

# Roka Plast

For Plastic Industries



# Catalogue

Water Supply System

# R ROKA PLAST



## Introduction

**ROKAPLAST** for Plastic Industries Corporate was established at 2015 to produce all types of Supply water, sanitary products and related accessories.

By constantly Improving our products to the needs of the market, and developing the relevant know-how, **ROKAPLAST** has covered Egypt region by distributing our products in 19 governances.

Becoming a leading developer of benchmark quality in PP-R and UPVC products, we manufacture an economically innovative product range of PP-R and UPVC Pipes and Fittings for Supply water and drainage.

Applied raw material technologies optimizes the material characteristics for the protection of the environment, hygiene, health and well-being packing for the most precious commodity.

Our promise is to over estimation for all customers and Distributors by offering them the highest quality products & a wide range of supported services with lowest price in the same category.

Our outstanding customer relations skills ensures efficient delivery, where in turn reflects in customer loyalty.

As an **Egyptian Corporate ROKAPLAST** strive to support and invest in our fellow citizens employees, the roots that flourish the success of any productive country.

At **ROKAPLAST** we believe, in team work, in progress in a better future and in honest open communication. Career opportunities are constantly open for those dedicated to build a strong infrastructure, while contributing to the economic growth and future stability of our country and the next generation.

Sincere Regards,  
**ROKAPLAST Team**

### **Vision:**

Pioneering the plastics, metals industry and modern systems.

### **Mission:**

our mission is providing the best customer service and technical support for technicians and develop products to meet international standards in the field of plastic, metal industries and modern systems using the latest technologies in all fields.

Innovation through young professional, distinct and harmonious team to build a bright future and contribute to uphold Made in Egypt in the local and regional market.

### **Values:**

- Commitment.
- Innovation.
- Integration.
- Harmony.



# PP-R Pipes & Fittings



**ROKA**  
PLAST

## Application Standard

ROKAPLAST PPR Pipes and fittings are manufactured according to the German, International and Egyptian Standards.

### German Standards:

DIN 8077	Dimension of Pipes.
DIN 8078	General quality and testing of fittings and Pipes.
DIN 16962	Part 5 General qualities and testing of fittings.
DIN 16962	Part 2,4,6,7,8,9,10,13 Dimension of Fittings.
DIN 1988	Technical rules for drinking water installations.

### International Standards:

ISO 15874	Plastic Pipe System for hot and cold Water installations.
Part 1	General
Part 2	Pipes
Part 3	Fittings

### Egyptian Standards :

ES 37032002 / 1- Poly Propylene Pipes (dimensions and tests)

### Marking

#### 1- Pipes :

Color: green with one Black line.

Trade mark 

International Standards ISO 9001 / 2015 German STD DIN 8077 – 8078

Type of resin PP-R type 3


Class pipe acc. (SDR & S) & PN (16 - 20)

Size

Time and Date of Production.

#### 2 – Fittings :

Color: green

Trade mark 

International Standards ISO 9001 / 2015 German STD DIN 8077 – 8078

Type of resin PP-R type 3

Class Fitting acc. (SDR & S) & PN ( 25)

Size

## General Characteristics

### Scope and field of application

The polymer type used for **ROKAPLAST** pipes system is thermoplastic propylene random copolymers PP-R (type3)

### Hygienic suitability :

According to DIN 1988 T2 and the law for food commodity the PP-R materials which is directly in contact with potable water are commodity good.

### The effect on the domestic water :

The increasing use of PP-R in the field of food packing confirms the hygienic qualities of the materials this makes **ROKAPLAST** the optimal packing for one of our most precious commodity goods for portable water. The domestic supply system should influence the water on its way up to the taps as little as possible. Choosing the right domestic water pipes system and its materials is of decisive importance **ROKA** plast pipes system are suitable for all different qualities of potable water.

### Easy to install:

It's flexible, light, easy to cut and easy to be fused for installation.

### Smooth:

The smooth internal surface of PP-R products reduces frictional losses and prevents fouling and scaling on long term, this maintains a greater capacity for a given diameter than with conventional products.

### U.V Resistance:

PP-R pipes and fittings should not be installed (without protection) when subjected to UV radiation.

**ROKAPLAST** pipes and fittings have UV stabilizer to bridge transport and installation times.

Maximum storage time in the open air is 6 months.

### Environmental Effect:

**ROKAPLAST** pipes system is physiologically, environmentally and microbiologically harmless.

### Durability:

**ROKAPLAST** pipes system has extrapolated durability more than 50 years' peak temperature of 100 arising from short disruptions are unproblematic.

### Brass:

Nontoxic brass.

Have the highest fixation power in the PP-R Product cause it has the largest types of fixations (fixations teeth, slots & knurl)



## PP-R Properties

### General Properties

**ROKAPLAST** Pipes system stops corrosion with no effect on the flow rate.

**ROKAPLAST** Pipes system have no danger of algae development installation.

**ROKAPLAST** Pipes system offers a unique and unrivalled connection process : material by fusion.

**ROKAPLAST** Pipes system connection can be Hydraulic pressure tested or put in to operation directly after their fusion there are no waiting times .

flow rate increased due the large inner diameter .

