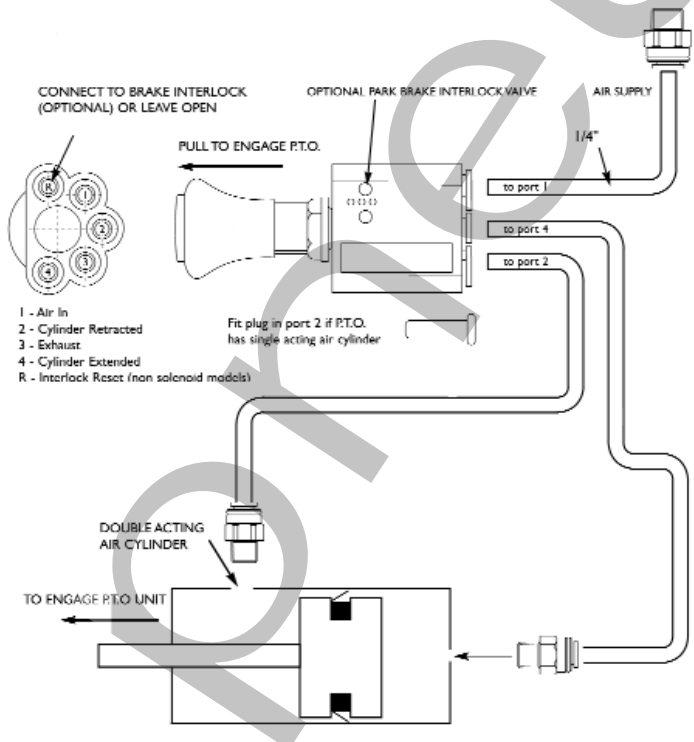


Air Or Electric Reset

The reset port can be connected to the handbrake line to force valve "shutoff" whenever the handbrake is released. This would prevent the simultaneous consumption of energy from auxiliary equipment and the moving vehicle, a situation likely to result in a stall condition or equipment damage. On electrical interlock models, removing the electrical supply will force shutoff.

ACVs are rear ported to simplify dashboard or panel mounting. All mountings are supplied with integral push-in fittings (for 5/32" or 1/4" tube). Simply push the tube directly into the valve.

Sample Hook-Up To Mobile PTO System



Ideal For Mobile Equipment Applications

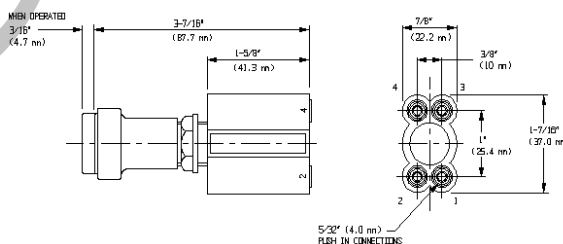
2-position ACV valves can be used for four-way directional control or as a three-way pilot valve. Its function indicator has been designed directly into the control knob and is visible only when the valve is in the energized or open position. In the unoperated (closed) position the indicator ring is concealed within the knob assembly.

ACV features an optional interlock reset port which can be used to automatically return the valve to the closed position. Designed for mobile equipment operations to avoid stall conditions, the interlock feature is used to ensure that the PTO cannot be operated while the vehicle is in motion.

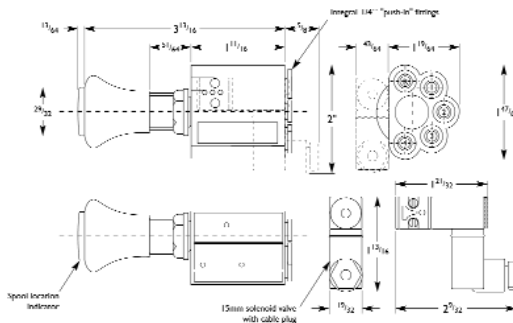
Model	Ports	Knob Color	Solenoid
ACV-R16	5/32" Push-In Fittings (4)	Red	-
ACV-B16	5/32" Push-In Fittings (4)	Black	-
ACV-R25	1/4" Push-In Fittings (5)	Red	-
ACV-B25	1/4" Push-In Fittings (5)	Black	-
ACV-R25A	1/4" Push-In Fittings (5)	Red	1.5W, 12VDC
ACV-B25A	1/4" Push-In Fittings (5)	Black	1.5W, 12VDC
ACV-R25B	1/4" Push-In Fittings (5)	Red	1.5W, 24VDC
ACV-B25B	1/4" Push-In Fittings (5)	Black	1.5W, 24VDC

