

## **Check Valves**





### **About Check Valves**

- A check value is designed to allow the flow of either liquid or gas one way
- Check valves are also known as non-return or one-way valves, and are often used as pressure relief valves. The basic design of a check valve inhibits backflow
- As a specialist supplier of miniature components, Eox's product portfolio includes a comprehensive range of check valve options. Depending upon the type of check valve chosen, the operation of the check valve differs from type to type
- The Eox check valve types are extensive. These include Floating Disc, Diaphragm, Duckbill, and Poppet. Our strength lies in our ability to support customers who are supplying into the medical and scientific markets. We provide many specification and material options specifically designed to meet the standards and compliances required by the healthcare industry

### How does a Check Valve work?

Because of their simple design, check valves generally operate without automation or human interaction and instead rely on the flow velocity (upstream pressure) of the liquid or gas to open and close. This means they generally do not have a method of external operation, like a handle or lever. The minimum upstream pressure required to open the valve is called the "cracking pressure". Check valves are designed for a specific cracking pressure.

Depending on the size and style of check valve, the cracking pressure can vary to suit the application. Cracking pressures from 0.1 psi (5mmHg or 70mmH2O) to 10 psi for applications are not unusual. The degree of opening on a check valve is determined by the flow rate. The higher the flow rate, the more open the valve will be, until it reaches its maximum, fully open position.



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### Modular



### Key features include:

- Compatible with clean air
- Modular assembly allows multiple combinations
- Single barb design to improve seal and improve clamping
- Unique push-in range
- Female thread form options for 1/8" NPT, BSPT and BSPP fittings
- Locking clip to prevent accidental disassembly
- Easy to use cartridge for manifold assembly
- Mixed imperial and metric combinations
- Easy to take apart for R&D purposes
- Multiple spring options

### Check Valve Assembly Configurator

Our check valve range is extensive. With our online Check Valve Assembly Configurator, you can build the valve specification that your application requires.





	Inlet Connector Outlet Connector				O-ring Material	Cracking										
Type (a)	Size (b)	Colour (c)	Type (d)	Size (e)	Colour (f)	(g)	(h)									
1 = Barb	C = 1/8" E = 1/4" F = 5/16" G = 3/8"		$ \begin{array}{l} 1 = Barb \\ E = 1/8" \\ E = 1/4" \\ F = 5/16" \\ G = 3/8" \end{array} $	C = 1/8" E = 1/4" F = 5/16" G = 3/8"	R = Pod	N = Nitrile 60 sh E = EPDM 70 sh S = Silicone 70 sh V = FKM Viton 75 sh	N = Nitrile 60 sh E = EPDM 70 sh S = Silicone 70 sh V = FKM Viton 75 sh	N = Nitrile 60 sh	N = Nitrile 60 sh	N = Nitrile 60 sh	N = Nitrile 60 sh	N = Nitrile 60 sh	N = Nitrile 60 sh	N = Nitrile 60 sh	N = Nitrile 60 sh	0.1 = 0.1 psi 0.5 = 0.5 psi 1 = 1 psi
2 = Push-In	M = 4mm N = 6mm E = 1/4"	R = Rea N = Natural B = Blue	2 = Push-In	M = 4mm N = 6mm E = 1/4"	R = Red N = Natural B = Blue			2 = 2 psi 3 = 3 psi 4 = 4 psi								
3 = BSPP Female Thread	C = 1/8		3 = BSPP Female Thread	C = 1/8			5 = 5 psi 10 = 10 psi									

### E-C58-PG-1ER1ER-N0.5 - Modular Polypropylene Red Bodied Check Valve, 1/4" Barb Input and Output, Nitrile Seals, Cracking Pressure 0.5 psi



### Technical Data

FORM TO\_SUIT M19\_SPANNER

00

4,5[0,1

Max. Inlet Pressure: 5 bar (75 psi) Connections: Barb Fitting to suit 1/4" (6.4mm) OD tube Mounting Style: In-Line Wetted Materials: Glass Filled Polypropylene, Polypropylene, Buna-N, 302 Stainless Steel Non-wetted Materials: Glass Filled Polypropylene Media/Ambient Temperature: 5°C to 50°C (41°F to 122°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Regulatory Information: FDA CFR21

**Other Technical Data:** This check valve is a form of poppet and is generally used in a pneumatic circuit, which requires free flow in one direction, indicated with an arrow on the check valve, and no flow in the opposite direction. See chart below for all available cracking pressures.

51,0 2,01

15,5[0,61] 20,0[0,79]

Flow Direction

TO SUIT 1/4"(6.4mm)ID TUBE

Price starting from: £7.50 \*Larger quantity price breaks available



1/4" Blue

1/4" Natural

	_,
Available Cracking	Pressures
0.1 psi	3 psi
0.5 psi	4 psi
1 psi	5 psi
2 nci	10 psi

\* Please contact us or see the chart to configure your part number

### - More from this range -

#### 1/8" Barb



1/8" Red





1/8" Natural





22,0 0,87

0

### More from this range ·

### 5/16" Barb



5/16" Red



5/16" Blue



5/16" Natural















FORM TO SUIT M19 SPANNER



#### 3/8" Red

3/8" Blue

3/8" Natural

### -Configure your barb check valve -

Inlet/Outlet						O-ring Material	Cracking Pressure
Diameter Code	Material Code	Inlet Code	Colour Code	Outlet Code	Colour Code	Material	psi code
E-C58	Glass Filled PP = -PG	1/8" = -1C	Red = R	1/8" = -1C	Red = R	Nitrile = -N	0.1
		1/4" = - <b>1E</b>	Blue = B	1/4" = <b>-1E</b>	Blue = B	EPDM = -E	0.5
		5/16" = - <b>1F</b>	Natural = N	5/16" = -1F	Natural = N	Silicone = -S	1
		3/8" = -1G		3/8" = -1G		Viton = -V	2
							3
							4
							5
							10

Example Product Code (indicated in blue in the above table): E - C 5 8 - P G - 1 C R 1 C R - N 3 This code will create a 1/8" barb inlet and outlet, red, Nitrile O-ring, 3 psi check valve

Contact us for further configurations/options or visit our online configurator

### E-C58-PG-2ER2ER-N0.5 - Modular Polypropylene Red Bodied Check Valve, 1/4" Push-In Input and Output, Nitrile Seals, Cracking Pressure 0.5 psi



#### **Technical Data**

FORM TO SUIT M19 SPANNER

Max. Inlet Pressure: 5 bar (75 psi) Connections: Push-In Fitting to suit 1/4" (6.4mm) OD tube Mounting Style: In-Line Wetted Materials: Glass Filled Polypropylene, Polypropylene, Buna-N, 302 Stainless Steel Non-wetted Materials: Glass Filled Polypropylene Media/Ambient Temperature: 5°C to 50°C (41°F to 122°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Regulatory Information: FDA CFR21

**Other Technical Data:** This check valve is a form of poppet and is generally used in a pneumatic circuit, which requires free flow in one direction, indicated with an arrow on the check valve, and no flow in the opposite direction. See chart below for all available cracking pressures.

#### Price starting from: £8.50 \*Larger quantity price breaks available



1/4" Blue

1/4" Natural

I/+ Dide	1/4 Natura
Available Cracking	Pressures
0.1 psi	3 psi
0.5 psi	4 psi
1 psi	5 psi
2 psi	10 psi

\* Please contact us or see the chart to configure your part number

51,3[2,02]

PUSH-IN FITTING TO SUIT 1/4"(6.4mm)OD TUBE

### •More from this range •

#### 4mm



4mm Red



4mm Blue



4mm Natural









6mm Red



6mm Blue



6mm Natural





### -Configure your push-in check valve -

Inlet/Outlet						O-ring Material	Cracking Pressure	
Diameter Code	Material Code	Inlet Code	Colour Code	Outlet Code	Colour Code	Material	psi code	
E-C58	Glass Filled PP = -PG	1/4" = -2E	Red = R	1/4" = -2E	Red = R	Nitrile = -N	0.1	
		4mm = -2M	Blue = B	4mm = -2M	Blue = B	EPDM = -E	0.5	
		6mm = -2N	Natural = N	6mm = -2N	Natural = N	Silicone = -S	1	
						Viton = -V	2	
							3	
							4	
							5	
							10	

Example Product Code (indicated in blue in the above table): E - C 5 8 - P G - 2 E R 2 E R - N 3 This code will create a 1/4" push-in inlet and outlet, red, Nitrile O-ring, 3 psi check valve

Contact us for further configurations/options or visit our online configurator **Go to the build your own section to configure your own check valve** 

### E-C58-PG-3CR3CR-N0.5 - Modular Polypropylene Red Check Valve, G1/8" Female Input and Output, Nitrile Seals, Cracking Pressure 0.5 psi



### **Technical Data**

Max. Inlet Pressure: 5 bar (75 psi) Connections: G1/8" Female Thread Mounting Style: In-Line Wetted Materials: Glass Filled Polypropylene, Polypropylene, Buna-N, 302 Stainless Steel Non-wetted Materials: Glass Filled Polypropylene Media/Ambient Temperature: 5°C to 50°C (41°F to 122°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Regulatory Information: FDA CFR21

**Other Technical Data:** This check valve is a form of poppet and is generally used in a pneumatic circuit, which requires free flow in one direction, indicated with an arrow on the check valve, and no flow in the opposite direction. See chart below for all available cracking pressures.



### -Configure your female thread check valve -

Inlet/Outlet							Cracking Pressure
Diameter Code	Material Code	Inlet Code	Colour Code	Outlet Code	Colour Code	Material	psi code
E-C58	Glass Filled PP = -PG	BSPP Female Thread = -3C	Red = R	BSPP Female Thread = -3C	Red = R	Nitrile = -N	0.1
			Blue = B		Blue = B	EPDM = -E	0.5
			Natural = N		Natural = N	Silicone = -S	1
						Viton = -V	2
							3
							4
							5
							10

Example Product Code (indicated in blue in the above table): E - C 5 8 - P G - 3 C R 3 C R - N 3 This code will create a Female Thread inlet and outlet, red, Nitrile O-ring, 3 psi check valve

### E-CC58-PP-N0.5 - Polypropylene Cartridge for Modular Check Valve, Nitrile Seals, Cracking Pressure 0.5 psi

### **Technical Data**

Max. Inlet Pressure: 5 bar (75 psi) Mounting Style: In-Line Wetted Materials: Polypropylene, Buna-N, 302 Stainless Steel Non-wetted Materials: Polypropylene Media/Ambient Temperature: 5°C to 50°C (41°F to 122°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes **Regulatory Information:** FDA CFR21 Other Technical Data: Compatible with clean air. Easy to use cartridge for manifold assembly. Mixed imperial and metric combinations. Easy to take apart for R&D purposes. Multiple spring and O-ring options









Price starting from: £5.90 \*Larger quantity price breaks available



Available in 3 psi E-CC58-PP-N3



Contact us for you free modular check valve or cartridge sample

sales@eoxshop.com

### Poppet & Ball



### Key features include:

- Provides quick interruption of flow
- Provides positive sealing at pressures below the cracking pressure of the valve
- Does not require gravity or backflow pressure to work or actuate
- Provides positive valve closure regardless of vertical orientation
- Prevents system fluid or gas backflow during routine maintenance

### What is a Poppet/Ball?

It is important to note that the poppet style check valve is usually designed to be normally closed. Poppet type valves generally utilise a spring to force shut the orifice by holding a component against a seal to replicate the backflow pressure. Spherical shapes like ball bearings with smooth surfaces, which seal against an O-ring seal, or poppets, which generally incorporate an O-ring seal and seal against a smooth face.

