

ByPass Valve for Bent Axis Pumps

ByPass Valve for Hydraulic Bent Axis Piston Pumps

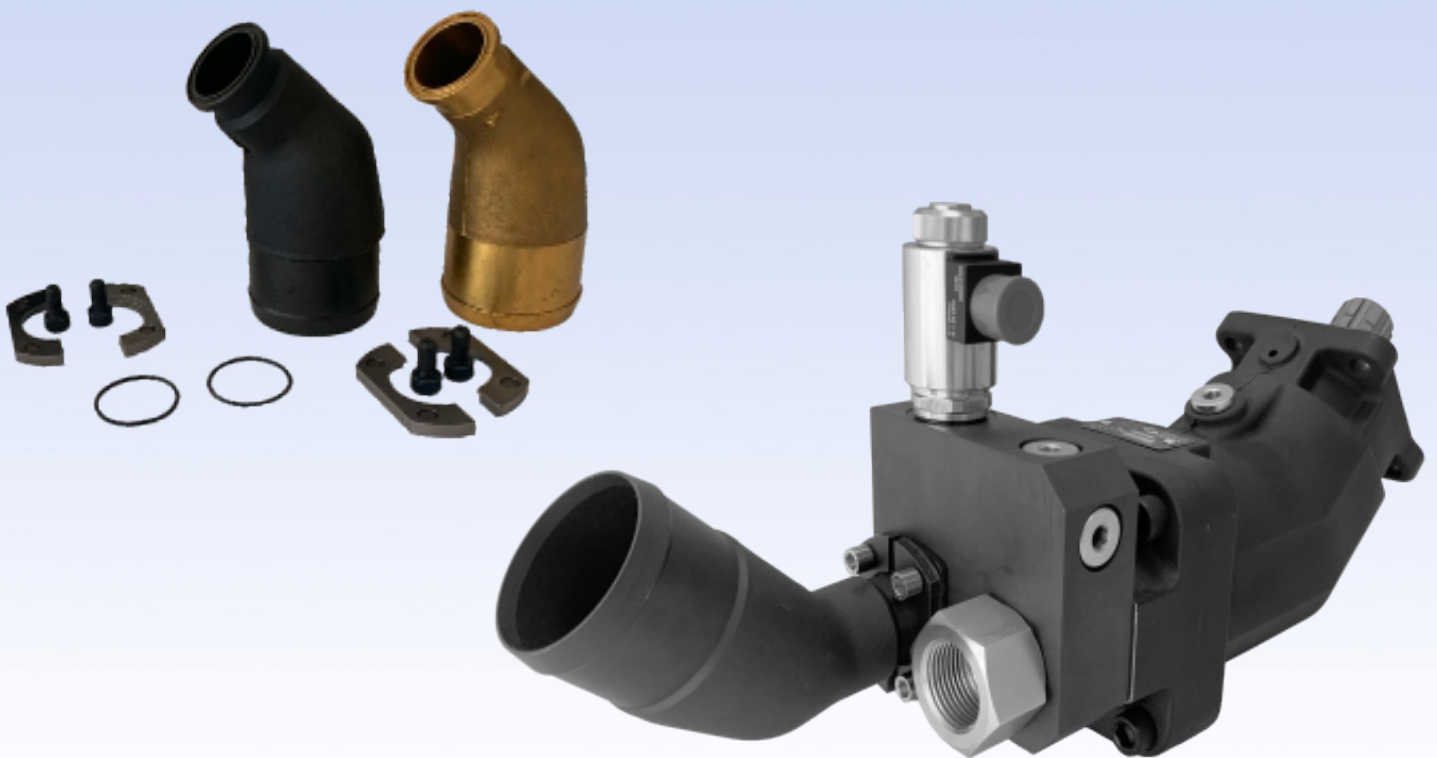
12V ByPass Valve

24V ByPass Valve

Designation;

