

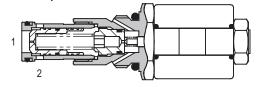
# S607 / S608 & S612 / S613 Directional Control Valve 2-Way, 2-Position Poppet/Spool

100 litres/min (26 US GPM) • 250 bar (3600 PSI)

#### **S607**

#### **S608**

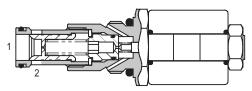
POPPET TYPE NORMALLY OPEN (as shown) POPPET TYPE NORMALLY CLOSED



## **S612**

## **S613**

SPOOL TYPE NORMALLY OPEN (as shown) SPOOL TYPE NORMALLY CLOSED



## **APPLICATION**

To give on-off control of flows up to 100 litres/min (26 US GPM) and pressures up to 250 bar (3600 psi).

#### **COIL INFORMATION**

(See Page 11-1021)

Part Number: C13-\*-\*/14

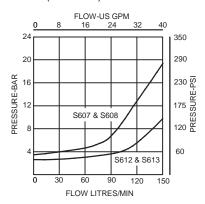
Voltage available: 12, 24 VDC

110, 220 VAC\*

\* AC coils must be used with a rectifying connector.

#### PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)



#### **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  S607 Poppet Type (N.C.) S612 Spool Type (N.C.) S613 Spool Type (N.C.) S613 Spool Type (N.C.) S613 Spool Type (N.C.) S613 Spool Type (N.C.)  S607 S608  S607 S608  S612 S613  W  T  Max. Working Pressure  S612 S613  W  T  Max. Working Pressure  S612 S613  W  T  Max. Working Pressure  S612 S613  S613  S614 S613  S615  S615  S616  Max. Working Pressure  S607 S608 S612 S613  S613  S614 S613  S615 S613  S615 S613  S616  S616 S613  S616 S613  S616 S613  S616 S613  S617 S618 S618 S618 S618 S619 S619 S619 S619 S619 S619 S619 S619		
Symbol  S612  S613  W T T Z  Max. Working Pressure  Flow Rating  100 litres/min (26 US GPM)  Nominal Flow (at Delta P = 5 bar (70 psi))  Internal Leakage  S607/S608: 0.6 ml/min (10 dpm) S612/S613: Less than 60 ml/min 210 bar differential at 32 centistokes  Temperature Range -20 to +120°C (-4 to +248°F)  Nominal Viscosity Range Recommended Filtration  Fluid  Compatible with most general purpose hydraulic fluids  Seal Material Standard nitrile with PTFE back up rings  Seal Kit Number SK390 (Nitrile) SK390V (Viton)  Mounting Position  Cartridge Weight 0.25 kg (0.55 lbs)  Coil Weight 0.2 kg (0.4 lbs)  Cavity Number A881 (See Section 17)  Torque into Cavity Electrical Data See coil data sheet	Basic Model Code	S608 Poppet Type (N.C.) S612 Spool Type (N.O.)
Symbol  S612  S613  W T T Z  Max. Working Pressure  Flow Rating  100 litres/min (26 US GPM)  Nominal Flow (at Delta P = 5 bar (70 psi))  Internal Leakage  S607/S608: 0.6 ml/min (10 dpm) S612/S613: Less than 60 ml/min 210 bar differential at 32 centistokes  Temperature Range -20 to +120°C (-4 to +248°F)  Nominal Viscosity Range Recommended Filtration  Fluid  Compatible with most general purpose hydraulic fluids  Seal Material Standard nitrile with PTFE back up rings  Seal Kit Number SK390 (Nitrile) SK390V (Viton)  Mounting Position  Cartridge Weight 0.25 kg (0.55 lbs)  Coil Weight 0.2 kg (0.4 lbs)  Cavity Number A881 (See Section 17)  Torque into Cavity Electrical Data See coil data sheet		S607 S608
Max. Working Pressure    Flow Rating   100 litres/min (26 US GPM)	Symbol	
Nominal Flow (at Delta P = 5 bar (70 psi))   90 litres/min (23 US GPM)		S612 S613
Nominal Flow (at Delta P = 5 bar (70 psi))   90 litres/min (23 US GPM)		$\mathbf{W} = \mathbf{Z} $
Nominal Flow (at Delta P = 5 bar (70 psi))  Internal Leakage  S607/S608: 0.6 ml/min (10 dpm) S612/S613: Less than 60 ml/min 210 bar differential at 32 centistokes  Temperature Range -20 to +120°C (-4 to +248°F)  Nominal Viscosity Range Recommended Filtration  Fluid  Compatible with most general purpose hydraulic fluids  Seal Material Standard nitrile with PTFE back up rings  Seal Kit Number SK390 (Nitrile) SK390V (Viton)  Mounting Position  Cartridge Weight 0.25 kg (0.55 lbs)  Coil Weight A881 (See Section 17)  Torque into Cavity Fluid  GO Nm (44 lbs ft) See coil data sheet	Max. Working Pressure	250 bar (3600 psi)
Seal Material   Standard nitrile with PTFE back up rings     Seal Kit Number   SK390 (Nitrile)   SK390V (Viton)     Mounting Position   Cartridge Weight   O.25 kg (0.4 lbs)     Cavity Number   Cavity Number   Cavity Number   Compatible kg (23 US GPM)     Seal Cartridge Weight   O.25 kg (0.4 lbs)     Cavity Number   Compatible kg (24 Us (24 U	Flow Rating	100 litres/min (26 US GPM)
