

# Air Intake Shut-off Valve

Model 7001

## Overview

Hydraulic fracturing technology requires the use of heavy-duty, high-horsepower diesel engines. Hydrocarbons released in an area where a diesel engine is operating can lead to diesel engine runaway which can be a highly dangerous situation. Once an engine begins to run on the external fuel source, turning off the ignition will have no effect. The engine will continue to run out of control, leading to mechanical failure and, potentially, an explosion. The AMOT 7001 Series air intake shutoff valve was designed for the harsh wear and tear of the frac industry. The valve will effectively shut down a runaway diesel engine by closing off engine intake air.



## Key features and benefits

- IP 67 Rated solenoid/actuator is enclosed for reliable performance
- Anodized aluminum and stainless steel construction resists corrosion
- Rugged and reliable performance in continuous working temperature from -40°C to 100°C
- Designed for post-turbo temperatures
- Designed for high-vibration environments
- Elbow kit (if needed) consists of male/female o-ring marmon flange connections that allow direct bolt on to MTU Series 4000 engines (S81/S82/S83)
- Position switch integrated into actuator housing for protection from charge air temperature and debris

## Typical Applications

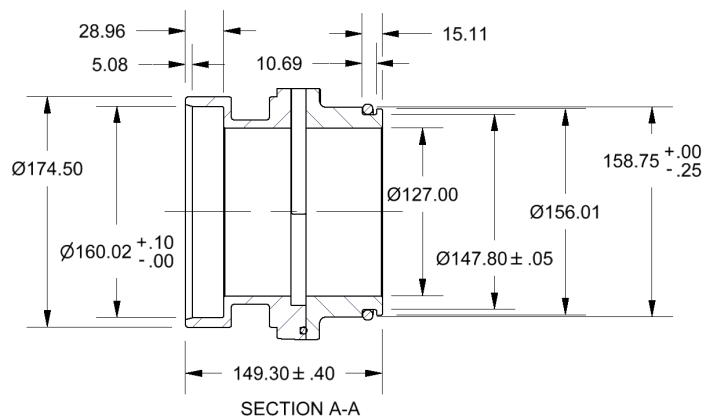
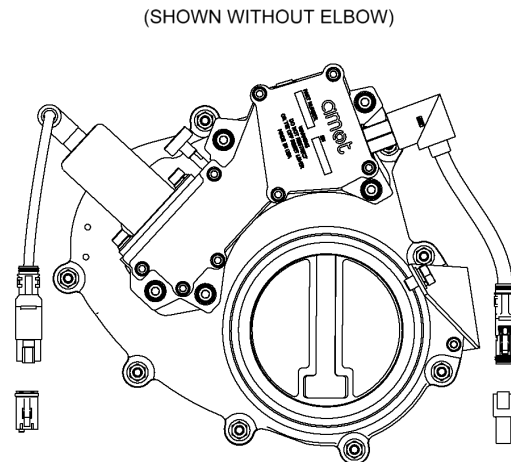
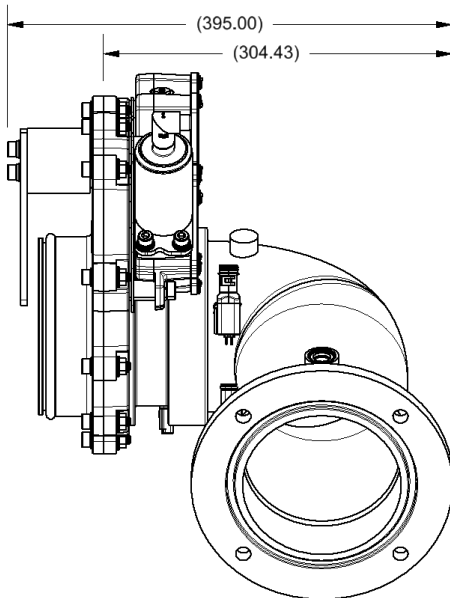
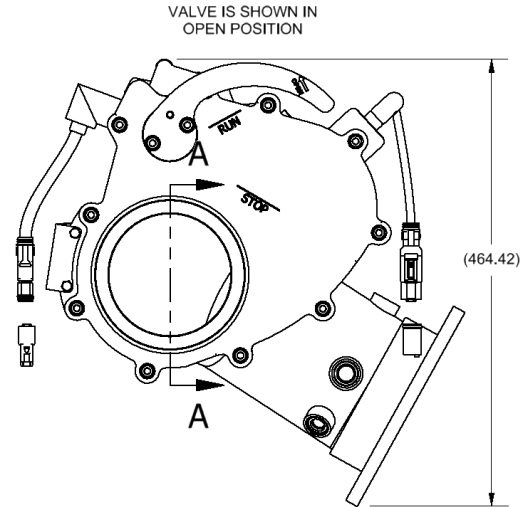
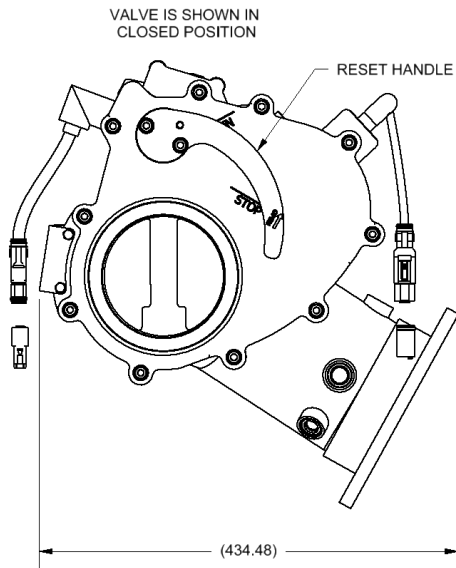
**MTU Series 4000 (S81/S82/S83) high horsepower engines used in the following applications:**

