3.5	4.6	0.15
*35-1	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30		7.9	10.8	0.33
41-1	12.700	7.77	6.25	3.58	13.75	15.00	9.91	1.30		6.7	12.6	0.41
40-1	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50		14.1	17.5	0.62
50-1	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03		22.2	29.4	1.02
60-1	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42		31.8	41.5	1.50
80-1	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25		56.7	69.4	2.60
100-1	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00		88.5	109.2	3.91
120-1	38.100	22.23	25.22	11.10	50.30	54.30	35.70	4.80		127.0	156.3	5.62
140-1	44.450	25.40	25.22	12.70	54.40	59.00	41.00	5.60		172.4	212.0	7.50
160-1	50.800	28.58	31.55	14.27	64.80	69.60	47.80	6.40		226.8	278.9	10.10
180-1	57.150	35.71	35.48	17.46	72.80	78.60	53.60	7.20		280.2	341.8	13.45
200-1	63.500	39.68	37.85	19.85	80.30	87.20	60.00	8.00		353.8	431.6	16.15
240-1	76.200	47.63	47.35	23.81	95.50	103.00	72.39	9.50		510.3	622.5	23.20
DUPLEX												
*25-2	6.350	3.30	3.18	2.31	14.50	15.00	6.00	0.80	6.40	7.0	8.6	0.28
*35-2	9.525	5.08	4.77	3.58	22.50	23.30	9.00	1.30	10.13	15.8	19.7	0.63
41-2	12.700	7.77	6.25	3.58	25.70	26.90	9.91	1.30	11.95	13.3	16.9	0.81
40-2	12.700	7.95	7.85	3.96	31.00	32.20	12.00	1.50	14.38	28.2	35.9	1.12
50-2	15.875	10.16	9.40	5.08	38.90	40.40	15.09	2.03	18.11	44.4	58.1	2.00
60-2	19.050	11.91	12.57	5.94	48.80	50.50	18.00	2.42	22.78	63.6	82.1	2.92
80-2	25.400	15.88	15.75	7.92	62.70	64.30	24.00	3.25	29.29	113.4	141.8	5.15
100-2	31.750	19.05	18.90	9.53	76.40	80.50	30.00	4.00	35.76	177.0	219.4	7.80
120-2	38.100	22.23	25.22	11.10	95.80	99.70	35.70	4.80	45.44	254.0	314.9	11.70
140-2	44.450	25.40	25.22	12.70	103.30	107.90	41.00	5.60	48.87	344.8	427.5	15.14
160-2	50.800	28.58	31.55	14.27	123.30	128.10	47.80	6.40	58.55	453.6	562.4	20.14
180-2	57.150	35.71	35.48	17.46	138.60	144.40	53.60	7.20	65.84	560.5	695.0	29.22
200-2	63.500	39.68	37.85	19.85	151.90	158.80	60.00	8.00	71.55	707.6	877.4	32.24
240-2	76.200	47.63	47.35	23.81	183.40	190.80	72.39	9.50	87.83	1020.6	1255.3	45.23
TRIPLEX												
*25-3	6.350	3.30	3.18	2.31	21.00	21.50	6.00	0.80	6.40	10.5	12.6	0.44
*35-3	9.525	5.08	4.77	3.58	32.70	33.50	9.00	1.30	10.13	23.7	28.6	1.05
40-3	12.700	7.95	7.85	3.96	45.40	46.60	12.00	1.50	14.38	42.3	50.0	1.90
50-3	15.875	10.16	9.40	5.08	57.00	58.50	15.09	2.03	18.11	66.6	77.8	3.09
60-3	19.050	11.91	12.57	5.94	71.50	73.30	18.00	2.42	22.78	95.4	111.1	4.54
80-3	25.400	15.88	15.75	7.92	91.70	93.60	24.00	3.25	29.29	170.1	198.4	7.89
100-3	31.750	19.05	18.90	9.53	112.20	116.30	30.00	4.00	35.76	265.5	309.6	11.77
120-3	38.100	22.23	25.22	11.10	141.40	145.20	35.70	4.80	45.44	381.0	437.2	17.53
140-3	44.450	25.40	25.22	12.70	152.20	156.80	41.00	5.60	48.87	517.2	593.3	22.20
160-3	50.800	28.58	31.55	14.27	181.80	186.60	47.80	6.40	58.55	680.4	780.6	30.02
180-3	57.150	35.71	35.48	17.46	204.40	210.20	53.60	7.20	65.84	840.7	983.6	38.22
200-3	63.500	39.68	37.85	19.85	223.50	230.40	60.00	8.00	71.55	1061.4	1217.8	49.03
240-3	76.200	47.63	47.35	23.81	271.30	278.60	72.39	9.50	87.83	1530.9	1756.5	71.60

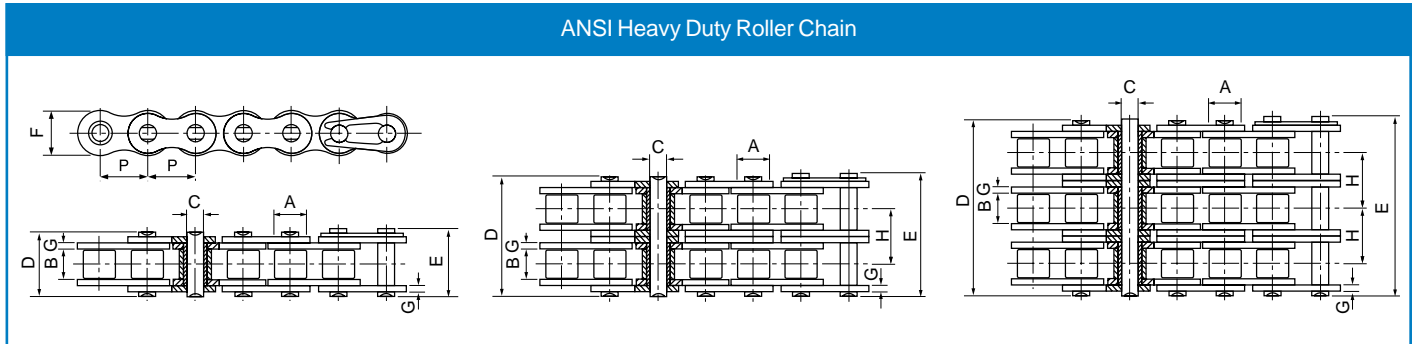
* Bush chain: A in the table indicates the external diameter of the bush

Standard boxed lengths are 5 meters. Special lengths available.

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

Roller Chain

ANSI Heavy Duty Roller Chain

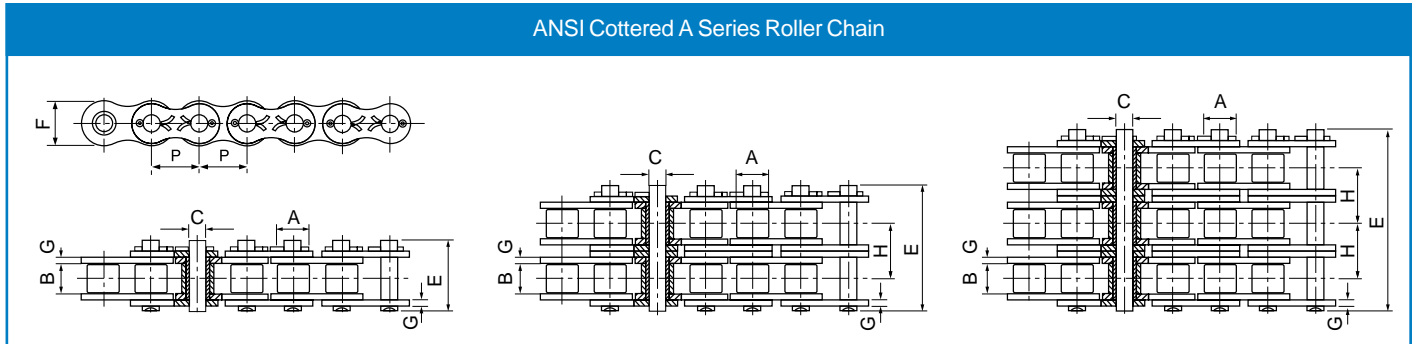


ANSI ChainNo.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	kN	kN	kg/m
SIMPLEX												
40H-1	12.700	7.95	7.85	3.96	18.80	19.90	12.00	2.03		14.10	19.10	0.82
50H-1	15.875	10.16	9.40	5.08	22.10	23.40	15.09	2.42		22.20	30.20	1.25
60H-1	19.050	11.91	12.57	5.94	29.20	31.00	18.00	3.25		31.80	42.70	1.87
80H-1	25.400	15.88	15.75	7.92	36.20	37.70	24.00	4.00		56.70	71.40	3.10
100H-1	31.750	19.05	18.90	9.53	43.60	46.90	30.00	4.80		88.50	112.40	4.52
120H-1	38.100	22.23	25.22	11.10	53.50	57.50	35.70	5.60		127.00	160.90	6.60
140H-1	44.450	25.40	25.22	12.70	57.60	62.20	41.00	6.40		172.40	217.30	8.30
160H-1	50.800	28.58	31.55	14.27	68.20	73.00	47.80	7.20		226.80	285.80	10.30
200H-1	63.500	39.68	37.85	19.85	86.60	93.50	60.00	9.50		353.80	444.50	19.16
DUPLEX												
60H-2	19.050	11.91	12.57	5.94	55.30	57.10	18.00	3.25	26.11	63.60	84.50	3.71
80H-2	25.400	15.88	15.75	7.92	68.80	70.30	24.00	4.00	32.59	113.40	145.30	6.15
100H-2	31.750	19.05	18.90	9.53	82.70	86.00	30.00	4.80	39.09	177.00	225.90	9.03
120H-2	38.100	22.23	25.22	11.10	102.40	106.40	35.70	5.60	48.87	254.00	322.70	13.13
140H-2	44.450	25.40	25.22	12.70	109.80	114.40	41.00	6.40	52.20	344.80	437.70	16.60
160H-2	50.800	28.58	31.55	14.27	130.10	134.90	47.80	7.20	61.90	453.60	571.60	20.20
200H-2	63.500	39.68	37.85	19.85	164.90	171.80	60.00	9.50	78.31	707.60	894.90	38.11
TRIPLEX												
60H-3	19.050	11.91	12.57	5.94	81.40	83.20	18.00	3.25	26.11	95.40	113.90	5.54
80H-3	25.400	15.88	15.75	7.92	101.40	102.90	24.00	4.00	32.59	170.10	203.50	9.42
100H-3	31.750	19.05	18.90	9.53	121.80	125.10	30.00	4.80	39.09	265.50	314.80	12.96
120H-3	38.100	22.23	25.22	11.10	151.20	155.20	35.70	5.60	48.87	381.00	444.70	19.64
140H-3	44.450	25.40	25.22	12.70	162.00	166.60	41.00	6.40	52.20	517.20	598.40	24.90
160H-3	50.800	28.58	31.55	14.27	192.00	196.80	47.80	7.20	61.90	680.40	787.30	30.10
200H-3	63.500	39.68	37.85	19.85	243.20	250.10	60.00	9.50	78.31	1061.40	1228.20	57.06

Standard boxed lengths are 5 meters
Special lengths available.

Roller Chain

ANSI Cottered Series Roller Chain

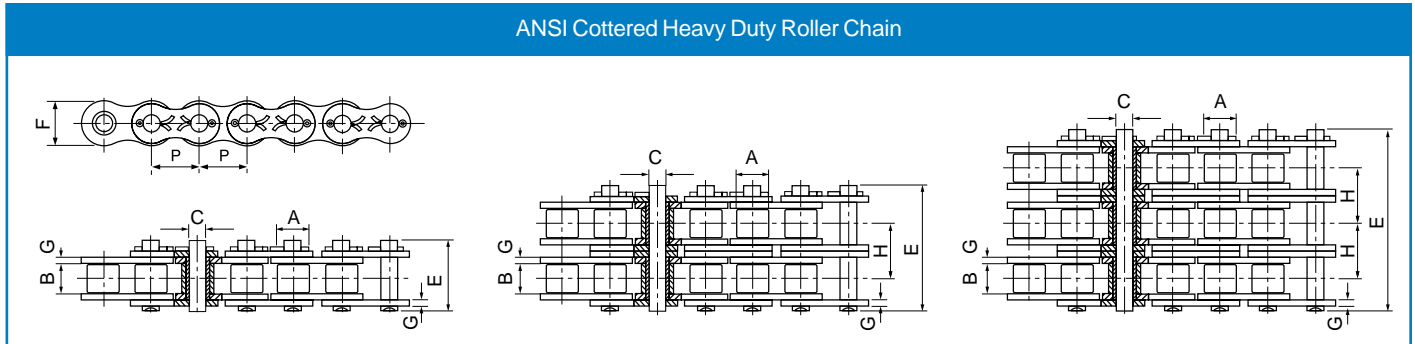


ANSI ChainNo.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	E mm	F mm	G mm	H mm	kN	kN	kg/m
SIMPLEX											
50-1	15.875	10.16	9.40	5.08	23.00	15.09	2.03		22.20	29.40	1.02
60-1	19.050	11.91	12.57	5.94	28.30	18.00	2.42		31.80	41.50	1.50
80-1	25.400	15.88	15.75	7.92	36.50	24.00	3.25		56.70	69.40	2.60
100-1	31.750	19.05	18.90	9.53	44.70	30.00	4.00		88.50	109.20	3.91
120-1	38.100	22.23	25.22	11.10	54.30	35.70	4.80		127.00	156.30	5.62
140-1	44.450	25.40	25.22	12.70	59.00	41.00	5.60		172.40	212.00	7.50
160-1	50.800	28.58	31.55	14.27	69.60	47.80	6.40		226.80	278.90	10.10
180-1	57.150	35.71	35.48	17.46	78.60	53.60	7.20		280.20	341.80	13.45
200-1	63.500	39.68	37.85	19.85	87.20	60.00	8.00		353.80	431.60	16.15
240-1	76.200	47.63	47.35	23.81	103.00	72.39	9.50		510.30	622.50	23.20
DUPLEX											
50-2	15.875	10.16	9.40	5.08	41.20	15.09	2.03	18.11	44.40	58.10	2.00
60-2	19.050	11.91	12.57	5.94	51.10	18.00	2.42	22.78	63.60	82.10	2.92
80-2	25.400	15.88	15.75	7.92	65.80	24.00	3.25	29.29	113.40	141.80	5.15
100-2	31.750	19.05	18.90	9.53	80.50	30.00	4.00	35.76	177.00	219.40	7.80
120-2	38.100	22.23	25.22	11.10	99.70	35.70	4.80	45.44	254.00	314.90	11.70
140-2	44.450	25.40	25.22	12.70	107.90	41.00	5.60	48.87	344.80	427.50	15.14
160-2	50.800	28.58	31.55	14.27	128.10	47.80	6.40	58.55	453.60	562.40	20.14
180-2	57.150	35.71	35.48	17.46	144.40	53.60	7.20	65.84	560.50	695.00	29.22
200-2	63.500	39.68	37.85	19.85	158.80	60.00	8.00	71.55	707.60	877.40	32.24
240-2	76.200	47.63	47.35	23.81	190.80	72.39	9.50	87.83	1020.60	1255.30	45.23
TRIPLEX											
50-3	15.875	10.16	9.40	5.08	59.30	15.09	2.03	18.11	66.60	77.80	3.09
60-3	19.050	11.91	12.57	5.94	73.90	18.00	2.42	22.78	95.40	111.10	4.54
80-3	25.400	15.88	15.75	7.92	93.60	24.00	3.25	29.29	170.10	198.40	7.89
100-3	31.750	19.05	18.90	9.53	116.30	30.00	4.00	35.76	265.50	309.60	11.77
120-3	38.100	22.23	25.22	11.10	145.20	35.70	4.80	45.44	381.00	437.20	17.53
140-3	44.450	25.40	25.22	12.70	156.80	41.00	5.60	48.87	517.20	593.30	22.20
160-3	50.800	28.58	31.55	14.27	186.60	47.80	6.40	58.55	680.40	780.60	30.02
180-3	57.150	35.71	35.48	17.46	210.20	53.60	7.20	65.84	840.70	983.60	38.22
200-3	63.500	39.68	37.85	19.85	230.40	60.00	8.00	71.55	1061.40	1217.80	49.03
240-3	76.200	47.63	47.35	23.81	278.60	72.39	9.50	87.83	1530.90	1756.50	71.60

Standard boxed lengths are 5 meters
Special lengths available.

Roller Chain

ANSI Cottered Heavy Duty Roller Chain

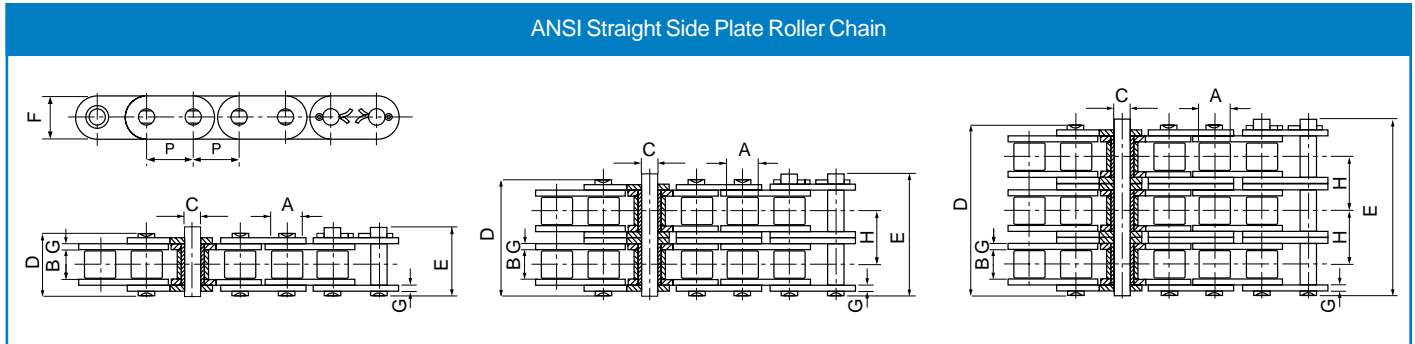


ANSI ChainNo.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	E mm	F mm	G mm	H mm	kN	kN	kg/m
SIMPLEX											
50H-1	15.875	10.16	9.40	5.08	24.40	15.09	2.42		22.20	30.20	1.25
60H-1	19.050	11.91	12.57	5.94	31.60	18.00	3.25		31.80	42.70	1.87
80H-1	25.400	15.88	15.75	7.92	39.40	24.00	4.00		56.70	71.40	3.10
100H-1	31.750	19.05	18.90	9.53	46.90	30.00	4.80		88.50	112.40	4.52
120H-1	38.100	22.23	25.22	11.10	57.50	35.70	5.60		127.00	160.90	6.60
140H-1	44.450	25.40	25.22	12.70	62.20	41.00	6.40		172.40	217.30	8.30
160H-1	50.800	28.58	31.55	14.27	73.00	47.80	7.20		226.80	285.80	10.30
200H-1	63.500	39.68	37.85	19.85	93.50	60.00	9.50		353.80	444.50	19.16
DUPLEX											
60H-2	19.050	11.91	12.57	5.94	57.70	18.00	3.25	26.11	63.60	84.50	3.71
80H-2	25.400	15.88	15.75	7.92	72.00	24.00	4.00	32.59	113.40	145.30	6.15
100H-2	31.750	19.05	18.90	9.53	86.00	30.00	4.80	39.09	177.00	225.90	9.03
120H-2	38.100	22.23	25.22	11.10	106.40	35.70	5.60	48.87	254.00	322.70	13.13
140H-2	44.450	25.40	25.22	12.70	114.40	41.00	6.40	52.20	344.80	437.70	16.60
160H-2	50.800	28.58	31.55	14.27	134.90	47.80	7.20	61.90	453.60	571.60	20.20
200H-2	63.500	39.68	37.85	19.85	171.80	60.00	9.50	78.31	707.60	894.90	31.11
TRIPLEX											
60H-3	19.050	11.91	12.57	5.94	83.80	18.00	3.25	26.11	95.40	113.90	5.54
80H-3	25.400	15.88	15.75	7.92	104.60	24.00	4.00	32.59	170.10	203.50	9.42
100H-3	31.750	19.05	18.90	9.53	125.10	30.00	4.80	39.09	265.50	314.80	12.96
120H-3	38.100	22.23	25.22	11.10	155.20	35.70	5.60	48.87	381.00	444.70	19.64
140H-3	44.450	25.40	25.22	12.70	166.60	41.00	6.40	52.20	517.20	598.40	24.90
160H-3	50.800	28.58	31.55	14.27	196.80	47.80	7.20	61.90	680.40	787.30	30.10
200H-3	63.500	39.68	37.85	19.85	250.10	60.00	9.50	78.31	1061.40	1228.20	57.06

Standard boxed lengths are 5 meters
Special lengths available.

Roller Chain

ANSI Straight Side Plate Roller Chain

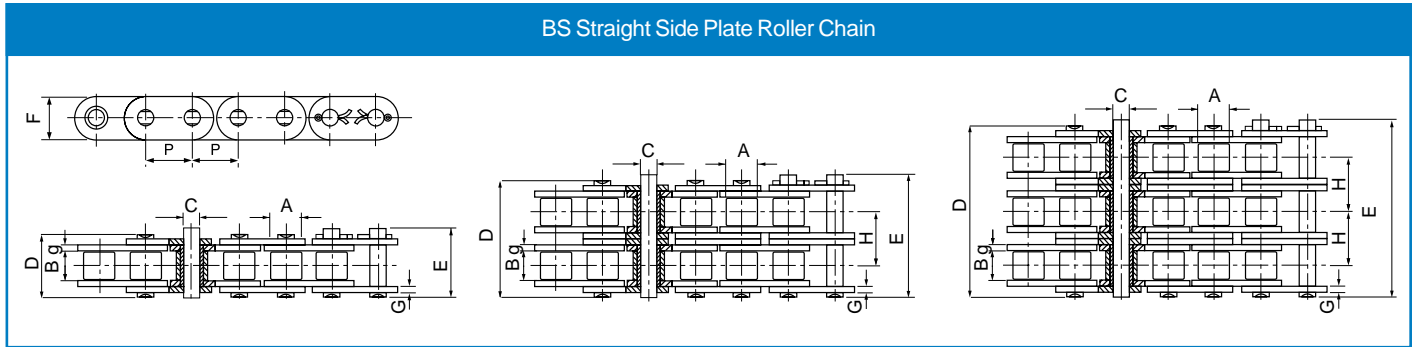


ANSI ChainNo.	Pitch	Roller diameter	Width between inner plates		Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	kN	kN	kg/m
SIMPLEX												
C40-1	12.700	7.95	7.85	3.96	16.60	18.80	12.00	1.50		14.10	17.50	0.73
C50-1	15.875	10.16	9.40	5.08	20.70	23.30	15.09	2.03		22.20	29.40	1.23
C60-1	19.050	11.91	12.57	5.94	25.90	28.30	18.0/18.2	2.42		31.80	41.50	1.81/1.83
C80-1	25.400	15.88	15.75	7.92	32.70	36.50	24.00	3.25		56.70	69.40	3.09
C100-1	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00		88.50	109.20	4.56
C120-1	38.100	22.23	25.22	11.10	50.30	54.30	35.70	4.80		127.00	156.30	6.86
C140-1	44.450	25.40	25.22	12.70	54.40	59.00	41.00	5.60		172.40	212.00	8.49
C160-1	50.800	28.58	31.55	14.27	64.80	69.60	47.80	6.40		226.80	278.90	11.50
DUPLEX												
C40-2	12.700	7.95	7.85	3.96	31.00	33.20	12.00	1.50	14.38	28.20	35.90	1.43
C50-2	15.875	10.16	9.40	5.08	38.90	41.40	15.09	2.03	18.11	44.40	58.10	2.42
C60-2	19.050	11.91	12.57	5.94	48.80	51.10	18.0/18.2	2.42	22.78	63.60	82.10	3.58/3.62
C80-2	25.400	15.88	15.75	7.92	62.70	65.80	24.00	3.25	29.29	113.40	141.80	6.12
C100-2	31.750	19.05	18.90	9.53	76.40	80.50	30.00	4.00	35.76	177.00	219.40	9.08
C120-2	38.100	22.23	25.22	11.10	95.80	99.70	35.70	4.80	45.44	254.00	314.90	13.60
C140-2	44.450	25.40	25.22	12.70	103.30	107.90	41.00	5.60	48.87	344.80	427.50	16.86
C160-2	50.800	28.58	31.55	14.27	123.30	128.10	47.80	6.40	58.55	453.60	562.40	22.90
TRIPLEX												
C40-3	12.700	7.95	7.85	3.96	45.40	47.60	12.00	1.50	14.38	42.30	50.00	2.14
C50-3	15.875	10.16	9.40	5.08	57.00	59.50	15.09	2.03	18.11	66.60	77.80	3.62
C60-3	19.050	11.91	12.57	5.94	71.50	73.90	18.0/18.2	2.42	22.78	95.40	111.10	5.36/5.41
C80-3	25.400	15.88	15.75	7.92	91.70	95.10	24.00	3.25	29.29	170.10	198.40	9.10
C100-3	31.750	19.05	18.90	9.53	112.20	116.30	30.00	4.00	35.76	265.50	309.60	13.60
C120-3	38.100	22.23	25.22	11.10	141.40	145.20	35.70	4.80	45.44	381.00	437.20	20.43
C140-3	44.450	25.40	25.22	12.70	152.20	156.80	41.00	5.60	48.87	517.20	593.30	25.23
C160-3	50.800	28.58	31.55	14.27	181.80	186.60	47.80	6.40	58.55	680.40	780.60	34.19

Standard boxed lengths are 5 meters
Special lengths available.

Roller Chain

BS Straight Side Plate Roller Chain

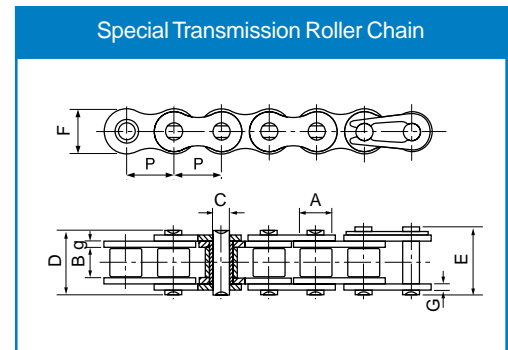


ISO ChainNo.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness g/G	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	D mm	E mm						
SIMPLEX												
08B-1 GL	12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60		18.00	19.50	0.80
10B-1 GL	15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70		22.40	27.90	1.06
12B-1 GL	19.050	12.07	11.68	5.72	22.50	25.20	16.00	1.85		29.00	32.20	1.32
16B-1 GL	25.400	15.88	17.02	8.28	36.10	39.10	21.0/24.0	4.15/3.1		60.00	72.80	3.08/3.49
20B-1 GL	31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5		95.00	106.70	4.16
24B-1 GL	38.100	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8		160.00	178.00	7.47
28B-1 GL	44.450	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0		200.00	222.00	9.90
32B-1 GL	50.800	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0		250.00	277.50	10.45
DUPLEX												
08B-2 GL	12.700	8.51	7.75	4.45	31.20	32.20	11.80	1.60	13.92	32.00	38.70	1.45
10B-2 GL	15.875	10.16	9.65	5.08	36.10	37.50	14.70	1.70	16.59	44.50	57.80	2.00
12B-2 GL	19.050	12.07	11.68	5.72	42.00	44.70	16.00	1.85	19.46	57.80	66.10	2.62
16B-2 GL	25.400	15.88	17.02	8.28	68.00	71.00	21.0/24.0	4.15/3.1	31.88	106.00	133.00	6.10/6.92
20B-2 GL	31.750	19.05	19.56	10.19	77.80	81.50	26.40	4.5/3.5	36.45	170.00	211.20	8.23
24B-2 GL	38.100	25.40	25.40	14.63	101.70	106.20	33.20	6.0/4.8	48.36	280.00	319.20	14.77
28B-2 GL	44.450	27.94	30.99	15.90	124.60	129.10	36.70	7.5/6.0	59.56	360.00	406.80	19.82
32B-2 GL	50.800	29.21	30.99	17.81	124.60	129.60	42.00	7.0/6.0	58.55	450.00	508.50	20.94
TRIPLEX												
08B-3 GL	12.700	8.51	7.75	4.45	45.10	46.10	11.80	1.60	13.92	47.50	57.80	2.10
10B-3 GL	15.875	10.16	9.65	5.08	52.70	54.10	14.70	1.70	16.59	66.70	84.50	2.87
12B-3 GL	19.050	12.07	11.68	5.72	61.50	64.20	16.00	1.85	19.46	86.70	101.80	3.89
16B-3 GL	25.400	15.88	17.02	8.28	99.80	102.90	21.0/24.0	4.15/3.1	31.88	160.00	203.70	9.12/10.34
20B-3 GL	31.750	19.05	19.56	10.19	114.20	117.90	26.40	4.5/3.5	36.45	250.00	290.00	11.34
24B-3 GL	38.100	25.40	25.40	14.63	150.10	154.60	33.20	6.0/4.8	48.36	425.00	493.00	22.10
28B-3 GL	44.450	27.94	30.99	15.90	184.20	188.70	36.70	7.5/6.0	59.56	530.00	609.50	29.64
32B-3 GL	50.800	29.21	30.99	17.81	183.20	188.20	42.00	7.0/6.0	58.55	670.00	770.50	31.27

Standard boxed lengths are 5 meters
Special lengths available.

Roller Chain

Special Transmission Roller Chain

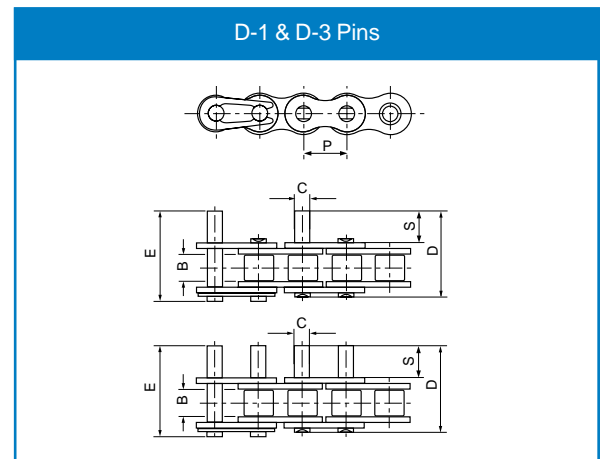


ISO ChainNo.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height F mm	Plate thickness g/G mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
	P mm	A mm	B mm	C mm	D mm	E mm					
04BH	6.00	4.00	2.80	1.85	8.40	9.40	5.00	0.90	5.00	5.30	0.14
415	12.70	7.77	4.76	3.60	11.00	12.40	9.70	1.00	6.86	7.60	0.32
415H	12.70	7.77	4.76	3.96	13.10	14.50	12.00	1.50	14.40	16.10	0.55
415B	12.70	7.75	4.88	4.09	12.90	14.40	10.30	1.30	12.00	14.20	0.44
415BF1	12.70	7.75	4.88	4.09	11.50	13.00	10.30	1.00	9.00	10.60	0.38
423	12.70	8.51	6.40	4.45	15.60	17.10	12.40	1.70	19.60	21.90	0.71
478	12.70	7.80	4.80	4.00	11.60	13.65	10.46	1.25	9.80	12.80	0.39
08BF	12.70	8.51	5.55	4.45	14.60	16.10	11.80	1.60	17.80	19.20	0.66
12BV	19.05	12.07	11.68	6.10	24.50	26.50	16.00	2.42	36.00	39.90	1.43
12BH	19.05	12.07	11.68	5.94	25.20	26.80	16.00	2.42	40.00	44.40	1.45
12BHF1	19.05	12.07	11.68	6.10	25.00	27.20	16.50	2.50	44.00	48.80	1.46
16BF1	25.40	15.88	12.20	8.28	31.40	32.70	21.00	4.15/3.1	60.00	71.40	2.60
16BF2	25.40	15.88	17.02	8.28	38.60	39.80	21.00	4.15	60.00	71.40	3.08
16BF5	25.40	15.88	12.70	8.28	30.80	32.10	20.00	3.5/3.0	50.00	57.50	2.37
16BH	25.40	15.88	17.02	8.90	35.70	38.90	24.10	4.0/3.1	80.00	94.20	3.11
24BH	38.10	25.40	25.40	14.63	58.60	63.40	36.20	7.5/6.0	225.00	250.30	9.00

Standard boxed lengths are 5 meters
Special lengths available.

Extended Pin Chain

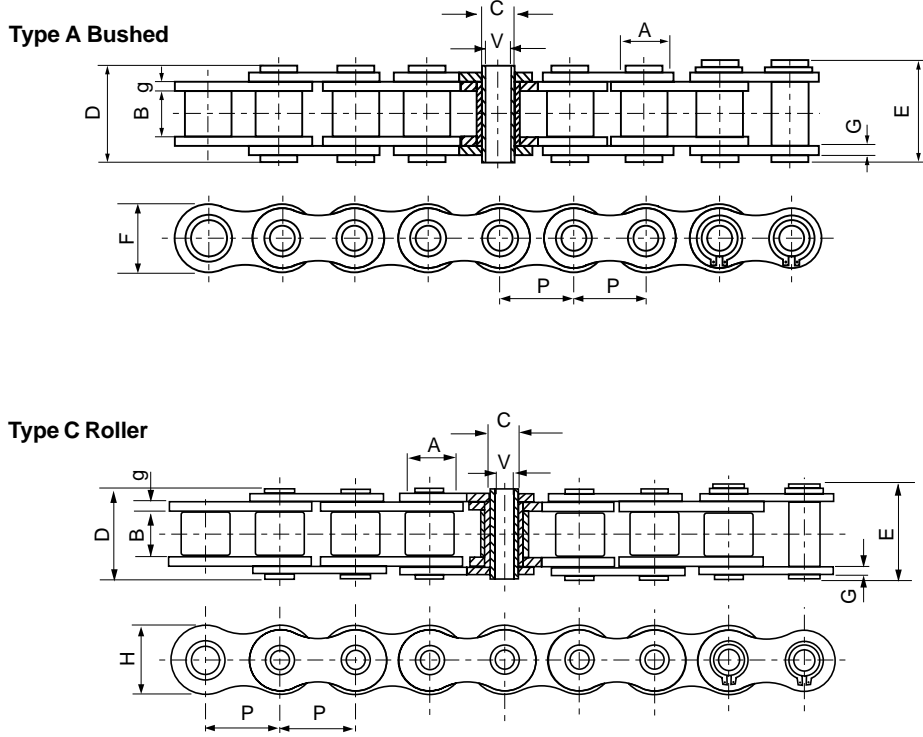
ISO Chain No.	ANSI Chain No.	P mm	B mm	ØC mm	S mm	D mm	E mm
	35	9.525	4.77	3.58	9.50	20.80	21.60
	40	12.700	7.85	3.96	9.50	25.10	26.20
	50	15.875	9.40	5.08	11.90	31.30	33.10
	60	19.050	12.57	5.94	14.30	38.60	40.60
	80	25.400	15.75	7.92	19.10	50.30	53.30
	100	31.750	18.90	9.53	23.80	61.80	66.10
	120	38.100	25.22	11.10	28.60	76.40	80.40
	140	44.450	25.22	12.70	33.30	84.80	89.40
	160	50.800	31.55	14.27	38.10	99.60	104.40
08B		12.700	7.75	4.45	9.50	25.10	26.60
10B		15.875	9.65	5.08	11.90	30.10	31.50
12B		19.050	11.68	5.72	14.30	35.40	37.10
16B		25.400	17.02	8.28	19.10	53.00	54.30



Roller Chain

Hollow Pin Chain

Hollow Pin Chain



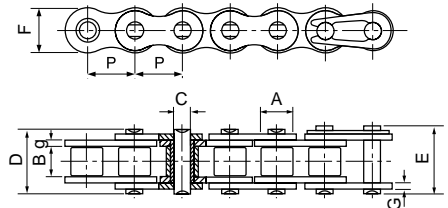
Chain No.	Pitch	Roller diameter	Width between inner plates	Pin diameter		Pin length		Inner plate height	Plate thickness g/G	Minimum tensile strength	Average tensile strength	Weight per meter	Type form
	P mm			A mm	B mm	C mm	V mm						
08BHP	12.700	8.51	7.75	6.55	4.50	16.4	17.6	11.80	1.6/1.3	11.10	12.1	0.56	A
10BHB	15.875	10.16	9.65	5.94	4.04	19.3	20.6	14.70	1.70	17.00	20.8	0.86	C
12BHP	19.050	12.07	11.68	6.50	4.00	21.6	22.8	15.90	1.85	23.60	25.9	1.09	C
HP35	35.000	20.00	16.00	13.35	10.20	30.4	31.6	26.30	2.50	23.52	26.4	2.02	C
40HP	12.700	7.95	7.85	5.63	4.00	16.5	17.6	12.00	1.50	11.00	12.2	0.54	A
50HP	15.875	10.16	9.40	7.03	5.13	20.7	21.9	15.09	2.03	20.00	22.6	0.91	A
60HP	19.050	11.91	12.70	8.31	6.00	25.8	26.8	18.00	2.42	24.00	26.9	1.29	A
60HPF1	19.050	11.91	12.70	8.31	5.01	25.5	26.8	18.00	2.42	28.00	30.9	1.37	A
60HB	19.050	11.91	12.70	7.00	5.01	25.5	26.6	18.00	2.42	20.00	22.4	1.35	C
80HP	25.400	15.88	15.75	11.40	8.05	32.5	33.8	24.00	3.25	50.00	58.3	2.26	A

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Roller Chain

Stainless Steel Transmission Roller Chain

Stainless Steel Transmission Roller Chain

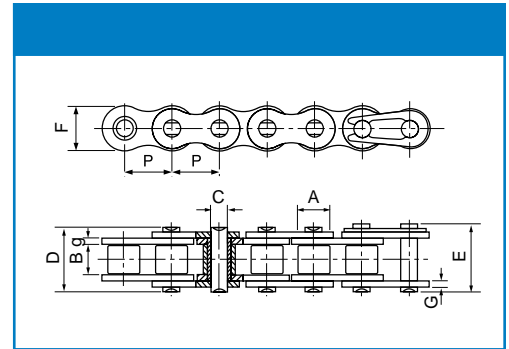


ISO Chain No.	ANSI Chain No.	Pitch	Roller diameter	Width between inner plates		Pin length		Inner plate height F mm	Plate thickness g/G mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
		P mm	A mm	B mm	C mm	D mm	E mm					
	*35SS	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30	5.50	6.60	0.33
	40SS	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50	9.60	10.80	0.63
	50SS	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03	15.20	17.20	1.03
	60SS	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42	21.70	26.40	1.51
	80SS	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25	38.90	46.60	2.62
	100SS	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	60.00	70.20	3.94
04BSS		6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	2.00	2.40	0.11
05BSS		8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	3.50	4.10	0.20
#06BSS		9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	6.20	6.80	0.41
08BSS		12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	12.00	14.30	0.70
10BSS		15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	14.50	17.20	0.94
12BSS		19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	18.50	20.90	1.16
16BSS		25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	40.00	47.60	2.73
20BSS		31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	59.00	69.60	3.73

* Bush chain: **A** in the table indicates the external diameter of the bush
 # Straight side plate chain

Standard boxed lengths are 5 meters
 Special lengths available.

Roller Chain



Nickle Plated Transmission Roller Chain

ISO Chain No.	ANSI Chain No.	Pitch	Roller diameter		Pin diameter	Pin length		Inner plate height F mm	Plate thickness g/G mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
		P mm	A mm	B mm		C mm	D mm					
	*25NP	6.350	3.30	3.18	2.31	7.90	8.40	6.00	0.80	3.50	4.60	0.15
	*35NP	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30	7.90	10.80	0.33
	41NP	12.700	7.77	6.25	3.58	13.75	15.00	9.91	1.30	6.67	12.60	0.41
	40NP	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	17.50	0.62
	50NP	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03	22.20	29.40	1.02
	60NP	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	41.50	1.50
	80NP	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25	56.70	69.40	2.60
	100NP	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	109.20	3.91
04BNP		6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	3.00	3.20	0.11
05BNP		8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	5.00	5.90	0.20
#06BNP		9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	9.00	10.40	0.41
08BNP		12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.69
10BNP		15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	22.40	27.50	0.93
12BNP		19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	29.00	32.20	1.15
16BNP		25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	60.00	72.80	2.71
20BNP		31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	95.00	106.70	3.70

Zinc Plated Transmission Roller Chain

ISO Chain No.	ANSI Chain No.	Pitch	Roller diameter		Pin diameter	Pin length		Inner plate height F mm	Plate thickness g/G mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
		P mm	A mm	B mm		C mm	D mm					
	*25ZP	6.350	3.30	3.18	2.31	7.90	8.40	6.00	0.80	3.50	4.60	0.14
	*35ZP	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30	7.90	10.80	0.33
	41ZP	12.700	7.77	6.25	3.58	13.75	15.00	9.91	1.30	6.67	12.60	0.41
	40ZP	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	17.50	0.62
	50ZP	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03	22.20	29.40	1.02
	60ZP	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	41.50	1.50
	80ZP	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25	56.70	69.40	2.60
	100ZP	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	109.20	3.91
04BZP		6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	3.00	3.20	0.11
05BZP		8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	5.00	5.90	0.20
#06BZP		9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	9.00	10.40	0.41
08BZP		12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.69
10BZP		15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	22.40	27.50	0.93
12BZP		19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	29.00	32.20	1.15
16BZP		25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	60.00	72.80	2.71
20BZP		31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	95.00	106.70	3.70

* Bush chain: **A** in the table indicates the external diameter of the bush
 # Straight side plate chain

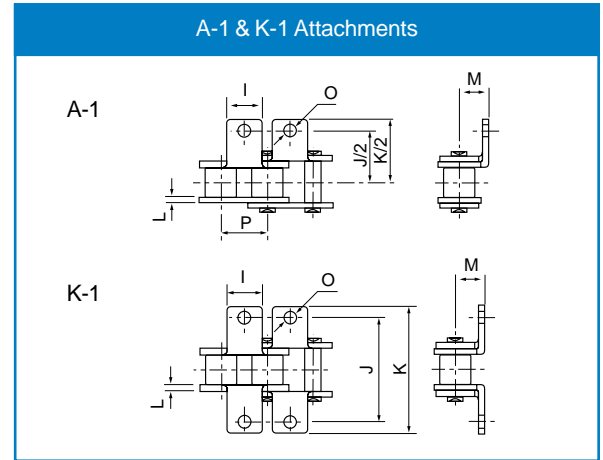
Standard boxed lengths are 5 meters
 Special lengths available.

Roller Chain Attachments

A-1 & K-1 Attachments

ISO Chain No.	ANSI Chain No.	P mm	I mm	J mm	K mm	L mm	M mm	ØO mm
	40	12.700	9.50	25.40	35.20	1.50	7.90	3.40
	50	15.875	12.70	31.75	46.20	2.03	10.30	5.50
	60	19.050	15.90	38.10	55.60	2.42	11.90	5.50
	80	25.400	19.10	50.80	64.80	3.25	15.90	6.80
	100	31.750	25.40	63.50	87.30	4.00	19.80	9.20
	120	38.100	28.60	76.20	108.50	4.80	23.00	9.80
	140	44.450	34.90	88.90	123.00	5.60	28.60	11.40
	160	50.800	38.10	101.60	142.80	6.40	31.80	13.10
*06B		9.525	8.00	19.04	27.00	1.30	6.50	3.50
08B		12.700	9.50	25.40	36.40	1.60	8.90	4.50
10B		15.875	14.30	31.75	44.60	1.70	10.31	5.30
12B		19.050	16.00	38.10	52.40	1.85	13.46	6.40
16B		25.400	19.10	50.80	72.60	3.10	15.88	6.40

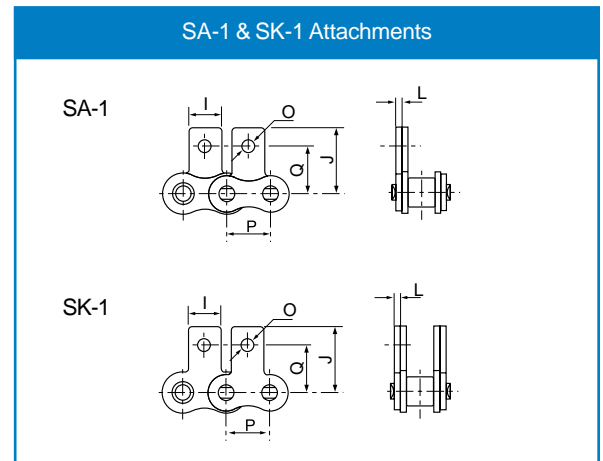
* Straight side plates



SA-1 & SK-1 Attachments

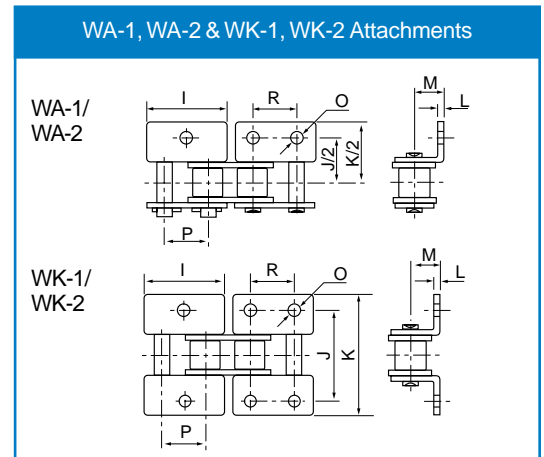
ISO Chain No.	ANSI Chain No.	P mm	I mm	Q mm	J mm	L mm	ØO mm
	40	12.700	9.50	12.70	19.05	1.50	3.40
	50	15.875	12.70	15.90	25.25	2.03	5.50
	60	19.050	15.90	18.30	29.33	2.42	5.50
	80	25.400	19.10	24.60	34.70	3.25	6.80
	100	31.750	25.40	31.80	43.30	4.00	9.20
	120	38.100	28.60	36.50	51.60	4.80	9.80
	140	44.450	34.90	44.50	62.00	5.60	11.40
	160	50.800	38.10	50.80	69.85	6.40	13.10
*06B		9.525	8.00	9.52	13.50	1.30	3.50
08B		12.700	9.50	13.35	18.90	1.60	4.30
10B		15.875	14.30	16.50	22.95	1.70	5.30
12B		19.050	16.00	21.45	28.60	1.85	6.40
16B		25.400	19.10	23.15	34.00	3.10	6.40

* Straight side plates



WA-1, WA-2 & WK-1, WK-2 Attachments

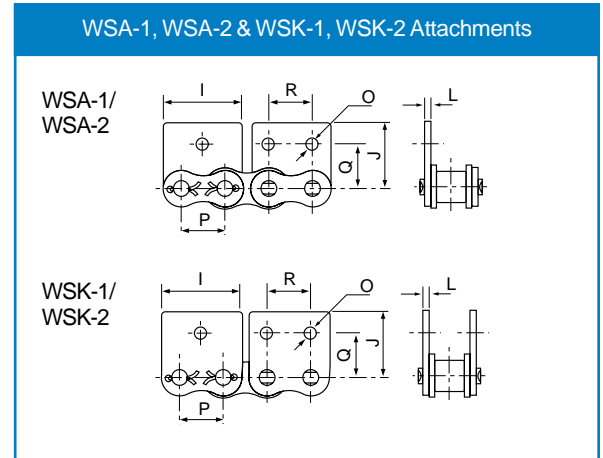
ISO Chain No.	ANSI Chain No.	P mm	I mm	R mm	J mm	K mm	L mm	M mm	ØO mm
	40	12.700	23.00	12.70	25.40	35.60	1.50	7.90	3.40
	50	15.875	28.80	15.88	31.80	46.80	2.03	10.30	5.50
	60	19.050	34.65	19.05	38.10	56.40	2.42	11.90	5.50
	80	25.400	45.90	25.40	50.80	73.20	3.25	15.90	6.80
	100	31.750	57.65	31.75	63.50	89.80	4.00	19.80	9.20
08B		12.700	24.00	12.70	25.40	36.40	1.60	8.90	4.30
10B		15.875	29.58	15.88	31.80	44.60	1.70	10.31	5.30
12B		19.050	34.05	19.05	38.10	52.40	1.85	13.46	6.40
16B		25.400	46.40	25.40	50.80	72.60	3.10	15.88	6.40



Roller Chain Attachments

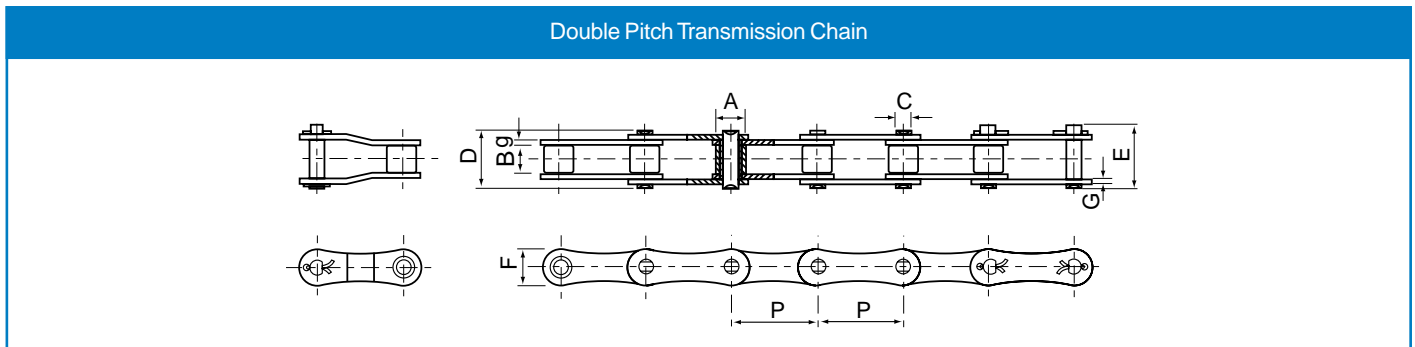
WSA-1, WSA-2 & WSK-1, WSK-2 Attachments

ISO Chain No.	ANSI Chain No.	P mm	I mm	R mm	Q mm	J mm	L mm	ØO mm
	40	12.700	23.00	12.70	12.70	17.40	1.50	3.40
	50	15.875	28.80	15.88	15.90	23.05	2.03	5.50
	60	19.050	34.65	19.05	18.30	26.86	2.42	5.50
	80	25.400	45.90	25.40	24.60	35.45	3.25	6.80
	100	31.750	57.65	31.75	31.80	44.00	4.00	9.20
08B		12.700	23.30	12.70	13.35	18.90	1.60	4.30
10B		15.875	29.58	15.88	16.50	22.95	1.70	5.30
12B		19.050	34.05	19.05	21.45	28.60	1.85	6.40
16B		25.400	46.40	25.40	23.15	34.00	3.10	6.40



Double Pitch Chain

Double Pitch Transmission Chain

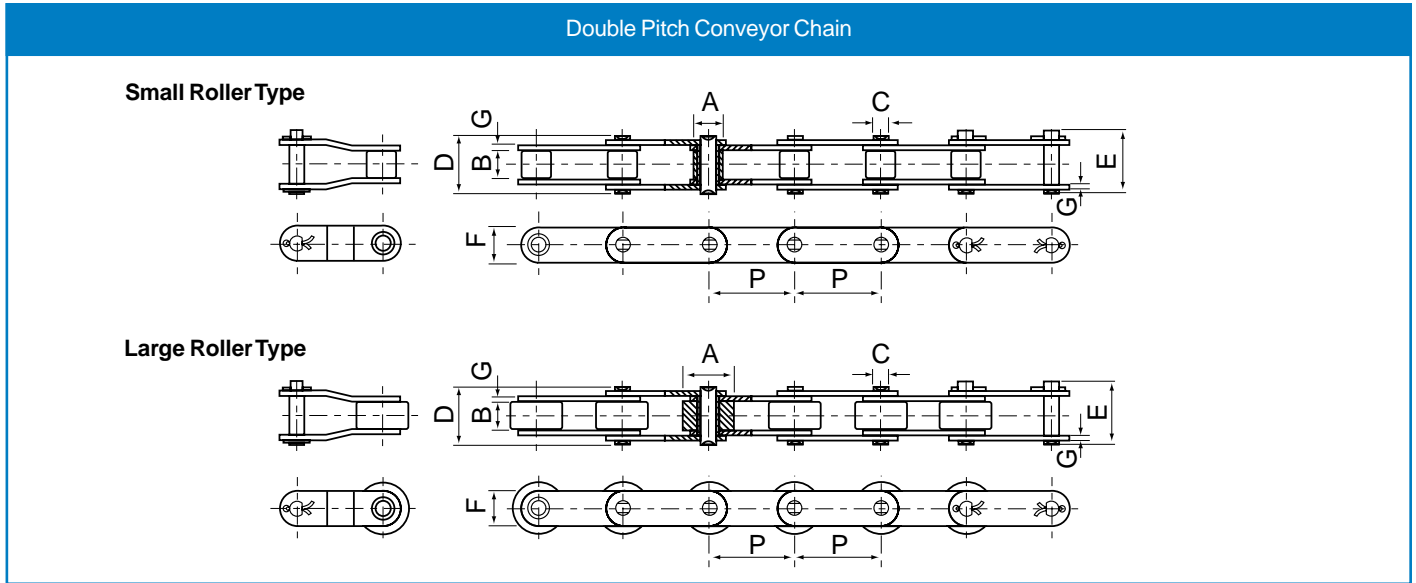


ISO ChainNo.	ANSI ChainNo.	Pitch	Roller diameter	Width between inner plates		Pin length		Inner plate height F mm	Plate thickness g/G mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
		P mm	A mm	B mm	C mm	D mm	E mm					
208B	A2040	25.40	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	16.70	0.42
	A2050	25.40	8.51	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.45
210B	A2050	31.75	10.16	9.40	5.08	20.70	22.20	15.00	2.03	22.20	28.10	0.73
	A2060	31.75	10.16	9.65	5.08	19.50	20.90	14.70	1.70	22.40	27.50	0.65
212B	A2060	38.10	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	36.80	1.02
	A2080	38.10	12.07	11.68	5.72	22.50	25.20	16.00	1.85	29.00	32.20	0.76
216AH	A2100	50.80	15.88	15.75	7.92	32.70	36.50	24.00	3.25	56.70	65.70	1.70
216B		50.80	15.88	15.75	7.92	36.20	39.40	24.00	4.00	56.70	70.00	2.17
220B	A2120	50.80	15.88	17.02	8.28	36.10	39.10	21.00	4.15/3.1	60.00	72.80	1.75
		63.50	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	102.60	2.55
224B	A2120	63.50	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	95.00	106.70	2.62
		76.20	22.23	25.22	11.10	50.30	54.30	35.70	4.80	127.00	147.30	4.06
228B		76.20	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8	160.00	178.00	4.70
232B		88.90	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0	200.00	222.00	6.23
		101.60	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0	250.00	277.50	6.72

Standard boxed lengths are 5 meters
Special lengths available.

Double Pitch Chain

Double Pitch Conveyor Chain



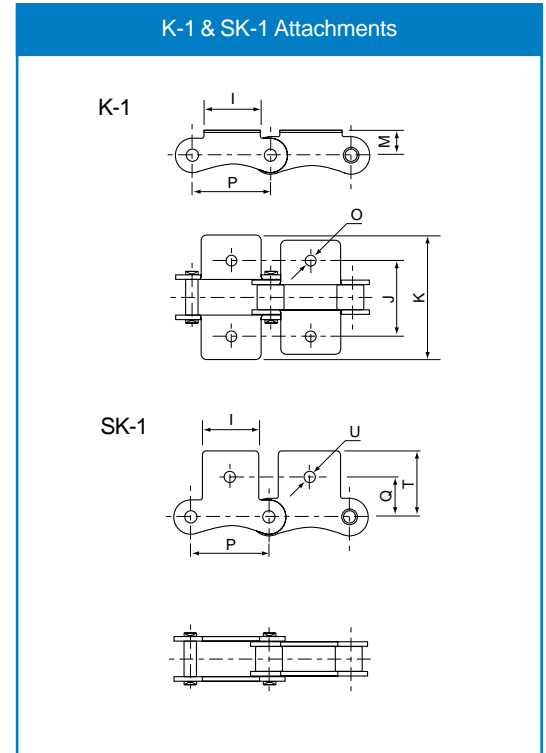
ISO ChainNo.	ANSI ChainNo.	Pitch	Roller diameter	Width between inner plates		Pin length		Inner plate height F mm	Plate thickness G mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
		P mm	A mm	B mm	C mm	D mm	E mm					
	C2040	25.40	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	16.70	0.50
	C2042		15.88									
C208B C208BL	C2040H	25.40	7.95	7.85	3.96	18.80	19.90	12.00	2.03	14.10	17.20	0.65
		25.40	8.51 15.88	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.55 0.89
	C2050	31.75	10.16	9.40	5.08	20.70	22.20	15.00	2.03	22.20	28.10	0.78
	C2052		19.05									
	C2060	38.10	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	36.80	1.12
	C2062		22.23									
	C2060H	38.10	11.91	12.57	5.94	29.20	31.60	18.00	3.25	31.80	41.60	1.44
	C2062H		22.23									
	C2080	50.80	15.88	15.75	7.92	32.70	36.50	24.00	3.25	56.70	65.70	2.08
	C2082		28.58									
	C2080H	50.80	15.88	15.75	7.92	36.20	39.40	24.40	4.00	56.70	70.00	2.54
	C2082H		28.58									
	C2100	63.50	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	102.60	3.01
	C2102		39.67									
	C2100H	63.50	19.05	18.90	9.53	43.60	46.90	30.00	4.80	88.50	112.40	3.56
	C2102H		39.67									
	C2120	76.20	22.23	25.22	11.10	50.30	54.30	35.70	4.80	127.00	147.30	4.66
	C2122		44.45									
	C2120H	76.20	22.23	25.22	11.10	53.50	57.50	35.70	5.60	127.00	160.90	5.26
	C2122H		44.45									
	C2160	101.60	28.58	31.75	14.27	64.80	69.60	47.80	6.40	226.80	278.90	8.23
	C2162		57.15									
	C2160H	101.60	28.58	31.75	14.27	68.20	73.00	47.80	7.20	226.80	285.80	9.06
	C2162H		57.15									

Standard boxed lengths are 5 meters
Special lengths available.

Double Pitch Attachments

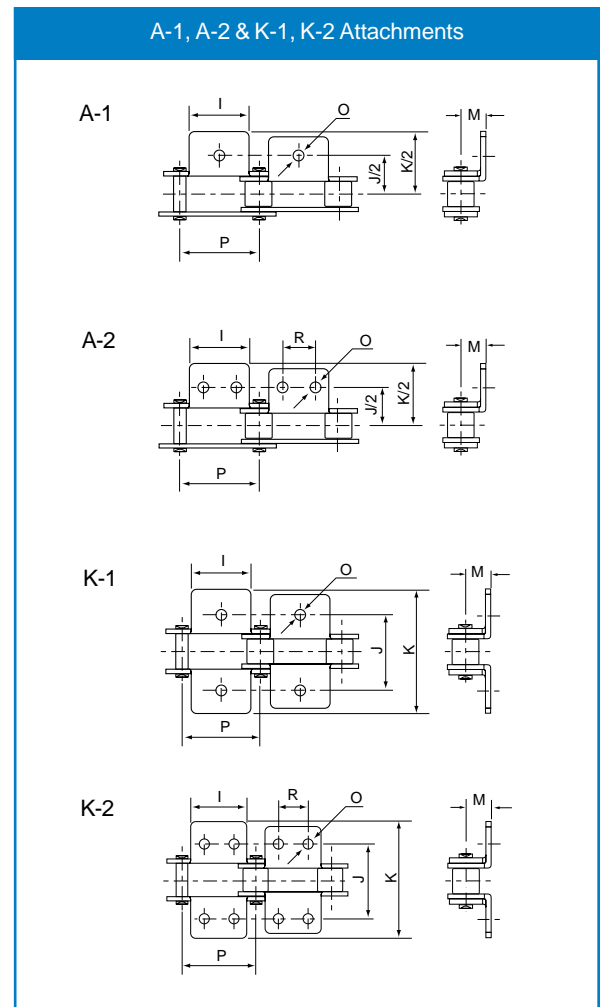
K-1 & SK-1 Attachments

ANSI Chain No.	P mm	I mm	J mm	K mm	M mm	ØO mm	Q mm	T mm	ØU mm
A2040	25.40	19.1	25.4	39.6	9.1	3.4	11.1	20.5	5.5
A2050	31.75	23.8	31.8	49.0	11.1	5.5	14.3	25.0	6.6
A2060	38.10	28.6	42.9	67.8	14.7	5.5	17.5	32.9	9.2
A2080	50.80	38.1	55.6	87.8	19.1	6.8	22.2	43.5	11.0
A2100	63.50	47.6	66.6	107.5	23.4	9.2	28.6	50.4	13.0
A2120	76.20	57.2	79.3	127.5	27.8	11.0			



A-1, A-2 & K-1, K-2 Attachments

ISO Chain No.	ANSI Chain No.	P mm	I mm	R mm	J mm	K mm	M mm	ØO mm
C208B C208BL	C2040 C2042	25.40	19.10	9.50	25.40	39.60	9.10	3.40
		25.40	23.20	12.70	25.40	39.60	9.10	4.50
	C2050 C2052	31.75	23.80	11.90	31.80	49.00	11.10	5.50
	C2060 C2062	38.10	28.60	14.30	42.90	67.80	14.70	5.50
	C2060H C2062H	38.10	28.60	14.30	42.90	67.80	14.70	5.50
	C2080 C2082	50.80	38.10	19.10	55.60	87.80	19.10	6.80
	C2080H C2082H	50.80	38.10	19.10	55.60	87.80	19.10	6.80
	C2100 C2102	63.50	47.60	23.80	66.60	107.50	23.40	9.20
	C2100H C2102H	63.50	47.60	23.80	66.60	107.50	23.40	9.20
	C2120 C2122	76.20	57.20	28.60	79.30	121.40	27.80	11.00
	C2120H C2122H	76.20	57.20	28.60	79.30	121.40	27.80	11.00
	C2160 C2162	101.60	76.20	38.10	104.70	151.60	36.50	13.10
	C2160H C2162H	101.60	76.20	38.10	104.70	151.60	36.50	13.10

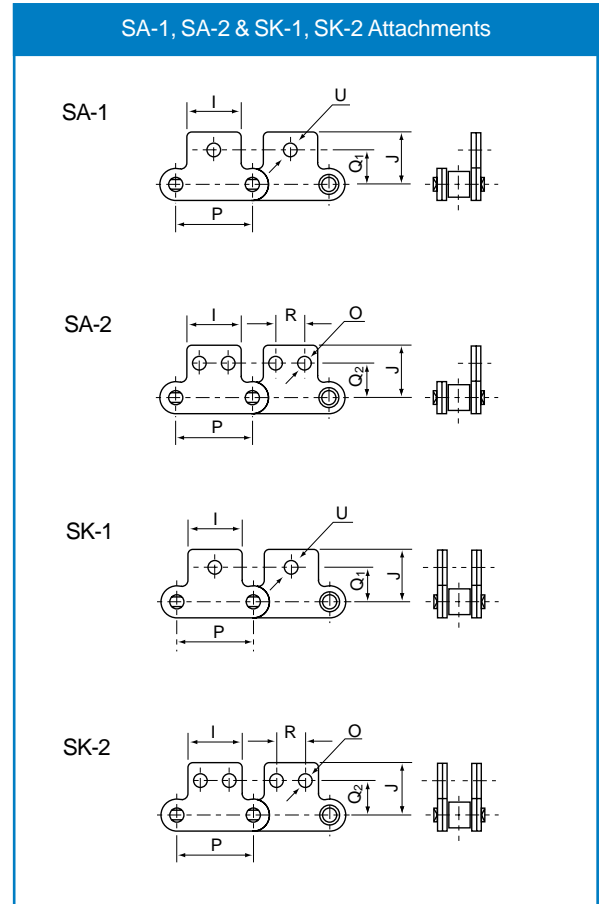


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Double Pitch Attachments

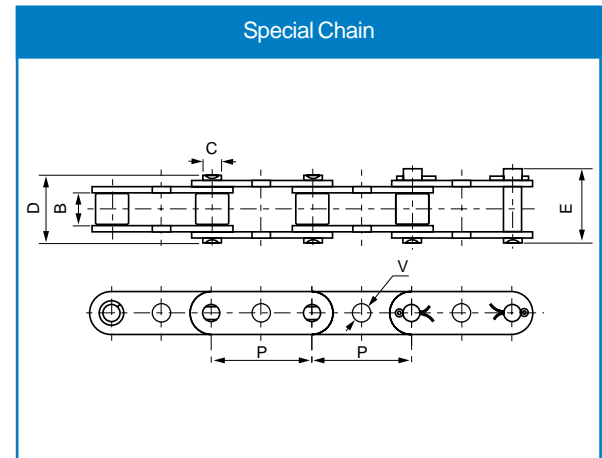
SA-1, SA-2 & SK-1, SK-2 Attachments

ISO Chain No.	ANSI Chain No.	P mm	I mm	R mm	Q ₁ mm	Q ₂ mm	J mm	ØO mm	ØU mm
	C2040 C2042	25.40	19.10	9.50	11.10	13.50	20.50	3.40	5.50
C208B C208BL		25.40	23.20	12.70	11.10	13.50	20.50	4.50	5.50
	C2050 C2052	31.75	23.80	11.90	14.30	15.90	25.00	5.50	6.60
	C2060 C2062	38.10	28.60	14.30	17.50	19.10	32.90	5.50	9.20
	C2060H C2062H	38.10	28.60	14.30	17.50	19.10	32.90	5.50	9.20
	C2080 C2082	50.80	38.10	19.10	22.20	25.40	43.50	6.60	11.00
	C2080H C2082H	50.80	38.10	19.10	22.20	25.40	43.50	6.60	11.00
	C2100 C2102	63.50	47.60	23.80	28.60	31.80	50.40	8.40	13.00
	C2100H C2102H	63.50	47.60	23.80	28.60	31.80	50.40	8.40	13.00



Special Chain (Attachment Holes in Side Plate)

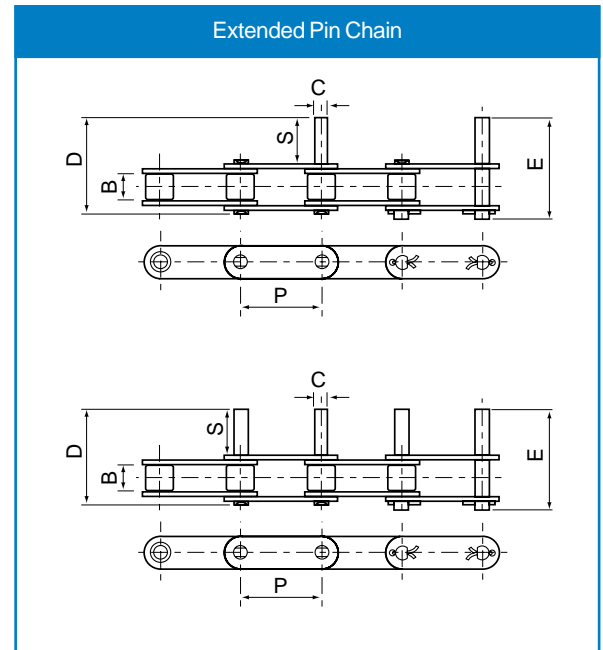
ANSI Chain No.	P mm	B mm	ØC mm	ØV mm	D mm	E mm
C2040 C2042	25.40	7.85	3.96	4.10	16.60	18.80
C2050 C2052	31.75	9.40	5.08	5.10	20.70	23.30
C2060 C2062	38.10	12.57	5.94	6.10	25.90	28.30
C2060H C2062H	38.10	12.57	5.94	6.10	29.20	31.60
C2080 C2082	50.80	15.75	7.92	8.10	32.70	36.50
C2080H C2082H	50.80	15.75	7.92	8.10	36.20	39.40
C2100 C2102	63.50	18.90	9.53	10.10	40.40	44.70
C2100H C2102H	63.50	18.90	9.53	10.10	43.60	46.90



Double Pitch Chain

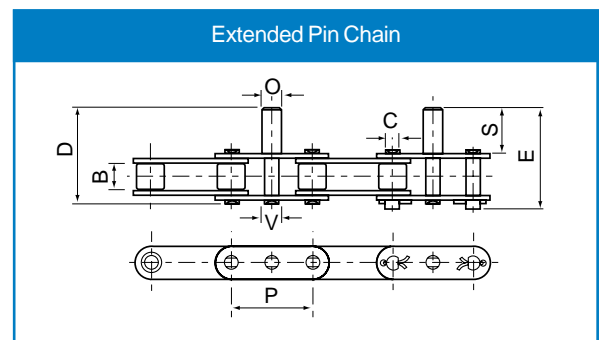
Extended Pin Chain

ANSI Chain No.	P mm	B mm	C mm	ØC mm	S mm	D mm	E mm
C2040	25.40	7.85	3.96	9.50	25.10	26.20	
C2042							
C2050	31.75	9.40	5.08	11.90	31.30	33.10	
C2052							
C2060	38.10	12.57	5.94	14.30	38.60	40.60	
C2062							
C2060H	38.10	12.57	5.94	14.30	42.00	43.80	
C2062H							
C2080	50.80	15.75	7.92	19.10	50.30	53.30	
C2082							
C2080H	50.80	15.75	7.92	19.10	53.50	55.00	
C2082H							
C2100	63.50	18.90	9.53	23.80	61.80	66.10	
C2102							
C2100H	63.50	18.90	9.53	23.80	65.00	68.30	
C2102H							
C2120H	76.20	25.22	11.10	28.60	79.60	83.60	
C2122H							
C2160H	101.60	31.75	14.27	38.10	103.00	107.80	
C2162H							



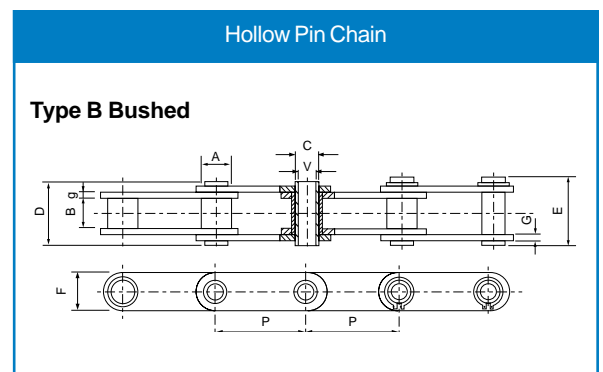
Extended Pin Chain

Chain No.	P mm	B mm	C mm	ØV mm	ØO mm	S mm	D mm
C2060H	38.10	12.57	5.94	5.94	8.00	25.00	53.00
C2060H	38.10	12.57	5.94	8.08	10.00	35.00	63.00
C2060H	38.10	12.57	5.94	5.94	12.70	41.20	69.20
C2060H	38.10	12.57	5.94	5.94	14.28	41.20	69.20



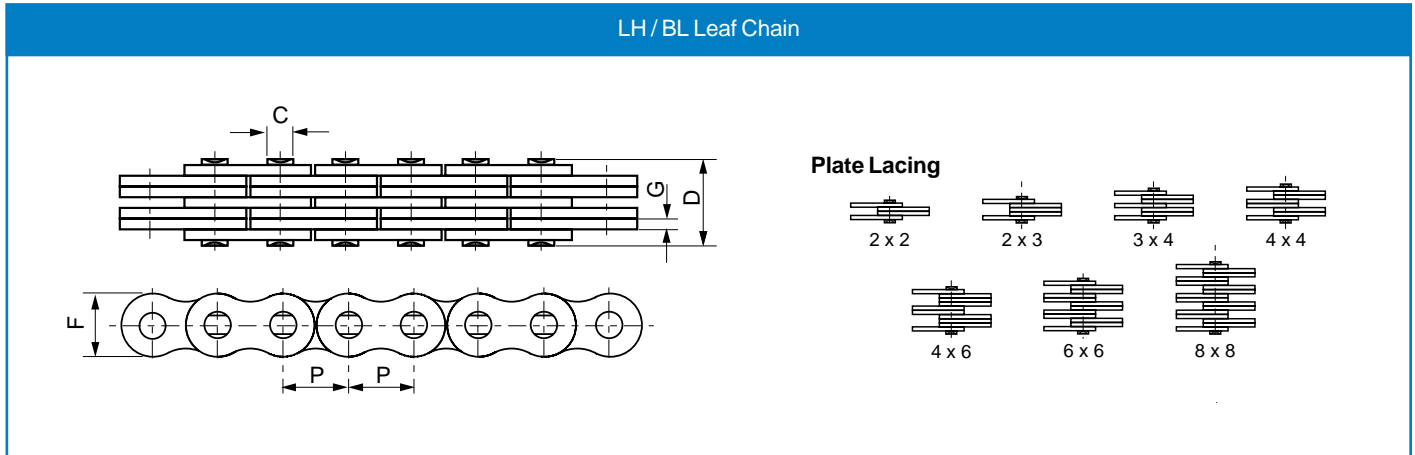
Hollow Pin Chain

Chain No.	Pitch	Roller diameter	Width between inner plates		Pin diameter		Pin length		Inner plate height F mm	Plate thickness g/G mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m	Type form
	P mm		A mm	B mm	C mm	V mm	D mm	E mm						
C2040HP	25.400	7.95	7.85	5.63	4.00	16.5	17.6	12.00	1.50	11.00	12.6	0.46	B	
C2050HP	31.750	10.16	9.40	7.22	5.12	20.5	21.8	15.00	2.03	20.40	22.8	0.76	B	
C2060HP	38.100	11.91	12.70	8.31	6.00	25.8	26.8	17.00	2.42	24.00	27.1	1.02	B	
C2080HP	50.800	15.88	15.75	11.40	8.05	32.5	33.8	24.00	3.25	50.00	55.2	1.81	B	



Leaf Chain

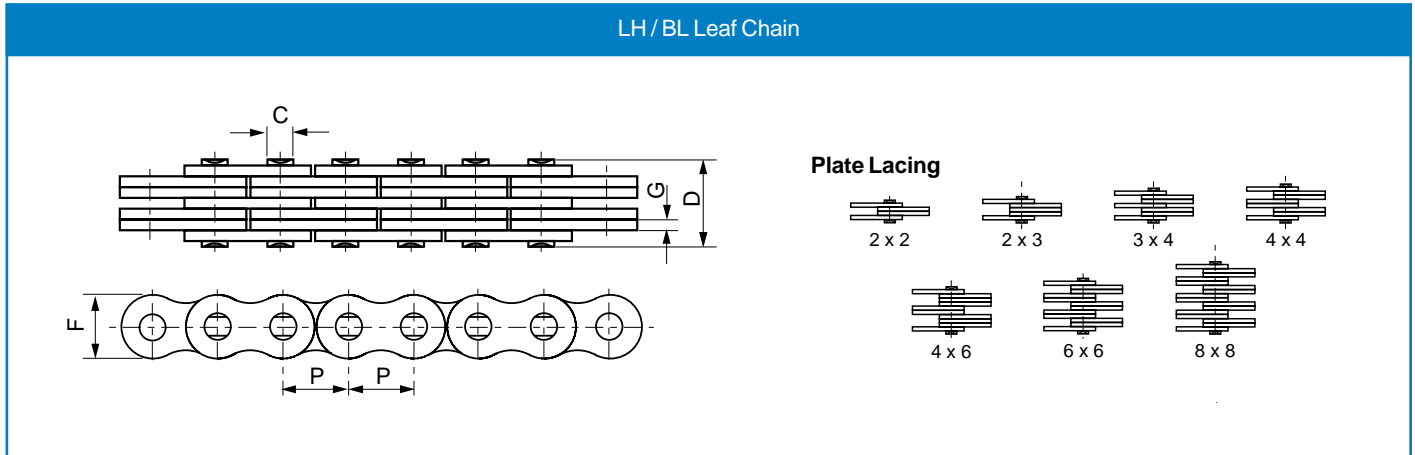
LH / BL Series Leaf Chain



ISO Chain No.	ANSI Chain No.	Pitch P mm	Chain lacing	Plate height F mm	Plate thickness G mm	Pin diameter C mm	Pin length D mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
LH0822	BL422	12.700	2x2	12.07	2.08	5.09	11.05	22.20	27.60	0.64
LH0823	BL423		2x3				13.16	22.20	27.60	0.80
LH0834	BL434		3x4				17.40	33.40	41.40	1.12
LH0844	BL444		4x4				19.51	44.50	56.00	1.28
LH0846	BL446		4x6				23.75	44.50	56.00	1.60
LH0866	BL466		6x6				27.99	66.70	81.70	1.92
LH0888	BL488		8x8				36.45	89.00	109.40	2.56
LH1022	BL522		15.875				2x2	15.09	2.44	5.96
LH1023	BL523	2x3		15.37	33.40	43.10	1.10			
LH1034	BL534	3x4		20.32	48.90	65.60	1.50			
LH1044	BL544	4x4		22.78	66.70	84.50	1.80			
LH1046	BL546	4x6		27.74	66.70	84.50	2.20			
LH1066	BL566	6x6		32.69	100.10	125.10	2.65			
LH1088	BL588	8x8		42.57	133.40	169.50	3.50			
LH1222	BL622	19.050		2x2	18.11	3.30	7.94			
LH1223	BL623		2x3	20.73				48.90	63.60	1.80
LH1234	BL634		3x4	27.43				75.60	102.80	2.50
LH1244	BL644		4x4	30.78				97.90	120.90	2.90
LH1246	BL646		4x6	37.49				97.90	120.90	3.60
LH1266	BL666		6x6	44.20				146.80	190.80	4.30
LH1288	BL688		8x8	57.61				195.70	238.80	5.80
LH1622	BL822		25.400	2x2				24.13	4.09	9.54
LH1623	BL823	2x3		25.48	84.50	108.20	2.70			
LH1634	BL834	3x4		33.76	129.00	170.00	3.80			
LH1644	BL844	4x4		37.90	169.00	214.60	4.30			
LH1646	BL846	4x6		46.18	169.00	214.60	5.40			
LH1666	BL866	6x6		54.46	253.60	324.50	6.50			
LH1688	BL888	8x8		71.02	338.10	432.70	8.60			

Leaf Chain

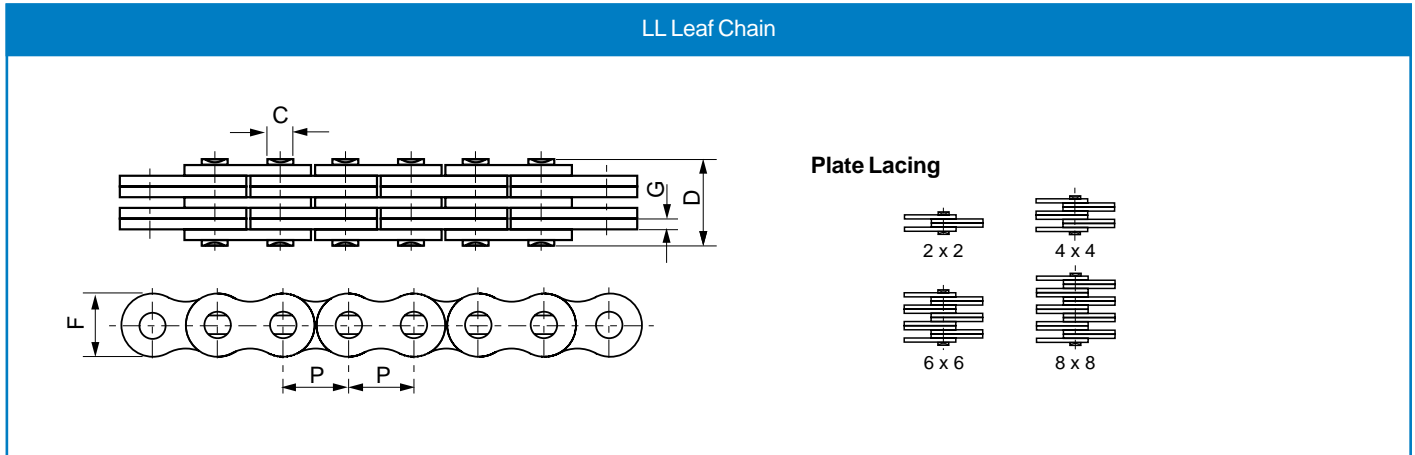
LH / BL Series Leaf Chain (cont)



ISO Chain No.	ANSI Chain No.	Pitch P mm	Chain lacing	Plate height F mm	Plate thickness G mm	Pin diameter C mm	Pin length D mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
LH2022	BL1022	31.750	2x2	30.18	4.90	11.11	25.37	115.60	150.80	3.40
LH2023	BL1023		2x3				30.33	115.60	150.80	4.30
LH2034	BL1034		3x4				40.23	182.40	231.60	6.00
LH2044	BL1044		4x4				45.19	231.30	291.40	6.90
LH2046	BL1046		4x6				55.09	231.30	291.40	8.60
LH2066	BL1066		6x6				65.00	347.00	430.30	10.30
LH2088	BL1088		8x8				84.81	462.60	555.10	13.80
LH2422	BL1222		38.100				2x2	36.20	5.77	12.71
LH2423	BL1223	2x3		35.43	151.20	192.00	5.80			
LH2434	BL1234	3x4		47.07	244.60	315.90	8.10			
LH2444	BL1244	4x4		52.88	302.50	381.10	9.30			
LH2446	BL1246	4x6		64.52	302.50	381.10	11.60			
LH2466	BL1266	6x6		76.15	453.70	543.60	13.90			
LH2488	BL1288	8x8		99.42	605.00	726.00	18.60			
LH2822	BL1422	44.450		2x2	42.24	6.55	14.29			
LH2823	BL1423		2x3	40.16				191.30	225.70	7.60
LH2834	BL1434		3x4	53.37				315.80	372.60	10.60
LH2844	BL1444		4x4	59.97				382.60	451.20	12.20
LH2846	BL1446		4x6	73.18				382.60	451.20	15.20
LH2866	BL1466		6x6	86.39				578.30	682.40	18.20
LH2888	BL1488		8x8	112.80				765.10	902.80	24.30
LH3222	BL1622		50.800	2x2				48.26	7.52	17.46
LH3223	BL1623	2x3		46.58	289.10	341.10	10.00			
LH3234	BL1634	3x4		61.72	440.40	519.60	14.00			
LH3244	BL1644	4x4		69.29	578.30	680.40	16.00			
LH3246	BL1646	4x6		84.43	578.30	680.40	20.00			
LH3266	BL1666	6x6		99.57	857.40	1000.70	24.00			
LH3288	BL1688	8x8		129.84	1156.50	1364.60	32.00			
LH4022	BL2022	63.500		2x2	60.33	9.91	23.81			
LH4023	BL2023		2x3	61.70				433.70	511.70	19.80
LH4034	BL2034		3x4	81.61				649.40	766.20	27.70
LH4044	BL2044		4x4	91.57				867.40	1023.50	31.60
LH4046	BL2046		4x6	111.48				867.40	1023.50	39.50
LH4066	BL2066		6x6	131.39				1301.10	1535.20	47.40
LH4088	BL2088		8x8	171.22				1734.80	2046.50	63.20

Leaf Chain

LL Series Leaf Chain

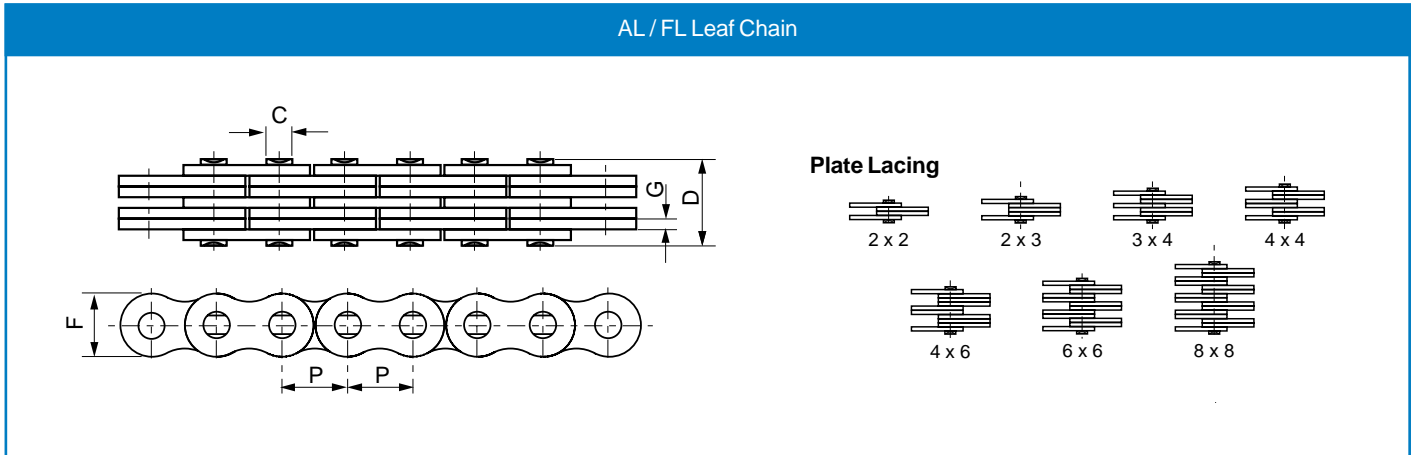


ISO Chain No.	Pitch P mm	Chain lacing	Plate height F mm	Plate thickness G mm	Pin diameter C mm	Pin length D mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
LL0822	12.700	2x2	10.60	1.30	4.45	7.60	17.80	20.40	0.35
LL0844		4x4				13.00	31.10	35.70	0.69
LL0866		6x6				18.20	44.50	50.90	1.00
LL0888		8x8				23.50	62.20	71.20	1.33
LL1022	15.875	2x2	13.70	1.60	5.08	9.20	22.30	25.50	0.54
LL1044		4x4				15.80	44.50	51.00	1.06
LL1066		6x6				22.10	66.70	76.30	1.57
LL1088		8x8				28.80	89.00	101.90	2.10
LL1222	19.050	2x2	16.00	1.85	5.72	10.40	28.90	33.20	0.73
LL1244		4x4				17.90	57.80	66.40	1.44
LL1266		6x6				25.40	86.70	99.70	2.15
LL1288		8x8				32.90	115.60	132.90	2.84
LL1622	25.400	2x2	21.00	3.10	8.28	17.20	58.00	66.70	1.52
LL1644		4x4				29.60	144.00	164.60	2.90
LL1666		6x6				42.40	200.00	230.00	4.30
LL1688		8x8				55.40	288.00	331.20	5.71
LL2022	31.750	2x2	26.40	3.70	10.19	20.10	95.00	109.20	2.33
LL2044		4x4				33.80	190.00	218.50	4.40
LL2066		6x6				50.10	285.00	324.60	6.79
LL2088		8x8				65.40	380.00	435.10	8.75
LL2422	38.100	2x2	33.40	5.00	14.63	28.40	170.00	195.50	4.47
LL2444		4x4				46.30	340.00	380.80	8.22
LL2466		6x6				66.40	510.00	571.20	12.22
LL2488		8x8				86.60	680.00	775.20	16.30
LL2822	44.450	2x2	37.08	6.00	15.90	32.20	200.00	224.00	5.10
LL2844		4x4				56.40	400.00	448.00	9.90
LL2866		6x6				80.60	600.00	672.00	14.60
LL2888		8x8				105.20	800.00	896.00	19.40
LL3222	50.800	2x2	42.00	6.00	17.81	33.20	260.00	291.20	5.80
LL3244		4x4				57.40	520.00	582.40	11.40
LL3266		6x6				81.60	780.00	873.60	16.90
LL3288		8x8				105.00	1050.00	1176.00	24.00
LL4022	63.500	2x2	52.76	8.25	22.89	44.70	360.00	403.20	10.30
LL4044		4x4				77.90	780.00	873.60	20.00
LL4066		6x6				111.10	1080.00	1209.60	29.50
LL4088		8x8				145.50	1560.00	1747.20	39.10
LL4822	76.200	2x2	63.88	10.30	29.24	56.10	560.00	627.20	18.50
LL4844		4x4				97.40	1120.00	1554.40	35.70
LL4866		6x6				138.90	1168.00	1308.10	53.00
LL4888		8x8				182.40	2240.00	2508.80	70.40

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Leaf Chain

AL / FL Series Leaf Chain



ANSI Chain No.	Pitch P mm	Chain lacing	Plate height F mm	Plate thickness G mm	Pin diameter C mm	Pin length D mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
AL322	9.525	2x2	7.70	1.30	3.58	6.80	9.00	10.20	0.23
AL422		2x2				7.90	14.10	16.90	0.39
AL444	12.700	4x4	10.40	1.50	3.96	14.40	28.20	35.20	0.74
AL466		6x6				20.50	42.30	52.70	1.10
AL522		2x2				10.30	22.00	27.50	0.61
AL534	15.875	3x4	12.80	2.03	5.08	17.00	33.00	46.00	1.10
AL544		4x4				18.90	44.00	55.00	1.19
AL566		6x6				26.90	66.00	82.50	1.79
AL622		2x2				12.40	37.00	44.40	0.86
AL644	19.050	4x4	15.60	2.42	5.94	22.70	64.00	78.80	1.69
AL666		6x6				32.40	101.00	118.60	2.52
AL822		2x2				16.00	56.70	68.60	1.54
AL844	25.400	4x4	20.50	3.25	7.92	29.40	113.40	135.60	3.00
AL866		6x6				42.50	170.00	202.30	4.46
AL1022		2x2				19.60	88.50	107.10	2.37
AL1044	31.750	4x4	25.60	4.00	9.53	35.90	177.00	203.60	4.68
AL1066		6x6				52.30	265.00	315.30	7.00
AL1222		2x2				24.30	127.00	151.10	3.65
AL1244	38.100	4x4	30.50	4.80	11.10	43.80	254.00	299.70	7.05
AL1266		6x6				63.00	381.00	426.30	10.44
AL1444		4x4				51.30	372.70	413.60	10.34
AL1466	44.450	6x6	36.40	5.60	12.64	74.56	559.00	620.40	15.16
AL1644		4x4				58.06	471.00	522.80	12.98
AL1666	50.800	6x6	41.60	6.40	14.21	84.46	706.00	783.60	19.41

Leaf Chain

Chain No.	Pitch P mm	Chain lacing	Plate height F mm	Plate thickness G mm	Pin diameter C mm	Pin length D mm	Minimum tensile strength kN	Average tensile strength kN	Weight per meter kg/m
FL644	5.940	4x4	4.70	0.60	1.85	6.60	6.50	7.80	0.13
FL666	5.940	6x6	4.70	0.60	1.85	9.30	9.75	11.80	0.20
FL688	5.940	8x8	4.70	0.60	1.85	12.00	13.00	15.60	0.25
FL844	8.000	4x4	6.90	0.73	2.31	7.90	10.00	12.10	0.25
FL944	9.525	4x4	8.70	1.04	3.28	10.40	21.00	24.70	0.43
FL966	9.525	6x6	8.70	1.00	3.28	14.90	31.00	36.80	0.65
F1222	12.700	2x2	8.20	1.00	3.58	7.00	11.43	13.60	0.19
F1223	12.700	2x3	10.20	2.03	4.45	12.80	20.00	23.80	0.61
F1244	12.700	4x4	10.20	1.70	4.45	16.70	44.00	52.30	0.83

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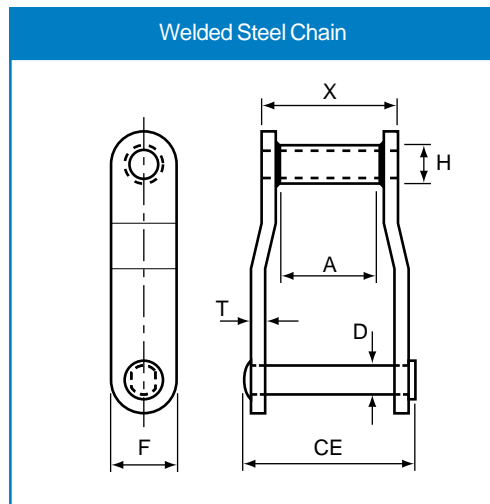
Timber Chain

Welded Steel Chain (Offset Side Bar)

Chain Ref	Pitch		Average Ultimate Strength lbs.	Max. Working Load lbs.	Approx. Links Per Foot	Average Weight lbs./ft.	Dimensions						
	mm	Inches					CE	X	D	T	F	H	A
WR78	66.26	2.609	24000	3000	4.6	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WH78	66.26	2.609	36000	3500	4.6	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WR82	66.26	2.609	26000	3800	4.6	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WH82	66.26	2.609	40000	4500	4.6	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WR124	101.60	4.000	46000	6300	3.0	8.3	107.95	69.85	19.05	9.53	38.10	31.75	38.10
WH124	101.60	4.000	60000	7350	3.0	8.3	107.95	69.85	19.05	9.53	38.10	31.75	38.10
WR111	120.90	4.760	46000	7550	2.5	9.5	123.83	85.00	19.05	9.53	44.45	31.75	50.80
WH111	120.90	4.760	60000	8850	2.5	9.5	123.83	85.00	19.05	9.53	44.45	31.75	50.80
WR106	152.40	6.000	46000	6750	2.0	7.0	107.95	69.85	19.05	9.53	38.10	31.75	41.28
WH106	152.40	6.000	69000	7200	2.0	7.0	107.95	69.85	19.05	9.53	38.10	31.75	41.28
WR110	152.40	6.000	46000	6750	2.0	7.2	117.48	76.20	19.05	9.53	38.10	31.75	47.63
WH110	152.40	6.000	69000	7900	2.0	7.2	117.48	76.20	19.05	9.53	38.10	31.75	47.63
WR132	153.67	6.050	84000	13100	2.0	14.2	158.75	111.00	25.40	12.70	50.80	41.28	73.03
WH132	153.67	6.050	110000	15000	2.0	14.2	158.75	111.00	25.40	12.70	50.80	41.28	73.03
WR150	153.67	6.050	84000	13100	2.0	16.8	158.75	111.00	25.40	12.70	63.50	41.28	73.03
WH150	153.67	6.050	110000	15300	2.0	16.8	158.75	111.00	25.40	12.70	63.50	41.28	73.03

WR - Welded steel chain c/w heat treated rivets

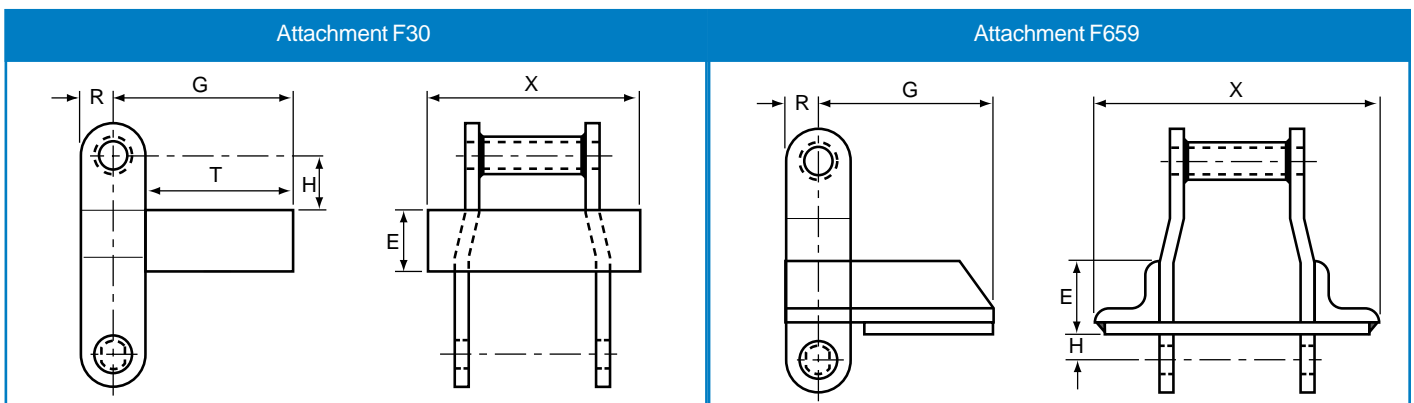
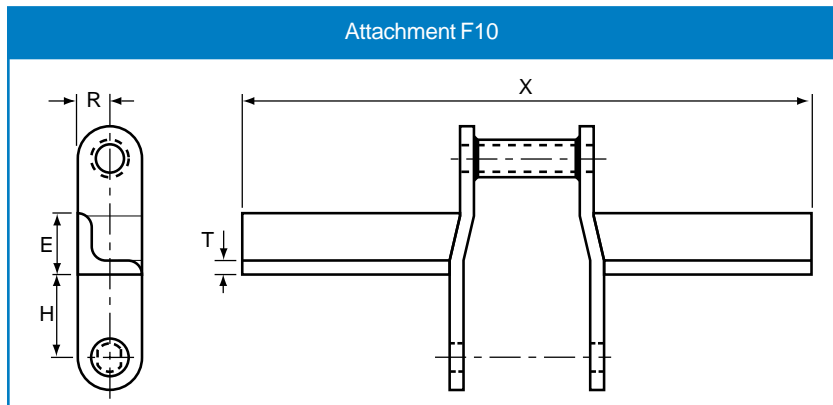
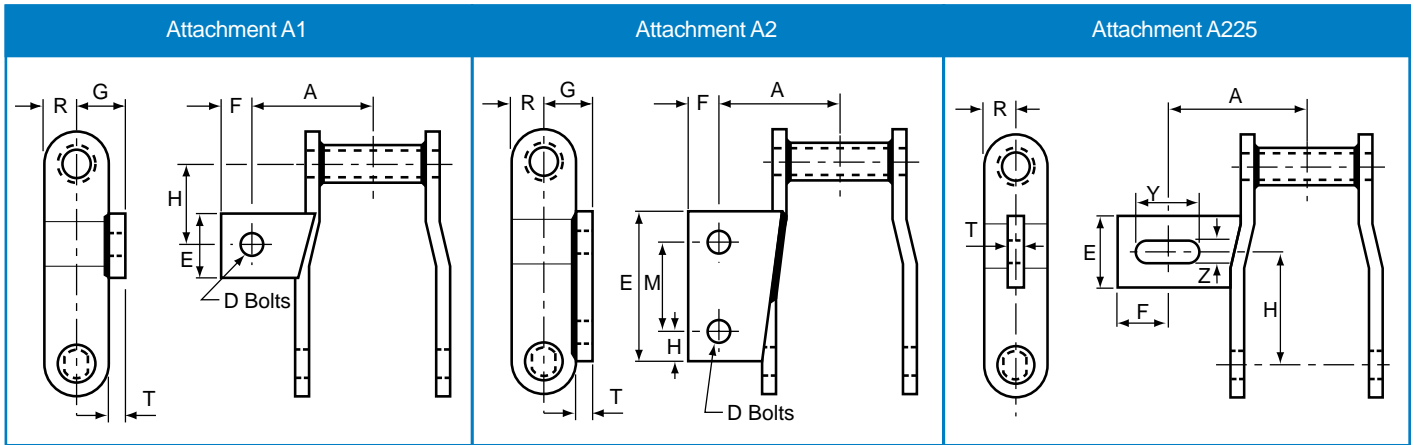
WH - Welded steel chain - fully heated treated



