

### Product Highlights

- Reliable and safe emergency shut down for diesel engines
- Simple pull cable activation method, with operator friendly manual reset
- Aluminum flap and housing for durable seal and low weight
- Designed for challenging thermal applications
- Wide range of sizes available
- Robust design; Tested to 18.6 gmrs vibration cycle
- Cycle tested 7300 actuations (2 times a day for 10 years)
- Components corrosion tested to ASTM B117, 96hrs Salt Fog
- Corrosion resistant pull cable



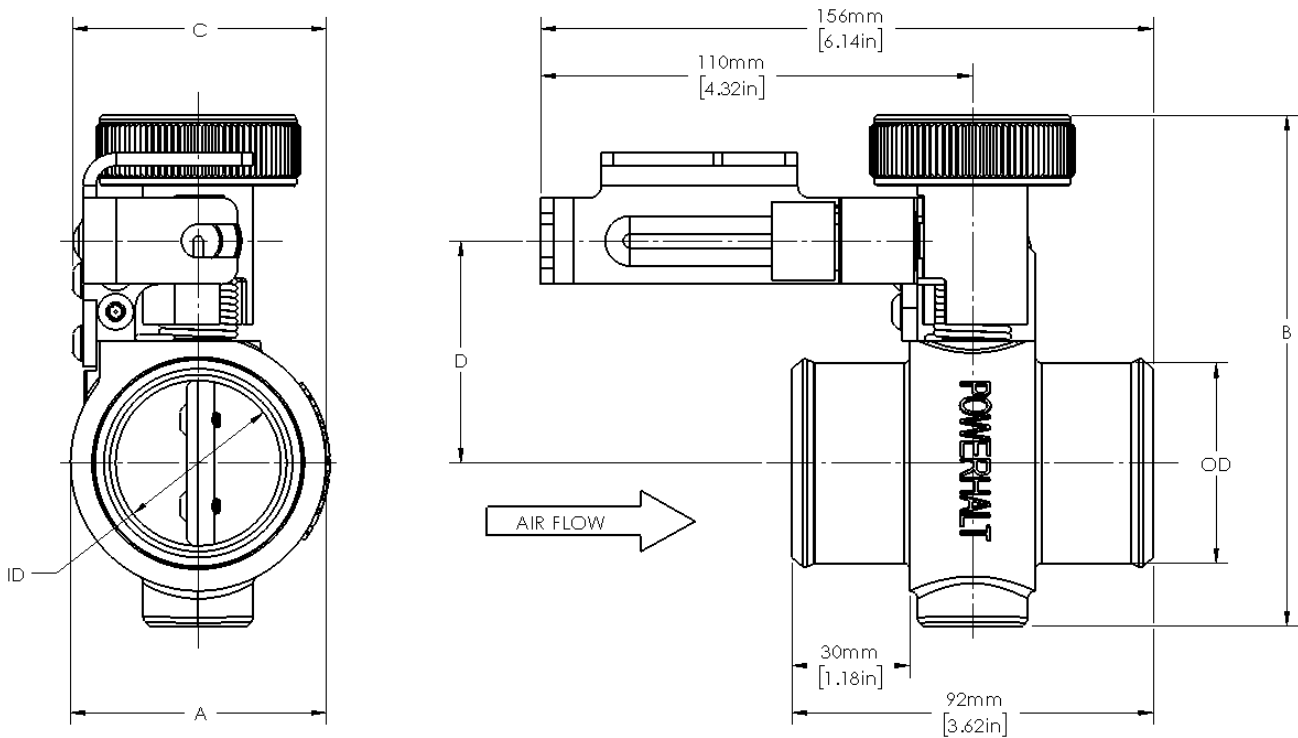
### Product Description

<b>Maximum Intake Boost Air Pressure</b>	2.76 bar (gauge) [40 psig]
<b>Continuous Intake Air Temperature</b>	-67°C to 200°C [-40°F to 392°F]
<b>Ambient Temperature Range</b>	-40°C to 120°C [-40°F to 248°F] (valve body)
<b>Resting Position</b>	Valve open
<b>Activated Position</b>	Valve closed
<b>Standard Mounting Options</b>	Hose to hose
<b>Pipe Sizes Supported</b>	Ø38 mm to 89 mm [Ø1.5 into Ø3.5 in] (more sizes available per request)

