



Pinch Valves



Delivering Innovative Pinch Valves &
Fluid Control Components





ACRO

DEDICATED TO SMARTER DEVICE DESIGN

With more than 40 years of experience, Acro Associates, Inc. continues to lead the industry in providing innovative fluidic products and engineering design services to the medical device and bioprocessing communities.

From solenoid and pneumatic pinch valves, to fluidic fittings and accessories, the Acro team of experts is dedicated to helping design engineers satisfy regulatory requirements with only the most efficient solutions.

Industry-Leading Quality

As a certified California Department of Public Health medical device manufacturer, as well as a ISO 9001:2008 and ISO 13485:2003 compliant company, Acro consistently delivers high-quality solutions.

- **QUALITY MANAGEMENT SYSTEM**

Acro's Quality Management Program employs Lean-Six Sigma best practices to ensure that customer, vendor and partner standards of quality are met.

Product Assurance

All products are rigorously inspected, tested and validated to guarantee that they meet manufacturer specifications and requirements for reliability and performance.

- **COMMITMENT TO GROWTH**

Metrics, including vendor certification/performance, manufacturing yields/failures and customer satisfaction are continually monitored to empower product and service improvement.

- **TRAINING**

Acro supports ongoing training and skill development for all employees—ensuring that customers experience superior service.



Acro Pneumatic Pinch Valves

900-SERIES PNEUMATIC PINCH VALVES

Robust Pneumatic Pinch Valves for Fluid Control

Pneumatic Pinch Valves are designed for biopharmaceutical processing, food and beverage, and industrial applications where sterility and wash down procedures are needed. These robust units offer reliability and performance—especially when working with harder or larger diameter tubing that requires stronger pinch forces.

Designed for disposable tubing, each model contains an easy snap-in tube slot for quick loading and unloading procedures. Panel or base mountable units can also be configured with optional state sensors, controllers, or setup in normally-open or normally-closed default states. Optional safety caps on certain models are also available to address operational hazards.



Experience the Difference

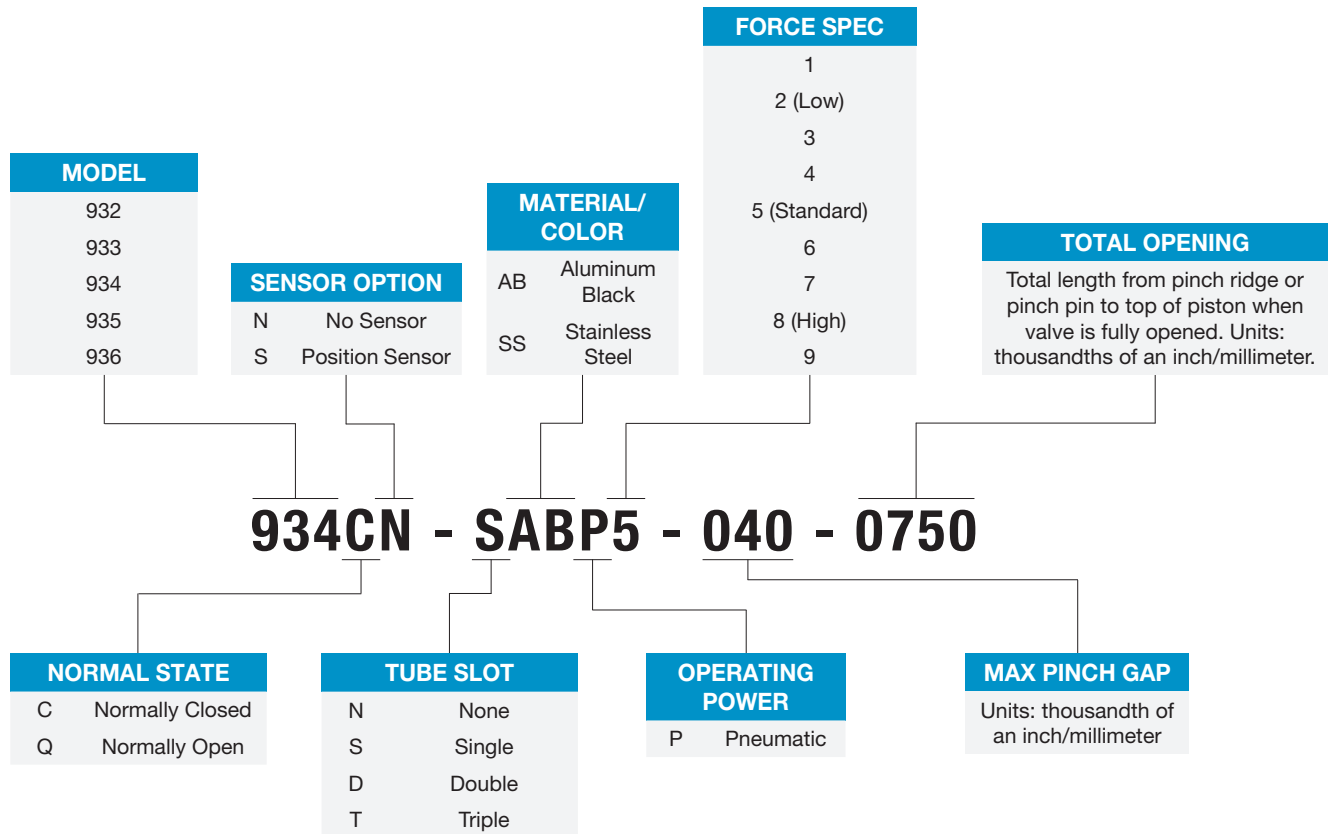
- Compact design that allows the customer to select preferred tubing within recommended guidelines
- Base or Panel mount ready with snap-in tubing slot
- Optional valve state detection sensors
- Optional 3- or 4-way controllers for pressure venting between states
- Panel splash seals for wash down procedures
- Manual overrides on model 932 and 933
- Offered in Black Anodized Aluminum or 316L stainless steel
- Warranted for 18 months

Each product is also calibrated for pinch force, pinch gap and stroke to ensure optimal performance.

Acro Pneumatic Pinch Valves

How to Order

Acro Part # Key: For Reference Purposes



SHELVING MODELS	STANDARD NON-SHELVING MODELS
932CN-SABP5-040-0188	932CS-SABP5-040-0188
932QN-SABP5-040-0188	932QS-SABP5-040-0188
932CN-SABP5-060-0188	932CS-SABP5-060-0188
932QN-SABP5-060-0188	932QS-SABP5-060-0188
933CN-SABP5-040-0375	933CS-SABP5-040-0375
933QN-SABP5-040-0375	934CS-SABP5-094-0750
934CN-SABP5-094-0750	934CS-SABP5-160-0750
934CN-SABP5-160-0750	935CS-SABP5-160-1000
934QN-SABP5-094-0750	935CS-SABP8-160-1000
934QN-SABP5-160-0750	936CS-SABP5-250-1500
935CN-SABP5-160-1000	936CS-SABP8-250-1500
935CN-SABP8-160-1000	936QS-SABP5-250-1500
935QN-SABP5-160-1000	

Acro Pneumatic Pinch Valves

Accessories

Pneumatic Controller (Shelving)	Part Number	Pneumatic Controller - Standard (Non-Shelving)	Part Number
3-way 24 VDC Controller	K1003-24	3-way 12 VDC Controller	K1003-12
3-way 110/120 VAC Controller	K1003-110	3-way 220 VAC Controller	K1003-230
4-way 24 VDC Controller	K1004-24	4-way 12 VDC Controller	K1004-12
4-way 120 VAC Controller	K1004-110	4-way 220 VAC Controller	K1004-230

Controller Kit Parts -- Selected Controller, Push-In Fittings; 2 pcs. 10-31 to 1/4" Tube O.D., 4 pcs. 1/8 NPT to 1/4" Tube O.D., 2 pcs. 1/4" O.D. Tubing 18" Length, 1 pc. Brass Fitting 1/8 NPT



