

Features & Specifications

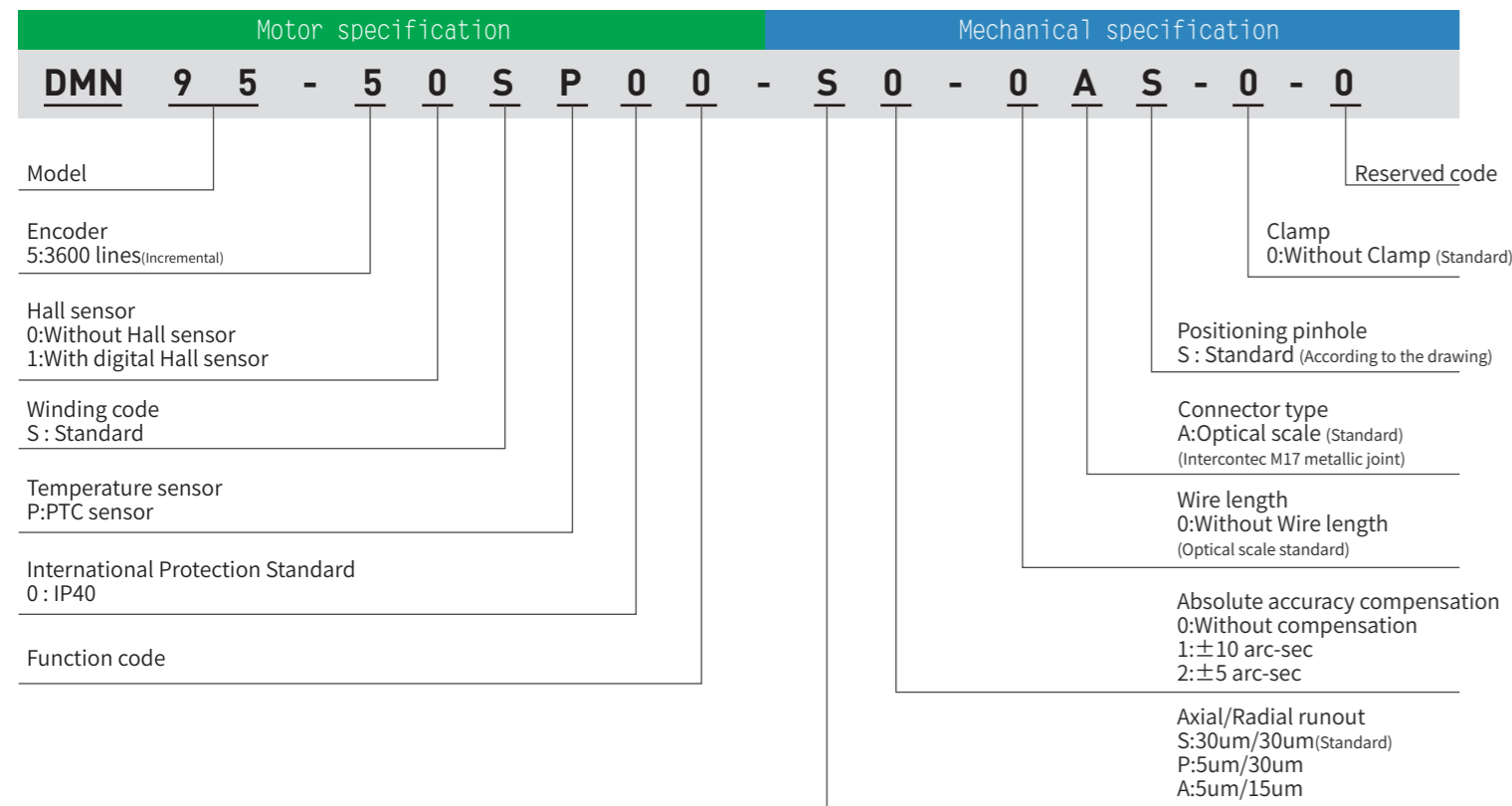
- Internal rotating
- Saving 30% space with same torque
- Integrated high resolution encoder
- High dynamic
- Maintenance free and longer life time



