



PIPELIFE CZECH

Product portfolio



PIPELIFE CZECH

Thanks to Czech Republic location in the middle of Europe is Czech market very competitive market – you can find here not only all reputable European producers but also other Czech local producers and different foreign producers have here strong position. Despite of this situation Pipelife Czech is leading pipe supplier on the Czech market with the market share roughly 30 %. We owe this to the pipes quality and we provide to our customers the perfect service.

Pipelife Czech use for manufacturing of our products non-harmful materials. All products are ecologically friendly. We applied into production international quality standards and presently we do produce all our products according to ISO/EN and ČSN. We invest in permanent quality development and customer satisfaction. With regard to this fact we received several international certificates confirming our product quality. During 25 years history Pipelife Czech was active in a lot of major projects. Pipelife Czech is one of 26 subsidiaries in Europe and USA with headquarter in Austria - Vienna.

EXPORT ACTIVITY

Pipelife Czech exports mainly on the basis of trade between individual sister companies; roughly 20% of exports is supplied to companies in the area of Eastern Europe. Pipelife Czech mainly conducts business with Pipelife Slovakia branch, which is our largest foreign customer and to whom we provide all possible services.

Actually we export to more than 25 countries worldwide with focus to Central and Eastern Europe and Middle East (U.A.E., Iraq, Kuwait) but also to Mongolia, Georgia, West Africa, Chile.



Otrokovice plant

PIPELIFE GROUP

Pipelife Group activities are focused on the development, manufacturing and distribution of plastic pipe systems. Group provides solutions for the complete water cycle, energy and power distribution, for telecommunication networks and industrial applications. Pipelife’s unique position of providing customers with excellent services and products is the result of constant improvement and innovation at the highest quality level.

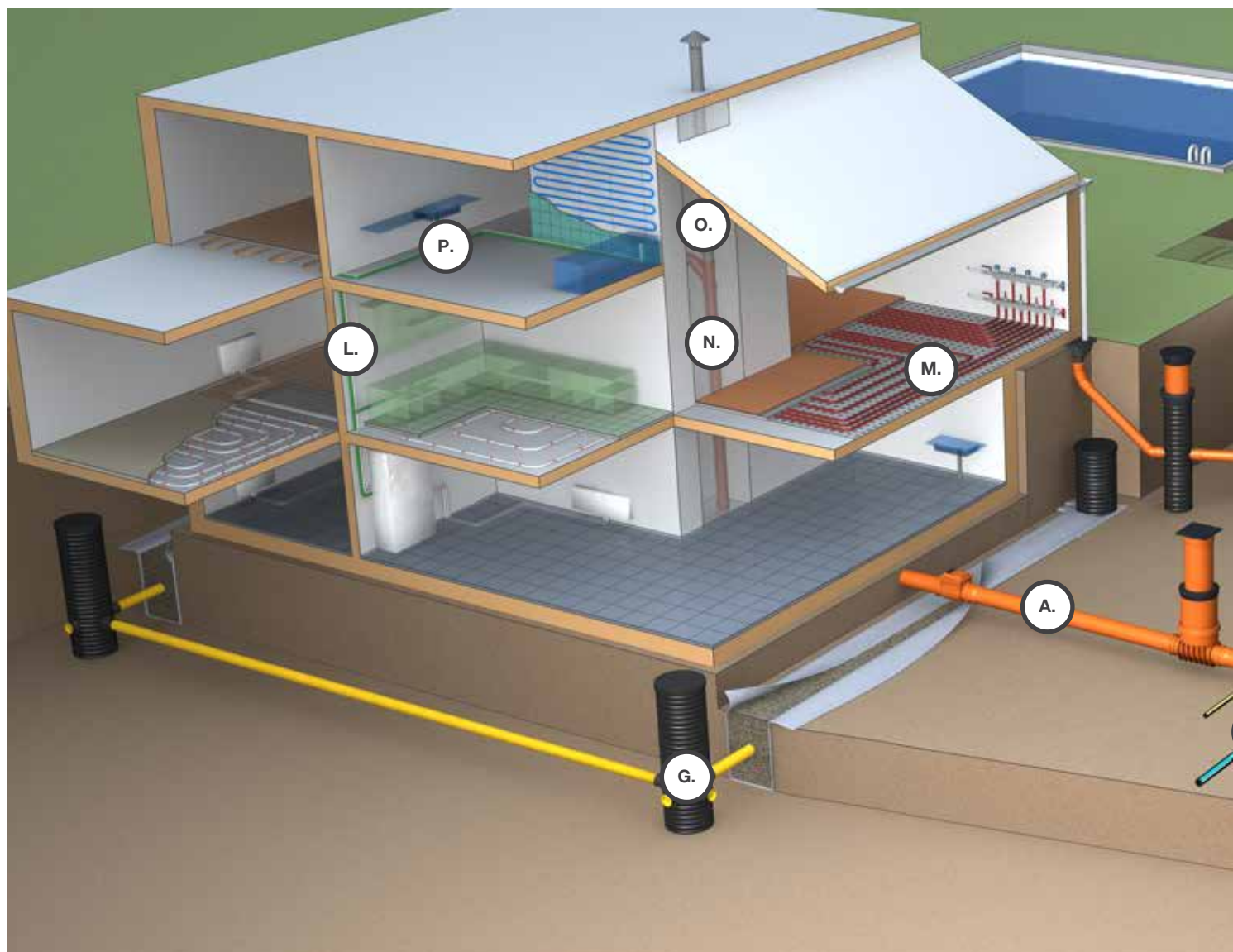
Outstanding competence, extraordinary team spirit, and visionary management are the key factors for being no.1 in terms of customer satisfaction. The vision of Group is to be NUMBER ONE value creator in active markets. The mission of Group is to improve quality of life by providing high value solutions for the protection and flow of water and energy.

PIPELIFE – PART OF WIENERBERGER GROUP

Company Pipelife was founded in 1819 as an Austrian brick manufacturer, Wienerberger has developed over the past five years into an international building materials group that combines Clay Building Materials and Pipes & Pavers businesses. Strategic milestones in the company’s geographic expansion, which began in the 1980s, include market entry in North America during 1999 and the expansion of roofing systems in Western Europe starting in 2003 as well as the full takeover of the plastic pipe producer Pipelife in 2012 and the leading clay roof tile producer Tondach Gleinstätten in 2014. Today Wienerberger has a broad industrial base, high innovative strength and a strong corporate culture, and is well positioned to profit from a market recovery through organic growth.



Zápy plant



Contain

INFRASTRUCTURE SYSTEMS

SEWAGE SYSTEMS

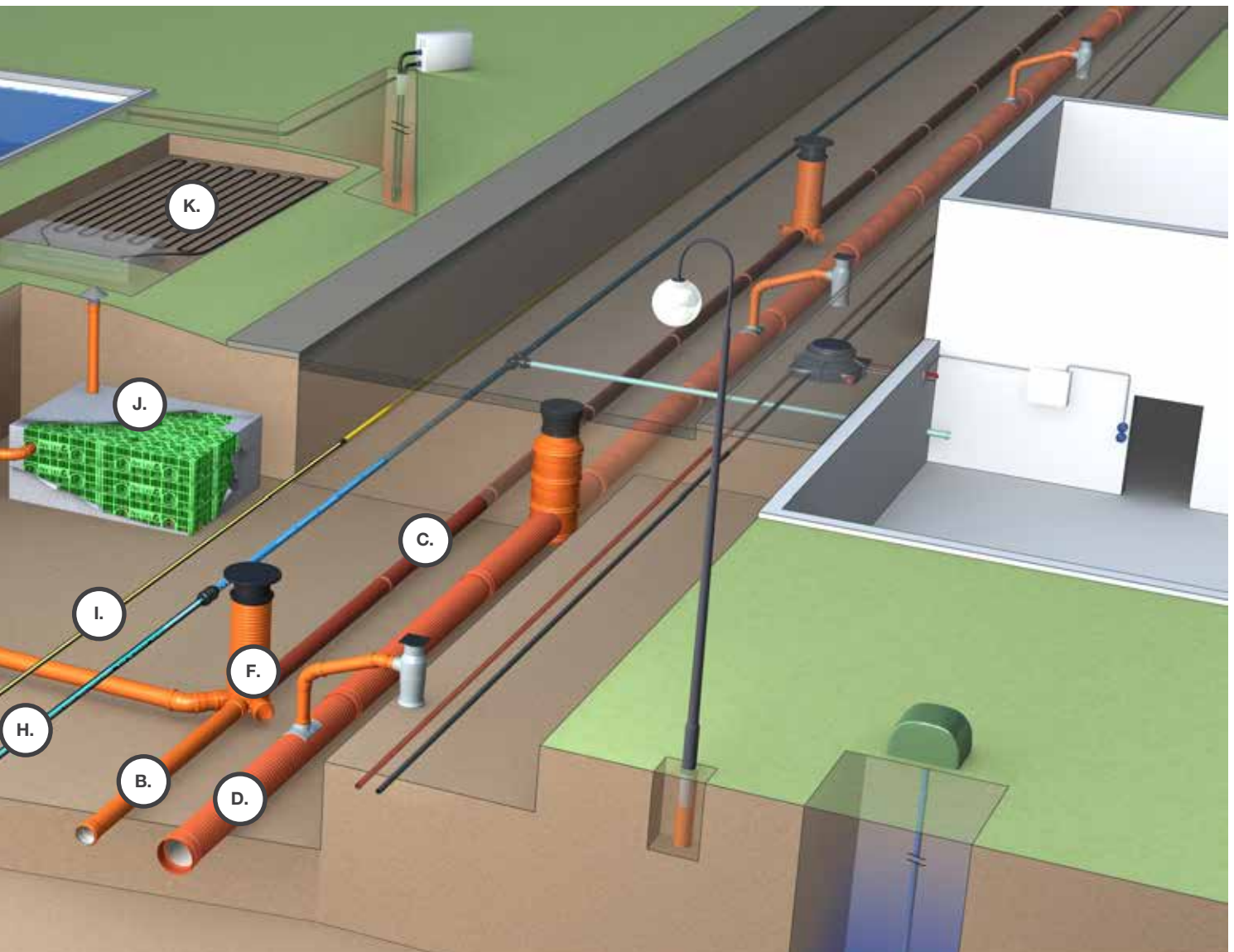
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SEWAGE SYSTEMS

A. PVC KG SN 4, SN 8

PVC is the oldest and best known plastic material for sewage pipes. Because of very good properties and price PVC is still dominant raw-material for plastic pipes.

PIPES CONSTRUCTION

Pipes and fittings are produced of PVC-U (PVC without plasticisers). It is hard, has very low creep and good shape stability.

