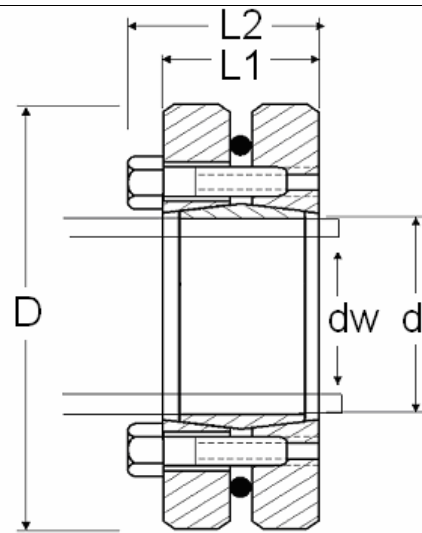


# ZSD SERIES

## SHRINK DISCS

Ma = screw tightening torque  
 Ft = axial holding force when Mt=0  
 Mt = transmissible torque when Ft=0  
 Pf = specific pressure on mating shaft and hub



DIMENSIONS						SCREWS			CAPACITIES		
Z – Lock number	d	dw	D	L1	L2	Size	Qty	Ma Nm	Ft kN	Mt kNm	Wgt kg
ZSD24-72	24	19 20 21	50	14	18	M5x15	6	5	17 21 23	0.17 0.21 0.25	0.2
ZSD30-72	30	24 25 26	60	16	20	M5x18	6	5	25 27 29	0.30 0.34 0.38	0.3
ZSD36-72	36	28 30 31	72	18	22	M6x20	5	12	31 38 40	0.44 0.57 0.63	0.5
ZSD44-72	44	34 35 36	80	20	24	M6x20	7	12	41 44 47	0.71 0.78 0.86	0.6
ZSD50-72	50	38 40 42	90	22	26	M6x22	8	12	49 58 65	0.94 1.16 1.38	0.8
ZSD55-72	55	42 45 48	100	23	29	M6x25	8	12	55 67 78	1.16 1.52 1.88	1.1
ZSD62-72	62	48 50 52	110	23	29	M6x25	10	12	73 80 86	1.75 2.00 2.25	1.3
ZSD68-72	68	50 55 60	115	23	29	M8x30	6	29	74 91 105	1.85 2.50 3.15	1.4
ZSD75-72	75	55 60 65	138	25	31	M8x30	7	29	87 106 121	2.40 3.20 3.95	2.4
ZSD80-72	80	60 65 70	145	25	31	M8x30	7	29	106 120 131	3.20 3.90 4.60	2.5
ZSD90-72	90	65 70 75	155	30	38	M8x30	10	29	146 171 193	4.75 6.00 7.25	3.3
ZSD100-72	100	70 75 80	170	34	43	M8x35	12	29	171 200 225	6.00 7.50 9.00	4.3
ZSD110-72	110	75 80 85	185	39	49	M10x40	9	58	192 225 254	7.20 9.00 10.8	5.9
ZSD125-72	125	85 90 95	215	42	53	M10x40	12	58	258 288 315	11.0 13.0 15.0	8.6
ZSD140-71	140	95 100 105	230	46	58	M12x50	10	100	317 352 382	15.1 17.6 20.1	10
ZSD155-71	155	105 110 115	263	50	62	M12x50	12	100	419 454 487	22.0 25.0 28.0	15
ZSD165-71	165	115 120 125	290	56	68	M16x55	8	240	539 583 624	31.0 35.0 39.0	22

