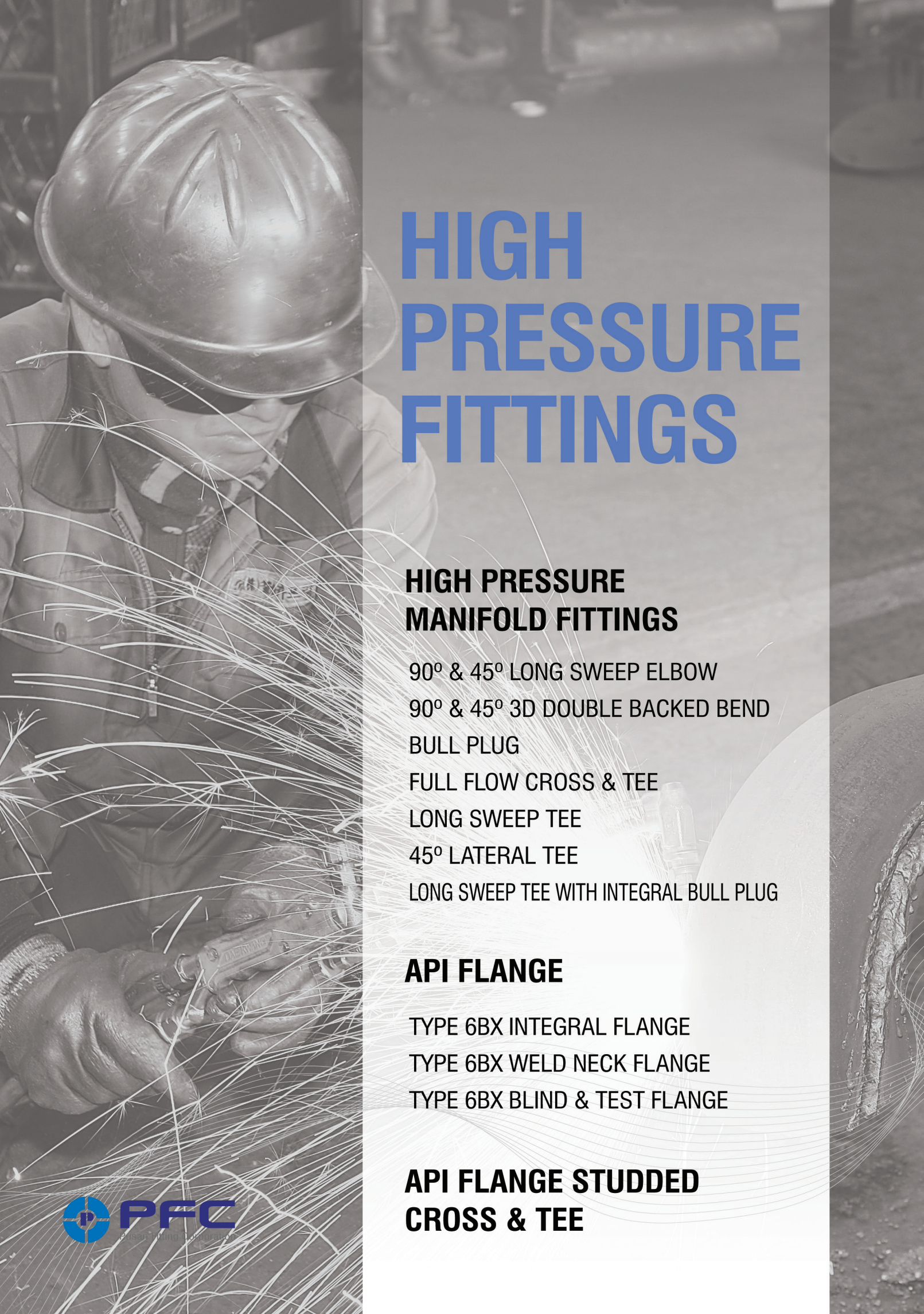


HIGH PRESSURE FITTINGS

HIGH PRESSURE MANIFOLD FITTINGS

90º & 45º LONG SWEEP ELBOW
90º & 45º 3D DOUBLE BACKED BEND
BULL PLUG
FULL FLOW CROSS & TEE
LONG SWEEP TEE
45º LATERAL TEE
LONG SWEEP TEE WITH INTEGRAL BULL PLUG

