

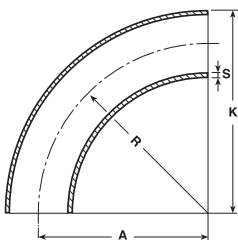
Secondo gli standard:

According to:

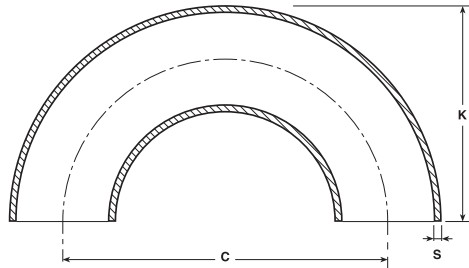
- ISO 3419
- DIN 2605-1 / 2609 ST 35.8 - ST 37.0 W
- EN 10253-1 S 235
- EN 10253-2 P235GH - P265GH

## Curve EN/DIN/ISO

EN/DIN/ISO Elbows and Bends



90°



180°

# Curve EN/DIN/ISO ( $R=1,5 D$ )

## EN/DIN/ISO Elbows model 3D

Tolleranze dimensionali: pag. 92  
Curve con dimensioni o spessori particolari: a richiesta (-)

Dimensional tolerances: pag. 92  
Bends with special thickness and size: on application (-)

DN	D [mm]	Senza Saldatura	Saldato	A [mm]	K [mm]	C [mm]
		Seamless	Welded			
		S	S			
15	<b>21,3</b>	2,0	—	38,0	49,0	76,0
20	<b>26,9</b>	2,3	—	38,0	51,0	76,0
25	<b>33,7</b>	2,6	—	38,0	56,0	76,0
—	<b>38,0</b>	2,6	—	45,0	64,0	90,0
32	<b>42,4</b>	2,6	—	48,0	69,0	96,0
—	<b>44,5</b>	2,6	—	51,0	73,5	102,0
40	<b>48,3</b>	2,6	—	57,0	82,0	114,0
—	<b>51,0</b>	2,6	—	63,0	88,0	126,0
—	<b>57,0</b>	2,9	—	72,0	100,0	144,0
50	<b>60,3</b>	2,9	—	76,0	106,0	152,0
—	<b>70,0</b>	2,9	—	92,0	127,0	184,0
65	<b>76,1</b>	2,9	—	95,0	133,0	190,0
—	<b>82,5</b>	3,2	—	107,5	149,0	215,0
80	<b>88,9</b>	3,2	—	114,0	159,0	228,0
—	<b>101,6</b>	3,6	—	133,5	184,0	267,0
—	<b>108,0</b>	3,6	—	142,5	196,0	285,0
100	<b>114,3</b>	3,6	—	152,0	210,0	304,0
—	<b>133,0</b>	4,0	—	181,0	247,0	362,0
125	<b>139,7</b>	4,0	—	190,0	260,0	380,0
—	<b>159,0</b>	4,5	—	216,0	295,0	432,0
150	<b>168,3</b>	4,5	—	229,0	313,0	457,0
—	<b>193,7</b>	5,6	—	270,0	367,0	540,0
200	<b>219,1</b>	6,3	4,5	305,0	414,0	610,0
—	<b>244,5</b>	6,3	5,6	340,0	462,0	680,0
250	<b>273,0</b>	6,3	5,6	381,0	518,0	762,0
300	<b>323,9</b>	7,1	6,3	457,0	619,0	914,0



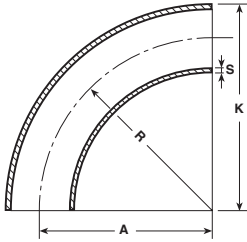
DN	D [mm]	Senza Saldatura	Saldato	A [mm]	K [mm]	C [mm]
		Seamless	Welded			
		S	S			
350	<b>355,6</b>	8,0	6,3	533,0	711,0	1066,0
—	<b>368,3</b>	8,0	6,3	534,0	717,0	1068,0
400	<b>406,4</b>	8,8	6,3	610,0	813,0	1220,0
—	<b>419,0</b>	8,8	6,3	610,0	819,0	1218,0
450	<b>457,0</b>	10,0	6,3	686,0	914,0	1372,0
500	<b>508,0</b>	11,5	6,3	762,0	1016,0	1524,0
550	<b>559,0</b>	12,5	6,3	838,0	1118,0	1676,0
600	<b>610,0</b>	12,5	6,3	914,0	1219,0	1828,0
650	<b>660,0</b>	12,5	—	990,0	1320,0	1980,0
700	<b>711,0</b>	12,5	7,1	1067,0	1422,0	2134,0
750	<b>762,0</b>	12,5	—	1143,0	1524,0	2286,0
800	<b>813,0</b>	12,5	8,0	1219,0	1626,0	2438,0
850	<b>864,0</b>	12,5	—	1296,0	1728,0	2592,0
900	<b>914,0</b>	12,5	—	1372,0	1829,0	2744,0

