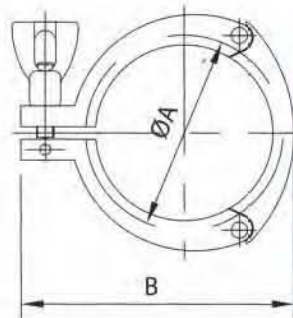
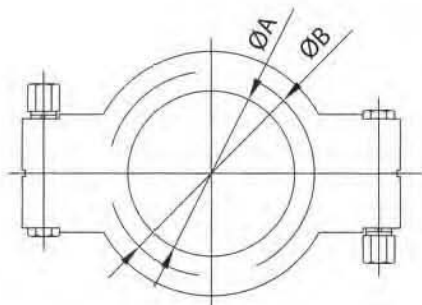
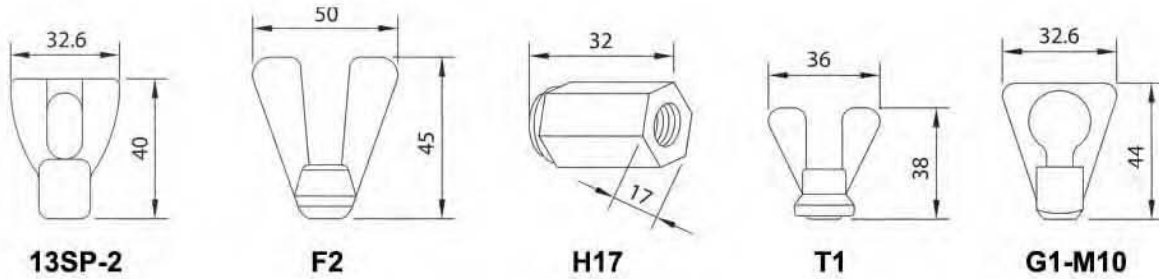
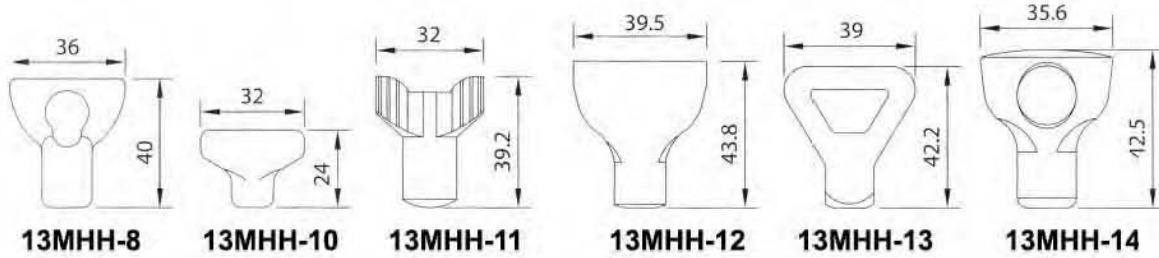


# Clamp Union (mm)

## WING-NUT FOR CLAMP



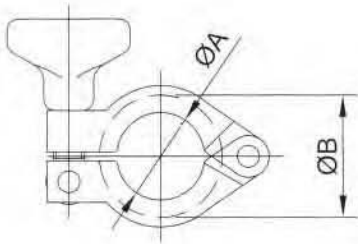
### 13MHP HIGH PRESSURE CLAMP WITH SCREW BOLT BRASS NUT

SIZE	ØA	ØB
3/4"	20	28
1.5"	43.32	52
2.0"	56.44	65.5
2.5"	69.54	79
3.0"	77.56	92.5
4.0"	108.86	120.5
6.0"	158	170
6.5"	173	186.2
10"	258.2	272.8
12"	309	327.6

