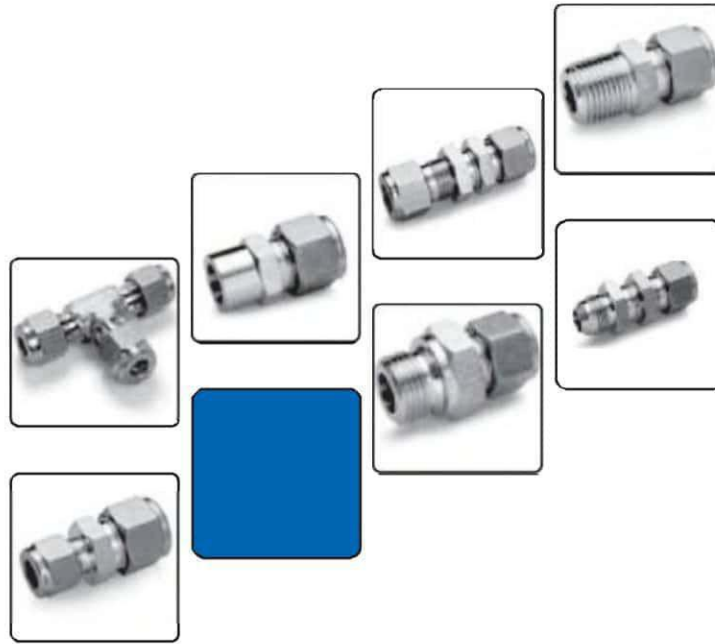




C-lok Instrument Valve Co.,Ltd.

# C-LOK



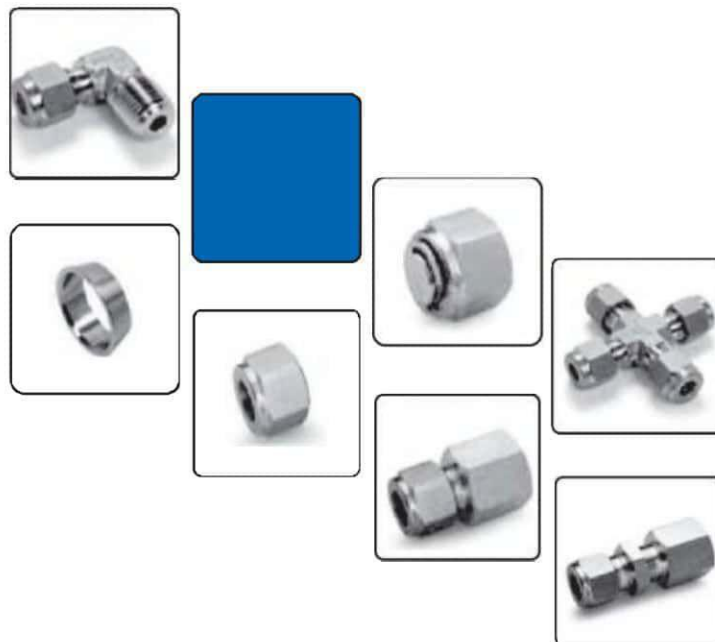
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*c-lok corporation*  
C-lok Instrument Valve Co.,Ltd.

## Petro Tajhiz Caspian Co.

### High Quality Standard

*High quality instrumentation valves & Fittings specialized production manufacture*



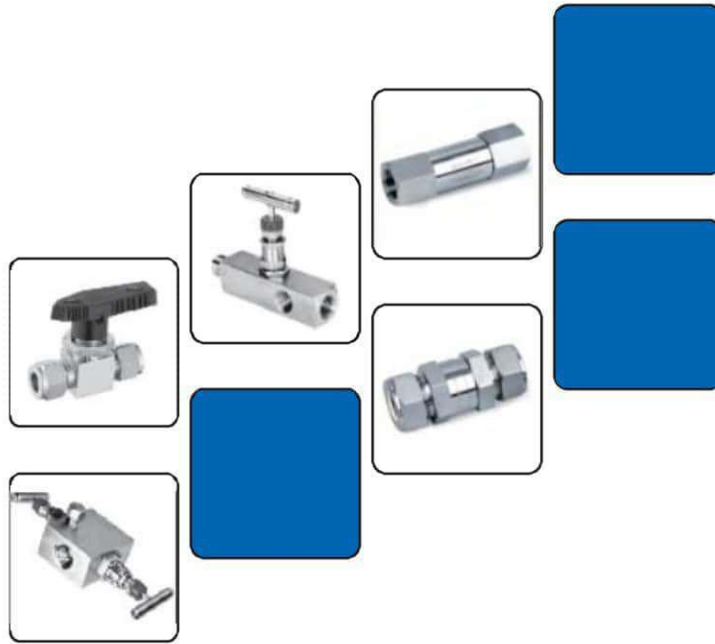
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## High Quality Standard


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**C-LOK**



## Male Connector

**MC**  
Male Connector  1  
2

**MCG**  
Male Connector G  3  
4

**BMC**  
Bulkhead Male Connector  5

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**TI**  
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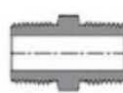


**BF**  
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**Pipe Fitting**

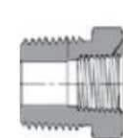
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**C-LOK**

**MC Male Connector**



Connect  
fractional  
tube to female  
NPT thread

Part No.	Tube O. D. D		T NPT
	inch	mm	
MC 2-2N	1/8	3.17	1/8
MC 2-4N	1/8	3.17	1/4
MC 2-6N	1/8	3.17	3/8
MC 2-8N	1/8	3.17	1/2
MC 4-2N	1/4	6.35	1/8
MC 4-4N	1/4	6.35	1/4
MC 4-6N	1/4	6.35	3/8
MC 4-8N	1/4	6.35	1/2
MC 4-12N	1/4	6.35	3/4
MC 6-2N	3/8	9.52	1/8
MC 6-4N	3/8	9.52	1/4
MC 6-6N	3/8	9.52	3/8
MC 6-8N	3/8	9.52	1/2
MC 6-12N	3/8	9.52	3/4
MC 8-2N	1/2	12.70	1/8
MC 8-4N	1/2	12.70	1/4
MC 8-6N	1/2	12.70	3/8
MC 8-8N	1/2	12.70	1/2
MC 8-12N	1/2	12.70	3/4
MC 8-16N	1/2	12.70	1
MC 12-8N	3/4	19.05	1/2
MC 12-12N	3/4	19.05	3/4
MC 12-16N	3/4	19.05	1
MC 16-8N	1	25.40	1/2
MC 16-12N	1	25.40	3/4
MC 16-16N	1	25.40	1



Connect metric  
tube to female  
ISO tapered  
thread

Part No.	D Tube O. D.	T R (PT)
MCR 4M - 2R	4	1/8
MCR 4M - 4R	4	1/4
MCR 6M - 2R	6	1/8
MCR 6M - 4R	6	1/4
MCR 6M - 6R	6	3/8
MCR 6M - 8R	6	1/2
MCR 8M - 2R	8	1/8
MCR 8M - 4R	8	1/4
MC 8M - 6R	8	3/8
MC 8M - 8R	8	1/2
MC 10M - 2R	10	1/8
MC 10M - 4R	10	1/4
MC 10M - 6R	10	3/8
MC 10M - 8R	10	1/2
MC 12M - 4R	12	1/4
MC 12M - 6R	12	3/8
MC 12M - 8R	12	1/2
MC 12M - 12R	12	3/4
MC 15M - 8R	15	1/2
MC 16M - 4R	16	1/4
MC 16M - 6R	16	3/8
MC 16M - 8R	16	1/2
MC 16M - 12R	16	3/4
MC 18M - 8R	18	1/2
MC 18M - 12R	18	3/4
MC 20M - 8R	20	1/2
MC 20M - 12R	20	3/4
MC 22M - 12R	22	3/4
MC 22M - 16R	22	1
MC 25M - 12R	25	3/4
MC 25M - 16R	25	1



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**MCG Male Connector G**



Connect  
fractional  
tube to female  
ISO parallel  
thread

Part No.	Tube O. D. D		T PF
	inch	mm	
MC 2-2G	1/8	3.17	1/8
MC 2-4G	1/8	3.17	1/4
MC 2-6G	1/8	3.17	3/8
MC 4-2G	1/4	6.35	1/8
MC 4-4G	1/4	6.35	1/4
MC 4-6G	1/4	6.35	3/8
MC 4-8G	1/4	6.35	1/2
MC 6-4G	3/8	9.53	1/4
MC 6-6G	3/8	9.53	3/8
MC 6-8G	3/8	9.53	1/2
MC 8-4G	1/2	12.70	1/4
MC 8-6G	1/2	12.70	3/8
MC 8-8G	1/2	12.70	1/2
MC 12-8G	3/4	19.05	1/2
MC 12-12G	3/4	19.05	3/4
MC 16-8G	1	25.40	1/2
MC 16-16G	1	25.40	1

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## MCG Male Connector G



Connect metric  
tube to female  
ISO parallel  
thread

Part No.	D Tube O. D.	T G (PF)
MC 4M-2G	4	1/8
MC 4M-4G	4	1/4
MC 6M-2G	6	1/8
MC 6M-4G	6	1/4
MC 6M-6G	6	3/8
MC 6M-8G	6	1/2
MC 8M-2G	8	1/8
MC 8M-4G	8	1/4
MC 8M-6G	8	3/8
MC 8M-8G	8	1/2
MC 10M-4G	10	1/4
MC 10M-6G	10	3/8
MC 10M-8G	10	1/2
MC 12M-4G	12	1/4
MC 12M-6G	12	3/8
MC 12M-8G	12	1/2
MC 12M-12G	12	3/4
MC 16M-6G	16	3/8
MC 16M-8G	16	1/2
MC 18M-8G	18	1/2
MC 18M-12G	18	3/4
MC 20M-8G	20	1/2
MC 20M-12G	20	3/4
MC 22M-12G	22	3/4
MC 22M-16G	22	1
MC 25M-12G	25	3/4
MC 25M-16G	25	1

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## BMC Bulkhead Male Connector

Connect  
fractional  
tube to female  
NPT thread



Part No.	Tube O. D.		T (NPT)
	D inch	mm	
BMC 2-2N	1/8	3.17	1/8
BMC 4-2N	1/4	6.35	1/8
BMC 4-4N	1/4	6.35	1/4
BMC 6-4N	3/8	9.52	1/4
BMC 6-6N	3/8	9.52	3/8
BMC 6-8N	3/8	9.52	1/2
BMC 8-6N	1/2	12.70	3/8
BMC 8-8N	1/2	12.70	1/2
BMC 12-12N	3/4	19.05	3/4
BMC 16-16N	1	25.40	1

## TSWC Tube Socket Weld Connector

Connect  
fractional  
tube to pipe



Part No.	Tube O. D.	
	D1	
	inch	mm
TSWC 2-2	1/8	3.17
TSWC 4-4	1/4	6.35
TSWC 6-6	3/8	9.52
TSWC 8-8	1/2	12.70
TSWC 12-12	3/4	19.05
TSWC 16-16	1	25.40

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## MPWC Male Pipe Weld Connector

Connect  
fractional  
tube to pipe



Part No.	Tube O. D. D		Male Pipe Size P Nom.	
	inch	mm		
PWC 2-2P	1/8	3.17	1/8	10.29
PWC 4-2P	1/4	6.35	1/8	10.29
PWC 4-4P	1/4	6.35	1/4	13.72
PWC 6-4P	3/8	9.52	1/4	13.72
PWC 6-6P	3/8	9.52	3/8	17.15
PWC 6-8P	3/8	9.52	1/2	21.34
PWC 8-6P	1/2	12.70	3/8	17.15
PWC 8-8P	1/2	12.70	1/2	21.34
PWC 8-12P	1/2	12.70	3/4	26.67
PWC 12-12P	3/4	19.05	3/4	26.67
PWC 16-16P	1	25.40	1	33.40

## MPWC Male Pipe Weld Connector

Connect  
metric  
tube to pipe



Part No.	Tube O. D. D	Male Pipe Size P	
		Nom.	O. D.
PWC 4M-2P	4	1/8	10.29
PWC 6M-2P	6	1/8	10.29
PWC 6M-4P	6	1/4	13.72
PWC 8M-2P	8	1/8	10.29
PWC 8M-4P	8	1/4	13.72
PWC 8M-8P	8	1/2	21.34
PWC 10M-4P	10	1/4	13.72
PWC 10M-6P	10	3/8	17.15
PWC 10M-8P	10	1/2	21.34
PWC 12M-4P	12	1/4	13.72
PWC 12M-6P	12	3/8	17.15
PWC 12M-8P	12	1/2	21.34
PWC 14M-6P	14	3/8	17.15
PWC 15M-8P	15	1/2	21.34
PWC 16M-8P	16	1/2	21.34
PWC 18M-8P	18	1/2	21.34

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## U Union

Connect fractional tube



Part No.	Tube O. D. D	
	inch	mm
U-2	1/8	3.17
U-4	1/4	6.35
U-6	3/8	9.52
U-8	1/2	12.7
U-12	3/4	19.05
U-16	1	25.4

## U Union

Connect metric tube



Part No.	D Tube O. D.	E Min.
U-4M	4	2.4
U-6M	6	4.8
U-8M	8	6.4
U-10M	10	7.9
U-12M	12	9.5
U-15M	15	11.9
U-16M	16	12.7
U-18M	18	15.1
U-20M	20	15.9
U-22M	22	18.3
U-25M	25	21.8

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# C-LOK

## RU Reducing Union

Connect  
fractional tube



Part No.	Tube O. D. D1		Tube O. D. D2	
	inch	mm	inch	mm
RU 4-2	1/4	6.35	1/8	3.17
RU 6-2	3/8	9.52	1/8	3.17
RU 6-4	3/8	9.52	1/4	6.35
RU 8-2	1/2	12.70	1/8	3.17
RU 8-4	1/2	12.70	1/4	6.35
RU 8-6	1/2	12.70	3/8	9.52
RU 12-4	3/4	19.05	1/4	6.35
RU 12-6	3/4	19.05	3/8	9.52
RU 12-8	3/4	19.05	1/2	12.70
RU 16-8	1	25.40	1/2	12.70
RU 16-12	1	25.40	3/4	19.05



## RU Reducing Union

Connect  
metric tube

Part No.	D1	D2
	Tube O. D.	Tube O. D.
RU 6M-4M	6	4
RU 8M-6M	8	6
RU 10M-6M	10	6
RU 10M-8M	10	8
RU 12M-6M	12	6
RU 12M-8M	12	8
RU 12M-10M	12	10
RU 16M-10M	16	10
RU 16M-12M	16	12
RU 18M-12M	18	12
RU 25M-18M	25	18
RU 25M-20M	25	20

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## RU Reducing Union

Connect  
metric tube to frectional tube



Part No.	D1 Tube O. D.	D2 Inch Tube O. D.	D2 mm Tube O. D.
RU 4M-2	4	1/8	3.17
RU 4M-4	4	1/4	6.35
RU 6M-2	6	1/8	3.17
RU 6M-4	6	1/4	6.35
RU 8M-4	8	1/4	6.35
RU 10M-2	10	1/8	3.17
RU 10M-4	10	1/4	6.35
RU 10M-6	10	3/8	9.52
RU 12M-6	12	3/8	9.52
RU 12M-8	12	1/2	12.70
RU 15M-8	15	1/2	12.70
RU 18M-12	18	3/4	19.05
RU 20M-12	20	3/4	19.05
RU 20M-16	20	1	25.40
RU 22M-16	22	1	25.40

Connect fractional  
tube



Part No.	Tube O. D. D	
	inch	mm
BU-2	1/8	3.17
BU-4	1/4	6.35
BU-6	3/8	9.52
BU-8	1/2	12.70
BU-12	3/4	19.05
BU-16	1	25.40



## BU Bulkhead Union

Connect metric  
tube

Part No.	D Tube O. D.
BU - 4M	4
BU - 6M	6
BU - 8M	8
BU - 10M	10
BU - 12M	12
BU - 15M	15
BU - 16M	16
BU - 18M	18
BU - 20M	20
BU - 22M	22
BU - 25M	25

## TU Tee Union

Connect fractional tubc



Part No.	Tube O. D. D	
	inch	mm
TU-2	1/8	3.17
TU-4	1/4	6.35
TU-6	3/8	9.52
TU-8	1/2	12.70
TU-12	3/4	19.05
TU-16	1	25.40

## TU Tee Union

Connect metric tubc



Part No.	D Tube O. D.
	TU - 4M
TU - 6M	6
TU - 8M	8
TU - 10M	10
TU - 12M	12
TU - 15M	15
TU - 16M	16
TU - 18M	18
TU - 20M	20
TU - 22M	22
TU - 25M	25



# C-LOK

## MBT Male Branch Tee

Connect  
fractional tube  
to female NPT  
thread

Part No.	Tube O. D.		T NPT
	inch	mm	
MBT 2-2N	1/8	3.17	1/8
MBT 2-4N	1/8	3.17	1/4
MBT 4-1N	1/4	6.35	1/16
MBT 4-2N	1/4	6.35	1/8
MBT 4-4N	1/4	6.35	1/4
MBT 4-6N	1/4	6.35	3/8
MBT 4-8N	1/4	6.35	1/2
MBT 6-4N	3/8	9.52	1/4
MBT 6-6N	3/8	9.52	3/8
MBT 6-8N	3/8	9.52	1/2
MBT 6-12N	3/8	9.52	3/4
MBT 8-4N	1/2	12.70	1/4
MBT 8-6N	1/2	12.70	3/8
MBT 8-8N	1/2	12.70	1/2
MBT 8-12N	1/2	12.70	3/4
MBT 12-8N	3/4	19.05	1/2
MBT 12-12N	3/4	19.05	3/4
MBT 16-12N	1	25.40	3/4
MBT 16-16N	1	25.40	1

