

Moulded Fittings

Concentric Reducer (SD-PEMCR)

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:

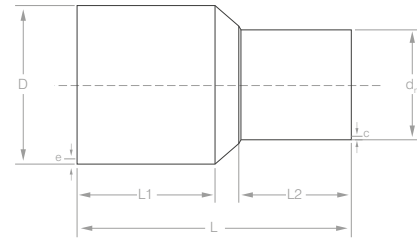
Available Size	20mm - 500mm, 4" - 20"
Material	High Density Polyethylene, Medium Density Polyethylene
Standard	ISO 4427, EN 12201, ANSI/AWWA C906, API 15LE
Application	Firefighting (underground), Irrigation, Potable Water, Drainage, Gas Insulation/Sleeves/Jacket, Horizontal Directional Drilling Machine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

Moulded Fittings

(Metric)

Product Dimensions:

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



Concentric Reducer

D x d _n mm	D (Min - Max) mm	d _n (Min - Max) mm	L mm	L1 mm	L2 mm	e				c			
						SDR 17 PN10	SDR 11 PN16	SDR 9 PN20	SDR 7.4 PN25	SDR 17 PN10	SDR 11 PN16	SDR 9 PN20	SDR 7.4 PN25
						mm	mm	mm	mm	mm	mm	mm	mm
25 x 20	25.0 - 25.3	20.0 - 20.2	113	49	48	-	2.3 - 2.7	3.0 - 3.4	3.5 - 4.0	-	2.0 - 2.3	2.3 - 2.7	3.0 - 3.4
32 x 20	32.0 - 32.3	20.0 - 20.2	124	55	52	-	3.0 - 3.4	3.6 - 4.1	4.4 - 5.0	-	2.0 - 2.3	2.3 - 2.7	3.0 - 3.4
32 x 25	32.0 - 32.3	25.0 - 25.2	130	61	59	-	3.0 - 3.4	3.6 - 4.1	4.4 - 5.0	-	2.3 - 2.7	3.0 - 3.4	3.5 - 4.0
40 x 20	40.0 - 40.3	20.0 - 20.2	130	59	52	-	3.7 - 4.2	4.5 - 5.1	5.5 - 6.2	-	2.0 - 2.3	2.3 - 2.7	3.0 - 3.4
40 x 25	40.0 - 40.3	25.0 - 25.2	128	59	54	-	3.7 - 4.2	4.5 - 5.1	5.5 - 6.2	-	2.3 - 2.7	3.0 - 3.4	3.5 - 4.0
40 x 32	40.0 - 40.3	32.0 - 32.3	125	61	54	-	3.7 - 4.2	4.5 - 5.1	5.5 - 6.2	-	3.0 - 3.4	3.6 - 4.1	4.4 - 5.0
50 x 25	50.0 - 50.4	25.0 - 25.2	135	60	50	-	4.6 - 5.2	5.6 - 6.3	6.9 - 7.7	-	2.3 - 2.7	3.0 - 3.4	3.5 - 4.0
50 x 32	50.0 - 50.4	32.0 - 32.3	134	60	47	-	4.6 - 5.2	5.6 - 6.3	6.9 - 7.7	-	3.0 - 3.4	3.6 - 4.1	4.4 - 5.0
50 x 40	50.0 - 50.4	40.0 - 40.3	134	60	62	-	4.6 - 5.2	5.6 - 6.3	6.9 - 7.7	-	3.7 - 4.2	4.5 - 5.1	5.5 - 6.2
63 x 25	63.0 - 63.4	25.0 - 25.2	140	64	57	-	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6	-	2.3 - 2.7	3.0 - 3.4	3.5 - 4.0
63 x 32	63.0 - 63.4	32.0 - 32.3	143	64	63	-	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6	-	3.0 - 3.4	3.6 - 4.1	4.4 - 5.0
63 x 40	63.0 - 63.4	40.0 - 40.3	139	68	52	-	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6	-	3.7 - 4.2	4.5 - 5.1	5.5 - 6.2
63 x 50	63.0 - 63.4	50.0 - 50.4	132	63	57	-	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6	-	4.6 - 5.2	5.6 - 6.3	6.9 - 7.7
75 x 40	75.0 - 70.5	40.0 - 40.3	147	72	60	-	6.8 - 7.6	8.4 - 9.4	10.3 - 11.5	-	3.7 - 4.2	4.5 - 5.1	5.5 - 6.2
75 x 50	75.0 - 70.5	50.0 - 50.4	153	72	59	-	6.8 - 7.6	8.4 - 9.4	10.3 - 11.5	-	4.6 - 5.2	5.6 - 6.3	6.9 - 7.7
75 x 63	75.0 - 75.5	63.0 - 63.4	160	75	65	-	6.8 - 7.6	8.4 - 9.4	10.3 - 11.5	-	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6
90 x 63	90.0 - 90.6	63.0 - 63.4	170	80	65	-	8.2 - 9.2	10.1 - 11.3	12.3 - 13.7	-	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6
90 x 75	90.0 - 90.6	75.0 - 75.5	170	80	75	-	8.2 - 9.2	10.1 - 11.3	12.3 - 13.7	-	6.8 - 7.6	8.4 - 9.4	10.3 - 11.5
