

## **Overview**

The new AMOT XT is the most advanced butterflystyle positive air shut off valve on the market today. Engineered with the latest technology and loaded with enhanced features, this valve shuts down a runaway diesel by positively choking off engine intake air. The valve operates as part of a fully-automatic overspeed shutdown system when paired with our Revguard 2 speed switch and activation kit.

The XT range currently offers 12V or 24V electric actuation of the solenoid to rapidly close the valve's butterfly disc which shuts off intake air flow into the engine. The XT range is available in a variety of sizes to fit your specific applications.

It is manufactured from corrosion resistant, RoHS compliant materials that offer toughness under extreme temperatures and resistance to corrosive environments.

# The butterfly valve most trusted by engine manufacturers



#### **New Enhanced Features**

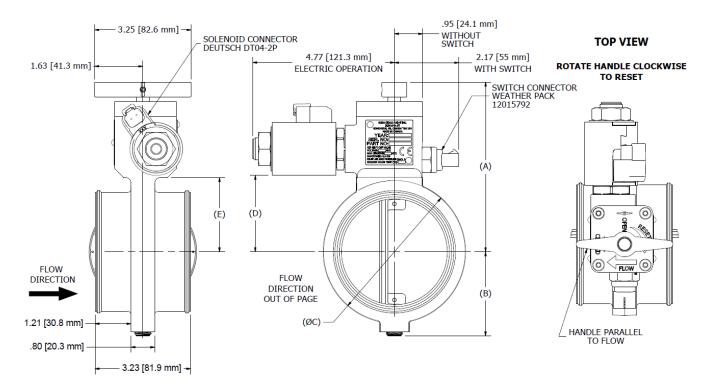
- Temperature range of -40°C to 125°C
- Tested to rigorous engine OEM standards for:
  - resistance to shock
  - corrosion
  - vibration
  - life cycle
  - ingress Protection ratings IP69k and 1P67
- Optional integrated valve position switch
- Field-serviceable components limit downtime



## **Dimensions**

Model XT Butterfly Valve

#### Side View



OD (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Weight (lb)
3.5	5.46	2.58	4.30	2.32	2.25	4.0
4.0	5.71	2.83	4.80	2.57	2.50	4.1
5.0	6.21	3.33	5.80	3.07	3.00	4.5

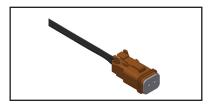
OD (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Weight (lb)
5.5	6.71	3.48	6.30	3.32	3.25	5.4
6.0	6.96	3.73	6.80	3.57	3.50	5.6
7.0	7.46	4.23	7.80	4.07	4.0	6.2
8.0	7.96	4.73	8.80	4.57	450	6.8

# **Mating Solenoid and Switch Connectors**

Included with Valve (comes with 12-inch pigtail)



XT switch connector (RKS-XT-017)



XT solenoid connector (RKS-XT-016)

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# **Specifications**

Standard Materials		Valve body/disc	Anodized aluminum	
		Seals	Viton	
		Solenoid housing	Plated steel	
Intake & Ambient Air Temp Electric		Minimum: -40°C / maximum: 125°C		
Max Charge Air Pressure		5 bar (72 psi); Solenoid coil duty cycle: 60s max on/540s off (11%)		
	12.406	26.4 Amps (max) @ 13.2 VDC / -40°C		
	12 VDC	19.8 Amps (max) @ 13.2 VDC / 25°C		
Electric Solenoid	24.4/06	13.2 Amps (max) @ 26.4 VDC / -40°C		
	24 VDC	9.9 Amps (max) @ 26.4 VDC / 25°C		
Switch Rating		4.4 Amps DC max		

