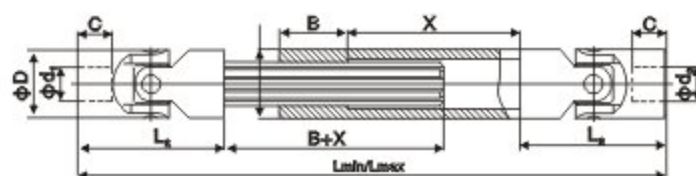
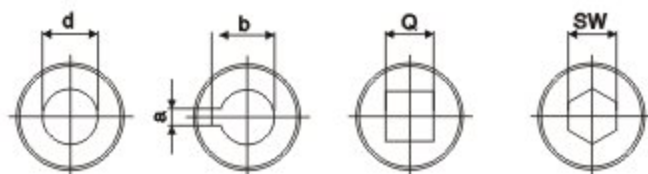




Precision Joints (Type G and Gd: extendable)



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			

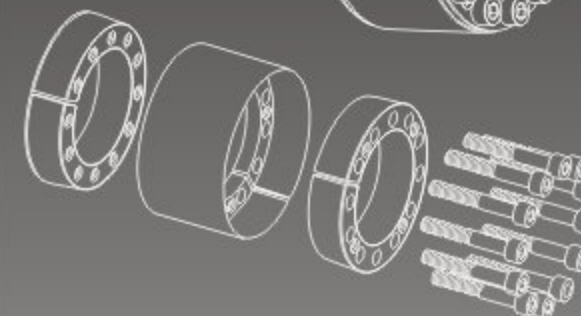
Size		d1d2 [H7]	D	L2	C	Lmin/Lmax/X	B	a [Js9]	b	Q [H8]	SW [H8]	D1
GA	HA											
01GA	01HA	10	22	48	12	Lmin/asper Lmax/customers request Lmin/Lmax	30	3	11.4	10	10	22
02GA	02HA	12	25	56	13		40	4	13.8	12	12	26
03GA	03HA	14	28	60	13		40	5	16.3	14	14	29
04GA	04HA	16	32	68	16		40	5	18.3	16	16	32
05GA	05HA	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