Timber Chain

Welded Steel Chain Attachments (Offset Side Bar)

Attachment Ref	Chain Ref.	Weight Per Ft lbs	Dimensions												
			A	D	E	F	G	H	K	M	R	T	X	Y	Z
A1	WR/WH78	4.97	50.80	9.58	31.75	12.70	20.57	31.75	-	-	14.27	6.35	-	-	-
A1	WR/WH82	6.50	54.10	9.58	44.45	15.88	23.88	38.10	-	-	15.88	6.35	-	-	-
A1	WR/WH124	8.40	66.68	15.88	50.80	15.88	28.70	45.97	-	-	19.05	9.53	-	-	-
A2	WR/WH78	4.50	50.80	9.58	54.10	12.70	19.81	10.41	-	28.70	14.27	6.35	-	-	-
A2	WR/WH82	6.00	54.10	9.53	57.15	15.80	23.88	12.70	-	31.75	15.88	7.92	-	-	-
A2	WR/WH124	10.00	66.68	9.58	76.20	22.23	28.70	22.23	-	49.28	19.05	9.53	-	-	-
A2	WR/WH132	17.00	95.25	12.70	101.60	19.05	38.10	41.28	-	69.85	25.40	12.70	-	-	-
A225	WR/WH124	8.90	101.60	-	50.80	49.28	-	50.80	-	-	19.05	12.70	-	57.15	22.23
F10	WR/WH82	4.80	-	-	31.75	-	-	23.80	-	-	15.88	6.35	260.35	-	-
F30	WR/WH78	9.90	-	-	25.40	-	-	68.33	-	-	14.27	54.10	76.20	-	-
F659	WR/WH124	13.10	-	-	44.45	-	-	120.65	-	-	19.05	-	167.39	-	-

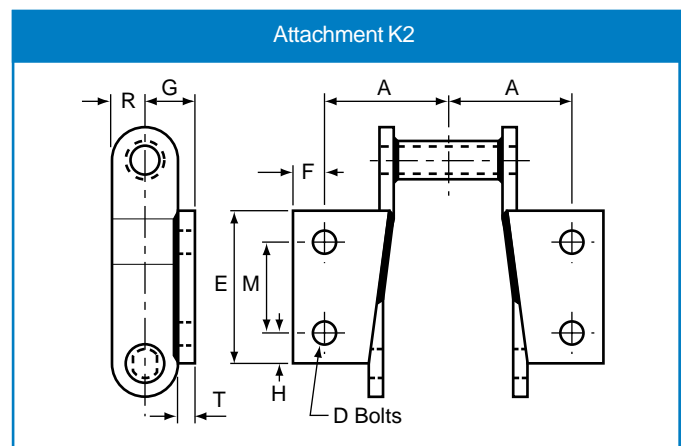
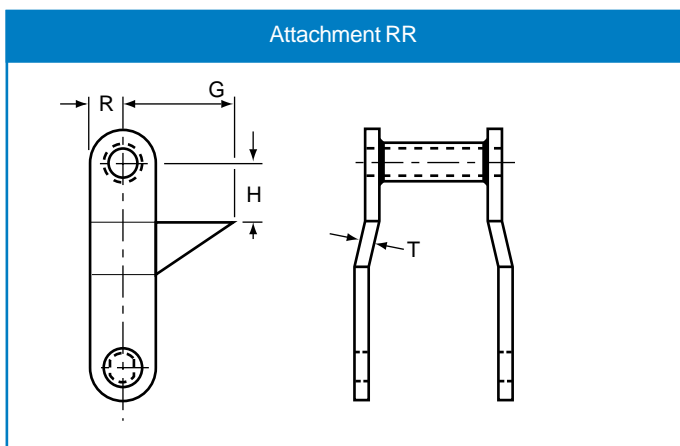
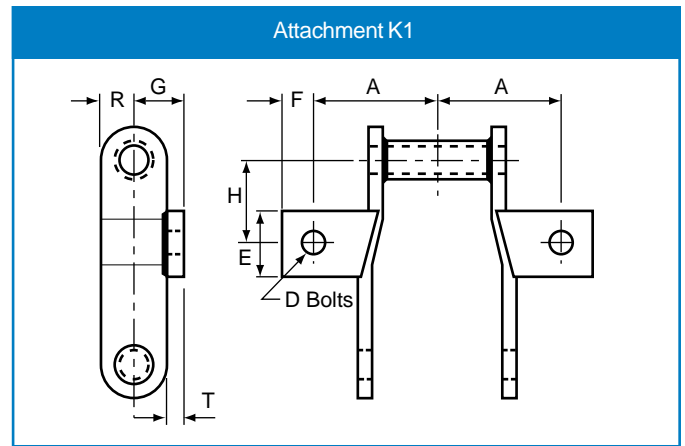
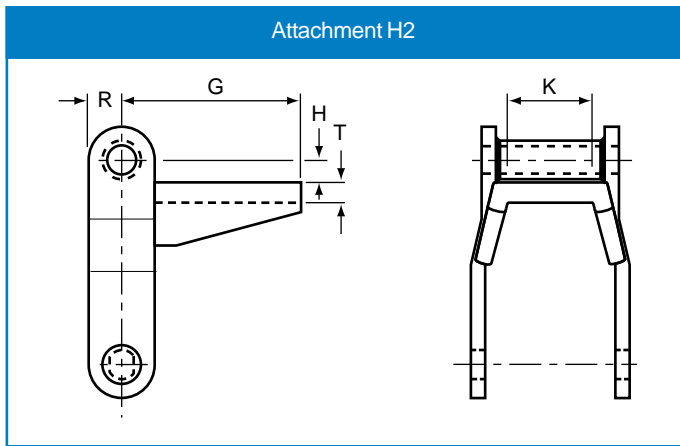


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Timber Chain

Welded Steel Chain Attachments (Offset Side Bar)

Attachment Ref	Chain Ref.	Weight Per Ft lbs	Dimensions												
			A	D	E	F	G	H	K	M	R	T	X	Y	Z
H2	WR/WH78	4.75	-	-	-	-	90.42	7.87	25.40	-	14.22	6.35	-	-	-
H2	WR/WH82	9.00	-	-	-	-	91.95	15.75	28.70	-	15.75	4.83	-	-	-
K1	WR/WH78	4.97	50.80	9.65	31.75	12.70	20.57	31.75	-	-	14.22	6.35	-	-	-
K1	WR/WH82	6.50	54.10	9.65	44.45	15.75	23.88	38.10	-	-	15.75	6.35	-	-	-
K1	WR/WH124	11.70	66.55	15.75	50.80	15.75	28.70	45.97	-	-	19.05	9.65	-	-	-
K2	WR/WH78	5.00	50.80	9.65	54.10	12.70	19.81	10.41	-	28.70	14.22	6.35	-	-	-
K2	WR/WH82	8.00	54.10	9.65	57.15	15.75	23.88	12.70	-	31.75	15.75	7.87	-	-	-
K2	WR/WH124	12.00	66.55	9.65	76.20	22.35	28.70	22.35	-	49.28	19.05	9.65	-	-	-
K2	WR/WH132	19.00	95.25	12.70	101.60	19.05	38.10	41.15	-	69.85	25.40	12.70	-	-	-
RR	WR/WH78	4.70	-	-	-	-	38.10	19.05	-	-	14.22	6.35	-	-	-
RR	WR/WH82	7.00	-	-	-	-	44.45	20.57	-	-	15.75	6.35	-	-	-
RR	WR/WH124	10.00	-	-	-	-	47.75	38.10	-	-	19.05	9.65	-	-	-



All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Timber Chain

Offset Sidebar Roller Chain

Offset Sidebar Roller Chain

Material Spec.				
	Sidebar	Pin	Bushing	Roller
S0-578	CH	CH	CC	CC
M0-88	C	CH	CC	CC
LXS-882	CH	AH	AC	CH
M0H-578	CH	CH	CC	CH

Chain No.	Pitch		Average Ultimate Strength lbs.	Max. Working Load lbs.	Approx. Links Per Foot	Average Weight lbs./ft.	Dimensions						
	inch	mm					A	B	C	D	F	G	K
	S0-578	2.609					66.269	19,000	2,200	4.6	2.7	22.23	26.99
M0-88	2.609	66.269	20,000	2,400	4.6	3.8	22.23	26.99	11.11	59.53	28.58	6.35	41.28
LXS-882	2.609	66.269	29,000	2,800	4.6	3.9	22.23	28.58	11.11	59.53	28.58	6.35	42.86
M0H-578	2.609	66.269	19,000	2,200	4.6	2.7	22.23	26.99	9.53	52.78	25.40	5.56	36.12

Straight Sidebar Roller Chain

Straight Sidebar Roller Chain

Material Spec.				
	Sidebar	Pin	Bushing	Roller
MS-88	C	CH	CC	CC
81-X	CH	AC	AC	CH
81-XH	CH	AC	AC	CH
81-XHS	CH	AC	AC	CH
SS-188	CH	AC	CC	CC

Chain No.	Pitch		Average Ultimate Strength lbs.	Max. Working Load lbs.	Approx. Links Per Foot	Average Weight lbs./ft.	Dimensions										
	inch	mm					A	B	C	D	F	K	Side Plate Thickness (G)				
							Chain	Conn									
MS-88	2.609	66.269	26,000	2,500	4.6	3.8	22.23	26.99	11.11	59.53	28.58	41.28	6.35	6.35			
81-X	2.609	66.269	22,000	2,200	4.6	2.6	23.02	26.99	11.11	47.23	28.58	34.93	3.97	3.97			
81-XH	2.609	66.269	41,800	5,000	4.6	3.9	23.02	26.99	11.11	59.18	31.75	42.86	7.94	5.56			
81-XHS	2.609	66.269	41,800	5,000	4.6	4.2	23.02	26.99	11.11	63.50	32.94	42.86	7.94	7.94			
SS-188	2.609	66.269	26,000	2,500	4.6	3.8	22.23	26.99	11.11	59.53	28.58	41.28	6.35	6.35			

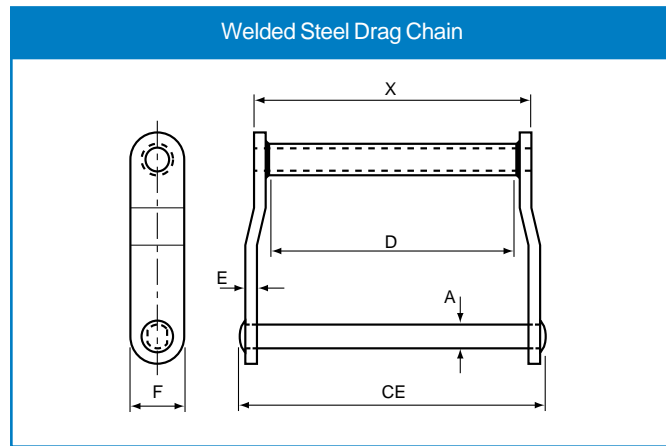
Material Designation

- C: Carbon Steel
- CC: Carbon Steel Case Hardened
- AC: Alloy Steel Case Hardened
- CH: Carbon Steel Heat Treated
- AH: Alloy Steel Heat Treated

Timber Chain

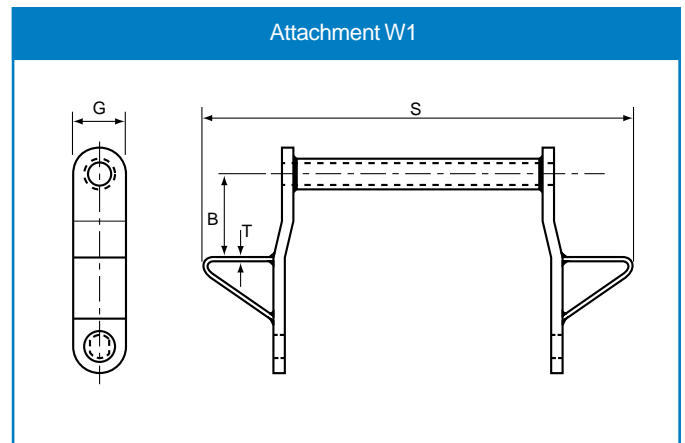
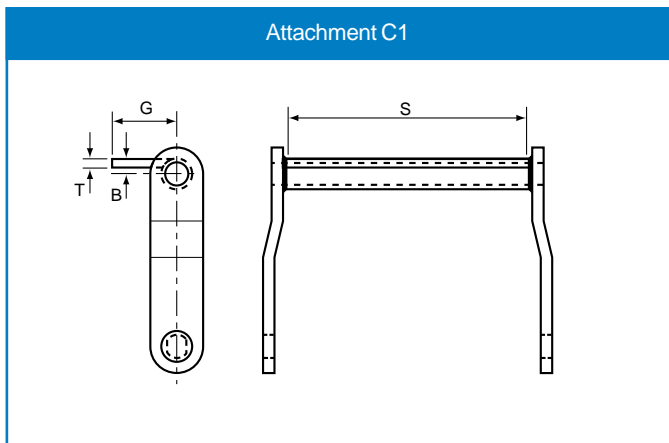
Welded Steel Drag Chain

Chain Ref	Pitch		Average Ultimate Strength lbs.	Max. Working Load lbs.	Approx. Links Per Foot	Average Weight lbs.	Dimensions					
	mm	Inches					CE	X	A	E	D	F
WD104	152.4	6	51000	8500	20	8.7	174.75	136.65	19.05	9.65	104.65	38.1
WD110	152.4	6	51000	8500	20	12.0	301.75	263.65	19.05	9.65	228.60	38.1
WD120	152.4	6	80000	12300	20	19.4	304.80	257.05	22.35	12.70	215.90	50.8
WD122	203.2	8	80000	12300	15	16.0	304.80	257.05	22.35	12.70	215.90	50.8
WD480	203.2	8	80000	12300	15	18.1	371.35	323.75	22.35	12.70	279.40	50.8



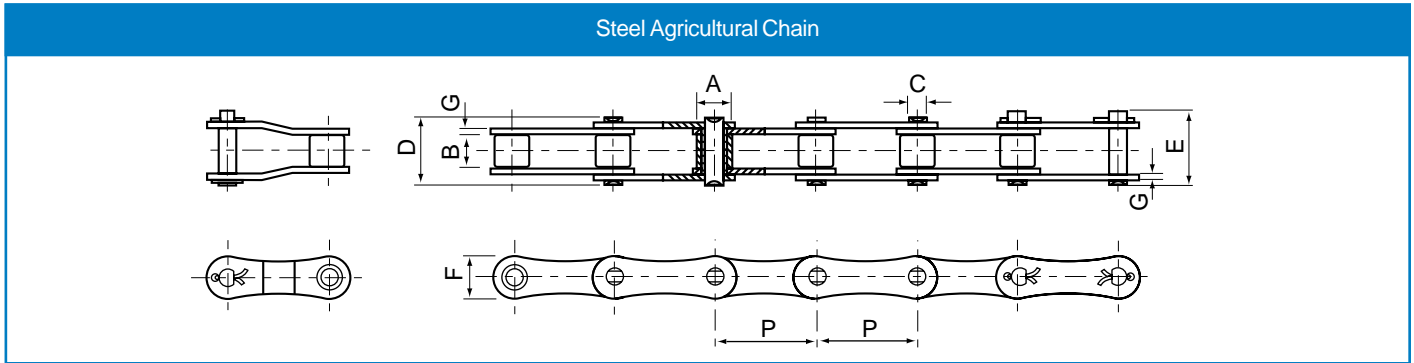
Drag Chain Attachments

Attachment Ref	Chain Ref	Dimensions			
		S	B	G	T
C1	WD104	104.65	9.53	57.15	9.53
W1	WD104	304.80	47.63	-	9.53
W1	WD120	431.80	44.45	-	12.70



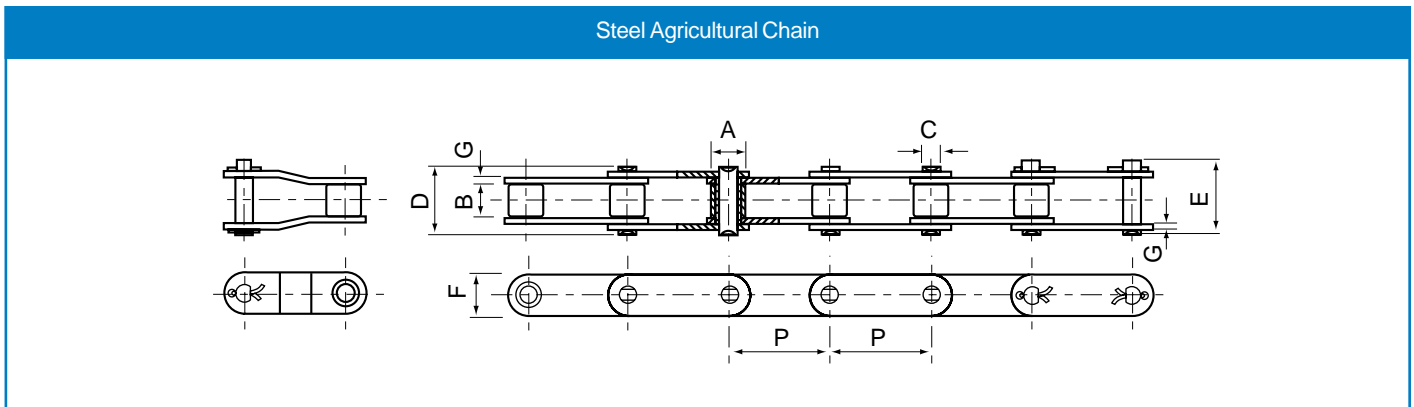
Agricultural Chain

Steel Agricultural Chain



Chain No.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	kN	kN	kg/m
S32	29.210	11.43	15.88	4.45	26.70	28.80	13.20	1.80	8.00	21.60	0.86
S42	34.930	14.27	19.05	7.00	34.30	37.00	19.80	2.80	27.00	50.80	1.60
S45	41.400	15.24	22.23	5.72	37.70	40.40	17.30	2.80	18.00	36.10	1.66
S52	38.100	15.24	22.23	5.72	37.70	40.40	17.30	2.80	18.00	36.10	1.68
S55	41.400	17.78	22.23	5.72	37.70	40.40	17.30	2.80	18.00	36.10	1.80
S55R	41.400	17.78	22.23	8.90	41.00	44.00	22.40	3.50	45.00	73.10	2.49
S62	41.910	19.05	25.40	5.72	40.30	43.00	17.30	2.50	27.00	36.10	1.87
S77	58.340	18.26	22.23	8.90	43.20	46.40	26.20	4.00	45.00	73.10	2.65
S88	66.270	22.86	28.58	8.90	49.80	53.00	26.20	4.00	45.00	73.10	3.25

Steel Agricultural Chain



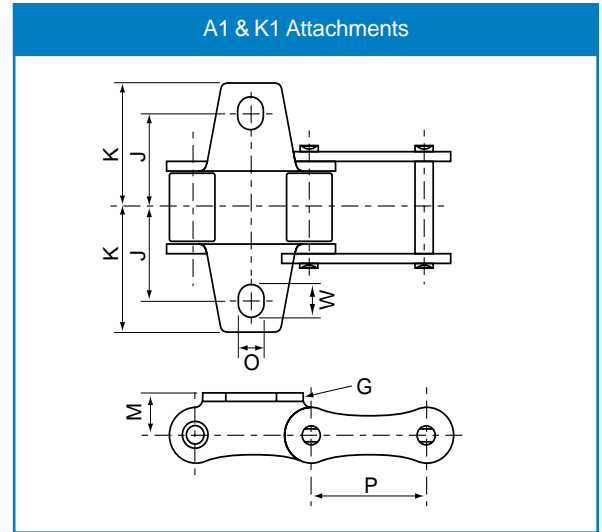
Chain No.	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Minimum tensile strength	Average tensile strength	Weight per meter
	P mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	kN	kN	kg/m
38.4	38.400	15.88	19.05	6.92	33.80	37.00	17.30	2.50	25.00	33.00	1.65
38.4-V	38.400	15.88	18.00	6.92	33.80	37.00	17.30	3.00	31.50	40.00	1.74
38.4-VB	38.400	15.88	19.05	8.27	36.20	39.40	20.50	3.00	45.00	50.00	2.12
CA550	41.400	16.87	19.81	7.19	35.00	38.00	19.30	2.80	39.10	51.20	1.94
CA555	41.400	16.87	12.70	7.19	29.70	33.10	19.30	3.10	39.10	56.00	1.83
CA557	41.400	17.78	20.24	8.00	37.40	40.60	23.10	3.10	55.61	74.30	2.20
CA620	42.010	17.91	24.51	7.19	41.80	45.20	20.20	3.25	39.10	55.10	2.35
CA650	50.800	25.00	27.80	9.53	40.40	44.70	25.00	4.00	80.00	95.50	3.49
CA2060H	38.100	11.91	12.70	5.94	29.74	31.72	17.45	3.25	31.28	40.50	1.50
CA2063H	38.100	11.89	12.70	5.94	29.40	34.20	19.30	3.25	31.28	40.50	1.65

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Agricultural Chain Attachments

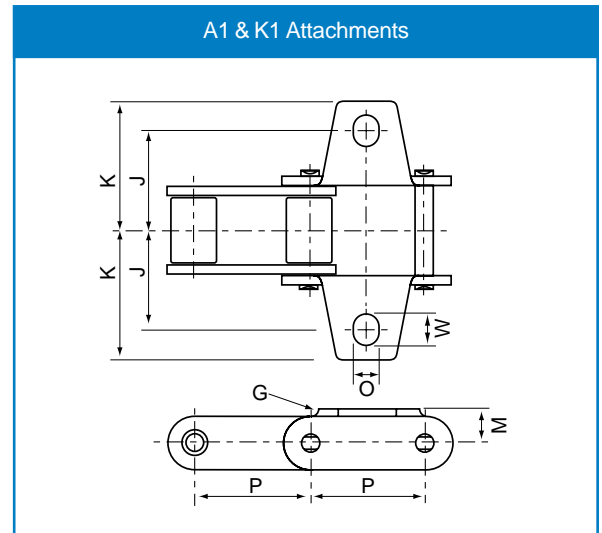
S Series A1 & K1 Attachments

Chain No.	P mm	G mm	J mm	K mm	M mm	ØO mm	W mm
S32	29.21	1.80	21.50	30.50	8.60	5.30	6.90
S42	34.93	2.80	27.00	37.45	14.00	8.30	11.50
S45	41.40	2.80	27.00	37.50	11.40	8.50	11.70
S52	38.10	2.80	29.40	39.00	11.40	8.30	9.90
S55	41.40	2.80	27.00	37.50	11.40	8.50	11.70
S62	41.91	2.50	33.40	47.70	11.40	6.50	13.00
S77	58.34	4.00	38.10	50.80	20.80	8.40	11.70
S88	66.27	4.00	48.50	59.70	20.80	8.40	10.00



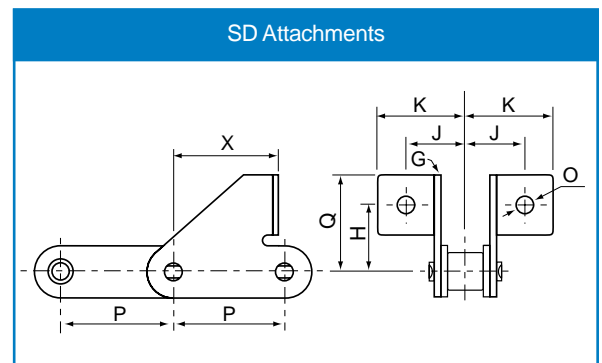
38.4 & CA Series A1 & K1 Attachments

Chain No.	P mm	G mm	J mm	K mm	M mm	ØO mm	W mm
38.4	38.40	2.50	29.00	41.50	15.40	9.00	
38.4-V	38.40	3.00	28.75	41.00	15.40	9.00	
38.4-VB	38.40	3.00	29.00	43.50	14.00	10.50	
CA550	41.40	2.80	26.25	38.10	12.70	8.30	10.00
CA557	41.40	3.10	25.40	36.00	15.90	8.70	



S, 38.4 & CA Series SD Attachments

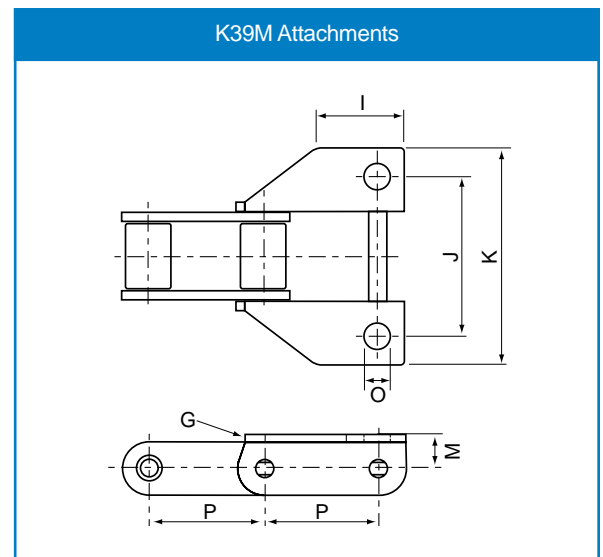
Chain No.	P mm	G mm	Q mm	J mm	K mm	H mm	X mm	ØO mm
S45	41.40	2.80	26.00	29.00	44.25	16.00	24.00	6.40
S55	41.40	2.80	26.00	29.00	44.25	16.00	24.00	6.40
38.4	38.40	2.50	37.00	26.00	35.50	24.00	38.40	8.40
38.4-VB	38.40	3.00	34.00	26.00	35.50	25.00	32.40	6.50
CA550	41.40	2.80	42.90	23.80	34.10	31.00	36.90	8.70



Agricultural Chain Attachments

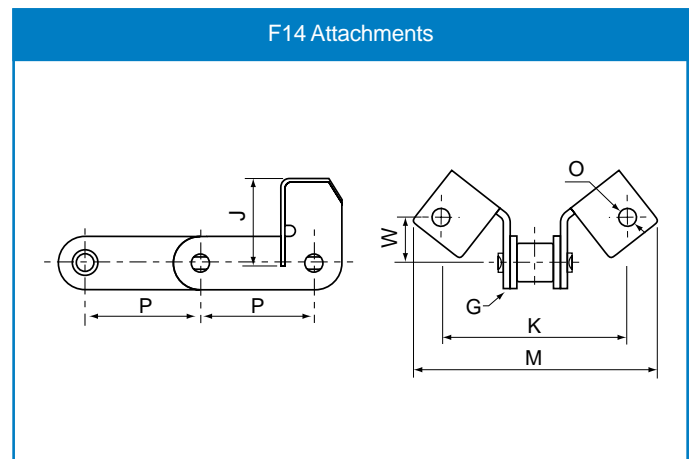
CA Series K39M Attachments

Chain No.	P mm	G mm	I mm	J mm	K mm	M mm	ØO mm
CA550	41.40	2.8	30.0	50.80	72.00	12.70	9.50
CA557	41.40	3.1	38.1	53.94	76.20	14.60	9.90



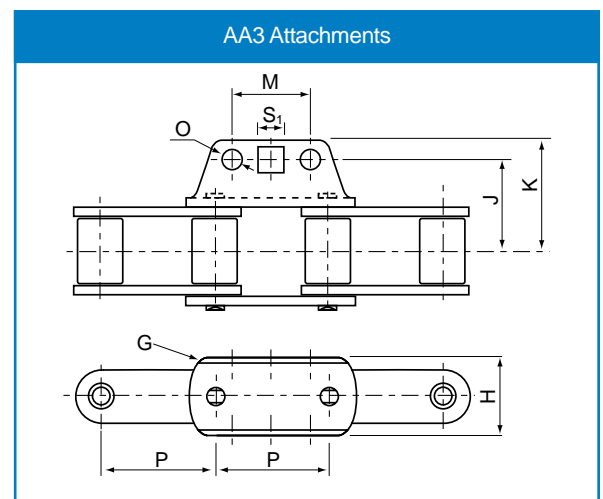
CA Series F14 Attachments

Chain No.	P mm	G mm	J mm	K mm	M mm	ØO mm	W mm
CA550	41.40	2.8	31.75	79.40	101.60	8.33	15.90
CA557	41.40	3.1	31.75	79.40	101.60	8.33	15.90



CA Series AA3 Attachments

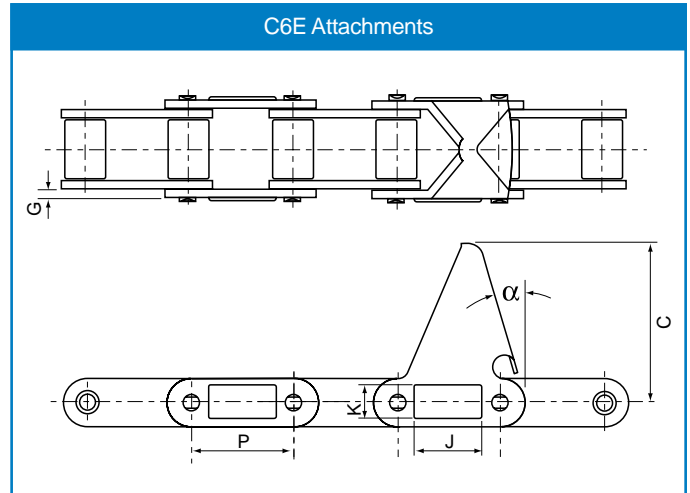
Chain No.	P mm	G mm	J mm	K mm	M mm	H mm	ØO mm	S ₁ mm
CA557	41.40	3.10	31.90	43.29	30.20	31.06	8.20	9.73



Agricultural Chain Attachments

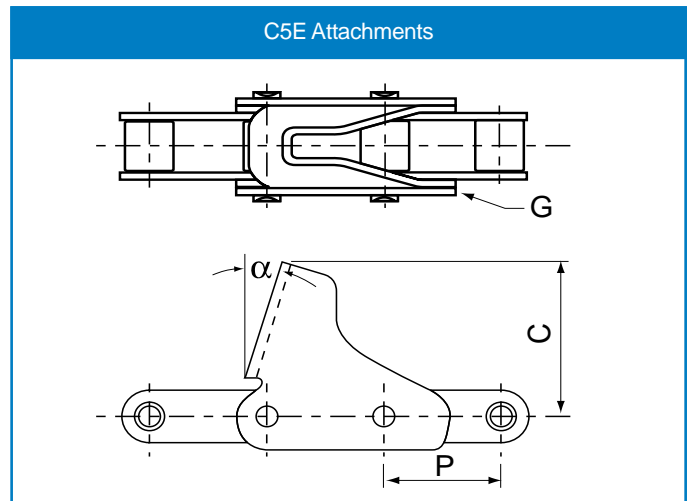
CA Series C6E Attachments

Chain No.	P mm	G mm	C mm	J mm	K mm	α °
CA550	41.40	2.80	55.60	23.60	13.50	20.0
CA555	41.40	3.10	63.50	23.60	13.50	15.0
C2060H	38.10	3.25	63.50	-	-	22.5



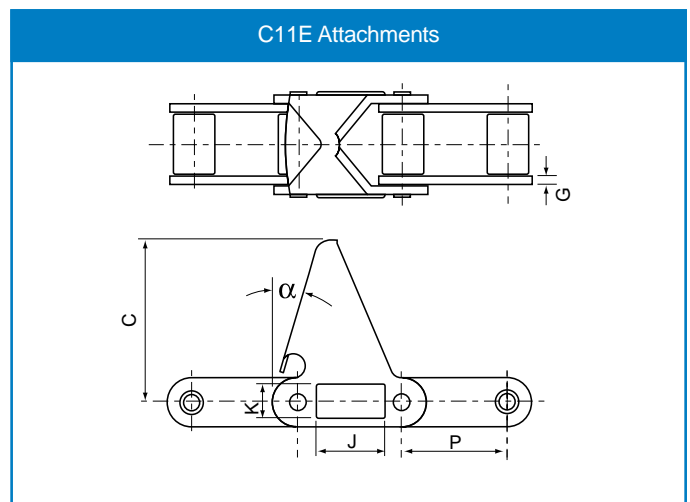
CA Series C5E Attachments

Chain No.	P mm	G mm	C mm	α °
CA550	41.40	2.8	59.00	15
CA555	41.40	3.1	57.15	15



CA Series C11E Attachments

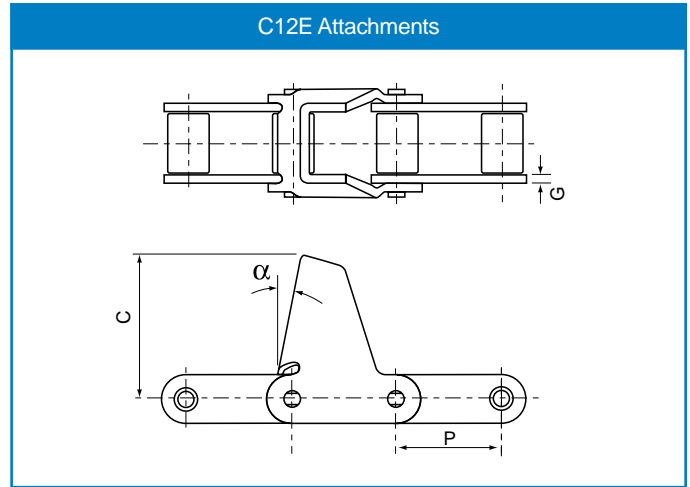
Chain No.	P mm	G mm	C mm	J mm	K mm	α °
CA550	41.40	2.80	59.00	23.60	13.50	15



Agricultural Chain Attachments

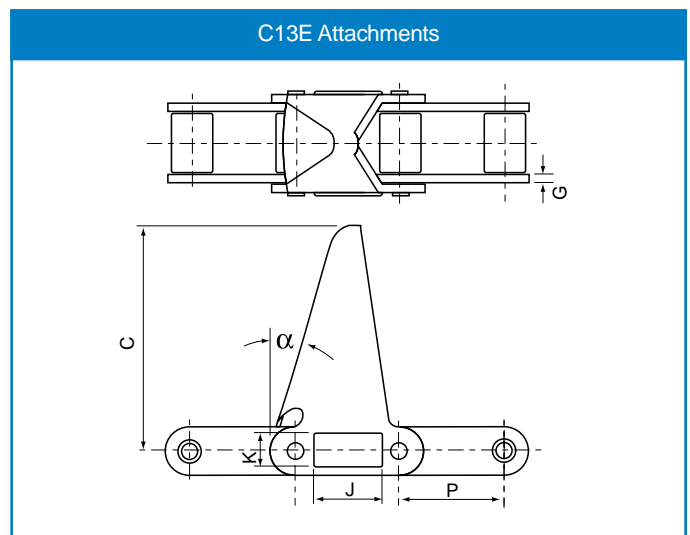
CA Series C12E Attachments

Chain No.	P mm	G mm	C mm	α °
CA550	41.40	2.8	59.00	9



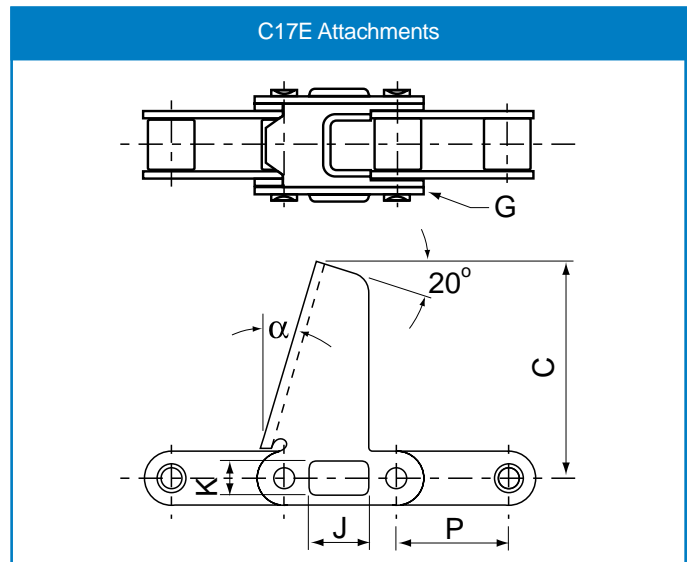
CA Series C13E Attachments

Chain No.	P mm	G mm	C mm	J mm	K mm	α °
CA550	41.40	2.80	92.10	23.60	13.50	15



CA Series C17E Attachments

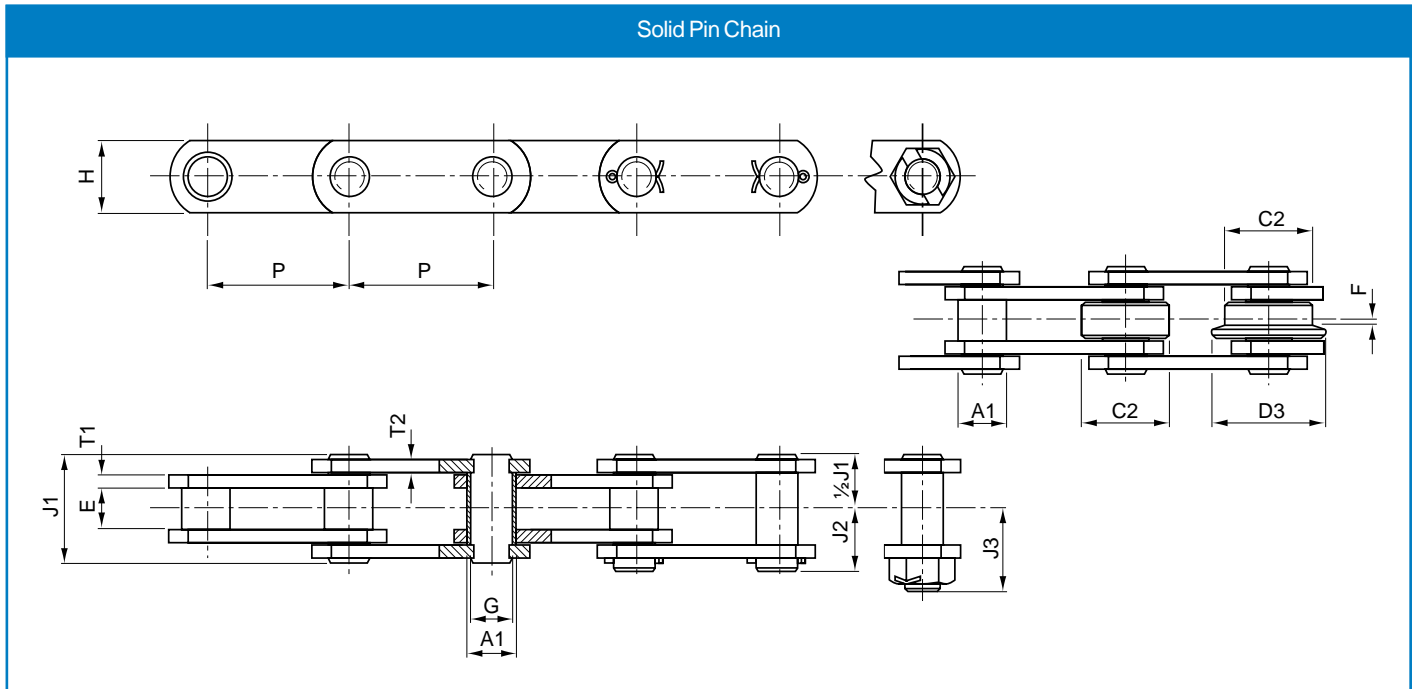
Chain No.	P mm	G mm	C mm	J mm	K mm	α °
CA550	41.40	2.80	76.20	23.60	13.50	15



Conveyor Chain

Solid Pin

BS Conveyor Chain (BS 4116 Part 4)



Solid Pin Chain

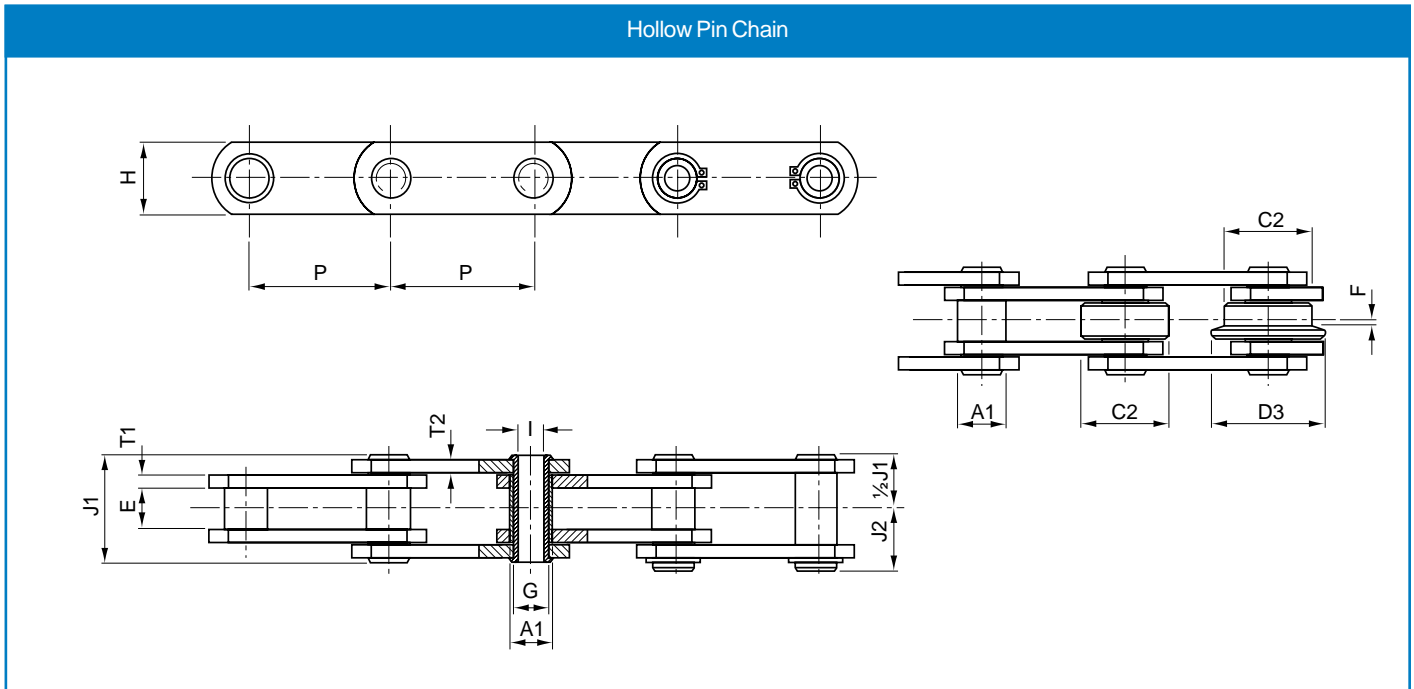
Chain Number	Minimum Breaking (Load) lbf	Pitch Inches	Pitch mm	E	C2	D3	F	A1	G	H	T1	T2	J1	J2	J3	Breaking Load			Weight (Type C) kg/m
																Minimum N	Average N	Up-rated N	
C40	7 500	2.0	50.8	15	31.75	40	2.5	17	14	25	4	4	37	22	28.5	33 000	40 000	50 000	4.0
C40	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.5
C40	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.2
C40	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.0
C40	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.8
C40	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.6
C40	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.4
C100	15 000	3.0	76.2	19	47.5	60	3.5	23	19	40	5	4	45	28	37	67 000	100 000	130 000	7.7
C100	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.0
C100	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.5
C100	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.8
C100	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.3
C100	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.0
C100	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.7
C160	30 000	4.0	101.6	26	66.7	82	3.5	33	26.9	50	7	5	58	34.5	51	134 000	156 000	200 000	14.3
C160	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	12.5
C160	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.3
C160	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	10.5
C160	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.8
C160	"	9.0	228.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.3
C160	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.0
C300	45 000	6.0	152.4	38	88.9	114	8.5	38	28	60	10	8	83	47	70	200 000	300 000	340 000	24.3
C300	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	22.0
C300	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	21.0
C300	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	18.0
C300	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	16.5
C300/60	60 000	6.0	152.4	38	88.9	114	8.5	38	32	60	10	8	84	52	71	267 000	300 000	380 000	24.0
C300/60	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	21.8
C300/60	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	20.0
C300/60	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	17.7
C300/60	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	16.0

Up-rated breaking load chain has heat treated side plates.

Conveyor Chain

Hollow Pin

BS Conveyor Chain (BS 4116 Part 4)



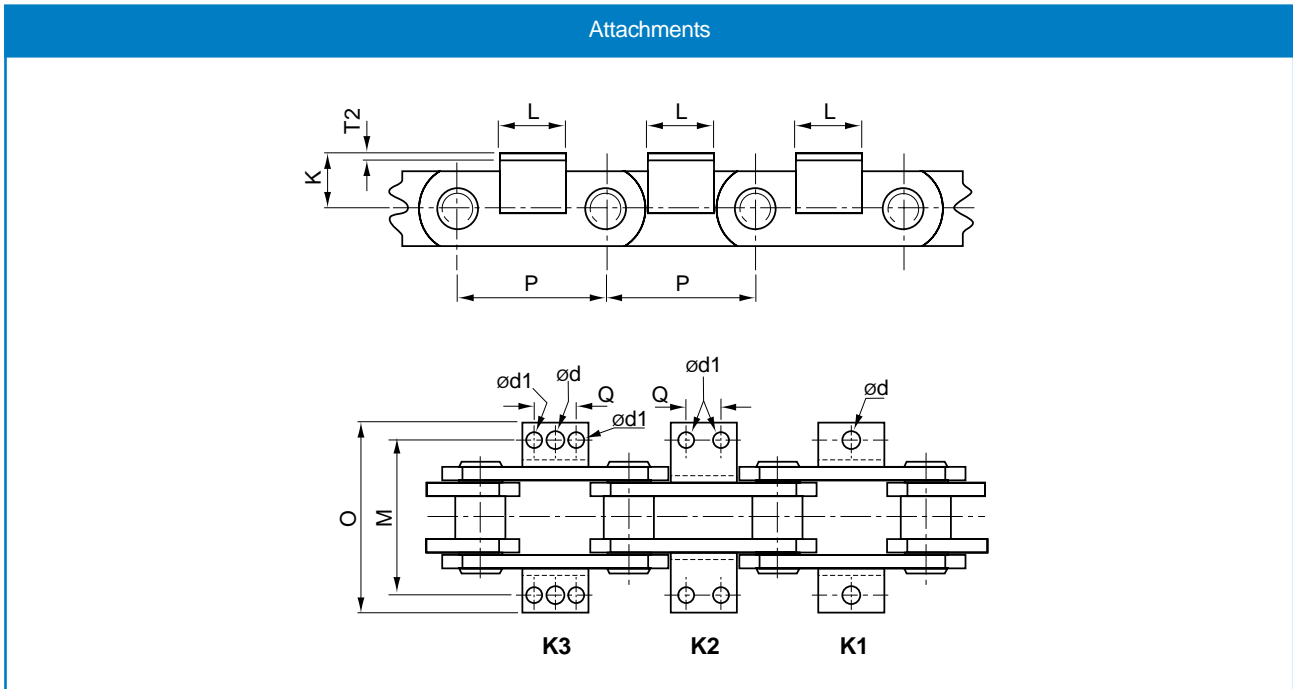
Hollow Pin Chain

Chain Number	Minimum Breaking (Load) lbf	Pitch Inches	Pitch mm	E	C2	D3	F	A1	G	I	H	T1	T2	J1	J2	Breaking Load			Weight (Type C) kg/m
																Minimum N	Average N	Up-rated N	
CC21	4 500	1.5	38.1	12.7	25.4	/	/	11	9	6.5	18	2.5	2.5	26	14.5	20 000	21 000	/	2.2
CC21	"	2.0	50.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1.7
CC21	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1.6
CC21	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1.4
CC40	6 000	2.0	50.8	15	31.75	40	2.5	17	14	10.2	25	4	4	36.4	19.5	27 000	40 000	50 000	3.6
CC40	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.2
CC40	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.0
CC40	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.8
CC40	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.6
CC40	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.4
CC40	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.3
CC60	12 000	3.0	76.2	19	47.5	60	3.5	23	19	13.2	40	5	4	45	23.5	54 000	60 000	120 000	7.0
CC60	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.4
CC60	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.0
CC60	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.3
CC60	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.9
CC60	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.6
CC60	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.4
CC150	24 000	4.0	101.6	26	66.7	82	4	33	26.9	20.2	50	7	5	58	31.5	107 000	150 000	190 000	12.8
CC150	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.3
CC150	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.0
CC150	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.5
CC150	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.0
CC150	"	9.0	228.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.6
CC150	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.2
CC300	36 000	6.0	152.4	38	88.9	114	8.5	38	32	22.5	60	10	8	83	43.5	160 000	300 000	380 000	22.3
CC300	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	20.2
CC300	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	18.8
CC300	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	16.4
CC300	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	15.2

Up-rated breaking load chain has heat treated side plates.

Conveyor Chain Attachments

Conveyor Attachments



Conveyor Attachments

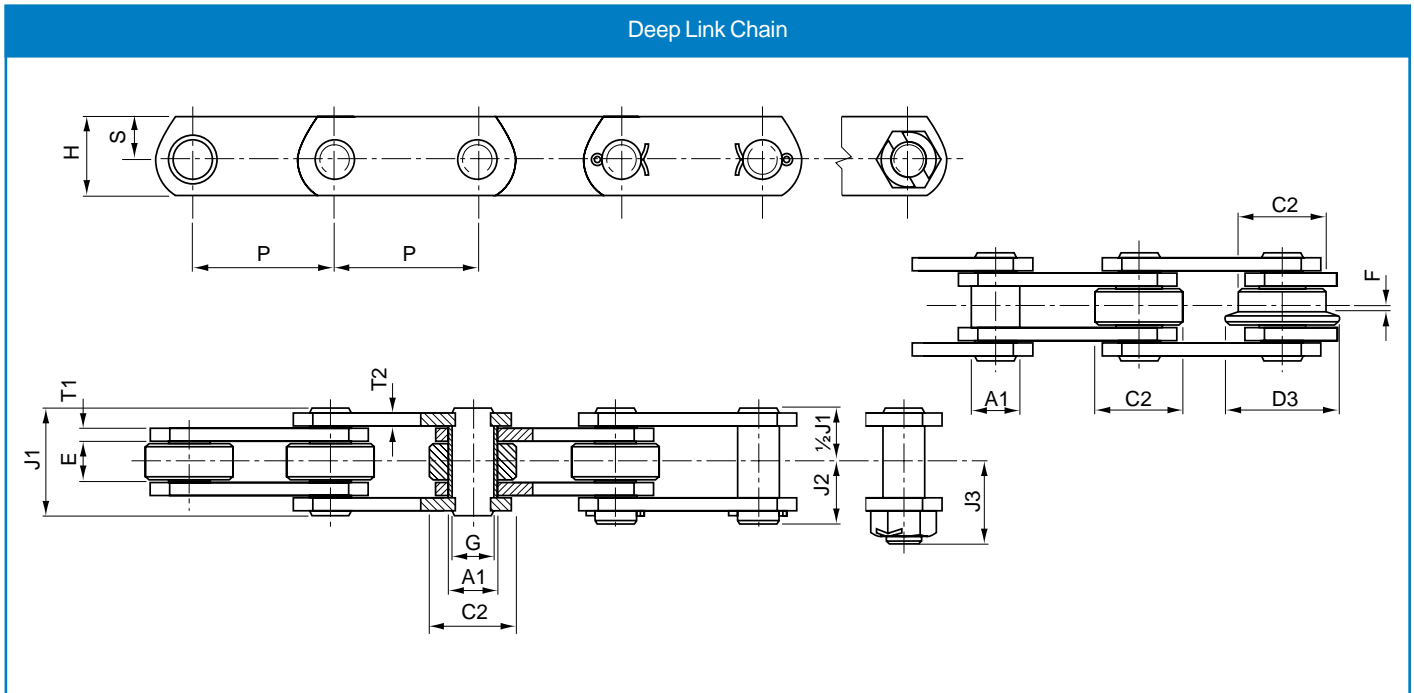
Chain Number	Minimum Breaking Load lbf	Pitch Inches	Pitch mm	Attachment Type	K	M	L	d	d1	O	Q	Average Weight (Ea) kg
CC40 / C40	6 000 / 7 500	2.0	50.8	K1	19	76.2	45.0	10.7	/	129	/	0.10
CC40 / C40	"	2.5	63.5	K1, K2	"	"	43.0	"	9.3	112	22.2	0.10
CC40 / C40	"	3.0	76.2	K3	"	"	"	"	"	136	"	0.10
CC40 / C40	"	3.5	88.9	K1, K2, K3	"	"	50.0	"	"	112	31.8	0.10
CC40 / C40	"	4.0	101.6	K3	"	"	64.0	"	"	110	"	0.10
CC40 / C40	"	5.0	127.0	K3	"	"	85.0	"	"	112	57.2	0.20
CC40 / C40	"	6.0	152.4	K3	"	"	88.0	"	"	"	"	0.20
CC100 / C100	12 000 / 15 000	3.0	76.2	K1	32	89.0	30.0	14.0	/	130	/	0.12
CC100 / C100	"	3.5	88.9	K1	"	"	"	"	/	"	/	0.12
CC100 / C100	"	4.0	101.6	K3	"	"	64.0	"	10.5	"	31.8	0.10
CC100 / C100	"	5.0	127.0	K1, K2	"	"	84.0	"	"	"	57.2	0.30
CC100 / C100	"	6.0	152.4	K3	"	"	114.5	"	"	"	"	0.32
CC100 / C100	"	7.0	177.8	K1, K2	"	"	110.0	"	"	"	80.0	0.40
CC100 / C100	"	8.0	203.2	K1, K2	"	"	"	"	"	"	"	0.40
CC160 / C160	24 000 / 30 000	4.0	101.6	K1	38	108.0	35.0	15.5	/	154	/	0.19
CC160 / C160	"	5.0	127.0	K1, K2	"	"	56.0	"	12.3	"	31.7	0.30
CC160 / C160	"	6.0	152.4	K1, K2	"	"	84.0	"	"	"	57.2	0.38
CC160 / C160	"	7.0	177.8	K1, K2	"	"	"	"	"	"	"	0.38
CC160 / C160	"	8.0	203.2	K1, K2	"	"	130.0	"	"	"	100.0	0.60
CC160 / C160	"	9.0	228.6	K1, K2	"	"	150.0	"	"	"	"	0.69
CC160 / C160	"	10.0	254.0	K1, K2	"	"	170.0	"	"	"	135.0	0.75
CC300 / C300	36 000 / 45 000	6.0	152.4	K1	51	146.0	70.0	17.0	/	200	38.1	0.50
CC300 / C300	"	7.0	177.8	K1	"	"	"	"	/	"	"	0.50
CC300 / C300	"	8.0	203.2	K1, K2	"	"	100.0	"	14.0	"	76.2	0.70
CC300 / C300	"	10.0	254.0	K1, K2	"	"	152.4	"	"	"	90.0	0.90
CC300 / C300	"	12.0	304.8	K1, K2	"	"	225.0	"	"	"	190.0	1.60
C300 / 60	60 000	6.0	152.4	K1	51	146.0	70.0	17.0	/	200	38.1	0.50
C300 / 60	"	7.0	177.8	K1	"	"	"	"	/	"	"	0.50
C300 / 60	"	8.0	203.2	K1, K2	"	"	100.0	"	14.0	"	76.2	0.70
C300 / 60	"	10.0	254.0	K1, K2	"	"	152.4	"	"	"	90.0	0.90
C300 / 60	"	12.0	304.8	K1, K2	"	"	225.0	"	"	"	190.0	1.60

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Conveyor Chain

Deep Link

BS Conveyor Chain (BS 4116 Part 4)



Deep Link Chain

Chain Number	Minimum Breaking (Load) lbf	Pitch Inches	Pitch mm	E	C2	A1	G	H	S	T1	T2	J1	J2	J3	Breaking Load			Weight (Type C) kg/m
															Minimum N	Average N	Up-rated N	
CE40	7 500	2.0	50.8	15	31.75	17	14	40	27	4	4	37	22	28.5	33 000	40 000	60 000	5.0
CE40	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.6
CE40	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.2
CE40	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.0
CE40	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.8
CE40	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.5
CE40	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.3
CE100	15 000	3.0	76.2	19	47.5	23	19	50	30	5	4	45	28	37	67 000	100 000	160 000	8.9
CE100	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.4
CE100	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.6
CE100	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.8
CE100	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.3
CE100	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.9
CE100	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.7
CE160	30 000	4.0	101.6	26	66.7	33	26.9	70	45	7	5	58	34.5	51	134 000	160 000	200 000	17.5
CE160	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	15.4
CE160	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	13.8
CE160	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	12.8
CE160	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	12.0
CE160	"	9.0	228.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.3
CE160	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	10.5
CE300	45 000	6.0	152.4	38	88.9	38	28	90	60	10	8	83	47	70	200 000	300 000	340 000	32.0
CE300	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	29.5
CE300	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	27.0
CE300	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	24.5
CE300	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	23.0
CE300/60	60 000	6.0	152.4	38	88.9	38	32	90	60	10	8	84	52	71	267 000	300 000	380 000	32.0
CE300/60	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	29.5
CE300/60	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	27.0
CE300/60	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	24.5
CE300/60	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	23.0

Up-rated breaking load chain has heat treated side plates.

SPROCKETS

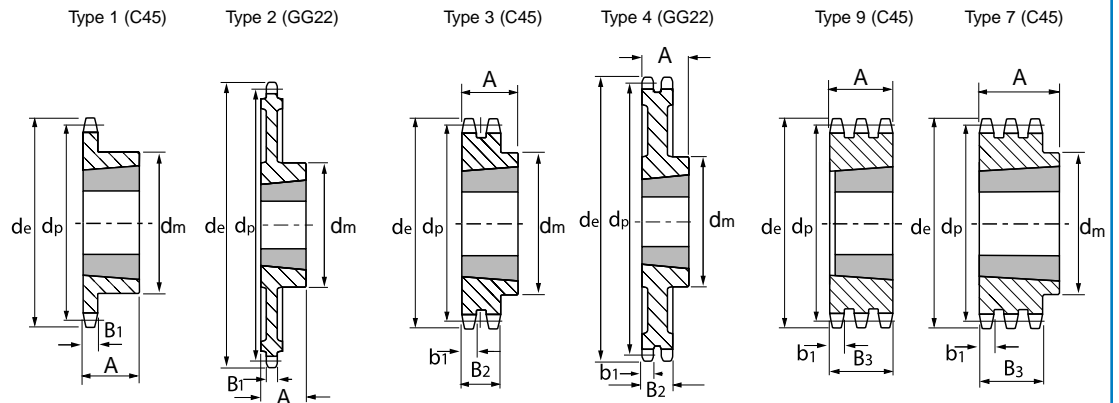
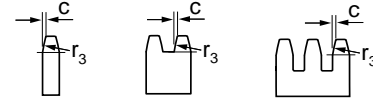


Taper Bore Sprockets

BS Taper Bore Sprockets

06B 3/8" x 7/32"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	10.0	Pitch	9.525
Chamfer c	1.0	Width Between Inner Plates	5.720
Tooth Width b_1	5.2	Roller Diameter	6.350
Tooth Width B_1	5.3		
Tooth Width B_2	15.4		
Tooth Width B_3	25.6		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex					Duplex					Triplex				
			Ref	Hub Dia d_m	Length thro' Bore A	Taper Bush	Type	Ref	Hub Dia d_m	Length thro' Bore A	Taper Bush	Type	Ref	Hub Dia d_m	Length thro' Bore A	Taper Bush	Type
17	55.3	51.83	31-17	45	22	1008	1	32-17	41	22	1008	3	33-17	-	25.6	1008	9
18	58.3	54.85	31-18	45	22	1008	1	32-18	43	22	1008	3					
19	61.3	57.87	31-19	45	22	1008	1	32-19	46	22	1008	3	33-19	-	25.6	1008	9
20	64.3	60.89	31-20	46	22	1008	1	32-20	48	22	1008	3					
21	68.0	63.91	31-21	46	22	1008	1	32-21	49	22	1008	3	33-21	-	25.6	1008	9
22	71.0	66.93	31-22	50	22	1108	1	32-22	52	22	1108	3					
23	73.5	69.95	31-23	63	25	1210	1	32-23	59	25	1210	3	33-23	-	25.6	1210	9
24	77.0	72.97	31-24	63	25	1210	1	32-24	61	25	1210	3					
25	80.0	76.02	31-25	63	25	1210	1	32-25	64	25	1210	3	33-25	-	25.6	1210	9
26	83.0	79.02	31-26	63	25	1210	1	32-26	65	25	1210	3					
27	86.0	82.02	31-27	63	25	1210	1	32-27	70	25	1210	3	33-27	-	25.6	1210	7
28	89.0	85.07	31-28	63	25	1210	1	32-28	70	25	1210	3					
30	94.7	91.12	31-30	63	25	1210	1	32-30	75	25	1210	3	33-30	79.0	38.0	1615	7
38	119.5	115.35	31-38	70	25	1210	1	32-38	80	25	1610	3	33-38	90.0	36.0	1615	7
45	140.7	136.55	31-45	70	25	1210	1	32-45	80	25	1610	3					
57	176.9	172.91	31-57	70	25	1210	2	32-57	80	25	1610	4					
76	234.9	230.49	31-76	70	25	1210	2	32-76	80	25	1610	4					
95	292.5	288.08	31-95	80	25	1210	2	32-95	90	25	1610	4					

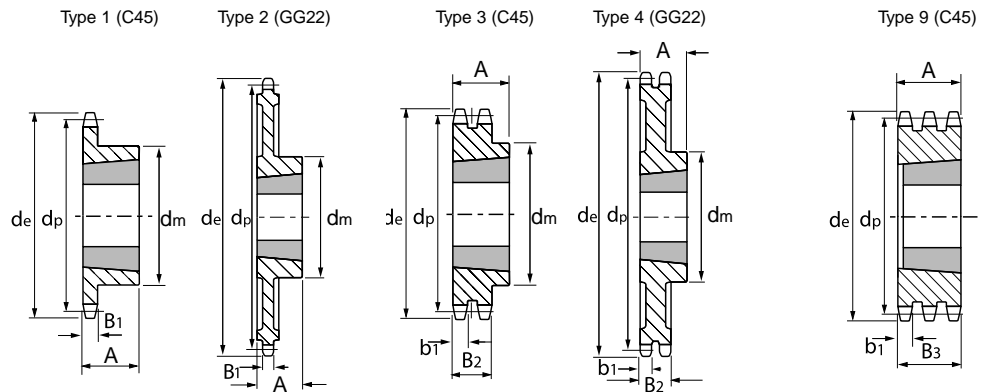
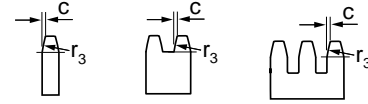
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Taper Bore Sprockets

BS Taper Bore Sprockets

08B 1/2" x 5/16"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	13.0	Pitch	12.700
Chamfer c	1.3	Width Between Inner Plates	7.750
Tooth Width b_1	7.0	Roller Diameter	8.510
Tooth Width B_1	7.2		
Tooth Width B_2	21.0		
Tooth Width B_3	34.9		



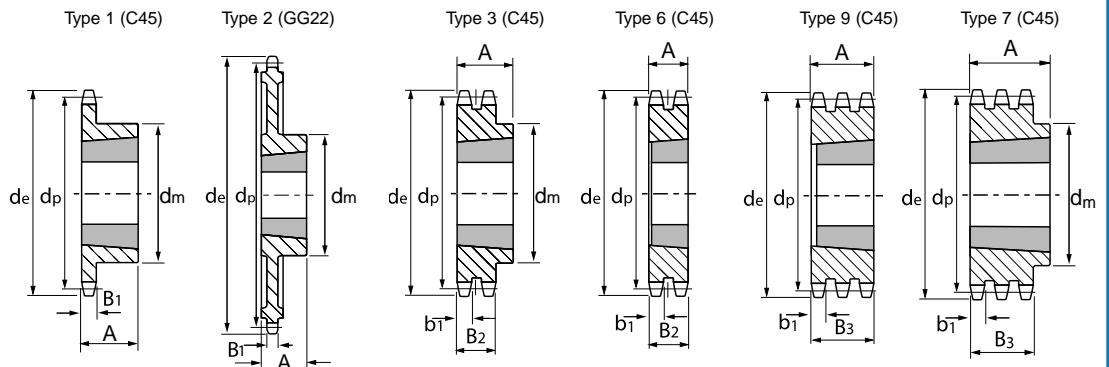
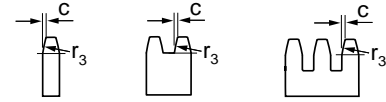
Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex					Duplex					Triplex				
			Ref	Hub Dia d_m	Length thro' Bore	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore	Taper	Type
15	65.5	61.90	41-15	45	22	1008	1	42-15	46	22	1008	3	43-15	-	34.9	1008	9
16	69.5	65.10	41-16	50	22	1108	1	42-16	50	22	1108	3					
17	73.6	69.11	41-17	60	25	1210	1	42-17	56	25	1210	3	43-17	-	34.9	1210	9
18	77.8	73.14	41-18	60	25	1210	1	42-18	60	25	1210	3					
19	81.7	77.16	41-19	63	25	1210	1	42-19	62	25	1210	3	43-19	-	34.9	1210	9
20	85.8	81.19	41-20	71	25	1610	1	42-20	66	25	1610	3					
21	89.7	85.22	41-21	71	25	1610	1	42-21	70	25	1610	3	43-21	-	34.9	1610	9
22	93.8	89.24	41-22	71	25	1610	1	42-22	76	25	1610	3					
23	98.2	93.27	41-23	76	25	1610	1	42-23	79	25	1610	3	43-23	-	34.9	1610	9
24	101.8	97.29	41-24	76	25	1610	1	42-24	84	25	1610	3					
25	105.8	101.33	41-25	76	25	1610	1	42-25	87	32	2012	3	43-25	-	34.9	2012	9
26	110.0	105.36	41-26	76	25	1610	1	42-26	87	32	2012	3					
27	114.0	109.40	41-27	76	25	1610	1	42-27	87	32	2012	3	43-27	-	34.9	2012	9
28	118.0	113.42	41-28	90	32	2012	1	42-28	87	32	2012	3					
30	126.1	121.50	41-30	90	32	2012	1	42-30	87	32	2012	3	43-30	-	34.9	2012	9
38	158.6	153.80	41-38	90	32	2012	1	42-38	100	32	2012	3	43-38	-	34.9	2012	9
45	188.0	182.07	41-45	100	32	2012	1	42-45	100	32	2012	4					
57	236.4	230.54	41-57	100	32	2012	2	42-57	100	32	2012	4					
76	313.3	307.33	41-76	100	32	2012	2	42-76	100	32	2012	4					
95	390.1	384.11	41-95	100	32	2012	2	42-95	100	32	2012	4					

Taper Bore Sprockets

BS Taper Bore Sprockets

10B 5/8" x 3/8"

SPROCKET		mm	CHAIN		mm
Tooth Radius r_3	16.0		Pitch	15.875	
Chamfer c	1.6		Width Between Inner Plates	9.650	
Tooth Width b_1	9.0		Roller Diameter	10.160	
Tooth Width B1	9.1				
Tooth Width B2	25.5				
Tooth Width B3	42.1				



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex					Duplex					Triplex					
			Ref	Hub Dia d_m	Length thro' Bore A	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore A	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore A	Taper	Type	
13	73.0	66.32	51-13	47	22	1008	1											
14	78.0	71.34	51-14	52	22	1108	1											
15	83.0	76.36	51-15	60	25	1210	1	52-15	-	25.5	1210	3	53-15	-	42.1	1210	9	
16	88.0	81.37	51-16	70	25	1610	1	52-16	-	25.5	1610	3						
17	93.0	86.36	51-17	71	25	1610	1	52-17	-	25.5	1610	3	53-17	-	42.1	1210	9	
18	98.3	91.42	51-18	75	25	1610	1	52-18	-	25.5	1610	3						
19	103.3	96.45	51-19	75	25	1610	1	52-19	-	25.5	1610	3	53-19	-	42.1	1615	9	
20	108.4	101.49	51-20	75	25	1610	1	52-20	-	25.5	1610	3						
21	113.4	106.52	51-21	76	25	1610	1	52-21	-	25.5	1610	3	53-21	-	42.1	1615	9	
22	118.0	111.55	51-22	76	25	1610	1	52-22	-	25.5	1610	3						
23	123.4	116.58	51-23	76	25	1610	1	52-23	-	25.5	1610	3	53-23	-	42.1	2012	9	
24	128.3	121.62	51-24	90	25	1610	1	52-24	90	32.0	2012	6						
25	134.0	126.66	51-25	90	32	2012	1	52-25	90	32.0	2012	6	53-25	105	45.0	2517	7	
26	139.0	131.70	51-26	90	32	2012	1	52-26	90	32.0	2012	6						
27	144.0	136.75	51-27	90	32	2012	1	52-27	90	32.0	2012	6	53-27	110	45.0	2517	7	
28	148.7	141.78	51-28	90	32	2012	1	52-28	90	32.0	2012	6						
30	158.8	151.87	51-30	90	32	2012	1	52-30	90	32.0	2012	6	53-30	120	45.0	2517	7	
38	199.2	192.24	51-38	100	32	2012	1	52-38	108	45.0	2517	6						
45	235.0	227.58	51-45	100	32	2042	2											
57	296.0	288.18	51-57	100	32	2012	2											
76	392.1	384.16	51-76	100	32	2012	2											
95	488.5	480.14	51-95	110	45	2517	2											

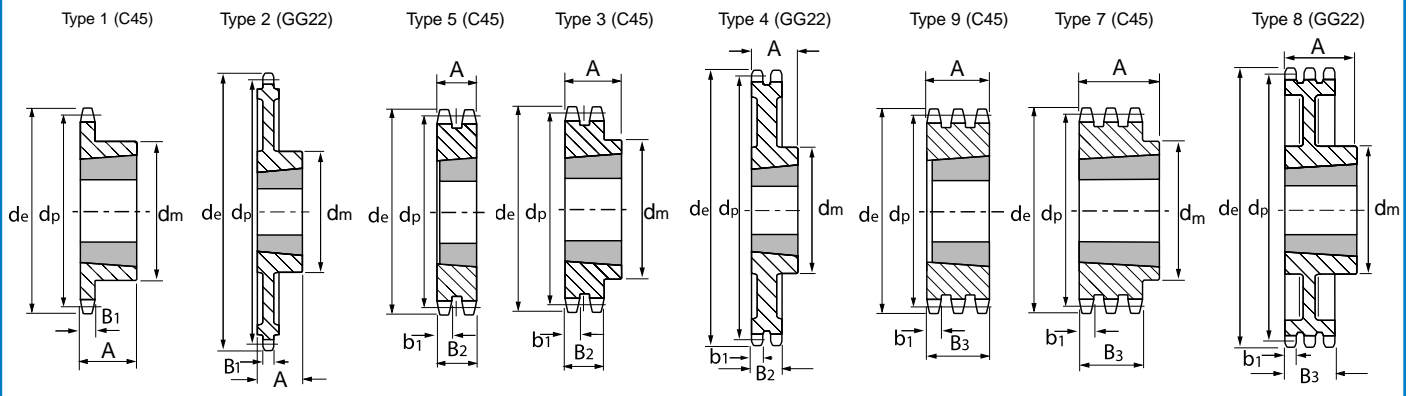
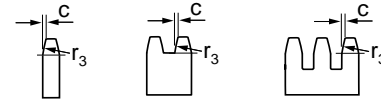
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Taper Bore Sprockets

BS Taper Bore Sprockets

12B 3/4" x 7/16"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	19.0	Pitch	19.050
Chamfer c	2.0	Width Between Inner Plates	11.680
Tooth Width b_1	10.8	Roller Diameter	12.070
Tooth Width B_1	11.1		
Tooth Width B_2	30.3		
Tooth Width B_3	49.8		



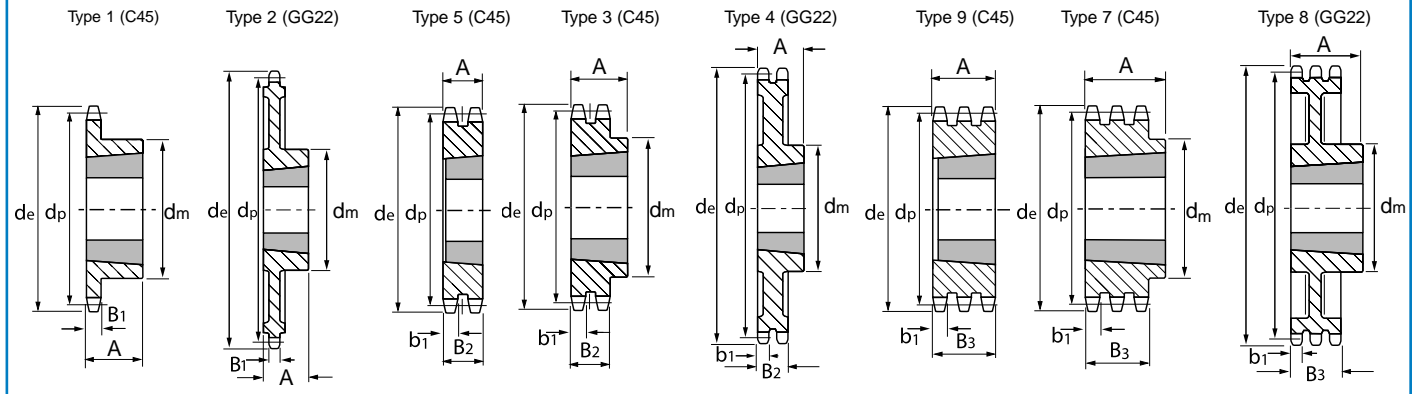
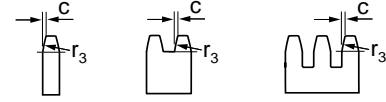
Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex					Duplex					Triplex					
			Ref	Hub Dia d_m	Length thro' Bore	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore	Taper	Type	
13	87.5	79.59	61-13	60	25	1210	1											
14	93.6	85.61	61-14	70	25	1610	1											
15	99.8	91.63	61-15	70	25	1610	1	62-15	-	30.3	1610	5	63-15	-	49.8	1615	9	
16	105.5	97.65	61-16	75	25	1610	1	62-16	-	30.3	1610	5						
17	111.5	103.67	61-17	76	25	1610	1	62-17	-	30.3	1610	5	63-17	-	49.8	1615	9	
18	118.0	109.71	61-18	90	32	2012	1	62-18	90.0	32.0	2012	3						
19	124.2	115.75	61-19	90	32	2012	1	62-19	90.0	32.0	2012	3	63-19	-	49.8	2012	9	
20	129.7	121.78	61-20	90	32	2012	1	62-20	108.0	45.0	2517	3						
21	136.0	127.82	61-21	102	45	2517	1	62-21	108.0	45.0	2517	3	63-21	-	49.8	2517	9	
22	141.8	133.86	61-22	102	45	2517	1	62-22	108.0	45.0	2517	3						
23	149.0	139.90	61-23	108	45	2517	1	62-23	108.0	45.0	2517	3	63-23	-	49.8	2517	9	
24	153.9	145.94	61-24	108	46	2517	1	62-24	108.0	45.0	2517	3						
25	160.0	152.00	61-25	108	45	2517	1	62-25	108.0	45.0	2517	3	63-25	-	49.8	2517	9	
26	165.9	158.04	61-26	108	45	2517	1	62-26	108.0	45.0	2517	3						
27	172.3	164.00	61-27	108	45	2517	1	62-27	108.0	45.0	2517	3	63-27	140.0	51.0	3020	7	
28	178.0	170.13	61-28	108	45	2517	1	62-28	108.0	45.0	2517	3						
30	190.5	182.25	61-30	108	45	2517	1	62-30	108.0	45.0	2517	3	63-30	140.0	51.0	3020	7	
38	239.0	230.69	61-38	108	45	2517	1	62-38	140.0	51.0	3020	3	63-38	140.0	51.0	3020	7	
45	282.5	273.10	61-45	108	45	2517	2	62-45	140.0	51.0	3020	4	63-45	140.0	51.0	3020	8	
57	355.4	345.81	61-57	108	45	2517	2	62-57	140.0	51.0	3020	4	63-57	140.0	51.0	3020	8	
76	469.9	460.99	61-76	108	45	2517	2	62-76	140.0	51.0	3020	4	63-76	140.0	51.0	3020	8	
95	585.1	576.17	61-95	108	45	2517	2	62-95	140.0	51.0	3020	4	63-95	140.0	76.0	3030	8	

Taper Bore Sprockets

BS Taper Bore Sprockets

16B 1" x 17.02mm

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	26.0	Pitch	25.400
Chamfer c	2.5	Width Between Inner Plates	17.020
Tooth Width b_1	15.8	Holler Diameter	15.880
Tooth Width B_1	16.2		
Tooth Width B_2	47.7		
Tooth Width B_3	79.6		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex					Duplex					Triplex					
			Ref	Hub Dia d_m	Length thro' Bore A	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore A	Taper	Type	Ref	Hub Dia d_m	Length thro' Bore A	Taper	Type	
13	117.0	106.12	81-13	73	38	1615	1											
14	125.0	114.15	81-14	76	38	1615	1											
15	133.0	122.17	81-15	76	38	1615	1	82-15	-	47.7	2012	5						
16	141.0	130.20	81-16	90	32	2012	1	82-16	-	47.7	2517	5						
17	149.0	138.22	81-17	90	32	2012	1	82-17	-	47.7	2517	5	83-17	-	79.6	2517	9	
18	157.0	146.28	81-18	108	45	2517	1	82-18	-	47.7	2517	5						
19	165.2	154.33	81-19	108	45	2517	1	82-19	-	47.7	2517	5	83-19	-	79.6	3030	9	
20	173.2	162.38	81-20	108	45	2517	1	82-20	-	47.7	2517	5						
21	181.2	170.43	81-21	110	45	2517	1	82-21	140.0	51.0	3020	3	83-21	-	79.6	3030	9	
22	189.3	178.48	81-22	110	45	2517	1	82-22	140.0	51.0	3020	3						
23	197.5	186.53	81-23	110	45	2517	1	82-23	140.0	51.0	3020	3	83-23	159.0	89.0	3535	7	
24	205.5	194.59	81-24	110	45	2517	1	82-24	140.0	51.0	3020	3						
25	213.5	202.66	81-25	110	45	2517	1	82-25	140.0	51.0	3020	3	83-25	175.0	89.0	3535	7	
26	221.6	210.72	81-26	110	45	2617	1	82-26	140.0	51.0	3020	3						
27	229.6	218.79	81-27	110	45	2617	1	82-27	140.0	51.0	3020	3	83-27	175.0	89.0	3535	7	
28	237.7	226.85	81-28	110	45	2517	1	82-28	140.0	51.0	3020	3						
30	254.0	243.00	81-30	140	51	3020	1	82-30	140.0	76.0	3030	3	83-30	175.0	89.0	3535	7	
38	320.7	307.59	81-38	140	51	3020	2	82-38	140.0	76.0	3030	4	83-38	175.0	89.0	3535	8	
45	377.1	364.13	81-45	140	51	3020	2	82-45	140.0	76.0	3030	4	83-45	215.0	102.0	4040	8	
57	474.0	461.07	81-57	140	51	3020	2	82-57	175.0	89.0	3535	4	83-57	215.0	102.0	4040	8	
76	627.0	614.65	81-76	140	51	3020	2	82-76	175.0	89.0	3535	4	83-76	215.0	102.0	4040	8	
95	781.1	768.22	81-95	140	51	3020	2	82-95	215.0	102.0	4040	4	83-95	215.0	102.0	4040	8	

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Taper Bore Sprockets

BS Taper Bore Sprockets

20B 1.1/4" x 3/4"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	32.0	Pitch	31.750
Chamfer c	3.5	Width Between Inner Plates	19.560
Tooth Width b1	18.2	Roller Diameter	19.050
Tooth Width B1	18.5		
Tooth Width B2	54.6		
Tooth Width B3	91.0		

Type 1 (C45)

Type 2 (GG22)

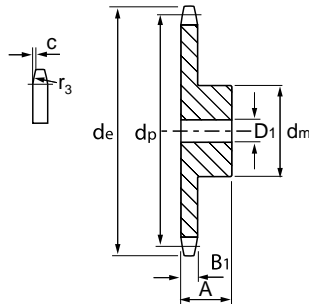
Teeth	Outer Dia d_e	Pitch Dia d_p	Ref	Simplex			
				Hub Dia d_m	Length thro' Bore A	Taper Bush	Type
13	147.8	132.65	101-13	90	32	2012	1
14	157.8	142.68	101-14	108	44	2517	1
15	167.9	152.72	101-15	108	44	2517	1
16	177.9	162.75	101-16	108	44	2517	1
17	187.9	172.78	101-17	108	44	2517	1
18	198.0	182.85	101-18	108	44	2517	1
19	208.1	192.91	101-19	110	44	2517	1
20	218.1	202.98	101-20	110	44	2517	1
21	228.2	213.04	101-21	110	44	2517	1
22	238.3	223.11	101-22	110	44	2517	1
23	248.3	233.17	101-23	110	44	2517	1
24	258.4	243.23	101-24	110	44	2517	1
25	268.5	253.33	101-25	110	44	2517	1
26	278.6	263.40	101-26	110	51	3020	1
27	288.6	273.80	101-27	150	51	3020	1
28	298.7	283.56	101-28	150	51	3020	1
30	318.9	303.75	101-30	150	51	3020	1
38	399.6	384.49	101-38	160	51	3020	2
45	470.3	455.17	101-45	160	51	3020	2
57	591.5	576.36	101-57	160	51	3020	2
76	783.5	768.32	101-76	160	51	3020	2

Pilot Bore Sprockets

BS Pilot Bore Sprockets

03B 5 x 2.5 mm

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	5.0	Pitch	5.000
Chamfer c	0.6	Width Between Inner Plates	2.500
Tooth Width B1	2.3	Roller Diameter	3.200



Type 1 (C45)

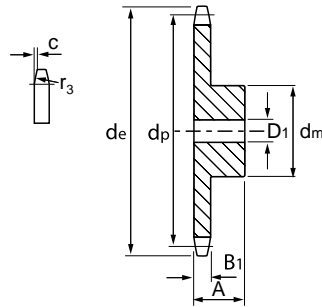
Teeth	Outer Dia d_e	Pitch Dia d_p	Hub Dia d_m	Simplex Length thro' Bore A	Stock Bore D_1	Type
8	15.2	13.06	7	10	4	1
9	16.8	14.62	8	10	5	1
10	18.3	16.18	9	10	5	1
11	19.9	17.75	11	10	6	1
12	21.5	19.32	12	10	6	1
13	23.0	20.89	14	10	6	1
14	24.6	22.47	15	10	6	1
15	26.2	24.04	16	10	6	1
16	27.8	25.63	18	13	8	1
17	29.4	27.20	18	13	8	1
18	30.9	28.79	18	13	8	1
19	32.5	30.38	18	13	8	1
20	34.1	31.96	18	13	8	1
21	35.7	33.54	20	13	8	1
22	37.3	35.13	20	13	8	1
23	38.9	36.72	20	13	8	1
24	40.5	38.30	20	13	8	1
25	42.0	39.89	20	13	6	1
26	43.6	41.48	25	15	8	1
27	45.2	43.07	25	15	8	1
28	46.8	44.65	25	15	8	1
29	48.4	46.25	25	15	8	1
30	50.0	47.83	25	15	8	1
31	51.6	49.42	30	15	8	1
32	53.2	51.01	30	15	8	1
33	54.8	52.60	30	15	8	1
34	56.3	54.19	30	15	8	1
35	57.9	55.78	30	15	8	1
36	59.5	57.37	30	15	8	1
37	61.1	58.96	30	15	8	1
38	62.7	60.54	30	15	8	1
39	64.3	62.13	30	15	8	1
40	65.9	63.73	30	15	8	1

Pilot Bore Sprockets

BS Pilot Bore Sprockets

04B 5 x 2.8 mm

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	6.0	Pitch	6.000
Chamfer c	0.7	Width Between Inner Plates	2.800
Tooth Width B1	2.6	Roller Diameter	4.000



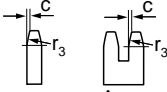
Type 1 (C45)

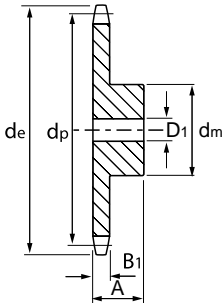
Teeth	Outer Dia d_e	Pitch Dia d_p	Hub Dia d_m	Simplex Length thro' Bore A	Stock Bore D_1	Type
8	18.0	15.67	9.8	10	5	1
9	19.9	17.54	11.5	10	5	1
10	21.7	19.42	13.0	10	6	1
11	23.6	21.30	14.0	10	6	1
12	25.4	23.18	16.0	10	6	1
13	27.3	25.05	18.0	10	6	1
14	29.2	26.96	20.0	10	6	1
15	31.1	28.86	20.0	10	6	1
16	33.0	30.76	20.0	13	8	1
17	35.0	32.65	20.0	13	8	1
18	36.9	34.55	20.0	13	6	1
19	38.8	36.44	20.0	13	8	1
20	40.7	38.34	20.0	13	8	1
21	42.6	40.25	25.0	13	8	1
22	44.5	42.16	25.0	13	8	1
23	46.4	44.06	25.0	13	8	1
24	48.3	45.96	25.0	13	8	1
25	50.2	47.87	25.0	13	8	1
26	52.1	49.77	30.0	15	8	1
27	54.0	51.67	30.0	15	8	1
28	55.9	53.58	30.0	15	8	1
29	57.8	55.50	30.0	15	8	1
30	59.8	57.42	30.0	15	8	1
31	61.7	59.31	30.0	15	10	1
32	63.6	61.21	30.0	15	10	1
33	65.5	63.11	30.0	15	10	1
34	67.4	65.02	30.0	15	10	1
35	69.3	66.93	30.0	15	10	1
36	71.2	68.84	30.0	15	10	1
37	73.1	70.75	30.0	15	10	1
38	75.0	72.66	30.0	15	10	1
39	75.9	74.56	30.0	15	10	1
40	78.9	76.47	30.0	15	10	1
45	88.5	86.01	40.0	18	12	1
50	98.0	95.55	50.0	20	12	1
57	111.4	108.93	50.0	20	12	1

Pilot Bore Sprockets

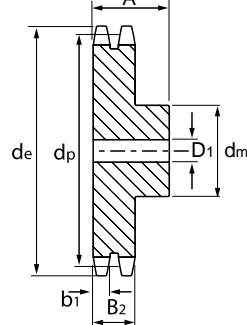
BS Pilot Bore Sprockets

05B 8 x 3 mm

SPROCKET	mm	CHAIN	mm	
Tooth Radius r_3	8.00	Pitch	8.000	
Chamfer c	1.0	Width Between Inner Plates	3.000	
Tooth Width b_1	2.7	Roller Diameter	5.000	
Tooth Width B1	2.8			
Tooth Width B2	8.3			



Type 1 (C45)



Type 1 (C45)

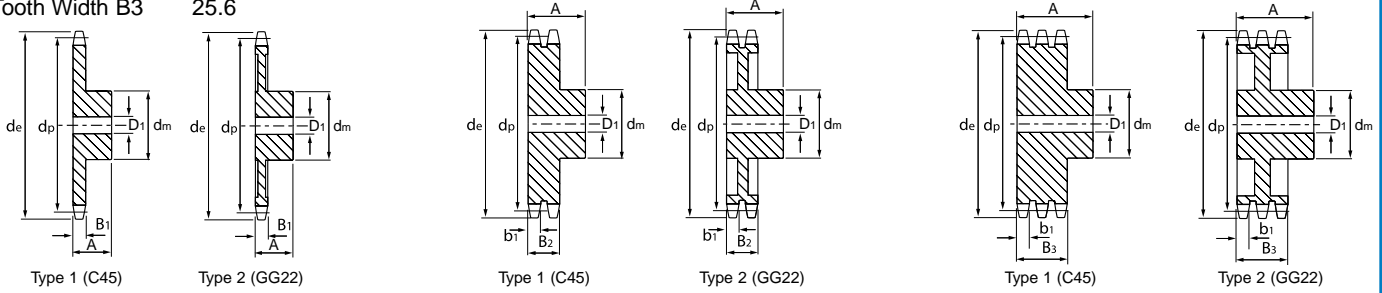
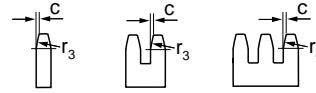
Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	24.0	20.90	13	12	6	12	18	6	1
9	26.6	23.39	15	12	6	15	18	6	1
10	29.2	25.89	17	12	6	17	18	8	1
11	31.7	28.39	18	13	7	19	18	8	1
12	34.2	30.91	20	13	7	21	18	8	1
13	36.7	33.42	23	13	7	24	18	8	1
14	39.2	35.95	25	13	7	26	18	8	1
15	41.7	38.48	28	13	7	29	18	18	1
16	44.3	41.01	30	14	8	32	20	10	1
17	46.8	43.53	30	14	8	34	20	10	1
18	49.3	46.07	30	14	8	37	20	10	1
19	51.9	48.61	30	14	8	39	20	10	1
20	54.4	51.14	30	14	8	40	20	10	1
21	67.0	53.67	35	14	8	40	20	10	1
22	59.5	56.21	35	14	8	40	20	10	1
23	62.0	58.75	36	14	8	40	20	10	1
24	64.6	61.29	35	14	8	40	20	10	1
25	67.5	63.83	35	14	8	40	20	10	1
26	69.5	66.37	40	16	10	50	22	12	1
27	72.2	68.91	40	16	10	50	22	12	1
28	74.8	71.45	40	16	10	50	22	12	1
29	77.3	73.99	40	16	10	50	22	12	1
30	79.8	76.53	40	16	10	50	22	12	1
31	82.4	79.08	40	16	12	60	22	12	1
32	84.9	81.61	40	16	12	60	22	12	1
33	87.5	84.16	40	16	12	60	22	12	1
34	90.0	86.70	40	16	12	60	22	12	1
35	92.5	89.24	40	16	12	60	22	12	1
36	95.0	91.79	40	16	12	60	22	12	1
37	97.6	94.33	40	16	12	60	22	12	1
38	100.2	96.88	40	16	12	60	22	12	1
39	102.7	99.42	40	16	12	60	22	12	1
40	105.2	101.97	40	16	12	60	22	12	1
45	118.0	114.69	60	20	12	-	-	-	1
50	130.7	127.41	60	20	12	-	-	-	1
57	148.6	145.22	80	20	14	-	-	-	1

Pilot Bore Sprockets

BS Pilot Bore Sprockets

06B 3/18" x 7/32"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	10.0	Pitch	9.525
Chamfer c	1.0	Width Between Inner Plates	5.720
Tooth Width b_1	5.2	Roller Diameter	6.350
Tooth Width B_1	5.3		
Tooth Width B_2	15.4		
Tooth Width B_3	25.6		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	28.0	24.89	15	22	8	15	22	8	15	32	8	1
9	31.0	27.85	18	22	8	18	22	8	18	32	8	1
10	34.0	30.82	20	22	8	20	22	8	20	32	10	1
11	37.0	33.80	22	25	8	22	25	10	22	35	12	1
12	40.0	36.80	25	25	8	25	25	10	25	35	12	1
13	43.0	39.80	28	25	10	28	25	10	28	35	12	1
14	46.3	42.80	31	25	10	31	25	10	31	35	12	1
15	49.3	45.81	34	25	10	34	25	10	34	35	12	1
16	52.3	48.82	37	28	10	37	30	12	37	35	12	1
17	55.3	51.93	40	28	10	40	30	12	40	35	12	1
18	58.3	54.85	43	28	10	43	30	12	43	35	12	1
19	61.3	57.87	45	28	10	46	30	12	46	35	12	1
20	64.3	60.89	46	28	10	49	30	12	49	35	12	1
21	68.0	63.91	48	28	12	52	30	16	52	40	16	1
22	71.0	66.93	50	28	12	55	30	16	55	40	16	1
23	73.5	69.95	52	28	12	58	30	16	58	40	16	1
24	77.0	72.97	54	28	12	61	30	16	61	40	16	1
25	80.0	76.00	57	28	12	64	30	16	64	40	18	1
26	83.0	79.02	60	28	12	67	30	16	67	40	16	1
27	86.0	82.04	80	28	12	70	30	16	70	40	16	1
28	89.0	85.07	60	28	12	73	30	16	73	40	16	1
29	92.0	88.09	60	28	12	76	30	16	76	40	16	1
30	94.7	91.12	60	28	12	79	30	16	79	40	16	1
31	98.3	94.15	65	30	14	80	30	16	80	40	16	1
32	101.3	97.17	65	30	14	80	30	16	80	40	16	1
33	104.3	100.20	65	30	14	80	30	16	80	40	16	1
34	107.3	103.23	65	30	14	90	30	16	85	40	16	1
35	110.4	106.26	65	30	14	80	30	16	85	40	16	1
36	113.4	109.29	70	30	14	90	30	16	90	40	16	1
37	116.4	112.32	70	30	14	90	30	16	90	40	16	1
38	119.5	115.34	70	30	14	90	30	16	90	40	16	1
39	122.5	118.37	70	30	14	90	30	16	90	40	16	1
40	125.5	121.40	70	30	14	90	30	16	90	40	16	1
38	119.5	115.34	70	32	20	80	40	20	90	56	24	2
45	140.7	136.54	70	32	20	80	40	20	90	56	24	2
57	176.9	172.91	70	32	20	80	40	20	90	56	24	2
76	234.9	230.49	70	32	20	80	40	20	100	56	24	2
95	292.5	288.08	80	40	20	90	45	20	100	56	24	2
114	349.6	345.68	80	40	20	95	45	20	100	56	24	2

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Pilot Bore Sprockets

BS Pilot Bore Sprockets

081 1/2" x 1/8"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	13.0	Pitch	12.700
Chamfer c	1.0	Width Between Inner Plates	3.300
Tooth Width B1	3.0	Roller Diameter	7.750

Type 1 (C45)

Teeth	Outer Dia d_e	Pitch Dia d_p	Hub Dia d_m	Simplex		Type
				Length thro' Bore A	Stock Bore D1	
8	37.2	33.18	21	14	8	1
9	41.5	37.13	25	14	8	1
10	46.2	41.10	28	14	8	1
11	49.6	45.07	31	16	8	1
12	53.9	49.07	35	16	8	1
13	58.4	53.06	39	16	8	1
14	62.8	57.07	43	16	8	1
15	66.8	61.09	47	16	8	1
16	70.9	65.10	50	18	10	1
17	74.9	69.11	50	18	10	1
18	78.9	73.14	50	18	10	1
19	82.9	77.16	50	18	10	1
20	86.9	81.19	50	18	10	1
21	91.0	85.22	60	20	12	1
22	95.0	89.24	60	20	12	1
23	99.0	93.27	60	20	12	1
24	103.0	97.29	60	20	12	1
25	107.1	101.33	60	20	12	1
26	111.2	105.36	70	20	16	1
27	115.4	109.40	70	20	16	1
28	119.4	113.42	70	20	16	1
29	123.4	117.46	70	20	16	1
30	127.5	121.50	70	20	16	1
31	131.5	125.54	70	20	16	1
32	135.5	129.56	70	20	16	1
33	139.6	133.60	70	20	16	1
34	143.6	137.64	70	20	16	1
35	147.6	141.68	70	20	16	1
36	151.7	145.72	70	25	16	1
37	155.7	149.76	70	25	16	1
38	159.8	153.80	70	25	16	1
39	163.8	157.83	70	25	16	1
40	167.8	161.87	70	25	16	1

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Pilot Bore Sprockets

BS Pilot Bore Sprockets

083 / 084 1/2" x 3/16"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	13.0	Pitch	12.700
Chamfer c	1.3	Width Between Inner Plates	4.880
Tooth Width B1	4.5	Roller Diameter	7.750

Type 1 (C45)

Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	38.5	33.18	21	14	8	1
9	41.5	37.13	25	14	8	1
10	46.2	41.10	28	14	8	1
11	49.6	45.07	31	16	8	1
12	53.9	49.07	35	16	8	1
13	58.4	53.06	39	16	8	1
14	62.8	57.07	43	16	8	1
15	66.8	61.09	47	16	8	1
16	70.9	65.10	50	18	10	1
17	74.9	69.10	50	18	10	1
18	78.9	73.14	50	18	10	1
19	82.9	77.16	50	18	10	1
20	86.9	81.19	50	18	10	1
21	91.0	85.22	60	20	12	1
22	95.0	89.24	60	20	12	1
23	99.0	93.27	60	20	12	1
24	103.0	97.29	60	20	12	1
25	107.1	101.33	60	20	12	1
26	111.2	105.36	70	20	16	1
27	115.4	109.40	70	20	16	1
28	119.4	113.42	70	20	16	1
29	123.4	117.46	70	20	16	1
30	127.5	121.50	70	20	16	1
31	131.5	125.54	70	20	16	1
32	135.5	129.56	70	20	16	1
33	139.6	133.60	70	20	16	1
34	143.6	137.64	70	20	16	1
35	147.6	141.68	70	20	16	1
36	151.7	145.72	70	25	16	1
37	155.7	149.76	70	25	16	1
38	159.8	153.80	70	25	16	1
39	163.8	157.83	70	25	16	1
40	167.8	161.87	70	25	16	1

Pilot Bore Sprockets

BS Pilot Bore Sprockets

085 1/2" x 1/4"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	13.0	Pitch	12.700
Chamfer c	1.3	Width Between Inner Plates	6.400
Tooth Width B_i	5.9	Roller Diameter	7.750

Type 1 (C45)

Teeth	Outer Dia d_e	Pitch Dia d_p	Hub Dia d_m	Simplex	Stock Bore D_1	Type
				Length thro' Bore A		
8	38.5	33.18	20	25	10	1
9	41.5	37.13	24	25	10	1
10	46.2	41.10	26	25	10	1
11	49.6	45.07	29	25	10	1
12	53.9	49.07	33	28	10	1
13	58.4	53.06	37	28	10	1
14	62.8	57.07	41	28	10	1
15	66.8	61.09	45	28	10	1
16	70.9	65.10	50	28	12	1
17	74.9	69.11	52	28	12	1
18	78.9	73.14	56	28	12	1
19	82.9	77.16	60	28	12	1
20	86.9	81.19	64	28	12	1
21	91.0	85.22	68	28	14	1
22	96.0	89.24	70	28	14	1
23	99.0	93.27	70	28	14	1
24	103.0	97.29	70	28	14	1
25	107.1	101.33	70	28	14	1
26	111.2	105.36	70	30	16	1
27	115.4	109.40	70	30	16	1
28	119.4	113.42	70	30	16	1
29	123.4	117.46	80	30	16	1
30	127.5	121.50	80	30	16	1
31	131.5	125.54	90	30	16	1
32	135.5	129.56	90	30	16	1
33	139.6	133.60	90	30	16	1
34	143.6	137.64	90	30	16	1
35	147.6	141.68	90	30	16	1
36	151.7	145.72	90	35	16	1
37	155.7	149.76	90	35	16	1
38	159.8	153.80	90	35	16	1
39	163.8	157.83	90	35	16	1
40	167.8	161.87	90	35	16	1

