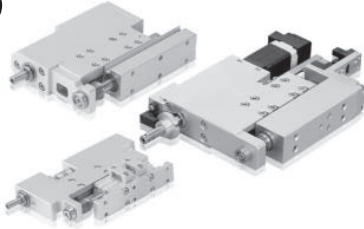


ROTARY PICK UP CYLINDER

PPRM Series

Features

NEW



- Miniature pick up cylinder that rotation function of motor and pick up cylinder with vacuum.
- Miniaturization, lightweight and generalization with ultra slim type body.
- Anti-shock effect by giving shockproof function at the end of connector.
- Actuator that integrate in one body rotation function with and up & down linear motion guide
- With electronic rotate, can control torque, rotation angle and rotation speed.
- Precise rotation angle with high angle resolution.

Order Form

PPRM12 S - 10 - 20 E - A2N S - D - AM2 ES2

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

②, ⑥ Auto Switch type

②Symbol	⑥Switch name	Type of switch	Remark
S	Blank	Not use	
	B2	PLC 3-wire1m	
	B2L	PLC 3-wire3m	
	A2N	DSC 2-wire1m	
	A2NL	DSC 2-wire3m	
P	Blank	Not use	
	PM	Micro photo sensor	PPRM08:Disable

⑨ Cable for motor

Name	Specification
Blank	Not need cable
AF <input type="checkbox"/>	Not movable type
AM <input type="checkbox"/>	For no encoder type
BF <input type="checkbox"/>	Not movable type
BM <input type="checkbox"/>	For Encoder type

- * is the length of Cable. The unit is 1m and maximum length is 10m.
- * Additional cable connectors will be supplied when the cable option is not selected (Only for driver option)

⑩ Cable for controller

Name	Specification
Blank	Not need cable
ES <input type="checkbox"/>	Not movable type
SS <input type="checkbox"/>	Not movable type

- * is the length of Cable. The unit is 1m and maximum length is 2m.
- * Recommended the 2m non-movable power cable.
- * Additional cable connectors will be supplied when the cable option is not selected (Only for driver option)

①, ④ Series and Bore size, Motor Size

①Order name	Bore size(mm)	④Motor size
PPRM08	08	10
PPRM10	10	14
PPRM12	12	20
		28
PPRM16	16	28

③ Cylinder stroke

Name	Stroke(mm)
10	10

- * For non-standard stroke, please contact to us.

⑤ Encoder option

Blank	Not Apply
E	Apply

- * Encoder option is non-selectable only for PPRM08 and PPRM10
- * This option is for PPRM12 and PPRM16 model only.

⑦ Auto Switch quantity

Blank	2ea
S	1ea

- * Only "S" option selectable for PPRM10. (If need 2 piece, contact us)

⑧ Driver option

Blank	Not Apply
D	Apply

- * It is selectable over PPRM12 Series.
- * For PPRM08, PPRM10 can use general driver.



Specification

Model		PPRM08-10-10	PPRM10-10-14	PPRM12-10-20	PPRM12-10-28	PPRM16-10-28	
Up & Down part	Bore size(mm)	8	10	12	12	16	
	Stroke(mm)	10	10	10	10	10	
	Theoretical thrust for up & down(kgf)	Forward	0.5×P	0.78×P	1.13 × P	1.13 × P	2 × P
		Backward	0.37×P	0.5×P	0.84 × P	0.84 × P	1.5 × P
	P : Air pressure(kgf/cm ²)						
	Air port size(mm)	M3	M3	M5	M5	M5	
	Shock Absorbing stroke(mm)	2	2	2.5	2.5	2.5	
	Air pressure(kgf/cm ²)	3.5 ~ 7					
	Lubrication	No need (if need, use one sort of turbine oil: SPEC ISOVG 32)					
	Motion type	Double-acting type					
Fluid	Clean air Note 1)						
Guide type	Linear Guide						
Rotation part	Rotate method	Stepping Motor					
	Motor size	10	14	20	28	28	
	Motor holding torque(mNm)	61.4 Note 2)	3.9	23.4	70.8	70.8	
	Step angle	18° / 64 Note 2)	1.8°				
	Motor drive method	BI - POLAR					
	Main body weight(kg)	0.12	0.23	0.64	0.78	1.5	
	Temperature(°C)	5 ~ 60					

Note 1) Clean air: Fresh air containing solid matters with 0.3% of supersaturated moisture and 99.9% of liquid oil that passed through the 3-10 μ m degree of filtering

Note 2) The product "PPRM08" which is applied 64:1 ratio gear box applied for increasing torque.

