

Planetary Gearheads

0,7 Nm

For combination with (overview on page 14-15)
 DC-Micromotors:
 2224, 2230, 2232, 2233, 2342
 Brushless DC-Servomotors:
 2057, 2444
 DC-Motor-Tacho Combinations:
 2251

Series 23/1

	23/1
Housing material	metal
Geartrain material	all steel
Recommended max. input speed for:	
– continuous operation	4 000 rpm
Backlash, at no-load	≤ 1°
Bearings on output shaft	preloaded ball bearings
Shaft load, max.:	
– radial (10 mm from mounting face)	≤ 170 N
– axial	≤ 150 N
Shaft press fit force, max.	≤ 150 N
Shaft play (on bearing output):	
– radial	≤ 0,015 mm
– axial	≤ 0,10 mm
Operating temperature range	– 30 ... + 100 °C

Specifications

reduction ratio (nominal)	weight without motor	length without motor L2 mm	length with motor						output torque		direction of rotation (reversible)	efficiency
			2224 U	2230 U	2232 U	2233 U	2444 S	2342 S	continuous operation	intermittent operation		
			L1 mm	L1 mm	L1 mm	L1 mm	L1 mm	L1 mm	M max. mNm	M max. mNm		
3,71:1 ¹⁾	60	24,0	48,2	54,0	56,2	56,6	—	—	200	400	=	88
3,71:1	60	27,9	—	—	—	—	71,9	69,9	200	400	=	88
14 :1	70	34,1	54,4	60,2	62,4	62,8	78,1	76,1	300	600	=	80
43 :1	90	40,3	60,6	66,4	68,6	69,0	84,3	82,3	700	1 000	=	70
66 :1	90	40,3	60,6	66,4	68,6	69,0	84,3	82,3	700	1 000	=	70
134 :1	100	46,4	66,7	72,5	74,7	75,1	90,4	88,4	700	1 000	=	60
159 :1	100	46,4	66,7	72,5	74,7	75,1	90,4	88,4	700	1 000	=	60
246 :1	100	46,4	66,7	72,5	74,7	75,1	90,4	88,4	700	1 000	=	60
415 :1	110	52,6	72,9	78,7	80,9	81,3	96,6	94,6	700	1 000	=	55
592 :1	110	52,6	72,9	78,7	80,9	81,3	96,6	94,6	700	1 000	=	55
989 :1	110	52,6	72,9	78,7	80,9	81,3	96,6	94,6	700	1 000	=	55
1 526 :1	110	52,6	72,9	78,7	80,9	81,3	96,6	94,6	700	1 000	=	55

¹⁾ Gearheads with ratio 3,71:1 available for motor types
 2224, 2230, 2232 and 2233 are to be order as 23/1 - 3,71:1 - K288

²⁾ Only for reduction ratio ≥ 14:1

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

