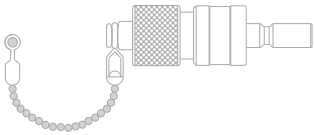
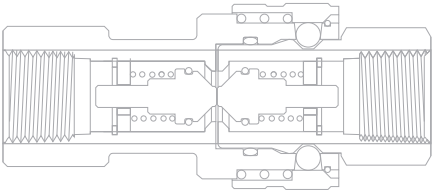
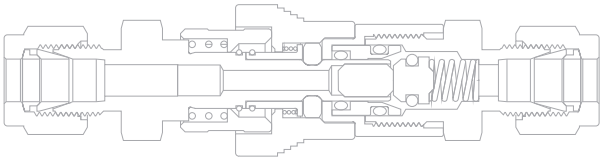


# Quick-connects



Climate Control  
Electromechanical  
Filtration  
Fluid & Gas Handling  
Hydraulics  
Process Control  
Sealing & Shielding



# Contents

91C Series



01

91F Series



08

91V Series



12

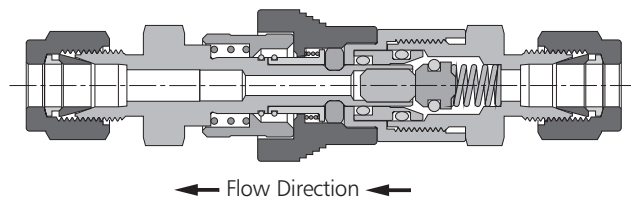
# 91C Series

## Features

- ⦿ Maximum working pressure: 3000 psig (207 bar)
- ⦿ Working temperatures:
  - 10°F to 400°F (-23°C to 204°C) with Fluorocarbon FKM seal
  - 10°F to 250°F (-23°C to 121°C) with Buna N seal
- ⦿ Materials: stainless steel or brass
- ⦿ Reliable, leak-tight O-ring seal for vacuum or pressure systems.
- ⦿ Interchangeable with other main brands.

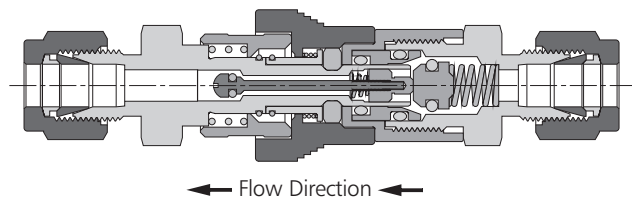
### Single-end Shutoff (SESO)

SESO stem + body



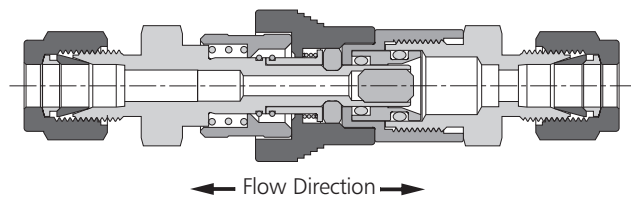
### Double-end Shutoff (DESO)

DESO stem + body



### Full-flow Quick-connects

SESO stem + full-flow body



## Pressure-Temperature Ratings

Temperature °F (°C)	Stainless Steel with FKM O-ring			Brass with Buna N O-ring		
	91C4	91C6	91C8	91C4	91C6	91C8
	pressure rating, psig (bar)					
70 (20)	3000 (207)	1500 (103)	750 (51.6)	2000 (137)	1000 (68.9)	500 (34.4)
250 (121)	—			250 (17.2)		
400 (204)	250 (17.2)			—		

## Insertion Depth and Maximum Flow Rate

Series	Insertion Depth		Max. Flow Rate at 70°F (20°C)	
	SESO	DESO		
	in. (mm)	in. (mm)	U.S. gal/min	L/min
91C4	1.09 (27.7)	1.15 (29.2)	4.0	15.0
91C6	1.18 (30.0)	1.30 (33.0)	6.0	22.0
91C8	1.48 (37.6)	1.68 (42.7)	10.0	37.0

In order to measure overall length in the coupled position, the insertion depth should be deducted from any overall stem and body combination length.

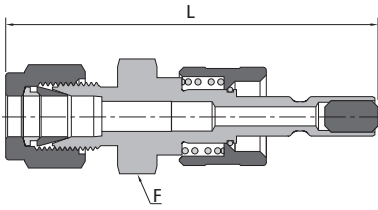
## Cautions:

- ⦿ Do not uncouple single-end shutoff quick-connects under pressure.
- ⦿ Do not insert foreign object into uncoupled stems and bodies.
- ⦿ Re-lubricate stem seal O-ring periodically.



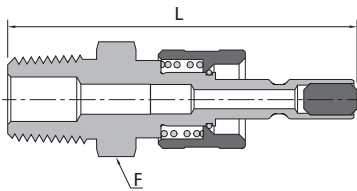
## SESO Stems

### Tube Fitting



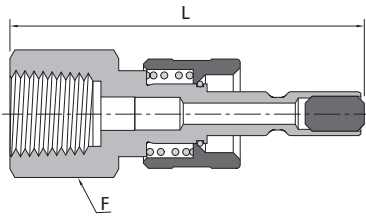
Tube Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
in.			in.	in. (mm)
1/8	-91C4-FX2-S	0.08	5/8	2.32 (58.9)
1/4	-91C4-FX4-S	0.3	5/8	2.36 (59.9)
3/8	-91C6-FX6-S	1.0	3/4	2.52 (64.0)
1/2	-91C8-FX8-S	2.4	15/16	2.96 (75.2)
mm	---	---	mm	mm (in.)
6	-91C4-MX6-S	0.3	16	59.9 (2.36)
10	-91C6-MX10-S	1.0	19	67.3 (2.65)
12	-91C8-MX12-S	2.4	24	75.2 (2.96)

### Male NPT



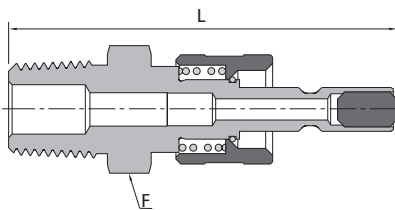
NPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
			in.	in. (mm)
1/8	-91C4-N2-S	0.3	5/8	2.07 (52.6)
1/4	-91C4-N4-S	0.3	5/8	2.22 (56.4)
1/4	-91C6-N4-S	0.8	3/4	2.32 (58.9)
3/8	-91C6-N6-S	0.8	3/4	2.35 (59.7)
1/2	-91C8-N8-S	2.0	15/16	2.84 (72.1)

