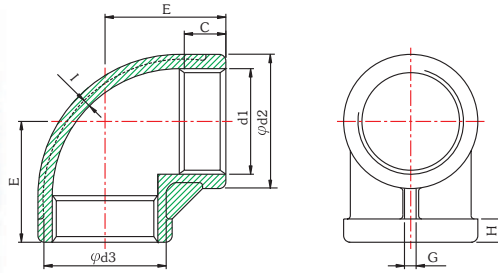


# I N D E X

<b>L9B</b>	<b>90° ELBOWS BANDED EQUAL</b>	
<b>LTB</b>	<b>45° ELBOWS BANDED EQUAL</b> .....	<b>1</b>
<b>L4B</b>	<b>TEES BANDED EQUAL</b>	
<b>L+B</b>	<b>CROSSES BANDED EQUAL</b> .....	<b>2</b>
<b>LSL</b>	<b>STREET ELBOWS 90° BANDED</b>	
<b>LCF</b>	<b>UNIONS F/F</b> .....	<b>3</b>
<b>LCM</b>	<b>UNIONS M/F</b>	
<b>LCB</b>	<b>UNIONS B/W</b> .....	<b>4</b>
<b>LRC</b>	<b>ROUND CAPS</b>	
<b>LSP</b>	<b>SQUARE HEAD PLUGS</b> .....	<b>5</b>
<b>LHP</b>	<b>HEX HEAD PLUGS</b>	
<b>LHC</b>	<b>HEX CAPS</b> .....	<b>6</b>
<b>HNT</b>	<b>HEX NUTS</b>	
<b>LHB</b>	<b>HEX BUSHINGS</b> (1/4"x1/8"~1"x3/4") .....	<b>7</b>
<b>LHB</b>	<b>HEX BUSHINGS</b> (1 1/4"x1/8"~4"x3") .....	<b>8</b>
<b>LRN</b>	<b>REDUCING HEX NIPPLE</b> (1/4"x1/8"~2"x1/4") .....	<b>9</b>
<b>LRN</b>	<b>REDUCING HEX NIPPLE</b> (2"x3/8"~4"x3") .....	<b>10</b>
<b>ONP</b>	<b>HOSE NIPPLE</b>	
<b>LNP</b>	<b>HEX NIPPLE</b> .....	<b>11</b>
<b>FCP</b>	<b>COUPLINGS/SOCKETS</b>	
<b>HCP</b>	<b>HALF COUPLINGS/HALF SOCKETS</b> .....	<b>12</b>
<b>LRS</b>	<b>REDUCING COUPLINGS</b> (1/4"x1/8"~1 1/2"x1 1/4") .....	<b>13</b>
<b>LRS</b>	<b>REDUCING COUPLINGS</b> (2"x4"~4"x3") .....	<b>14</b>
<b>BNP</b>	<b>BARREL NIPPLE</b>	
<b>WNP</b>	<b>WELDING NIPPLE</b> .....	<b>15</b>

# L9B

# 90° ELBOWS BANDED EQUAL



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

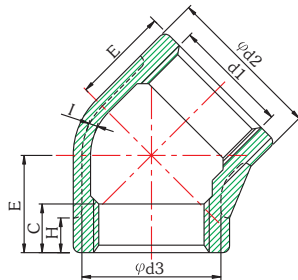
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d2	14.8	18.3	21.7	26.6	32.1	39.5	49.2	55.5	68.2	83.5	99.0	126.3
d3	13.3	16.8	20.2	24.6	30.1	37.5	46.7	53.0	65.7	80.5	96.0	123.3
C	6.2	9.4	9.7	12.0	12.0	14.0	16.0	18.0	18.0	22.0	24.0	25.0
E	17.0	19.0	23.0	27.0	32.0	38.0	45.0	48.0	57.0	69.0	78.0	96.0
G	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.5	4.5	5.5
H	6.0	6.0	6.5	7.5	8.5	10.0	11.0	12.0	13.0	14.0	15.0	15.0
I	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.0	2.2	2.7	3.0	3.4

# L4B

# 45° ELBOWS BANDED EQUAL



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

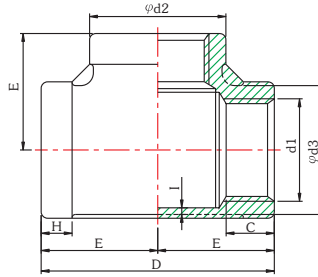
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d2	14.8	18.3	21.7	26.6	32.1	39.5	49.2	55.5	68.2	83.5	99.0	126.3
d3	13.3	16.8	20.2	24.6	30.1	37.5	46.7	53.0	65.7	80.5	96.0	123.3
C	6.2	9.4	9.7	12.0	12.0	14.0	16.0	18.0	18.0	22.0	24.0	25.0
E	16.0	17.0	19.0	21.0	25.0	29.0	33.0	37.0	42.0	49.0	54.0	64.0
H	5.0	5.0	5.5	6.0	7.0	8.0	8.0	10.0	10.0	11.0	12.0	12.0
I	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.0	2.2	2.7	3.0	3.4

# LTB

# TEES BANDED EQUAL



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

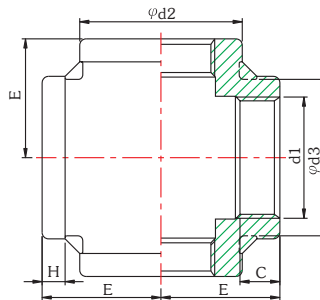
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d2	14.8	18.3	21.7	26.6	32.1	39.5	49.2	55.5	68.2	83.5	99.0	126.3
d3	13.3	16.8	20.2	24.6	30.1	37.5	46.7	53.0	65.7	80.5	96.0	123.3
C	6.2	9.4	9.7	12.0	12.0	14.0	16.0	18.0	18.0	22.0	24.0	25.0
E	17.0	19.0	23.0	27.0	32.0	38.0	45.0	48.0	57.0	69.0	78.0	96.0
D	34.0	38.0	46.0	54.0	64.0	76.0	90.0	96.0	114.0	138.0	156.0	192.0
I	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.0	2.2	2.7	3.0	3.4

