

## SHRINK DISC



**Shrink Disc**

**High torque and axial load transmission**  
Required contact pressure between shaft and hub can be generated by using the proper number and size of screws.

**Elimination of keys and keyways**  
Machining costs are reduced, notch effect is practically eliminated, full shaft cross section can be utilized.

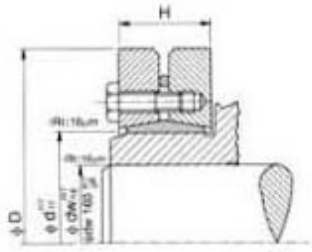
**Unaffected by fluctuating or reversing loads**  
Shrink Disc connection is absolutely tight and free of backlash.

**Axial and angular adjustability**  
Precise and easily timing and positioning of the hub on the shaft.

**This connection can be easily released by simply loosening the locking screws**  
Since the fitting tolerances are relatively large, the connection is easily broken as the hub relaxes to its original diameter. The Shrink Disc connection can be made and released as often as required.

**Torque is transmitted directly from shaft to hub or vice versa.**  
That is in the same way as with the conventional shrink fit.

**True running is not affected by the Shrink Disc**  
Neither the manufacturing accuracy of the shrink disc nor uneven tightening of the locking screws has any effect on true running of the connection.



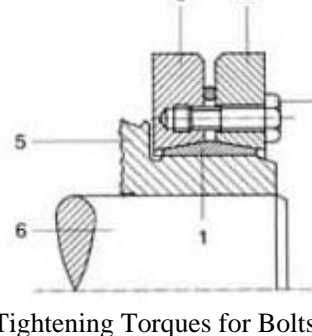
### SHRINK DISC, SERIES 91 AND 92

Type	d mm	dw mm	Mt Nm	Pax N	D mm	H mm	Weight kg
175-91	175	125	40000	640000	300	65	22
		130	44000	677000			
185-91	185	135	48000	711000	330	85	37
		140	60000	857000			
195-91	195	145	65000	895000	350	85	41
		150	76000	1013000			
200-91	200	140	65000	928000	350	85	41
		155	815000	1052000			
220-91	220	150	78000	1040000	370	103	54
		160	90000	1125000			
240-91	240	160	100000	1250000	405	107	67
		155	84000	1084000			
260-91	260	160	90000	1125000	430	119	82
		165	108000	1309000			
180-91	280	170	116000	1365000	460	132	102
		180	138000	1533000			
300-91	300	170	120000	1412000	485	140	118
		190	164000	1726000			
320-91	320	180	156000	1642000	520	140	131
		180	138000	1533000			
340-91	340	190	164000	1726000	570	155	186
		200	184000	1840000			
250-91	350	210	204000	1943000	590	159	204
		220	217000	2062000			
360-91	360	220	245000	2227000	590	159	204
		230	273000	2374000			
380-91	380	230	262000	2278000	645	163	239
		240	290000	2442000			
390-91	390	245	308000	2514000	660	163	260
		240	306000	2550000			
420-91	420	250	340000	2720000	690	184	316
		260	374000	2877000			
440-91	440	250	394000	3152000	750	192	408
		260	430000	3308000			
460-91	460	270	466000	3452000	770	192	420
		280	500000	3572000			
480-91	480	270	458000	3393000	800	213	505
		280	500000	3572000			
500-91	500	285	521000	3656000	850	213	575
		280	507000	3622000			
		290	560000	3793000			
		295	572000	3878000			
		290	590000	4069000			
		300	640000	4267000			
		310	690000	4452000			
		300	660000	4900000			
		310	710000	4580000			
		320	760000	4750000			
		330	780000	4727000			
		340	840000	4940000			
		350	900000	5143000			
		340	890000	5235000			
		350	960000	5846000			
		360	1030000	5722000			
		360	1000000	5556000			
		370	1070000	5784000			
		380	1140000	0000000			
		380	1200000	6316000			
		390	1270000	6513000			
		400	1340000	6700000			
		400	1440000	7200000			
		410	1520000	7415000			
		420	1600000	7619000			

### INSTALLATION

1. The contact area for the Shrink Disc on the hub extension has to be cleaned and greased.
2. Distance pieces which have been used for shipping purposes only must be removed.
3. Do not tighten screws before the Shrink Disc is positioned on the hub extension.
4. Before the Shrink Disc and hub are positioned on the shaft, do not start to tighten the screws. Otherwise deformations may occur.
5. For easy positioning the contact surfaces of the shaft and hub (dia) should be oiled (On these surfaces no MoS, should be used).
6. Before final tightening of the screws both thrust rings should be squarely positioned by preloading the locking screws.
7. Finally the locking screws have to be tightened clockwise (not in adiametrically opposite sequence). The screws have to be tightened in two, three or more stages up to the indicated tightening torque.

