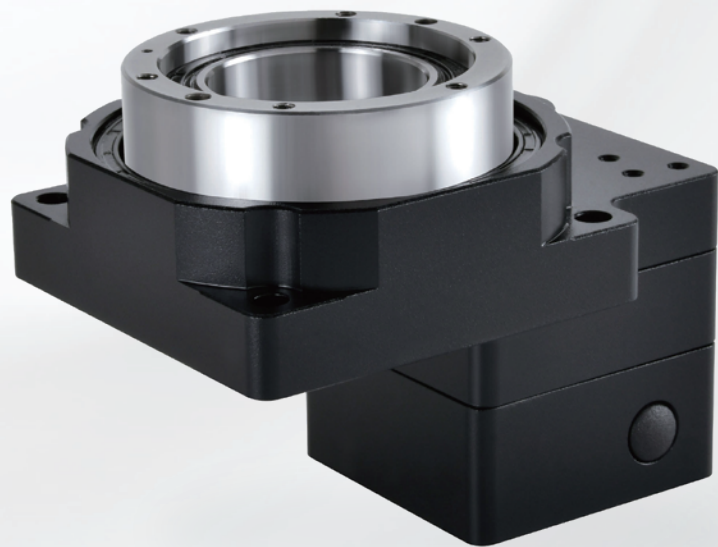
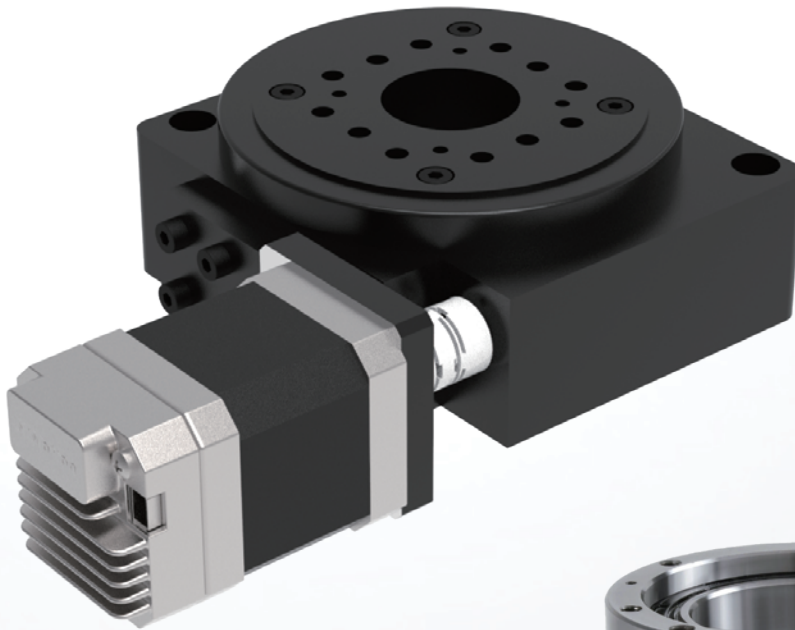




Turntable series manual

· NMTS series hollow turntable

· PTU precision turntable



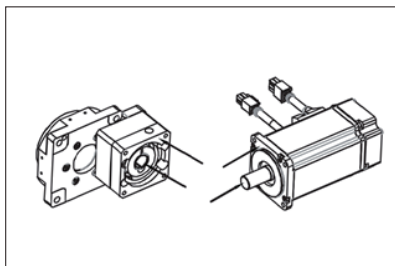
Naming rules for NMTS series hollow rotating platform

NMTS - 60 - 5 K - 42

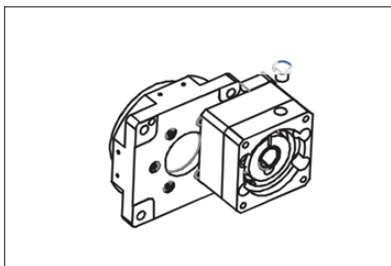
① ② ③ ④ ⑤

① NMTS series hollow rotary platform	② Specifications:60;85;130;200	③ Reduction ratio:5;10;15;18	④ Ratio:K
⑤ Motor specification: motor base width			
Stepper motor : 42;57;86			
Servo motor :40(100W);60(200~400W);80(750W)			

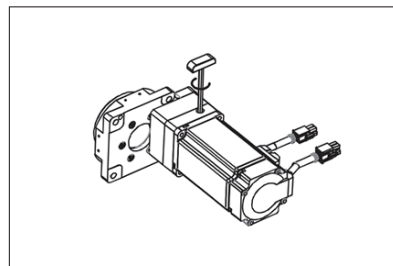
Installation instructions for hollow rotary platform



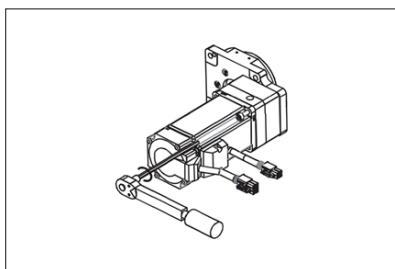
First, match the size of the motor and the rotating platform, and remove all foreign matters on the surface.



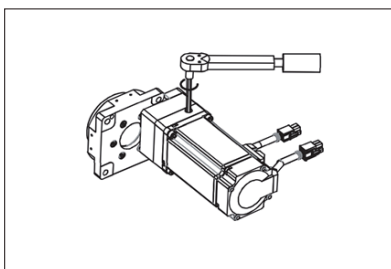
Remove the screw plug on the adapter flange and adjust the position until the fastening bolt can be seen. Note 1



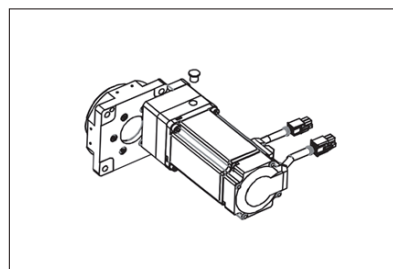
Adjust the position of the motor and the adapter flange and tighten the fastening bolts slightly until the pin ring is no longer idle.



Tighten the fastening bolts according to the tightening torque standard Ta (Note 2).

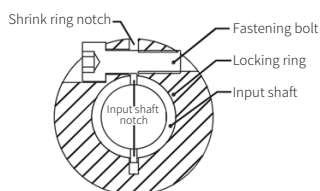


Tighten the fastening bolts according to the tightening torque standard Tb (Note 2).



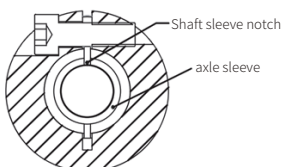
Tighten the screw plug.