There are two pipe options available:



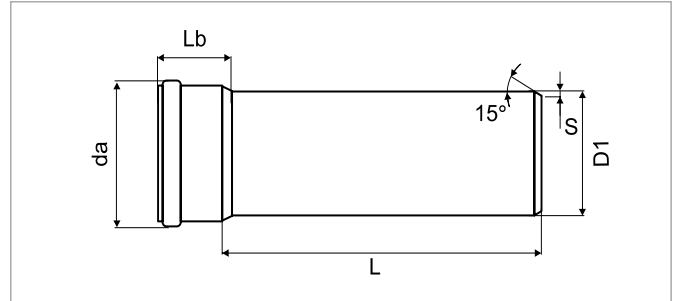
Pipes and fittings are produced with integrated sockets. Their rubber rings ensure by appropriate installation tightness at minimum 5 meters water height. Joints are tight even by deviation from the straight line according to EN 1277.

Ring stiffness of pipes is 4 or 8 kN/m², fittings SDR 41 more than 8 kN/m² so that (according to EN 1401-3) SDR 41 fittings can be used/ delivered with SN 8 pipes.



PIPES AND FITTINGS ASSORTMENT

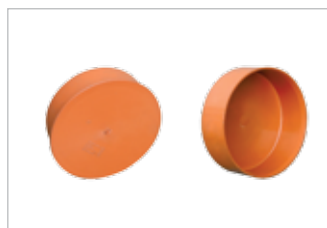
Smooth pipe SN 4 (foamed middle layer), SN 8 (with foamed middle layer or solid)



PVC KG SN 4, SN 8

SN 4							
DN	S	L [m]					Weight [kg/m]
[mm]		0,5	1	2	3	5	
100	3,2	0,5	1	2	3	5	1,3
125	3,2	0,5	1	2	3	5	1,4
150	4	0,5	1	2	3	5	2,2
200	4,9	0,5	1	2	3	5	3,7
250	6,2	-	1	2	-	5	6,1
300	7,7	-	1	2	-	5	8,8
400	9,8	-	1	2	-	5	14,9
500	12,3	-	1	2	-	5	27,7

SN 8							
DN	S	L [m]				Weight [kg/m]*	
[mm]		foamed (coex)		solid	foamed	solid	
150	4,7	1	2	5	6	2,7	3,4
200	5,9	1	2	5	6	4,2	5,3
250	7,3	1	2	5	6	6,9	8,8
300	9,2	1	2	5	6	10,2	13,2
400	11,7	1	2	5	6	16,1	21,1
500	14,6	-	2	5	6	36,9	47,9



SEWAGE SYSTEMS

B. QUANTUM SN 12, SN 16

System QUANTUM combines excellent strength and years of experience, research and development in the company Pipelife Czech. It is a top modern sewage system, which exceeds most of the products delivered so far.

Pipes QUANTUM SN 12 and SN 16 are tested according to relevant parameters of EN 1401-1, but they exceed many of them.

PIPES CONSTRUCTION

They are highstrength 3-layer solid pipes, outside and inside smooth, dimensions DN 150-DN 400 (DN/OD).

The pipes don't contain foam layer.

Sandwich construction improves property of material, especially crack resistance.

REINFORCED SEAL RING

Seal ring is fixed by a plastic reinforcement ring. This stops falling out or sealing impression while transport or inexpert installation, the ring can be taken out when cleaning and changing using suitable tools.

INTERNAL MARKING

Pipes internal surface is marked by standard specified range and intervals. Internal marking on each socket increases certainty – the most important parameters for pipes checking are accessible from the inside of the pipe after back filling of trench. It enables to check if the pipes weren't replaced with cheaper or less quality pipes by accident or intentionally while building.

Outer redbrown layer

- strongly resistant to stone impression

Middle dark-grey layer

- ensures pipes statics
- absorbs impacts

Internal light-grey layer

- ideal for camera inspection
- improves legibility of internal marking
- sediment abrasion resistant



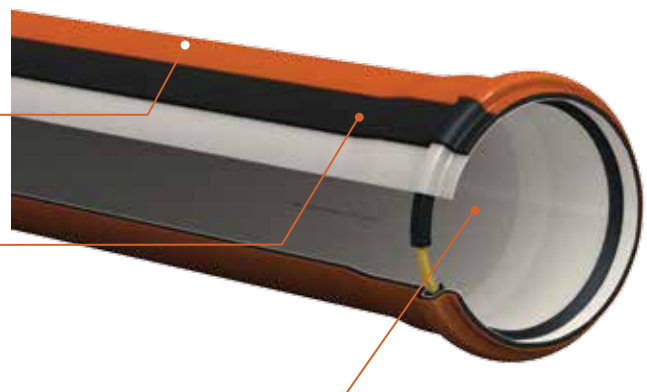
CRACK RESISTANCE AT LOW TEMPERATURES

Stones and tools falling and crashes can't be avoided at construction. Besides testing for common pipes according to EN 744, powerball test according to EN 1411 test is done at modern systems (staircase method).

Metal thumper (12,5 kg) falls on the pipe DN 300 at 0 °C from heights of at least 1 meter, while the pipe wall mustn't be damaged. Pipe system QUANTUM SN 12 meets already the falling height of 2 meters, therefore it can be marked the symbol ice crystal.

FITTINGS

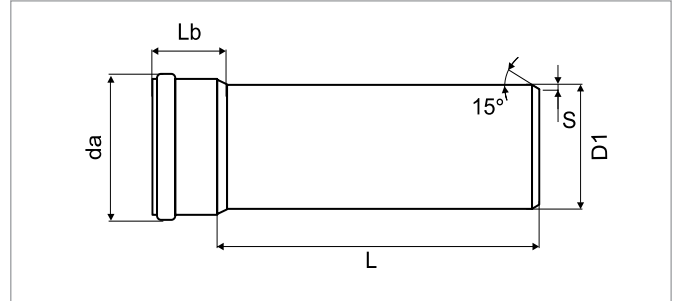
High strength fittings SDR 34 class are included in QUANTUM system.



QUANTUM SN12

PIPES AND FITTINGS ASSORTMENT

Smooth 3 layer solid PVC pipes QUANTUM SN 12 and SN 16



QUANTUM SN 12, SN 16

SN 12					
DN	S	L [m]			Weight [kg/m]
		[mm]			
150*	5,5	1	3	6	3,9
200*	6,6	1	3	6	5,5
250	8,2	1	3	6	9,5
300	10,0	1	3	6	14,9
400	12,6	1	3	6	24,0
500**	16,0	5,87			32,0
600**	21,0	5,75			49,0
800**	25,0	5,70			79,6

SN 16			
DN	S	L [m]	Weight [kg/m]
150*	6,0	6	4,7
200*	7,5	6	7,9
250	9,3	6	12,0
300	11,7	6	17,2
400	14,9	6	29,7
500**	18,0	5,87	33,2
600**	24,0	5,75	52,0
800**	28,0	5,70	92,8

* Redbrown internal layer
 ** Grey pipe due to EN 13476

Fittings SDR 34



SEWAGE SYSTEMS

C. PP MASTER SN 10, SN 12, SN 16

A powerful piece of the future: PP MASTER, a 3-layer sewer pipe system for public water engineering made of polypropylene from Pipelife. The combination of proven materials and innovative production technology sets the new standard in sewer construction.

Polypropylene (PP) fulfils the strictest requirements with regard to the environment and technology. Pipelife processes the 3-layered material into an exceptional product with the high stiffness class SN 12 (>12 kN/m²), SN 10 is also available.

THE PRODUCTION

The 3-layer structure the PP MASTER demands high-tech production equipment. 3 individual layers are combined to make a sewer pipe with exceptional characteristics using a multi-layer extrusion system and new production technology in the Wiener Neudorf plant near Vienna.

THE STANDARDS

The complete system is tested and manufactured according to ÖNORM rule ONR 20513. The high quality standard for the pipe production and the PP MASTER is guaranteed according to EN ISO 9001. Pipelife PP MASTER thereby satisfies all required testing criteria. This is also confirmed by multiple testing analyses by an authorized Austrian testing institute.

Naturally, PP MASTER also meets the special requirements of GRIS (Residential Water Engineering Pipe Quality Association).

Outer redbrown layer

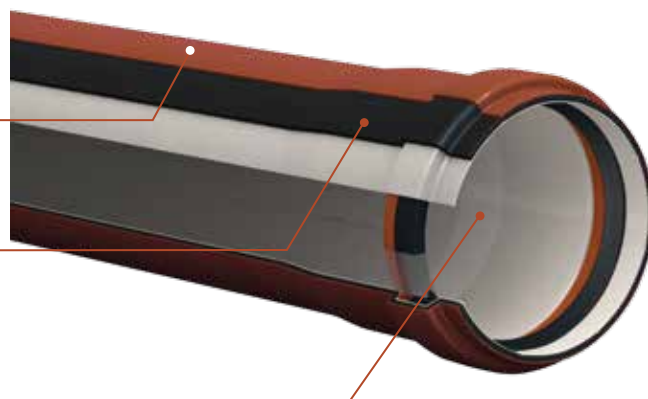
- made of high-quality PP filled with mineral aggregate
- has a high modulus of elasticity resulting in high stiffness
- very resistant to the introduction of foreign objects (such as stones, which are pressed against the pipe wall).