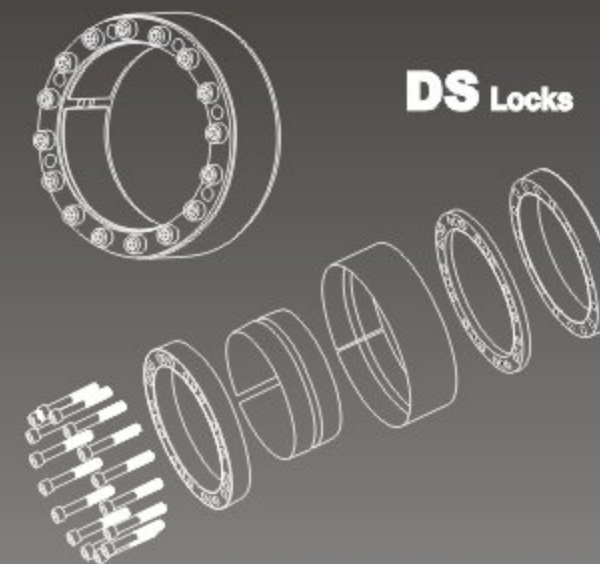
D Locks



DE Locks

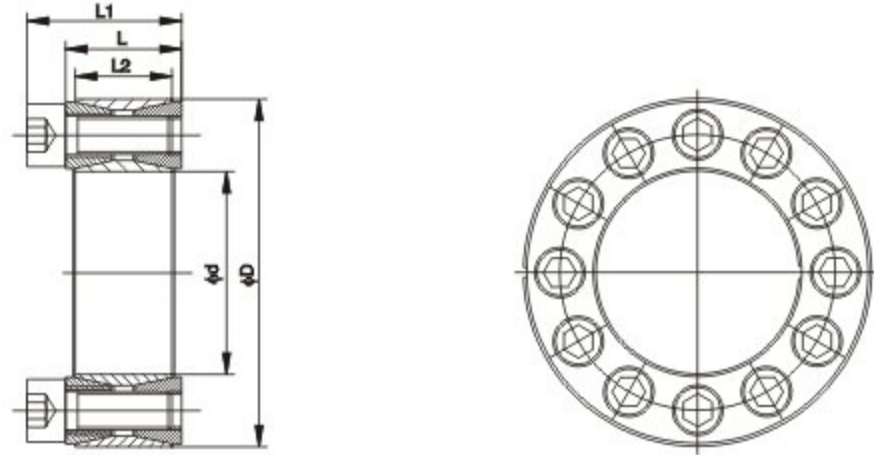


DS Locks



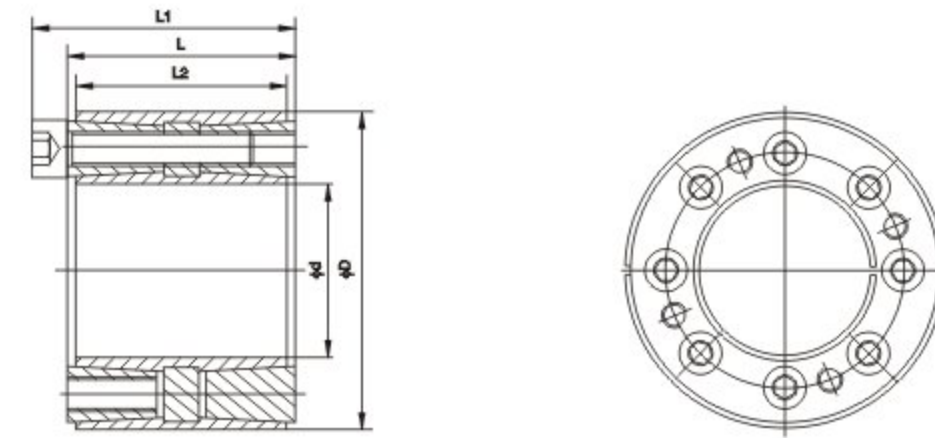
LOCKS





B

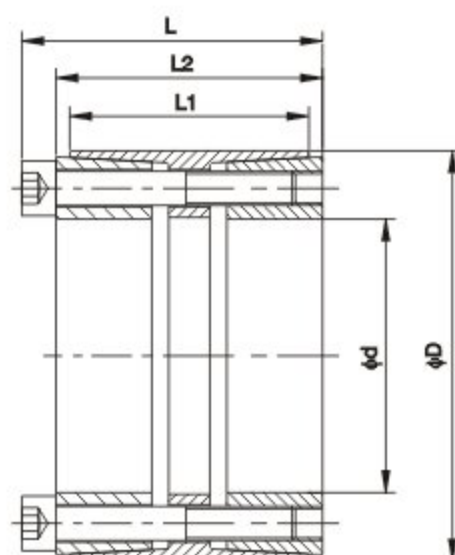
Size	Basic dimensions			SizesxN	Rated load		Ps	Ph	Ma	G
	L2	L	L1		Ft(Kn)	Mt(Kn.m)				
19x47B	17	20	26	M6x8	27	0.24	213	90	14	0.25
20x47B	17	20	26	M6x8	27	0.27	210	90	14	0.24
22x47B	17	20	26	M6x8	27	0.30	195	90	14	0.23
25x50B	17	20	26	M6x9	30	0.38	190	95	14	0.25
28x55B	17	20	26	M6x10	33	0.47	185	95	14	0.30
30x55B	17	20	26	M6x10	33	0.50	175	95	14	0.29
35x60B	17	20	26	M6x12	40	0.70	180	105	14	0.32
38x63B	17	20	26	M6x14	46	0.88	185	105	14	0.33
40x65B	17	20	26	M6x14	46	0.92	180	110	14	0.34
42x72B	20	24	32	M8x12	73	1.36	200	117	35	0.48
45x75B	20	24	32	M8x12	73	1.62	210	125	35	0.57
50x80B	20	24	32	M8x12	73	1.77	190	115	35	0.60
55x85B	20	24	32	M8x14	83	2.27	200	130	35	0.63
60x90B	20	24	32	M8x14	83	2.47	180	120	35	0.69
65x95B	20	24	32	M8x16	93	3.04	190	130	35	0.73
70x110B	24	28	38	M10x14	132	4.60	210	130	70	1.28
75x115B	24	28	38	M10x14	131	4.90	195	125	70	1.33
80x120B	24	28	38	M10x14	131	5.20	180	120	70	1.40
85x125B	24	28	38	M10x16	148	6.30	195	130	70	1.49
90x130B	24	28	38	M10x16	147	6.60	180	125	70	1.53
95x135B	24	28	38	M10x18	167	7.90	195	135	70	1.62
100x145B	29	33	45	M12x14	192	9.60	195	135	125	2.01
105x150B	29	33	45	M12x14	190	9.98	185	130	125	2.10
110x155B	29	33	45	M12x14	191	10.50	180	125	125	2.15
120x165B	29	33	45	M12x16	218	13.10	185	135	125	2.35
125x170B	29	33	45	M12x18	220	13.78	180	130	125	2.95
130x180B	34	38	50	M12x20	272	17.60	165	120	125	3.51
140x190B	34	38	50	M12x22	298	20.90	165	125	125	3.85
150x200B	34	38	50	M12x24	324	24.20	170	125	125	4.07
160x210B	34	38	50	M12x26	350	28.00	170	130	125	4.30
170x225B	38	44	58	M14x22	386	32.80	160	120	190	5.78
180x235B	38	44	58	M14x24	420	37.80	165	125	190	6.05
190x250B	46	52	66	M14x28	490	46.50	150	115	190	8.25
200x260B	46	52	66	M14x30	525	52.50	150	115	190	8.65
210x275B	50	56	72	M16x24	599	62.89	151	115	295	10.10



D

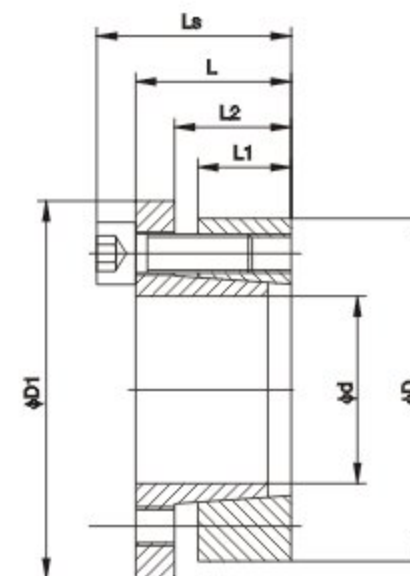
Size	Basic dimensions			SizesxN	Rated load		Ps	Ph	Ma	G
	L2	L	L1		Ft(Kn)	Mt(Kn.m)				
45x75D	56	64	72	M8x9	160	3.51	179	108	41	1.25
48x80D	56	64	72	M8x9	160	3.72	168	101	41	1.41
50x80D	56	64	72	M8x9	170	4.3	162	101	41	1.35
55x85D	56	64	72	M8x9	170	4.7	147	95	41	1.45
60x90D	56	64	72	M8x11	190	5.81	165	110	41	1.55
65x95D	56	64	72	M8x11	190	6.10	130	89	41	1.92
70x110D	70	78	88	M10x11	330	11.8	179	114	83	3.11
75x115D	70	78	88	M10x11	330	12.6	167	109	83	3.28
80x120D	70	78	88	M10x12	360	14.7	171	114	83	3.45
85x125D	70	78	88	M10x12	360	15.6	161	109	83	3.63
90x130D	70	78	88	M10x13	390	17.9	165	114	83	3.8
95x135D	70	78	88	M10x13	390	18.9	156	110	83	3.97
100x145D	90	100	112	M12x12	467	23.3	181	108	145	6.80
110x155D	90	100	112	M12x13	553	30.4	190	110	145	7.50
120x165D	90	100	112	M12x15	617	37	195	119	145	8.60
130x180D	104	116	130	M14x13	759	49	180	111	230	11.1
140x190D	104	116	130	M14x15	843	59	186	121	230	11.8
150x200D	104	116	130	M14x16	897	67	185	123	230	12.6
160x210D	104	116	130	M14x17	950	76	183	123	230	13.4
170x225D	134	146	162	M16x15	1223	104	172	110	355	19.6
180x235D	134	146	162	M16x16	1289	116	172	113	355	20.6
190x250D	134	146	162	M16x17	1363	130	172	113	355	23.8
200x260D	134	146	162	M16x17	1368	136	172	108	355	24.9
220x285D	134	146	162	M16x20	1582	174	172	118	355	29.6
240x305D	134	146	162	M16x22	1725	207	172	120	355	31.9
280x325D	134	146	162	M16x22	1800	225	170	110	355	34.3
280x355D	165	177	197	M20x20	2429	340	168	118	690	52.0
300x375D	165	177	197	M20x22	2540	381	161	112	690	55.3
320x405D	165	177	197	M20x22	2781	431	175	122	690	67.3
340x425D	165	177	197	M20x24	2994	509	171	108	690	71.0

The items<CL200X260D are standard products in stock, the items>CL200X260D will be produced against orders



