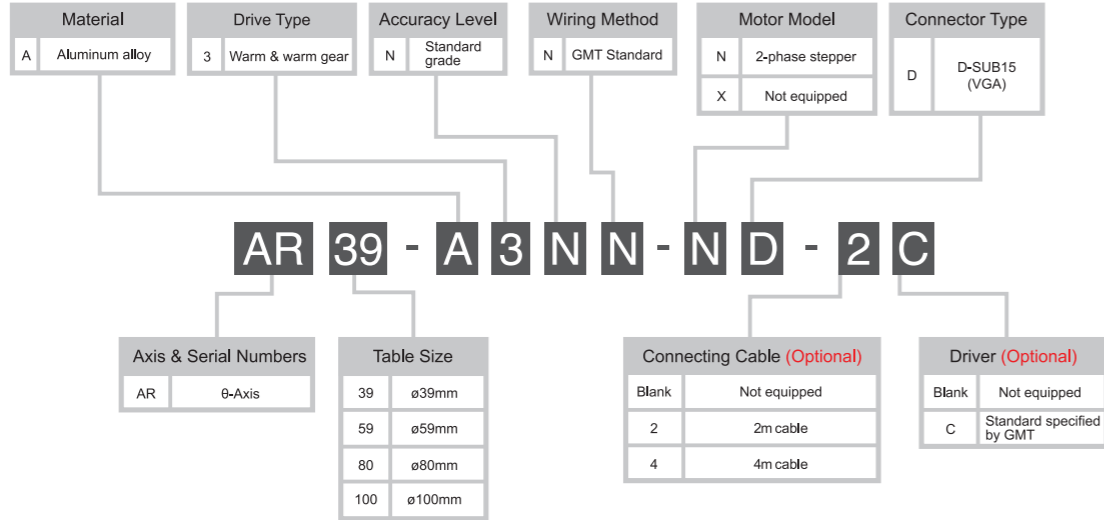


Model Description

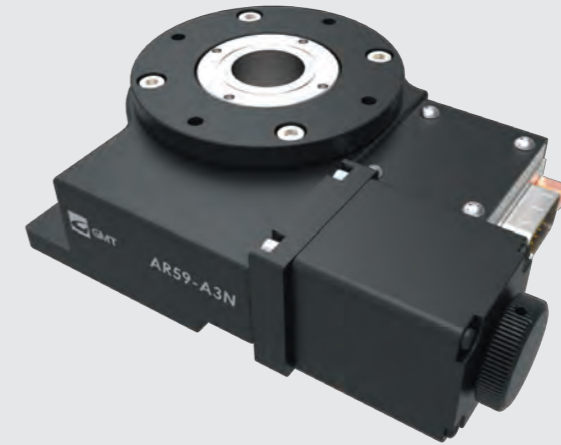
AR Series



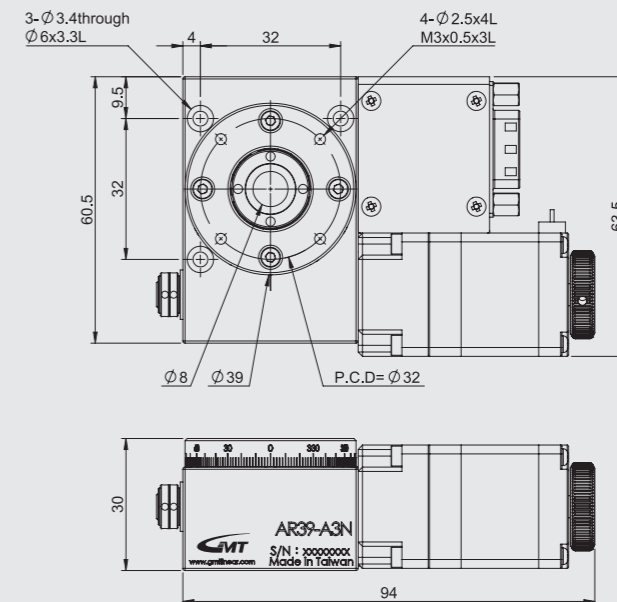
Model No.	AR39-A3NN-ND	AR59-A3NN-ND	AR80-A3NN-ND	AR100-A3NN-ND
Table Size	ø39 mm	ø59 mm	ø80 mm	ø100 mm
Travel Stroke	360°			
Drive Type	Warm & warm gear (ratio 1 / 120)	Warm & warm gear (ratio 1 / 180)	Warm & warm gear (ratio 1 / 144)	
Rail	Deep groove ball bearing			Crossed-roller bearing
Stage Material / Surface Treatment	Aluminum alloy / Black anodized			
Main Unit Weight	0.4 Kg	0.6 Kg	0.8 Kg	1.2 Kg
Coupling	FSMMS12-5*6		FSMMS12-5*5	FSMMS12-5*5
Accuracy Level	N : Standard grade			
Wiring Method	N : GMT Standard			
Resolution (Pulse)	Full / Half	0.015° / 0.0075°	0.01° / 0.005°	0.0125° / 0.00625°
Maximum Speed (Full Step)	25° / sec		15° / sec	25° / sec
Positioning Precision	0.1°			
Repeatability Precision	±0.05°			
Load Capacity	4 Kgf			20 Kgf
Missed Step	0.1°			
Parallelism	50 µm			
Dynamic Straightness	3 µm			
Dynamic Parallelism	30 µm			
Motor	Type / Shaft Numbers	2-phase stepper / □28 double shafts (NEMA11)		2-phase stepper / □35 double shafts (NEMA14)
	Brand / Model	GMT / 2MS-N28D32A		GMT / 2MS-N35D36A
Driver Brand / Model	GMT / GTR22G-D (Additional options)			
Connector	Stage Side Connector	15-pin male end connector D-SUB		
	Controller Side Connector	15-pin female end connector D-SUB (optional)		
Sensor	Origin Sensor	Photoelectric sensor EE-SX4134		
	Limit Sensor			
	Power Voltage	24V±10%		
	Control Output	NPN open collector output under 24V 8mA		
	Output Control	Testing (sensing) : output transistor OFF (closed)		

©GMT Standard wiring is defined as the product photo, and not optional available.
 ©GMT Standard Motorized Stage series is equipped with D-SUB connector as the standard one which is available to be changed to HRS or NJC on request as per reference stated on P.0492.
 ©In case HRS connection cable is required, please consult to your regional sales.

