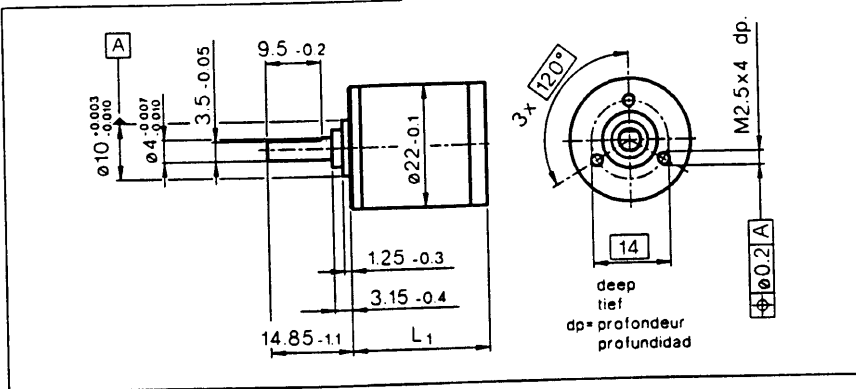


Planetary Gearhead  
 Ø22 mm, 0.5-1.0 Nm

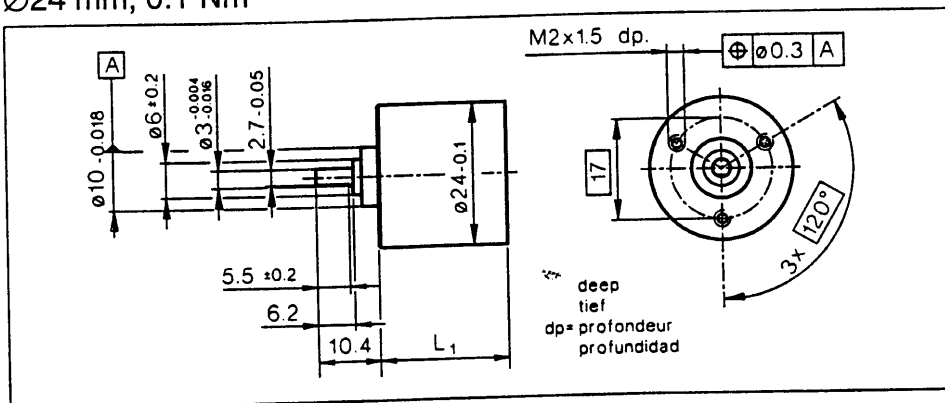
-909-660 to 695, -709-660



Technical Data	ball bearing	sleeve bear.
Bearing at output	ball bearing	sleeve bearing
Planetary gearhead	straight teeth	straight teeth
Radial play, 10 mm from flange	max. 0.20 mm	max. 0.07 mm
Max. perm. radial load, 10 mm from flange	70 N	40 N
Axial play	max. 0.2 mm	max. 0.1 mm
Max. permissible axial load	100 N	60 N
Max. perm. force for press fits	100 N	100 N
Average backlash	< 1.3°	< 1.3°
Recommended input speed	< 6000 rpm	< 6000 rpm
perm. temperature range	-15/+80°C	-15/+80°C
Gearhead order number	refer to list	on request