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**C-LOK**

**MBT Male Branch Tee**



Connect  
metric tube  
to female ISO  
tapered thread

Part No.	D Tube O. D.	T R (PT)
MBT 4M - 2R	4	1/8
MBT 4M - 4R	4	1/4
MBT 6M - 2R	6	1/8
MBT 6M - 4R	6	1/4
MBT 6M - 6R	6	3/8
MBT 6M - 8R	6	1/2
MBT 8M - 2R	8	1/8
MBT 8M - 4R	8	1/4
MBT 8M - 6R	8	3/8
MBT 8M - 8R	8	1/2
MBT 10M - 2R	10	1/8
MBT 10M - 4R	10	1/4
MBT 10M - 6R	10	3/8
MBT 10M - 8R	10	1/2
MBT 12M - 2R	12	1/8
MBT 12M - 4R	12	1/4
MBT 12M - 6R	12	3/8
MBT 12M - 8R	12	1/2
MBT 12M - 12R	12	3/4
MBT 16M - 6R	16	3/8
MBT 16M - 8R	16	1/2
MBT 16M - 12R	16	3/4
MBT 18M - 8R	18	1/2
MBT 18M - 12R	18	3/4
MBT 20M - 8R	20	1/2
MBT 20M - 12R	20	3/4
MBT 22M - 12R	22	3/4
MBT 22M - 16R	22	1
MBT 25M - 12R	25	3/4
MBT 25M - 16R	25	1



# C-LOK

## MRT Male Run Tee

Connect  
fractional  
tube to female  
NPT thread

Part No.	Tube O. D.		T NPT
	D		
MRT 2-2N	1/8	3.17	1/8
MRT 2-4N	1/8	3.17	1/4
MRT 4-1N	1/4	6.35	1/16
MRT 4-2N	1/4	6.35	1/8
MRT 4-4N	1/4	6.35	1/4
MRT 4-6N	1/4	6.35	3/8
MRT 4-8N	1/4	6.35	1/2
MRT 6-4N	3/8	9.52	1/4
MRT 6-6N	3/8	9.52	3/8
MRT 6-8N	3/8	9.52	1/2
MRT 6-12N	3/8	9.52	3/4
MRT 8-4N	1/2	12.70	1/4
MRT 8-6N	1/2	12.70	3/8
MRT 8-8N	1/2	12.70	1/2
MRT 8-12N	1/2	12.70	3/4
MRT 12-8N	3/4	19.05	1/2
MRT 12-12N	3/4	19.05	3/4
MRT 16-12N	1	25.40	3/4
MRT 16-16N	1	25.40	1

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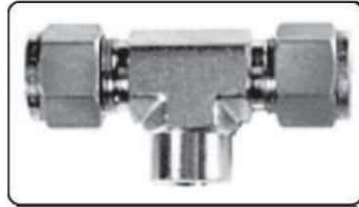
## MBT Male Run Tee



Connect  
metric tube  
to female ISO  
tapered thread

Part No.	D Tube O. D.	T R (PT)
ME 4M - 2R	4	1/8
ME 4M - 4R	4	1/4
ME 6M - 2R	6	1/8
ME 6M - 4R	6	1/4
ME 6M - 6R	6	3/8
ME 6M - 8R	6	1/2
ME 8M - 2R	8	1/8
ME 8M - 4R	8	1/4
ME 8M - 6R	8	3/8
ME 8M - 8R	8	1/2
ME 10M - 2R	10	1/8
ME 10M - 4R	10	1/4
ME 10M - 6R	10	3/8
ME 10M - 8R	10	1/2
ME 12M - 2R	12	1/8
ME 12M - 4R	12	1/4
ME 12M - 6R	12	3/8
ME 12M - 8R	12	1/2
ME 12M - 12R	12	3/4
ME 16M - 6R	16	3/8
ME 16M - 8R	16	1/2
ME 16M - 12R	16	3/4
ME 18M - 8R	18	1/2
ME 18M - 12R	18	3/4
ME 20M - 8R	20	1/2
ME 20M - 12R	20	3/4
ME 22M - 12R	22	3/4
ME 22M - 16R	22	1
ME 25M - 12R	25	3/4
ME 25M - 16R	25	1

Connect  
fractional tube  
to male NPT  
thread



Part No.	Tube O. D.		T NPT
	D inch	mm	
FBT 2-2N	1/8	3.17	1/8
FBT 2-4N	1/8	3.17	1/4
FBT 4-2N	1/4	6.35	1/8
FBT 4-4N	1/4	6.35	1/4
FBT 4-6N	1/4	6.35	3/8
FBT 4-8N	1/4	6.35	1/2
FBT 6-2N	3/8	9.52	1/8
FBT 6-4N	3/8	9.52	1/4
FBT 6-6N	3/8	9.52	3/8
FBT 6-8N	3/8	9.52	1/2
FBT 8-4N	1/2	12.70	1/4
FBT 8-6N	1/2	12.70	3/8
FBT 8-8N	1/2	12.70	1/2
FBT 12-8N	3/4	19.05	1/2
FBT 12-12N	3/4	19.05	3/4
FBT 16-12N	1	25.40	3/4
FBT 16-16N	1	25.40	1



C-lok Instrument Valve Co.,Ltd.

**C-LOK**

**MBT Female Branch Tee**

Connect  
metric tube  
to male ISO  
tapered thread



Part No.	D Tube O. D.	T (NPT)
FBT 6M-2N	6	1/8
FBT 6M-4N	6	1/4
FBT 6M-6N	6	3/8
FBT 6M-8N	6	1/2
FBT 8M-2N	8	1/8
FBT 8M-4N	8	1/4
FBT 8M-6N	8	3/8
FBT 8M-8N	8	1/2
FBT 10M-2N	10	1/8
FBT 10M-4N	10	1/4
FBT 10M-6N	10	3/8
FBT 10M-8N	10	1/2
FBT 12M-4N	12	1/4
FBT 12M-6N	12	3/8
FBT 12M-8N	12	1/2
FBT 16M-8N	16	1/2

Connect  
fractional tube  
to male NPT  
thread



Part No.	Tube O. D.		T NPT
	inch	mm	
FRT 2-2N	1/8	3.17	1/8
FRT 2-4N	1/8	3.17	1/4
FRT 4-2N	1/4	6.35	1/8
FRT 4-4N	1/4	6.35	1/4
FRT 4-6N	1/4	6.35	3/8
FRT 4-8N	1/4	6.35	1/2
FRT 6-2N	3/8	9.52	1/8
FRT 6-4N	3/8	9.52	1/4
FRT 6-6N	3/8	9.52	3/8
FRT 6-8N	3/8	9.52	1/2
FRT 8-4N	1/2	12.70	1/4
FRT 8-6N	1/2	12.70	3/8
FRT 8-8N	1/2	12.70	1/2
FRT 12-8N	3/4	19.05	1/2
FRT 12-12N	3/4	19.05	3/4
FRT 16-12N	1	25.40	3/4
FRT 16-16N	1	25.40	1

C-lok Instrument Valve Co.,Ltd.

**C-LOK**

**FRT Female Run Tee**

Connect  
metric tube  
to male ISO  
tapered thread



Part No.	D Tube O. D.	T (NPT)
FRT 6M-2N	6	1/8
FRT 6M-4N	6	1/4
FRT 6M-6N	6	3/8
FRT 6M-8N	6	1/2
FRT 8M-2N	8	1/8
FRT 8M-4N	8	1/4
FRT 8M-6N	8	3/8
FRT 8M-8N	8	1/2
FRT 10M-2N	10	1/8
FRT 10M-4N	10	1/4
FRT 10M-6N	10	3/8
FRT 10M-8N	10	1/2
FRT 12M-4N	12	1/4
FRT 12M-6N	12	3/8
FRT 12M-8N	12	1/2
FRT 16M-8N	16	1/2



Connect  
fractional  
to female  
NPT thread

Part No.	Tube O. D.		T NPT
	inch	mm	
ME 2-2N	1/8	3.17	1/8
ME 2-4N	1/8	3.17	1/4
ME 4-1N	1/4	6.35	1/16
ME 4-2N	1/4	6.35	1/8
ME 4-4N	1/4	6.35	1/4
ME 4-6N	1/4	6.35	3/8
ME 4-8N	1/4	6.35	1/2
ME 6-2N	3/8	9.52	1/8
ME 6-4N	3/8	9.52	1/4
ME 6-6N	3/8	9.52	3/8
ME 6-8N	3/8	9.52	1/2
ME 6-12N	3/8	9.52	3/4
ME 8-4N	1/2	12.70	1/4
ME 8-6N	1/2	12.70	3/8
ME 8-8N	1/2	12.70	1/2
ME 8-12N	1/2	12.70	3/4
ME 12-8N	3/4	19.05	1/2
ME 12-12N	3/4	19.05	3/4
ME 16-12N	1	25.40	3/4
ME 16-16N	1	25.40	1

C-lok Instrument Valve Co.,Ltd.

# C-LOK

## ME Male Elbow



Connects  
metric tube to  
female ISO  
tapered thread

Part No.	D Tube O. D.	T R (PT)
ME 4M - 2R	4	1/8
ME 4M - 4R	4	1/4
ME 6M - 2R	6	1/8
ME 6M - 4R	6	1/4
ME 6M - 6R	6	3/8
ME 6M - 8R	6	1/2
ME 8M - 2R	8	1/8
ME 8M - 4R	8	1/4
ME 8M - 6R	8	3/8
ME 8M - 8R	8	1/2
ME 10M - 2R	10	1/8
ME 10M - 4R	10	1/4
ME 10M - 6R	10	3/8
ME 10M - 8R	10	1/2
ME 12M - 2R	12	1/8
ME 12M - 4R	12	1/4
ME 12M - 6R	12	3/8
ME 12M - 8R	12	1/2
ME 12M - 12R	12	3/4
ME 16M - 6R	16	3/8
ME 16M - 8R	16	1/2
ME 16M - 12R	16	3/4
ME 18M - 8R	18	1/2
ME 18M - 12R	18	3/4
ME 20M - 8R	20	1/2
ME 20M - 12R	20	3/4
ME 22M - 12R	22	3/4
ME 22M - 16R	22	1
ME 25M - 12R	25	3/4
ME 25M - 16R	25	1



# C-LOK

## FE Female Elbow

Connect  
fractional tube  
to male NPT  
thread

Part No.	Tube O. D.		T NPT
	inch	mm	
FE 2-2N	1/8	3.17	1/8
FE 2-4N	1/8	3.17	1/4
FE 4-2N	1/4	6.35	1/8
FE 4-4N	1/4	6.35	1/4
FE 4-6N	1/4	6.35	3/8
FE 4-8N	1/4	6.35	1/2
FE 6-2N	3/8	9.52	1/8
FE 6-4N	3/8	9.52	1/4
FE 6-6N	3/8	9.52	3/8
FE 6-8N	3/8	9.52	1/2
FE 8-4N	1/2	12.70	1/4
FE 8-6N	1/2	12.70	3/8
FE 8-8N	1/2	12.70	1/2
FE 12-8N	3/4	19.05	1/2
FE 12-12N	3/4	19.05	3/4
FE 16-12N	1	25.40	3/4
FE 16-16N	1	25.40	1

C-LOK, the high quality instrumentation valves and fittings specialized production manufacture

C-lok Instrument Valve Co.,Ltd.

# C-LOK

## FE Female Elbow

Connect  
metric tube  
to male ISO  
tapered thread



Part No.	D Tube O. D.	T (NPT)
FE 6M-2N	6	1/8
FE 6M-4N	6	1/4
FE 6M-6N	6	3/8
FE 6M-8N	6	1/2
FE 8M-2N	8	1/8
FE 8M-4N	8	1/4
FE 8M-8N	8	1/2
FE 10M-2N	10	1/8
FE 10M-4N	10	1/4
FE 10M-6N	10	3/8
FE 10M-8N	10	1/2
FE 12M-4N	12	1/4
FE 12M-6N	12	3/8
FE 12M-8N	12	1/2
FE 16M-8N	16	1/2

## MPWE Male Pipe Weld Elbow

Connect  
fractional tube  
to pipe



Part No.	Tube O. D. D1		Male Pipe Size P	
	inch	mm	Nom.	O. D.
PWE 2-2P	1/8	3.17	1/8	10.29
PWE 4-4P	1/4	6.35	1/4	13.72
PWE 6-4P	3/8	9.52	1/4	13.72
PWE 8-8P	1/2	12.70	1/2	21.34
PWE 12-12P	3/4	19.05	3/4	26.67

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**C-LOK**

**TSWE Tube Socket Weld Elbow**

Connect  
fractional  
tube to pipe



Part No.	Tube O. D.	
	D1	
FLSWE 4-4	1/4	6.35
TSWE 6-6	3/8	9.52
TSWE 8-8	1/2	12.70
TSWE12-12	3/4	19.05
TSWE16-16	1	25.40



Connect  
fractional  
tube

Part No.	Tube O. D.	
	inch	mm
EU-2	1/8	3.17
EU-4	1/4	6.35
EU-6	3/8	9.52
EU-8	1/2	12.70
EU-12	3/4	19.05
EU-16	1	25.40



## EU Elbow Union

Connect  
metric  
tube

Part No.	D Tube O. D.
EU - 4M	4
EU - 6M	6
EU - 8M	8
EU - 10M	10
EU - 12M	12
EU - 15M	15
EU - 16M	16
EU - 18M	18
EU - 20M	20
EU - 22M	22
EU - 25M	25

C-LOK, the high quality instrumentation valves and fittings specialized production manufacture

C-lok Instrument Valve Co.,Ltd.

# C-LOK

## FC Female Connector

Connect  
fractional tube  
to male NPT thread



Part No.	Tube O. D.		T NPT
	inch	mm	
CAP 2-2N	1/8	3.17	1/8
CAP 2-4N	1/8	3.17	1/4
CAP 4-2N	1/4	6.35	1/8
CAP 4-4N	1/4	6.35	1/4
CAP 4-6N	1/4	6.35	3/8
CAP 4-8N	1/4	6.35	1/2
CAP 6-2N	3/8	9.52	1/8
CAP 6-4N	3/8	9.52	1/4
CAP 6-6N	3/8	9.52	3/8
CAP 6-8N	3/8	9.52	1/2
CAP 6-12N	3/8	9.52	3/4
CAP 8-4N	1/2	12.70	1/4
CAP 8-6N	1/2	12.70	3/8
CAP 8-8N	1/2	12.70	1/2
CAP 8-12N	1/2	12.70	3/4
CAP 12-8N	3/4	19.05	1/2
CAP 12-12N	3/4	19.05	3/4
CAP 16-12N	1	25.40	3/4
CAP 16-16N	1	25.40	1



# C-LOK

## FC Female Connector

Connect  
metric tube  
to male ISO  
tapered thread

Part No.	D Tube O. D.	T R (PT)
CAP 4M-2R	4	1/8
CAP 6M-2R	6	1/8
CAP 6M-4R	6	1/4
CAP 6M-6R	6	3/8
CAP 6M-8R	6	1/2
CAP 8M-2R	8	1/8
CAP 8M-4R	8	1/4
CAP 8M-6R	8	3/8
CAP 8M-8R	8	1/2
CAP 10M-2R	10	1/8
CAP 10M-4R	10	1/4
CAP 10M-6R	10	3/8
CAP 10M-8R	10	1/2
CAP 12M-2R	12	1/8
CAP 12M-4R	12	1/4
CAP 12M-6R	12	3/8
CAP 12M-8R	12	1/2
CAP 12M-12R	12	3/4
CAP 15M-8R	15	1/2
CAP 16M-8R	16	1/2
CAP 20M-8R	20	1/2
CAP 20M-12R	20	3/4
CAP 22M-12R	22	3/4
CAP 22M-16R	22	1
CAP 25M-12R	25	3/4
CAP 25M-16R	25	1

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C-lok Instrument Valve Co.,Ltd.

# C-LOK

## GC Gauge Connector

Connect  
fractional tube  
to male NPT  
thread



Part No.	Tube O. D. D		T G (PF)
	inch	mm	
GC 4-2G	1/4	6.35	1/8
GC 4-4G	1/4	6.35	1/4
GC 4-6G	1/4	6.35	3/8
GC 4-8G	1/4	6.35	1/2
GC 6-4G	3/8	9.52	1/4
GC 6-6G	3/8	9.52	3/8
GC 6-8G	3/8	9.52	1/2
GC 8-4G	1/2	12.70	1/4
GC 8-6G	1/2	12.70	3/8
GC 8-8G	1/2	12.70	1/2

Connect  
metric tube  
to male ISO  
tapered thread



Part No.	D Tube O. D.	T R (PT)
GC 6M-4G	6	1/4
GC 6M-6G	6	3/8
GC 6M-8G	6	1/2
GC 8M-4G	8	1/4
GC 8M-6G	8	3/8
GC 8M-8G	8	1/2
GC 10M-4G	10	1/4
GC 10M-6G	10	3/8
GC 10M-8G	10	1/2
GC 12M-4G	12	1/4
GC 12M-6G	12	3/8
GC 12M-8G	12	1/2
GC 20M-8G	20	1/2
GC 22M-8G	22	1/2

C-lok Instrument Valve Co.,Ltd.

**C-LOK**

**BFC Bulkhead Female Connector**



Connect fractional tube to male NPT thread

Part No.	Tube O. D.		T (NPT)
	inch	mm	
BCAP 2-2N	1/8	3.17	1/8
BCAP 4-2N	1/4	6.35	1/8
BCAP 4-4N	1/4	6.35	1/4
BCAP 6-4N	3/8	9.52	1/4
BCAP 6-6N	3/8	9.52	3/8
BCAP 8-6N	1/2	12.70	3/8
BCAP 8-8N	1/2	12.70	1/2
BCAP 12-12N	3/4	19.05	3/4
BCAP 16-16N	1	25.40	1

**BFC Bulkhead Female Connector**



Connect metric tube to male NPT tapered thread

Part No.	D Tube O. D.	T (NPT)
	BCAP 6M-2M	6
BCAP 6M-4M	6	1/4
BCAP 8M-4M	8	1/4
BCAP 12M-8M	12	1/2

Connect  
fractional tube



Part No.	Tube O. D.	
	D	
CU-2	1/8	3.17
CU-4	1/4	6.35
CU-6	3/8	9.52
CU-8	1/2	12.70
CU-12	3/4	19.05
CU-16	1	25.40



## CU Cross Union

Connect  
metric tube

Part No.	D
	Tube O. D.
CU-4M	4
CU-6M	6
CU-8M	8
CU-10M	10
CU-12M	12
CU-15M	15
CU-16M	16
CU-18M	18
CU-20M	20
CU-22M	22
CU-25M	25



C-lok Instrument Valve Co.,Ltd.

