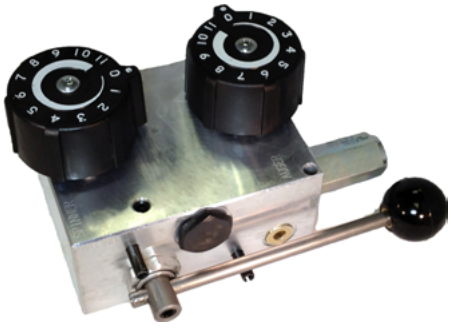
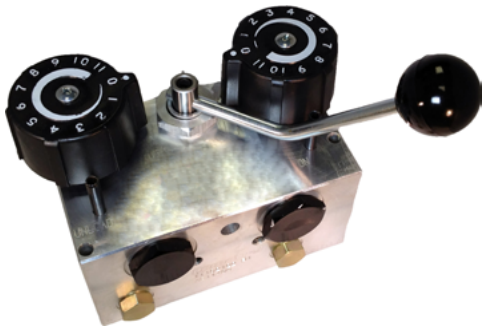
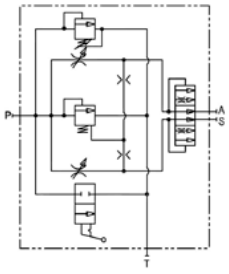
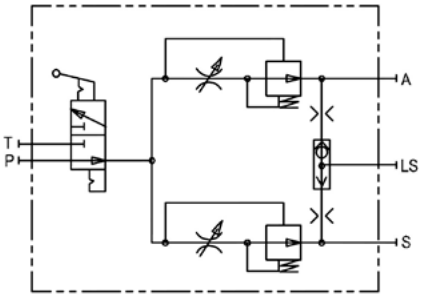
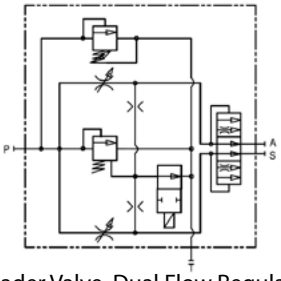
ENGINEERING TOMORROW

Spreader Valves Technical Information

Quick Reference



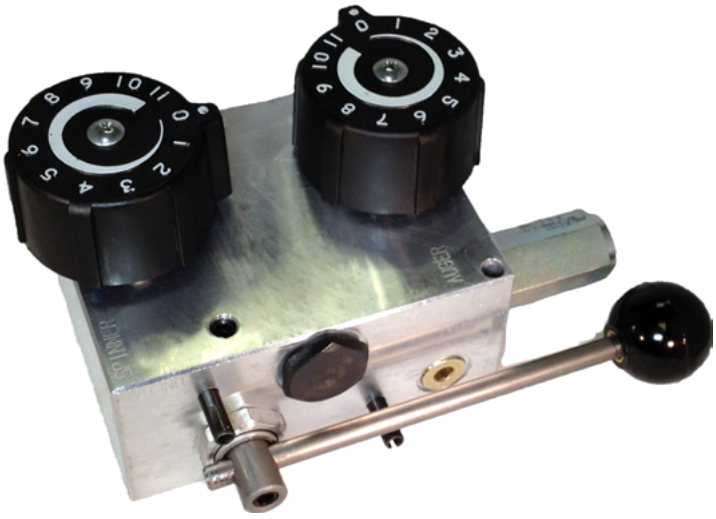


	SCHEMATIC	MODEL	PRESSURE	FLOW*	WEIGHT
Page 2	 Spreader Valve, Dual Flow Regulation, Compensated, Manual Dump, Gear Pump Circuit	**SPR-2FFL12**	138 bar [2000 psi]	114 l/m [30 US g/m]	2.62 kg [5.90 lb]
Page 4	 Spreader Valve, Dual Flow Regulation, Compensated, Manual Dump, Piston Pump Circuit	**SPR-2FFLC12**	207 bar [3000 psi]	114 l/m [30 US g/m]	3.08 kg [6.79 lb]
Page 6	 Spreader Valve, Dual Flow Regulation, Compensated, Solenoid Dump, Gear Pump Circuit	**SPR-2FFLW86**	138 bar [2000 psi]	114 l/m [30 US g/m]	3.08 kg [6.79 lb]

Spreader Valves Technical Information
SPR-2FFL12

OPERATION
This is a compensated spreader valve with dual flow regulation and manual dump for an open circuit gear pump application. This is a direct replacement to the 2FFL12.

