



Introduction

Pacific Hoseflex offers a comprehensive range of standard and sour gas Hammer Unions. Each union is thoroughly inspected to ensure long, dependable service in the most extreme conditions.

- Three lug nuts and self-locking ACME threads provide quick make-up and break-out
- Color coded for quick identification
- Unique identification for sour gas unions
- Meet or exceed National Association of Corrosion Engineers standard NACE MR-01-75 and API RP-14E
- Manufactured from quality steel meeting ASTM and/or AISI standards
- All unions provide pressure-tight & positive sealing for low-pressure services (500 to 2,000 PSI)
- The spherical surface male sub and angular surface female sub form a metal-to-metal seal
- The ball and tangent provides a perfect seal
- Range from 1/2" to 12" with cold working pressures from 500 to 20,000 PSI
- Fully interchangeable with most major brands of Hammer Unions

Specifications For Threaded and Butt Weld Hammer Unions

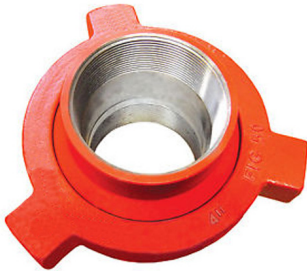
Fig. No.	Assembly Colour Code for Standard Service	Pressure Rating (PSI)				Nominal Pipe Size													
		Standard Service		Sour Gas Service		(in.)	1/2	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
		Cold Working	Test	Cold Working	Test	(mm)	13	25	32	38	50	65	80	100	125	150	200	250	300
50		500	750	N/A	N/A														
100		1000	1500	N/A	N/A														
101		1000	1500	N/A	N/A														
200		2000	3000	2000	3000														
201		2000	3000	2000	3000														
206		2000	3000	2000	3000														
207		2000	3000	2000	3000														
211		2000	3000	N/A	N/A														
300		2000	3000	N/A	N/A														
400		4000	6000	4000	6000														
602		6000	9000	6000	9000														
1002		10000	15000	7500	11250														
1003		10000	15000	7500	11250														
1004		10000	15000	7500	11250														
1502		15000	22500	10000	15000														
2002		20000	3000	N/A	N/A														
2202		N/A	N/A	15000	22500														
6666		6000	9000	N/A	N/A														

Cold working - the maximum allowable pressure under non- shock conditions at ambient temperature (-28° C to +38° C).

* Indicates different Cold Working Pressure due to other design factor - Difference as shown below:

- 5", 6", 12" : Figure 400, Cold Working Pressure 2,500 PSI & Test Pressure 4,000 PSI
- 5", 6" : Figure 1002 Butt weld, Cold Working Pressure 7,500 PSI & Test Pressure 11,250 PSI Std. Service
- 4", 5" : Figure 1003 Butt weld, Cold Working Pressure 7,500 PSI & Test Pressure 11,250 PSI Std. Service
- 5", 6" : Figure 1002 Butt weld, Cold Working Pressure 5,000 PSI & Test Pressure 7,500 PSI Sour Service
- 4", 5" : Figure 1003 Butt weld, Cold Working Pressure 5,000 PSI & Test Pressure 7,500 PSI Sour Service
- 1/2" : Figure 300, Cold Working Pressure 15,000 PSI & Test Pressure 20,000 PSI, Zinc Plated

Fig. 50 Union (Red Nut, Red Subs)



Size inches	Nut Radius mm	Length Total mm	Pressure Rating (PSI)				Weight (Approx.) kg
			Standard Service		Sour Gas Service		
			Cold Working	Test	Cold Working	Test	
4	130.30	157.48	500	750	N/A	N/A	12.24
5	132.59	142.24	500	750	N/A	N/A	10.16

- These Hammer Unions are recommended for suction and low pressure lines
- Available in threaded and socket weldends

Fig. 100 Union (Black Nut, Yellow Subs)