**C-LOK**

**TC Tube Cap**



Cap end of fractional tube

Part No.	Tube O. D.	
	D1	
	inch	mm
CAP-2	1/8	3.17
CAP-4	1/4	6.35
CAP-6	3/8	9.52
CAP-8	1/2	12.70
CAP-12	3/4	19.05
CAP-16	1	25.40

**TC Tube Cap**



Cap end of metric tube

Part No.	Tube O. D.	
	D1	
	mm	
CAP-2M	2	
CAP-3M	3	
CAP-4M	4	
CAP-6M	6	
CAP-8M	8	
CAP-10M	10	
CAP-12M	12	
CAP-15M	15	
CAP-16M	16	
CAP-18M	18	
CAP-20M	20	
CAP-22M	22	
CAP-25M	25	



Part No.	Tube O. D. D	
	inch	mm
PLUG-2	1/8	3.17
PLUG-4	1/4	6.35
PLUG-6	3/8	9.52
PLUG-8	1/2	12.70
PLUG-12	3/4	19.05
PLUG-16	1	25.40



## TP Tube Plug

Metric

Part No.	Tube O. D. D
	PLUG-4M
PLUG-6M	6
PLUG-8M	8
PLUG-10M	10
PLUG-12M	12
PLUG-15M	15
PLUG-16M	16
PLUG-18M	18
PLUG-20M	20
PLUG-22M	22
PLUG-25M	25

## TI Tube Insert

Fractional



Part No.	Tube O. D. D (inch)	Tube O. D. D (mm)
TI 4-2	1/4	6.35
TI 4-3	1/4	6.35
TI 6-3	3/8	9.52
TI 6-4	3/8	9.52
TI 8-4	1/2	12.7
TI 8-6	1/2	12.7
TI 12-8	3/4	19.05
TI 12-10	3/4	19.05
TI 16-12	1	25.4

## TI Tube Insert

Metric



Part No.	Tube O. D. D (mm)	Tube O. D. D1 (mm)
TI 6M-4M	6	4
TI 8M-6M	8	6
TI 10M-8M	10	8
TI 12M-8M	12	8
TI 12M-10M	12	10



Connect  
fractional  
C-LOK port  
to male  
NPT thread

Part No.	Tube O. D.		T (NPT)
	D		
	inch	mm	
FA 2-2N	1/8	3.17	1/8
FA 2-4N	1/8	3.17	1/4
FA 4-2N	1/4	6.35	1/8
FA 4-4N	1/4	6.35	1/4
FA 4-6N	1/4	6.35	3/8
FA 4-8N	1/4	6.35	1/2
FA 6-2N	3/8	9.52	1/8
FA 6-4N	3/8	9.52	1/4
FA 6-6N	3/8	9.52	3/8
FA 6-8N	3/8	9.52	1/2
FA 8-4N	1/2	12.70	1/4
FA 8-6N	1/2	12.70	3/8
FA 8-8N	1/2	12.70	1/2
FA 12-8N	3/4	19.05	1/2
FA 12-12N	3/4	19.05	3/4
FA 12-16N	3/4	19.05	1
FA 16-12N	1	25.40	3/4
FA 16-16N	1	25.40	1

C-lok Instrument Valve Co.,Ltd.

**C-LOK**

**FA Female Adaptor**

Connect metric  
C-LOK port  
to male  
ISO tapered



Part No.	Tube O. D.	T
	D	R (PT)
FA 3M-2R	3	1/8
FA 6M-2R	6	1/8
FA 6M-4R	6	1/4
FA 8M-4R	8	1/4
FA 10M-4R	10	1/4
FA 10M-6R	10	3/8
FA 10M-8R	10	1/2
FA 12M-4R	12	1/4
FA 12M-6R	12	3/8
FA 12M-8R	12	1/2
FA 18M-12R	18	3/4

## MA Male Adaptor

Connect  
fractional  
C-LOK port  
to female  
NPT thread



Part No.	Tube O. D.		T (NPT)
	D inch	D mm	
MA 2-2N	1/8	3.17	1/8
MA 2-4N	1/8	3.17	1/4
MA 4-2N	1/4	6.35	1/8
MA 4-4N	1/4	6.35	1/4
MA 4-6N	1/4	6.35	3/8
MA 4-8N	1/4	6.35	1/2
MA 6-2N	3/8	9.52	1/8
MA 6-4N	3/8	9.52	1/4
MA 6-6N	3/8	9.52	3/8
MA 6-8N	3/8	9.52	1/2
MA 8-4N	1/2	12.70	1/4
MA 8-6N	1/2	12.70	3/8
MA 8-8N	1/2	12.70	1/2
MA 12-8N	3/4	19.05	1/2
MA 12-12N	3/4	19.05	3/4
MA 12-16N	3/4	19.05	1
MA 14-12N	7/8	22.22	3/4
MA 16-12N	1	25.40	3/4
MA 16-16N	1	25.40	1

C-LOK, the high quality instrumentation valves and fittings specialized production manufacture

C-lok Instrument Valve Co.,Ltd.

# C-LOK

## MA Male Adaptor



Connect metric  
C-LOK port  
to female ISO  
tapered Thread

Part No.	Tube O. D.	
	D	T R (PT)
MA 3M-2R	3	1/8
MA 6M-2R	6	1/8
MA 6M-4R	6	1/4
MA 8M-4R	8	1/4
MA 10M-4R	10	1/4
MA 10M-6R	10	3/8
MA 10M-8R	10	1/2
MA 12M-4R	12	1/4
MA 12M-6R	12	3/8
MA 12M-8R	12	1/2
MA 18M-8R	18	1/2
MA 18M-12R	18	3/4

## BR Bulkhead Reduce



Connect  
fractional Tube  
to fractional  
C-LOK thread

Part No.	Tube O. D.	
	D	
	inch	mm
BR 2-2	1/8	3.17
BR 4-4	1/4	6.35
BR 6-6	3/8	9.52
BR 8-8	1/2	12.70
BR16-16	1	25.40

Connect  
metric tube  
to fractional  
C-LOK thread



Part No.	D Tube O. D.	Tube O. D. D1	
		inch	mm
R 2M-2	2	1/8	3.17
R 3M-2	3	1/8	3.17
R 3M-4	3	1/4	6.35
R 4M-4	4	1/4	6.35
R 6M-2	6	1/8	3.18
R 6M-4	6	1/4	6.35
R 6M-6	6	3/8	9.52
R 6M-8	6	1/2	12.70
R 8M-6	8	3/8	9.52
R 8M-8	8	1/2	12.70
R 10M-6	10	3/8	9.52
R 10M-8	10	1/2	12.70
R 12M-8	12	1/2	12.70
R 12M-12	12	3/4	19.05
R 18M-12	18	3/4	19.05
R 18M-16	18	1	25.40
R 25M-16	25	1	25.40



## R Reducer

Connect  
metric tube  
to metric  
C-LOK por



Part No.	D Tube O. D.	D1 Tube O. D.
R 4M-6M	4	6
R 6M-3M	6	3
R 6M-8M	6	8
R 6M-10M	6	10
R 6M-12M	6	12
R 8M-6M	8	6
R 8M-10M	8	10
R 8M-12M	8	12
R 10M-6M	10	6
R 10M-12M	10	12
R 10M-15M	10	15
R 10M-18M	10	18
R 12M-6M	12	6
R 12M-10M	12	10
R 12M-16M	12	16
R 12M-18M	12	18
R 12M-20M	12	20
R 12M-22M	12	22
R 12M-25M	12	25
R 16M-12M	16	12
R 18M-12M	18	12
R 18M-16M	18	16
R 18M-20M	18	20
R 18M-22M	18	22
R 18M-25M	18	25
R 20M-16M	20	16
R 20M-18M	20	18
R 20M-22M	20	22
R 20M-25M	20	25
R 22M-18M	22	18
R 22M-20M	22	20
R 22M-25M	22	25
R 25M-18M	25	18
R 25M-20M	25	20

## PC Port Connector

Connect  
two fractional  
C-LOK port

Part No.	Tube O. D. D	
	inch	mm
PC-2	1/8	3.17
PC-4	1/4	6.35
PC-6	3/8	9.52
PC-8	1/2	12.70
PC-12	3/4	19.05
PC-16	1	25.40



## PC Port Connector

Connect  
two metric  
C-LOK port

Part No.	Tube O. D. D
PC-4M	4
PC-6M	6
PC-8M	8
PC-10M	10
PC-12M	12
PC-15M	15
PC-16M	16
PC-18M	18
PC-20M	20
PC-22M	22
PC-25M	25



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C-lok Instrument Valve Co.,Ltd.

# C-LOK

## RPC Reduce Port Connector

Connect  
two fractional  
C-LOK port



Part No.	Tube O. D. D1		Tube O. D. D	
	inch	mm	inch	mm
RPC 2-1	1/8	3.17	1/16	1.59
RPC 4-2	1/4	6.35	1/8	3.17
RPC 6-2	3/8	9.52	1/8	3.17
RPC 6-4	3/8	9.52	1/4	6.35
RPC 8-4	1/2	12.70	1/4	6.35
RPC 8-6	1/2	12.70	3/8	9.52
RPC 12-8	3/4	19.05	1/2	12.70
RPC 16-8	1	25.40	1/2	12.70
RPC 16-12	1	25.40	3/4	19.05

## RPC Reduce Port Connector

Connect  
two metric  
C-LOK port



Part No.	Tube O. D. D1	Tube O. D. D
	mm	mm
RPC 6M-3M	6	3
RPC 8M-6M	8	6
RPC 10M-6M	10	6
RPC 10M-8M	10	8
RPC 12M-6M	12	6
RPC 12M-8M	12	8
RPC 12M-10M	12	10
RPC 16M-6M	16	6
RPC 16M-12M	16	12

Connect fractional tube  
to AN flared tube



Part No.	Tube O. D.		AN Tube	
	D1		Flare Size	
	inch	mm	inch	mm
AU 2-2	1/8	3.17	1/8	3.17
AU 2-4	1/8	3.17	1/4	6.35
AU 4-4	1/4	6.35	1/4	6.35
AU 6-4	3/8	9.52	1/4	6.35
AU 6-6	3/8	9.52	3/8	9.52
AU 8-8	1/2	12.70	1/2	12.70
AU 12-12	3/4	19.05	3/4	19.05
AU 16-16	1	25.40	1	25.40

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**C-LOK**

**BAU Bulkhead AN Union**

Connect fractional tube  
to AN flared tube



Part No.	Tube O. D.		AN Tube	
	D1		Flare Size	
	inch	mm	inch	mm
ABU 2-2	1/8	3.17	1/8	3.17
ABU 4-4	1/4	6.35	1/4	6.35
ABU 6-6	3/8	9.52	3/8	9.52
ABU 8-8	1/2	12.70	1/2	12.70
ABU 12-12	3/4	19.05	3/4	19.05
ABU 16-16	1	25.40	1	25.40



Part No	Tube O. D.	Tube O. D.
	D	D
	Inch	mm
NUT-2	1/8	3.17
NUT-4	1/4	6.35
NUT-6	3/8	9.52
NUT-8	1/2	12.70
NUT-12	3/4	19.05
NUT-16	1	25.40



## NUT Nut

Metric

Part No.	Tube O. D. D	H
NUT - 4M	4	12
NUT - 6M	6	14
NUT - 8M	8	16
NUT - 10M	10	19
NUT - 12M	12	22
NUT - 15M	15	25
NUT - 16M	16	25
NUT - 18M	18	30
NUT - 20M	20	32
NUT - 22M	22	32
NUT - 25M	25	38

## FF Front Ferrule

### Fractional



Part No.	Tube O. D.	Tube O. D.
	D Inch	D mm
FF-2	1/8	3.17
FF-4	1/4	6.35
FF-6	3./8	9.52
FF-8	1/2	12.70
FF-12	3/4	19.05
FF-16	1	25.40

## FF Front Ferrule

### Metric



Part No.	Tube O. D.
	D
FF - 4M	4
FF - 6M	6
FF - 8M	8
FF - 10M	10
FF - 12M	12
FF - 15M	15
FF - 16M	16
FF - 18M	18
FF - 20M	20
FF - 22M	22
FF - 25M	25

Fractional

Part No.	Tube O. D.	Tube O. D.
	D	D
	Inch	mm
BF-2	1/8	3.17
BF-4	1/4	6.35
BF-6	3./8	9.52
BF-8	1/2	12.70
BF-12	3/4	19.05
BF-16	1	25.40



## BF Back Ferrule

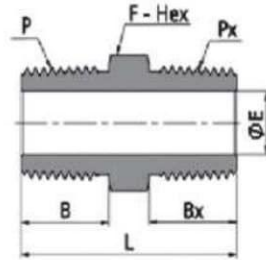
Metric

Part No.	Tube O. D.
	D
BF - 4M	4
BF - 6M	6
BF - 8M	8
BF - 10M	10
BF - 12M	12
BF - 15M	15
BF - 16M	16
BF - 18M	18
BF - 20M	20
BF - 22M	22
BF - 25M	25

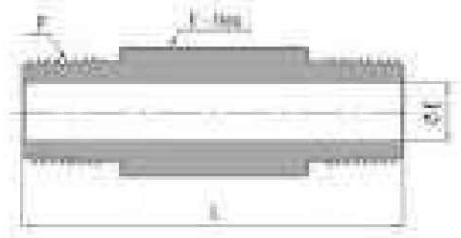


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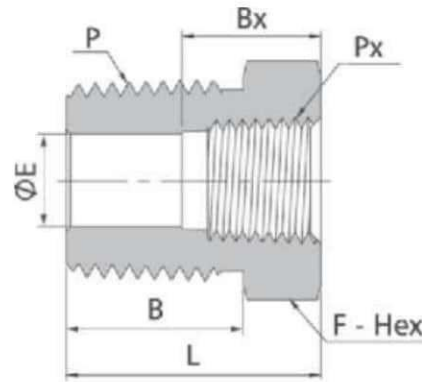


Male NPT Threads									
P-NPT Size	Px-NPT Size	Basic Ordering Number	Dimension, mm					Working Pressure psig (bar)	
			L	F	B	Bx	E	316 SS, Steel	Brass
1/16	1/16	-PHN-NS1	25.6	7.9	9.7	9.7	3.0	11000 (757)	5500 (378)
1/8	1/16	-PHN-NS2-NS1	25.6	11.1	9.7	9.7	3.0	11000 (757)	5500 (378)
1/8	1/8	-PHN-NS2	25.6	11.1	9.7	9.7	4.8	10000 (689)	5000 (344)
1/4	1/16	-PHN-NS4-NS1	31.0	14.3	14.2	9.7	3.0	11000 (757)	5500 (378)
1/4	1/8	-PHN-NS4-NS2	31.0	14.3	14.2	9.7	4.8	10000 (689)	5000 (344)
1/4	1/4	-PHN-NS4	35.6	14.3	14.2	14.2	7.1	8000 (551)	4000 (275)
3/8	1/16	-PHN-NS6-NS1	31.8	17.5	14.2	9.7	3.0	11000 (757)	5500 (378)
3/8	1/8	-PHN-NS6-NS2	31.8	17.5	14.2	9.7	4.8	10000 (689)	5000 (344)
3/8	1/4	-PHN-NS6-NS4	36.3	17.5	14.2	14.2	7.1	8000 (551)	4000 (275)
3/8	3/8	-PHN-NS6	36.3	17.5	14.2	14.2	9.7	7800 (537)	3900 (268)
1/2	1/8	-PHN-NS8-NS2	37.3	22.2	19.1	9.7	4.8	7700 (530)	3800 (261)
1/2	1/4	-PHN-NS8-NS4	41.9	22.2	19.1	14.2	7.1	8000 (551)	4000 (275)
1/2	3/8	-PHN-NS8-NS6	41.9	22.2	19.1	14.2	9.7	7800 (537)	3900 (268)
1/2	1/2	-PHN-NS8	46.7	22.2	19.1	19.1	11.9	7700 (530)	3800 (261)
3/4	1/8	-PHN-NS12-NS2	40.4	27.0	19.1	9.7	4.8	10000 (689)	5000 (344)
3/4	1/4	-PHN-NS12-NS4	41.9	27.0	19.1	14.2	7.1	8000 (551)	4000 (275)
3/4	3/8	-PHN-NS12-NS6	45.2	27.0	19.1	14.2	9.7	7800 (537)	3900 (268)
3/4	1/2	-PHN-NS12-NS8	46.7	27.0	19.1	19.1	11.9	7700 (530)	3800 (261)
3/4	3/4	-PHN-NS12	46.7	27.0	19.1	19.1	15.7	7300 (502)	3600 (248)
1	1/8	-PHN-NS16-NS2	45.2	34.9	23.9	9.7	4.8	10000 (689)	5000 (344)
1	1/4	-PHN-NS16-NS4	49.3	34.9	23.9	14.2	7.1	5300 (365)	2600 (179)
1	3/8	-PHN-NS16-NS6	50.0	34.9	23.9	14.2	9.7	7800 (537)	3900 (268)
1	1/2	-PHN-NS16-NS8	54.1	34.9	23.9	19.1	11.9	7700 (530)	3800 (261)
1	3/4	-PHN-NS16-NS12	54.1	34.9	23.9	19.1	15.7	7300 (502)	3600 (248)
1	1	-PHN-NS16	58.9	34.9	23.9	23.9	22.4	5300 (365)	2600 (179)
1 1/4	1	-PHN-NS20-NS16	62.2	44.5	23.9	23.9	22.4	5300 (365)	2600 (179)
1 1/4	1 1/4	-PHN-NS20	62.9	44.5	23.9	23.9	28.6	6000 (410)	3000 (200)
1 1/2	1 1/2	-PHN-NS24	66.3	50.8	26.2	26.2	34.0	5000 (344)	2500 (172)
2	2	-PHN-NS32	77.7	69.9	26.2	26.2	45.0	3900 (268)	1900 (130)

