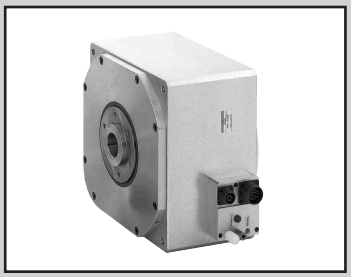
Discontinue



Direct drive actuator

AX5000 Series actuator

Pneumatic brakes are integrated so the output shaft is clamped when stopping.
This is used for work in which a load is applied after stopping.

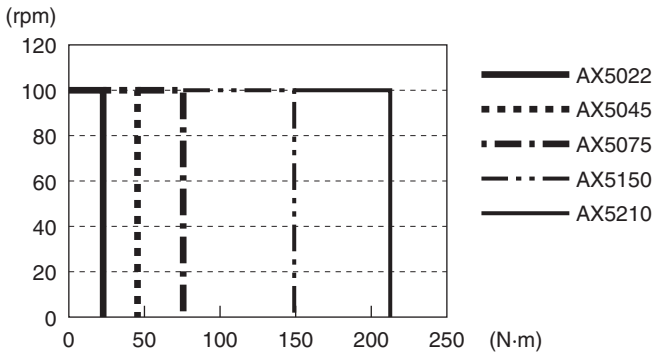
● Max. torque: 22/45/75/150/210 N·m

Actuator specifications

Descriptions		AX5022	AX5045	AX5075	AX5150	AX5210
Maximum output torque	N·m	22	45	75	150	210
Continuous output torque	N·m	7	15	25	50	70
Maximum rotation speed	rpm	100 (Note 2)		100		
Allowable axial load	N	600		2200		
Allowable moment load	N·m	19	38	70	140	170
Allowable radial load	N	1000		4000		
Output shaft moment of inertia	kg·m²	0.0056	0.0085	0.0403	0.0619	0.0987
Allowable load moment of inertia	kg·m²	0.6	0.9	4.0	6.0	10.0
Index accuracy (Note 1)	sec.	±15				
Repeatability	sec.	±5				
Output shaft friction torque	N·m	2.0		8.0		
Resolver resolution	P/rev	540672				
Motor insulation grade		Class F				
Motor withstanding voltage		1500 VAC for one minute				
Motor insulation resistance		10MΩ and over 500 VDC				
Working ambient temperature range		0 to 45˚C				
Working ambient humidity range		20 to 85%RH with no dew condensation				
Storage ambient temperature range		-20 to 80˚C				
Storage ambient humidity range		20 to 90%RH with no dew condensation				
Weight	kg	16.0	20.0	40.0	50.0	65.0
Runout of output shaft	mm	0.01				
Runout of output shaft surface	mm	0.01				
Brake torque	N·m	45		150		210

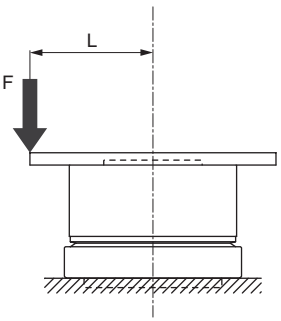
Note 1: Refer to the "CKD Index Units General Catalog" (CB-019SA) "Technical explanation, Static index precision" for details on the index precision.
Note 2: Consult with CKD if rotation speed is 100 rpm or faster.
(With models having a maximum torque of 45 N·m or less, the S type is used with special specifications up to 150 rpm and the H driver up to 180 rpm. Contact CKD for details. Note that maximum speed cannot be changed after delivery.)

Speed/max. torque characteristics



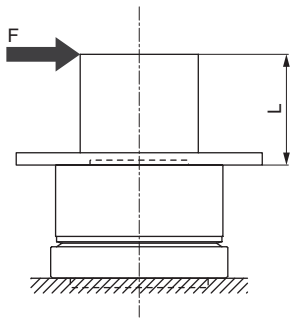
*This is characteristics at three phase 200 VAC .

