Chapter 4

ELECTRO-HYDRAULIC VALVE, TYPE FAC

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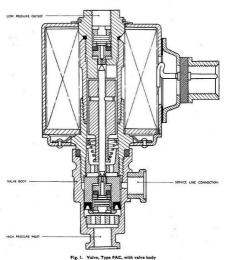
Type	Stores Ref.	(d.c.)	Coil current (amp.)	Weight		
FAC/A/218	274/3040	24	0-5	2 lb. 2 oz.		
FAC/A/316	27V/2695	24	0.5	2 16. 54 ez.		
FAC/A/230	27Y)	12	1-0	2 fb. 2 oz.		
FAC/A/319	27 V]	12	1-0	2 /b. 54 oz.		

DESCRIPTION

- The electro-hydraulic valve, Type FAC, is designed as a main valve gear or as a pilot valve for the remote control of hydraulic jacks. Details of the complete range of these valves are given under Leading Particulars.
- 2. The valve consists of a solenoid and a valve assembly. Types FAC/A/316 and /319 are fitted with a valve body as an integral part of the valve (fg. 1), but in Types FAC/A/218 and (230 the valve body is not supplied (fg. 2). Electrical connection is made by means of a 2-pin Breece plug, Type CZ1064/2. The working bydrasilic pressure is 2,000 lb, per sq. in., and the test pressure 3,000 lb, per sq. in.,
- 3. The solenoid windings surround an armature tunnel in which the armature operates. The armature is primed to a double-ended valve red, with conical ends forming the valve heads; the upper valve head matter with a low-pressure valve seat and the lower valve head with a high-pressure valve seat. The valve roll is spring-position, with the high-pressure valve closed, and the low-pressure valve open. When the solenoid is energized the armature lifts the valve red to its upper position, closing the low-pressure valve and opening the high-pressure valve.

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- 4. The valve body (when fitted) incorporates a high-pressure inlet communicating with the lower valve seat, and a service line connection communicating with the space between the two valve seats. Thus the operation of the solenoid valve is as follows :-
- (1) Solenoid energized.-High-pressure valve opens to permit a flow from highpressure inlet to service line. Low-pressure valve closed.
- (2) Solenoid de-energized .- Lowpressure valve opens to permit a flow from service line to low-pressure outlet. Highpressure valve closed.



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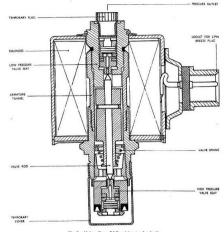


Fig. 2. Valve, Type FAC, without valve body

The service line is connected either direct to a hydraulic jack, or, for larger installations, to the servo-operating gear.

SERVICING

The joint between the valve body and the armature tunnel should be inspected for tightness, and the electrical plug and socket tested for continuity. No other servicing is permitted. 7. A plug is provided to close the low-pressure outlet connection during transit. A cover is also provided to enclose the high-pressure valve where no valve body is supplied. The plug and (where necessary) the cover should always be used when a valve is packed for transit. If the plug and cover are not available, protection should be improvised from materials such as cork and adhesive tape.

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