Note 1: How to install the motor



Installation method of motor with mechanical key

Pull out the mechanical key, adjust the position of the locking ring, seal its notch with the notch of the input shaft of the rotating platform, apply grease to the shaft hole of the input shaft of the platform and the motor shaft, insert the motor shaft, align the notch of the mechanical key with the notch of the locking ring, so as to tighten the fastening bolt of the locking ring to the maximum extent and make its connection more secure.



Installation method with shaft sleeve

Because the shaft diameter of the motor is too small to match the input shaft hole of the platform, the shaft sleeve can be added for adjustment. Its installation method is the same as that of the motor with mechanical key. Just put the shaft sleeve and align it with the notch of the locking ring, and then tighten the fastening bolt of the locking ring.

Note 2: Tightening torque of wrench bolt

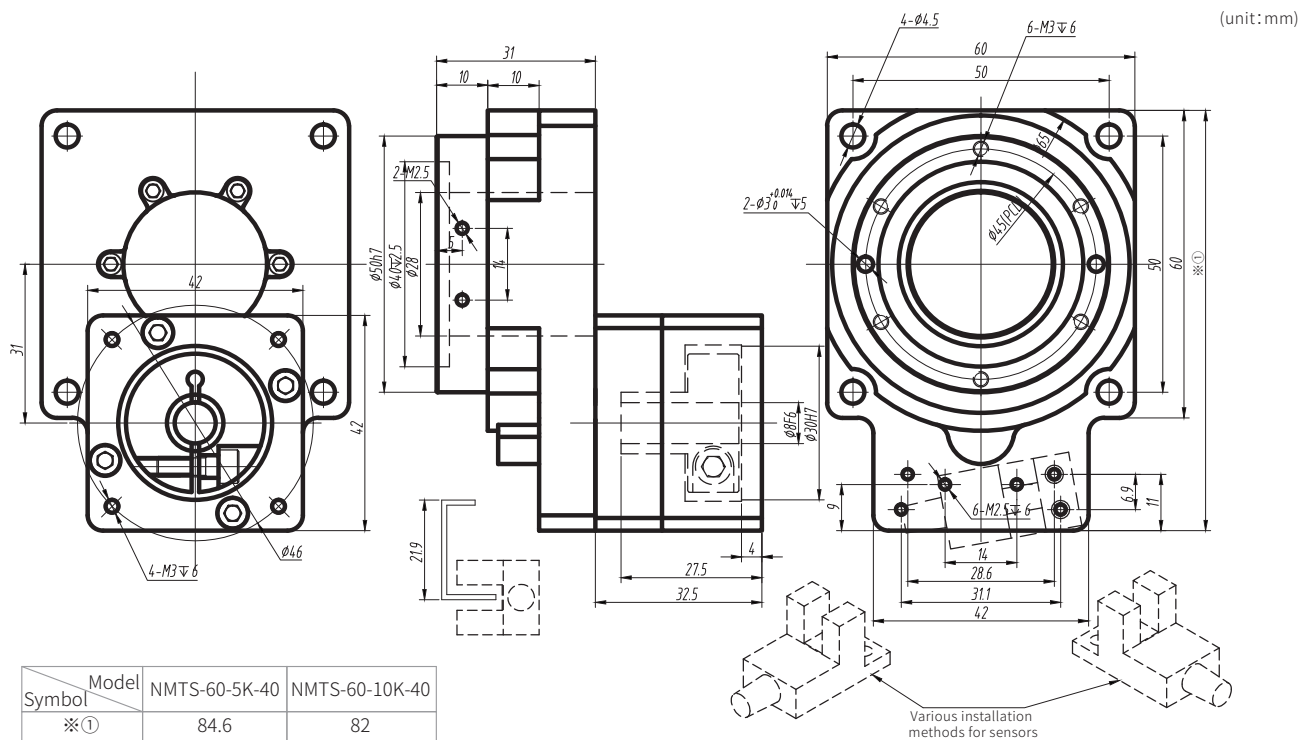
Wrench bolt size	Motor installation Ta(8.8T)		Locking ring installation Tb(12.9T)	
	N · m	Kgf · cm	N · m	Kgf · cm
M3	1.28	13	2.15	22
M4	2.9	30	4.95	50
M5	5.75	59	9.7	99
M6	909	101	16.5	168
M8	24	245	40	408
M10	48	489	81	826
M12	83	846	140	1428
M14	132	1346	220	2243
M16	200	2039	340	3467

