

### Valve Series
















- Pressure Regulator
- Ball Valve
- Needle Valve
- Check Valve
- Relief Valve
- Double Block & Bleed Valve
- Manifold Valve
- Gauge Root Valve
- Filter
- Bellows Valve
- Globe Valve
- Pneumatic Actuator Valve
- Electric Actuator Valve
- Special Alloy Valve
- UHP Valve
















### Hose & Tube












- Flexible Metal Hose
- Seamless Tubing
- Sample Cylinder













- Tube Fitting
- Thread Fitting
- Weld Fitting
- UHP Fitting



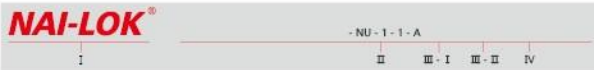
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### Ordering Information



I :NAI-LOK tube fitting II :fitting Type III:fitting size III - I :Tube O.D. III - II :Pipe Thread size or Tube Size IV :Material  
I :NAI-LOK Tube Fitting  
II :Type of Fitting

NU : Union NMC : Male Connector NUE : Union Elbow NUT:Union Tee  
NWC : Weld connector NR : Reducer NSMC : SAE/MS O-Ring Male Connector NAU:An union NP:Plug

※Referred to catalogue Index

#### III :Size of Fitting

##### III - I :Tube O.D

Fractional Tube	O.D (Inch)	1/16	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1-1/4	1-1/2	2
Identify		1	2	3	4	5	6	8	10	12	14	16	20	24	32
Metric Tube	O.D (mm)	2	3	4	6	8	10	12	16	20	22	25	28	32	38
Identify		2M	3M	4M	6M	8M	10M	12M	16M	20M	22M	25M	28M	32M	38M

##### III - II :Pipe Thread Size or Tube Size

SIZE (INCH)	1/8	1/4	3/8	1/2	3/4	1	Applied Size
ISO TAPERED	2R	4R	6R	8R	12R	16R	JIS B0203(PT), DIN2999, BSPT
NPT	2N	4N	6N	8N	12N	16N	ANSI B1.20.1
ISO PARALLEL	2G	4G	6G	8G	12G	16G	JIS B0202(PF), ISO 228/1, BSPP
UNIFIED SCREW	2U	4U	6U	8U	12U	16U	AMERICAN STANDARD UNIFIED SCREW THREAD

#### IV :Material

MATERIAL	Hastelloy C-276	Duplex Steel	Titanium	Stainless Steel 316/316L	Monel Alloy 400	Inconel Alloy 600
Identify	HC	DS	TI	SS	M	INC

#### IV :Material

Example	
* NMCB-6N-SS316L NAI-LOK MALE CONNECTOR, Tube O.D.: 1/2", Thread 3/8"NPT Stainless Steel 316L	* In case of Stainless Steel, It is possible to express SS316 or 316 itself.
TEES and CROSSES	

TEES and CROSSES



• TEES are described by the size of 1 & 2 and then the branch (3).  
• CROSSES are described by the size of 1 & 2 and then the branch (3 & 4).  
Ex. 1) NMB16 - 6N - SS316  
MALE BRANCH TEE 3/8" x 3/8" x 3/8" NPT Stainless steel 316  
Ex. 2) NMC - B - M  
UNION CROSS 1/2" x 1/2" 1/2" x 1/2" Monel 400

\* Products are for reference only and are subject to change on client's request.

NAI-LOK Tube Fitting shall be delivered to customer with completely assembled state, so be ready to immediate use only with finger-tightening. Disassembling the product prior to use can be a cause of leakage or a cause of inflow something into the fitting's inside. Do not use for the poor quality tubes, which can be a cause of leakage or functional deterioration.

NAI-LOK Tube Fittings are installed in three easy steps:

#### Step 1

Insert the tubing into NAI-LOK Tube Fitting's inside. At this moment, make sure that the tubing is completely contact with the shoulder of fittings and then finger-tighten the nut.

#### Step 2

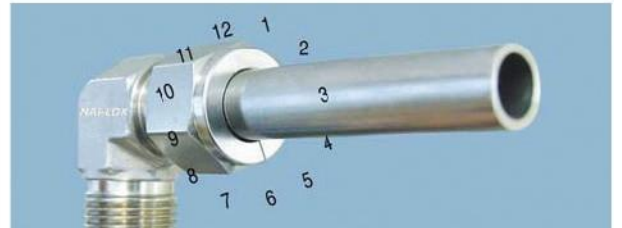
Before tightening the NAI-LOK nut, mark the starting point of turning at the 6 o'clock position.

#### Step 3

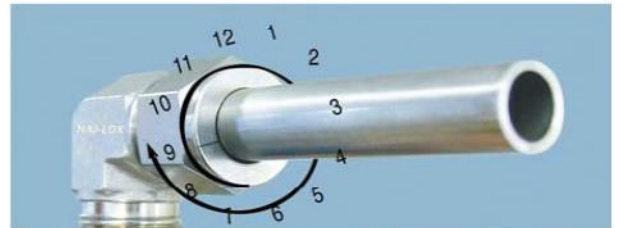
Hold the fitting body safely with a backup wrench and tighten the nut 1-1/4 turns. (pay attention to the mark of starting point of turning, make one revolution and place at 9 o'clock position. Marking the starting point of turning at the 6 o'clock position will let you notice where the starting point is). After 1-1/4 revolution, when the starting point is placed at 9 o'clock position, you can easily confirm and see that NAI-LOK Tube Fitting is installed accurately. After 1-1/4 revolution of the NAI-LOK nut by fingertightening, make sure whether it is sufficiently tightened using by the Gap Inspection Gage.



Step1



Step2



Step3

# Technological Data

Table 2 Stainless Steel Tubing  
Stainless Steel tubing which is high quality (such as 316L, Hastelloy, Monel, Duplex Nickel Alloy), fully annealed and seamless or welded, ASTM A269, A213 or equivalent.

## STAINLESS STEEL FRACTIONAL TUBE

Tube O.D. (inch)	TUBE WALL THICKNESS (inch)												
	0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/16	5600	6800	8100	9400	12000								
1/8						8500	10900						
3/16						5400	7000	10200					
1/4						4000	5100	7500	10200				
5/16							4000	5800	8000				
3/8							3300	4800	6500				
1/2							2600	3700	5100	6700			
5/8								2900	4000	5200	6000		
3/4								2400	3300	4200	4900	5800	
7/8								2000	2800	3600	4200	4800	
1									2400	3100	3600	4200	4700

## STAINLESS STEEL METRIC TUBE

Tube O.D. (mm)	TUBE WALL THICKNESS (mm)												
	0.71	0.89	1.00	1.25	1.50	1.65	2.00	2.11	2.41	2.50	2.77	3.00	3.05
3	10800	13800	15300										
4	7900	10100	11500	14400									
6	5000	6500	7400	9400	11500	12700							
8		4700	5800	6800	8400	9300							
10		3700	4200	5300	6500	7300							
12		3000	3400	4400	5300	5900	6800	7200					
16			2500	3200	3900	4300	5300	5700	6600	6800			
18				2800	3400	3800	4700	5000	5800	6000	6700		
20				2500	3000	3400	4200	4400	5100	5300	6000		
22				2300	2800	3000	3800	4000	4600	4800	5400		
25				2000	2400	2700	3300	3500	4000	4200	4700	5100	5200

\* Tubing working pressure (psi) /

Allowable stress value between -20° F and 100° F (-28.9°C ~ 37.8°C) is 19,500 psi  
Safety factor is 4 (Ultimate tensile strength is 75,000 psi)

The above data are based on the minimum wall thickness and the maximum O. D. allowed by and under the standard of ASTM A269.

The dimensions are not considered to erosion or corrosion.

**NU**  
*Union*



Connects Fractional Tubes

Part No.	Tube O.D.	
	D(inch)	D(mm)
NU - 1	1/16	1.58
NU - 2	1/8	3.17
NU - 3	3/16	4.76
NU - 4	1/4	6.35
NU - 5	5/16	7.93
NU -6	3/8	9.52
NU -8	1/2	12.70
NU -10	5/8	15.87
NU -12	3/4	19.05
NU -14	7/8	22.22
NU -16	1	25.40

Connects Metric Tubes

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

**NRU**  
*Reducing Union*



Connects Fractional Tubes

Part No.	Tube O.D.		Reduced O.D	
	D(inch)	O(mm)	h(inch)	D1(mm)
NRU 2 - 1	1/8	3.17	1/16	1.58
NRU 3 - 2	3/16	4.76	1/8	3.17
NRU 4 - 2	1/4	6.35	1/8	3.17
NRU 4 - 3	1/4	6.35	3/16	4.76
NRU 5 - 2	5/16	7.93	1/8	3.17
NRU 5 - 4	5/16	7.93	1/4	6.35
NRU 6 - 2	3/8	9.52	1/8	3.17
NRU 6 - 4	3/8	9.52	1/4	6.35
NRU 6 - 5	3/8	9.52	5/16	7.93
NRU 8 - 2	1/2	12.70	1/8	3.17
NRU 8 - 4	1/2	12.70	1/4	6.35
NRU 8 - 6	1/2	12.70	3/8	9.52
NRU 10 - 6	5/8	15.87	3/8	9.52
NRU 10 - 8	5/8	15.87	1/2	12.70
NRU 12 - 4	3/4	19.05	1/4	6.35
NRU 12 - 6	3/4	19.05	3/8	9.52
NRU 12 - 8	3/4	19.05	1/2	12.70
NRU 12 - 10	3/4	19.05	5/8	15.87
NRU 16 - 8	1	25.40	1/2	12.70
NRU 16 - 12	1	25.40	3/4	19.05

**NRU**  
*Reducing Union*



Connects Metric Tubes

Part No.	Tube O.D.	
	D(mm)	D1(mm)
NRU 6M- 3M	6	3
NRU 6M- 4M	6	4
NRU 8M- 6M	8	6
NRU 10M- 6M	10	6
NRU 10M- 8M	10	8
NRU 12M- 6M	12	6
NRU 12M- 8M	12	8
NRU 12M- 10M	12	10
NRU 16M- 12M	16	12
NRU 25M- 18M	25	18
NRU 25M- 20M	25	20

**NRU**  
*Reducing Union*



Connects Metric Tubes To Fractional Tubes

Part No.	Tube O.D.		Reduced O.D	
	D(mm)	D1(inch)	D1(inch)	D1(mm)
NRU 3M - 2	3	1/8		3.17
NRU 4M - 2	4	1/8		3.17
NRU 4M - 4	4	1/4		6.35
NRU 6M - 2	6	1/8		3.17
NRU 6M - 4	6	1/4		6.35
NRU 6M - 5	6	5/16		7.93
NRU 8M - 4	8	1/4		6.35
NRU 10M - 2	10	1/8		3.17
NRU 10M - 4	10	1/4		6.35
NRU 10M - 5	10	5/16		7.93
NRU 10M - 6	10	3/8		9.52
NRU 12M - 5	12	5/16		7.93
NRU 12M - 6	12	3/8		9.52
NRU 12M - 8	12	1/2		12.70
NRU 15M - 8	15	1/2		12.70
NRU 16M - 10	16	5/8		15.87
NRU 18M - 12	18	3/4		19.05
NRU 20M - 12	20	3/4		19.05
NRU 20M - 16	20	1		25.40
NRU 25M - 16	25	1		25.40