*Specification of motor can be changed according to specifications

◆ PPRM DRIVER specification

Item	PPRM 08, 10	PPRM 12, 16 Note 1)
Voltage(VDC)	12~24	24
Control method	OPEN LOOP	CLOSE LOOP
Driving currencty(A)	MAX 2 Note 2)	MAX 4 Note 3)
Condition	Temperature : 0~40 °C, humidity : less than 90% without condensation	
Max. RPM	3000	
Resolution [P/R]	200~25000 Note 2)	500~50000 Note 2)
Max inputKHz)	2000	500
Protection functions	Motor connection error, Over temperature, Over regenerated voltage, Over current	Over current, Over speed, Position tracking error, Over load, Over temperature, Rotation voltage, Motor voltage error, Motor connection error, Encoder connection error, Position overflow error
LED display	Power status, Operational status, Alarm status	Power status, Alarm status, In-Pulse status, Enable status
STOP current(%)	50, 90 Note 2)	20~100 Note 4)
Pulse input method	1-PULSE	1-PULSE/2-PULSE Note 2)
Speed/Position control commend	Pulse input	
Input signal	Position command pulse, enable	Position command pulse, enable, alarm reset
Output signal	-	In-Position, Alarm

Note 1) Only Encoder equipped model can use position detective function.

