

# Spur Gearheads

## 0,1 Nm

For combination with  
 DC-Micromotors:  
 1319, 1331, 1516, 1524, 1624  
 Brushless DC-Servomotors:  
 1524 BSL, 1536 BSL  
 Stepper Motors:  
 AM1524

### Series 15/5, 16/5

#### 15/5 and 16/5

Housing material	metal
Geartrain material	steel <sup>1)</sup>
Recommended max. input speed for:	
– continuous operation	5 000 rpm
Backlash, at no-load	≤ 3°
Bearings on output shaft	preloaded ball bearings
Shaft load, max.:	
– radial (6,5 mm from mounting face)	≤ 25 N
– axial	≤ 5 N <sup>2)</sup>
Shaft press fit force, max.	≤ 5 N <sup>2)</sup>
Shaft play:	
– radial (6,5 mm from mounting face)	≤ 0,02 mm
– axial	= 0 mm <sup>2)</sup>
Operating temperature range	– 30 ... + 100 °C

#### Specifications

reduction ratio (nominal)	weight without motor	length without motor L2	length with motor <sup>3)</sup>						output torque		direction of rotation (reversible)	efficiency
			1319 E	1331E	1516 E	1524 E 1624 E	1524 BSL	1536 BSL	continuous operation	intermittent operation		
	g	mm	L1	L1	L1	L1	L1	L1	M max. mNm	M max. mNm		%
6,3 :1	17	26,2	32,5	44,5	29,1	37,1	37,5	49,9	60	150	=	81
11,8 :1	17	26,2	32,5	44,5	29,1	37,1	37,5	49,9	60	150	=	81
22 :1	19	29,9	36,2	48,2	32,8	40,8	41,2	53,6	60	150	≠	73
41 :1	19	29,9	36,2	48,2	32,8	40,8	41,2	53,6	60	150	≠	73
76 :1	21	32,0	38,3	50,3	34,9	42,9	43,3	55,7	100	300	=	66
141 :1	21	32,0	38,3	50,3	34,9	42,9	43,3	55,7	100	150	=	66
262 :1	22	34,1	40,4	52,4	37,0	45,0	45,4	57,8	100	300	≠	59
485 :1	22	34,1	40,4	52,4	37,0	45,0	45,4	57,8	100	150	≠	59
900 :1	24	36,2	42,5	54,5	39,1	47,1	47,5	59,9	100	300	=	53
1 670 :1	24	36,2	42,5	54,5	39,1	47,1	47,5	59,9	100	150	=	53
3 101 :1	25	38,3	44,6	56,6	41,2	49,2	49,6	62,0	100	300	≠	48
5 752 :1	25	38,3	44,6	56,6	41,2	49,2	49,6	62,0	100	150	≠	48
10 683 :1	26	40,4	46,7	58,7	43,3	51,3	51,7	64,1	100	300	=	43
19 813 :1	26	40,4	46,7	58,7	43,3	51,3	51,7	64,1	100	150	=	43
36 796 :1	28	42,5	48,8	60,8	45,4	53,4	53,8	66,2	100	300	≠	39
68 245 :1	28	42,5	48,8	60,8	45,4	53,4	53,8	66,2	100	150	≠	39
126 741 :1	30	44,6	50,9	62,9	47,5	55,5	56,9	68,3	100	300	=	35
235 067 :1	30	44,6	50,9	62,9	47,5	55,5	56,9	68,3	100	150	=	35

<sup>1)</sup> Gearheads with ratio ≥ 3101:1 have plastic gears in the input stage. For extended life performance, the gearheads are available with all steel gears and heavy duty lubricant: type 15/5 S and 16/5 S.

<sup>2)</sup> Limited by the preloaded ball bearings. A higher axial load negates the preload.

<sup>3)</sup> Length L1 with Stepper Motors AM1524 = L2 + 3,9 mm.

**Note:** The reduction ratios are rounded, the exact values are available on request.

