



C O N S T R U C T I I



I N S T A L A T I I



T R A T A R E A A P E I

# FLOOR HEATING

## Advantages:

- \* Increased comfort
- \* High efficiency (thermal agent temperature <math><45\text{ }^\circ\text{C}</math>)
- \* Uniform heating
- \* Optimal room temperatures: 25 ° C floor, 22 ° C floor, 20 ° C ceiling)
- \* Energy saving used for heating 20 - 35%

Polyethylene pipes made of HDPE or PEMD, crosslinked and oxygen barrier.

## Applications in:

- \* Apartments
- \* Public buildings
- \* Industrial buildings
- \* Roads (bridges - snowmelt, airport runways, parking lots, garages, etc.)

## ADVANTAGES OF NETWORKED POLYETHYLENE AGAINST NATUR POLYETHYLENE:

- \* Better mechanical properties - tensile strength, hardness, fi shrinkage and low deformation even at high temperatures and pressures
- \* Better properties - abrasion, corrosion, mineral deposits, chemical resistance

## DISADVANTAGES:

- \* Shorter elongation at break
- \* Less flexibility

## METHODS AND MINIMUM DEGREES OF POLYETHYLENE RETICULATION

- \* Crosslinking with PE - Xa peroxides - crosslinking degree min.70%
- \* Crosslinking with PE silanes - Xb - crosslinking degree min.65%
- \* Lattice with radiation (gamma radiation or fl ux of electrons)  
PE - Xc - degree of crosslinking min. 60%
- \* Crosslinking with PE - Xd azoderivatives - minimum degree of crosslinking 60%

## COMPARISONS BETWEEN NETWORKING PROCEDURES-DISCUSSABLE

- 1.Peroxide crosslinking produces a denser PE-Xa with excellent mechanical properties due to the bridges between shorter molecules compared to polyethylene crosslinked by other processes. At the same time there is the advantage of a better controlled crosslinking because it occurs during In the case of crosslinking with PE - Xb silane crosslinking, a separate, high temperature steam installation is required and requires a long crosslinking time which leads to increased production costs if this is done by the manufacturer. often not)
2. PE - Xc radiation crosslinking has become very popular due to lower production costs, but with major investments in equipment, relatively good crosslinking control, the possibility of dissolving chemical crosslinking agents in water is eliminated even if at a certain level negligible.
3. PERT heat-resistant polyethylene is a non-crosslinked polyethylene with a linear structure and discrete molecular bonds. This type of polyethylene was created by DOW CHEMICALS with an application dedicated to the production of heating and plumbing pipes, for the manufacture of electrical cables. This material can produce pipes with a good fi exibility recommended for underfloor heating and less for circuit executions with higher temperatures and pressures, due to the lower mechanical strength characteristics.

PIPES

**PE-X**  
OXYGEN  
BARRIER

## PE - X WITH OXYGEN BARRIER

The EVOH (ethylene - vinyl alcohol) copolymer is used for the oxygen barrier, which: Prevents the formation of microorganisms that would deposit on the inner walls of the pipe ) Last but not least, it protects the pipe from oxygen-free atoms that can combine with hydrogen atoms in the molecular structure of polyethylene and that over time lead to the aging of the pipes. The gas diffusion rate is measured in cubic cm of gas passing through a 20 micron thick polymer foil over an area of 1 square meter for 24 hours. The behavior for EVOH and polymer is: EVOH - 0.2 PE - 12,000 The difference is obviously smaller in the case of copolymer and thus explains the need to use PEX with oxygen barrier.

# COMPARISONS BETWEEN PEX (high density crosslinked polyethylene) and PERT (low density heat resistant polyethylene)

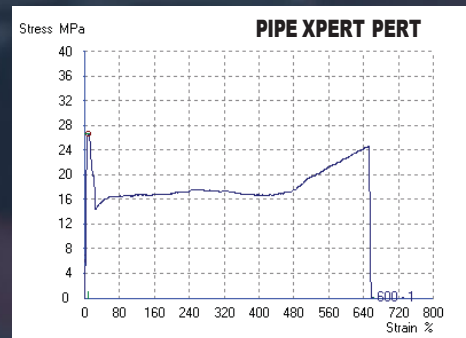
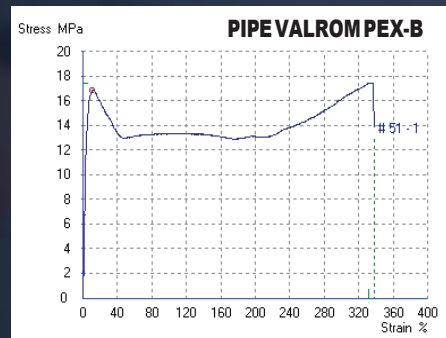
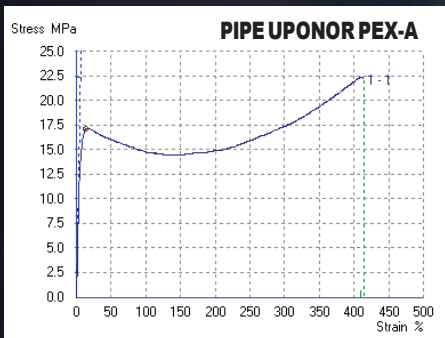
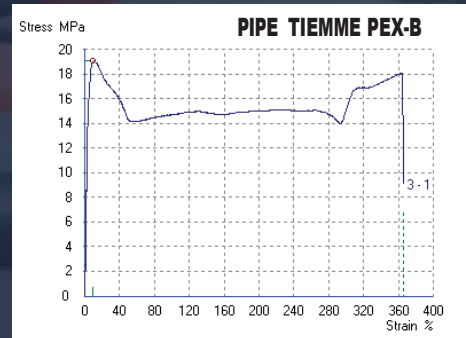
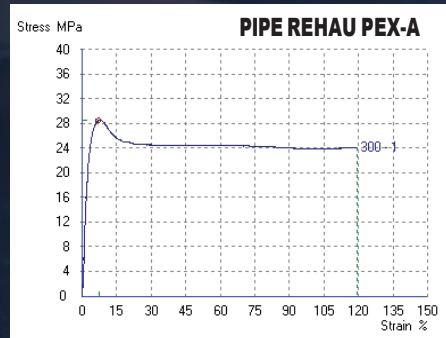
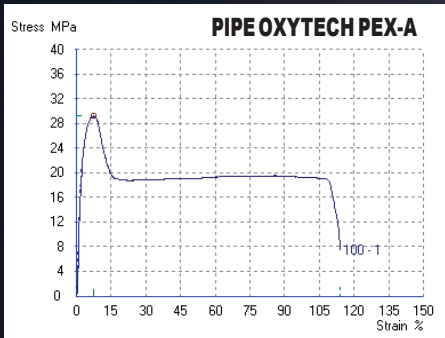
## PEX ADVANTAGES towards PERT:

- \* Higher tensile strength
- \* Higher hardness
- \* Higher crystallinity
- \* Lower solubility in polyethylene solvents
- \* Better thermal resistance - hot deformation is done at a higher temperature

## PEX DISADVANTAGES towards PERT:

- \* Shorter elongation at break
- \* Less flexibility
- \* Lower transparency

Name	Code	Oxygen barrier	Linear meter
'EAVĂ PE-Xa			
OXYTECH 16 x 2	20210	Yes	coil 200 m
OXYTECH 16 x 2	20211	Yes	coil 500 m
OXYTECH 17 x 2	20212	Yes	coil 500 m
OXYTECH 20 x 2	20213	Yes	coil 100 m
OXYTECH 25 x 3.5	20217	No	bar 4 m
OXYTECH 32 x 4.4	20271	No	bar 4 m



\* tensile tests performed in the ecotech chemicals laboratory \*\* indications of elongation and breaking strength are reported

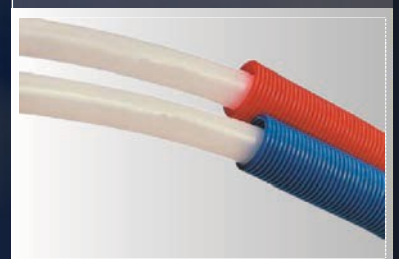
## CONCLUSIONS:

It would be unfair to give verdicts on what would be the best polyethylene pipe for installations. The most correct thing to say would be that the best pipe is the one that best fits our application. For example, for heating in the floor, wall or ceiling, you need an oxygen barrier pipe with good flexibility: PE - MDx, PERT, here the temperature conditions are lower compared to heating applications with temperatures of 80 - 90 C and higher pressures where a high crosslinking pipe PE - HDx - ie PE - Xa, PE - Xb or PE - Xc is recommended.