### 13MHHS 3 PIECES CLAMP

SIZE	ØA	ØB
1.5"	54	80
2.0"	67.5	94
2.5"	80.9	109
3.0"	84.4	126
4.0"	122.4	154

# Clamp Union (mm)

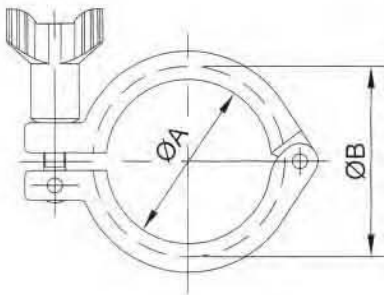


(13MHH & 13MHH & 13SF)

SIZE: 1/2"~3/4"

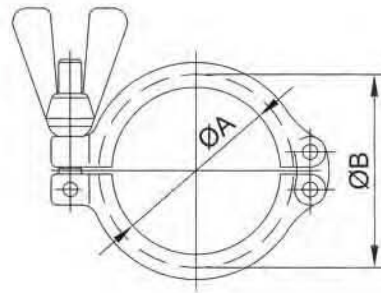
13MHH Heavy Duty Single Pin Clamp

SIZE	ØA	ØB
1/2"-3/4"	20	28.2
A37	27.8	37
1.5"	44.4	53.6
2.0"	57.8	67
2.5"	71.4	80.6
3.0"	84	94.2
3.5"	99	109.2
4.0"	110	122.2
4.5"	123	133.2
6.0"	155.4	170.4
8.0"	205	220



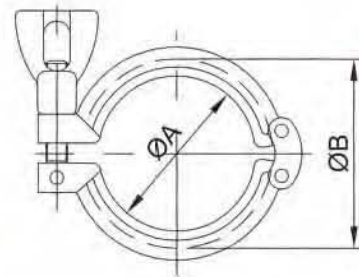
13MHH Heavy Duty Double Pin Clamp

SIZE	ØA	ØB
1/2"-3/4"	20	28
1.5"	43.6	53.6
2.0"	57	67
2.5"	70.6	80.6
3.0"	84	94
4.0"	112	122
6.0"	155	170
8.0"	205	220.8



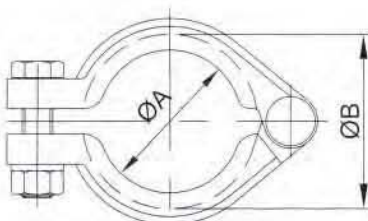
13CS Double Pin Clamp

SIZE	ØA	ØB
3/4"	20.58	28.34
DN10-20	27.2	37
1.5"	41.02	53.52
DN25-40	44.5	54.5
2.0"	54.54	67.04
DN50	57	68
2.5"	68.02	80.52
3.0"	81.52	94.02
DN65	84	95
DN80	99	110
4.0"	109.54	122.04
DN100	112	123
DN115	123	134
DN125	144	159
6.0"	157.6	175.1
DN150	172	187
8.0"	207.4	225.9
DN200	222.5	237.5
DN250	257	272
DN300	309	323



