



Pipe couplings and fittings

Elbows 90°



Approvals



Nominal size		Model	Pipe OD mm (Inch)	Part no.			Approvals				Weight kg (lbs)
DN	Inch			"Red paint similar RAL 3000"	"White powder similar RAL9010"	Galvanized	VdS	LPCB	FM	UL	
25	1	910	33.7 (1.33)	912320	919873	912325	G	G	D	D	0.2 (0.44)
32	1-1/4	910	42.4 (1.67)	849385	915761	849396	G	G	D	D	0.4 (0.90)
40	1-1/2	910	48.3 (1.90)	849386	915762	849397	G	G	D	D	0.5 (1.10)
50	2	910S	60.3 (2.37)	849387	915764	849398	G	G	D	D	0.7 (1.50)
65	2-1/2	910S	73.0 (2.87)	912321	919874	912326	G	G	D	D	0.9 (2.00)
65	3 OD	910S	76.1 (3.00)	849388	915765	849399	G	G	D	D	0.9 (2.00)
80	3	910S	88.9 (3.50)	849389	915767	849400	G	G	D	D	1.2 (2.70)
100	4	90S	108.0 (4.50)	919654	-	919748	-	-	D	F	1.8 (3.96)
100	4	910S	114.3 (4.50)	849390	915768	849401	G	G	D	D	2.1 (4.60)
100 LR	4 LR	910LR	114.3 (4.50)	912322	919857	912327	G	G	D	D	3.9 (8.60)
125	5-1/4 OD	90	133.0 (5.25)	919679	-	919749	-	-	F	D	3.4 (7.57)
125	5-1/2 OD	910S	139.7 (5.50)	849392	915769	849402	C	G	D	D	3.5 (7.70)
125	5	90	141.3 (5.56)	919680	-	919750	-	-	F	F	4.2 (9.33)
150	6-1/4 OD	90S	159.0 (6.25)	919681	-	919751	-	-	D	D	4.6 (10.23)
150	6-1/2 OD	910S	165.1 (6.50)	912323	919876	912328	C	G	D	D	5.0 (11.00)
150	6	910S	168.3 (6.63)	849394	915770	849403	C	G	D	D	5.0 (11.00)
200	8	910S	219.1 (8.63)	849395	915771	849404	C	G	D	D	10.2 (22.50)
250	10	910	273.0 (10.75)	912324	919877	912329	C	G	D	D	19.6 (43.20)
300	12	90	323.9 (12.75)	919681	-	919752	C	-	F	B	35.5 (78.30)

OD = Outside Diameter; (LR) = Long Radius R = 1.5D

Working pressure: A = max. 12.1 bar (175 psi) / B = max. 15.5 bar (225 psi) / C = max. 16 bar (232 psi) /

D = max. 20.7 bar (300 psi) / E = max. 25 bar (363 psi) / F = max. 34.5 bar (500 psi) / G = max. 20 bar (290 psi) / - = no approvals

Technical data

Groove for coupling ...P11.194.200 (Roll-Groove-Specifications)

Materialductile cast iron, ASTM A536 Grade 65-45-12

Finish:

- Red paint liquid painting similar RAL 3000
- White powder powder coating similar RAL 9010
- Galvanized hot dip galvanized

Application

Water based fire-suppression systems

Caution

For environments where aggressive, corrosive atmosphere is expected (e.g. direct outdoor exposure, direct contact with water, industrial atmosphere etc.) special surface coatings (e.g. Rilsan, Resicoat etc.) are available.

