

INCH-POUND

MIL-DTL-21604/6B

27 June 2003

SUPERSEDING

MIL-S-21604/6A(SH)

30 March 1992

DETAIL SPECIFICATION SHEET

SWITCH, ASSEMBLIES FOR REMOTE OPERATED SWITCHES, 10 AMPERE,
STYLES RJR AND RJRA

INACTIVE FOR NEW DESIGN AFTER 30 MARCH 1992
FOR NEW DESIGN, USE MIL-S-24187

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.

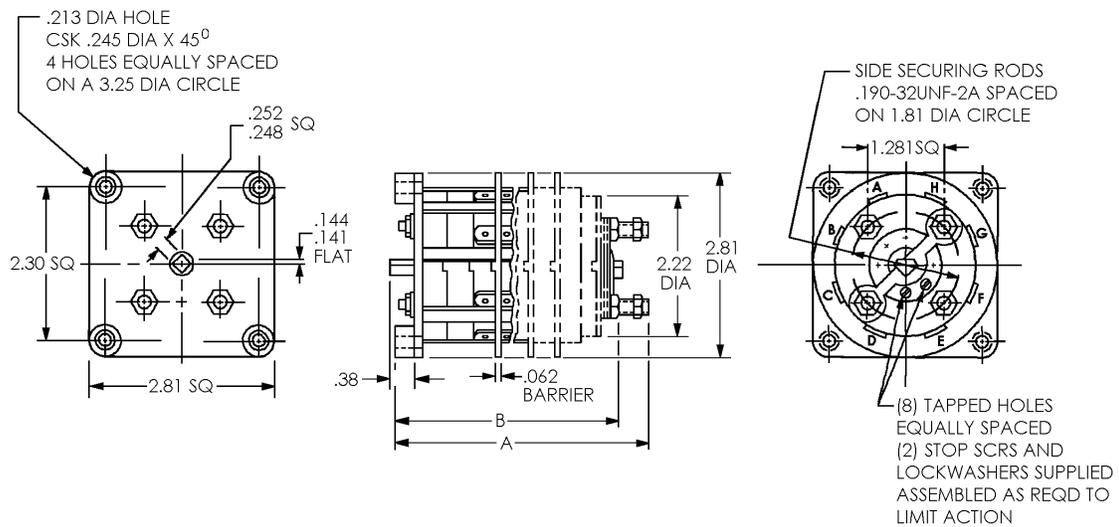
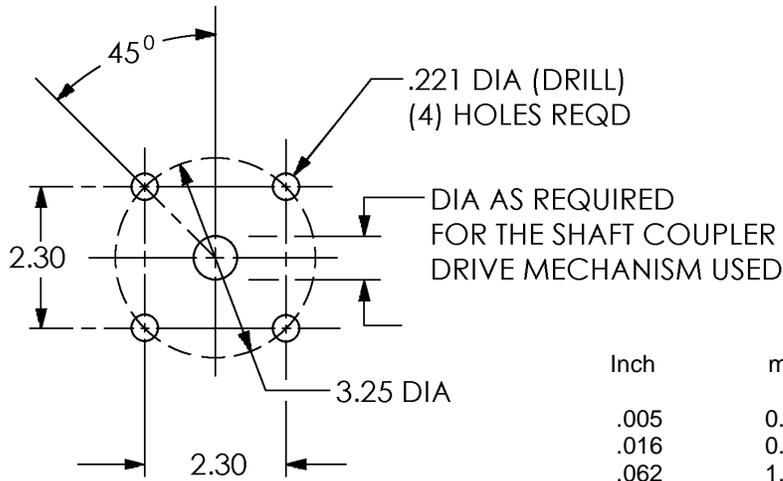
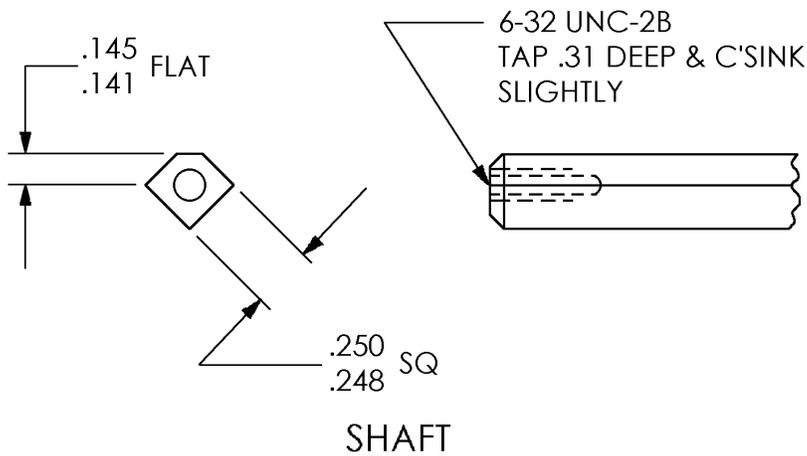


