

**PE**



POLYETHYLENE SYSTEMS

**PE-HD 80**

**PE-HD 100**

**PE-HD 100 RC**

# PE

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POLYETHYLENE SYSTEMS

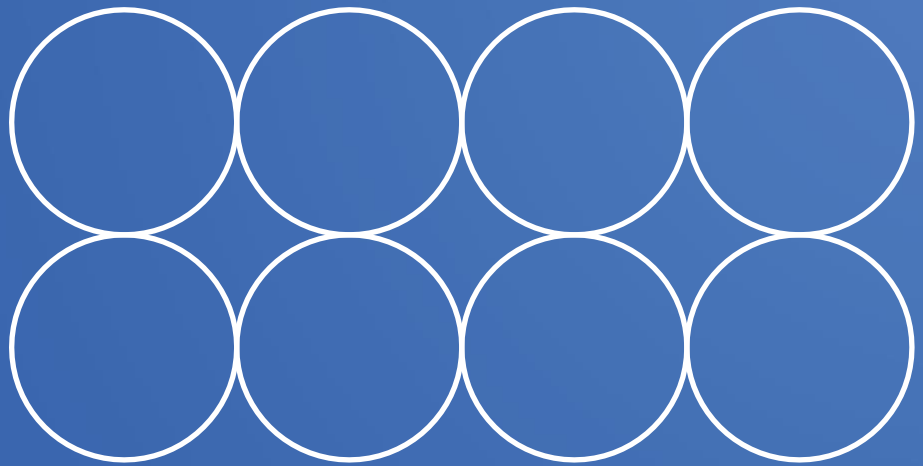
**PE-HD 80**  
**PE-HD 100**  
**PE-HD 100 RC**  
FOR WATER  
FOR SEWAGE PIPING

**magna**plast

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# GUARANTEED SAFETY AND DURABILITY

# POLYETHYLENE SYSTEMS



## PE-HD 80 / PE-HD 100 / PE HD 100 RC

The polyethylene pipes offered by Magnaplast are designed for the construction of below-ground sewage systems and water pipes distributing cold potable water.

All our pipes are manufactured in accordance with EN 12201-2 and have all

necessary certificates and water pipe hygienic approvals.

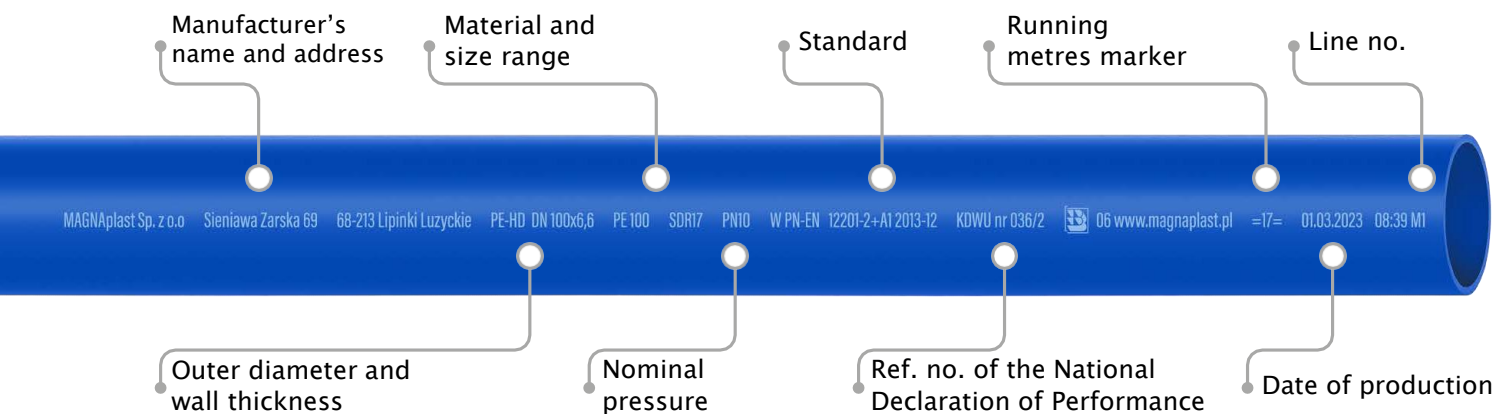
The material used is high-density polyethylene (PE-HD 100). Its properties also allow it to be used successfully in the construction of heat pumps.

