

# ERA<sup>®</sup>

SINCE 1993



WEBSITE LINK

# PPR PIPE & FITTINGS PLASTIC PIPING SYSTEM

CHINA ERA GROUP  
YONGGAO Co., Ltd.

VERSION  
NUMBER  
201901



SR-CU





# TEST CERTIFICATE

**Certificate number:** TC-J0299

**Client:** Liang Chew Hardware Pte Ltd

133 Kitchener Road  
Singapore 208517

**Product:** Polypropylene Pipes & Fittings

**Brand / Model:** ERA / PPR


**Detail:** Size (mm): 20, 25, 32, 40, 50, 63, 75, 90 & 110

**Specification:** ISO 15874-2: 2013, ISO 15874-3: 2013, ISO 15874-5: 2013, AS/NZS 4020: 2018, BS EN 12165: 2016, SS 375: 2015

**Test Reports:** 2121048/01-OYC, 2121048/02-OYC, 2121048/03-OYC, 2020855/02-CPC, 2020855/01-CPC, 2020855/03-CPC

## Summary

A sample of product submitted was tested and found to comply with the test requirements of the above standard(s).

  
Head, Certification  
Singapore Test Lab Pte Ltd

Date of Original Issue:

11 March 2022

Date of Last Revision:

-

Date of Expiry:

10 March 2024

This Certificate is part of the listed full report(s) and should be read in conjunction with it. This Certificate remains the property of Singapore Test Lab Pte Ltd and shall be returned upon request. The use of this Certificate is subjected to the Terms and Conditions of Singapore Test Lab Pte Ltd.



Singapore Test Lab is an ISO / IEC 17065 Certification Body

Singapore Test Lab Pte Ltd. 10B Enterprise Road, Singapore 629828. Telephone: 6353 6393 Fax: 6353 6395





# SINGAPORE GREEN BUILDING PRODUCT CERTIFICATE

AWARDED TO

**Liang Chew Hardware Pte Ltd**

133 Kitchener Road  
Singapore 208517

FOR THE PRODUCT

**Potable Water**

PRODUCT BRAND

**ERA**

PRODUCT MODEL

PIPPPRPN10 (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm), PIPPPRPN20 (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm), PPRE45 (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm), PPRE90 (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm), PPREC (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm), PPRET (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm), PPRES (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm), PPRMIS (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm), PPRU (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm), PPRFIS (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm), PPRMIE (DN 20mm, 25mm, 32mm), PPRFIE (DN 20mm, 25mm, 32mm), PPRFIT (DN 20mm, 25mm, 32mm), PPRMIT (DN 20mm, 25mm, 32mm), PPRSVCP (DN 20mm, 25mm, 32mm), PPRSV (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm), PPRCJ (DN 20mm, 25mm, 32mm), PPRBV (DN 20mm, 25mm, 32mm, 40mm, 50mm, 63mm), PPRSCB (DN 20mm, 25mm, 32mm)



THE PRODUCT HAS BEEN ASSESSED ACCORDING  
TO THE ASSESSMENT CRITERIA OF SINGAPORE  
GREEN BUILDING PRODUCT CERTIFICATION SCHEME.  
IT HAS BEEN AWARDED THE RATING:

A handwritten signature in black ink, appearing to be "M. S.", is positioned above a horizontal line.

Director  
SGBC Pte Ltd



Certificate Number	Original Issue Date	Revised Date	Valid Till
SGBP 4062	12 April 2021	-	11 April 2023

✓Good    ✓✓Very Good    ✓✓✓Excellent    ✓✓✓✓Leader

The use and reliance on this certificate is subject to the terms and conditions of the Singapore Green Building Product Certification Scheme. Revised certificates may also be issued at the discretion of the Council. The certification status may be verified at the Singapore Green Building Council website ([www.sgbc.sg](http://www.sgbc.sg)).



## PPR PIPES & FITINGS

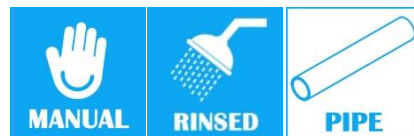
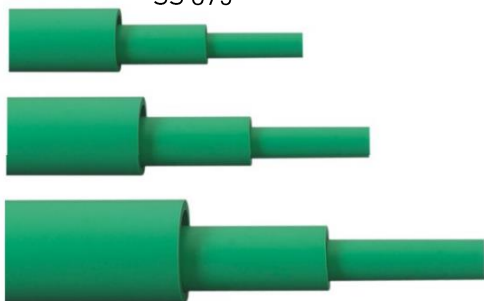
PPR PIPE (PN10) For Cold Water

