



مصانع نصار للمواسير والبلاستيك  
NASSAR PIPE AND PLASTIC FACTORIES



مصانع نصار للمواسير والبلاستيك  
NASSAR FACTORIES FOR PIPES  
AND PLASTIC

TECHNICAL CATALOG



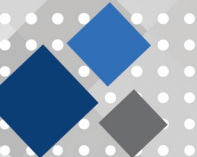
المصانع: مدينة العـبور - المنطقة الصناعية الامتداد الشمالي بلوك ١٢٠١٤ قطعة ١٥  
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[www.nassarplastic.com](http://www.nassarplastic.com)

NASSAR ... BEST CHOICE

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## **CHAIRMAN OF BOARD OF DIRECTORS SPEECH**

After our world becomes small, after it's now very easy to get any information about any product, after the customers become very sensible towards preferences of several products no matter how small they are, it doesn't matter just getting the cheapest product solely neglecting the quality, or getting the product in the best quality only neglecting the price, however both criteria must be taken into account & consideration, briefly, the most important now is getting not only the cheapest product but also the product in the best quality.

Although we are proud of offering the best quality & best mixture of quality & price, however we are sure that we still have a lot to offer to our honorable customers which is the comprehensive care to focus on each note, whether accidental or trivial, relating to not only the product or price but also each detail helping the customer to get the best solutions through our products.

The company regularly & periodically investigates customers' opinion as one of our basic means for the required development not only in our products but also in other aspects about which the customer cares like: package, wrapping & covering system & even means of communication.

The exact close follow-up for each complaint, whether small or individual, is also another way to support our long term strategy by making our customer feel completely satisfied & contented.

We definitely know that there are two ways leading to eliminate the newly established institutes which are: when you think you have reached completion or you think that there is no hope in reaching completion.

The best way is when you are still trying to reach completion however you are certain that our human default will not lead us to absolute completion which means that we will continuously try to reach amelioration.

For a long period of time, our slogan was "Best mixture of quality & price", however now we have something better than offering the international quality with suitable price, dealing with Nassar Co means getting the highest quality, best service & best solutions with more suitable price.

Our offering of all these advantages to our customers enables us to confidently say that Nassar products are your best choice.



## INTRODUCTION

### Nassar Factories for Pipes & Plastic

Nassar Factories for Plastic were established since 1982 in Tenth of Ramadan City as one of the leading factories in producing UPVC pipes for different purposes, & owing to experience of their establisher, the Chemist / Elsayed Ahmed Ismail Nassar for more than 26 years in field of plastic since 1956, Nassar Factories for Pipes & Plastic became of the distinguished companies in this field since their establishment.

As for now, after moving to the new manufacture sites in Al Obour City, Nassar Factories for Pipes & Plastic became able to manufacture UPVC pipes for all purposes including high pressure pipes for drinking water transmission, sanitary drainage pipes, phones & electricity cables covering pipes, house joints & connections pipes in 20 mm to 40 mm diameters according to the international specifications.

In addition to: Joints & connections department specialized for manufacturing UPVC joints & connections for sanitary drainage purposes.

In addition to: Manufacturing of PPR pipes for purposes of feeding, isolating pipes, & special spare parts







## Basic Information

### Trade Mark



### Material

Poly Vinyl Chloride (pvc)

### Test Marks

Un Plasticized Poly Vinyl Chloride

K – Value 67 for Pipe

K – Value 57 for Fitting

### Quality Requirements

ES 1717 ( 2008 ) , DIN 8061 , DIN 8062 , DIN 19531 , EN 1329 and Dimension according to ISO 160 Part 1 & 2  
Technical recommendation of installation

### Color

White Pipe by one blue longitudinally line.

### Chemical Resistance


resistant to inorganic salts, concentrated bases and mineral as found in laboratory discharges organic solvent, will not dissolve PVC.

### Marking

Pipe bear the following permanent marks in \_\_\_\_\_ color.

 UPVC DWV 110  $\square$  3 mm m/c (1) S. (1) 11:45 72017/7/ ES 1717

 Made in EGYPT by NASSAR CO. For Plastic Industries.

- 1- The brand 
- 2- Material type.
- 3- Drain, waste and vent (DWV) systems.
- 4- The nominal size.
- 5- The extrusion lines no.
- 6- The Quality control shift no.
- 7- The production shift no.
- 8- The date and the time of manufacture.
- 9- The number of the standard specification ES 1717.

Fittings show the angles degree of the branches, the number of cavity, the month and the year of production.

### Out side Diameter (OD)

32 – 48 – 60 – 75 – 110 – 160 mm

### Laying Length

6000mm

### Jointing

### PVC VEMENT

Application Drainage inside building and factories drainage of aggressive fluids.



The group of materials known as un plasticized pvc is one of the most important developments of the last few decades the cost and improves the reliability of pipeline installations. The properties can vary by addition of small modifying agents which have definite and controlled mechanical properties. They can be fabricated to close dimensional tolerances, light without being weak. Rigid without being brittle.

Furthermore, these materials can be converted into pipes and fittings by variable direct processes of extrusion or injection molding even though these processes demand heavy elaborate machinery and very precise processes.

The principal reason for the great handling of **NASSAR** pipes is not only their cost per meter as delivered to the site but also the dramatic reduction in installation costs which can be achieved by intelligent exploitation of their light weight. Higher availability in longer lengths. Their easy jointing and their resistance to corrosion. These characteristics are of even greater importance to engineers now that the need to carry out water supply and sewerage schemes. Industrial plant installation.etc.at minimum cost and maximum reliability.

## **NON – Corrosive**

UPVC pipes resist corrosion caused by acid, alkalis, salts, oils, moisture and the media inside and outside the pipe.

