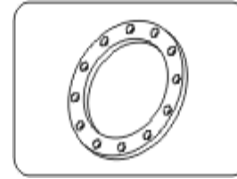


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Flanges and fasteners should be galvanised in accordance with AS/NZS 4680. AS/NZS 4680. Alternatively, stainless steel flanges and fasteners can be used or flanges can be protected with polymeric coatings in accordance with AS/NZS 4158 and be used in conjunction with stainless steel fasteners.

Backing Ring Table D



Galvanized

Code BRGD

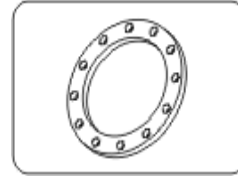
***Please Note some table D & E Backing Rings have been Interchanged with table B7 AS 4087 Backing Rings**

Dimension	Code	OD	ID	Thickness	PCD	Bolt Hole
110*	BRGW11013	215	128	13	178	4x18
125/100*	BRGW012113	215	135	13	178	4x18
125	BRGD012513	255	140	13	210	8x18
140	BRGD014013	255	158	13	210	8x18
160	BRGW016013	280	178	13	235	8x18
180	BRGW018013	280	188	13	135	8x18
200	BRGD020013	335	235	13	292	8x18
225/200*	BRGW022219	335	240	19	292	8x18
225	BRGD022513	335	238	13	292	8x22
250*	BRGW025019	405	288	19	356	8x22
280*	BRGW028019	405	294	19	356	8x22
315*	BRGW031523	455	338	23	406	12x22
355	BRGD035522	525	376	22	470	12x26
400	BRGD040022	580	430	22	521	12x26
450	BRGD045025	640	470	25	584	12x26
500	BRGD050029	705	533	29	641	16x26
560	BRGD056029	760	618	29	699	16x30
630	BRGD063032A	825	645	32	756	16x30
630	BRGD063032C	825	660	32	756	16x30
710	BRGD071035	910	740	35	845	20x30
800	BRGD080038	1060	843	38	984	20x36
800	BRGD080041	1060	843	41	984	20x36
900	BRGD090048	1175	947	48	1092	24x36
1000	BRGD100051	1255	1050	51	1175	24x36
1200	BRGD120051	1490	1280	71	1410	

***Please Note some table D & E Backing Rings have been Interchanged with table B7 Backing Rings which represents AS4087 PN16 BRGW**

*** Please note in Table D/E, AS 4087 & ANSI in 630mm Backing Rings there is two types of Backing Rings available one with a ID of 645mm (A Code) and the second with a ID of 660mm (C Code)**

**Backing Ring Table E
AS2129**



Galvanized Code BRGE

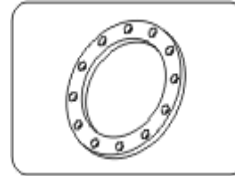
***Please Note some table D & E Backing Rings have been Interchanged with table B7 AS 4087 Backing Rings**

Dimension	Code	OD	ID	Thickness	PCD	Bolt Size
20	BRGE002006	95	28	6	67	4x14
25	BRGE002506	100	34	6	73	4x14
32	BRGE003207	115	42	7	83	4x14
40	BRGE004008	120	51	8	87	4x14
50	BRGE005009	135	62	9	98	4x14
63*	BRGW006311	150	78	11	114	4x18
75*	BRGW007511	165	92	11	127	4x18
90*	BRGW009011	185	108	11	146	4x18
110	BRGE011013	215	128	13	178	8x18
125/100	BRGE012113	215	135	13	178	8x18
125	BRGE012513	255	140	14	210	8x18
140	BRGE014014	255	158	14	210	8x18
160	BRGE016017	280	178	17	235	8x22
180	BRGE018017	280	188	17	235	8x22
200	BRGE020019	335	235	19	292	8x22
225	BRGE022519	335	238	19	292	8x22
250	BRGE025022	405	288	22	356	12x22
280	BRGE028022	405	294	22	356	12x22
315	BRGE031525	455	338	25	406	12x26
355*	BRGW035529	525	376	29	470	12x26
400	BRGE040032	580	430	32	521	12x26
450	BRGE045035	640	470	35	584	16x25
500	BRGW050038	705	533	38	641	16x26
560	BRGE056044	760	618	44	699	16x30
630	BRGE063048A	825	645	48	756	16x33
630	BRGE063048C	825	660	48	756	16x33
710	BRGE071051	910	740	51	845	20x33
800*	BRGW080056	1060	843	54	984	20x36
900	BRGE090064	1175	947	64	1092	24x36
1000	BRGE100067	1255	1050	67	1175	24x39

***Please Note some table D & E Backing Rings have been Interchanged with table B7 Backing Rings which represents AS4087 PN16 BRGW**