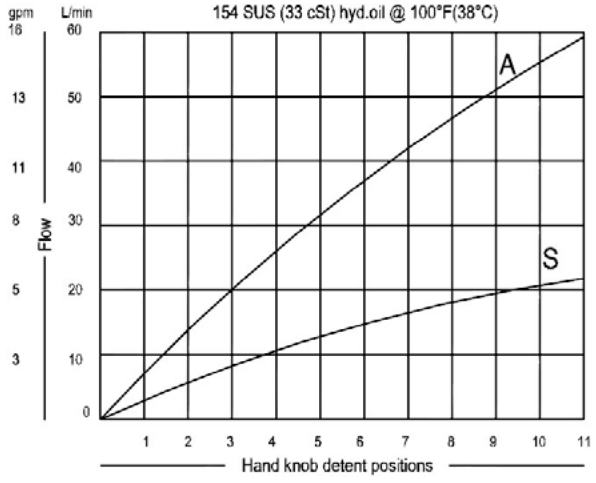
APPLICATIONS
The valve maintains constant regulated flow to two actuators even with changes in load pressure or input flow. The pressure-compensated regulating section bypasses excess pump flow to tank. The pump operates at the highest load pressure plus control section pressure drop. The tank or bypass port must be referenced directly to tank and not to a working line. The direct-acting relief valve senses system pressure and protects the pump from shock or overload pressure surges. The built-in lever-operated two-way valve dumps system flow to tank, allowing on/off control of both regulated flows without changing either flow setting. In the unload condition, an 8.6 bar [125 psi] check valve may be required in either the A port, the S port or both ports to reduce motor movement potential.



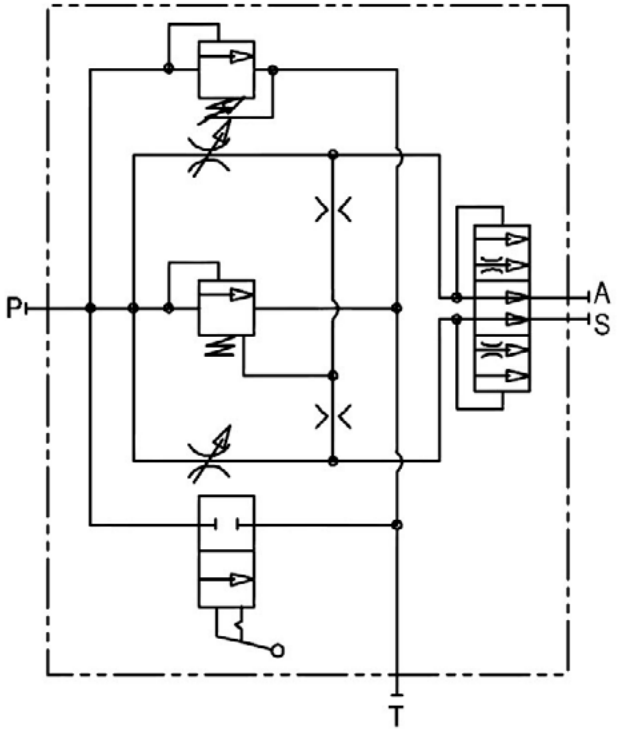
SPECIFICATIONS

Rated Pressure	138 bar [2000 psi]
Maximum Rated Flow at 7 bar [100 psi]	114 l/m [30 US gal/min]
Weight	2.62 kg [5.90 lb]