## **NON – ToXIC**

UPVC pipes are entirely non-toxic. It will not affect the taste, Smell of water or liquid it doesn't react with any liquid to cause precipitation.

## **LOW FLOW LOSSES**

UPVC pipes have a mirror – smooth surface which minimize resistance and impede the build – up of deposits and corrosive scales.

## **MECHANICAL STRENGTH**

UPVC pipes have great tensile strength yet they are flexible enough to with stand displacements in the pipe line. They will not dent or flatten under pressure.

## **LIGHT WEIGHT**

UPVC pipes are incredibly light. Their specific weight is one fifth that of steel pipe this cuts down trans-potation costs and facilitates the installation of pipe and reduces its cost.

## **EASE OF INSTALLATION**

UPVC pipes are quick and easy to install, with a complete range of fittings using solvent cement or rubber joints are leak proof UPVC pipes can be cut easily for installation.

## **EASY OF MAINTENANCE**

UPVC pipes can be quickly repaired with minimum complication and cost.

## **FIRE PROOF**

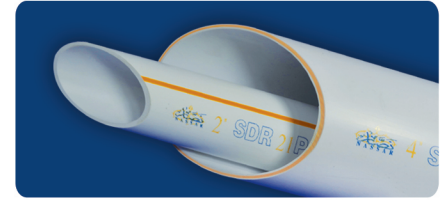
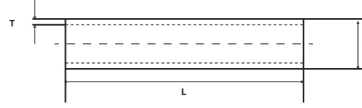
UPVC pipes will not support combustion. In the event of fire, flames are unable to travel along the pipe. It is self-extinguishing.

## **INSULATOR**

UPVC pipes are ideal for electric conduits. Because UPVC itself is an integral insulator, it eliminates the possibility of electrolytic corrosion which so often destroys underground piping.

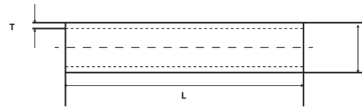
## **PROVEN EXPERIENCE**

UPVC pipes have been used worldwide for 45 years in all climates. The experience that many of its users have proved is its supreme quality, economy, ease of installation, and its non – corrosive qualities.



### According to American Standards ASTM D 2241 (SDR) Series

Item No.	Nominal Size (inch)	Outside (D) mm	Wall Thickness				
			SDR 21	SDR 26	SDR 32.5	SDR 41	SDR 64
			(13.8 Bar)	(11.0 Bar)	(8.6 Bar)	(6.9 Bar)	(4.3 Bar)
1	12"	21.34	-	-	-	-	-
2	34"	26.67	1.52	-	-	-	-
3	1"	33.40	1.60	1.52	-	-	-
4	1 1/4"	42.16	2.01	1.63	1.52	-	-
5	1 1/2"	48.26	2.29	1.85	1.52	-	-
6	2"	60.32	2.87	2.31	1.85	-	-
7	3"	88.90	4.24	3.43	2.74	2.16	-
8	4"	114.30	5.44	4.39	3.51	2.79	1.78
9	6"	168.28	8.03	6.48	5.18	4.11	2.64
10	8"	219.08	10.41	8.43	6.73	5.33	3.43



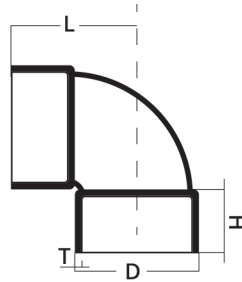
### Nassar Pipes According to American Standards For ASTM D 1785

Nominal size Inch	outside diameter mm		Schedule (40)				Schedule (80)			
			Thickness mm		Weight Kg / meter	pressure rating bar	Thickness mm		Weight Kg / meter	pressure rating bar
	Min	Max	Min	Max			Min	Max		
1 1/2 "	21.2	21.2	2.8	3.3	0.24	41.4	3.7	4.2	0.31	58.6
3/4 "	26.6	26.9	2.9	3.4	0.33	33.1	3.9	4.4	0.41	47.6
1 "	33.4	33.7	3.4	3.9	0.48	31	4.6	5.1	0.6	43.4
1 1/4 "	42.1	42.4	3.6	4.1	0.65	25.5	4.9	5.4	0.48	35.9
1 1/2 "	48.1	48.4	3.7	4.2	0.77	22.8	5.1	5.7	1.03	32.4
2 "	60.2	60.5	3.9	4.4	1.04	19.3	5.5	6.2	1.41	27.6
3 "	88.7	89.1	5.5	6.2	2.14	17.9	7.6	8.5	2.88	25.5
4 "	114.1	114.5	6	6.7	3.05	15.2	8.6	9.6	4.22	22.1
6 "	168	168.5	7.1	8	5.37	12.4	11	12.3	8.05	19.3
8 "	218.8	219.4	8.2	9.2	8.11	11	12.7	14.2	12.23	17.2

### Nassar Pipes According To System ( DWV )

Nominal size inch	outside diameter (mm)	Thickness (mm)
1 "	33.4	2.5
1 1/2 "	48.25	2.5
1 1/2 "	48.25	3.7
2 "	60.34	2.7
2 "	60.34	3.9
3 "	75	3
3 "	75	4
3 "	75	5
4 "	110	3
4 "	110	4
4 "	110	5
6 "	160	3
6 "	160	4
6 "	160	5

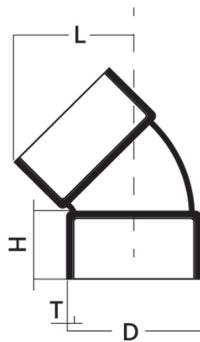




## ELBOW 90

$\beta = 90$

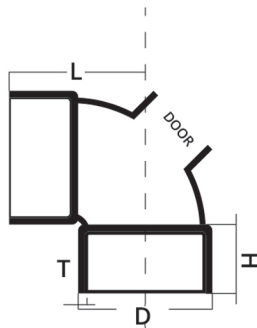
<b>Size</b>	1.5	2	3	4	6
<b>Packing</b>	60	35	50	25	6



