

◆ MODEL

PM-80



PM-80F



◆ SPECIFICATIONS

| Model Number | Maximum Pressure bar | Connecting PT | Maximum Flow lpm | Weight Kg |
|---------------------------------|-------------------------|---|---------------------|------------------|
| PM-50 | 250 (3625 psi) | 2" | 200 (52.84 gpm) | 1.17 (2.6 lbs) |
| SPM-50 | 400 (5801 psi) | | | |
| PM-80 | 250 (3625 psi) | 3" | 400 (105.67 gpm) | 2.8 (6.2 lbs) |
| PM-80F | | | | 8 (17.6 lbs) |
| SPM-80 | 400 (5801 psi) | | | 2.8 (6.2 lbs) |
| PM-90 | 250 (3625 psi) | 3-1/2" | 630 (166.4 gpm) | 3.8 (8.38 lbs) |
| PM-90F | | | | 11.3 (24.9 lbs) |
| SPM-90 | 400 (5801 psi) | | | 3.8 (8.38 lbs) |
| PM-100 | 250 (3625 psi) | 4" | 1000 (264.1 gpm) | 6 (13.2 lbs) |
| PM-100F | | | | 14.5 (31.96 lbs) |
| SPM-100 | 400 (5801 psi) | | | 6 (13.2 lbs) |
| PM-125 | 250 (3625 psi) | 5" | 1600 (422.7 gpm) | 10.8 (23.8 lbs) |
| PM-125F | | | | 23.8 (54.47 lbs) |
| SPM-125 | 400 (5801 psi) | | | 10.8 (23.8 lbs) |
| PM-150 | 250 (3625 psi) | 6" | 2500 (660.4 gpm) | 23.5 (51.8 lbs) |
| PM-150F | | | | 37 (81.57 lbs) |
| SPM-150 | 400 (5801 psi) | | | 23.5 (51.8 lbs) |
| PM-200 | 250 (3625 psi) | 8" | 4000 (1056 gpm) | 50 (110.2 lbs) |
| SPM-200 | 400 (5801 psi) | | | |
| Fluid Type | | ISO VG 32 , 46 , 68 | | |
| Viscosity cSt | | 10~400 (59~1854 SSU) | | |
| Operating Temperature °C | | -15~70 (-5~158 °F) | | |
| Contamination Level | | $\beta_{10} \geq 75$, Under NAS Class 12, 25 μ | | |

- Metric Threads Standard, Inch available on request

◆ HOW TO ORDER

| | | |
|----------|----------|----------|
| 1 | 2 | 3 |
| VCPM | - 80 | F |

1 VALVE SERIES

VCPM-Directional Control Valves
(Pre-fill Valves)

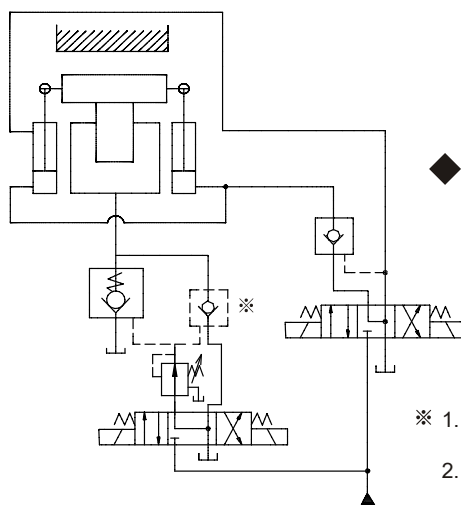
2 SUBPLATE MOUNTING SIZE:

- 50= 2"(50.8mm)
- 80= 3"(76.2mm)
- 90= 3-1/2"(89mm)
- 100= 4"(101.6mm)
- 125= 5"(127mm)
- 150= 6"(152.4mm)
- 200= 8"(203.2mm)

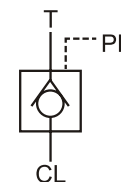
3 FLANGE CONNECTING TYPE

F : Flange (it is recommended that the customer provides the flange)
None : Standand

◆ Example



◆ CONTROL PORT(S)