**NBHRU**  
*Bulkhead Reducing Union*



Connects Fractional Tubes

Part No.	Tube O.D.		Reduced O.D	
	D(inch)	D(mm)	D1(inch)	D1(mm)
NBHRU 4 - 2	1/4	6.35	1/8	3.17
NBHRU 6 - 4	3/8	9.52	1/4	6.35
NBHRU 8 - 4	1/2	12.70	1/4	6.35

**NBHU**  
*Bulkhead Union*


Connects Fractional Tubes

Part No.	Tube O.D.	
	D(inch)	D(mm)
NBHU- 1	1/16	1.58
NBHU- 2	1/8	3.17
NBHU- 3	3/16	4.76
NBHU- 4	1/4	6.35
NBHU- 5	5/16	7.93
NBHU- 6	3/8	9.52
NBHU- 8	1/2	12.70
NBHU- 10	5/8	15.87
NBHU- 12	3/4	19.05
NBHU- 14	7/8	22.22
NBHU- 16	1	25.40

Connects Metric Tubes

Part No.	Tube O.D.
	D(mm)
NBHU- 3M	3
NBHU- 4M	4
NBHU- 6M	6
NBHU- 8M	8
NBHU- 10M	10
NBHU- 12M	12
NBHU- 15M	15
NBHU- 16M	16
NBHU- 18M	18
NBHU- 20M	20
NBHU- 22M	22
NBHU- 25M	25

 h1\* : Metric Tubes Bulkhead Hexagon application only  
 All dimensions in millimeters unless specified as "inch"

**NMC**  
*Male Connector*


Connects Fractional Tubes To Female NPT Thread

Part No.	Tube O.D.		NPT Male Pipe Size (in)
	D(inch)	D(mm)	
NMC-1-1N	1/16	1.58	1/16
NMC-1-2N	1/16	1.58	1/8
NMC-2-2N	1/8	3.17	1/8
NMC-2-4N	1/8	3.17	1/4
NMC-2-6N	1/8	3.17	3/8
NMC-2-8N	1/8	3.17	1/2
NMC-3-2N	3/16	4.76	1/8
NMC-3-4N	3/16	4.76	1/4
NMC-4-2N	1/4	6.35	1/8
NMC-4-4N	1/4	6.35	1/4
NMC-4-6N	1/4	6.35	3/8
NMC-4-8N	1/4	6.35	1/2
NMC-4-12N	1/4	6.35	3/4
NMC-5-2N	5/16	7.93	1/8
NMC-5-4N	5/16	7.93	1/4
NMC-5-6N	5/16	7.93	3/8
NMC-6-2N	3/8	9.52	1/8
NMC-6-4N	3/8	9.52	1/4
NMC-6-6N	3/8	9.52	3/8
NMC-6-8N	3/8	9.52	1/2
NMC-6-12N	3/8	9.52	3/4
NMC-8-2N	1/2	12.7	1/8
NMC-8-4N	1/2	12.70	1/4
NMC-8-6N	1/2	12.70	3/8
NMC-8-8N	1/2	12.70	1/2
NMC-8-12N	1/2	12.70	3/4
NMC-8-16N	1/2	12.70	1
NMC-10-6N	5/8	15.87	3/8
NMC-10-8N	5/8	15.87	1/2
NMC-10-12N	5/8	15.87	3/4

**NMC**  
**Male Connector**



Connects Fractional Tube To Female NPT Thread

Part No.	Tube O.D.		NPT Male Pipe Size(in)
	D(inch)	D(mm)	
NMC-12-8N	3/4	19.05	1/2
NMC-12-12N	3/4	19.05	3/4
NMC-12-16N	3/4	19.05	1
NMC-14-12N	7/8	22.22	3/4
NMC-14-16N	7/8	22.22	1
NMC-16-8N	1	25.40	1/2
NMC-16-12N	1	25.40	3/4
NMC-16-16N	1	25.40	1

Connects Fractional Tube To Female ISO Tapered Thread

Part No.	Tube O.D.		NPT Male Pipe Size(in)
	D(inch)	D(mm)	
NMC-2-2R	1/8	3.17	1/8
NMC-2-4R	1/8	3.17	1/4
NMC-4-2R	1/4	6.35	1/8
NMC-4-4R	1/4	6.35	1/4
NMC-4-6R	1/4	6.35	3/8
NMC-4-8R	1/4	6.35	1/2
NMC-5-2R	5/16	7.93	1/8
NMC-5-4R	5/16	7.93	1/4
NMC-6-2R	3/8	9.52	1/8
NMC-6-4R	3/8	9.52	1/4
NMC-6-6R	3/8	9.52	3/8
NMC-6-8R	3/8	9.52	1/2
NMC-8-4R	1/2	12.70	1/4
NMC-8-6R	1/2	12.70	3/8
NMC-8-8R	1/2	12.70	1/2
NMC-8-12R	1/2	12.70	3/4
NMC-12-12R	3/4	19.05	3/4
NMC-16-16R	1	25.40	1

**NMC**  
**Male Connector**



Connects Metric Tube To Female NPT Thread

Part No.	Tube O.D.		NPT Male Pipe Size(in)
	D(mm)	D(mm)	
NMC-2M-2N	2	2	1/8
NMC-3M-2N	3	3	1/8
NMC-3M-4N	3	3	1/4
NMC-4M-2N	4	4	1/8
NMC-4M-4N	4	4	1/4
NMC-6M-2N	6	6	1/8
NMC-6M-4N	6	6	1/4
NMC-6M-6N	6	6	3/8
NMC-6M-8N	6	6	1/2
NMC-8M-2N	8	8	1/8
NMC-8M-4N	8	8	1/4
NMC-8M-6N	8	8	3/8
NMC-8M-8N	8	8	1/2
NMC-10M-2N	10	10	1/8
NMC-10M-4N	10	10	1/4
NMC-10M-6N	10	10	3/8
NMC-10M-8N	10	10	1/2
NMC-12M-2N	12	12	1/8
NMC-12M-4N	12	12	1/4
NMC-12M-6N	12	12	3/8
NMC-12M-8N	12	12	1/2
NMC-12M-12N	12	12	3/4
NMC-14M-4N	14	14	1/4
NMC-14M-6N	14	14	3/8
NMC-14M-8N	14	14	1/2
NMC-16M-6N	16	16	3/8
NMC-16M-8N	16	16	1/2
NMC-16M-12N	16	16	3/4



**NMC**  
**Male Connector**



Connects Metric Tube To Female NPT Thread

Part No.	Tube O.D.	NPT Male Pipe Size(in)
	D(mm)	
NMC-18M-8N	18	1/2
NMC-18M-12N	18	3/4
NMC-20M-8N	20	1/2
NMC-20M-12N	20	3/4
NMC-22M-12N	22	3/4
NMC-22M-16N	22	1
NMC-25M-12N	25	3/4
NMC-25M-16N	25	1

Connects Metric Tube To Female ISO Tapered Thread

Part No.	Tube O.D.	ISO Male PipeSize(in)
	D(mm)	
NMC-2M-2R	2	1/8
NMC-3M-2R	3	1/8
NMC-3M-4R	3	1/4
NMC-4M-2R	4	1/8
NMC-4M-4R	4	1/4
NMC-6M-2R	6	1/8
NMC-6M-4R	6	1/4
NMC-6M-6R	6	3/8
NMC-6M-8R	6	1/2
NMC-8M-2R	8	1/8
NMC-8M-4R	8	1/4
NMC-8M-6R	8	3/8
NMC-8M-8R	8	1/2
NMC-10M-2R	10	1/8
NMC-10M-4R	10	1/4
NMC-10M-6R	10	3/8
NMC-10M-8R	10	1/2

**NMC**  
**Male Connector**



Connects Metric Tube To Female ISO Tapered Thread

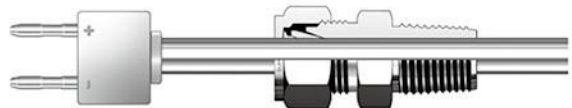
Part No.	Tube O.D.	ISO Male Pipe Size(in)
	D(mm)	
NMC-12M-4R	12	1/4
NMC-12M-6R	12	3/8
NMC-12M-8R	12	1/2
NMC-12M-12R	12	3/4
NMC-15M-8R	15	1/2
NMC-16M-4R	16	1/4
NMC-16M-6R	16	3/8
NMC-16M-8R	16	1/2
NMC-16M-12R	16	3/4
NMC-18M-8R	18	1/2
NMC-18M-12R	18	3/4
NMC-20M-8R	20	1/2
NMC-20M-12R	20	3/4
NMC-22M-12R	22	3/4
NMC-22M-16R	22	1
NMC-25M-12R	25	3/4
NMC-25M-16R	25	1

**Bored - Through Fittings for Thermocouples**

NAI-LOK Bored-Through MALE CONNECTORS accommodate thermocouples or dip tubes

To order, use TM as a suffix to the desired Male Connector ordering number.

Note - The root diameter of the pipe thread end of male connectors makes it impractical to bore through all male connectors.



**NOMC**

**Male Connector For Metal Gasket Seal**



Connects Metric Tube To Female ISO Parallel Thread

Part No.	Tube O.D. D(mm)	ISO Male Pipe Size(in)
NOMC-3M-2G	3	1/8
NOMC-3M-4G	3	1/4
NOMC-4M-2G	4	1/8
NOMC-6M-2G	6	1/8
NOMC-6M-4G	6	1/4
NOMC-6M-6G	6	3/8
NOMC-6M-8G	6	1/2
NOMC-8M-2G	8	1/8
NOMC-8M-4G	8	1/4
NOMC-8M-6G	8	3/8
NOMC-8M-8G	8	1/2
NOMC-10M-4G	10	1/4
NOMC-10M-6G	10	3/8
NOMC-10M-8G	10	1/2
NOMC-12M-4G	12	1/4
NOMC-12M-6G	12	3/8
NOMC-12M-8G	12	1/2
NOMC-12M-12G	12	3/4
NOMC-15M-8G	15	1/2
NOMC-16M-6G	16	3/8
NOMC-16M-8G	16	1/2
NOMC-18M-8G	18	1/2
NOMC-18M-12G	18	3/4
NOMC-20M-8G	20	1/2
NOMC-20M-12G	20	3/4
NOMC-22M-12G	22	3/4
NOMC-22M-16G	22	1
NOMC-25M-12G	25	3/4
NOMC-25M-16G	25	1

**NGMC**

**Male Connector For Bonded Washer Seal**



Connects Metric Tube To Female ISO Parallel Thread

Part No.	Tube O.D. D(mm)	ISO Male Pipe Size(in)
NGMC-3M-2G	3	1/8
NGMC-3M-4G	3	1/4
NGMC-4M-2G	4	1/8
NGMC-6M-2G	6	1/8
NGMC-6M-4G	6	1/4
NGMC-6M-6G	6	3/8
NGMC-6M-8G	6	1/2
NGMC-8M-2G	8	1/8
NGMC-8M-4G	8	1/4
NGMC-8M-6G	8	3/8
NGMC-8M-8G	8	1/2
NGMC-10M-4G	10	1/4
NGMC-10M-6G	10	3/8
NGMC-10M-8G	10	1/2
NGMC-12M-4G	12	1/4
NGMC-12M-6G	12	3/8
NGMC-12M-8G	12	1/2
NGMC-12M-12G	12	3/4
NGMC-16M-6G	16	3/8
NGMC-16M-8G	16	1/2
NGMC-18M-8G	18	1/2
NGMC-18M-12G	18	3/4
NGMC-20M-8G	20	1/2
NGMC-20M-12G	20	3/4
NGMC-22M-12G	22	3/4
NGMC-22M-16G	22	1
NGMC-25M-12G	25	3/4
NGMC-25M-16G	25	1

