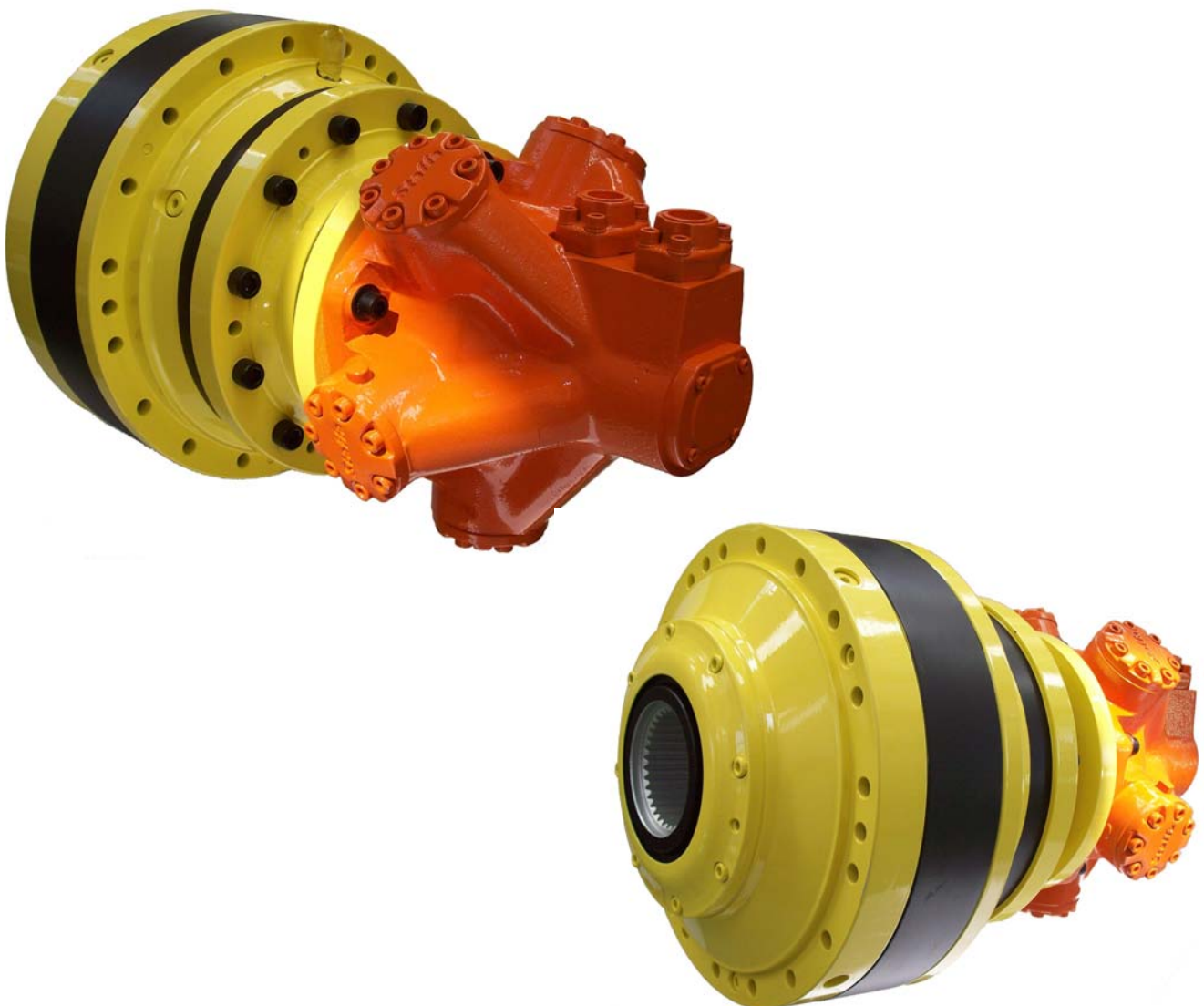


High Torque Geared Motors

From 70.000 up to 1.200.000 Nm Output Torque
(From 52.000 up to 885.000 lbf.ft)



HIGH TORQUE GEARED MOTORS - General Information

Summary Description

HANSA-TMP range of "GB" high torque Single or Multi-stages Reduction Planetary gear boxes combined with Kawasaki / Staffa single, dual or variable displacement radial piston motors comprises 14 models offering ISO torque from 70.000 up to 1.200.000 Nm (from 52.000 up to 885.000 lbf.ft).