110 x 63	110.0 - 110.7	63.0 - 63.4	185	88	65	-	10.0 - 11.1	12.3 - 13.7	15.1 - 16.8	-	5.8 - 6.5	7.1 - 8.0	8.6 - 9.6
110 x 75	110.0 - 110.7	75.0 - 75.5	185	88	75	6.6 - 7.4	10.0 - 11.1	12.3 - 13.7	15.1 - 16.8	4.5 - 5.1	6.8 - 7.6	8.4 - 9.4	10.3 - 11.5
110 x 90	110.0 - 110.7	90.0 - 90.6	185	88	80	6.6 - 7.4	10.0 - 11.1	12.3 - 13.7	15.1 - 16.8	5.4 - 6.1	8.2 - 9.2	10.1 - 11.1	12.3 - 13.7
125 x 75	125.0 - 125.8	75.0 - 75.5	200	95	75	7.4 - 8.3	11.4 - 12.7	14.0 - 15.6	17.1 - 19.0	4.5 - 5.1	6.8 - 7.6	8.4 - 9.4	10.3 - 11.5
125 x 90	125.0 - 125.8	90.0 - 90.6	200	95	80	7.4 - 8.3	11.4 - 12.7	14.0 - 15.6	17.1 - 19.0	5.4 - 6.1	8.2 - 9.2	10.1 - 11.1	12.3 - 13.7
125 x 110	125.0 - 125.8	110.0 - 110.7	200	95	85	7.4 - 8.3	11.4 - 12.7	14.0 - 15.6	17.1 - 19.0	6.6 - 7.4	10.0 - 11.1	12.3 - 13.7	15.1 - 16.8
160 x 110	160.0 - 161.0	110.0 - 110.7	230	110	90	9.5 - 10.6	14.6 - 16.2	17.9 - 19.8	21.9 - 24.2	6.6 - 7.4	10.0 - 11.1	12.3 - 13.7	15.1 - 16.8
160 x 125	160.0 - 161.0	125.0 - 125.8	230	110	95	9.5 - 10.6	14.6 - 16.2	17.9 - 19.8	21.9 - 24.2	7.4 - 8.3	11.4 - 12.7	14.0 - 15.6	17.1 - 19.0
180 x 110	180.0 - 181.1	110.0 - 110.7	250	110	90	10.7 - 11.9	16.4 - 18.2	20.1 - 22.3	24.6 - 27.2	6.6 - 7.4	10.0 - 11.1	12.3 - 13.7	15.1 - 16.8
180 x 125	180.0 - 181.1	125.0 - 125.8	250	115	95	10.7 - 11.9	16.4 - 18.2	20.1 - 22.3	24.6 - 27.2	7.4 - 8.3	11.4 - 12.7	14.0 - 15.6	17.1 - 19.0
180 x 160	180.0 - 181.1	160.0 - 161.0	250	115	110	10.7 - 11.9	16.4 - 18.2	20.1 - 22.3	24.6 - 27.2	9.5 - 10.6	14.6 - 16.2	17.9 - 19.8	21.9 - 24.2
200 x 125	200.0 - 201.2	125.0 - 125.8	270	120	95	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.3	7.4 - 8.3	11.4 - 12.7	14.0 - 15.6	17.1 - 19.0
200 x 160	200.0 - 201.2	160.0 - 161.0	270	120	110	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.3	9.5 - 10.6	14.6 - 16.2	17.9 - 19.8	21.9 - 24.2
200 x 180	200.0 - 201.2	180.0 - 181.1	270	120	115	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.3	10.7 - 11.9	16.4 - 18.2	20.1 - 22.3	24.6 - 27.2
225 x 160	225.0 - 226.4	160.0 - 161.0	280	125	110	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0	9.5 - 10.6	14.6 - 16.2	17.9 - 19.8	21.9 - 24.2
225 x 180	225.0 - 226.4	180.0 - 181.1	280	125	115	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0	10.7 - 11.9	16.4 - 18.2	20.1 - 22.3	24.6 - 27.2
225 x 200	225.0 - 226.4	200.0 - 201.2	280	125	120	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.4
250 x 160	250.0 - 251.5	160.0 - 161.0	300	130	110	14.8 - 16.4	22.7 - 25.1	27.9 - 30.8	34.2 - 37.8	9.5 - 10.6	14.6 - 16.2	17.9 - 19.8	21.9 - 24.2
250 x 180	250.0 - 251.5	180.0 - 181.1	300	130	115	14.8 - 16.4	22.7 - 25.1	27.9 - 30.8	34.2 - 37.8	10.7 - 11.9	16.4 - 18.2	20.1 - 22.3	24.6 - 27.2
250 x 200	250.0 - 251.5	200.0 - 201.2	300	130	120	14.8 - 16.4	22.7 - 25.1	27.9 - 30.8	34.2 - 37.8	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.4
250 x 225	250.0 - 251.5	225.0 - 226.4	300	130	125	14.8 - 16.4	22.7 - 25.1	27.9 - 30.8	34.2 - 37.8	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0

