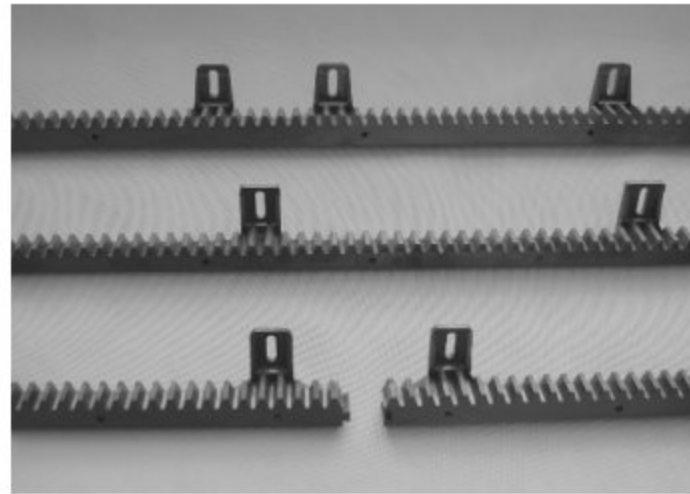
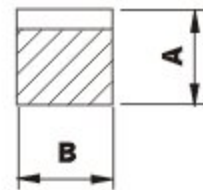
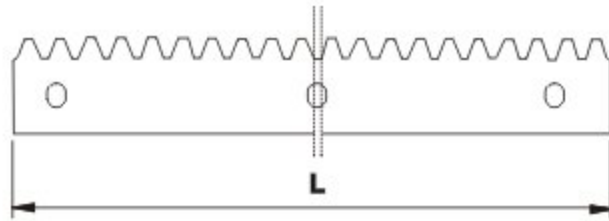


**AUTO GATE RACK**



**NYLON RACK**



Mod	Size	A	B	Long
M4	8x30x1000	8	30	1000
M4	9x30x1000	9	30	1000
M4	10x30x1000	10	30	1000
M4	11x30x1000	11	30	1000
M4	12x30x1000	12	30	1000
M4	12x30x2000	12	30	2000
M4	22x22x1000	22	22	1000
M4	22x22x2000	22	22	2000
M6	30x30x1000	30	30	1000

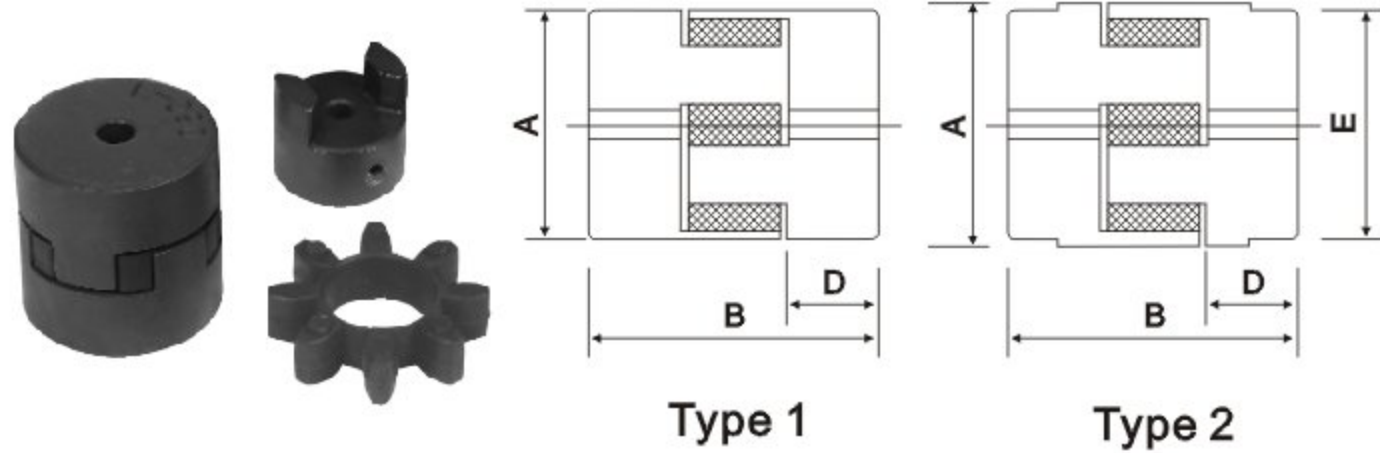
**NYLON RACK**

Mod	Size	A	B	Long	Hole
4	20x28x1000	20	28	1000	4
4	20x28x1000	20	28	1000	6
4	20x28x1000	20	28	1000	2



