



01.08.2022

Irrigation



kalde®

First Choice

Why Kalde?

Kalde produces high quality products, designs and develops integrated solutions for customers worldwide.

It is among the leading companies in production of pipes and fittings with its knowledge and expertise of more than 40 years.

The headquarters of the company is located in Istanbul where the continents of Asia and Europe meet.

Our strategical location at the junction of Europe, Asia and Africa together with a reliable supply chain give us unique advantages in providing our business partners and customers with high quality service as well as the competition in the global markets. Currently, our products are exported to more than 40 countries worldwide including Germany, Hungary, Romania, Austria, Greece, Bulgaria, Russia, Ukraine, Egypt, Syria, Lebanon, etc.

Kalde has product design, development and quality control facilities in 300.000 m².

Kalde produces a wide range of products including PP-R pipes, PP-R fittings, PP-R and brass valves, Al-pex & PE-RT pipes, screw fittings, press fittings, PE-X pipes and collectors. Kalde has internationally accredited certificates from respected organisations such as DVGW SKZ (Germany), CSTB (France) and AENOR (Spain). Furthermore, our management system has been certified by ISO. We are proud of our high quality products and experiences...

Our vision is providing our customers with an increasingly wide portfolio of high quality products and solutions with continuous research and development.

Our goal is to develop long term partnerships with our customers and suppliers.

We create integrated solutions by team work as well as collaboration with our customers and partners.

Having market-focused teams of around 1500 professionals supported by a strong management, we offer our business partners and customers worldwide with value-adding solutions.

As result of these reasons, **kalde** Kalde is the "First Choice" of the users worldwide

Kalde Value Commitment.

Kalde was established by four young engineers dedicated to provide customers with the best service in 1977.

This spirit is still alive and is the essence of our mission statement.

The Success of Kalde is the Result of Various Factors.

- **High quality** products.
- Utilization of best **practices**.
- Products meeting your **unique** requirements.
- **Proven** products.
- **Total** customer satisfaction.
- **Long term** relationships with each customer.
- A **dedicated** team of around 1500 professionals.

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Kalde Sprinkler System

Kalde sprinkler pipes and fittings can be used efficiently for irrigation of fields of sugar beet, potato, clove, cereal, carrot, peanut, corn, wheat, legume, etc., tea and coffee fields, areas requiring dust control, pasture land, sports fields and golf courses. The sprinkler pipes and fittings are produced in accordance with TS EN 12734 standard. Kalde sprinkler pipes and fittings are offered with diameters of Ø75, Ø90, Ø110, Ø125, Ø140 and Ø160 mm. Produced with high quality and in accordance with high standards, Kalde sprinkler pipes and fittings are offered with a warranty of 5 years.



Average Outer Diameter (mm)	PN 6 = at 0,6 MPa (PE 63) Wall Thickness, Minimum (mm)
75	2.9
90	3.5
110	4.2
125	4.8
160	6.2

Important Issues in Assembly-Disassembly and Use of Kalde Sprinkler System

Kalde Sprinkler systems (pipes and fittings) are placed on sale for consumption after the highest quality design and production processes involving the most suitable materials. In order to get the most of our system and use it without any problems for a long time, the following matters should be taken into account.

Important Issues Before Installation of the Sprinkler System

- It is very important for the performance of the system to choose the main line pipe supplying water to the system and lateral pipes to be used in the sprinkler system with the right diameters. Particularly, the main pipe supplying water to the system should have a sufficient diameter.
- The project for the sprinkler system should be created by computer software or carried out by experts.
- During the project design process of the sprinkler system, it should be noted that the pressure in the pipe line will increase as the length of the main line pipe and the elevation difference between the source of water and the irrigated land increases. For each additional elevation difference of 10 meters, the pipe will have an extra pressure of 1 bar. Similarly, each additional horizontal length of 100 meters will cause an extra pressure of 1 bar for the pipe.
- During the project design process of the sprinkler system, it should be ensured that the flow rate of the water in the pipe doesn't exceed 2 meters/second. If this value cannot be achieved, higher diameters should be preferred for the pipes.
- Since the sand, mud, scum and similar foreign materials in the water would decrease the flow rate (thus the efficiency of the system) and also block sprinklers and nipples, the end of the pipe at the source of water should be fitted with a suitable filter.
- If there are broken/damaged parts in the sprinkler pipes, they should be repaired or replaced. Broken or cracked latches should never be used.
- Don't carry the pipes by pulling on the ground. The friction between the ground and the pipe can damage the pipe and the head.

