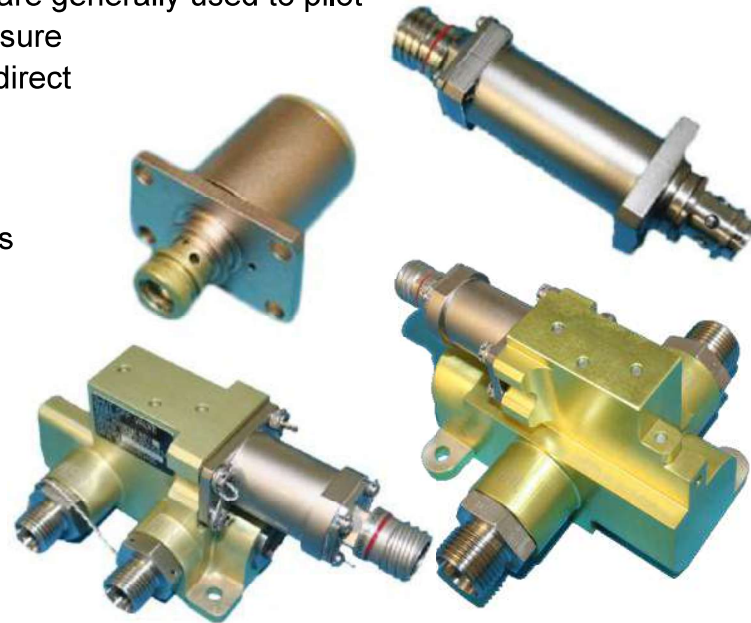




SOLENOID OPERATED VALVES

Crissair Inc. designs and manufactures a variety of Solenoid Operated Valves: Direct Acting Solenoid Valves and Piloted Operated Shutoff Valves.

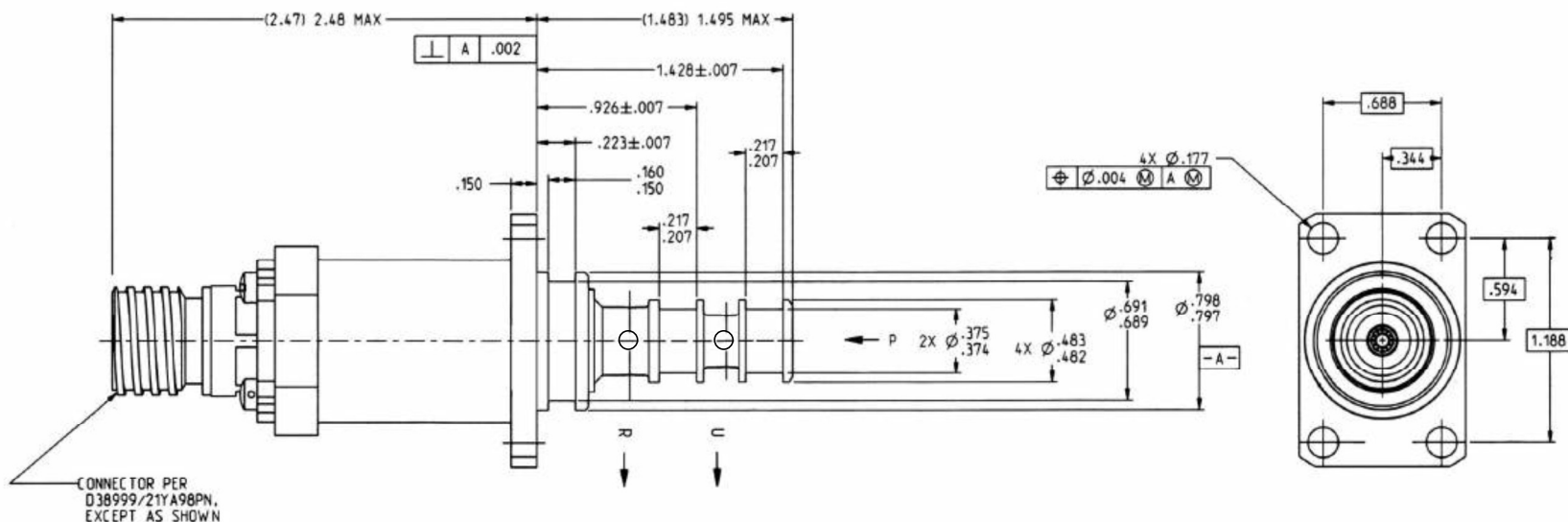
- Direct Acting Solenoid Valves have many uses in fluid control systems. For high pressure systems, they are generally used to pilot larger cylinders and spools. For lower pressure systems, they can be used to shut-off or redirect supply pressure.
- Pilot Operated Shut-off Valves are more complex in nature. A Pilot Solenoid Valve is packaged into a manifold which drives a larger Spool or Piston to redirect or shutoff system pressure and flow. In some cases, restriction and damping is added to improve and better control transient characteristics of pressure spikes and flow rates.



This catalog contains a small sample of drawings. Please contact Crissair for additional drawings and/or configurations.



PART NUMBER: 4S1294-XSOLENOID VALVE, 2POS 3WAY, NORMALLY CLOSED



PERFORMANCE SPECIFICATIONS:

FLUIDS: PHOSPHATE ESTER PER AS1241 TYPE IV CLASS 1 AND 2 AND AS1241 TYPE V*

MATERIAL: VALVE BODY 15-5PH CRES

NOMINAL SUPPLY PRESSURE: 3000 PSIG

TEMPERATURE RANGE: -67° TO 200°F

ENERGIZED FLOW: 0.5 GPM MINIMUM FROM PORT P TO U AT 3000 PSID

DE-ENERGIZED FLOW: 0.5 GPM MINIMUM FROM PORT U TO R AT 3000 PSID

INTERNAL LEAKAGE AT 3000 PSID IN ANY POSITION: 1 CC/MIN MAX

OPERATING VOLTAGE RANGE: 16 TO 32 VDC NOMINAL

COIL RESISTANCE: 42±2 OHMS AT 70°F

PULL-IN VOLTAGE: 13.5 VDC MAX AT 3000 PSID AND 80±20°F

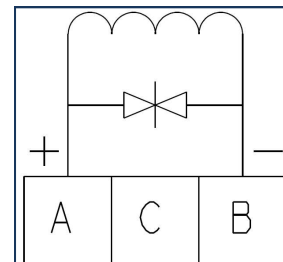
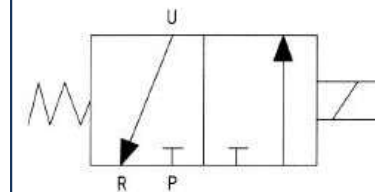
DROP-OUT VOLTAGE: 1.5 TO 7.5 VDC AT 3000 PSID AND 80±20°F

PEAK INVERSE VOLTAGE: ±60 VDC MAX

DUTY CYCLE: CONTINUOUS

*OTHER FLUIDS ACCEPTABLE WITH ELASTOMER CHANGE

HYDRAULIC SCHEMATIC

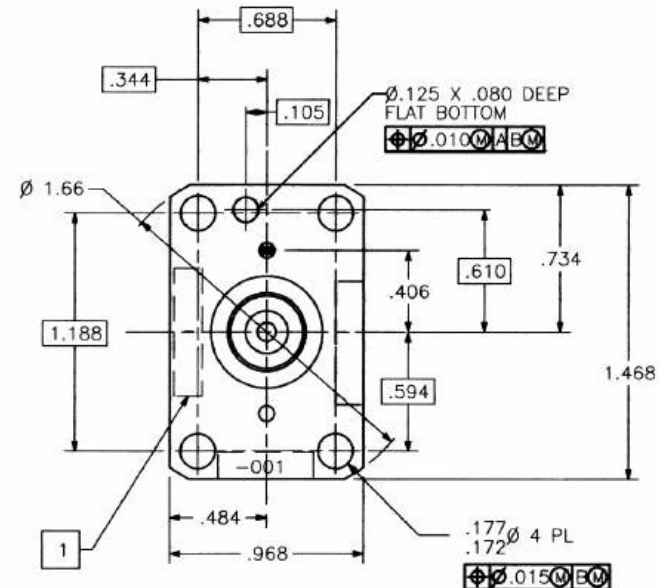
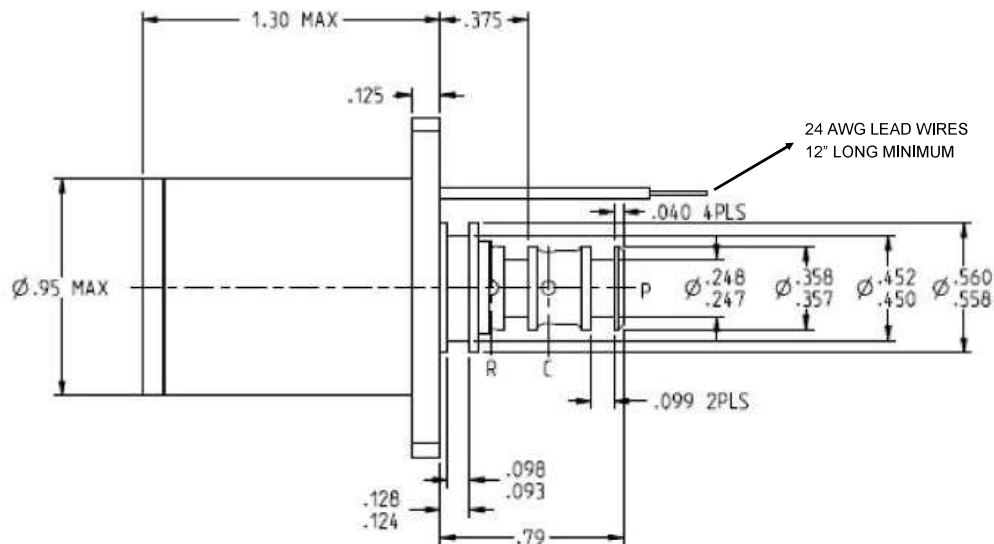


ELECTRICAL SCHEMATIC

CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1280-XSOLENOID VALVE, 2POS 3WAY, NORMALLY CLOSED



PERFORMANCE SPECIFICATIONS:

FLUIDS: MIL-PRF-5606, MIL-H-6083, MIL-H-83282 OR MIL-PRF-83282*

MATERIAL: VALVE BODY 303 CRES

NOMINAL SUPPLY PRESSURE: 3000 PSIG

TEMPERATURE RANGE: -65 TO 275°F

ENERGIZED FLOW (PRESS TO CYL): 1.2 GPM MINIMUM AT 3000 PSID

DE-ENERGIZED FLOW (CYL TO RET): 1.2 GPM MINIMUM AT 3000 PSID

INTERNAL LEAKAGE IN ANY POSITION: 5 CC/MIN MAX AT 3000 PSID

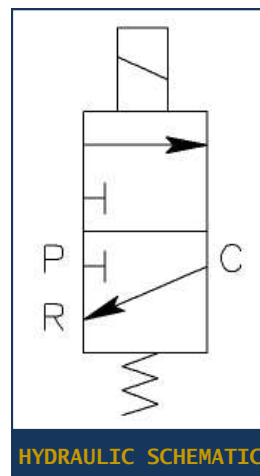
OPERATING VOLTAGE RANGE: 14 TO 30 VDC NOMINAL

