# Pipe Systems safeguarding future Generations

**Product Range** 





# egeplast - Pipe Systems safeguarding future Generations

egeplast is a highly innovative manufacturer of plastic piping systems and has been setting the standards for decades. Customers in over 30 countries rely fully on quality products and consulting solutions from egeplast. Our customers include some of the largest and most demanding utility companies and grid operators worldwide.





Head Office and production location is Greven/Germany



Dr.-Ing. Thorsten Späth, Head of Product Management, and Dr.-Ing. Michael Stranz, Head of New Product Development



The product range offers a solution for almost every challenge of our customers. The focus is mainly on intelligent piping systems for modern trenchless installation and rehabilitation techniques. The products provide our customers with maximum investment security. egeplast piping systems are future-proof.

Research and development have a tradition at egeplast. Thus, the company is renowned as an innovation hub for multi-layer pipes. The technological leadership covers more than 60 patents for products and manufacturing processes. Worldwide leading machinery manufacturers for plastics, like Krauss Maffei Berstorff and Battenfeld Cincinnati rank among the licence holders of egeplast.

Founded in 1908 by Engelbert Gröter, egeplast is still family-owned in the fourth generation and managed by its owners. The initials of the founder can be found in the company name. Highly qualified and motivated employees are devoted to our customers on a daily basis.

Head office and production location is Greven/Germany. This is where egeplast operates the most modern factory for polymer piping systems in Europe. We develop tailor-made solutions with our customers in a separate technology center.

We would like to invite you find out more about our Company and look forward to meeting you.

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#### **Applications**













Power



Telecommunication

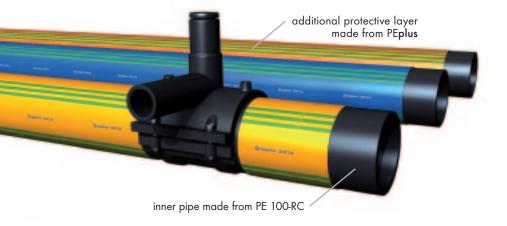


for the Rehabilitation of Pipelines

Gas

# **SLM® 3.0**

# **Protective Piping System for damage-free Installation**

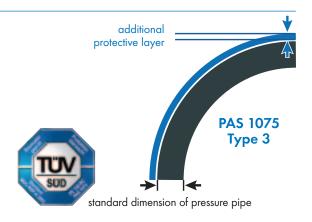


# Brief Description

SLM® 3.0 piping system is a patented, multi-layered protective piping system of the latest generation. When installed by means of alternative installation techniques, the protective pipe ensures the grid operator longevity and efficiency. Engineering offices and contractors verify flawless planning with this piping system.

#### Product Benefits | Product Structure

- The additional protective layer (wearing surface) enables damage-free installation of the new pressure pipe.
- Welding according to DVS standards: butt welding without cut-back is possible, tapping on undamaged pressure pipe
- Trenchless installation techniques are possible without shortening the durability due to damages or reduction of the safety factor.
- One piping system for all installation techniques (open trench and trenchless installation)



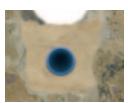
#### Installation Options



black-box installations such as horizontal directional drilling, burstlining, relining and soil displacement



open trench installation without sandbed, ploughing and milling



open trench installation in sandbed

# System Technology | Moulded Parts according to Pressure

flange connections



reducers electrofusion

fittings

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.

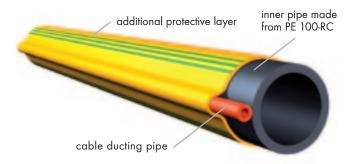


Contact us!

tapping fittings

Application	House connection pipes   supply and sewage pipes   transport pipes   industrial piping systems
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 25 - 1,600 mm
Medium	Potable water   gas   wastewater   industrial media
Material	Core pipe, calibrated and signed, of PE 100-RC (resistance to crack) Protective layer of modified Polyethylene PE <b>plus</b>
SDR	SDR 17.6 - SDR 7.4 (others on request)
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 8074/75; EN 12201; EN 1555; DVGW GW 335-A2; PAS 1075
Product limitations	Pressure up to PN 16 for water and PN 10 for gas; For operating pressures beyond that see HexelOne® SLM

# Variants



#### SLM® KKS

The SLM® KKS pipe is a pressure pipe of PE 100-RC with additional protective layer and integrated cable conduit between inner pipe and protective layer. It allows a cable to be pulled through as an electrical conductor to bridge the cathode current. In this way pipes with cathodic protection can be reconstructed trenchlessly, without having to separate the remainder of the older pipes from cathodic corrosion protection.

# Forms of Delivery



Coil



Drum Large drum on request



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



SLM® 3.0 Brochure



SLM® 3.0 Installation Guidelines



Welding Tables



**Project Reports** 



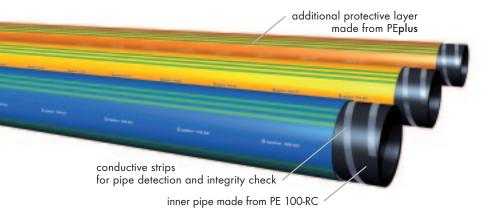
Price Lists



Guidelines for Decision-makers

# **SLM® DCT**

# Piping System with integrated Quality Test for trenchless Installation

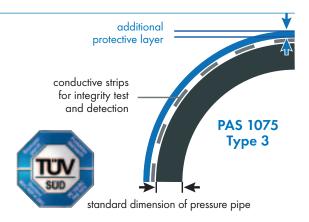


# Brief Description

SLM® DCT is a piping system of PE 100-RC with additional protective layer and integrated conductive strips. These enable testing of the piping system for integrity directly after installation and a localization of a possible damage. In addition, they offer the possibility of permanent detection of the installed pipe system.

#### Product Benefits | Product Structure

- Integrity test of the piping systems for acceptance of the construction work
- Increased safety during operation
- Permanent detection
- Trenchless installation techniques are possible without shortening the lifetime through damage or reduction of the safety factor.



## Installation Options



integrity test after trenchless installation as well as the possibility of permanent detection



black-box installations such as horizontal directional drilling, burstlining, relining and soil displacement

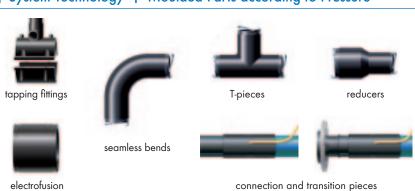


without sandbed, ploughing and milling



open trench installation in

# System Technology | Moulded Parts according to Pressure



connection and transition pieces

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.

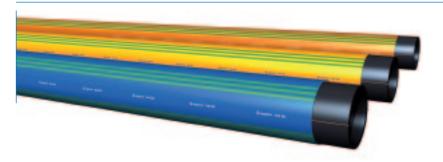


Contact us!

fittings

Application	House connection pipes   supply and sewage pipes   transport pipes   industrial piping systems
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 25 - 1,600 mm
Medium	Potable water   gas   wastewater   industrial media
Material	Core pipe, calibrated and signed, of PE 100-RC (resistance to crack) Protective layer of modified Polyethylene PE <b>plus</b>
SDR	SDR 17.6 - SDR 7.4 (others on request)
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 8074/75; EN 12201; EN 1555; DVGW GW 335-A2; PAS 1075
Product limitations	Pressure up to PN 16 for water and PN 10 for gas; For operating pressures beyond that see HexelOne® DCT

# Variants



# SLM® OD

egeplast manufactures order-related protective-layer pipes with integrated detection wire.

# Forms of Delivery



Coil



Drum Large drum on request



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



SLM® DCT Installation Guidelines



Project Reports



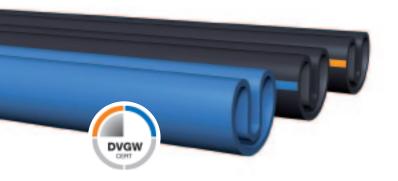
Price Lists



Guidelines for Decision-makers

# egeLiner®

# Factory-folded PE Pipes for Close-fit-lining



# **Brief Description**

egeLiner® is a polyethylene pipe for limited spaces at the jobsite. It is deformed and folded by means of a special thermomechanical treatment during manufacture. Long lengths, even with larger dimensions, can be wound on to drums due to the reduced cross-section. For the redeformation process, the egeLiner® is warmed up with steam after installation. The memory effect activated in this way causes the PE pipe to regain its original round form. The new pipe now lies as a static independent pipe, close-fit against the old pipe.

#### Product Benefits | Product Structure

- Minimum space requirement for the job site
- Little interference in road traffic (traffic can flow almost unobstructed)
- Lower excavation costs due to pulling the pipe in via excavation pits or existing shafts
- Statically sustainable piping system
- Obtains hydraulic capacity by means of very little loss of cross-section and reduction of the wall surface roughness
- DVGW certified





prior to steaming

after steaming

#### Installation Options



close-fit lining

# System Technology | Moulded Parts according to Pressure



reducers

flange connections

electrofusion fittings egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

tapping fittings

Application	Rehabilitation of pressure pipes
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 100 - 450 mm
Medium	Potable water   gas   wastewater   industrial media
Material	PE 100, PE 100-RC (resistance to crack)
SDR	SDR 26   SDR 17.6   SDR 17
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	Following DVGW GW 335-A2; INSTA SBC EN ISO 11298 (Nordic Polymark)   EN ISO 11297   EN ISO 11298   EN ISO 11299
Product limitations	Pressure up to PN 10 for water

# Variants



# egeLiner® High-T

egeplast offers, in particular for industrial applications or the use as protective pipe system for high and extra high voltage cables, the egeLiner® High-T for higher media temperatures. Specially developed PE materials enable permanent operation at temperatures of up to 70°C.

