



SY3120



SY3220



SY5220



SY7120

◆ Specifications

| Series | | SY3000 | SY5000 | SY7000 |
|-----------------------------------|--------------------------|--|--------|--------|
| Fluid | | Air | | |
| Internal pilot | 2 position single | 0.15~0.7 MPa | | |
| Operating pressure range | 2 position double | 0.1~0.7 MPa | | |
| | 3 position | 0.2~0.7 MPa | | |
| Ambient and fluid temperature | | -10~50°C (No freezing) | | |
| Max. operating frequency | 2 position single,double | 10 Hz | 5 Hz | 5 Hz |
| | 3 position | 3 Hz | 3 Hz | 3 Hz |
| Manual override(Manual operation) | | Non-locking push type | | |
| Pilot exhaust method | | Common exhaust type for main and pilot valve | | |
| Lubrication | | Not required | | |
| Mounting orientation | | Unrestricted | | |
| Impact/Vibration resistance | | 150/30 (m/s ²) | | |
| Enclosure | | Dustproof | | |

◆ Solenoid Specifications

| | | | |
|----------------------------------|------------|-----------------------------------|-----------------------------------|
| Electrical entry | | L plug connector(L) | |
| Coil rated voltage(V) | DC | 24, 12 | |
| | AC 50/60Hz | 110, 220 | |
| Allowable voltage fluctuation(%) | | ± 10% of rated voltage | |
| Power consumption | DC | 0.35W (With indicator light: 0.4) | |
| | AC | Standard | 110V |
| Apparent power | AC | 220V | 2.5VA (With indicator light: 2.6) |
| | | Indicator light | LED |

◆ Response Time

| Series | Type of actuation | Response time (at the pressure of 0.5MPa) | |
|--------|-------------------|---|--|
| | | Without light/surge voltage suppressor | With light/surge voltage suppressor Type S, Z |
| SY3000 | 2 position single | 12ms or less | 15ms or less |
| | 2 position double | 10ms or less | 13ms or less |
| | 3 position | 15ms or less | 20ms or less |
| SY5000 | 2 position single | 19ms or less | 26ms or less |
| | 2 position double | 18ms or less | 22ms or less |
| | 3 position | 32ms or less | 38ms or less |
| SY7000 | 2 position single | 31ms or less | 38ms or less |
| | 2 position double | 27ms or less | 30ms or less |
| | 3 position | 50ms or less | 56ms or less |

