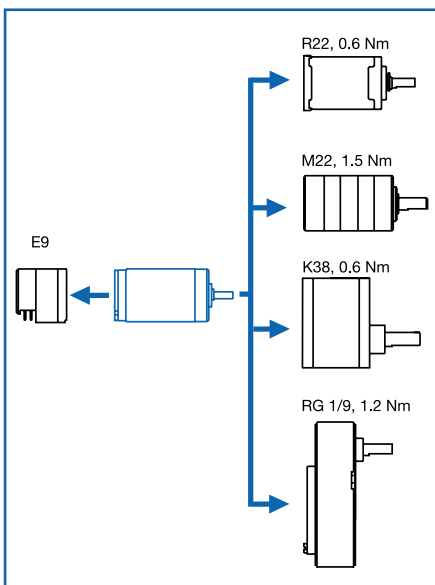


Winding types	<span style="border: 1px solid black; padding: 0 2px;">...</span>	-216P	-216E	-210E
<b>Measured values</b>				
1 Measuring voltage	V	9.0	18.0	28.0
2 No-load speed	rpm	6700	7300	7400
3 Stall torque	mNm (oz-in)	44 (6.2)	42 (5.9)	27 (3.8)
4 Average no-load current	mA	100	50	35
5 Typical starting voltage	V	--	--	--
<b>Max. recommended values</b>				
6 Max. continuous current	A	1.76	0.90	0.47
7 Max. continuous torque	mNm (oz-in)	21 (3)	19.5 (2.8)	15 (2.1)
8 Max. angular acceleration	10 <sup>3</sup> rad/s <sup>2</sup>	135	128	152
<b>Intrinsic parameters</b>				
9 Back-EMF constant	V/1000 rpm	1.30	2.40	3.60
10 Torque constant	mNm/A (oz-in/A)	12.4 (1.75)	22.9 (3.25)	34.4 (4.9)
11 Terminal resistance	ohm	2.55	9.8	36.3
12 Motor regulation R/k <sup>2</sup>	10 <sup>3</sup> /Nms	17	19	31
13 Rotor inductance	mH	0.20	0.80	1.70
14 Rotor inertia	kgm <sup>2</sup> · 10 <sup>-7</sup>	6.10	6.10	3.90
15 Mechanical time constant	ms	10	12	12

Availability: see enclosed document at the end of the catalogue



- Thermal resistance:  
rotor-body 5°C/W  
body-ambient 12°C/W
- Thermal time constant - rotor / stator:  
13 s / 580 s
- Max. rated coil temperature: 155°C
- Recom. ambient temperature range:  
-10°C to +80°C (-14°F to 176°F)
- Max. axial static force for press-fit: 250 N
- End play: ≤ 150 μm  
Radial play: ≤ 30 μm  
Shaft runout: ≤ 10 μm
- Max. side load at 5 mm from mounting face:  
- sleeve bearings 6 N  
- ball bearings 8 N
- Motor exec. • 1 fitted with sleeve bearings (ball bearings optional)
- Motor exec. • 93 fitted with two preloaded ball bearings

