

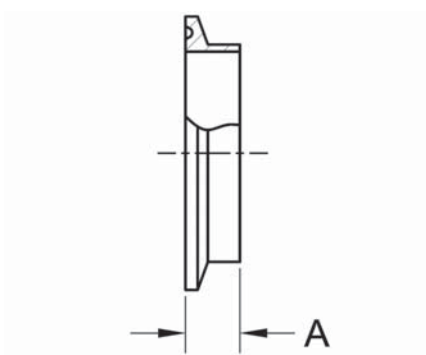


CLAMP FITTINGS

Don't See What You Need?

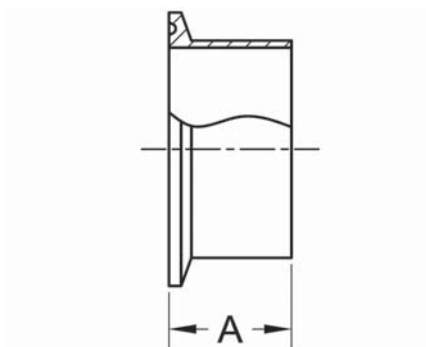
We have more than 35,000 unique part numbers in our inventory. We'll be happy to help you find what you need or we can manufacture a custom fabrication or custom machined fitting to your specification. If you don't see what you need give us a call at 1-585-492-5800

14WMP - WELD FERRULE, SHORT



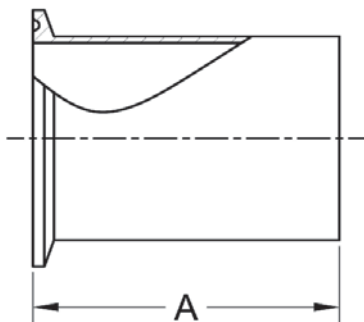
PART NUMBER	SIZE	A
14WMP-.50	1/2	.500
14WMP-.75	3/4	.500
14WMP-1-A	1 (TYPE A)	.500
14WMP-1	1	.500
14WMP-1.5	1-1/2	.500
14WMP-2	2	.500
14WMP-2.5	2-1/2	.500
14WMP-3	3	.500
14WMP-4	4	.625
14WMP-5	5	.750
14WMP-6	6	.750
14WMP-8	8	.875
14WMP-10	10	.875
14WMP-12	12	1.000

L14AM7 - WELD FERRULE, MEDIUM



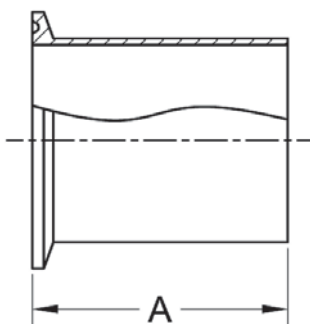
PART NUMBER	SIZE	A
L14AM7-.50	1/2	1.125
L14AM7-.75	3/4	1.125
L14AM7-1-A	1 (TYPE A)	1.125
L14AM7-1	1	1.125
L14AM7-1.5	1-1/2	1.125
L14AM7-2	2	1.125
L14AM7-2.5	2-1/2	1.125
L14AM7-3	3	1.125
L14AM7-4	4	1.125
L14AM7-5X1.5	5	1.500
L14AM7-6	6	1.500
L14AM7-8	8	1.500
L14AM7-10	10	1.500
L14AM7-12	12	1.500

14WLMP - WELD FERRULE, LONG



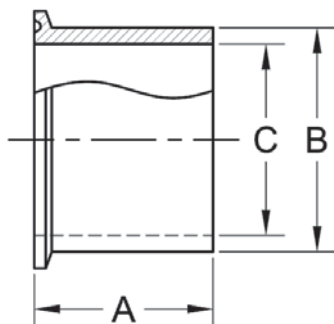
PART NUMBER	SIZE	A
14WLMP-.50	1/2	3.000
14WLMP-.75	3/4	3.000
14WLMP-1	1	3.000
14WLMP-1.5	1-1/2	3.000
14WLMP-2	2	3.000
14WLMP-2.5	2-1/2	3.000
14WLMP-3	3	4.000
14WLMP-4	4	4.000
14WLMP-6	6	6.000
14WLMP-8	8	6.000
14WLMP-10	10	6.000
14WLMP-12	12	6.000

TL14AM7 - WELD FERRULE



PART NUMBER	SIZE	A
TL14AM7-.50	1/2	2.000
TL14AM7-.75	3/4	2.000
TL14AM7-1	1	2.000
TL14AM7-1.5	1-1/2	2.000
TL14AM7-2	2	2.500
TL14AM7-2.5	2-1/2	2.500
TL14AM7-3	3	2.500
TL14AM7-4	4	2.500

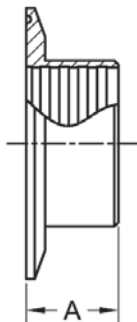
14MPW - TANK WELD FERRULE



PART NUMBER	SIZE	A	B	C
14MPW-1	1	1.625	1.160	.870
14MPW-1.5	1-1/2	1.625	1.676	1.370
14MPW-2	2	1.750	2.192	1.870
14MPW-2.5	2-1/2	1.750	2.708	2.370
14MPW-3	3	1.813	3.224	2.870
14MPW-4	4	2.125	4.256	3.834
14MPW-6	6	2.500	6.192	5.758
14MPW-8	8	2.500	8.192	7.758

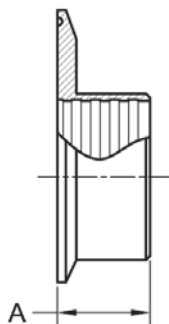
NOTE: FOR MORE HEAVY WALL FERRULE OPTIONS
SEE ASME FERRULES ON PAGE 12.

31RMP- REDUCING CONCENTRIC ROLL-ON FERRULE



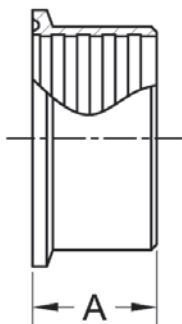
PART NUMBER	SIZE	A
31RMP-1.5X1	1-1/2 X 1	.750
31RMP-2X1	2 X 1	.750
31RMP-2X1.5	2 X 1-1/2	1.125
31RMP-2.5X1.5	2-1/2 X 1-1/2	1.313
31RMP-2.5X2	2-1/2 X 2	1.313
31RMP-3X2	3 X 2	1.313
31RMP-3X2.5	3 X 2-1/2	1.375
31RMP-4X2.5	4 X 2-1/2	1.375
31RMP-4X3	4 X 3	1.438

32RMP- REDUCING ECCENTRIC ROLL-ON FERRULE



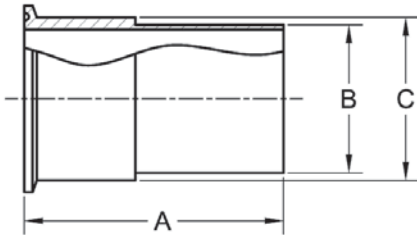
PART NUMBER	SIZE	A
32RMP-1.5X1	1-1/2 X 1	.750
32RMP-2X1	2 X 1	.750
32RMP-2X1.5	2 X 1-1/2	1.125
32RMP-3X1.5	3 X 1-1/2	1.313
32RMP-3X2	3 X 2	1.313
32RMP-3X2.5	3 X 2-1/2	1.375
32RMP-4X2.5	4 X 2-1/2	1.375
32RMP-4X3	4 X 3	1.438

14RMP - ROLL-ON FERRULE



PART NUMBER	SIZE	A
14RMP-1	1	.750
14RMP-1.5	1-1/2	1.125
14RMP-2	2	1.313
14RMP-2.5	2-1/2	1.375
14RMP-3	3	1.438
14RMP-4	4	1.500
14RMP-6	6	2.000