COIL CURRENT: 1 AMP MAX AT 28 VDC AND 70°F

RESPONSE TIME (ENERGIZED AND DE-ENERGIZED): 30 MSEC MAX

WEIGHT: 0.26 LBS MAX

*PHOSPHATE ESTER FLUID ACCEPTABLE WITH ELASTOMER CHANGE



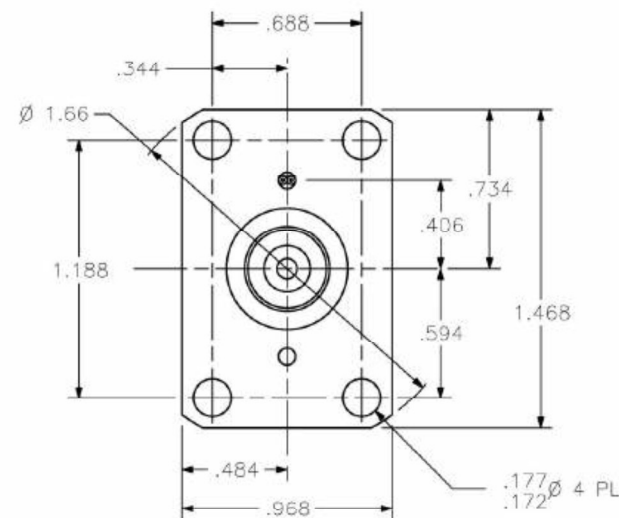
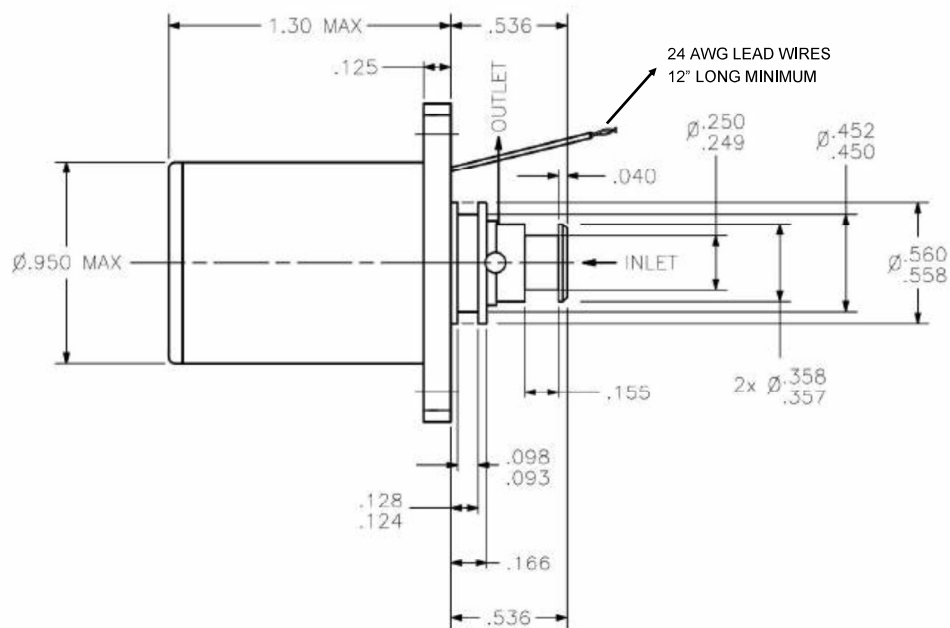
HYDRAULIC SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1282 SOLENOID VALVE, 2POS 2WAY, NORMALLY OPEN



PERFORMANCE SPECIFICATIONS:

FLUIDS: MIL-PRF-5606, MIL-H-6083, MIL-H-83282*

MATERIAL: VALVE BODY 303 CRES

NOMINAL SUPPLY PRESSURE: 3000 PSIG

TEMPERATURE RANGE: -65 TO 275°F

FLOW (ENERGIZED): 0.25 GPM MINIMUM AT 200 PSID

INTERNAL LEAKAGE (DE-ENERGIZED): 5 CC/MIN MAX AT 3000 PSID

OPERATING VOLTAGE RANGE: 18 TO 32 VDC NOMINAL

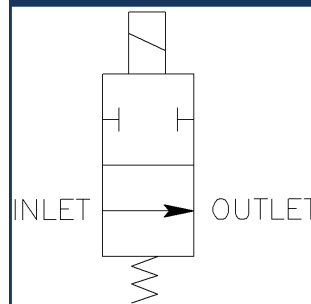
COIL CURRENT: 0.75 AMP MAX AT 28 VDC

RESPONSE TIME (ENERGIZED AND DE-ENERGIZED): 30 MSEC MAX

DUTY CYCLE: CONTINUOUS

*PHOSPHATE ESTER FLUID ACCEPTABLE WITH ELASTOMER CHANGE

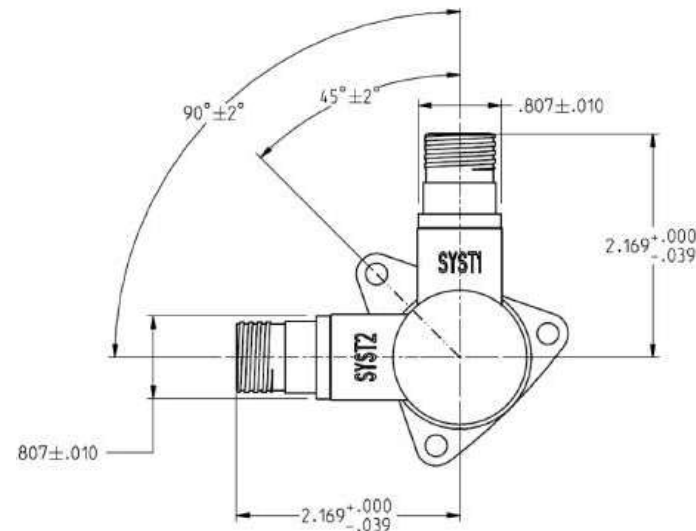
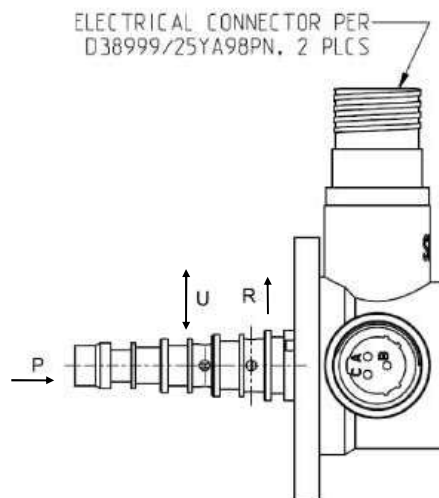
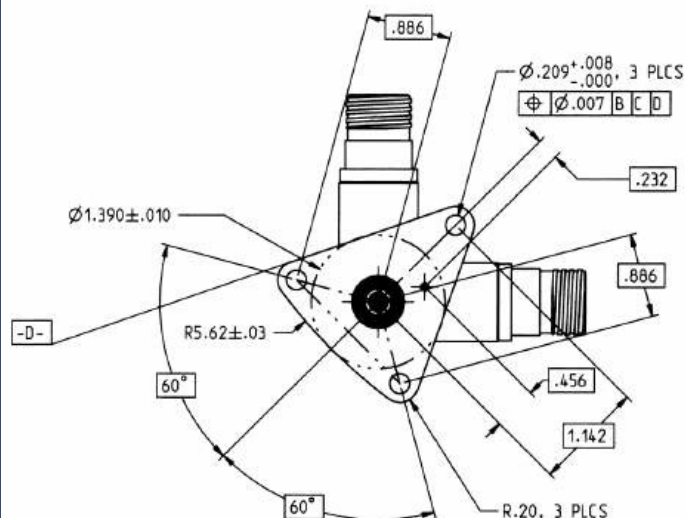
HYDRAULIC SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



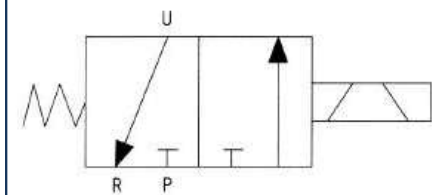
PART NUMBER: 4S1290 SOLENOID VALVE, 2POS 3WAY, NORMALLY CLOSED



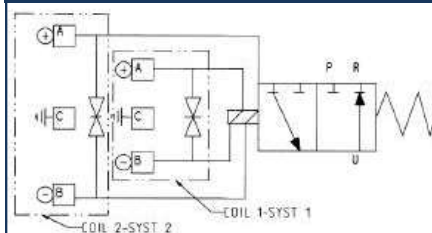
PERFORMANCE SPECIFICATIONS:

FLUIDS: LOW DENSITY PHOSPHATE ESTER FLUID TYPE IV, V*
 MATERIAL: VALVE BODY 15-5PH CRES
 NOMINAL SUPPLY PRESSURE: 3000 PSIG
 ENERGIZED FLOW (P TO U): 0.198±0.026 GPM AT 3000 PSID MAX
 DE-ENERGIZED FLOW (U TO R): 0.79 GPM MINIMUM AT 3000 PSID MAX
 INTERNAL LEAKAGE AT 3000 PSID IN ANY POSITION: 1.0 CC/MIN MAX
 OPERATING VOLTAGE RANGE: 26 TO 32 VDC
 COIL RESISTANCE: 42±2 OHMS
 PULL-IN VOLTAGE: 13.5 VDC MAX AT 3000 PSID AND 80±20°F
 DROP-OUT VOLTAGE: 1.0 VDC MIN AT 1015 PSID AND 80±20°F
 PEAK INVERSE VOLTAGE: ±60 VDC MAX
 DUTY CYCLE: CONTINUOUS
 WEIGHT: 0.595 LBS MAX
 *MIL-PRF-83282 ACCEPTABLE WITH ELASTOMER CHANGE

HYDRAULIC SCHEMATIC



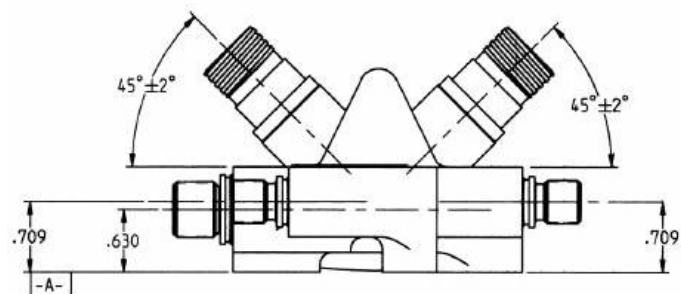
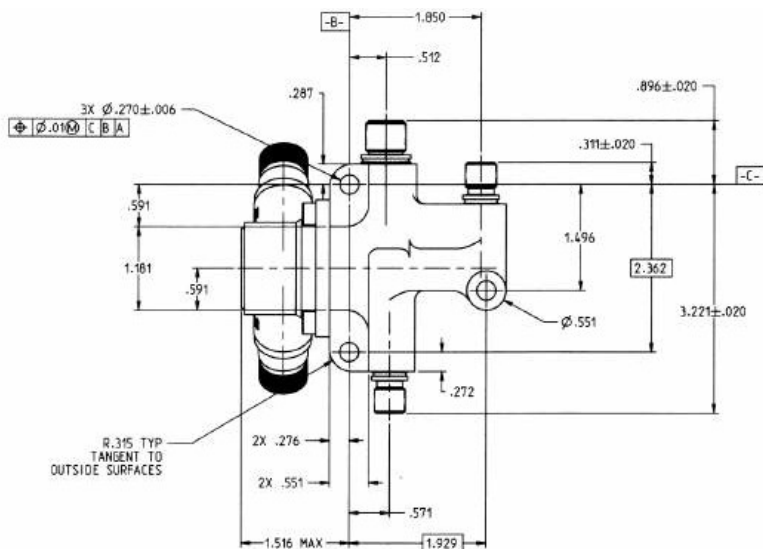
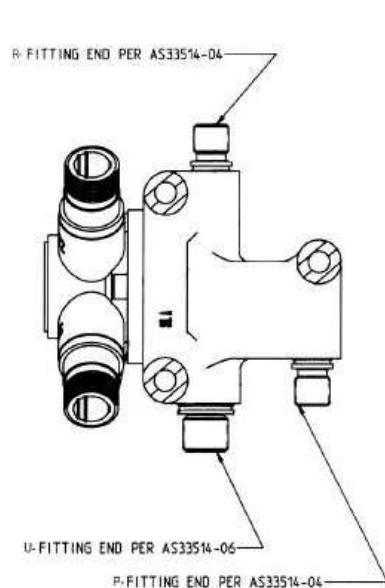
ELECTRICAL SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 1M1546 ,SOLENOID VALVE, 2POS 3WAY, NORMALLY CLOSED



PERFORMANCE SPECIFICATIONS:

