

Install your **future**



SYSTEM **KAN-therm**

# PP Green



High quality  
for reasonable price

EN 21/01

Ø 20–200 mm

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## 1 System **KAN-therm** PP Green

**System KAN-therm PP Green is a complete installation system consisting of pipes and fittings made of polypropylene.**

The system is widely used in construction, particularly in water supply systems.

The elements of the system are connected by welding (thermal polyfusion) with the use of electric welders. Welding technique through a homogeneous combination provides outstanding tightness and mechanical strength of the installation.

## The material

The plastic used in the production of pipes and fittings of the System KAN-therm PP Green is the high quality alpha type random polypropylene copolymer (PP-R) which used to be marked as Type 3.

In diameter range above 110 mm, pipes are made of beta type random polypropylene copolymer (PP-RCT) which used to be marked as Type 4.

System KAN-therm PP Green is characterised by a number of advantages:

- high microbiological and physiological inertness of products
- high chemical resistance,
- resistance to material corrosion,
- low thermal conductivity,
- low specific mass,
- resistance to scale accumulation,
- dampening of flow vibrations and noises,
- mechanical strength,
- homogeneity of connections,
- high operation durability.



## The scope of uses

**The installation System KAN-therm PP Green, due to its material properties, has a wide range of use:**

- cold (20°C/2.0 MPa) and hot (60°C/1.0 MPa) water in residential buildings in hospitals, hotels, office buildings, schools,
- central heating systems (temp. up to 90°C, working pressure up to 0.6 MPa),
- compressed air systems,
- balneological installations,
- installations in agriculture and gardening,
- industrial pipelines, e.g. for transporting of aggressive media and food substances,
- naval installations.

The scope of applications includes new installations, as well as repairs, modernizations and replacements.

## Sanitary systems installation

System KAN-therm PP Green installations, thanks to the special properties of PP-R polypropylene (physiological and microbiological inertness, resistance to corrosion, to scale accumulation, vibration resistance, high thermal insulation of pipes), they are widely used especially in water supply systems, in particular in the installation of risers and horizontal pipes.

This refers to both cold and hot water installations - in residential buildings, hospitals, hotels, office buildings, schools, on ships, etc. System KAN-therm PP Green installations are indispensable in the replacement of old, corroded water supply installations.

Due to the specific technique of connection, thermal polyfusion, i.e. welding, tightness and durability of the installation is guaranteed.

### Elements of the system

System KAN-therm PP Green includes the following elements:

- PP-R pipes (uniform and compound) supplied in straight sections,
- PP-RCT (compound) pipes supplied in straight sections,
- uniform PP-R fittings,
- „adaptor“ couplings with brass threaded inserts,
- sleeves for flange connections, pipe joint connections,
- expansion loops, wallplates, valves,
- fixing elements,
- tools for cutting, machining and welding.

## Pipes

### Pipe types

System KAN-therm PP Green features four pipe types which differ in wall thickness and structure (compound pipes):

- uniform pipes SDR7,4 (20 –110 mm),
- uniform pipes SDR6 (20 –110 mm),
- compound pipes SDR6 Stabi Al (20 –110 mm),
- compound pipes SDR7,4 Glass (20-110 mm),
- compound pipes SDR9 PP-RCT Glass (125 mm),
- compound pipes SDR11 PP-RCT Glass (160-200 mm).

### Pipe series (S), dimension ratio (SDR) and pressure classification (PN) of PP-R pipes

$$S = (D-s)/2s$$

$$SDR = D/s$$

S – pipe dimension series in accordance with ISO 4065

SDR – standard dimension ratio

D – nominal external tube diameter

s – nominal tube wall thickness

PN – pressure nominal

S	SDR	PN
5	11	10
3,2	7,4	16
2,5	6	20

Uniform pipes SDR7,4					
Dimensions	Ext. diameter D	Wall thick s	Int. diameter d	Unit volume	Unit mass
[mm]	[mm]	[mm]	[mm]	[l/m]	[kg/m]
<b>20 × 2,8</b>	20	2,8	14,4	0,163	0,148
<b>25 × 3,5</b>	25	3,5	18,0	0,254	0,230
<b>32 × 4,4</b>	32	4,4	23,2	0,415	0,370
<b>40 × 5,5</b>	40	5,5	29,0	0,615	0,575
<b>50 × 6,9</b>	50	6,9	36,2	1,029	0,896
<b>63 × 8,6</b>	63	8,6	45,8	1,633	1,410
<b>75 × 10,3</b>	75	10,3	54,4	2,307	2,010
<b>90 × 12,3</b>	90	12,3	65,4	3,358	2,870
<b>110 × 15,1</b>	110	15,1	79,8	4,999	4,300

Uniform pipes.

Diameter range from 20×2,8 mm to 110×15,1 mm.

Used in installations: cold and hot utility water, with the operating pressure of 8 bar and calculation temperature of up to 60°C.

4 m sections.

Uniform pipes SDR6					
Dimensions	Ext. diameter D	Wall thick s	Int. diameter d	Unit volume	Unit mass
[mm]	[mm]	[mm]	[mm]	[l/m]	[kg/m]
<b>20 × 3,4</b>	20	3,4	13,2	0,137	0,172
<b>25 × 4,2</b>	25	4,2	16,6	0,216	0,266
<b>32 × 5,4</b>	32	5,4	21,2	0,353	0,434
<b>40 × 6,7</b>	40	6,7	26,6	0,556	0,671
<b>50 × 8,3</b>	50	8,3	33,4	0,866	1,050
<b>63 × 10,5</b>	63	10,5	42,0	1,385	1,650
<b>75 × 12,5</b>	75	12,5	50,0	1,963	2,340
<b>90 × 15,0</b>	90	15,0	60,0	2,827	3,360
<b>110 × 18,3</b>	110	18,3	73,4	4,208	5,040

Uniform, thick-walled, universal pipes.

Diameter range from 20×3,4 to 110×18,3 mm.

Used in installations: cold and hot utility water, with the operating pressure of 10 bar and calculation temperature of up to 60°C, and in heating systems (6 bar/80°C,  $T_{max} = 90^\circ\text{C}$ ).

4 m sections.

Compound pipes SDR6 Stabi Al					
Dimensions	Ext. diameter D	Wall thick s	Int. diameter d	Unit volume	Unit mass
[mm]	[mm]	[mm]	[mm]	[l/m]	[kg/m]
<b>20 × 3,4</b>	20 (21,8)*	3,4	13,2	0,137	0,218
<b>25 × 4,2</b>	25 (26,9)*	4,2	16,6	0,216	0,328
<b>32 × 5,4</b>	32 (33,9)*	5,4	21,2	0,353	0,520
<b>40 × 6,7</b>	40 (41,9)*	6,7	26,6	0,556	0,770
<b>50 × 8,3</b>	50 (51,9)*	8,3	33,4	0,866	1,159
<b>63 × 10,5</b>	63 (64,9)*	10,5	42,0	1,385	1,770
<b>75 × 12,5</b>	75 (76,9)*	12,5	50,0	1,963	2,780
<b>90 × 15,0</b>	90 (92)*	15,0	60,0	2,830	3,590
<b>110 × 18,3</b>	110 (112)*	18,3	73,4	4,210	5,340

Compound, stabilized pipes, reinforced with aluminium film.

Diameter range from 20×3,4 to 110×18,3 mm.

Used in installations: hot utility water, with the operating pressure of 10 bar and calculation temperature of up to 60°C, and in heating systems (6 bar/80°C,  $T_{max} = 90^\circ\text{C}$ ).

4 m sections.

\* in brackets: internal diameter of the pipe with Al film and protective layer

Compound pipes SDR7,4 Glass					
Dimensions	Ext. diameter D	Wall thick s	Int. diameter d	Unit volume	Unit mass
[mm]	[mm]	[mm]	[mm]	[l/m]	[kg/m]
<b>20 × 2,8</b>	20	2,8	14,4	0,163	0,160
<b>25 × 3,5</b>	25	3,5	18,0	0,254	0,250
<b>32 × 4,4</b>	32	4,4	23,2	0,415	0,430
<b>40 × 5,5</b>	40	5,5	29,0	0,615	0,650
<b>50 × 6,9</b>	50	6,9	36,2	1,029	1,000
<b>63 × 8,6</b>	63	8,6	45,8	1,633	1,520
<b>75 × 10,3</b>	75	10,3	54,4	2,307	2,200
<b>90 × 12,3</b>	90	12,3	65,4	3,358	3,110
<b>110 × 15,1</b>	110	15,1	79,8	4,999	4,610

Compound, glass fibre reinforced pipes.

Diameter range from 20×2,8 to 110×15,1 mm.