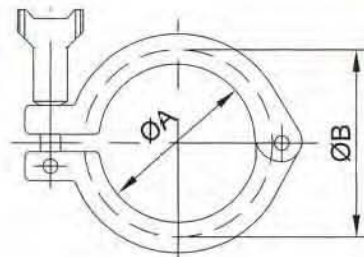
13SF Heavy Duty Double Pin Clamp

SIZE	ØA	ØB
1/2"-3/4"	20	28
A37	27.5	42.9
1.5"	45	58.6
2.0"	59	72
2.5"	67	84
3.0"	85	98
4.0"	114	127



13IU Bolted Clamp

SIZE	ØA	ØB
1.5"	45	55
2.0"	63	73
2.5"	74	89
3.0"	88	102
4.0"	111	128



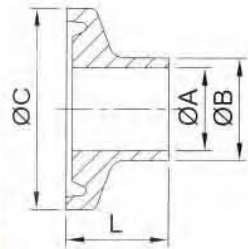
13IS I-line Clamp

SIZE	ØA	ØB
1.0"~1.5"	53.4	83.8
2.0"	72.2	111
2.5"	88.1	121.4
3.0"	102.4	136.1
4.0"	127.8	162
6.0"	195.3	242.1

# Clamp Union (mm)



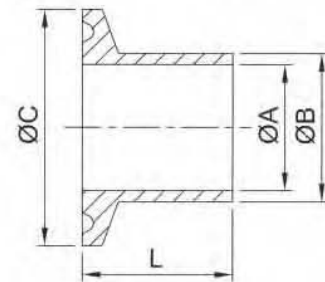
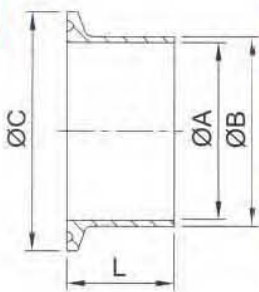
1/2"~3/4"



## Welding Ferrule

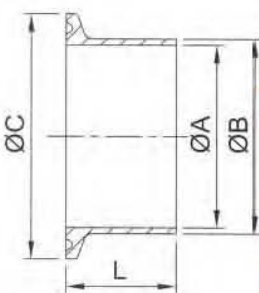
SIZE	3A/SMS			14WMP	14MMP	14AMP
	ØA	ØB	ØC	L	L	L
1/4"	3.9	6.35	25	12.7	21.5	28.6
1/2"	9.4	12.7	25	12.7	21.5	28.6
DN15	9.7	12.7	25.4	12.7	21.5	28.6
3/4"	15.75	19.05	25	12.7	21.5	28.6
DN20	15.95	19.05	25.4	12.7	21.5	28.6
1"	22.1	25.4	50.5	12.7	21.5	28.6
DN25	22.5	25	50.5	-	21.5	28.6
1.25"	28.45	31.75	50.5	12.7	21.5	28.6
1.5"	34.8	38.1	50.5	12.7	21.5	28.6
DN38	35.5	38.1	50.5	-	21.5	28.6
2.0"	47.5	50.8	64	12.7	21.5	28.6
DN51	48.5	51	64	-	21.5	28.6
2.5"	60.2	63.5	77.5	12.7	21.5	28.6
DN63.5	60.5	63.5	77.5	-	21.5	28.6
DN76	72.9	76.1	91	-	21.5	28.6
3.0"	72.9	76.2	91	12.7	21.5	28.6
DN104	100	104	119	-	21.5	28.6
4.0"	97.4	101.6	119	15.8	21.5	28.6
6.0"	145.86	152.4	166.87	-	21.5	28.6 or 38.1
8.0"	197.66	203.2	217.67	-	21.5	28.6 or 38.1
10"	247.2	254	268.47	-	21.5	28.6 or 38.1
12"	298	304.8	319.27	-	21.5	28.6 or 38.1

1.0"~12"



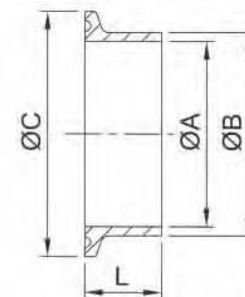
## ISO Ferrule

SIZE	ØA	ØB	ØC	L	L
DN8	10.3	13.5	34	21.5	28.6
DN12	14	17.5	34	21.5	28.6
DN15	18.1	21.6	34	21.5	28.6
DN20	23.7	26.9	50.5	21.5	28.6
DN25	30.5	33.7	50.5	21.5	28.6
DN32	39.2	42.4	50.5	21.5	28.6
DN40	45.1	48.3	64	21.5	28.6
DN50	56.3	60.3	77.5	21.5	28.6
DN65	72.1	76.1	91	21.5	28.6
DN80	84.9	88.9	106	21.5	28.6
DN100	109.1	114.3	130	21.5	28.6
DN125	133.7	139.7	155	-	28.6
DN150	162.3	168.3	183	-	28.6
DN200	211.1	219.1	233.5	-	28.6



