





GBO-



# **GBO.LO**

### Instrument quick connector

### SQC series

#### Feature

Simple push-pull actions can connect and disconnect pipelines without the need for tools; The Pipe body and stem can be provided with or without a one-way valve. The one-way valve automatically opens when connected and automatically closes when disconnected to minimize the loss of liquid or gas.



### Standard structural materials

Number	Component Name	Material
1	pipe body, pipe stem, pipe valve, pipe insert	316 stainless steel
2	DO valve, DO holder	316 stainless steel
3	SO Stem Insert	316 stainless steel
4	O-rings	Viton
5	spring	304 stainless steel
6	retaining ring	302 stainless steel
7	valve body sleeve	316 stainless steel
8	shell	316 stainless steel
9	DO stem sleeve	316 stainless steel
10	SO stem sleeve	316 stainless steel
11	locking Device	316 stainless steel

### Insertion depth

Series	Insertion d	epth, in. (mm)
Series	SO	DO
SQC1	1.09 (27.7)	1.15 (29.2)
SQC2	1.18 (30.0)	1.30 (33.0)
SQC3	1.48 (37.6)	1.68 (42.7)

#### Overflow and gas entrapment

Overflow - the amount of system fluid that leaks out when disconnecting the quick connector (only applicable to DO dual end shutdown);

Air entrapment - the amount of air that enters the system and remains between the Pipe body and stem when connecting a quick connector (only applicable for DO dual end shut-off).

Series	overflow, cm <sup>3</sup>	gas entrapment, cm³
SQC1	0.3	0.3
SQC2	1.0	1.0
SQC3	3.0	3.0

### **Pressure - Temperature Value**

	316 stainless	steel, Fluorocarb	on FKM O-rings	
Temperature °F (°C)	SQC1	SQC2	SQC3	
	Working Pressure,psig(bar)			
70 (20)	3000 (206)	1500 (103)	750 (51.6)	
400 (204)		250 (17.2)		

### Max flow rate

Water flow rate at 70 ° F (20 ° C)

Series	SQC1	SQC2	SQC3
U.S gal/min	4	6	10
L/min	15	22	37

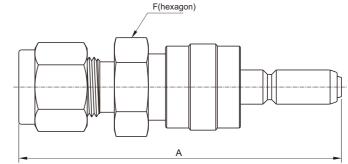
### Connect the entire length

To calculate the total length of the connection position, subtract the insertion depth from the total length of the stem and body.

### **Optional parts**

The Pipe body and stem protector can prevent them from being damaged or contaminated during the disconnection process.

Series	Produ	Product ordering model			
Series	Pipe body protector	Stem protector			
SQC1	SQC1-BP	SQC1-PP			
SQC2	SQC2-BP	SQC2-PP			
SQC3	SQC3-BP	SQC3-PP			



### Pipe stem

Size table

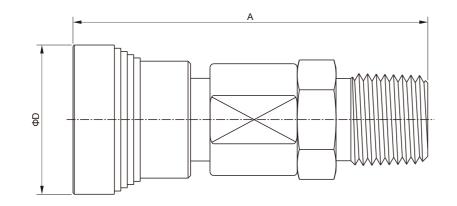
	Model		C	v			4																																		
Stem series Specs			End Connection Type	SO DO	DO	F																																			
SO	DO	opecs	30			30	00																																		
		S2	0.08	0.08	1/8" card sleeve connector	69.8	70.4																																		
		S4			1/4" card sleeve connector	59.9	61.5																																		
		S6M			6mm card sleeve connector	59.9	01.5	15.9																																	
SQC1P -SO	SQC1P -DO	M2N			1/8 NPT male thread	53.5	54.1	15.9																																	
		M4N(R)	0.4	0.2	1/4 NPT male thread(PT male thread)	57.3	57.9																																		
	F2N F4N(R)	F2N									1/8 NPT female thread	52.0	52.6																												
		F4N(R)			1/4 NPT female thread(PT female thread)	58.3	58.9	19.1																																	
			S6	1.5 0.5	1.5 0.5	1.5 0.5		3/8" card sleeve connector	66.5	67.1																															
		MAN	1.5 0.5				1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	1.5 0.5	.5 0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	10mm card sleeve connector
SQC2P	SQC2P				1/4 NPT male thread	61.3	61.9	19.1																																	
-SO		M6N(R)	1.6	0.5	3/8 NPT male thread(PT male thread)																																				
		F4N	1.5	0.5	5 1/4 NPT female thread 62.1	62.7																																			
		F6N(R)	1.6	0.5	3/8 NPT female thread(PT female thread)			22.2																																	
		S8			1/2" card sleeve connector	70.7	00.0																																		
SQC3P -SO	SQC3P S12M	S12M	3.3 1.5 12mm card sleeve connector	12mm card sleeve connector	79.7 80.3	80.3	23.8																																		
	-DO	M8N(R)			1/2 NPT male thread(PT male thread)	76.6	77.2																																		
	F8N(R) 3.1 1	1.3	1.3 1/2 NPT female thread(PT female thread)	76.1	76.7	27.0																																			

