

Flange Dimensions

Nominal Size:15 mm

Nom	inal Size:15 r											
	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Fastener Size and Thread	N	linimum Flange Th	ickness (mm)		Diameter of Raised Face mm (If applicable)	
	*						Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel		Flange Face Type
	PN14	95	67	4	14	M12	-	-	6	-		Flat
AS 4087	PN16	-	-	-	-	-	-	-	-	-		
70	PN21	-	-	-	-	-	-	-	-	-		
•	PN35	-	-	-	-	-	-	-	-	-		
	*Classificatio	n of flanges b	y PN Number base	ed on the	allowable ope	rating pressu	ıre (AOP) expresse	d in megapascals (F	PN=10x AOP)			
	_		PN14 & PN16 is co	-								
	Drilling for As	S 4087 Class	PN21 & PN35 is co	ompatible	with AS 2129), Table F & T	Гable H					
	Table A	95	67	4	14	M12	13	13	6	5	47*	
43	Table D	95	67	4	14	M12	13	13	6	5	47*	Flat/ Raised/ Flat with O Ring
A3 2129	Table E	95	67	4	14	M12	13	13	6	6	47*	Flat/ Raised/ Flat with O Ring
(Table F	95	67	4	14	M12	13	13	8	10	47*	Flat/ Raised/ Flat with O Ring
	Table H	115	83	4	18	M16	16	16	10	13	57*	Flat/ Raised/ Flat with O Ring
	*Not a prefer	red face										
	PN6	80	55	4	11	M10	12	-	6	12	38*/40	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	95	65	4	14	M12	14	-	6	14	46*/45	Flat/ Raised for Cast Iron and as per Note # for Steel
È	PN16	95	65	4	14	M12	14	-	6	-	46*/45	Flat/ Raised for Cast Iron and as per Note # for Steel
<u>-</u>	PN20	90	60.5	4	16	M14	-	-	-	11.5	-	As per Note # for steel
	PN25	95	65	4	14	M12	16		8	14	46*/45	Flat/ Raised for Cast Iron and as per Note # for Steel
2	PN40	95 5 of 100 700	65	4	14	M12	16		9	14	46*/45	Flat/ Raised for Cast Iron and as per Note # for Steel
	# As per lable		5-1 for Grey and D	ucille Cas	St Iron							
			EN 1092-1 S/NZS 4331, BS 45	504 & DIN	2533							
	Drilling Comp	Dauble Will A	5/1 1/2 0 4001, B 0 40	304 & DIIV	2000							
										*		
	150	90	60.3	4	⁵ ⁄8" - 15.9	¹ /2" - 12.7	_	_	_	11.2		Flat/ Raised/ Flat with Ring Joint/Others
B16.5	300	95	66.7	4	⁵ /8" - 15.9	¹ /2" - 12.7	_	_	_	14.3		Flat/ Raised/ Flat with Ring Joint/Others
'n	600	95	66.7	4	⁵ /8" - 15.9		-	-	-	14.3		Flat/ Raised/ Flat with Ring Joint/Others
			are as per Table 7,	-								Tide Italsed/ Flat with filling John Culeis
		_	-					le 11, and Table 16	as per ASME B16	3.5		
			, ass 150 is compati		-			-				
	J	, -			, -							



Flange Dimensions Nominal Size: 20 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Fastener Size and Thread		Minimum I	Flange Thickness (n	nm)	Diameter of Raised Face mm (If applicable)	
		` '		, ,			Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
	PN14	100	73	4	14	M12	-	-	6	-	-	Flat
AS 4087	PN16	-	-	-	-	-	-	-	-	-		
NA NA	PN21	-	-	-	-	-	-	-	-	-		
	PN35	-	-	-	-	-	-	-	-	-		
	*Classification	on of flanges	by PN Number ba	sed on th	e allowable	operating p	ressure (AC	OP) expressed i	n megapascals (PN=	:10x AOP)		
	Drilling for	AS 4087 CI	ass PN14 & PN16	is compa	tible with AS	2129, Table	e D					
	Drilling for A	S 4087 Clas	s PN21 & PN35 is	compatib	le with AS 2	129, Table I	F & Table F	ł				
	Table A	100	73	4	14	M12	13	13	6	5	53*	Flat/ Raised/ Flat with O Ring
S S	Table D	100	73	4	14	M12	13	13	6	5	53*	Flat/ Raised/ Flat with O Ring
AS 2129	Table E	100	73	4	14	M12	13	13	6	6	53*	Flat/ Raised/ Flat with O Ring
ž	Table F	100	73	4	14	M12	13	13	8	10	53*	Flat/ Raised/ Flat with O Ring
	Table H	115	83	4	18	M16	16	16	10	13	57*	Flat/ Raised/ Flat with O Ring
	*Not a prefe	rred face										
	PN6	90	65	4	11	M10	14	-	6	14	48*/50	Flat/ Raised for Cast Iron and as per Note # for Ste
Ž	PN10	105	75	4	14	M12	16	-	6	16	56*/58	Flat/ Raised for Cast Iron and as per Note # for Ste
	PN16	105	75	4	14	M12	16	-	6	-	56*/58	Flat/ Raised for Cast Iron and as per Note # for Ste
5	PN20	100	70	4	16	M14	-	-	8	13	56*	Flat/ Raised for Cast Iron and as per Note # for Ste
<u> </u>	PN25	105	75	4	14	M12	18		8	16	56*/58	Flat/ Raised for Cast Iron and as per Note # for Ste
	PN40	105	75	4	14	M12	18		9	16	56*/58	Flat/ Raised for Cast Iron and as per Note # for Ste
	*As per table	e 5 of ISO 70	005-1 for Grey and	Ductile C	ast Iron							
	# As per Fig	jure 3 and 4	of EN1092-1									
	Drilling Com	patible with	AS/NZS 4331, BS	4504 & D	IN 2535							
										*		
ις.	150	100	69.9	4	⁵ ⁄8" - 15.9	¹ /2" - 12.7	-	-	-	12.7		Flat/ Raised/ Flat with Ring Joint/Others
B16.5	300	115	82.6	4	³ ⁄4" - 19.1	⁵ ⁄8" - 15.9	-	-	-	15.9		Flat/ Raised/ Flat with Ring Joint/Others
ш	600	115	82.6	4	³ ⁄4" - 19.1	⁵ ⁄8" - 15.9	-	-	-	15.9		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above	e are as per Table 7	7, Table 1	0, Table 15	of ASME B	16.5					-
	* Thickness	of the flange	e given above is the	e thicknes	s given for t	he lapped jo	oint. As per	Table 8, Table	11, and Table 16 as	per ASME B16	.5	
	Drilling for A	NSI B16.5, (Class 150 is compa	atible with	ANSI B16.1	, Class 125						



