

C345 SERIES PNEUMATIC VALVES



- 125 PSI AIR —
- 4-WAY, 2 POSITION, $\frac{3}{8}$ NPT —
- SINGLE OR DOUBLE AIR PILOT —
- SINGLE OR DOUBLE SOLENOID —
- IN-LINE, BRACKET AND MANIFOLD MOUNTING —
- RUGGED MACHINE TOOL QUALITY & CONSTRUCTION —



CONTROL LINE EQUIPMENT, INC.

14750 Industrial Parkway • Cleveland, Ohio 44135
(216) 433-7766 • FAX: (216) 433-7664

SOLENOID VALVES

The C345 Solenoid Valves are a rugged yet compact valve which feature Delrin Sleeve construction to reduce friction for smooth performance and long life. They are available as single or double solenoid, internal or external piloted, and can be mounted in-line, on CMX Series Manifolds or with mounting brackets. All solenoid valves have non-locking manual overrides. The valve cover serves as a junction box for easy wiring and can be removed without disconnecting wiring.



SPECIFICATIONS

Flow to atmosphere at 125 PSIG	140 SCFM
Pressure range	
E1/E2	30-125 PSIG
AE1/AE2	0-125 PSIG
A/A2	0-125 PSIG
External pilot pressure AE1/AE2	Equal to valved pressure, 30 PSIG minimum
Pilot pressure A/A2	Valved Pressure
	30 60 100
Minimum pilot pressure	C(M)345-4A 30 40 55
	C(M)345-4A2 15 15 15
Temperature range:	
Solenoid	-20 to 150 F
Piloted	-20 to 180 F
Operating speeds:	
E1/E2 & AE1/AE2	to 600 CPM
A/A2	to 900 CPM
Materials	Aluminum, Diecast zinc, Delrin Stainless steel, Buna-N or Viton
Medium	Air
Lubrication	Recommended for all models
Weight:	
Valves- C(M)345-4E1/4AE1	1 lb. 13 oz.
C(M)345-4E2/4AE2	2 lb. 3 oz.
C(M)345-4A/4A2	13 oz.
Manifolds- CMX2	2 lb. 8 oz.
	add 1 lb. 4 oz. per additional station.

ELECTRICAL SPECIFICATIONS

VOLTAGE	WATTS	OHMS	DC RANGE
240 VAC*	6.1	1350	65-140
120 VAC*	8.2	255	35-60
24 VAC[]	6.0	86	21-31
24 VDC	6.6	86	—
12 VDC	7.4	19	—

AC Voltages are dual frequency 50 and 60 hertz.
Voltage fluctuations: Coils are designed for service at plus 10%, minus 15% of rated voltage.

Rectifiers: Ohms resistance readings are without rectifiers.

*Silicon, halfwave 600 P.I.V. avalanche-type rectifier installed in black lead.

[] Two silicon halfwave 600 P.I.V. avalanche-type rectifiers in "fly-wheel" configuration. One installed in black lead, the other bridges the black and yellow leads.

Note: Control circuits must accommodate rectifiers used in AC voltage valves.

Lead wires: 24 inches from coil standard.

Other voltages: Consult factory.

RESPONSE TIME @ 100 PSIG

MODEL	AC		DC	
	OPEN	CLOSE	OPEN	CLOSE
C(M)345-4E1/4AE1	.018	.043	.028	.043
C(M)345-4E2/4AE2	.010	.010	.024	.024

FLOW CO-EFFICIENT

All in-line valvesCV = 1.5
All manifold mount valvesCV = 1.1

ORDERING EXAMPLES

Valves.....C345-4A
 C345-4E1 120/60
 CM345-4E2-LL-39 24VDC
ManifoldsCMX2 (two station manifold)
 CMX7 (seven station manifold)
 8-39A (CMX manifold block-off plate)