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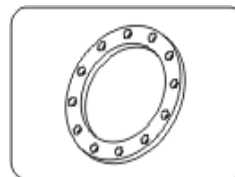
Backing Ring Table
ANSI
ASTM 105 Material

**Galvanized****Code BRGA**

Dimension	Code	OD	ID	Thickness	PCD	Bolt Size
20	BRGA002011	90	28	11.2	60.5	4x16
25	BRGA002513	98	34	12.8	70	4x16
32	BRGA003214	108	42	14.2	79.5	4x16
40	BRGA004016	117	51	15.7	89	4x16
50	BRGA005017	127	62	17.5	98.5	4x16
63	BRGA006319	152	78	19	120.5	4x20
75	BRGA007522	178	92	22.3	139.5	4x20
90	BRGA009024	191	108	23.9	152	4x20
110	BRGA011024	229	128	23.9	190.5	8x20
125	BRGA012524	254	135	23.9	216	8x22
140	BRGA014024	254	158	23.9	216	8x22
160	BRGA016025	279	178	25.4	241	8x22
180	BRGA018025	279	188	25.4	241	8x22
200	BRGA020028	343	235	28.4	298.5	8x22
225	BRGA022528	343	238	28.4	298.5	8x22
250	BRGA025030	406	288	30.2	362	12x26
280	BRGA028030	406	294	30.2	362	12x26
315	BRGA031531	482	338	31.8	432	12x26
355	BRGA035535	533	376	35	476	12x30
400	BRGA040037	600	430	36.6	540	16x30
450	BRGA045040	635	470	39.6	578	16x33
500	BRGA050043	700	533	43	635	20x33
560	BRGA056045	750	618	48	692	
630	BRGA063048A	815	645	47.8	750	20x36
630	BRGA063048C	815	660	47.8	750	20x36

*** Please note the Galvanised ANSI Backing Ring are now to PIPA 007 Full Specification,
on request available Galvanised PN16 ANSI Backing Rings Product Code (BRGNSA)**

**Backing Ring Table AS
4087**



Galvanized

Code BRGW

Dimension	Code	OD	ID	Thickness	PCD	Bolt Size
63	BRGW006311	150	78	11	114	4x18
75	BRGW007511	165	92	11	127	4x18
90	BRGW009011	185	108	11	146	4x18
110	BRGW011013	215	128	13	178	4x18
125	BRGW012113	215	135	13	178	4x18
160	BRGW016013	280	178	13	235	8x18
180	BRGW018013	280	188	13	235	8x18
200	BRGW020019	335	235	19	292	8x18
225/200*	BRGW022219	335	240	19	292	8x18
225	BRGW022519	370	238	19	324	8x18
250	BRGW025019	405	288	19	356	8x22
280	BRGW028019	405	294	19	356	8x22
315	BRGW031523	455	338	23	406	12x22
355	BRGW035530	525	376	30	470	12x26
400	BRGW040030	580	430	30	521	12x26
450	BRGW045030	640	470	30	584	12x26
500	BRGW050038	705	533	38	641	16x26
630	BRGW063048A	825	645	48	756	16x30
630	BRGW063048C	825	660	48	756	16x30
710	BRGW071056	910	740	56	845	20x30
800	BRGW080056	1060	843	56	984	20x36
900	BRGW090066	1175	947	66	1092	24x36
1000	BRGW100066	1255	1050	66	1175	24x36

Backing Ring Table D

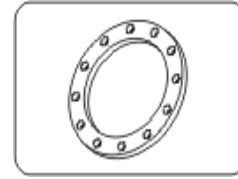
Stainless Steel

Code BRSD

***Please Note some table D & E Backing Rings have been Interchanged with table B7 Backing Rings**

Dimension	Code	OD	ID	Thickness	PCD	Bolt Size
110*	BRSW011013	215	128	13	178	
125	BRSW012113	215	135	13	178	
125	BRSD012513	255	140	13	210	
140	BRSD014013	255	158	13	210	
160	BRSW016013	280	178	13	235	
180	BRSW018013	280	188	13	235	
200	BRSD020013	335	235	13	292	
225	BRSD022513	335	238	13	292	
250*	BRSW025019	405	288	19	356	