API FLANGE

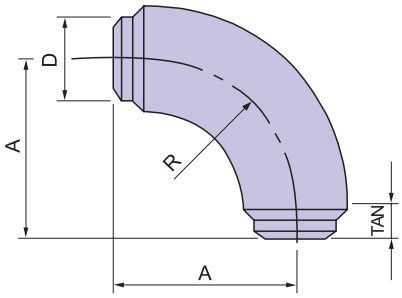
TYPE 6BX INTEGRAL FLANGE
TYPE 6BX WELD NECK FLANGE
TYPE 6BX BLIND & TEST FLANGE

API FLANGE STUDDED CROSS & TEE

PFC
Precision Fitting Corporation

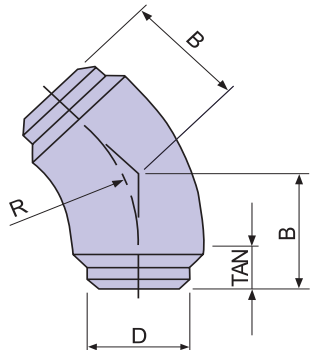
High Pressure Manifold Fittings

90° LONG SWEEP ELBOW

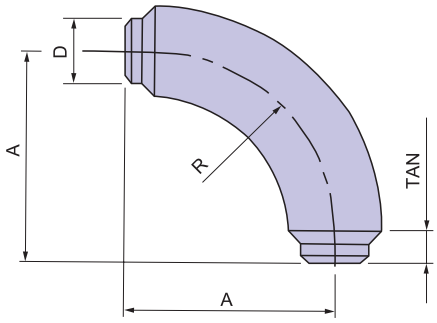


Size	ALL DIMENSIONS IN mm			
	D	A	R	TAN
2"	60.3	203	150	53
3"	88.9	203	150	53
4"	114.3	280	210	70
5"	141.3	305	240	65
6"	168.3	381	305	76

45° LONG SWEEP ELBOW

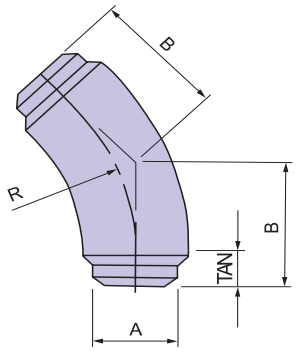


Size	ALL DIMENSIONS IN mm			
	D	B	R	TAN
2"	60.3	119	150	56
3"	88.9	119	150	56
4"	114.3	162	210	75
5"	141.3	172	240	72
6"	168.3	203	305	76



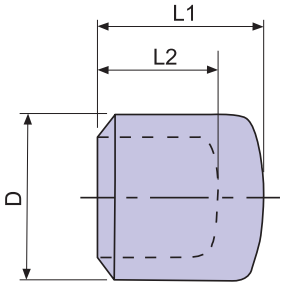
90° 3D DOUBLE BACKED BEND

Size	ALL DIMENSIONS IN mm			
	D	A	R	TAN
2"	60.3	178	152	26
3"	88.9	305	229	76
4"	114.3	356	305	51
5"	141.3	432	381	51
6"	168.3	533	457	76



45° 3D DOUBLE BACKED BEND

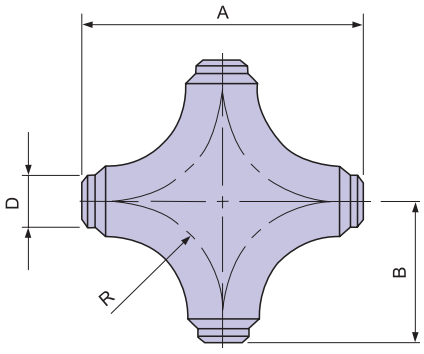
Size	ALL DIMENSIONS IN mm			
	D	B	R	TAN
2"	60.3	121	152	58
3"	88.9	171	229	76
4"	114.3	178	305	51
5"	141.3	209	381	51
6"	168.3	266	457	76



BULL PLUG

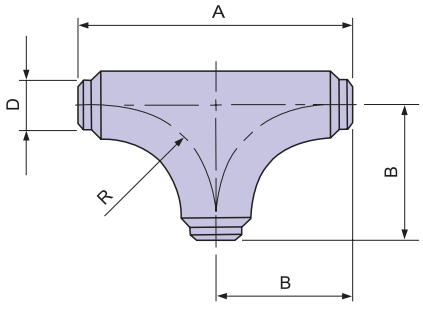
Size	ALL DIMENSIONS IN mm		
	D	L1	L2
2"	60.3	70	48
3"	88.9	90	60
4"	114.3	115	81
5"	141.3	140	102
6"	168.3	170	126

FULL FLOW CROSS

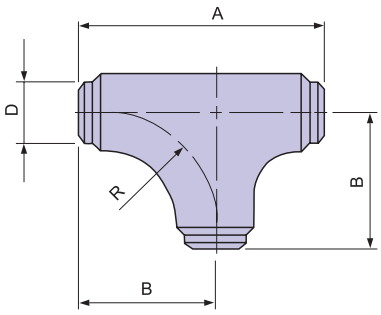


Size	ALL DIMENSIONS IN mm			
	D	A	B	R
2"	60.3	406	203	150
3"	88.9	406	203	150
4"	114.3	560	280	210
5"	141.3	610	305	240
6"	168.3	762	381	305

FULL FLOW TEE

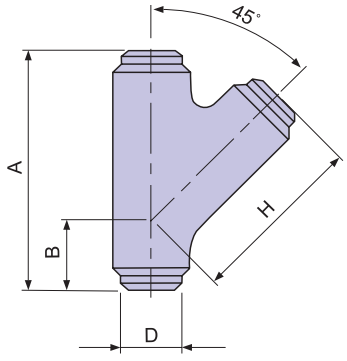


Size	ALL DIMENSIONS IN mm			
	D	A	B	R
2"	60.3	406	203	150
3"	88.9	406	203	150
4"	114.3	560	280	210
5"	141.3	610	305	240
6"	168.3	762	381	305