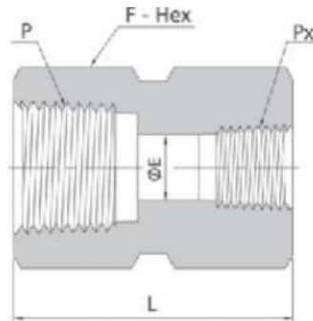


Male NPT Threads				
P-NPT Size	Basic Ordering Number	Dimension.mm	Working Pressure psig (bar)	
		L	316 SS, Steel	Brass
1/8	-PLN-NT2-38.1	38.1	10000 (689)	5000 (314)
1/8	-PLN-NT2-50.8	50.8	10000 (689)	5000 (314)
1/8	-PLN-NT2-63.5	63.5	10000 (689)	5000 (314)
1/8	-PLN-NT2-76.2	76.2	10000 (689)	5000 (314)
1/4	-PLN-NT4-38.1	38.1	8000 (551)	4000 (275)
1/4	-PLN-NT4-50.8	50.8	8000 (551)	4000 (275)
1/4	-PLN-NT4-63.5	63.5	8000 (551)	4000 (275)
1/4	-PLN-NT4-76.2	76.2	8000 (551)	4000 (275)
1/4	-PLN-NT4-101.5	101.5	8000 (551)	4000 (275)
3/8	-PLN-NT6-38.1	38.1	7800 (537)	3900 (268)
3/8	-PLN-NT6-50.8	50.8	7800 (537)	3900 (268)
3/8	-PLN-NT6-63.5	63.5	7800 (537)	3900 (268)
3/8	-PLN-NT6-76.2	76.2	7800 (537)	3900 (268)
3/8	-PLN-NT6-101.5	101.5	7800 (537)	3900 (268)
1/2	-PLN-NT8-50.8	50.8	7700 (530)	3800 (261)
1/2	-PLN-NT8-76.2	76.2	7700 (530)	3800 (261)
1/2	-PLN-NT8-101.5	101.5	7700 (530)	3800 (261)
1/2	-PLN-NT8-152.4	152.4	7700 (530)	3800 (261)
3/4	-PLN-NT12-50.8	50.8	7300 (502)	3600 (248)
3/4	-PLN-NT12-76.2	76.2	7300 (502)	3600 (248)
3/4	-PLN-NT8-101.6	101.6	7300 (502)	3600 (248)
1	-PLN-NT16-76.2	76.2	5300 (365)	2600 (179)
1	-PLN-NT16-101.6	101.6	5300 (365)	2600 (179)

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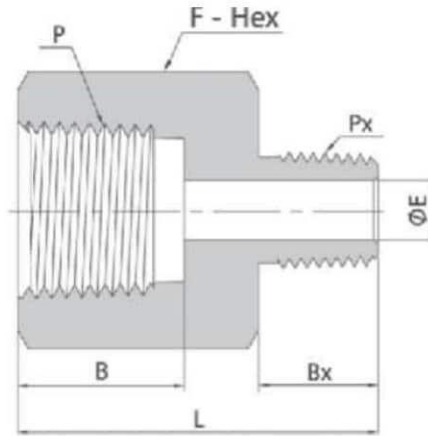


Male NPT Threads					Female NPT Threads				
P-NPT Size	Px-NPT Size	Basic Ordering Number	Dimension, mm					Working Pressure psig (bar)	
			L	F	B	Bx	E	316 SS, Steel	Brass
1/8	1/16	-PRB-NS2-NS1	26.2	11.1	9.7	9.9	4.8	6500 (447)	3200 (220)
1/4	1/16	-PRB-NS4-NS1	21.8	14.3	14.2	9.9	4.8	8000 (551)	4000 (275)
1/4	1/8	-PRB-NS4-NS2	26.9	14.3	14.2	10.4	7.1	6500 (447)	3300 (227)
3/8	1/16	-PRB-NS6-NS1	21.8	17.5	14.2	9.9	4.8	13300 (971)	6600 (454)
3/8	1/8	-PRB-NS6-NS2	21.8	17.5	14.2	10.4	8.6	9200 (633)	4700 (323)
3/8	1/4	-PRB-NS6-NS4	30.2	19.1	14.2	15.0	9.6	6600 (454)	3300 (227)
1/2	1/8	-PRB-NS8-NS2	27.4	22.2	19.1	10.4	8.6	12200 (840)	6200 (427)
1/2	1/4	-PRB-NS8-NS4	27.4	22.2	19.1	15.0	11.4	8300 (571)	4400 (303)
1/2	3/8	-PRB-NS8-NS6	35.8	22.2	19.1	15.0	11.9	5300 (365)	2600 (179)
3/4	1/8	-PRB-NS12-NS2	27.4	27.0	19.1	10.4	7.1	20000(1378)	10000(689)
3/4	1/4	-PRB-NS12-NS4	27.4	27.0	19.1	15.0	11.4	12000 (826)	6000 (410)
3/4	3/8	-PRB-NS12-NS6	27.4	27.0	19.1	15.0	15.0	8200 (564)	4300 (296)
3/4	1/2	-PRB-NS12-NS8	41.4	27.0	19.1	19.8	15.7	4900 (337)	2400 (165)
1	1/8	-PRB-NS16-NS2	34.5	34.9	23.9	10.4	7.1	20000(1378)	10000(689)
1	1/4	-PRB-NS16-NS4	34.8	34.9	23.9	15.0	11.4	14500 (999)	7400 (509)
1	3/8	-PRB-NS16-NS6	34.8	34.9	23.9	15.0	15.0	11600 (799)	5900 (406)
1	1/2	-PRB-NS16-NS8	34.8	34.9	23.9	19.8	18.5	8600 (592)	4300 (296)
1	3/4	-PRB-NS16-NS12	47.0	34.9	23.9	20.6	22.4	5300 (365)	2600 (179)
1 1/4	3/4	-PRB-NS20-NS12	37.3	44.5	23.9	20.6	22.4	7800 (537)	3900 (268)
1 1/4	1	-PRB-NS20-NS16	37.3	44.5	23.9	25.4	22.4	3500 (241)	1750 (120)
1 1/2	1	-PRB-NS24-NS16	40.1	50.8	26.2	25.4	22.4	6600 (454)	3300 (227)
1 1/2	1 1/4	-PRB-NS24-NS20	56.0	54.0	26.2	25.4	34.0	5000 (344)	2500 (172)

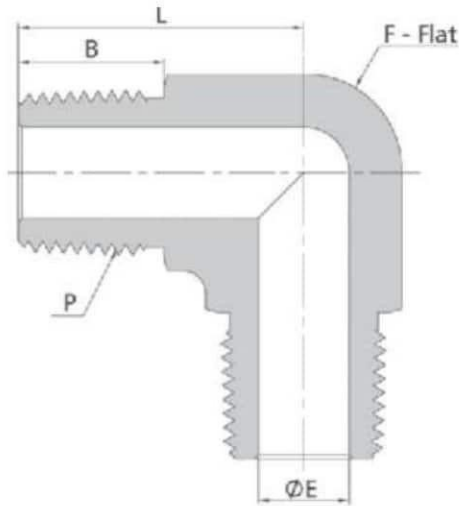


Female NPT Threads								
P-NPT Size	Px-NPT Size	Basic Ordering Number	Dimension, mm			Working Pressure psig (bar)		
			L	F	E	316 SS, Steel	Brass	
1/16	1/16	-PCG-NS1	19.8	11.1	4.8	6700 (460)	3300 (227)	
1/8	1/8	-PCG-NS2	20.6	14.3	8.6	6500 (447)	3200 (220)	
1/4	1/8	-PCG-NS4-NS2	31.0	19.1	8.6	6600 (454)	3300 (227)	
1/4	1/4	-PCG-NS4	30.2	19.1	11.4	6600 (454)	3300 (227)	
3/8	1/4	-PCG-NS6-NS4	35.1	22.2	11.4	5300 (365)	2600 (179)	
3/8	3/8	-PCG-NS6	33.3	22.2	15.0	5300 (365)	2600 (179)	
1/2	1/8	-PCG-NS8-NS2	39.6	27.0	8.6	4900 (337)	2400 (165)	
1/2	1/4	-PCG-NS8-NS4	44.4	27.0	11.4	4900 (337)	2400 (165)	
1/2	3/8	-PCG-NS8-NS6	45.2	27.0	15.0	4900 (337)	2400 (165)	
1/2	1/2	-PCG-NS8	39.6	27.0	18.5	4900 (337)	2400 (165)	
3/4	1/4	-PCG-NS12-NS4	46.0	33.3	11.4	4600 (316)	2300 (158)	
3/4	1/2	-PCG-NS12-NS8	52.3	33.3	18.5	4600 (316)	2300 (158)	
3/4	3/4	-PCG-NS12	41.1	33.3	23.9	4600 (316)	2300 (158)	
1	1/2	-PCG-NS16-NS8	55.6	41.3	18.5	4400 (303)	2200 (151)	
1	3/4	-PCG-NS16-NS12	57.2	41.3	23.9	4400 (303)	2200 (151)	
1	1	-PCG-NS16	50.8	41.3	29.7	4400 (303)	2200 (151)	

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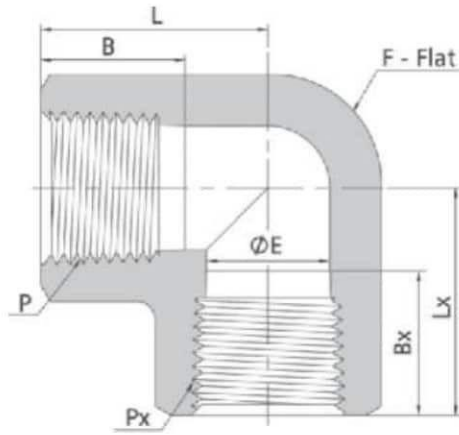


Female NPT Threads				Male NPT Threads						
P-NPT Size	Px-NPT Size	Basic Ordering Number	Dimension, mm					Working Pressure psig (bar)		
			L	F	B	Bx	E	316 SS, Steel	Brass	
1/8	1/16	-PA-NS2-NS1	27.7	14.3	10.4	9.7	3.0	6500 (447)	3200 (220)	
1/8	1/8	-PA-NS2	27.9	14.3	10.4	9.7	4.8	6500 (447)	3200 (220)	
1/4	1/16	-PA-NS4-NS1	30.5	19.1	15.0	9.7	3.0	6600 (454)	3300 (227)	
1/4	1/8	-PA-NS4-NS2	32.0	19.1	15.0	9.7	4.8	6600 (454)	3300 (227)	
1/4	1/4	-PA-NS4	35.6	19.1	15.0	14.2	7.1	6600 (454)	3300 (227)	
3/8	1/16	-PA-NS6-NS1	31.8	22.2	15.0	9.7	3.0	5300 (365)	2600 (179)	
3/8	1/8	-PA-NS6-NS2	33.8	22.2	15.0	9.7	4.8	5300 (365)	2600 (179)	
3/8	1/4	-PA-NS6-NS4	38.1	22.2	15.0	14.2	7.1	5300 (365)	2600 (179)	
3/8	3/8	-PA-NS6	38.4	22.2	15.0	14.2	9.7	5300 (365)	2600 (179)	
1/2	1/8	-PA-NS8-NS2	40.1	27.0	19.8	9.7	4.8	4900 (337)	2400 (165)	
1/2	1/4	-PA-NS8-NS4	44.7	27.0	19.8	14.2	7.1	4900 (337)	2400 (165)	
1/2	3/8	-PA-NS8-NS6	44.4	27.0	19.8	14.2	9.6	4900 (337)	2400 (165)	
1/2	1/2	-PA-NS8	49.3	27.0	19.8	19.1	11.9	4900 (337)	2400 (165)	
3/4	1/8	-PA-NS12-NS2	39.6	33.3	20.6	9.7	4.8	4600 (316)	2300 (158)	
3/4	1/4	-PA-NS12-NS4	47.0	33.3	20.6	14.2	7.1	4600 (316)	2300 (158)	
3/4	3/8	-PA-NS12-NS6	46.2	33.3	20.6	14.2	9.7	4600 (316)	2300 (158)	
3/4	1/2	-PA-NS12-NS8	51.3	33.3	20.6	19.1	11.9	4600 (316)	2300 (158)	
3/4	3/4	-PA-NS12	51.3	33.3	20.6	19.1	15.7	4600 (316)	2300 (158)	
1	1/8	-PA-NS16-NS2	46.0	41.3	25.4	9.7	4.8	4400 (303)	2200 (151)	
1	1/4	-PA-NS16-NS4	49.8	41.3	25.4	14.2	7.1	4400 (303)	2200 (151)	
1	3/8	-PA-NS16-NS6	50.8	41.3	25.4	14.2	9.7	4400 (303)	2200 (151)	
1	1/2	-PA-NS16-NS8	54.9	41.3	25.4	19.1	11.9	4400 (303)	2200 (151)	
1	3/4	-PA-NS16-NS12	55.1	41.3	25.4	19.1	15.7	4400 (303)	2200 (151)	
1	1	-PA-NS16	57.9	41.3	25.4	23.9	22.4	4400 (303)	2200 (151)	
1 1/4	1	-PA-NS20-NS16	62.7	54.0	25.4	23.9	22.4	5000 (344)	2500 (172)	

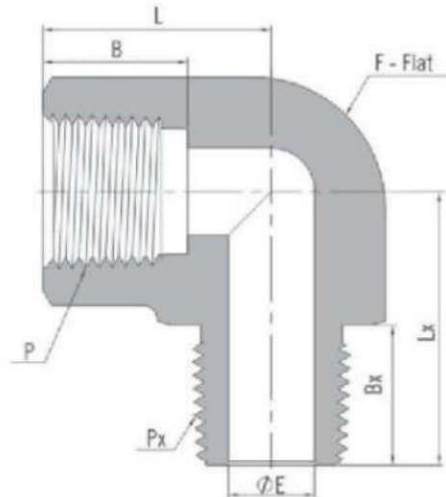


Male NPT Threads							
P-NPT Size	Basic Ordering Number	Dimension, mm				Working Pressure psig (bar)	
		L	F	B	E	316 SS, Steel	Brass
1/16	-PME-NS1	18.3	9.5	9.7	3.0	11000 (757)	5500 (378)
1/8	-PME-NS2	22.4	11.1	9.7	4.8	10000 (689)	5000 (344)
1/4	-PME-NS4	26.7	12.7	14.2	7.1	8000 (551)	4000 (275)
3/8	-PME-NS6	29.7	17.5	14.2	9.6	7800 (537)	3900 (268)
1/2	-PME-NS8	36.8	20.6	19.1	11.9	7700 (530)	3800 (261)
3/4	-PME-NS12	40.4	27.0	19.1	15.7	7300 (502)	3600 (248)
1	-PME-NS16	50.0	34.9	23.9	22.4	5300 (365)	2600 (179)

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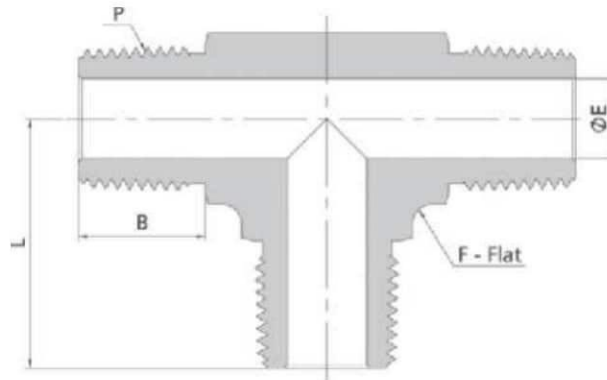


Female NPT Threads										
P-NPT Size	Px-NPT Size	Basic Ordering Number	Dimension, mm						Working Pressure psig (bar)	
			L	F	B	E	Lx	Bx	316 SS, Steel	Brass
1/16	1/16	-PE-NS1	21.8	11.1	9.9	4.8	21.8	9.9	6700 (460)	3300 (227)
1/8	1/16	-PE-NS2-NS1	26.4	12.7	10.4	4.8	26.4	9.9	6200 (427)	3100 (213)
1/8	1/8	-PE-NS2	26.4	12.7	10.4	8.6	26.4	10.4	6200 (427)	3100 (213)
1/4	1/8	-PE-NS4-NS2	29.7	17.5	15.0	7.1	29.7	10.4	7200 (496)	3600 (248)
1/4	1/4	-PE-NS4	29.7	17.5	15.0	11.4	29.7	15.0	7200 (496)	3600 (248)
3/8	3/8	-PE-NS6	36.1	20.6	15.0	15.0	36.1	15.0	5600 (385)	2800 (192)
1/2	1/2	-PE-NS8	39.6	25.4	19.8	18.5	39.6	19.8	5600 (385)	2800 (192)
3/4	3/4	-PE-NS12	48.8	31.8	20.6	23.9	48.8	20.6	5100 (351)	2500 (172)
1	1	-PE-NS16	48.5	42.9	25.4	29.7	48.5	25.4	6400 (440)	3200 (220)
1 1/4	1 1/4	-PE-NS20	59.8	50.8	25.4	27.7	50.8	25.4	3100 (213)	1600 (110)
1 1/2	1 1/2	-PE-NS24	65.0	63.5	27.7	34.8	52.8	27.7	5100 (351)	2500 (172)