Note 2) Setting FOR DIP switch

Note 3) AUTO SET

Note 4) Setting GUI



PPRM Series

08

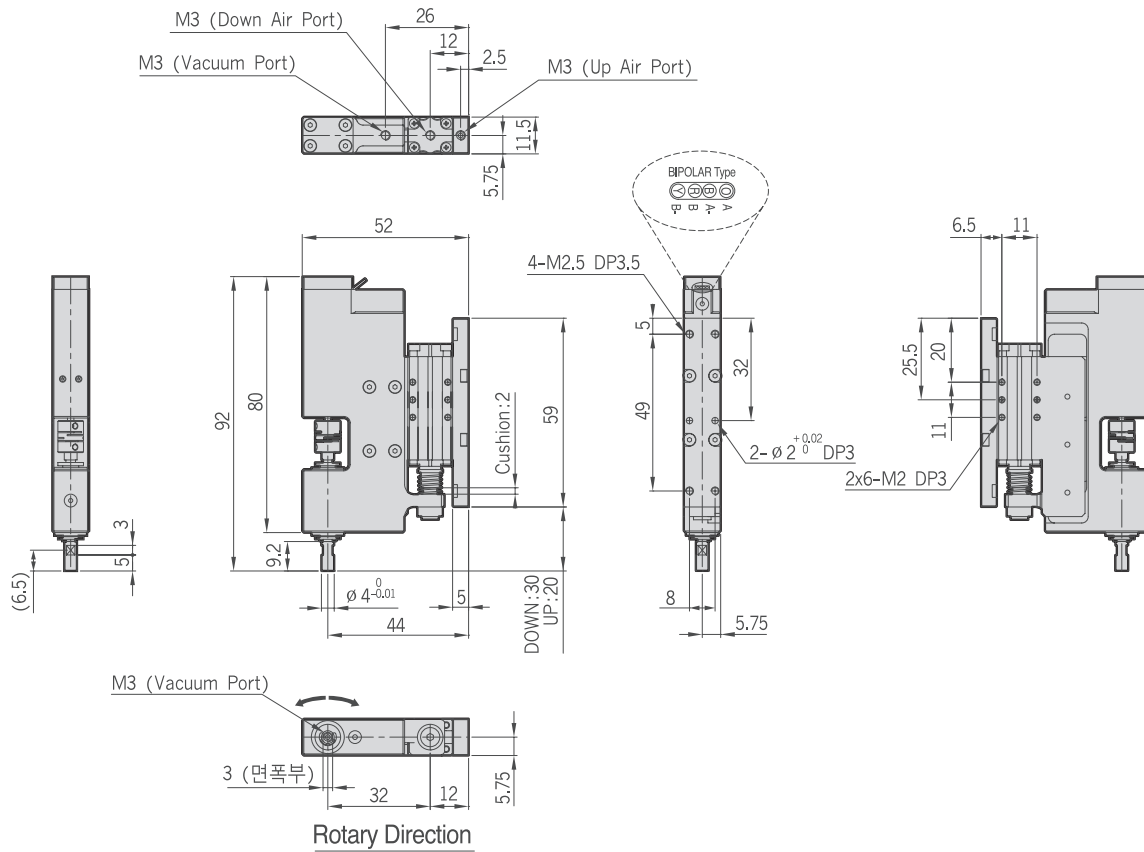
10

12

16

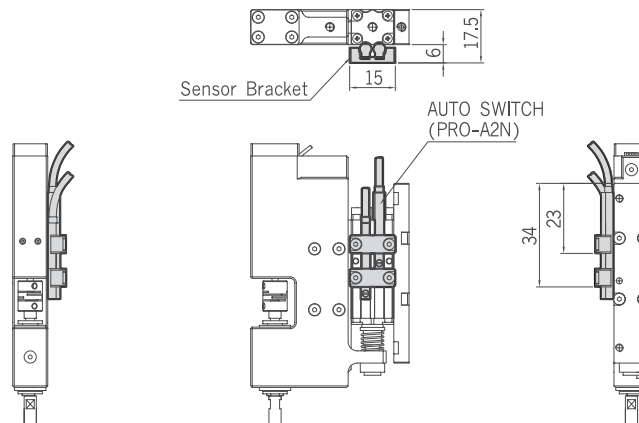
10-10

PPRM08-10-10



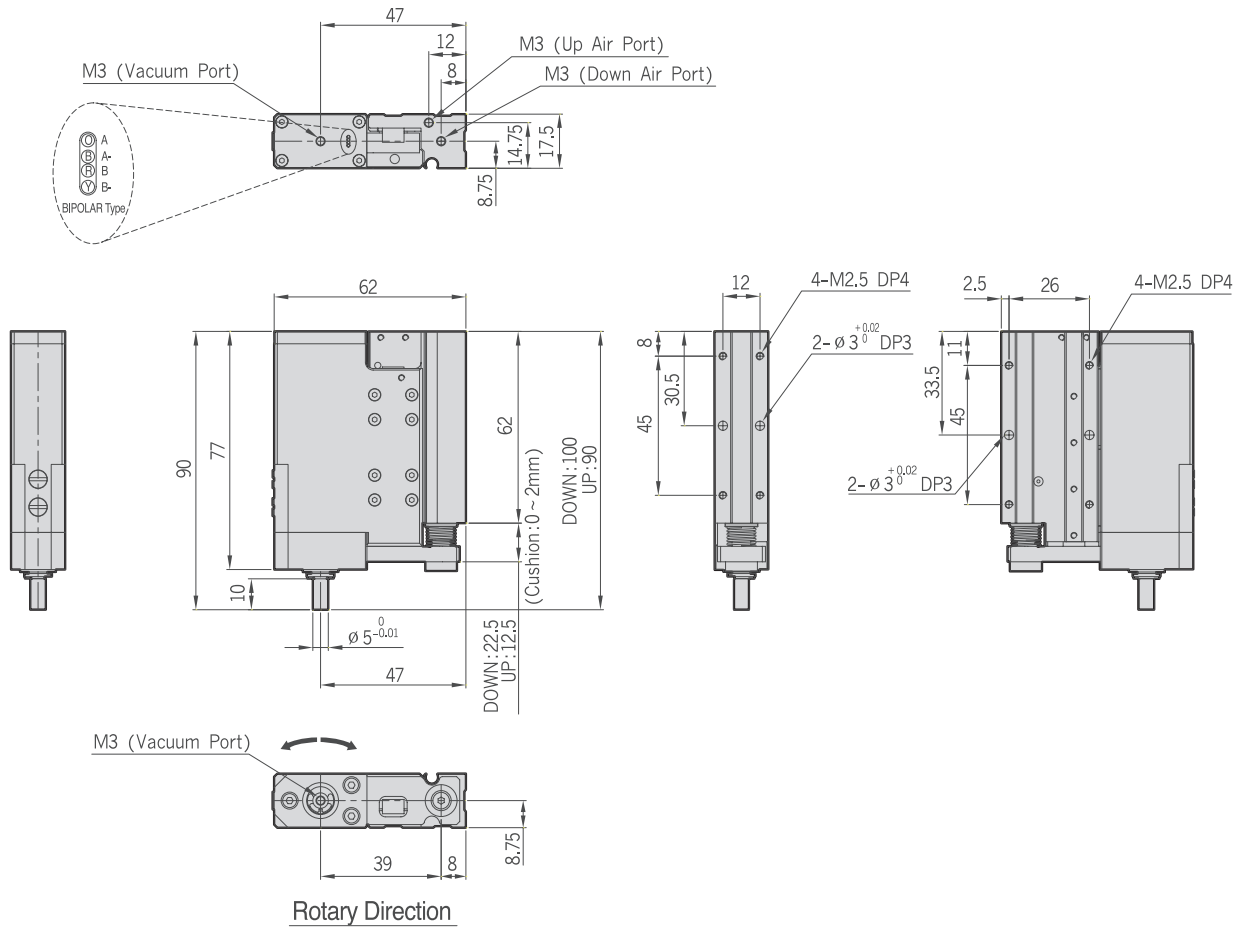
PPRM08-10-10-Auto Switch

MAGNETIC SENSOR



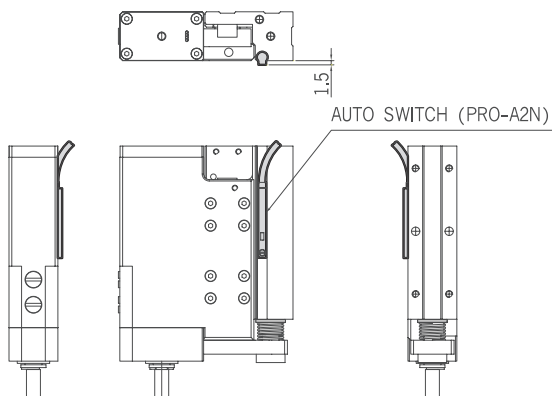
* For Micro Photo Sensor, Please contact to us.

PPRM10-10-14

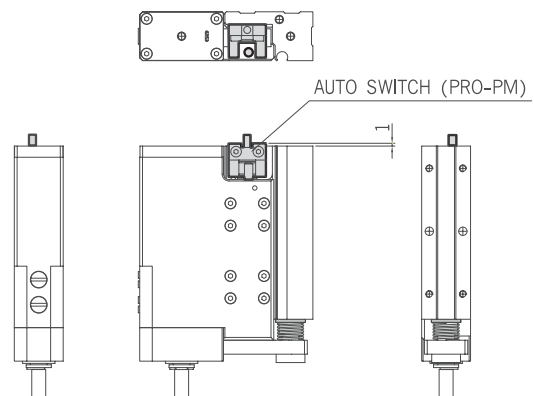


PPRM10-10-14-Auto Switch

1. MAGNETIC SENSOR



2. PHOTO SENSOR



* Detecting for forward position (Down) : S (PLC/3-Wire, DSC/2-Wire)
* Only 1 Auto Switch can apply for PPRM10 model. For 2 Auto switches, please contact to us.

* Detecting for forward position (Up) : P (Micro Photo-sensor)
* Only 1 Auto Switch can apply for PPRM10 model. For 2 Auto switches, please contact to us.



