

# Planetary Gearheads

## 0,7 Nm

For combination with  
DC-Micromotors  
Brushless DC-Motors  
Stepper Motors

### Series 23/1

	23/1
Housing material	metal
Geartrain material	steel
Recommended max. input speed for:	
– continuous operation	4 000 rpm
Backlash, at no-load	≤ 1 °
Bearings on output shaft	ball bearings, preloaded
Shaft load, max.:	
– radial (10 mm from mounting face)	≤ 170 N
– axial	≤ 150 N
Shaft press fit force, max.	≤ 150 N
Shaft play	
– radial (10 mm from mounting face)	≤ 0,03 mm
– axial	≤ 0,1 mm
Operating temperature range	- 30 ... + 100 °C

#### Specifications

	1	2	3	4	5
Number of gear stages					
Continuous torque	mNm 200	300	700	700	700
Intermittent torque	mNm 400	600	1 000	1 000	1 000
Weight without motor, ca.	g 60	70	90	100	110
Efficiency, max.	% 88	80	70	60	55
Direction of rotation, drive to output	=	=	=	=	=
Reduction ratio <sup>1)</sup> (rounded)	3,71:1	9,7:1 14:1	43:1 66:1	94:1 112:1 134:1 159:1 190:1 246:1	415:1 592:1 989:1 1 526:1
L2 [mm] = length without motor <sup>2)</sup>	27,9	34,1	40,3	46,4	52,6
L1 [mm] = length with motor	2224U...SR 48,2	2230U...S 54,4	2232U...SR 60,6	2233U...S 66,7	2237S...CXR 72,9
	2342S...CR 56,2	2057S...B 60,2	2232S...BSL 62,4	2444S...B 68,6	AM2224...-10 78,7
	2233U...S 56,6	2237S...CXR 71,1	2232S...BSL 66,5	2444S...B 74,7	
	2342S...CR 64,9	2057S...B 76,1	2232S...BSL 72,7	2444S...B 80,9	
	2233U...S 56,6	2237S...CXR 71,1	2232S...BSL 72,7	2444S...B 80,9	
	2237S...CXR 64,9	2232S...BSL 66,5	2232S...BSL 72,7	2444S...B 80,9	
	2342S...CR 69,9	2232S...BSL 66,5	2232S...BSL 72,7	2444S...B 80,9	
	2057S...B 84,9	2232S...BSL 66,5	2232S...BSL 72,7	2444S...B 80,9	
	2232S...BSL 60,3	2232S...BSL 66,5	2232S...BSL 72,7	2444S...B 80,9	
	2248S...BSL 75,9	2232S...BSL 66,5	2232S...BSL 72,7	2444S...B 80,9	
	2444S...B 71,9	2232S...BSL 66,5	2232S...BSL 72,7	2444S...B 80,9	
	AM2224...-10 55,5	2232S...BSL 66,5	2232S...BSL 72,7	2444S...B 80,9	

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

<sup>2)</sup> L2 - 3,9 mm, in combination with 2224U...SR, 2230U...S, 2232U...SR and 2233U...S.

**Note:** Reduction ratio 3,71:1 with motor types 2224U...SR, 2230U...S, 2232U...SR and 2233U...S shall be ordered as 23/1 3,71:1 - K288.

