

PIPE & FLANGE PROTECTION





PIPE CAPS 92 - 93



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SUCKER ROD PROTECTORS 95



STATOR CAPS 95



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WELD FITTING CAPS & PLUGS 96



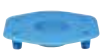
RAISED-FACE FLANGE PROTECTORS 97 - 98



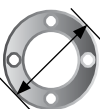
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PIPE & FLANGE PROTECTION

PIPE CAPS

RRC Series

Closed End or Vented Pipe Caps

Specifications:

- Material: Polyethylene
- Color: See Table

Features:

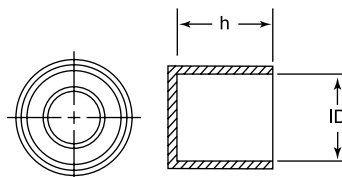
- Protects threaded or non-threaded pipe ends
- Sized and designed for positive-gripping power over the outside diameter of the pipe
- Eliminates foreign materials from entering the pipe
- Vented option prevents pressure build up inside the pipe that may otherwise force off the cap

Closed End Pipe Caps

Item No.	Nominal Pipe Size	ID	Height (h)	Color	Bulk Pack Qty.
	in	in	in		
RRC1/8A	1/8	0.385	0.485	Yellow	5500
RRC1/4A	1/4	0.516	0.490	Red	13000
RRC3/8A	3/8	0.660	0.538	Yellow	9500
RRC1/2A	1/2	0.840	0.717	Black	4000
RRC3/4A	3/4	1.045	0.750	Red	2500
RRC1A	1	1.290	0.877	Blue	1500
RRC1-1/4A	1-1/4	1.660	0.920	Red	1000
RRC1-1/2A	1-1/2	1.910	0.925	Black	1000
RRC2A	2	2.378	1.080	Blue	1000
RRC2-1/2A	2-1/2	2.860	1.580	Black	500
RRC3A	3	3.470	1.750	Blue	350
RRC3-1/2A	3-1/2	4.000	1.750	Black	280
RRC4A	4	4.500	1.870	Blue	208
RRC5A	5	5.630	2.150	Blue	120
RRC6A	6	6.640	1.960	Black	80
RRC8A	8	8.670	2.320	Black	50
RRC10A	10	10.680	2.410	Black	25
RRC12A	12	12.600	2.620	Black	18
RRC14E	14	14.000	3.000	Black	15
RRC16E	16	16.000	3.125	Black	15
RRC18E	18	18.000	3.375	Black	10
RRC20A	20	20.000	2.955	Black	15
RRC22A	22	22.000	2.985	Black	10
RRC24A	24	24.000	2.995	Black	8
RRC26A	26	26.000	4.500	Black	8
RRC28A	28	28.000	4.724	Black	12
RRC30A	30	30.000	4.625	Black	3
RRC32A	32	32.000	4.720	Black	10
RRC36A	36	36.000	3.040	Black	20
RRC42A	42	42.000	5.250	Black	12
RRC48A	48	48.000	5.250	Black	12



How to Measure a
Pipe & Pick a Cap
See Page 107



Vented Pipe Caps

Item No.	Nominal Pipe Size	ID	Height (h)	Color	Bulk Pack Qty.
	in	in	in		
RRC2F	2	2.378	1.080	Orange	1000
RRC2-1/2D	2-1/2	2.860	1.580	Orange	500
RRC3F	3	3.470	1.750	Orange	350
RRC3-1/2E	3-1/2	4.000	1.750	Orange	280
RRC4E	4	4.500	1.870	Orange	192
RRC5F	5	5.630	2.150	Orange	120
RRC6I	6	6.640	1.960	Orange	80
RRC8B	8	8.670	2.320	Orange	50
RRC10D	10	10.580	2.410	Orange	25
RRC12B	12	12.600	2.620	Orange	18

FPC Series

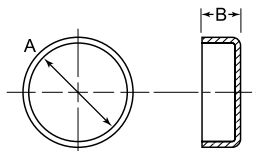
Cracking & Splitting Resistant Pipe Caps

Specifications:

- Material: Flexible Polyethylene
- Color: Yellow

Features:

- Protects threaded or non-threaded pipe ends
- Resistant to cracking and splitting
- Ideal for withstanding temperatures of -40°F to 150°F (-40°C to 66°C) and will not crack or split under normal use
- Outstanding toughness and puncture resistance
- Good flexibility
- DIN sizes available, please consult Essentra if needed



Item No.	Nominal Pipe Size	A	B	Bulk Pack Qty.
	in	in	in	
FPC34137A	2	2.374	2.362	300
FPC34140A	2-1/2	2.717	1.417	100
FPC34151A	3	3.386	1.693	100
FPC32709A	3-1/2	4.000	3.937	100
FPC34169A	4	4.500	1.969	200
FPC34179A	6	6.626	1.969	100
FPC31733A	8	8.625	2.165	80
FPC31735A	10	10.748	2.559	28
FPC31694A	12	12.748	2.953	32
FPC31685A	14	14.000	3.150	26
FPC31664A	16	16.000	3.346	18
FPC34211A	18	17.913	3.150	16
FPC31689A	20	20.000	4.134	12

Item No.	Nominal Pipe Size	A	B	Bulk Pack Qty.
	in	in	in	
FPC31710A	22	22.000	4.527	10
FPC31739A	24	24.000	4.921	10
FPC31718A	28	28.000	5.709	24
FPC31696A	30	30.000	6.102	22
FPC31722A	32	32.000	6.496	18
FPC34240A	34	34.000	6.693	20
FPC31701A	36	36.000	6.889	16
FPC34244A	38	38.000	7.087	16
FPC31727A	40	40.000	7.087	16
FPC34248A	44	44.000	7.283	5
FPC39127A	54	54.000	7.086	5
FPC34252A	56	56.000	8.465	5
FPC34254A	60	60.000	8.661	5
FPC34256A	64	64.000	9.056	5



RRO Series Pipe & Conduit Open-End Pipe Caps

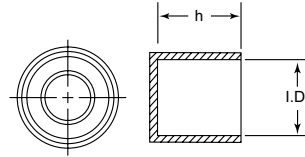
Specifications:

- Material: Polyethylene
- Color: See Table



Features:

- Protects external threads on pipe ends, rigid metal conduit ends (RMC) or intermediate metal conduit ends (IMC)
- Sized and designed for positive-gripping power over the threads on the pipe



Color Coded for Pipe, EMT or Rigid Metal Conduit (RMC)

Item No.	Nominal Pipe Size	ID	Height (h)	Color	Bulk Pack Qty.
	in	in	in		
RRO1/2C	1/2	0.835	0.750	Black	5000
RRO3/4A	3/4	1.048	0.747	Red	8000
RRO1A	1	1.305	0.940	Blue	4000
RRO1-1/4A	1-1/4	1.653	0.980	Red	2500
RRO1-1/2A	1-1/2	1.890	1.030	Black	1600
RRO2A	2	2.375	1.157	Blue	1000
RRO2-1/2A	2-1/2	2.891	1.580	Black	500
RRO3A	3	3.465	1.750	Blue	350
RRO3-1/2A	3-1/2	4.010	1.750	Black	280
RRO4A	4	4.530	1.870	Blue	208
RRO5A	5	5.531	1.870	Blue	120
RRO6A	6	6.586	2.180	Blue	80
RRO8A	8	8.625	2.210	Black	50
RRO10A	10	10.850	2.410	Black	30

Color Coded for Intermediate Metal Conduit (IMC)

Item No.	Nominal Pipe Size	ID	Height (h)	Color	Bulk Pack Qty.
	in	in	in		
RRO1/2B	1/2	0.835	0.750	Yellow	5000
RRO3/4C	3/4	1.048	0.747	Green	8000
RRO1D	1	1.305	0.940	Orange	4000
RRO1-1/4C	1-1/4	1.653	0.980	Green	2500
RRO1-1/2B	1-1/2	1.890	1.030	Yellow	1600
RRO2E	2	2.375	1.157	Orange	1000
RRO2-1/2B	2-1/2	2.891	1.580	Yellow	500
RRO3C	3	3.465	1.750	Orange	350
RRO3-1/2B	3-1/2	4.010	1.750	Yellow	280
RRO4C	4	4.530	1.870	Orange	208

NPS Series Heavy Duty Base Pipe Caps

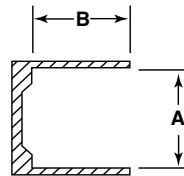
Specifications:

- Material: Polyethylene
- Color: Black



Features:

- Has a thicker heavy-duty base for added protection over the outside diameter of the pipe
- Protects threaded or non-threaded pipe ends
- Eliminates foreign materials from entering the pipe



Item No.	Nominal Pipe Size	A	B	Bulk Pack Qty.
	in	in	in	
NPS1/4B	1/4	0.540	0.813	4000
NPS3/8B	3/8	0.675	0.813	2500
NPS1/2B	1/2	0.840	0.813	1800
NPS3/4B	3/4	1.050	0.813	1200
NPS1B	1	1.315	0.813	1600
NPS1-1/4B	1-1/4	1.660	1.406	550

Item No.	Nominal Pipe Size	A	B	Bulk Pack Qty.
	in	in	in	
NPS1-1/2B	1-1/2	1.900	1.406	450
NPS2B	2	2.375	1.375	300
NPS2-1/2B	2-1/2	2.875	1.375	200
NPS3B	3	3.500	1.344	150
NPS3-1/2B	3-1/2	4.000	1.594	100
NPS4B	4	4.500	1.594	80

CEX Series Lightweight Pipe Caps

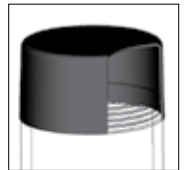
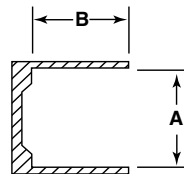
Specifications:

- Material: Polyethylene
- Color: See Table



Features:

- Lightweight range with internal rings for positive-gripping power
- Protects threaded or non-threaded pipe ends
- Eliminates foreign materials from entering the pipe