**NFC**  
**Female Connector**



Connects Fractional Tube To Male NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(inch)	D(mm)	
NFC-2-2N	1/8	3.17	1/8
NFC-2-4N	1/8	3.17	1/4
NFC-3-2N	3/16	4.76	1/8
NFC-4-2N	1/4	6.35	1/8
NFC-4-4N	1/4	6.35	1/4
NFC-4-6N	1/4	6.35	3/8
NFC-4-8N	1/4	6.35	1/2
NFC-5-2N	5/16	7.93	1/8
NFC-5-4N	5/16	7.93	1/4
NFC-6-2N	3/8	9.52	1/8
NFC-6-4N	3/8	9.52	1/4
NFC-6-6N	3/8	9.52	3/8
NFC-6-8N	3/8	9.52	1/2
NFC-6-12N	3/8	9.52	3/4
NFC-8-4N	1/2	12.70	1/4
NFC-8-6N	1/2	12.70	3/8
NFC-8-8N	1/2	12.70	1/2
NFC-8-12N	1/2	12.70	3/4
NFC-10-6N	5/8	15.87	3/8
NFC-10-8N	5/8	15.87	1/2
NFC-12-8N	3/4	19.05	1/2
NFC-12-12N	3/4	19.05	3/4
NFC-14-12N	7/8	22.22	3/4
NFC-16-12N	1	25.40	3/4
NFC-16-16N	1	25.40	1

\*ISO Tapered Threads are available upon request

**NFC**  
**Female Connector**



Connects Metric Tubes To Male ISO Tapered Thread

Part No.	Tube O.D.		ISO* Male Pipe Size(in)
	D(mm)		
NFC-3M-2R	3		1/8
NFC-3M-4R	3		1/4
NFC-4M-2R	4		1/8
NFC-6M-2R	6		1/8
NFC-6M-4R	6		1/4
NFC-6M-6R	6		3/8
NFC-6M-8R	6		1/2
NFC-8M-2R	8		1/8
NFC-8M-4R	8		1/4
NFC-8M-6R	8		3/8
NFC-8M-8R	8		1/2
NFC-10M-2R	10		1/8
NFC-10M-4R	10		1/4
NFC-10M-6R	10		3/8
NFC-10M-8R	10		1/2
NFC-12M-2R	12		1/8
NFC-12M-4R	12		1/4
NFC-12M-6R	12		3/8
NFC-12M-8R	12		1/2
NFC-12M-12R	12		3/4
NFC-15M-8R	15		1/2
NFC-16M-8R	16		1/2
NFC-20M-8R	20		1/2
NFC-20M-12R	20		3/4
NFC-22M-12R	22		3/4
NFC-22M-16R	22		1
NFC-25M-12R	25		3/4
NFC-25M-16R	25		1

\*NPT Threads are available upon request

**NGC**  
**Gauge Connector**


Connects Fractional Tubes To ISO Parallel Thread

Part No.	Tube O.D.		ISO Female Pipe Size(in)
	D(inch)	D(mm)	
NGC-4-4G	1/4	6.35	1/4
NGC-4-6G	1/4	6.35	3/8
NGC-4-8G	1/4	6.35	1/2
NGC-5-4G	5/16	7.93	1/4
NGC-5-8G	5/16	7.93	1/2
NGC-6-4G	3/8	9.52	1/4
NGC-6-6G	3/8	9.52	3/8
NGC-6-8G	3/8	9.52	1/2
NGC-8-4G	1/2	12.70	1/4
NGC-8-6G	1/2	12.70	3/8
NGC-8-8G	1/2	12.70	1/2

Connects Metric Tubes To ISO Parallel Thread

Part No.	Tube O.D.	ISO Female Pipe Size(in)
	D(mm)	
NGC-3M-4G	3	1/4
NGC-6M-4G	6	1/4
NGC-6M-6G	6	3/8
NGC-6M-8G	6	1/2
NGC-8M-4G	8	1/4
NGC-8M-6G	8	3/8
NGC-8M-8G	8	1/2
NGC-10M-4G	10	1/4
NGC-10M-6G	10	3/8
NGC-10M-8G	10	1/2
NGC-12M-4G	12	1/4
NGC-12M-6G	12	3/8
NGC-12M-8G	12	1/2
NGC-20M-8G	20	1/2
NGC-22M-8G	22	1/2

**NMCB**  
**Bulkhead Male Connector**


Connects Fractional Tubes To Female NPT Thread

Part No.	Tube O.D.		NPT*
	D(inch)	D(mm)	Male Pipe Size(in)
NMCB-2-2N	1/8	3.17	1/8
NMCB-4-2N	1/4	6.35	1/8
NMCB-4-4N	1/4	6.35	1/4
NMCB-6-4N	3/8	9.52	1/4
NMCB-6-6N	3/8	9.52	3/8
NMCB-6-8N	3/8	9.52	1/2
NMCB-8-6N	1/2	12.70	3/8
NMCB-8-8N	1/2	12.70	1/2
NMCB-12-12N	3/4	19.05	3/4
NMCB-16-16N	1	25.40	1

\*ISO Tapered Threads are available upon request

**NFCB**  
**Bulkhead Female**  
**Connector**



Connects Fractional Tubes To Male NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(inch)	D(mm)	
NFCB-2-2N	1/8	3.17	1/8
NFCB-4-2N	1/4	6.35	1/8
NFCB-4-4N	1/4	6.35	1/4
NFCB-6-4N	3/8	9.52	1/4
NFCB-8-6N	1/2	12.70	3/8
NFCB-8-8N	1/2	12.70	1/2
NFCB-12-12N	3/4	19.05	3/4

\*ISO Tapered Threads are available upon request

Connects Metric Tubes To Male NPT Thread

Part No.	Tube O.D.	NPT* Male Pipe Size(in)
	D(mm)	
NFCB-6M-2N	6	1/8
NFCB-6M-4N	6	1/4
NFCB-8M-4N	8	1/4
NFCB-12M-8N	12	1/2

\*ISO Tapered Threads are available upon request

**NUE**  
**Union Elbow**



Connects Fractional Tubes

Part No.	Tube O.D.	
	D(inch)	D(mm)
NUE-1	1/16	1.58
NUE-2	1/8	3.17
NUE-3	3/16	4.76
NUE-4	1/4	6.35
NUE-5	5/16	7.93
NUE-6	3/8	9.52
NUE-8	1/2	12.70
NUE-10	5/8	15.87
NUE-12	3/4	19.05
NUE-14	7/8	22.22
NUE-16	1	25.40

Connects Metric Tubes

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

**NME**  
**Male Elbow**



Connects Metric Tubes To Female NPT Thread

Part No.	Tube O.D.	NPT
	D(mm)	Male Pipe Size(in)
NME-3M-2N	3	1/8
NME-3M-4N	3	1/4
NME-4M-2N	4	1/8
NME-4M-4N	4	1/4
NME-6M-2N	6	1/8
NME-6M-4N	6	1/4
NME-6M-6N	6	3/8
NME-6M-8N	6	1/2
NME-8M-2N	8	1/8
NME-8M-4N	8	1/4
NME-8M-6N	8	3/8
NME-8M-8N	8	1/2
NME-10M-2N	10	1/8
NME-10M-4N	10	1/4
NME-10M-6N	10	3/8
NME-10M-8N	10	1/2
NME-12M-4N	12	1/4
NME-12M-6N	12	3/8
NME-12M-8N	12	1/2
NME-12M-12N	12	3/4
NME-16M-6N	16	3/8
NME-16M-8N	16	1/2
NME-16M-12N	16	3/4
NME-18M-8N	18	1/2
NME-18M-12N	18	3/4
NME-20M-8N	20	1/2
NME-20M-12N	20	3/4
NME-22M-12N	22	3/4
NME-22M-16N	22	1
NME-25M-12N	25	3/4
NME-25M-16N	25	1

**NME**  
**Male Elbow**



Connects Metric Tubes To Female ISO Tapered Thread

Part No.	Tube O.D.	ISO
	D(mm)	Male Pipe Size(in)
NME-3M-2R	3	1/8
NME-3M-4R	3	1/4
NME-4M-2R	4	1/8
NME-4M-4R	4	1/4
NME-6M-2R	6	1/8
NME-6M-4R	6	1/4
NME-6M-6R	6	3/8
NME-6M-8R	6	1/2
NME-8M-2R	8	1/8
NME-8M-4R	8	1/4
NME-8M-6R	8	3/8
NME-8M-8R	8	1/2
NME-10M-4R	10	1/4
NME-10M-6R	10	3/8
NME-10M-8R	10	1/2
NME-12M-2R	12	1/8
NME-12M-4R	12	1/4
NME-12M-6R	12	3/8
NME-12M-8R	12	1/2
NME-12M-12R	12	3/4
NME-16M-6R	16	3/8
NME-16M-8R	16	1/2
NME-18M-8R	18	1/2
NME-18M-12R	18	3/4
NME-20M-8R	20	1/2
NME-20M-12R	20	3/4
NME-22M-12R	22	3/4
NME-22M-16R	22	1
NME-25M-12R	25	3/4
NME-25M-16R	25	1

**NME**  
**Male Elbow**



Connects Fractional Tube To Female NPT Thread

Part No.	Tube O.D.		NPT Male Pipe Size(in)
	D(inch)	D(mm)	
NME-2-2N	1/8	3.17	1/8
NME-2-4N	1/8	3.17	1/4
NME-3-2N	3/16	4.76	1/8
NME-3-4N	3/16	4.76	1/4
NME-4-2N	1/4	6.35	1/8
NME-4-4N	1/4	6.35	1/4
NME-4-6N	1/4	6.35	3/8
NME-4-8N	1/4	6.35	1/2
NME-5-2N	5/16	7.93	1/8
NME-5-4N	5/16	7.93	1/4
NME-5-6N	5/16	7.93	3/8
NME-6-2N	3/8	9.52	1/8
NME-6-4N	3/8	9.52	1/4
NME-6-6N	3/8	9.52	3/8
NME-6-8N	3/8	9.52	1/2
NME-6-12N	3/8	9.52	3/4
NME-8-4N	1/2	12.70	1/4
NME-8-6N	1/2	12.70	3/8
NME-8-8N	1/2	12.70	1/2
NME-8-12N	1/2	12.70	3/4
NME-10-6N	5/8	15.87	3/8
NME-10-8N	5/8	15.87	1/2
NME-10-12N	5/8	15.87	3/4
NME-12-8N	3/4	19.05	1/2
NME-12-12N	3/4	19.05	3/4
NME-14-12N	7/8	22.22	3/4
NME-16-12N	1	25.40	3/4
NME-16-16N	1	25.40	1