- Inner ring
- Front thrust ring
- Rear thrust ring
- Locking Screw
- Hub
- Shaft



Tightening Torques for Bolts

Bolt Sizes	M5	M6	M8	M10	M12	M16	M20	M24	M24
TA(Nm)	4	12	30	59	100	250	490	840	1250

### REMOVAL.

1. For dismantling the screws should be released clockwise in several stages to avoid fitting of the thrust rings. Under no circumstances the locking screws should be taken out of the threads as due to pretensioning the Shrink Disc could jump apar.
2. The shaft can be taken out of the i.e. the hub can be withdrawn from the shaft. For easier dismantling the shaft should be cleaned and oiled.
3. The Shrink Disc can now be removed from the hub extension.

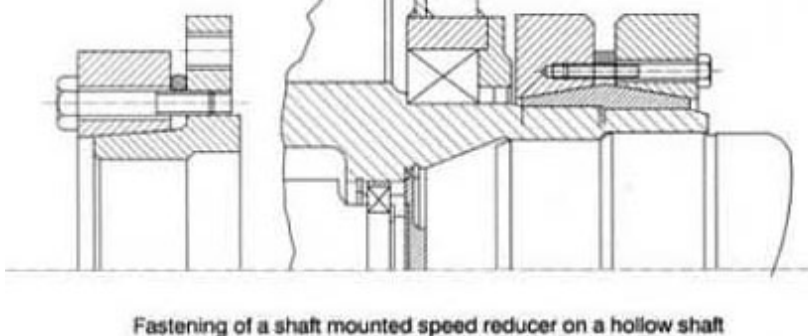
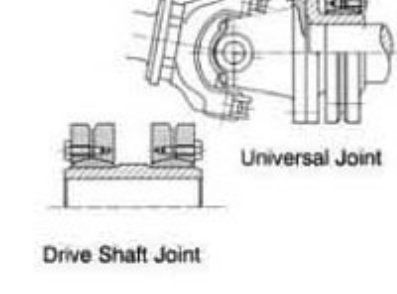
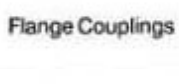
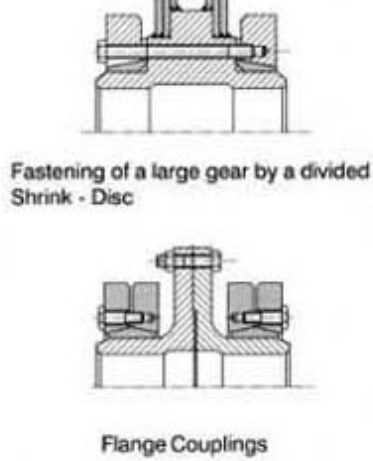
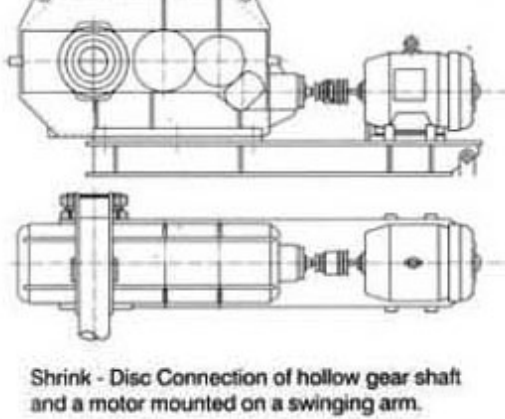
### CLEANING AND RE-LUBRICATION

After having been in use Shrink Discs should dismantled and cleaned. The cones have been lubricated with greases containing MoS (e.g. Molykote G Rapid) if the working surfaces are not damaged, they have to be relubricated with Molykote BR2 Also the screws (threads and contact areas for the heads) have to be lubricated with Molykote BR 2.

### Technical Assistance

Please let us know what your specific shaft –hub connection problems are and we shall be very happy to work out detailed recommendations without any obligation. Just a sketch with your requirements and specifications including following information :

1. Maximum torque and axial load to be transmitted
2. Shaft diameter (dw)
3. Shaft speed
4. Grade of shaft and hub material
5. Operating temperature.



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