

**Fixed Setpoint Design
Extreme Environments**

DESCRIPTION

The Model 744-S Fixed Setting Pressure Switch is a piston-operated, factory set, miniature design. It's ideal for use where installation space is limited and in tough environments where oil, fuel, water, dust, vibration, and shock 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
- Integral Pressure Port Snubbing
- Wide Media Compatibility Range
- High Shock & Vibration Survivability
- Wide Operating Temperature Range
- Custom Configuration
- UL Recognized
- NEMA Type 4 Rating

APPLICATIONS

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

STANDARD SPECIFICATIONS

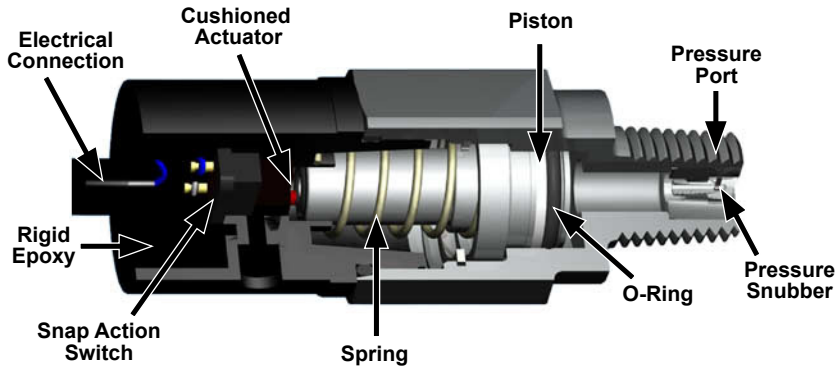
Pressure Connection	Electrical	Electrical Connection	Seal Materials	Materials	Temperature Range	Shipping Weight
1/4"-18 NPT	Snap-action Electrical Switch Listed by UL and CSA	Lead Wire Connectors	Nitrile (Buna-N) "O"- Ring	Hydraulic Module Housing 303 Stainless Steel	-40°F to + 250°F	Approximately 3 oz
1/8"-27 NPT		Single Pole Single Throw (SPST) or Double Throw (SPDT)	Fluorocarbon		-40°C to + 120°C	
9/16"-18 UNJF-3A	At 28 VDC: 7 Amps Resistive; 4 Amps Inductive; 2 1/2 Amps Lamp	Normally Open (NO), Normally Closed (NC)	Ethylene Propylene	Electric Module Housing Polyphenylene Sulfide (PPS)	(Temperature Limits Change with "O"-Ring Seal Material Selection)	
Options Available	Gold Contact Switches available for dry circuit applications	Options Available				

OPERATING PRESSURE DATA

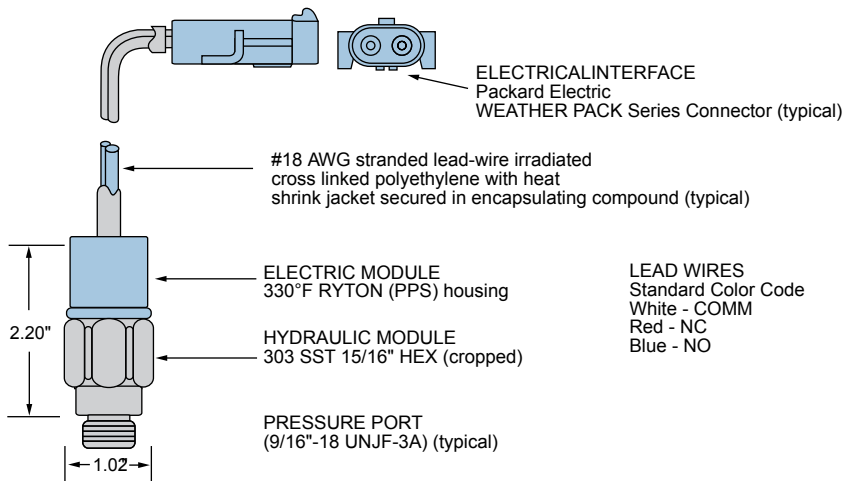
Series	Range Indicator	Pressure Range		Dead Band*		Max System Pressure		Proof Pressure	
		PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
744	1	8 - 125	0.55 - 8.62	4 / 14	0.28 / 0.97	1500	103	2250	153
744	6	50 - 275	3.45 - 18.96	10 / 27	0.69 / 1.86	2400	165	3500	241
744	2	75 - 500	5.17 - 34.47	15 / 45	1.03 / 3.10	3000	207	4500	310
744	7	130 - 1000	8.96 - 68.95	20 / 95	1.38 / 6.55	3000	207	8000	552
744	3	300 - 1500	20.68 - 103.42	45 / 130	3.10 / 8.96	4500	310	6800	469
744	4	1250 - 3000	86.18 - 206.84	150 / 240	10.34 / 16.55	6500	448	10000	690
744	5	2500 - 6000	172.37 - 413.68	250 / 425	17.24 / 29.30	7500	517	12000	827

*Interpolate for intermediate pressures

BASIC PRINCIPLES OF DESIGN



ENVELOPE DIMENSIONS



ORDERING PROCEDURE

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

*Insert available option number or letter as required

Example: 744.66-S03F-0060T

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)
- Consult factory for metric and additional configurations

Pressure Range Number

- See Operating Pressure data table

Type

- S - Environmentally Sealed, Fixed Setting Pressure Switch

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)
- Consult factory for additional electrical configurations

Set Pressure to be Held on

- R - Rising Pressure
- F - Falling Pressure

Set Pressure

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

Seal Materials

- T - 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
- Consult rep or factory for special items and configurations