

## Proportional Flow Control Cartridge Valves 08, 10, 12, 16 Series

As Comatrol, a member of the Sauer-Danfoss Group, we engineer, manufacture and supply screw-in Cartridge Valves and Hydraulic Integrated Circuits (HIC) to market-leading quality levels. We work closely with our customers around the world to deliver optimal machine control solutions based on their specific needs.

Comatrol intensified its investment in proportional flow control technology by expanding its extensive product line, making it the largest and most complete family in the industry.

The entire product line now features 26 families with 46 flow settings to allow the valve to match the vehicle performance expectations.

In order to address space and total installed cost constraints, the valves are more compact than the predecessors in order to provide advantages on the next generation of vehicle platforms.

The product line comes standard with robust coils for extreme environment exposure and are designed for installation on machines that utilize Sauer-Danfoss PLUS+1 hardware, ensuring they are compliant out of the box.



F101882

### Features:

- 26 families with 46 flow settings
- Compact size
- Optimum control
- PLUS+1™ compliant
- Environmentally robust coils
- Normally open and normally closed options
- Integrated compensation

### Restrictive spool (non-compensated)

- Two-way, two-position, spool-type valves provide non-compensated flow to machine function (electrically actuated needle valve).
- Commonly used for pump unloading, variable flow control of an actuator, and bleed off circuits that do not require internal compensation (load-independent flow)

### Restrictive poppet (non-compensated)

- Two-way, two-position, poppet-type valves provide non-compensated flow and low leakage load holding to machine function.
- Commonly used for load lowering or raising circuits that do not require internal compensation (load-independent flow) but need low-leakage load holding

### Priority, pressure-compensated, 3-way

- Three-ported design provides an infinitely variable flow to the priority port, regardless of load pressure changes in the circuit. Remaining flow is sent to the third port.
- Commonly used to direct fixed flow to a priority function or circuit, while secondary flow is available to other intermittent functions or bypassed to tank

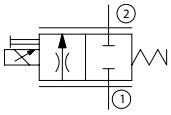
### Restrictive, pressure-compensated, 2-way

- Two-ported design provides an infinitely variable flow, regardless of load pressure changes in the circuit.
- Commonly used for variable meter-in or meter-out circuits to control actuator speeds or for controlling flow to a complete circuit, where compensation is required (load-independent flow)

Local Address:

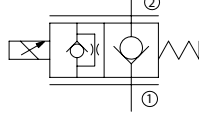
**Schematics\***

PSV10-NC



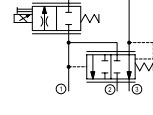
P104 832

PSVP10-NCR



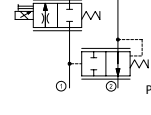
P104 854

PFC10-PC



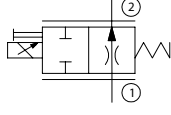
P104 789

PFC10-RC



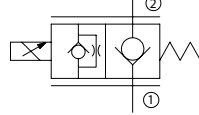
P104 797

PSV10-NO



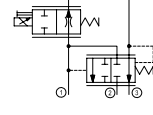
P104 836

PSVP10-NOR



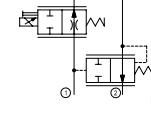
P104 854

PFC10-PO



P104 793

PFC10-RO



P104 802

\* Schematics for 10 series are shown. 08, 12 and 16 series use the same schematics.

**Technical Data**

Model No.	Cavity	Description	Flow		Pressure	
			l/min	US gal/min	bar	psi
<b>Restrictive spool, non compensated, normally closed</b>						
CP518-PNC	SDC08-2	Non-compensated, spool, normally closed	12	3	210	3000
PSV10-NC	SDC10-2	Non-compensated, spool, normally closed	40	11	260	3770
PSV12-NC	SDC12-2	Non-compensated, spool, normally closed	80	21	260	3770
PSV16-NC	SDC16-2	Non-compensated, spool, normally closed	100	26	260	3770
<b>Restrictive spool, non compensated, normally open</b>						
CP518-PNO	SDC08-2	Non-compensated, spool, normally open	12	3	210	3000
PSV10-NO	SDC10-2	Non-compensated, spool, normally open	45	12	260	3770
PSV12-NO	SDC12-2	Non-compensated, spool, normally open	100	26	260	3770
PSV16-NO	SDC16-2	Non-compensated, spool, normally open	110	29	260	3770
<b>Restrictive poppet, non compensated, normally closed</b>						
PSVP10-NCR	SDC10-2	Non-compensated, poppet, normally closed	55	15	260	3770
PSVP12-NCR	SDC12-2	Non-compensated, poppet, normally closed	70	18	260	3770
PSVP16-NCR	SDC16-2	Non-compensated, poppet, normally closed	90	24	260	3770
<b>Restrictive poppet, non compensated, normally open</b>						
PSVP10-NOR	SDC10-2	Non-compensated, poppet, normally open	45	12	260	3770
PSVP12-NOR	SDC12-2	Non-compensated, poppet, normally open	70	18	260	3770
PSVP16-NOR	SDC16-2	Non-compensated, poppet, normally open	80	21	260	3770
<b>Priority pressure Compensated, 3-way, normally closed</b>						
PFC10-PC	SDC10-3	Compensated, 3-way, normally closed	40	11	260	3770
PFC12-PC	SDC12-3	Compensated, 3-way, normally closed	65	17	260	3770
PFC16-PC	SDC16-3	Compensated, 3-way, normally closed	85	22	260	3770
<b>Priority pressure Compensated, 3-way, normally open</b>						
PFC10-PO	SDC10-3	Compensated, 3-way, normally open	35	9	260	3770
PFC12-PO	SDC12-3	Compensated, 3-way, normally open	70	18	260	3770
PFC16-PO	SDC16-3	Compensated, 3-way, normally open	90	24	260	3770
<b>Priority pressure Compensated, 2-way, normally closed</b>						
PFC10-RC	SDC10-2	Compensated, 2-way, normally closed	30	8	260	3770
PFC12-RC	SDC12-2	Compensated, 2-way, normally closed	65	17	260	3770
PFC16-RC	SDC16-2	Compensated, 2-way, normally closed	90	24	260	3770
<b>Priority pressure Compensated, 2-way, normally open</b>						
PFC10-RO	SDC10-2	Compensated, 2-way, normally open	30	8	260	3770
PFC12-RO	SDC12-2	Compensated, 2-way, normally open	60	16	260	3770
PFC16-RO	SDC16-2	Compensated, 2-way, normally open	85	22	260	3770

For more information on Comatrol cartridge valves and HICs, refer to [Cartridge Valves Technical Information 520L0588](#). See the proportional valves section for detailed information on proportional flow control valves.