Grease Fittings and Bleed Fittings

GCF Series, GCR Series, GCRH Series, GSF Series, GST Series and VFS Series





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Grease Fittings

Application

Installed onto the seat and stem of valves. Leakage may occur when the sealed part wears off or for other reasons. By injecting the grease through the grease fitting, the leakage will be sealed temporarily to secure time for remedial measures.

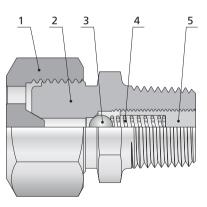
GCF Series

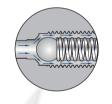
Features

- ◎ Maximum working pressure: 10,000 psig (690 bar)
- Special design to enable lubricant or sealant to flow around the spring and through the opening on the sides of the retainer smoothly
- O All-metal construction, applicable in both high and low temperature environments

Standard Materials of Construction



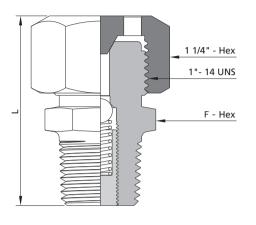




When the ball is off the body, the lubricant or sealant shall flow around the spring and through the opening on the sides of the retainer.

	Material			
Component	Carbon Steel	316 SS		
	Material Grade/ASTM Standard			
Vent Cap	CS (Zinc)	316 SS/A479		
Body	CS (Zinc)	316 SS/A479		
Ball	440C/A276	440C/A276		
Spring	302 SS/A313	X-750/AMS 5699		
Retainer	CS (Zinc)	316 SS/A479		
	Vent Cap Body Ball Spring	Component Carbon Steel Vent Cap CS (Zinc) Body CS (Zinc) Ball 440C/A276 Spring 302 SS/A313		

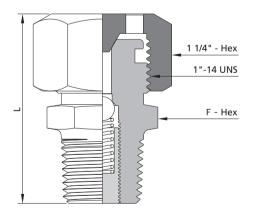




NPT Male Thread			
Basic Ordering	Connection Type and Size	Dimension, in.(mm)	
Number		L	F
□□-GCF-NS4	1/4" NPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-NS6	3/8" NPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-NS8	1/2" NPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-NS12	3/4" NPT Male Thread	1.97(50.1)	1.13(28.58)
□□-GCF-NS16	1" NPT Male Thread	2.17(55.0)	1.31(33.34)

Male ISO Tapered Th	read			
Basic Ordering	rdering Connection Type		Dimension, in.(mm)	
Number	and Size	L	F	
□□-GCF-RT4	1/4" BSPT Male Thread	1.95(49.6)	1.00(25.4)	
□□-GCF-RT6	3/8" BSPT Male Thread	1.95(49.6)	1.00(25.4)	
□□-GCF-RT8	1/2" BSPT Male Thread	1.95(49.6)	1.00(25.4)	
□□-GCF-RT12	3/4" BSPT Male Thread	1.97(50.1)	1.13(28.58)	
□□-GCF-RT16	1" BSPT Male Thread	2.17(55.0)	1.31(33.34)	

NPT Male Thread			
Basic Ordering	Connection Type and Size	Dimension, in.(mm)	
Number		L	F
□□-GCF-NS4-BH	1/4" NPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-NS6-BH	3/8" NPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-NS8-BH	1/2" NPT Male Thread	1.95(49.6)	1.00(25.4)
GCF-NS12-BH	3/4" NPT Male Thread	1.97(50.1)	1.13(28.58)
□□-GCF-NS16-BH	1" NPT Male Thread	2.17(55.0)	1.31(33.34)



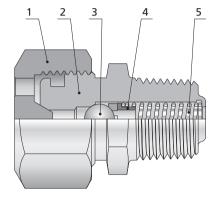
Male ISO Tapered Thread			
Basic Ordering	Connection Type and Size	Dimension, in.(mm)	
Number		L	F
□□-GCF-RT4-BH	1/4" BSPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-RT6-BH	3/8" BSPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-RT8-BH	1/2" BSPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCF-RT12-BH	3/4" BSPT Male Thread	1.97(50.1)	1.13(28.58)
□□-GCF-RT16-BH	1" BSPT Male Thread	2.17(55.0)	1.31(33.34)