Middle dark-grey layer

- ensures pipes statics
- absorbs impacts even at low temperatures

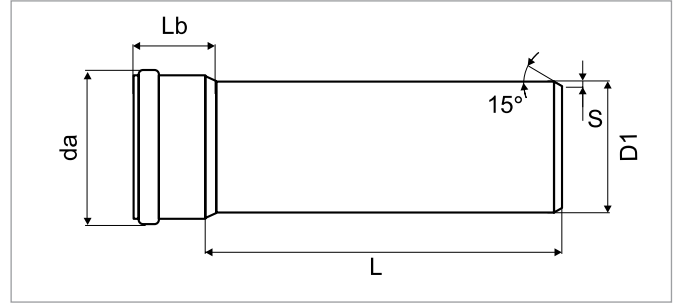
Internal light-grey layer

- ideal for camera inspection
- improves legibility of internal marking
- sediment abrasion and chemical resistant



PIPES AND FITTINGS ASSORTMENT

Smooth 3 layer solid PP pipe MASTER SN 10, SN 12 and SN 16

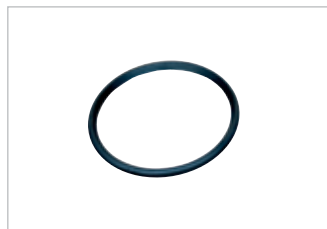


PP MASTER
SN 10, SN 12, SN 16

SN 10					
DN	S	L [m]			Weight [kg/m]
		[mm]			
100	3,7	1	3	6	9,4
125	4,2	1	3	6	12,1
150	5,5	1	3	6	19,9
200	6,8	1	3	6	30,8
250	8,6	1	3	6	49,1
300	10,7	1	3	6	77,0
400	13,6	1	3	6	124,2
500	17,0	1	3	6	195,5

SN 12					
DN	S	L [m]			Weight [kg/m]
		[mm]			
150	5,8	1	3	6	21,7
200	7,2	1	3	6	33,0
250	9,0	1	3	6	51,2
300	11,3	1	3	6	81,0
400	14,4	1	3	6	131,4
500	18,0	1	3	6	205,6

SN 16			
DN	S	L [m]	Weight [kg/m]
150	6,4	6	24,0
200	7,9	6	37,0
250	9,9	6	58,0
300	12,4	6	93,0
400	15,8	6	150,0
500	19,7	6	235,0



SEWAGE SYSTEMS

D. PRAGMA+ID SN 10, SN 12, SN 16

PRAGMA is structured wall system in PP-B (block polypropylene co-polymer), available in 150 up to 1000 mm diameters. Our customers received a high-quality sewerage system, made of uniform material.

At present, Pipelife offers sewerage pipes called PP PRAGMA+ID, the nominal size of which is determined by their inside diameter.

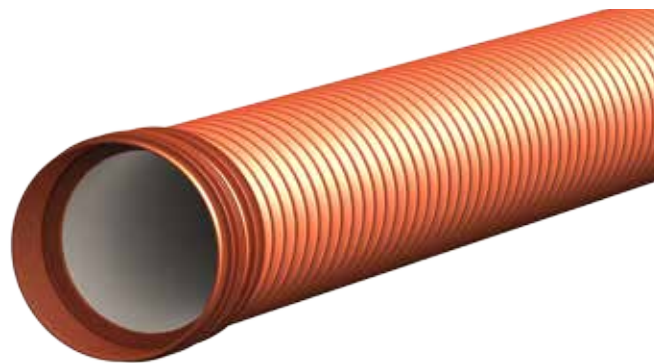
PP PRAGMA+ID are fabricated with their sockets factory welded to the pipes in the maximum range of diameters.

CONSTRUCTION OF PRAGMA SEWAGE PIPELINES

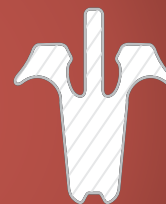
The pipes are connected by fittings made of PP-B, and elastomeric sealing rings of EPDM, placed in the last groove between ribs.

The gaskets have a symmetric structure and are made of EPDM elastomer, characterized by a very high resistance to various chemical compounds.

The PP PRAGMA+ID pipes have a light-weight structured design with smooth inner wall and profiled (corrugated) outer wall with trapezoidal section, which as per standard EN 13476-3:2007: Non-pressure systems of subsoil plastic pipelines for drainage and sewerage. Systems of structured-wall pipes of nonplasticized polyvinyl chloride (PVC-U), polypropylene (PP) and polyethylene (PE). Part 3: Specifications for pipes and fittings with smooth inner wall and profiled outer wall and system Type B.

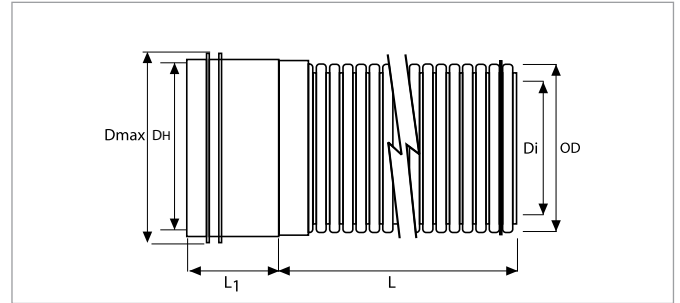
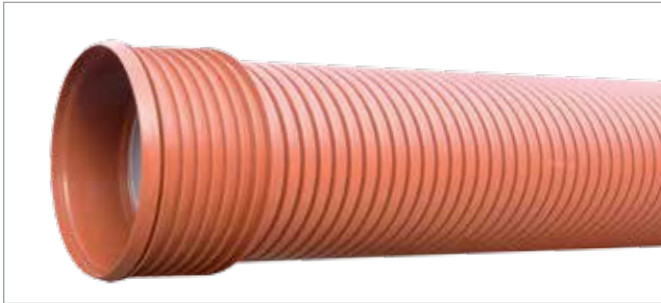


Sockets of the PRAGMA pipes enable connection with the spigot end of thermoplastic pipes (PVC-U, PP) by means of elastomeric seal with grip ring of PP, mounted at the socket edge.



PIPES AND FITTINGS ASSORTMENT

Corrugated pipes with sealing ring



PRAGMA+ID
SN 10, SN 12, SN 16

Order No.			DN/ID	OD	DH	D _i	D _{max}	L ₁	L
SN 10	SN 12	SN 16	[mm]						[m]
PR10-160/6	PR12-160/6	PR16-160/6	DN/OD 160	160	161	139	170	94	6
ID10-200/6	ID12-200/6	ID16-200/6	200	228	231	200	248	118	6
ID10-250/6	ID12-250/6	ID16-250/6	250	285	288	250	308	127	6
ID10-300/6	ID12-300/6	ID16-300/6	300	343	346	300	374	116	6
ID10-400/6	ID12-400/6	ID16-400/6	400	458	462	400	498	139	6
ID10-500/6	ID12-500/6	ID16-500/6	500	573	578	500	624	170	6
ID10-600/6	ID12-600/6	ID16-600/6	600	688	694	600	750	197	6
ID10-800/6	ID12-800/6	ID16-800/6	800	925	934	803	1003	247	6
ID10-1000/6	ID12-1000/6	ID16-1000/6	1000	1140	1148	1000	1213	403	6



SEWAGE SYSTEMS

E. PRAGNUM SN 8, SN 10, SN 12, SN 16

PRAGNUM pipes are manufactured by extrusion of structured wall pipes in the form of an endless belt of polyethylene reinforced PP pipes. It is using only certified non-recycled HDPE (PE 100).

At the next stage of the production is this belt while welding wound spirally around the mounting mandrel diameter optional. This method allows the production of pipes with large diameter, which can not be made by other extrusion technique for a large wall thickness.

CONSTRUCTION OF PRAGNUM SEWAGE PIPELINES

Pipelife supplies pipes with structured wall DIN 16 961 (equivalent to EN 13 476-3). The inner wall is smooth, external is structured. Standard length without neck is 6 m.

Pipe is produced with integrated welding spiral for electrofusion connection according to DVS 2207.

- pipes are black, the surface is hard and tough and UV resistant
- external facing prevents the penetration of large stones to the continuous pipe wall and thereby eliminates the possibility of damage even for pipes SN 8 or SN 10
- pipes have high abrasion resistance and excellent chemical and heat resistance, the surface is highly resistant against the formation of incrustations
- they are used also for the production of large diameter shafts customer requirements

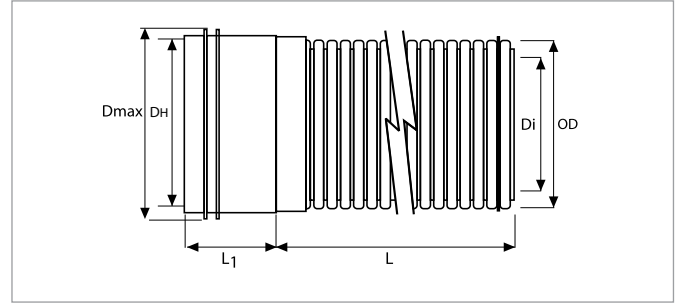


Welded joint



PIPES AND FITTINGS ASSORTMENT

Spiral welded pipe DN/ID, socket with integrated welding wire.



PRAGNUM SN 8,
SN 10, SN 12, SN 16

DN/ID [mm]	Order No.			
	SN8	SN10	SN12	SN16
500	PG8-500/6	PG10-500/6	PG12-500/6	PG16-500/6
600	PG8-600/6	PG10-600/6	PG12-600/6	PG16-600/6
700	PG8-700/6	PG10-700/6	PG12-700/6	PG16-700/6
800	PG8-800/6	PG10-800/6	PG12-800/6	PG16-800/6
900	PG8-900/6	PG10-900/6	PG12-900/6	PG16-900/6
1000	PG8-1000/6	PG10-1000/6	PG12-1000/6	PG16-1000/6
1100	PG8-1100/6	PG10-1100/6	PG12-1100/6	PG16-1100/6
1200	PG8-1200/6	PG10-1200/6	PG12-1200/6	PG16-1200/6
1300	PG8-1300/6	PG10-1300/6	PG12-1300/6	PG16-1300/6
1400	PG8-1400/6	PG10-1400/6	PG12-1400/6	PG16-1400/6
1500	PG8-1500/6	PG10-1500/6	PG12-1500/6	PG16-1500/6
1600	PG8-1600/6	PG10-1600/6	PG12-1600/6	PG16-1600/6
1800	PG8-1800/6	PG10-1800/6	PG12-1800/6	PG16-1800/6
2000	PG8-2000/6	PG10-2000/6	PG12-2000/6	PG16-2000/6
2200	PG8-2200/6	PG10-2200/6	PG12-2200/6	PG16-2200/6

Fittings and manholes production according to customer's specification.

SEWAGE SYSTEMS

F. MANHOLES AND CHAMBERS DN 200 - DN 1000

The main advantage of manholes and chambers is system with „floating“ self supporting cover turns out well. It doesn't load the shaft and it allows the cover to copy ground movements. It happens during the year in the surround of each shaft because of temperature changes and content of dampness in soil. Elevations or sink marks come up round the classic cover on the shaft. It has bad effect on the shaft, paving round it, vehicles going across it as well as inhabitant living in houses nearby due to increased noise level. Round the shaft asphalt or concrete layer is damaged and road servicing is more necessary. Floating cover of correctly installed plastic shaft stays permanently on the level of roadway, negative effects on surround are eliminated and the keeper doesn't waste money on frequent road correction. Operating costs are minimal.

Chamber and manhole components are equipped with rubber sealing rings and they put together in the same way as plastic pipes. Therefore water tightness is guaranteed permanently – at least 5 metres water column. The chambers are tight even if groundwater level is higher.

Plastic parts of chambers and manholes are very light that is why it is possible to install it without the use of heavy machine.