PPRM Series

08

10

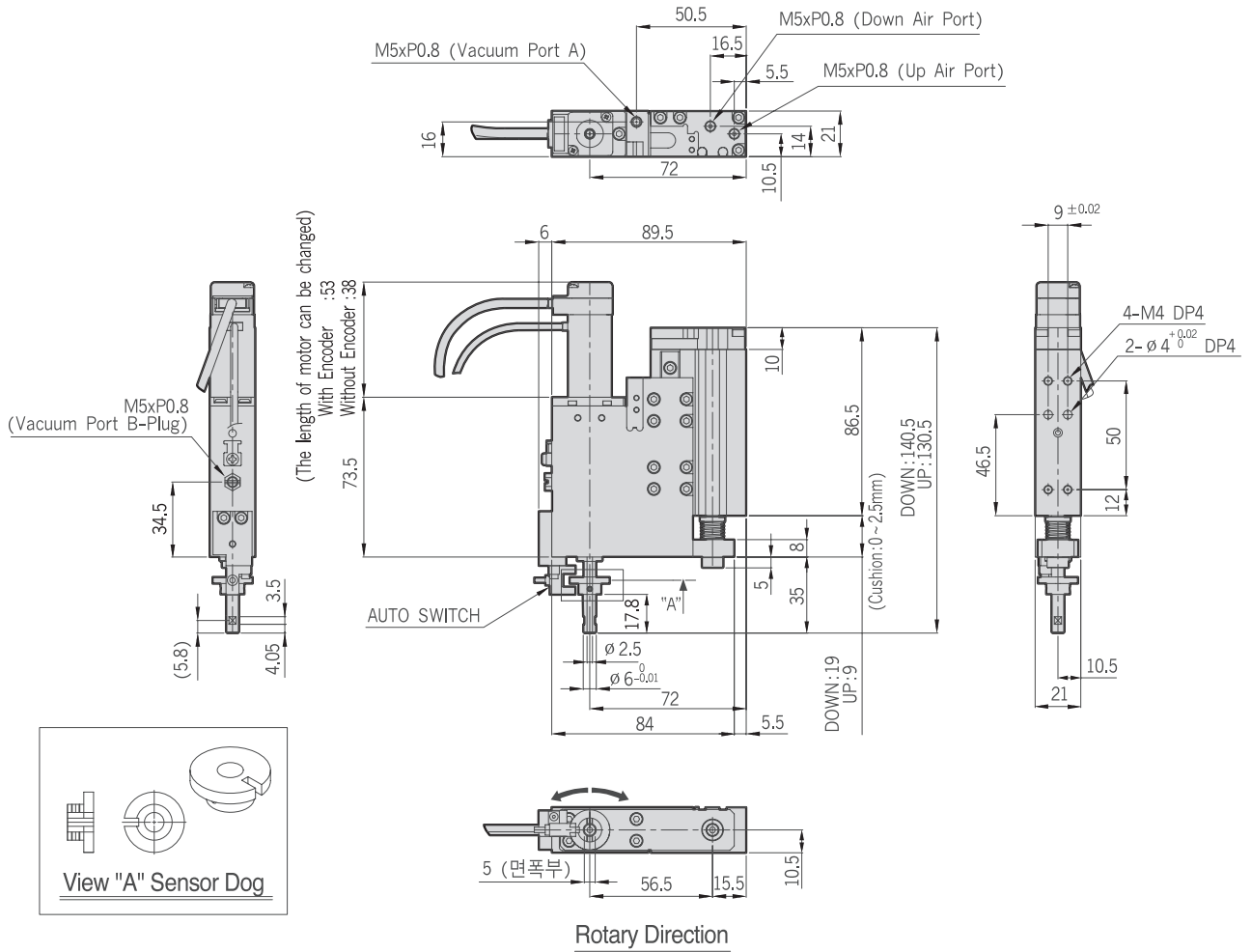
12

16

10-20

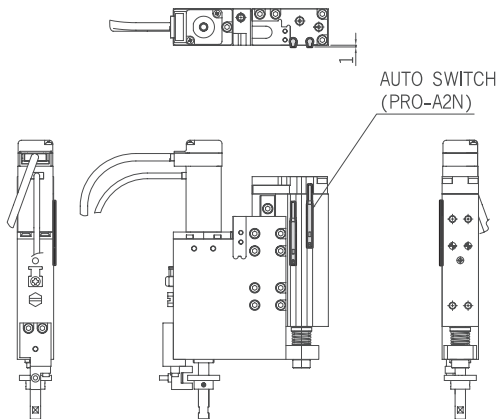
10-28

PPRM12-10-20

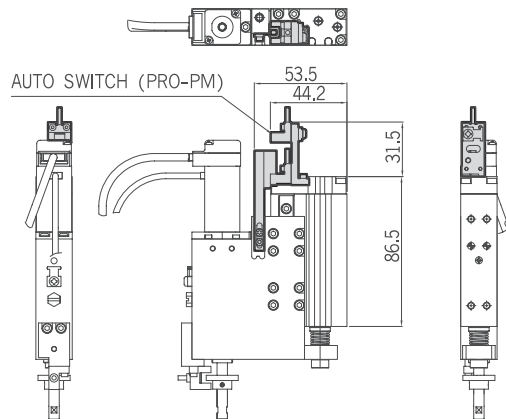


PPRM12-10-20-Auto Switch

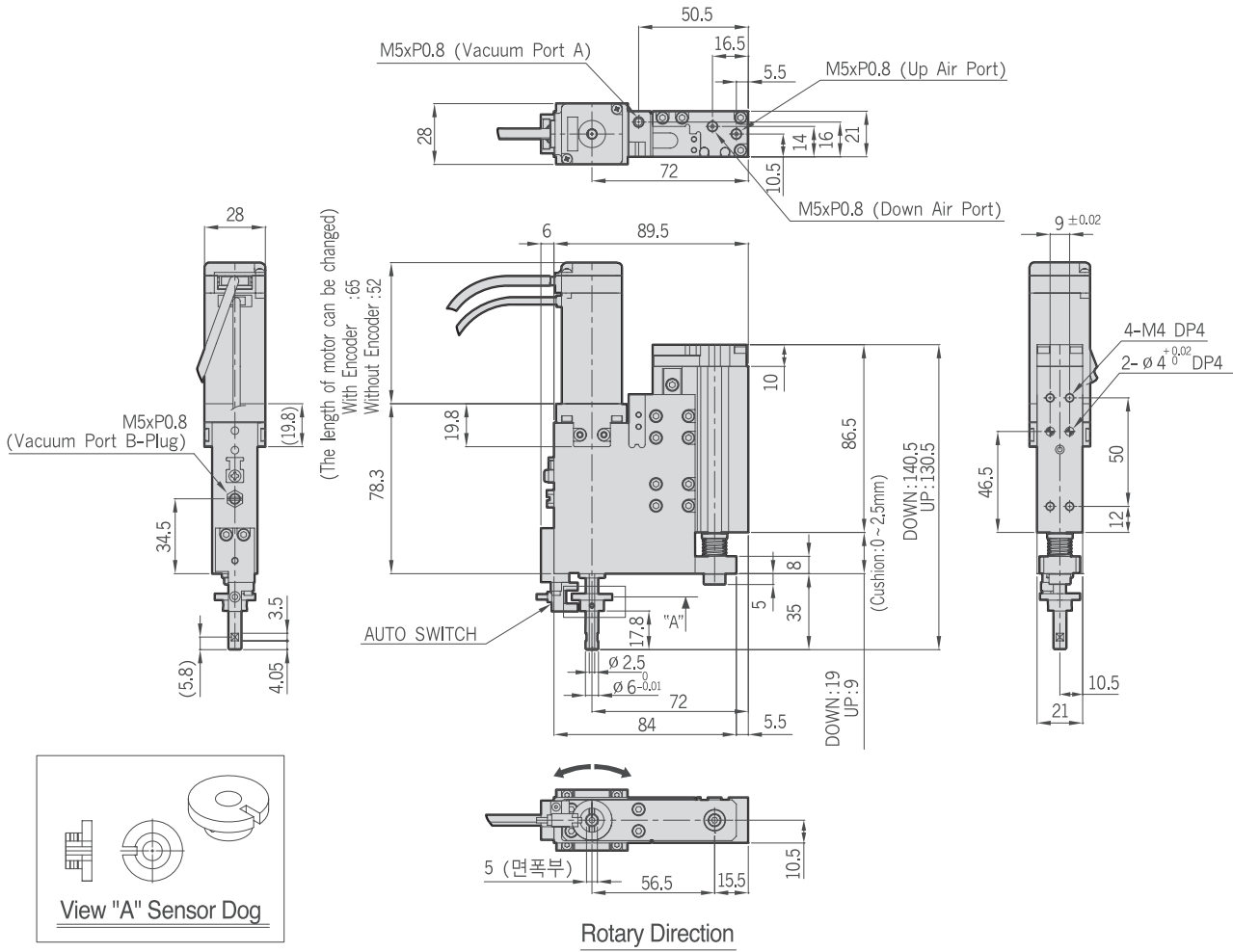