FIGURE 1. Styles RJR and RJRA switch.



PANEL MOUNTING DIMENSIONS
AND REAR SUPPORT

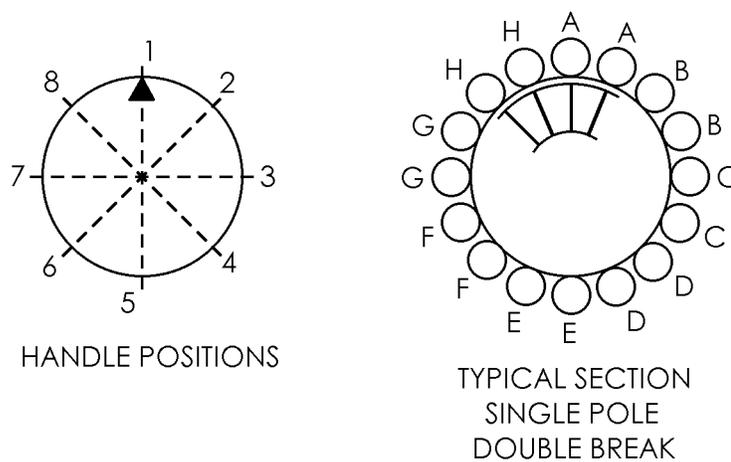
| Inch | mm | Inch | mm |
|------|------|------|-------|
| .005 | 0.13 | .252 | 6.35 |
| .016 | 0.41 | .31 | 7.87 |
| .062 | 1.57 | .38 | 9.65 |
| .141 | 3.58 | .44 | 11.18 |
| .144 | 3.66 | 1.28 | 32.51 |
| .145 | 3.68 | 1.81 | 45.97 |
| .190 | 4.83 | 2.22 | 56.39 |
| .213 | 5.41 | 2.30 | 58.42 |
| .221 | 5.61 | 2.81 | 71.37 |
| .245 | 6.22 | 3.25 | 82.55 |
| .248 | 6.30 | 6.0 | 152.4 |
| .250 | 6.35 | | |



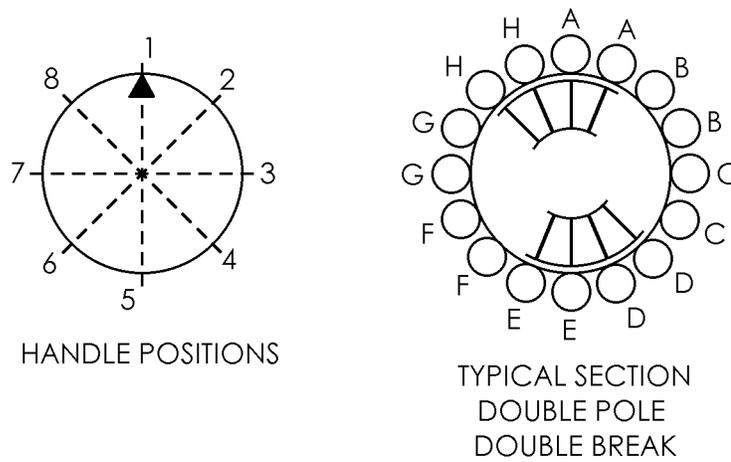
NOTES:

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 $\pm .016$ (0.41 mm) for two-place decimals and ± 0.005 (0.13 mm) for three-place decimals.

FIGURE 1. Styles RJR and RJRA switch - Continued.



