



Global Leading Korean Provider
Of Flowline Products



KOREA



Ministry of SMEs
and Startups



KBIZ Korea Federation
of SMEs



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Host

31 October - 3 November 2022
Abu Dhabi, United Arab Emirates

The perfect value of

SMI



e-catalogue

The Perfect Value of SMI

To the world and To the future,
To face the competition
with our innovation!

Leading Korean Company in Oil and Gas field

SMI manufacturing facility is located in Chilgok-Gun, South Korea. The plant was founded in 1998 and expanded in 2002, 2019, and 2021. SMI's all products utilizes the latest in CNC lathes, machining centers, production planning systems, CAD/CAM systems, and the latest technology in order and distribution operating systems. All products are manufactured in the South Korea.

Quality Principle

SMI's Quality System has been qualified and approved under the American Petroleum Institute (API 6A and 16A), ISO 9001, and 14001 requirements. Also, Internal Audit with respect to manufacturing and measuring processes are conducted regularly to verify all policies are being followed and through continuous improvement drives value for the customer.

Customers Satisfaction Achievement

SMI always tries to prioritize its ability to provide a rapid response to our customers opinions through more Innovative technology and progressive global network system.



MCT Machining Line

R&D Center

CNC Machining Line



Ensure high quality of products

For better products manufacturing, we will do the research and investment.



Greeting

For all customers' satisfaction, all SMI staffs work with integrity and all our efforts.

SMI is the company that produce and export of Oil Field Equipment to all Oil- Producing Countries and with constant investment and development, to be the only company of Flow Line Products in Korea.

SMI Promise to do our best for products quantity with customer's advices at all time and has attitude of unceasing innovation and challenge so that will reborn as an essential company in the world.

CEO



SMI Headquarter



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Certificate



API 6A-1064



API 16A-0497



ISO 9001:2015



ISO 14001 : 2015



UL-1091



RINA Type Approval



ABS Type Approval



ABS Manufacturing Assessment



Achilles JQS



AEO

VALVE & FITTING

Product Descriptions

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VALVE

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Best Interchangeability

SMI Products are interchangeable with all major brand products which are manufactured in accordance with API regulations.

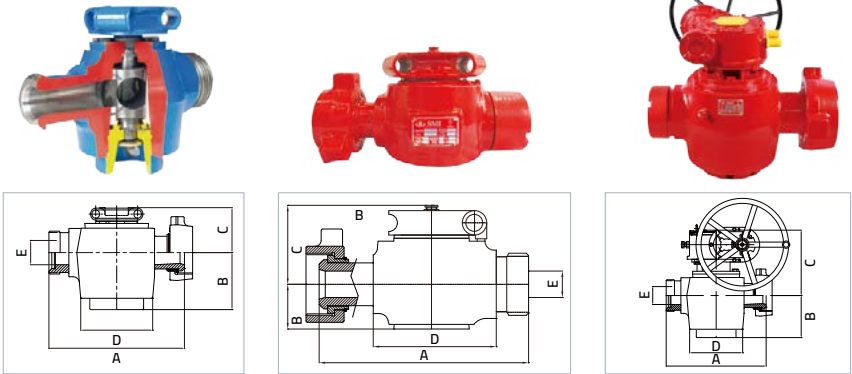


PLUG VALVE



Features

- Standard service is used up to 15,000psi and tested at 22,500psi
- Sour gas service is used up to 10,000psi and tested at 15,000psi
- Rugged Construction with Forged Alloy Steel Body
- Reliable Performance at high working pressure
- Valve Parts are Interchangeable with most major designs
- Each valve is serialized
- Suitable for a variety of high pressure applications such as fracturing, cementing, acidizing and etc.
- MTR and Test Reports are available at any time.
- Fig 1002 / Fig 1502 both available for 4" plug Valve
- API 6A Materials Classes and Temperature Classes are available.

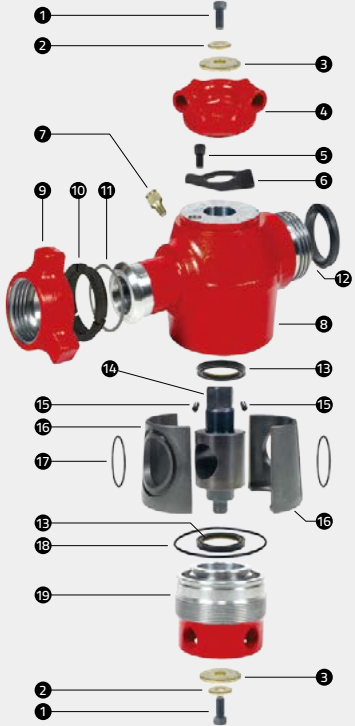


Type	Size (Inch)	End Connection	Service	Working Pressure	Test Pressure	Operation type	Dimensions (Inch)				
							A	B	C	D	E
BE	2x1	1502 MxF	Standard	15,000	22,500	Handle	10.53	4.74	4.50	4.50	1.00
			Sour gas	10,000	15,000						
	2x2	1502 MxF	Standard	15,000	22,500	Handle	8.50	5.41	5.25	6.85	2.05
			Sour gas	10,000	15,000						
	3x3	1502 MxF	Standard	15,000	22,500	Gear	17.00	7.20	-	9.06	3.05
			Sour gas	10,000	15,000						
4x4	1002 MxF	Standard	10,000	15,000	Gear	21.0	7.69	13.24	11.04	3.15	
		Sour gas	7,500	10,000							
TE	2x1	1502 MxF	Standard	15,000	22,500	Handle	10.58	2.40	4.82	-	0.87
			Sour gas	10,000	15,000						
TE	2x2	1502 MxF	Standard	15,000	22,500	Handle	13.89	2.95	5.24	8.23	1.75
			Sour gas	10,000	15,000						

* Each size can be changed as customer's requirements.

PLUG VALVE

BOTTOM ENTRY



Plug Valve (Bottom Entry)

NO	Item	Part No.				Q'ty
		2" x 1"	2" x 2"	3" x 3"	4" x 4"	
Assy	Plug Valve 1502 Handle Type	P21F1101	P22F1101	P33F1101	P44F1101G (Gear Box)	-
1	Cap Screw	P21FRK108	P22FRK108	P22FRK108	(b) P44FRK108	2
2	Flat Washer 1	P21FRK112	P22FRK112	P22FRK112	(b) P44FRK112	2
3	Flat Washer 2	(b) P21FRK107	P22FRK107	P22FRK107	(b) P44FRK107	2
4	Handle Adapter	P21FRK109	P22FRK109	P22FRK109	-	1
5	Stop Bolt	P21FRK114	P22FRK114	P22FRK114	-	1
6	Stop Collar	-	P22FRK111	P22FRK111	-	1
7	Grease Fitting	3/8" NPT 3/4" (safetap)	GF031101	GF031101	(a) GF031101	1
8	Body	P21FRK106	P22FRK106	P33FRK106	P44FRK106	1
9	Wing Nut	HU02JRK104	HU02JRK104	HU03JRK104	HU04JRK104	1
10	Segment	HU02JRK113	HU02JRK113	HU03JRK113	HU04JRK113	3
11	Retainer Ring	HU02JRK114	HU02JRK114	HU03JRK114	HU04JRK114	1
12	Lip Seal	HU02JRK115	HU02JRK115	HU03JRK115	HU04JRK115	1
13	Plug Seal	P21FRK118	P22FRK118	P22FRK118	P44FRK118	2
14	Plug	P21FRK116	P22FRK116	P33FRK116	P44FRK116	1
15	Roll Pin	P21FRK119	P22FRK119	(c) P22FRK119	(c) P22FRK119	2
16	Insert	P21FRK120	P22FRK120	P33FRK120	P44FRK120	2
17	Insert O-Ring	P21FRK115	P22FRK115	P33FRK115	P44FRK115	2
18	Adjustable Nut O-Ring	P21FRK117	P22FRK117	P33FRK117	P44FRK117	1
19	Adjustable Nut	P21FRK113	P22FRK113	P33FRK113	P44FRK113	1
20	Flat Washer 3	P21FRK121	-	-	-	1

- (a) Two(2) grease fitting for 4" plug valve [3/4" safetap grease fitting : Option]
- (b) 1 QTY
- (c) 4 QTY

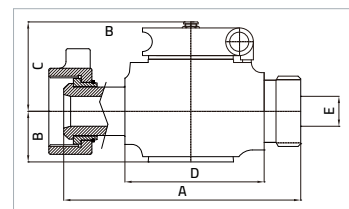
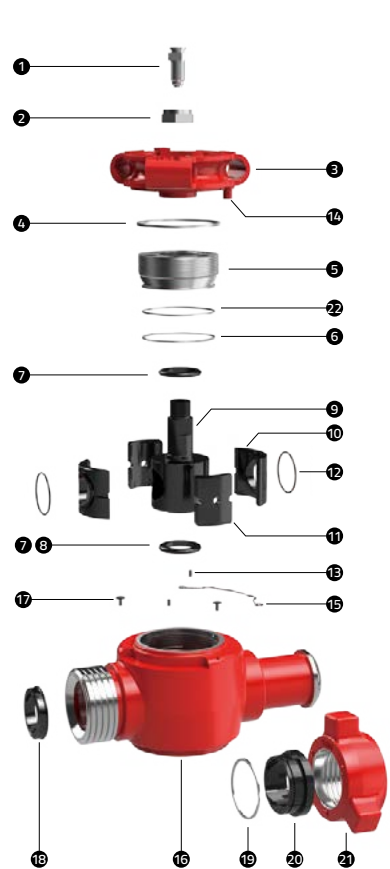
Plug Valve (Bottom Entry) Repair Kit

NO	Item	Part No.				Q'ty
		2" x 1"	2" x 2"	3" x 3"	4" x 4"	
-	Repair kit Set	P21FRK130	P22FRK130	P33FRK130	P44FRK130	-
13	Plug Seal	P21FRK118	P22FRK118	P22FRK118	P44FRK118	2
14	Plug	P21FRK116	P22FRK116	P33FRK116	P44FRK116	1
16	Insert	P21FRK120	P22FRK120	P33FRK120	P44FRK120	2
17	Insert O-ring	P21FRK115	P22FRK115	P33FRK115	P44FRK115	2
18	Adjusting Nut O-ring	P21FRK117	P22FRK117	P33FRK117	P44FRK117	1

* Seal Kit Contains No. 13, 17 and 18.

PLUG VALVE

TOP ENTRY



Plug Valve (Top Entry)

NO	Item	Part No.		Q'ty
		2" x 1"	2" x 2"	
Ass'y	TE Valve 1502 Handle Type	PT21F1101	PT22F1101	-
1	Grease Fitting	GF06E02101	GF06E02101	1
2	Lock Nut	PT21FRK107	PT22FRK107	1
3	Handle Adapter	PT21FRK109	PT22FRK109	1
4	Felt Gasket	PT21FRK121	PT22FRK121	1
5	Body Cap	PT21FRK113	PT22FRK113	1
6	Body Cap O-ring	PT21FRK117	PT22FRK117	1
7	Plug Seal O-ring	PT21FRK111	PT22FRK111	2
8	Plug Seal Support Ring	PT21FRK108	PT22FRK108	2
9	Plug	PT21FRK116	PT22FRK116	1
10	Insert	PT21FRK120	PT22FRK120	2
11	Side Segment	P21F5150	P22F5150	2
12	Insert O-ring	PT21FRK115	PT22FRK115	2
13	Dowel Pin	PT21FRK123	PT22FRK123	2
14	Roll Pin	PT21FRK119	PT22FRK119	1
15	Hold Spring	PT21FRK114	PT22FRK114	1
16	Body	PT21FRK106	PT22FRK106	1
17	Hold Spring Pin	PT21FRK118	PT22FRK118	2
18	Lip Seal	HU02JRK115	HU02JRK115	1
19	Retainer Ring	HU02JRK114	HU02JRK114	1
20	Segment	HU02JRK113	HU02JRK113	3
21	Wing Nut	HU02JRK104	HU02JRK104	1
22	Body Cap O-ring Backup	-	PT22FRK122	1

Plug Valve (Top Entry) Repair Kit

NO	Item	Part No.		Q'ty
		2" x 1"	2" x 2"	
-	Repair Kit Set	PT21FRK124	PT22FRK124	-
4	Felt Gasket	PT21FRK121	PT22FRK121	1
6	Body Cap O-ring	PT21FRK117	PT22FRK117	1
7	Plug Seal O-ring	PT21FRK111	PT22FRK111	2
8	Plug Seal Support Ring	PT21FRK108	PT22FRK108	2
9	Plug	PT21FRK116	PT22FRK116	1
10	Insert	PT21FRK120	PT22FRK120	2
11	Side Segment	PT21F5150	PT22F5150	2
12	Insert O-ring	PT21FRK115	PT22FRK115	2
22	Body Cap O-ring Backup	-	PT22FRK122	1

Size	Service	Working Pressure(psi)	Seat	Type	A	B	C	Weight(kg)	Part Number
2"	Standard	15,000	3/4" Half	Positive	5.00	11.66	1.88	39.64	PT22F1101
	Sour gas	10,000							PT22F1201

CHOKER VALVE



Features

- 2" Fig 1502 MxF with 3/4" or 1" Orifice and 3" Fig 1502 MxF with 2" Orifice
- Standard service is used up to 15,000psi and tested at 22,500psi
- Sour gas service is used up to 10,000psi and tested at 15,000psi
- Hammer Union End Connection
- Forged alloy steel body, stainless steel and tungsten carbide parts
- Parts are interchangeable with major brands
- Suitable for a broad range of applications including wellheads, well testing, stream injection, choke and kill manifolds and well clean operations, etc.
- API 6A Materials Classes and Temperature Classes are available.