1. MAGNETIC SENSOR



2. PHOTO SENSOR

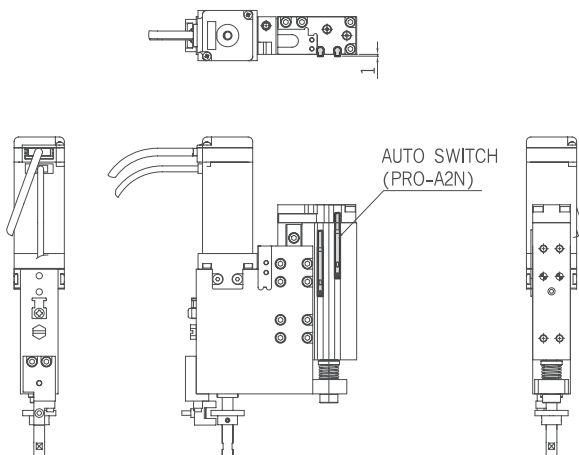


PPRM12-10-28

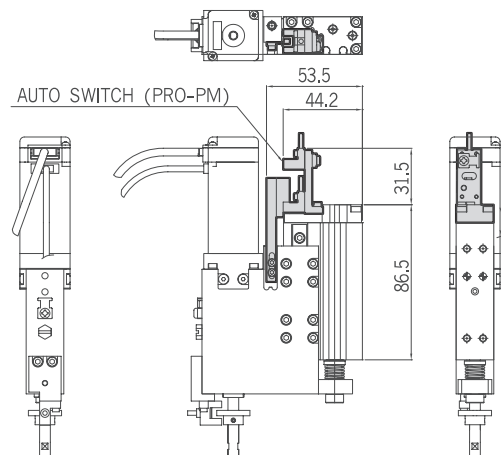


PPRM12-10-28-Auto Switch

1. MAGNETIC SENSOR



2. PHOTO SENSOR