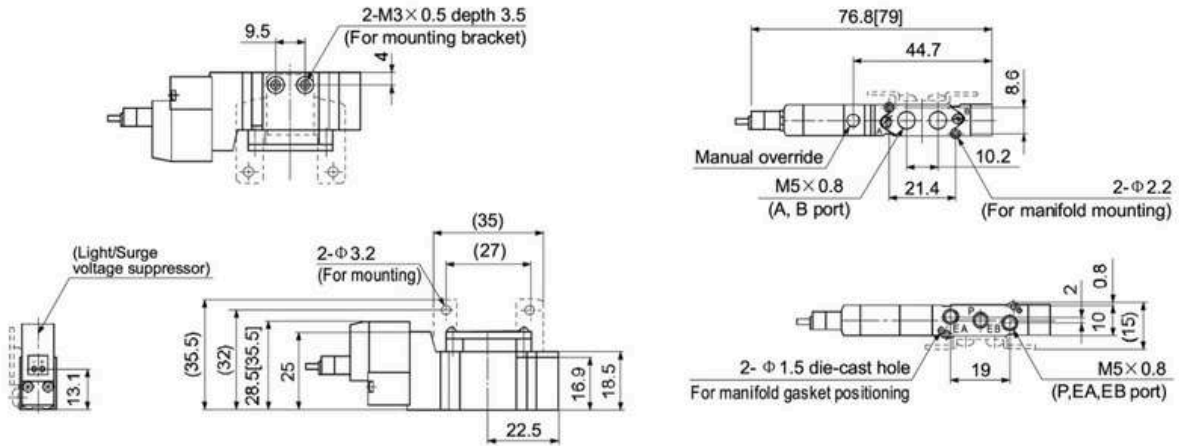
◆ Flow Characteristics/Weight

| Valve model | Type of actuation | | Port size | | Flow characteristics | | | | | | Weight(g) | |
|-------------|-------------------|----------------|---------------------|--------------|------------------------------|----------------|----------------|------------------------------|------|------|-----------|------------------|
| | | | 1,5,3 (P,EA,EB) | 4,2 (A,B) | 1→4/2(P→A/B) | | | 4/2→5/3(A/B→EA/EB) | | | | |
| | | | | | C(kdm ³ /(s·bar)) | b | Cv | C(kdm ³ /(s·bar)) | b | Cv | | L plug connector |
| SY3□20-□-M5 | 2 position | Single | M5×0.8 | M5×0.8 | 0.61 | 0.44 | 0.16 | 0.64 | 0.45 | 0.18 | 53 | |
| | | Double | | | | | | | | | 74 | |
| | 3 position | Closed center | | | 0.48 | 0.46 | 0.13 | 0.47 | 0.43 | 0.13 | 76 | |
| | | Exhaust center | | | | | | | | | | |
| SY5□20-□-01 | 2 position | Single | 1/8 | 1/8 | 1.9 | 0.35 | 0.49 | 2.4 | 0.39 | 0.61 | | 72 |
| | | Double | | | | | | | | | | 93 |
| | 3 position | Closed center | | | 1.7 | 0.43 | 0.45 | 1.8 | 0.35 | 0.46 | 98 | |
| | | Exhaust center | | | | | | | | | | |
| SY7□20-□-02 | 2 position | Single | 1(P) Port 1/4 | 1/4 | 4.1 | 0.23 | 0.93 | 3.3 | 0.33 | 0.81 | | 104 |
| | | Double | | | | | | | | | | 125 |
| | 3 position | Closed center | | | 2.9 | 0.31 | 0.70 | 2.4 | 0.38 | 0.63 | 133 | |
| | | Exhaust center | | | | | | | | | | |
| 3 position | Pressure center | 2.5 | 0.39 | 0.65 | 3.4 (2.1) | 0.35 (0.38) | 0.82 (0.54) | | | | | |
| | Pressure center | | | | | | | | | | | |

Dimensions

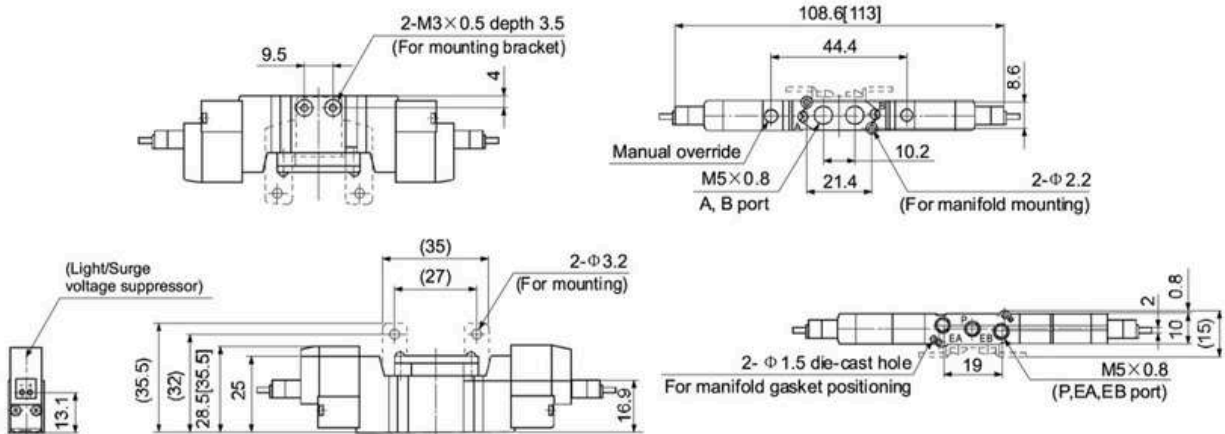
2 position single

L plug connector(L):SY3120-□L□□-M5(-F2)



