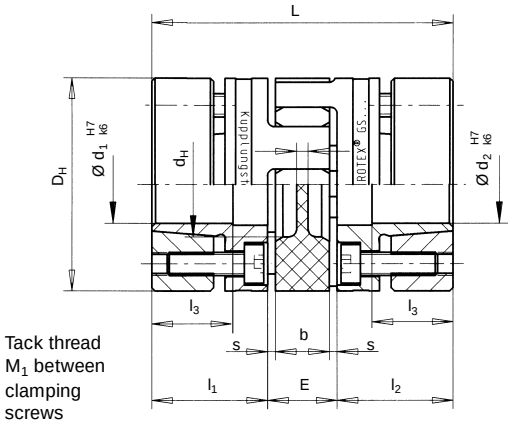
ROTEX®-GS

Backlash-free shaft coupling

Clamping ring hubs

- Backlash-free shaft coupling with integrated clamping system
- Applicable to, for example, forward feed main spindle drives of machine tools, press rollers, etc.
- High smoothness of running, application up to a peripheral speed of 40 m/s
- For high friction torques
- Easy to assemble due to internal clamping screws
- Finish bore up to Ø 50 acc. to ISO fit H7, from Ø 55 acc. to ISO fit G7



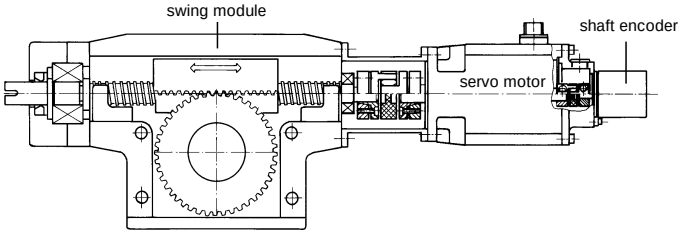
Tack thread M_1 between clamping screws

Size	Bores d_1/d_2 and the corresponding transmittable friction torques TR of clamping ring hub in (Nm)																								
	Ø6	Ø10	Ø11	Ø14	Ø15	Ø16	Ø19	Ø20	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø80
14	8,6	13,8	14,7	22,7																					
19		41	45	62	68	67	83	90																	
24			48	67	74	72	90	97	112	120	143														
28					142	154	189	188	237	250	280	307	310	353	389										
38								269	337	356	398	436	442	501	533	572	585	644							
42										399	445	506	470	566	581	647	630	728	836	858					
48												775	819	955	999	1092	1091	1230	1381	1334	1540				
55														918	954	1052	1040	1185	1220	1318	1359	1646	1662	1960	
65																1568	1569	1768	1833	1968	2049	2438	2495	2898	
75																		2246	2338	2500	2620	3082	3179	3657	4235

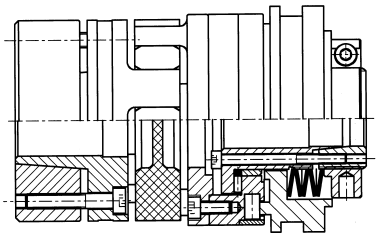
The transmittable torques of the clamping connection consider the max. clearance with shaft fit k6 / bore H7, from Ø 55 G7/m6. With bigger clearance the torque is reduced.

ROTEX® GS Size	Torques [Nm] 1) 92 Sh A - GS T_{KN}	92 Sh A - GS T_{Kmax}	98 Sh A - GS T_{KN}	98 Sh A - GS T_{Kmax}	Dimensions [mm] D_H 3)	d_H	L	l_1; l_2	l_3	E	b	s	Clamping screws a	M	Number z	T_A [Nm]	M_1	Weight per hub with max. bore [kg]	Mass moment of inertia per hub with max. bore [kg m²]
Hub material – Aluminium (Al-H) Clamping ring material – Steel (St-H)																			
14	7,5	15	12,5	25	30	10,5	50	18,5	13,5	13	10	1,5	2	M3	4	1,34	M3	0,049	0,07 x 10^{-4}
19	10,0	20	17	34	40	18	66	25,0	18	16	12	2,0	3	M4	6	2,9	M4	0,120	0,31 x 10^{-4}
24	35,0	70	60	120	55	27	78	30,0	22	18	14	2,0	3	M5	4	6	M5	0,280	1,35 x 10^{-4}
28	95,0	190	160	320	65	30	90	35,0	27	20	15	2,5	4	M5	8	6	M5	0,450	3,13 x 10^{-4}
38	190,0	380	325	650	80	38	114	45,0	35	24	18	3,0	4	M6	8	10	M6	0,950	9,60 x 10^{-4}
Hub and Clamping ring material – Steel (St-H)																			
42	265	530	450	900	95	46	126	50	35	26	20	3,0	4,0	M 8	4	35	M 8	2,30	31,7 x 10^{-4}
48	310	620	525	1050	105	51	140	56	41	28	21	3,5	4,0	M10	4	69	M10	3,08	52,0 x 10^{-4}
55	375	750	685	1370	120	60	160	65	45	30	22	4,0	4,5	M10	4	69	M10	4,67	103,0 x 10^{-4}
65	–	–	940 2)	1880 2)	135	68	185	75	55	35	26	4,5	4,5	M12	4	120	M12	6,7	191,0 x 10^{-4}
75	–	–	1465 2)	2930 2)	160	80	210	85	63	40	30	5	5	M12	4	120	M12	9,9	396,8 x 10^{-4}

1) Please note coupling selection on pages 3 – 5. · 2) Figures for 95 Sh A - GS · 3) $Ø_{DH}$ + 2 mm with high speeds for expansion of spider



ROTEX GS with clamping ring hub for connection of servo motor - swing module
servo motor - shaft encoder



ROTEX GS with clamping ring hub and torque limiter KTR-SI

Orderform:

ROTEX®-GS 24	98 Sh A - GS	6.0 – Ø 24		6.0 – Ø 20	
Coupling size	Spider hardness	Hub design	Finish bore	Hub design	Finish bore