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### Pipe body

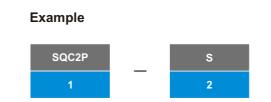


Model Stem series Specs				D		
		End Connection Type	A	U		
	S2	1/8" card sleeve connector	57.4			
	S4	1/4" card sleeve connector	50.4			
	S6M	6mm card sleeve connector	58.4			
SQC1B	M2N	1/8 NPT male thread	51.1	23.1		
	M4N(R)	1/4 NPT male thread(PT male thread)	50.0			
	F2N	1/8 NPT female thread	56.9			
	F4N(R)	1/4 NPT female thread(PT female thread)	61.5			
	S6	3/8" card sleeve connector	65.5			
	S10M	10mm card sleeve connector	68.1			
SQC2B	M4N	1/4 NPT male thread	60.5			
SQC2B	M6N(R)	3/8 NPT male thread(PT male thread)	0.5	26.2		
	F4N	1/4 NPT female thread	64.5			
	F6N(R)	3/8 NPT female thread(PT female thread)	65.3			
SQC3B	S8	1/2" card sleeve connector	70 5			
	S12M	12mm card sleeve connector	78.5		78.5	
	M8N(R)	1/2 NPT male thread(PT male thread)	75.4	30.7		
	F8N(R)	1/2 NPT female thread(PT female thread)	81.8			

### **Ordering Information**

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### **Quick Connector Series**

Pipe body	Pipe stem
SQC1B	SQC1P
SQC2B	SQC2P
SQC3B	SQC3P

### End Connection Type

S	
GBO-LOKcard sleeve connector	

### End Connection Specs

Pipe outside diameter code name

code	4
outside diameter(in.)	1/4
code	6M
outside diameter(mm)	6

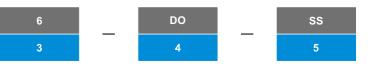
### Pipe thread Code Name

Spe	ecs(in.)	1/8	1/4	3/8	1/2
code	NPT thread	2N	4N	6N	8N
	BSPT thread	2R	4R	6R	8R

## 4 Quick connector code 50 Internal without one-way valve Material



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М	F
male thread joint	female thread joint

6	8
3/8	1/2
10M	12M

DO
Internally equipped with one-way valve

SS

316 stainless steel



# **GBO.LO**

### Full flow quick connector

### SFQC series

### Feature

The proven steel ball locking mechanism provides reliable connections;

Compact connections provide unrestricted full flow without any orifice restrictions;

O-ring can be easily replaced without disassembling the tube body.



### Standard structural materials:

Number	Component Name	Material			
Number	Component Name	316 stainless steel	brass		
1	Pipe stem	316 stainless steel/A479	brass/B16		
2	Steel wire retaining ring for shaft	304 stainless steel/A313			
3	steel ball	316 stainless steel			
4	Pipe body casing	316 stainless steel/A276	brass/B16		
5	spring	304 stainles	ss steel/A313		
6	O-rings	Viton	NBR		
7	Pipe body	316 stainless steel/A479	brass/B16		

### Insertion depth

Series	Insertion depth,in. (mm)
SFQC2	0.78 (19.8)
SFQC3	0.81 (20.6)
SFQC4	0.91 (23.0)
SFQC5	0.94 (23.9)

### Pressure - Temperature Value

	316 stainless steel Fluorocarbon(FKM) O-rings				brass,NBR O-rings			
Temperature °F (°C)	SFQC2	SFQC3	SFQC4	SFQC5	SFQC2	SFQC3	SFQC4	SFQC5
	Working Pressure,psig(bar)			Working Pressure,psig(bar)				
70 (20)	6000 (413) 4000 (275)		4000 (275) 3000 (206) 2000 (137)		37)			
250 (121)	3000 (206) 2100 (144)			100 (6.8)				
400 (204)	100 (6.8)					-		

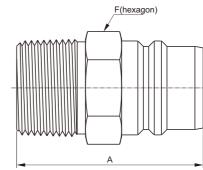
### **Optional parts**

### Pipe body and stem protector

The tube body and stem protector can prevent them from being damaged or contaminated during the disconnection process.

Series	Product ordering model				
	Pipe body protector	Pipe stem protector			
SFQC2	SFQC2-BP	SFQC2-PP			
SFQC3	SFQC3-BP	SFQC3-PP			
SFQC4	SFQC4-BP	SFQC4-PP			
SFQC5	SFQC5-BP	SFQC5-PP			