### Female NPT



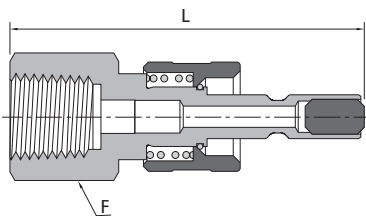
NPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
			in.	in. (mm)
1/8	-91C4-FN2-S	0.3	5/8	2.01 (51.1)
1/4	-91C4-FN4-S	0.3	3/4	2.26 (57.4)
1/4	-91C6-FN4-S	0.8	3/4	2.35 (59.7)
3/8	-91C6-FN6-S	0.8	7/8	2.35 (59.7)
1/2	-91C8-FN8-S	2.0	1 1/16	2.82 (71.6)

### Male BSPT



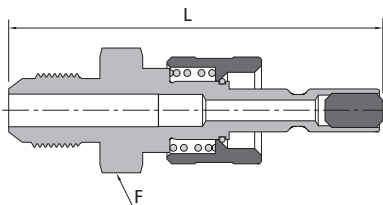
BSPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
			in.	in. (mm)
1/8	-91C4-R2-S	0.3	5/8	2.07 (52.6)
1/4	-91C4-R4-S	0.3	5/8	2.22 (56.4)
1/4	-91C6-R4-S	0.8	3/4	2.32 (58.9)
3/8	-91C6-R6-S	0.8	3/4	2.35 (59.7)
1/2	-91C8-R8-S	2.0	15/16	2.84 (72.1)

### Female BSPT



BSPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
			in.	in. (mm)
1/8	-91C4-FR2-S	0.3	5/8	2.01 (51.1)
1/4	-91C4-FR4-S	0.3	3/4	2.26 (57.4)
1/4	-91C6-FR4-S	0.8	3/4	2.35 (59.7)
3/8	-91C6-FR6-S	0.8	7/8	2.35 (59.7)
1/2	-91C8-FR8-S	2.0	1 1/16	2.82 (71.6)

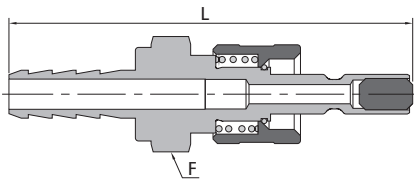
### Male JIC(AN) 37° Flare



AN Tube Flare Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
in.			in.	in. (mm)
1/4	-91C4-AN4-S	0.2	5/8	2.23 (56.6)
3/8	-91C6-AN6-S	1.0	3/4	2.35 (59.7)
1/2	-91C8-AN8-S	2.4	15/16	2.79 (70.9)

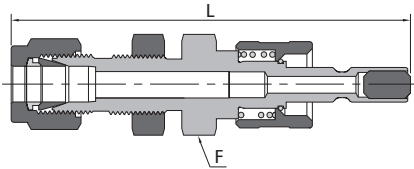
## SESO Stems

### Hose Connector



Hose Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
in.			in.	in. (mm)
1/4	-91C4-HC4-S	0.2	5/8	2.47 (62.7)
3/8	-91C6-HC6-S	1.0	3/4	2.66 (67.6)
1/2	-91C8-HC8-S	2.4	15/16	3.07 (78.0)

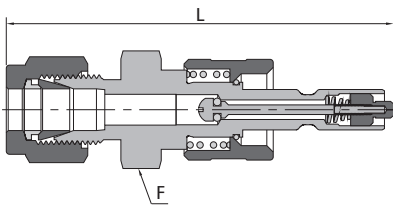
### Bulkhead Tube Fitting



Tube Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L	Min. Panel Hole	Max. Panel Thickness
in.			in.	in. (mm)	in. (mm)	in. (mm)
1/4	-91C4-FX4-SS	0.3	5/8	2.74 (69.6)	0.47 (11.9)	0.25 (6.4)
3/8	-91C6-FX6-SS	1.0	3/4	2.92 (74.2)	0.60 (15.2)	0.27 (6.9)
1/2	-91C8-FX8-SS	2.4	15/16	3.43 (87.1)	0.78 (19.8)	0.26 (6.6)
mm			mm	mm (in.)	mm (in.)	mm (in.)
6	-91C4-MX6-SS	0.3	16	69.6 (2.74)	11.7 (0.46)	6.4 (0.25)
10	-91C6-MX10-SS	1.0	22	77.7 (3.06)	16.8 (0.66)	6.9 (0.27)
12	-91C8-MX12-SS	2.4	24	87.1 (3.43)	19.6 (0.77)	6.6 (0.26)

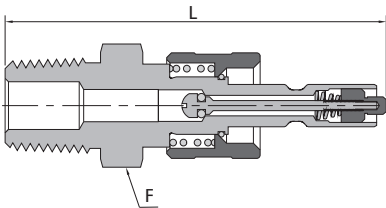
## DESO Stems

### Tube Fitting



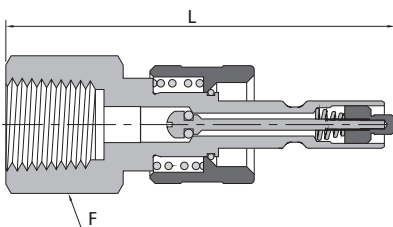
Tube Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
in.			in.	in. (mm)
1/8	-91C4-FX2-D	0.08	5/8	2.77 (70.4)
1/4	-91C4-FX4-D	0.2	5/8	2.42 (61.5)
3/8	-91C6-FX6-D	0.5	3/4	2.64 (67.1)
1/2	-91C8-FX8-D	1.5	15/16	3.16 (80.3)
mm			mm	mm (in.)
6	-91C4-MX6-D	0.2	16	61.5 (2.42)
10	-91C6-MX10-D	0.5	19	70.4 (2.77)
12	-91C8-MX12-D	1.5	24	80.3 (3.16)

### Male NPT



NPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
			in.	in.(mm)
1/8	-91C4-N2-D	0.2	5/8	2.13 (54.1)
1/4	-91C4-N4-D	0.2	5/8	2.28 (57.8)
1/4	-91C6-N4-D	0.5	3/4	2.44 (61.9)
3/8	-91C6-N6-D	0.5	3/4	2.47 (62.7)
1/2	-91C8-N8-D	1.3	15/16	3.04 (77.2)

### Female NPT

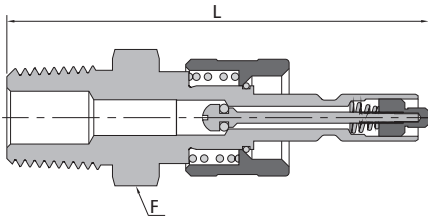


NPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F	L
			in.	in. (mm)
1/8	-91C4-FN2-D	0.2	5/8	2.07 (52.6)
1/4	-91C4-FN4-D	0.2	3/4	2.32 (58.9)
1/4	-91C6-FN4-D	0.5	3/4	2.47 (62.7)
3/8	-91C6-FN6-D	0.5	7/8	2.47 (62.7)
1/2	-91C8-FN8-D	1.3	1 1/16	3.04 (77.2)