# Curve EN/DIN/ISO ( $R=2,5 D$ )

## EN/DIN/ISO Elbows model 5D

Tolleranze dimensionali: pag. 92  
Curve con dimensioni o spessori particolari: a richiesta (-)

Dimensional tolerances: pag. 92  
Bends with special thickness and size: on application (-)

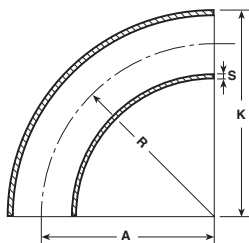


90°

DN	D [mm]	Senza Saldatura	Saldato	A [mm]	K [mm]
		Seamless	Welded		
		S	S		
15	<b>21,3</b>	2,0	—	42,5	53
20	<b>26,9</b>	2,3	—	57,5	71,0
25	<b>33,7</b>	2,6	—	72,5	89,0
—	<b>38,0</b>	2,6	—	82,5	101,0
32	<b>42,4</b>	2,6	—	92,5	114,0
40	<b>48,3</b>	2,6	—	109,5	134,0
—	<b>51,0</b>	2,6	—	122,5	149,0
—	<b>57,0</b>	2,9	—	130,0	158,0
50	<b>60,3</b>	2,9	—	137,5	168,0
—	<b>70,0</b>	2,9	—	160,0	195,0
65	<b>76,1</b>	2,9	—	175,0	213,0
80	<b>88,9</b>	3,2	—	207,5	252,0
—	<b>101,6</b>	3,6	—	235,0	286,0
—	<b>108,0</b>	3,6	—	253,0	306,0
100	<b>114,3</b>	3,6	—	270,0	327,0
—	<b>133,0</b>	4,0	—	311,5	378,0
125	<b>139,7</b>	4,0	—	330,0	400,0
—	<b>159,0</b>	4,5	—	375,0	454,0
150	<b>168,3</b>	4,5	—	390,0	474,0
—	<b>193,7</b>	5,6	—	455,0	552,0
200	<b>219,1</b>	6,3	4,5	515,0	624,0
—	<b>244,5</b>	6,3	5,6	580,0	702,0
250	<b>273,0</b>	6,3	5,6	650,0	786,0
300	<b>323,9</b>	7,1	6,3	770,0	932,0



DN	D [mm]	Senza Saldatura	Saldato	A [mm]	K [mm]
		Seamless	Welded		
		S	S		
350	<b>355,6</b>	8,0	6,3	850,0	1028,0
—	<b>368,3</b>	8,0	6,3	880,0	1064,0
400	<b>406,4</b>	8,8	6,3	970,0	1173,0
—	<b>419,0</b>	8,8	6,3	1000,0	1350,0
450	<b>457,0</b>	10,0	6,3	1122,0	1350,0
500	<b>508,0</b>	11,5	6,3	1254,0	1500,0
550	<b>559,0</b>	12,5	6,3	1398,0	1677,0
600	<b>610,0</b>	12,5	6,3	1525,0	1830,0
650	<b>660,0</b>	12,5	—	1650,0	1980,0
700	<b>711,0</b>	12,5	7,1	1778,0	2133,0
750	<b>762,0</b>	12,5	—	1905,0	2286,0
800	<b>813,0</b>	12,5	8,0	2033,0	2439,0
850	<b>864,0</b>	12,5	—	2155,0	2587,0
900	<b>914,0</b>	12,5	—	2285,0	2742,0



90°

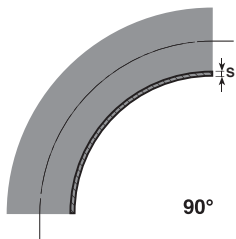
# Curve DIN (R=5 D)