## DIN Ferrule

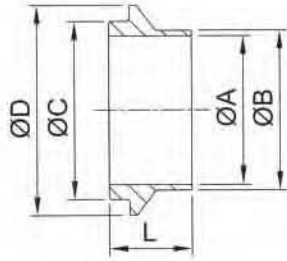
SIZE	ØA	ØB	ØC	L	L
DN10	10	12	34	21.5	28.6
DN15	16	18	34	21.5	28.6
DN20	20	22	34	21.5	28.6
DN28	26	28	50.5	21.5	28.6
DN34	32	34	50.5	21.5	28.6
DN40	38	40	50.5	21.5	28.6
DN52	50	52	64	21.5	28.6
DN70	66	70	91	21.5	28.6
DN85	81	85	106	21.5	28.6
DN101.6	97.6	101.6	119	21.5	28.6
DN100	100	104	119	21.5	28.6
DN125	125	129	155	21.5	28.6
DN150	150	154	183	21.5	28.6
DN200	200	204	233.5	-	28.6
DN250	250	254	268.47	-	28.6
DN300	300	304	319.27	-	28.6



## 14MPW Ferrule For Tank

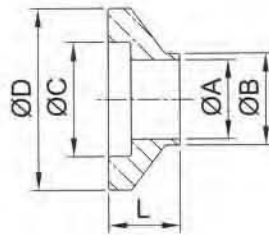
SIZE	ØA	ØB	ØC	L
1/2"	8.15	12.75	25.2	54
3/4"	14.6	19.05	25.2	54
1.0"	22.1	29.5	50.5	41.3
1.5"	34.8	42.6	50.5	41.3
2.0"	47.5	55.7	64	44.5
2.5"	60.2	68.8	77.5	44.5
3.0"	72.9	81.9	91	46.1
4.0"	97.4	108.1	119	54
6.0"	146.25	157.3	166.87	63.5
8.0"	197.05	208.1	217.67	63.5

# Clamp Union (mm)



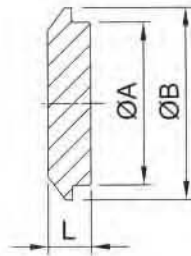
## 14WI- Ferrule Male

SIZE	ØA	ØB	ØC	ØD	L
1.0"	22.1	25.65	31.5	50.67	19.84
1.5"	34.8	38.35	44.2	50.67	23.8
2.0"	47.5	51.05	56.9	67.05	26.19
2.5"	60.2	63.75	69.6	84	29.36
3.0"	72.89	76.45	83.82	98.3	30.94
4.0"	97.38	101.85	109.14	123.7	34.11



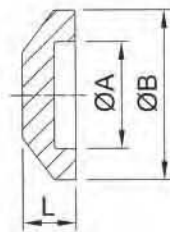
## 15WI- Ferrule Female

SIZE	ØA	ØB	ØC	ØD	L
1.0"	22.1	25.65	31.88	50.67	19.84
1.5"	34.8	38.35	44.58	50.67	23.8
2.0"	47.5	51.05	57.28	67.05	26.19
2.5"	60.2	63.75	69.98	84	29.36
3.0"	72.89	76.45	84.2	98.3	30.94
4.0"	97.38	101.85	109.6	123.7	34.11



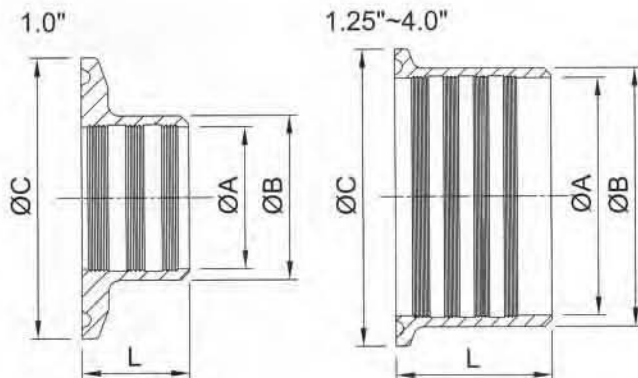
## 14WI- CAP Male

SIZE	ØA	ØB	L
1.0"	31.5	50.67	12.37
1.5"	44.2	50.67	12.37
2.0"	56.9	67.05	14.11
2.5"	69.6	84	18.72
3.0"	83.82	98.3	19.32
4.0"	109.14	123.7	19.32