Backing Ring Table D

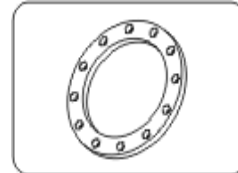


Stainless Steel Code BRSD

***Please Note some table D & E Backing Rings have been Interchanged with table B7 Backing Rings**

280*	BRSW028019	405	294	19	356	
315*	BRSW031523	455	338	23	406	

Backing Ring Table D

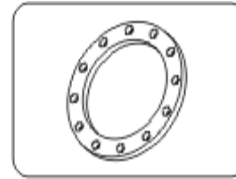


Stainless Steel Code BRSD

***Please Note some table D & E Backing Rings have been Interchanged with table B7 Backing Rings**

Dimension	Code	OD	ID	Thickness	PCD	
355	BRSD035522	525	376	22	470	
400	BRSD040022	580	430	22	521	
450	BRSD045025	640	470	25	584	
500	BRSD050029	705	533	29	641	
560	BRSD056029	760	618	29	699	
630	BRSD063032	825	645	32	756	
710	BRSD071035	910	740	35	845	
800	BRSD080041	1060	843	41	984	
900	BRSD090048	1175	947	48	1092	
1000	BRSD100051	1255	1050	51	1175	

**Backing Ring Table E
AS2129**

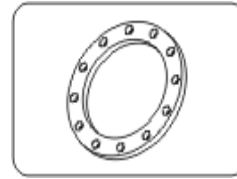


Stainless Steel Code BRSE

***Please Note some table D & E Backing Rings have been Interchanged with table B7 Backing Rings**

Dimension	Code	OD	ID	Thickness	PCD	
20	BRSE002006	95	28	6	67	
25	BRSE002506	100	34	6	73	
32	BRSE003207	115	42	7	83	
40	BRSE004008	120	51	8	87	
50	BRSE005009	135	62	9	98	
63*	BRSW006311	150	78	11	114	
75*	BRSW007511	165	92	11	127	
90*	BRSW009011	185	108	11	146	
110	BRSE011013	215	128	13	178	
125/100	BRSE012113	215	135	13	178	
125	BRSE012513	255	140	14	210	
140	BRSE014014	255	158	14	210	
160	BRSE016017	280	178	17	235	
180	BRSE018017	280	188	17	235	
200	BRSE020019	335	235	19	292	
225	BRSE022519	335	238	19	292	
250	BRSE025022	405	288	22	356	
280	BRSE028022	405	294	22	356	
315	BRSE031525	455	338	25	406	
355	BRSE035516	525	376	16	470	
355*	BRSW035530	525	376	30	470	
400	BRSE040020	580	430	20	521	
400	BRSE040032	580	430	32	521	
450	BRSE045020	640	470	20	584	
450	BRSE045035	640	470	35	584	
500	BRSE050025	705	533	25	641	

**Backing Ring Table E
AS2129**

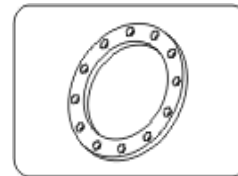


Stainless Steel Code BRSE

***Please Note some table D & E Backing Rings have been Interchanged with table B7 Backing Rings**

Dimension	Code	OD	ID	Thickness	PCD	
500	BRSE050038	705	533	38	641	
560	BRSE056030	760	618	30	699	
560	BRSE056044	760	618	44	699	
630	BRSE063030	825	645	30	756	
630	BRSE063048	825	645	48	756	
710	BRSE071051	910	740	51	845	
800*	BRSW080056	1060	843	54	984	
900	BRSE090064	1175	947	64	1092	
1000	BRSE100067	1255	1050	67	1175	

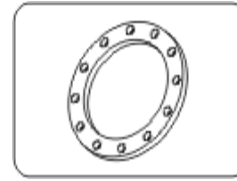
**Backing Ring Table
ANSI**



Stainless Steel Code BRSA

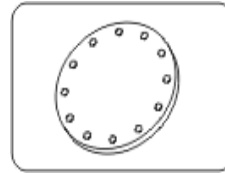
Dimension	Code	OD	ID	Thickness	PCD	
20	BRSA002008	90	28	11.2	60.5	
25	BRSA002513	98	34	12.8	70	
32	BRSA003214	108	42	14.2	79.5	
40	BRSA004016	117	51	15.7	89	
50	BRSA005017	127	62	17.5	98.5	
63	BRSA006310	152	78	10	120.5	
75	BRSA007510	178	92	10	139.5	
90	BRSA009011	191	108	11	152	
110	BRSA011013	229	128	13	190.5	
125	BRSA012514	254	135	14	216	
140	BRSA014014	254	158	14	216	
160	BRSA016017	279	178	17	241	
180	BRSA018017	279	188	17	241	
200	BRSA020019	343	235	19	298.5	
250	BRSA025022	406	288	22	362	
280	BRSA028022	406	294	22	362	
315	BRSA031525	482	338	25	432	
355	BRSA035529	533	376	29	476	
400	BRSA040032	600	430	32	540	
450	BRSA045035	635	470	35	578	
500	BRSA050038	700	533	38	635	
560	BRSA056045	750	618	48	692	
630	BRSA063048	815	645	47.8	750	

