

Product range

The **KELEN[®]** pipe system is constantly being extended and updated to meet the requirements of the industry.

Please refer to the current **KELEN[®]** price list for the complete product range.

The abbreviated references, e.g.

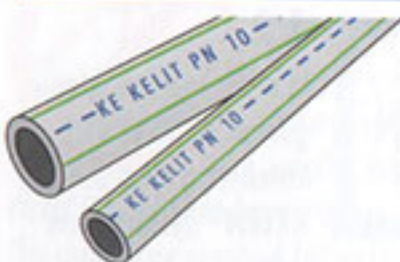
KE00 (= PN20 pipe) or

KE30 (= tee), simplify the administration.

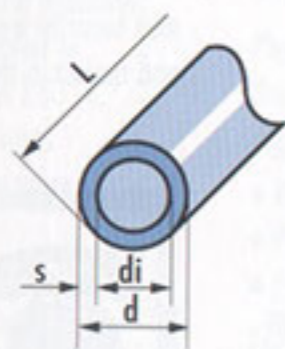
Please refer to the KE numbers when you place your order.

On request and subject to minimum quantities and capacities we can manufacture special types of fittings (e.g. 30° elbow).

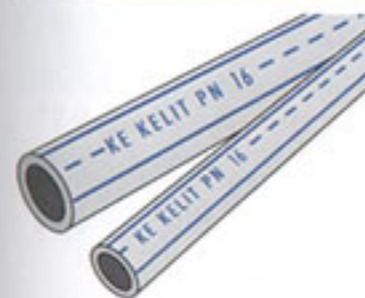
KE02 KELEN[®] pipe PN10



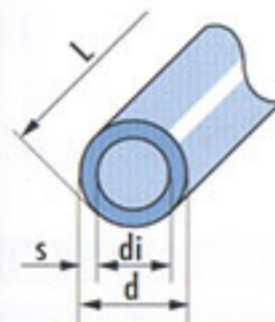
d mm	s mm	di mm	L m	Weight kg/m	V l/m
20	1,9	16,2	4	0,11	0,21
25	2,3	20,4	4	0,17	0,33
32	2,9	26,2	4	0,27	0,54
40	3,7	32,6	4	0,42	0,83
50	4,6	40,8	4	0,66	1,31
63	5,8	51,4	4	1,04	2,07
75	6,8	61,4	4	1,41	2,96
90	8,2	73,6	4	2,11	4,25
110	10,0	90,0	4	3,01	6,36
125	11,4	102,2	4	3,92	8,20
160	14,6	130,8	4	6,35	13,52



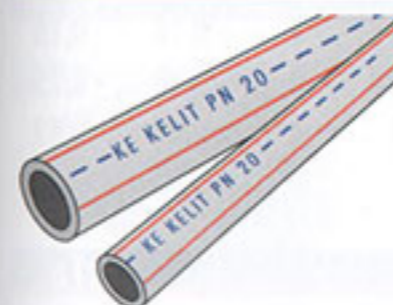
KE08 KELEN[®] pipe PN16



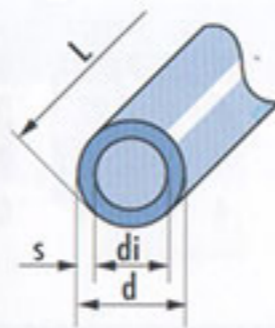
d mm	s mm	di mm	L m	Weight kg/m	V l/m
20	2,8	14,4	4	0,15	0,16
25	3,5	18,0	4	0,23	0,25
32	4,4	23,2	4	0,37	0,42
40	5,5	29,0	4	0,58	0,66
50	6,9	36,2	4	0,90	1,03
63	8,6	45,8	4	1,41	1,65
75	10,3	54,4	4	2,01	2,32
90	12,3	65,4	4	2,87	3,36
110	15,1	79,8	4	4,30	5,00



KE00 KELEN[®] pipe PN20



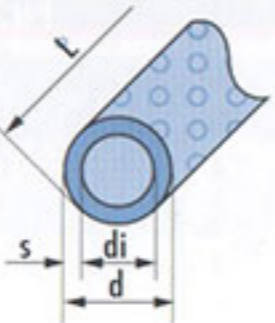
d mm	s mm	di mm	L m	Weight kg/m	V l/m
20	3,4	13,2	4	0,17	0,14
25	4,2	16,6	4	0,27	0,22
32	5,4	21,2	4	0,43	0,35
40	6,7	26,6	4	0,67	0,56
50	8,3	33,4	4	1,04	0,88
63	10,5	42,0	4	1,65	1,39
75	12,5	50,0	4	2,34	1,96
90	15,0	60,0	4	3,36	2,83
110	18,3	73,4	4	5,01	4,23