The "GB" range of gear boxes is available from 1 up to 5 stages with ratio from 3,43:1 up to 3794:1. This versatile range of gear boxes accepts standard Kawasaki / Staffa motors allowing the system designer to select the right motor and gear box to optimise his circuit pressure and flow against the torque and speed requirements of his transmission. The output shaft of the "GB" planetary gear boxes includes: splined male and female, parallel keyed and shrink disc.

Main Features

- **Flexibility in service:** modular concept enables drive to be uprated in service with minimum inconvenience.
- **Constant torques:** throughout the infinitely variable speed range.
- **Lower maintenance costs:** modular system enables motors to be overhauled without disturbing the system.
- **Uniform running at low speeds:** speeds at fractions of one R.P.M. can be achieved smoothly.
- **Excellent gear life:** materials used are aimed at maximum running hours.
- **Modular design:** plug in concept enables standard motors to be fitted from existing stock.
- **Complete transmission:** full range gives a balanced transmission package for both automotive and general industrial drives.

HIGH TORQUE GEARED MOTORS - Gearbox Selection Chart

Number of Stages	GB 11000				GB 13000				GB 18000			
	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power P _t kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power P _t kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power P _t kW
1	GB 11001	94.800	4,09	87	GB 13001	128.000	3,83	87	GB 18001	151.200	3,91	117
		-	-			-	-			-	-	
2	GB 11002	94.800	16,36	51	GB 13002	128.000	14,72	54	GB 18002	151.200	16,21	69
		-	-			-	-			-	-	
3	GB 11003	94.800	58,30	37	GB 13003	128.000	52,44	38	GB 18003	151.200	66,32	50
		-	-			-	-			-	-	
4	GB 11004	94.800	209,86	28	GB 13004	128.000	222,87	30	GB 18004	151.200	238,75	39
		-	-			-	-			-	-	
5	GB 11005	94.800	730,33	23	GB 13005	128.000	656,97	25	GB 18005	151.200	830,84	32
		-	-			-	-			-	-	
		59.700	6,23			113.700	4,40			97.000	5,79	
		59.700	38,94			93.112	28,43			97.000	37,61	
		59.700	267,03			106.876	194,95			97.000	234,32	
		59.700	2002,75			106.876	1462,15			97.000	1757,41	
		73.600	2992,50			113.700	3096,72				3044,27	

Number of Stages	GB 21000				GB 26000				GB 31000			
	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power P _t kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power P _t kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power P _t kW
1	GB 21001	204.800	3,68	117	GB 26001	235.100	3,68	120	GB 31001	238.000	3,43	184
		-	-			-	-			-	-	
2	GB 21002	204.800	14,72	73	GB 26002	235.100	14,72	75	GB 31002	290.300	16,74	113
		-	-			-	-			-	-	
3	GB 21003	204.800	58,88	53	GB 26003	235.100	58,88	54	GB 31003	290.300	66,94	81
		-	-			-	-			-	-	
4	GB 21004	204.800	209,76	42	GB 26004	235.100	209,76	43	GB 31004	290.300	238,48	63
		-	-			-	-			-	-	
5	GB 21005	204.800	755,14	35	GB 26005	235.100	755,14	35	GB 31005	290.300	858,53	51
		-	-			-	-			-	-	
		156.300	4,94			179.500	4,94			182.000	6,23	
		156.300	23,06			179.500	23,06			182.000	38,82	
		156.300	144,12			179.500	144,12			182.000	242,64	
		156.300	988,24			179.500	988,24			182.000	1663,82	
			3128,00			233.091	3128,00				2984,00	

HIGH TORQUE GEARED MOTORS - Gearbox Selection Chart (continued)

Number of Stages	GB 37000				GB 40000				GB 45000			
	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW
1	GB 37001	375.000	3,83	184	GB 40001	395.000 - 226.210	3,43 - 6,23	221	GB 45001	466.000	3,83	221
2	GB 37002	375.000 - 375.000	14,89 - 16,87	113	GB 40002	395.000 - 226.210	13,14 - 27,42	135	GB 45002	466.000 - 435.850	14,69 - 16,87	135
3	GB 37003	375.000 - 375.000	56,43 - 108,98	82	GB 40003	395.000 - 226.210	50,47 - 177,15	97	GB 45003	466.000 - 409.691	56,43 - 108,98	97
4	GB 37004	375.000 - 375.000	201,02 - 747,32	64	GB 40004	389.829 - 226.210	206,37 - 1214,71	76	GB 45004	466.000 - 409.691	201,02 - 747,32	76
5	GB 37005	375.000 - 375.000	723,67 - 3055,97	53	GB 40005	360.650 - 360.650	1093,50 - 3163,57	62	GB 45005	466.000 - 435.850	723,67 - 3055,97	62

