PREMIER INDUSTRIES

AO32 0.80 SERIES

Pneumatically Operated, 3 Way 2 Position
High Pressure Valves



Premier AO32 0.80 Series 3-way 2-position valves control the flow of media by connecting two of the three process ports.

Three functions in one valve:

- Normally Closed (NC):

  The valve blocks flow and vents downstream media in its default position. It allows flow when actuated.

- Normally Open (NO):

  The valve allows flow in its default position. It blocks flow and vents downstream media when actuated.

- Switching Operation:

  The valve flows through one or two outlets in its default position and switches to the other when actuated.

Premier AO32 0.80 valves are rated for pressures up to 10000 PSIG (689.5 BAR) and Cv 0.80.

FEATURES

- 3-way 2-position
- Cv 0.80
- 10000 PSIG (689.5 BAR) max operating pressure
- Robust design for long cycle life
- Customize and optimize to meet your unique requirement

SOME APPLICATIONS WILL REQUIRE A CUSTOM SOLUTION.
CONTACT PREMIER INDUSTRIES TO REQUEST A MODIFICATION OR A CUSTOM DESIGN.

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SPECIFICATIONS

- **MAXIMUM OPERATING PRESSURE :**
  - 10000 PSIG / 689.5 BAR
- **ACTUATION PRESSURE RANGE:**
  - 90-110 PSIG / 6.2-7.6 BAR
- **FLOW (Cv):** 0.80

PORTING

- **INLET & OUTLET OPTIONS**:
  - See selection chart
- **ACTUATION PORT:**
  - 1/8" FNPT
  - AS5202-04

MATERIALS OF CONSTRUCTION

PROCESS SIDE WETTED:

- **BODY/INSERT/STEM MATERIAL OPTIONS**:
  - 693 Eco Brass
  - 316 Stainless Steel
- **VALVE SEAT OPTIONS:**
  - Vespel-SP-1
  - Vespel-SP-21
- **O-RING SEAL OPTIONS**:
  - Buna-N
  - Viton-A
  - EPDM
  - FFKM
  - Polyurethane
- **LUBRICANT**:
  - Krytox 240AC *(STANDARD)*
  - Molykote 44 medium lubricant

ACTUATOR SIDE WETTED:

- **PISTON:**
  - 303 Stainless Steel
- **BONNET:**
  - 6061-T6 Aluminum, Clear Anodize

NON-WETTED:

- **SPRING**: Music Wire
- **BACKUP RINGS**: PTFE
- **OTHER**: Stainless Steel

OPTIONS

- Private label
- Solenoid valve
- Switch ports
- Indicator switch (P/N: 70-00434)

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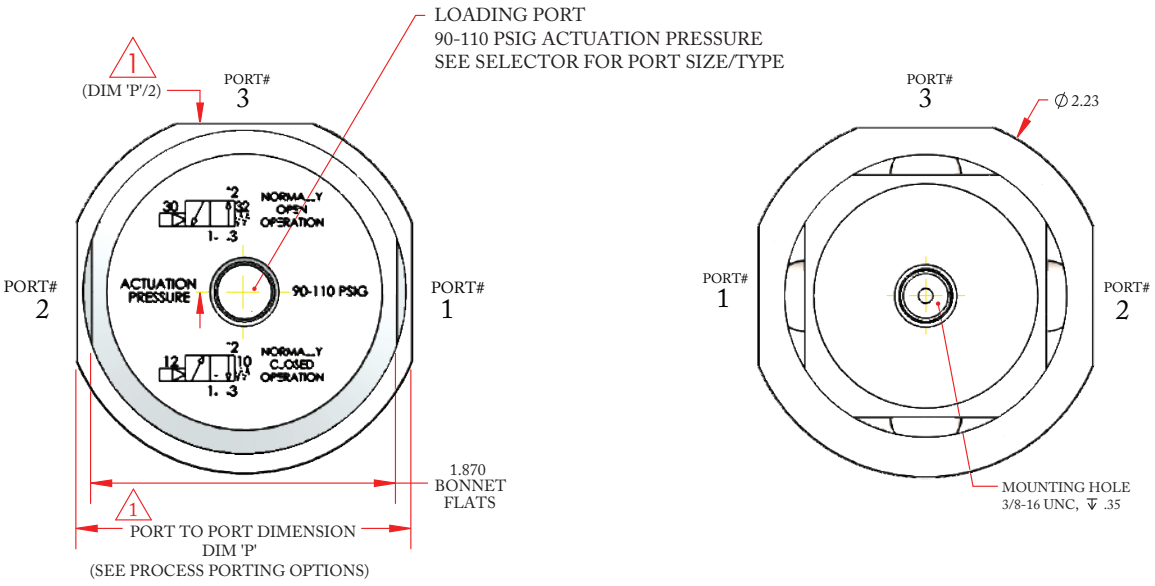
KRYTOX® IS A REGISTERED TRADEMARK OF THE CHEMOURS COMPANY FC, LLC.