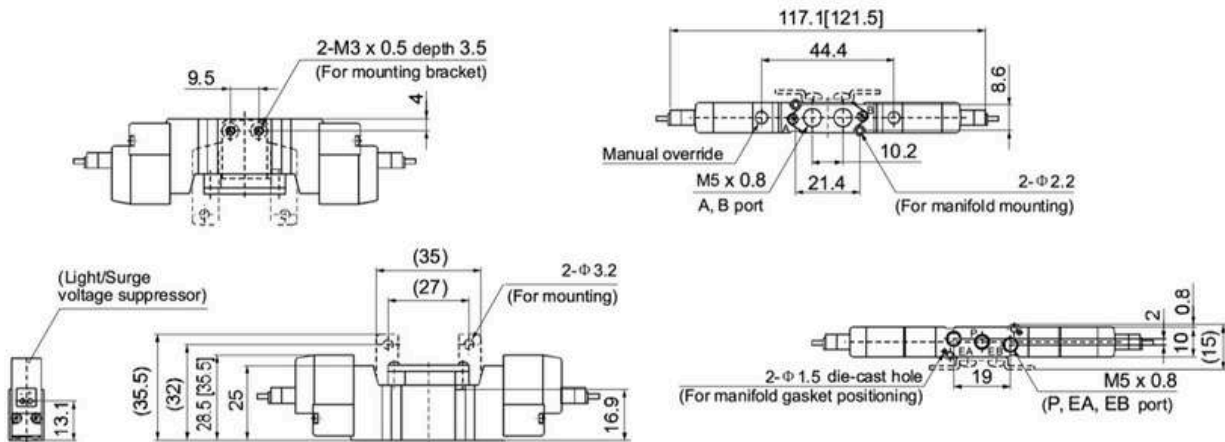
2 position double

L plug connector(L):SY3220-□L□□-M5(-F2)



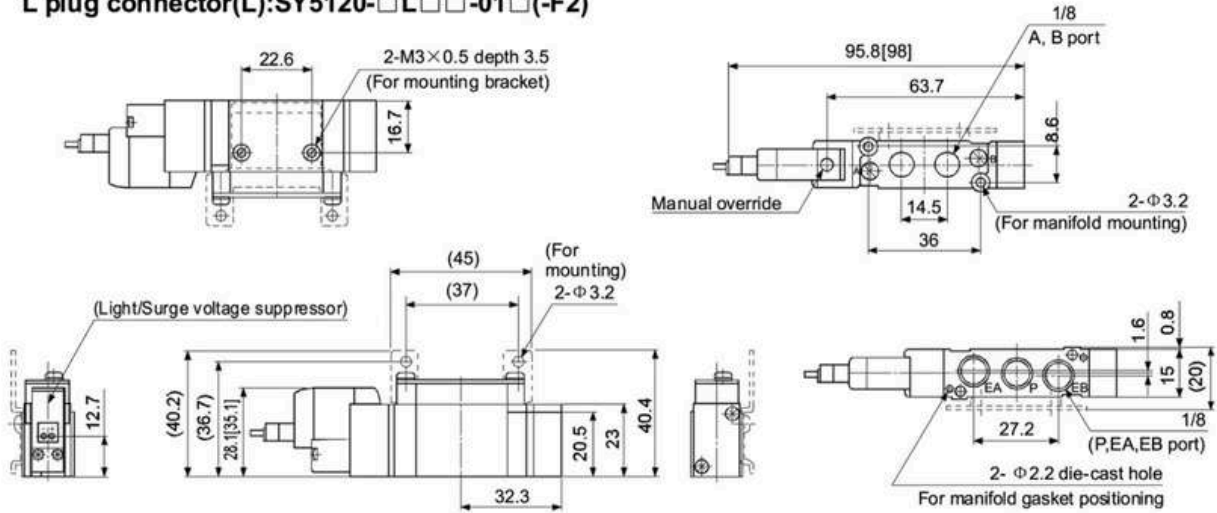
3 position closed center/exhaust center/pressure center