Item No.	Nominal Pipe Size	A	B	Color	Bulk Pack Qty.
	in	in	in		
CEX1/4B	1/4	0.540	0.845	Orange	4000
CEX3/8B	3/8	0.675	0.845	Orange	2500
CEX1/2B	1/2	0.840	0.845	Black	1800
CEX3/4B	3/4	1.050	0.845	Red	1300
CEX1C	1	1.315	0.845	Blue	1600
CEX1-1/4B	1-1/4	1.660	1.465	Red	650

Item No.	Nominal Pipe Size	A	B	Color	Bulk Pack Qty.
	in	in	in		
CEX1-1/2C	1-1/2	1.900	1.465	Black	500
CEX2B	2	2.375	1.465	Blue	300
CEX2-1/2B	2-1/2	2.875	1.465	Black	200
CEX3B	3	3.500	1.465	Blue	150
CEX3-1/2B	3-1/2	4.000	1.695	Black	100
CEX4B	4	4.500	1.695	Blue	80



PIPE PLUGS

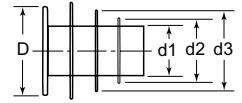
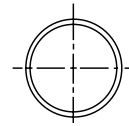
RPP Series
Ribbed Pipe Plug

Specifications:

- Material: Polyethylene
- Color: See Table

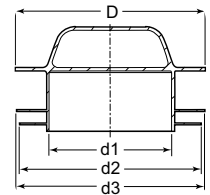
Features:

- Flexible ribs allow plug to fit multiple schedules of NPT pipe
- Straight wall on the plugs OD provides a secure and friction fit with the mating parts ID



Style 1

Item No.	NPT		Style	Color	D	d1	d2	d3	Bulk Pack Qty.
	in	Schedule							
• 1343438	1/4	40,80	1	Blue	0.539	0.266	0.478	0.5	20000
• 1343439	3/8	40,80	1	Blue	0.673	0.217	0.575	0.587	15000
• 1343440	1/2	40,80,160	1	Blue	0.838	0.407	0.695	0.734	12000
• 1343441	3/4	40,80,160	1	Blue	1.051	0.461	0.905	0.939	10000
• 1343442	1	40,80,160	1	Blue	1.315	0.637	1.161	1.194	8000
• 1343443	1-1/4	40,80,160	1	Blue	1.660	0.902	1.509	1.539	4000
• 1343444	1-1/2	40,80,160	1	Blue	1.900	1.053	1.717	1.759	3000
• 1343445	2	40,80,160	1	Blue	2.374	1.254	2.216	2.163	2000
• 1343446	2-1/2	40,80,160	1	Blue	2.875	1.641	2.758	2.737	1300
• 1343447	3	40,80,160	1	Blue	3.500	2.230	3.356	3.309	800
• 1343448	4	40,80,120,160	1	Blue	4.500	3.137	4.292	4.281	450
• RPP4A	4	40,80,120,160	2	Black	4.450	2.250	4.249	4.409	50
• 1343449	5	40,80,120,160	1	Blue	5.563	3.908	5.285	5.245	400
• RPP5A	5	40,80,120	2	Blue	5.452	2.875	5.150	5.275	50
• 1343450	6	40,80,120	1	Blue	6.625	4.852	6.472	6.364	270
• RPP6A	6	80,120	2	Red	6.460	3.500	5.500	6.000	20
• 1343451	8	40,60,80,100,120,140	1	Blue	8.625	6.625	8.396	8.268	115
• 1343452	10	20,30,40,60,80,100	1	Blue	10.750	8.750	10.475	10.450	90
• 1343453	12	30,40,60,80,100	1	Blue	12.750	10.687	12.366	12.410	42
• 1343454	14	20,30,60,80,100,120	1	Blue	14.000	11.500	13.602	13.566	12
• 1343455	16	20,30,40,60,80	1	Blue	16.000	13.750	15.655	15.547	15
• 1343456	18	20,30,40,60,80	1	Blue	18.000	15.250	17.464	17.443	10
• 1343457	20	20,30,40,60,80	1	Blue	20.000	17.000	19.593	19.522	10
• 1343458	24	20,30,40,60,80	1	Blue	24.000	20.867	24.606	24.606	5



Style 2

Schedule 40 & 80 Pipe Plugs



Specifications:

- Material: Polyethylene
- Color: See Table

Features:

- Designed to plug schedule 40 and 80 steel or plastic pipe ends

See the Numbered Series on page 24 - 26 for more size and color options.

Steel Pipe

Nominal Pipe Size		Item No.	Color	Bulk Pack Qty.
in	Schedule			
1/8	40	004A	Blue	5000
1/8	80	002A	Blue	5000
1/4	40	008A	Blue	5000
1/4	80	006A	Blue	5000
3/8	40	012A	Blue	5000
3/8	80	009A	Blue	5000
1/2	40	017A	Blue	7500
1/2	80	014A	Blue	9000
3/4	40	027A	Blue	7000
3/4	80	022A	Blue	4000
1	40	039A	Red	2000
1	80	030A	Blue	4500
1-1/4	40	1055A	Blue	2500
1-1/4	80	044A	Blue	2500
1-1/2	40	055A	Blue	1500
1-1/2	80	051A	Blue	1500
2	40	062A	Blue	850
2	80	1075A	Blue	2500
2-1/2	40	073A	Blue	600
2-2-1/2	80	064A	Blue	1000
3	40	083A	Blue	750
3	80	081A	Blue	500
3-1/2	40	089A	Blue	350
3-1/2	80	086A	Blue	400
4	40	092A	Blue	250
4	80	090A	Blue	300
5	40	1110A	Blue	250
5	80	096A	Blue	250
6	40	FPL6A	Black	150
6	80	102A	Blue	250
8	40	FPL8A	Black	100
8	80	112A	Blue	100
10	40	FPL10A	Black	50
12	40	FPL12A	Black	30
12	80	132A	Blue	40

Plastic Pipe

Nominal Pipe Size		Item No.	Color	Bulk Pack Qty.
in	Schedule			
1/8	40	003A	Blue	5000
1/8	80	1000A	Blue	5000
1/4	40	007A	Blue	5000
1/4	80	005A	Blue	5000
3/8	40	013A	Blue	5000
3/8	80	009A	Blue	5000
1/2	40	016A	Blue	7500
1/2	80	013A	Blue	9000
3/4	40	026A	Blue	4000
3/4	80	022A	Blue	4000
1	40	038A	Blue	2500
1	80	030A	Blue	4500
1-1/4	40	047A	Blue	2000
1-1/4	80	044A	Blue	2500
1-1/2	40	054A	Blue	1700
1-1/2	80	051A	Blue	1500
2	40	061A	Blue	1000
2	80	058A	Blue	900
2-1/2	40	071A	Blue	600
2-1/2	80	064A	Blue	1000
3	40	083A	Blue	750
3	80	081A	Blue	500
3-1/2	40	088A	Blue	300
3-1/2	80	086A	Blue	400
4	40	092A	Blue	300
4	80	090A	Blue	300
5	40	1100A	Blue	250
5	80	096A	Blue	250
6	40	104A	Blue	90
6	80	102A	Blue	250
8	40	116A	Blue	100
8	80	112A	Blue	100
10	40	128A	Blue	75
12	40	133A	Blue	30
12	80	132A	Blue	40

SUCKER ROD PROTECTORS, STATOR CAPS & NPT PLUGS



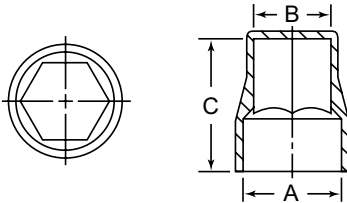
SRH Series Sucker Rod Caps

Specifications:

- Material: Polyethylene
- Color: Black

Features:

- Protects sucker-rod pin ends
- The heavy-duty part design protects during shipping or in-house processing
- The hex head design promotes easy removal in the field with an open or closed-end wrench



Item No.	Coupling Size in	A in	B in	C in	Bulk Pack Qty.
SRH5/8B	0.625	1.250	1.050	1.750	700
SRH3/4A	0.750	1.500	1.130	2.063	500
SRH7/8A	0.875	1.635	1.325	2.188	400
SRH1A	1.000	2.000	1.565	2.460	250
SRH1-1/8A	1.125	2.250	1.560	2.625	200

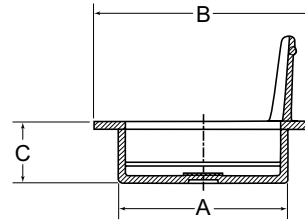
SRPP Series Sucker Rod Plug with Pull

Specifications:

- Material: Polyethylene
- Color: Black

Features:

- Protect sucker-rod coupling ends
- Protects the coupling during shipping and storage



Item No.	Coupling Size in	A in	B in	C in	Bulk Pack Qty.
SRPP5/8A	0.625	0.982	1.187	0.400	700
SRPP3/4A	0.750	1.110	1.437	0.400	500
SRPP7/8A	0.875	1.240	1.562	0.400	400
SRPP1A	1.000	1.430	1.937	0.400	250
SRPP1-1/8A	1.125	1.620	2.093	0.400	200

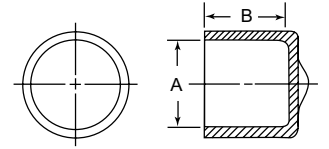
SCDK Series Pump Stator/Rotor Cap

Specifications:

- Material: PVC
- Color: Black

Features:

- Provides maximum protection for stators/rotors on progressive cavity pumps
- Flexible material for easy installation



Item No.	ID A in	Length B in	Bulk Pack Qty.
SCDK0262A	4.500	2.000	50
SCDK0259A	4.750	2.000	50
SCDK0263A	5.500	2.000	50
SCDK0264A	6.250	2.000	25

Item No.	ID A in	Length B in	Bulk Pack Qty.
SCDK0265A	6.500	2.000	25
SCDK0266A	6.750	2.000	25
SCDK0267A	8.000	2.000	25
DM9625-2A	9.625	2.000	20

NPT Series Plugs for NPT Threads

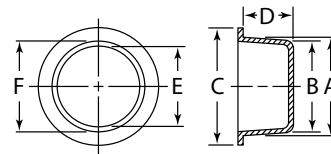


Specifications:

- Material: Low-Density Polyethylene
- Colors: See Table

Features:

- Designed specifically to be used to plug NPT tapered threaded fittings
- The tapered design allows the part to plug multiple inner diameters



To Assure Proper Fit:



Plug dimension "A" should be approx. 1% larger than the inner diameter of the part. Minimum of .020"



Item No.	A		B		C		D		E		F		Color	Bulk Pack Qty.
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
NPT3/8A	0.615	15.62	0.570	14.48	0.750	19.05	0.285	7.24	0.497	12.62	0.535	13.59	Yellow	5000
NPT3/4A	0.955	24.26	0.922	23.42	1.125	28.58	0.363	9.22	0.849	21.56	0.872	22.15	Red	5500
NPT1-1/4A	1.560	39.62	1.510	38.35	1.750	44.45	0.435	11.05	1.401	35.59	1.481	37.62	Red	2000
NPT2A	2.275	57.79	2.225	56.52	2.437	61.90	0.495	12.57	2.092	53.14	2.194	55.73	Blue	2500
NPT2-1/2A	2.725	69.22	2.680	68.07	2.875	73.03	0.480	12.19	2.512	63.80	2.628	66.75	Black	600
NPT3A	3.325	84.46	3.285	83.44	3.500	88.90	0.470	11.94	3.154	80.11	3.220	81.79	Blue	400
NPT3-1/2A	3.785	96.14	3.775	95.89	4.062	103.17	0.750	19.05	3.665	93.09	3.675	93.35	Black	550
NPT4A	4.315	109.61	4.295	109.09	4.687	119.05	0.790	20.07	4.077	103.56	4.115	104.52	Blue	500
NPT5A	5.360	136.14	5.350	135.89	5.750	146.05	0.850	21.59	5.205	132.21	5.215	132.46	Blue	275
NPT6A	6.425	163.20	6.390	162.31	6.750	171.45	0.895	22.73	6.252	158.80	6.272	159.31	Blue	180

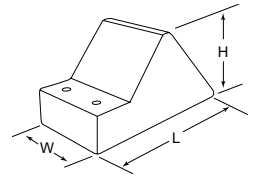
**PIPE CHOCKS & WELD FITTING CAPS AND PLUGS****PCK Series
Pipe Chocks**

Specifications:

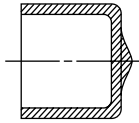
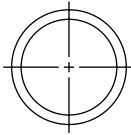
- Material: Low-Density Polyethylene
- Color: Orange

Features:

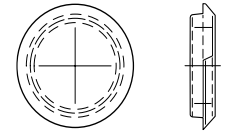
- Pipe chocks are used to help secure pipe during transit
- Nails are included



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

**BW & DM Series
Butt-Weld Caps & Plugs**

Type: Cap



Type: Plug

Specifications:

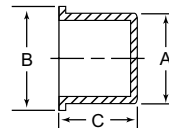
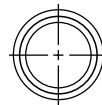
- See Table

Features:

- Provides maximum protection for butt-weld ends on valves, pumps and heat exchangers
- Will not crack or chip and eliminates the need for plywood, masonite and fasteners
- Saves labor assembly costs
- BW Plug – The special reverse angle matches the butt-weld angle and completely covers or protects the end during shipping and storage

Item No.	Nominal Pipe Size		Type	Material	Color	Bulk Pack Qty.
	In					
DM0843-1/2A	1/2	Cap	PVC	Black	5000	
DM1000-1/2A	3/4	Cap	PVC	Black	2500	
DM1312-1/2A	1	Cap	PVC	Black	2000	
DM1625-1/2A	1-1/4	Cap	PVC	Black	500	
DM1875-1/2A	1-1/2	Cap	PVC	Black	700	
BW2A	2	Plug	Polyethylene	Blue	1000	
DM2375-1/2A	2	Cap	PVC	Black	500	
BW2-1/2A	2-1/2	Plug	Polyethylene	Blue	600	

Item No.	Nominal Pipe Size		Type	Material	Color	Bulk Pack Qty.
	In					
DM2875-1/2A	2-1/2	Cap	PVC	Black	500	
BW3A	3	Plug	Polyethylene	Blue	400	
DM3500-1/2A	3	Cap	PVC	Black	200	
DM4000-1/2A	3-1/2	Cap	PVC	Black	200	
BW4A	4	Plug	Polyethylene	Blue	250	
DM4500-1/2A	4	Cap	PVC	Black	200	
DM5500-1/2A	5	Cap	PVC	Black	100	
DM6500-1/2A	6	Cap	PVC	Black	100	

**V Series
Socket-Weld Fitting Plugs**

Specifications:

- Material: Polyethylene
- Color: Blue

Features:

- Designed to provide maximum protection for close fit socket weld applications
- Straight wall on the plugs OD provides a secure and friction fit with the mating parts ID



Item No.	Socket Weld Size		A	B	C	Bulk Pack Qty.
	in		in	in	in	
V23A	1/2		0.875	1.000	0.355	5000
V31A	3/4		1.085	1.200	0.430	3000
V42A	1		1.350	1.475	0.430	4000
V53A	1-1/4		1.695	1.801	0.430	2500
V57A	1-1/2		1.935	2.060	0.430	2000
V68A	2		2.426	2.550	0.555	1000

RAISED-FACE FLANGE PROTECTORS



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

Specifications:

- Material: Polyethylene
- Colors: See Table
- 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



How to Measure a
Flange & Pick a
Protector
See Page 107



Nominal Pipe Size	Class Pressure Rating	Item No.	Color	Bulk Pack Qty.
in				
1/2	125	1501/2A	Blue	600
1/2	150	1501/2A	Blue	600
1/2	300	3001/2A	Black	500
1/2	400	3001/2A	Black	500
1/2	600	3001/2A	Black	500
1/2	900	9001/2A	Black	400
1/2	1500	9001/2A	Black	400
3/4	125	1503/4A	Blue	550
3/4	150	1503/4A	Blue	550
3/4	300	3003/4A	Black	325
3/4	400	3003/4A	Black	325
3/4	600	3003/4A	Black	325
3/4	900	9003/4A	Black	300
3/4	1500	9003/4A	Black	300
1	125	1501A	Blue	400
1	150	1501A	Blue	400
1	300	3001A	Black	280
1	400	3001A	Black	280
1	600	3001A	Black	280
1	900	9001A	Black	250
1	1500	9001A	Black	250
1-1/4	125	1501-1/4A	Blue	350
1-1/4	150	1501-1/4A	Blue	350
1-1/4	300	3001-1/4A	Black	200
1-1/4	400	3001-1/4A	Black	200
1-1/4	600	3001-1/4A	Black	200
1-1/4	900	9001-1/4A	Black	200
1-1/4	1500	9001-1/4A	Black	200
1-1/2A	125	1501-1/2A	Blue	250
1-1/2A	150	1501-1/2A	Blue	250
1-1/2A	300	3001-1/2A	Black	150
1-1/2A	400	3001-1/2A	Black	150
1-1/2A	600	3001-1/2A	Black	150
1-1/2A	900	900-1-1/2A	Black	100
1-1/2A	1500	900-1-1/2A	Black	100
2	125	1502A	Blue	200
2	150	1502A	Blue	200
2	300	3002A	Black	125
2	400	3002A	Black	125
2	600	3002A	Black	125
2	900	9002A	Black	100
2	1500	9002A	Black	100
2-1/2A	125	1502-1/2A	Blue	150

Nominal Pipe Size	Class Pressure Rating	Item No.	Color	Bulk Pack Qty.
in				
2-1/2A	150	1502-1/2A	Blue	150
2-1/2A	300	3002-1/2A	Black	100
2-1/2A	400	3002-1/2A	Black	100
2-1/2A	600	3002-1/2A	Black	100
2-1/2A	900	9002-1/2A	Black	100
2-1/2A	1500	9002-1/2A	Black	100
3	125	1503A	Blue	100
3	150	1503A	Blue	100
3	300	3003A	Black	100
3	400	3003A	Black	100
3	600	3003A	Black	100
3	900	9003A	Black	50
3-1/2	125	1503-1/2A	Blue	100
3-1/2	150	1503-1/2A	Blue	100
3-1/2	300	3003-1/2A	Black	80
4	125	1504A	Blue	100
4	150	1504A	Blue	100
4	300	3004A	Black	80
4	600	6004A	Black	50
4	900	9004A	Black	50
5	150	900098	Blue	50
5	300	900099	Blue	50
6	125	1506A	Blue	90
6	150	1506A	Blue	90
6	300	3006A	Black	40
6	600	6006A	Black	30
6	900	9006A	Black	20
8	125	1508A	Blue	70
8	150	1508A	Blue	70
8	300	3008A	Black	45
8	600	6008A	Black	20
8	900	9008A	Black	20
10	125	15010A	Blue	35
10	150	15010A	Blue	35
10	300	30010A	Black	35
10	600	60010A	Black	10
10	900	90010A	Black	10
12	125	15012A	Blue	30
12	150	15012A	Blue	30
12	300	30012A	Black	25
12	600	60012A	Black	10
12	900	90012A	Black	10

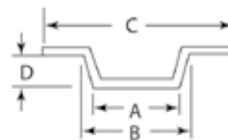
FPR Series Raised-Face Protector Plugs

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	A	B	C	D	Flange Thickness	Bulk Pack Qty.
	in	in	in	in	in	in	
FPR1A	1	1.110	1.156	2.080	0.375	0.150	2000
FPR2A	2	2.050	2.075	3.805	0.440	0.140	400
FPR2-1/2A	2-1/2	2.490	2.510	4.315	0.480	0.130	400
FPR3A	3	3.030	3.110	5.195	0.730	0.132	450
FPR4A	4	3.995	4.095	6.550	0.925	0.130	250

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



RAISED-FACE FLANGE PROTECTORS

PGR Series

Adhesive Peel and Stick Raised-Face Protectors

Specifications:

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



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

How to Measure a
Flange & Pick a
Protector
See Page 107



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

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

PIR Series

Push-In Raised Face Protectors

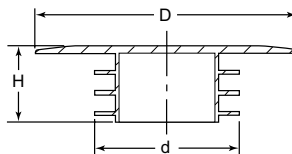


Specifications:

- 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	DIN	d	D	H	Bulk Pack Qty.
	in		in	in	in	
PIR494283A	1/2	DN 15	0.748	1.772	0.650	500
PIR494284A	3/4	DN 20	0.945	2.283	0.650	500
PIR494285A	1	DN 25	1.181	2.756	0.768	500
PIR494286A	1-1/4	DN 32	1.535	3.071	1.161	500
PIR494287A	1-1/2	DN 40	1.772	3.465	1.161	400
PIR494288A	2	DN 50	2.205	4.016	1.161	200
PIR494289A	2-1/2	DN 65	2.835	4.803	1.358	200
PIR494290A	3	DN 80	3.346	5.433	1.358	150
PIR494291A	4	DN 100	4.685	6.417	1.437	100
PIR494292A	5	DN 125	5.630	7.480	1.437	100
PIR494293A	6	DN 150	6.693	8.465	1.437	50
PIR494294A	8	DN 200	8.701	10.630	1.634	30
PIR494295A	10	DN 250	10.827	13.583	1.634	20
PIR494296A	12	DN 300	12.795	16.063	1.634	10

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FULL-FACE FLANGE PROTECTORS


RFL/PCF/PRB Series
Full-Face Flange Protectors

How to Measure a Flange & Pick a Protector, See Page 107.

