

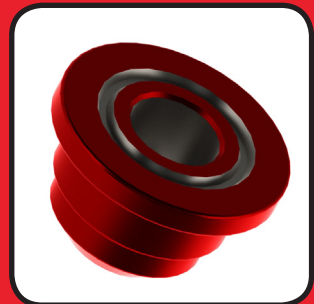
PACIFIC

**HOSEFLEX**

PTY LTD



**08**



**API APPROVED PRODUCTS**



## HAMMER UNIONS

Size : 1/2" to 12"

Working Pressure : 500 to 20000 psi

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## SWIVEL JOINTS

Size : 3/4" to 4"

Working Pressure : 1000 to 20000 psi

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## STAINLESS STEEL HOSE

Size : 3/8" to 4"

Working Pressure : 6000 to 20000 psi

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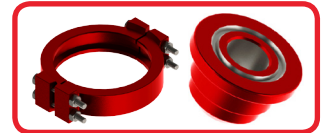


## CLAMPS & HUBS

Size : 3/8" to 2"

Working Pressure : 2000 to 15000 psi

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## API 7K ROTARY DRILLING HOSE

Size : 1/4" to 4"

Working Pressure : 1500 to 15000 psi

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## API 16C CHOKE KILL LINE

Size : 1/4" to 2"

Working Pressure : 15011 to 22517 psi

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### 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	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	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	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	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 )**

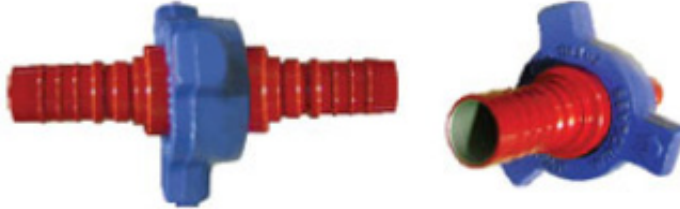


Size	Nut Radius	Length Total	Pressure Rating (PSI)				Weight (Approx.)
			Standard Service		Sour Gas Service		
			inches	mm	mm	Cold Working	Test
1 1/2	71.88	106.43	6000	9000	N/A	N/A	2.99
2	87.88	148.59	6000	9000	N/A	N/A	5.70

- 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.



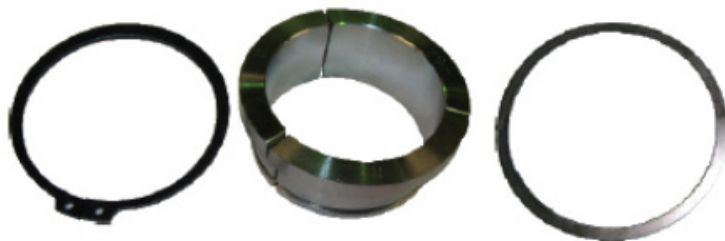
### O-RINGS & SEAL RINGS

- 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.



### Swivel Joints

Features include:

- Smooth rotation and movement without sacrificing strength and integrity of the steel
- Streamlined bore minimizes flow restrictions, turbulence and pressure drop
- Long-sweep Swivel Joints have extra-long radius elbows for better flow characteristics
- Manufactured specifically for high pressure applications
- Dual and tri-race ball bearing Swivel Joints are matched to load capacities & service conditions
- All ball races are either flame hardened, carburized & hardened or snap-in stainless steel
- All Swivel Joints are field repairable and easy to use. Repair kits are available

### Specifications For Threaded and Butt Weld Hammer Unions

Models	Colour Code	Cold Working Pressure (PSI)	Material	End Connections	Sizes (Inches)							
					3/4	1	1 1/4	1 1/2	2	3	4	
Low Pressure Swivel Joints	Blue	1000	Carbon Steel	NPT							✓	
				Beveled For welding							✓	
High Pressure Swivel Joints	Silver	6000	Alloy Steel	Female Line Pipe Threads	✓	✓	✓	✓	✓	✓	✓	✓
				Figure 602 Union	✓	✓	✓	✓	✓	✓	✓	✓
Longsweep Swivel Joints	Olive Green (Sour Gas)	7500	Alloy Steel	Figure 1002 Union					✓	✓	✓	
	Olive Green (Sour Gas)	10000	Alloy Steel	Figure 1502 Union					✓	✓	✓	
	Black	10000	Alloy Steel	Female Line Pipe Threads					✓	✓	✓	
				Figure 1002 Union					✓	✓	✓	
	Olive Green (Sour Gas)	15000	Alloy Steel	Figure 2202 Union					✓	✓		
	Red	15000	Alloy Steel	Figure 1502 Union					✓	✓	✓	
Light Blue	20000	Alloy Steel	Figure 2002 Union					✓	✓			