Typical Value	Test Method	Main Value	Unit
physical properties			
Density 23 °c	ISO 11 83	0.895	g / cm 2
Vicat softening Temperature ( 0.98N )	ISO 306	130	°C
Rheology			
Melt Mass Flow Rate MFR(230°C/2.16kg )	ISO 1133	0.3	g /10 min
Mechanical Properties			
Tensile modules ( 1mm / min )	ISO 527 - 1.2	900	Mpa
Tensile Stress yied ( 50mm / min )	ISO 527 - 1.2	27	Mpa
Tensile Strain yied ( 50mm / min )	ISO 527 - 1.2	13	%
Charpy impact strength at -23 °c	ISO 1791/eU	N.B	KJ/m2
Charpy impact strength at -20 °c	ISO 1791/eU	30	KJ/m2
Charpy impact strength Notched at -20°C	ISO 1791/eU	38	KJ/m2
Charpy impact strength Notched at -20 °c	ISO 1791/eU	2	KJ/m2
Thermal Properties			
Heat deflection ( Temperature 0.45 Mpa (HTD/B)	ISO 75 - 1.2	88	°C
Mean coefficient of linear (Thermal Expansion 0:110 °c)	DIN 53752	1.5 x	K <sup>-1</sup>
Thermal conductivity	DIN 52612 -1	0.23	K <sup>-1</sup> M <sup>-1</sup>
Electrical Properties			
Surface resistance	DIN 53482	> 10 <sup>13</sup>	Ohm.cm

## Product features

### Scope

**ROKAPLAST** products offer a superior German-quality piping system that could be equally installed in the residential and the industrial field:

- Sanitary applications.
- Heating & air-conditioning systems.
- Compressed air installations.
- Watering systems for greenhouses and gardens.
- Transporting liquid material. • Vacuum installations.
- In the chemical industry for the flow of various fluids

**ROKAPLAST** is an excellent choice for piping of clean hot & cold water. (Fig. A)

**ROKAPLAST** is certified by the European Water Authority (DVGW) under standard DIN 50930 -6

**ROKAPLAST** uses stops corrosion the best unique thread design and makes the strongest correlation feature between PP-R & copper.

Unlike other products, this correlation gets more and more stronger once the temperature increases, these features reflect on lifetime durable products.





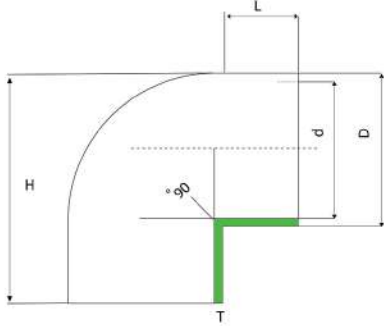
## PP-R Pipes Dimensions

### PP-R Pipes Dimensions . To Din 8077



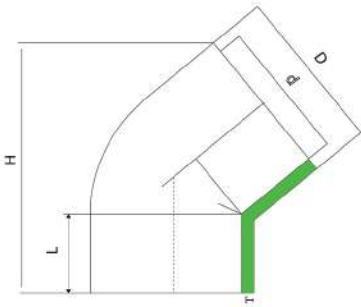
		Pipe series ( S )															
		20		16		12.5		8.3		5		3.2		2.5		2	
		Pressure Reting															
d		PN 2.5		PN3.2		PN 4		PN 6		PN 10		PN 16		PN 20		PN 25	
		Standard dimension ratio ( SDR )16															
		41		33		26		17.6		11		7.4		6		5	
	S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	
10	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.046	2.0	0.050	
12	-	-	-	-	-	-	-	-	-	-	-	1.8	0.057	2.0	0.062	2.4	0.071
16	-	-	-	-	-	-	-	-	-	-	-	2.2	0.095	2.7	0.110	3.3	0.128
20	-	-	-	-	-	-	-	-	-	1.9	0.107	2.8	0.148	3.4	0.172	4.1	0.198
25	-	-	-	-	-	-	-	-	-	2.3	0.164	3.5	0.230	4.2	0.266	5.1	0.307
32	-	-	-	-	-	-	1.8	0.172	2.9	0.261	4.4	0.370	5.4	0.434	6.5	0.498	
40	-	-	-	-	1.8	0.217	2.3	0.273	3.7	0.412	5.5	0.575	6.7	0.671	8.1	0.775	
50	-	-	1.8	0.274	2.0	0.301	2.9	0.422	4.6	0.638	6.9	0.896	8.3	1.04	10.1	1.21	
63	1.8	0.349	2.0	0.382	2.5	0.474	3.6	0.659	5.8	1.01	8.6	1.41	10.5	1.85	12.7	1.91	
75	1.9	0.438	2.3	0.528	2.9	0.647	4.3	0.935	6.8	1.41	10.3	2.01	12.5	2.34	15.1	2.70	
90	2.2	0.616	2.8	0.758	3.5	0.936	5.1	1.33	8.2	2.03	12.3	2.87	15	3.36	18.1	3.88	
110	2.7	0.903	3.4	1.12	4.2	1.37	6.3	1.99	10.0	3.01	15.1	4.30	18.3	5.01	22.1	5.78	
125	3.1	1.18	3.9	1.45	4.8	1.76	7.1	2.55	11.4	3.91	17.1	5.35	20.8	6.47	25.1	7.46	
140	3.5	1.48	4.3	1.80	5.4	2.23	8.0	3.2	12.7	4.87	19.2	6.95	23.3	8.12	28.1	9.35	
160	4.0	1.91	4.9	2.32	6.2	2.92	9.1	4.17	14.6	4.87	21.9	9.04	26.6	10.6	32.1	12.2	

### Elbow90



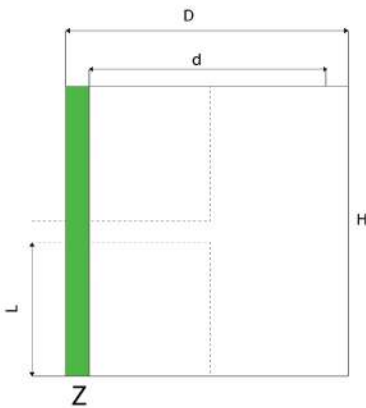
Size	d	D	H	L	T
20	19.0	30.3	42.5	16.2	5.5
25	23.6	31.3	49.3	18.4	6.0
32	31.0	44.3	59.2	19.6	6.6
50	49.2	67.2	87.2	24.2	9.3
63	61.7	82.2	103.4	27.4	9.9
75	74.2	95.5	117.6	31.4	10.8
90	88.1	113.8	136.0	34.0	12.9
110	107.2	138.0	166.0	42.0	15.0