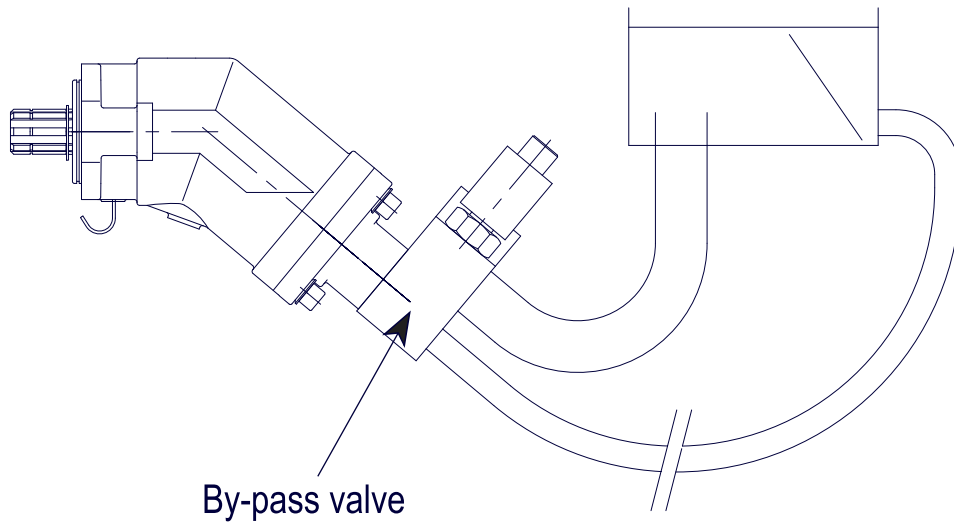
12V ByPass Valve

24V ByPass Valve

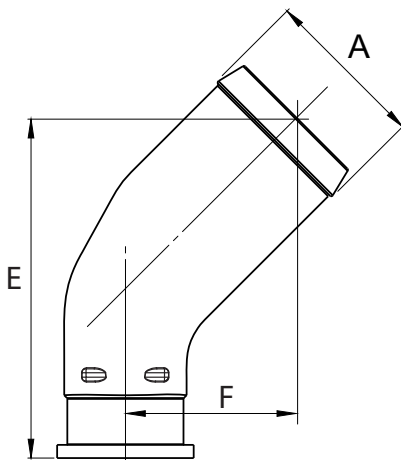


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ByPass Valve for Bent Axis Pumps