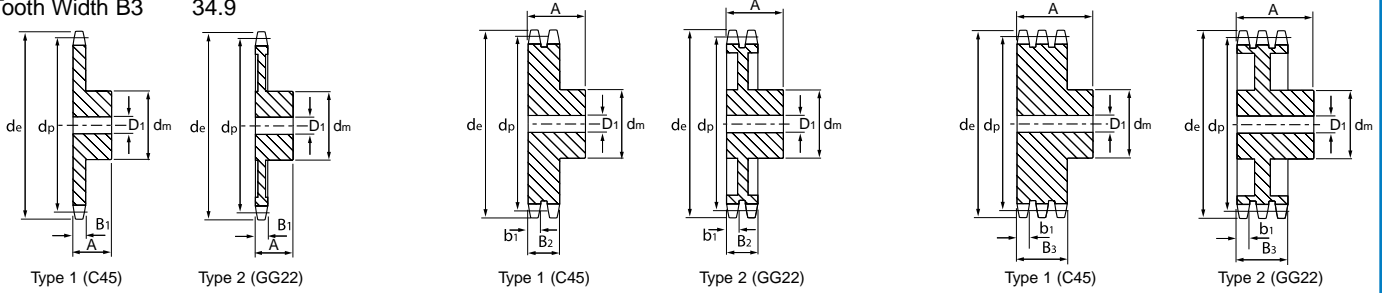
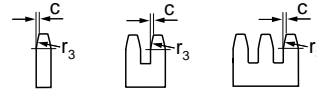
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

08B 1/2" x 5/16"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	13.0	Pitch	12.700
Chamfer c	1.3	Width Between Inner Plates	7.750
Tooth Width b_1	7.0	Roller Diameter	8.510
Tooth Width B_1	7.2		
Tooth Width B_2	21.0		
Tooth Width B_3	34.9		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	37.2	33.18	20	25	10	20	32	10	20	46	10	1
9	41.0	37.13	24	25	10	24	32	10	24	46	12	1
10	45.2	41.10	26	25	10	28	32	10	28	46	12	1
11	48.7	45.07	29	25	10	32	35	12	32	50	16	1
12	53.0	49.07	33	28	10	35	35	12	35	50	16	1
13	57.4	53.06	37	28	10	38	35	12	38	50	16	1
14	61.8	57.07	41	28	10	42	35	12	42	50	16	1
15	65.5	61.09	45	28	10	46	35	12	46	50	16	1
16	69.5	65.10	50	28	12	50	38	14	50	50	16	1
17	73.6	69.11	52	28	12	54	38	14	54	50	16	1
18	77.8	73.14	56	28	12	58	38	14	58	50	16	1
19	81.7	77.16	60	28	12	62	38	14	62	50	16	1
20	85.8	81.19	64	28	12	66	38	14	66	50	16	1
21	89.7	85.22	68	28	14	70	40	16	70	55	20	1
22	93.8	89.24	70	28	14	70	40	16	70	55	20	1
23	98.2	93.27	70	28	14	70	40	16	70	55	20	1
24	101.8	97.29	70	28	14	75	40	16	75	55	20	1
25	105.8	101.33	70	28	14	80	40	16	80	55	20	1
26	110.0	105.36	70	30	18	85	40	20	85	55	20	1
27	114.0	109.40	70	30	16	85	40	20	85	55	20	1
28	118.0	113.42	70	30	16	90	40	20	90	55	20	1
29	122.0	117.46	80	30	16	95	40	20	95	55	20	1
30	126.1	121.50	80	30	16	100	40	20	100	55	20	1
31	130.2	125.54	90	30	16	100	40	20	110	55	20	1
32	134.3	129.56	90	30	16	100	40	20	110	55	20	1
33	138.4	133.60	90	30	16	100	40	20	110	55	20	1
34	142.6	137.64	90	30	16	100	40	20	110	55	20	1
35	146.7	141.68	90	30	16	100	40	20	110	55	20	1
36	151.0	145.72	90	35	20	100	40	20	120	55	25	1
37	154.6	149.76	90	35	20	100	40	20	120	55	25	1
38	158.6	153.80	90	35	20	100	40	20	120	55	25	1
39	162.7	157.83	90	35	20	100	40	20	120	55	25	1
40	166.8	161.87	90	35	20	100	40	20	120	55	25	1
38	158.6	153.80	70	40	24	90	50	24	100	60	24	2
45	188.0	182.07	70	40	24	90	50	24	100	60	24	2
57	236.4	230.54	70	40	24	90	50	24	100	60	24	2
76	313.3	307.33	80	40	24	100	56	24	100	60	24	2
95	390.1	384.11	80	45	24	100	56	24	120	67	24	2
114	466.9	460.90	80	45	25	100	63	25	120	67	25	2

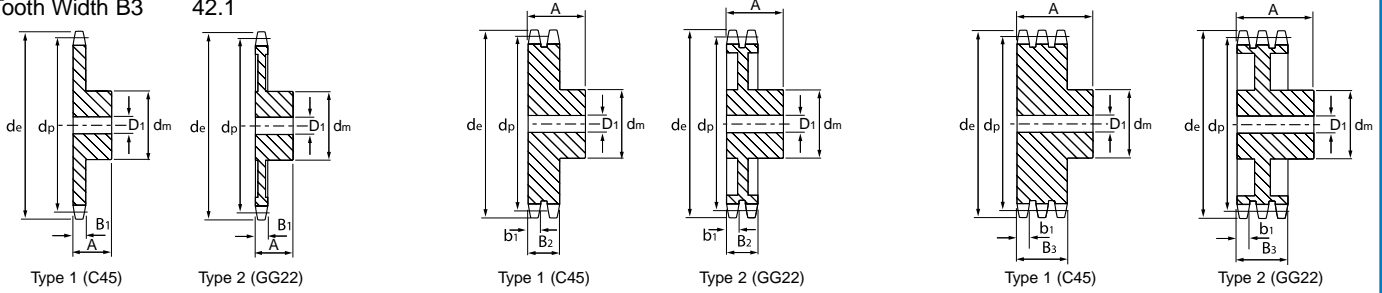
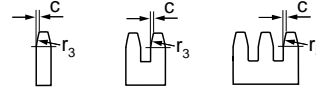
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

10B 5/8" x 3/8"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	16.0	Pitch	15.875
Chamfer c	1.6	Width Between Inner Plates	9.650
Tooth Width b_1	9.0	Roller Diameter	10.160
Tooth Width B_1	9.1		
Tooth Width B_2	25.5		
Tooth Width B_3	42.1		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	47.0	41.48	25	25	10	25	40	12	25	55	12	1
9	52.6	46.42	30	25	10	30	40	12	30	55	12	1
10	57.5	51.37	35	25	10	35	40	12	35	55	16	1
11	63.0	56.34	37	30	12	39	40	14	39	55	16	1
12	68.0	61.34	42	30	12	44	40	14	44	55	16	1
13	73.0	66.32	47	30	12	49	40	14	49	55	16	1
14	78.0	71.34	52	30	12	54	40	14	54	55	16	1
15	83.0	76.36	57	30	12	59	40	14	59	55	16	1
16	88.0	81.37	60	30	14	64	45	16	64	60	16	1
17	93.0	86.39	60	30	14	69	45	16	69	60	16	1
18	98.3	91.42	70	30	14	74	45	16	74	60	16	1
19	103.3	96.45	70	30	14	79	45	16	79	60	16	1
20	108.4	101.49	75	30	14	84	45	16	84	60	16	1
21	113.4	106.52	75	30	16	85	45	16	85	60	20	1
22	118.0	111.55	80	30	16	90	45	16	90	60	20	1
23	123.4	116.58	80	30	16	95	45	16	95	60	20	1
24	128.3	121.62	80	30	16	100	45	16	100	60	20	1
25	134.0	126.66	80	30	16	105	45	16	105	60	20	1
26	139.0	131.70	85	35	20	110	45	20	110	60	20	1
27	144.0	136.75	85	35	20	110	45	20	110	60	20	1
28	148.7	141.78	90	35	20	115	45	20	115	60	20	1
29	153.8	146.83	90	35	20	115	45	20	115	60	20	1
30	158.8	151.87	90	35	20	120	46	20	120	60	20	1
31	163.9	156.92	95	35	20	120	45	20	120	60	20	1
32	168.9	161.95	95	35	20	120	45	20	120	60	20	1
33	174.5	167.00	95	35	20	120	45	20	120	60	20	1
34	179.0	172.05	95	35	20	120	45	20	120	60	20	1
35	184.1	177.10	95	35	20	120	45	20	120	60	20	1
36	189.1	182.15	100	35	20	120	45	20	120	60	25	1
37	194.2	187.20	100	35	20	120	45	20	120	60	25	1
38	199.2	192.24	100	35	20	120	45	20	120	60	25	1
39	204.2	197.29	100	35	20	120	45	20	120	60	25	1
40	209.3	202.34	100	35	20	120	45	20	120	60	25	1
38	199.2	192.24	80	40	24	100	50	30	100	60	32	2
45	235.0	227.58	80	40	24	100	50	30	100	60	32	2
57	296.0	288.18	90	45	24	100	56	30	100	63	32	2
76	392.1	384.16	90	50	24	100	63	30	110	67	35	2
95	488.5	480.14	100	56	24	110	63	30	125	70	35	2
114	584.1	576.13	100	56	25	125	70	30	125	80	35	2

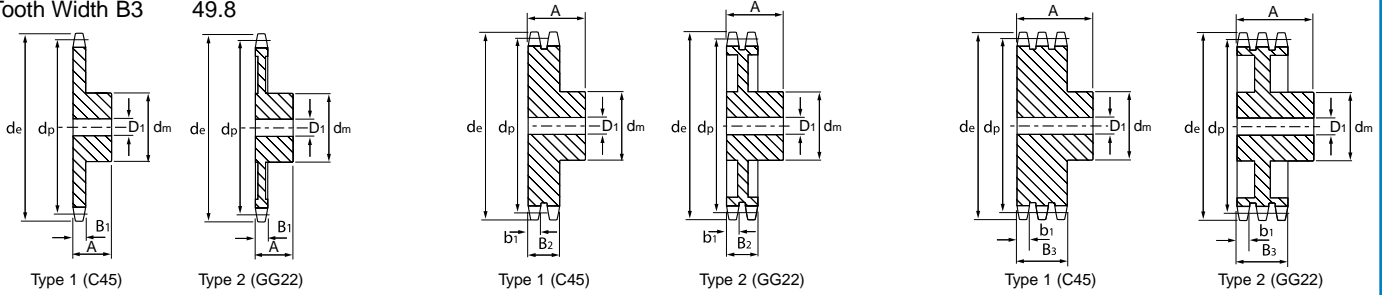
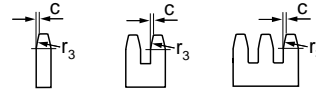
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

12B 3/4" x 7/16"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	19.0	Pitch	19.050
Chamfer c	2.0	Width Between Inner Plates	11.680
Tooth Width b_1	10.8	Roller Diameter	12.070
Tooth Width B_1	11.1		
Tooth Width B_2	30.3		
Tooth Width B_3	49.8		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	57.6	49.78	31	30	12	31	45	12	31	65	16	1
9	62.0	55.70	37	30	12	37	45	12	37	65	16	1
10	69.0	61.64	42	30	12	42	45	12	42	65	16	1
11	75.0	67.61	46	35	14	47	50	16	47	70	20	1
12	81.5	73.60	52	35	14	53	50	16	53	70	20	1
13	87.5	79.59	58	35	14	59	50	16	59	70	20	1
14	93.6	85.61	64	35	14	65	50	16	65	70	20	1
15	99.8	91.63	70	35	14	71	50	16	71	70	20	1
16	105.5	97.65	75	35	16	77	50	20	77	70	20	1
17	111.5	103.67	80	35	16	83	50	20	83	70	20	1
18	118.0	109.71	80	35	16	89	50	20	89	70	20	1
19	124.2	115.75	80	35	16	95	50	20	95	70	20	1
20	129.7	121.78	80	35	16	100	50	20	100	70	20	1
21	136.0	127.82	90	40	20	100	50	20	100	70	20	1
22	141.8	133.86	90	40	20	100	50	20	100	70	20	1
23	149.0	139.90	90	40	20	110	50	20	110	70	20	1
24	153.9	145.94	90	40	20	110	50	20	110	70	20	1
25	160.0	152.00	90	40	20	120	50	20	120	70	20	1
26	165.9	158.04	95	40	20	120	50	20	120	70	20	1
27	172.3	164.09	95	40	20	120	50	20	120	70	20	1
28	178.0	170.13	95	40	20	120	50	20	120	70	20	1
29	184.1	176.19	95	40	20	120	50	20	120	70	20	1
30	190.5	182.25	95	40	20	120	50	20	120	70	20	1
31	196.3	188.31	100	40	20	120	50	20	130	70	25	1
32	203.3	194.35	100	40	20	120	50	20	130	70	25	1
33	209.3	200.40	100	40	20	120	50	20	130	70	25	1
34	214.6	206.46	100	40	20	120	50	20	130	70	25	1
35	221.0	212.52	100	40	20	120	50	20	130	70	25	1
36	226.8	218.58	100	40	25	120	50	25	130	70	25	1
37	232.9	224.64	100	40	25	120	50	25	130	70	25	1
38	239.0	230.69	100	40	25	120	50	25	130	70	25	1
39	245.1	236.75	100	40	25	120	50	25	130	70	25	1
40	251.3	242.81	100	40	25	120	50	25	130	70	25	1
38	239.0	230.69	100	56	24	110	63	30	140	70	30	2
45	282.5	273.10	100	56	24	110	63	30	140	70	30	2
57	355.4	345.81	100	56	30	120	63	30	140	70	40	2
76	469.9	460.99	100	56	30	135	63	30	160	75	40	2
95	585.1	576.17	100	65	30	135	70	30	170	82	40	2
114	700.6	691.36	100	65	30	135	70	30	170	82	40	2

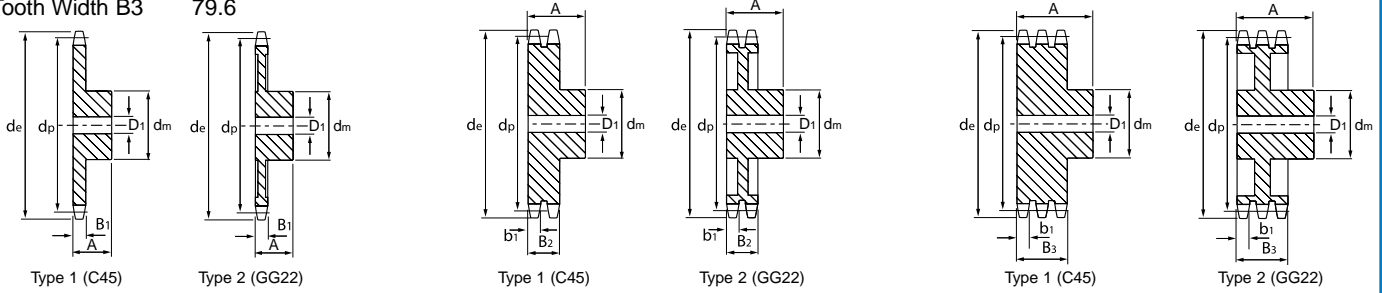
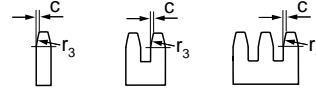
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

16B 1" x 17.02 mm

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	26.0	Pitch	25.400
Chamfer c	2.5	Width Between Inner Plates	17.020
Tooth Width b_1	15.8	Roller Diameter	15.880
Tooth Width B_1	16.2		
Tooth Width B_2	47.7		
Tooth Width B_3	79.6		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D_1	Hub Dia d_m	Length thro' Bore A	Stock Bore D_1	Hub Dia d_m	Length thro' Bore A	Stock Bore D_1	
8	77.0	66.37	42	35	16	42	65	16	42	95	20	1
9	85.0	74.27	50	35	16	50	65	16	50	95	20	1
10	93.0	82.19	55	35	16	56	65	16	56	95	20	1
11	99.5	90.14	61	40	16	64	70	20	64	100	25	1
12	109.0	98.14	69	40	16	72	70	20	72	100	25	1
13	117.0	106.12	78	40	16	80	70	20	80	100	25	1
14	125.0	114.15	84	40	16	88	70	20	88	100	25	1
15	133.0	122.17	92	40	16	96	70	20	96	100	25	1
16	141.0	130.20	100	45	20	104	70	25	104	100	30	1
17	149.0	138.22	100	45	20	112	70	25	112	100	30	1
18	157.0	146.28	100	45	20	120	70	25	120	100	30	1
19	165.2	154.33	100	45	20	128	70	25	128	100	30	1
20	173.2	162.38	100	45	20	130	70	25	130	100	30	1
21	181.2	170.43	110	50	20	130	70	25	130	100	30	1
22	189.3	178.48	110	50	20	130	70	25	130	100	30	1
23	197.5	186.53	110	50	20	130	70	25	130	100	30	1
24	205.5	194.59	110	50	20	130	70	25	130	100	30	1
25	213.5	202.66	110	50	20	130	70	25	130	100	30	1
26	221.6	210.72	120	50	20	130	70	25	130	100	30	1
27	229.6	218.79	120	50	20	130	70	25	130	100	30	1
28	237.7	226.85	120	50	20	130	70	25	130	100	30	1
29	245.8	234.92	120	50	20	130	70	25	130	100	30	1
30	254.0	243.00	120	50	20	130	70	25	130	100	30	1
31	262.0	251.08	120	50	25	140	70	25	140	100	30	1
32	270.0	259.13	120	50	25	140	70	25	140	100	30	1
33	278.5	267.21	120	50	25	140	70	25	140	100	30	1
34	287.0	275.28	120	50	25	140	70	25	140	100	30	1
35	296.2	283.36	120	50	25	140	70	25	140	100	30	1
36	304.6	291.44	120	50	25	140	70	25	140	100	30	1
37	312.6	299.51	120	50	25	140	70	25	140	100	30	1
38	320.7	307.59	120	50	25	140	70	25	140	100	30	1
39	328.8	315.67	120	50	25	140	70	25	140	100	30	1
40	336.9	323.75	120	50	25	140	70	25	140	100	30	1
30	254.0	243.00	110	65	30	125	75	40	145	90	40	2
38	320.0	307.59	110	65	30	140	75	40	160	100	45	2
45	377.0	364.12	125	70	30	150	75	40	160	100	45	2
57	474.0	461.07	125	70	35	170	90	40	165	100	45	2
76	627.0	614.65	140	80	35	175	95	40	200	110	45	2
95	781.0	768.22	140	80	40	175	95	45	200	110	50	2

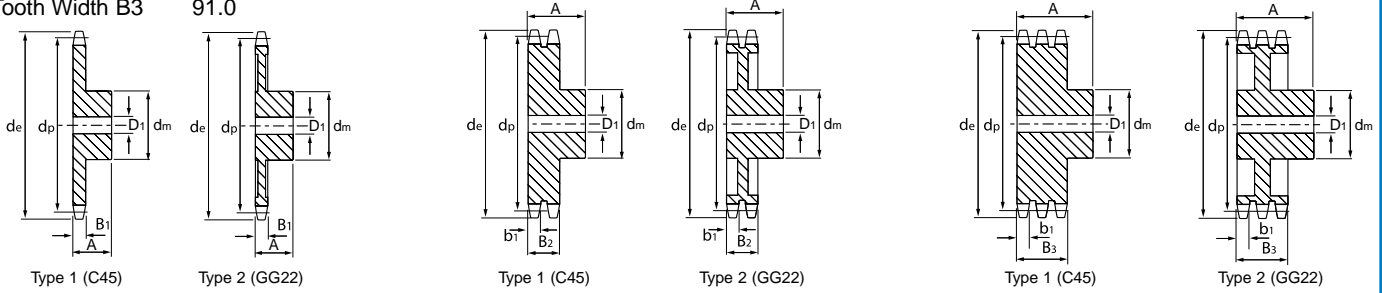
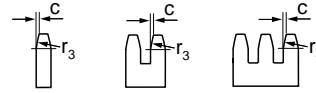
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

20B 1.1/4" x 3/4"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	32.0	Pitch	31.750
Chamfer c	3.5	Width Between Inner Plates	19.560
Tooth Width b_1	18.2	Roller Diameter	19.050
Tooth Width B_1	18.5		
Tooth Width B_2	54.6		
Tooth Width B_3	91.0		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	98.1	82.96	53	40	20	53	75	20	53	110	25	1
9	108.0	92.84	63	40	20	63	75	20	63	110	25	1
10	117.9	102.74	70	40	20	70	75	20	70	110	25	1
11	127.8	112.68	77	45	20	80	80	25	80	115	30	1
12	137.8	122.68	88	45	20	90	80	25	90	115	30	1
13	147.8	132.65	98	45	20	100	80	25	100	115	30	1
14	157.8	142.68	108	45	20	110	80	25	110	115	30	1
15	167.9	152.72	118	45	20	120	80	25	120	115	30	1
16	177.9	162.75	120	50	25	120	80	30	120	115	30	1
17	187.9	172.78	120	50	25	120	80	30	120	115	30	1
18	198.0	182.85	120	50	25	120	80	30	120	115	30	1
19	208.1	192.91	120	50	25	120	80	30	120	115	30	1
20	218.1	202.98	120	50	25	120	80	30	120	115	30	1
21	228.2	213.04	140	55	30	140	80	30	140	115	30	1
22	238.3	223.11	140	55	30	140	80	30	140	115	30	1
23	248.3	233.17	140	55	30	140	80	30	140	115	30	1
24	258.4	243.23	140	55	30	140	80	30	140	115	30	1
25	268.5	253.33	140	55	30	140	80	30	140	115	30	1
26	278.6	263.40	150	55	30	150	80	30	150	115	30	1
27	288.6	273.80	150	55	30	150	80	30	150	115	30	1
28	298.7	283.56	150	55	30	150	80	30	150	115	30	1
29	308.8	293.65	150	55	30	150	80	30	150	115	30	1
30	318.9	303.75	150	55	30	150	80	30	150	115	30	1
31	329.0	313.85	150	55	30	150	80	30	150	115	30	1
32	339.1	323.91	150	55	30	150	80	30	150	115	30	1
33	349.2	334.01	150	55	30	150	80	30	150	115	30	1
34	359.3	334.10	150	55	30	150	80	30	150	115	30	1
35	369.4	354.20	150	55	30	150	80	30	150	115	30	1
36	379.5	364.30	150	55	30	150	80	30	150	115	30	1
37	389.5	374.39	150	55	30	150	80	30	150	115	30	1
38	399.6	384.49	150	55	30	150	80	30	150	115	30	1
39	409.7	394.59	150	55	30	150	80	30	150	115	30	1
40	419.8	404.66	150	55	30	150	80	30	150	115	30	1
30	318.9	303.75	115	70	35	130	80	40	160	100	50	2
38	399.6	384.49	125	70	35	140	90	45	180	110	56	2
45	470.3	455.17	125	70	35	140	90	45	180	110	56	2
57	591.5	576.36	135	80	40	160	100	50	180	125	63	2
76	783.5	768.32	140	90	50	180	100	56	200	140	63	2

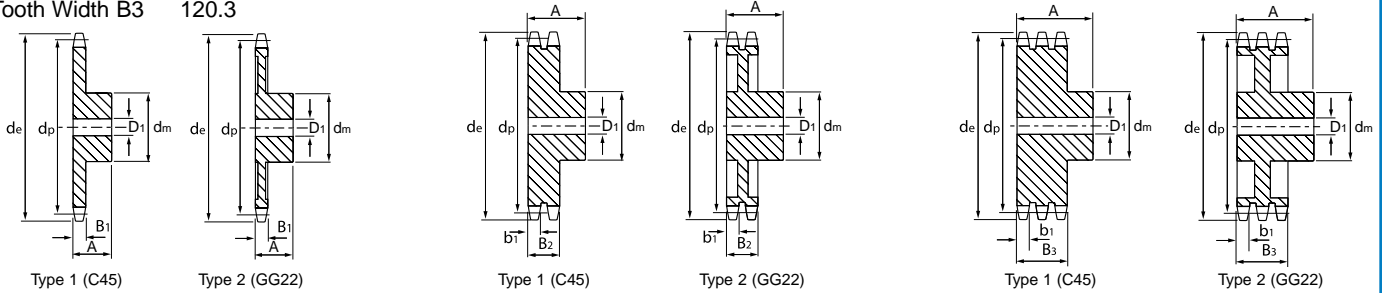
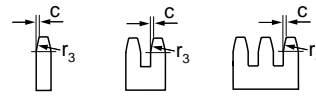
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

24B 1.1/2" x 1"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	38.0	Pitch	38.100
Chamfer c	4.0	Width Between Inner Plates	25.400
Tooth Width b_1	23.6	Roller Diameter	25.400
Tooth Width B_1	24.1		
Tooth Width B_2	72.0		
Tooth Width B_3	120.3		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	115.0	99.55	58	45	20	58	95	25	58	140	25	1
9	126.4	111.40	70	45	20	70	95	25	70	140	25	1
10	138.0	123.29	80	45	20	80	95	25	80	140	25	1
11	150.0	135.21	90	50	25	90	100	25	90	150	30	1
12	162.0	147.22	102	50	25	102	100	25	102	150	30	1
13	174.2	159.18	114	50	25	114	100	25	114	150	30	1
14	186.2	171.22	128	50	25	128	100	25	128	150	30	1
15	198.2	183.26	140	50	25	140	100	25	132	150	30	1
16	210.3	195.30	140	55	25	140	100	30	136	150	30	1
17	222.3	207.34	140	55	25	150	100	30	140	150	30	1
18	234.3	219.42	140	55	25	150	100	30	150	150	30	1
19	246.5	231.49	140	55	25	160	100	30	160	150	30	1
20	258.6	243.57	140	55	25	160	100	30	160	150	30	1
21	270.6	255.65	150	60	30	160	100	30	160	150	40	1
22	282.7	267.73	150	60	30	160	100	30	160	150	40	1
23	294.8	279.80	150	60	30	160	100	30	160	150	40	1
24	306.8	291.88	150	60	30	160	100	30	160	150	40	1
25	319.0	304.00	150	60	30	160	100	30	160	150	40	1
26	331.0	316.08	160	60	30	160	100	30	160	150	40	1
27	343.2	328.19	160	60	30	160	100	30	160	150	40	1
28	355.2	340.27	160	60	30	160	100	30	160	150	40	1
29	367.3	352.38	160	60	30	160	100	30	160	150	40	1
30	379.5	364.50	160	60	30	160	100	30	160	150	40	1
31	391.6	376.62	160	60	30	160	100	40	160	150	40	1
32	403.7	388.69	160	60	30	160	100	40	160	150	40	1
33	415.8	400.81	160	60	30	160	100	40	160	150	40	1
34	427.8	412.93	160	60	30	160	100	40	160	150	40	1
35	440.0	425.04	160	60	30	160	100	40	160	150	40	1
36	452.0	437.16	160	60	30	160	100	40	160	150	40	1
37	464.2	449.27	160	60	30	160	100	40	160	150	40	1
38	476.2	461.39	160	60	30	160	100	40	160	150	40	1
39	488.5	473.50	160	60	30	160	100	40	160	150	40	1
40	500.6	485.62	160	60	30	160	100	40	160	150	40	1
30	379.5	364.50	130	85	40	160	95	40	180	150	60	2
38	476.2	461.39	140	90	45	180	100	45	200	150	60	2
45	561.2	546.20	140	90	45	180	100	45	200	150	60	2
57	706.5	691.63	160	100	45	200	110	55	200	150	70	2
76	936.9	921.98	170	100	45	220	120	55	-	-	-	2
95	1167.3	1152.33	200	125	50	220	140	55	-	-	-	2

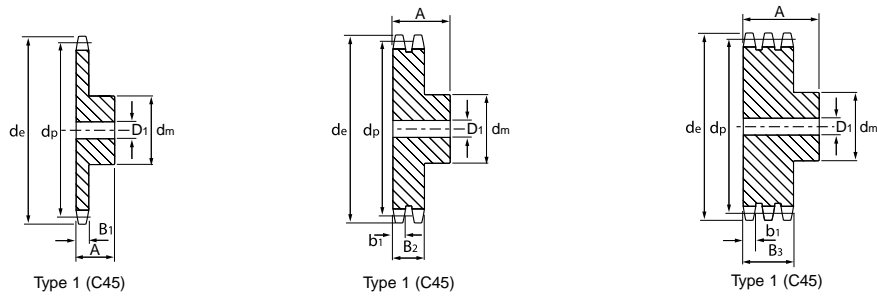
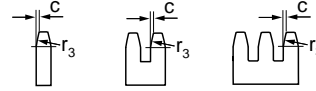
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

28B 1.3/4" x 1.1/4

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	44.0	Pitch	44.450
Chamfer c	5.0	Width Between Inner Plates	30.990
Tooth Width b_1	28.8	Roller Diameter	27.940
Tooth Width B_1	29.4		
Tooth Width B_2	88.4		
Tooth Width B_3	148.0		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	132.0	116.15	74	70	25	74	120	30	74	180	30	1
9	148.4	129.96	88	70	25	88	120	30	88	180	30	1
10	162.3	143.85	100	70	25	100	120	30	100	180	30	1
11	176.3	157.77	112	70	25	112	120	30	112	180	30	1
12	189.3	171.74	125	70	25	125	120	30	125	180	30	1
13	204.2	185.75	125	70	25	125	120	30	125	180	30	1
14	218.2	199.76	130	70	25	130	120	30	160	180	30	1
15	232.3	213.79	145	70	25	145	120	30	145	180	30	1
16	246.3	227.84	160	75	30	160	120	30	160	180	30	1
17	260.0	241.90	160	75	30	160	120	30	160	180	30	1
18	274.0	255.98	160	75	30	160	120	30	160	180	30	1
19	289.0	270.06	160	75	30	180	120	30	180	180	30	1
20	303.0	284.15	160	75	30	180	120	30	180	180	30	1
21	317.0	298.24	170	75	30	180	120	30	180	180	40	1
22	331.0	312.34	170	75	30	180	120	30	180	180	40	1
23	345.0	326.44	170	75	30	180	120	30	180	180	40	1
24	359.0	340.55	170	75	30	180	120	30	180	180	40	1
25	373.0	354.66	170	75	30	180	120	30	180	180	40	1
26	387.0	368.77	170	75	30	180	120	40	180	180	40	1
27	401.0	382.88	170	75	30	180	120	40	180	180	40	1
28	416.0	397.00	170	75	30	180	120	40	180	180	40	1
29	430.0	411.12	170	75	30	180	120	40	180	180	40	1
30	444.0	425.24	170	75	30	180	120	40	180	180	40	1
31	458.0	439.37	180	75	30	200	120	40	200	180	40	1
32	472.0	453.49	180	75	30	200	120	40	200	180	40	1
33	486.0	467.62	180	75	30	200	120	40	200	180	40	1
34	500.0	481.75	180	75	30	200	120	40	200	180	40	1
35	514.0	495.88	180	75	30	200	120	40	200	180	40	1
36	529.0	510.01	180	75	30	200	120	40	200	180	40	1
37	543.0	524.13	180	75	30	200	120	40	200	180	40	1
38	557.0	538.27	180	75	30	200	120	40	200	180	40	1
39	571.0	552.40	180	75	30	200	120	40	200	180	40	1
40	585.0	566.54	180	75	30	200	120	40	200	180	40	1

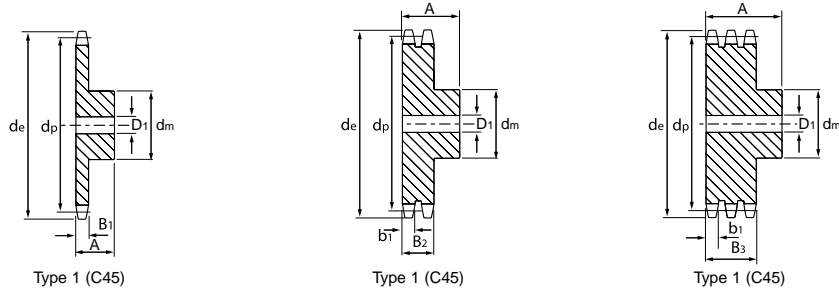
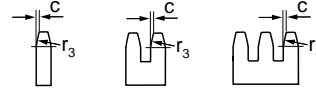
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Pilot Bore Sprockets

BS Pilot Bore Sprockets

32B 2" x 1.1/4"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	51.0	Pitch	50.800
Chamfer c	6.0	Width Between Inner Plates	30.990
Tooth Width b_1	28.8	Roller Diameter	29.210
Tooth Width B_1	29.4		
Tooth Width B_2	87.4		
Tooth Width B_3	146.0		



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex			Duplex			Triplex			Type
			Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	Hub Dia d_m	Length thro' Bore A	Stock Bore D1	
8	153.2	132.74	85	80	30	85	120	30	85	180	30	1
9	169.0	148.54	100	80	30	100	120	30	100	180	30	1
10	185.0	164.39	115	80	30	115	120	30	115	180	30	1
11	200.8	180.31	125	80	30	125	120	35	125	180	35	1
12	216.8	196.29	133	80	30	133	120	35	133	180	35	1
13	232.8	212.29	145	80	30	145	120	35	145	180	35	1
14	248.8	228.29	155	80	30	155	120	35	155	180	35	1
15	264.8	244.30	160	80	30	160	120	35	160	180	35	1
16	280.9	260.40	160	90	30	160	120	40	160	180	40	1
17	296.9	276.46	170	90	30	180	120	40	180	180	40	1
18	313.0	292.55	170	90	30	180	120	40	180	180	40	1
19	329.1	308.66	170	90	30	200	120	40	200	180	40	1
20	345.2	324.71	180	90	30	200	120	40	200	180	40	1
21	361.3	340.82	180	90	40	200	120	40	200	180	40	1
22	377.5	356.98	180	90	40	200	120	40	200	180	40	1
23	393.6	373.08	180	90	40	200	120	40	200	180	40	1
24	409.7	389.18	180	90	40	200	120	40	200	180	40	1
25	425.8	405.33	180	90	40	200	120	40	200	180	40	1
26	441.9	421.44	180	90	40	200	120	40	200	180	40	1
27	458.1	437.59	180	90	40	200	120	40	200	180	40	1
28	474.2	453.69	180	90	40	200	120	40	200	180	40	1
29	492.0	469.85	180	90	40	-	-	-	-	-	-	1
30	506.5	486.00	180	90	40	200	120	40	200	180	40	1
32	538.8	518.27	180	90	40	-	-	-	-	-	-	1
35	589.5	566.71	180	90	40	-	-	-	-	-	-	1
38	635.5	615.16	180	90	40	-	-	-	-	-	-	1
40	670.3	647.47	180	90	40	-	-	-	-	-	-	1

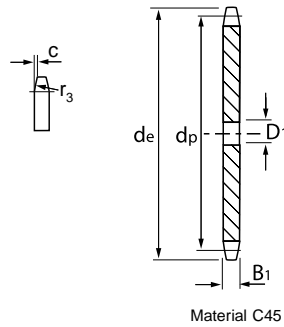
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

03B 5 x 2.5 mm

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	5.0	Pitch	5.000
Chamfer c	0.6	Width Between Inner Plates	2.500
Tooth Width B1	2.3	Roller Diameter	3.200



Teeth	Outer Dia de	Pitch Dia dp	Simplex Stock Bore D1
8	15.2	13.06	4
9	16.8	14.62	4
10	18.3	16.18	4
11	19.9	17.75	5
12	21.5	19.32	5
13	23.0	20.89	5
14	24.6	22.47	5
15	26.2	24.04	5
16	27.8	25.63	6
17	29.4	27.20	6
18	30.9	28.79	6
19	32.5	30.38	6
20	34.1	31.96	6
21	35.7	33.54	8
22	37.3	35.13	8
23	38.9	36.72	8
24	40.5	38.30	8
25	42.0	39.89	8
26	43.6	41.48	8
27	45.2	43.07	8
28	46.8	44.65	8
29	48.4	46.25	8
30	50.0	47.83	8
31	51.5	49.42	8
32	53.2	51.01	8
33	54.8	52.60	8
34	56.3	54.19	8
35	57.9	55.78	8
36	59.5	57.37	8
37	61.1	58.96	8
38	62.7	60.54	8
39	64.3	62.13	8
40	65.9	63.73	8
41	67.5	65.31	8
42	69.1	66.91	8
43	70.6	68.49	8

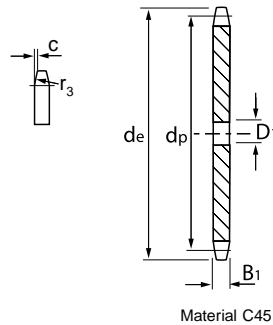
Teeth	Outer Dia de	Pitch Dia dp	Simplex Stock Bore D1
44	72.2	70.09	8
45	73.8	71.68	8
46	75.4	73.27	8
47	77.0	74.86	8
48	78.6	76.45	8
49	80.2	78.03	8
50	81.8	79.63	8
51	83.4	81.22	10
52	85.0	82.81	10
53	86.6	84.40	10
54	88.1	85.97	10
55	89.7	87.58	10
56	91.3	89.17	10
57	92.9	90.76	10
58	94.5	92.35	10
59	96.1	93.94	10
60	97.7	95.53	10
62	100.9	98.72	12
64	104.1	101.90	12
65	105.6	103.49	12
66	107.2	105.08	12
68	110.4	108.26	12
70	113.6	111.44	12
72	116.8	114.63	12
75	121.6	119.40	12
76	123.1	120.99	12
78	126.3	124.17	12
80	129.5	127.35	12
85	137.5	135.31	14
90	145.4	143.27	14
95	153.4	151.22	14
100	161.3	159.18	14
110	177.2	175.09	14
114	183.6	181.49	14
120	193.2	191.01	14
125	201.1	198.96	14

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

04B 6 x 2.8 mm

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	6.0	Pitch	6.000
Chamfer c	0.7	Width Between Inner Plates	2.800
Tooth Width B1	2.6	Roller Diameter	4.000



Teeth	Outer Dia de	Pitch Dia dp	Simplex Stock Bore D1
8	18.0	15.67	5
9	19.9	17.54	5
10	21.7	19.42	6
11	23.7	21.30	6
12	25.4	23.18	6
13	27.3	25.05	8
14	29.2	26.96	8
15	31.1	28.86	8
16	33.0	30.76	8
17	35.0	32.65	8
18	36.9	34.55	8
19	38.8	36.44	8
20	40.7	38.34	8
21	42.6	40.25	8
22	44.5	42.16	8
23	46.4	44.06	8
24	48.3	45.96	8
25	50.2	47.87	8
26	52.1	49.77	10
27	54.0	51.67	10
28	55.9	53.58	10
29	57.8	55.50	10
30	59.8	57.42	10
31	61.7	59.31	10
32	63.6	61.21	10
33	65.5	63.11	10
34	67.4	65.02	10
35	69.3	66.93	10
36	71.2	68.84	10
37	73.1	70.75	10
38	75.0	72.66	10
39	76.9	74.56	10
40	78.9	76.47	10
41	80.8	78.38	12
42	82.7	80.28	12
43	84.7	82.19	12

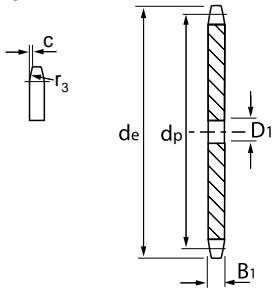
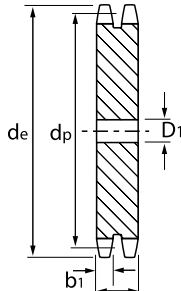
Teeth	Outer Dia de	Pitch Dia dp	Simplex Stock Bore D1
44	86.6	84.10	12
45	88.5	86.01	12
46	90.4	87.92	12
47	92.3	89.83	12
48	94.2	91.74	12
49	96.1	93.64	12
50	98.0	95.55	12
51	99.9	97.47	12
52	101.8	99.37	12
53	103.7	101.27	12
54	105.6	103.17	12
55	107.6	105.08	12
56	109.5	107.00	12
57	111.4	108.93	12
58	113.3	110.82	12
59	115.2	112.71	12
60	117.1	114.62	12
62	120.9	118.45	16
64	124.7	122.27	16
65	126.6	124.18	16
66	128.5	126.09	16
68	132.4	129.91	16
70	136.2	133.73	16
72	140.0	137.55	16
75	145.7	143.28	16
76	147.6	145.19	16
78	151.5	149.01	16
80	155.3	152.82	16
85	164.8	162.37	16
90	174.4	171.92	16
95	183.9	181.47	16
100	193.5	191.01	16
110	211.6	210.11	16
114	220.2	217.75	16
120	231.7	229.20	16
125	241.2	238.75	16

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

05B
8 x 3 mm

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	8.0	Pitch	8.000
Chamfer c	1.0	Width Between Inner Plates	3.000
Tooth Width b1	2.7	Roller Diameter	5.000
Tooth Width B1	2.8		
Tooth width B2	8.3		

Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex
			Stock Bore D1	Stock Bore D1
8	24.0	20.90	6	8
9	26.6	23.39	6	8
10	29.2	25.89	8	8
11	31.7	28.39	8	8
12	34.2	30.91	8	8
13	36.7	33.42	8	8
14	39.2	35.95	8	8
15	41.7	38.48	8	8
16	44.3	41.01	8	10
17	46.8	43.53	8	10
18	49.3	46.07	8	10
19	51.9	48.61	8	10
20	54.4	51.14	8	10
21	57.0	53.67	8	10
22	59.5	56.21	8	10
23	62.0	58.75	8	10
24	64.6	61.29	8	10
25	67.5	63.83	8	10
26	69.5	66.37	10	12
27	72.2	68.91	10	12
28	74.8	71.45	10	12
29	77.3	73.99	10	12
30	79.8	76.53	10	12
31	82.4	79.08	10	12
32	84.9	81.61	10	12
33	87.5	84.16	10	12
34	90.0	86.70	10	12
35	92.5	89.24	10	12
36	95.0	91.79	10	12
37	97.6	94.33	10	12
38	100.2	96.88	10	12
39	102.7	99.42	10	12
40	105.3	101.97	10	12
41	107.8	104.51	12	14
42	110.4	107.05	12	14
43	112.9	109.60	12	14

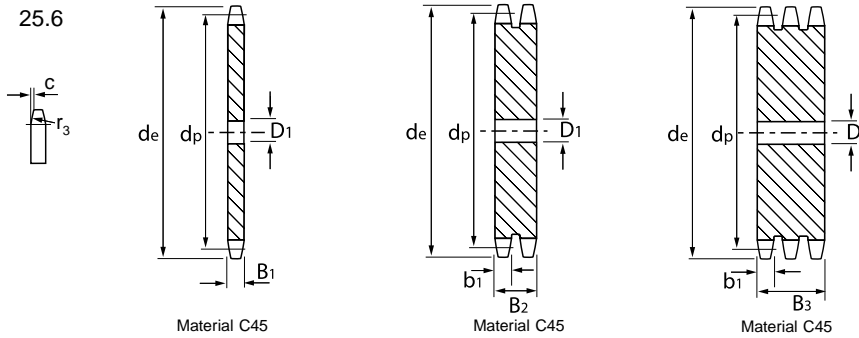
Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex
			Stock Bore D1	Stock Bore D1
44	115.5	112.14	12	14
45	118.0	114.69	12	14
46	120.6	117.23	12	14
47	123.1	119.77	12	14
48	125.6	122.32	12	14
49	128.2	124.89	12	14
50	130.7	127.41	12	14
51	133.3	129.95	14	16
52	135.8	132.49	14	16
53	138.4	135.04	14	16
54	140.9	137.59	14	16
55	143.5	140.13	14	16
56	146.0	142.68	14	16
57	148.6	145.22	14	16
58	151.0	147.77	14	16
59	153.6	150.31	14	16
60	156.2	152.85	14	16
62	162.0	157.95	16	20
64	167.1	163.04	16	20
65	169.2	165.58	16	20
66	172.2	168.13	16	20
68	177.3	173.22	16	20
70	182.4	178.31	16	20
72	187.5	183.41	20	20
75	195.1	191.04	20	20
76	197.7	193.59	20	20
78	202.8	198.68	20	20
80	207.9	203.77	20	20
85	220.6	216.50	20	20
90	233.4	229.23	20	20
95	246.1	241.96	20	20
100	258.9	254.68	20	20
110	284.3	280.15	20	20
114	294.5	290.33	20	20
120	310.0	305.61	20	20
125	322.5	318.34	20	20

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

06B 3/8" x 7/32

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	10.0	Pitch	9.525
Chamfer c	1.0	Width Between Inner Plates	5.720
Tooth Width b_1	5.2	Roller Diameter	6.350
Tooth Width B_1	5.3		
Tooth Width B_2	15.4		
Tooth Width B_3	25.6		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	28.0	24.89	6	8	8
9	31.0	27.85	7	8	8
10	34.0	30.82	7	8	10
11	37.0	33.80	8	10	12
12	40.0	36.80	8	10	12
13	43.0	39.80	8	10	12
14	46.3	42.80	8	10	12
15	49.3	45.81	8	10	12
16	52.3	48.82	10	12	12
17	55.3	51.83	10	12	12
18	58.3	54.85	10	12	12
19	61.3	57.87	10	12	12
20	64.3	60.89	10	12	12
21	68.0	63.91	12	12	16
22	71.0	66.93	12	12	16
23	73.5	69.95	12	12	16
24	77.0	72.97	12	12	16
25	80.0	76.00	12	12	16
26	83.0	79.02	12	16	16
27	86.0	82.04	12	16	16
28	89.0	85.07	12	16	16
29	92.0	88.09	12	16	16
30	94.7	91.12	12	16	16
31	98.3	94.15	16	16	16
32	101.3	97.17	16	16	16
33	104.3	100.20	16	16	16
34	107.3	103.23	16	16	16
35	110.4	106.26	16	16	16
36	113.4	109.29	16	16	20
37	116.4	112.32	16	16	20
38	119.5	115.35	16	16	20
39	122.5	118.37	16	16	20
40	125.5	121.40	16	16	20
41	128.5	124.43	16	20	20
42	131.6	127.46	16	20	20
43	134.6	130.49	16	20	20

Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
44	137.6	133.52	16	20	20
45	140.7	136.54	16	20	20
46	143.7	139.58	20	20	20
47	146.7	142.61	20	20	20
48	149.7	145.64	20	20	20
49	152.7	148.66	20	20	20
50	155.7	151.69	20	20	20
51	158.7	154.72	20	20	20
52	161.8	157.75	20	20	20
53	164.8	160.78	20	20	20
54	167.8	163.82	20	20	20
55	170.8	166.85	20	20	20
56	173.8	169.88	20	20	25
57	176.9	172.91	20	20	25
58	179.9	175.93	20	20	25
59	183.0	178.96	20	20	25
60	186.0	181.99	20	20	25
62	192.1	188.06	20	25	25
64	198.2	194.12	20	25	25
65	201.6	197.15	20	25	25
66	204.6	200.18	20	25	25
68	210.7	206.24	20	25	25
70	216.7	212.30	20	25	25
72	222.8	218.37	20	25	25
75	231.9	227.46	20	25	25
76	234.9	230.49	20	25	25
78	241.0	236.55	20	25	25
80	247.1	242.61	20	25	25
85	262.2	257.77	25	25	25
90	277.4	272.93	25	25	25
95	292.5	288.08	25	25	25
100	307.7	303.25	25	25	25
110	338.0	333.55	25	25	25
114	349.5	345.68	25	25	25
120	368.3	363.86	25	25	25
125	383.5	379.02	25	25	25

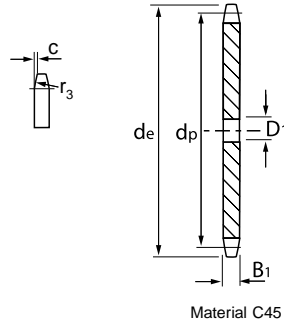
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Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

081 1/2" x 1/8"

SPROCKET		mm	CHAIN		mm
Tooth Radius r_3	13.0		Pitch		12.700
Chamfer c	1.3		Width Between Inner Plates		3.300
Tooth Width B_1	3.0		Roller Diameter		7.750



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex Stock Bore D_1
8	37.2	33.18	8
9	41.5	37.13	8
10	46.2	41.10	8
11	49.6	45.07	8
12	53.9	49.07	8
13	58.4	53.06	8
14	62.8	57.07	8
15	66.8	61.09	8
16	70.9	65.10	10
17	74.9	69.11	10
18	78.9	73.14	10
19	82.9	77.16	10
20	86.9	81.19	10
21	91.0	85.22	10
22	95.0	89.24	10
23	99.0	93.27	10
24	103.0	97.29	10
25	107.1	101.33	10
26	111.2	105.36	12
27	115.4	109.40	12
28	119.4	113.42	12
29	123.4	117.46	12
30	127.5	121.50	12
31	131.5	125.54	12
32	135.5	129.56	12
33	139.6	133.60	12
34	143.6	137.64	12
35	147.6	141.68	12
36	151.7	145.72	16
37	155.7	149.76	16
38	159.8	153.80	16
39	163.8	157.83	16
40	167.8	161.87	16
41	171.4	165.91	16
42	175.4	169.95	16

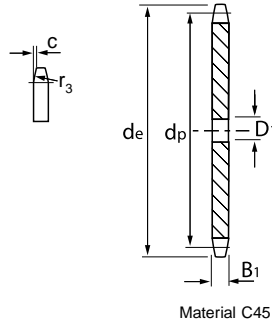
Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex Stock Bore D_1
43	179.5	173.99	16
44	183.5	178.03	16
45	187.5	182.07	16
46	191.6	186.10	20
47	195.6	190.14	20
48	199.7	194.18	20
49	203.7	198.22	20
50	207.8	202.26	20
51	211.8	206.30	20
52	215.9	210.34	20
53	219.9	214.37	20
54	224.0	218.43	20
55	228.0	222.46	20
56	232.1	226.50	20
57	236.1	230.54	20
58	240.2	234.58	20
59	244.2	238.62	20
60	248.2	242.66	20
62	256.7	250.75	20
64	264.8	258.82	20
65	268.8	262.86	20
66	272.9	266.90	25
68	280.9	274.99	25
70	289.0	283.07	25
72	297.1	291.16	25
76	313.3	307.33	25
78	321.4	315.40	25
80	329.4	323.48	25
85	349.7	343.70	25
90	369.9	363.90	25
100	410.3	404.31	25
110	450.7	444.74	25
114	466.9	460.90	25
120	491.2	485.16	25
125	511.4	505.37	25

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

083 / 084 1/2" x 3/16"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	13.0	Pitch	12.700
Chamfer c	1.3	Width Between Inner Plates	4.880
Tooth Width BI	4.5	Roller Diameter	7.750



Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex Stock Bore D_1
8	38.5	33.18	8
9	41.5	37.18	8
10	46.2	41.10	8
11	49.6	45.07	8
12	53.9	49.07	8
13	58.4	53.06	8
14	62.8	57.07	8
15	66.8	61.09	8
16	70.9	65.10	10
17	74.9	69.11	10
18	78.9	73.14	10
19	82.9	77.16	10
20	86.9	81.19	10
21	91.0	85.22	10
22	95.0	89.24	10
23	99.0	93.27	10
24	103.0	97.29	10
25	107.1	101.33	10
26	111.2	105.36	12
27	115.4	109.40	12
28	119.4	113.42	12
29	123.4	117.46	12
30	127.5	121.50	12
31	131.5	125.54	12
32	135.5	129.56	12
33	139.6	133.60	12
34	143.6	137.64	12
35	147.6	141.68	12
36	151.7	145.72	16
37	155.7	149.76	16
38	159.8	153.80	16
39	163.8	157.83	16
40	167.8	161.87	16
41	171.4	165.91	16
42	175.4	169.95	16

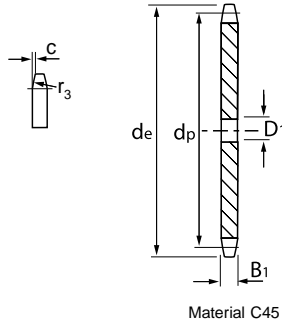
Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex Stock Bore D_1
43	179.5	173.99	16
44	183.5	178.03	16
45	187.5	182.07	16
46	191.6	186.10	20
47	195.6	190.14	20
48	199.7	194.18	20
49	203.7	198.22	20
50	207.8	202.26	20
51	211.8	206.30	20
52	215.9	210.34	20
53	219.9	214.37	20
54	224.0	218.43	20
55	228.0	222.46	20
56	232.1	226.50	20
57	236.1	230.54	20
58	240.2	234.58	20
59	244.2	238.62	20
60	248.2	242.66	20
62	256.7	250.75	20
64	264.8	258.82	20
65	268.8	262.86	20
66	272.9	266.90	25
68	280.9	274.99	25
70	289.0	283.07	25
72	297.1	291.16	25
76	313.3	307.33	25
78	321.4	315.40	25
80	329.4	323.48	25
85	349.7	343.70	25
90	369.9	363.90	25
100	410.3	404.31	25
110	450.7	444.74	25
114	466.9	460.90	25
120	491.2	485.16	25
125	511.4	505.37	25

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

085 1/2" x 1/4"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r3	13.0	Pitch	12.700
Chamfer c	1.3	Width Between Inner Plates	6.400
Tooth Width B1	5.9	Roller Diameter	7.750



Teeth	Outer Dia de	Pitch Dia dp	Simplex Stock Bore D1
8	38.5	33.18	8
9	41.5	37.18	8
10	46.2	41.10	8
11	49.6	45.07	8
12	53.9	49.07	8
13	58.4	53.06	8
14	62.8	57.07	8
15	66.8	61.09	8
16	70.9	65.10	10
17	74.9	69.11	10
18	78.9	73.14	10
19	82.9	77.16	10
20	86.9	81.19	10
21	91.0	85.22	10
22	95.0	89.24	10
23	99.0	93.27	10
24	103.0	97.29	10
25	107.1	101.33	10
26	111.2	105.36	12
27	115.4	109.40	12
28	119.4	113.42	12
29	123.4	117.46	12
30	127.5	121.50	12
31	131.5	125.54	12
32	135.5	129.56	12
33	139.6	133.60	12
34	143.6	137.64	12
35	147.6	141.68	12
36	151.7	145.72	16
37	155.7	149.76	16
38	159.8	153.80	16
39	163.8	157.83	16
40	167.8	161.87	16
41	171.4	165.91	16
42	175.4	169.95	16

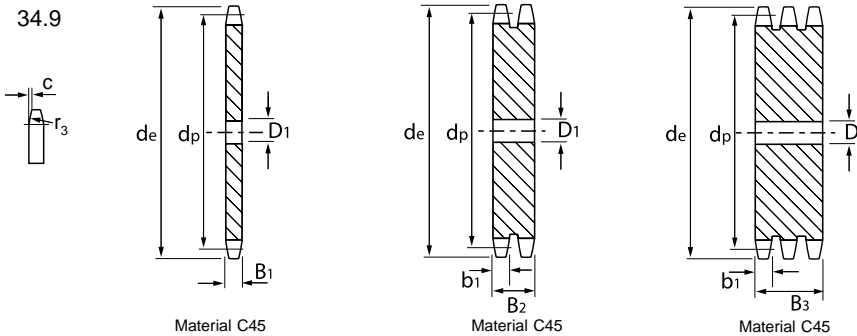
Teeth	Outer Dia de	Pitch Dia dp	Simplex Stock Bore D1
43	179.5	173.99	16
44	183.5	178.03	16
45	187.5	182.07	16
46	191.6	186.10	20
47	195.6	190.14	20
48	199.7	194.18	20
49	203.7	198.22	20
50	207.8	202.26	20
51	211.8	206.30	20
52	215.9	210.34	20
53	219.9	214.37	20
54	224.0	218.43	20
55	228.0	222.46	20
56	232.1	226.50	20
57	236.1	230.54	20
58	240.2	234.58	20
59	244.2	238.62	20
60	248.2	242.66	20
62	256.7	250.75	20
64	264.8	258.82	20
65	268.8	262.86	20
66	272.9	266.90	25
68	280.9	274.99	25
70	289.0	283.07	25
72	297.1	291.16	25
76	313.3	307.33	25
78	321.4	315.40	25
80	329.4	323.48	25
85	349.7	343.70	25
90	369.9	363.90	25
100	410.3	404.31	25
110	450.7	444.74	25
114	466.9	460.90	25
120	491.6	485.16	25
125	511.4	505.37	25

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

08B 1/2" x 5/16"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r3	13.0	Pitch	12.700
Chamfer c	1.3	Width Between Inner Plates	7.750
Tooth Width b1	7.0	Roller Diameter	8.510
Tooth Width B1	7.2		
Tooth Width B2	21.0		
Tooth Width B3	34.9		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	37.2	33.18	8	10	10
9	41.0	37.13	8	10	10
10	45.2	41.10	8	10	10
11	48.7	45.07	10	10	12
12	53.0	49.07	10	10	12
13	57.4	53.06	10	10	12
14	61.8	57.07	10	10	12
15	65.5	61.09	10	10	12
16	69.5	65.10	10	12	16
17	73.6	69.11	10	12	16
18	77.8	73.14	10	12	16
19	81.7	77.16	10	12	16
20	85.8	81.19	10	12	16
21	89.7	85.22	12	16	16
22	93.8	89.24	12	16	16
23	98.2	93.27	12	16	16
24	101.8	97.29	12	16	16
25	105.8	101.33	12	16	16
26	110.0	105.36	16	16	16
27	114.0	109.40	16	16	16
28	118.0	113.42	16	16	16
29	122.0	117.46	16	16	16
30	126.1	121.50	16	16	16
31	130.2	125.54	16	16	20
32	134.3	129.56	16	16	20
33	138.4	133.60	16	16	20
34	142.6	137.64	16	16	20
35	146.7	141.68	16	16	20
36	151.0	145.72	16	20	20
37	154.6	149.76	16	20	20
38	158.6	153.80	16	20	20
39	162.7	157.83	16	20	20
40	166.8	161.87	16	20	20
41	171.4	165.91	20	20	25
42	175.4	169.95	20	20	25
43	179.7	173.99	20	20	25

Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
44	183.8	178.03	20	20	25
45	188.0	182.07	20	20	25
46	192.1	186.10	20	20	25
47	196.2	190.14	20	20	25
48	200.3	194.18	20	20	25
49	204.3	198.22	20	20	25
50	208.3	202.26	20	20	25
51	212.1	206.30	20	25	25
52	216.1	210.34	20	25	25
53	220.2	214.37	20	25	25
54	224.1	218.43	20	25	25
55	228.1	222.46	20	25	25
56	232.2	226.50	20	25	25
57	236.4	230.54	20	25	25
58	240.5	234.58	20	25	25
59	244.5	238.62	20	25	25
60	248.6	242.66	20	25	25
62	256.9	250.75	25	25	25
64	265.1	258.82	25	25	25
65	269.0	262.86	25	25	25
66	273.0	266.90	25	25	25
68	281.0	274.99	25	25	25
70	289.0	283.07	25	25	25
72	297.2	291.16	25	25	25
75	309.2	303.27	25	25	25
76	313.2	307.33	25	25	25
78	321.4	315.40	25	25	25
80	329.4	323.48	25	25	25
85	349.0	343.69	25	25	25
90	369.9	363.90	25	25	25
95	390.1	384.11	25	25	25
100	410.3	404.31	25	25	25
110	450.7	444.74	25	25	25
114	466.9	460.90	25	25	25
120	491.2	485.16	25	25	25
125	511.3	505.37	25	25	25

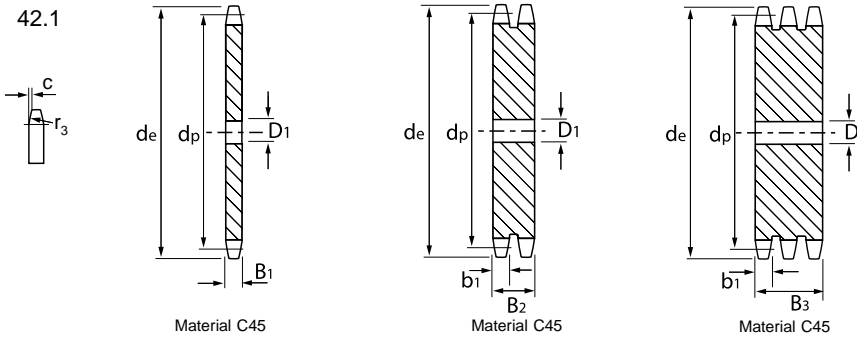
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

10B 5/8" x 3/8"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	16.0	Pitch	15.875
Chamfer c	1.6	Width Between Inner Plates	9.650
Tooth Width b_1	9.0	Roller Diameter	10.160
Tooth Width B_1	9.1		
Tooth Width B_2	25.5		
Tooth Width B_3	42.1		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	47.0	41.48	10	10	12
9	52.6	46.42	10	10	12
10	57.5	51.37	10	10	12
11	63.0	56.34	10	12	12
12	68.0	61.34	10	12	12
13	73.0	66.32	10	12	12
14	78.0	71.34	10	12	12
15	83.0	76.36	10	12	12
16	88.0	81.37	12	12	16
17	93.0	86.39	12	12	16
18	98.3	91.42	12	12	16
19	103.3	96.45	12	12	16
20	108.4	101.49	12	12	16
21	113.4	106.52	12	16	16
22	118.0	111.55	12	16	16
23	123.4	116.58	12	16	16
24	128.3	121.62	12	16	16
25	134.0	126.66	12	16	16
26	139.0	131.70	16	16	20
27	144.0	136.75	16	16	20
28	148.7	141.78	16	16	20
29	153.8	146.83	16	16	20
30	158.8	151.87	16	16	20
31	163.9	156.92	16	20	20
32	168.9	161.95	16	20	20
33	174.5	167.00	16	20	20
34	179.0	172.05	16	20	20
35	184.1	177.10	16	20	20
36	189.1	182.15	20	20	25
37	194.2	187.20	20	20	25
38	199.2	192.24	20	20	25
39	204.2	197.29	20	20	25
40	209.3	202.34	20	20	25
41	214.8	207.39	20	20	25
42	219.9	212.44	20	20	25
43	224.9	217.49	20	20	25

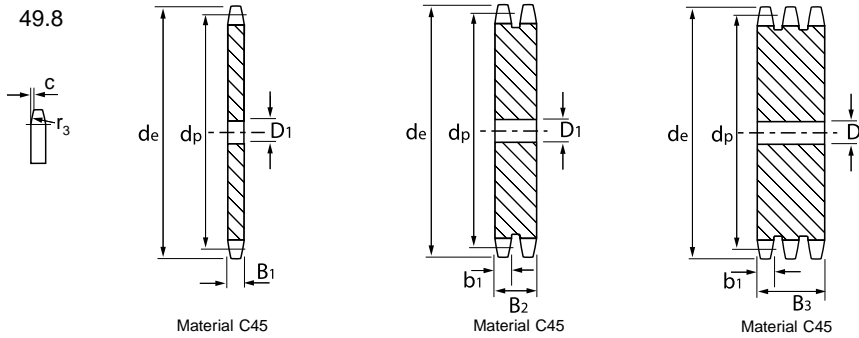
Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
44	230.0	222.53	20	20	25
45	235.0	227.58	20	20	25
46	240.1	232.63	20	25	25
47	245.1	237.68	20	25	25
48	250.2	242.73	20	25	25
49	255.2	247.78	20	25	25
50	260.3	252.82	20	25	25
51	265.3	257.87	20	25	25
52	270.4	262.92	20	25	25
53	275.4	267.97	20	25	25
54	280.5	273.03	20	25	25
55	285.5	278.08	20	25	25
56	290.6	283.13	25	25	25
57	296.0	288.18	25	25	25
58	300.7	293.23	25	25	25
59	305.7	298.27	25	25	25
60	310.8	303.32	25	25	25
62	321.4	313.43	25	25	30
64	331.5	323.83	25	25	30
65	336.5	328.58	25	25	30
66	341.6	333.63	25	25	30
68	351.7	343.74	25	25	30
70	361.8	353.84	25	25	30
72	371.9	363.95	25	25	30
75	387.1	379.09	25	25	30
76	392.1	384.16	25	25	30
78	402.2	394.25	25	25	30
80	412.3	404.35	25	25	30
85	437.6	429.62	30	30	30
90	462.8	454.88	30	30	30
95	488.5	480.14	30	30	30
100	513.4	505.40	30	30	30
110	563.9	555.92	30	30	30
114	584.1	576.13	30	30	30
120	614.8	606.44	30	30	30
125	639.7	631.71	30	30	30

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

12B 3/4" x 7/16"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	19.0	Pitch	19.050
Chamfer c	2.0	Width Between Inner Plates	11.680
Tooth Width b_1	10.8	Roller Diameter	12.070
Tooth Width B_1	11.1		
Tooth Width B_2	30.3		
Tooth Width B_3	49.8		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	57.6	49.78	12	12	12
9	62.0	55.70	12	12	12
10	69.0	61.64	12	12	12
11	75.0	67.61	14	14	16
12	81.5	73.10	14	14	16
13	87.5	79.59	14	14	16
14	93.6	85.61	14	14	16
15	99.8	91.63	14	14	16
16	105.5	97.65	14	16	16
17	111.5	103.67	14	16	16
18	118.0	109.71	14	16	16
19	124.2	115.75	14	16	16
20	129.7	121.78	14	16	16
21	136.0	127.82	16	16	20
22	141.8	133.86	16	16	20
23	149.0	139.90	16	16	20
24	153.9	145.94	16	16	20
25	160.0	152.00	16	16	20
26	165.9	158.04	16	20	20
27	172.3	164.09	16	20	20
28	178.0	170.13	16	20	20
29	184.1	176.19	16	20	20
30	190.5	182.25	16	20	20
31	196.3	188.31	20	20	25
32	203.3	194.35	20	20	25
33	209.3	200.40	20	20	25
34	214.6	206.46	20	20	25
35	221.0	212.52	20	20	25
36	226.8	218.58	20	25	25
37	232.9	224.64	20	25	25
38	239.0	230.69	20	25	25
39	245.1	236.75	20	25	25
40	251.3	242.81	20	25	25
41	257.3	248.87	25	25	25
42	264.5	254.93	25	25	25
43	270.5	260.98	25	25	25

Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
44	276.5	267.04	25	25	25
45	282.5	273.10	25	25	25
46	287.9	279.16	25	25	25
47	294.0	285.21	25	25	25
48	300.1	291.27	25	25	25
49	306.2	297.33	25	25	25
50	312.3	303.39	25	25	25
51	318.4	309.45	25	25	25
52	324.5	315.50	25	25	25
53	330.5	321.56	25	25	25
54	336.6	327.64	25	25	25
55	342.7	337.70	25	25	25
56	348.7	339.75	25	25	30
57	355.4	345.81	25	25	30
58	361.5	351.87	25	25	30
59	367.5	357.93	25	25	30
60	373.0	363.99	25	25	30
62	385.1	376.12	25	30	30
64	397.2	388.24	25	30	30
65	403.2	394.29	25	30	30
66	409.2	400.35	30	30	30
68	421.4	412.49	30	30	30
70	433.6	424.60	30	30	30
72	447.0	436.74	30	30	30
75	463.9	454.91	30	30	30
76	469.9	460.99	30	30	30
78	482.1	473.10	30	30	30
80	494.2	485.22	30	30	30
85	524.5	515.55	30	30	30
90	554.8	545.86	30	30	30
95	585.1	576.17	30	30	30
100	615.4	606.47	30	30	30
110	676.1	667.11	30	30	30
114	700.6	691.36	30	30	30
120	736.7	727.74	30	30	30
125	767.0	758.05	30	30	30

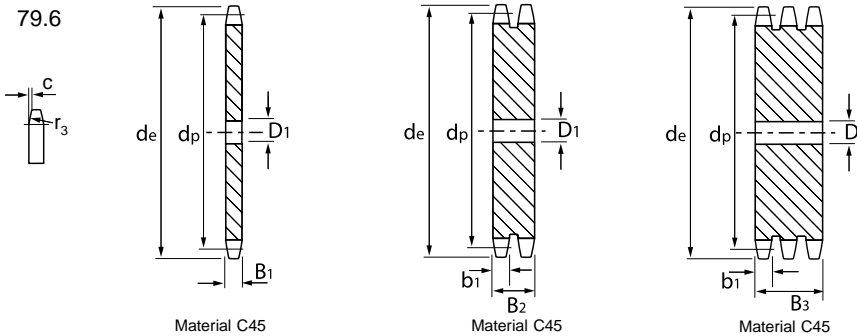
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

16B 1" x 17.02mm

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	26.0	Pitch	25.400
Chamfer c	2.5	Width Between Inner Plates	17.020
Tooth Width b1	15.8	Roller Diameter	15.880
Tooth Width B1	16.2		
Tooth Width B2	47.7		
Tooth Width B3	79.6		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	77.0	66.37	12	16	20
9	85.0	74.27	12	16	20
10	93.0	82.19	12	16	20
11	99.5	90.14	16	20	20
12	109.0	98.14	16	20	20
13	117.0	106.12	16	20	20
14	125.0	114.15	16	20	20
15	133.0	122.17	16	20	20
16	141.0	130.20	20	20	30
17	149.0	138.22	20	20	30
18	157.0	146.28	20	20	30
19	165.2	154.33	20	20	30
20	173.2	162.38	20	20	30
21	181.2	170.43	20	25	30
22	189.3	178.48	20	25	30
23	197.5	186.53	20	25	30
24	205.5	194.59	20	25	30
25	213.5	202.66	20	25	30
26	221.6	210.72	20	25	30
27	229.6	218.79	20	25	30
28	237.7	226.85	20	25	30
29	245.8	234.92	20	25	30
30	254.0	243.00	20	25	30
31	262.0	251.08	25	25	30
32	270.0	259.13	25	25	30
33	278.5	267.21	25	25	30
34	287.0	275.28	25	25	30
35	296.2	283.36	25	25	30
36	304.6	291.44	25	25	30
37	312.6	299.51	25	25	30
38	320.7	307.59	25	25	30
39	328.8	315.67	25	25	30
40	336.9	323.75	25	25	30
41	345.0	331.82	25	-	-
42	353.0	339.90	25	25	30
43	361.1	347.98	25	25	-

Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
44	369.1	356.06	25	25	30
45	377.1	364.13	25	25	30
46	385.2	372.21	25	30	30
47	393.2	380.29	25	-	-
48	401.3	388.36	25	30	30
49	409.3	396.44	25	-	-
50	417.4	404.52	25	30	30
51	425.5	412.60	30	30	40
52	433.6	420.67	30	30	40
53	441.7	428.75	30	-	-
54	448.3	436.85	30	-	-
55	457.9	444.93	30	30	40
56	466.0	453.01	30	40	40
57	474.0	461.07	30	40	40
58	482.1	469.16	30	-	-
59	490.2	477.24	30	-	-
60	498.3	485.32	30	40	40
62	514.5	501.50	30	40	-
64	530.7	517.65	30	-	-
65	538.8	525.73	30	40	40
66	546.8	533.80	30	-	-
68	562.9	549.98	30	40	40
70	579.2	566.14	30	40	40
72	595.4	582.32	30	40	40
75	619.7	606.55	30	40	40
76	627.0	614.65	30	40	40
78	643.3	630.80	30	-	-
80	660.0	646.96	30	40	40
85	699.9	687.40	30	40	40
90	740.3	727.81	30	40	40
95	781.1	768.22	30	40	40
100	821.1	808.63	30	40	40
110	902.0	889.48	30	40	40
114	934.3	921.81	30	40	40
120	982.8	970.33	30	40	40
125	1023.2	1010.73	30	40	40

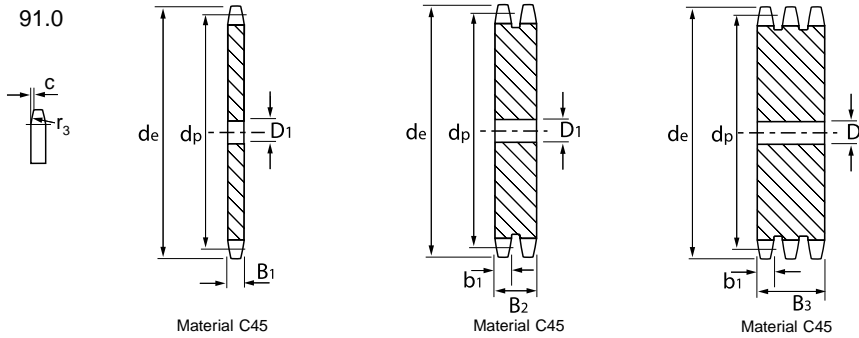
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Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

20B 1.1/4 x 19.56mm

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r3	32.0	Pitch	31.750
Chamfer c	3.5	Width Between Inner Plates	19.560
Tooth Width b1	18.2	Roller Diameter	19.050
Tooth Width B1	18.5		
Tooth Width B2	54.6		
Tooth Width B3	91.0		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	98.1	82.96	16	20	20
9	108.0	92.84	16	20	20
10	117.9	102.74	16	20	20
11	127.8	112.68	20	20	25
12	137.8	122.68	20	20	25
13	147.8	132.65	20	20	25
14	157.8	142.68	20	20	25
15	167.9	152.72	20	20	25
16	177.9	162.75	20	30	30
17	187.9	172.78	20	30	30
18	198.0	182.85	20	30	30
19	208.1	192.91	20	30	30
20	218.1	202.98	20	30	30
21	228.2	213.04	25	30	30
22	238.3	223.11	25	30	30
23	248.3	233.17	25	30	30
24	258.4	243.23	25	30	30
25	268.5	253.33	25	30	30
26	278.6	263.40	30	30	30
27	288.6	273.40	30	30	30
28	298.7	283.56	30	30	30
29	308.8	293.65	30	30	30
30	318.9	303.75	30	30	30
31	329.0	313.85	30	30	30
32	339.1	323.91	30	30	30
33	349.2	334.01	30	30	30
34	359.3	344.10	30	30	30
35	369.4	354.20	30	30	30
36	379.5	364.30	30	30	30
37	389.5	374.39	30	30	30
38	399.6	384.49	30	30	30
39	409.7	394.59	30	30	30
40	419.8	404.66	30	30	30
41	429.9	414.78	30	-	-

Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
42	440.0	424.80	30	30	40
43	450.1	434.97	30	-	-
44	460.2	445.07	30	-	-
45	470.3	455.07	30	30	40
46	480.4	465.26	30	30	40
47	490.5	475.36	30	-	-
48	500.6	485.46	30	30	40
49	510.7	495.55	30	-	-
50	520.8	505.65	30	30	40
51	530.9	515.75	30	-	-
52	541.0	525.84	30	40	40
53	551.1	535.94	30	-	-
54	561.2	546.07	30	-	-
55	571.3	556.16	30	40	40
56	581.4	566.26	30	-	-
57	591.5	576.36	30	40	40
58	601.6	586.45	30	-	-
59	611.7	596.55	30	-	-
60	621.8	606.65	30	40	40
62	642.0	626.87	30	-	-
64	662.2	647.06	30	-	-
65	672.3	657.16	30	40	40
66	682.4	667.26	30	-	-
68	702.6	687.48	30	-	-
70	722.8	707.67	30	40	40
72	743.1	727.90	30	-	-
75	773.3	758.19	30	-	-
76	783.5	768.32	30	40	40
80	823.9	808.72	30	40	40
85	874.4	859.25	30	-	-
90	924.9	909.76	30	-	-
95	975.2	960.28	30	40	40
100	1026.0	1010.79	40	-	-
114	1167.4	1152.26	40	40	40

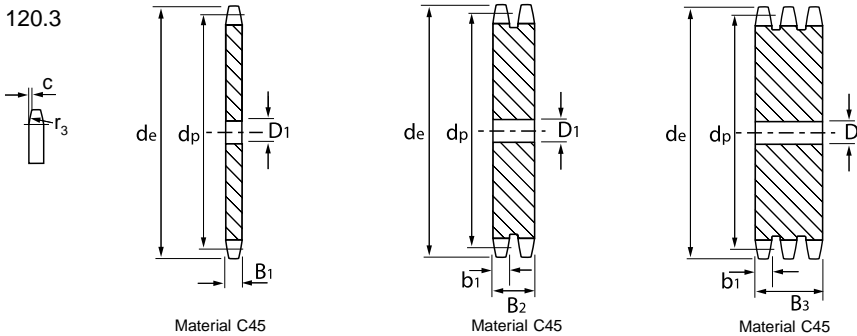
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Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

24B 1.1/2" x 25.4mm

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	38.0	Pitch	38.100
Chamfer c	4.0	Width Between Inner Plates	25.400
Tooth Width b1	23.6	Roller Diameter	25.400
Tooth Width B1	24.1		
Tooth Width B2	72.0		
Tooth Width B3	120.3		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	115.0	99.50	20	25	25
9	126.4	111.40	20	25	25
10	138.0	123.90	20	25	25
11	150.0	135.21	25	25	30
12	162.0	147.22	25	25	30
13	174.2	159.18	25	25	30
14	186.2	171.22	25	25	30
15	198.2	183.26	25	25	30
16	210.3	195.30	25	30	30
17	222.3	207.34	25	30	30
18	234.3	219.42	25	30	30
19	246.5	231.49	25	30	30
20	258.6	243.57	25	30	30
21	270.6	255.65	30	30	40
22	282.7	267.73	30	30	40
23	294.8	279.80	30	30	40
24	306.8	291.88	30	30	40
25	319.0	304.00	30	30	40
26	331.0	316.08	30	30	40
27	343.2	328.19	30	30	40
28	355.2	340.27	30	30	40
29	367.3	352.38	30	30	40
30	379.5	364.50	30	30	40
31	391.6	376.62	30	40	40
32	403.7	388.69	30	40	40
33	415.8	400.81	30	40	40
34	427.8	412.93	30	40	40
35	440.0	425.04	30	40	40
36	452.0	437.16	30	40	40
37	464.2	449.27	30	40	40
38	476.2	461.39	30	40	40
39	488.5	473.50	30	40	40
40	500.6	485.62	30	40	40

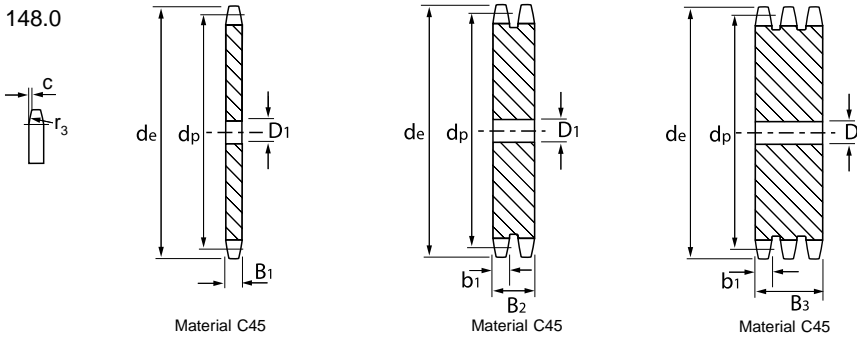
Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
41	512.6	497.74	30	-	-
42	524.7	509.85	30	40	40
43	536.8	521.97	30	-	-
44	549.0	534.08	30	-	-
45	561.2	546.20	30	40	40
46	573.3	558.32	30	40	40
47	585.4	570.43	30	-	-
48	597.4	582.55	30	40	40
49	609.5	594.66	30	-	-
50	621.7	606.78	30	40	40
51	633.8	618.89	30	-	-
52	646.0	631.01	30	-	-
53	658.0	643.13	30	-	-
54	670.2	655.25	30	-	-
55	682.3	667.40	30	40	40
56	694.4	679.50	30	-	-
57	706.5	691.73	30	40	40
58	718.6	703.74	30	-	-
59	730.7	715.86	30	-	-
60	742.8	727.97	30	40	40
62	767.2	752.24	40	-	-
64	791.3	776.48	40	-	-
65	803.4	788.59	40	40	40
66	815.6	800.17	40	-	-
68	839.8	824.98	40	-	-
70	864.2	849.21	40	-	-
72	888.4	873.48	40	-	-
75	924.8	909.83	40	-	-
76	936.9	921.98	40	40	40
80	985.4	970.44	40	-	-
85	1046.0	1031.10	40	-	-
95	1167.3	1152.33	40	-	-

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

28B 1.3/4" x 1.1/4"

SPROCKET		CHAIN	
	mm		mm
Tooth Radius r_3	44.0	Pitch	44.450
Chamfer c	5.0	Width Between Inner Plates	30.990
Tooth Width B1	29.4	Roller Diameter	27.940
Tooth Width b1	28.8		
Tooth Width B2	88.4		
Tooth Width B3	148.0		



Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	132.0	116.15	25	25	25
9	148.4	129.96	25	25	25
10	162.3	143.85	25	25	25
11	176.3	157.77	25	30	30
12	189.3	171.74	25	30	30
13	204.2	185.75	25	30	30
14	218.2	199.76	25	30	30
15	232.3	213.79	25	30	30
16	246.3	227.84	30	30	30
17	260.0	241.90	30	30	30
18	274.0	255.98	30	30	30
19	289.0	270.06	30	30	30
20	303.0	284.15	30	30	30
21	317.0	298.24	30	30	40
22	331.0	312.34	30	30	40
23	345.0	326.44	30	30	40
24	359.0	340.55	30	30	40
25	373.0	354.66	30	30	40
26	387.0	368.77	30	40	40

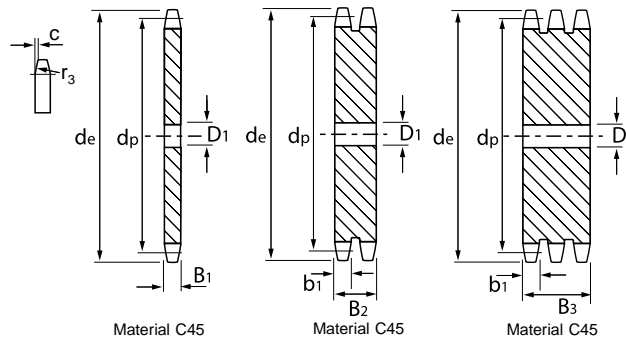
Teeth	Outer Dia de	Pitch Dia dp	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
27	401.0	382.77	30	40	40
28	416.0	397.00	30	40	40
29	430.0	411.12	30	40	40
30	444.0	425.24	30	40	40
31	458.0	439.37	30	40	40
32	472.0	453.49	30	40	40
33	486.0	467.62	30	40	40
34	500.0	481.75	30	40	40
35	514.0	495.88	30	40	40
36	529.0	510.01	30	40	40
37	543.0	524.13	30	40	40
38	557.0	538.27	30	40	40
39	571.0	552.40	30	40	40
40	585.0	566.54	30	40	40
45	656.0	637.22	30	40	40
50	726.0	707.91	30	40	40
57	825.0	806.90	40	40	40
60	869.0	849.32	40	40	40
76	1095.0	1075.62	40	40	40

Plate Wheel Sprockets

BS Pilot Bore Plate Wheels

32B 2" x 1.1/4"

SPROCKET	mm	CHAIN	mm
Tooth Radius r_3	51.0	Pitch	50.800
Chamfer c	6.0	Width Between Inner Plates	30.990
Tooth Width B1	29.4	Roller Diameter	29.210
Tooth Width b1	28.8		
Tooth Width B2	87.4		
Tooth Width B3	146.0		

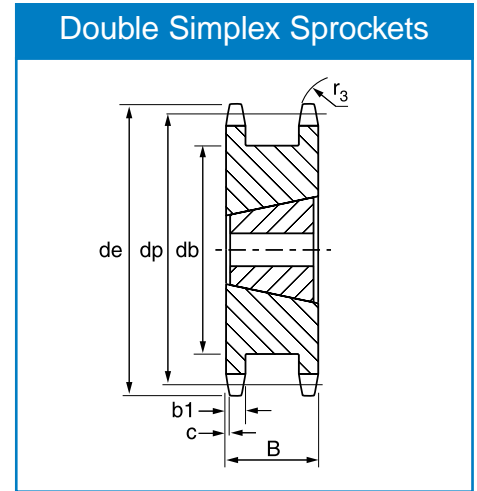


Teeth	Outer Dia d_e	Pitch Dia d_p	Simplex	Duplex	Triplex
			Stock Bore D1	Stock Bore D1	Stock Bore D1
8	153.2	132.74	25	25	25
9	169.0	148.54	25	25	25
10	185.0	164.39	25	25	25
11	200.8	180.31	30	35	35
12	216.8	196.29	30	35	35
13	232.8	212.29	30	35	35
14	248.8	228.29	30	35	35
15	264.8	244.30	30	35	35
16	280.9	260.40	30	40	40
17	296.9	276.46	30	40	40
18	313.0	292.55	30	40	40
19	329.1	308.66	30	40	40
20	345.2	324.71	30	40	40
21	361.3	340.82	40	40	40
22	377.5	356.98	40	40	40
23	393.6	373.08	40	40	40
24	409.7	389.18	40	40	40
25	425.8	405.33	40	40	40
26	441.9	421.44	40	40	40
27	458.1	437.69	40	40	40
28	474.2	453.69	40	40	40
29	490.2	469.85	40	40	40
30	506.5	486.00	40	40	40
32	538.8	518.27	40	40	40
35	589.5	566.71	40	40	40
38	635.5	615.16	40	40	40
40	670.3	647.47	40	40	40
45	751.0	728.24	40	40	40
50	831.8	809.04	40	40	40
57	945.0	922.16	40	40	40
60	993.4	970.65	40	40	40
76	1252.0	1229.27	40	40	40

Double Simplex Sprockets

Taper Bore Double Simplex Sprockets

06B 3/8" x 7/32"					
SPROCKET		mm			
Tooth Radius r_3		10.00			
Chamfer c		1.00			
Tooth Width b1		6.35			
Teeth	Outer Dia de	Pitch Dia dp	Width B	Hub Dia db	Taper Bush
18	58.3	54.85	23.5	43	1008
19	61.3	57.87	23.5	46	1008
20	64.3	60.89	23.5	48	1108
21	68.0	63.91	23.5	52	1108
23	73.5	69.95	23.5	58	1108
25	80.0	76.00	23.5	64	1108



08B 1/2" x 5/16"					
SPROCKET		mm			
Tooth Radius r_3		13.00			
Chamfer c		1.30			
Tooth Width b1		7.20			
Teeth	Outer Dia de	Pitch Dia dp	Width B	Hub Dia db	Taper Bush
14	61.8	57.07	31	41	1008
15	65.5	61.09	31	45	1008
16	69.5	65.1	31	49	1108
17	73.6	69.11	31	53	1108
18	77.8	73.14	31	58	1210
19	81.7	77.16	31	62	1210
20	85.8	81.19	31	66	1210
21	89.7	85.22	31	70	1610
23	98.2	93.27	31	78	1610
25	105.8	101.33	31	86	2012

10B 5/8" x 3/8"					
SPROCKET		mm			
Tooth Radius r_3		16.00			
Chamfer c		1.60			
Tooth Width b1		9.20			
Teeth	Outer Dia de	Pitch Dia dp	Width B	Hub Dia db	Taper Bush
12	68.0	61.34	36.5	45	1108
13	73.0	66.32	36.5	50	1108
14	78.0	71.34	36.5	55	1108
15	83.0	76.36	36.5	60	1210
16	88.0	81.37	36.5	65	1210
17	93.0	86.39	36.5	70	1610
18	98.3	91.42	36.5	75	1610
19	103.3	96.45	36.5	80	1610
20	108.4	101.49	36.5	85	1610
21	113.4	106.52	36.5	90	2012
23	123.4	116.58	36.5	100	2012
25	134.0	126.66	36.5	110	2012

12B 3/4" x 7/16"					
SPROCKET		mm			
Tooth Radius r_3		19.00			
Chamfer c		2.00			
Tooth Width b1		11.20			
Teeth	Outer Dia de	Pitch Dia dp	Width B	Hub Dia db	Taper Bush
12	81.5	73.61	45	53	1210
13	87.5	79.59	45	59	1210
14	93.6	85.61	45	65	1210
15	99.8	91.63	45	71	1610
16	105.5	97.65	45	77	1610
17	111.5	103.67	45	83	1610
18	118.0	109.71	45	89	2012
19	124.2	115.75	45	95	2012
20	129.7	121.78	45	101	2517
21	136.0	127.82	45	107	2517
23	149.0	139.90	45	119	2517
25	160.0	152.00	45	1310	2517

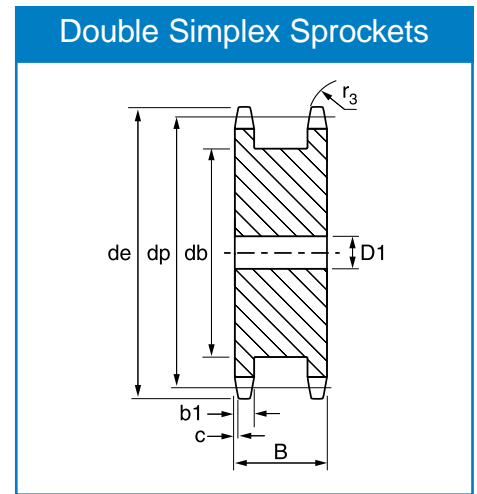
16B 1" x 17.2 mm					
SPROCKET		mm			
Tooth Radius r_3		26.00			
Chamfer c		2.50			
Tooth Width b1		16.20			
Teeth	Outer Dia de	Pitch Dia dp	Width B	Hub Dia db	Taper Bush
12	109.0	98.14	63.5	72	1615
13	117.0	106.12	63.5	81	1615
14	125.0	114.15	63.5	88	2012
15	133.0	122.17	63.5	97	2012
16	141.0	130.20	63.5	104	2012
17	149.0	138.22	63.5	113	2517
18	157.0	146.28	63.5	121	2517
19	165.2	154.33	63.5	129	2517
20	173.2	162.38	63.5	137	3020
21	181.2	170.43	63.5	145	3020
23	197.5	186.53	63.5	161	3525
25	213.5	202.66	63.5	177	3525

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Double Simplex Sprockets

Pilot Bore Double Simplex Sprockets

06B 3/8" x 7/32"					
SPROCKET		mm			
Tooth Radius r_3		10.00			
Chamfer c		1.00			
Tooth Width b1		6.35			
Teeth	Outer Dia d_e	Pitch Dia d_p	Width B	Hub Dia d_b	Stock Bore D1
14	46.3	42.80	23.5	31	10
15	49.3	54.81	23.5	34	10
16	52.3	48.82	23.5	37	10
17	55.3	51.83	23.5	40	10
18	58.3	54.85	23.5	43	10
19	61.3	57.87	23.5	46	10
20	64.3	60.89	23.5	48	10
21	68.0	63.91	23.5	52	10
23	73.5	69.95	23.5	58	10
25	80.0	76.00	23.5	64	10



08B 1/2" x 5/16"					
SPROCKET		mm			
Tooth Radius r_3		13.00			
Chamfer c		1.30			
Tooth Width b1		7.20			
Teeth	Outer Dia d_e	Pitch Dia d_p	Width B	Hub Dia d_b	Stock Bore D1
12	53.0	49.07	31	35	12
13	57.4	53.06	31	38	12
14	61.8	57.07	31	41	12
15	65.6	61.09	31	45	12
16	69.5	65.10	31	49	12
17	73.6	69.11	31	53	12
18	77.8	73.14	31	58	12
19	81.7	77.16	31	62	12
20	85.8	81.19	31	66	12
21	89.7	85.22	31	70	18
23	98.2	93.27	31	78	18
25	105.8	101.33	31	86	18

10B 5/8" x 3/8"					
SPROCKET		mm			
Tooth Radius r_3		16.00			
Chamfer c		1.60			
Tooth Width b1		9.20			
Teeth	Outer Dia d_e	Pitch Dia d_p	Width B	Hub Dia d_b	Stock Bore D1
12	68.0	61.34	36.5	45	19
13	73.0	66.32	36.5	50	19
14	78.0	71.34	36.5	55	19
15	83.0	76.36	36.5	60	19
16	88.0	81.37	36.5	65	19
17	93.0	86.39	36.5	70	19
18	98.3	91.42	36.5	75	19
19	103.3	96.45	36.5	80	19
20	108.4	101.49	36.5	85	19
21	113.4	106.52	36.5	90	19
23	123.4	116.58	36.5	100	19
25	134.0	126.66	36.5	110	19

12B 3/4" x 7/16"					
SPROCKET		mm			
Tooth Radius r_3		19.00			
Chamfer c		2.00			
Tooth Width b1		11.20			
Teeth	Outer Dia d_e	Pitch Dia d_p	Width B	Hub Dia d_b	Stock Bore D1
12	81.5	73.61	45	53	24
13	87.5	79.59	45	59	24
14	93.6	85.61	45	65	24
15	99.8	91.63	45	71	24
16	105.5	97.65	45	77	24
17	111.5	103.67	45	83	24
18	118.0	109.71	45	89	24
19	124.2	115.75	45	95	24
20	129.7	121.78	45	101	24
21	136.0	127.82	45	107	24
23	149.0	139.90	45	119	24
25	160.0	152.00	45	131	24

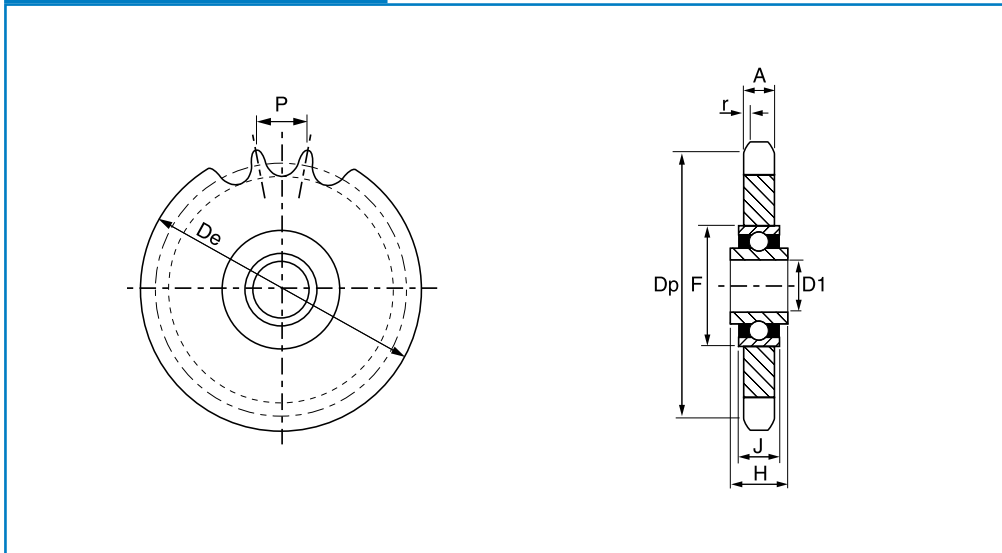
16B 1" x 17.2 mm					
SPROCKET		mm			
Tooth Radius r_3		26.00			
Chamfer c		2.50			
Tooth Width b1		16.20			
Teeth	Outer Dia d_e	Pitch Dia d_p	Width B	Hub Dia d_b	Stock Bore D1
12	109.0	98.14	63.5	72	25
13	117.0	106.12	63.5	81	25
14	125.0	114.15	63.5	88	25
15	133.0	122.17	63.5	97	25
16	141.0	130.20	63.5	104	25
17	149.0	138.22	63.5	113	25
18	157.0	146.28	63.5	121	25
19	165.2	154.33	63.5	129	25
20	173.2	162.38	63.5	137	25
21	181.2	170.43	63.5	145	25
23	197.5	186.53	63.5	161	25
25	213.5	202.66	63.5	177	25

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

Idler Sprockets

Idler Sprockets

Idler Sprockets



Chain Size	Chain Pitch		Teeth	Outer Dia de	Pitch Dia dp	Tooth Width A	Bearing Bore D1	Bearing		Bearing Width J
	x	Width Between Inner Plates						Bore Width H	Outside Dia F	
05B	8 mm	3 mm	23	62.0	58.75	2.8	16	18.3	40	12
06B	3/8"	7/32"	21	68.0	63.91	5.3	16	18.3	40	12
81	1/2"	1/8"	18	78.9	73.14	3.0	16	18.3	40	12
83	1/2"	3/16"	18	78.9	73.14	4.5	16	18.3	40	12
84	1/2"	3/16"	18	78.9	73.14	4.5	16	18.3	40	12
08B	1/2"	5/16"	16	69.5	65.10	7.2	16	18.3	40	12
08B	1/2"	5/16"	18	77.8	73.14	7.2	16	18.3	40	12
10B	5/8"	3/8"	14	78.0	71.34	9.1	16	18.3	40	12
10B	5/8"	3/8"	15	83.0	76.36	9.1	16	18.3	40	12
10B	5/8"	3/8"	17	93.0	86.30	9.1	16	18.3	40	12
12B	3/4"	7/16"	13	87.5	79.59	11.1	16	18.3	40	12
12B	3/4"	7/16"	15	99.8	91.63	11.1	16	18.3	40	12
16B	1"	17.02 mm	12	109.0	98.14	16.2	20	17.7	47	14
20B	1.1/4"	3/4"	13	147.8	132.65	18.5	25	21.0	52	15

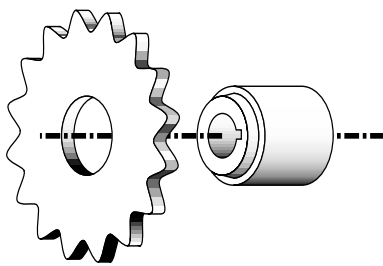
Chain Size	Chain Pitch		Teeth	Outer Dia de	Pitch Dia dp	Tooth Width A	Bearing Bore D1	Bearing		Bearing Width J
	x	Width Between Inner Plates						Bore Width H	Outside Dia F	
ASA 35	3/8"	3/16"	20	65.77	60.89	4.4	16.00	18.3	40	12
ASA 40	1/2"	5/16"	17	75.68	69.12	7.4	16.00	18.3	40	12
ASA 40	1/2"	5/16"	18	79.70	73.14	7.4	16.00	18.3	40	12
ASA 50	5/8"	3/8"	15	83.00	76.36	9.0	16.00	18.3	40	12
ASA 50	5/8"	3/8"	17	93.00	86.39	9.0	16.00	18.3	40	12
ASA 60	3/4"	1/2"	13	89.49	79.59	12.0	16.00	18.3	40	12
ASA 60	3/4"	1/2"	15	101.52	91.63	12.0	16.00	18.3	40	12
ASA 80	1"	5/8"	12	103.28	90.14	15.0	19.05	17.7	47	14