Flange Dimensions

	Size: 25 mn Class / Table	Outside Diameter	Pitch Circle Diameter (mm)	No of Holes	Hole Diameter	Bolt Diameter	R.	linimum Elanga	Thickness (mm)		Diameter of Raised Face mm (If applicable)	
		(mm)		(mm)	(mm)	(mm)	Cast Iron		Copper Alloy	Steel	(ii applicable)	Flange Face Type
	PN14	115	83	4	14	M12	-	-	8	-	-	Flat
	PN16	-	-	-	-	-	-	-	-	-		
:	PN21	-	-	-	-	-	-	-	-	-		
Ď ř	PN35	-	-	-	-	-	-	-	-	-		
2	*Classification	on of flange	s by PN Number b	ased on th	e allowable o	perating pres	sure (AOP)	expressed in me	gapascals (PN=1	0x AOP)		
	Drilling for	AS 4087 CI	lass PN14 & PN16	is compat	ible with AS 2	129, Table D)					
	Drilling for A	S 4087 Cla	ss PN21 & PN35 is	compatib	le with AS 21	29, Table F 8	& Table H					
	Table A	115	83	4	14	M12	13	13	8	5	63*	Flat/ Raised/ Flat with O Ring
	Table D	115	83	4	14	M12	13	13	8	5	65*	Flat/ Raised/ Flat with O Ring
	Table E	115	83	4	14	M12	13	13	8	7ŧ	63*	Flat/ Raised/ Flat with O Ring
7	Table F	120	87	4	18	M16	13	13	10	10 1	63*	Flat/ Raised/ Flat with O Ring
	Table H	120	87	4	18	M16	19	19	11	14	64*	Flat/ Raised/ Flat with O Ring
	*Not a prefe	rred face										Ç
	l Plate flange	e less than	12 mm may suffer	unaccepta	ble distortation	n after weldi	ng to the pip	oe e				
	PN6	100	75	4	11	M10	14	-	8	14	58*/60	Flat/ Raised for Cast Iron and as per Note # for S
	PN10	115	85	4	14	M12	16	-	8	16	65*/68	Flat/ Raised for Cast Iron and as per Note # for S
(2000)	PN16	115	85	4	14	M12	16	-	8	-	65*/68	Flat/ Raised for Cast Iron and as per Note # for S
	PN20	110	79.5	4	16	M14	11	11	9	11.5	65*	Flat/ Raised for Cast Iron and as per Note # for S
2	PN25	115	85	4	14	M12	18	-	9	16	65*/68	Flat/ Raised for Cast Iron and as per Note # for St
	PN40	115	85	4	14	M12	18	-	11	16	65*/68	Flat/ Raised for Cast Iron and as per Note # for S
	-		005-1 for Grey and	d Ductile C	ast Iron							
			of EN1092-1									
	Drilling Com	patible with	AS/NZS 4331, BS	4504 & D	IN 2535							
					E	1				*		
5	150	110	79.4	4		¹ ⁄2" - 12.7	-	-	-	14.3		Flat/ Raised/ Flat with Ring Joint/Others
B16.5	300	125	88.9	4		⁵ ⁄8″ - 15.9	-	-	-	17.5		Flat/ Raised/ Flat with Ring Joint/Others
	600	125	88.9	4	³ ⁄4" - 19.1	⁵ ⁄8″ - 15.9	-	-	-	17.5		Flat/ Raised/ Flat with Ring Joint/Others

* Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5



Flange Dimensions

Nominal Size: 32 mm

	Size: 32 mm	Outside	Pitch Circle	No of	Hole	Bolt					Diameter of Raised	
	Table	Diameter (mm)	Diameter (mm)	Holes (mm)	Diameter (mm)	Diameter (mm)	I	Minimum Flan	ge Thickness (mr	n)	Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
	PN14	120	87	4	14	M12	-	-	8		-	Flat
	PN16	-	-	-	-	-	-	-	-			
87	PN21	-	-	-	-	-	-	-	-			
AS 4087	PN35	-	-	-	-	-	-	-	-			
¥	*Classificatior	n of flanges by	PN Number bas	ed on the a	allowable oper	ating pressu	re (AOP) ex	pressed in meg	papascals (PN=10)	(AOP)		
	Drilling for A	AS 4087 Class	PN14 & PN16 is	compatible	e with AS 212	9, Table D						
,	Drilling for AS	3 4087 Class P	N21 & PN35 is c	compatible	with AS 2129,	Table F & T	able H					
	Table A	120	87	4	14	M12	16	16	8	6ŧ	67*	Flat/ Raised/ Flat with O Ring
53	Table D	120	87	4	14	M12	16	16	8	6ŧ	67*	Flat/ Raised/ Flat with O Ring
AS 2129	Table E	120	87	4	14	M12	16	16	8	13	67*	Flat/ Raised/ Flat with O Ring
AS	Table F	135	98	4	18	M16	16	16	10	13	74*	Flat/ Raised/ Flat with O Ring
	Table H	135	98	4	18	M16	22	22	11	17	76*	Flat/ Raised/ Flat with O Ring
	*Not a preferr	red face										_
	Plate flange	less than 12 n	nm thick may suf	fer unacce	ptable distorti	on after weld	ing to the pip	ое				
	PN6	120	90	4	14	M12	16	-	8	16	69*/70	Flat/ Raised for Cast Iron and as per Note # for Stee
<u> </u>	PN10	140	100	4	18	M16	18	-	8	18	76*/78	Flat/ Raised for Cast Iron and as per Note # for Stee
7005 (DIN)	PN16	140	100	4	18	M16	18	-	8	-	76*/78	Flat/ Raised for Cast Iron and as per Note # for Stee
700	PN20	120	89	4	16	M14	13	13	10	13	64*	Flat/ Raised for Cast Iron and as per Note # for Ste
08	PN25	140	100	4	18	M16	20	-	9	18	76*/78	Flat/ Raised for Cast Iron and as per Note # for Ste
	PN40	140	100	4	18	M16	20	-	11	18	76*/78	Flat/ Raised for Cast Iron and as per Note # for Stee
	*As per table	5 of ISO 7005	-1 for Grey and D	Ouctile Cas	t Iron							·
:	# As per Figu	re 3 and 4 of E	N1092-1									
	Drilling Comp	atible with AS/	NZS 4331, BS 4	504 & DIN	2535							
										*		
B16.5	150	115	88.9	4	⁵ ⁄8″ - 15.9	¹⁄2" - 12.7	-	-	-			Flat/ Raised/ Flat with Ring Joint/Others
	300	135	98.4	4	³ ⁄4″ - 19.1	⁵ ⁄8″ - 15.9	-	-	-			Flat/ Raised/ Flat with Ring Joint/Others
5 2												

* Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5



Flange Dimensions

Nominal Size: 40 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)	1	Minimum Flange	Thickness (mm)		Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
	PN14	135	98	4	14	M12	-	-	10	-	-	Flat
4087	PN16	-	-	-	-	-	-	-	-	-		
AS	PN21	-	-	-	-	-	-	-	-	-		
	PN35	-	-	-	-	-	-	-	-	-		
	Drilling for	AS 4087 Cla	by PN Number ss PN14 & PN1 s PN21 & PN35	16 is com	patible with A	S 2129, Tab	e D	expressed in me	gapascals (PN=10	x AOP)		
	Table A	135	98	4	14	M12	16	16	10	6ŧ	78*	Flat/ Raised/ Flat with O Ring
2129	Table D	135	98	4	14	M12	16	16	10	6ŧ	78*	Flat/ Raised/ Flat with O Ring
AS 2	Table E	135	98	4	14	M12	16	16	10	9 1	78*	Flat/ Raised/ Flat with O Ring
∢	Table F	140	105	4	18	M16	16	16	11	13	81*	Flat/ Raised/ Flat with O Ring
	Table H	140	105	4	18	M16	22	22	13	17	83*	Flat/ Raised/ Flat with O Ring
	ł Plate flang	e less than 1	2 mm thick may	/ suffer ur	nacceptable o	listortion afte	r welding to the	e pipe				
	DNG	130	100	4	14	M12	16	-	9	16	78*/88	Flat/ Raised for Cast Iron and as per Note # for St
	PN6		100									That Maised for Cast Horrand as per Note # 101 St
Î	PN10	150	110	4	18	M16	18	19	9	18	84*/88	·
(NIO) so		150 150				M16 M16	18 18	19 19	9 9	18 -	84*/88 84*/88	Flat/ Raised for Cast Iron and as per Note # for St
7005 (DIN)	PN10		110	4	18				-	18 - 14.5		Flat/ Raised for Cast Iron and as per Note # for St
ISO 7005 (DIN)	PN10 PN16	150	110 110	4 4	18 18	M16	18	19	9	-	84*/88	Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St
(DIN)	PN10 PN16 PN20	150 130	110 110 98.5	4 4 4	18 18 16	M16 M14	18 14.5	19 14.5	9	- 14.5	84*/88 73*	Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St
ISO 7005 (DIN)	PN10 PN16 PN20 PN25 PN40	150 130 150 150	110 110 98.5 110	4 4 4 4	18 18 16 18	M16 M14 M16	18 14.5 20	19 14.5 19	9 11 11	- 14.5 18	84*/88 73* 84*/88	Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St
08	PN10 PN16 PN20 PN25 PN40	150 130 150 150 e 5 of ISO 70	110 110 98.5 110 110 05-1 for Grey a	4 4 4 4	18 18 16 18	M16 M14 M16	18 14.5 20	19 14.5 19	9 11 11	- 14.5 18	84*/88 73* 84*/88	Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St
081	PN10 PN16 PN20 PN25 PN40 *As per table # As per Fig	150 130 150 150 e 5 of ISO 70 ure 3 and 4 c	110 110 98.5 110 110 05-1 for Grey a	4 4 4 4 4 nd Ductile	18 18 16 18 18 e Cast Iron	M16 M14 M16	18 14.5 20	19 14.5 19	9 11 11	- 14.5 18	84*/88 73* 84*/88	Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St
08	PN10 PN16 PN20 PN25 PN40 *As per table # As per Fig	150 130 150 150 e 5 of ISO 70 ure 3 and 4 c	110 110 98.5 110 110 05-1 for Grey al	4 4 4 4 4 nd Ductile	18 18 16 18 18 e Cast Iron	M16 M14 M16	18 14.5 20	19 14.5 19	9 11 11	- 14.5 18	84*/88 73* 84*/88	Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St
081	PN10 PN16 PN20 PN25 PN40 *As per table # As per Fig Drilling Com	150 130 150 150 e 5 of ISO 70 ure 3 and 4 of patible with A	110 110 98.5 110 110 05-1 for Grey ar of EN1092-1 AS/NZS 4331, B	4 4 4 4 and Ductile	18 16 18 18 18 • Cast Iron & DIN 2535	M16 M14 M16 M16	18 14.5 20	19 14.5 19	9 11 11	- 14.5 18 18	84*/88 73* 84*/88	Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St Flat/ Raised for Cast Iron and as per Note # for St

* Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5





	Class /	Outside	Pitch Circle	No of	Hole	Bolt					Diameter of	TRADERS
	Table	Diameter (mm)	Diameter (mm)	Holes (mm)	Diameter (mm)	Diameter (mm)	M	linimum Flan	ge Thickness (mn	1)	Raised Face (If applicable)	
		, ,	, ,		, ,	, ,			Copper Alloy	Steel	` ' '	Flange Face Type
_	PN14	150	114	4	18	M16	-	-	10	-		Flat
AS 4087	PN16	150	114	4	18	M16	-	-	-	11	90	Raised
AS (PN21	165	127	4	18	M16	-	-	-	15	103	Flat/ Raised
	PN35	165	127	4	18	M16	-	-	-	19	103	Flat/ Raised
		_	-					expressed in m	egapascals (PN=1	0x AOP)		
	•			N16 is compati								
	Drilling for A	S 4087 Class	PN21 & PN3	35 is compatibl	e with AS 21	29, Table F &	Table H					
	Table A	150	114	4	18	M16	16	16	10	8 ‡	90*	Flat/ Raised/ Flat with O Ring
53	Table D	150	114	4	18	M16	17	17	10	8	90*	Flat/ Raised/ Flat with O Ring
AS 2129	Table E	150	114	4	18	M16	19	19	10	10	90*	Flat/ Raised/ Flat with O Ring
Ř	Table F	165	127	4	18	M16	19	19	11	16	103*	Flat/ Raised/ Flat with O Ring
	Table H	165	127	4	18	M16	25	25	13	19	102*	Flat/ Raised/ Flat with O Ring
	*Not a prefe	rred face										
	Plate flang	e less than 12	2 mm thick ma	ay suffer unac	ceptable dist	ortion after we	elding to the p	oipe				
_	PN6	140	110	4	14	M12	16	-	11	16	88*/90	Flat/ Raised for Cast Iron and as per Note # for Steel
N N	PN10	165	125	4	18	M16	20	19	11	20	99*/102	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN16	165	125	4	18	M16	20	19	11	-	99*/102	Flat/ Raised for Cast Iron and as per Note # for Steel
0 2 0	PN20	150*	120.5	4	18	M16	16	16	13	16	92*	Flat/ Raised for Cast Iron and as per Note # for Steel
081	PN25	165	125	4	18	M16	22	19	11	20	99*/102	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	165	125	4	18	M16	22	19	13	20	99*/102	Flat/ Raised for Cast Iron and as per Note # for Steel
	·		-	and Ductile Ca	ast Iron							
		ure 3 and 4 o										
	Drilling Com	patible with A	\S/NZS 4331,	BS 4504 & DI	N 2535							
	Drilling Com	patible with A	S/NZS 4331,	BS 4504 & DI	N 2533							
	*When mad	e from cast o	r ductile iron,	this flange fea	tures an outs	side diameter	of 155mm.			*		
טו ע	150	150	120.7	4	³ ⁄4″ - 19.1	⁵ ⁄8″ - 15.9	-	-	-	* 19.1		Flat/ Raised/ Flat with Ring Joint/Others
A3ME B16.5	300	165	127	8	³ ⁄4″ - 19.1	⁵ ⁄8″ - 15.9	-	-	-	22.3		Flat/ Raised/ Flat with Ring Joint/Others
ĹΦ	600	165	127	8	³ ⁄4″ - 19.1	⁵ ⁄8″ - 15.9	-	-	-	25.4		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above	are as per Ta	ble 7, Table 10), Table 15 o	of ASME B16.	5					Ŭ

* Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5



Flange Dimensions Nominal Size: 65 mm

Nonmar C	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)		Minimum Flange	Thickness (mm)		Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
	PN14	165	127	4	18	M16	-	-	11	-	-	Flat
	PN16	165	127	4	18	M16	-	-	-	11	103	Flat/ Raised
4087	PN21	185	146	8	18	M16	-	-	-	15	122	Flat/ Raised
S 40	PN35	185	146	8	18	M16	-	-	-	19	122	Flat/ Raised
AS								e) expressed in me	gapascals (PN=10x	AOP)		
	•		ss PN14 & PN	•	•							
	Drilling for A	S 4087 Clas	s PN21 & PN35	is compa	atible with AS	3 2129, Table	e F & Table H					
	Table A	165	127	4	18	M16	17	17	11	8ŧ	103*	Flat/ Raised/ Flat with O Ring
2129	Table D	165	127	4	18	M16	17	17	11	8 1	103*	Flat/ Raised/ Flat with O Ring
AS 2	Table E	165	127	4	18	M16	19	19	11	10ŧ	103*	Flat/ Raised/ Flat with O Ring
∢	Table F	185	146	8	18	M16	19	19	13	16	122*	Flat/ Raised/ Flat with O Ring
	Table H	185	146	8	18	M16	25	25	14	19	114*	Flat/ Raised/ Flat with O Ring
	*Not a prefer											
	ł Plate flange	e less than 1	2 mm thick may	y suffer ur	nacceptable (distortion aft	er welding to th	e pipe				
	DNIO	400	400	•	4.4	1440	40		40	40	400*/440	
2	PN6	160	130	4	14	M12	16	-	12	16	108*/110	Flat/ Raised for Cast Iron and as per Note # for Steel
<u> </u>	PN10	185	145	4*	18	M16	20	19	13	20	118*/122	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN16	185	145	4*	18	M16	20	19	13	20	118*/122	Flat/ Raised for Cast Iron and as per Note # for Steel
0 70	PN20	180	139.5	4	18	M16	17.5	17.5	14	17.5	105*	Flat/ Raised for Cast Iron and as per Note # for Steel
<u> </u>	PN25	185	145	8	18	M16	24	19	13	22	118*/122	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	185	145	8	18	M16	24	19	14	22	118*/122	Flat/ Raised for Cast Iron and as per Note # for Steel
	·		05-1 for Grey a	ina Ducille	e Cast Iron							
	# As per Figure			3S 1501 8	. DIN 2535 W	/hen made f	rom steel thes	e flanges feature 8	R holes			
	Drilling Com	Pauble Willi A	4331, L	33 4304 6	k DIIN 2000.V	viieii iiiaue i	ioni steet, tiles	e lialiges leature t	o notes.			
										*		
	150	180	139.7	4	³ ⁄4″ - 19.1	⁵ ⁄8″ - 15 9	_	-	-	22.3		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	190	149.2	8	⁷ /8" - 22.2		_	-	-	25.4		Flat/ Raised/ Flat with Ring Joint/Others
AS B	600	190	149.2	8	⁷ /8" - 22.2		_	-	-	28.6		Flat/ Raised/ Flat with Ring Joint/Others
			are as per Tab				B16.5			-		ride reason ride with raing bollin outlots