INSPECTION CHAMBERS DN 200 – DN 400

Bottoms are made of polypropylene, which brings high toughness, abrasion resistance and high temperature resistance. Bottoms are straight and junction. Risers are made of PVC-U, for ID 315 from PP. Covers either for pedestrians or telescopic, loads 15 t up to 40 t.

INSPECTION CHAMBERS DN 630

Standard polypropylene chamber bottoms are straight and junction with advantageous hydraulic cunette form with inflow and outflow as smooth socket or spigot. PP bottoms are reinforced with ribs, riser is PP corrugated pipe DN/OD 630 mm. Covers (load 15 up to 40 tons) can be supported either by concrete bearing ring or by PP telescope.



MANHOLES DN 800 AND DN 1000

Standard polypropylene chamber bottoms are straight and junction with advantageous hydraulic cunette form with inflow and outflow as smooth socket or spigot, they have reinforcing ribs. It is possible to make another construction with different angles.

Riser rings are of the same construction as bottoms, length is 50 cm, possible shortening 10 or 20 cm is marked. Great advantage is sealing ring location on the sides, so that sealing rings are not weighted by traffic or ground above. Top of the plastic part is a cone 800/1000 to 630 mm. Manholes DN 800 and DN 1000 are only made with concrete ring. Covers 15 tons up to 40 tons are available. Manholes are equipped with massive plastic steps.

CHAMBERS AND MANHOLES ASSORTMENT

DN 200	DN/ID 315	DN 400	DN 630	DN 800	DN 1000
					
					
					
					
					

CHAMBERS AND MANHOLES
DN 200 - DN 1000

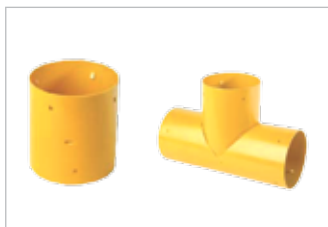
DRAINAGE SYSTEMS

G. DRAINAGE

1. FLEXIBLE PVC PIPES

Flexible PVC pipes with a corrugated perforated single wall are proven drainage system. Pipes are yellow according to DIN 1187.

Holes (groove cut) water inlet are located at the bottom of the wave and are thus relatively protected from clogging by soil. They are arranged in six rows. The standard width of cut is 1.2 mm (medium type according to DIN 1187). There are also non-perforated pipes for various applications, eg. as protectors.



2. DRAINAGE MANHOLES

Inspection and cleaning manholes DN 300 are designed for seamless connection to the drainage and drainage systems, universally applicable and suitable for retrofitting.

Vertical shafts of the profiled wall can be easily adapted to the conditions at the construction site with the help of extension and connecting segments. The standard connection size of drainage pipes DN 100, on special request we can deliver the shaft bottom for another dimension. These covers are installed according to the manual and used to finish with a telescope or delivery layer ring, because the shaft may be directly loaded transport.



3. RIGID DRAINAGE

HIGH-STRENGTH DRAINAGE SYSTEM Q-DRAIN

The basis of high drainage system Q-drain are solid three-layers pipes Quantum. Ring stiffness of pipes under normal demands on the geometry of perforations remains close to the baseline (SN 12). Like the sewer system can also Q-drain use a wide range of fittings SDR 34 high ring stiffness, but you can also use ordinary sewage fittings. They resist all influences of aggressive components of soil and drainage water and resistance to the formation of encrustations. Q-drain is supplied in a length of 6 m. Standard offered perforation angles are 180°, 220° and 360°. According to customer specifications it can be manufactured with any perforation (angle, number and width of openings).

PE DRAINAGE AGROSIL 2500

Corrugated pipes according to DIN 4262 form D (smooth inner wall, an outer profiled - hollow fins circular profile). By using/punching are available in DN 100 to DN 500.

Pipes are lightweight, stable, length is 6 m without a coupling. Pipes and fittings are black, leakage surface is on all the dimensions of at least 50 cm²/m, the width of the perforations from 0.8 to 1.4 mm. Connection by the couplings (fixation inside pipe) provides joints and all other fittings embossed on the neck. The neck is sealed against the ingress of sand, multipurpose and unperforated pipes have on one end in the second groove (wave) linked by a rubber seal. Non-perforated pipes are therefore waterproof up to about 14 m water column. Large selection of shapes, including transition to KG. Standard pipe stiffness Agrosil 2500 is 4 kN/m² for SN 4 and 8 kN/m² for SN 8.



PP DRAINAGE PRAGMA DRAIN

PRAGMA DRAIN are standard sewage PRAGMA+ID pipes, perforated in 120°, 220° or 360°. Lightweight corrugated PP brown pipes have welded socket, installation length is 6m, dimensions from 160 up to 1000 mm. PRAGMA DRAIN uses fittings of the broad PRAGMA+ID assortment (see point D).



DRAINAGE

PE PRESSURE SYSTEMS

H. PRESSURE PIPES PE 100 AND PE 100RC FOR WATER OR SEWAGE

Pipelife Czech offers pipes from PE100+ and PE 100RC (Resistant to crack).

PE 100+ pipes are black pipes with blue stripes for water and with brown stripes for sewage.

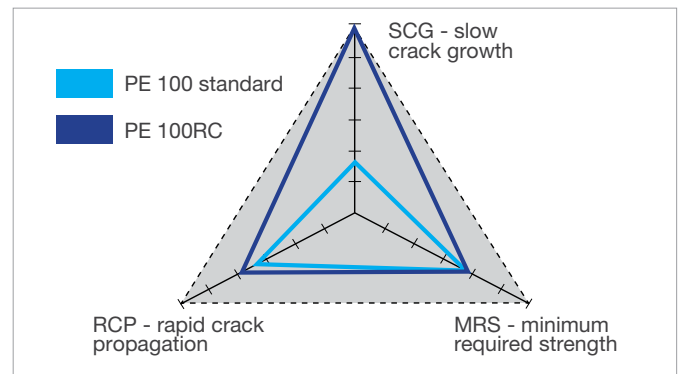
Dimensions and other technical parameters comply with EN 12 201.

PE pipes are supplied as

- bars of 6 or 12 meters
- coils of 100 m (up to DN 110 mm included)

PIPES MADE OF PE 100RC MATERIAL

At present, the most advanced developmental range of PE 100 raw material is PE 100RC (Resistant to Crack).



Pipelife uses RC materials to produce 3 types of pipes:

AQUALINE RC

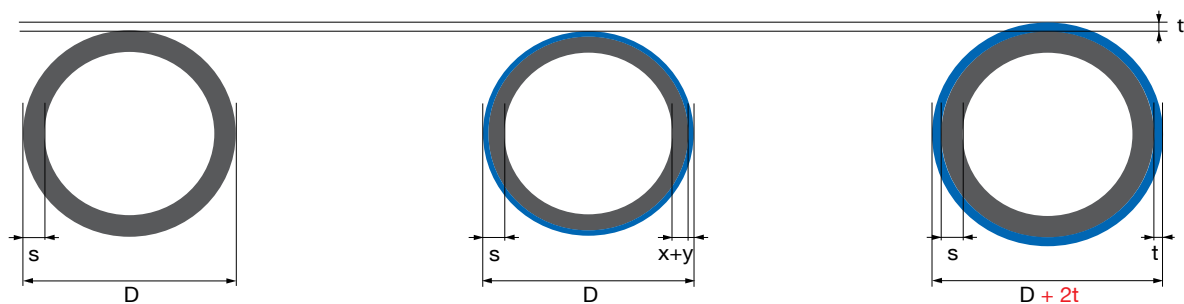
Monolayer homogeneous pipe made from 100 % PE 100RC, black, with integrated stripes color corresponding conveyed medium (blue for water, brown for sewage).

AQUALINE RC2

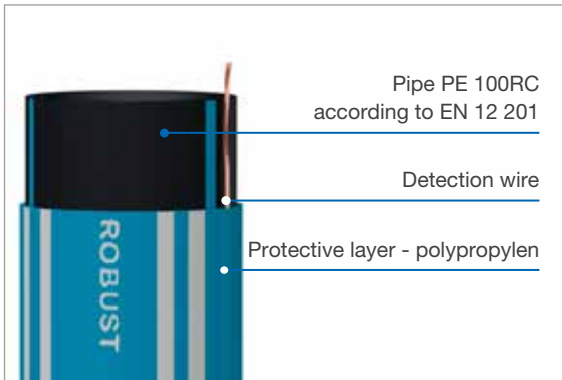
Two-layer pipe, 10 % of the outer layer in colours blue (for water) or brown (sewage) PE 100RC, 90 % black PE 100RC.

AQUALINE RC ROBUST

Basic pipe is monolayer homogeneous from PE 100RC black, with additional protective layer from PP (water blue, sewage brown) and integrated detection wire (on request). Smooth and extremely hard PP coat is very effective protection against damage.



AQUALINE RC ROBUST - THE ONLY PIPE FOR ALL LAYING TECHNOLOGIES



The additional protective layer is necessary to remove before jointing (butt fusion, electrofusion) - use special peeling tool:



The protection layer could roll down by horizontal drilling and similar laying methods. We recommend to fix the front of the pipe and all joints by shrinking sleeve:



PE100+
PE100RC

PE PIPES APPLICATION ACCORDING TO THE RISK OF DAMAGE

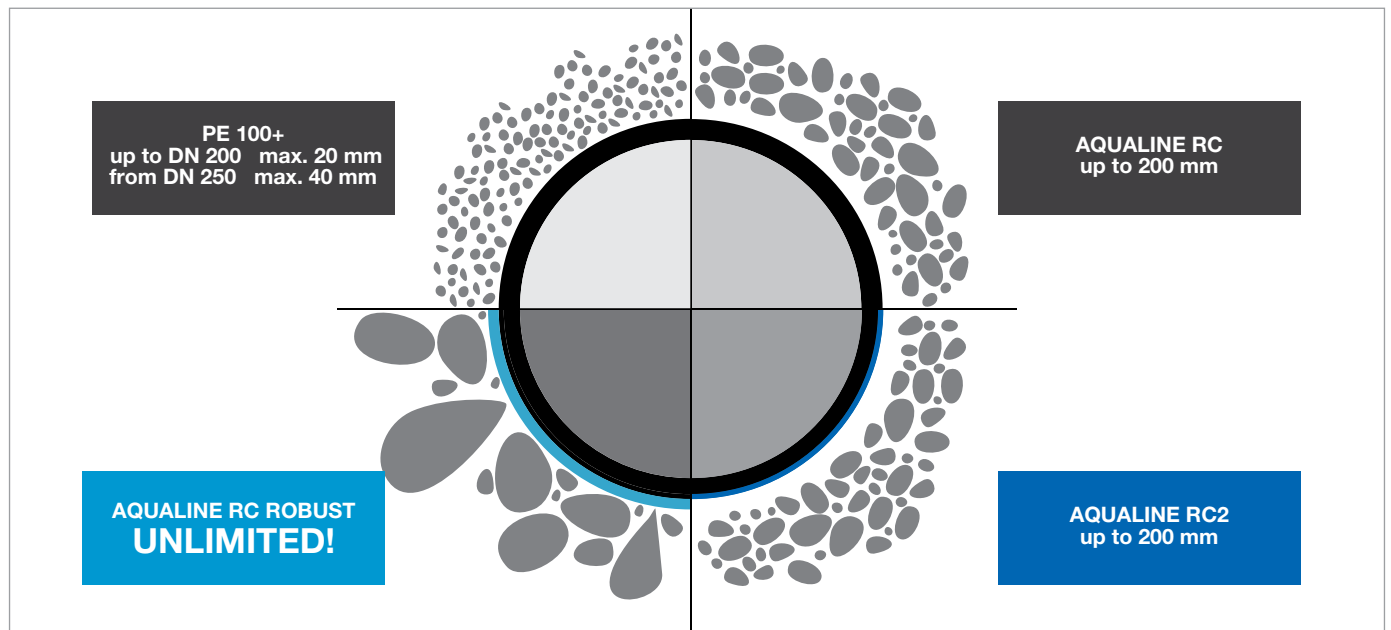
Method	Type of pipes		
	PE 100+	RC1 RC2	AQUALINE ROBUST
Laying in trench "sand backfill"	+	+	+
Laying in trench (max. grain)	-	+ (200 mm)	+ (without limit)
Laying in trench without limitation grain	-	-	+
Relining pipes with smooth internal surface	+	+	+
Relining pipes inside unspecified	-	+	+
Ploughing	-	+	+
Milling work	-	+	+
Horizontal drilling *	-	+	+
Burstlining	-	-	+

* Depends on the quality of soil

+	pipe can be used when laying with low risk
+	pipe can be used, for the installation with medium risk
+	pipe can be used when laying with high risk, it requires an additional protective layer

PRESSURE SYSTEMS

PE PIPES APPLICATION ACCORDING TO THE GRANULOMETRY



PE PIPES ASSORTMENT

d _n [mm]	e _n [mm]	Length [m]	PE 100+		AQUALINE RC		AQUALINE RC2		AQUALINE RC ROBUST	
			PN 10 SDR 17	PN 16 SDR 11	PN 10 SDR 17	PN 16 SDR 11	PN 10 SDR 17	PN 16 SDR 11	PN 10 SDR 17	PN 16 SDR 11
25		100		■						
		6		■						
32	2	100	■	■		■				■
	2	6	■	■		■				
40	2,4	100	■	■		■				■
	2,4	6	■	■		■				
50	3	100	■	■	■	■			■	■
	3	6	■	■	■	■				
63	3,8	100	■	■	■	■			■	■
	3,8	6	■	■	■	■				
75	4,5	100	■	■	■	■			■	■
	4,5	6	■	■	■	■				
90	5,4	100	■	■	■	■	■	■	■	■
	5,4	6	■	■	■	■	■	■		
	5,4	12	■	■	■	■	■	■	■	■
110	6,6	100	■	■	■	■	■	■	■	■
	6,6	6	■	■	■	■	■	■		
	6,6	12	■	■	■	■	■	■	■	■
125	7,4	6	■	■						
	7,4	12	■	■	■	■	■	■	■	■
140		6								
	8,3	12	■	■	■	■	■		■	■
160	9,5	6	■	■	■	■	■	■		
	9,5	12	■	■	■	■	■	■	■	■
180		6								
	10,7	12	■	■	■	■	■	■	■	■
200		6								
	11,9	12	■	■	■	■	■	■	■	■
225	13,4	6	■	■	■	■	■	■		
	13,4	12	■	■	■	■			■	■
250	14,8	12	□	□	□	□			□	□
315	18,7	12	□	□	□	□			□	□
355	21,1	12	□	□	□	□			□	□
400	23,7	12	□	□	□	□			□	□

d_n outer diameter of pipe
e_n wall thickness
■ available
□ on request

PE PRESSURE SYSTEMS

I. PRESSURE PIPES PE 100+ AND PE 100RC FOR GAS FUELS

PE PIPES

Pipelife Czech offers pipes from PE 100+ and PE 100RC (Resistant to Crack).

Dimensions and other technical parameters correspond according to EN 1555.

The pipes are supplied as:

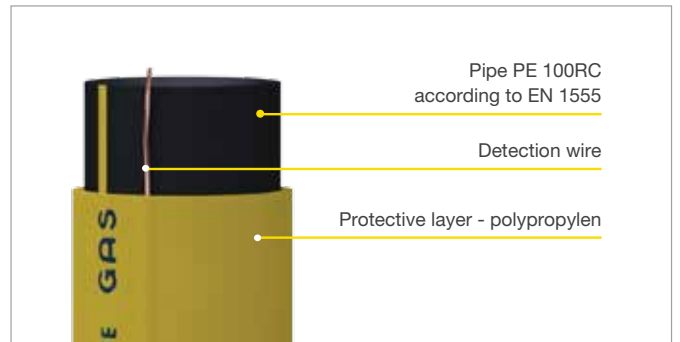
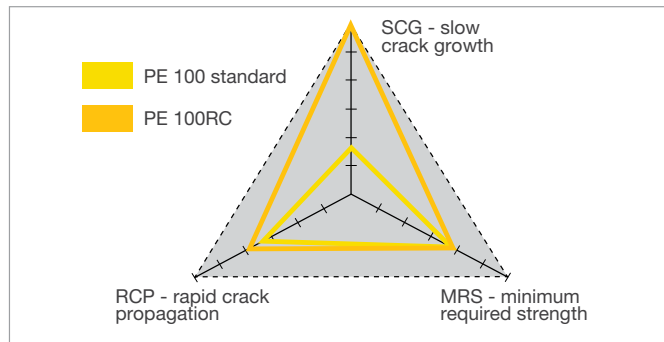
- bars of 6 or 12 m
- coils of 100 m up to Ø 110 mm included

ASSORTMENT

- dimension 32 mm - 63 mm in SDR 11
- dimension 90 mm - 225 mm is SDR 17,6 (17)

PIPES MADE OF PE 100RC MATERIAL

At present, the most advanced developmental range of PE 100 raw material is PE 100RC.



Pipelife uses RC materials to produce 3 types of pipes:

RC

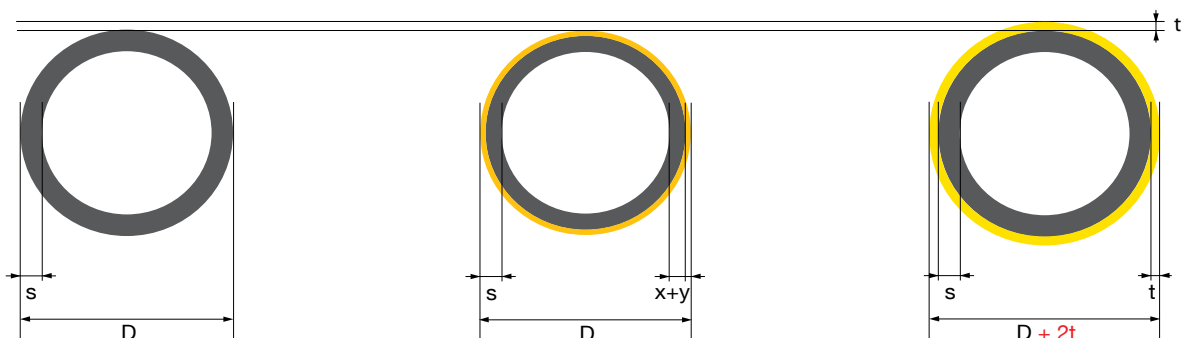
Monolayer homogeneous pipe made 100% from PE 100RC, black with orange integrated stripes color.

RC2

Two-layers pipe, 10 % of the outer layer orange, 90 % from black PE 100RC.

RC ROBUST

Basic pipe is monolayer homogeneous from PE 100RC black, with additional protective orange layer from PP and integrated detection wire (on request). Smooth and extremely hard PP coat is very effective protection against damage.



PE PIPES APPLICATION ACCORDING TO THE RISK OF DAMAGE

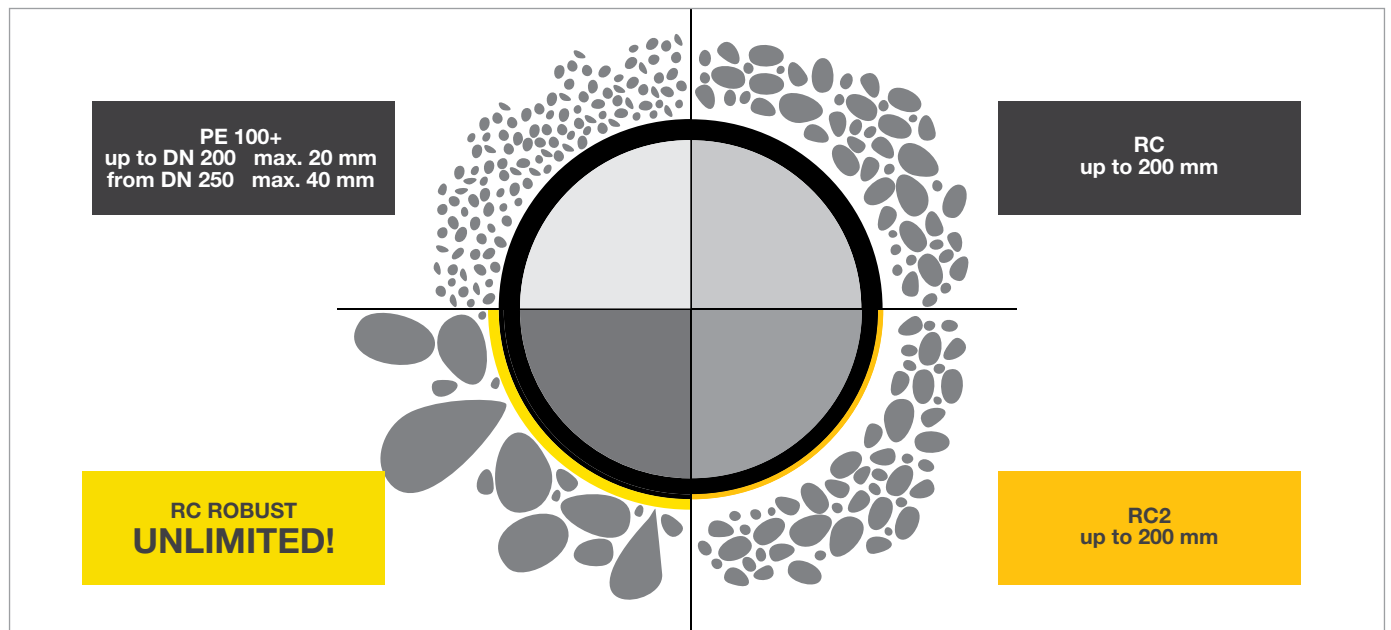
Method	Type of pipes		
	PE 100+	RC1 RC2	RC ROBUST
Laying in trench "sand backfill"	+	+	+
Laying in trench (max. grain)	-	+ (200 mm)	+ (without limit)
Laying in trench without grain limitation	-	-	+
Relining pipes with smooth internal surface	+	+	+
Relining pipes inside unknown surface	-	+	+
Ploughing	-	+	+
Milling work	-	+	+
Horizontal drilling *	-	+	+ style="background-color: #ffff00;">+
Burstlining	-	-	+

