

Flange Dimensions

Nominal Size: 15 mm

Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Fastener Size and Thread	Minimum Flange Thickness (mm)				Diameter of Raised Face mm (If applicable)	Flange Face Type	
						Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel			
AS 4087	PN14	95	67	4	14	M12	-	-	6	-	Flat	
	PN16	-	-	-	-	-	-	-	-	-	-	
	PN21	-	-	-	-	-	-	-	-	-	-	
	PN35	-	-	-	-	-	-	-	-	-	-	
	*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												
AS 2129	Table A	95	67	4	14	M12	13	13	6	5	47*	
	Table D	95	67	4	14	M12	13	13	6	5	47*	Flat/ Raised/ Flat with O Ring
	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 preferred face												
ISO 7005 (DIN)	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
	PN16	95	65	4	14	M12	14	-	6	-	46*/45	Flat/ Raised for Cast Iron and as per Note # for Steel
	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
	PN40	95	65	4	14	M12	16	-	9	14	46*/45	Flat/ Raised for Cast Iron and as per Note # for Steel
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	90	60.3	4	5/8" - 15.9	1/2" - 12.7	-	-	-	11.2	*	Flat/ Raised/ Flat with Ring Joint/Others
	300	95	66.7	4	5/8" - 15.9	1/2" - 12.7	-	-	-	14.3	*	Flat/ Raised/ Flat with Ring Joint/Others
	600	95	66.7	4	5/8" - 15.9	1/2" - 12.7	-	-	-	14.3	*	Flat/ Raised/ Flat with Ring Joint/Others
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: 20 mm

Class / Table	Outside Diameter (mm)	Pitch Circle Diameter (mm)	No of Holes (mm)	Hole Diameter (mm)	Fastener Size and Thread	Minimum Flange Thickness (mm)				Diameter of Raised Face mm (If applicable)	Flange Face Type	
						Cast Iron	Ductile Iron	Copper Alloy	Steel			
AS 4087	PN14	100	73	4	14	M12	-	-	6	-	-	Flat
	PN16	-	-	-	-	-	-	-	-	-	-	-
	PN21	-	-	-	-	-	-	-	-	-	-	-
	PN35	-	-	-	-	-	-	-	-	-	-	-
*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												
AS 2129	Table A	100	73	4	14	M12	13	13	6	5	53*	Flat/ Raised/ Flat with O Ring
	Table D	100	73	4	14	M12	13	13	6	5	53*	Flat/ Raised/ Flat with O Ring
	Table E	100	73	4	14	M12	13	13	6	6	53*	Flat/ Raised/ Flat with O Ring
	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 preferred face												
ISO 7005 (DIN)	PN6	90	65	4	11	M10	14	-	6	14	48*/50	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	105	75	4	14	M12	16	-	6	16	56*/58	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	105	75	4	14	M12	16	-	6	-	56*/58	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	100	70	4	16	M14	-	-	8	13	56*	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN25	105	75	4	14	M12	18	-	8	16	56*/58	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	105	75	4	14	M12	18	-	9	16	56*/58	Flat/ Raised for Cast Iron and as per Note # for Steel
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron # As per Figure 3 and 4 of EN1092-1 Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535												
ASME B16.5	150	100	69.9	4	5/8" - 15.9	1/2" - 12.7	-	-	-	12.7	*	Flat/ Raised/ Flat with Ring Joint/Others
	300	115	82.6	4	3/4" - 19.1	5/8" - 15.9	-	-	-	15.9	*	Flat/ Raised/ Flat with Ring Joint/Others
	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 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: 25 mm