# Forms of Delivery



- Special drum
- Length according to dimension



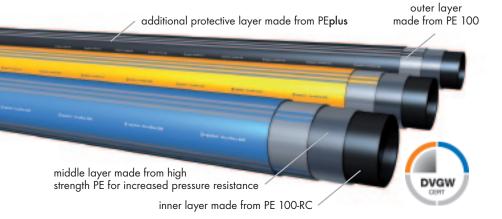


egeLiner® Brochure

**Project Reports** 

# HexelOne® SLM

# **High Pressure PE Piping System**

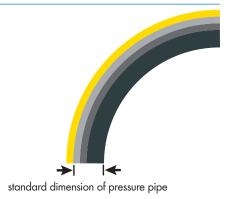


# **Brief Description**

egeplast HexelOne® SLM pipe is a self-reinforced high pressure pipe, a monocomposite only from polyethylene. This reinforcement enables new areas of application in the "raised pressure" area, in other words, operating pressures above applications previously covered using PE pipes. The reason: It indicates twice as high a strength compared to the previous PE pipes.

# Product Benefits | Product Structure

- Permissible operating pressures of 30 bar for water and 16 bar for gas
- Can also be installed trenchless due to protective layer and inner layer of PE 100-RC
- Less connections due to delivery lenghts up to 145 m
- Combination of weldings according to DVS: butt welding and electrofusion welding
- 100% recyclable
- DVGW certified



## Installation Options

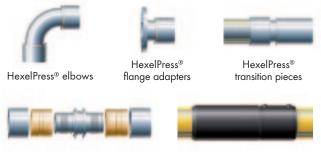


black-box installation like horizontal directional drilling



open trench installation without sandbed, ploughing and milling

# System Technology | Moulded Parts according to Pressure



HexelPress® couplings

electrofusion couplers

For your project egeplast offers a range of HexelPress® fittings for installation on site by means of a hydraulic press-

ing tool as well as a range of HexelPress® fittings pre-fitted with a HexelOne® pipe spigot for jointing by means of a combination welding on site. Fittings are made of steel (suitable for gas application) respectively stainless steel (suitable for water and gas application). Contact us!

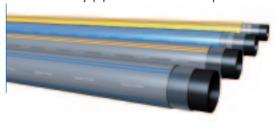


Application	Supply and sewage pipes   transport pipes   industrial piping systems
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 90 - 160 mm (further dimensions up to 630 mm on request)
Medium	Potable water   gas   wastewater   industrial media
Material	Inner layer PE 100-RC (resistance to crack)   PE 100
SDR	SDR 11
Connection technology	Combination of butt welding and electrofusion   mechanical joints
Approvals/Standards	DVGW Certification (Potable water: d 90 mm to d 125 mm for the pressure range 30 bar   Gas: d 90 mm to d 160 mm for the pressure range 16 bar); DIN 8074; EN 12201; EN 1555; PAS 1075
Product limitations	OD 160 mm (for water) only up to 25 bar

#### Variants

# HexelOne®

As an alternative HexelOne® pipes are also available without protective layer for open trench installation in sandbeds. Designs with metallic layers, such as DCT-, SLA®- or 3L safety pipe versions are also possible.



# HexelOne® XXXL

for dimensions > 630 mm



# Forms of Delivery



Coil



Drum



- Straight lengths (12 m)
- Special lengths on request
- Prefabrication
- Telescoping for shipment in containers



HexelOne® Product Range



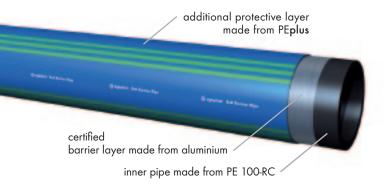
HexelOne® Installation Guidelines



Project Reports

# **SLA® Barrier Pipe**

# Impermeable to protect Potable Water and the Environment

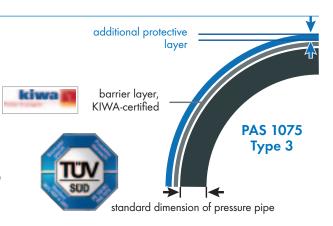


# Brief Description

The SLA® Barrier Pipe system reliably prevents the permeation of pollutants. The metallic permeation barrier enables permanent protection of sensitive media and the environment. In addition the electrical properties also provide the possibility of detecting the pipe and an integrity check after installation.

#### Product Benefits | Product Structure

- Impermeable piping system, approved for installation in contaminated soils and soils susceptible to contamination (KIWA-certified)
- Installation of potable water and wastewater systems possible in one single route with reduced installation clearance between them
- The special additional protective layer ensures installation of the pressure pipe without any damages in trenchless pipe-laying.
- Integrity testing of the piping system for acceptance of the construction work



# Installation Options



permeation protection; even of trenchless installed pipes



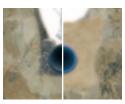
laying of pipe bundles with wastewater and potable water in one single route



integrity test after trenchless installation as well as the possibility of permanent detection



black-box installations such as horizontal directional drilling, burstlining, relining and soil displacement



open trench installation without sandbed, ploughing and milling | open trench installation in sandbed

#### System Technology | Moulded Parts according to Pressure



egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	House connection pipes   supply and sewage pipes   transport pipes   industrial piping systems
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 25 - 630 mm
Medium	Potable water   gas   wastewater   industrial media
Material	Core pipe, calibrated and signed, of PE 100-RC (resistance to crack) Protective layer of modified Polyethylene PE <b>plus</b>
SDR	SDR 17.6 - SDR 7.4 (others on request)
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 8074/75; EN 12201; EN 1555; DVGW GW 335-A2; PAS 1075; KIWA BRL-K17101
Product limitations	Pressure up to PN 16 for water; For operating pressures beyond that see HexelOne® SLA

#### Variants

The SLA® Barrier Pipe system can be tailor-made for different applications by intelligent multilayer design or by various material combinations.

gas and wastewater pipes



industrial pipes with pressure-bearing inner pipe of PP-R



industrial pipes with media-resistant pressure pipe and barrier layer



# Forms of Delivery







Drum
Large drum on request



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



SLA® Barrier Pipe Brochure



SLA® Barrier Pipe Installation Guidelines



Project Reports



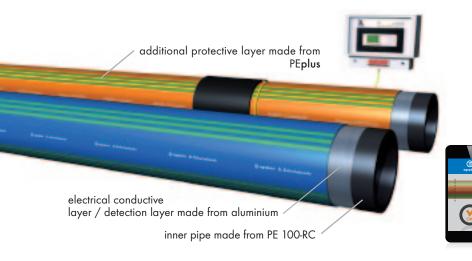
Price Lists



Guidelines for Decision-makers

# 3L Leak Control

# Permanently monitored Piping System that finds and reports Damages

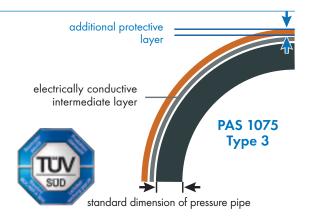


# Brief Description

The 3L Leak Control system provides a 100% leakage monitoring for soil and water protection. A monitoring unit conntected to the pipe emits an alarm even by the smallest damage to the pipe. Messages will be sent directly to the control centre or to the smartphone. It can automatically switch off connected pump systems, thus preventing disasters reliably and at an early stage.

#### Product Benefits | Product Structure

- Permanent monitoring of the pipeline, exact detection of leakages
- Cost-saving compared to conventional double containment systems
- A piping system for open construction and trenchless installation (both for new constructions and rehabilitations)
- Safe welding connections according to DVS 2207
- Fulfils the requirements of continuous leakage monitoring according to ATV-DVWK-A 142 for use in potable water protection zone II with high risk potential



#### Installation Options



permanent leakage monitoring and damage detection



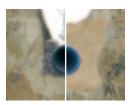
permeation protection; even of trenchless installed pipes



integrity test after trenchless installation as well as the possibility of permanent detection



black-box installations such as horizontal directional drilling, burstlining, relining and soil displacement



open trench installation without sandbed, ploughing and milling | open trench installation in sandbed

# System Technology | Moulded Parts according to Pressure



connection and transition pieces

egeplast offers complete piping systems: pipes for every application as well

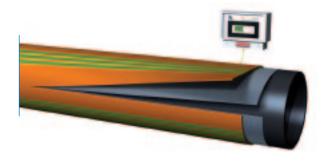
as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	Industrial applications   wastewater pressure and gravity pipes   house connection and transport pipes
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 25 - 1,600 mm
Medium	Potable water   wastewater   industrial media
Material	Core pipe, calibrated and signed, of PE 100-RC (resistance to crack) Protective layer of modified Polyethylene PE <b>plus</b>
SDR	SDR 17.6 - SDR 7.4 (others on request)
Connection technology	Butt welding   electrofusion
Approvals/Standards	DIN 8074/75; EN 12201; EN 1555; DVGW GW 335-A2; PAS 1075; TÜV Süd: MUC-KSP-A3014
Product limitations	Pressure up to PN 16 for water; For operating pressures beyond that see HexelOne® 3L

# Variants



# Flexible choice of material for special requirements

Requirements vary significantly in particular for industrial applications. For higher requirements on temperature, pressure and media resistance, we provide individual solutions by offering other high-performance plastic material, e.g. PP-R or PA for the core pipe.