## ELBOW 45

$\beta = 45$

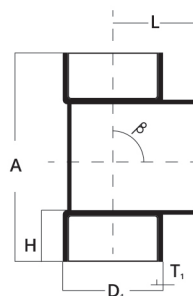
<b>Size</b>	1.5	2	3	4	6
<b>Packing</b>	70	40	15	30	8



## ELBOW 90

With Access  $\beta=90$

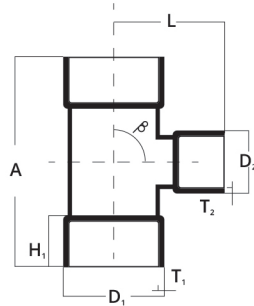
<b>Size</b>	2	3	4	6
<b>Packing</b>	24	10	20	6



## TEE 90

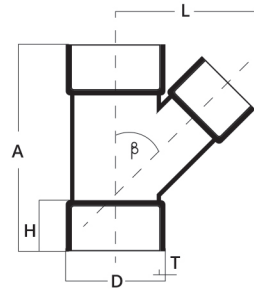
$\beta=90$

<b>Size</b>	1.5	2	3	4	6
<b>Packing</b>	50	16	30	16	5



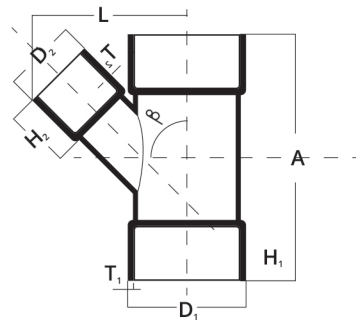
**TEE 90**  
Reducer  $\beta=90$

<b>Size</b>	2\3	2\4	3\4	4\6
<b>Packing</b>	30	16	16	5



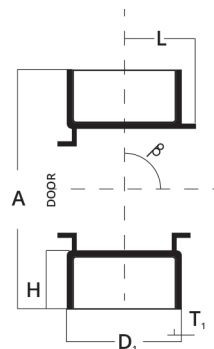
**TEE 45**  
 $\beta = 45$

<b>Size</b>	1.5	2	4
<b>Packing</b>	30	16	12



**TEE 45**  
Reducer  $\beta=45$

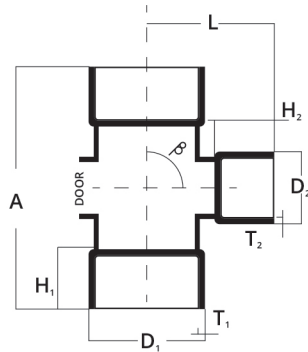
<b>Size</b>	2\3	2\4	3\4	4\6
<b>Packing</b>	30	16	16	5



**TEE 90**  
With Door  $\beta=90$

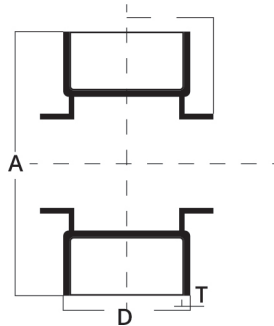
<b>Size</b>	2	3	4	6
<b>Packing</b>	16	30	12	4





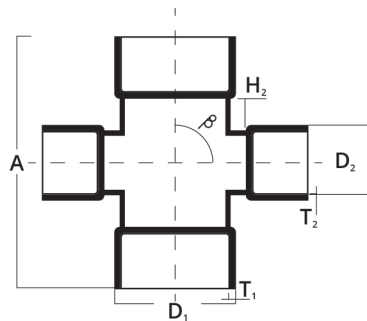
**TEE 90**  
Reducer With Door  $\beta=90$

<b>Size</b>	2\3	2\4	3\4	4\6
<b>Packing</b>	30	16	16	5



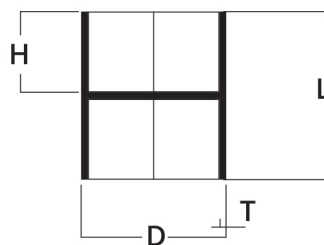
**TEE 90**  
 $\beta=90$

<b>Size</b>	1.5	2	3	4	6
<b>Packing</b>	50	16	50	16	5



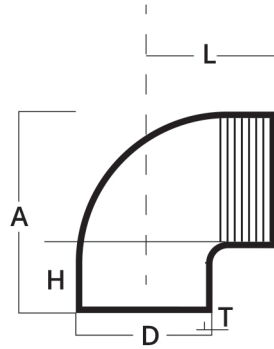
**TEE 90**  
Reducer  $\beta=90$

<b>Size</b>	2\3	2\4	3\4	4\6
<b>Packing</b>	30	16	16	5



**SOCKET**

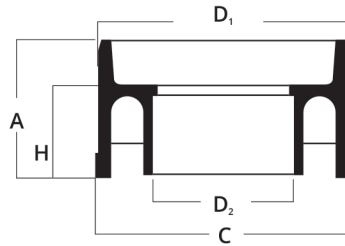
<b>Size</b>	1.5	2	3	4	6
<b>Packing</b>	129	72	30	48	18