Maintenance

Visual check

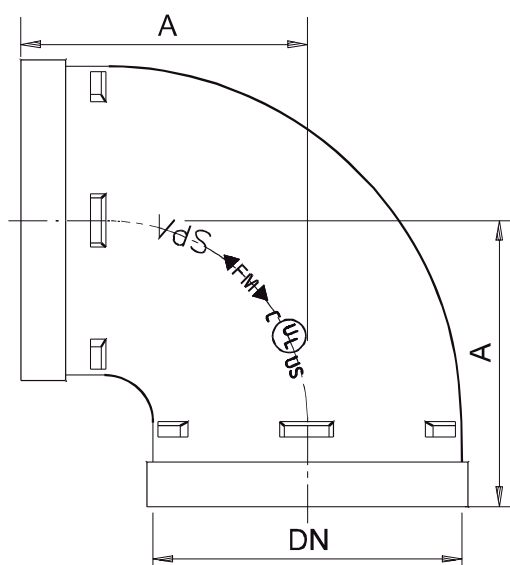


Pipe couplings and fittings

Elbows 90°

Dimensional drawing

Dimensions in mm (inch)



DN / mm	Inch	A (mm / inch)
25 / 33.7	1	57 (2.24)
32 / 42.4	1-1/4	70 (2.76)
40 / 48.3	1-1/2	70 (2.76)
50 / 60.3	2	70 (2.76)
65 / 73.0	2-1/2	76 (2.99)
65 / 76.1	3 OD	76 (2.99)
80 / 88.9	3	86 (3.39)
100 / 108.0	4	101 (3.98)
100 / 114.3	4	102 (4.02)
100 / 114.3 (LR)	4 (LR)	191 (7.52)
125 / 133.0	5-1/4 OD	122 (4.80)
125 / 139.7	5-1/2 OD	124 (4.88)
125 / 141.3	5	140 (5.50)
150 / 159.0	6-1/4 OD	140 (5.50)
150 / 165.1	6-1/2 OD	140 (5.51)
150 / 168.3	6	140 (5.51)
200 / 219.1	8	175 (6.89)
250 / 273.0	10	229 (9.02)
300 / 323.9	12	254 (10.00)



Pipe couplings and fittings

Elbows 45°



Approvals



Nominal size		Model	Pipe OD mm (Inch)	Part no.			Approvals				Weight
DN	Inch			Red paint similar RAL 3000	White powder similar RAL9010	Galvanized	VdS	LPCB	FM	UL	kg (lbs)
25	1	120	33.7 (1.32)	919695	-	919753	C	E	F	F	0.20 (0.45)
32	1-1/4	920	42.4 (1.67)	849416	915774	849426	G	G	D	D	0.30 (0.70)
40	1-1/2	920	48.3 (1.90)	849417	915775	849427	G	G	D	D	0.30 (0.70)
50	2	920	60.3 (2.37)	849418	915777	849428	G	G	D	D	0.50 (1.10)
65	2-1/2	120	73.0 (2.88)	919696	-	919754	-	-	F	F	0.79 (1.74)
65	3OD	920	76.1 (3.00)	849419	915778	849429	G	G	D	D	0.70 (1.50)
80	3	920	88.9 (3.50)	849420	915779	849430	G	G	D	D	1.00 (2.20)
100	4-1/4 OD	120	108.0 (4.25)	919697	-	919756	-	-	F	D	1.74 (3.83)
100	4	920	114.3 (4.50)	849422	915780	849431	G	G	D	D	1.80 (4.00)
125	5-1/2 OD	920	139.7 (5.50)	849423	915781	849432	C	G	D	D	2.80 (6.20)
150	6-1/4 OD	120	159.0 (6.25)	919698	-	919757	-	-	F	D	3.75 (8.26)
150	6-1/2 OD	920	165.1 (6.50)	912203	919878	912204	C	G	D	D	3.90 (8.60)
150	6	920	168.3 (6.63)	849424	915782	849434	C	G	D	D	4.00 (8.80)
200	8	920	219.1 (8.63)	849425	915783	849435	C	G	D	D	6.80 (15.00)
250	10	920	273.0 (10.75)	912205	919879	912206	C	G	D	D	11.50 (25.40)
300	12	120	323.9 (12.75)	919699	-	919758	C	-	F	F	21.70 (47.80)