When the forward pressure overcomes the spring force the valve opens. At this point the term cracking pressure is given to this action. An advantage of this type of check valve design is the low cracking pressures that can be achieved with repeatability. Small differentials in forward and backflow pressures can be accommodated. Low cracking pressures such as 0.1 psi are achievable.

When the check valve is fully open, flow in one direction is relatively unrestricted. When closed the check valve should not exhibit any flow. The key benefit of building a spring into a check valve's mechanism is that it largely eliminates the effect of gravity on check valve function. Without a spring, gravity and thus the valve's vertical orientation, can become a critical factor for a check valve to work properly.



### E-C-180089 - Polypropylene Bodied Check Valve, EPDM Seal, 3.2mm (1/8") ID Tube, Cracking Pressure 0.5 psi



Price starting from: £3.23 \*Larger quantity price breaks available

### **Technical Data**

Max. Inlet Pressure: 8.61 bar (125 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Polypropylene, EPDM, 316 & 302 Stainless Steel Non-wetted Materials: Polypropylene Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** A miniature In-Line Polypropylene bodied check valve with an EPDM seal, Stainless Steel spring, Stainless Steel ball, barbed ports to suit 1/8" ID tubing and a cracking pressure of 0.5 psi. Also available with a Viton seal.





- More from this range

### **EPDM Seal**



1 psi - EPDM Seal E-C-180090



2 psi -EPDM Seal E-C-180091



3 psi - EPDM Seal E-C-180092

### Viton Seal



0.5 psi - Viton Seal E-C-180097



1 psi - Viton Seal E-C-180098



2 psi - Viton Seal E-C-180099



3 psi - Viton Seal E-C-180100

### E-C-180085 - Polypropylene Bodied Check Valve, EPDM Seal, 6.4mm (1/4") ID Tube, Cracking Pressure 0.5 psi

### **Technical Data**

Max. Inlet Pressure: 8.61 bar (125 psi) Connections: 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Polypropylene, EPDM, 316 & 302 Stainless Steel Non-wetted Materials: Polypropylene Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: A miniature In-Line Polypropylene bodied check valve with an EPDM seal, Stainless Steel spring, Stainless Steel ball, barbed ports to suit 1/4" ID tubing and a cracking pressure of 0.5 psi. Also available with a Viton seal.







Price starting from: £3.23 \*Larger quantity price breaks available

### —— More from this range EPDM Seal



1 psi - EPDM Seal E-C-180086



2 psi -EPDM Seal E-C-180087



3 psi - EPDM Seal E-C-180088

### Viton Seal



0.5 psi - Viton Seal E-C-180093



1 psi - Viton Seal E-C-180094



2 psi - Viton Seal E-C-180095



3 psi - Viton Seal E-C-180096

### **Poppets - Plastic**

### E-C-180061 - Kynar® Bodied Check Valve, EPDM Seal, 3.2mm (1/8") ID Tube, Cracking Pressure 0.33 psi



\*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 8.61 bar (125 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Kynar®, Viton, 316 & 302 Stainless Steel Non-wetted Materials: Kynar® Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** A miniature In-Line black PVDF (Kynar®) bodied check valve with an EPDM seal, Stainless Steel spring, Stainless Steel ball, barbed ports to suit 1/8" ID tubing and a cracking pressure of 0.33 psi. Also available with a Viton seal.





More from this range



These EPDM seal check valves are also available in 0.33, 1, 1.5, 3, 5, 7, 10 & 12 psi

EPDM						
Part Number	Cracking Pressure	Part Number	Cracking Pressure			
E-C-180062	1 psi	E-C-180066	7 psi			
E-C-180063	1.5 psi	E-C-180067	10 psi			
E-C-180064	3 psi	E-C-180068	12 psi			
E-C-180065	5 psi					



These VITON seal check valves are also available in 0.33, 1, 1.5, 3, 5, 7, 10 & 12 psi

VITON						
Part Number	Cracking Pressue	Part Number	Cracking Pressure			
E-C-180077	0.33 psi	E-C-180081	5 psi			
E-C-180078	1 psi	E-C-180082	7 psi			
E-C-180079	1.5 psi	E-C-180083	10 psi			
E-C-180080	3 psi	E-C-180084	12 psi			

**EPDM rubber** (Ethylene Propylene Diene Monomer rubber) is a high-density synthetic rubber primarily used for outdoor applications like rubber roofing. It has dynamic and mechanical properties between natural rubber & synthetic rubber.

### E-C-180053 - Kynar® Bodied Check Valve, EPDM Seal, 6.4mm (1/4") ID Tube, Cracking Pressure 0.33 psi

### **Technical Data**

Max Inlet Pressure: 8.61 bar (125 psi) Connections: 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Kynar®, EPDM, 316 & 302 Stainless Steel Non-wetted Materials: Kynar® Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: A miniature In-Line black PVDF (Kynar®) bodied check valve with an EPDM seal, Stainless Steel spring, Stainless Steel ball, barbed ports to suit 1/4" ID tubing and a cracking pressure



of 0.33 psi. Also available with a Viton seal.





Price starting from: £18.76 \*Larger quantity price breaks available

### - More from this range



These EPDM seal check valves are also available in 0.33, 1, 1.5, 3, 5, 7, 10 & 12 psi

EPDM						
Part Number	Cracking Pressure	Part Number	Cracking Pressure			
E-C-180054	1 psi	E-C-180058	7 psi			
E-C-180055	1.5 psi	E-C-180059	10 psi			
E-C-180056	3 psi	E-C-180060	12 psi			
E-C-180057	5 psi					



These VITON seal check valves are also available in 0.33, 1, 1.5, 3, 5, 7, 10 & 12 psi

VITON							
PartCrackingPartCrackingNumberPressueNumberPressure							
E-C-180069	0.33 psi	E-C-180073	5 psi				
E-C-180070	1 psi	E-C-180074	7 psi				
E-C-180071	1.5 psi	E-C-180075	10 psi				
E-C-180072	3 psi	E-C-180076	12 psi				

Viton is a brand of FKM, a synthetic rubber and fluoropolymer elastomer commonly used in O-rings, chemical-resistant gloves and other moulded or extruded goods. Viton fluoroelastomers are categorised under the ASTM D1418 and ISO 1629 designation of FKM.

### **Poppets - Plastic**

### E-C-190044 - Clear Gamma Grade Polypropylene Bodied Check Valve, Silicone Stem, Luer Syringe Port to 6.4mm (1/4") ID Tube



#### **Technical Data**

in disposable applications.

Max. Inlet Pressure: 2.07 bar (30 psi) Connections: Luer Syringe Port to 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Polypropylene, Silicone, Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI Cleanroom Manufactured: Class 7 cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Cracking Pressure - free floating ball. Designed to be used as a dependable In-Line check valve or a directional flow control valve for liquid and air. All materials are Gamma Resistant and Latex-free. Product can be sterilised by Gamma based on raw material

manufacturers data. Valve stem and body will mate securely with all standard Luer syringes and Luer connectors. Product designed for use

Price starting from: £0.35 per piece \*Sold in multiples of 50 \*Larger quantity price breaks available



### E-C-190045 - Clear PVC Bodied Check Valve, Silicone Stem, Luer Syringe Port to 6.4mm (1/4") ID Tube



#### Technical Data

Max. Inlet Pressure: 2.07 bar (30 psi) Connections: Luer Syringe Port to 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Polypropylene, Silicone, PVC Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI Cleanroom Manufactured: Class 7 cleanroom RoHS/REACH Compliant: Yes Other Technical Data: All materials are Gamma Resistant and Latex-

free. Product can be sterilised by Gamma based on raw material manufacturers data. Valve stem and body will mate securely with all standard Luer syringes and Luer connectors. Product designed for use in disposable applications.

Price starting from: £0.38 per piece \*Sold in multiples of 50 \*Larger quantity price breaks available



### E-C-180109 - Plastic Bodied Check Valve, Buna-N Seal, 4mm OD Push-In to M5 Male Thread, Cracking Pressure 7 psi

### **Technical Data**

80 LPM.

Max. Inlet Pressure: 12 bar (174 psi) Connections: 4mm OD Push-In Fitting to M5 Male Thread Mounting Style: In-Line Wetted Materials: Technopolymer, Nickel Plated Brass, Buna-N, Stainless Steel Non-wetted Materials: Technopolymer, Nickel Plated Brass Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: The recommended types of pipe for use with the push-in fittings are Rilsan PA11, Nylon 6, Polyamide 12 and Polyurethane. 0.5 bar ( ≥ 7 psi) to fully open the check valve. Flow rate





Price starting from: £8.57 \*Larger quantity price breaks available



4mm Push-In to G1/8" E-C-180108



6mm Push-In to G1/8" E-C-180110



6mm Push-In to G1/4" E-C-180111



8mm Push-In to G1/8" E-C-180112



8mm Push-In Inlet to G1/4" E-C-180113

### **Poppets - Plastic**

### E-C-180114 - Technopolymer Bodied Check Valve, Buna-N Seal, 4mm OD Push-In, Cracking Pressure 7 psi

LPM.