Choke Valve 2" 1502 Adjustable



Choke Valve 2" 1502 Positive



Choke Valve 3" 1502 Adjustable

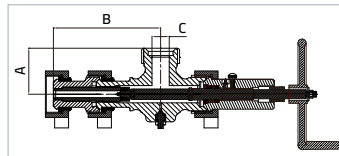
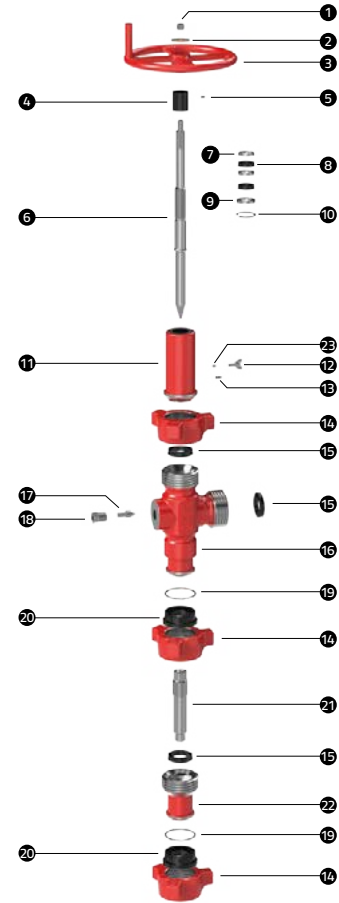


Choke Valve 3" 1502 Positive



CHOKE VALVE

2" ADJUSTABLE CHOKE VALVE



2" Adjustable Choke Valve

NO	Item	Part No.	
		2"×2"	Q'ty
Ass'y	Adjustable Choke Valve	CV02F11011	1
1	Stem Nut	CV02FRK106	1
2	Washer	CV02FRK107	1
3	Hand Wheel	CV02FRK108	1
4	Indicator	CV02FRK109	1
5	Lock Screw	CV02FRK110	1
6	Choke Stem	CV02FRK111	1
7	Stem Guide	CV02FRK112	2
8	Stem Seal	CV02FRK113	2
9	Junk Ring	CV02FRK114	1
10	Snap Ring	CV02FRK115	1
11	Choke Bonnet	CV02FRK116	1
12	Thumb Screw	CV02FRK117	1
13	Grease Fitting	CV02FRK129	1
14	Wing Nut	HU02JRK104	3
15	Lip Seal	HU02JRK115	3
16	Choke Body	CV02FRK118	1
17	Plug Stem	CV02FRK147	1
18	Stem Cap	CV02FRK120	1
19	Retainer Ring	HU02JRK114	2
20	Segment	HU02JRK113	6
21	* Choke Seat	CV02FRK130	1
22	Choke Saver	CV02FRK122	1
23	Lock Plug	CV02FRK134	1

* Available option : 1" seat Fully / Half, 3/4" seat Fully / Half

2" Adjustable Choke Valve Repair Kit

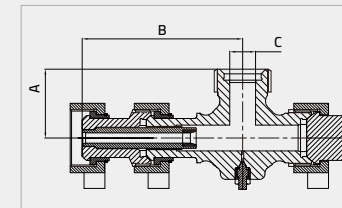
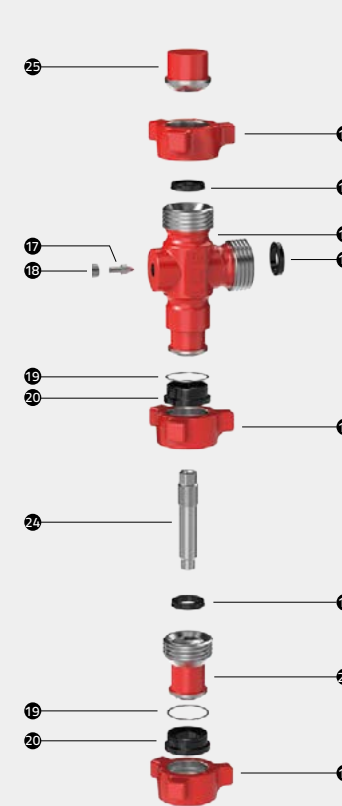
NO	Item	Part No.	
		2"×2"	Q'ty
-	Repair Kit Set	CV02FRK1521	-
6	Choke Stem	CV02FRK111	1
7	Stem Guide	CV02FRK112	2
8	Stem Seal	CV02FRK113	2
9	Junk Ring	CV02FRK114	1
10	Snap Ring	CV02FRK115	1
21	Choke Seat	CV02FRK130	1

*Seat size can be changed as customer's requirements.

Size	Service	Working Pressure(PSI)	Seat	Type	A	B	C	Weight(kg)	Part Number
2"	Standard	15,000	3/4" Half	Adjustable	5.00	11.66	1.88	46.70	CV02F11011
	Sour gas	10,000	3/4" Fully 1" Fully						CV02F21011

CHOKE VALVE

2" POSITIVE CHOKE VALVE



2" Positive Choke Valve

NO	Item	Part No.	
		2"×2"	Q'ty
Ass'y	Positive Choke Valve 150Z	CV02F2101	1
14	Wing Nut	HU02JRK104	3
15	Lip Seal	HU02JRK115	3
16	Choke Body	CV02FRK118	1
17	Plug Stem	CV02FRK147	1
18	Stem Cap	CV02FRK120	1
19	Retainer Ring	HU02JRK114	2
20	Segment	HU02JRK113	6
22	Choke Saver	CV02FRK122	1
24	Choke Bean	CV02FRK151	1
25	Blind Male Sub	HU02JRK109	1

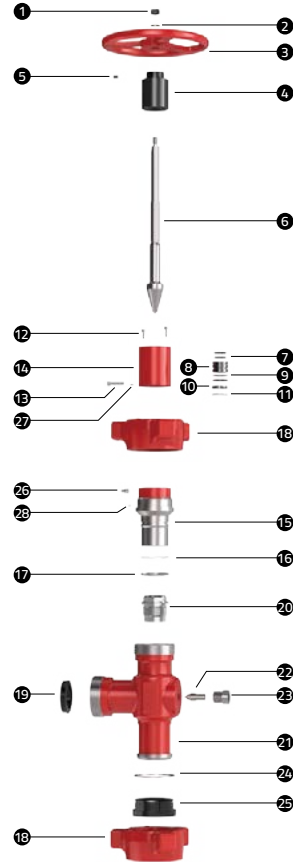
2" Positive Choke Valve Repair Kit

NO	Item	Part No.	
		2"×2"	Q'ty
24	Choke Bean 3/4", 1"	CV02FRK151	1

Size	Service	Working Pressure(PSI)	Seat	Type	A	B	C	Weight(kg)	Part Number
2"	Standard	15,000	3/4" Half	Positive	5.00	11.66	1.88	29.00	CV02F21011
	Sour gas	10,000	3/4" Fully 1" Fully						CV02F22011

CHOKE VALVE

3" ADJUSTABLE CHOKE VALVE



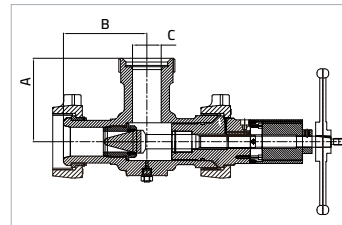
3" Adjustable Choke Valve

NO	Item	Part No. 2" 2"	Q'ty
Ass'y	Adjustable Choke Valve 1502	CV03F1101	1
1	Stem Nut	CV03FRK106	1
2	Washer	CV03FRK107	1
3	Hand Wheel	CV03FRK108	1
4	Indicator	CV03FRK146	1
5	Lock Screw	CV03FRK110	1
6	Choke Stem	CV03FRK111	1
7	Inside O-ring	CV03FRK124	2
8	Seal Piston	CV03FRK125	1
9	Outsider O-ring	CV03FRK123	2
10	Stem Seal	CV03FRK113	1
11	Snap Ring	CV03FRK115	1
12	Bonnet Bolt	CV03FRK144	2
13	Thumb Screw	CV03FRK117	1
14	Bonnet Extension	CV03FRK126	1
15	Choke Bonnet	CV03FRK116	1
16	Bonnet Back Up Ring	CV03FRK145	1
17	Bonnet O-ring	CV03FRK127	1
18	Wing Nut	HU03JRK104	2
19	Lip Seal	HU03JRK115	1
20	* Choke Seat	CV03FRK135	1
21	Choke Body	CV03FRK118	1
22	Plug Stem	CV03FRK147	1
23	Stem Cap	CV03FRK120	1
24	Retainer Ring	HU03JRK114	1
25	Segment	HU03JRK113	3
26	Grease Fitting	CV02FRK129	1
27	Lock Plug	CV02FRK134	1
28	Set Screw	CV03FRK149	2

* Available option : 2" seat Fully / Half

3" Adjustable Choke Valve Repair Kit

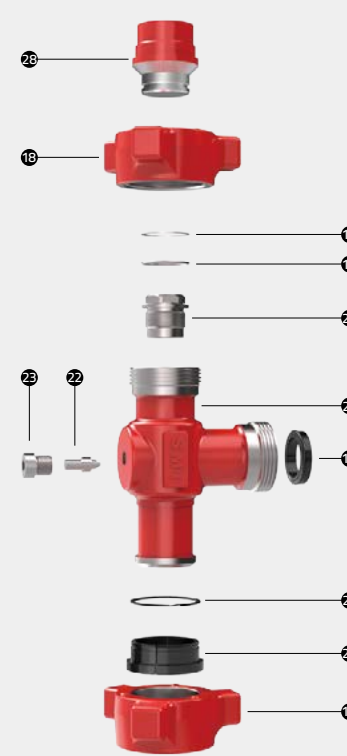
NO	Item	Part No. 3" 3"	Q'ty
-	Repair Kit Set	CV03FRK152	-
6	Chock Stem	CV03FRK111	1
7	Inside O-ring	CV03FRK124	2
8	Seal Piston	CV03FRK125	1
9	Outsider O-ring	CV03FRK123	2
10	Stem Seal	CV03FRK113	1
11	Snap Ring	CV03FRK115	1
16	Bonnet Back Up Ring	CV03FRK145	1
17	Bonnet O-ring	CV03FRK127	1
20	Choke Seat	CV03FRK135	1



Size	Service	Working Pressure(psi)	Seat	Type	A	B	C	Weight(kg)	Part Number
3"	Standard	15,000	2" Half	Adjustable	8.00	8.00	2.75	60.00	CV03F1101
	Sour gas	10,000	2" Fully						CV03F1201

CHOKE VALVE

3" POSITIVE CHOKE VALVE

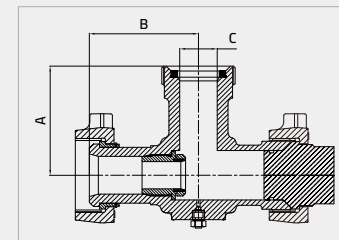


3" Positive Choke Valve

NO	Item	Part No. 3"	Q'ty
Ass'y	Positive Choke Valve 1502	CV03F2101	1
16	Bonnet Back Up Ring	CV03FRK145	1
17	Bonnet O-ring	CV03FRK127	1
18	Wing Nut	HU03JRK104	2
19	Lip Seal	HU03JRK115	1
20	Choke Seat	CV03FRK135	1
21	Choke Body	CV03FRK118	1
22	Plug Stem	CV02FRK147	1
23	Stem Cap	CV02FRK120	1
24	Retainer Ring	HU03JRK114	1
25	Segment	HU03JRK113	3
28	Bonnet Blind	CV03FRK150	1

3" Positive Choke Valve Repair Kit

NO	Item	Part No. 3"	Q'ty
20	Choke Seat	CV03FRK135	1



Size	Service	Working Pressure(psi)	Seat	Type	A	B	C	Weight(kg)	Part Number
3"	Standard	15,000	2" Half	Adjustable	8.00	8.00	2.75	50.00	CV03F2101
	Sour gas	10,000	2" Fully						CV03F2201

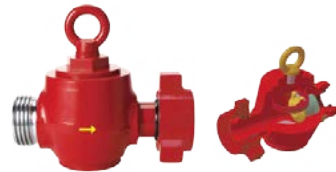
CHECK VALVE



Features - Benefits

- Check Valves are flow control devices that permit flow in one direction but stop flow in the opposite direction.
- Generally used in well service applications, the check valve is placed in the treating line to allow flow to the well but isolates any back flow upstream of the valve. This provides a safety device at various locations in the flow line and assures that pressure and fluid cannot backup into the manifold area or into the pumps, causing damage to equipment.
- The simplified Seat Cover and seat assembly has a minimum number of parts.
- For the sealing at Low Pressure, All Type Valves are consist of Stainless Steel Springs.
- API 6A Materials Classes and Temperature Classes are available.
- Standard Service is used up to 15,000psi and tested at 22,500psi.
- Sour gas Service is used up to 10,000psi and tested at 15,000psi.
- Reliable Performance at high working pressure.
- Valve Parts are Interchangeable with most major designs.
- Suitable for a variety of high pressure applications such as fracturing, cementing, acidizing and etc.
- MTR and Test Reports are available at any time.

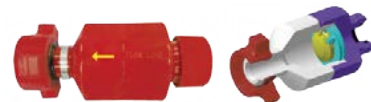
Top Entry Check Valve



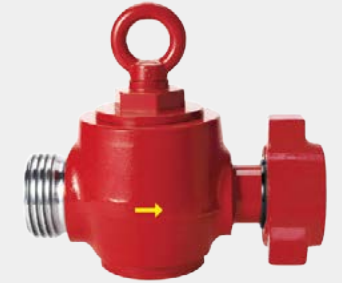
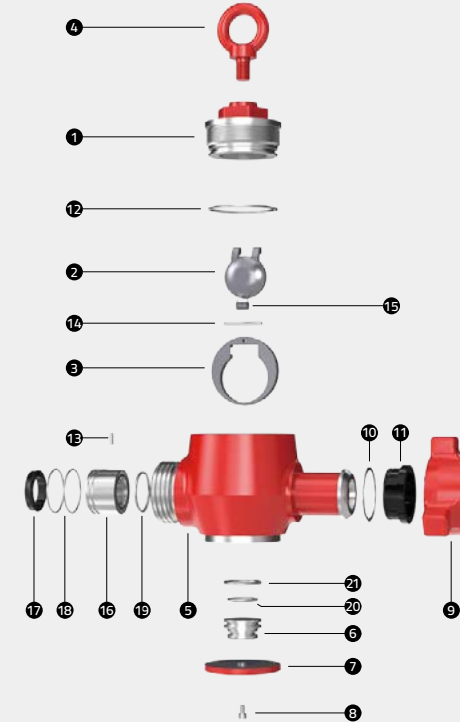
Dart Check Valve



In-Line Flapper Check Valve

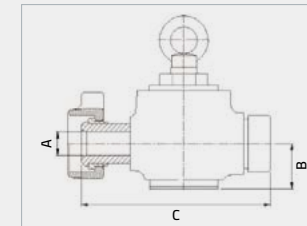


CHECK VALVE TOP ENTRY CHECK VALVE



Top Entry Check Valve

NO	Item	Part No. 2"	Q'ty
Ass'y	Check Valve 1502 Swing Type	CH02F1101	1
1	Body Cap	CH02FRK106	1
2	Seat Cover	CH02FRK108	1
3	Seat Cover Body	CH02FRK107	1
4	I-Bolt	CH02FRK109	1
5	Body	CH02FRK110	1
6	Plug	CH02FRK111	1
7	Plug Cap	CH02FRK112	1
8	Cap Screw	CH02FRK113	1
9	Wing Nut	HU02JRK104	1
10	Retainer Ring	HU02JRK114	1
11	Segment	HU02JRK113	3
12	Body Cap O-ring	CH02FRK114	1
13	Seat Pin	CH02FRK115	1
14	Seat Cover Pin	CH02FRK116	1
15	Set Screw	CH02FRK117	2
16	Seat	CH02FRK118	1
17	Lip Seal	HU02JRK115	1
18	Seat O-ring A	CH02FRK119	2
19	Seat O-ring B	CH02FRK120	1
20	Plug O-ring A	CH02FRK122	1
21	Plug O-ring B	CH02FRK123	1

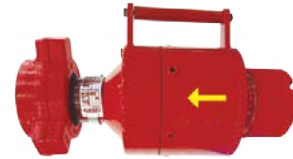
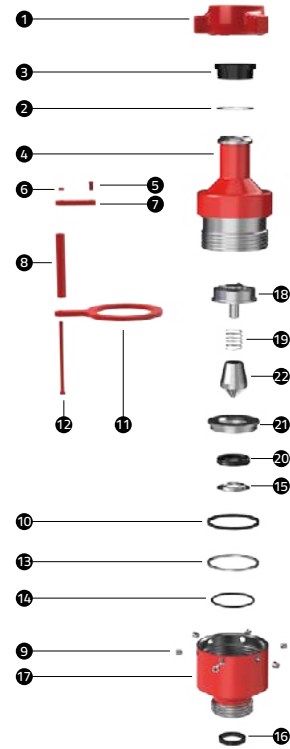


Size	Service	Working Pressure(psi)	Test Pressure	Type	A	B	Weight(kg)	Part Number
2"	Standard	15,000	22,500	1502 MxF	1.75	3.327	38.00	CH02F1101
	Sour gas	10,000	15,000		1.75	3.327	38.00	CH02F1201
3"	Standard	15,000	22,500	1502 MxF	2.75	4.05	83.10	CH03F1101
	Sour gas	10,000	15,000		2.75	4.05	83.10	CH03F1201

Each size can be changed as customer's requirements.

