

## SRV4-12

Solenoid operated relief valve

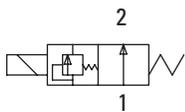
### Description

The SRV4-12 is a pilot operated, solenoid relief valve.

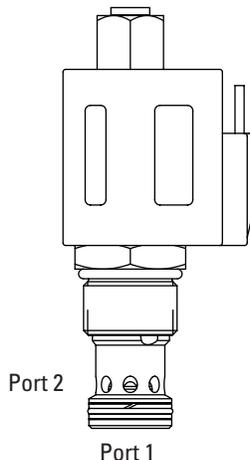
### Operation

In its de-energized state, the valve allows flow from port 1 to port 2. In the energized state the valve allows flow from 1 to 2 only when the set pressure is reached.

### Functional Symbol



### Sectional View



### RATINGS AND SPECIFICATIONS

*Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)*

Typical application pressure	250 bar (3600 psi)
Cartridge fatigue pressure (infinite life)	250 bar (3600 psi)
Rated flow	114 L/min (30 USgpm)
Reseat pressure	More than 80% of crack pressure
Hysteresis	Less than 3 bar (45 psi)
Internal leakage, port 1 to port 2	164 mL/min (10 in <sup>3</sup> /min) @ 80% cracking pressure
Overshoot	Less than 20% of max. press. range with flow step of 30 USgpm at pressure rise rate of 100,000 psi/sec.
Repeatability	+/- 1% maximum pressure range
Cavity	C-12-2
Standard housing materials	Aluminum or steel
Temperature range	-40° to 120° C (-40° to 248°F)
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness code 18/16/13
Weight cartridge only	0,4 kg (0.89 lbs)
Seal kits	02-180095 Buna-N 02-165887 Viton®

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### Performance characteristics

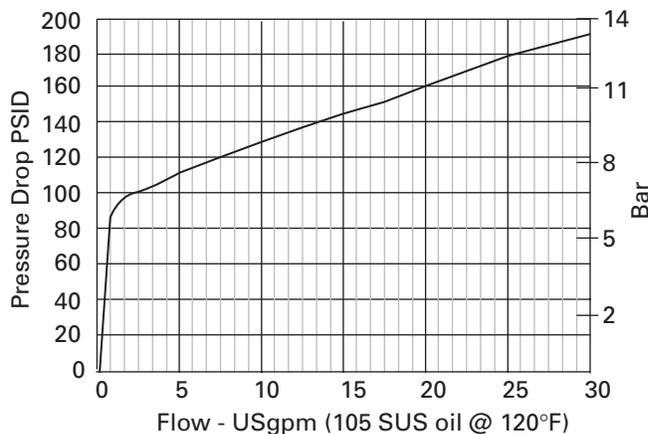
Cartridge only

**A** - typical pressure override @ 3000 psi setting

**B** - typical pressure override @ 1500 psi setting

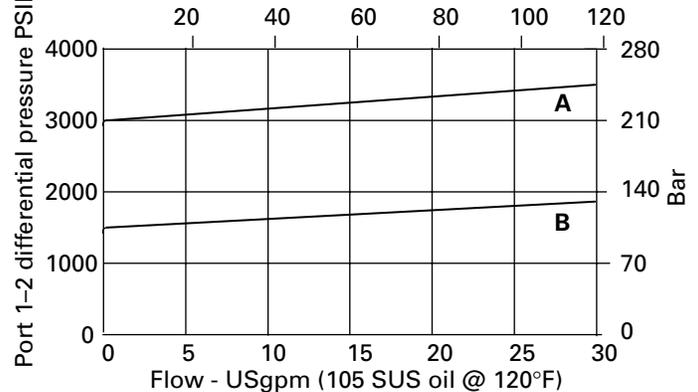
#### SRV De-energized Pressure Drop

Flow - L/min (21,8 cSt oil @ 49°C)



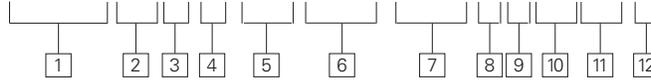
#### Pressure override

Flow - L/min (21,8 cSt oil @ 49°C)



# Model Code

**SRV4 12 \* \* \*\*\* \*\*\*\*\* \*\* 00 00 A**



## 1 Function

**SRV4** - Solenoid relief valve

## 2 Size

**12** - 12 Size

## 3 Seals

**N** - Buna-N

**V** - Viton®

## 4 Valve housing material

**0** - Cartridge only

**A** - Aluminum

## 5 Port size

**000** - Cartridge only

### CODE PORT SIZE HOUSING NUMBER

CODE	PORT SIZE	HOUSING NUMBER
		Aluminum Fatigue rated
<b>10T</b>	SAE 10	02-160640
<b>12T</b>	SAE 12	02-160644
<b>04G</b>	1/2" BSPP	02-161118
<b>06G</b>	3/4" BSPP	02-161117

See section J for housing details.

## 6 Setting pressure

50-3600 psi. User requested settings in 3,45 bar (50 psi) steps, coded as in the following examples:

**1000** - 70 bar (1000 psi)

**1500** - 103 bar (1500 psi)

**2000** - 138 bar (2000 psi)

## 7 Voltage rating

**0000** - No coil

**012D** - 12 VDC

**024D** - 24 VDC

**036D** - 36 VDC

**024A** - 24 VAC

**120A** - 120 VAC

**240A** - 240 VAC

**012B** - 12 VDC/w diode

**024B** - 24 VDC/w diode

## 8 Connector types

**0** - No coil

**G** - ISO 4400 DIN 43650

**W** - Lead wire

**N** - Deutsch (DC only)

**Y** - Amp JR (DC only)

## 9 Coil Series

**0** - No coil

**J** - 20 W, 10 series coil

## 10 Coil special features

**00** - None

## 11 Special features

**00** - None

(Only required if valve has special features, omitted if "00")

## 12 Design Code

**A** - Current design

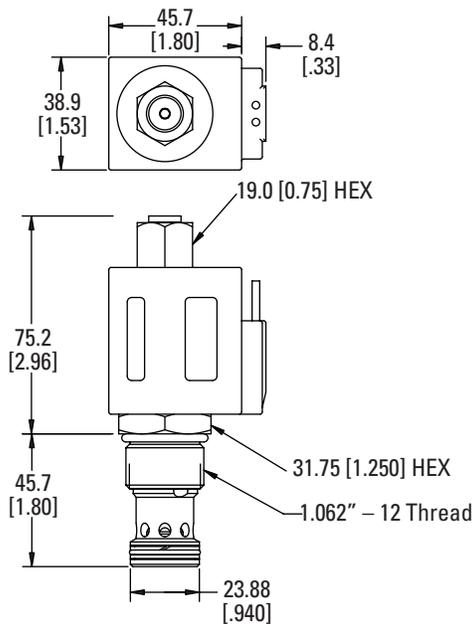
## Dimensions

mm (inches)

Torque cartridge in housing

**A** - 81-95 Nm (60-70 ft. lbs)

**S** - 102-115 Nm (75-85 ft. lbs)



Aluminum housings can be used for pressures up to 210 bar (3000 psi).

Steel housings **must** be used for operating pressures **above** 210 bar (3000 psi).

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