

V290 Series

3-port Solenoid Valve / Direct Poppet

HOW TO ORDER

V 2 9 0 - 4 P - M5

ACTUATION

8	Normally open type
9	Normally closed type

USING TYPE

-	Standard type
U	Large flow capacity type
V	For a vacuum

Only V280V is available for a vacuum.

COIL RATED VOLTAGE

1	AC 110V
2	AC 220V
3	DC 12V
4	DC 24V
6	DC 6V
9	Special orders

CONNECTOR

AC voltages are not available for P-type plug connector.

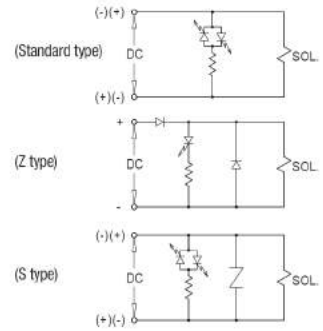
P	P-type Plug Connector (with 300 mm lead wires) 	PN	P-type Plug Connector (no connector)
E	E-type Plug Connector (with 300 mm lead wire) 	EN	E-type Plug Connector (no connector)
Q	Q-type Plug Connector (with 300 mm lead wire) 	QN	Q-type Plug Connector (no connector)
L	Lead wire type (with 300 mm lead wire) 	LL	Lead wire type (with 600 mm lead wire)

-	Without sub-base
M5	With sub-base

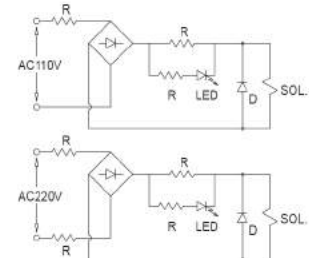
LAMP AND SURGE VOLTAGE SUPPRESSOR

-	Standard type (Non-polar)
Z	Polar lamp - with Diode (DC)
S	Non-polar lamp - with surge voltage suppressor (DC)

DC Circuit Diagram



AC Circuit Diagram



HOW TO ORDER CONNECTOR

CA2 - V4 - 6

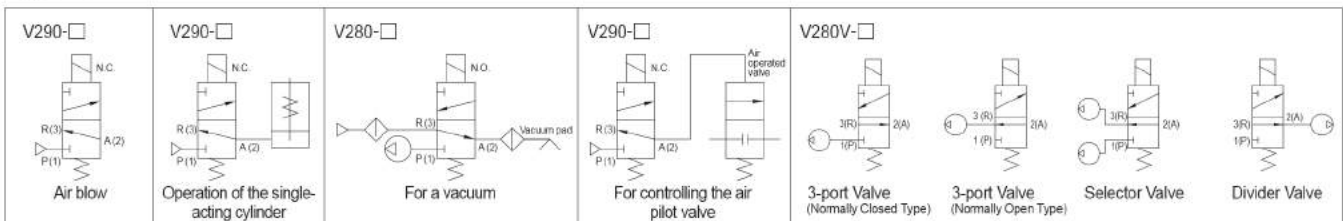
Connector assembly

COIL RATED VOLTAGE

V1	AC 110V
V2	AC 220V
V4	DC voltage

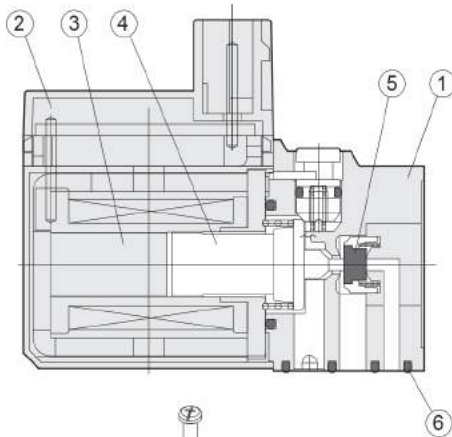
-	300 mm
6	600 mm
10	1,000 mm
15	1,500 mm
20	2,000 mm
25	2,500 mm
30	3,000 mm
50	5,000 mm

