

FLANGE PROTECTION



Flange Protector Fasteners

974



Full-Face Flange Protectors

970 - 973, 975 - 977



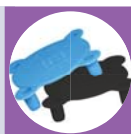
Pipe Chocks

969



Raised-Face Flange Protectors

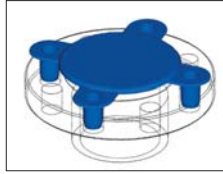
968 - 969





RAISED-FACE FLANGE PROTECTORS

150, 300, 600 & 900 Series Quick-Fit Raised-Face Protectors



Specifications:

- Material: Polyethylene
- Colors: Refer to Chart
- Meets ANSI B16.5 and API specifications
- Suitable for use on ASA and BS1560 flanges

Features:

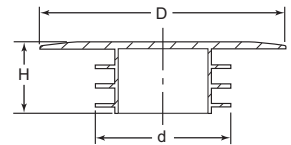
- Quickly fits into flange bolt holes
- Weather and petroleum resistant
- Requires no fasteners

Nominal Pipe Size (In)	Class Pressure Rating	Item No.	Color	Pack Qty.	Bulk Pack Qty.
1/2	125	1501/2A	Blue	1	600
1/2	150	1501/2A	Blue	1	600
1/2	300	3001/2A	Black	1	500
1/2	400	3001/2A	Black	1	500
1/2	600	3001/2A	Black	1	500
1/2	900	9001/2A	Black	1	400
1/2	1500	9001/2A	Black	1	400
3/4	125	1503/4A	Blue	1	550
3/4	150	1503/4A	Blue	1	550
3/4	300	3003/4A	Black	1	325
3/4	400	3003/4A	Black	1	325
3/4	600	3003/4A	Black	1	325
3/4	900	9003/4A	Black	1	300
3/4	1500	9003/4A	Black	1	300
1	125	1501A	Blue	1	400
1	150	1501A	Blue	1	400
1	300	3001A	Black	1	280
1	400	3001A	Black	1	280
1	600	3001A	Black	1	280
1	900	9001A	Black	1	250
1	1500	9001A	Black	1	250
1-1/4	125	1501-1/4A	Blue	1	350
1-1/4	150	1501-1/4A	Blue	1	350
1-1/4	300	3001-1/4A	Black	1	200
1-1/4	400	3001-1/4A	Black	1	200
1-1/4	600	3001-1/4A	Black	1	200
1-1/4	900	9001-1/4A	Black	1	200
1-1/4	1500	9001-1/4A	Black	1	200
1-1/2A	125	1501-1/2A	Blue	1	250

Nominal Pipe Size (In)	Class Pressure Rating	Item No.	Color	Pack Qty.	Bulk Pack Qty.
1-1/2A	150	1501-1/2A	Blue	1	250
1-1/2A	300	3001-1/2A	Black	1	150
1-1/2A	400	3001-1/2A	Black	1	150
1-1/2A	600	3001-1/2A	Black	1	150
1-1/2A	900	900-1-1/2A	Black	1	100
1-1/2A	1500	900-1-1/2A	Black	1	100
2	125	1502A	Blue	1	200
2	150	1502A	Blue	1	200
2	300	3002A	Black	1	125
2	400	3002A	Black	1	125
2	600	3002A	Black	1	125
2	900	9002A	Black	1	100
2	1500	9002A	Black	1	100
2-1/2A	125	1502-1/2A	Blue	1	150
2-1/2A	150	1502-1/2A	Blue	1	150
2-1/2A	300	3002-1/2A	Black	1	100
2-1/2A	400	3002-1/2A	Black	1	100
2-1/2A	600	3002-1/2A	Black	1	100
2-1/2A	900	9002-1/2A	Black	1	100
2-1/2A	1500	9002-1/2A	Black	1	100
3	125	1503A	Blue	1	100
3	150	1503A	Blue	1	100
3	300	3003A	Black	1	100
3	400	3003A	Black	1	100
3	600	3003A	Black	1	100
3	900	9003A	Black	1	50
3-1/2	125	1503-1/2A	Blue	1	100
3-1/2	150	1503-1/2A	Blue	1	100
3-1/2	300	3003-1/2A	Black	1	80

Nominal Pipe Size (In)	Class Pressure Rating	Item No.	Color	Pack Qty.	Bulk Pack Qty.
4	125	1504A	Blue	1	100
4	150	1504A	Blue	1	100
4	300	3004A	Black	1	80
4	600	6004A	Black	1	50
4	900	9004A	Black	1	50
5	150	900098	Blue	1	50
5	300	900099	Blue	1	50
6	125	1506A	Blue	1	90
6	150	1506A	Blue	1	90
6	300	3006A	Black	1	40
6	600	6006A	Black	1	30
6	900	9006A	Black	1	20
8	125	1508A	Blue	1	70
8	150	1508A	Blue	1	70
8	300	3008A	Black	1	45
8	600	6008A	Black	1	20
8	900	9008A	Black	1	20
10	125	15010A	Blue	1	35
10	150	15010A	Blue	1	35
10	300	30010A	Black	1	35
10	600	60010A	Black	1	10
10	900	90010A	Black	1	10
12	125	15012A	Blue	1	30
12	150	15012A	Blue	1	30
12	300	30012A	Black	1	25
12	600	60012A	Black	1	10
12	900	90012A	Black	1	10

PIR Series Push-In Raised Face Protectors



Specifications:

- Material: Polyethylene
- Color: Yellow
- Suitable for ANSI and DIN flanges

Features:

- The flexible fins ensure a snug fit into the bore
- Protects raised face against dirt, moisture, paint and sand blasting
- Parts fit 150, 300, 600, 900, 1500 and 2500 pound flanges
- Requires no fasteners

Item No.	Nominal Pipe Size In.	DIN	d In	D In	H In	Pack Qty.	Bulk Pack Qty.
PIR494283A	1/2	DN 15	0.748	1.772	0.650	1	500
PIR494284A	3/4	DN 20	0.945	2.283	0.650	1	500
PIR494285A	1	DN 25	1.181	2.756	0.768	1	500
PIR494286A	1-1/4	DN 32	1.535	3.071	1.161	1	500
PIR494287A	1-1/2	DN 40	1.772	3.465	1.161	1	400
PIR494288A	2	DN 50	2.205	4.016	1.161	1	200
PIR494289A	2-1/2	DN 65	2.835	4.803	1.358	1	200
PIR494290A	3	DN 80	3.346	5.433	1.358	1	150
PIR494291A	4	DN 100	4.685	6.417	1.437	1	100
PIR494292A	5	DN 125	5.630	7.480	1.437	1	100
PIR494293A	6	DN 150	6.693	8.465	1.437	1	50
PIR494294A	8	DN 200	8.701	10.630	1.634	1	30
PIR494295A	10	DN 250	10.827	13.583	1.634	1	20
PIR494296A	12	DN 300	12.795	16.063	1.634	1	10

Full line of Pipe Caps to fit nominal pipe size range from 1/8" to 60"

- 114 Parts
- 6 Different Styles
- 2 Different Materials
- Free Samples Available



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RAISED-FACE FLANGE PROTECTORS



ALLIANCE

PGR Series Adhesive Peel & Stick Raised-Face Protectors



Specifications:

- Meets ANSI/ASME B16.5 specifications
- Material: Polyethylene
- Color: Black

Features:

- Adhesive backed, peel and stick design
- Each size will protect the raised-face for the 150, 300, 400, 600, 900, 1500 and 2500 pound flanges
- Special adhesive bonds tightly and leaves no residue under normal conditions
- Requires no fasteners

Item No.	Nominal Pipe Size (In)	Actual O.D. In	Pack Qty.	Bulk Pack Qty.
PGR1/2A	1/2	1.380	1	50
PGR3/4A	3/4	1.690	1	50
PGR1A	1	2.000	1	50
PGR1-1/4A	1-1/4	2.500	1	50
PGR1-1/2A	1-1/2	2.880	1	50
PGR2A	2	3.620	1	50
PGR2-1/2A	2-1/2	4.120	1	25
PGR3A	3	5.000	1	50

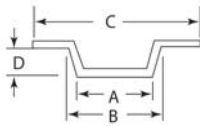
Item No.	Nominal Pipe Size (In)	Actual O.D. In	Pack Qty.	Bulk Pack Qty.
PGR3-1/2A	3-1/2	5.500	1	50
PGR4B	4	6.190	1	50
PGR5A	5	7.310	1	50
PGR6A	6	8.500	1	50
PGR8A	8	10.620	1	25
PGR10A	10	12.750	1	25
PGR12A	12	15.000	1	25

FPR Series Raised-Face Protector Plugs



Specifications:

- Material: Polyethylene
- Color: Black
- Meets ANSI/ASME B16.5 Specifications



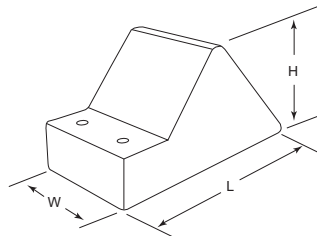
Features:

- Protects petroleum, gas and water type valve flanges
- Protects raised machine face and pipe interior from dirt and moisture during shot and sandblasting operations
- Bolt holes are not covered by flange plugs
- Tapered plug design fits snugly into the pipe's interior
- Requires no fasteners

Item No.	Nominal Pipe Size In	A In	B In	C In	D In	Flange Thickness In	Pack Qty.	Bulk Pack Qty.
FPR1A	1	1.110	1.156	2.080	0.375	0.150	1	2000
FPR2A	2	2.050	2.075	3.805	0.440	0.140	1	400
FPR2-1/2A	2-1/2	2.490	2.510	4.315	0.480	0.130	1	400
FPR3A	3	3.030	3.110	5.195	0.730	0.132	1	450
FPR4A	4	3.995	4.095	6.550	0.925	0.130	1	250

Item No.	Nominal Pipe Size In	A In	B In	C In	D In	Flange Thickness In	Pack Qty.	Bulk Pack Qty.
FPR5A	5	4.990	5.080	7.475	1.070	0.125	1	175
FPR6A	6	5.950	6.050	8.810	1.265	0.125	1	100
FPR8A	8	8.000	8.070	11.020	1.275	0.145	1	70
FPR10A	10	9.995	10.150	12.925	1.330	0.170	1	50
FPR12A	12	12.010	12.155	15.215	1.330	0.165	1	35

PCK Series Pipe Chocks



ALLIANCE

Specifications:

- Material: LDPE

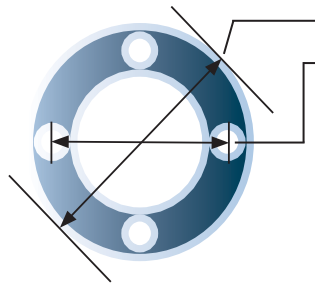
Features:

- Pipe chocks are used to help secure pipe during transit
- Nails are included

Item No.	Color	L		W		H		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm	In	mm		
PCK0400B	ORANGE	4.500	114.30	2.750	69.85	2.000	50.80	1	50
PCK0800B	ORANGE	8.000	203.20	3.500	88.90	3.000	76.20	1	20



RFL/PCF/PRB Series Full-Face Flange Protectors



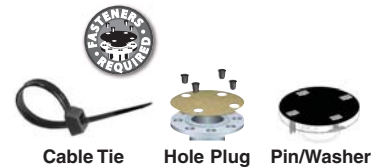
Actual Outside Diameter (O.D.)

Bolt Circle Diameter

1. Measure your flange's O.D. and its Bolt Circle Diameter as shown.
2. Refer to the RFL, PCF, and PRB below and locate your Actual (O.D.) and Bolt Circle Diameter.
3. Any of the part numbers shown in the part number columns to the right of the Bolt Circle Diameter column will work on your flange.

Features:

- Designed per ANSI B16.5 and ASME b16.47 flange dimensions
- Provides full face flange protection on the flange's exposed sealing surface
- Specifically designed with multiple holes to match the flange's bolt hole diameter and bolt circle
- Fasteners required - see chart below



Nominal Pipe Size	Class Pressure Rating	Actual (O.D.) In	Bolt Circle Dia.	Hole Size	Item No.			Pack Qty.	Bulk Pack Qty.	Fasteners			
					RFL Series HDPE	PCF Series PP	PRB Series Pressboard			Cable Tie	Hole Plug	PIN	Washer
1/2	150	3.500	2.375	0.625	RFD150-1/2A	PCF150-1/2A	PRB150-1/2A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1/2	300	3.750	2.625	0.625	RFD300-1/2A	PCF300-1/2A	PRB300-1/2A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1/2	400	3.750	2.625	0.625	RFD300-1/2A	PCF300-1/2A	PRB300-1/2A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1/2	600	3.750	2.625	0.625	RFD300-1/2A	PCF300-1/2A	PRB300-1/2A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1/2	900	4.750	3.250	0.875	RFL900-1/2A	PCF900-1/2A	PRB900-1/2A	1	50	CT022B	FLS015B	PIN2-1/4B	WAS1-3/8A
1/2	1500	4.750	3.250	0.875	RFL900-1/2A	PCF900-1/2A	PRB900-1/2A	1	50	CT022B	FLS015B	PIN2-1/4B	WAS1-3/8A
1/2	2500	5.250	3.500	0.875	RFL2500-1/2A	PCF2500-1/2A	PRB2500-1/2A	1	50	CT022B	FLS015B	PIN2-1/4B	WAS1-3/8A
3/4	150	3.875	2.750	0.625	RFD150-3/4A	PCF150-3/4A	PRB150-3/4A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
3/4	300	4.625	3.250	0.750	RFL300-3/4A	PCF300-3/4A	PRB300-3/4A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
3/4	400	4.625	3.250	0.750	RFL300-3/4A	PCF300-3/4A	PRB300-3/4A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
3/4	600	4.625	3.250	0.750	RFL300-3/4A	PCF300-3/4A	PRB300-3/4A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
3/4	900	5.125	3.500	0.875	RFL900-3/4A	PCF900-3/4A	PRB900-3/4A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3/4	1500	5.125	3.500	0.875	RFL900-3/4A	PCF900-3/4A	PRB900-3/4A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3/4	2500	5.500	3.750	0.875	RFL2500-3/4A	PCF2500-3/4A	PRB2500-3/4A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
1	150	4.250	3.125	0.625	RFD150-1A	PCF150-1A	PRB150-1A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1	300	4.875	3.500	0.750	RFL300-1A	PCF300-1A	PRB300-1A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1	400	4.875	3.500	0.750	RFL300-1A	PCF300-1A	PRB300-1A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1	600	4.875	3.500	0.750	RFL300-1A	PCF300-1A	PRB300-1A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1	900	5.875	4.000	1.000	RFL900-1A	PCF900-1A	PRB900-1A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
1	1500	5.875	4.000	1.000	RFL900-1A	PCF900-1A	PRB900-1A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
1	2500	6.250	4.250	1.000	RFL2500-1A	PCF2500-1A	PRB2500-1A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
1-1/4	150	4.625	3.500	0.625	RFD150-1-1/4A	PCF150-1-1/4A	PRB150-1-1/4A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1-1/4	300	5.250	3.875	0.750	RFL300-1-1/4A	PCF300-1-1/4A	PRB300-1-1/4A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1-1/4	400	5.250	3.875	0.750	RFL300-1-1/4A	PCF300-1-1/4A	PRB300-1-1/4A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1-1/4	600	5.250	3.875	0.750	RFL300-1-1/4A	PCF300-1-1/4A	PRB300-1-1/4A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1-1/4	900	6.250	4.875	1.000	RFL900-1-1/4A	PCF900-1-1/4A	PRB900-1-1/4A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
1-1/4	1500	6.250	4.875	1.000	RFL900-1-1/4A	PCF900-1-1/4A	PRB900-1-1/4A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
1-1/4	2500	7.250	5.125	1.125	RFL2500-1-1/4A	PCF2500-1-1/4A	PRB2500-1-1/4A	1	50	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
1-1/2	150	5.000	3.875	0.625	RFD150-1-1/2A	PCF150-1-1/2A	PRB150-1-1/2A	1	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1-1/2	300	6.125	4.500	0.875	RFL300-1-1/2A	PCF300-1-1/2A	PRB300-1-1/2A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
1-1/2	400	6.125	4.500	0.875	RFL300-1-1/2A	PCF300-1-1/2A	PRB300-1-1/2A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
1-1/2	600	6.125	4.500	0.875	RFL300-1-1/2A	PCF300-1-1/2A	PRB300-1-1/2A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
1-1/2	900	7.000	4.875	1.125	RFL900-1-1/2A	PCF900-1-1/2A	PRB900-1-1/2A	1	50	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
1-1/2	1500	7.000	4.875	1.125	RFL900-1-1/2A	PCF900-1-1/2A	PRB900-1-1/2A	1	50	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
1-1/2	2500	8.000	5.750	1.250	RFL2500-1-1/2A	PCF2500-1-1/2A	PRB2500-1-1/2A	1	50	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A