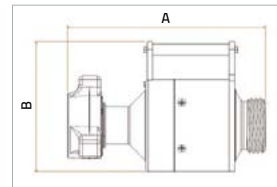
CHECK VALVE

DART CHECK VALVE



Dart Check Valve

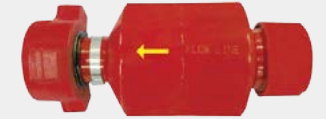
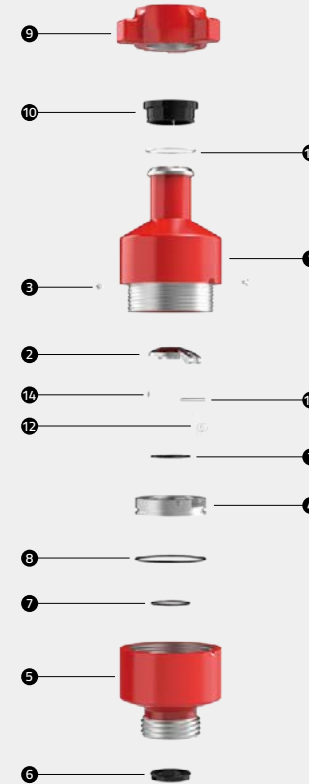
NO	Item	Part No.		Q'ty
		2"	3"	
Ass'y	Check Valve 1502 Dart Type	CD02F1101	CD03F1101	1
1	Wing Nut	HU02JRK104	HU03JRK104	1
2	Retainer Ring	HU02JRK114	HU03JRK114	1
3	Segments	HU02JRK113	HU03JRK113	3
4	Male Body	CD02FRK106	CD03FRK106	1
5	Bolt	CD02FRK108	CD03FRK108	1
6	Handle Nut	CD02FRK109	CD03FRK109	2
7	Plate, Male Body	CD02FRK110	CD03FRK110	1
8	Handle	CD02FRK107	CD03FRK107	1
9	Set Screw	CD02FRK111	CD03FRK111	6
10	Seal Male Body	CD02FRK112	CD03FRK112	1
11	Female Bracket	CD02FRK113	CD03FRK113	1
12	Handle Bolt	CD02FRK114	CD03FRK114	1
13	Spacer	CD02FRK115	CD03FRK115	1
14	O-ring Seat	CD02FRK116	CD03FRK116	1
15	Seat Retainer Ring	CD02FRK117	CD03FRK117	1
16	Lip Seal	HU02JRK115	HU03JRK115	1
17	Female Body	CD02FRK118	CD03FRK118	1
18	Stem	CD02FRK121	CD03FRK121	1
19	Spring	CD02FRK123	CD03FRK123	1
20	Molded Seal	CD02FRK124	CD03FRK124	1
21	Seat	CD02FRK125	CD03FRK125	1
22	Dart Head	CD02FRK126	CD03FRK126	1



Size	Service	Working Pressure(psi)	Test Pressure	Type	A	B	Weight(kg)	Part Number
2"	Standard	15,000	22,500	1502 MxF	14.04"	9.813"	37.50	CD02F1101
	Sour gas	10,000	15,000		14.04"	9.813"	37.50	CD02F1201
3"	Standard	15,000	22,500	1502 MxF	15.67"	10.95"	55.00	CD03F1101
	Sour gas	10,000	15,000		15.67"	10.95"	55.00	CD03F1201

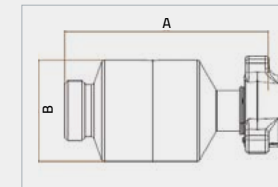
CHECK VALVE

IN-LINE FLAPPER CHECK VALVE



In-Line Flapper Check Valve

NO	Item	Part No.		Q'ty
		2"	3"	
Ass'y	Check Valve 1502 Flapper Type	CF02F1101	CF03F1101	1
1	Male Body	CF02FRK111	CF03FRK111	1
2	Seat Cover	CF02FRK102	CF03FRK102	1
3	Flush Bolt	CF02FRK103	CF03FRK103	2
4	Seat	CF02FRK104	CF03FRK104	1
5	Female Body	CF02FRK105	CF03FRK105	1
6	Lip Seal	HU02JRK115	HU03JRK115	1
7	O-Ring-1	CF02FRK106	CF03FRK106	2
8	O-Ring-2	CF02FRK107	CF03FRK107	1
9	Wing Nut	HU02JRK101	HU03JRK101	1
10	Segments	HU02JRK113	HU03JRK113	3
11	Retainer Ring	HU02JRK114	HU03JRK114	1
12	Torsion Spring	CF02FRK108	CF03FRK108	1
13	Seat Cover Pin	CF02FRK109	CF03FRK109	1
14	Seat Pin	CF02FRK110	CF03FRK110	1



Size	Service	Working Pressure(psi)	Test Pressure	Type	A	B	Weight(kg)	Part Number
2"	Standard	15,000	22,500	1502 MxF	14.04"	7"	37.00	CF02F1101
	Sour gas	10,000	15,000		14.04"	7"	37.00	CF02F1201
3"	Standard	15,000	22,500	1502 MxF	15.67"	8.11"	57.76	CF03F1101
	Sour gas	10,000	15,000		15.67"	8.11"	57.76	CF03F1201

RELIEF VALVE

2" RELIEF VALVE

Features

- Rugged Construction with Forged Alloy Steel Body
- Reliable Performance at high working pressure.
- Each valve is serialized.
- Relief valve can be controlled from 1,000psi to the maximum level of pressure.
- Pressure rating : available for customer order.
- Service: Standard, Sour gas
- CWP: 15,000psi
- Size: 2", 3"



2" Relief Valve

NO	Item	Part No. 2"	Q'ty
Ass'y	Relief Valve 2"1502	RE02F1101	1
1	Body	RE02FRK102	1
2	Stem	RE02FRK103	1
3	Spider	RE02FRK104	1
4	Adjustable Screw	RE02FRK105	1
5	Cap	RE02FRK106	1
6	Hex Nut	RE02FRK107	1
7	Seat	RE02FRK108	1
8	Ball	RE02FRK109	1
9	Disk Spring	RE02FRK110	16
10	Adjustable Screw Cover	RE02FRK111	1
11	Wing Nut	HU02JRK104	1
12	Segments	HU02JRK113	3
13	Retainer Ring	HU02JRK114	1
14	Lip Seal	HU02JRK115	1
15	Body O-ring	RE02FRK112	1
16	Cap O-ring	RE02FRK113	1
17	Keeper Seal	RE02FRK114	1
18	Data Band	RE02FRK115	1
19	Warning Band	RE02FRK116	1
20	Set Screw	RE02FRK117	1

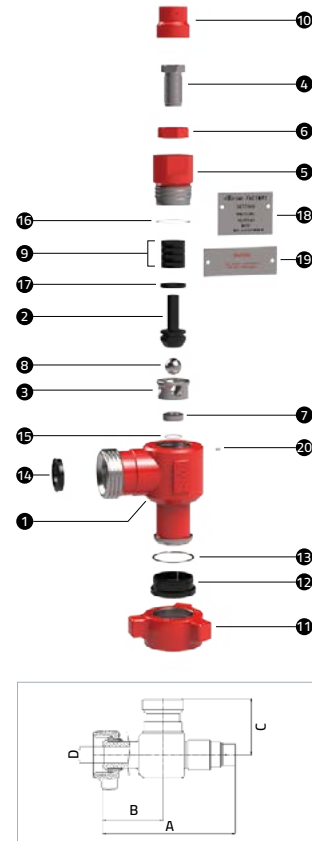
2" Repair Kit Annual Parts

No.	Item	Part No. 2"	Q'ty
Ass'y			
2	Stem	RE02FRK103	1
3	Spider	RE02FRK104	1
4	Adjustable screw	RE02FRK105	1
6	Hex nut	RE02FRK107	1
7	Seat	RE02FRK108	1
8	Ball	RE02FRK109	1
9	Disk spring	RE02FRK110	16
15	Body o-ring	RE02FRK112	1
16	Cap o-ring	RE02FRK113	1
17	Keeper Seal	RE02FRK114	1

2" Repair Kit Regular Parts

NO	Item	Part No. 2"	Q'ty
Ass'y			
7	Seat	RE02FRK108	1
8	Ball	RE02FRK109	1
15	Body o-ring	RE02FRK112	1

* It may vary depending on the operating environment.



Size	Service	Working Pressure(psi)	OperationType	A	B	C	D	Weight(kg)	Part Number
2"	Standard	2,000 -15,000	Spring	13.33	6.06	6.06	1.75	24.50	RE02F1101
	24.50							RE02F1201	

RELIEF VALVE

3" RELIEF VALVE



3" Relief Valve

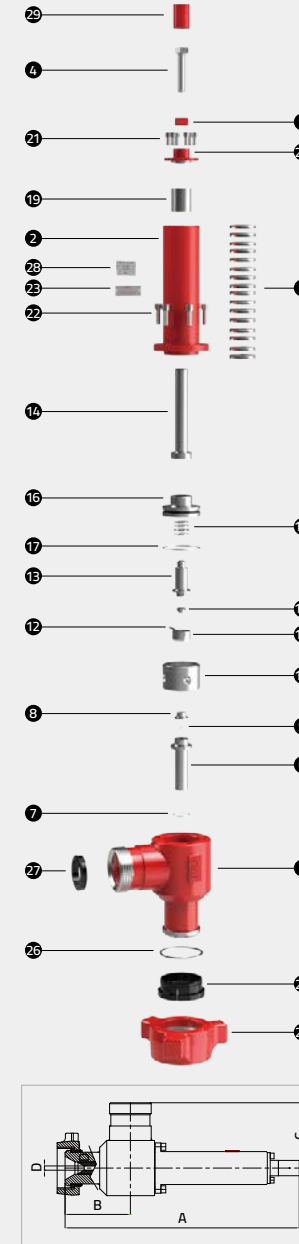
NO	Item	Part No. 3"	Q'ty
Ass'y	Relief Valve 3" 1502	RE03F1101	1
1	Body	RE03FRK102	1
2	Cap	RE03FRK106	1
3	Disk Spring	RE03FRK110	36
4	Adjustable screw	RE03FRK105	1
5	Hex Nut	RE03FRK107	1
6	Fixed Nozzle	RE03FRK119	1
7	Body O-ring	RE03FRK112	1
8	Discharge Nozzle	RE03FRK120	1
9	Fixed Nozzle O-ring	RE03FRK135	1
10	Valve Gate	RE03FRK121	1
11	Gate Keeper	RE03FRK122	1
12	Taper Pin	RE03FRK123	1
13	Keeper Lower	RE03FRK124	1
14	Keeper Upper	RE03FRK125	1
15	Spider Lower	RE03FRK126	1
16	Spider Upper	RE03FRK127	1
17	Spider Upper O-ring 1	RE03FRK128	1
18	Spider Upper O-ring 2	RE03FRK129	4
19	Guide Bushing	RE03FRK130	1
20	Flange	RE03FRK131	1
21	Wrench Bolt 1	RE03FRK132	6
22	Wrench Bolt 2	RE03FRK133	6
23	Warning Bend	RE03FRK116	1
24	Wing Nut	HU03JRK104	1
25	Segment	HU03JRK113	3
26	Retainer Ring	HU03JRK114	1
27	Lip Seal	HU03JRK115	1
28	Data Bend	RE03FRK115	1
29	Adjustable screw Cover	RE03FRK111	1

3" Repair Kit Annual Parts

NO	Item	Part No. 3"	Q'ty
Ass'y			
3	Disk Spring	RE03FRK110	36
6	Fixed Nozzle	RE03FRK119	1
7	Body O-ring	RE03FRK112	1
8	Discharge Nozzle	RE03FRK120	1
9	Fixed Nozzle O-ring	RE03FRK135	1
10	Valve Gate	RE03FRK121	1
11	Gate Keeper	RE03FRK122	1
13	Keeper Lower	RE03FRK124	1
15	Spider Lower	RE03FRK126	1
17	Spider Upper O-ring 1	RE03FRK128	1
18	Spider Upper O-ring 2	RE03FRK129	4

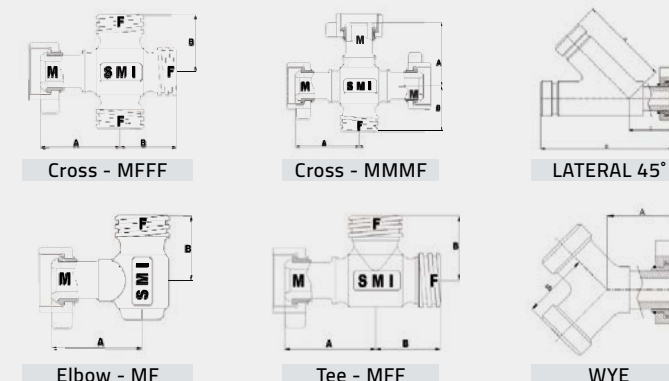
3" Repair Kit Regular Parts

NO	Item	Part No. 3"	Q'ty
Ass'y			
8	Discharge Nozzle	RE03FRK120	1
9	Fixed Nozzle O-ring	RE03FRK135	1
10	Valve Gate	RE03FRK121	1



Size	Service	Working Pressure(psi)	OperationType	A	B	C	D	Weight(kg)	Part Number
3"	Standard Sour gas	2,000 -15,000	Spring	30.25	8.44	8.44	0.55	75.50	RE03F1101
								75.50	RE03F1201

INTEGRAL FITTINGS



Features

- SMI Fittings are available 2", 3" and 4" nominal pipe sizes.
- All Fittings are available for Standard and Sour gas service.
- Suitable for variety of high pressure applications.
- Standard CWP 15,000psi/TP 22,500psi and Sour gas service CWP 10,000psi/TP 15,000psi

⊗ Cross MFFF



⊗ Cross MMMF



⊗ Lateral 45°



⊗ Elbow MF



⊗ Tee MFF



⊗ WYE



End Connections Information

WT.	End Connection	Size	A	B	C	Part No.	
Elbow	Straight MF	2"	7.00	5.00	-	L02F11011	
		3"	8.00	8.00	-	L03F11011	
		4"	10.50	10.50	-	L04F11011	
		2" (B)	6.06	6.06	-	L02F11011B	
		3" (B)	8.44	8.44	-	L03F11011B	
		4"	10.50	10.50	-	L04F11011B	
	Cushion MF	2"	7.00	5.00	-	L02F21011	
		3"	8.00	8.00	-	L03F21011	
		4"	10.50	10.50	-	L04F21011	
		Double Cushion MF	2"	7.00	5.00	-	L02F31011
			3"	8.00	8.00	-	L03F31011
			4"	10.50	10.50	-	L04F31011
Tee	MFF	2"	7.00	5.00	-	TE02F1101	
	MMF				-	TE02F2101	
	FFF				-	TE03F1101	
	MMF	3"	8.00	8.00	-	TE03F2101	
	MMF				-	TE02F11010B	
	MMF				-	TE02F21010B	
	FFF	2" (B)	6.06	6.06	-	TE02F51010B	
	MMM				-	TE02F61010B	
	MFF				-	TE03F11010B	
	MMF	3" (B)	8.44	8.44	-	TE03F21010B	
	FFF				-	TE03F51010B	
	MMM				-	TE03F61010B	
	Cross	MMMF	2"	7.00	5.00	-	CR02F1101
		FFFM				-	CR02F2101
		MMMF	3"	8.00	8.00	-	CR03F1101
FFFM		-				CR03F2101	
MMMF		4"	10.50	10.50	-	CR04F1101	
FFFM					-	CR04F2101	
Lateral 45 degree	MFF	2"	10.50	15.75	5.25	LT02F1101	
		3"	13.88	20.88	7.00	LT03F1101	
WYE	MFF	2"	5.25	5.00	-	WY02F1101	
		3"	7.75	7.75	-	WY03F1101	

PUP JOINT

Features

- SMI Pup Joints are available for 2", 3" and 4" of nominal pipe sizes for CWP 15,000psi
- 4" of nominal pipe size is available upon customer's request
- 15,000psi for Standard Service, 10,000psi for Sour gas Service
- NPST Pup Joints are made of high quality seamless pipeline with male and female detachable Hammer Unions.
- Integral Pup Joints are made of high quality alloy steel, integrally constructed, forged ended, and features seamless upset construction.

