

# DC-Gearmotors

0,01 Nm

## Precious Metal Commutation

### Series 2020 ... S

	2020
Housing material	metal
Geartrain material	all metal
Recommended max. input speed for:	
– continuous operation	5 000 rpm
Backlash, at no-load	≤ 4°
Bearings on output shaft	brass sleeves
Shaft load, max.:	
– radial (3 mm from mounting face)	≤ 0,5 N
– axial	≤ 0,1 N
Shaft press fit force, max.	≤ 10 N
Shaft play (on bearing output):	
– radial	≤ 0,05 mm
– axial	≤ 0,25 mm
Operating temperature range	– 30 ... + 65 °C

### Specifications

reduction ratio (nominal)	Series	weight g	length with motor 2017 mm	output torque		direction of rotation (reversible)	efficiency %
				continuous operation M max. mNm	intermittent operation M max. mNm		
3,9:1	2020 A...	24	20	1,5	3	=	90
15,1:1	2020 B...	24	20	3	10	=	85
58,8:1	2020 C...	24	20	10	30	=	80
215 :1	2020 D...	24	20	10	30	=	75

These DC-Gearmotors integrate exclusively the motor Series 2017.  
For the motor voltage see DC-Micromotors Series 2017.

Orientation with respect to motor terminals not defined