* Depends on the quality of soil

+	pipe can be used when laying with low risk
+	pipe can be used, for the installation with medium risk
+	pipe can be used when laying with high risk, it requires an additional protective layer

PE100+
PE100RC

PE PIPES APPLICATION ACCORDING TO THE GRANULOMETRY



ECOSYSTEMS

J. RAINEO SYSTEM

RAINEO is system used to capture, retention and effective utilization of rain water, if necessary, its smooth infiltration into the country.

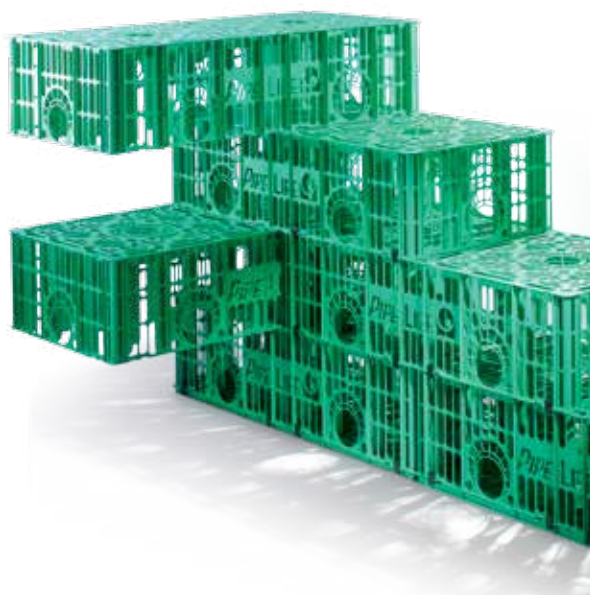
The quality of raw materials and components guarantees a long service life; high technical level of products and design ensure reliable operation over generations.

RAINEO SYSTEM ADVANTAGES




Using RAINEO system is much more efficient than the use of gravel drains (drains) or the infiltration pipes. It is much more economical, because its installation requires a much smaller range of earthworks.

Absorbing unit with a volume of 216 l weighs about 8.1 kg, including connecting clips (9.7 kg and the decking, which is given only under the lower box in the gallery) and a useful volume of 206 dm³. Small construction volume of individual boxes and the entire gallery is an advantage in confined spaces, eg. under a parking lot.

RAINEO system takes in a multilayer arrangement only minimal overhead area. It therefore may be placed, for example, under the park area without trees, under car parkings under the playground or the area above it be may otherwise aesthetically adjusted. The units may be regarded STORMBOX manually, without the need for equipment. Unlike the loose gravel when silting can be easily and repeatedly cleaned.



ASSORTMENT

	STORMBOX	basic desk	clip
box parts			
dimension [mm]	1200 x 600 x 300	1200 x 600 x 20	36,5 x 21,5
weight [kg]	8	1,7	0,01



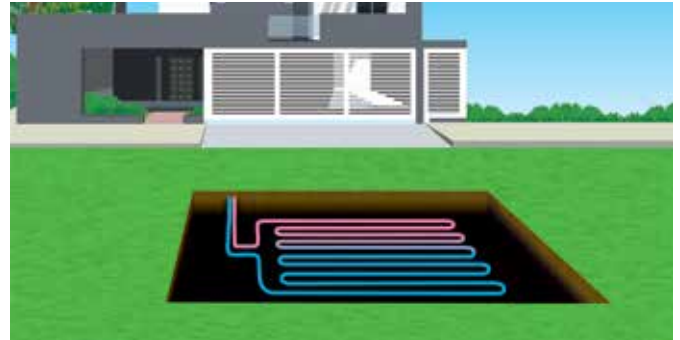
RAINEO

ECOSYSTEMS

K. GEOTHERM SYSTEM

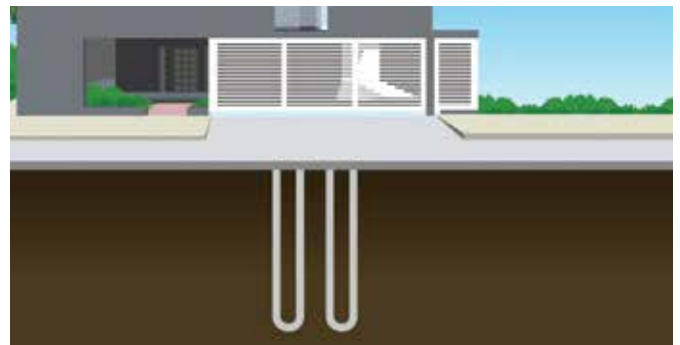
HORIZONTAL COLLECTORS

Horizontal collectors are the most commonly used method to transfer ground energy into heating/cooling source. They consist of horizontally buried pipes, in approximately 1.5 meters depth. Due to its closeness to the surface, the performance of horizontal collectors varies with seasonality. Although the investment is relatively low, as quite a large space – depending on the required heat output and soil conditions, approximately 30 m² collector space is needed per kW heat load of the building – might be needed, installation of horizontal loops might not be possible everywhere. The heat extraction per m³ of soil of the horizontal collectors is relatively low.



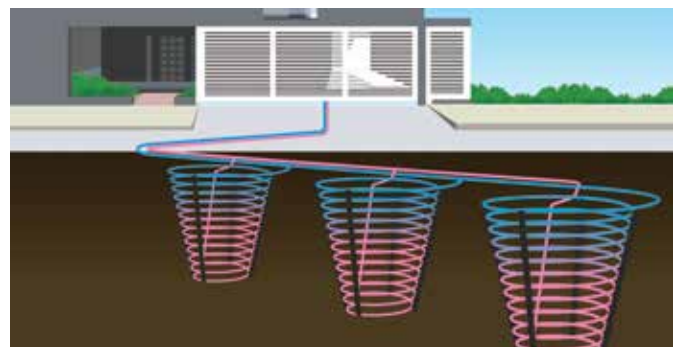
VERTICAL COLLECTORS

In case the required space needed to install the horizontal collector system is not available, vertical collectors can provide the optimal solution. Vertical collectors consist of one or more return and supply pipes that are installed vertically into the ground, approximately 100 meters, however greater depths are as well possible. Vertical collectors can be used in almost all types of landscape or ground and soil conditions.



BASKET OR TRENCH COLLECTORS

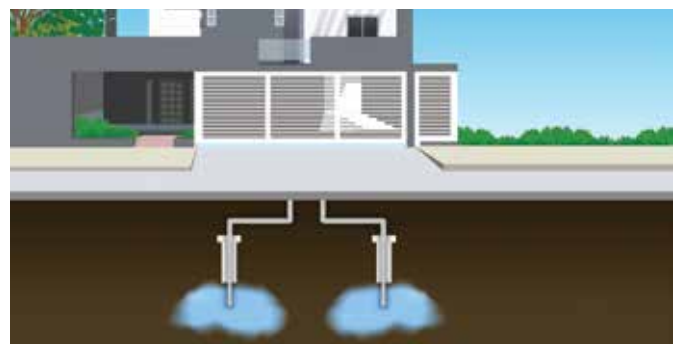
In the case of basket collectors, the pipes are installed in forms of baskets few meters below ground. Trench collector pipes are buried horizontally, but in contrast to real horizontal collectors where pipes are laid next to each other, parallel on top of each other. Burying depth is approximately 2 - 3 meters. This collector method can be used if not enough surface is available to install the horizontal system.



GROUND WATER, LAKE OR RIVER COLLECTOR LOOPS

Open loops pump natural water from a well or body of water (lake, river) into a heat exchanger inside the heat pump and then return the water back to the water source.

The supply and return lines must be placed far enough apart to ensure thermal recharge of the source.



ASSORTMENT



GEOTHERM

HOT & COLD SYSTEMS

L. PP-R INSTAPLAST

PP-R INSTAPLAST is universal plastic piping system that can be used for distribution lines for:

- potable, cold and hot water
- compressed air
- other substances if PP-R material is resistant to them (specific cases should be considered – contact the manufacturer)

ADVANTAGES OF THE PP-R INSTAPLAST SYSTEM

- Substitution of steel pipes by plastic ones results in considerably positive ecological and economical indicators
- Minimum service life in case of correct application: 50 years
- Hygienically harmless, it is not susceptible to corrosion
- Installation is simple, clean, quick
- Easy handling due to low weight
- Low noisiness
- The system complies with the standards for classification as “Environment friendly product” thanks to low pressure losses by friction

PIPES

PP-R pipes - S5; S3.2; S2.5 – compact PP-R pipes with different SDR

UNIBETA – compact PP-RCT pipe

STABI BETA - multi-layer pipe PP-RCT with aluminum foil

CARBO^{CRP} – composite pipe in structure PP-RCT/PP-RCT+CF/PP-RCT. The middle layer contains compounds of carbon fiber (CF)

Application – see table on next page.

FITTINGS

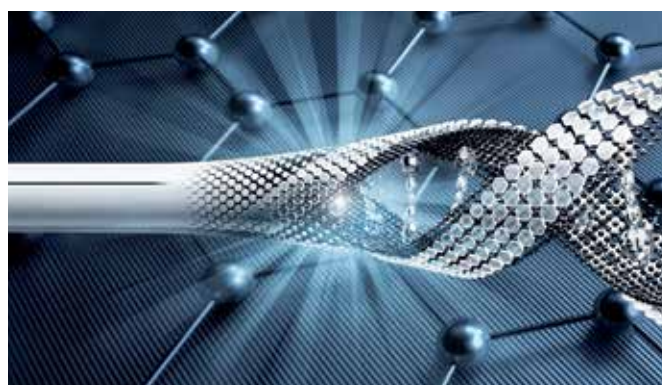
A wide range of fittings in all dimensions – both all-plastic and combined modifications. Fittings are produced in the highest pressure class.