NMTS-60 series hollow rotary platform

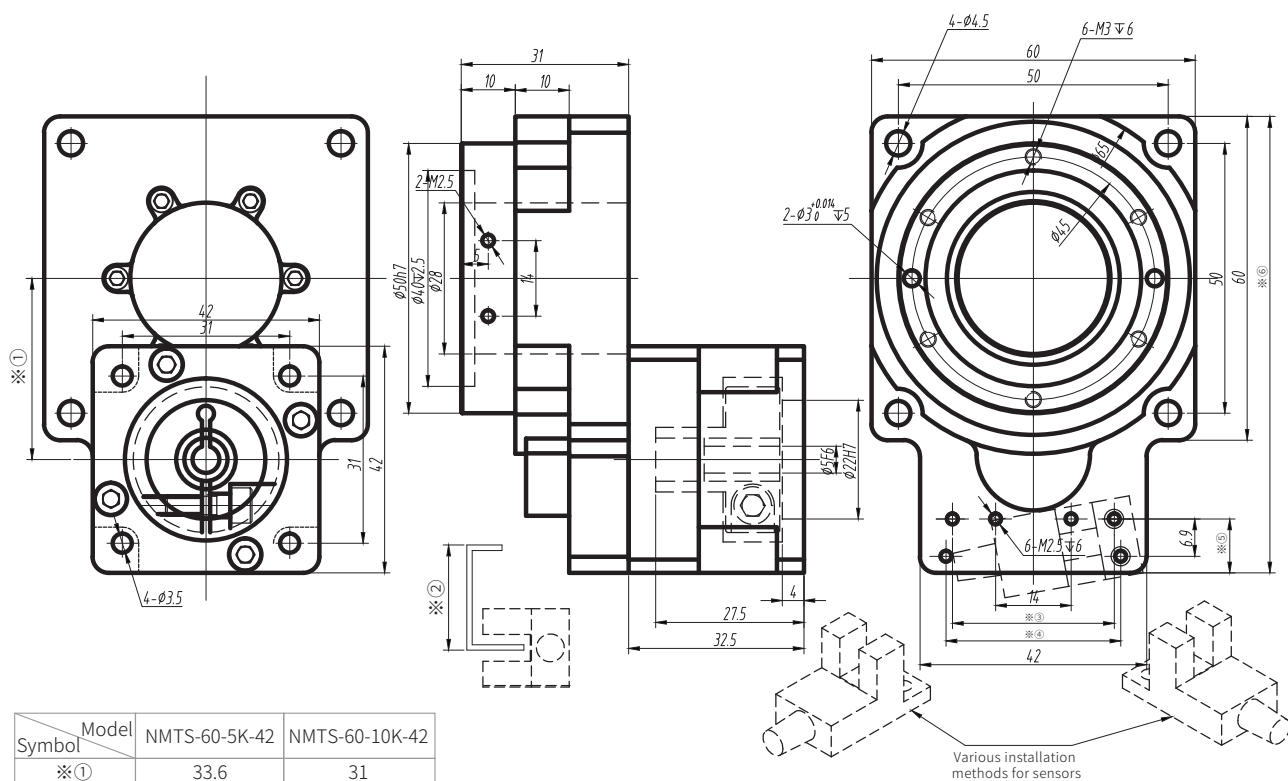
Technical Parameters

Model	NMTS-60-5K-40/42		NMTS-60-10K-40/42	
Adaptive stepper motor	STM42(-M) series			
Adaptive servo motor	PMMP40 series			
Rated torque(N·m)	10		6.5	
Allowable inertia torque(N·m)	20		13	
Weight (kg)	0.55			
Platform end face runout(mm)	±0.005	Maximum overturning moment(N·m)	137	
Platform radial runout(mm)	±0.005			
Platform parallelism(mm)	0.015	Maximum radial force(N)	1930	
Slewing accuracy(arc-min)	±0.5	Maximum axial force(N)	1930	
Repetitive positioning accuracy (arc-sec)	±5	Bearing type	Cross roller bearing	
		Service life(h)	25000	
Moment of inertia(kg·m²)	4.5*10 ⁻⁴	Protection grade	IP50	
Allowable output speed(rpm)	200	Lubrication method	Long-term effect	
Maximum input speed(rpm)	3000	Ambient temperature(°C)	-25~90℃	

Dimensions of NMTS-60 series hollow rotary platform



Compatible with PMMP40 servo series



Adapt to STM42(-M) stepping series

* This drawing is a standard dimension drawing. For details of input end, please refer to the independent dimension drawing
 If you have special requirements for size, please contact our technical personnel
 Due to the continuous updating and development of products, in case of any discrepancy, please refer to the real object

