

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 requirements for acquiring the switches described herein shall consist of this specification sheet and MIL-DTL-28788.

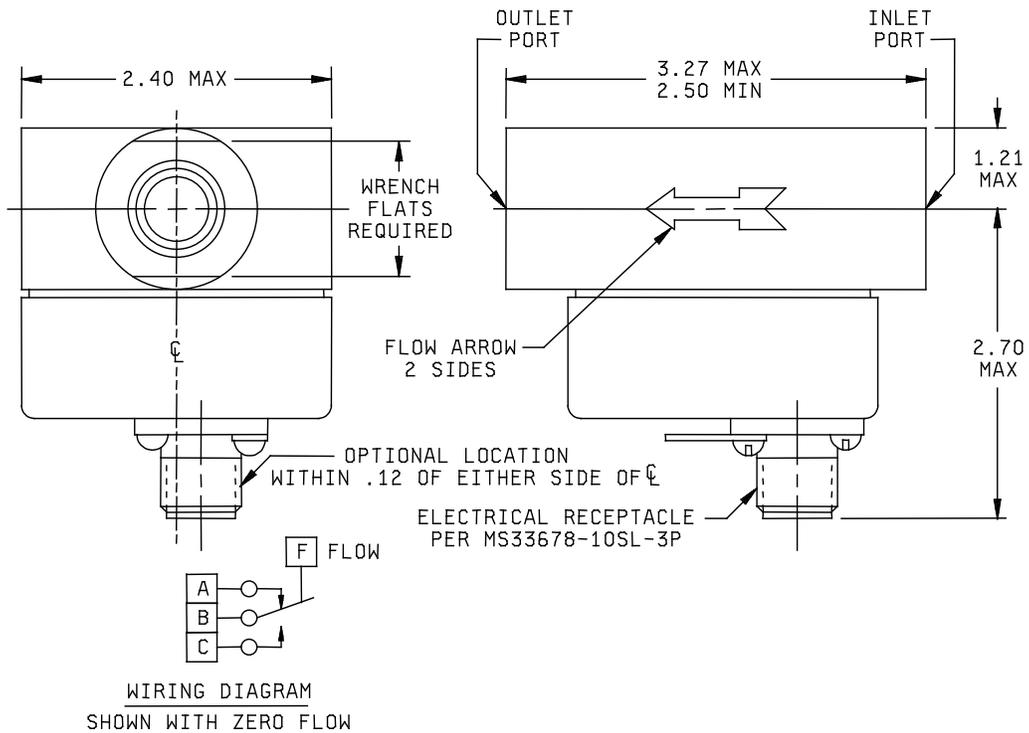


FIGURE 1. Configuration and dimenisons.

TABLE I. Operating characteristics.

Military Part Number	Port size		Switch role rates		Pressure drop during flow	
	Inlet	Outlet	Actuation Increasing GPM (max) at 104°F ± 9°F	Deactuation decreasing GPM (min) at 104°F ± 9°F	PSIG (max)	Rated flow GPM
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.

Temperature range:

Working: 32°F to 185°F.

Nonworking: -65°F to +200°F.

MIL-DTL-28788/1D

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	

Reference documents:  
MIL-DTL-28788

The margins of this specification are marked with vertical lines to indicate where modifications from this revision were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Custodians:  
Army - CR  
Navy - EC  
Air Force - 85  
DLA - CC

Preparing activity:  
DLA - CC  
  
(Project 5930-2009-032)

Review Activity:  
Air Force - 99

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 <https://assist.daps.dla.mil/> .