Applications

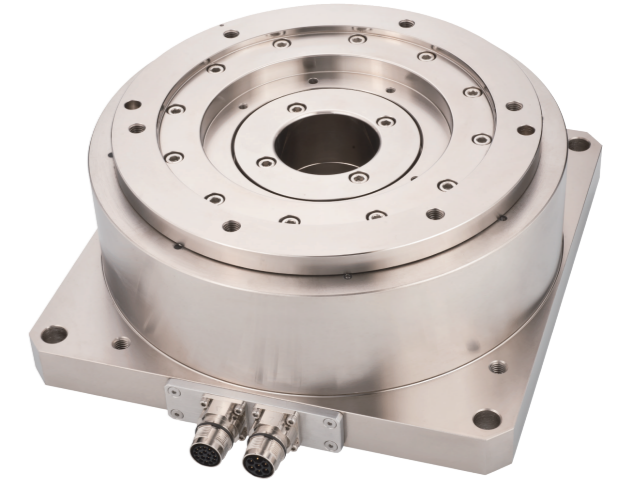
Screen printing, Laser cutting, Semi-conductor transport, Inspection/Processing, New energy, Automobile, Computers/Communications/Consumer product, Display panel, Medical, Inspection equipment.

Model Numbers for DMN Series



HIWIN®

HIWIN MIKROSYSTEM
New Generation Direct Drive Motor



HIWIN®

HIWIN MIKROSYSTEM CORP.
No.6, Jingke Central Rd.,
Taichung Precision Machinery Park,
Taichung 408226, Taiwan
Tel: +886-4-23550110
Fax: +886-4-23550123
www.hiwinmikro.tw
business@hiwinmikro.tw

Global Sales And Customer Service Site

HIWIN GmbH
OFFENBURG, GERMANY
www.hiwin.de
www.hiwin.eu
info@hiwin.de

HIWIN Schweiz GmbH
JONA, SWITZERLAND
www.hiwin.ch
info@hiwin.ch

HIWIN KOREA
SUWON · CHANGWON, KOREA
www.hiwin.kr
info@hiwin.kr

HIWIN JAPAN
KOBE · TOKYO · NAGOYA · NAGANO ·
TOHOKU · SHIZUOKA · HOKURIKU ·
HIROSHIMA · FUKUOKA · KUMAMOTO,
JAPAN
www.hiwin.co.jp
info@hiwin.co.jp

HIWIN s.r.o.
BRNO, CZECH REPUBLIC
www.hiwin.cz
info@hiwin.cz

HIWIN CHINA
SUZHOU, CHINA
www.hiwin.cn
info@hiwin.cn

HIWIN USA
CHICAGO, U.S.A.
www.hiwin.com
info@hiwin.com

HIWIN FRANCE
STRASBOURG, FRANCE
www.hiwin.fr
info@hiwin.de

Mega-Fabs Motion Systems, Ltd.
HAIFA, ISRAEL
www.mega-fabs.com
info@mega-fabs.com