θ-Axis

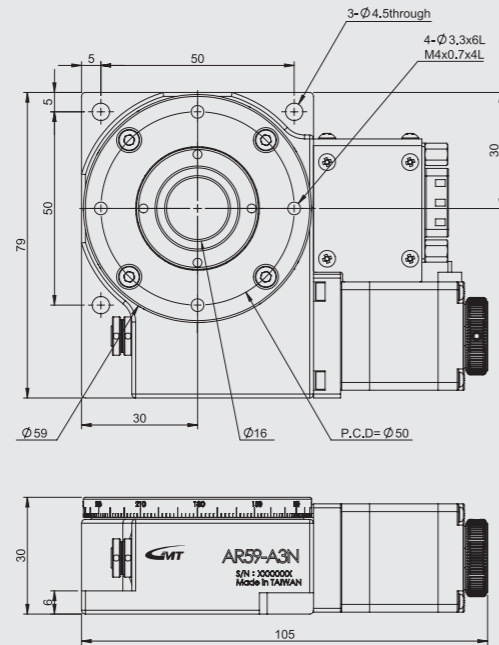


AR39-A3NN-ND

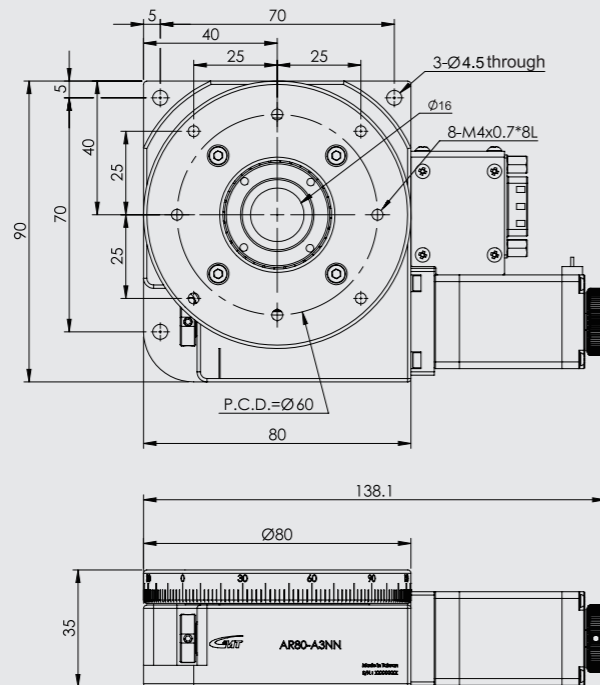


©Photo is AR100-A3NN-ND

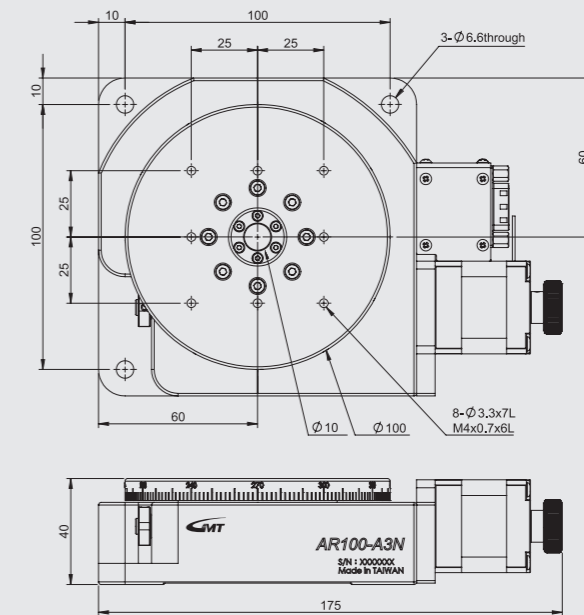
AR59-A3NN-ND



AR80-A3NN-ND



AR100-A3NN-ND



Model Description

AR series

Material	Drive Type	Mounting Type	Accuracy Level	Wiring Method	Motor Model	Connector Type
A Aluminum alloy	3 Warm & warm gear	NIL Horizontal V Vertical	P Precision grade	N GMT Standard	C 5-phase stepper X Not equipped	D D-SUB15 (VGA)

AR 59 - A3VPN - CD - 2C

Axis & Serial Numbers	Table Size	Connecting Cable (Optional)	Driver (Optional)
AR θ-Axis	39 Ø39mm 59 Ø59mm 79 Ø79mm	Blank Not equipped 2 2m cable 4 4m cable 6 6m cable	Blank Not equipped C Standard specified by GMT