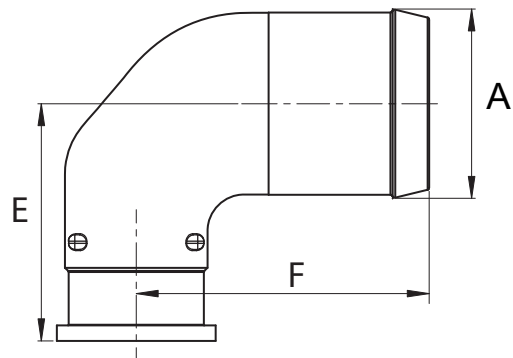


45° elbow fittings



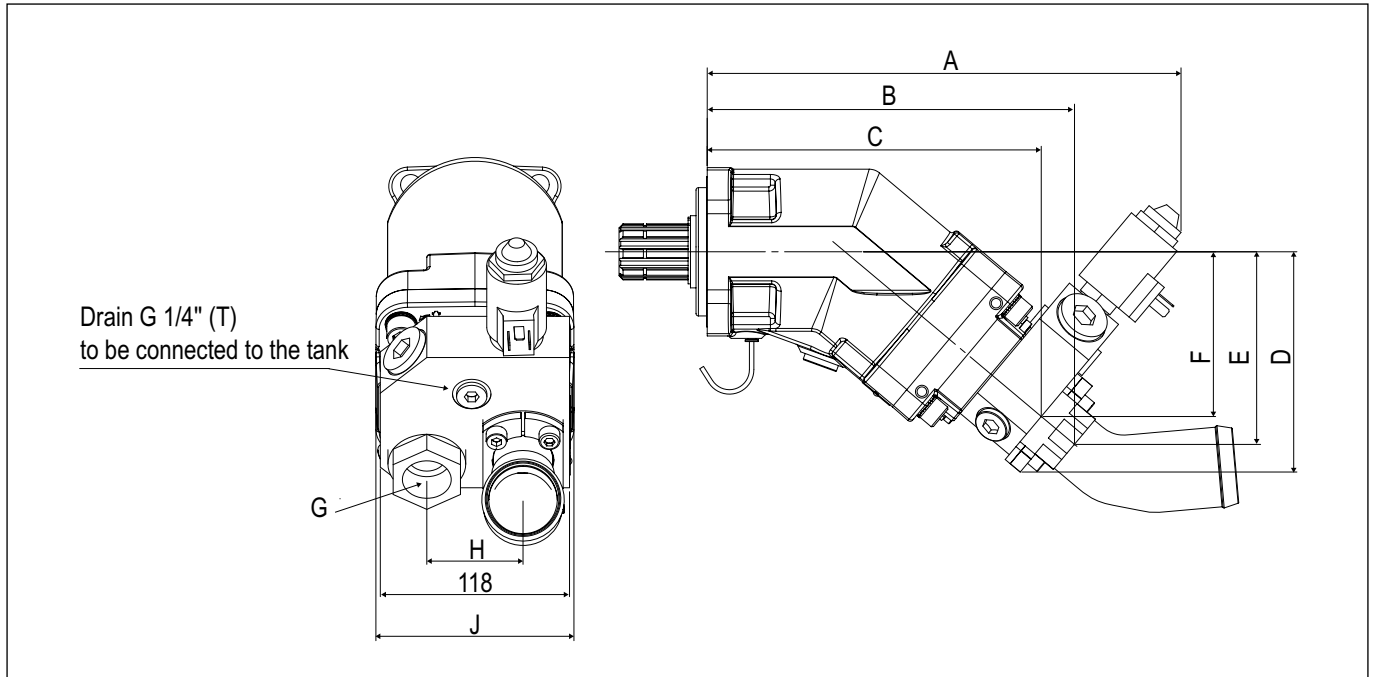
| Ø hose | Ø A | E | F |
|--------|------|-------|------|
| 1 1/2" | 39.1 | 91.7 | 46.7 |
| 42 | 43 | 91.7 | 46.7 |
| 1 3/4" | 46 | 91.7 | 46.7 |
| 2" | 51.8 | 108.4 | 54.4 |
| 2 1/2" | 64.5 | 125.2 | 62.2 |

90° elbow fittings



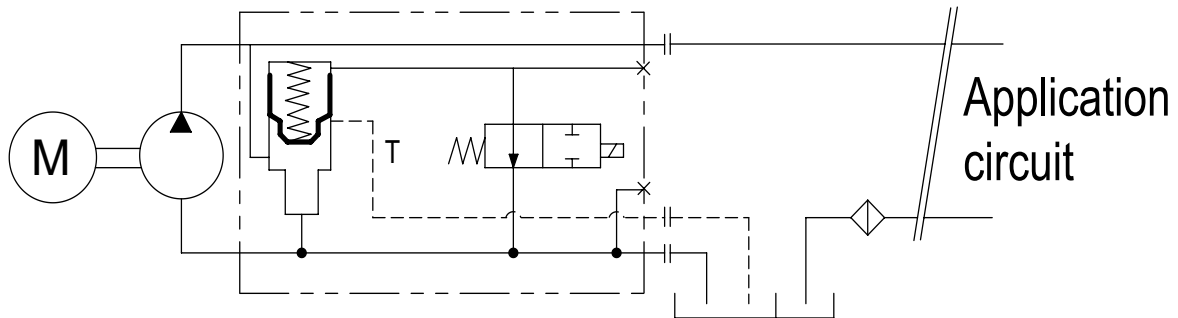
| Ø hose | Ø A | E | F |
|--------|------|------|------|
| 1 1/2" | 39.1 | 58.6 | 79.5 |
| 2" | 51.8 | 64.9 | 80.2 |
| 2 1/2" | 64.5 | 71.3 | 87.5 |