	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)	Flange Face Type
							Cast Iron	Ductile Iron	Copper Alloy	Steel		
							AS 4087					
	PN14	115	83	4	14	M12	-	-	8	-	-	Flat
	PN16	-	-	-	-	-	-	-	-	-	-	
	PN21	-	-	-	-	-	-	-	-	-	-	
	PN35	-	-	-	-	-	-	-	-	-	-	
	*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											
AS 2129												
	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	7†	63*	Flat/ Raised/ Flat with O Ring
	Table F	120	87	4	18	M16	13	13	10	10†	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 preferred face											
	† Plate flange less than 12 mm may suffer unacceptable distortion after welding to the pipe											
ISO 7005 (DIN)												
	PN6	100	75	4	11	M10	14	-	8	14	58*/60	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	115	85	4	14	M12	16	-	8	16	65*/68	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	115	85	4	14	M12	16	-	8	-	65*/68	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	110	79.5	4	16	M14	11	11	9	11.5	65*	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN25	115	85	4	14	M12	18	-	9	16	65*/68	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	115	85	4	14	M12	18	-	11	16	65*/68	Flat/ Raised for Cast Iron and as per Note # for Steel
	*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron											
	# As per Figure 3 and 4 of EN1092-1											
	Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535											
ASME B16.5												
	150	110	79.4	4	5/8" - 15.9	1/2" - 12.7	-	-	-	-	14.3	Flat/ Raised/ Flat with Ring Joint/Others
	300	125	88.9	4	3/4" - 19.1	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
	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: 32 mm

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)	Flange Face Type	
						Cast Iron	Ductile Iron	Copper Alloy	Steel			
						AS 4087	PN14	120	87			4
	PN16	-	-	-	-	-	-	-	-	-		
	PN21	-	-	-	-	-	-	-	-	-		
	PN35	-	-	-	-	-	-	-	-	-		
*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												
AS 2129	Table A	120	87	4	14	M12	16	16	8	6‡	67*	Flat/ Raised/ Flat with O Ring
	Table D	120	87	4	14	M12	16	16	8	6‡	67*	Flat/ Raised/ Flat with O Ring
	Table E	120	87	4	14	M12	16	16	8	13	67*	Flat/ Raised/ Flat with O Ring
	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 preferred face ‡ Plate flange less than 12 mm thick may suffer unacceptable distortion after welding to the pipe												
ISO 7005 (DIN)	PN6	120	90	4	14	M12	16	-	8	16	69*/70	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	140	100	4	18	M16	18	-	8	18	76*/78	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	140	100	4	18	M16	18	-	8	-	76*/78	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	120	89	4	16	M14	13	13	10	13	64*	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN25	140	100	4	18	M16	20	-	9	18	76*/78	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	140	100	4	18	M16	20	-	11	18	76*/78	Flat/ Raised for Cast Iron and as per Note # for Steel
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron # As per Figure 3 and 4 of EN1092-1 Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535												
ASME 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
	600	135	98.4	4	3/4" - 19.1	5/8" - 15.9	-	-	-	-	-	Flat/ Raised/ Flat with Ring Joint/Others
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: 40 mm

	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)	Flange Face Type
							Cast Iron	Ductile Iron	Copper Alloy	Steel		
AS 4087	PN14	135	98	4	14	M12	-	-	10	-	-	Flat
	PN16	-	-	-	-	-	-	-	-	-	-	-
	PN21	-	-	-	-	-	-	-	-	-	-	-
	PN35	-	-	-	-	-	-	-	-	-	-	-
<p>*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</p>												
AS 2129	Table A	135	98	4	14	M12	16	16	10	6‡	78*	Flat/ Raised/ Flat with O Ring
	Table D	135	98	4	14	M12	16	16	10	6‡	78*	Flat/ Raised/ Flat with O Ring
	Table E	135	98	4	14	M12	16	16	10	9‡	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
<p>*Not a preferred face ‡ Plate flange less than 12 mm thick may suffer unacceptable distortion after welding to the pipe</p>												
ISO 7005 (DIN)	PN6	130	100	4	14	M12	16	-	9	16	78*/88	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	150	110	4	18	M16	18	19	9	18	84*/88	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	150	110	4	18	M16	18	19	9	-	84*/88	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	130	98.5	4	16	M14	14.5	14.5	11	14.5	73*	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN25	150	110	4	18	M16	20	19	11	18	84*/88	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	150	110	4	18	M16	20	19	13	18	84*/88	Flat/ Raised for Cast Iron and as per Note # for Steel
<p>*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron # As per Figure 3 and 4 of EN1092-1 Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535</p>												
ASME B16.5	150	125	98.4	4	5/8" - 15.9	1/2" - 12.7	-	-	-	-	17.5	Flat/ Raised/ Flat with Ring Joint/Others
	300	155	114.3	4	7/8" - 22.2	3/4" - 19.1	-	-	-	-	20.7	Flat/ Raised/ Flat with Ring Joint/Others
	600	155	114.3	4	7/8" - 22.2	3/4" - 19.1	-	-	-	-	22.3	Flat/ Raised/ Flat with Ring Joint/Others
<p>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</p>												

