

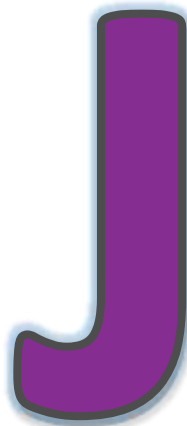
*Streaming Water. Streaming Life!*



# Pressure Pipes

## Pressure Pipes

### Pressure Pipes



- **Agriculture**
- **Landscape**
- **Building Infrastructure**
- **Industry**

Elysée offers a comprehensive range of pipes and fittings, designed for water supply and for buried and above-ground drainage and sewerage. EN ISO 1452 piping systems are available in a complete range of metric series from Ø16mm to Ø315mm with pressure rating from 6 bar up to 25 bar. Pipes can be found at straight lengths of 3, 4 and 6 m.

In order to ensure that all requirements of standards and regulations are fulfilled, Elysée's U-PVC plastics piping systems, are tested according to standards requirements in our well-equipped testing room.

Furthermore, Elysée EN ISO 1452 piping systems are being tested and certified according to EN ISO 1452, by external third party certification body (OFI Austria). Product certification has been obtained, ensuring EN ISO 1452 compliance.

EN1452 specifies the requirements for U-PVC piping systems regarding: Materials, Appearance, Colour, Geometrical Characteristics, Mechanical Characteristics, Physical Characteristics, Performance requirements, Specifications for the Sealing Ring.

## Quality Management

Our Quality management system ensures top-class products in terms of performance, reliability and durability. This is a crucial parameter to ensure customer satisfaction and loyalty. Elysée quality system, ISO 9001, is approved by CCC and IQNet.

## Certifications

Elysée U-PVC pressure piping systems conform to the European standard of EN ISO 1452. This standard specifies the requirements of solid-wall pressure pipes and fittings which are intended for water supply, both for buried and above-ground usage.

In compliance with this standard, Elysée ensures regular supply of reliable products with approved quality.

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## Dimensions and Characteristics

Nominal dimensions of mean outside diameters, the nominal wall thickness and their tolerances comply with the dimensions specified by the relevant standard of EN ISO 1452-2.

## Potable Water

All plastics and non-plastic products used for the production of Elysée piping systems, such as pipes, fittings, sealing rings, lubricants etc., which are intended for conveyance of water for human consumption, do not affect the quality of potable water according to the guidelines of BS6920 British Standard. The compounds and formulations of all materials are certified in accordance with the relevant standards.

## Materials

Elysée pressure piping systems are produced by U-PVC raw material which can be enhanced with additives in order to optimize its quality performance. The compound and formulation consist of U-PVC resin and the required additives are specified by the relevant standard of EN ISO 1452-2.

## Operating Temperature

A virgin material of U-PVC normally operates within a temperature range of 20°C to 70°C. Yet, the maximum allowable operating pressure is determined by the derating factor.

Additives are typically used in U-PVC production in order to increase the durability of the end product under higher temperatures.

## Sealing Ring

The sealing ring is a WA type, suitable for cold potable water which meets the requirements of the relevant standard of EN 681-1.

For each order, relevant information is provided to the customer, especially sealing ring's specifications and technical characteristics. The raw material of the sealing ring does not affect the quality of potable water in accordance with the British Standard of BS6920. In compliance with this standard and the relevant standard of EN 1452-5, it is assured that the sealing ring does not downgrade the properties of the pipes.

## General info

Traditionally, the market of domestic pipes has been dominated by the pipes of copper and galvanized iron, although in the last few years the plastic pipes have experienced a significant increment in their use in this market. In some parts of the world, the copper is still the dominant material although it is decreasing its use due to the increase of its cost and the robberies to melt. Although the first plastic materials developed for pipes could not compete with the properties of the traditional iron or steel pipes, the advances in researches and development of materials have made the plastic pipes to be nowadays one of the materials to choose for water supply, due to the economic and environmental balance that they represent.