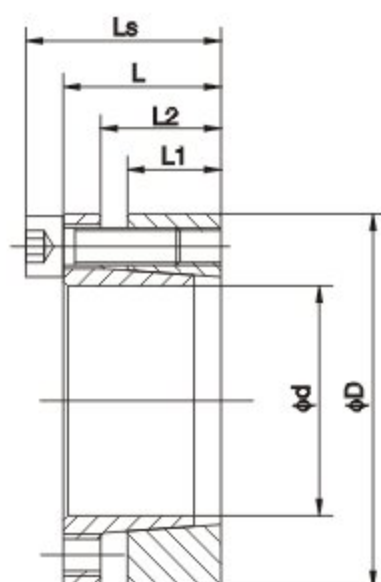
DE

Size	Basic dimensions			SizesxN	Rated load		Ps	Ph	Ma	G
	L1	L2	L		Ft(Kn)	Mt(Kn.m)				
25x50DE	32	40	46	M6x6	0.73	70	250	130	17	1.28
28x55DE	32	40	46	M6x6	0.82	70	220	120	17	1.35
30x55DE	32	40	46	M6x6	0.90	70	210	120	17	1.47
35x60DE	44	54	60	M6x7	1.22	80	150	90	17	1.55
38x65DE	44	54	60	M6x10	2.26	130	240	120	17	1.58
40x65DE	44	54	60	M6x10	2.39	130	230	140	17	1.68
42x75DE	44	54	62	M8x7	2.51	130	220	120	41	1.76
45x75DE	44	54	62	M8x7	2.69	130	200	120	41	1.85
48x80DE	56	64	72	M8x8	3.27	150	220	130	41	1.96
50x80DE	56	64	72	M8x8	3.41	150	170	110	41	2.04
55x85DE	56	64	72	M8x9	4.22	170	170	110	41	2.15
60x90DE	56	64	72	M8x10	5.11	180	170	120	41	2.25
65x95DE	56	64	72	M8x10	5.54	190	160	110	41	2.39
70x110DE	70	78	88	M10x10	10.15	310	200	130	83	2.48
75x115DE	70	78	88	M10x10	10.88	320	190	120	83	2.62
80x120DE	70	78	88	M10x12	12.76	340	190	130	83	2.76
85x125DE	70	78	88	M10x12	14.80	380	200	140	83	2.90
90x130DE	70	78	88	M10x12	15.65	380	190	130	83	3.04
95x135DE	70	78	88	M10x12	16.53	380	180	130	83	3.17
100x145DE	90	100	112	M12x12	23.25	510	180	120	145	5.44
110x155DE	90	100	112	M12x12	28.01	530	170	130	145	6.00
120x165DE	90	100	112	M12x14	35.51	650	190	140	145	6.88
130x180DE	104	116	130	M14x12	45.13	770	180	130	230	8.88
140x190DE	104	116	130	M14x14	56.70	870	190	140	230	9.44
150x200DE	104	116	130	M14x16	65.10	940	190	140	230	10.08
160x210DE	104	116	130	M14x16	74.05	1000	190	150	230	10.72
170x225DE	134	148	164	M16x14	95.25	1220	170	130	355	15.68
180x235DE	134	148	164	M16x16	108.05	1290	170	130	355	16.48
190x250DE	134	148	164	M16x16	121.65	1360	170	130	355	19.04
200x260DE	134	148	164	M16x16	128.06	1370	160	130	355	19.92
220x285DE	134	148	164	M16x18	158.48	1580	170	130	355	23.68



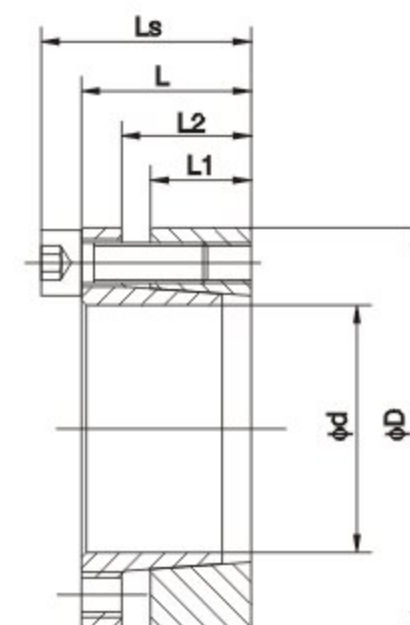
FE

Size	Basic dimensions					SizesxN	Rated load		Ps	Ph	Ma	G
	L1	L2	L	Ls	D1		Ft(Kn)	Mt(Kn.m)				
14x55FE	17	22	30	38	62	M8x3	18	0.127	208	56	25	0.81
16x55FE	17	22	30	38	62	M8x3	18	0.142	181	56	25	0.87
18x55FE	17	22	30	38	62	M8x3	18	0.157	161	56	25	0.94
19x55FE	17	22	30	38	62	M8x3	18	0.165	152	56	25	1.02
20x55FE	17	22	30	38	62	M8x3	18	0.172	145	56	25	1.06
22x55FE	17	22	30	38	62	M8x3	25.5	0.285	186	75	35	1.70
24x55FE	17	22	30	38	62	M8x3	25.5	0.307	170	75	35	1.79
25x55FE	17	22	30	38	62	M8x3	25.5	0.315	163	75	35	1.89
28x55FE	17	22	30	38	62	M8x3	31.5	0.395	175	91	41	1.98
30x55FE	17	22	30	38	62	M8x3	31.5	0.425	163	91	41	2.15
24x65FE	17	22	30	38	72	M8x5	37.4	0.44	244	91	41	0.94
25x65FE	17	22	30	38	72	M8x5	37.4	0.46	234	91	41	1.02
28x65FE	17	22	30	38	72	M8x5	43.6	0.6	243	105	35	1.06
30x65FE	17	22	30	38	72	M8x5	43.6	0.64	227	105	35	1.70
32x65FE	17	22	30	38	72	M8x5	43.6	0.69	213	105	35	1.79
35x65FE	17	22	30	38	72	M8x5	52.5	0.81	234	126	41	1.89
38x65FE	17	22	30	38	72	M8x5	52.5	0.95	216	126	41	1.98
40x65FE	17	22	30	38	72	M8x5	52.5	0.99	205	126	41	2.15
30x80FE	20	25	33	41	87	M8x7	56.5	0.78	232	87	30	1.70
32x80FE	20	25	33	41	87	M8x7	56.5	0.83	218	87	30	1.79
35x80FE	20	25	33	41	87	M8x7	61	1.06	232	102	35	1.89
38x80FE	20	25	33	41	87	M8x7	61	1.15	214	102	35	1.98
40x80FE	20	25	33	41	87	M8x7	61	1.22	203	102	41	2.15
42x80FE	20	25	33	41	87	M8x7	73.5	1.36	233	123	41	2.24
45x80FE	20	25	33	41	87	M8x7	73.5	1.55	217	123	41	3.07
48x80FE	20	25	33	41	87	M8x7	73.5	1.66	203	123	41	3.35
50x80FE	20	25	33	41	87	M8x7	73.5	1.73	195	123	41	3.59



FA1

Size	Basic dimensions				SizesxN	Rated load		Ps	Ph	Ma	G
	L1	L2	L	Ls		Ft(Kn)	Mt(Kn.m)				
18x47FA1	17	22	28	34	M6x5	34	0.31	314	125	14	0.26
19x47FA1	17	22	28	34	M6x5	35	0.33	297	125	14	0.27
20x47FA1	17	22	28	34	M6x5	38	0.38	295	125	14	0.27
22x47FA1	17	22	28	34	M6x5	38	0.41	270	125	14	0.28
24x50FA1	17	22	28	34	M6x5	38	0.45	245	120	14	0.29
25x50FA1	17	22	28	34	M6x6	45.6	0.57	285	140	14	0.29
28x55FA1	17	22	28	34	M6x6	45.6	0.63	255	130	14	0.35
30x55FA1	17	22	28	34	M6x6	45.6	0.66	235	130	14	0.36
32x60FA1	17	22	28	34	M6x8	60.6	0.97	295	155	14	0.44
35x60FA1	17	22	28	34	M6x8	60.6	1.06	270	155	14	0.47
38x65FA1	17	22	28	34	M6x8	60.6	1.15	250	145	14	0.48
40x65FA1	17	22	28	34	M6x8	60.6	1.21	235	145	14	0.55
42x75FA1	20	25	33	41	M8x7	98	2.05	295	170	35	0.76
45x75FA1	20	25	33	41	M8x7	98	2.2	290	170	35	0.78
48x80FA1	20	25	33	41	M8x7	98	2.35	270	160	35	0.81
50x80FA1	20	25	33	41	M8x7	98	2.45	260	160	35	0.87
55x85FA1	20	25	33	41	M8x8	112	3.08	270	175	35	0.94
60x90FA1	20	25	33	41	M8x8	112	3.36	245	165	35	1.00
63x95FA1	20	25	33	41	M8x9	126	3.87	260	175	35	1.06
65x95FA1	20	25	33	41	M8x9	126	4.09	250	175	35	1.70
70x110FA1	24	30	40	50	M10x8	179	6.3	280	180	70	1.79
75x115FA1	24	30	40	50	M10x8	179	6.7	260	170	70	1.89
80x120FA1	24	30	40	50	M10x8	179	7.15	250	170	70	1.98
85x125FA1	24	30	40	50	M10x9	200	8.5	260	180	70	2.15
90x130FA1	24	30	40	50	M10x9	200	9.1	250	170	70	2.24
95x135FA1	24	30	40	50	M10x10	224	10.6	260	180	70	3.07
100x145FA1	26	32	44	56	M12x8	268	13.4	270	190	125	3.35
110x155FA1	26	32	44	56	M12x8	268	14.6	240	180	125	3.59
120x165FA1	26	32	44	56	M12x9	298	17.9	250	180	125	5.04
130x180FA1	34	40	54	68	M12x12	400	26	240	170	125	5.33