### Pipes are colour-coded according to their diameters and applications:

Pipe type	Application	Diameters	Colour
PE-HD 80	Water	DN20 - DN63	
PE-HD 100	Water	DN20 - DN75	
PE-HD 100	Water	DN90 - DN355	
PE-HD 100 RC	Water	All	
PE-HD 100 / PE-HD 100 RC	Sewage system	All	

## MARKING

### Pipes are marked at 1 metre intervals with the following information:





### **Pipes can be connected with the use of:**

- ✓ Butt welding,
- ✓ Electrofusion welding,
- ✓ Mechanical joints with compression couplings.



# TRANSPORT AND STORAGE

### **Make sure the pipes are carried and stored according to the following guidelines:**

- ✓ Store the pipes on smooth surfaces free of sharp protruding parts,
- ✓ Take special care when moving the pipes in conditions of reduced ambient temperature, which can affect the resistance of plastic pipes to mechanical impact,
- ✓ Do not exceed a maximum stacking height of 3 m for pipes in pallets (straight sections) and 1.5 m for pipes in coils,
- ✓ Protect the pipes from direct exposure to heat sources, grease, oil and paint,
- ✓ Do not exceed a storage period of one year for polyethylene pipes exposed to direct sunlight.



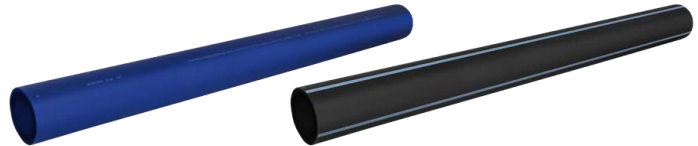
# WATER

## PE80 PIPES



Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
Pipes PE 80 SDR 13.6 PN 10	<b>47652</b>	25 x 2.0	200		22	118	5	1000
	<b>47654</b>	32 x 2.4	200		24	140	4	800
	<b>47656</b>	40 x 3.0	200		30	159	4	800
	<b>47658</b>	50 x 3.7	100		26	176	4	400
	<b>47660</b>	63 x 4.7	100		40	176	3	300

Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
PE 80 Pipes SDR 11 PN 12.5	<b>47690</b>	20 x 2.0	200		27	87	4	800
	<b>47692</b>	25 x 2.3	200		22	118	5	1000
	<b>47694</b>	32 x 3.0	200		24	140	4	800
	<b>47696</b>	40 x 3.7	200		30	159	4	800
	<b>47698</b>	50 x 4.6	100		26	176	4	400
	<b>47700</b>	63 x 5.8	100		40	176	3	300



## PE100 PIPES

Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
PN12.5	<b>46513</b>	25 x 2.0	200		22	118	5	1000
	<b>45523</b>	32 x 2.0	200		24	140	4	800
	<b>45533</b>	40 x 2.4	200		30	159	4	800
	<b>45343</b>	50 x 3.0	200		26	176	4	400
	<b>45353</b>	63 x 3.8	100		40	176	3	300
	<b>45363</b>	75 x 4.5	100		40	235	3	300
PE 100 Pipes SDR 17 PN 10	<b>45373</b>	90 x 5.4	100		40	240	3	300
	<b>45092</b>	90 X 5.4	12 mb		X	X	14	168
	<b>45283</b>	110 x 6.6	50		55	290	1	50
	<b>45083</b>	110 x 6.6	12 mb		X	X	14	168
	<b>445102</b>	125 x 7.4	12 mb		X	X	14	168
	<b>445122</b>	160 x 9.5	12 mb		X	X	8	96
	<b>447206</b>	225 x 13.4	12 mb		X	X	8	96
	<b>447214</b>	315 x 18.7	12 mb		X	X	6	72
	<b>447216</b>	355 x 21.1	12 mb		X	X	6	72

Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
PE 100 Pipes SDR 11 PN 16	<b>47503</b>	20 x 2.0	200		27	87	4	800
	<b>47513</b>	25 x 2.3	200		22	118	5	1000
	<b>47523</b>	32 x 3.0	200		24	140	4	800
	<b>47533</b>	40 x 3.7	200		30	159	4	800
	<b>47343</b>	50 x 4.6	100		26	176	4	400
	<b>47353</b>	63 x 5.8	100		40	176	3	300
	<b>447230</b>	90 x 8.2	12 mb		X	X	14	168
	<b>447236</b>	110 x 10.0	12 mb		X	X	14	168
	<b>447242</b>	160 x 14.6	12 mb		X	X	8	96
	<b>447252</b>	225 x 20.5	12 mb		X	X	8	96
	<b>447260</b>	315 x 28.6	12 mb		X	X	6	72
	<b>447262</b>	355 x 32.2	12 mb		X	X	6	72

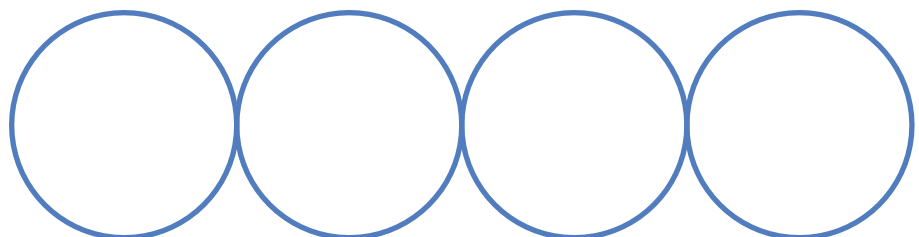
# WATER

## PE 100 RC PIPE



Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
PE 100 RC Pipes SDR 17 PN 10	<b>45525</b>	32 x 2.0	200		24	140	4	800
	<b>45535</b>	40 x 2.4	200		30	159	4	800
	<b>45345</b>	50 x 3.0	200		26	176	4	400
	<b>45355</b>	63 x 3.8	100		40	176	3	300
	<b>45365</b>	75 x 4.5	100		40	235	3	300
	<b>45375</b>	90 x 5.4	100		40	240	3	300
	<b>445175</b>	90 x 5.4	12 mb		X	X	14	168
	<b>45285</b>	110 x 6.6	50		55	290	1	50
	<b>445185</b>	110 x 6.6	12 mb		X	X	14	168
	<b>445125</b>	160 x 9.5	12 mb		X	X	8	96
	<b>447264</b>	225 x 13.4	12 mb		X	X	8	96
	<b>447266</b>	315 x 18.7	12 mb		X	X	6	72
<b>447268</b>	355 x 21.1	12 mb		X	X	6	72	

Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
PE 100 RC Pipes SDR 11 PN 16	<b>47525</b>	32 x 3.0	200		24	140	4	800
	<b>47535</b>	40 x 3.7	200		30	159	4	800
	<b>47345</b>	50 x 4.6	200		26	176	4	400
	<b>47355</b>	63 x 5.8	100		40	176	3	300
	<b>47365</b>	75 x 6.8	100		40	235	3	300
	<b>47275</b>	90 x 8.2	100		40	240	3	300
	<b>447175</b>	90 x 8.2	12 mb		X	X	14	168
	<b>47285</b>	110 x 10.0	50		55	290	1	50
	<b>447185</b>	110 x 10.0	12 mb		X	X	14	168
	<b>447125</b>	160 x 14.6	12 mb		X	X	8	96
	<b>447270</b>	225 x 20.5	12 mb		X	X	8	96
	<b>447272</b>	315 x 28.6	12 mb		X	X	6	72
	<b>447274</b>	355 x 32.2	12 mb		X	X	6	72



