

Robinson Pressure Switch Catalogue

The Original Oilfield Pressure Control Since 1952







Switch Features

Robinson Pressure Switch

A device that opens or closes a circuit at a predetermined pressure point.

External Set Point Adjustment

Allows users to change the set point without needing to remove the electrical enclosure cover.

Standards and Classifications

CSA approved explosion proof electrical enclosure for Class 1, Division 1, Groups B,C & D Enclosure type 4. CSA master contract number is 15024

Meets Up-to-date Oilfield Standards

Successfully tested to CSA 22.2 No. E60079-0:2007 which requires physical testing by CSA at a specific process temperature.

Pressures switches certified prior to 2007 likely have no been verified and certified by CSA to be explosion proof at their advertised process temperatures.

Dual Seal Certified

"DUAL SEAL" design is certified to meet ANSI/ISA—12.27.01-2003 requirements for process sealing between electrical systems and combustible process fluids.

NACE

The process connections meets the requirements of NACE MR0175.

The extra large diaphragm located in a very shallow recess minimizes performance degradation due to clogging and coking from dirty product streams.

Construction, Design and Performance

All components are designed and built to the latest ISO standards.

Field service life exceeding 10 years is quite the norm.

Field repair kits are available.

Factory repair and setting carry the same guarantee as a new switch.

Trim bushing design allows non-wetted parts of switch (spring body and electrical enclosure assemblies) to be removed without shutting down the process equipment.

External adjustment of both the set point and microswitch gap (dead-band) can be accomplished without opening the electrical enclosure.

ABSA

Certificate of Authorization issued by ABSA for our Quality Program. Registration number is AQP-5119.

Robinson Controls Inc. is an ISO 9001:2015 registered company.



Product Selection Guide



| Model | Adjustment Type | Reset Type | | | Set Point Adjustment Range (PSI) | | | | | Max Process Temp | Process Connection | | |
|-------------|--------------------|------------|--------|----------|-------------------------------------|--------|--------|----------|---------|------------------------|-----------------------|-----------|---------|
| | | Auto/Fixed | Manual | Variable | 2-30 | 10-100 | 20-500 | 100-1000 | 50-1500 | °C | 3/4" FNPT | 3/4" MNPT | 2" MNPT |
| RS-74A | External | Х | | ., | | | | | х | 140 | | | Х |
| RS-74M | External | až | х | | | , | | | х | 140 | | | Х |
| RS74A-750F | External | Х | | | | | | | х | 400 | | | Х |
| RS74M-750F | External | | х | | 2 | | | | х | 400 | | 8 | х |
| RC-AA-DUAL | Internal | X (2) | | | 8 | 9 | х | х | | 140 | | | Х |
| RC-VA-DUAL | Internal | х | | Х | | | х | Х | | 140 | | | х |
| RC-V-Single | Internal | | | Х | | | х | Х | | 140 | | | х |
| RC-M0750 | External | | х | | | Х | | | | 60 | | х | |
| RC-M0750AK | External | | х | | х | | | | | 60 | х | | |

General Specifications

- Process connections materials are NACE MR0175-2003 for sour service
- Electrical Connection is 1/2" 14 female NPT
- Tested with process temperature of up to 140 C with an ambient of 60 C for auto reset models
- Tested with process temperature of up to 120 C with an ambient of 60 C for manual reset models
- Tested to ANSI/ISA-12.27.01-2003 for Dual Seal Certification

 Enclosures have been tested for use in Hazardous Locations and each have the following markings:

Class 1, Div1

Groups B,C,D; Type 4

Ex d IIB+H2; IP54

Zone 1 AEx IIB+H2; IP54

Tamb -40 C to +60 C; T6

Dual Seal

1/2" - 14 NPT

ZIMCO INSTRUMENTATION INC.



RS74A Pressure Switch Automatic Reset

The Original Oilfield Pressure Switch Company... Incorporated 1952

Pressure Rating 5000 PSI

External Set Point Adjustment

NACE Compliant Process Connection



Security Car Seal

(Lid & Adjustment Collar)

50 to 1500 PSI Adjustment Range

> Dual Seal Certified

RS74A Technical Specifications

CSA certified for use in:

Class 1, Div 1, Groups B, C, D, Zone 1 Group IIB & Hazardous Locations

Tested and constructed to IECex standards

Rated pressure:

5000 psi

Adjustable Range: 50 to 1500 psi

Diaphragm:

Inconel, grade 718

Electrical connection:

1/2" NPT thread

NACE compliant process connection

Enclosure Type 4, IP 54

Additional Items

Electrical Cable Assembly CSA approved 20 to 60 ft.