FA1

Size	Basic dimensions				SizesxN	Rated load		Ps	Ph	Ma	G
	L1	L2	L	Ls		Ft(Kn)	Mt(Kn.m)				
18x47FA1	17	22	28	34	M6x5	34	0.31	314	125	14	0.26
19x47FA1	17	22	28	34	M6x5	35	0.33	297	125	14	0.27
20x47FA1	17	22	28	34	M6x5	38	0.38	295	125	14	0.27
22x47FA1	17	22	28	34	M6x5	38	0.41	270	125	14	0.28
24x50FA1	17	22	28	34	M6x5	38	0.45	245	120	14	0.29
25x50FA1	17	22	28	34	M6x6	45.6	0.57	285	140	14	0.29
28x55FA1	17	22	28	34	M6x6	45.6	0.63	255	130	14	0.35
30x55FA1	17	22	28	34	M6x6	45.6	0.66	235	130	14	0.36
32x60FA1	17	22	28	34	M6x8	60.6	0.97	295	155	14	0.44
35x60FA1	17	22	28	34	M6x8	60.6	1.06	270	155	14	0.47
38x65FA1	17	22	28	34	M6x8	60.6	1.15	250	145	14	0.48
40x65FA1	17	22	28	34	M6x8	60.6	1.21	235	145	14	0.55
42x75FA1	20	25	33	41	M8x7	98	2.05	295	170	35	0.76
45x75FA1	20	25	33	41	M8x7	98	2.2	290	170	35	0.78
48x80FA1	20	25	33	41	M8x7	98	2.35	270	160	35	0.81
50x80FA1	20	25	33	41	M8x7	98	2.45	260	160	35	0.87
55x85FA1	20	25	33	41	M8x8	112	3.08	270	175	35	0.94
60x90FA1	20	25	33	41	M8x8	112	3.36	245	165	35	1.00
63x95FA1	20	25	33	41	M8x9	126	3.87	260	175	35	1.06
65x95FA1	20	25	33	41	M8x9	126	4.09	250	175	35	1.70
70x110FA1	24	30	40	50	M10x8	179	6.3	280	180	70	1.79
75x115FA1	24	30	40	50	M10x8	179	6.7	260	170	70	1.89
80x120FA1	24	30	40	50	M10x8	179	7.15	250	170	70	1.98
85x125FA1	24	30	40	50	M10x9	200	8.5	260	180	70	2.15
90x130FA1	24	30	40	50	M10x9	200	9.1	250	170	70	2.24
95x135FA1	24	30	40	50	M10x10	224	10.6	260	180	70	3.07
100x145FA1	26	32	44	56	M12x8	268	13.4	270	190	125	3.35
110x155FA1	26	32	44	56	M12x8	268	14.6	240	180	125	3.59
120x165FA1	26	32	44	56	M12x9	298	17.9	250	180	125	5.04
130x180FA1	34	40	54	68	M12x12	400	26	240	170	125	5.33