# SEWAGE SYSTEM

## PE100 PIPES



Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
Pipes PE 100 SDR 17 PN 10	<b>47600</b>	75 x 4.5	100	■	40	235	3	300
	<b>47602</b>	90 x 5.4	100 metres	■	40	240	3	300 metres
	<b>47604</b>	90 X 5.4	12 mb	■	X	X	14	168 metres
	<b>47606</b>	110 x 6.6	50	■	55	290	1	50
	<b>47608</b>	110 x 6.6	12 mb	■	X	X	14	168 metres
	<b>47610</b>	125 x 7.4	12 mb	■	X	X	14	168 metres
	<b>47612</b>	160 x 9.5	12 mb	■	X	X	8	96 metres

Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
Pipes PE 100 SDR 11 PN 16	<b>47618</b>	90 x 8.2	100	■	X	X	3	300
	<b>47616</b>	90 x 8.2	12 mb	■	X	X	14	168
	<b>47620</b>	110 x 10.0	50	■	55	290	1	50
	<b>47622</b>	110 x 10.0	12 mb	■	X	X	14	168
	<b>47624</b>	160 x 14.6	12 mb	■	X	X	8	96

## PE 100 RC PIPE

Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
PE 100 RC Pipes SDR 17 PN 10	<b>47626</b>	75 x 4.5	100	■	40	235	3	300
	<b>47628</b>	90 x 5.4	100	■	40	240	3	300
	<b>47630</b>	90 X 5.4	12 mb	■	X	X	14	168
	<b>47632</b>	110 x 6.6	50	■	55	290	1	50
	<b>47634</b>	110 x 6.6	12 mb	■	X	X	14	168
	<b>47636</b>	160 x 9.5	12 mb	■	X	X	8	96

Product name	Part no.	Dimension	UoM	Colour	Coil width (cm)	Coil height (cm)	Pieces per pallet	Quantity (coils/sections) per pallet (m)
Pipes PE 100 RC SDR 11 PN 16	<b>47640</b>	90 x 8.2	100	■	40	240	3	300
	<b>47638</b>	90 x 8.2	12 mb	■	X	X	14	168
	<b>47642</b>	110 x 10.0	50	■	55	290	1	50
	<b>47644</b>	110 x 10.0	12 mb	■	X	X	14	168
	<b>47646</b>	160 x 14.6	12 mb	■	X	X	8	96

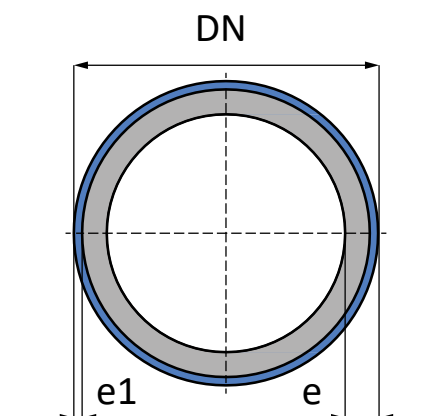
# PE-HD 100-RC PIPES

**PE-HD 100 pipes are also available in the RC variant, which is a further development of advanced technology of high-density polyethylene production. The material has been modified during the manufacturing process to be resistant to slow crack propagation (RC – resistant to crack).**

This distinguishes it from the **PE-HD 100** material and not only provides new opportunities for the construction of underground pressure systems, but has also effectively reduced construction costs and extended pipework service life.

**PE-HD 100-RC** pipes manufactured by Magnaplast are available in a double-layer version. This makes the product even more resistant to microcracking and allows any damage to be detected during installation.

