



Contact our sales office for delivery dates and prices as this is a special model.

**SMC** P.G.Information (Specialized Product)

SP031X-055E  
P: IQ

## Explosion Proof 3 Port Solenoid Valve

Certified by NEPSI (Chinese Agency)

50-VPE500/700-X50

C CORPORATION  
-1, SOTO-KANDA,  
YODA-KU,  
YO 101-0021, JAPAN  
. <http://www.smcworld.com>

### ■Features:

NEPSI\* certified model (\*: National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation)



### ■Specifications

<b>Fluid</b>	Air		
<b>Type of actuation</b>	N.C. or N.O. (Convertible)		
<b>Pilot type</b>	Internal pilot	External pilot	
<b>Operating pressure range</b>	0.2 to 0.8 MPa	Supply pressure	-101.2 kPa to 0.8 MPa
		External pilot pressure	0.2 to 0.8 MPa
<b>Ambient and fluid temperature</b>	-10 to 50°C (No freezing)		
<b>Response time (Note)</b>	45 ms or less		
<b>Max. operating frequency</b>	5 Hz		
<b>Lubrication</b>	Not required		
<b>Override</b>	Non-locking push type, Push-turn locking D type		
<b>Mounting orientation</b>	Unrestricted		

Note: Based on dynamic performance test, JIS B8375-1981 (0.5 MPa, at rated voltage, without surge voltage suppressor)

## • Solenoid Specifications

\* : Option

Rated voltage	AC (50/60 Hz)		100 V, 200 V, 12 V*, 24 V*, 32 V*, 48 V*, 110 V*, 120 V*, 220 V*, 240 V*
	DC		24 V, 6 V*, 12 V*, 30 V*, 48 V*, 75 V*, 100 V*, 110 V*, 120 V*, 125 V*
Allowable voltage fluctuation	-15 to 10% of rated voltage		
Apparent power	AC	Inrush	9.1 VA (50 Hz), 7.8 VA (60 Hz)
		Holding	6.2 VA (50 Hz), 4.6 VA (60 Hz)
Power consumption	DC	3.5 W (rated voltage of 6, 12, 24 V) (Note)	
Explosion proof construction	Explosion proof construction d2G4, Exd II BT4		
Lead inlet type	Conduit proof pressure threads connection type, pressure-resistant packing type		
Electrical entry	Conduit terminal		
Coil insulation	Class B (130°C)		

## • Flow-rate Characteristics

### 50-VPE500

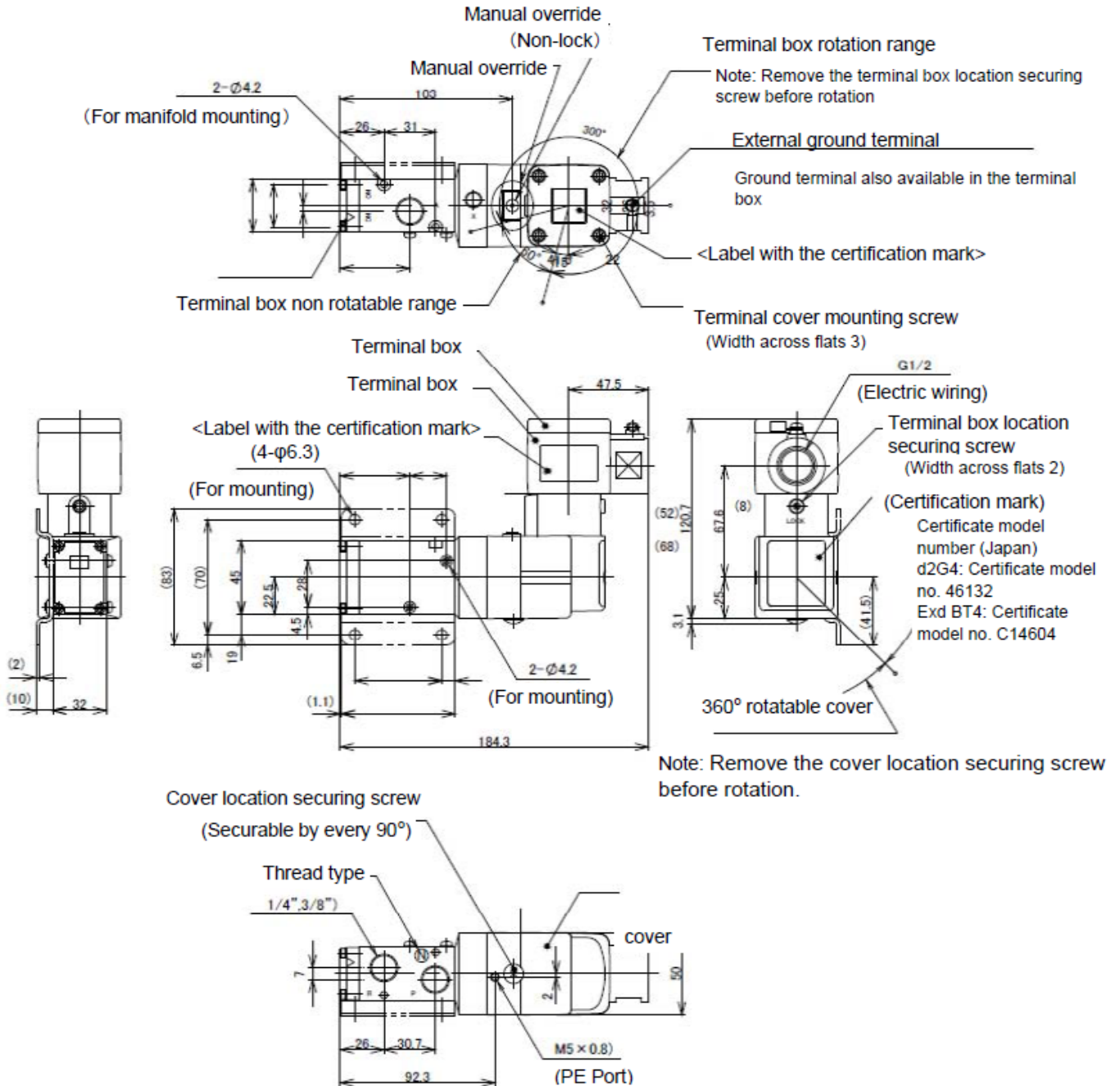
Port size	Flow-rate characteristics				
		1→2 (P→A)	2→3 (A→R)	3→2 (R→A)	2→1 (A→P)
1/4	C [dm <sup>3</sup> /(s·bar)]	6.6	7.4	6.9	7.5
	b	0.35	0.41	0.34	0.42
	Cv	1.6	2.0	1.7	2.0
3/8	C [dm <sup>3</sup> /(s·bar)]	9.1	9.0	8.8	9.3
	b	0.42	0.43	0.36	0.43
	Cv	2.4	2.4	2.2	2.5

### 50-VPE700

Port size	Flow-rate characteristics				
		1→2 (P→A)	2→3 (A→R)	3→2 (R→A)	2→1 (A→P)
3/8	C [dm <sup>3</sup> /(s·bar)]	12	12	12	13
	b	0.29	0.36	0.31	0.36
	Cv	2.9	3.1	3.1	3.4
1/2	C [dm <sup>3</sup> /(s·bar)]	15	14	15	16
	b	0.23	0.25	0.22	0.29
	Cv	3.8	3.8	3.7	4.0

## ■Dimensions: mm

50-VPE542-\*T-\*\*A\*-X50



**Caution** To ensure the safest possible operation of this product, please be sure to thoroughly read the "Safety Instructions" in our "Best Pneumatics" catalog before use.