Safety Cap	Part Number	Inventory
Model 934 - 0.5" Tube Slot	A5650	Non-Shelving
Model 934 - 0.75" Tube Slot	A5651	Shelving
Model 935 - 0.75" Tube Slot	A5652	Shelving
Model 935 - 1.0" Tube Slot	A5653	Shelving
Model 934/935 - No Tube Slot	A5654	Shelving

*935 HF comes standard with safety cap and mounting leash provided

Acro Pneumatic Pinch Valves

Product Selection Guide

SIMPLE AND AFFORDABLE SERIES PNEUMATIC PINCH VALVES										
THE THREE TUBING LISTED BELOW ARE RECOMMENDED FOR ALL VALVE MODELS, NORMALLY CLOSED AND NORMALLY OPEN, AT THEIR RESPECTIVE TUBING RANGE AND MIN. WALL THICKNESS AT 70°F										
VALVE MODEL	TUBING O.D. RANGE [in./mm]	MIN. WALL THICKNESS [in./mm]	No.	TUBING O.D. [in./mm]	TUBING I.D. [in./mm]	MATERIAL	DUROMETER [SHORE A]	MANUFACTURER MAX PRESSURE [PSI / Bar]†	MAX TESTED MEDIA PRESSURE [PSI / Bar]‡	VALVE PART NUMBER
ALL	DEPENDENT ON VALVE MODEL SEE CHART BELOW	SEE CHART BELOW	1	SEE CHART BELOW	SEE CHART BELOW	C-FLEX	50 - 60	9 - 15 / .6 - 1.0	9 - 15 / .6 - 1.0	SEE CHART BELOW DEPENDENT ON TUBING O.D.
			2			PHARMED BPT	64	9 - 30 / .6 - 2.1	9 - 30 / .6 - 2.1	
			3			SILICONE	50 - 60	9 - 15 / .6 - 1.0	9 - 15 / .6 - 1.0	

SIMPLE AND AFFORDABLE SERIES PNEUMATIC PINCH VALVES - NORMALLY CLOSED CONFIGURATION										
VALVE MODEL	VALVE MODEL ACCOMMODATES TUBING OUTER DIAMETER RANGE [in./mm]	MIN. TUBING WALL THICKNESS REQUIRED [in./mm]**	RECOMMENDED TUBING AND MEDIA PRESSURES FOR NORMALLY CLOSED VALVES AT 70°F FOR DIFFERENT TUBING AND MEDIA PRESSURES, COMPLIMENTARY TUBING TESTS AVAILABLE††							
			No.	TUBING O.D. [in./mm]	TUBING I.D. [in./mm]	MATERIAL	DUROMETER [SHORE A]	MANUFACTURER MAX PRESSURE [PSI / Bar]†	MAX TESTED MEDIA PRESSURE [PSI / Bar]‡	VALVE PART NUMBER [recommend supply pressure, PSI / Bar]
932	.125 - .177 / 3.2 - 4.5 (1/8 - .177)	.032 / .8 (1/32)	1	.125 3.2	.063 1.6	POLYURETHANE	70 - 85	105 / 7.2	50 / 3.4	932CN-SABP5-040-0188 932CS-SABP5-040-0188* [50 - 125 / 3.4 - 8.6]
			2			PVC	60 - 70	65 / 4.5	50 / 3.4	
			3			TYGON B-44-4X	65	60 / 4.1	50 / 3.4	
932	.188 - .250 / 4.8 - 6.4 (3/16 - 1/4)	.063 / 1.6 (1/16)	1	.250 6.4	.125 3.2	PHARMA 80	80	249 / 17.2	50 / 3.4	932CN-SABP5-060-0188 932CS-SABP5-060-0188* [50 - 125 / 3.4 - 8.6]
			2			POLYURETHANE	70 - 80	110 / 7.6	50 / 3.4	
			3			PVC	60 - 70	65 / 4.5	50 / 3.4	
			4			TYGON B-44-4X	65	60 / 4.1	50 / 3.4	
933	.250 - .375 / 6.4 - 9.5 (1/4 - 3/8)	.063 / 1.6 (1/16)	1	.375 / 9.5	.125 / 3.2	SILICONE, BRAID REINFORCED	60 - 65	175 / 12.1	50 / 3.4	933CN-SABP5-040-0375 933CS-SABP5-040-0375* [50 - 125 / 3.4 - 8.6]
			2			PHARMA 65	65	15 / 1.0	15 / 1.0	
			3	.375 9.5	.250 6.4	PHARMA 80	80	249 / 17.2	30 / 2.1	
			4			PVC	60 - 70	45 / 3.1	45 / 3.1	
			5			TYGON B-44-4X	65	34 / 2.3	34 / 2.3	
934	.500 - .750 / 12.7 - 19.1 (1/2 - 3/4)	.063 / 1.6 (1/16)	1	.500 12.7	.375 9.5	PHARMA 50	50	10 / .7	10 / .7	934CN-SABP5-094-0750 934CS-SABP5-094-0750* [60 - 125 / 4.1 - 8.6]
			2			POLYURETHANE	70 - 85	55	30 / 2.1‡	
			3			PVC	60 - 70	30 / 2.1	30 / 2.1	
			4			TYGON B-44-4X	65	25 / 1.7	25 / 1.7	
934	.500 - .750 / 12.7 - 19.1 (1/2 - 3/4)	.125 / 3.2 (1/8)	1	.500 12.7	.250 6.4	PHARMA 50	50	17 / 1.2	17 / 1.2	934CN-SABP5-160-0750 934CS-SABP5-160-0750* [60 - 125 / 4.1 - 8.6]
			2			SILICONE, BRAID REINFORCED	60 - 65	160 / 11.0	50 / 3.4	
			3			TYGON B-44-4X	65	60 / 4.1	30 / 2.1‡	
			4	.750 / 19.1	.500 / 12.7	PHARMA 65	65	11 / .8	11 / .8	
935	.750 - 1.000 / 19.1 - 25.4 (3/4 - 1)	.125 / 3.2 (1/8)	1	1.000 / 25.4	.750 / 19.1	PHARMA 50	50	9 / .6	9 / .6	935CN-SABP5-160-1000 935CS-SABP5-160-1000* [60 - 125 / 4.1 - 8.6]
935	.750 - 1.000 / 19.1 - 25.4 (3/4 - 1)	.125 / 3.2 (1/8)	1	0.938 / 23.8	.625 / 15.9	TYGON B-44-4X	65	35 / 2.4	20 / 1.4‡	935CN-SABP8-160-1000 935CS-SABP8-160-1000* [80 - 125 / 5.5 - 8.6] (High Force)
			2	1.000 / 25.4	.625 / 15.9	SILICONE, BRAID REINFORCED	60 - 65	100 / 6.9	40 / 2.8	
			3	1.000 25.4	.750 19.1	PHARMA 65	65	7 / .5	7 / .5	
			4			PVC	60 - 70	30 / 2.1	20 / 1.4‡	
936	1.125 - 1.625 / 28.6 - 41.3 (1 1/8 - 1 5/8)	.188 / 4.8 (3/16)	1	1.360 / 34.5	1.000 / 25.4	SILICONE, BRAID REINFORCED	60	65 / 4.5	30 / 2.1‡	936CS-SABP5-250-1500* [70 - 125 / 4.8 - 8.6]
			2	1.375 / 34.9	1.000 / 25.4	NORPRENE, BRAID REINFORCED	60	75 / 5.2	30 / 2.1	
			3	1.485 / 37.7	1.125 / 28.6	SILICONE, BRAID REINFORCED	60	55 / 3.8	30 / 2.1‡	
			4	1.625 / 41.3	1.250 / 31.8	PVC	60	20 / 1.4	10 / 1.4	
936	1.125 - 1.625 / 28.6 - 41.3 (1 1/8 - 1 5/8)	.188 / 4.8 (3/16)	1	1.360 / 34.5	1.000 / 25.4	SILICONE, BRAID REINFORCED	60	65 / 4.5	65 / 4.5	936CS-SABP8-250-1500* [90 - 125 / 6.2 - 8.6] (High Force)
			2	1.375 / 34.9	1.000 / 25.4	NORPRENE, BRAID REINFORCED	60	75 / 5.2	75 / 5.2	
			3	1.485 / 37.7	1.125 / 28.6	SILICONE, BRAID REINFORCED	60	55 / 3.8	55 / 3.8	
			4	1.625 / 41.3	1.250 / 31.8	PVC	60	20 / 1.4	20 / 1.4	
			5			PVC, BRAID REINFORCED	66	85 / 5.9	20 / 2.1‡	

*Valve model with position sensor.

