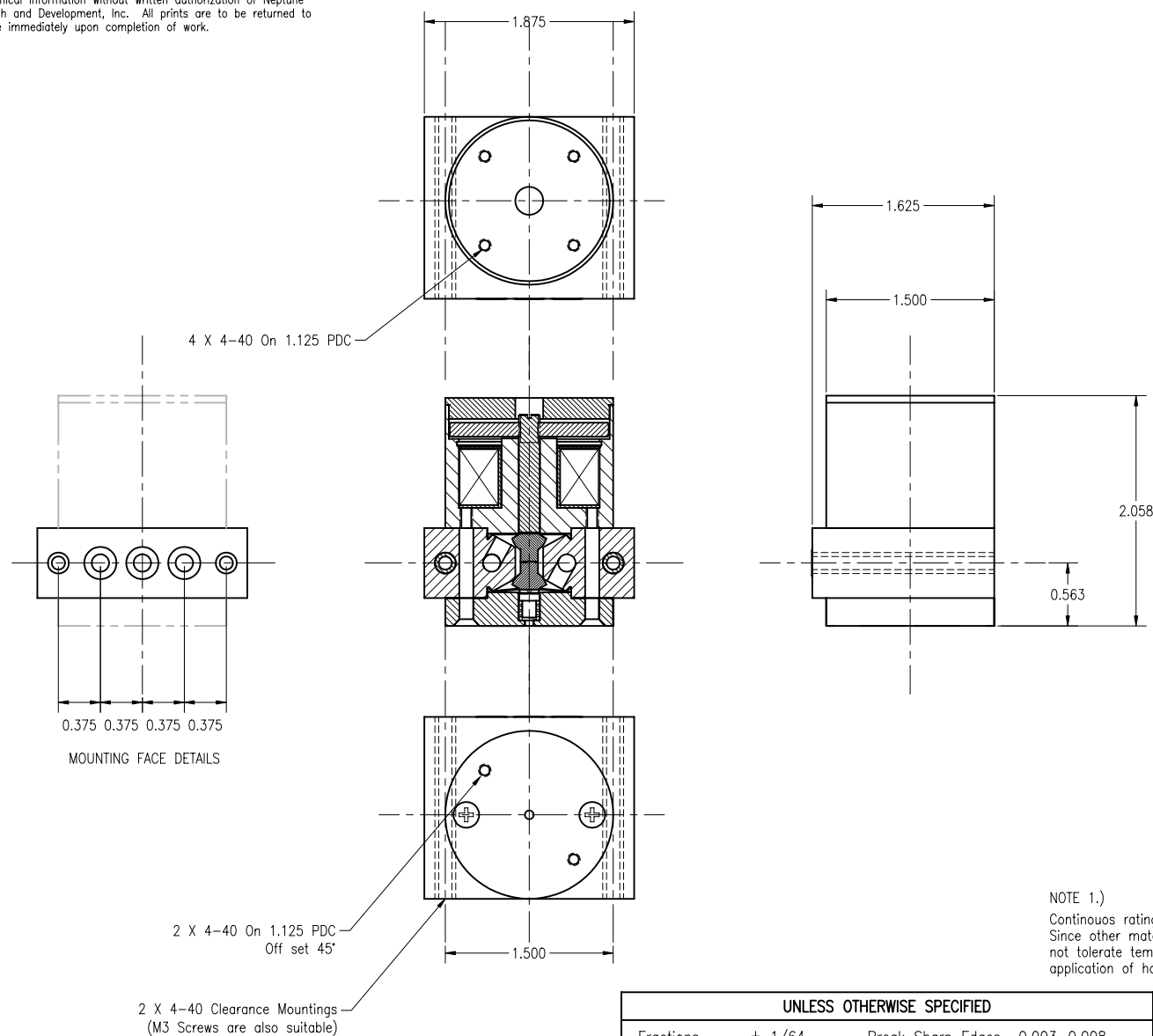


This drawing is NOT to be used for making reproductions thereof, or for making or using any apparatus, equipment, subject matter, or technical information without written authorization of Neptune Research and Development, Inc. All prints are to be returned to Neptune immediately upon completion of work.



Note: Valves supplied with 3 X 4mm X 1.8mm Viton O-Rings P/N FITM639 as standard

SPECIFICATIONS:

Mechanical:


- (Each Port)
- TYPE: 3-Way Manifold Mount
- PORT CONNECTION: Manifold Mount — O-Rings
- NOMINAL ORIFICE: 0.156 In. (4.0 mm)
- OPERATING PRESSURE: Vacuum to 30 PSI (2.0 Bars)
- TEST PRESSURE: 30 PSI N₂ (Leakage < 3μl/min)
- INTERNAL VOLUME: 1432 microliters from face of O-Ring ports.
- WETTED MATERIALS: TEFLON®
- MOUNTING ORIENTATION: Any Position

Electrical:

- (At 70° C No Pressure)
- OPERATING VOLTAGE: 12 VDC (Continuous, see note 1.)
12 to 24 volts subject to duty cycle and/or holding voltage applied.
- POWER CONSUMPTION: 7.2 watts/12VDC (approx.)
- LEAD WIRES: #22 AWG, TFE Insulated
Yellow 18 in. (457 mm) long.
- TEST VOLTAGE (ON): < 9 VDC
- TEST VOLTAGE (OFF): 0.5 to 4 VDC
- RESPONSE TIME (ON): 20ms Max. (12 VDC)
5 to 20 ms subject to applied voltage and driving circuits.
- RESPONSE TIME (OFF): 30ms Max. (from 12 VDC)
30 to 5 ms adjustable by driving circuits.

NOTE 1.)
Continuous rating applies to solenoid construction only. Since other materials incorporated in the product may not tolerate temperature variations as well as the solenoid application of holding voltage is strongly recommended.

NOTICE:
This product is protected by one or more of the following United States Patents: 4,496,133; 4,993,456; 5,143,118; Re. 34,261 5,433,244. Other Patents Pending.

UNLESS OTHERWISE SPECIFIED			Scale	1 : 1 (B)	Material	As noted		
Fractions	± 1/64	Break Sharp Edges	0.003-0.008	Dr. By	G Stevens	Date		31-Mar-04
2 Pl. Dec.	± 0.005	All Small Fin. Radii	0.003-0.008	Checked		Approved		
3 Pl. Dec.	± 0.002	All surfaces shall be Concentric,		Part Name	MMDT031 3W MM 12VDC			Drawing Number
Angular	± 0.06°	Parallel, Flat, Square and True						
All Fin. Surf.		to Each Other within 0.001 T.I.R.						