## PE-RT Material

PE-RT (Polyethylene of Raised Temperature Resistance), is a further development undertaken with the aim of permitting the use of polyethylene materials even at elevated operating temperatures. The aim was to improve the HDPE materials by elevating the long-term hydrostatic strength at high temperatures without cross-linking as required for PE-X. Unlike the cross-linked polyethylene grades (PEX), this has been achieved by means of modification of the structure of the PE macromolecules, without any sacrifice of advantageous properties such as good resistance to stress-induced cracking and the toughness of the unmodified polyethylene. Through the modification process PE-RT gets a unique molecular structure and crystalline microstructure. The avoidance of chemical cross-linking process is one of the main reasons why PE-RT is suitable for use in all hot & cold water applications, it especially meets drinking water requirements.

## Effect on Water

Water is essential to human life and the health of the environment. Water quality is commonly defined by its physical, chemical, biological and aesthetic (appearance and smell) characteristics. A healthy environment is one in which the water quality supports a rich and varied community of organisms and protects public health. Unsuitable non-metallic materials can cause changes in the quality of the water that they are in contact with. Pipes that are intended to be used for potable water supply systems should be manufactured concerning the requirements of the relevant standards. Elysée pipes are fully conformed to international hygiene and sanitary requirements that are indicated by the standard BS6920 (UK).

## Quality Inspections and Testing

Several tests are carried out to verify the compliance of our polyethylene pipes with the relevant standards through in-house testing as well as tests in external accredited laboratories. Furthermore, all quality procedures and practices are checked from the entry of raw material, until the delivery of the pipes to the customers. Out of the regular inspections of appearance, color, marking and geometric characteristics, several mechanical and material tests are carried out as mentioned below.

Refer to technical manual for more information

## Benefits of Polyethylene Pipes

- Resistance to:
  - high temperature
  - freeze damage
  - corrosion
  - chemical substances
  - deformation under load
  - crack growth
  - impact
- Maintenance free
- Hygienic
- Long lasting
- Environmentally friendly
- Recyclable
- Ease of installation
- Outstanding flexibility
- Cost efficient
- Deposit free
- Energy saving
- Reduced water hammer noise
- Low thermal conductivity
- Good resistance to UV

## Applications of PE-RT

PE-RT type materials have been used successfully in domestic hot and cold water piping systems for more than 20 years. Because of the many benefits offered by PE-RT and the improved processability, it has become a preferable plumbing system.

An overview of applications areas is as follows:

- Cold and hot sanitary water supply
- Industrial applications
- Circuits of refrigeration

# Pressure Pipes & Fittings

## PVC Pipes (EN ISO 1452)

EN ISO 1452

No. **PVC Pipes - PN 6.3**  
**9806 Bar**



Code	Diameter x Thickness	Weight (Kg/m)	Packing
<b>SDR 33</b>			
98063040	Ø 40 x 1.5	0,29	P
98063050	Ø 50 x 1.6	0,38	P
98063063	Ø 63 x 2.0	0,59	P
98063075	Ø 75 x 2.3	0,81	P
98063090	Ø 90 x 2.8	1,17	P
<b>SDR 41</b>			
98063110	Ø 110 x 2.7	1,39	P
98063125	Ø 125 x 3.1	1,82	P
98063140	Ø 140 x 3.5	2,28	P
98063160	Ø 160 x 4.0	2,94	P
98063180	Ø 180 x 4.4	3,66	P
98063200	Ø 200 x 4.9	4,50	P
98063225	Ø 225 x 5.5	5,73	P
98063250	Ø 250 x 6.2	7,17	P
98063280	Ø 280 x 6.9	8,93	P
98063315	Ø 315 x 7.7	11,20	P

