



# 180 Deg Elbow

## Dimensions



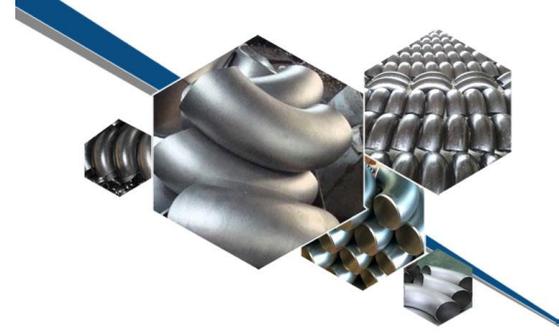
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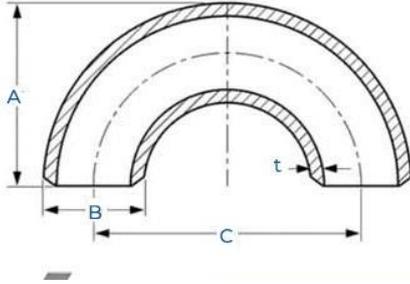
مواد الأنابيب

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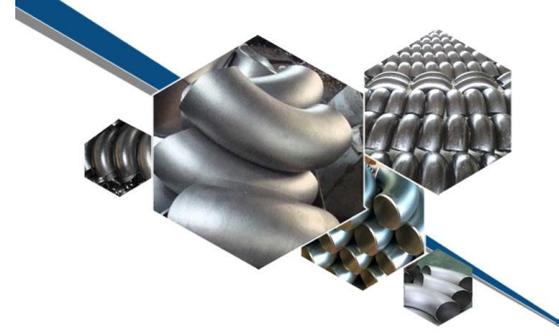
Elbow LR 180 Degree



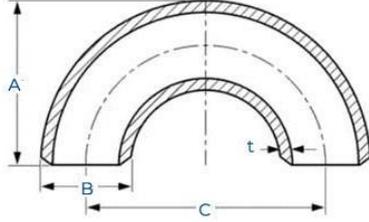
أبعاد الكوع 180 درجة

## 180 Deg Elbow Dimensions

Normal Pipe Size	Outside Diameter Of (B)	180 Degree Long Radius	
		Center to Center (C)	Back to Face (A)
1/2	21.3	76	48
3/4	26.7	76	51
1	33.4	76	56
1.1/4	42.2	95	70
1.1/2	48.3	114	83
2	60.3	152	106
2.1/2	73	190	132
3	88.9	229	159
3.1/2	101.6	267	184
4	114.3	305	210
5	141.3	381	262



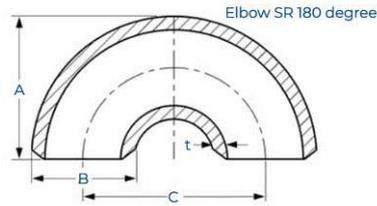
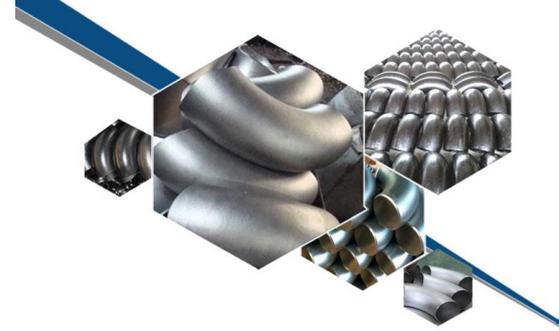
Elbow LR 180 Degree



أبعاد الكوع 180 درجة

## 180 Deg Elbow Dimensions

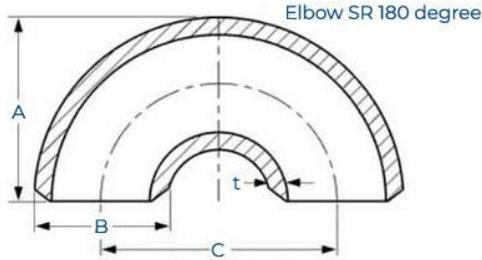
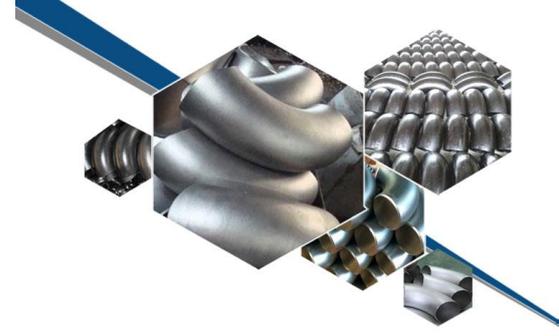
Normal Pipe Size	Outside Diameter Of (B)	180 Degree Long Radius	
		Center to Center (C)	Back to Face (A)
6	168.3	457	313
8	219.1	610	414
10	273	762	518
12	323.8	914	619
14	355.6	1067	711
16	406.4	1219	813
18	457	1372	914
20	508	1524	1016
22	559	1676	1118
24	610	1829	1219