### Elbow45



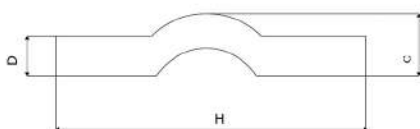
Size	d	D	H	L	T
25	24.4	36.6	49.8	15.9	5.9
32	31.3	45.5	61.3	20.1	7.1
50	49.2	67.4	87.1	24.1	9.0
63	61.5	81.9	102.6	27.0	10.8

### Socket



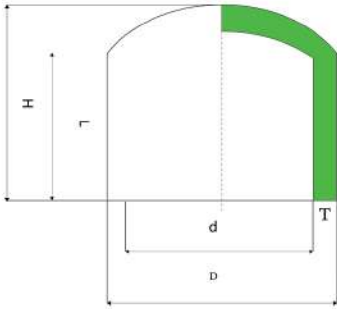
Size	d	D	H	L	T
20	19.2	30.2	34.3	16.3	5.5
25	24.3	36.2	37.1	17.6	6.5
32	30.9	45.3	43.3	20.2	7.2
50	48.0	66.3	55.2	24.3	9.1
63	61.8	81.6	62.9	27.7	10.1
75	73.6	95.5	68.2	31.7	11.0
90	87.7	115.1	76.6	35.3	13.9
110	105.7	135.7	90.0	39.8	15.5

### Crossover



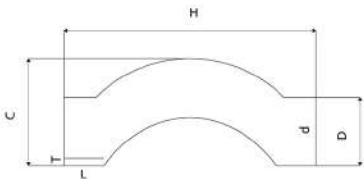
Size	d	D	H	L	T
20	13.3	20.5	302.5	40.9	3.8
25	17.4	25.3	304.5	50.5	4.0

## Cap



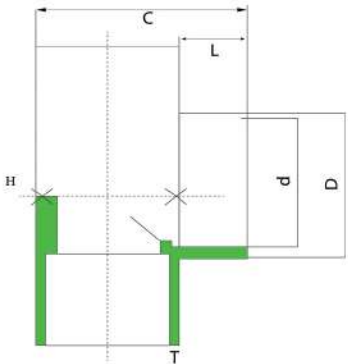
Size	d	D	H	L	T
20	19.0	29.5	24.8	18.3	5.0
25	23.9	36.0	26.6	16.6	6.1
32	31.2	44.6	30.4	20.3	6.5
50	49.3	67.2	41.5	28.5	9.0
63	61.2	81.9	50.6	28.2	10.4

## Crossover 2 Socket



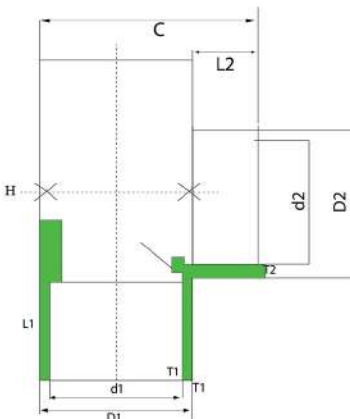
Size	d	D	H	C	L	T
25	23.9	36.4	116.7	54.6	17.7	7
32	30.5	45.0	129.3	62.2	20.2	7

## Tee90



Size	d	D	H	C	L	T
20	19.1	29.9	53.5	41.5	16.6	5
25	23.9	36.3	63.6	49.2	17.4	6
32	31.0	45.3	74.5	60.0	20.0	7
50	48.8	66.1	106.1	85.4	25.0	9
63	61.2	81.8	126.5	100.8	27.5	11
75	72.3	95.8	143.1	116.1	31.2	12
90	86.4	114.9	163.0	137.2	35.0	15
110	106.2	137.4	196.0	166.0	41.4	16

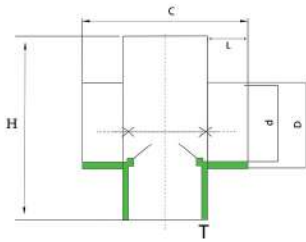
## Tee Reduced



Size	d1	D1	d2	D2	H	C	L1	T1	L2	T2
25*20	23.9	36.0	18.3	29.7	63.4	47.2	17.8	6.0	15.6	6.0
32*25	31.0	45.2	23.6	36.8	74.6	55.7	20.4	7.3	16.3	7.0
32*20	30.8	45.0	18.7	30.0	79.5	55.4	20.0	7.3	15.8	6.0
50*25	49.2	67.0	23.5	36.0	89.2	80.5	26.0	9.5	18.5	6.1
50*32	48.7	66.5	30.8	45.4	88.6	79.6	25.0	9.0	20.6	7.5
63*32	60.9	82.2	29.6	82.0	127.0	101.9	27.3	10.9	19.3	26.0
75*63	73.0	95.5	62.0	82.6	119.0	114.6	31.4	11.3	28.2	10.2
90*63	88.0	114.2	61.7	82.6	136.5	135.2	35.0	13.0	27.0	10.5
90*75	89.2	115.1	74.0	96.9	154.0	137.0	35.3	13.3	31.6	11.2
110*90	106.5	138.4	61.0	114.5	183.0	162.0	42.0	16.1	16.1	16.9