Dimensions

5/32" Models



1/4" Models



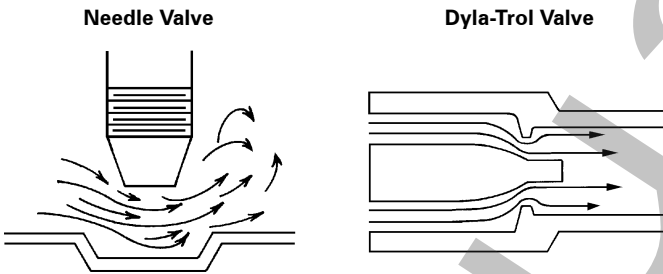
General Specifications

Media:	Air to 145 PSI (10 Bar)
Min. Pressure to Reset Port :	35 PSI
Flow (5/32" models):	0.053 C _v
Flow (1/4" models):	0.12 C _v
Neck Diameter For Panel Mounting :	1 1/16"
Body:	Plastic
Spool:	Brass
Fittings:	Brass and Plastic
Seals:	PTFE filled Nitrile
Temperature:	-4° to 122°F
Cycle Life:	>15 Million



Smooth Laminar Flow

The unique construction of Dyla-Trol® assures a perfectly tapering flow. This unprecedented smoothness is made possible by the "iris" type orifice mechanism. Where needle-type flow controls generate turbulence as they close, Dyla-trol® maintains an even 360° laminar flow regardless of the setting.



High Repeatability

The fast-acting check mechanism in each free flow model responds to very slight changes in pressure. This guarantees fast resetting and dependable repeatability with each cycle.

Models and Specifications

Flow Direction	MF1-02	MF1-04	MF1-06	MF1-08	MF1-12	MF1-25	MF1-37	MF1-50
Max. Pressure in PSI	250 Air 250 Oil	250 Air 250 Oil	250 Air 250 Oil	250 Air 250 Oil	250 Air 1000 Oil	250 Air 1000 Oil	250 Air 1000 Oil	250 Air 1000 Oil
Max. Flow @ 100 PSI	8 CFM C _v = 0.1	7 CFM C _v = 0.1	7 CFM C _v = 0.1	7 CFM C _v = 0.1	47 CFM C _v = 0.8	66 CFM C _v = 1.2	149 CFM C _v = 2.6	173 CFM C _v = 3.1
Body Length	1 1/4"	2 1/2"	2 7/16"	2 1/2"	2"	2 1/2"	2 7/8"	3 1/4"

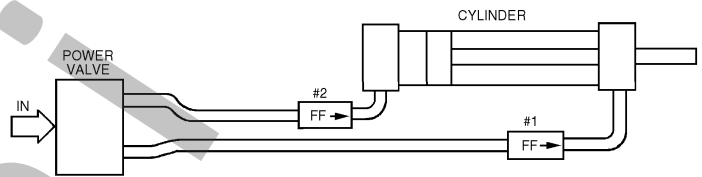
Precise-Metering Flow Control

Fine tune the speed of your cylinders with precise-metering Dyla-Trol® valves. No other flow control provides such accurate control of cylinder motion.

For best results locate flow control valves right on the cylinder ports with the "free flow" direction pointing toward the cylinder. Air exhausting from the cylinder will then be metered. Controlling air entering the cylinder produces a less smooth motion.

Note: While Dyla-Trol® are most often used to adjust cylinder speed, they are ideal for use wherever air or oil flow is to be controlled.

TYPICAL CYLINDER HOOK-UP



In this circuit, flow control #1 controls the outward movement of the cylinder rod and flow control #2 controls the return speed.

Compact Inline Design

The convenient inline design makes flow setting and plumbing easy. The hexagonal adjusting sleeve, which may be turned by hand, is only slightly greater in diameter than the tubing and has no protuberances to impair hook-up.

Each Valve Factory "Tuned" for Accuracy

To accomplish the perfect orifice concentricity that is necessary to produce the high performance of Dyla-Trols, each sleeve and body set is permanently mated during production.

Temperature Range

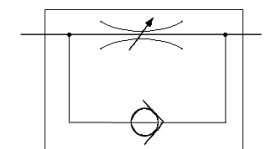
-40°F to +250°F

NOTE: For Right Angle Flow Controls see page 86.

