

Spring Return Multi-Signal Actuators for  
VP221 SmartX PIBCV, DN125-150 (5" ...6")



Product Description

MP2000 SRU/SRD/NSR Actuators with spring return safety function and non-spring return are for fine regulation of large control valves under the demand of the HVAC controller. MP2000 SR can be controlled by either a modulating or a 3-point control signal and is used specifically with the VP221x SmartX PIBCV valves.

Specifications

Nominal voltage	24 Vac/Vdc, 50 Hz/60 Hz
Power consumption	15 VA (24 V)
Control input signal	Modulating or 3-point floating
Power Supply Frequency	24 Vac/dc; +10 ... -15 %; 50/60 Hz
Control input Y	0 ... 10 V (2 ... 10 V) Ri = 40 kΩ 0 ... 20 mA (4 ... 20 mA) Ri = 500 Ω
Output U (Position Feedback)	0 ... 10 V (2 ... 10 V) 10kΩ 0...20 mA (4...20 mA) 510 Ω
Force	2000 N (450 lbf)
Stroke	50 mm (2")
Speed (selectable)	4 or 6 s/mm
Max. medium temperature	200 °C (392 °F)
Ambient temperature	0 ... + 55 °C (32...131 °F)
Storage and transport temperature	-40 ... +70 °C (-40... 158 °F) (storing for 3 days)
Humidity	5...95%
Protection class	III safety extra-low voltage
Grade of enclosure	IP 54, NEMA Type 2
Weight	8.6 kg (18.96 lbs) 6.26 kg NSR (13.8 lbs)
Safety function	Yes
Safety fuction runtime 50mm stroke	120 s
Manual operation	Electrical and Mechanical
Power failure response	
MP2000-SRD Safety function:	stem extends down
MP2000-SRU Safety function:	stem retracts up

Features

- Manual operation mechanical and/or electrical
- Position indication, LED signalization
- Selectable speed 4 or 6 s/mm (3 or 6 s/mm NSR)
- Automatic Stroke Calibration
- Linear to EQ% Curve Adaptation
- Anti-oscillation function
- Voltage or current output signal U
- Auto detection of Y signal
- 3-point or modulating control selection
- Thermal and overload protection
- Precise regulation and fast response on floating signal (0.01 s)

Standards/Directives

Heat	IEC 60068-2-2
Humidity	IEC 60068-2-3
Cold	IEC 60068-2-1
Vibration	IEC 60068-2-6

Regulatory Compliance: c-UL-us LISTED mark compliance per UL 60730-1 & -2-14 and CAN/CSA E60730-1 & -2-14. CE mark compliance per directives [2014/35/EU] LVD, [2014/30/EU] EMC, and [2011/65/EU] RoHS2. RCM mark compliance for Australia/New Zealand community.

Part Numbers

Part No.	Spring Return Direction
MP2000-SRD	Stem down, extends (valve closed)
MP2000-SRU	Stem up, retracts (valve open)
MP2000-NSR	Non-Spring Return

Dimensions mm (inch)