Flange Dimensions

Nominal Size: 50 mm

	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 (If applicable)	Flange Face Type
							Cast Iron	Ductile Iron	Copper Alloy	Steel		
AS 4087	PN14	150	114	4	18	M16	-	-	10	-		Flat
	PN16	150	114	4	18	M16	-	-	-	11	90	Raised
	PN21	165	127	4	18	M16	-	-	-	15	103	Flat/ Raised
	PN35	165	127	4	18	M16	-	-	-	19	103	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												
AS 2129	Table A	150	114	4	18	M16	16	16	10	8†	90*	Flat/ Raised/ Flat with O Ring
	Table D	150	114	4	18	M16	17	17	10	8	90*	Flat/ Raised/ Flat with O Ring
	Table E	150	114	4	18	M16	19	19	10	10	90*	Flat/ Raised/ Flat with O Ring
	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 preferred face												
† Plate flange less than 12 mm thick may suffer unacceptable distortion after welding to the pipe												
ISO 7005 (DIN)	PN6	140	110	4	14	M12	16	-	11	16	88*/90	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	165	125	4	18	M16	20	19	11	20	99*/102	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	165	125	4	18	M16	20	19	11	-	99*/102	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	150*	120.5	4	18	M16	16	16	13	16	92*	Flat/ Raised for Cast Iron and as per Note # for Steel
	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
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
*When made from cast or ductile iron, this flange features an outside diameter of 155mm.												
ASME B16.5	150	150	120.7	4	3/4" - 19.1	5/8" - 15.9	-	-	-	19.1	*	Flat/ Raised/ Flat with Ring Joint/Others
	300	165	127	8	3/4" - 19.1	5/8" - 15.9	-	-	-	22.3		Flat/ Raised/ Flat with Ring Joint/Others
	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 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: 65 mm

	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)	Flange Face Type
							Cast Iron	Ductile Iron	Copper Alloy	Steel		
							AS 4087					
	PN14	165	127	4	18	M16	-	-	11	-	-	Flat
	PN16	165	127	4	18	M16	-	-	-	11	103	Flat/ Raised
	PN21	185	146	8	18	M16	-	-	-	15	122	Flat/ Raised
	PN35	185	146	8	18	M16	-	-	-	19	122	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												
AS 2129												
	Table A	165	127	4	18	M16	17	17	11	8‡	103*	Flat/ Raised/ Flat with O Ring
	Table D	165	127	4	18	M16	17	17	11	8‡	103*	Flat/ Raised/ Flat with O Ring
	Table E	165	127	4	18	M16	19	19	11	10‡	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 preferred face												
‡ Plate flange less than 12 mm thick may suffer unacceptable distortion after welding to the pipe												
ISO 7005 (DIN)												
	PN6	160	130	4	14	M12	16	-	12	16	108*/110	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	185	145	4*	18	M16	20	19	13	20	118*/122	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	185	145	4*	18	M16	20	19	13	20	118*/122	Flat/ Raised for Cast Iron and as per Note # for Steel
	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
	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
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535. When made from steel, these flanges feature 8 holes.												
ASME B16.5												
	150	180	139.7	4	3/4" - 19.1	5/8" - 15.9	-	-	-	22.3	*	Flat/ Raised/ Flat with Ring Joint/Others
	300	190	149.2	8	7/8" - 22.2	3/4" - 19.1	-	-	-	25.4	*	Flat/ Raised/ Flat with Ring Joint/Others
	600	190	149.2	8	7/8" - 22.2	3/4" - 19.1	-	-	-	28.6	*	Flat/ Raised/ Flat with Ring Joint/Others
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												