FLUIDS: LOW DENSITY PHOSPHATE ESTER FLUID TYPE IV, V*

MATERIAL: MANIFOLD 6061-T6 AL

NOMINAL SUPPLY PRESSURE: 3000 PSIG

ENERGIZED FLOW (P TO U): 0.198 $\pm$ 0.026 GPM AT 3000 PSID MAX

DE-ENERGIZED FLOW (U TO R): 0.79 GPM MINIMUM AT 3000 PSID MAX

INTERNAL LEAKAGE AT 3000 PSID IN ANY POSITION: 1.0 CC/MIN MAX

OPERATING VOLTAGE RANGE: 26 TO 32 VDC

COIL RESISTANCE: 42 $\pm$ 2 OHMS

PULL-IN VOLTAGE: 13.5 VDC MAX AT 3000 PSID AND 80 $\pm$ 20°F

DROP-OUT VOLTAGE: 1.0 VDC MIN AT 1015 PSID AND 80 $\pm$ 20°F

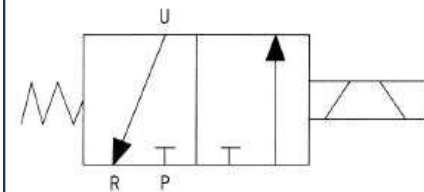
PEAK INVERSE VOLTAGE: $\pm$ 60 VDC MAX

DUTY CYCLE: CONTINUOUS

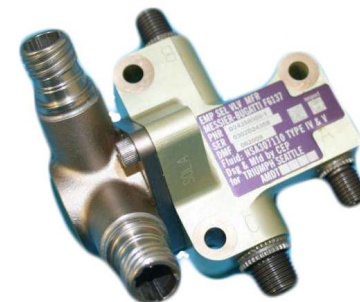
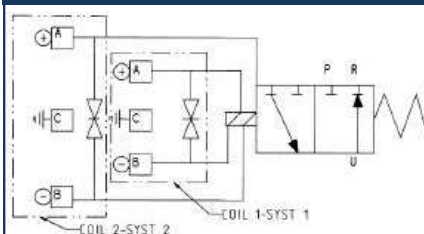
WEIGHT: 1.08 LBS MAX

*MIL-PRF-83282 ACCEPTABLE WITH ELASTOMER CHANGE

HYDRAULIC SCHEMATIC



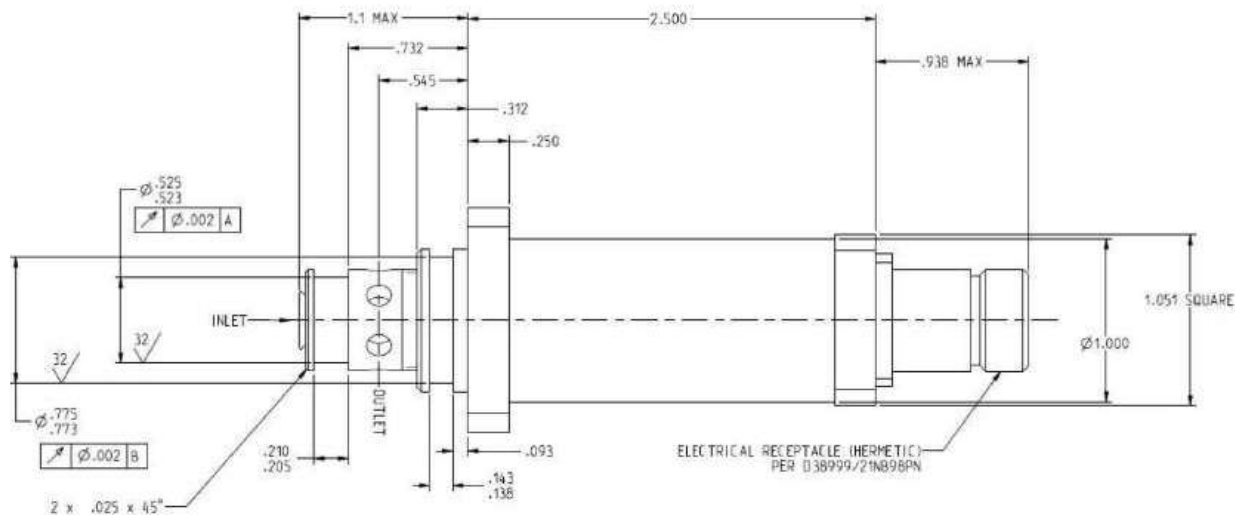
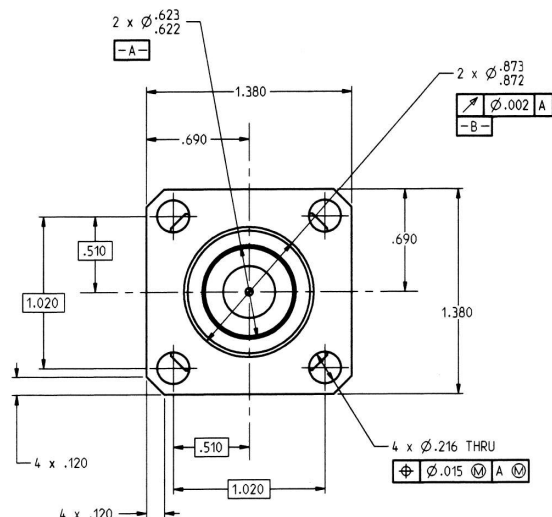
ELECTRICAL SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1276 SOLENOID VALVE, 2POS 2WAY, NORMALLY CLOSED



PERFORMANCE SPECIFICATIONS:

FLUIDS: MIL-H-46170 OR MIL-PRF-83282*

MATERIAL: VALVE BODY 440C CRES

NOMINAL SUPPLY PRESSURE: 1650 PSIG

TEMPERATURE RANGE: -25° TO 250°F

FLOW (ENERGIZED): 1.35 GPM MINIMUM AT 20 PSID

INTERNAL LEAKAGE (DE-ENERGIZED): 6 CC/MIN MAX @ 1650 PSID

OPERATING VOLTAGE RANGE: 18 TO 33 VDC NOMINAL

COIL CURRENT: 1 AMP MAX @ 28 VDC AND 70°F

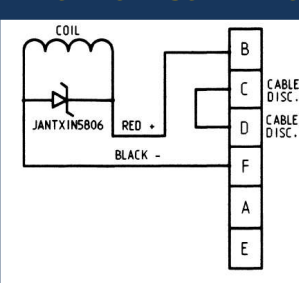
RESPONSE TIME (ENERGIZED AND DE-ENERGIZED): 100 MSEC MAX

DUTY CYCLE: CONTINUOUS

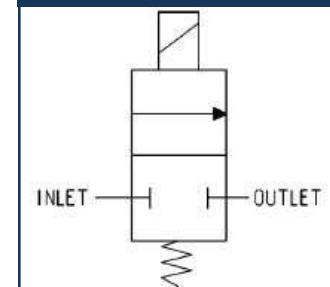
WEIGHT: 0.70 LBS MAX

*PHOSPHATE ESTER FLUID ACCEPTABLE WITH ELASTOMER CHANGE

ELECTRICAL SCHEMATIC



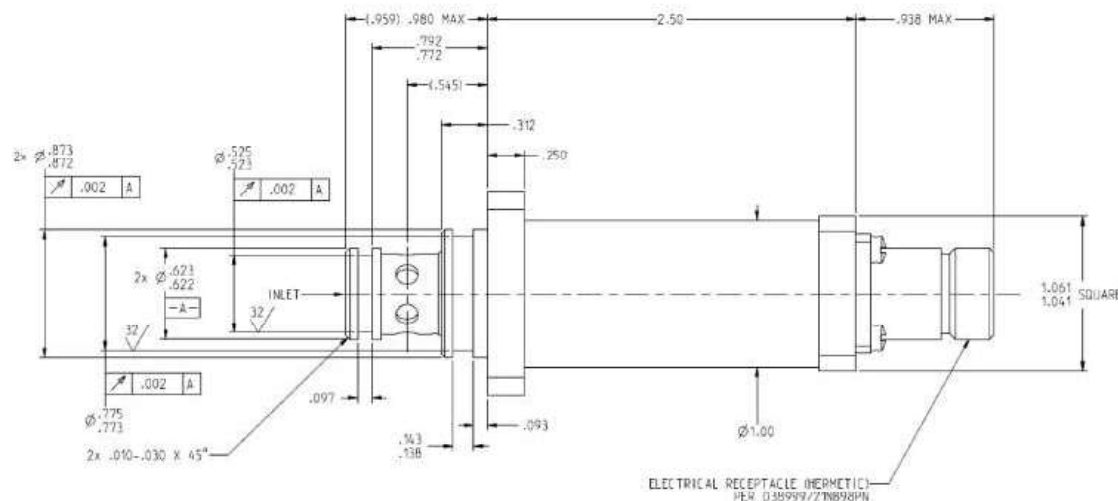
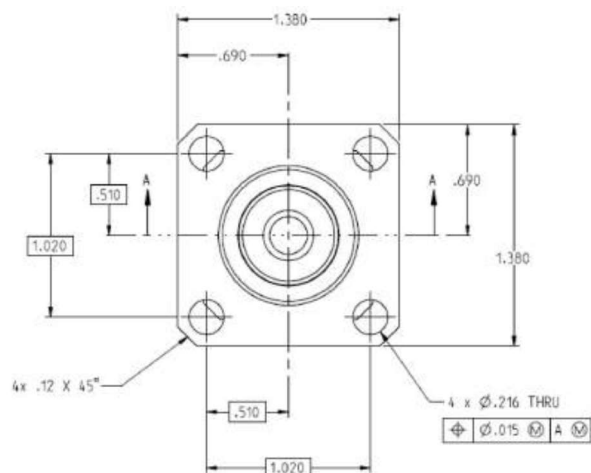
HYDRAULIC SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1284 SOLENOID VALVE, 2POS 2WAY, NORMALLY OPEN



PERFORMANCE SPECIFICATIONS:

FLUIDS: MIL-PRF-83282*

MATERIAL: VALVE BODY 304 CRES

NOMINAL SUPPLY PRESSURE: 100 PSIG

TEMPERATURE RANGE: -67° TO 275°F

FLOW (ENERGIZED): 5 GPM MINIMUM AT 64 PSID

INTERNAL LEAKAGE (DE-ENERGIZED): 10 CC/MIN MAX @ 5.8 PSID

OPERATING VOLTAGE RANGE: 12 TO 32 VDC NOMINAL

COIL CURRENT: 1 AMP MAX @ 28 VDC AND 70°F

PULL-IN VOLTAGE: 12 VDC MAX AT 0.145 PSID AND 70°F

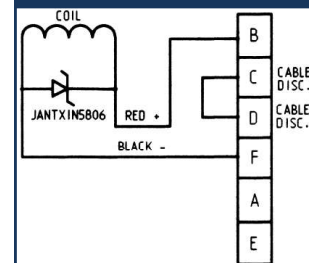
DROP-OUT VOLTAGE: 1.0 TO 8 VDC WHEN VOLTAGE IS DECREASED FROM 28 VDC

RESPONSE TIME (ENERGIZED AND DE-ENERGIZED): 100 MSEC MAX

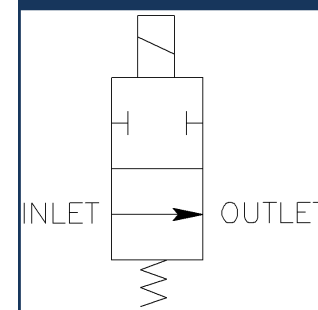
WEIGHT: 0.70 LBS MAX

*PHOSPHATE ESTER FLUID ACCEPTABLE WITH ELASTOMER CHANGE

ELECTRICAL SCHEMATIC



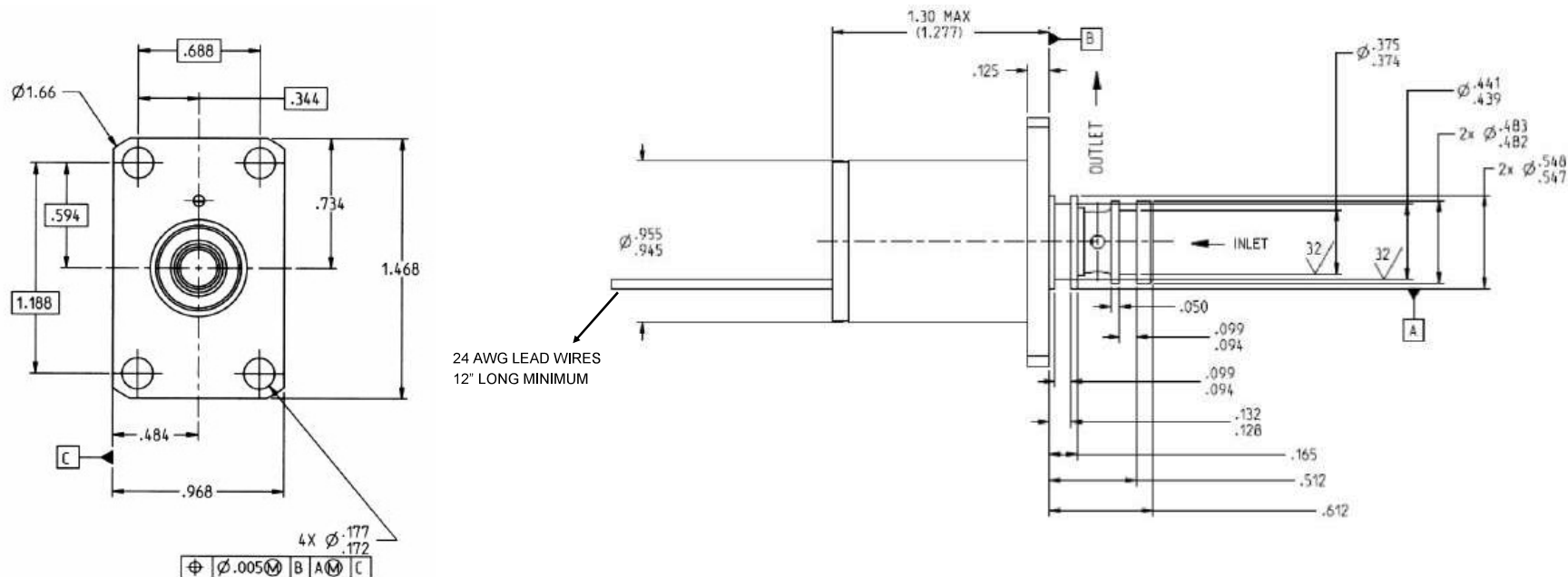
HYDRAULIC SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1286 SOLENOID VALVE, 2POS 2WAY, NORMALLY CLOSED