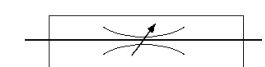
Equal Control

Models MF1-12, MF1-25, MF1-37 and MF1-50 are available with equally controlled flow in both directions (no free flow). When ordering specify MF2-12, MF2-25, MF2-37 or MF2-50. Prices remain the same.

Symbols



MF1 Style



MF2 Style

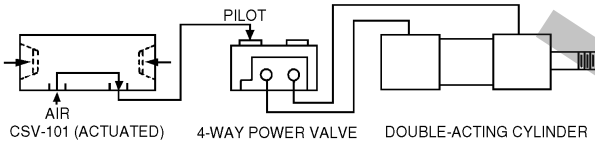


Function of CSV's

Concurrent actuation of the recessed buttons generates a signal. Releasing one or both buttons immediately stops the signal which cannot be re-instituted until both buttons are again actuated concurrently.

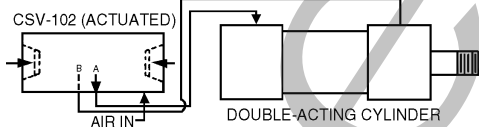
Low Stress (LS) models are for high production applications where operator fatigue is a concern. Needing only 6 ounces of force to actuate, LS units ease the stress on worker's hands and wrists and greatly reduce the risk of repetitive motion disorders. Standard models require 18 ounces of force to actuate.

CSV-101 & CSV-101LS



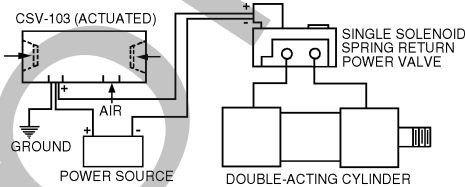
Will actuate any 3 or 4-way air piloted, spring return power valve or small single-acting cylinders. ($C_v = 0.11$)

CSV-102 & CSV-102LS



Complete power package containing a 4-way power valve ($C_v = 1.00$) for direct actuation of single-acting or double acting air cylinders. Actuation sends a sustained air flow to one cylinder port. Releasing one or both buttons shifts the flow to the other cylinder port. Built-in mufflers reduce sound levels. Quick-connect fittings included.

CSV-103



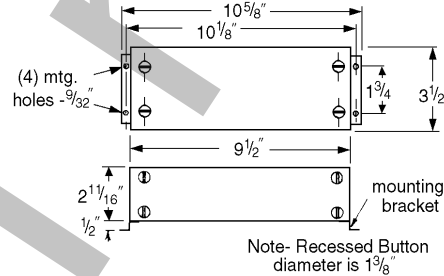
Converts an air signal into an electrical signal for actuating solenoid valves or other electrical devices. Concurrent actuation of the recessed buttons produces an electrical output. Releasing one or both buttons stops the output. The CSV-103 will not recycle until both triggers are released and again actuated concurrently. Internal switch rated at 15 amps, 480 VAC. Includes lead wire and receptacle.

For Safer Operation of Your Machinery

CSVs are two-hand anti-tiedown controls. When used, they provide safer operation of air presses, drill fixtures, clamping fixtures, cylinders, valves, or light assembly equipment. Models 101, 101LS, 102, 102LS and 103 have compact and completely self-contained controls, recessed actuation buttons built in the ends and a universal mount for convenient positioning. For remote two-hand, anti-tiedown operations, see model CSV-107 below.

Note: Operating pressure range is 70 - 120 PSI.

Dimensions (Except Model CSV-107)

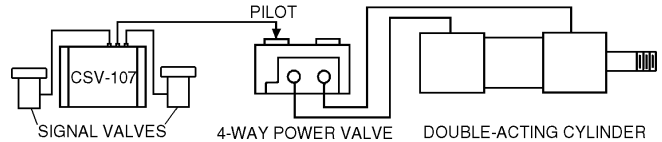


CSV-107 Logic Unit Responds To Remote Signals



Basic dimensions of CSV-107 logic unit are $6 \frac{5}{8} \times 2 \frac{5}{8} \times 1 \frac{13}{16}$

CSV-107 is designed to actuate 3 or 4-way air piloted, spring return - power valves or directly power smaller single-acting cylinders. A signal can only be initiated by concurrent actuation from two remote inputs. Releasing one or both buttons immediately stops the signal and the unit cannot recycle until both signals are again simultaneously actuated. ($C_v = 0.11$)



The CSV-107 may be purchased alone or with low stress signal valves (LS1, LS2). For information on Mead Low Stress Valves, which are offered with CSV Low Stress (LS) units, please refer to page 23.