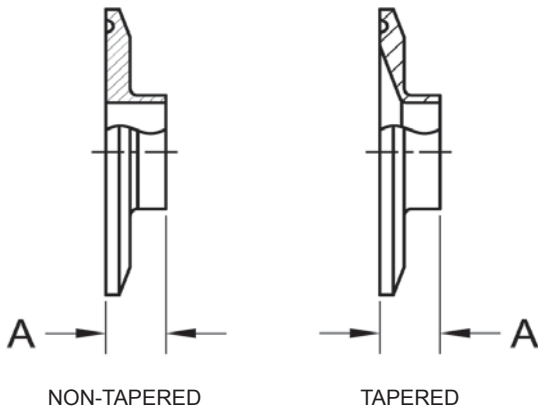
FLOWVERTER FERRULE



PART NUMBER	SIZE	A	B	C
LAB01000	1	3.500	1.000	1.200
LAB01500	1-1/2	3.500	1.500	1.700
LAB02000	2	3.500	2.000	2.200
LAB02500	2-1/2	3.500	2.500	2.700
LAB03000	3	3.500	3.000	3.200
LAB04000	4	3.500	4.000	4.200

NOTE: AVAILABLE IN OTHER END CONNECTIONS & LENGTHS

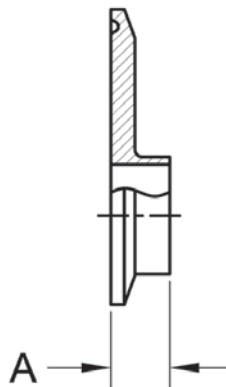
31WMP - REDUCING FERRULE



PART NUMBER	SIZE	A
31WMP-.75X.50	3/4 X 1/2	.500
31WMP-1X.50	1 X 1/2	.500
31WMP-1X.75	1 X 3/4	.500
31WMP-1.5X.50	1-1/2 X 1/2	.500
31WMP-1.5X.75	1-1/2 X 3/4	.625
31WMP-1.5X1	1-1/2 X 1	.500
31WMP-2X1	2 X 1	.500
31WMP-2X1.5	2 X 1-1/2	.500
31WMP-2.5X2	2-1/2 X 2	.500
31WMP-3X2	3 X 2	.500
31WMP-4X3	4 X 3	.625

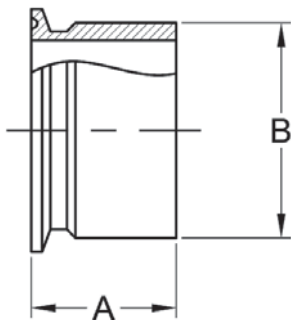
NOTE: AVAILABLE IN TAPERED AND NON-TAPERED STYLES (PART NUMBERS SHOWN ARE TAPERED STYLE)

32WMP - ECCENTRIC REDUCING FERRULE



PART NUMBER	SIZE	A
32WMP-1X.75	1 X 3/4	.500
32WMP-1.5X.50	1-1/2 X 1/2	.500
32WMP-1.5X1	1-1/2 X 1	.500
32WMP-2X.75	2 X 3/4	.750
32WMP-2X1	2 X 1	.500
32WMP-2X1.5	2 X 1-1/2	.500
32WMP-2.5X1.5	2-1/2 X 1-1/2	.500
32WMP-3X1	3 X 1	.500
32WMP-3X2	3 X 2	.500
32WMP-3X2.5	4 X 1-1/2	.625
32WMP-4X3	4 X 3	.625

14ASME - ASME WELDING FERRULE

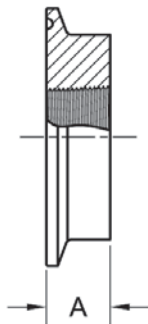


NOTE: FERRULES ARE MADE FROM
ASME CERTIFIED MATERIAL

PART NUMBER	SIZE	A	B
14ASME-.50X2.5	1/2	2.500	.592
14ASME-.75X25	3/4	2.500	.846
14ASME-1X2.5	1	2.500	1.190
14ASME-1X6	1	6.000	1.190
14ASME-1.5X1.25	1-1/2	1.250	1.690
14ASME-1.5X2	1-1/2	2.000	1.690
14ASME-1.5X3	1-1/2	3.000	1.690
14ASME-1.5X6	1-1/2	6.000	1.690
14ASME-2X1.25	2	1.250	2.230
14ASME-2X2.25	2	2.250	2.230
14ASME-2X3.25	2	3.250	2.230
14ASME-2X6	2	6.000	2.230
14ASME-2.5X3.5	2-1/2	3.500	2.780
14ASME-2.5X6	2-1/2	6.000	2.780
14ASME-3X1.25	3	1.250	3.310
14ASME-3X2.75	3	2.750	3.310
14ASME-3X3.75	3	3.750	3.310
14ASME-3X6	3	6.000	3.310
14ASME-4X1.25	4	1.250	4.350
14ASME-4X3	4	3.000	4.350
14ASME-4X4	4	4.000	4.350
14ASME-4X6	4	6.000	4.350
14ASME-6X1.75	6	1.750	6.462
14ASME-6X6	6	6.000	6.462

ALSO AVAILABLE IN 8", 10" AND 12" SIZES
OTHER LENGTHS AVAILABLE UPON REQUEST

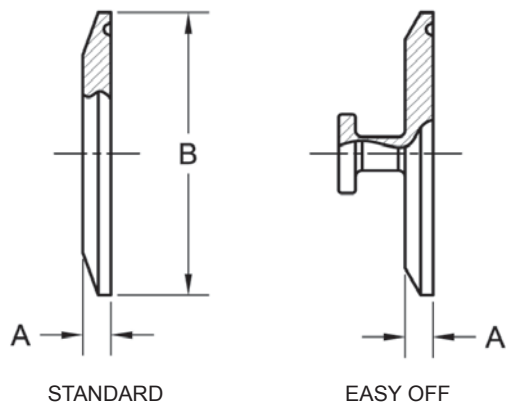
23BMP - THERMOMETER CAP



NOTE: SIZES ARE LISTED CLAMP SIZE X NPT SIZE

PART NUMBER	SIZE	A
23BMP-.50X.125	1/2 & 3/4 X 1/8	.500
23BMP-.50X.25	1/2 & 3/4 X 1/4	.500
23BMP-.50X.375	1/2 & 3/4 X 3/8	.500
23BMP-1X.25	1 & 1-1/2 X 1/4	.625
23BMP-1X.375	1 & 1-1/2 X 3/8	.625
23BMP-1X.50	1 & 1-1/2 X 1/2	.625
23BMP-1.5X.75	1 & 1-1/2 X 3/4	.625
23BMP-1.5X1	1 & 1-1/2 X 1	.625
23BMP-2X.50	2 X 1/2	.625
23BMP-2X.75	2 X 3/4	.625
23BMP-2X1	2 X 1	.625
23BMP-2X1.5	2 X 1-1/2	.625
23BMP-2.5X.50	2-1/2 X 1/2	.625
23BMP-2.5X.75	2-1/2 X 3/4	.625
23BMP-2.5X1	2-1/2 X 1	.625
23BMP-2.5X1.5	2-1/2 X 1-1/2	.625
23BMP-3X.50	3 X 1/2	.625
23BMP-3X.75	3 X 3/4	.625
23BMP-3X1	3 X 1	.625
23BMP-3X1.5	3 X 1-1/2	.625
23BMP-3X2	3 X 2	.625
23BMP-4X.50	4 X 1/2	.625
23BMP-4X.75	4 X 3/4	.625
23BMP-4X1	4 X 1	.625
23BMP-4X1.5	4 X 1-1/2	.625
23BMP-4X2	4 X 2	.625

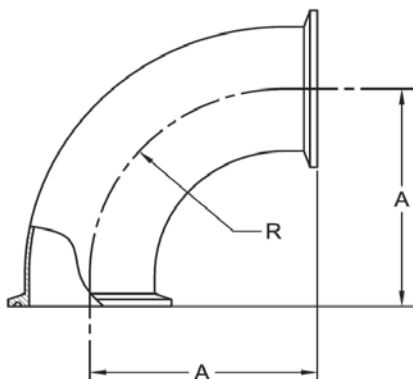
16AMP - SOLID END CAP



NOTE:
END CAPS AVAILABLE IN STANDARD OR EASY OFF STYLE.
STANDARD CAPS ALSO AVAILABLE IN ACRYLIC AND LEXAN.
SEE PAGE 120

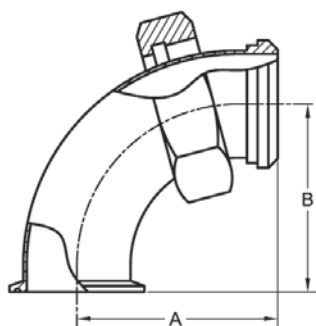
PART NUMBER	SIZE	A	B
16AMP-.50	1/2 & 3/4	.188	.984
16AMP-1-A	1 (TYPE A)	.250	1.339
16AMP-1	1 & 1-1/2	.250	1.984
16AMP-2	2	.250	2.516
16AMP-2.5	2-1/2	.250	3.047
16AMP-3	3	.250	3.579
16AMP-4	4	.312	4.682
16AMP-5	5	.375	5.687
16AMP-6	6	.438	6.570
16AMP-8	8	.480	8.570
16AMP-10	10	.480	10.570
16AMP-12	12	.480	12.570