DIMENSIONS						SCREWS			CAPACITIES		
Z – Lock number	d	dw	D	L	H	Size	Qty	Ma Nm	Ft kN	Mt kNm	Wgt kg
ZSD175-71	175	125 130 135	300	56	68	M16x55	8	240	640 677 711	40 44 48	22
ZSD185-71	185	135 140 145	330	71	85	M16x65	10	240	815 857 896	55 60 65	37
ZSD195-71	195	140 150 155	350	71	85	M16x65	12	240	928 1013 1052	65 76 81.5	41
ZSD200-71	200	150 155 160	350	71	85	M16x65	12	240	1040 1084 1125	78 84 90	41
ZSD220-71	220	160 165 170	370	88	103	M16x75	15	240	1250 1309 1365	100 108 116	54
ZSD240-71	240	170 180 190	405	92	107	M20x80	12	470	1412 1533 1642	120 138 156	67
ZSD260-71	260	190 200 210	430	103	119	M20x85	14	470	1726 1840 1943	164 184 204	82
ZSD280-71	280	210 220 230	460	114	132	M20x95	16	470	2062 2227 2374	217 245 273	102
ZSD300-71	300	230 240 245	485	122	140	M20x100	18	470	2278 2442 2514	262 293 308	118
ZSD320-71	320	240 250 260	520	122	140	M20x100	20	470	2550 2720 2877	306 340 374	131
ZSD340-71	340	250 260 270	570	134	155	M20x110	24	470	3152 3308 3452	394 430 466	186
ZSD360-71	360	280 290 295	590	140	159	M24x120	24	820	3622 3793 3878	507 550 572	204
ZSD380-71	380	290 300 310	645	144	163	M24x120	20	820	4069 4267 4452	590 640 690	239
ZSD390-71	390	300 310 320	660	144	163	M24x120	21	820	4400 4580 4750	660 710 760	260
ZSD420-71	420	330 340 350	690	164	184	M24x130	24	820	4727 4940 5143	780 840 900	316
ZSD440-71	440	340 350 360	750	172	192	M24x130	24	820	5235 5486 5722	890 960 1030	408
ZSD460-71	460	360 370 380	770	172	192	M24X130	28	820	5556 5784 6000	1000 1070 1140	420
ZSD480-71	480	380 390 400	800	188	213	M24X140	30	820	6316 6513 6700	1200 1270 1340	505
ZSD500-71	500	400 410 420	850	188	213	M27X170	24	1100	7200 7415 7619	1440 1520 1600	575
ZSD530-71	530	430 440 450	910	213	238	M27X160	30	1100	8465 8818 9156	1820 1940 2060	746
ZSD560-71	560	450 460 470	940	213	238	M27X160	32	1100	8889 9261 9617	2000 2130 2260	775
ZSD590-71	590	470 480 490	980	228	260	M27X170	36	1100	9574 10000 10410	2250 2400 2550	900
ZSD620-71	620	500 510 520	1020	254	286	M30X190	32	1640	10800 11220 11620	2700 2860 3020	1080
ZSD660-71	660	530 540 550	1070	260	292	M30X190	36	1640	11700 12150 12580	3100 3280 3460	1190

### Fitting:

1. Before fitting to shafts, remove any spacers that may have been installed between pressure plates for transport reasons.
2. Loosely tighten the screws such that the inner ring will still rotate.
3. Grease the hub on which the inner ring is to be fitted.
4. Slide the shrink disc on to the hub.
5. Slide the hub on to the solid shaft. Both hub bore and solid shaft surface must be ungreased.
6. Ensure that the pressure plates are parallel by carefully tightening screws at a low torque.
7. Begin tightening the screws to full tension  $M_a$ , evenly in a clockwise direction (not crosswise). Repeat the clockwise tensioning procedure several times until all screws are tensioned to the recommended torque  $M_a$ .

### Removal:

1. Loosen screws evenly in a clockwise direction several times, take care to keep the pressure plates parallel.  
**For safety reasons do not completely unscrew the screws as this could allow a pressure plate to jump off.**
2. Check for and remove any corrosion on hub and shaft, before hub is removed from solid shaft.
3. Remove shrink disc from hub.

### Used Shrink Discs:

Used shrink discs must be disassembled and cleaned. Undamaged bevel surfaces, screw threads and under screw heads should be re-greased with Molykote G Rapid or a suitable equivalent.

Screw (Grade12.9)	M5	M6	M8	M10	M12	M16	M20	M24	M27	M30
Torque $M_a$ (Nm)	5	12	29	58	100	240	470	820	1100	1640