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FULL-FACE FLANGE PROTECTORS



ALLIANCE

RFL/PCF/PRB Series
Full-Face Flange Protectors (continued)



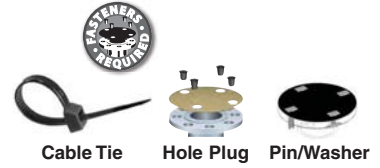
RFL Series



PCF Series



PRB Series



Nominal Pipe Size	Class Pressure Rating	Actual (O.D.) In	Bolt Circle Dia.	Hole Size	Item No.			Pack Qty.	Bulk Pack Qty.	Fasteners			
					RFL Series HDPE	PCF Series PP	PRB Series Pressboard			Cable Tie	Hole Plug	PIN	Washer
2	150	6.000	4.750	0.750	RFL150-2A	PCF150-2A	PRB150-2A	1	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
2	300	6.500	5.000	0.750	RFL300-2A	PCF300-2A	PRB300-2A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	400	6.500	5.000	0.750	RFL300-2A	PCF300-2A	PRB300-2A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	600	6.500	5.000	0.750	RFL300-2A	PCF300-2A	PRB300-2A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	900	8.500	6.500	1.000	RFL900-2A	PCF900-2A	PRB900-2A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	1500	8.500	6.500	1.000	RFL900-2A	PCF900-2A	PRB900-2A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	2500	9.250	6.750	1.125	RFL2500-2A	PCF2500-2A	PRB2500-2A	1	50	CT027B	FLS025B	PIN3-1/4B	WAS1-3/8A
2-1/2	150	7.000	5.500	0.750	RFL150-2-1/2A	PCF150-2-1/2A	PRB150-2-1/2A	1	50	CT025B	FLS010B	PIN2-1/4B	WAS1-3/8A
2-1/2	300	7.500	5.875	0.875	RFL300-2-1/2A	PCF300-2-1/2A	PRB300-2-1/2A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
2-1/2	400	7.500	5.875	0.875	RFL300-2-1/2A	PCF300-2-1/2A	PRB300-2-1/2A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
2-1/2	600	7.500	5.875	0.875	RFL300-2-1/2A	PCF300-2-1/2A	PRB300-2-1/2A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
2-1/2	900	9.625	7.500	1.125	RFL900-2-1/2A	PCF900-2-1/2A	PRB900-2-1/2A	1	50	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
2-1/2	1500	9.625	7.500	1.125	RFL900-2-1/2A	PCF900-2-1/2A	PRB900-2-1/2A	1	50	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
2-1/2	2500	10.500	7.750	1.250	RFL2500-2-1/2A	PCF2500-2-1/2A	PRB2500-2-1/2A	1	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
3	150	7.500	6.000	0.750	RFL150-3A	PCF150-3A	PRB150-3A	1	50	CT025B	FLS010B	PIN2-1/4B	WAS1-3/8A
3	300	8.250	6.625	0.875	RFL300-3A	PCF300-3A	PRB300-3A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3	400	8.250	6.625	0.875	RFL300-3A	PCF300-3A	PRB300-3A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3	600	8.250	6.625	0.875	RFL300-3A	PCF300-3A	PRB300-3A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3	900	9.500	7.500	1.000	RFL900-3A	PCF900-3A	PRB900-3A	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
3	1500	10.500	8.000	1.250	RFL1500-3A	PCF1500-3A	PRB1500-3A	1	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
3	2500	12.000	9.000	1.375	RFL2500-3A	PCF2500-3A	PRB2500-3A	1	25	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
3-1/2	150	8.500	7.000	0.750	RFL150-3-1/2A	PCF150-3-1/2A	PRB150-3-1/2A	1	50	CT025B	FLS010B	PIN2-1/4B	WAS1-3/8A
3-1/2	300	9.000	7.250	0.875	RFL300-3-1/2A	PCF300-3-1/2A	PRB300-3-1/2A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3-1/2	400	9.000	7.250	1.000	RFL600-3-1/2A	—	—	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
3-1/2	600	9.000	7.250	1.000	RFL600-3-1/2A	—	—	1	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
4	150	9.000	7.500	0.750	RFL150-4A	PCF150-4A	PRB150-4A	1	25	CT025B	FLS010B	PIN2-1/4B	WAS1-3/8A
4	300	10.000	7.875	0.875	RFL300-4A	PCF300-4A	PRB300-4A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
4	400	10.000	7.875	1.000	RFL400-4A	—	—	1	50	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A
4	600	10.750	8.500	1.000	RFL600-4A	PCF600-4A	PRB600-4A	1	50	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A
4	900	11.500	9.250	1.250	RFL900-4A	PCF900-4A	PRB900-4A	1	25	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
4	1500	12.250	9.500	1.375	RFL1500-4A	PCF1500-4A	PRB1500-4A	1	25	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
4	2500	14.000	10.750	1.625	RFL2500-4A	PCF2500-4A	PRB2500-4A	1	25	CT029B	FLS045B	—	—
5	150	10.000	8.500	0.875	RFL150-5A	PCF150-5A	PRB150-5A	1	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
5	300	11.000	9.250	0.875	RFL300-5A	PCF300-5A	PRB300-5A	1	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
5	400	11.000	9.250	1.000	RFL400-5A	—	—	1	25	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A
5	600	13.000	10.500	1.125	RFL600-5A	PCF600-5A	PRB600-5A	1	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
5	900	13.750	11.000	1.375	RFL900-5A	PCF900-5A	PRB900-5A	1	25	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
5	1500	14.750	11.500	1.625	RFL1500-5A	PCF1500-5A	PRB1500-5A	1	25	CT029B	FLS045B	—	—
5	2500	16.500	12.750	1.875	RFL2500-5A	PCF2500-5A	PRB2500-5A	1	25	CT029B	FLS055B	—	—
6	150	11.000	9.500	0.875	RFL150-6A	PCF150-6A	PRB150-6A	1	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
6	300	12.500	10.625	0.875	RFL300-6A	PCF300-6A	PRB300-6A	1	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
6	400	12.500	10.625	1.000	RFL400-6A	—	—	1	25	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A
6	600	14.000	11.500	1.125	RFL600-6A	PCF600-6A	PRB600-6A	1	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
6	900	15.000	12.500	1.250	RFL900-6A	PCF900-6A	PRB900-6A	1	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
6	1500	15.500	12.500	1.500	RFL1500-6A	PCF1500-6A	PRB1500-6A	1	25	CT029B	FLS040B	—	—
6	2500	19.000	14.500	2.125	RFL2500-6A	PCF2500-6A	PRB2500-6A	1	25	CT076B	FLS065B	—	—
8	150	13.500	11.750	0.875	RFL150-8A	PCF150-8A	PRB150-8A	1	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
8	300	15.000	13.000	1.000	RFL300-8A	PCF300-8A	PRB300-8A	1	25	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
8	400	15.000	13.000	1.125	RFL400-8A	—	—	1	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
8	600	16.500	13.750	1.250	RFL600-8A	PCF600-8A	PRB600-8A	1	25	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
8	900	18.500	15.500	1.500	RFL900-8A	PCF900-8A	PRB900-8A	1	25	CT027B	FLS040B	PIN3-1/4B	WAS1-3/8A
8	1500	19.000	15.500	1.750	RFL1500-8A	PCF1500-8A	PRB1500-8A	1	25	CT029B	FLS050B	—	—
8	2500	21.750	17.250	2.125	RFL2500-8A	PCF2500-8A	PRB2500-8A	1	10	CT076B	FLS065B	—	—

