

For directional, pressure, flow-control and check valves

# Cartridge Valves

**Market**

Applications are demanding:

- Higher system pressures and flow rates
- Lower power losses
- More favorable cost/performance ratios

**Our solution:**

**The Bucher Hydraulics cartridge valve program**

**Cartridge valves**

Our cartridge valve line covers a large area of valve functions and cavities for both ANSI (SAE) and DIN (EN) standards.

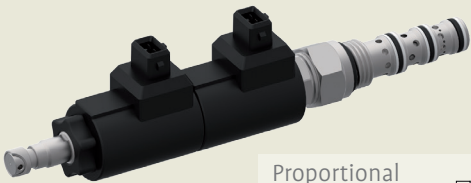
The high level of functional reliability and the great stability of our components are used in different applications:

- Mobile hydraulics with vast experience in construction, agricultural and municipal machinery
- Industrial hydraulics with its stringent safety requirements
- Equipment for wind power generation

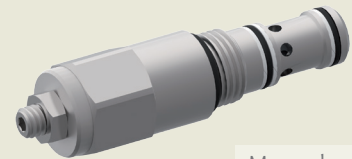
**Your benefits**

- Maximum flow rate and pressure, low pressure loss
- Save space and weight with compact design
- Long life at maximum performance levels
- High functional stability throughout the entire pressure and flow rate range
- Flexibility, availability and good cost/performance ratio
- Safety: All valves are tested before leaving the factory

**Actuators:**



Proportional solenoid



Manual adjustment



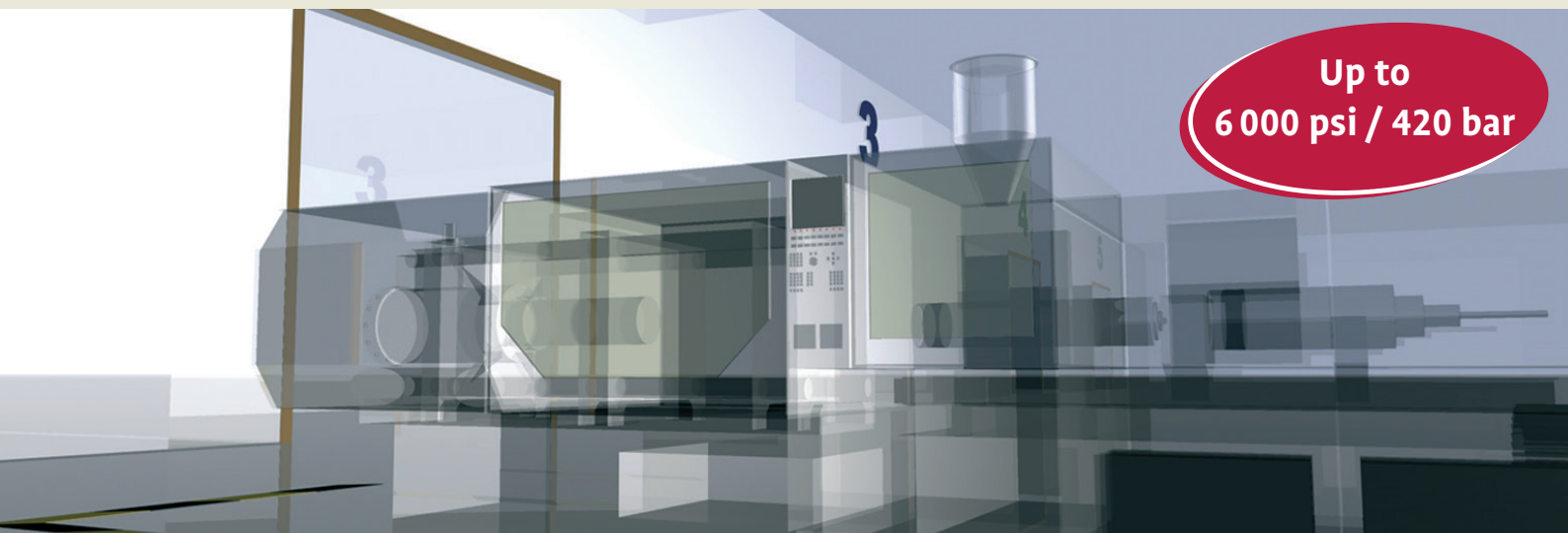
Manual operation



Solenoid and manual override



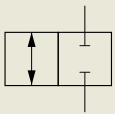
Hydraulic pilot operated



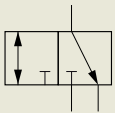
**Up to  
6 000 psi / 420 bar**

## Functions

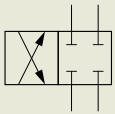
### Directional Valve



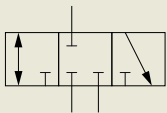
2/2 way valve



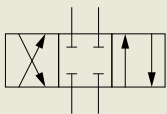
3/2 way valve



4/2 way valve

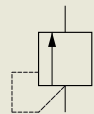


3/3 way valve

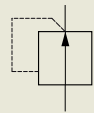


4/3 way valve

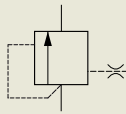
### Pressure Valve



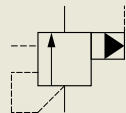
pressure relief



pressure reducing



pressure compensator

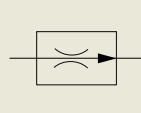


pressure controlled

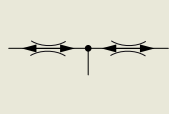
### Flow Valve



throttle valve



flow control valve



flow divider / combiner

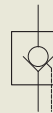


shut-off

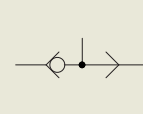
### Check Valve



spring loaded check valve

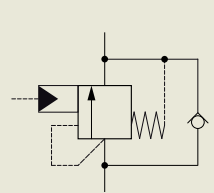


pilot operated check valve

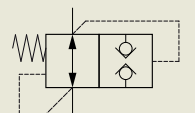


shuttle valve

### Safety Valve



load control valve



pipe rupture valve

## Sizes

Nominal flow	< 2.5 gpm < 10 l/min	< 5 gpm < 20 l/min	< 11 gpm < 40 l/min	< 19 gpm < 70 l/min	< 37 gpm < 140 l/min	< 50 gpm < 190 l/min	< 90 gpm < 350 l/min
Size SAE	AN 04	AN 08		AN 10	AN 12	AN 16	SAE -
Thread SAE	7/16" - 20 UNF	3/4" - 16 UNF		7/8" - 14 UNF	1 1/16" - 12 UN	1 5/16" - 12 UN	-
Size ISO	NG 1...4	NG 5	NG 6	NG 10		ISO NG 16	
Thread ISO	M20 x 1.5	M20 x 1.5	M20 x 1.5	M24 x 1.5		M42 x 2	