EN ISO 1452

No. **PVC Pipes - PN 8**  
**9808 Bar**



Code	Diameter x Thickness	Weight (Kg/m)	Packing
<b>SDR 26</b>			
98080040	Ø 40 x 1.6	0,30	P
98080050	Ø 50 x 2.0	0,46	P
98080063	Ø 63 x 2.5	0,73	P
98080075	Ø 75 x 2.9	1,00	P
98080090	Ø 90 x 3.5	1,44	P
<b>SDR 33</b>			
98080110	Ø 110 x 3.4	1,73	P
98080125	Ø 125 x 3.9	2,23	P
98080140	Ø 140 x 4.3	2,77	P
98080160	Ø 160 x 4.9	3,57	P
98080180	Ø 180 x 5.5	4,52	P
98080200	Ø 200 x 6.2	5,70	P
98080225	Ø 225 x 6.9	7,08	P
98080250	Ø 250 x 7.7	8,82	P
98080280	Ø 280 x 8.6	11,00	P
98080315	Ø 315 x 9.7	14,00	P

EN ISO 1452

No. **PVC Pipes - PN 10**  
**9810 Bar**



Code	Diameter x Thickness	Weight (Kg/m)	Packing
<b>SDR 21</b>			
98100032	Ø 32 x 1.6	0,24	P
98100040	Ø 40 x 1.9	0,35	P
98100050	Ø 50 x 2.4	0,55	P
98100063	Ø 63 x 3.0	0,85	P
98100075	Ø 75 x 3.6	1,22	P
98100090	Ø 90 x 4.3	1,75	P
<b>SDR 28</b>			
98100110	Ø 110 x 4.2	2,11	P
98100125	Ø 125 x 4.8	2,74	P
98100140	Ø 140 x 5.4	3,45	P
98100160	Ø 160 x 6.2	4,52	P
98100180	Ø 180 x 6.9	5,65	P
98100200	Ø 200 x 7.7	7,00	P
98100225	Ø 225 x 8.6	8,78	P
98100250	Ø 250 x 9.6	10,90	P
98100280	Ø 280 x 10.7	13,60	P
98100315	Ø 315 x 12.1	17,30	P

EN ISO 1452

No. **PVC Pipes - PN 12.5**  
**9812 Bar**



Code	Diameter x Thickness	Weight (Kg/m)	Packing
<b>SDR 17</b>			
98125025	Ø 25 x 1.5	0,17	P
98125032	Ø 32 x 1.9	0,28	P
98125040	Ø 40 x 2.4	0,44	P
98125050	Ø 50 x 3.0	0,67	P
98125063	Ø 63 x 3.8	1,06	P
98125075	Ø 75 x 4.5	1,50	P
98125090	Ø 90 x 5.4	2,17	P
<b>SDR 21</b>			
98125110	Ø 110 x 5.3	2,64	P
98125125	Ø 125 x 6.0	3,39	P
98125140	Ø 140 x 6.7	4,23	P
98125160	Ø 160 x 7.7	5,54	P
98125180	Ø 180 x 8.6	7,00	P
98125200	Ø 200 x 9.6	8,63	P
98125225	Ø 225 x 10.8	10,90	P
98125250	Ø 250 x 11.9	13,40	P
98125315	Ø 315 x 15.0	25,40	P



# Pressure Pipes & Fittings

## PVC Pipes (EN ISO 1452) & Tube Clips

EN ISO 1452

No. **PVC Pipes - PN 16**  
**9816 Bar**



Code	Diameter x Thickness	Weight (Kg/m)	Packing
<b>SDR 13.6</b>			
98160020	Ø 20 x 1.5	0,14	P
98160025	Ø 25 x 1.9	0,21	P
98160032	Ø 32 x 2.4	0,34	P
98160040	Ø 40 x 3.0	0,53	P
98160050	Ø 50 x 3.7	0,81	P
98160063	Ø 63 x 4.5	1,30	P
98160075	Ø 75 x 5.6	1,83	P
98160090	Ø 90 x 6.7	2,64	P
<b>SDR 17</b>			
98160110	Ø 110 x 6.6	3,21	P
98160125	Ø 125 x 7.4	4,12	P
98160140	Ø 140 x 8.3	5,16	P
98160160	Ø 160 x 9.5	6,75	P
98160180	Ø 180 x 10.7	8,56	P
98160200	Ø 200 x 11.9	10,50	P
98160225	Ø 225 x 11.9	13,40	P
98160250	Ø 250 x 14.8	16,40	P
98160315	Ø 315 x 18.7	31,50	P