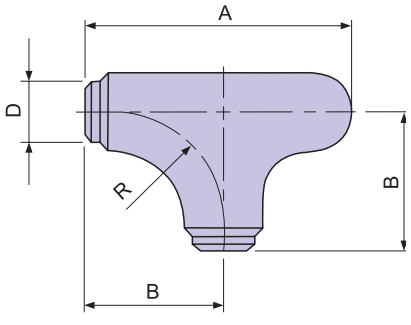
LONG SWEEP TEE

Size	ALL DIMENSIONS IN mm			
	D	A	B	R
2"	60.3	330	203	150
3"	88.9	330	203	150
4"	114.3	406	280	210
5"	141.3	483	305	240
6"	168.3	686	381	305



45° LATERAL TEE

Size	ALL DIMENSIONS IN mm			
	D	A	B	H
2"	60.3	365	115	265
3"	88.9	365	115	265
4"	114.3	510	155	365
5"	141.3	550	165	405
6"	168.3	670	195	505

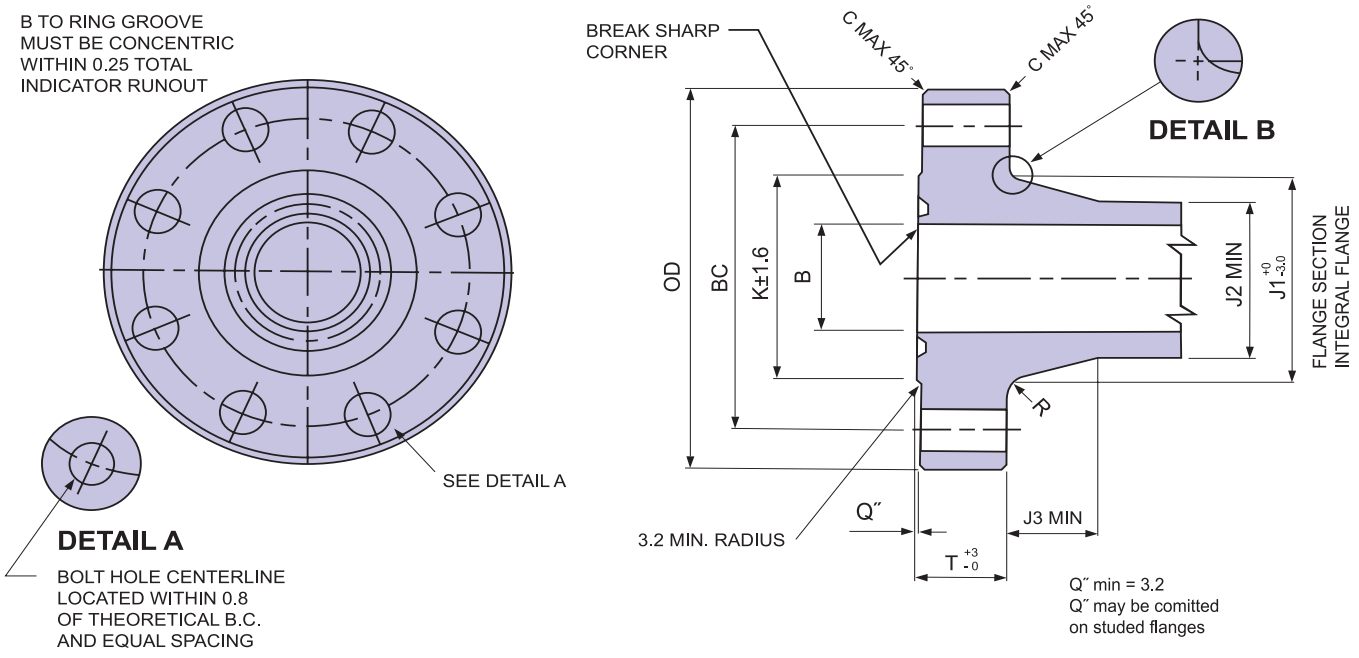


LONG SWEEP TEE WITH INTEGRAL BULL PLUG

Size	ALL DIMENSIONS IN mm				
	D	T	A	B	R
2"	60.3	11.1	385	203	150
3"	88.9	15.2	385	203	150
4"	114.3	17.1	496	280	210
5"	141.3	19.0	582	305	240
6"	168.3	21.9	805	381	304

