



TS-G01-2-11



TS Type Flow Control (and Check) Valve .002 to .52 gpm (Fine Adjustment Type with Pressure and Temperature Compensation) 1522 psi

Features

Original compact, lightweight configuration.
High-precision control up to minute flow rates of .61 in³.
Design allows large 5.2 gpm reverse flow

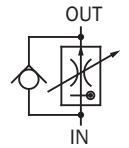
rate relative to control flow rate, which means there is no need to include an extra valve in the quick return circuit.
Stable control of each setting flow rate,

even as pressure and fluid temperature are fluctuating.

Specifications

| Model No. | Nominal Diameter (Size) | Volume control flow rate gpm | Maximum Working Pressure psi | Reverse Flow Rate gpm | Cracking pressure psi | Weight lbs |
|----------------|-------------------------|------------------------------|------------------------------|-----------------------|-----------------------|------------|
| (C)TS-G01-2-11 | 1/8 | .002 to .52 | 1522 | 5.2 | 11.6 | 1.9 |

CTS-G01-2-11



• Handling

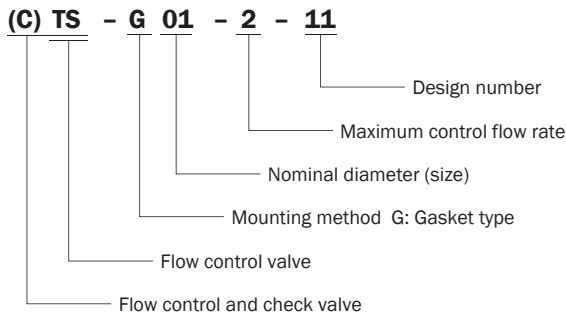
- In the temperature range of 68° to 140° F, flow rate fluctuation is within ±5% of the standard flow rate at 104° F.
- In the pressure range of 87 to 1522 psi, flow rate fluctuation is within ±5% of the setting flow rate.
- Note that flow rate fluctuation exceeds the rated fluctuation amount slightly in the vicinity of the minimum control flow rate, due to changes in operating temperature and hydraulic fluid viscosity.
- When controlling flow rates that are less than .05 gpm, use with a filter that does not exceed 10 μm.
- For flow rate control, make sure that the pressure differential between the input port and output port is at least 87 psi.
- The control flow rate is increased by clockwise (rightward) rotation of the control handle.
- Use the table to the right for specification when a sub plate is required.

| Model No. | Pipe Diameter | Recommended Flow Rate gpm | Weight lbs |
|------------|---------------|---------------------------|------------|
| MTS-01Y-10 | 3/8 | 5.2 | 1.7 |

8 Bundled Accessories: Hex Socket Bolts: M4 x 35 ℓ (four)

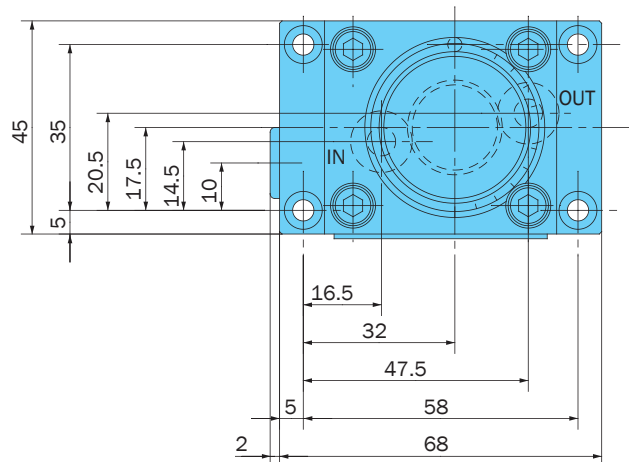
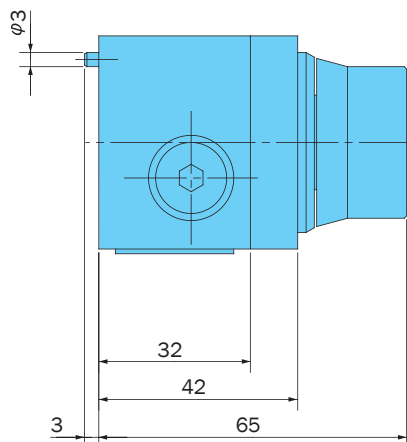
Note: 1. For mounting bolts, use 12T or equivalent.
2. Tightening torque is 1.9 to 2.4 ft lbs.