NPST Pup Joint



Size	Union End	CWP (psi)	Length							
2"	1502 MxF	15,000	1ft	2ft	3ft	4ft	5ft	6ft	8ft	10ft
	Part No.		PJ2F110101	PJ2F110102	PJ2F110103	PJ2F110104	PJ2F110105	PJ2F110106	PJ2F110108	PJ2F110110
	1502 MxF	15,000	12ft	15ft	20ft	-	-	-	-	-
3"	1502 MxF	15,000	1ft	2ft	3ft	4ft	5ft	6ft	8ft	10ft
	Part No.		PJ3F110101	PJ3F110102	PJ3F110103	PJ3F110104	PJ3F110105	PJ3F110106	PJ3F110108	PJ3F110110
	1502 MxF	15,000	12ft	15ft	20ft	-	-	-	-	-
4"	1502 MxF	15,000	1ft	2ft	3ft	4ft	5ft	6ft	8ft	10ft
	Part No.		PJ4E110101	PJ4E110102	PJ4E110103	PJ4E110104	PJ4E110105	PJ4E110106	PJ4E110108	PJ4E110110
	1502 MxF	15,000	12ft	15ft	20ft	-	-	-	-	-
4"	1502 MxF	15,000	1ft	2ft	3ft	4ft	5ft	6ft	8ft	10ft
	Part No.		PJ4F110101	PJ4F110102	PJ4F110103	PJ4F110104	PJ4F110105	PJ4F110106	PJ4F110108	PJ4F110110
	1502 MxF	15,000	12ft	15ft	20ft	-	-	-	-	-
	Part No.		PJ4F110112	PJ4E110115	PJ4E110120	-	-	-	-	-

· Each size can be changed as customer's requirements.

Integral Pup Joint



Size	Union End	CWP (psi)	Length							
2"	1502 MxF	15,000	1ft	2ft	3ft	4ft	5ft	6ft	8ft	10ft
	Part No.		PJ2F210101	PJ2F210102	PJ2F210103	PJ2F210104	PJ2F210105	PJ2F210106	PJ2F210108	PJ2F210110
3"	1502 MxF	15,000	1ft	2ft	3ft	4ft	5ft	7ft	8ft	10ft
	Part No.		PJ3F210101	PJ3F210102	PJ3F210103	PJ3F210104	PJ3F210105	PJ3F210106	PJ3F210108	PJ3F210110

· Each size can be changed as customer's requirements.

STEEL HOSE LOOP

Features

- SMI Cementing Steel Hose Loops are available for 2" and 3" of nominal pipe sizes.
- Suitable for Cementing lines, Water lines, Well Testing Lines, etc.
- SMI Cementing Steel Hose Loops are available for Standard and Sour gas Service.
- Long Radius Cementing Steel Hose Loops are suitable for Pressures up to 15,000psi.
- Short Radius Cementing Steel Hose Loops are suitable for Pressures up to 6,000psi.
- Styles of SMI Cementing Steel Hose Loops are customized.

10,000psi & 15,000psi Hose



Size	CWP (psi)	Swivel Joint Styles	Part No.		
			8 ft	10 ft	12 ft
2"	15,000	High Pressure Style 50 & Style 10	ST2F110108	ST2F110110	ST2F110112
		High Pressure Style 50 & Style 50	ST2F210108	ST2F210110	ST2F210112
3"	15,000	High Pressure Style 50 & Style 10	ST3F110108	ST3F110110	ST3F110112
		High Pressure Style 50 & Style 50	ST3F210108	ST3F210110	ST3F210112

· Each size can be changed as customer's requirements.

6,000psi Hose



Size	CWP (psi)	Swivel Joint Styles	Part No.		
			8 ft	10 ft	12 ft
2"	6,000	Code Silver Style 50 & Style 10	ST2D110108	ST2D110110	ST2D110112
		Code Silver Style 50 & Style 50	ST2D210108	ST2D210110	ST2D210112

· Each size can be changed as customer's requirements.

SWIVEL JOINT

CODE RED

Features

- Standard service is used up to 15,000psi and tested at 22,500psi.
- Sour gas Service is used up to 10,000psi and tested at 15,000psi.
- Forged Alloy Steel Elbows with Heat Treatment
- All Styles are available in nominal size 2", 3" and 4" with 1502 Union End
- For High Pressure Applications - Fracturing, Cementing and Circulating Hoses, Acidizing, Choke and Kill Lines and Test Lines, etc.
- Each product is serialized MTR and Test Reports are available at any time.



Style 10 MF(MM)



Style 20 MF(MM)



Style 30 MF



Style 50 MF



Style 60 MM(MF)



Style 80 MF



Style 100 MF(MM)

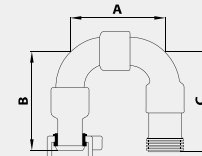


style	Item	2 (Inch)				3 (Inch)				4 (Inch)			
		A	B	C	Part No.	A	B	C	Part No.	A	B	C	Part No.
10	MxF	10.95	10.95	10.95	S02F011011A	16.4	14.4	14.4	S03F011011A	21.20	20.41	20.41	S04F011011A
	MxM	10.95	10.95	10.95	S02F011012A	16.4	14.4	14.4	S03F011012A	21.20	20.41	20.41	S04F011012A
20	MxF	10.95	-	-	S02F021011A	12.4	-	-	S03F021011A	-	-	-	S04F021011A
30	MxF	10.95	5.5	-	S02F031011A	14.4	7.9	-	S03F031011A	20.41	9.7	-	S04F031011A
50	MxF	10.95	5.5	10.95	S02F051011A	16.4	7.9	14.4	S03F051011A	21.20	9.7	20.41	S04F051011A
60	MxF	10.95	10.86	-	S02F061011A	14.4	14.4	-	S03F061011A	-	-	-	S04F061011A
80	MxF	10.95	5.5	10.95	S02F081011A	16.4	14.4	14.4	S03F081011A	21.20	20.41	9.7	S04F081011A
100	MxF	10.95	10.95	10.86	S02F101011A	16.4	14.4	14.4	S03F101011A	-	-	-	S04F101011A

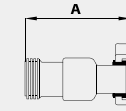
* Each size can be changed as customer's requirements.

SWIVEL JOINT

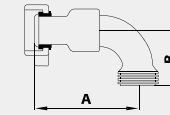
CODE RED



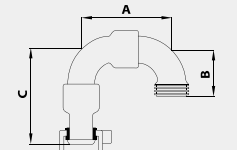
Style 10 MxF



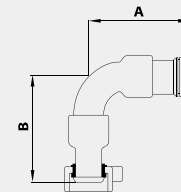
Style 20 MxF



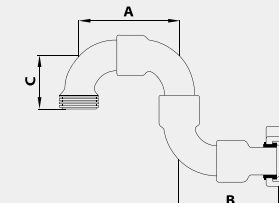
Style 30 MxF



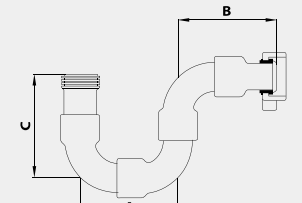
Style 50 MxF



Style 60 MxF



Style 80 MxF



Style 100 MxF

Swivel Joint Code Red Repair Kit

NO	Item	Part No.			Q'ty		
		2"	3"	4"	2"	3"	4"
-	Repair Kit Set	S02FRK1300A	S03FRK1300A	S04FRK1300A	-	-	-
1	Ball	S02FRK1110A	S02FRK1110A	S04FRK1110A	72	103	78
2	Ball Plug	S02FRK1140A	S02FRK1140A	S04FRK1140A	3	3	3
3	Ball Plug O-ring	S02FRK1130A	S02FRK1130A	S04FRK1130A	3	3	3
4	Ball Plug Cover	S02FRK1120A	S02FRK1120A	S04FRK1120A	3	3	3
5	Snap Ring	S02FRK1150A	S02FRK1150A	S04FRK1150A	3	3	3
6	Pressure Seal	S02FRK1160A	S03FRK1160A	S04FRK1160A	1	1	1
7	Dust Seal	S02FRK1170A	S03FRK1170A	S04FRK1170A	1	*1	1
8	Grease O-ring (M)	S02FRK1180A	S03FRK1180A	S04FRK1180A	1	1	1

* Seal Kit Contains No. 6, 7 and 8

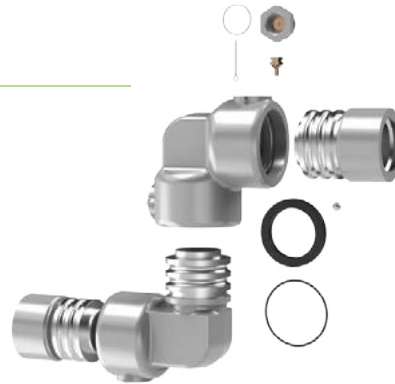
* 7 : O-Ring Type

SWIVEL JOINT

CODE SILVER

Features

- Size : 2"
- End Type : customized
- Test Pressure : 9,000psi
- CWP : 6,000psi (413.68 bar)
- Service : Standard, Sour gas
- Used for Cementing, Drill Mud, Fracturing fluids, Well Servicing
- MTR and Test Reports are available at any time.



Style 10



Style 20



Style 30



Style 40



Style 50



Style 60



Style 70



Style 80



Style	CWP (psi)	End Connection	Z (Inch)				Part No.
			A	B	C	WT IB	
10	6,000	Threaded	6.45	5.98	5.98	33.0	S02D011014
20	6,000	Threaded	6.65	-	-	11.9	S02D021014
30	6,000	Threaded	4	5.82	-	15.2	S02D031014
40	6,000	Threaded	4	5.98	-	19.7	S02D041014
50	6,000	Threaded	4	5.82	5.98	25.6	S02D051014
60	6,000	Threaded	5.82	5.82	-	21.1	S02D061014
70	6,000	Threaded	4	5.98	5.98	29.8	S02D071014
80	6,000	Threaded	4	5.98	5.82	37.1	S02D081014

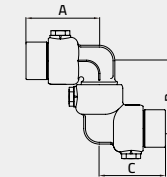
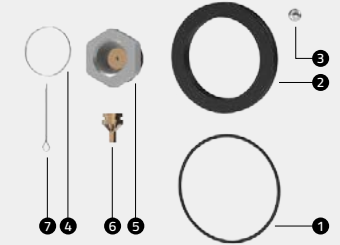
* Each size can be changed as customer's requirements.

SWIVEL JOINT

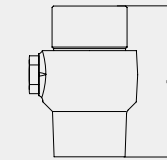
CODE SILVER

Features

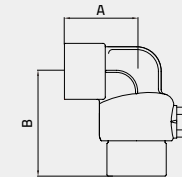
- 2" upto CWP 6,000psi with API Line Pipe Thread
- Suitable for Water Lines, Cementing Hoses
- Mud Lines, Choke and Kill Lines, Test Lines, etc.
- Female Thread End Connection
- Each product is serialized and pressure tested at 1.5 times of NSCWP.
- MTR and Test Reports are available at any time.



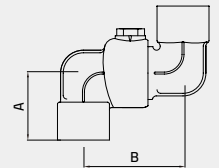
Style 10



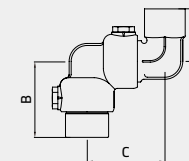
Style 20



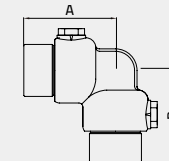
Style 30



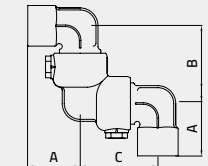
Style 40



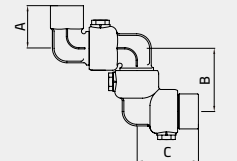
Style 50



Style 60



Style 70



Style 80

Swivel Joint Code Silver Repair Kit

NO	Item	Part No.	Q'ty
-	Repair Kit Set	S02DRK130	-
1	Dust Seal	S02DRK117	1
2	Pressure Seal	S02DRK116	1
3	Ball	S02DRK111	52
4	Nipple Nut O-ring	S02DRK120	1
5	Nipple Nut	S02DRK121	1
6	Grease Fitting	P22FRK36	1
7	Split Pin	S02DRK139	1