PERFORMANCE SPECIFICATIONS:

FLUIDS: ETHYLENE GLYCOL/WATER*

MATERIAL: VALVE BODY 6061-T6 AL

NOMINAL SUPPLY PRESSURE: 75 PSIG

TEMPERATURE RANGE: -60° TO 194°F

FLOW (ENERGIZED): 0.53 GPM AT 5 PSID MAX

INTERNAL LEAKAGE (DE-ENERGIZED): 1 DPM MAX AT 75 PSID

OPERATING VOLTAGE RANGE: 18 TO 32 VDC NOMINAL

COIL CURRENT: 0.6 AMPS MAX AT 24 VDC AND 80°F

PULL-IN VOLTAGE: 16 VDC MAX AT 75 PSID AND 70°F

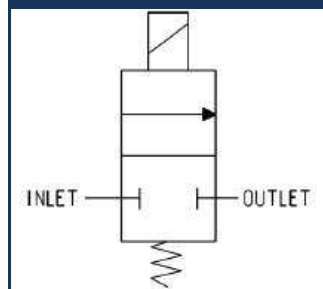
DROP-OUT VOLTAGE: 1.5 VDC MINIMUM AT 5 PSID AND 70°F

DUTY CYCLE: CONTINUOUS

WEIGHT: 0.24 LBS MAX

*OTHER FLUIDS ACCEPTABLE WITH ELASTOMER CHANGE

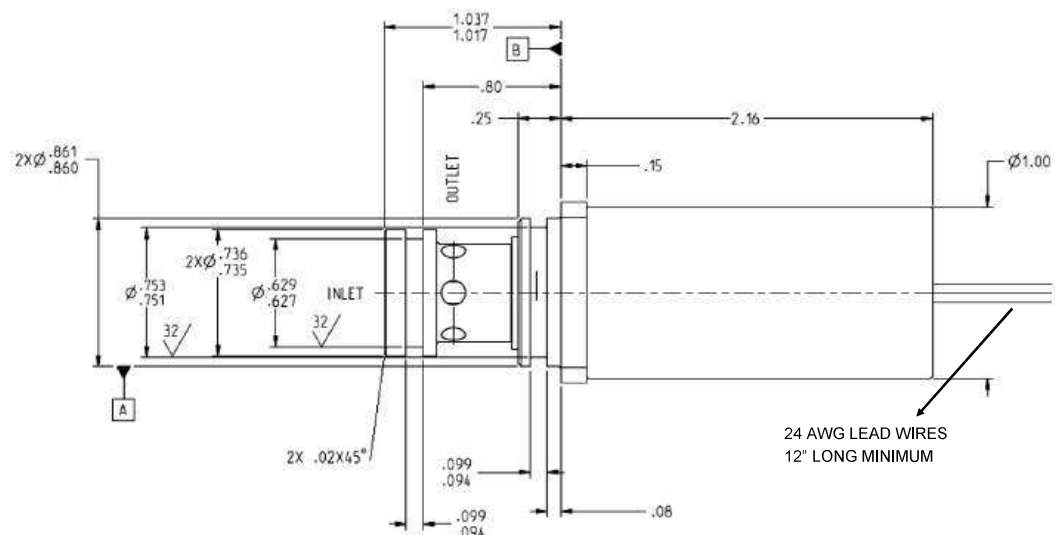
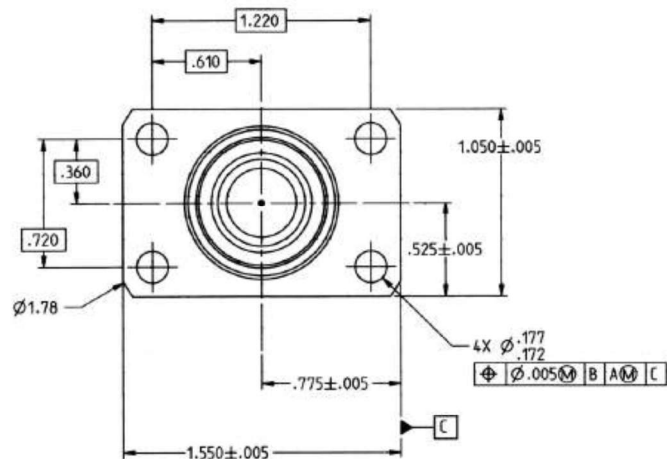
HYDRAULIC SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1288 SOLENOID VALVE, 2POS 2WAY, NORMALLY CLOSED



PERFORMANCE SPECIFICATIONS:

FLUIDS: ETHYLENE GLYCOL/WATER*

MATERIAL: VALVE BODY 6061-T6 AL

NOMINAL SUPPLY PRESSURE: 75 PSIG

TEMPERATURE RANGE: -60° TO 194°F

FLOW (ENERGIZED): 2.2 GPM AT 5 PSID MAX

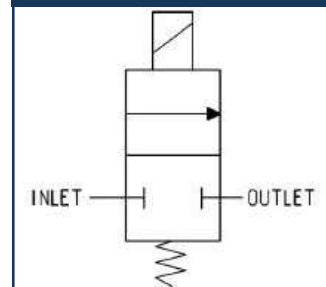
INTERNAL LEAKAGE (DE-ENERGIZED): 1 DPM MAX AT 75 PSID

- OPERATING VOLTAGE RANGE: 18 TO 32 VDC NOMINAL
- COIL CURRENT: 1.0 AMPS MAX AT 28 VDC AND 80°F
- PULL-IN VOLTAGE: 16 VDC MAX AT 75 PSID AND 70°F
- DROP-OUT VOLTAGE: 1.5 VDC MINIMUM AT 5 PSID AND 70°F
- DUTY CYCLE: CONTINUOUS

WEIGHT: 0.575 LBS MAX

*OTHER FLUIDS ACCEPTABLE WITH ELASTOMER CHANGE

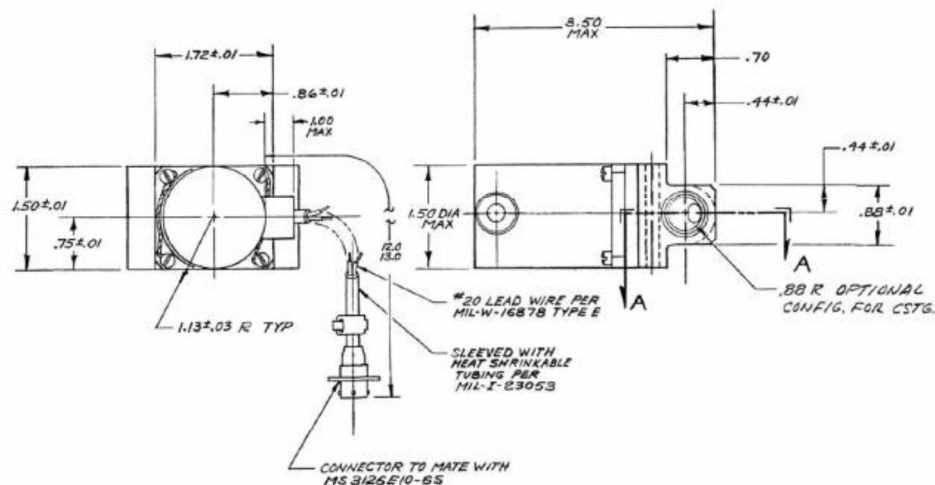
HYDRAULIC SCHEMATIC



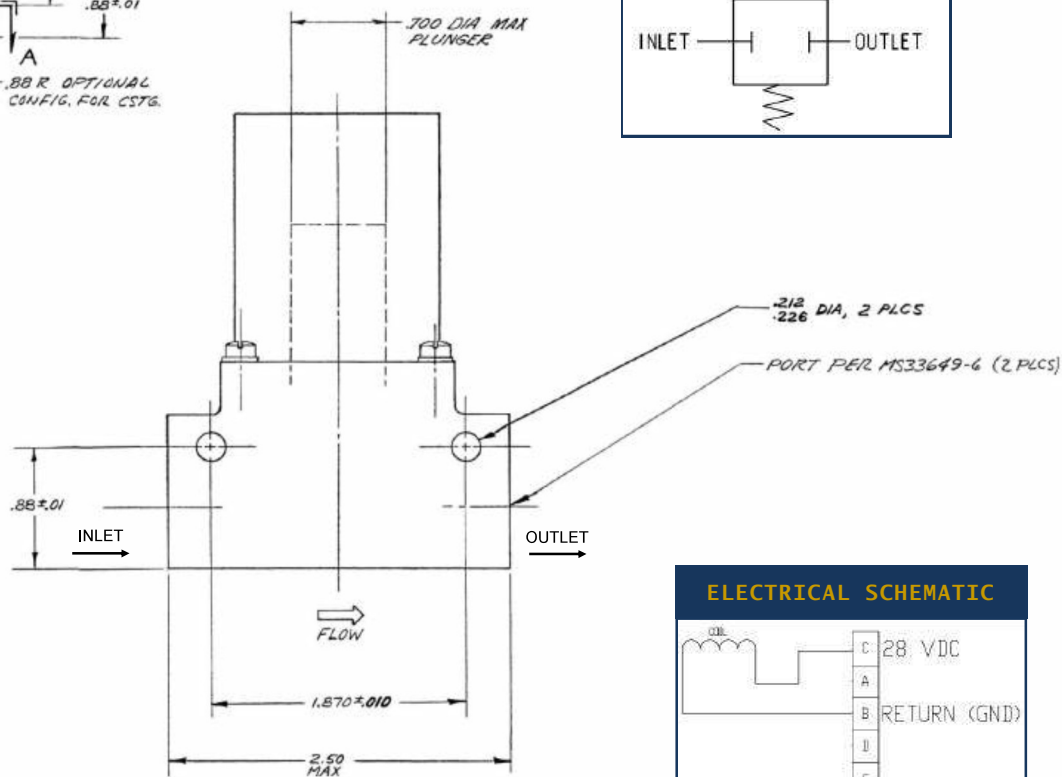
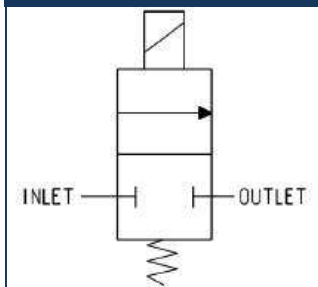
CATEGORY 4: DIRECT ACTING SOLENOID VALVES



