



SX203 / SX204 Directional Control Valve - 2-Way, 2-Position

Poppet

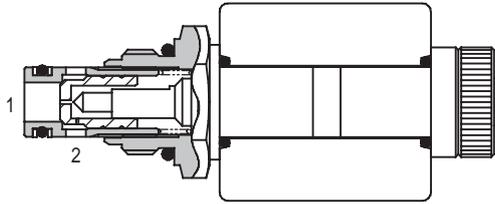
20 litres/min (5 US GPM) • 350 bar (5000 PSI)

SX203

NORMALLY OPEN
(as shown)

SX204

NORMALLY CLOSED



APPLICATION

To give on-off control of flows of 20 litres/min (5 US GPM) and pressures up to 350 bar (5000 psi). Typical usage includes the control of actuators in a hydraulic system.

OPERATION

Normally Open

De-energised; 2 to 1 – full flow, pressure difference through the pilot orifice holds the main poppet open. 1 to 2 – restricted flow, main poppet pressure biased onto its seat, pilot orifice open.

Energised; 2 to 1 - No flow, pilot orifice closed, main poppet pressure biased onto its seat. 1 to 2 – full flow when solenoid force overcome.

Normally Closed

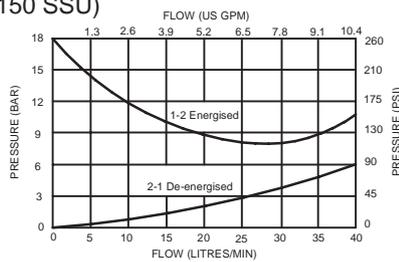
De-energised; 2 to 1 – no flow, pilot orifice closed, main poppet pressure biased onto its seat. 1 to 2 – full flow when spring force overcome.

Energised; 2 to 1- full flow, pressure difference through the pilot orifice holds the main poppet open. 1 to 2 – restricted flow, main poppet pressure biased onto its seat, pilot orifice open.

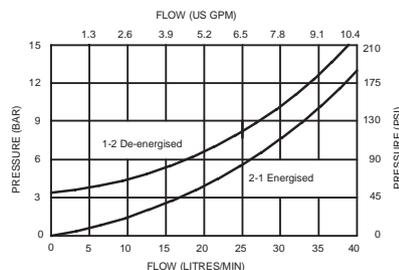
PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)

SX203 (280 bar) (Normally Open)



SX204 (350 bar) (Normally Closed)



*For applications above 210 bar please consult our technical department or use the steel body option.

COIL INFORMATION

(See Page 11-1021)

Part Number: C13-*-/22

Voltage available: 12, 24 VDC
110, 220 VAC*

* AC coils must be used with a rectifying connector.

FEATURES

- High flow capacity with reduced space requirements.
- No dynamic seals.
- Standard valve bodies and common cavities.
- One-piece encapsulated coil with minimal amperage draw.
- Oil immersed armature solenoid.
- Various coil terminals and voltages.
- Coil interchangeability with all Series S2 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

SPECIFICATIONS

Basic Model Code	SX203 (N.O.)	SX204 (N.C.)
Basic Model Code		
Max. Working Pressure	SX203: 280bar (4000psi) SX204: 350bar (5000psi)	
Cartridge Material	Working parts hardened and ground steel	
Body Material	Standard aluminium (up to 210 bar*) Add suffix '377' for steel option	
Mounting Position	Unrestricted	
Cavity Number	A879 (See Section 17)	
Torque Cartridge into Cavity	30 Nm (22 lbs ft)	
Weight (exc. coil)	0.08 kg (0.18lbs)	
Seal Kit Number	SK1043 (Nitrile) SK1043V (Viton)	
Recommended Filtration Level	BS5540/4 (25 micron nominal) Class 18/13	
Operating Temp	-20 C to +90 C	
Leakage	0.6 millilitres/min (10 dpm) closed	
Nominal Viscosity Range	5 to 500 cSt	