Specifications:

- Material: See Table
- Color: See Table



RFL Series



PCF Series

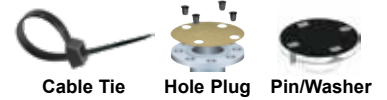


PRB Series



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 table below



Nominal Pipe Size	Class Pressure Rating	Actual OD In	Bolt Circle Ø	Hole Size	Item No.			Bulk Pack Qty.	Fasteners			
					HDPE (Black)	PP (Black)	Pressboard (Natural)		Cable Tie	Retainer Plug	PIN	Washer
1/2	150	3.500	2.375	0.625	RFD150-1/2A	PCF150-1/2A	PRB150-1/2A	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	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	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	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	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	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	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	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	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	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	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	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	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	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
1	150	4.250	3.125	0.625	RFD150-1A	PCF150-1A	PRB150-1A	50	CT022B	FLS005B	PIN2-1/4B	WAS1-3/8A
1	300	4.875	3.500	0.750	RFL300-1A	PCF300-1A	PRB300-1A	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1	400	4.875	3.500	0.750	RFL300-1A	PCF300-1A	PRB300-1A	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1	600	4.875	3.500	0.750	RFL300-1A	PCF300-1A	PRB300-1A	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
1	900	5.875	4.000	1.000	RFL900-1A	PCF900-1A	PRB900-1A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
1	1500	5.875	4.000	1.000	RFL900-1A	PCF900-1A	PRB900-1A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
1	2500	6.250	4.250	1.000	RFL2500-1A	PCF2500-1A	PRB2500-1A	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	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	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	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	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	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	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	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	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	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	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	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	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	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	50	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
2	150	6.000	4.750	0.750	RFL150-2A	PCF150-2A	PRB150-2A	50	CT022B	FLS010B	PIN2-1/4B	WAS1-3/8A
2	300	6.500	5.000	0.750	RFL300-2A	PCF300-2A	PRB300-2A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	400	6.500	5.000	0.750	RFL300-2A	PCF300-2A	PRB300-2A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	600	6.500	5.000	0.750	RFL300-2A	PCF300-2A	PRB300-2A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	900	8.500	6.500	1.000	RFL900-2A	PCF900-2A	PRB900-2A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	1500	8.500	6.500	1.000	RFL900-2A	PCF900-2A	PRB900-2A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
2	2500	9.250	6.750	1.125	RFL2500-2A	PCF2500-2A	PRB2500-2A	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	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	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	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	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	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	50	CT025B	FLS025B	PIN2-1/4B	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	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
3	150	7.500	6.000	0.750	RFL150-3A	PCF150-3A	PRB150-3A	50	CT025B	FLS010B	PIN2-1/4B	WAS1-3/8A
3	300	8.250	6.625	0.875	RFL300-3A	PCF300-3A	PRB300-3A	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3	400	8.250	6.625	0.875	RFL300-3A	PCF300-3A	PRB300-3A	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3	600	8.250	6.625	0.875	RFL300-3A	PCF300-3A	PRB300-3A	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3	900	9.500	7.500	1.000	RFL900-3A	PCF900-3A	PRB900-3A	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
3	1500	10.500	8.000	1.250	RFL1500-3A	PCF1500-3A	PRB1500-3A	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
3	2500	12.000	9.000	1.375	RFL2500-3A	PCF2500-3A	PRB2500-3A	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	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	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
3-1/2	400	9.000	7.250	1.000	RFL600-3-1/2A	PCF600-3-1/2A	—	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
3-1/2	600	9.000	7.250	1.000	RFL600-3-1/2A	—	—	50	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
4	150	9.000	7.500	0.750	RFL150-4A	PCF150-4A	PRB150-4A	25	CT025B	FLS010B	PIN2-1/4B	WAS1-3/8A
4	300	10.000	7.875	0.875	RFL300-4A	PCF300-4A	PRB300-4A	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
4	400	10.000	7.875	1.000	RFL400-4A	—	—	50	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A

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FULL-FACE FLANGE PROTECTORS

RFL/PCF/PRB Series
Full-Face Flange Protectors

How to Measure a Flange & Pick a Protector, See Page 107.