Female NPT Threads				
P-NPT Size	Px-NPT Size	Basic Ordering Number	Working Pressure psig (bar)	
			316 SS, Steel	Brass
1/16	1/16	-PSE-NT1	9200 (633)	4600 (316)
1/16	1/8	-PSE-NT1-NT2	9200 (633)	4600 (316)
1/16	1/4	-PSE-NT1-NT4	8000 (551)	4000 (275)
1/16	3/8	-PSE-NT1-NT6	7800 (537)	3900 (268)
1/8	1/16	-PSE-NT2-NT1	6200 (426)	3100 (213)
1/8	1/8	-PSE-NT2	6200 (426)	3100 (213)
1/8	1/4	-PSE-NT2-NT4	6500 (447)	3200 (220)
1/8	3/8	-PSE-NT2-NT6	7800 (537)	3900 (268)
1/8	1/2	-PSE-NT2-NT8	7700 (530)	3800 (261)
1/8	3/4	-PSE-NT2-NT12	7300 (502)	3600 (248)
1/8	1	-PSE-NT2-NT16	5300 (365)	2600 (179)
1/4	1/8	-PSE-NT4-NT2	7200 (496)	3600 (248)
1/4	1/4	-PSE-NT4	7200 (496)	3600 (248)
1/4	3/8	-PSE-NT4-NT6	7200 (496)	3600 (248)
1/4	1/2	-PSE-NT4-NT8	7200 (496)	3600 (248)
1/4	3/4	-PSE-NT4-NT12	7300 (502)	3600 (248)
1/4	1	-PSE-NT4-NT16	5300 (365)	2600 (179)
3/8	1/4	-PSE-NT6-NT4	5600 (385)	2800 (192)
3/8	3/8	-PSE-NT6	5600 (385)	2800 (192)
3/8	1/2	-PSE-NT6-NT8	5600 (385)	2800 (192)
3/8	3/4	-PSE-NT6-NT12	7300 (502)	3600 (248)
3/8	1	-PSE-NT6-NT16	5300 (365)	2600 (179)
1/2	1/4	-PSE-NT8-NT4	5600 (385)	2800 (192)
1/2	3/8	-PSE-NT8-NT6	5600 (385)	2800 (192)
1/2	1/2	-PSE-NT8	5600 (385)	2800 (192)
1/2	3/4	-PSE-NT8-NT12	5600 (385)	2800 (192)
1/2	1	-PSE-NT8-NT16	5300 (385)	2600 (179)
3/4	3/4	-PSE-NT12	5100 (351)	2500 (172)
3/4	1	-PSE-NT12-NT16	5100 (351)	2500 (172)
1	1	-PSE-NT16	5300 (365)	2600 (179)
1 1/4	1 1/4	-PSE-NT20	3100 (213)	1600 (110)



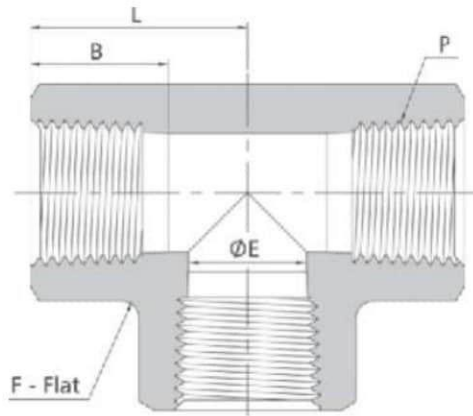


### Male NPT Threads

P-NPT Size	Basic Ordering Number	Dimension, mm				Working Pressure psig (bar)	
		L	F	B	E	316 SS, Steel	Brass
1/16	-PMT-NS1	18.3	9.5	9.7	3.0	11000 (757)	5500 (378)
1/8	-PMT-NS2	22.4	11.1	9.7	4.8	10000 (689)	5000 (344)
1/4	-PMT-NS4	26.7	12.7	14.2	7.1	8000 (551)	4000 (275)
3/8	-PMT-NS6	29.7	17.5	14.2	9.6	7800 (537)	3900 (268)
1/2	-PMT-NS8	36.8	20.6	19.1	11.9	7700 (530)	3800 (261)
3/4	-PMT-NS12	42.4	27.0	19.1	15.7	7300 (502)	3600 (248)
1	-PMT-NS16	49.3	34.9	23.9	22.4	5300 (365)	2600 (179)
1 1/4	-PMT-NS20	56.4	42.9	23.9	27.7	6000 (410)	3000 (200)
1 1/2	-PMT-NS24	67.1	47.6	26.2	34.0	5000 (344)	2500 (172)

# C-LOK

## Female Tees



Female NPT Threads							
P-NPT Size	Basic Ordering Number	Dimension, mm				Working Pressure psig (bar)	
		L	F	E	B	316 SS, Steel	Brass
1/16	-PT-NS1	21.8	11.1	4.8	9.9	6700 (460)	3300 (227)
1/8	-PT-NS2	26.4	12.7	8.6	10.4	6200 (427)	3100 (213)
1/4	-PT-NS4	29.7	17.5	11.4	15.0	7200 (496)	3600 (248)
3/8	-PT-NS6	36.1	20.6	15.0	15.0	5600 (385)	2800 (192)
1/2	-PT-NS8	39.6	25.4	18.5	19.8	5600 (385)	2800 (192)
3/4	-PT-NS12	48.8	31.8	23.9	20.6	5100 (351)	2500 (172)
1	-PT-NS16	48.5	42.9	29.7	25.4	6400 (440)	3200 (220)
1 1/4	-PT-NS20	59.8	50.8	37.2	25.4	3100 (213)	1600 (110)
1 1/2	-PT-NS24	65.0	63.5	43.3	27.7	5100 (351)	2500 (172)

C-LOK, the high quality instrumentation valves and fittings specialized production manufacture

### Features & Benefits

### 650 Series

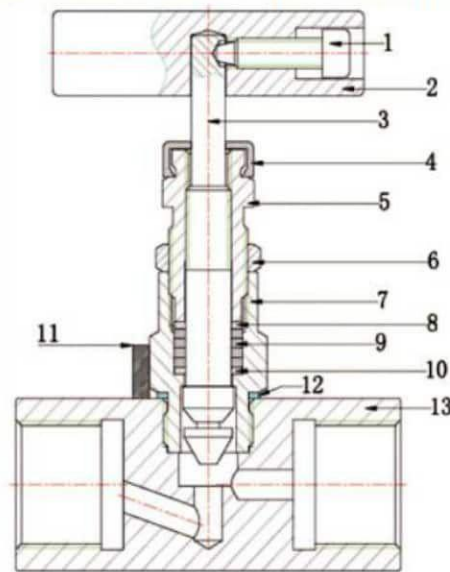
- ▲ Compact Design
- ▲ Non rotating vee tip design which forms a joint with the stem eliminates rotation between plug & seat at closure this prevents scoring and galing up the valve seat and ensure long life in repetitive shut off service
- ▲ Safety bonnet lock prevents accidental disassembly
- ▲ Stem thread rolled & hard plated provides additional strength & maximum servi lif
- ▲ Mirror finish stem , burnished to a 16RMS extends packing life and smoot stem operation
- ▲ Adjustable Packing Below Stem thread prevents stem lubrication washout and isolate threads form process contamination
- ▲ Upgraded large handle ensures ease of operation while actuating valve
- ▲ Body to bonnet seal with metal to metal constant compression , isolate bonnet threads form system fluids and eliminates possible tensile
- ▲ Dust cap prevents contaminants and lubricant washout of bonnet assembly
- ▲ All valves are hyrostatically tested to reted pressure prior to factory shipment

### Specifications

- ▼ Pressure rating 10000 psig (690bar) at 100°F (38°C)  
-65 to 450°F (-54 to 232 °C) with
- ▼ Temperature rating PTFE packing
- ▼ Body material 316 stainless steel,  
304 stainless steel, carbon steel
- ▼ Port connections 1/4" to 1" variety of end connection
- ▼ Orifice 4.8 mm to 8.5mm

- Each Valve is tested with nitrogen at 1000psig(69bar) to maximum allowable leak rate of 0.1 SCCM.
- Hydrostatic shell test is performed at 1.5 times of the working pressure. (OPTION)

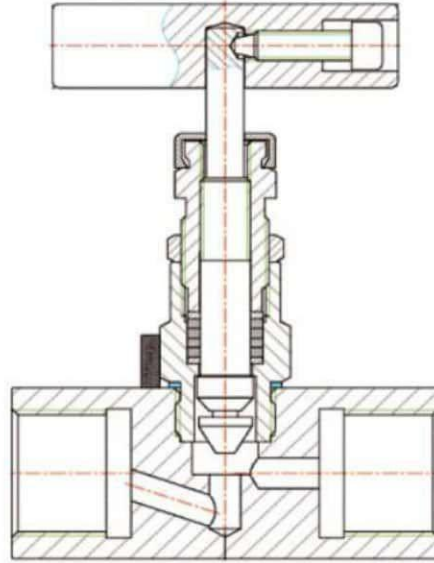
### Materials of Construction



No.	Component	Material Grade/ASTM Specification
1	Grib Screw	Stainless Steel
2	Handle	Stainless Steel
3	Stem Shaft	SS316+Stellited
4	Dust Cap	Plastic LD.
5	Bonnet	SS316/SS304/A-105
6	Lock Nut	SS316/SS304/A-105
7	Gland Body	SS316/SS304/A-105
8	Packing Washer	SS316/SS304/A-105
9	Packing	PTFE/Graphoil
10	Washer	SS316/SS304/A-105
11	Lock Pin	Stainless Steel
12	O-ring	FKM
13	Body	SS316/SS304/A-105

C-lok Instrument Valve Co.,Ltd.

# C-LOK



## Dimension Table

Connections		order Number	Orifice (mm)
Inlet	Outlet		
1/4" Female NPT	1/4" Female NPT	F-4N	4.8
1/4" Male NPT	1/4" Female NPT	MF-4N	4.8
1/4" C-LOK	1/4" C-LOK	C-4	4.8
3/8" Female NPT	3/8" Female NPT	F-6N	4.8
3/8" Male NPT	3/8" Female NPT	MF-6N	4.8
3/8" C-LOK	3/8" C-LOK	C-6	4.8
1/2" Female NPT	1/2" Female NPT	F-8N	4.8
1/2" Male NPT	1/2" Female NPT	MF-8N	4.8
1/2" Female ISO	1/2" Female ISO	F-8R	4.8
1/2" C-LOK	1/2" C-LOK	C-8	4.8
3/4" Female NPT	3/4" Female NPT	F-12N	6.4
3/4" Male NPT	3/4" Female NPT	MF-12N	6.4
3/4" Female ISO	3/4" Female ISO	F-12R	6.4
1" Female NPT	1" Female NPT	F-16N	8.5
1" Male NPT	1" Female NPT	MF-16N	8.5
1" Female ISO	1" Female ISO	F-16R	8.5

**650-MF-4N-PT-S316**

1      2      3      4      5

### 1. Valve Series

### 2. End Connector Type

- C : C-LOK Double Ferrule Compression Tube Fitting
- F : Female Pipe Thread
- MF: Male Pipe Thread Inlet x Female Pipe Thread Outlet

### 3. Connector Size

#### ■ Pipe Thread Designation

Size (Inch)	1/4"	3/8"	1/2"	3/4"	1"
Screwed BSPT	4R	6R	8R	12R	16R
Screwed NPT	4N	6N	8N	12N	16N

#### ■ Tube O.D Designation

Tube O.D (inch)	1/4"	3/8"	1/2"	3/4"
Designation	4	6	8	12
Tube O.D (mm)	6	8	10	12
Dsignation	6M	8M	10M	12M

### 4. Packing Material

- PT: PTFE (standard)
- PE : PEEK (optional)
- GR: Graphiol (optional)

### 5. Body Material

- S316 : 316 Stainless Steel
- S304 : 304 Stainless Steel
- CS : Carbon Steel

### ■ Example

#### Ex.1)650-F-8N-S316

- 650 series needle valve
- female thread Inlet and outlet port
- 1/2" inch NPT thread
- PTFE packing material
- 316 Stainless Steel valve body

#### Ex.2)650-C-6-S316

- 650 series needle valve
- C-LOK tube inlet and outlet port
- 3/8" inch tube O.D
- PTFE packing material
- 316 Stainless Steel valve body

C-lok Instrument Valve Co.,Ltd.

# C-LOK

## Integral Bonnet Needle Valves

15 Series (forged Body)

### Features

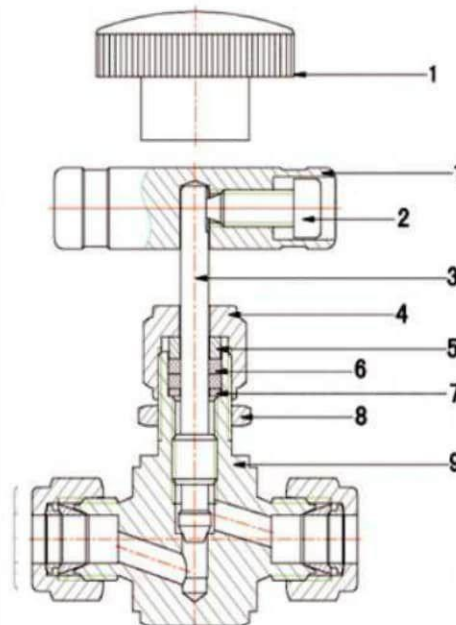
- ▲ Compact Design
- ▲ Low operation torques
- ▲ Panel mountable
- ▲ Variety of stem tips
- ▲ Variety of end connections
- ▲ Straight and angle flow patterns
- ▲ Each and every valve is tested at the factory

### Specifications

- ▼ Pressure rating      6000 psig (413bar)  
   at 100°F (38°C) with
- ▼ Temperature rating -65 to 450°F (-54 to 232 °C)  
   with PTFE packing
- ▼ Body material            316L stainless steel,  
   304 stainless steel
- ▼ Port connections        1/8" to 3/4" and 3mm to  
   12mm Variety of end  
   connection
- ▼ Orifice                    0.08" to 0.375"  
   (2.0mm to 9.5mm)

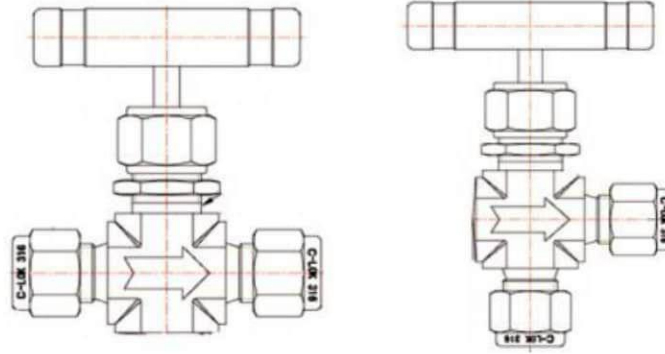
- Each Valve is tested with nitrogen at 1000psig(69bar) to maximum allowable leak rate of 0.1 SCCM.
- Hydrostatic shell test is performed at 1.5 times of the working pressure. (OPTION)

## Materials of Construction



No.	Component	Material Grade /ASTM Specification
1	Bar handle	Stainless Steel
	Knob handle	Phenolic with brass insert
2	Set screw	Stainless steel
3	Stem	SS316
4	Packing nut	SS316
5	Upper gland	SS316
6	Packing support	PTFE
7	Lower gland	SS316
8	Panel nut	SS316
9	Body	SS316

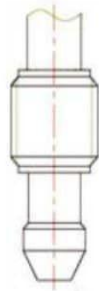




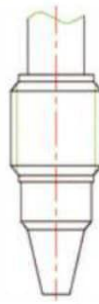
## Table of Dimensions

Order Number		Orifice (mm)	Cv	Connections		
Series	Part No.			Inlet	Outlet	
15-1	C	2N	2	0.09	1/8"FemaleNPT	
	M	2N			1/8"MaleNPT	
	MC	2N-2			1/8"MaleNPT	1/8" C-LOK
	C	3M			1/8" C-LOK	
	C	3M			3mm C-LOK	
15-2	F	2N	4.4	0.37	1/8"FemaleNPT	
	M	2N			1/8"MaleNPT	
	M	4N			1/4"MaleNPT	
	MC	4N-4			1/4"MaleNPT	1/4" C-LOK
	C	6M			6mm C-LOK	
	C	4			1/4" C-LOK	
	C	8M			8mm C-LOK	
15-3	F	4N	6.3	0.73	1/4"FemaleNPT	
	F	4R			1/4"ISOFemale	
	MF	4N			1/4"MaleNPT	1/4"FemaleNPT
	MC	4N-6			1/4"MaleNPT	3/8" C-LOK
	M	6N			3/8"MaleNPT	
	MC	6N-6			3/8"MaleNPT	3/8" C-LOK
	MC	6N-8			3/8"MaleNPT	1/2" C-LOK
	C	10M			10mm C-LOK	
	C	6			3/8" C-LOK	
	C	12M			12mm C-LOK	
	C	8			1/2" C-LOK	
15-4	F	6N	9.5	1.8	3/8"FemaleNPT	
	F	6R			3/8"ISOFemale	
	F	8N			1/2"FemaleNPT	
	F	8R			1/2"ISOFemale	
	M	8N			1/2"MaleNPT	
	NF	8N			1/2"MaleNPT	1/2"FemaleNPT
	C	8			1/2" C-LOK	
	C	12			3/4" C-LOK	

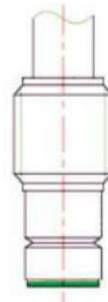
## Available Stem Type



Vee Stem(Standard)



Regulating Stem



Soft Seat Stem(PCTFE)

## Ordering Information

**15-1-MC-4N-8-BH-A-K-PT-S316**

1 2 3 4 5 6 7 8

### 1. Valve Series

- 15-1 2.0mm Orifice
- 15-2 4.4mm Orifice
- 15-3 6.3mm Orifice
- 15-4 9.5mm Orifice

### 2. End Connector Type

- C : C-LOK Double Ferrule Compression Tube Fitting
- F : Female Pipe Thread
- MF : Male Pipe Thread Inlet x Female Pipe Thread Outlet
- M : Male Pipe Thread

### ■ Pipe Thread Designation

Size (Inch)	1/8"	1/4"	3/8"	1/2"	3/4"
Screwed BSPT	2R	4R	6R	8R	12R
Screwed NPT	2N	4N	6N	8N	12N

### ■ Tube O.D Designation

Tube O.D (inch)	1/8"	1/4"	3/8"	1/2"	3/4"
Designation	2	4	6	8	12
Tube O.D (mm)	3	6	8	10	12
Designation	3M	6M	8M	10M	12M

### 4. Handle

- BH: Stainless Steel Bar Handle(Standard)
- KH: Phenolic Knob Handle

### 5. Flow Pattern

- ST: Straight Pattern (Standard)
- A: Angle pattern

### 6. Stem Type

- V : Vee Stem (Standard)
- R : Regulating Stem
- K: Soft Seat Stem

### 7. Packing Material

- PT: PTFE (standard)
- PE : PEEK (optional)
- GR: Graphiol (optional)

### ■ Example

Ex.1) 15-1-MC-2N-4

- ①15-1 series needle valve
- ②male thread Inlet and c-lok outlet port
- ③1/8" inch NPT thread, 1/4" O.D C-LOK
- ④stainless steel bar handle
- ⑤straight pattern
- ⑥Vee stem
- ⑦PTFE packing material
- ⑧316 Stainless Steel valve body

C-lok Instrument Valve Co.,Ltd.

