

DATA SHEET

PRESSURE SWITCH



**Stainless Steel
NPT Models:**

31615, 31625, 31640



Model 31615 (Blue Nut) Shown

SELECTION

Electromechanical device, which upon reaching a pre-set pressure, opens or closes an electrical control contact used to control the on-off operation of various low amp system components. Choose the appropriate pressure switch for the rated pressure of the system and for the required intervention of the electric commutation. In any case, the pressure of the machine should not exceed the permissible pressure rate imprinted on the pressure switch.

MAINTENANCE

Standard: Every 400 working hours (circa 10,000 cycles). Check and lubricate the seals with water resistant grease.

The manufacturer is not responsible for damage as a result of incorrect fitting and maintenance.

Technical data, descriptions and illustrations are indicative and liable to modification without notice.

PROBLEMS AND SOLUTIONS

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
Pressure switch does not function	Electric connection faulty or loose	Check and/or replace
	Rupture of microlever	Replace microswitch
	Rupture of piston spring	Replace
	Rupture of microcontacts	Replace microswitch
	Jammed piston	Check and/or replace
Fluid in the casing	Damaged piston seals	Check and/or replace
	Damaged nut seal	Check and/or replace

FEATURES

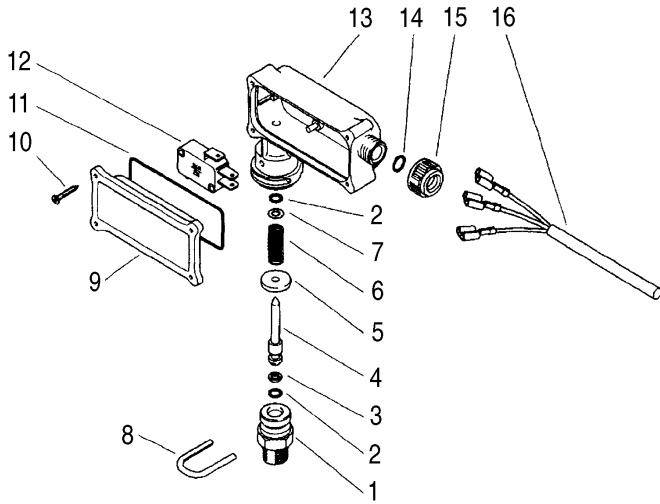
- Electrical Insulation: IP55
- Stainless steel contact pin for extended life.
- 3-wire construction allows either normally open or normally closed operation.
- Non-adjustable, preset pressure setting for consistent system protection.
- Pressure activated control device shuts off burner or other low amp system components.
- Threaded NPT connection

COMMON

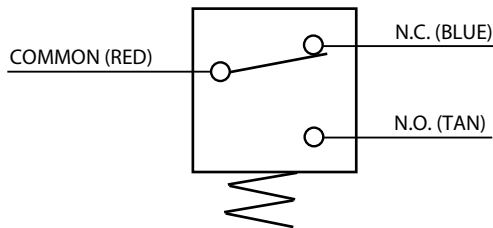
SPECIFICATIONS

	U.S.	Metric
Max. System Pressure	3650 psi	250 bar
Switch Engaging Pressure		
31615 (Blue Nut)	215 psi	15 bar
31625 (Red Nut)	360 psi	25 bar
31640 (Black Nut)	580 psi	40 bar
Voltage	12 - 250 Volts	12 - 250 Volts
Max. Amperage	6 Amps	6 Amps
Max. Temperature	194° F	90° C
Inlet Fitting	1/4" NPT(M)	1/4" NPT(M)
Weight	6.4 oz.	0.181 kg
Dimensions	3.0 x 3.0 x 1.0"	76 x 76 x 25 mm
Cable Length	47.2"	1200 mm

EXPLODED VIEW



WIRING DIAGRAM



PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
1	—	SS	Fitting, Inlet [1/4" NPT(M)]	1
2	—	PTFE	Back-up-Ring, Piston	2
3	—	NBR	O-Ring, Piston	1
4	—	BB	Piston	1
5	—	BB	Washer, Piston	1
6	—	SS	Spring (31615 - 215 psi, 15 bar)	1
	—	SS	Spring (31625 - 360 psi, 25 bar)	1
	—	SS	Spring (31640 - 580 psi, 40 bar)	1
7	—	BB	Washer, Spring	1
8	—	S	U-Clip, Fitting	1
9	—	NY	Cover	1
10	—	STZP	Screw (M2.6 x 11.5)	4
11	—	NBR	O-Ring, Square Cover	1
12	32861	—	Switch, Micro	1
13	—	NY	Case	1
14	—	NBR	O-Ring, Nut	1
15	—	NY	Nut, Blue (31615 - 215 psi, 15 bar)	1
	—	NY	Nut, Red (31625 - 360 psi, 25 bar)	1
	—	NY	Nut, Black (31640 - 580 psi, 40 bar)	1
16	—	—	Cable*, 3-wire, M1200	1
—	31530	NBR	Kit, O-Ring (Incls: 2, 3, 11, 14)	1

*Normally closed: red and blue. Normally open: red and tan.

Italics are optional items.

MATERIAL CODES (Not Part of Part Number): BB=Brass
 NBR=Medium Nitrile (Buna-N) NY=Nylon PTFE=Pure Polytetrafluoroethylene
 S=304SS SS=316SS STZP=Steel/Zinc Plated

See Reference Bulletin PN 99REF012 for Auto Shut Off kits with pressure switches.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Do not service pump or electrical equipment while energized. Electricity can cause personal injury, death or property damage.

1. Adhere to "Lock Out" and "Tag Out" procedures for electrical equipment.
2. Before commencing pump service, turn power supply off.
3. Keep water away from electrical outlets and electrical devices.
4. Electrical components must be installed by a qualified electrician to avoid risk of electrocution.

⚠ CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.



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