### Applications

- |                           |                |                         |                 |
|---------------------------|----------------|-------------------------|-----------------|
| • Lighting Units          | • Ambulances   | • Lighting Trucks       | • Frack Trucks  |
| • Bulk Haulers            | • Tankers      | • Power Generators      | • Drilling Rigs |
| • Grain Processing Plants | • Cranes       | • Forklifts             | • Work Boats    |
| • Refinery Processing     | • Vehicles     | • Underground Equipment | • Barges        |
| • Fueling Vehicles        | • Tow Vehicles | • Support Vehicles      | • Welders       |
| • Pump Trucks             | • Fire Trucks  | • Vacuum Trucks         |                 |

Valve Sizes



Nominal Valve Size [OD]	Dimensions					Weight
	Bore [ID]	Housing OD [A]	Height [B]	Width [C]	Trigger [D]	
38 mm [1.5 in]	29 mm [1.14 in]	46 mm [1.81 in]	126.4 mm [4.97 in]	55.6 mm [2.19 in]	63.5 mm [2.5 in]	0.6 kg [1.3 lb]
44.5 mm [1.75 in]	35.5 mm [1.40 in]	65 mm [2.56 in]	129.8 mm [5.11 in]	61.9 mm [2.44 in]	57 mm [2.22 in]	0.7 kg [1.5 lb]
51 mm [2.0 in]	42 mm [1.65 in]	65 mm [2.56 in]	129.8 mm [5.11 in]	61.9 mm [2.44 in]	57 mm [2.22 in]	0.7 kg [1.5 lb]
57 mm [2.25 in]	48 mm [1.89 in]	65 mm [2.56 in]	129.8 mm [5.11 in]	61.9 mm [2.44 in]	57 mm [2.22 in]	0.7 kg [1.5 lb]
64 mm [2.5 in]	55 mm [2.17 in]	81.5 mm [3.21 in]	135.9 mm [5.35 in]	70.1 mm [2.76 in]	59.5 mm [2.34 in]	0.8 kg [1.7 lb]

All information contained in this document is for reference only, subject to change without notice.



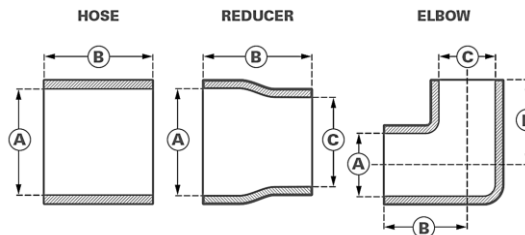
800.663.0096 / www.pacbrake.com

**Valve Selection Guide**

The PH1 Air Shut-off valve shall be sized to minimize the flow restriction on the engines inlet system with the sizing recommended below: Specific flow restriction requirements must be confirmed by the system builder to meet any engine manufacturers requirements.

Valve Size (Hose Bore Diameter)	Recommended Engine Power (HP)		
	Min <sup>1</sup>	Optimal <sup>2</sup>	Max <sup>3</sup>
38 mm [1.5 in]	14	25	32
44.5 mm [1.75 in]	25	43	55
51 mm [2.0 in]	42	70	89
57 mm [2.25 in]	56	96	122
64 mm [2.5 in]	73	129	160

**Hoses**



**Description**

**Temperature Range**

**Burst Pressure Rating**

**Nominal Wall Thickness**

Silicone Class "A", 4 Ply Polyester Reinforced  
 -55°C to +175°C [-67°F to +347°F]  
 1 MPa [145 psi]  
 5.5 mm [.217 in]