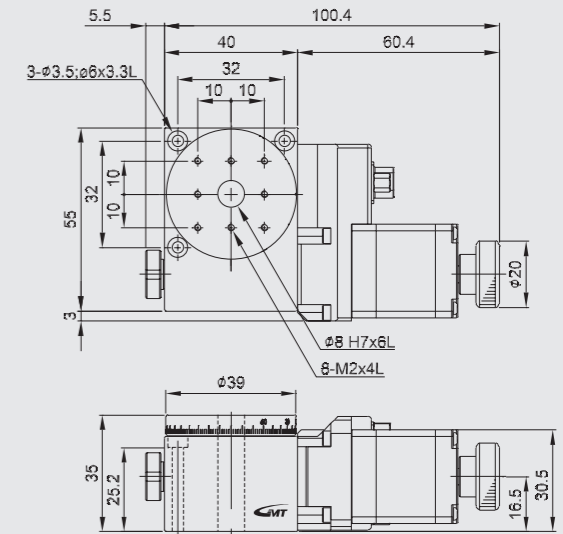
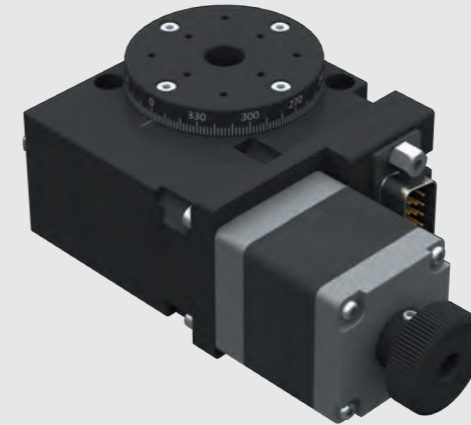
Model No.	AR39-A3PN-CD	AR59-A3PN-CD	AR59-A3VPN-CD	AR79-A3PN-CD																																																							
Mechanical Specifications	<table border="1"> <tr> <td>Table Size</td> <td>Ø39</td> <td colspan="2">Ø59</td> <td>Ø79</td> </tr> <tr> <td>Travel Stroke</td> <td colspan="3">360°</td> <td>360° / Adjustable limited rotation angle under 340°</td> </tr> <tr> <td>Drive Type</td> <td>Warm & warm gear (Ratio 1 / 120)</td> <td colspan="2">Warm & warm gear (Ratio 1 / 180)</td> <td>Warm & warm gear (Ratio 1 / 144)</td> </tr> <tr> <td>Rail</td> <td colspan="3">Assembled ball bearing</td> <td>Crossed-roller bearing</td> </tr> <tr> <td>Stage Material / Surface Treatment</td> <td colspan="4">Aluminum alloy / Black anodized</td> </tr> <tr> <td>Main Unit Weight</td> <td>0.42 Kg</td> <td>0.62 Kg</td> <td>0.68 Kg</td> <td>1.05 Kg</td> </tr> <tr> <td>Coupling</td> <td colspan="2">FSMMS12-4*5</td> <td colspan="2">FSMMS12-5*6</td> </tr> <tr> <td>Accuracy Level</td> <td colspan="4">P : Precision grade N : GMT Standard</td> </tr> <tr> <td>Wiring Method</td> <td colspan="4">N : GMT Standard</td> </tr> </table>				Table Size	Ø39	Ø59		Ø79	Travel Stroke	360°			360° / Adjustable limited rotation angle under 340°	Drive Type	Warm & warm gear (Ratio 1 / 120)	Warm & warm gear (Ratio 1 / 180)		Warm & warm gear (Ratio 1 / 144)	Rail	Assembled ball bearing			Crossed-roller bearing	Stage Material / Surface Treatment	Aluminum alloy / Black anodized				Main Unit Weight	0.42 Kg	0.62 Kg	0.68 Kg	1.05 Kg	Coupling	FSMMS12-4*5		FSMMS12-5*6		Accuracy Level	P : Precision grade N : GMT Standard				Wiring Method	N : GMT Standard													