*** Standard Ansi Backing Rings are rated to PN16**

AGRU AUSTRALIA**Backing Ring Table A3
A027****Stainless Steel****Code BRSW**

Dimension	Code	OD	ID	Thickness	PCD	
63	BRSW006311	150	78	11	114	
75	BRSW007511	165	92	11	127	
90	BRSW009011	185	108	11	146	
110	BRSW011013	215	128	13	178	
125/100	BRSW012113	215	135	13	178	
160	BRSW016013	280	178	13	235	
180	BRSW018013	280	188	13	235	
200	BRSW020019	335	235	19	292	
225	BRSW022519	370	238	19	324	
250	BRSW025019	405	288	19	356	
280	BRSW028019	405	294	19	356	
315	BRSW031523	455	338	23	406	
355	BRSW035530	525	376	30	470	
400	BRSW040030	580	430	30	521	
450	BRSW045030	640	470	30	584	
500	BRSW050038	705	533	38	641	
630	BRSW063048	825	645	48	756	
710	BRSW071056	910	740	56	845	
800	BRSW080056	1060	843	56	984	
900	BRSW090066	1175	947	66	1092	
1000	BRSW100066	1255	1050	66	1175	

Blind Flange Table E

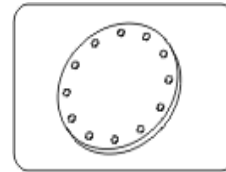


Galvanized

Code BLGE

Dimension	Code	OD	ID	Thickness	PCD	
90	BLGE009011	185		11	146	
110	BLGE011013	215		13	178	
125	BLGE012513	255		13	210	
160	BLGE016017	280		17	235	
200	BLGE020019	335		19	292	
250	BLGE025022	405		22	356	
315	BLGE031525	455		25	406	

Blind Flange Table D

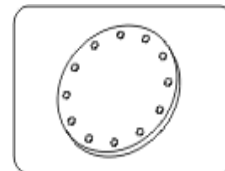


Galvanized

Code BLGD

Dimension	Code	OD	ID	Thickness	PCD	
250	BLGD025016	405		16	356	
315	BLGD031519	455		19	406	
355	BLGD035522	525		22	470	
400	BLGD040022	580		22	521	

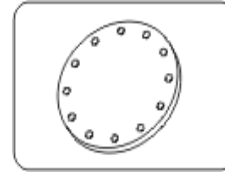
**Blind Flange ANSI
150lb**



Galvanized

Code BLGA

Dimension	Code	OD	ID	Thickness	PCD	
50	BLGA005017	127		17	98	
63	BLGA006319	152		19	120	
90	BLGA009023	191		23	152	
110	BLGA011023	229		23	190	
160	BLGA016025	279		25	241	
200	BLGA020028	343		28	298	
250	BLGA025030	406		30	362	
315	BLGA031531	482		31	432	

AGRU AUSTRALIA**Blind Flange AS 4087**

Galvanized

Code BLGW

Dimension	Code	OD	ID	Thickness	PCD	
50	BLGW005011	150		11	114	
63	BLGW006311	165		11	127	
75	BLGW007511	165		11	127	
110	BLGW011013	215		13	178	
160	BLGW016013	280		13	235	
225	BLGW022519	370		19	324	
250	BLGW025019	405		19	356	
315	BLGW31523	455		23	406	
355	BLGW035530	525		30	4070	
400	BLGW040030	580		30	521	
450	BLGW45030	640		30	584	
500	BLGW050038	705		38	641	
630	BLGW063048	825		48	756	

AGRU AUSTRALIA

HDPE

Valve Spacers

PE 100 black

Code BVS

Dimension	Code	Detail	Type	Code	
110	BVS0011011	110 HDPE SDR11	PE	BVS	
125	BVS0012511	125 HDPE SDR11	PE	BVS	
140	BVS0014011	140 HDPE SDR11	PE	BVS	
160	BVS0016011	160 HDPE SDR11	PE	BVS	
200	BVS0020011	200 HDPE SDR11	PE	BVS	
225	BVS0022511	225 HDPE SDR11	PE	BVS	
250	BVS0025011	250 HDPE SDR11	PE	BVS	
280	BVS0028011	280 HDPE SDR11	PE	BVS	
315	BVS0031511	315 HDPE SDR11	PE	BVS	
355	BVS0035511	355 HDPE SDR11	PE	BVS	
400	BVS0040011	400 HDPE SDR11	PE	BVS	
450	BVS0045011	450 HDPE SDR11	PE	BVS	
500	BVS0050011	500 HDPE SDR11	PE	BVS	
630	BVS0063011	630 HDPE SDR11	PE	BVS	

*Other SDR ratings available on request