

3-Way Miniature

Direct Acting Valves

1/8" NPT



3-Way

General Description:

3-way Miniature Direct Acting valves are suitable for low to medium pressure applications that do not require a minimum operating pressure differential, for actuation. Available in normally open, normally closed, or universal operation. Tested to 20 million cycles under lab conditions. Standard with 303 stainless steel bodies and FKM seals.

Installation

Valves can be mounted in any position. The preferred orientation is with the coil vertical and upright.

Standard Materials of Construction

Please refer to page B4.

Compatible Fluids

Lubricated Air, Inert Gases, Water, Light Oil (300 SSU) and additional fluids compatible with materials of construction.

Use of non-lubricated gaseous media can affect valve life.

Electrical Characteristics:

Standard Voltages:

AC – 24/60

120/60 – 110/50

240/60 – 220/50

DC – 12, 24

For other voltages – consult factory



Coil Classification:

Class F standard

Class H available

AC & DC coils are interchangeable on the same pressure vessel.

Agency Approvals:

Standard valves with NEMA 4X are

C-UL-US listed and CSA certified.

For additional details, consult factory.

Maximum Ambient Temperature

135°F (AC); 125°F (DC)

In the absence of moisture, applications as low as -20°F are possible.

Please refer to Page B4 for details.

Applications:

- Single acting spring return cylinder control
- Selection or diversion of process media
- HVAC damper control
- Instrumentation
- Pneumatic positioning
- Automatic dispensing equipment
- Small compressors
- Water treatment
- Air dryers
- Medical & dental equipment
- Damper control



3-Way Miniature Direct Acting - Normally Closed - Stainless Steel

Port Size NPT	Orifice Size In.		Flow Factor Cv		Operating Pressure Differential (MOPD) PSI				Watt	Max. Media Temp. °F	Seal	Pressure Vessel Number	Reference	
	In	Exh.	In	Exh.	Min.	Air, Inert Gas	Water	Light Oil					Coil	Valve
AC TECHNICAL SPECIFICATIONS														
1/8	1/32	1/32	0.02	0.02	0	250	250	250	10	240	FKM	30CC02AV4	9	B1
1/8	3/64	3/64	0.05	0.05	0	200	200	200	10	240	FKM	30CC02EV4	9	B1
1/8	1/16	1/16	0.09	0.10	0	130	130	130	10	240	FKM	30CC02GV4	9	B1
1/8	5/64	5/64	0.15	0.14	0	90	90	90	10	240	FKM	30CC02JV4	9	B1
1/8	3/32	3/32	0.19	0.20	0	75	75	75	10	240	FKM	30CC02LV4	9	B1
1/8	7/64	3/32	0.25	0.20	0	50	50	50	10	240	FKM	30CC02MV4	9	B1
1/8	1/8	3/32	0.32	0.20	0	40	40	40	10	240	FKM	30CC02PV4	9	B1
1/8	5/32	3/32	0.38	0.20	0	25	25	25	10	240	FKM	30CC02QV4	9	B1

DC TECHNICAL SPECIFICATIONS

1/8	1/32	1/32	0.02	0.02	0	250	250	250	8	240	FKM	30CC02AV4	9	B1
1/8	3/64	3/64	0.05	0.05	0	200	200	200	8	240	FKM	30CC02EV4	9	B1
1/8	1/16	1/16	0.09	0.10	0	130	130	130	8	240	FKM	30CC02GV4	9	B1
1/8	5/64	5/64	0.15	0.14	0	90	90	90	8	240	FKM	30CC02JV4	9	B1
1/8	3/32	3/32	0.19	0.20	0	75	75	75	8	240	FKM	30CC02LV4	9	B1
1/8	7/64	3/32	0.25	0.20	0	50	50	50	8	240	FKM	30CC02MV4	9	B1
1/8	1/8	3/32	0.32	0.20	0	40	40	40	8	240	FKM	30CC02PV4	9	B1
1/8	5/32	3/32	0.38	0.20	0	25	25	25	8	240	FKM	30CC02QV4	9	B1