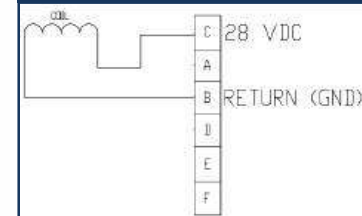
PART NUMBER: 4S1274 SOLENOID VALVE, NORMALLY CLOSED



HYDRAULIC SCHEMATIC



ELECTRICAL SCHEMATIC



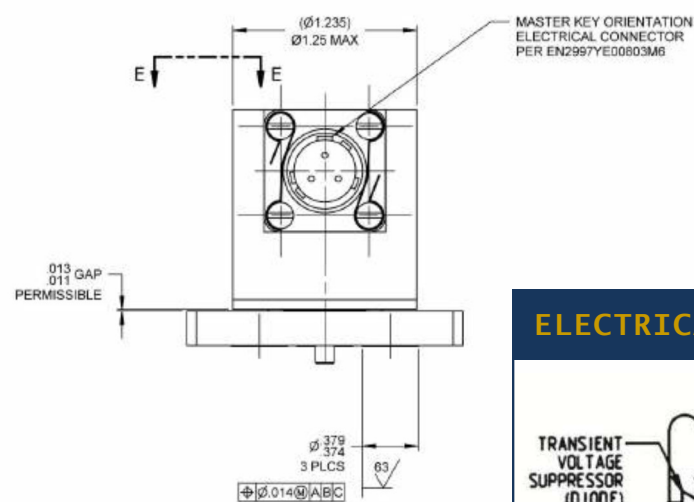
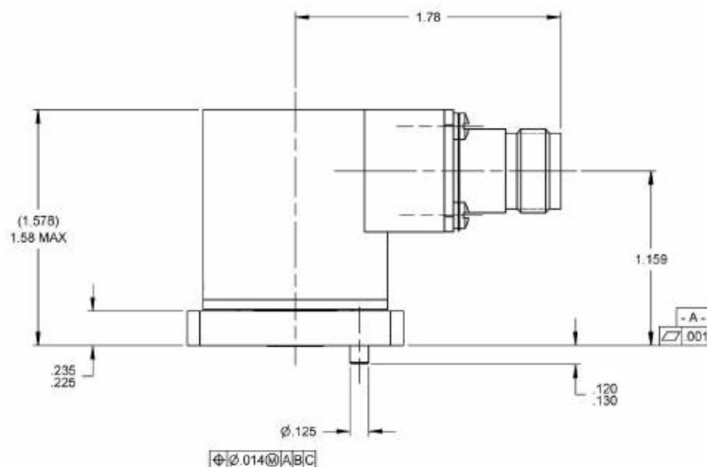
PERFORMANCE SPECIFICATIONS:

FLUIDS: AIR OR CORVIS OIL*
 MATERIAL: VALVE BODY 2024-T351 AL
 ELASTOMER VITON
 NOMINAL SUPPLY PRESSURE: 25 PSIG
 TEMPERATURE RANGE: -65° TO 250°F
 FLOW (ENERGIZED): 1.5 ± 0.25 GPM AT 3 PSID
 INTERNAL LEAKAGE (DE-ENERGIZED): 0 AT 50 PSID IN FLOW DIRECTION
 OPERATING VOLTAGE RANGE: 22 TO 30 VDC NOMINAL
 WEIGHT: 1.5 LBS MAX
 *OTHER FLUIDS ACCEPTABLE WITH ELASTOMER CHANGE

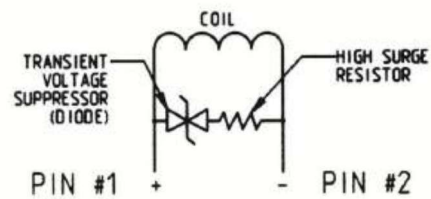
CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1096 SOLENOID VALVE, NORMALLY CLOSED

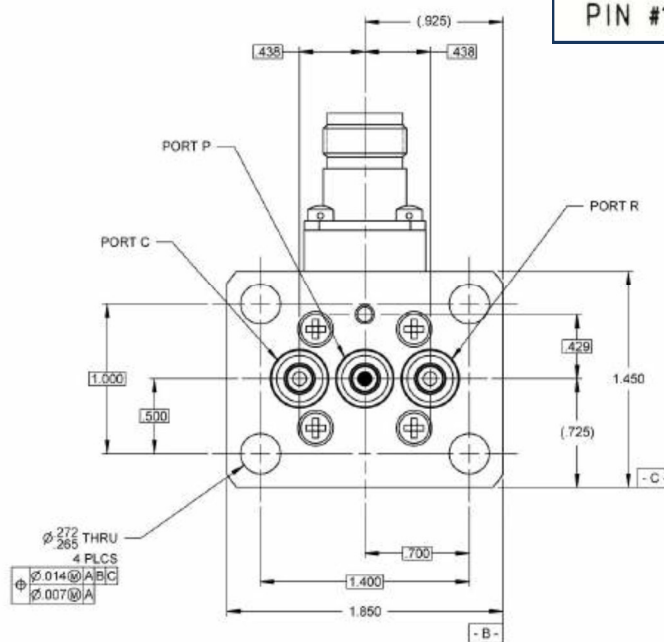


ELECTRICAL SCHEMATIC

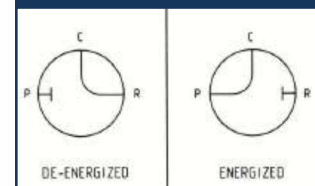


PERFORMANCE SPECIFICATIONS:

FLUIDS: PHOSPHATE ESTER BASED TYPE IV, V*
 MATERIAL: VALVE BODY 17-4PH CRES
 NOMINAL SUPPLY PRESSURE: 5076 PSIG (PORT P AND PORT C)
 1015 PSIG (PORT R)
 TEMPERATURE RANGE: -40°F TO 203°F
 FLOW (ENERGIZED): 0.156 ± .053 GPM AT 5076 PSID
 (DE-ENERGIZED): 0.396 GPM MINIMUM AT 5076 PSID
 INTERNAL LEAKAGE IN ANY POSITION: 1 CC/MIN MAX FROM PORT R WITH 5076 PSID AT PORT P WITH PORT C CAPPED
 OPERATING VOLTAGE RANGE: 18 TO 32.5 VDC NOMINAL
 COIL CURRENT: 1.0 AMPS MAX AT -40°F TO 203°F
 PULL-IN VOLTAGE: 17 VDC MAX UNDER ALL SPECIFIED TEMP
 12 VDC MAX AT AMBIENT TEMP
 DROP-OUT VOLTAGE: 2.0 VDC MINIMUM AT -65°F
 2.8 TO 6.0 VDC AT AMBIENT TEMP
 DUTY CYCLE: CONTINUOUS
 WEIGHT: 0.52 LBS MAX
 *MIL-PRF-83282 ACCEPTABLE WITH ELASTOMER CHANGE



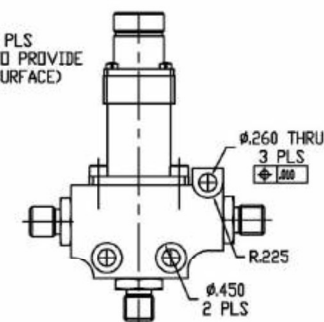
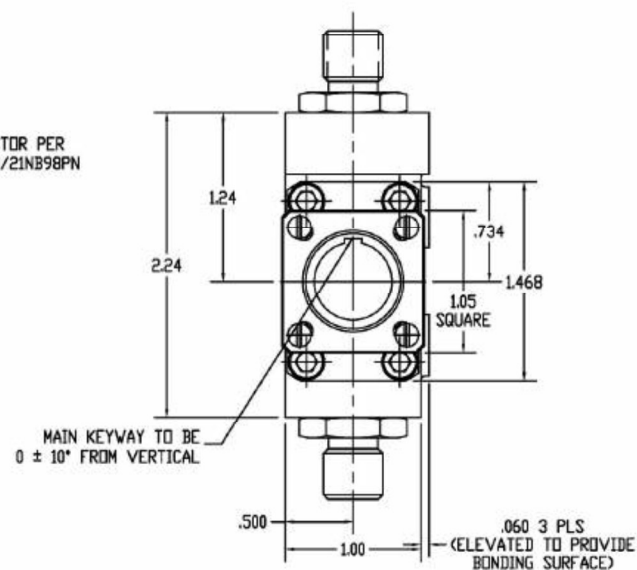
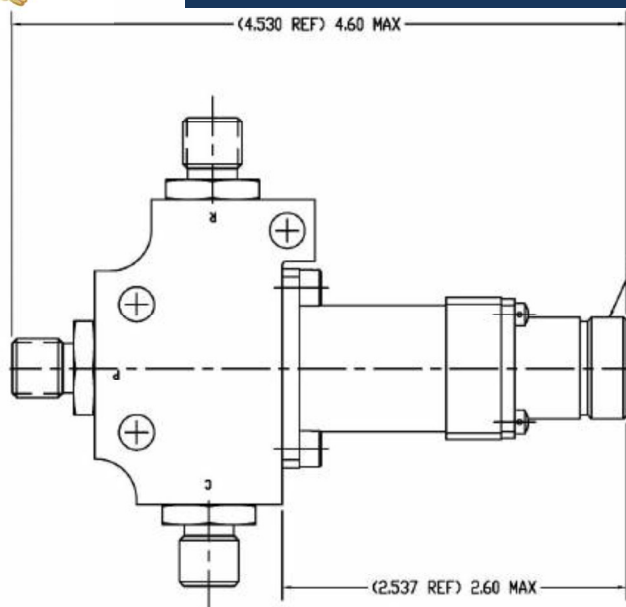
FLOW SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



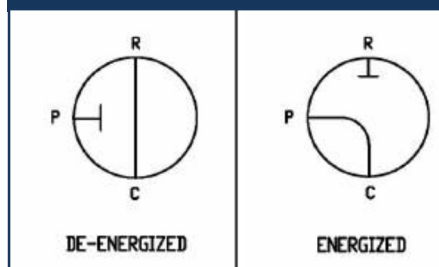
PART NUMBER: 4S1278 SOLENOID VALVE



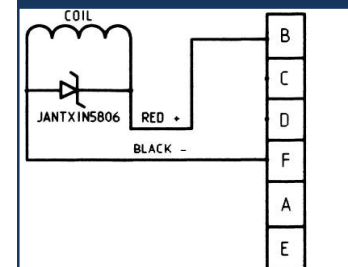
PERFORMANCE SPECIFICATIONS:

FLUIDS: PHOSPHATE ESTER PER AS 1241 TYPE IV*
 MATERIAL: HOUSING 6061-T6 AL
 NOMINAL SUPPLY PRESSURE: 3150 PSIG
 TEMPERATURE RANGE: -67° TO 165°F
 FLOW (ENERGIZED): 0.4±0.4 GPM AT 3000 PSID
 INTERNAL LEAKAGE IN ANY POSITION: 10 CC/MIN MAX AT 3000 PSID
 OPERATING VOLTAGE RANGE: 18 TO 32 VDC NOMINAL
 COIL CURRENT: 0.6 AMPS MAX AT 24 VDC AND 70°F TO 90°F
 DUTY CYCLE: CONTINUOUS
 WEIGHT: 1.0 LBS MAX
 *OTHER FLUIDS ACCEPTABLE WITH ELASTOMER CHANGE