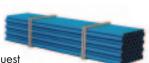
# Forms of Delivery



Coil



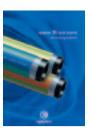
Drum
Large drum on request



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



3L Leak Control Brochure



3L Leak Control Installation Guidelines



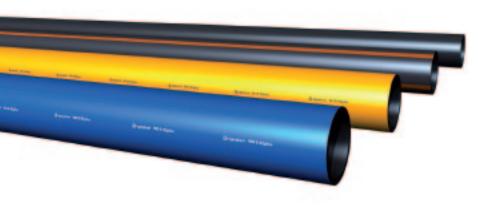
Project Reports



Guidelines for Decision-makers

# 90 10<sup>®</sup> RCplus

# Economical because of abstaining from the use of Sandbeds

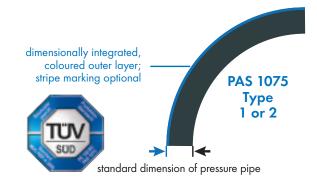


# Brief Description

90 10® RCplus is a piping system of PE 100-RC with stripes or with an outer layer, dimensionally integrated and coloured, to identify the medium. Due to the high resistance of the PE 100-RC-material to stress cracks, a protective pipe bed zone of sand can be avoided without any loss of safety or durability. The 90 10® RCplus is suitable for open trench installation with and without sandbed as well as installation by ploughing and milling.

#### Product Benefits | Product Structure

- High safety during operation due to the application of materials that are resistant to point loads
- Reduction of excavation costs as opposed to sandbeds by re-using the excavated soil
- Conservation of resources by reduced earth movement, elimination of disposal of spoils
- Shorter construction times, less emissions



# Installation Options

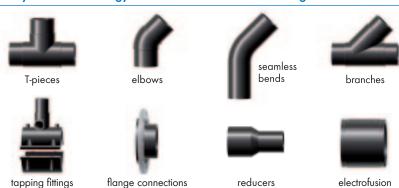


open trench installation without sandbed, ploughing and milling



open trench installation in sandbed

# System Technology | Moulded Parts according to Pressure



flange connections

Contact us!

fittings

requirements.

special installation applications or functional

egeplast offers complete piping systems: pipes for every application as well as harmonised components and solutions for



Application	House connection pipes   supply and sewage pipes   transport pipes   industrial piping systems
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 25 - 1,600 mm (from OD 630 mm only with stripe marking)
Medium	Potable water   gas   wastewater   industrial media
Material	PE 100-RC (resistance to crack)
SDR	SDR 17.6 - SDR 7.4 (others on request)
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 8074/75; EN 12201; EN 1555; DVGW GW 335-A2; PAS 1075
Product limitations	Pressure up to PN 16 for water and PN 10 for gas; for operating pressures beyond that see HexelOne®; no trenchless installation: see SLM® 3.0

# Variants



# Individual Labelling

The egeplast 90 10® RC<sup>plus</sup> has a coloured outer layer that is dimensionally integrated. Other areas of applications, e.g. fire extinguishing pipes, can also be distinctly colour-coded. From OD 630 mm egeplast can provide colour-coded stripe marking according to specification.

# Forms of Delivery



Coil



Drum Large drum on request



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



9010® RC<sup>plus</sup> Installation Guidelines



**Project Reports** 



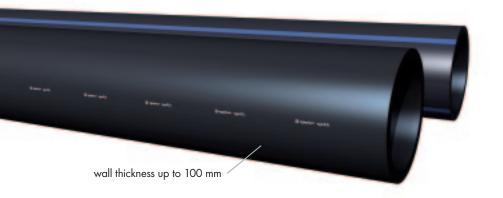
Price Lists



Guidelines for Decision-makers

# egeXXL

# Large Piping System up to 1,600 mm

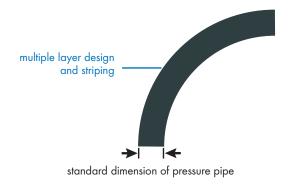


# Brief Description

Even the larger dimensions of PE pipes provide benefits, e.g. reliable welded connections. An extensive range of moulded parts made from PE 100 allows construction of transport pipelines with homogeneous materials.

# Product Benefits | Product Structure

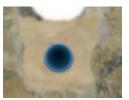
- A piping system made from homogenous materials, that includes the pipe, bends, flanges and jointing technology designed for their application
- A piping system for installation of new pipes and rehabilitation, for open trench and trenchless installation
- Colour-coded stripes possible for labelling the media



# Installation Options



PE reduction technique

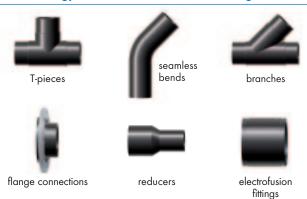


open trench installation in sandbed



sea installation

# System Technology | Moulded Parts according to Pressure



egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	Transport supply pipes   wastewater   coolant lines   pipes for industrial media
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 450 - 1,600 mm
Medium	Potable water   gas   wastewater   industrial media
Material	PE 100, PE 100-RC (resistance to crack)
SDR	SDR 33 - SDR 11 (others on request)
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 8074/75; EN 12201; EN 1555
Product limitations	Pressure up to PN 16 for water up to OD 1,200 mm

#### Variants



# egeXXL - Multilayer Variants

We offer large pipes with an OD of up to 1,600 mm for trenchless installation or with electrically conductive layers as the DCT Version or 3L safety piping system.

For higher demands we provide egeXXL-pipes of other materials, e.g Polypropylene.

# Forms of Delivery



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication





Project Reports

Price Lists

# **egeMDR**

# **Axially force locked Spigot and Socket PE Pipe System**



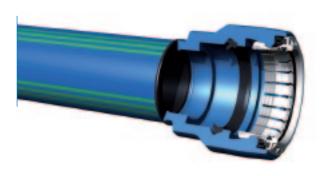
# Brief Description

egeMDR is a pressure piping system of polyethylene with an axially force locked spigot.

It offers short installation and processing times at full pressure resistance. In addition, installation can take place independent of temperature and weather.

# Product Benefits | Product Structure

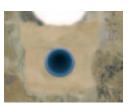
- No welder training necessary
- Short installation and processing times
- Axially force locking, no need for thrust blocks
- Installation with residual water in the pipe possible



# Installation Options



open trench installation without sandbed



open trench installation in sandbed

# System Technology | Moulded Parts according to Pressure



bends with socket



T-pieces with socket



flanged sockets



double couplers and repair couplers

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	Supply pipes   transport pipes
Target groups	Utility companies   industrial companies   construction companies
Dimension	OD 90 - 450 mm
Medium	Potable water
Material	PE 100-RC (resistance to crack)
SDR	SDR 17 / SDR 11
Connection technology	Axially force locked spigot and socket system
Approvals/Standards	Pipe DVGW-certified / socket DVGW-certified; DIN 8074/75; DIN EN 12201; DVGW GW 335 A2 / B3
Product limitations	Currently only approved for liquid media

#### Variants



# Customised spigot and socket system

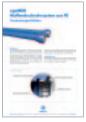
The egeMDR is also available with protective layer as well as for other areas of applications, e.g. sewage.

You will find either slotted or perforated variants under the title "Pressureless Piping Systems - egeDrain".

# Forms of Delivery



- Straight lengths (6, 12 or 20 m),
   Special lengths up to 30 m
- Pipe lengths prepared and chamfered in the area of the spigot end (in factory)



egeMDR Processing Guidelines



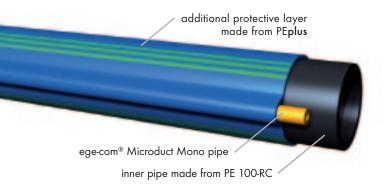
Project Reports



Price Lists

# egeHome

# Trenchless House Connection System for the digital Age

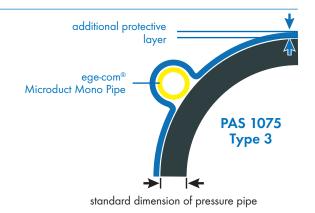


# **Brief Description**

egeHome enables simultaneous installation of a house connection (gas/water) and an empty conduit for fibre optic cables. It is a combination of a pressure pipe of PE 100-RC with additional protective layer and an egecom® Microduct Mono cable ducting pipe. It enables an economically viable connection of buildings to utility and fibre optic networks, even in trenchless installations. Subsequent excavations in the area of the property for connection to the high-speed internet are not necessary.

#### Product Benefits | Product Structure

- Reduced excavation costs due to multi-functional solution
- Mechanically protected pipe bundle with an increased protective effect, can be laid without additional protective pipe (direct buried)
- Trenchless installation / open trench installation possible without sandbed
- Possibility to equip subsequently with fibre optic cables



## Installation Options



black-box installation like soil displacement



open trench installation without sandbed



open trench installation in sandbed

# System Technology



straight connectors end caps



gas block connectors

egeplast offers complete piping systems: pipes for every application as well

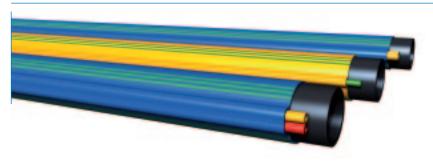
as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	House connection pipes
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 32 - 50 mm, ege-com® Microduct: 7 x 1.5 mm (others on request)
Medium	Potable water   gas
Material	Pressure pipe: calibrated and signed, of PE 100-RC (resistance to crack)   ege-com® Microduct Mono pipe: calibrated and signed, of PE-HD, with low friction, grooved inner surface
SDR	SDR 11
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 8074/75; EN 12201; EN 1555; DVGW GW 335-A2
Product limitations	Max. dimension OD 50 mm

# Variants



# Customised Multi-functional Systems

We also offer the egeHome with several Microduct pipes in additional dimensions.