Integrated Hydraulics Ltd

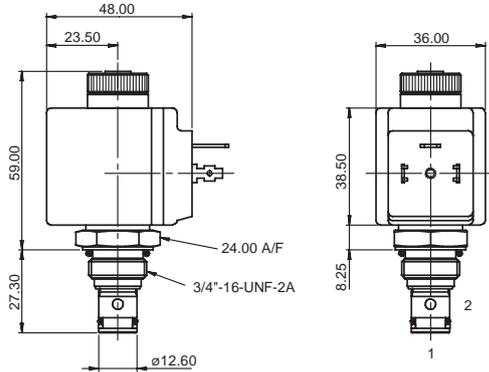
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CARTRIDGE ONLY

BASIC CODE: SX203 (Normally Open) 280 bar



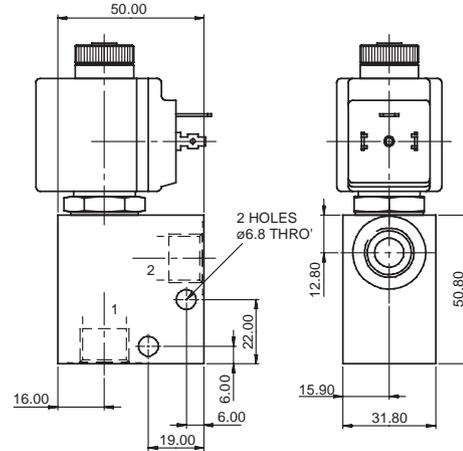
COMPLETE VALVE

1/4" 3/8" PORTS

BASIC CODE: SX203 (Normally Open) 280 bar

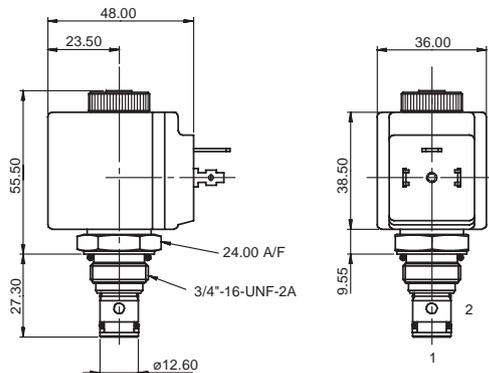
Body ONLY part numbers

BSP, aluminium		SAE, aluminium		BSP, steel		SAE, steel	
1/4"	A1485	3/8"	A15676	3/8"	A14175	3/8"	A14843
3/8"	A1043						



CARTRIDGE ONLY

BASIC CODE: SX204 (Normally Closed) 350 bar



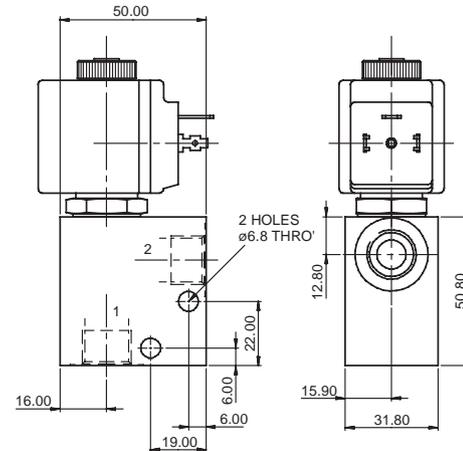
COMPLETE VALVE

1/4" 3/8" PORTS

BASIC CODE: SX204 (Normally Closed) 350 bar

Body ONLY part numbers

BSP, aluminium		SAE, aluminium		BSP, steel		SAE, steel	
1/4"	A1485	3/8"	A15676	3/8"	A14175	3/8"	A14843
3/8"	A1043						



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

SX* N H 24 3W**

Basic Code

SX203 = (normally open) 280 bar
SX204 = (normally closed) 350 bar

Seals

N = Nitrile
V = Viton

Manual Override (consult factory for availability)

Port Sizes

2W = 1/4" BSP
3W = 3/8" BSP
6T = 3/8" SAE

Voltage

12 = 12 VDC
24 = 24 VDC
110 = 110 VAC
220 = 220 VAC

Coil Termination

H = DIN43650
F = Flying Leads
DM = Deutsch Moulded
Other terminations available on request

We reserve the right to change specifications without notice