# **Corrugated Duct**

# Technical Data Sheet

### I. Manufacturer / Supplier

GM Plast A/S Plutovej 7

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### II. Definition

This technical specification is valid for PE twin-wall cable protection pipes according to EN 61386-24 (latest edition)

bars dimension from DN 50 up to DN 200
 coils dimension from DN 40 up to DN 175

## III. Technical Data

 fulfillment of standard

The pipes meet all requirements of standard EN 61386-24.

bars:

ring stiffness: requirements for at least "type 450" are fulfilled

impact test: requirements for "light version" are fulfilled

coils:

ring stiffness: requirements for at least "type 450" are fulfilled

impact test: requirements for "normal version" are fulfilled.

material Polyethylene according to EN 50086 is used exclusively.

The standard version of the pipes is made with an inside layer of PE-HD/bars

resp. PE-LD/coils and an outside layer of PE-HD/both bars and coils.

3. colouring inside layer: black, approximately RAL9011

outside layer: black, approximately RAL9011

red, approximately RAL3020 blue, approximately RAL 5015

4. UV-stability twin-wall pipes meet the requirements of this technical specification as to

stiffness and colouring also after outside storage with central european solar

radiation as mentioned below

black pipes: at least 2 years for stiffness and colour

coloured pipes: at least 1 year for stiffness

light bleaching of the colours possible

5. dimensions The values mentioned in the charts 1 and 2 are valid for the dimensions and

tolerances of the items.

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<u>bars</u>

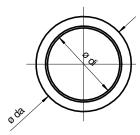
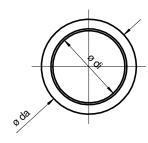


chart 1: dimensions and bending radius / bars

| DN  | Ø d <sub>i</sub><br>[mm]  | Ø da<br>[mm]         | ovality<br>[mm] | Bending<br>radius<br>at -5 ℃ [m] | Bending<br>radius at 23<br>℃ [m] |
|-----|---------------------------|----------------------|-----------------|----------------------------------|----------------------------------|
| 50  | <i>39</i> <sup>+1,5</sup> | 50 <sup>+ 1,0</sup>  | 1)              | 2,5                              | 2.5                              |
| 63  | <b>50</b> <sup>+1,2</sup> | 63 + 1,2             | 1)              | 3,0                              | 3,0                              |
| 75  | 61 <sup>+1,5</sup>        | 75 <sup>+ 1,4</sup>  | 1)              | 3,0                              | 3,0                              |
| 90  | 74 <sup>+2,0</sup>        | 90 + 1,7             | 1)              | 3,5                              | 3,5                              |
| 110 | 93 <sup>+2,0</sup>        | 110 + 2,0            | 1)              | 4,0                              | 4,0                              |
| 120 | 100 +2,0                  | 120 + 0,5/-0,5       | 1)              | 4,0                              | 4,0                              |
| 125 | 107 <sup>+2,0</sup>       | 125 <sup>+ 2,3</sup> | 1)              | 6,0                              | 6,0                              |
| 160 | 138 <sup>+2,5</sup>       | 160 + 2,3            | 1)              | 8,0                              | 8,0                              |
| 175 | 150 <sup>+2,5</sup>       | 175 +1,8/-1,0        | 1)              | 8,0                              | 8,0                              |
| 200 | 173 <sup>+2,5</sup>       | 200 + 3,6            | 1)              | 15,0                             | 15,0                             |