ByPass Valve for Bent Axis Pumps



| Pump MODEL | DISPL. (cc) | A | B | C | D | E | F | G | H | J |
|------------|-------------|--------|--------|--------|--------|--------|--------|--------|----|-----|
| 5 cc | 5.1 | 289.35 | 223.04 | 202.19 | 132.20 | 114.72 | 97.58 | G 3/4" | 54 | 108 |
| 10 cc | 10.2 | 289.35 | 223.04 | 202.19 | 132.20 | 114.72 | 97.58 | G 3/4" | 54 | 108 |
| 12 cc | 12.0 | 289.35 | 223.04 | 202.19 | 132.20 | 114.72 | 97.58 | G 3/4" | 54 | 108 |
| 18 cc | 18.0 | 289.35 | 223.04 | 202.19 | 132.20 | 114.72 | 97.58 | G 3/4" | 54 | 108 |
| 25 cc | 25.0 | 289.35 | 223.04 | 202.19 | 132.20 | 114.72 | 97.58 | G 3/4" | 54 | 108 |
| 32 cc | 32.0 | 295.50 | 229.00 | 208.30 | 137.30 | 120.10 | 102.70 | G 3/4" | 54 | 108 |
| 41 cc | 41.0 | 295.50 | 229.00 | 208.30 | 137.30 | 120.10 | 102.70 | G 3/4" | 54 | 108 |
| 50 cc | 50,3 | 307.10 | 240.40 | 220.00 | 147.10 | 129.70 | 112.50 | G 3/4" | 54 | 108 |
| 56 cc | 56,0 | 307.10 | 240.40 | 220.00 | 147.10 | 129.70 | 112.50 | G 3/4" | 54 | 108 |
| 63 cc | 63.0 | 307.10 | 240.40 | 220.00 | 147.10 | 129.70 | 112.50 | G 3/4" | 54 | 108 |
| 80 cc | 80,4 | 334.00 | 269.00 | 246.70 | 157.80 | 143.90 | 124.80 | G 1" | 60 | 123 |
| 108 cc | 108 | 334.00 | 269.00 | 246.70 | 157.80 | 143.90 | 124.80 | G 1" | 60 | 123 |
| 130 cc | 130 | 336.30 | 271.3 | 249.00 | 159.70 | 145.80 | 126.70 | G 1" | 60 | 123 |

ByPass Valve for Bent Axis Pumps



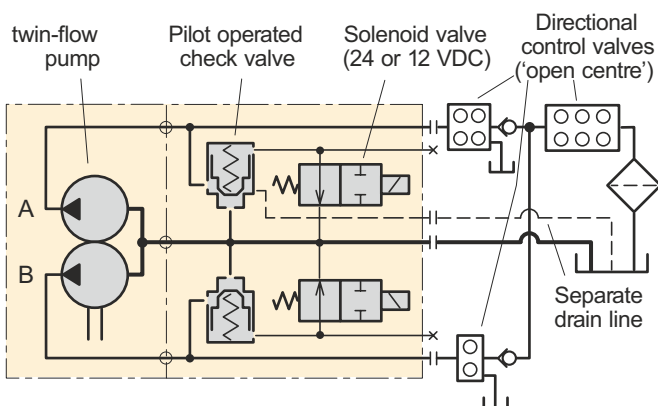
| Pump MODEL | DISPL. (cc) | WEIGHT WITHOUT INLET FITTING (kg) | WEIGHT WITH 2" INLET FITTING (kg) | TORQUE WITHOUT FITTING (N.m) | TORQUE WITH FITTING (N.m) |
|------------|-------------|-----------------------------------|-----------------------------------|------------------------------|---------------------------|
| 5 cc | 5.1 | 9.00 | 9.40 | 8.20 | 8.60 |
| 10 cc | 10.2 | 9.00 | 9.40 | 8.65 | 9.05 |
| 12 cc | 12.0 | 9.20 | 9.60 | 8.74 | 9.14 |
| 18 cc | 18.0 | 9.30 | 9.70 | 8.79 | 9.19 |
| 25 cc | 25.0 | 11.00 | 11.40 | 8.89 | 9.29 |
| 32 cc | 32.0 | 11.10 | 11.50 | 11.10 | 11.50 |
| 41 cc | 41.0 | 11.20 | 11.60 | 11.15 | 11.55 |
| 50 cc | 50,3 | 11.30 | 11.70 | 11.75 | 12.15 |
| 56 cc | 56,0 | 11.35 | 11.75 | 11.80 | 12.20 |
| 63 cc | 63.0 | 11.45 | 11.85 | 11.85 | 12.25 |
| 80 cc | 80,4 | 14.80 | 15.20 | 17.80 | 18.30 |
| 108 cc | 108 | 14.90 | 15.30 | 17.92 | 18.42 |
| 130 cc | 130 | 15.30 | 15.70 | 18.70 | 19.50 |

