

DC Motor Ø 76

1.13.075.XXX



1.13.075.XXX

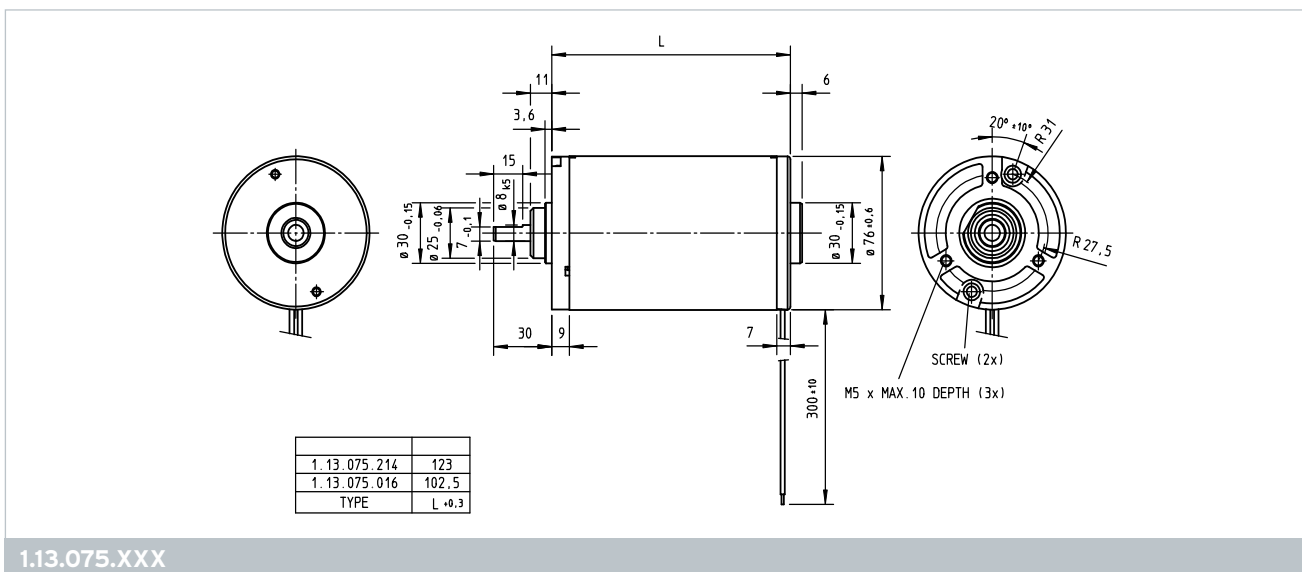
Design	
Commutator	Copper, 12-segments
RFI Protection	2 Chokes
Insulation class	Winding H, otherwise A
Protection class	IP40
Commutation	Graphite/copper-carbon brushes
Armature	sintered, straight slot
Magnet system	Permanent magnets, 2-pole
Bearings	2 preloaded ball bearings
Housing	Steel, corrosion protected
End shields	Zinc die-cast

Type 1.13.075.XXX			016	214
Characteristics*				
Rated voltage	V	V	24	24
Rated power	P_N	W	75	92
Rated torque	T_N	mNm	200	250
Rated speed	n_N	rpm	3600	3500
Rated current	I_N	A	4.4	5.1
No load characteristics*				
No load speed	n_o	rpm	4000	4000
No load current	I_o	A	0.6	0.6
Starting characteristics*				
Starting torque	T_s	mNm	2000	3000
Starting current	I_s	A	37	55
Performance characteristics				
max. Output power	P_{max}	W	210	314
max. Constant torque	T_{max}	mNm	230	285
Motor parameters*				
Weight	G	g	1500	1800
Rotor inertia	J	gcm ²	1300	1800
Terminal resistance	R	Ohm	0.7	0.5
Mech. time constant	τ_m	ms	27	29
Electr. time constant	τ_e	ms	2.4	2.0
Speed regulation constant	R_m	rpm/mNm	2.0	1.3
Torque constant	k_t	mNm/A	55	55
Thermal resistance	R_{th1}	K/W	2.2	2.0
Thermal resistance	R_{th2}	K/W	2.5	2.2
Axial play		mm	< 0.01	< 0.01
Direction of rotation	bidirectional			

Operational conditions

Temperature range	T	°C	-10 - +70
Humidity at room temperature	rel. F.	%	15 - 55
No condensation		g H ₂ O / m ³	2 - 25
Axial force	F _A	N	50
Radial force, 15 mm from mounting surface	F _R	N	200
Operating mode at P _{max}			S5
Operating mode at T _{max}			S1

* at 25° C



1.13.075.XXX

Customized versions

The following modifications are available upon request:

- ▶ Speed adjustment through winding change
- ▶ Lead sets
- ▶ Shaft length on both ends
- ▶ Shaft configuration (flat, grooved, etc.)
- ▶ Drive configuration
- ▶ Adapters and mounting plates