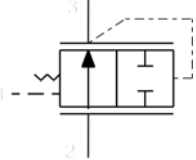
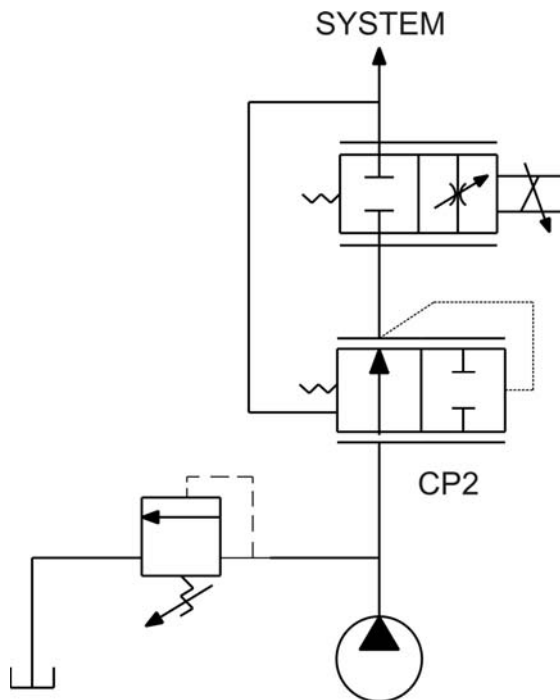


2-way, Compensating / Reducing Valves

	GPM	PSI	LPM	BAR	MODEL	CAVITY	PAGE
	8	3500	30	245	DF-CP2	7/8"– 14 UNF	60
	16	3500	60	245	QC-CP2	Special	62

Typical Schematic

Typical application for the CP2 is in a proportional circuit to achieve pressure compensated flow control. The pressure compensator is located upstream of the orifice and is spring biased to an open position.



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**DF-CP2 Pressure Compensating / Reducing Valve**

**DESCRIPTION**

10 size, 7/8-14 thread, "Delta" series, 2 ways pressure compensating / reducing valve.

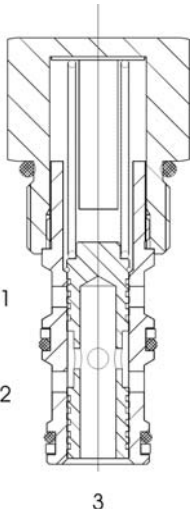
**OPERATION**

The DF-CP2 allows pressure compensated flow from (2) to (3) regulated the pressure present at (1). Pressure differential between (3) and (1) is fixed at 8 / 14 / 18 bar (according to the pressure settings). These are minimum values, increasing with the flow because of the pressure drop through the valve (see graph)

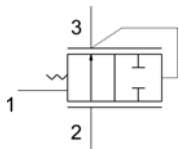
When used with (1) connected to a drain line, it works as pressure reducing valve.

**FEATURES**

- Hardened parts for long life
- Industry common cavity
- Spring range 8 to 18 bar



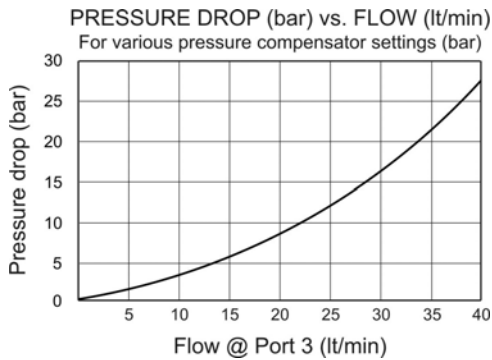
**HYDRAULIC SYMBOL**



Pressure compensator for 2 way flow control, typically used with an external orifice inline with port (3). Port (1) should sense upstream pressure of orifice.