Size inches	Nut Radius mm	Length Total mm	Pressure Rating (PSI)				Weight (Approx.) kg
			Standard Service		Sour Gas Service		
			Cold Working	Test	Cold Working	Test	
2	73.66	82.04	1000	1500	N/A	N/A	2.55
2 1/2	91.44	107.95	1000	1500	N/A	N/A	5.20
3	101.60	116.59	1000	1500	N/A	N/A	6.25
4	119.38	125.48	1000	1500	N/A	N/A	8.80
5	147.32	152.40	1000	1500	N/A	N/A	14.74
6	165.10	173.74	1000	1500	N/A	N/A	20.95
8	199.90	185.67	1000	1500	N/A	N/A	31.69

- These Hammer Unions are used in low pressure manifold lines and air, water, oil or gas applications
- Available in both threaded and butt weld ends
- Metal to Metal Sealing surface

Fig. 101 Union (Beige Nut, Yellow Subs)



Size inches	Nut Radius mm	Length Total mm	Pressure Rating (PSI)				Weight (Approx.) kg
			Standard Service		Sour Gas Service		
			Cold Working	Test	Cold Working	Test	
5	140.21	204.47	1000	1500	N/A	N/A	14.96

- These Hammer Unions are used in low pressure manifold lines and air, water, oil or gas applications
- Available in threaded ends
- Subs with flat face
- O-ring recommended for line connections where straight breakout of short pipe segments is required

Fig. 200 Union (Blue Nut, Grey Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
1	49.78	67.31	2000	3000	2000	3000	0.79
1 1/4	55.11	70.61	2000	3000	2000	3000	1.07
1 1/2	61.21	75.69	2000	3000	2000	3000	1.49
2	73.66	80.51	2000	3000	2000	3000	5.47
2 1/2	92.20	104.90	2000	3000	2000	3000	2.48
3	108.20	116.33	2000	3000	2000	3000	6.81
4	127.00	125.48	2000	3000	2000	3000	9.50
5	139.70	166.37	2000	3000	2000	3000	15.08
6	163.32	169.16	2000	3000	2000	3000	19.27
8	188.72	182.63	2000	3000	2000	3000	29.02
10	228.60	231.90	2000	3000	2000	3000	41.27

- These Hammer Unions are used in general service manifold lines and air, water, oil or gas applications
- Available in both threaded and butt weld ends
- Metal to metal sealing surface
- Available in butt weld schedules 40 and 80

Fig. 201 Union (Gold Nut, Grey Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
2 1/2	119.13	153.92	2000	3000	2000	3000	8.82

- These Hammer Unions are used in air, water, oil or gas applications
- Available in threaded ends
- Subs with flat face
- O-ring recommended for line connections where straight breakout of short pipe segments is required

Fig. 206 Union (Blue Nut, Grey Subs)



Size inches	Nut Radius mm	Length Total mm	Pressure Rating (PSI)				Weight (Approx.) kg
			Standard Service		Sour Gas Service		
			Cold Working	Test	Cold Working	Test	
1	49.78	67.31	2000	3000	2000	3000	0.79
1 1/4	55.11	70.61	2000	3000	2000	3000	1.07
1 1/2	261.21	75.69	2000	3000	2000	3000	1.49
2	73.66	80.51	2000	3000	2000	3000	5.47
2 1/2	96.20	104.90	2000	3000	2000	3000	4.53
3	108.20	116.33	2000	3000	2000	3000	6.81
4	127.00	125.48	2000	3000	2000	3000	9.50
5	139.70	166.37	2000	3000	2000	3000	15.08
6	163.32	169.16	2000	3000	2000	3000	19.27
8	188.72	182.36	2000	3000	2000	3000	29.02
10	228.60	231.90	2000	3000	2000	3000	41.27

- These Hammer Unions are similar to Fig 200 with a secondary seal to supplement the metal-to-metal design
- Recommended for use in corrosive environments
- Available in both threaded and butt weld ends
- Available in butt weld schedules 40 and 80

Fig. 207 Union (Blue Cap, Grey Subs)