NOTE:

- The tolerance limit for the dimensions (L, L1 & L2) will be 5± mm.
- e & c = 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

(Metric)

Product Dimensions:

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

D x d _n mm	D (Min - Max) mm	d _n (Min - Max) mm	L mm	L1 mm	L2 mm	e				c			
						SDR 17 PN10 mm	SDR 11 PN16 mm	SDR 9 PN20 mm	SDR 7.4 PN25 mm	SDR 17 PN10 mm	SDR 11 PN16 mm	SDR 9 PN20 mm	SDR 7.4 PN25 mm
280 x 200	280.0 - 281.7	200.0 - 201.2	320	150	150	16.6 - 18.4	25.4 - 28.1	31.3 - 34.6	38.3 - 42.3	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.3
280 x 225	280.0 - 281.7	225.0 - 226.4	320	150	150	16.6 - 18.4	25.4 - 28.1	31.3 - 34.6	38.3 - 42.3	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0
280 x 250	280.0 - 281.7	250.0 - 251.5	320	150	150	16.6 - 18.4	25.4 - 28.1	31.3 - 34.6	38.3 - 42.3	14.8 - 16.4	22.7 - 25.1	27.9 - 30.8	34.2 - 37.8
315 x 200	315.0 - 316.9	200.0 - 201.2	350	150	150	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.3
315 x 225	315.0 - 316.9	225.0 - 226.4	350	150	150	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0
315 x 250	315.0 - 316.9	250.0 - 251.5	350	150	150	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6	14.8 - 16.4	22.7 - 25.1	27.9 - 30.8	34.2 - 37.8
315 x 280	315.0 - 316.9	280.0 - 281.7	350	150	150	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6	16.6 - 18.4	25.4 - 28.1	31.3 - 34.6	38.3 - 42.3
355 x 200	355.0 - 357.2	200.0 - 201.2	350	150	150	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5	11.9 - 13.2	18.2 - 20.2	22.4 - 24.8	27.4 - 30.3
355 x 225	355.0 - 357.2	200.0 - 201.2	350	150	150	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5	13.4 - 14.9	20.5 - 22.7	25.2 - 27.9	30.8 - 34.0
355 x 280	355.0 - 357.2	280.0 - 281.7	350	150	150	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5	16.6 - 18.4	25.4 - 28.1	31.3 - 34.6	38.3 - 42.3
355 x 315	355.0 - 357.2	315.0 - 316.9	350	150	150	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6
400 x 280	400.0 - 402.4	280.0 - 281.7	400	160	160	23.7 - 26.2	36.3 - 40.1	44.7 - 49.3	54.7 - 60.3	16.6 - 18.4	25.4 - 28.1	31.3 - 34.6	38.3 - 42.3
400 x 315	400.0 - 402.4	315.0 - 316.9	400	160	160	23.7 - 26.2	36.3 - 40.1	44.7 - 49.3	54.7 - 60.3	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6
400 x 355	400.0 - 402.4	355.0 - 357.2	400	160	160	23.7 - 26.2	36.3 - 40.1	44.7 - 49.3	54.7 - 60.3	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5
450 x 315	450.0 - 452.7	315.0 - 316.9	400	180	180	26.7 - 29.5	40.9 - 45.1	50.3 - 55.5	61.5 - 67.8	18.7 - 20.7	28.6 - 31.6	35.2 - 38.9	43.1 - 47.6
450 x 355	450.0 - 452.7	355.0 - 357.2	400	180	180	26.7 - 29.5	40.9 - 45.1	50.3 - 55.5	61.5 - 67.8	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5
450 x 400	450.0 - 452.7	400.0 - 402.4	400	180	180	26.7 - 29.5	40.9 - 45.1	50.3 - 55.5	61.5 - 67.8	23.7 - 26.2	36.3 - 40.1	44.7 - 49.3	54.7 - 60.3
500 x 355	500.0 - 503.0	355.0 - 357.2	450	200	200	29.7 - 32.8	45.4 - 50.1	55.8 - 61.5	68.2 - 75.4	21.1 - 23.4	32.2 - 35.6	39.7 - 43.8	48.5 - 53.5
500 x 400	500.0 - 503.0	400.0 - 402.4	450	200	200	29.7 - 32.8	45.4 - 50.1	55.8 - 61.5	68.2 - 75.4	23.7 - 26.2	36.3 - 40.1	44.7 - 49.3	54.7 - 60.3
500 x 450	500.0 - 503.0	450.0 - 452.7	450	200	200	29.7 - 32.8	45.4 - 50.1	55.8 - 61.5	68.2 - 75.4	26.7 - 29.5	40.9 - 45.1	50.3 - 55.5	61.5 - 67.8

