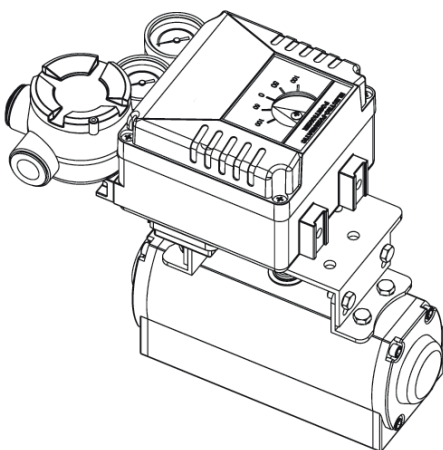




Options:

- Position transmitter (4 ... 20 mA output signal).
- 2 x SPDT limit switch.
- 2 x P&F proximity sensor NJ2- V3 - N.
- Visual dome indicator.
- High temperature(+120°C).
- Low temperature (-40°C).

With Flat Indicator



Robust valve control device giving a confidence in reliable performance and outstanding durability under harsh working environments.

Features / Design

- 1.- Easy maintenance.
 - 2.- Precise calibration with simple SPAN and ZERO adjustments.
 - 3.- Simple conversion to direct acting or reverse acting.
 - 4.- 1/2 split range available.
 - 5.- Rugged aluminum housing with corrosion-resistant coating.
 - 6.- Vibration resistant design.
 - 7.- Stainless steel gauges standard.
 - 8.- Restricted pilot valve orifice kit for small actuators included.
- ☑ KC-certified flameproof Ex dmb IIB+H₂ T6.
 - ☑ NEPSI-certified flameproof Ex dmb IIB+H₂ T6.
 - ☑ IECEx-certified flameproof Ex dmb IIC T6/T5.
 - ☑ ATEX / TR-CU-certified flameproof Ex dmb IIC T6/T5.
 - ☑ IECEx-certified intrinsically safe Ex ia IIC T6.
 - ☑ ATEX / TR-CU-certified flameproof Ex ia IIC T6.

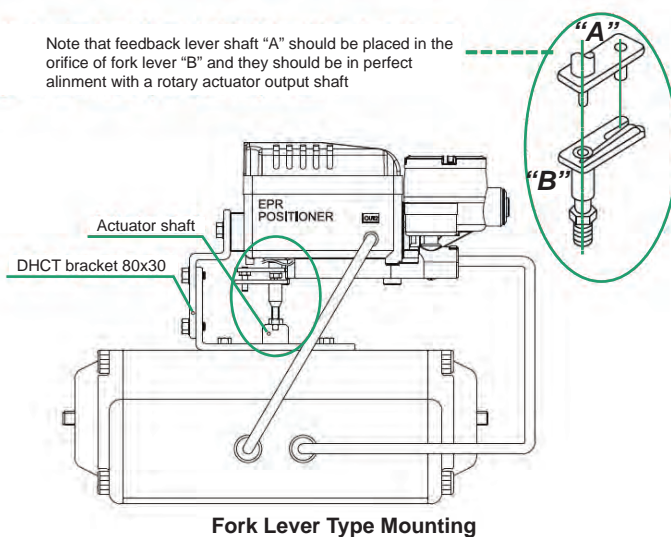
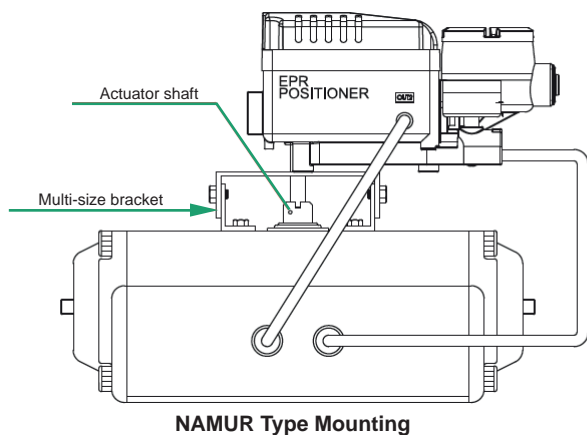
Specifications