(Note) Moment load



(Fig. a)

M (N·m) = F (N) x L (m)
M : Moment load
F : Load
L : Distance from center of output shaft

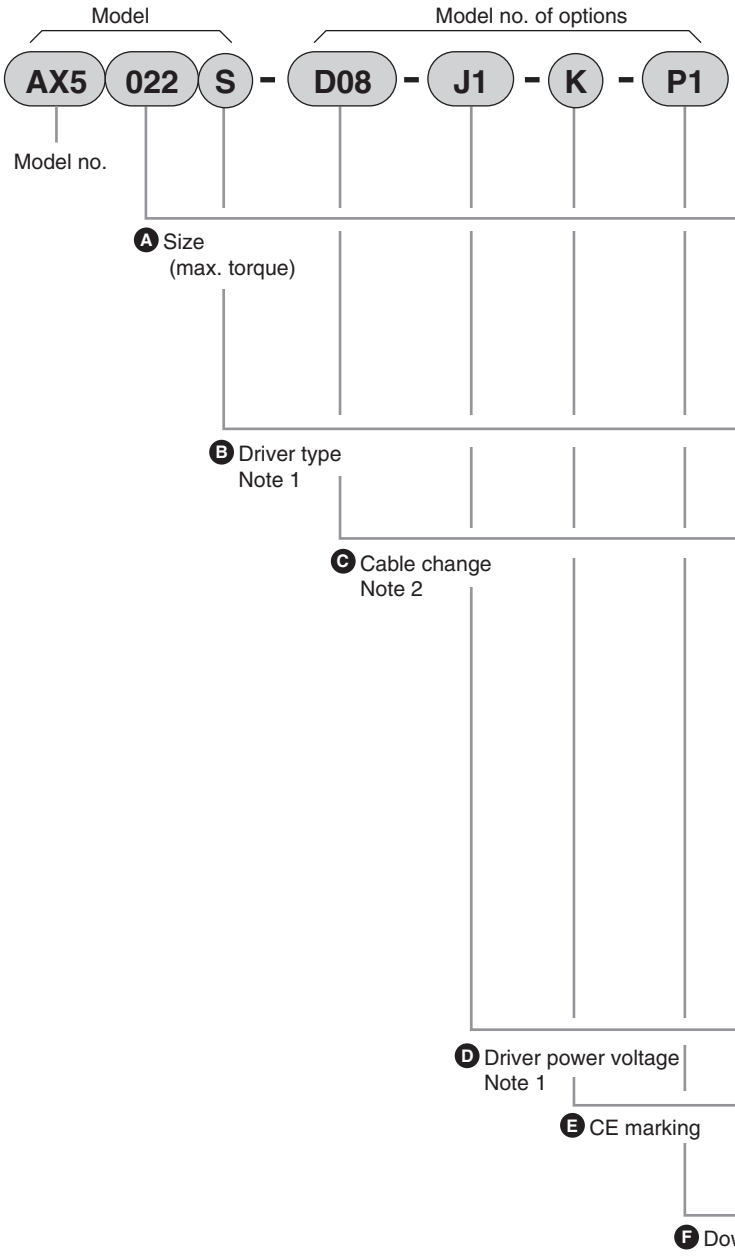


(Fig. b)

M (N·m) = F (N) x (L + 0.02) (m)
M : Moment load
F : Load
L : Distance from output shaft flange surface

⚠ Refer to the safety precautions on Intro 13 to 20 before operating.

How to order



Symbol	Descriptions
A Size (max. torque)	
022	22 N·m
045	45 N·m
075	75 N·m
150	150 N·m
210	210 N·m
B Driver type	
S	S type driver
H	H type driver
C Cable change	
Blank	Standard (cable length 4 m)
D**	Cable length change
DM**	Flexible cable length change

** cable length	Note: The length and type cannot be changed after delivery.	
02	2 m	
Blank	4 m	Flexible cable 4 m: DM
06	6 m	[Note] Use the noise filter for the motor cable if the cable is longer than 6 m.
08	8 m	
10	10 m	
15	15 m	
20	20 m	
25	25 m	
30	30 m	

Symbol	Descriptions
D Driver power voltage	
Refer to the driver - power voltage table below.	
E CE marking	
Blank	Standard (CE marking not available)
K	CE marking
F Dowel hole	
Blank	Standard (without dowel hole)
P1	1 on top

Note on model no. selection

Note 1: Select the driver according to the table below.

