

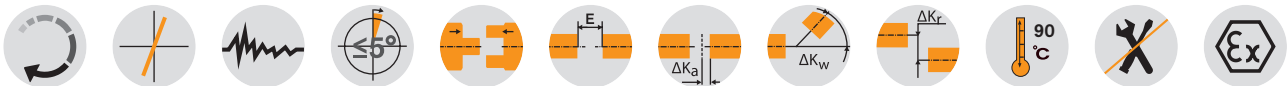
ROTEX® GS P

Backlash-free jaw couplings

Highly accurate type P according to DIN 69002



For legend of pictogram refer to flapper on the cover



ROTEX® GS P - hubs/clamping ring material steel

Size	Spider GS ¹⁾ torque T _{KN} [Nm]		Dimensions [mm]											Clamping screws DIN EN ISO 4762				Weight per hub d _{standard} ³⁾ [kg]	Mass moment of inertia per hub with bore d _{standard} ³⁾ [kgm ²]
	98 ShA	64 ShD	d _{max}	D _H ²⁾	d _H	L	l ₁ , l ₂	l ₃	E	b	s	a	d ₃	M	z = number	T _A [Nm]	M1		
14 P	12.5	16	15	32	10.5	50	18.5	15.5	13	10	1.5	2	—	M3	4	1.89	M3	0.08	0.011 x 10 ⁻³
19 P	21	26	20	40	18	66	25	21	16	12	2	3	—	M4	6	3.05	M4	0.19	0.046 x 10 ⁻³
24 P	60	75	28	55	27	78	30	25	18	14	2	3	—	M5	4	8.5	M5	0.44	0.201 x 10 ⁻³
28 P	160	200	38	65	30	90	35	30	20	15	2.5	4	—	M5	8	8.5	M5	0.64	0.438 x 10 ⁻³
38 P	325	405	48	80	38	114	45	40	24	18	3	4	—	M6	8	14	M6	1.32	1.325 x 10 ⁻³
42 P	450	560	51	95	46	126	50	45	26	20	3	4	18.5	M8	4	35	M8	2.23	3.003 x 10 ⁻³
48 P	525	655	55	105	51	140	56	50	28	21	3.5	4	20.5	M10	4	69	M10	3.09	5.043 x 10 ⁻³
55 P	685	825	70	120	60	160	65	58	30	22	4	4.5	22.5	M10	4	69	M10	4.74	10.02 x 10 ⁻³
65 P	940	1175	70	135	68	185	75	55	35	26	4.5	4.5	30	M12	4	120	M12	6.70	191.0 x 10 ⁻⁴
75 P	1920	2400	80	160	80	210	85	63	40	30	5.0	5.0	40	M12	5	120	M12	9.90	396.8 x 10 ⁻⁴
90 P	3600	4500	105	200	104	245	100	75	45	34	5.5	6.5	50	M16	5	295	M16	17.7	1136 x 10 ⁻⁴

¹⁾ For selections see page 22 et seqq./other spiders see page 127.

²⁾ Ø D_H + 2 mm with high speeds for expansion of spider

For the strength calculation of shaft/hollow shaft see KTR standard 45610 on our homepage www.ktr.com.

Review of shaft-hub-connection: Friction torques T_R [Nm] for hub type 6.0 steel

Size		Ø10	Ø11	Ø14	Ø15	Ø19	Ø20	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55*	Ø60*	Ø65*	Ø70*	Ø80*	Ø90*	Ø95*	Ø100*	Ø105*	
14	H6/k6	11	13	29																									
	H6/h6	3	4	23																									
19	H6/k6	34	41	75	90	68	104	119																					
	H6/h6	22	26	64	80	49	85	103																					
24	H6/k6			79	95	70	110	126	134	149	201																		
	H6/h6			64	82	46	85	104	101	119	183																		
28	H6/k6				128	150	225	177	278	307	341	403	366	461	528														
	H6/h6				94	117	191	123	232	265	293	364	295	405	478														
38	H6/k6								247	386	426	475	560	511	641	644	733	828	825	970									
	H6/h6								174	323	368	408	505	415	564	542	645	757	726	897									
42	H6/k6									389	433	512	464	585	586	669	631	753	888	906									
	H6/h6									330	367	457	368	508	485	581	512	654	815	823									
48	H6/k6										672	762	945	957	1082	1033	1219	1423	1296	1606									
	H6/h6										568	647	852	836	977	892	1101	1334	1148										
55	H6/k6											920	929	1055	1002	1190	1198	1325	1388	1743	1722	2088							
	H6/h6											807	783	927	834	1047	1022	1168											
65	H6/k6																1532	1465	1731	1750	1931	2034	2534	2521	3038				
	H6/h6																1361	1245	1542	1520	1723								
75	H6/k6																	1835	2161	2190	2413	2551	3161	3158	3789	4421			
	H6/h6																	1585	1944	1928	2175								
90	H6/k6																		4046	4503	5057	6079	6181	7324	8398	9530	9892	11084	
	H6/h6																		3645										

* From Ø55 tolerance G6/m6.

The friction torque is reduced with bigger clearance.. For the strength calculation of shaft/hollow shaft see KTR standard 45610 on our homepage www.ktr.com.

Assignment for stub spindles according to DIN 69002

Spindle drive	ROTEX® GS P size	Dimensions according to DIN 69002														Transmittable torque T _R with d [Nm] ³⁾	Weight per hub with bore d _{standard} ³⁾ [kg]	Mass moment of inertia with bore d _{standard} ³⁾ [kgm ²]	
		Standard spindle shaft diameter d	d ₁	d ₂	d ₃	D _H	l ₁ , l ₂	L	E										
25 x 20	14 P	14	17	17	8.5	32	18.5	50	13								25	0.08	0.011 x 10 ⁻³
32k x 25	19 P37.5	16	20	19	9.5	37.5	25	66	16								60	0.16	0.037 x 10 ⁻³
32g x 30	19 P	19	23	22	9.5	40	25	66	16								71	0.19	0.046 x 10 ⁻³
40 x 35	24 P50	24	28	29	12.5	50	30	78	18								108	0.331	0.136 x 10 ⁻³
50 x 45	24 P	25	30	30	12.5	55	30	78	18								170	0.44	0.201 x 10 ⁻³
63 x 55	28 P	35	40	40	14.5	65	35	90	20								506	0.64	0.438 x 10 ⁻³
80 x 75	38 P	40	46	46	16.5	80	45	114	24								821	1.32	1.325 x 10 ⁻³

³⁾ Standard spindle shaft diameter

Ordering example:	ROTEX® GS P 24	98 ShA-GS	6.0 - Ø25				6.0 - Ø25	
	Coupling size	Spider hardness	Hub type	Finish bore	Hub type	Finish bore		