SWIVEL JOINT

CODE BLUE & CODE GREEN

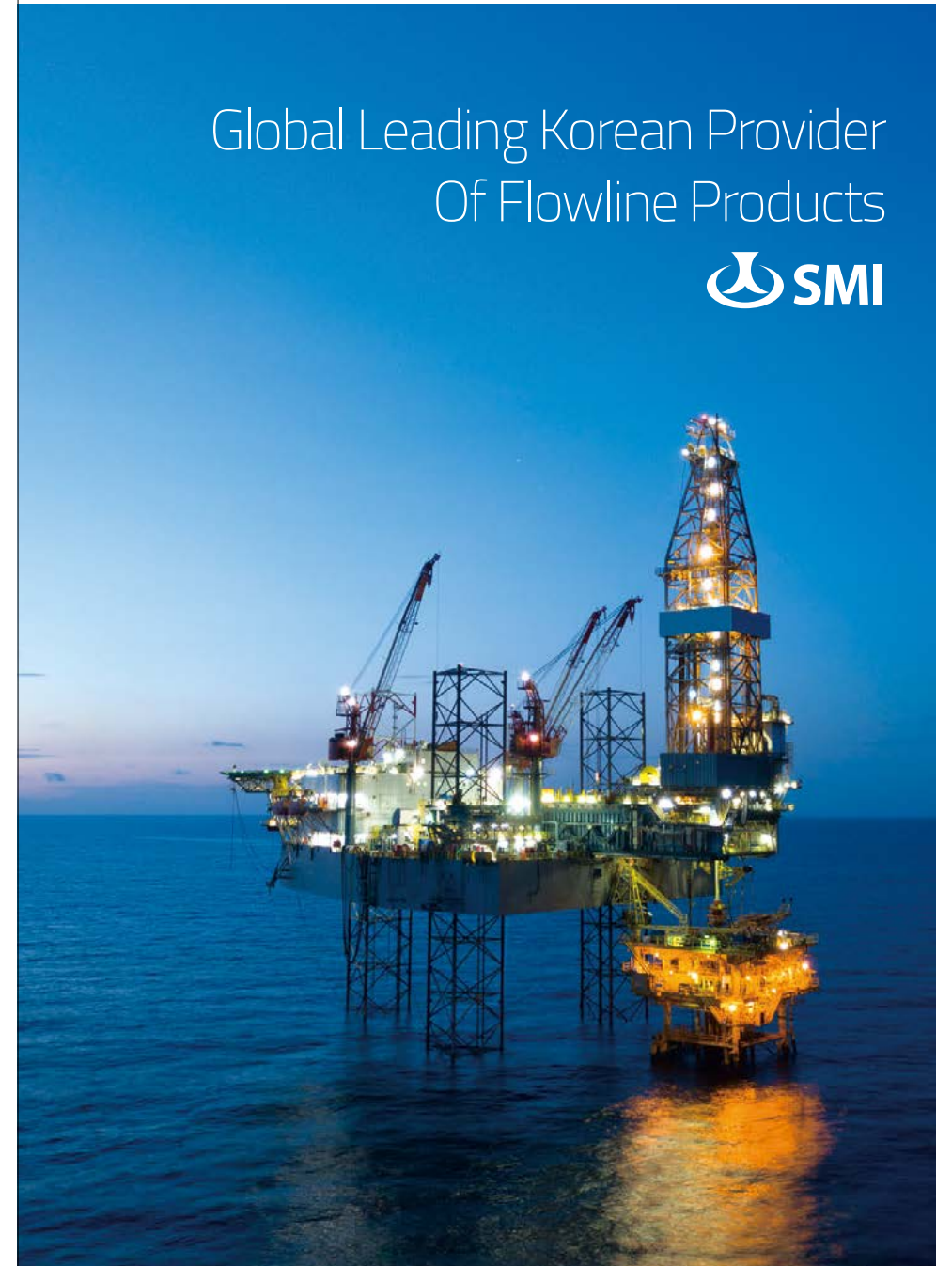
Features

- Standard Service is used up to CWP 1000psi (Code Blue) & 600psi (Code Green)
- Casting Iron(Ductile) with Heat Treatment
- Low Pressure
- All Styles are available in nominal pipe size 2" and 3"
- Each product is serialized and Pressure Tested at 1.5times of NSCWP
- MTR and Test Reports are available at any time.
- 2" and 3" up to CWP 1000psi (Code Blue) & 600psi (Code Green)
- Suitable for Water Lines
- Female Thread End Connection

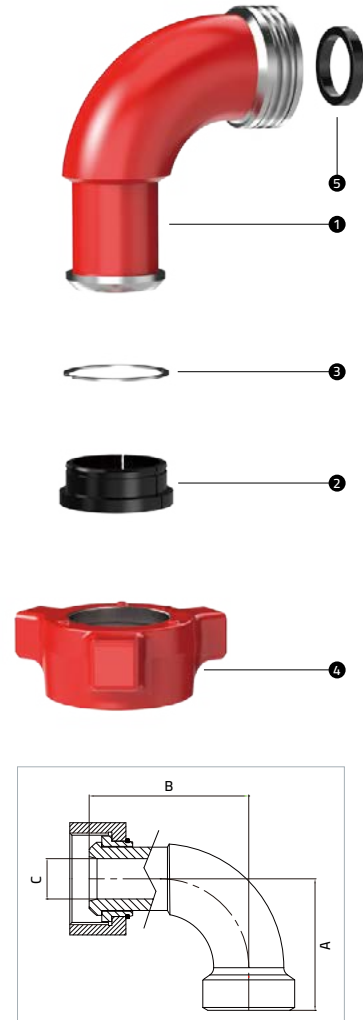


Style		Part No.			
		Code Blue		Code Green	
		2"	3"	2"	3"
	10	S02A011014	S03A011014	S02G011014	S03G011014
	20	S02A021014	S03A021014	S02G021014	S03G021014
	30	S02A031014	S03A031014	S02G031014	S03G031014
	40	S02A041014	S03A041014	S02G041014	S03G041014
	50	S02A051014	S03A051014	S02G051014	S03G051014
	60	S02A061014	S03A061014	S02G061014	S03G061014
	70	S02A071014	S03A071014	S02G071014	S03G071014
	80	S02A081014	S03A081014	S02G081014	S03G081014

Global Leading Korean Provider
Of Flowline Products



LONG SWEEP ELBOW



Long Sweep Elbow

NO	Item	Part No.		Q'ty
		2"	3"	
Ass'y	Long Sweep Elbow 1502	LS02J11011	LS03J11011	1
1	Body	LS02JRK1021	LS03JRK1021	1
2	Segment	HU02JRK113	HU03JRK113	3
3	Retainer Ring	HU02JRK114	HU03JRK114	1
4	Wing Nut	HU02JRK104	HU03JRK104	1
5	Lip Seal	HU02JRK115		1

Size	Service	Working Pressure(psi)	Type	A	B	C	Weight(kg)	Part Number
2"	Standard	15,000	Hammer Union Connection	5.91	7.17	1.81	13.88	LS02J11011
	Sour gas						13.88	LS02J12011
3"	Standard	15,000	Hammer Union Connection	7.94	10.00	2.75	29.12	LS03J11011
	Sour gas						29.12	LS03J12011

STANDPIPE MANIFOLD FITTING

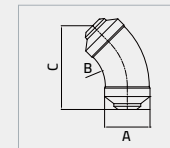


Features

- Standpipe Manifold Fittings are available for both standard pressure and high pressure mud manifolds. There are six standard configurations which are prepped for standard butt weld connections. All fittings are 7500psi, 10,000psi
- Size : 2", 3", 4", 5"
- Connections and Configurations : Schedule XXH Butt Weld, Schedule 160 Butt Weld, Line Pipe
- Material : ASTM A487 Grade 4 Class D
- 100 ksi Min. Tensile Strength, 75 ksi Min Yield Strength
- Working Pressure : 10,000psi(Max)

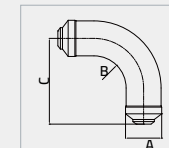


Long Sweep Elbow 45°



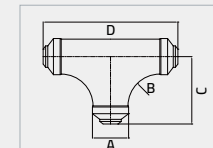
Size	Dimension		
	A	B	C
2	3.39	4.26	7.93
3	5.91	5.25	10.89
4	5.91	5.25	10.89
5	7.75	5.38	11.52

Long Sweep Elbow 90°



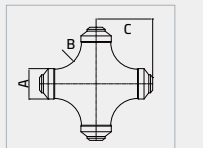
Size	Dimension		
	A	B	C
2	3.39	4.26	8
3	5.91	5.25	14
4	5.91	5.25	14
5	7.75	5.38	16

Long Sweep Full Flow Tee



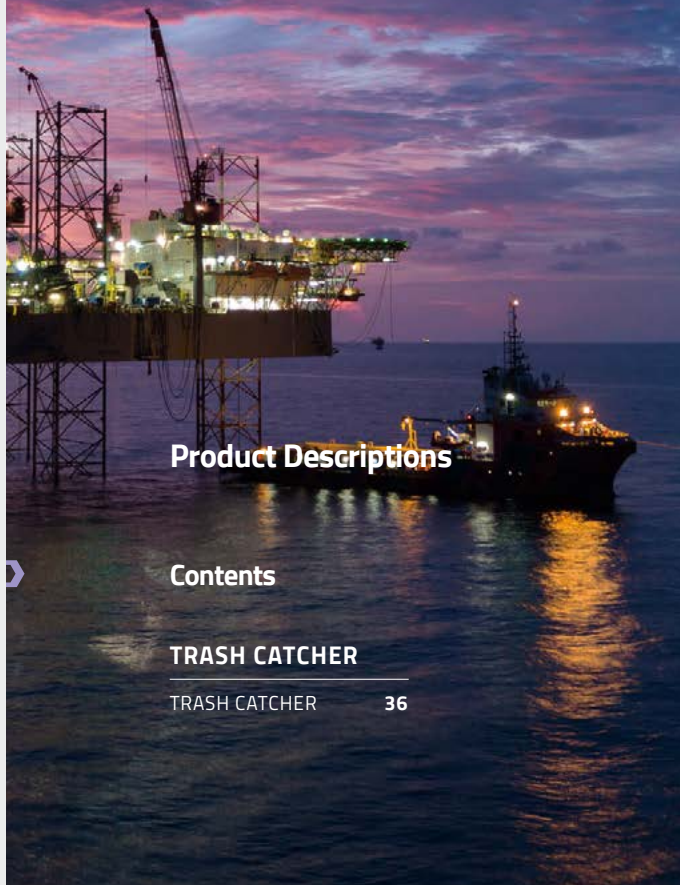
Size	Dimension			
	A	B	C	D
2	3.39	4.26	8	16
3	5.91	5.25	11	22
4	5.91	5.25	11	22
5	7.75	5.38	12	24

Full Flow Cross



Size	Dimension		
	A	B	C
3	5.91	5.25	11
4	5.91	5.25	11
5	7.75	5.38	12

TRASH CATCHER



Product Descriptions

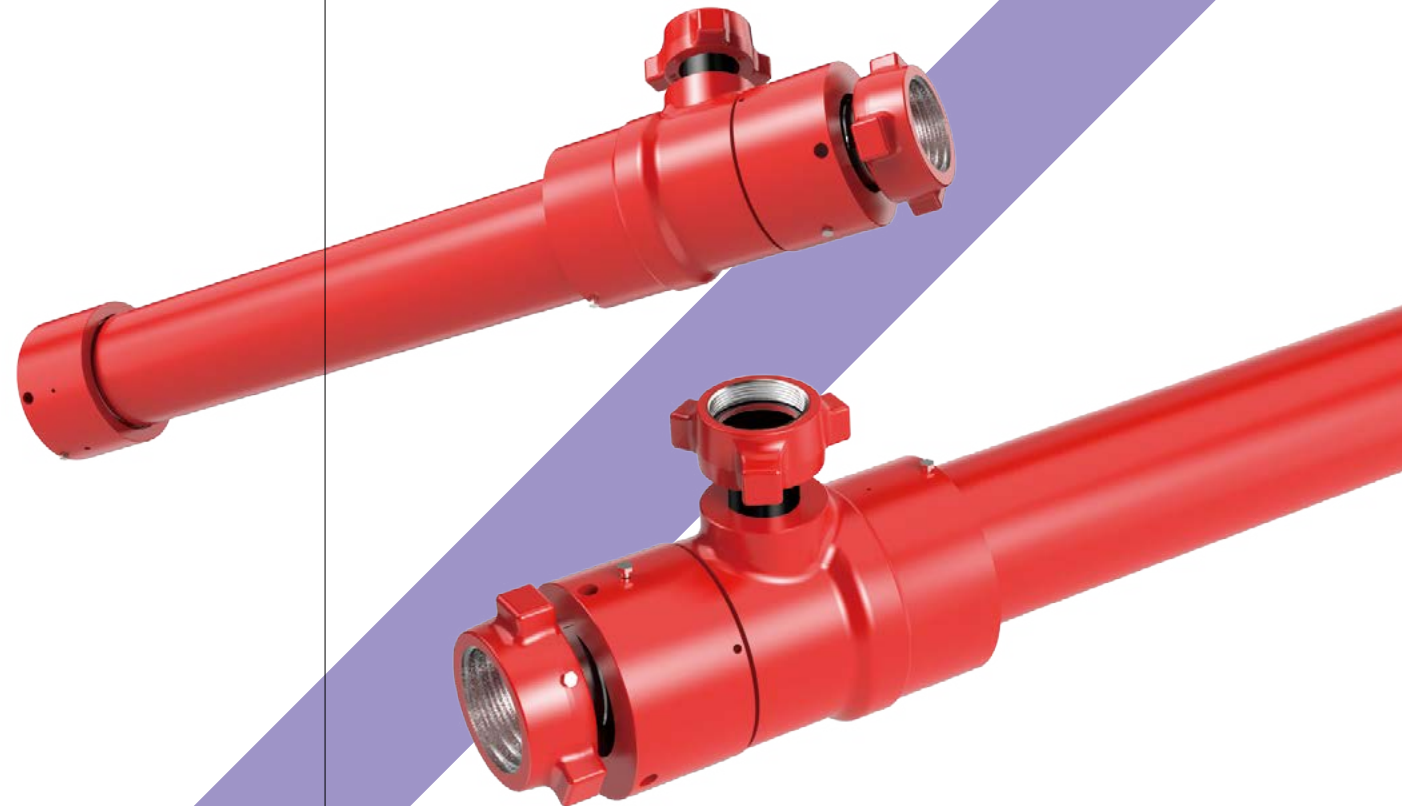
Contents

TRASH CATCHER

TRASH CATCHER 36

Best Lead Time and Optimized Stock System

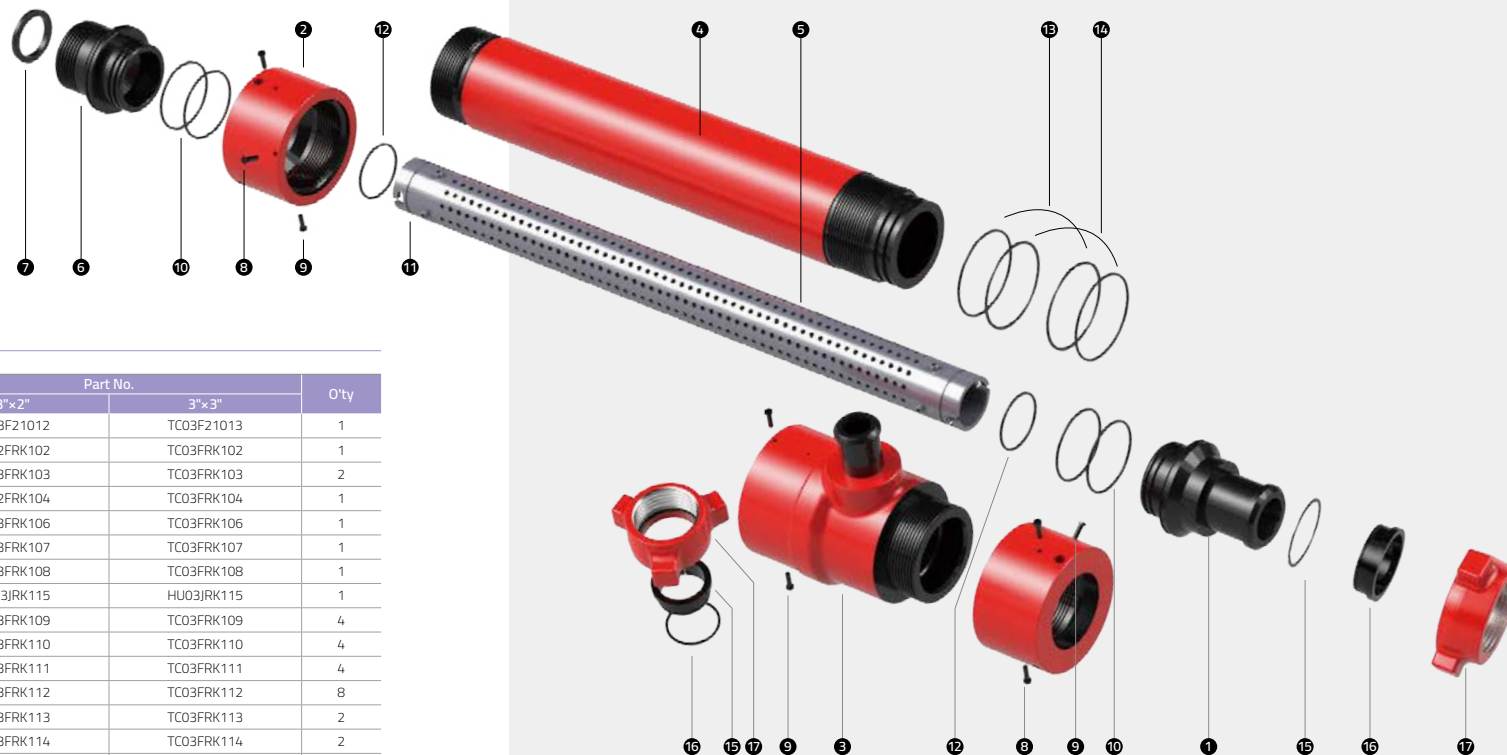
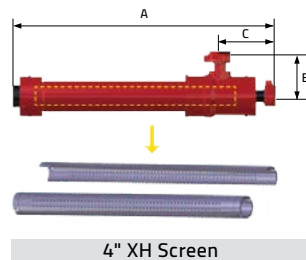
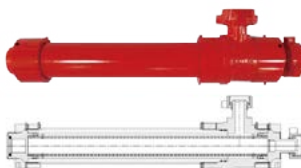
SMI assures the shortest lead time in the world based on the optimized stock system. We need only 2-week lead time from Purchase Order to shipment for standard products.