# C-LOK

## Screwed Bonnet Needle Valves

### Features & Benefits

660 Series  
Hex Valve Body

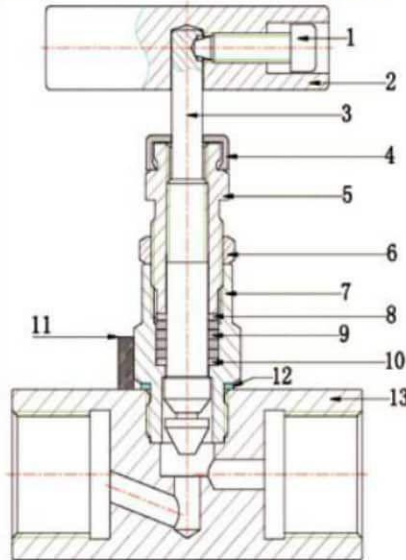
- ▲ Hex body
- ▲ Non rotating vee tip design which forms a joint with the stem eliminates rotation between plug & seat at closure this prevents scoring and galing up the valve seat and ensure long life in repetitive shut off service
- ▲ Safety bonnet lock prevents accidental disassembly
- ▲ Stem thread rolled & hard plated provides additional strength & maximum servi lif
- ▲ Mirror finish stem , burnished to a 16RMS extends packing life and smoot stem operation
- ▲ Adjustable Packing Below Stem thread prevents stem lubrication washout and isolate threads form process contamination
- ▲ Upgraded large handle ensures ease of operation while actuating valve
- ▲ Body to bonnet seal with metal to metal constant compression , isolate bonnet threads form system fluids and eliminates possible tensile
- ▲ Dust cap prevents contaminants and lubricant washout of bonnet assembly
- ▲ All valves are hyrostatically tested to reted pressure prior to factory shipment

### Specifications

- ▼ Pressure rating 10000 psig (690bar) at 100°F (38°C)  
-65 to 450°F (-54 to 232 °C) with
- ▼ Temperature rating PTFE packing
- ▼ Body material 316 stainless steel,  
304 stainless steel, carbon steel
- ▼ Port connections 1/4" to 1" variety of end connection
- ▼ Orifice 4.8 mm to 8.5mm

- Each Valve is tested with nitrogen at 1000psig(69bar) to maximum allowable leak rate of 0.1 SCCM.
- Hydrostatic shell test is performed at 1.5 times of the working pressure. (OPTION)

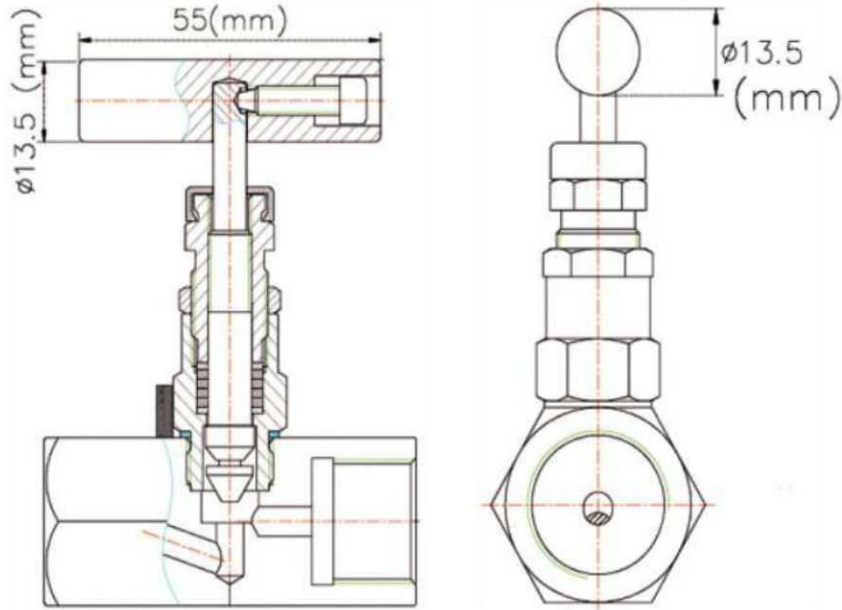
## Materials of Construction



No.	Component	Material Grade/ASTM Specification
1	Grib Screw	Stainless Steel
2	Handle	Stainless Steel
3	Stem Shaft	SS316+Stellited
4	Dust Cap	Plastic LD.
5	Bonnet	SS316/SS304/A-105
6	Lock Nut	SS316/SS304/A-105
7	Gland Body	SS316/SS304/A-105
8	Packing Washer	SS316/SS304/A-105
9	Packing	PTFE/Graphoil
10	Washer	SS316/SS304/A-105
11	Lock Pin	Stainless Steel
12	O-ring	FKM
13	Body	SS316/SS304/A-105

C-lok Instrument Valve Co.,Ltd.

# C-LOK



## Dimension Table

Connections		order Number	Orifice (mm)
Inlet	Outlet		
1/4" Female NPT	1/4" Female NPT	F-4N	4.8
1/4" Male NPT	1/4" Female NPT	MF-4N	4.8
1/4" C-LOK	1/4" C-LOK	C-4	4.8
3/8" Female NPT	3/8" Female NPT	F-6N	4.8
3/8" Male NPT	3/8" Female NPT	MF-6N	4.8
3/8" C-LOK	3/8" C-LOK	C-6	4.8
1/2" Female NPT	1/2" Female NPT	F-8N	4.8
1/2" Male NPT	1/2" Female NPT	MF-8N	4.8
1/2" Female ISO	1/2" Female ISO	F-8R	4.8
1/2" C-LOK	1/2" C-LOK	C-8	4.8
3/4" Female NPT	3/4" Female NPT	F-12N	6.4
3/4" Male NPT	3/4" Female NPT	MF-12N	6.4
3/4" Female ISO	3/4" Female ISO	F-12R	6.4
1" Female NPT	1" Female NPT	F-16N	8.5
1" Male NPT	1" Female NPT	MF-16N	8.5
1" Female ISO	1" Female ISO	F-16R	8.5

**660-MF-4N-PT-S316**

1
2
3
4
5

### 1. Valve Series

### 2. End Connector Type

- C : C-LOK Double Ferrule Compression Tube Fitting
- F : Female Pipe Thread
- MF : Male Pipe Thread Inlet x Female Pipe Thread Outlet

### 3. Connector Size

- Pipe Thread Designation

Size (Inch)	1/4"	3/8"	1/2"	3/4"	1"
Screwed BSPT	4R	6R	8R	12R	16R
Screwed NPT	4N	6N	8N	12N	16N

- Tube O.D Designation

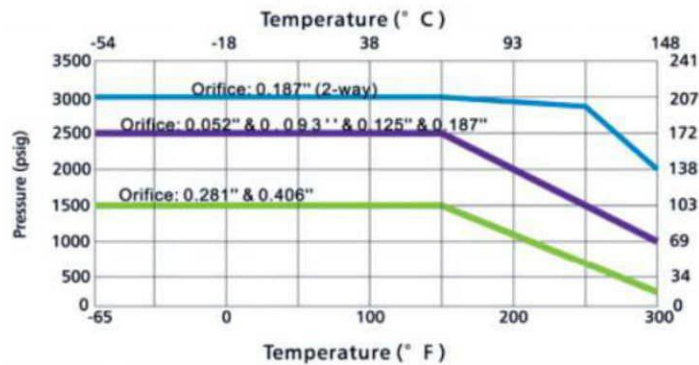
Tube O.D (inch)	1/4"	3/8"	1/2"	3/4"
Designation	4	6	8	12
Tube O.D (mm)	6	8	10	12
Dsignation	6M	8M	10M	12M

### Features

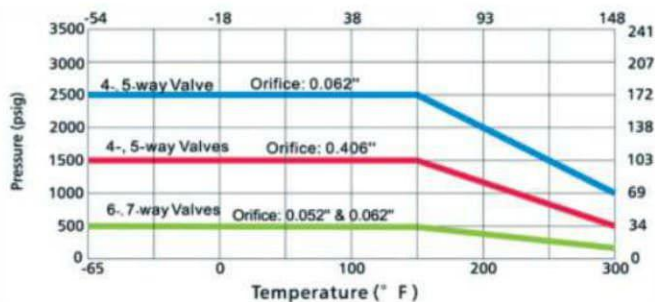
- ⊙ Maximum working pressure: 3000 psig (207 bar) , 6000psig ( 413 bar )
- ⊙ Working temperature: -65°F to 300°F (-54°C to 148°C)
- ⊙ Size from 1/16" to 3/4" or 3 mm to 18 mm
- ⊙ 2-, 3-, 4-, 5-, 6- and 7-way models for on-off, switching and crossover service available
- ⊙ One-piece body and one piece ball stem
- ⊙ In-line inspection and repair after system relieved by top entry design
- ⊙ Thermal cycle performance improved and wear compensated by live-loaded design
- ⊙ Any reasonable connections available
- ⊙ Pneumatic and electric actuation available
- ⊙ Full operating pressure at any port
- ⊙ Leak-tight performance testing for every valve at the

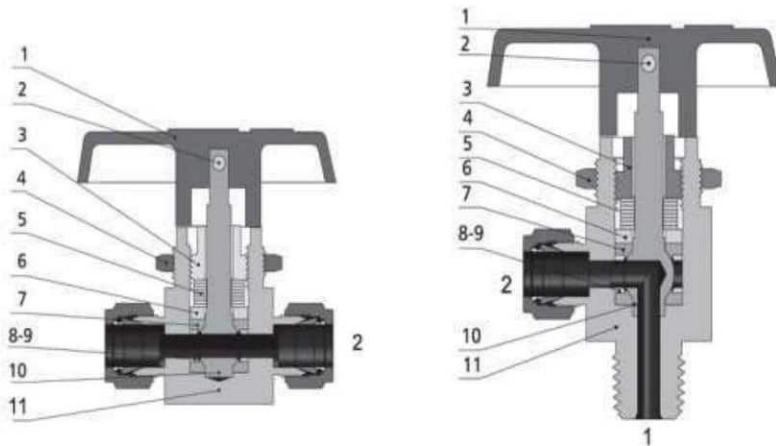
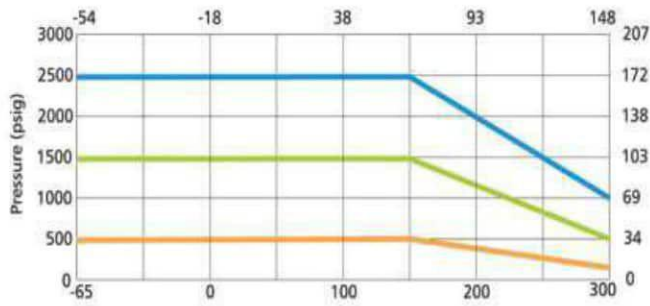
### Pressure vs. Temperature

#### 2-, 3-way, Angle Valves



#### 4-, 5-, 6-, 7-way Valves





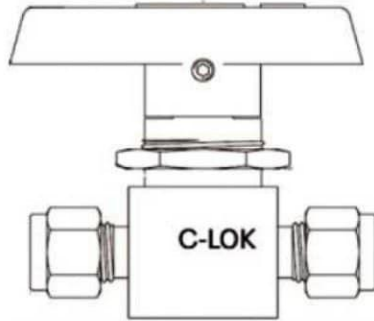
Item	Component	Valve Body Material		
		Stainless Steel	Brass	Alloy 400
Material Grade/ASTM Specification				
1	Handle	Nylon with 316 SS Insert		
2	Set Screw	S17400 SS/A564		
3	Packing Bolt	Powdered metal 300 series SS or 316 SS/A276, A479	Brass CDA 360/B16	Alloy R-405/B164
4	Panel Nut	Powdered metal 300 series SS /B783 or 316 SS/A276, A479	Brass CDA 360/B16	Powdered metal 300 series SS /B783 or 316 SS/A276, A479
5	Dishing Spring	S17700/A693		
6	Gland	Powdered metal 300 series SS/B783 or 316 SS/A276	Brass CDA 360/B16	Alloy 400/B164
7	Packing Seat	PTFE/D1710 or UHMWPE/D4020		
8	Support Ring	Fluorocarbon-coated powdered metal 300 series SS/B783	Fluorocarbon-coated brass powdered metal	Fluorocarbon-coated alloy 400 powdered metal
9	Support Disc			
10	Ball Stem	316 SS/A276	Brass CDA 360/B16	Alloy R-405/B164
11	Body		Brass CDA 360/B16	Alloy 400/B164
Fluorinated-based and silicone-based				
Nonwetted Lubricant		Molybdenum disulfide with hydrocarbon binder coat		

Contact the authorized representative or C-LOK for valves of other materials.

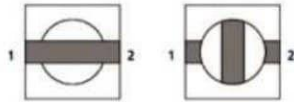


## Dimension

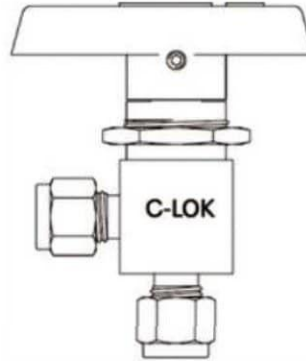
### 2-way Valves



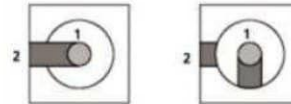
Flow Path



### Angle Pattern Valves



Flow Path

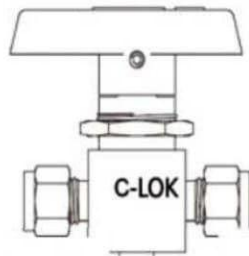


Basic Ordering Number	Connection Type and Size	Orifice in. (mm)
BO□□-FL1-00	1/16" C-LOK	0.052 (1.3)
BO□□-FL2-02	1/8" C-LOK	0.093 (2.4)
BO□□-FL4-03	1/4" C-LOK	0.125 (3.2)
BO□□-FL4-05		0.187 (4.8)
BO□□-FL6-05	3/8" C-LOK	0.281 (7.1)
BO□□-FL6-07		0.406 (10.3)
BO□□-FL8-10	1/2" C-LOK	0.406 (10.3)
BO□□-FL12-10	3/4" C-LOK	0.093 (2.4)
BO□□-ML3-02	3 mm C-LOK	0.125 (3.2)
BO□□-ML6-03	6 mm C-LOK	0.187 (4.8)
BO□□-ML6-05		0.281 (7.1)
BO□□-ML8-05	8 mm C-LOK	0.406 (10.3)
BO□□-ML10-07	10 mm C-LOK	0.281 (7.1)
BO□□-ML12-10	12 mm C-LOK	0.406 (10.3)

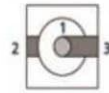
Basic Ordering Number	Connection Type and Size	Orifice in. (mm)
BO□□-FNS2-03	1/8 Female NPT	0.125 (3.2)
BO□□-FNS2-05		0.187 (4.8)
BO□□-FNS4-05	1/4 Female NPT	0.187 (4.8)
BO□□-FNS4-07		0.281 (7.1)
BO□□-FNS6-07	3/8 Female NPT	
BO□□-FNS8-10	1/2 Female NPT	0.406 (10.3)
BO□□-NS4-05	1/4 Male NPT	0.187 (4.8)
BO□□-FRT4-05	1/4 Female ISO Tapered	
BO□□-FRT6-07	3/8 Female ISO Tapered	0.281 (7.1)
BO□□-FRT8-10	1/2 Female ISO Tapered	0.406 (10.3)
BO□□-NS4-FL4-05	1/4 Male NPT to 1/4 C-LOK	0.187 (4.8)
BO□□-FO4-03	1/4" Male FO	0.125 (3.2)
BO□□-FO4-05		0.187 (4.8)
BO□□-MFR4-03	1/4" Male FR	0.125 (3.2)
BO□□-MFR4-05		0.187 (4.8)
BO□□-MFR8-07	1/2" Male FR	0.281 (7.1)
BO□□-MFR8-10		0.406 (10.3)

3-, 4-, 5-, 6- and 7-way Valves

3-way Valve



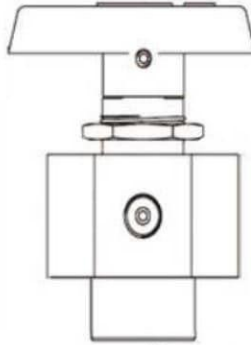
L Flow Path



HL Flow Path



4-, 5-way Valve



4-way Valve



5-way Valve



L Flow Path



HL Flow Path

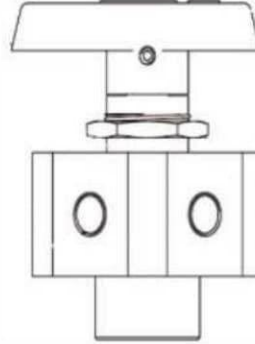


LL Flow Path



H Flow Path

6-, 7-way Valve



6-way Valve



7-way Valve



Basic Ordering Number	Connection Type and Size	Orifice in. (mm)
<b>3-way Valve</b>		
BO□□-FL1-01-3L	1/16" C-LOK	0.052 (1.3)
BO□□-FL2-02-3L	1/8" C-LOK	0.093 (2.4)
BO□□-FL4-03-3L	1/4" C-LOK	0.125 (3.2)
BO□□-FL4-05-3L		0.187 (4.8)
BO□□-FL6-07-3L	3/8" C-LOK	0.281 (7.1)
BO□□-FL8-10-3L	1/2" C-LOK	0.406 (10.3)
BO□□-FL12-10-3L	3/4" C-LOK	

