

Motion Control Valves

1CPPD90

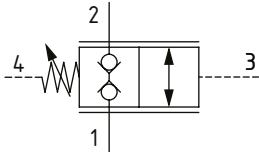
Zero Differential Valve, Normally Closed, Poppet Type, External Drain, Port 3 Pilot

350 bar [5000 psi] • 90 l/min [24 US gpm]

DESCRIPTION AND OPERATION

This is a normally closed zero differential valve, which is a pilot assisted metered, bi-directional poppet valve. By applying pilot pressure on port 3 the valve will open allowing the load to be lowered with oil passing from port 1 to 2 or port 2 to 1. With port 4 connected to tank, back pressure will not affect the pilot pressure required to open the valve. These valves are usually used in conjunction with a remote pilot source to maintain control in the event of hose failure. They should always be mounted on to or into the actuator. These valves do not have a relief function.

SCHEMATIC



PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	90 l/min [24 US gpm]
Leakage	0.3 ml/min nominal [5 drops/min]
Weight	0.37 kg [0.82 lbs]
Cavity	A12196

MODEL CODE

1CPPD90 - F - 4W - 2 - P - 377 - 10

Basic Code

1CPPD90 - No housing
1CPPD95 - Cartridge and housing

Adjustment Option

F - External
G - Tamper resistant
N - Non-adjustable option, contact technical support

Housing

Code	Ports	Aluminum	Steel
Omit	No housing		
4W	1/2" BSP Valve & Cyl. Port, 1/4" BSP Pilot and Vent Port	B16357	B23615
8T	#8 SAE Valve & Cyl. Port, #4 SAE Pilot and Vent Port	12007706	12007708

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

Pilot Pressure Range

Code	Bar	Psi
2	8-25	[116-363]
Standard Setting	10	[145]

Std setting made at 4.5 l/min

Pilot Pressure Setting

Code Pressure setting in bar (2 bar increments within specified Pressure Range)
XXX - Standard setting (see Pressure Range for value)
Example:

Code	Bar	Psi
10	10	[145]

Housing Material

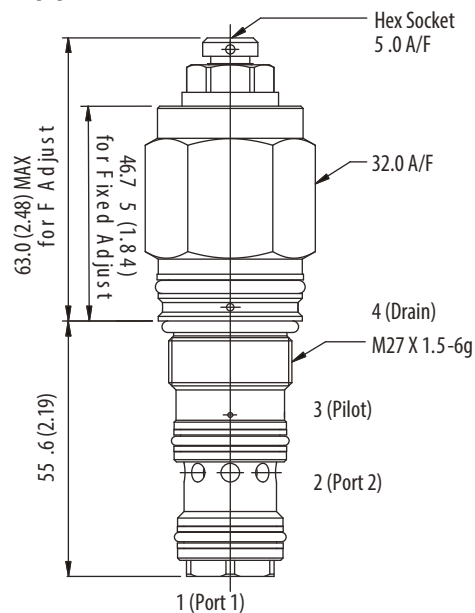
Omit - Aluminum/No Housing
377 - Steel

Seal Option

Code	Seal kit
S-Buna-N	SK1453
SV-Viton	SK1453V
P-Polyurethane/Buna-N	SK1453P

DIMENSIONS

mm [in]



Turn CW to increase pressure setting and CCW to decrease pressure setting

Torque lock nut to 20-25 Nm [15-18 ft lbs]

Installation torque 60 Nm [44 ft. lbs]

PERFORMANCE CURVES

Pressure Drop