†Maximum media pressure for reference only. User to verify performance. Shown manufacturer maximum rated pressure is for reference only and may change over time. Please consult tubing manufacturer for maximum rated working pressure and temperature.

‡Tubing may require conditioning for an instant seal. Conditioning consists of tubing being pinched by the valve for approximately 15 seconds without media pressure. Various factors can affect tubing seal rate that require conditioning.

**Tubing wall thickness can be calculated by the formula: wall thickness = (outer diameter - inner diameter)/2

††For any conditions not stated in the above Tubing Recommendation table please contact Acro Associates and we will gladly determine valve suitability with a complimentary tubing test.

Acro Pneumatic Pinch Valves

SIMPLE AND AFFORDABLE SERIES PNEUMATIC PINCH VALVES - NORMALLY OPEN CONFIGURATION										
VALVE MODEL	VALVE MODEL ACCOMMODATES TUBING OUTER DIAMETER RANGE [in./mm]	MIN. TUBING WALL THICKNESS REQUIRED [in./mm]**	RECOMMENDED TUBING AND MEDIA PRESSURES FOR NORMALLY OPEN VALVES AT 70°F FOR DIFFERENT TUBING AND MEDIA PRESSURES, COMPLIMENTARY TUBING TESTS AVAILABLE††							VALVE PART NUMBER [recommend supply pressure, PSI / Bar]
			No.	TUBING O.D. [in./mm]	TUBING I.D. [in./mm]	MATERIAL	DUROMETER [SHORE A]	MANUFACTURER MAX PRESSURE [PSI / Bar]†	MAX TESTED MEDIA PRESSURE [PSI / Bar]†	
932	.125 - .177 / 3.2 - 4.5 (1/8 - .177)	.032 / .8 (1/32)	1	.125 3.2	.063 1.6	POLYURETHANE	70 - 85	105 / 7.2	50 / 3.4	932QN-SABP5-040-0188 932QS-SABP5-040-0188* [80 - 125 / 3.4 - 8.6]
			2			PVC	60 - 70	65 / 4.5	50 / 3.4	
			3			TYGON B-44-4X	65	60 / 4.1	50 / 3.4	
932	.188 - .250 / 4.8 - 6.4 (3/16 - 1/4)	.063 / 1.6 (1/16)	1	.250 6.4	.125 3.2	PHARMA 80	80	249 / 17.2	50 / 3.4	932QN-SABP5-060-0188 932QS-SABP5-060-0188* [80 - 125 / 3.4 - 8.6]
			2			POLYURETHANE	70 - 80	110 / 7.6	50 / 3.4	
			3			PVC	60 - 70	65 / 4.5	50 / 3.4	
			4			TYGON B-44-4X	65	60 / 4.1	50 / 3.4	
933	.250 - .375 / 6.4 - 9.5 (1/4 - 3/8)	.063 / 1.6 (1/16)	1	.375 / 9.5	.125 / 3.2	SILICONE, BRAID REINFORCED	60 - 65	175 / 12.1	50 / 3.4	933QN-SABP5-040-0375 [80 - 125 / 5.5 - 8.6]
			2	.375 / 9.5	.188 / 4.8	PHARMA 65	65	15 / 1.0	15 / 1.0	
			3	.375 9.5	.250 6.4	PHARMA 80	80	249 / 17.2	30 / 2.1	
			4			PVC	60 - 70	45 / 3.1	45 / 3.1	
			5			TYGON B-44-4X	65	34 / 2.3	34 / 2.3	
934	.500 - .750 / 12.7 - 19.1 (1/2 - 3/4)	.063 / 1.6 (1/16)	1	.500 12.7	.375 9.5	PHARMA 50	50	10 / .7	10 / .7	934QN-SABP5-094-0750 [80 - 125 / 5.5 - 8.6]
			2			POLYURETHANE	70 - 85	55 / 3.8	50 / 3.4	
			3			PVC	60 - 70	30 / 2.1	30 / 2.1	
			4			TYGON B-44-4X	65	25 / 1.7	25 / 1.7	
934	.500 - .750 / 12.7 - 19.1 (1/2 - 3/4)	.125 / 3.2 (1/8)	1	.500 12.7	.250 6.4	PHARMA 50	50	17 / 1.2	17 / 1.2	934QN-SABP5-160-0750 [80 - 125 / 5.5 - 8.6]
			2			SILICONE, BRAID REINFORCED	60 - 65	160 / 11.0	50 / 3.4	
			3			TYGON B-44-4X	65	60 / 4.1	50 / 3.4	
			4	.750 / 19.1	.500 / 12.7	PHARMA 65	65	11 / .8	11 / .8	
			5			PHARMA 80	80	200 / 13.8	50 / 3.4	
			6			PVC	60 - 70	40 / 2.8	40 / 2.8	
935	.750 - 1.000 / 19.1 - 25.4 (3/4 - 1)	.125 / 3.2 (1/8)	1	0.938 / 23.8	.625 / 15.9	TYGON B-44-4X	65	35 / 2.4	35 / 2.4	935QN-SABP5-160-1000 [80 - 125 / 5.5 - 8.6]
			2	1.000 / 25.4	.625 / 15.9	SILICONE, BRAID REINFORCED	60 - 65	100 / 6.9	50 / 3.4	
			3	1.000	.750	PHARMA 65	65	7 / .5	7 / .5	
			4	25.4	19.1	PVC	60 - 70	30 / 2.1	30 / 2.1	
936	1.125 - 1.625 / 28.6 - 41.3 (1 1/8 - 1 5/8)	.188 / 4.8 (3/16)	1	1.360 / 34.5	1.000 / 25.4	SILICONE, BRAID REINFORCED	60	65 / 4.5	65 / 4.5	936QS-SABP5-250-1500* [80 - 125 / 5.5 - 8.6]
			2	1.375 / 34.9	1.000 / 25.4	NORPRENE, BRAID REINFORCED	60	75 / 5.2	75 / 5.2	
			3	1.485 / 37.7	1.125 / 28.6	SILICONE, BRAID REINFORCED	60	55 / 3.8	55 / 3.8	
			4	1.625 / 41.3	1.250 / 31.8	PVC	60	20 / 1.4	20 / 1.4	
			5			PVC, BRAID REINFORCED	66	85 / 5.9	50 / 3.4	

*Valve model with position sensor.

†Maximum media pressure for reference only. User to verify performance. Shown manufacturer maximum rated pressure is for reference only and may change over time. Please consult tubing manufacturer for maximum rated working pressure and temperature.