**NME**  
**Male Elbow**



Connects Fractional Tubes To Female ISO Tapered Thread

Part No.	Tube O.D.		ISO Male Pipe Size(in)
	D(inch)	D(mm)	
NME-4-2R	1/4	6.35	1/8
NME-4-4R	1/4	6.35	1/4
NME-4-6R	1/4	6.35	3/8
NME-4-8R	1/4	6.35	1/2
NME-5-4R	5/16	7.93	1/4
NME-6-4R	3/8	9.52	1/4
NME-6-6R	3/8	9.52	3/8
NME-8-6R	1/2	12.70	3/8
NME-8-8R	1/2	12.70	1/2

**NFE**  
**Female Elbow**


Connects Fractional Tubes To Male NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(inch)	D(mm)	
NFE-2-2N	1/8	3.17	1/8
NFE-2-4N	1/8	3.17	1/4
NFE-3-2N	3/16	4.76	1/8
NFE-4-2N	1/4	6.35	1/8
NFE-4-4N	1/4	6.35	1/4
NFE-4-6N	1/4	6.35	3/8
NFE-4-8N	1/4	6.35	1/2
NFE-5-2N	5/16	7.93	1/8
NFE-5-4N	5/16	7.93	1/4
NFE-6-2N	3/8	9.52	1/8
NFE-6-4N	3/8	9.52	1/4
NFE-6-6N	3/8	9.52	3/8
NFE-6-8N	3/8	9.52	1/2
NFE-8-4N	1/2	12.70	1/4
NFE-8-6N	1/2	12.70	3/8
NFE-8-8N	1/2	12.70	1/2
NFE-10-6N	5/8	15.87	3/8
NFE-10-8N	5/8	15.87	1/2
NFE-12-8N	3/4	19.05	1/2
NFE-12-12N	3/4	19.05	3/4
NFE-14-12N	7/8	22.22	3/4
NFE-16-12N	1	25.40	3/4
NFE-16-16N	1	25.40	1

\*ISO Tapered Threads are available upon request

**NFE**  
**Female Elbow**


Connects Metric Tubes To Male NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(mm)	D(mm)	
NFE-6M-4N	6		1/4
NFE-6M-6N	6		3/8
NFE-6M-8N	6		1/2
NFE-8M-4N	8		1/4
NFE-8M-8N	8		1/2
NFE-10M-4N	10		1/4
NFE-10M-6N	10		3/8
NFE-10M-8N	10		1/2
NFE-12M-6N	12		3/8
NFE-12M-8N	12		1/2

\*ISO Tapered Threads are available upon request



**NUT**  
*Union Tee*



Connects Fractional Tubes

Part No.	Tube O.D.	
	D(inch)	D(mm)
NUT-1	1/16	1.58
NUT-2	1/8	3.17
NUT-3	3/16	4.76
NUT-4	1/4	6.35
NUT-5	5/16	7.93
NUT-6	3/8	9.52
NUT-8	1/2	12.70
NUT-10	5/8	15.87
NUT-12	3/4	19.05
NUT-14	7/8	22.22
NUT-16	1	25.40

Connects Metric Tubes

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

**NRUT**  
*Reducing Union Tee*



Connects Fractional Tubes

Part No.	Tube O.D.		Reduced O.D	
	D(inch)	D(mm)	D1(inch)	D1(mm)
NRUT-6-4	3/8	9.52	1/4	6.35
NRUT-8-4	1/2	12.70	1/4	6.35
NRUT-8-6	1/2	12.70	3/8	9.52
NRUT-10-6	5/8	15.87	3/8	9.52
NRUT-12-6	3/4	19.05	3/8	9.52
NRUT-12-8	3/4	19.05	1/2	12.70
NRUT-16-6	1	25.40	3/8	9.52
NRUT-16-8	1	25.40	1/2	12.70
NRUT-16-12	1	25.40	3/4	19.05

**NMBT**  
*Male Branch Tee*



Connects Fractional Tubes To Female NPT Thread

Part No.	Tube O.D.		NPT*
	D(inch)	D(mm)	Male Pipe Size(in)
NMBT-2-2N	1/8	3.17	1/8
NMBT-2-4N	1/8	3.17	1/4
NMBT-3-2N	3/16	4.76	1/8
NMBT-4-2N	1/4	6.35	1/8
NMBT-4-4N	1/4	6.35	1/4
NMBT-5-2N	5/16	7.93	1/8
NMBT-6-4N	3/8	9.52	1/4
NMBT-6-6N	3/8	9.52	3/8
NMBT-8-6N	1/2	12.70	3/8
NMBT-8-8N	1/2	12.70	1/2
NMBT-10-8N	5/8	15.87	1/2
NMBT-12-12N	3/4	19.05	3/4

\*ISO Tapered Threads are available upon request

**NMBT**  
**Male Branch Tee**



Connects Metric Tubes To Female ISO Tapered Thread

Part No.	Tube O.D.	ISO Male Pipe Size(in)
	D(mm)	
NMBT-3M-2R	3	1/8
NMBT-3M-4R	3	1/4
NMBT-4M-2R	4	1/8
NMBT-6M-2R	6	1/8
NMBT-6M-4R	6	1/4
NMBT-8M-2R	8	1/8
NMBT-8M-4R	8	1/4
NMBT-10M-4R	10	1/4
NMBT-10M-6R	10	3/8
NMBT-12M-4R	12	1/4
NMBT-12M-6R	12	3/8
NMBT-12M-8R	12	1/2
NMBT-16M-6R	16	3/8
NMBT-16M-8R	16	1/2
NMBT-20M-12R	20	3/4

\*NPT Threads are available upon request

**NMRT**  
**Male Run Tee**



Connects Fractional Tubes To Female NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(inch)	D(mm)	
NMRT-2-2N	1/8	3.17	1/8
NMRT-2-4N	1/8	3.17	1/4
NMRT-3-2N	3/16	4.76	1/8
NMRT-4-2N	1/4	6.35	1/8
NMRT-4-4N	1/4	6.35	1/4
NMRT-5-2N	5/16	7.93	1/8
NMRT-6-4N	3/8	9.52	1/4
NMRT-6-6N	3/8	9.52	3/8
NMRT-8-6N	1/2	12.70	3/8
NMRT-8-8N	1/2	12.70	1/2
NMRT-10-8N	5/8	15.87	1/2
NMRT-12-12N	3/4	19.05	3/4

\*ISO Tapered Threads are available upon request

Connects Metric Tubes To Female ISO Tapered Thread

Part No.	Tube O.D.	ISO* Male Pipe Size(in)
	D(mm)	
NMRT-3M-2R	3	1/8
NMRT-3M-4R	3	1/4
NMRT-4M-2R	4	1/8
NMRT-6M-2R	6	1/8
NMRT-6M-4R	6	1/4
NMRT-8M-2R	8	1/8
NMRT-8M-4R	8	1/4
NMRT-10M-4R	10	1/4
NMRT-10M-6R	10	3/8
NMRT-12M-4R	12	1/4
NMRT-12M-6R	12	3/8
NMRT-12M-8R	12	1/2
NMRT-16M-6R	16	3/8
NMRT-16M-8R	16	1/2
NMRT-20M-12R	20	3/4

\*NPT Threads are available upon request

**NFBT**  
**Female Branch Tee**



Connects Fractional Tubes To Male NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(inch)	D(mm)	
NFBT-2-2N	1/8	3.17	1/8
NFBT-4-2N	1/4	6.35	1/8
NFBT-4-4N	1/4	6.35	1/4
NFBT-6-4N	3/8	9.52	1/4
NFBT-6-6N	3/8	9.52	3/8
NFBT-6-8N	3/8	9.52	1/2
NFBT-8-4N	1/2	12.70	1/4
NFBT-8-6N	1/2	12.70	3/8
NFBT-8-8N	1/2	12.70	1/2
NFBT-10-8N	5/8	15.87	1/2
NFBT-12-12N	3/4	19.05	3/4
NFBT-16-12N	1	25.40	3/4
NFBT-16-16N	1	25.40	1

Connects Metric Tubes To Male NPT Thread

Part No.	Tube O.D.	NPT* Male Pipe Size(in)
	D(mm)	
NFBT-6M-2N	6	1/8
NFBT-6M-4N	6	1/4
NFBT-6M-6N	6	3/8
NFBT-6M-8N	6	1/2
NFBT-8M-2N	8	1/8
NFBT-8M-4N	8	1/4
NFBT-8M-6N	8	3/8
NFBT-8M-8N	8	1/2
NFBT-10M-4N	10	1/4
NFBT-10M-6N	10	3/8
NFBT-10M-8N	10	1/2
NFBT-12M-4N	12	1/4
NFBT-12M-6N	12	3/8
NFBT-12M-8N	12	1/2
NFBT-16M-8N	16	1/2

\*ISO Tapered Threads are available upon request

**NFRT**  
**Female Run Tee**



Connects Fractional Tubes To Male NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(inch)	D(mm)	
NFRT-2-2N	1/8	3.17	1/8
NFRT-4-2N	1/4	6.35	1/8
NFRT-4-4N	1/4	6.35	1/4
NFRT-6-4N	3/8	9.52	1/4
NFRT-8-6N	1/2	12.70	3/8
NFRT-8-8N	1/2	12.70	1/2
NFRT-12-12N	3/4	19.05	3/4
NFRT-16-12N	1	25.40	3/4
NFRT-16-16N	1	25.40	1

Connects Metric Tubes To Male NPT Thread

Part No.	Tube O.D.	NPT* Male Pipe Size(in)
	D(mm)	
NFRT-6M-2N	6	1/8
NFRT-6M-4N	6	1/4
NFRT-6M-8N	6	1/2
NFRT-8M-2N	8	1/8
NFRT-8M-4N	8	1/4
NFRT-8M-6N	8	3/8
NFRT-8M-8N	8	1/2
NFRT-12M-4N	12	1/4
NFRT-12M-6N	12	3/8
NFRT-12M-8N	12	1/2
NFRT-16M-8N	16	1/2

\*ISO Tapered Threads are available upon request

**NUC**  
**Union Cross**



Connects Fractional Tubes

Part No.	Tube O.D.	
	D(inch)	D(mm)
NUC-1	1/16	1.58
NUC-2	1/8	3.17
NUC-3	3/16	4.76
NUC-4	1/4	6.35
NUC-5	5/16	7.93
NUC-6	3/8	9.52
NUC-8	1/2	12.70
NUC-10	5/8	15.87
NUC-12	3/4	19.05
NUC-14	7/8	22.22
NUC-16	1	25.40