Scan Rock Traders

Flange Dimensions



Nominal Size: 80 mm

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)	Flange Face Type
						Cast Iron	Ductile Iron	Copper Alloy	Steel		
						AS 4087					
PN14	185	146	4	18	M16	19	-	13	-	-	Flat
PN16	185	146	4	18	M16	-	18	-	11	122	Flat/ Raised
PN21	205	165	8	18	M16	19	-	-	15	141	Flat/ Raised
PN35	205	165	8	18	M16	29	22	-	24	141	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											
AS 2129											
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 preferred face											
‡ Plate flange less than 12 mm thick may suffer unacceptable distortion after welding to the pipe											
ISO 7005 (DIN)											
PN6	190	150	4	18	M16	18	-	13	18	124*/128	Flat/ Raised for Cast Iron and as per Note # for Steel
PN10	200	160	8	18	M16	22	19	13	20	132*/138	Flat/ Raised for Cast Iron and as per Note # for Steel
PN16	200	160	8	18	M16	22	19	13	20	132*/138	Flat/ Raised for Cast Iron and as per Note # for Steel
PN20	190	152.5	4	18	M16	19	19	16	19.5	127*	Flat/ Raised for Cast Iron and as per Note # for Steel
PN25	200	160	8	18	M16	26	19	14	24	132*/138	Flat/ Raised for Cast Iron and as per Note # for Steel
PN40	200	160	8	18	M16	26	19	16	24	132*/138	Flat/ Raised for Cast Iron and as per Note # for Steel
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron											
# As per Figure 3 and 4 of EN1092-1											
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535											
ASME B16.5											
150	190	152.4	4	3/4" - 19.1	5/8" - 15.9	-	-	-	23.9	*	Flat/ Raised/ Flat with Ring Joint/Others
300	210	168.3	8	7/8" - 22.2	3/4" - 19.1	-	-	-	28.6	*	Flat/ Raised/ Flat with Ring Joint/Others
600	210	168.3	8	7/8" - 22.2	3/4" - 19.1	-	-	-	31.8	*	Flat/ Raised/ Flat with Ring Joint/Others
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: 100 mm

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)	Flange Face Type
						Cast Iron	Ductile Iron	Copper Alloy	Steel		
						AS 4087					
PN14	215	178	4	18	M16	22	-	22	-	-	Flat
PN16	215	178	4	18	M16	-	20	-	13	154	Flat/ Raised
PN21	230	191	8	18	M16	22	-	-	19	167	Flat/ Raised
PN35	230	191	8	18	M16	32	22	-	24	167	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											
AS 2129											
Table A	215	178	4	18	M16	19	19	16	10	154*	Flat/ Raised/ Flat with O Ring
Table D	215	178	4	18	M16	19	19	16	10	154*	Flat/ Raised/ Flat with O Ring
Table E	215	178	8	18	M16	22	22	16	13	154*	Flat/ Raised/ Flat with O Ring
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 preferred face											
‡ Plate flange less than 12 mm thick may suffer unacceptable distortion after welding to the pipe											
ISO 7005 (DIN)											
PN6	210	170	4	18	M16	18	-	14	18	144*/148	Flat/ Raised for Cast Iron and as per Note # for Steel
PN10	220	180	8	18	M16	24	19	16	22	156*/158	Flat/ Raised for Cast Iron and as per Note # for Steel
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
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 5 of ISO 7005-1 for Grey and Ductile Cast Iron											
# As per Figure 3 and 4 of EN1092-1											
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2535											
ASME B16.5											*
150	230	190.5	8	3/4" - 19.1	5/8" - 15.9	-	-	-	23.9		Flat/ Raised/ Flat with Ring Joint/Others
300	255	200	8	7/8" - 22.2	3/4" - 19.1	-	-	-	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 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: 125 mm