Other Switch Models

Dual (RC-XX Dual)

Dual Fixed & Dual Variable

Variable (RC-V Single)

Hi Temp (RS-74A/M-750F) 50 to 1500 PSI Range

Stuffing Box Switch (RC-M0750) 10 to 100 PSI Range





RS74M Pressure Switch Manual Reset

The Original Oilfield Pressure Switch Company... Incorporated 1952

Pressure Rating 5000 PSI

External Set Point
Adjustment

NACE Compliant
Process Connection



Security Car Seal

(Lid & Adjustment Collar)

50 to 1500 PSI Adjustment Range

> Dual Seal Certified



RS74M Tech Specs

CSA certified for use in:

Class 1, Div 1, Groups B, C, D, Group 11B & Hazardous Locations

Tested & Constructed to IECex Standards

Rated Pressure: 5000 psi

Adjustable Range: 50 to 1500 psi Diaphragm: Inconel, grade 718

Electrical Connection: ½" NPT thread **NACE** Compliant Process Connection

Enclosure: Type 4, IP 54

Additional Items

Electrical Cable Assembly

CSA approved 20 to 60 ft.

Dual Fixed Pressure Switch

Dual Variable Pressure Switch

Single Variable Pressure Switch

Hi Temp Pressure Switch

50 to 1500 PSI Range

Stuffing Box Pressure Switch

10 to 100 PSI Range

ZIMCO INSTRUMENTATION INC.



RS74M-750F Hi Temp Manual Reset

Severe Duty Pressure Switch...

Operates 120°F cooler than the competition at a 400°F process temperature

Pressure Rating 5000 PSI at 750 °F

External Set Point Adjustment

CSA Explosion Proof Tested to 750 °F



Security Car Seal

(Lid & Adjustment Collar)

50 to 1500 PSI Adjustment Range

> Dual Seal Certified



RS74M-750F Tech Specs

CSA certified for use in:

Class 1, Div 1, Groups B, C, D, CEC Zone 1, Exd 11B + H2 T2

Tested & Constructed to IECex Standards

Rated Pressure: 5000 psi at 750 °F Adjustable Range: 50 to 1500 psi Diaphragm: Inconel, grade 718

Electrical Connection: ½" NPT thread NACE Compliant Process Connection

Enclosure: Type 4, IP 54

Additional Items

Electrical Cable Assembly

CSA approved 20 to 60 ft.

Dual Fixed Pressure Switch

Dual Variable Pressure Switch

Single Variable Pressure Switch

General Duty Pressure Switch

50 to 1500 PSI Range

Stuffing Box Pressure Switch

10 to 100 PSI Range

ZIMCO INSTRUMENTATION INC.



RS74M-750F Hi Temp Manual Reset

Severe Duty Pressure Switch...

Operates 120°F cooler than the competition at a 400°F process temperature

Pressure Rating 5000 PSI at 750 °F

External Set Point
Adjustment

CSA Explosion Proof Tested to 750 °F



Security Car Seal

(Lid & Adjustment Collar)

50 to 1500 PSI Adjustment Range

Dual Seal Certified



RS74M-750F Tech Specs

CSA certified for use in:

Class 1, Div 1, Groups B, C, D, CEC Zone 1, Exd 11B + H2 T2

Tested & Constructed to IECex Standards

Rated Pressure: 5000 psi at 750 °F Adjustable Range: 50 to 1500 psi Diaphragm: Inconel, grade 718

Electrical Connection: ½" NPT thread NACE Compliant Process Connection

Enclosure: Type 4, IP 54

Additional Items

Electrical Cable Assembly

CSA approved 20 to 60 ft.

Dual Fixed Pressure Switch
Dual Variable Pressure Switch
Single Variable Pressure Switch
General Duty Pressure Switch

50 to 1500 PSI Range

Stuffing Box Pressure Switch

10 to 100 PSI Range

ZIMCO INSTRUMENTATION INC.



RC-AA-Dual Dual Pressure Switch

Alternative to the dual **Presco FF series**



Two separate circuits with fixed differentials

Car-seal Safety Lockout

Process Connection NACE- MR0175:2003 NACE TM-0187



Two independently adjustable auto reset micro switches

Set Point Range

20 to 500 PSI 100 to 1000 PSI 250 to 1500 PSI

Check Valve Style Annunciation Port

Seals internal components from external environment

General Specifications

Maximum Allowable Working Pressure of 5000 psi. CRN: 0F10666.2 CSA Approved for Class 1, Div1, Groups B,C,D and CEC Zone 1, Exd IIB + H2 T4



RC-VA-Dual <u>Dual</u> Pressure Switch

Alternative to the dual Presco FV series



Control Two Separate Circuits

Car-seal
Safety Lockout

Process Connection NACE- MR0175:2003 NACE TM-0187



Equipped with one fixed and one variable micro switch

Set Point Range 20 to 500 PSI

100 to 1000 PSI 250 to 1500 PSI

Check Valve Style Annunciation Port

Seals internal components from external environment

General Specifications

Maximum Allowable Working Pressure of 5000 psi. CRN: 0F10666.2 CSA Approved for Class 1, Div1, Groups B,C,D and CEC Zone 1, Exd IIB + H2 T4