## 15WI- CAP Female

SIZE	ØA	ØB	L
1.0"	31.88	50.67	12.75
1.5"	44.58	50.67	12.75
2.0"	57.28	67.05	17.66
2.5"	69.98	84	18.77
3.0"	84.2	98.3	19.37
4.0"	109.6	123.7	19.37



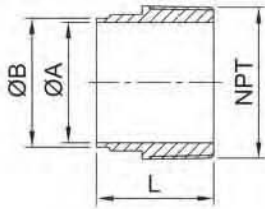
## 14RMP Expanding Ferrule

SIZE	ØA	ØB	ØC	L
1.0"	25.5	29.5	50.5	19.1
1.25"	31.9	36.3	50.5	21.5
1.5"	38.2	42.6	50.5	28.6
2.0"	50.9	55.7	64	33.3
2.5"	63.6	68.8	77.5	34.9
3.0"	76.3	81.9	91	36.5
4.0"	101.7	108.1	119	38.1

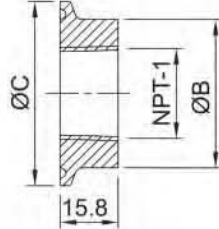
# Clamp Union (mm)



**B19W**



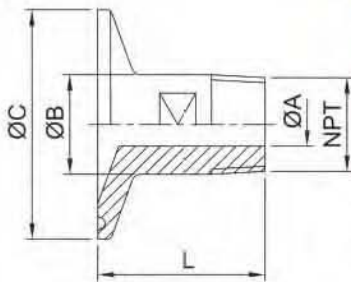
**23BMP**



**B19W . 23BMP**

SIZE	ØA	ØB	ØC	L	NPT	NPT-1
1.0"	22.1	25.4	50.5	44.5	1.0"-11.5T	1/2"-14T
1.5"	34.8	38.1	50.5	44.5	1.5"-11.5T	3/4"-14T
2.0"	47.5	50.8	64	46	2.0"-11.5T	3/4"-14T
2.5"	60.2	63.5	77.5	58.7	2.5"-8T	3/4"-14T
3.0"	72.9	76.2	91	63.5	3.0"-8T	3/4"-14T
4.0"	97.4	101.6	119	65.1	4.0"-8T	3/4"-14T
6.0"	146.9	152.4	166.8	76.2	6.0"-8T	3/4"-14T