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Electrical Specifications	<table border="1"> <tr> <td>Motor Type / Shaft Numbers</td> <td colspan="3">5-phase stepper / □28 double shafts</td> <td>5-phase stepping / □42 double shafts</td> </tr> <tr> <td>Brand / Model</td> <td colspan="3">Sanyo / SH5281-7211</td> <td>Sanyo / 103F5505-8211</td> </tr> <tr> <td>Driver Brand / Model</td> <td colspan="4">Please refer to motor / driver cross-reference table (page 0279~0280)</td> </tr> <tr> <td>Stage Side Connector</td> <td colspan="4">15-pin male end connector D-SUB</td> </tr> <tr> <td>Controller Side Connector</td> <td colspan="4">15-pin female end connector D-SUB (optional)</td> </tr> <tr> <td>Origin Sensor</td> <td colspan="3">Photoelectric sensor EE-SX4134</td> <td>Photoelectric sensor EE-SX4134 Installed limit sensor function switch ON/OFF</td> </tr> <tr> <td>Limit Sensor</td> <td colspan="4">N / A</td> </tr> <tr> <td>Origin Approximation Sensor</td> <td colspan="4">N / A</td> </tr> <tr> <td>Power Voltage</td> <td colspan="4">24V±10%</td> </tr> <tr> <td>Control Output</td> <td colspan="4">NPN open collector output under 24V 8mA</td> </tr> <tr> <td>Output Control</td> <td colspan="4">Testing (sensing) : output transistor OFF (closed)</td> </tr> </table>				Motor Type / Shaft Numbers	5-phase stepper / □28 double shafts			5-phase stepping / □42 double shafts	Brand / Model	Sanyo / SH5281-7211			Sanyo / 103F5505-8211	Driver Brand / Model	Please refer to motor / driver cross-reference table (page 0279~0280)				Stage Side Connector	15-pin male end connector D-SUB				Controller Side Connector	15-pin female end connector D-SUB (optional)				Origin Sensor	Photoelectric sensor EE-SX4134			Photoelectric sensor EE-SX4134 Installed limit sensor function switch ON/OFF	Limit Sensor	N / A				Origin Approximation Sensor	N / A				Power Voltage	24V±10%				Control Output	NPN open collector output under 24V 8mA				Output Control	Testing (sensing) : output transistor OFF (closed)			
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©GMT motorized stage is equipped with D-SUB connector as the standard one which is available to be changed to HRS or NJC on request as per reference stated on P.0492
©In case HRS connection cable is required, please consult to your regional sales.