chart 2: dimensions and bending radius / coils

<u>coils</u>



| DN  | Ø d <sub>i</sub><br>[mm] | Ø d <sub>a</sub><br>[mm] | ovality<br>[mm] | Bending<br>radius<br>at -5 ℃ | Bending<br>radius<br>at 23 ℃ [m] |
|-----|--------------------------|--------------------------|-----------------|------------------------------|----------------------------------|
| 40  | 30 <sup>+2,0</sup>       | 40 + 0,8                 | 1)              | 0,35                         | 0,35                             |
| 50  | 40 +2,0                  | 50 <sup>+ 1,0</sup>      | 1)              | 0,35                         | 0,35                             |
| 63  | 50 <sup>+2,0</sup>       | 63 <sup>+ 1,2</sup>      | 1)              | 0,35                         | 0,35                             |
| 75  | 60 <sup>+2,0</sup>       | 75 <sup>+ 1,4</sup>      | 1)              | 0,35                         | 0,35                             |
| 90  | 74 <sup>+2,0</sup>       | 90 + 1,7                 | 1)              | 0,40                         | 0,40                             |
| 110 | 93 <sup>+2,0</sup>       | 110 + 2,0                | 1)              | 0,40                         | 0,40                             |
| 120 | 102 <sup>+2,0</sup>      | 120 +0,5/-0,5            | 1)              | 0,50                         | 0,50                             |
| 125 | 105 <sup>+ 2,5</sup>     | 125 + 2,3                | 1)              | 0,50                         | 0,50                             |
| 160 | 137 <sup>+2,5</sup>      | 160 <sup>+ 2,3</sup>     | 1)              | 0,65                         | 0,65                             |
| 175 | 150 <sup>+2,5</sup>      | 175 + 1,8/-1,0           | 1)              | 0,70                         | 0,70                             |

ovality at least 95 % of the inside diameter stated of unrolled coils resp. after having taken it from the pallet (subject to correct storage)

<u>bars</u>



# <u>coils</u>



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### IV. Packaging / Marking / Storing

Usually the bars are delivered on pallets (wooden crates) according to the following chart 3.

The standard version – sand tight without profile seal – is supplied with a double connection sleeve mounted on.

If required the pipes can be delivered in water tight version. The water tightness of the connection up to 0,5 bar according to DIN EN 16961 is achieved by mounting one profile seal and afterwards the coupler on the

| KSR twin wall pipe DN |            | 50   | 63   | 75   | 90   | 110  | 120  | 125  | 160  | 175  | 200  |
|-----------------------|------------|------|------|------|------|------|------|------|------|------|------|
| Number of 6 m-bars p  | per pallet | 195  | 104  | 163  | 108  | 125  | 102  | 48   | 33   | 45   | 20   |
| Dimension of pallet   | B [mm]     | 6050 | 6060 | 6090 | 6100 | 6100 | 6100 | 6100 | 6130 | 6150 | 6170 |
|                       | H [mm]     | 630  | 670  | 900  | 780  | 1350 | 1330 | 720  | 780  | 1290 | 750  |

chart 3: packaging bars

Usually delivered in 50 m-coils as per chart 4. Each coil is manufactured with a draw-in aid. During transportation the draw-in aid has to be protected.

1070

1220

1110

1190

1150

1220

1170

1230

A double connection sleeve is mounted on each 50m-coil, sand tight connection.

820

920

T [mm]

If desired the pipes can be supplied with water tight connection. For this purpose a profile seal is mounted on both ends of the coils followed by the double connection sleeve. This leads to a tightness of the connection up to 0,5 bar according to standard DIN 16961.

chart 4: packaging coils

| KSR twin-wall pipe DN    | 40  | 50  | 63  | 75   | 90   | 110  | 120  | 125  | 160  | 175  |
|--------------------------|-----|-----|-----|------|------|------|------|------|------|------|
| Inside diameter of coil  | 560 | 600 | 600 | 610  | 700  | 760  | 800  | 810  | 850  | 850  |
| Outside diameter of coil | 900 | 950 | 900 | 1100 | 1250 | 1550 | 1450 | 1600 | 1950 | 2000 |
| Height of coil           | 300 | 370 | 500 | 450  | 650  | 500  | 650  | 700  | 750  | 800  |

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The pipes are marked as follows:

type of pipe
PE-HD resp. PE-HD/PE-LD
DN ...
EN 50086-2-4 \*N 450
Quarter of production / year of production
+ (country-specific data)

Labels with the following text are necessarily to be fixed on each coil resp. pallet:

DN ... content item number order number

### V. Miscellaneous

# 1. sampling / release

Sampling only on explicit customer's request.

# 2. test certificates

Test certificates are only generated on request based on the required standard (EN 10204, ...). They are either attached directly to the delivery or sent to the delivery address (via mail or e-mail) in advance.