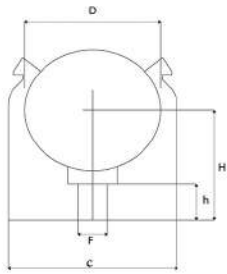


## Tee Cross



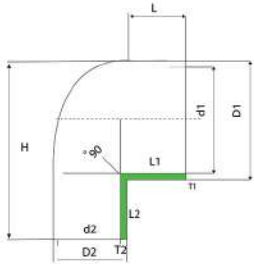
Size	d	D	H	C	L	T
25	24.2	36.2	76.7	76.6	18.0	6.1

## Fisher



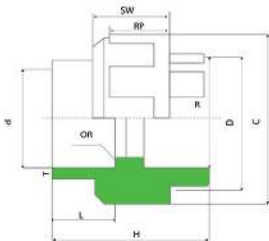
Size	D	h	H	C	F	T
20	18.5	16.0	27.7	31.8	5.5	3.5
25	22.4	15.6	30.7	35.7	5.7	3.6
32	38.0	16.1	46.0	43.5	6.0	3.5

## Elbow Reduced



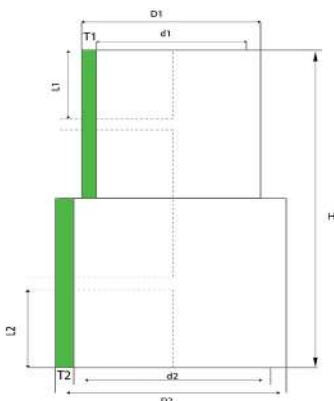
Size	d1	D1	L1	T1	H	C	d2	D2	L2	T2
32*20	31.1	45.3	20.0	7.2	57.9	46.9	19.4	29.4	16.2	5.1
32*25	30.1	45.1	19.7	7.3	57.6	53.4	24.3	36.2	16.9	5.9

## Socket Union



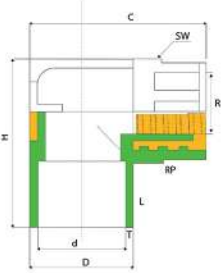
Size	d1	D1	L1	T1	H	C	SW	RP	R
32	31.2	44.1	19.2	6.5	69.0	65.9	22.0	22.6	52.2

## Reduced Coupling



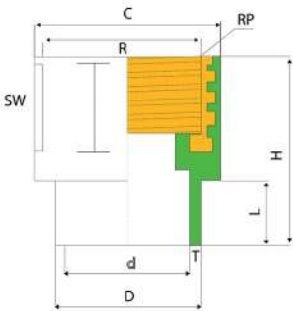
Size	d1	D1	d2	D2	H	L1	T1	L2	T2
25*20	24.2	35.6	19.0	31.2	38.0	23.4	6.1	16.6	5.9
32*25	30.7	45.0	24.0	35.7	42.0	20.0	7.3	12.3	6.0
32*20	31.1	43.9	18.9	29.1	39.4	20.0	6.6	16.0	5.0
50*32	48.1	66.2	30.8	45.5	51.1	24.5	9.2	19.1	7.5
63*32	61.7	81.0	30.5	45.0	52.5	28.2	10.0	8.5	7.2
63*50	61.4	81.8	48.9	66.3	55.9	28.2	10.0	24.3	9.0
75*50	74.0	95.0	62.0	81.6	63.2	31.8	10.7	27.3	10.0
75*63	74.3	95.5	49.6	81.5	63.4	31.6	10.7	30.7	16.0
90*50	88.1	114.2	49.5	95.0	71.5	35.6	13.4	18.6	23.0
90*75	87.9	114.2	61.8	115.6	71.7	35.5	13.4	30.3	17.0
110*90	106.5	137.5	61.3	114.0	84.7	41.4	126.0	34.6	20.7

## Elbow90 Female Threaded



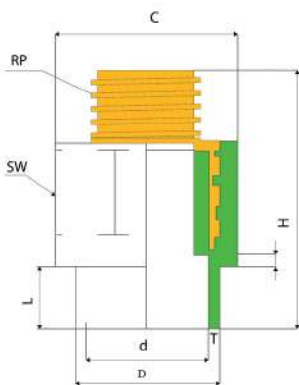
Size	d1	D1	L1	T1	d2	D2	L2	T2	H	C	SW	RP	R
20*20	19.0	29.9	16.6	5.5	26.7	37.5	26.1	4.7	71.4	48.5	19.0	13.4	0.5
25*20	24.2	36.2	18.0	6.0	26.8	37.4	26.3	4.5	75.6	54.7	19.0	13.4	0.5
25*25	24.2	36.0	18.1	6.1	31.0	44.8	28.1	6.3	75.5	55.5	20.0	17.6	0.8
32*25	30.9	45.3	19.8	7.3	31.7	44.9	28.1	6.9	80.0	63.4	20.0	17.6	0.8
32*20	30.5	45.3	20.0	7.2	27.6	37.9	20.2	4.7	67.7	65.0	19.0	13.4	0.5

## Socket Female Threaded



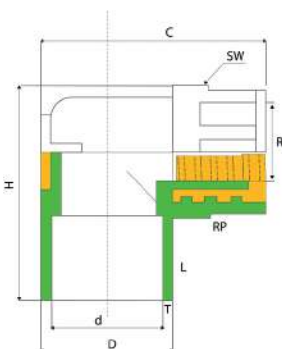
Size	d	D	L	T	H	C	SW	RP	R
20*20	19.2	30.0	15.5	5.5	39.3	37.4	19.0	13.4	0.5
25*20	24.1	36.1	18.3	6.2	34.2	37.5	19.0	13.4	0.5
25*25	24.1	36.1	18.5	6.0	43.8	45.5	20.0	17.6	0.8
32*1	31.2	45.5	20.5	7.3	48.6	55.2	24.0	20.8	1.0
50*50	67.5	47.7	24.0	9.6	60.2	73.8	25.1	19.0	1.5
63*2	60.3	82.0	28.2	10.3	61.4	91.2	32.3	24.8	2.0
75*2.5	73.2	98.9	32.7	13.1	79.5	112.9	31.2	21.2	2.5
90*3	87.7	114.6	35.0	13.2	80.0	127.0	40.0	25.5	3.0