### ELBOW

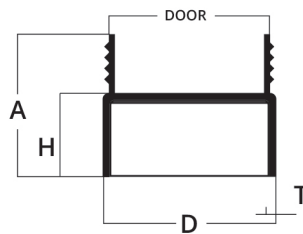
With thread  $\beta=90$

Size	1.5
Packing	50



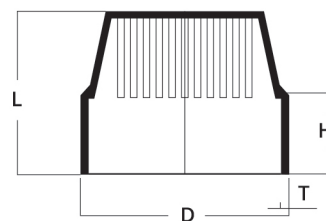
### REDUCING BRUSH

Size	1.5\2	2\3	2\4	3\4
Packing	180	75	32	32



### CLEANING INSERT

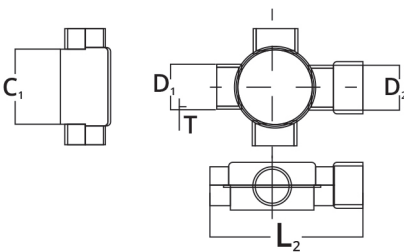
Size	4
Packing	24



### AIR VENT

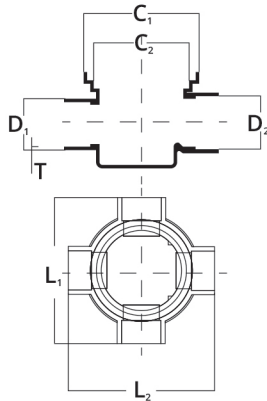
Size	3	4
Packing	18	36





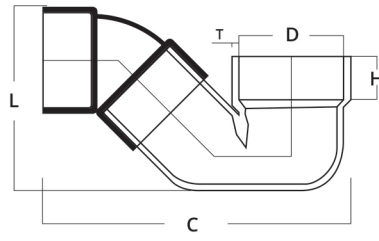
**FLOOR DRAIN 10 cm**

<b>Size</b>	1.5\2	2\2	2\3
<b>Packing</b>	20	20	20



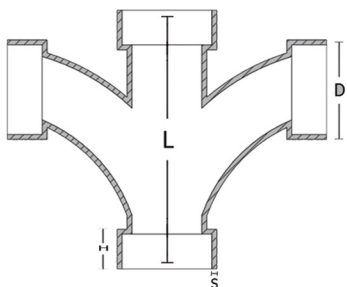
**FLOOR DRAIN 7 cm**

<b>Size</b>	1.5\2	2\2
<b>Packing</b>	35	35



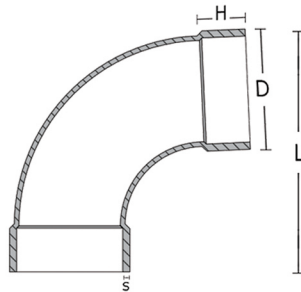
**SIPHON**

<b>Size</b>	4
<b>Packing</b>	12



**DOUBLE SANTIAR  
Reducer**

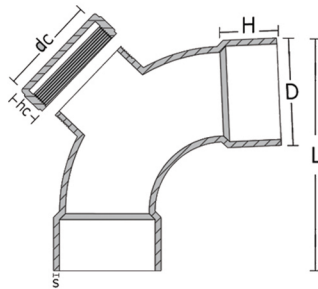
<b>Size</b>	4
<b>Packing</b>	12



### ELBOW 87.5

$\beta = 87.5$

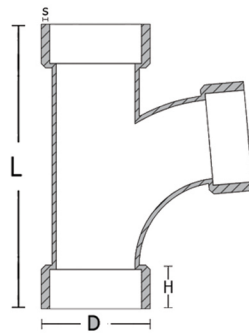
<b>Size</b>	1.5	2	3	4	6
<b>Packing</b>	60	35	50	25	6



### ELBOW 87.5

With Access Cap  $\beta = 87.5$

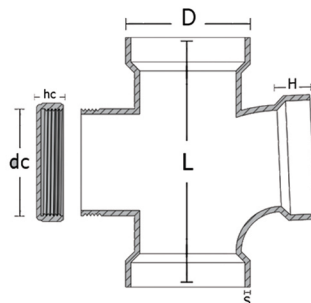
<b>Size</b>	2	3	4	6
<b>Packing</b>	24	10	20	6



### TEE 87.5

$\beta = 87.5$

<b>Size</b>	1.5	2	3	4	6
<b>Packing</b>	50	16	30	16	5

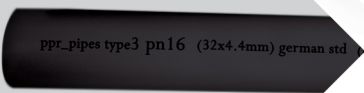
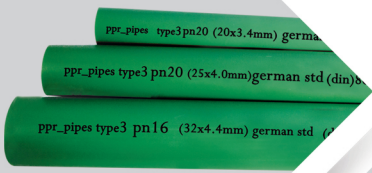


### TEE 87.5

With Access Cap  $\beta = 87.5$

<b>Size</b>	2	3	4	6
<b>Packing</b>	16	30	12	4





NASSAR 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.
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 red line.

Trade mark 

International Standards ISO 9001 / 2000 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 / 2000 German STD DIN 8077 – 8078

Type of resin PP-R type 3

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

Size

**Scope and field of application**

The polymer type used for **NASSAR** 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 **NASSAR** 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 **NASSAR** 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.

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

Maximum storage time in the open air is 6 months.