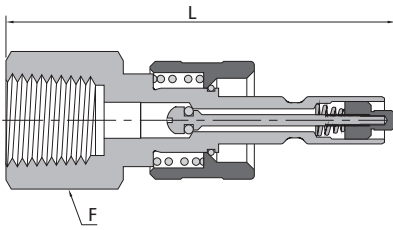
## DESO Stems

### Male BSPT



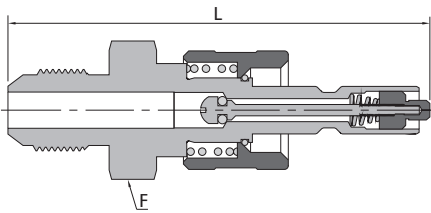
BSPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F		L	
			in.	in. (mm)	in.	in. (mm)
1/8	-91C4-R2-D	0.2	5/8	2.13 (54.1)		
1/4	-914-R4-D	0.2	5/8	2.28 (57.8)		
1/4	-916-R4-D	0.5	3/4	2.44 (61.9)		
3/8	-916-R6-D	0.5	3/4	2.47 (62.7)		
1/2	-918-R8-D	1.3	15/16	3.04 (77.2)		

### Female BSPT



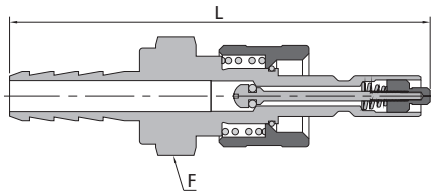
BSPT Size	Basic Ordering Number	Flow Coefficient (Cv)	F		L	
			in.	in. (mm)	in.	in. (mm)
1/8	-91C4-FR2-D	0.2	5/8	2.07 (52.6)		
1/4	-91C4-FR4-D	0.2	3/4	2.32 (58.9)		
1/4	-91C6-FR4-D	0.5	3/4	2.47 (62.7)		
3/8	-91C6-FR6-D	0.5	7/8	2.47 (62.7)		
1/2	-91C8-FR8-D	1.3	1 1/16	3.04 (77.2)		

### Male JIC(AN) 37° Flare



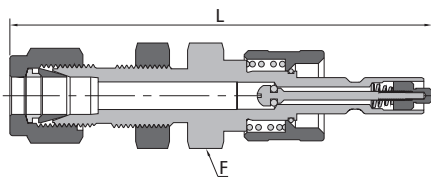
AN Tube Flare Size in.	Basic Ordering Number	Flow Coefficient (Cv)	F		L	
			in.	in. (mm)	in.	in. (mm)
1/4	-91C4-AN4-D	0.2	5/8	2.29 (58.2)		
3/8	-91C6-AN6-D	0.5	3/4	2.47 (62.7)		
1/2	-91C8-AN8-D	1.5	15/16	2.99 (75.9)		

### Hose Connector



Hose Size in.	Basic Ordering Number	Flow Coefficient (Cv)	F		L	
			in.	in. (mm)	in.	in. (mm)
1/4	-91C4-HC4-D	0.2	5/8	2.53 (64.3)		
3/8	-91C6-HC6-D	0.5	3/4	2.78 (70.6)		
1/2	-91C8-HC8-D	1.5	15/16	3.27 (83.1)		

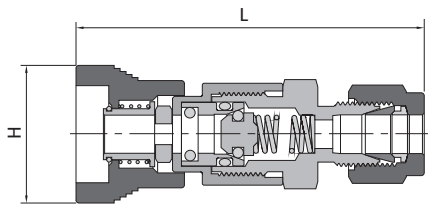
### Bulkhead Tube Fitting



Tube Size in.	Basic Ordering Number	Flow Coefficient (Cv)	F		Min. Panel Hole in. (mm)	Max. Panel Thickness in. (mm)
			in.	in. (mm)		
1/4	-91C4-FX4-DS	0.2	5/8	2.80 (71.1)	0.47 (11.9)	0.25 (6.4)
3/8	-91C6-FX6-DS	0.5	3/4	3.07 (78.0)	0.60 (15.2)	0.27 (6.9)
1/2	-91C8-FX8-DS	1.5	15/16	3.63 (92.2)	0.78 (19.8)	0.26 (6.6)
mm	—	—	mm	mm (in.)	mm (in.)	mm (in.)
6	-91C4-MX6-DS	0.2	16	71.1 (2.80)	11.7 (0.46)	6.4 (0.25)
10	-91C6-MX10-DS	0.5	22	78.7 (3.10)	16.8 (0.66)	6.9 (0.27)
12	-91C8-MX12-DS	1.5	24	92.2 (3.63)	19.6 (0.77)	6.6 (0.26)

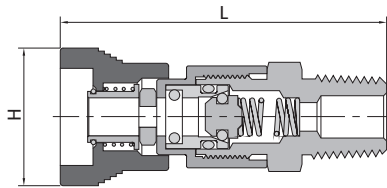
## Bodies

### Tube Fitting



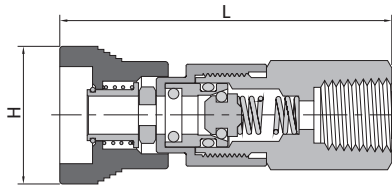
Tube Size	Basic Ordering Number	H	L
in.		in. (mm)	in. (mm)
1/8	-91C4-FX2-B	0.91 (23.1)	2.26 (57.4)
1/4	-91C4-FX4-B	0.91 (23.1)	2.30 (58.4)
3/8	-91C6-FX6-B	1.03 (26.2)	2.58 (65.5)
1/2	-91C8-FX8-B	1.21 (30.7)	3.09 (78.5)
mm	---	mm (in.)	mm (in.)
6	-91C4-MX6-B	23.1 (0.91)	58.4 (2.30)
10	-91C6-MX10-B	26.2 (1.03)	68.1 (2.68)
12	-91C8-MX12-B	30.7 (1.21)	78.5 (3.09)

### Male NPT



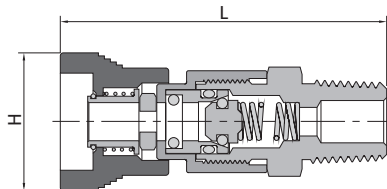
NPT Size	Basic Ordering Number	H	L
		in. (mm)	in. (mm)
1/8	-91C4-N2-B	0.91 (23.1)	2.01 (51.1)
1/4	-91C4-N4-B	0.91 (23.1)	2.16 (54.9)
1/4	-91C6-N4-B	1.03 (26.2)	2.38 (60.5)
3/8	-91C6-N6-B	1.03 (26.2)	2.38 (60.5)
1/2	-91C8-N8-B	1.21 (30.7)	2.97 (75.4)

