

SFC KOENIG

Flow control solutions

The SFC KOENIG expansion RESTRICTORS and CHECK VALVES are designed for reliable performance and simple installation in your application. Easy integration in numerous diverse applications such as automotive powertrains, commercial vehicles, construction equipment, medical equipment, agricultural equipment, and various fluid power and hydraulic systems.

**Simple, reliable, flexible**

- Eliminates the need for thread machining – substantial process cost savings
- No contamination or debris during installation
- Fast assembly suitable for high volume production
- Durable stainless steel construction
- Large range of sizes available
- Engineered solution customized to your flow requirements

SFC KOENIG RESTRICTOR

The KOENIG RESTRICTOR is a precise orifice and cost-effective engineered solution to restrict flow in fluid systems.



Your benefits

- Ideal for deep hole locations
- Eliminates the need for thread machining – substantial process cost savings
- Metal-to-metal seal prevents side leakage
- No additional sealant or adhesive compounds – eliminates contamination risks
- No metal debris, as with press-fit restrictors or thread restrictors
- Self-retained part, anchored safely in vibration environments
- Easy removal procedure
- Orifice diameters customized to your flow requirements
- Screened restrictors for smaller orifice diameters are available
- 100 % check of orifice diameters for consistent performance

Performance

- For up to 200 bar (3000 psi) systems
- Restrictor metric sizes: Ø 4 – 14 mm
- Restrictor imperial sizes: Ø 0.156" – 0.562"
- Material: stainless steel

- Orifice diameters down to Ø 0.40 mm (0.016")
- Smaller orifices available upon request
- Integrated filter screen available upon request
- Thread styles: metric, imperial NPTF available

Safety and efficiency

KOENIG RESTRICTORS provide several restrictor options for different application requirements.

- Air vent: removes air from fluid systems
- Pressure surge protector: limits sudden pressure rise and protect system components
- Flow limiter: controls the amount of fluid being supplied
- Control speed of actuation
- Limit fluid drain-out in case of system failure or shutdown
- Lubrication nozzle

Easy and quick installation

The one-piece expansion KOENIG RESTRICTOR easily installs into an as-drilled hole. The restrictor is simply dropped into a counter-bored hole. The integrated pin of the restrictor is then pushed inside to expand the sleeve. The grooves on the outside of the sleeve anchor into the base material for clean installation.

Engineered solutions

The innovative KOENIG RESTRICTOR is designed for tamperproof performance, and is conveniently available in various sizes to seamlessly integrate with any design. While KVT-Fastening offers restrictors in a wide variety of sizes and styles, your application may require special attention – please contact us to discuss your custom requirements.

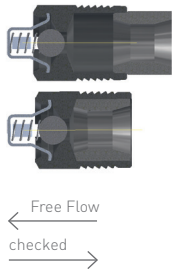
SFC KOENIG CHECK VALVE

New!

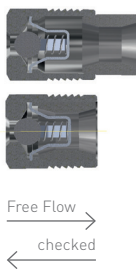
The KOENIG CHECK VALVE is simple to install and a reliable solution to control flow directions in fluid systems.



Forward Flow Valve (FF)



Reverse Flow Valve (RF)



- Cracking pressure: 0 to 2.5 bar
- Modular concept: Forward Flow Valve (FF) / Reverse Flow Valve (RF)
- Standard orifice diameters: 1.4 mm (0.055") and above
- Smaller orifices available upon request

Safety and efficiency

KOENIG CHECK VALVE can be used in critical applications.