Name	Code	Oxygen barrier	Linear meter
<b>TEAVA PE-RT</b>			
XPERT 16 x 2	20206	yes	coil 200 m
XPERT 16 x 2	20207	yes	coil 500 m
XPERT 17 x 2	20208	yes	coil 500 m
XPERT 20 x 2	20209	yes	coil 100 m



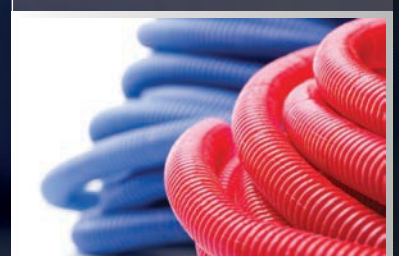
Name	Code	Oxygen barrier	Linear meter
<b>'EAVĂ PE-RT ÎN TUB CORUGAT</b>			
'eavă PERT 16x2 corugat BLUE	20376	no	coil 50 m
'eavă PERT 16x2 corugat RED	20215	no	coil 50 m
'eavă XPERT BO 16x2 corugat BLUE	20223	yes	coil 50 m
'eavă XPERT BO 16x2 corugat RED	20224	yes	coil 50 m



Name	Code	Oxygen barrier	Linear meter
<b>'EAVĂ PE-RT SIMPLĂ</b>			
VECTORKIT PERT 16x2	20218	no	coil 500 m
VECTORKIT PERT 17x2	20219	no	coil 500 m
VECTOR KIT PERT 20 x 2	20220	no	coil 100 m
VECTOR KIT PERT 25x2.5	20221	no	coil 50 m
VECTOR KIT PERT 32x3	20222	no	coil 50 m



Name	Code	Oxygen barrier	Linear meter
<b>TUB CORUGAT</b>			
CorugatALBASTRU 25	10249	-	coil 50 m
CorugatALBASTRU 32	10265	-	coil 25 m
CorugatROSU 25	10251	-	coil 50 m
CorugatROSU 32	10250	-	coil 25 m



# FITINGURI

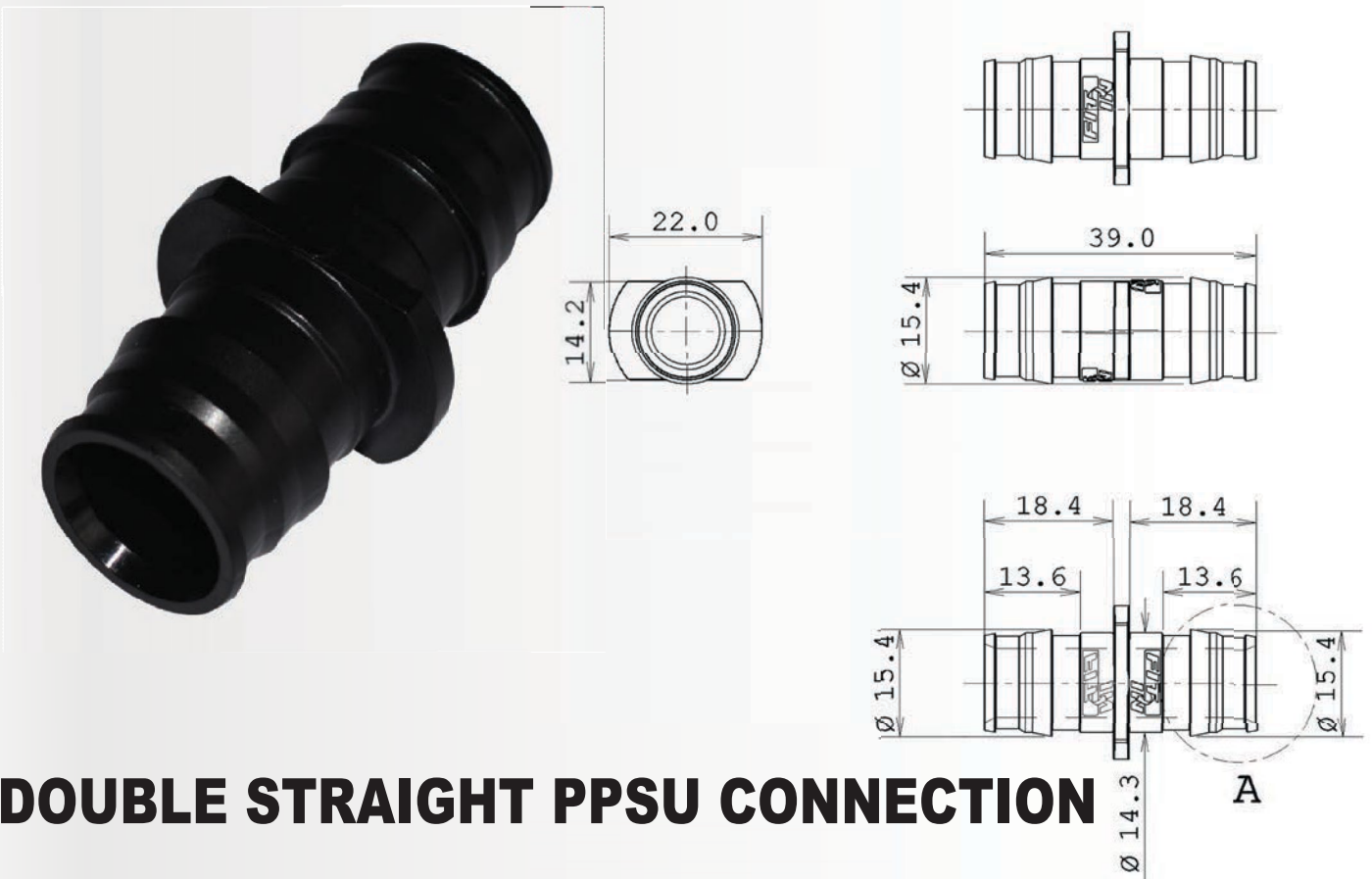
# FIT IN

The FIT-IN range of dyes are made by injecting an amorphous polymer with exceptional mechanical properties, called POLYPHENYLSULPHONE, for short PPSU. At similar dimensions, PS PPSU dyes are more resistant than steel but do not have the elasticity of the latter.

Assembly steps:

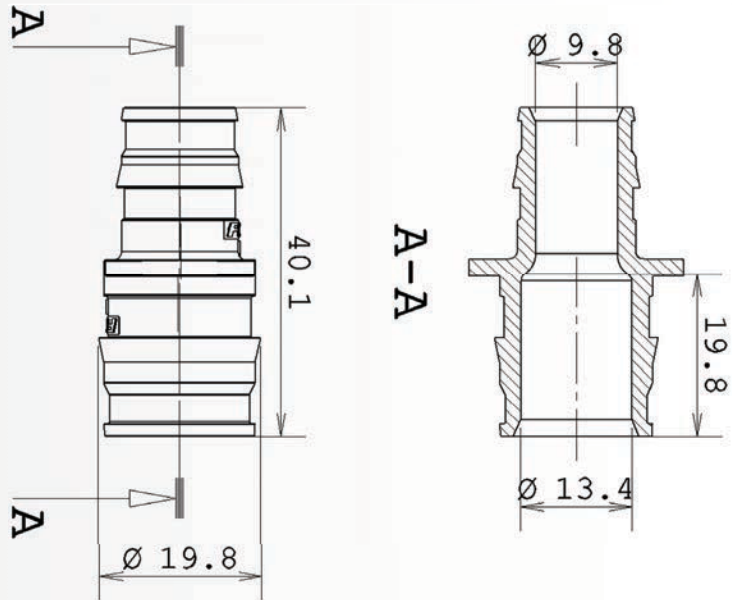
1. position the sleeve on the pipe
2. using the electric or mechanical expander, widen the PEX pipe
3. the PPSU ting is introduced

In a few tens of seconds the pipe and the sleeve will tighten evenly on the body of the fitting and will create a perfect seal.



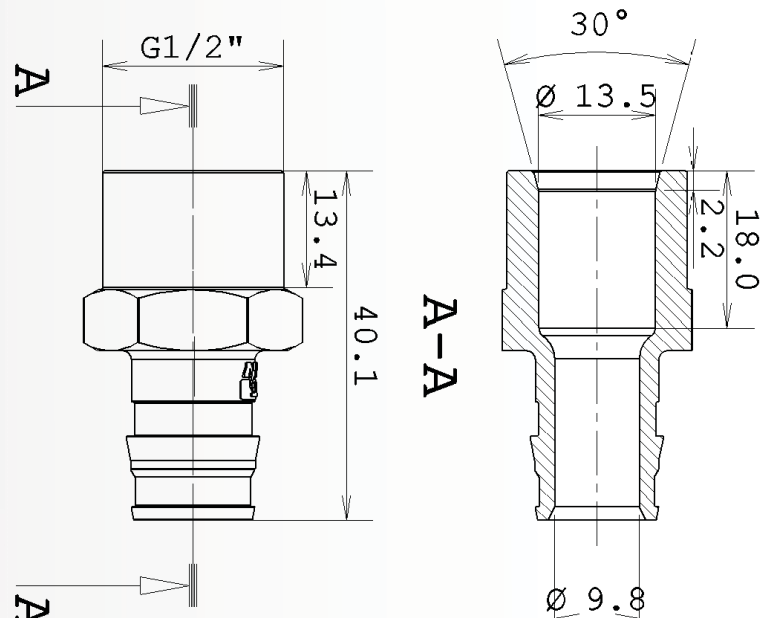
## DOUBLE STRAIGHT PPSU CONNECTION

Name	Code	Size
DOUBLE STRAIGHT PPSU CONNECTION		
Double Straight Fitting PPSU 16 x 16	10191	16x16
Double Straight Fitting PPSU 20 x 20	10192	20x20
Double Straight Fitting PPSU 25 x 25	10193	25x25
Double Straight Fitting PPSU 40 x 40	11345	40x40