EX) USE OF THE VALVE

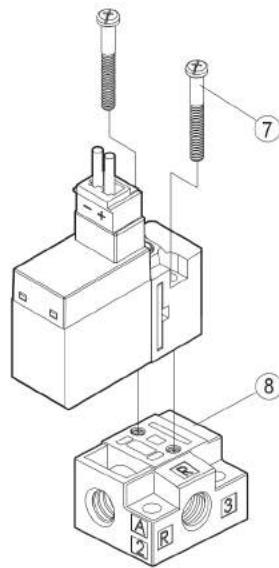
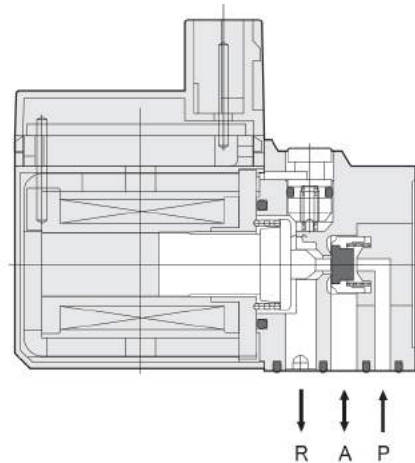


V290 (Normally closed)

NORMAL



ENERGIZED



No.	Part's name	Material
①	BODY	PLASTIC
②	COIL ASSY	-
③	FIXED CORE	SUS
④	MOVING CORE	SUS, PLASTIC
⑤	POPPET	NBR
⑥	GASKET	NBR
⑦	SCREW	-
⑧	BASE	Zn

■ SPECIFICATIONS

Items		Model	V290	V290U	V280	V280V ³⁾
Valve Structure			Direct-acting Poppet type			
Fluid			Air or insert gas			
Pressure range			0~0.7 MPa (0~7.1 kgf/cm ²)	0~0.6 MPa ¹⁾ (0~6.0 kgf/cm ²)	0~0.7 MPa (0~7.1 kgf/cm ²)	-100 kPa~0.2 MPa (-0.1~2.0 kgf/cm ²)
Effective area	P(1) → A(2)		0.3 mm ² (Cv 0.018)	0.5 mm ² (Cv 0.028)	0.2 mm ² (Cv 0.011)	0.3 mm ² (Cv 0.018)
	A(2) → R(3)		0.4 mm ² (Cv 0.024)	0.5 mm ² (Cv 0.028)	0.2 mm ² (Cv 0.011)	0.4 mm ² (Cv 0.024)
Ambient and fluid temperature			Max. 50°C ²⁾			
Response time			5 ms or less			
Lubrication			Not required			
Manual operation			Push Type			
Shock / Vibration resistance			150/30 (m/s ²)			
Protection structure			Dust proof			
Coil rated voltage			DC 6V, 12V, 24V / AC 110V, 220V		DC 6V, 12V, 24V	DC 6V, 12V, 24V / AC 110V, 220V
Allowable voltage			±10% of rated voltage			
Coil insulation			Class B or equivalent (130°C)			
Power consumption			DC: 1W / AC 110V: 1.0VA / AC 220V: 2.0VA			