# Forms of Delivery



The standard coil length is 100 m. Variants of 50 m or fixed lengths are also available.



egeHome Flyer

# egeIndustry

# Pressure Piping Systems of PE 100 / PE 100-RC

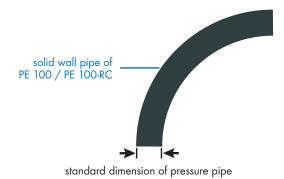


# Brief Description

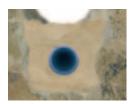
The egeIndustry pressure piping system of PE 100 / PE 100-RC offers the entire range for industrial pipeline construction. Apart from the delivery of the piping system, egeplast also offers the service of prefabrication of weld constructions at the factory as well as the manufacture of special components according to customer specifications.

#### Product Benefits | Product Structure

- Pipe and moulded parts of corrosion-resistant polyethylene
- Individual solutions according to customer requirements
- Prefabrication possible
- Possibility of customizations
- Low weight



# Installation Options



open trench installation in sandbed



aboveground installation - suspension -



aboveground installation - terrain -



inhouse installations

# System Technology | Moulded Parts according to Pressure



egeplast offers complete piping systems: pipes made from PE 100 and PE 100-RC for every application as well as harmonised com

as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

fittings

Application	Supply pipes   sewage pipelines   transport pipes   Industrial piping systems
Target groups	Industrial companies   construction companies
Dimension	OD 32 - 1,600 mm
Medium	Process water   wastewater   compressed air   gases
Material	PE 100, PE 100-RC (resistance to crack)
SDR	SDR 17 - SDR 11
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 8074/75, EN 12201
Product limitations	Pressure up to PN 16 for water and PN 10 for gas   temperature service limit: according to application at approximately 40°C

#### Variants



# Layer Structure 90 10 and Protective Layer SLM®

As an alternative to the black solid wall pipe, a pipe structure with integrated, coloured outer layer is also available. Other areas of application can also be clearly labeled accordingly, e.g. fire-extinguishing pipes. In addition, egeplast offers colour-coded stripe marking according to specification. Variants of protective layers for installation in difficult terrain are also possible.

# Forms of Delivery



Coil



Drum Large drum on request



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



Technical Basis Polyethylene



Project Reports

# egeSlurry®

# Piping System for abrasive Media

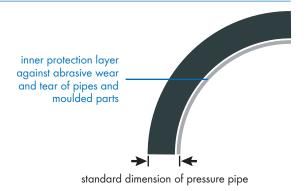


# **Brief Description**

egeSlurry® piping system is designed for the hydraulic and pneumatic transport of abrasive transport material. egeSlurry® pressure pipes ensure the best possible durability and efficiency for industrial applications through modern multi-layered pipe constructions with specially selected inner layers. In addition, the flexible, ductile and corrosion-resistant pipe materials can be installed cost-effectively.

#### Product Benefits | Product Structure

- Increased durability of the transport pipeline through integrated wear and tear protection
- Longer maintenance intervals, reduced costs and prevention of down times
- Installation with established jointing techniques, like welding or use of flange connections
- Fully integrated system with moulded parts, which are also protected against wear and tear
- Prefabricated piping system solution for challenging industrial applications



# Installation Options



open trench installation in sandbed



aboveground installation - conveyor pipes -



aboveground installation - terrain -



sea installation

# System Technology | Moulded Parts according to Pressure



seamless bends



flange connections



segmented bends

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	Industrial transport pipes for hydraulically and pneumatically conveyed solids and suspensions
Target groups	Industrial companies: sanddredging, building materials industry (cement, limestone, etc.), mining and tunnel construction, salt mining (brine pipelines), fodder industry   construction companies
Dimension	OD 160 - 630 mm
Medium	Abrasive wastewater and industrial media
Material	Pressure pipe: polyethylene and polypropylene optimised against abrasive wear and tear. Abrasion-resistant inner layer: polyolefin optimised according to application
SDR	SDR 17 - SDR 7.4
Connection technology	Butt welding   electrofusion   flange connections and other mechanical joints
Approvals/Standards	Dimensions according to DIN EN 12201
Product limitations	Pressure up to PN 10; operating pressures beyond that on request

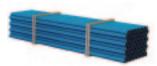
# Variants



# egeSlurry® – also as variant for higher operating temperatures or lightning conductor

egeSlurry® is also available with additional protective layer (SLM®). Conductive layers can be integrated against static charge, e.g. during transport of dry dust (see egeStatic on the next page). You will find additional options on the page "customized piping systems".

# Forms of Delivery



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



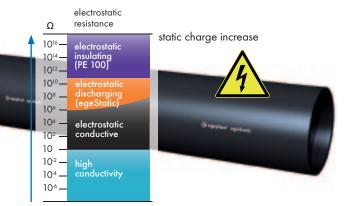


Technical Basis Polyethylene

egeSlurry® Flyer

# **egeStatic**

# Piping System to divert electrostatic Charges

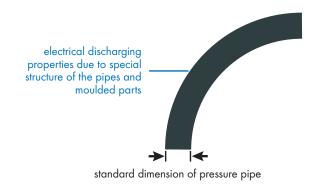


# **Brief Description**

egeStatic is an electric conductive piping system. Many industrial applications require the transport of dry gases, powdery substances and inflammable media. In such potentially explosive atmospheres, electrostatic charge of pipes, vessels and system components must be particularly prevented by taking the appropriate protective measures for the safety of mankind and the environment.

#### Product Benefits | Product Structure

- Pressure-tight up to 10 bar
- Individual solutions according to customer requirement
- Prefabrication possible
- Possibility of customizations
- Low weight
- No corrosion tendency



## Installation Options



aboveground installation - suspension -



aboveground installation - conveyor pipes -



aboveground installation - terrain -



inhouse installations

# System Technology | Moulded Parts according to Pressure



seamless bends



flange connections



segmented bends

egeplast offers complete piping systems: pipes for every application as well

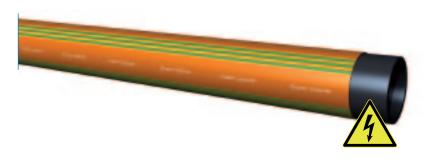
as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	Industrial transport pipes for hydraulically and pneumatically conveyed media
Target groups	Industral companies: cement plants, mining and tunnel construction, chemical Industry, fodder industry, electroindustry, automobile industry   construction companies
Dimension	OD 160 - 630 mm
Medium	Dry gases   dust or powder   inflammable liquids
Material	Based on polyethlene
SDR	SDR 17 - SDR 7.4
Connection technology	Butt welding   electrofusion   flange connections and other mechanical joints
Approvals/Standards	Dimensions according to DIN EN 12201
Product limitations	Pressure up to PN 10; operating pressures beyond that on request

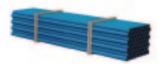
# Variants



# egeStatic with protective layer (SLM®)

egeStatic is also available with a protective layer for alternative installation techniques.

# Forms of Delivery



Straight lengths (6, 12 or 20 m),
 Special lengths on request



Technical Basis Polyethylene

# egeTherm High-T

# System for increased Media Temperatures up to 95°C

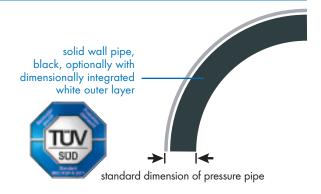


# Brief Description

The egeTherm High-T piping system can transport media up to a temperature of constant +70°C safe and with an operating period of 50 years. It is a piping system of the most current material generation for applications with increased media temperatures.

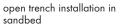
#### Product Benefits | Product Structure

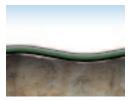
- Area of application with a higher temperature, also brief warming up to 95°C, e.g. when flushing a line, possible
- Reduction of an additional warming-up by solar radiation by means of a white outer layer possible
- UV-stabilised outer surface possible
- Can be welded according to DVS 2207-1
- High flexibility and ductility



# Installation Options



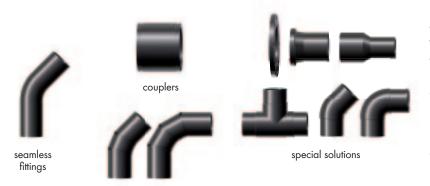




aboveground installation - terrain -

# System Technology | Moulded Parts according to Pressure

fittings



Contact us!

egeplast offers complete piping systems: pipes for every application as well as harmonised compo-

as harmonised components and solutions for special installation applications or functional requirements.



Application	House connection pipes   transport pipes   industrial piping systems
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 20 - 630 mm
Medium	Process water   wastewater   brine   watery mixtures of substances
Material	Temperature-resistant PE-HD materials
SDR	SDR 33 - SDR 7.4
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	TÜV Süd: MUC-KSP-A3017; DIN 8074, DIN EN 12201-2, ISO 24033, DIN EN ISO 22391-2
Product limitations	Pressure up to PN 16 at 20°C; inner pressure compressive strength depends on the intended service life and the media temperature

#### Variants



# egeTherm High-T with protective layer (SLM®)

egeTherm High-T is also available with protective layer for alternative installation techniques. Additional performance options, like integrated quality test and pipe detection after installation are also available.