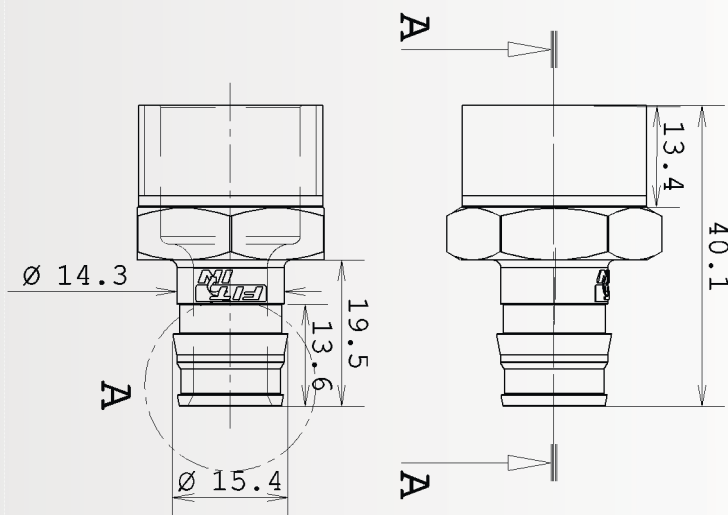
# REDUCED DOUBLE CONNECTION PPSU

Name	Code	Size
REDUCED DOUBLE CONNECTION PPSU		
Reduced double connection PPSU 20 x 16	10195	20 x 16
Reduced double connection PPSU 25 x 16	10196	25 x 16
Reduced double connection PPSU 25 x 20	10198	25 x 20
Reduced double connection PPSU 32 x 20	10258	25 x 20
Reduced double connection PPSU 32 x 25	10259	25 x 20
Reduced double connection PPSU 40 x 25	11398	25 x 20
Reduced double connection PPSU 40 x 32	11298	25 x 20



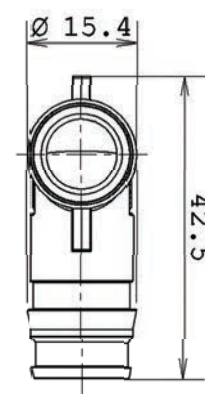
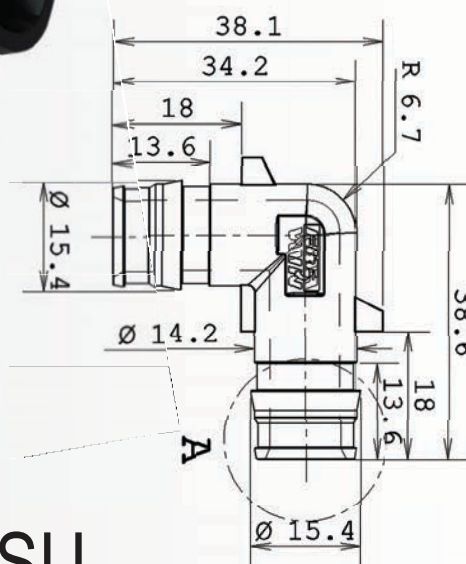
# STRAIGHT CONNECTION MALE PPSU

Name	Code	Size
STRAIGHT CONNECTION MALE PPSU		
Male straight connection PPSU 16 x 1/2	10182	16 x 1/2
Male straight connection PPSU 20 x 3/4	10185	20 x 3/4
Male straight connection PPSU 25 x 1	10187	25 x 1



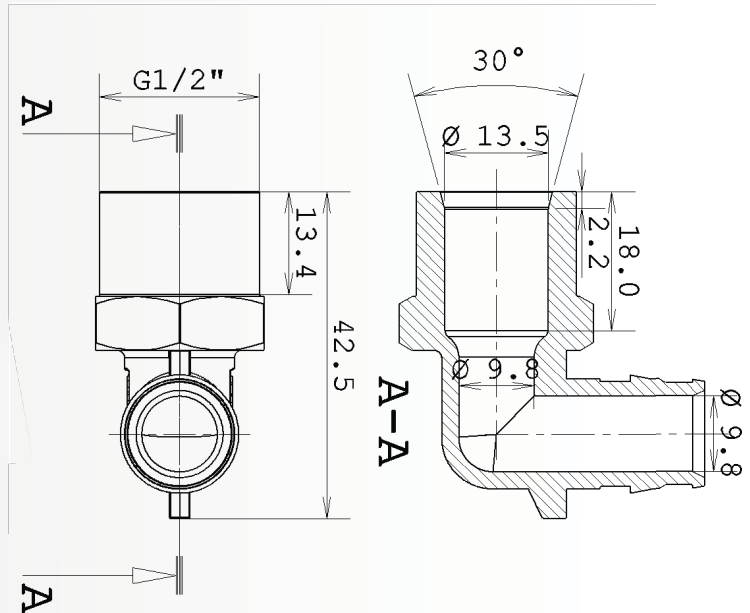
# STRAIGHT CONNECTION FEMALE PPSU

Name	Code	Size
FEMALE STRAIGHT CONNECTION PPSU		
Female straight connection PPSU 16 x 1/2	10175	16 x 1/2
Female straight connection PPSU 20 x 3/4	10176	20 x 3/4
Female straight connection PPSU 25x 1	10177	25 x 1



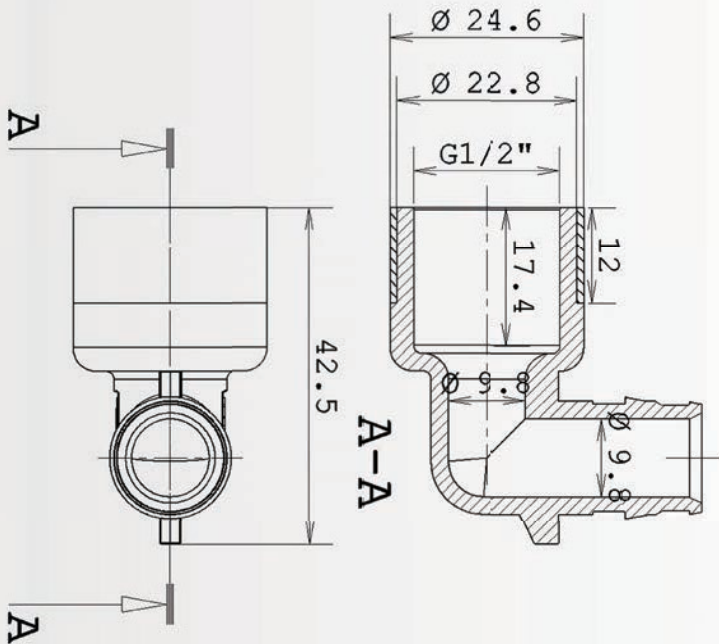
# EQUAL LBOW PPSU

Name	Code	Size
EQUAL LBOW PPSU		
Equal lbow PPSU 16 x 16	10089	16 x 16
Equal lbow PPSU 20 x 20	10090	20 x 20
Equal lbow PPSU 25 x 25	10091	25 x 25
Equal lbow PPSU 32 x 32	10306	32 x 32
Equal lbow PPSU 40 x 40	11780	40 x 40



## MALE LBOW PPSU

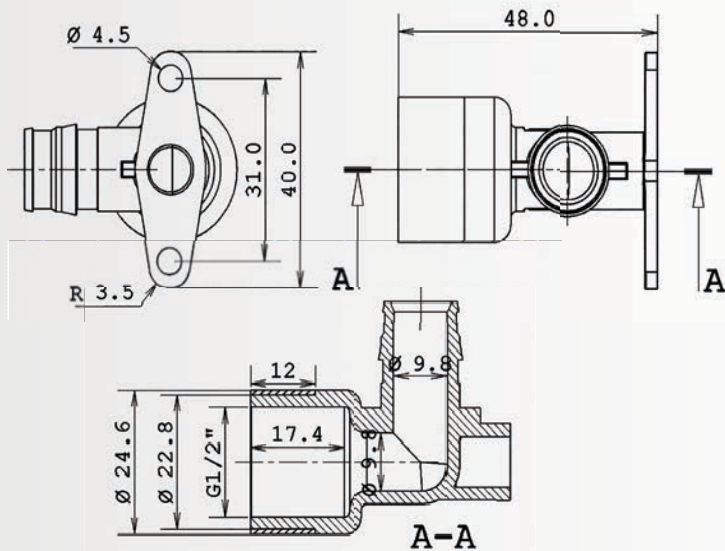
Name	Code	Size
MALE LBOW PPSU		
Male lbow PPSU 16 x 1/2	10101	16 x 1/2
Male lbow PPSU 20 x 3/4	10103	20 x 3/4



## FEMALE LBOW PPSU

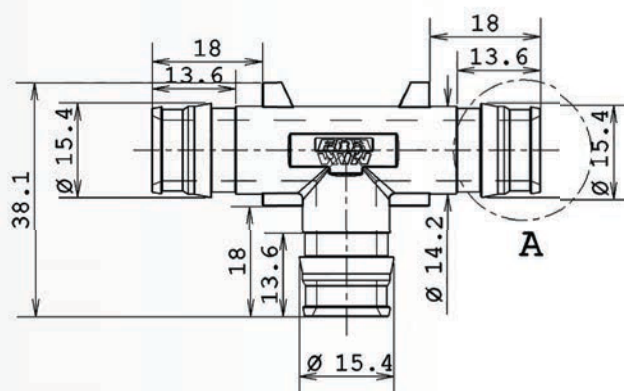
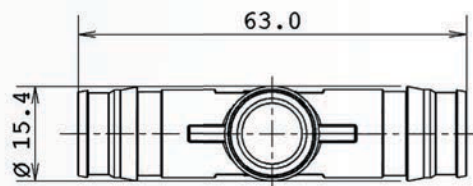
Name	Code	Size
FEMALE LBOW PPSU		
Female lbow PPSU 16 x 1/2	10093	16 x 1/2
Female lbow PPSU 20 x 3/4	10095	20 x 3/4





