

Acro 900 Series Pneumatic Pinch Valves



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Innovation,
products
and service



Engineering GREAT solutions through people, products, innovation and service

IMI Precision Engineering is a world-leader in fluid and motion control. Building close, collaborative relationships with our customers, we gain a deep understanding of their engineering needs and then mobilise our resources and expertise to deliver distinctive products and solutions.

Wherever precision, speed and engineering reliability are essential, our global footprint, problem-solving capability and portfolio of high performance products enables us to deliver GREAT solutions which help customers tackle the world's most demanding engineering challenges.

> **Reliability**

We deliver and support our high quality products through our global service network.

> **High performance products**

Calling on a world-class portfolio of fluid and motion control products including IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal. We can supply these singly, or combined in powerful customised solutions to improve performance and productivity.

> **Partnership & Problem Solving**

We get closer to our customers to understand their exact challenges.



Pneumatic Pinch Valves

Compact Design Valve for Single-Use Bioprocessing

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.



Simple And Affordable Series Pneumatic Pinch Valves

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 (RECOMMEND SUPPLY PRESSURE, PSI/ BAR)
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 ²							
			NO.	TUBING O.D. (IN./MM)	TUBING I.D. (IN./MM)	MATERIAL	DUROMETER (SHORE A)	MANUFACTURER MAX PRESSURE (PSI/ BAR) ¹	MAX TESTED MEDIA PRESSURE (PSI/ BAR) ¹	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			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 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	.125 / 3.2 12.7 3	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			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-SABP5-160-0750 935CS-SABP5-160-0750* (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 ¹	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	.750	PHARMA 65	65	7 / .5	7 / .5	
			4	25.4	19.1	PVC	60 - 70	30 / 2.1	20 / 1.4 ¹	
936	1.125 - 1.625 / 28.6 - 41.3 (11/8 - 15/8)	.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-SABP5-250-1500 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			PVC	60	20 / 1.4	20 / 1.4	
			5	1.625 / 41.3	1.250 / 31.8	PVC, BRAID REINFORCED	66	85 / 5.9	30 / 2.1 ¹	

* Valve model with position sensor.

¹ 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) / 2² For any conditions not stated in the above Tubing Recommendation table please contact Aero Associates and we will gladly determine valve suitability with a complimentary tubing test.

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 ²							
			NO.	TUBING O.D. (IN./MM)	TUBING I.D. (IN./MM)	MATERIAL	DUROMETER (SHORE A)	MANUFACTURER MAX PRESSURE (PSI/ BAR) ¹	MAX TESTED MEDIA PRESSURE (PSI/ BAR) ¹	VALVE PART NUMBER (RECOMMEND SUPPLY PRESSURE, PSI/ BAR)
932	.125 - .177 / 3.2 - 4.5 (1/8 - .177)	.032 / .8 (1/32)	1			POLYURETHANE	70 - 85	105 / 7.2	50 / 3.4	932QN-SABP5-040-0188 932QS-SABP5-040-01B8* (80 - 125 / 3.4 - 8.6)
			2	.125 / 3.2	.063 / 1.6	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			PHARMA 80	80	249 / 17.2	50 / 3.4	932QN-SABP5-060-0188 932QS-SABP5-060-01B8* (80 - 125 / 3.4 - 8.6)
			2	.250 / 6.4	.125 / 3.2	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			PHARMA 80	80	249 / 17.2	30 / 2.1	
			4	.375 / 9.5	.250 / 6.4	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			PHARMA 50	50	10 / .7	10 / .7	934QN-SABP5-094-0750 (80 - 125 / 5.5 - 8.6)
			2	.500 / 12.7	.375 / 9.5	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			PHARMA 50	50	17 / 1.2	17 / 1.2	934QN-SABP5-160-0750 (80 - 125 / 5.5 - 8.6)
			2	.500 / 12.7	.250 / 6.4	SILICONE, BRAID REINFORCED	60 - 65	160 / 11.0	50 / 3.4	
			3			TYGON B-44-4X	65	60 / 4.1	50 / 3.4	
			4			PHARMA 65	65	11 / .8	11 / .8	
			5	.750 / 19.1	.500 / 12.7	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 8-44-4X	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 / 25.4	.750 / 19.1	PHARMA 65	65	7 / .5	7 / .5	
			4			PVC	60 - 70	30 / 2.1	30 / 2.1	
936	1.125 - 1.625 / 28.6 - 41.3 (11/8 - 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			PVC	60	20 / 1.4	20 / 1.4	
			5	1.625 / 41.3	1.250 / 31.8	PVC, BRAID REINFORCED	66	85 / 5.9	50 / 3.4	

* Valve model with position sensor.

¹ Maximum media pressure for reference only. User 10 verify performance. Shown manufacturer maximum rated pressure is for reference only and may change over time. Please consult tubing manufacturer maximum rated working pressure and temperature.

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

² For any conditions not seated in the above Tubing Recommendation table please contact Acro Associates and we will gladly determine valve suitability with a complimentary tubing test.

OPTIONAL CONTROLLER KITS			
3-WAY	4-WAY	SUPPLY VOLTAGE	CORRESPONDING KIT P/N
•		24VDC	K1003-24
•		110/120VAC	K1003-110
•		230VAC	K1003-230
	•	24VDC	K1004-24
	•	110/120 VAC	K1004-110
	•	230VAC	K1004-230

CONTROLLER KIT INCLUDED PARTS		
NO.	DESCRIPTION	QTY
1	SELECTED CONTROLLER - TYPE & VOLTAGE	1
2	PUSH-IN FITTING, 10-32 TO 1/4" IUBE OD	2
3	PUSH-IN FITTING, 1/8 NPT TO 1/4" TUBE OD	4
4	TUBING, 1/4" OD, 18" LENGTH	2
5	ALL THREAD BRASS FITTING 1/8 NPT	1

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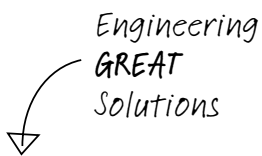
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z8933BR en/02/19

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