NOTE:

- The tolerance limit for the dimensions (L, L1 & L2) will be 5± mm.
- e & c = Thickness at the end.
- SDR 16 - 11 bar water/10 bar gas.
- Refer to FM & WRAS certificates for more details.
- Other SDRs and sizes are also available upon request.

Moulded Fittings

(Imperial)

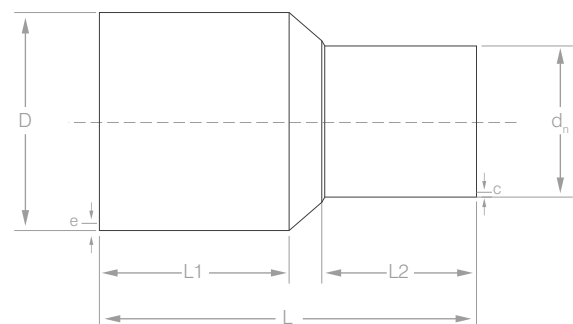
Product Dimensions:

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

D x d _n	D (Min - Max)	d _n (Min - Max)	L	L1	L2	e				c			
						DR 11	DR 9	DR 7.3	DR 7	DR 11	DR 9	DR 7.3	DR 7
						PC200	PC250	PC317	PC335	PC200	PC250	PC317	PC335
Inch	Inch	Inch	Min Inch	Min Inch	Min Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
6 x 4	6.60 - 6.66	4.50 - 4.52	11.02	4.52	3.50	0.602 - 0.674	0.736 - 0.825	0.920 - 1.031	0.946 - 1.060	0.409 - 0.458	0.500 - 0.560	0.625 - 0.700	0.643 - 0.720
8 x 6	8.60 - 8.66	6.60 - 6.65	12.00	4.52	4.00	0.784 - 0.878	0.958 - 1.073	1.198 - 1.342	1.228 - 1.376	0.602 - 0.674	0.736 - 0.825	0.920 - 1.031	0.946 - 1.060
10 x 6	10.70 - 10.80	6.60 - 6.65	16.00	4.52	6.00	0.977 - 1.094	1.194 - 1.337	1.473 - 1.650	1.536 - 1.720	0.602 - 0.674	0.736 - 0.825	0.920 - 1.031	0.946 - 1.060
10 x 8	10.70 - 10.80	8.60 - 8.66	16.00	4.52	6.00	0.977 - 1.094	1.194 - 1.337	1.473 - 1.650	1.536 - 1.720	0.784 - 0.878	0.958 - 1.073	1.198 - 1.342	1.228 - 1.376
12 x 8	12.70 - 12.80	8.60 - 8.66	16.00	4.52	6.00	1.159 - 1.298	1.417 - 1.587	1.747 - 1.957	1.821 - 2.039	0.784 - 0.878	0.958 - 1.073	1.198 - 1.342	1.228 - 1.376
12 x 10	12.70 - 12.80	10.70 - 10.78	16.00	4.52	6.00	1.159 - 1.298	1.417 - 1.587	1.747 - 1.957	1.821 - 2.039	0.977 - 1.094	1.194 - 1.337	1.473 - 1.650	1.536 - 1.720
14 x 8	13.93 - 14.10	8.60 - 8.66	18.03	7.00	7.00	1.273 - 1.426	1.556 - 1.743	1.918 - 2.148	2.000 - 2.240	0.784 - 0.878	0.958 - 1.073	1.198 - 1.342	1.228 - 1.376
14 x 10	13.93 - 14.10	10.70 - 10.78	18.03	7.00	7.00	1.273 - 1.426	1.556 - 1.743	1.918 - 2.148	2.000 - 2.240	0.977 - 1.094	1.194 - 1.337	1.473 - 1.650	1.536 - 1.720
14 x 12	13.93 - 14.10	12.70 - 12.80	18.03	7.00	7.00	1.273 - 1.426	1.556 - 1.743	1.918 - 2.148	2.000 - 2.240	1.159 - 1.298	1.417 - 1.587	1.747 - 1.957	1.821 - 2.039