TRASH CATCHER

Features

- Standard service is used up to 15,000psi and tested at 22,500psi.
- H2S Service is used up to 10,000psi and tested at 15,000psi.
- Reliable Performance at high working pressure.
- Trash Catcher is based on easily Handling designs and manufactured from the highest quality material.
- Screen size is 4" pipe SCH XH x 4.13 FT (660-Ø 3/8" Hole) [P110]
- Vessel size is O.D 7.2" / I.D 5.0" pipe [P110]
- All parts are applied to the black oxide coating.
- MTR and Test Reports are available at any time.



Trash Catcher

NO	Item	Part No.		Q'ty
		3"×2"	3"×3"	
Ass'y	Trash Catcher	TC03F21012	TC03F21013	1
1	1502 Plug Male	TC02FRK102	TC03FRK102	1
2	Plug Nut	TC03FRK103	TC03FRK103	2
3	Outlet Tee	TC02FRK104	TC03FRK104	1
4	Vessel Body	TC03FRK106	TC03FRK106	1
5	Strainer (Screen)	TC03FRK107	TC03FRK107	1
6	3" 1502 Plug Female	TC03FRK108	TC03FRK108	1
7	Lip Seal	HU03JRK115	HU03JRK115	1
8	Dog Screw	TC03FRK109	TC03FRK109	4
9	Lock Screw	TC03FRK110	TC03FRK110	4
10	O-ring A	TC03FRK111	TC03FRK111	4
11	Balance Screw	TC03FRK112	TC03FRK112	8
12	O-ring B	TC03FRK113	TC03FRK113	2
13	Back up Ring-Rubber	TC03FRK114	TC03FRK114	2
14	O-ring C	TC03FRK115	TC03FRK115	2
15	Segments	HU02JRK113	HU03JRK113	6
16	Retainer Ring	HU02JRK114	HU03JRK114	2
17	Wing Nut	HU02JRK104	HU03JRK104	2

[mm (inch)]

Size	Service	Working Pressure (psi)	Test Pressure	Type	A	B	C	Part Number
3"×2"	Standard	15,000	22,500	1502 MxF	1540.51 (60.65")	239.014 (9.41")	305.816 (12.04")	TC03F21012
	Sour gas	10,000	15,000					TC03F22012
3"×3"	Standard	15,000	22,500	1502 MxF	1540.51 (60.65")	231.902 (9.13")	319.024 (12.56")	TC03F21013
	Sour gas	10,000	15,000					TC03F22013

MANIFOLD



Product Descriptions

Contents

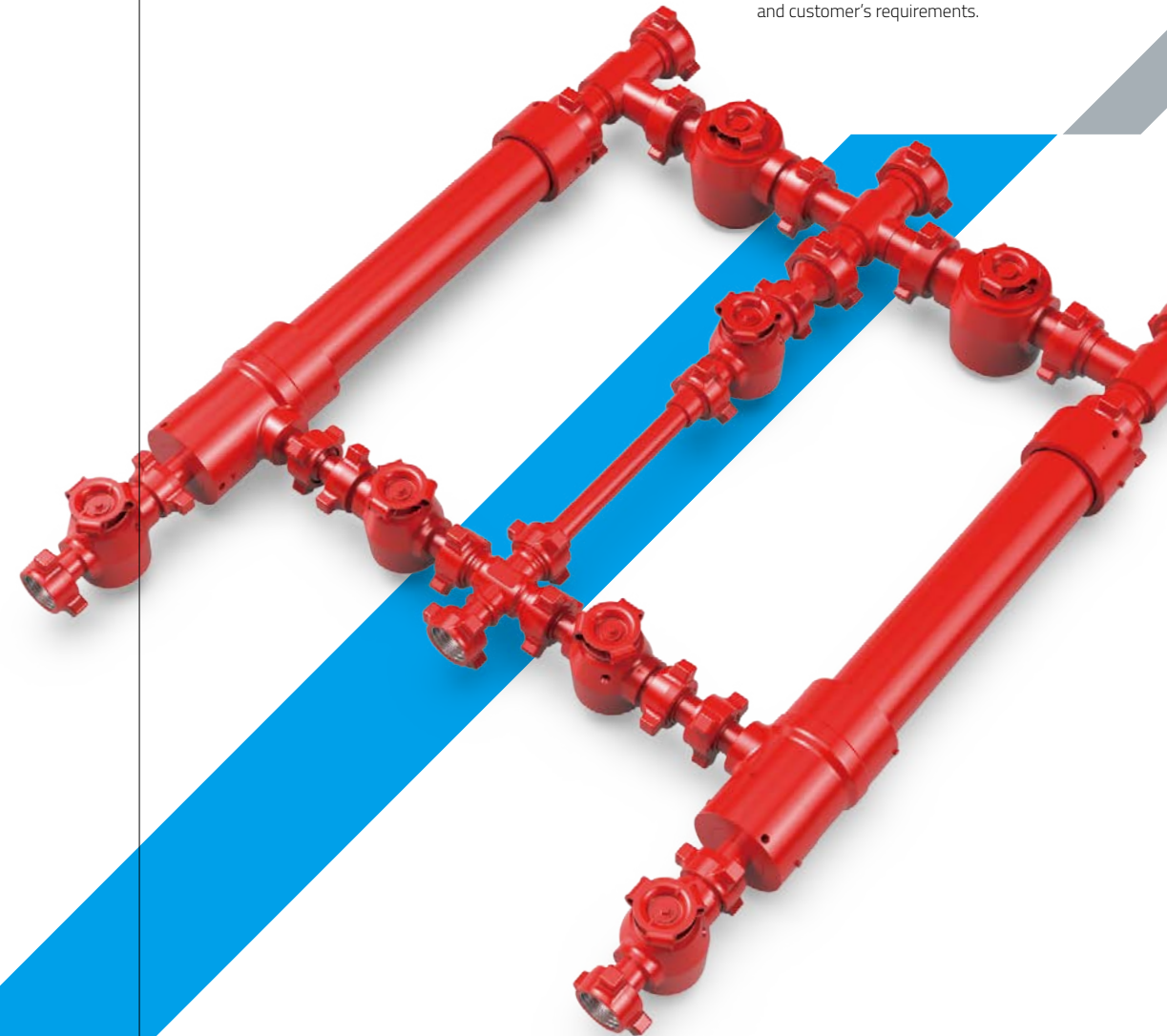
MANIFOLD

CHOKE MANIFOLD 40

TRACH CATHER
MANIFOLD 41

Accumulation of Advanced Technologies and safety

We have our own bending solution for high pressure Swivel Joint, and Advanced production system for Integral Pup Joint. We do 100% Pressure Test and provide Test Certificates in accordance with API and customer's requirements.



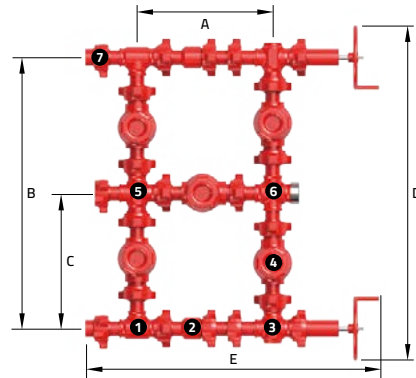
MANIFOLD

CHOKE MANIFOLD

Features

- SMI Manifolds are designed and manufactured to meet customer's requirements such as 4, 7, 8 or 9 Valve Manifold.
- Cement Manifolds
- Choke Manifolds
- Flowback Manifolds
- Well Testing Manifolds

Manifold - 5 Valves and, 2 Adjustable Choke Valves



Choke Manifold

NO	Item	Q'ty
Ass'y	Manifold -5 Plug Valve and, 2 Adjustable Choke Valve	1
1	Tee	2
2	Blast Joint	2
3	Adjustable Choke	2
4	Plug Valve	5
5	Cross (FFFM)	1
6	Cross (MMMM)	1
7	Blind Female	2

[mm (inch)]

Size	Working Pressure(psi)	Dimensions (Inch)					Remarks
		A	B	C	D	E	
2"	15,000 (Standard Service)	25.19	50.41	25.20	62.40	55.57	
3"	15,000 (Standard Service)	32.27	64.58	32.29	78.47	62.88	

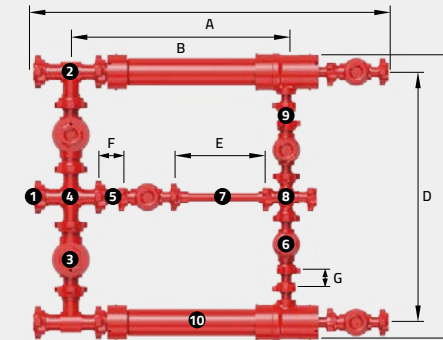
MANIFOLD

TRASH CATCHER MANIFOLD

Features

- Standard service is used up to 15,000psi and tested at 22,500psi.
- Sour gas Service is used up to 10,000psi and tested at 15,000psi.
- Reliable Performance at high working pressure.
- Trash catcher Manifold is available single & dual manifold type
※ Other combinations are also available by customer requirements
- Available Size : 2×2" / 3×2" / 3×3"
- MTR and Test Reports are available at any time.

3"×2" Dual Trash Catcher, 7 Valve Manifold



Trash Catcher Manifold

NO	Item	Q'ty
Ass'y	3"×2" Dual Trash Catcher, 7 Valve Manifold	1
1	3" Fig 1502 Blind Male & Nut	2
2	3" Fig 1502 Tee (FFM)	2
3	3" Fig 1502 Plug Valve	2
4	3" Fig 1502 Cross (FMMM)	1
5	3"×2" Fig 1502 Crossover	1
6	2" Fig 1502 Plug Valve	5
7	2" Fig 1502 Pup Joint (24inch)	1
8	2" Fig 1502 Cross (MFFF)	1
9	2" Fig 1502 Blast Joint	2
10	3"×2" Fig 1502 Trash Catcher	2

[mm (inch)]

Size	Working Pressure(psi)	Dimensions (Inch)							Remarks
		A	B	C	D	E	F	G	
2"	15,000 (Standard Service)	92.7"	55.72"	74.28"	64.54"	24"	6.25"	5"	
3"	15,000 (Standard Service)	95.42"	55.72"	94.17"	84.42"	23.82"	-	9.19"	

CONNECTOR

Product Descriptions

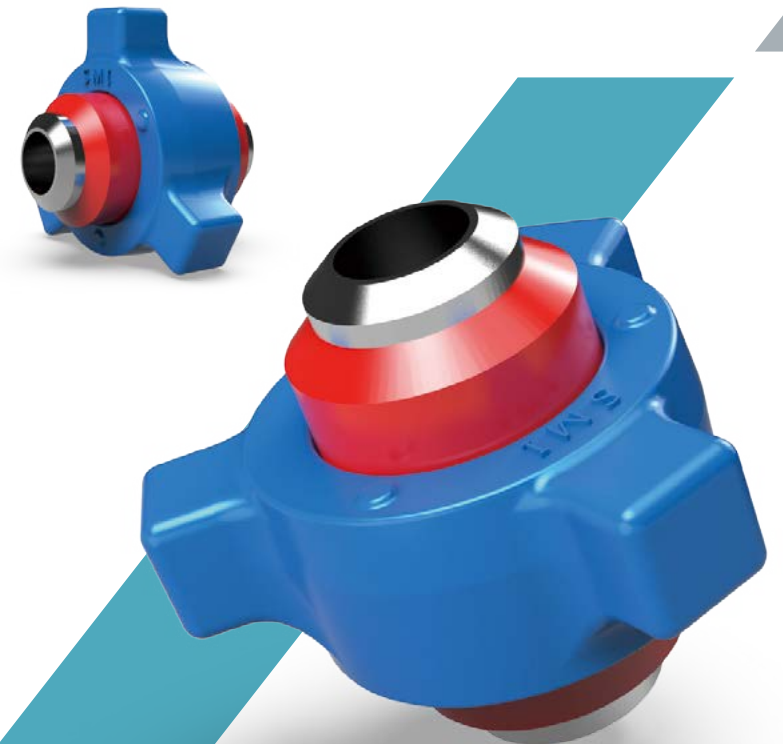
Contents

CONNECTOR

HAMMER UNION	44
ADAPTOR	46
HUB CLAMP (SMI LOCK & API)	50
API FLANGE	53
GREASE FITTING	54

Certified Quality Management

SMI manages quality in accordance with API Q1 and ISO 9001:2015 and educates all staffs according to SMI's own training plan. We use only the best quality material supplied by the certified steel manufacturer and the manufacturing process for each product is completed in one place so that SMI can easily trace the product manufacturing history, showing the traceability by documents that we offer.



HAMMER UNION

Features

- SMI Hammer unions are manufactured by steel forgings using appropriate materials to specific pressure ratings.
- SMI Hammer unions are available in a choice of end connections. API line pipe threads are standard.
- Butt Weld End is available. Customer needs to specify schedule of pipe while ordering it.
- Sour gas service is available and all Sour gas service parts of SMI unions conform to the latest NACE specifications.
- All SMI Hammer union components can be interchangeable with WECCO on the same size and figure.
- All SMI Hammer union nuts have three hammer lugs.

