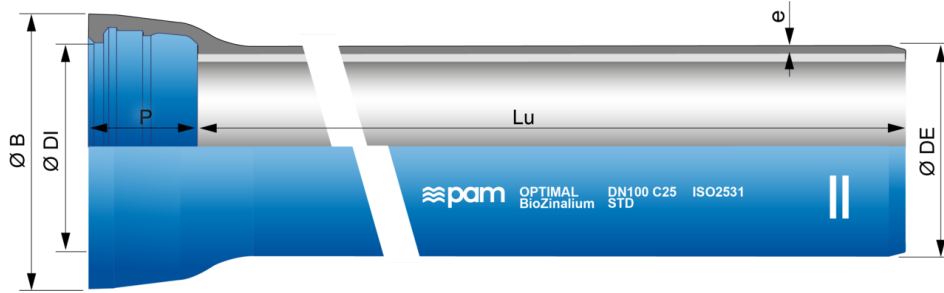


OPTIMAL BioZinalium pipes DN60 to 150 with STANDARD socket



DN	Lu (m)	Class	e (mm)	ØDE (mm)	ØDI (mm)	P (mm)	ØB (mm)	Mass (kg/m)	References
60	6.00	C25	3.9	77	80.3	89.5	122.3	8.41	KSA60H60AQ
80	6.00	C25	3.9	98	101.4	92.5	144.1	10.91	KSA80H60AQ
100	6.00	C25	3.9	118	121.4	94.5	166.9	13.29	KSB10H60AQ
125	6.00	C25	3.9	144	147.4	97.5	193.1	16.39	KSB12H60AQ
150	6.00	C25	4	170	173.4	100.5	220.8	19.85	KSB15H60AQ

Legend:

- DN: nominal diameter
- Lu: laying length, in m
- Class: pressure class according to ISO 2531
- e: nominal thickness according to ISO 2531, in mm
- ØDE: external nominal diameter of the barrel according to ISO 2531, in mm
- ØDI: internal nominal diameter of the socket, in mm
- P: nominal depth of the socket, in mm
- ØB: nominal diameter of the socket, in mm
- Mass: total mass per metre (including cement lining and socket), determined with the nominal thickness, in kg/m
- Reference: commercial reference Saint-Gobain PAM

Field of use:

- For drinking water supply systems and other networks (except waste water)
- Consult for other linings and joint options available

Main characteristics:

- Pressure class in conformity with Standard ISO 2531-2009
- External BioZinalium[®] coating:
 - a layer of zinc-aluminium 85/15 alloy, enriched with copper, with a minimum surface density of 400g/m², applied by spraying molten metal onto the surface of the iron, using an electric arc spray gun, from ZnAl (Cu) alloy wire
 - a protective layer of Aquacoat (semi-permeable), a water-based blue acrylic of average thickness 80 microns applied using a spray gun (RAL 5005)
- Internal lining: sulfate resisting blast furnace cement mortar
- Standard joint in alimentary elastomer EPDM (ACS, KTW, WRAS,...)
- Vi anchoring without bolts

Type of soils:

BioZinalium[®] coating can be in contact with all type of soil, as defined in Annex D.2.2 of EN545:2010, except:

- peaty and acid soils
- soils containing wastes, scraps, ashes, slags or soils contaminated by industrial effluents or other wastes
- soils located under the level of the marine water table with a resistivity lower than 500 Ω cm

In such soils, and also in the event of stray currents, it is recommended to use other types of external coatings for more aggressive soils (TT PE or TT PUX ranges).

Type of water:

PAM-OPTIMAL C25 ductile iron pipes with blast furnace cement mortar linings (BFCML) can convey all types of drinking water in accordance with Directive (EU) 2020/2184.

The limits for the use of BFCML are shown in the table below :

	Minimum value	Maximum value			
Parameter	pH	CO2 aggressive	Sulphate	Magnesium	Ammonium
Unit	-	mg/l	mg/l	mg/l	mg/l
Value	5,5	15	3000	500	30

Blast furnace cement mortar is a sulphate resisting cement (SRC).

Special cases : The European Directive (EU) 2020/2184 on water intended for human consumption sets the water quality criteria. If, however, the water transported is aggressive or corrosive and if its residence time in the network is abnormally long (more than several days), or whether their chemical composition must not vary during transit through pipes (mineral water), the PAM-OPTIMAL range with Ductan[®] coating (DN80-150) should be used.

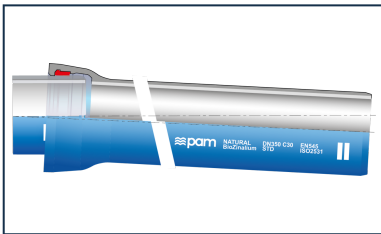
Environmental benefits:

The BAT production process, the use of recycled raw materials and the optimization of the thickness allow for a very strong reduction in emissions in manufacturing. The use of cupola and electric ovens (from 2025) will further reduce emission.

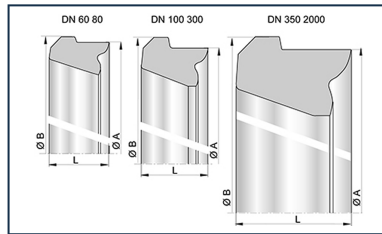
PAM-OPTIMAL C25 can also benefit from the "Blueway" low-emission transport service. The life cycle analysis, taking into account durability, safety, resistance to deformation, minimisation of incidents and its external impacts on other infrastructures, makes it possible to demonstrate the contribution of the Optimal C25 to the reduction of emissions also in service.

PAM-OPTIMAL C25 offers safety against various effects of climate change thanks to mechanical properties, jointing design, fire resistance and the ability to withstand pressure variations. For example, in the face of the consequences of extremely dry periods and torrential rains, expansive clays, fires and increased demand for water.

Linked products



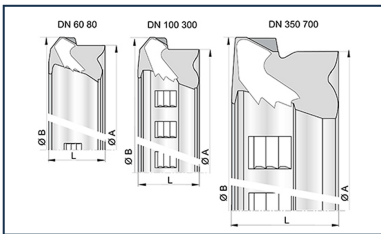
Kit Standard Pipe +
Standard Gasket



Standard gasket for Pipes
and Fittings DN60-2000



Kit Standard Pipe +
Standard Vi Gasket



STD Vi gasket for Pipes
and Fittings DN60-700



Lubricating paste -
BLUPAM

The information on this sketch is, to the best of our knowledge correct at the time of printing. However Saint-Gobain are constantly looking at ways of improving their products and services therefore reserve the right to change without prior notice, any of the data shown. Any orders placed will be subject to our Standard Conditions of Sale, available on request.