Connects Metric Tubes

Part No.	Tube O.D.
	D(mm)
NUC-3M	3
NUC-6M	6
NUC-8M	8
NUC-10M	10
NUC-12M	12
NUC-16M	16
NUC-18M	18
NUC-20M	20
NUC-25M	25

**NR**  
**Reducer**



Connects Fractional Tubes To Fractional NAILOK Port

Part No.	Tube O.D.		Port O.D.	
	D(inch)	D(mm)	D1(inch)	D1(mm)
NR-2-1	1/8	3.17	1/16	1.58
NR-2-2	1/8	3.17	1/8	3.17
NR-2-3	1/8	3.17	3/16	4.76
NR-2-4	1/8	3.17	1/4	6.35
NR-2-6	1/8	3.17	3/8	9.52
NR-2-8	1/8	3.17	1/2	12.70
NR-3-2	3/16	4.76	1/8	3.17
NR-3-4	3/16	4.76	1/4	6.35
NR-4-2	1/4	6.35	1/8	3.17
NR-4-3	1/4	6.35	3/16	4.76
NR-4-4	1/4	6.35	1/4	6.35
NR-4-5	1/4	6.35	5/16	7.93
NR-4-6	1/4	6.35	3/8	9.52
NR-4-8	1/4	6.35	1/2	12.70
NR-4-10	1/4	6.35	5/8	15.87
NR-4-12	1/4	6.35	3/4	19.05
NR-5-6	5/16	7.93	3/8	9.52
NR-5-8	5/16	7.93	1/2	12.70
NR-6-4	3/8	9.52	1/4	6.35
NR-6-6	3/8	9.52	3/8	9.52
NR-6-8	3/8	9.52	1/2	12.70
NR-6-10	3/8	9.52	5/8	15.87
NR-6-12	3/8	9.52	3/4	19.05
NR-8-4	1/2	12.70	1/4	6.35
NR-8-6	1/2	12.70	3/8	9.52
NR-8-8	1/2	12.70	1/2	12.70
NR-8-10	1/2	12.70	5/8	15.87
NR-8-12	1/2	12.70	3/4	19.05
NR-8-16	1/2	12.70	1	25.40
NR-10-12	5/8	15.87	3/4	19.05
NR-10-14	5/8	15.87	7/8	22.22
NR-10-16	5/8	15.87	1	25.40
NR-12-8	3/4	19.05	1/2	12.70
NR-12-16	3/4	19.05	1	25.40

**NR**  
**Reducer**



Connects Metric Tubes To Metric NAILOK Port

Part No.	Tube O.D.	Port O.D
	D(mm)	D1(mm)
NR-3M-4M	3	4
NR-3M-6M	3	6
NR-3M-10M	3	10
NR-4M-6M	4	6
NR-6M-3M	6	3
NR-6M-8M	6	8
NR-6M-10M	6	10
NR-6M-12M	6	12
NR-8M-6M	8	6
NR-8M-10M	8	10
NR-8M-12M	8	12
NR-10M-6M	10	6
NR-10M-8M	10	8
NR-10M-12M	10	12
NR-10M-15M	10	15
NR-10M-18M	10	18
NR-12M-6M	12	6
NR-12M-8M	12	8
NR-12M-10M	12	10
NR-12M-16M	12	16
NR-12M-18M	12	18
NR-12M-20M	12	20
NR-12M-22M	12	22
NR-12M-25M	12	25
NR-16M-12M	16	12
NR-18M-12M	18	12
NR-18M-16M	18	16
NR-18M-20M	18	20
NR-18M-22M	18	22
NR-18M-25M	18	25
NR-20M-16M	20	16
NR-20M-18M	20	18

**NR**  
**Reducer**



Connects Metric Tubes To Metric NAILOK Port

Part No.	Tube O.D.	Port O.D
	D(mm)	D1(mm)
NR-20M-22M	20	22
NR-20M-25M	20	25
NR-22M-18M	22	18
NR-22M-20M	22	20
NR-22M-25M	22	25
NR-25M-18M	25	18
NR-25M-20M	25	20

Connects Metric Tubes To Fractional NAILOK Port

Part No.	Tube O.D.	Port O.D	
		D1(inch)	D1(mm)
NR-3M-2	3	1/8	3.17
NR-3M-4	3	1/4	6.35
NR-6M-4	6	1/4	6.35
NR-6M-5	6	5/16	7.93
NR-6M-6	6	3/8	9.52
NR-6M-8	6	1/2	12.70
NR-8M-6	8	3/8	9.52
NR-8M-8	8	1/2	12.70
NR-10M-6	10	3/8	9.52
NR-10M-8	10	1/2	12.70
NR-12M-8	12	1/2	12.70
NR-12M-12	12	3/4	19.05
NR-18M-12	18	3/4	19.05
NR-18M-16	18	1	25.40

**NRB**  
*Bulkhead Reducer*



Connects Fractional Tubes To Fractional NAILOK Port

Part No.	Tube O.D.	
	D(inch)	D(mm)
NRB-2-2	1/8	3.17
NR8-4-4	1/4	6.35
NRB-6-6	3/8	9.52
NRB-8-8	1/2	12.70
NRB-10-10	5/8	15.87
NRB-16-16	1	25.40

**NMA**  
*Male Adapter*



Connects Fractional NAILOK Port To Female NPT Thread

Part No.	Tube O.D.		NPT*
	D(inch)	D(mm)	Male Pipe Size(in)
NMA-2-2N	1/8	3.17	1/8
NMA-2-4N	1/8	3.17	1/4
NMA-3-2N	3/16	4.76	1/8
NMA-3-4N	3/16	4.76	1/4
NMA-4-2N	1/4	6.35	1/8
NMA-4-4N	1/4	6.35	1/4
NMA-4-6N	1/4	6.35	3/8
NMA-4-8N	1/4	6.35	1/2
NMA-5-2N	5/16	7.93	1/8
NMA-5-4N	5/16	7.93	1/4
NMA-6-2N	3/8	9.52	1/8
NMA-6-4N	3/8	9.52	1/4
NMA-6-6N	3/8	9.52	3/8
NMA-6-8N	3/8	9.52	1/2
NMA-8-4N	1/2	12.70	1/4
NMA-8-6N	1/2	12.70	3/8
NMA-8-8N	1/2	12.70	1/2
NMA-10-6N	5/8	15.87	3/8
NMA-10-8N	5/8	15.87	1/2
NMA-10-12N	5/8	15.87	3/4
NMA-12-8N	3/4	19.05	1/2
NMA-12-12N	3/4	19.05	3/4
NMA-12-16N	3/4	19.05	1
NMA-14-12N	7/8	22.22	3/4
NMA-16-12N	1	25.40	3/4
NMA-16-16N	1	25.40	1

\*ISO Tapered Threads are available upon request

**NMA**  
**Male Adapter**



Connects Metric NAILOK Port To Female NPT Thread

Part No.	Tube O.D	NPT* Male Pipe Size(in)
	D(mm)	
NMA-6M-2N	6	1/8
NMA-6M-4N	6	1/4
NMA-8M-4N	8	1/4
NMA-10M-4N	10	1/4
NMA-10M-6N	10	3/8
NMA-10M-8N	10	1/2
NMA-12M-4N	12	1/4
NMA-12M-8N	12	1/2
NMA-18M-12N	18	3/4

\*ISO Tapered Threads are available upon request

**NFA**  
**Female Adapter**



Connects Fractional NAILOK Port To Male NPT Thread

Part No.	Tube O.D.		NPT* Male Pipe Size(in)
	D(inch)	D(mm)	
NFA-2-2N	1/8	3.17	1/8
NFA-2-4N	1/8	3.17	1/4
NFA-3-2N	3/16	4.76	1/8
NFA-3-4N	3/16	4.76	1/4
NFA-4-2N	1/4	6.35	1/8
NFA-4-4N	1/4	6.35	1/4
NFA-4-6N	1/4	6.35	3/8
NFA-4-8N	1/4	6.35	1/2
NFA-5-2N	5/16	7.93	1/8
NFA-5-4N	5/16	7.93	1/4
NFA-6-2N	3/8	9.52	1/8
NFA-6-4N	3/8	9.52	1/4
NFA-6-6N	3/8	9.52	3/8
NFA-6-8N	3/8	9.52	1/2
NFA-8-4N	1/2	12.70	1/4
NFA-8-6N	1/2	12.70	3/8
NFA-8-8N	1/2	12.70	1/2
NFA-10-6N	5/8	15.87	3/8
NFA-10-8N	5/8	15.87	1/2
NFA-12-8N	3/4	19.05	1/2
NFA-12-12N	3/4	19.05	3/4
NFA-12-16N	3/4	19.05	1
NFA-14-12N	7/8	22.22	3/4
NFA-16-12N	1	25.40	3/4
NFA-16-16N	1	25.40	1

\*ISO Tapered Threads are available upon request

**NFA**  
**Female Adapter**



Connects Metric NAILOK Port To Male NPT Thread

Part No.	Tube O.D.	
	D(mm)	NPT* Male Pipe Size(in)
NFA-3M-2N	3	1/8
NFA-6M-2N	6	1/8
NFA-6M-4N	6	1/4
NFA-8M-4N	8	1/4
NFA-10M-4N	10	1/4
NFA-10M-6N	10	3/8
NFA-10M-8N	10	1/2
NFA-12M-4N	12	1/4
NFA-12M-6N	12	3/8
NFA-12M-8N	12	1/2
NFA-18M-12N	18	3/4

**NPC**  
**Port Connector**



Connects Fractional NAILOK Ports

Part No.	Tube O.D.	
	D(inch)	D(mm)
NPC-2	1/8	3.17
NPC-4	1/4	6.35
NPC-5	5/16	7.93
NPC-6	3/8	9.52
NPC-8	1/2	12.70
NPC-12	3/4	19.05
NPC-16	1	25.40

**NPC**  
**Port Connector**



Connects Metric NAILOK Ports

Part No.	Tube O.D.	
	D(mm)	
NPC-3M	3	
NPC-6M	6	
NPC-8M	8	
NPC-10M	10	
NPC-12M	12	
NPC-16M	16	



**NPWC**  
**Male Pipe**  
**Weld Connector**



Connects Fractional Tubes To Pipe

Part No.	Tube O.D.		Male Pipe Size P	
	D(inch)	D(mm)	Nom.	O.D.
NPWC-2-2P	1/8	3.17	1/8	10.30
NPWC-3-2P	3/16	4.76	1/8	10.30
NPWC-4-2P	1/4	6.35	1/8	10.30
NPWC-4-4P	1/4	6.35	1/4	13.70
NPWC-5-2P	5/16	7.93	1/8	10.30
NPWC-5-4P	5/16	7.93	1/4	13.70
NPWC-6-4P	3/8	9.52	1/4	13.70
NPWC-6-6P	3/8	9.52	3/8	17.10
NPWC-6-8P	3/8	9.52	1/2	21.30
NPWC-8-6P	1/2	12.70	3/8	17.10
NPWC-8-8P	1/2	12.70	1/2	21.30
NPWC-8-12P	1/2	12.70	3/4	26.67
NPWC-10-8P	5/8	15.87	1/2	21.30
NPWC-12-12P	3/4	19.05	3/4	26.67
NPWC-16-16P	1	25.40	1	33.40

**NPWC**  
**Male Pipe**  
**Weld Connector**



Connects Metric Tubes To Pipe

Part No.	Tube O.D.	Tube O.D.	
	D(mm)	D(inch)	D(mm)
NPWC-3M-2P	3	1/8	10.3
NPWC-4M-2P	4	1/8	10.3
NPWC-6M-2P	6	1/8	10.3
NPWC-6M-4P	6	1/4	13.7
NPWC-8M-2P	8	1/8	10.3
NPWC-8M-4P	8	1/4	13.7
NPWC-8M-8P	8	1/2	21.3
NPWC-10M-4P	10	1/4	13.7
NPWC-10M-6P	10	3/8	17.1
NPWC-10M-8P	10	1/2	21.3
NPWC-12M-4P	12	1/4	13.7
NPWC-12M-6P	12	3/8	17.1
NPWC-12M-8P	12	1/2	21.3
NPWC-15M-8P	15	1/2	21.3
NPWC-16M-8P	16	1/2	21.3
NPWC-18M-8P	18	1/2	21.3