2CMP - 90 DEGREE ELBOW, CLAMP ENDS



PART NUMBER	SIZE	A	R
2CMP-.50	1/2	1.250	.750
2CMP-.50L	1/2	1.625	1.125
2CMP-.75	3/4	1.625	1.125
2CMP-1	1	2.000	1.500
2CMP-1.5	1-1/2	2.750	2.250
2CMP-2	2	3.500	3.000
2CMP-2.5	2-1/2	4.250	3.750
2CMP-3	3	5.000	4.500
2CMP-4	4	6.625	6.000
2CMP-6	6	9.750	9.000
2CMP-8	8	12.875	12.000

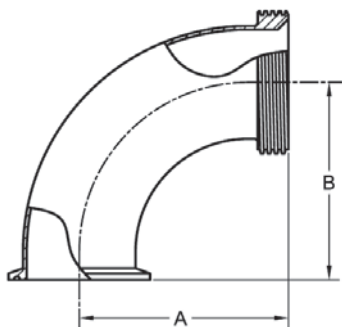
2FMP-14 - 90 DEGREE ELBOW, CLAMP X PLAIN BEVEL SEAT



PART NUMBER	SIZE	A	B
2FMP-14-1	1	2.188	2.000
2FMP-14-1.5	1-1/2	2.969	2.750
2FMP-14-2	2	3.723	3.500
2FMP-14-2.5	2-1/2	4.594	4.250
2FMP-14-3	3	5.406	5.000
2FMP-14-4	4	7.000	6.625

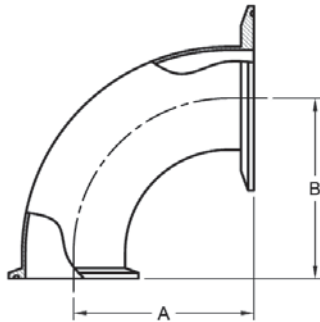
NOTE: HEX NUT INCLUDED

2FMP-15 - 90 DEGREE ELBOW, CLAMP X THREADED BEVEL SEAT



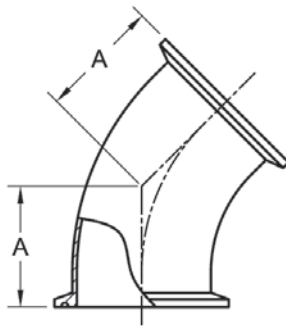
PART NUMBER	SIZE	A	B
2FMP-15-1	1	2.188	2.000
2FMP-15-1.5	1-1/2	2.969	2.750
2FMP-15-2	2	3.750	3.500
2FMP-15-2.5	2-1/2	4.594	4.250
2FMP-15-3	3	5.438	5.000
2FMP-15-4	4	7.219	6.625

2CMP-31MP - 90 DEGREE REDUCING ELBOW, CLAMP ENDS



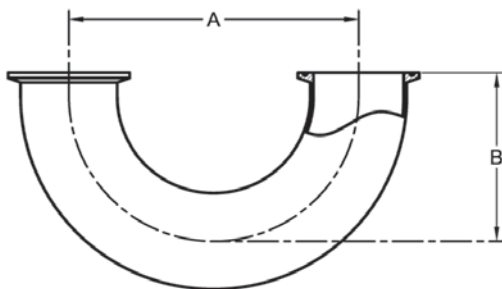
PART NUMBER	SIZE	A	B
2CMP-31MP-1.5X1	1-1/2 X 1	2.000	2.000
2CMP-31MP-2X1	2 X 1	2.000	2.000
2CMP-31MP-2X1.5	2 X 1-1/2	2.750	2.750
2CMP-31MP-2.5X1.5	2-1/2 X 1-1/2	2.750	2.750
2CMP-31MP-2.5X2	2-1/2 X 2	3.500	3.500
2CMP-31MP-3X1.5	3 X 1-1/2	2.750	2.750
2CMP-31MP-3X2	3 X 2	3.500	3.500
2CMP-31MP-3X2.5	3 X 2-1/2	4.250	4.250
2CMP-31MP-4X2.5	4 X 2-1/2	4.375	4.250
2CMP-31MP-4X3	4 X 3	5.125	5.000

2KMP - 45 DEGREE ELBOW, CLAMP ENDS



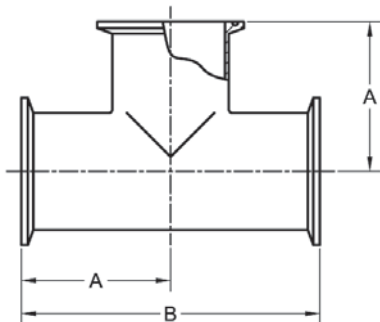
PART NUMBER	SIZE	A
2KMP-.50	1/2	.966
2KMP-.75	3/4	.966
2KMP-1	1	1.125
2KMP-1.5	1-1/2	1.437
2KMP-2	2	1.750
2KMP-2.5	2-1/2	2.063
2KMP-3	3	2.375
2KMP-4	4	3.125
2KMP-6	6	4.500

2UMP - 180 DEGREE RETURN BEND, CLAMP ENDS



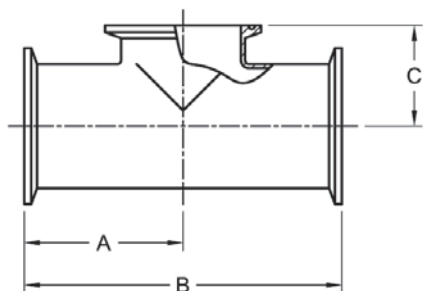
PART NUMBER	SIZE	A	B
2UMP-.50	1/2	1.500	1.250
2UMP-.75	3/4	2.250	1.625
2UMP-1	1	3.000	2.000
2UMP-1.5	1-1/2	4.500	2.750
2UMP-2	2	6.000	3.500
2UMP-2.5	2-1/2	7.500	4.250
2UMP-3	3	9.000	5.000
2UMP-4	4	12.000	6.625
2UMP-6	6	18.000	9.750

7MP - TEE, CLAMP ENDS



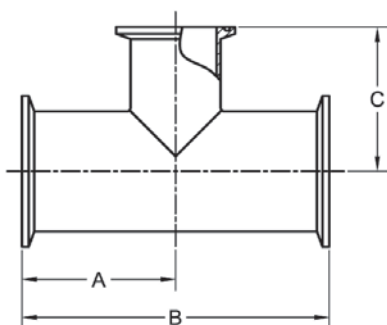
PART NUMBER	SIZE	A	B
7MP-.50	1/2	1.250	2.500
7MP-.75	3/4	2.375	4.750
7MP-1	1	2.375	4.750
7MP-1.5	1-1/2	2.750	5.500
7MP-2	2	3.500	7.000
7MP-2.5	2-1/2	3.500	7.000
7MP-3	3	3.750	7.500
7MP-4	4	4.500	9.000
7MP-6	6	6.375	12.750

7MPS - SHORT OUTLET TEE, CLAMP ENDS



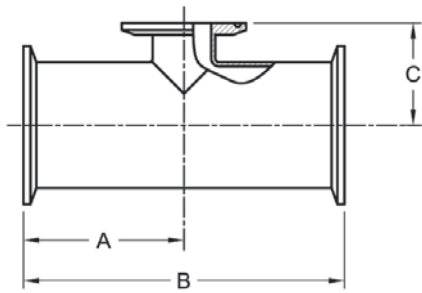
PART NUMBER	SIZE	A	B	C
7MPS-1	1	2.375	4.750	1.125
7MPS-1.5	1-1/2	2.750	5.500	1.375
7MPS-2	2	3.500	7.000	1.625
7MPS-2.5	2-1/2	3.500	7.000	1.875
7MPS-3	3	3.750	7.500	2.125
7MPS-4	4	4.500	9.000	2.750
7MPS-6	6	6.375	12.750	3.875