Internal Leakage  S612/S613: Less than 60 ml/min 210 bar differential at 32 centistokes  Temperature Range -20 to +120°C (-4 to +248°F)  Nominal Viscosity Range 15 to 250 centistokes  Recommended Filtration  BS5540/4 18/13 (25 micron or better)  Compatible with most general purpose hydraulic fluids  Seal Material Standard nitrile with PTFE back up rings  Seal Kit Number SK390 (Nitrile) SK390V (Viton)  Mounting Position Unrestricted  Cartridge Weight 0.25 kg (0.55 lbs)  Coil Weight 0.2 kg (0.4 lbs)  Cavity Number A881 (See Section 17)  Torque into Cavity See coil data sheet		90 litres/min (23 US GPM)
Nominal Viscosity Range Recommended Filtration BS5540/4 18/13 (25 micron or better)  Fluid Compatible with most general purpose hydraulic fluids Seal Material Standard nitrile with PTFE back up rings Seal Kit Number SK390 (Nitrile) SK390V (Viton) Mounting Position Unrestricted Cartridge Weight 0.25 kg (0.55 lbs) Coil Weight 0.2 kg (0.4 lbs) Cavity Number A881 (See Section 17) Torque into Cavity G0 Nm (44 lbs ft) Electrical Data See coil data sheet	Internal Leakage	S612/S613: Less than 60 ml/min
Recommended Filtration  BS5540/4 18/13 (25 micron or better)  Compatible with most general purpose hydraulic fluids  Seal Material  Standard nitrile with PTFE back up rings  Seal Kit Number  SK390 (Nitrile)  SK390V (Viton)  Mounting Position  Unrestricted  Cartridge Weight  0.25 kg (0.55 lbs)  Coil Weight  0.2 kg (0.4 lbs)  Cavity Number  A881 (See Section 17)  Torque into Cavity  60 Nm (44 lbs ft)  Electrical Data  See coil data sheet	Temperature Range	-20 to +120°C (-4 to +248°F)
Fluid  Compatible with most general purpose hydraulic fluids  Seal Material  Standard nitrile with PTFE back up rings  Seal Kit Number  SK390 (Nitrile)  SK390V (Viton)  Mounting Position  Unrestricted  Cartridge Weight  0.25 kg (0.55 lbs)  Coil Weight  0.2 kg (0.4 lbs)  Cavity Number  A881 (See Section 17)  Torque into Cavity  60 Nm (44 lbs ft)  Electrical Data  See coil data sheet	Nominal Viscosity Range	15 to 250 centistokes
purpose hydraulic fluids  Seal Material Standard nitrile with PTFE back up rings  Seal Kit Number SK390 (Nitrile) SK390V (Viton)  Mounting Position Unrestricted  Cartridge Weight 0.25 kg (0.55 lbs)  Coil Weight 0.2 kg (0.4 lbs)  Cavity Number A881 (See Section 17)  Torque into Cavity 60 Nm (44 lbs ft)  Electrical Data See coil data sheet	Recommended Filtration	BS5540/4 18/13 (25 micron or better)
Seal Kit Number  SK390 (Nitrile) SK390V (Viton)  Mounting Position  Cartridge Weight  0.25 kg (0.55 lbs)  Coil Weight  0.2 kg (0.4 lbs)  Cavity Number  A881 (See Section 17)  Torque into Cavity  60 Nm (44 lbs ft)  Electrical Data  See coil data sheet	Fluid	
Mounting Position  Cartridge Weight  0.25 kg (0.55 lbs)  Coil Weight  0.2 kg (0.4 lbs)  Cavity Number  A881 (See Section 17)  Torque into Cavity  60 Nm (44 lbs ft)  Electrical Data  See coil data sheet	Seal Material	Standard nitrile with PTFE back up rings
Cartridge Weight 0.25 kg (0.55 lbs)  Coil Weight 0.2 kg (0.4 lbs)  Cavity Number A881 (See Section 17)  Torque into Cavity 60 Nm (44 lbs ft)  Electrical Data See coil data sheet	Seal Kit Number	SK390 (Nitrile) SK390V (Viton)
Coil Weight 0.2 kg (0.4 lbs)  Cavity Number A881 (See Section 17)  Torque into Cavity 60 Nm (44 lbs ft)  Electrical Data See coil data sheet	Mounting Position	Unrestricted
Cavity Number A881 (See Section 17)  Torque into Cavity 60 Nm (44 lbs ft)  Electrical Data See coil data sheet	Cartridge Weight	0.25 kg (0.55 lbs)
Torque into Cavity 60 Nm (44 lbs ft)  Electrical Data See coil data sheet	Coil Weight	0.2 kg (0.4 lbs)
Electrical Data See coil data sheet	Cavity Number	A881 (See Section 17)
	Torque into Cavity	60 Nm (44 lbs ft)
Line Body Material Aluminium Alloy (up to 210 bar*)	Electrical Data	See coil data sheet
	Line Body Material	Aluminium Alloy (up to 210 bar*)