Size table Pipe stem

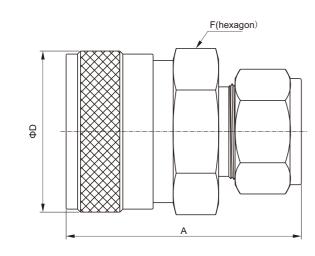


Model		0	Cy Min End Connection Type		•	
Pipe stem Series	Specs	CV	ID(mm)	End Connection Type	Α	F
	S4	2.2	4.8	1/4" card sleeve connector	45.0	14.3
	S6	2.8		3/8" card sleeve connector	45.0	17.5
	M4N(R)			1/4 NPT male thread (PT male thread)	40.4	14.3
SFQC2P	M6N(R)			3/8 NPT male thread (PT male thread)	40.4	17.5
3FQC2F	M4G	47	6.1	1/4 BSPP male thread	10.0	19.1
	F4N(R)	1.7		1/4 NPT female thread(PT female thread)	40.6	19.1
	F6N(R)			3/8 NPT female thread(PT female thread)	42.4	22.2
	F4G			1/4 BSPP female thread	40.6	19.1
	S6	2.9	7.1	3/8" card sleeve connector	47.8	
	S8	13.0	10.4	1/2" card sleeve connector	50.5	22.2
	M6N(R)	7.1	10.4	3/8 NPT male thread(PT male thread)	41.9	22.2
SFQC3P	M8N(R)	11.5	12.7	1/2 NPT male thread (PT male thread)	46.7	
SFQCSF	M8G	11.5	12.7	1/2 BSPP male thread	46.2	
	F6N(R)	7.1	11.9	3/8 NPT female thread(PT female thread)	40.4	27.0
	F8N(R)	11.5	40.7	1/2 NPT female thread(PT female thread)	46.2	27.0
	F8G	11.5	12.7	1/2 BSPP female thread	40.2	
	S12	26.0	15.7	3/4" card sleeve connector	54.6	27.0
SFQC4P	M12N(R)	23.6	10.2	3/4 NPT male thread(PT male thread)	51.6	27.0
	F12N(R)	23.0	18.3	3/4 NPT female thread(PT female thread)	52.8	33.3
	S16	45.0		1" card sleeve connector	62.2	34.9
SFQC5P	M16N(R)	20.0	22.4	1" NPT male thread(PT male thread)	59.7	54.9
	F16N(R)	39.0		1" NPT female thread(PT female thread)	63.2	41.3



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### Pipe body

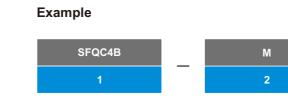


Model		Min End Connection Type				_	
Pipe stemSeries	Specs	ID(mm)	End Connection Type	Α	D	F	
	S4	4.8	1/4" card sleeve connector	45.7			
	S6	7.1	3/8" card sleeve connector	46.0		17.5	
	M4N(R)	6.4	1/4 NPT male thread (PT male thread)				
050000	M6N(R)	9.4	3/8 NPT male thread (PT male thread)	40.0	00.0		
SFQC2B	M4G	6.1	1/4 BSPP male thread	45.7	22.2	10.1	
	F4N(R)		1/4 NPT female thread (PT female thread)	38.1		19.1	
	F6N(R)	9.7	3/8 NPT female thread(PT female thread)	41.4		22.2	
	F4G		1/4 BSPP female thread	38.1		19.1	
	S6	7.1	3/8" card sleeve connector	55.1		27.0	
	S8	11.9	1/2" card sleeve connector	56.6			
	M6N(R)	10.4	3/8 NPT male thread (PT male thread)	46.5			
050000	M8N(R)	12.7	1/2 NPT male thread (PT male thread)		33.0		
SFQC3B	M8G	11.9	1/2 BSPP male thread	52.8			
	F6N(R)	15.0	3/8 NPT female thread (PT female thread)				
	F8N(R)	10.0	1/2 NPT female thread (PT female thread)	43.9			
	F8G	16.0	1/2 BSPP female thread				
	S12	15.7	3/4" card sleeve connector	62.2			
SFQC4B	M12N(R)	18.3	3/4 NPT male thread (PT male thread)	59.2	42.6	38.1	
	F12N(R)	22.4	3/4 NPT female thread (PT female thread)	48.0			
	S16	00.4	1" card sleeve connector	70.0			
SFQC5B	M16N(R)	22.4	1" NPT male thread (PT male thread)	67.3	49.0	44.5	
	F16N(R)	26.9	1" NPT female thread (PT female thread)	53.8			

### **Ordering Information**

1

2



### **Quick Connector Series**

Pipe body	Pipe stem
SFQC2B	SFQC2P
SFQC3B	SFQC3P
SFQC4B	SFQC4P
SFQC5B	SFQC5P

### End Connection Type

S	М	F
GBO-LOK card sleeve connector	male thread joint	female thread joint

### End Connection Specs

### Pipe outside diameter code name

code	4	6	8	12	16
outside diameter(in.)	1/4	3/8	1/2	3/4	1
code	6M	10M	12M	20M	25M
outside diameter(mm)	6	10	12	20	25

3

4

### Pipe thread Code Name

Specs(in.)		1/4	3/8	1/2	3/4	1
code	NPT thread	4N	6N	8N	12N	16N
	BSPT thread	4R	6R	8R	12R	16R
	BSPP thread	4G	6G	8G	12G	16G

### Material

SS	
316 stainless steel	



В
brass