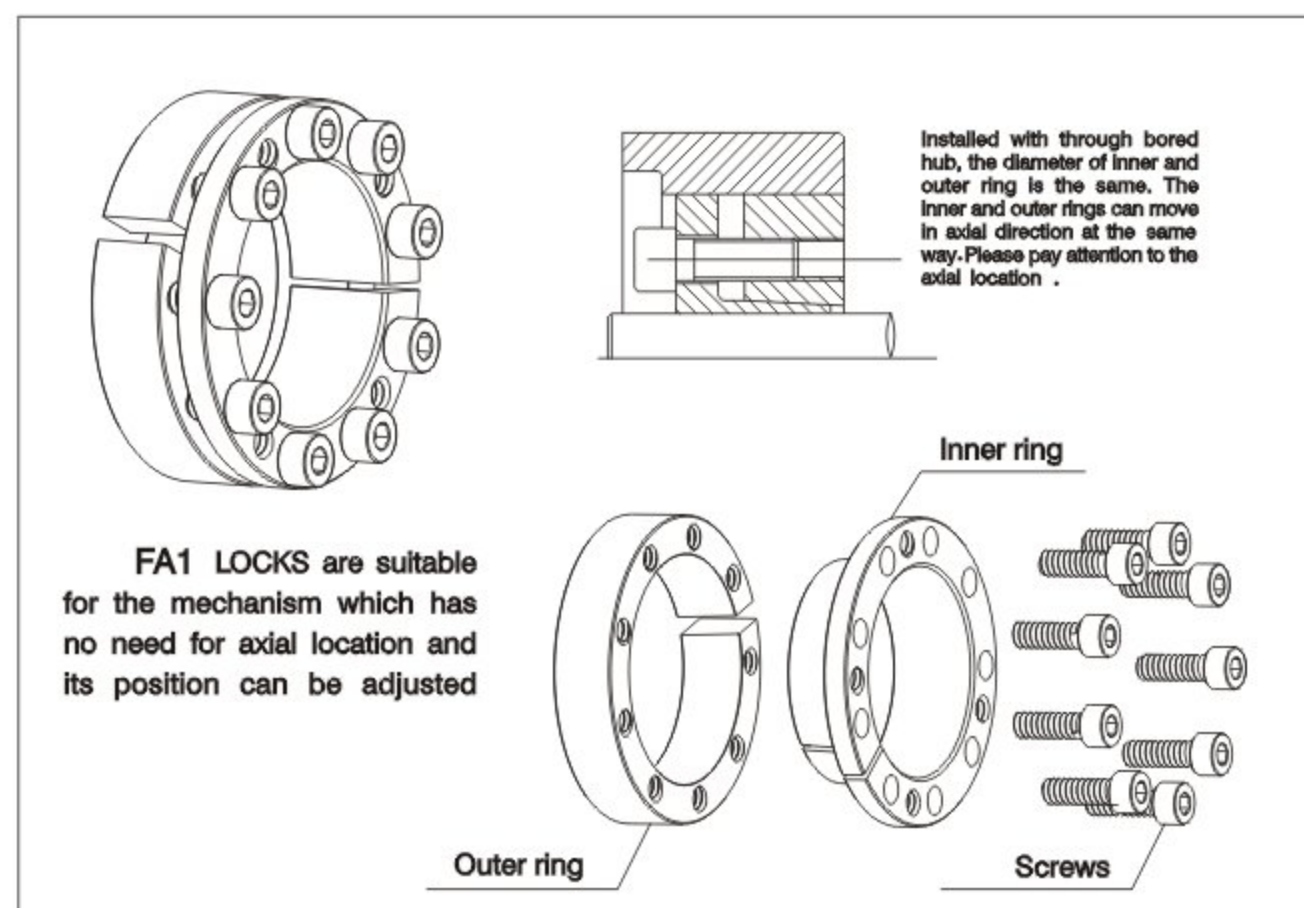


FA1

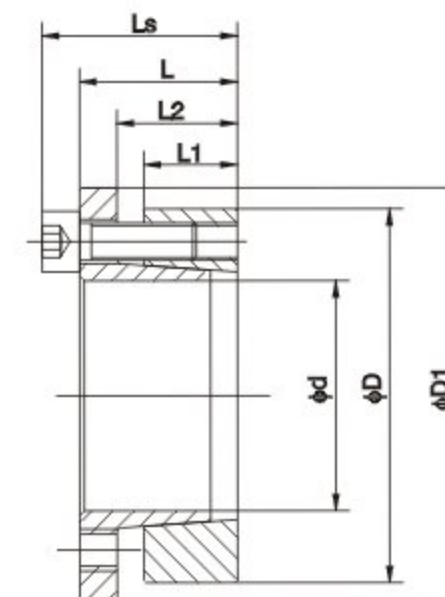
Size	Basic dimensions				Size×N	Rated load		Ps Mpa	Ph Mpa	Ma N.m	G Kg
	L1	L2	L	Ls		Ft(Kn)	Mt(Kn.m)				
140x190FA1	34	40	54	68	M14x9	384	27	210	150	190	5.81
150x200FA1	34	40	54	68	M14x10	440	33	230	170	190	6.87
160x210FA1	34	40	54	68	M14x11	470	38	230	170	190	7.61
170x225FA1	44	50	64	78	M14x12	530	45	180	130	190	8.05
180x235FA1	44	50	64	78	M14x12	530	47	170	130	190	8.9
190x250FA1	44	50	64	78	M14x15	590	49	210	150	190	9.58
200x260FA1	44	50	64	78	M14x15	590	52	190	150	190	10.7
220x285FA1	50	56	72	88	M16x12	587	64.5	145	110	355	14.4
240x305FA1	50	56	72	88	M16x15	734	88	165	130	355	15.5
260x325FA1	50	56	72	88	M16x18	880	114	180	145	355	16.7
280x355FA1	60	66	84	102	M18x16	948	132	150	120	485	24.0
300x375FA1	60	66	84	102	M18x18	1059	159	160	125	485	25.5
320x405FA1	74	81	101	121	M20x18	1374	220	150	120	690	38.0
340x425FA1	74	81	101	121	M20x21	1603	272	175	135	690	40.0
360x455FA1	86	94	116	138	M22x18	1710	308	140	110	930	48.0
380x475FA1	86	94	116	138	M22x21	1995	379	155	125	930	57.0
400x495FA1	86	94	116	138	M22x21	1995	399	150	120	930	63.0

Note: All the items listed in the above table will be produced against orders

Assembling diagram:



FA2



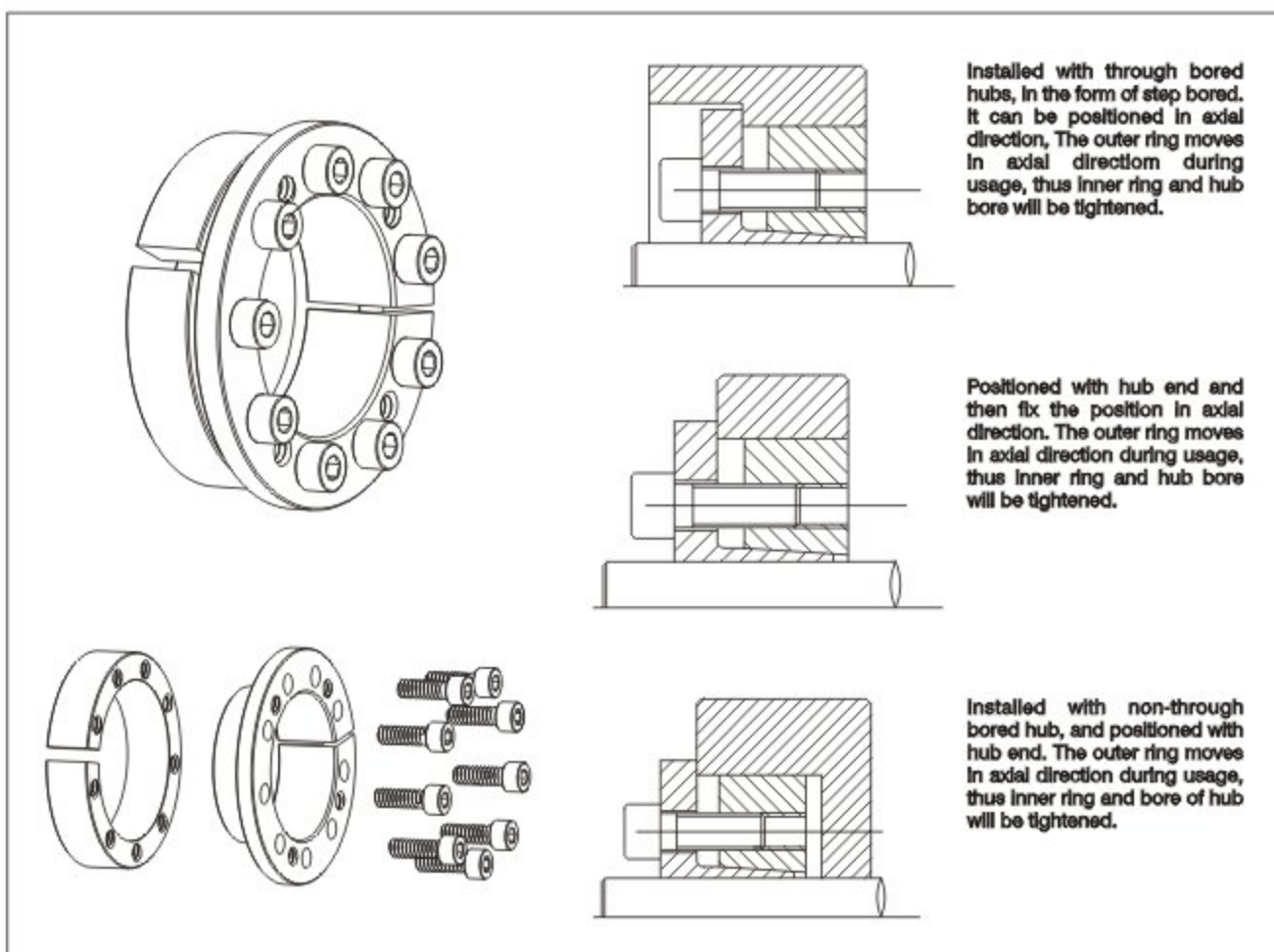
Size	Basic dimensions					Size×N	Rated load		Ps Mpa	Ph Mpa	Ma N.m	G Kg
	L1	L2	L	Ls	D1		Ft(Kn)	Mt(Kn.m)				
18x47FA2	17	22	28	34	56	M6x5	28	0.25	241	95	17	0.26
19x47FA2	17	22	28	34	56	M6x5	28	0.26	229	95	17	0.27
20x47FA2	17	22	28	34	56	M6x5	28	0.28	220	95	17	0.27
22x47FA2	17	22	28	34	56	M6x5	28	0.30	200	95	17	0.28
24x50FA2	17	22	28	34	59	M6x5	28	0.33	180	90	17	0.29
25x50FA2	17	22	28	34	59	M6x6	34	0.42	210	105	17	0.29
28x55FA2	17	22	28	34	64	M6x6	34	0.47	190	95	17	0.35
30x55FA2	17	22	28	34	64	M6x6	34	0.50	175	95	17	0.40
32x60FA2	17	22	28	34	69	M6x8	45	0.72	220	115	17	0.44
35x60FA2	17	22	28	34	69	M6x8	45	0.79	200	115	17	0.48
38x65FA2	17	22	28	34	74	M6x8	45	0.85	185	105	17	0.48
40x65FA2	17	22	28	34	74	M6x8	45	0.90	175	105	17	0.55
42x75FA2	20	25	33	41	84	M8x7	73	1.49	225	125	41	0.76
45x75FA2	20	25	33	41	84	M8x7	73	1.60	215	125	41	0.80
48x80FA2	20	25	33	41	89	M8x7	73	1.71	200	120	41	0.81
50x80FA2	20	25	33	41	89	M8x7	73	1.79	195	120	41	0.87
55x85FA2	20	25	33	41	94	M8x8	83	2.10	200	130	41	0.96
60x90FA2	20	25	33	41	99	M8x8	83	2.32	185	125	41	1.00
63x95FA2	20	25	33	41	104	M8x9	94	2.51	188	130	41	1.06
65x95FA2	20	25	33	41	104	M8x9	94	2.98	190	130	41	1.70
70x110FA2	24	30	40	50	119	M10x8	133	4.63	210	135	83	1.79
75x115FA2	24	30	40	50	124	M10x8	133	5.00	195	125	83	1.95
80x120FA2	24	30	40	50	129	M10x8	133	5.30	185	125	83	1.98
85x125FA2	24	30	40	50	134	M10x9	148	6.30	195	135	83	2.20
90x130FA2	24	30	40	50	139	M10x9	148	6.75	185	130	83	2.28
95x135FA2	24	30	40	50	144	M10x10	166	7.90	195	135	83	3.20
100x145FA2	26	32	44	56	154	M12x8	194	9.70	200	140	145	3.40
110x155FA2	26	32	44	56	164	M12x8	194	10.6	180	130	145	3.65
120x165FA2	26	32	44	56	174	M12x9	216	13.0	185	135	145	5.25
130x180FA2	34	40	54	68	189	M12x12	290	18.9	175	125	145	5.63