Driver - power voltage table

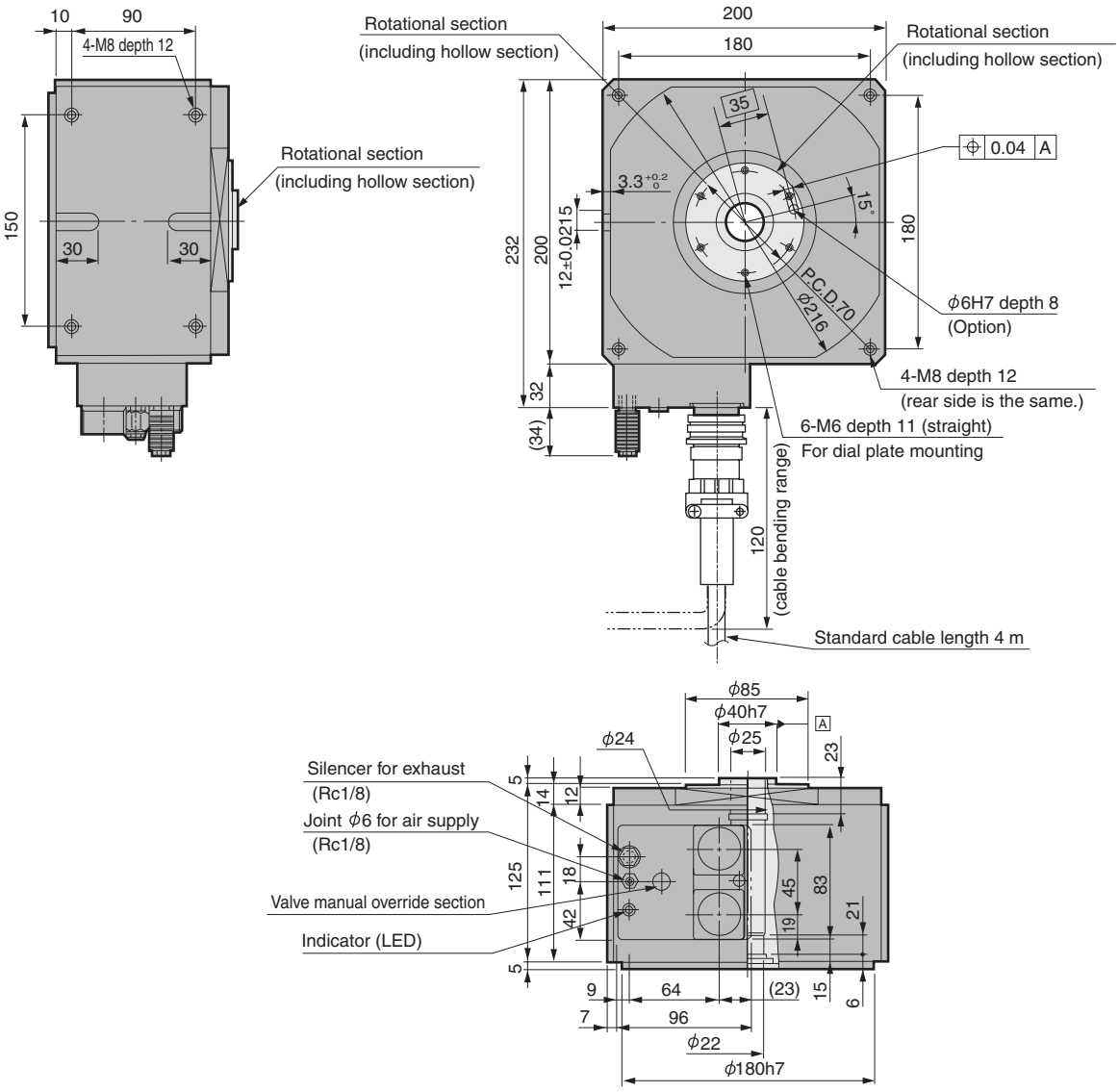
Model \ Driver type	S type driver		H type driver	
	200 to 230 VAC	100 to 115 VAC	200 to 230 VAC	100 to 115 VAC
AX5022	Blank	J1		
AX5045	Blank	J1		
AX5075	Blank			
AX5150			Blank	
AX5210			Blank	

* S type driver is recommended if the max. torque is 75 N·m or less. Contact CKD for details on the availability of the H type driver.