Welded Hubs & Sprockets

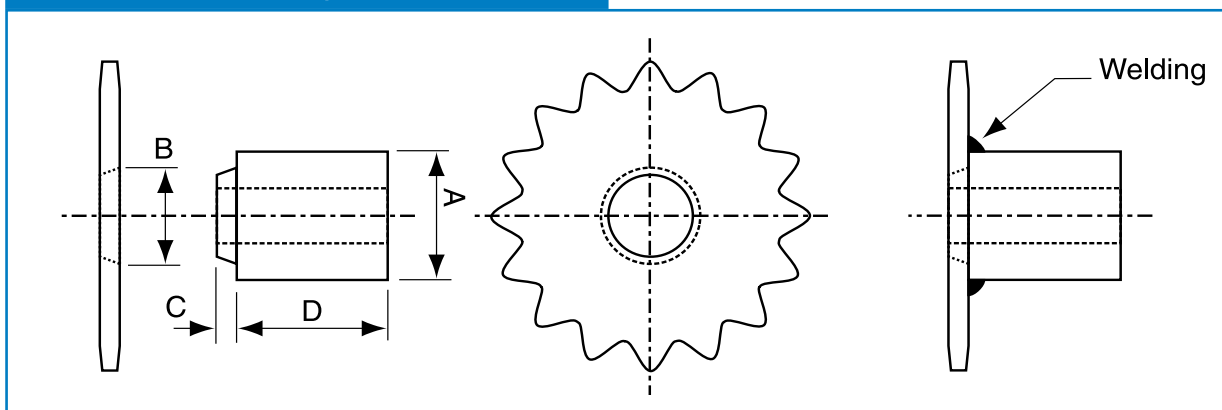
WELDED HUBS

For use with Welded Sprockets

	VTR Series Hub For AVT sprockets		WTR Series Hub For AWT sprockets		XTR Series Hub For AXT sprockets		YSR Series Hub-Bolt On For AYS sprockets	
A	34mm	(1-5/16)	45mm	(1-3/4)	62mm	(2-7/16)	125mm	(5)
B	30mm	(1-3/16)	41mm	(1-5/8)	57mm	(2-1/4)	90mm	(3-9/16)
C	12mm	(1/2)	12mm	(1/2)	12mm	(1/2)	24mm	(15/16)
D	30mm	(1-3/16)	37mm	(1-7/16)	37mm	(1-7/16)	41mm	(1-5/8)
Bore								
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
	1/2	12	1/2	12	1/2	12	3/4	18
	9/16	14	9/16	14	9/16	14	13/16	19
	5/8	15	5/8	15	5/8	15	7/8	20
	11/16	16	11/16	16	11/16	16	15/16	22
	3/4	18	3/4	18	3/4	18	1	24
	13/16	19	13/16	19	13/16	19	1-1/16	25
	7/8	20	7/8	20	7/8	20	1-1/8	28
		22	15/16	22	15/16	22	1-3/16	30
			1	24	1	24	1-1/4	32
			1-1/16	25	1-1/16	25	1-5/16	35
			1-1/8	28	1-1/8	28	1-3/8	38
			1-3/16	30	1-3/16	30	1-7/16	40
			1-1/4	32	1-1/4	32	1-1/2	42
					1-5/16	35	1-5/8	45
					1-3/8	38	1-3/4	48
					1-7/16	40	1-7/8	50
					1-1/2	42	2	55
					1-5/8	45	2-1/8	55
					1-3/4		2-1/4	
							2-3/8	60
							2-1/2	65
							2-5/8	
							2-3/4	70



Welded Hubs and Sprockets



Notes

- 1) Welding with low hydrogen electrodes is recommended
- 2) Keyways conform to BS 46 (imperial) and BS 4235 (metric)

Welded Hubs & Sprockets

BS Platewheel sprockets with prepared taper bore to receive welded hubs

No of Teeth	06B1 3/8" Pitch	08B1 1/2" Pitch	10B1 5/8" Pitch	12B1 3/4" Pitch	16B1 1" Pitch	20B1 1-1/4" Pitch
9				12AVT9HT	16AWT9HT	
10			10AVT10HT	12AVT10HT	16AWT10HT	20AXT10HT
11			10AVT11HT	12AWT11HT	16AWT11HT	20AXT11HT
12		08AVT12HT	10AWT12HT	12AWT12HT	16AXT12HT	20AXT12HT
13		08AVT13HT	10AWT13HT	12AWT13HT	16AXT13HT	20AXT13HT
14		08AVT14HT	10AWT14HT	12AWT14HT	16AXT14HT	20AXT14HT
15	06AVT15HT	08AVT15HT	10AWT15HT	12AXT15HT	16AXT15HT	20AXT15HT
16	06AVT16HT	08AWT16HT	10AWT16HT	12AXT16HT	16AXT16HT	20AYS16HT
17	06AVT17HT	08AWT17HT	10AXT17HT	12AXT17HT	16AXT17HT	20AYS17HT
18	06AVT18HT	08AWT18HT	10AXT18HT	12AXT18HT	16AXT18HT	20AYS18HT
19	06AVT19HT	08AWT19HT	10AXT19HT	12AXT19HT	16AXT19HT	20AYS19HT
20	06AVT20HT	08AXT20HT	10AXT20HT	12AXT20HT	16AXT20HT	20AYS20HT
21	06AVT21HT	08AXT21HT	10AXT21HT	12AXT21HT	16AXT21HT	20AYS21HT
22	06AWT22HT	08AXT22HT	10AXT22HT	12AXT22HT	16AXT22HT	20AYS22HT
23	06AWT23HT	08AXT23HT	10AXT23HT	12AXT23HT	16AXT23HT	20AYS23HT
24	06AWT24HT	08AXT24HT	10AXT24HT	12AXT24HT	16AXT24HT	20AYS24HT
25	06AWT25HT	08AXT25HT	10AXT25HT	12AXT25HT	16AXT25HT	20AYS25HT
26	06AWT26HT	08AXT26HT	10AXT26HT	12AXT26HT	16AXT26HT	20AYS26HT
27	06AWT27HT	08AXT27HT	10AXT27HT	12AXT27HT	16AXT27HT	20AYS27HT
28	06AWT28HT	08AXT28HT	10AXT28HT	12AXT28HT	16AXT28HT	20AYS28HT
29	06AWT29HT	08AXT29HT	10AXT29HT	12AXT29HT	16AXT29HT	20AYS29HT
30	06AWT30HT	08AXT30HT	10AXT30HT	12AXT30HT	16AXT30HT	20AYS30HT
31	06AWT31HT	08AXT31HT	10AXT31HT	12AXT31HT	16AXT31HT	20AYS31HT
32	06AWT32HT	08AXT32HT	10AXT32HT	12AXT32HT	16AXT32HT	20AYS32HT
33	06AWT33HT	08AXT33HT	10AXT33HT	12AXT33HT	16AXT33HT	20AYS33HT
34	06AWT34HT	08AXT34HT	10AXT34HT	12AXT34HT	16AXT34HT	20AYS34HT
35	06AWT35HT	08AXT35HT	10AXT35HT	12AXT35HT	16AXT35HT	20AYS35HT
36	06AWT36HT	08AXT36HT	10AXT36HT	12AXT36HT	16AXT36HT	20AYS36HT
37	06AWT37HT	08AXT37HT	10AXT37HT	12AXT37HT	16AXT37HT	20AYS37HT
38	06AWT38HT	08AXT38HT	10AXT38HT	12AXT38HT	16AXT38HT	20AYS38HT
39	06AWT39HT	08AXT39HT	10AXT39HT	12AXT39HT	16AXT39HT	20AYS39HT
40	06AWT40HT	08AXT40HT	10AXT40HT	12AXT40HT	16AXT40HT	20AYS40HT
42	06AWT42HT	08AXT42HT	10AXT42HT	12AXT42HT	16AXT42HT	20AYS42HT
43	06AWT43HT	08AXT43HT	10AXT43HT	12AXT43HT	16AXT43HT	20AYS43HT
44	06AWT44HT	08AXT44HT	10AXT44HT	12AXT44HT	16AXT44HT	20AYS44HT
45	06AWT45HT	08AXT45HT	10AXT45HT	12AXT45HT	16AXT45HT	20AYS45HT
48	06AWT48HT	08AXT48HT	10AXT48HT	12AXT48HT	16AXT48HT	20AYS48HT
50	06AWT50HT	08AXT50HT	10AXT50HT	12AXT50HT	16AYS50HT	20AYS50HT
57	06AWT57HT	08AXT57HT	10AXT57HT	12AXT57HT	16AYS57HT	20AYS57HT
60	06AWT60HT	08AXT60HT	10AXT60HT	12AXT60HT	16AYS60HT	20AYS60HT
70	06AYS70HT	08AYS70HT	10AYS70HT	12AYS70HT	16AYS70HT	20AYS70HT
76	06AYS76HT	08AYS76HT	10AYS76HT	12AYS76HT	16AYS76HT	20AYS76HT
80	06AYS80HT	08AYS80HT	10AYS80HT	12AYS80HT	16AYS80HT	20AYS80HT
84	06AYS84HT	08AYS84HT	10AYS84HT	12AYS84HT	16AYS84HT	20AYS84HT
96	06AYS96HT	08AYS96HT	10AYS96HT	12AYS96HT	16AYS96HT	20AYS96HT

HT = Induction Hardened Teeth

Pitch BS/ANSI Chain Size	3/8		1/2		5/8		3/4		1		1-1/4	
	06B	35	08B	40	10B	50	12B	60	16B	80	20B	100
Width between Inner Link Plates of Chain (mm)	5.72	4.78	7.75	7.95	9.65	9.53	11.68	12.70	17.02	15.88	19.56	19.05
Sprocket Teeth Width (mm)	5.30	4.30	7.20	7.20	8.70	8.70	11.00	11.70	16.10	14.60	17.60	17.60
Chain Roller Diameter (mm)	6.35	5.08	8.51	7.92	10.16	10.16	12.07	11.91	15.88	15.87	19.05	19.05

Welded Hubs & Sprockets

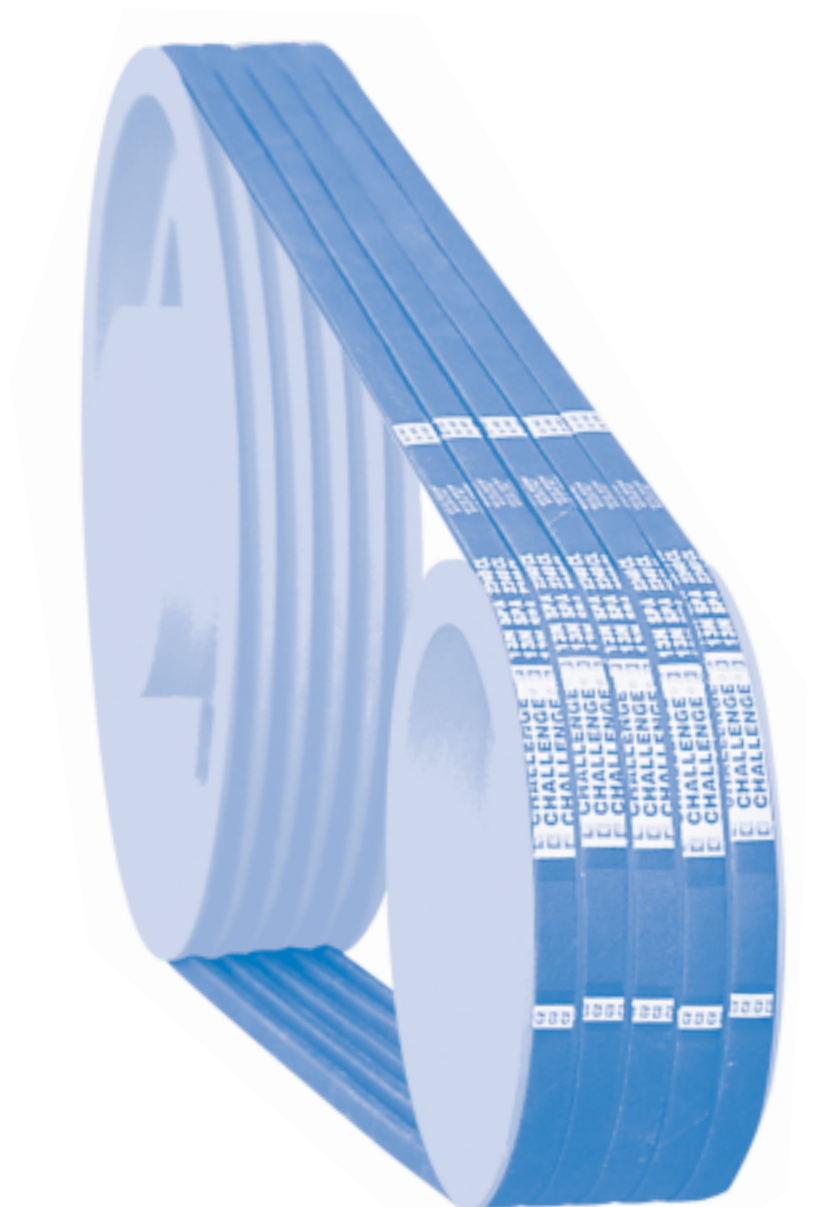
ANSI Platewheel sprockets with prepared taper bore to receive welded hubs

No of Teeth	ANSI-35 3/8" Pitch	ANSI-41 1/2" Pitch	ANSI-40 1/2" Pitch	ANSI-50 5/8" Pitch	ANSI-60 3/4" Pitch	ANSI-80 1" Pitch	ANSI-100 1-1/4" Pitch
9				60AVT9HT	80AWT9HT		
10				50AVT10HT	60AVT10HT	80AWT10HT	100AXT10HT
11				50AVT11HT	60AWT11HT	80AWT11HT	100AXT11HT
12		41AVT12HT	40AVT12HT	50AWT12HT	60AWT12HT	80AXT12HT	100AXT12HT
13		41AVT13HT	40AVT13HT	50AWT13HT	60AWT13HT	80AXT13HT	100AXT13HT
14		41AVT14HT	40AVT14HT	50AWT14HT	60AWT14HT	80AXT14HT	100AXT14HT
15	35AVT15HT	41AVT15HT	40AVT15HT	50AWT15HT	60AXT15HT	80AXT15HT	100AXT15HT
16	35AVT16HT	41AWT16HT	40AWT16HT	50AWT16HT	60AXT16HT	80AXT16HT	100AYS16HT
17	35AVT17HT	41AWT17HT	40AWT17HT	50AXT17HT	60AXT17HT	80AXT17HT	100AYS17HT
18	35AVT18HT	41AWT18HT	40AWT18HT	50AXT18HT	60AXT18HT	80AXT18HT	100AYS18HT
19	35AVT19HT	41AWT19HT	40AWT19HT	50AXT19HT	60AXT19HT	80AXT19HT	100AYS19HT
20	35AVT20HT	41AWT20HT	40AXT20HT	50AXT20HT	60AXT20HT	80AXT20HT	100AYS20HT
21	35AVT21HT	41AWT21HT	40AXT21HT	50AXT21HT	60AXT21HT	80AXT21HT	100AYS21HT
22	35AWT22HT	41AWT22HT	40AXT22HT	50AXT22HT	60AXT22HT	80AXT22HT	100AYS22HT
23	35AWT23HT	41AWT23HT	40AXT23HT	50AXT23HT	60AXT23HT	80AXT23HT	100AYS23HT
24	35AWT24HT	41AWT24HT	40AXT24HT	50AXT24HT	60AXT24HT	80AXT24HT	100AYS24
25	35AWT25HT	41AWT25HT	40AXT25HT	50AXT25HT	60AXT25HT	80AXT25HT	100AYS25
26	35AWT26HT	41AWT26HT	40AXT26HT	50AXT26HT	60AXT26HT	80AXT26HT	100AYS26
27	35AWT27HT	41AWT27HT	40AXT27HT	50AXT27HT	60AXT27HT	80AXT27HT	100AYS27
28	35AWT28HT	41AWT28HT	40AXT28HT	50AXT28HT	60AXT28HT	80AXT28HT	100AYS28
29	35AWT29HT	41AWT29HT	40AXT29HT	50AXT29HT	60AXT29HT	80AXT29HT	100AYS29
30	35AWT30HT	41AWT30HT	40AXT30HT	50AXT30HT	60AXT30HT	80AXT30HT	100AYS30
31	35AWT31HT	41AWT31HT	40AXT31HT	50AXT31HT	60AXT31HT	80AXT31	100AYS31
32	35AWT32HT	41AWT32HT	40AXT32HT	50AXT32HT	60AXT32HT	80AXT32	100AYS32
33	35AWT33HT	41AWT33HT	40AXT33HT	50AXT33HT	60AXT33HT	80AXT33	100AYS33
34	35AWT34HT	41AWT34HT	40AXT34HT	50AXT34HT	60AXT34HT	80AXT34	100AYS34
35	35AWT35HT	41AWT35HT	40AXT35HT	50AXT35HT	60AXT35HT	80AXT35	100AYS35
36	35AWT36HT	41AWT36HT	40AXT36HT	50AXT36HT	60AXT36HT	80AXT36	100AYS36
37	35AWT37HT	41AWT37HT	40AXT37HT	50AXT37HT	60AXT37HT	80AXT37	100AYS37
38	35AWT38HT	41AWT38HT	40AXT38HT	50AXT38HT	60AXT38HT	80AXT38	100AYS38
39	35AWT39HT	41AWT39HT	40AXT39HT	50AXT39HT	60AXT39HT	80AXT39	100AYS39
40	35AWT40HT	41AWT40HT	40AXT40HT	50AXT40HT	60AXT40HT	80AXT40	100AYS40
42	35AWT42	41AWT42	40AXT42	50AXT42	60AXT42	80AXT42	100AYS42
43	35AWT43	41AWT43	40AXT43	50AXT43	60AXT43	80AXT43	100AYS43
44	35AWT44	41AWT44	40AXT44	50AXT44	60AXT44	80AXT44	100AYS44
45	35AWT45	41AWT45	40AXT45	50AXT45	60AXT45	80AXT45	100AYS45
48	35AWT48	41AWT48	40AXT48	50AXT48	60AXT48	80AXT48	100AYS48
50	35AWT50	41AWT50	40AXT50	50AXT50	60AXT50	80AYS50	100AYS50
57	35AWT57	41AWT57	40AXT57	50AXT57	60AXT57	80AYS57	100AYS57
60	35AWT60	41AWT60	40AXT60	50AXT60	60AXT60	80AYS60	100AYS60
70	35AYS70	41AYS70	40AYS70	50AYS70	60AYS70	80AYS70	100AYS70
76	35AYS76	41AYS76	40AYS76	50AYS76	60AYS76	80AYS76	100AYS76
80	35AYS80	41AYS80	40AYS80	50AYS80	60AYS80	80AYS80	100AYS80
84	35AYS84	41AYS84	40AYS84	50AYS84	60AYS84	80AYS84	100AYS84
96	35AYS96	41AYS96	40AYS96	50AYS96	60AYS96	80AYS96	100AYS96

HT = Induction Hardened Teeth

Pitch BS/ANSI Chain Size	3/8		1/2		5/8		3/4		1		1-1/4	
	06B	35	08B	40	10B	50	12B	60	16B	80	20B	100
Width between Inner Link Plates of Chain (mm)	5.72	4.78	7.75	7.95	9.65	9.53	11.68	12.70	17.02	15.88	19.56	19.05
Sprocket Teeth Width (mm)	5.30	4.30	7.20	7.20	8.70	8.70	11.00	11.70	16.10	14.60	17.60	17.60
Chain Roller Diameter (mm)	6.35	5.08	8.51	7.92	10.16	10.16	12.07	11.91	15.88	15.87	19.05	19.05
Induction Hardened Teeth Up to & Including	40		40		40		35		30		23	

BELTS



Challenge V and Wedge Belts

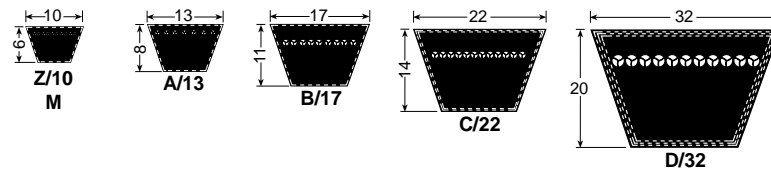
Belt Mass per metre length (kg/metre)

Section	Z	A	B	C	D
Vee	0.060	0.100	0.175	0.305	0.635
Section	SPZ	SPA	SPB	SPC	
Wedge	0.072	0.115	0.190	0.360	

Working Temperature:

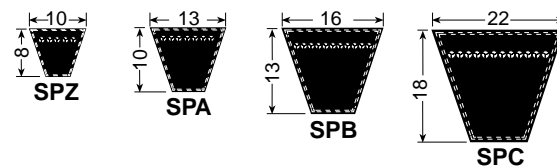
-30°C to +70°C

Classical V Belts



Section	Z	A	B	C	D
Top Width Nominal (mm)	10.0	13	17	22	32
Pitch Width (mm)	8.5	11	14	19	27
Section Height Nominal (mm)	6.0	8	11	14	19
Inside Length $L_i = L_p -$ (mm)	22.0	30	40	58	75
Outside Length $L_a = L_i +$ (mm)	50.0	63	100	160	280

Wedge Belts



Section	SPZ	SPA	SPB	SPC
Top Width Nominal (mm)	10	13	16	22
Pitch Width (mm)	8.5	11	14	19
Section Height Nominal (mm)	8	10	14	18
Inside Length $L_i = L_p -$ (mm)	37	45	60	83
Outside Length $L_a = L_i +$ (mm)	40	63	82	113

L_p = Pitch Length
 L_i = Inside Length
 L_a = Outside Length

All Challenge belts are of a wrapped construction. Challenge belts are heat and oil resistant and have anti static properties. The Challenge belt factory has ISO 9002 certification.

Classical V-Belts

Z / M					
10 x 6					
Imperial Li	Metric Lp	Alternative Metric Lp	Imperial Li	Metric Lp	Alternative Metric Lp
Z 15	Z 405		Z 51	Z 1320	10 x 1320
Z 15	Z 405		Z 52	Z 1340	10 x 1340
Z 15.5	Z 416		Z 53	Z 1370	10 x 1370
Z 15.7	Z 420		Z 54	Z 1390	10 x 1390
Z 16.7	Z 445		Z 55	Z 1420	10 x 1420
Z 17.5	Z 467		Z 56	Z 1450	10 x 1450
Z 17.7	Z 470		Z 57	Z 1470	10 x 1470
Z 18	Z 479		Z 58	Z 1500	
Z 18.5	Z 492		Z 59	Z 1520	
Z 19	Z 505		Z 60	Z 1546	
Z 19.5	Z 520		Z 62	Z 1600	
Z 20	Z 530		Z 63	Z 1620	
Z 20.5	Z 543		Z 64	Z 1650	
Z 21	Z 555		Z 75	Z 1920	
Z 21.7	Z 575		Z 78	Z 2000	
Z 22	Z 581				
Z 22.2	Z 585				
Z 23	Z 606	10 x 0610			
Z 23.5	Z 619				
Z 24	Z 632	10 x 0630			
Z 24.7	Z 650				
Z 25	Z 657	10 x 0660			
Z 26	Z 682	10 x 0680			
Z 26.5	Z 695				
Z 27	Z 708	10 x 0710			
Z 28	Z 733	10 x 0730			
Z 29	Z 759	10 x 0760			
Z 29.5	Z 770				
Z 30	Z 784	10 x 0780			
Z 30.7	Z 800				
Z 31	Z 809	10 x 0810			
Z 31.5	Z 820				
Z 32	Z 835	10 x 0840			
Z 33	Z 860	10 x 0860			
Z 33.7	Z 880				
Z 34	Z 886	10 x 0890			
Z 35	Z 911	10 x 0910			
Z 35.5	Z 925				
Z 36	Z 936	10 x 0940			
Z 36.5	Z 950				
Z 37	Z 962	10 x 0960			
Z 37.5	Z 975	10 x 0980			
Z 38	Z 987				
Z 39	Z 1013	10 x 1010			
Z 39.5	Z 1025				
Z 40	Z 1038	10 x 1040			
Z 40.5	Z 1050				
Z 41	Z 1063	10 x 1060			
Z 42	Z 1089	10 x 1090			
Z 43	Z 1114	10 x 1120			
Z 44	Z 1140	10 x 1140			
Z 45	Z 1165	10 x 1170			
Z 45.5	Z 1180				
Z 46	Z 1190	10 x 1190			
Z 46.5	Z 1200				
Z 47	Z 1220	10 x 1220			
Z 48	Z 1240	10 x 1240			
Z 49	Z 1270	10 x 1270			
Z 50	Z 1292	10 x 1290			

A					
13 x 8					
Imperial Li	Metric Lp	Alternative Metric Lp	Imperial Li	Metric Lp	Alternative Metric Lp
A 18	A 487		A 77	A 1986	
A 19	A 513		A 78	A 2011	13 x 2020
A 20	A 538	13 x 0540	A 79	A 2037	
A 21	A 563	13 x 0570	A 80	A 2062	13 x 2070
A 22	A 589	13 x 0590	A 81	A 2087	
A 23	A 614	13 x 0620	A 82	A 2113	13 x 2120
A 24	A 640	13 x 0650	A 83	A 2138	
A 25	A 665	13 x 0670	A 84	A 2164	
A 26	A 690	13 x 0700	A 85	A 2189	13 x 2190
A 27	A 716	13 x 0720	A 86	A 2214	
A 28	A 741	13 x 0750	A 87	A 2240	
A 29	A 767	13 x 0770	A 88	A 2265	
A 30	A 792	13 x 0800	A 89	A 2291	
A 31	A 817	13 x 0820	A 90	A 2316	13 x 2320
A 32	A 843	13 x 0850	A 91	A 2341	
A 33	A 868	13 x 0870	A 92	A 2367	
A 34	A 894	13 x 0900	A 93	A 2392	
A 35	A 919	13 x 0920	A 94	A 2418	
A 36	A 944	13 x 0950	A 95	A 2443	
A 37	A 970	13 x 0980	A 96	A 2468	13 x 2470
A 38	A 995	13 x 1000	A 97	A 2494	
A 39	A 1020	13 x 1030	A 98	A 2519	
A 40	A 1046	13 x 1050	A 99	A 2545	
A 41	A 1071	13 x 1080	A 100	A 2570	13 x 2580
A 42	A 1097	13 x 1100	A 102	A 2621	
A 43	A 1122	13 x 1130	A 103	A 2646	
A 44	A 1148	13 x 1150	A 105	A 2697	13 x 2700
A 45	A 1173	13 x 1180	A 106	A 2721	
A 46	A 1198	13 x 1200	A 107	A 2748	
A 47	A 1224	13 x 1230	A 108	A 2773	13 x 2800
A 48	A 1249	13 x 1250	A 110	A 2824	
A 49	A 1275	13 x 1280	A 112	A 2875	13 x 2880
A 50	A 1300	13 x 1310	A 115	A 2951	
A 51	A 1325	13 x 1330	A 116	A 2976	
A 52	A 1351	13 x 1360	A 117	A 3002	
A 53	A 1376	13 x 1380	A 118	A 3027	
A 54	A 1402	13 x 1410	A 120	A 3080	13 x 3080
A 55	A 1427	13 x 1430	A 124	A 3180	
A 56	A 1452	13 x 1460	A 125	A 3205	
A 57	A 1478	13 x 1480	A 128	A 3281	13 x 3290
A 58	A 1503	13 x 1510	A 130	A 3332	
A 59	A 1529	13 x 1530	A 136	A 3484	13 x 3490
A 60	A 1554	13 x 1560	A 140	A 3586	
A 61	A 1579	13 x 1580	A 144	A 3688	13 x 3690
A 62	A 1605	13 x 1610	A 154	A 3942	
A 63	A 1630	13 x 1640	A 158	A 4043	
A 64	A 1656	13 x 1660	A 173	A 4424	13 x 4430
A 65	A 1681	13 x 1690			
A 66	A 1710	13 x 1710			
A 67	A 1732				
A 68	A 1757	13 x 1760			
A 69	A 1783				
A 70	A 1808	13 x 1810			
A 71	A 1833				
A 72	A 1859	13 x 1860			
A 73	A 1884				
A 74	A 1910				
A 75	A 1935	13 x 1940			
A 76	A 1960				

Classical V-Belts

B								
17 x 11								
Imperial Li	Metric Lp	Alternative Metric Lp	Imperial Li	Metric Lp	Alternative Metric Lp	Imperial Li	Metric Lp	Alternative Metric Lp
B 22	B 599		B 82	B 2123		B 166	B 4256	
B 24	B 650		B 83	B 2148	17 x 2150	B 168	B 4307	
B 25	B 675		B 84	B 2174		B 173	B 4434	17 x 4440
B 26	B 700		B 85	B 2199	17 x 2200	B 180	B 4612	17 x 4620
B 28	B 751		B 86	B 2224		B 184	B 4714	
B 29	B 777		B 87	B 2250	17 x 2250	B 185	B 4740	
B 30	B 802	17 x 0810	B 88	B 2275		B 187	B 4790	
B 31	B 827		B 89	B 2301	17 x 2330	B 193	B 4942	
B 32	B 853		B 90	B 2326		B 194	B 4968	
B 33	B 878	17 x 0880	B 91	B 2351		B 195	B 4993	17 x 5000
B 34	B 904		B 92	B 2377		B 204	B 5222	
B 35	B 929	17 x 0930	B 93	B 2402	17 x 2410	B 210	B 5374	17 x 5380
B 36	B 954	17 x 0960	B 94	B 2428		B 215	B 5501	
B 37	B 980		B 95	B 2453	17 x 2460	B 220	B 5628	
B 38	B 1005	17 x 1010	B 96	B 2478		B 222	B 5679	
B 39	B 1031		B 97	B 2504	17 x 2510	B 225	B 5755	
B 40	B 1056	17 x 1060	B 98	B 2529	17 x 2530			17 x 6090
B 41	B 1081		B 99	B 2555		B 240	B 6136	
B 42	B 1107	17 x 1110	B 100	B 2580	17 x 2580	B 256	B 6542	
B 43	B 1132		B 101	B 2605		B 264	B 6746	
B 44	B 1158	17 x 1160	B 102	B 2631		B 268	B 6847	17 x 6850
B 45	B 1183		B 103	B 2656		B 298	B 7610	17 x 7610
B 46	B 1208	17 x 1210	B 104	B 2680		B 358	B 9140	17 x 9140
B 47	B 1234		B 105	B 2707	17 x 2710			
B 48	B 1259	17 x 1260	B 106	B 2732				
B 49	B 1285		B 107	B 2758				
B 50	B 1310	17 x 1310	B 108	B 2790	17 x 2790			
B 51	B 1335	17 x 1340	B 110	B 2840				
B 52	B 1361		B 112	B 2890	17 x 2890			
B 53	B 1386	17 x 1390	B 113	B 2910				
B 54	B 1412	17 x 1410	B 114	B 2936				
B 55	B 1437	17 x 1440	B 115	B 2961	17 x 2960			
B 56	B 1462	17 x 1470	B 116	B 2986				
B 57	B 1488		B 117	B 3012				
B 58	B 1513	17 x 1520	B 118	B 3037	17 x 3040			
B 59	B 1539		B 120	B 3088	17 x 3090			
B 60	B 1564	17 x 1570	B 124	B 3190	17 x 3190			
B 61	B 1589		B 125	B 3215				
B 62	B 1615	17 x 1620	B 126	B 3240				
B 63	B 1640		B 128	B 3291	17 x 3290			
B 64	B 1666	17 x 1670	B 130	B 3342				
B 65	B 1691	17 x 1690	B 131	B 3367				
B 66	B 1716	17 x 1720	B 132	B 3393				
B 66.5	B 1729		B 134	B 3444				
B 67	B 1742		B 135	B 3469				
B 68	B 1767	17 x 1770	B 136	B 3494				
B 69	B 1793		B 138	B 3550	17 x 3500			
B 70	B 1818	17 x 1820	B 140	B 3596				
B 71	B 1843	17 x 1850	B 142	B 3647				
B 72	B 1869	17 x 1870	B 144	B 3698	17 x 3700			
B 73	B 1894		B 146	B 3748				
B 74	B 1920		B 148	B 3799				
B 75	B 1945	17 x 1950	B 150	B 3850				
B 76	B 1970		B 152	B 3901				
B 77	B 1996		B 154	B 3952				
B 78	B 2021	17 x 2020	B 155	B 3977				
B 79	B 2047	17 x 2050	B 158	B 4053	17 x 4060			
B 80	B 2072	17 x 2080	B 160	B 4104				
B 81	B 2097	17 x 2100	B 162	B 4155				

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Classical V-Belts

C 22 x 14					
Imperial Li	Metric Lp	Alternative Metric Lp	Imperial Li	Metric Lp	Alternative Metric Lp
C 40	C 1074		C 106	C 2750	
C 42	C 1125		C 108	C 2801	
C 43	C 1150		C 110	C 2852	
C 44	C 1176		C 111	C 2880	
C 45	C 1201		C 112	C 2903	22 x 2900
C 46	C 1226		C 114	C 2954	
C 48	C 1277		C 115	C 2979	
C 50	C 1328		C 116	C 3004	
C 51	C 1353	22 x 1350	C 118	C 3055	22 x 3050
C 52	C 1379		C 120	C 3106	22 x 3100
C 53	C 1404		C 123	C 3182	
C 54	C 1430		C 124	C 3208	22 x 3210
C 55	C 1455	22 x 1450	C 125	C 3233	
C 56	C 1480		C 128	C 3309	22 x 3310
C 57	C 1506		C 130	C 3360	
C 58	C 1531		C 131	C 3385	
C 59	C 1557		C 132	C 3411	
C 60	C 1582	22 x 1580	C 133	C 3436	
C 61	C 1607		C 134	C 3460	
C 62	C 1633		C 136	C 3512	22 x 3510
C 63	C 1658	22 x 1660	C 140	C 3614	
C 64	C 1684		C 141	C 3639	
C 65	C 1709		C 142	C 3660	
C 67	C 1760		C 143	C 3690	
C 68	C 1785	22 x 1780	C 144	C 3716	22 x 3710
C 69	C 1811		C 146	C 3766	
C 70	C 1836		C 148	C 3817	
C 71	C 1871		C 150	C 3868	
C 72	C 1887		C 152	C 3899	
C 73	C 1912		C 154	C 3970	
C 75	C 1963	22 x 1960	C 156	C 4020	
C 76	C 1988		C 158	C 4071	22 x 4070
C 77	C 2014	22 x 2010	C 159	C 4097	22 x 4170
C 78	C 2039		C 160	C 4122	
C 79	C 2065	22 x 2060	C 162	C 4173	
C 80	C 2090		C 164	C 4224	
C 81	C 2115	22 x 2110	C 166	C 4274	
C 82	C 2141		C 168	C 4325	22 x 4320
C 83	C 2166	22 x 2160	C 170	C 4376	
C 84	C 2192		C 173	C 4452	22 x 4450
C 85	C 2217	22 x 2210	C 175	C 4500	
C 86	C 2242		C 180	C 4630	22 x 4630
C 87	C 2268		C 182	C 4681	
C 88	C 2293	22 x 2290	C 184	C 4732	
C 90	C 2344	22 x 2340	C 185	C 4757	
C 91	C 2369		C 190	C 4880	
C 92	C 2395		C 195	C 5011	22 x 5010
C 93	C 2420	22 x 2420	C 204	C 5240	
C 94	C 2446		C 210	C 5392	22 x 5390
C 95	C 2471		C 214	C 5494	
C 96	C 2496	22 x 2490	C 220	C 5640	
C 97	C 2522		C 224	C 5748	
C 98	C 2545	22 x 2550	C 225	C 5773	22 x 5770
C 99	C 2570		C 228	C 5850	
C 100	C 2598	22 x 2600	C 238	C 6100	22 x 6100
C 101	C 2623		C 240	C 6154	
C 102	C 2650		C 248	C 6360	
C 104	C 2700	22 x 2720	C 250	C 6408	
C 105	C 2725		C 255	C 6535	

Imperial Li	Metric Lp	Alternative Metric Lp
C 256	C 6560	
C 268	C 6865	22 x 6860
C 270	C 6910	22 x 7630
C 285	C 7260	
C 300	C 7678	22 x 8390
C 330	C 8440	
C 345	C 8821	22 x 9150
C 360	C 9202	22 x 10670
C 420	C 10690	

D 32 x 20					
Imperial Li	Metric Lp	Alternative Metric Lp	Imperial Li	Metric Lp	Alternative Metric Lp
D 90	D 2355		D 220	D 5663	
D 97	D 2539		D 225	D 5790	32 x 5800
D 98	D 2575		D 228	D 5865	
D 101	D 2640		D 230	D 5920	32 x 5920
D 102	D 2666		D 232	D 5980	32 x 5980
D 105	D 2742	32 x 2750	D 238	D 6120	32 x 6130
D 108	D 2820	32 x 2830	D 238	D 6130	
D 109	D 2845		D 240	D 6171	32 x 6180
D 110	D 2875		D 248	D 6375	
D 112	D 2920		D 250	D 6425	
D 113	D 2945		D 255	D 6552	32 x 6560
D 120	D 3123	32 x 3130	D 270	D 6933	32 x 6940
D 124	D 3225		D 280	D 7187	
D 128	D 3326	32 x 3330	D 285	D 7314	32 x 7320
D 130	D 3377	32 x 3380	D 298	D 7650	32 x 7650
D 132	D 3428		D 300	D 7695	32 x 7700
D 137	D 3555	32 x 3540	D 314	D 8051	32 x 8060
D 140	D 3631		D 315	D 8075	
D 144	D 3733	32 x 3740	D 328	D 8410	32 x 8410
D 148	D 3834	32 x 3840	D 330	D 8457	32 x 8460
D 150	D 3885		D 340	D 8710	
D 152	D 3940	32 x 3940	D 358	D 9170	32 x 9170
D 154	D 4000		D 360	D 9219	
D 156	D 4040	32 x 4040	D 380	D 9727	
D 158	D 4088	32 x 4090	D 394	D 10083	
D 162	D 4190	32 x 4200	D 418	D 10690	32 x 10700
D 166	D 4300	32 x 4300	D 420	D 10743	
D 170	D 4393		D 440	D 11251	
D 173	D 4469	32 x 4480	D 441	D 11275	
D 177	D 4571		D 450	D 11505	32 x 12220
D 180	D 4647	32 x 4650 32 x 4780	D 480	D 12267	
D 187	D 4825		D 525	D 13410	
D 191	D 4930	32 x 4930	D 540	D 13791	
D 195	D 5028	32 x 5030	D 564	D 14401	
D 204	D 5257	32 x 5260	D 600	D 15315	
D 210	D 5409	32 x 5420			

Wedge Belts

SPZ 10N		SPA 13N		SPB 16N		SPC 22N
Metric Lp	Metric Lp	Metric Lp	Metric Lp	Metric Lp	Metric Lp	Metric Lp
512	1250	750	1550	1250	2680	2000
530	1270	757	1557	1260	2800	2120
545	1300	782	1600	1340	2840	2240
580	1312	800	1632	1400	2990	2360
612	1320	807	1700	1410	3000	2500
630	1340	825	1732	1450	3150	2650
637	1400	832	1750	1500	3170	2800
662	1420	850	1782	1550	3340	3000
670	1462	882	1800	1590	3350	3150
710	1470	900	1832	1600	3550	3350
737	1500	925	1857	1650	3650	3550
750	1520	932	1900	1700	3750	3750
760	1560	950	1950	1750	3800	4000
787	1600	982	1957	1800	4000	4100
800	1637	1000	2000	1850	4060	4250
812	1700	1007	2032	1900	4250	4500
825	1737	1032	2057	1950	4310	4750
837	1762	1060	2120	2000	4560	5000
850	1800	1082	2182	2020	4820	5300
862	1850	1090	2240	2060	5000	5600
875	1862	1120	2300	2120	5070	6000
887	1900	1132	2360	2150	5300	6300
900	1962	1150	2500	2240	5380	6700
912	2000	1180	2650	2280	5600	7100
925	2030	1200	2800	2300	5680	7500
937	2120	1250	2900	2360	5990	8000
940	2150	1282	3000	2400	6300	8500
950	2160	1300	3150	2410	6340	9000
962	2187	1320	3350	2500	7100	9500
975	2240	1357	3550	2530	7500	10000
987	2280	1360	3750	2650	7990	
1000	2300	1400	4000			
1010	2360	1450	4250			
1012	2410	1500	4500			
1020	2500	1532				
1037	2540					
1060	2690					
1080	2840					
1120	2990					
1137	3000					
1140	3170					
1180	3350					
1200	3550					
1212	3810					

Equivalent belt designations are:

- 10N (SPZ) is interchangeable with Alpha, 3V and 9N
- 16N (SPB) is interchangeable with Beta, 5V and 15N
- 25N (8V) is interchangeable with SPP and Delta

These do not apply to Banded belts

Technical Information

Design Data Required For Belt Drives

- 1) Type of prime driver
- 2) Starting arrangement: Soft Start
Heavy Start
- 3) Speed of prime driver in r.p.m
- 4) Power rating of prime driver
- 5) Type of driven machine
- 6) Speed of driven machine in r.p.m
- 7) Absorbed power of the driven machine
- 8) Operating hours / day
- 9) Shaft diameters of both driver and driven machines
- 10) Drive centre distance. Is this fixed or does it have adjustment?
- 11) Are there any space constraints
- 12) Are there any environmental issues such as temperature, water, oil etc.

Belt Length Calculation

$$\text{Length (L)} = 2C + \frac{(D-d)^2}{4C} + 1,57 (D+d)$$

where

- L = Pitch length of belt in millimetres.
- C = Centre distance in millimetres.
- D = Pitch diam. of large pulley in millimetres.
- d = Pitch diam. of small pulley in millimetres.

Centre distance, given pulley diameters and belt length:

$$\text{Centre Distance (C)} = A + \sqrt{A^2 - B^2}$$

where

$$A = \frac{L}{4} - 0,3925 (D + d) \quad \text{and} \quad B = \frac{(D - d)^2}{8}$$

Belt Speed Calculation

$$S = \frac{(d \times n)}{19100} \quad (\text{m/s})$$

- where
- S = belt speed in - metres per second (m/s)
 - d = pulley pitch diameter in - mm
 - n = rotational speed of the same pulley in - revs per min (rpm)

Installation Guide.

Before fitting any new belts, an inspection should be carried out on the condition of the pulleys.

Good contact between belt and pulley is essential for both working capabilities and the life of the belt.

Worn or dirty pulley grooves will affect the contact of the belt with the pulley, which in turn will affect the performance of the belt. This will cause premature drive failure.

Check the parallel and angular alignment of the drive using a straight edge along the side of the pulleys prior to belt installation.

Always reduce the centre distance so that the belts can be loosely fitted to the pulley grooves. Belts should never be levered on to the pulleys as this may damage the tensile cords and cause premature belt failure.

After the belts have been fitted, the drive must be monitored over the first few hours of operation. The tension should be checked after the drive has been working under full load for approximately 30 minutes.

This will allow for the bedding in of the belt to the pulley groove and also counter initial, if any, belt stretch.

After 24 hours of working, it is advisable to check the belt tension again, particularly when they are continuously run under full load.

Belts should be stored in dry conditions and contact with cold surfaces, heat or direct sunlight should be avoided.

Trouble Shooting

Trouble Shooting

Problem	Probable Cause																	Solutions																														
	Excessive Oil	Exposure to Elements	Levered over Pulley	Contact with Obstruction	Insufficient Tension	Stalled Driven Pulley	Constant Slippage	Sub Standard Pulley	Excessive Tension	Shock Load	Foreign Material	Excessive Dust	Drive Misalignment	Worn Pulleys	Excessive Vibration	High Ambient Temperature	Incorrect design	Damaged Tensile Member	Incorrect Belts	Insufficient Drive Set up	Improper Take-up	Mixed Old & New Belts	Non Parallel Shafts	Different Manufacturers	Belt/Pulley Incompatible	Clean Pulleys & Belts	Replace Belts	Provide Protection	Install Properly	Check Belt Length	Remove Obstruction	Replace Pulleys	File Smooth	Redesign Drive	Align Drive	Provide Ventilation	Check for Proper Belt	Use only New Belts	Use single Source	Check Fit								
Loose Cover & Swell	*																								*	*																						
Weathering or Cracks	*																									*	*																					
Gouges		*	*																								*	*	*																			
Spin Burn				*	*								*									*							*	*																		
Envelope Wear					*					*												*			*	*		*								*												
Uneven Envelope Wear					*	*																						*	*	*																		
Ply Separation					*	*																		*			*	*	*																			
Side Split					*																			*		*	*	*																*				
Broken Belts	*						*	*				*	*												*	*		*																				
Belt Turn Over		*						*	*	*		*	*															*	*																			
Hardening & Premature Cracking			*									*																	*																			
Belt Squeal	*					*		*		*		*										*						*	*																			
Excessive Stretch					*			*		*		*																*	*										*									
Excessive Vibration	*		*						*			*													*	*	*	*	*	*								*					*			*		
Belts too Long at Installation								*		*		*	*	*								*		*		*	*	*	*								*	*										
Belts too Short at Installation									*	*		*	*									*		*		*	*	*	*							*	*											
Mismatched Belts at Installation							*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	

Question to Ask on “Belt Failures”

- 1) Ask for the above information. Check the design, using this information?
- 2) Were the belts tensioned correctly?
- 3) Has the alignment of the drive been checked?
- 4) Have the pulleys been checked for wear?
- 5) Ensure that the belts were not “levered” onto the pulley.
- 6) Compare the belts visual condition against the under mentioned “Trouble Shooting” table in “problems” and decide on the best probable cause/s.

Classical Timing Belts

Challenge Classical Timing Belts

Challenge classical synchronous belts are manufactured to ISO 5296 in four pitch sizes.

Belt Dimensions

	XL	L	H	XH
Belt Pitch (P)	5.080	9.525	12.700	22.225
Tooth Depth (T)	1.270	1.910	2.290	6.350
Belt Thickness (H)	2.400	3.600	4.400	11.400

XL (Extra Light Series) Pitch 5,08mm

Pitch Length	NO of Teeth	Width		
		1/4" (6.5 mm) Part no	5/16" (7.9 mm) Part no	3/8" (9.5 mm) Part no
152.4	30	60XL025	60XL031	60XL037
177.8	35	70XL025	70XL031	70XL037
203.2	40	80XL025	80XL031	80XL037
228.6	45	90XL025	90XL031	90XL037
248.9	49	98XL025	98XL031	98XL037
254.0	50	100XL025	100XL031	100XL037
259.1	51	102XL025	102XL031	102XL037
264.2	52	104XL025	104XL031	104XL037
269.2	53	106XL025	106XL031	106XL037
279.4	55	110XL025	110XL031	110XL037
304.8	60	120XL025	120XL031	120XL037
330.2	65	130XL025	130XL031	130XL037
355.6	70	140XL025	140XL031	140XL037
370.8	73	146XL025	146XL031	146XL037
381.0	75	150XL025	150XL031	150XL037
396.2	78	150XL025	150XL031	150XL037
406.4	80	160XL025	160XL031	160XL037
431.8	85	170XL025	170XL031	170XL037
447.0	88	176XL025	176XL031	176XL037
457.2	90	180XL025	180XL031	180XL037
462.3	91	182XL025	182XL031	182XL037
477.5	94	188XL025	188XL031	188XL037
482.6	95	190XL025	190XL031	190XL037
502.9	99	198XL025	198XL031	198XL037
508.0	100	200XL025	200XL031	200XL037
513.1	101	202XL025	202XL031	202XL037
533.4	105	210XL025	210XL031	210XL037
538.5	106	212XL025	212XL031	212XL037
543.6	107	214XL025	214XL031	214XL037
558.8	110	220XL025	220XL031	220XL037
579.1	114	228XL025	228XL031	228XL037
584.2	115	230XL025	230XL031	230XL037
594.4	117	234XL025	234XL031	234XL037
609.6	120	240XL025	240XL031	240XL037
635.0	125	250XL025	250XL031	250XL037
660.4	130	260XL025	260XL031	260XL037

Classical Timing Belts

L (Light Series) Pitch 9.525mm

Pitch Length	N0 of Teeth	Width		
		1/2" (13 mm) Part no	3/4"(19mm) Part no	1" (25 mm) Part no
314.3	33	124L050	124L075	124L100
342.9	36	135L050	135L075	135L100
381.0	40	150L050	150L075	150L100
438.2	46	173L050	173L075	173L100
476.3	50	187L050	187L075	187L100
514.4	54	202L050	202L075	202L100
533.4	56	210L050	210L075	210L100
571.5	60	225L050	240L075	225L100
609.6	64	240L050	255L075	240L100
647.7	68	255L050	270L075	255L100
685.8	72	270L050	285L075	270L100
723.9	76	285L050	300L075	285L100
762.0	80	300L050	322L075	300L100
819.2	86	322L050	345L075	322L100
848.4	89	334L050	334L075	334L100
876.3	92	345L050	345L075	345L100
933.5	98	367L050	367L075	367L100
990.6	104	390L050	390L075	390L100
1028.7	108	405L050	405L075	405L100
1047.8	110	412L050	412L050	412L100
1066.8	112	420L050	420L075	420L100
1143.0	120	450L050	450L075	450L100
1219.2	128	480L050	480L075	480L100
1295.4	136	510L050	510L075	510L100
1371.6	144	540L050	540L075	540L100
1524.0	160	600L050	600L075	600L100

Classical Timing Belts

H (Heavy Series) Pitch 12.7mm

Pitch Length	N0 of Teeth	Width				
		3/4" (19 mm) Part no	1" (25 mm) Part no	1.1/2" (38 mm) Part no	2" (51 mm) Part no	3" (75 mm) Part no
609.6	48	240H075	240H100	240H150	240H200	240H300
685.8	54	270H075	270H100	270H150	270H200	270H300
762.0	60	300H075	300H100	300H150	300H200	300H300
787.4	62	310H075	310H100	310H150	310H200	310H300
838.2	66	330H075	330H100	330H150	330H200	330H300
914.4	72	360H075	360H100	360H150	360H200	360H300
939.8	74	370H075	370H100	370H150	370H200	370H300
990.6	78	390H075	390H100	390H150	390H200	390H300
1066.8	84	420H075	420H100	420H150	420H200	420H300
1143.0	90	450H075	450H100	450H150	450H200	450H300
1219.2	96	480H075	480H100	480H150	480H200	480H300
1295.4	102	510H075	510H100	510H150	510H200	510H300
1371.6	108	540H075	540H100	540H150	540H200	540H300
1447.8	114	570H075	570H100	570H150	570H200	570H300
1524.0	120	600H075	600H100	600H150	600H200	600H300
1600.2	126	630H075	630H100	630H150	630H200	630H300
1676.4	132	660H075	660H100	660H150	660H200	660H300
1701.8	134	670H075	670H100	670H150	670H200	670H300
1778.0	140	700H075	700H100	700H150	700H200	700H300
1841.5	145	725H075	725H100	725H150	725H200	725H300
1905.0	150	750H075	750H100	750H150	750H200	750H300
2032.0	160	800H075	800H100	800H150	800H200	800H300
2159.0	170	850H075	850H100	850H150	850H200	850H300
2286.0	180	900H075	900H100	900H150	900H200	900H300
2540.0	200	1000H075	1000H100	1000H150	1000H200	1000H300
2794.0	220	1100H075	1100H100	1100H150	1100H200	1100H300
2844.8	224	1120H075	1120H100	1120H150	1120H200	1120H300
2895.6	228	1140H075	1140H100	1140H100	1140H200	1140H300
2921.0	230	1150H075	1150H075	1150H075	1150H200	1150H300
3175.0	250	1250H075	1250H100	1250H150	1250H200	1250H300
3556.0	280	1400H075	1400H100	1400H150	1400H200	1400H300
4178.3	329	1645H075	1645H100	1645H150	1645H200	1645H300
4318.0	340	1700H075	1700H100	1700H150	1700H200	1700H300

XH (Extra Heavy Series) Pitch 22.225mm

Pitch Length	N0 of Teeth	Width		
		2" (51 mm) Part no	3" (75 mm) Part no	4" (102 mm) Part no
1289.1	58	507XH200	507XH300	507XH400
1356.4	61	534XH200	534XH300	534XH400
1422.4	64	560XH200	560XH300	560XH400
1600.2	72	630XH200	630XH300	630XH400
1778.0	80	700XH200	700XH300	700XH400
1955.8	88	770XH200	770XH300	770XH400
2133.6	96	840XH200	840XH300	840XH400
2489.2	112	980XH200	980XH300	980XH400
2844.8	128	1120XH200	1120XH300	1120XH400
3200.4	144	1260XH200	1260XH300	1260XH400
3556.0	160	1400XH200	1400XH300	1400XH400
3911.6	176	1540XH200	1540XH300	1540XH400
4445.0	200	1750XH200	1750XH300	1750XH400

Curved Tooth Timing Belts

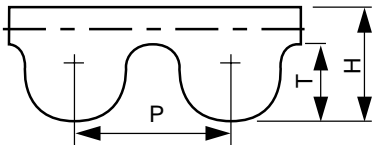
Challenge Curved Tooth Timing Belts

The special curved tooth design provides improved power transmission in a wide range of industrial applications. The precision formed teeth ensure smooth engagement with pulley grooves ensuring a long trouble free service life.

3M and 5M pitch belts are especially suited for many domestic, office machinery and power tool applications.

8M, 14M and 20M pitch belts are widely used in high performance drive applications.

Belt Dimensions

		3M	5M	8M	14M
	Belt Pitch (P)	3.00	5.00	8.00	14.00
	Tooth Depth (T)	1.15	2.00	3.20	6.00
	Belt Thickness (H)	2.40	3.80	5.40	9.70

Curved Tooth Pitch 3 mm

No of Teeth	Width			No of Teeth	Width		
	6 mm Part no	9 mm Part no	15 mm Part no		6 mm Part no	9 mm Part no	15 mm Part no
30	90-3M-6	90-3M-9	90-3M-15	115	345-3M-6	345-3M-9	345-3M-15
35	105-3M-6	105-3M-9	105-3M-15	119	357-3M-6	357-3M-9	357-3M-15
43	129-3M-6	129-3M-9	129-3M-15	121	363-3M-6	363-3M-9	363-3M-15
47	141-3M-6	141-3M-9	141-3M-15	125	375-3M-6	375-3M-9	375-3M-15
48	144-3M-6	144-3M-9	144-3M-15	128	384-3M-6	384-3M-9	384-3M-15
49	147-3M-6	147-3M-9	147-3M-15	130	390-3M-6	390-3M-9	390-3M-15
50	150-3M-6	150-3M-9	150-3M-15	131	393-3M-6	393-3M-9	393-3M-15
53	159-3M-6	159-3M-9	159-3M-15	135	405-3M-6	405-3M-9	405-3M-15
56	168-3M-6	168-3M-9	168-3M-15	140	420-3M-6	420-3M-9	420-3M-15
58	174-3M-6	174-3M-9	174-3M-15	144	432-3M-6	432-3M-9	432-3M-15
59	177-3M-6	177-3M-9	177-3M-15	149	447-3M-6	447-3M-9	447-3M-15
60	180-3M-6	180-3M-9	180-3M-15	158	474-3M-6	474-3M-9	474-3M-15
62	186-3M-6	186-3M-9	186-3M-15	160	480-3M-6	480-3M-9	480-3M-15
65	195-3M-6	195-3M-9	195-3M-15	162	486-3M-6	486-3M-9	486-3M-15
67	201-3M-6	201-3M-9	201-3M-15	163	489-3M-6	489-3M-9	489-3M-15
68	204-3M-6	204-3M-9	204-3M-15	167	501-3M-6	501-3M-9	501-3M-15
70	210-3M-6	210-3M-9	210-3M-15	170	510-3M-6	510-3M-9	510-3M-15
71	213-3M-6	213-3M-9	213-3M-15	171	513-3M-6	513-3M-9	513-3M-15
75	225-3M-6	225-3M-9	225-3M-15	174	522-3M-6	522-3M-9	522-3M-15
77	231-3M-6	231-3M-9	231-3M-15	177	531-3M-6	531-3M-9	531-3M-15
80	240-3M-6	240-3M-9	240-3M-15	179	537-3M-6	537-3M-9	537-3M-15
81	243-3M-6	243-3M-9	243-3M-15	188	564-3M-6	564-3M-9	564-3M-15
82	246-3M-6	246-3M-9	246-3M-15	190	570-3M-6	570-3M-9	570-3M-15
83	249-3M-6	249-3M-9	249-3M-15	192	576-3M-6	576-3M-9	576-3M-15
84	252-3M-6	252-3M-9	252-3M-15	193	579-3M-6	579-3M-9	579-3M-15
85	255-3M-6	255-3M-9	255-3M-15	199	597-3M-6	597-3M-9	597-3M-15
87	261-3M-6	261-3M-9	261-3M-15	200	600-3M-6	600-3M-9	600-3M-15
88	264-3M-6	264-3M-9	264-3M-15	211	633-3M-6	633-3M-9	633-3M-15
89	267-3M-6	267-3M-9	267-3M-15	216	648-3M-6	648-3M-9	648-3M-15
90	270-3M-6	270-3M-9	270-3M-15	223	669-3M-6	669-3M-9	669-3M-15
92	276-3M-6	276-3M-9	276-3M-15	237	711-3M-6	711-3M-9	711-3M-15
95	285-3M-6	285-3M-9	285-3M-15	245	735-3M-6	735-3M-9	735-3M-15
96	288-3M-6	288-3M-9	288-3M-15	246	738-3M-6	738-3M-9	738-3M-15
97	291-3M-6	291-3M-9	291-3M-15	252	756-3M-6	756-3M-9	756-3M-15
99	297-3M-6	297-3M-9	297-3M-15	268	804-3M-6	804-3M-9	804-3M-15
100	300-3M-6	300-3M-9	300-3M-15	294	882-3M-6	882-3M-9	882-3M-15
104	312-3M-6	312-3M-9	312-3M-15	315	945-3M-6	945-3M-9	945-3M-15
106	318-3M-6	318-3M-9	318-3M-15	354	1062-3M-6	1062-3M-9	1062-3M-15
109	327-3M-6	327-3M-9	327-3M-15	375	1125-3M-6	1125-3M-9	1125-3M-15
110	330-3M-6	330-3M-9	330-3M-15	415	1245-3M-6	1245-3M-9	1245-3M-15
111	333-3M-6	333-3M-9	333-3M-15	421	1263-3M-6	1263-3M-9	1263-3M-15
112	336-3M-6	336-3M-9	336-3M-15	500	1500-3M-6	1500-3M-9	1500-3M-15
113	339-3M-6	339-3M-9	339-3M-15	510	1530-3M-6	1530-3M-9	1530-3M-15

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Curved Tooth Timing Belts

Curved Tooth Pitch 5 mm

No of Teeth	Width		
	9 mm Part no	15 mm Part no	25 mm Part no
61	305-5M-9	305-5M-15	305-5M-25
65	325-5M-9	325-5M-15	325-5M-25
69	345-5M-9	345-5M-15	345-5M-25
70	350-5M-9	350-5M-15	350-5M-25
75	375-5M-9	375-5M-15	375-5M-25
80	400-5M-9	400-5M-15	400-5M-25
84	420-5M-9	420-5M-15	420-5M-25
85	425-5M-9	425-5M-15	425-5M-25
90	450-5M-9	450-5M-15	450-5M-25
91	455-5M-9	455-5M-15	455-5M-25
92	460-5M-9	460-5M-15	460-5M-25
93	465-5M-9	465-5M-15	465-5M-25
95	475-5M-9	475-5M-15	475-5M-25
100	500-5M-9	500-5M-15	500-5M-25
105	525-5M-9	525-5M-15	525-5M-25
107	535-5M-9	535-5M-15	535-5M-25
113	565-5M-9	565-5M-15	565-5M-25
115	575-5M-9	575-5M-15	575-5M-25
116	580-5M-9	580-5M-15	580-5M-25
120	600-5M-9	600-5M-15	600-5M-25
122	610-5M-9	610-5M-15	610-5M-25
123	615-5M-9	615-5M-15	615-5M-25
127	635-5M-9	635-5M-15	635-5M-25
128	640-5M-9	640-5M-15	640-5M-25
134	670-5M-9	670-5M-15	670-5M-25
135	675-5M-9	675-5M-15	675-5M-25
140	700-5M-9	700-5M-15	700-5M-25
141	705-5M-9	705-5M-15	705-5M-25
142	710-5M-9	710-5M-15	710-5M-25
145	725-5M-9	725-5M-15	725-5M-25
148	740-5M-9	740-5M-15	740-5M-25

No of Teeth	Width		
	9 mm Part no	15 mm Part no	25 mm Part no
150	750-5M-9	750-5M-15	750-5M-25
151	755-5M-9	755-5M-15	755-5M-25
160	800-5M-9	800-5M-15	800-5M-25
167	835-5M-9	835-5M-15	835-5M-25
170	850-5M-9	850-5M-15	850-5M-25
178	890-5M-9	890-5M-15	890-5M-25
180	900-5M-9	900-5M-15	900-5M-25
187	935-5M-9	935-5M-15	935-5M-25
188	940-5M-9	940-5M-15	940-5M-25
190	950-5M-9	950-5M-15	950-5M-25
196	980-5M-9	980-5M-15	980-5M-25
200	1000-5M-9	1000-5M-15	1000-5M-25
205	1025-5M-9	1025-5M-15	1025-5M-25
210	1050-5M-9	1050-5M-15	1050-5M-25
220	1100-5M-9	1100-5M-15	1100-5M-25
225	1125-5M-9	1125-5M-15	1125-5M-25
227	1135-5M-9	1135-5M-15	1135-5M-25
239	1195-5M-9	1195-5M-15	1195-5M-25
240	1200-5M-9	1200-5M-15	1200-5M-25
248	1240-5M-9	1240-5M-15	1240-5M-25
254	1270-5M-9	1270-5M-15	1270-5M-25
284	1420-5M-9	1420-5M-15	1420-5M-25
319	1595-5M-9	1595-5M-15	1595-5M-25
338	1690-5M-9	1690-5M-15	1690-5M-25
358	1790-5M-9	1790-5M-15	1790-5M-25
360	1800-5M-9	1800-5M-15	1800-5M-25
374	1870-5M-9	1870-5M-15	1870-5M-25
379	1895-5M-9	1895-5M-15	1895-5M-25
389	1945-5M-9	1945-5M-15	1945-5M-25
400	2000-5M-9	2000-5M-15	2000-5M-25

Curved Tooth Timing Belts

Curved Tooth Pitch 8 mm

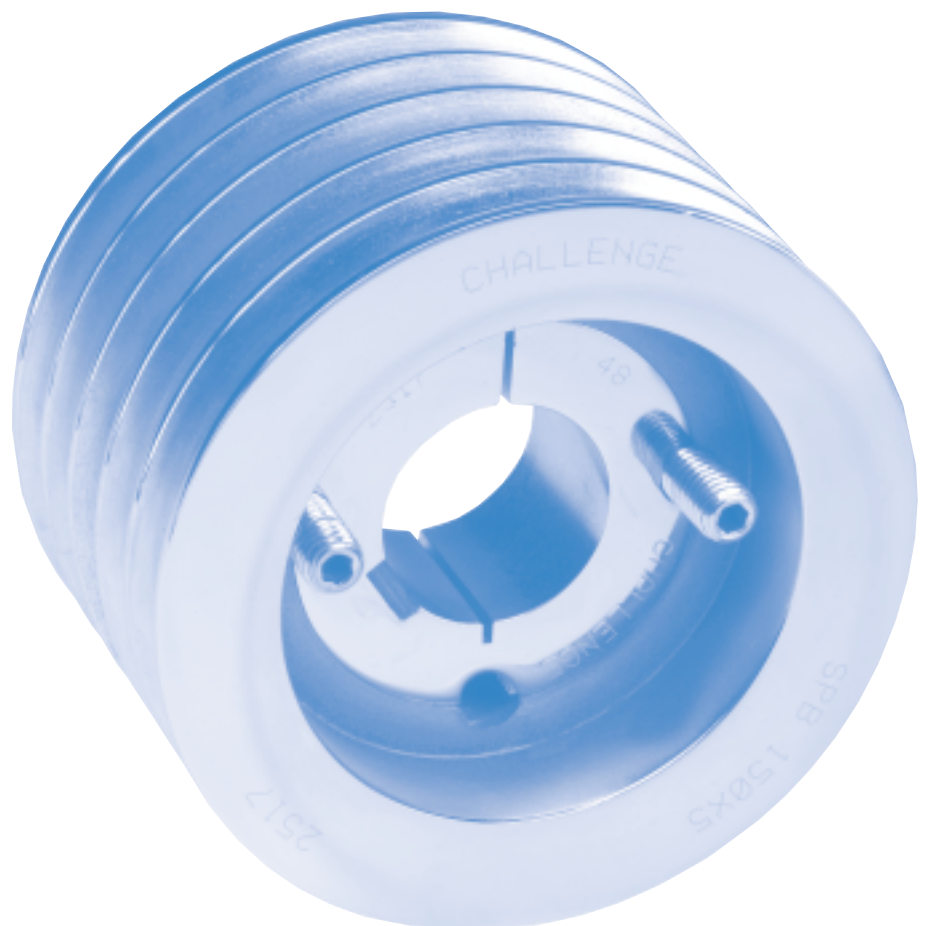
No of Teeth	Width			
	20 mm Part no	30 mm Part no	50 mm Part no	85 mm Part no
60	480-8M-20	480-8M-30	480-8M-50	480-8M-85
67	536-8M-20	536-8M-30	536-8M-50	536-8M-85
68	544-8M-20	544-8M-30	544-8M-50	544-8M-85
70	560-8M-20	560-8M-30	560-8M-50	560-8M-85
75	600-8M-20	600-8M-30	600-8M-50	600-8M-85
76	608-8M-20	608-8M-30	608-8M-50	608-8M-85
79	632-8M-20	632-8M-30	632-8M-50	632-8M-85
80	640-8M-20	640-8M-30	640-8M-50	640-8M-85
85	680-8M-20	680-8M-30	680-8M-50	680-8M-85
90	720-8M-20	720-8M-30	720-8M-50	720-8M-85
100	800-8M-20	800-8M-30	800-8M-50	800-8M-85
105	840-8M-20	840-8M-30	840-8M-50	840-8M-85
110	880-8M-20	880-8M-30	880-8M-50	880-8M-85
112	896-8M-20	896-8M-30	896-8M-50	896-8M-85
115	920-8M-20	920-8M-30	920-8M-50	920-8M-85
120	960-8M-20	960-8M-30	960-8M-50	960-8M-85
125	1000-8M-20	1000-8M-30	1000-8M-50	1000-8M-85
130	1040-8M-20	1040-8M-30	1040-8M-50	1040-8M-85
135	1080-8M-20	1080-8M-30	1080-8M-50	1080-8M-85
140	1120-8M-20	1120-8M-30	1120-8M-50	1120-8M-85
150	1200-8M-20	1200-8M-30	1200-8M-50	1200-8M-85
153	1224-8M-20	1224-8M-30	1224-8M-50	1224-8M-85
160	1280-8M-20	1280-8M-30	1280-8M-50	1280-8M-85
169	1352-8M-20	1352-8M-30	1352-8M-50	1352-8M-85
180	1440-8M-20	1440-8M-30	1440-8M-50	1440-8M-85
183	1464-8M-20	1464-8M-30	1464-8M-50	1464-8M-85
200	1600-8M-20	1600-8M-30	1600-8M-50	1600-8M-85
220	1760-8M-20	1760-8M-30	1760-8M-50	1760-8M-85
225	1800-8M-20	1800-8M-30	1800-8M-50	1800-8M-85
250	2000-8M-20	2000-8M-30	2000-8M-50	2000-8M-85
275	2200-8M-20	2200-8M-30	2200-8M-50	2200-8M-85
300	2400-8M-20	2400-8M-30	2400-8M-50	2400-8M-85
315	2520-8M-20	2520-8M-30	2520-8M-50	2520-8M-85
325	2600-8M-20	2600-8M-30	2600-8M-50	2600-8M-85
350	2800-8M-20	2800-8M-30	2800-8M-50	2800-8M-85

Curved Tooth Timing Belts

Curved Tooth Pitch 14 mm

No of Teeth	Width				
	40 mm Part no	55 mm Part no	85 mm Part no	115 mm Part no	170 mm Part no
69	966-14M-40	966-14M-55	966-14M-85	966-14M-115	966-14M-170
71	994-14M-40	994-14M-55	994-14M-85	994-14M-115	994-14M-170
78	1092-14M-40	1092-14M-55	1092-14M-85	1092-14M-115	1092-14M-170
79	1106-14M-40	1106-14M-55	1106-14M-85	1106-14M-115	1106-14M-170
85	1190-14M-40	1190-14M-55	1190-14M-85	1190-14M-115	1190-14M-170
90	1260-14M-40	1260-14M-55	1260-14M-85	1260-14M-115	1260-14M-170
92	1288-14M-40	1288-14M-55	1288-14M-85	1288-14M-115	1288-14M-170
96	1344-14M-40	1344-14M-55	1344-14M-85	1344-14M-115	1344-14M-170
100	1400-14M-40	1400-14M-55	1400-14M-85	1400-14M-115	1400-14M-170
103	1442-14M-40	1442-14M-55	1442-14M-85	1442-14M-115	1442-14M-170
112	1568-14M-40	1568-14M-55	1568-14M-85	1568-14M-115	1568-14M-170
115	1610-14M-40	1610-14M-55	1610-14M-85	1610-14M-115	1610-14M-170
126	1764-14M-40	1764-14M-55	1764-14M-85	1764-14M-115	1764-14M-170
127	1778-14M-40	1778-14M-55	1778-14M-85	1778-14M-115	1778-14M-170
132	1848-14M-40	1848-14M-55	1848-14M-85	1848-14M-115	1848-14M-170
135	1890-14M-40	1890-14M-55	1890-14M-85	1890-14M-115	1890-14M-170
136	1904-14M-40	1904-14M-55	1904-14M-85	1904-14M-115	1904-14M-170
140	1960-14M-40	1960-14M-55	1960-14M-85	1960-14M-115	1960-14M-170
150	2100-14M-40	2100-14M-55	2100-14M-85	2100-14M-115	2100-14M-170
160	2240-14M-40	2255-14M-55	2240-14M-85	2240-14M-115	2240-14M-170
165	2310-14M-40	2310-14M-55	2310-14M-85	2310-14M-115	2310-14M-170
170	2380-14M-40	2380-14M-55	2380-14M-85	2380-14M-115	2380-14M-170
175	2450-14M-40	2450-14M-55	2450-14M-85	2450-14M-115	2450-14M-170
185	2590-14M-40	2590-14M-55	2590-14M-85	2590-14M-115	2590-14M-170
190	2660-14M-40	2660-14M-55	2660-14M-85	2660-14M-115	2660-14M-170
200	2800-14M-40	2800-14M-55	2800-14M-85	2800-14M-115	2800-14M-170
225	3150-14M-40	3150-14M-55	3150-14M-85	3150-14M-115	3150-14M-170
240	3360-14M-40	3360-14M-55	3360-14M-85	3360-14M-115	3360-14M-170
250	3500-14M-40	3500-14M-55	3500-14M-85	3500-14M-115	3500-14M-170
275	3850-14M-40	3850-14M-55	3850-14M-85	3850-14M-115	3850-14M-170
280	3920-14M-40	3920-14M-55	3920-14M-85	3920-14M-115	3920-14M-170
309	4326-14M-40	4326-14M-55	4326-14M-85	4326-14M-115	4326-14M-170
327	4578-14M-40	4578-14M-55	4578-14M-85	4578-14M-115	4578-14M-170

PULLEYS



General Information

Material and Groove Specifications:

Challenge pulleys are manufactured from fine grain grey cast iron grade GG-25. Groove dimensions conform to DIN 2211/1 for both eccentricity of outside diameter to bore and groove side wobble tolerance. They are suitable for use with all wedge belts according to DIN 7753/1 and all classical V-belts according to DIN 2215.

Circumferential Speeds:

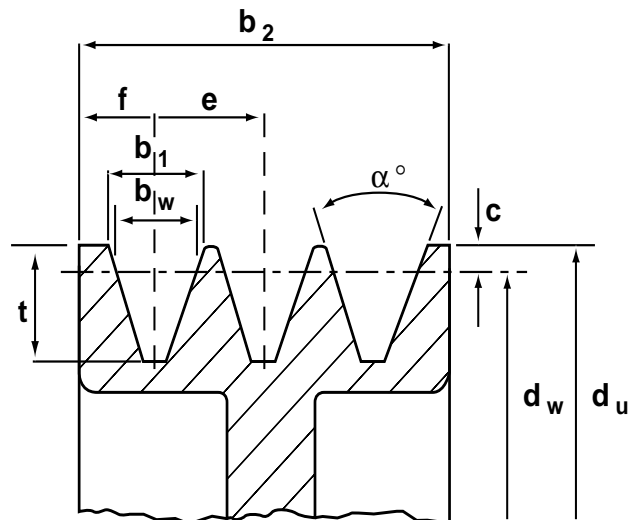
Circumferential speeds of up to 40 m/s are permissible

Balancing Specifications:

All Challenge pulleys are balanced to grade Q6.3 or better.

- Pulleys with a weight of 100Kg and above are dynamically balanced (two planes).
- All pulleys with a weight less than 100kg are statically machine balanced (one plane).

V-belt Pulleys DIN 2211/1

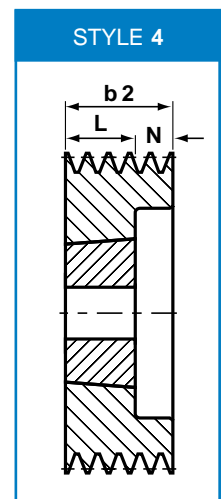
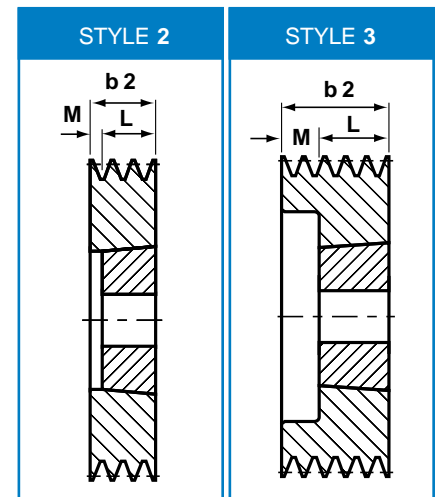
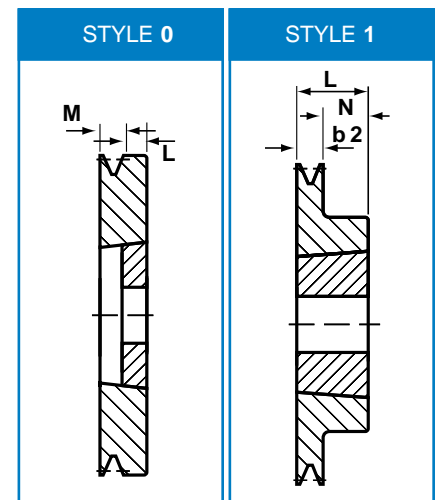


Profile	d_w (mm)	α°	b_1	b_w	c	f	e	t_{min}
SPZ (10Z)	Up to 80 Over 80	34 38	9.7	8.5	2.0	8 ± 0.3	12 ± 0.3	$11 + 0.6$
SPA (13A)	Up to 118 Over 118	34 38	12.7	11.0	2.8	10 ± 0.3	15 ± 0.3	$14 + 0.6$
SPB (17B)	Up to 190 Over 190	34 38	16.3	14.0	3.5	12.5 ± 0.4	19 ± 0.4	$18 + 0.6$
SPC (22C)	Up to 315 Over 315	34 38	22.0	19.0	4.8	17 ± 0.5	25.5 ± 0.5	$24 + 0.6$

Width of Pulleys b_2

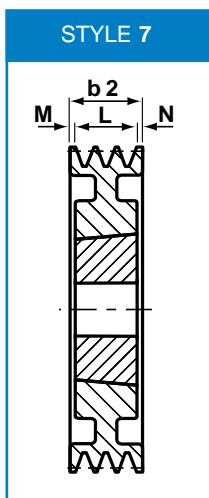
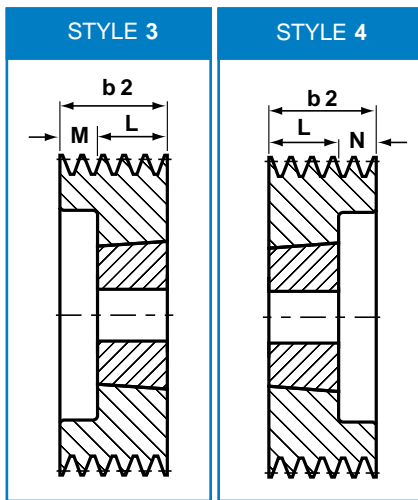
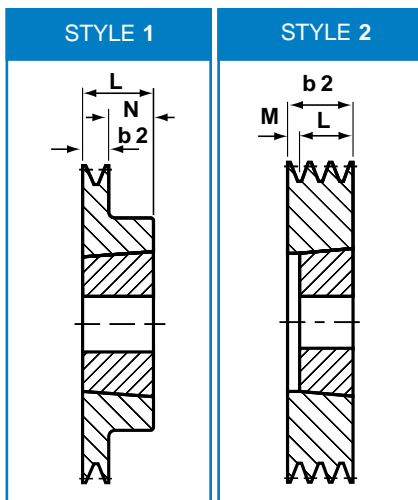
No. of Grooves	1	2	3	4	5	6	8	10
SPZ	16	28	40	52	64	76	100	-
SPA	20	35	50	65	80	95	-	-
SPB	25	44	63	82	101	120	158	196
SPC	-	-	85	110.5	136	161.5	212.5	263.5

Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
56	60	1	1008	25	0	S	-	23	14.0	-	0.5
56	60	2	1108	28	0	S	-	23	26.0	-	0.5
60	64	1	1008	25	0	S	-	23	14.0	-	0.3
60	64	2	1108	28	0	S	-	23	26.0	-	0.7
63	67	1	1108	28	1	S	16	23	-	7.0	0.3
63	67	2	1108	28	2	S	28	23	5.0	-	0.3
63	67	3	1108	28	3	S	40	23	17.0	-	0.5
67	71	1	1108	28	1	S	16	23	-	7.0	0.3
67	71	2	1108	28	2	S	28	23	5.0	-	0.4
67	71	3	1108	28	3	S	40	23	17.0	-	0.6
71	75	1	1108	28	1	S	16	23	-	7.0	0.4
71	75	2	1108	28	2	S	28	23	5.0	-	0.5
71	75	3	1108	28	3	S	40	23	17.0	-	0.6
71	75	4	1108	28	3	S	52	23	29	-	0.8
75	79	1	1108	28	1	S	16	23	-	7.0	0.4
75	79	2	1210	32	2	S	28	26	2.0	-	0.6
75	79	3	1210	32	3	S	40	26	14.0	-	0.6
75	79	4	1210	32	3	S	52	26	27	-	0.9
80	84	1	1210	32	1	S	16	26	-	10.0	0.5
80	84	2	1210	32	2	S	28	26	2.0	-	0.6
80	84	3	1210	32	3	S	40	26	14.0	-	0.8
80	84	4	1210	32	3	S	52	26	26.0	-	0.9
85	89	1	1210	32	1	S	16	26	-	10.0	0.6
85	89	2	1610	42	2	S	28	26	2.0	-	0.7
85	89	3	1610	42	3	S	40	26	14.0	-	0.8
85	89	4	1610	42	3	S	52	26	26.0	-	0.9
85	89	5	1610	42	3	S	64	26	38.0	-	1.3
90	94	1	1210	32	1	S	16	26	-	10.0	0.7
90	94	2	1610	42	2	S	28	26	2.0	-	0.7
90	94	3	1610	42	3	S	40	26	14.0	-	0.9
90	94	4	1610	42	3	S	52	26	26.0	-	1.1
90	94	5	1610	42	3	S	64	26	38.0	-	1.4
90	94	6	1610	42	3	S	76	26	50	-	1.6
95	99	1	1210	32	1	S	16	26	-	10.0	0.8
95	99	2	1610	42	2	S	28	26	2.0	-	0.8
95	99	3	1610	42	3	S	40	26	14.0	-	1.1
95	99	4	1610	42	3	S	52	26	26.0	-	1.3
95	99	5	1610	42	3	S	64	26	38.0	-	1.6
95	99	6	1610	42	3	S	76	26	50	-	1.8
100	104	1	1210	32	1	S	16	26	-	10.0	0.8
100	104	2	1610	42	2	S	28	26	2.0	-	1.0
100	104	3	1610	42	3	S	40	26	14.0	-	1.2
100	104	4	1610	42	3	S	52	26	26.0	-	1.4
100	104	5	2012	50	3	S	64	32	32.0	-	1.6
100	104	6	2012	50	3	S	76	32	44.0	-	1.9
106	110	1	1610	42	1	S	16	26	-	10.0	0.9
106	110	2	1610	42	2	S	28	26	2.0	-	1.2
106	110	3	1610	42	3	S	40	26	14.0	-	1.4
106	110	4	1610	42	3	S	52	26	26.0	-	1.6
106	110	5	2012	50	3	S	64	32	32.0	-	1.9
106	110	6	2012	50	3	S	76	32	44.0	-	2.2
112	116	1	1610	42	1	S	16	26	-	10.0	1.0
112	116	2	1610	42	2	S	28	26	2.0	-	1.4
112	116	3	2012	50	3	S	40	32	8.0	-	1.5
112	116	4	2012	50	3	S	52	32	20.0	-	1.7
112	116	5	2012	50	3	S	64	32	32.0	-	2.2
112	116	6	2012	50	3	S	76	32	44.0	-	2.5
118	122	1	1610	42	1	S	16	26	-	10.0	1.1
118	122	2	1610	42	2	S	28	26	2.0	-	1.6
118	122	3	2012	50	3	S	40	32	8.0	-	1.7
118	122	4	2012	50	4	S	52	32	-	20.0	2.0
118	122	5	2012	50	3	S	64	32	32.0	-	2.3
118	122	6	2517	60	3	S	76	45	31.0	-	2.5



Pulley Configuration: S = Solid, P = Plate, A = Arm.

SPZ

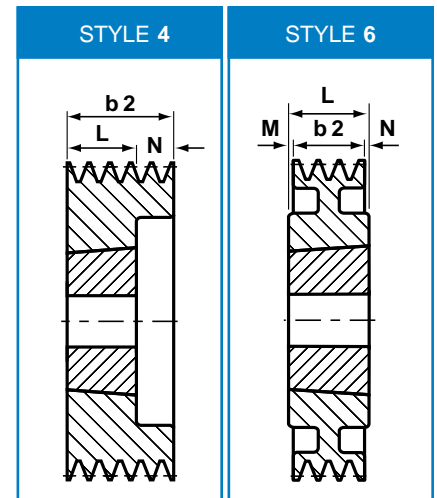


Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
125	129	1	1610	42	1	S	16	26	-	10.0	1.2
125	129	2	1610	42	2	S	28	26	2.0	-	1.8
125	129	3	2012	50	3	S	40	32	8.0	-	2.1
125	129	4	2012	50	4	S	52	32	-	20.0	2.3
125	129	5	2012	50	3	S	64	32	32.0	-	2.7
125	129	6	2517	60	3	S	76	45	31.0	-	3.0
132	136	1	1610	42	1	S	16	26	-	10.0	1.4
132	136	2	1610	42	2	S	28	26	2.0	-	2.1
132	136	3	2012	50	3	S	40	32	8.0	-	2.4
132	136	4	2012	50	3	S	52	32	20.0	-	2.7
132	136	5	2517	60	3	S	64	45	19.0	-	3.2
132	136	6	2517	60	3	S	76	45	31.0	-	3.5
140	144	1	1610	42	1	S	16	26	-	10.0	1.6
140	144	2	1610	42	2	S	28	26	2.0	-	2.4
140	144	3	2012	50	4	S	40	32	-	8.0	2.8
140	144	4	2012	50	4	S	52	32	-	20.0	3.2
140	144	5	2517	60	4	S	64	45	-	19.0	3.5
140	144	6	2517	60	4	S	76	45	-	31.0	3.9
150	154	1	1610	42	1	S	16	26	-	10.0	1.9
150	154	2	2012	50	1	S	28	32	-	4.0	2.6
150	154	3	2012	50	4	S	40	32	-	8.0	3.4
150	154	4	2517	60	4	S	52	45	-	7.0	3.9
150	154	5	2517	60	4	S	64	45	-	19.0	4.3
150	154	6	2517	60	4	S	76	45	-	31.0	4.7
160	164	1	1610	42	1	S	16	26	-	10.0	2.1
160	164	2	2012	50	1	S	28	32	-	4.0	3.1
160	164	3	2012	50	4	S	40	32	-	8.0	3.9
160	164	4	2517	60	4	S	52	45	-	7.0	4.7
160	164	5	2517	60	4	S	64	45	-	19.0	5.1
160	164	6	2517	60	4	S	76	45	-	31.0	5.5
170	174	1	1610	42	1	P	16	26	-	10.0	1.7
170	174	2	2012	50	1	S	28	32	-	4.0	3.4
170	174	3	2012	50	4	P	40	32	-	8.0	4.3
170	174	4	2517	60	4	S	52	45	-	7.0	5.4
170	174	5	2517	60	4	S	64	45	-	19.0	6.1
170	174	6	2517	60	4	S	76	45	-	31.0	6.7
180	184	1	1610	42	1	P	16	26	-	10.0	1.8
180	184	2	2012	50	1	P	28	32	-	4.0	2.7
180	184	3	2012	50	4	P	40	32	-	8.0	3.3
180	184	4	2517	60	4	S	52	45	-	7.0	6.5
180	184	5	2517	60	4	S	64	45	-	19.0	6.9
180	184	6	2517	60	4	S	76	45	-	31.0	7.3
190	194	1	1610	50	1	P	16	26	-	10.0	2.5
190	194	2	2012	50	1	P	28	32	-	4.0	3.2
190	194	3	2012	50	4	P	40	32	-	8.0	5.1
190	194	4	2517	60	4	P	52	45	-	7.0	5.5
190	194	5	2517	60	7	P	64	45	9.5	9.5	6.5
190	194	6	2517	60	7	P	76	45	15.5	15.5	7.2
190	194	8	2517	75	7	P	100	45	27.5	27.5	8.5
200	204	1	2012	50	1	P	16	32	-	16.0	3.2
200	204	2	2012	50	1	P	28	32	-	4.0	3.4
200	204	3	2012	50	4	P	40	32	-	8.0	3.6
200	204	4	2517	60	4	P	52	45	-	7.0	5.4
200	204	5	2517	60	7	P	64	45	9.5	9.5	6.1
200	204	6	2517	60	7	P	76	45	15.5	15.5	6.6
200	204	8	2517	75	7	P	100	45	27.5	27.5	9.6

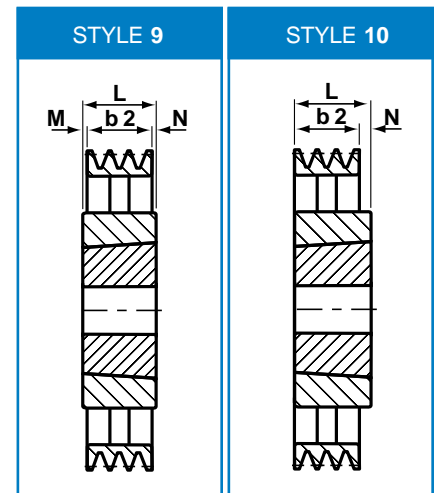
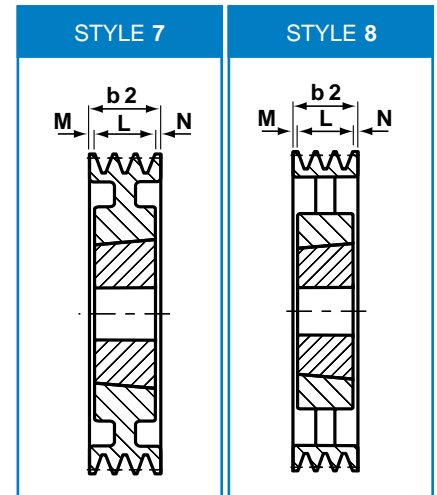
Pulley Configuration: S = Solid, P = Plate, A = Arm.

Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
224	228	1	2012	50	1	P	16	32	-	16.0	2.8
224	228	2	2012	50	1	P	28	32	-	4.0	3.5
224	228	3	2012	50	4	P	40	32	-	8.0	4.2
224	228	4	2517	60	4	P	52	45	-	7.0	6.3
224	228	5	2517	60	7	P	64	45	9.5	9.5	7.0
224	228	6	2517	60	7	P	76	45	15.5	15.5	7.6
224	228	8	2517	75	7	P	100	45	27.5	27.5	12.3
250	254	1	2012	50	1	P	16	32	-	16.0	3.2
250	254	2	2012	50	1	P	28	32	-	4.0	3.9
250	254	3	2012	50	4	P	40	32	-	8.0	4.7
250	254	4	2517	60	4	P	52	45	-	7.0	6.8
250	254	5	2517	60	7	P	64	45	9.5	9.5	8.1
250	254	6	2517	60	8	A	76	45	15.5	15.5	8.3
250	254	8	2517	75	8	A	100	45	27.5	27.5	10.2
280	284	1	2012	50	6	P	16	32	8.0	8.0	4.6
280	284	2	2012	50	1	P	28	32	-	4.0	5.4
280	284	3	2517	60	1	P	40	45	-	5.0	7.3
280	284	4	2517	60	4	P	52	45	-	7.0	8.1
280	284	5	2517	60	7	P	64	45	9.5	9.5	9.8
280	284	6	2517	60	8	A	76	45	15.5	15.5	9.9
280	284	8	2517	75	8	A	100	45	27.5	27.5	11.2
315	319	1	2012	50	6	P	16	32	8.0	8.0	5.8
315	319	2	2012	50	1	P	28	32	-	4.0	6.4
315	319	3	2517	60	1	P	40	45	-	5.0	8.3
315	319	4	2517	60	4	P	52	45	-	7.0	9.2
315	319	5	2517	60	7	P	64	45	9.5	9.5	11.0
315	319	6	2517	60	8	A	76	45	15.5	15.5	11.5
315	319	8	2517	75	8	A	100	45	27.5	27.5	13.9
355	359	1	2012	50	9	A	16	32	8.0	8.0	4.0
355	359	2	2012	50	10	A	28	32	-	4.0	6.5
355	359	3	2517	60	10	A	40	45	-	5.0	8.9
355	359	4	2517	60	4	A	52	45	-	7.0	9.5
355	359	5	2517	60	8	A	64	45	9.5	9.5	14.8
355	359	6	2517	60	8	A	76	45	15.5	15.5	14.8
355	359	8	2517	75	8	A	100	45	27.5	27.5	17.0
400	404	1	2012	50	9	A	16	32	8.0	8.0	6.0
400	404	2	2517	60	10	A	28	45	-	17.0	8.8
400	404	3	2517	60	10	A	40	45	-	5.0	10.5
400	404	4	2517	60	4	A	52	45	-	7.0	11.5
400	404	5	3020	75	8	A	64	52	6.0	6.0	13.8
400	404	6	3030	75	10	A	76	77	-	1.0	17.6
400	404	8	3030	75	8	A	100	76	12.0	12.0	19.0
450	454	2	2517	60	9	A	28	45	8.5	8.5	11.1
450	454	3	2517	65	10	A	40	45	-	5.0	11.6
450	454	4	3020	75	8	A	52	52	-	-	11.7
450	454	5	3020	75	8	A	64	52	6.0	6.0	18.0
450	454	6	3030	75	10	A	76	77	-	1.0	21.6
450	454	8	3030	90	8	A	100	76	12.0	12.0	22.6
500	504	2	2517	60	9	A	28	45	8.5	8.5	12.2
500	504	3	2517	65	10	A	40	45	-	5.0	10.1
500	504	4	3020	75	8	A	52	52	-	-	12.4
500	504	5	3030	75	9	A	64	77	6.5	6.5	22.3
500	504	6	3030	75	10	A	76	77	-	1.0	24.5
500	504	8	3030	90	8	A	100	77	11.5	11.5	28.0
630	634	2	2517	60	9	A	28	45	8.5	8.5	12.8
630	634	3	2517	65	10	A	40	45	-	5.0	17.4
630	634	4	3030	75	9	A	52	77	12.5	12.5	24.0
630	634	5	3030	75	9	A	64	77	6.5	6.5	27.6
630	634	6	3535	90	9	A	76	89	6.5	6.5	33.0
630	634	8	3535	90	8	A	100	89	5.5	5.5	40.0

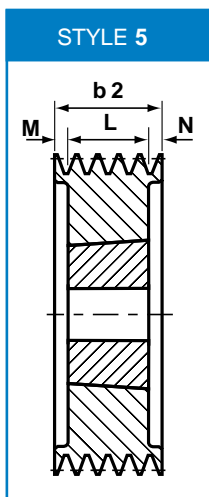
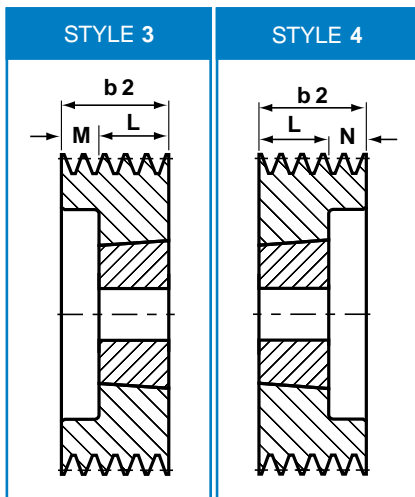
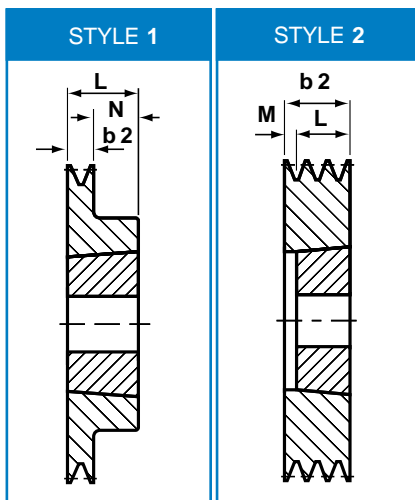
Pulley Configuration: S = Solid, P = Plate, A = Arm.



See facing page for pulley style 1



SPA

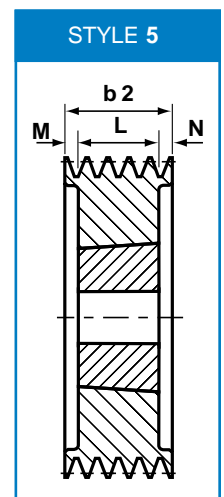
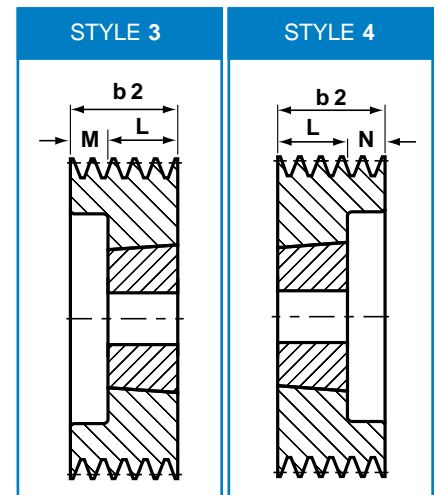
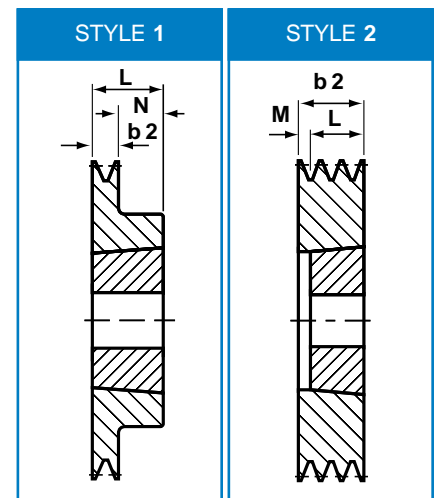


Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
67	72.5	1	1108	28	1	S	20	23	-	3.0	0.4
67	72.5	2	1108	28	2	S	35	23	12.0	-	0.6
71	76.5	1	1108	28	1	S	20	23	-	3.0	0.4
71	76.5	2	1108	28	2	S	35	23	12.0	-	0.6
71	76.5	3	1108	28	2	S	50	23	27.0	-	0.8
75	80.5	1	1108	28	1	S	20	23	-	3.0	0.5
75	80.5	2	1108	28	2	S	35	23	12.0	-	0.6
75	80.5	3	1108	28	2	S	50	23	27.0	-	0.8
80	85.5	1	1210	32	1	S	20	26	-	6.0	0.6
80	85.5	2	1210	32	3	S	35	26	9.0	-	0.6
80	85.5	3	1210	32	3	S	50	26	24.0	-	0.9
85	90.5	1	1210	32	1	S	20	26	-	6.0	0.6
85	90.5	2	1210	32	3	S	35	26	9.0	-	0.7
85	90.5	3	1210	32	3	S	50	26	24.0	-	1.1
90	95.5	1	1210	32	1	S	20	26	-	6.0	0.8
90	95.5	2	1610	42	3	S	35	26	9.0	-	0.8
90	95.5	3	1610	42	3	S	50	26	24.0	-	1.1
90	95.5	4	1615	42	3	S	65	38	27.0	-	1.4
95	100.5	1	1210	32	1	S	20	26	-	6.0	0.9
95	100.5	2	1610	42	3	S	35	26	9.0	-	0.9
95	100.5	3	1610	42	3	S	50	26	24.0	-	1.3
95	100.5	4	1615	42	3	S	65	38	27.0	-	1.7
100	105.5	1	1610	42	1	S	20	26	-	6.0	0.9
100	105.5	2	1610	42	3	S	35	26	9.0	-	1.1
100	105.5	3	1610	42	3	S	50	26	24.0	-	1.4
100	105.5	4	1615	42	3	S	65	38	27.0	-	1.9
100	105.5	5	1610	42	3	S	80	26	54.0	-	2.0
100	105.5	6	1615	42	3	S	95	38	57.0	-	2.4
106	111.5	1	1610	42	1	S	20	26	-	6.0	0.9
106	111.5	2	1610	42	3	S	35	26	9.0	-	1.2
106	111.5	3	1610	42	3	S	50	26	24.0	-	1.6
106	111.5	4	2012	50	3	S	65	32	33.0	-	1.9
106	111.5	5	2012	50	3	S	80	32	48.0	-	2.3
106	111.5	6	2012	50	3	S	95	32	63.0	-	2.6
112	117.5	1	1610	42	1	S	20	26	-	6.0	1.0
112	117.5	2	1610	42	3	S	35	26	9.0	-	1.4
112	117.5	3	2012	50	3	S	50	32	18.0	-	1.8
112	117.5	4	2012	50	3	S	65	32	33.0	-	2.2
112	117.5	5	2012	50	3	S	80	32	48.0	-	2.6
112	117.5	6	2012	50	3	S	95	32	63.0	-	2.7
118	123.5	1	1610	42	1	S	20	26	-	6.0	1.2
118	123.5	2	1610	42	3	S	35	26	9.0	-	1.6
118	123.5	3	2012	50	3	S	50	32	18.0	-	2.1
118	123.5	4	2012	50	3	S	65	32	33.0	-	2.5
118	123.5	5	2012	50	4	S	80	32	-	48.0	2.8
118	123.5	6	2012	50	4	S	95	32	-	63.0	2.9
125	130.5	1	1610	42	1	S	20	26	-	6.0	1.4
125	130.5	2	1610	42	4	S	35	26	-	10.0	1.9
125	130.5	3	2012	50	4	S	50	32	-	18.0	2.3
125	130.5	4	2012	50	4	S	65	32	-	33.0	2.8
125	130.5	5	2012	50	5	S	80	32	24.0	24.0	3.3
125	130.5	6	2012	50	5	S	95	32	31.5	31.5	3.8
132	137.5	1	1610	42	1	S	20	26	-	6.0	1.6
132	137.5	2	2012	50	4	S	35	32	-	3.0	2.2
132	137.5	3	2012	50	4	S	50	32	-	18.0	2.7
132	137.5	4	2517	60	4	S	65	45	-	20.0	3.2
132	137.5	5	2517	60	5	S	80	45	17.5	17.5	3.8
132	137.5	6	2517	60	5	S	95	45	25.0	25.0	3.8

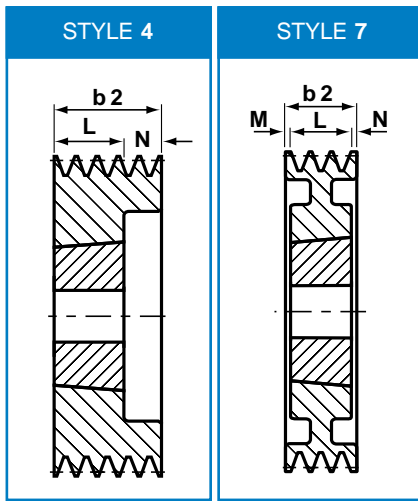
Pulley Configuration: S = Solid, P = Plate, A = Arm.

Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
140	145.5	1	1610	42	1	S	20	26	-	6.0	1.8
140	145.5	2	2012	50	3	S	35	32	3.0	-	2.6
140	145.5	3	2517	60	4	S	50	45	-	5.0	3.0
140	145.5	4	2517	60	4	S	65	45	-	20.0	3.6
140	145.5	5	2517	60	5	S	80	45	17.5	17.5	4.1
140	145.5	6	2517	60	5	S	95	45	25.0	25.0	4.1
150	155.5	1	1610	42	1	S	20	26	-	6.0	2.2
150	155.5	2	2012	50	3	S	35	32	3.0	-	3.1
150	155.5	3	2517	60	4	S	50	45	-	5.0	3.7
150	155.5	4	2517	60	4	S	65	45	-	20.0	4.3
150	155.5	5	2517	60	5	S	80	45	17.5	17.5	4.9
150	155.5	6	2517	60	5	S	95	45	25.0	25.0	5.7
160	165.5	1	1610	42	1	S	20	26	-	6.0	2.5
160	165.5	2	2012	50	3	S	35	32	3.0	-	3.8
160	165.5	3	2517	60	4	S	50	45	-	5.0	4.5
160	165.5	4	2517	60	4	S	65	45	-	20.0	5.1
160	165.5	5	2517	60	5	S	80	45	17.5	17.5	5.8
160	165.5	6	2517	60	5	S	95	45	25.0	25.0	6.4
170	175.5	1	1610	42	1	P	20	26	-	6.0	2.0
170	175.5	2	2012	50	2	S	35	32	3.0	-	3.3
170	175.5	3	2517	60	4	S	50	45	-	5.0	4.5
170	175.5	4	2517	60	4	S	65	45	-	20.0	5.9
170	175.5	5	2517	75	5	S	80	45	17.5	17.5	6.6
170	175.5	6	2517	60	5	S	95	45	25.0	25.0	7.3
180	185.5	1	1610	42	1	P	20	26	-	6.0	2.4
180	185.5	2	2012	50	3	S	35	32	3.0	-	4.8
180	185.5	3	2517	60	4	S	50	45	-	5.0	6.2
180	185.5	4	2517	60	4	S	65	45	-	20.0	6.9
180	185.5	5	3020	75	4	S	80	52	-	28.0	7.0
180	185.5	6	3020	75	5	S	95	52	21.5	21.5	8.5
190	195.5	1	2012	50	1	P	20	32	-	12.0	2.7
190	195.5	2	2012	60	1	P	35	32	-	3.0	4.4
190	195.5	3	2517	60	1	P	50	45	-	5.0	5.5
190	195.5	4	3020	75	4	S	65	52	-	13.0	7.2
190	195.5	5	3020	75	4	S	80	52	-	28.0	7.7
190	195.5	6	3020	75	5	S	95	52	21.5	21.5	10.0
200	205.5	1	2012	50	1	P	20	32	-	12.0	3.2
200	205.5	2	2517	60	1	P	35	45	-	10.0	5.0
200	205.5	3	2517	60	4	P	50	45	-	5.0	5.8
200	205.5	4	3020	75	4	S	65	52	-	13.0	8.4
200	205.5	5	3020	75	4	S	80	52	-	28.0	9.3
200	205.5	6	3020	75	5	S	95	52	21.5	21.5	12.0
212	217.5	1	2012	50	1	P	20	32	-	12.0	2.9
212	217.5	2	2517	60	1	P	35	45	-	10.0	4.7
212	217.5	3	2517	60	4	P	50	45	-	5.0	6.0
212	217.5	4	3020	75	4	S	65	52	-	13.0	7.8
212	217.5	5	3020	75	5	S	80	52	14.0	14.0	9.5
212	217.5	6	3020	75	5	S	95	52	21.5	21.5	14.0
224	229.5	1	2012	50	1	P	20	32	-	12.0	3.7
224	229.5	2	2517	60	1	P	35	45	-	10.0	5.7
224	229.5	3	2517	60	4	P	50	45	-	5.0	6.7
224	229.5	4	3020	75	4	P	65	52	-	13.0	11.0
224	229.5	5	3020	75	4	S	80	52	-	28.0	12.0
224	229.5	6	3020	75	5	S	95	52	21.5	21.5	14.8
236	241.5	1	2012	50	1	P	20	32	-	12.0	3.2
236	241.5	2	2517	60	1	P	35	45	-	10.0	5.4
236	241.5	3	2517	60	4	P	50	45	-	5.0	6.6
236	241.5	4	3020	75	4	S	65	52	-	13.0	9.8
236	241.5	5	3020	75	4	S	80	52	-	28.0	12.2
236	241.5	6	3020	75	5	S	95	52	21.5	21.5	12.5

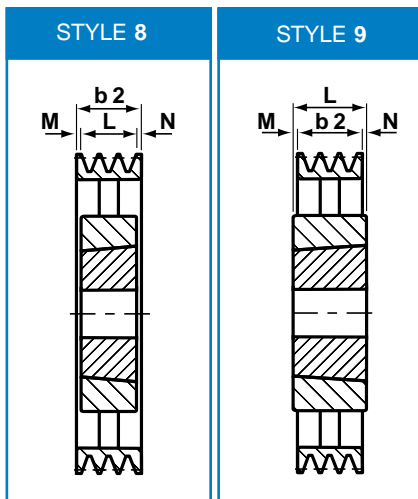
Pulley Configuration: S = Solid, P = Plate, A = Arm.



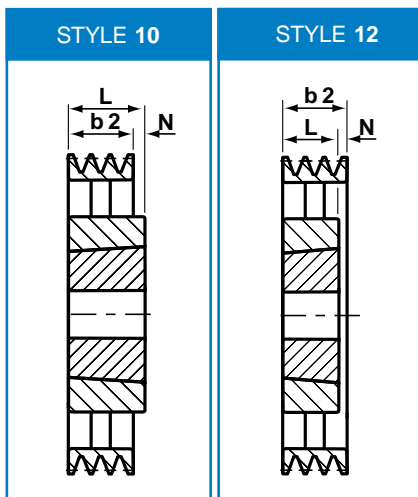
SPA



See facing page for pulley style 1



Pulley Configuration: S = Solid, P = Plate, A = Arm.

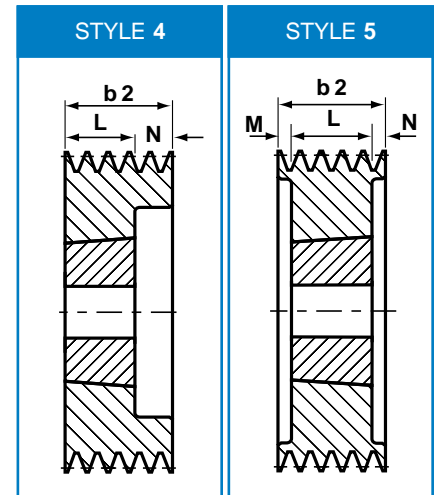
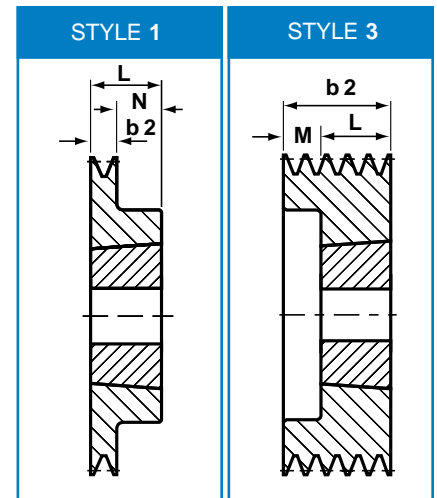


Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
250	255.5	1	2012	50	1	P	20	32	-	12.0	4.4
250	255.5	2	2517	60	1	P	35	45	-	10.0	6.4
250	255.5	3	2517	60	4	P	50	45	-	5.0	7.5
250	255.5	4	3020	75	4	P	65	52	-	13.0	9.8
250	255.5	5	3020	75	4	P	80	52	-	28.0	11.0
250	255.5	6	3020	75	7	P	95	52	21.5	21.5	17.5
280	285.5	1	2012	50	1	P	20	32	-	12.0	5.2
280	285.5	2	2517	60	1	P	35	45	-	10.0	7.3
280	285.5	3	2517	60	4	P	50	45	-	5.0	8.4
280	285.5	4	3020	75	7	P	65	52	6.5	6.5	11.0
280	285.5	5	3535	90	1	P	80	89	-	9.0	17.0
280	285.5	6	3535	90	4	P	95	89	-	6.0	19.1
300	305.5	1	2012	50	1	P	20	32	-	12.0	4.3
300	305.5	2	2517	60	1	P	35	45	-	10.0	6.2
300	305.5	3	3020	75	4	P	50	45	-	5.0	9.3
300	305.5	4	3020	75	7	P	65	52	6.5	6.5	12.4
300	305.5	5	3535	90	4	P	80	89	-	9.0	16.5
300	305.5	6	3535	90	4	P	95	89	-	6.0	19.5
315	320.5	1	2012	50	1	P	20	32	-	12.0	6.3
315	320.5	2	2517	60	1	P	35	45	-	10.0	9.2
315	320.5	3	3020	75	1	P	50	52	-	2.0	11.0
315	320.5	4	3020	75	7	P	65	52	6.5	6.5	13.0
315	320.5	5	3535	90	1	P	80	89	-	9.0	19.0
315	320.5	6	3535	90	4	P	95	89	-	6.0	24.0
355	360.5	1	2012	50	10	A	20	32	-	12.0	5.6
355	360.5	2	2517	60	10	A	35	45	-	10.0	9.0
355	360.5	3	3020	75	10	A	50	52	-	2.0	12.0
355	360.5	4	3020	75	8	A	65	52	6.5	6.5	13.0
355	360.5	5	3535	90	10	A	80	89	-	9.0	20.0
355	360.5	6	3535	90	12	A	95	89	-	6.0	24.2
400	405.5	1	2012	50	10	A	20	32	-	12.0	6.4
400	405.5	2	2517	60	10	A	35	45	-	10.0	10.0
400	405.5	3	3020	75	10	A	50	52	-	2.0	13.0
400	405.5	4	3020	75	8	A	65	52	6.5	6.5	14.5
400	405.5	5	3535	90	10	A	80	89	-	9.0	21.5
400	405.5	6	3535	90	12	A	95	89	-	6.0	25.1
450	455.5	1	2012	50	10	A	20	32	-	12.0	6.2
450	455.5	2	2517	60	10	A	35	45	-	10.0	11.5
450	455.5	3	3020	75	10	A	50	52	-	2.0	14.5
450	455.5	4	3020	75	8	A	65	52	6.5	6.5	16.5
450	455.5	5	3535	90	10	A	80	89	-	9.0	23.0
450	455.5	6	3535	90	12	A	95	89	-	6.0	40.0
500	505.5	1	2517	60	10	A	20	45	-	25.0	6.5
500	505.5	2	2517	60	10	A	35	45	-	10.0	12.5
500	505.5	3	3020	75	10	A	50	52	-	2.0	15.5
500	505.5	4	3020	75	8	A	65	52	6.5	6.5	18.0
500	505.5	5	3535	90	10	A	80	89	-	9.0	25.0
500	505.5	6	3535	90	12	A	95	89	-	6.0	54.2
560	565.5	2	3020	75	10	A	35	52	-	17.0	18.4
560	565.5	3	3020	75	10	A	50	52	-	2.0	16.0
560	565.5	4	3535	90	9	A	65	89	12.0	12.0	23.5
560	565.5	5	3535	90	10	A	80	89	-	9.0	27.0
560	565.5	6	3535	90	12	A	95	89	-	6.0	55.1
630	635.5	2	3020	75	10	A	35	52	-	17.0	20.5
630	635.5	3	3020	75	10	A	50	52	-	2.0	20.0
630	635.5	4	3535	90	10	A	65	89	-	24.0	28.0
630	635.5	5	3535	90	10	A	80	89	-	9.0	31.0
630	635.5	6	4040	100	10	A	95	102	-	7.0	56.3
800	805.5	2	3535	90	10	A	35	89	-	54.0	33.0
800	805.5	3	3535	90	10	A	50	89	-	39.0	36.0
800	805.5	4	3535	90	10	A	65	89	-	24.0	46.0
800	805.5	5	4040	100	9	A	80	102	11.0	11.0	55.5
800	805.5	6	4040	100	10	A	95	102	-	7.0	66.0

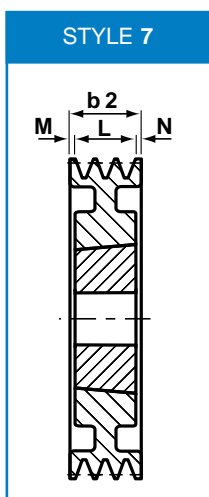
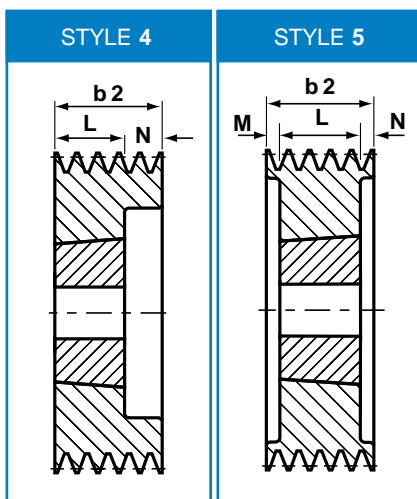
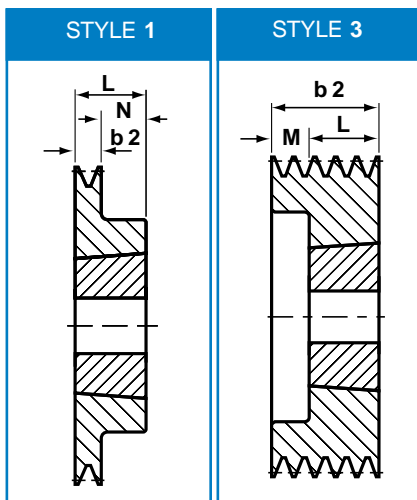
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
100	107	1	1610	42	1	S	25	26	-	1.0	0.9
100	107	2	1610	42	3	S	44	26	18.0	-	1.4
100	107	3	1610	42	3	S	63	26	37.0	-	1.9
106	113	1	1610	42	1	S	25	26	-	1.0	1.0
106	113	2	1610	42	3	S	44	26	18.0	-	1.5
106	113	3	1610	42	3	S	63	26	37.0	-	2.0
112	119	1	1610	42	1	S	25	26	-	1.0	1.2
112	119	2	1610	42	4	S	44	26	-	18.0	1.7
112	119	3	1610	42	3	S	63	26	37.0	-	2.3
118	125	1	1610	42	1	S	25	26	-	1.0	1.3
118	125	2	1610	42	4	S	44	26	-	18.0	1.9
118	125	3	1610	42	3	S	63	26	37.0	-	2.6
125	132	1	1610	42	1	S	25	26	-	1.0	1.5
125	132	2	2012	50	4	S	44	32	-	12.0	2.3
125	132	3	2012	50	4	S	63	32	-	31.0	2.3
125	132	4	2012	50	5	S	82	32	25.0	25.0	3.7
125	132	5	2012	50	3	S	101	32	69.0	-	4.4
132	139	1	1610	42	1	S	25	26	-	1.0	1.8
132	139	2	2012	50	4	S	44	32	-	12.0	2.4
132	139	3	2012	50	4	S	63	32	-	31.0	3.1
132	139	4	2012	50	5	S	82	32	25.0	25.0	3.8
132	139	5	2517	60	3	S	101	45	56.0	-	4.6
140	147	1	1610	42	1	S	25	26	-	1.0	2.1
140	147	2	2012	50	4	S	44	32	-	12.0	2.8
140	147	3	2012	50	4	S	63	32	-	31.0	3.6
140	147	4	2517	60	5	S	82	45	18.5	18.5	4.5
140	147	5	2517	60	5	S	101	45	28.0	28.0	5.3
140	147	6	2517	60	5	S	120	45	37.5	37.5	6.1
150	157	1	1610	42	1	S	25	26	-	1.0	2.5
150	157	2	2012	50	4	S	44	32	-	12.0	3.4
150	157	3	2517	60	4	S	63	45	-	18.0	4.1
150	157	4	2517	60	5	S	82	45	18.5	18.5	4.9
150	157	5	2517	60	5	S	101	45	28.0	28.0	5.8
150	157	6	2517	60	5	S	120	45	37.5	37.5	6.6
160	167	1	1610	42	1	S	25	26	-	1.0	2.9
160	167	2	2012	50	3	S	44	32	12.0	-	3.9
160	167	3	2517	60	3	S	63	45	18.0	-	4.9
160	167	4	2517	60	5	S	82	45	18.5	18.5	5.8
160	167	5	2517	60	5	S	101	45	28.0	28.0	6.7
160	167	6	3020	75	5	S	120	52	34.0	34.0	6.5
160	167	8	3020	75	5	S	158	52	53.0	53.0	8.5
170	177	1	1610	42	1	S	25	25	-	1.0	3.3
170	177	2	2012	50	3	S	44	32	12.0	-	4.5
170	177	3	2517	60	3	S	63	45	18.0	-	5.8
170	177	4	2517	60	5	S	82	45	18.5	18.5	6.7
170	177	5	3020	75	5	S	101	52	24.5	24.5	6.8
170	177	6	3020	75	5	S	120	52	34.0	34.0	7.8
170	177	8	3030	75	5	S	158	77	40.5	40.5	11.0
180	187	1	1610	42	1	S	25	26	-	1.0	3.8
180	187	2	2517	60	1	S	44	45	-	1.0	5.3
180	187	3	2517	60	3	S	63	45	18.0	-	6.7
180	187	4	2517	60	5	S	82	45	18.5	18.5	7.7
180	187	5	3020	75	5	S	101	52	24.5	24.5	8.0
180	187	6	3020	75	5	S	120	52	34.0	34.0	9.0
180	187	8	3030	75	5	S	158	77	40.5	40.5	12.0

Pulley Configuration: S = Solid, P = Plate, A = Arm.



SPB

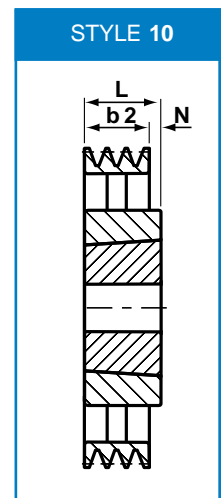
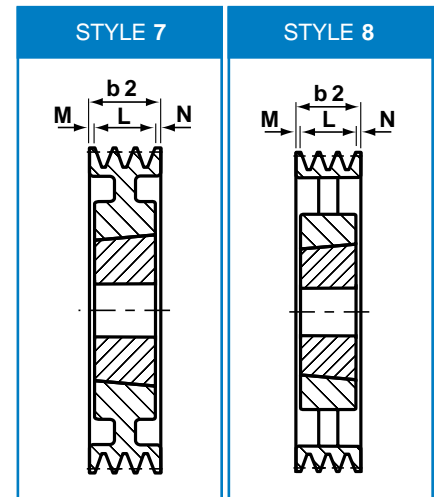
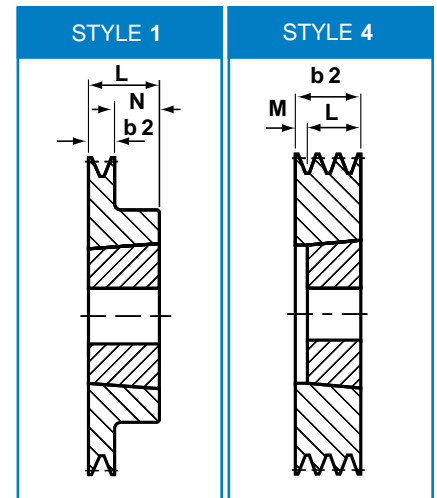


Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
190	197	1	2012	50	1	S	25	32	-	7.0	4.4
190	197	2	2517	60	1	S	44	45	-	1.0	6.5
190	197	3	2517	60	3	S	63	45	18.0	-	7.6
190	197	4	2517	60	5	S	82	45	18.5	18.5	8.7
190	197	5	3020	75	5	S	101	52	24.5	24.5	9.1
190	197	6	3020	75	5	S	120	52	34.0	34.0	10.0
190	197	8	3030	75	5	S	158	77	40.5	40.5	13.0
200	207	1	2012	50	1	P	25	32	-	7.0	4.4
200	207	2	2517	60	1	S	44	45	-	1.0	7.5
200	207	3	2517	60	4	S	63	45	-	18.0	8.8
200	207	4	3020	75	4	S	82	52	-	30.0	9.4
200	207	5	3020	75	5	S	101	52	24.5	24.5	10.0
200	207	6	3020	75	5	S	120	52	34.0	34.0	12.0
200	207	8	3535	90	5	S	158	89	34.5	34.5	15.0
212	219	1	2012	50	1	P	25	32	-	7.0	4.1
212	219	2	2517	60	1	P	44	45	-	1.0	5.9
212	219	3	2517	60	4	P	63	45	-	18.0	7.4
212	219	4	3020	75	4	S	82	52	-	30.0	11.0
212	219	5	3020	75	5	S	101	52	24.5	24.5	12.0
212	219	6	3535	90	5	S	120	89	15.5	15.5	15.0
212	219	8	3535	90	5	S	158	89	34.5	34.5	18.0
224	231	1	2012	50	1	P	25	32	-	7.0	4.5
224	231	2	2517	60	1	P	44	45	-	1.0	6.4
224	231	3	2517	60	4	P	63	45	-	18.0	8.0
224	231	4	3020	75	4	S	82	52	-	30.0	12.0
224	231	5	3020	75	5	S	101	52	24.5	24.5	14.0
224	231	6	3535	90	5	S	120	89	15.5	15.5	18.0
224	231	8	3535	90	5	S	158	89	34.5	34.5	21.0
224	231	10	3535	90	5	S	196	89	53.5	53.5	23.0
236	243	1	2012	50	1	P	25	32	-	7.0	4.9
236	243	2	2517	60	1	P	44	45	-	1.0	6.9
236	243	3	2517	60	4	P	63	45	-	18.0	8.3
236	243	4	3020	75	4	S	82	52	-	30.0	14.0
236	243	5	3535	90	4	S	101	89	-	12.0	19.0
236	243	6	3535	90	5	S	120	89	15.5	15.5	21.0
236	243	8	3535	90	5	S	158	89	34.5	34.5	24.0
236	243	10	3535	90	5	S	196	89	53.5	53.5	26.0
250	257	1	2012	50	1	P	25	32	-	7.0	5.5
250	257	2	2517	60	1	P	44	45	-	1.0	7.3
250	257	3	3020	75	4	P	63	52	-	11.0	10.0
250	257	4	3020	75	4	P	82	52	-	30.0	12.0
250	257	5	3535	90	4	S	101	89	-	12.0	23.0
250	257	6	3535	90	5	S	120	89	15.5	15.5	24.0
250	257	8	3535	90	5	S	158	89	34.5	34.5	27.0
250	257	10	3535	90	5	S	196	89	53.5	53.5	31.0
280	287	1	2012	50	1	P	25	32	-	7.0	6.5
280	287	2	2517	60	4	P	44	45	-	1.0	9.1
280	287	3	3020	75	4	P	63	52	-	11.0	12.0
280	287	4	3020	75	7	P	82	52	15.5	15.5	14.0
280	287	5	3535	90	7	P	101	89	6.0	6.0	20.0
280	287	6	3535	90	7	P	120	89	15.5	15.5	22.0
280	287	8	3535	90	7	P	158	89	34.5	34.5	25.0
280	287	10	3535	90	7	P	196	89	53.5	53.5	29.0
300	307	1	2012	50	1	P	25	32	-	7.0	6.8
300	307	2	2517	60	4	P	44	45	-	1.0	8.6
300	307	3	3020	60	4	P	63	52	-	11.0	9.8
300	307	4	3535	90	4	P	82	89	-	7.0	14.5
300	307	5	3535	90	7	P	101	89	6.0	6.0	19.5
300	307	6	3535	90	7	P	120	89	15.5	15.5	22.0
300	307	8	3535	90	7	P	158	89	34.5	34.5	41.0
300	307	10	3535	90	7	P	196	89	53.5	53.5	33.0

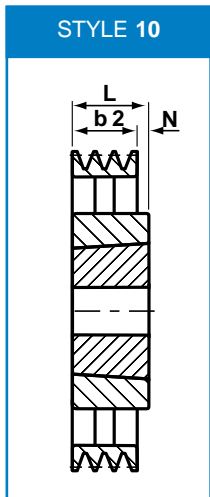
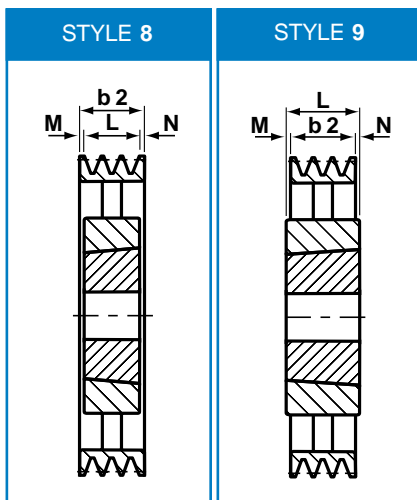
Pulley Configuration: S = Solid, P = Plate, A = Arm.

Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
315	322	1	2012	50	1	P	25	32	-	7.0	7.9
315	322	2	2517	60	1	P	44	45	-	1.0	11.0
315	322	3	3020	75	4	P	63	52	-	11.0	14.0
315	322	4	3535	90	4	P	82	89	-	7.0	20.0
315	322	5	3535	90	7	P	101	89	6.0	6.0	23.0
315	322	6	3535	90	7	P	120	89	15.5	15.5	25.0
315	322	8	3535	90	7	P	158	89	34.5	34.5	29.0
315	322	10	3535	90	7	P	196	89	53.5	53.5	33.0
335	342	2	2517	60	1	P	44	45	-	7.0	11.3
335	342	3	3020	75	4	P	63	52	-	11.0	12.0
335	342	4	3535	90	4	P	82	89	-	7.0	18.4
335	342	5	3535	90	7	P	101	89	6.0	6.0	19.6
335	342	6	3535	90	7	A	120	89	15.5	15.5	22.0
335	342	8	3535	90	7	P	158	89	34.5	34.5	29.0
335	342	10	4040	100	7	P	196	102	47.0	47.0	37.0
355	362	2	3020	75	1	P	44	52	-	8.0	14.0
355	362	3	3020	75	4	P	63	52	-	11.0	17.0
355	362	4	3535	90	4	P	82	89	-	7.0	24.0
355	362	5	3535	90	7	P	101	89	6.0	6.0	26.0
355	362	6	3535	90	7	P	120	89	15.5	15.5	29.0
355	362	8	3535	90	7	P	158	89	34.5	34.5	34.0
355	362	10	4040	100	7	P	196	102	47.0	47.0	41.0
400	407	2	3020	75	10	A	44	52	-	8.0	11.4
400	407	3	3535	90	10	A	63	89	-	26.0	17.0
400	407	4	3535	90	10	A	82	89	-	7.0	22.0
400	407	5	3535	90	8	A	101	89	6.0	6.0	25.5
400	407	6	3535	90	8	A	120	89	15.5	15.5	28.5
400	407	8	4040	100	7	P	158	102	28.0	28.0	41.0
400	407	10	4040	100	7	P	196	102	47.0	47.0	46.0
450	457	2	3020	75	10	A	44	52	-	8.0	14.0
450	457	3	3535	90	10	A	63	89	-	26.0	22.0
450	457	4	3535	90	10	A	82	89	-	7.0	25.5
450	457	5	3535	90	8	A	101	89	6.0	6.0	29.0
450	457	6	4040	100	8	A	120	102	9.0	9.0	35.0
450	457	8	4040	100	7	P	158	102	28.0	28.0	52.0
450	457	10	4545	110	7	P	196	114	41.0	41.0	56.0
500	507	2	3020	75	10	A	44	52	-	8.0	15.5
500	507	3	3535	90	10	A	63	89	-	26.0	24.0
500	507	4	3535	90	10	A	82	89	-	7.0	28.0
500	507	5	3535	90	8	A	101	89	6.0	6.0	32.0
500	507	6	4040	100	8	A	120	102	9.0	9.0	49.0
500	507	8	4040	100	8	A	158	102	28.0	28.0	58.0
500	507	10	4545	110	8	A	196	114	41.0	41.0	58.0
560	567	2	3020	75	10	A	44	52	-	8.0	25.0
560	567	3	3535	90	10	A	63	89	-	26.0	26.0
560	567	4	3535	90	10	A	82	89	-	7.0	31.0
560	567	5	4040	100	10	A	101	102	-	1.0	39.0
560	567	6	4040	100	8	A	120	102	9.0	9.0	42.5
560	567	8	4545	110	8	A	158	114	22.0	22.0	59.0
560	567	10	4545	110	8	A	196	114	41.0	41.0	66.0
630	637	2	3030	75	10	A	44	77	-	33.0	19.3
630	637	3	3535	90	10	A	63	89	-	26.0	31.0
630	637	4	3535	90	10	A	82	89	-	7.0	36.5
630	637	5	4040	100	10	A	101	102	-	1.0	44.5
630	637	6	4040	100	8	A	120	102	9.0	9.0	51.0
630	637	8	4545	110	8	A	158	114	22.0	22.0	66.0
630	637	10	4545	110	8	A	196	114	41.0	41.0	75.0

Pulley Configuration: S = Solid, P = Plate, A = Arm.



SPB

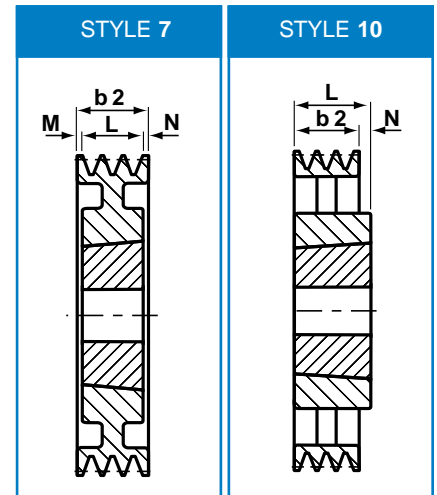
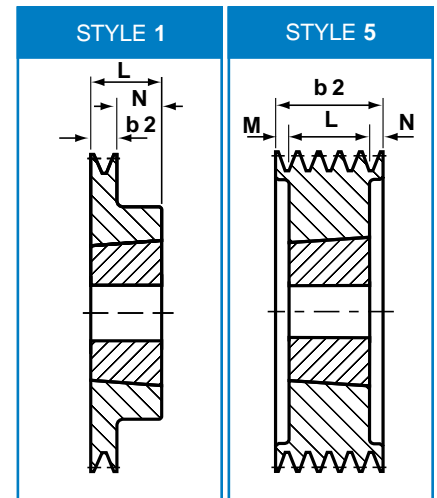


Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
710	707	3	3535	90	10	A	63	89	-	26.0	36.0
710	717	4	3535	90	10	A	82	89	-	7.0	41.0
710	717	5	4040	100	10	A	101	102	-	1.0	51.0
710	717	6	4545	110	10	A	114	120	-	6.0	59.0
710	717	8	4545	110	8	A	158	114	22.0	22.0	78.0
710	717	10	4545	110	8	A	196	114	41.0	41.0	88.0
800	807	3	3535	90	10	A	63	89	-	26.0	38.0
800	807	4	4040	100	10	A	82	102	-	20.0	48.0
800	807	5	4040	100	10	A	101	102	-	1.0	56.0
800	807	6	4545	110	10	A	114	120	-	6.0	66.0
800	807	8	4545	110	8	A	158	114	22.0	22.0	100.0
800	807	10	4545	110	8	A	196	114	41.0	41.0	110.0
900	907	3	3535	90	10	A	63	89	-	26.0	50.0
900	907	4	4040	100	10	A	82	102	-	20.0	88.0
900	907	5	4545	110	9	A	101	114	6.5	6.5	114.0
900	907	6	4545	110	10	A	114	120	-	6.0	120.0
900	907	8	4545	110	8	A	158	114	22.0	22.0	132.0
900	907	10	5050	125	8	A	196	127	34.5	34.5	140.0
1000	1007	3	4040	100	10	A	63	102	-	39.0	70.0
1000	1007	4	4040	100	10	A	82	102	-	20.0	78.0
1000	1007	5	4545	110	9	A	101	114	6.5	6.5	93.0
1000	1007	6	4545	110	10	A	114	120	-	6.0	100.0
1000	1007	8	5050	125	8	A	158	127	15.5	15.5	140.0
1000	1007	10	5050	125	8	A	196	127	34.5	34.5	150.0
1250	1257	3	4040	100	9	A	63	102	19.5	19.5	75.0
1250	1257	4	4545	110	9	A	82	114	16.0	16.0	158.0
1250	1257	5	4545	110	9	A	101	114	6.5	6.5	179.0
1250	1257	6	5050	125	10	A	120	127	-	7.0	180.0
1250	1257	8	5050	125	8	A	158	127	15.5	15.5	224.0
1250	1250	10	5050	125	8	A	196	127	35.0	35.0	320.0

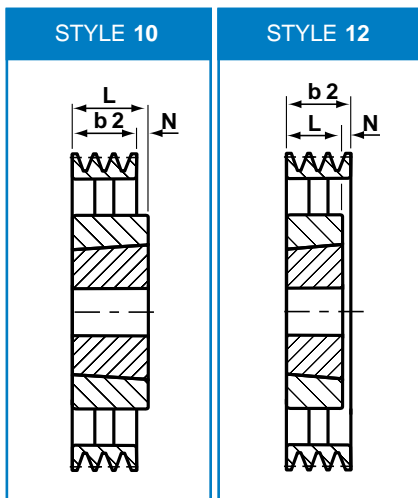
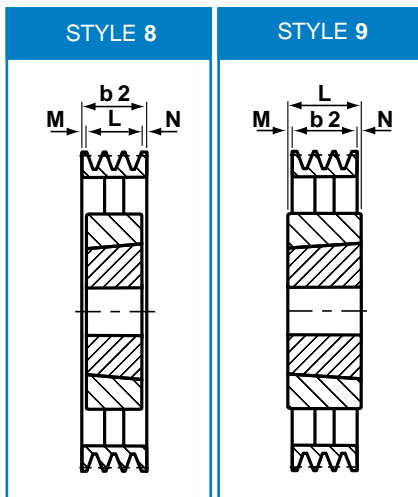
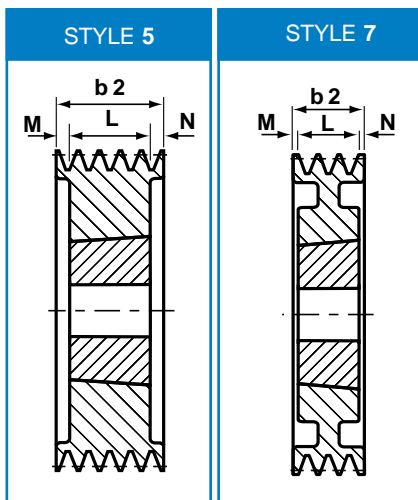
Pulley Configuration: S = Solid, P = Plate, A = Arm.

Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
200	209.5	3	2517	65	5	S	85	45	20.00	20.00	10.2
200	209.5	4	3020	75	5	S	110.5	52	29.25	29.25	11.0
200	209.5	5	3535	90	5	S	136	89	23.50	23.50	12.5
200	209.5	6	3535	90	5	S	161.5	89	36.25	36.25	17.5
212	221.5	3	3020	65	5	S	85	52	16.50	16.50	11.0
212	221.5	4	3020	75	5	S	110.5	51	29.75	29.75	13.5
212	221.5	5	3535	90	5	S	136	89	23.50	23.50	14.5
212	221.5	6	3535	90	5	S	161.5	89	36.25	36.25	19.0
224	233.5	3	3020	75	5	S	85	52	16.50	16.50	12.0
224	233.5	4	3535	90	5	S	110.5	89	10.75	10.75	16.0
224	233.5	5	3535	90	5	S	136	89	23.50	23.50	18.0
224	233.5	6	3535	90	5	S	161.5	89	36.25	36.25	20.0
224	233.5	8	3535	90	5	S	212.5	89	61.75	61.75	25.0
236	245.5	3	3020	75	5	S	85	52	16.50	16.50	14.0
236	245.5	4	3535	90	5	S	110.5	89	10.75	10.75	19.0
236	245.5	5	3535	90	5	S	136	89	23.50	23.50	21.0
236	245.5	6	3535	90	5	S	161.5	89	36.25	36.25	23.0
236	245.5	8	3535	90	5	S	212.5	89	61.75	61.75	28.0
250	259.5	3	3020	75	7	P	85	52	16.50	16.50	13.0
250	259.5	4	3535	90	5	S	110.5	89	10.75	10.75	22.0
250	259.5	5	3535	90	5	S	136	89	23.50	23.50	25.0
250	259.5	6	3535	90	5	S	161.5	89	36.25	36.25	27.0
250	259.5	8	3535	90	5	S	212.5	89	61.75	61.75	32.0
265	274.5	3	3535	90	1	P	85	89	-	4.00	24.0
265	274.5	4	3535	90	5	S	110.5	89	10.75	10.75	26.0
265	274.5	5	3535	90	5	S	136	89	23.50	23.50	29.0
265	274.5	6	3535	90	5	S	161.5	89	36.25	36.25	31.0
265	274.5	8	3535	90	5	S	212.5	89	61.75	61.75	36.0
265	274.9	10	4040	100	5	S	263.5	102	80.75	80.75	60.0
280	289.5	3	3535	90	1	P	85	89	-	4.00	19.0
280	289.5	4	3535	90	7	P	110.5	89	10.75	10.75	21.0
280	289.5	5	3535	90	7	P	136	89	23.50	23.50	24.0
280	289.5	6	3535	90	7	P	161.5	89	36.25	36.25	36.0
280	289.5	8	3535	90	7	P	212.5	89	61.75	61.75	41.0
280	289.5	10	4040	100	5	S	263.5	102	80.75	80.75	46.0
300	309.5	3	3535	90	10	P	85	89	-	4.00	21.0
300	309.5	4	3535	90	7	P	110.5	89	10.75	10.75	24.0
300	309.5	5	3535	90	7	P	136	89	23.50	23.50	24.0
300	309.5	6	3535	90	7	P	161.5	89	36.25	36.25	29.0
300	309.5	8	4040	100	5	S	212.5	102	55.25	55.25	48.0
300	309.5	10	4545	110	5	S	263.5	114	74.75	74.75	54.0
315	324.5	3	3535	90	10	P	85	89	-	4.00	21.0
315	324.5	4	3535	90	7	P	110.5	89	10.75	10.75	24.0
315	324.5	5	3535	90	7	P	136	89	23.50	23.50	28.0
315	324.5	6	3535	90	7	P	161.5	89	36.25	36.25	31.0
315	324.5	8	4040	100	5	S	212.5	102	55.25	55.25	54.0
315	324.5	10	4545	110	5	S	263.5	114	74.75	74.75	60.0
335	344.5	3	3535	90	10	P	85	89	-	4.00	24.0
335	344.5	4	3535	90	7	P	110.5	89	10.75	10.75	27.0
335	344.5	5	3535	90	7	P	136	89	23.50	23.50	31.0
335	344.5	6	3535	90	7	P	161.5	89	36.25	36.25	34.0
335	344.5	8	4040	100	7	P	212.5	102	55.25	55.25	45.0
335	344.5	10	4545	110	7	P	263.5	114	74.75	74.75	85.0
355	364.5	3	3535	90	10	P	85	89	-	4.00	26.0
355	364.5	4	3535	90	7	P	110.5	89	10.75	10.75	30.0
355	364.5	5	3535	90	7	P	136	89	23.50	23.50	34.0
355	364.5	6	3535	90	7	P	161.5	89	36.25	36.25	37.0
355	364.5	8	4040	100	7	P	212.5	102	55.25	55.25	48.0
355	364.5	10	4545	110	5	S	263.5	114	74.75	74.75	81.0

Pulley Configuration: S = Solid, P = Plate, A = Arm.



SPC

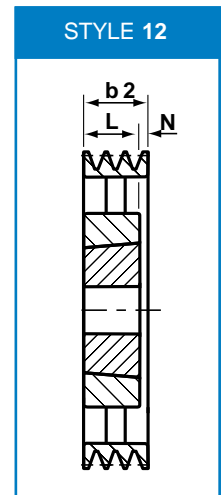
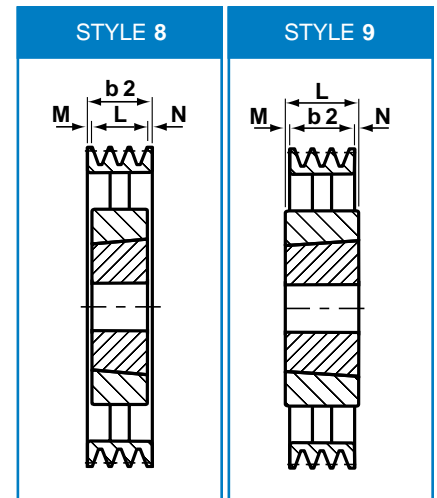


Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
375	384.5	3	3535	90	10	P	85	89	-	4.00	29.0
375	384.5	4	3535	90	7	P	110.5	89	10.75	10.75	33.0
375	384.5	5	3535	90	7	P	136	89	23.50	23.50	36.0
375	384.5	6	4040	100	7	P	161.5	102	29.75	29.75	44.0
375	384.5	8	4545	110	7	P	212.5	114	49.25	49.25	57.0
375	384.5	10	4545	110	5	S	263.5	114	74.75	74.75	92.0
400	409.5	3	3535	90	10	P	85	89	-	4.00	31.0
400	409.5	4	3535	90	7	P	110.5	89	10.75	10.75	35.0
400	409.5	5	3535	90	7	P	136	89	23.50	23.50	40.0
400	409.5	6	4040	100	7	P	161.5	102	29.75	29.75	48.0
400	409.5	8	4545	110	7	P	212.5	114	49.25	49.25	62.0
400	409.5	10	5050	125	7	P	263.5	127	68.25	68.25	73.0
425	434.5	3	3535	90	10	P	85	89	-	4.00	37.0
425	434.5	4	3535	90	7	P	110.5	89	10.75	10.75	42.0
425	434.5	5	3535	90	7	P	136	89	23.50	23.50	46.0
425	434.5	6	4040	100	7	P	161.5	102	29.75	29.75	56.0
425	434.5	8	4545	110	7	P	212.5	114	49.25	49.25	68.0
425	434.5	10	5050	125	7	P	263.5	127	68.25	68.25	105.0
450	459.5	3	3535	90	10	A	85	89	-	4.00	34.0
450	459.5	4	3535	90	8	A	110.5	89	10.75	10.75	39.0
450	459.5	5	4040	100	8	A	136	102	17.00	17.00	49.0
450	459.5	6	4545	110	7	P	161.5	114	23.75	23.75	67.0
450	459.5	8	5050	125	7	P	212.5	127	42.75	42.75	81.0
450	459.5	10	5050	125	7	P	263.5	127	68.25	68.25	94.0
475	484.5	3	3535	90	10	A	85	89	-	4.00	30.0
475	484.5	4	3535	90	8	A	110.5	89	10.75	10.75	37.0
475	484.5	5	4040	100	8	A	136	102	17.00	17.00	48.0
475	484.5	6	4545	110	7	P	161.5	114	23.75	23.75	65.0
475	484.5	8	5050	125	7	P	212.5	127	42.75	42.75	100.0
475	484.5	10	5050	125	7	P	263.5	127	68.25	68.25	125.0
500	509.5	3	3535	90	10	A	85	89	-	4.00	31.9
500	509.5	4	3535	90	8	A	110.5	89	10.75	10.75	44.0
500	509.5	5	4040	100	8	A	136	102	17.00	17.00	54.0
500	509.5	6	4545	110	8	A	161.5	114	23.75	23.75	67.0
500	509.5	8	5050	125	7	P	212.5	127	42.75	42.75	91.0
500	509.5	10	5050	125	7	P	263.5	127	68.25	68.25	111.0
530	539.5	3	3535	90	10	A	85	89	-	4.00	34.5
530	539.5	4	4040	100	12	A	110.5	102	-	8.50	45.0
530	539.5	5	4545	110	8	A	136	114	11.00	11.00	56.0
530	539.5	6	5050	125	8	A	161.5	127	17.25	17.25	73.0
530	539.5	8	5050	125	7	P	212.5	127	42.75	42.75	105.0
530	539.5	10	5050	125	7	P	263.5	127	68.25	68.25	145.0
560	569.5	3	3535	90	10	A	85	89	-	4.00	37.0
560	569.5	4	4040	100	12	A	110.5	102	-	8.50	60.0
560	569.5	5	4545	110	8	A	136	114	11.00	11.00	60.0
560	569.5	6	5050	125	8	A	161.5	127	17.25	17.25	85.0
560	569.5	8	5050	125	8	A	212.5	127	42.75	42.75	101.0
560	569.5	10	5050	125	8	A	263.5	127	68.25	68.25	121.0
630	639.5	3	4040	10	9	A	85	102	8.50	8.50	49.5
630	639.5	4	4545	110	10	A	110.5	114	-	3.50	114.0
630	639.5	5	5050	125	12	A	136	127	-	9.00	91.0
630	639.5	6	5050	125	8	A	161.5	127	17.25	17.25	97.0
630	639.5	8	5050	125	8	A	212.5	127	42.75	42.75	116.0
630	639.5	10	5050	125	8	A	263.5	127	68.25	68.25	130.0
710	719.5	3	4040	10	9	A	85	102	8.50	8.50	57.0
710	719.5	4	4545	110	10	A	110.5	114	-	3.50	70.3
710	719.5	5	5050	125	12	A	136	127	-	9.00	92.0
710	719.5	6	5050	125	8	A	161.5	127	17.25	17.25	100.0
710	719.5	8	5050	125	8	A	212.5	127	42.75	42.75	130.0
710	719.5	10	5050	125	8	A	263.5	127	68.25	68.25	145.0

Pulley Configuration: S = Solid, P = Plate, A = Arm.

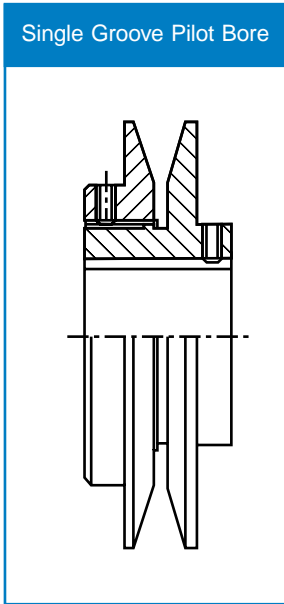
Pitch Dia. dw mm	Outside Dia. du mm	Groove No.	Bush Size	Max Bore mm	Pulley Style	Pulley Config.	Rim Width b2 mm	L mm	M mm	N mm	Weight kg
800	809.5	3	4545	110	9	A	85	114	14.50	14.50	65.0
800	809.5	4	5050	125	9	A	110.5	127	8.25	8.25	76.5
800	809.5	5	5050	125	12	A	136	127	-	9.00	143.0
800	809.5	6	5050	125	8	A	161.5	127	17.25	17.25	120.0
800	809.5	8	5050	125	8	A	212.5	127	42.75	42.75	150.0
800	809.5	10	5050	125	8	A	263.5	127	68.25	68.25	170.0
1000	1009.5	3	5050	125	9	A	85	127	21.00	21.00	116.0
1000	1009.5	4	5050	125	9	A	110.5	127	8.25	8.25	125.0
1000	1009.5	5	5050	125	12	A	136	127	-	9.00	143.0
1000	1009.5	6	5050	125	8	A	161.5	127	17.25	17.25	155.0
1000	1009.5	8	5050	125	8	A	212.5	127	42.75	42.75	205.0
1000	1009.5	10	5050	125	8	A	263.5	127	68.25	68.25	230.0
1250	1259.5	3	5050	125	9	A	85	127	21.00	21.00	170.0
1250	1259.5	4	5050	125	9	A	110.5	127	8.25	8.25	214.0
1250	1259.5	5	5050	125	12	A	136	127	-	9.00	187.0
1250	1259.5	6	5050	125	8	A	161.5	127	17.25	17.25	200.0
1250	1259.5	8	5050	125	8	A	212.5	127	42.75	42.75	252.0
1250	1259.5	10	5050	125	8	A	263.5	127	68.25	68.25	300.0

Pulley Configuration: S = Solid, P = Plate, A = Arm.



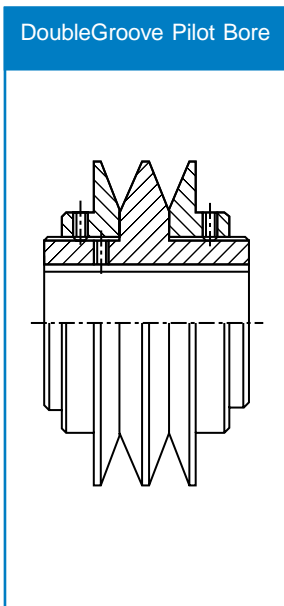
Variable Speed Pulleys

Single Groove Variable Speed Pulley - Pilot Bore



Type	Belt Section	Max Bore	Mid Pitch Dia	Max/Min Dia	Total Width	Weight kg
84Z1-P	SPZ	20	71	62 - 80	35	0.7
95Z1-P	SPZ	20	82	73 - 91	35	0.8
100Z1-P	SPZ	20	87	78 - 96	35	1.1
108Z1-P	SPZ	24	97	90 - 104	40	1.7
108A1-P	SPA	24	89	76 - 102	40	1.8
120A1-P	SPA	24	101	88 - 114	40	2.0
129A1-P	SPA	30	110	97 - 123	45	2.1
139A1-P	SPA	30	121	109 - 133	45	2.2
146A1-P	SPA	30	128	116 - 140	45	2.4
156A1-P	SPA	40	138	126 - 150	45	3.3
164A1-P	SPA	40	146	134 - 158	45	3.6
177A1-P	SPA	50	160	149 - 171	65	6.2
187A1-P	SPA	50	170	159 - 181	65	6.5
178B1-P	SPB	50	155	139 - 171	65	6.0
187B1-P	SPB	50	164	148 - 180	65	6.5
200B1-P	SPB	50	178	163 - 193	60	7.1
215B1-P	SPB	50	198	178 - 208	60	7.4
226B1-P	SPB	50	204	189 - 219	60	7.6
244B1-P	SPB	60	224	211 - 237	70	9.7
256B1-P	SPB	60	236	223 - 249	70	11.8

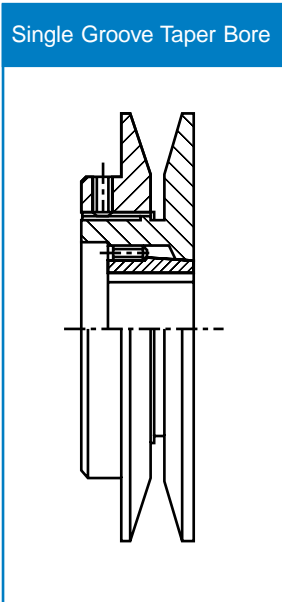
Double Groove Variable Speed Pulley - Pilot Bore



Type	Belt Section	Max Bore	Mid Pitch Dia	Max/Min Dia	Total Width	Weight kg
108A2-P	SPA	28	89	76 - 102	70	3.6
120A2-P	SPA	30	101	88 - 114	70	4.7
129A2-P	SPA	30	111	99 - 123	70	5.3
139A2-P	SPA	40	121	109 - 133	70	5.8
146A2-P	SPA	40	128	116 - 140	70	5.9
156A2-P	SPA	40	138	126 - 150	70	6.2
164A2-P	SPA	40	146	134 - 158	70	6.5
177A2-P	SPA	50	160	149 - 171	90	9.3
187A2-P	SPA	50	170	159 - 181	90	9.8
160B2-P	SPB	42	137	121 - 153	90	6.4
178B2-P	SPB	50	155	139 - 171	90	9.3
187B2-P	SPB	50	164	148 - 180	90	9.9
200B2-P	SPB	50	178	163 - 193	105	11.5
215B2-P	SPB	50	193	178 - 208	105	11.6
226B2-P	SPB	50	204	189 - 219	105	11.8
244B2-P	SPB	60	224	211 - 237	110	14.3
250B-2P	SPB	60	230	217 - 243	110	14.3
256B2-P	SPB	60	236	223 - 249	110	17.2
320B-2P	SPB	60	300	287 - 313	110	36.8
355B2-P	SPB	60	315	302 - 328	110	41.5

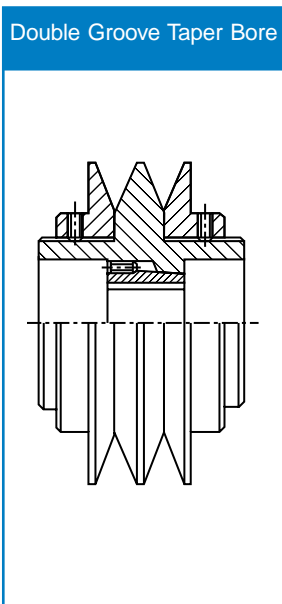
Variable Speed Pulleys

Single Groove Variable Speed Pulley - Taper Bore



Type	Belt Section	Taper Bush	Max Bore	Mid Pitch Dia	Max/Min Dia	Total Width	Weight kg
84Z1-T	SPZ	1108	25	71	62 - 80	28	0.65
95Z1-T	SPZ	1108	25	82	73 - 91	30	0.85
100Z1-T	SPZ	1108	25	87	78 - 96	30	1.00
108Z1-T	SPZ	1210	30	97	90 - 104	35	1.30
108A1-T	SPA	1210	30	89	76 - 102	35	1.40
120A1-T	SPA	1210	30	101	88 - 114	35	1.60
129A1-T	SPA	1210	30	110	97 - 123	35	1.90
139A1-T	SPA	1610	40	121	109 - 133	35	2.50
146A1-T	SPA	1610	40	128	116 - 140	35	2.70
156A1-T	SPA	1610	40	138	126 - 150	35	3.10
164A1-T	SPA	1610	40	146	134 - 158	35	3.50
177A1-T	SPA	2012	50	160	149 - 171	40	4.30
187A1-T	SPA	2012	50	170	159 - 181	40	4.70
178B1-T	SPB	2012	50	155	139 - 171	40	4.30
187B1-T	SPB	2012	50	164	148 - 180	40	4.70

Double Groove Variable Speed Pulley - Taper Bore

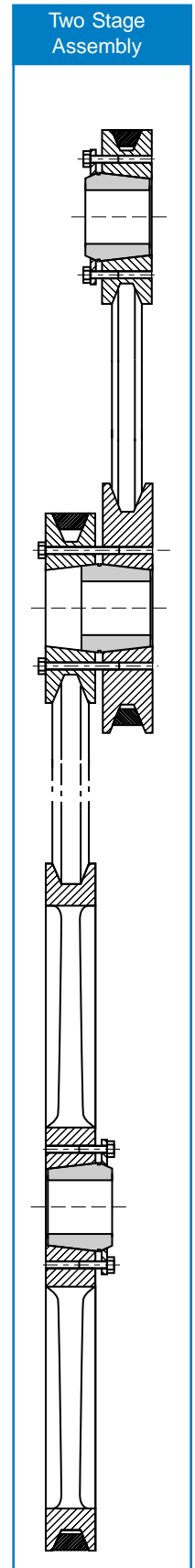
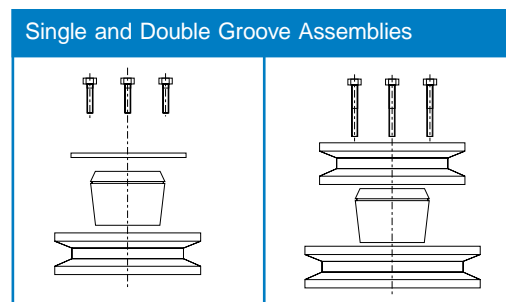
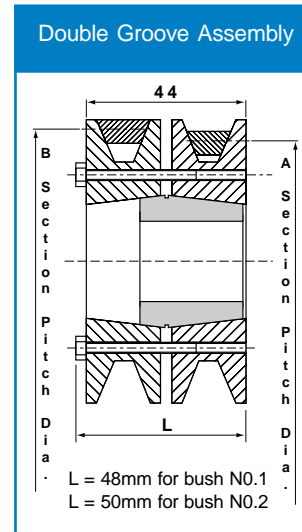
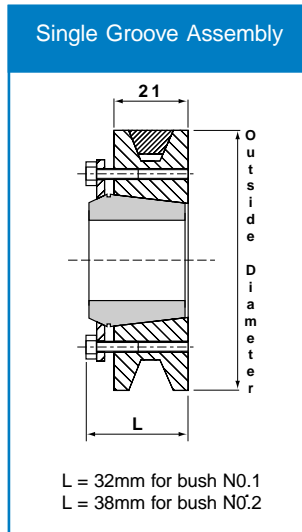


Type	Belt Section	Taper Bush	Max Bore	Mid Pitch Dia	Max/Min Dia	Total Width	Weight kg
120A2-T	SPA	1215	30	101	88 - 114	65	4.4
129A2-T	SPA	1215	30	110	97 - 123	65	4.6
139A2-T	SPA	1615	40	121	109 - 133	70	4.9
146A2-T	SPA	1615	40	128	116 - 140	70	5.3
156A2-T	SPA	1615	40	138	126 - 150	70	5.7
164A2-T	SPA	1615	40	146	134 - 158	70	6.1
177A2-T	SPA	2012	50	160	149 - 171	90	8.1
187A2-T	SPA	2012	50	170	159 - 181	90	8.7
178B2-T	SPB	2012	50	155	139 - 171	90	8.1
187B2-T	SPB	2012	50	164	148 - 180	90	8.7

Mi-Lock

Mi-Lock Pulleys

Pitch Dia.		Outside Diameter	Mass Kg	Mi-Lock Bush
A*	B			
071	081	88	0.42	1
075	085	92	0.47	1
080	090	97	0.53	1
085	095	102	0.62	1
090	100	107	0.72	1
095	105	111	0.80	1
100	110	117	0.91	1
106	116	123	1.02	1
112	122	129	0.98	1
118	128	135	1.05	1
125	135	142	1.17	1
132	142	149	1.28	1
140	150	157	1.49	2
150	160	167	1.61	2
160	170	177	1.75	2
180	190	197	2.03	2
200	209	216	2.38	2
224	233	240	3.34	2
250	259	266	4.22	2
280	289	296	3.77	2
315	324	331	4.45	2
355	364	371	4.94	2
400	409	416	7.51	2
450	459	466	9.05	2



Mi-Lock Bush Sizes

Bush Reference		Bush Shaft Sizes
Mi-Lock Bush No. 1	mm	10, 11, 12, 14, 15, 16, 18, 19, 20, 22, 24, 25, 28
	inch	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8
Mi-Lock Bush No. 2	mm	16, 18, 19, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42
	inch	1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16

Notes On Ordering Mi-Lock Pulleys and Bushes

Use the A column for specifying pulley size*
Single Groove Assembly
1 x Pulley 1 x Bush (No.1 or No.2) 1 x Retaining ring set (No.1 or No.2)
Double Groove Assembly
2 x Pulleys 1 x Bush (No.1 or No.2) 1 x LR Bolt kit (No.1 or No.2)

Mi-Lock Ring Sets and LR Ring Kits

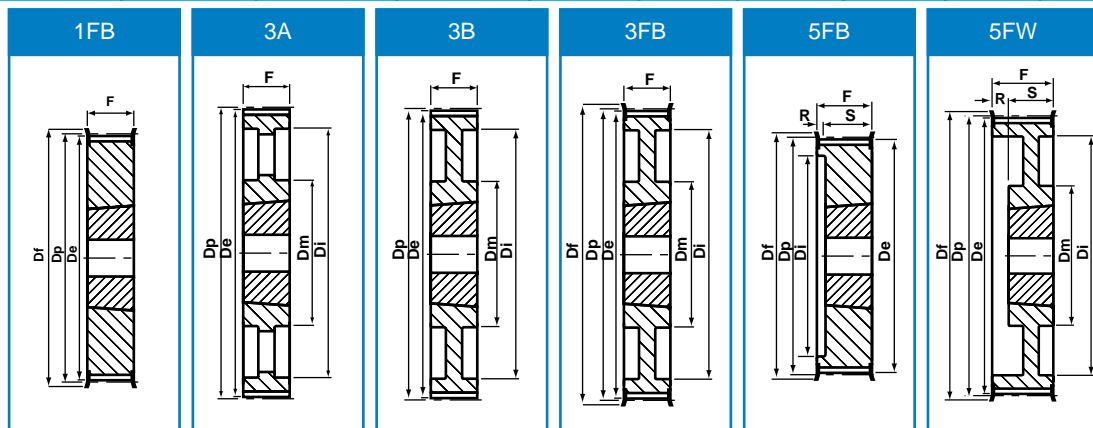
Retaining Ring Sets No. 1 & No. 2	LR Bolt Kits (Long reach)
1 x Retainer 3 x Short bolts 3 x Washers	3 x Long bolts 3 x Washers

* The same pulley is used for both A and B section belts but is ordered using A pitch diameter.

Timing Taper Bore

3/8" PITCH (9.525mm) L050

Number of Teeth	Type	Bush Size	De	Dp	Df	Dm	Di	F	S	R	Weight Kg
18	8FB	1108	53.81	54.57	60	43	-	19	22	3.0	0.2
19	8FB	1108	56.84	57.61	63	43	-	19	22	3.0	0.2
20	8FB	1108	59.88	60.64	67	48	-	19	22	3.0	0.2
21	8FB	1108	62.91	63.67	70	48	-	19	22	3.0	0.3
22	8FB	1108	65.94	66.70	75	51	-	19	22	3.0	0.3
23	8FB	1108	68.97	69.73	79	54	-	19	22	3.0	0.4
24	8FB	1108	72.00	72.77	79	54	-	19	22	3.0	0.4
25	8FB	1108	75.04	75.80	87	56	-	19	22	3.0	0.5
26	8FB	1108	78.07	78.83	87	60	-	19	22	3.0	0.5
27	8FB	1108	81.10	81.86	91	65	-	19	22	3.0	0.6
28	8FB	1108	84.13	84.89	91	65	-	19	22	3.0	0.6
30	8FB	1108	90.20	90.96	97	70	-	19	22	3.0	0.8
32	8FB	1108	96.26	97.02	102	74	-	19	22	3.0	0.9
36	8FB	1108	108.39	109.15	120	87	-	19	22	3.0	1.2
40	8FB	1210	120.51	121.28	128	87	-	19	25	6.0	1.5
48	8FW	1210	144.77	145.53	150	88	124	19	25	6.0	2.3
60	7B	1610	181.15	181.91	-	92	166	19	25	3.0	2.0
72	7A	1610	217.53	218.30	-	92	202	19	25	3.0	3.0
84	7A	1610	253.90	254.68	-	106	236	19	25	3.0	4.0
96	7A	2012	290.30	291.06	-	106	270	19	32	6.5	5.5
120	7A	2012	363.07	363.83	-	106	343	19	32	6.5	6.8



3/8" PITCH (9.525mm) L075

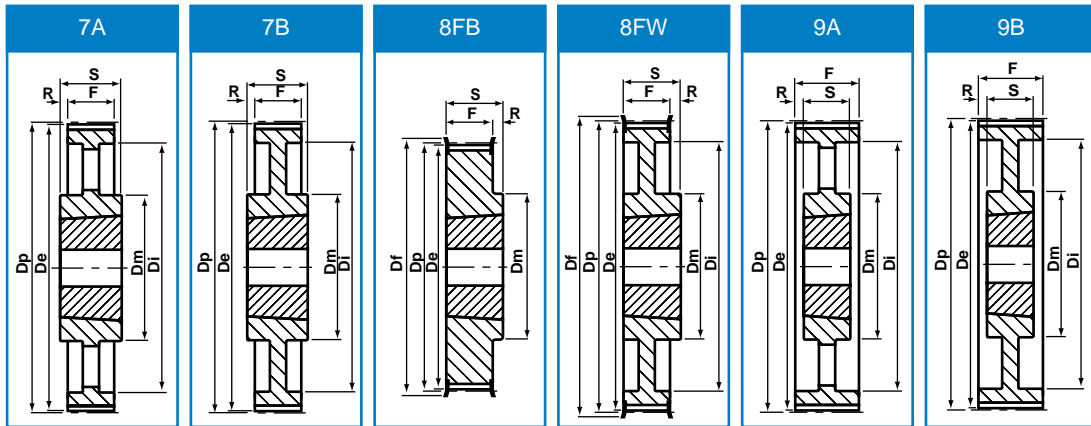
Number of Teeth	Type	Bush Size	De	Dp	Df	Dm	Di	F	S	R	Weight Kg
18	1FB	1108	53.81	54.57	60	-	-	25	25	-	0.2
19	1FB	1108	56.84	57.61	63	-	-	25	25	-	0.3
20	1FB	1108	59.88	60.64	67	-	-	25	25	-	0.3
21	1FB	1108	62.91	63.67	70	-	-	25	25	-	0.4
22	1FB	1108	65.94	66.70	75	-	-	25	25	-	0.4
23	1FB	1108	68.97	69.73	79	-	-	25	25	-	0.4
24	1FB	1108	72.00	72.77	79	-	-	25	25	-	0.5
25	1FB	1108	75.04	75.80	87	-	-	25	25	-	0.6
26	1FB	1108	78.07	78.83	87	-	-	25	25	-	0.6
27	1FB	1108	81.10	81.86	91	-	-	25	25	-	0.7
28	1FB	1108	84.13	84.89	91	-	-	25	25	-	0.7
30	1FB	1108	90.20	90.96	97	-	-	25	25	-	0.9
32	1FB	1108	96.26	97.02	102	-	-	25	25	-	1.0
36	1FB	1210	108.39	109.15	120	-	-	25	25	-	1.2
40	1FB	1210	120.51	121.28	128	-	-	25	25	-	1.7
48	3FB	1610	144.77	145.53	150	92	125	25	25	-	2.5
60	3B	1610	181.15	181.91	-	92	166	25	25	-	3.0
72	3A	1610	217.53	218.30	-	92	202	25	25	-	4.0
84	7A	2012	253.90	254.68	-	106	236	25	32	3.5	5.2
96	7A	2012	290.30	291.06	-	106	270	25	32	3.5	6.5
120	7A	2012	363.07	363.83	-	106	343	25	32	35.0	7.6

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Timing Taper Bore

3/8" PITCH (9.525mm) L100

Number of Teeth	Type	Bush Size	De	Dp	Df	Dm	Di	F	S	R	Weight Kg
18	5FB	1108	53.81	54.57	60	-	38	31	22	9.0	0.2
19	5FB	1108	56.84	57.61	63	-	38	31	22	9.0	0.3
20	5FB	1108	59.88	60.64	67	-	45	31	22	9.0	0.4
21	5FB	1108	62.91	63.67	70	-	47	31	22	9.0	0.4
22	5FB	1108	65.94	66.70	75	-	51	31	22	9.0	0.4
23	5FB	1108	68.97	69.73	79	-	54	32	22	10.0	0.5
24	5FB	1108	72.00	72.77	79	-	54	32	22	10.0	0.6
25	5FB	1108	75.04	75.80	87	-	56	32	22	10.0	0.6
26	5FB	1108	78.07	78.83	87	-	60	32	22	10.0	0.7
27	5FB	1108	81.10	81.86	91	-	62	32	22	10.0	0.8
28	5FB	1108	84.13	84.89	91	-	65	32	22	10.0	0.8
30	5FB	1210	90.20	90.96	97	-	71	32	25	7.0	0.9
32	5FB	1210	96.26	97.02	102	-	75	32	25	7.0	1.0
36	5FB	1210	108.39	109.15	120	-	89	32	25	7.0	1.4
40	5FB	1610	120.51	121.28	128	-	101	32	25	7.0	1.7
48	5FW	1610	144.77	145.53	150	92	124	32	25	7.0	2.7
60	9B	1610	181.15	181.91	-	92	166	32	25	4.0	2.4
72	3A	2012	217.53	218.30	-	106	202	32	32	-	4.4
84	3A	2012	253.90	254.68	-	106	236	32	32	-	6.0
96	3A	2012	290.30	291.06	-	106	270	32	32	-	7.1
120	3A	2012	363.07	363.83	-	106	343	32	32	-	8.5



1/2" PITCH (10.70mm) H100

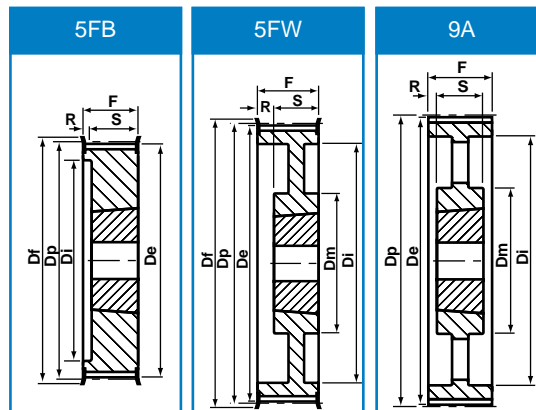
Number of Teeth	Type	Bush Size	De	Dp	Df	Dm	Di	F	S	R	Weight Kg
18	5FB	1210	71.39	72.77	79	-	52	31	25	6.0	0.5
19	5FB	1210	75.44	76.81	83	-	56	31	25	6.0	0.6
20	5FB	1210	79.48	80.55	87	-	60	31	25	6.0	0.7
21	5FB	1210	83.52	84.89	91	-	63	32	25	7.0	0.8
22	5FB	1210	87.56	88.94	94	-	67	32	25	7.0	0.9
23	5FB	1210	91.61	92.98	102	-	70	32	25	7.0	0.9
24	5FB	1610	95.65	97.02	102	-	75	32	25	7.0	1.0
25	5FB	1610	99.69	101.06	112	-	79	32	25	7.0	1.0
26	5FB	1610	103.73	105.11	112	-	83	32	25	7.0	1.2
27	5FB	1610	107.78	109.15	120	-	87	32	25	7.0	1.3
28	5FB	1610	111.82	113.19	120	-	91	32	25	7.0	1.5
30	5FB	1610	119.90	121.28	128	-	99	32	25	7.0	1.7
32	5FW	1610	127.99	129.36	135	92	108	32	25	7.0	2.0
36	5FW	1610	144.16	145.53	158	92	124	32	25	7.0	2.7
40	5FW	1610	160.33	161.70	168	92	140	32	25	7.0	3.6
44	3FB	2012	176.50	177.87	184	106	153	32	32	-	3.8
48	3FB	2012	192.67	194.04	200	106	169	32	32	-	3.2
60	9A	2012	241.18	242.55	-	106	223	34	32	1.0	4.8
72	9A	2012	289.69	291.06	-	106	270	34	32	1.0	5.7
84	9A	2012	338.20	339.57	-	106	318	34	32	1.0	6.8
96	7A	2517	386.71	388.08	-	119	366	34	45	6.0	8.2

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Timing Taper Bore

1/2" PITCH (12.70mm) H150

Number of Teeth	Type	Bush Size	De	Dp	Df	Dm	Di	F	S	R	Weight Kg
18	5FB	1210	71.39	72.77	79	-	53	45	25	20.0	0.6
19	5FB	1210	75.44	76.81	83	-	56	45	25	20.0	0.7
20	5FB	1210	79.48	80.55	87	-	60	45	25	20.0	0.8
21	5FB	1210	83.52	84.89	91	-	64	45	25	20.0	1.0
22	5FB	1210	87.56	88.94	94	-	68	45	25	20.0	1.2
23	5FB	1610	91.61	92.98	102	-	71	45	25	20.0	1.3
24	5FB	1610	95.65	97.02	102	-	74	45	25	20.0	1.0
25	5FB	1610	99.69	101.06	112	-	78	45	25	20.0	1.2
26	5FB	1610	103.73	105.11	112	-	82	45	25	20.0	1.4
27	5FB	1610	107.78	109.15	120	-	87	45	25	20.0	1.6
28	5FB	1610	111.82	113.19	120	-	91	45	25	20.0	1.8
30	5FB	1610	119.90	121.28	128	-	99	45	25	20.0	2.3
32	5FW	1610	127.99	129.36	135	92	108	45	25	20.0	2.3
36	5FW	1610	144.16	145.53	158	92	124	45	25	20.0	3.1
40	5FW	1610	160.33	161.70	168	92	140	45	25	20.0	4.0
44	5FW	2012	176.50	177.87	184	106	153	45	32	13.0	4.4
48	5FW	2012	192.67	194.04	200	106	169	45	32	13.0	4.8
60	9A	2012	241.18	242.55	-	106	223	46	32	7.5	5.4
72	9A	2012	289.69	291.06	-	106	270	46	32	7.5	6.5
84	9A	2012	338.20	339.57	-	106	320	46	32	7.5	8.4
96	9A	2517	386.71	388.08	-	119	366	46	45	0.5	11.0



1/2" PITCH (12.70mm) H200

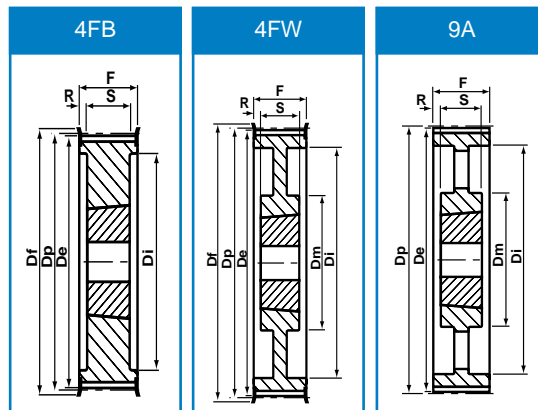
Number of Teeth	Type	Bush Size	De	Dp	Df	Dm	Di	F	S	R	Weight Kg
18	5FB	1210	71.39	72.77	79	-	52	58	25	33.0	0.8
19	5FB	1210	75.44	76.81	83	-	56	58	25	33.0	0.9
20	5FB	1610	79.48	80.55	87	-	60	58	25	33.0	1.0
21	5FB	1610	83.52	84.89	91	-	64	58	25	33.0	1.7
22	5FB	1610	87.56	88.94	94	-	68	58	25	33.0	1.5
23	5FB	1610	91.61	92.98	102	-	71	58	25	33.0	1.8
24	5FB	1610	95.65	97.02	102	-	74	58	25	33.0	1.5
25	5FB	1610	99.69	101.06	112	-	78	58	25	33.0	1.5
26	5FB	1610	103.73	105.11	112	-	82	58	25	33.0	1.8
27	5FB	1610	107.78	109.15	120	-	87	58	25	33.0	1.9
28	5FB	1610	111.82	113.19	120	-	91	58	25	33.0	2.3
30	5FB	1610	119.90	121.28	128	-	99	58	25	33.0	3.0
32	5FB	2012	127.99	129.36	135	-	107	58	32	26.0	3.0
36	5FW	2012	144.16	145.53	158	102	124	58	32	26.0	3.6
40	5FW	2012	160.33	161.70	168	106	140	58	32	26.0	4.0
44	5FW	2012	176.50	177.87	184	106	153	58	32	26.0	4.6
48	5FW	2517	192.67	194.04	200	119	169	58	45	13.0	7.0
60	9A	2517	241.18	242.55	-	119	223	60	45	7.5	8.0
72	9A	2517	289.69	291.06	-	119	270	60	45	7.5	9.0
84	9A	2517	338.20	339.57	-	119	320	60	45	7.5	10.0
96	9A	2517	386.71	388.08	-	119	366	60	45	7.5	13.4

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Timing Taper Bore

1/2" PITCH (12.70mm) H300

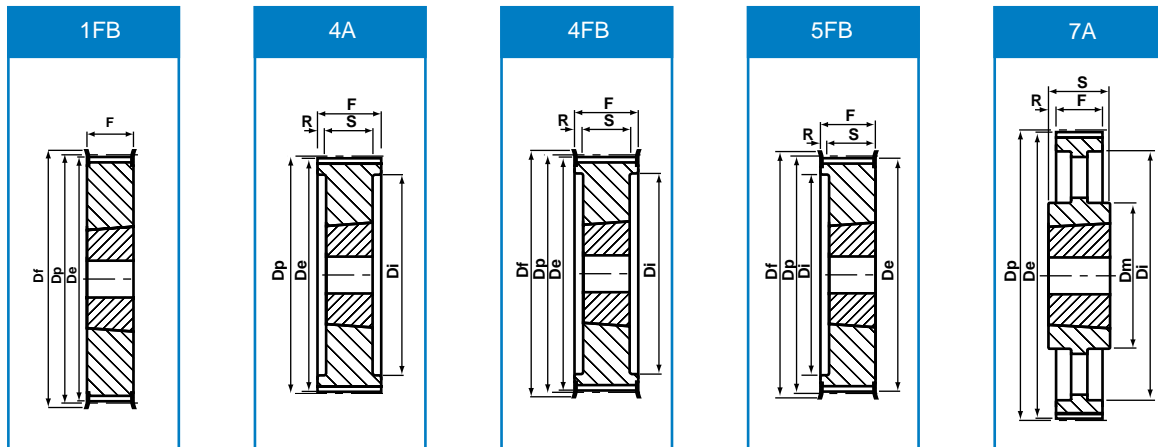
Number of Teeth	Type	Bush Size	De	Dp	Df	Dm	Di	F	S	R	Weight Kg
20	4FB	1615	79.48	80.85	87	-	65	84	38	23.0	1.5
21	4FB	1615	83.52	84.89	91	-	66	84	38	23.0	12.0
22	4FB	1615	87.56	88.94	94	-	67	84	38	23.0	1.6
23	4FB	1615	91.61	92.98	102	-	71	84	38	23.0	1.8
24	4FB	1615	95.65	97.02	102	-	75	84	38	23.0	2.1
25	4FB	1615	99.69	101.06	112	-	79	84	38	23.0	2.0
26	4FB	1615	103.73	105.11	112	-	83	84	38	23.0	2.7
27	4FB	2012	107.78	109.15	120	-	87	84	32	26.0	3.0
28	4FB	2012	111.82	113.19	120	-	91	84	32	26.0	2.4
30	4FB	2012	119.90	121.28	128	-	99	84	32	26.0	2.9
32	4FB	2517	127.99	129.36	135	-	107	84	45	19.5	3.3
36	4FB	2517	144.16	145.53	158	-	124	84	45	19.5	4.5
40	4FB	2517	160.33	161.70	168	-	137	84	45	19.5	6.0
44	4FW	2517	176.50	177.87	184	119	153	86	45	20.5	6.5
48	4FW	2517	192.67	194.04	200	119	169	86	45	20.5	7.6
60	9A	2517	241.18	242.55	-	119	223	86	45	20.5	8.4
72	9A	2517	289.69	291.06	-	119	270	86	45	20.5	10.4
84	9A	2517	338.20	339.57	-	119	320	86	45	20.5	12.5
96	9A	3030	386.71	338.08	-	150	362	86	76	5.0	14.2
120	9A	3030	483.73	485.10	-	150	460	86	76	5.0	18.8



HTD® Taper Bore

5mm Pitch 5M-15 (15mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
34-5M-15	34	8FB	1008	Steel	54.11	52.97	57.00	43	-	20.5	22	1.50	0.19
36-5M-15	36	8FB	1108	Steel	57.30	56.16	60.00	44	-	20.5	22	1.50	0.20
38-5M-15	38	8FB	1108	Steel	60.48	59.34	66.00	48	-	20.5	22	1.50	0.25
40-5M-15	40	8FB	1108	Steel	63.66	62.52	71.00	52	-	20.5	22	1.50	0.31
44-5M-15	44	8FB	1108	Steel	70.03	68.89	75.00	54	-	20.5	22	1.50	0.40
48-5M-15	48	8FB	1210	Cast Iron	76.39	75.25	83.00	64	-	20.5	25	4.50	0.45
56-5M-15	56	8FB	1210	Cast Iron	89.13	87.99	93.00	70	-	20.5	25	4.50	0.67
64-5M-15	64	8FB	1210	Cast Iron	95.49	94.35	106.00	78	-	20.5	25	4.50	0.96
72-5M-15	72	8FB	1610	Cast Iron	114.59	113.45	119.00	90	-	20.5	25	4.50	1.19
80-5M-15	80	8FB	1610	Cast Iron	127.32	126.18	135.00	92	-	20.5	25	4.50	1.57
90-5M-15	90	7A	1610	Cast Iron	143.24	142.10	-	92	126	20.5	25	2.30	1.47
112-5M-15	112	7A	1610	Cast Iron	178.25	177.11	-	92	162	20.5	25	2.30	1.94
136-5M-15	136	7A	2012	Cast Iron	216.45	215.31	-	106	199	20.5	32	5.80	3.06
150-5M-15	150	7A	2012	Cast Iron	238.73	237.59	-	106	222	20.5	32	5.80	3.90



8mm Pitch 8M-20 (20mm Wide Belt)

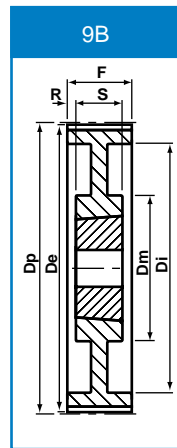
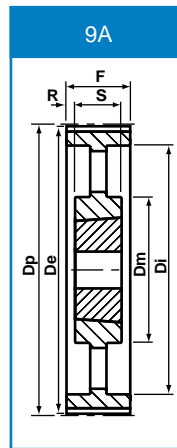
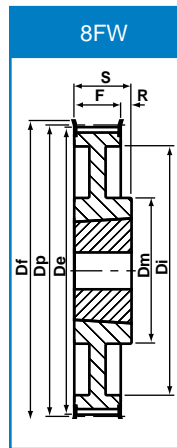
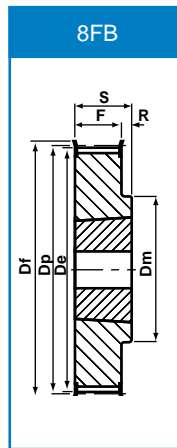
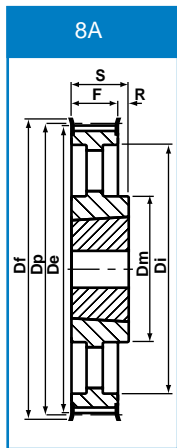
Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
22-8M-20	22	5FB	1008	Cast Iron	56.02	54.65	60.00	-	41	28	22	6.00	0.24
24-8M-20	24	5FB	1108	Cast Iron	61.12	59.75	66.00	-	42	28	22	6.00	0.30
26-8M-20	26	5FB	1108	Cast Iron	66.21	64.84	71.00	-	46	28	22	6.00	0.36
28-8M-20	28	5FB	1108	Cast Iron	71.30	70.08	75.00	-	50	28	22	6.00	0.44
30-8M-20	30	5FB	1108	Cast Iron	76.39	75.13	83.00	-	58	28	22	6.00	0.53
32-8M-20	32	5FB	1610	Cast Iron	81.49	80.16	87.00	-	62	28	25	3.00	0.42
34-8M-20	34	5FB	1610	Cast Iron	86.58	85.22	91.00	-	65	28	25	3.00	0.55
36-8M-20	36	5FB	1610	Cast Iron	91.67	90.30	98.50	-	68	28	25	3.00	0.68
38-8M-20	38	5FB	1610	Cast Iron	96.77	95.39	103.00	-	72	28	25	3.00	0.80
40-8M-20	40	5FB	1610	Cast Iron	101.86	100.49	106.00	-	76	28	25	3.00	1.00
44-8M-20	44	8FB	2012	Cast Iron	112.05	110.67	119.00	93	-	28	32	4.00	1.20
48-8M-20	48	8FB	2012	Cast Iron	122.23	120.86	127.00	96	-	28	32	4.00	1.60
56-8M-20	56	8FB	2012	Cast Iron	142.60	141.23	148.00	110	-	28	32	4.00	2.40
64-8M-20	64	8FW	2012	Cast Iron	162.97	161.60	168.00	110	137	28	32	4.00	2.70
72-8M-20	72	8FW	2012	Cast Iron	183.35	181.97	192.00	110	158	28	32	4.00	3.30
80-8M-20	80	8W	2012	Cast Iron	203.72	202.35	-	110	180	28	32	4.00	3.50
90-8M-20	90	8A	2012	Cast Iron	229.18	227.81	-	110	204	28	32	4.00	3.65
112-8M-20	112	8A	2517	Cast Iron	285.21	283.83	-	125	260	38	45	7.00	6.20
144-8M-20	144	8A	2517	Cast Iron	366.69	365.32	-	125	341	38	45	7.00	9.00
168-8M-20	168	7A	3525	Cast Iron	427.81	426.44	-	190	402	60	65	2.50	16.40
192-8M-20	192	7A	3525	Cast Iron	488.92	487.55	-	190	460	60	65	2.50	21.80

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HTD® Taper Bore

8mm Pitch 8M-30 (30mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
22-8M-30	22	5FB	1008	Cast Iron	56.02	54.65	60.00	-	41	28	22	6.00	0.24
24-8M-30	24	5FB	1108	Cast Iron	61.12	59.75	66.00	-	42	38	22	16.00	0.38
26-8M-30	26	5FB	1108	Cast Iron	66.21	64.84	71.00	-	46	38	22	16.00	0.45
28-8M-30	28	5FB	1108	Cast Iron	71.30	70.08	75.00	-	50	38	25	13.00	0.50
30-8M-30	30	1FB	1615	Cast Iron	76.39	75.13	83.00	-	-	38	38	-	0.55
32-8M-30	32	1FB	1615	Cast Iron	81.49	80.16	87.00	-	-	38	38	-	0.59
34-8M-30	34	1FB	1615	Cast Iron	86.58	85.22	91.00	-	-	38	38	-	0.77
36-8M-30	36	1FB	1615	Cast Iron	91.67	90.30	98.50	-	-	38	38	-	0.96
38-8M-30	38	1FB	1615	Cast Iron	96.77	95.39	103.00	-	-	38	38	-	1.15
40-8M-30	40	1FB	1615	Cast Iron	101.86	100.49	106.00	-	-	38	38	-	1.34
44-8M-30	44	4FB	2012	Cast Iron	112.05	110.67	119.00	-	91	38	32	3.00	1.33
48-8M-30	48	4FB	2012	Cast Iron	122.23	120.86	127.00	-	95	38	32	3.00	1.78
56-8M-30	56	4FB	2012	Cast Iron	142.60	141.23	148.00	-	117	38	32	3.00	3.76
64-8M-30	64	8FB	2517	Cast Iron	162.97	161.60	168.00	125	-	38	45	7.00	4.20
72-8M-30	72	8FW	2517	Cast Iron	183.35	181.97	192.00	125	158	38	45	7.00	4.30
80-8M-30	80	8W	2517	Cast Iron	203.72	202.35	-	125	180	38	45	7.00	4.60
90-8M-30	90	8A	2517	Cast Iron	229.18	227.81	-	125	204	38	45	7.00	5.00
112-8M-30	112	8A	2517	Cast Iron	285.21	283.83	-	125	260	38	45	7.00	6.20
144-8M-30	144	8A	2517	Cast Iron	366.69	365.32	-	125	341	38	45	7.00	9.00



8mm Pitch 8M-50 (50mm Wide Belt)

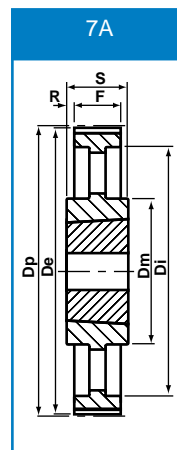
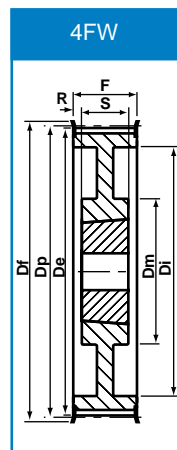
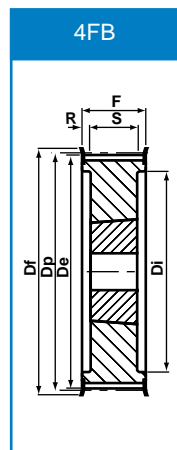
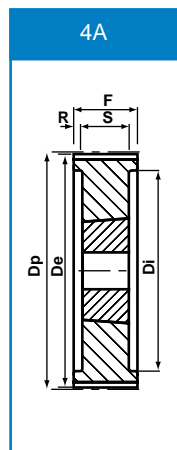
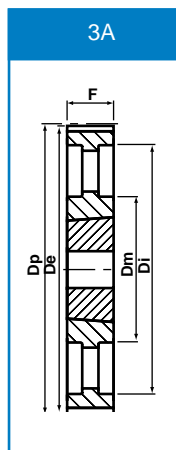
Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
28-8M-50	28	5FB	1210	Cast Iron	71.30	70.08	75.00	-	50	60	25	35.00	0.60
30-8M-50	30	5FB	1615	Cast Iron	76.39	75.13	83.00	-	58	60	38	22.00	0.65
32-8M-50	32	5FB	1615	Cast Iron	81.49	80.16	87.00	-	62	60	38	22.00	0.82
34-8M-50	34	5FB	1615	Cast Iron	86.58	85.22	91.00	-	65	60	38	22.00	1.10
36-8M-50	36	5FB	1615	Cast Iron	91.67	90.30	98.50	-	68	60	38	22.00	1.30
38-8M-50	38	5FB	1615	Cast Iron	96.77	95.39	103.00	-	72	60	38	22.00	1.60
40-8M-50	40	4FB	2012	Cast Iron	101.86	100.49	106.00	-	82	60	32	14.00	1.71
44-8M-50	44	4FB	2012	Cast Iron	112.05	110.67	119.00	-	91	60	32	14.00	1.78
48-8M-50	48	4FB	2012	Cast Iron	122.23	120.86	127.00	-	96	60	32	14.00	2.30
56-8M-50	56	4FB	2517	Cast Iron	142.60	141.23	148.00	-	116	60	45	7.50	3.40
64-8M-50	64	4FB	2517	Cast Iron	162.97	161.60	168.00	-	137	60	45	7.50	5.00
72-8M-50	72	4FB	2517	Cast Iron	183.35	181.97	192.00	125	158	60	45	7.50	6.70
80-8M-50	80	4A	3020	Cast Iron	203.72	202.35	-	-	180	60	51	4.50	8.80
90-8M-50	90	9B	3020	Cast Iron	229.18	227.81	-	170	204	60	51	4.50	10.00
112-8M-50	112	9B	3020	Cast Iron	285.21	283.83	-	170	260	60	51	4.50	12.00
144-8M-50	144	9A	3020	Cast Iron	366.69	365.32	-	170	341	60	51	4.50	15.20
168-8M-50	168	7A	3525	Cast Iron	427.81	426.44	-	190	402	60	65	2.50	16.40
192-8M-50	192	7A	3525	Cast Iron	488.92	487.55	-	190	460	60	65	2.50	21.80

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

HTD® Taper Bore

8mm Pitch 8M-85 (85mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
34-8M-85	34	4FB	1615	Cast Iron	86.58	85.22	91.00	-	65	95	38	28.50	1.43
36-8M-85	36	4FB	1615	Cast Iron	91.67	90.30	98.50	-	68	95	38	28.50	1.87
38-8M-85	38	4FB	1615	Cast Iron	96.77	95.39	103.00	-	72	95	38	28.50	2.20
40-8M-85	40	4FB	2012	Cast Iron	101.86	100.49	106.00	-	82	95	32	31.50	1.80
44-8M-85	44	4FB	2012	Cast Iron	112.05	110.67	119.00	-	91	95	32	31.50	2.30
48-8M-85	48	4FB	2517	Cast Iron	122.23	120.86	127.00	-	100	95	45	25.00	2.66
56-8M-85	56	4FB	2517	Cast Iron	142.60	141.23	148.00	-	117	95	45	25.00	4.45
64-8M-85	64	4FB	2517	Cast Iron	162.97	161.60	168.00	-	137	95	45	25.00	6.20
72-8M-85	72	4FB	3020	Cast Iron	183.35	181.97	192.00	-	158	95	51	22.00	8.00
80-8M-85	80	4A	3020	Cast Iron	203.72	202.35	-	-	180	95	51	22.00	10.00
90-8M-85	90	9B	3020	Cast Iron	229.18	227.81	-	170	204	95	51	22.00	10.80
112-8M-85	112	9B	3020	Cast Iron	285.21	283.83	-	170	260	95	51	22.00	15.00
144-8M-85	144	9A	3525	Cast Iron	366.69	365.32	-	190	341	95	65	15.00	20.00
168-8M-85	168	9A	3525	Cast Iron	427.81	426.44	-	190	402	95	65	15.00	23.00
192-8M-85	192	9A	3525	Cast Iron	488.92	487.55	-	190	460	95	65	15.00	28.50



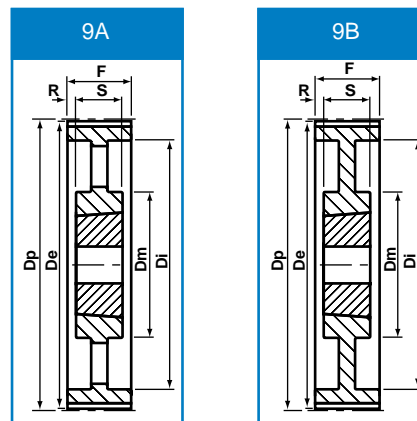
14mm Pitch 14M-40 (40mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
28-14M-40	28	4FB	2012	Cast Iron	124.78	122.12	127.00	-	98	54	32	11.00	2.10
29-14M-40	29	4FB	2012	Cast Iron	129.23	126.57	138.00	-	100	54	32	11.00	2.38
30-14M-40	30	4FB	2012	Cast Iron	133.69	130.99	138.00	-	100	54	32	11.00	2.65
32-14M-40	32	4FB	2012	Cast Iron	142.60	139.88	154.00	-	104	54	32	11.00	3.40
34-14M-40	34	4FB	2517	Cast Iron	151.52	148.79	160.00	-	110	54	45	4.50	3.87
36-14M-40	36	4FB	2517	Cast Iron	160.43	157.68	168.00	-	120	54	45	4.50	4.80
38-14M-40	38	4FB	2517	Cast Iron	169.34	166.60	183.00	-	130	54	45	4.50	5.40
40-14M-40	40	4FB	2517	Cast Iron	178.28	175.49	188.00	-	138	54	45	4.50	6.00
44-14M-40	44	4FB	3020	Cast Iron	196.08	193.28	211.00	-	155	54	51	1.50	7.80
48-14M-40	48	4FB	3020	Cast Iron	213.90	211.11	226.00	-	170	54	51	1.50	9.40
56-14M-40	56	4FW	3020	Cast Iron	249.55	246.76	256.00	170	208	54	51	1.50	10.10
64-14M-40	64	4FW	3020	Cast Iron	285.21	282.41	296.00	170	242	54	51	1.50	13.40
72-14M-40	72	9B	3020	Cast Iron	320.86	318.06	-	170	280	54	51	1.50	15.20
80-14M-40	80	9A	3020	Cast Iron	356.51	353.71	-	170	315	54	51	1.50	16.00
90-14M-40	90	9A	3020	Cast Iron	401.07	398.28	-	170	360	54	51	1.50	17.80
112-14M-40	112	9A	3020	Cast Iron	499.11	496.32	-	170	457	54	51	1.50	25.60
144-14M-40	144	9A	3020	Cast Iron	641.71	638.92	-	170	600	54	51	1.50	32.00
168-14M-40	168	9A	3020	Cast Iron	748.66	745.87	-	170	706	54	51	1.50	44.00
192-14M-40	192	9A	3020	Cast Iron	855.62	852.82	-	170	813	54	51	1.50	49.00
216-14M-40	216	9A	3020	Cast Iron	962.57	959.76	-	170	920	54	51	1.50	55.00