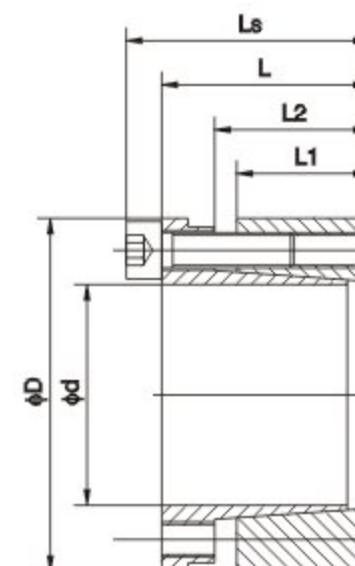
FA2

Size	Basic dimensions					SizesxN	Rated load		Ps	Ph	Ma	G
	L1	L2	L	Ls	D1		Ft(Kn)	Mt(Kn.m)				
140x190FA2	34	40	54	68	199	M14x9	290	20.5	165	120	230	5.95
150x200FA2	34	40	54	68	209	M14x10	333	24.5	175	130	230	6.89
160x210FA2	34	40	54	68	219	M14x11	362	28.9	180	135	230	7.85
170x225FA2	44	50	64	78	234	M14x12	400	33.2	140	105	230	8.32
180x235FA2	44	50	64	78	244	M14x12	400	35.6	135	105	230	9.12
190x250FA2	44	50	64	78	259	M14x15	500	46.5	160	120	230	9.58
200x260FA2	44	50	64	78	269	M14x15	500	48.3	150	115	230	11.7
220x285FA2	50	56	72	88	294	M16x12	578	58.0	145	110	355	15.9
240x305FA2	50	56	72	88	314	M16x15	725	79.0	165	130	355	16.5
260x325FA2	50	56	72	88	334	M16x18	830	102	180	145	355	17.7
280x355FA2	60	66	84	102	364	M18x16	925	118	150	120	485	24.0
300x375FA2	60	66	84	102	384	M18x18	1050	142	160	125	485	25.5
320x405FA2	74	81	101	121	414	M20x18	1365	198	150	120	690	38.0
340x425FA2	74	81	101	121	434	M20x21	1590	230	175	135	690	40.0
360x455FA2	86	94	116	138	464	M22x18	1675	256	140	110	930	48.0
380x475FA2	86	94	116	138	484	M22x21	1980	310	155	125	930	57.0
400x495FA2	86	94	116	138	504	M22x21	1980	352	150	120	930	63.0

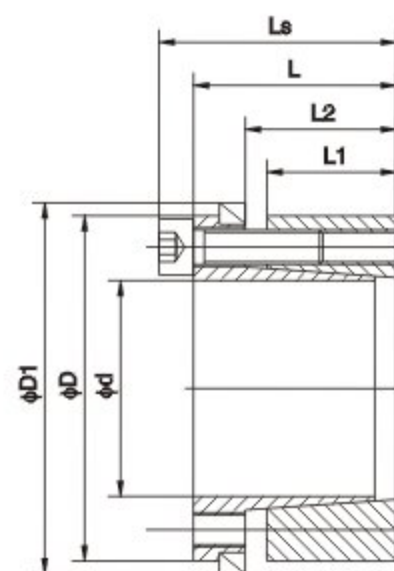
Note: All the items listed in the above table will be produced against orders