## Socket Male Threaded



Size	d	D	L	T	H	C	SW	RP	R
20*20	19.1	29.7	16.1	5.4	54.1	36.9	16.8	14.7	0.5
25*20	24.2	35.8	17.8	6.2	56.0	37.5	16.8	14.7	0.5
25*25	24.2	35.8	18.1	6.2	63.7	44.8	20.2	15.5	0.8
32*1	31.1	44.9	20.0	7.3	66.4	55.3	21.9	17.9	1.0
50*50	48.5	67.4	24.1	9.7	82.8	74.1	17.9	21.1	1.5
63*2	61.2	81.9	27.8	10.8	94.5	86.4	56.6	24.0	2.0
90*3	88.3	117.7	35.6	13.4	110.3	126.5	74.1	30.0	3.0
110*4	107.2	138.8	42.2	15.5	128.5	152.3	90.5	31.4	4.0

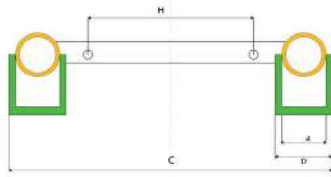
## Tee Female Threaded



Size	d1	D1	L1	T1	d2	D2	L2	T2	H	C	SW	RP	R
20*20	19.0	29.9	16.6	5.5	26.7	37.5	26.1	4.7	71.4	48.5	19.0	13.4	0.5
25*20	24.2	36.2	18.0	6.0	26.8	37.4	26.3	4.5	75.6	54.7	19.0	13.4	0.5
25*25	24.2	36.0	18.1	6.1	31.0	44.8	28.1	6.3	75.5	55.5	20.0	17.6	0.8
32*25	30.9	45.3	19.8	7.3	31.7	44.9	28.1	6.9	80.0	63.4	20.0	17.6	0.8
32*20	30.5	45.3	20.0	7.2	27.6	37.9	20.2	4.7	67.7	65.0	19.0	13.4	0.5

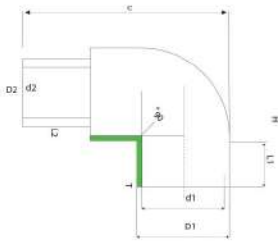


## Elbow Closed Female Threaded



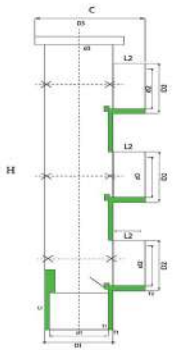
Size	d1	D1	L1	T1	H	h	C	c	SW	RP	R
25*20	24.1	36.3	18.5	6.0	56.5	21.4	190.6	68.0	19.0	13.4	0.5

## Elbow Male



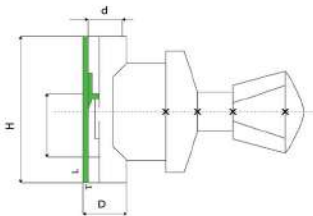
Size	d1	D1	L1	T1	d2	D2	L2	T2	H	C
25	23.8	35.9	18.4	5.9	16.1	25.0	16.9	4.5	49.1	67.2
32	30.6	45.3	19.6	7.4	19.8	31.8	20.9	6.0	59.5	80.5

## Manifold Welding



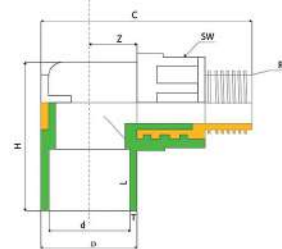
Size	d1	D1	L1	T1	d2	D2	L2	T2	D3	H	C
50*25	31.9	52.6	25.2	10.4	23.6	44.6	16.0	10.7	67.3	393.0	76.1
50*32	31.5	52.4	25.0	10.2	31.0	45.0	19.8	10.3	67.5	394.0	74.2

## Valve



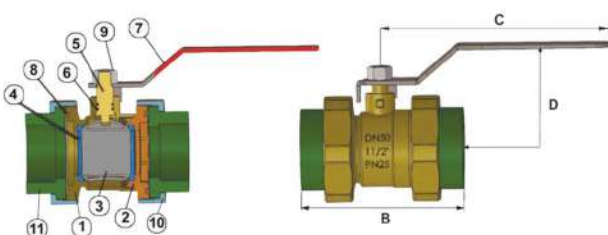
Size	d	D	H	C	L1	T	L2	L3	SW	RP	R
25	23.2	36.2	76.3	52.6	16.9	6.5	27.7	20.1	18.1	11.9	0.8

## Elbow Male Threaded



Size	d1	D1	L1	T1	d2	D2	L2	T2	H	C	SW	RP	R
25*20	24.2	36.1	17.9	6.1	36.9	37.9	26.1	5.2	48.5	73.1	16.8	14.7	0.5