Note: NAILOK weld ends are constructed per schedule 80 wall thickness or greater.  
Weld End: ANSI B31.1 and B31.3

**NSWC**  
**Socket Weld Connector**


Connects Fractional Tubes To Pipe

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

**NP**  
**Plug**


Fractional

Part No.	Tube O.D.	
	D(inch)	D(mm)
NP-2	1/8	3.17
NP-3	3/16	4.76
NP-4	1/4	6.35
NP-5	5/16	7.93
NP-6	3/8	9.52
NP-8	1/2	12.70
NP-10	5/8	15.87
NP-12	3/4	19.05
NP-14	7/8	22.22
NP-16	1	25.40

**NP**  
**Plug**


Metric

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

**NC**  
**Cap**



Connects Caps End of Fractional Tubes

Part No.	Tube O.D.	
	D(inch)	D(mm)
NC-1	1/16	1.58
NC-2	1/8	3.17
NC-3	3/16	4.76
SC-4	1/4	6.35
NC-5	5/16	7.93
NC-6	3/8	9.52
NC-8	1/2	12.70
NC-10	5/8	15.87
NC-12	3/4	19.05
NC-14	7/8	22.22
NC-16	1	25.40

Connects Metric Tubes

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

**NN**  
**Nut**



Fractional

Part No.	Tube O.D.	
	D(inch)	D(mm)
NN-1	1/16	1.58
NN-2	1/8	3.17
NN-3	3/16	4.76
NN-4	1/4	6.35
NN-5	5/16	7.93
NN-6	3/8	9.52
NN-8	1/2	12.70
NN-10	5/8	15.87
NN-12	3/4	19.05
NN-14	7/8	22.22
NN-16	1	25.40

Metric

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

**NFF**  
**Front Ferrule**


Fractional

Part No.	Tube O.D.	
	D(inch)	D(mm)
NFF-1	1/16	1.58
NFF-2	1/8	3.17
NFF-3	3/16	4.76
NFF-4	1/4	6.35
NFF-5	5/16	7.93
NFF-6	3/8	9.52
NFF-8	1/2	12.70
NFF-10	5/8	15.87
NFF-12	3/4	19.05
NFF-14	7/8	22.22
NFF-16	1	25.40

Metric

Part No.	Tube O.D.
	D(mm)
NFF-2M	2
NFF-3M	3
NFF-4M	4
NFF-6M	6
NFF-8M	8
NFF-10M	10
NFF-12M	12
NFF-14M	14
NFF-15M	15
NFF-16M	16
NFF-18M	18
NFF-20M	20
NFF-22M	22
NFF-25M	25

**NBF**  
**Back Ferrule**


Fractional

Part No.	Tube O.D.	
	D(inch)	D(mm)
NBF-1	1/16	1.58
NBF-2	1/8	3.17
NBF-3	3/16	4.76
NBF-4	1/4	6.35
NBF-5	5/16	7.93
NBF-6	3/8	9.52
NBF-8	1/2	12.70
NBF-10	5/8	15.87
NBF-12	3/4	19.05
NBF-14	7/8	22.22
NBF-16	1	25.40

Metric

Part No.	Tube O.D.
	D(mm)
NBF-2M	2
NBF-3M	3
NBF-4M	4
NBF-6M	6
NBF-8M	8
NBF-10M	10
NBF-12M	12
NBF-14M	14
NBF-15M	15
NBF-16M	16
NBF-18M	18
NBF-20M	20
NBF-22M	22
NBF-25M	25

**NCN**  
**Close Nipple**


Male NPT Threads

Part No.	Pipe Size(in)
NCN-2N	1/8
NCN-4N	1/4
NCN-6N	3/8
NCN-8N	1/2
NCN-12N	3/4
NCN-16N	1

**NIHN**  
**Hex Nipple**


Male NPT to Male ISO Parallel Pipe Threads

Part No.	Pipe Size(in)	BSP/ISO Thread SizeSize(in)
NIHN-2N-2G	1/8	1/8
NIHN-4N-4G	1/4	1/4
NIHN-6N-6G	3/8	3/8
NIHN-8N-8G	1/2	1/2
NIHN-12N-12G	3/4	3/4
NIHN-16N-16G	1	1

**NHN**  
**Hex Nipple**


Male NPT Threads

Part No.	Pipe Size(in)
NHN-2N	1/8
NHN-4N	1/4
NHN-6N	3/8
NHN-8N	1/2
NHN-12N	3/4
NHN-16N	1

**NHLN**  
**Hex Long Nipple**


Male NPT Threads

Part No.	Pipe Size(in)
NHLN-2N	1/8
NHLN-4N	1/4
NHLN-6N	3/8
NHLN-8N	1/2
NHLN-12N	3/4
NHLN-16N	1

**NHRN**  
**Hex Reducing Nipple**



Male NPT Threads

Part No.	Pipe Size(in)	Reduced Pipe Size(in)
NHRN-2N-1N	1/8	1/16
NHRN-4N-2N	1/4	1/8
NHRN-6N-2N	3/8	1/8
NHRN-6N-4N	3/8	1/4
NHRN-8N-2N	1/2	1/8
NHRN-8N-4N	1/2	1/4
NHRN-8N-6N	1/2	3/8
NHRN-12N-4N	3/4	1/4
NHRN-12N-8N	3/4	1/2
NHRN-16N-4N	1	1/4
NHRN-16N-8N	1	1/2
NHRN-16N-12N	1	3/4

**NA**  
**Adapter**



Female To Male NPT Threads

Part No.	Pipe Size(in)
NA-2N	1/8
NA-4N	1/4
NA-6N	3/8
NA-8N	1/2
NA-12N	3/4
NA-16N	1

**NA**  
**Adapte**



Female NPT To Male ISO Parallel Pipe Threads

Part No.	Pipe Size(in)	BSP/ISO Thread SizeSize(in)
NA-2G-2N	1/8	1/8
NA-4G-4N	1/4	1/4
NA-6G-6N	3/8	3/8
NA-8G-8N	1/2	1/2
NA-12G-12N	3/4	3/4
NA-16G-16N	1	1

**NRA**  
**Reducing Adapter**



Female To Male NPT Threads

Part No.	Male Pipe Size(in)	Female Pipe Size(in)
NRA-2N-4N	1/8	1/4
NRA-2N-6N	1/8	3/8
NRA-4N-6N	1/4	3/8
NRA-2N-8N	1/8	1/2
NRA-4N-8N	1/4	1/2
NRA-6N-8N	3/8	1/2
NRA-4N-12N	1/4	3/4
NRA-6N-12N	3/8	3/4
NRA-8N-12N	1/2	3/4
NRA-4N-16N	1/4	1
NRA-8N-16N	1/2	1
NRA-12N-16N	3/4	1

## NRHB

### Reducing Hex Bushing



Male To Female NPT Threads

Part No.	Male Pipe Size(in)	Female Pipe Size(in)
NRHB-4N-2N	1/4	1/8
NRHB-6N-2N	3/8	1/8
NRHB-6N-4N	3/8	1/4
NRHB-8N-2N	1/2	1/8
NRHB-8N-4N	1/2	1/4
NRHB-8N-6N	1/2	3/8
NRHB-12N-4N	3/4	1/4
NRHB-12N-6N	3/4	3/8
NRHB-12N-8N	3/4	1/2
NRHB-16N-4N	1	1/4
NRHB-16N-6N	1	3/8
NRHB-16N-8N	1	1/2
NRHB-16N-12N	1	3/4

## NHC

### Hex Coupling



Female NPT Threads

Part No.	Pipe Size(in)
NHC-2N	1/8
NHC-4N	1/4
NHC-6N	3/8
NHC-8N	1/2
NHC-12N	3/4
NHC-16N	1

## NHRC

### Hex Reducing Coupling



Female NPT Threads

Part No.	Pipe Size(in)	Reduced Pipe Size(in)
NHRC-4N-2N	1/4	1/8
NHRC-6N-4N	3/8	1/4
NHRC-8N-2N	1/2	1/8
NHRC-8N-4N	1/2	1/4
NHRC-8N-6N	1/2	3/8
NHRC-12N-4N	3/4	1/4
NHRC-12N-8N	3/4	1/2
NHRC-16N-8N	1	1/2
NHRC-16N-12N	1	3/4

**NFE**  
**Female Elbow**



Female NPT Threads

Part No.	Pipe Size(in)
NFE-2N	1/8
NFE-4N	1/4
NFE-6N	3/8
NFE-8N	1/2
NFE-12N	3/4
NFE-16N	1

**NSE**  
**Street Elbow**



Female to Male NPT Threads

Part No.	Pipe Size(in)
NSE-2N	1/8
NSE-4N	1/4
NSE-6N	3/8
NSE-8N	1/2
NSE-12N	3/4
NSE-16N	1

**NRSE**  
**Reducing Street Elbow**



Female to Male NPT Threads

Part No.	Male Pipe Size(in)	Female Pipe Size(in)
NRSE-2N-1N	1/8	1/16
NRSE-4N-2N	1/4	1/8
NRSE-6N-4N	3/8	1/4
NRSE-8N-4N	1/2	1/4
NRSE-8N-6N	1/2	3/8
NRSE-12N-8N	3/4	1/2
NRSE-16N-8N	1	1/2

**NMEW**  
**Male Elbow**



Male NPT Threads

Part No.	Pipe Size(in)
NMEW-2N	1/8
NMEW-4N	1/4
NMEW-6N	3/8
NMEW-8N	1/2
NMEW-12N	3/4
NMEW-16N	1



**NFT**  
**Female Tee**



Female NPT Threads

Part No.	Pipe Size(in)
NFT-2N	1/8
NFT-4N	1/4
NFT-6N	3/8
NFT-8N	1/2
NFT-12N	3/4
NFT-16N	1

**NBT**  
**Branch Tee**



Male to Female NPT Threads

Part No.	Pipe Size(in)
NBT-2N	1/8
NBT-4N	1/4
NBT-6N	3/8
NBT-8N	1/2
NBT-12N	3/4
NBT-16N	1

**NRT**  
**Run Tee**



Male to Female NPT Threads

Part No.	Pipe Size(in)
NRT-2N	1/8
NRT-4N	1/4
NRT-6N	3/8
NRT-8N	1/2
NRT-12N	3/4
NRT-16N	1

**NMT**  
**Male Tee**

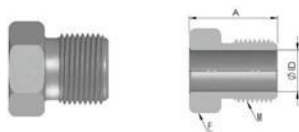


Male NPT Threads

Part No.	Pipe Size(in)
NMT-2N	1/8
NMT-4N	1/4
NMT-6N	3/8
NMT-8N	1/2
NMT-12N	3/4
NMT-16N	1