HTD® Taper Bore

14mm Pitch 14M-55 (55mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
28-14M-55	28	4FB	2012	Cast Iron	124.78	122.12	127.00	-	98	70	32	19.00	2.20
29-14M-55	29	4FB	2012	Cast Iron	129.23	126.57	138.00	-	100	70	32	19.00	2.74
30-14M-55	30	4FB	2517	Cast Iron	133.69	130.99	138.00	-	100	70	45	12.50	2.70
32-14M-55	32	4FB	2517	Cast Iron	142.60	139.88	154.00	-	108	70	45	12.50	3.66
34-14M-55	34	4FB	2517	Cast Iron	151.52	148.79	160.00	-	110	70	45	12.50	4.55
36-14M-55	36	4FB	2517	Cast Iron	160.43	157.68	168.00	-	120	70	45	12.50	5.20
38-14M-55	38	4FB	2517	Cast Iron	169.34	166.60	183.00	-	130	70	45	12.50	6.20
40-14M-55	40	4FB	2517	Cast Iron	178.25	175.49	188.00	-	138	70	45	12.50	7.00
44-14M-55	44	4FB	3020	Cast Iron	196.08	193.28	211.00	-	155	70	51	9.50	8.60
48-14M-55	48	4FB	3020	Cast Iron	213.90	211.11	226.00	-	170	70	51	9.50	10.40
56-14M-55	56	4FW	3020	Cast Iron	249.55	246.76	256.00	170	208	70	51	9.50	12.00
64-14M-55	64	4FW	3020	Cast Iron	285.21	282.41	296.00	170	242	70	51	9.50	14.50
72-14M-55	72	9B	3020	Cast Iron	320.86	318.06	-	170	280	70	51	9.50	16.20
80-14M-55	80	9A	3020	Cast Iron	356.51	353.71	-	170	315	70	51	9.50	17.50
90-14M-55	90	9A	3020	Cast Iron	401.07	398.28	-	170	360	70	51	9.50	20.10
112-14M-55	112	9A	3020	Cast Iron	499.11	496.32	-	170	457	70	51	9.50	28.40
144-14M-55	144	9A	3020	Cast Iron	641.71	638.92	-	170	600	70	51	9.50	36.20
168-14M-55	168	9A	3020	Cast Iron	748.66	745.87	-	170	706	70	51	9.50	49.00
192-14M-55	192	9A	3020	Cast Iron	855.62	852.82	-	170	813	70	51	9.50	53.00
216-14M-55	216	7A	3535	Cast Iron	962.57	959.76	-	190	920	70	89	9.50	65.90



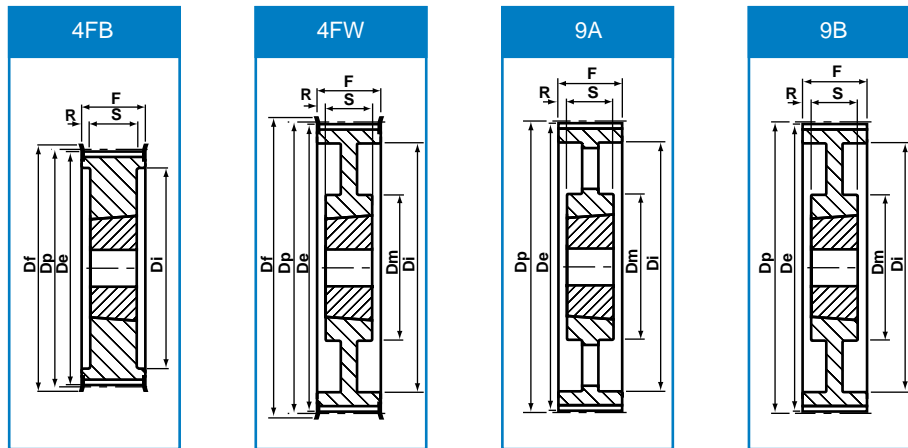
14mm Pitch 14M-85 (85mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
28-14M-85	28	4FB	2517	Cast Iron	124.78	122.12	127.00	-	98	102	45	28.50	2.70
29-14M-85	29	4FB	2517	Cast Iron	129.23	126.57	138.00	-	100	102	45	28.50	3.40
30-14M-85	30	4FB	2517	Cast Iron	133.69	130.99	138.00	-	100	102	45	28.50	3.75
32-14M-85	32	4FB	2517	Cast Iron	142.60	139.88	154.00	-	108	102	45	28.50	4.80
34-14M-85	34	4FB	2517	Cast Iron	151.52	148.79	160.00	-	110	102	45	28.50	6.00
36-14M-85	36	4FB	3020	Cast Iron	160.43	157.68	168.00	-	125	102	51	25.50	5.80
38-14M-85	38	4FB	3020	Cast Iron	169.34	166.60	183.00	-	130	102	51	25.50	6.80
40-14M-85	40	4FB	3020	Cast Iron	178.25	175.49	188.00	-	138	102	51	25.50	8.00
44-14M-85	44	4FB	3030	Cast Iron	196.08	193.28	211.00	-	155	102	76	13.00	11.80
48-14M-85	48	4FB	3030	Cast Iron	213.90	211.11	226.00	-	170	102	76	13.00	15.10
56-14M-85	56	4FB	3535	Cast Iron	249.55	246.76	256.00	190	210	102	89	6.50	18.00
64-14M-85	64	4FW	3535	Cast Iron	285.21	282.41	296.00	190	242	102	89	6.50	23.00
72-14M-85	72	9B	3535	Cast Iron	320.86	318.06	-	190	280	102	89	6.50	25.00
80-14M-85	80	9A	3535	Cast Iron	356.51	353.71	-	190	315	102	89	6.50	26.00
90-14M-85	90	9A	3535	Cast Iron	401.07	398.28	-	190	360	102	89	6.50	28.00
112-14M-85	112	9A	3535	Cast Iron	499.11	496.32	-	190	457	102	89	6.50	36.50
144-14M-85	144	9A	3535	Cast Iron	641.71	638.92	-	190	600	102	89	6.50	48.00
168-14M-85	168	9A	3535	Cast Iron	748.66	745.87	-	190	706	102	89	6.50	60.00
192-14M-85	192	3A	4040	Cast Iron	855.62	852.82	-	230	813	102	102	-	86.00
216-14M-85	216	3A	4040	Cast Iron	962.57	959.76	-	230	920	102	102	-	91.50

HTD® Taper Bore

14mm Pitch 14M-115 (115mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
28-14M-115	28	4FB	2517	Cast Iron	124.78	122.12	127.00	-	98	133	45	44.00	3.70
29-14M-115	29	4FB	2517	Cast Iron	129.23	126.57	138.00	-	100	133	45	44.00	4.00
30-14M-115	30	4FB	2517	Cast Iron	133.69	130.99	138.00	-	100	133	45	44.00	5.00
32-14M-115	32	4FB	2517	Cast Iron	142.60	139.88	154.00	-	108	133	45	44.00	6.80
34-14M-115	34	4FB	2517	Cast Iron	151.52	148.79	160.00	-	110	133	45	44.00	6.80
36-14M-115	36	4FB	3020	Cast Iron	160.43	157.68	168.00	-	125	133	51	41.00	7.00
38-14M-115	38	4FB	3020	Cast Iron	169.34	166.60	183.00	-	130	133	51	41.00	8.40
40-14M-115	40	4FB	3020	Cast Iron	178.25	175.49	188.00	-	140	133	51	41.00	9.20
44-14M-115	44	4FB	3030	Cast Iron	196.08	193.28	211.00	-	155	133	76	28.50	14.00
48-14M-115	48	4FB	3030	Cast Iron	213.90	211.11	226.00	-	170	133	76	28.50	17.10
56-14M-115	56	4FB	3535	Cast Iron	249.55	246.76	265.00	-	210	133	89	22.00	24.80
64-14M-115	64	4FW	3535	Cast Iron	285.21	282.41	296.00	190	242	133	89	22.00	27.00
72-14M-115	72	9B	3535	Cast Iron	320.86	318.06	-	190	280	133	89	22.00	29.00
80-14M-115	80	9A	3535	Cast Iron	356.51	353.71	-	190	315	133	89	22.00	32.00
90-14M-115	90	9A	3535	Cast Iron	401.07	398.28	-	190	360	133	89	22.00	36.50
112-14M-115	112	9A	3535	Cast Iron	499.11	496.32	-	190	457	133	89	22.00	46.00
144-14M-115	144	9A	4040	Cast Iron	641.71	638.92	-	230	600	133	102	15.50	68.00
168-14M-115	168	9A	4040	Cast Iron	748.66	745.87	-	230	706	133	102	15.50	82.60
192-14M-115	192	9A	4040	Cast Iron	855.62	852.82	-	230	813	133	102	15.50	96.00
216-14M-115	216	9A	4040	Cast Iron	962.57	959.76	-	230	920	133	102	15.50	107.00



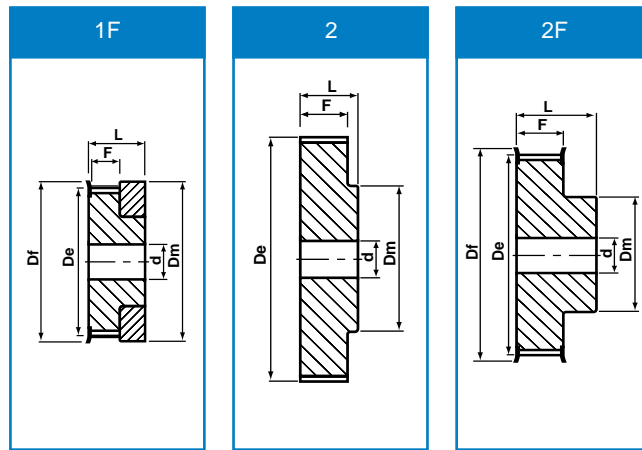
14mm Pitch 14M-170 (170mm Wide Belt)

Product Description	Number of Teeth	Type	Bush Size	Material	Dp	De	Df	Dm	Di	F	S	R	Weight Kg
38-14M-170	38	4FB	3030	Cast Iron	169.34	166.60	183.00	-	130	187	76	55.50	11.70
40-14M-170	40	4FB	3030	Cast Iron	178.25	175.49	188.00	-	140	187	76	55.50	13.00
44-14M-170	44	4FB	3535	Cast Iron	196.08	193.28	211.00	-	155	187	89	49.00	15.00
48-14M-170	48	4FB	3535	Cast Iron	213.90	211.11	226.00	-	175	187	89	49.00	19.00
56-14M-170	56	4FB	3535	Cast Iron	249.55	246.76	256.00	-	210	187	89	49.00	28.50
64-14M-170	64	4FB	4040	Cast Iron	285.21	282.41	296.00	-	240	187	102	42.50	41.00
72-14M-170	72	9B	4040	Cast Iron	320.86	318.06	-	230	280	187	102	42.50	46.90
80-14M-170	80	9B	4040	Cast Iron	356.51	353.71	-	230	315	187	102	42.50	48.00
90-14M-170	90	9A	4040	Cast Iron	401.07	398.28	-	230	360	187	102	42.50	52.50
112-14M-170	112	9A	5050	Cast Iron	499.11	496.32	-	265	456	187	127	30.00	74.50
144-14M-170	144	9A	5050	Cast Iron	641.71	638.92	-	265	600	187	127	30.00	91.00
168-14M-170	168	9A	5050	Cast Iron	748.66	745.87	-	265	706	187	127	30.00	116.00
192-14M-170	192	9A	5050	Cast Iron	855.62	852.82	-	265	813	187	127	30.00	134.00
216-14M-170	216	9A	5050	Cast Iron	962.57	959.76	-	265	920	187	127	30.00	146.50

Metric Timing Pilot Bore

PITCH = 2.5mm BELT WIDTH = 6mm T2.5

Teeth	Type	De	Df	Dm	F	L	d	kg
12	1F	9.00	13.0	12.0	9.0	16	4	0.003
14	1F	10.60	15.0	14.0	9.0	16	4	0.004
15	1F	11.40	15.0	15.0	9.0	16	4	0.005
18	2F	13.80	17.5	10.0	10.0	16	4	0.006
19	2F	14.60	18.0	10.0	10.0	16	4	0.007
20	2F	15.40	19.5	12.0	10.0	16	4	0.008
24	2F	18.55	23.0	12.0	10.0	16	4	0.012
25	2F	19.35	23.0	14.0	10.0	16	4	0.013
30	2F	23.35	28.0	16.0	10.0	16	6	0.018
32	2F	24.95	32.0	16.0	10.0	16	6	0.020
36	2F	28.10	37.0	20.0	10.0	16	6	0.026
40	2F	31.30	38.0	22.0	10.0	16	6	0.032
48	2	37.70	-	26.0	10.0	16	6	0.048
60	2	47.25	-	34.0	10.0	16	8	0.073



Metric Timing Pilot Bore

PITCH = 5mm BELT WIDTH = 10mm T5

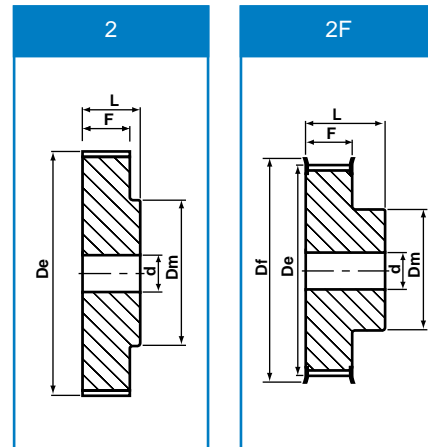
Teeth	Type	De	Df	Dm	F	L	d	kg
10	2F	15.05	19.5	8.0	15.0	21	6	0.012
12	2F	18.25	23.0	11.0	15.0	21	6	0.016
14	2F	21.45	25.0	14.0	15.0	21	6	0.019
15	2F	23.05	28.0	16.0	15.0	21	6	0.021
16	2F	24.60	32.0	18.0	15.0	21	6	0.025
18	2F	27.80	32.0	20.0	15.0	21	6	0.031
19	2F	29.40	36.0	22.0	15.0	21	6	0.036
20	2F	31.00	36.0	23.0	15.0	21	6	0.038
22	2F	34.15	38.0	24.0	15.0	21	6	0.046
24	2F	37.40	42.0	26.0	15.0	21	6	0.054
25	2F	38.95	44.0	26.0	15.0	21	6	0.058
26	2F	40.60	44.0	26.0	15.0	21	6	0.061
27	2F	42.20	48.0	30.0	15.0	21	8	0.064
28	2F	43.75	48.0	32.0	15.0	21	8	0.068
30	2F	46.95	51.0	34.0	15.0	21	8	0.075
32	2F	50.10	54.0	38.0	15.0	21	8	0.088
36	2F	56.45	63.0	38.0	15.0	21	8	0.114
40	2F	62.85	66.0	40.0	15.0	21	8	0.138
42	2F	66.00	71.0	40.0	15.0	21	8	0.160
44	2	69.20	-	45.0	15.0	21	8	0.174
48	2	75.55	-	50.0	15.0	21	8	0.200
60	2	94.65	-	65.0	15.0	21	8	0.307

PITCH = 5mm BELT WIDTH = 16mm T5

Teeth	Type	De	Df	Dm	F	L	d	kg
10	2F	15.05	19.5	8.0	21.0	27	6	0.016
12	2F	18.25	23.0	11.0	21.0	27	6	0.022
14	2F	21.45	25.0	14.0	21.0	27	6	0.026
15	2F	23.05	28.0	16.0	21.0	27	6	0.029
16	2F	24.60	32.0	18.0	21.0	27	6	0.035
18	2F	27.80	32.0	20.0	21.0	27	6	0.043
19	2F	29.40	36.0	22.0	21.0	27	6	0.049
20	2F	31.00	36.0	23.0	21.0	27	6	0.053
22	2F	34.15	38.0	24.0	21.0	27	6	0.065
24	2F	37.40	42.0	26.0	21.0	27	6	0.076
25	2F	38.95	44.0	26.0	21.0	27	6	0.082
26	2F	40.60	44.0	26.0	21.0	27	6	0.085
27	2F	42.20	48.0	30.0	21.0	27	8	0.090
28	2F	43.75	48.0	32.0	21.0	27	8	0.098
30	2F	46.95	51.0	34.0	21.0	27	8	0.105
32	2F	50.10	54.0	38.0	21.0	27	8	0.123
36	2F	56.45	63.0	38.0	21.0	27	8	0.160
40	2F	62.85	66.0	40.0	21.0	27	8	0.193
42	2F	66.00	71.0	40.0	21.0	27	8	0.215
44	2	69.20	-	45.0	21.0	27	8	0.234
48	2	75.55	-	50.0	21.0	27	8	0.280
60	2	94.65	-	65.0	21.0	27	8	0.430

PITCH = 5mm BELT WIDTH = 25mm T5

Teeth	Type	De	Df	Dm	F	L	d	kg
10	2F	15.05	19.5	8.0	30.0	36	6	0.023
12	2F	18.25	23.0	11.0	30.0	36	6	0.031
14	2F	21.45	25.0	14.0	30.0	36	6	0.037
15	2F	23.05	28.0	16.0	30.0	36	6	0.041
16	2F	24.60	32.0	18.0	30.0	36	6	0.050
18	2F	27.80	32.0	20.0	30.0	36	6	0.061
19	2F	29.40	36.0	22.0	30.0	36	6	0.070
20	2F	31.00	36.0	23.0	30.0	36	6	0.076
22	2F	34.15	38.0	24.0	30.0	36	6	0.090
24	2F	37.40	42.0	26.0	30.0	36	6	0.109
25	2F	38.95	44.0	26.0	30.0	36	6	0.116
26	2F	40.60	44.0	26.0	30.0	36	6	0.124
27	2F	42.20	48.0	30.0	30.0	36	8	0.128
28	2F	43.75	48.0	32.0	30.0	36	8	0.140
30	2F	46.95	51.0	34.0	30.0	36	8	0.150
32	2F	50.10	54.0	38.0	30.0	36	8	0.176
36	2F	56.45	63.0	38.0	30.0	36	8	0.230
40	2F	62.85	66.0	40.0	30.0	36	8	0.276
42	2F	66.00	71.0	40.0	30.0	36	8	0.310
44	2	69.20	-	45.0	30.0	36	8	0.344
48	2	75.55	-	50.0	30.0	36	8	0.400
60	2	94.65	-	65.0	30.0	36	8	0.614



Metric Timing Pilot Bore

PITCH = 10mm BELT WIDTH = 16mm T10

Teeth	Type	De	Df	Dm	F	L	d	kg
12	2F	36.35	42.0	28.0	21.0	31	6	0.076
14	2F	42.70	48.0	32.0	21.0	31	8	0.104
15	2F	45.90	51.0	32.0	21.0	31	8	0.116
16	2F	49.10	54.0	35.0	21.0	31	8	0.134
18	2F	55.45	60.0	40.0	21.0	31	8	0.167
19	2F	58.65	66.0	44.0	21.0	31	8	0.184
20	2F	61.80	66.0	46.0	21.0	31	8	0.208
22	2F	68.20	75.0	52.0	21.0	31	8	0.249
24	2F	74.55	83.0	58.0	21.0	31	8	0.288
25	2F	77.75	83.0	60.0	21.0	31	8	0.310
26	2F	80.90	87.0	60.0	21.0	31	8	0.337
27	2F	84.10	91.0	60.0	21.0	31	8	0.364
28	2F	87.25	93.0	60.0	21.0	31	8	0.399
30	2F	93.65	97.0	60.0	21.0	31	8	0.441
32	2F	100.00	106.0	65.0	21.0	31	10	0.493
36	2F	112.75	119.0	70.0	21.0	31	10	0.623
40	2F	125.45	131.0	80.0	21.0	31	10	0.767
44	2	138.20	-	88.0	21.0	31	10	0.932
48	2	150.95	-	95.0	21.0	31	16	1.090
60	2	189.10	-	110.0	21.0	31	16	1.701

PITCH = 10mm BELT WIDTH = 25mm T10

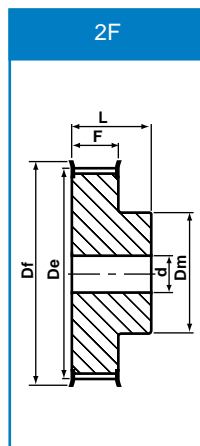
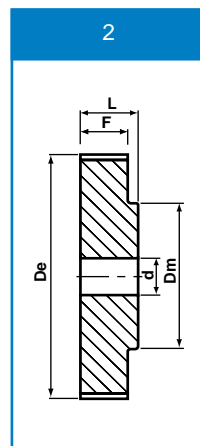
Teeth	Type	De	Df	Dm	F	L	d	kg
12	2F	36.35	42.0	28.0	30.0	40	6	0.099
14	2F	42.70	48.0	32.0	30.0	40	8	0.134
15	2F	45.90	51.0	32.0	30.0	40	8	0.152
16	2F	49.10	54.0	35.0	30.0	40	8	0.176
18	2F	55.45	60.0	40.0	30.0	40	8	0.224
19	2F	58.65	66.0	44.0	30.0	40	8	0.247
20	2F	61.80	66.0	46.0	30.0	40	8	0.276
22	2F	68.20	75.0	52.0	30.0	40	8	0.378
24	2F	74.55	83.0	58.0	30.0	40	8	0.392
25	2F	77.75	83.0	60.0	30.0	40	8	0.422
26	2F	80.90	87.0	60.0	30.0	40	8	0.485
27	2F	84.10	91.0	60.0	30.0	40	8	0.536
28	2F	87.25	93.0	60.0	30.0	40	8	0.585
30	2F	93.65	97.0	60.0	30.0	40	8	0.640
32	2F	100.00	106.0	65.0	30.0	40	10	0.693
36	2F	112.75	119.0	70.0	30.0	40	10	0.873
40	2F	125.45	131.0	80.0	30.0	40	10	1.067
44	2	138.20	-	88.0	30.0	40	10	1.310
48	2	150.95	-	95.0	30.0	40	16	1.516
60	2	189.10	-	110.0	30.0	40	16	2.339

PITCH = 10mm BELT WIDTH = 30mm T10

Teeth	Type	De	Df	Dm	F	L	d	kg
18	2F	55.45	60.0	40.0	37.0	47	10	0.422
19	2F	58.65	66.0	44.0	37.0	47	10	0.466
20	2F	61.80	66.0	46.0	37.0	47	12	0.520
22	2F	68.20	75.0	52.0	37.0	47	12	0.631
24	2F	74.55	83.0	58.0	37.0	47	12	0.736
25	2F	77.75	83.0	60.0	37.0	47	12	0.766
26	2F	80.90	87.0	60.0	37.0	47	12	0.847
27	2F	84.10	91.0	60.0	37.0	47	12	0.946
28	2F	87.25	93.0	60.0	37.0	47	12	1.074
30	2F	93.65	97.0	60.0	37.0	47	12	1.169
32	2F	100.00	106.0	65.0	37.0	47	12	1.300
36	2F	112.75	119.0	70.0	37.0	47	16	1.637
40	2F	125.45	131.0	80.0	37.0	47	16	1.999
44	2	138.20	-	88.0	37.0	47	16	2.386
48	2	150.95	-	95.0	37.0	47	16	2.830
60	2	189.10	-	110.0	37.0	47	16	4.366

PITCH = 10mm BELT WIDTH = 50mm T10

Teeth	Type	De	Df	Dm	F	L	d	Kg
18	2F	55.45	60.0	40.0	56.0	66	10	
19	2F	58.65	66.0	44.0	56.0	66	10	
20	2F	61.80	66.0	46.0	56.0	66	12	
22	2F	68.20	75.0	52.0	56.0	66	12	
24	2F	74.55	83.0	58.0	56.0	66	12	
25	2F	77.75	83.0	60.0	56.0	66	12	
26	2F	80.90	87.0	60.0	56.0	66	12	
27	2F	84.10	91.0	60.0	56.0	66	12	
28	2F	87.25	93.0	60.0	56.0	66	12	
30	2F	93.65	97.0	60.0	56.0	66	12	
32	2F	100.00	106.0	65.0	56.0	66	12	
36	2F	112.75	119.0	75.0	56.0	66	16	
40	2F	125.45	131.0	80.0	56.0	66	16	
44	2	138.20	-	88.0	56.0	66	16	
48	2	150.95	-	95.0	56.0	66	16	
60	2	189.10	-	110.0	56.0	60	16	



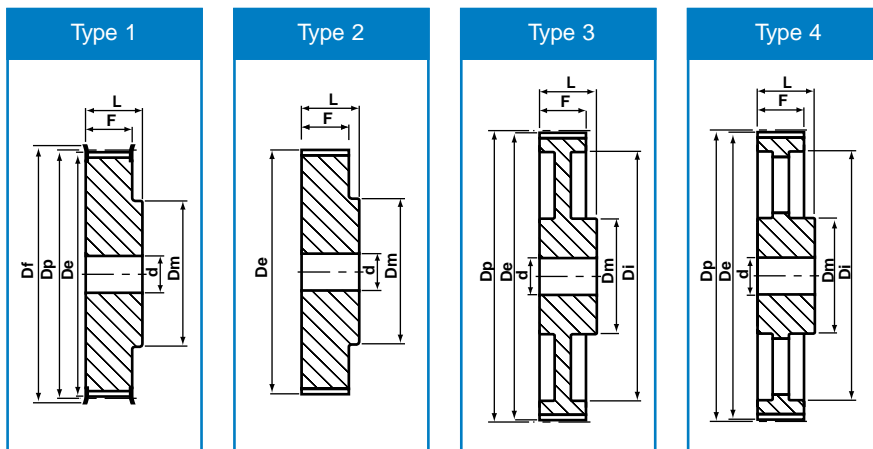
Timing Pilot Bore

PITCH 1/5" (5.08 mm) XL037

Teeth	Type	De	Dp	Df	Dm	F	L	d
10	1	15.66	16.17	23.0	9.5	14.3	20	6
11	1	17.28	17.79	23.0	9.5	14.3	20	6
12	1	18.90	19.40	25.0	10.0	14.3	20	6
13	1	20.51	21.02	25.0	10.0	14.3	20	6
14	1	22.13	22.64	28.0	15.0	14.3	20	6
15	1	23.75	24.26	28.0	16.0	14.3	20	6
16	1	25.36	25.87	32.0	20.0	14.3	20	6
17	1	26.98	27.49	32.0	20.0	14.3	20	6
18	1	28.60	29.11	35.0	20.0	14.3	20	6
19	1	30.22	30.72	35.0	23.5	14.3	22	6
20	1	31.83	32.34	38.0	23.5	14.3	22	6
21	1	33.45	33.96	38.0	25.0	14.3	22	6
22	1	35.07	35.57	41.0	25.0	14.3	22	6
23	1	36.68	37.19	41.0	30.0	14.3	22	8
24	1	38.30	38.81	44.0	30.0	14.3	22	8
25	1	39.92	40.43	44.0	30.0	14.3	22	8
26	1	41.53	42.04	48.0	34.0	14.3	22	8
27	1	43.15	43.66	48.0	34.0	14.3	22	8
28	1	44.77	45.28	51.0	38.0	14.3	22	8
29	1	46.39	46.90	51.0	38.0	14.3	22	8
30	1	48.00	48.51	54.0	38.0	14.3	22	8
32	1	51.24	51.74	57.0	38.0	14.3	25	8
34	1	54.47	54.98	61.0	45.0	14.3	25	8
35	1	56.09	56.60	61.0	45.0	14.3	25	8
36	2	57.70	58.21	-	45.0	14.3	25	8
38	2	60.94	61.45	-	45.0	14.3	25	8
39	2	62.56	63.06	-	45.0	14.3	25	8
40	2	64.17	64.68	-	45.0	14.3	25	8
42	2	67.41	67.91	-	45.0	14.3	25	8
44	2	70.64	71.15	-	45.0	14.3	25	8
45	2	72.26	72.77	-	45.0	14.3	25	10
48	3	77.11	77.62	-	45.0	14.3	25	10
52	3	83.58	84.08	-	45.0	14.3	25	10
56	3	90.04	90.55	-	45.0	14.3	25	10
57	3	91.66	92.17	-	45.0	14.3	25	10
60	3	96.51	97.02	-	45.0	14.3	25	10
68	3	109.45	109.96	-	45.0	14.3	25	10
70	3	112.68	113.19	-	45.0	14.3	25	10
72	3	115.92	116.42	-	45.0	14.3	25	10

PITCH 3/8" (9.525 mm) L050

Teeth	Type	De	Dp	Df	Dm	F	L	d
10	1	29.56	30.33	37.0	20.0	19.0	28	8
11	1	32.59	33.35	37.0	22.0	19.0	30	8
12	1	35.62	36.37	43.0	24.0	19.0	30	8
13	1	38.65	39.41	43.0	28.0	19.0	30	8
14	1	41.68	42.44	48.0	28.0	19.0	30	10
15	1	44.72	45.48	51.0	34.0	19.0	30	10
16	1	47.75	48.51	54.0	36.0	19.0	32	10
17	1	50.78	51.54	57.0	36.0	19.0	32	10
18	1	53.81	54.59	60.0	40.0	19.0	32	10
19	1	56.84	57.61	64.0	40.0	19.0	32	10
20	1	59.88	60.63	66.5	40.0	19.0	32	10
21	1	62.91	63.68	70.0	45.0	19.0	32	10
22	1	65.94	66.70	75.0	45.0	19.0	32	10
23	1	68.97	69.73	79.0	55.0	19.0	32	10
24	1	72.00	72.77	79.0	55.0	19.0	32	10
25	1	75.04	75.80	82.5	58.0	19.0	32	10
26	1	78.07	78.84	86.0	58.0	19.0	32	12
27	1	81.10	81.86	87.0	58.0	19.0	32	12
28	1	84.13	84.89	91.0	58.0	19.0	32	12
30	1	90.20	90.96	97.0	70.0	19.0	32	12
32	1	96.26	97.03	102.0	70.0	19.0	32	12
33	1	99.29	100.05	106.0	70.0	19.0	32	12
34	1	102.32	103.08	112.0	70.0	19.0	32	12
35	1	105.35	106.12	112.0	70.0	19.0	32	12
36	1	108.39	109.14	115.0	70.0	19.0	32	12
40	1	120.51	121.29	128.0	70.0	19.0	32	12
42	1	126.57	127.34	135.0	70.0	19.0	32	12
44	1	132.65	133.40	142.0	70.0	19.0	32	12
45	1	135.67	136.44	142.0	70.0	19.0	32	12
48	1	144.77	145.54	150.0	70.0	19.0	32	12
50	4	150.83	151.60	-	70.0	19.0	32	12
56	4	169.02	169.79	-	70.0	19.0	32	14
57	4	172.06	172.82	-	70.0	19.0	32	14
60	4	181.15	181.92	-	75.0	19.0	42	14
68	4	205.41	206.18	-	75.0	19.0	42	14
70	4	211.47	212.24	-	75.0	19.0	42	14
72	4	217.53	218.29	-	75.0	19.0	42	14
84	4	253.92	254.69	-	75.0	19.0	42	14
96	4	290.30	291.06	-	75.0	19.0	42	14



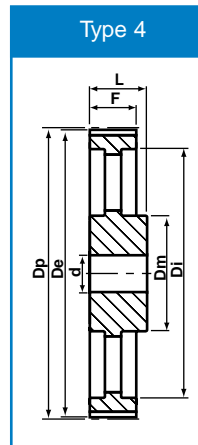
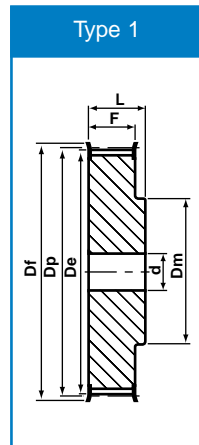
Timing Pilot Bore

PITCH 3/8" (9.525 mm) L075

Teeth	Type	De	Dp	Df	Dm	F	L	d
10	1	29.56	30.33	37.0	20.0	25.4	38	8
11	1	32.59	33.35	37.0	22.0	25.4	38	8
12	1	35.62	36.37	43.0	24.0	25.4	38	8
13	1	38.65	39.41	43.0	28.0	25.4	38	8
14	1	41.68	42.44	48.0	28.0	25.4	38	12
15	1	44.72	45.48	51.0	34.0	25.4	38	12
16	1	44.75	48.51	54.0	36.0	25.4	38	12
17	1	50.78	51.54	57.0	36.0	25.4	38	12
18	1	53.81	54.59	60.0	40.0	25.4	38	12
19	1	56.84	57.61	64.0	40.0	25.4	38	12
20	1	59.88	60.63	66.5	40.0	25.4	38	12
21	1	62.91	63.68	70.0	45.0	25.4	38	12
22	1	65.94	66.70	75.0	45.0	25.4	38	12
23	1	68.97	69.73	79.0	55.0	25.4	38	12
24	1	72.00	72.77	79.0	55.0	25.4	38	12
25	1	75.04	75.80	82.5	58.0	25.4	38	12
26	1	78.07	78.84	86.0	58.0	25.4	38	12
27	1	81.10	81.86	87.0	58.0	25.4	38	12
28	1	84.13	84.89	91.0	58.0	25.4	38	12
30	1	90.20	90.96	97.0	70.0	25.4	38	12
32	1	96.26	97.03	102.0	70.0	25.4	38	12
33	1	99.29	100.05	106.0	70.0	25.4	38	12
34	1	102.32	103.08	112.0	70.0	25.4	38	12
35	1	105.35	106.12	112.0	70.0	25.4	38	12
36	1	108.39	109.14	115.0	70.0	25.4	38	12
38	1	114.46	115.22	120.0	70.0	25.4	38	12
40	1	120.51	121.29	128.0	70.0	25.4	38	12
42	1	126.57	127.34	135.0	70.0	25.4	38	12
44	1	132.64	133.40	142.0	70.0	25.4	38	12
45	1	135.67	136.44	142.0	70.0	25.4	38	12
48	1	144.77	145.54	150.0	70.0	25.4	38	12
50	4	150.83	151.60	-	70.0	25.4	38	14
52	4	156.90	157.66	-	70.0	25.4	38	14
56	4	169.02	169.79	-	70.0	25.4	38	14
57	4	172.06	172.82	-	70.0	25.4	38	14
60	4	181.15	181.92	-	75.0	25.4	38	14
70	4	211.47	212.23	-	75.0	25.4	45	14
72	4	217.53	218.29	-	75.0	25.4	45	14
84	4	253.92	254.69	-	75.0	25.4	45	14
96	4	290.30	291.06	-	75.0	25.4	45	14

PITCH 3/8" (9.525 mm) L100

Teeth	Type	De	Dp	Df	Dm	F	L	d
10	1	29.56	30.33	37.0	20.0	31.8	45	8
11	1	32.59	33.35	37.0	22.0	31.8	45	8
12	1	35.62	36.37	43.0	24.0	31.8	45	8
13	1	38.65	39.41	43.0	28.0	31.8	45	8
14	1	41.68	42.44	48.0	28.0	31.8	45	12
15	1	44.72	45.48	51.0	34.0	31.8	45	12
16	1	47.75	48.51	54.0	36.0	31.8	45	12
17	1	50.78	51.54	57.0	36.0	31.8	45	12
18	1	53.81	54.59	60.0	40.0	31.8	45	12
19	1	56.84	57.61	64.0	40.0	31.8	45	12
20	1	59.88	60.63	66.5	40.0	31.8	45	12
21	1	62.91	63.68	70.0	45.0	31.8	45	14
22	1	65.94	66.70	75.0	45.0	31.8	45	14
23	1	68.97	69.73	79.0	55.0	31.8	45	14
24	1	72.00	72.77	79.0	55.0	31.8	45	14
25	1	75.04	75.80	82.5	58.0	31.8	45	14
26	1	78.07	78.84	86.0	58.0	31.8	45	14
27	1	81.10	81.86	87.0	58.0	31.8	45	14
28	1	84.13	84.89	91.0	58.0	31.8	45	14
30	1	90.20	90.96	97.0	70.0	31.8	45	14
32	1	96.26	97.03	102.0	70.0	31.8	45	14
33	1	99.29	100.05	106.0	70.0	31.8	45	14
34	1	102.32	103.08	112.0	70.0	31.8	45	14
35	1	105.35	106.12	112.0	70.0	31.8	45	14
36	1	108.39	109.14	115.0	70.0	31.8	45	14
40	1	120.51	121.29	128.0	70.0	31.8	45	14
42	1	126.57	127.34	135.0	70.0	31.8	45	14
44	1	132.64	133.40	142.0	70.0	31.8	45	14
45	1	135.67	136.44	142.0	70.0	31.8	45	14
48	1	144.77	145.54	150.0	70.0	31.8	45	14
50	4	150.83	151.60	-	70.0	31.8	45	14
52	4	156.90	157.66	-	70.0	31.8	45	14
56	4	169.02	169.79	-	70.0	31.8	45	14
57	4	172.06	172.82	-	70.0	31.8	45	14
60	4	181.15	181.92	-	75.0	31.8	45	14
68	4	205.41	206.17	-	75.0	31.8	45	14
72	4	217.53	218.29	-	75.0	31.8	45	14
84	4	253.92	254.69	-	75.0	31.8	45	14
96	4	290.30	291.06	-	75.0	31.8	45	14



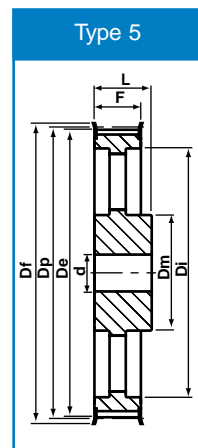
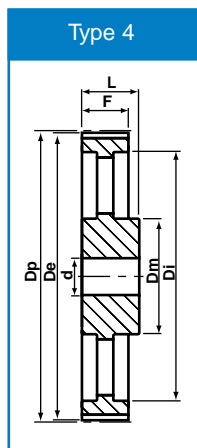
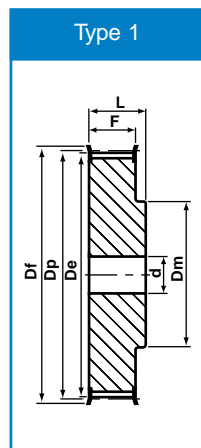
Timing Pilot Bore

PITCH 1/2" (12.70 mm) H075

Teeth	Type	De	Dp	Df	Dm	F	L	d
14	1	55.22	56.59	64.0	40.0	26.4	40	12
15	1	59.27	60.64	70.0	45.0	26.4	40	12
16	1	63.31	64.67	70.0	45.0	26.4	40	12
17	1	67.35	68.72	75.0	45.0	26.4	40	12
18	1	71.39	72.77	79.0	55.0	26.4	40	12
19	1	75.44	76.81	82.5	60.0	26.4	40	12
20	1	79.48	80.85	86.0	62.0	26.4	40	12
21	1	83.52	84.89	91.0	65.0	26.4	40	12
22	1	87.56	88.93	94.0	68.0	26.4	40	12
23	1	91.61	92.98	97.0	72.0	26.4	40	12
24	1	95.65	97.03	102.0	72.0	26.4	40	12
25	1	99.69	101.06	106.0	72.0	26.4	40	12
26	1	103.73	105.11	112.0	80.0	26.4	40	12
27	1	107.78	109.15	115.0	80.0	26.4	40	12
28	1	111.82	113.18	120.0	80.0	26.4	40	12
30	1	119.90	121.29	128.0	80.0	26.4	40	12
32	1	127.99	129.30	135.0	80.0	26.4	40	12
33	1	132.03	133.40	142.0	80.0	26.4	40	12
34	1	136.07	137.45	150.0	80.0	26.4	40	12
35	1	140.12	141.49	150.0	80.0	26.4	40	12
36	1	144.16	145.54	150.0	80.0	26.4	40	12
38	1	152.24	153.62	158.0	80.0	26.4	40	12
40	1	160.33	161.70	168.0	80.0	26.4	40	12
42	1	168.41	169.79	184.0	80.0	26.4	40	12
44	4	176.50	177.88	-	80.0	26.4	40	14
48	4	192.67	194.03	-	90.0	26.4	45	14
50	4	200.75	202.13	-	90.0	26.4	45	14

PITCH 1/2" (12.70 mm) H100

Teeth	Type	De	Dp	Df	Dm	F	L	d
14	1	55.22	56.59	64.0	40.0	31.8	45	12
15	1	59.27	60.64	70.0	45.0	31.8	45	12
16	1	63.31	64.67	70.0	45.0	31.8	45	12
17	1	67.35	68.72	75.0	45.0	31.8	45	12
18	1	71.39	72.77	79.0	55.0	31.8	45	12
19	1	75.44	76.81	82.5	60.0	31.8	45	14
20	1	79.48	80.85	86.0	62.0	31.8	45	14
21	1	83.52	84.89	91.0	65.0	31.8	45	14
22	1	87.56	88.93	94.0	68.0	31.8	45	14
23	1	91.61	92.98	97.0	72.0	31.8	45	14
24	1	95.65	97.03	102.0	72.0	31.8	45	14
25	1	99.69	101.06	106.0	72.0	31.8	45	14
26	1	103.73	105.11	112.0	80.0	31.8	45	14
27	1	107.78	109.15	115.0	80.0	31.8	45	14
28	1	111.82	113.18	120.0	80.0	31.8	45	14
29	1	115.86	117.23	120.0	80.0	31.8	45	14
30	1	119.90	121.29	128.0	80.0	31.8	45	14
32	1	127.99	129.30	135.0	80.0	31.8	45	14
33	1	132.03	133.40	142.0	80.0	31.8	45	14
34	1	136.07	137.45	150.0	80.0	31.8	45	14
35	1	140.12	141.49	150.0	80.0	31.8	45	14
36	1	144.16	145.54	150.0	80.0	31.8	45	14
38	1	152.24	153.62	158.0	80.0	31.8	45	14
40	1	160.33	161.70	168.0	80.0	31.8	45	14
42	1	168.41	169.79	184.0	80.0	31.8	45	14
44	5	176.50	177.88	184.0	80.0	31.8	50	14
45	5	180.54	181.91	192.0	80.0	31.8	50	14
48	5	192.67	194.03	200.0	90.0	31.8	50	14
50	4	200.75	202.13	-	90.0	31.8	50	20
52	4	208.84	210.21	-	90.0	31.8	50	20
57	4	229.05	230.42	-	90.0	31.8	50	20
58	4	233.09	234.47	-	90.0	31.8	50	20
60	4	241.18	242.55	-	120.0	31.8	50	20
68	4	273.53	274.90	-	120.0	31.8	55	20
70	4	281.61	282.98	-	120.0	31.8	55	20
72	4	289.69	291.06	-	120.0	31.8	55	20
84	4	338.20	339.57	-	120.0	31.8	55	20
96	4	386.71	388.09	-	120.0	31.8	60	20
120	4	483.73	485.12	-	120.0	31.8	60	20
150	4	605.01	606.38	-	120.0	31.8	60	20



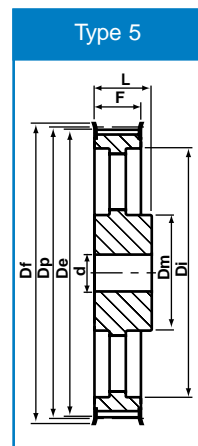
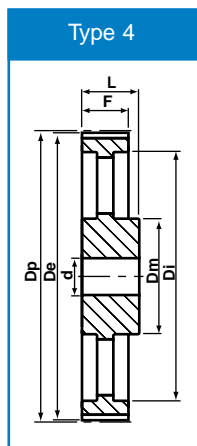
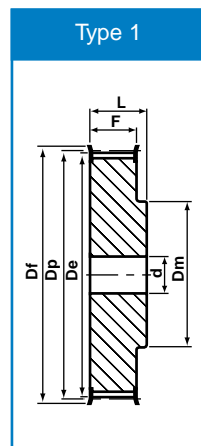
Timing Pilot Bore

PITCH 1/2" (12.70 mm) H150

Teeth	Type	De	Dp	Df	Dm	F	L	d
14	1	55.22	56.59	64.0	42.0	46.0	58	20
15	1	59.27	60.64	70.0	45.0	46.0	58	20
16	1	63.31	64.67	70.0	45.0	46.0	58	20
17	1	67.35	68.72	75.0	45.0	46.0	58	20
18	1	71.39	72.77	79.0	55.0	46.0	58	20
19	1	75.44	76.81	82.0	60.0	46.0	58	20
20	1	79.48	80.85	86.0	62.0	46.0	58	20
21	1	83.52	84.89	91.0	65.0	46.0	58	20
22	1	87.56	88.93	94.0	68.0	46.0	58	20
23	1	91.61	92.98	97.0	72.0	46.0	58	20
24	1	95.65	97.03	102.0	72.0	46.0	58	20
25	1	99.69	101.06	106.0	72.0	46.0	58	20
26	1	103.73	105.11	112.0	80.0	46.0	58	20
27	1	107.78	109.15	115.0	80.0	46.0	58	20
28	1	111.82	113.18	120.0	80.0	46.0	58	20
29	1	115.86	117.23	120.0	80.0	46.0	58	20
30	1	119.90	121.29	128.0	80.0	46.0	58	20
32	1	127.99	129.30	135.0	80.0	46.0	58	20
33	1	132.03	133.40	142.0	80.0	46.0	58	20
34	1	136.07	137.45	150.0	80.0	46.0	58	20
35	1	140.12	141.49	150.0	80.0	46.0	58	20
36	1	144.16	145.54	150.0	80.0	46.0	58	20
38	1	152.24	153.62	158.0	80.0	46.0	58	20
40	1	160.33	161.70	168.0	80.0	46.0	58	20
42	1	168.41	169.79	184.0	80.0	46.0	58	20
45	5	180.54	181.91	192.0	80.0	46.0	58	20
48	5	192.67	194.03	200.0	90.0	46.0	58	20
50	4	200.75	202.13	-	90.0	46.0	65	20
52	4	208.84	210.21	-	90.0	46.0	65	20
57	4	229.05	230.43	-	90.0	46.0	65	20
58	4	233.09	234.47	-	90.0	46.0	65	20
60	4	241.18	242.55	-	120.0	46.0	65	20
68	4	273.53	274.91	-	120.0	46.0	65	25
70	4	281.61	282.98	-	120.0	46.0	65	25
72	4	289.69	291.06	-	120.0	46.0	65	25
84	4	338.20	339.57	-	120.0	46.0	65	25
96	4	386.71	388.09	-	120.0	46.0	65	25
120	4	483.73	485.12	-	120.0	46.0	65	25
150	4	605.01	606.38	-	120.0	46.0	65	25

PITCH 1/2" (12.70 mm) H200

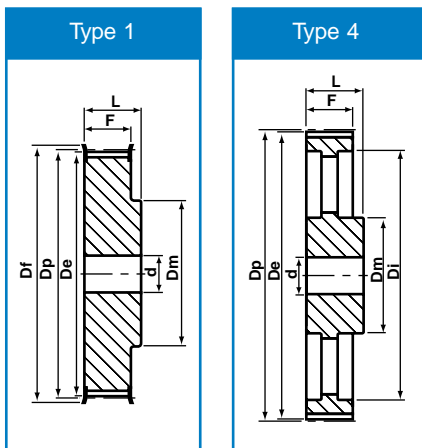
Teeth	Type	De	Dp	Df	Dm	F	L	d
14	1	55.22	56.59	64.0	42.0	58.7	70	20
15	1	59.27	60.64	40.0	45.0	58.7	70	20
16	1	63.31	64.67	70.0	45.0	58.7	70	20
17	1	67.35	68.72	75.0	45.0	58.7	70	20
18	1	71.39	72.77	79.0	55.0	58.7	70	20
19	1	75.44	76.81	82.0	60.0	58.7	70	20
20	1	79.48	80.85	86.0	62.0	58.7	70	20
21	1	83.52	84.89	91.0	65.0	58.7	70	20
22	1	87.56	88.93	94.0	68.0	58.7	70	20
23	1	91.61	92.98	97.0	72.0	58.7	70	20
24	1	95.65	97.03	102.0	72.0	58.7	70	20
25	1	99.69	101.06	106.0	72.0	58.7	70	20
26	1	103.73	105.11	112.0	80.0	58.7	70	20
27	1	107.78	109.15	115.0	80.0	58.7	70	20
28	1	111.82	113.18	120.0	80.0	58.7	70	20
29	1	115.86	117.23	120.0	80.0	58.7	70	20
30	1	119.90	121.29	128.0	80.0	58.7	70	20
32	1	127.99	129.30	135.0	80.0	58.7	70	20
33	1	132.03	133.40	142.0	80.0	58.7	70	20
34	1	136.07	137.45	150.0	80.0	58.7	70	20
35	1	140.12	141.49	150.0	80.0	58.7	70	20
36	1	144.16	145.54	150.0	80.0	58.7	70	20
38	1	152.24	153.62	158.0	80.0	58.7	70	20
40	1	160.33	161.70	168.0	80.0	58.7	70	20
42	1	168.41	169.79	184.0	80.0	58.7	70	20
44	5	176.50	177.88	184.0	80.0	58.7	70	20
45	5	180.54	181.91	192.0	80.0	58.7	70	20
48	5	192.67	194.03	200.0	90.0	58.7	75	25
50	4	200.75	202.13	-	90.0	58.7	75	25
52	4	208.84	210.21	-	90.0	58.7	75	25
57	4	229.05	230.42	-	90.0	58.7	75	25
58	4	233.09	234.47	-	90.0	58.7	75	25
60	4	241.18	242.55	-	120.0	58.7	75	25
68	4	273.53	274.90	-	120.0	58.7	75	28
70	4	281.61	282.98	-	120.0	58.7	75	28
72	4	289.69	291.06	-	120.0	58.7	75	28
84	4	338.20	339.57	-	120.0	58.7	75	28
96	4	386.71	388.09	-	120.0	58.7	75	28
120	4	483.73	485.12	-	120.0	58.7	75	28
150	4	605.01	606.38	-	120.0	58.7	75	28



Timing Pilot Bore

PITCH 1/2" (12.70 mm) H300

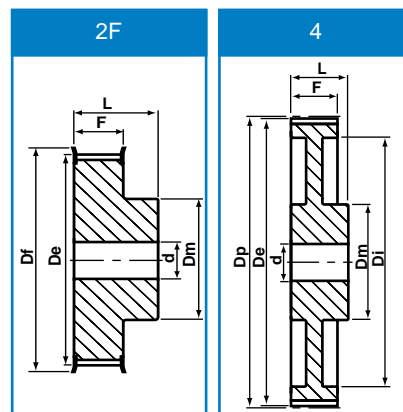
Teeth	Type	De	Dp	Df	Dm	F	L	d
14	1	55.22	56.59	64.0	42.0	85.7	100	20
15	1	59.27	60.64	70.0	45.0	85.7	100	20
16	1	63.31	64.67	70.0	45.0	85.7	100	20
17	1	67.35	68.72	75.0	45.0	85.7	100	20
18	1	71.39	72.77	79.0	55.0	85.7	100	20
19	1	75.44	76.81	82.5	60.0	85.7	100	20
20	1	79.48	80.85	86.0	62.0	85.7	100	20
21	1	83.52	84.89	91.0	65.0	85.7	100	20
22	1	87.56	88.93	94.0	68.0	85.7	100	20
23	1	91.61	92.98	97.0	72.0	85.7	100	20
24	1	95.65	97.03	102.0	72.0	85.7	100	20
25	1	99.69	101.06	106.0	72.0	85.7	100	20
26	1	103.73	105.11	112.0	80.0	85.7	100	20
27	1	107.78	109.15	115.0	80.0	85.7	100	20
28	1	111.82	113.18	120.0	80.0	85.7	100	20
30	1	119.90	121.29	128.0	80.0	85.7	100	20
32	1	127.99	129.30	135.0	80.0	85.7	100	20
33	1	132.03	133.40	142.0	80.0	85.7	100	20
34	1	136.07	137.45	150.0	80.0	85.7	100	20
35	1	140.12	141.49	150.0	80.0	85.7	100	25
36	1	144.16	145.54	150.0	80.0	85.7	100	25
38	1	152.24	153.62	158.0	80.0	85.7	100	25
40	1	160.33	161.70	168.0	80.0	85.7	100	25
42	1	168.41	169.79	184.0	80.0	85.7	100	25
44	4	176.50	177.88	-	90.0	85.7	100	25
45	4	180.54	181.91	-	90.0	85.7	100	25
48	4	192.67	194.03	-	90.0	85.7	100	25
50	4	200.75	202.13	-	90.0	85.7	100	25
52	4	208.84	210.21	-	90.0	85.7	100	25
57	4	229.05	230.47	-	90.0	85.7	100	25
58	4	233.09	234.47	-	90.0	85.7	100	25
60	4	241.18	242.55	-	120.0	85.7	100	25
70	4	281.61	282.98	-	120.0	85.7	100	30
72	4	289.69	291.06	-	120.0	85.7	100	30
84	4	338.20	339.57	-	120.0	85.7	100	30
96	4	386.71	388.09	-	120.0	85.7	100	30
120	4	483.73	485.12	-	120.0	85.7	100	30
150	4	605.01	606.38	-	120.0	85.7	100	30
156	4	629.26	630.64	-	120.0	85.7	100	30



HTD[®] Pilot Bore

5mm Pitch 5M-09 (9mm Wide Belt)

Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
12	2F	17.96	19.10	23.0	13.0	-	14.5	20.0	6	0.02
14	2F	21.14	22.28	25.0	14.0	-	14.5	20.0	6	0.03
15	2F	22.73	23.87	28.0	16.0	-	14.5	20.0	6	0.04
16	2F	24.32	25.46	28.0	16.5	-	14.5	20.0	6	0.05
18	2F	27.51	28.65	32.0	20.0	-	14.5	20.0	6	0.07
20	2F	30.69	31.83	37.0	23.0	-	14.5	22.5	6	0.09
21	2F	32.28	33.42	38.0	24.0	-	14.5	22.5	6	0.11
22	2F	33.87	35.01	38.0	25.5	-	14.5	22.5	6	0.11
24	2F	37.06	38.20	43.0	27.0	-	14.5	22.5	6	0.14
26	2F	40.24	41.38	44.0	30.0	-	14.5	22.5	6	0.17
28	2F	43.42	44.56	48.0	30.5	-	14.5	22.5	6	0.20
30	2F	46.60	47.75	51.0	35.0	-	14.5	22.5	6	0.23
32	2F	49.79	50.93	54.0	38.0	-	14.5	22.5	8	0.27
36	2F	56.16	57.30	60.0	38.0	-	14.5	22.5	8	0.32
40	2F	62.52	63.66	70.0	38.0	-	14.5	22.5	8	0.40
44	4	68.89	70.03	-	38.0	-	14.5	25.5	8	0.17
48	4	75.25	76.39	-	45.0	-	14.5	25.5	8	0.18
60	4	94.35	95.49	-	45.0	-	14.5	25.5	8	0.23
72	4	113.45	114.59	-	45.0	-	14.5	25.5	8	0.27



5mm Pitch 5M-15 (15mm Wide Belt)

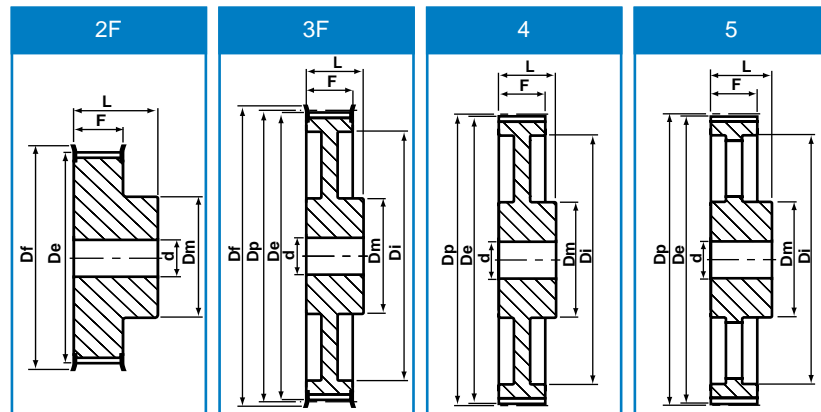
Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
12	2F	17.96	19.10	23.0	13.0	-	20.5	26.0	6	0.03
14	2F	21.14	22.28	25.0	14.0	-	20.5	26.0	6	0.04
15	2F	22.73	23.87	28.0	16.0	-	20.5	26.0	6	0.05
16	2F	24.32	25.45	28.0	17.0	-	20.5	26.0	6	0.06
18	2F	27.51	28.65	32.0	20.0	-	20.5	26.0	6	0.08
20	2F	30.69	31.83	37.0	23.0	-	20.5	26.0	6	0.11
21	2F	32.28	33.42	38.0	24.0	-	20.5	26.0	6	0.13
22	2F	33.87	35.01	38.0	26.0	-	20.5	26.0	6	0.14
24	2F	37.06	38.20	43.0	27.0	-	20.5	28.0	6	0.18
26	2F	40.24	41.38	44.0	30.0	-	20.5	28.0	6	0.22
28	2F	43.42	44.56	48.0	31.0	-	20.5	28.0	6	0.25
30	2F	46.60	47.75	51.0	35.0	-	20.5	28.0	6	0.30
32	2F	49.79	50.93	54.0	38.0	-	20.5	28.0	8	0.35
36	2F	56.16	57.30	60.0	38.0	-	20.5	28.0	8	0.42
40	2F	62.52	63.66	70.0	38.0	-	20.5	28.0	8	0.52
44	4	68.89	70.03	-	38.0	-	20.5	30.0	8	0.22
48	4	75.25	76.39	-	38.0	-	20.5	30.0	8	0.28
60	4	94.35	95.49	-	50.0	-	20.5	30.0	8	0.30
72	4	113.45	114.59	-	50.0	-	20.5	30.0	8	0.36

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

HTD® Pilot Bore

5mm Pitch 5M-25 (25mm Wide Belt)

Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
12	2F	17.96	19.10	23.0	13.0	-	30.5	36.0	6	
14	2F	21.14	22.28	25.0	14.0	-	30.5	36.0	6	
15	2F	22.73	23.87	28.0	16.0	-	30.5	36.0	6	
16	2F	24.32	25.45	28.0	16.5	-	30.5	36.0	6	
18	2F	27.51	28.65	32.0	20.0	-	30.5	36.0	6	
20	2F	30.69	31.83	37.0	23.0	-	30.5	36.0	6	
21	2F	32.28	33.42	38.0	24.0	-	30.5	38.0	6	
22	2F	33.87	35.01	38.0	25.5	-	30.5	38.0	6	
24	2F	37.06	38.20	43.0	27.0	-	30.5	38.0	6	
26	2F	40.24	41.38	44.0	30.0	-	30.5	38.0	6	
28	2F	43.42	44.56	48.0	30.5	-	30.5	38.0	6	
30	2F	46.60	47.75	51.0	35.0	-	30.5	38.0	6	
32	2F	49.79	50.93	54.0	38.0	-	30.5	38.0	8	
36	2F	56.16	57.30	60.0	38.5	-	30.5	38.0	8	
40	2F	62.52	63.66	70.0	38.0	-	30.5	38.0	8	
44	4	68.89	70.03	-	38.0	-	30.5	40.0	8	
48	4	75.25	76.39	-	38.0	-	30.5	40.0	8	
60	4	94.35	95.49	-	50.0	-	30.5	40.0	8	
72	4	113.45	114.59	-	50.0	-	30.5	40.0	8	



8mm Pitch 8M-20 (20mm Wide Belt)

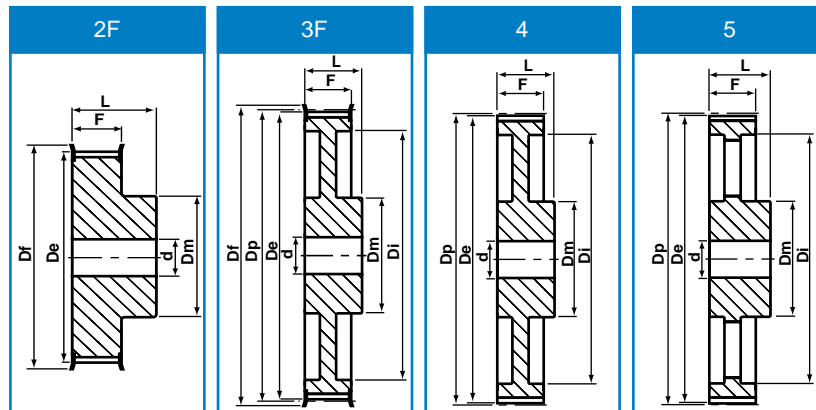
Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
22	2F	54.65	56.02	60.0	43.0	-	28.0	38	12	0.54
24	2F	59.75	61.12	67.0	45.0	-	28.0	38	12	0.65
26	2F	64.85	66.21	70.0	50.0	-	28.0	38	12	0.80
28	2F	70.08	71.30	75.0	50.0	-	28.0	38	16	0.87
30	2F	75.13	76.39	83.0	55.0	-	28.0	38	16	1.02
32	2F	80.16	81.49	87.0	60.0	-	28.0	38	16	1.20
34	2F	85.22	86.58	91.0	70.0	-	28.0	38	16	1.40
36	2F	90.30	91.67	97.0	70.0	-	28.0	38	16	1.55
38	2F	95.39	96.77	102.0	75.0	-	28.0	38	16	1.65
40	2F	100.49	101.86	106.0	75.0	-	28.0	38	16	1.74
44	2F	110.67	112.05	120.0	75.0	-	28.0	38	16	2.10
48	2F	120.86	122.23	128.0	75.0	-	28.0	38	16	2.44
56	3F	141.23	142.60	150.0	80.0	117	28.0	38	16	2.60
64	3F	161.60	162.97	168.0	80.0	137	28.0	38	16	2.90
72	3F	181.97	183.35	192.0	80.0	158	28.0	38	16	3.10
80	4	202.35	203.72	-	90.0	180	28.0	38	16	3.80
90	4	227.81	229.18	-	90.0	204	28.0	38	16	4.20
112	5	283.83	285.21	-	90.0	260	28.0	38	16	5.20
144	5	365.32	366.69	-	90.0	341	28.0	38	20	7.50
168	5	426.44	427.81	-	100.0	402	28.0	38	20	10.00
192	5	487.55	488.92	-	100.0	463	28.0	38	20	14.40

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

HTD[®] Pilot Bore

8mm Pitch 8M-30 (30mm Wide Belt)

Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
22	2F	54.65	56.02	60.0	43.0	-	38.0	48	12	0.69
24	2F	59.75	61.12	67.0	45.0	-	38.0	48	12	0.84
26	2F	64.85	66.21	70.0	50.0	-	38.0	48	12	1.00
28	2F	70.08	71.30	75.0	50.0	-	38.0	48	16	1.12
30	2F	75.13	76.39	83.0	55.0	-	38.0	48	16	1.32
32	2F	80.16	81.49	87.0	60.0	-	38.0	48	16	1.53
34	2F	85.22	86.58	91.0	70.0	-	38.0	48	16	1.80
36	2F	90.30	91.67	97.0	70.0	-	38.0	48	16	1.99
38	2F	95.39	96.77	102.0	75.0	-	38.0	48	16	2.27
40	2F	100.49	101.86	106.0	75.0	-	38.0	48	16	2.40
44	2F	110.67	112.05	120.0	75.0	-	38.0	48	16	2.80
48	2F	120.86	122.23	128.0	75.0	-	38.0	48	16	3.20
56	3F	141.23	142.60	150.0	80.0	117	38.0	48	16	3.60
64	3F	161.60	162.97	168.0	80.0	138	38.0	48	16	4.30
72	3F	181.97	183.35	192.0	80.0	158	38.0	48	16	4.80
80	4	202.35	203.72	-	90.0	180	38.0	48	16	5.10
90	4	227.81	229.18	-	90.0	204	38.0	48	16	5.70
112	5	283.83	285.21	-	90.0	260	38.0	48	16	6.80
144	5	365.32	366.69	-	90.0	341	38.0	48	20	9.30
168	5	426.44	427.81	-	100.0	402	38.0	48	20	11.40
192	5	487.55	488.92	-	100.0	463	38.0	48	20	16.00



8mm Pitch 8M-50 (50mm Wide Belt)

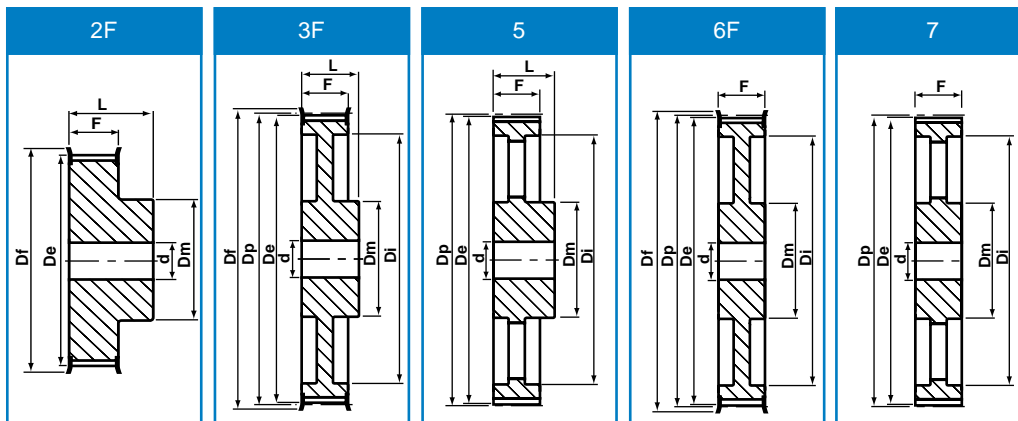
Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
22	2F	54.65	56.02	60.0	43.0	-	60.0	70	12	1.00
24	2F	59.75	61.12	67.0	45.0	-	60.0	70	12	1.23
26	2F	64.84	66.21	70.0	50.0	-	60.0	70	12	1.50
28	2F	70.08	71.30	75.0	50.0	-	60.0	70	16	1.67
30	2F	75.13	76.39	83.0	55.0	-	60.0	70	16	1.97
32	2F	80.16	81.49	87.0	60.0	-	60.0	70	16	2.27
34	2F	85.22	86.58	91.0	70.0	-	60.0	70	16	2.69
36	2F	90.30	91.67	97.0	70.0	-	60.0	70	16	2.97
38	2F	95.39	96.77	102.0	75.0	-	60.0	70	16	3.23
40	2F	100.49	101.86	106.0	75.0	-	60.0	70	18	3.50
44	2F	110.67	112.05	120.0	75.0	-	60.0	70	18	3.90
48	2F	120.86	122.23	128.0	80.0	-	60.0	70	18	4.30
56	6F	141.23	142.60	150.0	90.0	117	60.0	60	18	5.00
64	6F	161.60	162.97	168.0	100.0	137	60.0	60	18	5.60
72	6F	181.97	183.35	192.0	100.0	158	60.0	60	18	6.80
80	7	202.35	203.72	-	110.0	180	60.0	60	18	6.90
90	7	227.81	229.18	-	110.0	204	60.0	60	18	8.60
112	7	283.83	285.21	-	110.0	260	60.0	60	18	9.60
144	7	365.32	366.69	-	110.0	341	60.0	60	20	13.80
168	7	426.44	427.81	-	120.0	402	60.0	60	20	16.00
192	7	487.55	488.92	-	130.0	463	60.0	60	20	22.40

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

HTD® Pilot Bore

8mm Pitch 8M-85 (85mm Wide Belt)

Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
22	2F	54.65	56.02	60.0	43.0	-	95.0	105	12	1.55
24	2F	59.75	61.12	67.0	45.0	-	95.0	105	12	1.90
26	2F	64.84	66.21	70.0	50.0	-	95.0	105	12	2.25
28	2F	70.08	71.30	75.0	50.0	-	95.0	105	16	2.55
30	2F	75.13	76.39	83.0	55.0	-	95.0	105	16	3.00
32	2F	80.16	81.49	87.0	60.0	-	95.0	105	16	3.57
34	2F	85.22	86.58	91.0	70.0	-	95.0	105	16	4.00
36	2F	90.30	91.67	97.0	70.0	-	95.0	105	16	4.50
38	2F	95.39	96.77	102.0	75.0	-	95.0	105	16	4.90
40	2F	100.49	101.86	106.0	75.0	-	95.0	105	16	5.20
44	2F	110.67	112.05	120.0	75.0	-	95.0	105	18	6.60
48	2F	120.86	122.23	128.0	80.0	-	95.0	105	18	7.60
56	2F	141.23	142.60	150.0	90.0	-	95.0	105	18	9.80
64	6F	161.60	162.97	168.0	100.0	137	95.0	95	20	10.40
72	6F	181.97	183.35	192.0	100.0	158	95.0	95	20	11.40
80	7	202.35	203.72	-	110.0	180	95.0	95	20	13.20
90	7	227.81	229.18	-	110.0	204	95.0	95	20	16.30
112	7	283.83	285.21	-	110.0	260	95.0	95	25	21.50
144	7	365.32	366.69	-	110.0	341	95.0	95	25	23.60
168	7	426.44	427.81	-	120.0	402	95.0	95	25	26.10
192	7	487.55	488.92	-	130.0	463	95.0	95	25	30.60



14mm Pitch 14M-40 (40mm Wide Belt)

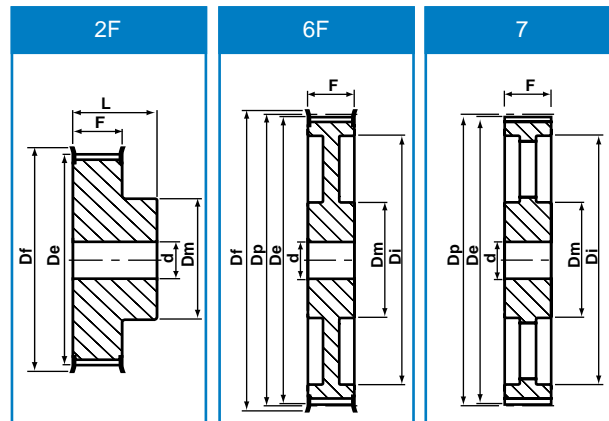
Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
28	2F	122.12	124.78	128.0	100.0	-	54.0	69	24	4.73
29	2F	126.57	129.23	142.0	100.0	-	54.0	69	24	5.09
30	2F	130.99	133.69	142.0	100.0	-	54.0	69	24	5.45
32	2F	139.88	142.60	158.0	100.0	-	54.0	69	24	6.17
34	2F	148.79	151.52	158.0	100.0	-	54.0	69	24	6.88
36	2F	157.68	160.43	168.0	100.0	-	54.0	69	24	7.60
38	2F	166.60	169.34	184.0	120.0	-	54.0	69	24	8.28
40	2F	175.49	178.25	192.0	120.0	-	54.0	69	24	9.26
44	2F	193.28	196.08	211.0	120.0	-	54.0	69	24	10.32
48	3F	211.11	213.90	226.0	135.0	172	54.0	69	24	11.50
56	3F	246.76	249.55	265.0	135.0	207	54.0	69	28	13.05
64	3F	282.41	285.21	296.0	135.0	242	54.0	69	28	14.40
72	5	318.06	320.86	-	135.0	278	54.0	69	28	16.90
80	5	353.71	356.51	-	135.0	314	54.0	69	28	18.50
90	5	398.28	401.07	-	135.0	358	54.0	69	28	20.00
112	5	496.32	499.11	-	135.0	456	54.0	69	28	26.70
144	5	638.92	641.71	-	135.0	600	54.0	69	28	35.00
168	5	745.87	748.66	-	135.0	706	54.0	69	28	44.20
192	5	852.82	855.62	-	135.0	813	54.0	69	28	52.20
216	5	959.76	962.57	-	150.0	920	54.0	69	28	60.00

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

HTD[®] Pilot Bore

14mm Pitch 14M-55 (55mm Wide Belt)

Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
28	2F	122.12	124.78	128.0	100.0	-	70.0	85	24	5.60
29	2F	126.57	129.23	142.0	100.0	-	70.0	85	24	6.10
30	2F	130.99	133.69	142.0	100.0	-	70.0	85	24	6.60
32	2F	139.88	142.60	158.0	100.0	-	70.0	85	24	7.60
34	2F	148.79	151.52	158.0	100.0	-	70.0	85	24	8.60
36	2F	157.68	160.43	168.0	100.0	-	70.0	85	24	9.60
38	2F	166.60	169.34	184.0	120.0	-	70.0	85	24	10.80
40	2F	175.49	178.25	192.0	120.0	-	70.0	85	24	11.20
44	2F	193.28	196.08	211.0	120.0	-	70.0	85	24	12.50
48	6F	211.11	213.90	226.0	135.0	172	70.0	70	24	13.70
56	6F	246.76	249.55	265.0	135.0	207	70.0	70	28	14.50
64	6F	282.41	285.21	296.0	135.0	242	70.0	70	28	15.60
72	7	318.06	320.86	-	135.0	278	70.0	70	28	16.90
80	7	353.71	356.51	-	135.0	314	70.0	70	28	20.00
90	7	398.28	401.07	-	135.0	358	70.0	70	28	22.60
112	7	496.32	499.11	-	135.0	456	70.0	70	28	29.50
144	7	638.92	641.71	-	135.0	600	70.0	70	28	39.00
168	7	745.87	748.66	-	135.0	706	70.0	70	28	48.50
192	7	852.82	855.62	-	135.0	813	70.0	70	28	57.80
216	7	959.76	962.57	-	150.0	920	70.0	70	28	67.0



14mm Pitch 14M-85 (85mm Wide Belt)

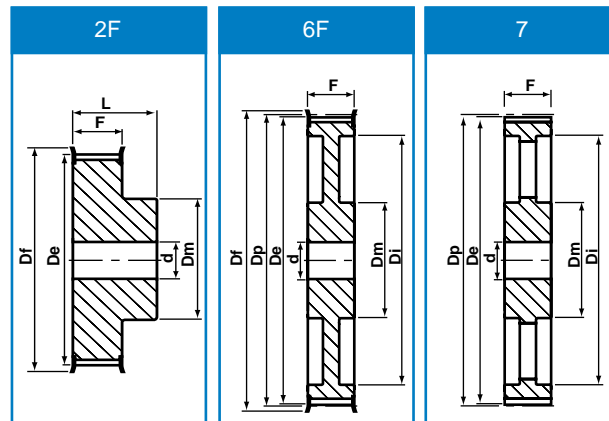
Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
28	2F	122.12	124.78	128.0	100.0	-	102.0	117	24	7.70
29	2F	126.57	129.23	142.0	100.0	-	102.0	117	24	8.40
30	2F	130.99	133.69	142.0	100.0	-	102.0	117	24	9.10
32	2F	139.88	142.60	158.0	100.0	-	102.0	117	24	10.50
34	2F	148.79	151.52	158.0	100.0	-	102.0	117	24	11.90
36	2F	157.68	160.43	168.0	100.0	-	102.0	117	32	13.20
38	2F	166.60	169.34	184.0	120.0	-	102.0	117	32	15.15
40	2F	175.49	178.25	192.0	135.0	-	102.0	117	32	17.10
44	2F	193.28	196.08	211.0	135.0	-	102.0	117	32	23.30
48	2F	211.11	213.90	226.0	150.0	-	102.0	117	32	25.00
56	6F	246.76	249.55	265.0	150.0	207	102.0	102	32	25.00
64	6F	282.41	285.21	296.0	150.0	242	102.0	102	32	30.50
72	7	318.06	320.86	-	150.0	278	102.0	102	32	28.80
80	7	353.71	356.51	-	150.0	314	102.0	102	32	30.10
90	7	398.28	401.07	-	150.0	358	102.0	102	32	33.00
112	7	496.32	499.11	-	150.0	456	102.0	102	32	41.80
144	7	638.92	641.71	-	150.0	600	102.0	102	32	52.40
168	7	745.87	748.66	-	150.0	706	102.0	102	32	60.30
192	7	852.82	855.62	-	165.0	813	102.0	102	32	70.20
216	7	959.76	962.57	-	165.0	920	102.0	102	32	81.00

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

HTD® Pilot Bore

14mm Pitch 14M-115 (115mm Wide Belt)

Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
28	2F	122.12	124.78	128.0	100.0	-	133.0	148	32	9.20
29	2F	126.57	129.23	142.0	100.0	-	133.0	148	32	10.20
30	2F	130.99	133.69	142.0	100.0	-	133.0	148	32	11.20
32	2F	139.88	142.60	158.0	100.0	-	133.0	148	32	13.20
34	2F	148.79	151.52	158.0	100.0	-	133.0	148	32	14.80
36	2F	157.68	160.43	168.0	100.0	-	133.0	148	32	16.60
38	2F	166.60	169.34	184.0	120.0	-	133.0	148	32	19.20
40	2F	175.49	178.25	192.0	135.0	-	133.0	148	32	20.56
44	2F	193.28	196.08	211.0	140.0	-	133.0	148	32	21.93
48	2F	211.11	213.90	226.0	150.0	-	133.0	148	32	25.00
56	2F	246.76	249.55	265.0	150.0	-	133.0	148	32	27.50
64	6F	282.41	285.21	296.0	150.0	242	133.0	133	32	30.10
72	7	318.06	320.86	-	150.0	278	133.0	133	32	32.83
80	7	353.71	356.51	-	150.0	314	133.0	133	32	35.55
90	7	398.28	401.07	-	150.0	358	133.0	133	32	41.00
112	7	496.32	499.11	-	150.0	456	133.0	133	32	54.40
144	7	638.92	641.71	-	165.0	600	133.0	133	32	67.80
168	7	745.87	748.66	-	165.0	706	133.0	133	32	75.80
192	7	852.82	855.62	-	165.0	813	133.0	133	32	88.30
216	7	959.76	962.57	-	165.0	920	133.0	133	32	98.00



14mm Pitch 14M-170 (170mm Wide Belt)

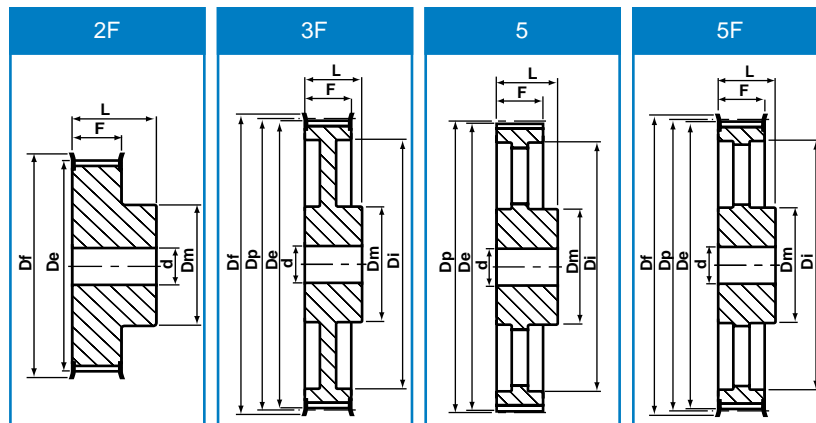
Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
28	2F	122.12	124.78	128.0	100.0	-	187.0	202	32	13.80
29	2F	126.57	129.23	142.0	100.0	-	187.0	202	32	14.20
30	2F	130.99	133.69	142.0	100.0	-	187.0	202	32	15.60
32	2F	139.88	142.60	158.0	100.0	-	187.0	202	32	18.10
34	2F	148.79	151.52	158.0	100.0	-	187.0	202	32	20.40
36	2F	157.68	160.43	168.0	120.0	-	187.0	202	32	23.50
38	2F	166.60	169.34	184.0	135.0	-	187.0	202	32	26.50
40	2F	175.49	178.25	192.0	135.0	-	187.0	202	32	30.10
44	2F	193.28	196.08	211.0	160.0	-	187.0	202	32	37.80
48	2F	211.11	213.90	226.0	160.0	-	187.0	202	32	44.50
56	2F	246.76	249.55	265.0	160.0	-	187.0	202	32	61.00
64	2F	282.41	285.21	296.0	180.0	-	187.0	202	32	81.00
72	6	318.06	320.86	-	180.0	278	187.0	187	32	61.40
80	6	353.71	356.51	-	180.0	314	187.0	187	32	65.00
90	7	398.28	401.07	-	180.0	358	187.0	187	38	68.00
112	7	496.32	499.11	-	200.0	456	187.0	187	38	87.50
144	7	638.92	641.71	-	220.0	600	187.0	187	38	114.00
168	7	745.87	748.66	-	220.0	706	187.0	187	38	125.00
192	7	852.82	855.62	-	220.0	813	187.0	187	38	136.40
216	7	959.76	962.57	-	220.0	920	187.0	187	38	147.00

Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

HTD[®] Pilot Bore

20mm Pitch 20M-115 (115mm Wide Belt)

Number of Teeth	Type	De	Dp	Df	Dm	Di	F	L	d	Weight Kg
34	2F	212.13	216.45	240.0	165.0	-	136.5	168.5	32	
36	2F	224.87	229.18	250.0	178.0	-	136.5	168.5	32	
38	2F	237.60	241.92	265.0	181.0	-	136.5	168.5	32	
40	2F	250.33	254.56	275.0	203.0	-	136.5	168.5	32	
44	2F	275.79	280.11	300.0	210.0	-	136.5	168.5	32	
48	2F	301.26	305.88	325.0	228.0	-	136.5	168.5	32	
52	2F	326.72	331.04	350.0	228.0	-	136.5	168.5	32	
56	2F	352.19	356.51	375.0	228.0	-	136.5	168.5	32	
60	3F	377.65	381.97	405.0	228.0	318	136.5	168.5	38	
64	3F	403.12	407.44	430.0	228.0	343	136.5	168.5	38	
68	3F	428.58	432.90	455.0	228.0	366	136.5	168.5	38	
72	5F	454.05	458.37	480.0	228.0	435	136.5	168.5	38	
80	5F	504.98	509.30	530.0	280.0	445	136.5	168.5	38	
90	5F	568.64	572.96	595.0	280.0	508	136.5	168.5	38	
112	5	708.70	713.01	-	280.0	648	136.5	168.5	38	
144	5	912.41	916.73	-	300.0	852	136.5	168.5	44	
168	5	1065.21	1069.52	-	300.0	1005	136.5	168.5	44	
192	5	1218.00	1222.31	-	300.0	1158	136.5	168.5	48	
216	5	1370.78	1375.10	-	300.0	1300	136.5	168.5	48	



TAPER BUSHES AND HUBS

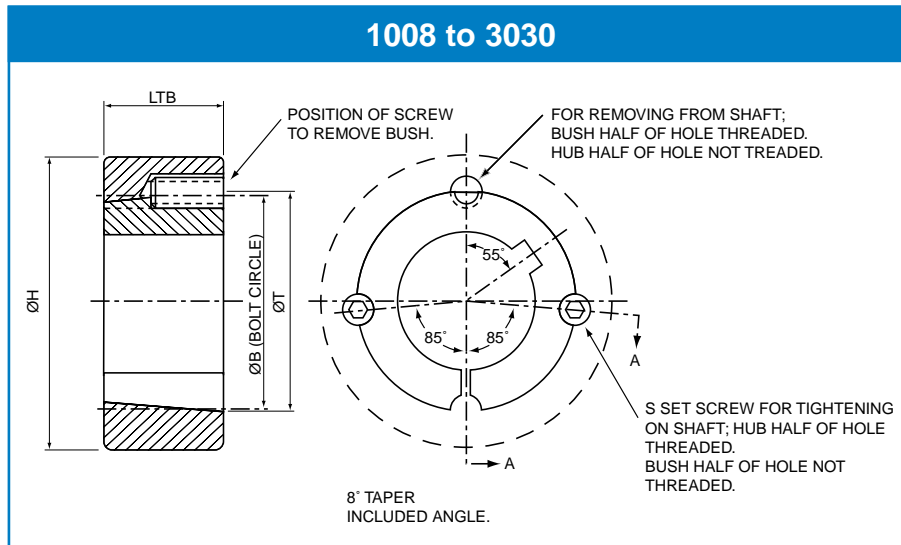


Taper Bushes

Range and Material Specifications:

Challenge Taper Bushes are manufactured to the highest quality standards using GG22 - 25 cast iron depending on size. Thin wall bushes are produced from C45 steel. All surfaces are carefully machined to provide maximum contact area and transmission of torque.

In excess of 500 sizes of Challenge Taper Bushes are manufactured and stocked making this one of the most comprehensive ranges available today.

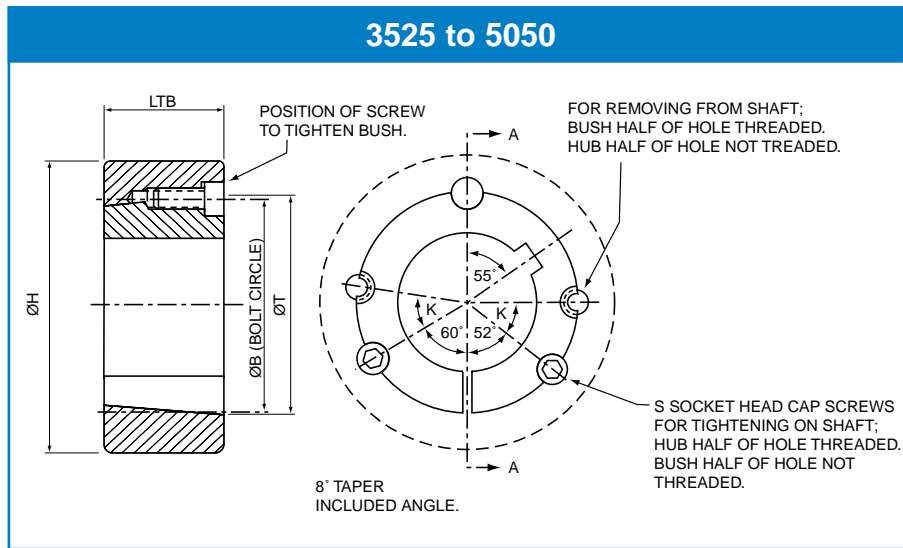


Taper Bush 1008 to 3030

BUSH Size.	Ø T	LTB	Minimum HUB Dia H			Ø B	S Set Screws	
			UTS 200 N/mm ² Gray Iron	UTS 250 N/mm ² Gray Iron	UTS 420 N/mm ² Steel		QTY. Screws	Size (Inches)
1008	35.20	22.3	59	54	51	33.73	2	1/4 x 1/2
1108	38.38	22.3	61	57	54	36.92	2	1/4 x 1/2
1210	47.62	25.4	99	86	78	44.44	2	3/8 x 5/8
1215	47.62	38.1	79	73	68	44.44	2	3/8 x 5/8
1310	50.80	25.4	100	88	80	47.63	2	3/8 x 5/8
1610	57.15	25.4	102	92	85	53.97	2	3/8 x 5/8
1615	57.15	38.1	86	81	77	53.97	2	3/8 x 5/8
2012	69.85	31.8	115	106	99	66.68	2	7/16 x 7/8
2517	85.73	44.5	125	119	113	82.55	2	1/2 x 1
2525	85.73	63.5	115	111	108	82.56	2	1/2 x 1
3020	107.96	50.8	154	146	140	101.60	2	5/8 x 1.1/4
3030	107.96	76.2	141	136	132	101.60	2	5/8 x 1.1/4

Severe operating conditions may require the use of a larger diameter hub.

Taper Bushes



Taper Bush 3525 to 5050

BUSH Size.	Ø T	LTB	Minimum HUB Dia H			Ø B	S Cap Screws		K
			UTS 200 N/mm ² Gray Iron	UTS 250 N/mm ² Gray Iron	UTS 420 N/mm ² Steel		QTY. Cap Screws	Size (Inches)	
3525	127.00	63.5	206	191	178	122.68	3	1/2 x 1.1/2	40°
3535	127.00	89.0	185	176	168	122.68	3	1/2 x 1.1/2	40°
4030	146.05	76.2	220	207	197	140.72	3	5/8 x 1.3/4	40°
4040	146.05	101.5	203	195	188	140.72	3	5/8 x 1.1/4	40°
4535	161.93	89.0	221	212	205	455.70	3	3/4 x 2	40°
4545	161.93	114.3	211	205	200	155.70	3	3/4 x 2	40°
5040	177.80	101.6	236	229	223	170.69	3	7/8 x 2.1/4	37°
5050	177.80	127.0	230	223	219	170.69	3	7/8 x 2.1/4	37°

Severe operating conditions may require the use of a larger diameter hub.

Taper Bushes

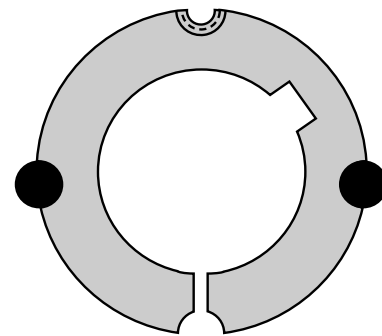
To Install

1. Clean shaft, bore and outside of bush, and bore of hub. Remove any oil, laquer or dirt. Place bush in hub and match half holes to make complete holes (each complete hole will be threaded on one side only).
2. Lightly oil thread and point of set screws, or thread and under head of cap screws. Place screws loosely in holes that are threaded on hub side.
3. Make sure bush is free in hub. Slip assembly onto shaft and locate in the desired position.
4. Tighten screws alternately and evenly until all are pulled up tightly (See table for torque settings).
5. Hammer against large end of bush using hammer and block or sleeve to avoid damage. Screws can now be turned a little more to the specified torque setting. Repeat this alternate hammering and screw re-tightening until the specified torque is reached. Fill all holes with grease to exclude dirt.

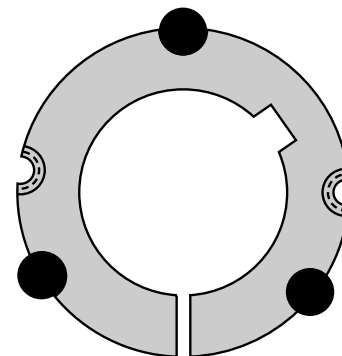
To Remove

1. Remove all screws (●). Lightly oil thread and point of set screws, or thread and under head of cap screws.
2. Insert screws into removal holes that are threaded on the bush side(☺). In sizes where washers are found under screw heads, be sure to use these washers.
3. Tighten screws alternately until bush is loosened in hub and then remove the complete assembly. If bush does not loosen immediately, tap on hub.

1008 to 3030



3525 to 5050



Recommended Wrench Torque

Bush Size.	Screws	Tightening Torque (Nm)	Bush Size.	Screws	Tightening Torque (Nm)	Bush Size.	Screws	Tightening Torque (Nm)
1008	1/4" Set Screws	6	2012	7/16" Set Screws	30	4030	5/8" Cap Screws	170
1108	1/4" Set Screws	6	2517	1/2" Set Screws	50	4040	5/8" Cap Screws	170
1210	3/8" Set Screws	20	2525	1/2" Set Screws	50	4535	3/4" Cap Screws	190
1215	3/8" Set Screws	20	3020	5/8" Set Screws	90	4545	3/4" Cap Screws	190
1310	3/8" Set Screws	20	3030	5/8" Set Screws	90	5040	7/8" Cap Screws	270
1610	3/8" Set Screws	20	3525	1/2" Cap Screws	113	5050	7/8" Cap Screws	270
1615	3/8" Set Screws	20	3535	1/2" Cap Screws	113			

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Taper Bushes - Metric

1008

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
9	0.13	3 x 1.4	3 x 1.8
10	0.14	3 x 1.4	3 x 1.8
11	0.14	4 x 1.8	4 x 2.5
12	0.13	4 x 1.8	4 x 2.6
14	0.13	5 x 2.3	5 x 3.0
16	0.12	5 x 2.3	5 x 3.0
18	0.11	6 x 2.8	6 x 3.5
19	0.10	6 x 2.8	6 x 3.5
20	0.10	6 x 2.8	6 x 3.5
22	0.09	6 x 2.8	6 x 3.5
24*	0.09	8 x 1.3*	8 x 4.0
25*	0.08	8 x 1.3*	8 x 4.0

1108

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
9	0.16	3 x 1.4	3 x 1.8
10	0.15	3 x 1.4	3 x 1.8
11	0.10	4 x 1.8	4 x 2.5
12	0.16	4 x 1.8	4 x 2.5
14	0.16	5 x 2.3	5 x 3.0
16	0.14	5 x 2.3	5 x 3.0
18	0.14	6 x 2.8	6 x 3.5
19	0.13	5 x 2.8	6 x 3.5
20	0.13	6 x 2.8	6 x 3.5
22	0.12	6 x 2.8	6 x 3.5
24	0.11	8 x 3.3	8 x 4.0
25	0.10	8 x 3.3	8 x 4.0
28*	0.09	8 x 1.3*	8 x 4.0

1210

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
11	0.20	4 x 1.8	4 x 2.5
12	0.28	4 x 1.8	4 x 2.5
14	0.28	5 x 2.3	5 x 3.0
16	0.27	5 x 2.3	5 x 3.0
18	0.26	6 x 2.8	6 x 3.5
19	0.25	6 x 2.8	6 x 3.5
20	0.25	6 x 2.8	6 x 3.5
22	0.23	6 x 2.8	6 x 3.5
24	0.22	8 x 3.3	8 x 4.0
25	0.21	8 x 3.3	8 x 4.0
28	0.19	8 x 3.3	8 x 4.0
30	0.17	8 x 3.3	8 x 4.0
32	0.15	10 x 3.3	10 x 5.0

1215

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
11	0.41	4 x 1.8	4 x 2.5
12	0.40	4 x 1.8	4 x 2.5
14	0.39	5 x 2.3	5 x 3.0
16	0.38	5 x 2.3	5 x 3.0
18	0.37	6 x 2.8	6 x 3.5
19	0.36	6 x 2.8	6 x 3.5
20	0.35	6 x 2.8	6 x 3.5
22	0.33	6 x 2.8	6 x 3.5
24	0.31	8 x 3.3	8 x 4.0
25	0.30	8 x 3.3	8 x 4.0
28	0.27	8 x 3.3	8 x 4.0
30	0.24	8 x 3.3	8 x 4.0
32	0.22	10 x 3.3	10 x 5.0

1310

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
14	0.32	5 x 2.3	5 x 3.0
16	0.31	5 x 2.3	5 x 3.0
18	0.30	6 x 2.8	6 x 3.5
19	0.29	6 x 2.8	6 x 3.5
20	0.29	6 x 2.8	6 x 3.5
22	0.28	5 x 2.8	6 x 3.5
24	0.26	8 x 3.3	8 x 4.0
25	0.26	8 x 3.3	8 x 4.0
28	0.23	8 x 3.3	8 x 4.0
30	0.22	8 x 3.3	8 x 4.0
32	0.20	10 x 3.3	10 x 5.0
35	0.17	10 x 3.3	10 x 5.0

1610

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
14	0.42	5 x 2.3	5 x 3.0
16	0.41	5 x 2.3	5 x 3.0
18	0.40	6 x 2.8	6 x 3.5
19	0.40	6 x 2.8	6 x 3.5
20	0.39	6 x 2.8	6 x 3.5
22	0.38	6 x 2.8	6 x 3.5
24	0.36	8 x 3.3	8 x 4.0
25	0.35	8 x 3.3	8 x 4.0
28	0.33	8 x 3.3	8 x 4.0
30	0.31	8 x 3.3	8 x 4.0
32	0.29	10 x 3.3	10 x 5.0
35	0.26	10 x 3.3	10 x 5.0
38	0.24	10 x 3.3	10 x 5.0
40	0.22	12 x 3.3	12 x 5.0
42	0.20	12 x 3.3	12 x 5.0

Bold italic type indicate bushes made of steel.

Keyways are in accordance with BS4235, Part 1, 1972, DIN6885 and conform to ISO recommendations with the exception of those marked* which are shallower.

Depth of key measured at center

Taper Bushes - Metric

1615

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
14	0.60	5 x 2.3	5 x 3.0
16	0.58	5 x 2.3	5 x 3.0
18	0.56	6 x 2.8	6 x 3.5
19	0.56	6 x 2.8	6 x 3.5
20	0.54	6 x 2.8	6 x 3.5
22	0.52	6 x 2.8	6 x 3.5
24	0.50	8 x 3.3	6 x 4.0
25	0.49	8 x 3.3	8 x 4.0
28	0.47	8 x 3.3	8 x 4.0
30	0.44	8 x 3.3	8 x 4.0
32	0.41	10 x 3.3	10 x 5.0
35	0.38	10 x 3.3	10 x 5.0
38	0.33	10 x 3.3	10 x 5.0
40	0.31	12 x 3.3	12 x 5.0
42*	0.28	12 x 2.2*	12 x 5.0

2012

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
14	0.79	5 x 2.3	5 x 3.0
16	0.78	5 x 2.3	5 x 3.0
18	0.77	6 x 2.8	6 x 3.5
19	0.76	6 x 2.8	6 x 3.5
20	0.76	6 x 2.8	6 x 3.5
22	0.74	6 x 2.8	6 x 3.5
24	0.73	8 x 3.3	8 x 4.0
25	0.71	8 x 3.3	8 x 4.0
28	0.68	8 x 3.3	8 x 4.0
30	0.66	8 x 3.3	8 x 4.0
32	0.64	10 x 3.3	10 x 5.0
35	0.61	10 x 3.3	10 x 5.0
38	0.57	10 x 3.3	10 x 5.0
40	0.54	12 x 3.3	12 x 5.0
42	0.51	12 x 3.3	12 x 5.0
45	0.47	14 x 3.8	14 x 5.5
48	0.42	14 x 3.8	14 x 5.5
50	0.37	14 x 3.8	14 x 5.5

2517

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
16	1.75	5 x 2.3	5 x 3.0
18	1.71	6 x 2.8	6 x 3.5
19	1.66	6 x 2.8	6 x 3.5
20	1.62	6 x 2.8	6 x 3.5
22	1.58	6 x 2.8	6 x 3.5
24	1.56	8 x 3.3	8 x 4.0
25	1.56	8 x 3.3	8 x 4.0
28	1.50	8 x 3.3	8 x 4.0
30	1.49	8 x 3.3	8 x 4.0
32	1.46	10 x 3.3	10 x 5.0
35	1.42	10 x 3.3	10 x 5.0
38	1.35	10 x 3.3	10 x 5.0
40	1.31	12 x 3.3	12 x 5.0
42	1.26	12 x 3.3	12 x 5.0
45	1.20	14 x 3.8	14 x 5.5
48	1.14	14 x 3.8	14 x 5.5
50	1.10	14 x 3.8	14 x 5.5
55	0.95	16 x 4.3	16 x 6.0
60	0.82	18 x 4.4	18 x 7.0
65	0.70	18 x 4.4	18 x 7.0

2525

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
22	2.20	6 x 2.8	6 x 3.5
24	2.17	8 x 3.3	8 x 4.0
25	2.15	8 x 3.3	8 x 4.0
28	2.09	8 x 3.3	8 x 4.0
30	2.05	8 x 3.3	8 x 4.0
32	2.01	10 x 3.3	10 x 5.0
35	1.94	10 x 3.3	10 x 5.0
38	1.86	10 x 3.3	10 x 5.0
40	1.80	12 x 3.3	12 x 5.0
42	1.74	12 x 3.3	12 x 5.0
45	1.65	14 x 3.8	14 x 5.5
48	1.55	14 x 3.8	14 x 5.5
50	1.48	14 x 3.8	14 x 5.5
55	1.29	16 x 4.3	16 x 6.0
60	1.08	18 x 4.4	18 x 7.0

3020

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
25	2.93	8 x 3.3	8 x 4.0
28	2.88	8 x 3.3	8 x 4.0
30	2.85	8 x 3.3	8 x 4.0
32	2.84	10 x 3.3	10 x 5.0
35	2.77	10 x 3.3	10 x 5.0
38	2.71	10 x 3.3	10 x 5.0
40	2.67	12 x 3.3	12 x 5.0
42	2.60	12 x 3.3	12 x 5.0
45	2.56	14 x 3.8	14 x 5.5
48	2.47	14 x 3.8	14 x 5.5
50	2.20	14 x 3.8	14 x 5.5
55	2.15	16 x 4.3	16 x 6.0
60	2.07	18 x 4.4	18 x 7.0
65	1.93	18 x 4.4	18 x 7.0
70	1.70	20 x 4.9	20 x 7.5
75	1.50	20 x 4.9	20 x 7.5

3030

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
35	3.97	10 x 3.3	10 x 5.0
38	3.89	10 x 3.3	10 x 5.0
40	3.80	12 x 3.3	12 x 5.0
40	3.65	12 x 3.3	12 x 5.0
42	3.40	14 x 3.8	14 x 5.5
45	3.35	14 x 3.8	14 x 5.5
48	3.30	14 x 3.8	14 x 5.5
50	3.25	14 x 3.8	14 x 5.5
55	3.20	16 x 4.3	16 x 6.0
60	2.95	18 x 4.4	18 x 7.0
65	2.67	18 x 4.4	18 x 7.0
70	2.45	20 x 4.9	20 x 7.5
75	2.10	20 x 4.9	20 x 7.5

Bold italic type indicate bushes made of steel.

