

P - shaft version for shrink disc:  
For minimum length of torque reaction arm refer to the relevant data table, value "L<sub>min</sub>"

Data and dimensions are not binding and may be modified without prior notice

Dimensions, solid shafts														Keyed										DIN Splined									
Model	A	la	B	db	C	lc	df	lf	p	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	Dk	lk	bk	hk	wk	d1	s1	o	code	Dx	lx	ls	di	li	de	le	d2	s2	o	code
1700	700	195	635	32	560	20	25	35	152	266	407.5	459	543	200	260	45	210	250	M16	36	140	K 11	200x5	200	130	200	30	170	20	M16	36	140	X 12
2100	700	220	635	32	560	20	25	35	152	315.5	484	588.5	615	200	260	45	210	250	M16	36	140	K 11	200x5	200	130	200	30	170	20	M16	36	140	X 12
2500	700	220	635	32	560	20	25	35	152	315.5	484	588.5	615	220	300	50	231	280	M16	36	160	K 13	220x5	220	150	220	30	190	20	M16	36	160	X 14

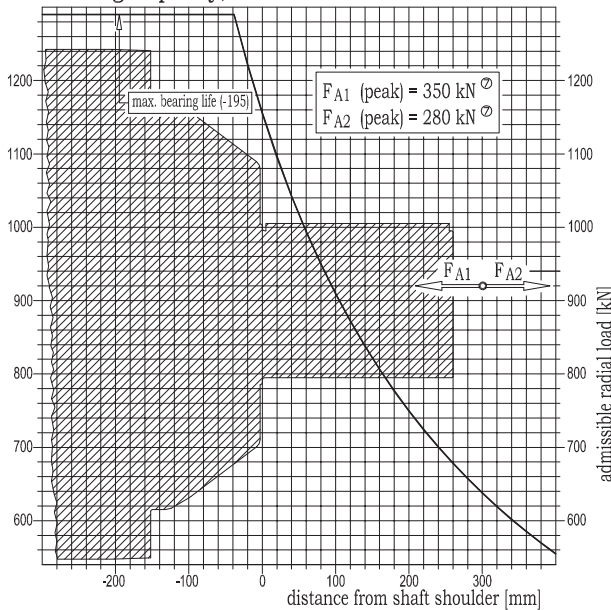
Dimensions, hollow shafts										Hollow for Shrink Disc										Hollow Splined													
Model	A	B	db	C	lc	df	lf	la	p	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	Dp	lp	Dq	lq	Dw	lw	code	L <sub>min</sub>	la	p	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	Dz	lz	de	le	t	code
1700	700	635	32	560	20	25	35	195	153	266	407.5	459	543	200	210	170	305	260	180	P 22	1500	195	152	266	407.5	459	543	200x5	115	210	17	140	Z 21
2100	700	635	32	560	20	25	35	220	153	315.5	484	588.5	615	200	210	170	305	260	180	P 22	1500	220	152	315.5	484	588.5	615	200x5	115	210	17	140	Z 21
2500	700	635	32	560	20	25	35	220	153	315.5	484	588.5	615	200	210	170	305	260	180	P 22	1500	220	152	315.5	484	588.5	615	210x5	115	220	17	140	Z 23

