



## Product Datasheet MHT2877

### PowerProtect+ Black + Red stripe

#### General

Emtelle PowerProtect+ ducts are suitable for electric cable protection. The ducts are made of PE100. The ducts are manufactured and have mechanical performance according to DIN8074/DIN EN12201/DIN16834. Emtelle PowerProtect+ ducts are smooth in- and outside and suitable for Fusion-Butt-Welding.

The ducts are skinned coloured black with red stripes.

#### Raw Materials

Material PE100 material are used

#### Dimensions PowerProtect+ 17 BLACK WITH RED STRIPES

Product Code	Product Description	Supply Length	Metre / Frame
300274-12	110x6,6mm PowerProtect+ SDR17, 12m	12	576
300275-12	125x7,4mm PowerProtect+ SDR17, 12m	12	408
300276-12	140x8,3mm PowerProtect+ SDR17, 12m	12	312
300277-12	160x9,5mm PowerProtect+ SDR17, 12m	12	240
300278-12	180x10,7mm PowerProtect+ SDR17, 12m	12	204
300279-12	200x11,9mm PowerProtect+ SDR17, 12m	12	168
300280-12	225x13,4mm PowerProtect+ SDR17, 12m	12	168
300281-12	250x14,8mm PowerProtect+ SDR17, 12m	12	84
300282-12	280x16,6mm PowerProtect+ SDR17, 12m	12	48
300283-12	315x18,7mm PowerProtect+ SDR17, 12m	12	36
300284-12	355x21,1mm PowerProtect+ SDR17, 12m	12	36
300285-12	400x23,7mm PowerProtect+ SDR17, 12m	12	36
300286-12	450x26,7mm PowerProtect+ SDR17, 12m	12	24
300287-12	500x29,7mm PowerProtect+ SDR17, 12m	12	24
300288-12	560x33,2mm PowerProtect+ SDR17, 12m	12	24
300289-12	630x37,4mm PowerProtect+ SDR17, 12m	12	12
300290-12	710x42,1mm PowerProtect+ SDR17, 12m	12	12
300291-12	800x47,4mm PowerProtect+ SDR17, 12m	12	12

Other supply lengths available on request

This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2025]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. [www.emtelle.com](http://www.emtelle.com)

**Dimensions PowerProtect+ 11 BLACK WITH RED STRIPES**

Product Code	Product Description	Supply Length	Metre / Frame
300292-12	110x10mm PowerProtect+ SDR11, 12m	12	576
300293-12	125x11,4mm PowerProtect+ SDR11, 12m	12	408
300294-12	140x12,7mm PowerProtect+ SDR11, 12m	12	312
300295-12	160x14,6mm PowerProtect+ SDR11, 12m	12	240
300296-12	180x16,4mm PowerProtect+ SDR11, 12m	12	204
300297-12	200x18,2mm PowerProtect+ SDR11, 12m	12	168
300298-12	225x20,5mm PowerProtect+ SDR11, 12m	12	168
300299-12	250x22,7mm PowerProtect+ SDR11, 12m	12	84
300300-12	280x25,4mm PowerProtect+ SDR11, 12m	12	48
300301-12	315x28,6mm PowerProtect+ SDR11, 12m	12	36
300302-12	355x32,2mm PowerProtect+ SDR11, 12m	12	36
300303-12	400x36,3mm PowerProtect+ SDR11, 12m	12	36
300304-12	450x40,9mm PowerProtect+ SDR11, 12m	12	24
300305-12	500x45,4mm PowerProtect+ SDR11, 12m	12	24
300306-12	560x50,8mm PowerProtect+ SDR11, 12m	12	24
300307-12	630x57,2mm PowerProtect+ SDR11, 12m	12	12

This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2025]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. [www.emtelle.com](http://www.emtelle.com)

## Pipe Performance

### Physical Properties:

Test	Standard	Result
Hydrostatic test 165 h	DIN EN 12201	OK
Impact test 5kg	DS EN 61386	OK
Elongation at Break	EN ISO 6259	>350%
Yield Stress	EN ISO 6259	>22MPa
Compression	DS EN 61386	>750N
Ring stiffness	ISO 9969	See tables below
Longitudinal reversion	EN ISO 2505	<3%
MFR (190°C/5kg)		
Deviation raw mat. To pipe: ≤ 20%	EN ISO 1133	OK
OIT ≥ 20 min	ISO 11357	OK

The pipes shall have dimensions (mm) as defined above, in addition other non-standard dimensions can be chosen,

The weight (mass) of the pipe shall be nominally calculated for 1m pipe

$(OD - wt) \times wt \times \pi \times density$  Where:

OD (outside diameter) and wt (wall thickness) is in mm, and density for PE100 is 0.96 g/cm<sup>3</sup>.