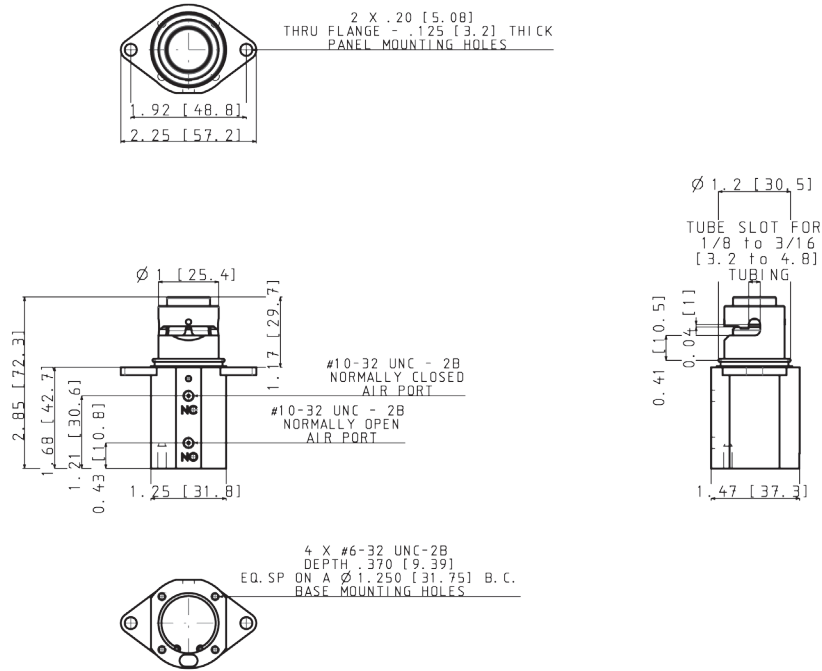
**Tubing wall thickness can be calculated by the formula: wall thickness = (outer diameter - inner diameter)/2

††For any conditions not stated in the above Tubing Recommendation table please contact Acro Associates and we will gladly determine valve suitability with a complimentary tubing test.

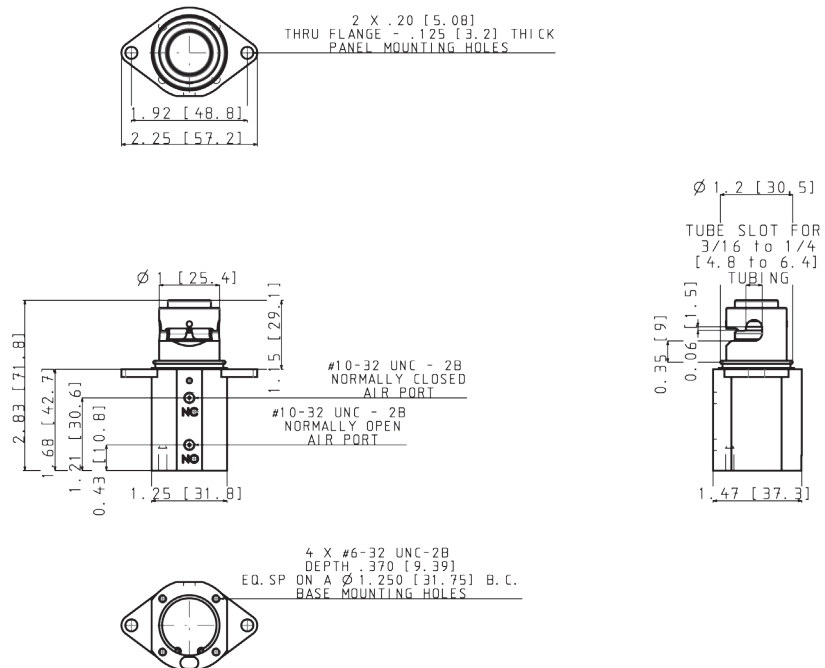
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

932CN-SABP5-040-0188



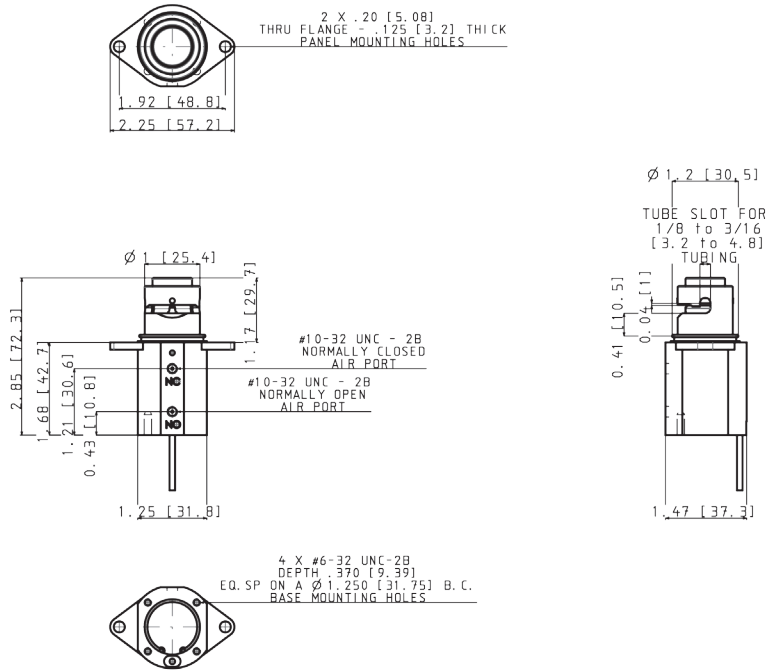
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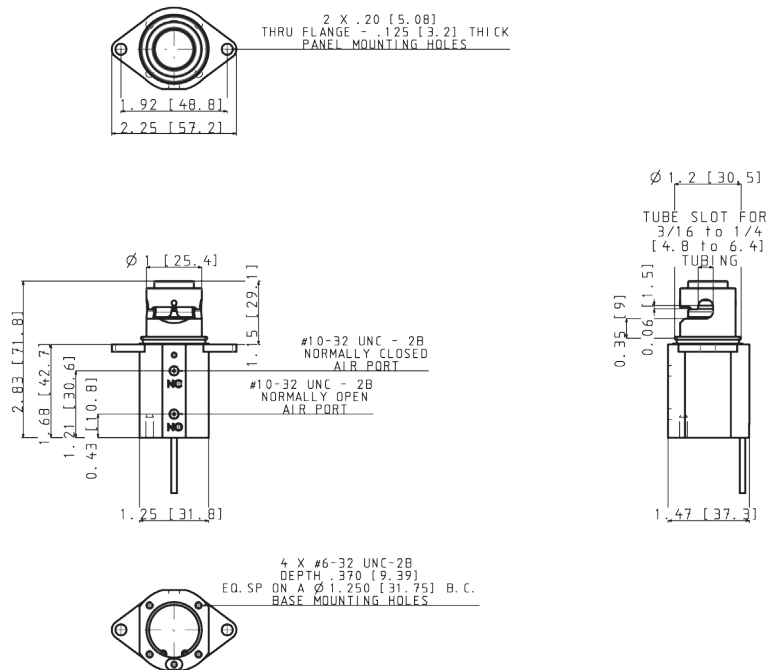
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