Specifications

Model No.	Function	Ports (NPTF)
CSV-101	Actuation of Power Valve	(2) $\frac{1}{8}$ "
CSV-101 LS	CSV-101, With Low Stress Actuation	(2) $\frac{1}{8}$ "
CSV-102	Direct Actuation of Air Cylinder or Air Press	(3) $\frac{1}{4}$ " Fittings
CSV-102 LS	CSV-102, With Low Stress Actuation	(3) $\frac{1}{4}$ " Fittings
CSV-103	Electrical Actuation of Solenoid Valve	(1) $\frac{1}{8}$ "
CSV-107	Remote Logic Unit Only	(3) Fittings
CSV-107 LS1	Logic Unit, (2) LTV-PBG Low Stress Valves	Included for
CSV-107 LS2	Logic Unit, (2) LTV-PBGF Low Stress Valves	$\frac{5}{32}$ " OD Tube

Warning: CSV's are intended to operate pneumatic valves and cylinders. They are not meant to be used on full or partial revolution fly wheel presses, power brakes or other similar devices.

Warning: Actuators for CSV-107 must be positioned so that they may not be accidentally tripped or operated in an unsafe manner. Do not actuate CSV-107 with foot operated valves.



CSV-111

Installs In Minutes

Connect and Go! These units are completely self-contained and pre-packaged controls. Simply connect the output to an appropriate valve or cylinder and plug the power cord to a 120VAC outlet and your control is fully operational. Mounts on any flat surface.

Years of Reliable Service

Every No-Touch unit is fully tested to 5000 cycles! Units are solid state with no mechanical switches or relays to wear out, ensuring years of reliable service in any application.

End cap switches are reliable even in harsh environments. Dust impenetrable and resistant to chemicals and moisture, end caps require no additional gaskets or sealing.

Pneumatic or Electrical Output

While all "No Touch" models utilize a 120VAC power supply, each model provides a different output. CSV-109 (24VDC) and CSV-110 (120VAC) each provide electrical outputs while CSV-111 releases an air signal upon actuation.

Model	Input	Output	Switch Location
CSV-109	120VAC	24VDC (Max. Draw 400 mA)	End Caps
CSV-109R	120VAC	24VDC (Max. Draw 400 mA)	Remote*
CSV-110	120VAC	120VAC (Max. Draw 5A)	End Caps
CSV-110R	120VAC	120VAC (Max. Draw 5A)	Remote*
CSV-111	120VAC	Pneumatic Signal	End Caps
CSV-111R	120VAC	Pneumatic Signal	Remote*

* Remote End Caps include 6' of wire to connect to main unit.

WARNING!

"No Touch" CSV units are two-hand starting switches. They are not a complete press control. CSV's are intended to operate pneumatic valves and cylinders. They are not meant to be used on full or partial revolution flywheel presses, power brakes or other similar devices; therefore such applications are absolutely prohibited.

"No Touch" Units Provide Operator Relief

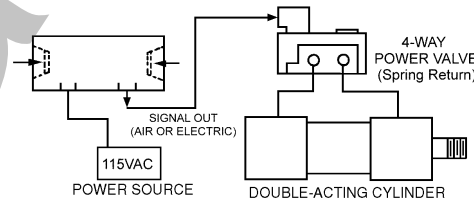
Protect your machine operators from the physical stress due to repetitive operations. These unique devices allow for "no touch" control of electric or pneumatic signals while providing user safety with two-hand no-tiedown actuation.

Zero Force Required

To activate these units, simply interrupt the photo optic beams in the recessed end caps. Units may be ordered with either attached or remote end caps. Remote end caps can be mounted virtually anywhere, including panel mounts.

Two-Hand Safety Control

To generate a signal from a "No-Touch" CSV device, simultaneous interruption of two infrared photo beams must occur. Located on opposite ends (standard models), interruption must occur within 1/3 of a second of each other. This interruption must be maintained for the entire cycle or the circuit will reset. At reset, both beams must again be interrupted simultaneously to generate another signal.



Certifications & Standards

No-Touch CSV units have been designed and tested to meet OSHA Standards 1910.212, 1910.217 and ANSI Z8, I-1990. They are further certified to the following:

- ANSI/UL 347
- CSA-C22.2 NO. 14-95
- UL STD. NO. 50
- ANSI/UL 508
- CSA-C22.2 NO. 94-M91