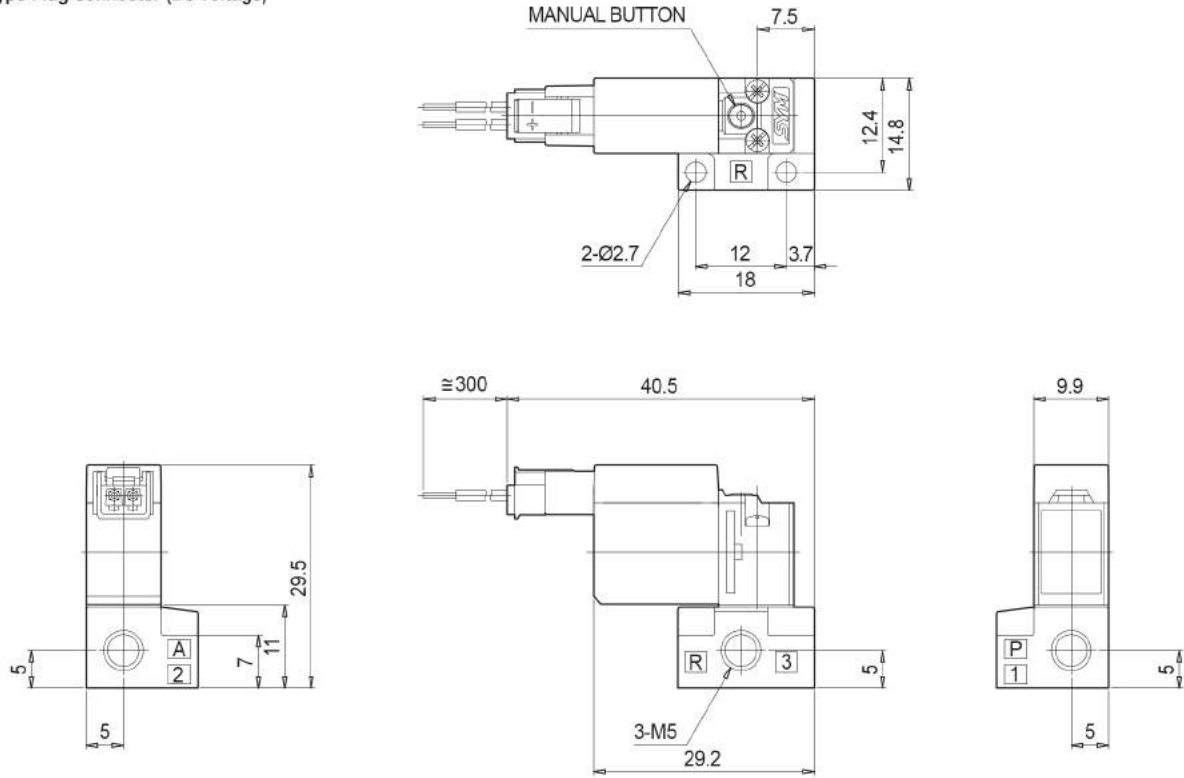
1) Spec of high pressure (0~0.7 Mpa, Power consumption DC: 1.4W) is made to order.

2) There should be a measure to prevent freezing and dew condensation at a low temperature below 5°C.

3) V280 is universal type valve for a vacuum.