#### **Technical Data**

Max. Inlet Pressure: 12 bar (174 psi) Connections: 4mm OD Push-In Fitting Mounting Style: In-Line Wetted Materials: Technopolymer, Nickel Plated Brass, Buna-N, Stainless Steel Non-wetted Materials: Technopolymer, Nickel Plated Brass Media Temperature: -20°C to 60°C (-4°F to 140°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: 0.5 bar ( ≥ 7 psi) to fully open the check valve. The recommended types of pipe for use with the push-in fittings are Rilsan PA11, Nylon 6, Polyamide 12 and Polyurethane. Flow rate - 80

Price starting from: £7.24 \*Larger quantity price breaks available





6mm Push-In E-C-180115



8mm Push-In E-C-180116

### E-C-180107 - Technopolymer Bodied Check Valve, Buna-N Seal, M5 Male Thread to 4mm OD Push-In, Cracking Pressure 7 psi

### **Technical Data**

LPM.

Max. Inlet Pressure: 12 bar (174 psi) Connections: M5 Male Thread to 4mm OD Push-In Fitting Mounting Style: In-Line Wetted Materials: Technopolymer, Nickel Plated Brass, Buna-N, Stainless Steel Non-wetted Materials: Technopolymer, Nickel Plated Brass Media Temperature: -20°C to 60°C (-4°F to 140°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: 0.5 bar ( ≥ 7 psi) to fully open the check valve. The recommended types of pipe for use with the push-in fittings are Rilsan PA11, Nylon 6, Polyamide 12 and Polyurethane. Flow rate - 80



Price starting from: £8.57 \*Larger quantity price breaks available







G1/8" Inlet to 4mm Push-in E-C-180102



G1/8" Inlet to 6mm Push-In E-C-180103



G1/4" Inlet to 6mm Push-In E-C-180105



G1/8" Inlet to 8mm Push-In E-C-180104



G1/4" Inlet to 8mm Push-In E-C-180106

### **Poppets - Plastic**

### E-C-180124 - Nickel Plated Brass Bodied Check Valve, Buna-N Seal, R1/4" Male Thread to 6mm OD Push-In, Cracking Pressure 1.45 psi



Price starting from: £16.59 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 10.34 bar (150 psi) Connections: R1/4" Male Thread to 6mm OD Push-In Fitting Mounting Style: Direct via R1/4" Male Thread Wetted Materials: Nickel Plated Brass, Buna-N, Stainless Steel, Aluminium Non-wetted Materials: Nickel Plated Brass, Polyacetal Media Temperature: 0°C to 60°C (32°F to 140°F)

**Recommended Filtration:** Depending on application **RoHS/REACH Compliant:** Yes

**Other Technical Data:** A Nickel Plated Brass bodied check valve with a R1/4" male inlet, 6mm OD Push-In outlet and a cracking pressure of 1.45 psi. This check valve is able to keep the service pressure at -750mm Hg (vacuum) and permits piping under low pressure. Flow rate - 5.3 LPM.







R1/4" to 8mm Push-In E-C-180125



R1/4" Male Inlet to Female Outlet E-C-180120



R1/4" Female Inlet to Male Outlet E-C-180118

### E-C-180002 - Brass Bodied Check Valve, Buna-N Seal, G1/2" Female Thread, Cracking Pressure $\leq$ 1 psi

#### **Technical Data**

Max. Inlet Pressure: 15 bar (217 psi) Connections: G1/2" Female Thread Mounting Style: In-Line Wetted Materials: Brass, Buna-N (NBR 65), Stainless Steel, Plastic Non-wetted Materials: Brass Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: In-Line Brass bodied check valve with an internal plastic shutter and Buna-N seals, G1/2" female ports and a cracking pressure of ≤ 1 psi. 0.99 bar (14.35 psi) to fully open the check valve.

Actual Size



Price starting from: £11.64 \*Larger quantity price breaks available







G3/4" Female Ports E-C-180003



G1" Female Ports E-C-180004

### E-C-180023 - Brass Bodied Check Valve, Internal Brass Poppet, Buna-N Seals, 10-32 UNF Male Thread to 10-32 UNF Female Thread, Cracking Pressure 0.5 psi



#### **Technical Data**

Max. Inlet Pressure: 20.68 bar (300 psi) Connections: 10-32 UNF Male Thread to 10-32 UNF Female Thread Mounting Style: In-Line Wetted Materials: Brass, Buna-N, Stainless Steel Non-wetted Materials: Brass Media Temperature: 0°C to 110°C (32°F to 230°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: 0.69 bar (≤ 10 psi) to fully open the check valve. These valves are compatible with air and hydraulic oil. They are not intended for use as a pressure relief valve. Flow rate - 280 LPM.

Price starting from: £10.73 \*Larger quantity price breaks available







10-32 UNF FemaleM5 FemThread to Male ThreadThreadE-C-180025E-C-180



M5 Female to Male Thread E-C-180029

### E-C-180026 - Brass Bodied Check Valve, Internal Brass Poppet, Buna-N Seal, 10-32 UNF Female Thread, Cracking Pressure 0.5 psi

### **Technical Data**

Max. Inlet Pressure: 20.68 bar (300 psi) Connections: 10-32 UNF Female Thread Mounting Style: In-Line Wetted Materials: Brass, Buna-N, Stainless Steel Non-wetted Materials: Brass Media Temperature: 0°C to 110°C (32°F to 230°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: 0.69 bar (≤ 10 psi) to fully open the check valve.

These valves are compatible with Air and Hydraulic Oil. They are not intended for use as a pressure relief valve. Flow rate - 280 LPM.



Price starting from: £10.73 \*Larger quantity price breaks available







M5 Female Thread E-C-180030



G1/8" Female Thread E-C-180028

### E-C-180009 - Nickel Plated Brass Bodied Check Valve, Viton Seal, M5 Female Thread, Cracking Pressure 3 psi



\*Larger quantity price breaks available

### **Technical Data**

Max. Inlet Pressure: 8 bar (116 psi) Connections: M5 Female Thread Mounting Style: In-Line Wetted Materials: Nickel Plated Brass, Viton (FKM), 302 Stainless Steel Non-wetted Materials: Nickel Plated Brass

Recommended Filtration: Depending on application

RoHS/REACH Compliant: Yes

**Other Technical Data:** In-Line Nickel Plated Brass bodied check valve with an internal Nickel Plated Brass shutter and Viton seals, M5 female ports and a cracking pressure of  $\leq$ 3 psi. 2 bar (29 psi) to fully open the check valve. Flow rate - 700 LPM.





G1/8" Female Thread E-C-180005



G1/4" Female Thread E-C-180006



G3/8" Female Thread E-C-180007



G1/2" Female Thread E-C-180008

### E-C-180010 - Nickel Plated Brass Bodied Check Valve, Buna-N Seal, 4mm OD Push-In, Cracking Pressure 3 psi

### **Technical Data**

Max. Inlet Pressure: 8 bar (116 psi) Connections: 4mm OD Push-In Fitting Mounting Style: In-Line Wetted Materials: Nickel Plated Brass, Buna-N, 302 Stainless Steel Non-wetted Materials: Nickel Plated Brass, Technopolymer Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: An In-Line Nickel Plated Brass bodied check valve with an internal Nickel Plated Brass shutter and Buna-N seals, 4mm OD Push-In fitting and a cracking pressure of 3 psi. 2 bar (29 psi) to fully open the check valve.





Price starting from: £9.84 \*Larger quantity price breaks available



6mm Push-In E-C-180011



8mm Push-In E-C-180012

### E-C-180032 - Nickel Plated Brass Bodied Check Valve, Internal Brass Poppet, Viton Seal, M5 Male Thread to M5 Female Thread, Cracking Pressure 0.5 psi



Price starting from: £18.24

\*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 20.68 bar (300 psi) Connections: M5 Male Thread to M5 Female Thread Mounting Style: In-Line Wetted Materials: Brass, Nickel Plated Brass, Viton, Stainless Steel Non-wetted Materials: Nickel Plated Brass Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: 0.69 bar (≤ 10 psi) to fully open the check valve. These valves are compatible with air and hydraulic oil, they are not intended for use as a pressure relief valve. Flow rate - 280 LPM.

![](_page_27_Figure_5.jpeg)

![](_page_27_Picture_7.jpeg)

M5 Female to Male Thread - 0.5 psi E-C-180034

![](_page_27_Picture_9.jpeg)

M5 Female Thread 0.5 psi E-C-180035

### E-C-180033 - Nickel Plated Brass Bodied Check Valve, Internal Delrin® Acetal Poppet, Viton Seal, G1/8" Female Thread, Cracking Pressure 0.5 psi

#### **Technical Data**

Max. Inlet Pressure: 20.68 bar (300 psi) Connections: G1/8" Female Thread Mounting Style: In-Line Wetted Materials: Nickel Plated Brass, Viton, Acetal, Stainless Steel Non-wetted Materials: Nickel Plated Brass Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: 0.69 bar (≤ 10 psi) to fully open the check valve. These valves are compatible with air and hydraulic oil, they are not intended for use as a pressure relief valve. Flow rate - 580 LPM.

![](_page_28_Figure_4.jpeg)

![](_page_28_Picture_5.jpeg)

Price starting from: £19.69 \*Larger quantity price breaks available

### Contact us for a copy of the modular check valve flyer or download online

https://www.eoxshop.com/Literature/

![](_page_28_Picture_9.jpeg)

### E-C-180128 - Nickel Plated Brass Bodied Check Valve, Buna-N Seal, 4mm OD Push-In to M5 Male Thread, Cracking Pressure 1.45 psi

![](_page_29_Picture_2.jpeg)

#### Price starting from: £13.84 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 10.34 bar (150 psi)

Connections: 4mm OD Push-In Fitting to M5 Male Thread Mounting Style: Direct via M5 Male Thread

Wetted Materials: Nickel Plated Brass, Buna-N, Stainless Steel, Aluminium

Non-wetted Materials: Nickel Plated Brass, Polyacetal Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** A Nickel Plated Brass bodied check valve with a 4mm OD Push-In inlet, M5 male threaded outlet and a cracking pressure of 1.45 psi. This check valve is able to keep the service pressure at -750mm Hg (vacuum) and permits piping under low pressure. Flow rate 2 LPM.

![](_page_29_Figure_10.jpeg)

![](_page_29_Picture_12.jpeg)

M5 to 4mm Push-In E-C-180126

![](_page_29_Picture_14.jpeg)

4mm Push-In to R1/8" E-C-180127

### E-C-180129 - Nickel Plated Brass Bodied Check Valve, Buna-N Seal, 6mm OD Push-In to R1/8" Male Thread, Cracking Pressure 1.45 psi

### **Technical Data**

Max. Inlet Pressure: 10.34 bar (150 psi) Connections: 6mm OD Push-in Fitting to R1/8" Male Thread Mounting Style: Direct via R1/8" Male Thread Flow Rate: 5.3 LPM Wetted Materials: Nickel Plated Brass, Buna-N, Stainless Steel, Aluminium Non-wetted Materials: Nickel Plated Brass, Polyacetal Recommended Filtration: Depending on application

RoHS/REACH Compliant: Yes

**Other Technical Data:** A Nickel Plated Brass bodied check valve with a 6mm OD Push-In inlet, R1/8" Male Thread outlet, cracking pressure of 1.45 psi. This check valve is able to keep the service pressure at -750mm Hg (vacuum) and permits piping under low pressure.