## Ball Valve

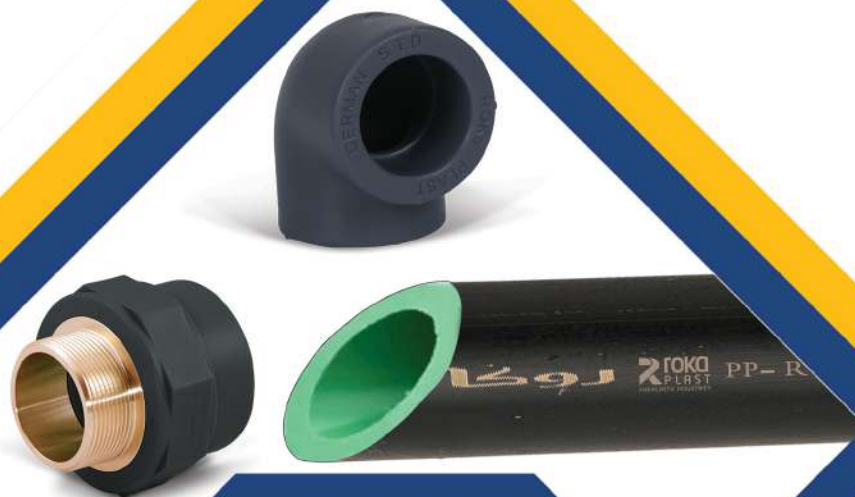


Items	PCs.	Materials
1 Body	1	Nickel Plated Brass OT58 UNI 5705
2 End Connection	1	Nickel Plated Brass OT58 UNI 5705
3 Ball	1	Chrome Plated Brass OT58 UNI 5705
4 Ball Seal	2	Virgin P.T.F.E
5 Stem	1	Brass OT58 UNI 5705
6 Stem O-Ring	2	NBR 70 SH A
7 Steel Handle	1	Chrome Plated Steel
8 O-Ring	2	Silica Gel
9 Screw	1	Nickel Plated Steel
10 Union Cap	2	Nickel Plated Brass OT58 UNI 5705
11 PPR Connection	2	PPR

size	11/2"			
DN (mm)	50			
B (mm)	133			
C (mm)	145			
D (mm)	68			
PN (Bar)	25			



# UV-Resistant System



**ROKO**  
PLAST

## UV-Resistant system

**Rokoplast** PP-R/ PP-RCT for Outdoor Applications – UV-Resistant system for warm and cold water supply While the green PP-R pipes and fittings are designed to be used indoor, we developed an ultraviolet resistant water supply system to avoid the corrosion of the plumbing system under high temperatures and all weather conditions that might affect it.

**Rokoplast** – UV pipes consist of well-established four layers;

1. The first-outer layer is coated with a black UV-resistant material to ensure pipe long-term durability and prevent PP-R material from expansions and deformities.
2. The second layer of PP-R Polypropylene Copolymer, which is ideally integrated within the pipe structure to retain high water flow.
3. The unique third layer of absolute fiber/aluminum provides high rigidity and stability that prevents outside air from infiltration into the pipe.
4. The forth-inner layer is made of PP-R where the smooth surface is in direct contact with hot and cold water to guarantee you a safer and better way of water transportation.

### Advantages of Black UV Pipes:

- Linear expansion coefficient is only 2030%- of ordinary PP-R pipe, completely resolves the stretching problem of common plastic pipe.
- Enhances pipe rigid, prevents droop down phenomenon, and also reduces the density and number of supporting points, thus cuts down the total cost of installation.
- Higher pressure-resistant level and longer working life under usual vibration.
- Better high-temperature resistance, and obvious energy-saving effect; used in water heating system, the normal temperature is up to 95100- degrees, it not only increases the medium temperature.
- Solves the oxygen permeability of the pipeline, the inner surface is non-toxic, fine sealing, and sphagnum will not appear. The middle layer of the pipe completely prevents outside air from infiltration into pipe inside, thereby inhibits algae growth, and maintains fresh pure water.

Note: All **Rokoplast** UV fittings are injected with UV-resistant material to ensure long-term durability

## PP-R Pipes with UV resistance

### PP-R Pipes with UV resistance / outdoor water supply solutions

Material: PP-R with integrated fiber reinforced layer and external UV layer

Pipes Series: SDR6/S2.5

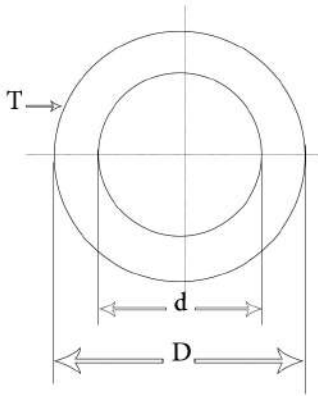
Standard: DIN 8077/DIN8078, DIN EN ISO 15874

Color: internal layer is green and outer layer is black.

Pipe: black pipes with laser labelling system

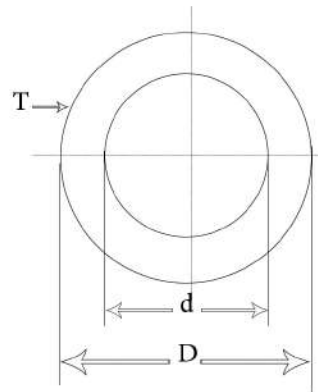


### Multilayer pipes with fiber Reinforced UV in Black PN 20 SDR



Size	d	D	T	Water Capacity Lit/m	Kg/m	M/bag
20mm	13.2	20	3.4	0.187	0.137	100
25mm	16.6	25	4.2	0.216	0.216	100
32mm	21.2	32	5.4	0.451	0.353	60
40mm	26.6	40	6.7	0.711	0.637	40
50mm	33.4	50	8.3	1.068	0.988	32
63mm	42.0	63	10.5	1.695	1.336	20
75mm	50.0	75	12.5	2.404	1.963	4
90mm	60.0	90	15.0	3.452	2.827	4
110mm	73.0	110	18.3	5.148	4.094	4