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)	Flange Face Type	
						Cast Iron	Ductile Iron	Copper Alloy	Steel			
AS 4087	PN14	-	-	-	-	-	-	-	-	-	-	
	PN16	-	-	-	-	-	-	-	-	-	-	
	PN21	-	-	-	-	-	-	-	-	-	-	
	PN35	-	-	-	-	-	-	-	-	-	-	
*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												
AS 2129	Table A	255	210	4	18	M16	19	19	17	13	186*	Flat/ Raised/ Flat with O Ring
	Table D	255	210	8	18	M16	21	21	17	13	186*	Flat/ Raised/ Flat with O Ring
	Table E	255	210	8	18	M16	22	22	17	14	186*	Flat/ Raised/ Flat with O Ring
	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 preferred face ‡ Plate flange less than 12 mm thick may suffer unacceptable distortion after welding to the pipe												
ISO 7005 (DIN)	PN6	240	200	8	18	M16	20	-	14	18	174*/178	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	250	210	8	18	M16	26	19	18	22	184*/188	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	250	210	8	18	M16	26	19	18	22	184*/188	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	255	216	8	22	M20	24	24	19	24	186*/188	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN25	270	220	8	26	M24	30	19	24	26	184*/188	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	270	220	8	26	M24	30	23.5	24	26	184*/188	Flat/ Raised for Cast Iron and as per Note # for Steel
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron # As per Figure 3 and 4 of EN1092-1 Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	255	215.9	8	7/8" - 22.2	3/4" - 19.1	-	-	-	23.9	-	Flat/ Raised/ Flat with Ring Joint/Others
	300	280	235	8	7/8" - 22.2	3/4" - 19.1	-	-	-	35	-	Flat/ Raised/ Flat with Ring Joint/Others
	600	330	266.7	8	1 1/8" - 28.6	1" - 25.4	-	-	-	44.5	-	Flat/ Raised/ Flat with Ring Joint/Others
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: 150 mm

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)	Flange Face Type	
						Cast Iron	Ductile Iron	Copper Alloy	Steel			
AS 4087	PN14	280	235	8	18	M16	22	-	22	-	-	Flat
	PN16	280	235	8	18	M16	-	23	-	13	-	Flat/ Raised
	PN21	305	260	12	22	M20	25	-	-	24	232	Flat/ Raised
	PN35	305	260	12	22	M20	35	27	-	31	-	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												
AS 2129	Table A	280	235	4	18	M16	21	21	17	13	211*	Flat/ Raised/ Flat with O Ring
	Table D	280	235	8	18	M16	21	21	17	13	211*	Flat/ Raised/ Flat with O Ring
	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												
ISO 7005 (DIN)	PN6	265	225	8	18	M16	20	-	14	20	199*/202	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	285	240	8	22	M20	26	19	18	24	211*/212	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	285	240	8	22	M20	26	19	18	24	211*/212	Flat/ Raised for Cast Iron and as per Note # for Steel
	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 Steel
	PN25	300	250	8	26	M24	34	20	24	28	211*/218	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	300	250	8	26	M24	34	26	24	28	211*/218	Flat/ Raised for Cast Iron and as per Note # for Steel
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	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
	600	355	292.1	12	1 1/8" - 28.6	1" - 25.4	-	-	-	47.7	-	Flat/ Raised/ Flat with Ring Joint/Others
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: 200 mm

	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)	Flange Face Type
							Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel		
AS 4087	PN14	335	292	8	18	M16	25	-	-	-		Flat
	PN16	335	292	8	18	M16	-	23	-	19	268	Flat/ Raised
	PN21	370	324	12	22	M20	29	-	-	24		Flat/ Raised
	PN35	370	324	12	22	M20	41	31	-	31	31	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												
AS 2129	Table A	335	292	8	18	M16	22	22	19	13	268*	Flat/ Raised/ Flat with O Ring
	Table D	335	292	8	18	M16	22	22	19	13	268*	Flat/ Raised/ Flat with O Ring
	Table E	335	292	8	22	M20	25	25	19	19	264*	Flat/ Raised/ Flat with O Ring
	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 preferred face												
ISO 7005 (DIN)	PN6	320	280	8	18	M16	22	-	18	22	254*/258	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	340	295	8	22	M20	26	20	20	24	266*/268	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	340	295	12	22	M20	30	20	22	24	266*/268	Flat/ Raised for Cast Iron and as per Note # for Steel
	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
	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 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	345	298.5	8	7/8" - 22.2	3/4" - 19.1	-	-	-	28.6		Flat/ Raised/ Flat with Ring Joint/Others
	300	380	330.2	12	1" - 25.4	7/8" - 22.2	-	-	-	41.3		Flat/ Raised/ Flat with Ring Joint/Others
	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 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												