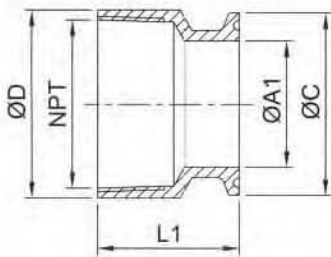
**21MP**



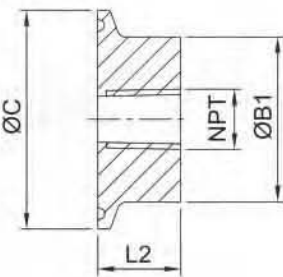
**BLANK 16AMP (Ferrule Nipple)**

SIZE	ØA1		ØB	ØB1	ØC	ØD	L	L1	L2	NPT
	1.0"	1.5"								
1/2"x1/2"	9.4	9.4	12.7		25	30	45	33		1/2"-18T
3/4"x1/2"	15.75		19.05		25		45			1/2"-18T
3/4"x3/4"	15.75	15.75	19.05		25	30	45	33		3/4"-18T
1.0"&1.5"*1/4"	3.18		14	38.1	50.5		40		19	1/4"-18T
1.0"&1.5"*3/8"	6.35		18	38.1	50.5		40		19	3/8"-18T
1.0"&1.5"*1/2"	9.7		22	38.1	50.5		40		19	1/2"-14T
1.0"&1.5"*3/4"	15.75		27	38.1	50.5		45		19	3/4"-14T
1.0"&1.5"*1.0"	22.1		34	38.1	50.5		50		19	1.0"-11.5T
1.0"&1.5"*1.2"	28.6	22.1	34.8	38.1	50.5	46	50	39		1.2"-11.5T
1.0"&1.5"*1.5"	34.8	22.1	34.8	38.1	50.5	52	50	39		1.5"-11.5T
1.0"&1.5"*2.0"	47.5	22.1	34.8	38.1	50.5	65	55	39		2.0"-11.5T
2.0"*1/4"	3.18		50.8	50.8	64		40		19	1/4"-18T
2.0"*3/8"	6.35		50.8	50.8	64		40		19	3/8"-18T
2.0"*1/2"	9.4		50.8		64		40			1/2"-14T
2.0"*3/4"	15.75		50.8		64		50		19	3/4"-14T
2.0"*1.0"	22.1		50.8	50.8	64		50		19	1.0"-11.5T
2.0"x1.5"	34.8		50.8	50.8	64	65	50	39		1.5"-11.5T
2.0"x2.0"	47.5		50.8		64		55			2.0"-11.5T
2.0"x2.5"	60.2		50.8		64		60			2.5"-8T
2.0"x3.0"	72.9		50.8		64		70			3.0"-8T
2.0"x4.0"	97.6		50.8		64		75			4.0"-8T
2.5"x1.0"	22.1		63.5	63.5	77.5		50		35	1.0"-11.5T
2.5"x1.5"	34.8		63.5	63.5	77.5		50		35	1.5"-11.5T
2.5"x2.0"	47.5		63.5	63.5	77.5		55		35	2.0"-11.5T
2.5"x2.5"	60.2	60.2	63.5		77.5	80	60	50		2.5"-8T
2.5"x3.0"	72.9		63.5		77.5		70			3.0"-8T
2.5"x4.0"	97.6		63.5		77.5		75			4.0"-8T
3.0"x1.0"	22.1		76.2	76.2	91		55		35	1.0"-11.5T
3.0"x1.5"	34.8		76.2	76.2	91		55		35	1.5"-11.5T
3.0"x2.0"	47.5		76.2	76.2	91		55		35	2.0"-11.5T
3.0"x2.5"	60.2	72.9	76.2		91	95	60	50		2.5"-8T
3.0"x3.0"	72.9		76.2		91		70			3.0"-8T
3.0"x4.0"	97.6		76.2		91		75			4.0"-8T
4.0"x1.0"	22.1		101.6	101.6	119		55		35	1.0"-11.5T
4.0"x1.5"	34.8		101.6	101.6	119		55		35	1.5"-11.5T
4.0"x2.0"	47.5		101.6	101.6	119		55		35	2.0"-11.5T
4.0"x2.5"	60.2		101.6	101.6	119		60		35	2.5"-8T
4.0"x3.0"	72.9	72.9	101.6	101.6	119	95	70	52	35	3.0"-8T
4.0"x4.0"	97.6		101.6		119		75			4.0"-8T
6.0"x4.0"		97.6	101.6		119	120	75	54		4.0"-8T

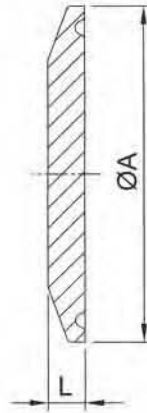
**22MP**



**22MP**



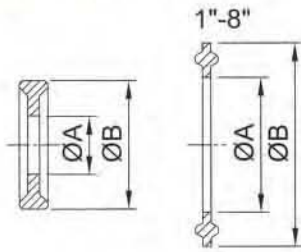
# Clamp Union (mm)



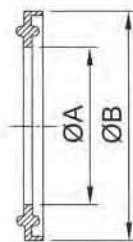
## BLANK 16AMP

3A	DIN	ISO	ØA	L
1/2"~3/4"			25	6
A37			34	6.3
	DN10	DN8	34	6.3
	DN15	DN12	34	6.3
	DN20	DN15	34	6.3
1.0"	DN28	DN20	50.5	6.3
1.5"	DN34	DN25	50.5	6.3
	DN40	DN32	50.5	6.3
2.0"	DN52	DN40	64	6.3
2.5"	DN70	DN50	77.5	6.3
3.0"	DN80	DN65	91	6.3
	DN100	DN80	106	6.3
4.0"	DN100		119	7.9
		DN100	130	7.9
	DN125	DN125	155	7.9
6.0"			166.87	11.1
	DN150	DN150	183	11.1
8.0"			217.7	11.1
	DN200	DN200	233.5	11.1
10"			268.5	11.1
12"			319.3	11.1