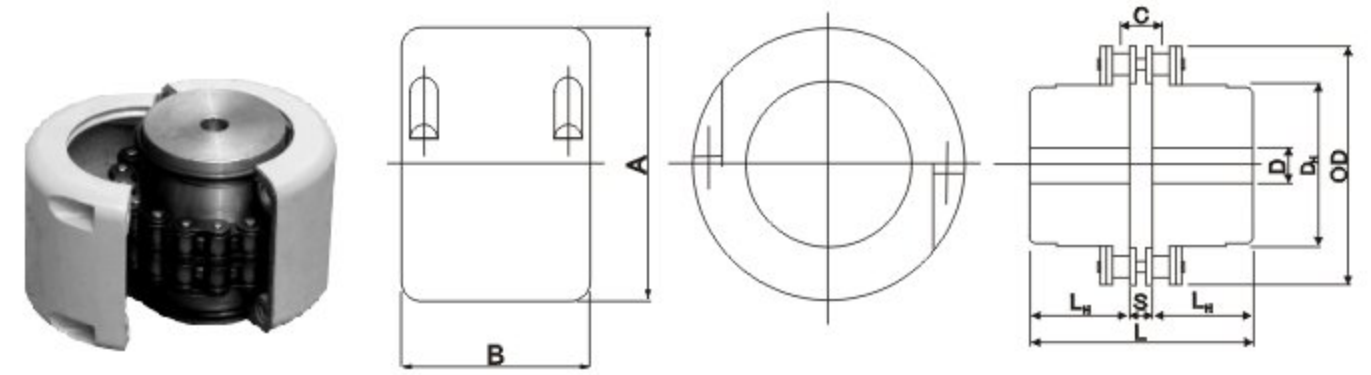
# Couplings





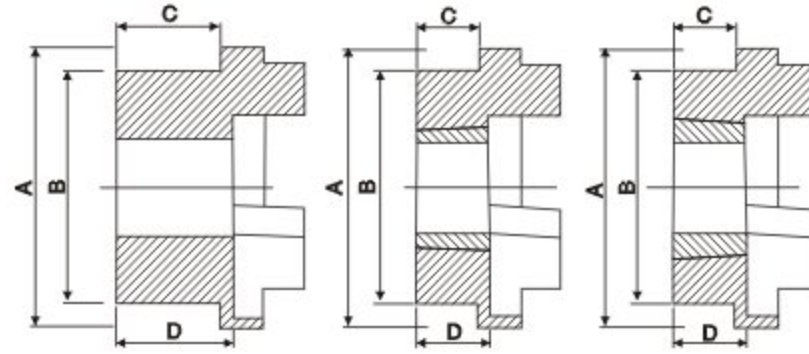
**JAW COUPLING**

SIZE	TYPE	A	B	D	E	Std bore	Bore metric		Bore Inch	
							Min	Max	Min	Max
L035	1	16	20.5	6.6	—	3	3	8	1/8"	3/8"
L050	1	28	43.2	15.6	—	6	6	15	3/16"	5/8"
L070	1	35	50.8	19.0	—	9	9	19	3/16"	3/4"
L075	1	45	54.7	21	—	9	9	25	3/16"	1"
L090	1	54	54.7	21	—	9	9	28	3/16"	1 1/8"
L095	1	54	63.7	25.5	—	9	9	28	3/8"	1 1/8"
L099	1	64.5	72.5	27	—	12	12	35	7/16"	1 3/8"
L100	1	64.5	88.5	35	—	12	12	35	7/16"	1 3/8"
L110	1	85	108	43	—	15	15	48	1/2"	1 7/8"
L150	1	96	115.4	45	—	15	15	48	5/8"	1 7/8"
L190	2	115	133.4	54	101.6	19	19	55	5/8"	2 1/4"
L225	2	127	153.4	64	108	19	19	65	3/1"	1 5/8"



**CHAIN COUPLING**

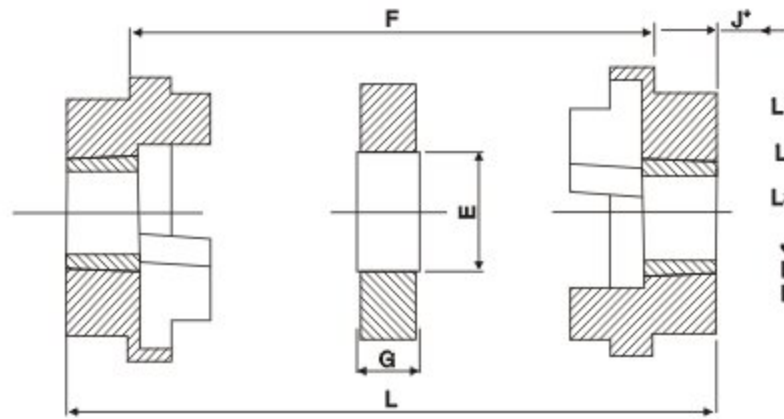
SIZE	Chainpitch	Drill hole	Coupling								Casing			
			Bore		O	L	D <sub>H</sub>	L <sub>H</sub>	S	C	Approx. Weight (kg/m)	A	B	Approx. Weight (kg/m)
			Min.	Max.										
3012	9.525	12	13.5	16	45	65	27.2	29.5	6	10.1	0.31	69	63	0.22
4012	12.7	12	14	22	62	79.4	36	36	7.4	14.4	0.73	77	72	0.30
4014		12	14	28	69	79.4	45	36			1.12	84	75	0.31
4016		13.5	16	32	77	87.4	51.5	40			1.50	92	72	0.35
5014	15.875	14.5	17	35	86	99.7	56	45	9.7	18.1	2.15	101	85	0.47
5016		14.5	18	40	96	99.7	64	45			2.75	110	87	0.50
5018		16	18	45	106	123.5	73.5	45			3.60	122	85	0.60
6018	19.05	20	22	56	127	123.5	89.5	56	11.5	22.8	6.55	147	105	1.2
6020		20	24	60	139	123.5	102.5	56			8.38	158	105	1.2
6022		20	28	71	151	123.5	115	56			10.4	168	117	1.2
8018	20.4	20	32	80	169	141.2	115	63	15.2	29.3	13.2	190	129	1.9
8020		20	36	90	185	145.2	125	65			16.2	210	137	2.5
8022		20	40	100	202	157.2	142	71			21.8	226	137	2.7
10020	31.75	25	45	110	233	178.8	162	80	18.8	35.8	32.4	281	153	4.1
12018	38.1	35	50	125	256	202.7	173	90	22.7	45.4	43.2	307	181	5.2
12022		35	56	140	304	222.7	213	100			69.1	357	181	6.7