Keyways are in accordance with BS4235, Part 1, 1972, DIN6885 and conform to ISO recommendations with the exception of those marked* which are shallower.

Depth of key measured at center

Taper Bushes - Metric

3525

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
35	4.96	10 x 3.3	10 x 5.0
38	4.88	10 x 3.3	10 x 5.0
40	4.82	12 x 3.3	12 x 5.0
42	4.76	12 x 3.3	12 x 5.0
45	4.67	14 x 3.8	14 x 5.5
48	4.57	14 x 3.8	14 x 5.5
50	4.50	14 x 3.8	14 x 5.5
55	4.31	16 x 4.3	16 x 6.0
60	4.10	18 x 4.4	18 x 7.0
65	3.88	18 x 4.4	18 x 7.0
70	3.64	20 x 4.9	20 x 7.5
75	3.38	20 x 4.9	20 x 7.5
80	3.10	22 x 5.4	22 x 9.0
85	2.80	22 x 5.4	22 x 9.0
90	2.49	25 x 5.4	25 x 9.0
95	2.20	25 x 5.4	25 x 9.0
100*	2.00	28 x 5.4*	28 x 10.0

3535

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
35	6.20	10 x 3.3	10 x 5.0
38	6.50	10 x 3.3	10 x 5.0
40	6.60	12 x 3.3	12 x 5.0
42	6.34	12 x 3.3	12 x 5.0
45	6.25	14 x 3.8	14 x 5.5
48	6.10	14 x 3.8	14 x 5.5
50	6.00	14 x 3.8	14 x 5.5
55	5.77	16 x 4.3	16 x 6.0
60	5.45	18 x 4.4	18 x 7.0
65	5.15	18 x 4.4	18 x 7.0
70	4.80	20 x 4.9	20 x 7.5
75	4.45	20 x 4.9	20 x 7.5
80	4.06	22 x 5.4	22 x 9.0
85	3.63	22 x 5.4	22 x 9.0
90	3.50	25 x 5.4	25 x 9.0

4030

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
40	7.85	12 x 3.3	12 x 5.0
42	7.78	12 x 3.3	12 x 5.0
45	7.66	14 x 3.8	14 x 5.5
48	7.54	14 x 3.8	14 x 5.5
50	7.46	14 x 3.8	14 x 5.5
55	7.23	16 x 4.3	16 x 6.0
60	6.99	18 x 4.4	18 x 7.0
65	6.72	18 x 4.4	18 x 7.0
70	6.43	20 x 4.9	20 x 7.5
75	6.11	20 x 4.9	20 x 7.5
80	5.78	22 x 5.4	22 x 9.0
85	5.42	22 x 5.4	22 x 9.0
90	5.05	25 x 5.4	25 x 9.0
95	4.65	25 x 6.4	25 x 9.0
100	4.23	28 x 6.4	28 x 10.0
105	4.00	28 x 6.4	28 x 10.0
110	3.80	28 x 6.4	28 x 10.0
115*	3.60	32 x 5.4*	32 x 11.0

4040

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
40	10.46	12 x 3.3	12 x 5.0
42	10.07	12 x 3.3	12 x 5.0
45	9.77	14 x 3.8	14 x 5.5
48	9.84	14 x 3.8	14 x 5.5
50	9.50	14 x 3.8	14 x 5.5
55	9.25	16 x 4.3	16 x 6.0
60	8.90	18 x 4.4	18 x 7.0
65	8.50	18 x 4.4	18 x 7.0
70	8.20	20 x 4.9	20 x 7.5
75	7.70	20 x 4.9	20 x 7.5
80	7.40	22 x 5.4	22 x 9.0
85	6.90	22 x 5.4	22 x 9.0
90	6.40	25 x 5.4	25 x 9.0
95	5.95	25 x 5.4	25 x 9.0
100	5.50	28 x 6.4	28 x 10.0

Bold italic type indicate bushes made of steel.

Keyways are in accordance with BS4235, Part 1, 1972, DIN6885 and conform to ISO recommendations with the exception of those marked* which are shallower.

Depth of key measured at center

Taper Bushes - Metric

4535

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
55	10.69	16 x 4.3	10 x 6.0
60	10.40	18 x 4.4	18 x 7.0
65	10.08	18 x 4.4	18 x 7.0
70	9.74	20 x 4.9	20 x 7.5
75	9.38	20 x 4.9	20 x 7.5
80	8.99	22 x 5.4	22 x 9.0
85	8.57	22 x 5.4	22 x 9.0
90	8.13	25 x 5.4	25 x 9.0
95	7.67	25 x 5.4	25 x 9.0
100	7.17	28 x 6.4	28 x 10.0
105	6.66	28 x 6.4	28 x 10.0
110	6.12	28 x 6.4	28 x 10.0
115	6.00	32 x 7.4	32 x 11.0
120	5.80	32 x 7.4	32 x 11.0
125	5.60	32 x 7.4	32 x 11.0

4545

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
55	13.20	16 x 4.3	16 x 6.0
60	12.90	18 x 4.4	18 x 7.0
65	12.40	18 x 4.4	18 x 7.0
70	12.00	20 x 4.9	20 x 7.5
75	11.50	20 x 4.9	20 x 7.5
80	10.90	22 x 5.4	22 x 9.0
85	10.50	22 x 5.4	22 x 9.0
90	9.90	25 x 5.4	25 x 9.0
95	9.50	25 x 5.4	25 x 9.0
100	8.90	28 x 6.4	28 x 10.0
105	8.20	28 x 6.4	28 x 10.0
110	7.40	28 x 6.4	28 x 10.0

5040

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
70	13.93	20 x 4.9	20 x 7.5
75	13.52	20 x 4.9	20 x 7.5
80	13.07	22 x 5.4	22 x 9.0
85	12.60	22 x 5.4	22 x 9.0
90	12.09	25 x 5.4	25 x 9.0
95	11.56	25 x 5.4	25 x 9.0
100	11.00	28 x 6.4	28 x 10.0
105	10.41	28 x 6.4	28 x 10.0
110	9.80	28 x 6.4	28 x 10.0
115	9.15	32 x 7.4	32 x 11.0
120	8.48	32 x 7.4	32 x 11.0
125	7.77	32 x 7.4	32 x 11.0

5050

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
70	17.00	20 x 4.9	20 x 7.5
75	16.30	20 x 4.9	20 x 7.5
80	15.60	22 x 5.4	22 x 9.0
85	15.00	22 x 5.4	22 x 9.0
90	14.40	25 x 5.4	25 x 9.0
95	13.60	25 x 5.4	25 x 9.0
100	12.90	28 x 6.4	28 x 10.0
105	12.30	28 x 6.4	28 x 10.0
110	11.50	28 x 6.4	28 x 10.0
115	10.60	32 x 7.4	32 x 11.0
120	9.80	32 x 7.4	32 x 11.0
125	8.90	32 x 7.4	32 x 11.0

Bold italic type indicate bushes made of steel.

Keyways are in accordance with BS4235, Part 1, 1972, DIN6885 and conform to ISO recommendations with the exception of those marked* which are shallower.

Depth of key measured at center

Taper Bushes - Imperial

1008

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
3/8	0.14	0.125 x 0.060	0.125 x 0.072
1/2	0.13	0.125 x 0.060	0.125 x 0.072
5/8	0.12	0.188 x 0.088	0.188 x 0.107
3/4	0.11	0.188 x 0.088	0.188 x 0.107
7/8	0.09	0.250 x 0.115	0.250 x 0.142
1*	0.07	0.250 x 0.053*	0.250 x 0.142

1108

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
3/8	0.17	0.125 x 0.060	0.125 x 0.072
1/2	0.16	0.125 x 0.060	0.125 x 0.072
5/8	0.15	0.188 x 0.088	0.188 x 0.107
3/4	0.14	0.188 x 0.088	0.188 x 0.107
7/8	0.12	0.250 x 0.115	0.250 x 0.142
1	0.10	0.250 x 0.115	0.250 x 0.142
1 1/8*	0.80	0.312 x 0.080*	0.312 x 0.177

1210

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1/2	0.20	0.125 x 0.060	0.125 x 0.072
5/8	0.28	0.188 x 0.088	0.188 x 0.107
3/4	0.26	0.188 x 0.088	0.188 x 0.107
7/8	0.24	0.250 x 0.115	0.250 x 0.142
1	0.21	0.250 x 0.115	0.250 x 0.142
1 1/8	0.10	0.312 x 0.112	0.312 x 0.177
1 1/4	0.15	0.312 x 0.112	0.312 x 0.177

1215

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
5/8	0.42	0.188 x 0.088	0.188 x 0.107
3/4	0.30	0.188 x 0.088	0.188 x 0.107
7/8	0.36	0.250 x 0.115	0.250 x 0.142
1	0.32	0.250 x 0.115	0.250 x 0.142
1 1/8	0.28	0.312 x 0.112	0.312 x 0.177
1 1/4	0.24	0.312 x 0.112	0.312 x 0.177

1310

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1/2	0.35	0.125 x 0.060	0.125 x 0.072
5/8	0.34	0.188 x 0.088	0.188 x 0.107
3/4	0.32	0.188 x 0.088	0.188 x 0.107
7/8	0.30	0.250 x 0.115	0.250 x 0.142
1	0.28	0.250 x 0.115	0.250 x 0.142
1 1/8	0.25	0.312 x 0.112	0.312 x 0.177
1 1/4	0.22	0.312 x 0.112	0.312 x 0.177
1 3/8	0.19	0.375 x 0.11	0.375 x 0.213

1610

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1/2	0.46	0.125 x 0.060	0.125 x 0.072
5/8	0.44	0.188 x 0.088	0.188 x 0.107
3/4	0.42	0.188 x 0.088	0.188 x 0.107
7/8	0.40	0.250 x 0.115	0.250 x 0.142
1	0.38	0.250 x 0.115	0.250 x 0.142
1 1/8	0.35	0.312 x 0.112	0.312 x 0.177
1 1/4	0.32	0.312 x 0.112	0.312 x 0.177
1 3/8	0.29	0.375 x 0.11	0.375 x 0.213
1 1/2	0.25	0.375 x 0.11	0.375 x 0.213
1 5/8	0.21	0.438 x 0.134	0.438 x 0.248

1615

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1/2	0.66	0.125 x 0.060	0.125 x 0.072
5/8	0.04	0.188 x 0.088	0.188 x 0.107
3/4	0.61	0.188 x 0.088	0.188 x 0.107
7/8	0.58	0.250 x 0.115	0.250 x 0.142
1	0.55	0.250 x 0.115	0.250 x 0.142
1 1/8	0.51	0.312 x 0.112	0.312 x 0.177
1 1/4	0.46	0.312 x 0.112	0.312 x 0.177
1 3/8	0.41	0.375 x 0.11	0.375 x 0.213
1 1/2	0.36	0.375 x 0.11	0.375 x 0.213
1 5/8*	0.30	0.438 x 0.103*	0.438 x 0.248

Bold italic type indicate bushes made of steel.

Keyways are parallel and in accordance with BS46:Part 1:1958, with the exception of those marked* which are shallower.

Depth of key measured at centre

Taper Bushes - Imperial

2012

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
5/8	0.85	0.188 x 0.088	0.188 x 0.107
3/4	0.83	0.188 x 0.088	0.188 x 0.107
7/8	0.80	0.250 x 0.115	0.250 x 0.142
1	0.77	0.250 x 0.115	0.250 x 0.142
1 1/8	0.74	0.312 x 0.112	0.312 x 0.177
1 1/4	0.70	0.312 x 0.112	0.312 x 0.177
1 3/8	0.66	0.375 x 0.11	0.375 x 0.213
1 1/2	0.61	0.375 x 0.11	0.375 x 0.213
1 5/8	0.56	0.438 x 0.134	0.438 x 0.248
1 3/4	0.51	0.438 x 0.134	0.438 x 0.248
1 7/8	0.45	0.500 x 0.131	0.500 x 0.283
2	0.39	0.500 x 0.131	0.500 x 0.283

2517

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
3/4	1.77	0.188 x 0.088	0.188 x 0.107
7/8	1.74	0.250 x 0.115	0.250 x 0.142
1	1.70	0.250 x 0.115	0.250 x 0.142
1 1/8	1.65	0.312 x 0.112	0.312 x 0.177
1 1/4	1.60	0.312 x 0.112	0.312 x 0.177
1 3/8	1.54	0.375 x 0.110	0.376 x 0.213
1 1/2	1.48	0.375 x 0.110	0.375 x 0.213
1 5/8	1.41	0.438 x 0.134	0.438 x 0.248
1 3/4	1.33	0.438 x 0.134	0.438 X 0.248
1 7/8	1.25	0.500 x 0.131	0.500 X 0.263
2	1.17	0.500 x 0.131	0.500 X 0.283
2 1/8	1.07	0.625 x 0.185	0.626 x 0.354
2 1/4	0.98	0.625 x 0.185	0.625 x 0.354
2 3/8	0.88	0.625 x 0.185	0.025 x 0.354
2 1/2	0.77	0.625 x 0.185	0.625 x 0.354

2525

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
7/8	2.38	0.250 x 0.115	0.250 x 0.142
1	2.31	0.250 x 0.115	0.250 x 0.142
1 1/8	2.24	0.312 x 0.112	0.312 x 0.177
1 1/4	2.19	0.312 x 0.112	0.312 x 0.177
1 3/8	1.99	0.375 x 0.110	0.375 x 0.213
1 1/2	1.97	0.375 x 0.110	0.375 x 0.213
1 5/8	1.94	0.438 x 0.134	0.438 x 0.248
1 3/4	1.62	0.438 x 0.134	0.438 x 0.248
1 7/8	1.72	0.500 x 0.131	0.500 x 0.283
2	1.58	0.500 x 0.131	0.500 x 0.283
2 1/8	1.45	0.625 x 0.185	0.625 x 0.364
2 1/4	1.31	0.625 x 0.185	0.625 x 0.354
2 3/8	1.18	0.625 x 0.185	0.625 x 0.354
2 1/2	1.01	0.625 x 0.153*	0.625 x 0.354

3020

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1 1/4	3.07	0.312 x 0.112	0.212 x 0.177
1 3/8	3.00	0.375 x 0.110	0.375 x 0.213
1 1/2	2.93	0.375 x 0.110	0.375 x 0.213
1 5/8	2.85	0.438 x 0.134	0.438 x 0.248
1 3/4	2.76	0.438 x 0.134	0.438 x 0.248
1 7/8	2.67	0.500 x 0.131	0.500 x 0.283
2	2.57	0.500 x 0.131	0.500 x 0.283
2 1/8	2.47	0.625 x 0.185	0.625 x 0.354
2 1/4	2.36	0.625 x 0.185	0.025 x 0.354
2 3/8	2.24	0.625 x 0.185	0.625 x 0.354
2 1/2	2.12	0.625 x 0.185	0.025 x 0.354
2 5/8	1.99	0.750 x 0.209	0.750 x 0.424
2 3/4	1.85	0.750 x 0.209	0.750 x 0.424
2 7/8	1.78	0.750 x 0.209	0.750 x 0.424
3	1.56	0.750 x 0.209	0.750 x 0.424

3030

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1 1/4	4.44	0.312 x 0.112	0.312 x 0.177
1 3/8	4.34	0.375 x 0.110	0.375 x 0.213
1 1/2	4.23	0.375 x 0.110	0.375 x 0.213
1 5/8	4.12	0.438 x 0.134	0.438 x 0.248
1 3/4	3.99	0.438 x 0.134	0.438 x 0.248
1 7/8	3.85	0.500 x 0.131	0.500 x 0.283
2	3.70	0.500 x 0.131	0.500 x 0.283
2 1/8	3.55	0.625 x 0.185	0.625 x 0.354
2 1/4	3.38	0.625 x 0.185	0.625 x 0.354
2 3/8	3.21	0.625 x 0.185	0.625 x 0.354
2 1/2	3.02	0.625 x 0.185	0.625 x 0.354
2 5/8	2.63	0.750 x 0.209	0.750 x 0.424
2 3/4	2.62	0.750 x 0.209	0.750 x 0.424
2 7/8	2.41	0.750 x 0.209	0.750 x 0.424
3	2.19	0.750 x 0.209	0.750 x 0.424

Bold italic type indicate bushes made of steel.

Keyways are parallel and in accordance with BS46:Part 1:1958, with the exception of those marked* which are shallower.

Depth of key measured at centre

Taper Bushes - Imperial

3525

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1 1/2	5.28	0.375 x 0.110	0.375 x 0.213
1 5/8	5.18	0.438 x 0.134	0.438 x 0.248
1 3/4	5.08	0.438 x 0.134	0.438 x 0.248
1 7/8	4.96	0.500 x 0.131	0.500 x 0.283
2	4.84	0.500 x 0.131	0.500 x 0.283
2 1/8	4.71	0.625 x 0.185	0.625 x 0.354
2 1/4	4.57	0.625 x 0.185	0.625 x 0.354
2 3/8	4.42	0.625 x 0.185	0.625 x 0.354
2 1/2	4.27	0.625 x 0.185	0.625 x 0.354
2 5/8	4.11	0.750 x 0.209	0.750 x 0.424
2 3/4	3.94	0.750 x 0.209	0.750 x 0.424
2 7/8	3.76	0.750 x 0.209	0.750 x 0.424
3	3.58	0.750 x 0.209	0.750 x 0.424
3 1/8	3.38	0.875 x 0.264	0.875 x 0.495
3 1/4	3.18	0.875 x 0.264	0.875 x 0.495
3 3/8	2.07	0.875 x 0.264	0.875 x 0.495
3 1/2	2.80	0.875 x 0.264	0.875 x 0.495
3 3/4*	2.50	0.999 x 0.245*	1.000 x 0.566
4*	2.20	0.999 x 0.155*	1.000 x 0.566

3535

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1 1/2	7.16	0.375 x 0.110	0.375 x 0.213
1 5/8	7.02	0.438 x 0.134	0.438 x 0.248
1 3/4	0.88	0.438 x 0.134	0.438 x 0.248
1 7/8	6.73	0.500 x 0.131	0.500 x 0.283
2	6.55	0.500 x 0.131	0.500 x 0.283
2 1/8	6.36	0.625 x 0.185	0.625 x 0.354
2 1/4	6.16	0.625 x 0.185	0.625 x 0.354
2 3/8	5.96	0.625 x 0.185	0.625 x 0.354
2 1/2	5.75	0.625 x 0.185	0.625 x 0.354
2 5/8	5.51	0.750 x 0.209	0.750 x 0.424
2 3/4	5.28	0.750 x 0.209	0.750 x 0.424
2 7/8	5.02	0.750 x 0.209	0.750 x 0.424
3	4.77	0.750 x 0.209	0.750 x 0.424
3 1/8	4.50	0.875 x 0.264	0.875 x 0.495
3 1/4	4.21	0.875 x 0.264	0.875 x 0.495
3 3/8	3.92	0.875 x 0.264	0.875 x 0.495
3 1/2	3.62	0.875 x 0.264	0.875 x 0.495

4030

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1 3/4	8.33	0.438 x 0.134	0.438 x 0.248
2	8.04	0.500 x 0.131	0.500 x 0.283
2 1/8	7.88	0.625 x 0.185	0.625 x 0.354
2 1/4	7.71	0.625 x 0.185	0.625 x 0.354
2 3/8	7.54	0.625 x 0.185	0.625 x 0.354
2 1/2	7.36	0.625 x 0.185	0.625 x 0.354
2 5/8	7.16	0.750 x 0.209	0.750 x 0.424
2 3/4	6.96	0.750 x 0.209	0.750 x 0.424
2 7/8	6.75	0.750 x 0.209	0.750 x 0.424
3	6.53	0.750 x 0.209	0.750 x 0.424
3 1/8	6.28	0.875 x 0.264	0.875 x 0.495
3 1/4	6.05	0.875 x 0.264	0.875 x 0.495
3 3/8	5.80	0.875 x 0.264	0.875 x 0.495
3 1/2	5.54	0.875 x 0.264	0.875 x 0.495
3 3/4	4.98	1.000 x 0.318	1.000 x 0.566
4	4.40	1.000 x 0.318	1.000 x 0.566
4 1/4	4.00	1.250 x 0.366	1.250 x 0.707
4 1/2*	3.70	1.250 x 0.255*	1.250 x 0.707

4040

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
1 3/4	10.92	0.438 x 0.134	0.438 x 0.248
1 7/8	10.61	0.500 x 0.131	0.500 x 0.283
2	10.42	0.500 x 0.131	0.500 x 0.238
2 1/8	10.21	0.625 x 0.185	0.625 x 0.254
2 1/4	9.99	0.625 x 0.185	0.625 x 0.354
2 3/8	9.71	0.625 x 0.185	0.625 x 0.354
2 1/2	9.51	0.625 x 0.185	0.625 x 0.354
2 5/8	9.15	0.750 x 0.209	0.750 x 0.424
2 3/4	8.97	0.750 x 0.209	0.750 x 0.424
2 7/8	8.09	0.750 x 0.209	0.750 x 0.424
3	8.40	0.750 x 0.209	0.750 x 0.424
3 1/8	8.09	0.875 x 0.264	0.875 x 0.495
3 1/4	7.76	0.875 x 0.264	0.875 x 0.495
3 3/8	7.43	0.875 x 0.264	0.875 x 0.495
3 1/2	7.08	0.875 x 0.264	0.875 x 0.495
3 3/4	6.35	1.000 x 0.318	1.000 x 0.566
4	5.56	1.000 x 0.318	1.000 x 0.566

Bold italic type indicate bushes made of steel.

Keyways are parallel and in accordance with BS46:Part 1:1958, with the exception of those marked* which are shallower.

Depth of key measured at centre

Taper Bushes - Imperial

4535

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
2 1/4	8.65	0.625 x 0.185	0.625 x 0.354
2 3/8	14.06	0.625 x 0.185	0.625 x 0.354
2 1/2	9.99	0.625 x 0.185	0.625 x 0.354
2 3/4	9.53	0.750 x 0.209	0.750 x 0.424
2 7/8	12.87	0.750 x 0.209	0.750 x 0.424
3	9.02	0.750 x 0.209	0.750 x 0.424
3 1/8	8.75	0.875 x 0.264	0.875 x 0.495
3 1/4	8.46	0.875 x 0.264	0.875 x 0.495
3 3/8	8.17	0.875 x 0.264	0.875 x 0.495
3 1/2	7.87	0.875 x 0.264	0.875 x 0.495
3 3/4	7.22	1.000 x 0.318	1.000 x 0.566
4	6.54	1.000 x 0.318	1.000 x 0.566
4 1/4	5.81	1.250 x 0.366	1.250 x 0.707
4 1/2	5.03	1.250 x 0.366	1.250 x 0.707
4 3/4	4.90	1.250 x 0.366	1.250 x 0.707

4545

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
2 1/4	14.30	0.625 x 0.185	0.625 x 0.354
2 3/8	14.06	0.625 x 0.185	0.625 x 0.354
2 1/2	13.80	0.625 x 0.185	0.625 x 0.354
2 3/4	13.20	0.750 x 0.209	0.750 x 0.424
2 7/8	12.87	0.750 x 0.209	0.750 x 0.424
3	12.54	0.750 x 0.209	0.750 x 0.424
3 1/8	8.75	0.875 x 0.264	0.875 x 0.495
3 1/4	11.83	0.875 x 0.264	0.875 x 0.495
3 3/8	11.46	0.875 x 0.264	0.875 x 0.495
3 1/2	11.07	0.875 x 0.264	0.875 x 0.495
3 3/4	10.25	1.000 x 0.318	1.000 x 0.566
4	9.37	1.000 x 0.318	1.000 x 0.566
4 1/4	8.43	1.250 x 0.366	1.250 x 0.707
4 1/2	7.43	1.250 x 0.366	1.250 x 0.707

5040

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
2 3/4	15.12	0.750 x 0.209	0.750 x 0.424
2 7/8	12.50	0.750 x 0.209	0.750 x 0.424
3	14.54	0.750 x 0.209	0.750 x 0.424
3 1/8	14.10	0.875 x 0.264	0.875 x 0.495
3 1/4	13.90	0.875 x 0.264	0.875 x 0.495
3 3/8	13.57	0.875 x 0.264	0.875 x 0.495
3 1/2	13.22	0.875 x 0.264	0.875 x 0.495
3 3/4	12.49	1.000 x 0.318	1.000 x 0.566
4	11.70	1.000 x 0.318	1.000 x 0.566
4 1/4	10.87	1.250 x 0.366	1.250 x 0.707
4 1/2	10.40	1.250 x 0.366	1.250 x 0.707
4 3/4	10.00	1.250 x 0.366	1.250 x 0.707
5	9.90	1.250 x 0.366	1.250 x 0.707

5050

BORE	WT. (kg)	KEYSEAT	
		BUSH	SHAFT
2 3/4	15.12	0.750 x 0.209	0.750 x 0.424
2 7/8	12.50	0.750 x 0.209	0.750 x 0.424
3	17.80	0.750 x 0.209	0.750 x 0.424
3 1/8	14.10	0.875 x 0.264	0.875 x 0.495
3 1/4	16.93	0.875 x 0.264	0.875 x 0.495
3 1/2	15.99	0.875 x 0.264	0.875 x 0.495
3 3/4	15.16	1.000 x 0.318	1.000 x 0.566
4	14.18	1.000 x 0.318	1.000 x 0.566
4 1/4	13.13	1.250 x 0.366	1.250 x 0.707
4 1/2	12.03	1.250 x 0.366	1.250 x 0.707
4 3/4	10.86	1.250 x 0.366	1.250 x 0.707
5	9.03	1.250 x 0.366	1.250 x 0.707

Bold italic type indicate bushes made of steel.

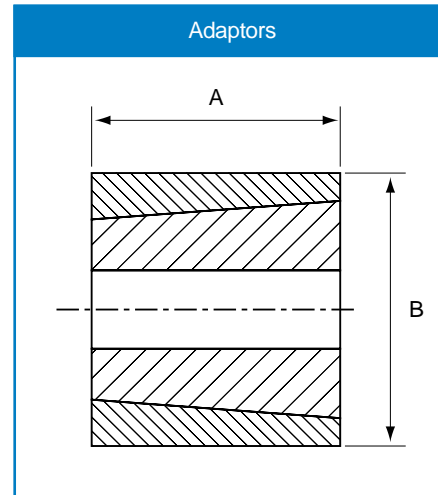
Keyways are parallel and in accordance with BS46:Part 1:1958, with the exception of those marked* which are shallower.

Depth of key measured at centre

Adaptors

Adaptors

Hub Type	A	B	Key Section
1008PM	22	45	-
1008KM	22	45	5 x 5
1210PM	25	60	-
1210KM	25	60	6 x 6
1610PM	25	70	-
1610KM	25	70	10 x 8
2517PM	45	105	-
2517KM	45	105	16 x 10
3030PM	76	130	-
3030KM	76	130	20 x 12
3535PM	90	160	-
3535KM	90	160	22 x 12
4040PM	102	185	-
4040KM	102	185	24 x 12



Adaptors for Pilot Bored components allow them to take standard Taper Lock bushes. This added convenience removes the need to drill, tap and taper-bore.

PM= Plain outside diameter

KM= Keyway on outside diameter allowing additional torque transmission

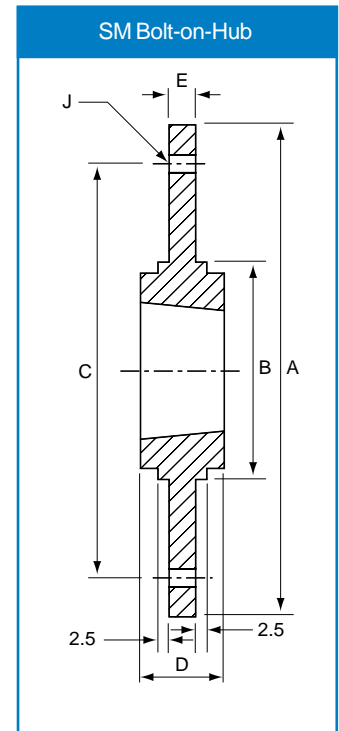
Bolt-on-Hubs

Taper Bore Bolt-on-Hubs are designed for use with the universally accepted Taper Bush. They provide a convenient means of securing fan rotors, impellers, agitators and other devices which must be fastened firmly to shafts.

Challenge Bolt-on-Hubs, type BF and SM, complete the range. They are manufactured from GG22 cast iron and are phosphated for extra rust protection.

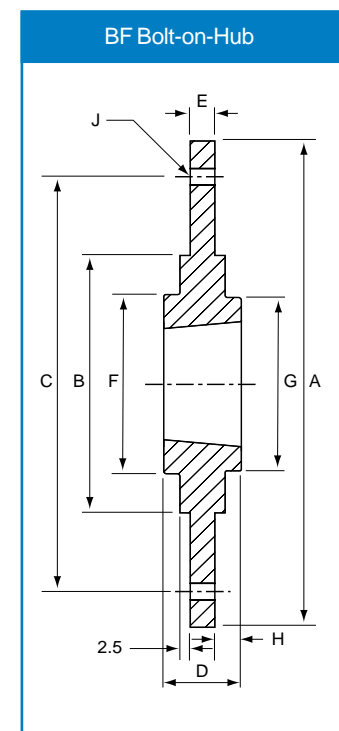
SM Bolt-on-Hubs

Hub Reference	Bush Number	A	B	C	D	E	J (No. x Diam)
SM 12	1210	180	90	135	26	6.5	6 x 7.5
SM 16-1	1610	200	110	150	26	7.5	6 x 7.5
SM 16-2	1615	200	110	150	38	7.5	6 x 7.5
SM 20	2012	270	140	190	32	8.5	6 x 9.5
SM 25	2517	340	170	240	45	9.5	6 x 11.5
SM 30-1	3020	430	220	300	51	13.5	8 x 13.5
SM 30-2	3020	485	250	340	51	13.5	8 x 13.5



BF Bolt-on-Hubs

Hub Reference	Bush Number	A	B	C	D	E	G	H	J (No. x Diam)
BF12	1210	120	80	100	25	5.5	80	10	6 x 7.5
BF16	1610	130	90	110	25	6.5	90	10	6 x 7.5
BF20	2012	145	100	125	32	8.5	100	13	6 x 9.5
BF25	2517	185	130	155	44	11.5	119	20	8 x 11.5
BF30	3020	220	165	190	50	11.5	147	20	8 x 13.5

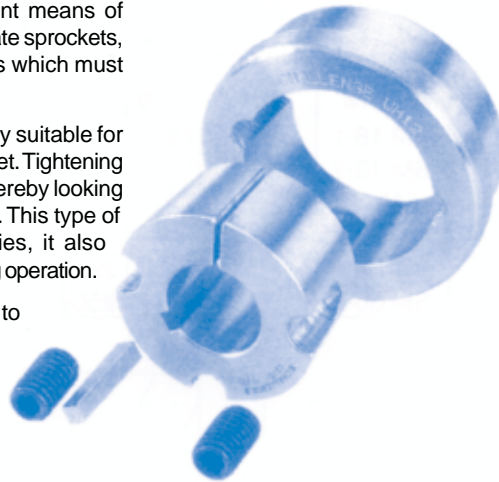


Weld-on-Hubs

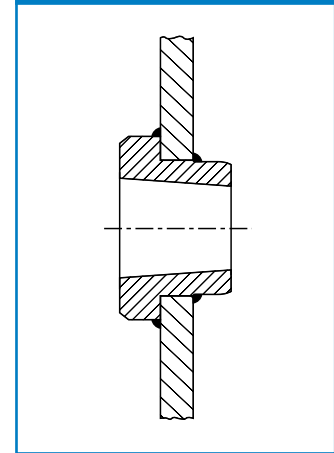
Taper Bore Weld-on-Hubs are made out of steel, drilled, tapped and taper bored to receive standard Taper Bushes. The extended flange provides a convenient means of welding hubs into fan rotors, steel pulleys, plate sprockets, impellers, agitators and many other devices which must be firmly fastened to the shaft.

Weld-on-Hubs are easy to install and entirely suitable for use where severe operating conditions are met. Tightening the screws contracts the bore of the bush, thereby locking it to the shaft with the equivalent of press fit. This type of construction eliminates mounting difficulties, it also prevents loosening and wear on the hub during operation.

Challenge Weld-on-Hubs are manufactured to complement the Taper Bush range and include W, WG, WH, WHG, WM and WMG Taper Bore Hubs. All are manufactured to world standards using C45 steel.



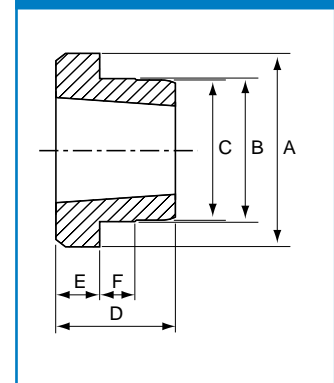
Typical Assembly



W Weld-on-Hubs

Hub Reference	Bush Number	A	B	C	D	E	F
W12	1215	73.03	63.50	62.71	38.10	15.88	9.53
W16	1615	82.55	73.03	72.24	38.10	15.88	9.53
W20	2017	101.60	80.90	88.11	44.45	19.05	14.45
W25	2517	127.00	111.13	110.34	44.45	19.05	12.70
W30	3030	149.86	133.35	132.56	76.20	25.40	19.05
W35	3535	184.15	158.75	157.96	88.90	31.75	25.40
W40	4040	225.43	196.85	196.06	101.60	31.75	31.75
W45	4545	254.00	222.25	221.46	114.30	38.10	38.10

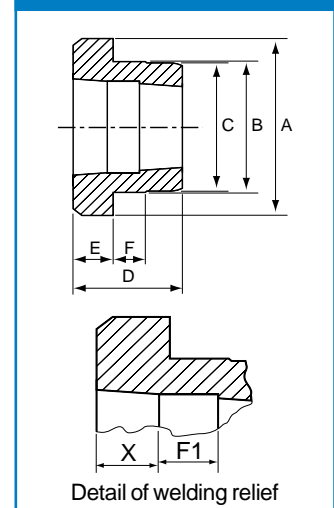
W Weld-on-Hub



WG Weld-on-Hubs

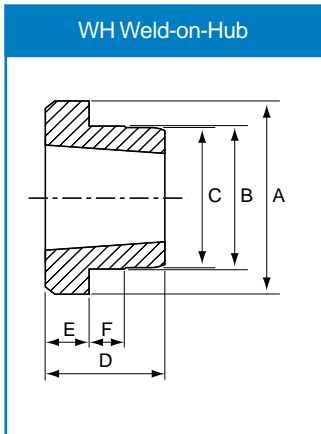
Hub Reference	Bush Number	A	B	C	D	E	F	F1	X
WG12	1215	73.03	63.50	62.71	38.10	15.88	9.53		
WG16	1515	82.55	73.03	72.24	38.10	15.88	9.53		
WG20	2017	101.60	88.90	88.11	44.45	19.05	14.45		
WG25	2017	127.00	111.13	110.34	44.45	19.05	12.70		
WG30	3030	149.86	133.35	132.56	70.20	25.40	19.05	25	19
WG35	3535	184.15	158.75	157.96	88.90	31.75	25.40	31	22
WG40	4040	225.43	196.85	196.06	101.60	31.75	31.75	37	22
WG45	4545	254.00	222.25	221.46	114.30	38.10	38.10	44	15

WG Weld-on-Hub



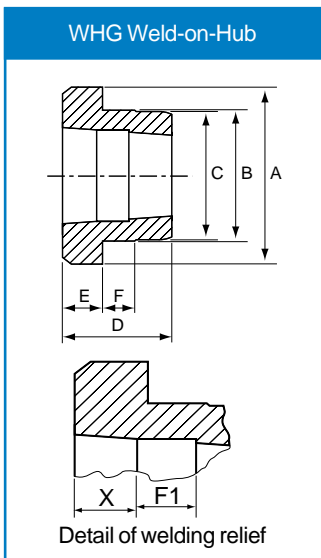
"G" notation represents welding relief.

Weld-on-Hubs



WH Weld-on-Hubs

Hub Reference	Bush Number	A	B	C	D	E	F
WH12	1210	70	65	64.5	25	9	10
WH16-1	1610	80	75	74.5	25	9	10
WH20	2012	95	90	89.5	32	12	12
WH25	2517	115	110	109.5	44	19	15
WH30-2	3020	145	140	139.5	50	20	15
WH35	3525	190	180	179.5	65	25	25
WH40-1	4030	200	190	189.0	76	32	30
WH40-2	4040	200	190	189.5	101	32	30
WH45-1	4535	210	200	190.5	89	40	30
WH45-2	4545	210	200	190.5	114	40	30
WH50-1	5040	230	220	210.5	102	40	35
WH50-2	5050	230	220	219.5	127	40	35



WHG Weld-on-Hubs

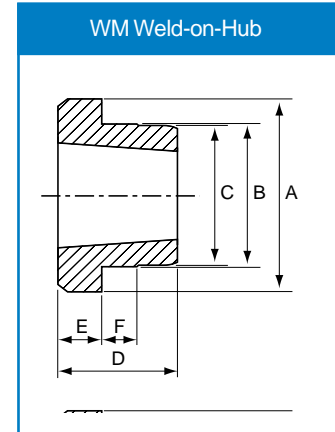
Hub Reference	Bush Number	A	B	C	D	E	F	F1	X
WHG12	1210	70	65	64.5	25	9	10	-	-
WHG16-1	1610	80	75	74.5	25	9	10	-	-
WHG20	2012	95	90	89.5	32	12	12	-	-
WHG25	2517	115	110	109.5	44	19	15	-	-
WHG30-2	3020	145	140	139.5	50	20	15	21	14
WHG35	3525	190	180	179.5	65	25	25	31	19
WHG40-1	4030	200	190	189.0	76	32	30	27	22
WHG40-2	4040	200	190	189.5	101	32	30	27	22
WHG45-1	4S35	210	200	199.5	89	40	30	33	25
WHG45-2	4545	210	200	199.5	114	40	30	33	25
WHG50-1	5040	230	220	219.5	102	40	35	37	29
WHG50-2	5050	230	220	219.5	127	40	35	37	20

"G" notation represents welding relief.

Weld-on-Hubs

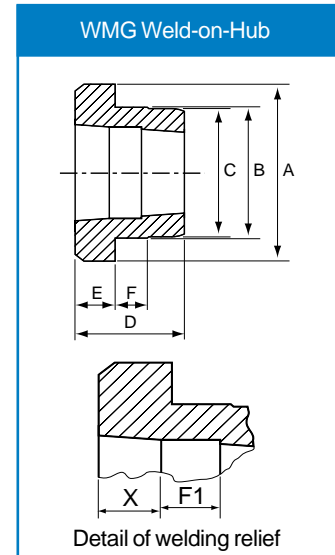
WM Weld-on-Hubs

Hub Reference	Bush Number	A	B	C	D	E	F
WM12	1210	70	60	58	26	9	10
WM16-1	1010	83	70	68	26	9	10
WM16-2	1615	83	70	68	38	10	11
WM20	2012	95	90	88	32	12	12
WM25	2517	127	110	108	44	19	13
WM30-2	3020	152	130	125	50	20	15
WM30-3	3030	152	130	125	76	25	19
WM35	3535	184	155	151	89	32	25
WM40	4040	225	195	187	102	32	32
WM45	4545	254	220	213	114	38	38
WM50	5050	278	242	228	127	38	38



WMG Weld-on-Hubs

Hub Reference	Bush Number	A	B	C	D	E	F	F1	X
WMG12	1210	70	60	58	26	9	10	8	9
WMG16-1	1610	53	70	68	26	9	10	8	9
WMG16-2	1615	83	70	68	38	16	11	8	16
WMG20	2012	95	90	88	32	12	12	10	12
WMG25	2517	127	110	108	44	19	13	10	19
WMG30-2	3020	152	130	125	50	20	15	12	20
WMG30-3	3030	152	130	125	70	25	19	12	25
WMG35	3535	184	155	151	89	32	25	15	32
WMG40	4040	225	195	187	102	32	32	15	32
WMG45	4545	254	220	213	114	38	38	20	38
WMG50	5050	276	242	228	127	38	38	20	38



"G" notation represents welding relief.

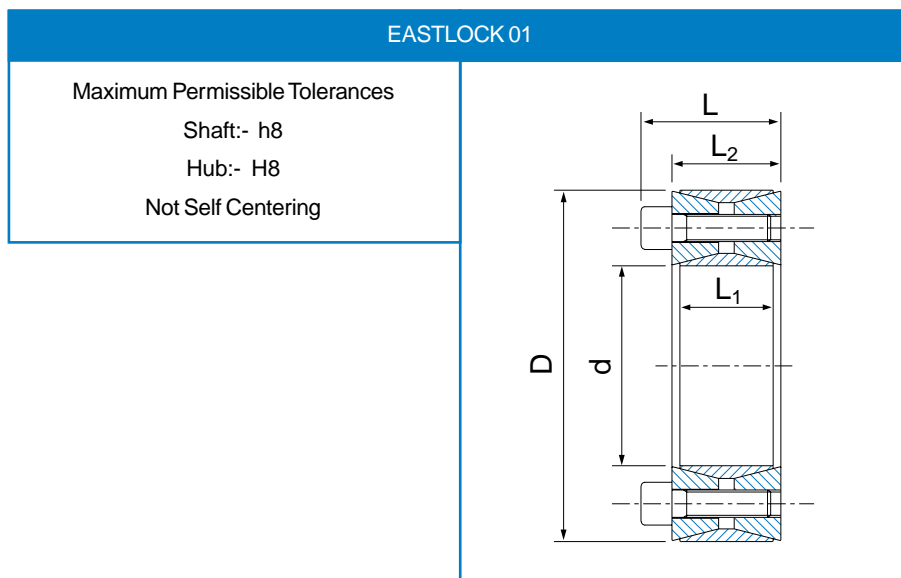
CLAMPING ELEMENTS



Eastlock

EASTLOCK 01 Clamping Element

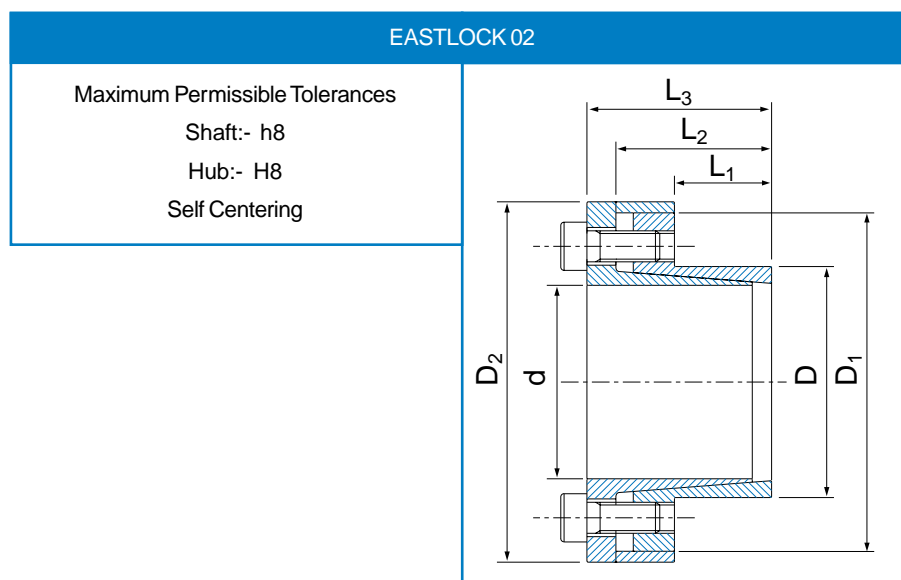
Dimensions					Transmission		Contact Pressure		Locking Screws (DIN 912-12.9)		
Ød	ØD	L ₁	L ₂	L	Torque	Axial Force	Shaft	Hub	Qty.	Size	Tightening Torque
mm	mm	mm	mm	mm	Mt Nm	Ft kN	P N/mm ²	P ₁ N/mm ²			T _s Nm
19	47	17	20	26	270	26.8	220	93	8	M6x18	16
20	47	17	20	26	280	26.8	210	93	8	M6x18	16
22	47	17	20	26	315	26.8	207	96	8	M6x18	16
24	50	17	20	26	375	30.1	206	103	9	M6x18	16
25	50	17	20	26	390	30.1	206	103	9	M6x18	16
28	55	17	20	26	485	33.5	204	103	10	M6x18	16
30	55	17	20	26	520	33.5	190	103	10	M6x18	16
32	60	17	20	26	660	40.2	214	114	12	M6x18	16
35	60	17	20	26	715	40.2	196	114	12	M6x18	16
38	65	17	20	26	920	46.9	204	122	14	M6x18	16
40	65	17	20	26	960	46.9	200	122	14	M6x18	16
42	75	20	24	32	1550	73.2	228	125	12	M8x22	38
45	75	20	24	32	1650	73.2	208	125	12	M8x22	38
48	80	20	24	32	1756	73.2	190	110	12	M8x22	38
50	80	20	24	32	1830	73.2	189	115	12	M8x22	38
55	85	20	24	32	2348	85.4	200	130	14	M8x22	38
60	90	20	24	32	2580	85.4	180	122	14	M8x22	38
65	95	20	24	32	3190	97.6	191	130	16	M8x22	38
70	110	24	28	38	4800	134.4	211	132	14	M10x25	75
75	115	24	28	38	5100	134.4	194	128	14	M10x25	75
80	120	24	28	38	5400	134.4	182	124	14	M10x25	75
85	125	24	28	38	6500	153.6	196	133	16	M10x25	75
90	130	24	28	38	6920	153.6	181	128	16	M10x25	75
95	135	24	28	38	8350	172.8	196	139	18	M10x25	75
100	145	26	33	45	9970	197.4	198	139	14	M12x30	130
110	155	26	33	45	11050	187.4	181	128	14	M12x30	130
120	165	26	33	45	13600	225.6	187	139	16	M12x30	130
130	180	34	38	50	18500	282.0	168	119	20	M12x35	130
140	190	34	38	50	21700	310.1	168	128	22	M12x35	130
150	200	34	38	50	25300	338.4	170	128	24	M12x35	130
160	210	34	38	50	29300	366.6	171	132	26	M12x35	130
170	225	38	44	58	33300	389.0	162	123	22	M14x40	207
180	235	38	44	58	38600	424.0	168	128	24	M14x40	207
190	250	46	52	66	47150	495.0	154	114	28	M14x45	207
200	260	46	52	66	53800	531.0	157	118	30	M14x45	207



All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

EASTLOCK 02 Clamping Element

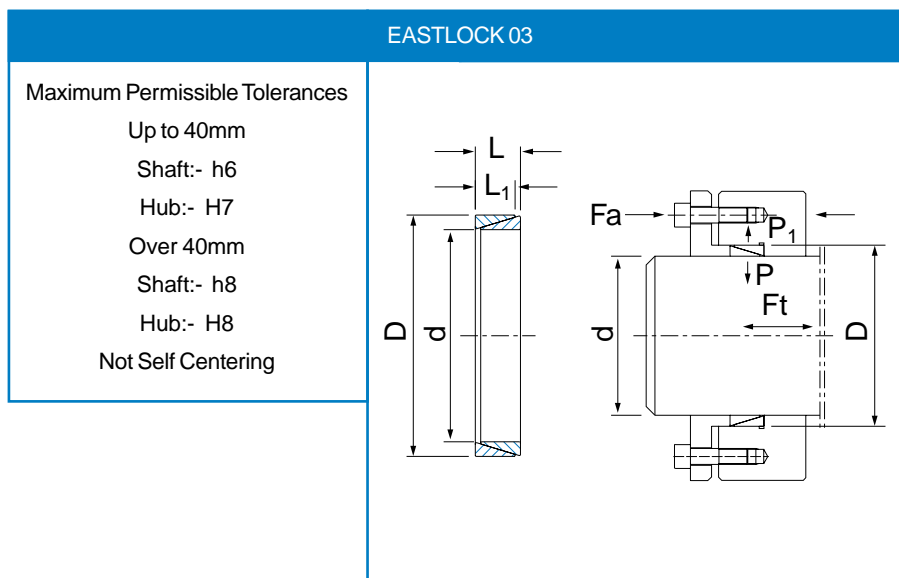
Dimensions								Transmission		Contact Pressure		Lock Screws (DIN 912-12.9)		
$\varnothing d$ mm	$\varnothing D$ mm	L_1 mm	L_2 mm	L_3 mm	L mm	$\varnothing D_2$ mm	$\varnothing D_1$ mm	Torque Mt Nm	Axial Force Ft kN	Shaft P N/mm ²	Hub P ₁ N/mm ²	Qty.	Size	Tightening Torque T _s Nm
8	15	12	21	24	28	32	28	35	7.2	190.0	105.0	3	M4x12	5.2
9	16	14	23	27	31	32	28	38	7.2	150.0	92.0	3	M4x12	5.2
10	16	14	23	27	31	32	28	45	9.0	140.0	90.0	3	M4x12	5.2
11	18	14	23	27	31	34	30	55	9.0	174.8	106.8	4	M4x12	5.2
12	18	14	23	27	31	34	30	60	9.0	160.8	106.8	4	M4x12	5.2
14	23	14	23	27	31	39	35	68	9.0	137.4	83.6	4	M4x12	5.2
15	24	16	29	36	42	45	40	110	13.0	161.8	101.2	4	M6x18	17.0
16	24	16	29	36	42	45	40	125	13.0	151.7	101.2	4	M6x18	17.0
18	26	18	31	38	44	47	42	175	18.0	159.8	110.7	4	M6x18	17.0
19	27	18	31	38	44	48	43	190	18.0	151.4	106.6	4	M6x18	17.0
20	28	18	31	38	44	49	44	210	21.0	143.9	102.8	4	M6x18	17.0
22	32	25	38	45	51	54	48	245	21.0	112.8	77.6	4	M6x18	17.0
24	34	25	38	45	51	56	50	270	21.0	103.4	73.0	4	M6x18	17.0
25	34	25	38	45	51	56	50	280	21.0	99.3	73.0	4	M6x18	17.0
28	39	25	38	45	51	61	55	385	31.0	110.8	79.6	6	M6x18	17.0
30	41	25	38	45	51	63	57	505	31.0	124.1	90.8	6	M6x18	17.0
32	43	30	43	50	56	65	59	535	31.0	97.0	72.2	6	M6x18	17.0
35	47	30	43	50	56	69	63	787	42.0	118.9	88.0	8	M6x18	17.0
38	50	30	43	50	56	72	66	842	42.0	108.9	82.8	8	M6x18	17.0
40	53	32	45	52	58	75	69	985	53.0	109.1	82.3	8	M6x18	17.0
42	55	32	55	52	70	77	71	1035	78.0	103.9	79.3	8	M8x22	42.0
45	59	40	56	64	72	85	79	1790	78.0	127.4	97.2	8	M8x22	42.0
48	62	40	56	64	72	88	82	1935	78.0	119.5	92.5	8	M8x22	42.0
50	65	50	66	74	82	92	85	2550	97.0	114.7	98.2	10	M8x22	42.0
55	71	50	66	74	82	98	91	2792	97.0	104.3	80.8	10	M8x22	42.0
60	77	50	66	74	82	104	97	3055	97.0	95.6	74.5	10	M8x22	42.0
65	84	50	66	74	82	111	104	3297	97.0	88.2	68.8	10	M8x22	42.0
70	90	60	80	91	101	122	115	4495	123.0	86.7	67.4	10	M10x25	84.0
75	95	60	80	91	101	126	119	6365	197.0	93.0	74.0	10	M10x25	84.0
80	100	65	85	96	106	131	124	8196	237.0	97.0	77.0	12	M10x25	84.0
85	106	65	85	96	106	137	130	8745	237.0	91.0	73.0	12	M10x25	84.0
90	112	65	85	96	106	143	136	10600	276.0	100.0	51.0	12	M10x25	84.0
95	120	65	85	96	106	153	144	11232	276.0	95.0	75.0	14	M10x25	84.0
100	125	65	89	102	114	162	153	14765	348.0	114.0	91.0	12	M12x30	145.0
110	140	70	94	107	119	177	168	16262	348.0	96.0	75.0	14	M12x30	145.0
120	155	90	114	127	139	195	185	23697	465.0	91.0	71.0	18	M12x30	145.0
130	165	90	114	127	139	205	195	25579	465.0	84.0	66.0	18	M12x30	145.0
140	175	90	114	127	139	215	205	28205	465.0	78.0	63.0	18	M12x30	145.0
150	185	90	114	127	139	225	215	29841	465.0	73.0	59.0	18	M12x30	145.0



Eastlock

EASTLOCK 03 Clamping Element

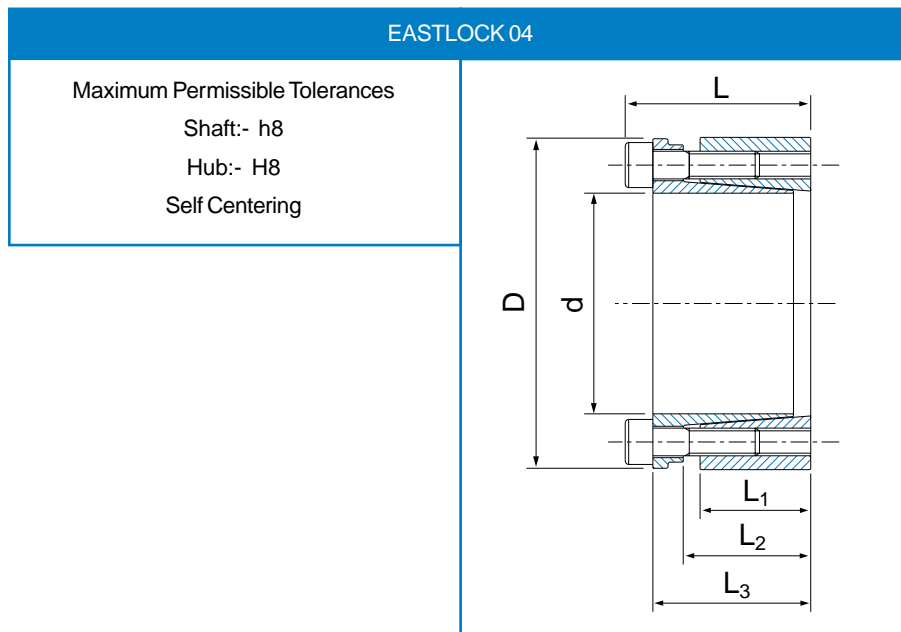
Dimensions				Transmission Axial Force			Contact Pressure	
Ød mm	ØD mm	L mm	L ₁ mm	Torque Mt Nm	Fa kN	Ft kN	Shaft P N/mm ²	Hub P ₁ N/mm ²
8	11	4.5	3.7	2.9	4.3	0.97	98	73
10	13	4.5	3.7	6.9	12.1	1.37	98	75
12	15	4.5	3.7	9.8	12.4	1.64	98	78
14	18	6.3	5.3	19.2	20.4	2.74	98	76
15	19	6.3	5.3	22.1	23.5	2.94	98	77
16	20	6.3	5.3	25.1	23.9	3.14	98	78
18	22	6.3	5.3	31.8	24.8	3.53	98	80
19	24	6.3	5.3	35.3	29.1	3.72	98	77
20	25	6.3	5.3	39.2	29.5	3.92	98	78
22	26	6.3	5.3	47.0	28.3	4.31	98	83
24	28	6.3	5.3	56.8	29.4	4.70	98	84
25	30	6.3	5.3	60.8	31.8	4.90	98	81
28	32	6.3	5.3	76.4	31.9	5.49	98	86
30	35	6.3	5.3	88.2	34.8	5.88	98	84
32	36	6.3	5.3	100.0	35.9	6.27	98	87
35	40	7.0	6.0	136.0	44.8	7.74	98	86
38	44	7.0	6.0	160.0	48.8	8.43	98	84
40	45	8.0	6.6	195.0	57.6	9.75	98	87
42	48	8.0	6.6	216.0	61.4	10.30	98	86
45	52	10.0	8.6	321.0	90.3	14.30	98	85
48	55	10.0	8.6	367.0	92.7	15.30	98	85
50	57	10.0	8.6	397.0	94.7	15.90	98	86
55	62	10.0	8.6	480.0	99.7	17.40	98	87
60	68	12.0	10.4	692.0	130.9	23.00	98	86
65	73	12.0	10.4	813.0	134.9	25.00	98	87
70	79	14.0	12.2	1110.0	172.4	31.60	98	87
75	84	14.0	12.2	1260.0	185.7	33.80	98	87
80	91	17.0	15.0	1770.0	247.1	44.10	98	86
90	101	17.0	15.0	2240.0	266.2	50.00	98	87
100	114	21.0	18.7	3450.0	370.8	69.60	98	86
110	124	21.0	18.7	4170.0	406.1	76.40	98	87
120	134	21.0	18.7	4950.0	432.0	83.30	98	88
130	148	28.0	25.3	7840.0	640.8	122.00	98	86
140	158	28.0	25.3	9110.0	676.5	131.00	98	87
150	168	28.0	25.3	10500.0	713.0	140.00	98	87



All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

EASTLOCK 04 Clamping Element

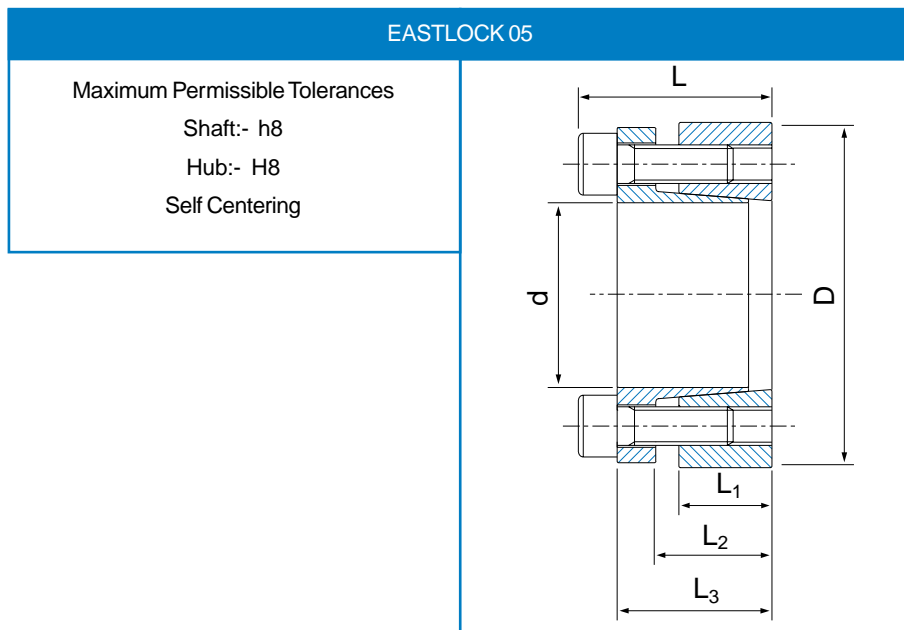
Dimensions						Transmission Axial		Contact Pressure		Lock Screws (DIN 912-12.9)		
$\varnothing d$ mm	$\varnothing D$ mm	L_1 mm	L_2 mm	L_3 mm	L mm	Torque Mt Nm	Force Ft kN	Shaft P N/mm ²	Hub P ₁ N/mm ²	Qty.	Size	Tightening Torque T _s Nm
19	47	26	31	39	45	353	30.6	228	98	4	M6x25	17
20	47	26	31	39	45	382	33.4	226	98	4	M6x25	17
22	47	26	31	39	45	431	33.4	215	93	4	M6x25	17
24	50	26	31	39	45	519	50.2	215	102	6	M6x25	17
25	50	26	31	39	45	578	50.2	225	102	6	M6x25	17
28	55	26	31	39	45	686	50.2	215	107	6	M6x25	17
30	55	26	31	39	45	745	50.2	196	117	6	M6x25	17
32	60	26	31	39	45	912	66.9	225	111	8	M6x25	17
35	60	26	31	39	45	1010	66.9	196	116	8	M6x25	17
38	65	26	31	39	45	1216	66.9	205	121	8	M6x25	17
40	65	26	31	39	45	1323	66.9	196	122	8	M6x25	17
42	75	30	36	47	55	2128	66.9	232	137	6	M8x30	41
45	75	30	36	47	55	2304	92.1	232	137	6	M8x30	41
48	80	30	36	47	55	2461	110.0	213	132	6	M8x30	41
50	80	30	36	47	55	2530	122.8	213	132	6	M8x30	41
55	85	30	36	47	55	3138	122.8	218	142	8	M8x30	41
60	90	30	36	47	55	3314	122.8	194	153	8	M8x30	41
65	95	30	36	47	55	4079	122.8	208	137	8	M8x30	41
70	110	40	46	57	67	6707	193.5	220	140	8	M10x35	83
75	115	40	46	62	72	7354	193.5	205	135	8	M10x35	83
80	120	40	46	62	72	7943	193.5	196	127	8	M10x35	83
85	125	40	46	62	72	9512	241.9	205	142	10	M10x35	83
90	130	40	46	62	72	10100	241.9	196	135	10	M10x35	83
95	135	40	46	62	72	11865	241.9	205	145	10	M10x35	83
100	145	46	52	77	89	15396	282.8	211	145	8	M12x45	145
110	155	46	52	77	89	16867	282.8	192	136	8	M12x45	145
120	165	46	52	77	89	22064	353.6	211	152	10	M12x45	145
130	180	46	52	77	89	23535	424.3	192	137	12	M12x45	145
140	190	51	59	84	90	30210	448.5	192	142	8	M14x45	230
150	200	51	59	84	90	36440	489.0	201	150	10	M14x45	230



Eastlock

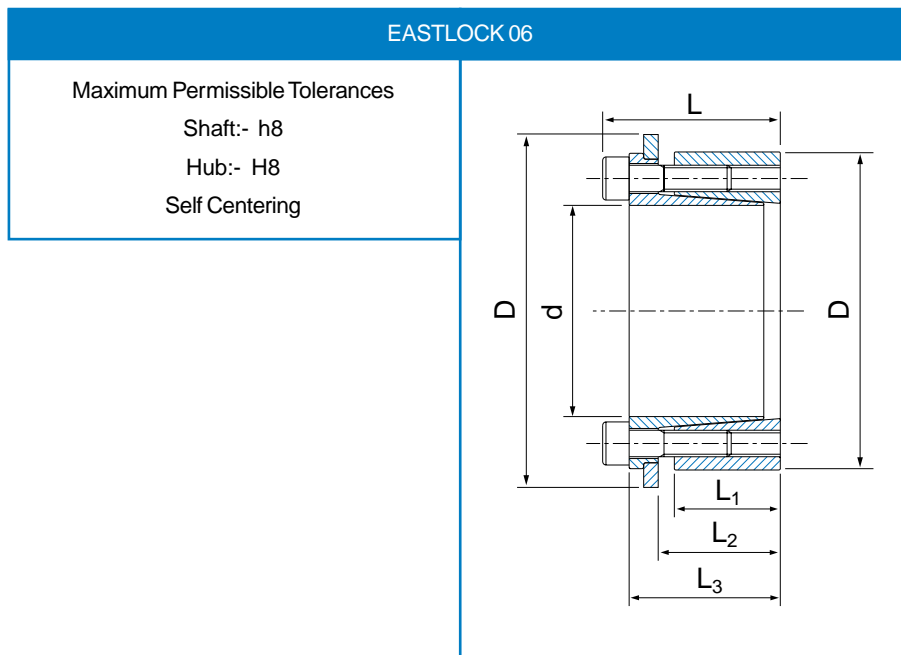
EASTLOCK 05 Clamping Element

Dimensions						Transmission Axial		Contact Pressure		Lock Screws (DIN 912-12.9)		
Ød	ØD	L ₁	L ₂	L ₃	L	Torque Mt	Force Ft	Shaft P	Hub P ₁	Qty.	Size	Tightening Torque T _s
mm	mm	mm	mm	mm	mm	Nm	kN	N/mm ²	N/mm ²			Nm
19	47	17	22	28	34	355	31	280	120	5	M6x20	14
20	47	17	22	28	34	360	33	280	120	5	M6x20	14
22	47	17	22	28	34	400	33	268	123	5	M6x20	14
24	50	17	22	28	34	440	36	243	120	6	M6x20	14
25	50	17	22	28	34	560	36	280	138	6	M6x20	14
28	55	17	22	28	34	625	36	250	128	6	M6x20	14
30	55	17	22	28	34	650	36	235	128	6	M6x20	14
32	60	17	22	28	34	950	50	290	150	8	M6x20	14
35	60	17	22	28	34	1050	50	268	150	8	M6x20	14
38	65	17	22	28	34	1140	50	252	146	8	M6x20	14
40	65	17	22	28	34	1200	50	232	146	8	M6x20	14
45	75	20	25	33	41	2180	70	285	168	7	M8x25	35
50	80	20	25	33	41	2430	85	258	158	7	M8x25	35
55	85	20	25	33	41	3050	85	268	173	8	M8x25	35
60	90	20	25	33	41	3350	85	243	163	8	M8x25	35
65	95	20	25	33	41	4080	85	253	173	9	M8x25	35
70	110	24	30	40	50	6280	119	278	178	8	M10x30	70
75	115	24	30	40	50	6680	119	258	168	8	M10x30	70
80	120	24	30	40	50	7130	119	248	168	8	M10x30	70
85	125	24	30	40	50	8750	132	258	178	9	M10x30	70
90	130	24	30	40	50	9080	132	248	168	9	M10x30	70
95	135	24	30	40	50	10580	132	258	178	10	M10x30	70
100	145	26	32	44	56	13380	170	268	188	8	M12x35	125
110	155	26	32	44	56	14580	170	238	178	8	M12x35	125
120	165	26	32	44	56	17880	200	248	178	9	M12x35	125
130	180	34	40	52	64	25950	270	238	168	12	M14x40	190
140	190	34	40	54	68	26950	270	208	148	9	M14x40	190
150	200	34	40	54	68	32950	320	228	168	10	M14x40	190



EASTLOCK 06 Clamping Element

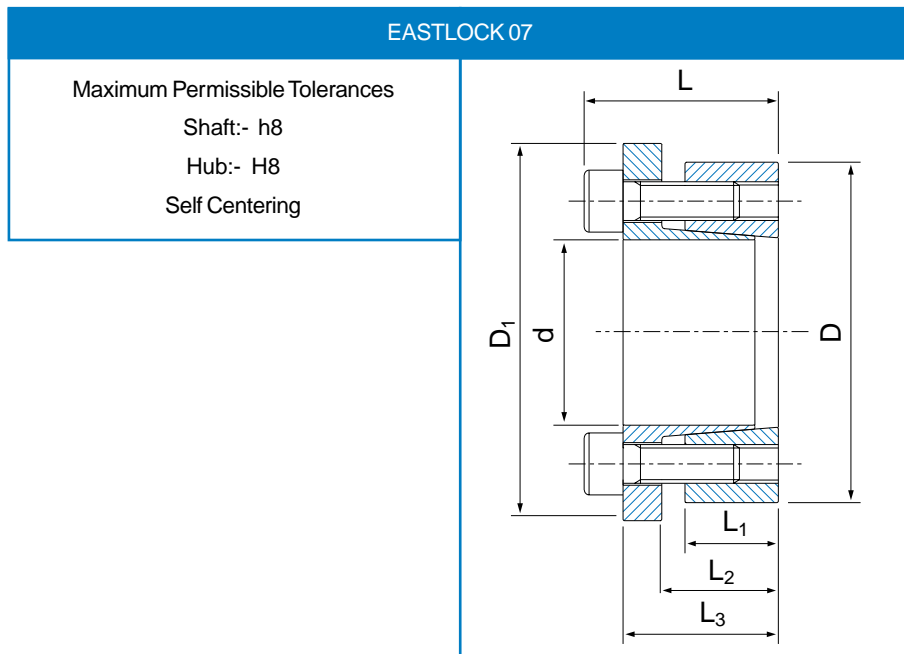
Dimensions							Transmission		Contact Pressure		Lock Screws (DIN 912-12.9)		
$\varnothing d$ mm	$\varnothing D$ mm	$\varnothing D_1$ mm	L_1 mm	L_2 mm	L_3 mm	L mm	Torque Mt Nm	Axial Force Ft kN	Shaft P N/mm ²	Hub P ₁ N/mm ²	Qty.	Size	Tightening Torque Ts Nm
19	47	53	26	31	39	45	294	19.8	228	96	4	M6x20	17
20	47	53	26	31	39	45	313	23.4	226	96	4	M6x20	17
22	47	53	26	31	39	45	362	23.4	206	97	4	M6x20	17
24	50	56	26	31	39	45	421	35.1	206	100	6	M6x20	17
25	50	56	26	31	39	45	470	35.1	221	110	6	M6x20	17
28	55	61	26	31	39	45	578	35.1	202	105	6	M6x20	17
30	55	61	26	31	39	45	637	35.1	221	118	6	M6x20	17
32	60	66	26	31	39	45	784	46.8	197	114	8	M6x20	17
35	60	66	26	31	39	45	843	46.8	202	118	8	M6x20	17
38	65	71	26	31	39	45	1010	46.8	197	121	8	M6x20	17
40	65	71	26	31	39	45	1108	46.8	234	143	8	M6x20	17
42	75	81	30	36	47	55	1892	46.8	216	135	6	M8x30	41
45	75	81	30	36	47	55	1912	64.4	216	135	6	M8x30	41
48	80	86	30	36	47	55	2137	73.6	221	142	6	M8x30	41
50	80	86	30	36	47	55	2167	86.0	221	143	6	M8x30	41
55	85	91	30	36	47	55	2677	86.0	221	143	8	M8x30	41
60	90	96	30	36	47	55	2853	86.0	197	131	8	M8x30	41
65	95	101	30	36	47	55	3500	86.0	206	142	8	M8x30	41
70	110	116	40	46	57	67	5717	135.0	221	142	8	M10x35	83
75	115	121	40	46	62	72	6207	135.0	216	148	8	M10x35	83
80	120	126	40	46	62	72	6707	135.0	198	139	8	M10x35	83
85	125	131	40	46	62	72	8002	169.0	216	157	10	M10x35	83
90	130	136	40	46	62	72	8502	169.0	197	143	10	M10x35	83
95	135	141	40	46	62	72	10002	169.0	187	138	10	M10x35	83
100	145	151	46	52	77	89	13336	198.0	197	148	8	M12x45	145
110	155	161	46	52	77	89	14582	198.0	197	178	8	M12x45	145
120	165	171	46	52	77	89	19083	248.0	216	158	10	M12x45	145
130	180	186	46	52	77	89	20417	297.0	198	143	12	M12x45	145
140	190	196	51	59	84	90	24920	342.0	188	138	8	M14x45	230
150	200	206	51	59	84	90	30130	342.0	198	149	10	M14x45	230



Eastlock

EASTLOCK 07 Clamping Element

Dimensions							Transmission		Contact Pressure		Lock Screws (DIN 912-12.9)		
$\varnothing d$ mm	$\varnothing D$ mm	$\varnothing D_1$ mm	L_1 mm	L_2 mm	L_3 mm	L mm	Torque M_t Nm	Axial Force F_t kN	Shaft P N/mm ²	Hub P_1 N/mm ²	Qty.	Size	Tightening Torque T_s Nm
19	47	56	17	22	28	34	274	28	215	93	5	M6x20	17
20	47	56	17	22	28	34	284	32	215	93	5	M6x20	17
22	47	56	17	22	28	34	314	32	196	93	5	M6x20	17
24	50	59	17	22	28	34	401	32	215	107	6	M6x20	17
25	50	59	17	22	28	34	441	34	210	107	6	M6x20	17
28	55	64	17	22	28	34	490	34	196	98	6	M6x20	17
30	55	64	17	22	28	34	529	34	186	98	6	M6x20	17
32	60	69	17	22	28	34	755	46	210	112	8	M6x20	17
35	60	69	17	22	28	34	824	46	186	107	8	M6x20	17
38	65	74	17	22	28	34	892	46	191	112	8	M6x20	17
40	65	74	17	22	28	34	941	46	186	102	8	M6x20	17
45	75	84	20	25	33	41	1716	64	225	132	7	M8x25	41
50	80	84	20	25	33	41	1893	85	205	127	7	M8x25	41
55	85	94	20	25	33	41	2403	85	210	132	8	M8x25	41
60	90	99	20	25	33	41	2648	85	186	122	8	M8x25	41
65	95	104	20	25	33	41	3188	85	196	132	9	M8x25	41
70	110	119	24	30	40	50	4905	119	215	137	8	M10x30	83
75	115	124	24	30	40	50	5150	119	195	127	8	M10x30	83
80	120	129	24	30	40	50	5490	119	185	122	8	M10x30	83
85	125	134	24	30	40	50	6620	132	195	132	9	M10x30	83
90	130	139	24	30	40	50	6960	132	185	127	9	M10x30	83
95	135	144	24	30	40	50	8190	132	195	137	10	M10x30	83
100	145	154	26	32	44	56	10100	170	205	145	8	M12x35	145
110	155	164	26	32	44	56	11030	170	190	135	8	M12x35	145
120	165	174	26	32	44	56	13600	200	205	142	9	M12x35	145
130	180	189	34	40	52	64	19000	270	186	137	12	M12x35	145
140	190	199	34	40	54	68	21800	270	177	127	9	M14x40	230
150	200	209	34	40	54	68	25600	320	185	137	10	M14x40	230



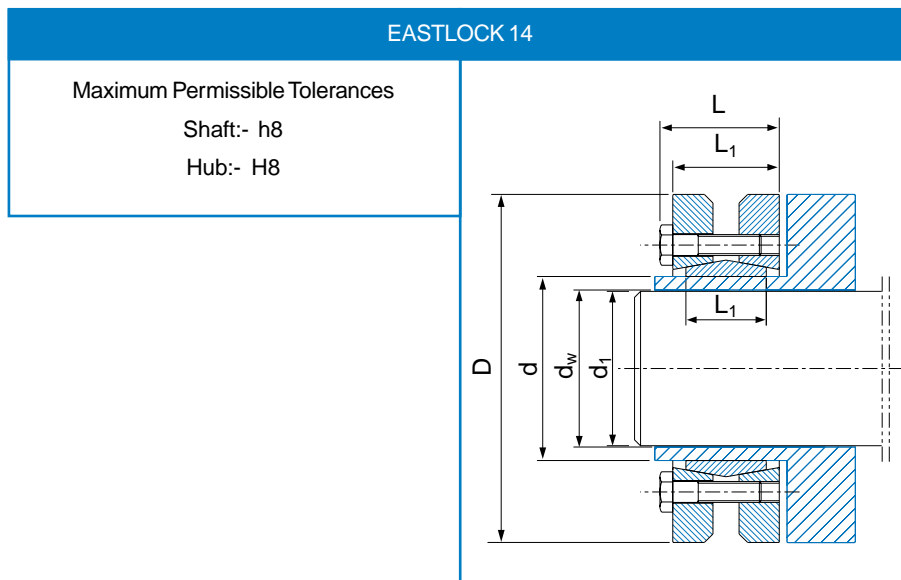
EASTLOCK 14 Clamping Element

Dimensions							Transmission	Axial	Contact	Lock Screws (DIN 912-12.9)		
Ød	ØD	dw	L ₁	L ₂	L	C _(dw-d1)	Torque	Force	Press	Qty.	Size	Tightening
mm	mm	mm	mm	mm	mm	mm	Mt	Ft	Shaft			Torque
							Nm	kN	P			Ts
									N/mm ²			Nm
24	50	19	14	19.5	23.0	0.017	170	15.0	286.0	6	M5x18	4.9
		20					210	18.5				
		21					250	21.0				
30	60	24	16	21.5	25.0	0.017	300	15.7	233.0	7	M5x18	4.9
		25					340	23.7				
		26					380	26.7				
36	72	28	18	23.5	27.5	0.032	440	27.0	307.0	5	M6x20	11.8
		30					570	38.0				
		31					630	43.0				
44	80	32	20	25.5	29.5	0.032	620	44.0	317.0	7	M6x20	11.8
		35					780	49.0				
		36					860	54.0				
50	90	38	22	27.5	31.5	0.032	940	48.8	289.0	8	M6x25	11.8
		40					1160	58.8				
		42					1380	69.0				
55	100	42	23	30.5	34.5	0.032	1160	48.0	252.0	8	M6x25	11.8
		45					1520	61.7				
		48					1880	77.0				
62	110	48	23	30.5	34.5	0.048	1850	69.0	279.0	10	M6x25	11.8
		50					2200	80.9				
		52					2400	90.0				
68	115	50	23	30.5	34.5	0.048	2000	71.2	255.0	10	M6x25	11.8
		55					2500	80.9				
		60					3150	95.7				
75	138	55	25	32.5	37.8	0.048	2500	94.4	273.0	7	M8x30	29.4
		60					3200	111.0				
		65					3950	126.0				
80	145	60	25	32.5	37.8	0.048	3200	99.3	256.0	7	M8x30	29.4
		65					3900	115.0				
		70					4600	130.0				
90	155	65	30	39.0	44.3	0.048	4750	141.0	271.0	10	M8x35	29.4
		70					6000	160.0				
		75					7250	178.0				
100	170	70	34	44.0	49.3	0.048	6900	163.0	258.0	12	M8x35	29.4
		75					7500	182.0				
		80					9000	202.0				
110	185	75	39	50.0	56.4	0.048	7200	185.0	244.0	9	M10x40	57.8
		80					9000	207.0				
		85					10800	221.0				

Eastlock

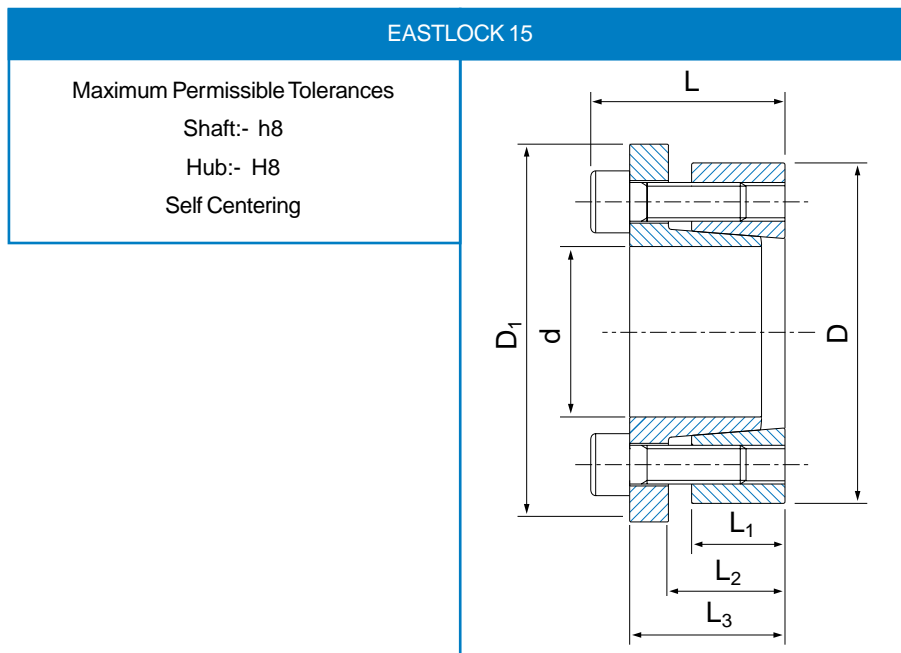
EASTLOCK 14 Clamping Element

Dimensions							Transmission Torque Mt Nm	Axial Force Ft kN	Contact Press Shaft P N/mm ²	Lock Screws (DIN 912-12.9)		
Ød mm	ØD mm	d _w mm	L ₁ mm	L ₂ mm	L mm	C _(d_w-d₁) mm				Qty.	Size	Tightening Torque T _s Nm
125	215	85	42	54.0	60.4	0.069	11000	240.0	266.0	12	M10x40	57.8
		90					13000	262.0				
		95					15000	285.0				
140	230	95	46	60.5	68.0	0.069	15100	308.0	264.0	10	M12x45	98.0
		100					17600	331.0				
		105					20100	357.0				
155	265	105	50	64.5	72.0	0.069	22000	366.0	263.0	12	M12x50	98.0
		110					25000	392.0				
		115					28000	417.0				
165	290	115	56	71.0	81.0	0.069	31000	513.0	277.0	8	M16x55	245.0
		120					25000	544.0				
		125					39000	564.0				



EASTLOCK 15 Clamping Element

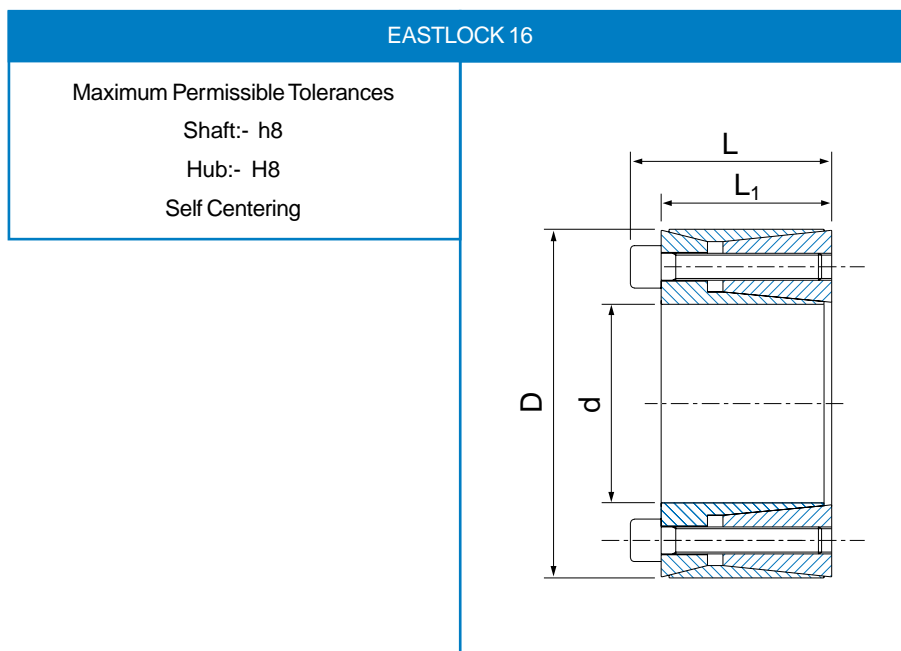
Dimensions							Transmission Torque Mt Nm	Contact Pressure		Lock Screws (DIN 912-12.9) Tightening		
Ød mm	ØD mm	ØD ₁ mm	L ₁ mm	L ₂ mm	L ₃ mm	L mm		Shaft P N/mm ²	Hub P ₁ N/mm ²	Qty.	Size	Torque Ts Nm
14	55	62	17	22	31	39	282	458	118	4	M8x25	41
16	55	62	17	22	31	39	313	400	118	4	M8x25	41
18	55	62	17	22	31	39	353	356	118	4	M8x25	41
19	55	62	17	22	31	39	372	337	118	4	M8x25	41
20	55	62	17	22	31	39	392	320	118	4	M8x25	41
22	55	62	17	22	31	39	431	290	118	4	M8x25	41
24	55	62	17	22	31	39	470	265	118	4	M8x25	41
25	55	62	17	22	31	39	490	255	118	4	M8x25	41
28	55	62	17	22	31	39	549	228	118	4	M8x25	41
30	55	62	17	22	31	39	588	213	118	4	M8x25	41
24	65	72	17	22	31	39	617	332	122	5	M8x25	41
25	65	72	17	22	31	39	637	320	122	5	M8x25	41
28	65	72	17	22	31	39	725	285	122	5	M8x25	41
30	65	72	17	22	31	39	764	267	122	5	M8x25	41
32	65	72	17	22	31	39	823	250	122	5	M8x25	41
35	65	72	17	22	31	39	902	228	122	5	M8x25	41
38	65	72	17	22	31	39	970	210	122	5	M8x25	41
40	65	72	17	22	31	39	1029	200	122	5	M8x25	41
30	80	87	20	25	33	41	1082	315	120	7	M8x25	41
32	80	87	20	25	33	41	1155	298	120	7	M8x25	41
35	80	87	20	25	33	41	1260	272	120	7	M8x25	41
38	80	87	20	25	33	41	1370	250	120	7	M8x25	41
40	80	87	20	25	33	41	1440	238	120	7	M8x25	41
42	80	87	20	25	33	41	1510	226	120	7	M8x25	41
45	80	87	20	25	33	41	1620	212	120	7	M8x25	41
48	80	87	20	25	33	41	1735	198	120	7	M8x25	41
50	80	87	20	25	33	41	1806	190	120	7	M8x25	41



Eastlock

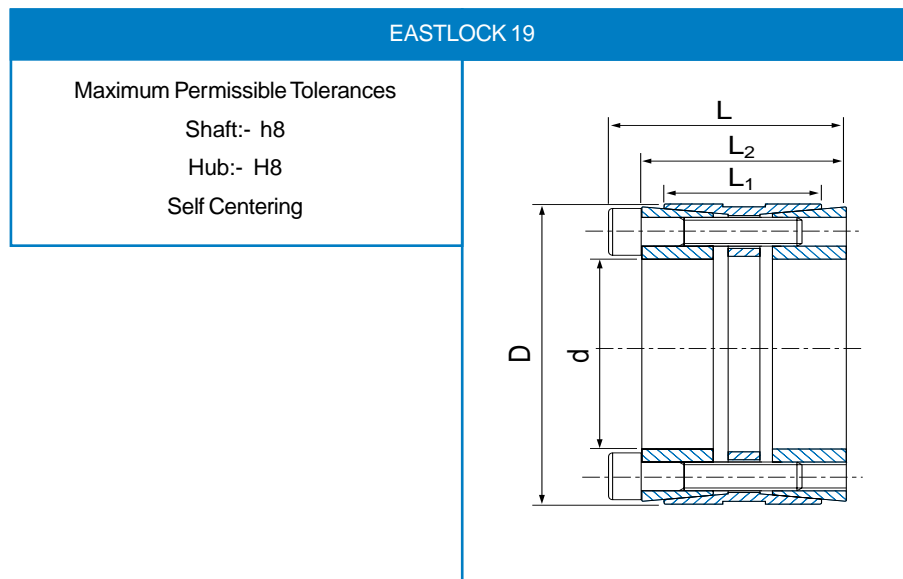
EASTLOCK 16 Clamping Element

Dimensions				Transmission		Contact Pressure		Lock Screws (DIN 912-12.9)		
$\varnothing d$ mm	$\varnothing D$ mm	L_1 mm	L mm	Torque M_t Nm	Axial Force F_t kN	Shaft P N/mm ²	Hub P_1 N/mm ²	Qty.	Size	Tightening Torque T_s Nm
16	32	18.0	24	72	9	83	41	4	M4x16	5
18	40	18.0	24	210	23	83	74	4	M6x18	17
19	41	18.0	24	222	23	155	72	4	M6x18	17
20	42	18.0	24	233	23	147	70	4	M6x18	17
22	44	18.0	24	257	23	134	67	4	M6x18	17
24	46	18.0	24	420	35	184	96	6	M6x18	17
25	47	18.0	24	438	35	177	94	6	M6x18	17
28	50	18.0	24	490	35	158	88	6	M6x18	17
30	52	18.0	24	525	35	147	85	6	M6x18	17
32	54	18.0	24	560	35	138	82	6	M6x18	17
35	57	21.5	28	459	26	79	49	6	M6x18	17
36	58	21.5	28	630	35	103	64	8	M6x18	17
38	60	21.5	28	665	35	97	62	8	M6x18	17
40	62	21.5	28	700	35	93	60	8	M6x18	17
42	70	28.0	36	1730	82	159	96	8	M8x22	40
45	73	28.0	36	1853	82	149	92	8	M8x22	40
48	76	28.0	36	1977	82	139	88	8	M8x22	40
50	78	28.0	36	2059	82	134	86	8	M8x22	40
55	83	28.0	36	2589	94	139	92	8	M8x22	40
60	88	28.0	36	2824	94	127	87	8	M8x22	40
65	93	35.0	45	3060	94	94	66	8	M8x22	40
70	105	35.0	45	4671	133	124	83	8	M10x25	81
75	110	35.0	45	5004	133	116	79	8	M10x25	81
80	115	35.0	45	6005	150	122	85	9	M10x25	81
85	120	35.0	45	7089	167	127	90	10	M10x25	81
90	125	35.0	45	7506	167	120	87	10	M10x25	81
100	138	35.0	45	8340	167	108	79	10	M10x25	81



EASTLOCK 19 Clamping Element

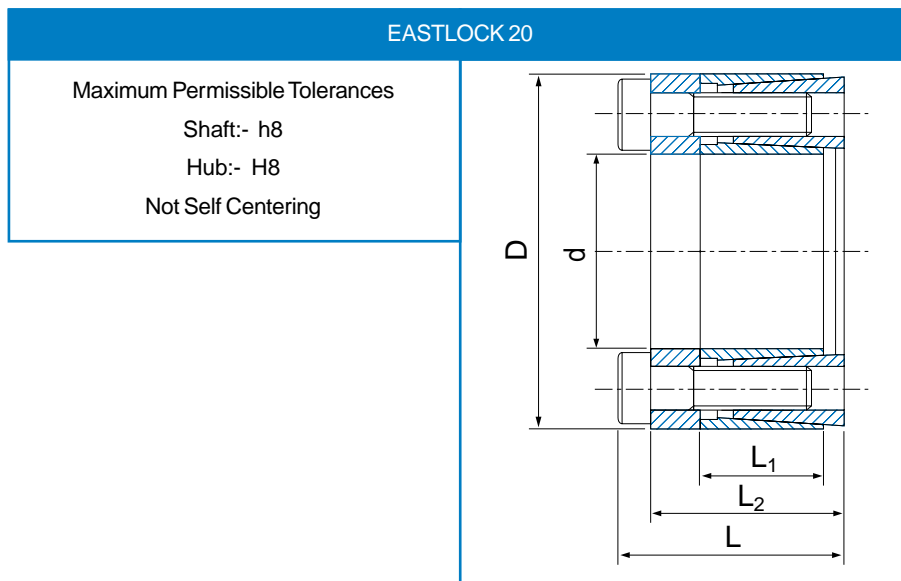
Dimensions					Transmission		Contact Pressure		Locking Screws (DIN 912-12.9)		
Ød	ØD	L ₁	L ₂	L	Torque	Axial Force	Shaft	Hub	Qty.	Size	Tightening Torque
mm	mm	mm	mm	mm	Mt Nm	Ft kN	P N/mm ²	P ₁ N/mm ²			T _s Nm
25	55	32	40	46	840	67	295	134	6	M6x35	18
28	55	32	40	46	940	67	264	134	6	M6x35	18
30	55	32	40	46	1000	67	246	134	6	M6x35	18
35	60	44	54	60	1300	74	174	101	7	M6x45	18
38	75	44	54	62	2600	74	296	150	7	M8x50	41
40	75	44	54	62	2900	145	281	150	7	M8x50	41
42	75	44	54	62	2930	145	268	150	7	M8x50	41
45	75	44	54	62	3260	145	250	150	7	M8x50	41
48	80	56	64	62	3800	155	207	124	8	M8x55	41
50	80	56	64	72	4150	155	200	98	8	M8x55	41
55	85	56	64	72	5150	186	205	104	9	M8x55	41
60	90	56	64	72	6200	207	202	106	10	M8x55	41
65	95	56	64	72	6750	207	187	100	10	M8x55	41
70	110	70	78	88	11500	329	223	114	10	M10x60	83
75	115	70	78	88	12060	329	223	114	10	M10x60	83
80	120	70	78	88	14500	360	215	115	11	M10x60	83
85	125	70	78	88	15100	360	215	115	12	M10x60	83
90	130	70	78	88	17600	390	208	115	12	M10x60	83
95	135	70	78	88	18300	390	208	115	12	M10x60	83
100	145	90	100	112	23300	467	200	107	11	M12x80	145
110	155	90	100	112	30400	553	198	110	12	M12x80	145
120	165	90	100	112	37000	617	212	120	14	M12x80	145
130	180	104	116	130	49000	759	192	112	12	M14x90	230
140	190	104	116	130	59000	843	208	124	14	M14x90	230
150	200	104	116	130	67000	897	208	127	15	M14x90	230
160	210	104	116	130	76000	950	208	128	16	M14x90	230
170	225	134	148	164	10200	1223	182	113	16	M16x110	360
180	235	134	148	164	11500	1289	184	115	16	M16x111	360
190	250	134	148	164	13000	1363	186	116	16	M16x112	360
200	260	134	148	164	14370	1438	177	112	16	M16x113	360
220	285	134	148	164	17400	1582	188	115	16	M16x114	360



Eastlock

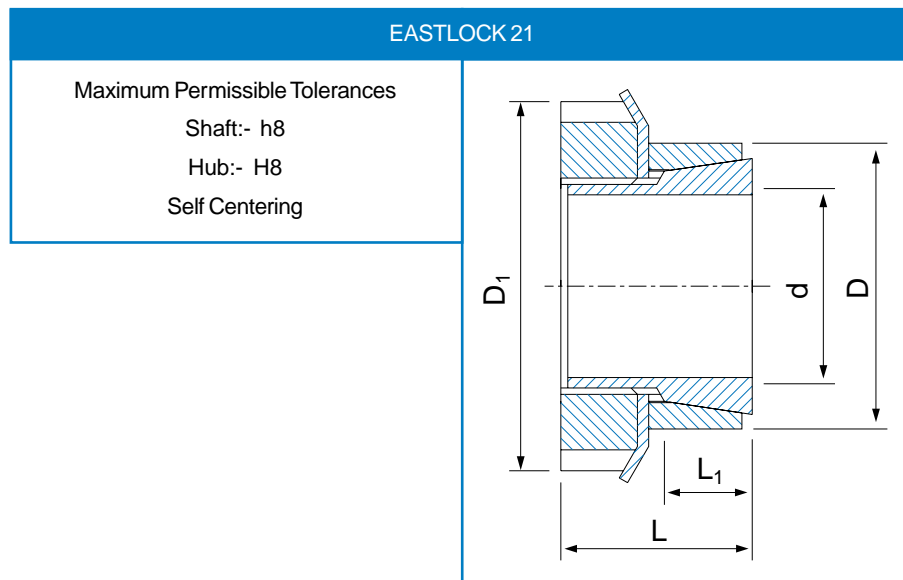
EASTLOCK 20 Clamping Element

Dimensions					Transmission Torque Mt Nm	Axial Force Ft kN	Contact Pressure		Locking Screws (DIN 912-12.9)		
Ød mm	ØD mm	L ₁ mm	L ₂ mm	L mm			Shaft P N/mm ²	Hub P ₁ N/mm ²	Qty.	Size	Tightening Torque T _s Nm
18	40	12	18.5	24.5	190	21	260	120	6	M6x15	17
19	41	12	18.5	24.5	210	22	260	120	6	M6x15	17
20	42	12	18.5	24.5	240	24	250	120	6	M6x15	17
24	46	12	18.5	24.5	290	24	250	120	6	M6x15	17
25	47	12	18.5	24.5	330	26	230	120	8	M6x15	17
28	50	12	18.5	24.5	370	26	220	120	8	M6x15	17
30	52	12	18.5	24.5	430	28	210	120	8	M6x15	17
35	57	15	22.0	28.0	610	35	170	100	12	M6x15	17
38	60	15	22.0	28.0	680	35	170	100	12	M6x15	17
40	62	15	22.0	28.0	780	39	170	100	12	M6x15	17
42	70	18	28.0	36.0	1480	70	190	110	12	M8x22	41
45	73	18	28.0	36.0	1500	66	210	130	12	M8x22	41
48	76	18	28.0	36.0	1550	66	210	130	12	M8x22	41
50	78	18	28.0	36.0	1650	66	190	120	12	M8x22	41
55	83	18	28.0	36.0	2000	72	190	120	16	M8x22	41
60	88	18	28.0	36.0	2350	78	190	120	16	M8x22	41
70	105	22	35.0	45.0	3900	111	180	120	12	M10x25	83
80	115	22	35.0	45.0	4800	120	180	120	16	M10x25	83

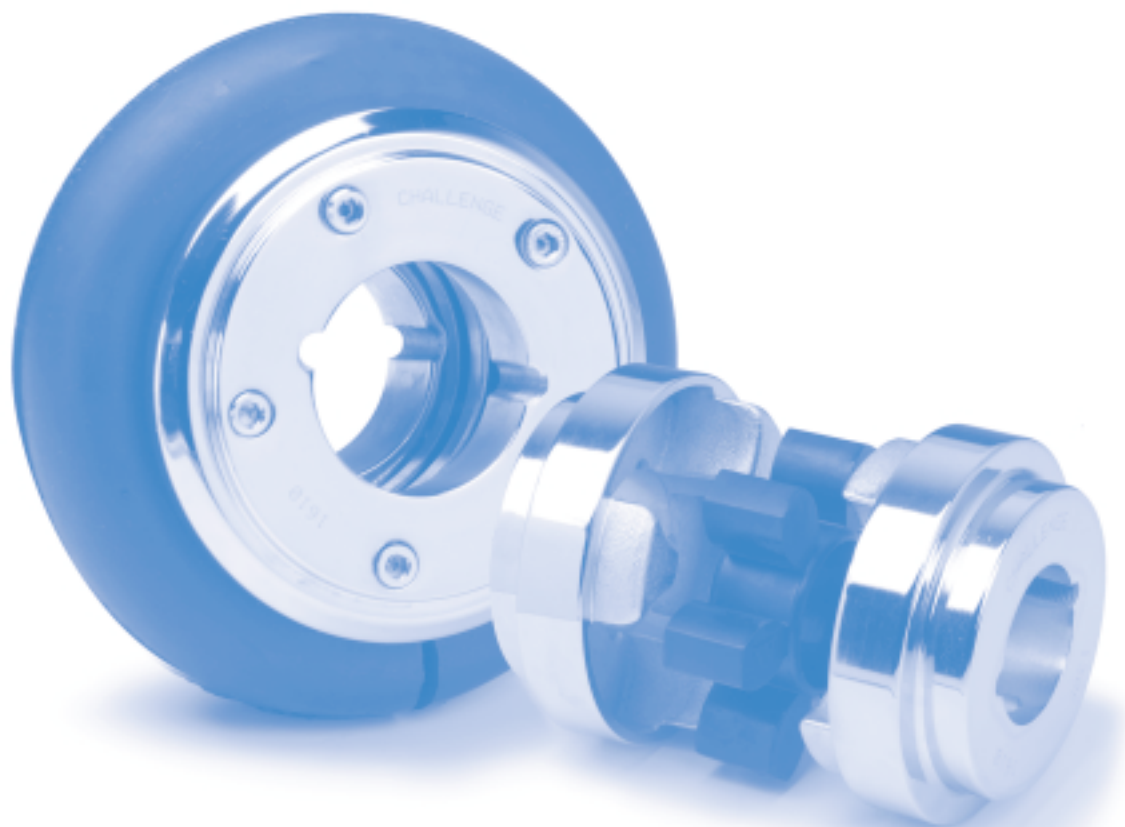


EASTLOCK 21 Clamping Element

Dimensions					Transmission Torque Mt Nm	Axial Force Ft kN	Contact Pressure		Locking Screws (DIN 912-12.9)		
Ød mm	ØD mm	ØD ₁ mm	L ₁ mm	L mm			Shaft P N/mm ²	Hub P ₁ N/mm ²	Qty.	Size	Tightening Torque T _s Nm
14	25	32	20	30	91	13	124	74	1	M20x1	92
15	25	32	20	30	99	13	117	70	1	M20x1	92
16	25	32	20	30	80	10	83	53	1	M20x1	70
17	25	32	20	32	99	12	91	62	1	M22x1.5	91
18	30	32	20	32	193	21	158	95	1	M25x1.5	188
19	30	38	20	32	167	18	123	78	1	M25x1.5	154
20	30	38	20	32	136	14	90	60	1	M25x1.5	119
22	35	45	25	36	345	31	151	95	1	M30x1.5	327
24	35	45	25	36	262	22	96	66	1	M30x1.5	228
25	35	45	25	36	209	17	71	51	1	M30x1.5	175
28	40	52	25	37	447	32	121	85	1	M35x1.5	387
30	40	52	25	37	298	20	70	53	1	M35x1.5	242
32	45	52	30	44	701	44	121	86	1	M40x1.5	606
35	45	58	30	44	403	23	58	45	1	M40x1.5	319
36	50	58	30	45	283	16	39	28	1	M40x1.5	217
38	50	58	30	45	805	42	99	75	1	M45x1.5	657
40	50	65	30	45	524	26	58	46	1	M45x1.5	407
42	55	65	30	46	1184	56	119	91	1	M50x1.5	966
45	55	70	30	46	661	29	58	47	1	M50x1.5	503
48	60	75	30	46	1267	53	97	78	1	M55x2	1000
50	60	75	30	46	813	33	58	48	1	M55x2	616
55	65	80	30	46	768	28	45	38	1	M60x2	574
60	70	85	30	52	1420	47	70	60	1	M65x2	1045



COUPLINGS



FFX Tyre Couplings

FFX Tyre Coupling Data

Coupling Size	Bush Size	Max Bore		A	B	C	E¶	G	Types F & H		Type B		Clamping Screw	Weight# (kg)	Inertia# (kgm ²)
		Metric	Inch						F	D	F	D			
040B	–	32	–	104	–	82	11.0	29	–	–	33.0	22	M5	0.8	0.00074
040F	1008	25	1"	104	–	82	11.0	29	33.0	22	–	–	–	0.8	0.00074
040H	1008	25	1"	104	–	82	11.0	29	33.0	22	–	–	–	0.8	0.00074
050B	–	38	–	133	79	100	12.5	38	–	–	45.0	32	M5	1.2	0.00115
050F	1210	32	1.1/4"	133	79	100	12.5	38	38.0	25	–	–	–	1.2	0.00115
050H	1210	32	1.1/4"	133	79	100	12.5	38	38.0	25	–	–	–	1.2	0.00115
060B	–	45	–	165	70	125	16.5	38	–	–	55.0	38	M6	2.0	0.0052
060F	1610	42	1.5/8"	165	103	125	16.5	38	42.0	25	–	–	–	2.0	0.0052
060H	1610	42	1.5/8"	165	103	125	16.5	38	42.0	25	–	–	–	2.0	0.0052
070B	–	50	–	187	80	144	11.5	–	–	–	47.0	35	M10	3.1	0.009
070F	2012	50	2"	187	80	144	11.5	42	44.0	32	–	–	–	3.1	0.009
070H	1610	42	1.5/8"	187	80	144	11.5	38	42.0	25	–	–	–	3.0	0.009
080B	–	60	–	211	98	167	12.5	–	–	–	55.0	42	M10	4.9	0.018
080F	2517	60	2.1/2"	211	97	167	12.5	48	58.0	45	–	–	–	4.9	0.018
080H	2012	50	2"	211	98	167	12.5	42	45.0	32	–	–	–	4.6	0.017
090B	–	70	–	235	112	188	13.5	–	–	–	63.5	49	M12	7.1	0.032
090F	2517	60	2.1/2"	235	108	188	13.5	48	59.5	45	–	–	–	7.0	0.031
090H	2517	60	2.1/2"	235	108	188	13.5	48	59.5	45	–	–	–	7.0	0.031
100B	–	80	–	254	125	216	13.5	–	–	–	70.5	56	M12	9.9	0.055
100F	3020	75	3"	254	120	216	13.5	55	65.5	51	–	–	–	9.9	0.055
100H	2517	60	2.1/2"	254	113	216	13.5	48	59.5	45	–	–	–	9.4	0.054
110B	–	90	–	279	128	233	12.5	–	–	–	75.5	63	M12	12.5	0.081
110F	3020	75	3"	279	134	233	12.5	55	63.5	51	–	–	–	11.7	0.078
110H	3020	75	3"	279	134	233	12.5	55	63.5	51	–	–	–	11.7	0.078
120B	–	100	–	314	143	264	14.5	–	–	–	84.5	70	M16	16.9	0.137
120F	3525	100	4"	314	140	264	14.5	67	79.5	65	–	–	–	16.5	0.137
120H	3020	75	3"	314	140	264	14.5	55	65.5	51	–	–	–	15.9	0.13
140B	–	130	–	359	178	311	16.0	–	–	–	110.5	94	M20	22.2	0.254
140F	3525	100	4"	359	178	311	16.0	67	81.5	65	–	–	–	22.3	0.255
140H	3525	100	4"	359	178	311	16.0	67	81.5	65	–	–	–	22.3	0.255
160B	–	140	–	402	187	345	15.0	–	–	–	117.0	102	M20	35.8	0.469
160F	4030	115	4.1/2"	402	197	345	15.0	80	92.0	77	–	–	–	32.5	0.38
160H	4030	115	4.1/2"	402	197	345	15.0	80	92.0	77	–	–	–	32.5	0.38
180B	–	150	–	470	200	398	23.0	–	–	–	137.0	114	M20	49.1	0.871
180F	4535	125	5"	470	205	398	23.0	89	112.0	89	–	–	–	42.2	0.847
180H	4535	125	5"	470	205	398	23.0	89	112.0	89	–	–	–	42.2	0.847
200B	–	150	–	508	200	429	24.0	–	–	–	138.0	114	M20	58.2	1.301
200F	4535	125	5"	508	205	429	24.0	89	113.0	89	–	–	–	53.6	1.281
200H	4535	125	5"	508	205	429	24.0	89	113.0	89	–	–	–	53.6	1.281
220B	–	160	–	562	218	474	27.5	–	–	–	154.5	127	M20	79.6	2.142
220F	5040	125	5"	562	223	474	27.5	92	129.5	102	–	–	–	72.0	2.104
220H	5040	125	5"	562	223	474	27.5	92	129.5	102	–	–	–	72.0	2.104
250B	–	190	–	628	254	532	29.5	–	–	–	161.5	132	M20	104.0	3.505

Notes

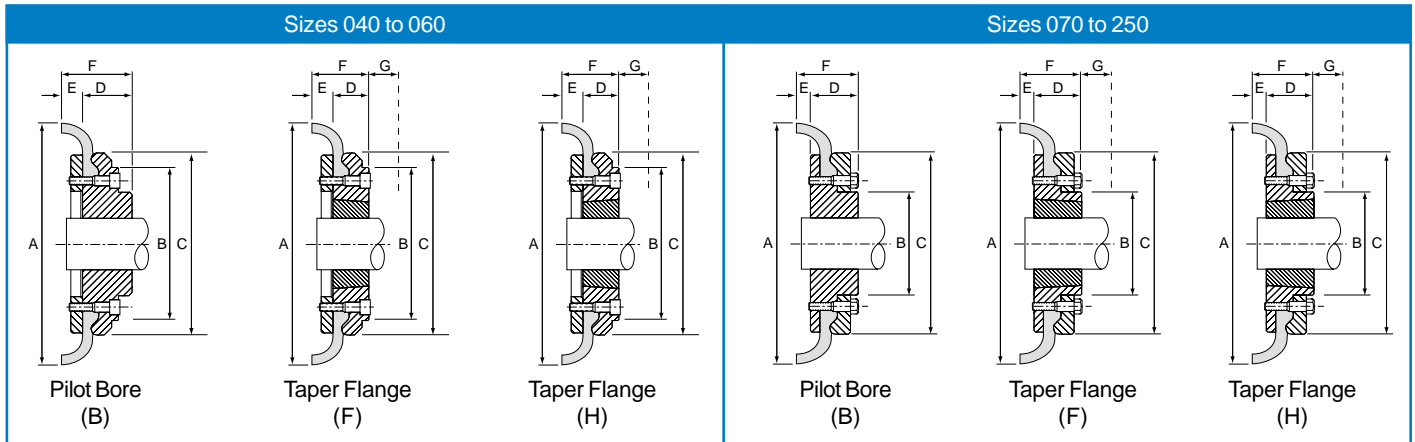
G = Wrench clearance needed to allow for the tightening or loosening of the bush on the shaft as well as the tyre clamping screws.

