Typical applications

- Monitors pressure or temperature on rotating machinery in hazardous and industrial applications

Key features and benefits

- Entirely mechanical
  - Requires no external power source
- Safe in hazardous area installation
- Snap acting
  - Immediate shutdown on sensed pressure loss
- Easy installation and operation
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Overview

The Model 2800 is a safety shutdown device which senses oil pressure or other control pressure. The device is typically connected to an engine fuel rack governor or fuel pump stop lever. Should a loss or drop in oil pressure occur below the setpoint the 2800 will trip immediately.

Operation

Model 2800 may be used alone or as the engine shutdown component in an engine monitoring system. It also can be coupled with a wide array of devices for monitoring pressures, temperatures or other variables on rotating machinery, or can operate as a stand-alone oil pressure sensor.

Model 2800 is a snap acting device monitoring low lubricating oil pressure or other control pressure. An emergency stop handle and a trip pressure adjusting screw are standard. Factory set to trip at 0.7 bar (10 psi) and field adjustable, from 0.35 - 2.8 bar (5 - 40 psi). A trip lever is installed on a splined shaft, and can be clamped in any of 36 radial positions to facilitate installation in most applications. The lever permits mechanical linkage between the tripping unit and the engine governor control, fuel pump stop lever or other mechanism.

Predrilled holes give a wide range of connection options. A standard reset latch is supplied.

In normal condition, the 2800 is in open position and is being held open under the system pressure. When the system pressure drops below the factory set trip pressure of 0.7 bar (10 psi), the handle rotates 90° clockwise from its position in the open condition and closes the valve. In order to reopen the valve, the handle is moved to open the valve and the reset latch is engaged, which will hold the handle while the system is pressuring. The reset latch will be released when it reaches the reset latch release pressure of 1.8 bar (26 psi) and model 2800 will be open and working under the system pressure.

How to Order

Use the table below to select the unique specification of your 2800D Safety Shutdown Device.

<table>
<thead>
<tr>
<th>Example</th>
<th>Code description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2800D</td>
<td>Basic model (A)</td>
<td></td>
</tr>
<tr>
<td>Body style (B)</td>
<td>Aluminum, black anodized, front shaft</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Aluminum, black anodized, front shaft</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Aluminum, black anodized, rear shaft</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Aluminum, black anodized, front shaft</td>
<td></td>
</tr>
<tr>
<td>Pressure connection (C)</td>
<td>£¼” NPT</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>£¼” BSP PL</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>#6 straight thread SAE o-ring</td>
<td></td>
</tr>
<tr>
<td>Reset latch (D)</td>
<td>WITH reset latch</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>WITHOUT reset latch</td>
<td></td>
</tr>
<tr>
<td>Special requirements (E)</td>
<td>Standard</td>
<td></td>
</tr>
<tr>
<td>-AA</td>
<td>Made-to-order</td>
<td></td>
</tr>
</tbody>
</table>
Dimensions

Dimensions - inches (mm)

PRESSURE INLET 170 PSI MAX. (1170 kPa)

3" (76.3)  2 7/8" (66.7)

1 3/4" (41.3)  1 3/4" (44.5)

TRIP PRESSURE ADJUSTING SCREW

Ø0.266" (6.7) - 7 HOLES EQUALLY SPACED AT 5/16" (12.7) INCREMENTS

RESET LEVER MAY BE POSITIONED IN 18 POSITIONS ON SHAFT. 18 ADDITIONAL POSITIONS ARE AVAILABLE BY REVERSING LEVER.

0.266" (6.7) - 7 HOLES EQUALLY SPACED AT 5/16" (12.7) INCREMENTS

TWO (2) 1/4-20 SCREWS FURNISHED FOR MOUNTING

RESET LATCH

90° MAX STROKE

RUN

STOP

TRIP PRESSURE ADJUSTING SCREW

RESET LEVER MAY BE POSITIONED IN 18 POSITIONS ON SHAFT. 18 ADDITIONAL POSITIONS ARE AVAILABLE BY REVERSING LEVER.

0.266" (6.7) - 7 HOLES EQUALLY SPACED AT 5/16" (12.7) INCREMENTS

TWO (2) 1/4-20 SCREWS FURNISHED FOR MOUNTING

RESET LATCH

90° MAX STROKE

RUN

STOP
USE THESE TWO (2) NUTS FOR MOUNTING THE CONTROL TO THE BRACKET ¼" (6.4) MAXIMUM ALLOWABLE THICKNESS: 0.281" (7.1) CLEARANCE HOLES REQUIRED.

CENTRELINE OF PRESSURE INLET PORT:

Dimensions Continued

Dimensions - inches (mm)
Safety Shutdown Device - Model 2800D

Specification

<table>
<thead>
<tr>
<th>Standard materials</th>
<th>Metric units</th>
<th>English units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>Aluminum alloy dye casting</td>
<td></td>
</tr>
<tr>
<td>Internals and levers</td>
<td>Precision steel castings</td>
<td></td>
</tr>
<tr>
<td>Pressure connections</td>
<td>¼” NPT or BSP (PL)</td>
<td></td>
</tr>
</tbody>
</table>

| Maximum pressure at inlet | 11.7 bar | 170 psi |
| Tripping pressure adjustment range (falling pressure) | 0.35 - 2.8 bar | 5 - 40 psi |
| Factory set trip pressure** | Field adjustable | |
| Field adjustable reset latch release pressure (MAX) | 1.8 bar | 26 psi |

| Tripping force available | In run position at 1” (25.4 mm) radius | 62.3 N | 14 lbs |
| In run position at 1” (25.4 mm) radius | 31.1 N | 7 lbs |
| Net weight | 1 kg | 2 lbs 3 oz |
| Shipping weight | 1.36 kg | 3 lbs |

** If factory set trip pressure is adjusted in the field, the reset latch will release within 1.17 bar (17 psi) above the field adjusted trip pressure

Maintenance and Service Parts

Over time, exposure to prolonged operation at extreme conditions may reduce the effectiveness of the safety shutdown device. At such time, AMOT Model 2800D Safety Shutdown Devices can be restored to original performance by installing an AMOT safety shutdown device service kit. Service kits include all new seals, diaphragm and gasket required for normal maintenance.

How to order service kits

Service kits are available with seals, diaphragm and gasket required to service the valve. All 2800D Safety Shutdown Devices require the same service kit 10049X.

Service parts *(refer to diagrams on page 7)*

<table>
<thead>
<tr>
<th>Service kit parts</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Ref no.</td>
<td>Qty.</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>42</td>
<td>1</td>
</tr>
<tr>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td>61</td>
<td>2</td>
</tr>
</tbody>
</table>

AMOT designs and tests all its products to ensure that high quality standards are met. For good product life, carefully follow the installation and maintenance instructions; failure to do so could result in damage to the equipment being protected or controlled.
Reset Latch

Section A4

Safety Shutdown Device - Model 2800D

Maintenance and Service Parts Continued

Service parts continued
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WARNING
This product can expose you to chemicals including Lead, which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.