MVX-Series

Overview

Flammable gas or vapor drawn into the intake of a diesel engine acts as an additional ungoverned fuel supply and can cause uncontrolled engine overspeed followed by mechanical failure or flash back from the intake, resulting in ignition of the surrounding flammable atmosphere. When this occurs, the only certain way to stop the engine is by the operation of an air intake shutdown (shutoff) valve.

The Chalwyn MVX Manually Operated Valve is a mechanically actuated butterfly valve designed to mechanically latch in the open position for the diesel engine to run. In the event of an engine overspeed condition, the operator actuates the manual stop mechanism. Once actuated, the positive spring action in the valve will close the valve.

Features & Benefits

- Local and remote cable manual actuation methods
- Suitable for hazardous and non-hazardous area applications
- Slim-fit and lightweight valve body for easy installation
- Basic flange mount with hose adaptors available (1¹/₂" to 8" | 38 to 203mm)
- Corrosion resistant aluminum valve bodies and discs
- May be mounted horizontally or vertically



Applications*

- Drilling rigs (onshore & offshore)
- Drilling support equipment
- Well servicing equipment
- Refinery support equipment
- Mining equipment
- Generator sets
- Work boats
- Barges

*Not approved for vehicular applications.

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Specifications

Standard materials	Valve body and disc	Hard anodized aluminum with PTFE coating		
	Spindles and mechanisms	316 stainless steel		
Net weight	t weight Product weight			
(including actuator)	Shipping weight	ТВА		
Intake air temperature range Standard valve		-30°C to 150°C	(-22°F to 302°F)	
Ambient air temperature range	Standard valve	-30°C to 60°C	(-22°F to 140°F)	

Actuation Description

All versions of the MVX valve are designed to be opened locally using the reset lever mounted on top of the actuator. The valve should be positioned where the reset lever is easily and safely accessible.

Local Stop Button Close

The stop button is mounted on top of the valve actuator. The valve is actuated by either pushing or pulling on the button. The valve should be located where both the reset lever and stop button will be easily and safely accessible.

Standard Pushbutton Manual Cable Close

The valve is actuated using a remote push button and cable. The pushbutton cable is mounted vertically through a bracket mounted to the top of the valve actuator. The valve should be positioned and cable length selected to give a reasonably straight cable run between the MVX valve and the proposed stop button position. Various cable lengths are available.

Compact Pushbutton Manual Cable Close

The valve is actuated using a remote pushbutton and cable. In this compact version, the cable assembly is mounted horizontally through a bracket mounted on top of the valve actuator. This version is useful in application with tight clearance above the valve. The valve should be positioned and cable length selected to give a reasonably straight cable run between the MVX valve and the proposed stop button position. Various cable lengths are available.

Pull "T" Handle Manual Cable Close

The valve is actuated using a remote pull "T" handle and cable. The "T" handle cable is mounted vertically through a bracket mounted to the top of the valve actuator. The valve should be positioned and cable length selected to give a reasonably straight cable run between the MVX valve and the proposed "T" handle position. Various cable lengths are available.

Dual Pull "T" Handle Manual Cable Close

Available only on the 3" (76mm) valve model. The valve is actuated by two pull "T" handles with cables. Both "T" handle cables are mounted vertically through a bracket mounted to the top of the valve actuator. The valve should be positioned and cable set length selected to give reasonably straight cable runs between the MVX valve and the proposed positions for both "T" handles. The cable is available in sets of 1, 1.5, 2, and 3 meters.

How to Order

Determine the size and position of the MVX valve to be installed. Within the various constraints imposed by the application, the valve should be as generously sized as possible Check that the valve can be positioned such that the reset lever will be easily and safely accessible and that a reasonably straight run is available for the shutdown cable.

I	MODEL MVX - A					
]			
	Α	Valve Size		BB		
	3	3″		00		
	5	5″		01		
	8	8″		02		

BB	Actuation Method
00	Local Pushbutton to Stop
01	Pushbutton Cable to Stop
02	Pushbutton Cable to Stop
03	Pull (T-Handle) Cable to Stop
04	Dual Pull (T-Handle) Cable to Stop (3" only)

Select the cable length required from the options listed below.

Remote "Push" Button and Cable Assembly Options (for Models MVX- 301, -302, -501, -502, -801, -802)

Select the required length of the manual shut down cable from the table. Alternative lengths may be available on request.

Assembly Part No.	Length (meters)				
RBC-100	1				
RBC-150	1.5				
RBC-200	2				
RBC-300	3				

Cable options for use with "PULL" Handle RTD-100 (for Models MVX-303, -503, -803).

Select the required length of the manual shut down cable from the table. Alternative lengths may be available on request. Also order handle RTD-100.

Cable Part No.	Length (metes)				
CLD-100	1				
CLD-150	1.5				
CLD-200	2				
CLD-300	3				

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Hose Adaptor Options

If the valve is to be fitted into a hose as opposed to flange mounted, suitable hose adaptors may be selected from the table below for ordering with the valve.

76mm (3") Bore Valves					
Adaptor Part Number	To Suit Hose Bore mm (inches)				
HAX-320	38 (11/2)				
HAX-322	44.5 (13/4)				
HAX-301	51 (2)				
HAX-303	57 (2 1/4)				
HAX-304	60 (2 3/8)				
HAX-305	63.5 (2 1/2)				
HAX-306	67 (2 5/8)				
HAX-307	70 (2 3/4)				
HAX-309	76 (3)				
HAX-312	82.5 (31/4)				
HAX-314	89 (3 1/2)				
HAX-319	102 (4)				

127mm (5") Bore Valves					
Adaptor Part Number	To Suit Hose Bore mm (inches)				
HAX-501	89 (3 1/2)				
HAX-503	95 (3 3/4)				
HAX-505	102 (4)				
HAX-507	108 (4 1/4)				
HAX-509	114 (4 1/2)				
HAX-511	121 (4 3/4)				
HAX-513	127 (5)				
HAX-518	140 (5 1/2)				
HAX-523	152 (6)				

203mm (8") Bore Valves					
Adaptor Part Number	To Suit Hose Bore mm (inches)				
HAX-807	178 (7)				
HAX-808	203 (8)				

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Dimensions



Note: Maximum temperature of the engine intake air at the MVX valve not to exceed 150°C.

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Valve Model	Nominal Bore Diameter	A		В		C1		C2 min & max	
		mm	in	mm	in	mm	in	mm	in
MVX-300, -301, -302	75 (3")	190	7.5	111.5	4.4	37.5	1.5	82.5 to 112.5	3.2 to 4.4
MVX-303, -304	76 (3")	223	8.8	111.5	4.4	37.5	1.5	82.5 to 112.5	3.2 to 4.4
MVX-500, -501, -502	127 (5")	246	9.7	167	6.6	45.5	1.8	102.0 to 157.5	4.0 to 6.2
MVX-503	127 (5")	279	11	167	6.6	45.5	1.8	102.0 to 157.5	4.0 to 6.2
MVX-800, -801, -802	203 (8")	346.5	13.6	257	10.1	56	2.2	136.5 to 185.5	5.4 to 7.3
MVX-803	203 (8")	377.5	14.9	257	10.1	56	2.2	136.5 to 185.5	5.4 to 7.3

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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.