

## **Overview**

The new AMOT XTB 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 XTB 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 XTB range is available in two sizes and optional custom flanges.

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

## **New Enhanced Features**

- Optional bolt-on flanges (contact factory)
- 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

# The butterfly valve most trusted by engine manufacturers



Base XTB Valve

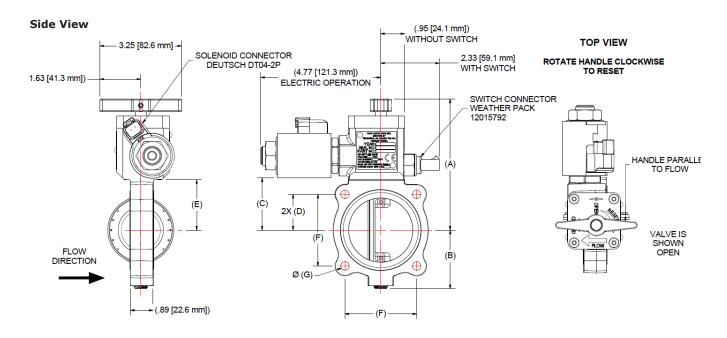


XTB Valve with Example Custom Flanges



## **Dimensions**

# Model XTB Butterfly Valve



	VALVE DIMENSIONS									
OD (in)	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Weight (lb)		
3.0	5.21	2.33	3.80	1.43	2.00	2.85	0.33	3.8		
4.0	5.71	2.83	4.80	1.77	2.50	3.53	0.33	4.1		

# **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)

DS-AMOT-XTB-0122-Rev13 page 2





# **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 n	nax on/540s off (11%)		
	12.1/06	26.4 Amps (max) @ 13.2 VDC / -40°C			
Electric Solenoid	12 VDC	19.8 Amps (max) @ 13.2 VDC / 25°C			
	24.1/06	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 XTB 3 0 B 2					2	Α	3.0" OD, 24V, low temp, no switch		
						•			
Basic model code	хтв								
							mm OD	inches OD	
Valvo flango sizo		3	0				76	3.0	
Valve flange size		4	0				102	4.0	
A							Electric power to close - 12 VDC		
Actuator B					Electric power to close - 24 VDC				
1					1		Normal (-20°C to +125°C)		
Temperature 2					Low temp (-40°C to +125°C)				
						Α	No switch		
Switch type				В	Valve open =	Valve open = switch open (100°C max)			
				С	Valve open = switch closed (100°C max)				

DS-AMOT-XTB-0122-Rev13 page 3



# **Optional Hose Adapter Kit Selection**

The XTB is a modular design. If hose adaptors are required for connection to your intake, a hose adaptor kit will be required. The CKS kits shown below each contain two hose adaptors. The hose adaptors can be added by AMOT at the factory or can be shipped with the product to be added later. Custom kits are available for differing installations.

	Example	CKS-XTB-A	3	250
--	---------	-----------	---	-----

Basic model code CKS-XTB-A				
Value sine		3		3.0"
Valve size		4		4.0"
Hose adapter size (for 3" valves)			250	3" to 2.5"
			275	3" to 2.75"
			300	3" to 3"
			325	3" to 3.25"
			350	3" to 3.5"
Hose adapter size (for 4" valves)			350	4" to 3.5"
			375	4" to 3.75"
			400	4" to 4"
			425	4" to 4.25"
			450	4" to 4.5"





Modular bolt-on hose adapter for XTB

**XTB Valve without hose adapters** 

## **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.

DS-AMOT-XTB-0122-Rev13 page 4



## **Service Kits**

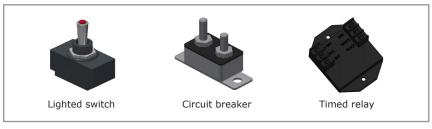
Part No.	Description
RKS-XT-001	12V complete solenoid kit (A Actuator Code)
RKS-XT-002	24V complete solenoid kit (B Actuator Code)
RKS-XT-018	12V solenoid coil kit (A Actuator Code)
RKS-XT-019	24V solenoid coil kit (B Actuator Code)
RKS-XT-006	Switch kit: valve open = switch open (B Switch Code)
RKS-XT-007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

## **Accessories for Fully Automatic Systems**

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



Revguard speed switch (1520-001)



Activation kit components

### 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 <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

#### **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

## www.amot.com

#### **Asia Pacific**

AMOT - China Tel +86 21 5910 4052 Fax +86 21 5237 8560 shanghai@amot.com

#### **Europe, Middle East and Africa**

AMOT - United Kingdom Tel +44 (0) 1284 715739 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