![](_page_30_Figure_6.jpeg)

Price starting from: £15.68 \*Larger quantity price breaks available

![](_page_30_Picture_8.jpeg)

Available in 6mm Push-In to R1/4" E-C-180130

![](_page_30_Figure_10.jpeg)

### E-C-180131 - Nickel Plated Brass Bodied Check Valve, Buna-N Seal, 8mm OD Push-In to R1/8" Male Thread, Cracking Pressure 1.45 psi

![](_page_31_Picture_2.jpeg)

#### **Technical Data**

Max. Inlet Pressure: 10.34 bar (150 psi) Connections: 8mm OD Push-In Fitting to R1/8" Male Thread Mounting Style: Direct via R1/8" Male Thread Wetted Materials: Nickel Plated Brass, Buna-N, Stainless Steel,

Aluminium Non-wetted Materials: Nickel Plated Brass, Polyacetal Media Temperature: 0°C to 60°C (32°F to 140°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** A Nickel Plated Brass bodied check valve with a 8mm OD Push-In inlet, R1/8" outlet and a cracking pressure of 1.45 psi. This check valve is able to keep the service pressure at -750mm Hg (vacuum) and permits piping under low pressure. Flow rate 5.3 LPM.

Price starting from: £17.52 \*Larger quantity price breaks available

![](_page_31_Picture_8.jpeg)

16,1[0,63] 16,1[0,63] 16,1[0,63] 16,1[0,63] 10,1[0,6] 10,1[0,6] 10,1[0,6] 10,1[0,6] 10,1[0,6] 10,1[0,6] 

38,0 [1,49]

Available in 8mm Push-In to R1/4" E-C-180132

### E-C-180121 - Nickel Plated Brass Bodied Check Valve, Buna-N Seal, R1/8" Male Thread to 4mm OD Push-In, Cracking Pressure 1.45 psi

### **Technical Data**

Max. Inlet Pressure: 10.34 bar (150 psi) Connections: R1/8" Male Thread to 4mm OD Push-In Fitting Mounting Style: Direct via R1/8" Male Thread Wetted Materials: Nickel Plated Brass, Buna-N, Stainless Steel, Aluminium

Non-wetted Materials: Nickel Plated Brass, Polyacetal **Recommended Filtration:** Depending on application **RoHS/REACH Compliant:** Yes

Other Technical Data: A Nickel Plated Brass bodied check valve with a R1/8" Male Thread inlet to 4mm OD Push-In outlet and a cracking pressure of 1.45 psi. This check valve is able to keep the service pressure at -750mm Hg (vacuum) and permits piping under low pressure. Flow rate - 2.15 LPM.

![](_page_32_Figure_6.jpeg)

![](_page_32_Picture_7.jpeg)

Price starting from: £14.75 \*Larger quantity price breaks available

![](_page_32_Picture_10.jpeg)

R1/8" to 6mm Push-In R1/8" to 8mm Push-In R1/8" Male to Female E-C-180122

![](_page_32_Picture_12.jpeg)

E-C-180123

![](_page_32_Picture_14.jpeg)

E-C-180119

![](_page_32_Picture_16.jpeg)

R1/8" Female to Male E-C-180117

### Ball - Plastic

### E-C-190060 - Grey Noryl Bodied Check Valve, Buna-N O-ring, Borosilicate Glass Ball, 3.2mm (1/8") ID Tube, Cracking Pressure 0.5 psi

![](_page_33_Picture_2.jpeg)

#### **Technical Data**

Max. Inlet Pressure: 6.89 bar (100 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Borosilicate Glass, Grey Noryl, 302 Stainless Steel, Buna-N Non-wetted Materials: Grey Noryl Media Temperature: 4°C to 66°C (40°F to 150°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: A Grey Noryl body check valve complete with 302 Stainless Steel spring, Buna-N and Borosilicate Glass ball. Cracking pressure 0.5 psi (Typically 0.3 psi or 8" water column). This

check valve is designed for medical, HVAC, light industrial, process control, pump, gas mixers and dipp irrigation use. Black or white

Polysulfone body, Silicone or Viton seal available

Price starting from: £5.69 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available Available with EPDM Seal E-C-200003 47,4[1,47] 40,40]40,40]

E-C-200004 - Grey Noryl Bodied Check Valve, EPDM O-ring, Stainless Steel Ball, 3.2mm (1/8") ID Tube, Cracking Pressure 0.5 psi

![](_page_33_Picture_7.jpeg)

### Technical Data Max. Inlet Pressure: 6.89 bar (100 psi)

or Viton seal available.

Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: 304 Stainless Steel, Grey Noryl, 302 Stainless Steel, EPDM Non-wetted Materials: Grey Noryl Media Temperature: 4°C to 66°C (40°F to 150°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: A Grey Noryl body check valve complete with 302 Stainless Steel spring, EPDM seal and Stainless Steel ball. Cracking <0.5 psi (Typically 0.3 psi or 8" water column). This check valve is designed for medical, HVAC, light industrial, process control, pump, gas mixers and dipp irrigation use. Black or white Polysulfone body, Silicone

Price starting from: £5.69 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

![](_page_33_Picture_11.jpeg)

![](_page_33_Figure_12.jpeg)

![](_page_33_Figure_13.jpeg)

### Ball - Metal

### E-C-190040 - Clear PVC Bodied Check Valve, Nylon Ball, Luer Syringe Port to 6.4mm (1/4") ID Tube

### **Technical Data**

Max. Inlet Pressure: 2.07 bar (30 psi) Connections: Luer Syringe Port to 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: PVC, Nylon Media Temperature: 0°C to 60°C (32°F to 140°F) Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI Cleanroom Manufactured: Class 7 cleanroom RoHS/REACH Compliant: Yes Other Technical Data: All materials are Latex-free. Valve stem and body will mate securely with all standard Luer syringes and Luer connectors. Product designed for use in disposable applications. Designed to be used as a dependable In-Line check valve or a

![](_page_34_Picture_4.jpeg)

Price starting from: £0.34 per piece \*Sold in multiples of 10

\*Larger quantity price breaks available

![](_page_34_Figure_7.jpeg)

directional flow control valve for liquid and air.

# Floating & Diaphragm

![](_page_35_Picture_1.jpeg)

### **Key features include:**

- Positive seal
- Orientation dependant
- Variable opening pressure through seat thickness
- Cost effective
- Corrosion resistant
- Wear resistant
- ISO 80369 7 compliant check valves available
## What is a Floating Disc/Diaphragm?

Floating disc check valves use a self-centring flexible elastomer disc. The valve body keeps the disc centred over the sealing surface of the valve. The sealing surface is on the inlet side of the check valve body and is curved back towards the inlet port. Backflow causes the flexible elastomer disc to lie down across the curved sealing surface and this closes the opening to the inlet port. The closed check valve prevents upstream flow through the inlet port. The floating disc check valve has a two-level valve seat with built in channels on the outlet side of the valve body. Upstream flow towards the outlet or exit port causes the disc to lie against this seat. The media then flows around the disc, through the channels and out through the exit port of the check valve.

Diaphragm check valves are almost always normally closed. Diaphragm design types typically rely upon a formed membrane shape fixed in position and sealing against the inlet surface through the spring force of the membrane. The membrane lifts within the housing as the upstream flow increases until it is greater than the spring force of the membrane plus any backflow pressure. When this differential occurs, the diaphragm either compresses or bends to allow the valve to open and the media to flow through the diaphragm and out through the outlet.



## **Floating Disc**

# E-C-180017 - Polysulfone Bodied Check Valve, (Blue Symbol), Internal Silicone Disc, 1.6mm (1/16") ID Tube, Cracking Pressure < 0.8" H2O



Price starting from: £6.69 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 0.69 bar (10 psi) Connections: 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Silicone Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** Designed to have a low cracking pressure and a minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 3.4 LPM (0.12 SCFM)



E-C-180018 - Polysulfone Bodied Check Valve, (Black Housing), Internal Silicone Disc, 1.6mm (1/16") ID Tube, Cracking Pressure < 10" H2O



**Technical Data** 

Max. Inlet Pressure: 5.17 bar (75 psi) Connections: 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Silicone Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: Designed to have a low cracking pressure and a

minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 56.6 LPM LPM2.0 SCFM.





# E-C-180016 - Polysulfone Bodied Check Valve, (Orange Symbol), Internal Celcon Disc, 1.6mm (1/16") ID Tube, Cracking Pressure < 0.8"H2O

#### **Technical Data**

Max. Inlet Pressure: 0.69 bar (10 psi) Connections: 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Celcon Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: Designed to have a low cracking pressure and a

minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 3.4 LPM (0.12 SCFM)





Price starting from: £6.69 \*Larger quantity price breaks available

# E-C-180015 - Polysulfone Bodied Check Valve, (Black Housing), Internal Silicone Disc, 3.2mm (1/8") ID Tube, Cracking Pressure < 10" H2O

#### **Technical Data**

Max. Inlet Pressure: 5.17 bar (75 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Silicone Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: Designed to have a low cracking pressure and a

minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 56.6 LPM LPM2.0 SCFM.





Price starting from: £9.74 \*Larger quantity price breaks available

## **Floating Disc**

#### E-C-180014 - Polysulfone Bodied Check Valve, (Blue Symbol), Internal Silicone Disc, 3.2mm (1/8") ID Tube, Cracking Pressure < 0.8" H2O



Price starting from: £6.69 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 0.69 bar (10 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Silicone Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application **RoHS/REACH Compliant:** Yes

Other Technical Data: A miniature In-Line Polysulfone bodied check valve with an internal Silicone disc. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 3.4 LPM (0.12 SCFM).



#### E-C-180013 - Polysulfone Bodied Check Valve, (Orange Symbol), Internal Celcon Disc, 3.2mm (1/8") ID Tube, Cracking Pressure < 0.8" H2O



Price starting from: £6.69 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 0.69 bar (10 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Celcon Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

Other Technical Data: Designed to have a low cracking pressure and a minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 3.4 LPM (0.12 SCFM).