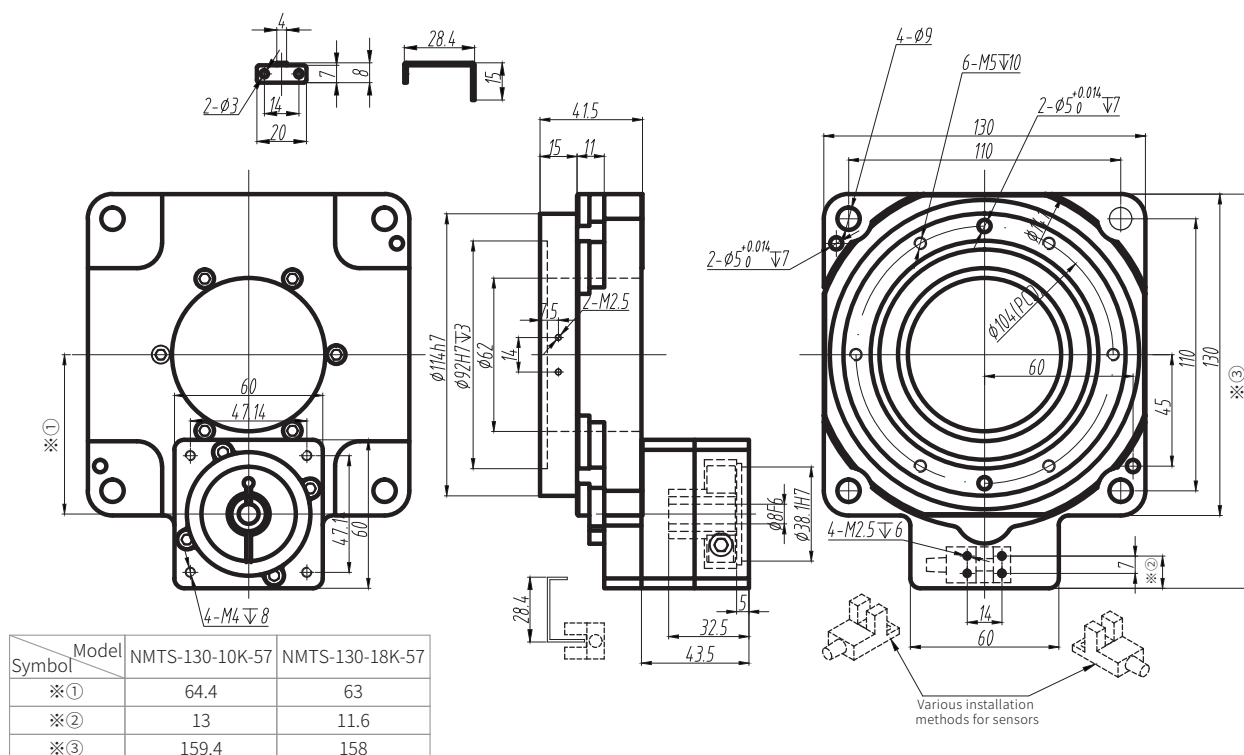
NMTS-130 series hollow rotary platform

Technical Parameters

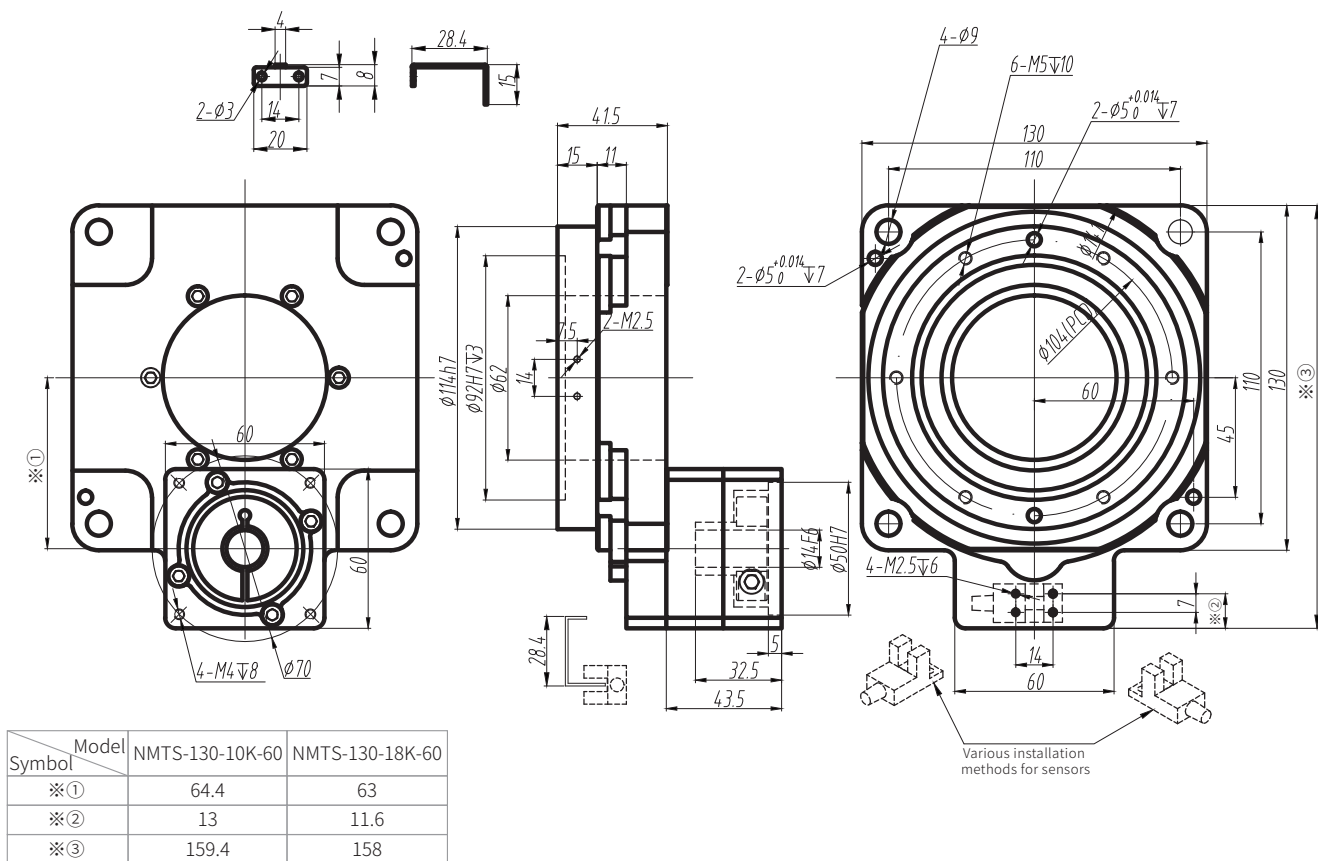
Model	NMTS-130-10K-57/60/86		NMTS-130-18K-57/60/86	
Adaptive stepper motor	STM57(-M) / STM86(-P) series			
Adaptive servo motor	PMM(P)60 series			
Rated torque(N·m)	50		22	
Allowable inertia torque(N·m)	100		44	
Weight (kg)	2.5			
Platform end face runout(mm)	≤0.01	Maximum overturning moment(N·m)	1090	
Platform radial runout(mm)	≤0.01			
Platform parallelism(mm)	0.015	Maximum radial force(N)	8400	
Slewing accuracy(arc-min)	±0.5	Maximum axial force(N)	8400	
Repetitive positioning accuracy (arc-sec)	±5	Bearing type	Cross roller bearing	
		Service life(h)	25000	
Moment of inertia(kg·m²)	110*10 ⁻⁴	Protection grade	IP50	
Allowable output speed(rpm)	200	Lubrication method	Long-term effect	
Maximum input speed(rpm)	3000	Ambient temperature(°C)	-25~90℃	

Dimensions of NMTS-130 series hollow rotary platform

(unit:mm)



Adapt to STM57(-M) stepping series



Compatible with PMM(P)60 servo series

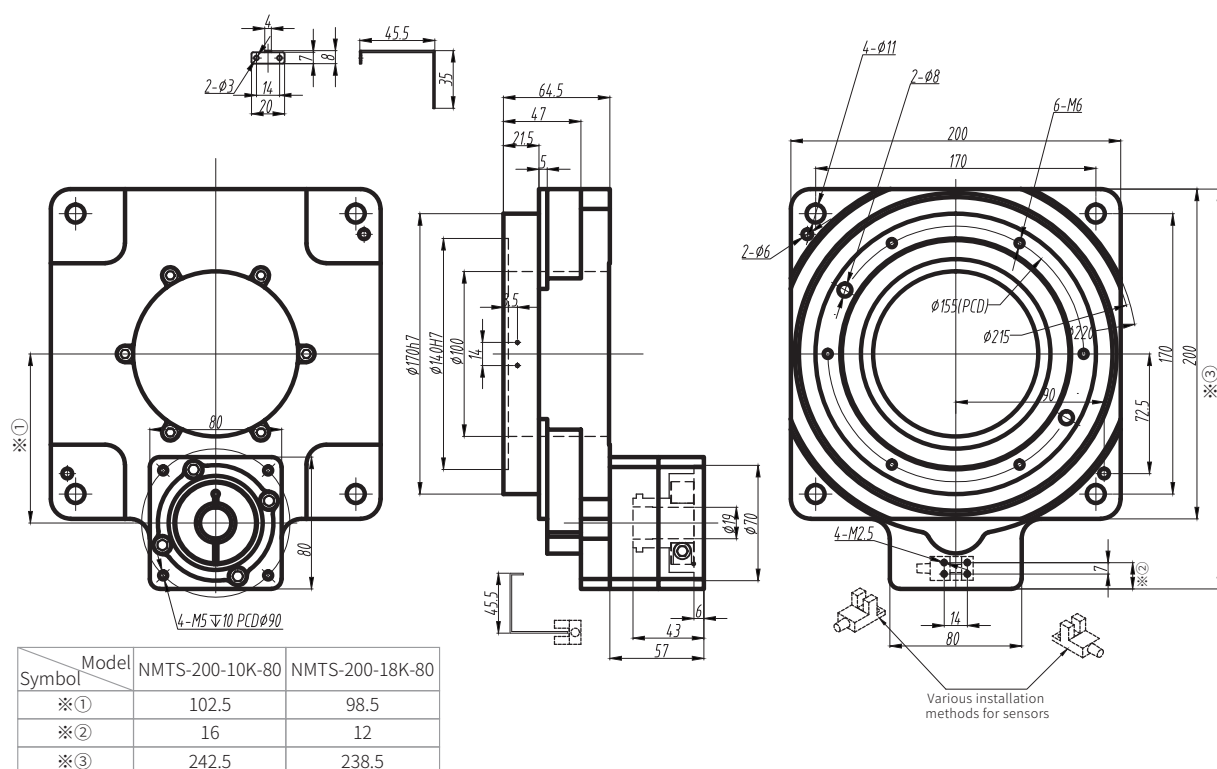
*This drawing is a standard dimension drawing. For details of input end, please refer to the independent dimension drawing
If you have special requirements for size, please contact our technical personnel
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NMTS-200 series hollow rotary platform