932CS-SABP5-040-0188



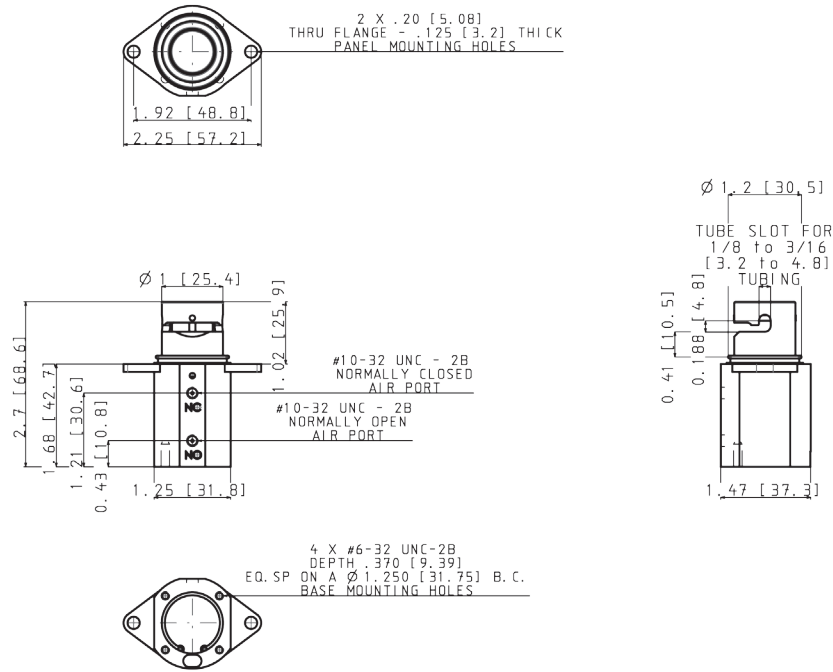
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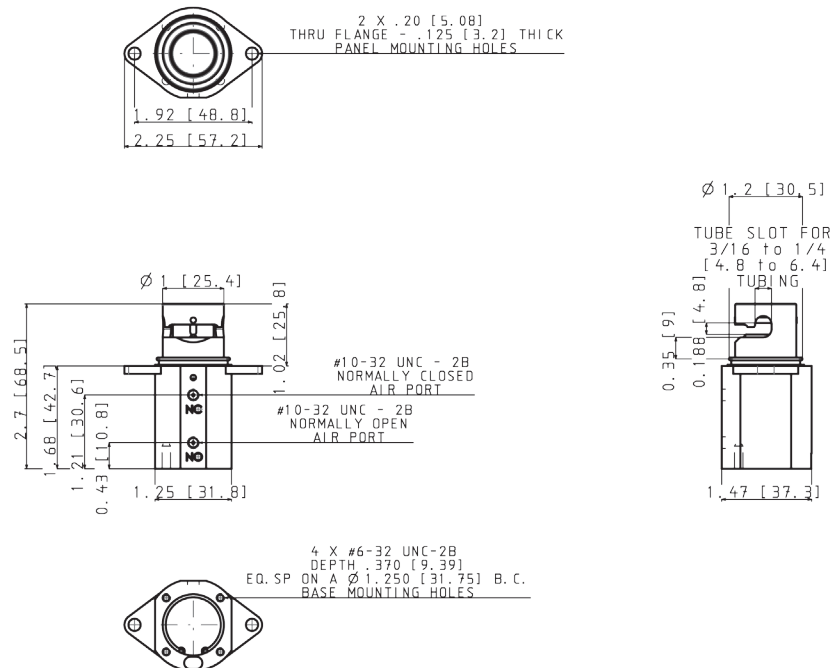
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

932QN-SABP5-040-0188



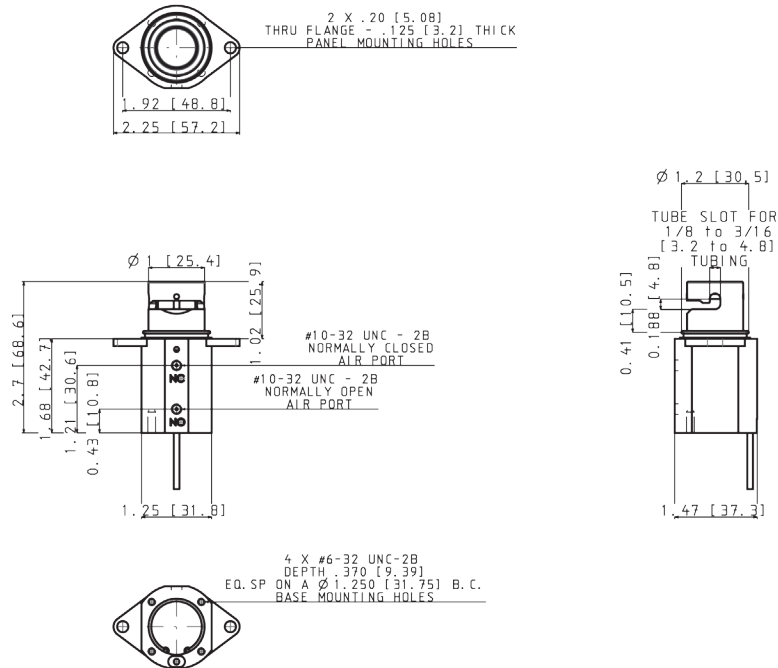
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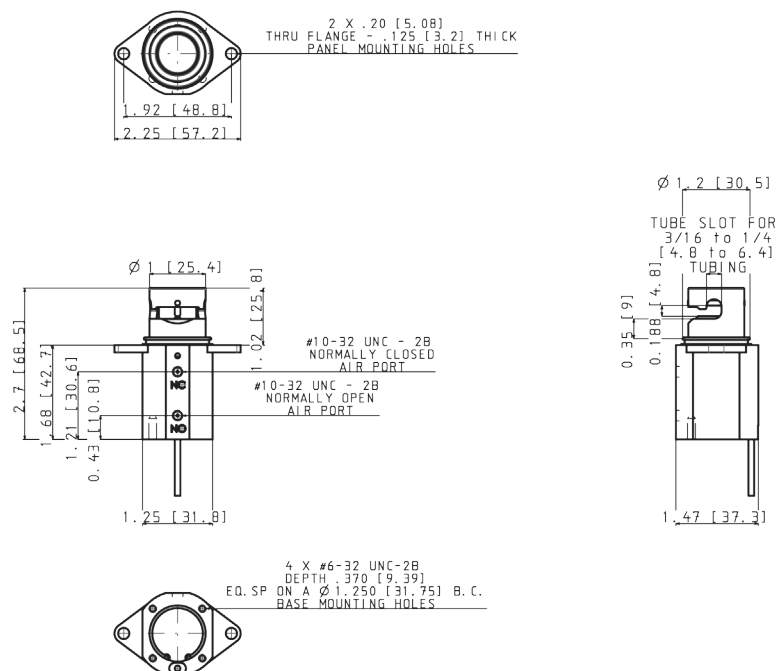
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

932QS-SABP5-040-0188



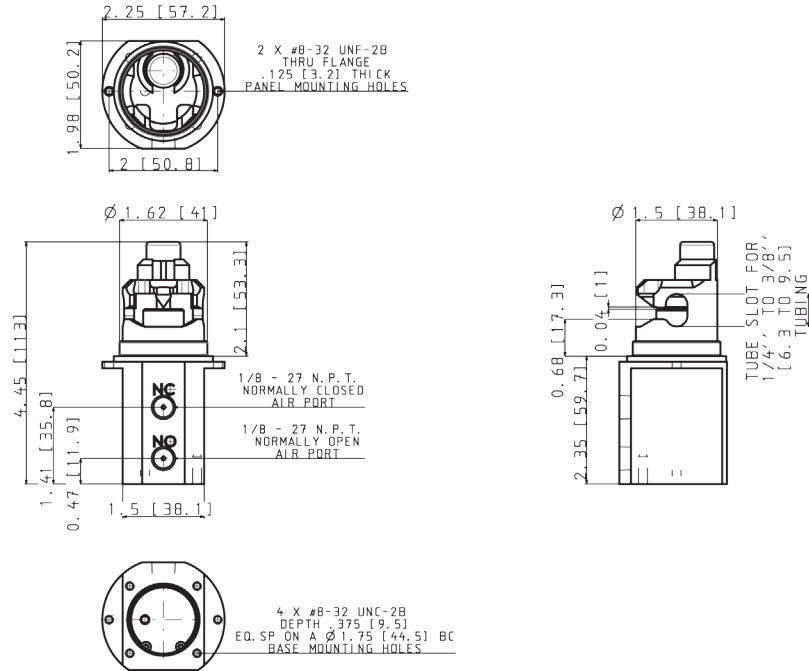
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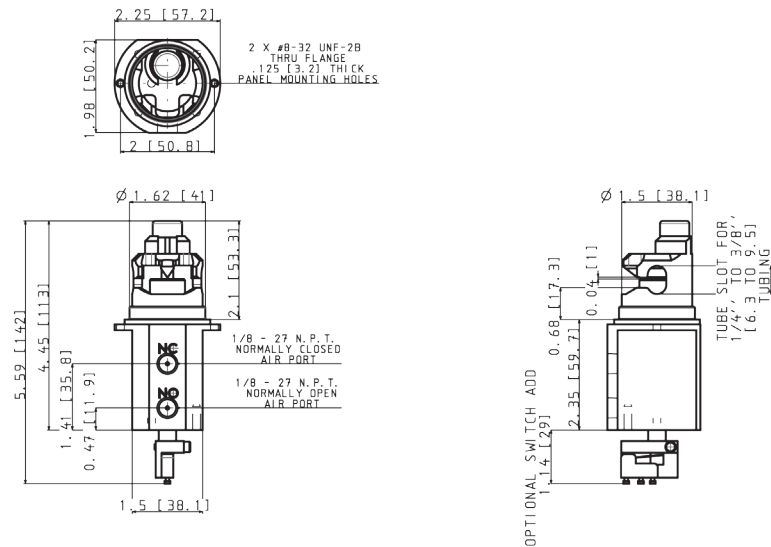
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