RC-A-Single Pressure Switch

Alternative to the **Presco F series**



Automatically controls one circuit

Car-seal Safety Lockout

Process Connection NACE- MR0175:2003 NACE TM-0187



Equipped with one auto reset micro switch

Set Point Range

20 to 500 PSI 100 to 1000 PSI 250 to 1500 PSI

Check Valve Style Annunciation Port

Seals internal components from external environment

General Specifications

Maximum Allowable Working Pressure of 5000 psi. CRN: 0F10666.2 CSA Approved for Class 1, Div1, Groups B,C,D and CEC Zone 1, Exd IIB + H2 T4



RC-M0750 Stuffing Box Pressure Switch

Wellhead Stuffing Box Switch...

and other low pressure applications

Pressure Rating 5000 PSI

External Set Point Adjustment

NACE Compliant
Process Connection

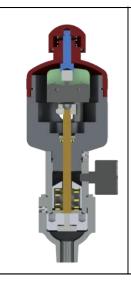


Security Car Seal

(Lid & Adjustment Screw)

10 - 100 PSI Adjustment Range

Dual Seal Certified



RC-M0750 Tech Specs

CSA certified for use in:

Class 1, Div 1, Groups B, C, D, Zone 1 Group IIB & Hazardous Locations

Tested & Constructed to IECex Standards

Rated Pressure: 5000 psi

Adjustment Range: 10 to 100 psi

Diaphragm Materials: Inconel, PTFE

Electrical Connection: ½" NPT thread

NACE Compliant Process Connection

Enclosure: Type 4, IP 54

Additional Items

Electrical Cable Assembly

CSA approved 20 to 60 ft.

Dual Fixed Pressure Switch
Dual Variable Pressure Switch
Single Variable Pressure Switch
General Duty Pressure Switch

50 to 1500 PSI Range Hi Temp Pressure Switch 50 to 1500 PSI Range



RC-0750AK Pressure Switch

The Original Oilfield Pressure Switch Company... Incorporated 1952 Low Pressure Switch...

Pressure Range 5 - 30 psi

Manual & Auto Reset

NACE Compliant
Process Connection



Security Car Seal

(Lid & Adjustment Screws)

External Set Point
Adjustment

Dual Seal Certified

RC-0750AK Technical Specifications

CSA certified for use in:

Class 1, Div 1, Groups B, C, D, Zone 1 Group IIB & Hazardous Locations

Tested and constructed to IECex standards

Rated pressure:

200 psi

Adjustable Range

5 to 30 psi

Diaphragm:

PTFE

Electrical connection:

1/2" NPT thread

NACE compliant process connection

Enclosure Type 4, IP 54

Additional Items

Electrical Cable Assembly CSA approved 20 to 60 ft.

Other Switch Models

Dual (RC-XX Dual)
Dual Fixed & Dual Variable

Variable (RC-V Single)

Hi Temp (RS-74A/M-750F) 50 to 1500 PSI Range

General Duty (RS-74A/M) 50 to 1500 PSI Range

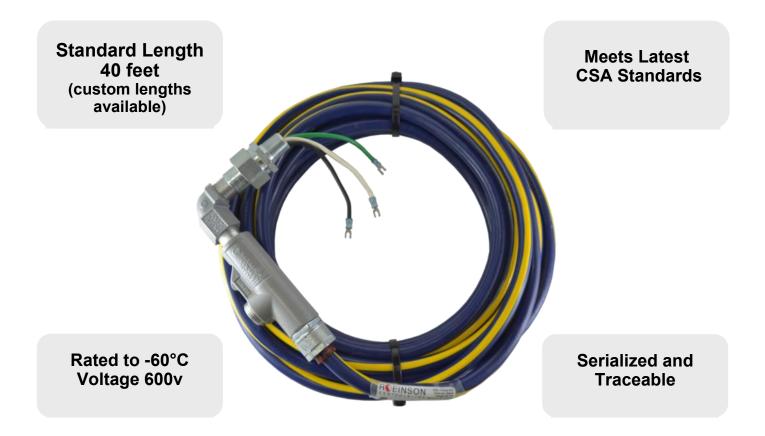


ZIMCO INSTRUMENTATION INC.



RC-40 Cord Assembly

Explosion Proof for Hazardous Locations



Technical Specifications

14/3 –60°C 600 volt
Ultraflex Jacket (for oil applications)
Type STOW
3 Wire (14 gauge)
Class 1, Div 2, Group C & D
CSA Approved (C22.2 No.0 & C22.2 No. 30)
1/2" MNPT with 90° elbow

Additional Items...

Hazardous Location Pressure Switches

- High Temperature
- Low Pressure
- Dual Circuit
- Variable Differential

Pressure Gauges Isolation Valve





RC-BV2-3705 PSI Isolation Valve

2" Isolation Valve 3705 PSI

Materials of Construction

Body: Forged Steel A350 LF2

Ball: Cast Steel—CF8M SS

SS Stem: 17-4 PH SS

NACE MR0175/ISO 15156

Connections NPT

Inlet: 2" male

Outlet: 2" female

Accessory: two 1/2" female Class 1500 (MAWP 3705 PSI)

Design Code

ASME B16.34

API 607 Rev 5

API 598

PED-97/23/EC, Module H

CRN: 0C06968.2