Technical Parameters

Model	NMTS-200-10K-80/86		NMTS-200-18K-80/86	
Adaptive stepper motor	STM86(-P) series			
Adaptive servo motor	PMM(P)80 series			
Rated torque(N·m)	90		50	
Allowable inertia torque(N·m)	180		100	
Weight (kg)	9.5			
Platform end face runout(mm)	±0.005	Maximum overturning moment(N·m)	2500	
Platform radial runout(mm)	±0.005			
Platform parallelism(mm)	0.015	Maximum radial force(N)	12500	
Slewing accuracy(arc-min)	±0.5	Maximum axial force(N)	12500	
Repetitive positioning accuracy (arc-sec)	±5	Bearing type	Cross roller bearing	
		Service life(h)	25000	
Moment of inertia(kg·m²)	880*10 ⁻⁴	Protection grade	IP50	
Allowable output speed(rpm)	150	Lubrication method	Long-term effect	
Maximum input speed(rpm)	3000	Ambient temperature(°C)	-25~90°C	

Dimensions of NMTS-200 series hollow rotary platform



Compatible with PMM(P)80 servo series

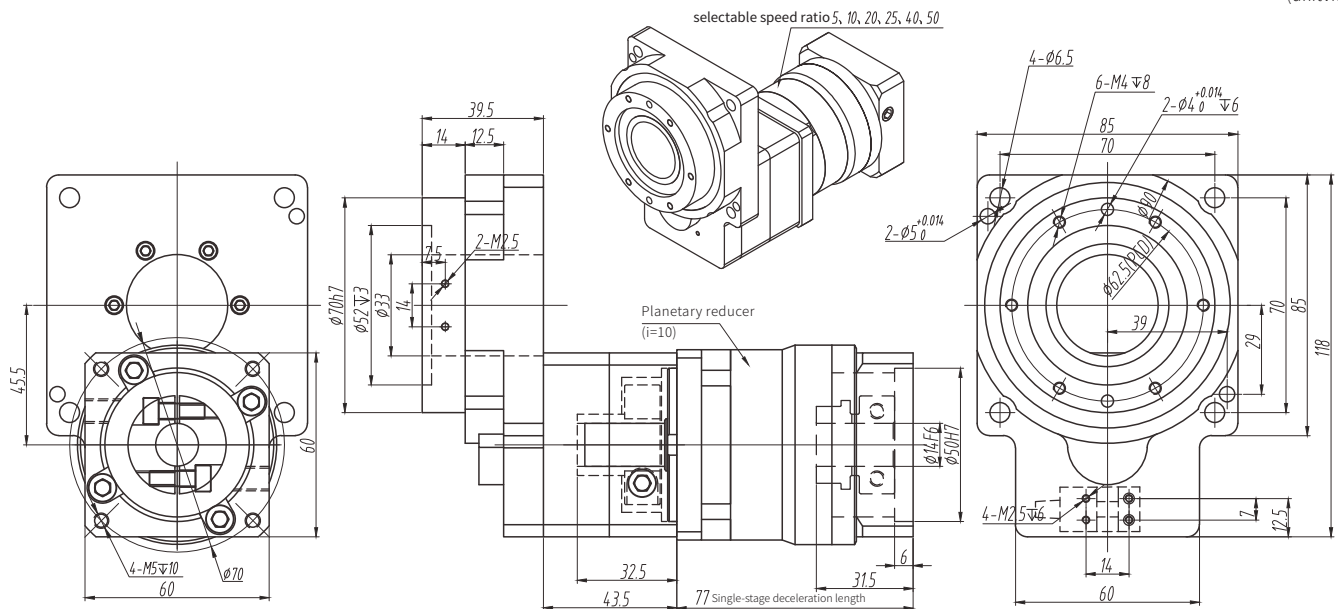
NMTS-85 series hollow rotary platform - with reducer

Technical Parameters

Model	NMTS-85-5K-40/57/60	Rated torque(N·m)	35
Adaptive stepper motor	STM57(-M) series	Allowable inertia torque(N·m)	70
Adaptive servo motor	PMMP40 / PMM(P)60 series	Weight (kg)	1.4
Platform end face runout(mm)	±0.005	Maximum overturning moment(N·m)	369
Platform radial runout(mm)	±0.005		
Platform parallelism(mm)	0.015	Maximum radial force(N)	4800
Slewing accuracy(arc-min)	±0.5	Maximum axial force(N)	4800
Repetitive positioning accuracy (arc-sec)	±5	Bearing type	Cross roller bearing
		Service life(h)	25000
Moment of inertia(kg·m ²)	21*10 ⁻⁴	Protection grade	IP50
Allowable output speed(rpm)	200	Lubrication method	Long-term effect
Maximum input speed(rpm)	3000	Ambient temperature(°C)	-25~90°C

Dimensions of NMTS-85 series hollow rotary platform (with reducer)

(unit:mm)



* This drawing is a standard dimension drawing. For details of input end, please refer to the independent dimension drawing
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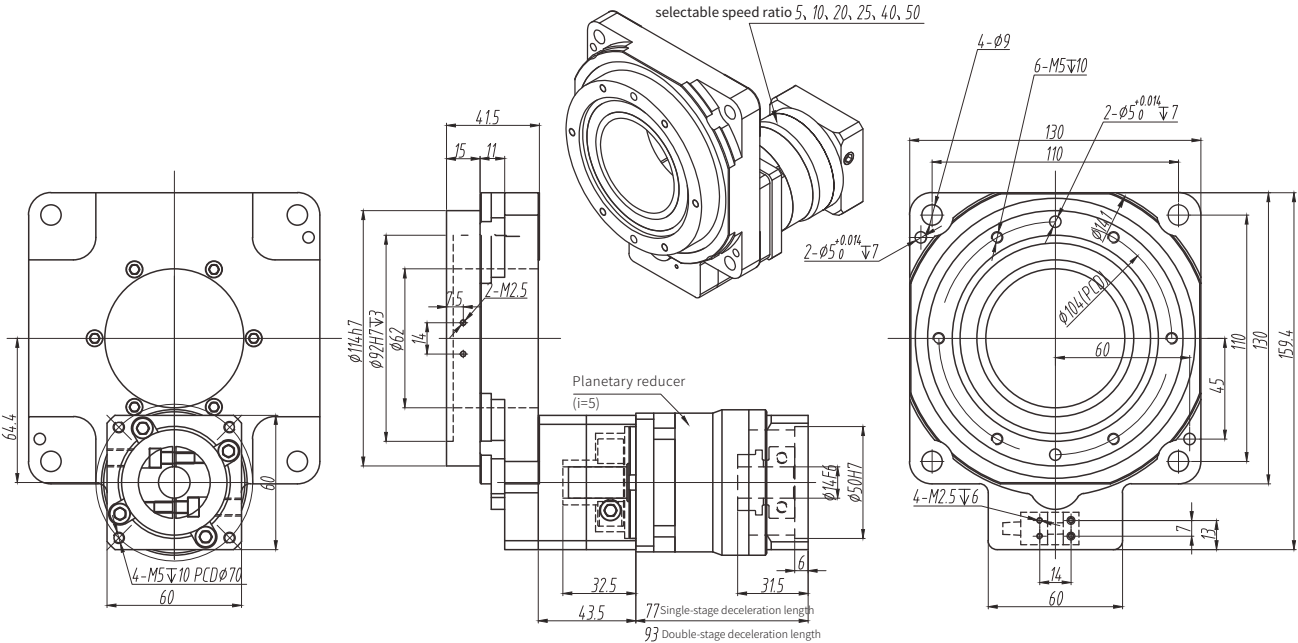
NMTS-130 series hollow rotary platform - with reducer