### Multilayer pipes with fiber Reinforced UV in Black PN16 SDR 6



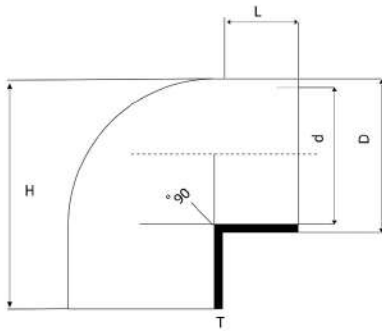
Size	d	D	T	Water Capacity Lit/m	Kg/m	M/bag
20mm	14.4	20	2.8	0.163	0.160	100
25mm	18.0	25	3.5	0.254	0.242	100
32mm	23.2	32	4.4	0.415	0.392	60
40mm	29.0	40	5.5	0.660	0.597	40
50mm	36.2	50	6.9	1.029	0.949	32
63mm	45.8	63	8.6	1.649	1.434	20
75mm	54.4	75	10.3	2.323	2.127	4
90mm	65.4	90	12.3	3.358	2.956	4
110mm	79.8	110	15.1	4.999	4.320	4



## PP-R Fitting with UV resistance

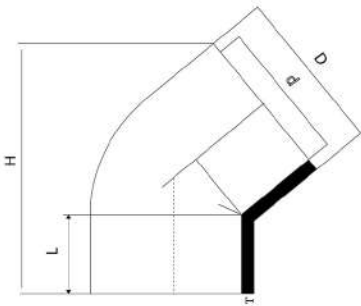
PP-R Fittings with UV resistance / outdoor water supply

### Elbow90



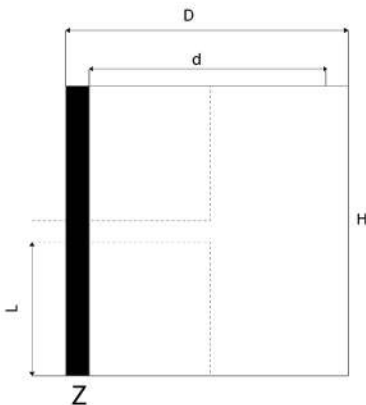
Size	d	D	H	L	T
20	19.0	30.3	42.5	16.2	5.5
25	23.6	31.3	49.3	18.4	6.0
32	31.0	44.3	59.2	19.6	6.6
50	49.2	67.2	87.2	24.2	9.3
63	61.7	82.2	103.4	27.4	9.9
75	74.2	95.5	117.6	31.4	10.8
90	88.1	113.8	136.0	34.0	12.9
110	107.2	138.0	166.0	42.0	15.0

### Elbow45



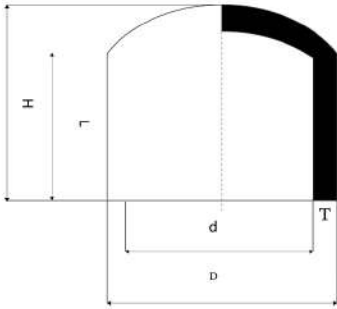
Size	d	D	H	L	T
25	24.4	36.6	49.8	15.9	5.9
32	31.3	45.5	61.3	20.1	7.1
50	49.2	67.4	87.1	24.1	9.0
63	61.5	81.9	102.6	27.0	10.8

### Socket



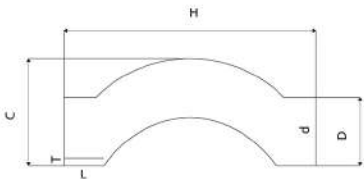
Size	d	D	H	L	T
20	19.2	30.2	34.3	16.3	5.5
25	24.3	36.2	37.1	17.6	6.5
32	30.9	45.3	43.3	20.2	7.2
50	48.0	66.3	55.2	24.3	9.1
63	61.8	81.6	62.9	27.7	10.1
75	73.6	95.5	68.2	31.7	11.0
90	87.7	115.1	76.6	35.3	13.9
110	105.7	135.7	90.0	39.8	15.5

### Cap



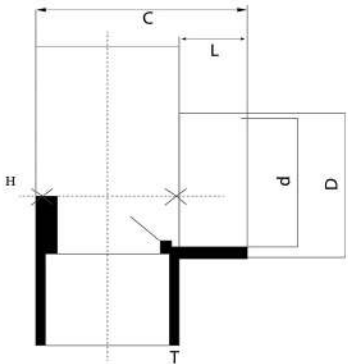
Size	d	D	H	L	T
20	19.0	29.5	24.8	18.3	5.0
25	23.9	36.0	26.6	16.6	6.1
32	31.2	44.6	30.4	20.3	6.5
50	49.3	67.2	41.5	28.5	9.0
63	61.2	81.9	50.6	28.2	10.4

### Crossover 2 Socket



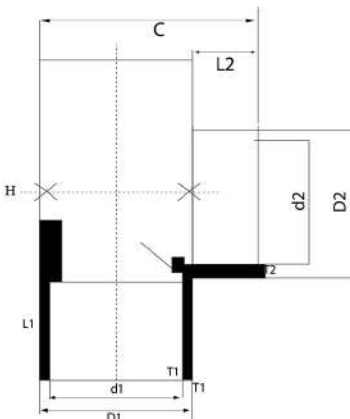
Size	d	D	H	C	L	T
25	23.9	36.4	116.7	54.6	17.7	7
32	30.5	45.0	129.3	62.2	20.2	7

### Tee90



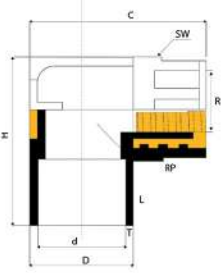
Size	d	D	H	C	L	T
20	19.1	29.9	53.5	41.5	16.6	5
25	23.9	36.3	63.6	49.2	17.4	6
32	31.0	45.3	74.5	60.0	20.0	7
50	48.8	66.1	106.1	85.4	25.0	9
63	61.2	81.8	126.5	100.8	27.5	11
75	72.3	95.8	143.1	116.1	31.2	12
90	86.4	114.9	163.0	137.2	35.0	15
110	106.2	137.4	196.0	166.0	41.4	16