Understanding Model Numbers

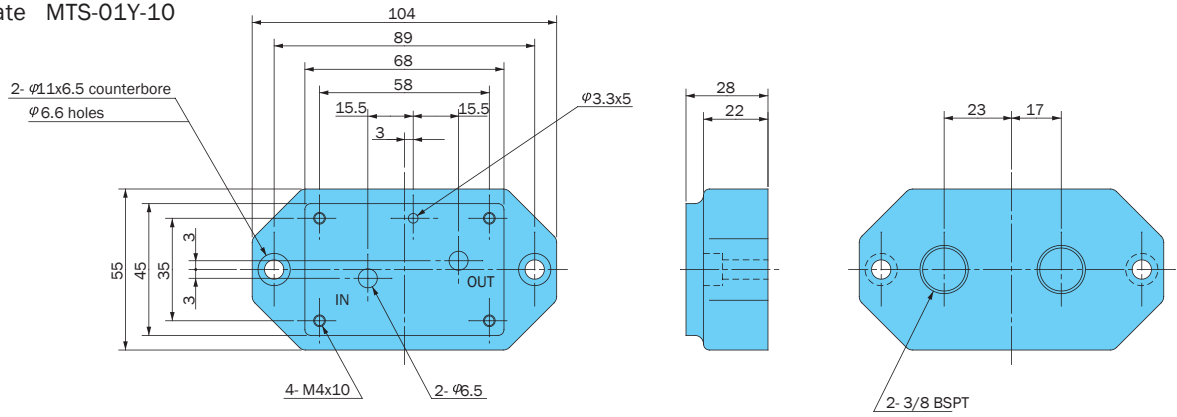


Installation Dimension Drawings

(C)TS-G01-2-11



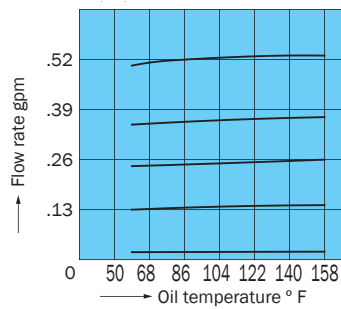
Sub Plate MTS-01Y-10



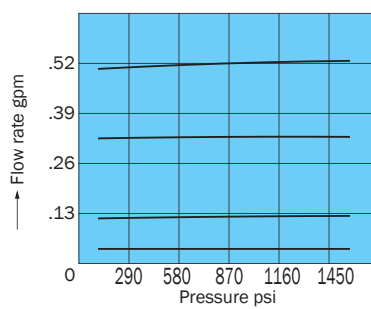
Performance Curves

Hydraulic Operating Fluid Viscosity 32 centistokes

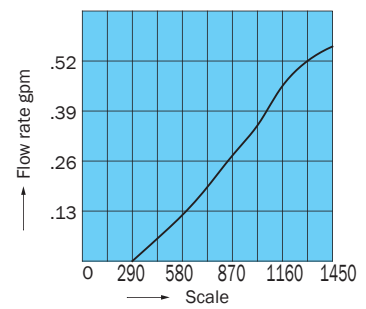
Fluid Temperature - Control Flow Rate Characteristics



Pressure - Control Flow Rate Characteristics

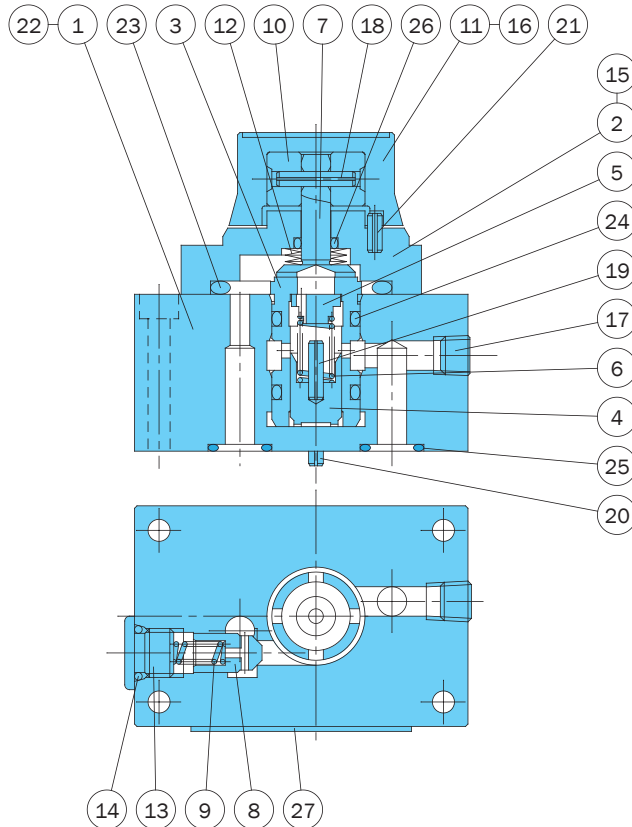


Scale - Control Flow Rate Characteristics

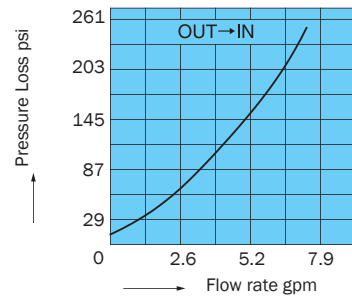


Cross-sectional Drawing

CTS-G01-2-11



Pressure Loss Characteristics



| Part No. | Part Name | Part No. | Part Name | Part No. | Part Name |
|----------|-----------|----------|------------|----------|------------|
| 1 | Body | 10 | Spacer | 19 | Spring pin |
| 2 | Cover | 11 | Knob | 20 | Spring pin |
| 3 | Sleeve | 12 | Spring | 21 | Spring pin |
| 4 | Piston | 13 | Plug | 22 | Spring pin |
| 5 | Guide | 14 | O-ring | 23 | O-ring |
| 6 | Spring | 15 | Screw | 24 | O-ring |
| 7 | Throttle | 16 | Screw | 25 | O-ring |
| 8 | Poppet | 17 | Plug | 26 | O-ring |
| 9 | Spring | 18 | Spring pin | 27 | Nameplate |

Seal Part List (Kit Model Number FKS-G01(C))

| Part No. | Part Name | TS-G01-2-11 | | CTS-G01-2-11 | |
|----------|-----------|-------------|------|--------------|------|
| | | Part Number | Q'ty | Part Number | Q'ty |
| 14 | O-ring | — | — | IB-P8 | 1 |
| 23 | O-ring | IB-P31 | 1 | IB-P31 | 1 |
| 24 | O-ring | IB-P14 | 2 | IB-P14 | 2 |
| 25 | O-ring | IB-P10 | 2 | IB-P10 | 2 |
| 26 | O-ring | IB-P6 | 1 | IB-P6 | 1 |

Note: O-ring 1B-** refers to JIS B2401-1B-**. Specify C at the end of the model number for the CTS kit.