Technical Parameters

Model	NMTS-130-10K-57/60/80/86	Rated torque(N·m)	50
Adaptive stepper motor	STM57(-M) / STM86(-P) series	Allowable inertia torque(N·m)	100
Adaptive servo motor	PMM(P)60 / PMM(P)80 series	Weight (kg)	2.5
Platform end face runout(mm)	≤0.01	Maximum overturning moment(N·m)	1090
Platform radial runout(mm)	≤0.01		
Platform parallelism(mm)	0.015	Maximum radial force(N)	8400
Slewing accuracy(arc-min)	±0.5	Maximum axial force(N)	8400
Repetitive positioning accuracy (arc-sec)	±5	Bearing type	Cross roller bearing
		Service life(h)	25000
Moment of inertia(kg·m ²)	110*10 ⁻⁴	Protection grade	IP50
Allowable output speed(rpm)	200	Lubrication method	Long-term effect
Maximum input speed(rpm)	3000	Ambient temperature(°C)	-25~90°C

Dimensions of NMTS-130 series hollow rotary platform (with reducer)

(unit:mm)



* This drawing is a standard dimension drawing. For details of input end, please refer to the independent dimension drawing
If you have special requirements for size, please contact our technical personnel
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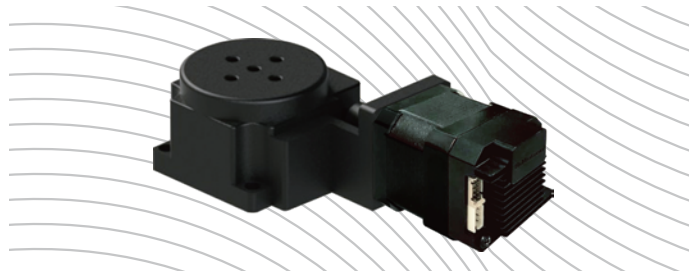
Naming rules for PTU series integrated precision turntable

PTU 60 - 45 H - 40

① ② ③ ④

① PTU series precision turntable	② Turntable diameter: 60-60mm; 100-100mm; 200-200mm
③ Turntable height: 45-45mm; 50-50mm; 65-65mm	④ Motor Base Width: 40; 42; 57; 60

PTU60 series integrated precision turntable

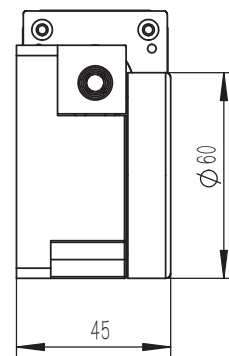
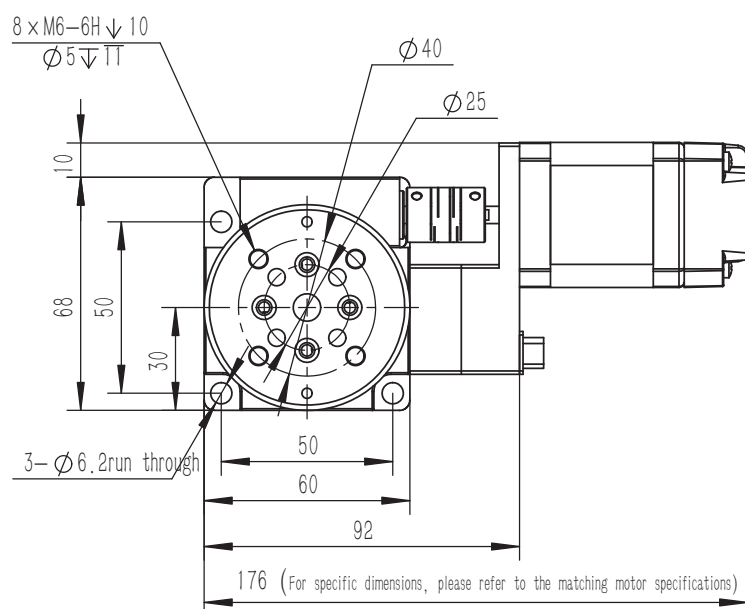


Technical Parameters

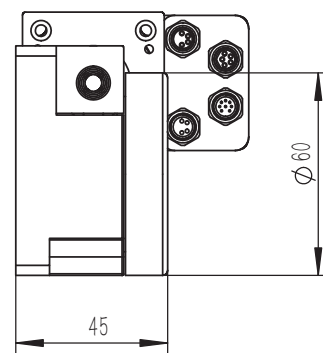
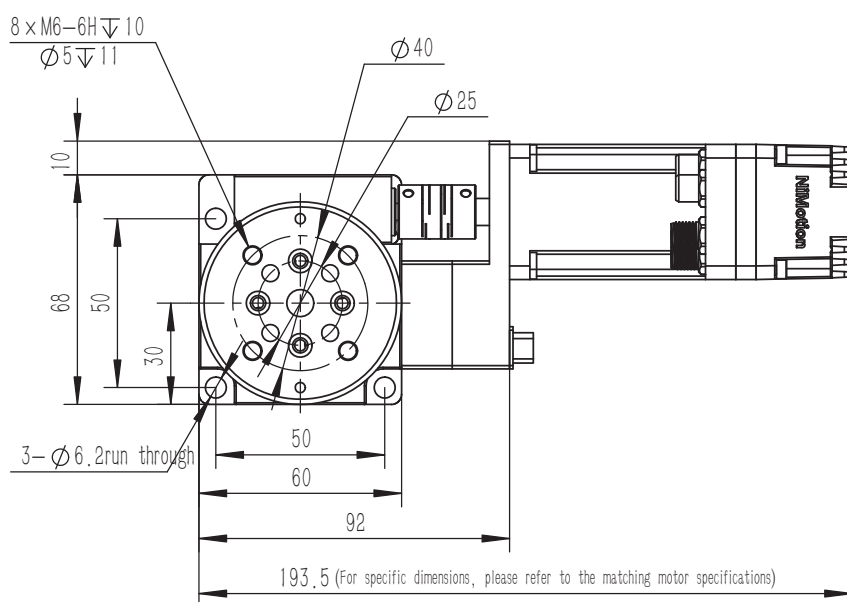
Model	PTU60-45H-40/42
Adapt to stepper motor	STM42(-M) series
Adapt to servo motor	PMMP40 series
Rotation diameter	Φ60mm
Rotation angle	360°
Reduction ratio	90:1
Transmission mechanism	Turbo Worm
Main material	Aluminum alloy (anodized black)
Driving force	42BYG(1.8°)
Self-respect	0.7kg
Center load	10kg
Maximum speed	Stepper: 40°/sec (Servo: 120°/sec)
Resolution (no subdivision)	0.02°
Repeatability	±0.05°
Absolute precision	±0.06°
End runout rate	15μ
Parallelism	10μ