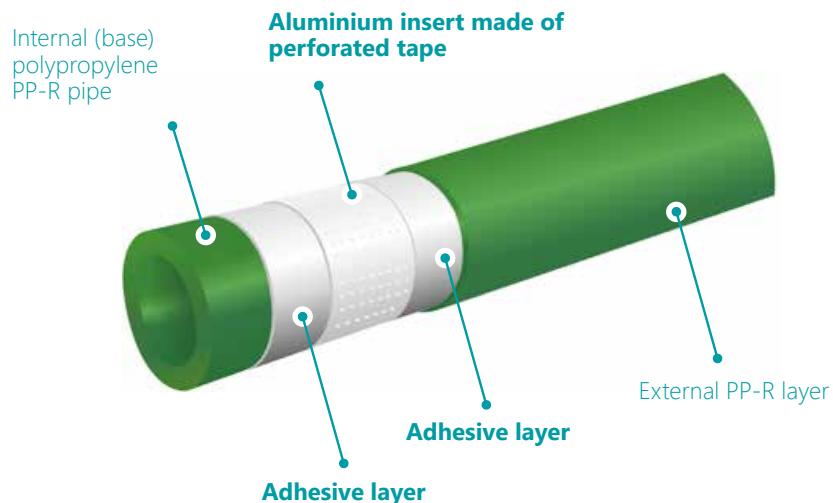
Used in installations: hot utility water, with the operating pressure of 10 bar and operating temperature of up to 60°C, and in heating systems (6 bar/80°C,  $T_{max} = 90^\circ\text{C}$ ).

4 m sections.

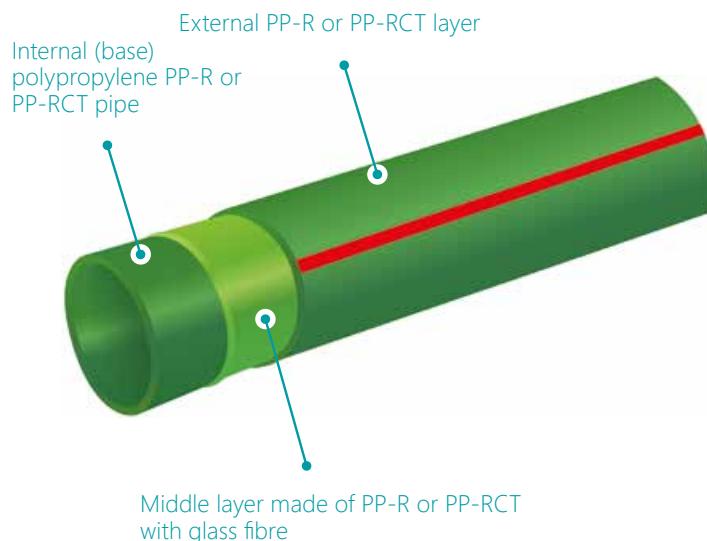
Compound pipes PP-RCT Glass SDR9 and SDR11					
Dimensions	Ext. diameter D	Wall thickness s	Int. diameter d	Unit volume	Unit mass
[mm]	[mm]	[mm]	[mm]	[l/m]	[kg/m]
<b>125 × 14,0</b>	140	14,0	97,0	12,270	4,480
<b>160 × 14,6</b>	160	14,6	130,8	20,100	6,780
<b>200 × 18,2</b>	200	18,2	163,6	31,400	10,640

Compound PP-RCT glass fibre reinforced pipes. Diameter range 125×14,0 to 160×14,6 mm. Used in installations: hot utility water (60 °C), with the operating pressure:  
 - 8 bar for 125×14,0 mm  
 - 6 bar for 160×14,6 mm  
 - 8 bar for 200×18,2 mm  
 and in heating systems (80 °C,  $T_{max} = 90$  °C), with the operating pressure:  
 - 6 bar for 125×14,0 mm  
 - 4 bar for 160×14,6 mm  
 - 6 bar for 200×18,2 mm  
 4 m sections.

Compound pipes Stabi Al



Compound pipes Glass



## Thermal elongation

Every pipeline, when exposed to temperature difference  $\Delta T$ , undergoes elongation (or shortening) by the  $\Delta L$  value. This amount is calculated with the below formula:

$$\Delta L = \alpha \times L \times \Delta T$$

where:

$\alpha$  – thermal linear elongation coefficient [mm/mK]

0,15 [mm/mK] – homogenous PP Green pipes

0,05 [mm/mK] – PP Green Glass and PP-RCT Glass pipes

0,03 [mm/mK] – PP Green Stabi Al pipes

$L$  – pipeline section length [m]

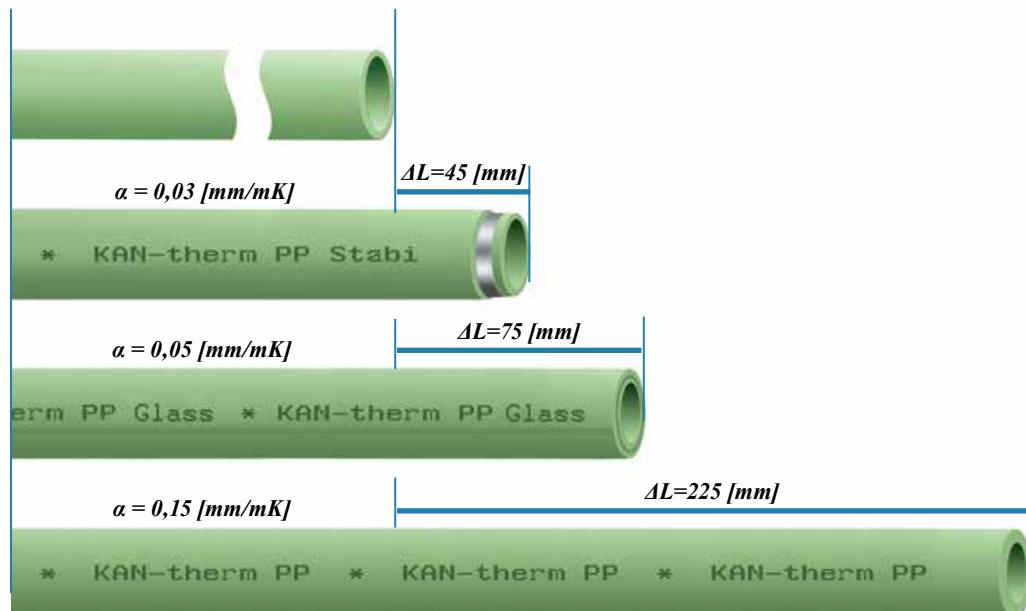
$\Delta T$  – temperature difference during installation and use [K]

### Example:

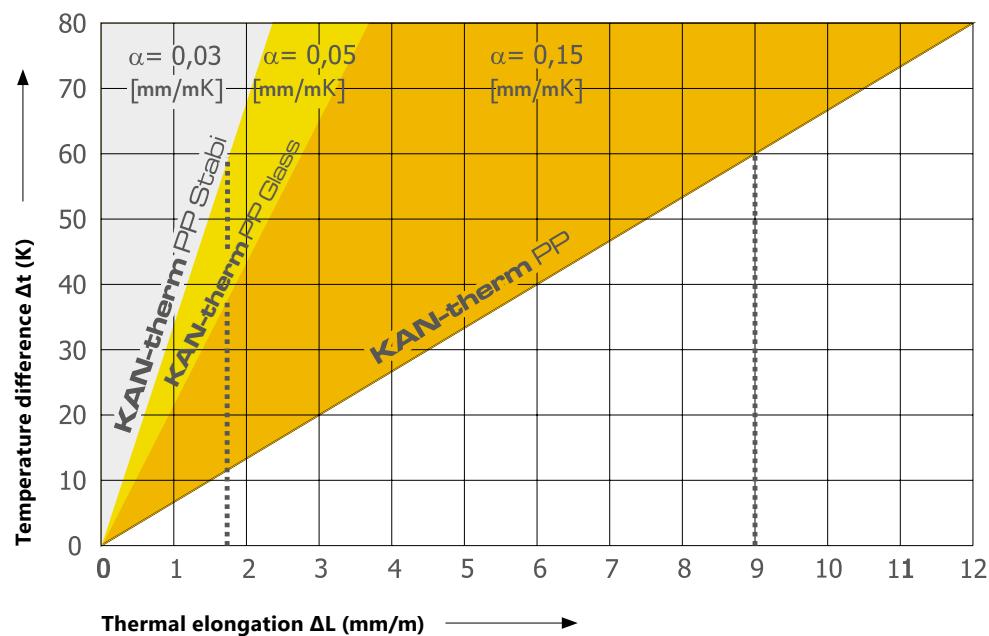
Elongation of 25 m pipe KAN-therm PP Green Stabi Al, KAN-therm PP Green Glass, KAN-therm PP Green homogenous at temperature difference 60°C.

- KAN-therm PP Green Stabi Al  $\Delta L = 0,03 \times 25 \times 60 = 45$  [mm]
- KAN-therm PP Green Glass  $\Delta L = 0,05 \times 25 \times 60 = 75$  [mm]
- KAN-therm PP Green homogenous  $\Delta L = 0,15 \times 25 \times 60 = 225$  [mm]

Elongation of 25 m pipe



Comparison of thermal elongation KAN-therm PP Green homogeneous, Stabi Al and Glass pipes



## Compensators

In order to eliminate linear elongation effects (uncontrolled movements of pipelines and their deformation), compensation solutions with different structures are used (flexible arm, U- and Z-shape compensators).

$$L_s = K \times \sqrt{D_z} \times \Delta L$$

where:

**$L_s$**  – flexible arm's length [mm]

**$K$**  – material coefficient = 20

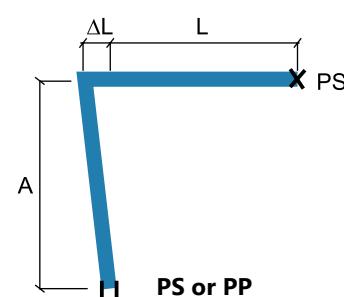
**$D_z$**  – external diameter of the pipe [mm]

**$\Delta L$**  – elongation of the pipe-line length [mm]

## „L“, „Z“, and „U“ compensator selection

Rules for selection of different types of compensators are given below:

### „L“ type compensator



**$A$**  – flexible arm length

**$PP$**  – sliding support (allows only axial movement of a pipeline)

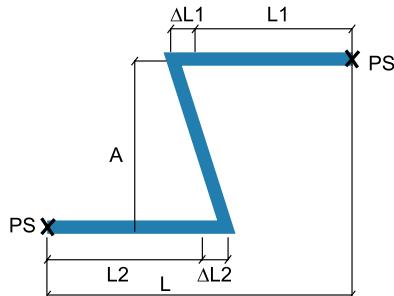
**$PS$**  – fixed point (prevents any movement of a pipeline)

**$L$**  – the initial length of a pipeline

**$\Delta L$**  – pipeline thermal elongation

For compensation arm  **$A$**  dimensioning, a substitute length  $L_z=L$  is taken, and for  **$L_z$**  length the thermal elongation value  **$\Delta L$** , is determined from formula.

