# Safety Shutdown Device Model 2800D

### **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

Model 2800D



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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.

# 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.

Should a loss or drop in oil pressure occur below the setpoint the 2800 will trip immediately.

The reset latch locks the trip lever in the "run" position until oil pressure is up to normal operating pressure, then the latch releases thus arming the device.

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.

Example	2800D	4	1	2		Code description	Comments
Example	20000	-	-	2		Basic model (A)	comments
Basic model (A)	2800D						
						Body style (B)	1
Body style (B)		0				Aluminum, black anodized, front shaft	
		4				Aluminum, black anodized, rear shaft	
						Pressure connection (C)	
0   Pressure connection (C)   1   2			1⁄4″ NPT				
			¼″ BSP PL				
				#6 straight thread SAE o-ring			
						Reset latch (D)	
Reset latch (D) 2			2		WITH reset latch		
					Special requirements (E)		
Special Requirements (E)				-AA	Standard	May be omitted	
				_***	Made-to-order		

# Safety Shutdown Device - Model 2800D



# **Dimensions Continued**

Dimensions - inches (mm)



## Specification

#### Metric units English units

Standard materials			
Housing	Aluminum alloy dye casting		
Internals and levers	Precision steel castings		
Pressure connections	¼″ NPT or BSP (PL)		
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	0.6 - 0.75 bar	9 - 11 psi
Reset latch release pressure (MAX)		1.8 bar	26 psi
	In run position at 1" (25.4 mm) radius	62.3 N	14 lbs
Tripping force available	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
		1 1111 4 4	7 1 (17 )

\*\* 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.

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.

All 2800D Safety Shutdown Devices require the same service kit **10049X**.

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

Service kit parts							
Ref no.	Qty.	Description					
4	1	Plunger seal					
23	1	Seal					
25	1	Diaphragm					
42	1	Gasket					
53	1	Reset latch seal					
61	2	Trip shaft seals					

# Safety Shutdown Device - Model 2800D

Maintenance and Service Parts Continued











Section A4

**Reset Latch** 

### Contact

### Americas

AMOT USA 8824 Fallbrook Dr. Houston, TX 77064 USA

Tel: +1 (281) 940 1800 Fax: +1 (713) 559 9419 Email: customer.service@amot.com

### Europe, Middle East and Africa

AMOT UK Western Way Bury St. Edmunds Suffolk, IP33 3SZ England

Tel: +44 1284 715739 Fax: +44 1284 760256 Email: info@amot.com

AMOT Germany Rondenbarg 25 22525 Hamburg Germany

Tel: +49 40 8537 1298 Fax: +49 40 8537 1331 Email: germany@amot.com

### Asia Pacific

AMOT Shanghai Bd. 7A, No. 568, Longpan Rd., Malu Jiading Shanghai 201801 China

Tel: +86 21 5910 4052 Fax: +86 21 5237 8560 Email: shanghai@amot.com

🕂 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.

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