# Forms of Delivery









- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers





egeTherm High-T Brochure

Price Lists

# **Customized Solutions**

# Tailor-made Piping Systems - Individually adjusted to the Application

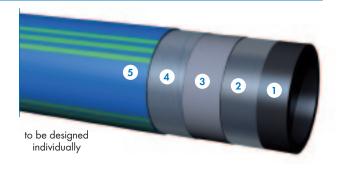


# **Brief Description**

The applications in industry are diverse and make different demands on a piping system depending on the field of activity. Abrasion-resistance, chemical resistance, protection from static charge, the desire for permanent monitoring of the systems or increased pressure resistance: The characteristics of egeplast pipes for the industry can be individually combined for the respective intended purpose. For complete industrial piping systems, pipelines and suitable moulded parts, such as bends, T-pieces etc. are available at egeplast.

# Product Benefits | Product Structure

- Combination of proven system functions available
- Can be welded
- High durability
- High flexibility and ductility
- High chemical resistance



# Installation Options



black-box installations such as horizontal directional drilling, burstlining, relining and soil displacement



open trench installation in sandbed



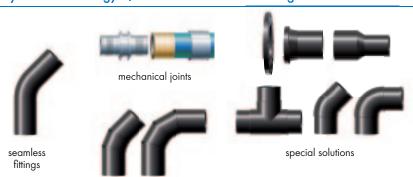
aboveground installation - terrain -



inhouse installations

The Installation options depend on the selected pipe system.

# System Technology | Moulded Parts according to Pressure



egeplast offers complete piping systems: pipes for every application as well as harmonised components and solutions for special installation applications or functional requirements.

Contact us!



#### **Media Pipe**

The media pipe is adjusted to the application. It can be provided with abrasion-resistant inner layers, on request made of special, temperature-resistant PE for the transmission of hot media until max. 95°C (egeTherm High-T) or for protection of static charge (egeStatic).

# Choice of materials for the media pipe

PE 100 PE 100-RC PP PP-HM PP-R Polyamide HexelOne® Inner layers

- A For applications in the high pressure area operating pressures up to 32 bar can be realised on the basis of a HexelOne® high pressure pipe.
- Chemically resistant inner layers are possible for transport of aggressive media.



#### **Strengthening layer**

e.g. increased pressure resistance by means of a middle layer of stretched PE 100 or fibres



#### Co-extruded intermediate layer/outer layer

e.g. can also be used as indicator layer; on request possible as abrasion-resistant outer layer or also as white outer layer to reduce warming-up by means of solar radiation



#### **Metallic layer**

e.g. permeation-tight aluminium barrier layer for protection against chemicals or for performance of an integrity test and/or permanent monitoring of the pipeline



#### Abrasion-resistant protective layer

for protection of outer damage

PE**plus** PP Polyamide

#### Forms of Delivery



Coil



Drum
Large drum on request



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers

# **egeFit®**

# Components and Moulded Parts according to Specifications

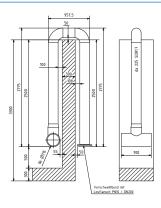


# Brief Description

egeplast offers segmented moulded parts, manufactured from piping, also designed according to the pressure class and requirements. All moulded parts can be delivered in the desired function (SLA®, DCT, 3L, egeSlurry® or similar). Entire assemblies, consisting of pipe and/or moulded parts, can be designed and prefabricated according to customer specifications, in order to facilitate your work at the jobsite.

# Product Benefits | Customized Product Designs

- Individually manufactured moulded parts and assemblies, design according to customer measurement
- Welding performed at the factory
- Interchanging of design drawings for approval
- Time-saving at the jobsite due to prefabrication



## Installation Options



open trench installation in sandbed

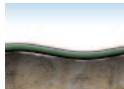


aboveground installation - suspension -

fittings



aboveground installation - conveyor pipes -

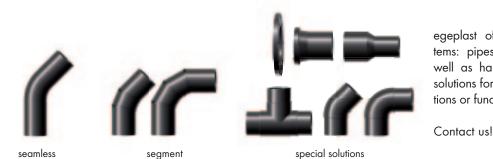


aboveground installation - terrain -



inhouse installations

# System Technology | According to Pressure Class and segmented Moulded Parts and Assemblies



egeplast offers complete piping systems: pipes for every application as well as harmonised components and solutions for special installation applications or functional requirements.

fittings

## Examples



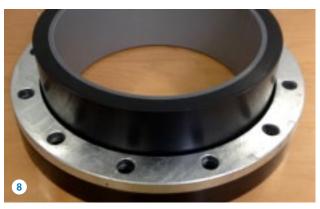










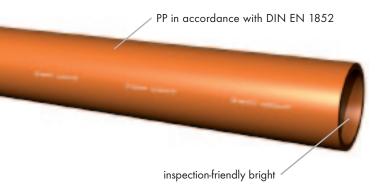




1. Welding egeFit® in the manufacture of egeplast moulded parts 2. Special moulded part branch 45°, flanged; OD 630 mm 3. SLA® Barrier Pipe System Components 4. egeFit® segment elbows 5. PE 100 swan-neck bends OD 800 mm with V-flange and loose-type flange according to customer specifications 6. PE 100-T-piece according to Pressure Class with one-sided reduced passage and segment elbow at outflow 7. PE 100-T-piece weld construction with special flange connections and flange connector with loose-type flange 8. egeSlurry® special flange connection OD 355 mm; SDR 13,6; DN 300; PN 10 drilled 9. PE 100 segment elbow angled at three levels according to customer specifications

# egeReline PP

# Piping System for Long Pipe Relining of old Sewers

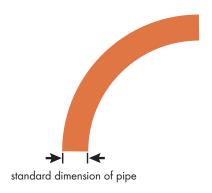


#### Brief Description

egeReline PP is a long pipe of polypropylene for rehabilitation or replacement of damaged sewers by means of long pipe relining. The filler-free material PP ensures acceptance of high static loads and represents durability and efficiency.

## Product Benefits | Product Structure

- Inspection-friendly bright
- External Test Certificate of the minimum bend angle of butt-welded PP connections
- The welded jointing technology enables permanent tightness against ex- and infiltrations as well as excellent root resistance.
- The egeplast raw materials formula enables high tractive forces during the pulling operation.



#### Installation Options



long pipe relining

## System Technology | Moulded Parts



welding sockets







branches



wall collars



electrofusion fittings



saddles

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Application	Rehabilitation/replacement of gravity sewer pipes
Target groups	Disposal and industrial companies   civil engineering and rehabilitation companies   construction companies
Dimension	OD 160 - 630 mm
Medium	Wastewater
Material	PP according to DIN EN 1852
SDR	SDR 17.6 (others on request)
Connection technology	Butt welding   electrofusion
Approvals/Standards	According to DIN 8077/78 and DIN EN 1852, DIN EN ISO 11295, data sheet RSV 3, data sheet ATV-M 127-2, DVS2207-11
Product limitations	Exclusively suitable for installation in long pipe relining

#### Variants



As an alternative, the sewer piping system is also available in black with bright inner layer.

#### egeDrain: to hold, collect and drain

You will find slotted or perforated piping systems under the title "Pressureless Piping Systems - egeDrain".

## Forms of Delivery



- Straight lengths (6, 12 or 20 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers





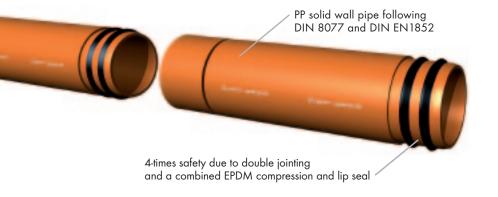
egeReline PP Installation Guidelines



Static

# egeModul PP

# Short Pipe Module System for Rehabilitation of older Sewers by Burstlining and **TIP Techniques**

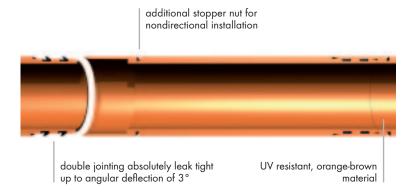


## Brief Description

egeModul PP is a short pipe module of polypropylene for rehabilitation or replacement of damaged sewers. The filler-free material PP ensures acceptance of high static loads and represents durability and efficiency.

#### Product Benefits | Product Structure

- A short pipe module system for all installation techniques (from relining to TIP technique to burstlining)
- Cost-effective rehabilitation possible from shaft to shaft
- Verified tightness according to DIN EN 1277 with increased test requirements of maximum 2.5 bar and angulation of maximum 3° in the area of the sleeve



#### Installation Options



single pipe lining



TIP technique (Tight in Pipe)



egeplast offers complete piping sys-

burstlining technique

#### System Technology | Moulded Parts



shaft connection modules



adaptor couplings



wall collars



adaptor pieces



welding sockets



saddles



electrofusion fittings

tems: pipes for every application as well as harmonised components and solutions for special installation applications or functional

requirements.



Contact us!

Application	Rehabilitation/replacement of gravity sewer pipes
Target groups	Disposal and industrial companies   civil engineering and rehabilitation companies   construction companies
Dimension	OD 140 - 630 mm
Medium	Wastewater
Material	PP according to DIN EN 1852
SDR	SDR 17.6 (others on request)
Connection technology	Plug-in connection; EPDM or oil-resistant NBR sealing material
Approvals/Standards	According to DIN 8077 and DIN EN 1852, DIN EN ISO 11295, data sheet RSV 2, data sheet RSV 3, data sheet RSV 8, data sheet DWA M-143 part 15
Product limitations	Exclusively suitable for installation in gravity sewers

#### Variants



#### egeDuct® Modules

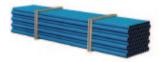
egeplast also manufactures projectrelated short pipe modules from the egeDuct® sewer piping system.