933CN-SABP5-040-0375



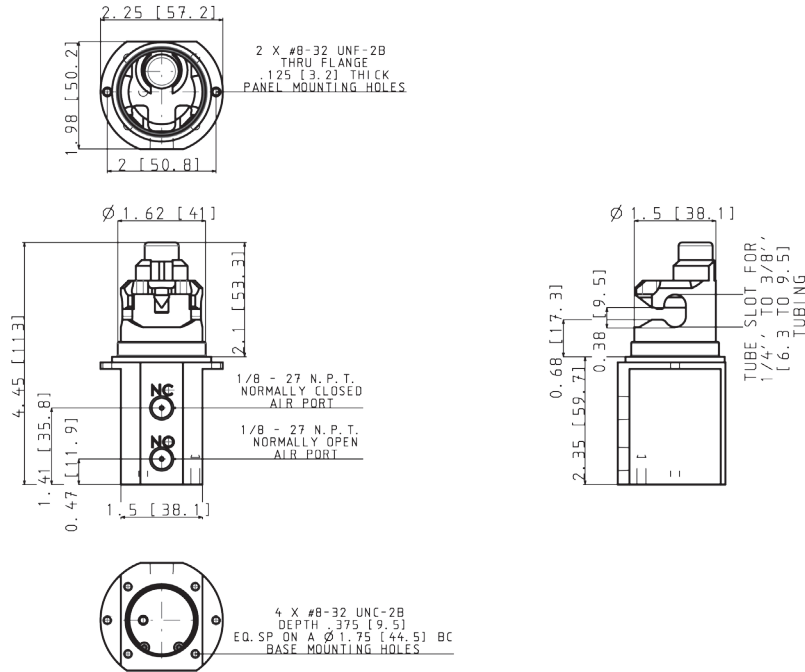
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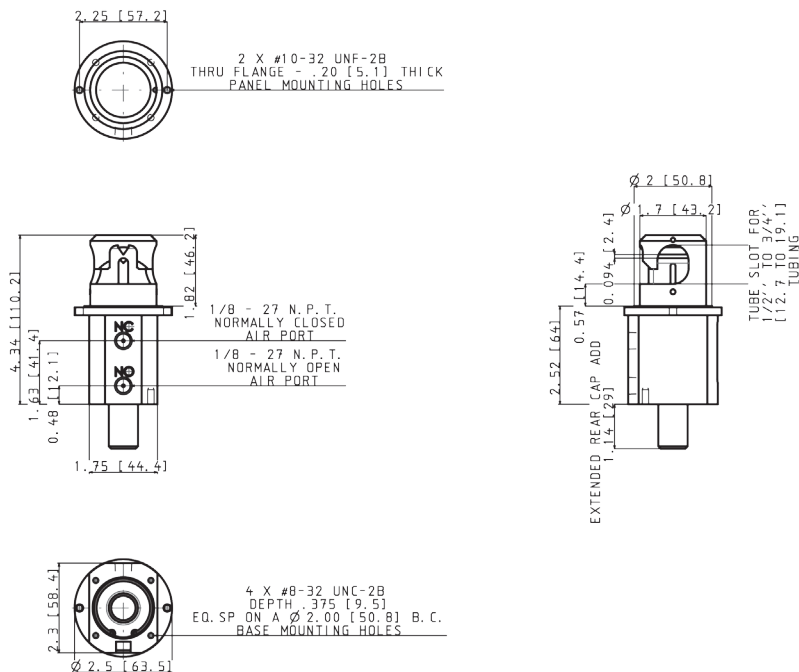
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

933QN-SABP5-040-0375



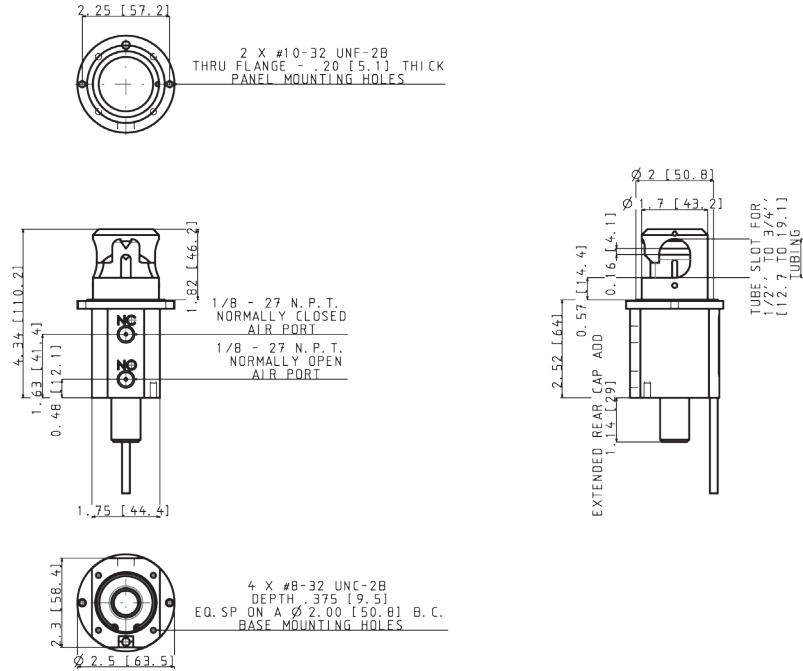
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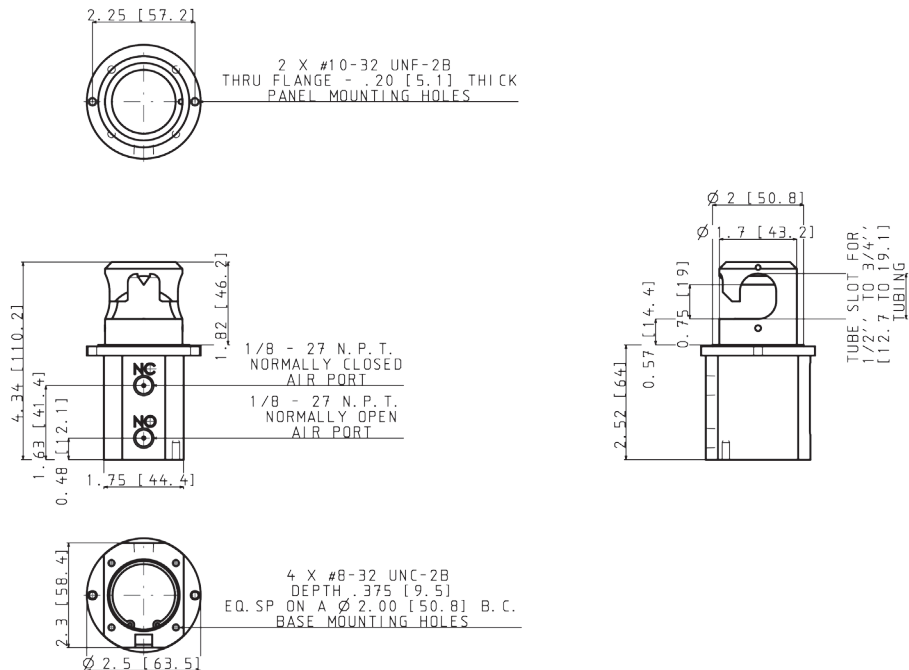
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