### Female NPT



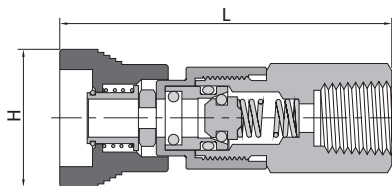
NPT Size	Basic Ordering Number	H	L
		in. (mm)	in. (mm)
1/8	-91C4-FN2-B	0.91 (23.1)	2.16 (54.9)
1/4	-91C4-FN4-B	0.91 (23.1)	2.42 (61.5)
1/4	-91C6-FN4-B	1.03 (26.2)	2.54 (65.4)
3/8	-91C6-FN6-B	1.03 (26.2)	2.57 (65.3)
1/2	-91C8-FN8-B	1.21 (30.7)	3.22 (81.8)

### Male BSPT



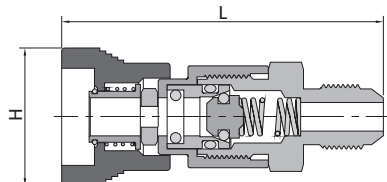
BSPT Size	Basic Ordering Number	H	L
		in. (mm)	in. (mm)
1/8	-91C4-R2-B	0.91 (23.1)	2.01 (51.1)
1/4	-91C4-R4-B	0.91 (23.1)	2.16 (54.9)
1/4	-91C6-R4-B	1.03 (26.2)	2.38 (60.5)
3/8	-91C6-R6-B	1.03 (26.2)	2.38 (60.5)
1/2	-91C8-R8-B	1.21 (30.7)	2.97 (75.4)

### Female BSPT



BSPT Size	Basic Ordering Number	H	L
		in. (mm)	in. (mm)
1/8	-91C4-FR2-B	0.91 (23.1)	2.16 (54.9)
1/4	-91C4-FR4-B	0.91 (23.1)	2.42 (61.5)
1/4	-91C6-FR4-B	1.03 (26.2)	2.54 (65.4)
3/8	-91C6-FR6-B	1.03 (26.2)	2.57 (65.3)
1/2	-91C8-FR8-B	1.21 (30.7)	3.22 (81.8)

### Male JIC (AN) 37° Flare

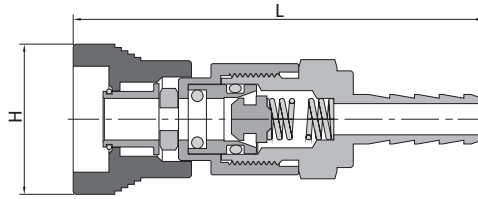


AN Tube Flare Size	Basic Ordering Number	H	L
in.		in. (mm)	in. (mm)
1/4	-91C4-AN4-B	0.91 (23.1)	2.17 (55.1)
3/8	-91C6-AN6-B	1.03 (26.2)	2.41 (61.2)
1/2	-91C8-AN8-B	1.21 (30.7)	2.92 (74.2)



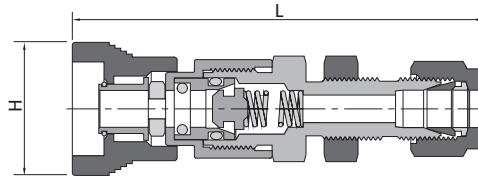
## Bodies

### Hose Connector



Hose Size in.	Basic Ordering Number	Flow Coefficient (Cv)	H in. (mm)	L in. (mm)
1/4	-91C4-HC4-B	0.3	0.91 (23.1)	2.41 (61.2)
3/8	-91C6-HC6-B	1.5	1.03 (26.2)	2.72 (69.1)
1/2	-91C8-HC8-B	3.3	1.21 (30.7)	3.20 (81.3)

### Bulkhead Tube Fitting



Tube Size in.	Basic Ordering Number	Flow Coefficient (Cv)	H in. (mm)	L in. (mm)	Min. Panel Hole in. (mm)	Max. Panel Thickness in. (mm)
1/4	-91C4-FX4-BS	0.4	0.91 (23.1)	2.67 (67.8)	0.47 (11.9)	0.25 (6.4)
3/8	-91C6-FX6-BS	1.5	1.03 (26.2)	2.98 (75.7)	0.60 (15.2)	0.27 (6.9)
1/2	-91C8-FX8-BS	3.3	1.21 (30.7)	3.56 (90.4)	0.78 (19.8)	0.26 (6.6)
mm			mm (in.)	mm (in.)	mm (in.)	mm (in.)
6	-91C4-MX6-BS	0.4	23.1 (0.91)	67.8 (2.67)	11.7 (0.46)	6.4 (0.25)
10	-91C6-MX10-BS	1.5	26.2 (1.03)	75.9 (2.99)	16.8 (0.66)	6.9 (0.27)
12	-91C8-MX12-BS	3.3	30.7 (1.21)	90.4 (3.56)	19.6 (0.77)	6.6 (0.26)

## Keyed QC Series

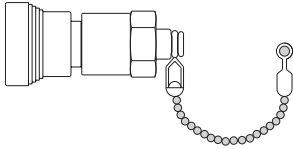
VFK keyed quick-connects provide a positive mechanical lockout system to prevent accidental intermixing of different lines in multifluid or multipressure systems.

### QC Series Key Numbers and Sleeve Outside Diameters

Key Number and Color	QC4		QC6		QC8	
	Body Sleeve	Stem Sleeve	Body Sleeve	Stem Sleeve	Body Sleeve	Stem Sleeve
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)
K1 black	0.96 (24.4)	0.82 (20.8)	1.13 (28.7)	0.99 (25.1)	1.26 (32.0)	1.10 (27.9)
K2 orange	0.99 (25.1)	0.85 (21.6)	1.16 (29.5)	1.02 (25.9)	1.29 (32.8)	1.14 (29.0)
K3 green	1.02 (25.9)	0.88 (22.4)	1.19 (30.2)	1.05 (26.7)	1.32 (33.5)	1.17 (29.7)
K4 yellow	1.05 (26.7)	0.91 (23.1)	1.22 (31.0)	1.08 (27.4)	1.35 (34.3)	1.20 (30.5)
K5 blue	1.08 (27.4)	0.94 (23.9)	1.24 (31.5)	1.11 (28.2)	1.38 (35.1)	1.23 (31.2)
K6 white	1.11 (28.2)	0.97 (24.6)	1.28 (32.5)	1.14 (29.0)	1.41 (35.8)	1.26 (32.0)
K7 purple	1.14 (29.0)	1.00 (25.4)	1.31 (33.3)	1.17 (29.7)	1.44 (36.6)	1.29 (32.8)
K8 brown	1.17 (29.7)	1.03 (26.2)	1.34 (34.0)	1.20 (30.5)	1.47 (37.3)	1.32 (33.5)