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RFL/PCF/PRB Series Full-Face Flange Protectors (continued)



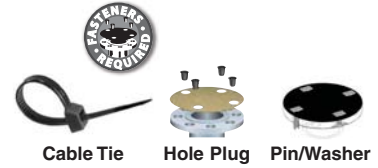
RFL Series



PCF Series



PRB Series



Nominal Pipe Size	Class Pressure Rating	Actual (O.D.) In	Bolt Circle Dia.	Hole Size	Item No.			Pack Qty.	Bulk Pack Qty.	Fasteners			
					RFL Series HDPE	PCF Series PP	PRB Series Pressboard			Cable Tie	Hole Plug	PIN	Washer
10	150	16.000	14.250	1.000	RFL150-10A	PCF150-10A	PRB150-10A	1	25	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
10	300	17.500	15.250	1.125	RFL300-10A	PCF300-10A	PRB300-10A	1	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
10	400	17.500	15.250	1.250	RFL400-10A	—	—	1	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
10	600	20.000	17.000	1.375	RFL600-10A	PCF600-10A	PRB600-10A	1	25	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
10	900	21.500	18.500	1.500	RFL900-10A	PCF900-10A	PRB900-10A	1	10	CT027B	FLS040B	—	WAS1-3/4A
10	1500	23.000	19.000	2.000	RFL1500-10A	PCF1500-10A	PRB1500-10A	1	10	CT076B	FLS060B	—	—
10	2500	26.500	21.250	2.625	RFL2500-10A	PCF2500-10A	PRB2500-10A	1	10	CT076B	FLS075B	—	—
12	150	19.000	17.000	1.000	RFL150-12A	PCF150-12A	PRB150-12A	1	25	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
12	300	20.500	17.750	1.250	RFL300-12A	PCF300-12A	PRB300-12A	1	10	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
12	400	20.500	17.750	1.375	RFL400-12A	—	—	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
12	600	22.000	19.250	1.375	RFL600-12A	PCF600-12A	PRB600-12A	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
12	900	24.000	21.000	1.500	RFL900-12A	PCF900-12A	PRB900-12A	1	10	CT029B	FLS040B	—	—
12	1500	26.500	22.500	2.125	RFL1500-12A	PCF1500-12A	PRB1500-12A	1	10	CT076B	FLS065B	—	—
12	2500	30.000	24.380	2.875	RFL2500-12A	PCF2500-12A	PRB2500-12A	1	10	CT076B	—	—	—
14	150	21.000	18.750	1.125	RFL150-14A	PCF150-14A	PRB150-14A	1	10	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
14	300	23.000	20.250	1.250	RFL300-14A	PCF300-14A	PRB300-14A	1	10	CT025B	FLS030B	PIN3-1/4B	—
14	400	23.000	20.250	1.375	RFL400-14A	—	—	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
14	600	23.750	20.750	1.500	RFL600-14A	PCF600-14A	PRB600-14A	1	10	CT027B	FLS040B	—	—
14	900	25.250	22.000	1.625	RFL900-14A	PCF900-14A	PRB900-14A	1	10	CT029B	FLS045B	—	—
14	1500	29.500	25.000	2.375	RFL1500-14A	PCF1500-14A	PRB1500-14A	1	10	CT076B	FLS070B	—	—
16	150	23.500	21.250	1.125	RFL150-16A	PCF150-16A	PRB150-16A	1	10	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
16	300	25.500	22.500	1.375	RFL300-16A	PCF300-16A	PRB300-16A	1	10	CT025B	FLS035B	PIN3-1/4B	WAS1-3/4A
16	400	25.500	22.500	1.500	RFL400-16A	—	—	1	10	CT027B	FLS040B	PIN3-1/4B	WAS1-3/4A
16	600	27.000	23.750	1.625	RFL600-16A	PCF600-16A	PRB600-16A	1	10	CT027B	FLS045B	—	—
16	900	27.750	24.250	1.750	RFL900-16A	PCF900-16A	PRB900-16A	1	10	CT029B	FLS050B	—	—
16	1500	32.500	27.750	2.625	RFL1500-16A	PCF1500-16A	PRB1500-16A	1	10	CT076B	FLS075B	—	—
18	150	25.000	22.750	1.250	RFL150-18A	PCF150-18A	PRB150-18A	1	10	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
18	300	28.000	24.750	1.375	RFL300-18A	PCF300-18A	PRB300-18A	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
18	400	28.000	24.750	1.500	RFL400-18A	—	—	1	10	CT027B	FLS040B	PIN3-1/4B	WAS1-3/4A
18	600	29.250	25.750	1.750	RFL600-18A	PCF600-18A	PRB600-18A	1	10	CT027B	FLS050B	—	—
18	900	31.000	27.000	2.000	RFL900-18A	PCF900-18A	PRB900-18A	1	10	CT076B	FLS060B	—	—
18	1500	36.000	30.500	2.875	RFL1500-18A	PCF1500-18A	PRB1500-18A	1	10	CT076B	—	—	—
20	150	27.500	25.000	1.250	RFL150-20A	PCF150-20A	PRB150-20A	1	10	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
20	300	30.500	27.000	1.375	RFL300-20A	PCF300-20A	PRB300-20A	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
20	400	30.500	27.000	1.625	RFL400-20A	—	—	1	10	CT029B	FLS045B	—	—
20	600	32.000	28.500	1.750	RFL600-20A	PCF600-20A	PRB600-20A	1	10	CT029B	FLS050B	—	—
20	900	33.750	29.500	2.125	RFL900-20A	PCF900-20A	PRB900-20A	1	10	CT076B	FLS065B	—	—
20	1500	38.750	32.750	3.125	RFL1500-20A	PCF1500-20A	PRB1500-20A	1	10	CT080B	—	—	—
22	150	29.500	27.250	1.375	RFL150-22A	PCF150-22A	PRB150-22A	1	10	CT025B	FLS035B	PIN3-1/4B	WAS1-3/4A
22	300	33.000	29.250	1.625	RFL300-22A	PCF300-22A	PRB300-22A	1	10	CT029B	FLS045B	PIN3-1/4B	WAS1-3/4A
22	400	33.000	29.250	1.750	RFL400-22A	—	—	1	10	CT029B	FLS050B	—	—
22	600	34.250	30.625	1.750	RFL600-22A	PCF600-22A	PRB600-22A	1	10	CT029B	FLS050B	—	—
24	150	32.000	29.500	1.375	RFL150-24A	PCF150-24A	PRB150-24A	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
24	300	36.000	32.000	1.625	RFL300-24A	PCF300-24A	PRB300-24A	1	10	CT029B	FLS045B	—	—
24	400	36.000	32.000	1.875	RFL400-24A	—	—	1	10	CT029B	FLS055B	—	—
24	600	37.000	33.000	2.000	RFL600-24A	PCF600-24A	PRB600-24A	1	10	CT076B	FLS060B	—	—
24	900	41.000	35.500	2.625	RFL900-24A	PCF900-24A	PRB900-24A	1	10	CT076B	FLS075B	—	—
24	1500	46.000	39.000	3.625	RFL1500-24A	PCF1500-24A	PRB1500-24A	1	10	CT080B	FLS080B	—	—
26	150	34.250	31.750	1.375	RFL150-26A	PCF150-26A	PRB150-26A	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
26	300	38.250	34.500	1.750	RFL300-26A	PCF300-26A	PRB300-26A	1	10	CT029B	FLS050B	—	—
26	400	38.250	34.500	1.875	RFL400-26A	—	—	1	10	CT029B	FLS055B	—	—
26	600	40.000	36.000	2.000	RFL600-26A	PCF600-26A	PRB600-26A	1	10	CT076B	FLS060B	—	—
26	900	42.750	37.500	2.875	RFL900-26A	PCF900-26A	PRB900-26A	1	10	CT076B	—	—	—
28	150	36.500	34.000	1.375	RFL150-28A	PCF150-28A	PRB150-28A	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
28	300	40.750	37.000	1.750	RFL300-28A	PCF300-28A	PRB300-28A	1	10	CT029B	FLS050B	—	—
28	400	40.750	37.000	2.000	RFL400-28A	—	—	1	10	CT029B	FLS060B	—	—
28	600	42.250	38.000	2.125	RFL600-28A	PCF600-28A	PRB600-28A	1	10	CT076B	FLS065B	—	—
28	900	46.000	40.250	3.125	RFL900-28A	PCF900-28A	PRB900-28A	1	10	CT076B	—	—	—