PERFORMANCE CURVE

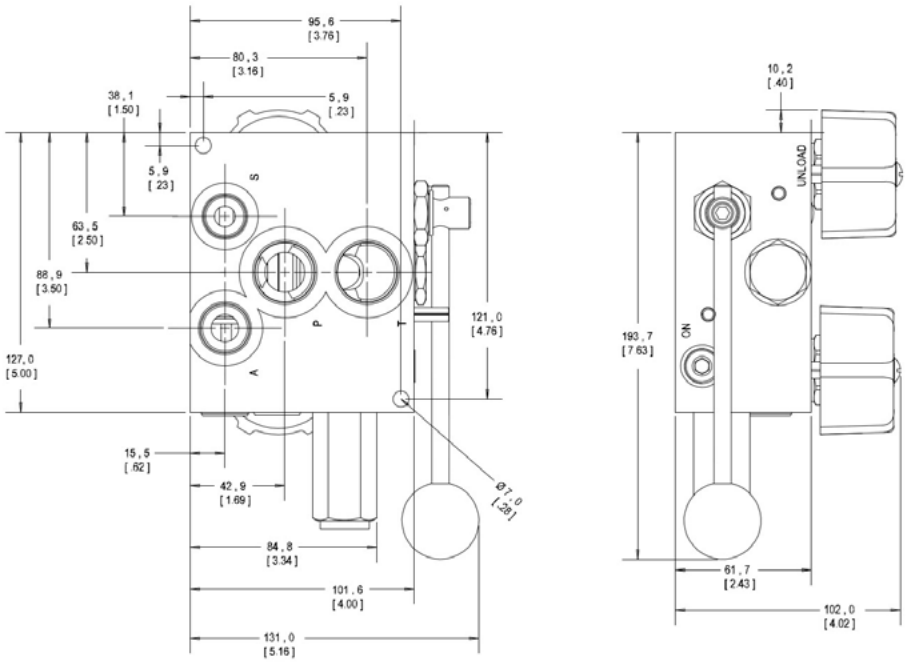


SCHEMATIC

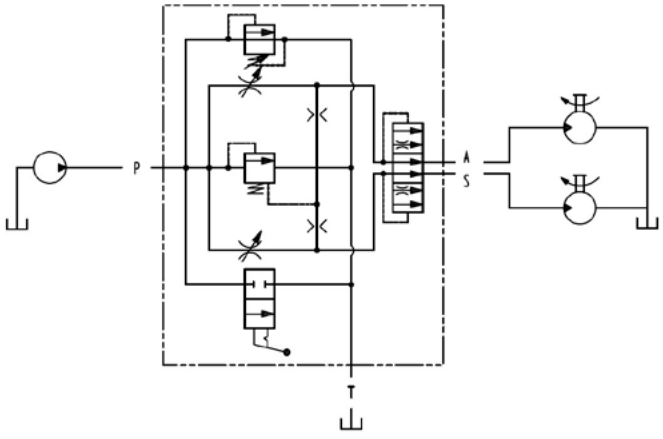


DIMENSIONS

mm [in]



EXAMPLE CIRCUIT



ORDERING INFORMATION

SPR-2FFL12 - D - 12S - 7/15 - V

Adjustment Option

Code	Adjustment
D	Detented hand knob

Seal Option

Code	Seal Material
V	Viton

Port Size

Code	Port P and T	Port A	Port S
12S	12 SAE	10 SAE	8 SAE

Regulated Flow Range

Code	S (Spinner)	A (Auger)
7/15	7 = 0 - 26 LPM (0-7 GPM)	15 = 0 - 57 LPM (0-15 GPM)
10/30	10 = 0 - 38 LPM (0-10 GPM)	30 = 0 - 114 LPM (0-30 GPM)

