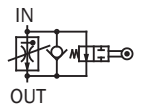




TL-G03-\*-11



Note: O4 has DR

### TL (TLT) Type Feed Control Valve (Fine Control Type with Pressure Compensation)

.02 to 2.1 gpm  
1000 psi

### Features

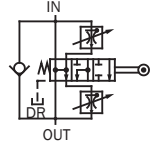
Very compact, lightweight, and economically priced.

Applicable for control of machine tool table operations. For example, a single valve provides smooth control of: Fast Feed =>

Cutting Feed (2 stage) => Fast Return.  
Stable control of each setting flow rate, even as pressure and fluid temperature are fluctuating.  
Dial markings are proportional to flow rate for simple control flow rate adjustment

Sealing the gasket surface allows as-is screw-in connection.

TLT-G04-\*-11



### Specifications

Model No	Nominal Diameter (Size)	Volume control flow rate gpm		Reverse Flow Rate gpm	Maximum Working Pressure psi	Cracking pressure psi	Weight lbs
		Feed 1	Feed 2				
TL-G03-2-11 8-11	3/8	.02 to .5 .02 to 2.1	-	9.2	1015	14.5	4.8
TL-G04-2-11 8-11	1/2	.02 to .5 .02 to 2.1	-	14.0			15.4
TLT-G04-2-1.5-11 8-2-11		.02 to .5 .02 to 2.1	.02 to .39 .02 to .5				

#### • Handling

- In the temperature range of 68° F to 140° F, flow rate fluctuation is within ±5% of the standard flow rate at 104° F.
- In the pressure range of 145 to 1000 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 line filter no greater than 10µm.
- Make sure that the pressure differential between the inlet port and outlet is at least 87 psi at 1 gpm or less, and at least 145 psi at 1 gpm or greater.
- The control flow rate is increased by clockwise (rightward) rotation of the control handle.
- For connection to piping, normally connect to the sub plate. Valve mounting is gasket type, using an O-ring. When a screw in connection is required, seal the gasket surface, remove the side plug, and create a screw in connection directly to the valve unit. In this case, remove all seal material affixed to the plug.
- See the table below for installation hex socket bolts.
- Use the table to the right for specification when a sub plate is required.

Model No.	Pipe Diameter	Recommended Flow Rate gpm	Applicable Valve Type
MTL-03-10	3/8	9.2	TL-G03-*-11
MTL-04-10	1/2	14.0	TL(T)-G04-*-11

TL-G03-11 -

Cam Down Force  
27 lbs minimum

TLT-G04-\*-11

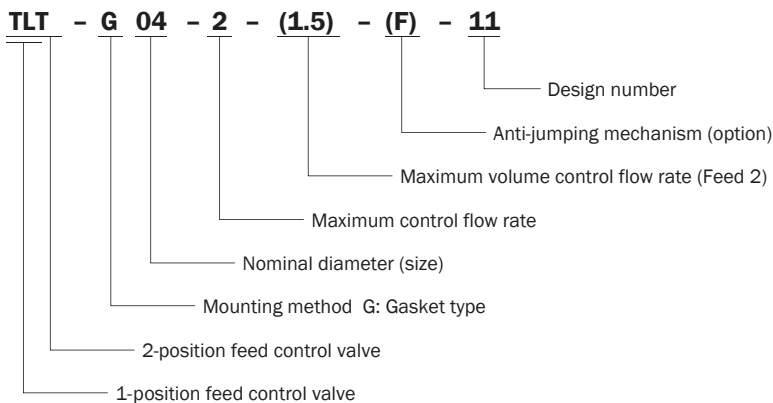
Feed 1 Cam Down Force  
31 lbs minimum  
Feed 2 Cam Down Force  
45 lbs minimum

- Make the cam angle no greater than 30 degrees.

Applicable Model	Bolt Size	Qty	Tightening Torque ft lbs
TL-G03-*-11	M8 × 60r	4	14.7 to 18.4
TL(T)-G04-*-11	M10 × 75r	4	33 to 40.5

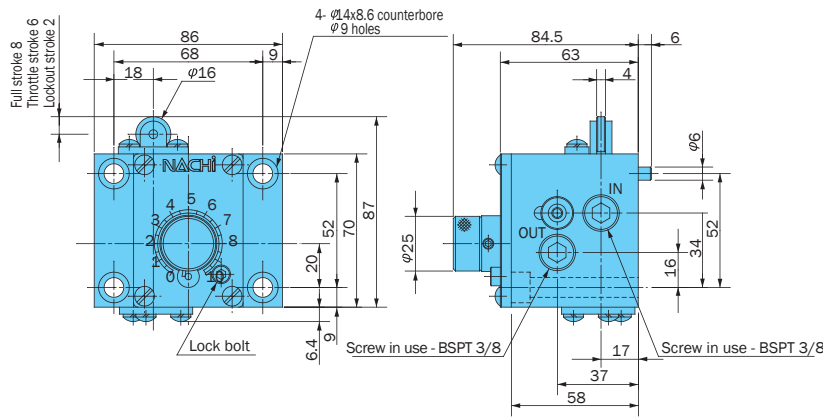
Note: For mounting bolts, use 12T or equivalent.