BFLANGE FFLANGE HFLANGE

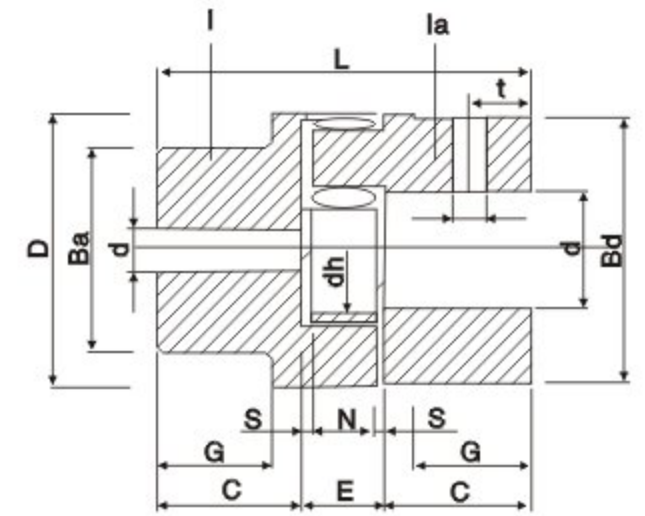
**HRC COUPLING**

SIZE	BUSH	Type F&H				Bored to size				A	B	E	F	G	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	J <sub>4</sub>
		Bore		C	D	Bore		C	D									
		MAX	MIN			MAX	MIN											
70	1008	25	9	20.0	23.5	32	10	20	23.5	69	60	31	25	18	65	66.5	68	29
90	1108	28	9	19.5	23.5	42	10	26	30.5	85	70	32	30.5	22.5	69.5	76	82.5	29
110	1610	42	14	18.5	26.5	55	10	37	45.5	112	100	45	45	29	82	101	119	38
130	1610	42	14	18.5	26.5	60	20	39	47.5	130	105	50	53	35	89	118	146	38
150	2012	50	14	23.5	33.5	65	28	46	56.0	150	115	62	60	40	107	134	160	42
180	2517	60	16	34.5	46.5	80	28	58	70.0	180	125	77	73	49	142	165	189	48
230	3020	75	25	39.5	52.5	100	48	77	90.0	225	155	99	85.5	59.5	165	202	240	55
280	3525	100	35	51.0	66.5	115	60	90	105.5	175	206	119	105.5	74.5	208	247	286	67



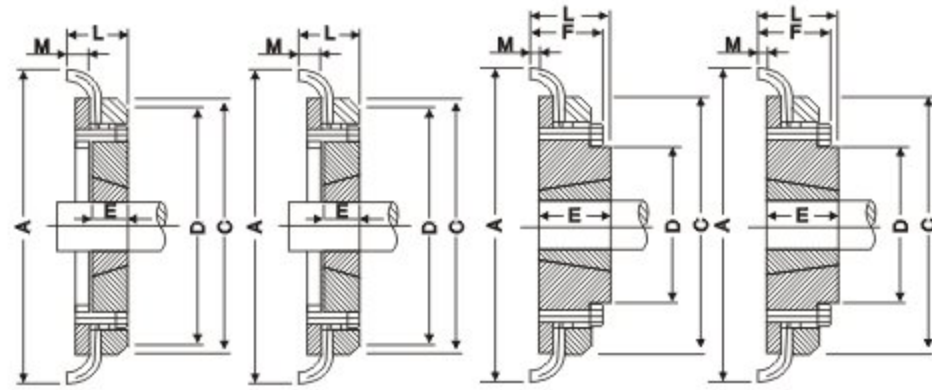
Assembled length

L<sub>1</sub> is the length with assembly combinations F.F-H.H-F.H  
 L<sub>2</sub> is the length with assembly combinations F.B-H.B  
 L<sub>3</sub> is the length with assembly combinations B.B  
 J\* is the wrench clearance required for tightening and loosening the bush on the shaft. The use of a shotted key will allow this dimension to be reduced