PPRM Series

08

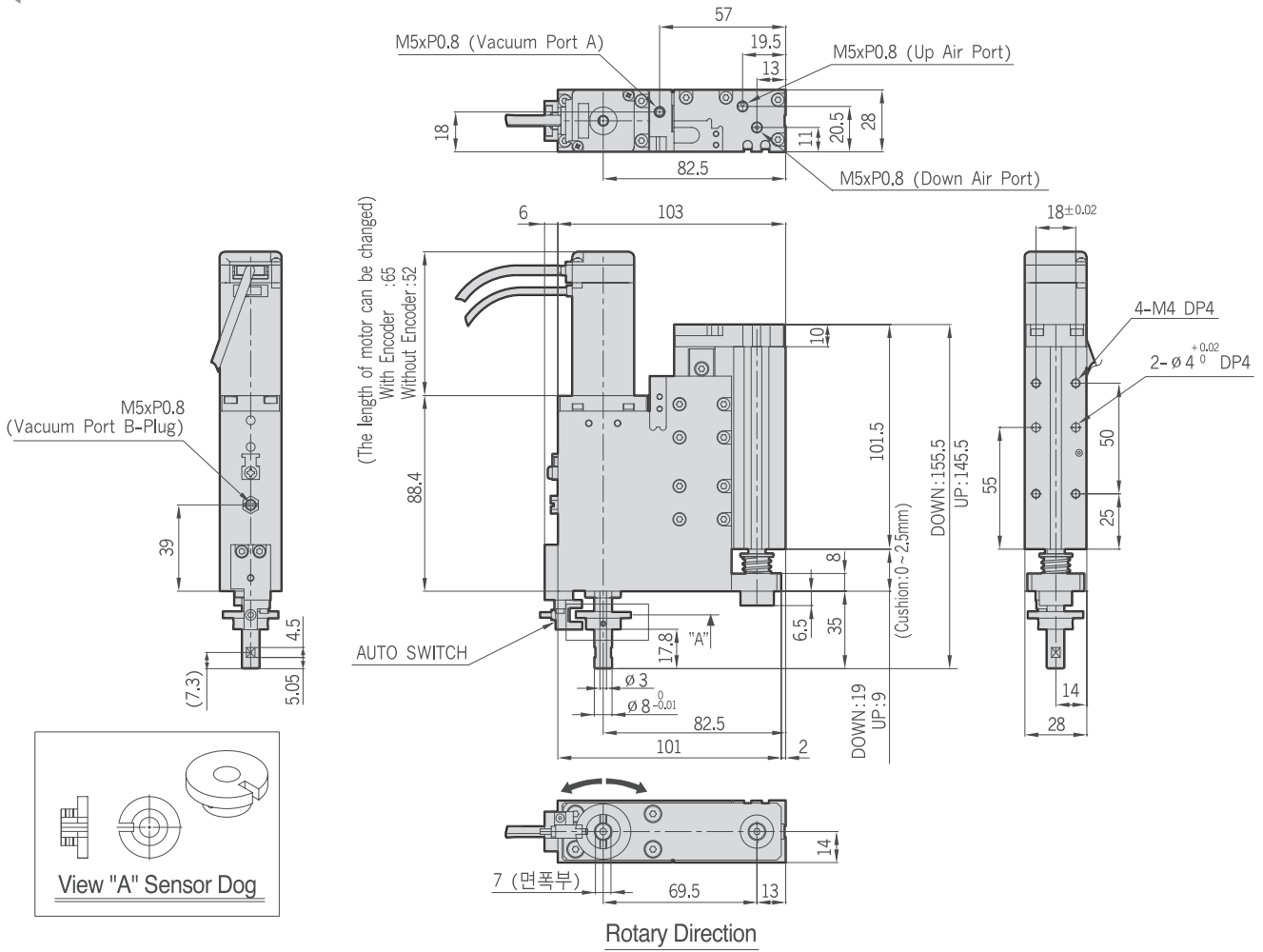
10

12

16

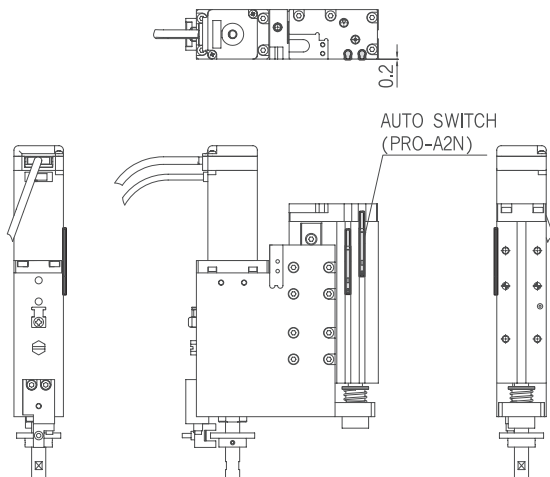
10-28

PPRM16-10-28

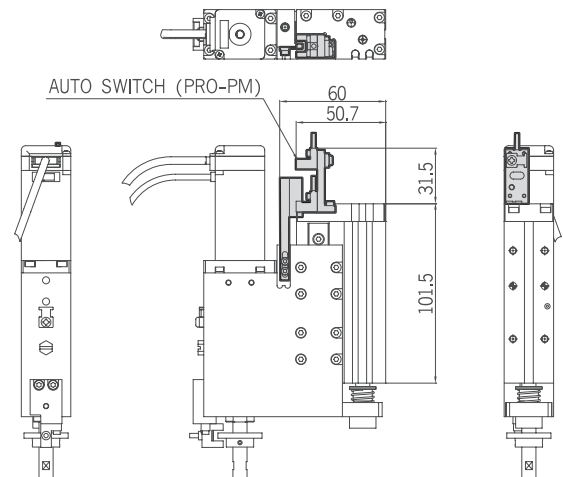


PPRM16-10-28-Auto Switch

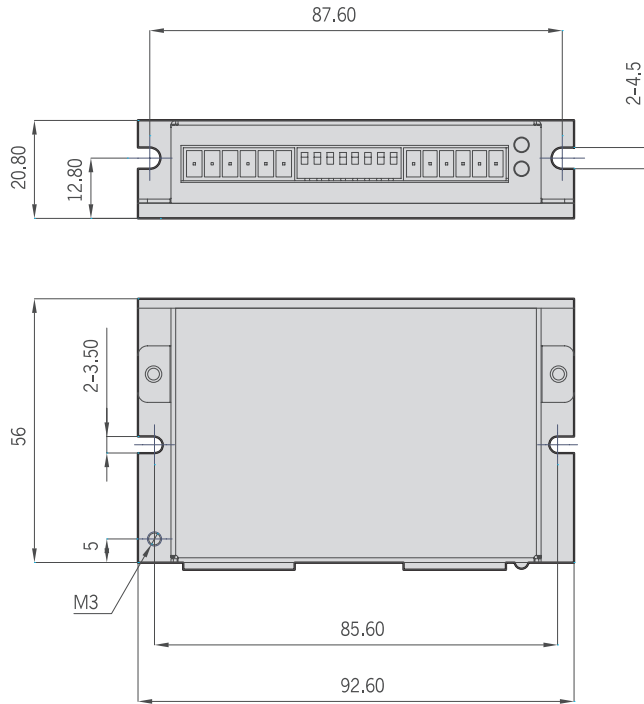