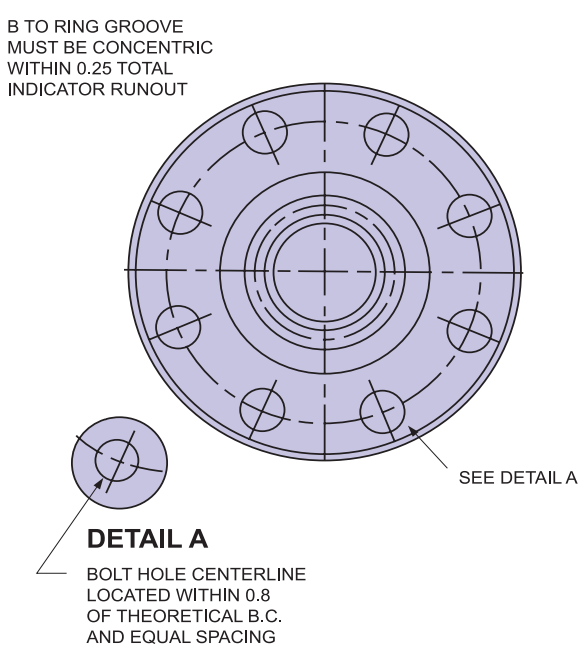
High Pressure Manifold Fittings

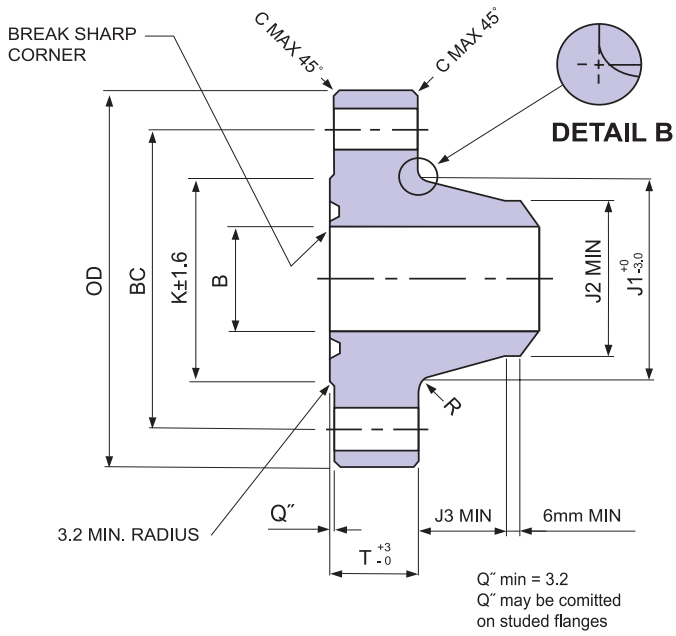
API FLANGE - TYPE 6BX INTEGRAL FLANGE



Basic Flange Dimensions														Bolting Dimensions				
Norminal Size of Flange		Maximum Bore	Outside Diameter of Flange	Tolerance	Maximum Chamfer	Diameter of Raiserd Face	Tatal Thickness of Flange	Large Diameter of Hub	Small Diameter of Hub	Length of Hub	Radius of Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts	Diameter of Bolts Holes	Bolt Hole Tolerance	Maximum Length of Stud Bolts	Ring Number
in.	mm	B	OD	OD	C	K	T	J1	J2	J3	R	BC	-	in.	mm	-	Lssb	BX
10000psi																		
1 13/16	46	46.8	190	2	3	105	42.1	88.9	65.1	48.4	10	146.0	8	3/4	23	+2/-0.5	130	151
2 1/16	52	53.2	200	2	3	111	44.1	100.0	74.6	51.6	10	158.8	8	3/4	23	+2/-0.5	130	152
9/16	65	65.9	230	2	3	132	51.2	120.7	92.1	57.2	10	184.2	8	7/8	25	+2/-0.5	150	153
3 1/16	78	78.6	270	2	3	152	58.4	142.1	110.4	63.5	10	215.9	8	1	29	+2/-0.5	170	154
4 1/16	103	104.0	315	2	3	185	70.3	182.6	146.1	73.1	10	258.8	8	1-1/8	32	+2/-0.5	200	155
5 1/8	130	131.0	360	2	3	221	79.4	223.8	182.6	81.0	10	300.0	12	1-1/8	32	+2/-0.5	220	169
7 1/16	179	180.2	479	3	6	302	103.2	301.6	254.0	95.3	16	403.2	12	1-1/2	42	+2/-0.5	285	156
9	228	229.4	555	3	6	359	123.8	374.7	327.1	93.7	16	476.2	16	1-1/2	42	+2/-0.5	330	157
11	279	280.2	655	3	6	429	141.3	450.9	400.1	103.2	16	565.2	16	1-3/4	48	+3/-0.5	380	158
13 5/8	346	346.9	770	3	6	518	168.3	552.5	495.3	114.3	16	673.1	20	1-7/8	51	+3/-0.5	440	159
16 3/4	425	426.2	870	3	6	576	168.3	655.6	601.7	76.2	19	776.3	24	1-7/8	51	+3/-0.5	440	162
15000psi																		
1 13/16	46	46.8	210	2	3	106	45.2	97.6	71.4	47.6	10	160.3	8	7/8	26	+2/-0.5	140	151
2 1/16	52	53.2	220	2	3	114	50.8	111.1	82.6	54.0	10	174.6	8	7/8	26	+2/-0.5	150	152
9/16	65	65.9	250	2	3	133	57.1	128.6	100.0	57.1	10	200.0	8	1	30	+2/-0.5	170	153
3 1/16	78	78.6	290	2	3	154	64.3	154.0	122.2	63.5	10	230.2	8	1-1/8	32	+2/-0.5	190	154
4 1/16	103	104.0	360	2	3	194	78.6	195.3	158.8	73.0	10	290.5	8	1-3/8	40	+2/-0.5	235	155
7 1/16	179	180.2	505	3	6	305	119.1	325.4	276.2	66.7	16	428.6	16	1-1/2	42	+2/-0.5	325	156
20000psi																		
1 13/16	46	46.8	255	2	3	117	63.5	133.3	109.5	49.2	10	203.2	8	1	30	+2/-0.5	190	151
2 1/16	52	53.2	285	2	3	132	71.5	154.0	127.0	52.4	10	230.2	8	1-1/8	32	+2/-0.5	210	152
9/16	65	65.9	325	2	3	151	79.4	173.0	144.4	58.7	10	261.9	8	1-1/4	36	+2/-0.5	235	153
3 1/16	78	78.6	355	2	3	171	85.7	192.1	160.3	63.5	10	287.3	8	1-3/8	40	+2/-0.5	255	154
4 1/16	103	104.0	445	2	3	219	106.4	242.9	206.4	73.0	10	357.2	8	1-3/4	48	+3/-0.5	310	155
7 1/16	179	180.2	655	3	6	352	165.1	385.7	338.1	96.8	16	554.0	16	2	54	+3/-0.5	445	156

