INCH-POUND

MIL-DTL-21604/1B
27 June 2003
SUPERSEDING
MIL-S-21604/1A(SH)
30 March 1992

DETAIL SPECIFICATION SHEET

SWITCH, ROTARY, MULTIPOLE AND SELECTOR, 1 AMPERE,

STYLES JF AND JFM

This specification is approved for use by the Navy Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-DTL-21604.

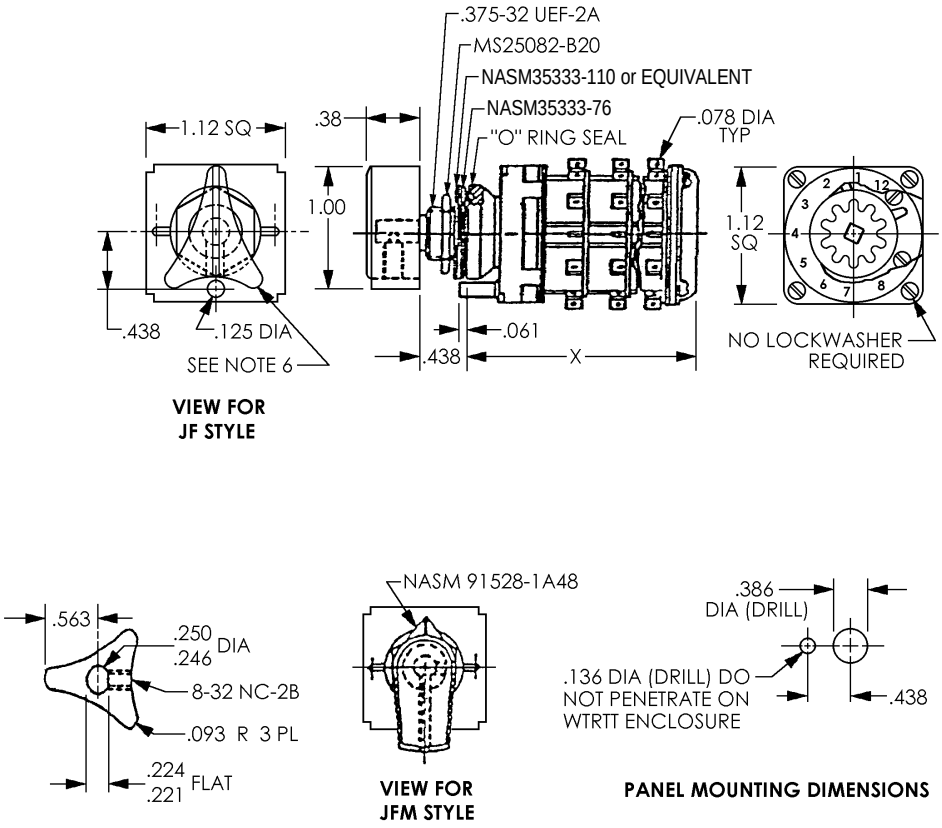
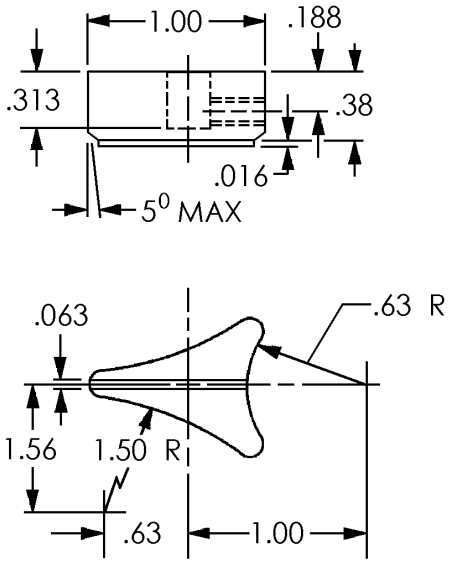


FIGURE 1. Style JF and JFM switch.



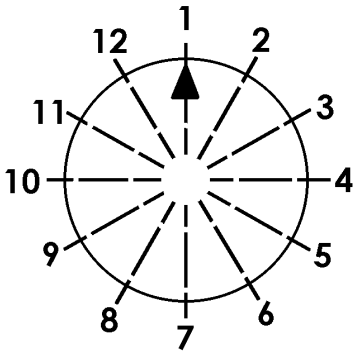
HANDLE FOR JF STYLE

Inch	mm	Inch	mm
.005	0.13	.250	6.35
.016	0.41	.313	7.95
.061	1.55	.375	9.53
.063	1.60	.38	9.65
.078	1.98	.386	9.80
.093	2.36	.438	11.12
.125	3.18	.563	14.30
.136	3.45	.63	16.00
.188	4.78	1.00	25.40
.221	5.61	1.12	28.45
.224	5.69	1.50	38.10
.246	6.25	1.56	39.64

