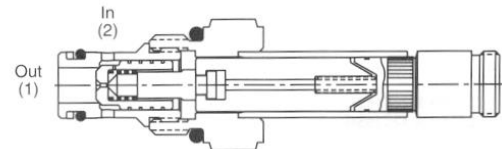


Construction . . .



General Description . . .

The Series 12 Solenoid Valves are used in applications requiring on/off valves and low leakage. Single acting cylinder applications typically utilize valves of this type. Valves can be used for bleed down flow and/or raising and lowering a vertical cylinder. Normally open and normally closed configurations are available.

Features . . .

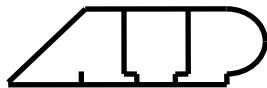
- Low hysteresis.
- Replaceable, one piece encapsulated, coils with minimal amperage draw.
- Variety of coil terminations and voltages.
- Variety of manual override options available.

Operation . . .

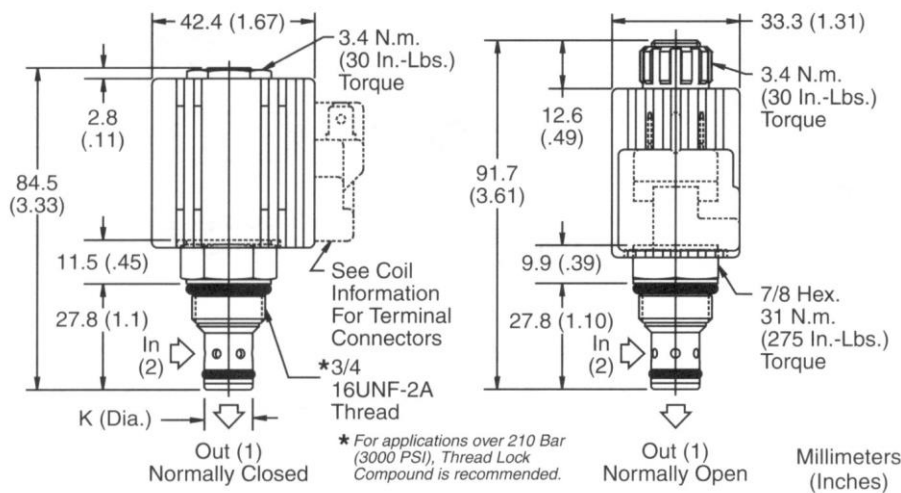
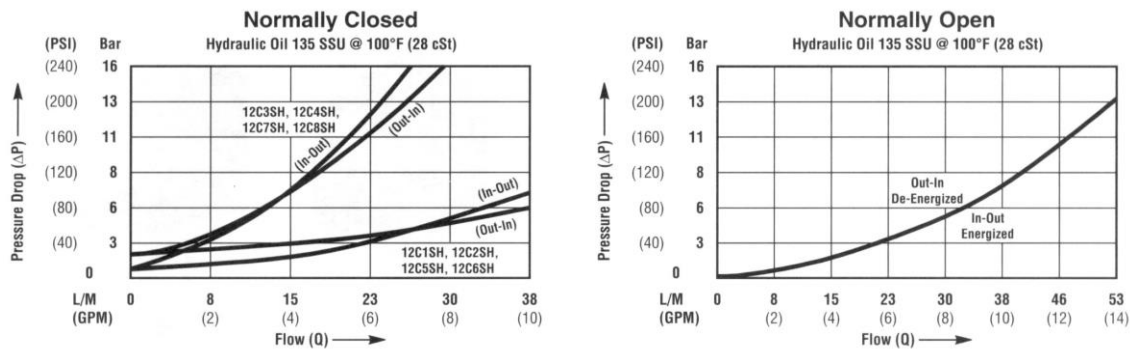
Normally Open — The valve pilot is held off its seat by spring force. Pilot flow is vented to the outlet port, creating a pressure imbalance that moves the main poppet off its seat, allowing flow from the inlet to the outlet. When the coil is energized, the valve pilot and main poppets are forced to close, thus blocking flow from the inlet to the outlet.

Tated Flow	30 L/M (8 GPM)
Maximum Inlet Pressure	345 bar (5000 PSI) Steel 210 bar (3000 PSI) Aluminium
Leakage	10 drops/min (2/3 cc/min) at 345 bar (5000 PSI)
Response Time (at nominal flow & max. pressure)	Open – 50 ms Close – 150 ms
Minimum Operatin Voltage	90% of rated voltage at 345 bar (5000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel
Body Material	Steel or Alumnium
Filtration	ISO Code 16/13 SAE Class 4 or better
Operating Temp. Range (Ambient)	-40°C to + 93,3°C (Nitril) (-40°F to + 200°F) -31,7°C to +121,1°C (Fluorcarbon) (-25°F to + 250°F)
Mounting	No Restrictions
Weight	0,22 kg (1,5 lbs.)
Cavity Form Tool No.	½" = FT 12-2 (Cavity Style #12-2)

Release:	Supersedes:	Page	Directional poppet valve 2/2	ATP Part No.
20.07.99	---	1 of 2	Waterman 12C11SH	305 117 204



Valve Performance ... Flow vs. Pressure Drop (Trough cartridge only)



K=12,6
(0,50)

Release:	Supersedes:	Page	Directional poppet valve 2/2	ATP Part No.
20.07.99	---	2 of 2	Waterman 12C11SH	305 117 204