- Eight short radius Swivel Joint styles and configurations are available
- Threaded, integral wing union, beveled for welding or flanged end connections are available
- Sizes available 1" to 4" furnished with high nitrile packing and brass or stainless steel ring
- All joints are specially heat treated to achieve optimal hardness
- All materials meet ASTM and/or AISI standards
- 100% quality control and testing
- Sour gas Swivel Joints are manufactured in accordance with the National Association of Corrosion Engineers (NACE) standard MR-01-75 & the American Petroleum Institute's (API) standard RP-14-E

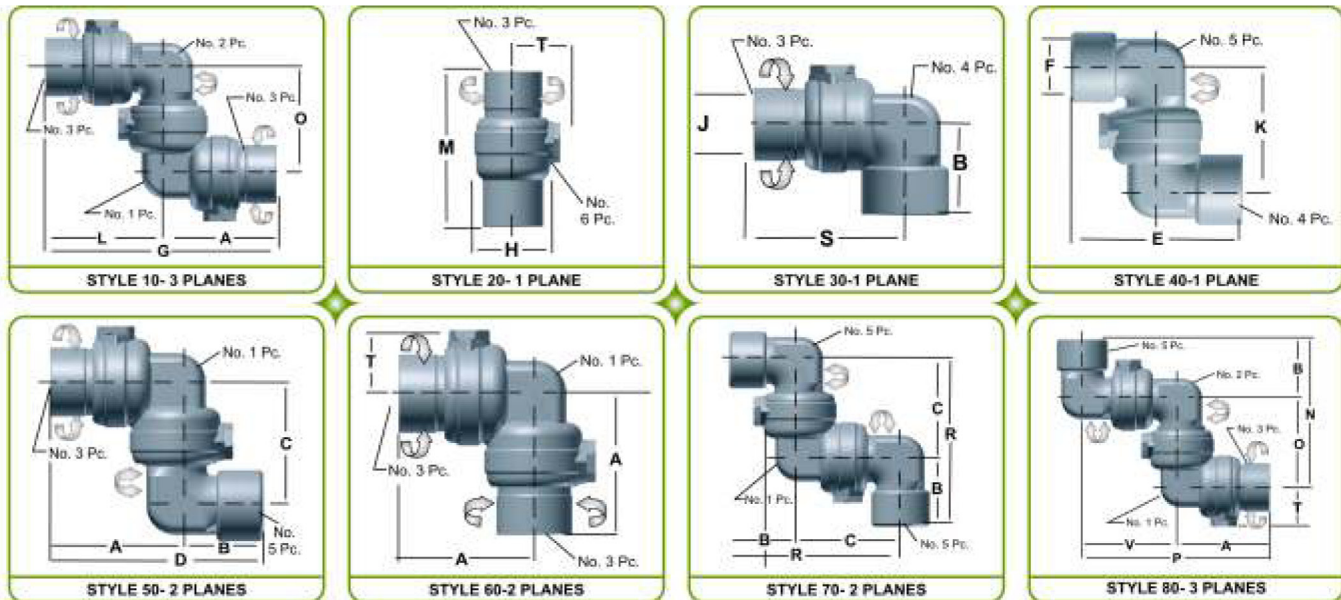


#### High Pressure Short Radius Swivel Joints

Available in sizes 3/4" through 3" for 6,000 PSI, non-shock cold working pressure. All sizes available in eight styles for 360 degree rotation in one, two or three planes. These Swivel Joints are recommended for hydraulic control lines, mud lines, rotary, line connections, BOP lines, test lines, water lines, offshore wellhead connections, cementing, circulating hoses and choke-kill lines.