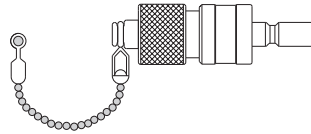


Stem Protector



Series	Basic Ordering Number
91C4	-91C4-SP
91C6	-91C6-SP
91C8	-91C8-SP

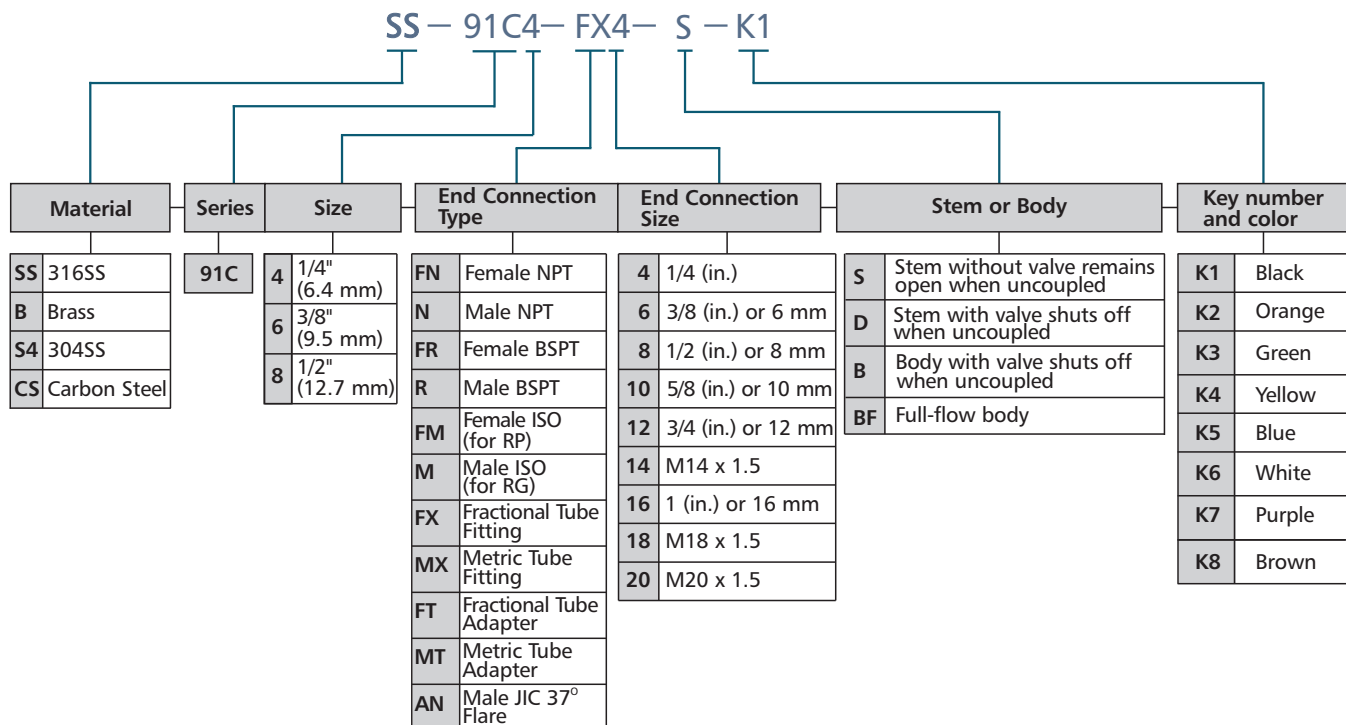
Body Protector



Series	Basic Ordering Number
91C4	-91C4-BP
91C6	-91C6-BP
91C8	-91C8-BP

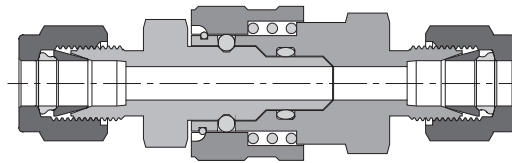
- To order a protector, add material designator (SS for stainless steel or B for brass ) as a prefix to the basic ordering number.  
Example: SS91C4-BP
- To order a keyed protector, add material designator (SS for stainless steel or B for brass ) as a prefix and key designator from the table below as a suffix to the ordering number.  
Example: SS91C4-BP-K2

## 91 Series How to Order



- Sizes and types listed are standard. Other sizes and types are available on request.
- Dimensions are for reference only and are subject to change.

# 91F Series



## Features

- ⦿ Full flow
- ⦿ Quick, easy operation
- ⦿ Maximum working pressure: 6000 psig (414 bar)
- ⦿ Materials: stainless steel, carbon steel, and brass
- ⦿ Smooth, open bores without valving on either end to minimize pressure drop and allow easy cleaning.

## Pressure-Temperature Ratings

Temperature °F (°C)	Stainless Steel with FKM O-ring				Brass with Buna N O-ring				Carbon Steel with Buna N O-ring			
	91F4	91F8	91F12	91F16	91F4	91F8	91F12	91F16	91F4	91F8	91F12	91F16
	pressure rating, psig (bar)											
70 (20)	6000 (414)	4000 (275)	4000 (275)	4000 (275)	3000 (207)	2000 (137)	4000 (275)	3000 (207)				
250 (121)	—				100 (6.9)				100 (6.9)			
400 (204)	100 (6.9)				—				—			

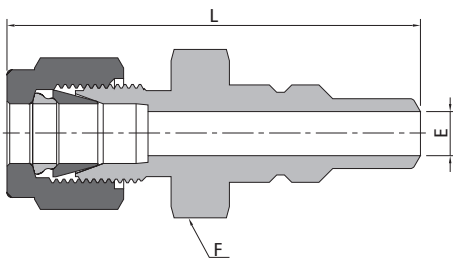
## Insert Depth

Series	Insert Depth in. (mm)
91F4	0.78 (19.8)
91F8	0.81 (20.6)
91F12	0.90 (22.9)
91F16	0.94 (23.9)

In order to measure overall length in the coupled position, insertion depth should be deducted from any overall stem and body combination length.

## Stems

### Tube Fitting



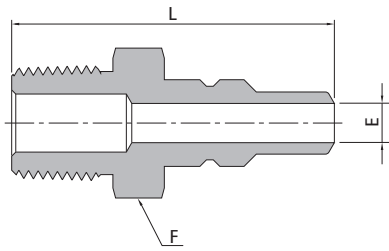
Tube Size in.	Basic Ordering Number	Flow Coefficient (Cv)	E	F	L
			in. (mm)	in.	in. (mm)
1/4	-91F4-FX4-S	2.2	0.19 (4.8)	9/16	1.77 (45.0)
3/8	-91F4-FX6-S	2.8	0.24 (6.1)	11/16	1.77 (45.0)
3/8	-91F8-FX6-S	2.8	0.28 (7.1)	7/8	1.88 (47.8)
1/2	-91F8-FX8-S	13.0	0.41 (10.4)	7/8	1.99 (50.5)
3/4	-91F12-FX12-S	26.0	0.62 (15.7)	1 1/16	2.15 (54.6)
1	-91F16-FX16-S	45.0	0.88 (22.4)	1 3/8	2.45 (62.2)
mm			(mm) in.	mm	(mm) in.
6	-91F4-MX6-S	2.2	4.8 (0.19)	15	45.0 (1.77)
10	-91F8-MX10-S	2.8	7.1 (0.28)	22	48.5 (1.91)
12	-91F8-MX12-S	13.0	9.5 (0.37)	22	51.3 (2.02)
20	-91F12-MX20-S	26.0	15.7 (0.62)	30	54.6 (2.15)
25	-91F16-MX25-S	45.0	22.4 (0.88)	36	63.5 (2.50)

## Cautions:

- ⦿ Do not uncouple under pressure.
- ⦿ Do not insert foreign object into uncoupled stems and bodies.
- ⦿ Re-lubricate stem seal O-ring periodically.

