# Air Start Valve

### Model 4123C

#### Overview

The Model 4123C is a pilot-operated control valve with instant open-close action handling high flow rate air at high pressure designed for use on diesel and gas engine air starting systems.

### **Typical applications**

 Designed for use on diesel and gas engine air starting systems

### **Key benefits**

- Electric, pneumatic or manual actuation can be used in many systems
- On/off with vent action
- Flanged or screwed ports suitable for any system
- Solenoid versions to 35 bar (500 psi) rating



Model 4123C Air Start Valve



# Specification

### **Valve body**

Bronze to BS 1400 LG2					
Nitrile rubber					
DIN 2503, ND40 or ports threaded 1" NPT or					
3/8" NPT or BSPT					
3.0 bar	44 psi				
35.0 bar 500 psi					
13					
6.5 - 7.2 kg					
	Nitrile rubber DIN 2503, ND40 3/8" NPT or BSPT 3.0 bar 35.0 bar				

### Manual operator push button

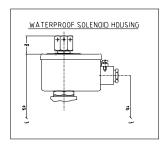
Stroke	3mm (approximate)						
Maximum force required	11 kg (25 lbs)	11 kg (25 lbs)					
Air pilot operator							
Minimum pilot pressure	3.0 bar	3.0 bar 44 psi					
Maximum pilot pressure	17.2 bar	17.2 bar 250 psi					
Maximum line pressure	35.0 bar	35.0 bar 500 psi					
Weatherproof	IP67						

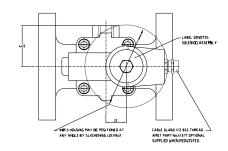
# **Electrical solenoid operator**

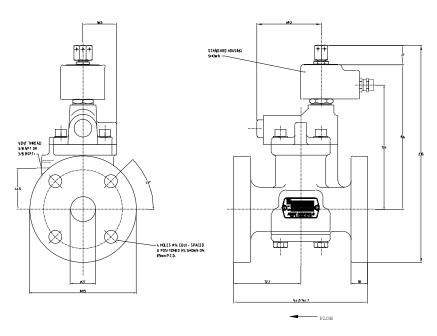
Voltage	12 or 24 volts DC Continuously rated, co	110 or 220 volts AC* nsuming 8 Watts	
Weatherproof	IP43 (standard)	IP67 (optional)	
Maximum line pressure	27 bar	400 psi	

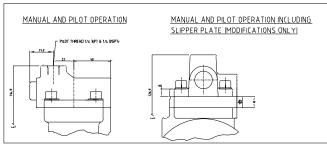
<sup>\*</sup> For AC voltage operation, the valve is supplied with flying leads and terminal box containing an encapsulated rectifier and terminal block.

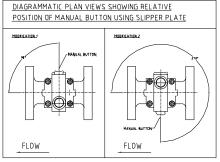
# **Dimensions**

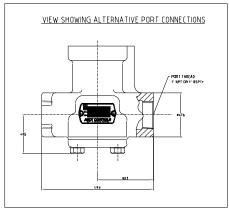












## Flow data

$$\triangle P = \left(\frac{Q}{1360 \text{ Cv}}\right)^2 \left(\frac{G (T + 460)}{P_{in}}\right)$$

Pressure drop through valve can be calculated using the formula opposite.

Q = Flow-standard cubic feet per hour

P<sub>in</sub> = Inlet pressure PSIA

T = Temperature in °F

G = Specific gravity of gas

## How to order

Use the tables below to select the unique specification of your 4123C air start valve.

Example	4123C	1	2	1	2	N	N	AA	Comments
									Model
Basic Model	4123C				: : :				Bronze to BS 1400 LG2 body
			: : : :		• : • :				Туре
Madaltona		1					: . : .		Manual and air pilot
Model type		2			:::		• ; • ;		Manual and electrical solenoid
					• : • :				Connection
Valve line connection			1		. : : :		: : :		Flanges to ND40: DIN 2503
			2				· ; · ;		Threaded ports: 1 inch BSPTr
					$\cdots$		$\vdots$		Thread
				1	. : :		: : :		1/4" BSP Tr: 3/8" BSP Tr vent thread (not on
Pilot thread: vent thread									solenoid version)
					• : • :		: : :		NPT - non standard, please contact AMOT
					:·:·				Operator
Manual operator position					0				Standard - push button over valve exit port
		1			1		: : ·		Push button rotated 90° clockwise
Plantal operator position					2				Push button rotated 270° (rotated push button
									increases valve height by 11mm)
					٠.٠.		Special requirements		
Α						12 Volt DC: 10.8 - 13.8 VDC			
						В	:::		24 Volt DC: 21.6 - 27.6 VDC
				· . · .		110 Volt AC: 99 - 126.5 VAC			
Special requirements H			. : : :		220 Volt AC: 198 - 253 VAC				
:				:·:·		Without solenoid - ie. Air Pilot models (all coils			
					Ν			are continuously rated, consuming 8 watts)	
								Calamaid Hausing	
1.1.						Solenoid Housing			
Solenoid housing type  A B			_		Standard housing to IP43				
				Waterproof housing to IP67					
N						Without housing - ie. Air pilot models			
						Coil voltage			
Coil voltage (solenoid operator)			AA	Standard construction - no special requirements					

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