#### Features:

- Smooth rotation and movement without sacrificing strength and integrity of the steel
- Streamlined bore minimizes flow restrictions, turbulence and pressure drop
- End connections are threaded or union ends
- All joints are specially heat treated to maintain optimal hardness and undergo strict quality control
- All material meets ASTM and/or AISI standards



#### Size Chart

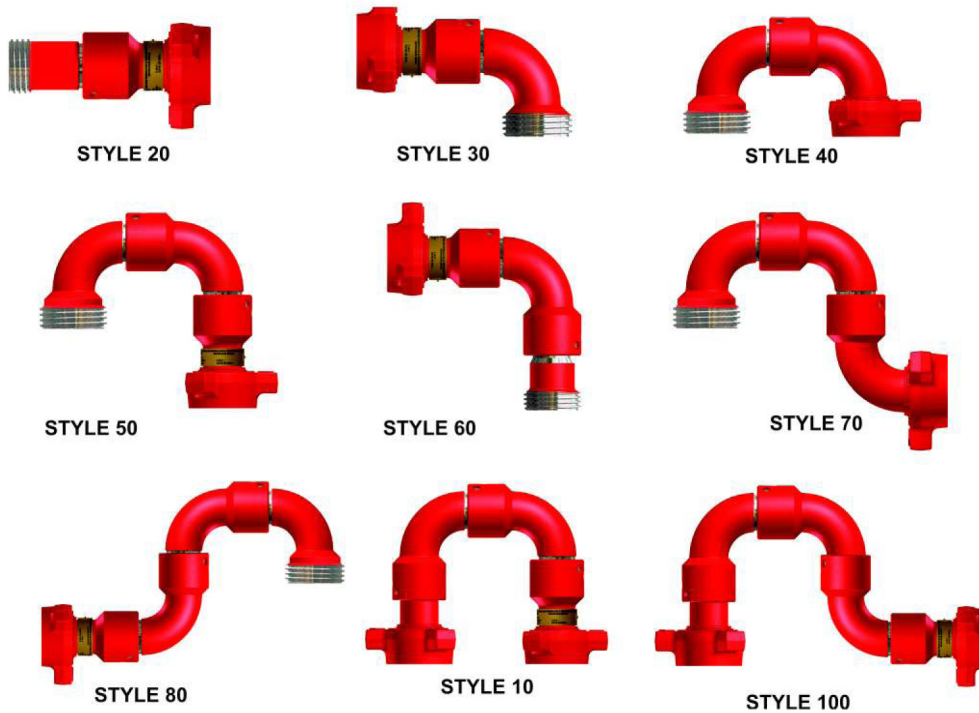
Size (Inches)	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	V
3/4 - 1	117.47	69.05	107.15	186.53	138.11	44.45	234.95	61.91	44.45	107.15	117.47	131.76	176.21	107.15	224.63	176.21	117.47	47.62	107.15
1 1/4 - 1 1/2	119.85	80.96	108.74	200.81	161.92	254.79	254.79	73.02	60.32	108.74	134.93	138.90	189.70	108.74	242.88	189.70	119.85	53.97	123.03
2	148.43	102.39	149.22	250.82	204.78	312.73	312.73	104.77	84.13	149.22	164.30	169.06	254.79	152.4	313.53	251.61	251.61	67.46	165.10
3	219.07	117.47	336.55	336.55	234.95	458.78	458.78	147.63	114.30	222.25	239.71	231.77	319.08	201.61	441.32	441.32	319.08	85.72	222.25

### Extra High Pressure Long Sweep Swivel Joints

- Tri-race code black swivels are available in 10,000 PSI working pressure with female line pipe thread and connections
- Tri-race code red Swivel Joints are designed for the critical service conditions that exist in fracturing, cementing, acidizing and well testing. They are available in 2", 3" and 4" sizes with 15,000 PSI working pressure and 22,500 PSI test pressure. With 1502 union ends for fast, easy make-up

#### Features:

- Long sweep joints have extra-long radius elbows for better flow characteristics
- Manufactured specifically for high pressure applications
- All Swivel Joints are field repairable and easy to use. Repair kits are available
- Tri-race ball bearing Swivel Joints are matched to load capacities & service conditions
- All ball races are either flame hardened or snap-in stainless steel
- Available in both union and threaded ends