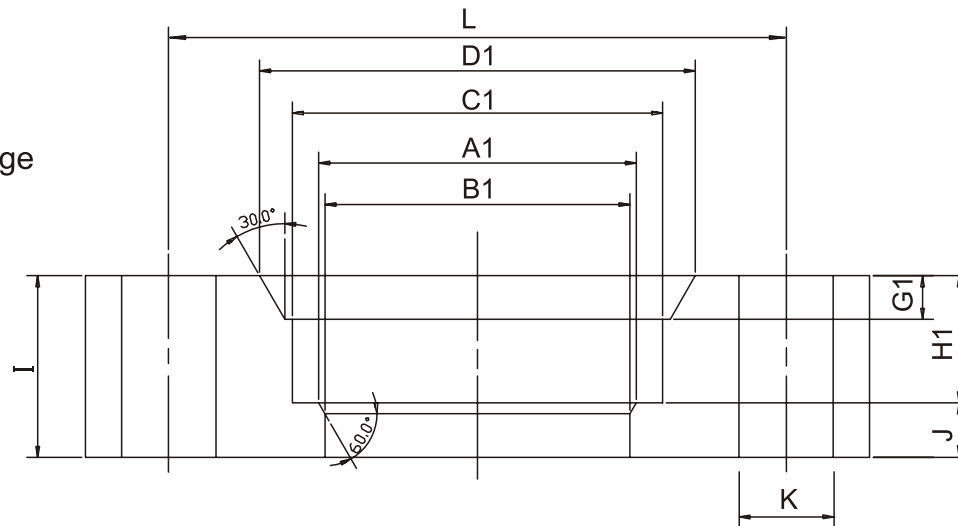


- * 1. Keep system pressure under 140 bar when pilot to open prefill valve.
- 2. Pilot pressure "PL" needs to be 4.5times the pressure in "CL".