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RFL/PCF/PRB Series
Full-Face Flange Protectors (continued)



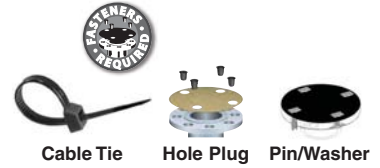
RFL Series



PCF Series



PRB Series



Nominal Pipe Size	Class Pressure Rating	Actual (O.D.) In	Bolt Circle Dia.	Hole Size	Item No.			Pack Qty.	Bulk Pack Qty.	Fasteners			
					RFL Series HDPE	PCF Series PP	PRB Series Pressboard			Cable Tie	Hole Plug	PIN	Washer
30	150	38.750	36.000	1.375	RFL150-30A	PCF150-30A	PRB150-30A	1	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
30	300	43.000	39.250	1.875	RFL300-30A	PCF300-30A	PRB300-30A	1	10	CT029B	FLS065B	—	—
30	400	43.000	39.250	2.125	RFL400-30A	—	—	1	10	CT076B	FLS065B	—	—
30	600	44.500	40.250	2.125	RFL600-30A	PCF600-30A	PRB600-30A	1	10	CT076B	FLS065B	—	—
30	900	48.500	42.750	3.125	RFL900-30A	—	—	1	1	CT076B	—	—	—
32	150	41.750	38.500	1.625	RFL150-32A	PCF150-32A	PRB150-32A	1	10	CT029B	FLS045B	—	—
32	300	45.250	41.500	2.000	RFL300-32A	PCF300-32A	PRB300-32A	1	10	CT029B	FLS060B	—	—
32	400	45.250	41.500	2.125	RFL400-32A	—	—	1	10	CT076B	FLS065B	—	—
32	600	47.000	42.500	2.375	RFL600-32A	PCF600-32A	PRB600-32A	1	10	CT076B	FLS070B	—	—
32	900	51.750	45.500	3.375	RFL900-32A	—	—	1	10	CT076B	—	—	—
34	150	43.750	40.500	1.625	RFL150-34A	PCF150-34A	PRB150-34A	1	10	CT029B	FLS045B	—	—
34	300	47.500	43.500	2.000	RFL300-34A	PCF300-34A	PRB300-34A	1	10	CT076B	FLS060B	—	—
34	400	47.500	43.500	2.125	RFL400-34A	—	—	1	10	CT076B	FLS065B	—	—
34	600	49.000	44.500	2.375	RFL600-34A	—	—	1	10	CT076B	FLS070B	—	—
34	900	55.000	48.250	3.625	RFL900-34A	—	—	1	10	CT076B	FLS080B	—	—
36	150	46.000	42.750	1.625	RFL150-36A	PCF150-36A	PRB150-36A	1	10	CT029B	FLS045B	—	—
36	300	50.000	46.000	2.125	RFL300-36A	—	—	1	10	CT076B	FLS065B	—	—
36	400	50.000	46.000	2.125	RFL400-36A	—	—	1	10	CT076B	FLS065B	—	—
36	600	51.750	47.000	2.625	RFL600-36A	—	—	1	10	CT076B	FLS075B	—	—
36	900	57.500	50.750	3.625	RFL900-36A	—	—	1	10	CT076B	FLS080B	—	—
38	150	48.750	45.250	1.625	RFL150-38A	—	—	1	10	CT080B	FLS045B	—	—
38	300	46.000	43.000	1.625	RFL300-38A	—	—	1	10	CT080B	FLS045B	—	—
38	400	47.500	44.000	1.875	RFL400-38A	—	—	1	10	CT080B	FLS055B	—	—
38	600	50.000	45.750	2.375	RFL600-38A	—	—	1	10	CT080B	FLS070B	—	—
38	900	57.500	50.750	3.625	RFL900-38A	—	—	1	10	CT080B	FLS080B	—	—
40	150	50.750	47.250	1.625	RFL150-40A	—	—	1	1	CT080B	FLS045B	—	—
40	300	48.750	45.500	1.750	RFL300-40A	—	—	1	1	CT080B	FLS050B	—	—
40	400	50.000	46.250	2.000	RFL400-40A	—	—	1	1	CT080B	FLS060B	—	—
40	600	52.000	47.750	2.375	RFL600-40A	—	—	1	1	CT080B	FLS070B	—	—
40	900	59.500	52.750	3.625	RFL900-40A	—	—	1	1	CT080B	FLS080B	—	—
42	150	53.000	49.500	1.625	RFL150-42A	—	—	1	1	CT080B	FLS045B	—	—
42	300	50.750	47.500	1.750	RFL300-42A	—	—	1	1	CT080B	FLS050B	—	—
42	400	52.000	48.250	2.000	RFL400-42A	—	—	1	1	CT080B	FLS060B	—	—
42	600	55.250	50.500	2.625	RFL600-42A	—	—	1	1	CT080B	FLS075B	—	—
44	150	55.250	51.750	1.625	RFL150-44A	—	—	1	1	CT080B	FLS045B	—	—
44	300	53.250	49.750	1.875	RFL300-44A	—	—	1	1	CT080B	FLS055B	—	—
44	400	54.500	50.500	2.125	RFL400-44A	—	—	1	1	CT080B	FLS065B	—	—
44	600	57.250	52.500	2.625	RFL600-44A	—	—	1	1	CT080B	FLS075B	—	—
46	150	57.250	53.750	1.625	RFL150-46A	—	—	1	1	CT080B	FLS045B	—	—
46	300	55.750	52.000	2.000	RFL300-46A	—	—	1	1	CT080B	FLS060B	—	—
46	400	56.750	52.750	2.125	RFL400-46A	—	—	1	1	CT080B	FLS065B	—	—
46	600	59.500	54.750	2.625	RFL600-46A	—	—	1	1	CT080B	FLS075B	—	—
48	150	59.500	56.000	1.625	RFL150-48A	—	—	1	1	CT080B	FLS045B	—	—
48	300	57.750	54.000	2.000	RFL300-48A	—	—	1	1	CT080B	FLS060B	—	—
48	400	59.500	55.250	2.375	RFL400-48A	—	—	1	1	CT080B	FLS070B	—	—