EN ISO 1452

No. **PVC Pipes - PN 25**  
**9825 Bar**



Code	Diameter x Thickness	Weight (Kg/m)	Packing
<b>SDR 9</b>			
98250016	Ø 16 x 1.8	0,17	P
98250020	Ø 20 x 2.3	0,28	P
98250025	Ø 25 x 2.8	0,44	P
98250032	Ø 32 x 3.6	0,67	P
98250040	Ø 40 x 4.5	1,06	P
98250050	Ø 50 x 5.6	1,50	P
98250063	Ø 63 x 7.1	0,44	P
98250075	Ø 75 x 8.4	0,67	P
<b>SDR 11</b>			
98250110	Ø 110 x 10.0	4,69	P
98250125	Ø 125 x 11.4	6,05	P
98250140	Ø 140 x 12.7	7,61	P
98250160	Ø 160 x 14.6	9,96	P
98250180	Ø 180 x 16.4	12,60	P
98250200	Ø 200 x 18.2	15,60	P

No. **Tube Clips**  
**817B**



Code	Size	Bag	Box
817A00016	Ø 16 x 2 (White)	2400	L
817B00016	Ø 16 (Black)	1000	L
817B00020	Ø 20 (Black)	800	L
817B00025	Ø 25 (Black)	600	L
817B00032	Ø 32 (Black)	500	L
817B00040	Ø 40 (Black)	700	L
817B00050	Ø 50 (Black)	400	L
817B00063	Ø 63 (Black)	270	L
817B00075	Ø 75 (Black)	240	L
817B00090	Ø 90 (Black)	120	L
817B00110	Ø 110 (Black)	120	L



No. **Tube Clip Base**  
**818B**



Code	Size	Bag	Box
818B00032	Ø 32	1000	L
818B00040	Ø 40	1500	L
818B00050	Ø 50	1000	L
818B00063	Ø 63	800	L

# Pressure Pipes & Fittings

## PERT Pipes - PPR Pipes & Pool Hoses

### No. 450 PERT Pipe in Corugated Hose



Code	Diameter x Thickness	Length (m)	Packing
45032016050	Ø 16 x 2,2	50	1 C
45032018050	Ø 18 x 2,5	50	1 C
45032020050	Ø 20 x 2,8	50	1 C
45032025050	Ø 25 x 3,5	50	1 C
45035016050	Ø 16 x 2,0	50	1 C
45040018050	Ø 18 x 2,0	50	1 C
45042028050	Ø 28 x 3,0	50	1 C
45045020050	Ø 20 x 2,0	50	1 C
45050025050	Ø 25 x 2,3	50	1 C
45050032050	Ø 32 x 3,0	50	1 C

### No. 45A PERT Pipe



Code	Diameter x Thickness	Length (m)	Packing
45A35016050	Ø 16 x 2,0	50	1 C
45A32016050	Ø 16 x 2,2	50	1 C
45A40018050	Ø 18 x 2,0	50	1 C
45A32018050	Ø 18 x 2,5	50	1 C
45A32020050	Ø 20 x 2,8	50	1 C
45A50025050	Ø 25 x 2,3	50	1 C
45A32025050	Ø 25 x 3,5	50	1 C
45A42028050	Ø 28 x 3,0	50	1 C
45A50032050	Ø 32 x 3,0	50	1 C

