Directional Control Valves

1SB304

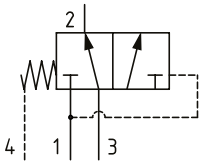
Brake Sequence Directional Valve, 3-Way, Spool Type, Internal Pilot, External Drain

350 bar [5000 psi] • 30 l/min [8 US gpm]

DESCRIPTION AND OPERATION

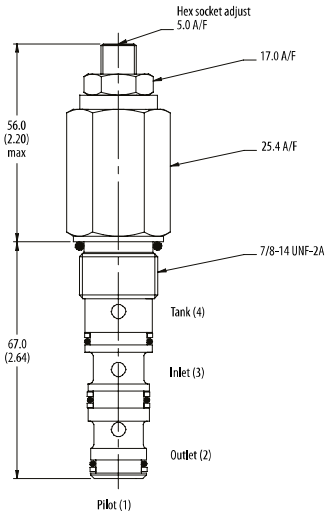
This is a 3-way, spool type, internally piloted directional control valve with external drain. Pressure at port 1 will connect port 1 to port 2 and block port 3. When this pressure falls below the spring setting, the valve connects port 2 to port 3 and blocks port 1. Due to the external drain, the pilot pressure required shift the valve is dependent on the pressure in port 4, which would normally be connected to tank. This is ideal for brake circuits and allows the brake to automatically dis-engage when the machine is in operation.

SCHEMATIC



DIMENSIONS

mm [in]

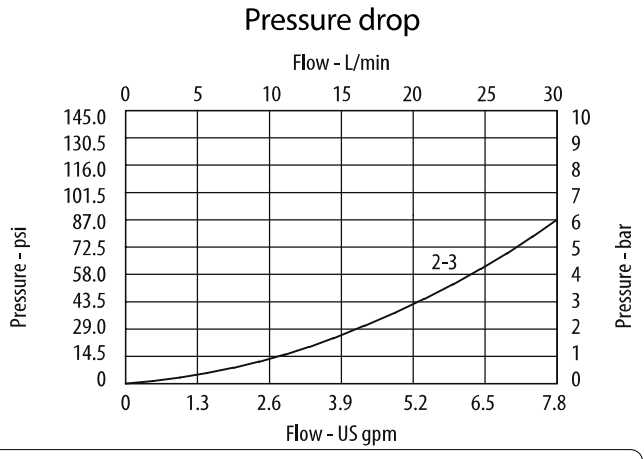


Installation torque
60 Nm [44 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**30 l/min [8 US gpm]**
Max pilot pressure	210 bar [3000 psi]
Leakage	50 ml/min nominal
Weight	0.24 kg [0.53 lb]
Cavity	A5302

PERFORMANCE CURVES



MODEL CODE

1SB354 - P - 3W - S - 12 - 377 - 60

Basic Code

1SB304 - Cartridge Only
1SB354 - Cartridge and Housing

Adjustment Option

P - External

Housing

Code	Ports	Aluminum	Steel
0	No housing		
3W	3/8" BSP	B13602	B13603
6T	3/8" SAE	B21661	B21660

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

Seal Option

Code	Seal Kit
S-Buna-N	SK645
SV-Viton	SK645V

Pressure Range

Code	Bar	[Psi]
6 Standard Setting	10-60 30	[145-870] [435]
12 Standard Setting	20-100 60	[290-1450] [870]

Standard setting made at 14 l/min [3.8 US gpm]

Housing Material

Omit - No housing/Aluminum
377 - Steel

Pressure Setting

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

Code	Bar	Psi
60	60	[870]