16 x 10	15.92 - 16.10	10.70 - 10.78	18.03	7.00	7.00	1.455 - 1.630	1.778 - 1.992	2.192 - 2.455	2.286 - 2.560	0.977 - 1.094	1.194 - 1.337	1.473 - 1.650	1.536 - 1.720
16 x 12	15.92 - 16.10	12.70 - 12.80	18.03	7.00	7.00	1.455 - 1.630	1.778 - 1.992	2.192 - 2.455	2.286 - 2.560	1.159 - 1.298	1.417 - 1.587	1.747 - 1.957	1.821 - 2.039
16 x 14	15.92 - 16.10	13.93 - 14.10	18.03	7.00	7.00	1.455 - 1.630	1.778 - 1.992	2.192 - 2.455	2.286 - 2.560	1.273 - 1.426	1.556 - 1.743	1.918 - 2.148	1.228 - 1.376
18 x 12	17.91 - 18.10	12.70 - 12.80	18.03	7.00	7.00	1.636 - 1.832	2.000 - 2.240	2.466 - 2.762	2.571 - 2.879	1.159 - 1.298	1.417 - 1.587	1.747 - 1.957	1.821 - 2.039
18 x 14	17.91 - 18.10	13.93 - 14.10	18.03	7.00	7.00	1.636 - 1.832	2.000 - 2.240	2.466 - 2.762	2.571 - 2.879	1.273 - 1.426	1.556 - 1.743	1.918 - 2.148	2.000 - 2.240
18 x 16	17.91 - 18.10	15.92 - 16.10	18.03	7.00	7.00	1.636 - 1.832	2.000 - 2.240	2.466 - 2.762	2.571 - 2.879	1.455 - 1.630	1.778 - 1.992	2.192 - 2.455	2.286 - 2.560
20 x 14	19.90 - 20.10	13.93 - 14.10	18.03	7.00	7.00	1.818 - 2.036	2.222 - 2.489	2.740 - 3.069	2.857 - 3.200	1.273 - 1.426	1.556 - 1.743	1.918 - 2.148	2.000 - 2.240
20 x 16	19.90 - 20.10	15.92 - 16.10	18.03	7.00	7.00	1.818 - 2.036	2.222 - 2.489	2.740 - 3.069	2.857 - 3.200	1.455 - 1.630	1.778 - 1.992	2.192 - 2.455	2.286 - 2.560
20 x 18	19.90 - 20.10	17.91 - 18.10	18.03	7.00	7.00	1.818 - 2.036	2.222 - 2.489	2.740 - 3.069	2.857 - 3.200	1.636 - 1.832	2.000 - 2.240	2.466 - 2.762	2.571 - 2.879

NOTE:

- ▶ The tolerance limit for the dimensions (L, L1, & L2) will be 0.2± inch.
- ▶ e & c = Thickness at the end.
- ▶ Refer to FM & WRAS certificates for more information.



Concentric Reducer

Moulded Fittings

Miscellaneous Data:

1. Ordering Information

Example: SD-PEMCR-1-40

- SD-PEMCR is the part number
- (1) ISO 4427 (2) ANSI/AWWA C906 (3) API 15LE
- (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
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