# L+B

# CROSSES BANDED EQUAL



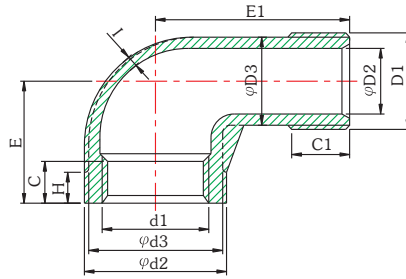
### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d2	14.8	18.3	21.7	26.6	32.1	39.5	49.2	55.5	68.2	83.5	99.0	126.3
d3	13.3	16.8	20.2	24.6	30.1	37.5	46.7	53.0	65.7	80.5	96.0	123.3
C	6.2	9.4	9.7	12.0	12.0	14.0	16.0	18.0	18.0	22.0	24.0	25.0
E	17.0	19.0	23.0	27.0	32.0	38.0	45.0	48.0	57.0	69.0	78.0	96.0
H	5.0	5.0	5.0	6.0	7.0	8.0	8.0	10.0	10.0	11.0	12.0	12.0



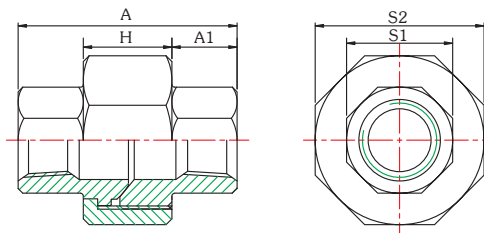
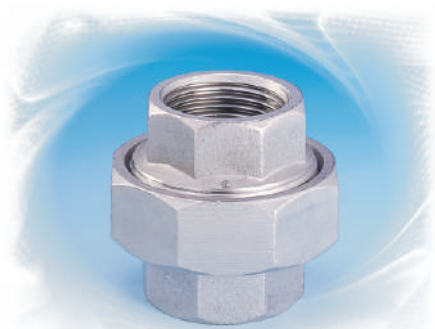
**DESIGN FEATURES:**

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

**DIMENSIONS**

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d2	14.8	18.3	21.7	26.6	32.1	39.5	49.2	55.5	68.2	83.5	99.0	126.3
d3	13.3	16.8	20.2	24.6	30.1	37.5	46.7	53.0	65.7	80.5	96.0	123.3
C	6.2	9.4	9.7	12.0	12.0	14.0	16.0	18.0	18.0	22.0	24.0	25.0
E	17.0	19.0	23.0	27.0	32.0	38.0	45.0	48.0	57.0	69.0	78.0	97.0
H	4.0	5.0	6.0	8.0	9.0	9.0	11.0	11.0	13.0	14.0	15.0	18.0
D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D2	5.5	8.0	11.5	15.0	20.5	26.0	34.5	40.0	51.0	60.0	77.5	101.5
D3	8.5	11.0	14.5	18.2	23.9	29.8	38.5	44.0	55.4	65.0	82.5	106.5
C1	8.0	10.5	11.0	14.5	15.5	18.0	20.5	20.5	25.0	27.0	30.0	36.0
E1	26.0	27.0	29.0	35.0	40.0	46.0	54.0	57.0	70.0	83.0	94.0	115.0
I	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.0	2.2	2.7	3.0	3.4



**DESIGN FEATURES:**

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

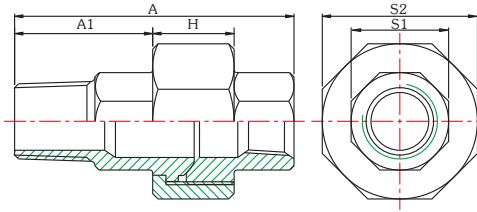
**DIMENSIONS**

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A±1.5	36.3	36.3	37.2	39.1	45.4	49.0	51.1	54.2	58.8	71.2	87.5	98.6
A1±0.5	10.5	10.5	11.0	11.6	14.9	15.5	14.5	15.0	16.4	22.7	29.0	32.0
H±0.5	15.0	15.0	15.0	15.0	15.5	18.0	21.3	22.2	25.2	25.0	29.2	34.3
S1±1.0	13.3	16.8	20.2	24.5	29.7	36.5	46.2	52.3	64.6	79.2	94.9	120.3
S2±1.0	24.1	27.6	34.0	39.5	46.7	54.0	63.9	73.5	86.9	90.9	121.9	151.3

# LCM

# UNIONS M/F



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

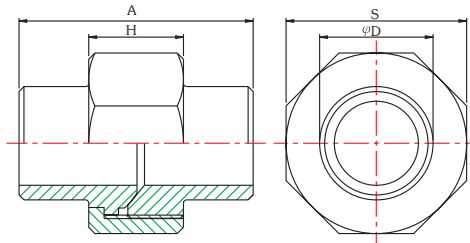
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A±1.5	42.5	46.5	47.2	52.3	54.7	66.1	67.8	75.2	84.4	96.1	116.1	130.3
A1±0.5	17.0	21.0	21.2	25.7	27.6	32.6	32.0	38.0	42.8	48.4	57.9	64.0
H±0.5	15.0	15.0	15.0	15.0	15.5	18.0	21.3	22.2	25.2	25.0	29.2	34.3
S1±1.0	13.3	16.8	20.2	24.5	29.7	36.5	46.2	52.3	64.4	79.2	94.9	120.3
S2±1.0	24.1	27.6	34.0	39.5	46.7	54.0	63.9	73.5	86.9	90.9	121.9	151.3

# LCB

# UNIONS B/W



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).
- SHIPPING QUANTITY: 10%

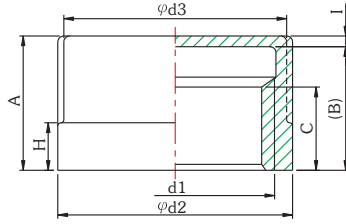
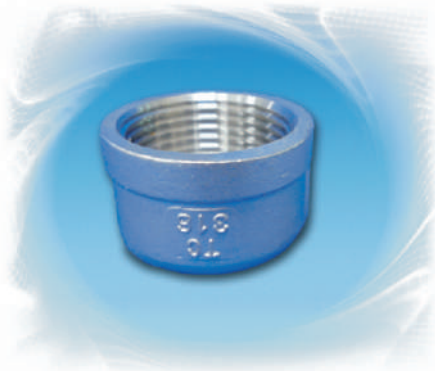
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A±1.5	31.0	32.2	38.0	40.0	47.1	49.6	54.3	57.2	60.0	70.4	81.0	92.3
D±0.5	11.4	13.8	17.3	21.6	27.1	34.0	42.7	48.6	60.5	76.3	89.1	114.3
H±0.5	15.0	15.0	15.0	15.0	15.5	18.0	21.3	22.2	25.2	25.0	29.2	34.3
S±0.5	24.1	27.6	34.0	39.5	46.7	54.0	63.9	73.5	86.9	102.9	121.9	151.3