**GE COUPLINGS**

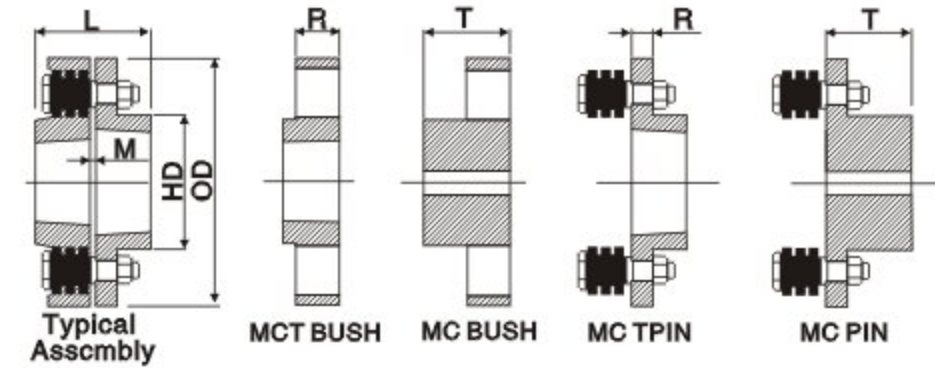
SIZE	Component	Spider(part2)rated torque(NM)			Std bore (D)	Finish bore (D)min-max	L	C	E	N	S	D	dh	ba: bd	G	Finish bore	
		92 Sh A	98 Sh A	64 Sh D												H	t
		19/24	1	10	17	21										6	6-16
	la				6	6-24								40	-		
24/32	1	35	60	75	9	9-24	78	30	18	14	2	55	27	40	24	M5	10
	la				9	9-32								55	-		
28/38	1	95	160	200	10	10-28	90	35	20	15	2.5	65	30	48	28	M8	15
	la				10	10-38								65	-		
38/45	1	190	325	405	12	12-38	114	45	24	18	3	80	38	66	37	M8	15
	la				12	12-45								78	-		
42/55	1	265	450	560	12	12-42	126	50	26	20	3	95	46	75	40	M8	20
	la				12	12-55								94	-		
48/60	1	310	525	655	12	12-46	140	56	28	21	3.5	105	51	85	45	M8	20
	la				12	12-60								104	-		
55/70	1	410	685	825	15	15-55	160	65	30	22	4	120	60	98	52	M10	20
	la				15	15-70								118	-		
65/75	1	625	940	1175	15	15-65	185	75	35	26	4.5	135	68	115	61	M10	20
	la				15	15-75								133	-		
75/90	1	1280	1920	2400	15	15-95	210	85	40	30	5	160	80	135	69	M10	25
	la				15	15-90								158	-		
90/100	1	2400	3600	4500	38	38-90	245	100	45	34	5.5	200	100	160	81	M12	25
	la				38	38-100								180	-		



FFLANGE HFLANGE FFLANGE HFLANGE  
SIZE F40 TO F60 SIZE F70 TO F250

**TYRE COUPLING**

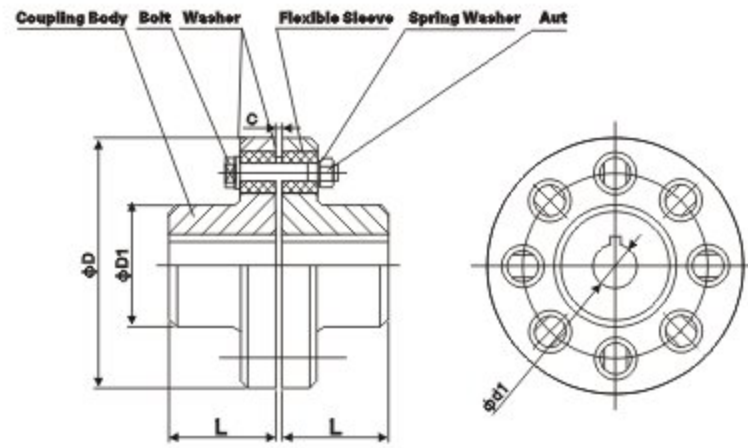
Size	Type	Bush No.	MAX. Bore		Type F&H		Type H		Serve over Key	A	C	D	F	M
			mm	Inch	L	E	L	E						
F40	B	—	32	—	—	—	—	—	M5	104	82	—	—	11
F40	F	1008	25	1"	33	22	—	—	—	104	82	—	—	11
F40	H	1008	25	1"	33	22	—	—	—	104	82	—	—	11
F50	B	—	38	—	—	—	—	—	M5	133	100	79	—	12.5
F50	F	1210	32	1 1/4"	38	25	—	—	—	133	100	79	—	12.5
F50	H	1210	32	1 1/4"	38	25	—	—	—	133	100	79	—	12.5
F60	B	—	45	—	—	—	—	—	M6	165	125	70	—	16.5
F60	F	1610	42	1 5/8"	42	25	—	—	—	165	125	103	—	16.5
F60	H	1610	42	1 5/8"	42	25	—	—	—	165	125	103	—	16.5
F70	B	—	50	—	—	—	—	—	M8	187	142	80	50	11.5
F70	F	2012	50	2"	44	32	—	—	—	187	142	80	50	11.5
F70	H	1610	42	1 5/8"	42	25	—	—	—	187	142	80	50	11.5
F80	B	—	60	—	—	—	—	—	M8	211	165	98	54	12.5
F80	F	2517	60	2 1/2"	58	45	—	—	—	211	165	98	54	12.5
F80	H	2012	50	2"	45	32	—	—	—	211	165	98	54	12.5
F90	H	—	70	—	—	—	—	—	M10	235	188	108	60	13.5
F90	F	2517	60	2 1/2"	58.5	45	—	—	—	235	188	108	60	13.5
F90	H	2517	60	2 1/2"	58.5	45	—	—	—	235	188	108	60	13.5
F100	H	—	80	—	—	—	—	—	M10	254	216	120	62	13.5
F100	F	3020	75	3"	64.5	51	—	—	—	254	216	125	62	13.5
F100	H	2517	60	2 1/2"	58.5	45	—	—	—	254	216	113	62	13.5
F110	B	—	90	—	—	—	—	—	M12	279	233	128	62	12.5
F110	F	3020	75	3"	63.5	51	—	—	—	279	233	134	62	12.5
F110	H	3020	75	3"	63.5	51	—	—	—	279	233	134	62	12.5
F120	B	—	100	—	—	—	—	—	M12	314	264	140	67	14.5
F120	F	3525	100	4"	79.5	65	—	—	—	314	264	144	67	14.5
F120	H	3020	75	4"	85.5	51	—	—	—	314	264	144	67	14.5
F140	B	—	130	—	—	—	—	—	M16	359	311	178	73	16
F140	F	3525	100	4"	81.5	65	—	—	—	359	311	178	73	16
F140	H	3525	100	4"	81.5	65	—	—	—	359	311	178	73	16
F160	B	—	140	—	—	—	—	—	M20	402	345	187	78	15
F160	F	4030	115	4 1/2"	92	77	—	—	—	402	345	197	78	15
F160	H	4030	115	4 1/2"	92	77	—	—	—	402	345	197	78	15
F180	B	—	150	—	—	—	—	—	M16	470	394	205	94	23
F180	F	4535	125	5"	112	89	—	—	—	470	394	205	94	23
F180	H	4535	125	5"	112	89	—	—	—	470	394	205	94	23
F200	B	—	160	—	—	—	—	—	M20	508	429	205	103	24
F200	F	4535	125	5"	113	89	—	—	—	508	429	205	103	24
F200	H	4535	125	5"	113	89	—	—	—	508	429	205	103	24
F220	B	—	180	—	—	—	—	—	M20	562	474	223	118	27.5
F220	F	5010	125	5"	129.5	102	—	—	—	562	474	223	118	27.5
F220	H	5010	125	5"	129.5	102	—	—	—	562	474	223	118	27.5
F250	H	—	190	—	c	—	—	—	M20	628	522	254	125	29.5