^{*} Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5 Drilling for ANSI B16.5, Class 150 is compatible with ANSI B16.1, Class 125

Flange Dimensions





	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)		Minimum Flanc	e Thickness (mm)		Diameter of Raised Face mm (If applicable)	
		(111111)	(11111)	(11111)	(111111)	(11111)	Cast Iron	Ductile Iron	Copper Alloy	Steel	(ii applicable)	Flange Face Type
	PN14	185	146	4	18	M16	19	-	13	-	-	Flat
4087	PN16	185	146	4	18	M16	-	18	-	11	122	Flat/ Raised
1 1	PN21	205	165	8	18	M16	19	-	-	15	141	Flat/ Raised
•	PN35	205	165	8	18	M16	29	22	-	24	141	Flat/ Raised
		_	by PN Number I ss PN14 & PN1				•) expressed in m	negapascals (PN=10	x AOP)		
	Drilling for A	S 4087 Class	s PN21 & PN35	is compati	ble with AS 2	129, Table F	- & Table H					
	Table A	185	146	4	18	M16	17	17	13	10 †	122*	Flat/ Raised/ Flat with O Ring
) ! !	Table D	185	146	4	18	M16	19	19	13	10 ‡	122*	Flat/ Raised/ Flat with O Ring
))	Table E	185	146	4	18	M16	19	19	13	11	122*	Flat/ Raised/ Flat with O Ring
	Table F	205	165	8	18	M16	19	19	14	16	141*	Flat/ Raised/ Flat with O Ring
	Table H	205	165	8	18	M16	29	29	16	22	127*	Flat/ Raised/ Flat with O Ring
	*Not a prefe	rred face										
	•	e less than 12	2 mm thick may	suffer una	cceptable dis	tortion after	welding to the	e pipe				
	•	e less than 12 190	2 mm thick may 150	suffer una 4	cceptable dis	tortion after M16	welding to the	e pipe -	13	18	124*/128	Flat/ Raised for Cast Iron and as per Note # for Ste
	Plate flange	e less than 12	-					e pipe - 19	13 13	18 20	124*/128 132*/138	·
	Plate flange	e less than 12 190	150	4	18	M16	18	- -	13 13		132*/138 132*/138	Flat/ Raised for Cast Iron and as per Note # for Ste
(200)	PN6 PN10 PN16 PN20	e less than 12 190 200	150 160	4 8	18 18	M16 M16	18 22	- 19	13	20	132*/138 132*/138 127*	Flat/ Raised for Cast Iron and as per Note # for Ste
(100) 000	PN6 PN10 PN16 PN20 PN25	190 200 200 190 200	150 160 160 152.5 160	4 8 8	18 18 18	M16 M16 M16 M16 M16	18 22 22 19 26	- 19 19 19 19	13 13	20 20 19.5 24	132*/138 132*/138 127* 132*/138	Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste
	PN6 PN10 PN16 PN20 PN25 PN40	190 200 200 190 200 200	150 160 160 152.5 160	4 8 8 4 8	18 18 18 18 18	M16 M16 M16 M16	18 22 22 19	- 19 19 19	13 13 16	20 20 19.5	132*/138 132*/138 127*	Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste
	PN6 PN10 PN16 PN20 PN25 PN40 *As per table	190 200 200 190 200 200 200 e 5 of ISO 700 ure 3 and 4 o	150 160 160 152.5 160 160 05-1 for Grey an	4 8 4 8 8 ad Ductile (18 18 18 18 18 18 Cast Iron	M16 M16 M16 M16 M16	18 22 22 19 26	- 19 19 19 19	13 13 16 14	20 20 19.5 24	132*/138 132*/138 127* 132*/138	Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste
	PN6 PN10 PN16 PN20 PN25 PN40 *As per table	190 200 200 190 200 200 200 e 5 of ISO 700 ure 3 and 4 o	150 160 160 152.5 160 160	4 8 4 8 8 ad Ductile (18 18 18 18 18 18 Cast Iron	M16 M16 M16 M16 M16	18 22 22 19 26	- 19 19 19 19	13 13 16 14	20 20 19.5 24	132*/138 132*/138 127* 132*/138	Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste
(See (Din))	PN6 PN10 PN16 PN20 PN25 PN40 *As per table # As per Fig	190 200 200 190 200 200 200 e 5 of ISO 700 ure 3 and 4 o	150 160 160 152.5 160 160 05-1 for Grey and f EN1092-1	4 8 4 8 8 ad Ductile (18 18 18 18 18 18 Cast Iron	M16 M16 M16 M16 M16 M16	18 22 22 19 26	- 19 19 19 19	13 13 16 14	20 20 19.5 24 24	132*/138 132*/138 127* 132*/138	Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste
(MIC) 600 / 061	PN6 PN10 PN16 PN20 PN25 PN40 *As per table # As per Fig Drilling Com	190 200 200 190 200 200 e 5 of ISO 700 ure 3 and 4 o patible with A	150 160 160 152.5 160 160 05-1 for Grey and f EN1092-1 AS/NZS 4331, BS	4 8 8 4 8 8 ad Ductile (18 18 18 18 18 18 Cast Iron DIN 2535	M16 M16 M16 M16 M16 M16	18 22 22 19 26	- 19 19 19 19	13 13 16 14	20 20 19.5 24 24 24	132*/138 132*/138 127* 132*/138	Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and as per Note # for Ste Flat/ Raised for Cast Iron and Iron and Iron and Iron Ste Flat/ Raised for Cast Iron and Iron Iron Iron Iron Iron Iron Iron Iron
ISO 7005 (DIN)	PN6 PN10 PN16 PN20 PN25 PN40 *As per table # As per Fig	190 200 200 190 200 200 200 e 5 of ISO 700 ure 3 and 4 o	150 160 160 152.5 160 160 05-1 for Grey and f EN1092-1	4 8 4 8 8 ad Ductile (18 18 18 18 18 18 Cast Iron	M16 M16 M16 M16 M16 M16	18 22 22 19 26	- 19 19 19 19	13 13 16 14	20 20 19.5 24 24	132*/138 132*/138 127* 132*/138	Flat/ Raised for Cast Iron and as per Note # for Sterical Raised for Cast Iron and as per Note # for Sterical Raised for Cast Iron and as per Note # for Sterical Raised for Cast Iron and as per Note # for Sterical Raised for Cast Iron and as per Note # for Sterical Raised for Cast Iron and as per Note # for Sterical Raised for Cast Iron and as per Note # for Sterical Raised for Cast Iron and as per Note # for Sterical Raised Flat with Ring Joint/Others Flat/ Raised/ Flat with Ring Joint/Others Flat/ Raised/ Flat with Ring Joint/Others