# LRC

# ROUND CAPS



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

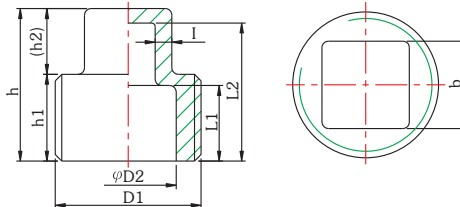
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d2	14.8	18.3	21.7	26.6	32.1	39.5	49.2	55.5	68.2	83.5	99.0	126.3
d3	13.3	16.8	20.2	24.6	30.1	37.5	46.7	53.0	65.7	80.5	96.0	123.3
A	13.5	18.5	19.5	21.1	21.7	24.8	26.5	30.0	34.2	38.7	42.5	48.4
C	6.2	9.4	9.7	10.0	11.0	15.0	17.5	18.0	18.0	22.0	23.0	25.0
H	5.0	5.0	5.5	6.0	7.0	8.0	8.0	10.0	10.0	11.0	12.0	12.0
I	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.0	2.2	2.7	3.0	3.4
(B)	12.0	17.0	18.0	19.5	20.0	23.0	24.5	28.0	32.0	36.0	39.5	45.0

# LSP

# SQUARE HEAD PLUGS



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

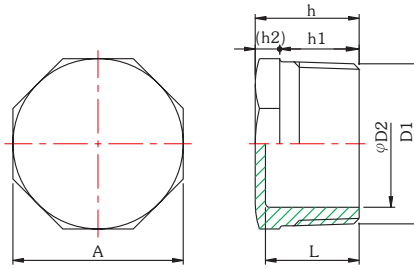
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
b	7.0	9.0	10.0	13.0	18.0	19.0	23.0	26.0	29.0	40.0	44.0	59.0
D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D2	—	—	—	15.5	21.0	27.0	35.0	40.5	52.0	60.0	81.0	103.0
L1	—	—	—	9.9	11.3	12.6	14.8	14.6	18.8	20.3	22.9	28.4
L2	—	—	—	16.9	19.3	23.6	26.0	27.0	32.0	36.0	39.0	49.0
h	11.0	13.5	15.0	18.5	21.0	25.5	28.0	29.0	34.5	38.5	41.5	51.5
h1	6.0	8.5	9.0	11.5	13.0	14.5	17.0	17.0	21.5	23.5	26.5	32.5
(h2)	5.0	5.0	6.0	7.0	8.0	11.0	11.0	12.0	13.0	15.0	15.0	19.0
I	—	—	—	1.6	1.7	1.9	2.0	2.0	2.2	2.5	2.5	2.5

# LHP

# HEX HEAD PLUGS



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

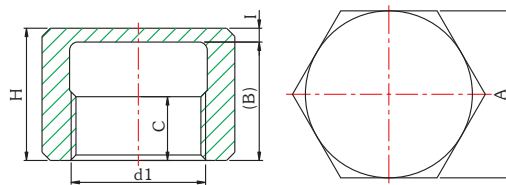
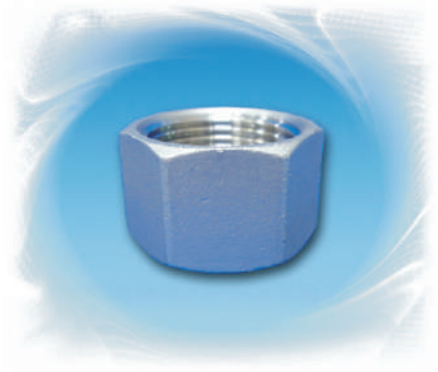
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	14.0	17.0	21.0	26.0	32.0	38.0	46.0	52.0	65.0	80.0	95.0	120.0
D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D2	—	—	11.3	14.6	19.9	25.8	34.5	39.5	51.5	61.2	76.8	102.3
L	—	—	14.5	17.9	19.3	22.1	25.0	25.0	29.8	31.5	35.0	41.5
h	12.0	14.5	16.0	19.5	21.0	24.0	27.0	27.0	32.0	34.0	37.5	44.0
h1	8.0	10.5	11.0	14.5	15.5	18.0	20.5	20.5	25.0	27.0	30.0	36.0
(h2)	4.0	4.0	5.0	5.0	5.5	6.0	6.5	6.5	7.0	7.0	7.5	8.0

# LHC

# HEX CAPS



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) MATERIAL IS NOT AVAILABLE.
- CF8M (316) SHIPPING QUANTITY: 10%

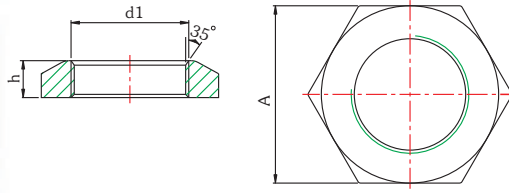
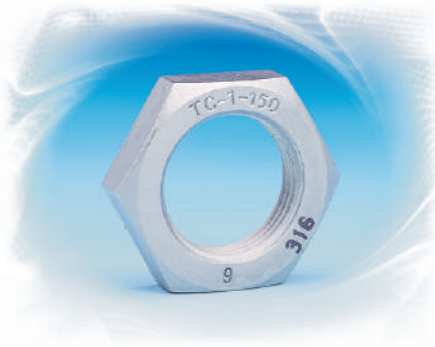
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	13.5	16.8	20.2	24.6	30.1	37.5	46.7	53.0	65.7	80.5	96.0	123.3
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
C	6.2	9.4	9.7	10.0	11.0	15.0	17.5	18.0	18.0	22.0	23.0	25.0
H	13.5	18.5	19.5	21.1	21.7	24.8	26.5	30.0	34.2	38.7	42.5	48.4
I	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.0	2.2	2.7	3.0	3.4
(B)	12.0	17.0	18.0	19.5	20.0	23.0	24.5	28.0	32.0	36.0	39.5	45.0

# HNT

# HEX NUTS



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) MATERIAL IS NOT AVAILABLE.
- CF8M (316) SHIPPING QUANTITY: 10%

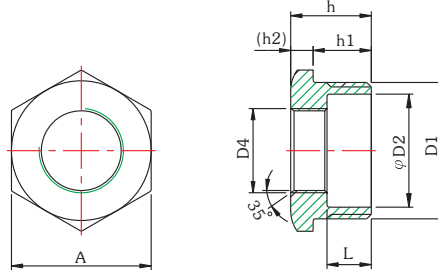
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	19.0	22.0	27.0	32.0	36.0	46.0	55.0	60.0	75.0	90.0	100.0	130.0
h	8.5	8.5	9.0	9.0	10.0	11.0	12.0	13.0	13.5	17.5	21.0	22.0