**Fire Resistance:**

**NASSAR** pipes system is normally inflammable and this reduces the risk of fire.

**NASSAR** pipes system do not produce any toxic gases and it gives no risk of dioxin emission.

**Environmental Effect:**

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

**Durability:**

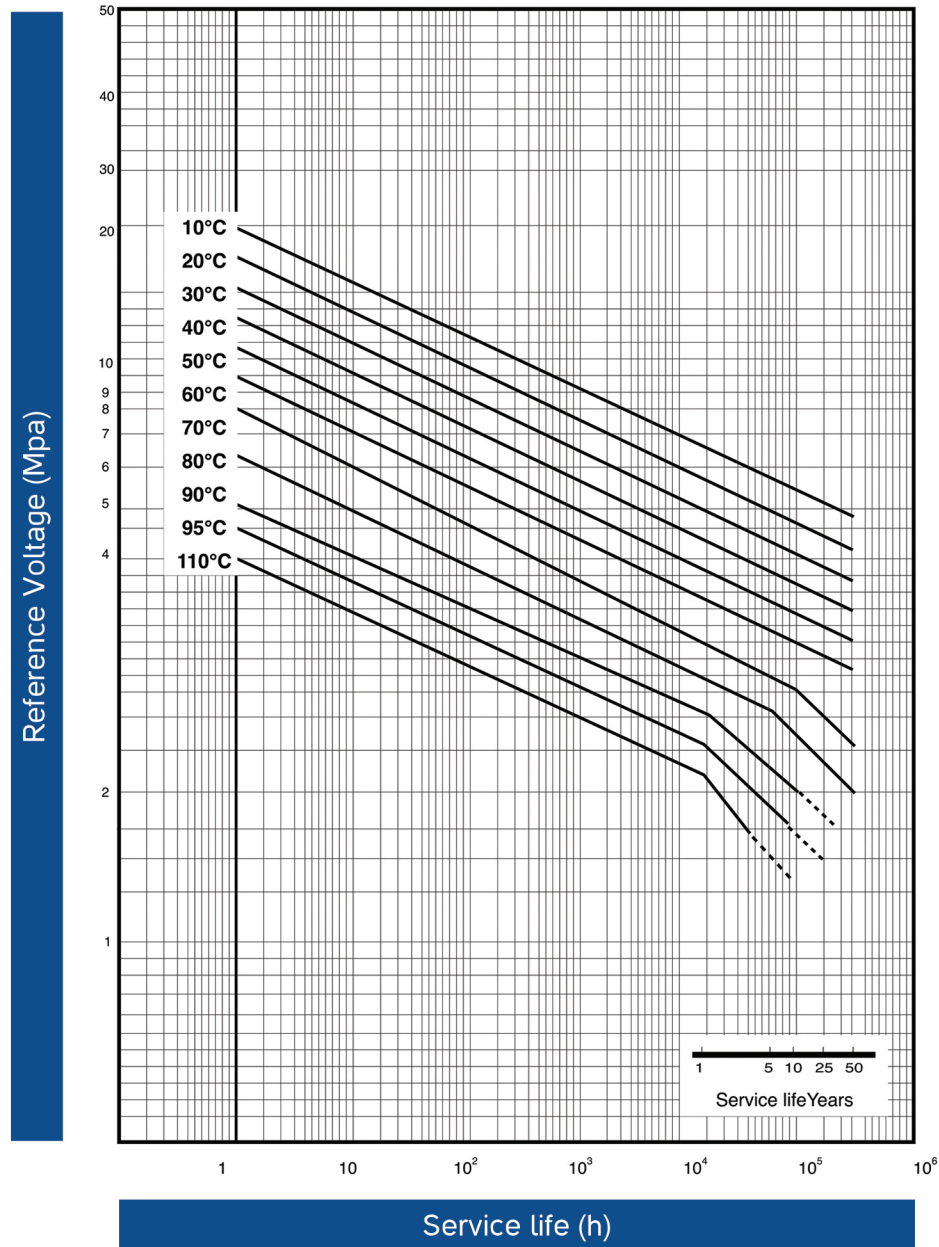
**NASSAR** pipes system has extrapolated durability more than 50 years' peak temperature of 100 arising from short disruptions are unproblematic.

**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) .





Utilisation Section for Pipes and Fittings of **NASSAR** According to DINEN Pr 12202

**Cold Water Supply :**

Permanent operating temperature up to 20°C  
Permanent operating pressure up to 20 bar

**Hot Water Supply :**

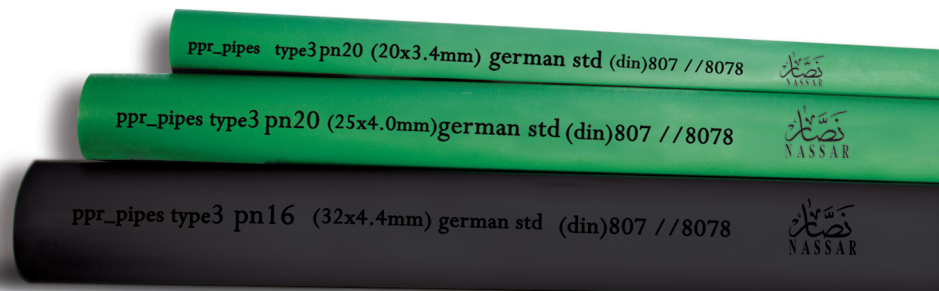
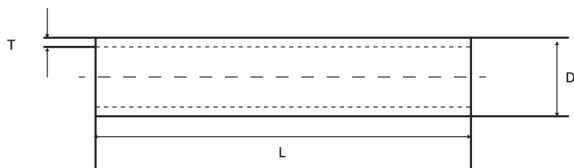
Permanent operating temperature up to 70°C  
Permanent operating pressure up to 10 bar

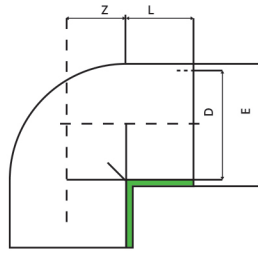
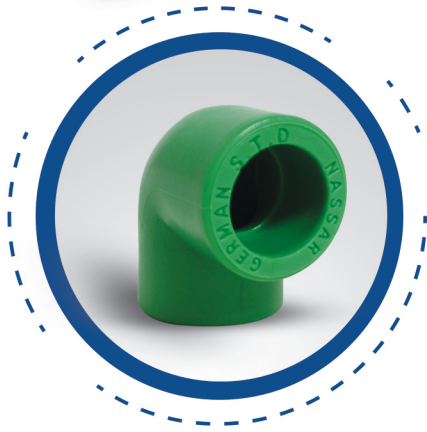
**Heating Supply :**