E¶ = Half the distance required between flanges faces

= Weight and inertia figures are for a single flange including mid range bore, clamping ring, screws and half tyre.

FFX Tyre Couplings

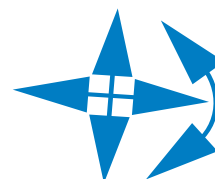
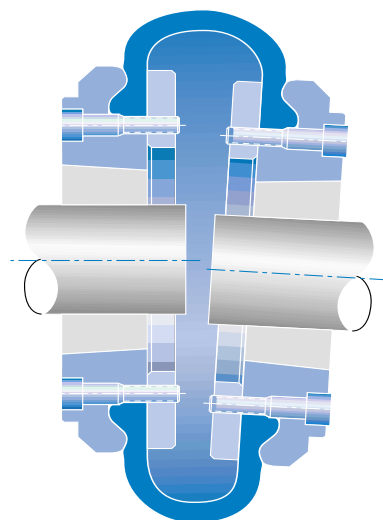
FFX Tyre Coupling Data



FFX Coupling Installation and Operational Data

Coupling Size	Flange Face Spacing (mm)	Gap Between Tyre Ends (mm)	Nominal Torque (Nm)	Max Speed (rev/min)	Max Par Mis (mm)	Max End Float (mm)	Clamping Screw Size	Clamping Screw Torque (Nm)
40	22	2	24	4500	1.1	1.3	M6	15
50	25	2	66	4500	1.3	1.7	M6	15
60	33	2	127	4000	1.6	2.0	M6	15
70	23	3	250	3600	1.9	2.3	M8	24
80	25	3	375	3100	2.1	2.6	M8	24
90	27	3	500	3000	2.4	3.0	M10	40
100	27	3	675	2600	2.6	3.3	M10	40
110	25	3	875	2300	2.9	3.7	M10	40
120	29	3	1330	2050	3.2	4.0	M12	50
140	32	5	2325	1800	3.7	4.6	M12	55
160	30	5	3770	1600	4.2	5.3	M16	80
180	46	6	6270	1500	4.8	6.0	M16	105
200	48	6	9325	1300	5.3	6.6	M16	120
220	55	6	11600	1100	5.8	7.3	M20	165
250	59	6	14675	1000	6.6	8.2	M20	165

NB. All flexible tyres have an angular misalignment capacity up to 4 deg.



Accommodate simultaneous maximum misalignment in all planes.

HRC Couplings

HRC Common Data

Coupling No	Nominal Torque Nm	Overall Diameter A	Hub Diameter B	Assembled Length F	Element		Parallel Misalignment (mm)	Weight (kg)	Assembled Length (L)		
					Ring Dia E	Ring Width G			FF, FH, HH	FB, HB	BB
70	31	69	60	25.5	31	18.5	0.3	1.00	65.5	65.5	65.5
90	80	85	70	30.5	32	22.5	0.3	1.17	69.5	76.5	82.5
110	160	112	100	45.5	45	29.5	0.3	5.00	82.5	100.5	119.5
130	315	130	105	53.5	50	36.5	0.4	5.46	89.5	110.5	131.5
150	600	150	115	60.5	62	40.5	0.4	7.11	107.5	129.5	152.5
180	950	180	125	73.5	77	49.5	0.4	16.65	142.5	165.5	189.5
230	2000	225	155	85.5	99	59.5	0.5	26.05	164.5	202.5	239.5
280	3150	275	206	105.5	119	74.5	0.5	50.05	207.5	246.5	285.5

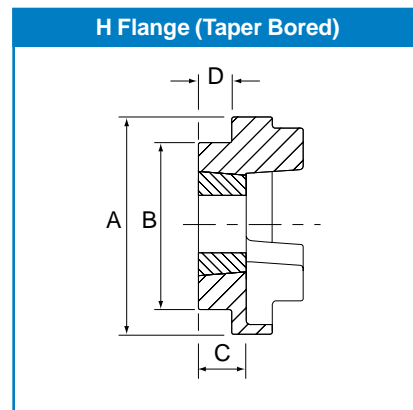
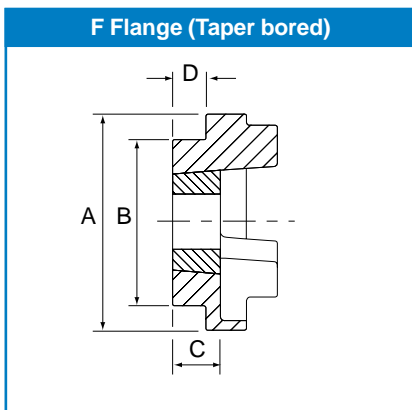
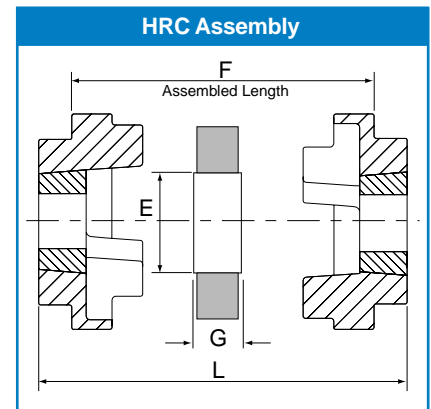
Angular misalignmet capacity up to 1 deg

Mass is for an FF, FH or HH coupling with mid range Taper Lock Bushes

F refers to combinations of flanges: FF, FH, HH, FB, HB, BB.

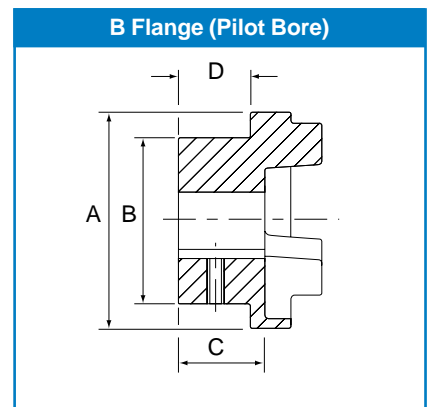
HRC Type F & H

Coupling No	Bush size	Max. Bore		Shoulder Width D	Hub Width C
		(mm)	(ins)		
70	1008	25	1	20.0	23.5
90	1108	28	1.1/8	19.5	23.5
110	1610	42	1.5/8	18.5	26.5
130	1610	42	1.5/8	18.0	26.5
150	2012	50	2	23.5	33.5
180	2517	60	2.1/2	34.5	46.5
230	3020	75	3	39.5	52.5
280	3525	100	4	51.0	66.5



HRC Type B

Coupling No	Max. Bore (mm)	Pilot Bore (mm)	Keyway Screw Size	Shoulder Width D	Hub Width C
70	32	8	M6	20	23.5
90	42	10	M6	26	30.5
110	55	10	M10	37	45.5
130	60	15	M10	39	47.5
150	70	20	M10	46	56.5
180	80	25	M10	58	70.5
230	100	25	M12	77	90.5
280	115	30	M16	90	105.5



All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

Jaw Couplings

Jaw Coupling Data

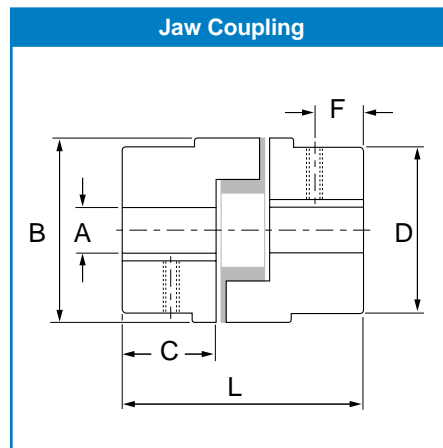
Coupling No	Nominal Torque (Nm)	Pilot Bore A (mm)	Max Bore A (mm)	Overall Diameter B	Assembled Length L	Hub Width C	Hub Diameter D	Set Screw Position F	Set Screw Size	Complete Weight (kg)
035	-	3	8	16.0	20	7	16.0	3.0	M3	0.06
050	3.51	6	14	27.5	44	16	27.5	6.5	M6	0.10
070	5.77	9	19	35.0	51	19	35.0	9.5	M6	0.25
075	11.90	9	24	44.5	54	21	44.5	8.0	M6	0.45
090	19.20	9	24	54.0	54	21	54.0	8.7	M6	0.55
095	25.80	9	28	54.0	64	25	54.0	11.5	M6	0.65
100	55.40	12	35	65.0	89	35	65.0	12.5	M8	1.60
110	105.00	15	42	84.0	108	43	84.0	20.5	M10	3.00
150	150.00	15	48	96.0	115	45	96.0	22.5	M10	4.90
190	200.00	19	55	115.0	133	54	102.0	22.5	M12	7.00
225	280.00	19	60	127.0	153	64	108.0	25.5	M12	9.00

Angular misalignmet capacity up to 1 deg

Parallel misalignment capacity up to 0.38mm

Mass is for a complete coupling with a pilot bore

Nitrile insert temperature range -40 degC to 100 degC



Chain Couplings

Chain Coupling Data

Coupling Size	Chain Size	Bore		Casing O.D A	Casing Width B	Assembled Width C	Hub Length D	Hub Diam E	Bolt Centres F	Complete Weight (kg)
		Min (mm)	Max (mm)							
3012	35-2	12	15	70	62	65	28	25	57	0.5
4012	40-2	12	20	78	72	78	36	31	61	1.0
4014	40-2	12	25	85	75	80	36	43	72	1.4
4016	40-2	14	30	92	75	80	36	50	77	1.8
5014	50-2	14	35	101	84	100	45	53	82	2.5
5016	50-2	16	40	111	85	100	45	60	92	3.2
5018	50-2	16	45	123	85	100	45	70	106	4.0
6018	60-2	20	55	144	106	122	54	85	122	7.2
6020	60-2	20	70	160	108	123	54	98	132	9.5
6022	60-2	25	75	168	116	123	54	110	145	11.3
8018	80-2	30	75	190	128	140	67	110	160	14.7
8020	80-2	30	85	211	138	144	67	120	184	18.2
8022	80-2	35	95	226	138	155	67	140	196	23.3
10020	100-2	40	110	280	152	176	91	160	250	36.0
12018	120-2	40	120	305	180	196	119	170	280	49.0
12022	120-2	40	150	355	180	220	119	210	335	77.0

Chain Coupling Selection

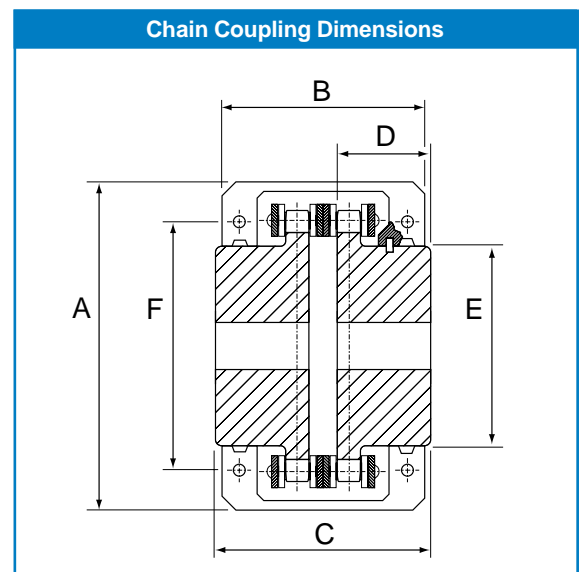
In general, the torque capacity of the coupling exceeds the normal torque transmitted by the largest shaft size that the coupling can accommodate.

Therefore, select the smallest coupling which accommodates both shaft diameters.

Where there is reverse operation, shock loads, or any other severe operating condition, it is recommended that the next coupling size up is selected.

Operation

In order to ensure that the maximum service life of the coupling is achieved, the cover together with the supplied 'O' rings should always be used. This is even more important when the drive is operating at high speeds or in a moist environment. The space between the cover and chain, should be filled with a soft to medium consistency grease.



TORQUE LIMITERS



Torque Limiters

Challenge Torque Limiter

Prevent Machine Damage and Eliminate Costly Down Time.

The Challenge Torque limiter is a mechanical protective device that limits the transmitted torque in a drive system by slipping when the torque demand exceeds a preset value. This excessive torque is normally a result of shock loads, overloads, or machine jams. The torque limiter automatically re-engages when the overload is removed. No manual re-setting is required. Challenge Torque Limiters prevent machine damage, thus eliminating costly downtime.

Challenge Torque Limiters utilize spring loaded friction discs for their operation and slip torque is preset by adjustment of the spring force using the adjustment nut or bolts.

Challenge Torque Limiters can be used with platewheel sprockets, gears, sheaves, or flange plates as the center member. This center member is clamped between two friction discs.

Because the Challenge Torque Limiter ratings are realistic and consistent with optimum spring loads, they permit longer slip time, maintain re-engagement at preset torque and provide long lasting machine protection. This is an important advantage over the shear-pin mechanism which only serves as a one-shot remedy.



Sizes 50-1 and 50-2

- Single Nut Adjustment
- Lock Washer to prevent the nut from loosening



Sizes 65-1 and 65-2 Sizes 89-1 and 89-2

- Single Nut Adjustment
- Lock Washer to prevent the nut from loosening



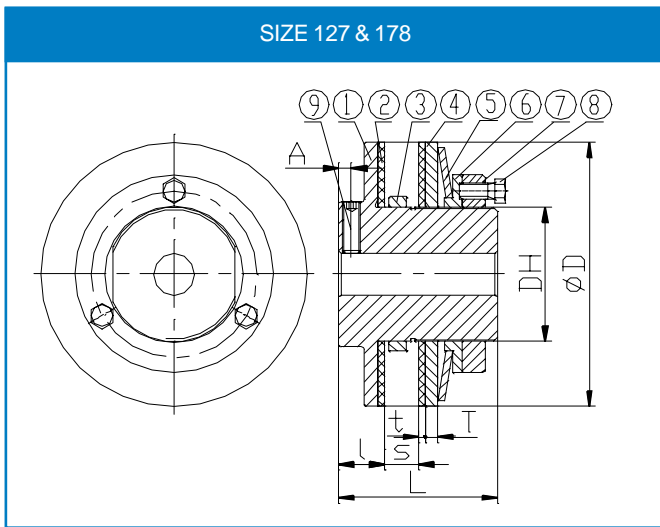
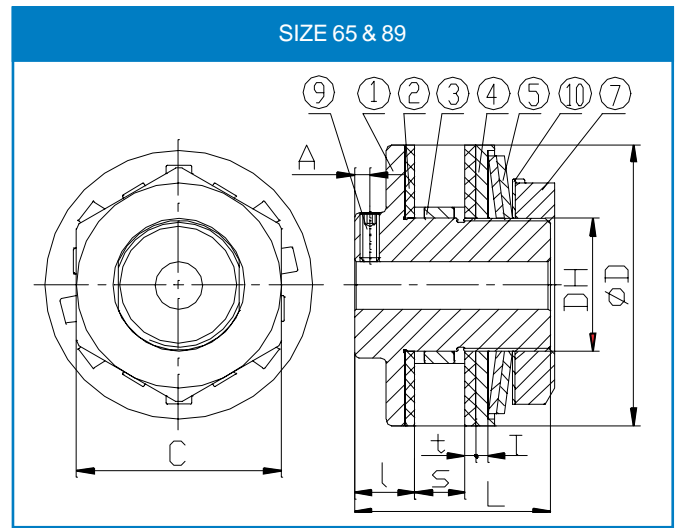
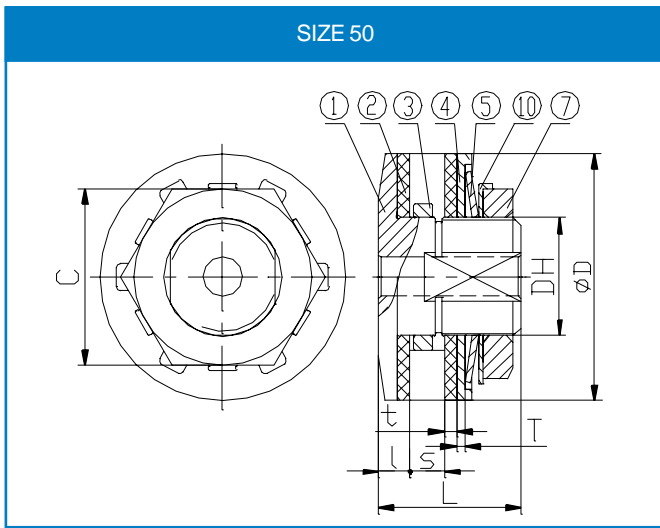
Sizes 127-1 and 127-2 Sizes 178-1 and 178-2

- Three Bolts Adjustment
- Torque preset by the three bolts (an adjustment nut to fix a pilot plate in place)

Designation



Torque Limiters



Description of parts

- ① Hub
- ② Friction Disc
- ③ Bush
- ④ Pressure Plate
- ⑤ Disc Spring
- ⑥ Pilot Plate
- ⑦ Adjustment Nut
- ⑧ Adjustment Bolt
- ⑨ Set Screw
- ⑩ Lock Washer

Dimensions and Capacity for Sizes 50 to 178

Size	Torque Range (kgf·m)	Plain Bore	Max. Bore	Bush Length	O.D. of Bush	Bore for Center Member	D	DH	L	I	T	t	S (Max)	A	C	Adjust. Nut	Adjust. Bolt	Set Screw	Weight (kg)
50-1	0.3 ~ 1.0	8	14	3.8	30	0.033	50	24	29	6.5	1.6	2.5	7	-	36	M24	-	-	0.248
50-2	0.7 ~ 2.0			-0.020		0										-0.041	0	0.256	
65-1	0.7 ~ 2.8	10	22	6.0	41	0.039	65	35	48	16.0	4.0	3.2	9	4.0	50	M35	-	M5	0.721
65-2	1.4 ~ 5.5			-0.025		0										-0.050	0	0.739	
89-1	2.0 ~ 7.6	17	25	6.0	49	0.039	89	42	62	19.0	4.0	3.2	16	5.0	65	M42	-	M6	2.417
89-2	3.5 ~ 15.2			-0.025		0										-0.050	0	2.477	
127-1	4.8 ~ 21.4	20	42	6.0	74	0.046	127	65	76	22.0	6.0	3.2	16	6.0	-	M65	M8	M8	3.692
127-2	9.0 ~ 42.9			-0.030		0										-0.060	0		3.858
178-1	11.8 ~ 58.1	30	64	8.0	105	0.054	178	95	98	24.0	7.0	3.2	29	6.5	-	M95	M10	M10	9.033
178-2	22.8 ~ 111			-0.036		0										-0.071	0		9.436

1 kgf.m = 9.80665 Nm

Torque Limiters

SELECTION PROCEDURE

1. Determine the required slip torque required for the machine. If the slip torque is not known then set the torque limiter to 1.5 ~ 2 times the torque that the motor produces on the shaft where the torque limiter is to be mounted.
2. From the Torque Range column, select a torque limiter that has sufficient torque. Also ensure that the chosen size can accommodate the required bore.
3. Based on the thickness of the center member to be inserted between the friction discs, determine the required bush length. Always choose a bush, which will not exceed the width of the center member. The maximum width of the center member that can be accommodated is shown as "S max." in the dimension table.

CENTER MEMBER INFORMATION

1. So as to obtain the rated torque release and re-engagement, Challenge recommend that the center member should be machined on its rubbing surfaces. The recommended surface finish is Ra1.6. It should also be flat, parallel, square with the bore and free from rust, scale, and oil. If these recommendations are not adhered to, the slip torque could be erratic.
2. The recommended bore that the center member should be machined to, is shown in the table below. Also, provided is the minimum number of sprocket teeth to be used, together with the suggested bush length.

Bore Sizes, Minimum Recommended number of Sprocket Teeth and Bush Lengths

Size	Bore of Center Member (mm)	Sprocket Pitch and Number of Teeth													
		9.525 - (06B)		12.7 - (08B)		15.875 - (10B)		19.05 - (12B)		25.4 - (16B)		31.75 - (20B)		38.1 - (24B)	
		Sprocket Min Teeth	Bush Length (mm)	Sprocket Min Teeth	Bush Length (mm)	Sprocket Min Teeth	Bush Length (mm)	Sprocket Min Teeth	Bush Length (mm)	Sprocket Min Teeth	Bush Length (mm)	Sprocket Min Teeth	Bush Length (mm)	Sprocket Min Teeth	Bush Length (mm)
50	30	20	3.8	16	6										
65	41			20	6	17	8								
89	49			26	6	21	8	18	9.5	15	14.5				
127	74			35	6	29	8	25	9.5	19	14.5				
178	105					39	8	33	9.5	26	14.5	21	17	18	22

SETTING THE TORQUE

Setting the torque on the limiter is achieved by tightening or loosening the adjustment nut and/or the adjustment bolts. An adjustment nut is provided for torque adjustment on the size 50 through to size 89. On the sizes 127 and 178, the adjustment is accomplished by adjusting the provided bolts.

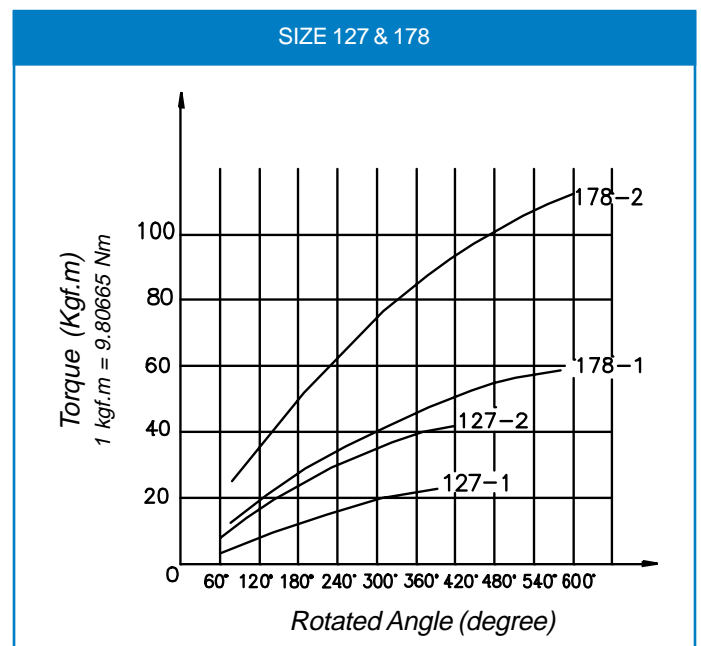
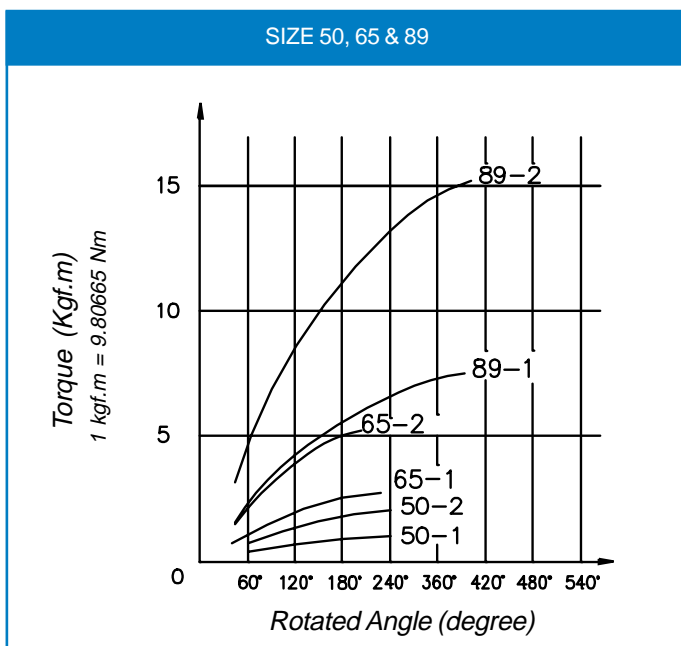
If the torque limiter slips under normal loading conditions, tighten the nut (for size 50 ~ size 89) or the bolts (for size 127 ~ size 178) gradually until the torque limiter stops slipping.

Always tighten (or loosen) the bolts or nut evenly. Try this adjustment several times, so as to find the proper torque setting for the machine.

ROTATED ANGLE AND SETTING TORQUE

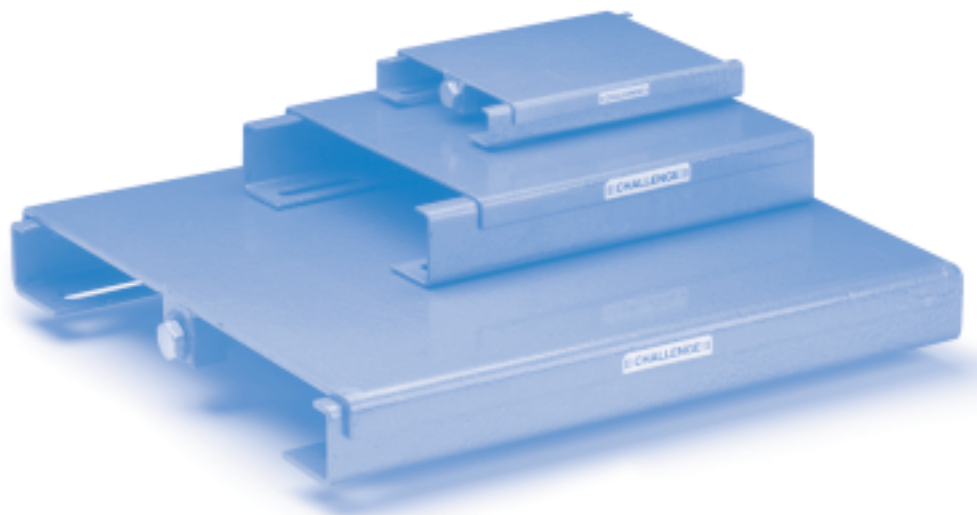
The chart below shows the relation between the effective rotated angle and preset torque and can be used as guidance. As an example, size 127-2 at 30kgf.m (294Nm) needs a rotated angle of +260 degrees of adjustment on the bolts.

To get the precise torque setting, Challenge recommends the run-in of the torque limiter.



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MOTOR MOUNTS



Rapid Fit Motor Mounts

Specification

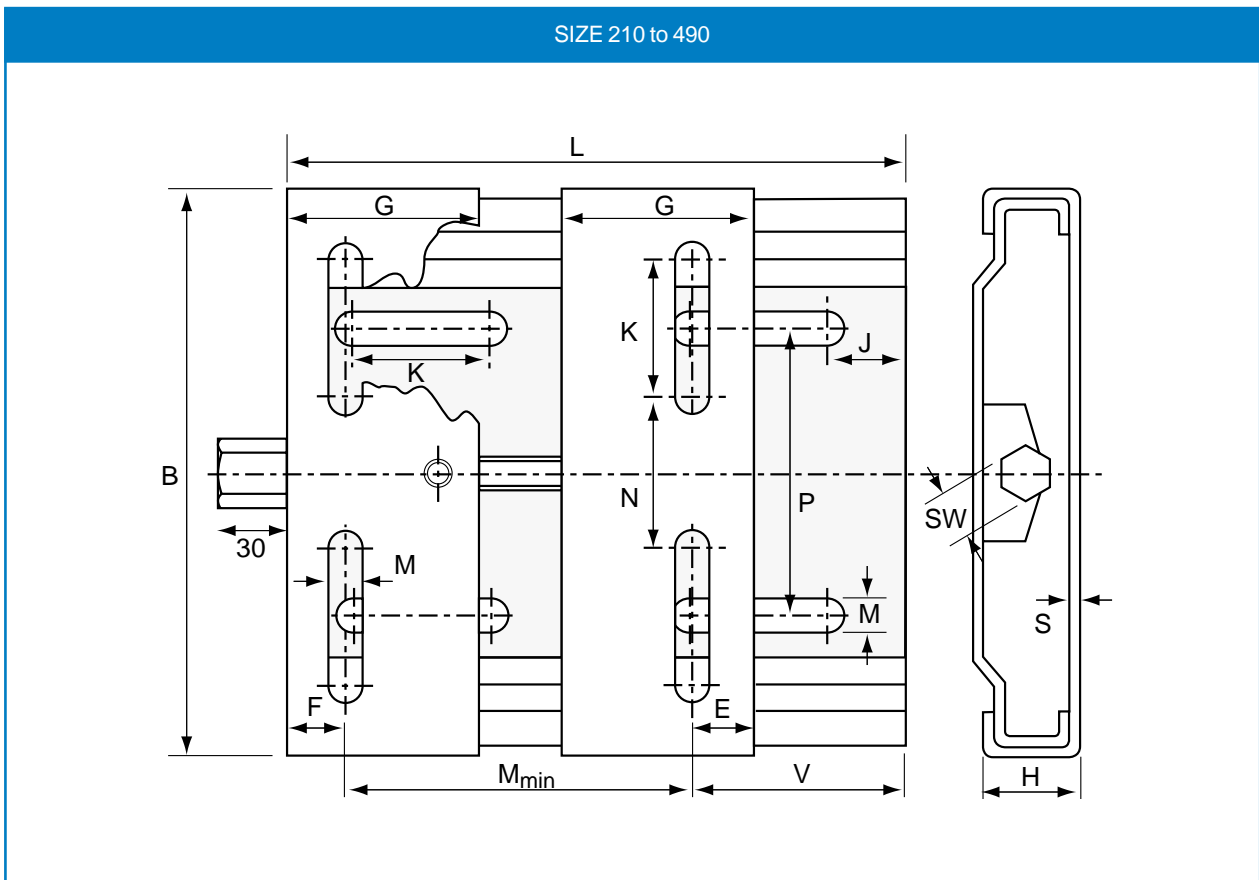
The fastest and most economical method of securing motors to machine beds. The five sizes are manufactured from galvanised steel and they can accommodate motor frame sizes 63 to 180. They have four slotted holes for fastening the base to the foundation.

Alignment

The pressed top plate is designed to slide over the base plate preventing vibration and noise whilst ensuring continuous belt alignment. Belts are tensioned by adjusting a single screw.

Motor Mounting

The motor is bolted to the two piece top plate which accommodates a wide range of motors. Centre distance adjustments can be made without the need to loosen the motor bolts.



Dimensions for Sizes 210 to 490 Rapid Fit Motor Mount

Type	Frame Size	L	B	H	M _{min}	G	E	J	K	M	N	P	SW	S
210	63 - 80	210	195	33	100	70	20	25	50.0	10.5	43	98	19	3
270	63 - 100	270	195	33	100	70	20	25	50.0	10.5	43	98	19	3
340	90 - 132	340	290	39	136	95	27	29	62.5	12.5	90	165	22	4
430	90 - 160	430	290	39	136	95	27	29	62.5	12.5	90	165	22	4
490	160 - 180	490	409	40	110	95	40	30	60.0	15.0	193	142	22	4

Standard Motor Mounts

Specification

Produced in three sizes for motors from frame size 63 to 225 and manufactured from pressed steel fabrications with four slotted holes for fastening the base to the foundation.

Alignment

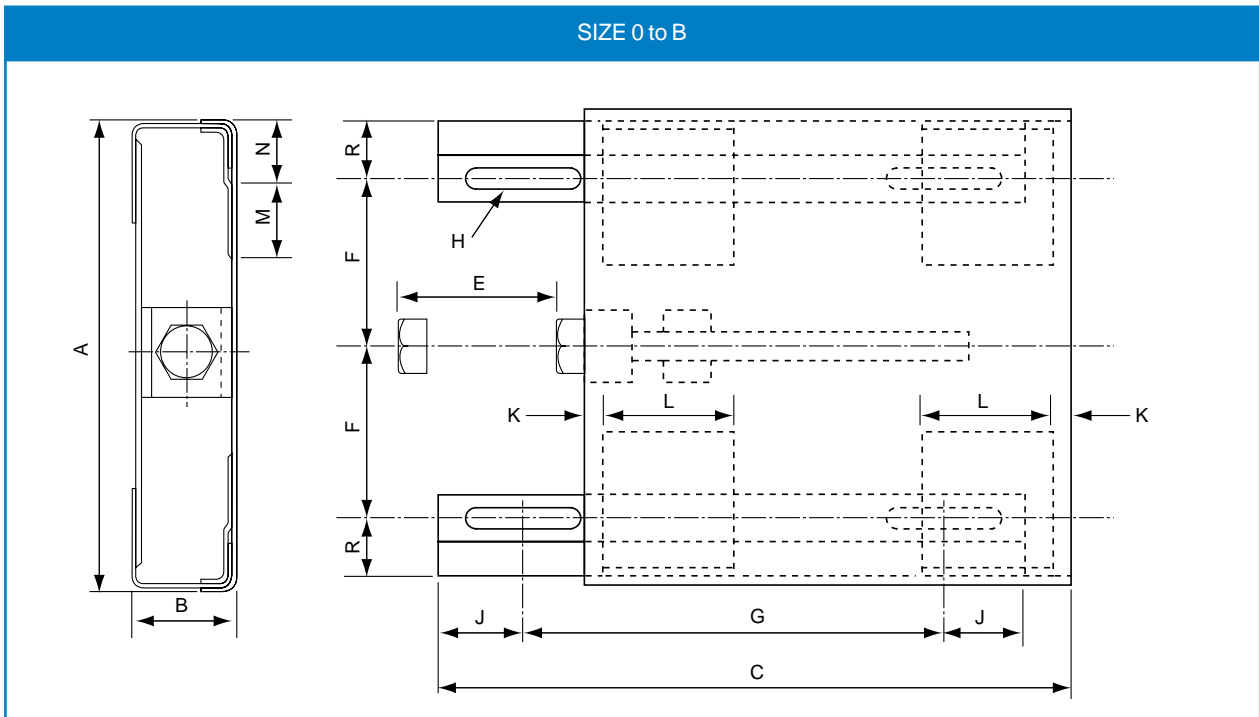
The pressed top plate is designed to slide exactly over the mounting rails preventing vibration and noise whilst ensuring continuous belt alignment. Belts are tensioned by adjusting a single screw which is possible whilst the motor is running.

Surface Finish

Stove enamelled finish with zinc plated adjustment screws to prevent corrosion.

Motor Mounting

The top plate requires drilling to accommodate the required motor mounting bolts. Centre distance adjustments can be made without the need to loosen the motor bolts.



Dimensions for Sizes 0 to B Motor Mounts

Base Ref	Motor Frame Ref	Motor Bolt Holes	A	B	C	D	Movement E	F	G	H	J	K	I	M	N	R	SW	Approx. Weight kg
0	63 71	7	146	29	225	170	80	55.0	148	9.5 x 25	27	60	50	32	18	15.0	17	1.4
A	80 90S 90L	10	240	55	325	258	100	89.0	215	13 x 51	45	10	70	51	32	28.5	24	5.3
	100S 100L 112S 112M 132S	12																
	132M	12																
	160M 160L 180M 180L	15																
	200M 200L 225S 225M	19																
B	132M	12	428	60	578	450	180	172.5	370	17 x 50	51	28	100	98	42	36.0	24	19.0
	160M 160L 180M 180L	15																
	200M 200L 225S 225M	19																

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Slide Rails

Specification

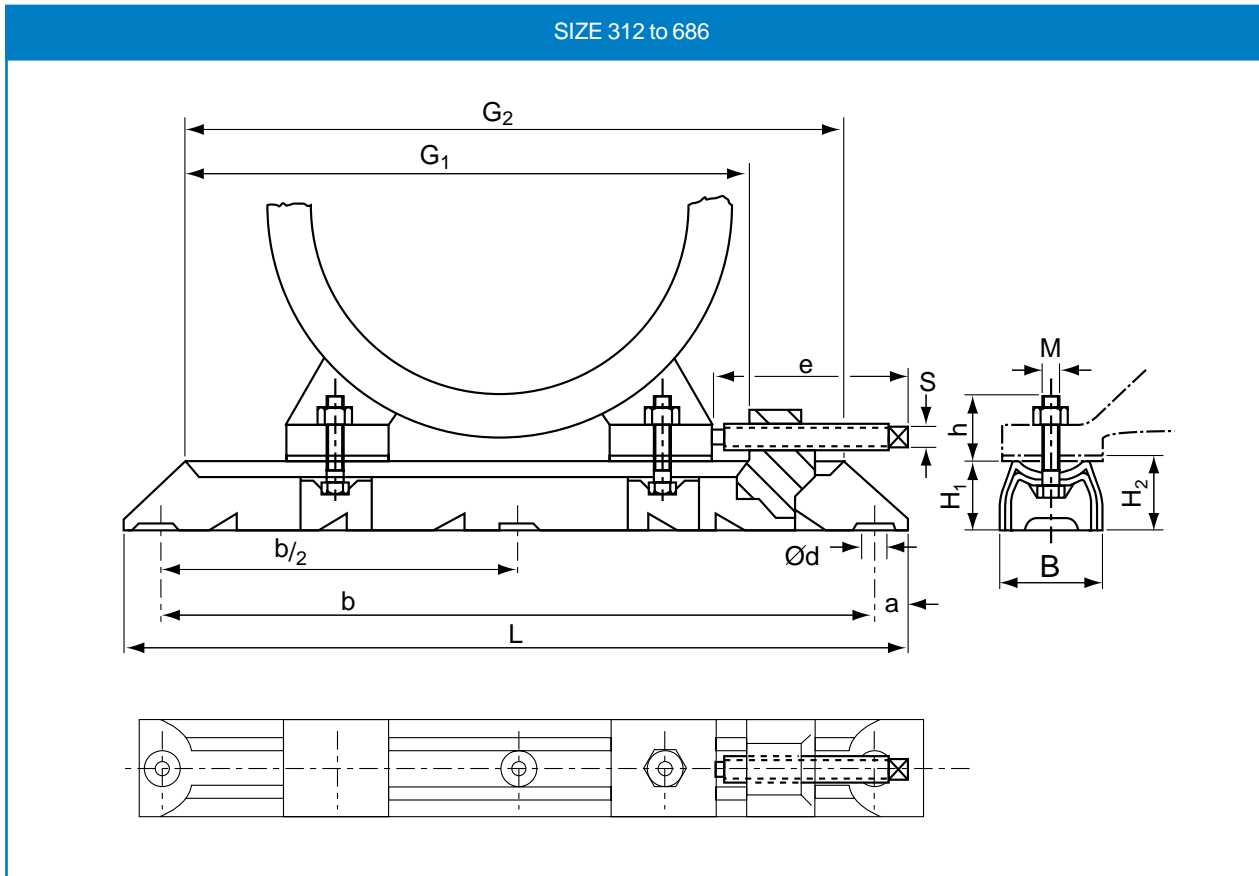
Covering frame sizes 63 to 225, Challenge slide rails are manufactured in galvanised steel with movable positioning blocks for rapid accurate drive alignment.

Alignment

The pressed steel rails are solidly fixed by three securing bolts while the motor is bolted to the rails eradicating vibration and noise whilst ensuring rigid positioning.

Motor Mounting

The motor is bolted to the slide rails and positioned with the aid of adjustment screws. The motor must be stopped and the motor bolts loosened before repositioning.

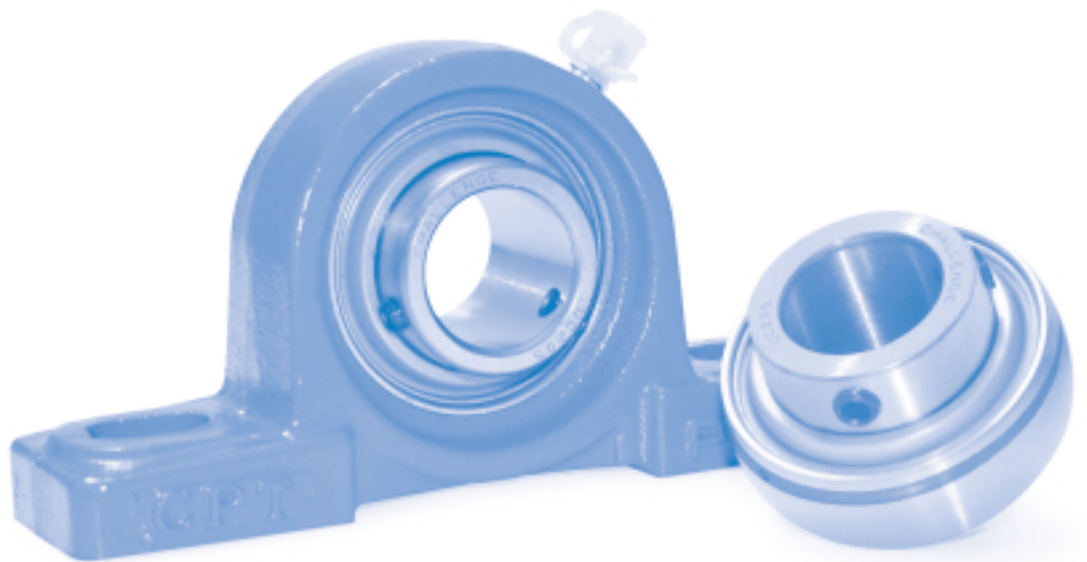


Dimensions for Sizes 312 to 686 Slide Rails

Base Ref	Overall Length L	Slide Length G ₁	Motor Frame Ref	M x h	I x S	G ₂	a	b	b/2	Ø d	B	H ₁	H ₂	Weight kg
312/6	312	240	63/71	M6 x 19	75 x 6	262	16	280	-	12	40	28	30	1.4
312/8	312	240	80/90	M8 x 27	75 x 6	262	16	280	-	12	40	28	30	1.5
375/6	375	305	63/71	M6 x 19	75 x 6	325	16	343	-	12	40	26	30	1.5
375/8	375	305	80/90	M8 x 27	75 x 6	325	16	343	-	12	40	28	30	1.6
375/10	375	305	100/112	M10 x 32	75 x 6	325	16	343	-	12	40	28	30	1.6
395/8	395	302	80/90	M8 x 28	97 x 8	325	20	355	-	12	50	40	43	3.4
395/10	395	302	100/112	M10 x 35	97 x 8	325	20	355	-	12	50	40	43	3.4
495/8	495	405	80/90	M8 x 29	97 x 8	425	20	455	-	12	50	40	43	4.0
495/10	495	405	100/112/132	M10 x 35	97 x 8	425	20	455	-	12	50	40	43	4.0
495/12	495	405	160	M12 x 49	97 x 8	425	20	455	-	12	50	40	43	4.0
530/10	530	413	132	M10 x 37	119 x 9	442	25	480	-	14	60	50	54	6.4
530/12	530	413	160	M12 x 49	119 x 9	442	25	480	-	14	60	50	54	6.4
630/10	630	515	132	M10 x 37	119 x 9	542	25	580	-	14	60	50	54	8.2
630/12	630	515	160/180	M12 x 45	119 x 9	542	25	580	-	14	60	50	54	8.2
686/12	686	538	160/180	M12 x 43	154 x 12	575	28	630	315	18	75	60	64	12.8
686/16	686	538	200/225	M16 x 62	154 x 12	575	28	630	315	18	75	60	64	12.8

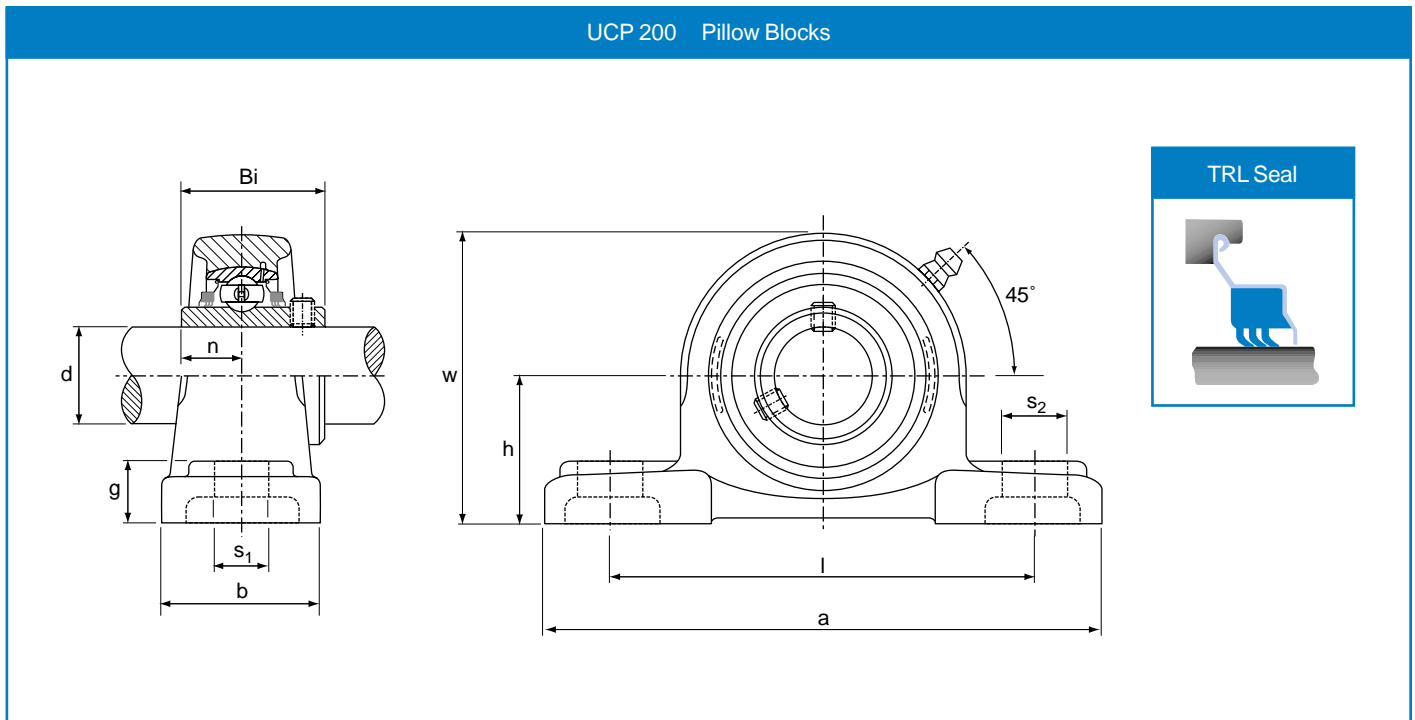
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BEARING UNITS



Pillow Blocks

UCP 200 Pillow Blocks

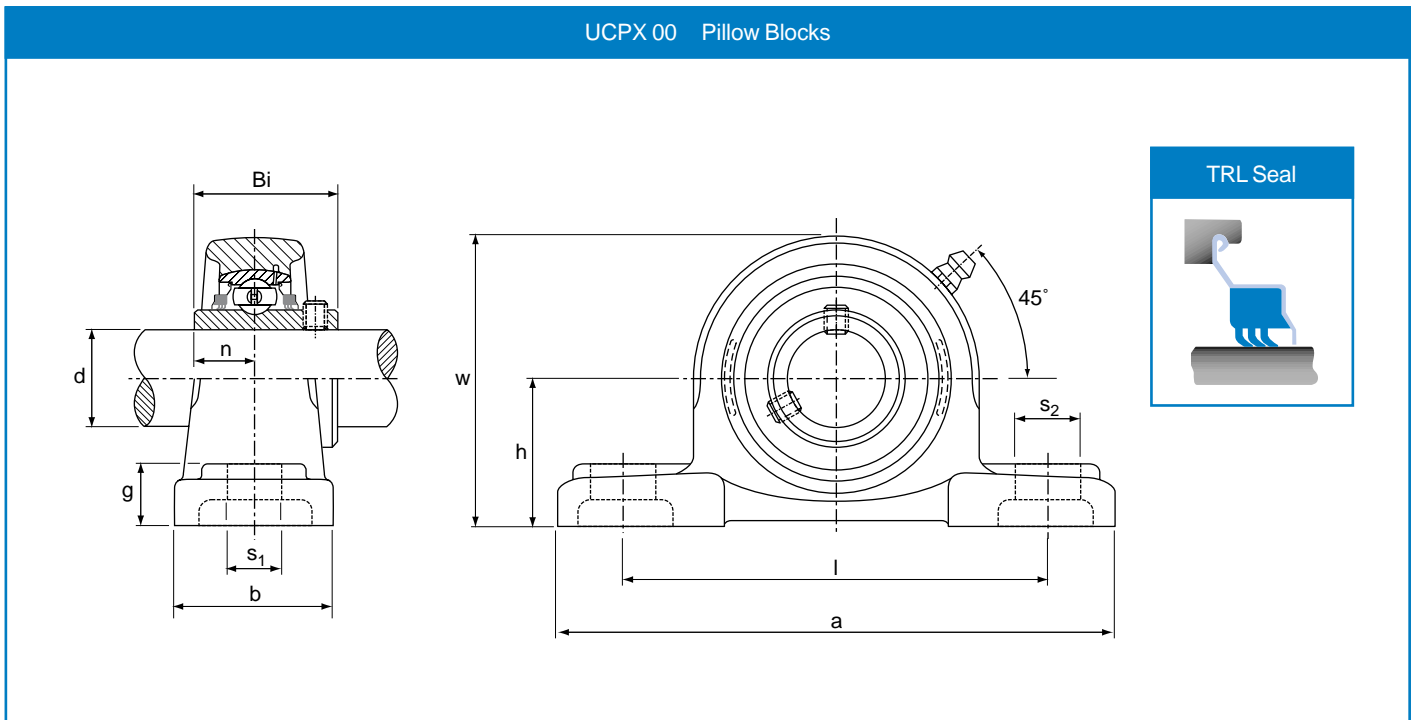


UCP 200 Pillow Blocks (Normal Duty)

Bearing Unit	Shaft Dia.		h	a	l	b	s ₂	s ₁	g	w	Bi	n	Bolt Size		Insert No.	Housing No.	Weight kg
	d inch	d mm											inch	mm			
UCP 204	3/4	20	33.3	127	96	38	19	13	15	65	31.0	12.7	3/8	M10	UC 204	P204	0.65
UCP 204-12																	
UCP 205	1	25	36.5	140	105	38	19	13	16	70	34.0	14.3	3/8	M10	UC 205	P205	0.79
UCP 205-16																	
UCP 206	1-1/8	30	42.9	165	121	48	21	17	18	83	38.1	15.9	1/2	M14	UC 206	P206	0.79
UCP 206-18																	
UCP 207	1-1/4	35	47.6	167	126	48	21	17	19	92	42.9	17.5	1/2	M14	UC 207	P207	1.60
UCP 207-20																	
UCP 207-22	1-3/8																
UCP 208	1-1/2	40	49.2	184	136	54	21	17	19	98	49.2	19.0	1/2	M14	UC 208	P208	2.00
UCP 208-24																	
UCP 209	1-3/4	45	54.0	190	146	54	21	17	20	106	49.2	19.0	1/2	M14	UC 209	P209	2.20
UCP 209-28																	
UCP 210	2	50	57.2	206	159	60	25	20	22	112	51.6	19.0	5/8	M16	UC 210	P210	2.80
UCP 210-32																	
UCP 211	2	55	63.5	219	171	60	25	20	22	126	55.6	22.2	5/8	M16	UC 211	P211	3.40
UCP 211-32																	
UCP 212	2-1/4	60	69.8	241	184	70	25	20	25	137	65.1	25.4	5/8	M16	UC 212	P212	4.80
UCP 212-36																	
UCP 213	2-1/2	65	76.2	265	203	70	29	25	27	150	65.1	25.4	3/4	M20	UC 213	P213	5.70
UCP 213-40																	
UCP 214	2-3/4	70	79.4	266	210	72	31	25	27	156	74.6	30.2	3/4	M20	UC 214	P214	7.00
UCP 214-44																	
UCP 215	3	75	82.6	275	217	74	31	25	28	163	77.8	33.3	3/4	M20	UC 215	P215	7.60
UCP 215-48																	
UCP 216		80	88.9	292	232	78	31	25	30	175	82.6	33.3		M20	UC 216	P216	9.00

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Pillow Blocks

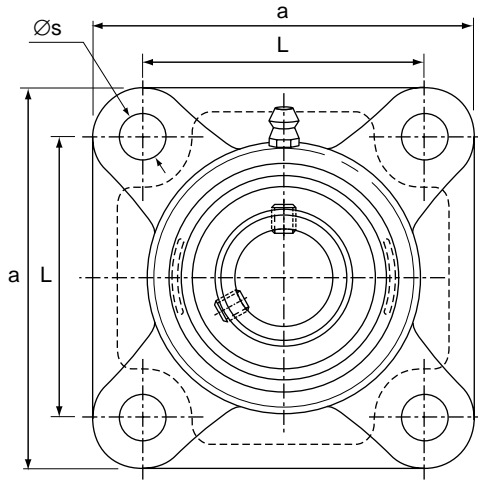
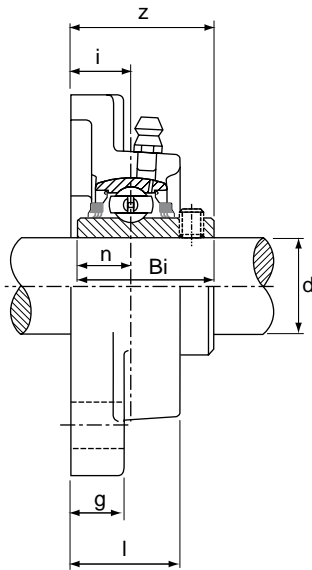


UCPX 00 Pillow Block (Medium Duty)

Bearing Unit	Shaft Dia.		h	a	l	b	s ₂	s ₁	g	w	Bi	n	Bolt Size		Insert No.	Housing No.	Weight kg
	d inch	d mm											inch	mm			
UCPX 05	1	25	44.4	159	119	51	25	17	18	85	38.1	15.9	1/2	M14	UCX 05	PX 05	1.50
UCPX 05-16		30	47.6	175	127	57	25	17	20	94	42.9	17.5	1/2	M14	UCX 06	PX 06	2.00
UCPX 06	1-1/4	35	54.0	203	144	57	30	17	22	105	49.2	19.0	1/2	M14	UCX 07	PX 07	2.70
UCPX 06-20		40	58.7	222	156	67	32	20	26	113	49.2	19.0	5/8	M16	UCX 08	PX 08	3.50
UCPX 07	1-1/4	45	58.7	222	156	67	33	20	26	116	51.6	19.0	5/8	M16	UCX 09	PX 09	3.60
UCPX 07-20		50	63.5	241	171	73	36	20	27	126	55.6	22.2	5/8	M16	UCX 10	PX 10	4.40
UCPX 07-22	1-3/8	55	69.8	260	184	79	36	25	30	139	65.1	25.4	3/4	M20	UCX 11	PX 11	6.30
UCPX 08		60	76.2	286	203	83	41	25	32	152	65.1	25.4	3/4	M20	UCX 12	PX 12	7.40
UCPX 08-24	2-1/4	65	76.2	286	203	83	41	25	32	154	74.6	30.2	3/4	M20	UCX 13	PX 13	7.70
UCPX 09		70	88.9	330	229	89	51	27	35	171	77.8	33.3	7/8	M22	UCX 14	PX 14	10.60
UCPX 09-28	2-3/4	75	88.9	330	229	89	51	27	35	175	82.6	33.3	7/8	M22	UCX 15	PX 15	11.10
UCPX 10		80	101.6	381	283	102	59	27	42	195	85.7	34.1	M22	UCX 16	PX 16	16.20	

Flange Units

UCF 200 4 Hole Flange Units



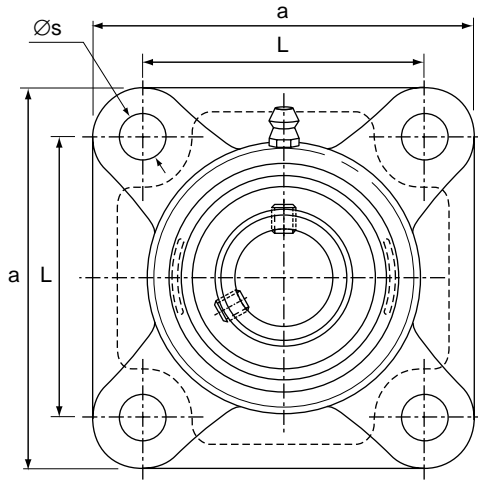
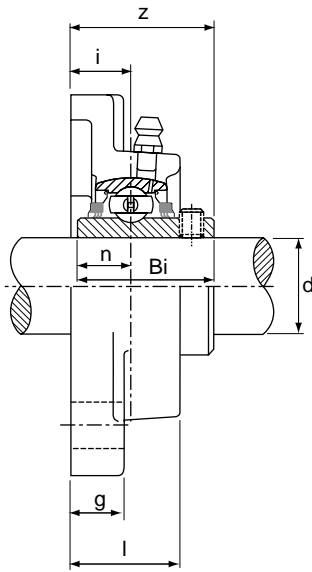
UCF 200 4 Hole Flange Units (Normal Duty)

Bearing Unit	Shaft Dia.		a	L	i	g	l	Øs	z	Bi	n	Bolt Size		Insert No.	Housing No.	Weight kg
	d inch	d mm										inch	mm			
UCF 204	3/4	20	86	64	15	12	25.5	12	33.3	31.0	12.7	3/8	M10	UC 204	F 204	0.6
UCF 204-12		UC 204-12														
UCF 205	1	25	95	70	16	14	27	12	35.7	34.0	14.3	3/8	M10	UC 205	F 205	0.8
UCF 205-16		UC 205-16														
UCF 206	1-1/8	30	108	83	18	14	31	12	40.2	38.1	15.9	3/8	M10	UC 206	F 206	1.1
UCF 206-18		UC 206-18														
UCF 207	1-1/4	35	117	92	19	16	34	14	44.4	42.9	17.5	7/16	M12	UC 207	F 207	1.5
UCF 207-20		UC 207-20														
UCF 207-22		UC 207-22														
UCF 208	1-1/2	40	130	102	21	16	36	16	51.2	49.2	19.0	1/2	M14	UC 208	F 208	1.9
UCF 208-24		UC 208-24														
UCF 209	1-3/4	45	137	105	22	18	38	16	52.2	49.2	19.0	1/2	M14	UC 209	F 209	2.3
UCF 209-28		UC 209-28														
UCF 210	2	50	143	111	22	18	40	16	54.6	51.6	19.0	1/2	M14	UC 210	F 210	2.5
UCF 210-32		UC 210-32														
UCF 211	2	55	162	130	25	20	43	19	58.4	55.6	22.2	5/8	M16	UC 211	F 211	3.4
UCF 211-32		UC 211-32														
UCF 212	2-1/4	60	175	143	29	20	48	19	68.7	65.1	25.4	5/8	M16	UC 212	F 212	4.4
UCF 212-36		UC 212-36														
UCF 213	2-1/2	65	187	149	30	20	50	19	69.7	65.1	25.4	5/8	M16	UC 213	F 213	5.3
UCF 213-40		UC 213-40														
UCF 214	2-3/4	70	193	152	31	24	54	19	75.4	74.6	30.2	5/8	M16	UC 214	F 214	6.0
UCF 214-44		UC 214-44														
UCF 215	3	75	200	159	35	24	57	19	79.5	77.8	33.3	5/8	M16	UC 215	F 215	6.6
UCF 215-48		UC 215-48														
UCF 216		80	208	165	35	24	59	23	84.3	82.6	33.3	M20	UC 216	F 216	7.5	

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Flange Units

UCFX 00 4 Hole Flange Units

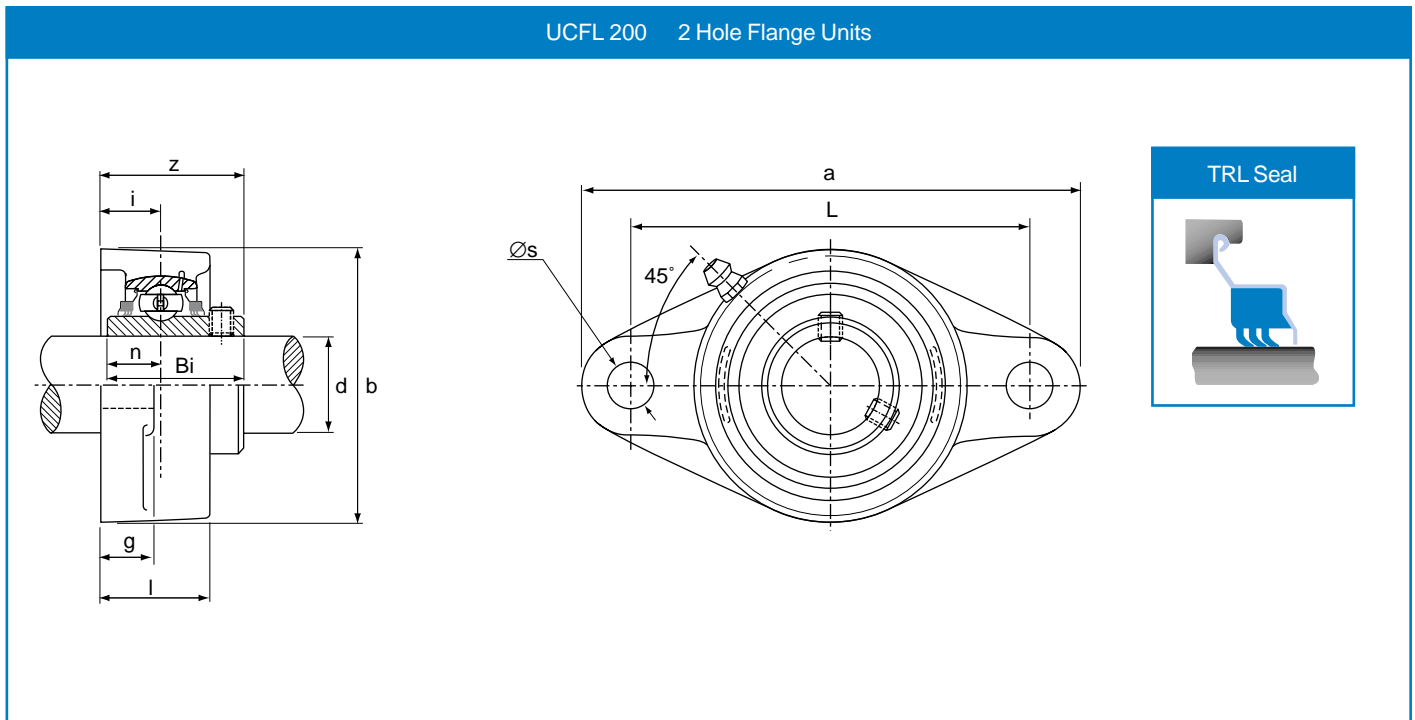


UCFX 00 4 Hole Flange Units (Medium Duty)

Bearing Unit	Shaft Dia.		a	L	i	g	l	Øs	z	Bi	n	Bolt Size		Insert No.	Housing No.	Weight kg
	d inch	d mm										inch	mm			
UCFX 05	1	25	108	83	18	13	30	12	40.2	38.1	15.9	3/8	M10	UCX 05 UCX 05-16	FX 05	1.1
UCFX 05-16		M14														
UCFX 06	1-1/4	30	117	92	19	14	34	16	44.4	42.9	17.5	1/2	M14	UCX 06 UCX 06-20	FX 06	1.4
UCFX 06-20		M14														
UCFX 07	1-1/4	35	130	102	21	14	38	16	51.2	49.2	19.0	1/2	M16	UCX 07 UCX 07-20	FX 07	1.9
UCFX 07-20																
UCFX 07-22	1-3/8													UCX 07-22		
UCFX 08	1-1/2	40	137	105	22	14	40	19	52.2	49.2	19.0	5/8	M16	UCX 08 UCX 08-24	FX 08	2.1
UCFX 08-24		M16														
UCFX 09	1-3/4	45	143	111	23	14	40	19	55.6	51.6	19.0	5/8	M16	UCX 09 UCX 09-28	FX 09	2.5
UCFX 09-28		M16														
UCFX 10	2	50	162	130	26	20	44	19	59.4	55.6	22.2	5/8	M16	UCX 10 UCX 10-32	FX 10	3.6
UCFX 10-32		M16														
UCFX 11	2-1/4	55	175	143	29	20	49	19	68.7	65.1	25.4	5/8	M16	UCX 11 UCX 11-36	FX 11	4.7
UCFX 11-36		M16														
UCFX 12	2-1/4	60	187	149	34	21	59	19	73.7	65.1	25.4	5/8	M16	UCX 12 UCX 12-36	FX 12	5.5
UCFX 12-36		M16														
UCFX 13	2-1/2	65	187	149	34	21	59	19	78.4	74.6	30.2	5/8	M16	UCX 13 UCX 13-40	FX 13	5.9
UCFX 13-40		M16														
UCFX 14	2-3/4	70	197	152	37	24	60	23	81.5	77.8	33.3	3/4	M20	UCX 14 UCX 14-44	FX 14	7.3
UCFX 14-44		M20														
UCFX 15	3	75	197	152	40	24	68	23	89.3	82.6	33.3	3/4	M20	UCX 15 UCX 15-48	FX 15	8.0
UCFX 15-48		M20														
UCFX 16		80	214	171	40	24	70	23	91.6	85.7	34.1	M20	UCX 16	FX 16	9.8	

Flange Units

UCFL 200 2 Hole Flange Units

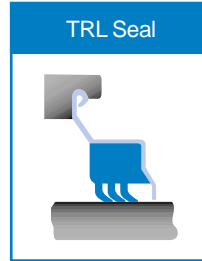
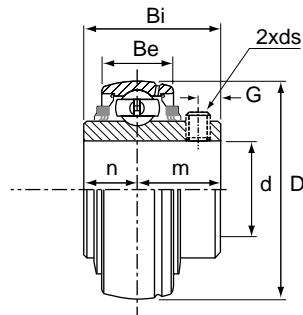


UCFL 200 2 Hole Flange Units (Normal Duty)

Bearing Unit	Shaft Dia.		a	L	i	g	l	Øs	b	z	Bi	n	Bolt Size		Insert No.	Housing No.	Weight kg
	d inch	d mm											inch	mm			
UCFL 204	3/4	20	113	90	15	11	26	12	60	33.3	31.0	12.7	3/8	M10	UC 204	FL 204	0.5
UCFL 204-12													UC 204-12				
UCFL 205	1	25	130	99	16	13	27	16	68	35.7	34.0	14.3	1/2	M14	UC 205	FL 205	0.6
UCFL 205-16													UC 205-16				
UCFL 206	1-1/4	30	148	117	18	13	31	16	80	40.2	38.1	15.9	1/2	M14	UC 206	FL 206	0.9
UCFL 206-20													UC 206-20				
UCFL 207	1-1/4	35	161	130	19	14	34	16	90	44.4	42.9	17.5	1/2	M14	UC 207	FL 207	1.2
UCFL 207-20													UC 207-20				
UCFL 207-22	1-3/8														UC 207-22		
UCFL 208	1-1/2	40	175	144	21	14	36	16	100	51.2	49.2	19.0	1/2	M14	UC 208	FL 208	1.6
UCFL 208-24													UC 208-24				
UCFL 209	1-3/4	45	188	148	22	15	38	19	108	52.2	49.2	19.0	5/8	M16	UC 209	FL 209	1.9
UCFL 209-28													UC 209-28				
UCFL 210	2	50	197	157	22	15	40	19	115	54.6	51.6	19.0	5/8	M16	UC 210	FL 210	2.2
UCFL 210-32													UC 210-32				
UCFL 211	2	55	224	184	25	18	43	19	130	58.4	55.6	22.2	5/8	M16	UC 211	FL 211	3.2
UCFL 211-32													UC 211-32				
UCFL 212	2-1/4	60	250	202	29	18	48	23	140	68.7	65.1	25.4	3/4	M20	UC 212	FL 212	4.1
UCFL 212-36													UC 212-36				
UCFL 213	2-1/2	65	258	210	30	20	50	23	155	69.7	65.1	25.4	3/4	M20	UC 213	FL 213	5.1
UCFL 213-40													UC 213-40				
UCFL 214	2-3/4	70	265	216	31	20	54	23	160	75.4	74.6	30.2	3/4	M20	UC 214	FL 214	5.9
UCFL 214-44													UC 214-44				
UCFL 215	3	75	275	225	35	20	57	23	165	79.5	77.8	33.3	3/4	M20	UC 215	FL 215	6.4
UCFL 215-48													UC 215-48				

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused

UC 200 Inserts



UC 200 Inserts with Set Screws (Normal Duty)

Bearing Unit	Shaft Dia.		D	Bi	Be	n	m	G	ds		Load Rating (kg)		Weight kg
	d inch	d mm							inch	mm	Dynamic	Static	
UC 204		20	47	31.0	17	12.7	18.3	4.8		M6X1.0	1000	630	0.16
UC 204-12	3/4								1/4-28UNF				0.16
UC 205		25	52	34.0	17	14.3	19.7	5.5		M6X1.0	1100	710	0.20
UC 205-16	1								1/4-28UNF				0.20
UC 206		30	62	38.1	19	15.9	22.2	6.0		M6X1.0	1520	1020	0.32
UC 206-20	1-1/4								1/4-28UNF				0.32
UC 207		35								M8X1.0			0.48
UC 207-20	1-1/4		72	42.9	20	17.5	25.4	6.5	5/16-24UNF		2010	1390	0.54
UC 207-22	1-3/8								5/16-24UNF				0.48
UC 208		40	80	49.2	21	19.0	30.2	8.0		M8X1.0	2560	1810	0.64
UC 208-24	1-1/2								5/16-24UNF				0.68
UC 209		45	85	49.2	22	19.0	30.2	8.0		M8X1.0	2560	1810	0.68
UC 209-28	1-3/4								5/16-24UNF				0.70
UC 210		50	90	51.6	24	19.0	32.6	10.0		M10X1.0	2750	2020	0.82
UC 210-32	2								3/8-24UNF				0.80
UC 211		55	100	55.6	25	22.2	33.4	10.0		M10X1.0	3400	2550	1.11
UC 211-32	2								3/8-24UNF				1.26
UC 212		60	110	65.1	27	25.4	39.7	10.0		M10X1.0	4100	3150	1.54
UC 212-36	2-1/4								3/8-24UNF				1.67
UC 213		65	120	65.1	28	25.4	39.7	10.0		M10X1.0	4480	3470	1.86
UC 213-40	2-1/2								3/8-24UNF				1.94
UC 214		70	125	74.6	30	30.2	44.4	12.0		M12X1.5	4870	3810	2.05
UC 214-44	2-3/4								7/16-20UNF				2.06
UC 215		75	130	77.8	30	33.3	44.5	12.0		M12X1.5	5190	4190	2.12
UC 215-48	3								7/16-20UNF				2.21
UC 216		80	140	82.6	33	33.3	49.3	14.0		M12X1.5	5700	4550	2.79
UC 218-56	3-1/2		160	96.0	37	39.7	56.3	14.0	1/2-20UNF		7500	6170	4.46

Bearing Speeds

The maximum rotational speed of a grease lubricated ball bearing is related to the fit between shaft and bearing.

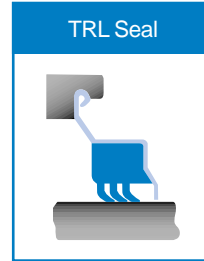
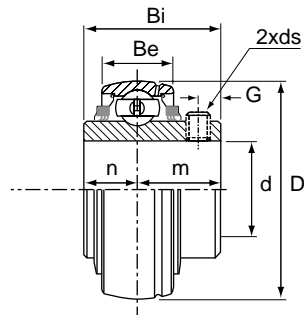
Under normal operating conditions the fit between the bearing and shaft should be h7. The maximum permissible bearing speeds are shown on the right.

A looser fit, allowing lower speeds is recommended for lighter loads and a tighter fit allowing higher speeds is recommended for heavier loads

Bearing No.	Max Speed r/min	Bearing No.	Max Speed r/min
201	4500	210	1800
202	4500	211	1600
203	4500	212	1500
204	4000	213	1400
205	3400	214	1300
206	2800	215	1200
207	2400	216	1100
208	2200	217	1000
209	1900	218	950

Inserts

UCX 00 Inserts



UCX 00 Inserts with Set Screws (Medium Duty)

Bearing Unit	Shaft Dia.		D	Bi	Be	n	m	G	ds		Load Rating (kg)		Weight kg
	d inch	d mm							inch	mm	Dynamic	Static	
UCX05	1	25	62	38.1	19	15.9	22.2	6	1/4-28UNF	M6X1.0	1520	1020	0.39
UCX05-16		30	72	42.9	20	17.5	25.4	6.5		M8X1.0	2010	1390	0.38
UCX06	1-1/4	35	80	49.2	21	19.0	30.2	8.0	5/16-24UNF	M8X1.0	2560	1810	0.58
UCX06-20		72	42.9	20	17.5	25.4	6.5	0.55					
UCX07	1-1/4	35	80	49.2	21	19.0	30.2	8.0	5/16-24UNF	M8X1.0	2560	1810	0.72
UCX07-20													0.75
UCX07-22	1-3/8	40	85	49.2	22	19.0	30.2	8.0	5/16-24UNF	M8X1.0	2650	1910	0.72
UCX08	1-1/2	40	85	49.2	22	19.0	30.2	8.0	5/16-24UNF	M8X1.0	2650	1910	0.83
UCX08-24													0.87
UCX09	1-3/4	45	90	51.6	24	19.0	32.6	10.0	3/8-24UNF	M10X1.0	2750	2020	0.95
UCX09-28													0.97
UCX10	2	50	100	55.6	25	22.2	33.4	10.0	3/8-24UNF	M10X1.0	3400	2550	1.29
UCX10-32													1.26
UCX11	2-1/4	55	110	65.1	27	25.4	39.7	10.0	3/8-24UNF	M10X1.0	4100	3150	1.80
UCX11-36													1.70
UCX12	2-3/8	60	120	65.1	28	25.4	39.7	10.0	3/8-24UNF	M10X1.0	4480	3470	2.05
UCX12-38													2.03
UCX13	2-1/2	65	125	74.6	30	30.2	44.4	12.0	7/16-20UNF	M12X1.5	4870	3810	2.52
UCX13-40													2.61
UCX14	2-3/4	70	130	77.8	30	33.3	44.5	12.0	7/16-20UNF	M12X1.5	5190	4190	2.74
UCX14-44													2.75
UCX15	3	75	140	82.6	32	33.3	49.3	14.0	7/16-20UNF	M12X1.5	5700	4550	3.41
UCX15-48													3.32

Bearing Speeds

The maximum rotational speed of a grease lubricated ball bearing is related to the fit between shaft and bearing.

Under normal operating conditions the fit between the bearing and shaft should be h7. The maximum permissible bearing speeds are shown on the right.

A looser fit, allowing lower speeds is recommended for lighter loads and a tighter fit allowing higher speeds is recommended for heavier loads

Bearing No.	Max Speed r/min	Bearing No.	Max Speed r/min
201	4500	210	1800
202	4500	211	1600
203	4500	212	1500
204	4000	213	1400
205	3400	214	1300
206	2800	215	1200
207	2400	216	1100
208	2200	217	1000
209	1900	218	950

Notes

CHALLENGE WORLDWIDE PLC AND GROUP OF COMPANIES TERMS OF SALE

These Terms do not apply if you deal as a Consumer Your statutory rights are not affected by these conditions

1. DEFINITIONS

In these Terms of Sale the following meanings shall apply:

"We" and "Us"	means	CHALLENGE WORLDWIDE Plc
"You"	means	the person seeking to purchase Goods from Us.
"the Goods"	means	the goods or where the context permits the services to be supplied by Us.
"Company Signatory"	means	a person authorised by Us.
"the Terms"	means	the terms set out in this document and special terms agreed in writing between a Company Signatory and You or on Buyer's order.
"the Contract"	means	the contract for the supply of Goods incorporating these Terms.
"Consumer"	means	any natural person acting for purposes outside their trade, business or profession.
"the Defect"	means	the condition and/or any attribute of the Goods and/or any other circumstances which but for the effect of these Terms would have entitled You to damages.

2. THE CONTRACT

- All orders are accepted by Us only under these Terms and they may not be altered other than with the written agreement of a Company Signatory. Any contrary or additional terms unless so agreed are excluded.
- Quotations are invitations to treat only.
- Orders may be cancelled only with the written agreement of a Company Signatory and You will indemnify Us against all costs claims losses or expenses incurred as a result of that cancellation.
- You shall be responsible to Us for ensuring the accuracy of the terms of any order including any applicable design drawing or specification provided to Us by You and for giving Us any necessary information relating to the Goods within a sufficient time to enable Us to perform the Contract in accordance with its Terms.
- 1 It is Your responsibility to be fully conversant with the nature and performance of the Goods, including any harmful effects their use may have.
2.5.2 Without prejudice to Clause 2.5.4 of these Terms while We take every precaution in the preparation of our catalogues technical circulars price lists and other literature these documents are for your general guidance, only and statements included in these documents (in the absence of fraud on our part) shall not constitute representations by Us and We shall not be bound by them.
- 2.5.3 We undertake to comply with the Safety Legislation including, but not limited to the provision of any available information relating to the safety of the Goods to secure so far as reasonable practicable the health and safety of the users of the Goods.
- 2.5.4 You will comply with the Safety Legislation and agrees to indemnify and keep indemnified Us against Your failure to comply with the Safety Legislation. In particular, you shall indemnify Us against any and all claims or proceedings resulting from any injury, loss or damage caused by a failure to use the Goods in accordance with Our instructions whether such failure is on the part of the Your employees, contractors or agents or a third party to whom You have supplied the Goods.
- 2.5.5 We shall not be liable in respect of any misrepresentation made by Us or our employees or agents to You our employees or agents as to the condition of the Goods their fitness for any purpose or as to quantity or measurements unless the representation is:
2.5.5.1 made or confirmed in writing by a Company Signatory; and/or
2.5.5.2 fraudulent
- 2.5.6 For the avoidance of doubt our liability for damages for misrepresentation (other than fraudulent) is excluded or limited by Clause 8 of these Terms.

3. PRICE

- The price of the Goods shall be as published in our price list current at the date of delivery of the Goods. The price is exclusive of VAT which shall be due at the rate ruling on the date of a VAT invoice.
- Prices listed or quoted are based on costs prevailing at the time when they are given or agreed. We shall be entitled to adjust the price of the Goods as at the time of delivery by such amount as may be necessary to cover any increase sustained by Us after the date of acceptance of your order and any direct or indirect costs of making obtaining handling or supplying the Goods.
- Prices listed or quoted are applicable to the quantity specified and on the information provided by You at the time of order. In the event of orders being placed for lesser quantities or if there is any change in specifications, delivery dates, or delay is caused by our instructions or lack of instructions we shall be entitled to adjust the price of the Goods as ordered to take account of the variations.
- We shall have the option of supplying any Goods ordered by You in imperial measurements in the nearest equivalent metric measurements and the Goods may be charged in metric measure allowing for conversions.

4. PAYMENT

- Unless other credit terms have been agreed in writing with a Company Signatory all accounts are due for payment on the last day of the month following the month in which the Goods are delivered.
- Late payments will incur interest at the rate of 5% per annum above the base rate of Barclays Bank Plc in force from time to time from the due date until the date of payment after as well as before judgement.
- Credit facilities may be withdrawn or reduced at any time in our sole discretion.
- Even if We have previously agreed to give You credit we reserve the right to refuse to execute any order or contract if the arrangements for payment or your credit rating is not satisfactory to Us. In our discretion We may require security satisfactory to Us or payment for each consignment when it is available and before it is despatched in which case delivery will not be effected until We are in receipt of security or cleared funds as requested by Us.
- In the case of short delivery You will remain liable to pay the full invoice price of all goods delivered or available for delivery.
- You may not withhold payment of any invoice or other amount due to Us by reason of any right of set off or counterclaim which You may have or allege to have for any reason whatever.
- We shall be entitled at all times to set off any debt or claim of whatever nature which We may have against You against any sums due from Us to You.

5. DELIVERY

- Delivery will be effected when the Goods leave our premises whether carried by Us or an independent carrier or the premises of our suppliers when the Goods are delivered direct from suppliers.
- Delivery dates are given in good faith but are estimates only.
- Time for delivery shall not be of the essence of the Contract.
- For the avoidance of doubt and without detracting from any other provisions of these Terms We shall not be liable for any damages whatsoever whether direct or indirect (including for the avoidance of doubt any liability to any third party) resulting from any delay in delivery of the Goods or failure to deliver the Goods in a reasonable time whether such delay or failure is caused by our negligence or otherwise howsoever.
- We reserve the right to make delivery by instalments and tender a separate invoice in respect of each instalment. Our failure to deliver any one or more instalments or any claim by You in respect of any one or more instalments shall not entitle You to treat the Contract as a whole as repudiated.
- The price agreed includes our normal delivery charges but We may make an additional charge if We incur further costs or expense such as (but not limited to) those caused by delivery of less than a full load; complying with your request for delivery outside our normal delivery pattern or trading hours or by instalments; orders of small value which are not economical for us to deliver free.
- You must provide the necessary labour for unloading the Goods and unloading is to be completed with reasonable speed. If our delivery vehicle is kept waiting for an unreasonable time or is obliged to return without completing delivery or if We provide additional staff to unload Goods an additional charge will be made.
- You may collect Goods from Us during our trading hours. If they are not collected within 14 days from when We notify You that they are available a storage charge will be payable before the Goods are released.
- If you fail to take delivery accept or collect the Goods within the agreed time in our discretion We may make an additional charge, invoice You for the Goods or treat the contract as repudiated and in any case recover our losses from You.
- If you collect Goods from Us You are solely responsible for the size weight and positioning of the load on the vehicle and shall indemnify Us in respect of all costs claims losses or expenses We may incur as a result of your collecting the Goods including any resulting from our negligence.

6. INSPECTION

- You shall inspect the Goods at the place and time of unloading or collection but nothing in these Terms shall require You to break packaging and/or unpack Goods which are intended to be stored before use.
- 2.1 You must advise Us by telephone immediately and give Us written notice within three working days of unloading of any claim for short delivery.
- 2.2 If you do not give Us that notice within that time the Goods will be deemed to have been delivered in the quantities shown in the delivery documents.
- 2.2.3 You shall not be entitled and irrevocably and unconditionally waive any right to reject the Goods or claim any damages whatsoever for short delivery howsoever caused.
- 2.2.4 Our liability for short delivery is limited to make good the shortage.
- 2.2.5 Where it is or would have been apparent on a reasonable inspection that the goods are not in conformity with the Contract or (where the Contract is a contract for sale by sample) that the bulk does not compare with the sample You must advise Us by telephone immediately and give us written notice within three working days of inspection.
- 2.2.6 If you fail to give Us that notice within that time the Goods will be deemed to have been accepted and You shall not be entitled and irrevocably and unconditionally waive any right to reject the Goods.
- 2.2.7 If you fail to give Us that notice within that time Clause 8 shall have effect.

7. TITLE AND RISK

- Risk in the Goods shall pass to You when the Goods are delivered.
- The property in the Goods shall remain with Us until You pay all sums due to Us whether in respect of this Contract or otherwise.
- Until title passes:-
 - You shall hold the Goods as our fiduciary agent and bailee.
 - The Goods shall be stored separately from any other goods and You shall not interfere with any identification marks labels batch numbers or serial numbers on the Goods.
- We agree that You may use or agree to sell the Goods as principal and not as our agents in the ordinary course of your business subject to the express condition that at our direction the entire proceeds of any sale or insurance proceeds received in respect of the goods are held in trust for Us and not mixed with any other monies or paid into an overdraft bank account and shall at all times be identifiable as our money.
- We shall be entitled at any time to recover any or all of the Goods in your possession to which We have title and for that purpose We our employees or agents may with such transport as is necessary enter upon any premises occupied by You or to which You have access and where the Goods may be or are believed to be situated.

8. LIABILITIES

- Nothing in these Terms shall exclude or restrict our liability for death or personal injury resulting from our negligence or our liability for fraudulent misrepresentation.
- Subject to Clause 8.1 these Terms We shall not be liable by reason of any misrepresentation (unless fraudulent) or any breach of warranty condition or other term express or implied or any breach of duty (common law or statutory) or negligence for any damages whatsoever. Instead of liability in damages We undertake liability under Clause 8.3 below.
- Where but for the effect of Clause 8.2 of these Terms You would have been entitled to damages against Us We shall not be liable to pay damages but subject to the conditions set out in Clause 8.4 below shall in our sole discretion either repair the Goods at our own expense or supply replacement Goods free of charge or refund all (or where appropriate part) of the price paid for the relevant Goods.
- We will not be liable under Clause 8.3:
 - If the Defect arises from fair wear and tear.
 - If the Defect arises from wilful damage negligence abnormal working conditions mis-use alteration or repair of the Goods failure to follow British Standard or industry instructions relevant to the

Goods or storage of the Goods in unsuitable conditions (but this sub-clause shall not apply to any act or omission on our part)

- 4.3 Unless after discovery of the Defect we are given a reasonable opportunity to inspect the Goods before they are used or in any way interfered with. For the avoidance of doubt We acknowledge that the costs of suspending works are relevant to the determination of what is a reasonable opportunity and this sub-clause shall not apply to any works affecting the Goods which it may be reasonably necessary to carry out in the interests of safety and/or as emergency measures.
- 4.4 If the Defect would have been apparent on a reasonable inspection under Clause 6.1 of these Terms at the time of unloading unless You advise Us by telephone immediately and written notice of any claim is given to Us within three working days of the time of unloading; or in any other case.
- 4.4.5 The Defect is discovered within four months from the date of delivery and We are given written notice of the Defect within three working days of it being discovered.
- 4.5 If the Goods are manufactured processed or milled by Us to the design quantity measure or specification of You or your agents then:
 - Subject to Clause 8.1 of these Terms We shall not be under any liability for damages whatsoever under Clause 8.3 of these Terms as the case may be except in the event of:
 - 8.5.1.1 Fraudulent misrepresentation.
 - 8.5.1.2 Misrepresentation where the representation was made or confirmed in writing by a Company Signatory.
 - 8.5.1.3 Non-compliance with such design quantity measurement or specification.
 - 8.5.1.4 Breach of a written warranty signed by a Company Signatory that the Goods are fit for that purpose; or
 - 8.5.1.5 A claim maintainable against Us pursuant to Clause 8.1 of these Terms.
 - 8.5.2 You will unconditionally fully and effectively indemnify Us against all loss damages costs on an indemnity basis and expenses awarded against or incurred by Us in connection with or paid or agreed to be paid by Us in settlement of any claim for infringement of any patents copyright design trademark or any other industrial or intellectual property rights of any other person.
 - 8.5.3 You will further unconditionally fully and effectively indemnify Us against all loss damages costs on an indemnity basis and expenses awarded against or incurred by Us in connection with or paid or agreed to be paid by Us in settlement of any other claim arising from any such manufacturing processing or milling including but not limited to any Defect in the Goods. This indemnity will be reduced in proportion to the extent that such loss damage costs and expenses are due to our negligence.
 - 8.6 You will unconditionally fully and effectively indemnify Us against all loss damages costs on an indemnity basis and expenses awarded against or incurred by Us in connection with or paid or agreed to be paid by Us in settlement of any claim by any third party arising from the supply or use of the Goods. This indemnity will be reduced in proportion to the extent that such loss damage costs and expenses are due to our negligence.
 - 8.7 Without prejudice to any other provisions in these Terms in any event our total liability for any one claim or for the total of all claims arising from any one act of default on our part (whether arising from our negligence or otherwise) shall not exceed the purpose price of the goods the subject matter of any claim.
9. NON PAYMENT/INSOLVENCY
 - "Insolvent" means You becoming unable to pay your debts within the meaning of Section 123 of the Insolvency Act 1986; the levying or the threat of execution or distress on any of your property; the appointment of a receiver or administrative receiver over all or any part of your property; a proposal for a voluntary arrangement or compromise between You and your creditors whether pursuant to the Insolvency Act 1986 or otherwise; the passing of a resolution for voluntary winding-up or summoning a meeting to pass such a resolution otherwise than for the purposes of a bona fide amalgamation or reconstruction; the presentation of a petition for your winding-up or for an administration order in relation to You; if You suffer any analogous step or proceedings under foreign law or You ceasing or threatening to cease to carry on your business.
 - If you fail to pay the price for any Goods on the due date or fail to pay any sum due to Us under any contract on the due date or You become Insolvent or if You are a Limited Company or partnership and there is a material change in your constitution or You commit a material breach of this Contract and fail to remedy that breach all sums outstanding between You and Us shall become immediately payable and We shall be entitled to do any one or more of the following (without prejudice to any other right or remedy We may have)
 - 9.2.1 Require payment in cleared funds in advance of further deliveries.
 - 9.2.2 Cancel or suspend any further deliveries to You under any contract without liability on our part.
 - 9.2.3 Without prejudice to the generality of Clause 7 of these Terms exercise any of our rights pursuant to that clause.
 - If we reasonably incur third party costs such as tracing or debt collection agency costs or seek legal advice or take legal proceedings to enforce our rights as a result of your breach of this Contract including but not limited to recovery of any sums due, you will reimburse us such reasonable agency costs or legal costs incurred on an indemnity basis.
10. GENERAL
 - This Contract shall be governed and interpreted according to the law of England and Wales and You agree to submit to the non-exclusive jurisdiction of the English Courts.
 - We shall not be liable for any delay or failure to perform any of our obligations in relation to the Goods due to any cause beyond our reasonable control including industrial action.
 - The waiver by Us of any breach or default of these Terms shall not be construed as a continued waiver of that breach nor as a waiver of any subsequent breach of the same or any other provision.
 - If any clause or sub-clause of these Terms is held by a competent authority to be invalid or unenforceable the validity of the other clauses and sub-clauses of these Terms shall not be affected and they shall remain in full force and effect.
 - We may assign novate or sub-contract all or part of this Contract and You shall be deemed to consent to any novation. This Contract is personal to You and it may not be assigned.
 - Nothing in this Contract is intended to or will grant any right to any third party to enforce any terms of this contract whether express or implied.