### Style & Types

#### 2" Union Ends

STYLE NO. 10 - Male x Female	STYLE NO. 10 - Male x Male	STYLE NO. 10 - Female x Female	STYLE NO. 20 - Male x Female
STYLE NO. 30 - Male x Female	STYLE NO. 40 - Male x Female	STYLE NO. 50 - Male x Female	STYLE NO. 50 - Male x Male
STYLE NO. 50 - Female x Female	STYLE NO. 60 - Male x Female	STYLE NO. 70 - Male x Female	STYLE NO. 80 - Male x Female
STYLE NO. 100 - Male x Female			

#### 3" Union Ends

STYLE NO. 10 - Male x Female	STYLE NO. 10 - Male x Male	STYLE NO. 10 - Female x Female	STYLE NO. 30 - Male x Female
STYLE NO. 50 - Male x Female	STYLE NO. 50 - Female x Female	STYLE NO. 60 - Male x Female	STYLE NO. 80 - Male x Female

#### 4" Union Ends, 1002

STYLE NO. 20 - Male x Female	STYLE NO. 30 - Male x Female	STYLE NO. 50 - Male x Female	STYLE NO. 10 - Male x Female
STYLE NO. 10 - Male x Male			

#### 4" Union Ends, 1502

STYLE NO. 50 - Male x Female	STYLE NO. 60 - Male x Female	STYLE NO. 10 - Male x Female	STYLE NO. 10 - Male x Male
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#### Steel Hose Assemblies

- Used in a variety of high pressure well service applications
- Utilize swivel joint & hammer union end connections for fast and secure make up & breakout operations
- Made to withstand cold working pressures up to 15,000 PSI for standard service and 10,000 PSI for sour service
- Steel Hoses Assemblies eliminate the need for exact alignment when installing to facilitate the routing of lines around fixed objects and simplify folding, transporting and storage of equipment.

Size	Swivel Joint Style	Quantity of Wing Unions	Weight (LBS)
2" x 10"	50 & 10	1	147
2" x 12"	50 & 10	1	170
2" x 12"	(2) 50	2	179
2" x 12"	(2) 50	4	207
3" x 10"	(2) 50	4	454



#### Pup Joints

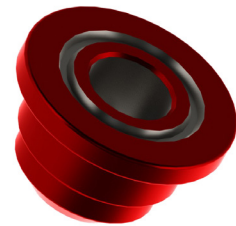
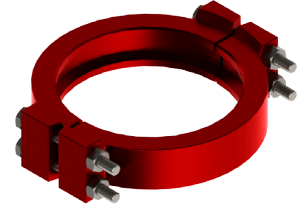
Pup Joints with integral hammer lug union end connections. This enables faster, easier make-up and break-out of temporary flow lines.

- Integrally forged hammer lug union end connections eliminate welding or threading
- Lightest Pup Joint available for fast, easy handling
- Available in butt weld, integral, threaded (LPT & NPST)
- Sizes from 2" to 4". Integral Pup Joint available in lengths up to 12 feet while threaded / butt weld is available up to 20 feet
- Available in 6,000 to 20,000 PSI pressure rating
- All products manufactured from forged steel which meets ASTM and/or AISI standards
- Available in both standard and H2S service



The complete range of Clamps & Hubs in accordance to API 16A.

- Clamps allow fast and easy make up even in limited space. All clamps have 360° infinite adjust ability
- Clamps reliably to connect hubs and other API connections
- Hubs & clamps up to pressure range from 2,000 PSI to 20,000 PSI
- Hubs & clamps are designed & manufactured in accordance with below specific requirements:
  - Products specification level - 1,2,3
  - Temperature rating - K to Y
  - Min. yield - 60,000 PSI up to 10,000 PSI & 75,000 PSI up to 20,000 PSI
  - Min. tensile - 85,000 PSI up to 10,000 PSI & 95,000 PSI up to 20,000 PSI
  - Material class - API - 60 K up to 15,000 PSI & 75 K up to 20,000 PSI
- Type 16B & 16BX hubs are of the ring joint type and are designed for face to face make-up