◆ FLANGE DIMENSIONS

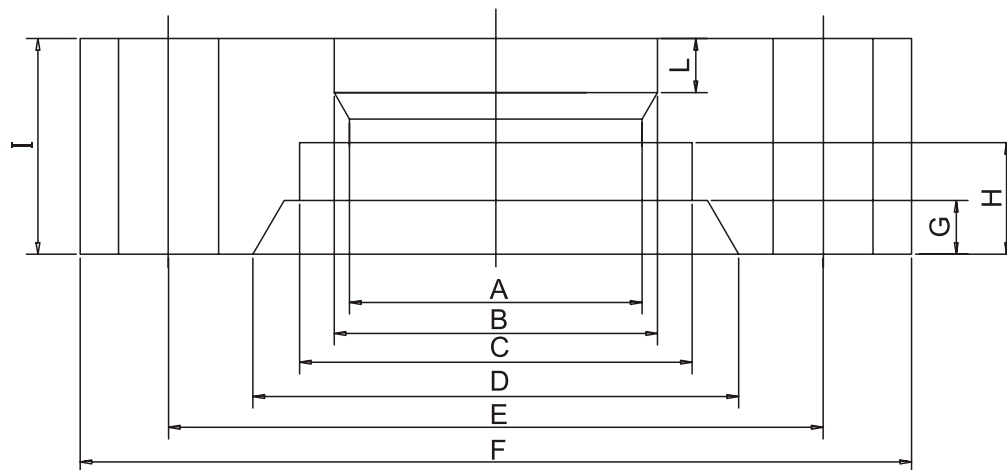
PM-*

T side flange



| MODEL | I | J | A1 | B1 | C1 | D1 | L | H1 | G1 | SCREW | QT | K |
|--------|-----------|-----------|-----------|------------|--------------|------------|-------------|-----------|----------|-----------|----|------------|
| PM-80 | 45(1.77") | 12(0.47") | 79(3.11") | 73(2.87") | 90.2(3.55") | 105(4.13") | 146(5.75") | 25(0.98") | 5(0.2") | M16 x140L | 6 | 18(0.71") |
| PM-90 | 50(1.97") | 14(0.55") | 91(3.58") | 88(3.46") | 102.8(4.04") | 120(4.72") | 165(6.5") | 27(1.06") | 5(0.2") | M18 x170L | 6 | 20(0.79") |
| PM-100 | 55(2.17") | 18(0.71") | - | 108(4.25") | 115.5(4.55") | 135(5.31") | 191(7.52") | 22(0.87") | 5(0.2") | M20 x190L | 6 | 22(0.87") |
| PM-125 | 65(2.56") | 25(0.98") | - | 132(5.2") | 141.2(5.56") | 165(6.5") | 238(9.37") | 25(0.98") | 5(0.2") | M24 x230L | 6 | 26(1.02") |
| PM-150 | 75(2.95") | 40(1.57") | 155(6.1") | 155(6.1") | 167(6.57") | 181(7.13") | 280(11.02") | 30(1.18") | 7(0.27") | M30 x260L | 6 | 32(1.26") |
| PM-200 | 90(3.54") | - | - | 218(8.58") | 270(10.62") | - | 367(14.45") | 40(1.57") | - | M30 | 16 | 33(12.99") |

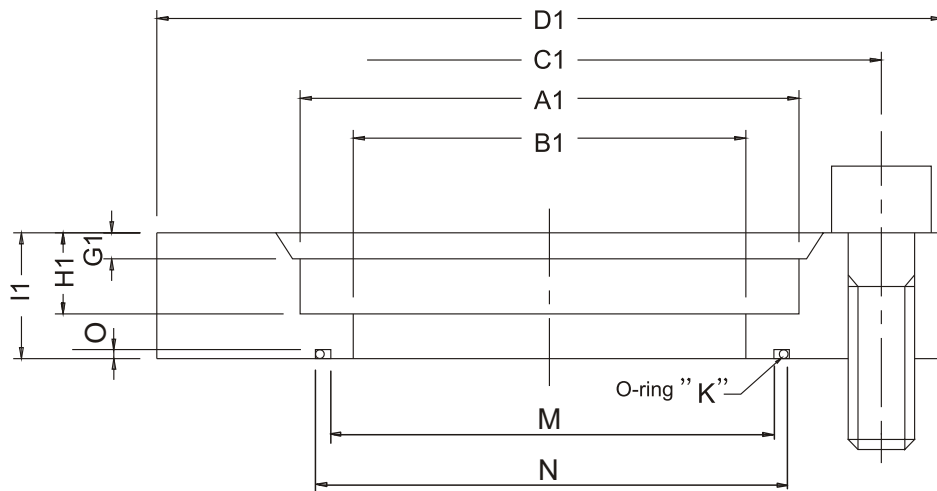
PM-* CL side flange



| MODEL | A | B | C | D | E | F | G | H | I | L |
|--------|------------|------------|--------------|------------|-------------|-------------|-----------|-----------|-----------|-----------|
| PM-80 | 71(2.79") | 73(2.87") | 90.2(3.55") | 115(4.53") | 146(5.75") | 180(7.08") | 10(0.39") | 23(0.9") | 45(1.77") | 12(0.47") |
| PM-90 | 82(3.23") | 88(3.46") | 102.8(4.04") | 125(4.92") | 165(6.5") | 206(8.11") | 10(0.39") | 23(0.9") | 50(1.97") | 14(0.55") |
| PM-100 | 100(3.93") | 108(4.25") | 115.5(4.55") | 140(5.51") | 191(7.52") | 240(9.45") | 12(0.47") | 28(1.1") | 55(2.17") | 18(0.71") |
| PM-125 | 112(4.41") | 132(5.2") | 141.2(5.56") | 170(6.69") | 238(9.37") | 300(11.8") | 15(0.59") | 20(0.79") | 65(2.56") | 25(0.98") |
| PM-150 | - | 168(6.61") | 167(6.57") | 220(8.66") | 280(11.02") | 335(13.19") | 15(0.59") | 30(1.18") | 75(2.95") | 65(2.56") |
| PM-200 | - | 218(8.58") | 270(10.62") | - | 367(14.45") | 422(16.6") | - | 40(1.57") | 90(3.54") | - |