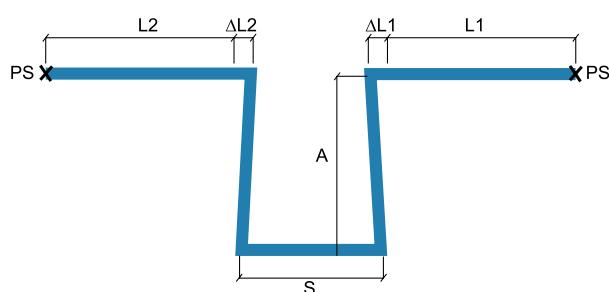
## „Z“ type compensator



**A** – expansion compensation length  
**PS** – fixed point (prevents the pipeline from moving)  
**L** – pipeline initial length  
**ΔL** – pipeline thermal elongation

For compensation arm **A** dimensioning, **L1** and **L2** sum is taken as a substitute length **Lz** = **L1+L2**, and for **Lz** length a substitute **ΔL** is determined from formula.

## „U“ type compensator



**A** – expansion compensation length  
**PS** – fixed point (prevents the pipeline from moving)  
**L** – pipeline initial length  
**ΔL** – pipeline thermal elongation  
**S** – U type compensator width

In case of placing fixed point **PS** in the section of compensator length **S**, for compensation arm **A** dimensioning, the greater value from **L1** and **L2** is taken as a substitute length for **Lz**: **Lz=max(L1, L2)** and for this length the substitute elongation **ΔL** is determined on the basis of formula. Compensator width **S=A/2**.

## Safety

Pipes and fittings in KAN-therm PP Green System holds a set of necessary approvals and comply with current standards and normatives, which ensures long - lasting and trouble - free operation and full security of the installation. KAN-therm runs production in compliance with European PN-EN ISO 15874, German standards DIN 8077, DIN 8078 and DVGW certificate.

- KAN-therm PP Green pipes complies with EN ISO 15874-2:2013 and positive hygienic result, German standards DIN 8077, DIN 8078 and DVGW certificate,
- KAN-therm PP Green fittings and valves complies with EN ISO 15874-3:2013 and positive hygienic result and DVGW certificate.
- System KAN-therm PP Green is granted with 10-years material warranty.

Pipes and fittings of KAN-therm PP Green System also holds positive opinion of international certification units:



## Connection technique - socket fusion welding (20-125 mm)

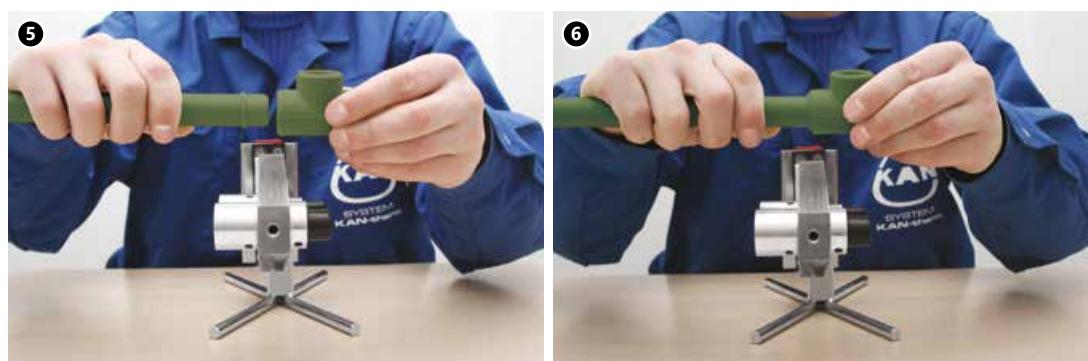
1. Cutting the pipes with scissors.
2. Removing of the aluminum foil with a coarse file (only for compound Stabi Al pipe).



3. Marking of the welding depth.
4. Heating of the pipe and the connector. Parameters:  
- welding depth,  
- welding time.



5. Connecting of the elements.  
Parameters:  
- joining time.
6. Holding and cooling of the joint.  
Parameters:  
- cooling time.



### CAUTION!

**In order to make a tight and strong connection between a pipe and a KAN-therm PP Green System fitting, it is advised to use welding inserts available in the KAN-therm PP Green System offer.**

Socket fusion welding parameters					
Ext. pipe diameter [mm]	Welding depth [mm]	Heating time [sek.]	Joining time [sek.]	Cooling time [min.]	
20	14,0	5	4	2	
25	15,0	7	4	2	
32	16,0	8	6	4	
40	18,0	12	6	4	
50	20,0	18	6	4	
63	24,0	24	8	6	
75	26,0	30	10	8	
90	29,0	40	10	8	
110	32,5	50	10	8	
125	40,0	90	10	8	

The heating time at external temperatures below +5 °C should be increased by 50%.

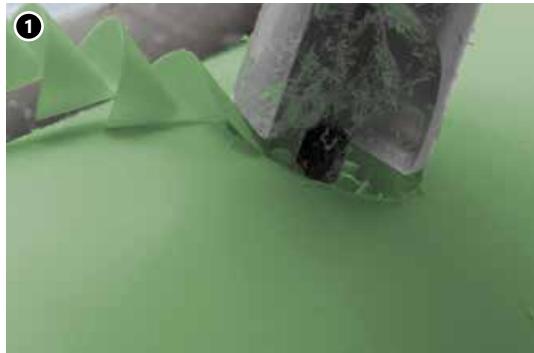
### General requirements for welding

Only the products coming from the same manufacturer can be welded together. Pipes and fittings should be heated simultaneously and not more than once. All operations during a welding process shall be performed without turning a pipe against a fitting and welding ends. It should be taken into account that welding time differs depending on elements' diameters. Welding below 0 °C should be avoided. Double, even flow-out on the whole weld surface indicates a good quality of a joint. In case of Stabi Al pipes it is essential to make sure that an aluminum foil has been removed.



### Installation of pipe saddle fittings PP Green

1. Drilling a hole under the pipe saddle fitting
2. Processing the hole – removing the burrs made when drilling.



3. Welding the pipe saddle fitting.
4. Ready connection.

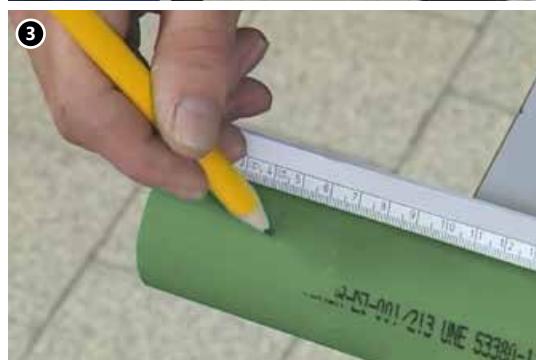


## Connection technique - electrofusion welding (20-200 mm)

1. Pipe surface scraping.
2. Cleaning pipe surface with alcohol.



3. Insertion depth marking.
4. Insertion of pipe into the fitting.



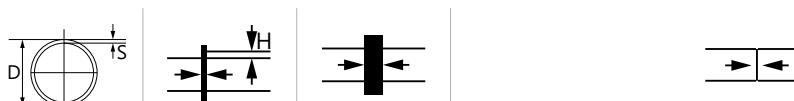
5. Programming of welding machine via laser reader (welding machine will adjust parameters automatically).
6. Welding process start - do not rotate or mechanically stress the elements through all of welding and cooling process.



Ext. pipe diameter [mm]	Electrofusion welding parameters			
	R (23 °C) [Ohm]	RMS [Volt]	Welding time [sek.]	Cooling time [min.]
20	0,76	11	65	10
25	0,76	13	55	10
32	1,25	20	55	10
40	1,90	24	105	10
50	1,41	24	150	15
63	0,85	24	145	15
75	0,79	24	165	20
90	0,76	24	210	20
110	0,57	24	250	20
160	0,84	40	270	30
200	0,56	40	270	30

## Connections technique - butt-welding (90 – 200 mm)

1. Placing the pipe in butt-welding machine.
2. Determining the correct pipe-pipe and pipe-fitting position.
3. Checking the parallelism of the ends by positioning elements together.
4. Milling the welding surfaces – 3 continuous coils of cut material requested.
5. Purging the welding surfaces.
6. Welding – outflows and welding time acc. to table.
7. Cooling down – cooling time acc. to table.