- Backflow prevention in pumps, motors, compressors
- Maintain device/system pressure in common rails, accumulators, transmission valves
- Prevent fluid discharge in engine heads and transmission valves
- Regulate fluid pressure in circuits
- Maintain prime pressures for pumps
- Use in return lines upstream of reservoir

Your benefits

- Metal-to-metal seal prevents side leakage
- No additional sealant or adhesive compounds – eliminates contamination risks
- Self-retained part, anchored safely in vibration environments
- Easy removal procedure
- Orifice diameter and cracking pressure customized to your flow requirements

Performance

- Max. working pressure differential: 300 bar (4351 psi) in checked direction
- Check valve sizes: Ø 5.5 mm, Ø 8 mm, Ø 10 mm (0.217" – 0.394")
- Material: stainless steel

Easy and quick installation

The KOENIG CHECK VALVE easily installs into an as-drilled hole. It is simply dropped into a counter-bored hole. The integrated pin of the KOENIG CHECK VALVE is then pushed inside to expand the sleeve. The grooves on the outside of the sleeve anchor into the base material for clean installation.

Engineered solutions

KVT-Fastening provides a range of check valves for various application requirements. The cracking pressure can be optimized to your system requirements; this allows you to have complete design control. Please contact us to discuss your custom requirements.

Order details

Orifice restrictors, series expander type, metric

Order reference	Size	Orifice diameter (0 +/- 0.025)	Length after installation	Packaging unit	
RE-040-XXX	4.0	0.50-1.25	4.0	100	1000
RE-050-XXX	5.0	0.50-1.90	5.5	100	1000
RE-060-XXX	6.0	0.50-2.50	6.5	100	1000
RE-070-XXX	7.0	0.50-3.30	7.5	100	1000
RE-080-XXX	8.0	0.50-3.80	8.5	100	1000
RE-090-XXX	9.0	0.50-4.30	10.0	100	1000
RE-100-XXX	10.0	0.50-4.95	11.0	50	250
RE-120-XXX	12.0	0.50-6.10	13.0	50	250
RE-140-XXX	14.0	0.50-7.10	15.0	25	125

Dimensions in millimeters

Order reference key: XXX is orifice diameter in hundredths of a millimeter, e.g. 127 for 1.27 mm

Orifice restrictors, series expander type, inch

Order reference	Size	Orifice diameter (0 +/- 0.001)	Length after installation	Packaging unit	
RE-156-XXX	0.156	0.020-0.050	0.158	100	1000
RE-187-XXX	0.187	0.020-0.070	0.217	100	1000
RE-218-XXX	0.218	0.020-0.085	0.217	100	1000
RE-250-XXX	0.250	0.020-0.105	0.256	100	1000
RE-281-XXX	0.281	0.020-0.130	0.296	100	1000
RE-312-XXX	0.312	0.020-0.150	0.335	100	1000
RE-343-XXX	0.343	0.020-0.160	0.394	50	250
RE-375-XXX	0.375	0.020-0.180	0.394	50	250
RE-406-XXX	0.406	0.020-0.195	0.434	50	250
RE-437-XXX	0.437	0.020-0.220	0.512	25	100
RE-468-XXX	0.468	0.020-0.240	0.512	25	100
RE-562-XXX	0.562	0.020-0.290	0.591	25	100

Dimensions in inches

Check valves

Order reference	Description	Size	Orifice diameter	Cracking pressure range	Material	Packaging unit	
BF660055014100	check valve (FF) 5.5 mm	5.5 mm/0.217 in	1.4 mm/0.055 in	0-2.5 bar	stainless steel	100	500
BR660055014100	check valve (RF) 5.5 mm	5.5 mm/0.217 in	1.4 mm/0.055 in	0-2.5 bar	stainless steel	100	500
BF660080024100	check valve (FF) 8 mm	8 mm/0.315 in	2.4 mm/0.0945 in	0-2.5 bar	stainless steel	100	500
BR660080024100	check valve (RF) 8 mm	8 mm/0.315 in	2.4 mm/0.0945 in	0-2.5 bar	stainless steel	100	500
BF660100033100	check valve (FF) 10 mm	10 mm/0.394 in	3.3 mm/0.13 in	0-2.5 bar	stainless steel	100	250
BR660100033100	check valve (RF) 10 mm	10 mm/0.394 in	3.3 mm/0.13 in	0-2.5 bar	stainless steel	100	250

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