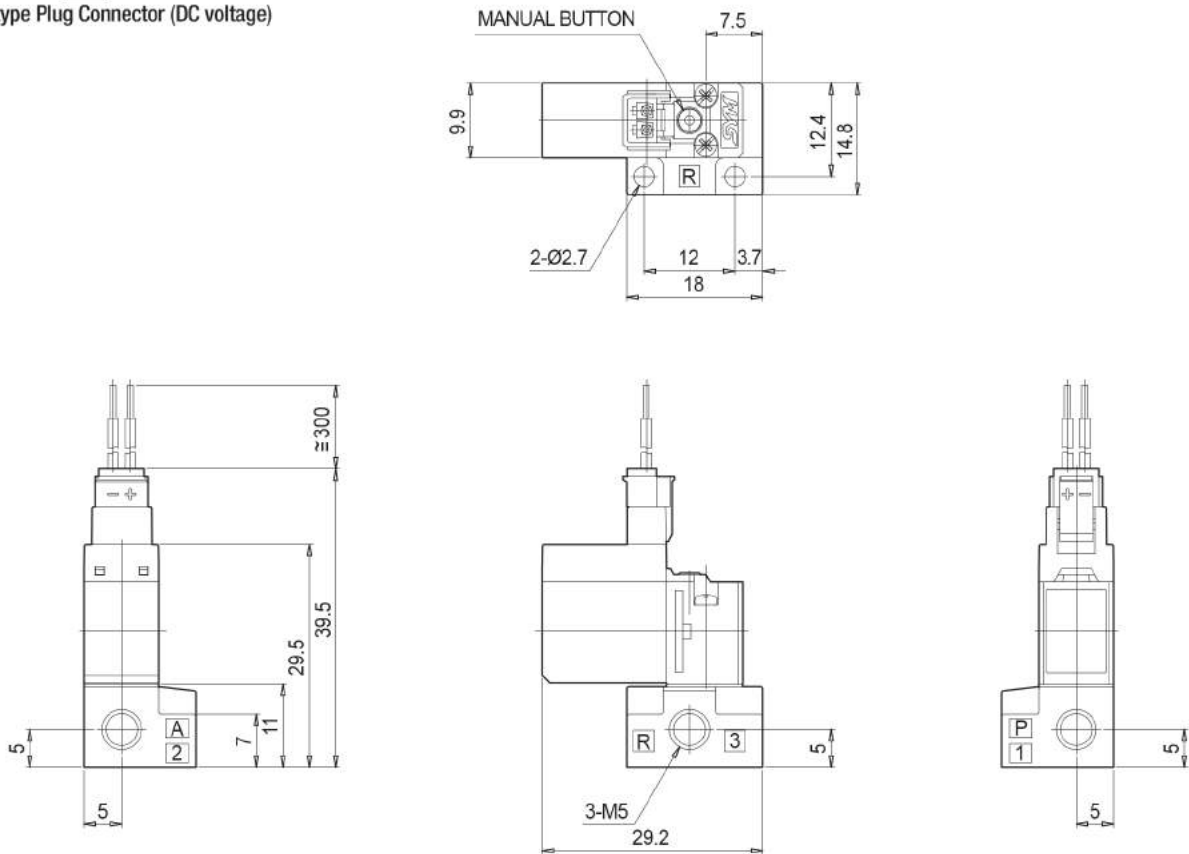
V290 - 4 P-M5

P-type Plug Connector (DC voltage)



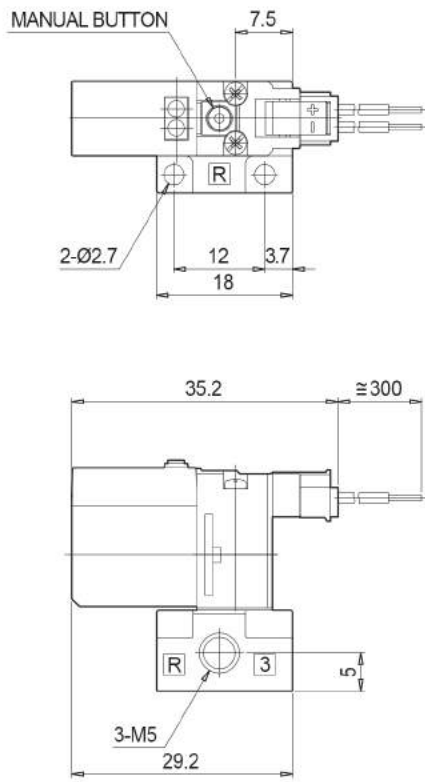
V290 - 4 E-M5

E-type Plug Connector (DC voltage)



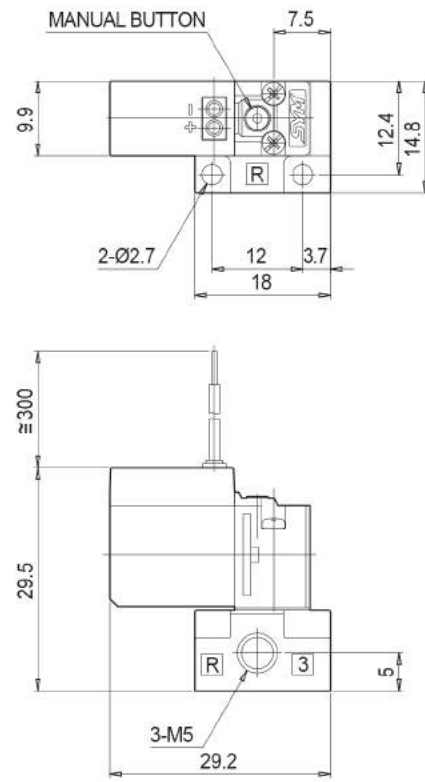
V290 - 4 Q-M5

Q-type Plug Connector (DC voltage)



V290 - 4 L-M5

Lead wire type (DC voltage)



V290 - 2 E-M5

E-type Plug Connector (AC voltage)

