

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	P Precision grade	N GMT Standard	C 5-phase stepper X Not equipped	D D-SUB15 (VGA)

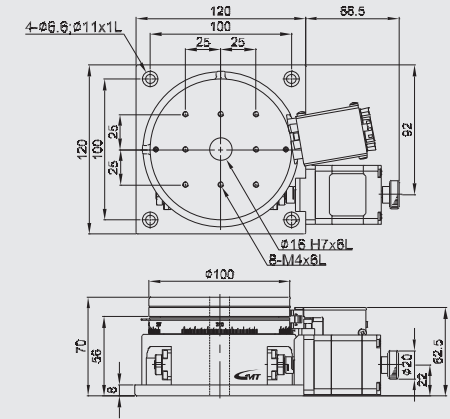
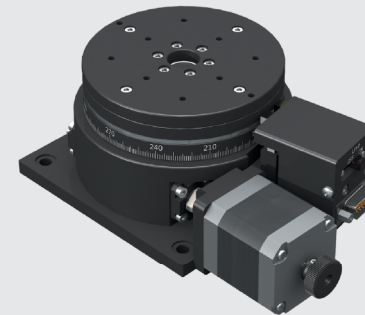
AR 100 - A 3 P N - C D - 2 C

Axis & serial numbers	Table size	Connecting cable (optional)	Driver (optional)
AR θ axis	100 \varnothing 100mm 120 \varnothing 120mm 159 \varnothing 159mm 179 \varnothing 179mm	Blank Not equipped 2 2m cable 4 4m cable 6 6m cable	Blank Not equipped C Standard specified by GMT

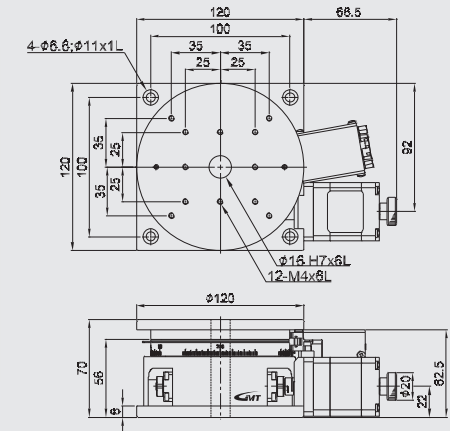
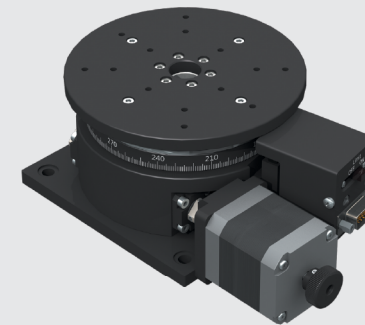
Model Number	AR100-A3PN-CD	AR120-A3PN-CD	AR159-A3PN-CD	AR179-A3PN-CD
Table size	\varnothing 100	\varnothing 120	\varnothing 159	\varnothing 179
Travel stroke	Adjustable limited rotation angle under 345°			
Drive type	Warm & warm gear (Ratio 1 / 180)			
Rail	Assembled ball bearing		Angular bearing	
Stage material/Surface treatment	Aluminum alloy / Black anodized			
Main unit weight	2.51 Kg	2.56 Kg	6.17 Kg	6.63 Kg
Coupling	FSMMS12-5*5		FAMMS16-5*6	
Accuracy level	P : Precision grade			
Wiring method	N : GMT Standard			
Resolution (pulse)	Full / Half	0.004° / 0.002°		
Maximum speed (full step)	20 deg / sec			
Positioning precision	0.03°			
Repeatability precision	±0.005°			
Load capacity	15 Kg		Horizontal 60 Kg / Vertical 10Kg	
Missed step	0.05°			
Parallelism	40 μ m			50 μ m
Dynamic straightness			20 μ m	
Dynamic parallelism	30 μ m			40 μ m
Motor	5-phase stepper / \square 42 double shafts			
Brand/ Model	Sanyo / 103F5505-8211			
Driver brand/Model	Please refer to motor / driver cross-reference table (page E3)			
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-SX912-R		Photoelectric sensor EE-SX4134	
Limit sensor	(Installed limit sensor function switch ON/OFF)			
Origin approximation sensor	N/A		Photoelectric sensor EE-SX912-R	
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.171
* In case HRS connection cable is required, please consult to your regional sales.

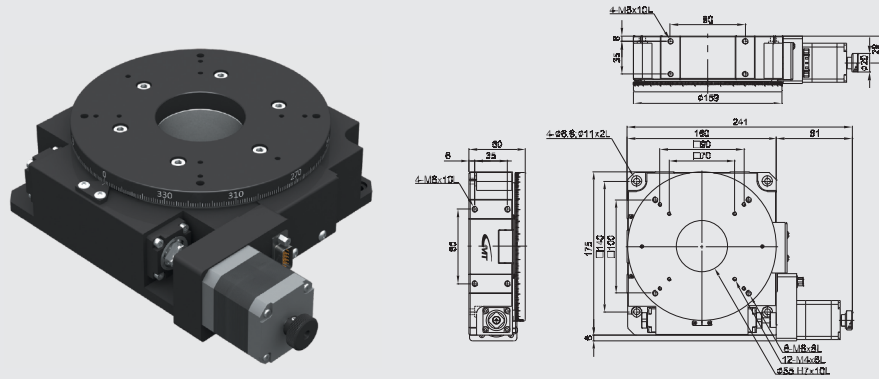
AR100-A



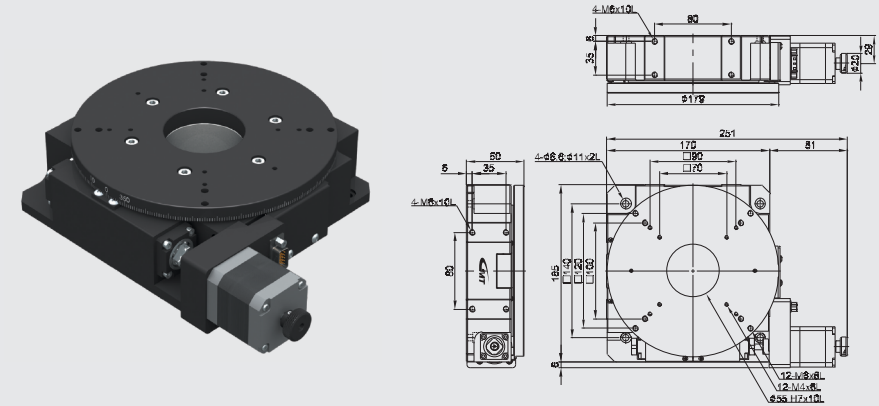
AR120-A



AR159-A



AR179-A



Application examples

