## 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

Material	Bronze to BS 1400 LG2 Nitrile rubber					
Seals material						
Valve flanges	DIN 2503, ND40 or ports threaded 1" N					
Vent port threaded	3/8" NPT or BSPT					
Minimum line pressure	3.0 bar	44 psi				
Maximum line pressure	35.0 bar	500 psi				
Valve Cv factor	13					
Net weight	6.5 - 7.2 kg					

#### Manual operator push button

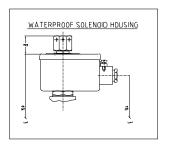
Stroke	3mm (approximate)						
Maximum force required	11 kg (25 lbs)	11 kg (25 lbs)					
Air pilot operator							
Minimum pilot pressure	3.0 bar	44 psi					
Maximum pilot pressure	17.2 bar	250 psi					
Maximum line pressure	35.0 bar	500 psi					
Weatherproof	IP67						

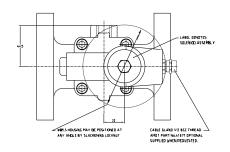
### **Electrical solenoid operator**

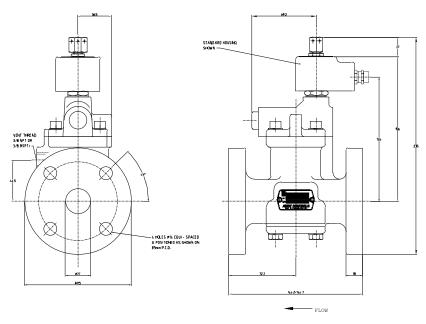
Voltage	12 or 24 volts DC Continuously rated, co	110 or 220 volts AC* suming 8 Watts		
Weatherproof	IP43 (standard)	IP67 (optional)		
Maximum line pressure	27 bar	400 psi		

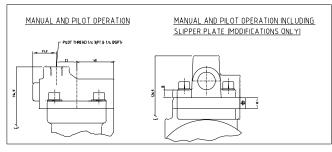
<sup>\*</sup> For AC voltage operation, the valve is supplied with flying leads and terminal box containing an encapsulated rectifier and terminal block.

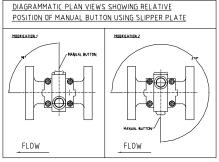
## **Dimensions**

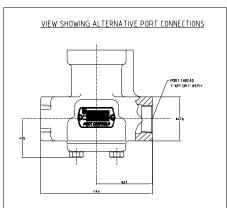












## Flow data

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

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	Ν	Ν	AA	Comments
									Model
Basic Model	4123C								Bronze to BS 1400 LG2 body
									Туре
Model type	1 ::::			$\cdot \cdot \cdot$				Manual and air pilot	
Model type		2			$\vdots$		:::		Manual and electrical solenoid
									Connection
Valve line connection			1		• : • :		::		Flanges to ND40: DIN 2503
			2				÷		Threaded ports: 1 inch BSPTr
									Thread
	Pilot thread: vent 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
					0		:::		Standard - push button over valve exit port
Manual operator position	1					::		Push button rotated 90° clockwise	
Transaction position			2			1	Push button rotated 270° (rotated push button		
								increases valve height by 11mm)	
									Special requirements
				A			12 Volt DC : 10.8 - 13.8 VDC		
						В			24 Volt DC : 21.6 - 27.6 VDC
Special requirements  G H					110 Volt AC : 99 - 126.5 VAC				
					220 Volt AC : 198 - 253 VAC				
				N.		• : • :		Without solenoid - ie. Air Pilot models (all coils	
						N		1	are continuously rated, consuming 8 watts)
								Solenoid Housing	
A					Α		Standard housing to IP43		
			В		Waterproof housing to IP67				
N					_		Without housing - ie. Air pilot models		
									Coil voltage
Coil voltage (solenoid operator)				АА	Standard construction - no special requirements				