



# ADJUSTABLE PRESSURE SWITCHES

Piston Operating

## INSTRUCTION AND PRODUCT DATA SHEET

3291118  
to  
3291130

ENGLISH

### DESCRIPTION:

These pressure sensors have been designed for the automatic control of lubrication systems and are available with two different types of electrical fitting connections:

Supplied complete with 1,5 metres (59 ins.) of 4 wire cable. Both versions can be supplied to cover pressure ranges shown in Table 1.

These pressure switches can be used on any type of lubrication system.

### SPECIFICATION:

**Type 1.** Moulded connector (see Fig. 1/A.).

**Type 2.** Screwed compression and grommet (see Fig. 1/B.).

#### Microswitch contact rating:

up to 5 Amps 220V a.c.  
or .2 Amps 220V d.c.

**Protection degree:** IP55.

**Port size (connection):** 1/8" BSP thread, or a 1/8" NPT

**Max. working pressure:** 200 bar. (2902 psi.).

**Fixing holes:** two 4,2 mm. (0.165 in.) dia.  
with a pitch of 40 mm. (1.575 in.).

**Pressure setting range:** (Table 1.).

Part No.	Setting range		Std. setting.		Wiring connection
	bar	psi	bar	psi	
3291118	8-26	116-337	20	290	Type 1.
3291119	15-60	218-870	40	580	
3291120	35-100	508-1451	80	1160	
3291128	8-26	116-337	20	290	Type 2.
3291129	15-60	218-870	40	580	
3291130	35-100	508-1451	80	1160	

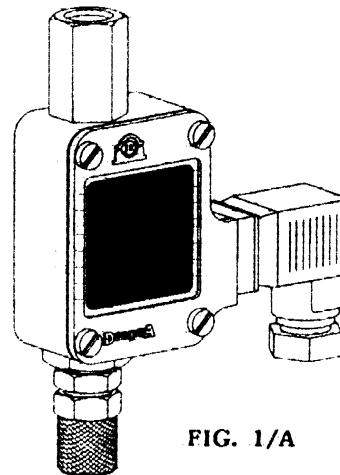


FIG. 1/A

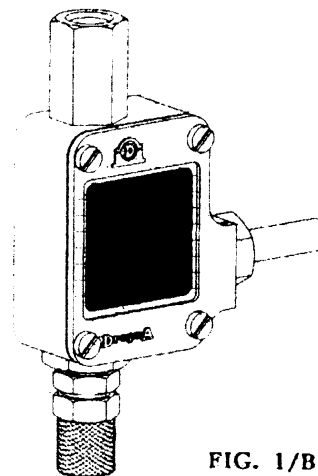
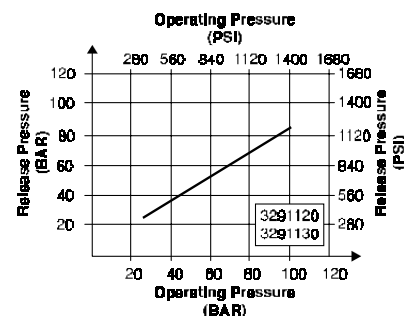
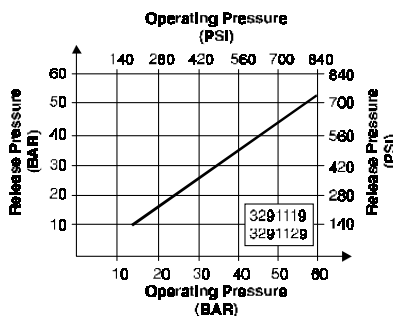
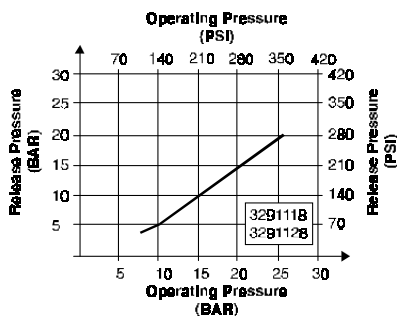


FIG. 1/B



## INSTALLATION/OPERATION:

Fig. 3. shows an example of this pressure switch fitted on the lube supply line that controls a DROPSA lubrication unit used to supply the lube dosage valves on the machine.

When the pressure switch setting is reached the microswitch contact closes.

This contact signal can be used to operate external control equipment or send a signal to the electronic control panel of the lubrication system.