Flange Dimensions

Nominal Size: 100 mm



	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)	M	linimum Flange	Thickness (mm)		Diameter of Raised Face mm (If applicable)	
		` ,		` ′	, ,	, ,	Cast Iron		Copper Alloy	Steel	, , ,	Flange Face Type
	PN14	215	178	4	18	M16	22	-	22	-	-	Flat
4087	PN16	215	178	4	18	M16	-	20	-	13	154	Flat/ Raised
AS 4	PN21	230	191	8	18	M16	22	-	-	19	167	Flat/ Raised
	PN35	230	191	8	18	M16	32	22	-	24	167	Flat/ Raised
	*Classificatio	on of flanges l	oy PN Number base	ed on the a	allowable ope	rating pressur	e (AOP) expr	essed in megap	ascals (PN=10x A	OP)		
	Drilling for AS	S 4087 Class	PN14 & PN16 is co	ompatible	with AS 2129	, Table D						
	Drilling for AS	S 4087 Class	PN21 & PN35 is co	ompatible	with AS 2129	, Table F & Ta	able H					
	Table A	215	178	4	18	M16	19	19	16	10	154*	Flat/ Raised/ Flat with O Ring
29	Table D	215	178	4	18	M16	19	19	16	10	154*	Flat/ Raised/ Flat with O Ring
AS 2129	Table E	215	178	8	18	M16	22	22	16	13	154*	Flat/ Raised/ Flat with O Ring
Ä	Table F	230	191	8	18	M16	22	22	17	19	167*	Flat/ Raised/ Flat with O Ring
	Table H	230	191	8	18	M16	32	32	19	25	152*	Flat/ Raised/ Flat with O Ring
	*Not a prefer	red face										
	ł Plate flange	e less than 12	mm thick may suff	er unacce	ptable distorti	on after weldir	ng to the pipe					
_	PN6	210	170	4	18	M16	18	-	14	18	144*/148	Flat/ Raised for Cast Iron and as per Note # for Steel
(N)	PN10	220	180	8	18	M16	24	19	16	22	156*/158	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN16	220	180	8	18	M16	24	19	16	22	156*/158	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	230	190.5	8	18	M16	24	24	17	24	157*	Flat/ Raised for Cast Iron and as per Note # for Steel
180	PN25	235	190	8	22	M20	28	19	17	24	156*/162	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	235	190	8	22	M20	28	19	19	24	156*/162	Flat/ Raised for Cast Iron and as per Note # for Steel
	*As per table	e 5 of ISO 700	05-1 for Grey and D	uctile Cas	t Iron							
		ure 3 and 4 of										
	Drilling Comp	patible with A	S/NZS 4331, BS 45	504 & DIN	2535							
										*		
Щις	150	230	190.5	8	³ ⁄4" - 19.1	⁵ ⁄8″ - 15.9	-	-	-	23.9		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	255	200	8	⁷ /8" - 22.2		-	-	-	31.8		Flat/ Raised/ Flat with Ring Joint/Others
	600	275	215.9	8	1" - 25.4	⁷ /8" - 22.2	-	-	-	38.1		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above a	are as per Table 7,	Table 10,	Table 15 of A	ASME B16.5						

* Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5

Flange Dimensions

Nominal Size: 125 mm



	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)		Minimum Flan	ge Thickness (mm)		Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
_	PN14	-	-	-	-	-	-	-	-	-	-	-
4087	PN16	-	-	-	-	-	-	-	-	-	-	-
AS (PN21	-	-	-	-	-	-	-	-	-	-	-
	PN35	-	-	-	-	-	-	-	-	-	-	-
		_	_				•	P) expressed in	megapascals (PN=	10x AOP)		
	_		ss PN14 & PN		•							
	Drilling for A	S 4087 Clas	s PN21 & PN3	35 is compa	atible with AS	2129, Table	F & Table F					
	Table A	255	210	4	18	M16	19	19	17	13	186*	Flat/ Raised/ Flat with O Ring
67	Table D	255	210	8	18	M16	21	21	17	13	186*	Flat/ Raised/ Flat with O Ring
5 2129	Table E	255	210	8	18	M16	22	22	17	14	186*	Flat/ Raised/ Flat with O Ring
A	Table F	280	235	8	22	M20	25	25	19	22	207*	Flat/ Raised/ Flat with O Ring
	Table H	280	235	8	22	M20	35	35	22	29	178*	Flat/ Raised/ Flat with O Ring
	*Not a prefe	rred face										
	ł Plate flang	e less than 1	2 mm thick ma	ay suffer u	nacceptable di	istortion after	welding to	the pipe				
	PN6	240	200	8	18	M16	20	-	14	18	174*/178	Flat/ Raised for Cast Iron and as per Note # for Ste
7005 (DIN)	PN10	250	210	8	18	M16	26	19	18	22	184*/188	Flat/ Raised for Cast Iron and as per Note # for Ste
02 (PN16	250	210	8	18	M16	26	19	18	22	184*/188	Flat/ Raised for Cast Iron and as per Note # for Ste
2	PN20	255	216	8	22	M20	24	24	19	24	186*/188	Flat/ Raised for Cast Iron and as per Note # for Ste
<u>80</u>	PN25	270	220	8	26	M24	30	19	24	26	184*/188	Flat/ Raised for Cast Iron and as per Note # for Ste
	PN40	270	220	8	26	M24	30	23.5	24	26	184*/188	Flat/ Raised for Cast Iron and as per Note # for Ste
	,		05-1 for Grey	and Ductil	e Cast Iron							
	# As per Fig											
	Drilling Com	patible with <i>i</i>	AS/NZS 4331,	BS 4504 8	& DIN 2533							
	450	255	045.0	•	7	3 4 5				00.0		
5.5	150	255	215.9	8		³ ⁄4" - 19.1	-	-	-	23.9		Flat/ Raised/ Flat with Ring Joint/Others
B16.5	300	280	235	8		³ ⁄4" - 19.1	-	-	-	35		Flat/ Raised/ Flat with Ring Joint/Others
	600	330	266.7	8 bla 7. Tabl	1 ¹ /8" - 28.6		- 16 F	-	-	44.5		Flat/ Raised/ Flat with Ring Joint/Others
		_	are as per Tal						1, and Table 16 as p			



Flange Dimensions
Nominal Size: 150 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)	Mi	nimum Flange	Thickness (mm)		Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
											-	
_	PN14	280	235	8	18	M16	22	-	22	-		Flat
4087	PN16	280	235	8	18	M16	-	23	-	13		Flat/ Raised
Ą	PN21	305	260	12	22	M20	25	-	-	24	232	Flat/ Raised
	PN35	305	260	12	22	M20	35	27	-	31		Flat/ Raised
		• •		•	ating pressure (AOF) expressed in	n megapascals	(PN=10x AOP)				
	_		& PN16 is compatib									
	Drilling for AS 40)87 Class PN21 &	PN35 is compatible	e with AS 2129,	Table F & Table H							
	Table A	280	235	4	18	M16	21	21	17	13	211*	Flat/ Raised/ Flat with O Ring
AS 2129	Table D	280	235	8	18	M16	21	21	17	13	211*	Flat/ Raised/ Flat with O Ring
) 1	Table E	280	235	8	22	M20	22	22	17	17	207*	Flat/ Raised/ Flat with O Ring
(Table F	305	260	12	22	M20	25	25	22	22	232*	Flat/ Raised/ Flat with O Ring
	Table H	305	260	12	22	M20	35	35	25	29	210*	Flat/ Raised/ Flat with O Ring
	*Not a preferred	face										
_	PN6	265	225	8	18	M16	20	-	14	20	199*/202	Flat/ Raised for Cast Iron and as per Note # for Ste
<u>z</u>	PN10	285	240	8	22	M20	26	19	18	24	211*/212	Flat/ Raised for Cast Iron and as per Note # for Ste
(NIC) 6007	PN16	285	240	8	22	M20	26	19	18	24	211*/212	Flat/ Raised for Cast Iron and as per Note # for Ste
	PN20	280	241.5	8	22	M20	25.5	25.5	21	25.5	216	Flat/ Raised for Cast Iron and as per Note # for Ste
20	PN25	300	250	8	26	M24	34	20	24	28	211*/218	Flat/ Raised for Cast Iron and as per Note # for Ste
	PN40	300	250	8	26	M24	34	26	24	28	211*/218	Flat/ Raised for Cast Iron and as per Note # for Ste
	·		Grey and Ductile Ca	st Iron								
		3 and 4 of EN1092										
	Drilling Compatil	ole with AS/NZS 43	331, BS 4504 & DIN	N 2533								
						_						
	150	280	241.3	8	⁷ /8" - 22.2	³ ⁄4" - 19.1	-	-	-	25.4		Flat/ Raised/ Flat with Ring Joint/Others
	300	320	269.9	12	⁷ /8" - 22.2	³ ⁄4" - 19.1	-	-	-	36.6		Flat/ Raised/ Flat with Ring Joint/Others
B16.5	600	355	292.1	12	1 ¹ /8" - 28.6	1" - 25.4	-	-	-	47.7		Flat/ Raised/ Flat with Ring Joint/Others
9	•	-	r Table 7, Table 10									
	* Thickness of th	ne flange given abo	ove is the thickness	given for the lap	oped joint. As per T	able 8, Table 1	11, and Table 1	6 as per ASME	B16.5			
			is compatible with A					-				