Kits

Knob Kit	158B8962
Seal Kit (for 2 adjust assemblies)	158B8858
Lever Kit	158B8972

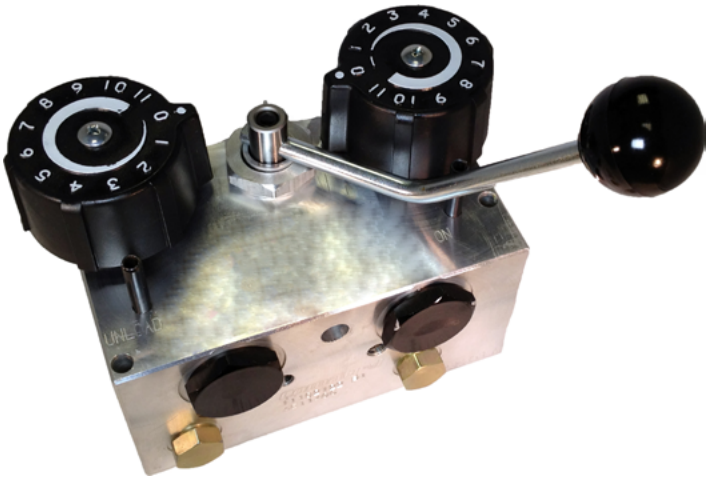
Relief Valve: CP200-1

OPERATION

This is a compensated spreader valve with dual flow regulation and manual dump for an open circuit piston pump application. This is a direct replacement to the 2FFLC12

APPLICATIONS

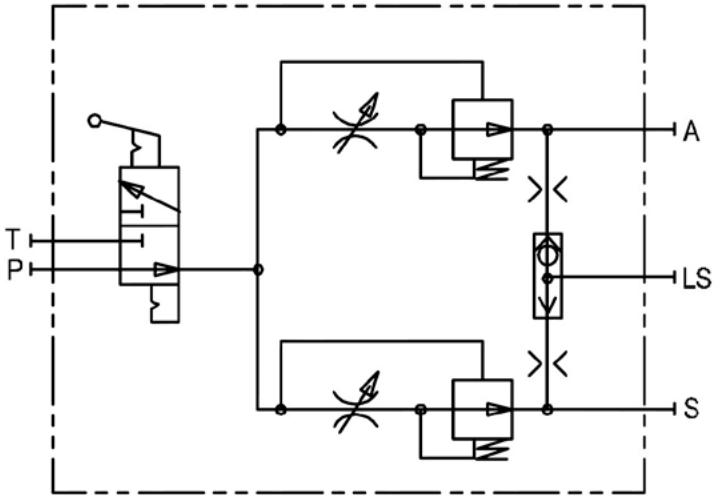
For use with variable displacement pressure compensated pumps in load sensing circuits that require two pressure compensated flow controls. The integral lever allows on/off pump control. This valve is designed for speed control of two actuators which must have individual flow settings. The LS port senses the load pressure on both actuators to signal the pump to increase or decrease the supply flow. With the lever in the unload position, no load is sensed and the pump de-strokes.



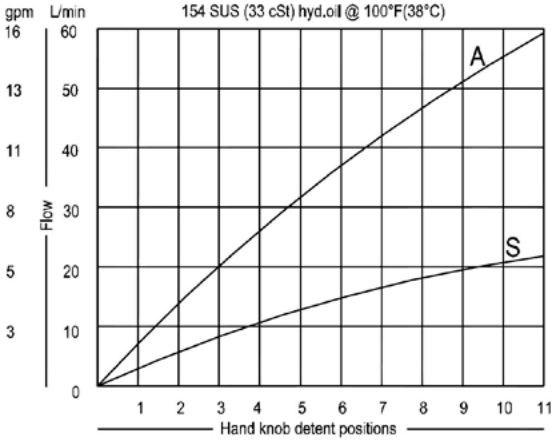
SPECIFICATIONS

Rated Pressure	207 bar [3000 psi]
Maximum Rated Flow at 7 bar [100 psi]	114 l/m [30 US gal/min]
Weight	3.08 kg [6.79 lb]