Number of Stages	GB 53000				GB 61000				GB 85000			
	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW
1	GB 53001	572.000	3,84	268	GB 61001	705.000	3,84	268	GB 85001	897.200	3,84	275
2	GB 53002	572.000 - 372.480	15,03 - 22,22	161	GB 61002	705.000 - 600.192	14,13 - 18,97	161	GB 85002	897.200 - 689.280	14,13 - 18,97	164
3	GB 53003	572.000 - 372.480	62,25 - 144,41	115	GB 61003	705.000 - 600.192	56,52 - 88,55	117	GB 85003	897.200 - 689.280	56,52 - 88,55	119
4	GB 53004	572.000 - 372.480	254,66 - 899,79	89	GB 61004	705.000 - 600.192	226,10 - 553,41	92	GB 85004	897.200 - 689.280	226,10 - 553,41	94
5	GB 53005	572.000 - 572.000	916,79 - 3134,53	73	GB 61005	705.000 - 600.192	805,48 - 3157,29	76	GB 85005	897.200 - 689.280	805,48 - 3794,82	77

Number of Stages	GB 110000				GB 130000							
	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW	Gearbox type	Output Torque T _{ISO} Nm	Ratio i _e	Thermal Power Pt kW
1	GB 110001	977.000	4,32	278	GB 130001	1.205.000	4,32	278				
2	GB 110002	977.000 - 977.000	14,81 - 26,92	187	GB 130002	1.205.000 - 977.227	14,81 - 26,92	187				
3	GB 110003	977.000 - 977.000	56,78 - 118,43	140	GB 130003	1.205.000 - 977.227	56,78 - 118,43	140				
4	GB 110004	977.000 - 977.000	218,02 - 765,27	111	GB 130004	1.205.000 - 977.227	218,02 - 765,27	111				
5	GB 110005	977.000 - 977.000	776,71 - 3445,37	91	GB 130005	1.205.000 - 1.205.000	776,71 - 3445,37	91				

HYDRAULIC MOTORS SELECTION CHART

Fixed Displacement Radial Piston Hydraulic Motors HMB Series

Motor Model	Displacement cm ³ /n	Rated Pressure bar	Intermittent Pressure bar	Continuous Speed n/min.	Continuous Power kW	Approx Weight kg
HMB 010	188	207	240	500	25	40
HMB 030	442	207	290	450	42	73
HMB 045	740	250	290	400	60	120
HMB 060	983	250	290	300	80	144
HMB 080	1.344	250	290	300	100	144
HMB 100	1.639	250	290	250	110	144
HMB 125	2.050	250	290	220	100	217
HMB 150	2.470	250	290	220	115	265
HMB 200	3.080	250	290	175	130	265
HMB 270	4.310	250	290	125	140	420
HMB 325	5.310	250	290	100	140	429
HMB 400 (4")	6.800	250	290	120	190	481
HMB 400 (4-1/2")						510
HMB 700	11.600	250	290	100	240	1.050

Dual Displacement Radial Piston Hydraulic Motors HMC Series

Motor Model	Displacement min/max. * cm ³ /n	Rated Pressure bar	Intermittent Pressure bar	Continuous Speed ** n/min.	Continuous Power *** kW	Approx Weight kg
HMC 030	49 - 492	207	241	1.000 - 450	60	100
HMC 045	81 - 737	250	275	1.000 - 450	99	150
HMC 080	82 - 1.475	250	275	1.000 - 300	138	172
HMC 125	82 - 2.048	250	275	1.000 - 190	135	235
HMC 200	80 - 3.080	250	275	1.000 - 175	174	282
HMC 270	160 - 4.588	250	275	1.000 - 120	189	450
HMC 325	492 - 5.326	250	275	350 - 100	189	460
* Intermediate displacements can be made available to special order ** At min / max. displacement *** At max. displacement						

Dual Displacement Radial Piston Hydraulic Motors HPC Series (Low friction components)

Motor Model	Displacement min/max. * cm ³ /n	Rated Pressure bar	Intermittent Pressure bar	Continuous Speed ** n/min.	Continuous Power *** kW	Approx Weight kg
HPC 080	164 - 1.600	250	275	1.000 - 270	165	172
HPC 125	164 - 2.048	250	275	1.000 - 190	202	235
HPC 200	164 - 3.087	250	275	1.000 - 175	261	282
HPC 270	328 - 4.588	250	275	1.000 - 120	278	450
HPC 325	492 - 5.326	250	275	350 - 100	278	460
* Intermediate displacements can be made available to special order ** At min. / max. displacement *** At max. displacement, 250 bar, with flushing						