## egeDrain:

#### to hold, collect and drain

You will find slotted or perforated piping systems under the title "Pressureless Piping Systems - egeDrain".

## Forms of Delivery



- Standard construction lengths (0.5 m 1.95 m)
- Larger construction lengths > 1.95 m possible
- Slotted or perforated design on request
- Stationary pallettisation



egeModul PP Installation Guidelines



Static



Project Reports

# egeModul PE

## Short Pipe Module System for Rehabilitation of older Sewers by Relining

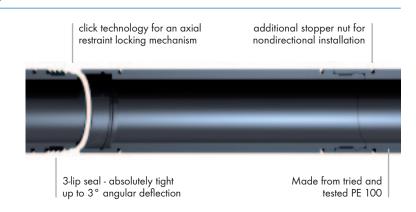


## Brief Description

egeModul PE is a short pipe module of polyethylene with a high density (PE-HD) for rehabilitation or replacement of damaged sewers. The high ductility of the applied PE-HD enables long-lasting operation of the rehabilitated sewer.

#### Product Benefits | Product Structure

- Cost-effective rehabilitation from shaft to shaft possible
- Verified tightness according to DIN EN 1277 with increased test requirements of maximum 2.5 bar and angular deflection of maximum 3° in the socket
- Click technology prevents shifting in the socket during pulling operation



#### Installation Options



single pipe lining

# System Technology | Moulded Parts



egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Application	Rehabilitation/replacement of gravity sewer pipes
Target groups	Disposal and industrial companies   civil engineering and rehabilitation companies   construction companies
Dimension	OD 160 - 630 mm
Medium	Wastewater
Material	PE-HD according to DIN 8074/75
SDR	SDR 17.6 (others on request)
Connection technology	Mechanical, axial restraint click connection; SBR or oil-resistant NBR sealing material
Approvals/Standards	Dimensions according to DIN 8074, Material according to DIN8074/75, DIN EN ISO 11295, data sheet RSV 3
Product limitations	Only for relining (burstlining: see egeModul PP)

#### Variants



#### egeModul PE SLM®

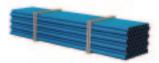
The egeModule PE can also be manufactured with protective layer depending on the project.

## egeDrain:

#### to hold, collect and drain

You will find slotted or perforated piping systems under the title "Pressureless Piping Systems - egeDrain".

## Forms of Delivery



- Standard construction lengths (0.5 m 1.95 m)
- Larger construction lengths > 1.95 m possible
- Slotted or perforated design on request
- Stationary pallettisation



egeModul PE Installation Guidelines



Static

# egeDuct® Sewer Piping System

# Spigot and Socket System made from filler-free PP



## **Brief Description**

The egeDuct® PP is a gravity sewer system according to DIN EN 1852. The fully developed plug-in connection technique enables simple, safe and economically viable installation. The system is divided into wastewater and rainwater pipes in ring stiffness classes SN 10+ and SN 16+. The complete piping system provides a high quality and long-lasting durability.

#### Product Benefits | Product Structure

- Filler-free PP offers utmost safety during installation and in installed condition
- Excellent chemical resistance
- No danger due to biogenic corrosion by sulphuric acid
- Good thermal resistance
- Very high abrasion resistance
- Oil-resistant sealing system (up to OD 500 mm)
- Safety lock system through integrated support ring in the sealant



#### Installation Options



open trench installation in sandbed

## System Technology | Moulded Parts



double sockets



bends



welding sockets



reducers



electrofusion couplers



shafts

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Contact us!

Application	Gravity sewer system
Target groups	Disposal and industrial companies   construction companies
Dimension	OD 110 - 630 mm
Medium	Wastewater   rain water
Material	Filler-free PP (Polypropylene) according to DIN EN 1852
SDR	SN 10+ and SN 16+
Connection technology	Plug-in connection   alternative electrofusion
Approvals/Standards	DIN EN 1852, DIN EN 681-2
Product limitations	Only open trench installation in sandbed; for trenchless installation see egeReline PP   egeModul PP

#### Variants



## egeDrain: to hold, collect and drain

You will find slotted or perforated piping systems under the title "Pressureless Piping Systems - egeDrain".

## Forms of Delivery



- Straight lengths (1, 3 and 6 m)
- with plug-in socket mounted at the factory





egeDuct® Brochure

Static

# egeFuse® Sewer Piping System

# Welded PE System with integrated Welding Technology



## Brief Description

With the egeFuse® gravity sewer system made from polyethylene, pipe and jointing technology are delivered at the same time – as one component – to the jobsite, where spigot end and weldable socket ends are integrated. The high ductility of the used PE-HD enables subsequent operation of the rehabilitated sewer without any cracks or breaks.

#### Product Benefits | Product Structure

- Simple and economically viable installation due to weldable spigot and socket combination with integrated heating coils.
- No machining on the welded zone necessary
- Verified tightness according to DIN EN 1277 with increased test requirements of maximum 2.5 bar
- Inspection-friendly, white inner layer up to OD 630 mm



#### Installation Options



open trench installation in sandbed

#### System Technology | Moulded Parts



Confact us

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Application	New construction of welded gravity sewers
Target groups	Disposal and industrial companies   civil engineering and rehabilitation companies   construction companies
Dimension	OD 225 - 710 mm
Medium	Wastewater
Material	PE-HD according to DIN 8074/75
SDR	SDR 17.6 / SDR 17
Connection technology	Welded jointing technology according to DVS 2207 and manufacturer specifications
Approvals/Standards	DIN 8074/75, dimensions according to DIN EN 12666, DIN EN 1610, data sheet DWA A -127 and DWA A-139, DIN 4124
Product limitations	Only open trench installation in sandbed; For trenchless installation see egeReline PP   egeModul PP   egeModul PE

#### Variants



#### SL® Sewer System

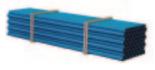
For jointing by means of butt welding or electrofusion couplers, egeplast also offers SL® sewer pipes with smooth ends.

#### egeDrain:

## to hold, collect and drain

You will find slotted or perforated piping systems under the title "Pressureless Piping Systems - egeDrain".

## Forms of Delivery



- Standard construction lengths (0.5 m 12 m)
- Larger construction lengths > 12 m possible







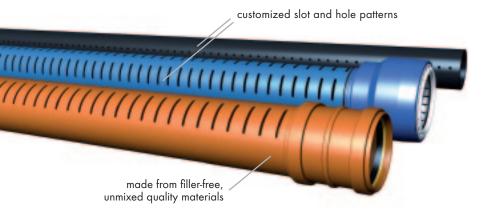
egeFuse® | SL® Installation Guidelines

Static

Project Reports

# **egeDrain**

## Seepage Pipes for Collection and Drainage

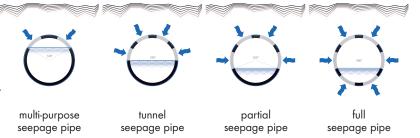


## **Brief Description**

egeplast offers a wide range of various seepage pipes. The portfolio covers products from slotted egeModul to perforated PE 100 pipes for use in opencast mining to the slotted egeDuct® system for draining industrial sites.

#### Product Benefits | Product Structure

- Development as a multi-purpose seepage pipe (1/3), tunnel seepage pipe (1/2), partial seepage pipe (2/3) and full seepage pipe (3/3)
- Minimum water inlet surface 100 cm<sup>2</sup>/m, smaller or larger water inlet surfaces possible in all gradients
- Large construction lengths
- Extensive range of fittings



#### Installation Options



trenchless installation techniques



long pipe relining



open trench installation in sandbed

The Installation options depend on the selected pipe system.

## System Technology | Moulded Parts



spigot and socket fittings



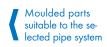
socket fittings



electrofusion fittings



double sockets



egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Application	Spring water pipes   transport and seepage pipes
Target groups	Utility and disposal companies   industrial companies   construction companies
Dimension	OD 90 - 630 mm
Medium	Rain water   ground water   stratum water   landfill leachate
Material	PE 100, PE 100-RC (resistance to crack), PP
SDR	SDR 17, SDR 11 (PE)   SDR 26, SDR 22, SDR 17,6 (PP)
Connection technology	Plug-in and weld connections depending on the choice of piping system
Approvals/Standards	DIN 8074/75, DIN EN 12201, DIN 8077/78, DIN EN 1852
Product limitations	Elastomer connection technology not suitable for gaseous substances

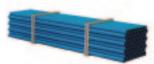
#### Variants



#### **Customised Drainage Systems**

Different connection techniques, even axial restraint, offer a wide range of possible application options. In addition, the slot widths and perforation diameter are variable.

## Forms of Delivery



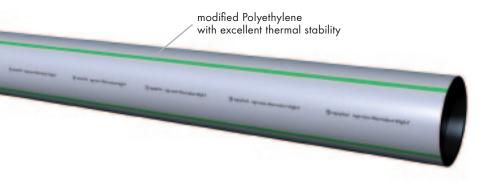
- Straight lengths
- Modules 0.5 m 1.95 m
- Special lengths on request



Flyer
Spring Catchment
Pipes

# egezcom® Macroduct High-T PE

## Protective pipe made from polyethylene for high and extra high voltage cables up to 380 kV



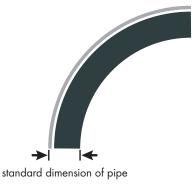
#### Brief Description

ege-com® Macroduct High-T PE is a protective pipe made from polyethylene, which is used for high and extra high voltage cables up to 380 kV. The protective pipe has an increased thermal stability due to a special PE-HD material, in order to withstand high thermal loads for a long period of time. Due to this the electricity distributors can ensure a long service life of their grid.