# **Product Code Definitions**

Example	XT	3	5	В	2	Α	3.5" OD, 24V, low temp, no switch		
Basic model code	XT								
							mm OD	inches OD	
		3	5				89	3.5	
		4	0				102	4.0	
		5	0				127	5.0	
Valve flange size		5	5				140	5.5	
		6	0				152	6.0	
		7	0				178	7.0	
		8	0				203	8.0	
A							Electric power	to close - 12 \	/DC
Actuator					Electric power to close - 24 VDC				
Temperature (Disc Seal) 2					Low temp (-40°C to +125°C)				
						Α	No switch		
						В	Valve open = switch open (100°C max)		
71						С	Valve open = switch closed (100°C max)		
						D	Valve open = switch open (heavy duty) available on 6", 7", 8"		
						Е	Valve open = switch closed (heavy duty) available on 6", 7", 8"		

Note: Switch E option has 33  $k\Omega$  internal shunt resistor.

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## **Service Schedule**

Valve servicing should be conducted according to the maintenance schedule in the table below. However, frequency of part replacement may vary depending on environmental and operational factors. Contact customer service for specific kit ordering information.

Engine Hours on Valve	Switch	Actuation	Replace Valve
10,000	✓	✓	
20,000			✓

# **Testing Schedule**

Regular operation testing should be performed on the valve to ensure it is in proper working order for emergency situations. AMOT recommends testing in weekly intervals.

## **Service Kits**

Part No.	Description
RKS-XT-001	12V complete solenoid kit (A Actuator Code)
RKS-XT-002	24V complete solenoid kit (B Actuator Code)
RKS-XT-018	12V solenoid coil kit (A Actuator Code)
RKS-XT-019	24V solenoid coil kit (B Actuator Code)
RKS-XT-006	Switch kit: valve open = switch open (B Switch Code)
RKS-XT-007	Switch kit: valve open = switch closed (C Switch Code)
RKS-XT-024	Switch kit: valve open = switch open (D switch code)
RKS-XT-025	Switch kit: valve open = switch closed (E switch code)

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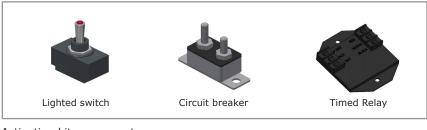
# **Accessories for Fully Automatic Systems**

Activation Kits				
Part No.	Description			
1520-001	Revguard 2 speed switch kit			
AK2-E1-RM	Electric activation kit for 12V valve			
AK2-E2-RM	Electric activation kit for 24V valve			

Hose and Clamp Kits				
Part No.	Description			
IK-3500H-01	Hose and clamp kit for 3.5 in (89 mm)			
IK-4000H-01	Hose and clamp kit for 4.0 in (102 mm)			
IK-5000H-01	Hose and clamp kit for 5.0 in (127 mm)			
IK-5500H-01	Hose and clamp kit for 5.5 in (140 mm)			
IK-6000H-01	Hose and clamp kit for 6.0 in (152 mm)			
IK-7000H-01	Hose and clamp kit for 7.0 in (178 mm)			



Revguard speed switch (1520-001)



Activation kit components



Hose and clamp kit (IK-3500H-01)

#### WARNING

These products can expose you to chemicals including carbon black (airborne and extracts), antimony trioxide, titanium dioxide, silica (crystalline), di(2-ethylhexyl)phthalate, ethylene thiourea, acrylonitrile, 1,3-butadiene, epichlorohydrin, toluenediisocyanate, tetrafluoroethylene, ethylbenzene, formaldehyde, furfuryl alcohol, glass fibers, methyl isobutyl ketone, nickel (metallic and compounds), lead and lead compounds which are known to the state of California to cause cancer; and 1,3 butadiene, epichlorohydrin, di(2-ethylhexyl)phthalate, di-isodecyl phthalate, ethylene thiourea, methyl isobutyl ketone, toluene, lead and lead components which are known to the state of California to cause birth defects and other reproductive harm. For more information go to www.PSWamnings.ca.gov. harm. For more information go to www.P65Warnings.ca.gov

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