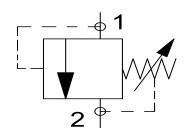
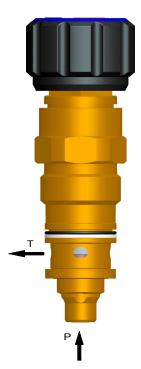


Relief valve Direct Acting ,Piston Type



- $Q_{(max)}$ =40 lpm , $P_{(max)}$ =320 bar Screw -in Cartridge,
- Direct Acting, Balanced Piston Design



- Balanced Piston Type design insures low pressure override and greater stability.
- Overset Protection -Spring cannot go solid.
- Quick Reponse to load change in hydraulic system with low internal leakage
- Available in Leakproof screw adjustment / Fixed setting cap.
- 3 Pressure ranges available (30-95 bar, 95-210 bar ,210-320 bar).
- All external parts are zinc plated ,chromated (CrVI-Free).

1. Description -

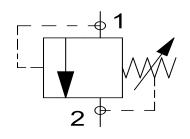
SH series catridge valves are Screwin, Direct Acting, Balanced Piston type, high performance Pressure relief valves. This cartridge offers excellent response to load change in hydraulic system requiring low internal leakage. Pressure (From Pump) should be connected to P-port (as shown).

while T-port is connected to T-line. This relief valve can be used in manifold blocks & line mounting bodies. All external parts of this catridge are Zinc-plated and chromated (CrVI-free) poppet is hardened and thus suitable to be used in harshest environmental conditions.