Basic Ordering Number	Connection Type and Size	Orifice in. (mm)
BO□□-ML3-02-3L	3 mm C-LOK	0.093 (2.4)
BO□□-ML6-03-3L	6 mm C-LOK	0.125 (3.2)
BO□□-ML6-05-3L		0.187 (4.8)
BO□□-ML8-05-3L	8 mm C-LOK	
BO□□-ML10-07-3L	10 mm C-LOK	0.281 (7.1)
BO□□-ML12-07-3L	12 mm C-LOK	0.406 (10.3)
BO□□-FNS2-03-3L	1/8 Female NPT	0.125 (3.2)
BO□□-FNS4-05-3L	1/4 Female NPT	0.187 (4.8)
BO□□-FNS4-07-3L		0.281 (7.1)
BO□□-FNS6-07-3L	3/8 Female NPT	
BO□□-FNS8-10-3L	1/2 Female NPT	0.406 (10.3)
BO□□-FRT4-05-3L	1/4 Female BSPT	0.187 (4.8)
BO□□-FRT6-07-3L	3/8 Female BSPT	0.281 (7.1)
BO□□-FRT8-10-3L	1/2 Female BSPT	0.406 (10.3)

#### 4- & 5-way Valve

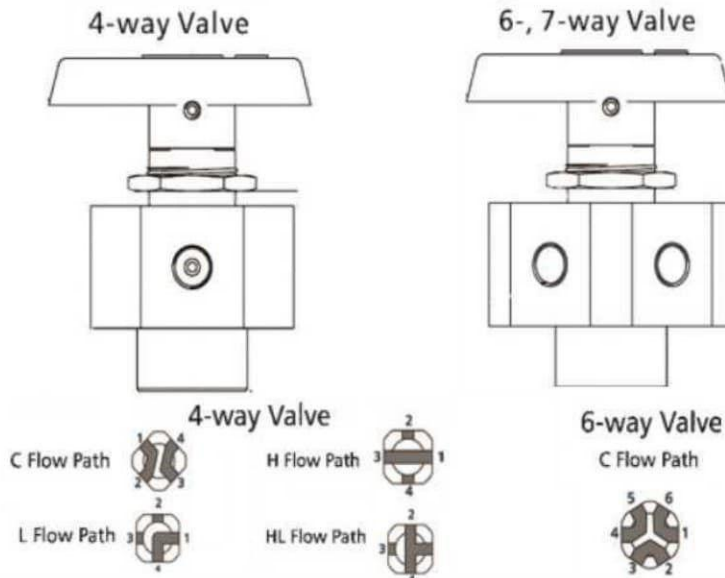
BO□□-FL2-01-4	1/8" C-LOK	0.062 (1.6)
BO□□-FL2-01-5L		
BO□□-FNS2-01-4	1/8 Female NPT	0.062 (1.6)
BO□□-FNS2-01-5L		
BO□□-FNS8-10-4	1/2 Female NPT	0.406 (10.3)
BO□□-FNS8-10-5L		

#### 6- & 7-way Valve

BO□□-FL1-00-6	1/16" C-LOK	0.052 (1.3)
BO□□-FL1-00-7		
BO□□-FL2-01-6	1/8" C-LOK	0.062 (1.6)
BO□□-FL2-01-7		

C-lok Instrument Valve Co.,Ltd.  
**C-LOK**

3-, 4-, 5-, 6- and 7-way Valves



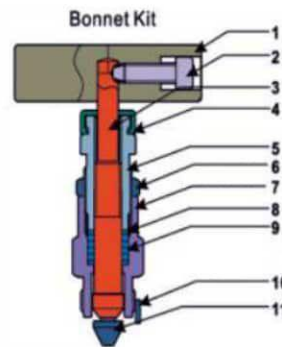
Basic Ordering Number	Connection Type and Size	Orifice in. (mm)
<b>4-way Valve</b>		
BO□□-FL1-00-4C	1/16" C-LOK	0.052 (1.3)
BO□□-FL2-01-4C	1/8" C-LOK	0.062 (1.6)
BO□□-FNS2-01-4C	1/8 Female NPT	
BO□□-FNS8-07-4C	1/2 Female NPT	0.281 (7.1)
<b>6-way Valve</b>		
BO□□-FL1-00-6C	1/16" C-LOK	0.052 (1.3)
BO□□-FL2-01-6C	1/8" C-LOK	0.062 (1.6)

1. C-LOK means C-LOK double ferrule tube fittings.
2. Size and types listed are standard. Other sizes and types are available upon request, refer to the ordering information.
3. Dimension are shown with C-LOK nuts finger-tightened. All dimensions are for reference only and are subject to change. for dimensions not shown above, please contact the authorized representative or C-LOK.

### Standard Bonnet Kit for Gauge Valves & Manifolds

## Features

- ⊙ Pressure up to 6000 psig(414 bar) for standard stainless steel body
- ⊙ Temperature for PTFE packing from -65°F to 450°F (-54°C to 232°C).  
Temperature for Grafoil packing from -65°F to 1200°F (-54°C to 649°C)
- ⊙ Packing below stem thread isolates the thread lubricant from the media
- ⊙ Non-rotating stem tip
- ⊙ Every manifold is factory tested at or above 1000 psig(69 bar) with nitrogen, 3% valves have another test at 1.5 times maximum working pressure with pure water
- ⊙ Orifice: 0.157"(4.0mm), CV: 0.35



## Materials of Construction

Item	Part	Material				
1	Handle	Stainless Steel				
2	Set Screw	Stainless Steel				
3	Stem	316SS				
4	Dust Cap	Nylon				
5	Gland	316SS (304SS)				
6	Lock Nut	316SS (304SS)				
7	Bonnet	316SS				
8	Packing Washer	316SS				
9	Packing	PTFE	PTFE	Grafoil	Grafoil	PEEK
10	Lock Pin	304SS				
11	Stem Tip	316SS	PCTFE	316SS	Stellite	316SS
	Body	316SS (321SS, 304SS)				

## Technical Data

Working pressure in psig(bar)

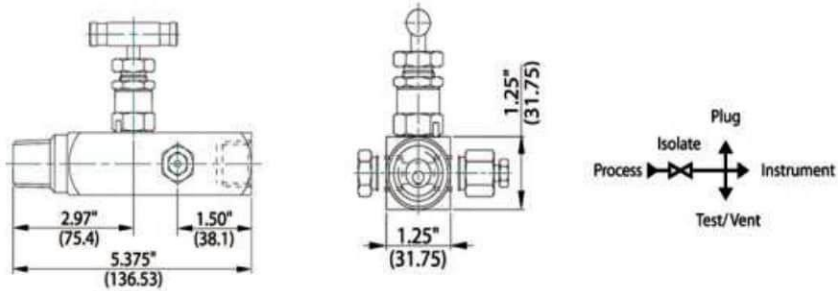
Temperature		Valve Material Stainless Steel			Valve Material Brass
°F	°C	Packing Material			Packing Material
		PTFE	Grafoil	PEEK	PTFE
-65~100	-53~37	6000(414)	6000(414)	6000(414)	3000(207)
200	93	5160(356)	5160(356)	5160(356)	2350(162)
250	121	4910(338)	4910(338)	4910(338)	2200(151)
300	148	4660(321)	4660(321)	4660(321)	2050(141)
350	176	4470(307)	4470(307)	4470(307)	1470(101)
400	204	4280(295)	4280(295)	4280(295)	390(27)
450	232	4130(285)	4130(285)	4130(285)	
500	260		3980(274)	3980(274)	
550	288		3880(268)	3880(268)	
600	315		3760(259)	3780(261)	
650	343		3690(254)		
700	371		3600(248)		
750	399		3510(242)		
800	426		3460(238)		
850	454		3380(232)		
900	482		3280(225)		
950	510		3220(221)		
1000	538		3030(208)		
1050	566		3000(207)		
1100	593		2685(184)		
1150	621		2285(157)		
1200	649		1715(118)		

## Gauge Valve(Block-and-Bleed Manifolds)

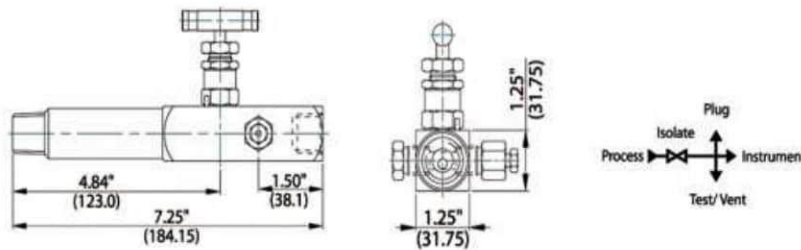
### Features

- ⊙ A valve with 3 outlets in one block for isolation, bleeding of instruments

Model Number	Inlet/process	Outlet/instrument	Test/Vent/Plug
GV□□-NS8-FNS8	1/2" Male NPT	1/2" Female NPT	1/2" Female NPT
GV□□-NS8-FNS8-G			



Model Number	Inlet/process	Outlet/instrument	Bleed
GV□□-NS8-FNS8-E	1/2" Male NPT	1/2" Female NPT	1/2" Female NPT
GV□□-NS8-FNS8-EG			

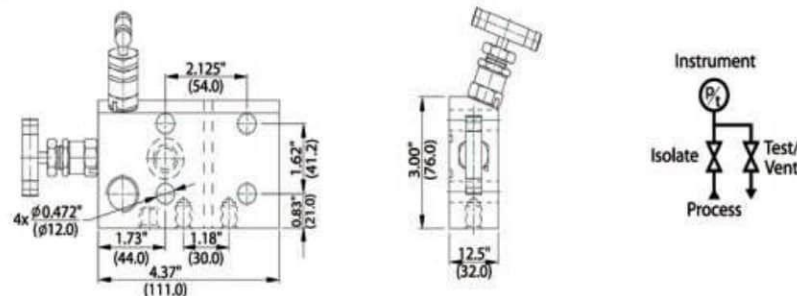


## Two-Valve Manifolds

### Features

- ⊙ Two valves in one block for isolation, calibration, test and bleeding of instruments

Model Number	Inlet/process	Outlet/instrument	Test/vent
2D□□-FNS8-A	1/2" Female NPT	Flanged	1/4" Female NPT
2D□□-FNS8-AG			



This manifold is supplied with one PTFE manifold to instrument sealing rings and four 7/16" UNF high tensile bolts

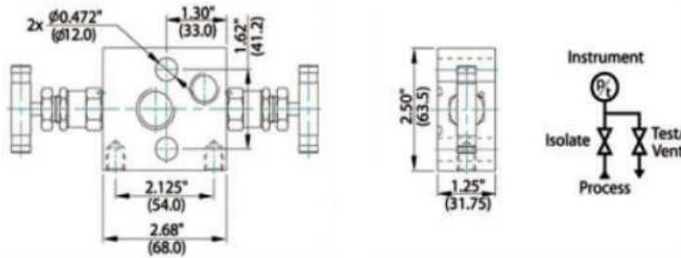
☆ Insert material designator in □□ to get a complete model number, see ordering information



# C-lok Instrument Valve Co.,Ltd.

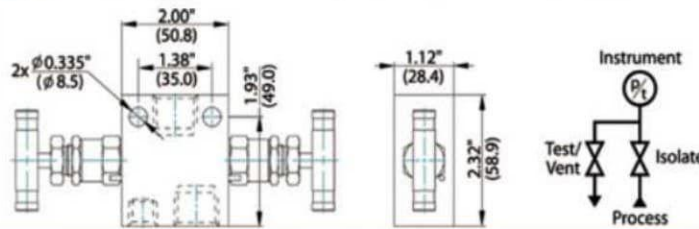
# C-LOK

Model Number	Inlet/process	Outlet/instrument	Test/vent
2D□□-FNS8-L	1/2" Female NPT	Flanged	1/4" Female NPT
2D□□-FNS8-LG			

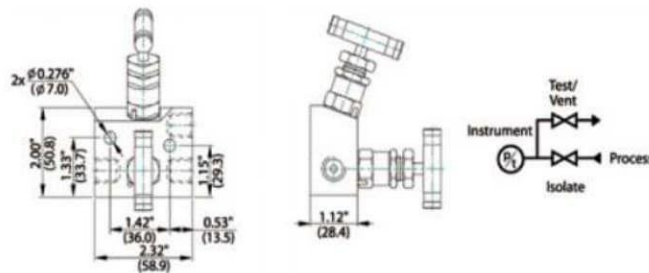


This manifold is supplied with one PTFE manifold to instrument sealing rings and two 7/16" UNF high tensile bolts

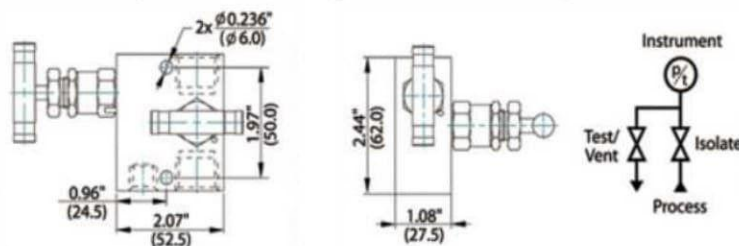
Model Number	Inlet/process	Outlet/instrument	Test/vent
2R□□-FNS8-L	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT
2R□□-FNS8-LG			



Model Number	Inlet/process	Outlet/instrument	Test/vent
2R□□-FNS4-A	1/4" Female NPT	1/4" Female NPT	1/4" Female NPT
2R□□-FNS4-AG			

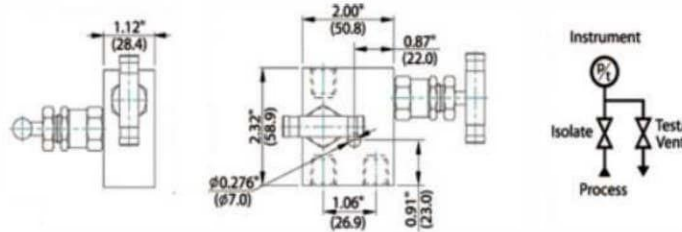


Model Number	Inlet/process	Outlet/instrument	Test/vent
2R□□-FNS8-V	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT
2R□□-FNS8-VG			

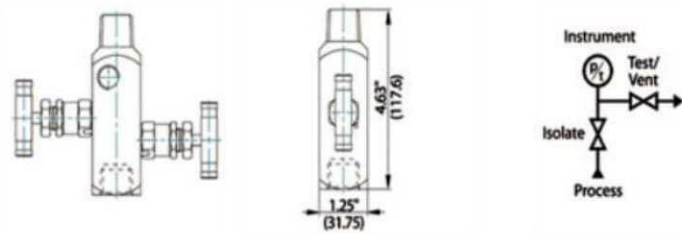


★ Insert material designator in □□ to get a complete model number, see ordering information

Model Number	Inlet/process	Outlet/instrument	Test/vent
2R□□-FNS4-C	1/4" Female NPT	1/4" Female NPT	1/4" Female NPT
2R□□-FNS4-CG			



Model Number	Inlet/process	Outlet/instrument	Test/vent
2D□□-FNS8-NS8-H	1/2" Female NPT	1/2" Male NPT	1/4" Female NPT
2D□□-FNS8-NS8-HG			
2D□□-NS8-H	1/2" Male NPT	1/2" Male NPT	1/4" Female NPT
2D□□-NS8-HG			

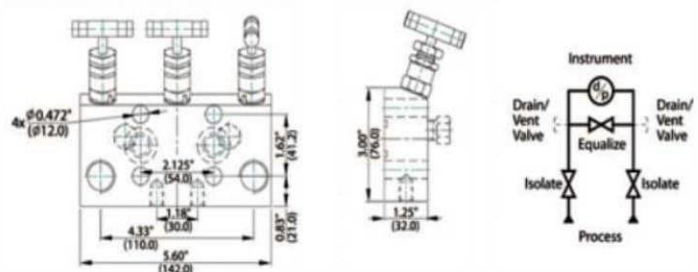


## Three-Valve Manifolds

### Features

- ☉ Three valves in one block for isolation, equalization, bleeding of instruments

Model Number	Inlet/process	Outlet/instrument	Test/vent
3D□□-FNS8-L	1/2" Female NPT	Flanged	Optional
3D□□-FNS8-LG			
3D□□-FL8-L	1/2" C-LOK	Flanged	Optional
3D□□-FL8-LG			



This manifold is supplied with two PTFE manifold to instrument sealing rings and four 7/16" UNF high tensile bolts

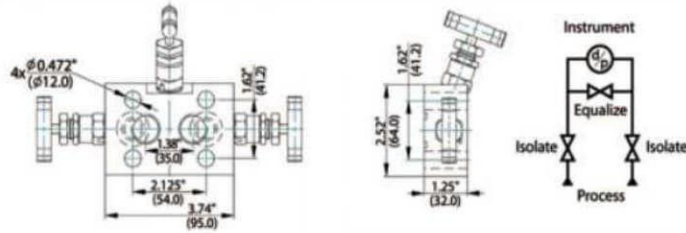
Option: Use Model No. Suffix -T for 1/4" female NPT test/vent ports and plus

☆ Insert material designator in □□ to get a complete model number, see ordering information

