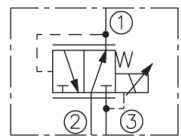


CONFIDENTIAL

SOLID EDGE DRAWING

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USASI/ISO:



DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type reducing/relieving valve, which can be infinitely adjusted across a prescribed range using a variable electric input. Pressure output is proportional to DC current input. This valve is intended for use as a pressure limiting device in demanding applications.

OPERATION

The TS10-36 allows flow from ② to ③ until sufficient pressure is present at ① to open the pilot section by offsetting the electrically induced solenoid force. Increasing electric current will increase the control (reduced) pressure at ①. With no current applied to the solenoid, the valve will maintain pressure at ① at approximately 100 psi, regardless of pressure at ②.

The TS10-36 has an optional manual override feature. This allows the valve to be set when the electric supply is lost. The manual setting is added to the electric setting, so when using the manual override feature to establish a minimum setting, care is required to prevent the system from becoming over-pressurized.

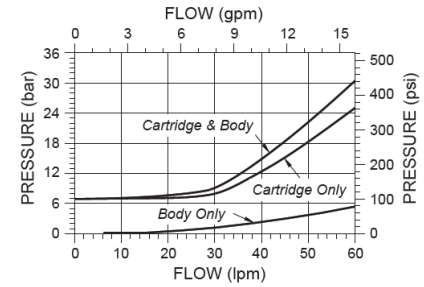
FEATURES

- Manual override option.
- Industry common cavity.
- 12 and 24 volt coils standard.
- Optional waterproof E-Coils rated up to IP69K.

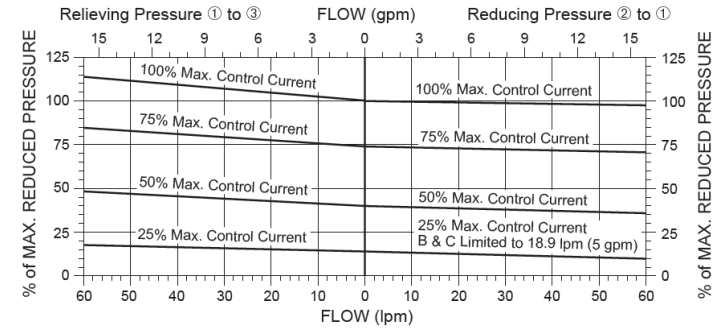
RATINGS

Maximum Operating Pressure: 241 bar (3500 psi)
Maximum Control Current: 1.10 amps for 12 VDC coil, 0.55 amps for 24 VDC coil
Relief Pressure Range from Zero to Maximum Control Current:
 A: 6.9–207 bar (100–3000 psi); B: 6.9–159 bar (100–2300 psi)
 C: 6.9–117 bar (100–1700 psi)
Rated Flow: 56.8 lpm (15 gpm), ΔP=22.8 bar (330 psi), Cartridge only, ① to ③ coil de-energized
Maximum Pilot Flow: 0.76 lpm (0.2 gpm)
Flow Path: Free Flow: ① to ③ coil de-energized; Reduced: ② to ① coil energized; Relieving: ③ to ② coil energized
Temperature: -40 to 120°C (-40 to 250°F), with standard Buna N seals
Filtration: See page 9.010.1
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1
Installation Recommendation: When possible, the valve should be mounted below the reservoir oil level. This will maintain oil in the armature preventing trapped air instability. If this is not feasible, mount the valve horizontally for best results.
Cavity: VC10-3; See page 9.110.1; **Cavity Tool:** CT10-3XX; See page 8.600.1
Seal Kit: SK10-3N-BM; See page 8.650.1
Coil Nut: Part No. 4540560;
 For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

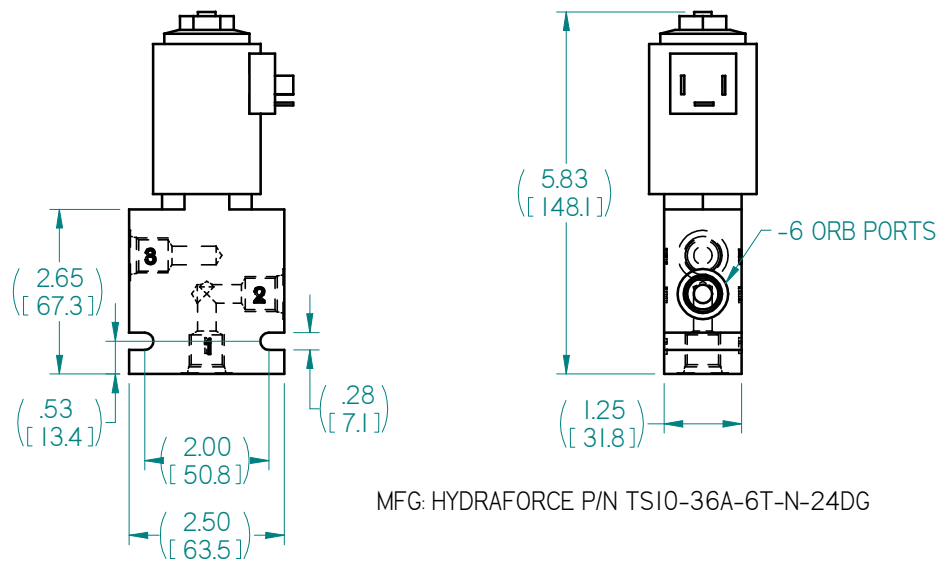
Pressure Drop vs. Flow Characteristic For Flow ① to ③ with Coil De-energized



Typical Relieving/Reducing Pressure vs. Flow Characteristic Typical Relieving Pressure at Various %'s of Maximum Control Current Pressure Range "A" (207 bar/3000 psi); Cartridge in Body



SEE D0334Y02 & Y04 FOR BRKTS
 SEE A1033Y07 FOR REPLACEMENT COIL
 SEE A1034Y11 FOR SEAL KIT

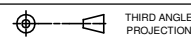


MFG: HYDRAFORCE P/N TS10-36A-6T-N-24DG

IMPLIED TOLERANCES

ALL DIMENSIONS ARE IN INCHES - TOLERANCE UNLESS OTHERWISE SPECIFIED

NOMINAL SIZE RANGE		INCH PLUS OR MINUS		NOMINAL SIZE RANGE		METRIC PLUS OR MINUS	
OVER	TO	2 PLACE DECIMAL	3 PLACE DECIMAL	OVER	TO	1 PLACE DECIMAL	2 PLACE DECIMAL
0	6	.03	.005	0	150	.8	.13
6	24	.04	.008	150	600	1.0	.20
24	-	.06	.010	-	600	1.5	.25



UNLESS OTHERWISE SPECIFIED ALL MACHINED SURFACES WILL HAVE:
 A SURFACE FINISH OF 125 MICRONS INCHES
 ANGULAR TOLERANCE OF ± 50°
 CONCENTRICITY WITHIN .010

CHANGE	R/L	REVISION	DATE
I01848	C	VENDOR # WAS TS10-36AM-6T-N-24DG, WAS ME10	6-12-08

Description PROP RED/RLV VALVE	
Drawing Number	Machine Type MK IV
Model D8305Y01.par	Drawn badler
Weight 4.0 lbm	Date Drawn 6-12-08
Scale 1:4	APVD Desg BPA
Mat'l	APVD ChEng JBR

HTT
Harsco Track Technologies
 Harsco
 Columbia, SC

Part Number
D8305Y01

Size
B

Sheet
1 of 1