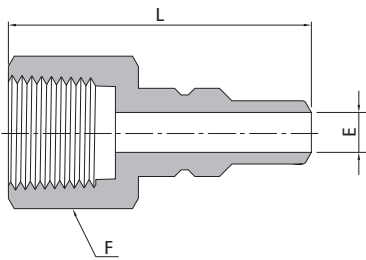
## Stems

### Male NPT



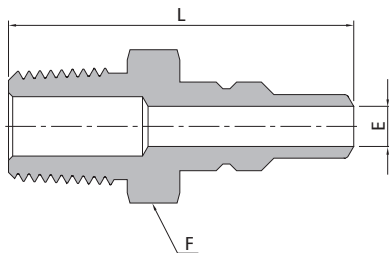
NPT Size	Basic Ordering Number	Flow Coefficient (Cv)	E	F	L
			in. (mm)	in.	in. (mm)
1/4	-91F4-N4-S	1.7	0.24 (6.1)	9/16	1.59 (40.4)
3/8	-91F4-N6-S	1.7	0.24 (6.1)	11/16	1.59 (40.4)
3/8	-91F8-N6-S	7.1	0.41 (10.4)	7/8	1.65 (41.9)
1/2	-91F8-N8-S	11.5	0.50 (12.7)	7/8	1.84 (46.7)
3/4	-91F12-N12-S	23.6	0.72 (18.3)	1 1/16	2.03 (51.6)
1	-91F16-N16-S	39.0	0.88 (22.4)	1 3/8	2.35 (59.7)

### Female NPT



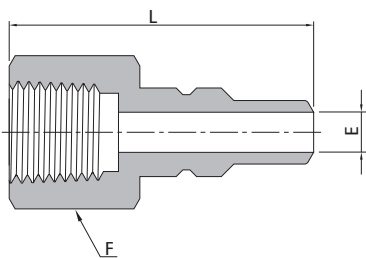
NPT Size	Basic Ordering Number	Flow Coefficient (Cv)	E	F	L
			in. (mm)	in.	in. (mm)
1/4	-91F4-FN4-S	1.7	0.24 (6.1)	3/4	1.60 (40.6)
3/8	-91F4-FN6-S	1.7	0.24 (6.1)	7/8	1.67 (42.4)
3/8	-91F8-FN6-S	7.1	0.41 (10.4)	1 1/16	1.59 (40.4)
1/2	-91F8-FN8-S	11.5	0.50 (12.7)	1 1/16	1.82 (46.2)
3/4	-91F12-FN12-S	23.6	0.72 (18.3)	1 5/16	2.08 (52.8)
1	-91F16-FN16-S	39.0	0.88 (22.4)	1 5/8	2.49 (63.2)

### Male BSPT



BSPT Size	Basic Ordering Number	Flow Coefficient (Cv)	E	F	L
			in. (mm)	in.	in. (mm)
1/4	-91F4-R4-S	1.7	0.24 (6.1)	9/16	1.59 (40.4)
3/8	-91F4-R6-S	1.7	0.24 (6.1)	11/16	1.59 (40.4)
3/8	-91F8-R6-S	7.1	0.41 (10.4)	7/8	1.65 (41.9)
1/2	-91F8-R8-S	11.5	0.50 (12.7)	7/8	1.84 (46.7)
3/4	-91F12-R12-S	23.6	0.72 (18.3)	1 1/16	2.03 (51.6)
1	-91F16-R16-S	39.0	0.88 (22.4)	1 3/8	2.35 (59.7)

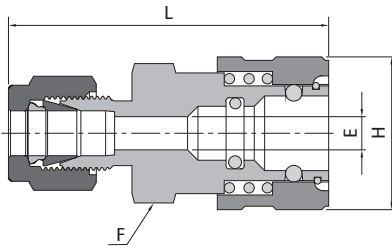
### Female BSPT



BSPT Size	Basic Ordering Number	Flow Coefficient (Cv)	E	F	L
			in. (mm)	in.	in. (mm)
1/4	-91F4-FR4-S	1.7	0.24 (6.1)	3/4	1.60 (40.6)
3/8	-91F4-FR6-S	1.7	0.24 (6.1)	7/8	1.67 (42.4)
3/8	-91F8-FR6-S	7.1	0.41 (10.4)	1 1/16	1.59 (40.4)
1/2	-91F8-FR8-S	11.5	0.50 (12.7)	1 1/16	1.82 (46.2)
3/4	-91F12-FR12-S	23.6	0.72 (18.3)	1 5/16	2.08 (52.8)
1	-91F16-FR16-S	39.0	0.88 (22.4)	1 5/8	2.49 (63.2)

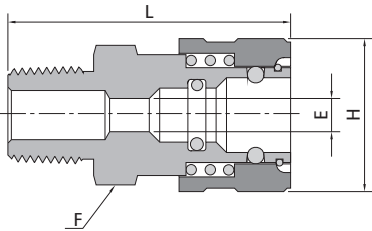
## Bodies

### Tube Fitting



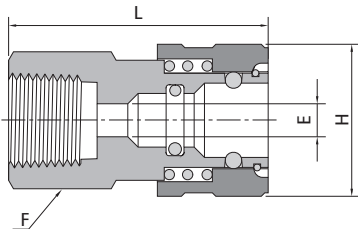
Tube Size	Basic Ordering Number	E	F	H	L
in.		in. (mm)	in.	in. (mm)	in. (mm)
1/4	-91F4-FX4-B	0.19 (4.8)	11/16	0.87 (22.1)	1.80 (45.7)
3/8	-91F4-FX6-B	0.28 (7.1)	11/16	0.87 (22.1)	1.81 (46.0)
3/8	-91F8-FX6-B	0.28 (7.1)	1 1/16	1.30 (33.0)	2.17 (55.1)
1/2	-91F8-FX8-B	0.47 (11.9)	1 1/16	1.30 (33.0)	2.23 (56.6)
3/4	-91F12-FX12-B	0.62 (15.7)	1 1/2	1.66 (42.2)	2.45 (62.2)
1	-91F16-FX16-B	0.88 (22.4)	1 11/16	1.88 (47.8)	2.75 (69.9)
mm	—	(mm) in.	mm	(mm) in.	(mm) in.
6	-91F4-MX6-B	4.8 (0.19)	18	22.1 (0.87)	45.7 (1.80)
10	-91F8-MX10-B	7.1 (0.28)	27	33.0 (1.30)	55.9 (2.20)
12	-91F8-MX12-B	10.4 (0.41)	27	33.0 (1.30)	57.4 (2.26)
22	-91F12-MX20-B	15.9 (0.63)	38	42.2 (1.66)	63.5 (2.50)
25	-91F16-MX25-B	21.8 (0.86)	46	47.8 (1.88)	70.0 (2.76)

