

DC-Gearmotors

with flat ironless rotor

100 mNm

Series 2619 ... SR

	2619 S	003 SR	006 SR	012 SR	024 SR	
Nominal voltage	U_N	3	6	12	24	Volt
Terminal resistance	R	1,9	8,2	36,5	128	Ω
Output power	$P_{2\max}$	1,16	1,08	0,97	1,1	W
No-load speed (motor)	n_0	6 300	6 600	5 900	6 200	rpm
Speed constant	k_n	2 129	1 111	500	261	rpm/V
Back-EMF constant	k_E	0,47	0,9	2	3,83	mV/rpm
Torque constant	k_M	4,49	8,59	19,09	36,54	mNm/A
Current constant	k_i	0,223	0,116	0,052	0,027	A/mNm
Slope of n-M curve	$\Delta n/\Delta M$	902	1 055	957	917	rpm/mNm
Rotor inductance	L	120	465	2 200	8 400	μH
Rotor inertia	J	0,68	0,68	0,68	0,68	gcm^2

Housing material		plastic		
Geartrain material		metal		
Backlash, at no-load	\leq	4		$^\circ$
Bearings on output shaft		brass / ceramic bearings	ball bearings	
Shaft load max.:		(standard)	(optional)	N
– radial (3 mm from bearing)	\leq	5	15	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	0,25	mm
Operating temperature range		– 30 ... + 80		$^\circ\text{C}$

Specifications

reduction ratio (rounded)	output speed up to n_{\max} rpm	weight with motor g	output torque		direction of rotation (reversible)	efficiency %
			continuous operation M_{\max} mNm	intermittent operation M_{\max} mNm		
8 : 1	635	25	9	30	=	81
22 : 1	223	26	23	75	\neq	73
33 : 1	151	26	30	100	=	60
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