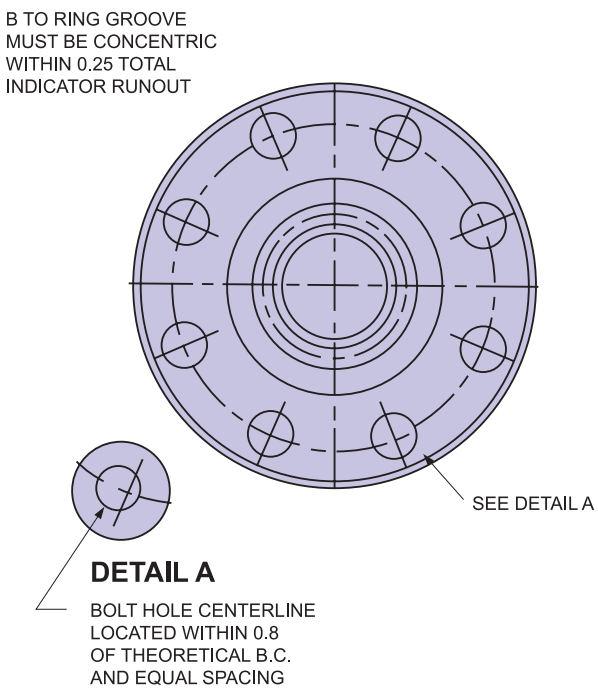
API FLANGE - TYPE 6BX WELD NECK FLANGE

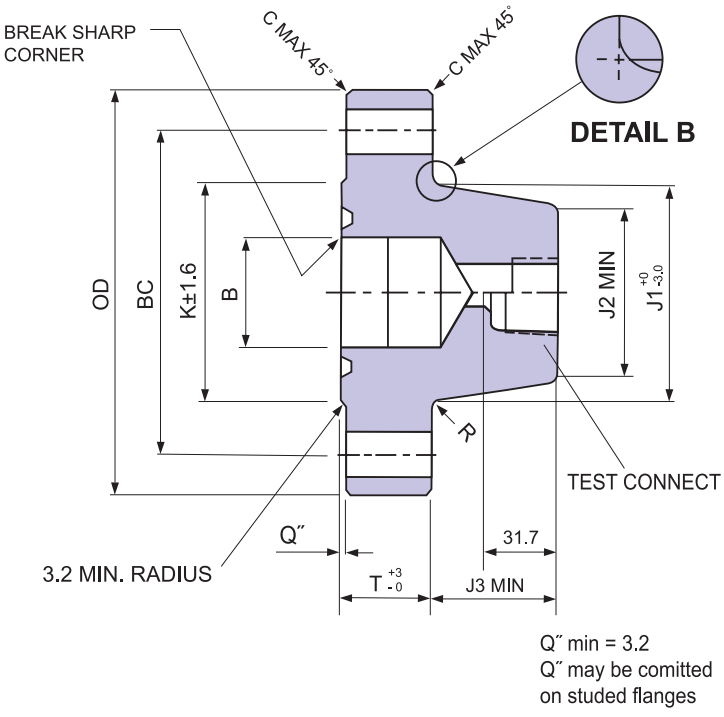




Basic Flange Dimensions														Bolting Dimensions				
Norminal Size of Flange		Maximum Bore	Outside Diameter of Flange	Tolerance	Maximum Chamfer	Diameter of Raiserd Face	Tatal Thickness of Flange	Large Diameter of Hub	Small Diameter of Hub	Length of Hub	Radius of Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts	Diameter of Bolts Holes	Bolt Hole Tolerance	Maximum Length of Stud Bolts	Ring Number
in.	mm	B	OD	OD	C	K	T	J1	J2	J3	R	BC	-	in.	mm	-	Lssb	BX
10000psi																		
1 13/16	46	46.8	190	2	3	105	42.1	88.9	65.1	48.4	10	146.0	8	3/4	23	+2/-0.5	130	151
2 1/16	52	53.2	200	2	3	111	44.1	100.0	74.6	51.6	10	158.8	8	3/4	23	+2/-0.5	130	152
9/16	65	65.9	230	2	3	132	51.2	120.7	92.1	57.2	10	184.2	8	7/8	25	+2/-0.5	150	153
3 1/16	78	78.6	270	2	3	152	58.4	142.1	110.4	63.5	10	215.9	8	1	29	+2/-0.5	170	154
4 1/16	103	104.0	315	2	3	185	70.3	182.6	146.1	73.1	10	258.8	8	1-1/8	32	+2/-0.5	200	155
5 1/8	130	131.0	360	2	3	221	79.4	223.8	182.6	81.0	10	300.0	12	1-1/8	32	+2/-0.5	220	169
7 1/16	179	180.2	479	3	6	302	103.2	301.6	254.0	95.3	16	403.2	12	1-1/2	42	+2/-0.5	285	156
9	228	229.4	555	3	6	359	123.8	374.7	327.1	93.7	16	476.2	16	1-1/2	42	+2/-0.5	330	157