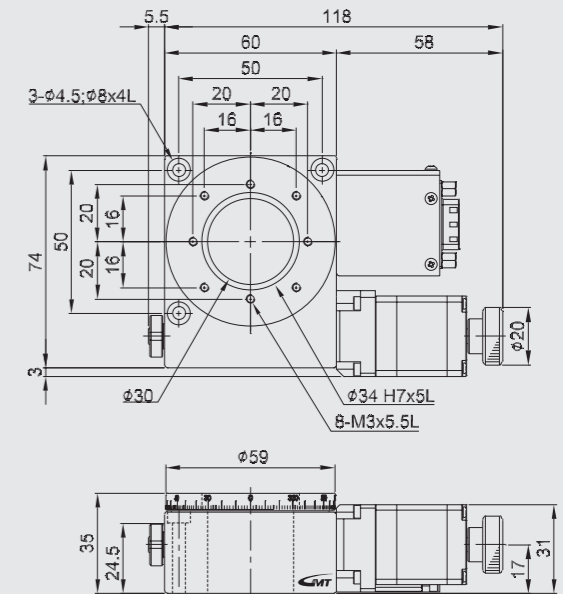
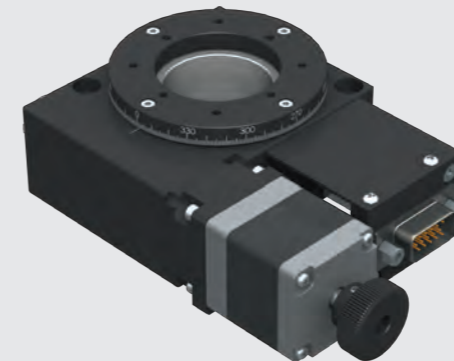
θ-Axis