**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 Flange Thickness (mm)				Diameter of Raised Face mm (If applicable)	Flange Face Type	
						Cast Iron	Ductile Iron	Copper Alloy	Steel			
AS 4087	PN14	405	356	8	22	M20	25	-	-	-	328	Flat
	PN16	405	356	8	22	M20	-	24	-	19	328	Flat/ Raised
	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												
AS 2129	Table A	405	356	8	22	M20	24	24	19	16	328*	Flat/ Raised/ Flat with O Ring
	Table D	405	356	8	22	M20	25	25	19	16	328*	Flat/ Raised/ Flat with O Ring
	Table E	405	356	12	22	M20	25	25	22	22	328*	Flat/ Raised/ Flat with O Ring
	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
*Not a preferred face												
ISO 7005 (DIN)	PN6	375	335	12	18	M16	24	-	20	24	309*/312	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	395	350	12	22	M20	28	22	22	26	319*/320	Flat/ Raised for Cast Iron and as per Note # for Steel
	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
	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 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	405	362	12	1" - 25.4	7/8" - 22.2	-	-	-	30.2		Flat/ Raised/ Flat with Ring Joint/Others
	300	445	387.4	16	1 1/8" - 28.6	1" - 25.4	-	-	-	47.7		Flat/ Raised/ Flat with Ring Joint/Others
	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 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: 300 mm

	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)	Flange Face Type
							Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel		
AS 4087	PN14	455	406	12	22	M20	29	-	-	-		Flat
	PN16	455	406	12	22	M20	-	30	-	23	378	Flat/ O Ring/ Raised
	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 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												
AS 2129	Table A	455	406	8	22	M20	24	24	22	19	378*	Flat/ O Ring/ Raised
	Table D	455	406	12	22	M20	25	25	22	19	378*	Flat/ O Ring/ Raised
	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 preferred face												
ISO 7005 (DIN)	PN6	440	395	12	22	M20	24	-	22	24	363*/365	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	445	400	12	22	M20	28	24.5	26	26	370*/370	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	460	410	12	26	M24	32	24.5	28	28	370*/378	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	485	432	12	26	M24	32	32	27	32	381*	Flat/ Raised for Cast Iron and as per Note # for Steel
	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 7005-1 for Grey and Ductile Cast Iron # As per Figure 3 and 4 of EN1092-1 Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	485	431.8	12	1" - 25.4	7/8" - 22.2	-	-	-	31.8		Flat/ Raised/ Flat with Ring Joint/Others
	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 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 Dimension

Nominal Size: 350 mm

	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)	Flange Face Type
							Cast Iron	Ductile Iron	Copper Alloy	Steel		
AS 4087	PN14	525	470	12	26	M24	32	-	-	-		Flat
	PN16	525	470	12	26	M24	-	33	-	30	438	Flat/ Raised
	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
*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												
AS 2129	Table A	525	470	8	26	M24	25	25	25	22	438*	Flat/ O Ring/ Raised
	Table D	525	470	12	26	M24	29	29	25	22	438*	Flat/ O Ring/ Raised
	Table E	525	470	12	26	M24	32	32	25	25	438*	Flat/ O Ring/ Raised
	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 preferred face												
ISO 7005 (DIN)	PN6	490	445	12	22	M20	26	-	22	24	413*/415	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN10	505	460	16	22	M20	30	24.5	26	26	429*/430	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN16	520	470	16	26	M24	36	26.5	30	30	429*/438	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN20	535	476	12	29.5	M27	35	35	35	35	413*	Flat/ Raised for Cast Iron and as per Note # for Steel
	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
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	535	476.3	12	1 1/8" - 28.6	1" - 25.4	-	-	-	35		Flat/ Raised/ Flat with Ring Joint/Others
	300	585	514.4	20	1 1/4" - 31.8	1 1/8" - 28.6	-	-	-	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 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: 400 mm