Flange Dimensions

Nominal Size: 200 mm

	Class / Table	Outside Diameter	Pitch Circle Diameter (mm)	No of Holes	Hole Diameter (mm)	Bolt Diameter		dinimum Flores The	ialmaaa (mma)		Diameter of Raised Face mm (If applicable)	
		(mm)		(mm)		(mm)		Minimum Flange Th Ductile Cast Iron		Steel	(ii applicable)	
	DNAA	005	000	0	40	1440	•	Ductile Gast Iron	Copper Alloy			Flange Face Type
	PN14	335	292	8	18	M16	25	-	-	-	000	Flat
87	PN16	335	292	8	18	M16	-	23	-	19	268	Flat/ Raised
4087	PN21	370	324	12	22	M20	29	-	-	24		Flat/ Raised
AS	PN35	370	324	12	22	M20	41	31	-	31	31	Flat/ Raised
		_	=				(AOP) expressed in	n megapascals (PN=	10x AOP)			
	•			•	tible with AS 2129,							
	Drilling for A	S 4087 Clas	s PN21 & PN35 is	compatib	ole with AS 2129, Ta	able F & Tabl	e H					
	Table A	335	292	8	18	M16	22	22	19	13	268*	Flat/ Raised/ Flat with O Ring
2129	Table D	335	292	8	18	M16	22	22	19	13	268*	Flat/ Raised/ Flat with O Ring
27	Table E	335	292	8	22	M20	25	25	19	19	264*	Flat/ Raised/ Flat with O Ring
AS	Table F	370	324	12	22	M20	29	29	25	25	296*	Flat/ Raised/ Flat with O Ring
	Table H	370	324	12	22	M20	38	38	32	32	260*	Flat/ Raised/ Flat with O Ring
	*Not a prefe	rred face										
	PN6	320	280	8	18	M16	22	-	18	22	254*/258	Flat/ Raised for Cast Iron and as per Note # for Steel
<u> </u>	PN10	340	295	8	22	M20	26	20	20	24	266*/268	Flat/ Raised for Cast Iron and as per Note # for Steel
ISO 7005 (DIN)	PN16	340	295	12	22	M20	30	20	22	24	266*/268	Flat/ Raised for Cast Iron and as per Note # for Steel
700	PN20	345	298.5	8	22	M20	28.5	28.5	24	29	270*	Flat/ Raised for Cast Iron and as per Note # for Steel
180	PN25	360	310	12	26	M24	34	22	26	30	274*/278	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	375	320	12	29.5	M27	40	30	30	34	284*/285	Flat/ Raised for Cast Iron and as per Note # for Steel
	*As per table	e 5 of ISO 70	005-1 for Grey and	Ductile C	ast Iron							·
	# As per Fig	ure 3 and 4 o	of EN1092-1									
	Drilling Com	patible with A	AS/NZS 4331, BS	4504 & D	IN 2533							
111 .6	150	345	298.5	8	⁷ /8" - 22.2	³ ⁄4″ - 19.1	-	-	-	28.6		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	380	330.2	12	1″ - 25.4	⁷ ⁄8" - 22.2	-	-	-	41.3		Flat/ Raised/ Flat with Ring Joint/Others
₹ m	600	420	349.2	12	1 ¹ ⁄4" - 31.8	1 ¹ ⁄8" - 28.6	-	-	-	55.6		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above	are as per Table	7, Table 1	0, Table 15 of ASI	ME B16.5						· ·

^{*} Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5



Flange Dimensions

Nominal Size: 225 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)		Minimum Flange	e Thickness (mm)		Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
	PN14	370	324	8	18	M16	25	-	-	-		Flat
1087	PN16	370	324	8	18	M16	-	24	-	19	300	Flat/ Raised
AS 4087	PN21	405	356	12	26	M24	29	-	-	30	324	Flat/ Raised
	PN35	405	356	12	26	M24	41	34	-	38	286	Flat/ Raised
	Drilling for	AS 4087 Cla	by PN Number bass PN14 & PN16 is PN21 & PN35 is	is compati	ble with AS	2129, Table [)	rpressed in mega	pascals (PN=10x A	OP)		
	Table A	-	-	-	-	-	-	-	-	-		
AS 2129	Table D	-	-	-	-	-	-	-	-	-		
	Table E	-	-	-	-	-	-	-	-	-		
Ä	Table F	-	-	-	-	-	-	-	-	-		
	Table H	-	-	-	-	-	-	-	-	-		
	PN6	-	-	-	-	-	-	-	-	-		
<u>Z</u>	PN10	-	-	-	-	-	-	-	-	-		
7005 (DIN)	PN16	-	-	-	-	-	-	-	-	-		
700	PN20	-	-	-	-	-	-	-	-	-		
180	PN25	-	-	-	-	-	-	-	-	-		
	PN40	-	-	-	-	-	-	-	-	-		
	Drilling Com	patible with A	AS/NZS 4331, BS	4504 & DI	N 2533							
l ro	125/150	-	-	-	-	-	-	-	-	-		
A3ME B16.5	300	-	-	-	-	-	-	-	-	-		
_	600	-	-	-	-	-	-	-	-	-		



Scan Rock Traders Flange Dimensions

Nominal Size: 250 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)		Minimum Flang	ge Thickness (mm)		Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
	PN14	405	356	8	22	M20	25	-	-	-		Flat
4087	PN16	405	356	8	22	M20	-	24	-	19	328	Flat/ Raised
AS,	PN21	430	381	12	26	M24	32	-	-	30	324	Flat/ Raised
	PN35	430	381	12	26	M24	44	34	-	38	311	Flat/ Raised
*Classification of flanges by PN Number based on the allowable operating pressure (AOP) expressed in megapascals (PN=10x AOP) Drilling for AS 4087 Class PN14 & PN16 is compatible with AS 2129, Table D Drilling for AS 4087 Class PN21 & PN35 is compatible with AS 2129, Table F & Table H												
	Table A	405	356	8	22	M20	24	24	19	16	328*	Flat/ Baiand/ Flat with O Bing
o	Table D	405	356	8	22	M20	25	25	19	16	328*	Flat/ Raised/ Flat with O Ring
2129	Table E	405	356	12	22	M20	25	25	22	22	328*	Flat/ Raised/ Flat with O Ring
AS	Table F	430	381	12	26	M24	29	29	25	25	349*	Flat/ Raised/ Flat with O Ring
	Table H	430	381	12	26	M24	29	41	35	35	311*	Flat/ Raised/ Flat with O Ring Flat/ Raised/ Flat with O Ring
	*Not a prefe	rred face										Tidy Halood/ Flat with C Hing
	PN6	375	335	12	18	M16	24	-	20	24	309*/312	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN10	395	350	12	22	M20	28	22	22	26	319*/320	Flat/ Raised for Cast Iron and as per Note # for Steel
05 (1	PN16	405	355	12	26	M24	32	22	24	26	319*/320	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	405	362	12	26	M24	30	30	25	30.5	324*	Flat/ Raised for Cast Iron and as per Note # for Steel
180	PN25	425	370	12	29.5	M27	36	24.5	30	32	330*/335	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	450	385	12	32.5	M30	46	34.5	36	38	345*	Flat/ Raised for Cast Iron and as per Note # for Steel
	*As per table	e 5 of ISO 70	005-1 for Grey a	and Ductile	e Cast Iron							
	# As per Fig	ure 3 and 4 o	of EN1092-1									
	Drilling Com	patible with A	AS/NZS 4331,	BS 4504 8	DIN 2533							
III	150	405	362	12	1″ - 25.4	⁷ /8" - 22.2	-	-	-	30.2		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	445	387.4	16	1 ¹ ⁄8″ - 28.6	1" - 25.4	-	_	-	47.7		Flat/ Raised/ Flat with Ring Joint/Others
A M	600	510	431.8	16	1 ³ /8" - 34.9	1 ¹ /4" - 31.8	-	_	-	63.5		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above	are as per Tab	ole 7, Table	e 10, Table 15 o							

* Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5



Flange Dimensions Nominal Size: 300 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)	М	inimum Flange Thio	ckness (mm)		Diameter of Raised Face mm (If applicable)	
							Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel		Flange Face Type
	PN14	455	406	12	22	M20	29	-	-	-		Flat
4087	PN16	455	406	12	22	M20	-	30	-	23	378	Flat/ O Ring/ Raised
AS,	PN21	490	438	16	26	M24	32	-	-	30	406	Flat/ O Ring/ Raised
	PN35	490	438	16	26	M24	44	38	-	38	406/362	Flat/ O Ring/ Raised
	*Classification	n of flanges b	y PN Number	based on the	allowable ope	erating pressu	re (AOP) expressed	d in megapascals (PN	N=10x AOP)			
	Drilling for	AS 4087 Clas	s PN14 & PN	16 is compatib	le with AS 21	29, Table D						
	Drilling for A	S 4087 Class	PN21 & PN35	is compatible	with AS 2129	9, Table F & Ta	able H					
	Table A	455	406	8	22	M20	24	24	22	19	378*	Flat/ O Ring/ Raised
29	Table D	455	406	12	22	M20	25	25	22	19	378*	Flat/ O Ring/ Raised
AS 2129	Table E	455	406	12	26	M24	29	29	25	25	374*	Flat/ O Ring/ Raised
¥	Table F	490	438	16	26	M24	32	32	29	29	406*	Flat/ O Ring/ Raised
	Table H	490	438	16	26	M24	44	44	38	38	362*	Flat/ O Ring/ Raised
	*Not a prefer	red face										
_	PN6	440	395	12	22	M20	24	-	22	24	363*/365	Flat/ Raised for Cast Iron and as per Note # for Steel
(DIN)	PN10	445	400	12	22	M20	28	24.5	26	26	370*/370	Flat/ Raised for Cast Iron and as per Note # for Steel
1) 20	PN16	460	410	12	26	M24	32	24.5	28	28	370*/378	Flat/ Raised for Cast Iron and as per Note # for Steel
7005	PN20	485	432	12	26	M24	32	32	27	32	381*	Flat/ Raised for Cast Iron and as per Note # for Steel
180	PN25	485	430	16	29.5	M27	40	27.5	32	34	389*/395	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	515	450	16	32.5	M30	50	39.5	40	42	409*/410	Flat/ Raised for Cast Iron and as per Note # for Steel
	*As per table	5 of ISO 700	5-1 for Grey a	nd Ductile Cas	st Iron							
	# As per Figu	ure 3 and 4 of	EN1092-1									
	Drilling Com	patible with A	S/NZS 4331, E	BS 4504 & DIN	2533							
Пrò	150	485	431.8	12	1" - 25.4	⁷ ⁄8" - 22.2	-	-	-	31.8		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	520	450.8	16	1 ¹ ⁄4" - 31.8	1 ¹ ⁄8" - 28.6	-	-	-	50.8		Flat/ Raised/ Flat with Ring Joint/Others
	600	560	489	20	1 ³ ⁄8" - 34.9	1 ¹ ⁄4" - 31.8	-	-	-	66.7		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above a	ire as per Tab	le 7, Table 10,	Table 15 of	ASME B16.5						

^{*} Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5



Flange Dimension

Nominal Size: 350 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)	N	linimum Flanç	ge Thickness (m	m)	Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
~	PN14	525	470	12	26	M24	32	-	-	-		Flat
408	PN16	525	470	12	26	M24	-	33	-	30	438	Flat/ Raised
AS 4087	PN21	550	495	16	30	M27	35	-	-	30	459	Flat/ Raised
	PN35	550	495	16	30	M27	48	41	-	48	459/419	Flat/ O Ring/ Raised
			by PN Number b				e (AOP) exp	ressed in mega	apascals (PN=10	x AOP)		
	_		ass PN14 & PN16	•								
	Drilling for A	S 4087 Clas	s PN21 & PN35 is	s compatible v	vith AS 2129,	Table F & Tal	ble H					
	Table A	525	470	8	26	M24	25	25	25	22	438*	Flat/ O Ring/ Raised
2129	Table D	525	470	12	26	M24	29	29	25	22	438*	Flat/ O Ring/ Raised
S 21	Table E	525	470	12	26	M24	32	32	25	25	438*	Flat/ O Ring/ Raised
AS	Table F	550	495	16	30	M27	35	35	32	32	459*	Flat/ O Ring/ Raised
	Table H	550	495	16	30	M27	48	48	41	41	419*	Flat/ O Ring/ Raised
	*Not a prefe	rred face										
	PN6	490	445	12	22	M20	26	-	22	24	413*/415	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN10	505	460	16	22	M20	30	24.5	26	26	429*/430	Flat/ Raised for Cast Iron and as per Note # for Steel
05 (PN16	520	470	16	26	M24	36	26.5	30	30	429*/438	Flat/ Raised for Cast Iron and as per Note # for Steel
0 7 0	PN20	535	476	12	29.5	M27	35	35	35	35	413*	Flat/ Raised for Cast Iron and as per Note # for Steel
180	PN25	555	490	16	32.5	M30	44	30	36	38	448*/450	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	580	510	16	35.5	M33	54	44	46	46	465*	Flat/ Raised for Cast Iron and as per Note # for Steel
	·		005-1 for Grey and	d Ductile Cast	Iron							
	# As per Fig	ure 3 and 4	of EN1092-1									
	Drilling Com	patible with	AS/NZS 4331, BS	4504 & DIN 2	2533							
Пc	150	535	476.3	12	11/8" - 28.6	1" - 25.4	-	-	-	35		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	585	514.4	20	1 ¹ ⁄4" - 31.8		-	-	-	54		Flat/ Raised/ Flat with Ring Joint/Others
	600	605	527	20	1 ¹ /2" - 38.1	1 ³ ⁄8″ - 34.9	-	-	-	69.9		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above	are as per Table	7, Table 10,	Table 15 of A	SME B16.5						

* Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5

SCAN ROCK

Flange Dimensions
Nominal Size: 400 mm

	Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Bolt Diameter (mm)	Mir	nimum Flange	Thickness (mm	1)	Diameter of Raised Face mm (If applicable)	
							Cast Iron	Ductile Iron	Copper Alloy	Steel		Flange Face Type
~	PN14	580	521	12	26	M24	32	-	-	-		Flat
4087	PN16	580	521	12	26	M24	-	33	-	30	489	Flat/ Raised
AS	PN21	610	552	20	30	M27	35	-	-	38	516	Flat/ Raised
	PN35	610	552	20	30	M27	51	44	-	48	516/483	Flat/ Raised
	*Classification	on of flanges	by PN Numbe	er based o	n the allowable	operating press	sure (AOP)	expressed in m	egapascals (PN:	=10x AOF	?)	
	Drilling for	AS 4087 Cla	ass PN14 & PN	116 is com	patible with AS	2129, Table D						
	Drilling for A	S 4087 Clas	s PN21 & PN3	5 is comp	atible with AS 2	2129, Table F &	Table H					
	Table A	580	521	12	26	M24	27	27	25	22	489*	Flat/ O Ring/ Raised
29	Table D	580	521	12	26	M24	29	29	25	22	489*	Flat/ O Ring/ Raised
AS 2129	Table E	580	521	12	26	M24	32	32	25	25	489*	Flat/ O Ring/ Raised
A	Table F	610	552	20	30	M27	35	35	32	32	516*	Flat/ O Ring/ Raised
	Table H	610	552	20	30	M27	51	51	44	44	483*	Flat/ O Ring/ Raised
	*Not a prefe	rred face										-
	PN6	540	495	16	22	M20	28	-	22	24	463*/465	Flat/ Raised for Cast Iron and as per Note # for Steel
<u>Z</u>	PN10	565	515	16	26	M24	32	24.5	26	26	480*/482	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN16	580	525	16	29.5	M27	38	28	32	32	480*/490	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	600	540	16	29.5	M27	36.5	36.5	37	37	470*	Flat/ Raised for Cast Iron and as per Note # for Steel
080	PN25	620	550	16	35.5	M33	48	32	38	40	503*/505	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	660	585	16	39	M36	62	48	50	50	535*	Flat/ Raised for Cast Iron and as per Note # for Steel
	*As per table	5 of ISO 70	005-1 for Grey	and Ductil	e Cast Iron							
	# As per Fig	ure 3 and 4	of EN1092-1									
	Drilling Com	patible with	AS/NZS 4331,	BS 4504 8	& DIN 2533							
									*			
шь	150	595	539.8	16	1 ¹ ⁄8" - 28.6	1" - 25.4	-	-	-	36.6		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	650	571.5	20	1 ³ ⁄8" - 34.9	1 ¹ ⁄4" - 31.8	-	-	-	57.2		Flat/ Raised/ Flat with Ring Joint/Others
∢ ⊞	600	685	603.2	20	1 ⁵ ⁄8″ - 41.3	1 ¹ /2" - 38.1	-	-	-	76.2		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions	given above	are as per Tal	ble 7, Tabl	le 10, Table 15	of ASME B16.	5					Ğ