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

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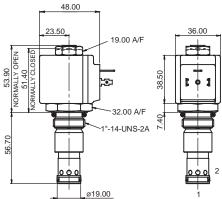
11-1811.B



## **CARTRIDGE ONLY**

BASIC CODE: S607 Poppet Type (N.O.)

S612 Spool Type (N.O.) S608 Poppet Type (N.C.) S613 Spool Type (N.C.)



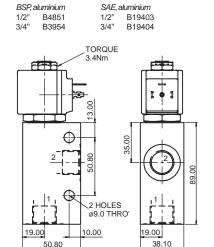
## **COMPLETE VALVE**

**Body ONLY part numbers** 

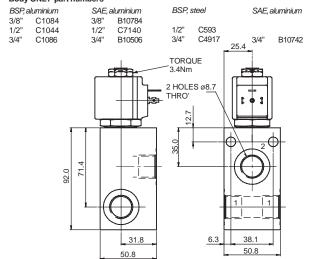
1/2" 3/4" PORTS

BASIC CODE: S607 Poppet Type (N.O.) S608 Poppet Type (N.C.)

S612 Spool Type (N.O.) S613 Spool Type (N.C.)



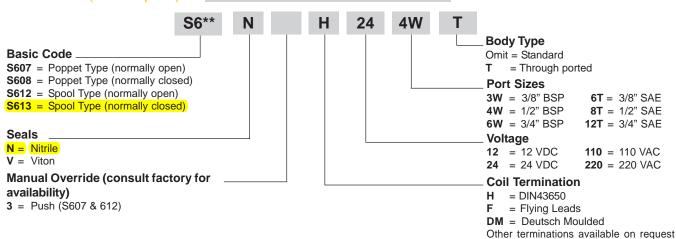
Body ONLY part numbers



Where measurements are critical request certified drawings

# S613 N (ohne Spule)

#### ORDERING CODE EXAMPLE



We reserve the right to change specifications without notice