OD = Outside Diameter

Working pressure: A = max. 12.1 bar (175 psi) / B = max. 15.5 bar (225 psi) / C = max. 16 bar (232 psi) /

D = max. 20.7 bar (300 psi) / E = max. 25 bar (363 psi) / F = max. 34.5 bar / (500 psi) / G = max. 20 bar (290 psi) / - = no approvals

Technical data

Groove for coupling ...P11.194.200 (Roll-Groove-Specifications)

Materialductile cast iron, ASTM A536 Grade 65-45-12

Finish:

- Red paint liquid painting similar RAL 3000
- White powder powder coating similar RAL 9010
- Galvanized hot dip galvanized

Application

Water based fire-suppression systems

Caution

For environments where aggressive, corrosive atmosphere is expected (e.g. direct outdoor exposure, direct contact with water, industrial atmosphere etc.) special surface coatings (e.g. Rilsan, Resicoat etc.) are available.

Maintenance

Visual check

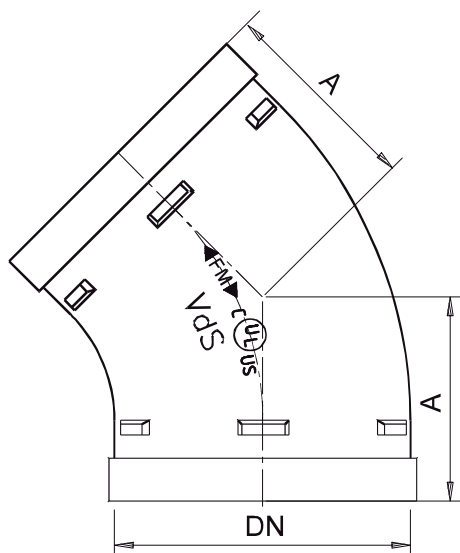


Pipe couplings and fittings

Elbows 45°

Dimensional drawing

Dimensions in mm (inch)



DN / mm	Inch	A (mm / inch)
25 / 33.7	1	44.5 (1.75)
32 / 42.4	1-1/4	70 (2.76)
40 / 48.3	1-1/2	70 (2.76)
50 / 60.3	2	70 (2.76)
65 / 73.0	2-1/2	57 (2.24)
65 / 76.1	3 OD	76 (2.99)
80 / 88.9	3	86 (3.39)
100 / 108.0	4-1/4 OD	76 (3.00)
100 / 114.3	4	102 (4.02)
125 / 139.7	5-1/2 OD	124 (4.88)
150 / 159.0	6-1/4 OD	89 (3.50)
150 / 165.1	6-1/2 OD	140 (5.51)
150 / 168.3	6	140 (5.51)
200 / 219.1	8	175 (6.89)
250 / 273.0	10	229 (9.02)
300 / 323.9	12	133 (5.25)



Pipe couplings and fittings

Elbows 22.5°



Approvals



Nominal size		Pipe OD	Part no.		Approvals				Weight approx.
DN	Inch	mm (Inch)	Red paint	Galvanized	VdS	LPCB	FM	UL	kg (lbs)
32	1-1/4	42.4 (1.66)	919700	919759	-	-	F	F	0.32 (0.72)
40	1-1/2	48.3 (1.90)	919704	919760	-	-	F	F	0.37 (0.82)
50	2	60.3 (2.38)	919707	919761	-	-	F	F	0.52 (1.14)
65	3 OD	76.1 (3.00)	919712	919763	C	E	F	F	0.87 (1.92)
80	3	88.9 (3.50)	919715	919764	C	E	F	F	1.07 (2.37)
100	4	114.3 (4.50)	919718	919765	C	E	F	D	1.89 (4.16)
125	5-1/2 OD	139.7 (5.50)	919722	919766	C	E	F	D	2.72 (6.00)
150	6-1/2 OD	165.1 (6.50)	919727	919767	-	E	F	D	3.63 (7.99)
	6	168.3 (6.63)	919730	919768	C	-	F	D	4.53 (9.99)
200	8	219.1 (8.63)	919731	919769	C	E	D	D	6.83 (15.10)