SCHEMATIC

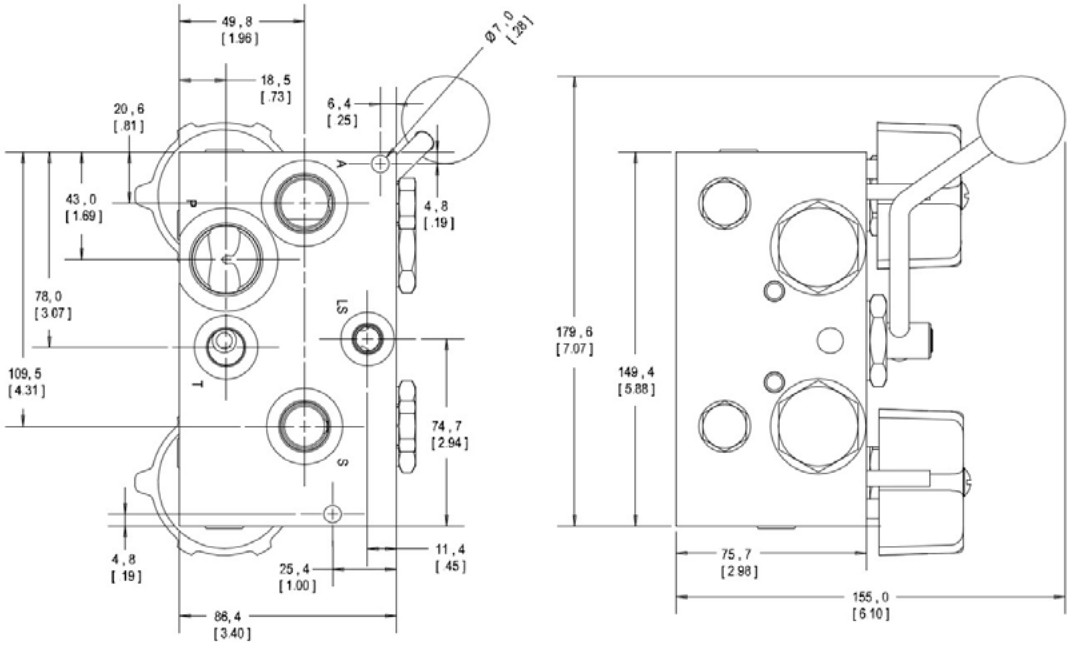


PERFORMANCE CURVE

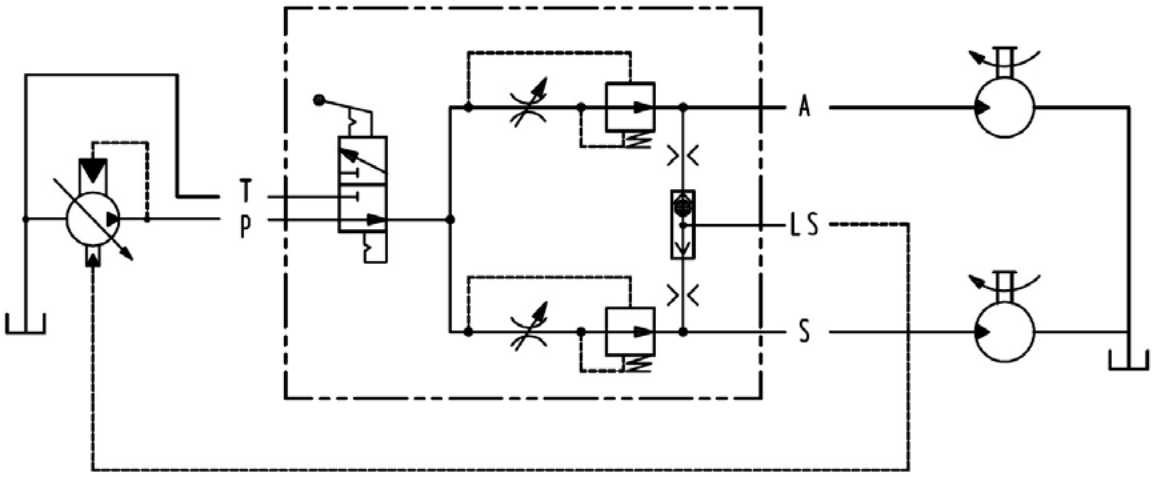


DIMENSIONS

mm [in]