PER	Rotary Type (Cam Feedback)	
	Single	Double
Input Signal	4-20 mA DC (Note.1)	
Input Resistance	235 ± 15Ω	
Air Supply	Max. 7.0 bar (100 psi) free of oil, water, and moisture	
Operating Angle	60 ~ 100° (Note.2)	
Pneumatic Connections	PT(Rc) 1/4 or NPT 1/4	
Electrical Connections	PF(G) 1/2 or NPT 1/2	
Protection Class	Ex dmb IIB+H ₂ T6 / Ex dmb IIC T6/T5 Ex ia IIC T6 / IP66	
Ambient Temperature	-20 ~ + 70 °C (Note.3)	
Pressure Gauge	Stainless steel	
Output Characteristics	Linear	
Linearity	Within ± 1.0 % F.S	Within ± 1.5 % F.S
Sensitivity	Within ±0.5 % F.S	
Hysteresis	Within 1.0 % F.S	
Repeatability	Within ± 0.5 % F.S	
Air Consumption	5 LPM (Sup. 1.4 kgf/cm ²)	
Flow Capacity	80 LPM (Sup. 1.4 kgf/cm ²)	
Material	Aluminum die-cast	
Weight	3.5 kg (with terminal box) 3.2 kg (without terminal box)	

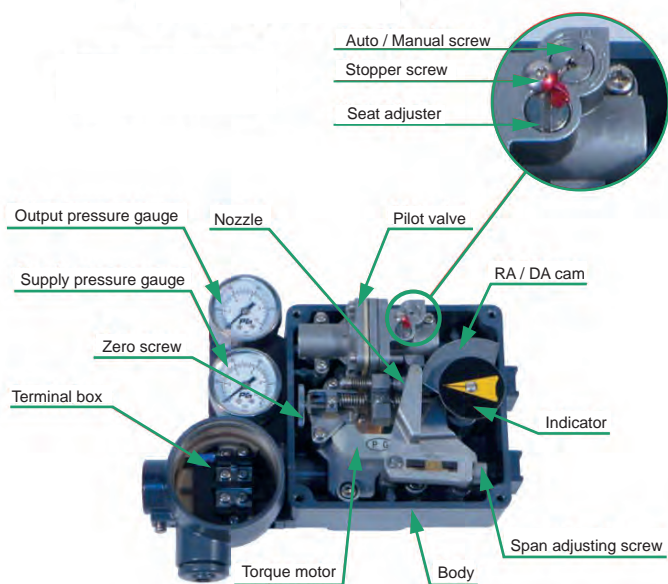
NOTE: 1) 1/2 SPLIT RANGE IS AVAILABLE FOR 4-12MA INPUT SIGNAL OR 12-20MA INPUT SIGNAL.
 2) OPERATING ANGLE CAN BE ADJUSTED TO 0-60° OR 0-100°.
 3) TEMPERATURE OPTION: UP TO +120 °C WITHOUT FEEDBACK OPTIONS; UP TO +85 °C WITH FEEDBACK OPTIONS; UP TO -40°C WITHOUT FEEDBACK OPTIONS.



Mounting

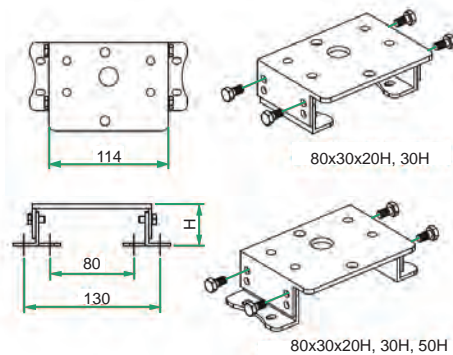


Internal View



Multi-size Bracket

TYPE	H
80x30x20H	41
80x30x30H	51
130x30x20H	41
130x30x30H	51
130x30x50H	71



Air Connections

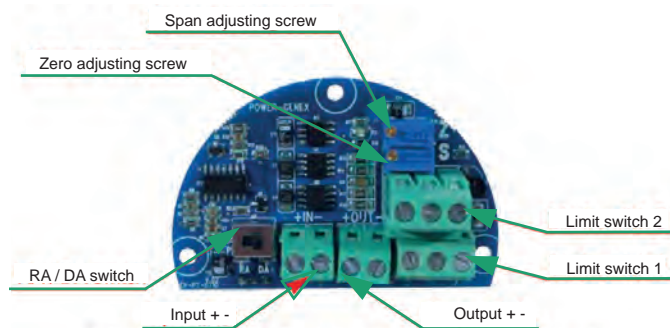
Direct Acting (DA)	
As the input signal increases, Actuator stem rotates clockwise.	<p>Single acting actuator</p> <p>OUT1 must be plugged</p>
As the input signal increases, Actuator stem rotates clockwise.	<p>Double acting actuator</p>

Direct Acting (RA)	
As the input signal increases, Actuator stem rotates counter clockwise.	<p>Single acting actuator</p> <p>OUT2 must be plugged</p>
As the input signal increases, Actuator stem rotates counter clockwise.	<p>Double acting actuator</p>