# E-C-180019 - Polypropylene Bodied Check Valve, (Red Symbol), Internal Silicone Disc, 1.6mm (1/16") ID Tube, Cracking Pressure < 0.8" H2O

#### **Technical Data**

Max. Inlet Pressure: 0.69 bar (10 psi) Connections: 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: Polypropylene, Silicone Non-wetted Materials: Polypropylene Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: Designed to have a low cracking pressure and a

minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 3.4 LPM (0.12 SCFM).





Price starting from: £5.88 \*Larger quantity price breaks available

E-C-180020 - Polysulfone Bodied Check Valve, (Orange Symbol), Internal Celcon Disc, 1.6mm (1/16") ID Tube, Cracking Pressure < 0.8" H2O

#### **Technical Data**

Max. Inlet Pressure: 0.69 bar (10 psi) Connections: 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Celcon Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: Designed to have a low cracking pressure and a

minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 3.4 LPM (0.12 SCFM).





Price starting from: £5.88 \*Larger quantity price breaks available

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## **Floating Disc**

## E-C-180021 - Polysulfone Bodied Check Valve, (Blue Symbol), Internal Silicone Disc, 1.6mm (1/16") ID Tube, Cracking Pressure < 0.8" H2O



Price starting from: £5.88 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 0.69 bar (10 psi) Connections: 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: Polysulfone, Silicone Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** Designed to have a low cracking pressure and a minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 3.4 LPM (0.12 SCFM).



E-C-180022 - Polysulfone Bodied Check Valve, (Black Housing), Internal Silicone Disc, 10-32 UNF Female Thread, Cracking Pressure < 10" H2O



Price starting from: £9.13 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 5.17 bar (75 psi) Connections: 10-32 UNF Female Thread Mounting Style: In-Line Wetted Materials: Polysulfone, Silicone Non-wetted Materials: Polysulfone Media/Ambient Temperature: 5°C to 48°C (40°F to 120°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** Designed to have a low cracking pressure and a minimum differential for forward flow. The operation of the check valve is based on the movement of a small disc. The disc shifts within the housing as the pressure differential changes from forward to reverse. A flat surface on one side of the disc seals off the flow, whilst the other side allows flow to pass. Flow rate - 56.6 LPM (2 SCFM).



Flow Direction -

10-32 UNF FEMALE THREAD X2

## Diaphragm

# E-C-200010 - ABS Bodied Check Valve, Silicone Disc, 1.6mm (1/16") ID Tube, Cracking Pressure ≤ 8 mbar

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: 1.6 mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone Non-wetted Materials: ABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.





Price starting from: £2.68 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### E-C-180038 - Nylon Bodied Check Valve, EPDM Diaphragm, 6.4mm (1/4") ID Tube, Cracking Pressure 0.5 psi

#### **Technical Data**

Max. Inlet Pressure: 1.03 bar (15 psi) Connections: 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Nylon 6/6, EPDM Non-wetted Materials: Nylon 6/6 Media/Ambient Temperature: -29 to 121°C (-20 to 250°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** This valve has a cracking pressure of 0.5 psi and will operate in any orientation. Can be used with vacuum or pressure and is also suitable for some vapour, gas and fluid systems. Flow rate - 7.08 LPM (0.25 SCFM).





Price starting from: £2.56 \*Larger quantity price breaks available

## E-C-180101 - Delrin® Acetal Bodied Check Valve, Internal Silicone Seal, 6.4mm (1/4") ID Tube, Cracking Pressure 0.3 psi



Price starting from: £2.27 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 5.51 Bar (80 psi) Connections: 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Delrin® Acetal, Silicone Non-wetted Materials: Delrin® Acetal Media/Ambient Temperature: -40°C to 65.5°C (-40°F to 150°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** An In-Line Delrin® Acetal bodied check valve with an internal Silicone seal. Single barb design without parting lines on barb surface gives the tubing a chance to relax behind the barb and gives a better seal and hold than multiple barb designs.



E-C-180039 - Polypropylene Bodied Check Valve, Viton Diaphragm, 3.2mm (1/8") ID Tube, Cracking Pressure 0.5 psi



Price starting from: £2.56 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 1.03 bar (15 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Polypropylene, Viton Non-wetted Materials: Polypropylene Media/Ambient Temperature: -29°C to 121°C (-20 to 250°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** This valve has a cracking pressure of 0.5 psi and will operate in any orientation. Can be used with vacuum or pressure and is also suitable for some vapour, gas and fluid systems. Flow rate - 5.66 LPM (0.2 SCFM).





## Diaphragm

#### E-C-180040 - Polypropylene Bodied Check Valve, Viton Diaphragm, 6.4mm (1/4") ID Tube, Cracking Pressure 0.5 psi

#### **Technical Data**

LPM (0.25 SCFM).

Max. Inlet Pressure: 1.03 bar (15 psi) Connections: 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Polypropylene, Viton Non-wetted Materials: Polypropylene Media/Ambient Temperature: -29°C to 121°C (-20 to 250°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: This valve has a cracking pressure of 0.5 psi and will operate in any orientation. Can be used with vacuum or pressure and

is also suitable for some vapour, gas and fluid systems. Flow rate - 7.08





Price starting from: £2.56 \*Larger quantity price breaks available

# E-C-180041 - Acrylic Bodied High Flow Check Valve, Silicone Diaphragm, 3.2mm (1/8") ID Tube, Cracking Pressure 0.1 psi

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Medical Grade Acrylic, Medical Grade Silicone Non-wetted Materials: Medical Grade Acrylic Media/Ambient Temperature: 82°C (180 °F) Recommended Filtration: Depending on application Regulatory Information: USP Class VI RoHS/REACH Compliant: Yes Other Technical Data: This check valve is made from medical

**Other Technical Data:** This check valve is made from medical grade materials and is suitable for EtO and radiation methods of sterilisation. The materials will not withstand the high temperatures of steam autoclave and are not suitable for this process.





Price starting from: £4.55 \*Larger quantity price breaks available

## Diaphragm

## E-C-180042 - Acrylic Bodied High Flow Check Valve, Silicone Diaphragm, 6.4mm (1/4") ID Tube, Cracking Pressure 0.1 psi



Price starting from: £4.55 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Medical Grade Acrylic, Medical Grade Silicone Non-wetted Materials: Medical Grade Acrylic Media/Ambient Temperature: 82°C (180 °F) Recommended Filtration: Depending on application Regulatory Information: USP Class VI RoHS/REACH Compliant: Yes Other Technical Data: This check valve is made from medical

grade materials and is suitable for EtO and radiation methods of sterilisation. The materials will not withstand the high temperatures

Flow Direction ——>

E-C-2015-0023 - Medical ABS Bodied Check Valve, Silicone Diaphragm, Barbs for 2.4mm (3/32") ID Tube, Cracking Pressure  $\leq$  0.087 psi



Price starting from: £0.85 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: 2.4mm (3/32") ID Tube Mounting Style: In-Line Wetted Materials: MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, MABS bodied check valve complete with Silicone diaphragm and barbed ports for 3/32" ID tube (inlet and



outlet). Cracking pressure  $\leq 0.087$  psi. Flow rate -  $\geq 0.15$  LPM.

#### E-C-2015-0025 - Medical ABS Bodied Check Valve, Silicone Diaphragm, 2.4mm (3/32") ID Tube to 3.2mm (1/8") ID Tube, Cracking Pressure ≤ 0.087 psi

#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: 2.4mm (3/32") ID Tube to 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, MABS bodied check valve complete with Silicone diaphragm and barbed ports for 3/32" ID tube (inlet) to 1/8" ID tube (outlet). Flow rate - ≥0.15 LPM.



Price starting from: £0.88 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



E-C-2015-0029 - SAN/Medical ABS Bodied Check Valve, Silicone Diaphragm, 2.4mm (3/32") ID Tube to Male Luer Lock, Cracking Pressure  $\leq$  0.087 psi

#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: 2.4mm (3/32") ID Tube to Male Luer Lock Mounting Style: In-Line Wetted Materials: SAN, MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, SAN/MABS bodied check valve complete with Silicone diaphragm and barbed ports for 3/32" ID tube (inlet) and

With Silicone diaphragm and barbed ports for  $3/32^{"}$  ID tube (inlet) and male luer lock (outlet). Cracking pressure  $\leq 0.087$  psi. Flow rate -  $\geq 0.15$  LPM.





Price starting from: £0.86 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

## Diaphragm

## E-C-2015-0027 - SAN/Medical ABS Bodied Check Valve, Silicone Diaphragm, Female Luer Lock to Barbs for 2.4mm (3/32") ID Tube, Cracking Pressure $\leq$ 0.087 psi



#### **Technical Data**

ports for 3/32" ID tube (outlet).

Max. Inlet Pressure: 6 bar (87 psi) Connections: Female Luer Lock to 2.4mm (3/32") ID Tube Mounting Style: In-Line Wetted Materials: SAN, MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, SAN and MABS bodied check valve complete with Silicone diaphragm, female luer lock (inlet) and barbed

Price starting from: £0.79 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



E-C-2015-0024 - Medical ABS Bodied Check Valve, Silicone Diaphragm, 3.2mm (1/8") ID Tube, Cracking Pressure ≤ 0.087 psi



Price starting from: £0.88 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Flow rate -  $\geq 0.15$  LPM.

Max. Inlet Pressure: 6 bar (87 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, MABS bodied check valve complete with Silicone diaphragm and barbed ports for 1/8" ID tube (inlet and outlet).

#### E-C-2015-0026 - Medical ABS Bodied Check, Valve, Silicone Diaphragm, 3.2mm (1/8") ID Tube to 2.4mm (3/32") ID Tube, Cracking Pressure ≤ 0.087 psi

#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: 3.2mm (1/8") ID Tube to 2.4mm (3/32") ID Tube Mounting Style: In-Line Wetted Materials: MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, MABS bodied check valve complete with Silicone diaphragm and barbed ports for 1/8" ID tube (inlet) to 3/32" ID tube (outlet). Flow rate - ≥0.15 LPM.



Price starting from: £0.88 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



E-C-2015-0030 - SAN/Medical ABS Bodied Check Valve, Silicone Diaphragm, 3.2mm (1/8") ID Tube to Male Luer Lock, Cracking Pressure ≤ 0.087 psi

#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: 3.2mm (1/8") ID Tube to Male Luer Lock Mounting Style: In-Line Wetted Materials: SAN, MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, SAN/MABS bodied check valve complete with Silicone diaphragm, barbed ports for 1/8" ID tube (inlet) and male luer lock (outlet). Flow rate - ≥0.15 LPM.