### Mounting the Pressure Switch:

The pressure switch can be mounted on a base plate as follows:

Loosen the four cover screws (see Fig. 5/A.) and remove the cover with the gasket. The 4,2 mm. (0.165 in.) dia. blind holes lie underneath the cover. The pressure switch is mounted by drilling through the thin aluminium metal of each hole.

Install the pressure switch then refit the cover complete with gasket. Tighten the cover screws.

### Installation:

If necessary mount the pressure switch as previously described.

Connect the pressure switch control pipe to the lube system (see Fig. 6.).

The pressure switch connection has a double sealing seat to accept a 4 mm. (0.157 in.) pipe with a 1/8" BSP female thread.

A 1/8" NPT connection is available on request (**Part No. 3077075**).

For electrical connections refer to the wiring diagram shown on the tag of the pressure switch cover, and in Fig. 4/A.

Fig. 4/B. shows how to disassemble the connector (when used): Extract the fixing screw and then use the screw adjuster to press in the point indicated in the figure and to eject the cover.

Pressure switch adjustment is made by loosening the lock

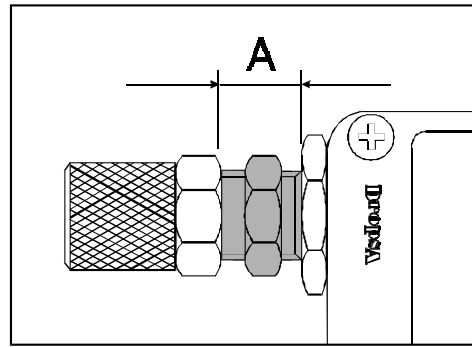


Fig. 2.

nut and turning the knurled regulator knob clockwise to increase the pressure setting and anti-clockwise to decrease the pressure setting (refer to Fig. 2.).

**Pressure Switch Setting in Bar (psi) according to 'A'.**  
(Table 2.).

Assembly Part No.	Distance 'A'		
	6 mm. (.236 in.)	10 mm. (.394 in.) (mark 2)	15 mm. (.590 mm.) (mark 1)
<b>3291118</b>	26 mm. (1.024 in.)	18 mm. (.709 in.)	9 mm. (.354 in.)
<b>3291128</b>	60 mm. (2.362 in.)	40 mm. (1.575 in.)	20 mm. (.787 in.)
<b>3291119</b>	100 mm. (3.937 in.)	65 mm. (2.560 in.)	33 mm. (1.300 in.)
<b>3291120</b>			
<b>3291130</b>			