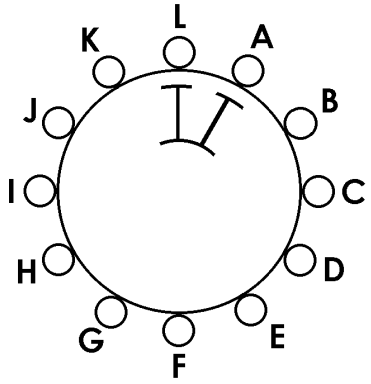
NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are ± .016 (0.41 mm) for two-place decimals and ± .005 (0.13 mm) for three-place decimals.
4. Type JFM switches shall be limited to three positions, (0 degrees and ± 30 degrees) by a stop assembly located in the spring case. Either of the 30 degree positions can be eliminated by adjustment of the female gears in the read stop shown on figure 1.
5. Unless otherwise specified in the acquisition document, type JFM switches shall be furnished with handle NASM91528-1A4B.
6. Brass with nickel finish.
7. MS35333 and MS91528 have been cancelled and replaced by NASM35333 and NASM91528, respectively. The existing military part identification numbers have been retained in the NASM documents.

FIGURE 1. Style JF and JFM switch - Continued.

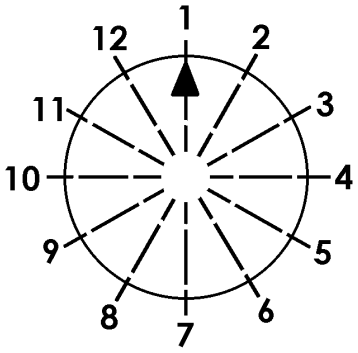


HANDLE POSITIONS

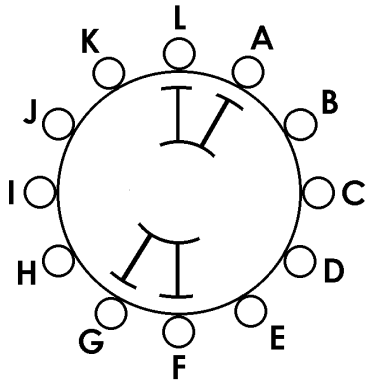


TYPICAL SECTION
SINGLE POLE

ROTOR DESIGNATION 1



HANDLE POSITIONS



TYPICAL SECTION
DOUBLE POLE

ROTOR DESIGNATION 2

NOTE: Viewed from the handle end.

FIGURE 2. Rotor contact configuration and handle positions.

REQUIREMENTS:

Dimensions and configuration: See figure 1, figure 2, and table I.

Angle of throw: 30 degrees.

Switching action: Detent (style JF), momentary (style JFM). These switches have single break contact action.

Electrical loads:

AC current: 1 ampere.

Voltage: 125 volts (at 60 Hz, 0.5 power factor inductive).

Insulation: Grade 4 of polychlorotrifluoroethylene (Kel-F) of ASTM D1430 or thermosetting plastic (except phenolic) of ASTM D5948.

Temperature rise: 15°F maximum.

Contact material: Solid silver-overlay on copper or copper alloy.

Stop torque: 35 inch-pounds.

Barriers: See figure 1.

Terminal marking: None.

Stop marking: See figure 1.

Qualification samples: See table II.

Operating shaft: Material shall be selected which will enable the switch to meet the performance requirements of this specification.

TABLE I. Type designation and switching characteristics.

Type designation		Style	Number of sections	Dimension "X" 2/ ± .062 (1.57)	Approximate weight (ounces)	Maximum rotational torque (inch-pounds)
Component	Rotor designation 1/					
S	1	JF	4	1.960 (49.78)	4.2	8
S	1	JF	5	2.250 (57.15)	4.4	8
S	2	JF	1	1.090 (27.69)	3.5	5
S	2	JF	2	1.380 (35.05)	3.7	5
S	2	JF	3	1.670 (42.42)	3.9	5
S	2	JF	4	1.960 (49.78)	4.2	8
S	2	JF	5	2.250 (57.15)	4.4	8
S	2	JFM	3	1.950 (49.53)	4.4	5
S	2	JFM	4	2.240 (56.90)	4.6	8
S	2	JFM	5	2.530 (64.26)	4.9	8

1/ For rotor designation, see figure 2.

2/ Dimensions are in inches. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.

TABLE II. Qualification test samples.

Sample switch	Test number 1/, 2/
S1JFM2	1
S2JF2	2
S1JF5	3
S2JF5	4
S2JF1	5
S3JFM3	6

1/ Test numbers in accordance with table II of MIL-DTL-21604.
2/ For group qualification, see 4.5.1.

Custodians:
Navy - SH
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-1749-07)