

MODEL 744-S

Fixed Setting Design
303 SS Construction
Pressure Range: 8 to 6000 PSI
Extreme Environments



DESCRIPTION

The Model 744-S Fixed Setting Pressure Switch is a piston-operated, miniature design. It's ideal for use where installation space is limited and in tough environments where oil, fuel, water, dust, and vibration exist.

The Model 744-S has been applied in thousands of applications where its unique design, rugged construction, and high-over pressure capability has proven its long-term reliability. Standard electrical and pressure port configurations are listed below. Please consult factory for custom designs.

FEATURES

- ✓ High-over Pressure Capability
- ✓ High-strength Stainless Steel Construction
- ✓ Pressure Port Snubbing
- ✓ Wide Media Compatibility Range
- ✓ High Shock & Vibration Suitable
- ✓ Wide Operating Temperature Range
- ✓ Custom Configurations
- ✓ UL Listed
- ✓ NEMA Type 4 Rating

APPLICATIONS

- ✓ Off Road Equipment
- ✓ Industrial OEM Equipment
- ✓ Train Braking Systems
- ✓ Compactors
- ✓ Compressors

STANDARD SPECIFICATIONS

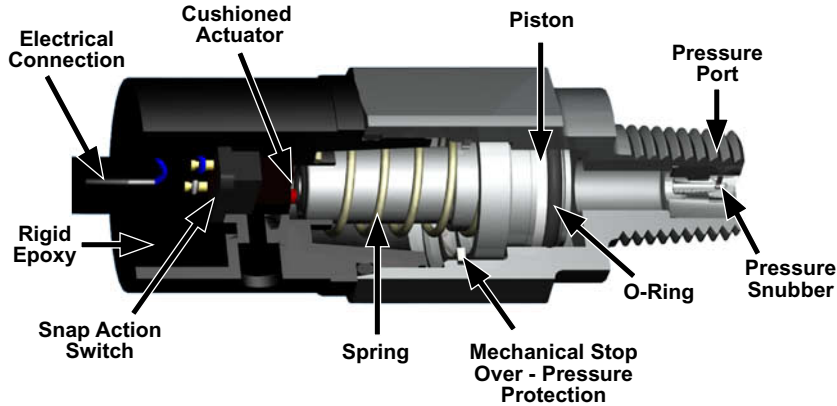
Pressure Connection	Electrical	Electrical Connection	Seal Materials	Materials	Temperature Range	Shipping Weight
1/4"- 18 NPT	Snap-action Electrical Switch Listed by Underwriters Lab and CSA	Lead Wire Connectors	Nitrile (Buna-N) "O"- Ring	Hydraulic Module Housing 303 Stainless Steel	-30°F to + 250°F	Approximately 3 oz
1/8"- 27 NPT		Single Pole Single Throw (SPST) or Double Throw (SPDT) Specify	Fluorocarbon		-30°C to + 120°C	
9/16"- 18 UNJF-3A		Normally Open (NO), Normally Closed (NC)	Ethylene Propylene	Electric Module Housing Polyphenylene Sulfide (PPS)	(Temperature Limits Change with "O"- Ring Seal Material Selection)	
Other Options Available	At 28 VDC: 7 Amps Resistive; 4 Amps Inductive; 2 ½ Amps lamp Load	Options Available				

OPERATING PRESSURE DATA

Series	Range Number	Pressure Range	Tolerance On Set Pressure*	Dead Band*	Max System Pressure	Proof Pressure
744	1	8 - 125	± 1 / ± 5	4 / 14	1500	2250
744	6	50 - 275	± 5 / ± 10	10 / 27	2400	3500
744	2	75 - 500	± 7 / ± 15	15 / 45	3000	4500
744	7	130 - 1000	± 8 / ± 20	20 / 95	3000	8000
744	3	300 - 1500	± 15 / ± 40	45 / 130	4500	6800
744	4	1250 - 3000	± 40 / ± 75	150 / 240	6500	10000
744	5	2500 - 6000	± 75 / ± 125	250 / 425	7500	12000

Note: Pressure in PSIG, *Interpolate for Intermediate Pressures

BASIC PRINCIPLES OF DESIGN



ORDERING SEQUENCE

Series

- 744 - Set pressures between 8 and 6000 PSIG
- See Operating Pressure Data table

Pressure Connection

- 6 - 9/16"- 18 UNJF-3A (MS33656-E6)
- 2 - 1/4"- 18 NPT (Male)
- 1 - 1/8"- 27 NPT (Male)
- Consult factory for metric and additional configurations

Pressure Range Number

- See Operating Pressure Data table

Type

- S - Environmentally Sealed Fixed Setting Pressure Switch
- NEMA TYPE 4

Electrical Connection

- 03 - SPDT - 3 Terminal Tabs with #8-32 "SEMS" screws
- 28 - SPDT - Weather Pack connector with 4" lead wires (socket)
- 33 - SPDT - 3 #18 AWG lead wires 10" long
- 37 - SPDT - Weather Pack connector with 4" lead wires (pin)

Set Pressure to be Held on

- R - Rising Pressure
- F - Falling Pressure

Set Pressure

- Specify factory set pressure in 4-place PSIG (Example: 1250 or 0060 for 60 PSIG)

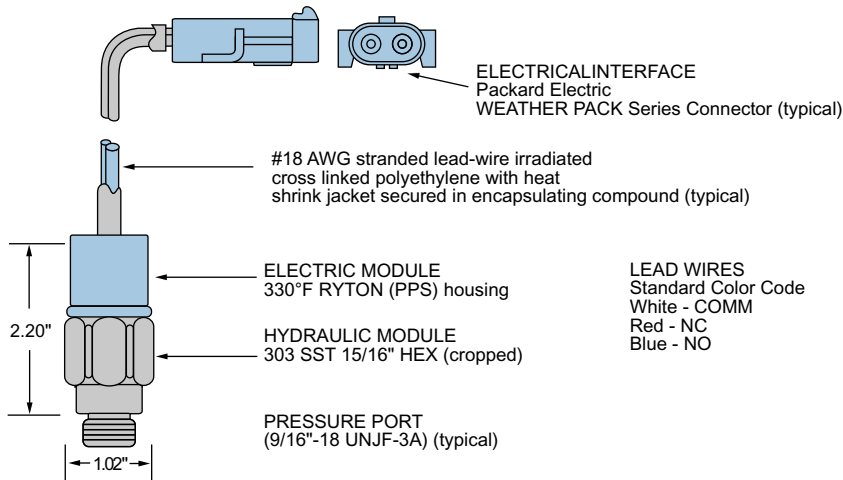
Seal Materials

- N - Nitrile (BUNA-N) -Standard
- V - Fluorocarbon
- E - Ethylene Propylene
- Consult factory for other available materials

Special Items

- Wire, cable, and cable length
- Pressure connection
- Seal materials
- Weather-proof connectors
- Gold electrical contacts for low current applications
- Custom configurations
- Consult factory for special items

ENVELOPE DIMENSIONS



*All dimensions are reference

ORDERING PROCEDURE

Series Number	Pressure Port	Pressure Range	Factory Set Pressure Switch	Electrical Connector	Set Pressure Held On	Set Pressure	Seal Material
744.	6	6	S	03	F	0060	N
	.6 = 9/16" 18 UNJF-3A	6 = 50-275 PSI		03 = SPDT-3 Terminal Tabs	F = Falling Pressure	60 PSIG	N-Nitrile (Buna-N)

*Insert available option number or letter as required

Example: 744.66-S03F-0060 N