# LHB

# HEX BUSHINGS



### DESIGN FEATURES:

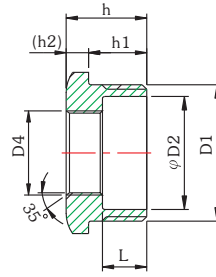
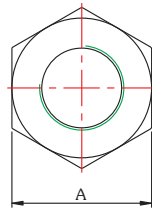
- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/4"x1/8"	3/8"x1/8"	3/8"x1/4"	1/2"x1/8"	1/2"x1/4"	1/2"x3/8"	3/4"x1/8"	3/4"x1/4"	3/4"x3/8"	3/4"x1/2"	1"x1/8"	1"x1/4"	1"x3/8"	1"x1/2"	1"x3/4"
A	16.5	20.8	20.8	23.8	23.8	23.8	28.8	28.8	28.8	28.8	35.8	35.8	35.8	35.8	35.8
L	9.4	9.4	—	13.4	13.4	—	18.4	18.4	18.4	15.0	21.4	21.4	21.4	18.0	17.0
D1	1/4"	3/8"	3/8"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"	1"
D2	8.7	11.9	—	14.6	14.6	—	20.2	20.2	20.2	20.2	26.5	26.5	26.5	26.5	26.5
D4	1/8"	1/8"	1/4"	1/8"	1/4"	3/8"	1/8"	1/4"	3/8"	1/2"	1/8"	1/4"	3/8"	1/2"	3/4"
h	16.0	16.0	16.0	20.0	20.0	20.0	25.0	25.0	25.0	25.0	28.0	28.0	28.0	28.0	28.0
h1	11.0	11.0	11.0	14.5	14.5	14.5	19.0	19.0	19.0	19.0	22.0	22.0	22.0	22.0	22.0
(h2)	5.0	5.0	5.0	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0





**DESIGN FEATURES:**

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

**DIMENSIONS**

UNIT : mm

SIZE SPEC.	1 1/4"x1/8"	1 1/4"x1/4"	1 1/4"x3/8"	1 1/4"x1/2"	1 1/4"x3/4"	1 1/4"x1"	1 1/2"x1/8"	1 1/2"x1/4"	1 1/2"x3/8"	1 1/2"x1/2"	1 1/2"x3/4"	1 1/2"x1"	1 1/2"x1 1/4"	2"x1/8"
A	43.8	43.8	43.8	43.8	43.8	43.8	50.5	50.5	50.5	50.5	50.5	50.5	50.5	61.5
L	23.4	23.4	23.4	20.0	19.0	16.0	24.4	24.4	24.4	21.0	20.0	17.0	16.0	25.4
D1	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"
D2	36.0	36.0	36.0	36.0	36.0	36.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	52.6
D4	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1/8"
h	30.0	30.0	30.0	30.0	30.0	30.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	32.0
h1	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
(h2)	7.0	7.0	7.0	7.0	7.0	7.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	9.0

**DIMENSIONS**

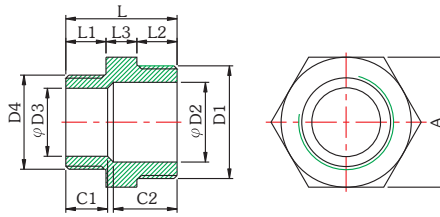
UNIT : mm

SIZE SPEC.	2"x1/4"	2"x3/8"	2"x1/2"	2"x3/4"	2"x1"	2"x1 1/4"	2"x1 1/2"	2 1/2"x1/2"	2 1/2"x3/4"	2 1/2"x1"	2 1/2"x1 1/4"	2 1/2"x1 1/2"	2 1/2"x2"	3"x1/2"
A	61.5	61.5	61.5	61.5	61.5	61.5	61.5	76.0	76.0	76.0	76.0	76.0	76.0	92.5
L	25.4	25.4	22.0	21.0	18.0	17.0	16.0	30.0	29.0	26.0	25.0	24.0	23.0	32.0
D1	2"	2"	2"	2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"
D2	52.6	52.6	52.6	52.6	52.6	52.6	52.6	64.0	64.0	64.0	64.0	64.0	64.0	79.0
D4	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"
h	32.0	32.0	32.0	32.0	32.0	32.0	32.0	40.0	40.0	40.0	40.0	40.0	40.0	42.0
h1	23.0	23.0	23.0	23.0	23.0	23.0	23.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
(h2)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	11.0	11.0	11.0	11.0	11.0	11.0	13.0

**DIMENSIONS**

UNIT : mm

SIZE SPEC.	3"x3/4"	3"x1"	3"x1 1/4"	3"x1 1/2"	3"x2"	3"x2 1/2"	4"x1/2"	4"x3/4"	4"x1"	4"x1 1/4"	4"x1 1/2"	4"x2"	4"x2 1/2"	4"x3"
A	92.5	92.5	92.5	92.5	92.5	92.5	118.0	118.0	118.0	118.0	118.0	118.0	118.0	118.0
L	31.0	28.0	27.0	26.0	25.0	23.5	35.0	34.0	31.0	30.0	29.0	28.0	26.5	25.0
D1	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	4"	4"	4"
D2	79.0	79.0	79.0	79.0	79.0	79.0	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5
D4	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
h	42.0	42.0	42.0	42.0	42.0	42.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
h1	29.0	29.0	29.0	29.0	29.0	29.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
(h2)	13.0	13.0	13.0	13.0	13.0	13.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0



**DESIGN FEATURES:**

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).
- NPT THREADED SHIPPING
- QUANTITY: 10%

