Monitors

Commando Exd Electric Remote Controlled Monitors

Description

The Commando Hazardous Area monitors are stainless steel monitors with computer controlled motor driven swivels for the most flexible remote control we know of. The motor units are Hazardous area certified to IECEx or ATEX for Class 1, Zone 1 areas, IP66.

Swivel units are fully enclosed for long service life. The monitor can be used with Orion fog nozzles.

The Commando monitors are designed for use in extreme environments. The monitors are fully programmable and may be programmed for a range of preset movements & preset limits. Full position monitoring for the monitor is available if they are network controlled.

The Commando monitors are controlled over a network using the robust Modbus protocol. Wiring to is extremely simple, simply requiring power (24 VDC) and network cables which makes installation extremely simple. They may also be hard wired though some functionality is not available with this option.

The Commando monitors represent some of the most corrosion resistant monitor ranges available. Key features that make these monitors so reliable are:

- No external parts made from aluminium or steel.
- Fully enclosed swivels.
- Corrosion resistant motors.
- No external limit switches or position sensors.
- Wide elevation movement and up to 500 degrees of rotation movement.
- Dust seals in swivels.
Orion hazardous area monitors are also extremely simple to install and commission.

- Cabling requirements are much simpler, just network and power.
- Configuration is also simple, and it is all done from the control room, by one person.

**Specifications**

<table>
<thead>
<tr>
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<th>Commando 80mm 3152EX</th>
<th>Commando 100mm 4152EX</th>
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<tbody>
<tr>
<td><strong>Maximum Recommended Flow:</strong></td>
<td>4,500 lpm  -250º to +250º  -75º to +90º  Flanged 3” ANSI #150 80mm BSP Male</td>
<td>7,500 lpm  -250º to +250º  -75º to +90º  Flanged 4” ANSI #150 100mm BSP Male</td>
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<td><strong>Horizontal Rotation:</strong></td>
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<td><strong>Vertical Movement:</strong></td>
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<td><strong>Inlet Connection:</strong></td>
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<td><strong>Outlet Connection:</strong></td>
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**Materials of Construction**

- **Waterway:** 316L Stainless Steel
- **Swivels:** 316L Stainless Steel
- **Inlet Flange:** 316L Stainless Steel
- **Balls:** Brass
- **Grease Nipples:** 316 Stainless Steel
- **Fasteners:** 316 Stainless Steel
- **Motor Housing:** Brass

These monitors are also available in a variety of high performance stainless steel alloys such as SAF 2507, 6Mo and 254 SMO as well as Titanium.

**Commando Monitor Friction Loss**

![Graph showing friction loss vs. flow for 80mm and 100mm Commando monitors]
**Control Functions**

Left-Right movement  
Up-Down movement  
Spray-Jet pattern control for nozzle

Optional  
– Standard movement speed is 6 degrees per second but this may be adjusted.

Optional  
– preset oscillation modes  
– preset parking position

The Commando monitors are designed for use with the Orion FireNet monitor control system. The monitors are network controlled and may be programmed for preset oscillating movement. As a result of the “Smart” nature of these monitors they do not require detailed control by the network controller which greatly reduces network traffic and this makes them ideal for larger systems.

Only a two core screened cable is required to operate the monitor and nozzle when networked, making cabling extremely simple.

**Power Requirements**

24 VDC, 10 Amps

**Options**

Inlet Flange:  
ANSI #150 RF solid or composite, roll groove