

# Ruelco



## MP-4 Indicating Relay

Model 1901

# MP-4

## Indicating Relay

### FEATURES

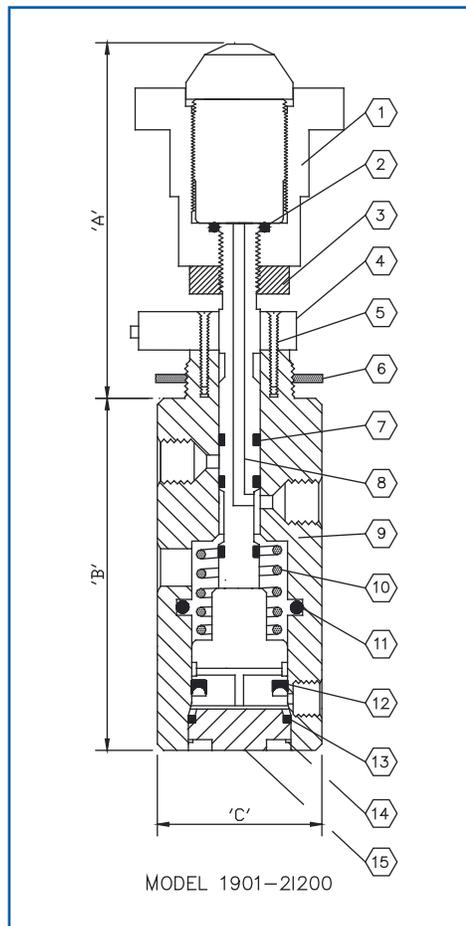
- 316 stainless steel construction (models to N.A.C.E. MR0175 available).
- Easy to close with pilot signal pressures as high as 100 PSI.
- Can be repaired without removing relay from system or panel.
- 'Lock closed' design prevents relay from automatically opening.
- Viton and nitril seals are utilized for dependability.
- Design minimizes malfunctions due to supply system debris.
- Inconel X-750 20 PSI spring assures dependability in most corrosive environments (optional 30 PSI spring available).
- Indicating knob with Green/Red visual status of relay operation.

### OPTIONS

- 30 psi closing spring
- Stem protector to prevent external debris accumulation on relay shaft

#### GENERAL DESCRIPTION:

The Ruelco MP-4 indicating relay is a multi-pressure control valve for production control and safety systems. It functions as a manual reset, pilot operated, normally closed, block and bleed valve. Its simple and compact design makes maintenance and repair easy. The MP-4 does not need to be removed from its control panel or system loop if repair or maintenance is necessary. The visual indicator on the knob will switch between green and red as the operating condition of the relay changes.



### Parts List For MP-4 Relay

| Item | Qty. | Description                       | Material               | Part No.   |
|------|------|-----------------------------------|------------------------|------------|
| 1    | 1    | INDICATING KNOB ASSY.             | 316 ST. STL.           | 19-018-000 |
| 2*   | 1    | KNOB SEAL                         | VITON                  | V0-108-70H |
| 3    | 1    | LOCK NUT                          | 316 ST. STL.           | T8-08K-0F3 |
| 4    | 1    | DETENT ASSEMBLY                   | 316 ST. STL.           | 10-005-000 |
| 5    | 1    | SCREW                             | 316 ST. STL.           | T3-632-0G3 |
| 6    | 1    | PANEL MOUNT NUT                   | 316 ST. STL.           | 10-006-000 |
| 7*   | 3    | SHAFT SEAL                        | VITON                  | V0-009-90T |
| 8A   | 1    | SHAFT ASSEMBLY WITH DELRIN PISTON | 316 ST. STL. W/ DELRIN | 19-016-000 |
| 8B   | -    | S.S. PISTON                       | 316 ST. STL.           | 19-016-001 |
| 9    | 1    | BODY                              | 316 ST. STL.           | 19-001-0A0 |
| 10A  | 1    | SPRING (20 PSI.)                  | INCONEL X-750          | 10-024-000 |
| 10B  | 1    | SPRING (30 PSI.)                  | INCONEL X-750          | 10-017-000 |
| 11*  | 1    | BODY SEAL                         | VITON                  | V0-118-75T |
| 12*  | 1    | PISTON SEAL                       | NITRIL                 | NU-209-70H |
| 13*  | 1    | BASE SEAL                         | VITON                  | V0-019-75H |
| 14*  | 1    | RETAINING RING                    | 316 ST. STL.           | S2-910-093 |
| 15A  | 1    | DELRIN BASE                       | DELRIN                 | 19-004-000 |
| 15B  | -    | ST. STL. BASE                     | 316 ST. STL.           | 19-004-001 |
| 18   | -    | REPAIR KIT                        | * ITEMS                | 19-019-000 |

### Specifications P.S.I. (BAR)

|  |  |
|--|--|
| VALVE BODY MAX. W.P.                             | 150 (10.3)   |
| PILOT CAP MAX. W.P.                              | 125 (8.6)  |
| AMBIENT TEMP. RANGE                              | -20 TO 250° F<br>-29 TO 122° C                             |
| MINIMUM PILOT SIGNAL PRESSURE TO HOLD RELAY OPEN | 25 (1.7) WITH 20 PSI SPRING<br>35 (2.4) WITH 30 PSI SPRING |
| Cv FACTOR  | .34  |

### Dimensions In. (MM)

|                      |                     |
|----------------------|---------------------|
| 'A'(CLOSED/OPEN)     | 2.36/2.85 (60/72.4) |
| 'B'                  | 3.25 (82.5)         |
| 'C'                  | 1.5 (38.1)          |
| INLET & OUTLET PORTS | 1/4" FNPT           |
| PILOT PORT           | 1/8" FNPT           |
| PANEL MOUNT HOLE     | 1.0 (25.4)          |
| MAX. PANEL THICKNESS | .18 (4.6)           |
| WEIGHT               | 1.6 LB. (.72 KG.)   |

### Ordering Code: 1901 X 2 | X X 0