API Type 16B Intergral Hub Connections for 2000 PSI & 3000 PSI Rated Working Pressure						
Nominal Size and Bore B (Inches)	Outside Diameter D (mm)	Total Thickness C (mm)	Large Diameter of Neck A (mm)	Neck Length for Clamp Clearance L (mm)	Ring Gasket Nuber	Clamp Number
<b>2000 PSI</b>						
7 1/16"	263.52	36.65	225.42	63.50	RX-45	25
16 3/4"	517.52	32.23	482.60	79.50	RX-65	12
21 1/14"	669.92	47.54	622.30	127	RX-73	18
<b>3000 PSI</b>						
11"	396.90	35.53	355.60	79.50	RX-53	9
13 5/8"	466.75	33.93	425.45	81.02	RX-57	11
16 3/4"	539.75	37.05	498.47	93.47	RX-65	14

API Type 16X Intergral Hub Connections for 5000 PSI Rated Working Pressure						
Nominal Size and Bore B (Inches)	Outside Diameter D (mm)	Total Thickness C (mm)	Large Diameter of Neck A (mm)	Neck Length for Clamp Clearance L (mm)	Ring Gasket Nuber	Clamp Number
<b>5000 PSI</b>						
2 1/6"	127.78	29.61	92.86	56.38	BX 152	1
2 9/16"	146.83	29.61	111.91	57.65	BX 153	2
3 1/8"	160.32	29.61	125.42	59.94	BX 154	4
4 1/16"	193.67	30.40	158.75	60.45	BX 155	5
7 1/16"	336.55	41.19	295.27	85.85	BX 156	8
9"	336.55	41.19	295.27	85.85	BX 157	8
11"	412.75	42.01	371.47	104.90	BX 158	10
13 5/8"	523.87	47.52	482.60	123.95	BX 160	13
16 3/4"	650.87	45.16	609.60	139.70	BX 162	19
21 1/4"	793.75	92.20	708.02	171.45	BX 165	27





API Type 16BX Integral Hub Connections for 10,000 PSI Rated Working Pressure						
Nominal Size and Bore B (Inches)	Outside Diameter D (mm)	Total Thickness C (mm)	Large Diameter of Neck A (mm)	Neck Length for Clamp Clearance L (mm)	Ring Gasket Nuber	Clamp Number
<b>10,000 PSI</b>						
1 13/16"	127.78	29.61	92.86	56.38	BX 151	1
2 1/16"	146.83	29.61	111.91	57.65	BX 152	2
2 9/16"	160.32	29.61	125.42	59.94	BX 153	4
3 1/16"	193.67	30.40	158.75	60.45	BX 154	5
4 1/16"	214.29	33.27	173.02	71.62	BX 155	6
7 1/16"	412.75	41.98	371.47	104.90	BX 156	10
9"	412.75	41.98	371.47	104.90	BX 157	10
11"	524.51	51.68	473.07	120.65	BX 158	22
13 5/8"	565.15	58.64	523.87	134.87	BX 159	15
16 3/4"	711.20	76.32	635	156.71	BX 162	28
18 3/4"	793.75	92.20	708.02	171.45	BX 164	27
21 1/4"	863.60	101.72	774.70	208.78	BX 166	26

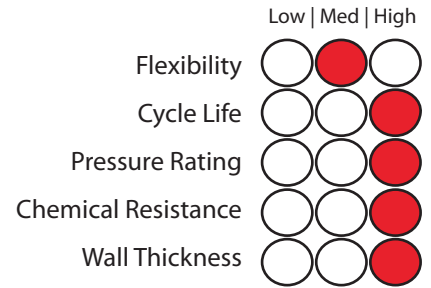
API Type 16BX Integral Hub Connections for 15,000 PSI Rated Working Pressure						
Nominal Size and Bore B (Inches)	Outside Diameter D (mm)	Total Thickness C (mm)	Large Diameter of Neck A (mm)	Neck Length for Clamp Clearance L (mm)	Ring Gasket Nuber	Clamp Number
<b>15,000 PSI</b>						
1 13/16"	146.83	29.61	111.91	57.65	BX 151	2
2 1/16"	155.57	29.61	114.30	81.78	BX 152	3
2 9/16"	155.57	29.61	114.30	81.78	BX 153	3
3 1/16"	216.83	33.27	173.02	71.62	BX 154	6
4 1/16"	336.55	41.19	295.27	85.85	BX 155	8
7 1/16"	523.90	51.68	473.07	120.65	BX 156	22
11"	565.15	58.64	523.87	137.87	BX 158	15
13 5/8"	711.20	76.32	635	156.71	BX 159	28
18 3/4"	863.60	101.72	774.7	208.78	BX 164	26