Ext. pipe diameter	Outflow height	Welding time	Outflow width	Cooling time <15°C	Cooling time 15-25°C	Cooling time 25-40°C
[mm]	[mm]	[s]	[mm]	[min]	[min]	[min]
90	1	138	10±15 mm	10	13	16
110	1	166	10±15 mm	12	15	20
125	1	155	10±15 mm	11	14	18
160	1	161	10±15 mm	12	15	20
200	1	198	10±15 mm	14	18	24

### Thread sealing

It is advised to seal threaded connections with such an amount of hemp, that leaves the thread tops not covered. Using too much hemp may lead to thread damage. By winding hemp just after the first thread ridge you can avoid skew screwing and damaging the thread.



### CAUTION

**Do not use chemical sealants or glues.**

### Tools - safety

All tools must be applied and used in accordance with their purpose and the manufacturer's instructions.

Use for other purposes or in other areas are considered to be inconsistent with the intended use.

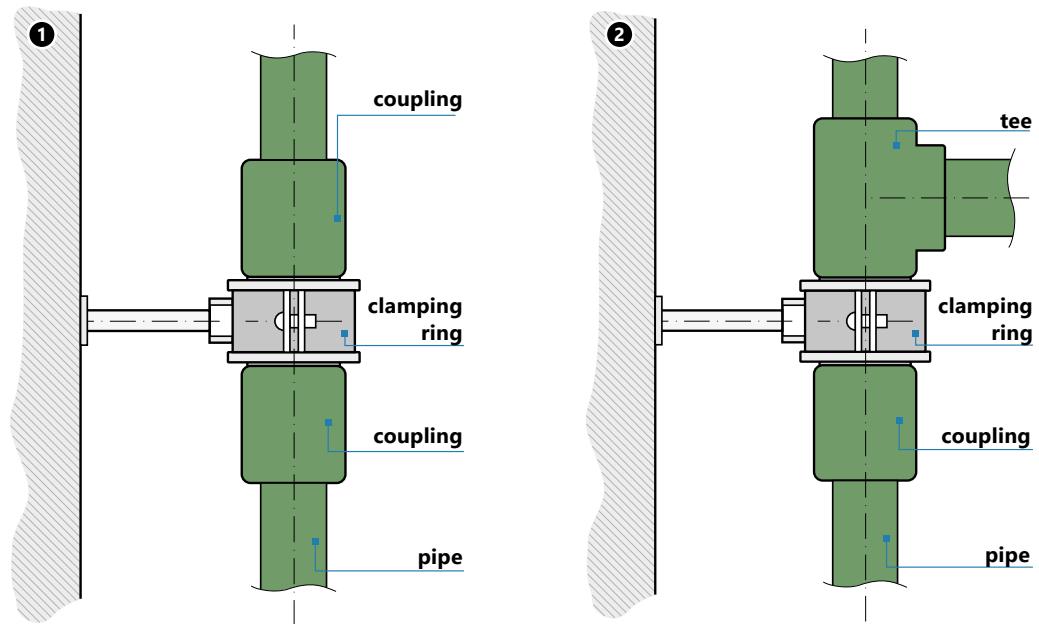
Intended use also requires compliance with the instructions, conditions of inspection and maintenance and relevant safety regulations in their current version.

All works done with tools, which do not meet the application compatible with the intended purpose may result in damage to tools, accessories and pipes.

The consequence may be the leak and / or damage.

## Installation procedures

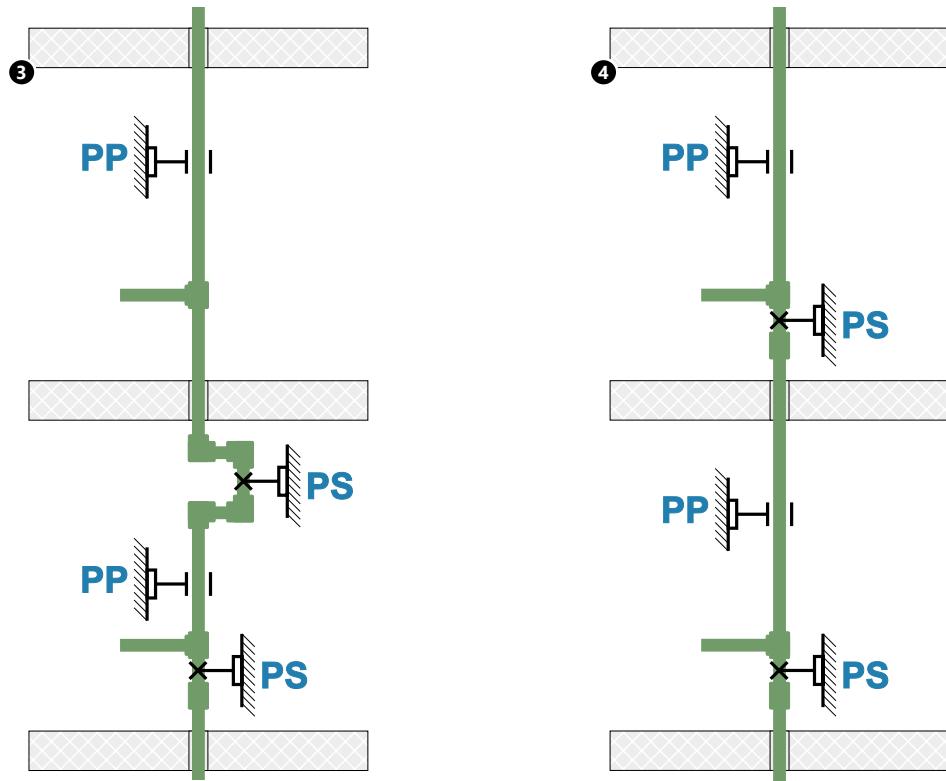
Fixed installation points - installation examples (Fig. 1 and 2)



Examples of installation of hot water risers depending on pipe types (Fig. 3 and 4)

**3.** Installation made of pipes:  
System KAN-therm PP SDR 7,4;  
SDR 6.

**4.** Installation made of pipes:  
System KAN-therm PP Green  
Stabi Al and KAN-therm PP Green  
Glass: PP – slidable point,  
PS – fixed point



**Maximum distances between supports for KAN-therm PP Green System uniform pipes depending on the diameter and medium temperature. For vertical pipeline sections, the distance between the supports can be increased by about 30%.**

T [°C]	External pipe diameter D [mm]								
	20	25	32	40	50	63	75	90	110
Distance between fixing points [cm]									
20	60	70	90	100	120	140	150	160	180
30	60	70	90	100	120	140	150	160	180
40	60	65	80	90	110	130	140	150	170
50	60	65	80	90	110	130	140	150	170
60	55	60	75	85	100	115	125	140	160
70	50	60	70	80	95	105	115	125	140

**Maximum distances between supports for KAN-therm Stabi Al System pipes depending on the diameter and medium temperature. For vertical pipeline sections, the distance between the supports can be increased by about 30%.**

T [°C]	External pipe diameter D [mm]								
	20	25	32	40	50	63	75	90	110
Distance between fixing points [cm]									
20	120	130	150	170	190	210	220	230	250
30	120	130	150	170	190	210	220	230	240
40	110	120	140	160	180	200	210	220	230
50	110	120	140	160	180	200	210	220	210
60	100	110	130	150	170	190	200	210	200
70	90	100	120	140	160	180	190	200	200

**Maximum distances between supports for KAN-therm System PP Green Glass/PP-RCT pipes depending on the diameter and medium temperature. For vertical pipeline sections, the distance between the supports can be increased by about 30%.**

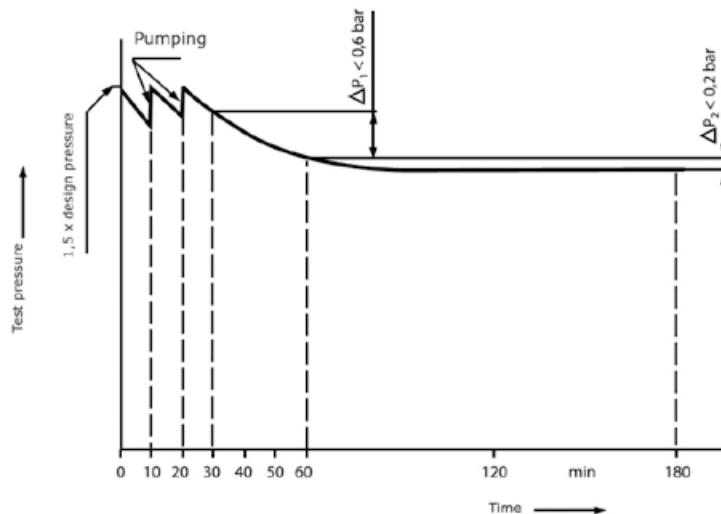
T [°C]	External pipe diameter D [mm]											
	20	25	32	40	50	63	75	90	110	125	160	200
Distance between fixing points [cm]												
0	120	140	160	180	205	230	245	260	290	225	225	250
20	90	105	120	135	155	175	185	195	215	220	220	245
30	90	105	120	135	155	175	185	195	210	210	210	235
40	85	95	110	125	145	165	175	185	200	205	205	225
50	85	95	110	125	145	165	175	185	190	195	195	220
60	80	90	105	120	135	155	165	175	180	185	185	210
70	70	80	95	110	130	145	155	165	170	175	175	200

## Pressure testing

To apply the hydrostatic test pressure with COLD water, conduct the procedure as follows:

- Open the venting system;
- Purge the system with water to expel all air that can be removed. Stop the flow and close the venting system;
- Apply the selected test pressure equal to 1,5 times the design pressure by pumping according to chart during the first 30 min;
- Read the pressure when the first 30 min have elapsed;
- Read the pressure after another 30 min and visually check for leaks. If the pressure has dropped by less than 0,6 bar conclude the system has no obvious leakage and continue the test without further pumping;
- Visually check for leaks and if during the next 2h, the pressure drops by more than 0,2 bar this indicates a leak within the system.