7RMP - REDUCING TEE, CLAMP ENDS



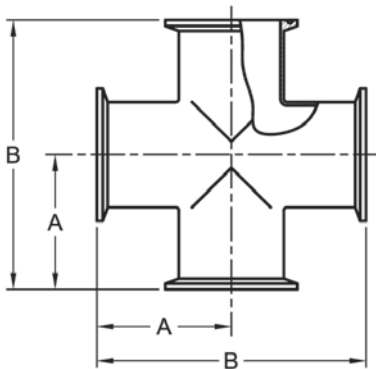
PART NUMBER	SIZE	A	B	C
7RMP-1.5X.75	1-1/2 X 3/4	2.875	5.750	2.875
7RMP-1.5X1	1-1/2 X 1	2.156	4.312	1.875
7RMP-2X1	2 X 1	2.562	5.125	2.125
7RMP-2X1.5	2 X 1-1/2	2.562	5.125	2.406
7RMP-2.5X1	2-1/2 X 1	2.844	5.688	2.375
7RMP-2.5X1.5	2-1/2 X 1-1/2	2.844	5.688	2.656
7RMP-2.5X2	2-1/2 X 2	2.844	5.688	2.812
7RMP-3X1	3 X 1	3.094	6.188	2.625
7RMP-3X1.5	3 X 1-1/2	3.094	6.188	2.906
7RMP-3X2	3 X 2	3.094	6.188	3.063
7RMP-3X2.5	3 X 2-1/2	3.094	6.188	3.094
7RMP-4X1.5	4 X 1-1/2	4.063	8.125	3.406
7RMP-4X2	4 X 2	4.063	8.125	3.562
7RMP-4X2.5	4 X 2-1/2	4.063	8.125	3.594
7RMP-4X3	4 X 3	4.063	8.125	3.594
7RMP-6X3	6 X 3	6.375	12.750	6.000
7RMP-6X4	6 X 4	6.375	12.750	5.500

7RMPS - SHORT OUTLET REDUCING TEE, CLAMP ENDS



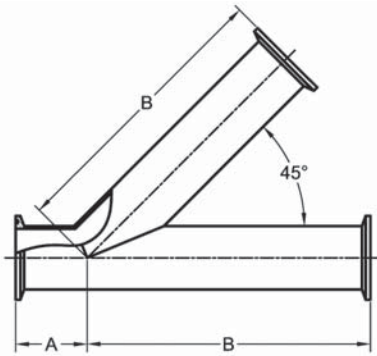
PART NUMBER	SIZE	A	B	C
7RMPS-1.5X.75	1-1/2 X 3/4	2.875	5.750	1.375
7RMPS-1.5X1	1-1/2 X 1	2.156	4.312	1.375
7RMPS-2X1	2 X 1	2.563	5.125	1.625
7RMPS-2X1.5	2 X 1-1/2	2.563	5.125	1.625
7RMPS-2.5X1	2-1/2 X 1	2.844	5.688	1.875
7RMPS-2.5X1.5	2-1/2 X 1-1/2	2.844	5.688	1.875
7RMPS-2.5X2	2-1/2 X 2	2.844	5.688	1.875
7RMPS-3X1	3 X 1	3.094	6.188	2.125
7RMPS-3X1.5	3 X 1-1/2	3.094	6.188	2.125
7RMPS-3X2	3 X 2	3.094	6.188	2.125
7RMPS-3X2.5	3 X 2-1/2	3.094	6.188	2.125
7RMPS-4X1.5	4 X 1-1/2	4.063	8.125	2.625
7RMPS-4X2	4 X 2	4.063	8.125	2.625
7RMPS-4X2.5	4 X 2-1/2	4.063	8.125	2.625
7RMPS-4X3	4 X 3	4.063	8.125	2.625
7RMPS-6X3	6 X 3	5.750	11.500	3.625
7RMPS-6X4	6 X 4	6.375	12.750	3.750

9MP - CROSS, CLAMP ENDS



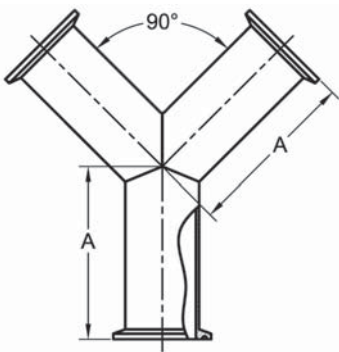
PART NUMBER	SIZE	A	B
9MP-1	1	2.375	4.750
9MP-1.5	1-1/2	2.750	5.500
9MP-2	2	3.500	7.000
9MP-2.5	2-1/2	3.500	7.000
9MP-3	3	3.750	7.500
9MP-4	4	4.500	9.000
9MP-6	6	6.375	12.750

28AMP - LATERAL WYE, CLAMP ENDS



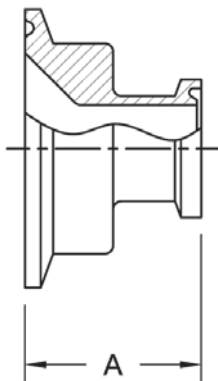
PART NUMBER	SIZE	A	B
28AMP-.50	1/2	1.500	5.500
28AMP-.75	3/4	1.500	5.500
28AMP-1	1	1.500	5.500
28AMP-1.5	1-1/2	1.687	6.688
28AMP-2	2	2.125	7.625
28AMP-2.5	2-1/2	2.000	9.000
28AMP-3	3	2.375	9.375
28AMP-4	4	2.687	11.375
28AMP-6	6	4.375	13.250

28BMP - TRUE WYE, CLAMP ENDS



PART NUMBER	SIZE	A
28BMP-.50	1/2	2.500
28BMP-.75	3/4	2.500
28BMP-1	1	3.500
28BMP-1.5	1-1/2	3.500
28BMP-2	2	4.500
28BMP-2.5	2-1/2	5.500
28BMP-3	3	6.500
28BMP-4	4	8.625
28BMP-6	6	8.750

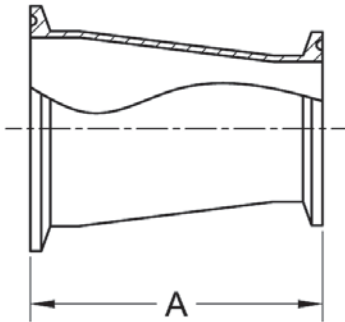
31-14MP - SHORT CONICAL INSTRUMENT REDUCER, CLAMP ENDS



PART NUMBER	LARGE SIZE	SMALL SIZE	A
31-14MP-1X.50X1.25	1	1/2	1.250
31-14MP-1X.75X1.25	1	3/4	1.250
31-14MP-1.5X.50X1.25	1-1/2	1/2	1.250
31-14MP-1.5X.75X1.25	1-1/2	1	1.250
31-14MP-2X.50X1.25	2	1/2	1.250
31-14MP-2X.75X1.25	2	3/4	1.250
31-14MP-2X1X1.25	2	1	1.250

OTHERS SIZES AND LENGTHS AVAILABLE

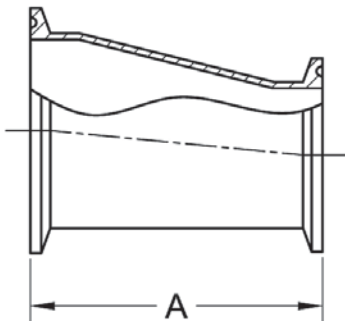
31-14MP - CONCENTRIC REDUCER, CLAMP ENDS