EXAMPLE CIRCUIT



ORDERING INFORMATION

SPR-2FFLC12 - D - 12S - 7/15 - V

Adjustment Option

Code	Adjustment
D	Detented hand knob

Seal Option

Code	Seal Material
V	Viton

Port Size

Code	Port P	Port A	Port S	Port T	Port LS
12S	12 SAE	10 SAE	8 SAE	6 SAE	4 SAE

Regulated Flow Range

Code	S (Spinner)	A (Auger)
7/15	7 = 0 - 26 LPM (0-7 GPM)	15 = 0 - 57 LPM (0-15 GPM)

Kits

Knob Kit	158B8962
Seal Kit (for 2 adjust assemblies)	158B8858
Lever Kit	11109844

OPERATION

This is a compensated spreader valve with dual flow regulation and solenoid dump for an open circuit gear pump application. This is a direct replacement to the 2FFLW86.

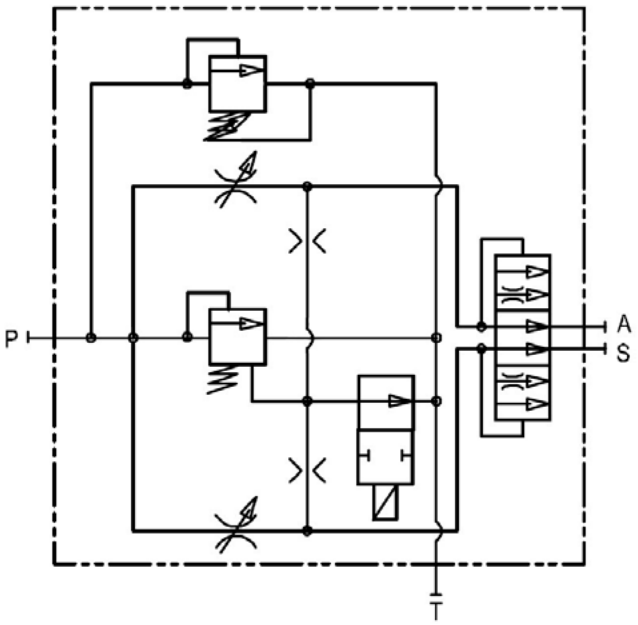
APPLICATIONS

For use with fixed displacement pumps in circuits that require two pressure compensated flow controls, solenoid valve for on-off dump and pump relief. The valve maintains constant regulated flow to two actuators even with changes in load pressure or input flow. The pressure-compensated regulating section bypasses excess pump flow to tank. The pump operates at the highest load pressure plus control section pressure drop. The tank or bypass port must be referenced directly to tank and not to a working line. The direct acting relief valve senses system pressure and protects the pump from shock or overload pressure surges. The built-in, solenoid-operated, two-way valve unloads system flow to tank. This allows on-off control of both regulated flows without changing either flow setting. In the unload condition an 8.6 bar [125 psi] check valve may be required in either the A port, the S port or both ports to reduce the potential of motor movement.

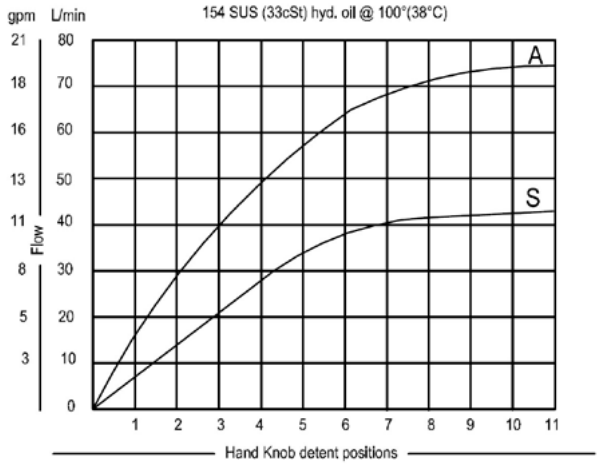
SPECIFICATIONS

Rated Pressure	138 bar [2000 psi]
Maximum Rated Flow at 7 bar [100 psi]	114 l/m [30 US gal/min]
Weight including coil	3.08 kg [6.79 lbs]
Robust Coil	**R13** 16 Watt ("FL" Connector) Robust Nut P/N **173800539** (no coil O-rings needed)