Size inches	Nut Radius mm	Length Total mm	Pressure Rating (PSI)				Weight (Approx.) kg
			Standard Service		Sour Gas Service		
			Cold Working	Test	Cold Working	Test	
3	69.85	98.29	2000	3000	2000	3000	4.44
4	91.18	111.25	2000	3000	2000	3000	7.37
6	124.97	142.24	2000	3000	2000	3000	20.81

- Fig 207 Hammer Unions are fully interchangeable with figure 200 and 206 unions
- Used to blank off the end of a line
- O-ring is provided in blanking cap to ensure leak proof seal
- Available in both threaded and butt weld ends
- Available in butt weld schedules 40 and 80

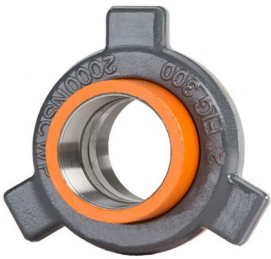
Fig. 211 Union (Grey Nut, Blue Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
3	76.96	87.63	2000	3000	N/A	N/A	2.99
2	108.46	115.57	2000	3000	N/A	N/A	6.38

- These Hammer Unions are used in air, water, oil or gas applications
- Available in threaded ends
- Subs with flat face
- O-ring recommended for line connections where straight breakout of short pipe segments is required

Fig. 300 Union (Grey Nut, Yellow Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
1/2	45.72	76.20	15000	20000	N/A	N/A	0.81
1	54.10	66.80	2000	3000	N/A	N/A	0.90
2	73.15	95.25	2000	3000	N/A	N/A	1.13

- These Hammer Unions are similar to Fig 200 with a secondary seal to supplement the metal-to-metal design
- Recommended for use in corrosive environments
- Available in both threaded and butt weld ends
- Available in butt weld schedules 40 and 80

Fig. 400 Union (Black Nut, Red Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
2	89.91	130.30	4000	6000	4000	6000	5.65
3	105.92	155.96	4000	6000	4000	6000	9.13
4	128.02	207.77	4000	6000	4000	6000	14.17
5	170.18	281.94	2500	4000	2500	4000	22.49
6	195.58	289.56	2500	4000	2500	4000	31.05
12	260.60	276.86	2500	4000	2500	4000	74.79

- These Hammer Unions are used in manifold & line connections, pump suction and mud service
- Available in both threaded and butt weld ends
- 3" through 12" sizes have o-ring for primary seal
- Available in butt weld schedule 80

Fig. 602 Union (Black Nut, Orange Subs)



Size inches	Nut Radius mm	Length Total mm	Pressure Rating (PSI)				Weight (Approx.) kg
			Standard Service		Sour Gas Service		
			Cold Working	Test	Cold Working	Test	
2	89.91	130.30	6000	9000	6000	9000	5.65
3	105.92	155.96	6000	9000	6000	9000	9.13
4	128.02	207.77	6000	9000	6000	9000	14.17
5	170.18	281.94	6000	9000	6000	9000	22.49
6	195.58	289.56	6000	9000	6000	9000	28.78
12	260.60	276.86	6000	9000	6000	9000	74.79

- These Hammer Unions are used in water, oil, gas and mud service
- Replaceable, lip type rubber seal provides primary sealing
- Available in both threaded and butt weld ends

Fig. 1002 Union (Red Nut, Blue Subs)



Size inches	Nut Radius mm	Length Total mm	Pressure Rating (PSI)				Weight (Approx.) kg
			Standard Service		Sour Gas Service		
			Cold Working	Test	Cold Working	Test	
1	55.62	90.17	10000	15000	7500	11250	1.58
1 1/4	78.23	123.95	10000	15000	7500	11250	4.08
1 1/2	78.74	124.46	10000	15000	7500	11250	4.15
2	93.98	134.62	10000	15000	7500	11250	6.25
3	114.30	157.48	10000	15000	7500	11250	10.21
4	132.08	208.28	10000	15000	7500	11250	15.83
5	159.00	231.90	7500	11250	5000	7500	30.19
6	177.80	193.04	7500	11250	5000	7500	41.34