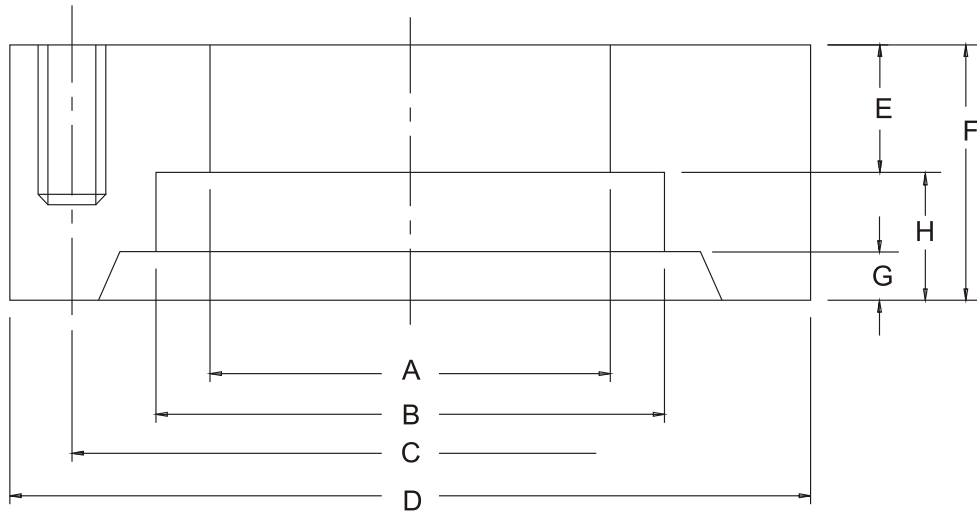
◆ FLANGE DIMENSIONS

PM-*F Series T side flange



| MODEL | A1 | B1 | C1 | D1 | I1 | H1 | G1 | SCREW | QT | K | M | N | O |
|---------|--------------|-------------|-------------|-------------|------------|------------|----------|----------|----|------|------------|------------|------------|
| PM-80F | 90.2(3.55") | 71(2.79") | 120 (4.72") | 142 (5.59") | 23 (0.95") | 15 (0.59") | 5(0.2") | M12 x40L | 6 | G80 | 77(3.03") | 85(3.35") | 2.4(0.09") |
| PM-90F | 101.6 (4") | 88 (3.46") | 135 (5.31") | 160 (6.3") | 23 (0.95") | 15 (0.59") | 5(0.2") | M12 x40L | 6 | G100 | 97(3.82") | 105(4.13") | 2.4(0.09") |
| PM-100F | 115.5(4.55") | 106 (4.17") | 148 (5.83") | 170 (6.69") | 23 (0.95") | 15 (0.59") | 5(0.2") | M12 x40L | 6 | G115 | 112(4.41") | 120(4.72") | 2.4(0.09") |
| PM-125F | 141.2(5.56") | 130(5.12") | 175 (6.89") | 200 (7.87") | 31(1.22") | 15 (0.59") | 5(0.2") | M12 x40L | 6 | G140 | 137(5.39") | 145(5.71") | 2.4(0.09") |
| PM-150F | 167 (6.57") | 155 (6.1") | 200 (7.87") | 225 (8.85") | 31(1.22") | 15 (0.59") | 7(0.27") | M12 x40L | 8 | G170 | 165(6.50") | 180(7.09") | 4.6(0.18") |