The test result should be recorded.



## Maximum operating pressure of PP Green against temperature and service life

**Maximum operating pressure of PP-R and PP-RCT pipes depending on the temperature and service life of the installation (safety factor C=1.25)**

Temperature [°C]	Time [years]	PP-R pipes		PP-RCT pipes	
		SDR7,4 / S3,2	SDR6 / S2,5	SDR11 / S5	SDR9 / S4
10	1	33,1	42,5	23,0	28,8
	5	31,2	40	22,3	28,0
	10	30,5	39	22,0	27,6
	25	29,4	37,7	21,6	27,1
	50	28,7	36,7	21,4	26,8
20	1	28,3	36,2	20,0	25,1
	5	26,6	34,1	19,3	24,4
	10	25,9	33,1	19,1	24
	25	25,0	32,0	18,7	23,5
	50	24,4	31,2	18,5	23,2
40	1	20,4	26,2	14,9	18,7
	5	19,1	24,5	14,4	18
	10	18,6	23,8	14,2	17,8
	25	17,9	22,8	13,8	17,4
	50	17,4	22,2	13,7	17,2
60	1	14,6	18,7	10,8	13,6
	5	13,6	17,4	10,3	13,0
	10	13,2	16,8	10,2	12,7
	25	12,6	16,1	10,0	12,5
	50	12,2	15,6	9,7	12,2
70	1	12,2	15,7	9	11,4
	5	11,4	14,5	8,6	10,9
	10	11,0	14,0	8,5	10,7
	25	9,6	12,2	8,3	10,4
	50	8,0	10,3	8,2	10,2
80	1	10,3	13,2	7,6	9,5
	5	9,1	11,6	7,2	9
	10	7,7	9,8	7,1	8,9
	25	6,1	7,9	6,8	8,6
	50	5,2	6,7	6,7	8,5
90	1	8,6	11,0	6,2	7,8
	5	6	7,7	5,9	7,4
	10	5,0	6,5	5,8	7,3
	25	4,1	5,2	5,6	7,1
	50				
95	1	7,3	9,4	5,6	7,1
	5	4,9	6,4	5,4	6,7
	10	4,2	5,3	5,3	6,6

## Application areas

### Operating conditions according to EN ISO 15874

In terms of pressure and temperature for pipes and fittings, the operating conditions set forth in ISO 15874 are taken as the basic conditions.

Water supply and heating systems are classified according to ISO 15874 in the following way:

Appl. class	Design temp. $T_d$	Time at $T_d$	Max. design temp.	Time at $T_{max}$	Emerg. temp.	Time at $T_{mal}$	Scope of applica- tion
	°C	years	°C	years	°C	hours	
1	60	49	80	1	95	100	Hot water supply (60°C)
2	70	49	80	1	95	100	Hot water supply (60°C)
4	20	2,5					Floor heating Loew temp. radiators
	40	20	70	2,5	100	100	
	60	25					
5	20	14					High-temper- ature heating
	60	25	90	1	100	100	
	80	10					

$T_d$  - design temperature defined by the application

$T_{max}$  - maximum design temperature, with its time-limited exposure

$T_{mal}$  - malfunction temperature arising under emergencies due to troubles in control systems

Application	Permissible [bar]	Pipe type
<b>Cold tap water <math>T = 20^\circ\text{C}</math></b>	according to pipe application	All pipes
<b>Hot tap water [Application class 1] <math>T_d/T_{max} = 60/80^\circ\text{C}</math></b>	10	SDR6 uniform and Stabi Al pipes
	8	SDR7,4 uniform, Stabi Al and Glass pipes; SDR9 Glass PP-RCT pipes
<b>Hot tap water [Application class 2] <math>T_d/T_{max} = 70/80^\circ\text{C}</math></b>	8	SDR6 uniform and Stabi Al pipes; SDR9 Glass PP-RCT pipes
	6	SDR7,4 uniform, Stabi Al and Glass pipes; SDR11 Glass PP-RCT pipes
<b>Floor heating, low temperature radiator heating [Application class 4] <math>T_d/T_{max} = 60/70^\circ\text{C}</math></b>	10	all PP-R pipes
	8	SDR9 Glass PP-RCT pipes
	6	SDR11 Glass PP-RCT pipes
<b>Radiator heating [Application class 5] <math>T_d/T_{max} = 80/90^\circ\text{C}</math></b>	6	all PP-R pipes and SDR9 Glass PP-RCT pipes
	4	SDR11 Glass PP-RCT pipe

## Handling and storage

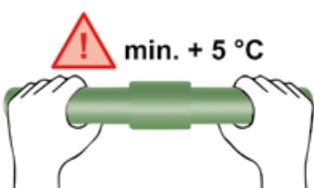
- Components of plastic piping systems must be protected against impact, falling, blow or any other mechanical damage during their transport and installation.



- Only the components that are not damaged or contaminated, during storage or transportation, may be used for installation works.



- A minimum temperature for plastic piping installation, as regards welding, is +5 °C. At lower temperatures it is difficult to provide working conditions for high quality pipe joints.



- Pipeline crossings are made by means of the components specially designed for this purpose.



- Joining of plastic parts is done by polyfusion welding which results in a high-quality homogeneous joint. Joining must be performed under specified working conditions with the use of appropriate tools. It is not recommended to weld KAN-therm PP Green components together with other brand products (no warranty).



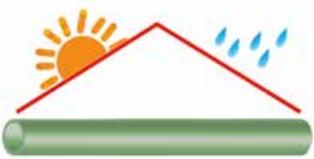
- Components must not be exposed to open fire.



- Sharp and professional tools can only be used to cut the pipes.



- Protect against sun and rain.



# System KAN-therm PP - assortment

## Pipe SDR7.4 PN16

Dimension	Code	*	6/		UM	Price EUR/UM	GROUP: L
20 × 2,8	<a href="#">2029203002</a>	**	4	160	m		
25 × 3,5	<a href="#">2029203004</a>	**	4	100	m		
32 × 4,4	<a href="#">2029203006</a>	**	4	60	m		
40 × 5,5	<a href="#">2029203008</a>	**	4	40	m		
50 × 6,9	<a href="#">2029203010</a>	**	4	28	m		
63 × 8,6	<a href="#">2029203012</a>	**	4	16	m		
75 × 10,3	<a href="#">2029203014</a>	**	4	12	m		
90 × 12,3	<a href="#">2029203016</a>	**	4	8	m		
110 × 15,1	<a href="#">2029203000</a>	**	4	4	m		



## Pipe SDR6 PN20

Dimension	Code	*	6/		UM	Price EUR/UM	GROUP: L
20 × 3,4	<a href="#">2029206018</a>		4	160	m		
25 × 4,2	<a href="#">2029206020</a>		4	100	m		
32 × 5,4	<a href="#">2029206022</a>		4	60	m		
40 × 6,7	<a href="#">2029206024</a>		4	40	m		
50 × 8,3	<a href="#">2029206026</a>		4	28	m		
63 × 10,5	<a href="#">2029206028</a>		4	16	m		
75 × 12,5	<a href="#">2029206030</a>		4	12	m		
90 × 15,0	<a href="#">2029206032</a>	*	4	8	m		
110 × 18,3	<a href="#">2029206014</a>	*	4	4	m		



## Stabi Al pipe SDR6 PN20

Dimension	Code	*	6/		UM	Price EUR/UM	GROUP: M
20 × 3,4	<a href="#">2029205002</a>	**	4	100	m		
25 × 4,2	<a href="#">2029205004</a>	**	4	80	m		
32 × 5,4	<a href="#">2029205006</a>	**	4	40	m		
40 × 6,7	<a href="#">2029205008</a>	**	4	28	m		
50 × 8,3	<a href="#">2029205010</a>	**	4	20	m		
63 × 10,5	<a href="#">2029205012</a>	**	4	12	m		
75 × 12,5	<a href="#">2029205014</a>	**	4	8	m		
90 × 15,0	<a href="#">2029205017</a>	**	4	8	m		
110 × 18,3	<a href="#">2029205016</a>	**	4	4	m		



coil    bar    pipes in tube    bag    carton box    pallet

\* custom-made - lead time max 4 weeks | \*\* availability as agreed | \*\*\* while stock lasts



### Stabi Glass pipe SDR7.4 PN16

**GROUP: M**

Dimension	Code	*	6/		UM	Price EUR/UM
20 x 2,8	2029204007	4	200	m		
25 x 3,5	2029204008	4	100	m		
32 x 4,4	2029204009	4	60	m		
40 x 5,5	2029204010	4	40	m		
50 x 6,9	2029204011	4	20	m		
63 x 8,6	2029204012	4	12	m		
75 x 10,3	2029204013	*	4	8	m	
90 x 12,3	2029204014	*	4	8	m	
110 x 15,1	2029204006	*	4	4	m	



### Stabi Glass pipe SDR9 PN16

**GROUP: M**

Dimension	Code	*	6/		UM	Price EUR/UM
125 x 14,0	2029206034	**	4	4	m	



### Stabi Glass pipe SDR11 PN16

**GROUP: M**

Dimension	Code	*	6/		UM	Price EUR/UM
160 x 14,6	2029206035	**	4	4	m	
200 x 18,2	2029206093	**	4	4	m	



### PP/Push saddle

**GROUP: N**

Dimension	Code	*				UM	Price EUR/UM
63 / 18 x 2,0	2009238035	*	20	160		pc.	
75 / 18 x 2,0	2009238036	*	20	160		pc.	
90 / 18 x 2,0	2009238037	*	20	160		pc.	
110 / 18 x 2,0	2009238038	*	20	160		pc.	