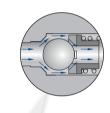
GCR Series

Features

- ◎ Maximum working pressure: 10,000 psig (690 bar)
- © Special design to enable the lubricant or sealant to flow through the ball support and the opening of the spring, reducing the tendency to "pack-off"
- © Special curling design to secure the spring and internal parts from dropping out
- O All-metal construction, applicable in both high-temperature and low-temperature environments

Standard Materials of Construction

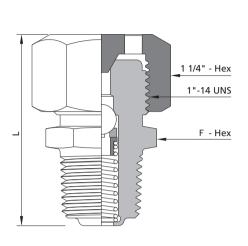




When the ball is off the body, the lubricant or sealant shall flow through the center of the spring, without flowing through the spring coil.

		Material				
No.	Component	Carbon Steel	316 SS			
		Material Grade	Material Grade/ASTM Standard			
1	Сар	CS (Zinc)	316 SS/A479			
2	Body	CS (Zinc)	316 SS/A479			
3	Ball	440C/A276	440C/A276			
4	Ball Support	CS (Zinc)	316 SS/A479			
5	Spring	302 SS/A313	X-750/AMS 5699			

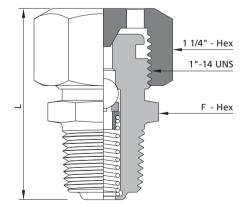




NPT Male Thread			
Basic Ordering	Connection Type	Dimension, in.(mm)	
Number	and Size	L	F
GCR-NS4	1/4" NPT Male Thread	1.91(48.6)	1.00(25.4)
□□-GCR-NS6	3/8" NPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCR-NS8	1/2" NPT Male Thread	1.97(50.1)	1.00(25.4)
□□-GCR-NS12	3/4" NPT Male Thread	1.97(50.1)	1.13(28.6)
□□-GCR-NS16	1" NPT Male Thread	1.67(55.0)	1.31(33.3)

Male ISO Tapered Thread			
Basic Ordering Connection Type		Dimension, in.(mm)	
Number	and Size	L	F
□□-GCR-RT4	1/4" BSPT Male Thread	1.91(48.6)	1.00(25.4)
□□-GCR-RT6	3/8" BSPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCR-RT8	1/2" BSPT Male Thread	1.97(50.1)	1.00(25.4)
□□-GCR-RT12	3/4" BSPT Male Thread	1.97(50.1)	1.13(28.6)
□□-GCR-RT16	1" BSPT Male Thread	1.67(55.0)	1.31(33.3)

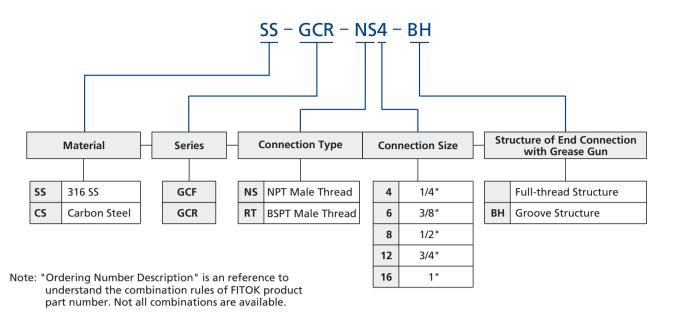
NPT Male Thread			
Basic Ordering	Connection Type and Size	Dimension, in.(mm)	
Number		L	F
GCR-NS4-BH	1/4" NPT Male Thread	1.91(48.6)	1.00(25.4)
□□-GCR-NS6-BH	3/8" NPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCR-NS8-BH	1/2" NPT Male Thread	1.97(50.1)	1.00(25.4)
GCR-NS12-BH	3/4" NPT Male Thread	1.97(50.1)	1.13(28.6)
GCR-NS16-BH	1" NPT Male Thread	1.67(55.0)	1.31(33.3)