This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2025]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. [www.emtelle.com](http://www.emtelle.com)

SDR 17												
OD [mm]	WT [mm]	ID [mm]	ODmin [mm]	ODmax [mm]	Ovality	WTmin [mm]	WTmax [mm]	Weight [kg/m]	Min Bend Radius [mm] @ 20 ° C	Ring Stiffness SN {kN/m <sup>2</sup> }	Max Install tension [kN] @ 20 ° C	Max Install tension [kg] @ 20 ° C
110	6,6	96,8	110,0	110,7	2,2	6,6	7,4	2,06	2.200	16	22,64	2.305,51
125	7,4	110,2	125,0	125,8	2,5	7,4	8,3	2,62	2.500	16	28,87	2.939,96
140	8,3	123,4	140,0	140,9	2,8	8,3	9,3	3,30	2.800	16	36,26	3.692,89
160	9,5	141,0	160,0	161,0	3,2	9,5	10,6	4,31	3.200	16	47,43	4.830,17
180	10,7	158,6	180,0	181,1	3,6	10,7	11,9	5,46	3.600	16	60,10	6.119,88
200	11,9	176,2	200,0	201,2	4,0	11,9	13,2	6,75	4.000	16	74,26	7.562,02
225	13,4	198,2	225,0	226,4	4,5	13,4	14,9	8,55	4.500	16	94,07	9.579,06
250	14,8	220,4	250,0	251,5	5,0	14,8	16,4	10,50	5.000	16	115,48	11.759,84
280	16,6	246,8	280,0	281,7	5,0	16,6	18,4	13,19	5.600	16	145,06	14.771,55
315	18,7	277,6	315,0	316,9	5,0	18,7	20,7	16,71	6.300	16	183,82	18.718,69
355	21,1	312,8	355,0	357,2	6,0	21,1	23,4	21,25	7.100	16	233,73	23.801,33
400	23,7	352,6	400,0	402,4	7,0	23,7	26,2	26,90	8.000	16	295,87	30.129,01
450	26,7	396,6	450,0	452,7	8,0	26,7	29,5	34,09	9.000	16	374,95	38.182,28
500	29,7	440,6	500,0	503,0	8,0	29,7	32,8	42,13	10.000	16	463,39	47.188,23
560	33,2	493,6	560,0	563,4	8,0	33,2	36,7	52,75	11.200	16	580,23	59.086,21
630	37,4	555,2	630,0	633,8	9,0	37,4	41,3	66,84	12.600	16	735,27	74.874,78
710	42,1	625,8	710,0	716,4	9,0	42,1	46,5	84,80	14.200	16	932,84	94.993,93
800	47,4	705,2	800,0	807,2	10,0	47,4	52,3	107,59	16.000	16	1.183,47	120.516,04

\*Note that “,” separates for decimals and “.” separates for thousands

SDR 11												
OD [mm]	WT [mm]	ID [mm]	ODmin [mm]	ODmax [mm]	Ovality	WTmin [mm]	WTmax [mm]	Weight [kg/m]	Min Bend Radius [mm] @ 20 ° C	Ring Stiffness SN {kN/m <sup>2</sup> }	Max Install tension [kN] @ 20 ° C	Max Install tension [kg] @ 20 ° C
110	10,0	90,0	110,0	110,7	2,2	10,0	11,1	3,02	2.200	64	33,18	3.378,33
125	11,4	102,2	125,0	125,8	2,5	11,4	12,7	3,91	2.500	64	42,96	4.375,07
140	12,7	114,6	140,0	140,9	2,8	12,7	14,1	4,88	2.800	64	53,63	5.461,78
160	14,6	130,8	160,0	161,0	3,2	14,6	16,2	6,40	3.200	64	70,43	7.171,66
180	16,4	147,2	180,0	181,1	3,6	16,4	18,2	8,09	3.600	64	89,01	9.064,20
200	18,2	163,6	200,0	201,2	4,0	18,2	20,2	9,98	4.000	64	109,77	11.178,09
225	20,5	184,0	225,0	226,4	4,5	20,5	22,7	12,64	4.500	64	139,08	14.162,81
250	22,7	204,6	250,0	251,5	5,0	22,7	25,1	15,56	5.000	64	171,17	17.431,21
280	25,4	229,2	280,0	281,7	5,0	25,4	28,1	19,50	5.600	64	214,54	21.847,13
315	28,6	257,8	315,0	316,9	5,0	28,6	31,6	24,70	6.300	64	271,74	27.672,05
355	32,2	290,6	355,0	357,2	6,0	32,2	35,6	31,35	7.100	64	344,83	35.114,92
400	36,3	327,4	400,0	402,4	7,0	36,3	40,1	39,82	8.000	64	437,99	44.601,78
450	40,9	368,2	450,0	452,7	8,0	40,9	45,1	50,46	9.000	64	555,09	56.526,89
500	45,4	409,2	500,0	503,0	8,0	45,4	50,1	62,25	10.000	64	684,70	69.724,85
560	50,8	458,4	560,0	563,4	8,0	50,8	56,0	78,01	11.200	64	858,16	87.388,53
630	57,2	515,6	630,0	633,8	9,0	57,2	63,1	98,81	12.600	64	1.086,96	110.688,20

\*Note that “,” separates for decimals and “.” separates for thousands

This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2025]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. [www.emtelle.com](http://www.emtelle.com)

**Exposure:**

The pipe shall be UV stabilised to withstand daylight exposure period of at least 12 months.  
However, for optimum performance, the pipe is best stored for no longer than 6 months if outdoors.

**Marking on duct every meter:**

**EMTELLE POWERPROTECT+ PE100 ODxWTmm SDR-Value “DD.MM.YYYY HH:MM” “Lot. No.”**

**Environmental considerations:** Can be disposed to recycling.

---

This document is intended as a guide only. Whilst the information it contains is believed to be correct, Emtelle can take no responsibility for actions taken based on the information contained in this document. Emtelle reserves the right to make changes to this document without notice. All sales of product are subject to Emtelle's terms and conditions of sale only, which can be found on Emtelle's website. This document is protected by copyright (c) Emtelle Group [2025]. The products depicted are protected by intellectual property rights. Any unauthorized copying of this document or of our products is prohibited and Emtelle UK Limited will take action to prevent any infringement of its rights and to claim damages for the loss that it suffers. [www.emtelle.com](http://www.emtelle.com)