### Female saddle

**GROUP: N**

Dimension	Code	*				UM	Price EUR/UM
63 Rp½	2009238024	*	20	100		pc.	
75 Rp½	2009238025	*	20	100		pc.	
90 Rp½	2009238026	*	20	100		pc.	
110 Rp½	2009238018	*	20	100		pc.	



### Looping compensation

**GROUP: N**

Dimension	Code	*				UM	Price EUR/UM
20	2009036004	-	20			pc.	
25	2009036005	-	15			pc.	
32	2009036008	-	10			pc.	

Crossover's diameter Ø150, length 370 mm.



pipes in tube



bag



carton box



pallet

\* custom-made - lead time max 4 weeks | \*\* availability as agreed | \*\*\* while stock lasts

## Crossover

Dimension	Code	*	□	📦	UM	Price EUR/UM
20	<a href="#">2009269001</a>	-	200	pc.		
25	<a href="#">2009269004</a>	-	130	pc.		
32	<a href="#">2009269006</a>	-	75	pc.		



## Coupling

Dimension	Code	*	□	📦	UM	Price EUR/UM
20	<a href="#">2009245007</a>	100	700	pc.		
25	<a href="#">2009245009</a>	50	550	pc.		
32	<a href="#">2009245011</a>	40	280	pc.		
40	<a href="#">2009245013</a>	30	180	pc.		
50	<a href="#">2009245015</a>	10	110	pc.		
63	<a href="#">2009245017</a>	-	60	pc.		
75	<a href="#">2009245019</a>	*	-	45	pc.	
90	<a href="#">2009245021</a>	*	-	24	pc.	
110	<a href="#">2009245002</a>	*	-	16	pc.	
125	<a href="#">2009245004</a>	**	-	9	pc.	



## Nipple reducer

Dimension	Code	*	□	📦	UM	Price EUR/UM
25 / 20	<a href="#">2009220015</a>	100	900	pc.		
32 / 20	<a href="#">2009220017</a>	80	640	pc.		
32 / 25	<a href="#">2009220019</a>	80	560	pc.		
40 / 20	<a href="#">2009220021</a>	50	400	pc.		
40 / 25	<a href="#">2009220023</a>	50	350	pc.		
40 / 32	<a href="#">2009220025</a>	50	300	pc.		
N 50 / 20	<a href="#">2009220120</a>	**	30	180	pc.	
50 / 25	<a href="#">2009220000</a>	30	120	pc.		
50 / 32	<a href="#">2009220001</a>	30	180	pc.		
50 / 40	<a href="#">2009220027</a>	30	150	pc.		
N 63 / 25	<a href="#">2009220119</a>	**	-	100	pc.	
63 / 32	<a href="#">2009220029</a>	-	100	pc.		
63 / 40	<a href="#">2009220031</a>	-	100	pc.		
63 / 50	<a href="#">2009220033</a>	-	100	pc.		
75 / 50	<a href="#">2009220035</a>	*	-	80	pc.	
75 / 63	<a href="#">2009220037</a>	*	-	50	pc.	
90 / 50	<a href="#">2009220039</a>	*	-	48	pc.	
90 / 63	<a href="#">2009220041</a>	*	-	45	pc.	
90 / 75	<a href="#">2009220043</a>	*	-	45	pc.	
110 / 63	<a href="#">2009220003</a>	*	-	27	pc.	
110 / 75	<a href="#">2009220004</a>	*	-	27	pc.	
110 / 90	<a href="#">2009220005</a>	*	-	27	pc.	
125 / 110	<a href="#">2009220008</a>	**	-	6	pc.	
160 / 110	<a href="#">2009220009</a>	**	-	2	pc.	
160 / 125	<a href="#">2009220010</a>	**	-	4	pc.	
200 / 160	<a href="#">2009220114</a>	**	-	1	pc.	



coil      bar      pipes in tube      bag      carton box      pallet

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### Female connector

**GROUP: N**

Dimension	Code	*	Box	Carton box	UM	Price EUR/UM
20 Rp1/2"	<a href="#">2009245028</a>	20	180	pc.		
20 Rp3/4"	<a href="#">2009245030</a>	30	150	pc.		
25 Rp1/2"	<a href="#">2009245032</a>	20	160	pc.		
25 Rp3/4"	<a href="#">2009245034</a>	30	150	pc.		
25 Rp1"	<a href="#">2009245207</a>	-	100	pc.		
32 Rp3/4"	<a href="#">2009245038</a>	20	60	pc.		
32 Rp1"	<a href="#">2009245036</a>	20	60	pc.		
40 Rp1/4"	<a href="#">2009245039</a>	-	60	pc.		
50 Rp1 1/2"	<a href="#">2009245041</a>	-	35	pc.		
63 Rp2"	<a href="#">2009245043</a>	-	18	pc.		
75 Rp2 1/2"	<a href="#">2009245045</a>	*	-	12	pc.	
90 Rp3"	<a href="#">2009245047</a>	*	-	8	pc.	

**Caution:**  
spanner can be used within the element.



### Male connector

**GROUP: N**

Dimension	Code	*	Box	Carton box	UM	Price EUR/UM
20 R1/2"	<a href="#">2009245056</a>	20	160	pc.		
20 R3/4"	<a href="#">2009245058</a>	30	120	pc.		
25 R1/2"	<a href="#">2009245060</a>	20	140	pc.		
25 R3/4"	<a href="#">2009245062</a>	30	120	pc.		
25 R1"	<a href="#">2009245201</a>	-	80	pc.		
32 R1"	<a href="#">2009245064</a>	20	60	pc.		
32 R1 1/4"	<a href="#">2009245202</a>	-	50	pc.		
40 R1 1/4"	<a href="#">2009245067</a>	-	50	pc.		
50 R1 1/2"	<a href="#">2009245069</a>	-	36	pc.		
63 R2"	<a href="#">2009245071</a>	-	18	pc.		
75 R2 1/2"	<a href="#">2009245073</a>	*	-	10	pc.	
90 R3"	<a href="#">2009245075</a>	*	-	6	pc.	

**Caution:**  
spanner can be used within the element



### Elbow 90°

**GROUP: N**

Dimension	Code	*	Box	Carton box	UM	Price EUR/UM
20	<a href="#">2009068027</a>	100	500	pc.		
25	<a href="#">2009068029</a>	50	350	pc.		
32	<a href="#">2009068031</a>	50	200	pc.		
40	<a href="#">2009068033</a>	20	120	pc.		
50	<a href="#">2009068035</a>	10	60	pc.		
63	<a href="#">2009068037</a>	-	32	pc.		
75	<a href="#">2009068039</a>	*	-	20	pc.	
90	<a href="#">2009068041</a>	*	-	12	pc.	
110	<a href="#">2009068023</a>	*	-	8	pc.	
125	<a href="#">2009068021</a>	**	-	1	pc.	
160	<a href="#">2009068022</a>	**	-	2	pc.	
200	<a href="#">2009068215</a>	**	-	1	pc.	



coil

bar

pipes in tube



bag



carton box



pallet

\* custom-made - lead time max 4 weeks | \*\* availability as agreed | \*\*\* while stock lasts

### Nipple elbow 90°

Dimension	Code	*	Box	Carton	UM	Price EUR/UM
20	<a href="#">2009068080</a>		100	600	pc.	
25	<a href="#">2009068081</a>		50	400	pc.	
32	<a href="#">2009068075</a>		50	200	pc.	

**GROUP: N**



### Elbow 45°

Dimension	Code	*	Box	Carton	UM	Price EUR/UM
20	<a href="#">2009068005</a>		100	700	pc.	
25	<a href="#">2009068007</a>		50	400	pc.	
32	<a href="#">2009068009</a>		40	200	pc.	
40	<a href="#">2009068011</a>		20	140	pc.	
50	<a href="#">2009068013</a>		-	80	pc.	
63	<a href="#">2009068015</a>		-	40	pc.	
75	<a href="#">2009068017</a>	*	-	25	pc.	
90	<a href="#">2009068019</a>	*	-	14	pc.	
110	<a href="#">2009068000</a>	*	-	10	pc.	
125	<a href="#">2009068001</a>	**	-	4	pc.	
160	<a href="#">2009068002</a>	**	-	2	pc.	
200	<a href="#">2009068214</a>	**	-	1	pc.	

**GROUP: N**



### Nipple elbow 45°

Dimension	Code	*	Box	Carton	UM	Price EUR/UM
20	<a href="#">2009068073</a>		100	700	pc.	
25	<a href="#">2009068074</a>		50	450	pc.	