## FIXTURE LBOW PPSU

Name	Code	Size
FIXTURE LBOW PPSU		
Fixture LBOW 16 x 1/2 PPSU	10077	16 x 1/2



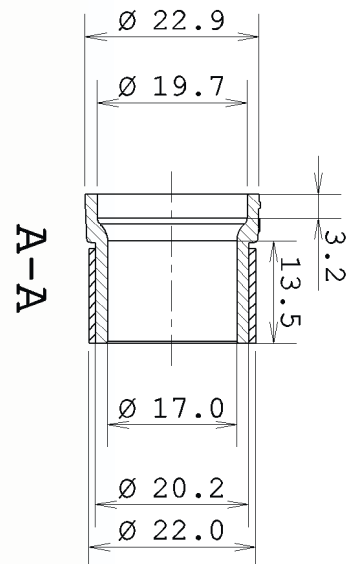
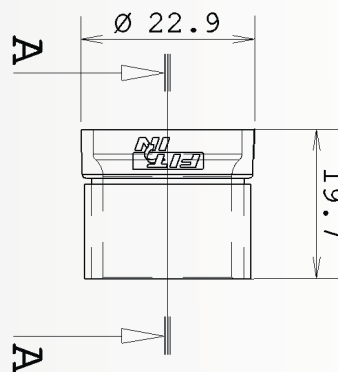
## T PPSU

Name	Code	Size
T PPSU		
Equal T PPSU 16x16x16	10233	16x16x16
Equal T PPSU 20x20x20	10234	20x20x20
Equal T PPSU 25x25x25	10235	25x25x25
Equal T PPSU 32x32x32	10257	32x32x32
Equal T PPSU 40x40x40	11098	40x40x40
Reduced T PPSU 20x16x20	10268	20x16x20
Reduced T PPSU 25x20x20	10269	25x20x20
Reduced T PPSU 32x20x32	10270	32x20x32
Reduced T PPSU 32x25x32	10307	32x25x32
Reduced T PPSU 40x32x40	11509	40x32x40



## SLEEVE PEX

Name	Code	Size
SLEEVE PEX		
Sleeve PEXa 16	10144	16
Sleeve PEXa 20	10145	20
Sleeve PEXa 25	10146	25
Sleeve PEXa 32	10305	32
Sleeve PEXa 40	11872	40



## SLIDING SLEEVE PPSU

Name	Code	Size
SLIDING SLEEVE PPSU		
Sliding sleeve 16 PPSU	10138	16
Sliding sleeve 20 PPSU	10139	20

# SHIMGE Electronic Recirculation Pump

Electronic recirculation pump is a water pump that can circulate water at different temperatures. A single-stage centrifugal pump is generally used. The flow rate of the circulating pump is medium in size, and under constant operating conditions, the flow rate of the pump is relatively small. His body is reduced, only to overcome the pressure drop of the circulatory system. Function control is electronic.

### Advantages:

\* No water loss The magnetic unit has no moving gaskets, which fundamentally eliminates the problem of water leakage Low noise The accuracy of key parts is greater than two thousand millimeters to ensure outstanding performance

\* Long service life The use of ceramics with mirrors and anti-wear ceramic nano-bearings ensures a long service life Lower energy consumption Because the size is reasonable, the motor power is small The circulation pump has a compact structure and reasonable design, so small size and light weight Low water quality requirements: if the circulating water contains tiny impurities, it will not affect the operation of the circulating pump Overheating: the pump is protected by thermal coatings, will not damage the engine from cause of overload.

The intelligent frequency converter circulation pump uses a brushless or low-brush continuous inverter control technology and a single-phase intelligent unit. It can change the speed and power of the pump by adjusting the operating cycle. The ceramic shaft core and the carbon bushing ensure a long service life of the pump. This product is safe and reliable, with a long life and low noise.

### FEATURES:

- Energy class A
- Motor frequency conversion control
- Compact design, electronic controls encapsulated on the pump head
- Function mode: proportional pressure
- Function mode: constant pressure
- Function mode: constant rotation
- Function mode: automatic
- Function mode: night
- Salt consumption
- Low noise level
- Suction connection (inch): 2
- Source pump body
- Weight: 2.4 kg

### PERFORMANCES:

- Maximum flow: 3.5 m<sup>3</sup> / h
- Height: 6 m

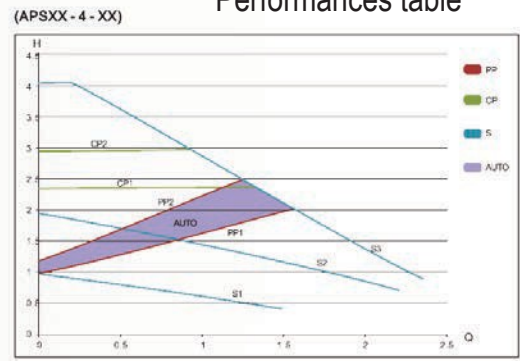
### OPERATION RANGES:

- Agent temperature: 2 - 110 degrees Celsius
- Ambient temperature: + 40 degrees Celsius
- Installation pressure: 10 bar
- Protection level: IP44
- Power supply: 220V 50/60 Hz
- Waterproof class: F
- Use: for clean liquids, without impurities, observe the recommended pH
- Ph: 6.5 - 8.5
- The pump motor must run in a horizontal-position

### CERTIFICATION:



Performances table



# SHIMGE ELECTRONIC PUMPS

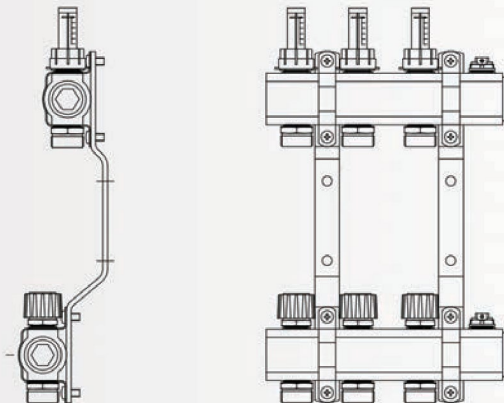
Name	Code	Size
SHIMGE ELECTRONIC PUMP		
SHIMGE recirculation pump - 25 - 6 (130)	10170	130
SHIMGE recirculation pump - 25 - 6 (180)	10171	180
SHIMGE recirculation pump - 32 - 6 (180)	10172	180



# BRASS MIXING GROUP

Name	Code	Size
<b>BRASS MIXING GROUP</b>		
Mixing group – without pump	10118	130
Mixing group – electronic pump	10121	130

The mixing unit consists of: • box mounting bracket, • distributor • automatic vent resistant to temperatures up to 120°C • thermometer 0°-80°C • semi-Dutch 1¼ for recirculation pump connection • mixing valve M30x1.5 for thermostatic head with capillary 20°-65°C • regulation and by-pass valve • thermostatic head temperature sensor sheath with capillary • thermostatic valve with immersion probe • side-right flow-return connections 1 " for distributors



# BRASS DISTRIBUTION KIT

Name	Code	Size
<b>BRASS DISTRIBUTION KIT</b>		
3 way brass Distributor Kit	10293	1" x 3/4
4 way brass Distributor Kit	10294	1" x 3/4
5 way brass Distributor Kit	10295	1" x 3/4
6 way brass Distributor Kit	10296	1" x 3/4
7 way brass Distributor Kit	10297	1" x 3/4
8 way brass Distributor Kit	10298	1" x 3/4
9 way brass Distributor Kit	10299	1" x 3/4
10 way brass Distributor Kit	10300	1" x 3/4
11 way brass Distributor Kit	10301	1" x 3/4
12 way brass Distributor Kit	10302	1" x 3/4

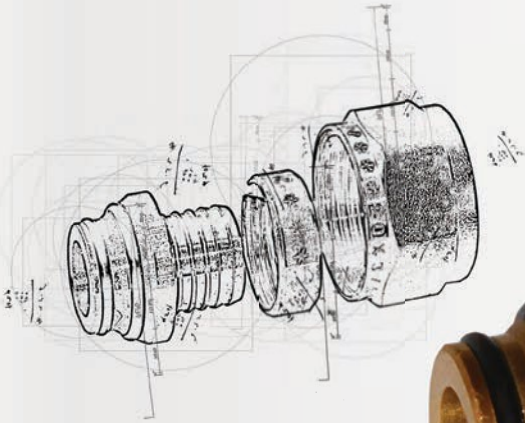
equipment: flanges, flow meters, manual valves





## BRASS COLLECTORS WITH FAUCETS

Name	Code	Size
BRASS COLLECTORS WITH FAUCETS		
2-way tap manifolds	10061	1" x 3/4
3-way tap manifolds	10062	1" x 3/4
4-way tap manifolds	10063	1" x 3/4



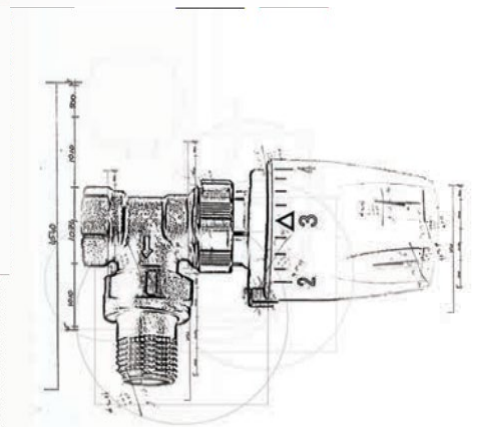
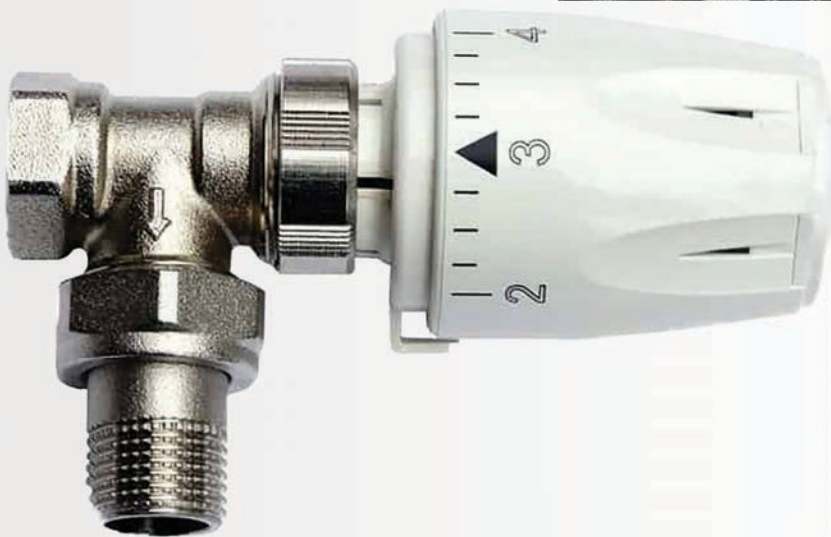
## BRASS CONNECTORS