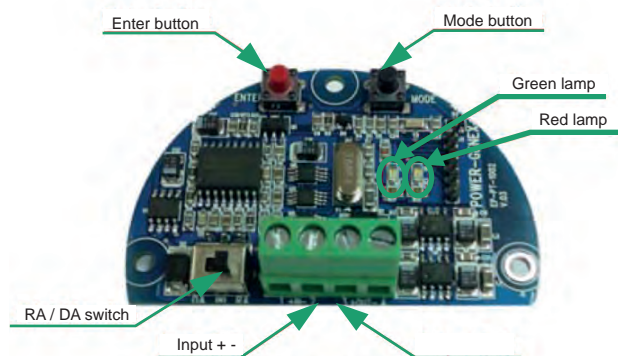


Position Transmitter Options (Built-in Type)

1. Board View

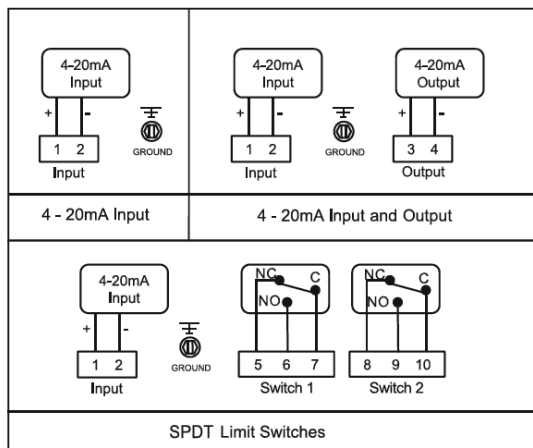


< Analog Position Transmitter & Limit Switches >



< Smart Position Transmitter > (Zero / Span Auto Setting)

3. Wiring Diagram



4. SPDT Limit Switches

a. Specifications

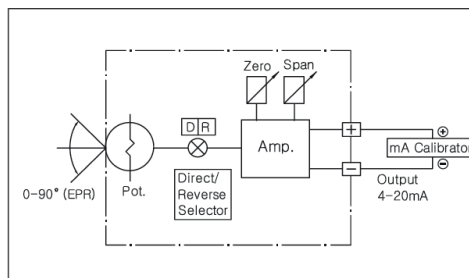
Contacts	SPDT Forme
AC Rating	16 A 1/2 HP 125/250 VAC
DC Rating	0.6 A 125 VDC / 0.3 A 250 VDC
Adjustment	Cams with set screws (L-wrench included for setting)

2. Position Transmitter (4-20mA output signal)

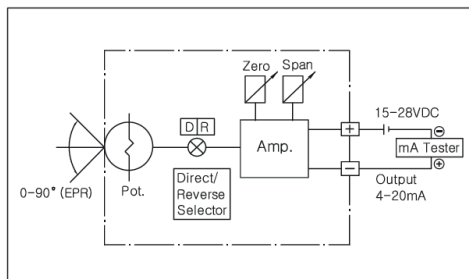
a. Specifications

TYPE	H
Power Supply Rating	5.5- 30 VDC loop power
Recommended Power Supply	24VDC
Output Signal	4 - 20 mA, 2-wire
Operating Temperature	-20°C ~ +85°C
Load Impedance	0-600ohms
Max. Output	30mADC
Linearity	±1.0%
Hysteresis	1.0 % of full scale
Repeatability	±0.5 % of full scale
Adjustment	Zero and Span in terminal box