1. MAGNETIC SENSOR



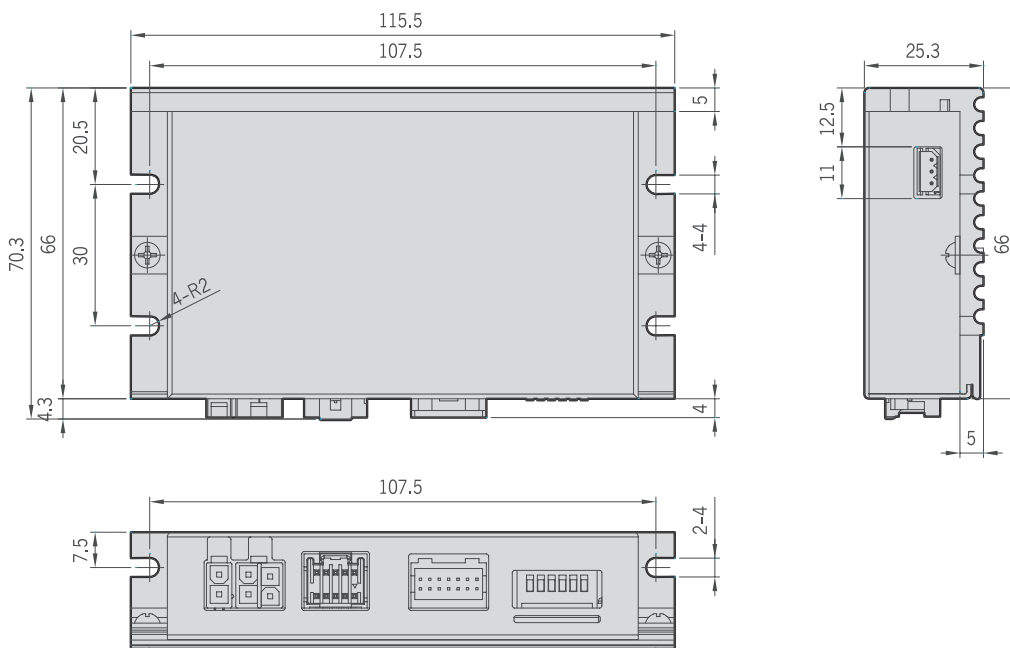
2. PHOTO SENSOR



DRIVER(PPRM 08, 10)



DRIVER(PPRM 12, 16)



※Above driver (PPRM12, PPR16) is only for Encoder type. For non-Encoder type, please contact to us.