

# Planetary Gearheads

## 1 Nm

For combination with  
DC-Micromotors  
Brushless DC-Motors

### Series 22F

	22F
Housing material	steel
Geartrain material	metal
Recommended max. input speed for: – continuous operation	6 000 rpm
Backlash, at no-load	≤ 3,5 °
Bearings on output shaft	ball bearings
Shaft load, max.:	
– radial (10 mm from mounting face)	≤ 70 N
– axial	≤ 100 N
Shaft press fit force, max.	≤ 100 N
Shaft play	
– radial (10 mm from mounting face)	≤ 0,06 mm
– axial	≤ 0,2 mm
Operating temperature range	- 30 ... + 100 °C

#### Specifications

	1	2	3	4
Number of gear stages				
Continuous torque	mNm 400	600	900	1 000
Intermittent torque	mNm 600	900	1 350	1 500
Weight without motor, ca.	g 41	57	75	90
Efficiency, max.	% 80	75	70	60
Direction of rotation, drive to output	=	=	=	=
Reduction ratio <sup>1)</sup> (rounded)	4:1	14:1 16:1 19:1 25:1	51:1 59:1 68:1 71:1 93:1 100:1 107:1 130:1 169:1	189:1 218:1 252:1 264:1 292:1 305:1 344:1
L2 [mm] = length without motor	26,6	34,8	42,9	51,1
L1 [mm] = length with motor	2224U...SR 50,8	2232U...SR 59,0	2237S...CXR 67,1	2342S...CR 75,3
	2237S...CXR 58,8	2342S...CR 67,0	2232S...BX4(S) 75,1	2250S...BX4(S) 83,3
	2237S...CXR 63,6	2232S...BX4(S) 71,8	2250S...BX4(S) 79,9	
	2342S...CR 68,6	2232S...BX4(S) 76,8	2250S...BX4(S) 84,9	
	2232S...BX4(S) 60,4	2250S...BX4(S) 68,6		
	2250S...BX4(S) 78,4			

<sup>1)</sup> The reduction ratios are rounded, the exact values are available on request or at [www.faulhaber.com](http://www.faulhaber.com).