Male ISO Tapered Thread			
Basic Ordering	Connection Type and Size	Dimension, in.(mm)	
Number		L	F
□□-GCR-RT4-BH	1/4" BSPT Male Thread	1.91(48.6)	1.00(25.4)
□□-GCR-RT6-BH	3/8" BSPT Male Thread	1.95(49.6)	1.00(25.4)
□□-GCR-RT8-BH	1/2" BSPT Male Thread	1.97(50.1)	1.00(25.4)
□□-GCR-RT12-BH	3/4" BSPT Male Thread	1.97(50.1)	1.13(28.6)
□□-GCR-RT16-BH	1" BSPT Male Thread	1.67(55.0)	1.31(33.3)



Ordering Number Description

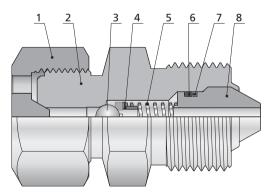


GCRH Series

Features

- Maximum working pressure: 20,000 psig (1379 bar)
- Special design to enable the lubricant or sealant to flow through the ball support and the opening of the spring, reducing the tendency to "pack-off"

Standard Materials of Construction



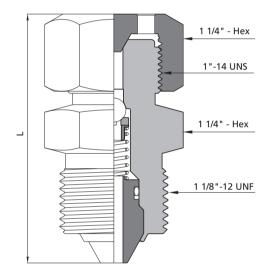


When the ball is off the body, the lubricant or sealant shall flow through the center of the spring, without flowing through the spring coil.



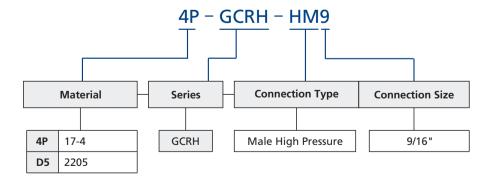
FITOK

		Material			
No.	Component	17-4	2505		
		Material Grade/	Material Grade/ASTM Standard		
1 (Сар	316SS/A479	S31803/A479		
2 E	Body	S17400/A564	S31803/A479		
3 E	Ball	Tungsten Carbide	Tungsten Carbide		
4 E	Ball Support	S17400/A564	S31803/A479		
5 S	Spring	X-750/AMS 5699	X-750/AMS 5699		
6 (O-ring	FKM	FKM		
7 E	Backup Ring	PTFE/D1710	PTFE/D1710		
8 F	Floating Cone	316SS/A479	S31803/A479		



Connection Type and Size	Dimension, in.(mm)
	L
9/16" Male High Pressure	2.59(65.8)

Ordering Number Description





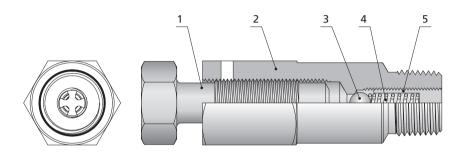


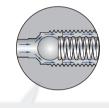
GSF Series

Features

- O Maximum working pressure: 10,000 psig (690 bar)
- Special design to enable lubricant or sealant to flow through the spring and through the opening on the sides of the retainer smoothly
- O All-metal construction, applicable in both high and low temperature environments

Standard Materials of Construction

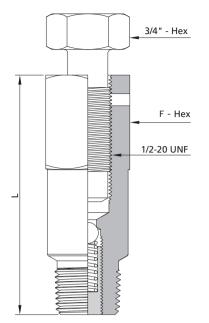




When the ball is off the body, the lubricant or sealant shall flow around the spring and through the opening on the sides of the retainer.

		Material		
No.	Component	Carbon Steel	316 SS	
		Material Grade/ASTM Standard		
1	Screw	CS (QPQ Processed ^A +Zinc)	316 SS/A479 (QPQ Processed)	
2	Body	CS (Zinc)	316 SS/A479	
3	Ball	440C/A276	440C/A276	
4	Spring	302 SS/A313-	X-750/AMS 5699	
5	Retainer	CS (Zinc)	316 SS/A479	

QPQ is the abbreviation of "Quench-Polish-Quench". Metal components are immersed into two salt baths, in which a variety of elements are diffused into surface of the metal, forming a compound layer. The process optimizes the surface hardness, wear and corrosion resistance and fatigue strength.