#### Product Benefits | Product Structure

- Higher temperature range than standard PE pipes following DVS 2201-1
- Longer service life at higher temperature load than PE pipes according to DIN 8074
- Monitored and certified by TÜV-Süd
- Weldable
- Flexible and ductile

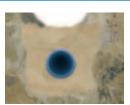




## Installation Options

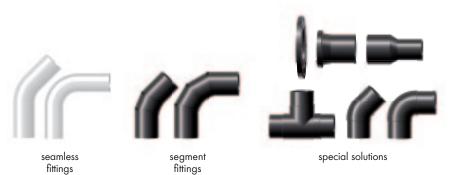






open trench installation in sandbed

## System Technology | Moulded Parts



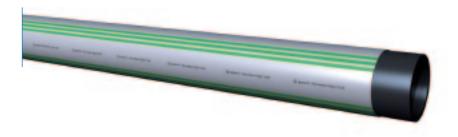
egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Application	Protective pipe for high and extra high voltage cables
Target groups	Network operators   construction companies
Dimension	OD 20 - 1,200 mm
Medium	Power- and energy-cables
Material	Modified PE-HD - heat-stabilized
SDR	SDR 33 - SDR 7.4
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	TÜV Süd: MUC-KSP-A3018, temperature-resistance analogue ISO 24033
Product limitations	Up to 70°C

#### Variants



## Macroduct High-T PE SLM®

additional protection for trenchless installation techniques

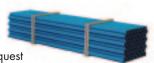
## Forms of Delivery



Coil



Drum Large drum on request



- Straight lengths (6 and 12 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



Macroduct High-T Flyer



Project Reports



ege-com® Macroduct Brochure



ege-com® Installation Manual

# egezcom® Macroduct High-T PP

## Protective pipe made from polypropylene for high and extra high voltage cables up to 380 kV

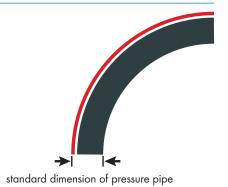


#### Brief Description

The ege-com® Macroduct High-T PP is a protective pipe made from polypropylene with a socket for an economic installation in an open trench. The tight system is used for high and extra high voltage cables up to 380 kV. In order to withstand sustained high thermal loads, the system is made of a modified PP material which provides an enhanced thermal stability. Due to this the electricity distributors can ensure a long service life of their grid.

#### Product Benefits | Product Structure

- Very high thermal stability: The system can therefore be used for thermal loads > 70 °C (short-term peaks up to 90 °C)
- With increased elastic modulus for an approved ring stiffness
- The ege-com® Macroduct High-T PP pipes are optionally supplied with a factory-mounted socket
- Long socket solution for higher safety
- Reliable fit of the sealant in the socket



#### Installation Options



open trench installation in sandbed

## System Technology



Also available: transition pieces, skids

egeplast offers complete piping systems: pipes for every application as well

as harmonised components and solutions for special installation applications or functional requirements.



Application	Protective pipe for high and extra high voltage cables
Target groups	Network operators   construction companies
Dimension	OD 200 - 250 mm
Medium	Power- and energy-cables
Material	Modified PP - heat-stabilized
Ring stiffness	SN 10 in accordance with EN 1852-1
Connection technology	Plug connection
Approvals/Standards	analogue DIN EN 1852
Product limitations	up to 70°C (short-term peaks up to 90°C)

#### Variants



## Macroduct High-T PP

Version with abrasion resistant and low friction inner layer

## Forms of Delivery



- Straight lengths (6 and 12 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



Macroduct High-T PP Flyer



ege-com® Macroduct Brochure



ege-com® Installation Manual

# egezcom® Macroduct Protective Pipe

# Protective Pipes for Power Cables up to 30 kV

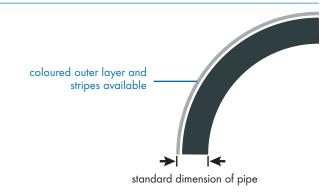


## Brief Description

The ege-com® Macroduct protective pipe of polyethylene is used for power cables in the medium-voltage range up to 30 kV. The pipes are offered as multi-layered and solid-wall pipes and are according to at least the requirements DIN 16874. Connection of the pipes can be achieved with mechanical connections, electrofusion welding or by butt welding.

#### Product Benefits | Product Structure

- Outer diameter ≥ 75 mm
- The basic pipe is black and can be supplied with a coloured outer layer and/or stripes.
- Open trench and trenchless installation possible
- Weldable
- Flexible and ductile



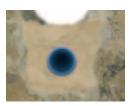
#### Installation Options



horizontal directional drilling



open trench installation without sandbed, ploughing and milling



open trench installation in sandbed

## System Technology



seamless fittings



segment fittings



special solutions

egeplast offers complete piping systems:

You can find the extensive range of accessories in the catalogue "ege-com® accessories".





Application	Protective pipe for power cables up to 30 kV
Target groups	Network operators   Construction companies
Dimension	OD ≥ 75 mm
Medium	Power- and energy-cables
Material	Pressure pipe quality following DIN 8074 (PE100) or PE-HD according to DIN 16874
SDR	SDR 11, 17 und 17.6 (others on request)
Connection technology	Butt welding   electrofusion   mechanical joints
Approvals/Standards	DIN 16874
Product limitations	Up to 30 kV

#### Variants

#### Macroduct SLM®

additional protection for trenchless installation techniques



#### **Macroduct Protective Pipe**

for ploughing, milling and open trench installations; Dimension 75 - 400 mm, following DIN 16876



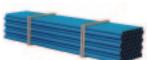
## Forms of Delivery



Coil



Drum on request



- Straight lengths (6 and 12 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



ege-com® Macroduct Brochure



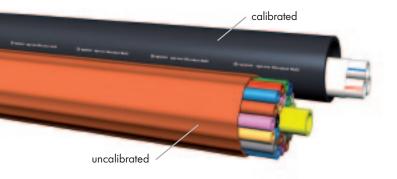
ege-com® Accessories Brochure



ege-com® Installation Manual

# egezcom® Microduct Multi

## Pipe Bundle System made of ege-com® Microducts



#### **Brief Description**

The ege-com<sup>®</sup> Microduct Multi is a pipe bundle that is made up of several ege-com® Microduct Mono pipes. This pipe bundle is used in network applications, such as FttH (Fiber to the Home), backbones or last mile. They are suitable for direct buried installation and for inserting or pushing into cable shafts, into ege-com® Macroduct Mono pipes or other pipe systems.

#### Product Benefits | Product Structure

- Wide range of colours: inner pipes natural-coloured with stripes or fully tinted; the standard sheathing is orange or black, optionally with stripes
- Standard design: with thin, flexible outer sheathing; Version with a rigid and calibrated outer pipe possible
- Twist- and stress-free inner pipes
- Different bundles of up to 24 ege-com® Microduct Mono pipes plus guide pipe



uncalibrated outer sheathing



calibrated outer pipe

#### Installation Options



open trench installation in sandbed





insertion or push into cable ducts, ege-com® Macroduct pipes or other pipe systems

## System Technology



egeplast offers complete piping systems:

You can find the extensive range of accessories in the catalogue "ege-com® accessories".



Application	Protection of telecommunication cables (e.g. copper or fibre optic cable) in network applications, such as FttH, FttB, FttC (Fibre to the Home/Building/Curb) or last mile
Target groups	Network operators   Construction companies
Dimension	Bundle variants with and without guide pipe (FR): 2-way, 3-way, 4-way, 5-way, 6-way, 7-way, 8x7+1x12, 9-way + FR, 10-way, 12-way, 12-way + FR, 14-way, 18-way, 22x7+1x12, 24-way, 24x7+1x14  Versions di (direct installed) calibrated and db (direct buried) uncalibrated
Medium	Telecommunication cable (fibre bundle, mini and microcable)
Material	Polyolefin
Bundles	Standard design: ege-com <sup>®</sup> Microduct Multi db with thin, flexible outer sheathing Additional version: ege-com <sup>®</sup> Microduct Multi db with solid, calibrated outer pipe
Connection technology	Plug-in connection
Regulations/ Installation techniques	Installation manual, KRV installation instructions A 535b
Product limitations	Bundles of max. 25 Mono pipes

## Variants

#### Microduct Mono

direct buried OD 7 to 20 mm direct install OD 5 to 12 mm



## Microduct OD

A detection wire enables subsequent detection.



## Laser Labelling and Barcode

damage-resistant and high quality labelling / barcode for logistics and network documentation



## Forms of Delivery



Coil



Drum Large drum on request



ege-com® Microduct Brochure



ege-com® Accessories Brochure



ege-com® Installation Manual

# egezcom® Microduct Multi protec

## Piping system for trenchless and sand bed free installation techniques



## Brief Description

egeplast has developed the ege-com® Microduct Multi protec for the trenchless installation of Microduct Multi pipes. The trenchless installation technique enables the network operators to expand their grid economically efficient. Damages of the inner pipes are prevented by the a flexible double layer with modified outer sheathing of the ege-com® Microduct Multi protec which increases its wear resistance and hardness. Especially suited for network applications such as Backbones, FttH (Fibre to the home) or last mile.