HIWIN Srl
BRUGHERIO, ITALY
www.hiwin.it
info@hiwin.it

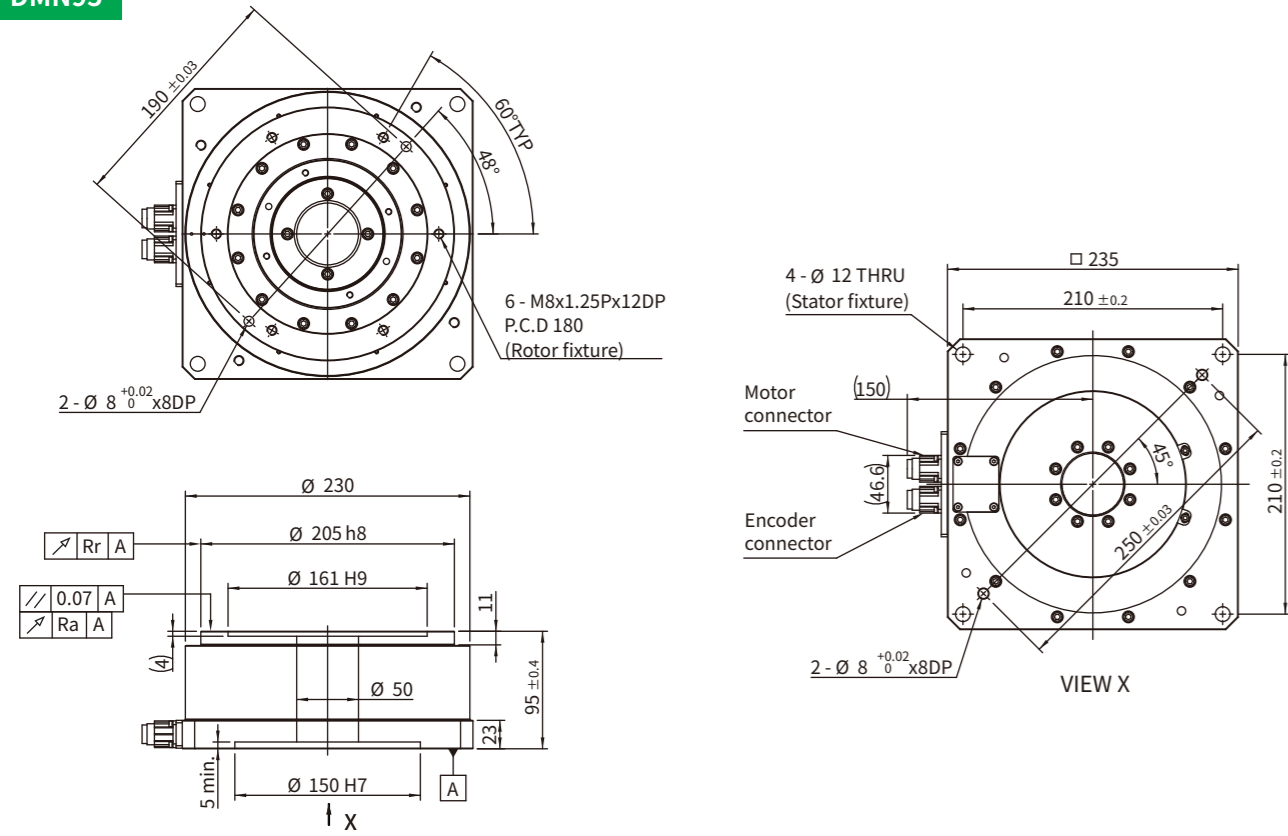
HIWIN SINGAPORE
SINGAPORE
www.hiwin.sg
info@hiwin.sg