OD = Outside Diameter

Working pressure: **A** = max. 12.1 bar (175 psi) / **B** = max. 15.5 bar (225 psi) / **C** = max. 16 bar (232 psi) / **D** = max. 20.7 bar (300 psi) /

E = max. 25 bar (363 psi) / **F** = max. 34.5 bar (500 psi) / - = no approvals

Technical data

Type..... 110

Material..... ductile cast iron

Finish:

- Red paint liquid painting similar RAL 3000

- Galvanized hot dip galvanized

Application

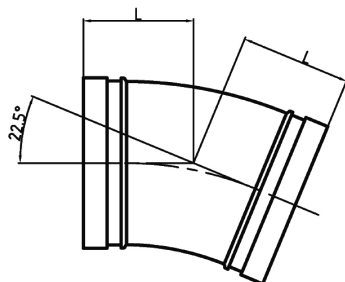
Water based fire-suppression systems

Maintenance

Visual check

Dimensional drawing

Dimensions in mm (inch)



DN	Inch	L (mm / inch)
32 / 42.4	1-1/4	45 (1.77)
40 / 48.3	1-1/2	
50 / 60.3	2	48 (1.89)
65 / 76.1	3 OD	51 (2.00)
80 / 88.9	3	57 (2.24)

DN	Inch	L (mm / inch)
100 / 114.3	4	73 (2.87)
125 / 139.7	5-1/2 OD	
150 / 165.1	6-1/2 OD	79 (3.11)
150 / 168.3	6	
200 / 219.1	8	98 (3.86)



Pipe couplings and fittings

Elbows 11.25°



Approvals



Nominal size		Pipe OD	Part no.		Approvals				Weight approx.
DN	Inch	mm (Inch)	Red paint	Galvanized	VdS	LPCB	FM	UL	kg (lbs)
50	2	60.3 (2.38)	919732	919770	C	E	F	F	0.39 (0.86)
65	3 OD	76.1 (3.00)	919733	919771	C	E	F	F	0.59 (1.30)
80	3	88.9 (3.50)	919734	919772	C	E	F	F	0.86 (1.91)
100	4	114.3 (4.50)	919735	919773	C	E	F	D	1.21 (2.67)
125	5-1/2 OD	139.7 (5.50)	919736	919774	C	E	F	D	1.98 (4.37)
150	6	168.3 (6.63)	919737	919775	C	-	F	D	3.06 (6.74)
200	8	219.1 (8.63)	919738	919776	C	E	D	D	3.80 (8.38)

OD = Outside Diameter

Working pressure: **A** = max. 12.1 bar (175 psi) / **B** = max. 15.5 bar (225 psi) / **C** = max. 16 bar (232 psi) / **D** = max. 20.7 bar (300 psi) /

E = max. 25 bar (363 psi) / **F** = max. 34.5 bar (500 psi) / - = no approvals

Technical data

Type.....105

Materialductile cast iron

Finish:

- Red paint liquid painting similar RAL 3000

- Galvanizedhot dip galvanized

Application

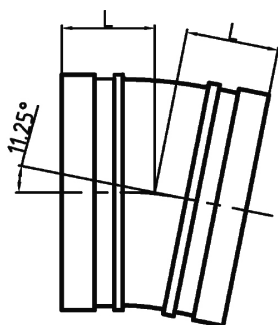
Water based fire-suppression systems

Maintenance

Visual check

Dimensional drawing

Dimensions in mm (inch)



DN	Inch	L (mm / inch)
50 / 60.3	2	35 (1.38)
65 / 76.1	3 OD	38 (1.51)
80 / 88.9	3	
100 / 114.3	4	44 (1.73)
125 / 139.7	5-1/2 OD	51 (2.00)
150 / 168.3	6	
200 / 219.1	8	