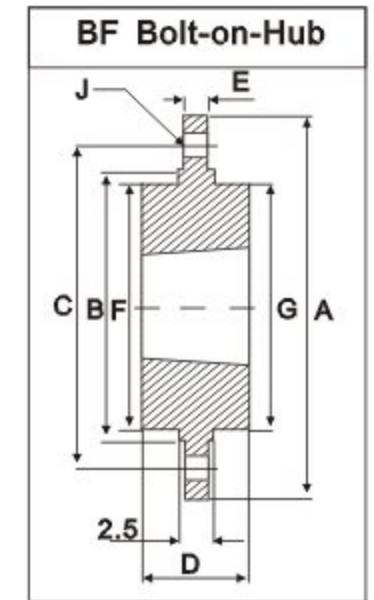
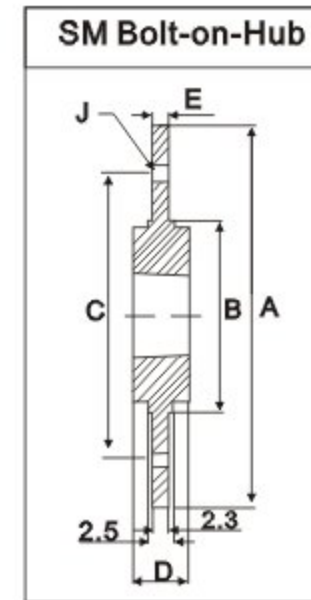
**MCT COUPLING**

SIZE	Max bore (mm)		OD(mm) OD-outside dimension	HD(mm) hub diameter		L(mm) length	M(mm) M-gap	R-flange length		T-length through bore	Spares Number of pin (pcs)	Spares pin size
	Pin half	Bush half		Pin half	Bush half			Pin half	Bush half			
MC020	28	20	89	38	33	72	6	12	23	33	6	M8
MC030	38	32	127	64	51	88	6	12	26	41	4	M10
MC038	42	38	132	70	64	102	6	12	26	48	6	M10
MC042	48	42	146	82	70	118	6	12	33	58	8	M10
MC048	55	48	171	90	82	128	6	17	33	61	6	M12
MC058	65	58	193	105	97	142	6	17	33	68	8	M12
MC070	80	70	216	128	117	159	7	17	33	76	10	M20
MC075	85	75	254	142	127	183	7	30	56	88	8	M20
MC085	90	85	279	162	147	207	7	30	56	100	10	M20
MC0105	115	105	330	200	180	241	7	30	56	117	12	M20
MC0120	130	120	370	232	206	271	7	46	76	132	10	M24
MC0135	135	135	419	240	230	301	7	46	76	147	12	M24
MC0150	150	150	457	260	256	337	7	46	76	165	14	M24