**PERFORMANCE**

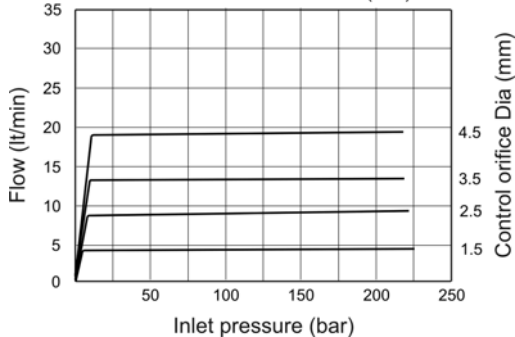
Actual Test Data (Cartridge Only)



Nominal Flow	8 GPM (30 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	35 ml/min @ 250 bar
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-25° to +95° C
Weight	.35 lbs. (.16 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	33 ft-lbs (45 Nm)
Cavity	DELTA 3W
Cavity Tools kit (form tool, reamer, tap)	40500001
Seal Kit	210902025

**DF - CP2 008**

**FLOW (lt/min) vs INLET PRESSURE (bar)**  
For various orifice diameters (mm)



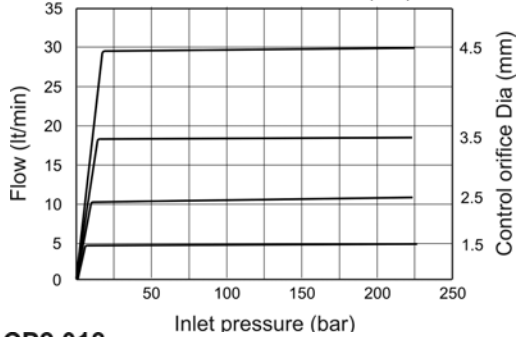
**WARNING:** The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

**PERFORMANCE**

**DIMENSIONS**

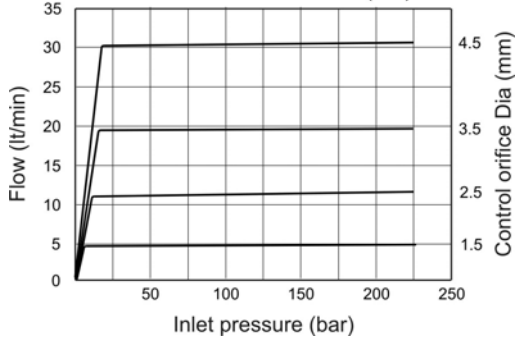
**DF - CP2 014**

FLOW (lt/min) vs INLET PRESSURE (bar)  
For various orifice diameters (mm)



**DF - CP2 018**

FLOW (lt/min) vs INLET PRESSURE (bar)  
For various orifice diameters (mm)



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

**DF - CP2**

**OPTIONS**  
Buna Standard **00**  
Viton Standard **V0**

**BODIES**  
Blank  
**N** 3/8" BSP Ports  
**S** #6 SAE Ports

**PRESSURE SETTINGS**  
**008** 8 bar (115 psi)  
**014** 14 bar (200 psi)  
**018** 18 bar (260 psi)

Differential Pressure Across  
External Controlling Orifice

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**QC-CP2 Pressure Compensating / Reducing Valve**

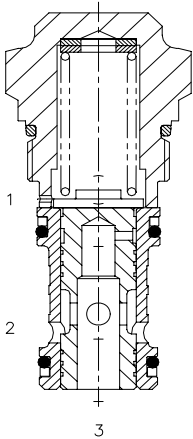
**DESCRIPTION**

Special cavity, 2 ways pressure compensating / reducing valve.

**OPERATION**

The QC-CP2 allows pressure compensated flow from (2) to (3) regulated the pressure present at (1). Pressure differential between (3) and (1) is fixed at 8 / 14 / 18 / 24 bar (according to the pressure settings). These are minimum values, increasing with the flow because of the pressure drop through the valve (see graph).

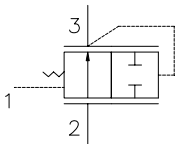
When used with (1) connected to a drain line, it works as a fix setting pressure reducing valve.



