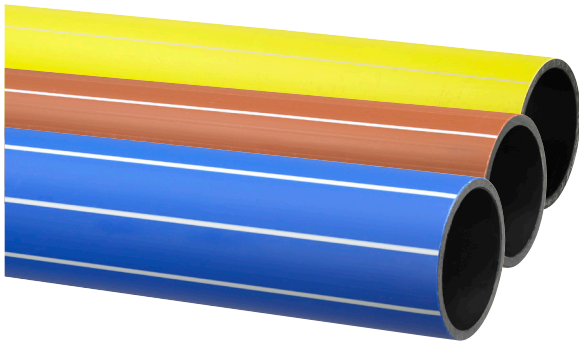


**uponor**

# **Profuse RC**

**Technical factsheet**

## Profuse RC



Profuse RC is the new generation pipe drinking water, sewage and gas. Profuse RC pressure pipes are produced from PE100 RC with a polypropylene protection layer. This combination makes the pipe extremely resistant against surface damage and point loads, and the RC pressure pipe is therefore highly useful for example in no-dig installation or renovation.

The protective outer PP-layer is applied in different colours, indicating the area of use. The production technique by Uponor creates a strong bond of the outer layer to the core pipe, so that it stays on even in the hardest circumstances but still makes it easy to peel.

Profuse RC is available in dimensions 63-630mm, SDR17 (ring stiffness SN16) and SDR11 (ring stiffness SN64).

Profuse RC pipes have excellent chemical properties: heavy metals, salts and bases do not permeate polyethylene and the pipe is corrosion free.

<b>Application</b>	Potable water, sewer or gas
<b>Material</b>	Polyethylene (core pipe), polypropylene (outer layer)
<b>Dimensions</b>	63-630mm
<b>Lengths</b>	6, 12, 100m and special lengths
<b>Colour</b>	Black pipe with blue, brown or yellow layer, white stripes
<b>Standards</b>	EN 12201 and EN 1555 (gas)
<b>Approvals</b>	Drinking water approval for Denmark (DK-VAND) and Finland (FI) NPM Cert. nr. 2003 and NPM Cert. nr 2086 (gas) Raw material tested according to PAS1075

- ✓ Withstands point loads without cracking extremely well
- ✓ Suitable for No-Dig installation and renovation
- ✓ High impact strength even in low temperatures
- ✓ Resistant to pressure shocks and fluctuations
- ✓ High ductility and low friction factor
- ✓ Expected service life of at least 100 years

### Joints

Profuse RC primary jointing methods are electrofusion, butt welding or mechanical jointing. The protection layer has to be removed from the connection area prior jointing. The protection layer prevents oxidation so if the welding can be done within the next 30 minutes after removing the protection layer, the media pipe doesn't have to be scraped. Welded Profuse RC pipelines have high pulling strength. To get a good and tight welded connection it is important to do it correct and according to the jointing instructions.

System properties	Value	Unit
Min. bending radius	50 x d <sub>e</sub>	mm
Max. use temperature under pressure	+ 45	°C
Min. ambient installation temperature	- 20	°C
Min. ambient installation temperature coils	- 15*	°C
Min. ambient welding temperature	- 20	°C
Coefficient of thermal expansion	0,17	mm/m°C

\*Minimum installing temperature is -15° C, but it is not recommended because it creates high forces on the coil. In cold weather it is recommended that the coil is stored in a warm place until installing.

	SDR17 PN10	SDR11 PN16
OD mm	Wall thickness mm	Wall thickness mm
63	3,8	5,8
75	4,5	6,8
90	5,4	8,2
110	6,6	10,0
125	7,4	11,4
140	8,3	12,7
160	9,5	14,6
180	10,7	16,4
200	11,9	18,2
225	13,4	20,5
250	14,8	22,7
280	16,6	25,4
315	18,7	28,6
355	21,1	32,2
400	23,7	36,3
450	26,7	40,9
500	29,6	45,4
560	33,2	50,8
630	37,3	57,2

Table: Wall thickness Profuse RC