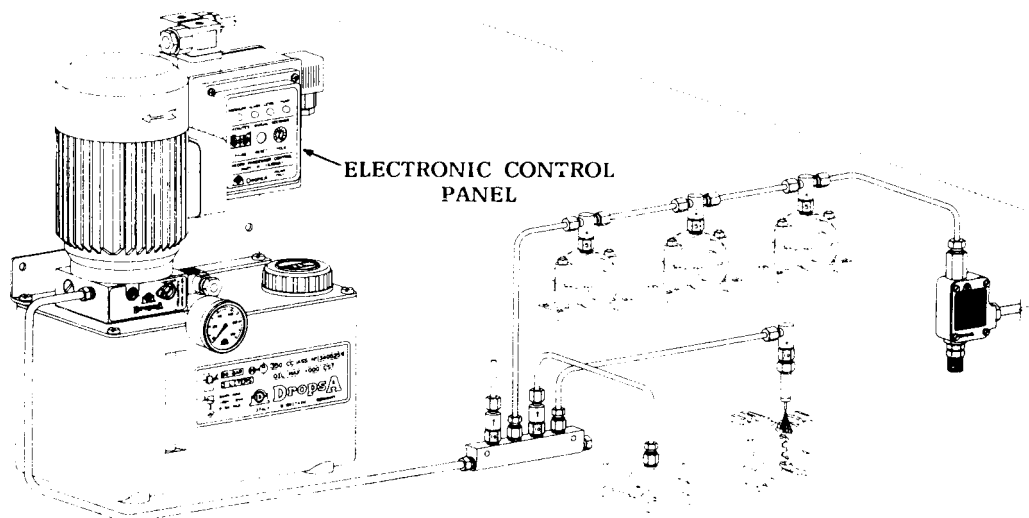


FIG. 3

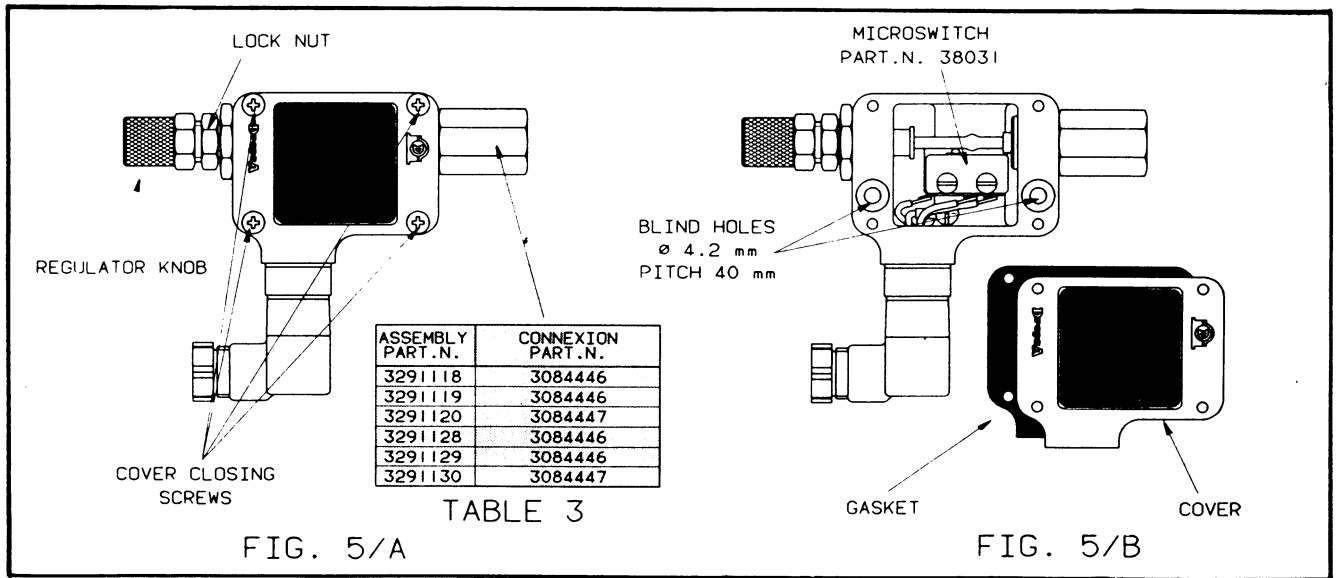


FIG. 5/A

FIG. 5/B

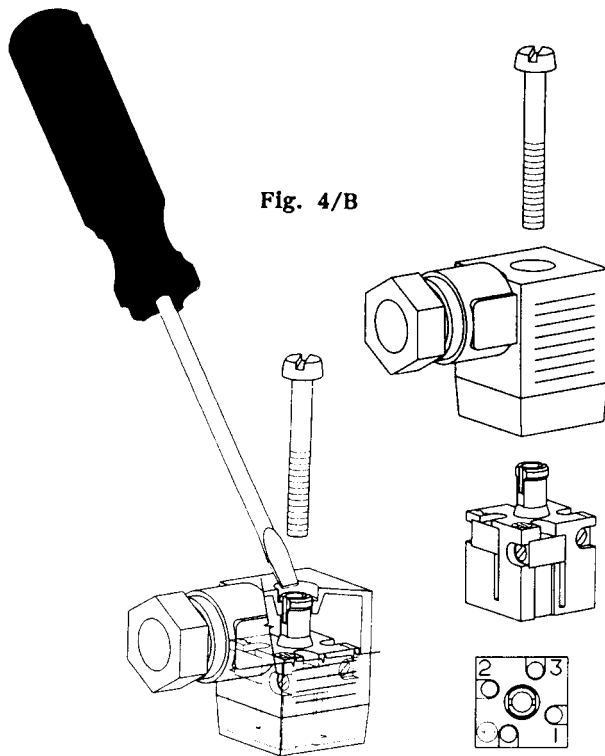


Fig. 4/B

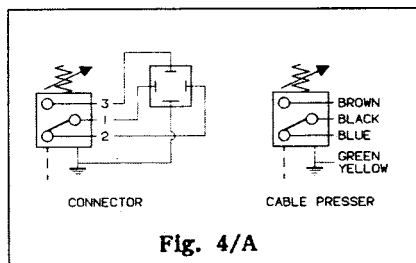


Fig. 4/A

After setting the pressure switch retighten the locknut. Table 2. illustrates the pressure settings with respect to

the position of the knurled regulator knob. The regulator thread has two markings to facilitate the pressure switch setting.