RFL Series



PCF Series



PRB Series



Cable Tie



Hole Plug



Pin/Washer

Nominal Pipe Size in	Class Pressure Rating	Actual OD in	Bolt Circle Ø	Hole Size	Item No.			Bulk Pack Qty.	Fasteners			
					HDPE (Black)	PP (Black)	Pressboard (Natural)		Cable Tie	Retainer Plug	PIN	Washer
4	600	10.750	8.500	1.000	RFL600-4A	PCF600-4A	PRB600-4A	50	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A
4	900	11.500	9.250	1.250	RFL900-4A	PCF900-4A	PRB900-4A	25	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
4	1500	12.250	9.500	1.375	RFL1500-4A	PCF1500-4A	PRB1500-4A	25	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
4	2500	14.000	10.750	1.625	RFL2500-4A	PCF2500-4A	PRB2500-4A	25	CT029B	FLS045B	—	—
5	150	10.000	8.500	0.875	RFL150-5A	PCF150-5A	PRB150-5A	50	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
5	300	11.000	9.250	0.875	RFL300-5A	PCF300-5A	PRB300-5A	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
5	400	11.000	9.250	1.000	RFL400-5A	—	—	25	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A
5	600	13.000	10.500	1.125	RFL600-5A	PCF600-5A	PRB600-5A	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
5	900	13.750	11.000	1.375	RFL900-5A	PCF900-5A	PRB900-5A	25	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
5	1500	14.750	11.500	1.625	RFL1500-5A	PCF1500-5A	PRB1500-5A	25	CT029B	FLS045B	—	—
5	2500	16.500	12.750	1.875	RFL2500-5A	PCF2500-5A	PRB2500-5A	25	CT029B	FLS055B	—	—
6	150	11.000	9.500	0.875	RFL150-6A	PCF150-6A	PRB150-6A	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
6	300	12.500	10.625	0.875	RFL300-6A	PCF300-6A	PRB300-6A	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
6	400	12.500	10.625	1.000	RFL400-6A	—	—	25	CT025B	FLS020B	PIN3-1/4B	WAS1-3/8A
6	600	14.000	11.500	1.125	RFL600-6A	PCF600-6A	PRB600-6A	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
6	900	15.000	12.500	1.250	RFL900-6A	PCF900-6A	PRB900-6A	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
6	1500	15.500	12.500	1.500	RFL1500-6A	PCF1500-6A	PRB1500-6A	25	CT029B	FLS040B	—	—
6	2500	19.000	14.500	2.125	RFL2500-6A	PCF2500-6A	PRB2500-6A	25	CT076B	FLS065B	—	—
8	150	13.500	11.750	0.875	RFL150-8A	PCF150-8A	PRB150-8A	25	CT025B	FLS015B	PIN2-1/4B	WAS1-3/8A
8	300	15.000	13.000	1.000	RFL300-8A	PCF300-8A	PRB300-8A	25	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
8	400	15.000	13.000	1.125	RFL400-8A	—	—	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
8	600	16.500	13.750	1.250	RFL600-8A	PCF600-8A	PRB600-8A	25	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
8	900	18.500	15.500	1.500	RFL900-8A	PCF900-8A	PRB900-8A	25	CT027B	FLS040B	PIN3-1/4B	WAS1-3/8A
8	1500	19.000	15.500	1.750	RFL1500-8A	PCF1500-8A	PRB1500-8A	25	CT029B	FLS050B	—	—
8	2500	21.750	17.250	2.125	RFL2500-8A	PCF2500-8A	PRB2500-8A	10	CT076B	FLS065B	—	—
10	150	16.000	14.250	1.000	RFL150-10A	PCF150-10A	PRB150-10A	25	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
10	300	17.500	15.250	1.125	RFL300-10A	PCF300-10A	PRB300-10A	25	CT025B	FLS025B	PIN3-1/4B	WAS1-3/8A
10	400	17.500	15.250	1.250	RFL400-10A	—	—	25	CT027B	FLS030B	PIN3-1/4B	WAS1-3/4A
10	600	20.000	17.000	1.375	RFL600-10A	PCF600-10A	PRB600-10A	25	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
10	900	21.500	18.500	1.500	RFL900-10A	PCF900-10A	PRB900-10A	10	CT027B	FLS040B	—	WAS1-3/4A
10	1500	23.000	19.000	2.000	RFL1500-10A	PCF1500-10A	PRB1500-10A	10	CT076B	FLS060B	—	—
10	2500	26.500	21.250	2.625	RFL2500-10A	PCF2500-10A	PRB2500-10A	10	CT076B	FLS075B	—	—
12	150	19.000	17.000	1.000	RFL150-12A	PCF150-12A	PRB150-12A	25	CT025B	FLS020B	PIN2-1/4B	WAS1-3/8A
12	300	20.500	17.750	1.250	RFL300-12A	PCF300-12A	PRB300-12A	10	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
12	400	20.500	17.750	1.375	RFL400-12A	—	—	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
12	600	22.000	19.250	1.375	RFL600-12A	PCF600-12A	PRB600-12A	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
12	900	24.000	21.000	1.500	RFL900-12A	PCF900-12A	PRB900-12A	10	CT029B	FLS040B	—	—
12	1500	26.500	22.500	2.125	RFL1500-12A	PCF1500-12A	PRB1500-12A	10	CT076B	FLS065B	—	—
12	2500	30.000	24.380	2.875	RFL2500-12A	PCF2500-12A	PRB2500-12A	10	CT076B	—	—	—
14	150	21.000	18.750	1.125	RFL150-14A	PCF150-14A	PRB150-14A	10	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
14	300	23.000	20.250	1.250	RFL300-14A	PCF300-14A	PRB300-14A	10	CT025B	FLS030B	PIN3-1/4B	—
14	400	23.000	20.250	1.375	RFL400-14A	—	—	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
14	600	23.750	20.750	1.500	RFL600-14A	PCF600-14A	PRB600-14A	10	CT027B	FLS040B	—	—
14	900	25.250	22.000	1.625	RFL900-14A	PCF900-14A	PRB900-14A	10	CT029B	FLS045B	—	—
14	1500	29.500	25.000	2.375	RFL1500-14A	PCF1500-14A	PRB1500-14A	10	CT076B	FLS070B	—	—
16	150	23.500	21.250	1.125	RFL150-16A	PCF150-16A	PRB150-16A	10	CT025B	FLS025B	PIN2-1/4B	WAS1-3/8A
16	300	25.500	22.500	1.375	RFL300-16A	PCF300-16A	PRB300-16A	10	CT025B	FLS035B	PIN3-1/4B	WAS1-3/4A
16	400	25.500	22.500	1.500	RFL400-16A	—	—	10	CT027B	FLS040B	PIN3-1/4B	WAS1-3/4A
16	600	27.000	23.750	1.625	RFL600-16A	PCF600-16A	PRB600-16A	10	CT027B	FLS045B	—	—
16	900	27.750	24.250	1.750	RFL900-16A	PCF900-16A	PRB900-16A	10	CT029B	FLS050B	—	—
16	1500	32.500	27.750	2.625	RFL1500-16A	PCF1500-16A	PRB1500-16A	10	CT076B	FLS075B	—	—
18	150	25.000	22.750	1.250	RFL150-18A	PCF150-18A	PRB150-18A	10	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
18	300	28.000	24.750	1.375	RFL300-18A	PCF300-18A	PRB300-18A	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
18	400	28.000	24.750	1.500	RFL400-18A	—	—	10	CT027B	FLS040B	PIN3-1/4B	WAS1-3/4A
18	600	29.250	25.750	1.750	RFL600-18A	PCF600-18A	PRB600-18A	10	CT027B	FLS050B	—	—
18	900	31.000	27.000	2.000	RFL900-18A	PCF900-18A	PRB900-18A	10	CT076B	FLS060B	—	—
18	1500	36.000	30.500	2.875	RFL1500-18A	PCF1500-18A	PRB1500-18A	10	CT076B	—	—	—
20	150	27.500	25.000	1.250	RFL150-20A	PCF150-20A	PRB150-20A	10	CT025B	FLS030B	PIN3-1/4B	WAS1-3/8A
20	300	30.500	27.000	1.375	RFL300-20A	PCF300-20A	PRB300-20A	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
20	400	30.500	27.000	1.625	RFL400-20A	—	—	10	CT029B	FLS045B	—	—
20	600	32.000	28.500	1.750	RFL600-20A	PCF600-20A	PRB600-20A	10	CT029B	FLS050B	—	—
20	900	33.750	29.500	2.125	RFL900-20A	PCF900-20A	PRB900-20A	10	CT076B	FLS065B	—	—
20	1500	38.750	32.750	3.125	RFL1500-20A	PCF1500-20A	PRB1500-20A	10	CT080B	—	—	—
22	150	29.500	27.250	1.375	RFL150-22A	PCF150-22A	PRB150-22A	10	CT025B	FLS035B	PIN3-1/4B	WAS1-3/4A
22	300	33.000	29.250	1.625	RFL300-22A	PCF300-22A	PRB300-22A	10	CT029B	FLS045B	PIN3-1/4B	WAS1-3/4A
22	400	33.000	29.250	1.750	RFL400-22A	—	—	10	CT029B	FLS050B	—	—
22	600	34.250	30.625	1.750	RFL600-22A	PCF600-22A	PRB600-22A	10	CT029B	FLS050B	—	—
24	150	32.000	29.500	1.375	RFL150-24A	PCF150-24A	PRB150-24A	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A

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FULL-FACE FLANGE PROTECTORS

RFL/PCF/PRB Series
Full-Face Flange Protectors

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RFL Series



PCF Series



PRB Series



Cable Tie



Hole Plug



Pin/Washer



Nominal Pipe Size in	Class Pressure Rating	Actual OD in	Bolt Circle Ø	Hole Size	Item No.			Bulk Pack Qty.	Fasteners			
					HDPE (Black)	PP (Black)	Pressboard (Natural)		Cable Tie	Retainer Plug	PIN	Washer
24	300	36.000	32.000	1.625	RFL300-24A	PCF300-24A	PRB300-24A	10	CT029B	FLS045B	—	—
24	400	36.000	32.000	1.875	RFL400-24A	—	—	10	CT029B	FLS055B	—	—
24	600	37.000	33.000	2.000	RFL600-24A	PCF600-24A	PRB600-24A	10	CT076B	FLS060B	—	—
24	900	41.000	35.500	2.625	RFL900-24A	PCF900-24A	PRB900-24A	10	CT076B	FLS075B	—	—
24	1500	46.000	39.000	3.625	RFL1500-24A	PCF1500-24A	PRB1500-24A	10	CT080B	FLS080B	—	—
26	150	34.250	31.750	1.375	RFL150-26A	PCF150-26A	PRB150-26A	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
26	300	38.250	34.500	1.750	RFL300-26A	PCF300-26A	PRB300-26A	10	CT029B	FLS050B	—	—
26	400	38.250	34.500	1.875	RFL400-26A	—	—	10	CT029B	FLS055B	—	—
26	600	40.000	36.000	2.000	RFL600-26A	PCF600-26A	PRB600-26A	10	CT076B	FLS060B	—	—
26	900	42.750	37.500	2.875	RFL900-26A	PCF900-26A	PRB900-26A	10	CT076B	—	—	—
28	150	36.500	34.000	1.375	RFL150-28A	PCF150-28A	PRB150-28A	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
28	300	40.750	37.000	1.750	RFL300-28A	PCF300-28A	PRB300-28A	10	CT029B	FLS050B	—	—
28	400	40.750	37.000	2.000	RFL400-28A	—	—	10	CT029B	FLS060B	—	—
28	600	42.250	38.000	2.125	RFL600-28A	PCF600-28A	PRB600-28A	10	CT076B	FLS065B	—	—
28	900	46.000	40.250	3.125	RFL900-28A	PCF900-28A	PRB900-28A	10	CT076B	—	—	—
30	150	38.750	36.000	1.375	RFL150-30A	PCF150-30A	PRB150-30A	10	CT027B	FLS035B	PIN3-1/4B	WAS1-3/4A
30	300	43.000	39.250	1.875	RFL300-30A	PCF300-30A	PRB300-30A	10	CT029B	FLS055B	—	—
30	400	43.000	39.250	2.125	RFL400-30A	—	—	10	CT076B	FLS065B	—	—
30	600	44.500	40.250	2.125	RFL600-30A	PCF600-30A	PRB600-30A	10	CT076B	FLS065B	—	—
30	900	48.500	42.750	3.125	RFL900-30A	—	—	1	CT076B	—	—	—
32	150	41.750	38.500	1.625	RFL150-32A	PCF150-32A	PRB150-32A	10	CT029B	FLS045B	—	—
32	300	45.250	41.500	2.000	RFL300-32A	PCF300-32A	PRB300-32A	10	CT029B	FLS060B	—	—
32	400	45.250	41.500	2.125	RFL400-32A	—	—	10	CT076B	FLS065B	—	—
32	600	47.000	42.500	2.375	RFL600-32A	PCF600-32A	PRB600-32A	10	CT076B	FLS070B	—	—
32	900	51.750	45.500	3.375	RFL900-32A	—	—	10	CT076B	—	—	—
34	150	43.750	40.500	1.625	RFL150-34A	PCF150-34A	PRB150-34A	10	CT029B	FLS045B	—	—
34	300	47.500	43.500	2.000	RFL300-34A	PCF300-34A	PRB300-34A	10	CT076B	FLS060B	—	—
34	400	47.500	43.500	2.125	RFL400-34A	—	—	10	CT076B	FLS065B	—	—
34	600	49.000	44.500	2.375	RFL600-34A	—	—	10	CT076B	FLS070B	—	—
34	900	55.000	48.250	3.625	RFL900-34A	—	—	10	CT076B	FLS080B	—	—
36	150	46.000	42.750	1.625	RFL150-36A	PCF150-36A	PRB150-36A	10	CT029B	FLS045B	—	—
36	300	50.000	46.000	2.125	RFL300-36A	PCF300-36A	—	10	CT076B	FLS065B	—	—
36	400	50.000	46.000	2.125	RFL400-36A	—	—	10	CT076B	FLS065B	—	—
36	600	51.750	47.000	2.625	RFL600-36A	—	—	10	CT076B	FLS075B	—	—
36	900	57.500	50.750	3.625	RFL900-36A	—	—	10	CT076B	FLS080B	—	—
38	150	48.750	45.250	1.625	RFL150-38A	—	—	10	CT080B	FLS045B	—	—
38	300	46.000	43.000	1.625	RFL300-38A	—	—	10	CT080B	FLS045B	—	—
38	400	47.500	44.000	1.875	RFL400-38A	—	—	10	CT080B	FLS055B	—	—
38	600	50.000	45.750	2.375	RFL600-38A	—	—	10	CT080B	FLS070B	—	—
38	900	57.500	50.750	3.625	RFL900-38A	—	—	10	CT080B	FLS080B	—	—
40	150	50.750	47.250	1.625	RFL150-40A	—	—	1	CT080B	FLS045B	—	—
40	300	48.750	45.500	1.750	RFL300-40A	—	—	1	CT080B	FLS050B	—	—
40	400	50.000	46.250	2.000	RFL400-40A	—	—	1	CT080B	FLS060B	—	—
40	600	52.000	47.750	2.375	RFL600-40A	—	—	1	CT080B	FLS070B	—	—
40	900	59.500	52.750	3.625	RFL900-40A	—	—	1	CT080B	FLS080B	—	—
42	150	53.000	49.500	1.625	RFL150-42A	—	—	1	CT080B	FLS045B	—	—
42	300	50.750	47.500	1.750	RFL300-42A	—	—	1	CT080B	FLS050B	—	—
42	400	52.000	48.250	2.000	RFL400-42A	—	—	1	CT080B	FLS060B	—	—
42	600	55.250	50.500	2.625	RFL600-42A	—	—	1	CT080B	FLS075B	—	—
44	150	55.250	51.750	1.625	RFL150-44A	—	—	1	CT080B	FLS045B	—	—
44	300	53.250	49.750	1.875	RFL300-44A	—	—	1	CT080B	FLS055B	—	—
44	400	54.500	50.500	2.125	RFL400-44A	—	—	1	CT080B	FLS065B	—	—
44	600	57.250	52.500	2.625	RFL600-44A	—	—	1	CT080B	FLS075B	—	—
46	150	57.250	53.750	1.625	RFL150-46A	—	—	1	CT080B	FLS045B	—	—
46	300	55.750	52.000	2.000	RFL300-46A	—	—	1	CT080B	FLS060B	—	—
46	400	56.750	52.750	2.125	RFL400-46A	—	—	1	CT080B	FLS065B	—	—
46	600	59.500	54.750	2.625	RFL600-46A	—	—	1	CT080B	FLS075B	—	—
48	150	59.500	56.000	1.625	RFL150-48A	—	—	1	CT080B	FLS045B	—	—
48	300	57.750	54.000	2.000	RFL300-48A	—	—	1	CT080B	FLS060B	—	—
48	400	59.500	55.250	2.375	RFL400-48A	—	—	1	CT080B	FLS070B	—	—