FB1

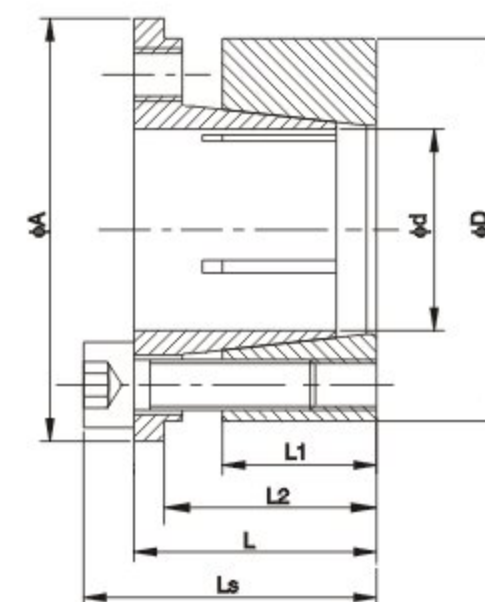


Size	Basic dimensions				SizesxN	Rated load		Ps	Ph	Ma	G
	L1	L2	L	Ls		Ft(Kn)	Mt(Kn.m)				
19x47FB1	26	30	39	45	M6x6	54	0.54	260	105	17	0.35
20x47FB1	26	30	39	45	M6x8	54	0.55	250	105	17	0.36
22x47FB1	26	30	39	45	M6x6	54	0.6	230	105	17	0.44
24x50FB1	26	30	39	45	M6x6	54	0.65	210	100	17	0.47
25x50FB1	26	30	39	45	M6x6	54	0.68	200	100	17	0.48
28x55FB1	26	30	39	45	M6x6	54	0.78	180	95	17	0.55
30x55FB1	26	30	39	45	M6x8	54	0.82	170	95	17	0.76
32x60FB1	26	30	39	45	M6x9	82	1.31	246	131	17	0.79
35x60FB1	26	30	39	45	M6x9	82	1.44	225	131	17	0.81
38x65FB1	26	30	39	45	M6x9	82	1.56	207	121	17	0.87
40x65FB1	26	30	39	45	M6x9	82	1.64	197	121	17	0.94
42x75FB1	30	35	47	55	M8x8	99	2.08	215	120	41	1.02
45x75FB1	30	35	47	55	M8x6	99	2.23	200	120	41	1.06
48x80FB1	30	35	47	55	M8x6	99	2.33	215	115	41	1.7
50x80FB1	30	35	47	55	M8x6	99	2.43	201	115	41	1.79
55x85FB1	30	35	47	55	M8x9	152	4.18	244	160	41	1.89
60x90FB1	30	35	47	55	M8x9	152	4.56	225	152	41	1.98
65x95FB1	30	35	47	55	M8x9	152	4.94	210	145	41	2.15
70x110FB1	40	46	67	77	M10x7	186	6.5	214	136	83	2.24
75x115FB1	40	46	67	77	M10x7	186	7	200	130	83	3.07
80x120FB1	40	46	67	77	M10x7	186	7.4	187	125	83	3.35
85x125FB1	40	46	67	77	M10x8	213	9	200	140	83	3.59
90x130FB1	40	46	67	77	M10x8	213	9.6	188	134	83	5.04
95x135FB1	40	46	67	77	M10x10	267	12.6	197	139	83	5.38
100x145FB1	46	52	77	89	M12x7	270	13.3	174	117	145	5.81
110x155FB1	46	52	77	89	M12x7	270	14.7	158	109	145	6.67
120x165FB1	46	52	77	89	M12x8	309	18.4	182	130	145	7.61
130x180FB1	46	52	77	89	M12x10	368	25.1	193	134	145	8.05
140x190FB1	51	59	88	102	M14x11	485	36.2	203	152	230	8.9
150x200FB1	51	59	88	102	M14x12	551	41.3	216	162	230	9.58
160x210FB1	51	59	88	102	M14x13	651	50.5	213	165	230	10.7
170x225FB1	51	59	88	102	M14x14	643	54.6	223	168	230	11.7
180x235FB1	51	59	88	102	M14x14	643	57.8	210	161	230	13.5
190x250FB1	51	59	88	102	M14x15	689	65.4	214	162	230	15.4
200x260FB1	51	59	88	102	M14x15	689	68.8	203	156	230	17.9
220x285FB1	64	72	106	122	M16x12	948	88.1	210	165	355	20.3



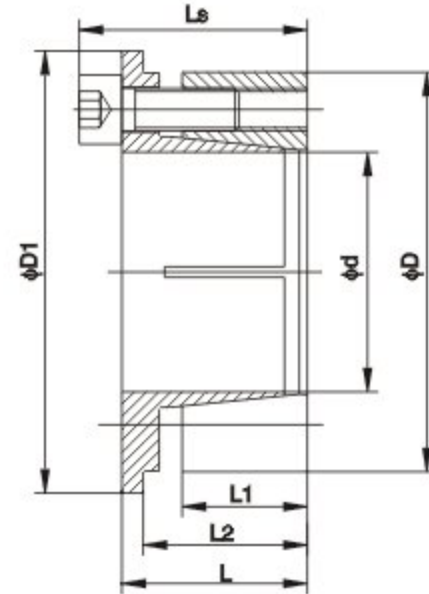
FB2

Size	Basic dimensions					SizesxN	Rated load		Ps	Ph	Ma	G
	L1	L2	L	Ls	D		Ft(Kn)	Mt(Kn.m)				
19x47FB2	26	30	39	45	53	M6x6	33	0.32	191	77	17	0.37
20x47FB2	26	30	39	45	53	M6x6	33	0.34	181	77	17	0.39
22x47FB2	26	30	39	45	53	M6x6	33	0.37	165	77	17	0.46
24x50FB2	26	30	39	45	56	M6x6	33	0.4	151	72	17	0.50
25x50FB2	26	30	39	45	56	M6x6	33	0.42	145	72	17	0.51
28x55FB2	26	30	39	45	61	M6x6	33	0.47	129	66	17	0.59
30x55FB2	26	30	39	45	61	M6x6	33	0.51	121	66	17	0.79
32x60FB2	26	30	39	45	66	M6x9	50	0.72	161	87	17	0.83
35x60FB2	26	30	39	45	66	M6x9	50	0.79	148	87	17	0.85
38x65FB2	26	30	39	45	71	M6x9	50	0.85	137	76	17	0.95
40x65FB2	26	30	39	45	71	M6x9	50	0.9	131	76	17	0.97
42x75FB2	30	35	47	55	81	M8x6	60	1.28	135	78	41	1.12
45x75FB2	30	35	47	55	81	M8x6	60	1.37	126	78	41	1.16
48x80FB2	30	35	47	55	86	M8x6	60	1.47	141	81	41	1.81
50x80FB2	30	35	47	55	86	M8x6	60	1.52	128	81	41	1.83
55x85FB2	30	35	47	55	91	M8x9	90	2.24	148	98	41	1.89
60x90FB2	30	35	47	55	96	M8x9	90	2.44	136	94	41	1.98
65x95FB2	30	35	47	55	101	M8x9	90	2.98	126	90	41	2.25
70x110FB2	40	46	67	77	116	M10x7	115	3.87	126	84	83	2.34
75x115FB2	40	46	67	77	121	M10x7	115	4.33	118	80	83	3.27
80x120FB2	40	46	67	77	126	M10x7	115	4.62	110	77	83	3.35
85x125FB2	40	46	67	77	131	M10x8	130	5.58	125	82	83	3.69
90x130FB2	40	46	67	77	136	M10x8	130	6.00	118	78	83	5.34
95x135FB2	40	46	67	77	141	M10x10	160	7.62	111	85	83	5.48
100x145FB2	46	52	77	89	151	M12x7	170	8.32	114	82	145	5.86
110x155FB2	46	52	77	89	161	M12x7	170	9.23	103	77	145	6.77
120x165FB2	46	52	77	89	171	M12x8	185	11.37	114	85	145	7.71
130x180FB2	46	52	77	89	186	M12x10	220	15.68	127	90	145	8.25
140x190FB2	51	59	88	102	196	M14x11	325	22.80	130	96	230	8.29
150x200FB2	51	59	88	102	206	M14x12	380	29.32	146	109	230	9.78
160x210FB2	51	59	88	102	216	M14x13	392	31.27	146	110	230	10.37
170x225FB2	51	59	88	102	231	M14x14	450	38.77	150	113	230	12.55
180x235FB2	51	59	88	102	241	M14x14	450	41.05	141	108	230	13.45
190x250FB2	51	59	88	102	256	M14x15	480	46.42	144	109	230	15.44
200x260FB2	51	59	88	102	266	M14x15	480	48.86	136	105	230	17.59
220x285FB2	64	72	106	122	291	M16x12	582	58.20	150	110	355	20.85