### Male NPT



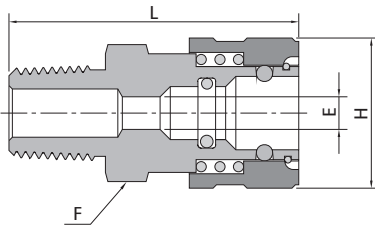
NPT Size	Basic Ordering Number	E	F	H	L
		in. (mm)	in.	in. (mm)	in. (mm)
1/4	-91F4-N4-B	0.25 (6.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-91F4-N6-B	0.37 (9.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-91F8-N6-B	0.41 (10.4)	1 1/16	1.30 (33.0)	1.83 (46.5)
1/2	-91F8-N8-B	0.50 (12.7)	1 1/16	1.30 (33.0)	2.08 (52.8)
3/4	-91F12-N12-B	0.72 (18.3)	1 1/2	1.66 (42.2)	2.33 (59.2)
1	-91F16-N16-B	0.88 (22.4)	1 11/16	1.88 (47.8)	2.65 (67.3)

### Female NPT



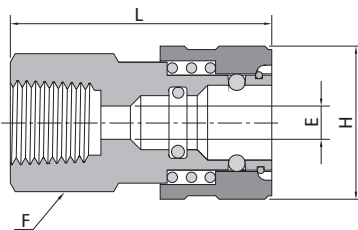
NPT Size	Basic Ordering Number	E	F	H	L
		in. (mm)	in.	in. (mm)	in. (mm)
1/4	-91F4-FN4-B	0.38 (9.7)	3/4	0.87 (22.1)	1.50 (38.1)
3/8	-91F4-FN6-B	0.38 (9.7)	7/8	0.87 (22.1)	1.63 (41.4)
3/8	-91F8-FN6-B	0.59 (15.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
1/2	-91F8-FN8-B	0.63 (16.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
3/4	-91F12-FN12-B	0.88 (22.4)	1 1/2	1.66 (42.2)	1.89 (48.0)
1	-91F16-FN16-B	1.06 (26.9)	1 11/16	1.88 (47.8)	2.12 (53.8)

### Male BSPT



BSPT Size	Basic Ordering Number	E	F	H	L
		in. (mm)	in.	in. (mm)	in. (mm)
1/4	-91F4-R4-B	0.25 (6.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-91F4-R6-B	0.37 (9.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-91F8-R6-B	0.41 (10.4)	1 1/16	1.30 (33.0)	1.83 (46.5)
1/2	-91F8-R8-B	0.50 (12.7)	1 1/16	1.30 (33.0)	2.08 (52.8)
3/4	-91F12-R12-B	0.72 (18.3)	1 1/2	1.66 (42.2)	2.33 (59.2)
1	-91F16-R16-B	0.88 (22.4)	1 11/16	1.88 (47.8)	2.65 (67.3)

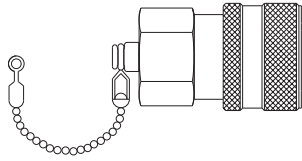
### Female BSPT



BSPT Size	Basic Ordering Number	E	F	H	L
		in. (mm)	in.	in. (mm)	in. (mm)
1/4	-91F4-FR4-B	0.38 (9.7)	3/4	0.87 (22.1)	1.50 (38.1)
3/8	-91F4-FR6-B	0.38 (9.7)	7/8	0.87 (22.1)	1.63 (41.4)
3/8	-91F8-FR6-B	0.59 (15.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
1/2	-91F8-FR8-B	0.63 (16.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
3/4	-91F12-FR12-B	0.88 (22.4)	1 1/2	1.66 (42.2)	1.89 (48.0)
1	-91F16-FR16-B	1.06 (26.9)	1 11/16	1.88 (47.8)	2.12 (53.8)

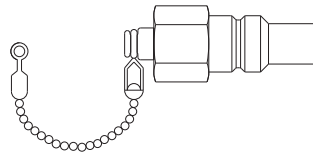
## Protectors

### Stem Protector



Series	Basic Ordering Number
91F4	-91F4-SP
91F8	-91F8-SP
91F12	-91F12-SP
91F16	-91F16-SP

### Body Protector



Series	Basic Ordering Number
91F4	-91F4-BP
91F8	-91F8-BP
91F12	-91F12-BP
91F16	-91F16-BP

© To order a protector, add material designator (SS for stainless steel or B for brass ) as a prefix to the basic ordering number.

Example: SS91F4-BP

## Ordering Information

**SS 91F4 - Fx4 - S**

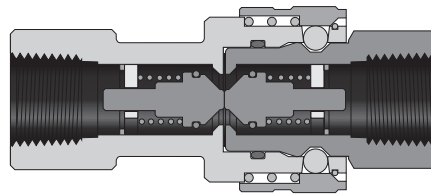
Material		Series	Size	End Connection Type	End Connection Size	Stem or Body
SS	316SS	91F	4	FN	4	S
B	Brass		8	N	6	
S4	304SS		12	FR	8	B
CS	Carbon Steel		16	R	10	
				FM	12	
				M	14	
				FX	16	
				MX	18	
				FT	20	
				MT		
				AN		

1. Dimensions are for reference only and are subject to change.
2. Sizes and types listed are standard. Other sizes and types are available on request.

## QV Series

### Features

- ⦿ Large flow area and stem ensure high flow capacity.
- ⦿ Positive valve stop. The perch maintains valve alignment and provides metal to metal valve stop to ensure that the valves open fully.
- ⦿ Hardened nipples and sleeves and solid barstock construction make for a quality coupling with maximum resistance to damage from hydraulic and mechanical shock.
- ⦿ The seal is designed to withstand high pressure and provide reliable sealing.
- ⦿ Durable ball-locking mechanism assures reliable connection.