FULL-FACE FLANGE PROTECTORS

Flange Protection Discs



Specifications:

- Material: PolyCor™ Corrugated Polypropylene
- Color: Black



Features:

- Provides simple, cost-effective protection for flanges
- Covers full flange face - applied by strapping cable ties through bolt holes
- Wide range covers variety of DIN sizes and pressure ratings

DIN - PN 6 Range

Item No.	Nominal Pipe Size	Outside Ø	Bolt Circle Ø	Bolt Hole Size	Bulk Pack Qty.	Cable Tie Item No.
		mm	mm	mm		
PCL6DN10A	DN 10	75	50	11	50	CT022B
PCL6DN15A	DN 15	80	55	11	50	CT022B
PCL6DN20A	DN 20	90	65	11	50	CT022B
PCL6DN25A	DN 25	100	75	11	50	CT022B
PCL6DN32A	DN 32	120	90	14	50	CT022B
PCL6DN40A	DN 40	130	100	14	50	CT022B
PCL6DN50A	DN 50	140	110	14	50	CT022B
PCL6DN65A	DN 65	160	130	14	50	CT022B
PCL6DN80A	DN 80	190	150	18	50	CT022B
PCL6DN100A	DN 100	210	170	18	50	CT022B
PCL6DN125A	DN 125	240	200	18	50	CT022B
PCL6DN150A	DN 150	265	225	18	25	CT022B
PCL6DN200A	DN 200	320	280	18	25	CT022B
PCL6DN250A	DN 250	375	335	18	25	CT022B
PCL6DN300A	DN 300	440	395	22	25	CT022B
PCL6DN350A	DN 350	490	445	22	25	CT022B
PCL6DN400A	DN 400	540	495	22	10	CT022B
PCL6DN500A	DN 500	645	600	22	10	CT022B
PCL6DN600A	DN 600	755	705	24	10	CT022B

DIN - PN 16 Range

Item No.	Nominal Pipe Size	Outside Ø	Bolt Circle Ø	Bolt Hole Size	Bulk Pack Qty.	Cable Tie Item No.
		mm	mm	mm		
PCL10162540DN10A	DN 10	90	60	14	50	CT022B
PCL10162540DN15A	DN 15	95	65	14	50	CT022B
PCL10162540DN20A	DN 20	105	75	14	50	CT022B
PCL10162540DN25A	DN 25	115	85	14	50	CT022B
PCL10162540DN32A	DN 32	140	100	18	50	CT022B
PCL10162540DN40A	DN 40	150	110	18	50	CT022B
PCL10162540DN50A	DN 50	165	125	18	50	CT022B
PCL1016DN65A	DN 65	185	145	18	50	CT022B
PCL1016DN80A	DN 80	200	160	18	50	CT022B
PCL1016DN100A	DN 100	220	180	18	50	CT022B
PCL1016DN125A	DN 125	250	210	18	50	CT022B
PCL1016DN150A	DN 150	285	240	22	25	CT022B
PCL16DN200A	DN 200	340	295	22	25	CT022B
PCL16DN250A	DN 250	405	355	26	25	CT022B
PCL16DN300A	DN 300	460	410	26	25	CT022B
PCL16DN350A	DN 350	520	470	26	10	CT022B
PCL16DN400A	DN 400	580	525	30	10	CT022B
PCL16DN500A	DN 500	715	650	33	10	CT022B
PCL16DN600A	DN 600	840	770	33	10	CT022B

DIN - PN 40 Range

Part Number	Nominal Pipe Size	Outside Ø	Bolt Circle Ø	Bolt Hole Size	Bulk Pack Qty.	Cable Tie Item No.
		mm	mm	mm		
PCL10162540DN10A	DN 10	90	60	14	50	CT025B
PCL10162540DN15A	DN 15	95	65	14	50	CT025B
PCL10162540DN20A	DN 20	105	75	14	50	CT025B
PCL10162540DN25A	DN 25	115	85	14	50	CT025B
PCL10162540DN32A	DN 32	140	100	18	50	CT025B
PCL10162540DN40A	DN 40	150	110	18	50	CT025B
PCL10162540DN50A	DN 50	165	125	18	50	CT025B
PCL2540DN65A	DN 65	185	145	18	50	CT025B
PCL2540DN80A	DN 80	200	160	18	50	CT025B
PCL2540DN100A	DN 100	235	190	22	50	CT025B
PCL2540DN125A	DN 125	270	220	26	25	CT025B
PCL2540DN150A	DN 150	300	250	26	25	CT025B
PCL40DN200A	DN 200	375	320	30	25	CT025B
PCL40DN250A	DN 250	450	385	33	25	CT025B
PCL40DN300A	DN 300	515	450	33	10	CT025B
PCL40DN350A	DN 350	580	510	36	10	CT025B
PCL40DN400A	DN 400	660	585	39	10	CT025B
PCL40DN500A	DN 500	755	670	42	10	CT025B

DIN - PN 10 Range

Item No.	Nominal Pipe Size	Outside Ø	Bolt Circle Ø	Bolt Hole Size	Bulk Pack Qty.	Cable Tie Item No.
		mm	mm	mm		
PCL10162540DN10A	DN 10	90	60	14	50	CT022B
PCL10162540DN15A	DN 15	95	65	14	50	CT022B
PCL10162540DN20A	DN 20	105	75	14	50	CT022B
PCL10162540DN25A	DN 25	115	85	14	50	CT022B
PCL10162540DN32A	DN 32	140	100	18	50	CT022B
PCL10162540DN40A	DN 40	150	110	18	50	CT022B
PCL10162540DN50A	DN 50	165	125	18	50	CT022B
PCL1016DN65A	DN 65	185	145	18	50	CT022B
PCL1016DN80A	DN 80	200	160	18	50	CT022B
PCL1016DN100A	DN 100	220	180	18	50	CT022B
PCL1016DN125A	DN 125	250	210	18	50	CT022B
PCL1016DN150A	DN 150	285	240	22	25	CT022B
PCL10DN200A	DN 200	340	295	22	25	CT022B
PCL10DN250A	DN 250	395	350	20	25	CT022B
PCL10DN300A	DN 300	445	400	22	25	CT022B
PCL10DN350A	DN 350	505	460	22	25	CT022B
PCL10DN400A	DN 400	565	515	26	10	CT022B
PCL10DN500A	DN 500	670	620	26	10	CT022B
PCL10DN600A	DN 600	780	725	27	10	CT022B

DIN - PN 25 Range

Item No.	Nominal Pipe Size	Outside Ø	Bolt Circle Ø	Bolt Hole Size	Bulk Pack Qty.	Cable Tie Item No.
		mm	mm	mm		
PCL10162540DN10A	DN 10	90	60	14	50	CT025B
PCL10162540DN15A	DN 15	95	65	14	50	CT025B
PCL10162540DN20A	DN 20	105	75	14	50	CT025B
PCL10162540DN25A	DN 25	115	85	14	50	CT025B
PCL10162540DN32A	DN 32	140	100	18	50	CT025B
PCL10162540DN40A	DN 40	150	110	18	50	CT025B
PCL10162540DN50A	DN 50	165	125	18	50	CT025B
PCL2540DN65A	DN 65	185	145	18	50	CT025B
PCL2540DN80A	DN 80	200	160	18	50	CT025B
PCL2540DN100A	DN 100	235	190	22	50	CT025B
PCL2540DN125A	DN 125	270	220	26	25	CT025B
PCL2540DN150A	DN 150	300	250	26	25	CT025B
PCL25DN200A	DN 200	375	320	30	25	CT025B
PCL25DN250A	DN 250	450	385	33	25	CT025B
PCL25DN300A	DN 300	515	450	33	10	CT025B
PCL25DN350A	DN 350	580	510	36	10	CT025B
PCL25DN400A	DN 400	660	585	39	10	CT025B
PCL25DN500A	DN 500	755	670	42	10	CT025B
PCL25DN600A	DN 600	845	770	36	10	CT025B