Dimensions of PTU60 series integrated precision turntable

(unit:mm)

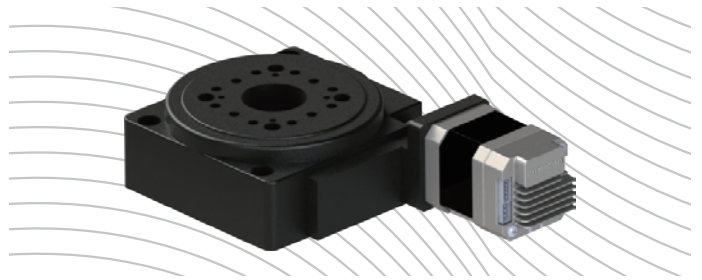


Adapt to STM42(-M) stepping series



Compatible with PMMP40 servo series

PTU100 series integrated precision turntable

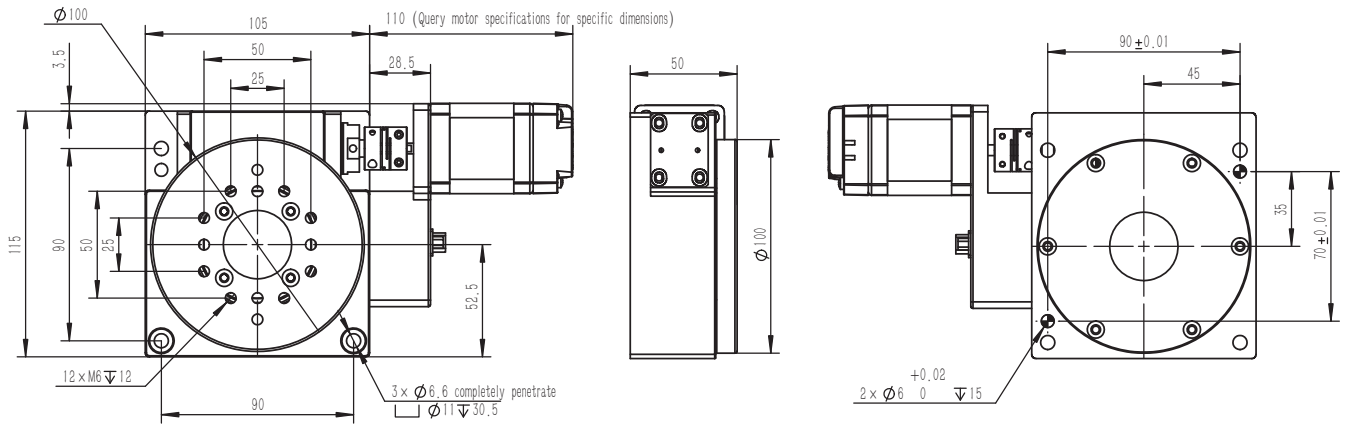


Technical Parameters

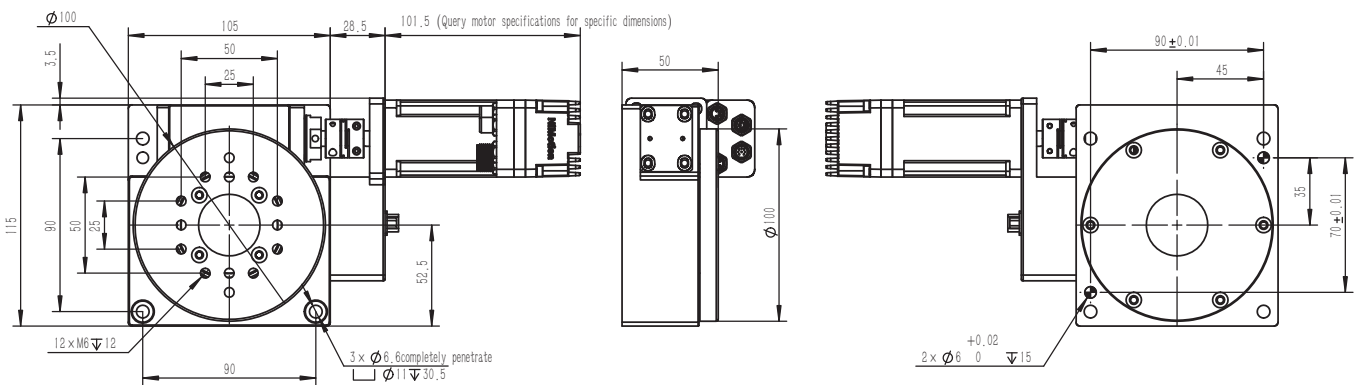
Model	PTU100-50H-40/42
Adapt to stepper motor	STM42(-M) series
Adapt to servo motor	PMMP40 series
Rotation diameter	Φ100mm
Rotation angle	360°
Reduction ratio	72:1
Transmission mechanism	Turbo Worm
Main material	Aluminum alloy (anodized black)
Driving force	42BYG(1.8°)
Self-respect	2kg
Center load	30kg
Maximum speed	Stepper: 50°/sec (Servo: 150°/sec)
Resolution (no subdivision)	0.025°
Repeatability	±0.05°
Absolute precision	±0.06°
End runout rate	15μm
Parallelism	10μm

Dimensions of PTU100 series integrated precision turntable

(unit:mm)