DUAL FLOW PUMP bypass valve

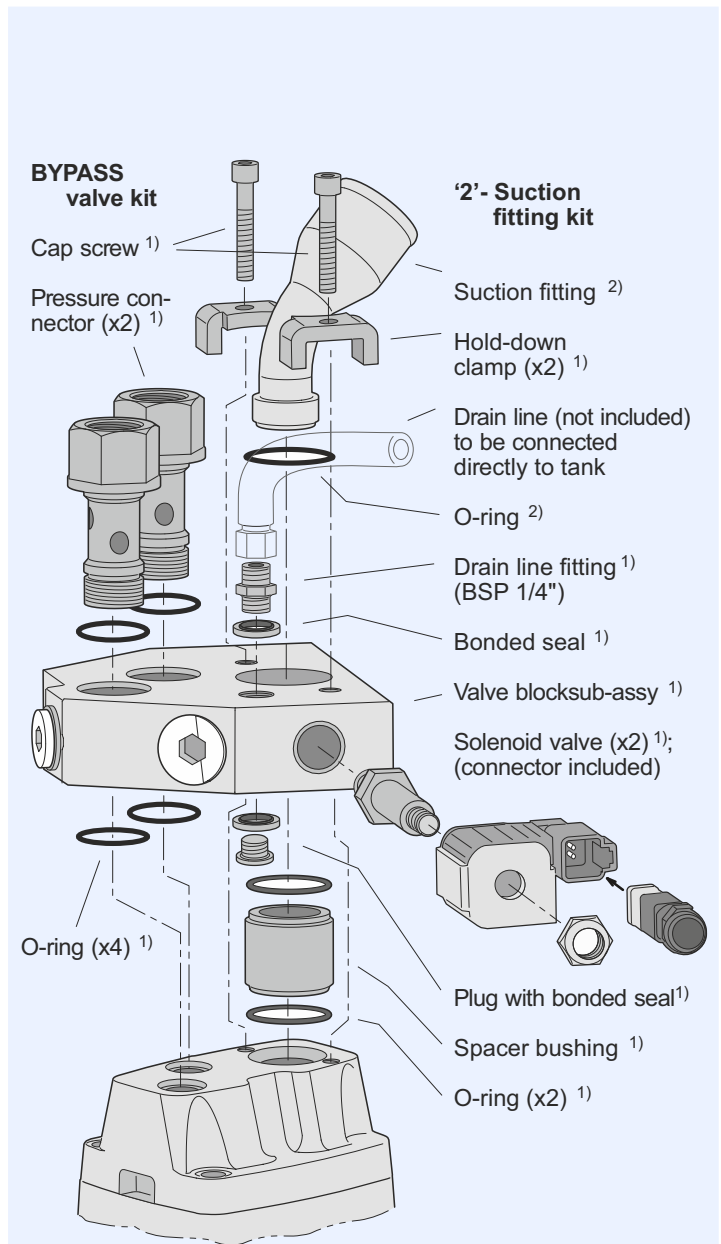
- A dual/twin pump fitted with a bypass valve can be utilised in applications where the pump is operating constantly i.e. when the pump is driven from the crankshaft through a cardan shaft, or when it is installed on an engine-PTO. In addition, it can be used when, temporarily, one of the two circuits is not required; the power loss is thus reduced as the non-required flow is not forced through lines and 'open center' valves.
- The DUAL bypass valve should be disengaged during transportation when the pump is operating constantly and the engine is running at max rpm; the hydraulic system is not sized for the large flow that would otherwise go through it.
- The DUAL valve connects the outlet and inlet ports of the pump, and only a small oil flow goes through the system and to the reservoir.
- The valve is installed directly on top of the pump port surface with 'banjo' fittings and two cap screws (refer to the split view to the right).
- As the DUAL valve is symmetrical it can be 'turned 180°' so as not to interfere with chassis components. The valve can accommodate left hand as well as right hand rotating pumps.
- The valve can only be engaged or disengaged (through the 24 or 12 VDC solenoid) at low system pressures (below 20 bar).