# C-lok Instrument Valve Co.,Ltd.

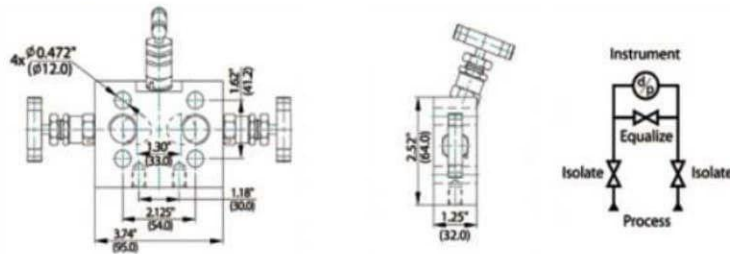
# C-LOK

Model Number	Inlet/process	Outlet/instrument
3D□□-FNS8-A	1/2" Female NPT	Flanged
3D□□-FNS8-AG		
3D□□-FL6-A	3/8" FITOK	Flanged
3D□□-FL6-AG		



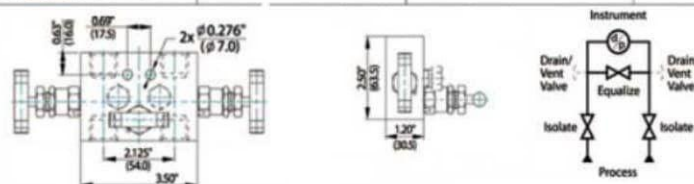
This manifold is supplied with two PTFE manifold to instrument sealing rings and four 7/16" UNF high tensile bolts

Model Number	Inlet/process	Outlet/instrument
3D□□-FNS8-C	1/2" Female NPT	Flanged
3D□□-FNS8-CG		
3D□□-FL6-C	3/8" C-LOK	Flanged
3D□□-FL6-CG		



This manifold is designed specifically for mounting to the 3051 series of differential pressure transmitters with outlets positioned to avoid the use of the adaptor/convertor flange. The manifold is not supplied with sealing rings, four 7/16" UNF high tensile bolts are provided

Model Number	Inlet/process	Outlet/instrument	Test/vent
3R□□-FNS8-V	1/2" Female NPT	1/2" Female NPT	Optional
3R□□-FNS8-VG			
3R□□-FL8-V	1/2" C-LOK	1/2" C-LOK	Optional
3R□□-FL8-VG			



Option: Use Model No. Suffix -T for 1/4" female NPT test/vent ports and plugs

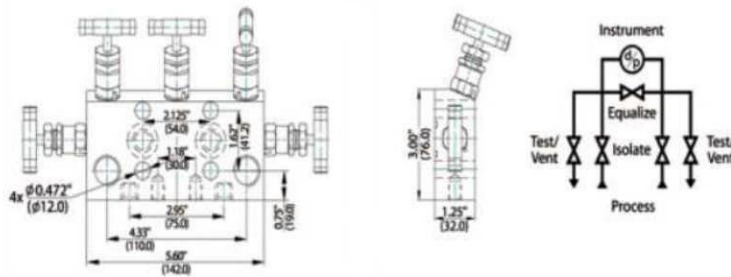
☆ Insert material designator in □□ to get a complete model number, see ordering information

## Five-Valve Manifolds

### Features

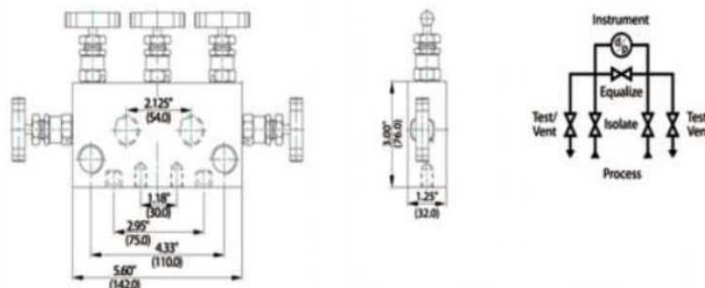
- Five valves in one block for isolation, equalization, testing and venting of instruments

Model Number	Inlet/process	Outlet/instrument	Test/vent
5D□□-FNS8-A	1/2" Female NPT	Flanged	1/4" Female NPT
5D□□-FNS8-AG			
5D□□-FL8-A	1/2" C-LOK	Flanged	1/4" Female NPT
5D□□-FL8-AG			



This manifold is supplied with two PTFE manifold to instrument sealing rings and four 7/16" UNF high tensile bolts

Model Number	Inlet/process	Outlet/instrument	Test/vent
5R□□-FNS8-V	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT
5R□□-FNS8-VG			
5R□□-FL8-FNS8-V	1/2" C-LOK	1/2" Female NPT	1/4" Female NPT
5R□□-FL8-FNS8-VG			

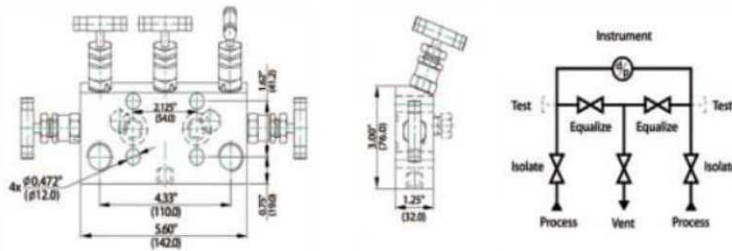


# C-lok Instrument Valve Co.,Ltd.

# C-LOK

- Five-valve metering manifold including two equalizing valves is available for fiscal metering or gas flow measurements

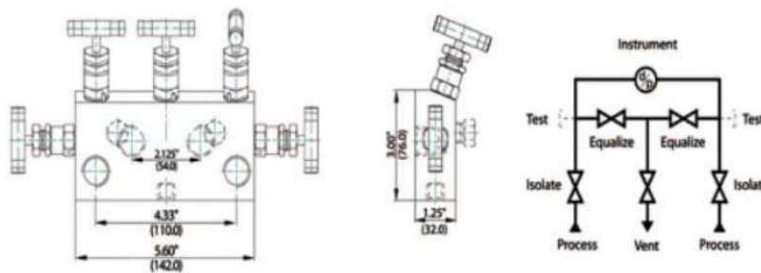
Model Number	Inlet/process	Outlet/instrument	Vent	Test
5D□□-FNS8-B	1/2" Female NPT	Flanged	1/4" Female NPT	Optional
5D□□-FNS8-BG				
5D□□-FL8-B	1/2" C-LOK	Flanged	1/4" Female NPT	Optional
5D□□-FL8-BG				



This manifold is supplied with two PTFE manifold to instrument sealing rings and four 7/16 UNF high tensile bolts. Optional M10x1.5 mounting holes at the bottom of the body

Option: Use Model No.Suffix -T for 1/4" female NPT test ports and plugs

Model Number	Inlet/process	Outlet/instrument	Vent	Test
SR□□-FNS8-B	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT	Optional
SR□□-FNS8-BG				
SR□□-FL8-FNS8-B	1/2" C-LOK	1/2" Female NPT	1/4" Female NPT	Optional
SR□□-FL8-FNS8-BG				



Optional M10x1.5 mounting holes at the bottom of the body

Option: Use Model No.suffix -T for 1/4" female NPT test ports and plugs

Note: For special types and sizes, consult your local distributor or the Factory's Sales Center

☆ Insert material designator in □□ to get a complete model number, see ordering information

### Features

Reliable prevent back flow function and high Cv flow rates

#### C1, C2, and C3 Series

Fixed cracking pressures Can be install in any directions

##### C1 Series

- Resilient O-ring seat design provides cushioned and noise-free closing, and resists flow
- Maximum working pressure: 3000 psig (207 bar)
- Working temperatures:-10°F to 375°F (-23°C to 190°C)
- Cracking pressures:1/3 to 25 psig (0.02 to 1.7 bar)
- Various end connections and many materials of construction

##### C2 Series

- The floating O-ring is cleaned continually to protect sealing from system contaminants
- Maximum working pressure: 6000 psig(414 bar)
- Working temperatures:-10°F to 400°F (-23°C to 204°C)
- Cracking pressures:1/3 to 25psig (0.02 to 1.7 bar)
- Various end connections and many materials of construction

##### C3 Series

- Compact, one piece body
- Maximum working pressure: 3000 psig(207 bar)
- Working temperature:-10°F to 375°F (-23°C to 190°C)
- Cracking pressures:1/3 to 25 psig(0.02 to 1.7 bar)
- Various end connections and many materials of construction

##### C4 and C5 series

Adjustable Cracking pressures various optional springs install in any directions

##### C4 Series

- Maximum working pressure: 3000 psig(207 bar)
- Working temperatures:-10°F to 375°F (-23°C to 190°C)
- Cracking pressures:3 to 600 psig(0.2 to 41.3 bar)
- Various end connections and many materials of construction

##### C5 Series

- Compact, one piece body
- Maximum working pressure: 3000 psig(207 bar)
- Working temperatures:-10°F to 400°F (-23°C to 204°C)
- Cracking pressures:3 to 600 psig (0.2 to 41.3 bar)
- Various end connections and many materials of construction

##### C6 series

Union bonnet design All-stainless steel structure Horizontal installation

- Maximum working pressure:6000 psig (414 bar)
- Working temperatures:-65°F to 900°F (-53°C to 482°C)
- Many options for various end connections
- Provide 316 SS valve body and brass valve body

## Pressure vs. Temperature

### C1 , C3 , C4 , C5 Series

#### FKM seat in 316 SS body and buna N Brass body

Temperature		Valve body material	
		316 SS	Brass
°F	°C	Working pressure, psig (bar)	
-10 ~100	-23~37	3000(207)	3000(207)
200f	93	2575(177)	2600(179)
250	121	2450(168)	2405(165)
300	148	2325(160)	-
375	190	2186(150)	-

### C2 Series

#### FKM seat in 316 SS body

Temperature		Valve body material
		316 SS
°F	°C	Working pressure, psig (bar)
-10 ~100	-2~37	6000(414)
200f	93	5160(355)
250	121	4910(338)
300	148	4660(321)
375	190	4280(294)

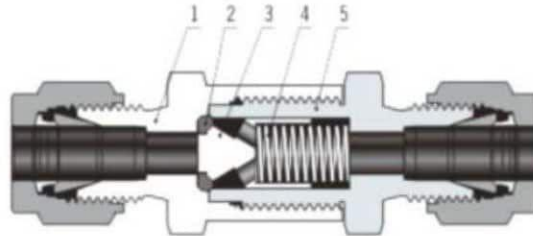
Note: Consult the factory for the curves of other materials.

### C6 Series

#### 316 SS body

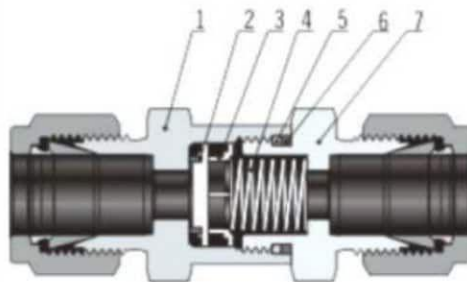
Temperature		Valve body material
		316 SS
°F	°C	Working pressure, psig (bar)
-65 ~100	-53~37	6000(414)
200	93	5160(356)
250	121	4910(338)
300	148	4660(321)
350	176	4470(307)
400	204	4280(295)
450	232	4130(285)
500	260	3980(274)
600f	315	3760(259)
650	343	3690(254)
700	371	3600(248)
750	399	3150(242)
800	426	3460(238)
850	454	3380(232)
900	482	3280(225)

## C1 Series



Component		Valve Material Grade/ASTM Specification	
		316 SS	Brass
1	Inlet body	316 SS/A479	Brass 360/B16
2	O-ring	Fluorocarbon FKM	Buna N
3	Poppet	316 SS/A479	Brass 360/B16
4	Spring	302 SS/A313	302 SS/A313
5	Outlet body	316 SS/A479	Brass 360/B16

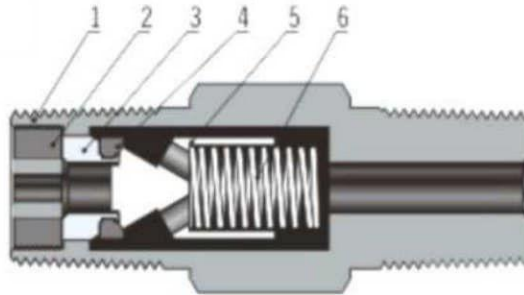
## C2 Series



Component	Valve Material Grade/ASTM Specification	
1	Inlet body	316 SS/A479
2	Poppet	Fluorocarbon FKM-bonded 316 SS/A479
3	Poppet stop	316 SS/A240
4	Spring	302 SS/A313
5	O-ring	Fluorocarbon FKM
6	Backup ring	PTEE/D1710
7	Outlet body	316 SS/A479

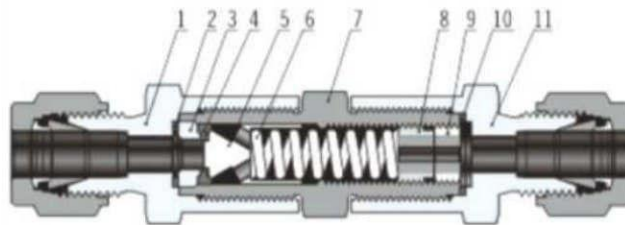


### C3 Series



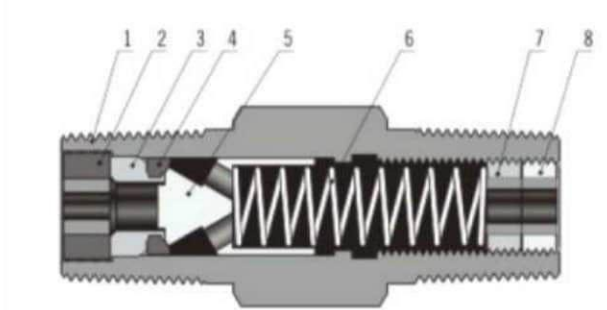
Component		Valve Material Grade/ASTM Specification	
		316 SS	Brass
1	body	316 SS/A276 or479	Brass 360/B16
2	Locking screw	316 SS/A276	Brass 360/B16
3	Insert	316 SS/A276	Brass 360/B16
4	O-ring	Fluorocarbon FKM	Buna N
5	Poppet	316 SS/A479	Brass 360/B16
6	Spring	302 SS/A313	302 SS/A313

### C4 Series



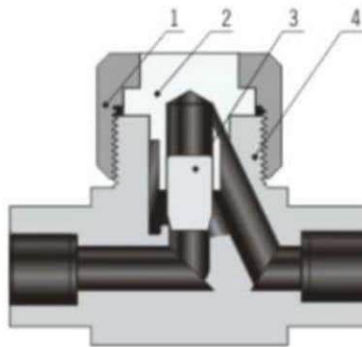
Component		Valve Material Grade/ASTM Specification	
		316 SS	Brass
1	Inlet body	316 SS/A479	Brass 360/B16
2	Inlet gasket	PTEE-coated 316 SS/A276	PTEE-coated 316 SS/A276
3	Insert	316 SS/A479	Naval brass 360/B21
4	O-ring	Fluorocarbon FKM	Fluorocarbon FKM
5	Poppet	316 SS/A479	Brass 360/B16
6	Spring	302 SS/A313	302 SS/A313
7	Center body	316 SS/A479	Brass 360/B16
8	Adjusting screw	316 SS/A276	316 SS/A276
9	Locking nut	316 SS/A276	316 SS/A276
10	Outlet gasket	PTEE-coated 316 SS/A276	PTEE-coated 316 SS/A276
11	Outlet body	316 SS/A479	Brass 360/B16

### C5 Series



Component		Valve Material Grade/ASTM Specification	
		316 SS	Brass
1	Body	316 SS/A276	Brass 360/B16
2	Locking nut	316 SS/A479	Brass 360/B16
3	Insert	316 SS/A479	Brass 360/B16
4	O-ring	Fluorocarbon FKM	Fluorocarbon FKM
5	Poppet	316 SS/A479	Brass 360/B16
6	Spring	302 SS/A313	302 SS/A313
7	Adjusting screw	316 SS/A276	316 SS/A276
8	Locking screw	316 SS/A276	316 SS/A276

### C6 Series



Component	Valve Material Grade /ASTM Specification	
1	Bonnet nut	Brass 360/A479
2	Bonnet	Brass 360/A479
3	Poppet	Brass 360/A564
4	Body	316 SS/A479

\*All valves use same lubricants, they are silicone-based and molybdenum disulfide-based.

\*Consult the factory for bill of material for other body materials.

## Cracking Pressure and Resealed Pressure

Series	Nominal Cracking Pressures psig (bar)	Cracking pressures range psig (bar)	Reseal pressure range psig (bar)
C1 Series	1/3 (0.02) 1 (0.06) 10 (0.68) 25 (1.7)	1/3~3 (0.02~0.2) 1~4 (0.06~0.27) 7~15 (0.48~1.0) 20~30 (1.3~2.0)	Max 6(0.41) Max 6(0.41) 3(0.2) or higher 17(1.1) or Higher
C2 Series	1/3 (0.02) 1 (0.06) 5 (0.34) 10 (0.68) 25 (1.7)	1/3~3 (0.02~0.2) 1~4 (0.06~0.27) 3~9 (0.20~0.62) 7~15 (0.48~1.0) 20~30 (1.3~2.0)	Max 6(0.41) Max 2(0.13) 3(0.2) or higher 17(1.1) or higher
C3 Series	1/3 (0.02) 1 (0.06) 10 (0.68) 25 (1.7)	1/3~3 (0.02~0.2) 1~4 (0.06~0.27) 7~15 (0.48~1.0) 20~30 (1.3~2.0)	Max 6(0.41) Max 6(0.41) 3(0.2) or higher 17(1.1) or Higher
C4 Series	3~50 (0.2~3.4) 50~150 (3.4~10.3) 150~350 (10.3~24.1) 350~600 (24.1~41.3)	—	shown in figure below
C5 Series			
C6 Series	1/3 (0.02) 1 (0.06)	1/3~1/2 (0.02~0.03) 1~4 (0.06~0.27)	Max 6(0.41) Max 5(0.34)

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# C-LOK



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