K06 KELIT-ALU composite pipe PN20



d mm	s mm	di mm	L m	Weight kg/m	V l/m
20	2,8	14,4	4	0,21	0,16
25	3,5	18,0	4	0,32	0,25
32	4,4	23,2	4	0,47	0,42
40	5,5	29,0	4	0,70	0,66
50	6,9	36,2	4	1,03	1,03
63	8,6	45,8	4	1,60	1,65
75	10,3	54,4	4	2,22	2,32
90	12,3	65,4	4	3,15	3,36



PP-R pipe system

KEO2 KELEN pipe	PN10
d x s	Flow rate L/m
20 x 1,9 mm	0,21
25 x 2,3 mm	0,33
32 x 2,9 mm	0,54
40 x 3,7 mm	0,83
50 x 4,6 mm	1,31
63 x 5,8 mm	2,07
75 x 6,8 mm	2,96
90 x 8,2 mm	4,25
110 x 10,0 mm	6,36
125 x 11,4 mm	8,20
160 x 14,6 mm	13,52

KEO2 KELEN pipe	PN16
d x s	Flow rate L/m
20 x 2,8 mm	0,16
25 x 3,5 mm	0,25
32 x 4,4 mm	0,42
40 x 5,5 mm	0,66
50 x 6,9 mm	1,03
63 x 8,6 mm	1,65
75 x 10,3 mm	2,32
90 x 12,3 mm	3,36
110 x 15,1 mm	6,36

KEO2 KELEN pipe	PN20
d x s	Flow rate L/m
20 x 3,4 mm	0,14
25 x 4,2 mm	0,22
32 x 5,4 mm	0,35
40 x 6,7 mm	0,56
50 x 8,3 mm	0,88
63 x 10,5 mm	1,39
75 x 12,5 mm	1,96
90 x 15,0 mm	2,83
110 x 18,3 mm	4,23

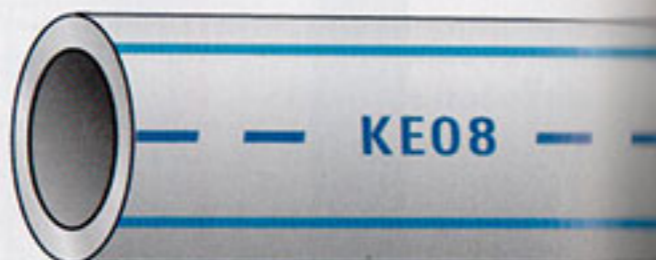
Dimensions: as specified by DIN 8077
Colour: Grey. 3 co-extruded green lines (90° apart) help the plumber to align pipe and fitting.

Standard length: 4 m,
Other lengths can be produced on request subject to minimum order quantities!



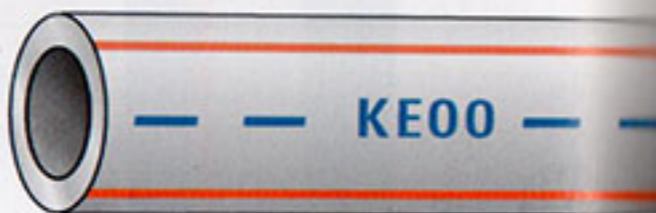
Dimensions: as specified by DIN 8077
Colour: Grey. 3 co-extruded blue lines (90° apart) help the plumber to align pipe and fitting.

Standard length: 4 m,
Other lengths can be produced on request subject to minimum order quantities!



Dimensions: as specified by DIN 8077
Colour: Grey. 3 co-extruded red lines (90° apart) help the plumber to align pipe and fitting.

Standard length: 4 m,
Other lengths can be produced on request subject to minimum order quantities!



Application as specified:

Cold water

PN10: 20°/10 bar

Safety factor: The DIN standard takes account of raw material properties and calculates a safety factor of 50% (SF=1.5) when deriving the operating conditions given on the right:

Operating pressure in relation to service life and operating temperature

Temperature (°C)	Pressure (bar)	Service life (years)
20	10	50
30	9	50
40	8	50

— KEO2 — — KE KELEN - DRINKING WATER PN10 — blue line —

Application as specified:

Hot and cold water

**PN16: 20°/16 bar
60°/8 bar**

Safety factor: The DIN standard takes account of raw material properties and calculates a safety factor of 50% (SF=1.5) when deriving the operating conditions given on the right:

Temperature (°C)	Pressure (bar)	Service life (years)
20	16	50
40	12	50
60	8	50
70	6	25

— KEO8 — — KE KELEN - DRINKING WATER PN16 — blue line —

Application as specified:

Hot and cold water

**PN20: 20°/20 bar
70°/8 bar**

Safety factor: The DIN standard takes account of raw material properties and calculates a safety factor of 25% (SF=1.5) when deriving the operating conditions given on the right:

Temperature (°C)	Pressure (bar)	Service life (years)
20	20	50
40	15	50
60	10	50
70	8	50
80	6	25

— KEO0 — — KE KELEN - DRINKING WATER PN20 — blue line —

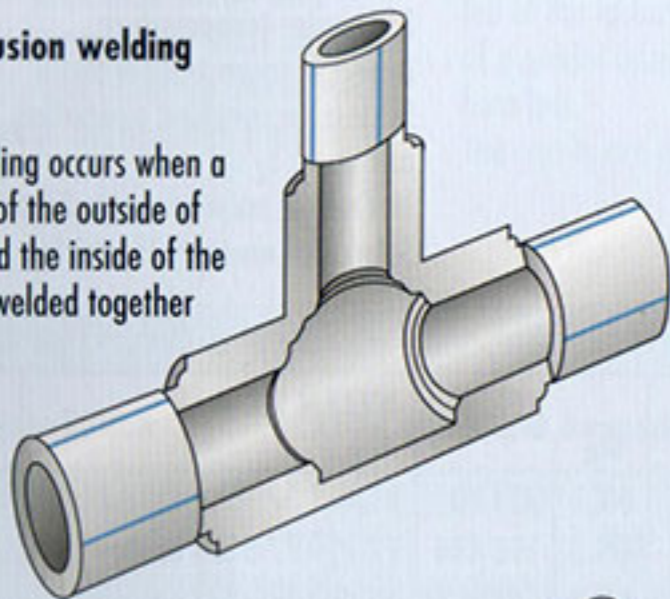
The six ways of joining the pipes

A wide range of safe and secure methods for joining the pipes is essential for a pipe system.

KE KELIT has a comprehensive range of fittings for each method of joining.

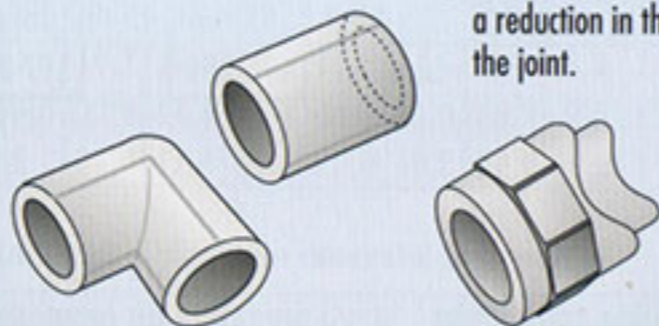
1. Polyfusion welding

Principle:
Fusion welding occurs when a large area of the outside of the pipe and the inside of the socket are welded together



A wide range of welding fittings is available

Sizes: d20 – d110



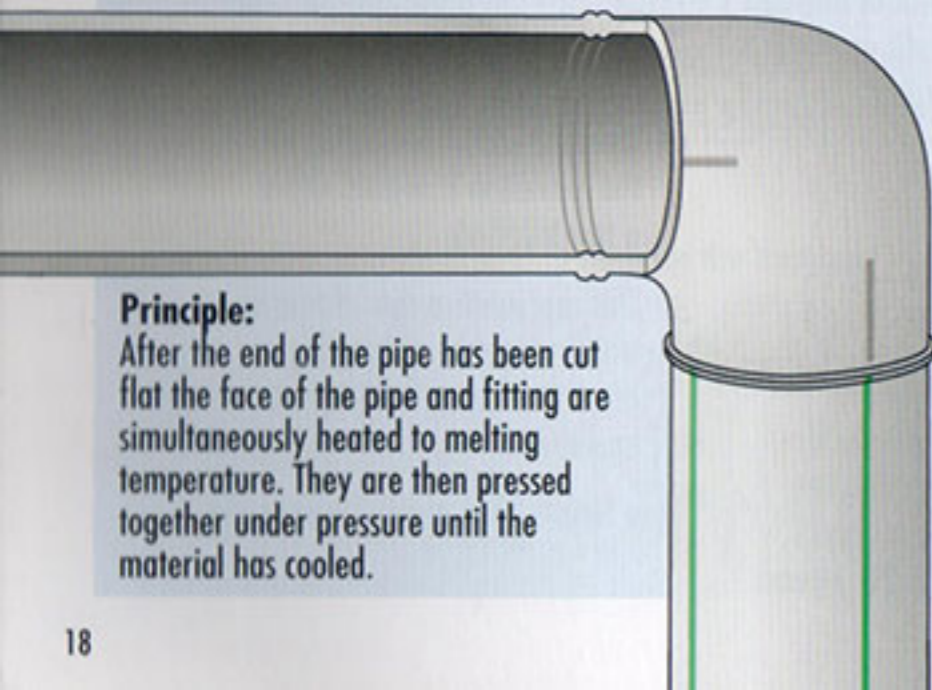
Advantages

- Pipe and fitting are made of the same material. No additional materials are required.
- Welded joints are not a weak point in the system
- Pipe can only enter the fitting after they have been heated on the welding machine (important safety feature)
- The weld does not cause a reduction in the flow at the joint.