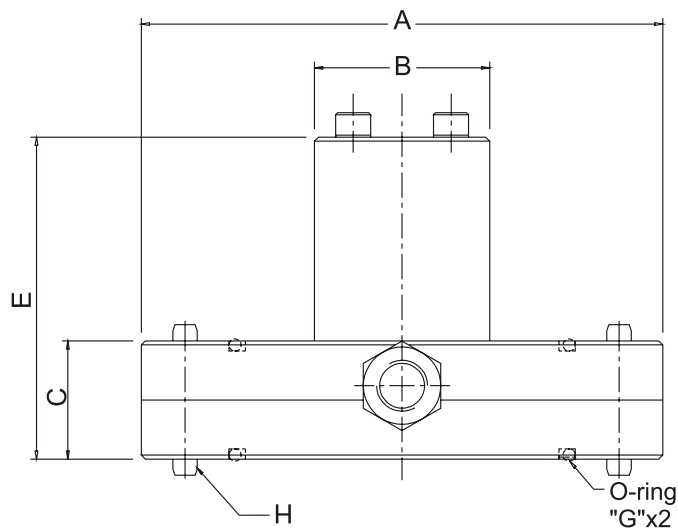
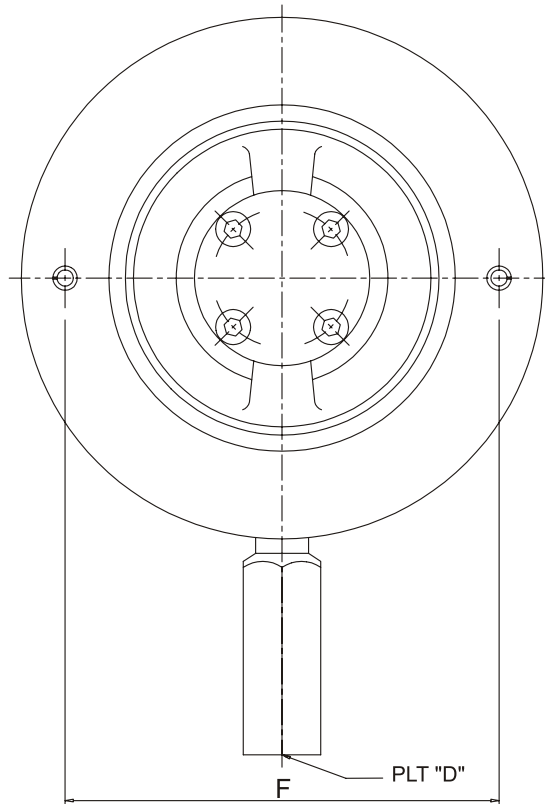
PM-*F Series CL side flange



| MODEL | A | B | C | D | E | F | G | H |
|---------|-------------|--------------|-------------|-------------|------------|------------|------------|------------|
| PM-80F | 71(2.79") | 90.2(3.55") | 146 (5.75") | 180 (7.09") | 22 (0.87") | 45 (1.77") | 10(0.39") | 23 (0.95") |
| PM-90F | 88 (3.46") | 101.6 (4") | 165 (6.5") | 200 (7.87") | 30 (1.18") | 50 (1.97") | 10(0.39") | 23 (0.95") |
| PM-100F | 106 (4.17") | 115.5(4.55") | 191 (7.52") | 230 (9.06") | 32 (1.26") | 60 (2.36") | 12(0.47") | 28(1.1") |
| PM-125F | 130(5.12") | 141.2(5.56") | 230 (9.06") | 270 (10.6") | 50 (1.97") | 80 (3.15") | 15 (0.59") | 20(0.79") |
| PM-150F | 155 (6.1") | 167 (6.57") | 260(10.23") | 300(11.81") | 40 (1.57") | 80 (3.15") | 15 (0.59") | 30(1.18") |