934CS-SABP5-160-0750



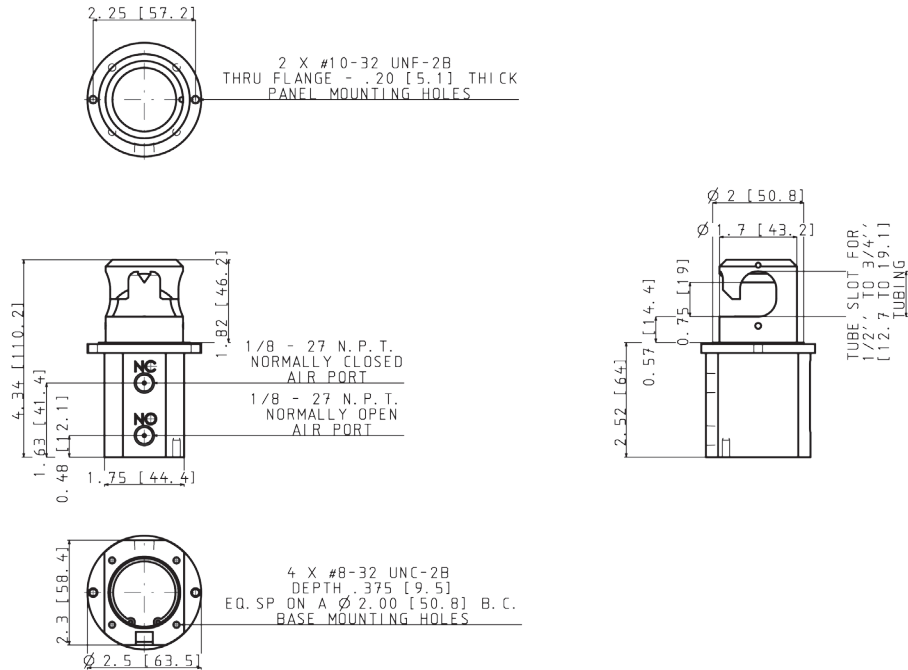
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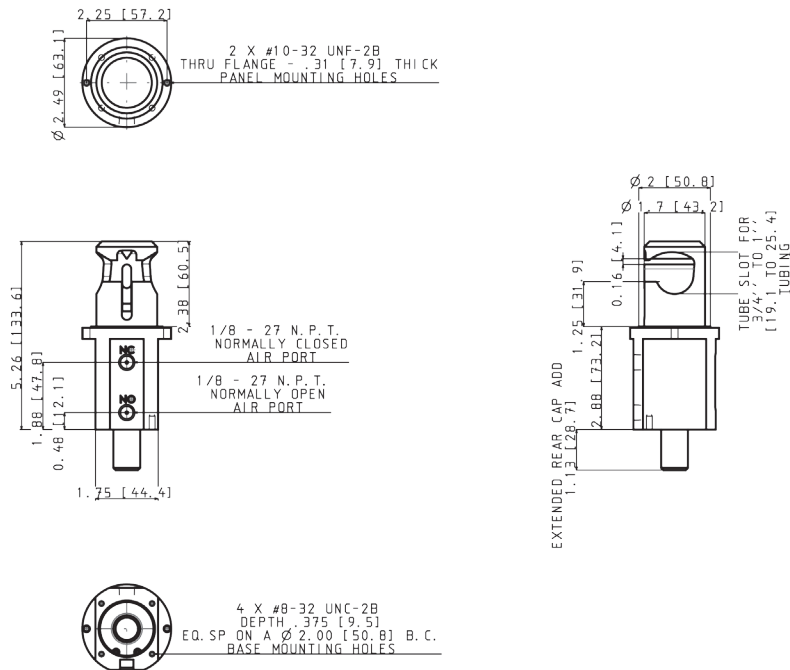
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

934QN-SABP5-160-0750



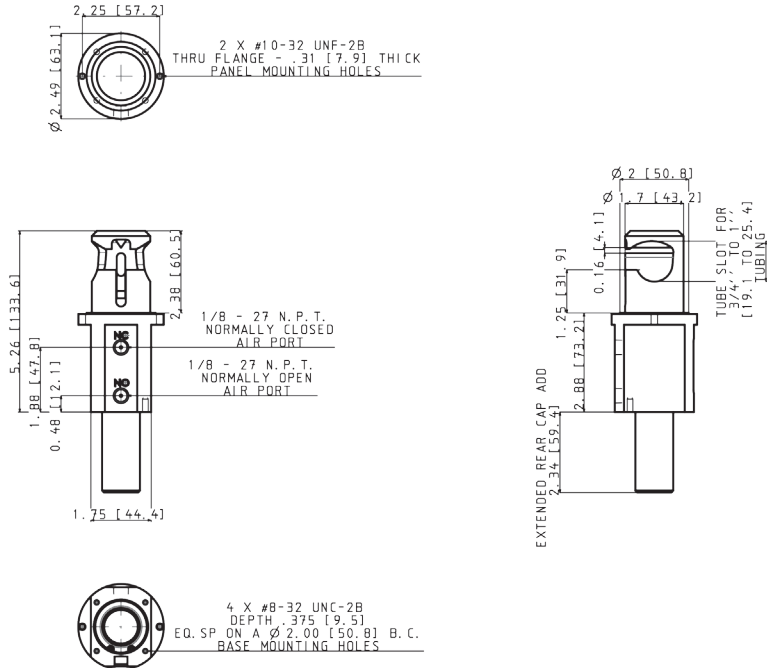
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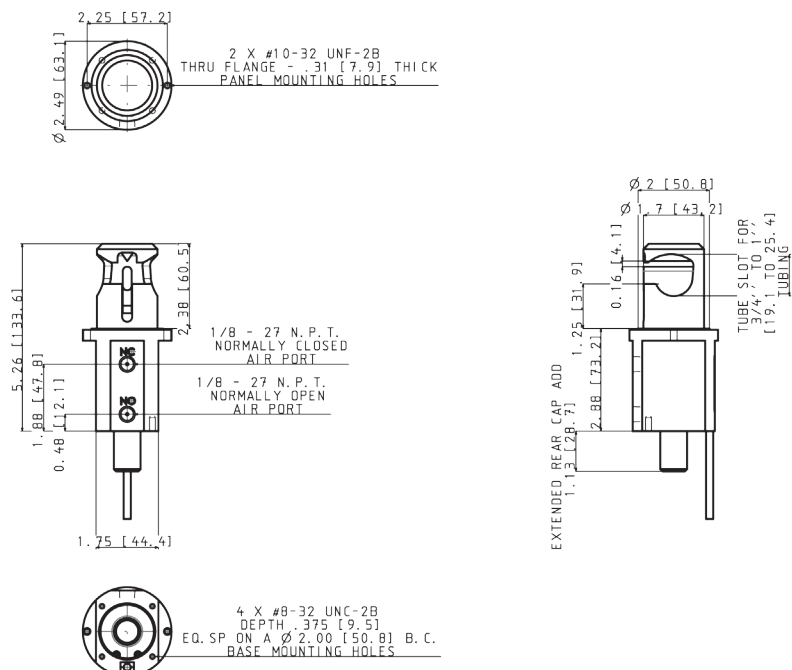
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