## 1/2"~3/4"



13PG



13FG

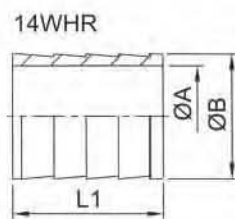
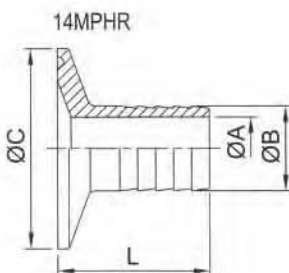
## Ferrule Gasket (EPDM,SILICON,VITON,PTFE)

### PLAIN TYPE 13PG

### Flange Type 13FG

SIZE	ØA	ØB	SIZE	ØA	ØB
1/2"	9.9	21.8	1.0"	22.8	52.7
3/4"	16.3	21.8	1.5"	35.8	52.7
A37	15.5	33	2.0"	48.8	66.2
1.0"	22.7	50	2.5"	60.5	79.7
1.2"	29.5	50.5	3.0"	73.1	93.2
1.5"	35.9	50	4.0"	97.8	121.2
2.0"	48.6	63.5	6.0"	148	169.1
2.5"	61.3	76.2	10"	249	270.7
3.0"	74	88.9	12"	300	321.5
4.0"	98.6	118			
6.0"	147.8	165			
8.0"	198.6	216			

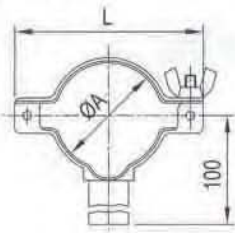
## 14MPHR . 14WHR Hose Adapter



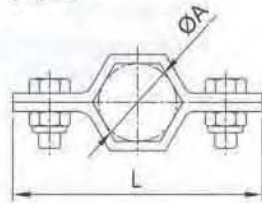
SIZE	ØA	ØB	ØC	L	L
1/2"x1/2"	9.5	13.7	25	38	25.3
3/4"x3/4"	15.8	21.4	25	38	25.3
1.0"x1/2"	9.5	13.7	50.5	38	25.3
1.0"x3/4"	15.8	21.4	50.5	38	25.3
1.0"x1.0"	20.6	25.4	50.5	43	25.3
1.5"x1/2"	9.5	13.7	50.5	38	25.3
1.5"x3/4"	15.8	21.4	50.5	38	25.3
1.5"x1.0"	20.6	25.4	50.5	43	25.3
1.5"x1.5"	33.2	38.1	50.5	43	30.3
2.0"x1.5"	33.2	38.1	64	43	30.3
2.0"x2.0"	46	50.8	64	58.7	46
2.5"x2.5"	58.7	63.5	77.5	59.5	46.8
3.0"x3.0"	72	76.2	91	78.6	65.9
4.0"x4.0"	97.6	101.6	119	85.5	72.8