FC

Size	Basic dimensions					SizesxN	Rated load		Ps	Ph	Ma	G
	A	L1	L2	L	Ls		Ft(Kn)	Mt(Kn.m)				
5x16FC	18.5	8.0	11.2	13.0	16.0	M3x4	4.89	0.010	191	110	2	0.02
6x19FC	21.5	9.0	12.3	14.3	18.3	M4x4	9.16	0.015	181	120	5	0.03
6.35x20FC	22.5	9.0	12.3	14.3	18.3	M4x4	9.16	0.019	165	119	5	0.03
8x21FC	23.5	9.3	12.6	14.6	18.6	M4x4	9.16	0.028	151	112	5	0.04
10x23FC	25.5	9.5	12.8	14.8	18.8	M4x4	9.16	0.041	145	108	5	0.04
11x24FC	26.5	9.5	13.8	15.8	19.8	M4x4	9.16	0.046	129	104	5	0.04
12x26FC	28.5	10.5	15.5	18.0	22.0	M4x6	13.75	0.068	141	106	5	0.06
14x28FC	30.5	10.5	15.5	18.0	22.0	M4x6	13.75	0.096	161	121	5	0.06
15x29FC	31.5	11.5	16.5	19.0	23.0	M4x6	13.75	0.098	148	106	5	0.07
16x30FC	33.0	12.0	17.1	19.6	23.6	M4x6	13.75	0.101	137	99	5	0.07
17x31FC	33.5	12.5	17.6	20.1	24.1	M4x8	18.33	0.144	131	118	5	0.08
18x32FC	34.5	12.5	17.6	20.1	24.1	M4x8	18.33	0.153	135	118	5	0.08
19x33FC	35.5	12.5	17.6	20.1	24.1	M4x8	18.33	0.164	126	102	5	0.08
20x38FC	42.0	15.3	21.1	24.1	29.1	M5x8	29.33	0.251	141	110	10	0.13
22x40FC	44.0	15.3	21.1	24.1	29.1	M5x8	29.33	0.308	148	110	10	0.14
24x42FC	46.0	16.3	22.1	25.1	30.1	M5x8	29.33	0.332	148	111	10	0.16
25x43FC	47.0	17.3	23.1	26.1	31.1	M5x8	29.33	0.347	136	102	10	0.17
28x46FC	50.0	17.3	23.1	26.6	31.6	M5x10	36.66	0.490	146	119	10	0.19
30x48FC	52.0	17.3	23.1	26.6	31.6	M5x10	36.66	0.525	126	110	10	0.19
32x50FC	54.0	18.3	24.1	27.6	32.6	M5x10	36.66	0.563	118	104	10	0.21
35x57FC	62.0	19.5	26.0	30.0	36.0	M6x8	41.55	0.702	120	103	17	0.32
36x60FC	65.0	20.0	26.5	30.5	36.5	M6x10	51.93	0.955	125	101	17	0.35
40x62FC	67.0	20.5	27.0	31.0	37.0	M6x10	51.93	1.019	118	101	17	0.36
42x64FC	69.0	20.5	27.0	31.0	37.0	M6x10	51.93	1.061	120	111	17	0.38
45x67FC	72.0	21.0	27.5	31.5	37.5	M6x10	51.93	1.138	118	110	17	0.40
48x70FC	75.0	21.0	27.5	32.0	38.0	M6x12	62.32	1.446	129	103	17	0.44
50x72FC	77.0	21.5	27.5	32.5	38.5	M6x14	72.70	1.768	143	114	17	0.46
55x77FC	83.0	21.5	27.5	32.5	38.5	M6x14	72.70	1.939	133	121	17	0.50
60x82FC	87.0	22.0	28.5	33.5	39.5	M6x15	77.90	2.287	131	121	17	0.52
65x87FC	92.0	22.0	28.5	33.5	39.5	M6x15	77.90	2.432	146	124	17	0.55
70x97FC	103	24.0	31.1	36.1	44.1	M8x14	131.5	4.415	169	141	41	0.87
75x102FC	108	24.0	31.1	36.1	44.1	M8x15	140.9	5.154	172	150	41	0.87
80x107FC	113	25.0	32.1	37.1	45.1	M8x15	140.9	5.536	158	141	41	0.93
85x112FC	118	25.0	32.1	37.1	45.1	M8x15	140.9	5.886	151	144	41	0.97



FD

Size	Basic dimensions					Screw bolt Size x N	Rated load		Ps Mpa	Ph Mpa	Ma N.m	G Kg
	D1	L1	L2	L	Ls		Mt(Kn)	Ft(Kn.m)				
19x47FD	53	19	24.8	27.3	33.3	M6x6	0.265	28.1	287	93	17	0.28
20x47FD	53	19	24.8	27.3	33.3	M6x6	0.274	28.1	272	93	17	0.27
22x47FD	53	19	24.8	27.3	33.3	M6x6	0.304	28.1	248	93	17	0.26
24x50FD	57	19	25.3	27.8	33.8	M6x7	0.392	32.8	274	102	17	0.29
25x50FD	57	19	25.3	27.8	33.8	M6x7	0.412	32.8	282	102	17	0.28
28x55FD	62	19	25.3	28.6	34.6	M6x8	0.519	37.5	269	106	17	0.35
30x55FD	62	19	25.3	28.6	34.6	M6x8	0.559	37.5	251	106	17	0.34
32x60FD	67	20.5	27.3	30.9	36.9	M6x10	0.745	46.9	267	113	17	0.44
35x60FD	67	20.5	27.3	30.9	36.9	M6x10	0.823	46.9	244	113	17	0.41
38x65FD	73	20.5	27.5	31.1	37.1	M6x10	0.892	46.9	228	104	17	0.48
40x65FD	73	20.5	27.5	31.1	37.1	M6x10	0.931	46.9	217	104	17	0.45
42x75FD	83	23.5	30.8	34.8	42.8	M8x9	1.84	78.1	285	130	41	0.76
45x75FD	83	23.5	30.8	34.8	42.8	M8x9	1.75	78.1	266	130	41	0.71
48x80FD	88	23.5	31.0	35.0	43.0	M8x10	2.06	86.8	280	136	41	0.81
50x80FD	88	23.5	31.0	35.0	43.0	M8x10	2.16	86.8	270	136	41	0.77
55x85FD	94	23.5	30.8	34.8	42.8	M8x10	2.35	86.8	242	128	41	0.84
60x90FD	99	23.5	30.8	34.8	42.8	M8x10	2.55	86.8	219	122	41	0.90
65x95FD	104	23.5	30.8	34.8	42.8	M8x12	3.33	104	246	137	41	0.96
70x110FD	120	28	36.5	41.0	51.0	M10 x10	4.80	137	247	132	82	1.70
75x115FD	125	28	36.5	41.0	51.0	M10 x10	5.10	137	230	126	82	1.79
80x120FD	130	28	36.5	41.0	51.0	M10 x12	6.57	165	260	145	82	1.89
85x125FD	135	28	36.5	41.0	51.0	M10 x12	6.96	165	244	139	82	1.98
90x130FD	140	28	37.5	43.0	53.0	M10 x12	7.45	165	241	134	82	2.15
95x135FD	145	28	37.5	43.0	53.0	M10 x14	9.11	193	267	151	82	2.24
100x145FD	155	34	44.0	50.0	60.0	M10 x15	10.30	207	218	123	82	3.07
110x155FD	167	34	44.0	50.0	60.0	M10 x15	11.40	207	198	116	82	3.35
120x165FD	177	34	44.0	50.0	60.0	M10 x18	14.90	248	218	130	82	3.59
130x180FD	195	38	50.0	57.0	69.0	M12 x15	19.60	301	214	129	142	5.04
140x190FD	205	38	50.0	57.0	69.0	M12 x15	21.10	301	198	123	142	5.38
150x200FD	215	38	50.0	58.0	70.0	M12 x18	27.00	361	221	140	142	5.81



Bushing