**Maintenance:**

The mechanical and electrical parts used are not subject to extreme mechanical or thermal fatigue. Nevertheless Fig. 5/A, Fig. 5/B, and Table 3, illustrate the parts that may be subject to wear in time.

**Dimensions:**

Refer to Fig. 6.

**TEST PROCEDURES:**

Available on request.

**ORDERING INFORMATION:**

Ordering is by Part No. and Description:

**Part No. 3291118** Adjustable Pressure Switch.

**Part No. 3291130** Adjustable Pressure Switch.

**SPARES:**

Refer to Fig. 5A and 5B.

**SAFETY REQUIREMENTS:**

Dropsa Adjustable Pressure Switches must be installed and operated in accordance with the requirements of this Instruction Sheet and must not be used for any purpose other than that stated without the agreement of the suppliers.

Apart from the need to observe general safety procedures the following specific hazards apply:

Release all pressure from the system and disconnect all electrical supplies before installing, adjusting or servicing Adjustable Pressure Switches.

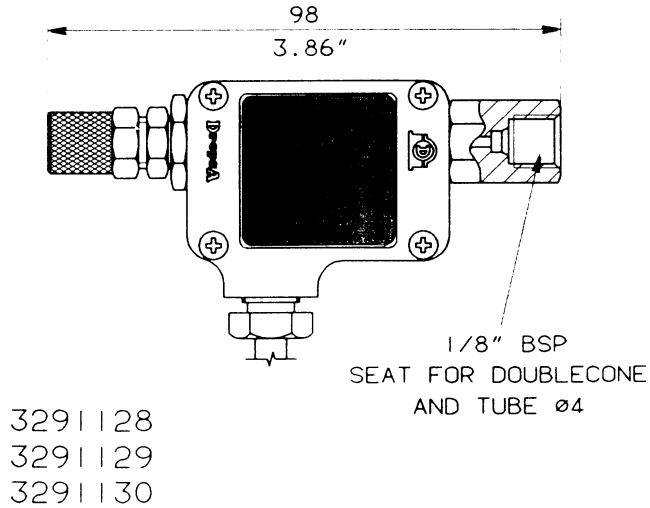
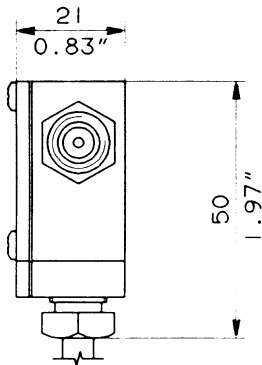
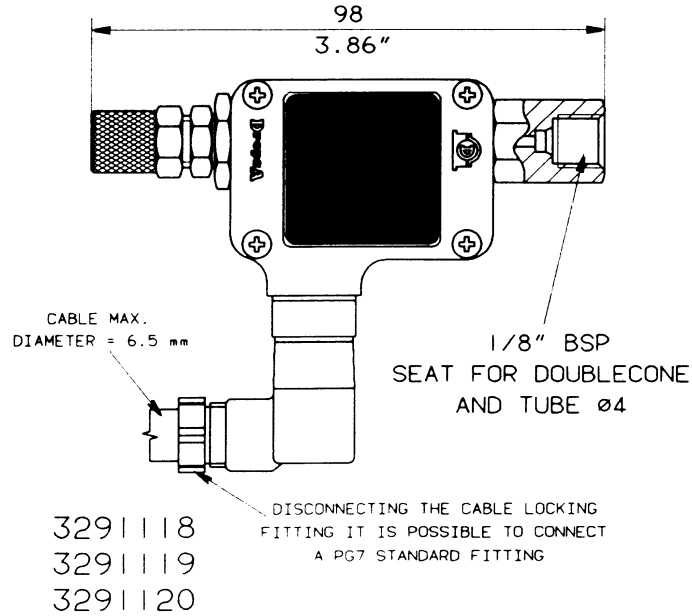
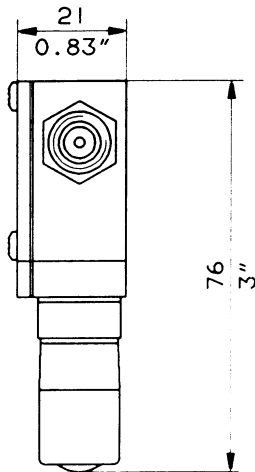
## OPERATING ENVIRONMENT:

Dropsa Adjustable Pressure Switches must not be installed in excessively aggressive or corrosive environments and must not be operated immersed in fluid.

## RELATED PRODUCTS:

T.B.A.

**Fig. 6. OVERALL DIMENSIONS**



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