PART NUMBER	SIZE	A
31-14MP-.75X.50	3/4 X 1/2	2.000
31-14MP-1X.50	1 X 1/2	3.000
31-14MP-1X.75	1 X 3/4	2.000
31-14MP-1.5X.50	1-1/2 X 1/2	5.000
31-14MP-1.5X.75	1-1/2 X 3/4	4.000
31-14MP-1.5X1	1-1/2 X 1	3.000
31-14MP-2X1	2 X 1	5.000
31-14MP-2X1.5	2 X 1-1/2	3.000
31-14MP-2.5X1.5	2-1/2 X 1-1/2	5.000
31-14MP-2.5X2	2-1/2 X 2	3.000
31-14MP-3X1.5	3 X 1-1/2	7.000
31-14MP-3X2	3 X 2	5.000
31-14MP-3X2.5	3 X 2-1/2	3.000
31-14MP-4X2	4 X 2	9.125
31-14MP-4X2.5	4 X 2-1/2	7.125
31-14MP-4X3	4 X 3	5.125
31-14MP-6X3	6 X 3	6.750
31-14MP-6X4	6 X 4	6.875

OTHER SIZES AVAILABLE UPON REQUEST

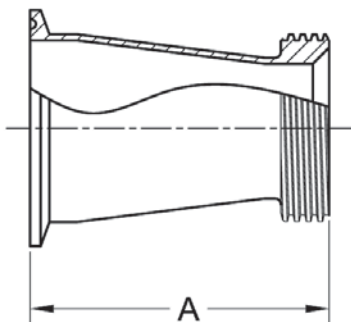
32-14MP - ECCENTRIC REDUCER, CLAMP ENDS



PART NUMBER	SIZE	A
32-14MP-.75X.50	3/4 X 1/2	2.000
32-14MP-1X.50	1 X 1/2	2.500
32-14MP-1X.75	1 X 3/4	2.000
32-14MP-1.5X1	1-1/2 X 1	3.000
32-14MP-2X1	2 X 1	5.000
32-14MP-2X1.5	2 X 1-1/2	3.000
32-14MP-2.5X1.5	2-1/2 X 1-1/2	5.000
32-14MP-2.5X2	2-1/2 X 2	3.000
32-14MP-3X1.5	3 X 1-1/2	7.000
32-14MP-3X2	3 X 2	5.000
32-14MP-3X2.5	3 X 2-1/2	3.000
32-14MP-4X2	4 X 2	9.125
32-14MP-4X2.5	4 X 2-1/2	7.125
32-14MP-4X3	4 X 3	5.125
32-14MP-6X3	6 X 3	6.750
32-14MP-6X4	6 X 4	6.875

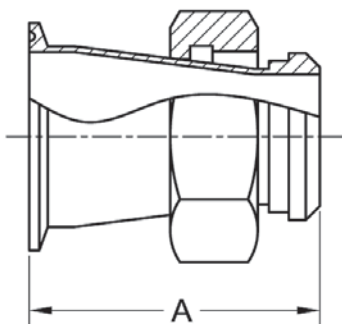
OTHER SIZES AVAILABLE UPON REQUEST

31MPT - CONCENTRIC REDUCER, CLAMP X THREADED BEVEL SEAT



PART NUMBER	SIZE	A
31MPT-1.5X1	1-1/2 X 1	3.188
31MPT-2X1	2 X 1	5.188
31MPT-2X1.5	2 X 1-1/2	3.188
31MPT-2.5X1.5	2-1/2 X 1-1/2	5.219
31MPT-2.5X2	2-1/2 X 2	3.219
31MPT-3X2	3 X 2	5.406
31MPT-3X2.5	3 X 2-1/2	3.406
31MPT-4X2.5	4 X 2-1/2	7.719
31MPT-4X3	4 X 3	5.719

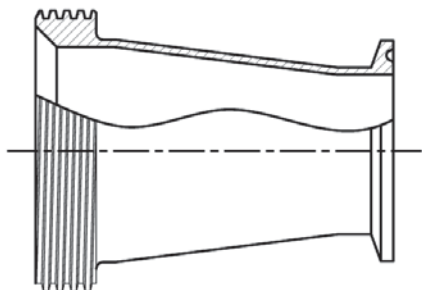
31MPP - CONCENTRIC REDUCER, CLAMP X PLAIN BEVEL SEAT



NOTE: HEX NUT INCLUDED

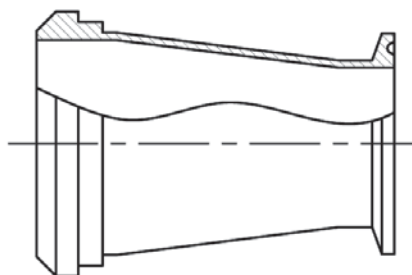
PART NUMBER	SIZE	A
31MPP-1.5X1	1-1/2 X 1	3.875
31MPP-2X1	2 X 1	5.875
31MPP-2X1.5	2 X 1-1/2	4.000
31MPP-2.5X1.5	2-1/2 X 1-1/2	6.000
31MPP-2.5X2	2-1/2 X 2	4.000
31MPP-3X2	3 X 2	6.000
31MPP-3X2.5	3 X 2-1/2	4.250
31MPP-4X2.5	4 X 2-1/2	8.375
31MPP-4X3	4 X 3	6.375

OTHER CLAMP REDUCERS AVAILABLE FROM STEEL & O'BRIEN:



31TMP (CONCENTRIC)

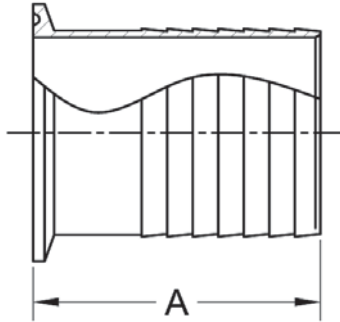
32TMP (ECCENTRIC)



31PMP (CONCENTRIC)

32PMP (ECCENTRIC)

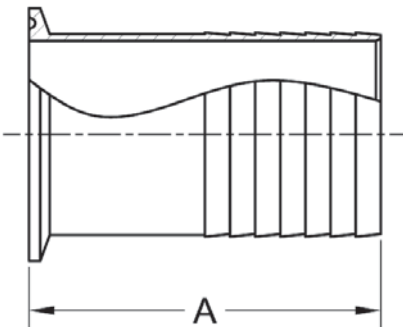
14MPHR - RUBBER HOSE ADAPTER



PART NUMBER	SIZE	A	PART NUMBER	SIZE	A
14MPHR-.50X.125	1/2 X 1/8	1.250	14MPHR-1.5X.50	1-1/2 X 1/2	1.500
14MPHR-.50X.25	1/2 X 1/4	1.500	14MPHR-1.5X.75	1-1/2 X 3/4	1.500
14MPHR-.50X.375	1/2 X 3/8	1.500	14MPHR-1.5X1	1-1/2 X 1	1.687
14MPHR-.50	1/2 X 1/2	1.500	14MPHR-1.5X1.25	1-1/2 X 1-1/4	1.687
14MPHR-.50X.75	1/2 X 3/4	1.500	14MPHR-1.5	1-1/2 X 1-1/2	1.687
14MPHR-.75X.125	3/4 X 1/8	1.250	14MPHR-2X.50	2 X 1/2	1.812
14MPHR-.75X.25	3/4 X 1/4	1.500	14MPHR-2X.75	2 X 3/4	1.812
14MPHR-.75X.375	3/4 X 3/8	1.500	14MPHR-2X1	2 X 1	2.312
14MPHR-.75X.50	3/4 X 1/2	1.500	14MPHR-2X1.5	2 X 1-1/2	2.312
14MPHR-.75	3/4 X 3/4	1.500	14MPHR-2	2 X 2	2.312
14MPHR-1X.375	1 X 3/8	1.500	14MPHR-2.5X1.5	2-1/2 X 1-1/2	2.312
14MPHR-1X.50	1 X 1/2	1.500	14MPHR-2.5X2	2-1/2 X 2	2.312
14MPHR-1X.75	1 X 3/4	1.500	14MPHR-2.5	2-1/2 X 2-1/2	2.343
14MPHR-1	1 X 1	1.687	14MPHR-3X2	3 X 2	3.109
14MPHR-1.5X.25	1-1/2 X 1/4	1.500	14MPHR-3	3 X 3	3.093
14MPHR-1.5X.375	1-1/2 X 3/8	1.500	14MPHR-4	4 X 4	3.406

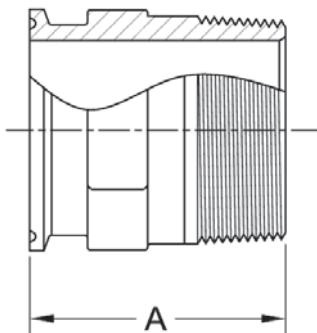
NOTE: SIZES ARE LISTED CLAMP SIZE X HOSE BARB
OTHER LENGTHS AND SIZES AVAILABLE UPON REQUEST.