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)	Flange Face Type
						Cast Iron	Ductile Iron	Copper Alloy	Steel		
						AS 4087					
PN14	580	521	12	26	M24	32	-	-	-	-	Flat
PN16	580	521	12	26	M24	-	33	-	30	489	Flat/ Raised
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 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											
AS 2129											
Table A	580	521	12	26	M24	27	27	25	22	489*	Flat/ O Ring/ Raised
Table D	580	521	12	26	M24	29	29	25	22	489*	Flat/ O Ring/ Raised
Table E	580	521	12	26	M24	32	32	25	25	489*	Flat/ O Ring/ Raised
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 preferred face											
ISO 7005 (DIN)											
PN6	540	495	16	22	M20	28	-	22	24	463*/465	Flat/ Raised for Cast Iron and as per Note # for Steel
PN10	565	515	16	26	M24	32	24.5	26	26	480*/482	Flat/ Raised for Cast Iron and as per Note # for Steel
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
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 7005-1 for Grey and Ductile Cast Iron											
# As per Figure 3 and 4 of EN1092-1											
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533											
ASME B16.5											
150	595	539.8	16	1 ¹ / ₈ " - 28.6	1" - 25.4	-	-	-	-	36.6	Flat/ Raised/ Flat with Ring Joint/Others
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 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 (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)	Flange Face Type
							Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel		
AS 4087	PN14	640	584	12	26	M24	35	-	-	-	-	Flat
	PN16	640	584	12	26	M24	-	33	-	-	552	Flat/ Raised
	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
*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												
AS 2129	Table A	640	584	12	26	M24	27	27	27	22	552*	Flat/ O Ring/ Raised
	Table D	640	584	12	26	M24	32	32	29	25	532*	Flat/ O Ring/ Raised
	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												
ISO 7005 (DIN)	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
	PN20	635	578	16	32.5	M30	39.5	39.5	-	-	533*	Flat/ Raised for Cast Iron and as per Note # for Steel
	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
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	635	577.9	1 1/4" - 31.8	16	1 1/8" - 28.6	-	-	-	39.7	-	Flat/ Raised/ Flat with Ring Joint/Others
	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 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: 500 mm

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)	Flange Face Type	
						Grey Cast Iron	Ductile Cast Iron	Copper Alloy	Steel			
AS 4087	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
	PN35	735	673	24	33	M30	57	49		58	634/597	Flat/ O Ring/ 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												
AS 2129	Table A	705	641	12	26	M24	29	29	29	25	609*	Flat/ O Ring/ Raised
	Table D	705	641	16	26	M24	32	32	32	29	609*	Flat/ O Ring/ Raised
	Table E	705	641	16	26	M24	38	38	32	38	609*	Flat/ O Ring/ Raised
	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 face												
ISO 7005 (DIN)	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
	PN20	700	635	20	32.5	M30	43	43		-	584*	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN25	730	660	20	37/36	M33	52	52		48	609*/615	Flat/ Raised for Cast Iron and as per Note # for Steel
	PN40	755	670	20	42	M39	52	52		57	615	Flat/ Raised for Cast Iron and as per Note # for Steel
*As per table 5 of ISO 7005-1 for Grey and Ductile Cast Iron												
# As per Figure 3 and 4 of EN1092-1												
Drilling Compatible with AS/NZS 4331, BS 4504 & DIN 2533												
ASME B16.5	150	700	635.0	20	1 1/4" - 31.75	1 1/8" - 28.6	-	-	-	42.9		Flat/ Raised/ Flat with Ring Joint/Others
	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 3/4" - 44.45	1 5/8" - 41.3	-	-	-	88.9		Flat/ Raised/ Flat with Ring Joint/Others
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												