**DIMENSIONS**

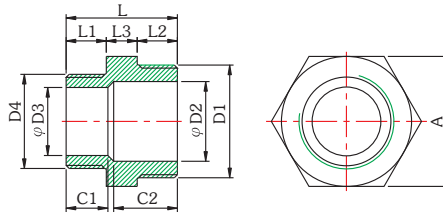
UNIT : mm

SIZE SPEC.	1/4"x1/8"	3/8"x1/8"	3/8"x1/4"	1/2"x1/8"	1/2"x1/4"	1/2"x3/8"	3/4"x1/8"	3/4"x1/4"	3/4"x3/8"	3/4"x1/2"	1"x1/4"	1"x3/8"	1"x1/2"
A	15.0	19.0	19.0	23.0	23.0	23.0	29.0	29.0	29.0	29.0	36.0	36.0	36.0
D1	1/4"	3/8"	3/8"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"
D2	9.0	12.0	12.0	15.5	15.5	15.5	21.0	21.0	21.0	21.0	27.0	27.0	27.0
D3	6.0	6.0	9.0	6.0	9.0	12.0	6.0	9.0	12.0	15.5	9.0	12.0	15.5
D4	1/8"	1/8"	1/4"	1/8"	1/4"	3/8"	1/8"	1/4"	3/8"	1/2"	1/4"	3/8"	1/2"
C1	9.5	7.5	10.5	11.0	13.5	14.0	14.0	14.5	14.5	17.0	16.5	16.5	18.5
C2	11.5	13.5	15.0	9.5	13.5	14.5	13.0	14.0	13.5	15.5	15.5	16.5	18.0
L	22.5	24.0	26.5	27.5	30.0	30.5	29.0	31.5	32.0	35.5	34.5	35.0	38.5
L1	8.0	8.0	10.5	8.0	10.5	11.0	8.0	10.5	11.0	14.5	10.5	11.0	14.5
L2	10.5	11.0	11.0	14.5	14.5	14.5	15.5	15.5	15.5	15.5	18.0	18.0	18.0
L3	4.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.5	5.5	6.0	6.0	6.0

**DIMENSIONS**

UNIT : mm

SIZE SPEC.	1"x3/4"	1 1/4"x1/4"	1 1/4"x3/8"	1 1/4"x1/2"	1 1/4"x3/4"	1 1/4"x1"	1 1/2"x1/4"	1 1/2"x3/8"	1 1/2"x1/2"	1 1/2"x3/4"	1 1/2"x1"	1 1/2"x1 1/4"	2"x1/4"
A	36.0	45.0	45.0	45.0	45.0	45.0	51.0	51.0	51.0	51.0	51.0	51.0	63.0
D1	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"
D2	27.0	35.0	35.0	35.0	35.0	35.0	40.5	40.5	40.5	40.5	40.5	40.5	52.0
D3	21.0	9.0	12.0	15.5	21.0	27.0	9.0	12.0	15.5	21.0	27.0	35.0	9.0
D4	3/4"	1/4"	3/8"	1/2"	3/4"	1"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1/4"
C1	18.0	18.5	21.9	20.5	20.5	22.5	20.0	19.5	19.0	21.0	23.5	26.0	18.5
C2	18.5	16.0	15.1	18.0	18.0	19.5	15.5	16.5	19.5	18.5	18.5	18.5	22.0
L	39.5	37.5	38.0	41.5	42.5	45.0	37.5	38.0	41.5	42.5	45.0	47.5	42.5
L1	18.0	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	25.0
L2	15.5	10.5	11.0	14.5	15.5	18.0	10.5	11.0	14.5	15.5	18.0	20.5	10.5
L3	6.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0



**DESIGN FEATURES:**

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).
- NPT THREADED SHIPPING QUANTITY: 10%

**DIMENSIONS**

UNIT : mm

SIZE SPEC.	2"x3/8"	2"x1/2"	2"x3/4"	2"x1"	2"x1 1/4"	2"x1 1/2"	2 1/2"x1/2"	2 1/2"x3/4"	2 1/2"x1"	2 1/2"x1 1/4"	2 1/2"x1 1/2"	2 1/2"x2"	3"x1/2"
A	63.0	63.0	63.0	63.0	63.0	63.0	80.0	80.0	80.0	80.0	80.0	80.0	95.0
D1	2"	2"	2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"
D2	52.0	52.0	52.0	52.0	52.0	52.0	66.0	66.0	66.0	66.0	66.0	66.0	81.0
D3	12.0	15.5	21.0	27.0	35.0	40.5	15.5	21.0	27.0	35.0	40.5	52.0	15.5
D4	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"
C1	17.5	21.5	22.5	22.5	22.5	21.5	26.5	26.5	26.5	26.5	26.5	30.5	18.5
C2	22.5	22.0	21.0	23.5	27.0	27.0	19.0	20.0	22.5	24.0	25.0	24.5	30.5
L	43.0	46.5	47.5	50.0	52.5	52.5	48.5	49.5	52.0	54.5	54.5	59.0	52.0
L1	11.0	14.5	15.5	18.0	20.5	20.5	14.5	15.5	18.0	20.5	20.5	25.0	14.5
L2	25.0	25.0	25.0	25.0	25.0	25.0	27.0	27.0	27.0	27.0	27.0	27.0	30.0
L3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5

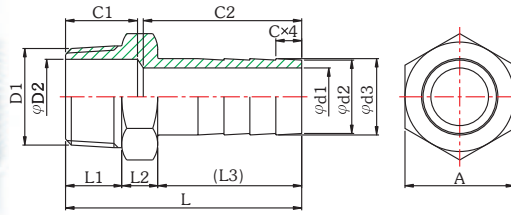
**DIMENSIONS**

UNIT : mm

SIZE SPEC.	3"x3/4"	3"x1"	3"x1 1/4"	3"x1 1/2"	3"x2"	3"x2 1/2"	4"x3/4"	4"x1"	4"x1 1/4"	4"x1 1/2"	4"x2"	4"x2 1/2"	4"x3"
A	95.0	95.0	95.0	95.0	95.0	95.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
D1	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	4"	4"
D2	81.0	81.0	81.0	81.0	81.0	81.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
D3	21.0	27.0	35.0	40.5	52.0	66.0	21.0	27.0	35.0	40.5	52.0	66.0	81.0
D4	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
C1	20.5	29.0	29.5	29.5	29.5	29.5	21.0	23.5	26.0	26.0	30.5	32.0	35.5
C2	29.5	23.5	25.5	25.5	30.0	32.0	35.5	36.5	35.5	35.5	35.5	32.5	35.5
L	53.0	55.5	58.0	58.0	62.5	64.5	59.5	62.0	64.5	64.5	69.0	71.0	74.0
L1	15.5	18.0	20.5	20.5	25.0	27.0	15.5	18.0	20.5	20.5	25.0	27.0	30.0
L2	30.0	30.0	30.0	30.0	30.0	30.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
L3	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0

# ONP

# HOSE NIPPLE



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).
- 2 1/2" NPT THREADED IS NOT AVAILABLE.
- SHIPPING QUANTITY: 10% INCLUDING CF8 (304) ALL THREADS & CF8M (316) NPT THREAD.

