

# DC-Gearmotors

100 mNm

## Precious Metal Commutation

### Series 2619 ... SR

Values at 22°C and nominal voltage		2619 S	006 SR	012 SR	024 SR	
Nominal voltage	$U_N$		6	12	24	Volt
Terminal resistance	$R$		8,2	36,5	128	$\Omega$
No-load speed (motor)	$n_o$		6 600	5 900	6 200	$\text{min}^{-1}$
Speed constant	$k_n$		1 111	500	261	$\text{min}^{-1}/\text{V}$
Back-EMF constant	$k_E$		0,9	2	3,83	$\text{mV}/\text{min}^{-1}$
Torque constant	$k_M$		8,59	19,09	36,54	$\text{mNm}/\text{A}$
Current constant	$k_I$		0,116	0,052	0,027	$\text{A}/\text{mNm}$
Slope of n-M curve	$\Delta n/\Delta M$		1 055	957	917	$\text{min}^{-1}/\text{mNm}$
Rotor inductance	$L$		465	2 200	8 400	$\mu\text{H}$
Rotor inertia	$J$		0,68	0,68	0,68	$\text{gcm}^2$

Housing material		plastic		
Geartrain material		metal		
Backlash, at no-load	$\leq$	4		$^\circ$
Bearings on output shaft		brass / ceramic bearings	ball bearings, preloaded	
Shaft load max.:		(standard)	(optional)	
– radial (5 mm from mounting face)	$\leq$	3,5	10,5	N
– axial	$\leq$	2	5	N
Shaft press fit force, max.	$\leq$	10	10	N
Shaft play:				
– radial (5 mm from mounting face)	$\leq$	0,07	0,03	mm
– axial	$\leq$	0,25	0	mm
Operating temperature range		– 25 ... + 80		$^\circ\text{C}$

### Specifications

reduction ratio (rounded)	output speed up to $n_{\text{max}}$ $\text{min}^{-1}$	weight with motor g	output torque		direction of rotation (reversible)	efficiency %
			continuous operation $M_{\text{max}}$ mNm	intermittent operation $M_{\text{max}}$ mNm		
8 : 1	635	25	9	30	=	81
22 : 1	223	26	23	75	$\neq$	73
33 : 1	151	26	30	100	=	66
112 : 1	44	27	93	180	$\neq$	59
207 : 1	24	27	100	180	=	53
361 : 1	14	27	100	180	=	53
814 : 1	6	28	100	180	=	43
1 257 : 1	4	29	100	180	=	43

Note: output speed at 5000  $\text{min}^{-1}$  input speed. Based on motor 2607 ... SR.