### Tee Reduced



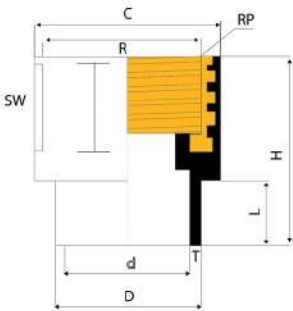
Size	d1	D1	d2	D2	H	C	L1	T1	L2	T2
25*20	23.9	36.0	18.3	29.7	63.4	47.2	17.8	6.0	15.6	6.0
32*25	31.0	45.2	23.6	36.8	74.6	55.7	20.4	7.3	16.3	7.0
32*20	30.8	45.0	18.7	30.0	79.5	55.4	20.0	7.3	15.8	6.0
50*25	49.2	67.0	23.5	36.0	89.2	80.5	26.0	9.5	18.5	6.1
50*32	48.7	66.5	30.8	45.4	88.6	79.6	25.0	9.0	20.6	7.5
63*32	60.9	82.2	29.6	82.0	127.0	101.9	27.3	10.9	19.3	26.0
75*63	73.0	95.5	62.0	82.6	119.0	114.6	31.4	11.3	28.2	10.2
90*63	88.0	114.2	61.7	82.6	136.5	135.2	35.0	13.0	27.0	10.5
90*75	89.2	115.1	74.0	96.9	154.0	137.0	35.3	13.3	31.6	11.2
110*90	106.5	138.4	61.0	114.5	183.0	162.0	42.0	16.1	16.1	16.9

## Elbow90 Female Threaded



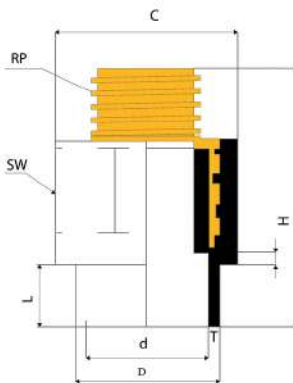
Size	d1	D1	L1	T1	d2	D2	L2	T2	H	C	SW	RP	R
20*20	19.0	29.9	16.6	5.5	26.7	37.5	26.1	4.7	71.4	48.5	19.0	13.4	0.5
25*20	24.2	36.2	18.0	6.0	26.8	37.4	26.3	4.5	75.6	54.7	19.0	13.4	0.5
25*25	24.2	36.0	18.1	6.1	31.0	44.8	28.1	6.3	75.5	55.5	20.0	17.6	0.8
32*25	30.9	45.3	19.8	7.3	31.7	44.9	28.1	6.9	80.0	63.4	20.0	17.6	0.8
32*20	30.5	45.3	20.0	7.2	27.6	37.9	20.2	4.7	67.7	65.0	19.0	13.4	0.5

## Socket Female Threaded



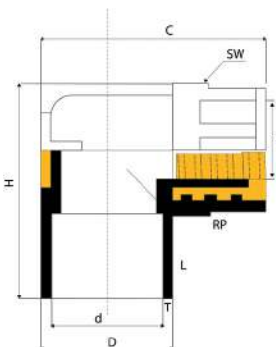
Size	d	D	L	T	H	C	SW	RP	R
20*20	19.2	30.0	15.5	5.5	39.3	37.4	19.0	13.4	0.5
25*20	24.1	36.1	18.3	6.2	34.2	37.5	19.0	13.4	0.5
25*25	24.1	36.1	18.5	6.0	43.8	45.5	20.0	17.6	0.8
32*1	31.2	45.5	20.5	7.3	48.6	55.2	24.0	20.8	1.0
50*50	67.5	47.7	24.0	9.6	60.2	73.8	25.1	19.0	1.5
63*2	60.3	82.0	28.2	10.3	61.4	91.2	32.3	24.8	2.0
75*2.5	73.2	98.9	32.7	13.1	79.5	112.9	31.2	21.2	2.5
90*3	87.7	114.6	35.0	13.2	80.0	127.0	40.0	25.5	3.0

## Socket Male Threaded



Size	d	D	L	T	H	C	SW	RP	R
20*20	19.1	29.7	16.1	5.4	54.1	36.9	16.8	14.7	0.5
25*20	24.2	35.8	17.8	6.2	56.0	37.5	16.8	14.7	0.5
25*25	24.2	35.8	18.1	6.2	63.7	44.8	20.2	15.5	0.8
32*1	31.1	44.9	20.0	7.3	66.4	55.3	21.9	17.9	1.0
50*50	48.5	67.4	24.1	9.7	82.8	74.1	17.9	21.1	1.5
63*2	61.2	81.9	27.8	10.8	94.5	86.4	56.6	24.0	2.0
90*3	88.3	117.7	35.6	13.4	110.3	126.5	74.1	30.0	3.0
110*4	107.2	138.8	42.2	15.5	128.5	152.3	90.5	31.4	4.0

## Tee Female Threaded



Size	d1	D1	L1	T1	d2	D2	L2	T2	H	C	SW	RP	R
20*20	19.0	29.9	16.6	5.5	26.7	37.5	26.1	4.7	71.4	48.5	19.0	13.4	0.5
25*20	24.2	36.2	18.0	6.0	26.8	37.4	26.3	4.5	75.6	54.7	19.0	13.4	0.5
25*25	24.2	36.0	18.1	6.1	31.0	44.8	28.1	6.3	75.5	55.5	20.0	17.6	0.8
32*25	30.9	45.3	19.8	7.3	31.7	44.9	28.1	6.9	80.0	63.4	20.0	17.6	0.8
32*20	30.5	45.3	20.0	7.2	27.6	37.9	20.2	4.7	67.7	65.0	19.0	13.4	0.5