Note 2: Use the optional flexible cable in applications where the cable is bent repeatedly. Refer to page 57 for dimensions of the cable.

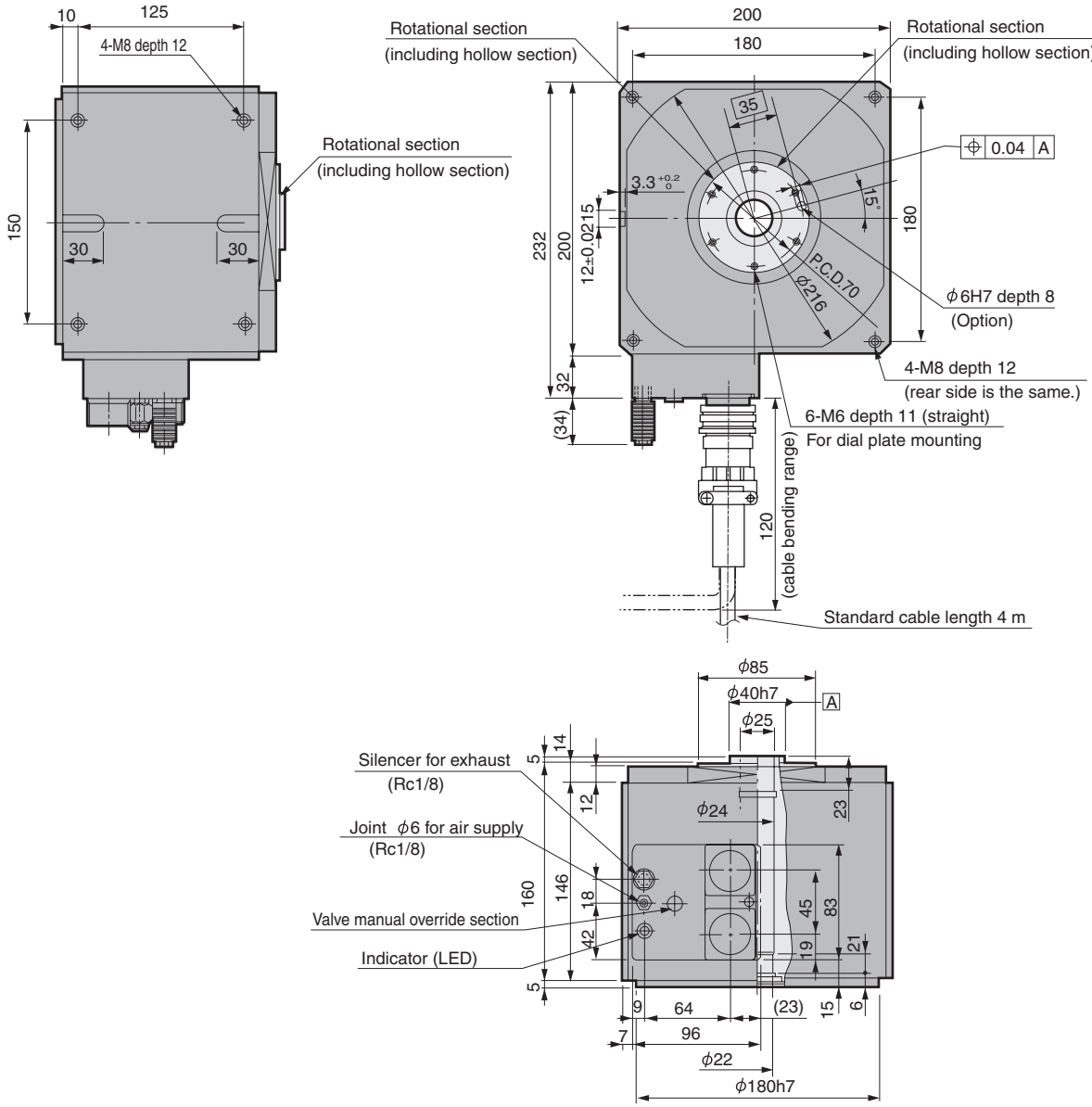
Dimensions

● AX5022



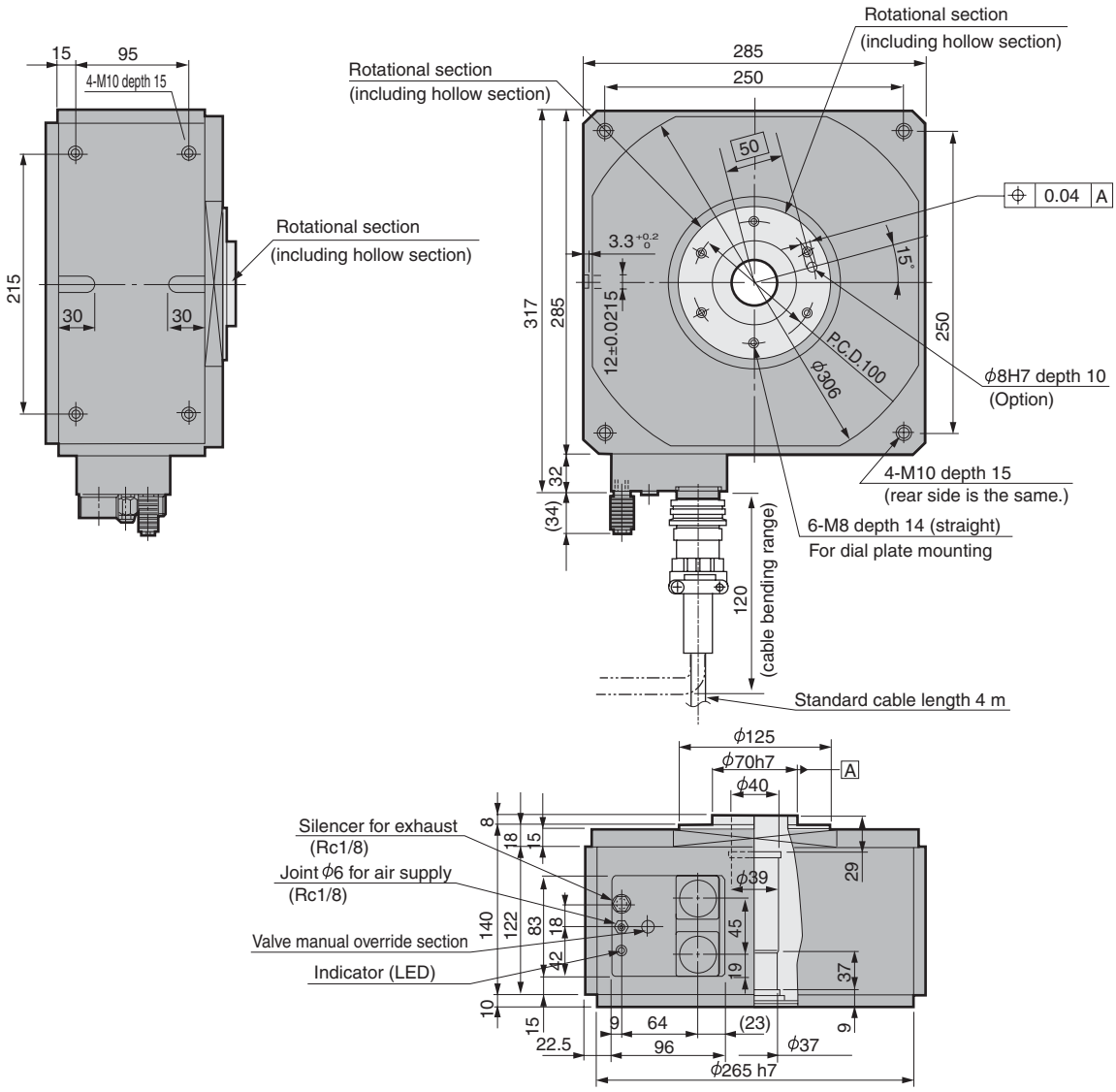
Dimensions