HYDRAULIC SCHEMATIC



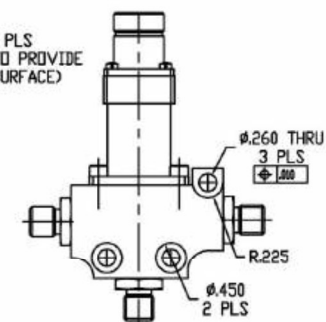
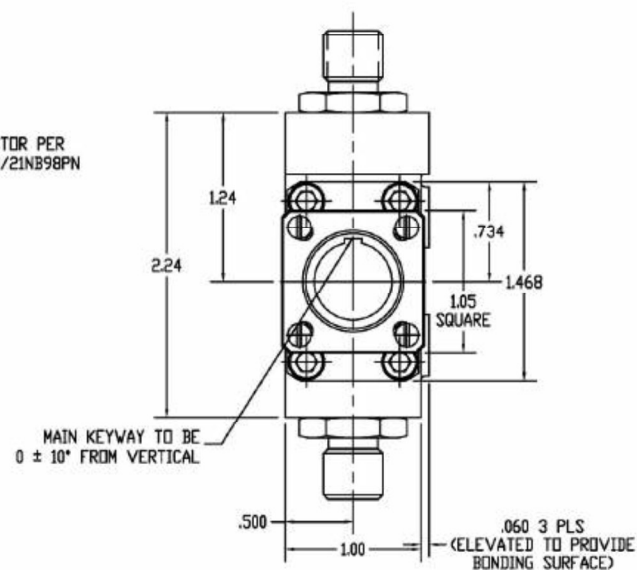
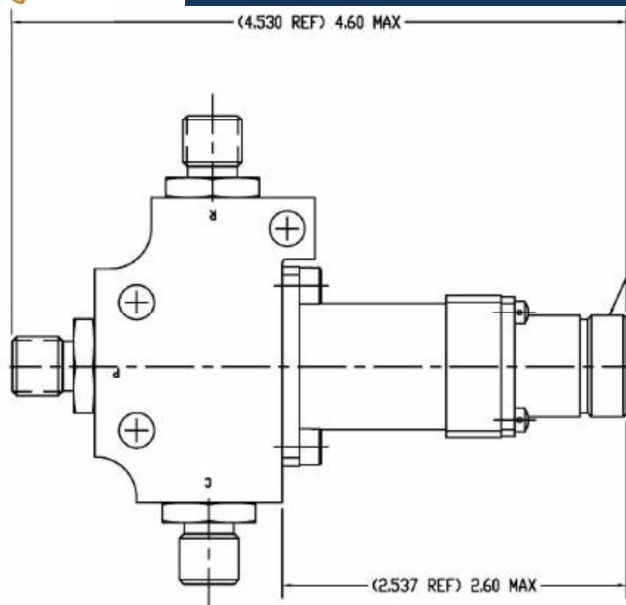
ELECTRICAL SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



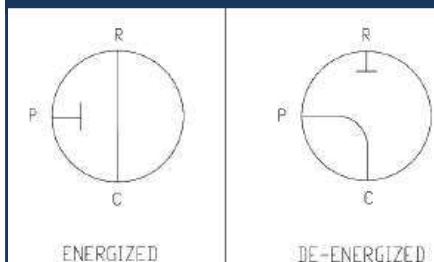
PART NUMBER: 1M1536 SOLENOID VALVE



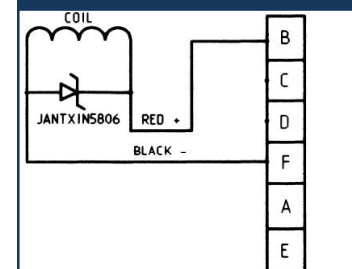
PERFORMANCE SPECIFICATIONS:

FLUIDS: ENGINE BLEED AIR
 MATERIAL: HOUSING 7075-T73
 NOMINAL SUPPLY PRESSURE: 27.5 PSIG
 TEMPERATURE RANGE: -40° TO 392°F
 FLOW (DE-ENERGIZED): 0.398 SCFM AT 24 PSID
 INTERNAL LEAKAGE IN ANY POSITION: 200 SCCM MAX AT 24 PSID
 OPERATING VOLTAGE RANGE: 18 TO 32 VDC NOMINAL
 COIL CURRENT: 0.6 AMPS MAX AT 24 VDC AND 70°F TO 90°F
 DUTY CYCLE: CONTINUOUS
 WEIGHT: 1.0 LBS MAX

HYDRAULIC SCHEMATIC



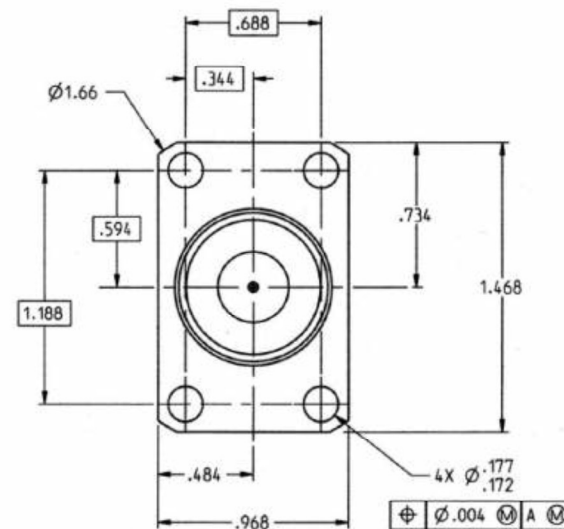
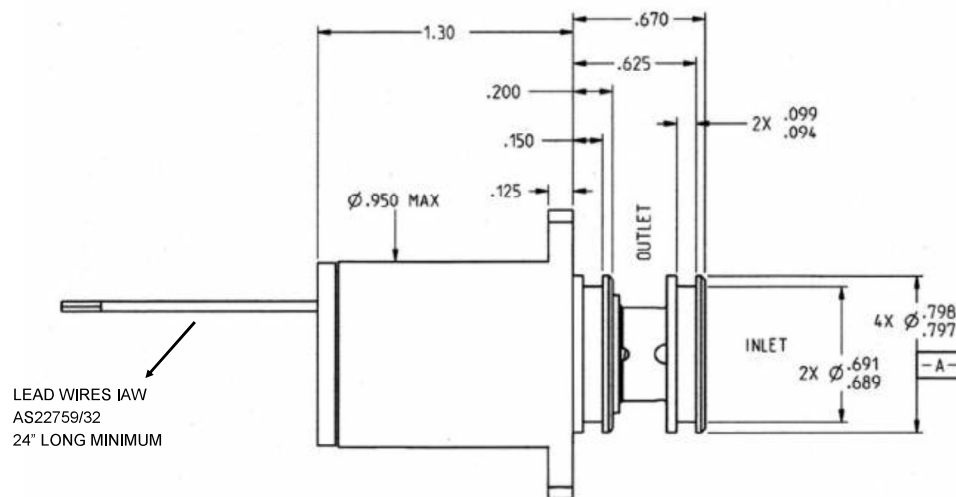
ELECTRICAL SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 4S1296 SOLENOID VALVE, PROPORTIONAL, NORMALLY CLOSED



PERFORMANCE SPECIFICATIONS:

FLUIDS: MIL-PRF-87252*

MATERIAL: VALVE BODY 303 CRES

NOMINAL SUPPLY PRESSURE: 200 PSIG

TEMPERATURE RANGE: -106° TO 246°F

FLOW (ENERGIZED): 1.05 GPM AT 5 PSID MAX AT 125°F

VALVE POSITION: PROPORTIONAL TO PWM SIGNAL SUPPLIED AT FIXED FREQUENCY GREATER THAN 1000 HZ

INTERNAL LEAKAGE (DE-ENERGIZED): 2 CC/MIN MAX AT 15 PSID

OPERATING VOLTAGE RANGE: 22 TO 32 VDC (28 VDC NOMINAL)

PULL-IN VOLTAGE: 18 VDC MAX AT 15 PSID AND 70°F

DROP-OUT VOLTAGE: 1.5 VDC AT 5 PSID AND 70°F

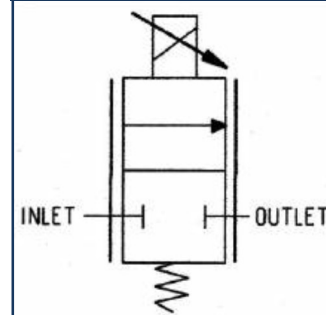
COIL CURRENT: 0.6 AMPS MAX AT 24 VDC AND 70°F

DUTY CYCLE: CONTINUOUS

WEIGHT: 0.350 LBS MAX

*OTHER FLUIDS ACCEPTABLE WITH ELASTOMER CHANGE

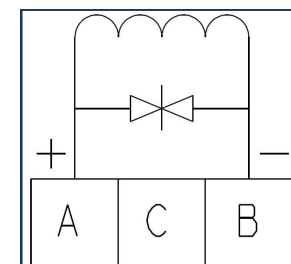
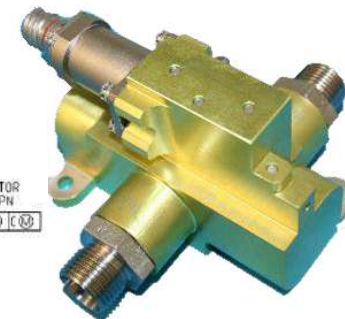
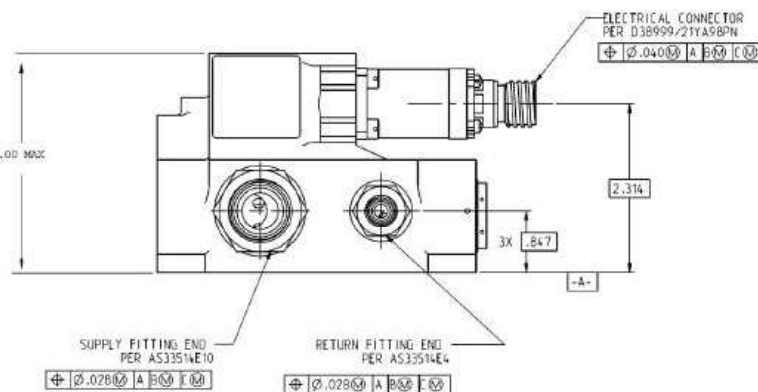
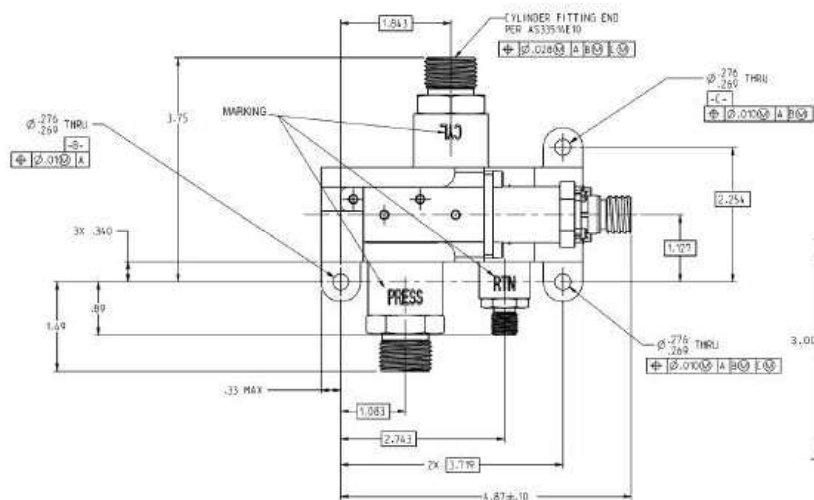
HYDRAULIC SCHEMATIC



CATEGORY 4: DIRECT ACTING SOLENOID VALVES



PART NUMBER: 1M1548 SHUT-OFF VALVE



ELECTRICAL SCHEMATIC

PERFORMANCE SPECIFICATIONS:

FLUIDS: LOW DENSITY PHOSPHATE ESTER FLUID TYPE IV, V*

MATERIAL: MANIFOLD 7075-T6 AL

NOMINAL SUPPLY PRESSURE: 3000 PSIG

ENERGIZED FLOW (PRESS TO CYL): 10 GPM AT 60 PSID MAX AND 100°F

DE-ENERGIZED FLOW (CYL TO RET): 2 GPM AT 70 PSID MAX AND 100°F

INTERNAL LEAKAGE AT 3000 PSID IN ANY POSITION: 15.0 CC/MIN MAX

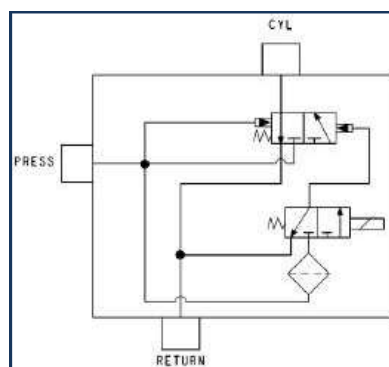
OPERATING VOLTAGE RANGE: 16 TO 31.5 VDC

COIL RESISTANCE: 42±2 OHMS

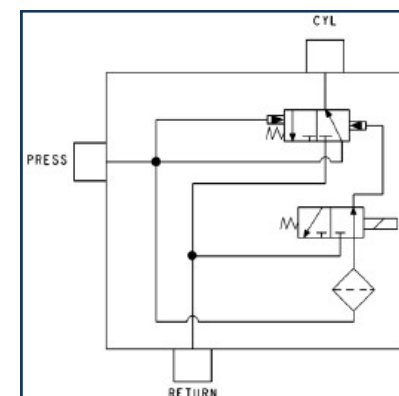
PEAK INVERSE VOLTAGE: ±60 VDC MAX

WEIGHT: 2.60 LBS MAX

*MIL-PRF-83282 ACCEPTABLE WITH ELASTOMER CHANGE



HYDRAULIC SCHEMATIC
(SHOWN DE-ENERGIZED)