◆ DIMENSIONS

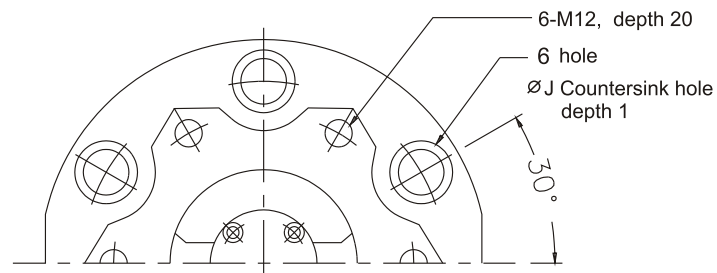
PM-*



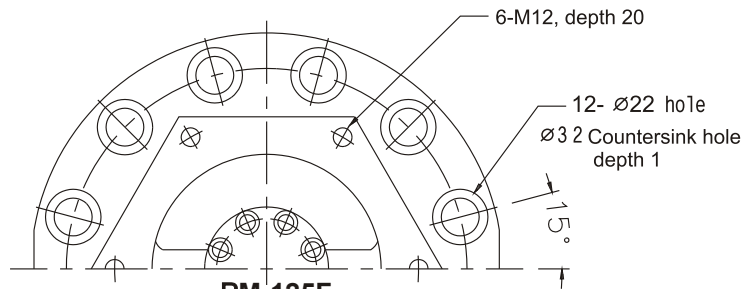
| MODEL | SIZE | A | B | C | D | E | F | G | H |
|--------|--------|------------|------------|-------------|-------|------------|-------------|------|------------|
| PM-50 | 2" | 82(3.22") | 32 (1.26") | 28(1.10") | PT1/4 | 55 (2.17") | — | G60 | — |
| PM-80 | 3" | 128(5.04") | 43 (1.69") | 29(1.14") | PT1/4 | 78 (3.07") | 106(4.17") | G80 | 6 (0.24") |
| PM-90 | 3 1/2" | 143(5.63") | 50 (1.97") | 35 (1.38") | PT1/4 | 87 (3.43") | 125(4.92") | G100 | 6 (0.24") |
| PM-100 | 4" | 169(6.65") | 56 (2.2") | 38.5(1.52") | PT1/4 | 103(4.05") | 145(5.71") | G115 | 6 (0.24") |
| PM-125 | 5" | 212(8.35") | 69 (2.72") | 44 (1.73") | PT1/4 | 118(4.65") | 180(7.09") | G140 | 6 (0.24") |
| PM-150 | 6" | 248(9.76") | 89 (3.5") | 72 (2.83") | PT3/8 | 181(7.13") | 220(8.66") | G180 | 10 (0.39") |
| PM-200 | 8" | 310(12.2") | 115(4.53") | 105 (4.13") | PT1/2 | 233(9.17") | 284(11.18") | P235 | 10 (0.39") |