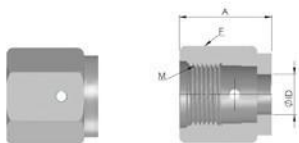


## Male Nut



Head Size	Ordering Number	ID	A	F	M
1/4"	NV-MN04	9.10	18.30	15.90	9/16-18UNF
1/2"	NV-MN08	15.50	20.00	23.80	7/8-14UNF
3/4"	NV-MN12	22.60	25.40	33.30	1 1/4-18UNEF
1"	NV-MN16	30.50	30.20	41.30	1 1/2-20UNF

## Female Nut



Head Size	Ordering Number	ID	A	F
1/4"	NV-FN04	9.10	20.75	19.05
1/2"	NV-FN08	15.50	22.50	26.90
3/4"	NV-FN12	22.60	28.50	38.10
1"	NV-FN16	30.50	34.00	44.50

## Gasket Retainer Assembly



Head Size	Ordering Number	OD	ID	A
1/4"	NV-GSK04	11.85	5.50	0.70
1/2"	NV-GSK08	19.30	11.70	0.70
3/4"	NV-GSK12	28.00	16.80	0.70
1"	NV-GSK16	34.20	22.60	0.70

## Gasket Non-Retained Style



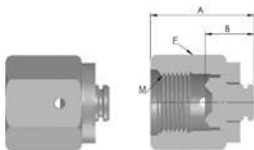
Head Size	Ordering Number	OD	ID	A
1/4"	NV-NGSK04	11.90	5.60	0.70
1/2"	NV-NGSK08	19.80	11.20	0.70
3/4"	NV-NGSK12	29.00	16.80	0.70
1"	NV-NGSK16	35.60	22.30	0.70

## Plug



Head Size	Ordering Number	A	F
1/4"	NV-PG04	23.20	15.90
1/2"	NV-PG08	27.30	23.80
3/4"	NV-PG12	36.30	33.30
1"	NV-PG16	38.60	41.30

## Cap



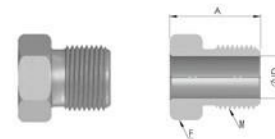
Head Size	Ordering Number	A	B	F
1/4"	NV-CP04	22.90	11.30	19.10
1/2"	NV-CP08	25.60	12.20	27.00
3/4"	NV-CP12	32.80	13.70	38.10
1"	NV-CP16	39.40	16.00	44.50

## Hvcr Gland



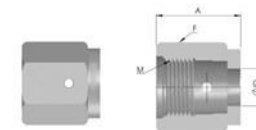
Head Size	Tube Size(OD)	Ordering Number	OD	ID	ID1	A	B
1/4"	3/8"	NV-HG06	9.53	7.53	6.35	33.20	28.40

## Hvcr Male Nut



Head Size	Ordering Number	ID	A	F
1/4"	NV-HMN04	9.90	18.30	15.90

## Hvcr Female Nut



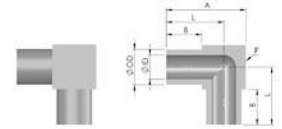
Head Size	Ordering Number	ID	A	F
1/4"	NV-HFN04	9.90	20.75	19.05

**Long Gland-F**



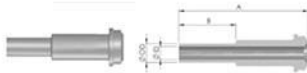
Head Size	Tube Size(OD)	Ordering Number	OD	ID	A	B
1/4"	1/4"	NV-LGF04	6.35	4.35	28.00	19.05
3/8"	3/8"	NV-LGF06	9.53	7.53	28.50	19.05
1/2"	1/2"	NV-LGF08	12.70	10.22	28.50	19.05
1/2"	1/4"	NV-LGF08-04	6.35	4.35	28.50	19.05
3/4"	3/4"	NV-LGF12	19.05	15.75	34.50	19.05
1"	1"	NV-LGF16	25.40	22.10	38.60	20.00

**Micro Elbow**



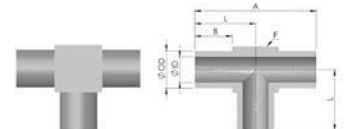
Size(OD)	Ordering Number	OD	ID	A	B	L	F
1/4"	NV-MEO4	6.35	4.35	14.29	6.35	10.32	7.94
3/8"	NV-MEO6	9.53	7.53	17.46	6.35	11.91	11.11
1/2"	NV-MEO8	12.70	10.22	20.64	6.35	13.50	14.29
3/4"	NV-ME12	19.05	15.75	27.00	6.35	16.68	20.65
6M	NV-ME6M	6.00	4.00	14.29	6.35	10.32	7.94
8M	NV-ME8M	8.00	6.00	17.46	6.35	11.91	11.11
10M	NV-ME10M	10.00	8.00	17.46	6.35	11.91	11.11
12M	NV-ME12M	12.00	10.00	20.64	6.35	13.50	14.29

**Long Gland-M**



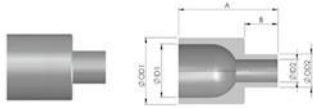
Head Size	Tube Size(OD)	Ordering Number	OD	ID	A	B
1/4"	1/4"	NV-LGM04	6.35	4.35	43.20	19.05
3/8"	3/8"	NV-LGM06	9.53	7.53	45.50	19.05
1/2"	1/2"	NV-LGM08	12.70	10.22	45.50	19.05
1/2"	1/4"	NV-LGM08-04	6.35	4.35	45.50	19.05
3/4"	3/4"	NV-LGM12	19.05	15.75	51.60	19.05
1"	1"	NV-LGM16	25.40	22.10	58.90	20.00

**Micro Tee**



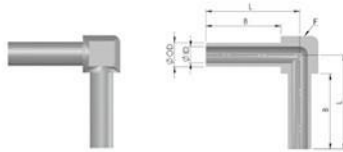
Size(OD)	Ordering Number	OD	ID	A	B	L	F
1/4"	NV-MT04	6.35	4.35	20.64	6.35	10.32	7.94
3/8"	NV-MT06	9.53	7.53	23.81	6.35	11.91	11.11
1/2"	NV-MT08	12.70	10.22	26.99	6.35	13.50	14.29
3/4"	NV-MT12	19.05	15.75	33.35	6.35	16.68	20.65
6M	NV-MT6M	6.00	4.00	20.64	6.35	10.32	7.94
8M	NV-MT8M	8.00	6.00	23.81	6.35	11.91	11.11
10M	NV-MT10M	10.00	8.00	23.81	6.35	11.91	11.11
12M	NV-MT12M	12.00	10.00	26.99	6.35	13.50	14.29

**Micro R-Union**



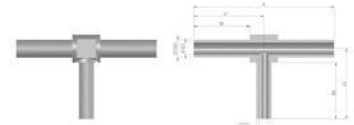
Size(OD)		Ordering Number	OD		ID		A	B
OD1	OD2		OD1	OD2	ID1	ID2		
3/8"	1/4"	NV-MRU06-04	9.53	6.35	7.53	4.35	19.05	6.35
1/2"	1/4"	NV-MRU08-04	12.70	6.35	10.22	4.35	19.05	6.35
1/2"	3/8"	NV-MRU08-06	12.70	9.53	10.22	7.53	19.05	6.35

**Long Elbow**



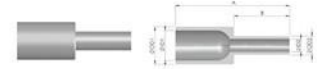
Size(OD)	Ordering Number	OD	ID	B	L	F
1/4"	NV-LE04	6.35	4.35	20.00	25.00	10.00
3/8"	NV-LE06	9.53	7.53	20.00	26.00	12.50
1/2"	NV-LE08	12.70	10.22	20.00	28.00	16.00
3/4"	NV-LE12	19.05	15.75	23.00	34.00	22.00
1"	NV-LE16	25.40	22.10	23.00	37.50	28.50

**Long Tee**



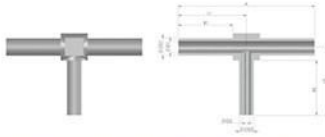
Size(OD)	Ordering Number	OD	ID	A	B	L	F
1/4"	NV-LT04	6.35	4.35	50.00	20.00	25.00	10.00
3/8"	NV-LT06	9.53	7.53	52.00	20.00	26.00	12.50
1/2"	NV-LT08	12.70	10.22	56.00	20.00	28.00	16.00
3/4"	NV-LT12	19.05	15.75	68.00	23.00	34.00	22.00
1"	NV-LT16	25.40	22.10	75.00	23.00	37.50	28.50

**Long Reducing Union**



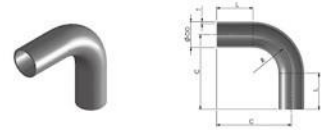
Size(OD)		Ordering Number	OD		ID		A	B
OD1	OD2		OD1	OD2	ID1	ID2		
3/8"	1/4"	NV-LRU06-04	9.53	6.35	7.53	4.35	39.00	19.00
1/2"	1/4"	NV-LRU08-04	12.70	6.35	10.22	4.35	39.00	19.00
1/2"	3/8"	NV-LRU08-06	12.70	9.53	10.22	7.53	39.00	19.00
3/4"	1/4"	NV-LRU012-04	19.05	6.35	15.75	4.53	42.90	19.00
3/4"	3/8"	NV-LRU012-06	19.05	9.53	15.75	7.53	42.90	19.00
3/4"	1/2"	NV-LRU012-08	19.05	12.70	15.75	10.22	42.90	19.00
1"	1/4"	NV-LRU16-04	25.40	6.35	22.10	4.35	44.50	19.00
1"	3/8"	NV-LRU16-06	25.40	9.53	22.10	7.53	44.50	19.00
1"	1/2"	NV-LRU16-08	25.40	12.70	22.10	10.22	44.50	19.00
1"	3/4"	NV-LRU16-12	25.40	19.05	22.10	15.75	44.50	23.00

**Long Reducing Tee**



Size(OD)		Ordering Number	OD		ID		A	B1	L	B2	L2	F
OD1	OD2		OD1	OD2	ID1	ID2						
3/8"	1/4"	NV-LRT06-04	9.53	6.35	7.53	4.35	52.00	20.00	26.00	20.00	26.00	12.50
1/2"	1/4"	NV-LRT08-04	12.70	6.35	10.22	4.35	56.00	20.00	28.00	20.00	28.00	16.00
1/2"	3/8"	NV-LRT08-06	12.70	9.53	10.22	7.53	56.00	20.00	28.00	20.00	28.00	16.00
3/4"	1/4"	NV-LRT12-04	9.05	6.35	15.75	4.35	68.00	23.00	34.00	20.00	31.00	22.00
3/4"	3/8"	NV-LRT12-06	9.05	9.53	15.75	7.53	68.00	23.00	34.00	20.00	31.00	22.00
3/4"	1/2"	NV-LRT12-08	9.05	12.70	15.75	10.22	68.00	23.00	34.00	20.00	31.00	22.00
1"	1/4"	NV-LRT16-04	25.40	6.35	22.10	4.35	75.00	23.50	37.50	20.00	34.00	28.50
1"	3/8"	NV-LRT16-06	25.40	9.53	22.10	7.53	75.00	23.50	37.50	20.00	34.00	28.50
1"	1/2"	NV-LRT16-08	25.40	12.70	22.10	10.22	75.00	23.50	37.50	20.00	34.00	28.50
1"	3/4"	NV-LRT16-12	25.40	19.05	22.10	15.75	75.00	23.50	37.50	23.00	34.00	28.50

