Chapter 33

ACTUATOR, PLESSEY, TYPE CZ71186

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LEADING PARTICULARS

Voltage (nominal 24 volt)	18-29 volts d.c.
Working load	
Normal	50 lb. in.
Maximum	80 lb. in.
Angle of travel	See Table 1
Operating time	See Table 1
Weight	2 lb. 8 oz.
Motor rating	1½ min.
Motor output (CZ72452)	0·0155 H.P. at 15,500 r.p.m.
Stores Ref.	See Table 1

TABLE 1

Actuator variants

Type No.	*Stores Ref.*	*Angular Travel (deg.)*	*Time of Travel (sec.)*
CZ71186/A	5W/437	314½	9
CZ71186/B		96	3¾
CZ71186/C		206½	6
CZ71186/D		51	1½

Introduction

1. The Type CZ71186 actuator is one of the Panther series as described in A.P.4343, Vol. 1, Sect. 17. The angle of travel and time of travel for each variant of the actuator are listed in Table 1.

DESCRIPTION

2. Details of the actuator are shown in the sectional view (*fig.* 2). The features peculiar to this type are described in the

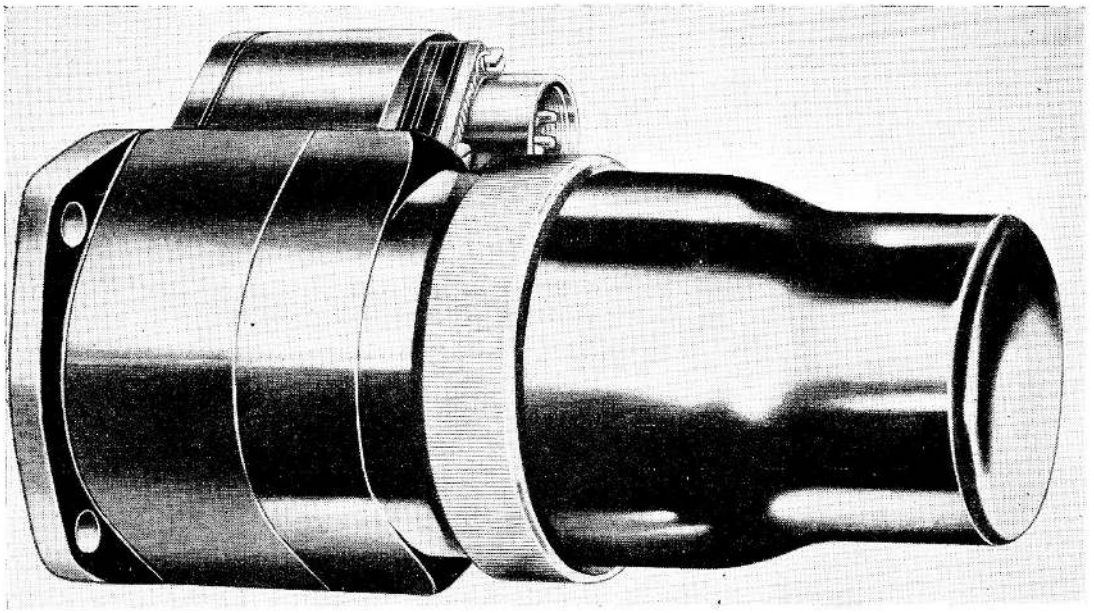