◆ DIMENSIONS

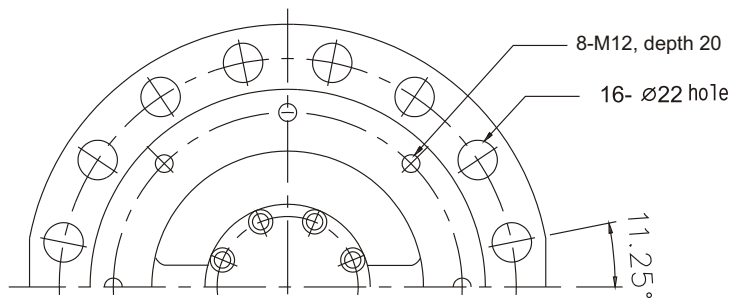
PM-*F Series



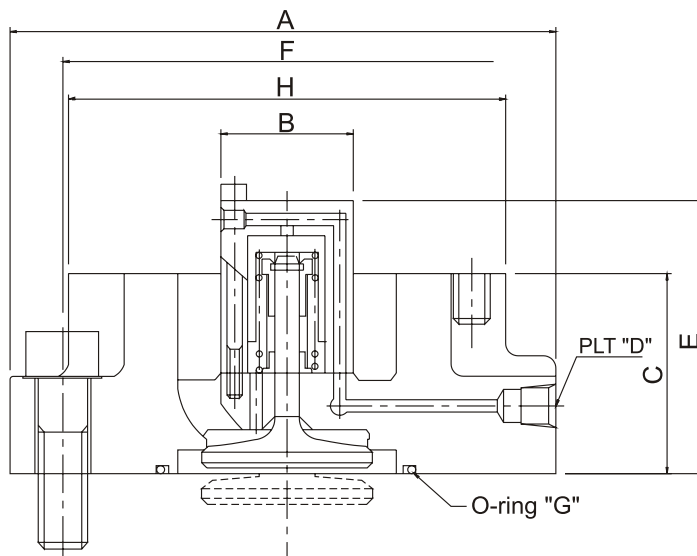
PM-80/90/100F



PM-125F

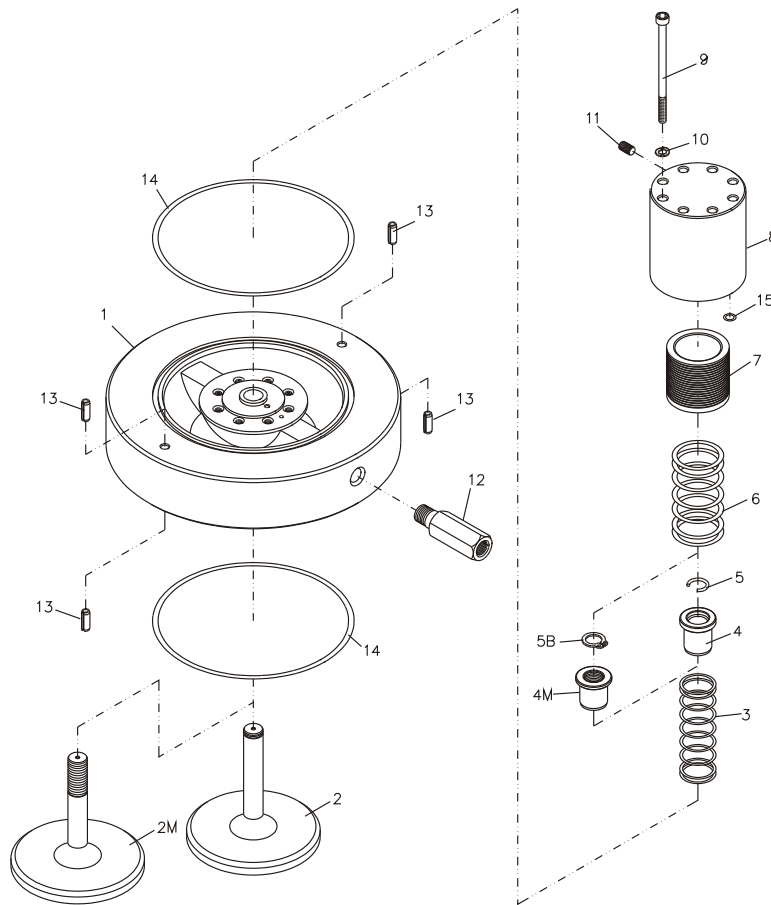


PM-150F



| MODEL | SIZE | A | B | C | D | E | F | G | SCREW | QT |
|---------|--------|--------------|------------|-------------|-----|---------------|--------------|------|----------|----|
| PM-80F | 3" | 180 (7.09") | 43 (1.69") | 65 (2.56") | 1/4 | 94 (3.7") | 146 (5.75") | G80 | M16 x55L | 6 |
| PM-90F | 3 1/2" | 200 (7.87") | 50 (1.97") | 70 (2.76") | 1/4 | 119 (4.69") | 165 (6.5") | G100 | M18 x65L | 6 |
| PM-100F | 4" | 230 (9.06") | 56 (2.2") | 71 (2.8") | 1/4 | 132.5 (5.22") | 191 (7.52") | G115 | M20 x70L | 6 |
| PM-125F | 5" | 270 (10.6") | 69 (2.72") | 85 (3.35") | 1/4 | 165 (6.5") | 230 (9.06") | G140 | M20 x80L | 12 |
| PM-150F | 6" | 300 (11.81") | 89 (3.5") | 105 (4.13") | 1/4 | 204 (8.03") | 260 (10.23") | G180 | M20 x95L | 16 |

◆ PARTS LIST OF PM-*F Series



◆ ACCESSORIES

| (S)PM-80 | | | |
|----------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 9 | HEX. COUNTER-SINK SCREW | 4 | M5 x 65L |
| 14 | O-ring | 2 | G80 |
| 15 | O-ring | 1 | P4 |

| (S)PM-90 | | | |
|----------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 9 | HEX. COUNTER-SINK SCREW | 4 | M5 x 70L |
| 14 | O-ring | 2 | G100 |
| 15 | O-ring | 1 | P5 |

| (S)PM-100 | | | |
|-----------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 9 | HEX. COUNTER-SINK SCREW | 8 | M5 x 75L |
| 14 | O-ring | 2 | G115 |
| 15 | O-ring | 1 | P5 |