## PE-HD 100-RC Pipes – design and wall thickness



SDR 17 PN 10			SDR 11 PN 16		
DN/OD	e [mm]	e1 [mm]	DN/OD	e [mm]	e1 [mm]
<b>32</b>	2.0	0.4	<b>32</b>	3.0	0.6
<b>40</b>	2.4	0.4	<b>40</b>	3.7	0.6
<b>50</b>	3.0	0.6	<b>50</b>	4.6	1.0
<b>63</b>	3.8	0.6	<b>63</b>	5.8	1.2
<b>75</b>	4.5	1.0	<b>75</b>	6.8	1.5
<b>90</b>	5.4	1.2	<b>90</b>	8.2	1.5
<b>110</b>	6.6	1.5	<b>110</b>	10.0	2.0
<b>160</b>	9.5	2.0	<b>160</b>	14.6	2.3
<b>225</b>	13.4	2.3	<b>225</b>	20.5	2.5
<b>315</b>	18.7	2.5	<b>315</b>	28.6	3.0
<b>355</b>	21.1	2.5	<b>355</b>	32.2	3.5

## PE-HD 100-RC PIPELAYING TECHNOLOGY

### Pipelaying technologies for PE-HD 100-RC:

#### 1. Trenchless methods:

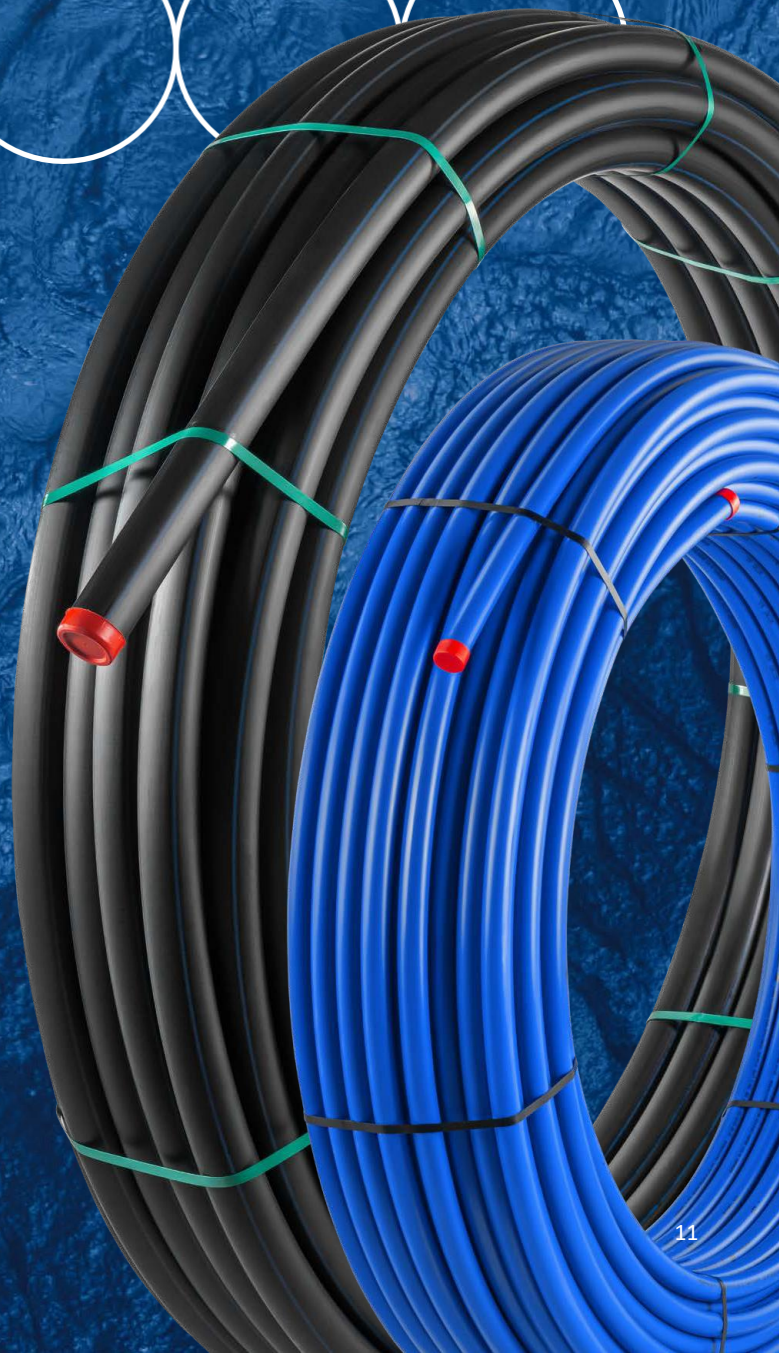
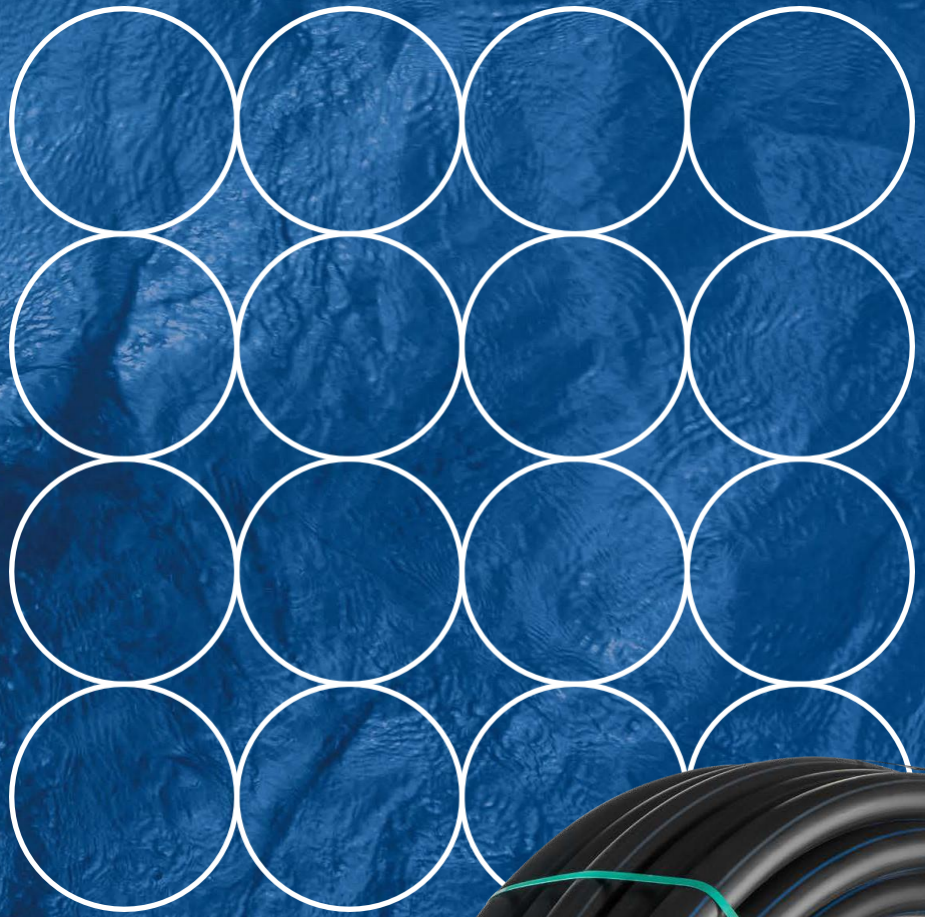
- Impact Moling (pneumatic pipe ramming machine)
- Guided Boring
- Directional Drilling
- Microtunnelling
- Pipe Jacking

#### 2. **Narrow-trenching** (mole ploughing and milling).

#### 3. **Open trench** without sand bedding, on natural substrate with backfill with a stone size of up to 63 mm.

#### 4. **Pipe** Relining.





SOLUTIONS THAT  
LAST YEARS



## POLYETHYLENE SYSTEMS

PE-HD 80

PE-HD 100

PE-HD 100 RC



## FIND OUT ABOUT OUR OTHER SYSTEMS:

HT Plus sound-attenuated drainage system



ULTRA dB sound-attenuated drainage system



Skolan SAFE thick-walled sound-attenuated drainage system



KG External sewage and drainage lines



MAGNACOR external sewage and drainage lines



PP KG 2000 SN10 external sewage and drainage lines



SC jointing chambers



DR subdrainage systems



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