Permanent operating temperature up to 70°C  
Permanent operating pressure up to 3 bar

## PP-R Pipes Dimensions acc . To Din 8077 Dimension in millimeters

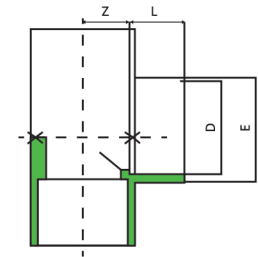
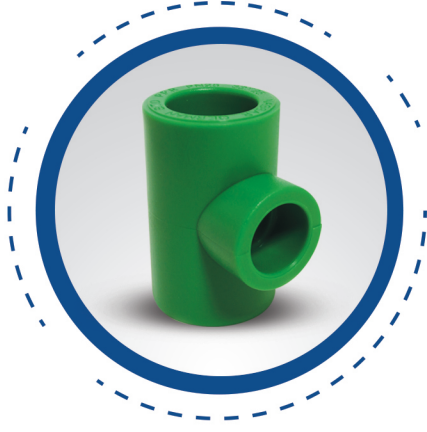
d	Pipe series ( S )															
	20		16		12.5		8.3		5		3.2		2.5		2	
	Pressure Reting															
	PN 2.5		PN3.2		PN 4		PN 6		PN 10		PN 16		PN 20		PN 25	
	Standard dimension ratio ( SDR )16															
	41		33		26		17.6		11		7.4		6		5	
S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	S	mass in kg/m	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	





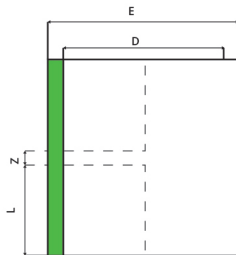
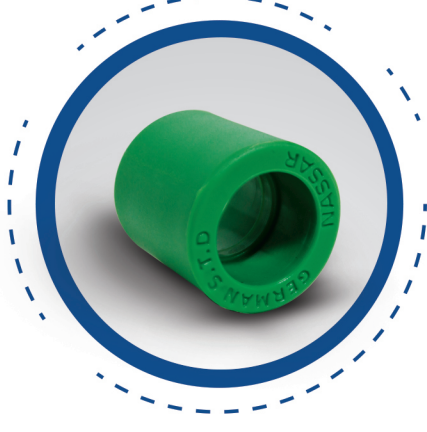
### ELBOW 90

<b>Size</b>	20	25	32	50
<b>Packing</b>	150	100	50	20



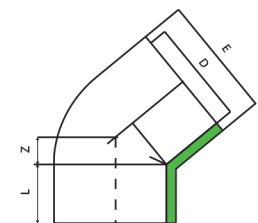
### TEE 90

<b>Size</b>	20	25	32	50
<b>Packing</b>	100	60	40	16



### SOCKET

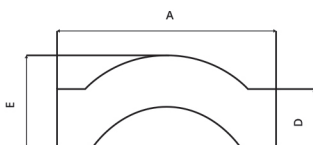
<b>Size</b>	20	25	32	50
<b>Packing</b>	200	120	105	36



### ELBOW 45

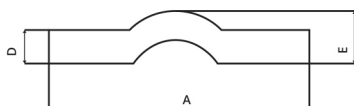
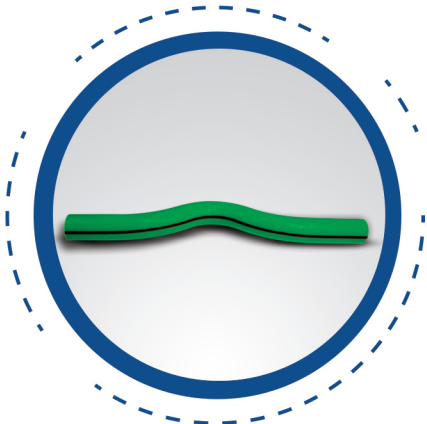
<b>Size</b>	20	25	32	50
<b>Packing</b>	150	100	50	20





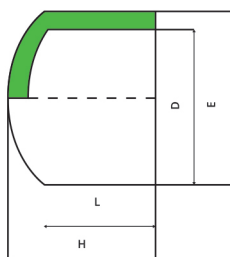
## CROSSOVER Two Socket

<b>Size</b>	20	25
<b>Packing</b>	60	60



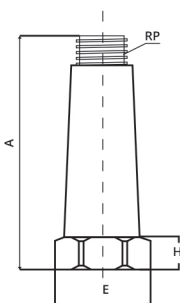
## CROSSOVER

<b>Size</b>	20	25
<b>Packing</b>	50	50



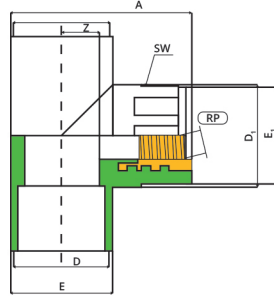
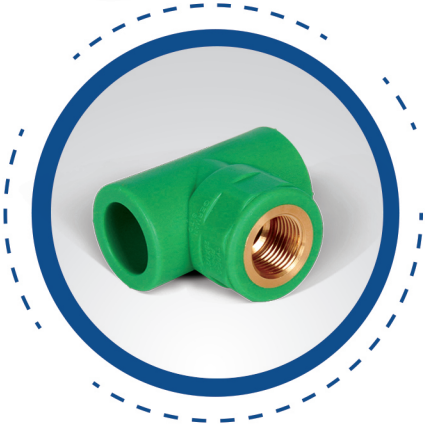
## CAP