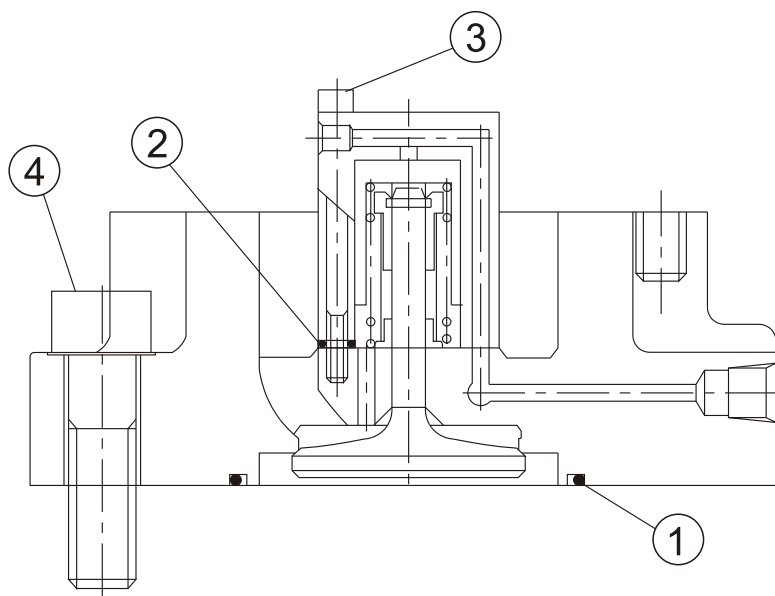
| (S)PM-125 | | | |
|-----------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 9 | HEX. COUNTER-SINK SCREW | 8 | M6 x 90L |
| 14 | O-ring | 2 | G140 |
| 15 | O-ring | 1 | P6 |

| (S)PM-150 | | | |
|-----------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 9 | HEX. COUNTER-SINK SCREW | 8 | M8 x 130L |
| 14 | O-ring | 2 | G180 |
| 15 | O-ring | 1 | P8 |

| (S)PM-200 | | | |
|-----------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 9 | HEX. COUNTER-SINK SCREW | 8 | M10 x 150L |
| 14 | O-ring | 2 | P235 |
| 15 | O-ring | 1 | P10 |

◆ SECTION

PM-*F Series



◆ ACCESSORIES

| PM-80F | | | |
|--------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 1 | O-ring | 1 | G80 |
| 2 | O-ring | 1 | P4 |
| 3 | HEX. COUNTER-SINK SCREW | 6 | M5 x 65L |
| 4 | HEX. COUNTER-SINK SCREW | 6 | M16 x55L |

| PM-90F | | | |
|--------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 1 | O-ring | 1 | G100 |
| 2 | O-ring | 1 | P5 |
| 3 | HEX. COUNTER-SINK SCREW | 6 | M5 x 70L |
| 4 | HEX. COUNTER-SINK SCREW | 6 | M18 x65L |

| PM-100F | | | |
|---------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 1 | O-ring | 1 | G115 |
| 2 | O-ring | 1 | P5 |
| 3 | HEX. COUNTER-SINK SCREW | 8 | M5 x 75L |
| 4 | HEX. COUNTER-SINK SCREW | 6 | M20 x70L |

| PM-125F | | | |
|---------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 1 | O-ring | 1 | G140 |
| 2 | O-ring | 1 | P6 |
| 3 | HEX. COUNTER-SINK SCREW | 8 | M6 x 90L |
| 4 | HEX. COUNTER-SINK SCREW | 12 | M20 x80L |

| PM-150F | | | |
|---------|-------------------------|------|---------------|
| NO | Description | Q'ty | Specification |
| 1 | O-ring | 1 | G180 |
| 2 | O-ring | 1 | P8 |
| 3 | HEX. COUNTER-SINK SCREW | 8 | M8 x 130L |
| 4 | HEX. COUNTER-SINK SCREW | 16 | M20 x95L |