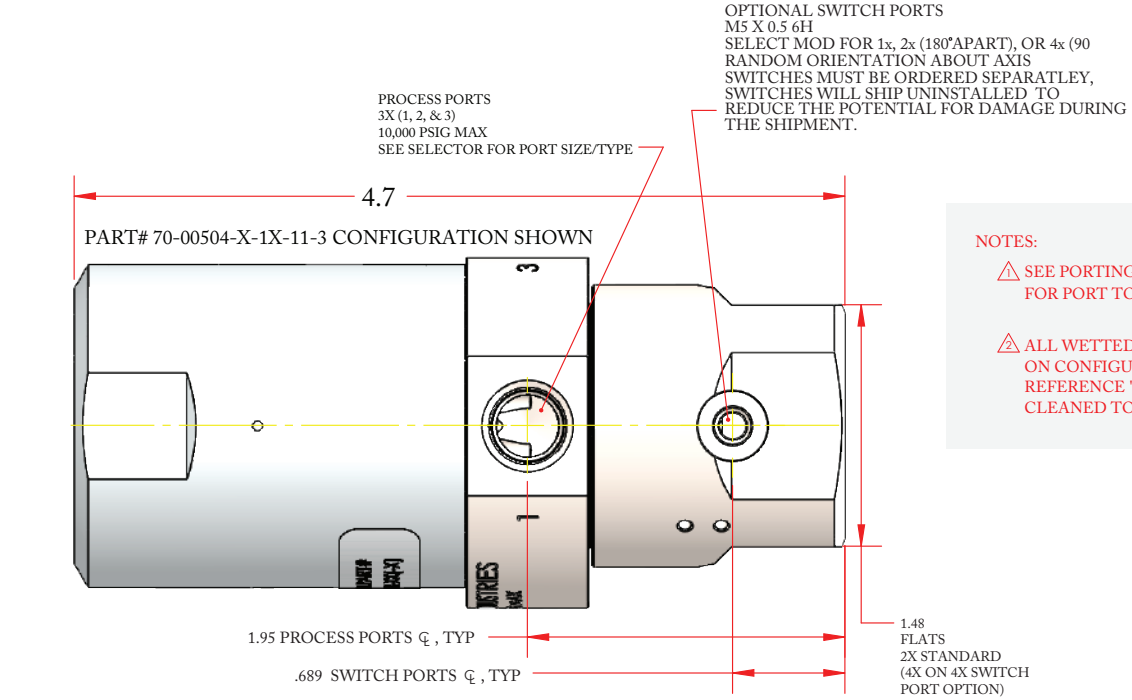
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PART NUMBER: 70-00504

70-00504-X-1X-11-3 CONFIGURATION SHOWN BELOW





NOTES:

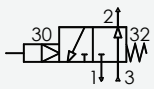
1. SEE PORTING OPTIONS ON SELECTOR FOR PORT TO PORT DIMENSION
2. ALL WETTED COMPONENTS ON CONFIGURATIONS THAT REFERENCE 'GOX' (AND THIS NOTE) CLEANED TO WI615 PER CGA G4.1.

AO32 0.80 SERIES

Pneumatically Operated, 3 Way 2 Position
High Pressure Valves

PART NUMBER: 70-00504

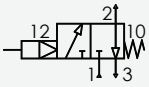
NORMALLY OPEN OPERATION



SUPPLY PORT 3

DOWNSTREAM PROCESS, PORT 2
EXHAUST, PORT 1

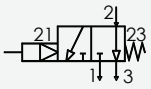
NORMALLY CLOSED OPERATION



SUPPLY PORT 1

DOWNSTREAM PROCESS PORT 2
EXHAUST PORT 3

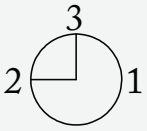
SWITCHING OPERATION



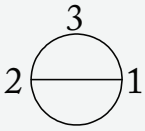
SUPPLY PORT 2

NOT ACTUATED OUTLET PORT 3
ACTUATED OUTLET PORT 1

NOT ACTUATED



PORTING CONNECTIONS REFERENCE



ACTUATED

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PART #	-	1	-	2	3	-	4	5	-	MODS
70-00504	-		-			-			-	

1	SEAT MATERIAL
1	VESPEL SP-1
2	VESPEL SP-21
2	**BODY/INSERT/STEM MATERIAL**
1	316 STAINLESS STEEL
2	693 ECO BRASS ⚠2
3	**O-RING MATERIAL**
1	BUNA-N
2	VITON-A®
3	EPDM
4	FFKM
5	POLYURETHANE

4	PROCESS PORTS
1	1/4" SAE (AS5202-04) (ALL PORTS) ('P' = 2.06")
2	1/4" (F)NPT (ALL PORTS) ('P' = 2.23")
3	1/4" MED. PRESSURE (ALL PORTS) ('P' = 2.06") Cv 0.20
4	1/4" HIGH PRESSURE (ALL PORTS) ('P' = 2.06") Cv 0.15
5	**ACTUATION PORT**
1	1/8 (F)NPT
2	1/4" SAE (AS5202-04)

SPECIAL MODS**	
BLANK	NONE
1	1X INDICATOR SWITCH PORT
2	2X INDICATOR SWITCH PORTS
3	4X INDICATOR SWITCH PORTS
4	SOLENOID VALVE ACTUATOR, 24 VDC
5	MOLYKOTE 44 MEDIUM LUBRICANT
Q	617 CLEANING
C	615 CLEANING (CGA G4.1)
D	SOLENOID VALVE ACTUATOR, 24 VDC,SPADE TERMINALS (AS5202 ONLY)
S	INDICATOR SWITCH

NOTES:

⚠1 SEE PORTING OPTIONS ON SELECTOR FOR PORT TO PORT DIMENSION

⚠2 FOR OXYGEN APPLICATIONS SEE O2 AO32 0.80 SERIES P/N OY70-00504

CONSULT PREMIER INDUSTRIES IF ORDERING SPECIAL MODS, OR IF UNLISTED CONFIGURATIONS ARE REQUIRED.

ADD ALL MODS TO END OF PART# (EX. 70-00504-1-22-12-1)

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