**FEATURES**

- Hardened parts for long life
- Spring range from 8 to 24 bar

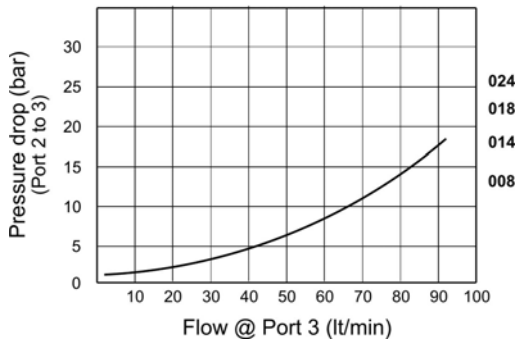
**HYDRAULIC SYMBOL**



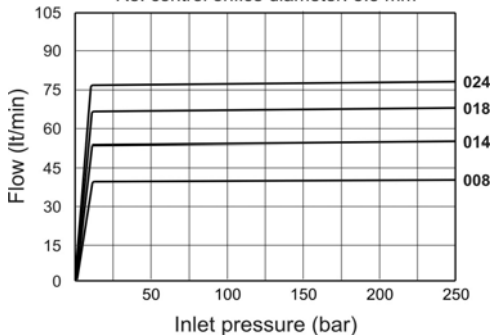
Pressure compensator for 2 way flow control, typically used with an external orifice inline with port (3). Port (1) should sense upstream pressure of orifice.

**PERFORMANCE Actual Test Data (Cartridge Only)**

PRESSURE DROP (bar) vs. FLOW (lt/min)



FLOW (lt/min) vs INLET PRESSURE (bar)  
For various Press. Compensator Valve settings  
Re: control orifice diameter: 5.5 mm

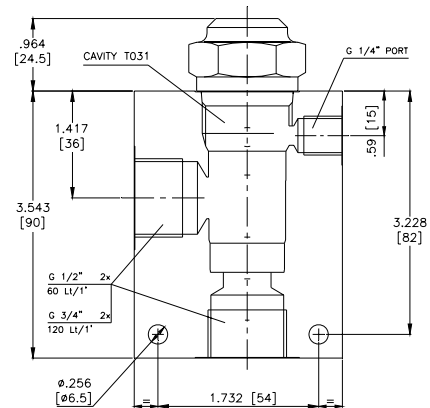
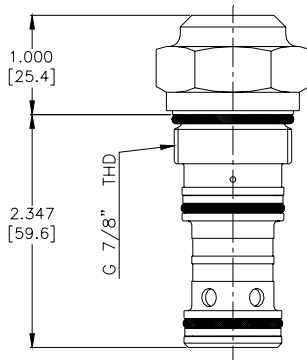
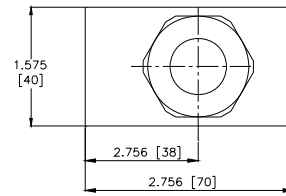
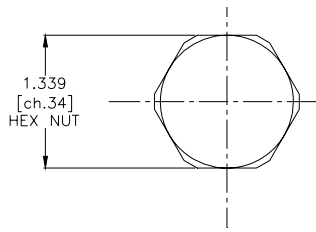


**VALVE SPECIFICATIONS**

Nominal Flow	19 GPM (70 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	35 ml/min @ 250 bar
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.35 lbs. (.16 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	33 ft-lbs (45 Nm)
Cavity	T031
Cavity Tools kit (form tool, reamer, tap)	K-T031
Seal Kit	210902012

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**DIMENSIONS**



**ORDERING INFORMATION**

**QC - CP2**

**OPTIONS**  
Buna Standard **00**  
Viton Standard **V0**

**BODIES**  
Blank  
**N**  
**S**  
Without Body  
1/2" BSP Ports  
#8 SAE Ports

**PRESSURE SETTINGS**  
**008** 8 bar (115 psi)  
**014** 14 bar (200 psi)  
**018** 18 bar (260 psi)  
**024** 24 bar (340 psi)

Differential Pressure Across  
External Controlling Orifice

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