#### Product Benefits | Product Structure

- Economically beneficial due to reduced civil engineering works; protection pipes are not required
- Protection against grooves and scratches
- Improved mechanical properties for higher requirements
- Layers separable, simplified handling, inner pipes can not be damaged



#### Installation Options



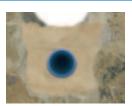
horizontal directional drilling



soil displacement



open trench installation without sandbed, ploughing and milling



open trench installation in sandbed

#### System Technology



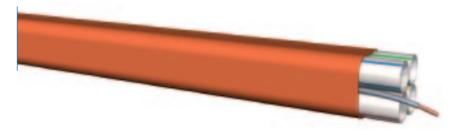
egeplast offers complete piping systems:

You can find the extensive range of accessories in the catalogue "ege-com® accessories".



Application	Protection of telecommunication cables (e.g. copper or fibre optic cable) in network applications, such as FttH, FttB, FttC (Fibre to the Home/Building/Curb) or last mile
Target groups	Network operators   Construction companies
Dimension	Bundle variants with and without guide pipe (FR): 4-way, 5-way, 6-way, 7-way, 24-way Version db (direct buried) uncalibrated
Medium	Telecommunication cable (fibre bundle, mini and microcable)
Material	Double layer made of modified polyolefin
Connection technology	Plug-in connection
Regulations/ Installation techniques	Installation manual, KRV installation instructions A 535b
Product limitations	Bundles of max. 25 Mono pipes

#### Variants



## Microduct OD

A detection wire enables subsequent detection.

## Forms of Delivery





Drum on request



- Straight lengths (6 and 12 m)
- Special lengths up to 30 m
- Prefabrication
- Telescoping for shipment in containers



ege-com® Microduct Multi protec Flyer



ege-com® Microduct Brochure



ege-com® Accessories Brochure



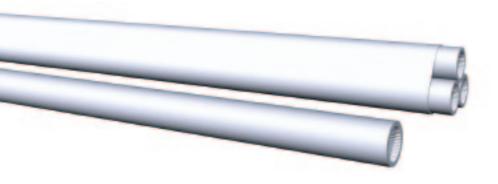
ege-com® Installation Manual



Project Reports

# egezcom® Microduct LSOH

# Flame retarded Piping System for Inhouse Applications



## **Brief Description**

The ege-com® Microduct LSOH pipes are of low flammability and sparsely produce any smoke because of their special material formulation. The abbreviation LSOH is short for "Low Smoke free Of Halogen". The pipes are used in network applications such as FttH (Fibre to the Home) inside of buildings.

#### Product Benefits | Product Structure

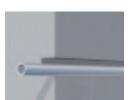
- LSOH pipes are of low flammability: The material meets the requirements of DIN 4102, building material class B1
- Free of halogens
- Low smoke: minimum smoke development in case of fire
- Standard design: colour white opaque, inner surface grooved



## Installation Options

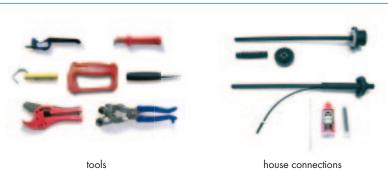


insertion or push into cable ducts



installation on or below

#### System Technology



egeplast offers complete piping systems:

You can find the extensive range of accessories in the catalogue "ege-com® accessories".

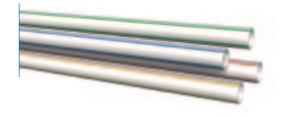


Application	Protection of telecommunication cables in network applications, such as FttD (Fibre to the Desk); suitable for use in buildings
Target groups	Network operators   construction companies
Dimension	Bundle variants with and without guide pipe (FR)
Medium	Telecommunication cable (fibre bundle, mini and microcable)
Material	Flame-retarded polyolefin
Bundles	ege-com® Microduct Multi db with thin, flexible outer sheathing
Connection technology	Plug-in connection
Regulations/ Installation techniques	Installation manual

## Variants

## Microduct Mono

direct buried OD 7 to 20 mm direct install OD 5 to 12 mm



#### Microduct Multi

pipe bundle of max. 24 Microduct Mono pipes plus guide pipe



## Forms of Delivery



Coil



Drum Large drum on request



ege-com® Microduct Brochure



ege-com® Accessories Brochure



ege-com® Installation Manual

# egezcom® Macroduct Multi-M, -S and -L

# Pipe Bundle System made of ege-com® Macroducts



## Brief Description

ege-com® Macroduct Multi pipes are an assembly of several cable protection pipes from the ege-com® Macroduct Mono range joined to make a composite pipe. This consists of several pipes with the same or different dimensions, which can be assembled according to user requirements.

#### Product Benefits | Product Structure

- Wide range of colours: The basic pipe is black and can be supplied with a coloured outer layer and/or stripes.
- Various bundles possible: with sheathing (-M), back-to-back joint (-S) or loosely wound (-L).
- Multi-M:
  - available as inliner or direct buried version
  - single pipes are manufactured according to given standards
- labelling of the inner pipe as well as various colours possible

2-way 40 x 3.7 50 x 4.6



3-way 40 x 3.7 50 x 4.6



4-way 32 x 2.0

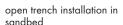


4-way 40 x 2.5 with 32 x 2.0



#### Installation Options







insertion in cable protection pipes / conduit tiles (Multi -M)

## System Technology



plug-in connections, clamped and screwin connections



tools



seals

egeplast offers complete piping systems:

You can find the extensive range of accessories in the catalogue "ege-com® accessories".



Application	Protection of telecommunication cables (e.g. copper or fibre optic cables)	
Target groups	Network operators   construction companies	
Dimension	Inliner version: 32 to 40 mm; 3-way and 4-way Direct buried version: 32 – 50 mm; 2-way to 4-way	
Medium	Telecommunication cable	
Material	PE-HD	
Bundles	Multi-M: A polyolefin sheathing secures the Macroducts. Multi-S: The Macroducts are joined using a back-to-back joint. Multi-L: Several Macroducts will be wound up loosely together.	
Connection technology	Plug-in connections, clamped and screw-in connections	
Approvals/Standards	Following DIN 8074 (PE 100), according to DIN 16874, according to DIN 16876	
Product limitations	Bundles of max. 5 Mono pipes	

#### Variants

#### Macroduct Mono Dimension 32 – 63 mm



## Special Applications SLA®, SLM®, DCT



# Special Applications OD (detection wire),

OD (detection wire), with integrated RFID chip



## Forms of Delivery



Coil



Drum Large drum on request



ege-com® Macroduct Brochure



ege-com® Accessories Brochure



ege-com® Installation Manual

# egezcom® Multi-fit-Sealing (MfS)

# For Sealing of used and unused ege-com® Micro- and Macroducts



#### Brief Description

The ege-com® Multi-fit seal is used to seal filled or unfilled ege-com® Microand Macroducts. The ege-com® Multifit seal is easy to assemble with two separable outer and inner shells. It is available as a sealing system for the polygon and round version.

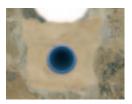
#### Product Benefits | Product Structure

- Sealing system for polygon and round version
- Clamping system for polygon and round version
- Fixed inner pipes
- Stress-free inner pipes in sealing element
- No risk of incorrect assembly
- Pressure tight permanently up to 0.5 bar





#### Installation Options



open trench installation in sandbed

## System Technology



You can find the extensive range of

egeplast offers complete piping

accessories in the catalogue "ege-com® accessories".



Contact us!

systems:

Application	Sealing of filled or unfilled ege-com® Micro- and Macroducts	
Target groups	Network operators   construction companies	
Dimension	ege-com <sup>®</sup> Macroduct: 32 – 50 mm ege-com <sup>®</sup> Microduct: up to 24x7 plus guide pipe Design db (direct buried)	
Medium	Telecommunication cable (fibre bundle, mini- and microcables)	
Material	Polyolefin	
Regulations/ Installation techniques	Installation manual	

## ■ Variants | More additional Accessories

MfS-t	MfS-t-MD-Multi
(ege-com® Macroduct)	(ege-com® Microduct Multi)
50 / 7×12	24x7+1x14

### Plug-in and screw connections for ege-com® Macroduct Mono pipes



Connectors, Endcaps, Reducers and Gas Blocks for ege-com® Microduct Mono pipes



## Forms of Delivery



Coil



Drum Large drum on request



ege-com® Macroduct Brochure



ege-com® Microduct Brochure



ege-com® Accessories Brochure



ege-com® Installation Manual

# **Service**

Please allow our sales staff or the staff in Application Technology to explain to you exactly what the benefits of egeplast products are – and how these solutions can assist your business achieve more investment security.

## Consulting in Project Planning



Online Planning Aid, free of charge



**Provision of Tender Documents** 



Support during Construction Work on Site



Rental of Welding Machinery and Clamping Jaws, Accessories



**Seminars** 



# Notes

The information in this document are according to the state-of-the-art at the time of compilation. No claim is asserted for accuracy or completeness and are for the purposes of training and consulting. No liability can be derived from them. Amendments are reserved. Our Customer Service will be happy to answer any questions, e.g. with regard to the installation and the application of our products.

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We would like to point out that warranty shall cease to apply if and as far as the information in this document is not followed closely with regard to proper installation and processing as well as proper application of our products. Corresponding safety regulations as well as the currently valid standards, guidelines and rules as well as additional relevant provisions must be complied with.

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