

Spur Gearheads

0,03 Nm

For combination with
 DC-Micromotors:
 1016, 1024, 1219, 1224
 Brushless DC-Servomotors:
 1226

Series 12/3

	12/3	12/3 K
Housing material	metal	metal
Geartrain material	all metal	all metal
Recommended max. input speed for:		
– continuous operation	5 000 rpm	5 000 rpm
Backlash, at no-load	≤ 3°	≤ 3°
Bearings on output shaft	sintered sleeve bearings	ball bearings
Shaft load, max.:		
– radial (4,5 mm from mounting face)	≤ 3 N	≤ 5 N
– axial	≤ 2 N	≤ 10 N
Shaft press fit force, max.	≤ 10 N	≤ 10 N
Shaft play (on bearing output):		
– radial	≤ 0,03 mm	≤ 0,02 mm
– axial	≤ 0,10 mm	≤ 0,05 mm
Operating temperature range	– 30 ... + 100 °C	– 30 ... + 100 °C

Specifications

reduction ratio (nominal)	weight without motor	length without motor	length with motor					output torque		direction of rotation (reversible)	efficiency
			1016 E	1024 E	1219 E	1224 E	1226 E	continuous operation	intermittent operation		
	g	mm	L1	L1	L1	L1	L1	M max. mNm	M max. mNm		%
9,17:1	9	15,4	31,1	39,1	34,1	39,6	41,4	6	100	≠	90
20,6 :1	10	17,5	33,2	41,2	36,2	41,7	43,5	8	100	=	86
46,4 :1	11	19,6	35,3	43,3	38,3	43,8	45,6	10	100	≠	81
104,4 :1	12	21,7	37,4	45,4	40,4	45,9	47,7	20	100	=	77
235 :1	13	23,8	39,5	47,5	42,5	48,0	49,8	30	100	≠	74
529 :1	14	25,9	41,6	49,6	44,6	50,1	51,9	30	100	=	70
1 190 :1	15	28,0	43,7	51,7	46,7	52,2	54,0	30	100	≠	66
2 677 :1	16	30,1	45,8	53,8	48,8	54,3	56,1	30	100	=	63
6 023 :1	17	32,2	47,9	55,9	50,9	56,4	58,2	30	100	≠	60
13 552 :1	18	34,3	50,0	58,0	53,0	58,5	60,3	30	100	=	57
30 492 :1	19	36,4	52,1	60,1	55,1	60,6	62,4	30	100	≠	54
68 608 :1	20	38,5	54,2	62,2	57,2	62,7	64,5	30	100	=	51
154 368 :1	22	40,6	56,3	64,3	59,3	64,8	66,6	30	100	≠	49

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