Name	Code	Size
BRASS CONNECTORS		
Eurocon EK 16 X 2	10114	16 x 2
Eurocon EK 17 X 2	10115	17 x 2
Eurocon EK 20 X 2	10117	20 x 2



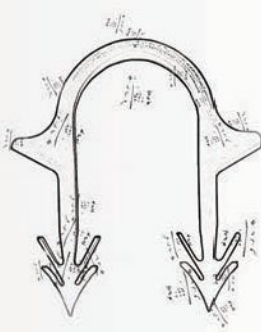
## ACTUATORS M \* 1.5 MM

Name	Code	Size
ACTUATORS M*1.5mm		
Actuator 230 V	10043	M30*1.5 mm
IP 54, temp. -20C + 50C, trip 3-5 mm, F=110N		



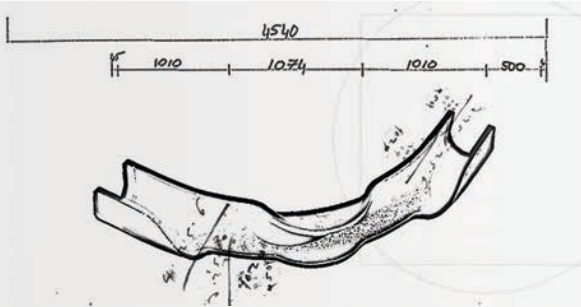
## THERMOSTATIZABLE VALVE

Name	Code	Size
THERMOSTATIZABLE VALVE		
Thermostatic cap	10303	M30*1.5 mm
Brass thermostatic valve	13201	1/2
temperature range 6 ° C - 28 ° C, frost protection 6 ° C, maximum allowable static pressure 1.0MPa, thread M30x1.5		



## TACKER DIN PP CLIPS

Name	Code	Size
TACKER DIN PP CLIPS		
Tacker clips - 40 mm	10060	40 mm



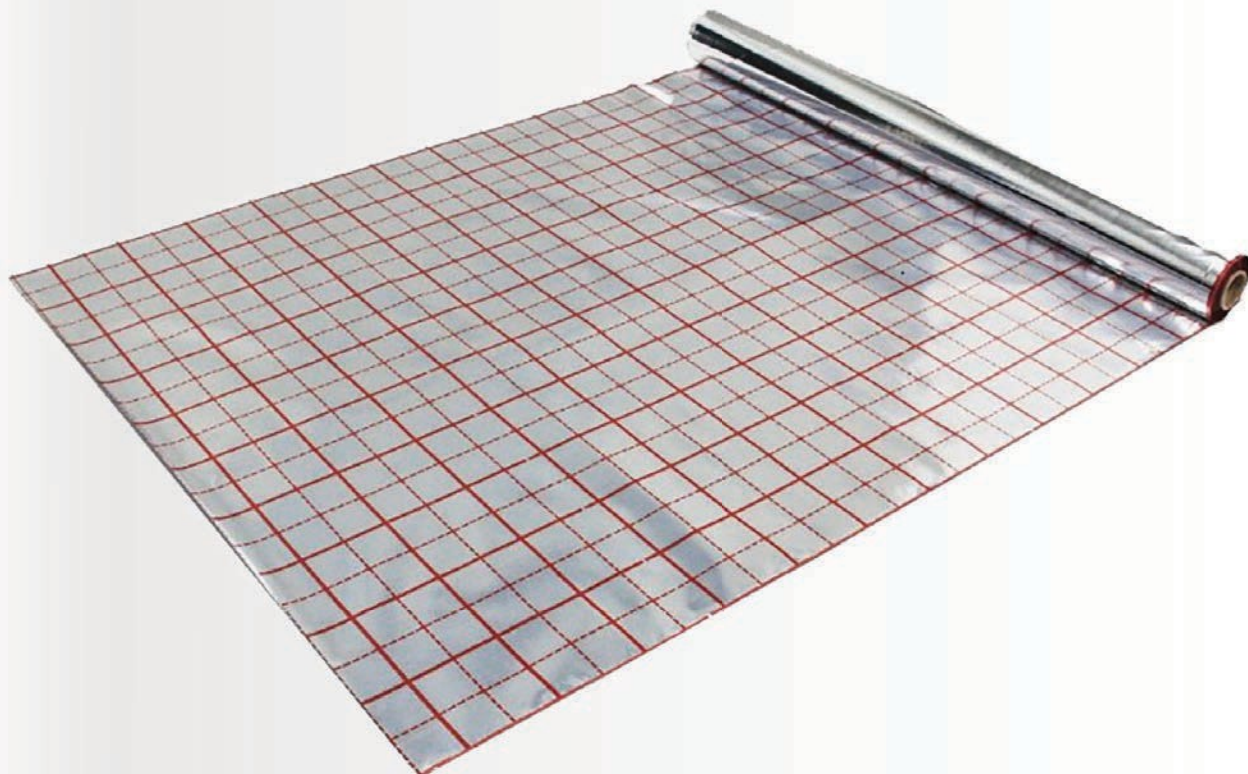
## GUIDING CURVES DIN ABS

Name	Code	Size
GUIDING CURVES DIN ABS		
Guiding curves 14 - 18	10004	14 - 18
Guiding curves 20 - 22	10005	20 - 22
Guiding curves 25	10006	25

## METAL COLLARS WITH STUD AND GASKET

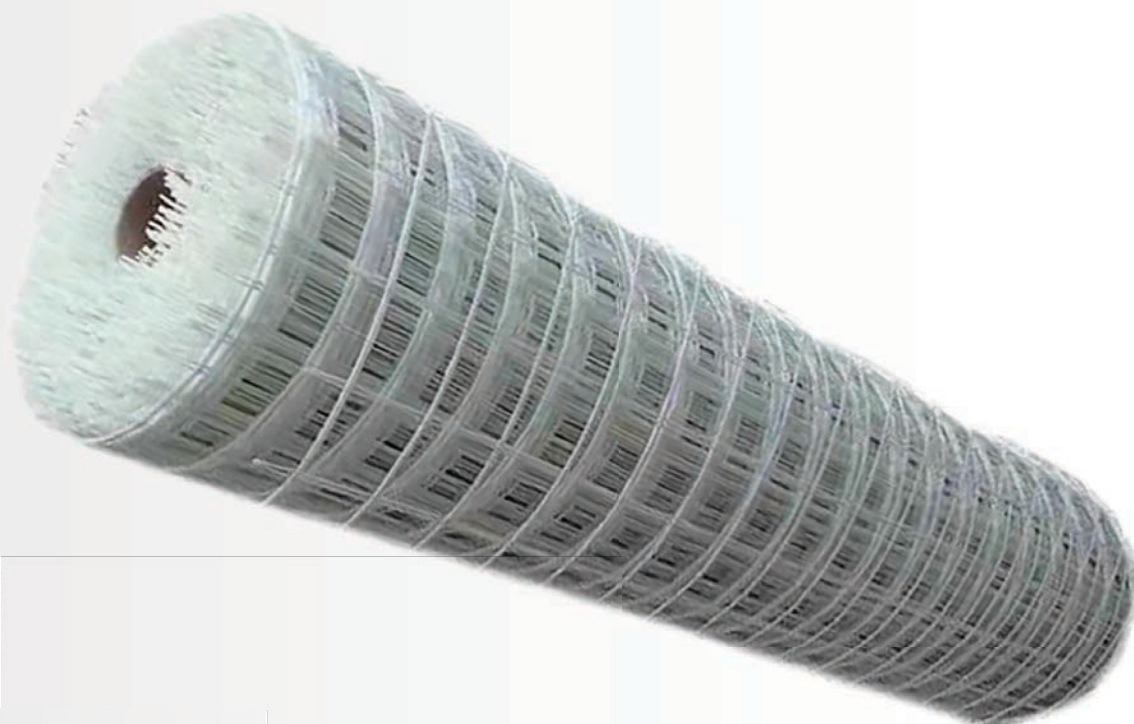
Name	Code	Size
METAL COLLARS WITH STUD AND GASKET		
Metal collar with stud and gasket	19230	3/8
Metal collar with stud and gasket	19231	1/2
Metal collar with stud and gasket	19232	3/4
Metal collar with stud and gasket	19233	1
Metal collar with stud and gasket	19234	1 1/4
Metal collar with stud and gasket	19235	1 1/2
Metal collar with stud and gasket	19236	2
Metal collar with stud and gasket	19237	2 1/2
Metal collar with stud and gasket	19238	3
Metal collar with stud and gasket	19239	4





## ALUMINIUM FOIL

Name	Code	Size
ALUMINIUM FOIL		
Aluminium foil 100 sqm	13022	100 sqm
For thermal protection and vapor transfer		