## DIN Bends model 10D

Tolleranze dimensionali: pag. 92  
Curve con dimensioni o spessori particolari: a richiesta (-)

Dimensional tolerances: pag. 92  
Bends with special thickness and size: on application (-)

DN	D [mm]	Senza Saldatura	Saldato	A [mm]	K [mm]
		Seamless	Welded		
		S	S		
20	<b>26,9</b>	2,3	—	95,0	109,0
25	<b>33,7</b>	2,6	—	127,0	144,0
32	<b>42,4</b>	2,6	—	159,0	180,0
40	<b>48,3</b>	2,6	—	190,0	214,0
50	<b>60,3</b>	2,9	—	254,0	284,0
65	<b>76,1</b>	2,9	—	318,0	356,0
80	<b>88,9</b>	3,2	—	381,0	425,0
—	<b>101,6</b>	3,6	—	455,0	496,0
100	<b>114,3</b>	3,6	—	508,0	565,0
125	<b>139,7</b>	4,0	—	635,0	705,0
150	<b>168,3</b>	4,5	—	762,0	846,0
—	<b>193,7</b>	5,4	—	889,0	986,0
200	<b>219,1</b>	6,3	4,5	1016,0	1126,0
250	<b>273,0</b>	6,3	5,6	1270,0	1407,0
300	<b>323,9</b>	7,1	6,3	1524,0	1686,0
350	<b>355,6</b>	8,0	6,3	1778,0	1956,0
—	<b>368,3</b>	8,0	6,3	1778,0	1956,0
400	<b>406,4</b>	8,8	6,3	2032,0	2235,0
—	<b>419,0</b>	8,8	6,3	2095,0	2304,0
450	<b>457,0</b>	10,0	6,3	2286,0	2515,0
500	<b>508,0</b>	11,5	6,3	2540,0	2794,0
600	<b>610,0</b>	12,5	6,3	3050,0	3355,0
700	<b>711,0</b>	12,5	7,1	3555,0	3911,0
800	<b>813,0</b>	12,5	8,0	4065,0	4472,0
900	<b>914,0</b>	12,5	—	4570,0	5027,0



# Pesi [kg]

## EN/DIN/ISO (R=1,5 D)

### Weights EN/DIN/ISO (R=1,5 D)

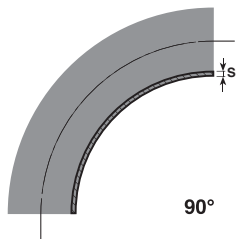
Tolleranze dimensionali: pag. 92  
Curves with dimensions or special thicknesses: on application (-)

Dimensional tolerances: pag. 92  
Elbows with special thickness and size: on application (-)

D [mm]	2,0	2,3	2,6	2,9	3,2	3,6	4,0	4,5	5,4	5,9	6,3	7,1	8,0	8,8	10,0	11,0	12,5
21,3	0,04																
26,9		0,06															
33,7			0,11														
38,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42,4			0,19														
44,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48,3			0,26														
51,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60,3				0,49													
70,0																	
76,1				0,78													
82,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88,9					1,21												
101,6						1,82											
108,0						2,07											
114,3						2,35											
133,0							3,61										
139,7							4,00										
159,0								5,81									
168,3								6,52									
193,7									11,00								
219,1										14,00							
244,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
273,0											24,00						
323,9									36,00		36,00	40,00					
355,6											46,00		57,00				
368,3												59,00					
406,4											61,00			82,00			
419,0														85,00			
457,0											77,00				119,0		
508,0											95,00					160,0	
559,0											115,0					188,0	226,0
610,0											136,0						265,0
≥ 660,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
≤ 1219,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

# Pesi [kg] EN/DIN/ISO (R=2,5 D)

## Weights EN/DIN/ISO (R=2,5 D)



Tolleranze dimensionali: pag. 92  
Curve con dimensioni o spessori particolari: a richiesta (-)

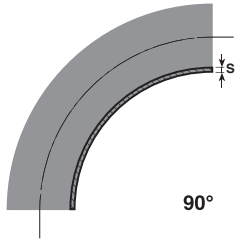
Dimensional tolerances: pag. 92  
Elbows with special thickness and size: on application (-)