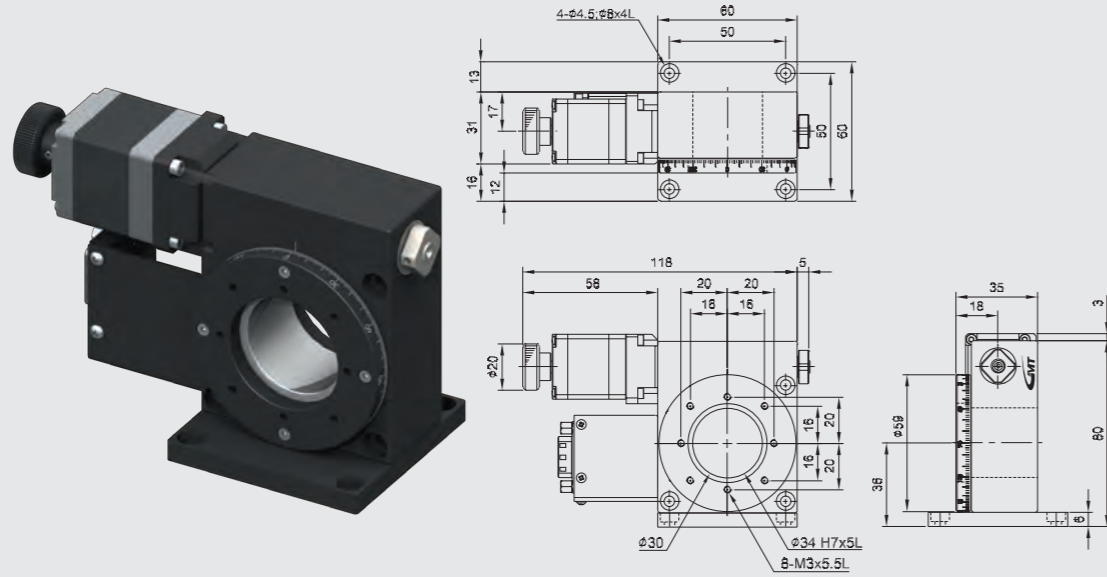
AR39-A



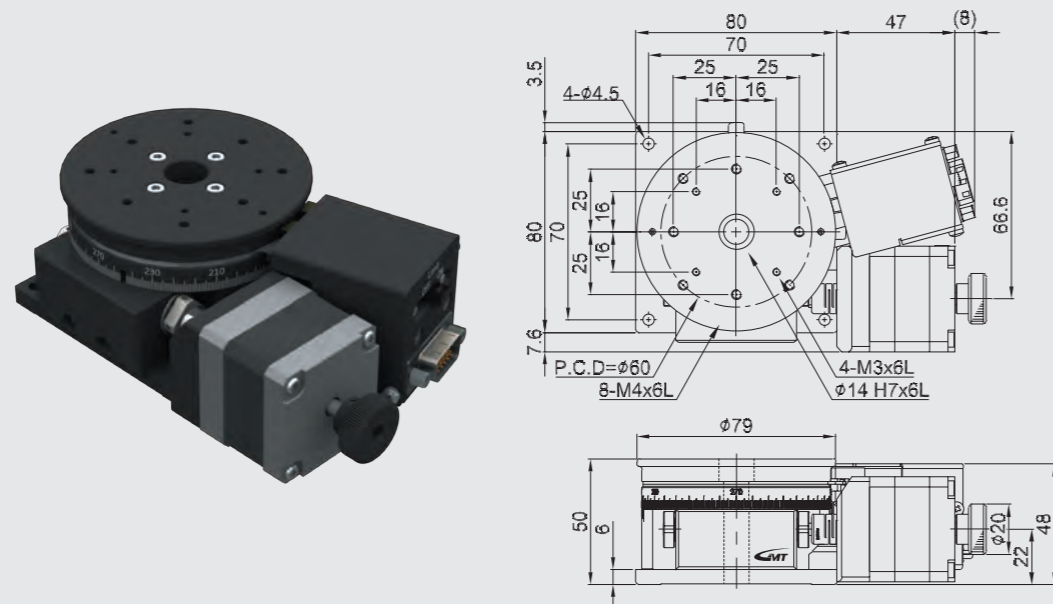
AR59-A



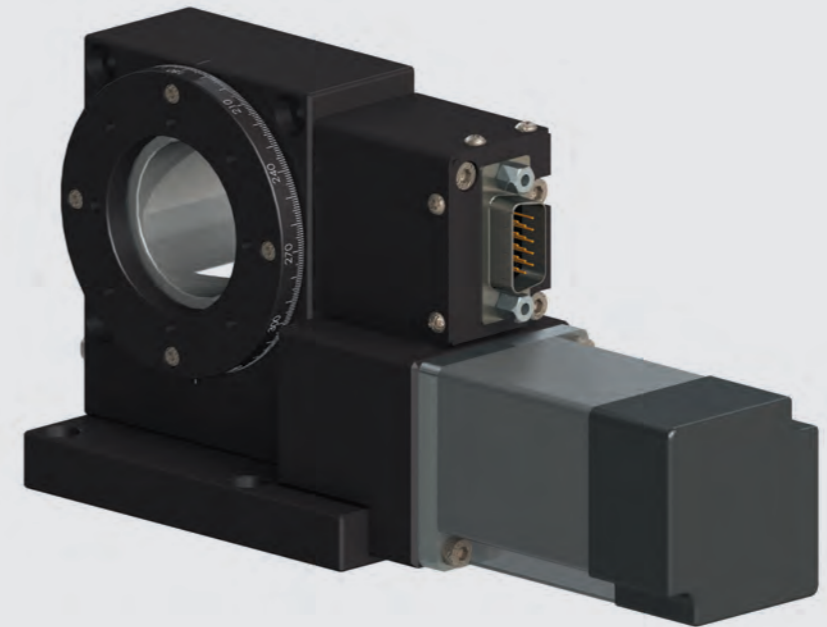
AR59-A3V



AR79-A



Application Examples



AR series

Model Description

Material	Drive Type	Mounting Type	Accuracy Level	Wiring Method	Motor Model	Connector Type
A Aluminum alloy	3 Warm & warm gear	NIL Horizontal	P Precision grade	N GMT Standard	C 5-phase stepper X Not equipped	D D-SUB15 (VGA)