Part Number	Hose Type	'A' – Diameter	'B' – Hose Length	'C' – Diameter
C5082	Straight	38.1mm [1.5 in]	76.2 mm [3.0 in]	N/A
C3912	Straight	44.5mm [1.75 in]	76.2 mm [3.0 in]	N/A
C3913	Straight	50.8 mm [2.0 in]	76.2 mm [3.0 in]	N/A
C3914	Straight	57.2 mm [2.25 in]	76.2 mm [3.0 in]	N/A
C3997	Straight	63.5 mm [2.5 in]	76.2 mm [3.0 in]	N/A
C4070	Reducer	44.5 mm [1.75 in]	76.2 mm [3.0 in]	38.1 mm [1.5 in]
C3835	Reducer	69.9 mm [2.75 in]	76.2 mm [3.0 in]	44.5 mm [1.75 in]
X6225	Reducer	57.2 mm [2.25 in]	76.2 mm [3.0 in]	50.8 mm [2.0 in]
C5011	Reducer	63.5 mm [2.5 in]	76.2 mm [3.0 in]	50.8 mm [2.0 in]
C3783	Reducer	69.9 mm [2.75 in]	76.2 mm [3.0 in]	63.5 mm [2.5 in]
C4108	Reducer	76.2 mm [3.0 in]	76.2 mm [3.0 in]	63.5 mm [2.5 in]
C3866	Reducer	88.9 mm [3.5 in]	76.2 mm [3.0 in]	63.5 mm [2.5 in]

<sup>1</sup> Correlates to approximately 0.5kPa ΔP in open position during engine peak power

<sup>2</sup> Correlates to approximately 1.5kPa ΔP in open position during engine peak power

<sup>3</sup> Correlates to approximately 2.5kPa ΔP in open position during engine peak power

All information contained in this document is for reference only, subject to change without notice.



**Clamps**



**Description** Stainless Steel, Constant Tension Gear Clamp, Heavy Duty  
**Standard** SAE J1508 Type SLHD  
**Size Range** 45 mm to 80 mm [1.75 in to 3.13 in]  
**Installation Torque** 8.5 Nm [75 in-lbf]

Part Number	SAE Size	Minimum Diameter	Maximum Diameter	Band Width	Pipe Size: <sup>4</sup>
C4131	212	31.8 mm [1.25 in]	54.0 mm [2.125 in]	15.9 mm [0.625 in]	1.5 in
C3975	262	44.5 mm [1.75 in]	66.7 mm [2.625 in]	15.9 mm [0.625 in]	1.75 in – 2.0 in
C3976	312	57.2 mm [2.25 in]	79.4 mm [3.125 in]	15.9 mm [0.625 in]	2.25 in