IMPORTANT INFORMATION

- In order to secure a cooling flow through the system, a separate drain line **must** be connected from the BPV-pump drain line fitting (shown in the split view) directly to tank; refer also to the schematic.
- The pressure connectors must be tightened (to 50 Nm) before the suction fitting clamp screws are tightened.



Bypass valve circuit schematic (example).



Bypass valve split view without manual override (with dual flow pump end cap).

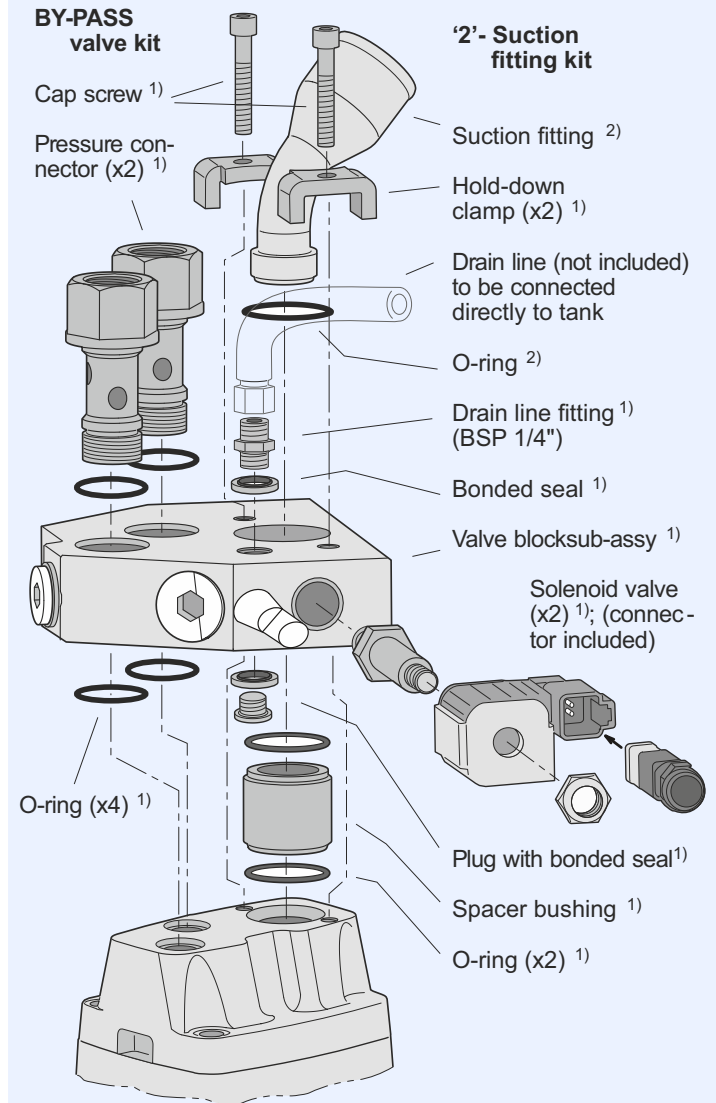
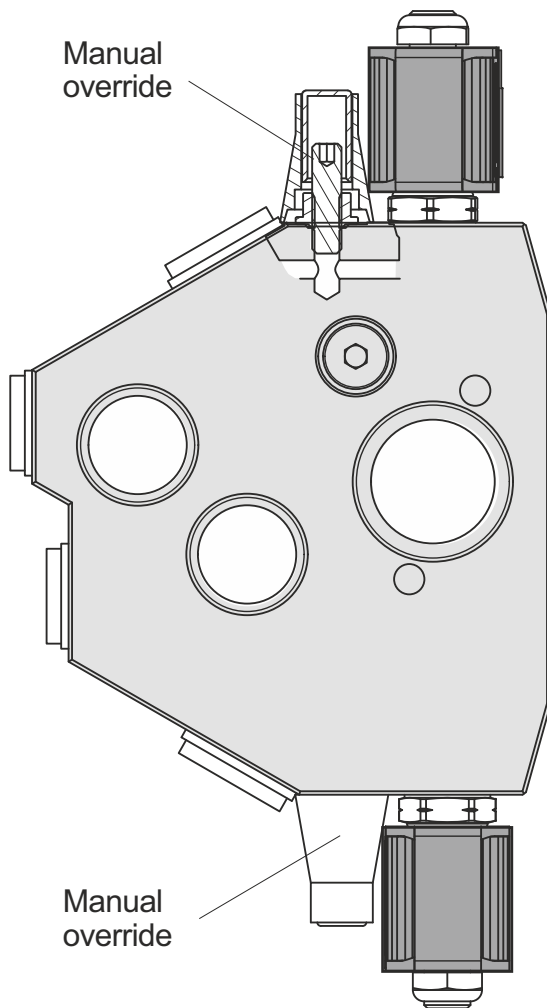
NOTE: A suction fitting kit (parts designated '2' in the split view) is **not** included with the pump; it must be ordered separately.