### No. 45A PERT Pipe



Code	Diameter x Thickness	Length (m)	Packing
45A25015100	Ø 15 x 2,5	100	1 C
45A35016100	Ø 16 x 2,0	100	1 C
45A40018100	Ø 18 x 2,0	100	1 C
45A32018100	Ø 18 x 2,5	100	1 C
45A32022100	Ø 22 x 3,0	100	1 C



### No. 482 PPR Pipe (Green)



Code	Diameter x Thickness	Length (m)	Packing
482500204	Ø 20 x 3.4	4	1 P
482500254	Ø 25 x 4.2	4	1 P
482500324	Ø 32 x 5.4	4	1 P
482500404	Ø 40 x 6.7	4	1 P
482500504	Ø 50 x 8.4	4	1 P
482500634	Ø 63 x 10.5	4	1 P

### No. 980F Poolflex Hose



Code	Diameter x Thickness	Length (m)	Packing
980F25032	Ø 32	25	1 C
980F25050	Ø 50	25	1 C
980F25063	Ø 63	25	1 C
980F25075	Ø 75	25	1 C

# Pressure Pipes & Fittings

## Risers (BS 2779) - PVC Glue & Cleaner



No. 580	½"			¾"			1"		
	Length (cm)	Code	Box	Code	Box	Code	Box		
5	○ 58000501	1.200	S	○ 58000502	750	S	○ 58000503	400	S
10	○ 580001001	600	S	○ 580001002	400	S	○ 580001003	240	S
15	○ 580001501	400	S	○ 580001502	250	S	○ 580001503	340	S
20	○ 580002001	350	S	○ 580002002	260	S	○ 580002003	160	S
25	○ 580002501	300	S	○ 580002502	150	S	○ 580002503	130	S
30	○ 580003001	270	S	○ 580003002	180	S	○ 580003003	110	S
40	○ 580004001	170	S	○ 580004002	130	S	○ 580004003	170	S
50	○ 580005001	100	L	○ 580005002	60	L	○ 580005003	40	L
60	○ 580006001	100	L	○ 580006002	60	L	○ 580006003	40	L
70	○ 580007001	160	L	○ 580007002	60	L	○ 580007003	40	L
80	○ 580008001	100	L	○ 580008002	60	L	○ 580008003	40	L
90	○ 580009001	100	L	○ 580009002	60	L	○ 580009003	40	L
100	○ 580010001	100	L	○ 580010002	60	L	○ 580010003	40	L

No. 580	1½"			2"			3"		
	Length (cm)	Code	Box	Code	Box	Code	Box		
10	○ 580001005	300	S	○ 580001006	200	S	○ 580001008	90	S
15	○ 580001505	230	S	○ 580001506	135	S	○ 580001508	60	S
20	○ 580002005	160	S	○ 580002006	100	S	○ 580002008	40	S
25	○ 580002505	140	S	○ 580002506	80	S	○ 580002508	30	S
30	○ 580003005	120	S	○ 580003006	70	S	○ 580003008	30	S
40	○ 580004005	80	S	○ 580004006	50	S	○ 580004008	18	S
50	○ 580005005	65	L	○ 580005006	40	L	○ 580005008	18	L
60	○ 580006005	30	L	○ 580006006	20	L	○ 580006008	8	L
70	○ 580007005	30	L	○ 580007006	20	L	○ 580007008	8	L
80	○ 580008005	30	L	○ 580008006	20	L	○ 580008008	8	L
90	○ 580009005	30	L	○ 580009006	20	L	○ 580009008	8	L
100	○ 580010005	30	L	○ 580010006	20	L	○ 580010008	8	L

No.  
5200

### UPVC Glue



Code	Size (ml)	Packing
520000125	125	1
520000500	500	1
520001000	1000	1
520E00500	500	1
520E01000	1000	1

No.  
420A

### Cleaner for UPVC



Code	Size (ml)	Packing
420A00125	125	1
420A01000	1000	1