SIZE	Bush no max bore		OD(mm) OD-outside dimension	HD(mm) hub diameter		L(mm) length	M(mm) M-gap	R-flange length		Spares Number of pin (pcs)	Spares pin size	T-length through bore	
	Pin half	Bush half		Pin half	Bush half			Pin half	Bush half			Pin half	Bush half
MCT042	1610-42	1212-32	146	82	78	69	6	12	26	8	M10	25	38
MCT048	2012-50	1615-42	171	90	82	76	6	17	33	6	M12	30	38
MCT058	2517-65	2012-50	193	106	-	83	6	17	33	8	M12	44	38
MCT070	3020-75	2517-65	216	128	117	102	7	17	33	10	M12	51	44
MCT085	3535-90	3030-75	279	162	148	172	7	30	56	10	M20	89	76
MCT105	4040-100	3535-90	330	200	180	198	7	30	56	12	M20	102	89
MCT120	4040-100	4040-100	370	232	206	211	7	46	76	10	M24	102	102
MCT135	4045-100	4545-110	419	240	230	235	7	46	76	12	M24	114	114
MCT150	5050125	5050125	457	260	256	261	7	46	76	10	M24	127	127



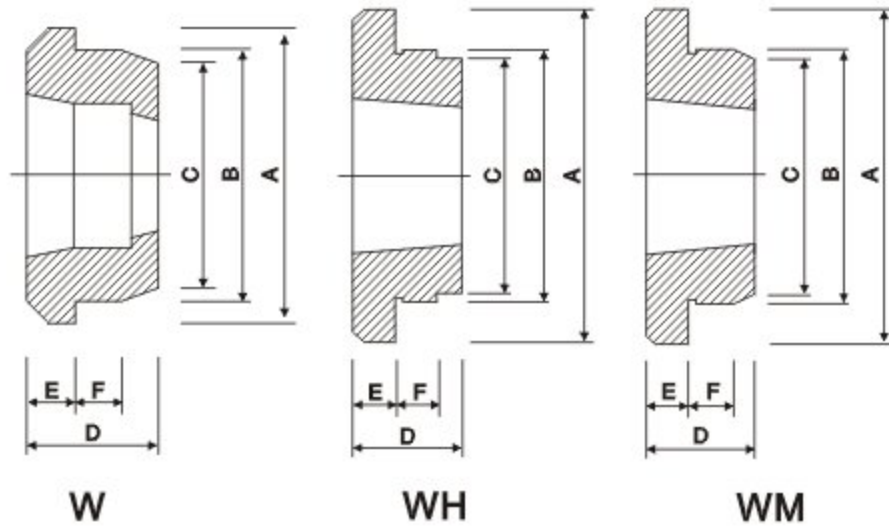
Type	D	D <sub>1</sub>	d <sub>1</sub>	L	C	n-M	Pin No.	Max torque N.m	Max speed r/min	weight (kg)
FCL90	L90	35.5	11	11	3	4-M8X50	1	6	4000	1.7
FCL100	100	40	11	35.5	3	4-M10X56	2	12	4000	2.5
FCL112	112	45	13	40	3	4-M10X56	2	18	4000	3.0
FCL125	125	50	13	45	3	4-M12X64	3	27	4000	4.0
FCL140	140	63	13	50	3	6-M12X64	3	55	4000	5.6
FCL160	160	80	15	56	3	8-M12X64	3	118	4000	7.8
FCL180	180	90	15	63	3	8-M12X64	3	160	3500	10.5
FCL200	200	100	21	71	4	8-M18X80	4	250	3200	16.2
FCL224	224	112	21	80	4	8-M18X80	4	400	2850	21.6
FCL250	250	125	25	90	4	8-M20X85	5	616	2550	31.8
FCL280	280	140	34	100	4	8-M20X85	5	980	2300	44.0
FCL315	315	160	41	112	4	10-M20X85	5	1568	2050	58.0
FCL355	355	180	60	125	5	8-M30X150	6	2460	1800	89.5
FCL400	400	200	60	125	5	10-M30X150	6	3920	1600	113
FCL450	450	224	65	140	5	12-M30X150	6	6180	1400	145
FCL560	560	250	85	160	5	14-M30X150	6	9800	1150	229
FCL630	630	280	95	180	5	18-M30X150	6	15680	1000	296



### FLANGE

Hub Reference	Bush Number	A	B	C	D	E	J No.xDiam
SM 12	1210	180	90	135	26	6.5	6x7.5
SM 16-1	1610	200	110	150	26	7.5	6x7.5
SM 16-2	1615	200	110	150	38	7.5	6x7.5
SM 20	2012	270	140	190	32	8.5	6x9.5
SM 25	2517	340	170	240	45	9.5	6x11.5
SM 30-1	3020	430	220	300	51	13.5	8x13.5
SM 30-2	3020	485	250	340	51	13.5	8x13.5

Hub Reference	Bush Number	A	B	C	D	E	G	H	J No.xDiam
BF 12	1210	120	80	100	25	5.5	80	10	6x7.5
BF 16	1610	130	90	110	25	6.5	90	10	6x7.5
BF 20	2012	145	100	125	30	8.5	100	13	6x9.5
BF 25	2517	185	130	155	44	11.5	119	20	8x11.5
BF 30	3020	220	165	190	50	11.5	147	20	8x13.5



**HUBS**

SIZE	Bushing	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	4040	200	190	189.5	101	32	30
WH45	4545	210	200	199.5	114	40	30
WH50	5050	230	220	219.5	127	40	35