Order Number	Reduction	Reduction absolute	Order Number	Reduction	Reduction absolute	Order Number	Reduction	Reduction absolute	Number of stages	max. Torque		η max. [%]	Weight [g]	L1 max. [mm]	Stock program				Standard program			
										Cont. [Nm]	Int. [Nm]											
134156	3.8 : 1	3 <sup>3/4</sup>	110337	4.4 : 1	4 <sup>5/13</sup>	134157	5.4 : 1	5 <sup>2/5</sup>	1	0.5	0.8	84	42	25.35								
134158	14 : 1	14 <sup>1/16</sup>	134159	16 : 1	16 <sup>23/52</sup>	110338	19 : 1	19 <sup>26/100</sup>	2	0.5	0.8	70	55	32.20								
134160	20 : 1	20 <sup>1/4</sup>	134161	24 : 1	23 <sup>64/65</sup>	134162	29 : 1	29 <sup>4/25</sup>	2	0.5	0.8	70	55	32.20								
134163	53 : 1	52 <sup>47/64</sup>	134164	62 : 1	61 <sup>137/208</sup>	134165	72 : 1	72 <sup>63/678</sup>	3	0.8	1.2	59	68	39.00								
134166	76 : 1	75 <sup>15/16</sup>	110339	84 : 1	84 <sup>845/2197</sup>	134167	89 : 1	88 <sup>41/52</sup>	3	0.8	1.2	59	68	39.00								
134168	104 : 1	103 <sup>882/845</sup>	134169	109 : 1	109 <sup>7/20</sup>	134170	128 : 1	127 <sup>278/325</sup>	3	0.8	1.2	59	68	39.00								
134171	157 : 1	157 <sup>56/125</sup>	134173	231 : 1	231 <sup>183/832</sup>	134174	270 : 1	270 <sup>945/2704</sup>	4	1.0	1.6	49	81	45.80								
134172	198 : 1	197 <sup>193/256</sup>	134175	316 : 1	316 <sup>887/8788</sup>	134177	333 : 1	332 <sup>199/208</sup>	4	1.0	1.6	49	81	45.80								
134176	285 : 1	284 <sup>4/64</sup>	134178	389 : 1	389 <sup>205/878</sup>	134180	410 : 1	410 <sup>1/16</sup>	4	1.0	1.6	49	81	45.80								
110340	370 : 1	369 <sup>7/79</sup>	134181	479 : 1	479 <sup>119/260</sup>	134182	561 : 1	560 <sup>252/4225</sup>	4	1.0	1.6	49	81	45.80								
134179	455 : 1	455 <sup>882/3739</sup>	134184	690 : 1	690 <sup>681/1825</sup>	134185	850 : 1	850 <sup>191/825</sup>	4	1.0	1.6	49	81	45.80								
134183	590 : 1	590 <sup>49/100</sup>	134187	867 : 1	867 <sup>249/3328</sup>	134188	1014 : 1	1013 <sup>4514/5569</sup>	5	1.0	1.6	42	94	52.60								
134186	742 : 1	741 <sup>59/1024</sup>	134189	1185 : 1	1185 <sup>1271/3358</sup>	134192	1249 : 1	1248 <sup>489/832</sup>	5	1.0	1.6	42	94	52.60								
134191	1068 : 1	1067 <sup>223/256</sup>	134193	1460 : 1	1459 <sup>2399/2704</sup>	134196	1538 : 1	1537 <sup>47/64</sup>	5	1.0	1.6	42	94	52.60								
134190	1386 : 1	1385 <sup>3772/3845</sup>	134194	1707 : 1	1706 <sup>8005/8788</sup>	134197	1798 : 1	1797 <sup>201/208</sup>	5	1.0	1.6	42	94	52.60								
110341	1621 : 1	1620 <sup>3409/8525</sup>	134198	2102 : 1	2102 <sup>203/3380</sup>	134200	2214 : 1	2214 <sup>27/80</sup>	5	1.0	1.6	42	94	52.60								
134195	1996 : 1	1995 <sup>8006/7383</sup>	134201	2589 : 1	2589 <sup>23/1300</sup>	134202	3027 : 1	3027 <sup>1483/8722</sup>	5	1.0	1.6	42	94	52.60								
134199	2458 : 1	2458 <sup>8/8348</sup>	134204	3728 : 1	3728 <sup>2137/8125</sup>	134205	4592 : 1	4591 <sup>2032/3125</sup>	5	1.0	1.6	42	94	52.60								
134203	3189 : 1	3188 <sup>223/500</sup>																				

Spur Gearhead  
 Ø24 mm, 0.1 Nm



Technical Data	
Spur gearhead	straight teeth
Bearing at output	sleeve bearing
Radial play, 8 mm from flange	0.038 mm
Axial play	0.03 - 0.30 mm
Max. perm. radial load, 8 mm from flange	5 N
Max. perm. axial load	8 N
Max. permissible force for press fits	500 N
Average backlash no load	< 2.5°
Backlash at 0.1 Nm torque	4°
Recommended input speed	< 4000 rpm
Recommended temperature range	-20/+65°C

Order Number	Reduction	Number of stages	max. Torque		Sense of direction	η max. [%]	Weight [g]	L1 max. [mm]													
			Cont. [Nm]	Int. [Nm]																	
110480	7.2 : 1	2	0.1	0.15	-	81	25	13.70													
110481	20 : 1	4	0.1	0.15	-	66	28	17.40													
110482	32 : 1	4	0.1	0.15	-	66	28	17.40													
110483	64 : 1	4	0.1	0.15	-	66	28	17.40													
110484	131 : 1	4	0.1	0.15	-	66	28	17.40													
110485	199 : 1	6	0.1	0.15	-	53	30	21.20													
110486	325 : 1	6	0.1	0.15	-	53	30	21.20													