## FIXTURE MESH

Name	Code	Size
FIXTURE MESH		
Glass fibre fixture mesh 5 x5 cm	13023	5 x 5 cm





## PEX EXPANDING MANUAL KIT

Name	Code	Size
PEX Expansion Manual Kit		
PEX Expansion Manual Kit	12313	16-25



## PEX EXPANDING ELECTRIC KIT

Name	Code	Size
PEX Expansion Electric Kit		
PEX Expansion Electric Kit	12312	16-32



## METAL TACKER

Denumire	Code	Size
Metal Tacker		
Metal Tacker	10218	16 – 20 clips



## SLIDING SLEEVE KIT

Name	Code	Size
Sliding sleeve kit		
Sliding sleeve kit	10248	16 -20



## PEX PIPE SCISSORS 16-32

Name	Code	Size
Pipe scissors		
Pipe scissors PEX 16-32	10271	16-32

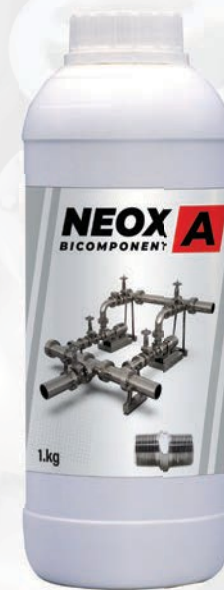


## PIPE SCISSORS PEX 32-75

Name	Code	Size
Pipe scissors		
Pipe scissors PEX 32-75	10272	32 - 75

A blue-tinted photograph of a complex industrial chemical plant. The image shows a dense network of large, polished metal pipes and vessels. In the foreground, a large, dark metal handwheel valve is prominent, attached to a pipe. The background is filled with more pipes, some with insulation, and structural elements of the facility. The overall scene is industrial and technical.

# *CHEMICALS INSTALLATIONS*



## PASTA VERDE

### METALLIC THREADS

Anti-seizure mastic, antioxidant, for sealing water and gas connections. It is used together with hemp. Working temperature, max 100 ° C. P. max. 12 bar

Code 20009 / Pasta verde / bottle 460.g / 24 box

Code 20411 / Pasta verde / tube 230.g / 40 box

## PASTA GAS

### GAS METALLIC THREADS

Anti-seizure mastic, antioxidant for sealing gas and water vapor joints. Working temperature max. 300 ° C. P. max. 12 bar. It is used together with hemp.

Code 20392 / Pasta GAS / bottle 460.g / 24 box

## CÂNEPĂ

### HEMP BLISTER AND BALOT

Combed hemp strings for the classic sealing of steel and brass letters with green paste, for water, gas and hydrocarbon installations. Hemp is not used for plastic threads.

Code 20063 / hemp / balot 25 kg

Code 20023 / hemp / blister

## NEOX A+B

### PRESSURE AND TEMPERATURE SEALANT

Anti-seizure mastic, antioxidant, for sealing water and gas connections. It is used together with hemp. Working temperature, max 100 ° C. P. max. 12 bar

Code 28901 / NEOX A / bottle 1.kg / 4 box

Code 28902 / NEOX B / bottle 100.g / 60 box



**THERMAL UNIT ANTIFREEZE -60 ° C**

ELECTRIC, GAS, WOOD

Permanent antifreeze, thermodynamic additive, based on monoethyl glycol, carboxylic type. Anti-corrosion product - its protective properties apply to all metals that are part of the cooling and heating circuits, especially aluminium and copper.

Code 20037/ THERMAL UNIT ANTIFREEZE -60 °C / large bottle 10.kg/244 -palet

Code 20389/ THERMAL UNIT ANTIFREEZE -60 °C / large bottle 20.kg

**SOLAR ANTIFREEZE - 30 ° C**

THERMODYNAMIC ADDITIVE

Permanent thermal vector intended for installations with pressurized solar panels. Improves heat transfer in radiators, air conditioners, heating, reducing friction by 45%. It has an ocular, anti-limescale and antifreeze effect.

Code 20352/SOLAR ANTIFREEZE -30 °C / large bottle 10.kg/244 -pale

Code 20397/SOLAR ANTIFREEZE-30°C/ large bottle 20.kg

**SOLEN**

THERMODYNAMIC ADDITIVE

Solen is a permanent thermodynamic additive, intended for heating and air conditioning installations, the solution is introduced in installations in a ratio of 1-2% of the weight of the fluid used.

Code 20417/SOLEN/ bottle 1.kg/ 6 box

Code 20416/SOLEN/ large bottle 5.kg/ 2 box

**CORROSION INHIBITOR**

CARBOXYLIC ADDITIVE

Agent for the protection of heating and conditioning circuits, thermal power plants, cooling towers, motor vehicles, against chemical electro-corrosion and oxidation. Prevents the formation of limestone crusts which, together with the dirt - magnetite or ferrite, can clog the pipes. The product is compatible with all types of metals and antifreeze agents.

Code 27453 / CORROSION INHIBITOR / bottle 1.kg

Code 27454 / CORROSION INHIBITOR / large bottle 5.kg



Ab 123



k 99



Ab 1777

## THERMAL UNIT ANTIFREEZE POLAR-TECH

### CONCENTRATED PRODUCT - 72°C

Permanent antifreeze for cars and industry, based on monoethyl glycol, carboxylic type. Anticorrosive product. Its protective properties apply to all metals that are part of cooling and heating circuits, especially aluminium and copper.

Code 20044/ ANTIFREEZE POLAR-TECH -72 °C / large bottle 10.kg / 244 -palet

Code 20045/ ANTIFREEZE POLAR-TECH -72 °C / large bottle 20.kg

## FOOD ANTIFREEZE -30 °C

### NON-TOXIC PRODUCT

Antifreeze based on organic acids for the food industry, ready prepared at a freezing temperature of -30 ° C. The product is characterized by excellent heat transfer properties, which it recommends for use in refrigeration.

Code 20034 /FOOD ANTIFREEZE -30 °C / large bottle 10.kg / 244 -palet

Code 20035 /FOOD ANTIFREEZE -30 °C / large bottle 20.kg

## CONCENTRATED SOLAR ANTIFREEZE

### FREEZING POINT -72 °C

Pure permanent antifreeze based on monopropylene glycol for food and solar installations. It does not contain amines, nitriles or substances harmful to humans and the environment. It does not cause corrosion of the metals with which it comes into contact. Suitable for all materials that are parts of cooling circuits, especially aluminium and copper.

Code 20051/ CONCENTRATED SOLAR ANTIFREEZE -72 °C / large bottle 10.kg / 244 -palet

Code 20285/ CONCENTRATED SOLAR ANTIFREEZE -72 °C / large bottle 20.kg

## SOFTENED WATER

### SOFTENED WATER FOR INDUSTRIAL CIRCUITS

Softened water is a water from which the ions responsible for the limestone deposits (calcium and magnesium) have been removed, the rest of the minerals contained in the water do not change and the properties of the water do not change in any way.

Code 20060 / SOFTENED WATER / large bottle 10.kg/244 -palet

Code 40219 / SOFTENED WATER / bulk



## STRIPPING PASTE

### FOR SOFT WELDING

Stripping and deoxidizing gel for welding copper, brass, lead, steel compounds. It promotes the flow of the alloy, leaves no residue, the traces can be washed with water. Used for welding pipes, electrical and electronic equipment.

Code 20167 / Stripping paste / bottle 100.g / 60 box

## FITIN

### SILICONIC LUBRICANT

Silicone gel lubricant for joints between plastics, tubes, electrical cables, fittings. Protects gaskets and plastic; maintains its lubricating qualities unaltered over time.

Code 20365 / FITIN / tube 125.g / 40 box

Code 20008 / FITIN / tube 250.g / 25 box

## CARBONITO

### ANTI-TAR CARTRIDGE

Intense combustion powders for cleaning incombustible deposits from fireplaces on solid fuels: wood, coal, etc. They can be used to clean stoves, chimneys, boilers from wood-fired boilers.

Code 20275 / Carbonito / tube 180.g / 60 box

## ULEI DE FILETARE

### COOLING OIL

Cooling and cutting oil for automatic or manual machining centres, for perfect results. It has excellent lubrication-cooling properties, perfect for various operations: milling, drilling, drilling, reaming, grinding, turning, etc.

Code 20226 / THREADING OIL / bottle 500.g / 12 box



# UNCLOGGERS



## DIZOL

### SIPHON OPENING SOLUTION

Professional liquid detergent based on fast-acting sulfuric acid for toilets, sinks and industrial drains. The product has a package of inhibitors that prevents corrosion of metals and does not affect the pipes.

Code 20370 / DIZOL / bottle 1.Kg / 6 box

## FOSE SEPTICE

### BIOACTIVATOR WITH BACTERIA

Spores of latent bacteria that activate in contact with water and organic matter, which separates them in water and other solid deposits. Application: septic tanks.

Code 20410 / SEPTIC TANKS/ bottle 1.kg / 6 box

Code 20019 / SEPTIC TANKS/ sachet 10.g

## BIODIZOL

### UNCLOGGES AND ELIMINATES ORGANIC ODORS

BIODIZOL It is a liquid bacterial concentrate that combines a unique, environmentally friendly chemistry with bacteria and enzymes to provide a proven, innovative and effective long-term solution for odor control and unclogging of organic matter pipes.

Code 20477 / BIODIZOL / bottle 1.Kg / 6 box

## ENZYKAN 1X

### BIOACTIVATOR FAT SEPARATORS

Bacterial solution for destroying fats, oils and other food residues. Ideal for unclogging drain pipes where grease blocks drainage and for grease separator treatments. It is used as such. Daily dose 150 ml.