DIMENSIONS IN MM UNLESS OTHERWISE SPECIFIED

Model	1700		2100		2500	
Torque Rating <sup>Ⓞ</sup>	170000 Nm		210000 Nm		250000 Nm	
L1	RATIO (ACT. RATING) 3.5 (B)* 5.3 (B) 4.2 (A) * on request		RATIO (ACT. RATING) 3.5 (B)* 5.3 (B) 4.2 (A) * on request		RATIO (ACT. RATING) 3.5 (B)* 5.3 (B) 4.2 (A) * on request	
n <sub>1</sub> nom./max.	750 rpm	1000 rpm	750 rpm	1000 rpm	750 rpm	1000 rpm
P th. <sup>Ⓞ</sup> / P mech.	100 kW	750 kW	110 kW	850 kW	110 kW	900 kW
L2	NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 13 (B)* 21 (A) 15 (B)* 24 (B) 18 (A) 28 (B) * on request		NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 12 (B)* 18 (B) 14 (A) 22 (A) 17 (A) 28 (B)		NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 12 (B)* 18 (B) 14 (A) 22 (A) 17 (A) 28 (B)	
n <sub>1</sub> nom./max.	1500 rpm	2000 rpm	900 rpm	1200 rpm	900 rpm	1200 rpm
P th. <sup>Ⓞ</sup> / P mech.	63 kW	360 kW	70 kW	390 kW	70 kW	440 kW
L3	NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 56 (B)* 120 (A) 67 (A) 140 (B) 80 (A) 150 (A) 90 (A) 160 (B) 105 (A) 190 (B) * on request		NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 45 (B)* 110 (A) 53 (A) 120 (A) 63 (A) 130 (A) 71 (A) 150 (A) 80 (A) 170 (B) 90 (A) 190 (B) 100 (A) * on request		NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 45 (B)* 110 (A) 53 (A) 120 (A) 63 (A) 130 (A) 71 (A) 150 (A) 80 (A) 170 (B) 90 (A) 190 (B) 100 (A) * on request	
n <sub>1</sub> nom./max.	1800 rpm	2500 rpm	1800 rpm	2500 rpm	1800 rpm	2500 rpm
P th. <sup>Ⓞ</sup> / P mech.	45 kW	240 kW	50 kW	280 kW	50 kW	280 kW
L4	NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 220 (A) 530 (A) 1000 (A) 260 (A) 560 (A) 1100 (B) 300 (A) 630 (A) 1300 (B) 340 (A) 710 (A) 400 (A) 750 (A) 450 (A) 850 (A) 480 (A) 900 (A)		NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 180 (A) 400 (A) 850 (B) 200 (A) 450 (A) 950 (A) 210 (A) 500 (A) 1050 (A) 240 (A) 560 (A) 1200 (B) 280 (A) 630 (A) 1300 (B) 320 (A) 710 (A) 360 (A) 800 (A)		NOM. RATIO <sup>Ⓞ</sup> (ACT. RATING) 180 (A) 400 (A) 850 (B) 200 (A) 450 (A) 950 (A) 210 (A) 500 (A) 1050 (A) 240 (A) 560 (A) 1200 (B) 280 (A) 630 (A) 1300 (B) 320 (A) 710 (A) 360 (A) 800 (A)	
n <sub>1</sub> nom./max.	2800 rpm	3800 rpm	2800 rpm	3800 rpm	2800 rpm	3800 rpm
P th. <sup>Ⓞ</sup> / P mech.	33 kW	120 kW	37 kW	120 kW	37 kW	120 kW
Actual Torque [Nm] <sup>Ⓞ</sup>	(A) 215000 (B) 175000		(A) 260000 (B) 220000		(A) 310000 (B) 260000	
Peak Torque <sup>Ⓞ</sup>	300000 Nm		350000 Nm		400000 Nm	

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### Bearing Capacity, solid shafts<sup>Ⓞ</sup>



- ① Harmonized nominal value referring to Preferred Numbers R'40. Actual transmissible torque may vary depending on ratio, speed, application.
- ② Harmonized nominal value referring to Preferred Numbers R'40. For actual ratios see Annex C.
- ③ Thermal power limit. For actual figures based on speed, temperature and duty see Section B4, Specifications, Paragraph 8.
- ④ Mean value at rated conditions. For actual figures based on speed, service life and application/duty see Section B4, Specifications, Paragraph 6.
- ⑤ Restrictions may apply for hollow shaft for shrink disc, see Section G, Output Accessories. Customer to verify the mating shaft is capable of loads actually transmitted.
- ⑥ Mean values at rated conditions. For actual admissible loads based on speed, service life and application/duty see Section B4, Specifications, Paragraph 9.
- ⑦ Max. peak values, which must never be exceeded. Combined thrust and radial shaft loads might reduce bearing life. Please contact Plan-Star Engineering for accurate life calculation of your specific application.
- ⑧ Combination of high torque and heavy radial shaft load might require verification of the output shaft. If the following condition is not fulfilled, contact Plan-Star Engineering for accurate verification of your specific application:

$$\frac{\text{Radial Load (applied)}}{\text{Radial Load (admissible)}} \times \frac{\text{Torque (applied)}}{\text{Torque (nominal)}} < 0.5$$