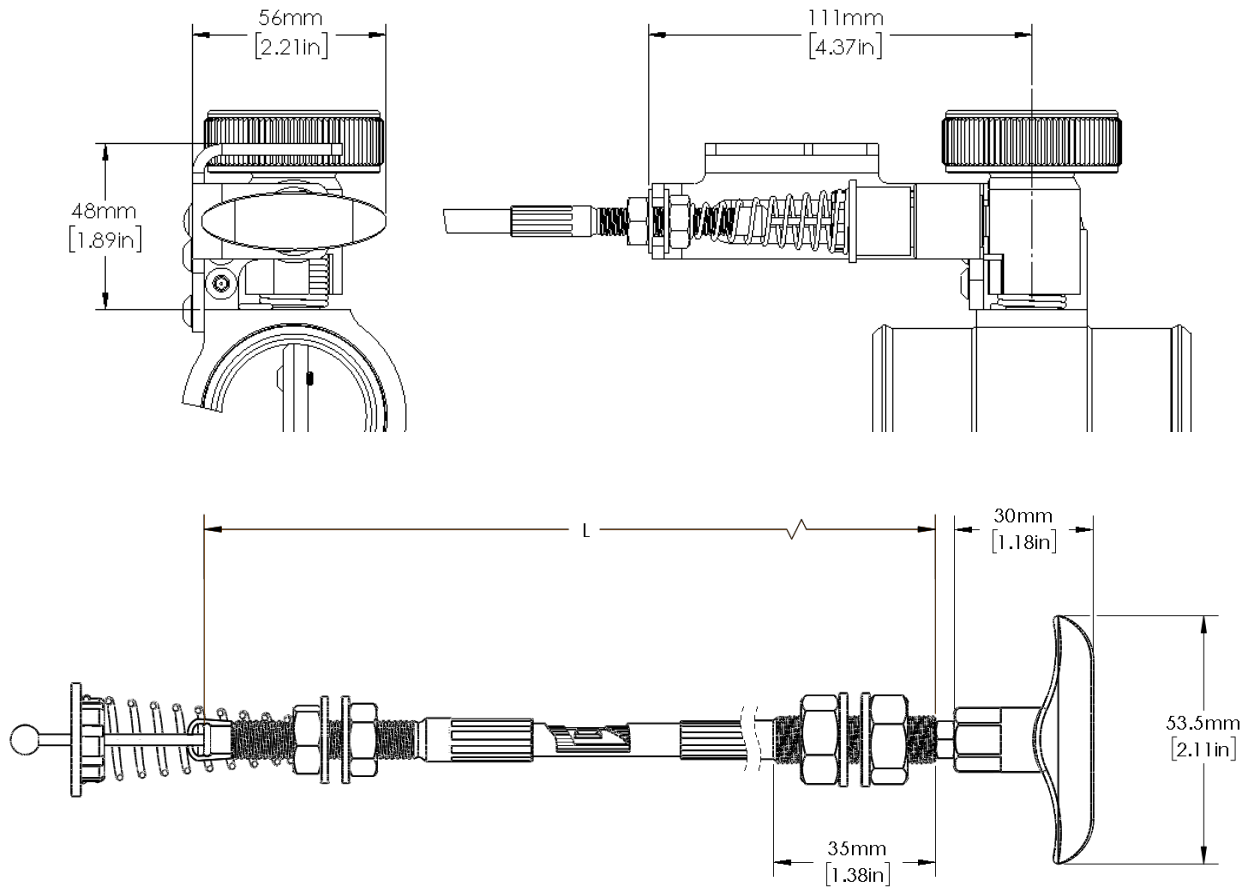
**Description** Stainless Steel, Spring Loaded T-Bolt Clamp, Heavy Duty  
**Standard** SAE J1508 Type SLTB  
**Size Range** 70 mm to 152 mm [2.75 in to 6 in]  
**Installation Torque** 8.5 Nm [75 in-lbf]

Part Number	SAE Size	Minimum Diameter	Maximum Diameter	Band Width	Pipe Size: <sup>4</sup>
C3871	60	69.9 mm [2.75 in]	77.8 mm [3.063 in]	19.1 mm [0.75 in]	2.5 in
C3872	68	76.2 mm [3.0 in]	84.1 mm [3.313 in]	19.1 mm [0.75 in]	2.75 in
C3873	76	82.6 mm [3.25 in]	90.5 mm [3.563 in]	19.1 mm [0.75 in]	3.0 in
C3875	92	95.3 mm [3.75 in]	103.2 mm [4.063 in]	19.1 mm [0.75 in]	3.5 in

<sup>4</sup> When paired with a Pacbrake Silicone hose

All information contained in this document is for reference only, subject to change without notice.

**Pull Cable Activation**



<b>Minimum Cable Bending Radius</b>		90 mm [3.54 in]				
<b>Cable Part Numbers</b>		C50018	C50022	C50026	C50030	C50035
<b>Cable Lengths [L]</b>	mm	610	1220	1830	2440	3050
	ft	2	4	6	8	10
<b>Default Position</b>		Handle retracted				
<b>Cable Weight (Reference)</b>		0.29 kg [0.64 lb] for 1830 mm [6 ft] Length				
<b>Total degrees of all bends</b>		360° maximum				
<b>Through-hole size</b>		11 mm [7/16 in]				
<b>Ambient Temperature Range</b>		-40°C to 85°C [-40°F to 185°F]				
<b>Minimum Cable Activation Pull Force</b>		50 N [11.2 lbf]				
<b>Minimum Stroke for Activation</b>		12 mm [0.47 in]				
<b>Activation</b>		Pull to shut valve				

All information contained in this document is for reference only, subject to change without notice.



800.663.0096 / [www.pacbrake.com](http://www.pacbrake.com)