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3S — *World leading company*



3S Co., Ltd.

MP series



Features

- Easy operation
- LCD display
- Protection against lightning
- Flexible configuration
- Feedback signal function (option)
- HART communication (option)

Specification

Specification	MP
Input signal	4 to 20 mA (minimum range: 4 mA) minimum drive current : 3.8 mA *1 (Voltage across terminals 10.5 V Typ)
Supply air pressure	0.14 to 0.50MPa
Stroke / Open angle	Linear motion: 10 to 100 mm Rotation angle of feedback lever 45° (40 to 100°) Rotary motion: Rotation angle of feedback lever 40 to 100°
Air connection	Standard: Rc 1/4 (Pressure gauge Rc 1/8) Option: 1/4 NPT (Pressure gauge 1/8 NPT)
Power connection	Standard: G 1/2 Option1: 1/2 NPT Option2: M20 × 1.5 (Not available for TIIS flameproof.)
Protection of enclosure	IP65 (IEC 60529:1989 / AMD2:2013)
Type of Protection	Standard: Non-explosion proof (Flameproof construction Ex d IIC T6)
Operating temperature range	Standard model: -20 to 80°C Flameproof model: -20 to 60°C
Flow characteristics	Linear, near equal-percentage, quick open, user setting (17 setting points)
Manual action	A/M switch function (Single acting only)
Weight	Approx. 3.8 kg
Material	Aluminum Diecasting

*1 In case input signal goes below this limit, the unit goes "wait mode" (shutdown status). To change settings, at least 4 mA power is required.

Option

Function	Items	Specification
Feedback signal	Output signal range	4 to 20 mA (reverse output is available)
	Input voltage	12 to 36 V DC (Flameproof: 12 to 24 V DC)
	Accuracy	± 1.0% F.S. to the position cognized internally
Communication function	HART communication	HART7

* In case input signal goes below 3.8mA, the feedback signal falls stand-by value.



Easy operation with 4 buttons



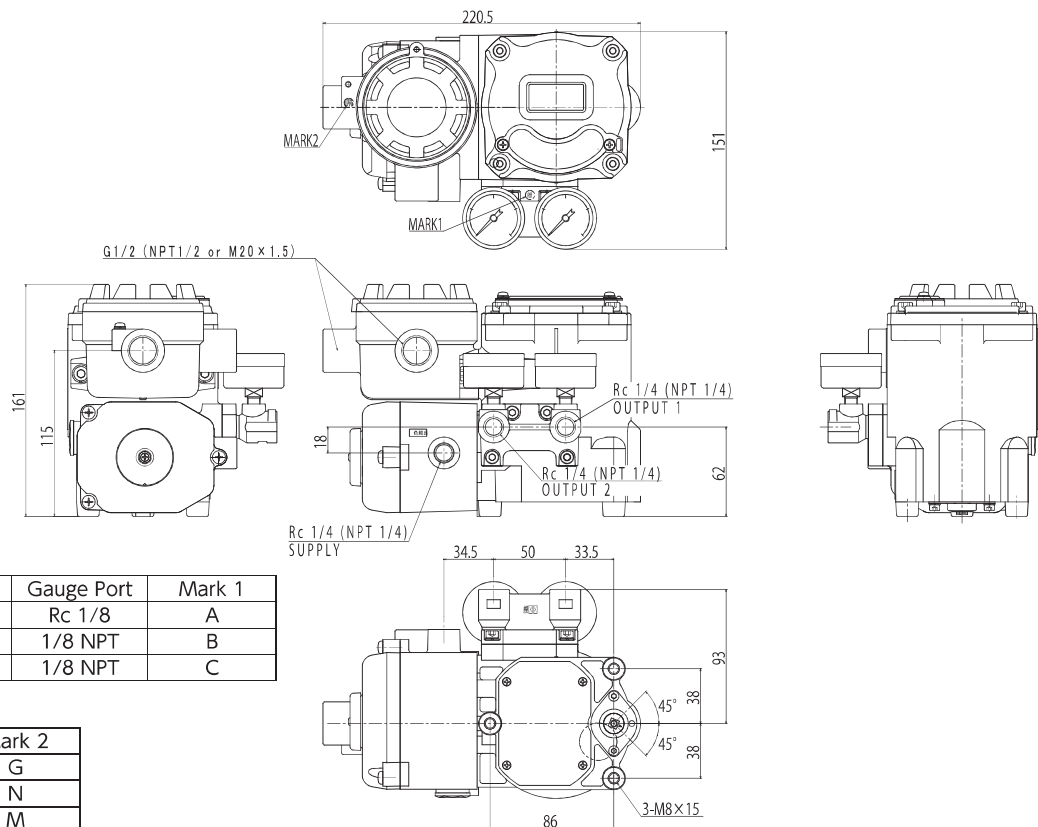
Rotatable LCD display

Notation table

1	2	3a	3b	3c	4	5	6

	Specification	Definition	Code
1	Series	Smart positioner	MP1
2	Housing	Standard (non-explosion proof)	0
		Flameproof Ex d IIC T6	6
3a	Connection & acting	Single acting, Rc 1/4 (gauge: Rc 1/8)	1
		Double acting, Rc 1/4 (gauge: Rc 1/8)	2
		Single acting, 1/4 NPT (gauge: 1/8 NPT)	3
		Double acting, 1/4 NPT (gauge: 1/8 NPT)	4
3b	Electric connection	G1/2	1
		1/2 NPT	2
		M20 × 1.5 (Not available for TIS flameproof.)	3
3c	Option	N/A	1
		Feedback signal	2
		HART communication	3
4	Ambient temp.	Non-explosion proof: -20 to 80°C Ex d IIC T6: -20 to 60°C	5
5	Actuator	Linear motion	L
		Rotary motion	R
86	Output press. gauge	0.2 MPa	M2
		0.4 MPa	M4
		1.0 MPa	M0

Dimension



Air Connection Port

Supply Port	Output Port	Gauge Port	Mark 1
Rc 1/4	Rc 1/4	Rc 1/8	A
1/2 NPT	1/4 NPT	1/8 NPT	B
Rc 1/4	Rc 1/4	1/8 NPT	C

Cable Entry Conduit

Cable Entry Conduit	Mark 2
G1/2	G
1/2 NPT	N
M20 × 1.5	M