

INCH-POUND
MIL-DTL-28788/1C
23 June 2004

SUPERSEDING
MIL-S-28788/1B
4 June 1984

DETAIL SPECIFICATION SHEET

SWITCHES, LIQUID FLOW, SINGLE POLE, DOUBLE THROW (SPDT),
3 AMPERES, OPERATING TEMPERATURE (32°F to 185°F)

Inactive for new design after 8 March 1999

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the switches described herein shall consist of this specification and the latest issue of MIL-DTL-28788.

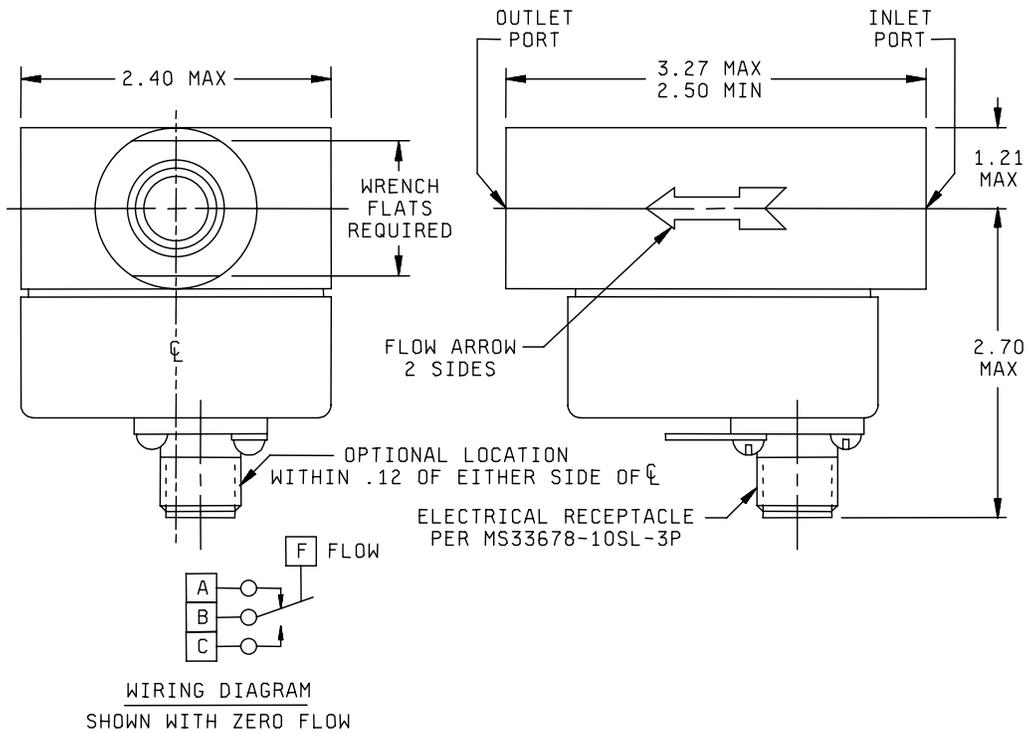


FIGURE 1. Configuration and dimensions.

TABLE I. Operating characteristics.

Military Part Number	Port size in accordance with M51642		Switch role rates		Pressure drop during flow	
			Actuation Increasing GPM (max) at 104°F ± 9°F	Deactuation decreasing GPM (min) at 104°F ± 9°F	PSIG (max)	Rated flow GPM
	Inlet	Outlet				
M28788/1-1	-6	-6	.85	.60	5	1.00
-2	-6	-6	.42	.27	5	.50
-3	-6	-6	.60	.40	4.5	.66
-4	-6	-6	.65	.45	5	.75
-5	-8	-8	3.70	2.90	5	4.00
-6	-6	-6	1.30	1.00	5	1.50
-7	-6	-6	1.80	1.50	5	2.00
-8	-6	-6	2.30	2.00	5	2.50
-9	-8	-8	2.70	2.40	5	3.00
-10	-8	-8	3.70	3.20	7	4.00
-11	-8	-8	4.50	4.00	7	5.00
-12	-8	-8	5.40	4.00	7	6.00
-13	-8	-8	.85	.75	5	1.00

REQUIREMENTS:

Mounting: See figure 1.

Termination: Connector MS33678-10SL-3P.

Weight: 1.6 pounds (725.76 grams) approximate.

Calibration: See table I.

Media: Water.

Ports: See table I.

Proof flow: 225 percent of rated flow.

Differential pressure: See table I.

Working pressure: 25 to 75 PSIG.

Proof pressure: 150 PSIG.

Burst pressure: 300 PSIG.

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Temperature range:

Working: 32°F to 185°F.

Nonworking: -65°F to +200°F.

Seal: Electrical chamber only - hermetic.

Endurance: 20,000 cycles.

Electrical rating: 3 amperes inductive at 28 volts dc.

Connector torque: Applicable.

Sand and dust: Applicable.

Explosion: Applicable.

Vibration: Grade 2.

Dielectric withstanding voltage:

At atmospheric pressure: 1050 test voltage.

At reduced pressure: Test condition C, 1 minute time duration.

QUALIFICATION:

Group submission: See table II.

TABLE II. Extent of qualification.

Switches for testing	Number of sample units	Examination or test	Extent of approval
M28788/1-2	All sample units	Qualification inspection of MIL-DTL-28788	All
M28788-1-9 -12	2 each	Visual and mechanical examination Operating characteristics Vibration, shock, and electrical endurance	

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Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-1831)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at www.dodssp.daps.mil.