Price starting from: £0.86 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

## Diaphragm

## E-C-2015-0028 - SAN/Medical ABS Bodied Check Valve, Silicone Diaphragm, Female Luer Lock to 3.2mm (1/8") ID Tube, Cracking Pressure ≤ 0.087 psi



#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: Female Luer Lock to 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: SAN, MABS, Silicone Non-wetted Materials: MABS Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI, ISO 10993, California Prop 65, FDA 21 CFR 181.32 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: In-Line, SAN and MABS bodied check valve complete with Silicone diaphragm, female luer lock (inlet) and barbed ports for 1/8" ID tube (outlet). Flow rate - ≥0.15 LPM.

Price starting from: £0.83 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available





E-C-180184 - SAN Blue - Transparent Medical ABS Bodied Check Valve, Silicone Disc, Female Luer Lock to Male Luer Lock, Cracking Pressure ≤ 1 psi



Price starting from: £0.83 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 8 bar (116 psi) Connections: Female Luer Lock to Male Luer Lock Mounting Style: In-Line Wetted Materials: SAN Blue-Transparent/MABS, Silicone Non-wetted Materials: SAN Blue-Transparent/MABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP free. Animal derivative free. Human derivative free. BPA free. Phthalate free. Latex free. Compatible with EtO sterilisation, but is not compatible with

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autoclave or gamma sterilisation.



/ FEMALE LUER LOCK





Flow Direction -

#### E-C-180191 - SAN Blue - Transparent Medical ABS Bodied Check Valve, Silicone Disc, Female Luer Lock to 4.1mm OD Bond-In, Cracking Pressure 2.9 psi

#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: Female Luer Lock to 4.1 mm (.161") OD Bond-in Port Mounting Style: In-Line Wetted Materials: SAN Blue-Transparent/MABS, Silicone Non-wetted Materials: SAN Blue-Transparent/MABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP free. Animal derivative free. Human derivative free. BPA free. Phthalate free. Latex

free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.



Actual Size

Price starting from: £0.53 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

E-C-180192 - SAN Blue - Transparent Medical ABS Bodied Check Valve, Silicone Disc, Female Luer Lock to 3.0mm ID/4.1mm OD Bond-In, Cracking Pressure ≤ 1 psi

#### **Technical Data**

Max. Inlet Pressure: 6 bar (87 psi) Connections: Female Luer Lock to 3.0 mm (.118") ID/4.1 mm (.161") OD Bond-in Port Mounting Style: In-Line Wetted Materials: SAN Blue -Transparent/MABS, Silicone Non-wetted Materials: SAN Blue -Transparent/MABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP free Animal

**Other Technical Data:** Conflict Mineral Compliant. DEHP free. Animal derivative free. Human derivative free. BPA free. Phthalate free. Latex free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.







Price starting from: £0.53 per piece \*Sold in multiples of 10

\*Larger quantity price breaks available

# E-C-180189 - SAN Blue - Transparent Medical ABS Bodied Check Valve, Silicone Disc, 3.1mm OD Bond-In to Male Luer Lock, Cracking Pressure 2.9 psi



#### **Technical Data**

Max. Inlet Pressure: 21 bar (304 psi) Connections: 3.1mm OD Bond-in Port to Male Luer Lock Mounting Style: In-Line Wetted Materials: SAN Blue -Transparent/MABS, Silicone Non-wetted Materials: SAN Blue -Transparent/MABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes

**Other Technical Data:** Conflict Mineral Compliant. DEHP free. Animal derivative free. Human derivative free. BPA free. Phthalate free. Latex free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.

Price starting from: £0.53 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



## E-C-180190 - SAN Blue - Transparent Medical ABS Bodied Check Valve, Silicone Disc, 3.1mm ID to 4.2mm OD Bond-In, Cracking Pressure ≤ 1 psi



Price starting from: £0.52 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 8 bar (116 psi)

Connections: 3.1mm ID to 4.2mm OD Bond-in Port Mounting Style: In-Line Wetted Materials: SAN Blue -Transparent/MABS, Silicone Non-wetted Materials: SAN Blue -Transparent/MABS Recommended Filtration: Depending on application

**Regulatory Information:** Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65

Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes

**Other Technical Data:** Conflict Mineral Compliant. DEHP free. Animal derivative free. Human derivative free. BPA free. Phthalate free. Latex free. Compatible with EtO (Ethylene Oxide) sterilisation, but is not compatible with autoclave or gamma sterilisation.



# E-C-190042 - Polycarbonate Bodied Disc Style Check Valve, Silicone Seal Disc, 3.3mm (0.130") OD Stem

#### **Technical Data**

Max. Inlet Pressure: 4.13 bar (60 psi) Connections: 3.3mm (0.130") OD Stem Mounting Style: In-Line Wetted Materials: Polycarbonate, Silicone Media Temperature: 0°C to 121°C (32°F to 250°F) Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI Cleanroom Manufactured: Class 7 cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Designed to be used as a dependable In-Line

check valve or a directional flow control valve for liquid and air. All materials are Latex-free. Valve stem and body will mate securely with all standard Luer syringes and Luer connectors. Product designed for use in disposable applications.



Actual Size

Price starting from: £0.65 per piece \*Sold in multiples of 50 \*Larger quantity price breaks available

E-C-190043 - Polycarbonate Bodied Disc Style Check Valve, Silicone Seal Disc, Female Luer Lock to 3.3mm (0.130") OD Stem

#### **Technical Data**

Max. Inlet Pressure: 4.13 bar (60 psi) Connections: Female Luer Lock to 3.3mm (0.130") OD Stem Mounting Style: In-Line Wetted Materials: Polycarbonate, Silicone Media Temperature: 0°C to 121°C (32°F to 250°F) Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI Cleanroom Manufactured: Class 7 cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Designed to be used as a dependable In-Line

check valve or a directional flow control valve for liquid and air. All materials are Latex-free. Valve stem and body will mate securely with all standard Luer syringes and Luer connectors. Product designed for use in disposable applications.





Price starting from: £0.65 per piece \*Sold in multiples of 50 \*Larger quantity price breaks available

#### E-C-190066 - Natural Polypropylene Bodied Check Valve, Viton Diaphragm, 4.8mm (3/16") ID Tube, Cracking Pressure 0.5 psi



Price starting from: £1.72 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: To suit 4.8mm (3/16") ID Tube Mounting Style: In-Line Wetted Materials: Natural Polypropylene, Viton Non-wetted Materials: Natural Polypropylene Media Temperature: 0°C to 121°C (32°F to 250°F) Recommended Filtration: Depending on application Regulatory Information: FDA 21 CFR 177.1520(c)1.1a, USP Class VI RoHS/REACH Compliant: Yes

**Other Technical Data:** An In-Line, Natural Polypropylene bodied check valve complete with Viton diaphragm and barb for 3/16" ID tube.



- More from this range



1/8" E-C-190067



1/4" E-C-190068

#### E-C-190069 - Natural Polypropylene Bodied Check Valve, Viton Diaphragm, 1/8-27 NPT Male Thread to 4.8mm (3/16") Barb, Cracking Pressure 0.5 psi

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: 1/8-27 NPT Male Thread to 4.8mm (3/16") ID Tube Mounting Style: In-Line Wetted Materials: Natural Polypropylene, Viton Non-wetted Materials: Natural Polypropylene Media Temperature: 0°C to 121°C (32°F to 250°F) Recommended Filtration: Depending on application Regulatory Information: FDA 21 CFR 177.1520(c)1.1a, USP Class VI RoHS/REACH Compliant: Yes Other Technical Data: An In-Line, Natural Polypropylene bodied check valve complete with Viton diaphragm and 1/8-27 NPT male thread inlet to barb for 3/16" ID tube outlet.





Price starting from: £1.72 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

## - More from this range



1/8-27 NPT to 1/8" E-C-190070



1/8-27 NPT to 1/4" E-C-190071

## Diaphragm

# E-C-190072 - Natural Polycarbonate Bodied Check Valve, Silicone Diaphragm, Female Luer Lock to Male Slip Luer, Cracking Pressure 0.5 psi



#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: Female Luer Lock to Male Slip Luer Mounting Style: In-Line Wetted Materials: Natural Polycarbonate, Silicone Non-wetted Materials: Natural Polycarbonate Media Temperature: -63°C to 135°C (-82°F to 275°F) Recommended Filtration: Depending on application Regulatory Information: FDA 21 CFR 177.1580 RoHS/REACH Compliant: Yes

**Other Technical Data:** An In-Line, Natural Polycarbonate bodied check valve complete with Silicone diaphragm and female luer lock inlet to male slip luer outlet.

Price starting from: £2.12 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



E-C-190073 - Natural Polycarbonate Bodied Check Valve, Silicone Diaphragm, Male Luer Lock, Cracking Pressure 0.5 psi



Price starting from: £3.07 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: Male Luer Lock Mounting Style: In-Line Wetted Materials: Natural Polycarbonate, Silicone Non-wetted Materials: Natural Polycarbonate Media Temperature: -63°C to 135°C (-82°F to 275°F) Recommended Filtration: Depending on application Regulatory Information: FDA 21 CFR 177.1580 RoHS/REACH Compliant: Yes

**Other Technical Data:** An In-Line, Natural Polycarbonate bodied check valve complete with Silicone diaphragm and male luer lock.

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MALE LUER LOCK TO ISO 594 X2

# E-C-190074 - Natural Polycarbonate Bodied Check Valve, Silicone Diaphragm, Female Luer Lock, Cracking Pressure 0.5 psi

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: Female Luer Lock Mounting Style: In-Line Wetted Materials: Natural Polycarbonate, Silicone Non-wetted Materials: Natural Polycarbonate Media Temperature: -63°C to 135°C (-82°F to 275°F) Recommended Filtration: Depending on application Regulatory Information: FDA 21 CFR 177.1580 RoHS/REACH Compliant: Yes Other Technical Data: An In-Line, Natural Polycarbonate bodied check valve complete with Silicone diaphragm and female luer lock.



Price starting from: £2.13 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



#### E-C-180194 - Kynar® Bodied Check Valve, FDA Viton Diaphragm, 3.2mm (1/8") ID Tube, Cracking Pressure <0.1 psi

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Kynar®, FDA Viton Non-wetted Materials: Kynar® Media Temperature: -20°C to 200°C (-4°F to 392°F) Recommended Filtration: Depending on application Regulatory Information: FDA Viton RoHS/REACH Compliant: Yes Other Technical Data: In-Line, Kynar® bodied check valve complete with FDA Viton diaphragm and barbed ports to suit 1/8" ID tubing.



