

# Spur Gearheads

## 0,03 Nm

For combination with  
DC-Micromotors

### Series 16A

	16A	16AC	16AK
Housing material	plastic	plastic	plastic
Geartrain material	metal	metal	metal
Recommended max. input speed for:			
– continuous operation	5 000 min <sup>-1</sup>	5 000 min <sup>-1</sup>	5 000 min <sup>-1</sup>
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)	≤ 2 N	≤ 6 N	≤ 10 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)	≤ 0,05 mm	≤ 0,06 mm	≤ 0,06 mm
– axial	≤ 0,25 mm	≤ 0,25 mm	≤ 0,25 mm
Operating temperature range	- 30 ... + 65 °C	- 20 ... + 65 °C	- 30 ... + 65 °C

Technical data									
Number of gear stages		2	3	3	4	4	5	6	7
Continuous torque	mNm	10	10	20	20	30	30	30	30
Intermittent torque	mNm	100	100	100	100	100	100	100	100
Mass without motor, ca.	g	3	4	4	4	4	5	5	6
Efficiency, max.	%	81	73	73	66	66	59	53	48
Direction of rotation, drive to output		=	≠	≠	=	=	≠	=	≠
Reduction ratio <sup>1)</sup> (rounded)		11,9:1	22:1	41:1	76:1	141:1	262:1 485:1	900:1 1 670:1	3 101:1 5 752:1
L2 [mm] = length without motor		9,2	11,0	11,0	12,8	12,8	14,5	16,3	18,0
L1 [mm] = length with motor									
	1516E...S	25,0	26,8	26,8	28,6	28,6	30,3	32,1	33,8
	1516E...SR	25,0	26,8	26,8	28,6	28,6	30,3	32,1	33,8
	1524E...SR	33,0	34,8	34,8	36,6	36,6	38,3	40,1	41,8
	1624E...S	33,0	34,8	34,8	36,6	36,6	38,3	40,1	41,8
	1717E...SR	26,2	28,0	28,0	29,8	29,8	31,5	33,3	35,0
	1724E...SR	33,0	34,8	34,8	36,6	36,6	38,3	40,1	41,8

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