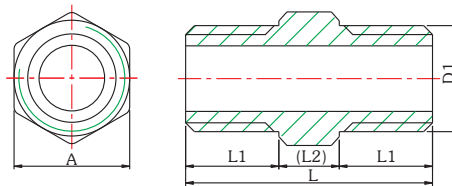
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	16.0	19.0	25.0	31.0	38.0	46.0	52.0	65.0	80.0	95.0	120.0
D1	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D2	6.5	9.5	14.5	18.0	26.0	35.0	40.0	51.5	67.0	78.0	102.0
C	4.0	5.5	6.5	8.5	9.0	9.5	10.5	13.0	16.0	17.0	21.0
C1	17.0	18.0	19.0	23.0	25.0	28.0	31.0	33.0	37.0	43.0	48.0
C2	28.0	31.0	41.0	48.0	55.0	48.0	58.0	74.0	95.0	100.0	105.0
L	46.5	51.5	62.5	72.5	82.0	80.0	92.5	109.5	136.0	147.0	158.0
L1	13.0	13.0	15.5	18.0	19.5	22.5	23.0	24.5	27.0	33.0	36.0
L2	10.0	10.0	10.0	11.5	12.5	12.5	13.5	15.0	16.0	17.0	18.0
(L3)	23.5	28.5	37.0	43.0	50.0	53.0	56.0	70.0	93.0	97.0	104.0
d1	5.0	6.5	9.5	14.5	20.0	27.0	33.0	45.0	58.0	70.0	90.0
d2	8.0	10.0	13.5	19.5	25.5	32.5	38.5	50.5	62.0	75.0	101.0
d3	9.0	11.0	14.5	20.5	26.5	34.0	40.5	52.5	64.0	78.0	104.0

# LHN

# HEX NIPPLE



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

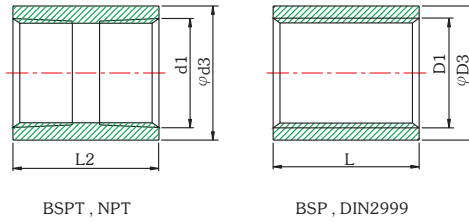
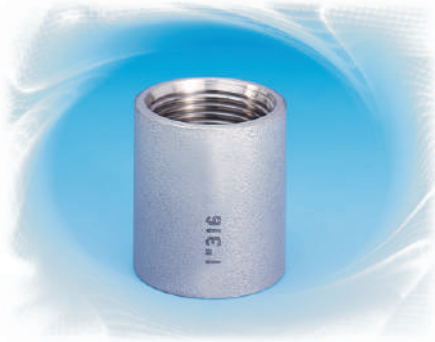
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	12.0	15.0	19.0	23.0	29.0	36.0	45.0	51.0	63.0	80.0	95.0	120.0
D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
L	20.0	25.0	27.0	34.0	36.5	42.0	47.5	47.5	57.0	62.0	67.5	80.0
L1	8.0	10.5	11.0	14.5	15.5	18.0	20.5	20.5	25.0	27.5	30.0	36.0
L2	4.0	4.0	5.0	5.0	5.5	6.0	6.5	6.5	7.0	7.0	7.5	8.0

# FCP

# COUPLINGS/SOCKETS



### DESIGN FEATURES:

- 🔴 THREAD: NPT,BSP (BS21),BSPT,DIN.
- 🔴 CF8 (304) & CF8M (316).
- 🔴 MADE FROM STAINLESS STEEL WELDED PIPE.

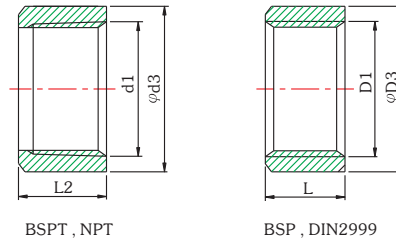
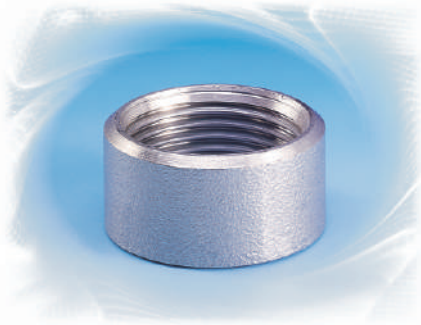
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	
BSPT , NPT	d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
	d3	14.0	18.5	21.5	26.5	32.0	39.5	48.5	54.5	66.5	84.0	100.0	129.0
	L2	20.0	27.0	28.0	36.0	39.0	43.0	48.0	48.0	56.0	65.0	71.0	83.0
BSP , DIN2999	D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
	D3	14.0	18.5	21.5	26.5	32.0	39.5	48.5	54.5	66.5	82.0	95.0	122.0
	L	20.0	25.0	26.0	34.0	36.0	43.0	48.0	48.0	56.0	65.0	71.0	83.0

# HCP

# HALF COUPLINGS/HALF SOCKETS



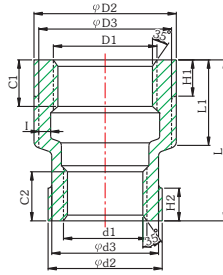
### DESIGN FEATURES:

- 🔴 THREAD: NPT,BSP (BS21),BSPT,DIN.
- 🔴 CF8 (304) & CF8M (316).
- 🔴 MADE FROM STAINLESS STEEL WELDED PIPE.

## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	
BSPT , NPT	d1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
	d3	14.0	18.5	21.5	26.5	32.0	39.5	48.5	54.5	66.5	84.0	100.0	129.0
	L2	11.0	13.0	14.0	18.0	20.0	21.0	24.0	24.0	28.0	33.0	36.0	42.0
BSP , DIN2999	D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
	D3	14.0	18.5	21.5	26.5	32.0	39.5	48.5	54.5	66.5	82.0	95.0	122.0
	L	11.0	11.0	12.0	15.0	17.0	19.0	22.0	22.0	26.0	30.0	33.0	40.0