AR 100 - A 3 P N - C D - 2 C

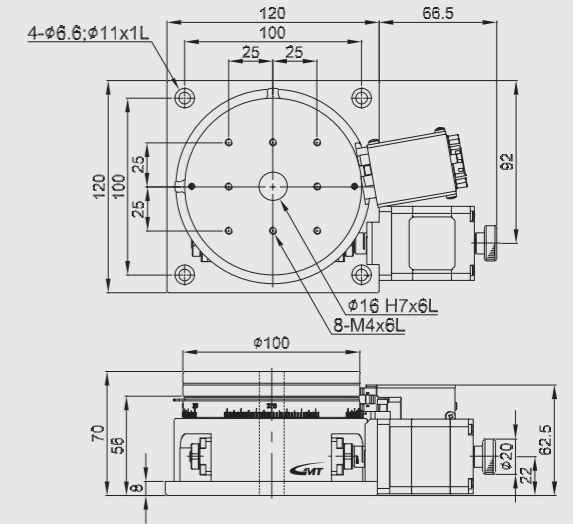
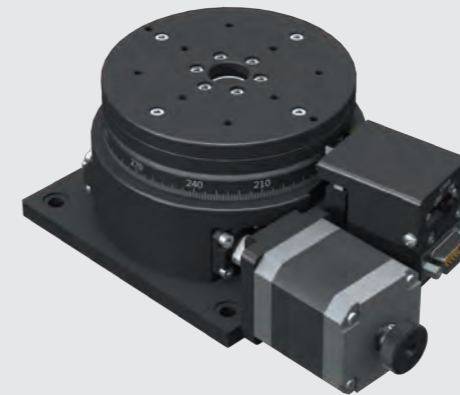
Axis & Serial Numbers	Table Size	Connecting Cable (Optional)	Driver (Optional)
AR θ-Axis	100 Ø100mm 120 Ø120mm 159 Ø159mm 179 Ø179mm	Blank Not equipped 2 2m cable 4 4m cable 6 6m cable	Blank Not equipped C Standard specified by GMT

Model No.	AR100-A3PN-CD	AR120-A3PN-CD	AR159-A3PN-CD	AR179-A3PN-CD
Mechanical Specifications	Table Size: Ø100, Ø120, Ø159, Ø179			
	Adjustable limited rotation angle under 345°		Adjustable limited rotation angle under 340°	
	Drive Type: Warm & warm gear (Ratio 1 / 180)			
	Assembled ball bearing		Angular bearing	
	Stage Material / Surface Treatment: Aluminum alloy / Black anodized			
	2.51 Kg	2.56 Kg	6.17 Kg	6.63 Kg
	FSMMS12-5*5		FAMMS16-5*6	
	Accuracy Level: P : Precision grade, N : GMT Standard			
	Wiring Method: N : GMT Standard			
Precision Specifications	Resolution (Pulse) Full / Half: 0.004° / 0.002°			
	Maximum Speed (Full Step): 20 deg / sec			
	Positioning Precision: 0.03°			
	Repeatability Precision: ±0.005°			
	15 Kgf	Horizontal 60 Kgf / Vertical 10Kgf		
	Missed Step: 0.05°			
	40 μm	20 μm		50 μm
	30 μm		40 μm	
Electrical Specifications	Motor Type / Shaft Numbers: 5-phase stepper / □42 double shafts			
	Brand / Model: Sanyo / 103F5505-8211			
	Driver Brand / Model: Please refer to motor / driver cross-reference table (page 0279-0280)			
	Stage Side Connector: 15-pin male end connector D-SUB			
	Controller Side Connector: 15-pin female end connector D-SUB (optional)			
	Photoelectric sensor EE-SX912-R (Installed limit sensor function switch ON/OFF)		Photoelectric sensor EE-SX4134	
	Origin Approximation Sensor: N / A, Photoelectric sensor PM-F24			
	Power Voltage: 24V±10%			
	Control Output: NPN open collector output under 24V 8mA			
	Output Control: Testing (sensing) : output transistor OFF (closed)			