Important Issues During Installation of the System

- Since the pipes would be softer at high temperatures, there might be folds and bends at the middle of the pipes during transport and the pipes might be damaged. So, the pipes should be carried by two people to avoid folds and bends.
- Avoid applying force or impact while assembling and disassembling the system.
- The gaskets at the joints should be cleaned thoroughly prior to assembly.
- Worn, torn or damaged gaskets shouldn't be used and they should be replaced.
- Lubricate the gaskets and male ends with soap and water, soft soap, etc. prior to joining pipes. This would allow easy assembly of the pipes.
- The joints of the pipes should be checked for defects and they should be perfect.

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Important Issues During Operation of the System

- The pipe line should be cleaned by operating the sprinkler system at low flow rates and pressures and keeping the pipe stopper at the lateral or main pipe for a short period of time.
- When supplying the system with pressure, the initial pressure should be as low as 1-2 bars and increased gradually. Thus, the negative effects of the impacts known as water ram would be minimized.
- Polyethylene pipes are designed for operation at 20 °C. The performance of a polyethylene pipe would drop as the temperature rises. Therefore, when installing and commissioning a pipeline under sunlight (which would cause the pipe line temperature to rise up to 50-60 °C), the pressure of the pipe line should be maintained at low values such as 2-3 bars until the hot water in the pipes is discharged completely. The pressure value shouldn't exceed 1-2 bars until the hot water is discharged completely and the pipe has cooled with the cold water flowing through it.

Important Issues When the System is not Used

- The pipes should not be exposed to direct sunlight when not in use. Extended exposure to direct sunlight would shorten the service life of the pipes.
- Since driving tractors or other vehicles on the pipe heads would damage them, you should avoid doing it.
- Direct contact of polyethylene pipes with sharp objects should be avoided. They could scratch and damage the pipe.
- Polyethylene pipes should be kept away from heat and fire. If you are going to set a fire or burn stubble, the pipes and fittings should be taken away.
- Unused gaskets should be kept away from sunlight. They should not be exposed to sunlight for a long time.

Note:

Please keep in mind that the sprinkler system you purchased is yours. You can use the sprinkler system without any problems for a long period of time if you follow the instructions above. If you experience any unexpected problems, please contact KALDE sprinkling experts.

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Tube - 5 Meters

Code	Size	Pcs.
8202-tip-750005	75	1
8202-tip-900005	90	1
8202-tip-110005	110	1
8202-tip-125005	125	1
8202-tip-140005	140	1
8202-tip-160005	160	1



Tube LATERAL - 5 Meters

Code	Size	Pcs.
8202-ltr-750005	75	1
8202-ltr-900005	90	1
8202-ltr-110005	110	1



Tube - 6 Meters

Code	Size	Pcs.
8202-tip-750006	75	1
8202-tip-900006	90	1
8202-tip-110006	110	1
8202-tip-125006	125	1
8202-tip-140006	140	1
8202-tip-160006	160	1



