Indicating Relays
First Out / Visual Indicator
(Up to and including 145 psi / 10 bar working pressure)

Valve Body 316L Stainless Steel, NACE-MR-01-75 Compliant

Compact Design
Up to 145 psi / 10 bar Operating Pressure & Pilot Pressure
Up to 0.7 Cv

Superior Performance Throughout the Full Operational Range

Innovative and Reliable Valve Solutions
Features & Benefits

Introduction

Bifold’s Indicating Relays, First Out / Visual Indicator type ranges have two functions. First, to indicate visually on a panel that a circuit malfunction has occurred and secondly, to quickly exhaust operating pressure from the system through the Main Supply Reset valve. The Indicating Relay valve with the Bypass function additionally provides the means to bypass the specific malfunctioning circuit without shutting down associated circuits.

First Out / Visual Indicator Valve

Standard Valve

Equipment Design & Build

- Manufactured from 316L grade stainless steel as standard. The valves are suited for offshore and other corrosive atmospheres. Materials can be certified compliant to NACE MR-01-75 rendering the valves suitable for sour gas media.

Safety and Environmental Benefits

- Bifold has state of the art product qualification and production equipment including flow (Cv), environment (-70ºC to +180ºC), function and leakage testing, and data logging.

- Tolerant to moist air in control lines.

- Products are manufactured, inspected, assembled and tested in our state of the art production facilities.
**Overview**

"T" Transmitting Type

The "T" type FOI's transmit a restricted pilot signal through to the sensor which blocks this signal allowing the pressure to build up and cause the FOI to move to the GREEN position, if the sensor is activated the PL is exhausted and causes the first out indicator to move to the RED position, all other first out indicators in the system remain green if their sensor remains intact.

"R" Receiving Type

When PL is applied the valve moves to the open position and the indicator shows green even if there is no air on P(in).

When a sensor drops out, air is removed from PL, the valve closes and the indicator turns to red. The remaining circuit shuts down and the other indicators stay green provided their pilot signal remains on.

**SJJ06-FOI-T**

("T" Transmitting Type)

**SJJ06-FOI-R**

("R" Receiving Type)

Accuracy of information: We take care to ensure that the product information in this catalogue is reasonably accurate and up-to-date. However, our products are continually developed and updated so to ensure accurate and up-to-date information please refer to the product catalogue issue list on our website or contact a member of our sales team.

When selecting a product, the applicable operating system design and maintenance must be considered to ensure safe use. The product function, material compatibility, adequate ratings, correct installation, operation and maintenance are the responsibilities of the system designer and user.

Quality Assurance: All Bifold products are manufactured to a rigorous QA programme to ensure optimum performance and reliability. We are third party certified to BS EN ISO 9001:2008. Functional test certificate, letter of conformity and copies of original mill certificates, providing total traceability are available on request to BS EN 10204 3.1 where applicable. We reserve the right to make changes to the specifications and design etc., without prior notice.
Overview
"RA" Receiving Type

Image shown with the L123 (shroud) option.

"RB" Receiving Type

Image shown with the L123 (shroud) option.

SJJ06-FOI-RA
("RA" Receiving Type)

When PL and P(in) are applied the valve moves to the open position and the indicator shows green.

When a sensor drops out, air is removed from PL, the valve closes and the indicator turns to red. The remaining circuit shuts down and the other indicators stay green provided their pilot signal remains on.

Note: If P(in) is maintained by a special manual circuit, there will be a small venting discharge from pilot stage exhaust P(Ex).

SJJ06-FOI-RB
("RB" Receiving Type)

When PL and P(in) are applied the valve moves to the open position and the indicator shows green.

When a sensor drops out, air is removed from PL, the valve closes and the indicator turns to red. The remaining circuit shuts down and the other indicators stay green. The others will remain green even if their sensors subsequently shut down. Therefore only the first indicator to shut down goes red.
### FIRST OUT INDICATOR PILOT VALVES - PREFERRED RANGE

<table>
<thead>
<tr>
<th>Product</th>
<th>Schematic Representation</th>
<th>Page Number</th>
<th>Product Code</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJJ06</td>
<td><img src="image" alt="Pilot Valve Schematic" /></td>
<td>6</td>
<td>SJJ06-FOI-T-L97</td>
<td>¼” NPT Ports, 3 Way 2 Position, Pilot Operated, First Out Indicator, Transmitting. Cv 0.7, 145 psi / 10 bar.</td>
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<td><img src="image" alt="Pilot Valve Schematic" /></td>
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</tr>
</tbody>
</table>

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BFD369 October '14 © Bifold 2014
# Indicating Relays, First Out / Visual Indicator Valve Range

## Overview

### Materials of Construction

- **Valve:** 316L Stainless Steel as standard.
- **Fasteners:** Metric A4 18/10 316L grade Stainless Steel.
- **Seat Materials:** Viton as standard.
- **Springs:** UNS R30003 and 316L stainless steel.
- **Valve Ports:** ¼" thread milled NPT (BSPP options available).
- **Pilot Ports:** ⅛" thread milled NPT (BSPP options available).

### Operating Pressure

- 22 psi / 1.5 bar - 145 psi / 10 bar mainstage working pressure.
- 22 psi / 1.5 bar minimum pilot pressure.

### Flow Performance

<table>
<thead>
<tr>
<th>Condition</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 = 6 bar</td>
<td>0.7 Cv</td>
</tr>
<tr>
<td>dP = 1 bar</td>
<td>25 SCFM</td>
</tr>
<tr>
<td></td>
<td>708 NL/min</td>
</tr>
</tbody>
</table>

### Operating Media

- Filtered air
- Inert gas
- Sweet or sour gas

### Indicating Colours

- **Red** - Trip mode (Depressurised)
- **Green** - Working mode (Pressurised)

### Mounting & Installation

- Panel mount - Ø26mm

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For more information, please contact Bifold Sales Department.

## SJJ06

### SJJ06 Selection Chart - Ordering Example

<table>
<thead>
<tr>
<th>SJJ</th>
<th>Standard</th>
<th>Model Code</th>
<th>Port Size</th>
<th>First Out / Visual Indicator</th>
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</thead>
<tbody>
<tr>
<td>06</td>
<td>¼&quot; NPT</td>
<td>FO1</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Pneumatic Pilot Valve</td>
<td></td>
<td>First Out / Visual Indicator</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>Transmitting Type</td>
<td></td>
<td></td>
<td>Transmitting &amp; Receiving Types</td>
</tr>
<tr>
<td>R</td>
<td>Receiving Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>Receiving Type</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>RB</td>
<td>Receiving Type</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>L123</td>
<td>Shroud</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K6</td>
<td>BSPP</td>
<td></td>
<td></td>
<td>Option</td>
</tr>
</tbody>
</table>

### Ordering Example

- SJJ06 - FO1 - R - L97 - K6 - L123

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Accuracy of Information

The data are in accordance with the catalogue of the original source and are for guidance only. Bifold reserves the right to make changes to the information and specifi cations at any time. When selecting a product, the applicability to the equipment or system design must be considered in addition to the manufacturer’s recommendations and information. The specifications and design are subject to change without prior notice.

Quality Assurance

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Instrument, Process, Directional Control Valves, Pumps and Actuator Electronic Control and Positioning

Pneumatic and Instrumentation Valves
Hydraulic Valves
Subsea Valves
Hydraulic Pumps, Intensifiers and Valves
Actuator Electronic Control and Positioning

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