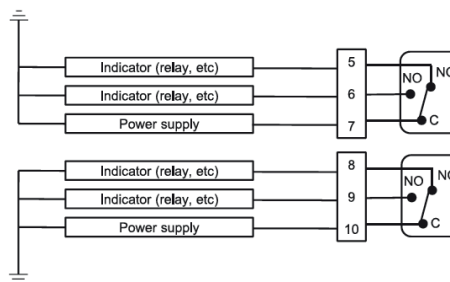
b. with mA calibrator



c. with multimeter

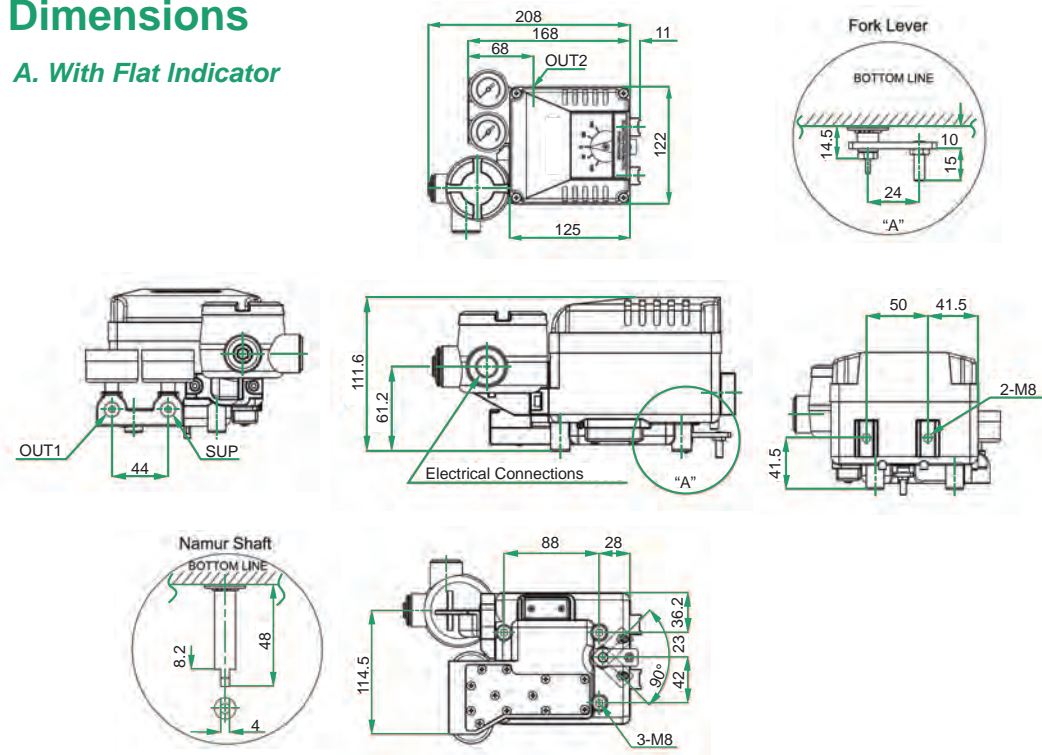


b. Wiring and Application

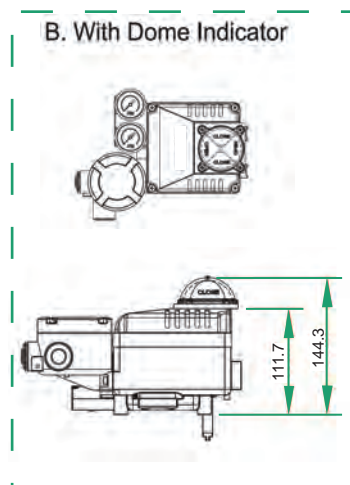


Dimensions

A. With Flat Indicator



B. With Dome Indicator



How to Order

PER—

Protection Class

Feedback Shaft

Pressure Gauges (SUP. OUT)

Pilot Valve Orifice

Position Feedback

Connection Threads

Dome Indicator

Operating Temp.

Mounting Bracket

DESCRIPTION	CODE	DESCRIPTION	CODE
Protection Class:	F KC / NEPSI flameproof Ex dmb IIB+H ² T6 A KC flameproof Ex dmb IIC T6/T5 D IECEx / ATEX / TR-CU flameproof Ex dmb IIC T6/T5 I IECEx / ATEX / TR-CU / KC intrinsically safe Ex ia IIC T6 W Weatherproof to IP66	Connection Threads: (pneumatic - electrical)	3 PT(Rc) 1/4 - PF(G) 1/2 (standard) 4 NPT 1/4 - NPT 1/2 5 PT(Rc) 1/4 - M20 x 1.5
Feedback Shaft:	N NAMUR shaft (direct mounting) A Fork lever M6 x 40L B Fork lever other size on request	Dome Indicator:	N Flat indicator (standard) D Dome indicator
Pressure Gauge:	1 6 bar (90 psi) 2 10 bar (150 psi)	Operating Temperature: (only for weatherproof type)	T 70 °C (standard) H 120°C(without position feedback option) 85 °C (with position feedback option) L - 40°C(without position feedback option)
Pilot Valve Orifice :	S Standard (Actuator volume over 180cm ³) M Small orifice (Ø1.0 or Ø0.7) (Actuator volume over 90 ~ 180cm ³)	Mounting Bracket: -NAMUR Shaft type :	N None R Multi-size NAMUR bracket for IEC 60534-6-2 / VDI 3845 (130x30x50 bracket on request) F PG bracket 80x30 for fork lever type E Multi-size NAMUR bracket for fork lever type (130x30x50 bracket on request)
Position Feedback: (only for weatherproof type)	N None (standard) O Analog position transmitter (4 - 20mA output signal) S Smart position transmitter (4 - 20mA output signal) L 2 x SPDT limit switch P 2 x proximity sensor P&F NJ2-V3-N M O+L Q O+P	-Fork Lever type	