<b>Size</b>	20	25	32
<b>Packing</b>	300	200	100



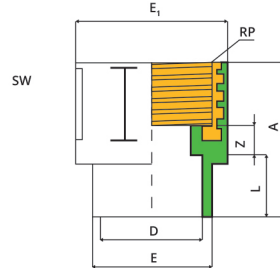
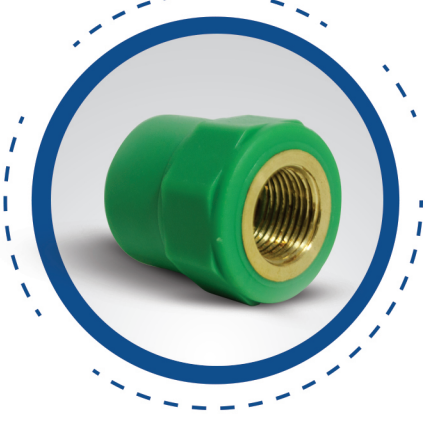
## TEST CAP

<b>Size</b>	20	25
<b>Packing</b>	300	200



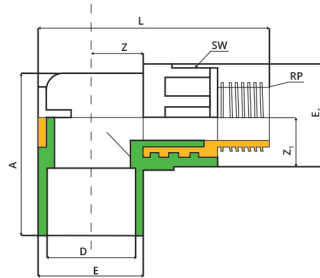
### TEE 90 Female Threaded

Size	20x1½	25x1½	25x¾	32x¾	32x1
Packing	60	60	60	60	40



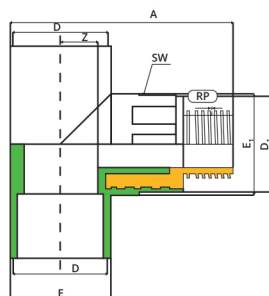
### SOCKET Female Threaded

Size	20x1½	25x1½	25x¾	32x¾	32x1	50x1 ½
Packing	80	80	60	60	40	36



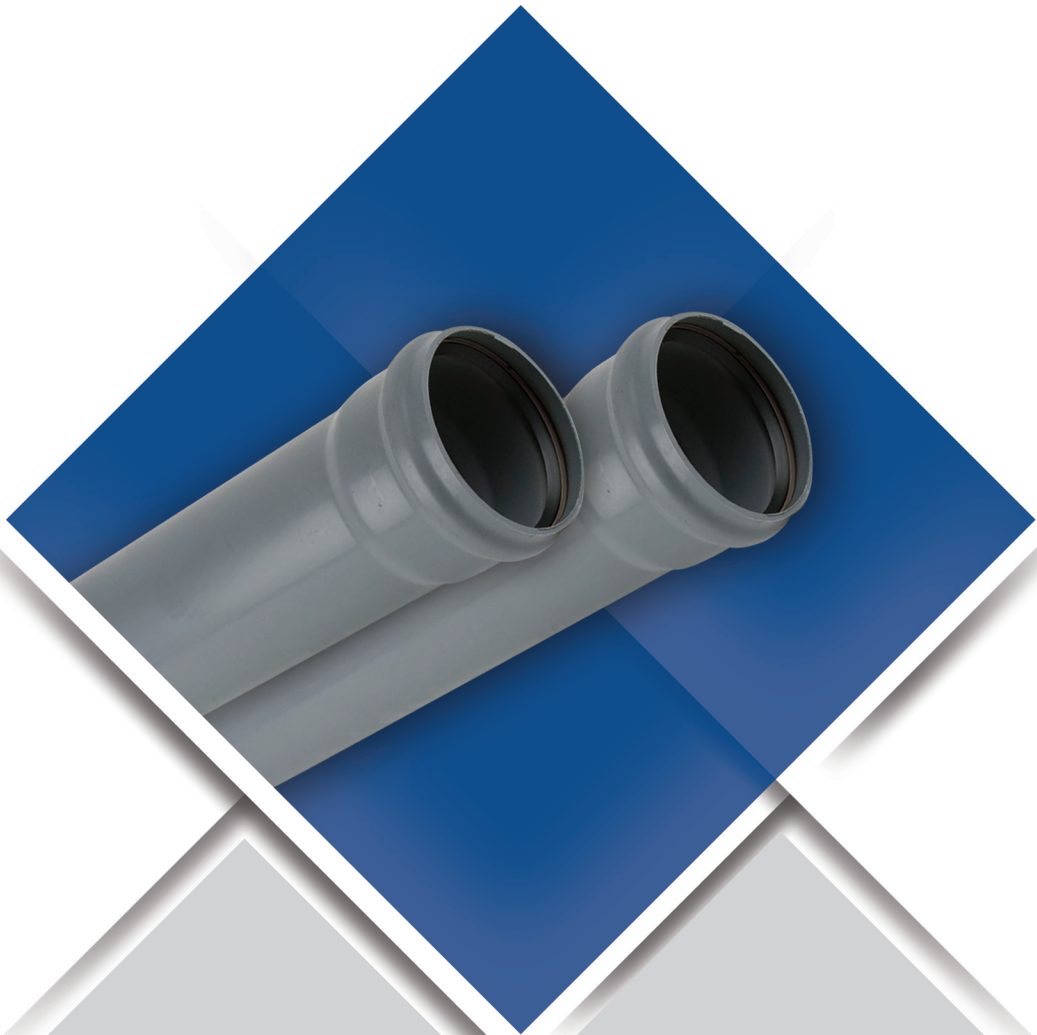
### ELBOW 90 Male Threaded

Size	20x1½	25x1½	32x¾	32x1
Packing	60	60	60	30



### TEE 90 Male Threaded

Size	20x1½	25x1½	25x¾	32x¾	32x1
Packing	60	60	60	60	40





## UPVC pipes according to German Standards DIN 80618062/ Egyptian standards 848(2008) Applications: potable water, irrigation, and industrial uses.