Fig. 1. General view of actuator, Type CZ71186

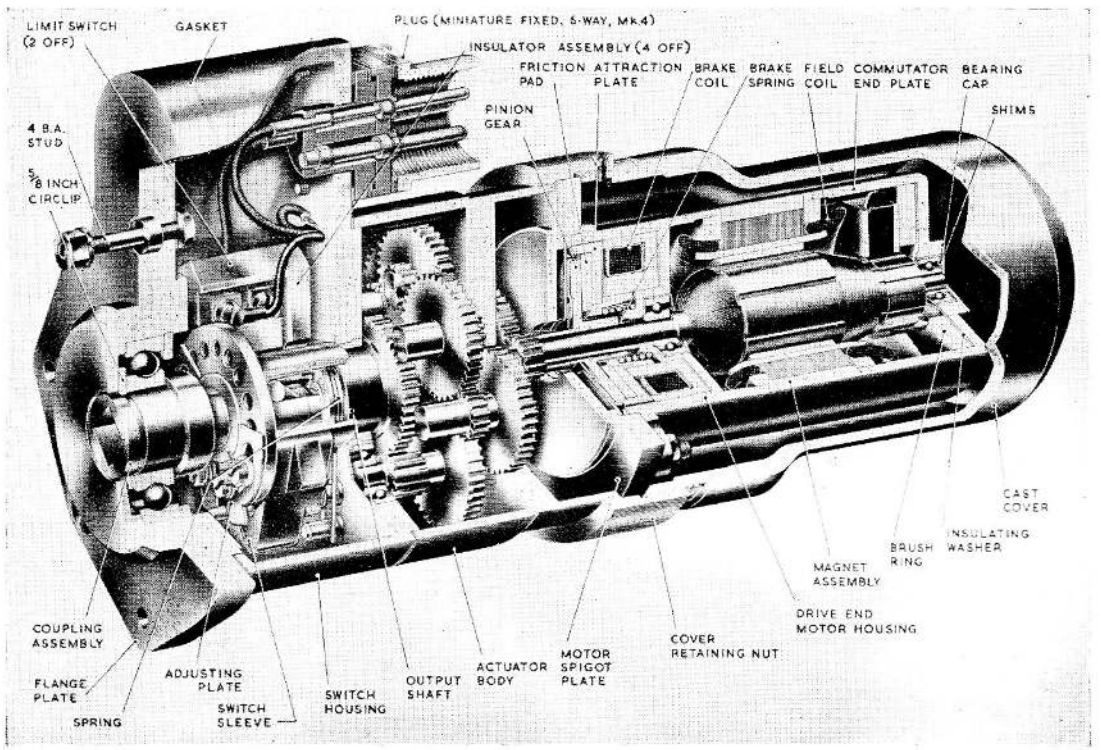

Fig. 2. Sectional view of actuator, Type CZ71186

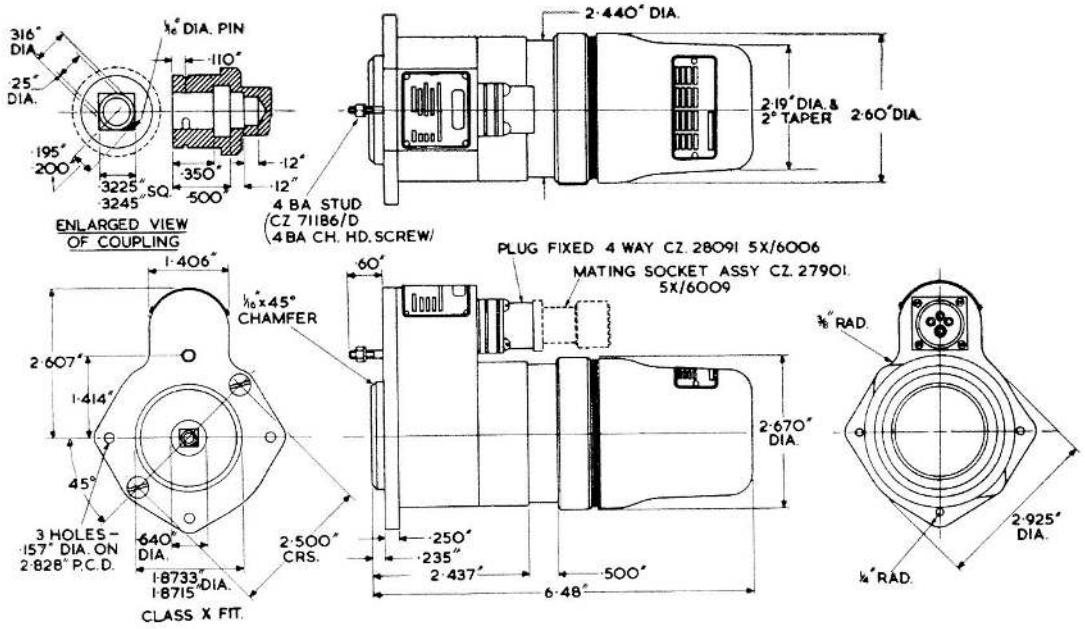

Fig. 3. Installation diagram

following paragraphs. For further information, reference should be made to A.P.4343, Vol. 1, Sect. 17.

Flange plate

3. The flange plate is secured to the switch housing by means of two ¼ in. B.S.F. bolts. A ball bearing, which supports the output shaft, is assembled in a bearing housing which is part of the flange plate casting. A bonding terminal is fitted to the flange plate. The bonding terminal used on the CZ71186/D actuator is a 4 B.A. cheese-head screw, and on the other variants a 4 B.A. stud.

4. There is no visual indicator on the switch housing of the Type CZ71186 actuator.

Electrical connections

5. The internal connections of the actuator are shown in fig. 5. The external electrical connections are made via a four-pin plug which is mounted on a square base secured to the switch housing by means of four screws. Pin D of the plug is not used.