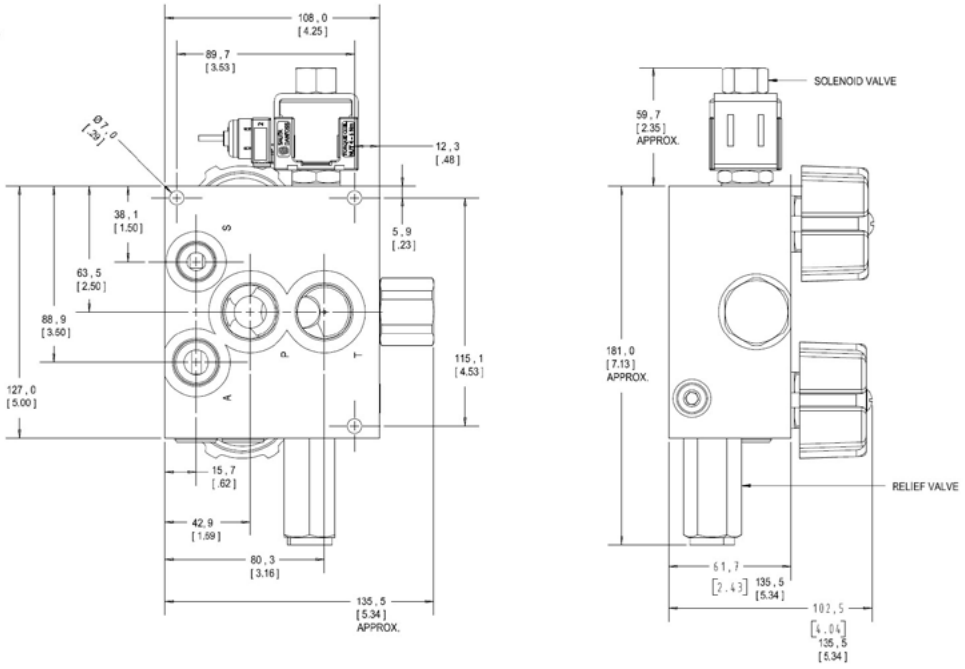
SCHEMATIC



PERFORMANCE CURVE



DIMENSIONS
mm [in]



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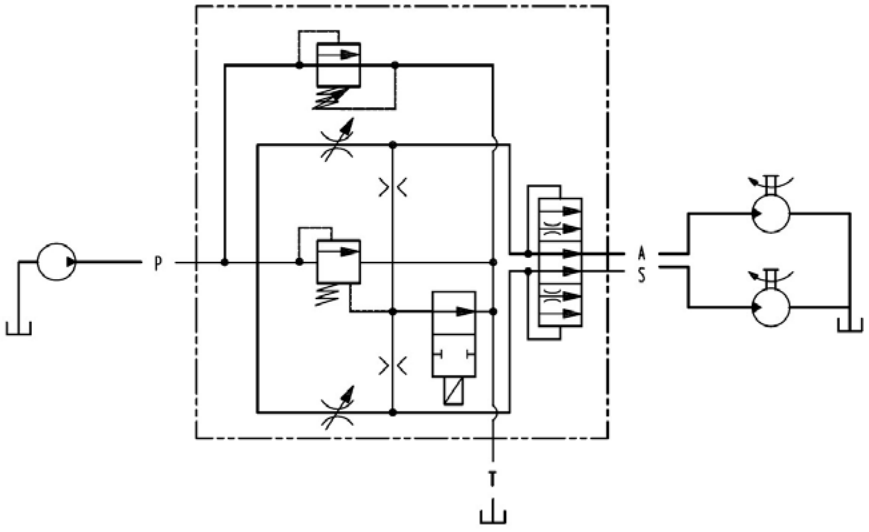

ORDERING INFORMATION

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Adjustment Option

Code	Adjustment
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Seal Option

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Kits

Knob Kit	158B8962
Seal Kit (for 2 adjust assemblies)	158B8858

Relief Valve: CP200-1

Solenoid Valve: SVP08-NO