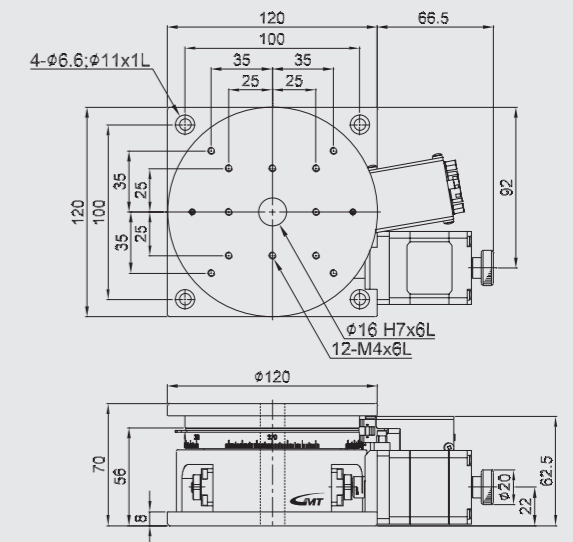
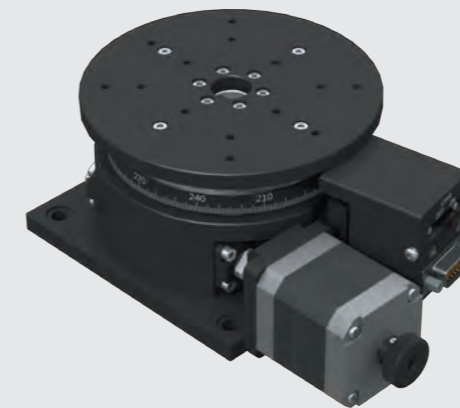
©GMT motorized stage is equipped with D-SUB connector as the standard one which is available to be changed to HRS or NJC on request as per reference stated on P.0492
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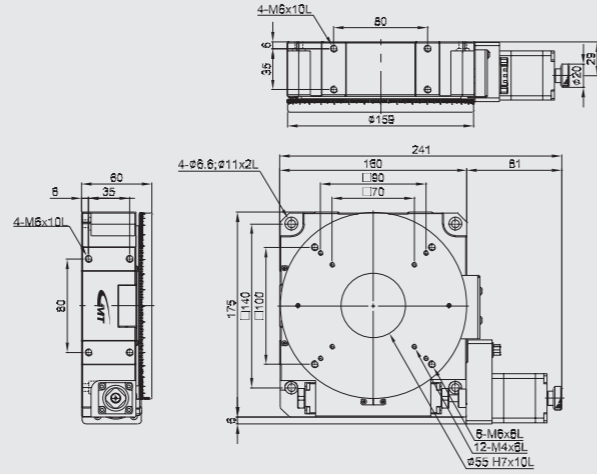
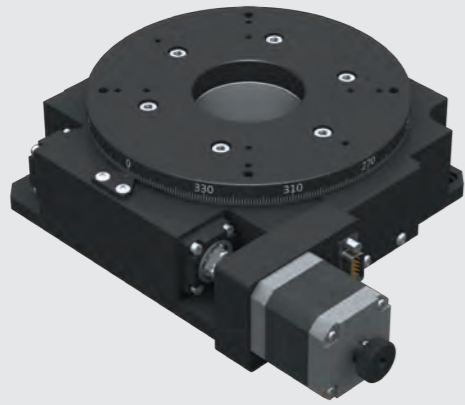
AR100-A



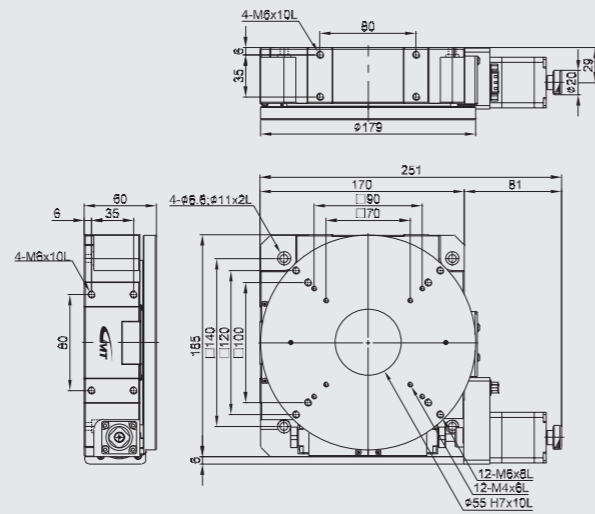
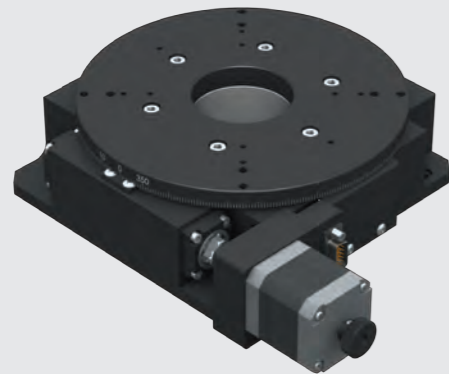
AR120-A



AR159-A



AR179-A



Application Examples