API Type 16BX Integral Hub Connections for 15,000 PSI Rated Working Pressure						
Nominal Size and Bore B (Inches)	Outside Diameter D (mm)	Total Thickness C (mm)	Large Diameter of Neck A (mm)	Neck Length for Clamp Clearance L (mm)	Ring Gasket Nuber	Clamp Number
<b>15,000 PSI</b>						
1 13/16"	155.57	41.19	114.30	81.78	BX 151	3
2 1/16"	155.57	41.19	114.30	81.78	BX 152	3
2 9/16"	214.29	33.27	173.02	71.62	BX 153	6
3 1/16"	336.55	41.19	295.27	85.85	BX 154	8
4 1/16"	412.75	41.98	371.47	104.90	BX 155	10
7 1/16"	565.15	58.64	523.87	134.87	BX 156	25
11"	711.12	76.32	635	156.71	BX 158	28

10  
9  
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### API 7K Rotary Drilling Hose

**Inner Layer:** Nano Synthesis, NBR  
**Reinforcement:** Multiple layers of single high strength steel wire spiraled  
**Middle Layer:** Nano synthesis, SBR  
**Cover:** Nano synthesis, CR (Chloroprene rubber)  
**Size Available:** 2" - 6"  
**Temperature:** -40°C +120°C



#### Construction

**Use:**  
 The drilling rotary hose is suitable for flexible connection between the top of the drilling riser and the swivel which can move vertically. It resists corrosion of hydrogen sulfide and can deliver water, oil, mud high-pressure media



**Standards:**  
 API Spec 7K, SY/T5469

#### Specifications

Size	Internal Diameter	Class	Minimum Bend Radius	Working Pressure			Test Pressure				
				inch	mm	PSI	kPa	bar	PSI	kPa	bar
2"	51	A	800			1500	10342	103.42	3000	20684	206.84
2"	51	B	800			2000	13789	137.89	4000	27579	275.79
2"	51	C	850			4000	27579	275.79	5000	34473	344.73
2"	51	D	850			5000	34473	344.73	8000	55158	551.58
2"	51	E	900			7500	51710	517.10	15000	103421	1034.21
2"	51	F	950			10000	68947	689.47	15000	103421	1034.21
2"	51	G	1000			15000	103421	1034.21	22500	155132	1551.32
2 1/2"	64	A	900			1500	10342	103.42	3000	20684	206.84
2 1/2"	64	B	900			2000	13789	137.89	4000	27579	275.79
2 1/2"	64	C	1000			4000	27579	275.79	5000	34473	344.73
2 1/2"	64	D	1000			5000	34473	344.73	8000	55158	551.58
2 1/2"	64	E	1050			7500	51710	517.10	15000	103421	1034.21
2 1/2"	64	F	1100			10000	68947	689.47	15000	103421	1034.21
2 1/2"	64	G	1150			15000	103421	1034.21	22500	155132	1551.32
3"	76	A	950			1500	10342	103.42	3000	20684	206.84
3"	76	B	950			2000	13789	137.89	4000	27579	275.79
3"	76	C	1050			4000	27579	275.79	5000	34473	344.73
3"	76	D	1050			5000	34473	344.73	8000	55158	551.58
3"	76	E	1100			7500	51710	517.10	15000	103421	1034.21
3"	76	F	1150			10000	68947	689.47	15000	103421	1034.21
3"	76	G	1150			15000	103421	1034.21	22500	155132	1551.32