All KELEN polyfusion fittings from d20 to d110 are rated PN20. They can be used for welding to pipes of all pressure ratings.

2. Butt welding

Principle:
After the end of the pipe has been cut flat the face of the pipe and fitting are simultaneously heated to melting temperature. They are then pressed together under pressure until the material has cooled.



Advantages

- Pipe and fitting are made of the same material. No additional materials are required.
- Welded joints are not a weak point in the system.
- The weld does not cause a reduction in the flow at the joint

Sizes: d125–d160

3. Threaded adaptor fittings

Sizes:
d20 x 1/2" – d75 x 2 1/2"
The threads conform to DIN 2999 and are made of dezincification resistant brass (MS63-CZ 132). They are metal-plated to protect against stress corrosion cracking. Male and female threads are available as both straight and elbow fittings.

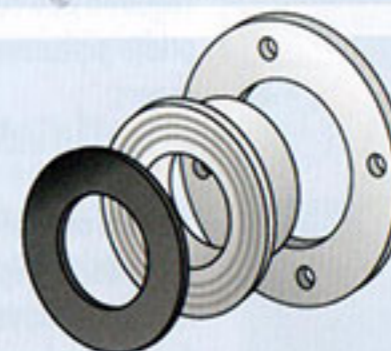


Advantages

- Wide range of fittings
- Female thread is a straight thread
- Male thread is tapered and roughened
- Thread is firmly anchored in the fitting
- High resistance to twisting strain

4. Flange connection

Sizes: d20–d160
The solution for flanged fittings
Backing ring conforms to pipe sizes
Fusion welding: d20–d125
Butt welding: d160



Advantages

- Can be detached at any time
- Elastic EPDM seal
- Dimensions conform to DIN 2501-PN16

5. Detachable union fittings

Sizes: d20 x 1/2" – d90 x 3"

3 types:



KE55-PPR-male thread

KE56-PPR-PPR

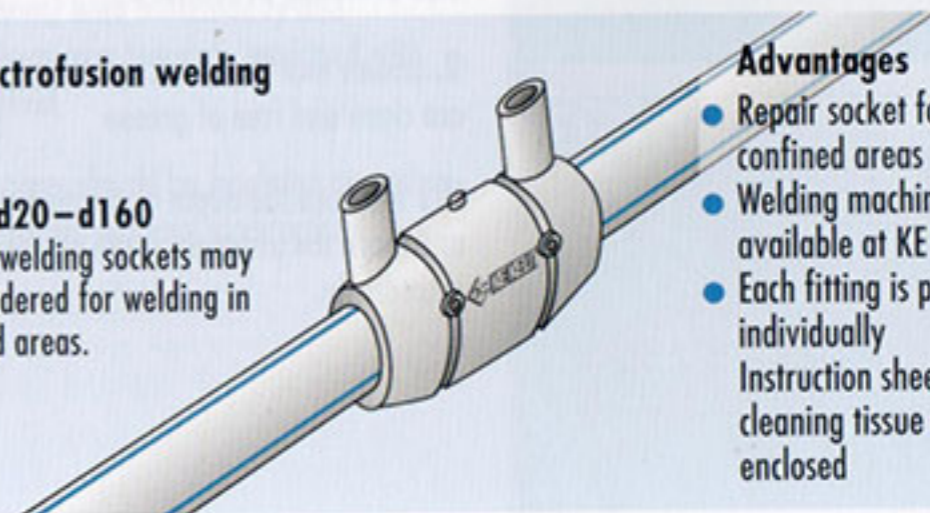
KE57-PPR-male thread

Advantages

- Detachable fittings
- Elastic EPDM fittings
- KE57 fitting for connecting to appliances

6. Electrofusion welding

Sizes: d20–d160
KELIT E-welding sockets may be considered for welding in confined areas.



Advantages

- Repair socket for confined areas
- Welding machine available at KE KELIT
- Each fitting is packaged individually
- Instruction sheet and cleaning tissue are enclosed