CABLE TIES

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Pages 599 - 608



CTCS Series
PVC Coated Stainless Steel Ties



Specifications:

- 316 Grade Stainless Steel available with Black PVC Coating
- Temperature Range: -112° (-80°C) to 302°F (150°C)

Features:

- Coated version offers edge protection & prevents corrosion between metals

Item No.	Length		Width		Maximum Bundle Diameter		Tensile Strength		Pack Qty.
	In	mm	In	mm	In	mm	Lbs	N	
CTCS0150B	5.91	150	0.181	4.6	1.18	30	112.5	500	100
CTCS0200B	7.87	200	0.181	4.6	1.97	50	112.5	500	100
CTCS0360B	14.17	360	0.181	4.6	3.94	100	112.5	500	100
CTCS0520B	20.47	520	0.181	4.6	6.14	156	112.5	500	100
CTCS0680B	26.77	680	0.181	4.6	8.15	207	112.5	500	100
CTCS1200B	7.87	200	0.311	7.9	1.18	30	250.8	1115	100
CTCS1360B	14.17	360	0.311	7.9	1.97	50	250.8	1115	100
CTCS1520B	20.47	520	0.311	7.9	3.94	100	250.8	1115	100
CTCS1680B	26.77	680	0.311	7.9	6.14	156	250.8	1115	100
CTCS1840B	33.07	840	0.311	7.9	8.15	207	250.8	1115	100

FLS Series
Flange Protector Retainer Plugs

ALLIANCE

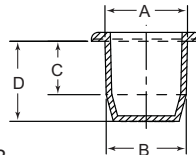


Specifications:

- Material: PVC
- Color: Black

Features:

- Used to secure the PRB, PCF and RFL Series on pages 970 - 973



Item No.	To Fit Bolt Hole	A	B	C	D	Pack Qty.	Bulk Pack Qty.
	In	In	In	In	In		
FLS005B	5/8	0.640	0.625	0.750	1.130	1	3000
FLS010B	3/4	0.775	0.755	0.750	1.130	1	2000
FLS015B	7/8	0.900	0.880	0.820	1.200	1	2500
FLS020B	1	1.020	1.010	0.990	1.370	1	1500
FLS025B	1-1/8	1.165	1.135	1.000	1.380	1	1000
FLS030B	1-1/4	1.275	1.260	1.120	1.490	1	1000
FLS035B	1-3/8	1.410	1.390	1.360	1.740	1	750
FLS040B	1-1/2	1.545	1.510	1.370	1.730	1	750

Item No.	To Fit Bolt Hole	A	B	C	D	Pack Qty.	Bulk Pack Qty.
	In	In	In	In	In		
FLS045B	1-5/8	1.665	1.645	1.360	1.730	1	500
FLS050B	1-3/4	1.770	1.750	1.360	1.700	1	400
FLS055B	1-7/8	1.905	1.875	1.630	2.000	1	300
FLS060B	2	2.035	2.000	1.630	2.000	1	250
FLS065B	2-1/8	2.160	2.125	1.630	2.000	1	200
FLS070B	2-3/8	2.410	2.375	1.750	2.130	1	100
FLS075B	2-5/8	2.660	2.625	1.750	2.130	1	50
FLS080B	3-5/8	3.660	3.625	1.750	2.130	1	50

PIN & WAS Series
Pins & Washers



Specifications:

- Material: Refer to Chart
- Color: Refer to Chart

PIN Series

Item No.	Size In	Material & Color	Pack Qty.	Bulk Pack Qty.
PIN2-1/4B	2.25	GALVANIZED STEEL	1	1000
PIN3-1/4B	3.25	GALVANIZED STEEL	1	1000



Features:

- Pins and washers are used together to securely fasten the flange protectors to the flange
- Used to secure PRB, PCF, RFL Series on pages 970 - 973

WAS Series

Item No.	Size In	Material & Color	Pack Qty.	Bulk Pack Qty.
WAS1-3/8A	1.375	HDPE Black	1	800
WAS1-3/4A	1.75	HDPE Black	1	800
WAS1-3/4B	1.75	GALVANIZED STEEL	1	2000

FULL-FACE FLANGE PROTECTORS



OFP Series Self-Locking Protectors

ALLIANCE



Specifications:

- Meets ANSI B16.5 and ASME B16.47 specification
- Material: Polyethylene
- Color: Black

Features:

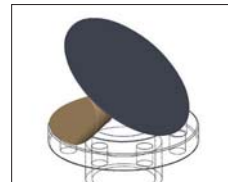
- Fast, easy installation and removal
- Four Integral arrows push thru the flange bolt holes to fasten the OFP firmly in place
- Requires no fasteners

