

DATA SHEET

Black C1+ Electric Cable Duct (ENA TS 12-24) Ø63mm to Ø630mm

POLYMER

All pipe to be produced from Black PE100 polymer using one of the following grades:

- Borealis Borsafe HE3490-LS
- Ineos Eltex TUB121N3000
- Lyondell Bassell CRP100
- Sabic Vestolen A6060R10000

STRAIGHT STICK & COILED SOLID WALL PIPE DIMENSIONS SDR11

All dimensions to be in accordance with table below:

Product Code	Outside diameter Min. (mm)	Outside diameter Max (mm)	Ovality (Max)	SDR11 Wall Thickness Min. (mm)	SDR11 Wall Thickness Max. (mm)
EHBKN063X**MC1	63	63.4	1.5	5.8	6.5
PEHBKN075X**MC1	75	75.5	1.6	6.8	7.6
PEHBKN090X**MC1	90	90.6	1.8	8.2	9.2
PEHBKN110X**MC1	110	110.7	2.2	10	11.1
PEHBKN125X**MC1	125	125.8	2.5	11.4	12.7
PEHBKN140X**MC1	140	140.9	2.8	12.7	14.1
PEHBKN160X**MC1	160	161	3.2	14.6	16.2
PEHBKN180X**MC1	180	181.1	3.6	16.4	18.2
PEHBKN200X**MC1	200	201.2	4	18.2	20.2
PEHBKN225X**MC1	225	226.4	4.5	20.5	22.7
PEHBKN250X**MC1	250	251.5	5	22.7	25.1
PEHBKN280X**MC1	280	281.7	9.8	25.4	28.1
PEHBKN315X**MC1	315	316.9	11.1	28.6	31.6
PEHBKN355X**MC1	355	357.2	12.5	32.2	35.6
PEHBKN400X**MC1	400	402.4	14	36.3	40.1
PEHBKN450X**MC1	450	452.7	15.6	40.9	45.1
PEHBKN500X**MC1	500	503	17.5	45.4	50.1
PEHBKN560X**MC1	560	563.4	19.6	50.8	56
PEHBKN630X**MC1	630	633.8	22.1	57.2	63.1

All dimensions are to be measured at 23 ±2°C

COILED PIPE AVAILABILITY (HIGHLIGHTED)

MARKING DETAIL

The pipe to be marked on two sides (180°) at intervals not greater than 1 metre.

All pipes shall be permanently and legibly marked along their length with a legend made from indelible ink print. Pipe can be marked with a single “non-inked” indented strip plus an inkjet print line which shall be indented to a depth of between 0.02 mm and 0.15 mm.

Marking colours shall be contrasting to the pipe surface and easily identified with the naked eye without the need for magnification.

Example:

**PEAK PIPE SYSTEMS (PPS1/2) HDPE PE100; DANGER ELECTRIC CABLE DUCT C1+
“MFR” “OD” X SDR11 BATCH NO. DATE /TIME “B1/B2/B3” BUTT-WELDING TO BE
IN ACCORDANCE WITH WIS 4-32-08 ; WO.No**

Print colour: White

Print size: No smaller than 8mm

Customer marking requirements:

Specific marking details can be added as per customer specification requirements.

PIPE APPEARANCE

Colour: Solid black

Visual Appearance: internal and external surfaces shall be free of scoring, cavities or any other defects that would prevent conformity to customer requirements or compromise performance in use.

Pipe Ends: the ends of the pipe shall be clean and cut square to the axis of the pipe.

BENDING RADII

Typical bending radius for SDR11 pipe is 25 times the pipe O/D increasing to 35 times in very cold weather.

JOINTING/WELDING INFORMATION

We advise that Butt Welding and Electrofusion jointing methods are adhered to under the jointing guidelines **WIS 4-32-08**.

Performance of the product will be considerably reduced if incorrect jointing parameters are used.

We advise that good welding practice is always adhered to. Guidelines can be submitted for reference upon request.

QUALITY

At Peak Pipe Systems we have certified Quality Management Systems that comply with the requirements of **ISO 9001:2015 (FM654870)**

PIPE CLASSIFICATION

The classification of ducts shall be as specified in Section 6 of ENA TS 12-24.

The black ECD product range is classified in the “Class 1+ ducts” category.

TESTING

The minimum testing shall be in accordance with the test requirements outlined in Table 16.1 ENA TS 12-4 (Issue 3) as summarised below:

Test Title	Type	Minimum test frequency	Clause reference
Visual inspection	Routine test	Continuous, recorded at least once every two hours minimum	9.1
Measurement of dimensions (diameter/wall thickness)	Sample test	Recorded every two hours minimum 1)	8
Measurement of dimensions (length and ovality)	Sample test	Recorded every 24 hours or change of length	8
Resistance to deformation at 23 °C	Sample test*	Recorded every 24 hours minimum 2)*	10.2
Impact test at -5 °C	Sample test*	Recorded every 24 hours minimum 2)*	10.3
Heat reversion test	Sample test*	Recorded every production run minimum and every tool change*	16.5
Material properties of HDD ducts	Raw material test	Recorded every production run	9.7 / 16.6

- 1) For large diameter coils, this is done per coil (some coils can take in excess of two hours to manufacture).
- 2) Polyolefin ducts do not necessitate 24 hour testing for impact and compression - these shall be tested at a minimum of once per production run.

* Sampling and frequency as agreed with specifier