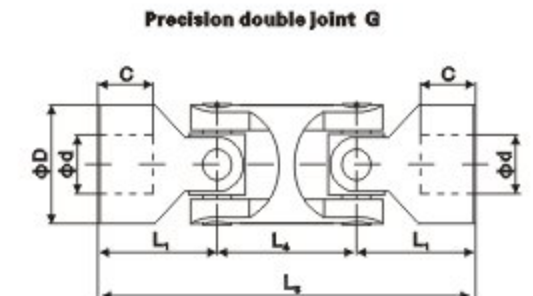
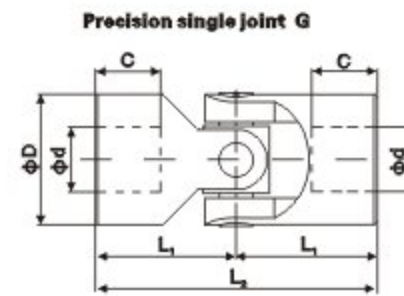
SIZE	Bushing	A	B	C	D	E	F
W12	1215	73.03	63.50	62.17	38.10	15.88	9.53
W16	1615	82.55	73.03	72.24	38.10	15.88	9.53
W20	2017	101.60	88.90	88.11	44.45	19.05	14.45
W25	2517	127.00	111.13	110.34	44.45	19.05	12.70
W30	3030	149.86	133.35	132.56	76.20	25.40	19.05
W35	3535	184.15	158.75	157.96	88.90	31.75	25.40
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

SIZE	Bushing	A	B	C	D	E	F
WM12	1210	70.00	60.00	58.00	25.00	9.00	10.00
WM16-1	1610	83.00	70.00	68.00	25.00	9.00	10.00
WM16-2	1615	83.00	70.00	68.00	38.00	16.00	11.00
WM20	2012	95.00	90.00	88.00	32.00	12.00	12.00
WM25	2517	127.00	110.00	108.00	44.00	19.00	13.00
WM30-1	3020	152.00	130.00	125.00	50.00	20.00	15.00
WM30-2	3030	152.00	130.00	125.00	76.00	25.00	19.00
WM35	3535	184.00	155.00	151.00	89.00	32.00	25.00
WM40	4040	225.00	195.00	187.00	102.00	32.00	32.00
WM45	4545	254.00	220.00	213.00	114.00	38.00	38.00
WM50	5050	270.00	242.00	228.00	127.00	38.00	38.00

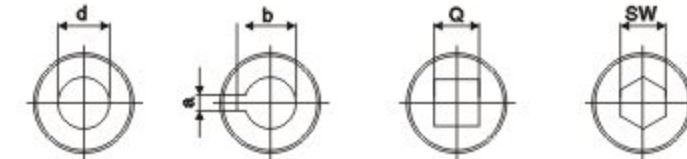


- Suitable for every application in the range of general engineering up to a maximum speed of 4000 min<sup>-1</sup>
- Type G precision single joint Type GD precision double joint
- Maximum articulation angle 45° for each joint
- Available with finish bore H7—on request with keyway, hexagon bore or square bore
- Type G GD (plain bearing) Bearings designed n<sub>max</sub>= 1000 min<sup>-1</sup>
- Type GZ GDZ (needle bearing) Bearings designed n<sub>max</sub>= 4000 min<sup>-1</sup>

**Precision Joints (Type G and GD)**



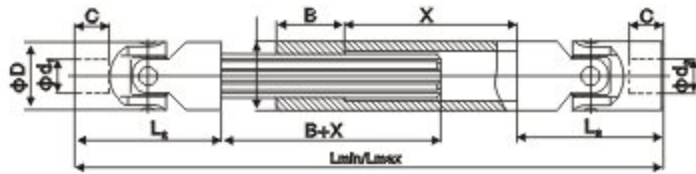
Finish bores:



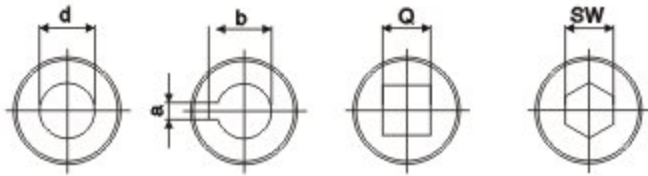
Types and size		d	D	L <sub>2</sub>	L <sub>1</sub>	C	L <sub>4</sub>	L <sub>3</sub>	A	b	Q	SW	Weight	
Size G	DIN description G	Size GD	DIN description GD	[H7]					[JS9]			[H8]	G [kg]	GD [kg]
01G	E6X16-G	01GD	D6X16-G	6	16	34	17	8	22	56	2	7.0	6	0.05 0.08
02G	E10X22-G	02GD	D10X22-G	10	22	48	24	12	26	74	3	11.4	10	0.10 0.15
03G	E12X25-G	03GD	D12X25-G	12	25	56	28	13	30	86	4	13.8	12	0.16 0.25
04G	E14X28-G	04GD	D14X28-G	14	28	60	30	13	36	96	5	16.3	13	0.20 0.40
05G	E16X32-G	05GD	D16X32-G	16	32	68	34	14	36	104	5	18.3	14	0.30 0.45
06G	E18X36-G	06GD	D18X36-G	18	36	74	37	17	40	114	6	20.8	18	0.45 0.70
07G	E20X42-G	07GD	D20X42-G	20	42	82	41	18	46	128	6	22.8	20	0.60 1.00
08G	E22X45-G	08GD	D22X45-G	22	45	95	17.5	22	50	145	6	24.8	22	0.95 1.55
09G	E25X50-G	09GD	D25X50-G	25	50	108	54	26	55	163	8	28.3	25	1.20 2.00
10G	E30X58-G	10GD	D30X58-G	30	58	122	61	29	68	190	8	33.3	30	1.85 2.90
11G	E35X70-G	11GD	D35X70-G	35	70	140	70	35	72	212	10	38.3	-	3.15 4.75
12G	E40X80-G	12GD	D40X80-G	40	80	160	80	40	85	245	12	43.3	-	4.80 7.20
13G	E50X95-G	13GD	D50X95-G	50	95	190	95	50	100	290	14	53.8	-	7.60 12.0