14MPHRL - BREWERY STYLE RUBBER HOSE ADAPTER



PART NUMBER	SIZE	A
14MPHRL-1X3.5	1	3.500
14MPHRL-1.5X3.5	1-1/2	3.500
14MPHRL-2X4.5	2	4.500
14MPHRL-2.5X4.5	2-1/2	4.500
14MPHRL-3X4.5	3	4.500
14MPHRL-4X6.25	4	6.250

21MP - ADAPTER, CLAMP X MALE NPT



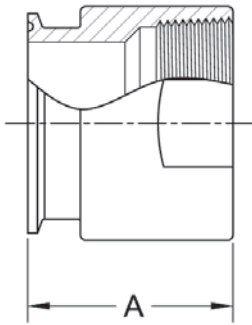
NOTE: SIZES ARE LISTED CLAMP SIZE X NPT

PART NUMBERS DENOTED WITH AN ASTERISK (*) ARE SUPPLIED WITH A HEX OR WRENCH FLATS

HEX SHAPE PROVIDED ON OTHER SIZES UPON REQUEST

PART NUMBER	SIZE	A
21MP-.50X.125	1/2 X 1/8	2.000
21MP-.50X.25	1/2 X 1/4	2.000
21MP-.50X.375	1/2 X 3/8	2.000
21MP-.50	1/2 X 1/2	2.000
21MP-.50X.75	1/2 X 3/4	2.000
21MP-.50X1*	1/2 X 1	2.250
21MP-.75X.125	3/4 X 1/8	2.000
21MP-.75X.25	3/4 X 1/4	2.000
21MP-.75X.375	3/4 X 3/8	2.000
21MP-.75X.50	3/4 X 1/2	2.000
21MP-.75	3/4 X 3/4	2.000
21MP-.75X1*	3/4 X 1	2.250
21MP-1X.50*	1 X 1/2	2.187
21MP-1X.75*	1 X 3/4	2.187
21MP-1*	1 X 1	2.250
21MP-1.5X.50*	1-1/2 X 1/2	2.187
21MP-1.5X.75*	1-1/2 X 3/4	2.187
21MP-1.5X1*	1-1/2 X 1	2.313
21MP-1.5X1.25*	1-1/2 X 1-1/4	2.438
21MP-1.5*	1-1/2 X 1-1/2	2.438
21MP-2X1*	2 X 1	2.469
21MP-2X1.25*	2 X 1-1/4	2.469
21MP-2X1.5*	2 X 1-1/2	2.469
21MP-2*	2 X 2	2.656
21MP-2.5X1	2-1/2 X 1	2.781
21MP-2.5X1.5	2-1/2 X 1-1/2	2.781
21MP-2.5X2	2-1/2 X 2	2.781
21MP-2.5	2-1/2 X 2-1/2	3.281
21MP-3X1	3 X 1	2.875
21MP-3X1.5	3 X 1-1/2	3.000
21MP-3X2	3 X 2	3.000
21MP-3X2.5	3 X 2-1/2	3.500
21MP-3	3 X 3	3.500
21MP-4X1.5	4 X 1-1/2	3.813
21MP-4X2	4 X 2	3.813
21MP-4X2.5	4 X 2-1/2	3.813
21MP-4X3	4 X 3	3.813
21MP-4	4 X 4	3.813
21MP-6	6 X 6	4.500

22MP - ADAPTER, CLAMP X FEMALE NPT



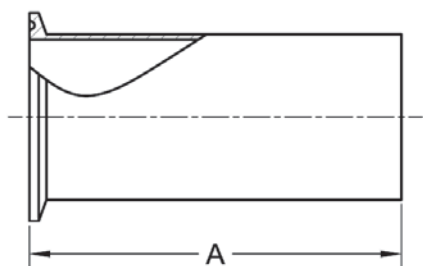
NOTE: SIZES ARE LISTED CLAMP SIZE X NPT

PART NUMBERS DENOTED WITH AN ASTERISK (*) ARE SUPPLIED WITH A HEX OR WRENCH FLATS

HEX SHAPE PROVIDED ON OTHER SIZES UPON REQUEST

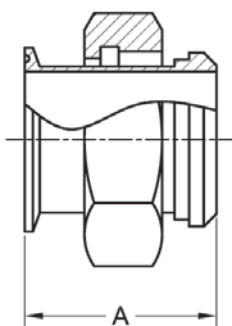
PART NUMBER	SIZE	A
22MP-.50X.125	1/2 X 1/8	1.250
22MP-.50X.25	1/2 X 1/4	1.500
22MP-.50X.375	1/2 X 3/8	1.500
22MP-.50	1/2 X 1/2	1.500
22MP-.50X.75	1/2 X 3/4	1.625
22MP-.50X1	1/2 X 1	1.625
22MP-.75X.125	3/4 X 1/8	1.250
22MP-.75X.25	3/4 X 1/4	1.500
22MP-.75X.375	3/4 X 3/8	1.500
22MP-.75X.50	3/4 X 1/2	1.500
22MP-.75	3/4 X 3/4	1.625
22MP-.75X1*	3/4 X 1	1.625
22MP-1X.50*	1 X 1/2	1.625
22MP-1X.75*	1 X 3/4	1.625
22MP-1*	1 X 1	1.625
22MP-1.5X.50*	1-1/2 X 1/2	1.625
22MP-1.5X.75*	1-1/2 X 3/4	1.625
22MP-1.5X1*	1-1/2 X 1	1.625
22MP-1.5X1.25*	1-1/2 X 1-1/4	2.250
22MP-1.5*	1-1/2 X 1-1/2	2.250
22MP-2X1*	2 X 1	1.687
22MP-2X1.25*	2 X 1-1/4	1.687
22MP-2X1.5*	2 X 1-1/2	1.687
22MP-2*	2 X 2	2.343
22MP-2.5X1	2-1/2 X 1	1.313
22MP-2.5X1.5	2-1/2 X 1-1/2	1.656
22MP-2.5X2	2-1/2 X 2	1.719
22MP-2.5	2-1/2 X 2-1/2	2.094
22MP-3X1	3 X 1	2.187
22MP-3X1.5	3 X 1-1/2	2.187
22MP-3X2	3 X 2	2.187
22MP-3X2.5	3 X 2-1/2	2.187
22MP-3	3 X 3	2.187
22MP-4X1.5	4 X 1-1/2	2.187
22MP-4X2	4 X 2	2.187
22MP-4X2.5	4 X 2-1/2	2.187
22MP-4X3	4 X 3	2.187
22MP-4	4 X 4	2.625
22MP-6	6 X 6	3.250

14MPHT - TYGON HOSE ADAPTER



PART NUMBER	SIZE	A
14MPHT-.50	1/2	4.500
14MPHT-.75	3/4	4.500
14MPHT-1	1	4.500
14MPHT-1.5	1-1/2	4.500
14MPHT-2	2	4.500
14MPHT-2.5	2-1/2	4.500
14MPHT-3	3	4.500
14MPHT-4	4	4.625

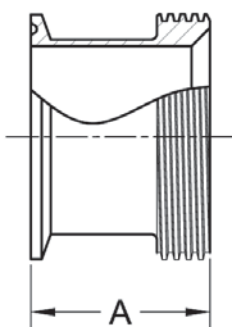
17MP-14 - ADAPTER, CLAMP X PLAIN BEVEL SEAT



PART NUMBER	SIZE	A
17MP-14-1	1	2.500
17MP-14-1.5	1-1/2	2.625
17MP-14-2	2	2.625
17MP-14-2.5	2-1/2	2.875
17MP-14-3	3	2.875
17MP-14-4	4	2.875