Tube LATERAL - 6 Meters

Code	Size	Pcs.
8202-ltr-750006	75	1
8202-ltr-900006	90	1
8202-ltr-110006	110	1



Irrigation

Cross

Code	Size	Pcs.
8212-crs-757500	75 x 75	1
8212-crs-907500	90 x 75	1
8212-crs-909000	90 x 90	1
8212-crs-110750	110 x 75	1
8212-crs-110900	110 x 90	1
8212-crs-110110	110 x 110	1
8212-crs-125750	125 x 75	1
8212-crs-125900	125 x 90	1
8212-crs-125110	125 x 110	1
8212-crs-125125	125 x 125	1
8212-crs-140750	140 x 75	1
8212-crs-140900	140 x 90	1
8212-crs-140110	140 x 110	1
8212-crs-140125	140 x 125	1
8212-crs-140140	140 x 140	1
8212-crs-160750	160 x 75	1
8212-crs-160900	160 x 90	1
8212-crs-160110	160 x 110	1
8212-crs-160125	160 x 125	1
8212-crs-160140	160 x 140	1
8212-crs-160160	160 x 160	1



Elbow

Code	Size	Pcs.
8212-elb-750000	75	1
8212-elb-900000	90	1
8212-elb-110000	110	1



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Reduction

Code	Size	Pcs.
8212-rdc-907500	90 x 75	1
8212-rdc-110750	110 x 75	1
8212-rdc-110900	110 x 90	1
8212-rdc-125750	125 x 75	1
8212-rdc-125900	125 x 90	1
8212-rdc-125110	125 x 110	1
8212-rdc-140750	140 x 75	1
8212-rdc-140900	140 x 90	1
8212-rdc-140110	140 x 110	1
8212-rdc-140125	140 x 125	1
8212-rdc-160750	160 x 75	1
8212-rdc-160900	160 x 90	1
8212-rdc-160110	160 x 110	1
8212-rdc-160125	160 x 125	1
8212-rdc-160140	160 x 140	1



Tee

Code	Size	Pcs.
8212-tio-757500	75 x 75	1
8212-tio-907500	90 x 75	1
8212-tio-909000	90 x 90	1
8212-tio-110750	110 x 75	1
8212-tio-110900	110 x 90	1
8212-tio-110110	110 x 110	1
8212-tio-125750	125 x 75	1
8212-tio-125900	125 x 90	1
8212-tio-125110	125 x 110	1
8212-tio-125125	125 x 125	1
8212-tio-140750	140 x 75	1
8212-tio-140900	140 x 90	1
8212-tio-140110	140 x 110	1
8212-tio-140125	140 x 125	1
8212-tio-140140	140 x 140	1
8212-tio-160750	160 x 75	1
8212-tio-160900	160 x 90	1
8212-tio-160110	160 x 110	1
8212-tio-160125	160 x 125	1
8212-tio-160140	160 x 140	1
8212-tio-160160	160 x 160	1



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Hydrant Tee With Latch

Code	Size	Pcs.
8212-abt-750000	75	1
8212-abt-900000	90	1



Stopend

Code	Size	Pcs.
8212-ste-630000	63	1
8212-ste-750000	75	1
8212-ste-900000	90	1
8212-ste-110000	110	1
8212-ste-125000	125	1
8212-ste-140000	140	1
8212-ste-160000	160	1



Motopomp Connection

Code	Size	Pcs.
8212-mtp-750000	75	1
8212-mtp-900000	90	1
8212-mtp-110000	110	1
8212-mtp-125000	125	1
8212-mtp-140000	140	1
8212-mtp-160000	160	1



Elongation Tube / ø32 mm.

Code	Size	Pcs.
8202-tbl-322500	25	1
8202-tbl-325000	50	1
8202-tbl-326000	60	1
8202-tbl-321000	100	1



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Sprink

Code	Size	Pcs.
8212-spr-000000	Standart Type	1



Sprink Adapter

Code	Size	Pcs.
8212-spr-322501	32 x 25	1



Ball Valve

Code	Size	Pcs.
8242-vlb-320000	32 x 1"	1



Line Valve

Code	Size	Pcs.
8242-vlp-750000	75	1
8242-vlp-900000	90	1
8242-vlp-110000	110	1
8242-vlp-125000	125	1



Joint

Code	Size	Pcs.
8212-tup-630000	63	1
8212-tup-750000	75	1
8212-tup-900000	90	1
8212-tup-110000	110	1
8212-tup-125000	125	1
8212-tup-140000	140	1
8212-tup-160000	160	1





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