**90° Elbow**



Tube Size

Units=mm

OD	R	C
1/4"	20	49
3/8"	23	52
1/2"	25	54
5/8"	28	64
3/4"	30	66
1"	33	69
1-1/4"	47.6	84
1-1/2"	57.2	104
2"	76.2	123
2-1/2"	95.3	147
3"	95.3	147
4"	133.4	185
5"	190.5	250
6"	228.6	290

**45° Elbow**

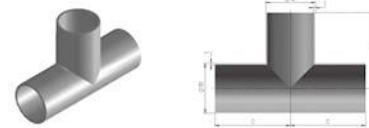


Tube Size

OD	R	C
1/4"	20	38
3/8"	23	39
1/2"	25	40
5/8"	28	48
3/4"	30	49
1"	33	50
1-1/4"	47.6	56
1-1/2"	57.2	70
2"	76.2	78
2-1/2"	95.3	91
3"	95.3	91
4"	133.4	107
5"	190.5	140
6"	228.6	155

Units=mm

**90° Tee**



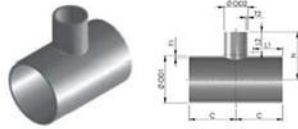
Tube Size

OD	C=N
1/4"	35
3/8"	37
1/2"	39
5/8"	49
3/4"	52
1"	55
1-1/4"	59
1-1/2"	74
2"	77
2-1/2"	90
3"	97
4"	110
5"	140
6"	160

Units=mm



**Reducing-TEE**

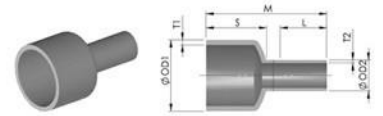


Tube Size

Units=mm

OD1	OD2	C	N	OD1	OD2	C	N
3/8"	1/4"	37	37	3"	1/2"-1/4"	60	71
1/2"	3/8"-1/4"	39	39		1-1/4"-5/8"	72	79
3/4"	1/2"-1/4"	47	47		2"-1-1/2"	90	90
	5/8"	52	52		2-1/2"	97	97
1"	1/2"-1/4"	47	47	4"	1/2"-1/4"	61	87
	3/4"-5/8"	55	55		1-1/4"-5/8"	72	95
1-1/4"	1/2"-1/4"	47	50		2"-1-1/2"	90	105
	1"-3/4"-5/8"	59	59		3"-2-1/2"	110	110
1-1/2"	1/2"-1/4"	57	54	5"	1/2"-1/4"	70	100
	1-1/4"-5/8"	68	62		1-1/4"-5/8"	90	110
2"	1/2"-1/4"	57	57		2"-1-1/2"	110	120
	1-1/4"-5/8"	68	65		4*.3"-2-1/2"	140	140
2-1/2"	1-1/2"	77	77	6"	1/2"-1/4"	80	115
	1/2"-1/4"	61	63		1-1/4"-5/8"	100	125
	1-1/4"-5/8"	72	71		2"-1-1/2"	120	135
	2"-1-1/2"	90	83		4*.3"-2-1/2"	140	145
				5"	160	160	

**CAP Reducer**

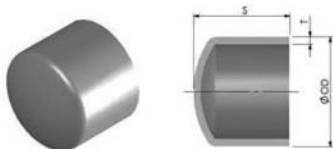


Tube Size

Units=mm

OD1	OD2	C	N	OD1	OD2	C	N	
3/8"	1/4"			3"	1/2"-1/4"	38.1	73	
1/2"	3/8"-1/4"				1-1/4"-5/8"		80	
3/4"	1/2"-1/4"	19.1	54		2*.1-1/2"		(90)	
	5/8"		60		2"-1/2"		(95)	
1"	1/2"-1/4"	25.4	60	4"	1/2"-1/4"	63.5	98	
	3/4"-5/8"		67		1-1/4*.5/8"		105	
1-1/4"	1/2"-1/4"	38.1	73		2"-1-1/2"		115	
	1*.3/4*5/8"		80		3"-2-1/2"		(125)	
1-1/2"	1/2"-1/4"	38.1	73	5"	1/2"-1/4"			
	1-1/4"-5/8"		80		1-1/4"-5/8"			
2"	1/2"-1/4"	38.1	73		2*.1-1/2"			
	1-1/4"-5/8"		80		4*.3"-2-1/2"			
2-1/2"	1-1/2"	38.1	90	6"	1/2"-1/4"	63.5		
	1/2"-1/4"		73		1"-1/4"-5/8"			
	1-1/4"-5/8"		80		2*.1-1/2"			
	2"-1-1/2"		90		4*.3"-2-1/2"			
				5"				

**CAP**

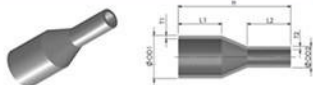


Tube Size

Units=mm

OD	S
1/4"	12.7
3/8"	12.7
1/2"	12.7
5/8"	12.7
3/4"	12.7
1"	25.4
1-1/4"	38.1
1-1/2"	38.1
2"	38.1
2-1/2"	38.1
3"	38.1
4"	63.5

**CON Reducer**



Tube Size

Units=mm

OD1	OD2	H
1-1/2"	1-1/4"-1/4"	85(125)
2"	1-1/4"-1/4"	95(130)
2-1/2"	2-1/4"	105(140)
3"	2-1/2"-1/4"	110(165)
4"	3-1/4"	130(175)
5"	4-1/4"	180(230)
6"	5-1/4"	200(250)

**ECC Reducer**



Tube Size

Units=mm

OD1	OD2	H
1/4"		60(70)
3/8"	1/4"	60(70)
1/2"	3/8"-1/4"	60(75)
5/8"	1/2"-1/4"	70(90)
3/4"	5/8"-1/4"	75(100)
1"	3/4"-1/4"	75(105)
1-1/4"	1-1/4"	75(120)

Ordering Number

Sample Order Number	NBFSS-RT-08-04-BA		
Brand	N=NAILOK	Size	04=1/4" 06=3/8" 08=1/2" 10=5/8" 12=3/4" 24=1 1/2" 32=2" 40=2 1/2" 48=3"
Fitting Type	BF=Bend Fitting		
Material	SS=Stainless steel(SS) H=Hastelloy	Surface Finish Level	BA=Bright Annealed EP=Electro Polished
Name	90E=90° Elbow 45E=45° Elbow ET=Equal Tee RT=Reducing Tee C=Cap CR=Cap Reducer ER=Ecc Reducer CNR=Con Reducer		

















### Pneumatic Actuator Ball Valve

- Stainless steel 316
- Electric/pneumatic actuator
- Working pressure: 1000psi,6000 psig
- Size: From 1/4" to 2"

### Needle Valve NG Series

- Stainless steel 316
- Maximum working pressure: 6000 psig(414 Bar)
- Working temperature:
  - PTFE: -65° F to 450° F (-54° C to 232° C)
  - Grophite: -65° F to 650° F (-54° C to 343° C)
- Size :From 1/4" to 1/2"



### Needle Valve NB Series

- Working pressure: 6000 psig
- Working temperature:
  - PTFE: -65° F to 450° F (-54° C to 232° C)
  - Grophite: -65° F to 650° F (-54° C to 343° C)
- NAI-LOK 1/4" to 1" OD

### Gauge Valve GV Series

- Stainless steel 316
- Woring pressure: 6000 psig(414 Bar)
- 1/2" and 3/4" male to 1/2"female end connecions
- 1/2" female gauge ports standard



### Manifold Valve MV Series

- Stainless steel 316
- Working pressure: 6000 psig
- 2,3 and 5 valve as standard

### Relief Valve RV Series

- Stainless steel 316
- Working pressure: Up to 6000 psig(414 bar)
- Cracking pressure: 15 to 6000 psig
- 18 to 900 °F (-28 to 204°C )
- Size: From 1/4" to 1/2"



### Check Valve CV Series

- Stainless steel 316
- Working pressure: Up to 3000 psig(207 bar)
- Cracking pressure; 1/3PSI
- Size: From 1/8" to 1"



### Check Valve CVH Series

- Working pressure:6000 psig(414 bar)•
- Stainless steel 316•
- NAI-LOK 1/8" to 1" OD •
- Pipe thread 1/8" to 1" •
- Cracking pressure:1 psig•

### Filter FI Series

- Standard micron filtering ranges:0.5,2,7,15,60 and 90 microns
- Stainless steel 316
- NAI-LOK 1/8" to 1/2" OD
- Pipe thread 1/8" to 1/2"



### Quick Connection QC Series

- Stainless steel 316•
- Working pressure: 3000 psig(206bar)•
- Bi-directions flow design•
- Size: From 1/8" to 1/2" •

### Sample cylinder

- Sizes from 10 to 3785 cm3 (1 gal)
- Working pressures up to 5000 psig (344 bar)
- 316L stainless steel and alloy 400





### Flange Adapters

- SS316L,HC-276,Super Alloy
- Pressure: CL150, CL300, CL600
- Size: 1/16"-2" Ø4-Ø42 (DN15-DN50)
- End connection:Tube fitting,flange
- Flange types meet ASME, •DIN EN, and JIS standards

### Flexible Metal Hoses

- Working pressure:up to 4000 psig(276 Bar)
- Temperature:-65° F to 450° F (-54° C to 232° C)
- Stainless steel end connections are available from stock in 1/4" to 1" size



### Stainless Steel Tubing

- Bright Seamless Tubing
- Stainless steel 316,Alloy C276
- Size:1/8" to 2",3 MM to 50 MM
- Surface finish level: AP/ BA / EP

### Metal Seal Fittings

- High-purity stainless steels
- 1/16 to 1 in.
- BA-EP grade



### Weld Bend Fittings

- Grade\* BA-Bright Annealed Pipe\*
- EP-ElectroPolished Pipe
- Size:1/4 to 6 inch
- Elbow Tee Reducing tee Cap Reducer



### Weld Fittings

- BA,Grades\*
- Size:1/4"to 1"\*
- Elbow Tee Reducing tee Cap Reducer\*

### Bellows Valve

- Material: SS316,Alloy C276
- Working pressure:1 MPA
- Size:15A to 50 A,
- Available in pneumatic 15A to 250A



### High Purity Clean Ball Valve

- Pressure rating up to 800PSIG(55 Bar)\*
- Swing out 3PC design for easy field maintenance\*
- All extend weld ends in SS316L material allows orbital welding in place
- Size:1/2 to 4 in. \*
- High purity cleaning (Oil free)\*

### Y type globe valve

- Size: 3/8 to 4 "(10-100mm)
- ASME Class: 1500, 2500and4500
- Design: ASME B16.34
- Test-ASME B16.34,AP1598
- Socket welding port ASME B16.11
- Bult welding port-ASME B16.25



### Flanged globe valve

- Working pressure: 32MPa116MPa 22MPa 25MPa 32MPa)\*
- Operating temperature: PTFE packing:-54° C to 232° C(-65°Fto450F)\*
- Diameter: DN15 DN10 DN200)\*
- Port standard: threaded flange JBIT2769
- Material:316L stainless steel,Alloy 20,Hastelloy C-276 and Titanium\*

### Double Block & Bleed Valve DBB

- Ball valve bore size from 3/8 to 2 in.
- Working Temperatures: -58 to 400F (-50 to 204°C) for stainless steel and duplex valve assemblies
- Material:316L stainless steel,Alloy 20,Hastelloy C-276 and Titanium