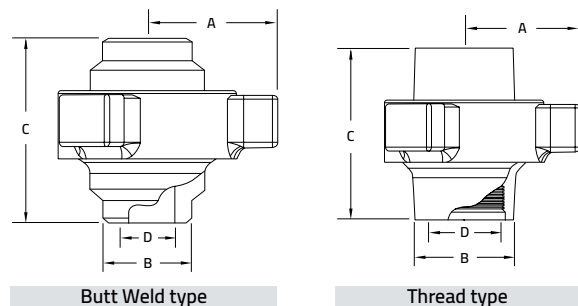


Fig 100



Dim	2"		3"		4"		6"		8"		10"	
WT.	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W
A	2 29/32	4	4 23/64	6 57/64	7 3/4	10 5/16	10 5/16					
B	2 53/64	4 1/16	5 13/64	7 13/32	9 15/32	11 3/4	10 3/4					
C	3 13/32	4 7/8	5 3/4	6 23/32	7 3/16	9 3/16	9 3/16					
D	2 5/32	3 13/64	4 3/16	6 9/32	8 1/4	10	10					
WT(lb)	5.73	14.2	19.36	45.06	71.56	105.82	108.56					
P/N	HU02A1101	HU03A1101	HU04A1101	HU06A1101	HU08A1101	HU10A1101	HU10A5101					

Fig 200/206



Dim	1"		2"		3"		4"		6"		8"		10"	
WT.	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W
A	1 29/32	2 7/8	2 7/8	4	4	4 17/32	4 17/32	6 1/4	6 1/4	7 3/4	10 5/16	10 5/16		
B	1 19/32	2 53/64	2 3/8	4 1/16	3 1/2	5 13/64	4 1/2	7 1/2	6 5/8	9 15/32	11 3/4	10 3/4		
C	2 13/32	3 13/32	3 17/64	4 35/64	4 41/64	4 15/16	5	6 21/32	6 1/4	7 3/16	9 3/16	9 3/16		
D	1 1/8	2 5/32	2 5/64	3 13/64	3 5/64	4 3/16	4 1/32	6 9/32	6 5/64	8 1/4	10	10		
WT(lb)	1.23	5.32	5.86	14.4	15.39	19.3	20.42	43.3	47.42	71.69	105.82	108.66		
P/N	HU01B1101	HU02B1101	HU02B5101	HU03B1101	HU03B5101	HU04B1101	HU04B5101	HU06B1101	HU06B5101	HU08B1101	HU10B1101	HU10B5101		

· Each size can be changed as customer's requirements.

Fig 400



Dim	2"		3"		4"	
WT.	THD	B/W	THD	B/W	THD	B/W
A	2 29/32	4	4	4 23/64	4 23/64	4 23/64
B	2 53/64	4 1/16	4 1/16	5 13/64	5 13/64	5 13/64
C	3 5/8	4 7/8	4 7/8	5 3/4	5 3/4	5 3/4
D	2 5/32	3 13/64	3 13/64	4 3/16	4 3/16	4 3/16
WT(lb)	11.2	20.15	20.15	29.59	29.59	29.59
P/N	HU02D1101	HU03D1101	HU03D1101	HU04D1101	HU04D1101	HU04D1101

Fig 602



Dim	1"		2"		3"		4"	
WT.	THD	B/W	THD	B/W	THD	B/W	THD	B/W
A	2 1/4	2 1/4	3 17/32	3 17/32	4 1/2	4 1/2	5 5/16	5 5/16
B	1 3/4	1 5/16	3	2 25/64	4 1/4	3 1/2	5 5/16	4 1/2
C	3 17/32	3 17/32	5 1/4	5 1/16	6 1/4	5 7/16	8 7/32	5 43/64
D	1 7/64	19/32	2 1/16	1 1/2	3 3/16	3 5/64	4 1/64	3 5/32
WT(lb)	3.8	3.57	12.6	13.9	25	26.4	37	35
P/N	HU01E1101	HU01E5101	HU02E1101	HU02E5101	HU03E1101	HU03E5101	HU04E1101	HU04E5101

Fig 1002



Dim	1"		2"		3"		4"		5"	
WT.	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W
A	2 1/4	2 29/32	3 17/32	3 17/32	4 1/2	4 1/2	5 5/16	6 3/16	6 3/16	6 3/16
B	1 3/4	2 53/64	3	2 25/64	4 1/4	3 1/2	5 5/16	5 7/64	4 7/64	4 7/64
C	3 17/32	2 29/32	5 1/4	5 1/16	6 1/4	5 7/16	8 7/32	6 3/16	6 3/16	6 3/16
D	1 7/64	2 53/64	2 1/16	1 15/16	3 3/16	3 5/64	4 1/64	4 13/16	4 13/16	4 13/16
WT(lb)	3.8	3.57	12.6	10.47	25.8	26.8	37.04	34.97	62.5	62.5
P/N	HU01F1101	HU01F5101	HU02F1101	HU02F5101	HU03F1101	HU03F5101	HU04F1101	HU04F5101	HU05F1101	HU05F5101

Fig 1502



Dim	1"		2"		3"		4"		5"		6"	
WT.	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W	THD	B/W
A	3 1/16	3 1/16	3 47/64	3 47/64	4 1/2	4 1/2	6 5/64	6 5/64	9	9	11	11
B	2 3/16	1 21/64	3 11/64	2 25/64	4 13/32	3 1/2	5 3/4	4 1/2	5 1/2	6 1/2	6 1/2	6 1/2
C	4 21/64	4 23/64	7 1/32	6 1/4	7 5/8	5 1/4	8 1/2	8 1/2	9	9	9 1/4	9 1/4
D	1 7/64	3/7	2 1/16	1 1/2	3 3/16	2 9/32	4 1/64	3 11/64	4 1/64	4 1/64	4 1/64	4 1/64
WT(lb)	9.5	9.26	19.5	20	32.1	30.42	74.52	78.1	50	50	67.8	67.8
P/N	HU0111101	HU0111101	HU0111101	HU0111101	HU0311101	HU0311101	HU0411101	HU0411101	HU0511101	HU0511101	HU0611101	HU0611101

Fig 2202

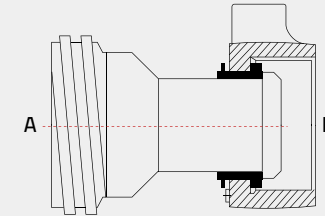


Dim	2"		3"		5"		6"	
WT.	B/W	B/W	B/W	B/W	B/W	B/W	B/W	B/W
A	3 3/4		6 3/32		9 1/4		11 1/4	
B	2 19/32		5 1/2		5 1/2		6 1/2	
C	7 13/32		10 1/2		10 3/4		10	
D	1 5/16		3		4 1/64		4 1/4	
WT(lb)	25.53		91.27		55.2		74.7	
P/N	HU02L5101		HU03L5101		HU05L5101		HU06L5101	

· Each size can be changed as customer's requirements.

ADAPTER CROSSOVER

Union Thread x Union Nut



NO.	End Connections		Working Pressure (psi)	Length (In)	ID (In)	Service
	A	B				
1	1"-1002	2"-1502	10,000	6.00	1.00	Standard
2	1"-1502	2"-1502	15,000	7.00	1.00	Standard
3	1 1/2"-1002	2"-1002	10,000	7.00	1.31	Standard
4	1 1/2"-1502	1 1/2"-1502	10,000	5.75	1.34	Standard
5	1 1/2"-1502	1 1/2"-1502	15,000	6.62	1.31	Standard
6	1 1/2"-1502	2"-1502	15,000	5.25	1.31	Standard
7	2"-1502	1 1/2"-1002	10,000	9.40	1.31	Standard
8	2"-1502	1 1/2"-1002	15,000	7.00	1.31	Standard
9	2"-1502	2"-1502	15,000	6.62	1.87	Standard
10	2"-1502	2"-2002	15,000	6.87	1.30	Standard
11	2"-1502	2"-2202	10,000	6.87	1.30	Sour gas
12	2"-1502	3"-602	6,000	8.00	2.00	Standard
13	2"-1502	3"-1502	10,000	8.00	2.00	Sour gas
14	2"-1502	3"-1502	15,000	8.00	2.00	Standard
15	2"-1502	4"-602	6,000	7.00	2.00	Standard
16	2"-1502	4"-1002	10,000	7.00	2.00	Standard
17	2"-2002	2"-1502	15,000	8.00	1.30	Standard
18	2"-2002	2"-2002	20,000	7.00	1.30	Standard
19	2"-2002	3"-1502	15,000	5.00	1.30	Standard
20	2"-2202	3"-1502	10,000	7.00	1.30	Sour gas
21	2"-2002	3"-1502	15,000	7.00	1.30	Standard

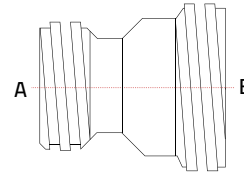
· Each size can be changed as customer's requirements.

NO.	End Connections		Working Pressure (psi)	Length (In)	ID (In)	Service
	A	B				
1	3"-602	4"-602	6,000	8.00	3.00	Standard
2	3"-602	3"-1502	6,000	6.00	3.00	Standard
3	3"-1002	2"-1502	7,500	7.62	1.87	Sour gas
4	3"-1502	2"-1502	10,000	6.94	1.87	Sour gas
5	3"-1502	2"-1502	15,000	6.94	1.87	Standard
6	3"-1502	3"-602	6,000	7.62	3.00	Standard
7	3"-1502	2"-2002	15,000	7.75	1.30	Standard
8	3"-1502	2"-2202	10,000	7.75	1.30	Sour gas
9	3"-1502	3"-1502	15,000	7.62	3.00	Standard
10	3"-1502	4"-602	6,000	8.00	3.00	Standard
11	3"-1502	4"-1002	10,000	8.00	3.00	Standard
12	4"-602	3"-602	6,000	7.00	2.75	Standard
13	4"-602	3"-1502	6,000	7.00	2.75	Standard
14	4"-1002	3"-1502	10,000	6.75	3.00	Standard
15	4"-1002	4"-602	6,000	12.00	4.00	Standard
16	4"-1002	4"-1002	10,000	12.00	4.00	Standard

· Each size can be changed as customer's requirements.

ADAPTER CROSSOVER

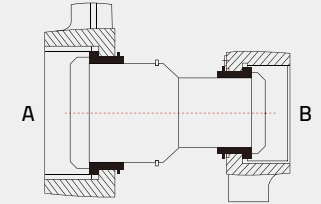
Union Thread × Union Thread



NO.	End Connections		Working Pressure (psi)	Length (In)	ID (In)	Service
	A	B				
1	1"-1502	1 1/2"-1502	15,000	5.62	1.00	Standard
2	1 1/2"-1502	1 1/2"-1502	15,000	5.62	1.31	Standard
3	2"-1502	2"-1502	15,000	5.75	2.00	Standard
4	2"-1502	2"-2002	15,000	6.00	1.30	Standard
5	2"-1502	3"-1502	15,000	6.00	2.06	Standard
6	2"-1502	3"-2202	10,000	6.00	2.00	Sour gas
7	2"-2002	2"-2002	20,000	8.20	1.30	Standard
8	2"-2002	3"-1502	15,000	6.00	1.30	Standard
9	2"-2202	2"-2202	15,000	8.20	1.30	Sour gas
10	3"-1502	3"-1502	15,000	5.75	3.00	Standard
11	4"-602	4"-602	6,000	8.18	4.00	Standard
12	4"-1002	4"-1002	10,000	5.75	4.00	Standard

· Each size can be changed as customer's requirements.

Union Nut × Union Nut



NO.	End Connections		Working Pressure (psi)	Length (In)	ID (In)	Service
	A	B				
1	1 1/2"-1502	2"-1502	15,000	6.75	1.50	Standard
2	2"-1002	2"-1502	10,000	6.75	1.87	Standard
3	2"-1502	2"-1502	15,000	6.75	1.94	Standard
4	2"-1502	2"-1502	10,000	6.75	1.94	Sour gas
5	2"-1502	2"-2002	15,000	8.00	1.30	Standard
6	2"-1502	3"-1502	15,000	8.00	1.87	Standard
7	2"-1502	3"-1502	10,000	8.00	1.87	Sour gas
8	2"-2002	2"-2002	20,000	7.50	1.30	Standard
9	2"-2002	3"-1502	15,000	8.00	1.30	Standard
10	2"-2202	2"-2202	15,000	7.50	1.30	Sour gas
11	3"-602	3"-602	6,000	6.0	3.00	Standard
12	3"-1502	3"-1502	15,000	6.0	3.00	Standard
13	3"-1502	3"-1502	10,000	12.00	2.75	Sour gas
14	4"-602	4"-602	6,000	12.00	4.00	Standard
15	4"-1002	4"-1002	10,000	12.00	4.00	Standard

· Each size can be changed as customer's requirements.

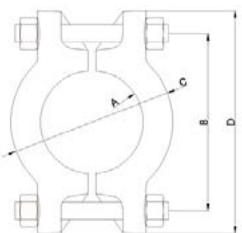
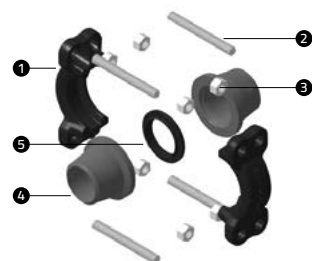
HUB CLAMP

SMILOCK

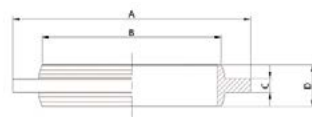
Features

- SMILOCK Hub Clamps are made with appropriate forged materials to specific pressure ratings.
- Standard hub materials are A105 carbon steel and AISI 4130 Low alloy steel but they can be manufactured from other types of carbon, low alloy and stainless steels as per customer's requirement.