TO SUIT 3.2mm(1/8")ID TUBE X2



Price starting from: £3.12 per piece \*Sold in multiples of 10

\*Larger quantity price breaks available

#### E-C-190033 - Nylon Bodied Check Valve, Fluorosilicone Diaphragm, 6.4mm (1/4") ID Tube, Cracking Pressure <0.1 psi



#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: To suit 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Nylon, Fluorosilicone Non-wetted Materials: Nylon

Media Temperature: 82°C (180°F)

Recommended Filtration: Depending on application

RoHS/REACH Compliant: Yes

**Other Technical Data:** An In-line Nylon bodied check valve with an internal Fluorosilicone Seal (0.020" thickness) and hose barbs to suit 1/8" ID (3.2mm) soft flexible tubing. This valve has a cracking pressure of less than 0.1PSI and can be used with vacuum or pressure applications. Suitable for some vapour, gas and fluid systems.

Price starting from: £2.93 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



#### E-C-2015-0041 - Kynar® Bodied Check Valve, Silicone Diaphragm, 6.4mm (1/4") ID Tube, Cracking Pressure <0.1 psi



Price starting from: £4.07 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Kynar®, Silicone Non-wetted Materials: Kynar® Media Temperature: -36°C to 93°C (-32°F to 200°F) Recommended Filtration: Depending on application Regulatory Information: USP Class VI RoHS/REACH Compliant: Yes Cleanroom Manufactured: Class 7 cleanroom Other Technical Data: In-Line, USP class VI Kynar® bodied and Silicone diaphragm check valve complete with barbed ports to suit 1/4" ID tubing. Less than 0.1 psi cracking pressure.





# E-C-190041 - Clear Polypropylene Catheter Bodied Check Valve, Luer Syringe Port to 8.6mm (0.339") OD Barbed Stem for 6.4mm (1/4") ID Tube

#### **Technical Data**

Max. Inlet Pressure: 2.07 bar (30 psi) Connections: Luer Syringe Port to 8.6mm (0.339") OD Barbed Stem for 6.4mm (1/4") ID Tube Mounting Style: In-Line Wetted Materials: Clear Polypropylene, Silicone Media Temperature: 0°C to 121°C (32°F to 250°F) Recommended Filtration: Depending on application Regulatory Information: Meets Requirements for USP Class VI Cleanroom Manufactured: Class 7 cleanroom RoHS/REACH Compliant: Yes Other Technical Data: All materials are Gamma resistant, DEHPfree and Latex-free. Product can be sterilised by ETO and Gamma based on raw material manufacturers data. Luer fittings are

compatible with ANSI/HIMA MD70.1-83 & ISO 594.



Price starting from: £0.24 per piece \*Sold in multiples of 50

\*Larger quantity price breaks available



## Diaphragm - ISO 80369-7 ——ISO 80369-7 Check Valves -

## What is ISO 80369?

ISO 80369 is a series of standards which is designed to improve patient safety by reducing the risk of misconnections with small-bore connectors which are used in liquid and gas healthcare applications. The ISO 80369 series of standards aims to minimise misconnections between small-bore connectors of different functional categories.

#### What are 80369 standards & what do they mean?

- ISO 80369-2 Respiratory Systems
- ISO 80369-3 Enteral Feeding Systems
- ISO 80369-4 Urinary Collection
- ISO 80369-5 Blood Pressure Cuffs (Limb Cuff)
- ISO 80369-6 Neuraxial (Spine) Coming soon
- ISO 80369-7 Vascular Intravenous (Artery/Veins)

#### \*blue indicates products are available on Eox



Please note: These products are compliant to both ISO 594 and ISO 80369-7

# E-C-190007- ABS Bodied Check Valve, Silicone Disc, 1.6mm (1/16") ID Tube to Male Luer Lock, Cracking Pressure ≤ 8 mbar

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: 1.6mm (1/16") ID Tube to Male Luer Lock Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone Non-wetted Materials: ABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.



Price starting from: £2.68 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available \*Larger quantity price breaks available

# E-C-190008 - ABS Bodied Check Valve, Silicone Disc, 2.4mm (3/32") ID Tube to Male Luer Lock, Cracking Pressure ≤ 8 mbar

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: 2.4mm (3/32") ID Tube to Male Luer Lock Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone Non-wetted Materials: ABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.





Price starting from: £1.47 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

# E-C-190009 - ABS Bodied Check Valve, Silicone Disc, 3.2mm (1/8") ID Tube to Male Luer Lock, Cracking Pressure $\leq$ 8 mbar



#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: 3.2mm (1/8") ID Tube to Male Luer Lock Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone Non-wetted Materials: ABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with

Price starting from: £1.47 per piece

\*Sold in multiples of 10

\*Larger quantity price breaks available



autoclave or gamma sterilisation.

## E-C-190010 - ABS Bodied Check Valve, Silicone Disc, Female Luer Lock to 1.6mm (1/16") ID Tube, Cracking Pressure ≤ 8 mbar



Price starting from: £2.68 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi)
Connections: Female Luer Lock to 1.6mm (1/16") ID Tube
Mounting Style: In-Line
Wetted Materials: ABS, Polystyrene, Silicone
Non-wetted Materials: ABS
Recommended Filtration: Depending on application
Regulatory Information: Meets requirements for USP Class VI, FDA 21
CFR 181.32. California Prop. 65
Cleanroom Manufactured: Class 8 (100,000) cleanroom
RoHS/REACH Compliant: Yes
Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.



# E-C-190011 - ABS Bodied Check Valve, Silicone Disc, Female Luer Lock to 2.4mm (3/32") ID Tube, Cracking Pressure $\leq 8$ mbar

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: Female Luer Lock to 2.4mm (3/32") ID Tube Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone Non-wetted Materials: ABS Recommended Filtration: Depending on application Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with



Price starting from: £1.47 per piece \*Sold in multiples of 10

\*Larger quantity price breaks available



E-C-190013 - ABS Bodied Filtered Check Valve, Silicone Disc, 1.6mm (1/16") Barb to Male Luer Lock, Cracking Pressure ≤ 8 mbar

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi)

autoclave or gamma sterilisation.

Connections: 1.6mm (1/16") ID Tube to Male Luer Lock

Mounting Style: In-Line

Wetted Materials: ABS, Polystyrene, Silicone, Glass Fibre, HDPE Non-wetted Materials: ABS

**Recommended Filtration:** Integrated with 0.2 micron & Hydrophobic Glass Fibre filter

**Regulatory Information:** Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65

Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes

**Other Technical Data:** Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.





Price starting from: £3.30 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

# E-C-190014 - ABS Bodied Filtered Check Valve, Silicone Disc, 2.4mm (3/32") ID Tube to Male Luer Lock, Cracking Pressure ≤ 8 mbar



#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: 2.4mm (3/32") ID Tube to Male Luer Lock Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone, Glass Fibre Non-wetted Materials: ABS Recommended Filtration: Integrated with 0.2 micron & Hydrophobic Glass Fibre filter Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal

derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.

Price starting from: £3.30 per piece \*Sold in multiples of 10

\*Larger quantity price breaks available



## E-C-190015 - ABS Bodied Filtered Check Valve, Silicone Disc, 3.2mm (1/8") ID Tube to Male Luer Lock, Cracking Pressure ≤ 8 mbar



Price starting from: £3.30 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### Technical Data

Max. Inlet Pressure: 4 bar (58 psi) Connections: 3.2mm (1/8") ID Tube to Male Luer Lock Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone, Glass Fibre Non-wetted Materials: ABS Recommended Filtration: Integrated with 0.2 micron & Hydrophobic Glass Fibre filter Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex

derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.



# E-C-190016 - ABS Bodied Filtered Check Valve, Female Luer Lock to 1.6mm (1/16") ID Tube, Silicone Disc, Cracking Pressure ≤ 8 mbar

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: Female Luer Lock to 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone, Glass Fibre, HDPE Non-wetted Materials: ABS Recommended Filtration: Integrated with 0.2 micron & Hydrophobic Glass Fibre filter Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex



Price starting from: £3.30 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available



Free. Compatible with EtO sterilisation, but is not compatible with

# E-C-190017 - ABS Bodied Filtered Check Valve, Female Luer Lock to 2.4mm (3/32") ID Tube, Silicone Disc, Cracking Pressure ≤ 8 mbar

#### **Technical Data**

autoclave or gamma sterilisation.

Max. Inlet Pressure: 4 bar (58 psi) Connections: Female Luer Lock to 2.4mm (3/32") ID Tube

Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone, Glass Fibre, HDPE Non-wetted Materials: ABS

**Recommended Filtration:** Integrated with 0.2 micron & Hydrophobic Glass Fibre filter

**Regulatory Information:** Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65

Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes

**Other Technical Data:** Conflict Mineral Compliant. DEHP Free. Animal derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.





Price starting from: £3.30 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

# E-C-190018 - ABS Bodied Filtered Check Valve, Female Luer Lock to 3.2mm (1/8") ID Tube, Silicone Disc, Cracking Pressure ≤ 8 mbar



Price starting from: £3.30 per piece \*Sold in multiples of 10 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 4 bar (58 psi) Connections: Female Luer Lock to 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: ABS, Polystyrene, Silicone, Glass Fibre, HDPE Non-wetted Materials: ABS Recommended Filtration: Integrated with 0.2 micron & Hydrophobic Glass Fibre filter Regulatory Information: Meets requirements for USP Class VI, FDA 21 CFR 181.32. California Prop. 65 Cleanroom Manufactured: Class 8 (100,000) cleanroom RoHS/REACH Compliant: Yes Other Technical Data: Conflict Mineral Compliant. DEHP Free. Animal

derivative Free. Human derivative Free. BPA Free. Phthalate Free. Latex Free. Compatible with EtO sterilisation, but is not compatible with autoclave or gamma sterilisation.



#### - Other Available Combinations



## Why is ISO 80369-7 important?

The need to improve patient safety is the most obvious answer. It is common for patients to have many lines connected in order to deliver the treatment they require. For example, the devices in intravenous applications needed to administer the treatment use a universal luer lock connection. Misconnections can cause leaks which lead to an incorrect dosage of medication or delivery of an incorrect fluid or gas which can cause complications or even death.

#### **Minimise Misconnections**

The ISO 80369-7 standard for intravascular and hypodermic applications has tightened dimensions and functional testing for luer connectors to stop these mistakes from happening.

