

# Planetary Gearheads

## 20 Nm

For combination with  
DC-Micromotors  
Brushless DC-Motors  
Motion Control Systems

### Series 38A

	38A
Housing material	steel
Geartrain material	steel
Recommended max. input speed for:	
– continuous operation	4 500 min <sup>-1</sup>
Backlash, at no-load	≤ 0,5 °
Bearings on output shaft	ball bearings
Shaft load, max.:	
– radial (14,5 mm from mounting face)	≤ 200 N
– axial	≤ 200 N
Shaft press fit force, max.	≤ 490 N
Shaft play	
– radial (14,5 mm from mounting face)	≤ 0,02 mm
– axial	≤ 0,3 mm
Operating temperature range	- 25 ... + 90 °C

Technical data		1	2	2	3	3	4	4
Number of gear stages								
Continuous torque	Nm	6	20	18	20	18	20	18
Intermittent torque	Nm	9,6	32	29	32	29	32	29
Mass without motor, ca.	g	190	260	260	330	330	410	410
Efficiency, max.	%	96	94	94	90	90	80	80
Direction of rotation, drive to output		=	=	=	=	=	=	=
Reduction ratio (exact)		4:1 5:1	12:1 16:1 20:1	25:1	36:1 45:1 60:1 80:1 100:1 120:1 160:1	200:1	240:1 360:1 480:1 800:1	1 600:1
L2 [mm] = length without motor <sup>1)</sup>		42,2	55,0	55,0	67,6	67,6	80,2	80,2
L1 [mm] = length with motor								
	3242G...CR	78,8	91,6	91,6	104,2	104,2	116,8	116,8
	3257G...CR	93,8	106,6	106,6	119,2	119,2	131,8	131,8
	3272G...CR	108,8	121,6	121,6	134,2	134,2	146,8	146,8
	3863H...CR	113,6	126,4	126,4	139,0	139,0	151,6	151,6
	3890H...CR	139,6	152,4	152,4	165,0	165,0	177,6	177,6
	3242G...BX4	81,0	93,8	93,8	106,4	106,4	119,0	119,0
	3268G...BX4	107,0	119,8	119,8	132,4	132,4	145,0	145,0
	3274G...BP4	110,8	123,6	123,6	136,2	136,2	148,8	148,8
	3564K...B	106,2	119,0	119,0	131,6	131,6	144,2	144,2
	4490H...B/BS	139,6	152,4	152,4	165,0	165,0	177,6	177,6
	MCS 3242G...BX4..	117,2	130,0	130,0	142,6	142,6	155,2	155,2
	MCS 3268G...BX4..	143,2	156,0	156,0	168,6	168,6	181,2	181,2
	MCS 3274G...BP4..	152,2	165,0	165,0	177,6	177,6	190,2	190,2

<sup>1)</sup> L2 - 5,4 mm, in combination with 3242G...CR, 3257G...CR, 3272G...CR, 3242G...BX4, 3268G...BX4 and 3274G...BP4.

L2 + 7,4 mm, in combination with 3863A...CR, 3890A...CR, 4490H...B and 4490H...BS.

