

Moulded Fittings

90° Elbow (SD-PEM90E)

SHIELD Fittings are available in moulded. They are manufactured as per ISO and ANSI/AWWA standard which are UL, FM, WRAS and API approved, applicable for fire fighting & Water Applications.



Product Specifications:

Available Size	20mm - 500mm, 4" - 10"
Material	High Density Polyethylene, Medium Density Polyethylene
Standard	ISO 4427, EN 12201, ANSI/AWWA C906, API 15LE
Application	Firefighting (underground), Irrigation, Potable Water, Drainage, Gas Insulation/Sleeves/Jacket, Horizontal Directional Drilling Machine
Approvals/Listings	   

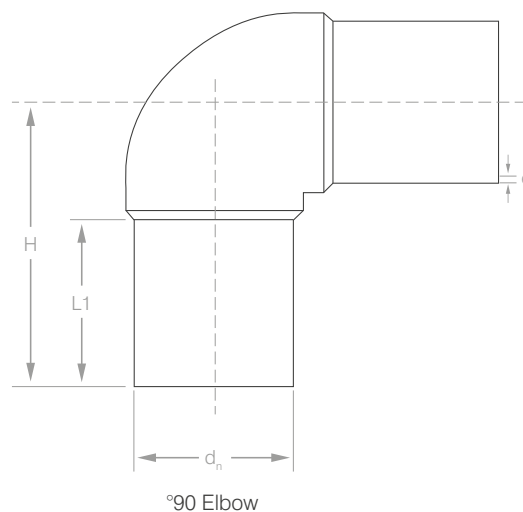
Moulded Fittings

(Metric)

Product Dimensions:

SD-PEM90E (ISO 4427) (PE 100 Long spigot version)

d _n	D (Min - Max)	H	L1	e			
				SDR 17 PN10	SDR 11 PN16	SDR 9 PN20	SDR 7.4 PN25
mm	mm	mm	mm	mm	mm	mm	mm
20	20.0 - 20.1	75	49	-	2.0 - 2.3	2.3 - 2.7	3.0 - 3.4
25	25.0 - 25.1	80	53	-	2.3 - 2.7	3.0 - 3.4	3.5 - 4.0
32	32.0 - 32.1	89	59	-	3.0 - 3.4	3.6 - 4.1	4.4 - 5.0
40	40.0 - 40.2	89	59	-	3.7 - 4.2	4.5 - 5.1	5.5 - 6.2
50	50.0 - 50.3	89	60	-	4.6 - 5.2	5.6 - 6.3	6.9 - 7.7
63	63.0 - 63.4	115	65	3.8 - 4.3	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6
75	75.0 - 75.5	130	75	4.5 - 5.1	6.8 - 7.6	8.4 - 9.4	10.3 - 11.5
90	90.0 - 90.6	145	80	5.4 - 6.1	8.2 - 9.2	10.1 - 11.1	12.3 - 13.7
110	110.0 - 110.7	165	88	6.6 - 7.4	10.0 - 11.1	12.3 - 13.7	15.1 - 16.8
125	125.0 - 125.8	180	95	7.4 - 8.3	11.4 - 12.7	14.0 - 15.6	17.1 - 19.0
160	160.0 - 161.0	215	110	9.5 - 10.6	14.6 - 16.2	17.9 - 19.8	21.9 - 24.2
180	180.0 - 181.1	230	120	10.7 - 11.9	16.4 - 18.2	20.1 - 22.3	24.6 - 27.2
200	200.0 - 201.2	250	130	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.3
225	225.0 - 226.4	285	135	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0
250	250.0 - 251.5	310	140	14.8 - 16.4	22.7 - 25.1	27.9 - 30.8	34.2 - 37.8
280	280.0 - 281.7	265	120	16.6 - 18.4	25.4 - 28.1	31.3 - 34.6	38.3 - 42.3
315	315.0 - 316.9	290	110	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6
355	355.0 - 357.2	365	155	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5
400	400.0 - 402.4	375	155	23.7 - 26.2	36.3 - 40.1	44.7 - 49.3	54.7 - 60.3
450	450.0 - 452.7	425	175	26.7 - 29.5	40.9 - 45.1	50.3 - 55.5	61.5 - 67.8
500	500.0 - 503.0	445	170	29.7 - 32.8	45.4 - 50.1	55.8 - 61.5	68.2 - 75.4



NOTE:

- ▶ The tolerance limit for the dimensions (H & L1) will be 5± mm.
- ▶ e = Thickness at the end.
- ▶ SDR 16 - 11 bar water/10 bar gas.
- ▶ Refer to FM & WRAS certificates for more details.
- ▶ Other SDRs are also available upon request.

Moulded Fittings

(Imperial)

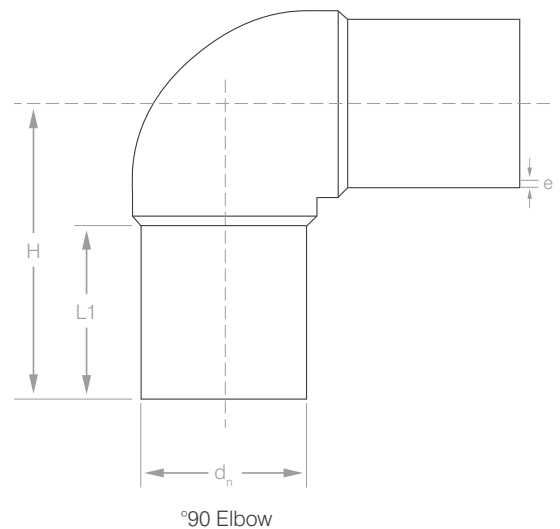
Product Dimensions:

SD-PEM90E (ANSI/AWWA C906) (PE 100/PE 4710 Long spigot version)

d _n	D (Min - Max)	H	L1	e			
				DR 11 PC200	DR 9 PC250	DR 7.3 PC317	DR 7 PC335
Inch	Inch	Min Inch	Min Inch	Inch	Inch	Inch	Inch
4	4.48 - 4.52	6.70	3.54	0.409 - 0.458	0.500 - 0.560	0.625 - 0.700	0.643 - 0.720
6	6.60 - 6.65	8.66	4.33	0.602 - 0.674	0.736 - 0.825	0.920 - 1.031	0.946 - 1.060
8	8.60 - 8.66	10.62	4.92	0.784 - 0.878	0.958 - 1.073	1.198 - 1.342	1.228 - 1.376
10	10.70 - 10.78	12.20	5.11	0.977 - 1.094	1.194 - 1.337	1.473 - 1.650	1.536 - 1.720

NOTE:

- ▶ The tolerance limit for the dimensions (H & L1) will be 0.2± inch.
- ▶ e = Thickness at the end.
- ▶ Refer to FM & WRAS certificates for more information.



Moulded Fittings

Miscellaneous Data:

1. Ordering Information

Example: SD-PEM90E-1-40

- SD-PEM90E is the part number
- (1) ISO 4427 (2) ANSI/AWWA C906 (3) API 15LE
- (1) HDPE (2) MDPE
- (40) Size

2. Contact Information

For further information on any aspect of the SHIELD HDPE Moulded Fittings please contact below:

MIDDLE EAST & AFRICA	UNITED KINGDOM
Jebel Ali Free Zone, Dubai, UAE P.O Box: 61199 Tel.: +971 4 881 2070 Fax: +971 4 881 2198 Email: shieldme@shielglobal.com	Unit 3, Endeavor Drive, Basildon-Essex, SS3 14WF Tel.: +44 1708 377731 Fax: +44 1708347637 Email: shielduk@shielglobal.com