NPT Male Thread				
Basic Ordering	Connection Type and Size	Dimension, in.(mm)		
Number		L	F	
□□-GSF-NS4	1/4" NPT Male Thread	2.49(63.3)	0.88(22.23)	
□□-GSF-NS6	3/8" NPT Male Thread	2.49(63.3)	0.88(22.23)	
□□-GSF-NS8	1/2" NPT Male Thread	2.49(63.3)	0.88(22.23)	

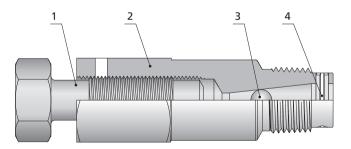
Male ISO Tapered Thread				
Basic Ordering	Connection Type	Dimension, in.(mm)		
Number	and Size	L	F	
□□-GSF-RT4	1/4" BSPT Male Thread	2.49(63.3)	0.88(22.23)	
□□-GSF-RT6	3/8" BSPT Male Thread	2.49(63.3)	0.88(22.23)	
□□-GSF-RT8	1/2" BSPT Male Thread	2.49(63.3)	0.88(22.23)	

GST Series

Features

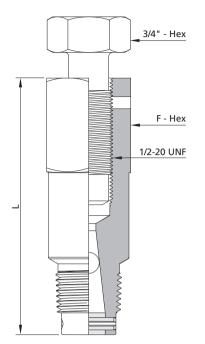
- ◎ Maximum working pressure: 10,000 psig (690 bar)
- O All-metal construction, applicable in both high-temperature and low-temperature environments

Standard Materials of Construction



		Material				
No.	Component	Carbon Steel	316 SS			
		Material Grade/ASTM Standard				
1	Screw	CS (QPQ Processed+Zinc)	316 SS/A479 (QPQ Processed)			
2	Body	CS (Zinc)	316 SS/A479			
3	Ball	440C/A276	440C/A276			
4	Spring Round Pin	Stainless Steel	Stainless Steel			

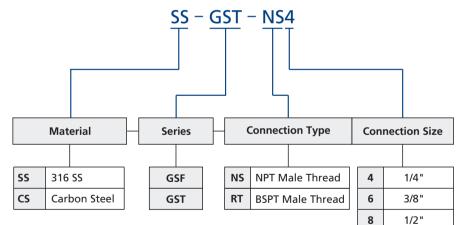




NPT Male Thread				
Basic Ordering	Connection Type	Dimension, in.(mm)		
Number	and Size	L	F	
□□-GST-NS4	1/4" NPT Male Thread	2.34(59.5)	0.86(22.23)	
□□-GST-NS6	3/8" NPT Male Thread	2.43(61.8)	0.86(22.23)	
GST-NS8	1/2" NPT Male Thread	2.35(59.8)	0.86(22.23)	

Male ISO Tapered Thread				
Basic Ordering	Connection Type	Dimension, in.(mm)		
Number	and Size	L	F	
□□-GST-RT4	1/4" BSPT Male Thread	2.34(59.5)	0.86(22.23)	
□□-GST-RT6	3/8" BSPT Male Thread	2.43(61.8)	0.86(22.23)	
□□-GST-RT8	1/2" BSPT Male Thread	2.35(59.8)	0.86(22.23)	

Ordering Number Description



Note: "Ordering Number Description" is an reference to understand the combination rules of FITOK product part number. Not all combinations are available.



Bleed Fittings

Application

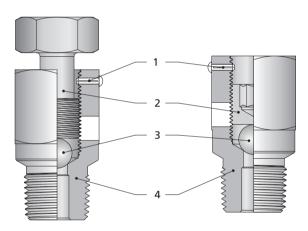
Installed onto the valve seat to vent the small amount of gas and pollutant in the valve.

VFS Series

Features

- O Maximum working pressure: 10,000 psig (690 bar)
- O All-metal construction, applicable in both high and low temperature environments

Standard Materials of Construction

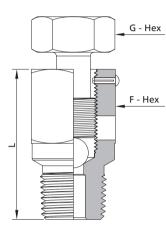


		Material		
No.	Component	Carbon Steel	316 SS	
		Material Grade/ASTM Standard		
1	Round Head Grooved Pin	316 SS/A479	316 SS/A479	
2	Screw	CS (Zinc)	316 SS/A479	
3	Ball	440C/A276	440C/A276	
4	Body	CS (Zinc)	316 SS/A479	