Compact Clamp - SMILOCK



Clamp



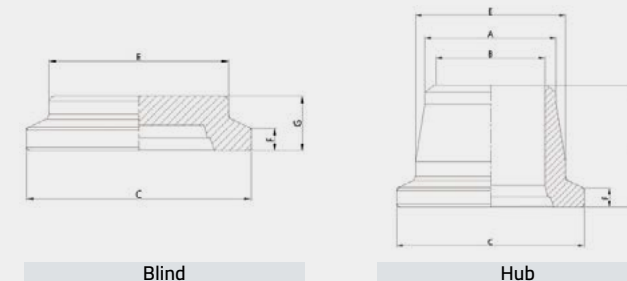
Seal

SMILOCK Hub Clamp

NO	Item	Q'ty
1	Clamp	2
2	Stud Bolt (B7)	4
3	Nut (ZH)	8
4	Hub	2
5	Gasket (PTFE Coated)	1

Clamp Size	Clamp ID(A)		Bolt Centres(B)		Clamp OD(C)		Overall Length(D)		Clampset Weight		
	ins	mm	ins	mm	ins	mm	ins	mm	Lbs	Kg	
-	1in	1.69	42.9	3.25	82.6	2.81	71.5	4.25	108.0	4.2	1.90
1	1/2in	2.69	68.2	5.00	127.0	4.50	114.3	6.50	165.1	9.9	4.50
2	2in	3.20	81.3	5.75	146.1	5.50	139.7	7.50	190.5	13.2	6.00
3	3in	4.38	111.1	7.50	190.5	6.88	174.6	9.25	235.0	23.6	10.70
4	4in	5.38	136.5	8.50	215.9	8.25	209.6	10.50	266.7	28.7	13.00
5	5in	6.88	174.6	10.25	260.4	9.88	250.8	12.38	314.3	41.0	18.60
6	6in	8.38	212.7	12.63	320.7	12.00	304.8	15.25	387.4	70.3	31.90

Seal ring Size	Outside Diameter (A)		Inside Diameter (B)		Rib Thickness (C)		Overall Thickness (D)		Sealring Weight		
	ins	mm	ins	mm	ins	mm	ins	mm	Lbs	Kg	
-	4	1.00	25.4	0.500	12.7	0.125	3.2	0.375	9.5	0.030	0.00
5	1.094	27.8	0.625	15.9	0.125	3.2	0.375	9.5	0.040	0.00	
7	1.375	34.9	0.906	23.0	0.125	3.2	0.375	9.5	0.040	0.00	
11	1.750	44.5	1.125	28.6	0.125	3.2	0.375	9.5	0.060	0.00	
13	2.375	60.3	1.500	38.1	0.125	3.2	0.375	9.5	0.110	0.10	
14	2.625	66.7	1.609	40.9	0.250	6.4	0.563	14.3	0.280	0.10	
16	2.750	69.9	1.868	47.4	0.250	6.4	0.625	15.9	0.280	0.10	
20	3.250	82.6	2.063	52.4	0.250	6.4	0.750	19.1	0.450	0.20	
23	3.500	88.9	2.375	60.3	0.250	6.4	0.750	19.1	0.480	0.20	
25	4.000	102.0	2.672	67.9	0.250	6.4	0.750	19.1	0.620	0.30	
27	4.250	108.0	3.063	77.8	0.250	6.4	0.750	19.1	0.620	0.30	
31	4.500	114.0	3.250	82.6	0.250	6.4	0.750	19.1	0.690	0.30	
34	5.000	127.0	3.688	93.7	0.250	6.4	0.750	19.1	0.800	0.40	
40	5.500	140.0	4.063	103.0	0.250	6.4	1.000	25.4	1.130	0.50	
42	6.375	162.0	4.188	106.0	0.250	6.4	1.000	25.4	1.680	0.80	
46	6.250	159.0	4.750	121.0	0.250	6.4	1.000	25.4	1.340	0.60	
52	6.625	168.0	5.313	135.0	0.250	6.4	1.000	25.4	1.330	0.60	
54	6.812	173.0	5.500	140.0	0.250	6.4	1.000	25.4	1.570	0.70	
56	7.500	191.0	5.750	146.0	0.250	6.4	1.000	25.4	1.820	0.80	
62	7.875	200.0	6.065	154.0	0.375	9.5	1.375	34.9	3.130	1.40	



Blind

Hub

N.P.S.O. Dia	DN	Pipe Sch	SMILOCK Hub-Gasket No.	Pipe Inside Diameter		Hub Outside Diameter		Hub Length		Backface Diameter		Lip Thickness		Blind Thickness		BW Hub Weight		Blind Hub Weight	
				(B)	(C)	(D)	(E)	(F)	(G)	Lbs	Kg	Lbs	Kg						
(A)				ins	mm	ins	mm	ins	mm	ins	mm	ins	mm	ins	mm	Lbs	Kg	Lbs	Kg
1/2" 0.840	DN 15 (21.3)	Standard 40 40S	1 SL 5	0.622	15.8	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.600	0.30	0.800	0.40
		XS 80 80S	1 SL 5	0.546	13.9	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.600	0.30	0.800	0.40
		160	1 SL 4	0.466	11.8	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.600	0.30	0.800	0.40
		XXS	1 SL 4	0.252	6.4	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.700	0.30	0.800	0.40
3/4" 1.05	DN 20 (26.7)	Standard 40 40S	1 SL 7	0.824	20.9	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.500	0.20	0.800	0.40
		XS 80 80S	1 SL 7	0.742	18.8	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.600	0.30	0.800	0.40
		160	1 SL 5	0.614	15.6	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.700	0.30	0.800	0.40
		XXS	1 SL 4	0.434	11.0	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.700	0.30	0.800	0.40
1" 1.315	DN 25 (33.4)	Standard 40 40S	1 SL 11	1.049	26.6	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.500	0.20	0.800	0.40
		XS 80 80S	1 SL 11	0.957	24.3	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.500	0.20	0.800	0.40
		160	1 SL 7	0.815	20.7	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.600	0.30	0.800	0.40
		XXS	1 SL 5	0.599	15.2	2.000	50.8	1.750	44.5	1.500	38.1	0.313	8.0	1.313	33.4	0.700	0.30	0.800	0.40
1-1/2" 1.900	DN 40 (48.3)	Standard 40 40S	1 1/2 SL 14	1.610	40.9	3.125	79.4	2.375	60.3	2.375	60.3	0.437	11.1	1.625	41.3	1.600	0.70	2.500	1.10
		XS 80 80S	1 1/2 SL 13	1.500	38.1	3.125	79.4	2.375	60.3	2.375	60.3	0.500	12.7	1.625	41.3	1.900	0.80	2.600	1.20
		160	1 1/2 SL 13	1.338	34.0	3.125	79.4	2.375	60.3	2.375	60.3	0.500	12.7	1.625	41.3	2.000	0.90	2.600	1.20
		XXS	1 1/2 SL 11	1.100	27.9	3.125	79.4	2.375	60.3	2.375	60.3	0.500	12.7	1.625	41.3	2.400	1.10	2.600	1.20
2" 2.375	DN 50 (60.3)	Standard 40 40S	2 SL 20	2.067	52.5	3.625	92.1	2.750	69.9	2.875	73.0	0.437	11.1	1.750	44.5	2.200	1.00	3.700	1.70
		XS 80 80S	2 SL 20	1.939	49.3	3.625	92.1	2.750	69.9	2.875	73.0	0.437	11.1	1.750	44.5	2.500	1.10	3.700	1.70
		160	2 SL 16	1.689	42.9	3.625	92.1	2.750	69.9	2.875	73.0	0.437	11.1	1.750	44.5	3.000	1.40	3.800	1.70
		XXS	2 SL 14	1.503	38.2	3.625	92.1	2.750	69.9	2.875	73.0	0.437	11.1	1.750	44.5	3.400	1.50	3.800	1.70
3" 3.500	DN 75 (88.9)	Standard 40 40S	3 SL 27	3.068	77.9	5.000	127.0	3.250	82.6	4.000	101.6	0.500	12.7	1.875	47.6	4.700	2.10	7.800	3.50
		XS 80 80S	3 SL 27	2.900	73.7	5.000	127.0	3.250	82.6	4.000	101.6	0.500	12.7	1.875	47.6	5.200	2.40	7.800	3.50
		160	3 SL 25	2.624	66.6	5.000	127.0	3.250	82.6	4.000	101.6	0.500	12.7	1.875	47.6	6.300	2.90	7.800	3.50
		XXS	3 SL 23	2.300	58.4	5.000	127.0	3.250	82.6	4.000	101.6	0.500	12.7	1.875	47.6	7.400	3.30	7.800	3.60
4" 4.500	DN 100 (114.3)	Standard 40 40S	4 SL 40	4.026	102.3	6.000	152.4	3.625	92.1	5.000	127.0	0.500	12.7	2.125	54.0	6.700	3.10	13.100	5.90
		XS 80 80S	4 SL 40	3.826	97.2	6.000	152.4	3.625	92.1	5.000	127.0	0.500	12.7	2.125	54.0	7.700	3.50	13.100	5.90
		120	4 SL 34	3.624	92.0	6.000	152.4	3.625	92.1	5.000	127.0	0.500	12.7	2.125	54.0	9.200	4.20	13.200	6.00
		160	4 SL 34	3.438	87.3	6.000	152.4	3.625	92.1	5.000	127.0	0.500	12.7	2.125	54.0	10.000	4.50	13.200	6.00
XXS	4 SL 31	3.152	80.1	6.000	152.4	3.625	92.1	5.000	127.0	0.500	12.7	2.125	54.0	11.000	5.20	13.200	6.00		
5" 5.563	DN 125 (141.3)	Standard 40 40S	5 SL 52	5.047	128.2	7.500	190.5	4.375	111.1	6.500	165.1	0.625	15.9	2.750	69.9	13.300	6.00	27.800	12.60
		XS 80 80S	5 SL 52	4.813	122.3	7.500	190.5	4.375	111.1	6.500	165.1	0.625	15.9	2.750	69.9	14.800	6.70	27.800	12.60
		120	5 SL 46	4.563	115.9	7.500	190.5	4.375	111.1	6.500	165.1	0.625	15.9	2.750	69.9	17.800	8.10	27.900	12.60
		160	5 SL 46	4.313	109.6	7.500	190.5	4.375	111.1	6.500	165.1	0.625	15.9	2.750	69.9	19.200	8.70	27.800	12.60
XXS	5 SL 40	4.063	103.2	7.500	190.5	4.375	111.1	6.500	165.1	0.625	15.9	2.750	69.9	21.900	9.90	27.900	12.60		
6" 6.625	DN 150 (168.3)	Standard 40 40S	6 SL 62	6.065	154.1	9.250	235.0	4.625	117.5	7.750	196.9								

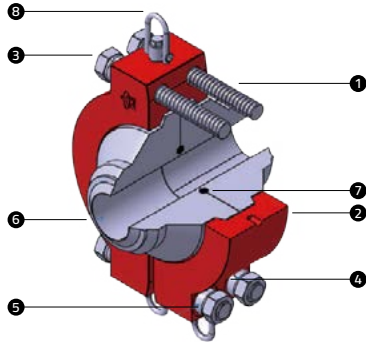
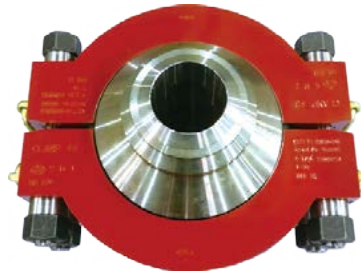
HUB CLAMP

API 6A CLAMP

Specification

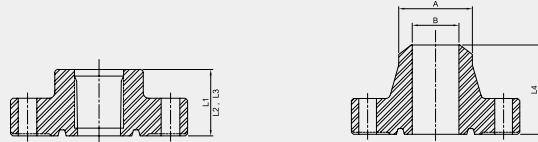
- Hubs & clamps are designed & manufactured in accordance with below specific requirements
 - Temperature rating - K to Y
 - Material class - AA to EE
 - Bolt & Nut : API 20E/20F
- The complete range of Clamps & Hubs in accordance to API 16A.
- Clamps are operated quickly and easy, making it up even in limited space.
- All clamps have 360° infinite adjustability
- Clamps are reliable to connect hubs and other API connections
- Hubs & clamps have up to pressure range from 2,000 psi to 20,000 psi
- Hubs & clamps are designed & manufactured in accordance with below specific information.

API 16A CLAMP



NO.	Item	Q'ty
1	Stud Bolt	4
2	Hub Clamp	2
3	Nut	8
4	Inner Washer	8
5	Outer Washer	8
6	Hub	2
7	Ring Type Joint Gasket	1
8	Swivel Lifting Eye	6

API FLANGE

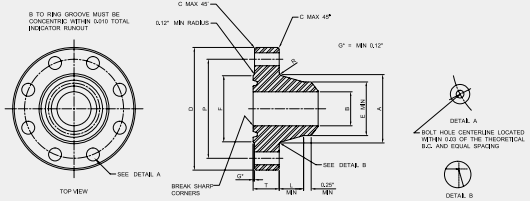


Threaded Flange

Weld Neck Line Pipe Flange

Nominal Size and Bore of Flange	Nominal Size and Bore of Flange	Hub Length Threaded Line-Pipe Flange	Hub Length Threaded Casing Pipe	Hub Length Tubing Flange	Hub Length Welding Nec Line-Pipe Flange	Maximum Bore of Welding Neck Flange
	-	L ₁	L ₂	L ₃	L _{4±0.06}	B
2,000psi	2 1/16	2.56	-	2.56	4.31	1.97
	2 9/16	2.81	-	2.81	4.44	2.35
	3 1/8	2.44	-	2.94	4.31	2.93
	4 1/16	3.06	3.50	3.50	4.81	3.86
3,000psi	-	L ₁	L ₂	-	L _{3±0.06}	B
	2 1/16	1.75	-	-	3.19	2.10
	2 9/16	1.94	-	-	3.44	2.50
	3 1/8	2.12	-	-	3.56	3.10
5,000psi	4 1/16	2.44	3.50	-	4.31	4.06
	-	L ₁	L ₂	L ₃	L _{4±0.08}	B
	2 1/16	2.56	-	2.56	4.31	1.72
	2 9/16	2.81	-	2.81	4.44	2.16
5,000psi	3 1/8	3.19	-	3.19	4.94	2.65
	4 1/16	3.88	3.88	3.88	5.19	3.47

Each size can be changed as customer's requirements.



API 6A-TYPE 6BX Welding Neck Flanges

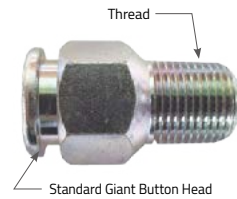
Working Pressure (psi)	Nominal Size and Bore of Flange	Maximum Bore	Outside Diameter of Flange	Total Thickness of Flange	Length of Hub	Diameter of bolt circle	Number of Bolts	Diameter of Bolts	Diameter of Bolt Holes	Ring Number
-	-	B	D	T	L	P	-	-	-	BX
10,000psi	2 1/16	2.09	7.88	1.73	2.03	6.25	8	3/4	0.88	152
	2 9/16	2.59	9.12	2.02	2.25	7.25	8	7/8	1.00	153
	3 1/16	3.09	10.62	2.30	2.50	8.50	8	1	1.12	154
	4 1/16	4.09	12.44	2.77	2.50	10.19	8	1 1/8	1.25	155
15,000psi	2 1/16	2.09	8.75	2.00	2.12	6.88	8	7/8	1.00	152
	2 9/16	2.59	10.00	2.25	2.25	7.88	8	1	1.12	153
	3 1/16	3.09	11.31	2.53	2.50	9.06	8	1 1/8	1.25	154
	4 1/16	4.09	14.19	3.09	2.88	11.44	8	1 3/8	1.50	155
20,000psi	2 1/16	2.09	11.31	2.81	2.06	9.06	8	1 1/8	1.25	152
	2 9/16	2.59	12.81	3.12	2.31	10.31	8	1 1/4	1.38	153
	3 1/16	3.09	14.06	3.38	2.50	11.31	8	1 3/8	1.50	154
	4 1/16	4.09	17.56	4.19	2.88	14.06	8	1 3/4	1.88	155

GREASE FITTING

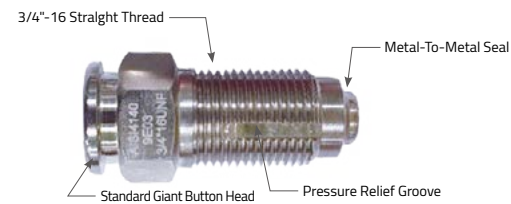


Global Leading Korean Provider
Of Flowline Products

3/8" Grease fitting
[GF31101]



3/4" Safetap Grease fitting
[GF06E02101]



Safetap grease fitting

- The unique metal-to-metal seal eliminates wetted threads and pipe taps. Since the threads do not perform a sealing function they do not require Teflon tape or other sealing aids.
- The heavier cross section stands up better to impacts.
- Each fitting has a slot machined through the threads which serves as a pressure relief path in the event of a leak.
- The metal-to-metal seal and the pressure relief slot of the SafeTap grease fitting also allow a means to safely bleed off any residual internal pressure.

Global Leading Korean Provider Of Flowline Products



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