Nominal Pipe Size (In)	Class Pressure Rating	Actual (OD) In	Item No.	Pack Qty.	Bulk Pack Qty.
1/2	150	3.500	OFP150-1/2A	1	50
1/2	300	3.750	OFP300-1/2A	1	500
1/2	400	3.750	OFP300-1/2A	1	500
1/2	600	3.750	OFP300-1/2A	1	500
3/4	150	3.875	OFP150-3/4A	1	500
3/4	300	4.625	OFP300-3/4A	1	300
3/4	400	4.625	OFP300-3/4A	1	300
3/4	600	4.625	OFP300-3/4A	1	300
1	150	4.250	OFP150-1A	1	50
1	300	4.875	OFP300-1A	1	300
1	400	4.875	OFP300-1A	1	300
1	600	4.875	OFP300-1A	1	300
1-1/4	300	5.250	OFP300-1-1/4A	1	50
1-1/4	400	5.250	OFP300-1-1/4A	1	50
1-1/4	600	5.250	OFP300-1-1/4A	1	50
1-1/2	150	5.000	OFP150-1-1/2A	1	200
1-1/2	300	6.125	OFP300-1-1/2A	1	200
2	150	6.000	OFP150-2A	1	50
2	300	6.500	OFP300-2A	1	50
2-1/2	150	7.000	OFP150-2-1/2A	1	50
2-1/2	300	7.500	OFP300-2-1/2A	1	50
3	150	7.500	OFP150-3A	1	50
3	300	8.250	OFP300-3A	1	50
3-1/2	150	8.500	OFP150-3-1/2A	1	200
3-1/2	300	9.000	OFP300-3-1/2A	1	50

Nominal Pipe Size (In)	Class Pressure Rating	Actual (OD) In	Item No.	Pack Qty.	Bulk Pack Qty.
4	150	9.000	OFP150-4A	1	50
4	300	10.000	OFP300-4A	1	50
5	150	10.000	OFP150-5A	1	50
5	300	11.000	OFP300-5A	1	25
6	150	11.000	OFP150-6A	1	25
6	300	12.500	OFP300-6A	1	50
8	150	13.500	OFP150-8A	1	50
8	300	15.000	OFP300-8A	1	50
10	150	16.000	OFP150-10A	1	50
10	300	17.500	OFP300-10A	1	50
12	150	19.000	OFP150-12A	1	50
12	300	20.500	OFP300-12A	1	10
14	150	21.000	OFP150-14A	1	10
14	300	23.000	OFP300-14A	1	10
16	150	23.500	OFP150-16A	1	10
16	300	25.500	OFP300-16A	1	10
18	150	25.000	OFP150-18A	1	10
18	300	28.000	OFP300-18A	1	10
20	150	27.500	OFP150-20A	1	10
20	300	30.500	OFP300-20A	1	10
22	150	29.500	OFP150-22A	1	10
24	150	32.000	OFP150-24A	1	10
24	300	36.000	OFP300-24A	1	10
30	150	38.750	OFP150-30A	1	10

PG Series Adhesive Peel & Stick Full-Face Protectors

ALLIANCE



Specifications:

- Meets ANSI B16.5 and ASME B16.47 specification
- Material: Polyethylene
- Color: Black

Features:

- 150 lb rating
- Adhesive backed, peel and stick design
- Full-face O.D. flange protection
- Special adhesive bonds tightly and leaves no residue under normal conditions
- Requires no fasteners

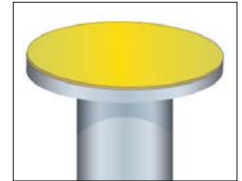
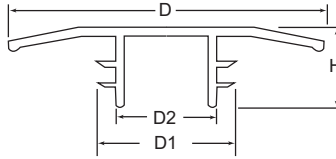
Item No.	Nominal Pipe Size In	Actual O.D. In	Pack Qty.	Bulk Pack Qty.
PG150-1/2A	1/2	3.500	1	50
PG150-3/4A	3/4	3.875	1	25
PG150-1A	1	4.250	1	50
PG150-1-1/4A	1-1/4	4.625	1	50
PG150-1-1/2A	1-1/2	5.000	1	50
PG150-2A	2	6.000	1	50
PG150-2-1/2A	2-1/2	7.000	1	50
PG150-3A	3	7.500	1	50

Item No.	Nominal Pipe Size In	Actual O.D. In	Pack Qty.	Bulk Pack Qty.
PG150-3-1/2A	3-1/2	8.500	1	25
PG150-4A	4	9.000	1	50
PG150-5A	5	10.000	1	50
PG150-6A	6	11.000	1	25
PG150-8A	8	13.500	1	25
PG150-10A	10	16.000	1	25
PG150-12A	12	19.000	1	25
PG150-14A	14	21.000	1	25

Item No.	Nominal Pipe Size In	Actual O.D. In	Pack Qty.	Bulk Pack Qty.
PG150-16A	16	23.500	1	25
PG150-18A	18	25.000	1	25
PG150-20A	20	27.500	1	10
PG150-24A	24	32.000	1	10
PG150-30A	30	38.750	1	10
PG150-36A	36	46.000	1	10



**PI Series
Push-In Full-Face Protectors**



Specifications:

- Material: Polyethylene
- Color: Yellow
- Meets ANSI B16.5 Class 150 flanges, DN2627-2638 and BS5504 flanges

Features:

- The flexible fins ensure a snug fit into the bore every time
- Requires no fasteners

Item No.	Nominal Pipe Size		D2		D1		D		H		Pack Qty.	Bulk Pack Qty.
	In	DIN	In	mm	In	mm	In	mm	In	mm		
PI10A	3/8	DN 10	0.275	6.98	0.555	14.09	3.385	85.97	0.606	15.39	1	700
PI15A	1/2	DN 15	0.358	9.09	0.755	19.17	3.543	89.99	0.633	16.07	1	500
PI20A	3/4	DN 20	0.563	14.30	0.944	23.97	3.937	99.99	0.830	21.08	1	350
PI25A	1	DN 25	0.724	18.38	1.177	29.89	4.330	109.98	0.826	20.98	1	600
PI32A	1-1/4	DN 32	0.885	22.47	1.539	39.09	5.354	135.99	0.787	19.98	1	500
PI40A	1-1/2	DN 40	1.181	29.99	1.771	44.98	5.748	145.99	0.826	20.98	1	200
PI50A	2	DN 50	1.574	39.97	2.204	55.98	6.299	159.99	0.799	20.29	1	150
PI65A	2-1/2	DN 65	2.086	52.98	2.834	71.98	7.126	181.00	0.807	20.49	1	200
PI80A	3	DN 80	2.637	66.97	3.346	84.98	7.677	194.99	0.972	24.68	1	150
PI100A	4	DN 100	3.543	89.99	4.301	109.24	8.543	216.99	0.929	23.59	1	100
PI125A	5	DN 125	4.370	110.99	5.275	133.98	9.685	245.99	1.027	26.08	1	70
PI150A	6	DN 150	5.492	139.49	6.456	163.98	11.023	279.98	1.267	32.18	1	50
PI200A	8	DN 200	7.362	186.94	8.212	208.58	13.228	335.99	1.318	33.47	1	25
PI250A	10	DN 250	9.606	243.99	10.472	265.98	15.866	403.50	1.401	35.58	1	15
PI300A	12	DN 300	11.181	283.99	12.559	318.99	17.716	449.98	1.909	48.48	1	5

**FF Series
Flexible Protectors**

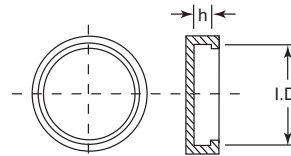


Specifications:

- Material: Flexible Polyethylene
- Color: Yellow
- Suitable for ANSI B16.5 Flanges

Features:

- Provides complete all-around flange protection including bolt holes
- Material is durable, yet flexible enough to provide an easy fit
- Requires no fasteners



Nominal Pipe Size (In)	Class Pressure Rating	Actual (I.D.) In	Height (h)	Item No.	Pack Qty.	Bulk Pack Qty.
1/2	150	3.500	0.441	FF31836A	1	500
1/2	300	3.750	0.559	FF31963A	1	500
1/2	400	3.750	0.559	FF31963A	1	500
1/2	600	3.750	0.559	FF31963A	1	500
3/4	150	3.940	0.480	FF31837A	1	250
3/4	300	4.618	0.618	FF31965A	1	100
3/4	400	4.618	0.618	FF31965A	1	100
3/4	600	4.618	0.618	FF31965A	1	100
1	150	4.250	0.559	FF31887A	1	600
1	300	4.881	0.689	FF31938A	1	400
1	400	4.881	0.689	FF31938A	1	400
1	600	4.881	0.689	FF31938A	1	400
1-1/4	150	4.618	0.618	FF31965A	1	100
1-1/4	300	5.251	0.748	FF34260A	1	40
1-1/2	150	5.000	0.689	FF110321A	1	300
1-1/2	300	6.118	0.811	FF31886A	1	250
2	150	6.000	0.752	FF31791A	1	200
2	300	6.515	0.885	FF31783A	1	150
2-1/2	150	7.000	0.882	FF32313A	1	100
2-1/2	300	7.500	1.000	FF31888A	1	100
3	150	7.500	0.940	FF31766A	1	125
3	300	8.250	1.118	FF31867A	1	50
3-1/2	150	8.500	0.940	FF34262A	1	75

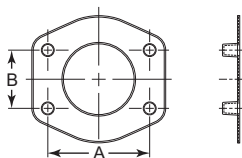
Nominal Pipe Size (In)	Class Pressure Rating	Actual (I.D.) In	Height (h)	Item No.	Pack Qty.	Bulk Pack Qty.
3-1/2	300	9.000	1.189	FF34263A	1	50
4	150	9.000	0.940	FF31763A	1	75
4	300	10.000	1.250	FF31868A	1	30
5	150	10.000	0.941	FF34265A	1	30
5	300	11.000	1.378	FF34266A	1	35
6	150	11.000	1.000	FF31760A	1	50
6	300	12.500	1.437	FF31869A	1	25
8	150	13.500	1.118	FF31870A	1	30
8	300	15.000	1.618	FF31871A	1	10
10	150	16.000	1.189	FF31872A	1	35
10	300	17.500	1.878	FF31873A	1	24
12	150	19.090	1.181	FF31874A	1	25
12	300	20.500	2.000	FF31875A	1	10
14	150	21.000	1.382	FF31876A	1	10
14	300	23.000	2.118	FF31847A	1	10
16	150	23.500	1.441	FF31877A	1	10
16	300	25.500	2.248	FF31878A	1	6
18	150	25.000	1.559	FF31879A	1	8
18	300	28.000	2.378	FF31880A	1	10
20	150	27.500	1.689	FF31881A	1	50
20	300	30.500	2.500	FF31882A	1	10
24	150	32.000	1.882	FF31943A	1	8
24	300	36.000	2.748	FF32088A	1	5

CODE 61 & 62 FLANGE PROTECTORS



BFP & XP Series SAE J518 Quick Fit Flange Protectors

ALLIANCE



Specifications:

- Material: Polyethylene
- Color: Refer to Chart

Features:

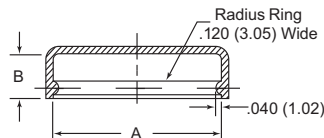
- The BFP series are used to protect SAE Code 61 3000 PSI flanges
- The XP series are used to protect SAE Code 62 6000 PSI flanges
- Provides full coverage with lugs firmly positioned into bolt holes
- Requires no fasteners

Nominal Pipe Size (In)	Class Pressure Rating	Item No.	A In	B In	Color	Pack Qty.	Bulk Pack Qty.
1/2	3000	BFP1/2A	1.500	0.688	Blue	1	2000
1/2	3000	XP1/2A	1.594	0.718	Red	1	2000
3/4	3000	BFP3/4A	1.875	0.875	Blue	1	1000
3/4	6000	XP3/4A	2.000	0.937	Red	1	1000
1	3000	BFP1A	2.062	1.031	Blue	1	1000
1	6000	XP1A	2.250	1.093	Red	1	700
1-1/4	3000	BFP1-1/4A	2.312	1.188	Blue	1	700
1-1/4	6000	XP1-1/4A	2.625	1.250	Red	1	500
1-1/2	3000	BFP1-1/2A	2.750	1.406	Blue	1	450

Nominal Pipe Size (In)	Class Pressure Rating	Item No.	A In	B In	Color	Pack Qty.	Bulk Pack Qty.
1-1/2	6000	XP1-1/2A	3.125	1.437	Red	1	400
2	3000	BFP2A	3.062	1.688	Blue	1	400
2	6000	XP2A	3.812	1.750	Red	1	250
2-1/2	3000	BFP2-1/2A	3.500	2.000	Blue	1	300
3	3000	BFP3A	4.188	2.438	Blue	1	50
3-1/2	3000	BFP3-1/2A	4.750	2.750	Blue	1	50
4	3000	BFP4A	5.125	3.062	Blue	1	50
5	3000	BFP5A	6.000	3.625	Blue	1	30

Q & HP Series SAE J518 Split-Flange Covers

ALLIANCE



Specifications:

- Material: Polyethylene
- Color: Natural

Features:

- The Q Series are used on SAE Code 61 3000 PSI high pressure flanges
- The HP Series are used on SAE Code 62 6000 PSI high pressure flanges
- Protects machined surfaces on split flanged connections
- Manufactured in a natural translucent polyethylene so the O-ring assembled on the flange remains visible thru the cap
- The internal-locking bead design provides a secure fit
- Requires no fasteners



Nominal Flange Size (In)	Code	Class Pressure Rating	Item No.	A In	B In	Pack Qty.	Bulk Pack Qty.
1/2	61	3000	Q1A	1.190	0.390	1	2500
5/8	61	3000	Q2A	1.330	0.415	1	4000
3/4	61	3000	Q3A	1.510	0.435	1	3000
3/4	62	6000	HP12A	1.610	0.546	1	2200
1	61	3000	Q4A	1.760	0.465	1	2000
1	62	6000	HP16A	1.860	0.578	1	1600
1-1/4	61	3000	Q5A	1.971	0.465	1	1700

Nominal Flange Size (In)	Code	Class Pressure Rating	Item No.	A In	B In	Pack Qty.	Bulk Pack Qty.
1-1/4	62	6000	HP20A	2.110	0.609	1	1200
1-1/2	61	3000	Q6A	2.385	0.465	1	1200
1-1/2	62	6000	HP24A	2.485	0.690	1	750
2	61	3000	Q7A	2.810	0.585	1	750
2	62	6000	HP32A	3.110	0.690	1	500
2-1/2	61	3000	Q8A	3.310	0.500	1	550



HOSE PROTECTION



Wrap it. Cover it. Shield it. Secure it.

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