

# Spur Gearheads

## 0,1 Nm

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

### Series 15/5

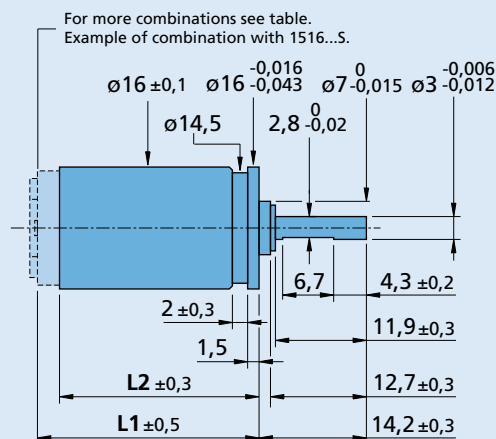
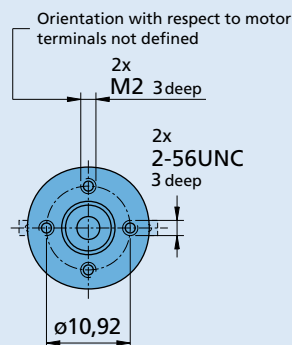
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Housing material	metal
Geartrain material <sup>1)</sup>	plastic/steel
Recommended max. input speed for:	
– continuous operation	5 000 rpm
Backlash, at no-load	≤ 3 °
Bearings on output shaft	ball bearings, preloaded
Shaft load, max.:	
– radial (6,5 mm from mounting face)	≤ 25 N
– axial	≤ 5 N
Shaft press fit force, max.	≤ 5 N
Shaft play	
– radial (6,5 mm from mounting face)	≤ 0,03 mm
– axial	= 0 mm
Operating temperature range	- 30 ... + 100 °C

### Specifications

	2	3	4	4	5	5	6	6	7
Number of gear stages									
Continuous torque	mNm 60	60	100	100	100	100	100	100	100
Intermittent torque	mNm 150	150	300	150	300	150	300	150	300
Mass without motor, ca.	g 17	19	21	21	22	22	24	24	25
Efficiency, max.	% 81	73	66	66	59	59	53	53	48
Direction of rotation, drive to output	=	≠	=	=	≠	≠	=	=	≠
Reduction ratio <sup>2)</sup> (rounded)	6,3:1 11,8:1	22:1 41:1	76:1	141:1	262:1	485:1	900:1	1 670:1	3 101:1
L2 [mm] = length without motor	26,2	29,9	32,0	32,0	34,1	34,1	36,2	36,2	38,3
L1 [mm] = length with motor									
1319E...SR	32,5	36,2	38,3	38,3	40,4	40,4	42,5	42,5	44,6
1331E...SR	44,5	48,2	50,3	50,3	52,4	52,4	54,5	54,5	56,6
1516E...S	29,1	32,8	34,9	34,9	37,0	37,0	39,1	39,1	41,2
1516E...SR	29,1	32,8	34,9	34,9	37,0	37,0	39,1	39,1	41,2
1524E...SR	37,1	40,8	42,9	42,9	45,0	45,0	47,1	47,1	49,2
1524E...BSL	37,5	41,2	43,3	43,3	45,4	45,4	47,5	47,5	49,6
1536E...BSL	49,9	53,6	55,7	55,7	57,8	57,8	59,9	59,9	62,0
AM1524...-57	30,0	33,7	35,8	35,8	37,9	37,9	40,0	40,0	42,1

<sup>1)</sup> Gearheads with ratios < 3 101:1 have all steel gears.

<sup>2)</sup> The reduction ratios are rounded, the exact values are available on request or at [www.faulhaber.com](http://www.faulhaber.com).



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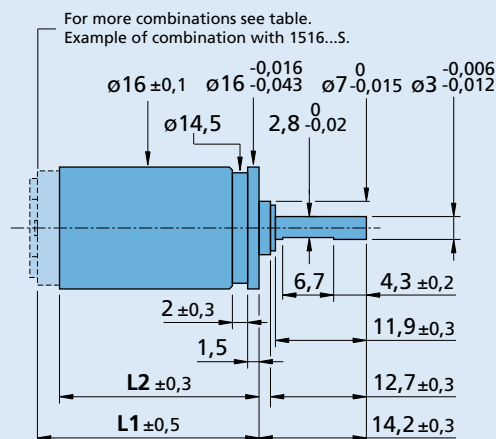
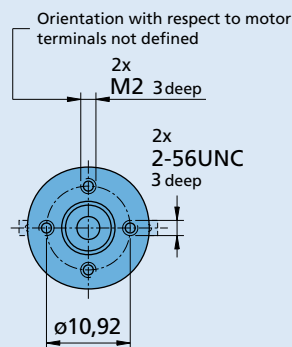
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Operating temperature range	- 30 ... + 100 °C

### Specifications

	7	8	8	9	9	10	10
Number of gear stages							
Continuous torque	mNm 100	100	100	100	100	100	100
Intermittent torque	mNm 150	300	150	300	150	300	150
Mass without motor, ca.	g 25	26	26	28	28	30	30
Efficiency, max.	% 48	43	43	39	39	35	35
Direction of rotation, drive to output	≠	=	=	≠	≠	=	=
Reduction ratio <sup>2)</sup> (rounded)	5 752:1	10 683:1	19 813:1	36 796:1	68 245:1	126 741:1	235 067:1
L2 [mm] = length without motor	38,3	40,4	40,4	42,5	42,5	44,6	44,6
L1 [mm] = length with motor							
1319E...SR	44,6	46,7	46,7	48,8	48,8	50,9	50,9
1331E...SR	56,6	58,7	58,7	60,8	60,8	62,9	62,9
1516E...S	41,2	43,3	43,3	45,4	45,4	47,5	47,5
1516E...SR	41,2	43,3	43,3	45,4	45,4	47,5	47,5
1524E...SR	49,2	51,3	51,3	53,4	53,4	55,5	55,5
1524E...BSL	49,6	51,7	51,7	53,8	53,8	55,9	55,9
1536E...BSL	62,0	64,1	64,1	66,2	66,2	68,3	68,3
AM1524...-57	42,1	44,2	44,2	46,3	46,3	48,4	48,4

<sup>1)</sup> Gearheads with ratios < 3 101:1 have all steel gears.

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