

## Planetary Gearheads

### 1 Nm

For combination with  
Brushless DC-Servomotors:  
2232 ... BX4, 2250 ... BX4

### 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 (on bearing output):	
– radial	≤ 0,02 mm
– axial	≤ 0,2 mm
Operating temperature range	– 30 ... + 100 °C

### Specifications

reduction ratio (nominal)	weight without motor  g	length without motor  mm	length with motor		output torque		direction of rotation	efficiency  %
			2232 BX4 L2 mm	2250 BX4 L1 mm	continuous operation  M max. mNm	intermittent operation  M max. mNm		
4 :1	41	26,6	60,4	78,4	400	600	=	80
14 :1	57	34,8	68,6	86,6	600	900	=	75
16 :1	57	34,8	68,6	86,6	600	900	=	75
19 :1	57	34,8	68,6	86,6	600	900	=	75
25 :1	57	34,8	68,6	86,6	600	900	=	75
51 :1	75	42,9	76,7	94,7	900	1 350	=	70
59 :1	75	42,9	76,7	94,7	900	1 350	=	70
68 :1	75	42,9	76,7	94,7	900	1 350	=	70
71 :1	75	42,9	76,7	94,7	900	1 350	=	70
93 :1	75	42,9	76,7	94,7	900	1 350	=	70
100 :1	75	42,9	76,7	94,7	900	1 350	=	70
107 :1	75	42,9	76,7	94,7	900	1 350	=	70
130 :1	75	42,9	76,7	94,7	900	1 350	=	70
169 :1	75	42,9	76,7	94,7	900	1 350	=	70
189 :1	90	51,1	84,9	102,9	1 000	1 500	=	60
218 :1	90	51,1	84,9	102,9	1 000	1 500	=	60
252 :1	90	51,1	84,9	102,9	1 000	1 500	=	60
264 :1	90	51,1	84,9	102,9	1 000	1 500	=	60
292 :1	90	51,1	84,9	102,9	1 000	1 500	=	60
305 :1	90	51,1	84,9	102,9	1 000	1 500	=	60
344 :1	90	51,1	84,9	102,9	1 000	1 500	=	60

**Note:** The reduction ratios are rounded, the exact values are available on request.