INSTALLATION

6. The installation instructions given in

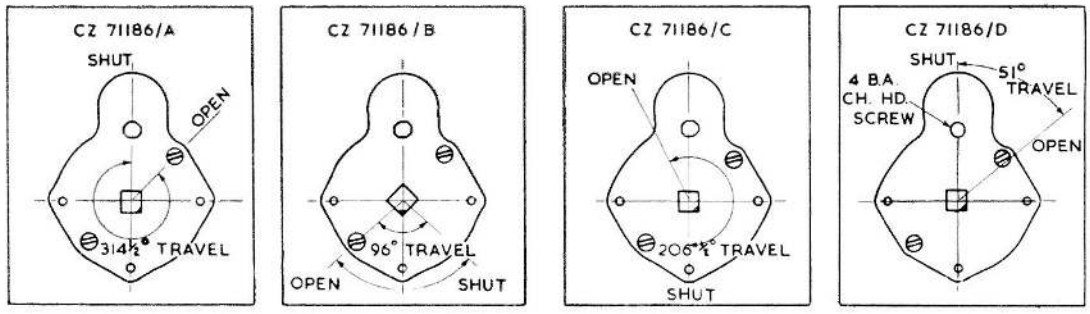

Fig. 4. Stroke travel settings

A.P.4343, Vol. 1, Sect. 17, for Panther actuators are applicable to this actuator.

SERVICING

7. The actuator is fully lubricated during overhaul and requires no internal relubrication during its overhaul life. The external fittings should be kept well lubricated with a low temperature grease.

8. During routine inspection, check that the external screws and the actuator mounting are secure. Check the security of the plug and socket connection.

Insulation resistance test

9. With an insulation resistance tester measure the insulation resistance between the plug pins and earth whilst still installed in the aircraft. The insulation resistance must not be less than 50,000 ohms.

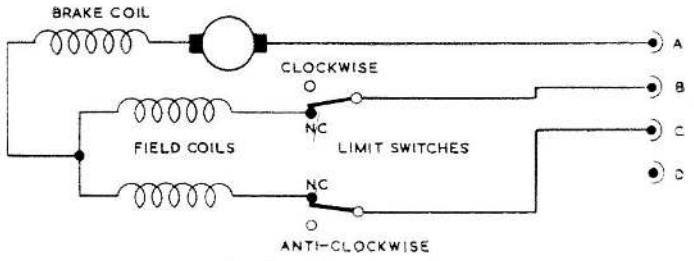

Fig. 5. Circuit diagram