3-Way Miniature Direct Acting - Normally Open - Stainless Steel

Port Size NPT	Orifice Size In.		Flow Factor Cv		Operating Pressure Differential (MOPD) PSI				Watt	Max. Media Temp. °F	Seal	Pressure Vessel Number	Reference	
	In	Exh.	In	Exh.	Min.	Air, Inert Gas	Water	Light Oil					Coil	Valve
AC TECHNICAL SPECIFICATIONS														
1/8	1/32	1/32	0.02	0.02	0	375	375	375	10	240	FKM	30CF02AV4	9	B1
1/8	3/64	3/64	0.05	0.05	0	230	230	230	10	240	FKM	30CF02EV4	9	B1
1/8	1/16	1/16	0.10	0.09	0	150	150	150	10	240	FKM	30CF02GV4	9	B1
1/8	5/64	5/64	0.14	0.15	0	105	105	105	10	240	FKM	30CF02JV4	9	B1
1/8	3/32	3/32	0.20	0.19	0	80	80	80	10	240	FKM	30CF02LV4	9	B1

DC TECHNICAL SPECIFICATIONS

1/8	1/32	1/32	0.02	0.02	0	375	375	375	8	240	FKM	30CF02AV4	9	B1
1/8	3/64	3/64	0.05	0.05	0	230	230	230	8	240	FKM	30CF02EV4	9	B1
1/8	1/16	1/16	0.10	0.09	0	150	150	150	8	240	FKM	30CF02GV4	9	B1
1/8	5/64	5/64	0.14	0.15	0	105	105	105	8	240	FKM	30CF02JV4	9	B1
1/8	3/32	3/32	0.20	0.19	0	80	80	80	8	240	FKM	30CF02LV4	9	B1

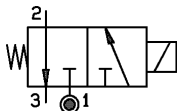
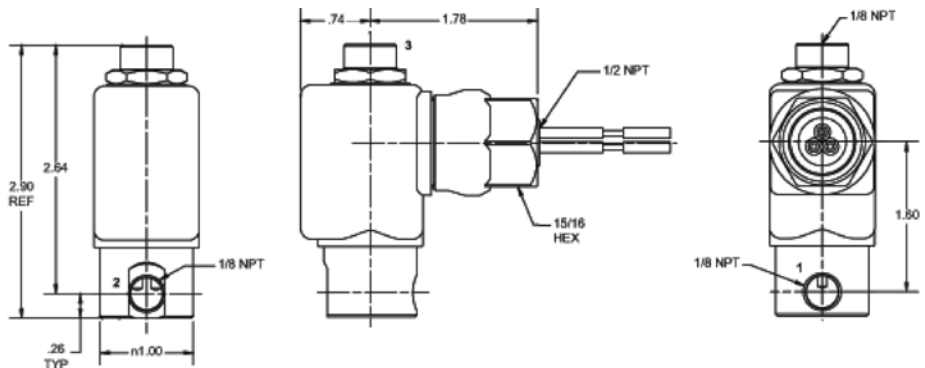


3-Way Miniature Direct Acting - Universal - Stainless Steel

Port Size NPT	Orifice Size In.		Flow Factor Cv		Operating Pressure Differential (MOPD) PSI				Watt	Max. Media Temp. °F	Seal	Pressure Vessel Number	Reference	
						Air, Inert Gas	Water	Light Oil						
	NC	NO	NC	NO	Min.								Coil	Valve
AC TECHNICAL SPECIFICATIONS														
1/8	1/32	1/32	0.02	0.02	0	200	200	200	10	240	FKM	30CU02AV4	9	B1
1/8	3/64	3/64	0.05	0.05	0	150	150	150	10	240	FKM	30CU02EV4	9	B1
1/8	1/16	1/16	0.09	0.10	0	100	100	100	10	240	FKM	30CU02GV4	9	B1
1/8	5/64	5/64	0.15	0.14	0	70	70	70	10	240	FKM	30CU02JV4	9	B1
1/8	3/32	3/32	0.19	0.20	0	50	50	50	10	240	FKM	30CU02LV4	9	B1
1/8	7/64	3/32	0.25	0.20	0	40	40	40	10	240	FKM	30CU02MV4	9	B1
1/8	1/8	3/32	0.32	0.20	0	30	30	30	10	240	FKM	30CU02PV4	9	B1
1/8	5/32	3/32	0.38	0.20	0	20	20	20	10	240	FKM	30CU02QV4	9	B1