Code 20003 / ENZYKAN 1X / bottle 1.kg / 6 box

Code 20018 / ENZYKAN 1X / large bottle 5.kg / 2 box



## DETAR

### COPPER, IRON, IRON DESCALER

Acid descaler for a wide range of applications: removal of rust, removal of limescale or silicon plugs from the circulation tubes of boilers, heat exchangers, removal of traces of oxidation of various metals: recommended for copper, steel. After descaling, washing with a neutralizer is recommended (see Neutral).

Code 20081 / DETAR / large bottle 5 kg / 2 box

Code 20361 / DETAR / large bottle 10 kg / 244 palet

## MAGNERIT K

### DESCALER FOR ANY TYPE OF METALS

MagneritK is a unique combination of properties - removes heavy deposits of calcium, iron, magnesium and manganese salts that act as an insulator reducing heat transfer efficiency and damage the plant. By forming complexing (chelating) agents that can be easily removed later, MagneritK - is a suitable solution for a variety of applications.

Code 20187 / MAGNERIT K / large bottle 5 kg / 2 box

## NITRICAL

### ALUMINIUM DESCALER

Acid descaling agent for a wide range of applications: removal of rust, removal of limescale or silicon plugs from boiler circulation pipes, heat exchangers, removal of oxidation marks in aluminium installations.

Code 20077 / NITRICAL / large bottle 5 kg / 2 box

## INOXID

### STAINLESS STEEL FOAM DESCALER

Specialized product for cleaning stainless steel installations: heat exchangers, pumps, pipes, tanks.

Code 20082 / INOXID / large bottle 5 kg / 2 box

Code 24536 / INOXID / bottle 500 g / 12 box



## NEUTRAL

### SOLUTION FOR ACID NEUTRALIZATION

Strong alkaline solution to neutralize acid residues resulting from the Detar descaling process.

Code 20391 / NEUTRAL / large bottle 5 kg / 2 box

## RUGINEX

### RUST REMOVER

Ruginex is used for cleaning rusty (corroded) ferrous metal surfaces. The solution is suitable for both small parts and large metal surfaces, for example applications in the industrial field (machinery) or in the field of car tinsmithing.

Code 2026 / RUGINEX / bottle 500.g / 12 box

Code 28756 / RUGINEX / large bottle 5 kg / 2 box

## INSTALLATIONS DETERGENT RPD10X

### FOR INTERNAL CLEANING OF INSTALLATIONS

RPD10X is a concentrated, non-foaming detergent for washing industrial water circuits. Remove dirt, sludge or accumulations of anaerobic algae. It can also make a light descaling, depending on the time allotted for cleaning.

Code 20102 / INSTALLATIONS DETERGENT RPD10X / large bottle 10 kg / 244 pallet

## SPARK

### FIREPLACE CLEANING SOLUTION

Removes residues from burning and / or baking: soot, smoke, grease, dirt and dust. Can be used to clean fireplaces and stove windows.

Code 20262 / SPARK / bottle 500.g



**SPLIT NET**

**AIR CONDITIONER DETERGENT**

Complex, fragrant foam detergent based on surfactants, alcohols, disinfectants, pH corrector, ensures efficient cleaning of air conditioner splits, disinfects and smells, eliminating the discomfort caused by the unpleasant smell of the installation, has anti-algae effect and it is easily descaling for surfaces.

Code 20402/SPLITNET/bottle500.g/ 12box

Code 20401/SPLITNET/large bottle 5.kg/ 2 box

**CLIMATECH BASIC**

**ALKALINE DETERGENT FOR VENTILATION BATTERIES**

Foaming detergent used for lamellar batteries in the registers of indoor and outdoor air conditioners, filters for hot air generators, fan-coil and air ducts. Dissolves and emulsifies organic and inorganic dirt from the environment.

Code 20117/CLIMATECHBASIC/large bottle 5.kg/2 box

**CLIMATECH ACID**

**REMOVAL FOR ALUMINIUM RECORDS**

Foaming detergent used for lamellar batteries in the registers of indoor and outdoor air conditioners, filters for hot air generators, fan-coil and air ducts. Removes deposits of salt, calcium and magnesium and oxides. Clima Tech Acid treatment is applied after treatment with Clima Tech Basic:

Code 20693 / CLIMATECH ACID / large bottle 5.kg / 2 box

**FILTER PLUS**

**DETERGENT FOR HOODS AND OTHER FILTERS**

Detergent that has a strong cleaning effect for alkali-resistant surfaces: oils, lubricants, greases, etc. It is indicated in the food industry, for restaurants, warehouses, halls, for filters in air conditioners and for those in hoods, where there is a need for a detergent with intense action and disinfection.

Code 20096 / FILTER PLUS / large bottle 5.kg / 2 box



# *CONSTRUCTIONS*

## SUPERFLUIDIZANT ECH 300

### DIG AND CONCRETE FLUIDIZER

The additive ensures a low water / cement ratio and the achievement of increased strengths. The effect is immediate. ECH 300 super-fluidizer ensures excellent fresh mortar flow. Areas of application: industrial screeds, self-leveling screeds, profile casting. The product is compatible with other antifreeze, waterproofing and shrinkage additives.



packaging 5 l large bottle  
product code 20396



packaging 10 l large bottle  
product code 20395

## D-ECOTECH

### PEELER

It is used for stripping and protection of casting surfaces, absorbent or non-absorbent, of wood or metal. D-ECOTECH ensures easy disassembly, does not contain solvent and does not stain concrete surfaces. The product is applied by brushing or spraying. We recommend use at a dilution ratio of 1: 3. The quantity of 1 kg covers 70-90 sqm of surface.



packaging 5l large bottle  
product code 22343



packaging 10l large bottle  
product code 20071

## CIMSOL

### CEMENT SCRAP REMOVER

CIMSOL is a professional solution for cleaning cement from industrial machinery or concrete conveyor shafts, for removing the rest of the cement from surfaces after construction. Ready-made product, used as such.



packaging 5l large bottle  
product code 20190



packaging bottle 500ml  
Product code 20191

## SPUMIX

### MILD CELLULAR CONCRETE

Spumix is a foaming additive used in the manufacture of lightweight concrete with the ability to produce air bubbles with a high level of stability. The thermal and acoustic insulation properties make the product ideal for applications for insulating floors and roofs, to reduce heat loss. Foaming is done with a dedicated pump. Advantages: • reduced weight of the superstructure • better fire protection • improved thermal insulation • possibility of pumping at high altitudes



packaging 5l large bottle  
product code 21745



Packaging 10l large bottle  
product code 20031

## VETRO

### GLASS WATER

Aqueous sodium silicate solution for concrete, mortar and plaster applications. Protects against moisture and fire. Product for sealing and fireproofing wood and fabrics by impregnation. It can be used for insulation against moisture and water penetration in concrete constructions, wells, septic tanks, resistance walls, as an additive that accelerates the binding of cement.



packaging 5l large bottle  
product code 20593



packaging bottle 1000ml  
product code 20390

## MIXGEL

### ANTIFREEZE FOR CONCRETE

MIXGEL is a powder for pouring concrete in low temperature conditions. The product accelerates the hardening of concrete and mortars in a short time. The strength characteristics of concrete do not change. It is used in a ratio of 0.5-1% by weight of cement.



packaging bottle 1000ml  
product code 29456



packaging sack 25 kg  
product code 27892

## HIDROFOB ECH 3003

### WATERPROOFING FOR PLASTERS AND FLOORS

It is a ready-made product without solvent, an emulsion based on silane and siloxane. The ECH 3003 HYDROFUG solution serves as a high-quality general-purpose water repellent for impregnating mineral surfaces. Features: • Rapid development of water-repellent character • Good adhesion to water-based paints • Good depth of penetration • Resistant to alkalis • Does not change colours and does not look shiny • Allows substrate to breathe



packaging 10l large bottle  
product code 20105



packaging 5l large bottle  
product code 20106

## SILANE

### PAINTING FOR FLOORS

SILANE is a silane-based binder for impregnating mineral, wood or metal layers. Successfully replaces epoxy or polyurethane paints. The product is applied as such (colourless) or together with other pigments dedicated to the application. It is mixed with GF91 catalyst in a ratio of 5%. SILANE is characterized by: - resistant to moisture and aggressive chemicals - easy handling - resistant to mechanical and high temperatures - without solvent - spectacular appearance on floors and surfaces - high resistance to heavy traffic.



packaging metal box 5kg  
product code 23424

packaging metal box 1kg  
product code 29878

### CATALYST GF 91

Product code 40153

packaging Metal box 30kg

product code 24516

## SILICON MATRITE RTV3325

### SILICONE MOLDS WITH MULTIPLE MOLDING

RTV 3325 is a silicone elastomer, which after the addition of a catalyst, vulcanizes at room temperature and leads to a flexible and elastic material. Applications: • decorative objects: cornices, ornaments, statues, figurines, toys, candles, gift items • constructions: pavements, columns, artistic castings • excellent mechanical properties, especially when broken • very good flexibility, easy demulcation



packaging	bucket 5.kg
product code	27452

packaging	bottle 1.kg
product code	20181

## DEMULANT R7

### MOLD DEMULCATION

DEMULANT R7 is a liquid wax-based release agent that does not contain hydrocarbons and silicone.



packaging	bottle 1.kg
product code	40064

## SILICON RTV3527 (A)

### TWO-COMPONENT SILICONE FOR MOLDS

RTV 3527 is a mixture of A + B products, for the realization of molds of the highest quality, with excellent resistance and flexibility properties. The fluidity is very good and does not require catalysts. A premium product for professionals.