### Understanding Model Numbers

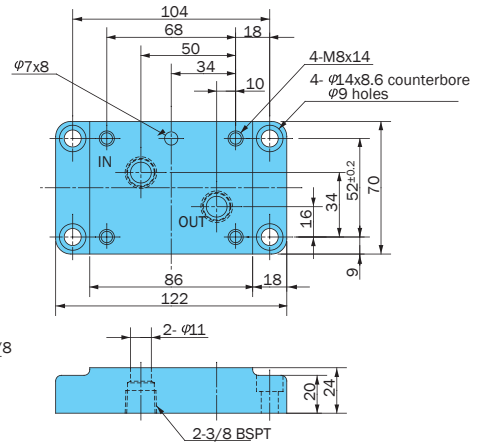


# Installation Dimension Drawings

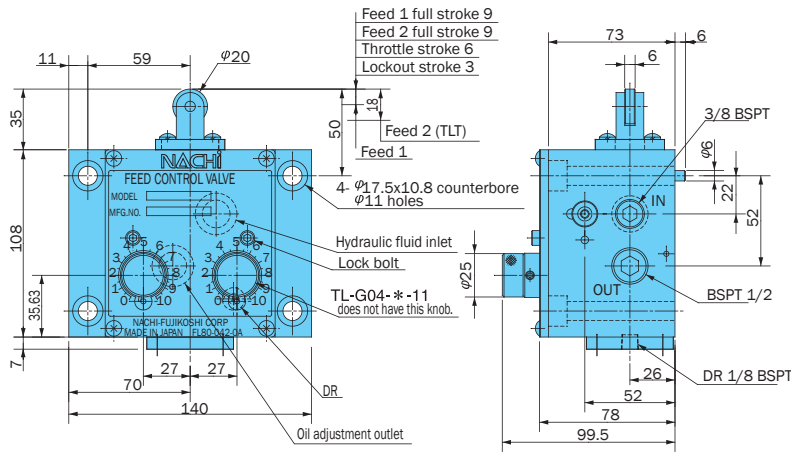
TL-G03-\*-11



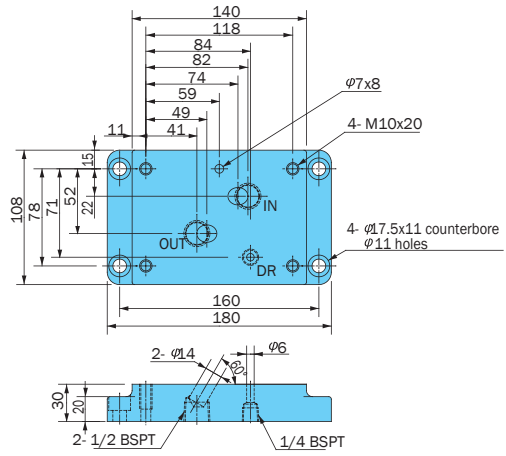
Sub Plate MTL-03-10



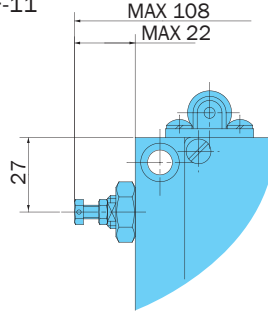
TL(T)-G04-\*-11



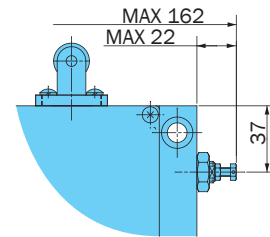
Sub Plate MTL-04-10



Anti-jumping Mechanism TL-G03-\*-F-11



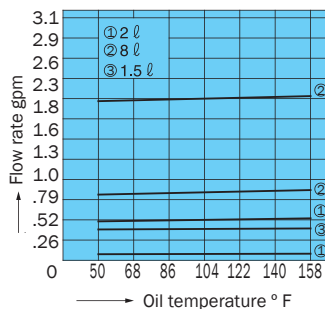
TL(T)-G04-\*-F-11



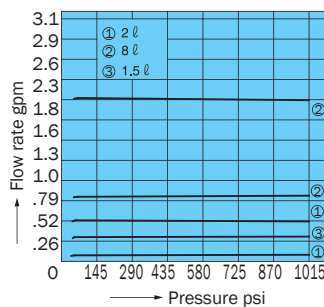
## Performance Curves

Hydraulic Operating Fluid Viscosity 32 centistokes

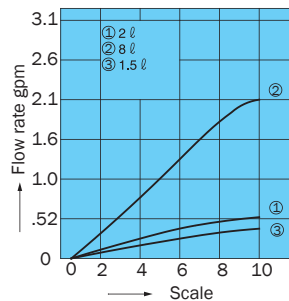
Fluid Temperature - Control Flow Rate Characteristics



Pressure - Control Flow Rate Characteristics



Scale - Control Flow Rate Characteristics



Pressure Loss Characteristics