935CN-SABP8-160-1000



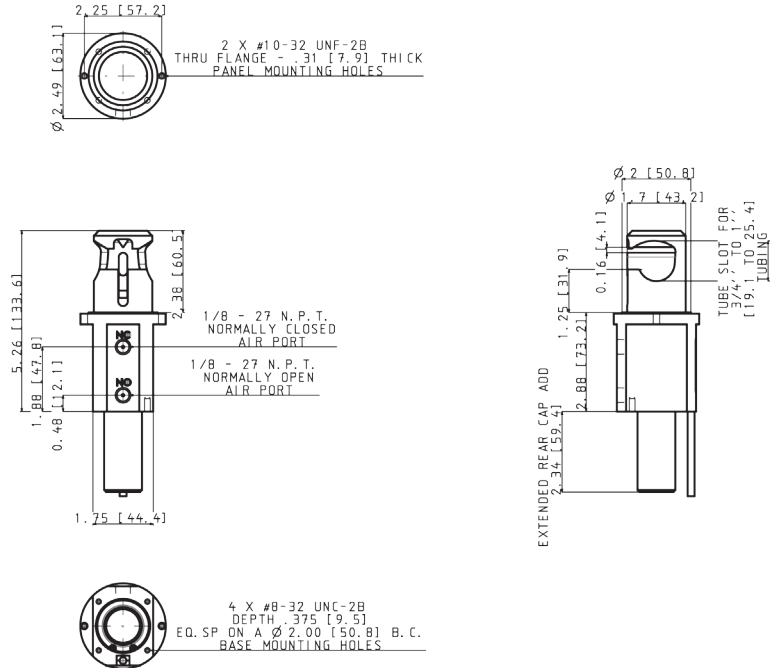
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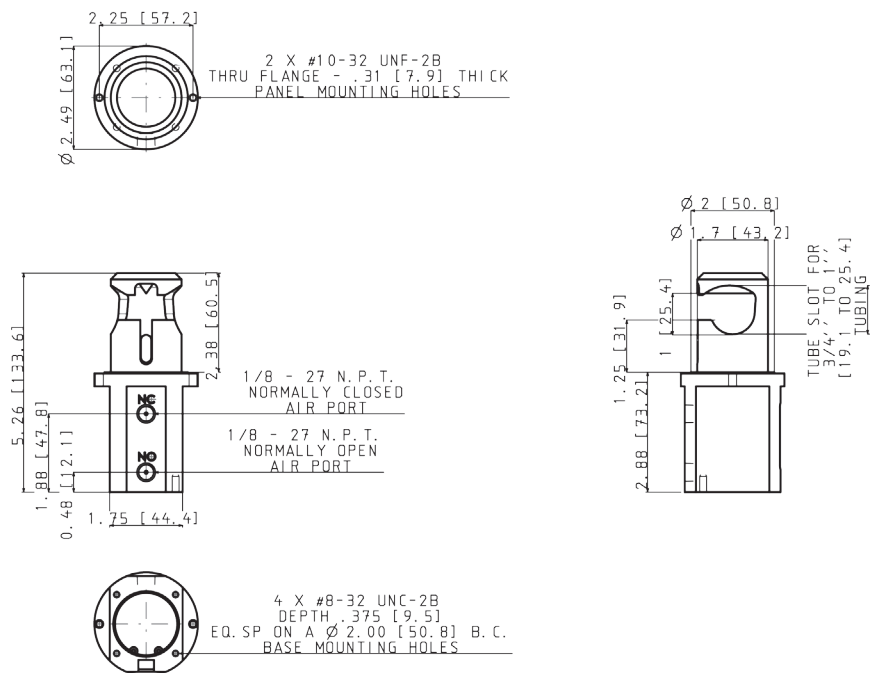
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

935CS-SABP8-160-1000



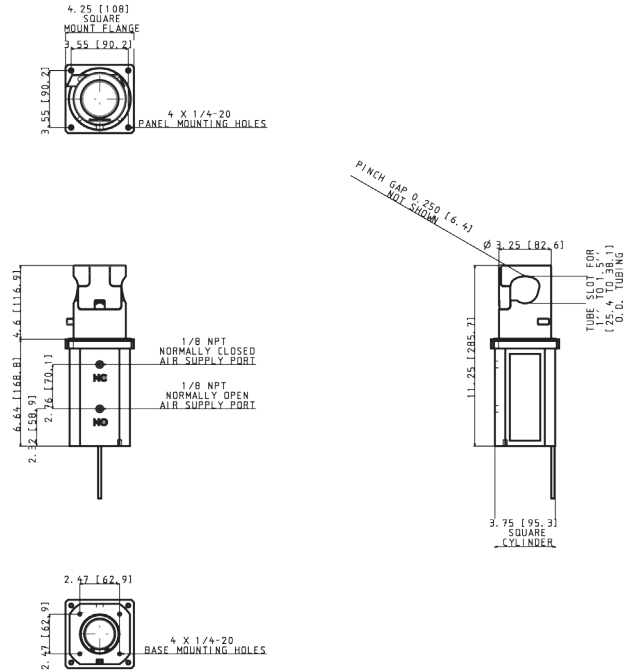
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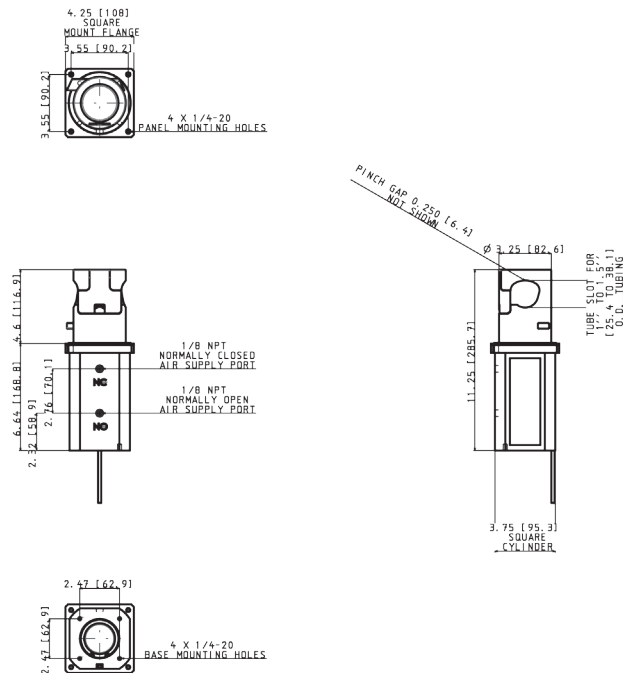
Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

936CS-SABP5-250-1500



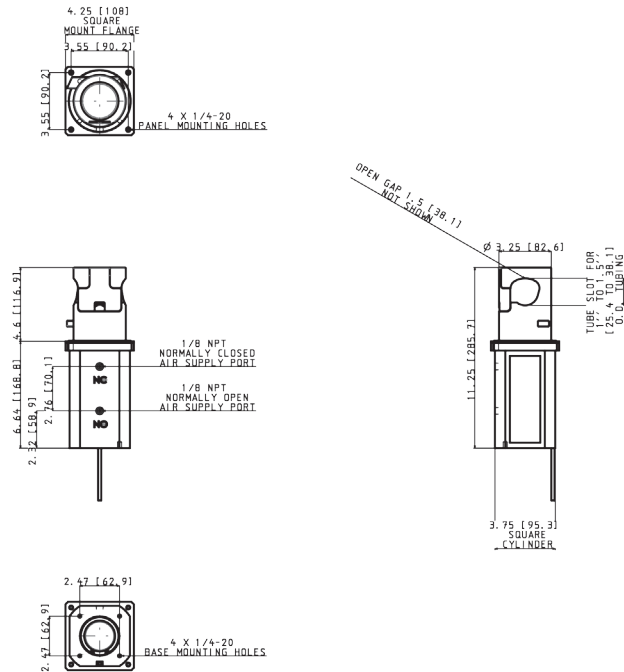
936CS-SABP8-250-1500



Acro Pneumatic Pinch Valves

Dimensional Details: Inch (mm)

936QS-SABP5-250-1500



About Acro and Bimba

Acro Associates is a leading innovator in pinch valves and fluid control components for medical, bioprocessing and industrial applications. As a wholly-owned subsidiary of Bimba Manufacturing, a global leader in actuation technologies, Acro is a part of a family of brands that includes Mead, MFD, Pneumadyne and TRD. Together, they provide industry-leading actuator based pneumatic, hydraulic, electric and automation solutions worldwide. Acro is based in Concord, CA and Bimba is headquartered in University Park, IL. For more information, visit acroassociates.com or bimba.com.



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