## 180 درجة قصيرة أبعاد الكوع نصف القطر

### 180 Degree Short Radius Elbow Dimensions

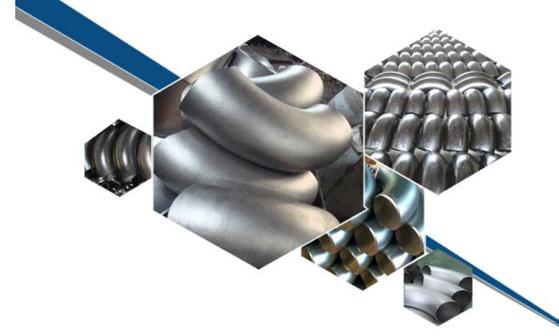
Normal Pipe Size	Outside Diameter Of B	180 Degree Short Radius	
		Center to Center C	Back to Face A
1/2	21.3		
3/4	26.7		
1	33.4	51	41
1.1/4	42.2	64	52
1.1/2	48.3	76	62
2	60.3	102	81
2.1/2	73	127	100
3	88.9	152	121
3.1/2	101.6	178	140
4	114.3	203	159
5	141.3	254	197



180 درجة قصيرة أبعاد الكوع نصف القطر

## 180 Degree Short Radius Elbow Dimensions

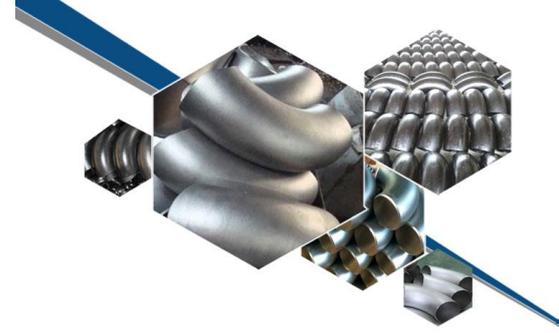
Normal Pipe Size	Outside Diameter Of B	180 Degree Short Radius	
		Center to Center C	Back to Face A
6	168.3	305	237
8	219.1	406	313
10	273	508	391
12	323.8	610	467
14	355.6	711	533
16	406.4	813	610
18	457	914	686
20	508	1016	762
22	559	1118	838
24	610	1219	914



## 180 درجة لحام الكوع الأبعاد التسامح

### 180 Degree Weld Elbow Dimensional Tolerances

NPS	1/2 to 2.1/2	3 to 3.1/2	4
O.D. at Bevel (D)	+ 1.6 - 0.8	1.6	1.6
I.D. at End	0.8	1.6	1.6
Center to Center (O)	6	6	6
Back to Face (K)	6	6	6
NPS	5 to 8	10 to 18	20 to 24
O.D. at Bevel (D)	+ 2.4 - 1.6	+ 4 - 3.2	+ 6.4 - 4.8
I.D. at End	1.6	3.2	4.8
Center to Center (O)	6	10	10
Back to Face (K)	6	6	6
Wall Thickness (t)	Not less than 87.5% of Nominal Wall Thickness		



## What is so essential regarding 180 degree elbow dimensions?

Elbow fittings get regularly used to connect piping when a change in direction is required. You will have to use a 180 degree elbow when you need to implement a directional reversal of 180 degrees. Ensuring you select the best fitting for your requirement is vital for optimum performance.

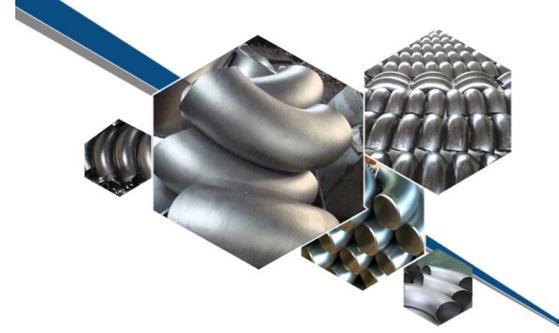
Measuring 180 degree long radius elbow dimensions will help you avoid improper fittings and incorrect installation. These are the most common culprits of leakage, poor performance, and system failure.

The dimensions depend on whether you choose a long- or a short-radius 180 degree steel pipe elbow. The former requires the centre-to-face distance to equal 1.5 times the nominal pipe size. In contrast, short-radius connections need this metric to equal the nominal pipe size.

## What is the outside diameter in 180 degree long radius elbow dimensions?

You can find a 180 degree elbow connection in both short- and long-radius styles. Short-radius ones are not very popular due to their minimum pressure tolerance. But a large diameter 180 deg elbow often gets used in industrial applications. In these fittings, the centre-to-face distance is 1.5 times the nominal pipe size. It means the radius is 1.5 times the pipe diameter.

The OD gets calculated at the end. Along with the OD, you must also measure the inside diameter or ID. You will have to make these measurements to find the suitable fitting for your requirements, for example, a Sch 40 180 deg elbow.



## What is the pipe attachment method of 180 degree weld elbow?

You can use different attachment methods for the pipe according to the budget and required strength. A common technique for 180 degree elbow pipe is butt welding, where the ends get machined. This approach guarantees a leak-proof installation with permanence. Since a metal contact gets established between the tube and the fitting, a 180 degree weld elbow incorporates strength.

Butt welding attachment is popular because of its compact nature and resistance to corrosion and erosion. For instance, in an Sch 80 180 deg elbow, this solution minimizes turbulence and pressure losses. It also changes the direction at a more gradual pace than other techniques. A 180 degree pipe fitting usually gets manufactured from stainless steel, steel alloys, duplex steels, etc.

## How are 180 degree short radius elbow dimensions measured?

A 180 degree short radius elbow has the centre to face distance equal to the nominal pipe size. For measuring 180 degree short radius elbow dimensions, the first step is to calculate the centre-to-face metric. It is the line connecting one end to the opposite face. Then, measure the outside diameter or OD. Similarly, the inside diameter or ID gets calculated at the end.

A small diameter 180 deg elbow gets used in low-pressure conditions. You can see them in construction, chemical processing, and shipbuilding. You can pick pipes of various schedules based on the required thickness.

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