PLASTIC VALVES

Non-dismountable and dismountable ball valves and direct valves.

OTHERS

We offer tools for installation of the PP-R system, consumable materials and thermal insulations.




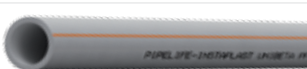
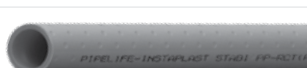



instaplast

Carbo^{CRP}

UNI BETA

PIPES AND FITTINGS ASSORTMENT

	Pipe type	Scope of application					
		Pressure series Dimension series	Drinking water	Hot & cold water	Heating I (max. 70 °C)	Heating II (max. 90 °C)	Air/Clima
	PP-R S5	S5 Ø 20 - 110	■				
	PP-R S3.2	S3.2 Ø 16 - 110	■	■			
	PP-R S2.5	S2.5 Ø 20 - 110	■	■	■		■
	UNIBETA	S4 S5 (Ø 160)	■	■	■		■
	STABI BETA	S3.2	■	■	■	■	■
	CARBO ^{CRP}	S3.2 S4	■	■	■	■	■



PP-R INSTAPLAST

More information is available in separate brochure PP-R INSTAPLAST.

HOT & COLD SYSTEMS

M. RADOPRESS

HOT AND COLD SYSTEM USEFUL IN ALL DISTRIBUTION AREAS:

- sanitary - hot and cold water
- central heating radiatory connection
- underfloor heating

MAIN ADVANTAGES OF THE PIPELIFE RADOPRESS SYSTEM

- one system for all H&C applications - sanitary, underfloor heating and radiator connection
- quick and economic installation
- permanently leakproof connection
- fail safe installation tools
- high safety level of performance
- flexible and shape-stable pipe
- efficient joint control using inspection window
- no corrosion and incrustation
- no oxygen diffusion
- high chemical resistance
- low dilatation of the central heating pipes
- wide fitting rang

Pipelife insists on highest quality standards in its own production as well as from all suppliers of complementary products.

The Pipelife Radopress system of multilayer pipes, brass fittings as well as the accessories and professional engineering service.

RADOPRESS PIPES

More types of pipes from our system RADOPRESS will facilitate your right choice of the installation.

Structure of the RADOPRESS "M" type pipe

- inner PE-X or PE-RT layer
- adhesive layer
- longitudinally-welded aluminum pipe
(The minimum aluminum layer thickness is 0.2)
- adhesive layer
- outer layer made of PE-X or PE-RT

FITTINGS

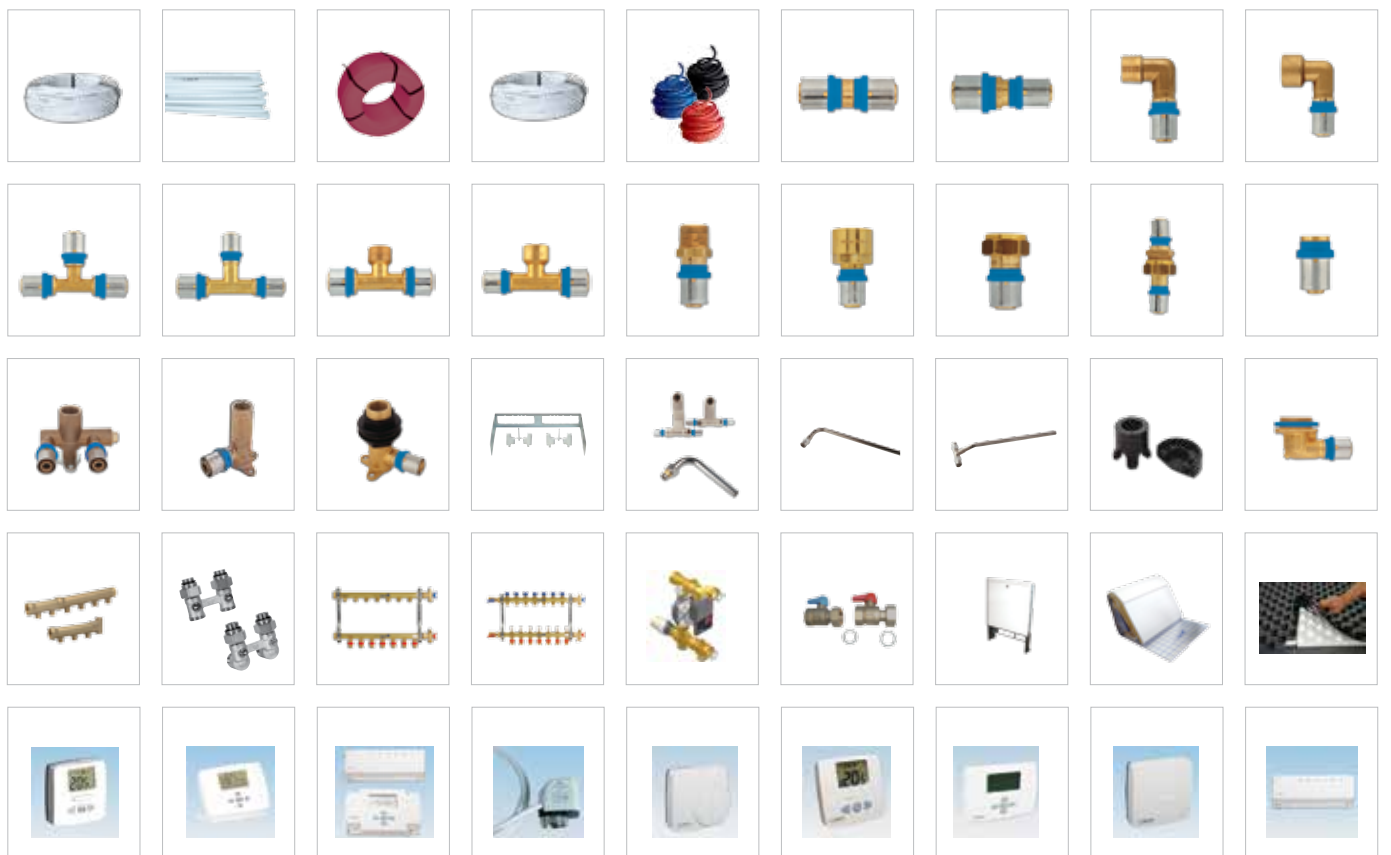
- The fittings are made of brass - we are using corrosion-resistant material.
- The RADOPRESS fittings provide you the best guarantee in simple processing.
- The fitting is pressed, the maximum pressing force is 10 tons. O-rings provide a safe and tight connection.
- The fitting is permanently leakproof. It can be used both underplaster and over it.
- The fittings are not sensitive to temperature changes, pressure stroke loading, torsion or tension.



RADO PRESS

PIPES AND FITTINGS ASSORTMENT

Pipe	Dimension	Code	Packaging	Application
PE-Xb/AL/PE-Xb	16x2,0	RP-R 16/2,0	coil 200 m	for all application
	18x2,0	RP-R 18/2,0	coil 150 m	for all application
	20x2,0	RP-R 20/2,0	coil 100 m	for all application
	26x3,0	RP-R 26/3,0	coil 100 m	for all application
	32x3,0	RP-R 32/3,0	coil 50 m	for all application
PE-Xb/AL/PE-Xb	16x2,0	RP-R 16/2,0	bar 4 m	for all application
	18x2,0	RP-R 18/2,0	bar 4 m	for all application
	20x2,0	RP-R 20/2,0	bar 4 m	for all application
	26x3,0	RP-R 26/3,0	bar 5 m	for all application
	32x3,0	RP-R 32/3,0	bar 5 m	for all application
	40x3,5	RP-R 40/3,5	bar 5 m	for all application
	50x4,0	RP-R 50/4,0	bar 5 m	for all application
PE-RT/AL/PE-RT	16x2,0	PLUFH16x2-200	coil 200 m	only for floorheating
	16x2,0	PLUFH16x2-400	coil 400 m	only for floorheating
PE-RT EVOH	18x2,0	FT-R18L4RED	coil 400 m	only for floorheating



RADOPRESS

SOIL SYSTEMS

N. MASTER 3

The new Pipelife MASTER 3 soil pipe consists of 3 optimally adapted layers. It fulfils all demands that can be made of modern soil pipe systems in modern houses and residential buildings as well as in industrial structures.

The smooth inner layer prevents incrustation and is also partly responsible for the good **sound absorbing characteristics**. The solid middle layer provides a **high degree of stiffness** and ensures especial robustness. The reddish brown outer layer provides **excellent impact resistance** – even at low temperatures.

Each layer has its own special influence on the characteristics of the pipe.

Pipelife MASTER 3 pipes and fittings are mainly used for drainage lines resistant to hot water for domestic and industrial gray, black and rain water.

Inside these buildings the Pipelife MASTER 3 system can be used for

- individual and collective lines
- downpipes
- bypass lines
- ventilation pipes and interior rain water pipes

The impact resistant outer layer

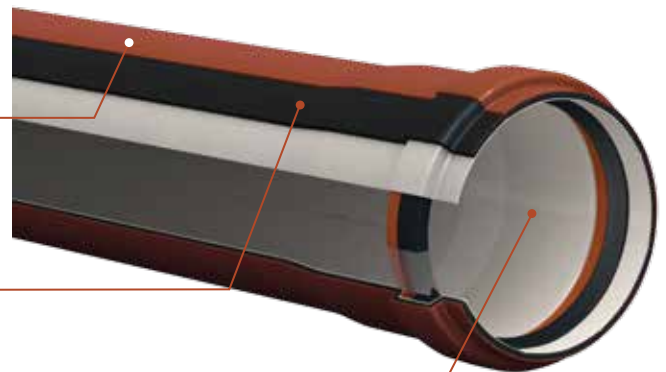
- constructed of Polypropylene Copolymer (PP-CO)
- particularly robust
- no socket fractures
- safe installation even at low temperatures

The solid middle layer

- constructed of mineral enhanced Polypropylene (PP-MV)
- high degree of ring and longitudinal stiffness
- good sound absorbing characteristics
- high degree of dimensional stability

The smooth inner layer

- constructed of Polypropylene Copolymer (PP-CO)
- no separation of the water column -> low noise development
- signal white for optimum camera inspection
- high discharge rate



Sound measurements for the MASTER 3 system

Sound level L_{IN} of Master 3 in ("basement at rear") according to DIN EN 14366 at the Fraunhofer Institute.