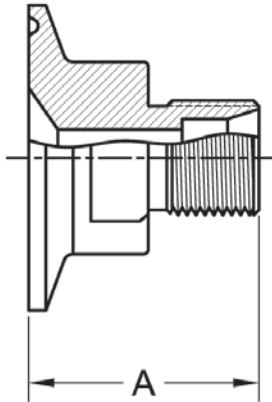
NOTE: HEX NUT INCLUDED

17MP-15 - ADAPTER, CLAMP X THREADED BEVEL SEAT



PART NUMBER	SIZE	A
17MP-15-1	1	1.813
17MP-15-1.5	1-1/2	1.844
17MP-15-2	2	1.875
17MP-15-2.5	2-1/2	1.969
17MP-15-3	3	2.062
17MP-15-4	4	2.344

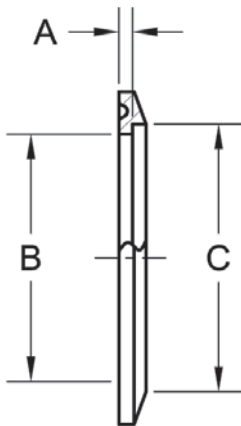
31-14C - CLAMP X TUBE COMPRESSION



PART NUMBER	TC SIZE	TUBE SIZE	A
31-14-.50X.25	1/2	1/4	1.170
31-14-.50X.375	1/2	3/8	1.590
31-14-.50	1/2	1/2	1.715
31-14-1	1	1	1.500
31-14-1.5X.25	1-1/2	1/4	1.250
31-14-1.5X.50	1-1/2	1/2	1.500

OTHERS SIZES AND LENGTHS AVAILABLE
NUT AND BACK FERRULES AVAILABLE UPON REQUEST

16AAS - CLAMP FLUSH FERRULE



PART NUMBER	SIZE	A	B	C
16AAS-1	1	.188	.870	1.010
16AAS-1.5	1-1/2	.100	1.370	1.510
16AAS-2	2	.100	1.870	2.010
16AAS-2.5	2-1/2	.124	2.370	2.510
16AAS-3	3	.100	2.870	3.010
16AAS-4	4	.100	3.834	4.010

SLIP ONTO SANITARY TUBING AND WELD, NO NEED TO BUTT-WELD
EASY WELDING FOR NON-SANITARY APPLICATIONS

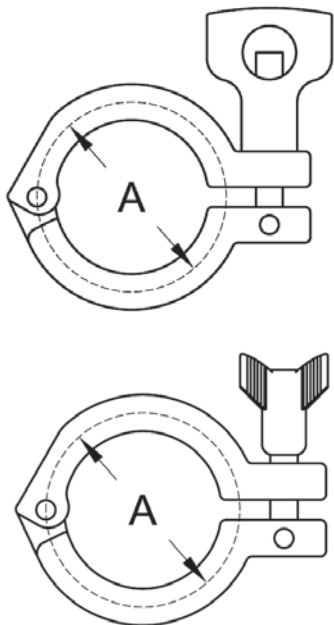
CLAMP WING NUT TIGHTENING TOOL



The wing nut tightening tool fits "most" clamp wing nuts for all sizes. This tool eases in the tightening and loosening of clamp wing nuts, while protecting the user from hot wing nuts.

Part number - 13WNTT-.50-12

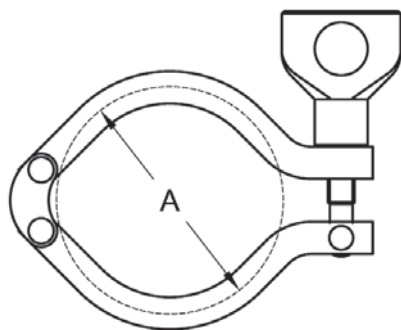
13MHHM - SINGLE PIN CLAMP



PART NUMBER	SIZE	A	PSI RATING @ 70° F	PSI RATING @ 250° F
13MHHM-.50	1/2 & 3/4	1.125	1500	1200
13MHHM-1	1 & 1-1/2	2.122	500	300
13MHHM-2	2	2.654	450	300
13MHHM-2.5	2-1/2	3.185	400	200
13MHHM-3	3	3.717	350	195
13MHHM-4	4	4.820	300	150
13MHHM-5	5	5.625	150	75
13MHHM-6	6	6.695	150	75
13MHHM-8	8	8.695	100	50
13MHHM-10	10	10.695	75	40
13MHHM-12	12	12.695	50	25

NOTES: ALSO AVAILABLE WITH ROCKET WING NUT
 AVAILABLE IN 304 OR 316 MATERIAL
 PRESSURE RATINGS ARE MAXIMUM WORKING PRESSURE ONLY
 PRESSURE RATINGS PERTAIN TO THE CLAMP "UNION"

13MHHM-DP - DOUBLE PIN CLAMP

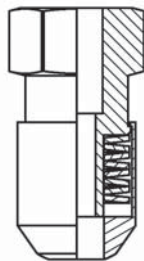


AVAILABLE IN 304 MATERIAL ONLY

PART NUMBER	SIZE	A	PSI RATING @ 70° F	PSI RATING @ 250° F
13MHHM-DP-.50	1/2 & 3/4	1.125	1500	1200
13MHHM-DP-1	1 & 1-1/2	2.122	500	300
13MHHM-DP-2	2	2.654	450	300
13MHHM-DP-2.5	2-1/2	3.185	400	200
13MHHM-DP-3	3	3.717	350	195
13MHHM-DP-4	4	4.820	300	150
13MHHM-DP-6	6	6.695	150	75
13MHHM-DP-8	8	8.695	100	50
13MHHM-DP-10	10	10.695	75	40

NOTES: ROCKET WING NUTS ALSO AVAILABLE
 PRESSURE RATINGS ARE MAXIMUM WORKING PRESSURE ONLY
 PRESSURE RATINGS PERTAIN TO THE CLAMP "UNION"

13MLL - LIVE LOADED CLAMP NUT

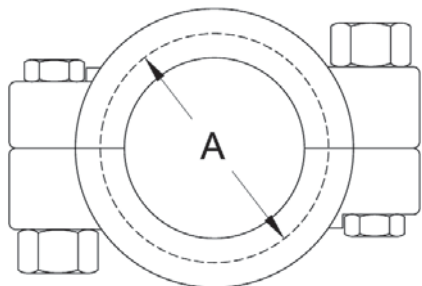


The live loaded clamp nut maintains a constant tightening force on clamped unions. This is helpful in keeping the seal of a clamped union, especially one with teflon gaskets.

The "Live Loaded" nut fits on standard clamps and can be retrofitted on existing clamps.

The assembly consists of a two-piece outer housing with springs contained inside, once the nut is tightened to 50 inch/pounds on the clamp, the springs are compressed. Steel & O'Brien part number is KCH00003.

13MHP - HIGH PRESSURE CLAMP

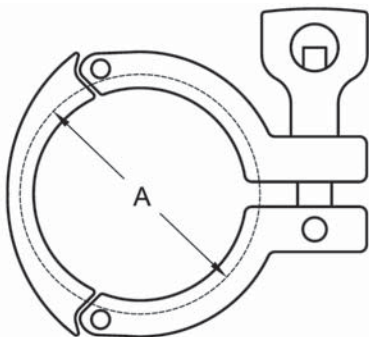


AVAILABLE IN 304 AND 316 MATERIAL

PART NUMBER	SIZE	A	PSI RATING @ 70° F	PSI RATING @ 250° F
13MHP-50	1/2 & 3/4	1.125	1500	1200
13MHP-1	1 & 1-1/2	2.046	1000	800
13MHP-2	2	2.596	1000	800
13MHP-2.5	2-1/2	3.127	1000	800
13MHP-3	3	3.659	1000	800
13MHP-4	4	4.762	800	600
13MHP-5	5	5.762	300	200
13MHP-6	6	6.695	300	200
13MHP-8	8	8.695	250	150
13MHP-10	10	10.695	200	125
13MHP-12	12	12.695	150	100

NOTES: PRESSURE RATINGS ARE MAXIMUM WORKING PRESSURE ONLY
PRESSURE RATINGS PERTAIN TO THE CLAMP "UNION"
SUPPLIED WITH BRASS HEX NUTS