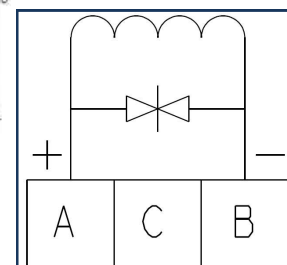
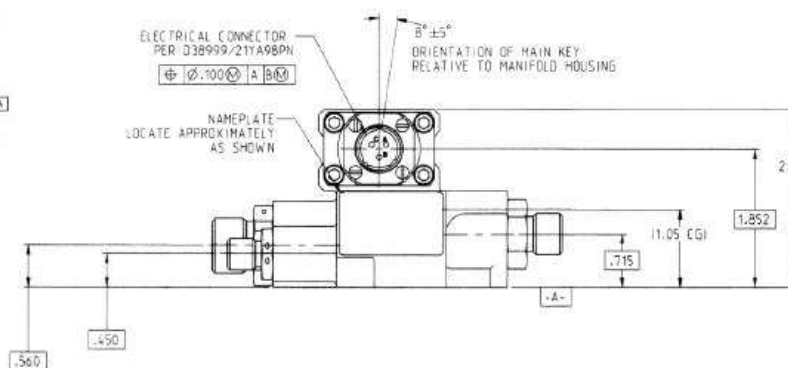
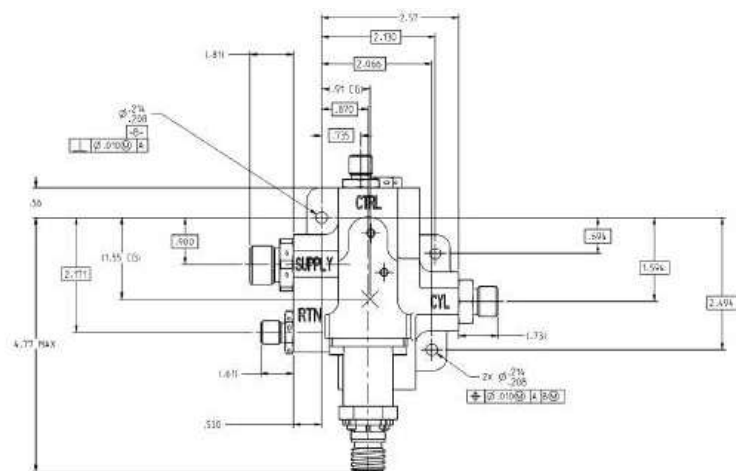


HYDRAULIC SCHEMATIC
(SHOWN ENERGIZED)

CATEGORY 4: SHUT-OFF VALVES, PILOT SOLENOID OPERATED



PART NUMBER: 1M1550 SHUT-OFF VALVE

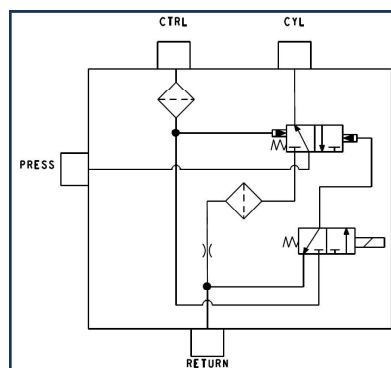


ELECTRICAL SCHEMATIC

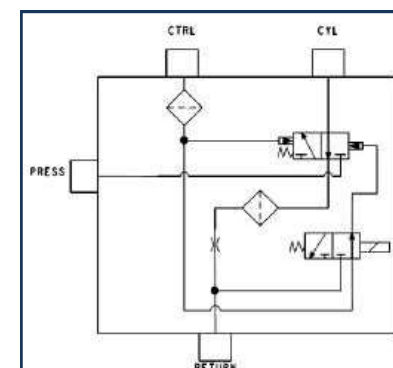
PERFORMANCE SPECIFICATIONS:

FLUIDS: LOW DENSITY PHOSPHATE ESTER FLUID TYPE IV, V*
 MATERIAL: MANIFOLD 7075-T6 AL
 NOMINAL SUPPLY PRESSURE: 3000 PSIG
 ENERGIZED FLOW (CYL TO RET): 1.1±0.1 GPM AT 2600 PSID MAX AND 100°F
 DE-ENERGIZED FLOW (SUP TO CYL): 6.4 GPM AT 60 PSID MAX AND 100°F
 INTERNAL LEAKAGE AT 3000 PSID IN ANY POSITION: 15.0 CC/MIN MAX
 OPERATING VOLTAGE RANGE: 16 TO 31.5 VDC
 COIL RESISTANCE: 42±2 OHMS
 PEAK INVERSE VOLTAGE: ±60 VDC MAX
 WEIGHT: 2.00 LBS MAX

*MIL-PRF-83282 ACCEPTABLE WITH ELASTOMER CHANGE

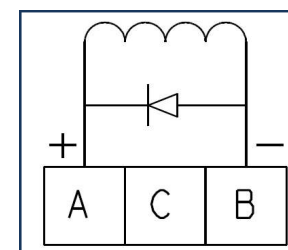
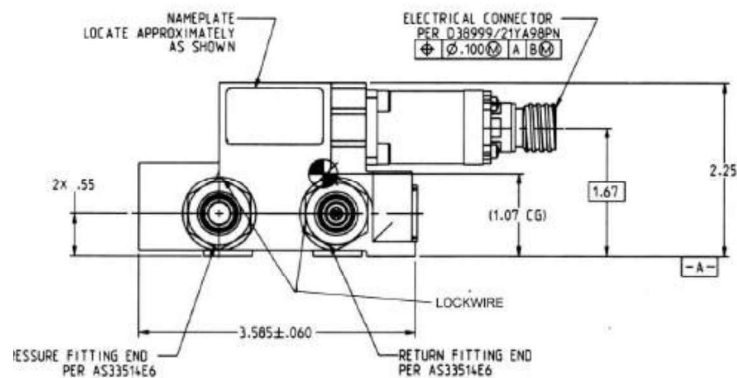


HYDRAULIC SCHEMATIC
(SHOWN DE-ENERGIZED)



HYDRAULIC SCHEMATIC
(SHOWN ENERGIZED)

CATEGORY 4: SHUT-OFF VALVES, PILOT SOLENOID OPERATED

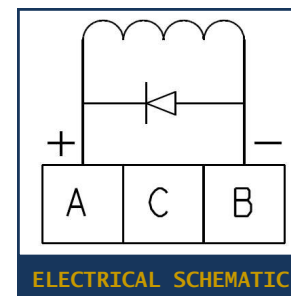
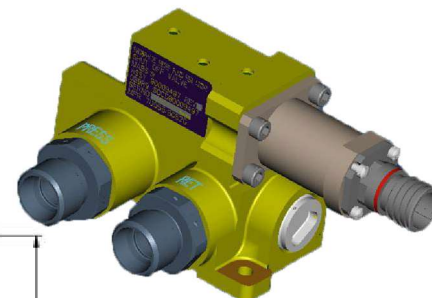
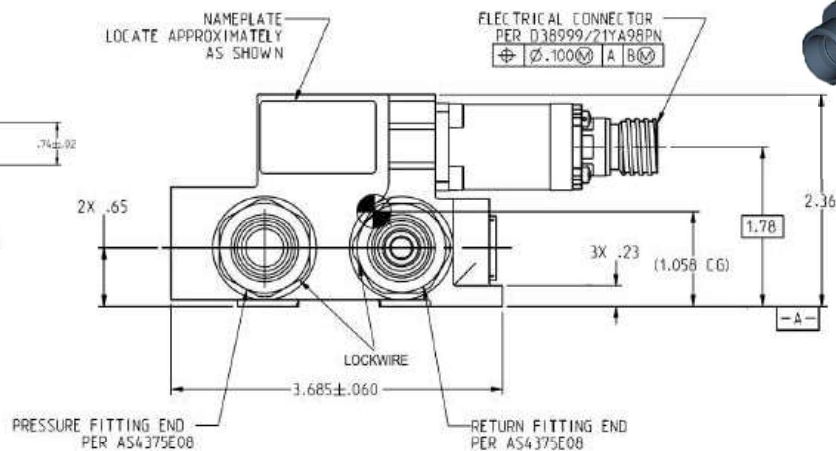
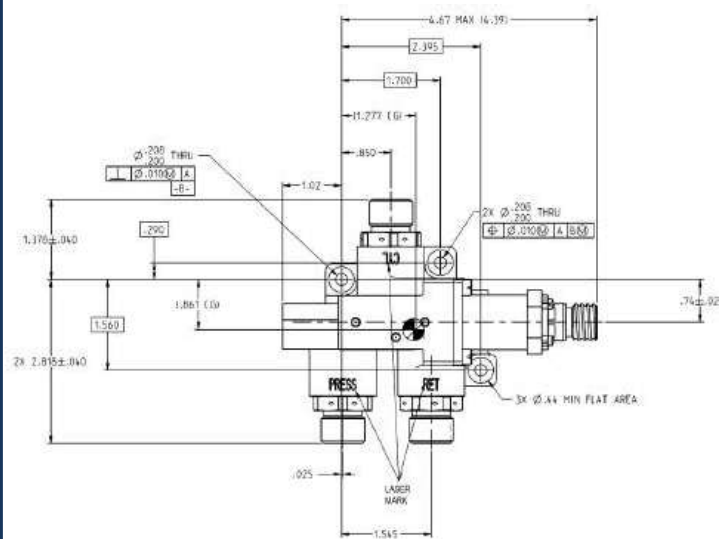


HYDRAULIC SCHEMATIC (SHOWN ENERGIZED)

CATEGORY 4: SHUT-OFF VALVES, PILOT SOLENOID OPERATED



PART NUMBER: 1M1556 SHUT-OFF VALVE



PERFORMANCE SPECIFICATIONS:

FLUIDS: LOW DENSITY PHOSPHATE ESTER FLUID TYPE IV, V*

MATERIAL: MANIFOLD 7075-T73 AL

NOMINAL SUPPLY PRESSURE: 3000 PSIG

ENERGIZED FLOW (PRESS TO CYL): 6 GPM AT 377±23 PSID AND 100°F

DE-ENERGIZED FLOW (CYL TO RET): 3 GPM AT 110 PSID MAX AND 100°F

INTERNAL LEAKAGE AT 3000 PSID IN ANY POSITION: 0.25 CC/MIN MAX

OPERATING VOLTAGE RANGE: 16 TO 32 VDC

COIL RESISTANCE: 100±8 OHMS

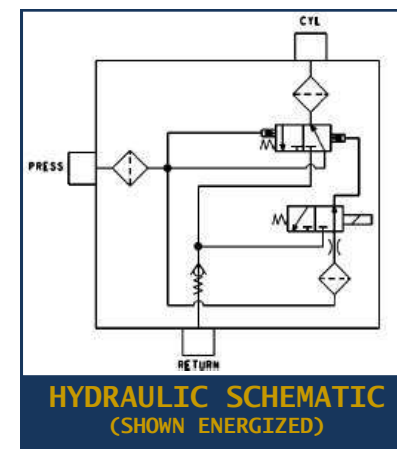
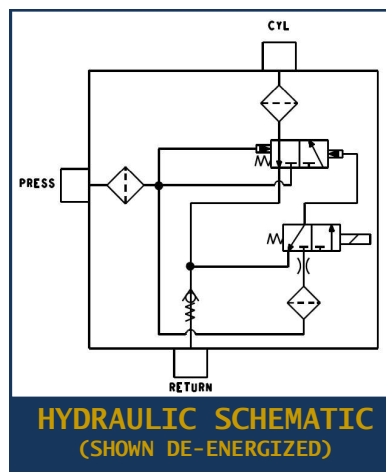
OPENING TRANSIENT: 60 MSEC MAX