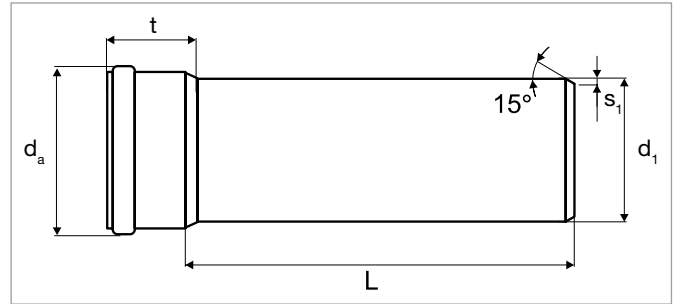
*not comparable with installation at site

MASTER 3 with Bismat 1000 clamps (SL 125/SX 100)*

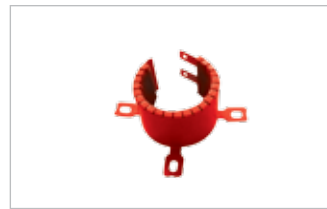
Volumetric flow rate (L/sec)	0,5	1,0	2,0	4,0
Measured value L_{IN} (dB(A))	<10	10	14	18

MASTER 3

PIPES AND FITTINGS ASSORTMENT



DN	d ₁	s ₁	d _a	t	Weight [kg/pcs]						
					[mm]				L 150	L 250	L 500
32	32	1,8	43,0	55	0,04	0,06	0,12	0,22	0,32	0,42	-
40	40	1,8	54,2	55	0,06	0,08	0,15	0,28	0,41	0,54	-
50	50	1,8	64,2	56	0,07	0,10	0,19	0,35	0,51	0,68	-
70	75	2,1	89,4	61	0,13	0,19	0,33	0,63	0,92	1,21	1,59
100	110	3,0	127,8	76	0,29	0,41	0,72	1,34	1,96	2,57	3,57
125	125	3,5	145,5	82	0,40	0,57	0,98	1,81	2,64	3,47	4,54
150	160	4,4	183,9	100	0,69	0,96	1,63	2,96	4,30	5,63	7,37



MASTER 3

SOIL SYSTEMS

O. PP HT SOIL SYSTEM

Soil pipes and fittings are designed to drain water inside the houses and industrial buildings (area using B - inside buildings, and on their outer walls) and a vent pipe soil systems. They are not equipped with UV protection, so it is not consistently used in places with direct sunlight.

The maximum permissible temperature of the medium is transported up to 100 °C.

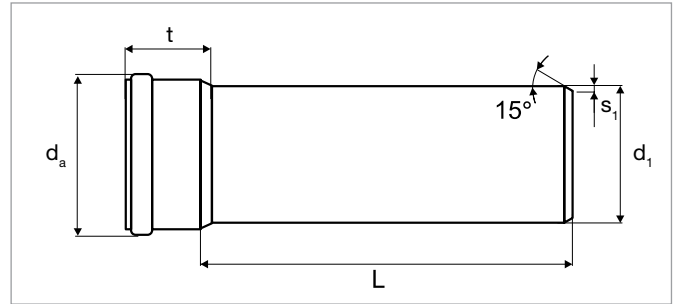
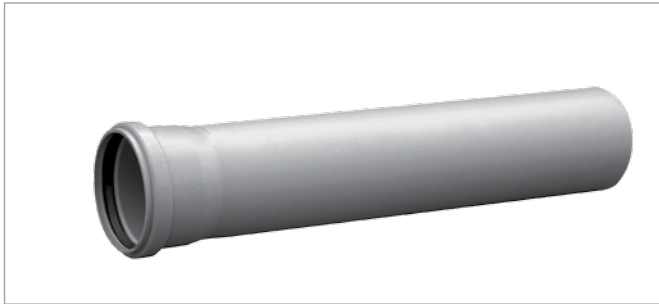
Thanks to the standardized size can be components of the HT without adapters connect not only with the silent soil system Master 3 or pipes from other producers, but also with PVC KG pipes.

- product range available in the diameters from \varnothing 32 to \varnothing 150.
- high resistance to the temperature of waste discharges
- high chemical resistance
- smoothness of walls prevents sedimentation and clogging
- high tightness of socket joints with rubber gaskets
- enhanced safety
- easy and fast installation

The system is manufactured in compliance with EN 1451.



PIPES AND FITTINGS ASSORTMENT



DN	d ₁	s ₁	d _a	t	Weight [kg/pcs]						
					[mm]						
					L 150	L 250	L 500	L 1000	L 1500	L 2000	L 3000
32	32	1,8	43,0	55	0,04	0,05	0,10	0,18	0,26	0,35	0,52
40	40	1,8	54,2	55	0,05	0,07	0,13	0,24	0,35	0,48	0,65
50	50	1,8	64,2	56	0,06	0,09	0,16	0,31	0,44	0,60	0,83
70	75	1,9	89,4	61	0,10	0,15	0,26	0,49	0,71	0,96	1,32
100	110	2,7	127,8	76	0,21	0,31	0,55	1,03	1,46	1,99	2,31
125	125	3,1	154,5	82	0,28	0,41	0,73	1,36	1,92	2,63	3,56
150	160	3,9	183,9	100	0,46	0,66	1,16	2,16	3,10	4,15	5,58



PP HT

SOIL SYSTEMS

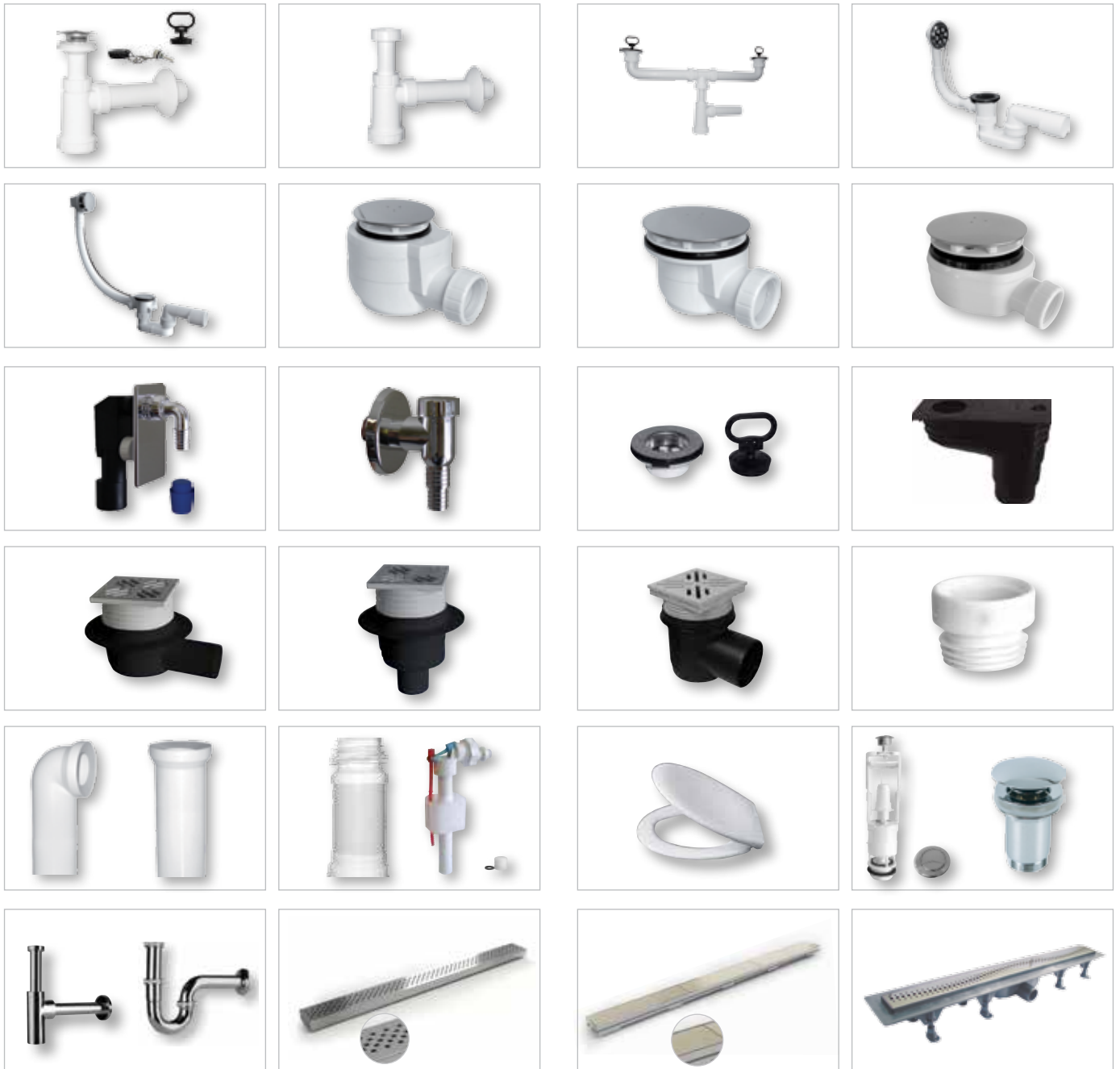
P. SANITARY ACCESSORIES

Another very important part of product portfolio are the accessories for connections of sanitary appliances. This range includes traps for washbasins, sinks, washing machines, shower trays, bathtubs, toilet connectors, flushing and filling valves, floor drains, toilet seats and drain channels etc. All products are made in accordance to European standard norms (EN 274, EN 1251) and are certified for usage by the certification authority.

Wide range of products with fast and easy installation and maintenance satisfy each customer. Craftsmanship, unique solutions and experiences in combination with usage of high quality raw materials offer perfect and faultless products for many years from the Czech producer.



ASSORTMENT



SANITARY ACCESSORIES

Protecting the environment we recommend their material or energy recycling company with appropriate authorization. Our technical advice is based on standards, calculations and past experience. We have a chance to influence the conditions of use of our products, particularly non-standard use or installation, because all data are non-binding. Guarantees are subject to qualitative parameters of our products. In case of damage, our liability applies to goods delivered by us.

We reserve the right to delivery of goods different from the views mentioned in the catalog.

Use our ordering part numbers.

Brochures constantly improving according to the latest state of the art and we reserve the right to change the data.

Actuality specific prospectus therefore to validate www.pipelife.cz by release date.



Pipelife Czech s.r.o.

Kučovany 1778
765 02 Otrokovice
tel.: +420 577 111 213
fax: +420 577 111 227
www.pipelife.cz
pipelifeczech@pipelife.com