13MHHS - THREE SEGMENT CLAMP

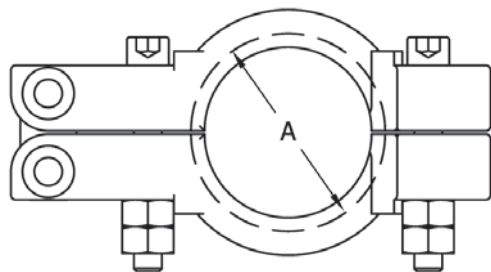


AVAILABLE IN 304 MATERIAL ONLY

PART NUMBER	SIZE	A	PSI RATING @ 70° F	PSI RATING @ 250° F
13MHHS-1	1 & 1-1/2	2.122	600	300
13MHHS-2	2	2.654	550	275
13MHHS-2.5	2-1/2	3.185	450	225
13MHHS-3	3	3.717	350	175
13MHHS-4	4	4.820	300	150

NOTES: ROCKET WING NUTS ALSO AVAILABLE
PRESSURE RATINGS ARE MAXIMUM WORKING PRESSURE ONLY
PRESSURE RATINGS PERTAIN TO THE CLAMP "UNION"

13ASME - ASME DOUBLE BOLT CLAMP

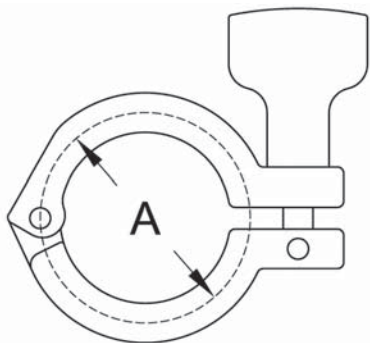


AVAILABLE IN 316 MATERIAL ONLY

PART NUMBER	SIZE	A	PSI RATING @ 70° F	PSI RATING @ 250° F
13ASME-1	1 & 1-1/2	2.046	1485	1337
13ASME-2	2	2.578	1370	1233
13AMSE-3	3	3.640	1000	900
13ASME-4	4	4.744	874	787
13ASME-6	6	6.632	415	374
13ASME-8	8	8.632	299	269
13ASME-10	10	10.632	161	145
13ASME-12	12	12.632	102	92

NOTE: TO MEET THE PSI RATINGS ABOVE THE FERRULE (HUB) USED SHALL BE DESIGNED IN ACCORDANCE WITH ASME SECTION 8 DIVISION 1 MANDATORY APPENDIX 24
STANDARD FERRULES AND FULL FACE GASKET CAN BE USED HOWEVER PERFORMANCE MAY NOT MEET THE ABOVE RATINGS

P13MHHM - PURITY CLAMP

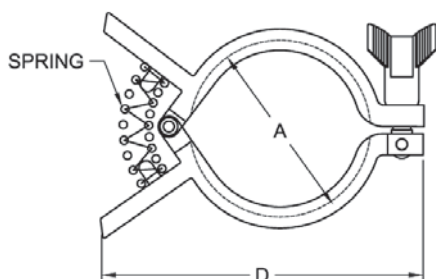


AVAILABLE IN 304 MATERIAL ONLY

PART NUMBER	SIZE	A	PSI RATING @ 70° F	PSI RATING @ 250° F
P13MHHM-.50	1/2 & 3/4	1.125	1500	1200
P13MHHM-1	1 & 1-1/2	2.122	500	300
P13MHHM-2	2	2.654	450	300
P13MHHM-2.5	2-1/2	3.185	400	200
P13MHHM-3	3	3.717	350	195
P13MHHM-4	4	4.820	300	150

TRUE SPHERICAL DESIGN
LOBE WING NUT
POLISHED

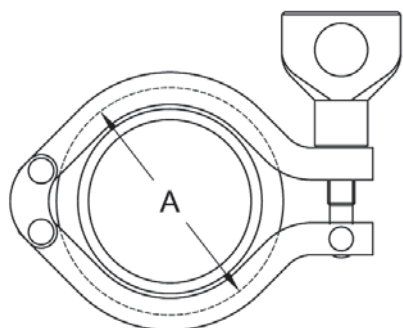
13MHHMQ - SQUEEZE CLAMP



AVAILABLE IN 304 MATERIAL ONLY

PART NUMBER	SIZE	A	D	PSI RATING @ 70° F	PSI RATING @ 250° F
13MHHMQ-.50	1/2 & 3/4	1.125	3.625	1500	1200
13MHHMQ-1	1 & 1-1/2	2.122	4.625	500	300
13MHHMQ-2	2	2.654	5.000	450	300
13MHHMQ-2.5	2-1/2	3.185	6.000	400	200
13MHHMQ-3	3	3.717	7.000	350	195
13MHHMQ-4	4	4.820	8.000	300	150

A12MPS - SWIVEL JOINT CLAMP ASSEMBLY



AVAILABLE IN 304 MATERIAL ONLY

PART NUMBER	SIZE	A	PSI RATING @ 70° F
A12MPS-1	1 & 1-1/2	2.122	50
A12MPS-2	2	2.654	50
A12MPS-2.5	2-1/2	3.185	50
A12MPS-3	3	3.717	50
A12MPS-4	4	4.820	50

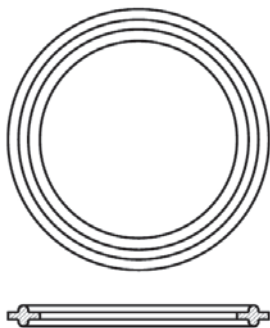
NOTES:
"A" DIMENSION DOES NOT INCLUDE TEFLON COLLAR
ASSEMBLY INCLUDES PTFE COLLAR AND
PTFE/EPDM ENVELOPE GASKET

CLAMP GASKET PERFORMANCE CHART

PROPERTY	BUNA-N	EPDM	TEFLON	VITON	SILICONE
TENSILE STRENGTH	GOOD	GOOD - EXCELLENT	EXCELLENT	EXCELLENT	GOOD
ELECTRICAL PROPERTIES	POOR	EXCELLENT	EXCELLENT	GOOD	EXCELLENT
WEATHER RESISTANCE	GOOD	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT
OZONE RESISTANCE	POOR	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT
HEAT RESISTANCE	GOOD (250° F)	EXCELLENT (300° F)	EXCELLENT (500° F)	EXCELLENT (400° F)	EXCELLENT (450° F)
COLD RESISTANCE	GOOD (-30° F)	GOOD - EXCELLENT (-20° F)	EXCELLENT (-100° F)	GOOD (-30° F)	EXCELLENT (-40° F)
STEAM RESISTANCE	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	GOOD
TEAR RESISTANCE	GOOD	GOOD	EXCELLENT	GOOD	GOOD
ABRASION RESISTANCE	GOOD	GOOD	EXCELLENT	GOOD	GOOD
ACID RESISTANCE	POOR - GOOD	GOOD - EXCELLENT	EXCELLENT	GOOD	GOOD
PETROLEUM OIL	EXCELLENT	POOR	EXCELLENT	EXCELLENT	POOR - GOOD
FLAME RESISTANCE	POOR	POOR	EXCELLENT	GOOD	POOR
VEGETABLE OIL	EXCELLENT	GOOD	EXCELLENT	EXCELLENT	GOOD (INTERMITTENT)
USP CLASS VI	NO	YES	YES	YES	YES
ANIMAL OILS & FATS	EXCELLENT	POOR	EXCELLENT	EXCELLENT	GOOD
ALCOHOL, GLYCOLS	EXCELLENT	EXCELLENT	EXCELLENT	GOOD	EXCELLENT
SOAPS, BLEACHES, DETERGENTS	POOR	EXCELLENT	EXCELLENT	GOOD	POOR

THE ABOVE CHART IS INTENDED AS A GUIDELINE, ACUTAL PERFORMANCE MAY VARY WITH EACH APPLICATION.

40MP - CLAMP GASKET



AVAILABLE IN THE FOLLOWING MATERIALS:
 BUNA-N, EPDM, TEFLON, VITON, SILICONE
 TUF-STEEL & STAINLESS
 OTHER MATERIALS AVAILABLE UPON REQUEST

PART NUMBER	SIZE
40MP-.50	1/2
40MP-.75	3/4
40MP-1	1
40MP-1.5	1-1/2
40MP-2	2
40MP-2.5	2-1/2
40MP-3	3
40MP-4	4
40MP-5	5
40MP-6	6
40MP-8	8
40MP-10	10
40MP-12	12