- These Hammer Unions are in high pressure applications for choke and kill lines, cementing and acidizing. Replaceable, lip type rubber seal provides primary sealing up to 4"
- 5" and 6" sizes have o-ring for primary sealing
- Available in both threaded and butt weld ends
- 6" unions are only available in butt weld for sour service

Fig. 1003 Union (Black Nut, Grey Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
3	121.92	8.87	10000	15000	7500	11250	21.54
4	152.40	276.86	7500	11250	5000	7500	35.44
5	152.40	276.86	7500	11250	5000	7500	36.11

- These Hammer Unions are used in air, water, oil, mud, gas service, high pressure manifold, drilling rig where alignment of piping components is a problem
- Replaceable o-ring on male sub provides primary sealing
- Available in both threaded and butt weld ends
- 5" unions are available in butt weld ends only

Fig. 1004 Union (Red Nut, Grey Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
5	152.40	209.55	10000	15000	7500	11250	38.55
6	184.15	238.25	10000	15000	7500	11250	63.50

- Available in butt weld ends
- Face of male & female subs is perfectly square
- Provided with lip type seal ring

Fig. 1502 Union (Blue Nut, Red Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
1	70.10	11.25	15000	22500	10000	15000	4.13
1 1/2	88.90	114.30	15000	22500	10000	15000	7.39
2	101.60	177.80	15000	22500	10000	15000	9.12
3	123.95	194.06	15000	22500	10000	15000	15.46
4	152.91	217.68	15000	22500	10000	15000	32.96
5	165.86	228.60	15000	22500	10000	15000	43.09
6	182.88	247.65	15000	22500	10000	15000	65.77

- These Hammer Unions are use in cementing, acidizing, choke and kill lines
- Replaceable lip type rubber seal
- Available in both threaded and butt weld ends

Fig. 2002 Union (Green Nut, Grey Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
2	69.85	118.62	20000	30000	N/A	N/A	3.71
3	88.90	114.30	20000	30000	N/A	N/A	7.39
4	101.60	177.80	20000	30000	N/A	N/A	9.52

- Replaceable Lip type rubber seal
- Available in butt weld ends only

Fig. 2202 Union (Green Nut, Green Subs)



Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
2	69.85	118.62	N/A	N/A	15000	22500	3.71
3	88.90	114.30	N/A	N/A	15000	22500	7.39
4	101.60	177.80	N/A	N/A	15000	22500	9.52

- These Hammer Unions are specially designed for sour gas service
- Replaceable lip type rubber seal with stainless steel anti extrusion ring
- Conform to NACE standard MR-01-75 and API-14E
- Available in butt weld ends only

Fig. 6666 Union (Red Nut, Blue Subs)

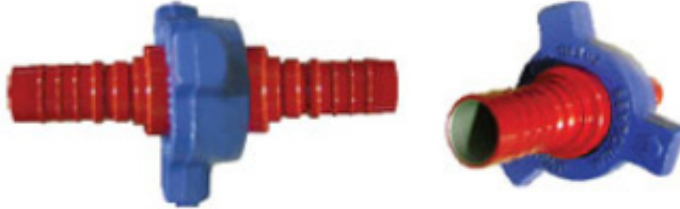


Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
1 1/2	71.88	106.43	6000	9000	N/A	N/A	2.99
2	87.88	148.59	6000	9000	N/A	N/A	5.70

- Available in threaded ends only

HOSE NIPPLE UNIONS

Hose Nipple Unions from 1" to 4" for all pressure ratings



INTEGRAL BLIND SUBS

Blind Male and Female Subs with NPT ports with or without SS chain for all sizes ranging from 1" to 10" for all pressure ratings.



O-RINGS & SEAL RINGS

- O-Rings & Seal Rings for hammer unions are available in nitrile for standard service and viton for H2S service
- Available for various figures and styles
- O-Rings
- Lip Seal Rings
- Brass Backed Seal Rings
- Stainless Steel Backed Seal Rings



RETAINER RINGS & RETAINER SEGMENTS

Retainer Rings and Retainer Segments are used for assembly of a wing nut with a male end of hammer union. These are manufactured in all sizes and figure of hammer unions.