DMN95
DMN9A

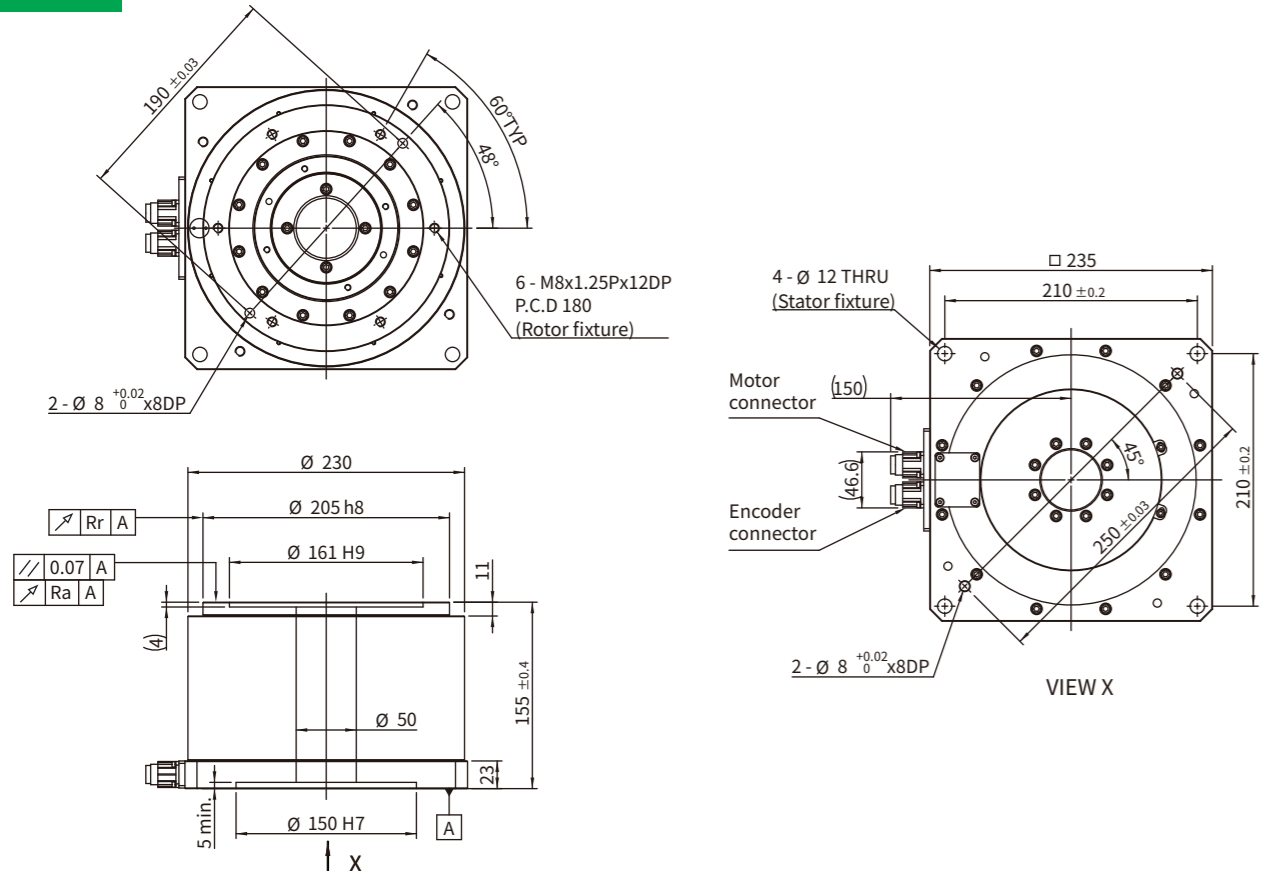
Direct Drive Motor

Dimensions

DMN95



DMN9A



Specifications

DMN95 / DMN9A Specifications	Symbol	Unit	DMN95-5	DMN9A-5
Continuous torque	Tc	Nm	47	94
Continuous current	Ic	Arms	4	12
Peak torque (Within 1s)	Tp	Nm	141	282
Peak current (Within 1s)	Ip	Arms	12	36
Torque constant	Kt	Nm/Arms	11.76	7.6
Electrical time constant	Te	ms	4.7	4.3
Resistance (line to line at 25 °C)	R ₂₅	Ω	6.01	1.06
Inductance (line to line)	L	mH	28	4.57
Number of poles	2p		22	22
Back emf constant (line to line)	Kv	Vrms/rad/s	6.8	4.4
Motor constant (line to line at 25°C)	Km	Nm/√W	3.9	6
Thermal resistance	Rth	K/W	0.52	0.33
Temperature sensor			PTC SNM100	PTC SNM100
Nominal input voltage		V _{DC}	600	600
Inertia of rotating parts	J	kgm ²	0.042	0.042
Mass of motor	Mm	kg	22.5	31.5
Max. axial load	Fa	N	8000	8000
Max. moment load	M	Nm	120	120
Max. speed		rpm	250	350
Resolution		p/rev	4,320,000 (incremental, sin/cos 1Vpp)	4,320,000 (incremental, sin/cos 1Vpp)
Repeatability		arc-sec	±2.5	±2.5
Accuracy	Ra	arc-sec	±15/±10 ¹⁾	±15/±10 ¹⁾
Axial runout	Rr	mm	0.03 (0.005 ²⁾)	0.03 (0.005 ²⁾)
Radial runout	H	mm	0.03 (0.015 ²⁾)	0.03 (0.015 ²⁾)
Height		mm	95	155

Note : ¹⁾ After error mapping
²⁾ Optional
 *All the specifications in the table are in ±10% of tolerance except dimensions.

T-N Curve