CLOSING TRANSIENT: 100 MSEC MAX

PEAK INVERSE VOLTAGE: ±600 VDC

WEIGHT: 1.77 LBS MAX

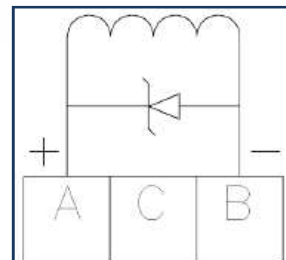
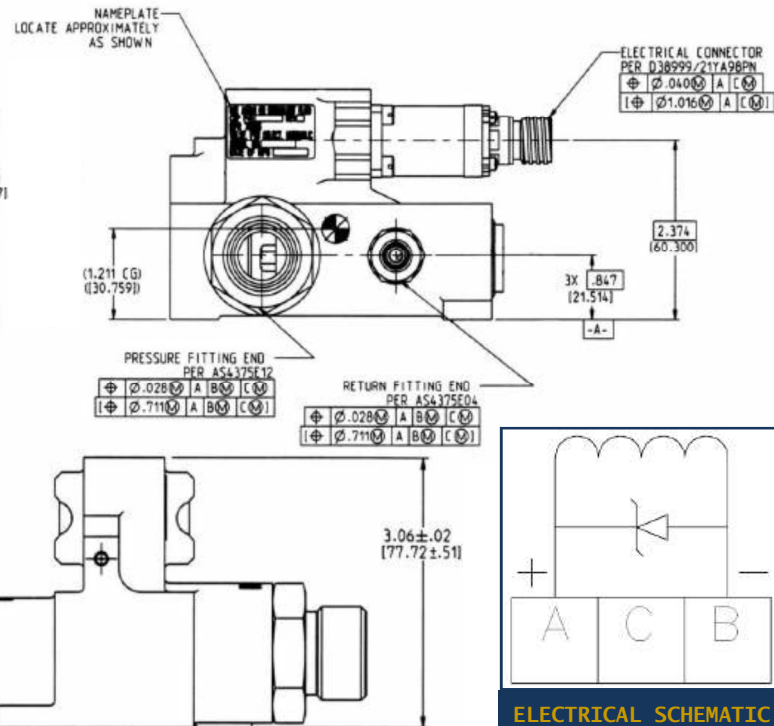
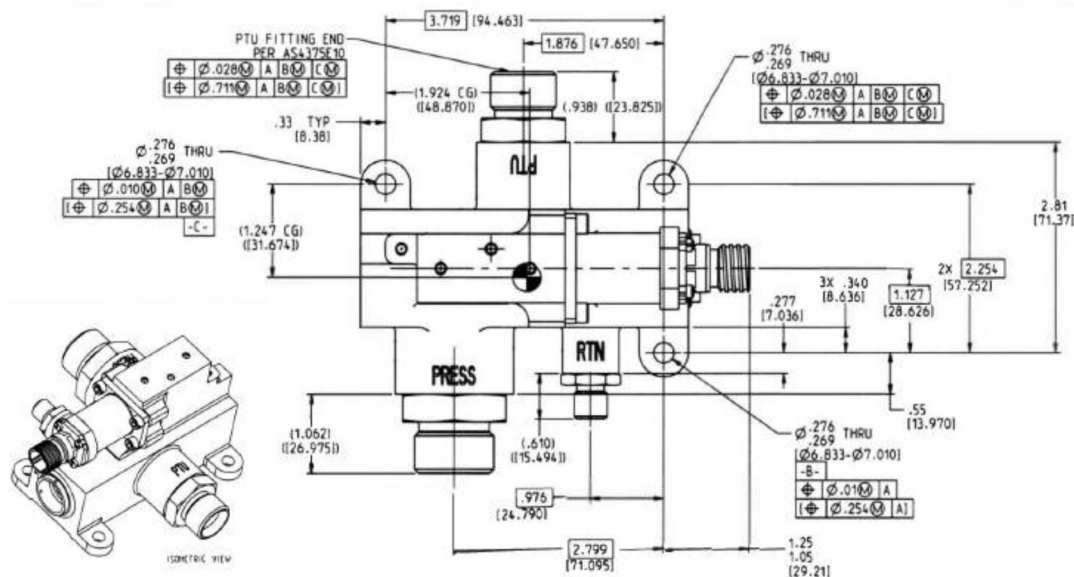
*MIL-PRF-83282 ACCEPTABLE WITH ELASTOMER CHANGE



CATEGORY 4: SHUT-OFF VALVES, PILOT SOLENOID OPERATED



PART NUMBER: 1M1552 SHUT-OFF VALVE



ELECTRICAL SCHEMATIC

PERFORMANCE SPECIFICATIONS:

FLUIDS: SKYDROL AS1241 TYPE IV CLASS 1 OR 2 AND TYPE V*

MATERIAL: MANIFOLD 7075-T73 AL

NOMINAL SUPPLY PRESSURE: 3000 PSIG

TEMPERATURE RANGE: -65° TO 185°F

ENERGIZED FLOW (PRESS TO PTU): 18 GPM AT 50 PSID MAX

ENERGIZED LEAKAGE (PTU TO RTN): 15 CC/MIN MAX AT 3000 PSID

DE-ENERGIZED FLOW (PTU TO RET): 2 GPM AT 60 PSID MAX

DE-ENERGIZED LEAKAGE (PRESS TO PTU): 15 CC/MIN MAX AT 3000 PSID

OPERATING VOLTAGE RANGE: 16 TO 32 VDC

PULL-IN VOLTAGE: 13.5 VDC MAX AT 3000 PSID AND 80°F $\pm 20^\circ$ F

DROP-OUT VOLTAGE: 3 VDC AT 3000 PSID AND 70°F

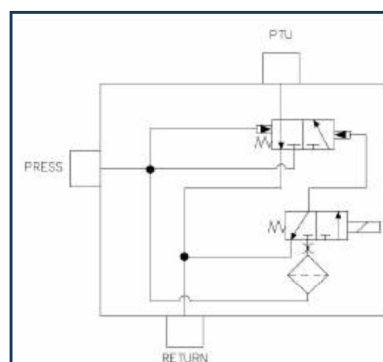
PEAK INVERSE VOLTAGE: ± 60 VDC MAX

COIL CURRENT: 0.6 AMPS MAX AT 24 VDC AND 70°F

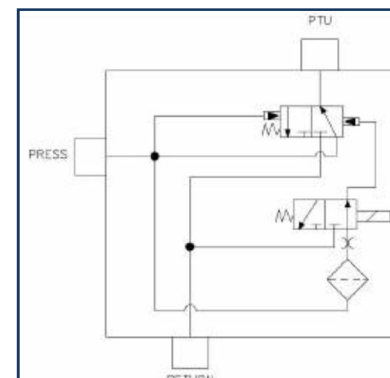
DUTY CYCLE: 500,000 ACTUATION CYCLES MINIMUM

WEIGHT: 3.09 LBS MAX

*OTHER FLUIDS ACCEPTABLE WITH ELASTOMER CHANGE



HYDRAULIC SCHEMATIC
(SHOWN DE-ENERGIZED)

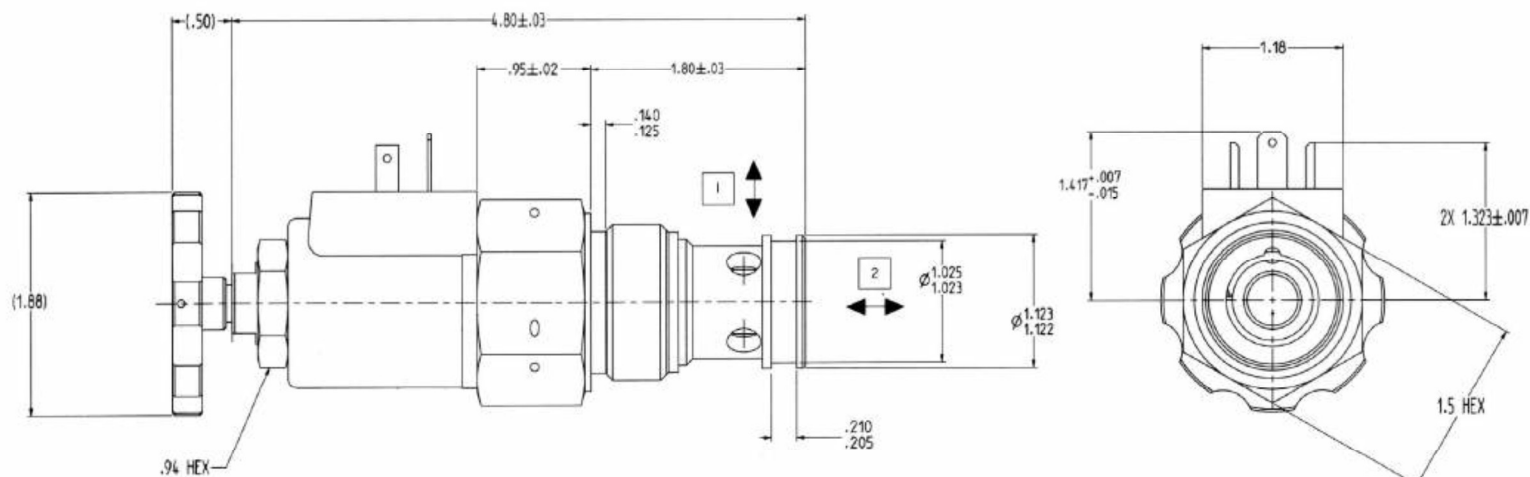
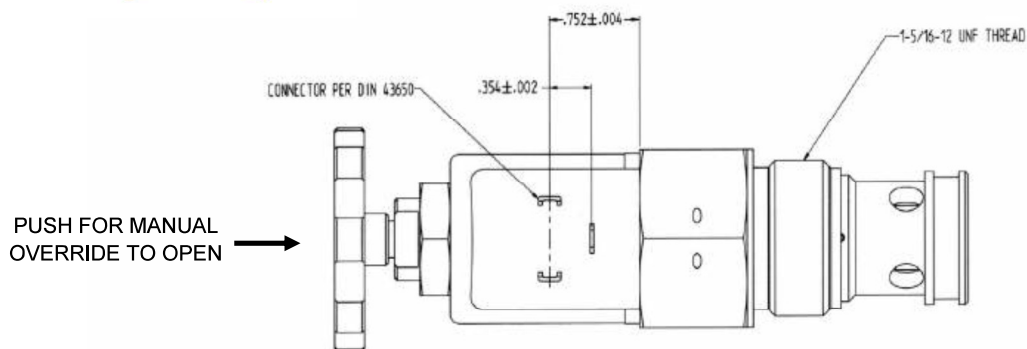


HYDRAULIC SCHEMATIC
(SHOWN ENERGIZED)

CATEGORY 4: SHUT-OFF VALVES, PILOT SOLENOID OPERATED



PART NUMBER: 4S1292 SOLENOID VALVE, BI-DIRECTIONAL, 2POS 2WAY, NORMALLY OPEN



PERFORMANCE SPECIFICATIONS:

FLUIDS: MIL-PRF-83282*

MATERIAL: VALVE BODY 17-4PH CRES

NOMINAL SUPPLY PRESSURE: 3000 PSIG

FLOW (DE-ENERGIZED): (1 TO 2) 29.1 GPM AT 70 PSID AND 80°F±20°F

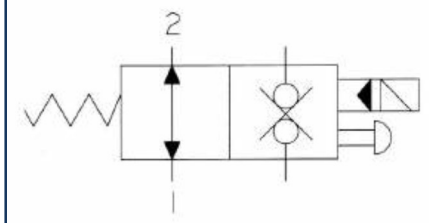
(2 TO 1) 9.2 GPM AT 70 PSID AND 80°F±20°F

INTERNAL LEAKAGE (ENERGIZED): 1 CC/MIN MAX AT 3000 PSID AND 80°F±20°F

OPERATING VOLTAGE: 100 VDC

*PHOSPHATE ESTER BASE ACCEPTABLE WITH ELASTOMER CHANGE

HYDRAULIC SCHEMATIC



CATEGORY 4: SHUT-OFF VALVES, PILOT SOLENOID OPERATED



CRISSAIR HAS VARIOUS OTHER SOLENOID VALVES NOT LISTED IN THE CATALOG WITH DIFFERENT MATERIALS, FITTINGS, AND SIZE CONFIGURATIONS.

CONTACT CRISSAIR FOR ADDITIONAL INFORMATION/DRAWINGS AT

(661) 367-3300 OR SALES@CRISSAIR.COM.

YOU CAN ALSO VISIT WWW.CRISSAIR.COM.