- Hydraulic fracturing units
- Offshore production engines
- Hazardous material vehicles
- Marine engines
- Bulk fuel haulers (tankers)
- Power generation (gen sets)
- Mining equipment
- Locomotives
- Fuel transfer pumps
- Fire pumps

# Air Intake Shut-off Valve

Model 7001

## Dimensions



# Air Intake Shut-off Valve

Model 7001

## Specifications

<b>Standard materials</b>	Valve body & actuator housing	Hard anodized aluminum
	Gate	Brass
	Seals	Viton/Silicone
<b>Maximum intake air temperature</b>	-40°C to 100°C	-40°F to 212°F
<b>Valve Size</b>	5" valve size	127 mm
<b>Net weight</b> (without elbow kit)	15 kg (34 lbs)	
<b>Max Charge Air Pressure</b>	5 bar	72 psi
<b>Solenoid</b>	Voltage	16.8 - 31.2 Volts DC
	Max current draw	42.2 A @ 31.2 VDC & -40°C
	Inductance	3.5mH ±40°C
	Actuation Sequence @ 31.2 VDC, 100°C	Max 2s ON, Min 1s OFF Max 2s ON, Min 300s OFF
	Actuation Sequence @ 24 VDC, 25°C	Max 2s ON, Min 1s OFF Max 2s ON, Min 60s OFF
<b>Switch</b>	5 Amp resistive load max >0.25W	

## Service Kits & Accessories

Part Number	Description
RKS-7001-04	Solenoid kit
RKS-7001-09	Reset handle
RKS-7002-04	Normally-closed switch kit
RKS-7002-01	Normally-open switch kit
4009-077	Flange o-ring
1641-019	Timer relay, 24 VDC

# Air Intake Shut-off Valve

## Model 7001

### How to order

Use the tables below to select the unique specification of your Model 7001 Intake Air Shut-off Valve:

Example: **7001** **A** **BB** **C** - **DDD**

A	Valve Size	BB	Valve Operator	C	Switch Options	DDD	Connection Options
5	5 inch bore	72	Electric Solenoid, 24VDC	A	Valve Open = Switch Closed	HAH	S83 Left side with Elbow, Deutsch Solenoid, Deutsch Switch, Reset Handle
		25	Pneumatic Cyl.	B	Valve Open = Switch Open, 33 Kohm Shunt Resistor Switch	HAI	S83 Right Side with Elbow, Deutsch Solenoid, Deutsch Switch, Resent Handle
						H AJ	S83 Left Side without Elbow, Deutsch Solenoid, Deutsch Switch
						H AK	S83 Right Side without Elbow, Deutsch Solenoid, Deutsch Switch
						RZL	T94 Left Side without Elbow
						RZM	T94 Right Side without Elbow

Note: AMOT doesn't not qualify the valve for specific applications. Consult the engine and valve specifications.

Elbow, Switch, Solenoid, Harness and Reset Service Kits are available for your valve. Contact Customer Service for the specific part number.

#### Americas

AMOT - USA  
Tel +1 (281) 940 1800  
Fax +1 (713) 559 9419  
customer.service@amot.com

AMOT - Canada  
Tel +1 (780) 465 4429  
Fax +1 (780) 469 6275  
customer.service@amot.com

#### Asia Pacific

AMOT - China  
Tel +86 21 6279 7700  
Fax +86 21 5237 8560  
shanghai@amot.com

#### Europe, Middle East and Africa

AMOT - UK  
Tel +44 (0) 1284 762222  
Fax +44 (0) 1284 760256  
info@amot.com

AMOT - Germany  
Tel +49 (0) 40 8537 1298  
Fax +49 (0) 40 8537 1331  
germany@amot.com