## ISO 80369 Available Products



80369-3 Enteral Feeding Couplings



80369-5 Blood Pressure Couplings



80369-7 Luers



80369-7 Luer Filters



80369-7 Check Valves



80369-7 Metal Luers

# Duckbill



## Key features include:

- Position independent
- Low opening pressure- immediate free flow
- Non-tortuous flow path
- High flow rate vs. package size
- Virtually no internal volume and dead space
- Particle compliant
- Corrosion resistant
- Wear resistant
- Cost effective

## What is a Duckbill?

Duckbill valves are unique, one-piece, elastomeric components that act as backflow prevention devices, one-way valves or check valves. They have elastomeric lips in the shape of a duckbill which prevent backflow and allow forward flow.

The main advantage of duckbill valves over other types of one-way valves is that they are self-contained, i.e. the critical sealing function is an integral part of the one piece elastomeric component, as opposed to valves where a sealing element has to engage with a smooth seat surface to form a seal. Therefore, duckbill valves are easily incorporated and assembled into a wide variety of devices, without the hassle or problems associated with the surface finish quality of mating seats and/or complex assembly processes.



## **Duckbill - Plastic**

#### E-C-180045 - Natural Nylon Bodied Check Valve, Silicone Duckbill, 3.2mm (1/8") ID Tube, Cracking Pressure 0.1 psi



#### **Technical Data**

Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: FDA Approved Natural Nylon, Silicone Non-wetted Materials: FDA Approved Natural Nylon Recommended Filtration: Depending on application Regulatory Information: FDA Approved Natural Nylon RoHS/REACH Compliant: Yes

**Other Technical Data:** An In-Line, Natural Nylon bodied check valve complete with Silicone duckbill and barbed ports to suit 1/8" ID tube.



Price starting from: £3.29 \*Larger quantity price breaks available

#### E-C-180046 - Polycarbonate Bodied Check Valve, Silicone Duckbill, 3.2mm (1/8") ID Tube, Cracking Pressure 0.1 psi



Price starting from: £4.04 \*Larger quantity price breaks available

#### **Technical Data**

Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Polycarbonate, Silicone Non-wetted Materials: Polycarbonate Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: An In-Line, Polycarbonate bodied check valve complete with Silicone duckbill and barbed ports to suit 1/8" ID tube.





# E-C-180050 - Polycarbonate Bodied Check Valve, Silicone Duckbill, Female Luer to Male Luer Lock, Cracking Pressure 0.11 psi

#### **Technical Data**

Connections: Female Luer to Male Luer Lock Mounting Style: In-Line Wetted Materials: Polycarbonate, Silicone Non-wetted Materials: Polycarbonate Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** An In-Line, Polycarbonate bodied check valve complete with Silicone duckbill and Female Luer inlet and Male Luer Lock outlet ports. This valve has a cracking pressure of 3" H20- 0.11 psi. Designed for medical use where the temperature is ambient.



# Actual Size

Price starting from: £9.85 \*Larger quantity price breaks available

E-C-200017 - Kynar® Bodied Check Valve, Silicone Duckbill, Barbed Ports for 3.2mm (1/8") ID Tube, Cracking Pressure 0.1 psi

#### **Technical Data**

Flow Direction —

Actual Size Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: PVDF (Kynar®), Silicone Non-wetted Materials: PVDF (Kynar®) **Recommended Filtration:** Depending on application **RoHS/REACH Compliant:** Yes Other Technical Data: An In-Line, PVDF (Kynar®), bodied check valve complete with Silicone duckbill and barbed ports to suit 1/8" ID tube. 34,1[1,34] Ø14,0 0,55 11,5 0,45 11,6[0,46] Price starting from: £3.82 0,08 4,4 0,18 \*Larger quantity price breaks available D TO SUIT 3.2mm(1/8")ID TUBE

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## Duckbill - Plastic

#### E-C-190075 - Natural Polypropylene Bodied Check Valve, Silicone Duckbill, 4.8mm (3/16") ID Tube, Cracking Pressure 0.5 psi



#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: 4.8mm (3/16") ID Tube Mounting Style: In-Line Wetted Materials: Natural Polypropylene, Silicone Non-wetted Materials: Natural Polypropylene Media Temperature: 0°C to 121°C (32°F to 250°F) Recommended Filtration: Depending on application Regulatory Information: FDA 21 CFR 177.1520(c)1.1a, USP Class VI **RoHS/REACH Compliant:** Yes Other Technical Data: An In-Line, Natural Polypropylene bodied check valve complete with Silicone duckbill and barbed ports to suit 3/16" ID

Price starting from: £3.11 \*Larger quantity price breaks available



E-C-180171 - Natural Polypropylene Bodied Check Valve, Silicone Duckbill, 3.2mm (1/8") ID Tube, Cracking Pressure 0.5 psi

tube.



Price starting from: £3.11 \*Larger quantity price breaks available

#### **Technical Data**

Max. Inlet Pressure: 3.45 bar (50 psi) Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Natural Polypropylene, Silicone Non-wetted Materials: Natural Polypropylene Media Temperature: 0°C to 121°C (32°F to 250°F) Recommended Filtration: Depending on application Regulatory Information: FDA 21 CFR 177.1520(c)1.1a, USP Class VI RoHS/REACH Compliant: Yes

Other Technical Data: An In-Line, Natural Polypropylene bodied check valve complete with Silicone duckbill and barbed ports to suit 1/8" ID tube.


## **Duckbill - Plastic & Metal**

#### E-C-180049 - Acrylic Bodied Check Valve, White Silicone Duckbill, 3.2mm (1/8") ID Tube, Cracking Pressure 3" H2O

#### **Technical Data**

Connections: 3.2mm (1/8") ID Tube Mounting Style: In-Line Wetted Materials: Acrylic, Silicone Non-wetted Materials: Acrylic Media Temperature: 5°C to 60°C (40°F to 140°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Regulatory Information: Silicone duckbill meets USP class VI and ISO 10993 biocompatibility requirements Other Technical Data: Suitable for Gamma irradiation up to 5 megarads and is also compatible with EtO Sterilisation. Housing is made from Plexiglas® DRG-100 Acrylic and is bondable to PVC and other compatible tubing





Price starting from: £6.70 \*Larger quantity price breaks available

# E-C-180027 - Brass Bodied Check Valve with an Internal Buna-N Duckbill, 10-32 UNF Female Ports, Cracking Pressure 1 psi

#### **Technical Data**

Max. Inlet Pressure: 6.89 bar (100 psi) Connections: 10-32 UNF Female Thread Mounting Style: In-Line Wetted Materials: Brass, Buna-N Non-wetted Materials: Brass Media Temperature: 0°C to 110°C (32°F to 230°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes

**Other Technical Data:** 0.17 bar (2.5 psi) to fully open the check valve. These valves are compatible with air and hydraulic oil, they are not intended for use as a pressure relief valve. Flow rate 28 LPM.







Price starting from: £10.73 \*Larger quantity price breaks available

## Duckbill - Metal

# E-C-180031 - Brass Bodied Check Valve with an Internal Buna-N Duckbill, M5 Female Ports, Cracking Pressure 1 psi



E-C-180036 - Nickel Plated Brass Bodied Check Valve, Viton Duckbill, M5 Female Thread Ports, Cracking Pressure 1 psi



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# Eox supplies customers around the world with a unique portfolio of fittings, couplings, tubing, check valves and other miniature fluid control components



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ISO 80369



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# Umbrella



## **Key features include:**

- Immediate positive seal
- Position independent
- Variable opening pressure through seat thickness
- High flow rate vs. package size
- Corrosion resistant
- Wear resistant

## What is an Umbrella?

Umbrella valves are elastomeric valve components that have a diaphragm shaped sealing disc or an umbrella shape. These elastomeric components are used as sealing elements in backflow prevention devices. (one-way valves or check valves) in (vent valves or pressure relief valves) and in metering valves.

When mounted in a seat, the convex diaphragm flattens out against the valve seat and absorbs a certain amount of seat irregularities and creates a sealing force. The umbrella valve will allow forward flow once the head pressure creates enough force to lift the convex diaphragm from the seat and so it will allow flow at a predetermined pressure in one way and prevent back flow immediately in the opposite way.

The main advantage compared to other types of valves, such as spring loaded disc valves, is that an umbrella valve uses its elastic material properties and its preloaded convex shape to create the sealing force against the seat and that it uses the central stem to hold the component in place. To avoid the need for additional components such as a spring and the need for a central or circumferential disc positioner(s). This simplifies the design of the assembly and makes the valve adaptable to minimal space, reduces the number of pieces in a valve and simplifies assembly.



## **Umbrella- Metal**

## E-C-180136 - Nickel Plated Brass Check Valve, Buna-N Seal, 1/16" Barb to 10-32 UNF, Cracking Pressure 0.1 psi



#### **Technical Data**

Max. Inlet Pressure: 8.62 bar (125 psi) Connections: 1.6mm (1/16") ID Tube to 10-32 UNF Male Thread Mounting Style: In-Line Wetted Materials: Nickel Plated Brass, Buna-N Non-wetted Materials: Nickel Plated Brass Media Temperature: -29°C to 71°C (-20°F to 160°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: This valve does not contain a spring. A Nickel Plated Brass bodied check valve with a barbed inlet port to suit 1/16" ID tubing and a 10-32 UNF male threaded outlet, internal Buna-N

Price starting from: £12.08 \*Larger quantity price breaks available



batwing seal. Flow rate - 70 LPM 2.5 SCFM.



## - More from this range



1/16" ID Tubing E-C-180137



.170" ID Tubing E-C-180139



5/64" ID Tubing E-C-180138



10-32 UNF Male to Female E-C-180140



10-32 UNF Female to Male E-C-180141



10-32 UNF to 5/64" Barb E-C-180142

## E-C-180133 - Nickel Plated Brass Check Valve, Buna-N Seal, Barbs for 1/16" ID Tube, Cracking Pressure 0.1 psi

#### **Technical Data**

Max Inlet Pressure: 8.62 bar (125 psi) Connections: 1.6mm (1/16") ID Tube Mounting Style: In-Line Wetted Materials: Nickel Plated Brass, Buna-N Non-wetted Materials: Nickel Plated Brass Media Temperature: -29°C to 71°C (-20°F to 160°F) Recommended Filtration: Depending on application RoHS/REACH Compliant: Yes Other Technical Data: This valve does not contain a spring. An In-

Line Nickel Plated Brass bodied check valve with barbed ports to suit 1/16" ID tubing, internal Buna-N batwing seal and a cracking pressure of 0.1 psi. Flow rate - 70 LPM 2.5 SCFM.





Price starting from: £12.08 \*Larger quantity price breaks available

## More from this range



.170" ID Tubing E-C-180135



5/64" ID Tubing E-C-180134





E: sales@eoxshop.com T: +44 (0)2392 266031 W: eoxshop.com