L plug connector(L):SY3³/₅20-□L□□-M5(-F2)



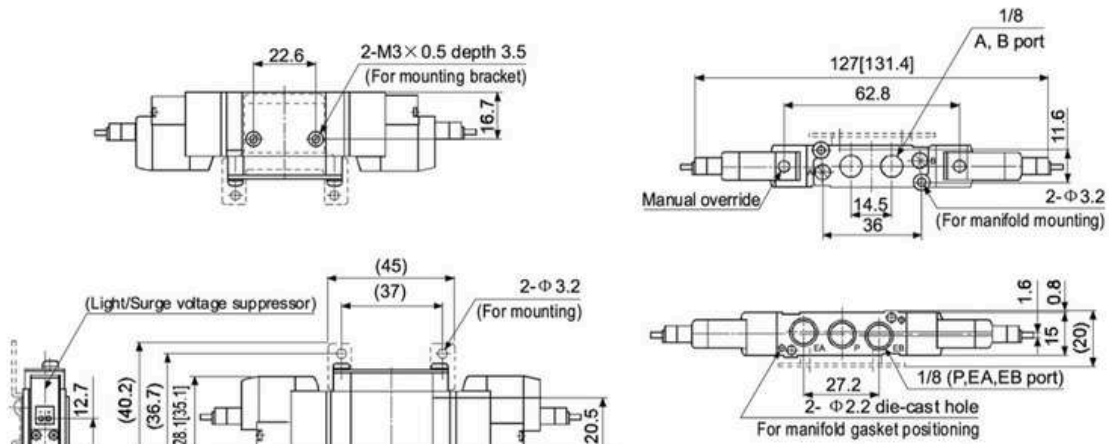
2 position single

L plug connector(L):SY5120-□L□□-01□(-F2)



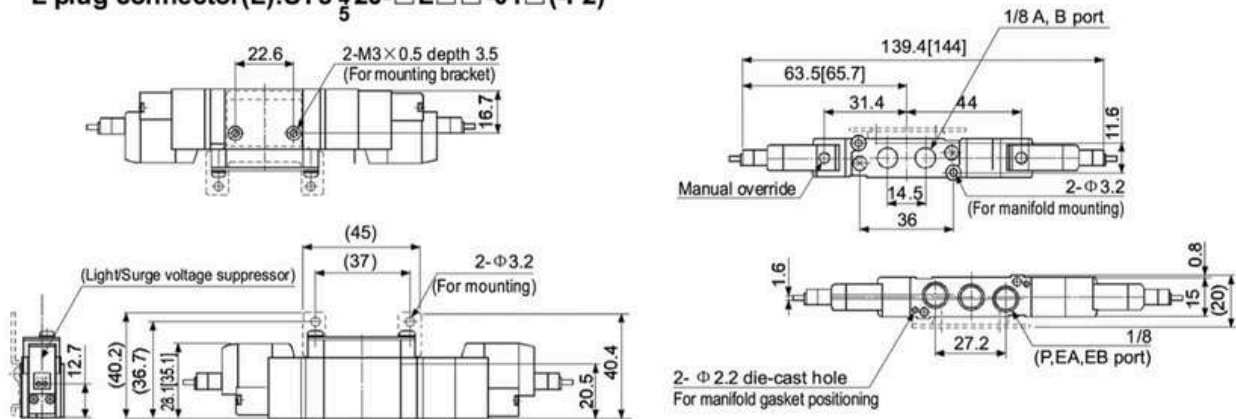
2 position double

L plug connector(L):SY5220-□L□□-01□(-F2)