**GROUP: N**



### Female directly fixed wallplate elbow

Dimension	Code	*	Box	Carton	UM	Price EUR/UM
20 Rp½"	<a href="#">2009068085</a>		20	140	pc.	
25 Rp½"	<a href="#">2009068086</a>		20	120	pc.	

**GROUP: N**



### Male elbow 90°

Dimension	Code	*	Box	Carton	UM	Price EUR/UM
20 R½"	<a href="#">2009068058</a>		30	90	pc.	
20 R¾"	<a href="#">2009068060</a>		30	90	pc.	
25 R½"	<a href="#">2009068062</a>		20	120	pc.	
25 R¾"	<a href="#">2009068064</a>		30	90	pc.	
32 R¾"	<a href="#">2009068067</a>		30	60	pc.	
32 R1"	<a href="#">2009068066</a>		15	45	pc.	

**GROUP: N**



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### Female elbow 90°

**GROUP: N**

Dimension	Code	*			UM	Price EUR/UM
20 Rp1/2"	<b>2009068045</b>	20	140	pc.		
20 Rp3/4"	<b>2009068047</b>	30	120	pc.		
25 Rp1/2"	<b>2009068049</b>	30	120	pc.		
25 Rp3/4"	<b>2009068051</b>	30	120	pc.		
32 Rp3/4"	<b>2009068054</b>	30	90	pc.		
32 Rp1"	<b>2009068053</b>	15	45	pc.		



### Reducing tee

**GROUP: N**

Dimension	Code	*			UM	Price EUR/UM
25 / 20 / 20	<b>2009260013</b>	20	140	pc.		
25 / 25 / 20	<b>2009260016</b>	20	140	pc.		
25 / 20 / 25	<b>2009260000</b>	20	240	pc.		
32 / 20 / 20	<b>2009260021</b>	20	140	pc.		
32 / 20 / 32	<b>2009260022</b>	20	140	pc.		
32 / 25 / 25	<b>2009260024</b>	20	140	pc.		
32 / 25 / 32	<b>2009260025</b>	20	140	pc.		
40 / 20 / 40	<b>2009260028</b>	20	80	pc.		
40 / 25 / 40	<b>2009260029</b>	15	90	pc.		
40 / 32 / 40	<b>2009260031</b>	15	90	pc.		
50 / 20 / 50	<b>2009260034</b>	-	60	pc.		
50 / 25 / 50	<b>2009260035</b>	-	65	pc.		
50 / 32 / 50	<b>2009260036</b>	-	60	pc.		
50 / 40 / 50	<b>2009260039</b>	-	50	pc.		
63 / 25 / 63	<b>2009260040</b>	-	24	pc.		
63 / 32 / 63	<b>2009260042</b>	-	30	pc.		
63 / 40 / 63	<b>2009260044</b>	-	22	pc.		
63 / 50 / 63	<b>2009260046</b>	-	22	pc.		
75 / 40 / 75	<b>2009260002</b>	*	-	17	pc.	
N 75 / 50 / 75	<b>2009260139</b>	**	-	16	pc.	
N 75 / 63 / 75	<b>2009260140</b>	**	-	16	pc.	
90 / 50 / 90	<b>2009260049</b>	*	-	12	pc.	
90 / 63 / 90	<b>2009260051</b>	*	-	10	pc.	
90 / 75 / 90	<b>2009260053</b>	*	-	12	pc.	
110 / 63 / 110	<b>2009260003</b>	*	-	8	pc.	
N 110 / 75 / 110	<b>2009260143</b>	-		8	pc.	
N 110 / 90 / 110	<b>2009260141</b>	-		8	pc.	
125 / 110 / 125	<b>2009260004</b>	**	-	3	pc.	
160 / 90 / 160	<b>2009260008</b>	**	-	1	pc.	
160 / 110 / 160	<b>2009260007</b>	**	-	1	pc.	
200 / 90 / 200	<b>2009257097</b>	**	-	1	pc.	
200 / 110 / 200	<b>2009257098</b>	**	-	1	pc.	
200 / 125 / 200	<b>2009257099</b>	**	-	1	pc.	
200 / 160 / 200	<b>2009257100</b>	**	-	1	pc.	



coil



bar



pipes in tube



bag



carton box



pallet

\* custom-made - lead time max 4 weeks | \*\* availability as agreed | \*\*\* while stock lasts

### Tee

Dimension	Code	*			UM	Price EUR/UM
20	<a href="#">2009257006</a>		80	400	pc.	
25	<a href="#">2009257008</a>		20	240	pc.	
32	<a href="#">2009257010</a>		20	140	pc.	
40	<a href="#">2009257012</a>		15	75	pc.	
50	<a href="#">2009257014</a>		5	30	pc.	
63	<a href="#">2009257016</a>	-		24	pc.	
75	<a href="#">2009257018</a>	*	-	15	pc.	
90	<a href="#">2009257020</a>	*	-	10	pc.	
110	<a href="#">2009257000</a>	*	-	8	pc.	
125	<a href="#">2009257002</a>	**	-	1	pc.	
160	<a href="#">2009257005</a>	**	-	1	pc.	
200	<a href="#">2009257096</a>	**	-	1	pc.	

**GROUP: N**

### Corner tee

Dimension	Code	*			UM	Price EUR/UM
20	<a href="#">2009257037</a>		40	360	pc.	

**GROUP: N**

### Crossing

Dimension	Code	*			UM	Price EUR/UM
20	<a href="#">2009057002</a>		40	320	pc.	
25	<a href="#">2009057007</a>	**	20	140	pc.	

**GROUP: N**

### Male tee

Dimension	Code	*			UM	Price EUR/UM
20 R1/2"	<a href="#">2009257035</a>		20	120	pc.	

**GROUP: N**

### Female tee

Dimension	Code	*			UM	Price EUR/UM
20 Rp1/2"	<a href="#">2009257024</a>		20	120	pc.	
20 Rp3/4"	<a href="#">2009257026</a>		30	90	pc.	
25 Rp1/2"	<a href="#">2009257028</a>		20	180	pc.	
25 Rp3/4"	<a href="#">2009257030</a>		30	180	pc.	
32 Rp3/4"	<a href="#">2009257033</a>		15	60	pc.	
32 Rp1"	<a href="#">2009257032</a>		15	60	pc.	

**GROUP: N**

### Union coupling

Dimension	Code	*			UM	Price EUR/UM
20 G3/4"	<a href="#">2009065000</a>	*	20	200	pc.	

**GROUP: N**

\* custom-made - lead time max 4 weeks | \*\* availability as agreed | \*\*\* while stock lasts



### Female half union with flat gasket

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20 G $\frac{3}{4}$ "	2009105002		50	400	pc.	
25 G1"	2009105004		20	100	pc.	



### Female half union connector with flat gasket

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
N 20 Rp $\frac{1}{2}$ "	2009271041	*	20	200	pc.	
N 20 Rp $\frac{3}{4}$ "	2009271042	*	20	200	pc.	
N 25 Rp $\frac{3}{4}$ "	2009271043	*	20	200	pc.	



### Male union connector

**GROUP: N**

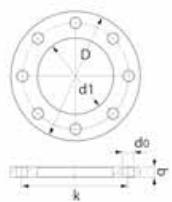
Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20 G $\frac{1}{2}$ "	2009271002		20	200	pc.	
20 G $\frac{3}{4}$ "	2009271004		20	200	pc.	
25 G $\frac{3}{4}$ "	2009271008		20	100	pc.	
25 G1"	2009271006		20	100	pc.	
32 G1"	2009271010		20	60	pc.	



### Flange connector

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
N 40	2009091012		1	40	pc.	
N 50	2009091013		1	30	pc.	
N 63	2009091014		1	20	pc.	
N 75	2009091015		1	15	pc.	
N 90	2009091016		1	10	pc.	
N 110	2009091011		1	6	pc.	
125	2009245079	**	-	2	pc.	
160	2009245080	**	-	2	pc.	
200	2009245209	**	-	1	pc.	



### Steel flange PN16

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
N 40	1209091002	-	1	pc.		
N 50	1209091003	-	1	pc.		
N 63	1209091004	-	1	pc.		
N 75	1209091005	-	1	pc.		
N 90	1209091006	-	1	pc.		
N 110	1209091001	-	1	pc.		
125	2009091000	**	-	1	pc.	
160	2009091001	**	-	1	pc.	
200	2009025056	**	-	1	pc.	



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**Bend 90°****GROUP: N**

Dimension	Code	*			UM	Price EUR/UM
20	<a href="#">2009011002</a>	**	30	300	pc.	
25	<a href="#">2009011000</a>	**	20	180	pc.	
32	<a href="#">2009011001</a>	**	15	180	pc.	

**Electrofusion coupling****GROUP: N**

Dimension	Code	*			UM	Price EUR/UM
20	<a href="#">2009088005</a>	**	20	120	pc.	
25	<a href="#">2009088006</a>	**	20	120	pc.	
32	<a href="#">2009088007</a>	**	20	120	pc.	
40	<a href="#">2009088008</a>	**	10	30	pc.	
50	<a href="#">2009088001</a>	**	5	20	pc.	
63	<a href="#">2009088002</a>	**	5	15	pc.	
75	<a href="#">2009088003</a>	**	4	8	pc.	
90	<a href="#">2009088004</a>	**	2	8	pc.	
110	<a href="#">2009088000</a>	**	1	4	pc.	
125	<a href="#">2009245001</a>	**	-	1	pc.	
160	<a href="#">2009245000</a>	**	-	1	pc.	
200	<a href="#">2009088036</a>	**	-	1	pc.	

