

# Planetary Gearheads

## 10 Nm

For combination with  
DC-Micromotors  
Brushless DC-Motors

### Series 38/1 S

	38/1 S
Housing material	metal
Geartrain material	steel
Recommended max. input speed for:	
– continuous operation	4 000 min <sup>-1</sup>
Backlash, at no-load	≤ 1 °
Bearings on output shaft	ball bearings, preloaded
Shaft load, max.:	
– radial (10 mm from mounting face)	≤ 300 N
– axial	≤ 300 N
Shaft press fit force, max.	≤ 350 N
Shaft play	
– radial (10 mm from mounting face)	≤ 0,03 mm
– axial	≤ 0,15 mm
Operating temperature range	- 20 ... + 125 °C

#### Technical data

		2	3	4	5
Number of gear stages					
Continuous torque	Nm	10	10	10	10
Intermittent torque	Nm	15	15	15	15
Mass without motor, ca.	g	215	268	320	375
Efficiency, max.	%	80	70	60	55
Direction of rotation, drive to output		=	=	=	=
Reduction ratio <sup>1)</sup> (rounded)		14:1	43:1 66:1	134:1 159:1 246:1	415:1 592:1 989:1 1 526:1
L2 [mm] = length without motor <sup>2)</sup>		40,1	47,9	55,7	63,5
L1 [mm] = length with motor					
3242G...CR		81,3	89,1	96,9	104,7
3257G...CR		96,3	104,1	111,9	119,7
3272G...CR		111,3	119,1	126,9	134,7
3863A...CR		99,1	106,9	114,7	122,5
3890A...CR		125,1	132,9	140,7	148,5
3056K...B		96,1	103,9	111,7	119,5
3242G...BX4		83,5	91,3	99,1	106,9
3268G...BX4		109,5	117,3	125,1	132,9
3274G...BP4		113,3	121,1	128,9	136,7
3564K...B		104,1	111,9	119,7	127,5
4221G...BXT		61,3	69,1	76,9	84,7
4221G...BXTR		60,5	68,3	76,1	83,9

<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 - 0,8 mm, in combination with 3242G...CR, 3257G...CR, 3272G...CR, 3242G...BX4, 3268G...BX4, 3274G...BP4 and 4221G...BXT R/H.  
L2 - 5 mm, in combination with 3863A...CR and 3890A...CR.

**Note:** The gearheads as S-type have all steel gears and heavy duty lubricant for extended lifetime performance.