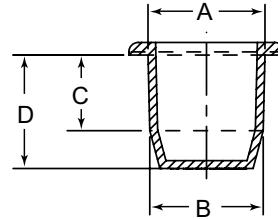
Cable ties fastened through bolt holes secure disc to flange



FLANGE PROTECTOR FASTENERS



FLS Series Flange Protector Retainer Plugs


Specifications:

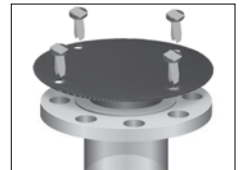
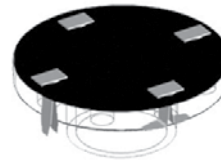
- Material: PVC
- Color: Black

Features:

- Used to secure the RFL, PCF and PRB Series on pages 99 - 101

Item No.	To Fit Bolt Hole in	A in	B in	C in	D in	Bulk Pack Qty.
FLS005B	5/8	0.640	0.625	0.750	1.130	3000
FLS010B	3/4	0.775	0.755	0.750	1.130	2000
FLS015B	7/8	0.900	0.880	0.820	1.200	2500
FLS020B	1	1.020	1.010	0.990	1.370	1500
FLS025B	1-1/8	1.165	1.135	1.000	1.380	1000
FLS030B	1-1/4	1.275	1.260	1.120	1.490	1000
FLS035B	1-3/8	1.410	1.390	1.360	1.740	750
FLS040B	1-1/2	1.545	1.510	1.370	1.730	750
FLS045B	1-5/8	1.665	1.645	1.360	1.730	500
FLS050B	1-3/4	1.770	1.750	1.360	1.700	400
FLS055B	1-7/8	1.905	1.875	1.630	2.000	300
FLS060B	2	2.035	2.000	1.630	2.000	250
FLS065B	2-1/8	2.160	2.125	1.630	2.000	200
FLS070B	2-3/8	2.410	2.375	1.750	2.130	100
FLS075B	2-5/8	2.660	2.625	1.750	2.130	50
FLS080B	3-5/8	3.660	3.625	1.750	2.130	50

PIN & WAS Series Pins & Washers


Specifications:

- Material: See Table
- Color: See Table

Features:

- Pins and washers are used together to securely fasten the flange protectors to the flange
- Used to secure the RFL, PCF and PRB Series on pages 99 - 101

PIN Series

Item No.	Size in	Material & Color	Bulk Pack Qty.
PIN2-1/4B	2.25	Galvanized Steel	1000
PIN3-1/4B	3.25	Galvanized Steel	1000

WAS Series

Item No.	Size in	Material & Color	Bulk Pack Qty.
WAS1-3/8A	1.375	HDPE Black	800
WAS1-3/4A	1.75	HDPE Black	800
WAS1-3/4B	1.75	Galvanized Steel	2000

3"
to
59"

CABLE TIES

Call or go online to request FREE samples!

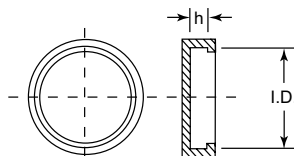
Millions
In Stock
Ready for
Same Day
Shipping

**FULL-FACE FLANGE PROTECTORS****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



How to Measure a
Flange & Pick a
Protector
See Page 107



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

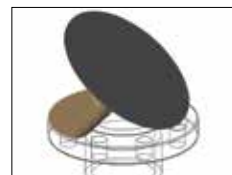
Item No.	Nominal Pipe Size in	Class Pressure Rating	Actual ID in	Height h	Bulk Pack Qty.
FF34263A	3-1/2	300	9.000	1.189	50
FF31763A	4	150	9.000	0.940	75
FF31868A	4	300	10.000	1.250	30
FF34265A	5	150	10.000	0.941	30
FF34266A	5	300	11.000	1.378	35
FF31760A	6	150	11.000	1.000	50
FF31869A	6	300	12.500	1.437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

PG Series**Adhesive Peel & Stick Full-Face Protectors****Specifications:**

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

Features:

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



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

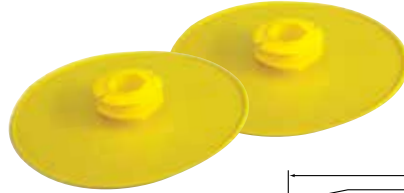
Item No.	Nominal Pipe Size in	Actual OD in	Bulk Pack Qty.
PG150-3A	3	7.500	50
PG150-3-1/2A	3-1/2	8.500	25
PG150-4A	4	9.000	50
PG150-5A	5	10.000	50
PG150-6A	6	11.000	25
PG150-8A	8	13.500	25
PG150-10A	10	16.000	25
PG150-12A	12	19.000	25

Item No.	Nominal Pipe Size in	Actual OD in	Bulk Pack Qty.
PG150-14A	14	21.000	25
PG150-16A	16	23.500	25
PG150-18A	18	25.000	25
PG150-20A	20	27.500	10
PG150-24A	24	32.000	10
PG150-30A	30	38.750	10
PG150-36A	36	46.000	10

FULL-FACE FLANGE PROTECTORS



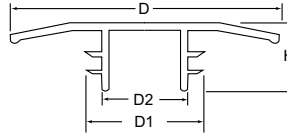
PI Series Push-In Full-Face Protectors



How to Measure a
Flange & Pick a
Protector
See Page 107

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		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	700
PI15A	1/2	DN 15	0.358	9.09	0.755	19.17	3.543	89.99	0.633	16.07	500
PI20A	3/4	DN 20	0.563	14.30	0.944	23.97	3.937	99.99	0.830	21.08	350
PI25A	1	DN 25	0.724	18.38	1.177	29.89	4.330	109.98	0.826	20.98	600
PI32A	1-1/4	DN 32	0.885	22.47	1.539	39.09	5.354	135.99	0.787	19.98	500
PI40A	1-1/2	DN 40	1.181	29.99	1.771	44.98	5.748	145.99	0.826	20.98	200
PI50A	2	DN 50	1.574	39.97	2.204	55.98	6.299	159.99	0.799	20.29	150
PI65A	2-1/2	DN 65	2.086	52.98	2.834	71.98	7.126	181.00	0.807	20.49	200
PI80A	3	DN 80	2.637	66.97	3.346	84.98	7.677	194.99	0.972	24.68	150
PI100A	4	DN 100	3.543	89.99	4.301	109.24	8.543	216.99	0.929	23.59	100
PI125A	5	DN 125	4.370	110.99	5.275	133.98	9.685	245.99	1.027	26.08	70
PI150A	6	DN 150	5.492	139.49	6.456	163.98	11.023	279.98	1.267	32.18	50
PI200A	8	DN 200	7.362	186.94	8.212	208.58	13.228	335.99	1.318	33.47	25
PI250A	10	DN 250	9.606	243.99	10.472	265.98	15.866	403.50	1.401	35.58	15
PI300A	12	DN 300	11.181	283.99	12.559	318.99	17.716	449.98	1.909	48.48	5

OFP Series Self-Locking Protectors

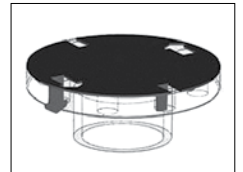


Specifications:

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

Features:

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



Nominal Pipe Size	Class Pressure Rating	Actual OD		Item No.	Bulk Pack Qty.
		in	mm		
1/2	150	3.500	88.9	OFP150-1/2A	50
1/2	300	3.750	95.3	OFP300-1/2A	500
1/2	400	3.750	95.3	OFP300-1/2A	500
1/2	600	3.750	95.3	OFP300-1/2A	500
3/4	150	3.875	98.4	OFP150-3/4A	500
3/4	300	4.625	117.5	OFP300-3/4A	300
3/4	400	4.625	117.5	OFP300-3/4A	300
3/4	600	4.625	117.5	OFP300-3/4A	300
1	150	4.250	108.0	OFP150-1A	50
1	300	4.875	123.8	OFP300-1A	300
1	400	4.875	123.8	OFP300-1A	300
1	600	4.875	123.8	OFP300-1A	300
1-1/4	300	5.250	133.0	OFP300-1-1/4A	50
1-1/4	400	5.250	133.0	OFP300-1-1/4A	50
1-1/4	600	5.250	133.0	OFP300-1-1/4A	50
1-1/2	150	5.000	127.0	OFP150-1-1/2A	200
1-1/2	300	6.125	155.5	OFP300-1-1/2A	200
2	150	6.000	152.4	OFP150-2A	50
2	300	6.500	165.1	OFP300-2A	50
2-1/2	150	7.000	177.8	OFP150-2-1/2A	50
2-1/2	300	7.500	190.5	OFP300-2-1/2A	50
3	150	7.500	190.5	OFP150-3A	50
3	300	8.250	209.6	OFP300-3A	50
3-1/2	150	8.500	215.9	OFP150-3-1/2A	200
3-1/2	300	9.000	228.6	OFP300-3-1/2A	50