**Stop end****GROUP: N**

Dimension	Code	*			UM	Price EUR/UM
20	<a href="#">2009025006</a>		200	1000	pc.	
25	<a href="#">2009025008</a>		100	700	pc.	
32	<a href="#">2009025010</a>		50	500	pc.	
40	<a href="#">2009025012</a>		50	250	pc.	
50	<a href="#">2009025014</a>		-	170	pc.	
63	<a href="#">2009025016</a>		-	80	pc.	
75	<a href="#">2009025018</a>	*	-	50	pc.	
90	<a href="#">2009025020</a>	*	-	30	pc.	
110	<a href="#">2009025000</a>	*	-	20	pc.	
125	<a href="#">2009025002</a>	**	-	10	pc.	
160	<a href="#">2009025005</a>	**	-	8	pc.	
200	<a href="#">2009025055</a>	**	-	1	pc.	

**Ball valve****GROUP: N**

Dimension	Code	*			UM	Price EUR/UM
20	<a href="#">2009278001</a>		10	90	pc.	
25	<a href="#">2009278002</a>		10	50	pc.	
32	<a href="#">2009278003</a>		5	25	pc.	
40	<a href="#">2009278005</a>		5	15	pc.	
50	<a href="#">2009278006</a>		2	10	pc.	
63	<a href="#">2009277002</a>		2	8	pc.	
75	<a href="#">2009277003</a>	*	1	5	pc.	



coil   bar   pipes in tube   bag   carton box   pallet

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### Globe valve

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20	<a href="#">2009280006</a>	1	30	pc.		
25	<a href="#">2009280008</a>	1	40	pc.		
32	<a href="#">2009280010</a>	1	30	pc.		



### Concealed globe valve

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20	<a href="#">2009280000</a>	1	80	pc.		
25	<a href="#">2009280002</a>	1	40	pc.		
32	<a href="#">2009280004</a>	1	20	pc.		
N 40	<a href="#">2009277004</a>	**	5	15	pc.	
N 63	<a href="#">2009277005</a>	**	2	8	pc.	

Valves delivered with two plugs for marking hot water (red) or cold water (blue).



### Concealed globe valve with masking

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20	<a href="#">2009280015</a>	1	30	pc.		
25	<a href="#">2009280016</a>	1	30	pc.		
32	<a href="#">2009280017</a>	**	1	30	pc.	



### Pipe clip

**GROUP: N**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20	<a href="#">2009107025</a>	20	800	pc.		
25	<a href="#">2009107026</a>	20	700	pc.		
32	<a href="#">2009107027</a>	20	440	pc.		
40	<a href="#">2009107028</a>	20	300	pc.		
50	<a href="#">2009107030</a>	20	240	pc.		
63	<a href="#">2009107031</a>	20	120	pc.		
75	<a href="#">2009107032</a>	*	20	100	pc.	
90	<a href="#">2009107033</a>	*	10	60	pc.	

**Caution:**

Use only for uniform pipes. For compound pipes use clamps with rubber insert.



coil



bar



pipes in tube



bag



carton box



pallet

\* custom-made - lead time max 4 weeks | \*\* availability as agreed | \*\*\* while stock lasts

## Single pipe clamp with insulation

Dimension	Code	*		UM	Price EUR/UM
20-23	<b>1700081028</b>	-	100	pc.	
25-28	<b>1700081029</b>	-	100	pc.	
32-36	<b>1700081030</b>	-	50	pc.	
40-44	<b>1700081031</b>	-	50	pc.	
47-52	<b>1700081032</b>	-	50	pc.	
57-63	<b>1700081034</b>	-	50	pc.	
74-78	<b>1700081035</b>	-	25	pc.	
85-91	<b>1700081036</b>	-	25	pc.	
108-112	<b>1700081023</b>	-	25	pc.	
125	<b>2009107075</b>	**	-	20	pc.
160	<b>2009107076</b>	**	-	10	pc.
200	<b>2009107077</b>	**	-	10	pc.

**GROUP: A**



**Caution:**

Single pipe clamp with rubber insert contains the closing screws (8x70) and extension anchor (Ø12).

## Double pipe clamp with insulation

Dimension	Code	*		UM	Price EUR/UM
20-23	<b>1700081020</b>	-	50	pc.	
25-28	<b>1700081021</b>	-	50	pc.	
32-36	<b>1700081022</b>	-	50	pc.	

**GROUP: A**



**Caution:**

Single pipe clamp with rubber insert contains the closing screws (8x70) and extension anchor (Ø12).

## Mounting plate

Dimension	Code	*		UM	Price EUR/UM
L = 150	<b>2009210000</b>		30    150	pc.	

**GROUP: N**



coil    bar    pipes in tube



bag



carton box



pallet

\* custom-made - lead time max 4 weeks | \*\* availability as agreed | \*\*\* while stock lasts

# Tools



## Peeler for PP pipes

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20/25	<a href="#">1933267043</a>	-		1	pc.	
25/32	<a href="#">1933267045</a>	-		1	pc.	
32/40	<a href="#">1933267047</a>	-		1	pc.	
50	<a href="#">1933267049</a>	-		1	pc.	
63	<a href="#">1933267051</a>	-		1	pc.	
75	<a href="#">1933267053</a>	-		1	pc.	
90	<a href="#">1933267055</a>	-		1	pc.	
110	<a href="#">1933267039</a>	-		1	pc.	



## Blade for pipe peeler

**GROUP: K**

Code	*	bag	carton box	UM	Price EUR/UM
<a href="#">1933267035</a>	*	-		1	pc.



## Cutter for pipes

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20-40 mm	<a href="#">1933267029</a>	-		1	pc.	



## Roll-cutter for PP pipes

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
50-110 mm	<a href="#">1933267032</a>	-		1	pc.	

Roll-cutter is not suitable for 110 mm SDR6 Stabi Al pipes.



## Pipe cutting machine

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
50-200 mm	<a href="#">1948267034</a>	-		1	pc.	

The set contains the pipe cutting machine and cutting wheel.



## Pipe support for cutting machine

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
	<a href="#">1948267029</a>	-		1	pc.	



## Wheel for cutting machine

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
125-200	<a href="#">1933267072</a>	*	-	1	pc.	



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## Stationery welding machine

Dimension	Code	*			UM	Price EUR/UM
63-110 mm, 1600 W	<a href="#">1933267036</a>	-		1	set	

Set includes:

- Welding machine set PZ-125
- welding machine 1600W
- Tool case (for welding machine, pipe clamps and welding sockets)
- pipe clamps Ø 63
- pipe clamps Ø 75
- pipe clamps Ø 90
- pipe clamps Ø 110

**Caution:**

Set does not include welding sockets!



## Electrofusion welding machine

Dimension	Code	*			UM	Price EUR/UM
20-200, 3000 W	<a href="#">1933267071</a>	-		1	pc.	



## Butt-welding machine

Dimension	Code	*			UM	Price EUR/UM
90-200, 2200 W	<a href="#">1933267073</a>	-		1	pc.	



## Welding set

Dimension	Code	*			UM	Price EUR/UM
20-50 mm, 800 W	<a href="#">1933267062</a>	-		1	set	
63-125 mm*, 1600 W	<a href="#">1933267064</a>	-		1	set	

**Caution:**

Every set includes: electric welding machine, welding machine's stand, metal box, set of inserts (\*up to 110 mm in set).



## Screw for welding machine

	Code	*			UM	Price EUR/UM
	<a href="#">1933267037</a>	-		1	pc.	



## Welding stones for saddle fittings

Dimension	Code	*			UM	Price EUR/UM
63	<a href="#">1933267006</a>	-		1	pc.	
75	<a href="#">1933267007</a>	-		1	pc.	
90	<a href="#">1933267008</a>	-		1	pc.	
110	<a href="#">1933267002</a>	-		1	pc.	



## Drill for mounting saddle fittings

Dimension	Code	*			UM	Price EUR/UM
25	<a href="#">1933267038</a>	-		1	pc.	



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### Stabi peller for PP pipes

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
25	<a href="#">1933267074</a>	-	1	pc.		



### Welding sockets

**GROUP: K**

Dimension	Code	*	bag	carton box	UM	Price EUR/UM
20	<a href="#">1933267013</a>	-	1	set		
25	<a href="#">1933267015</a>	-	1	set		
32	<a href="#">1933267017</a>	-	1	set		
40	<a href="#">1933267019</a>	-	1	set		
50	<a href="#">1933267021</a>	-	1	set		
63	<a href="#">1933267023</a>	-	1	set		
75	<a href="#">1933267025</a>	-	1	set		
90	<a href="#">1933267027</a>	-	1	set		
110	<a href="#">1933267009</a>	-	1	set		



coil



bar



pipes in tube



bag



carton box



pallet

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## SYSTEM KAN-therm

Optimal, complete multipurpose installation system consisting of state of the art, mutually complementary technical solutions for pipe water distribution installations, heating installations, as well as technological and fire extinguishing installations.

	UltraLine	
	Push/Push Platinum	
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	Inox	
	Groove	
	Copper/Copper Gas	
	Sprinkler	
	Surface heating and automation	
	Football Stadium installations	
	Cabinets and manifolds	

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