● AX5045



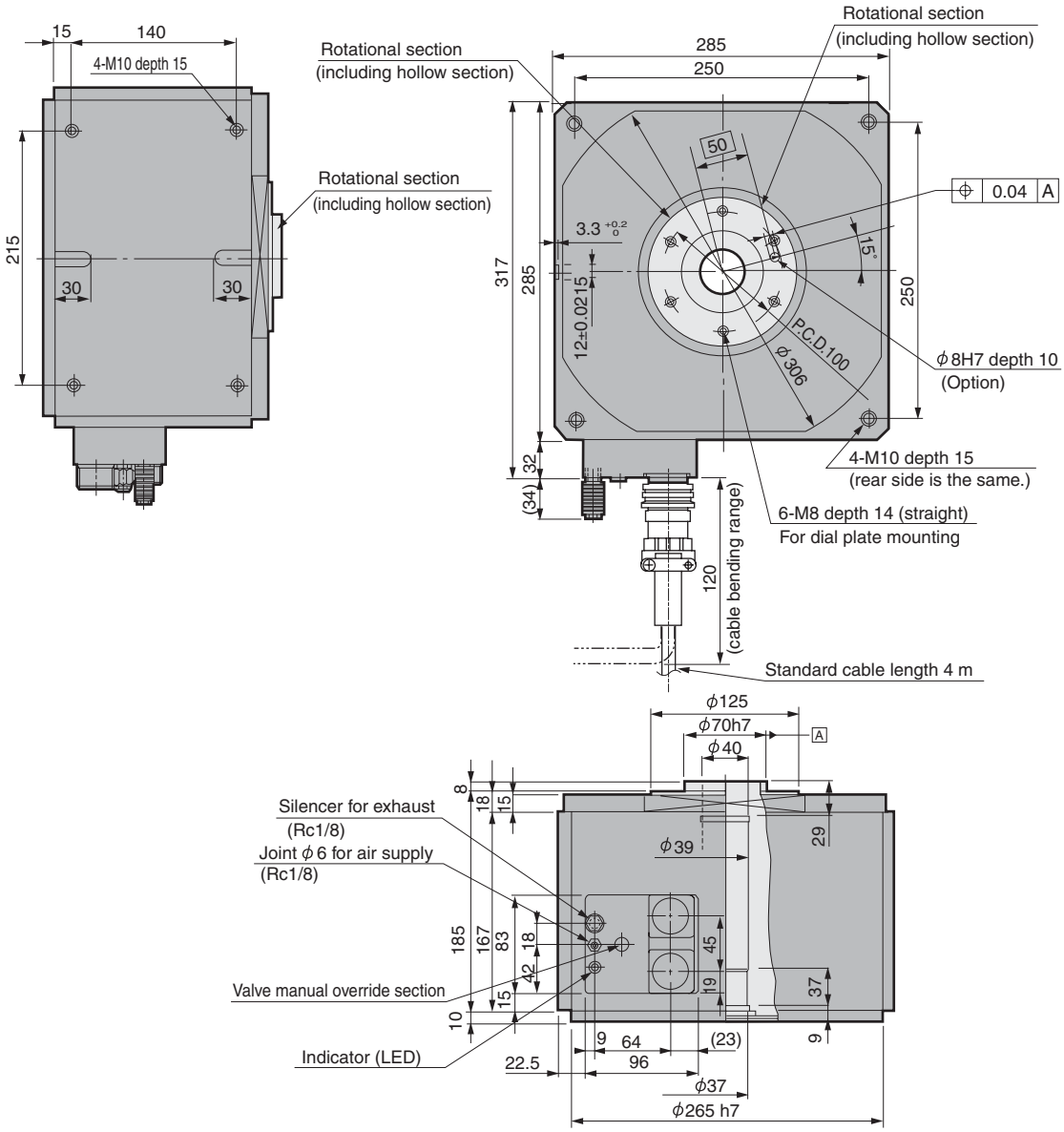
Dimensions

● AX5075



Dimensions

● AX5150



Dimensions

● AX5210