Dimensions given above are as per Table 7, Table 10, Table 15 of ASME B16.5

^{*} Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5 Drilling for ANSI B16.5, Class 150 is compatible with ANSI B16.1, Class 125

Flange Dimensions Nominal Size: 450 mm

	Class / Table	Outside Diameter	Pitch Circle Diameter	No of Holes (mm)	Hole Diameter	Bolt Diameter		Minimum Flance	Thisley and (may)		Diameter of Raised Face mm	
		(mm)	(mm)		(mm)	(mm)	Grey Cast	Minimum Flange			(If applicable)	
							Iron	Ductile Cast Iron	Copper Alloy	Steel		Flange Face Type
_	PN14	640	584	12	26	M24	35	-	-	-	-	Flat
AS 4087	PN16	640	584	12	26	M24	-	33	-	-	552	Flat/ Raised
AS	PN21	675	610	20	33	M30	38	-	-	38	571	Flat/ Raised
	PN35	675	610	20	33	M30	54	46	-	58	571/565	Flat/ O Ring/ Raised
							AOP) expresse	d in megapascals (P	N=10x AOP)			
	Drilling for AS 40	087 Class PN	N14 & PN16 is	compatible with	AS 2129, Ta	ble D						
	Table A	640	584	12	26	M24	27	27	27	22	552*	Flat/ O Ring/ Raised
29	Table D	640	584	12	26	M24	32	32	29	25	532*	Flat/ O Ring/ Raised
AS 2129	Table E	640	584	16	26	M24	35	35	29	35	552*	Flat/ O Ring/ Raised
¥	Table F	675	610	20	33	M30	38	38	35	35	571*	Flat/ O Ring/ Raised
	Table H	675	610	20	33	M30	54	54	48	48	533*	Flat/ O Ring/ Raised
	*Not a preferred	face										
	PN6	595	550	16	22	M20	28	28		30	518*/520	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	615	565	20	26	M24	32	28		28	530*/532	Flat/ Raised for Cast Iron and as per Note # for Steel
_	PN16	640	585	20	30	M27	40	40		40	548*/550	Flat/ Raised for Cast Iron and as per Note # for Steel
(N)	PN20	635	578	16	32.5	M30	39.5	39.5		-	533*	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN25	670	600	20	36	M33	50	50		46	548*/555	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	685	610	20	40	M36	49	49		57	560*	Flat/ Raised for Cast Iron and as per Note # for Steel
180	*As per table 5 o	of ISO 7005-	1 for Grey and I	Ductile Cast Iro	n							
	# As per Figure	3 and 4 of El	N1092-1									
	Drilling Compati	ble with AS/N	NZS 4331, BS 4	1504 & DIN 253	3							
										*		
Πīc	150	635	577.9	1 ¹ ⁄4" - 31.8	16	1 ¹ ⁄8" - 28.6	-	-	-	39.7		Flat/ Raised/ Flat with Ring Joint/Others
ASME B16.5	300	710	628.6	1 ³ ⁄8″ - 34.9	24	1 ¹ ⁄4" - 31.8	-	-	-	60.4		Flat/ Raised/ Flat with Ring Joint/Others
_	600	745	654.0	1 ³ ⁄4" - 44.45	24	1 ⁵ ⁄8" - 41.3	-	-	-	82.6		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions give	en above are	as per Table 7	, Table 10, Tab	ole 15 of ASM	1E B16.5						

^{*} Thickness of the flange given above is the thickness given for the lapped joint. As per Table 8, Table 11, and Table 16 as per ASME B16.5 Drilling for ANSI B16.5, Class 150 is compatible with ANSI B16.1, Class 125

Flange Dimensions





	Class / Table	Outside Diameter	Pitch Circle Diameter	No of Holes	Hole Diameter						Diameter of Raised Face mm	
		(mm)	(mm)	(mm)	(mm)	(mm)		Minimum Flange Thick	ness (mm)		(If applicable)	
							Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel		Flange Face Type
	PN14	705	641	16	26	M24	38					Flat
	PN16	705	641	16	26	M24		35		38	609	Flat/ Raised
_	PN21	735	673	24	33	M30	41			48	634	Flat/ Raised
408	PN35	735	673	24	33	M30	57	49		58	634/597	Flat/ O Ring/ Raised
AS 4087	*Classification of fla	anges by PN N	lumber based	on the all	owable operating p	oressure (AOP) ex	rpressed in megapa	ascals (PN=10x AOP)				
	Drilling for AS 4087	Class PN14	& PN16 is com	patible w	ith AS 2129, Table	D						
	Drilling for AS 4087	Class PN21	& PN35 is com	patible w	ith AS 2129, Table	F & Table H						
	Table A	705	641	12	26	M24	29	29	29	25	609*	Flat/ O Ring/ Raised
29	Table D	705	641	16	26	M24	32	32	32	29	609*	Flat/ O Ring/ Raised
AS 2129	Table E	705	641	16	26	M24	38	38	32	38	609*	Flat/ O Ring/ Raised
AS	Table F	735	673	24	33	M30	41	41	38	38	634*	Flat/ O Ring/ Raised
	Table H	735	673	24	33	M30	57	57	51	51	597*	Flat/ O Ring/ Raised
	*Not a preferred fac	e										
	PN6	645	600	16/22	20	M20	28	28		30	568*/570	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	670	620	20	28/26	M24	34	34		28	582*/585	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	715	650	20	33/34	M30	42	42		44	609*/610	Flat/ Raised for Cast Iron and as per Note # for Steel
7005 (DIN)	PN20	700	635	20	32.5	M30	43	43		-	584*	Flat/ Raised for Cast Iron and as per Note # for Steel
05 (1	PN25	730	660	20	37/36	M33	52	52		48	609*/615	Flat/ Raised for Cast Iron and as per Note # for Steel
2	PN40	755	670	20	42	M39	52	52		57	615	Flat/ Raised for Cast Iron and as per Note # for Steel
180	*As per table 5 of IS	SO 7005-1 for	Grey and Duc	tile Cast I	ron							
	# As per Figure 3 a	nd 4 of EN109	2-1									
	Drilling Compatible	with AS/NZS	4331, BS 4504	4 & DIN 2	533							
										*		
					4							
밑 :	150	700	635.0	20	1 ¹ ⁄4" - 31.75	1 ¹ /8" - 28.6	-	-	-	42.9		Flat/ Raised/ Flat with Ring Joint/Others
ASME	300	775	685.8	24	1 ³ /8" - 34.9	1 ¹ ⁄4" - 31.75	-	-	-	63.5		Flat/ Raised/ Flat with Ring Joint/Others
	600	815	723.9	24		1 ⁵ ⁄8″ - 41.3	-	-	-	88.9		Flat/ Raised/ Flat with Ring Joint/Others
	Dimensions given a	•										
				-		-	e 8, Table 11, and T	able 16 as per ASME B1	6.5			
	Drilling for ANSI B1	6.5, Class 150) is compatible	with AN	Si B16.1, Class 12	0						