11	279	280.2	655	3	6	429	141.3	450.9	400.1	103.2	16	565.2	16	1-3/4	48	+3/-0.5	380	158
13 5/8	346	346.9	770	3	6	518	168.3	552.5	495.3	114.3	16	673.1	20	1-7/8	51	+3/-0.5	440	159
16 3/4	425	426.2	870	3	6	576	168.3	655.6	601.7	76.2	19	776.3	24	1-7/8	51	+3/-0.5	440	162
15000psi																		
1 13/16	46	46.8	210	2	3	106	45.2	97.6	71.4	47.6	10	160.3	8	7/8	26	+2/-0.5	140	151
2 1/16	52	53.2	220	2	3	114	50.8	111.1	82.6	54.0	10	174.6	8	7/8	26	+2/-0.5	150	152
9/16	65	65.9	250	2	3	133	57.1	128.6	100.0	57.1	10	200.0	8	1	30	+2/-0.5	170	153
3 1/16	78	78.6	290	2	3	154	64.3	154.0	122.2	63.5	10	230.2	8	1-1/8	32	+2/-0.5	190	154
4 1/16	103	104.0	360	2	3	194	78.6	195.3	158.8	73.0	10	290.5	8	1-3/8	40	+2/-0.5	235	155
7 1/16	179	180.2	505	3	6	305	119.1	325.4	276.2	66.7	16	428.6	16	1-1/2	42	+2/-0.5	325	156
20000psi																		
1 13/16	46	46.8	255	2	3	117	63.5	133.3	109.5	49.2	10	203.2	8	1	30	+2/-0.5	190	151
2 1/16	52	53.2	285	2	3	132	71.5	154.0	127.0	52.4	10	230.2	8	1-1/8	32	+2/-0.5	210	152
9/16	65	65.9	325	2	3	151	79.4	173.0	144.4	58.7	10	261.9	8	1-1/4	36	+2/-0.5	235	153
3 1/16	78	78.6	355	2	3	171	85.7	192.1	160.3	63.5	10	287.3	8	1-3/8	40	+2/-0.5	255	154
4-1/16	103	104.0	445	2	3	219	106.4	242.9	206.4	73.0	10	357.2	8	1-3/4	48	+3/-0.5	310	155
7 1/16	179	180.2	655	3	6	352	165.1	385.7	338.1	96.8	16	554.0	16	2	54	+3/-0.5	445	156