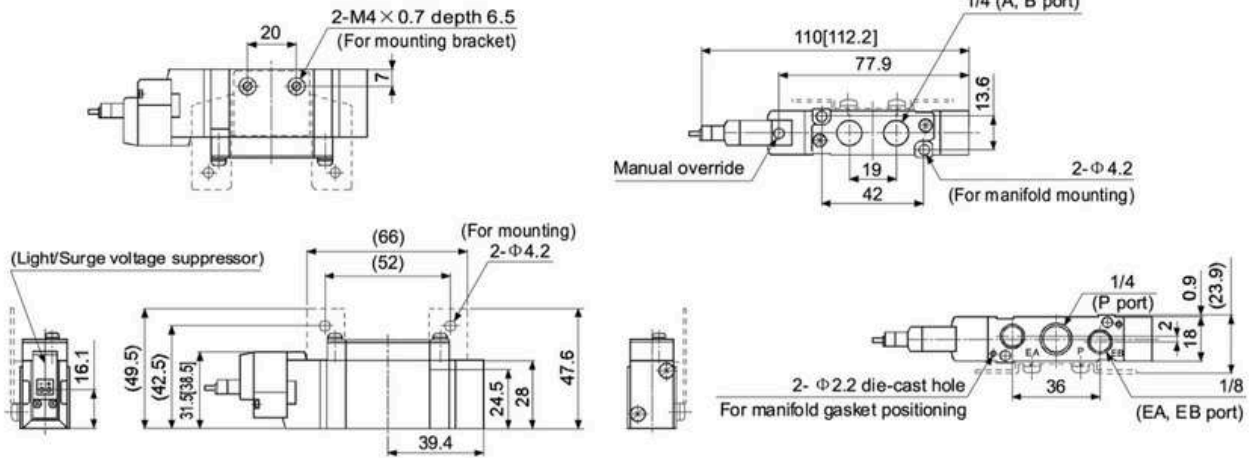
3 position closed center/exhaust center/pressure center

L plug connector(L):SY5³/₄20-□L□□-01□(-F2)



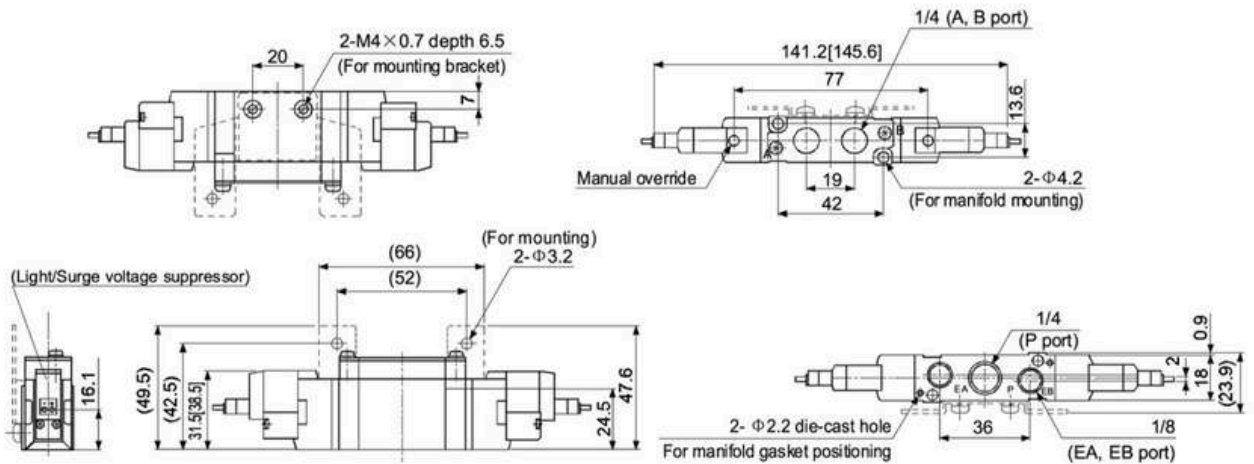
2 position single

L plug connector(L):SY7120-□L□□-02□(-F2)



2 position double

L plug connector(L):SY7220-□L□□-02□(-F2)



3 position closed center/exhaust center/pressure center

L plug connector(L):SY7220-□L□□-02□(-F2)