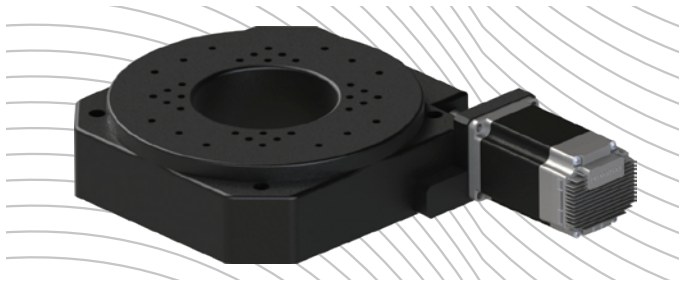


Adapt to STM42(-M) stepping series



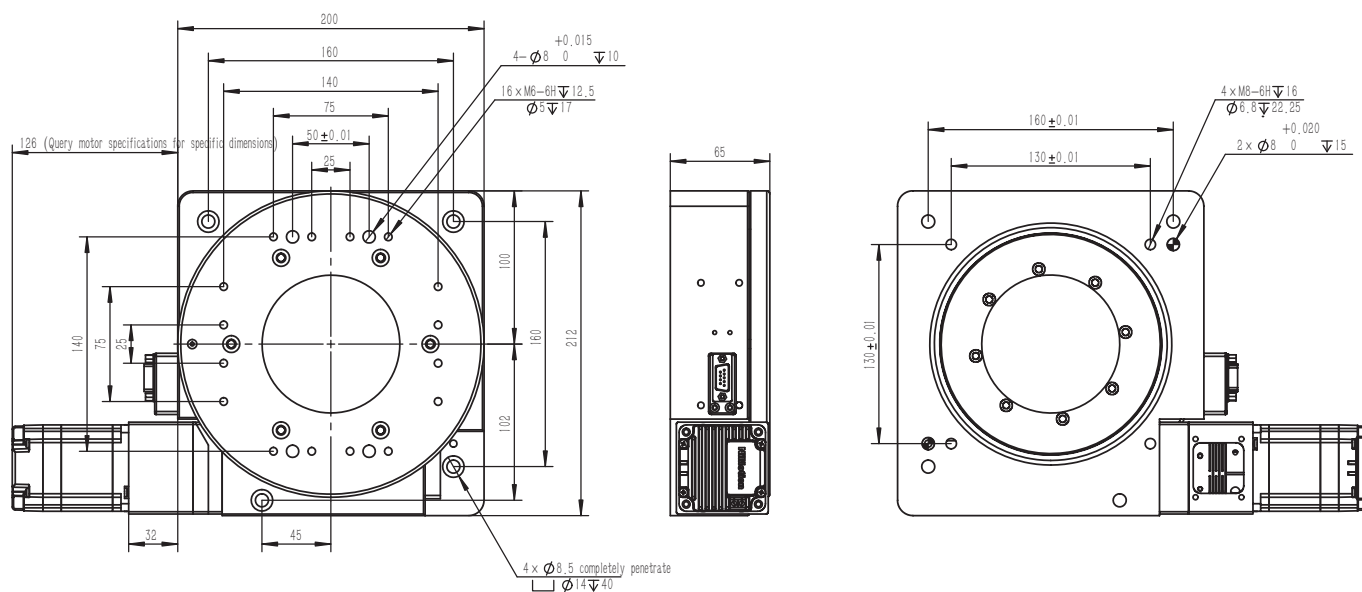
Compatible with PMMP40 servo series

PTU200 series integrated precision turntable

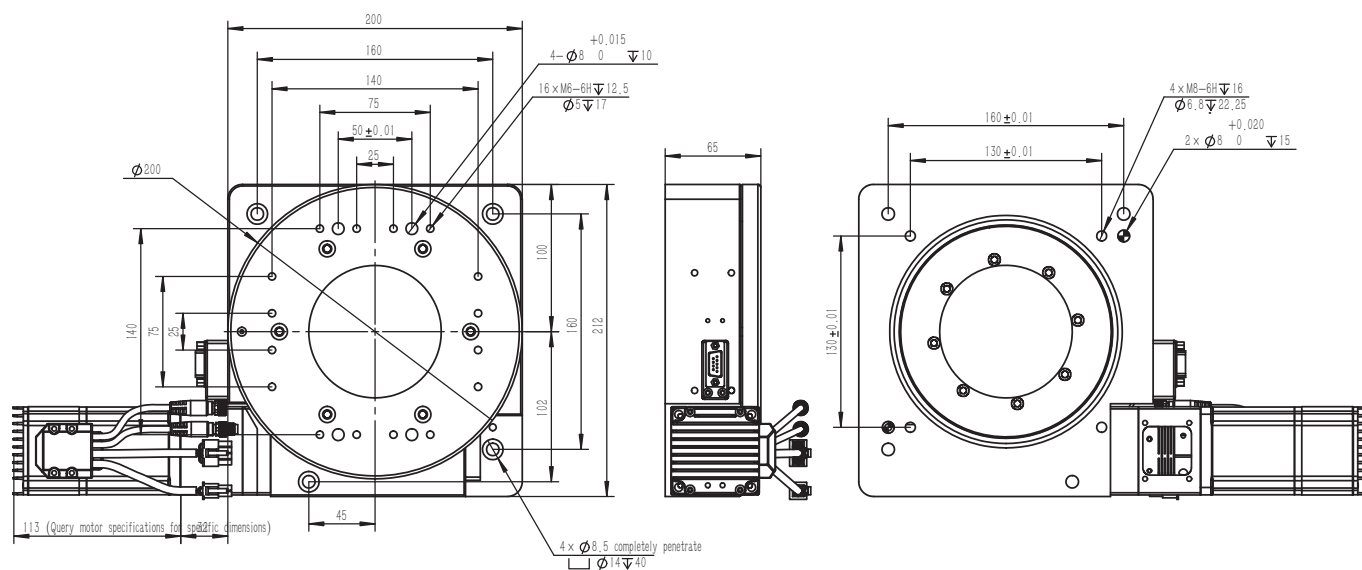


Technical Parameters

Model	PTU200-65H-57/60
Adapt to stepper motor	STM57(-M) series
Adapt to servo motor	PMM(P)60 series
Rotation diameter	Φ200mm
Rotation angle	360°
Reduction ratio	72:1
Transmission mechanism	Turbo Worm
Main material	Aluminum alloy (anodized black)
Driving force	57BYG(1.8°)
Self-respect	8kg
Center load	65kg
Maximum speed	Stepper: 50°/sec (Servo: 150°/sec)
Resolution (no subdivision)	0.02°
Repeatability	±0.05°
Absolute precision	±0.06°
End runout rate	25μ
Parallelism	50μ



Adapt to STM57(-M) stepping series



Compatible with PMM(P)60 servo series



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