Nominal Outside Diameter mm	Socket depth mm	Class I 2bar		Class II 4 bar		Class III 6 bar		Class IV 10 bar		Class V 16 bar	
		NO.thick of Wall mm	NO.wt KgLm	NO.thick of Wall mm	NO.wt KgLm	NO.thick of Wall mm	NO.wt KgLm	NO.thick of Wall mm	NO.wt KgLm	NO.thick of Wall mm	NO.wt KgLm
10										1.0	0.045
12										1	0.055
16										1.2	0.09
20										1.5	0.137
25								1.5	0.174	1.9	0.212
32								1.8	0.264	2.4	0.342
40						1.8	0.334	1.9	0.35	3	0.525
50	75					1.8	0.422	2.4	0.552	3.7	0.809
63	100					1.9	0.562	3	0.854	4.7	1.289
75	110			1.8	0.642	2.2	0.782	3.6	1.22	5.6	1.82
90	110			1.8	0.774	2.7	1.13	4.3	1.75	6.7	2.61
110	115	1.8	0.95	2.2	1.16	3.2	1.64	5.3	2.61	8.2	3.9
125	120	1.8	1.08	2.5	1.48	3.7	2.13	6	3.34	9.3	5.01
140	125	1.8	1.21	2.8	1.84	4.1	2.65	6.7	4.18	10.4	6.27
160	132	1.8	1.39	3.2	2.41	4.7	3.44	7.7	5.47	11.9	8.17
180	145	1.8	1.57	3.6	3.02	5.3	4.37	8.7	6.88	13.4	10.4
200	145	1.8	1.74	4	3.7	5.9	5.37	9.6	8.51	14.9	12.8
225	152	1.8	1.96	4.5	4.7	6.6	6.76	10.8	10.8	16.7	16.1
250	160	2	2.4	4.9	5.65	7.3	8.31	11.9	13.2	18.6	19.9
280	170	2.3	3.11	5.5	7.11	8.2	10.4	13.4	16.6	20.8	24.9
315	180	2.5	3.78	6.2	9.02	9.2	13.2	15	20.9	23.4	31.5
355	180	2.9	4.87	7	11.4	10.4	16.7	16.9	26.5	26.3	39.9
400	200	3.2	6.1	7.9	14.5	11.7	21.1	19.1	33.7	29.7	50.8
450	200	3.6	7.65	8.9	18.3	13.2	26.8	21.5	42.7		
500	250	4	9.37	9.8	22.4	14.6	32.9	23.9	52.6		
560	260	4.5	11.8	11	28.1	16.4	41.4	26.7	65.8		
630	300	5	14.7	12.4	35.7	18.4	52.2	30	83.2		
710	320	5.7	18.9	14	45.3	20.7	66.1				
800	360	6.4	23.9	15.7	57.2	23.3	83.9				

## UPVC pipes according to Egyptian Telecom standards TC161A for year 2008 Applications: Electric and telecom cables conduit.

Size MM	Thick MM	Weight Kg/M
160	3.6	2.65
200	4	3.7

## UPVC pipes according to Egyptian Telecom standards TC161A Applications: Electric and telecom cables conduit.

Size MM	Thick MM	Weight Kg/M
50	1.8	0.428
110	3.2	1.69

## UPVC pipes according to Egyptian Standards 17172008- and ISO 44352003/Applications : Drain, Waste and Vent .

Nominal Outside Diameter DN	SN 2 SDR 51		SN 4 SDR 41		SN 8 SDR 4134	
	NO.thick of Wall / mm	NO.wt Kg/m	NO.thick of Wall / mm	NO.wt Kg/m	NO.thick of Wall / mm	NO.wt Kg/m
110			3.2	1.64	3.2	1.64
125			3.2	1.82	3.7	2.13
160	3.2	2.41	4	2.91	4.7	3.44
200	3.9	3.7	4.9	4.46	5.9	5.37
250	4.9	5.65	6.2	7.06	7.3	8.31
315	6.2	9.02	7.7	11.11	9.2	13.2
355	7	11.4	8.7	14.06	10.4	16.7
400	7.9	14.5	9.8	17.8	11.7	21.1
450	8.8	18.3	11	22.53	13.2	26.8
500	9.8	22.4	12.3	28	14.6	32.9
630	12.3	35.7	15.4	43.944	18.4	52.2
710	13.9	45.3	17.4	56.15		
800	15.7	57.2	19.6	71.39		

## UPVC pipes according to German Standards DIN19534

Nominal size mm	Outside diameter		Wall thickness		Insertion depth mm	Weight KgLm.
	(D)	Tolerance	(S)	Tolerance		
110	*110	0.3	3	0.5	115	1.63
125	**125	0.3	3	0.5	120	1.87
160	160	0.4	3.6	0.6	132	2.65
200	200	0.4	4.5	0.7	145	4.12
250	250	0.5	6.1	0.9	160	7
300	315	0.6	7.7	1	180	11.11
400	400	0.7	9.8	1.2	200	17.8
500	500	0.9	12.2	1.5	250	27.649
630	630	1.1	15.4	1.8	300	43.944

### APPLICATION OF UPVC PIPES :

- potable water network s
- Sewerage and industrial waste .
- Gravity drainge and ventilation .
- transportation of alkalis and chemicals
- rrigation networks .
- Conduit for cables .

### ADVANTAGES OF UPVC PIPES :

- Do not or corrode .
- Resistant to chemicals and alkalis .
- Easy To Transport and install due to light weight .
- Smooth inner surface results in better fluid flow .
- PVC-u piping systems are nontoxic, odorless, and tasteless.
- long service life
- Easy joining in site .
- High impact resistance.