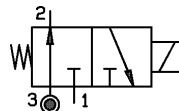
DC TECHNICAL SPECIFICATIONS														
1/8	1/32	1/32	0.02	0.02	0	200	200	200	8	240	FKM	30CU02AV4	9	B1
1/8	3/64	3/64	0.05	0.05	0	150	150	150	8	240	FKM	30CU02EV4	9	B1
1/8	1/16	1/16	0.09	0.10	0	100	100	100	8	240	FKM	30CU02GV4	9	B1
1/8	5/64	5/64	0.15	0.14	0	70	70	70	8	240	FKM	30CU02JV4	9	B1
1/8	3/32	3/32	0.19	0.20	0	50	50	50	8	240	FKM	30CU02LV4	9	B1
1/8	7/64	3/32	0.25	0.20	0	40	40	40	8	240	FKM	30CU02MV4	9	B1
1/8	1/8	3/32	0.32	0.20	0	30	30	30	8	240	FKM	30CU02PV4	9	B1
1/8	5/32	3/32	0.38	0.20	0	20	20	20	8	240	FKM	30CU02QV4	9	B1

Valve Reference B1



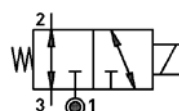
3-Way Normally Closed
30CCxx

Port Identification:
Press - 1/CYL - 2/EXH - 3



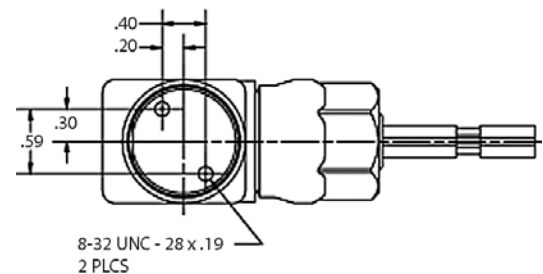
3-Way Normally Open
30CFxx

Port Identification:
Press - 3/ CYL - 2/EXH - 1



3-Way Universal
30CUxx

Port Identification:
Pressure can be applied at
either port.



3-Way Miniature Direct Acting Materials of Construction**

Product*	Watt	Type	Port Size	Body	Sleeve Tube	Sleeve Stop	Sleeve Flange	"Plunger Blank"	Plunger Spring	Shading Ring	Max. Ambient Temp.
30CC02	10 (AC)	3WNC	1/8	303SS	304SS	430FR	430FR	430FR	18-8SS	Copper	135°F
30CC02	8 (DC)	3WNC	1/8	303SS	304SS	430FR	430FR	430FR	18-8SS	Copper	125°F
30CF02	10 (AC)	3WNO	1/8	303SS	304SS	430FR	430FR	430FR	18-8SS	Copper	135°F
30CF02	8 (DC)	3WNO	1/8	303SS	304SS	430FR	430FR	430FR	18-8SS	Copper	125°F
30CU02	10 (AC)	3WU	1/8	303SS	304SS	430FR	430FR	430FR	18-8SS	Copper	135°F
30CU02	8 (DC)	3WU	1/8	303SS	304SS	430FR	430FR	430FR	18-8SS	Copper	125°F

* Shows the first 6 digits of the pressure vessel part number.

** Maximum ambient temperature shown is the rating when valve is operating at the maximum fluid temperature as shown in the product sections for each of the valves in this catalog.

Check out the 2-Way and 3-Way Manifold Mounted Miniature Cartridge valves in the Specialty Section of this catalog.



Product Features:

- Space saving approach
- Less manifold machining equals lower manifold cost
- No manifold orifices to machine or press in
- Easy to assemble & disassemble with a 5/32" hex wrench (Torque = 25-35 in-lbs)
- Cartridge valves are 100% tested
- No loose parts: sleeve, plunger, spring and orifice are pressed together as one unit
- Available with all coils/enclosures from Chart 9 in the Coil Section of this catalog