Model Symbol

Description

C345-4E1 	4-way, 2 position, single solenoid, spring return, internal pilot, in-line mount
C345-4E2 	4-way, 2 position, double solenoid, internal pilot, in-line mount
C345-4AE1 	4-way, 2 position, single solenoid, spring return, external pilot, in-line mount
C345-4AE2 	4-way, 2 position, double solenoid, external pilot, in-line mount
CM345-4E1 	4-way, 2 position, single solenoid, spring return, internal pilot, manifold mount
CM345-4E2 	4-way, 2 position, double solenoid, internal pilot, manifold mount
CM345-4AE1 	4-way, 2 position, single solenoid, spring return, external pilot, manifold mount
CM345-4AE2 	4-way, 2 position, double solenoid, external pilot, manifold mount

See page 4 for dimensional information

AIR PILOTED VALVES

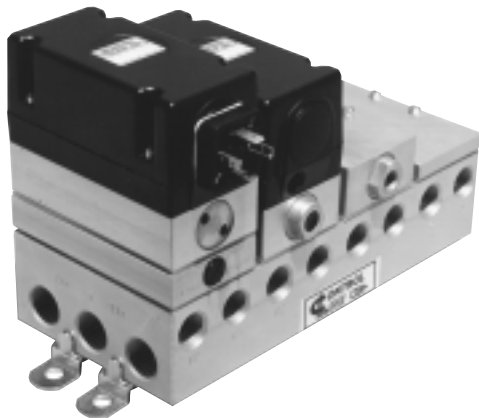


The C345 Air Piloted Valves are a rugged yet compact valve which feature Delrin Sleeve construction to reduce friction for smooth performance and long life. They are available as single or double air piloted, and can be mounted in-line, on CMX Series Manifolds or with Mounting Brackets.

Model	Description	Symbol
C345-4A	4-way, 2 position, air piloted, spring return, in-line mount	
C345-4A2	4-way, 2 position, double air piloted, in-line mount	
CM345-4A	4-way, 2 position, air piloted, spring return, manifold mount	
CM345-4A2	4-way, 2 position, double air piloted, manifold mount	

See page 4 for dimensional information

MANIFOLDS, OPTIONS AND ACCESSORIES



CMX SERIES MANIFOLDS

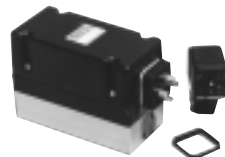
Manifolds permit centralized location of control valves, simplify plumbing and reduce installation costs. Valves and manifolds can be sub-assembled and placed in the end product as a complete, unitized control unit, thereby saving the time and labor involved with installing valves individually.

CMX series manifolds are of rugged, one-piece extruded aluminum construction and are available in models for two to seven stations. A CMX manifold has a common inlet and two common (captured) exhausts. Captured exhaust is desirable when exhausting medium must be piped away to avoid contamination of the ambient area, as in clean rooms.

Valves mount in either of two positions. The position of the electrical connections can be changed by reversing the valve on the manifold.

A CMX series manifold will accept any combination of single or double solenoid and single or double air piloted CM345 valves.

The manifold is furnished with four mounting brackets and screws.



PLUG-IN ELECTRICAL CONNECTOR, CODE 39

This optional plug-in electrical connector simplifies wiring and speeds installation. The HS-4 socket for single or double solenoid valves is not supplied with Code 39. Order separately. Cord not included.



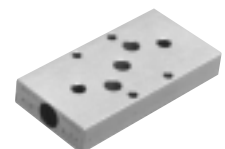
BLOCK-OFF PLATE, 8-39A

This block-off plate may be used either to suspend use of a station or to reserve a station for future use.



MOUNTING BRACKET, 8-45A

The 8-45A mounting bracket comprises of two "Z" type shouldered mounting brackets and two $\frac{5}{16}$ -18 x $\frac{3}{8}$ long screws. Bracket and screws are plated steel.



SPEED CONTROL, CODE 74

This unit, for use with CM345 series manifold valves, provides controlled exhaust flow in both modes of valve operation. The exhaust is ported to the manifold and may be captured.