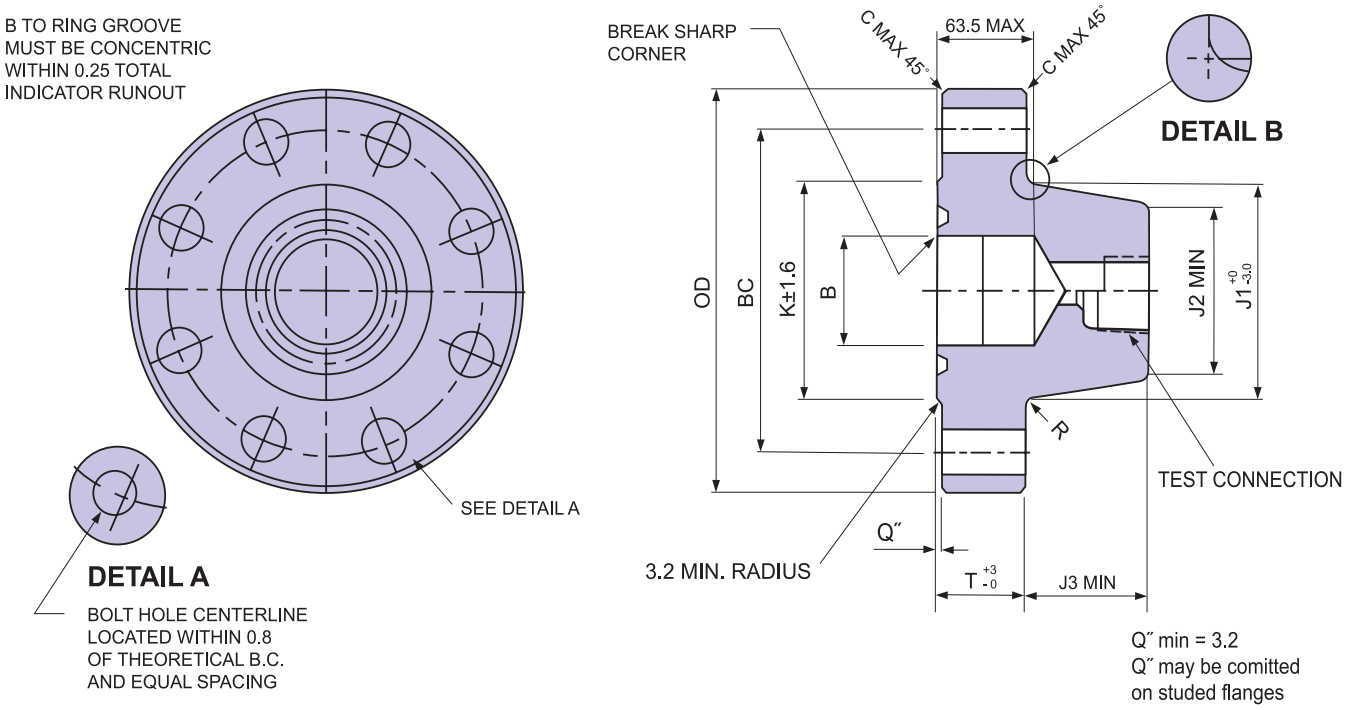
API FLANGE - TYPE 6BX BLIND AND TEST FLANGE





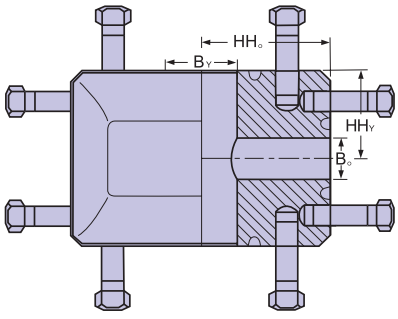
Basic Flange Dimensions														Bolting Dimensions				
Norminal Size of Flange		Maximum Bore	Outside Diameter of Flange	Tolerance	Maximum Chamfer	Diameter of Raiserd Face	Tatal Thickness of Flange	Large Diameter of Hub	Small Diameter of Hub	Length of Hub	Radius of Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts	Diameter of Bolts Holes	Bolt Hole Tolerance	Maximum Length of Stud Bolts	Ring Number
in.	mm	B	OD	OD	C	K	T	J1	J2	J3	R	BC	-	in.	mm	-	Lssb	BX
10000psi																		
1 13/16	46	46.8	190	2	3	105	42.1	88.9	65.1	48.4	10	146.0	8	3/4	23	+2/-0.5	130	151
2 1/16	52	53.2	200	2	3	111	44.1	100.0	74.6	51.6	10	158.8	8	3/4	23	+2/-0.5	135	152
9/16	65	65.9	230	2	3	132	51.2	120.7	92.1	57.2	10	184.2	8	7/8	25	+2/-0.5	155	153
3 1/16	78	78.6	270	2	3	152	58.4	142.1	110.3	63.5	10	215.9	8	1	29	+2/-0.5	175	154
4-1/16	103	104.0	315	2	3	185	70.3	182.6	146.0	73.0	10	258.8	8	1-1/8	32	+2/-0.5	205	155
15000psi																		
1 13/16	46	46.8	210	2	3	106	45.2	97.6	71.4	47.6	10	160.3	8	7/8	26	+2/-0.5	140	151
2 1/16	52	53.2	220	2	3	114	50.8	111.1	82.6	54.0	10	174.6	8	7/8	26	+2/-0.5	150	152
9/16	65	65.9	250	2	3	133	57.1	128.6	100.0	57.1	10	200.0	8	1	29	+2/-0.5	170	153
3 1/16	78	78.6	290	2	3	154	64.3	154.0	122.2	63.5	10	230.2	8	1-1/8	32	+2/-0.5	190	154
4 1/16	103	104.0	360	2	3	194	78.6	195.3	158.8	73.0	10	290.5	8	1-3/8	39	+2/-0.5	230	155

