

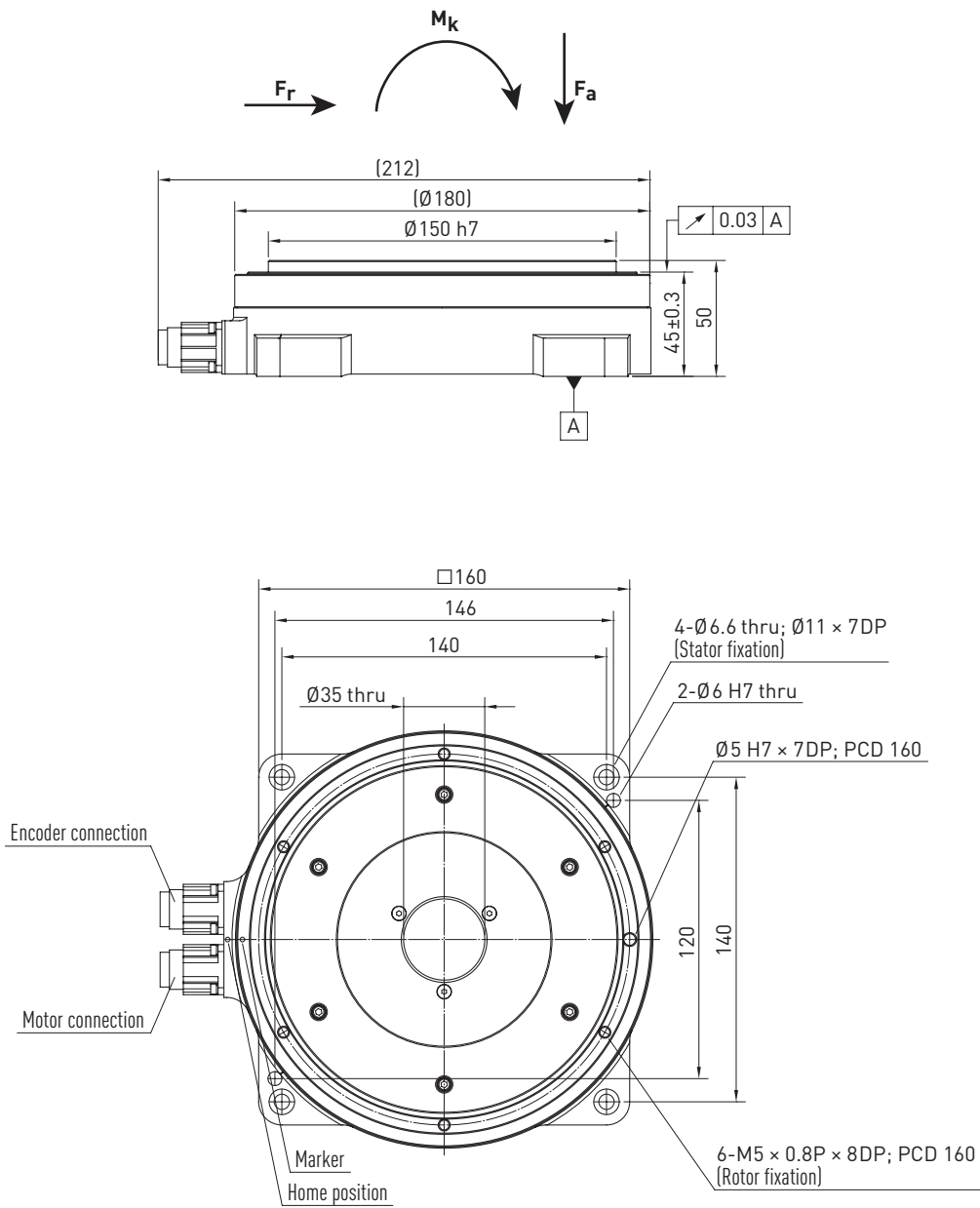
# Rotary Table

DMN71

**HIWIN**<sup>®</sup>

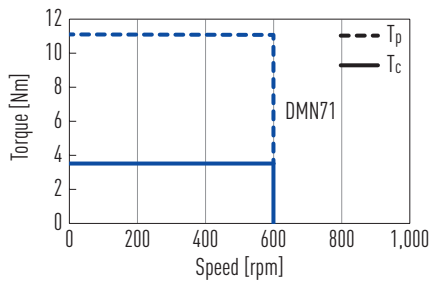
Motion Control & Systems

## Dimensions



### Technical data

#### Torque-speed curve (DC bus voltage: 320/560 VDC)



#### Technical data for DMN71 HIWIN rotary tables

	Symbol	Unit	DMN71
<b>Technical data of rotary table</b>			
Peak torque (for 1 sec.)	$T_p$	Nm	11.1
Continuous torque	$T_c$	Nm	3.7
Stall torque	$T_s$	Nm	2.59
Inertia of rotating parts	J	kgm <sup>2</sup>	0.008
Weight	$M_m$	kg	3.5
Max. axial load	$F_a$	N	1,000
Max. radial load	$F_r$	N	1,000
Max. moment of tilt	$M_k$	Nm	50
Nominal speed (at 400 VAC)	n	1/min	600
Position accuracy		arcsec	± 45
Repeatability		arcsec	± 2.5
Radial run-out		mm	0.03
Axial run-out		mm	0.03
Height	H	mm	50
Protection class			IP40
<b>Technical data of motor</b>			
Peak current (for 1 sec.)	$I_p$	$A_{eff}$	10.2
Continuous current	$I_c$	$A_{eff}$	3.4
Motor constant	$K_m$	Nm/ $\sqrt{W}$	0.6
Resistance <sup>1)</sup>	$R_{25}$	$\Omega$	2.55
Inductance <sup>1)</sup>	L	mH	9.02
Electrical time constant	$T_e$	ms	3.5
Torque constant	$K_t$	Nm/ $A_{eff}$	1.09
Back emf constant	$K_u$	$V_{eff}/(\text{rad/s})$	0.63
Number of poles	2p		16
Thermal resistance	$R_{th}$	$^{\circ}\text{C/W}$	1.7
Thermal time constant	$T_{th}$	s	1,420
Thermal sensor			PTC SNM 100
Max. DC Bus		V	600

All the specifications in the table (except dimensions) are in  $\pm 10\%$  of tolerance at 25 °C ambient temperature

<sup>1)</sup> Line-to-line

#### Encoder specifications (optical, incremental)

- 2,048 lines/cycle
- Index mark
- Signal output sin/cos 1 V<sub>pp</sub>