Bypass valve (Dual Flow Pump)

Without manual override

| Bypass valve, type | Dual Flow Pump |
|---------------------------|---|
| Max pressure, continuous | 350 bar |
| intermittent | 400 bar |
| Solenoid voltage (option) | 24 VDC, (12 VDC) |
| Power requirement | 14 W (each solenoid) |
| Operating mode | Activated solenoid: Check valve closed |

| Bypass valve ¹⁾ | Voltage | Ordering number | Dual Flow | Torque ³⁾ |
|----------------------------|---------|-----------------|---|----------------------|
| ByPass | 24 VDC | 2400 565 | 42/42, 53/53, 55/28, 70/35, 70/70 | 50 Nm |
| | 12 VDC | 1200 565 | | |



Bypass valve split view with manual override (with pump end cap).

NOTE: A suction fitting kit (parts designated '2' in the split view) is **not** included with the pump; it must be ordered separately

Complete Product Range

Bent Axis Piston Motors

A9MD (DIN) Bent Axis Motors
A9MO (ISO) Bent Axis Motors
A9MS (SAE) Bent Axis Motors
A9ML (SAE2) Bent Axis Motors
A9MF (Fixed Plugin) Bent Axis Motors
A10M (HYBRID) Bent Axis Motors
A7GM Hydraulic Gear Motors
A7GMT Tandem Hydraulic Gear Motors

Bent Axis Piston Pumps

A8P (Aluminum) Bent Axis Pumps
A8PD (DIN) Bent Axis Pumps
A8PO (ISO) Bent Axis Pumps
A8PS (SAE) Bent Axis Pumps
A8PF (Fixed Plugin) Bent Axis Pumps
A10 (HYBRID) Bent Axis Pumps
A11 (ISO2) Bent Axis Pumps
A11 (SAE2) Bent Axis Pumps

Variable Displacement Pumps

A12V Variable Displacement Piston Pumps

Dual Flow Piston Pumps

A8PL (DIN) Dual Flow Pumps

Axial Piston & Gear Pumps

A4PP Axial Hydraulic Piston Pumps
A6HP High Pressure Piston Pumps
A7GP Hydraulic Gear Pumps
A7GPT Tandem Hydraulic Gear Pumps

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Circulation Valve
ByPass Valve
Anti-Cavitation Valve
Flushing Valve
LS Valve
AntiShock Valve
Speed Sensor

Hydraulic Spare Parts

Suction Fittings
Couplars
Adapters
Flanges
Power Take Off
Monoblock Valve
Section Valve

Hydraulic Pumps, Motors

Bent Axis Hydraulic Piston Motors, Bent Axis Hydraulic Piston Pumps, Piston Pumps, Variable Displacement Piston Pumps, Variable Displacement Piston Motors, Axial Piston Pumps, High Pressure Piston Pumps, Gear Pumps, Gear Motors, Hydraulic Valve.

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