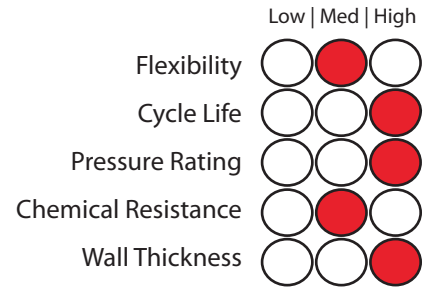
Size	Internal Diameter	Class	Minimum Bend Radius	Working Pressure			Test Pressure		
				PSI	kPa	bar	PSI	kPa	bar
3 1/2"	89	A	1000	1500	10342	103.42	3000	20684	206.84
3 1/2"	89	B	1000	2000	13789	137.89	4000	27579	275.79
3 1/2"	89	C	1100	4000	27579	275.79	5000	34473	344.73
3 1/2"	89	D	1100	5000	34473	344.73	8000	55158	551.58
3 1/2"	89	E	1150	7500	51710	517.10	15000	103421	1034.21
3 1/2"	89	F	1150	10000	68947	689.47	15000	103421	1034.21
3 1/2"	89	G	1200	15000	103421	1034.21	22500	155132	1551.32
4"	102	A	1050	1500	10342	103.42	3000	20684	206.84
4"	102	B	1050	2000	13789	137.89	4000	27579	275.79
4"	102	C	1100	4000	27579	275.79	5000	34473	344.73
4"	102	D	1100	5000	34473	344.73	8000	55158	551.58
4"	102	E	1150	7500	51710	517.10	15000	103421	1034.21
4"	102	F	1200	10000	68947	689.47	15000	103421	1034.21
4"	102	G	1300	15000	103421	1034.21	22500	155132	1551.32
5"	127	A	1200	1500	10342	103.42	3000	20684	206.84
5"	127	B	1200	2000	13789	137.89	4000	27579	275.79
5"	127	C	1300	4000	27579	275.79	5000	34473	344.73
5"	127	D	1300	5000	34473	344.73	8000	55158	551.58
6"	152	A	1300	1500	10342	103.42	3000	20684	206.84
6"	152	B	1300	2000	13789	137.89	4000	27579	275.79
6"	152	C	1400	4000	27579	275.79	5000	34473	344.73
6"	152	D	1400	5000	34473	344.73	8000	55158	551.58

### Applications



### API 16C Choke Kill Line

**Inner Layer:** Nano Synthesis, NBR  
**Reinforcement:** Mutually cross wire layers, Adhesive texture  
**Middle Layer:** Heat-insulation layer, Fire-resistance layer  
**Cover:** Stainless Steel armor  
**Size Available:** 2" - 4"  
**Temperature:** -40°C +100°C



#### Construction

##### Use:

The flexible choke & kill hose can be used for flexible connection between the riser and manifold. It is applicable as connection part when drill platform, semi-submersible drilling vessel or drilling vessel moves relatively and for adjustment of the installation variance of the drilling rig.



##### Standards:

API Spec 16C & SY/T5323-2004.

#### Specifications

Size	Internal Diameter	Minimum Bend Radius	Working Pressure			Min. Burst Pressure			Test Pressure		
			PSI	kPa	bar	PSI	kPa	bar	PSI	kPa	bar
2"	50.8	900	5003	34500	345	15011	103500	1035	10007	69000	690
2"	50.8	1000	10007	69000	690	22517	155250	1552.5	15011	103500	1035
2"	50.8	1000	15011	103500	1035	33775	232875	2328.75	22517	155250	1552.5
2"	50.8	900	20015	138000	1380	45034	310500	3105	30022	207000	2070
2 1/2"	64.0	1000	5003	34500	345	15011	103500	1035	10007	69000	690
2 1/2"	64.0	1100	10007	69000	690	22517	155250	1552.5	15011	103500	1035
2 1/2"	64.0	1150	15011	103500	1035	33775	232875	2328.75	22517	155250	1552.5
2 1/2"	64.0	1100	20015	138000	1380	45034	310500	3105	30022	207000	2070
3"	76.2	1000	5003	34500	345	15011	103500	1035	10007	69000	690
3"	76.2	1150	10007	69000	690	22517	155250	1552.5	15011	103500	1035
3"	76.2	1200	15011	103500	1035	33775	232875	2328.75	22517	155250	1552.5
3"	76.2	1200	20015	138000	1380	45034	310500	3105	30022	207000	2070
3 1/2"	89.0	1100	5003	34500	345	15011	103500	1035	10007	69000	690
3 1/2"	89.0	1200	10007	69000	690	22517	155250	1552.5	15011	103500	1035
4"	101.6	1200	5003	34500	345	15011	103500	1035	10007	69000	690
4"	101.6	1250	10007	69000	690	22517	155250	1552.5	15011	103500	1035

#### Applications

