

## Chapter 2

### ROTARY SWITCHES

#### LIST OF CONTENTS

	<i>Para.</i>		<i>Para.</i>
<i>Introduction</i> ... ..	1	<i>Rotary switch, Type B, 7 amp.</i> ... ..	3
<b>Description</b>		<i>Rotary switch, TOK Type 215, 30 amp.</i>	4
<i>Rotary switch, Type B, 4 amp.</i> ... ..	2	<i>Mooring light switch, 5 amp.</i> ... ..	5

#### LIST OF ILLUSTRATIONS

	<i>Fig.</i>		<i>Fig.</i>
<i>Rotary switches, Type B, and TOK Type</i>		<i>Mooring light switch</i> ... ..	2
215 ... ..	1	<i>Exploded view of mooring light switch</i> ...	3

#### LEADING PARTICULARS

<b>Rotary switch, Type B, 4 amp.</b>	...	...	...	Ref. No. 5CW/936
<i>Dimensions of mounting flange</i>	...	...	...	1.7 in. × 1.7 in.
<i>Overall depth</i> ... ..	...	...	...	2.4 in.
<i>Weight</i> ... ..	...	...	...	4 oz.
<b>Rotary switch, Type B, 7 amp.</b>	...	...	...	Ref. No. 5CW/2910
<i>Dimension of mounting flange</i>	...	...	...	1.7 in. × 1.7 in.
<i>Overall depth</i> ... ..	...	...	...	2.48 in.
<i>Weight (approx.)</i> ... ..	...	...	...	4 oz.
<b>Rotary switch, TOK Type 215, 30 amp.</b>	...	...	...	Ref. No. 5CW/2122
<i>Overall diameter</i> ... ..	...	...	...	3.12 in.
<i>Overall depth</i> ... ..	...	...	...	3.69 in.
<i>Weight</i> ... ..	...	...	...	1.06 oz.
<b>Mooring light switch, 5 amp.</b>	...	...	...	Ref. No. 5CW/626
<i>Overall diameter</i> ... ..	...	...	...	4.6 in.
<i>Overall depth</i> ... ..	...	...	...	3.7 in.
<i>Weight</i> ... ..	...	...	...	14 oz.

RESTRICTED

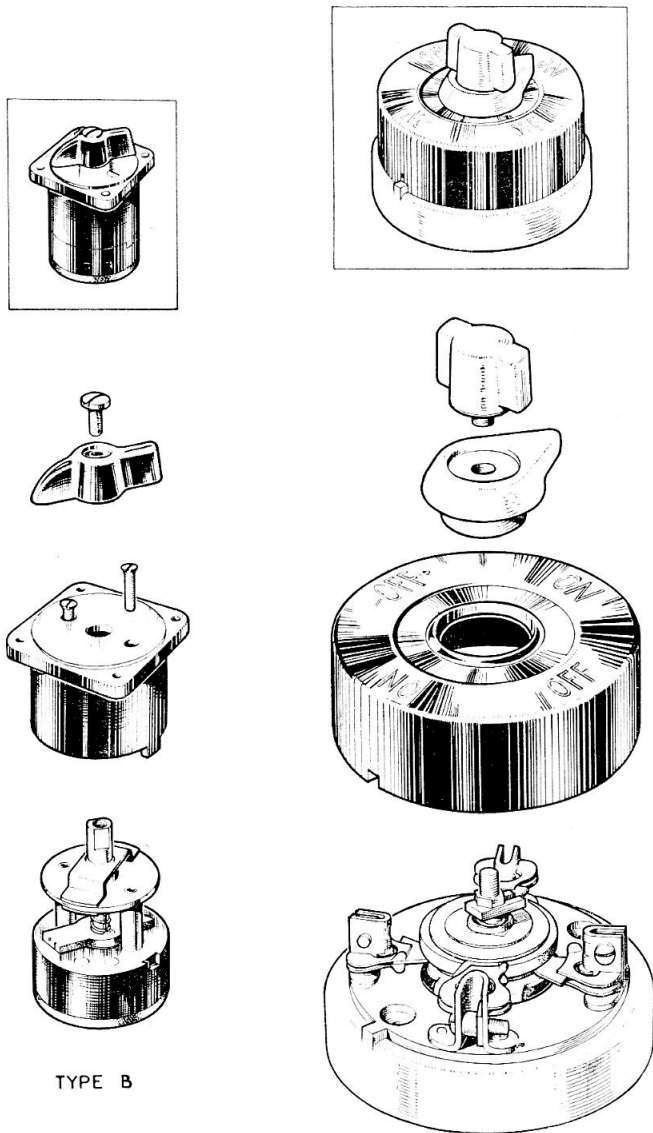


Fig. 1. Rotary switches, Type B, and TOK Type 215

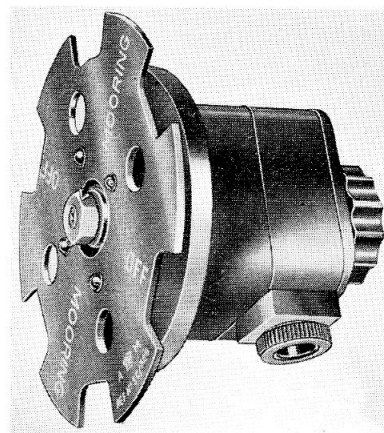


Fig. 2. Mooring light switch

### Introduction

1. This chapter covers various types of rotary switch; dimensional details and weights are given under Leading Particulars.

### DESCRIPTION

#### Rotary switch, Type B, 4 amp.

2. The Type B rotary switch (fig. 1) is single-pole, 3-way, with six terminals, three of which are linked. As the operating knob is moved to one of the three positions, it rotates the central spindle, which moves the contact plate over the inserts to make the required connections.

#### Rotary switch, Type B, 7 amp.

3. The Type B, 7 amp. rotary switch is a single-pole, 4-way switch, with eight terminals, four of which are linked. It is physically similar to the Type B rotary switch illustrated in fig. 1.

#### Rotary switch, TOK Type 215, 30 amp.

4. This is a double-pole rotary switch with four terminals. It has a clockwise action only, with two ON positions and two OFF positions for each revolution of the operating knob. As each position is selected, two contact plates, one above the other, each with two contact blades, alternately engage and disengage with corresponding fixed contacts mounted on the porcelain base. The operating knob, also of porcelain, is strongly spring-loaded, and the mechanism is enclosed in a Bakelite cover. The right-hand view in fig. 1 shows a general view of the switch, and also gives details of the mechanism.

Fig. 3. Exploded view of mooring light switch

RESTRICTED

**Mooring light switch, 5 amp.**

5. This is a weatherproof switch for use on flying boats, and is illustrated in fig. 2 and 3. It is a double-pole rotary on/off switch, which can be operated either by rotating the front plate, or by turning the knob at the rear, both of which are engraved MOORING and OFF in the appropriate positions.

6. As can be seen in fig. 3, the spindle of the control knob is forked to engage with the spindle carrying the contact plate. The

latter is spring-loaded to bear against inserts at the back of the terminals, and two leaf springs acting on a squared portion of the spindle hold the switch at whatever position has been set.

7. In setting the switch to the MOORING position, the contact plate is rotated so that it bridges the two inserts at the back of the terminals. When it is moved to the OFF position, the contact plate is further rotated to clear these terminals. A third terminal is fitted for earthing the switch.

**RESTRICTED**