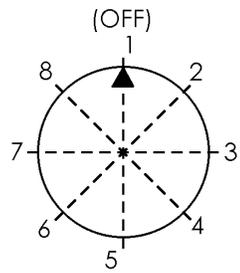
ROTOR DESIGNATION 1



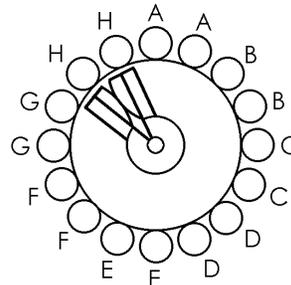
ROTOR DESIGNATION 2

NOTE: Viewed from the handle end.

FIGURE 2. Rotor contact configuration and handle positions.

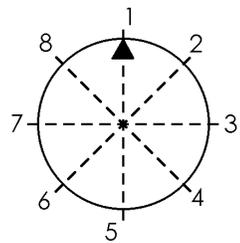


HANDLE POSITIONS

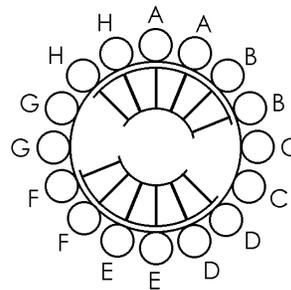


TYPICAL SECTION
SINGLE POLE
SELECTOR

ROTOR DESIGNATION



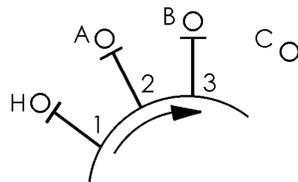
HANDLE POSITIONS



TYPICAL SECTION
DOUBLE POLE
TRIPLE BREAK

ROTOR DESIGNATION 4 ^{1/}

^{1/} WITH ROTOR CONFIGURATION 4, CONTACT H-1 BREAKS BEFORE C-3 MAKES, AND CONTACTS A-1 AND B-2 MAKE BEFORE A-2 AND B-3 BREAK



NOTE: Viewed from handle end.

FIGURE 2. Rotor contact configuration and handle positions - Continued.

REQUIREMENTS:

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

Angle of throw: 45 degrees.

Switching action: Detent.

Electrical loads:

AC current: 10 amperes.

Voltage: 125 volts (at 60 - 400 Hz, 0.80 inductive power factor).

Temperature rise: 30°C maximum.

Contact material:

Rotor: Silver-overlay phosphor-bronze.

Stator: Silver-overlay copper.

Barriers: See figure 1.

Terminal marking: See figure 1.

Stop marking: See figure 1.

Qualification samples: See table II.

TABLE I. Type designation and switching characteristics.

| Type designation | | Style | No. of switch sections | Total number of sections including control sections | Dimensions <u>2/</u> | | Approx. weight (ounces) | Maximum rotational torque (inch-pounds) |
|------------------|-------------------|-------|------------------------|---|----------------------|--------------------------------|-------------------------|---|
| Component | Rotor designation | | | | A ±.06 (1.57) | B | | |
| S | 1 | RJR | 25 | 27 | 12.56(319.07) | 12.06(306.37) +0.14 (±3.58) | 66 | 33-40 |
| S | 2 | RJR | 25 | 27 | 12.56(319.07) | 12.06(306.37) +0.14 (±3.58) | 66 | 39-46 |
| S | 3 | RJR | 25 | 27 | 12.56(319.07) | 12.06(306.37) +0.14 (±3.58) | 66 | 34-41 |
| S | 4 | RJR | 25 | 27 | 12.56(319.07) | 12.06(306.37) +0.14 (±3.58) | 66 | 43-50 |
| S | 2 | RJRA | 26 | 27 | 12.56(319.07) | 12.06(306.37) +0.14 (±3.58) | 66 | 39-46 |

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 sample.

| Sample switch | Test number <u>1/</u> | Sample switch | Test number |
|---------------|-----------------------|---------------|-------------|
| S1JR25 | 1 | S3JR25 | 4 |
| S1JR25 | 2 | S4JR25 | 1 |
| S1JR25 | 3 | S4JR25 | 2 |
| S2JR25 | 4 | S4JR25 | 3 |
| S2JR25 | 1 | S4JR25 | 4 |
| S2JR25 | 2 | S4JR25 | 5 |
| S3JR25 | 3 | S4JR25 | 6 |

1/ Test numbers in accordance with table II of MIL-DTL-21604.

2/ For group qualifications, see 4.5.1.

Custodians:
Navy - SH
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-1749-05)