packaging	bucket 5.kg
product code	23956

packaging	bottle 1.kg
product code	20274

## SILICON RTV3527 (B)

### TWO-COMPONENT SILICONE FOR MOLDS

RTV 3527 is a mixture of A + B products, for the realization of molds of the highest quality, with excellent resistance and flexibility properties. The fluidity is very good and does not require catalysts. A premium product for professionals.



packaging	bucket 5.kg
product code	26730

packaging	bottle 1.kg
product code	20254



## CATALIZATOR 6H

### CATALYST

The CATA 6H catalyst is used to vulcanize RTV silicones in 6 hours. The process is completed within 24 hours, when demolition is recommended. Use 10% in a mixture with different types of silicones.



packaging                      bottle 100ml  
product code                      20407

packaging                      bottle 1000 ml  
product code                      40048

## CATALIZATOR TIXO

### THIXOTROPIC CATALYST

The TIXOTROPIC catalyst is used to vulcanize all types of silicones in a very short time. It has the additional advantage of being able to be used in making molds on vertical surfaces. As it is a toxic product, it is not recommended for use in facial molds. Usage ratio: 1-10.



packaging                      bottle 100ml  
product code                      20408

packaging                      bottle 1000ml  
product code                      40049

## RTV SILICON APPLICATIONS



## SILANE APPLICATIONS





***WATER TREATMENT***

# ALGO CLEAN

## algacide solution

- sanitizing agent with high antimicrobial action to remove algae and fungi from the pool • concentrated product, dosage:
- initial 150 ml - 10 m3 water • weekly 100 ml - 10 m3 water



packaging      bottle 1000ml

prod. code      20374

packaging      can 5 L

prod. code      20373

packaging      can 20 Litri

prod. code      20431

# OXY ACTIVE

## active oxygen

- active oxygen solution with clarifying effect and together with an algicide is meant to replace chlorine. • The recommended dosage is 1 liter per 10 m3 of pool water.



packaging      bottle 1000ml

prod. code      20147

packaging      can 5 L

prod. code      20148

packaging      can 20 Litri

prod. code      20339

# INSTANT CLOR

## shock chlorine disinfectant

- quick-dissolving chlorine shock tablets for pool water treatment • composition: dichloroisocyanuric acid dihydrate
- the amount of chlorine 55 - 60% • dosage - 15 grams per 1 m3 of water



packaging      bucket 5 L

prod. code      20144

packaging      bottle 1000ml

prod. code      20143

# CLOR ACTIV

## liquid chlorine disinfection

- concentrated solution of active chlorine in a proportion of 12-15% and anti-limescale sequestrants. • eliminates bacteria, viruses and germs • maintain a dosage of active chlorine in a concentration of 0.4 -1.4 mg / liter
- the product is dosed directly from the package or with dosing pumps
- solution with approval in Romania



packaging      bottle 1000ml

prod. code      20066

packaging      can 5 L

prod. code      20067

packaging      can 20 L

prod. code      20845

## MULTI ACTION

### 3 action tablet

- tablets with multiple action • disinfection - bacteria, viruses, anti-algae: • pH reduction • flocculation effect, dosage:
- a tablet of 200 grams per 20 m3 of water for every 7 days



packaging	bucket 5 L
prod. code	20169
packaging	tablet 200g
prod. code	10161

## PH MINUS LICHID

### PH lowering liquid solution

- liquid solution for lowering the pH of the water, which causes unpleasant deposits and unnecessary losses of chlorine • concentrated product
- dosing 150 - 200 ml in 4 m3 of water for 24 hours



packaging	bottle 1000ml
prod. code	20171
packaging	can 5 L
prod. code	20172

packaging	can 20 L
prod. code	20432

## PH MINUS SOLID

### Water PH reducer

- granular powder to lower the pH of the water. dosage:
- the decrease of the PU by 0.2 units is done by adding 1.5 kg of powder to 100 cubic meters of water



packaging	bucket 8 kg
prod. code	20174

packaging	bottle 1,6 kg
prod. code	20173

## PH PLUS SOLID

### Water PH riser

- granular powder to increase the pH of the water. dosage:
- raising the pH by 0.1 is done by adding 0.6 kg of powder to 100 cubic meters of water



packaging	can 5 L
prod. code	20176

packaging	bottle 1000ml
prod. code	20175

# AQUA CLEAR

## flocculating, coagulating solution

- transforms microparticles and flakes in suspension into large particles that deposit on the bottom of the pool and can be collected manually or with the robot
- concentrated product
- optimal dosage 0.1 - 3g / cm<sup>3</sup>



packagin	bottle 1000ml
prod. code	20139
packaging	can 5 L
prod. code	20140

packaging	can 20 L
prod. code	20317

# DETARTRANT LINER

## Water line descaler

- descaling gel for the water line, with good adhesion.
- removes limescale and algae deposits. does not foam
- 10 minutes after application, rub with a sponge. The product acts with its own abrasion
- ready-made descaler



packaging	bottle 1000ml
prod. code	20107

# WINTER TREATMENT

## winter treatment for pool water

- concentrated liquid for the treatment of swimming pools during the winter
- prevents the formation of algae and bacteria
- prevents the formation of calcium precipitates
- does not foam
- a shock treatment with Instant Chlorine 15 g / m<sup>3</sup> will be performed, add Winter Treat 5 l for every 100 m<sup>3</sup> of water
- It is recommended to repeat the process in the middle of the winter



packaging	can 5 L
prod. code	27809

# POOL TEST

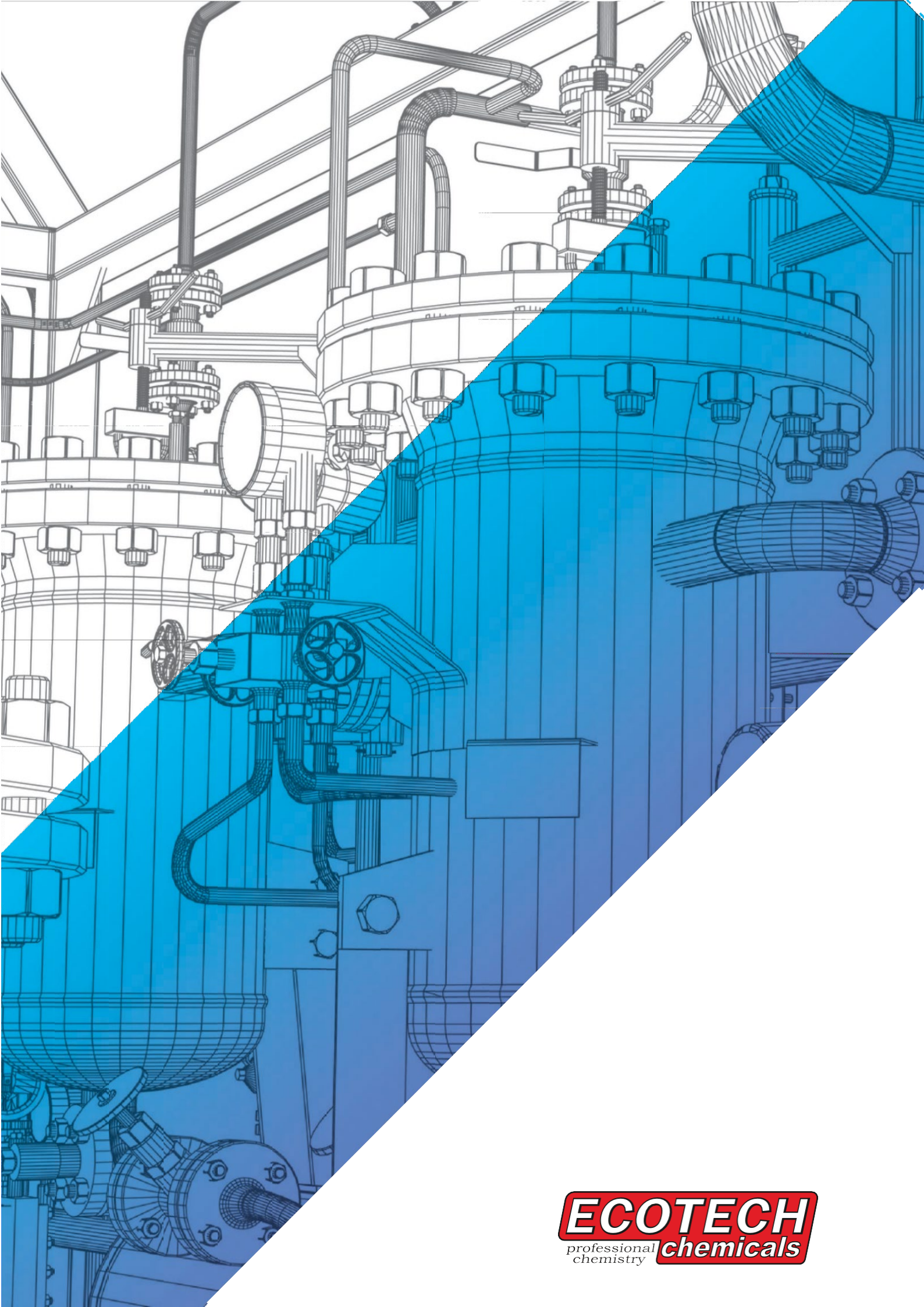
## Pool water tester

- simple test to determine the pH and chlorine present in the pool water
- add water to be analysed in the tester and then insert tablets from the kit. The resulting colour will help determine and adjust the correct water in your pool.



packaging	pool tester
prod. code	10224

packaging	reserves pool test
prod. code	10208



**ECOTECH**  
professional chemistry **chemicals**