**DESIGN FEATURES:**

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

**DIMENSIONS**

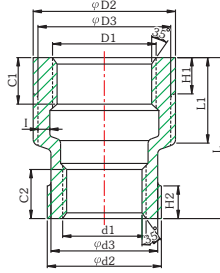
UNIT : mm

SIZE SPEC.	1/4"x1/8"	3/8"x1/8"	3/8"x1/4"	1/2"x1/8"	1/2"x1/4"	1/2"x3/8"	3/4"x1/8"	3/4"x1/4"	3/4"x3/8"	3/4"x1/2"	1"x1/8"	1"x1/4"	1"x3/8"
D1	1/4"	3/8"	3/8"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"
D2	18.3	21.7	21.7	26.6	26.6	26.6	32.1	32.1	32.1	32.1	39.5	39.5	39.5
D3	16.8	20.2	20.2	24.6	24.6	24.6	30.1	30.1	30.1	30.1	37.5	37.5	37.5
C1	9.4	9.7	9.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	14.0	14.0	14.0
H1	6.0	6.5	6.5	7.5	7.5	7.5	8.5	8.5	8.5	8.5	10.0	10.0	10.0
d1	1/8"	1/8"	1/4"	1/8"	1/4"	3/8"	1/8"	1/4"	3/8"	1/2"	1/8"	1/4"	3/8"
d2	14.8	14.8	18.3	14.8	18.3	21.7	14.8	18.3	21.7	26.6	14.8	18.3	21.7
d3	13.3	13.3	16.8	13.3	16.8	20.2	13.3	16.8	20.2	24.6	13.3	16.8	20.2
C2	6.2	6.2	9.4	6.2	9.4	9.7	6.2	9.4	9.7	12.0	6.2	9.4	9.7
H2	6.0	6.0	6.0	6.0	6.0	6.5	6.0	6.0	6.5	7.5	6.0	6.0	6.5
L1	15.7	17.1	17.1	19.9	19.9	19.9	19.9	19.9	19.9	19.9	24.2	24.2	24.2
L	25.0	26.0	26.0	34.0	34.0	34.0	36.0	36.0	36.0	36.0	42.0	42.0	42.0
I	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8

**DIMENSIONS**

UNIT : mm

SIZE SPEC.	1"x1/2"	1"x3/4"	1 1/4"x1/4"	1 1/4"x3/8"	1 1/4"x1/2"	1 1/4"x3/4"	1 1/4"x1"	1 1/2"x1/4"	1 1/2"x3/8"	1 1/2"x1/2"	1 1/2"x3/4"	1 1/2"x1"	1 1/2"x1 1/4"
D1	1"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
D2	39.5	39.5	49.2	49.2	49.2	49.2	49.2	55.5	55.5	55.5	55.5	55.5	55.5
D3	37.5	37.5	46.7	46.7	46.7	46.7	46.7	53.0	53.0	53.0	53.0	53.0	53.0
C1	14.0	14.0	16.0	16.0	16.0	16.0	16.0	18.0	18.0	18.0	18.0	18.0	18.0
H1	10.0	10.0	11.0	11.0	11.0	11.0	11.0	12.0	12.0	12.0	12.0	12.0	12.0
d1	1/2"	3/4"	1/4"	3/8"	1/2"	3/4"	1"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"
d2	26.6	32.1	18.3	21.7	26.6	32.1	39.5	18.3	21.7	26.6	32.1	39.5	49.2
d3	24.6	30.1	16.8	20.2	24.6	30.1	37.5	16.8	20.2	24.6	30.1	37.5	46.7
C2	12.0	12.0	9.4	9.7	12.0	12.0	14.0	9.4	9.7	12.0	12.0	14.0	16.0
H2	7.5	8.5	6.0	6.5	7.5	8.5	10.0	6.0	6.5	7.5	8.5	10.0	11.0
L1	24.2	24.2	27.0	27.0	27.0	27.0	27.0	28.6	28.6	28.6	28.6	28.6	28.6
L	42.0	42.0	48.0	48.0	48.0	48.0	48.0	52.0	52.0	52.0	52.0	52.0	52.0
I	1.8	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0



**DESIGN FEATURES:**

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).

**DIMENSIONS**

UNIT : mm

SIZE SPEC.	2"x1/4"	2"x3/8"	2"x1/2"	2"x3/4"	2"x1"	2"x1 1/4"	2"x1 1/2"	2 1/2"x3/4"	2 1/2"x1"	2 1/2"x1 1/4"	2 1/2"x1 1/2"	2 1/2"x2"
D1	2"	2"	2"	2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
D2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	83.5	83.5	83.5	83.5	83.5
D3	65.7	65.7	65.7	65.7	65.7	65.7	65.7	80.5	80.5	80.5	80.5	80.5
C1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	22.0	22.0	22.0	22.0	22.0
H1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	14.0	14.0	14.0	14.0	14.0
d1	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
d2	18.3	21.7	26.6	32.1	39.5	49.2	55.5	32.1	39.5	49.2	55.5	68.2
d3	16.8	20.2	24.6	30.1	37.5	46.7	53.0	30.1	37.5	46.7	53.0	65.7
C2	9.4	9.7	12.0	12.0	14.0	16.0	18.0	12.0	14.0	16.0	18.0	18.0
H2	6.0	6.5	7.5	8.5	10.0	11.0	12.0	8.5	10.0	11.0	12.0	13.0
L1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	34.0	34.0	34.0	34.0	34.0
L	58.0	58.0	58.0	58.0	58.0	58.0	58.0	65.0	65.0	65.0	65.0	65.0
I	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.7	2.7	2.7	2.7	2.7

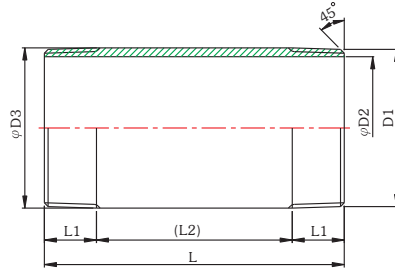
**DIMENSIONS**

UNIT : mm

SIZE SPEC.	3"x3/4"	3"x1"	3"x1 1/4"	3"x1 1/2"	3"x2"	3"x2 1/2"	4"x1"	4"x1 1/4"	4"x1 1/2"	4"x2"	4"x2 1/2"	4"x3"
D1	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	4"
D2	99.0	99.0	99.0	99.0	99.0	99.0	126.3	126.3	126.3	126.3	126.3	126.3
D3	96.0	96.0	96.0	96.0	96.0	96.0	123.3	123.3	123.3	123.3	123.3	123.3
C1	24.0	24.0	24.0	24.0	24.0	24.0	25.0	25.0	25.0	25.0	25.0	25.0
H1	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
d1	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
d2	32.1	39.5	49.2	55.5	68.2	83.5	39.5	49.2	55.5	68.2	83.5	99.0
d3	30.1	37.5	46.7	53.0	65.7	80.5	37.5	46.7	53.0	65.7	82.1	96.0
C2	12.0	14.0	16.0	18.0	18.0	22.0	14.0	16.0	18.0	18.0	22.0	24.0
H2	8.5	10.0	11.0	12.0	13.0	14.0	10.0	11.0	12.0	13.0	14.0	15.0
L1	36.0	36.0	36.0	36.0	36.0	36.0	52.0	52.0	52.0	52.0	52.0	52.0
L	72.0	72.0	72.0	72.0	72.0	72.0	94.0	94.0	94.0	94.0	94.0	94.0
I	3.0	3.0	3.0	3.0	3.0	3.0	3.4	3.4	3.4	3.4	3.4	3.4

# BNP

# BARREL NIPPLE



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).
- MADE FROM STAINLESS STEEL WELDED PIPE.