# Tubing Hanger (mm)

TH-1



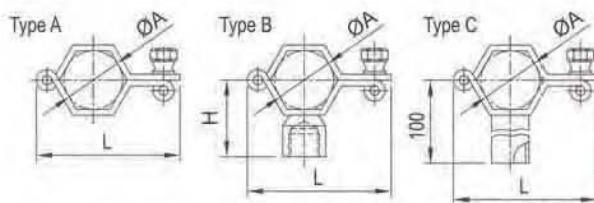
TH-2



TH-1.TH-4.TH-5 (Type A.Type C).TH6

SIZE	ØA	ØA1	ØC	H	H1	H2	L	L1	L2	L3
1/2"	12.7							79	83	
3/4"	19.05							79	83	
1.0"	25.4	25.5	10	84	90	46.8	66	79	83	55
1.25"		31.75	10	87	90	49.9				60
1.5"	38.1	38.1	10	90	90	53	76	95	97.7	80
2.0"	50.8	50.8	10	76	90	59.4	90	117.9	111.7	90
2.5"	63.5	63.5	10	85	90	66.3	105	120	124	120
3.0"	76.2	76.1	10	92.5	90	72.6	120	135.1	104.5	138
4.0"	101.6/104	101.6	10	102	90	85.3	146	168.4	162	180
5.0"		129	12	114.5		99				207
6.0"	152.4	154	12	127	145	112		225	217	232
8.0"		204	12	152		137				285

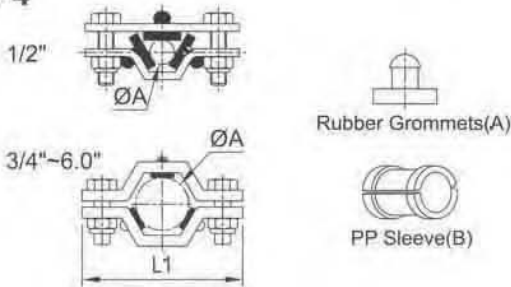
TH-3



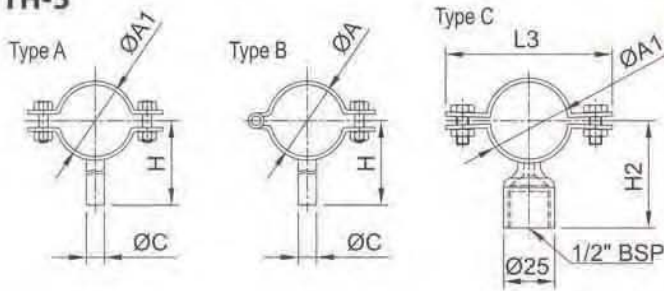
TH-3.TH-5.(Type A .Type B .Type C) (Type A)

SIZE	ØA	H	L	SIZE	ØA	ØA1	ØC	H	H1	L
				DIN10			12/13	6		67.5
				DIN15			18/19	8		70.5
				DIN20			22/23	8		72.5
SMS25	25	45	61	DIN25	28	28/29	8	46.5	75.5	64
				DIN32	34	34/35	10	49.5	78.5/79.5	64
SMS38	38	51.5	76	DIN40	40	40/41	10	52.5	81.5/82.5	78
SMS51	51	58	90	DIN50	52	52/53	12	58.5	88/89	90
SMS63.5	63.5	64	106	DIN65	70	70	12	67.5	98	111
SMS76	76.1	70.5	120	DIN80	85	85	15	75	105.5	125
SMS104	104	84.5	152	DIN100	101.6	104	15	83	116	146
				DIN125		129	18		127	
				DIN150		154	18		140	
				DIN200		204				
				DIN250		254				

TH-4



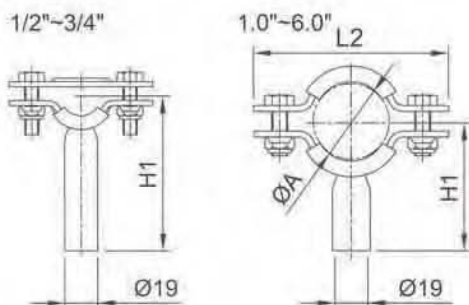
TH-5



TH-2

SIZE	ØA	L
ISO-21.3	21.3	68
ISO-26.9	26.9	74
ISO-33.7	33.7	82
ISO-42.4	42.4	93
ISO-48.3	48.3	101
ISO-60.3	60.3	114
ISO-88.9	88.9	149
ISO-114.3	114.3	177

TH-6



TH-5 (Type B)

SIZE	ØA	ØC	H
NW20	22	10	61
NW25	28	10	64
NW32	34	10	67
NW40	40	10	70
NW50	52	10	76
NW65	70	10	85
NW80	85	10	92.5
NW100	104	10	102
NW125	129	12	114.5
NW150	154	12	127
NW200	204	12	152