Precision Joints (Type G and Gd: extendable)



Finish bores:



- Precision double joint—extendable, maximum Articulation angle 45° for each joint
- Bridging of bigger shaft distances
- Type GA (plain bearing)  $n_{max.} = 1000 \text{ min}^{-1}$
- Type HA (needle bearing)  $n_{max.} = 4000 \text{ min}^{-1}$
- Available with finish bore H7—on request with keyway, hexagon bore or square bore

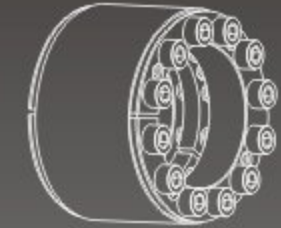
Size	Dimensions Lmin/Lmax, Standard lengths									
01	140	160	180	230						
	170	200	240	330						
02	160	180	200	220	250	280	300			
	190	225	270	300	355	420	450			
03	170	180	200	220	250	280	300	350	400	
	200	220	260	300	350	420	450	550	650	
04	190	210	240	250	275	300	380	400		
	210	250	350	350	390	430	590	630		
05	230	250	270	290	300	400	500			
	280	320	370	400	415	620	820			
06	250	270	290	320	380	420	500			
	300	340	380	440	580	640	800			
07	250	270	290	330	350	470	800			
	280	320	250	430	470	710	800			
08	295	310	250	380	420	460	500			
	345	375	450	500	590	660	745			
09	330	350	370	400	450	500	540			
	380	420	455	510	620	720	795			

Size		d1d2 [H7]	D	L2	C	$L_{min}/L_{max}/X$	B	a [Js9]	b	Q [H8]	SW [H8]	D1
GA	HA											
01GA	01HA	10	22	48	12	$L_{min}/asper$ $L_{min}/customers\ request$ $L_{min}/L_{max}$	30	3	11.4	10	10	22
02GA	02HA	12	25	56	13		40	4	13.8	12	12	26
03GA	03HA	14	28	60	13		40	5	16.3	14	14	29
04GA	04HA	16	32	68	16		40	5	18.3	16	16	32
05GA	05HA	18	36	74	17		40	6	20.8	18	18	37
06GA	06HA	20	42	82	18		45	6	22.8	20	20	42
07GA	07HA	22	45	95	22		50	6	24.8	22	22	47
08GA	08HA	24	50	108	24		50	8	28.3	25	25	52
09GA	09HA	30	58	122	30		60	8	33.3	30	30	58
10GA	10HA	35	70	140	35		70	10	38.3	-	-	70
11GA	11HA	40	80	160	40		80	12	43.3	-	-	80
12GA	12HA	50	95	190	50		90	14	53.8	-	-	95

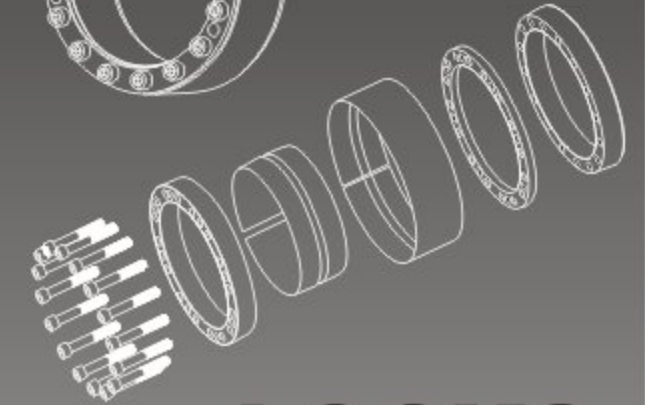
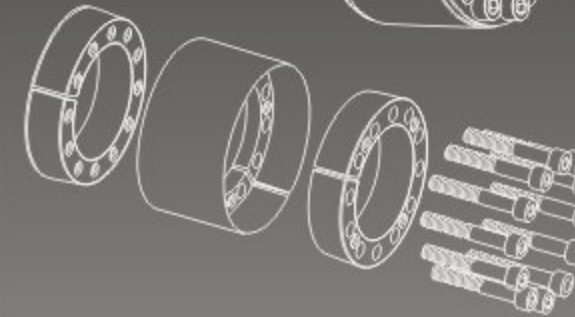


D Locks

DE Locks



DS Locks



# LOCKS

