

TW Size 5 [310 DC Bus]

0503A.30.2



Reference data	Symbol	0503A.30.2	Units
Nominal torque, S1, $\omega=0$, free air	T_{nc}	3.4	Nm
Nominal torque, S1, $\omega=0$, flanged	$T_{n\alpha}$	3.4	Nm
Nominal torque, S1, $\omega=\omega_n$, flanged	T_n	2.7	Nm
Peak torque, S6 40%	T_{pk}	7.0	Nm
Maximum structural speed	ω_p	4000	rpm

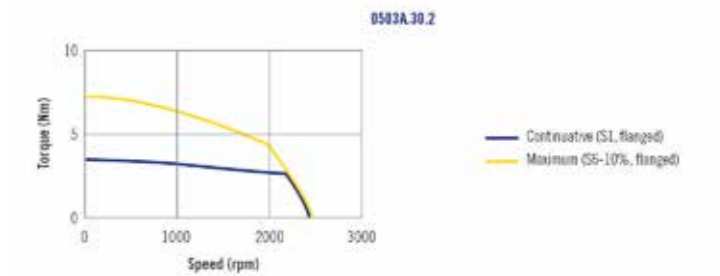
Physical data	Symbol	0503A.30.2	Units
Rotor inertia	J	$0.27 \cdot 10^{-3}$	kgm ²
Acceleration at peak torque	a_{pk}	22600	rad/s ²
Total weight	M_{sta}	2.7	kg
Insulation		Class H-F	
Protection class		IP 67	

Thermal data	Symbol	0503A.30.2	Units
Thermal time constant	T_c	2189	s
Motor loss at T_{nc} (S1, $\omega=0$, free air)	LO_c	41	W
Motor thermal protection threshold		110	°C
Drive thermal protection threshold		100	°C

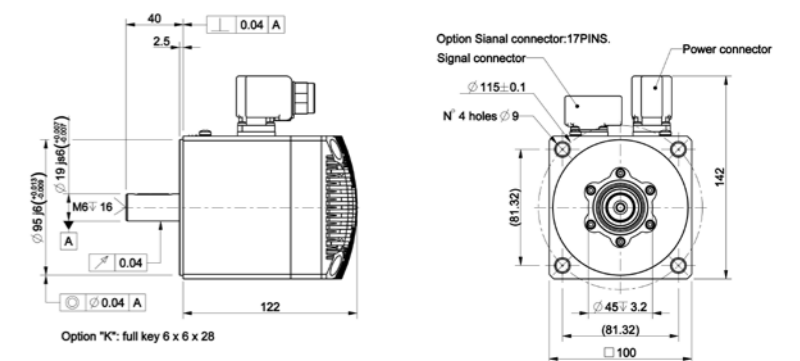
Electrical data	Symbol	0503A.30.2	Units
Power supply (typical)	U_n	310	V _{dc}
Maximum speed	ω_{max}	2500	rpm
Nominal speed	ω_n	2100	rpm
Peak current, $T=T_{pk}$	I_{pk}	6	Arms
Nominal current, $\omega=\omega_n$, $T=T_n$	I_n	2.2	Arms
Nominal power, $\omega=\omega_n$	$P_{n\alpha}$	600	W
Torque constant	k_t	1.2	Nm/Arms

Brake Data (optional)	Symbol	0503A.30.2	Units
Supply voltage	U_n	24	Vdc
Power consumption	P20	13	W
Stall braking torque (20°C)	TB_x	7.0	Nm
Rated torque	TB_{kn}	3.8	Nm
Additional Inertia	JBk	$0.041 \cdot 10^{-3}$	kgm ²

TW Servodrive Operational Area



Overall Dimensions



Drawing referred to the TW0503A.30.2 model. For the other drawings model please visit our website www.phase.eu