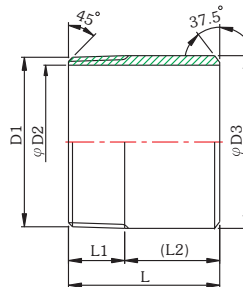
## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D2	6.0	9.0	12.0	16.0	21.0	27.0	35.0	41.0	53.0	66.0	79.0	103.0
D3	10.0	13.5	17.0	21.0	27.0	33.5	42.0	48.0	60.5	76.0	89.0	114.0
L	40.0	40.0	40.0	60.0	60.0	60.0	80.0	80.0	100.0	100.0	120.0	120.0
L1	10.5	12.0	12.0	17.0	17.0	19.0	22.0	22.0	26.0	26.0	30.0	35.0
(L2)	19.0	16.0	16.0	26.0	26.0	22.0	36.0	36.0	48.0	48.0	60.0	50.0

# WNP

# WELDING NIPPLE



### DESIGN FEATURES:

- THREAD: NPT, BSP (BS21), BSPT, DIN.
- CF8 (304) & CF8M (316).
- MADE FROM STAINLESS STEEL WELDED PIPE.

## DIMENSIONS

UNIT : mm

SIZE SPEC.	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D1	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D2	6.0	9.0	12.0	16.0	21.0	27.0	35.0	41.0	53.0	66.0	79.0	103.0
D3	10.0	13.5	17.0	21.0	27.0	33.5	42.0	48.0	60.5	76.0	89.0	114.0
L	30.0	30.0	30.0	35.0	40.0	40.0	50.0	50.0	50.0	60.0	70.0	80.0
L1	10.0	12.0	12.0	17.0	19.0	19.0	22.0	22.0	25.0	25.0	30.0	35.0
(L2)	20.0	18.0	18.0	18.0	21.0	21.0	28.0	28.0	25.0	35.0	40.0	45.0



# WEIGHT LIST

unit: lb / pc

ITEM	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
90° ELBOWS BANDED EQUAL (L9B)	0.018	0.026	0.040	0.064	0.098	0.158	0.240	0.302	0.498	0.810	1.170	2.600
TEES BANDED EQUAL (LTB)	0.028	0.038	0.058	0.090	0.142	0.238	0.342	0.454	0.670	1.220	1.520	2.520
45° ELBOWS BANDED EQUAL (L4B)	0.020	0.030	0.040	0.060	0.088	0.146	0.216	0.300	0.442	0.630	1.010	1.650
STREET ELBOWS 90 BANDED (LSL)	0.018	0.028	0.038	0.064	0.098	0.160	0.216	0.336	0.548	0.880	1.280	2.240
CROSSES BANDED EQUAL (L+B)	0.039	0.052	0.070	0.116	0.164	0.300	0.410	0.570	0.830	1.170	2.096	3.050
UNIONS F/F (LCF)	0.060	0.076	0.110	0.138	0.190	0.272	0.414	0.540	0.800	1.120	1.930	3.050
UNIONS M/F (LCM)	0.071	0.082	0.116	0.156	0.210	0.300	0.460	0.640	0.930	1.540	2.450	3.750
UNIONS B/W (LCW)	-	0.142	0.106	0.140	0.206	0.302	0.112	0.590	0.860	1.200	2.000	2.774
ROUND CAPS (LRC)	0.008	0.016	0.022	0.030	0.050	0.076	0.084	0.162	0.234	0.340	0.540	0.820
SQUARE HEAD PLUGS (LSP)	0.006	0.012	0.020	0.020	0.032	0.054	0.122	0.104	0.142	0.300	0.480	0.850
HEX HEAD PLUGS (LHP)	0.010	0.020	0.022	0.034	0.052	0.082	0.138	0.150	0.242	0.370	0.570	0.870
HEX CAPS (LHC)	0.013	0.018	0.024	0.038	0.054	0.092	0.122	0.194	0.304	0.500	0.770	1.360
HEX NUTS (HNT)	0.150	0.019	0.029	0.040	0.046	0.086	0.156	0.142	0.230	0.372	0.439	0.776
HEX BUSHINGS (LHB)	-	0.014	0.020	0.038	0.070	0.104	0.170	0.222	0.350	0.520	0.810	1.500
REDUCING HEX NIPPLE (LRH)	-	0.010	0.020	0.040	0.060	0.100	0.138	0.190	0.290	0.440	0.540	1.070
HEX NIPPLE (LNP)	0.008	0.014	0.022	0.038	0.052	0.084	0.267	0.172	0.272	0.460	0.450	1.010
HOSE NIPPLE (ONP)	-	0.031	0.048	0.077	0.137	0.211	0.156	0.367	0.606	0.740	1.450	2.495
COUPLINGS/SOCKETS (FCP) NPT - BSPT	0.013	0.031	0.037	0.072	0.100	0.159	0.232	0.254	0.371	0.918	1.223	2.352
COUPLINGS/SOCKETS (FCP) BSP - DIN2999	0.013	0.028	0.033	0.065	0.084	0.145	0.204	0.242	0.350	0.506	0.676	1.228
COUPLINGS/SOCKETS (HCP) NPT - BSPT	0.008	0.015	0.018	0.037	0.050	0.073	0.108	0.125	0.177	0.451	0.623	1.138
COUPLINGS/SOCKETS (HCP) BSP - DIN2999	0.008	0.012	0.015	0.028	0.038	0.059	0.091	0.108	0.158	0.233	0.305	0.560
REDUCING COUPLINGS (LRS)	-	0.020	0.028	0.044	0.056	0.100	0.150	0.190	0.260	0.440	0.640	1.030
BARREL NIPPLE (BNP)	0.013	0.019	0.025	0.058	0.078	0.118	0.213	0.243	0.394	0.799	1.100	1.403
WELDING NIPPLE (WNP)	0.011	0.015	0.020	0.036	0.055	0.084	0.135	0.161	0.203	0.453	0.622	1.022