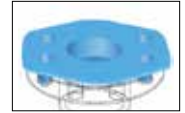
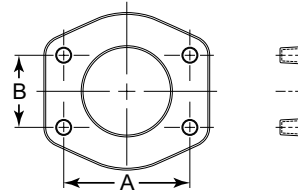
Nominal Pipe Size	Class Pressure Rating	Actual OD		Item No.	Bulk Pack Qty.
		in	mm		
4	150	9.000	228.6	OFP150-4A	50
4	300	10.000	254.0	OFP300-4A	50
5	150	10.000	254.0	OFP150-5A	50
5	300	11.000	279.4	OFP300-5A	25
6	150	11.000	279.4	OFP150-6A	25
6	300	12.500	317.5	OFP300-6A	50
8	150	13.500	342.9	OFP150-8A	50
8	300	15.000	381.0	OFP300-8A	50
10	150	16.000	406.4	OFP150-10A	50
10	300	17.500	442.6	OFP300-10A	50
12	150	19.000	482.6	OFP150-12A	50
12	300	20.500	519.1	OFP300-12A	10
14	150	21.000	533.4	OFP150-14A	10
14	300	23.000	584.2	OFP300-14A	10
16	150	23.500	596.7	OFP150-16A	10
16	300	25.500	647.7	OFP300-16A	10
18	150	25.000	635.0	OFP150-18A	10
18	300	28.000	711.2	OFP300-18A	10
20	150	27.500	701.5	OFP150-20A	10
20	300	30.500	774.5	OFP300-20A	10
22	150	29.500	749.3	OFP150-22A	10
24	150	32.000	812.8	OFP150-24A	10
24	300	36.000	914.4	OFP300-24A	10
30	150	38.750	984.3	OFP150-30A	10

**CODE 61 & 62 FLANGE PROTECTORS****BFP & XP Series****SAE J518 Quick Fit Flange Protectors****Specifications:**

- Material: Polyethylene
- Color: See Table

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



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

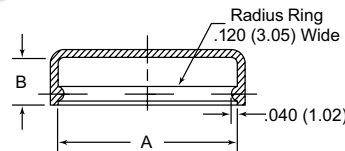
Item No.	Nominal Pipe Size in	Class Pressure Rating	A in	B in	Color	Bulk Pack Qty.
XP1-1/2A	1-1/2	6000	3.125	1.437	Red	400
BFP2A	2	3000	3.062	1.688	Blue	400
XP2A	2	6000	3.812	1.750	Red	250
BFP2-1/2A	2-1/2	3000	3.500	2.000	Blue	300
BFP3A	3	3000	4.188	2.438	Blue	50
BFP3-1/2A	3-1/2	3000	4.750	2.750	Blue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

Q & HP Series**SAE J518 Split-Flange Covers****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 through the cap
- The internal-locking bead design provides a secure fit
- Requires no fasteners



Item No.	Nominal Flange Size in	Code	Class Pressure Rating	A in	B in	Bulk Pack Qty.
Q1A	1/2	61	3000	1.190	0.390	2500
Q2A	5/8	61	3000	1.330	0.415	4000
Q3A	3/4	61	3000	1.510	0.435	3000
HP12A	3/4	62	6000	1.610	0.546	2200
Q4A	1	61	3000	1.760	0.465	2000
HP16A	1	62	6000	1.860	0.578	1600
Q5A	1-1/4	61	3000	1.971	0.465	1700
HP20A	1-1/4	62	6000	2.110	0.609	1200

Item No.	Nominal Flange Size in	Code	Class Pressure Rating	A in	B in	Bulk Pack Qty.
Q6A	1-1/2	61	3000	2.385	0.465	1200
HP24A	1-1/2	62	6000	2.485	0.690	750
Q7A	2	61	3000	2.810	0.585	750
HP32A	2	62	6000	3.110	0.690	500
Q8A	2-1/2	61	3000	3.310	0.500	550
Q9A	4	61	3000	4.000	0.500	500
Q11A	4-1/2	61	3000	4.500	0.570	250
Q12A	5	61	3000	5.000	0.570	250

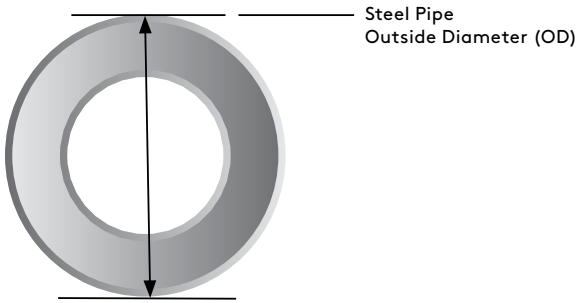
DON'T FORGET YOUR FITTINGS!**R Series**
Square Head
NPT Threads**TSSP Series**
Positive Sealing for
Metric/BSP Threads**PFP Series**
NPT Threads
(O-Ring Option)**BL Nylon Series**
Tough/Higher Temp
For Standard Threads
(O-Ring Option)**G Series**
UNF/JIC Threads for
Flared/Flareless Fittings**TF Series**
Flat Faced O-Ring
Hydraulic Fitting Threads**BLM Series**
Molded O-Ring Unified
Standard Threads**DC Series**
UNJ/UNJS Threads**EZP Series**
Easy Pull for Unified
Standard/Metric Threads**UN Series**
Quick Fit for Standard
JIC/Metric/BSP Threads

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HOW TO MEASURE A PIPE OR FLANGE



HOW TO MEASURE A STEEL PIPE & PICK A PIPE CAP



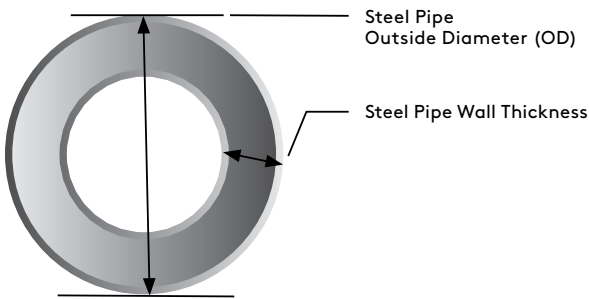
1. Measure the pipe OD as shown above.
2. Refer to the chart to the right and locate the pipe OD.
3. The 2nd column to is the Nominal Pipe Size of the pipe.
4. Refer to any pipe cap series on pages 92-93.
5. Find your nominal pipe size on the series table.

Pipe O.D. (Measurement)	Nominal Pipe Size (In)
0.405 (10.3)	1/8
0.540 (13.7)	1/4
0.675 (17.1)	3/8
0.840 (21.3)	1/2
1.050 (26.7)	3/4
1.315 (33.4)	1
1.660 (42.2)	1-1/4
1.900 (48.3)	1-1/2
2.375 (60.3)	2
2.875 (73.0)	2-1/2
3.500 (88.9)	3
4.000 (101.6)	3-1/2
4.500 (114.3)	4
5.563 (141.3)	5
6.625 (168.3)	6
8.625 (219.1)	8
10.750 (273.0)	10
12.750 (323.8)	12

Item No.	Nominal Pipe Size (In)	Actual ID In	Height (h) In	Color	Pack Qty.
RRC1/8A	1/8	0.385	0.485	Yellow	1
RRC1/4A	1/4	0.516	0.490	Yellow	1
RRC3/8A	3/8	0.660	0.538	Yellow	1
RRC1/2A	1/2	0.840	0.717	Yellow	1

EXAMPLE

HOW TO MEASURE A STEEL PIPE & PICK A PIPE PLUG



1. Measure the pipe OD and wall thickness as shown above.
2. Refer to the chart to the right and locate the pipe OD.
3. The 2nd column is the Nominal Pipe Size of the pipe.
4. Refer to any pipe plug series on pages 94 - 96.
5. Find your nominal pipe size on the series table.
6. That is the correct size plug for your pipe.

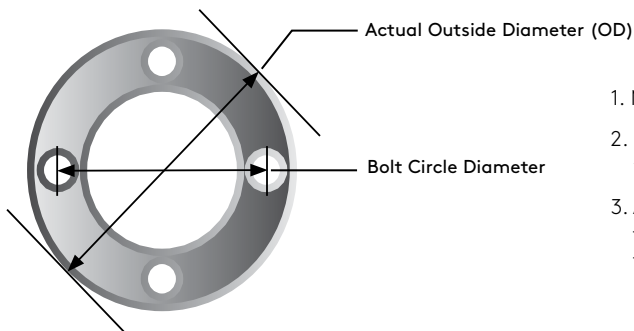
Pipe O.D. (Measurement)	Nominal Pipe Size (In)	Wall Thickness (Measurement)	Schedule No.
0.405 (10.3)	1/8	.068 (1.73)	40
		.095 (2.41)	80
0.540 (13.7)	1/4	.088 (2.23)	40
		.119 (3.02)	80
0.675 (17.1)	3/8	.091 (2.31)	40
		.126 (3.20)	80
0.840 (21.3)	1/2	.109 (2.77)	40
		.147 (3.73)	80
1.050 (26.7)	3/4	.113 (2.87)	40
		.154 (3.91)	80
1.315 (33.4)	1	.133 (3.38)	40
		.179 (4.55)	80
1.660 (42.2)	1-1/4	.140 (3.56)	40
		.191 (4.85)	80
1.900 (48.3)	1-1/2	.145 (3.68)	40
		.200 (5.08)	80
2.375 (60.3)	2	.154 (3.91)	40
		.218 (5.54)	80
2.875 (73.0)	2-1/2	.203 (5.16)	40
		.276 (7.01)	80
3.500 (88.9)	3	.216 (5.49)	40
		.300 (7.62)	80
4.000 (101.6)	3-1/2	.226 (5.74)	40
		.318 (8.08)	80
4.500 (114.3)	4	.237 (6.02)	40
		.337 (8.56)	80
5.563 (141.3)	5	.258 (6.55)	40
		.375 (9.52)	80
6.625 (168.3)	6	.280 (7.11)	40
		.432 (10.97)	80
8.625 (219.10)	8	.322 (8.18)	40
		.500 (12.70)	80
10.750 (273.0)	10	.365 (9.27)	40
		.594 (15.09)	80
12.750 (323.8)	12	.406 (10.31)	40
		.688 (17.48)	80

Nominal Pipe Size (In)	Schedule	Item No.	Color	Pack Qty.	Bu Pa Qt
1/8	40	004A	Blue	1	450
1/8	80	002A	Blue	1	450
1/4	40	008A	Blue	1	500
1/4	80	006A	Blue	1	500

EXAMPLE

Plugs for other pipe schedules available. Contact Essentra for details.

HOW TO MEASURE A FLANGE & PICK A PROTECTOR



1. Measure your flange's OD and its Bolt Circle Diameter as shown.
2. Refer to the RFL, PCF, and PRB on pages 99 - 101 and locate your Actual (OD) 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.