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FITOK

NPT Male Thread				
Basic Ordering Number	Connection Type and Size	Dimension, in.(mm)		
		L	F	G
□□-VFS-NS4	1/4" NPT Male Thread	1.63(41.3)	0.88(22.23)	0.75(19.05)
□□-VFS-NS6	3/8" NPT Male Thread	1.56(39.7)	0.88(22.23)	0.75(19.05)
□□-VFS-NS8	1/2" NPT Male Thread	1.50(38.1)	0.88(22.23)	0.75(19.05)
□□-VFS-NS12	3/4" NPT Male Thread	1.63(41.3)	1.13(28.58)	0.75(19.05)
□□-VFS-NS16	1" NPT Male Thread	2.19(55.6)	1.31(33.34)	0.81(20.64)
□□-VFS-NS20	1 1/4" NPT Male Thread	2.31(58.7)	1.75(44.45)	0.88(22.23)
□□-VFS-NS24	1 1/2" NPT Male Thread	2.63(66.7)	2.00(50.8)	0.88(22.23)



Male ISO Tapered Thread				
Basic Ordering	Connection Type and Size	Dimension, in.(mm)		
Number		L	F	G
□□-VFS-RT4	1/4" BSPT Male Thread	1.63(41.3)	0.88(22.23)	0.75(19.05)
□□-VFS-RT6	3/8" BSPT Male Thread	1.56(39.7)	0.88(22.23)	0.75(19.05)
□□-VFS-RT8	1/2" BSPT Male Thread	1.50(38.1)	0.88(22.23)	0.75(19.05)
□□-VFS-RT12	3/4" BSPT Male Thread	1.63(41.3)	1.13(28.58)	0.75(19.05)
□□-VFS-RT16	1" BSPT Male Thread	2.19(55.6)	1.31(33.34)	0.81(20.64)
□□-VFS-RT20	1 1/4" BSPT Male Thread	2.31(58.7)	1.75(44.45)	0.88(22.23)
□□-VFS-RT24	1 1/2" BSPT Male Thread	2.63(66.7)	2.00(50.8)	0.88(22.23)

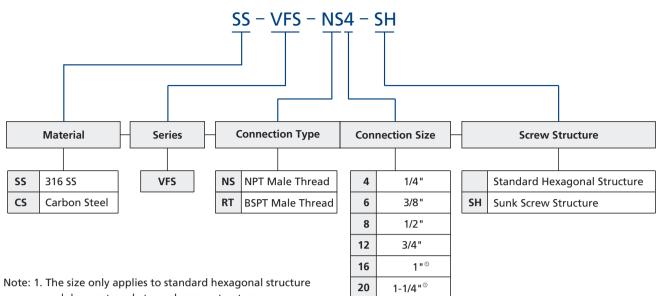
NPT Male Thread				
Basic Ordering	Connection Type	Dimension		
Number	and Size	L	F	
□□-VFS-NS4-SH	1/4" NPT Male Thread	1.63(41.3)	0.88(22.23)	
□□-VFS-NS6-SH	3/8" NPT Male Thread	1.56(39.7)	0.88(22.23)	
□□-VFS-NS8-SH	1/2" NPT Male Thread	1.50(38.1)	0.88(22.23)	
□□-VFS-NS12-SH	3/4" NPT Male Thread	1.63(41.3)	1.13(28.58)	

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Male ISO Tapered Thread				
Basic Ordering Number	Connection Type and Size	Dimension		
		L	F	
□□-VFS-RT4-SH	1/4" BSPT Male Thread	1.63(41.3)	0.88(22.23)	
□□-VFS-RT6-SH	3/8" BSPT Male Thread	1.56(39.7)	0.88(22.23)	
□□-VFS-RT8-SH	1/2" BSPT Male Thread	1.50(38.1)	0.88(22.23)	
□□-VFS-RT12-SH	3/4" BSPT Male Thread	1.63(41.3)	1.13(28.58)	



Ordering Number Description



1-1/2"^①

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and does not apply to sunk screw structure.2. "Ordering Number Description" is an reference to understand the combination rules of FITOK product

part number. Not all combinations are available.

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info@fitokgroup.com www.fitokgroup.com

FK-IC-GF-13-EN-190822