D [mm]	2,0	2,3	2,6	2,9	3,2	3,6	4,0	4,5	5,4	5,9	6,3	7,1	8,0	8,8	10,0	11,0	12,5
21,3	0,07																
26,9		0,13															
33,7			0,20														
38,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42,4			0,37														
48,3			0,50														
51,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60,3				0,90													
70,0																	
76,1				1,44													
88,9					2,20												
101,6						3,20											
108,0						3,70											
114,3						4,20											
133,0							6,20										
139,7							7,00										
159,0								10,00									
168,3								11,00									
193,7									18,00								
219,1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
244,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
273,0											26,00						
323,9											42,00						
355,6												67,00					
368,3													91,00				
406,4													98,00				
419,0														131,0			
457,0														140,0			
508,0																264,0	
559,0																	364,0
610,0																	434,0
≥ 660,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
≤ 1219,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



# Pesi [kg] EN/DIN/ISO (R=5 D)

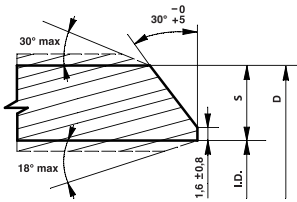
## Weights EN/DIN/ISO (R=5 D)



Tolleranze dimensionali: pag. 92  
Curves with dimensions or special thicknesses: on application (-)

Dimensional tolerances: pag. 92  
Elbows with special thickness and size: on application (-)

D [mm]	2,0	2,3	2,6	2,9	3,2	3,6	4,0	4,5	5,4	5,9	6,3	7,1	8,0	8,8	10,0	11,0	12,5
26,9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33,7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42,4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48,3	-	-	0,87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60,3	-	-	-	1,64	-	-	-	-	-	-	-	-	-	-	-	-	-
76,1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88,9	-	-	-	-	4,05	-	-	-	-	-	-	-	-	-	-	-	-
101,6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
114,3	-	-	-	-	-	7,84	-	-	-	-	-	-	-	-	-	-	-
133,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
139,7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
168,3	-	-	-	-	-	-	-	21,76	-	-	-	-	-	-	-	-	-
193,7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
219,1	-	-	-	-	-	-	-	-	-	-	52,76	-	-	-	-	-	-
273,0	-	-	-	-	-	-	-	-	-	-	82,66	-	-	-	-	-	-
323,9	-	-	-	-	-	-	-	-	-	-	118,13	-	-	-	-	-	-
355,6	-	-	-	-	-	-	-	-	-	-	-	-	67,00	-	-	-	-
368,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
406,4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
419,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
457,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
508,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
558,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
610,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
711,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
813,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
914,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1016,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1120,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1420,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1620,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Bevel EN/DIN/ISO

Fittings having  $3 < S < 22$  mm

For wall thickness above 22 mm  
the type of bevel shall be agreed

# Tolleranze dimensionali a norme EN/DIN/ISO

Dimensional tolerances  
according to EN/DIN/ISO standards

(-) a richiesta

(-) on application

Per tutti i raccordi For all fittings				A Curve 90° 90° Bends 3D / 5D	A Curve 90° 90° Bends 10D	A Curve a 180° 180° Bends 3D	K Curve a 180° 180° Bends 3D
DN Nominal size	D Outside diam. at the bevel	I.D. Inside diam. at end	S Thickness	Centro ad estremità Center to end	Lunghezza Length	Centro ad estremità Center to end	Altezza Height
15 - 40	+ 1,6 - 0,8	± 0,8	Non inferiore 87,5% dello spess. nom.  Not less than 87,5% of the nom. thickness	± 2	± 5	± 7	± 7
50 - 100	+ 1,6	± 1,6		± 2	± 10	± 7	± 7
125 - 200	+ 2,4 - 1,6	± 1,6		± 2	± 25	± 7	± 7
250 - 450	+ 4,0 - 3,2	± 3,2		± 3	± 40	± 10	± 7
500 - 600	+ 6,4 - 4,8	± 4,8		± 3	± 50	± 10	± 10
650 - 750	+ 6,3 - 4,8	± 4,8		± 3	± 80	± 10	—
800 - 900	+ 6,4 - 4,8	± 4,8		± 5	± 100	± 10	—