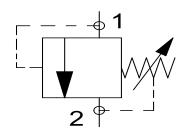
Relief valve Direct Acting ,Piston Type



2. Technical Data :

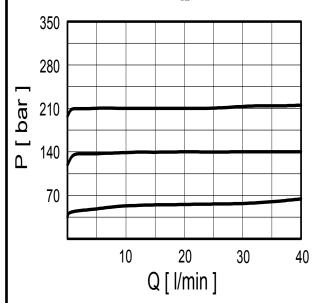
8. OPERATING TEMPERATURE 9. HYDRAULIC FLUID Properties at 15250 mm²/sec 10. MINIMUM FLUID CLEANINESS Phydraulic system > 210BAR-STEEL HOUSING -ZINC PLA -20° TO +90° C MINIMUM FLUID SWITH LUBRICATING PROPERTIES AT 15250 mm²/sec	S.no.	General Specification	Values
3. MAXIMUM OPERATING PRESSURE 4. MAXIMUM FLOW 5. MAXIMUM INTERNAL LEAKAGE 6. RESEAT PRESSURE 7. VALVE HOUSING P _{Hydraulic system} ≤ 210 BAR-ALUMINUM HOUSING-ANOD P _{Hydraulic system} > 210BAR-STEEL HOUSING -ZINC PLA 8. OPERATING TEMPERATURE 9. HYDRAULIC FLUID MINERAL OILS WITH LUBRICATING PROPERTIES AT 15250 MM²/SEC 10. MINIMUM FLUID CLEANINESS CLASS 20/18/15	1.	DESIGNATION	DIRECT ACTING RELIEF VALVE
4. MAXIMUM FLOW 4. MAXIMUM INTERNAL LEAKAGE 5. MAXIMUM INTERNAL LEAKAGE 6. RESEAT PRESSURE 7. VALVE HOUSING P _{Hydraulic system} ≤ 210 BAR-ALUMINUM HOUSING-ANOD P _{Hydraulic system} > 210BAR-STEEL HOUSING -ZINC PLA 8. OPERATING TEMPERATURE 9. HYDRAULIC FLUID MINERAL OILS WITH LUBRICATING PROPERTIES AT 15250 mm²/sec 10. MINIMUM FLUID CLEANINESS CLASS 20/18/15	2.	Mounting Method	SN-01 CAVITY
5. MAXIMUM INTERNAL LEAKAGE 6. RESEAT PRESSURE 7. VALVE HOUSING P _{Hydraulic system} ≤ 210 BAR-ALUMINUM HOUSING-ANOD P _{Hydraulic system} > 210BAR-STEEL HOUSING -ZINC PLA 8. OPERATING TEMPERATURE 9. HYDRAULIC FLUID MINERAL OILS WITH LUBRICATING PROPERTIES AT 15250 MM²/SEC 10. MINIMUM FLUID CLEANINESS CLASS 20/18/15	3.	MAXIMUM OPERATING PRESSURE	320 BAR
6. RESEAT PRESSURE 7. VALVE HOUSING P _{Hydraulic system} ≤ 210 BAR-ALUMINUM HOUSING-ANOD P _{Hydraulic system} > 210BAR-STEEL HOUSING -ZINC PLA 8. OPERATING TEMPERATURE -20° TO +90° C 9. HYDRAULIC FLUID MINERAL OILS WITH LUBRICATING PROPERTIES AT 15250 MM²/SEC 10. MINIMUM FLUID CLEANINESS CLASS 20/18/15	4.	MAXIMUM FLOW	40 LPM
7. VALVE HOUSING P _{Hydraulic system} ≤ 210 BAR-ALUMINUM HOUSING-ANOD P _{Hydraulic system} > 210BAR-STEEL HOUSING -ZINC PLA 8. OPERATING TEMPERATURE -20° TO +90° C 9. HYDRAULIC FLUID MINERAL OILS WITH LUBRICATING PROPERTIES AT 15250 MM²/SEC 10. MINIMUM FLUID CLEANINESS CLASS 20/18/15	5.	MAXIMUM INTERNAL LEAKAGE	0.25 cc/min
8. OPERATING TEMPERATURE 9. HYDRAULIC FLUID Properties at 15250 mm²/sec 10. MINIMUM FLUID CLEANINESS Thydraulic system > 210 BAR ALUTHNOFT HOUSING - AND Plus Plu	6.	RESEAT PRESSURE	95% OF CRACK PRESSURE
8. OPERATING TEMPERATURE 9. HYDRAULIC FLUID PROPERTIES AT 15250 MM ² /SEC 10. MINIMUM FLUID CLEANINESS CLASS 20/18/15	7.	VALVE HOUSING	P _{Hydraulic system} ≤ 210 BAR-ALUMINUM HOUSING-ANODISED P _{Hydraulic system} >210BAR-STEEL HOUSING -ZINC PLATED
PROPERTIES AT 15250 MM ² /SEC 10. MINIMUM FLUID CLEANINESS CLASS 20/18/15	8.	OPERATING TEMPERATURE	
PHINIMOM I LOID CLEANINESS CLASS 20/10/13	9.	HYDRAULIC FLUID	MINERAL OILS WITH LUBRICATING PROPERTIES AT 15250 MM ² /SEC
44	10.	MINIMUM FLUID CLEANINESS	CLASS 20/18/15
WEIGHT 0.13 KG	11.	WEIGHT	0.13 KG
12. INSTALLATION TORQUE 40-50 N/M	12.	INSTALLATION TORQUE	40-50 N/M

Relief valve Direct Acting ,Piston Type

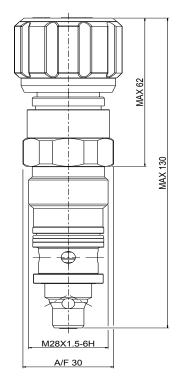


3. P-Q Characteristics :

Note: The Performance Chart shows Flow handling capacity at specific pressure setting P/Q Curve is recorded at Temp_{oil} = 40° C at 46 cst.



4. <u>Dimensioning</u>:



5. Ordering Code:

 $\frac{SH - 01}{VALVE \ BASIC \ CODE}$ $\frac{CAVITY \ TYPE}{Cavity \ SN-01} = See \ Detail \ of \ BOUSING \& PORTS$ $\frac{PRESSURE \ SETTING \ (bar)}{000 = for \ no \ specific \ setting}$

ADJUSTMENT :

F = FIXED SETTING

A = ADJUSTMENT SCREW

V VNOD

C : Cartridge only |

 \underline{X} A3 : 3/8" BSP

XB8 : SAE #8

A: Aluminium Housing

S : Steel Housing

SPRING RANGE:

A = 30-95 bar B = 95-210 bar

C = 210-320 bar

SUBJECT TO CHANGE WITHOUT NOTICE