API FLANGE - TYPE 6BX BLIND AND TEST FLANGE

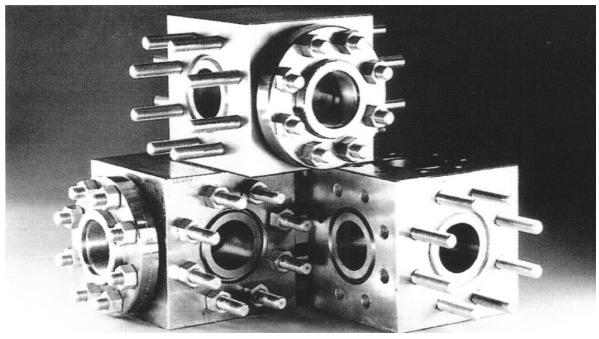


Basic Flange Dimensions														Bolting Dimensions				
Norminal Size of Flange		Maximum Bore	Outside Diameter of Flange	Tolerance	Maximum Chamfer	Diameter of Raiserd Face	Tatal Thickness of Flange	Large Diameter of Hub	Small Diameter of Hub	Length of Hub	Radius of Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts	Diameter of Bolts Holes	Bolt Hole Tolerance	Maximum Length of Stud Bolts	Ring Number
in.	mm	B	OD	OD	C	K	T	J1	J2	J3	R	BC	-	in.	mm	-	Lssb	BX
20000psi																		
1 13/16	46	46.8	255	2	3	117	63.5	133.4	109.5	49.2	10	203.2	8	1	29	+2/-0.5	190	151
2 1/16	52	53.2	290	2	3	132	71.4	154.0	127.0	52.4	10	230.2	8	1-1/8	32	+2/-0.5	210	152
9/16	65	65.9	325	2	3	151	79.4	173.0	144.4	58.7	10	261.9	8	1-1/4	36	+2/-0.5	235	153
3 1/16	78	78.6	355	2	3	171	85.7	192.0	160.3	63.5	10	287.3	8	1-3/8	38	+2/-0.5	255	154
4 1/16	103	104.0	445	2	3	219	106.4	242.9	206.4	73.0	10	357.2	8	1-3/4	48	+3/-0.5	310	155

Api Flange Studded Cross & Tee



API Flange studded Cross $ Tee



Rated Working Pressure (psi)	Vertical Bv +1,-0mm	Outlet Bo +1,-0mm	Center to Face Vertical Run, HHv ±0.8mm	Center to Face Horizontal Run, HHo ±0.8mm
2000	52	52	89.0	89.0
2000	65	52	89.0	101.5
2000	65	65	114.5	114.5
2000	78	52	114.5	114.5
2000	78	65	114.5	114.5
2000	78	78	114.5	114.5
2000	103	52	114.5	139.5
2000	103	65	114.5	139.5
2000	103	78	114.5	139.5
2000	103	103	139.5	139.5
3000	78	52	114.5	127.0
3000	78	65	127.0	127.0
3000	78	78	127.0	127.0
3000	103	52	114.5	156.0
3000	103	65	127.0	156.0
3000	103	78	127.0	156.0
3000	103	103	156.0	156.0
5000	52	52	114.5	114.5
5000	65	52	114.5	127.0
5000	65	65	127.0	127.0
5000	78	52	114.5	139.5
5000	78	65	139.5	139.5
5000	78	78	139.5	139.5
5000	103	52	114.5	165.0
5000	103	65	127.0	165.0
5000	103	78	139.5	165.0
5000	103	103	165.0	165.0
10000	46	46	111.0	111.0
10000	52	46	111.0	111.0
10000	52	52	111.0	111.0
10000	65	46	114.5	130.0
10000	65	52	114.5	130.0
10000	65	65	130.0	130.0
10000	78	46	114.5	149.0
10000	78	52	114.5	149.0

Rated Working Pressure (psi)	Vertical Bv +1,-0mm	Outlet Bo +1,-0mm	Center to Face Vertical Run, HHv ±0.8mm	Center to Face Horizontal Run, HHo ±0.8mm
10000	78	65	130.0	149.0
10000	78	78	149.0	149.0
10000	103	46	114.5	174.5
10000	103	52	114.5	174.5
10000	103	65	130.0	174.5
10000	103	78	149.0	174.5
10000	103	103	174.5	174.5
15000	46	46	127.0	127.0
15000	52	46	127.0	127.0
15000	52	52	127.0	127.0
15000	65	46	139.5	139.5
15000	65	52	139.5	139.5
15000	65	65	139.5	139.5
15000	78	46	160.5	160.5
15000	78	52	160.5	160.5
15000	78	65	160.5	160.5
15000	78	78	160.5	160.5
15000	103	46	194.0	194.0
15000	103	52	194.0	194.0
15000	103	65	194.0	194.0
15000	103	78	194.0	194.0
15000	103	103	194.0	194.0
20000	46	46	164.5	164.5
20000	52	46	164.5	164.5
20000	52	52	164.5	164.5
20000	65	46	185.0	185.0
20000	65	52	185.0	185.0
20000	65	65	185.0	185.0
20000	78	46	202.5	202.5
20000	78	52	202.5	202.5
20000	78	65	202.5	202.5
20000	78	78	202.5	202.5
20000	103	46	251.5	251.5
20000	103	52	251.5	251.5
20000	103	65	251.5	251.5
20000	103	78	251.5	251.5
20000	103	103	251.5	251.5