### Pressure-Temperature Ratings

Body Material	Stainless Steel						Brass					
Series	91V2	91V4	91V6	91V8	91V12	91V16	91V2	91V4	91V6	91V8	91V12	91V16
O-ring	FKM						Buna N					
Temperature Range	-10°F to 400°F (-23°C to 204°C)						-10°F to 250°F (-23°C to 121°C)					
Working Pressure psig (bar)	2000 (137)		1500 (103)		1000 (68.9)		1000 (68.9)					

### Insert Depth

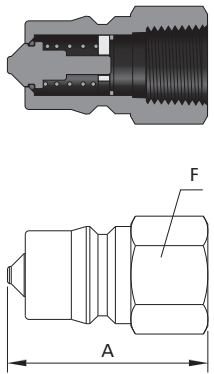
Series	Insert Depth
	in. (mm)
91V2	0.71 (18.0)
91V4	0.81 (20.6)
91V6	0.89 (22.5)
91V8	1.01 (25.6)
91V12	1.26 (32.1)
91V16	1.42 (36.1)

*In order to measure overall length in the coupled position, the insertion depth should be deducted from any overall stem and body combination length.*

### Cautions:

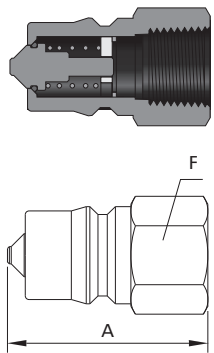
- ⦿ Do not uncouple under pressure.
- ⦿ Do not insert foreign object into uncoupled stems and bodies.
- ⦿ Re-lubricate stem seal O-ring periodically.

## Stems



### Female NPT

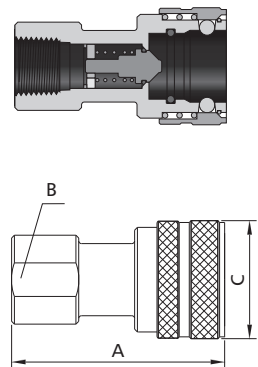
NPT Size	Basic Ordering Number	Flow coefficient (Cv)	A	F
			in. (mm)	in.
1/8	-91V2-FN2-D	0.8	1.16 (29.5)	9/16
1/4	-91V4-FN4-D	3.0	1.39 (35.3)	3/4
3/8	-91V6-FN6-D	6.0	1.50 (38.1)	7/8
1/2	-91V8-FN8-D	12.0	1.75 (44.5)	1 1/8
3/4	-91V12-FN12-D	28.0	2.16 (54.9)	1 3/8
1	-91V16-FN16-D	50.0	2.58 (65.5)	1 5/8



### Female BSPT

BSPT Size	Basic Ordering Number	Flow coefficient (Cv)	A	F
			in. (mm)	in.
1/8	-91V2-FR2-D	0.8	1.16 (29.5)	9/16
1/4	-91V4-FR4-D	3.0	1.39 (35.3)	3/4
3/8	-91V6-FR6-D	6.0	1.50 (38.1)	7/8
1/2	-91V8-FR8-D	12.0	1.75 (44.5)	1 1/8
3/4	-91V12-FR12-D	28.0	2.16 (54.9)	1 3/8
1	-91V16-FR16-D	50.0	2.58 (65.5)	1 5/8

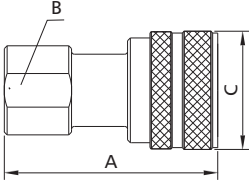
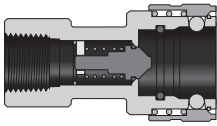
## Bodies



### Female NPT

NPT Size	Basic Ordering Number	A	B	C
		in. (mm)	in. (mm)	in. (mm)
1/8	-91V2-FN2-B	1.90 (48.3)	0.69 (17.5)	0.96 (24.4)
1/4	-91V4-FN4-B	2.26 (57.4)	0.81 (20.6)	1.14 (29.0)
3/8	-91V6-FN6-B	2.49 (63.2)	0.88 (22.2)	1.40 (35.6)
1/2	-91V8-FN8-B	2.87 (72.9)	1.13 (28.6)	1.77 (45.0)
3/4	-91V12-FN12-B	3.56 (90.4)	1.31 (33.3)	2.14 (54.4)
1	-91V16-FN16-B	4.18 (106.2)	1.63 (41.3)	2.52 (64.0)

## Bodies

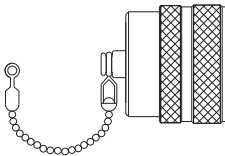


### Female BSPT

NPT Size	Basic Ordering Number	A	B	C
		in. (mm)	in. (mm)	in. (mm)
1/8	-91V2-FR2-B	1.90 (48.3)	0.69 (17.5)	0.96 (24.4)
1/4	-91V4-FR4-B	2.26 (57.4)	0.81 (20.6)	1.14 (29.0)
3/8	-91V6-FR6-B	2.49 (63.2)	0.88 (22.2)	1.40 (35.6)
1/2	-91V8-FR8-B	2.87 (72.9)	1.13 (28.6)	1.77 (45.0)
3/4	-91V12-FR12-B	3.56 (90.4)	1.31 (33.3)	2.14 (54.4)
1	-91V16-FR16-B	4.18 (106.2)	1.63 (41.3)	2.52 (64.0)

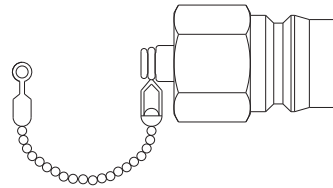
## Protectors

### Stem Protector



Series	Basic Ordering Number
91V2	-91V2-SP
91V4	-91V4-SP
91V6	-91V6-SP
91V8	-91V8-SP
91V12	-91V12-SP
91V16	-91V16-SP

### Body Protector



Series	Basic Ordering Number
91V2	-91V2-BP
91V4	-91V4-BP
91V6	-91V6-BP
91V8	-91V8-BP
91V12	-91V12-BP
91V16	-91V16-BP

© To order a protector, add material designator (SS for stainless steel or B for brass ) as a prefix to the basic ordering number.  
Example: SS91V4-BP

## Ordering Information

**SS91V8-FN8-D**

Material	Series	Size	End Connection Type	End Connection Size	Stem or Body
SS 316SS	91V	2 1/8" (3.2 mm)	FN Female NPT	4 1/4 (in.)	D Stem with valve shuts off when uncoupled
B Brass		4 1/4" (6.4 mm)	FR Female BSPT	6 3/8 (in.) or 6 mm	B Body without valve shuts off when uncoupled
S4 304SS		8 1/2" (12.7 mm)		8 1/2 (in.) or 8 mm	
CS Carbon Steel		12 3/4" (19.0 mm)		10 5/8 (in.) or 10 mm	
		16 1" (25.4 mm)		12 3/4 (in.) or 12 mm	
				14 M14 x 1.5	
				16 1 (in.) or 16 mm	
				18 M18 x 1.5	
				20 M20 x 1.5	

- Dimensions are for reference only and are subject to change.
- Sizes and types listed are standard. Other sizes and types are available on request.





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