

# Planetary Gearheads

0,18 Nm

For combination with  
DC-Micromotors

## Series 13A

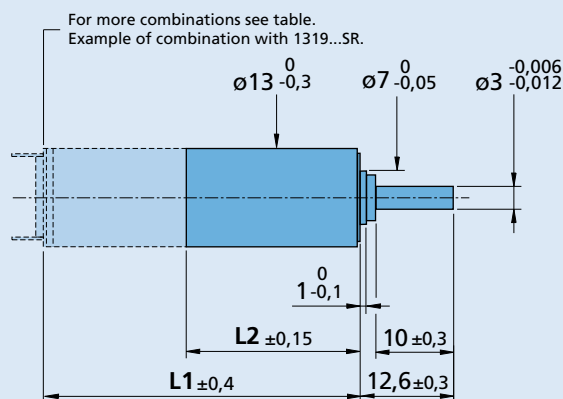
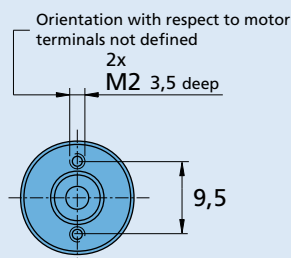
	13A	13AC	13AK
Housing material	plastic/aluminium	plastic/aluminium	plastic/aluminium
Geartrain material	plastic	plastic	plastic
Recommended max. input speed for:			
– continuous operation	5 000 rpm	5 000 rpm	5 000 rpm
Backlash, at no-load	≤ 4°	≤ 4°	≤ 4°
Bearings on output shaft	sintered bearings	ceramic bearings	ball bearings
Shaft load, max.:			
– radial (5 mm from mounting face)	≤ 3 N	≤ 10 N	≤ 15 N
– axial	≤ 1 N	≤ 2 N	≤ 5 N
Shaft press fit force, max.	≤ 10 N	≤ 10 N	≤ 10 N
Shaft play			
– radial (5 mm from mounting face)	≤ 0,06 mm	≤ 0,08 mm	≤ 0,09 mm
– axial	≤ 0,25 mm	≤ 0,25 mm	≤ 0,25 mm
Operating temperature range	- 30 ... + 65 °C	- 20 ... + 85 °C	- 30 ... + 85 °C

### Specifications

		2	3	4	5
Number of gear stages					
Continuous torque	mNm	100	100	150	180
Intermittent torque	mNm	150	150	180	220
Weight without motor, ca.	g	5	5	5	6
Efficiency, max.	%	80	72	64	55
Direction of rotation, drive to output		=	=	=	=
Reduction ratio <sup>1)</sup> (rounded)		16:1	50:1 64:1	158:1 201:1 256:1	497:1 632:1 805:1 1 024:1
L2 [mm] = length without motor		18,8	22,0	25,2	28,4
L1 [mm] = length with motor					
1319C...SR		38,0	41,2	44,4	47,6
1331C...SR		50,0	53,2	56,4	59,6
1336C...C		53,8	57,0	60,2	63,4

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

**Note:** These gearheads are available only with motors mounted.  
Vibrational load of up to 5 g at frequencies up to 500 Hz will not limit the function of the motor-gearhead combinations.



13A, 13AC, 13AK