PPR PIPE (PN20) For Hot Water

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5

SS 375



### DIMENSIONS FOR PPR PIPES PN10

SKU	Diameter D (mm)	Wall Thickness (mm)	WEIGHT (kg)
PIPPPR020PN10	20.0~20.3	2.3	0.50
PIPPPR025PN10	25.0~25.3	2.8	0.76
PIPPPR032PN10	32.0~32.3	3.6	1.23
PIPPPR040PN10	40.0~40.4	4.5	1.90
PIPPPR050PN10	50.0~50.5	5.6	2.49
PIPPPR063PN10	63.0~63.6	7.1	4.82
PIPPPR075PN10	75.0~75.7	8.4	6.66
PIPPPR090PN10	90.0~90.9	10.1	9.53
PIPPPR110PN10	110.0~111.0	12.3	14.31

### DIMENSIONS FOR PPR PIPES PN20

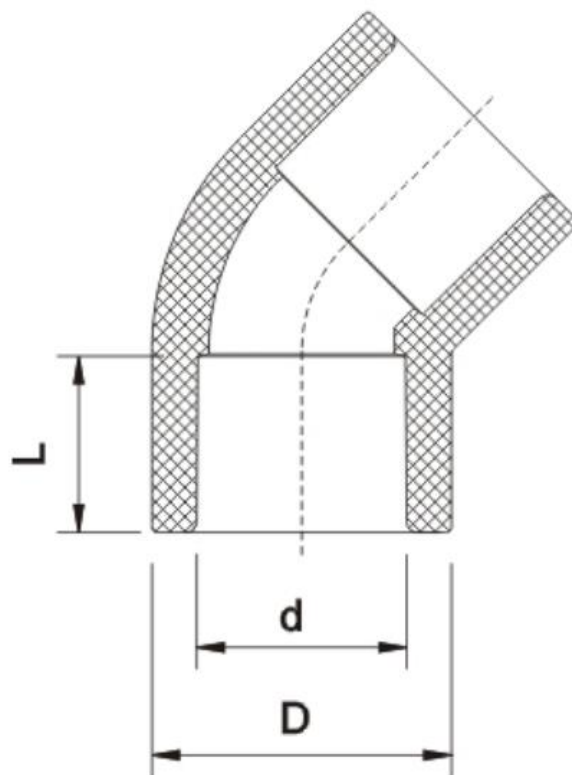
SKU	Diameter D (mm)	Wall Thickness (mm)	WEIGHT (kg)
PIPPPR020PN20	20.0~20.3	2.8	0.58
PIPPPR025PN20	25.0~25.3	3.5	0.90
PIPPPR032PN20	32.0~32.3	4.4	1.44
PIPPPR040PN20	40.0~40.4	5.5	2.20
PIPPPR050PN20	50.0~50.5	6.9	3.48
PIPPPR063PN20	63.0~63.6	8.7	5.44
PIPPPR075PN20	75.0~75.7	10.3	7.87
PIPPPR090PN20	90.0~90.9	12.3	11.28
PIPPPR110PN20	110.0~111.0	15.1	17.09

## PPR PIPES & FITINGS

PPR 45 ° ELBOW

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	WEIGHT (kg)
PPRE45020	27.4	19.0	15.8	0.015
PPRE45025	34.8	24.0	18.1	0.024
PPRE45032	42.4	31.0	20.1	0.040
PPRE45040	52.1	38.8	22.1	0.067
PPRE45050	65.7	48.9	25.1	0.120
PPRE45063	83.1	61.7	28.0	0.205
PPRE45075	99.0	73.4	30.4	0.331
PPRE45090	119.6	88.8	35.1	0.552
PPRE45110	146.7	108.3	42.0	1.012

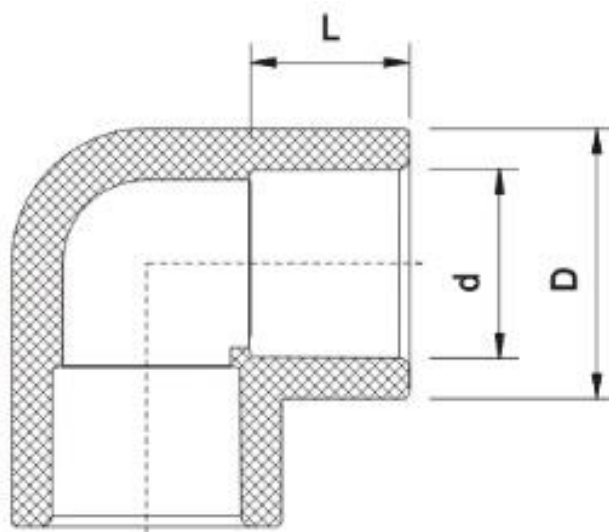


## PPR PIPES & FITINGS

PPR 90° ELBOW

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



### DIMENSIONS

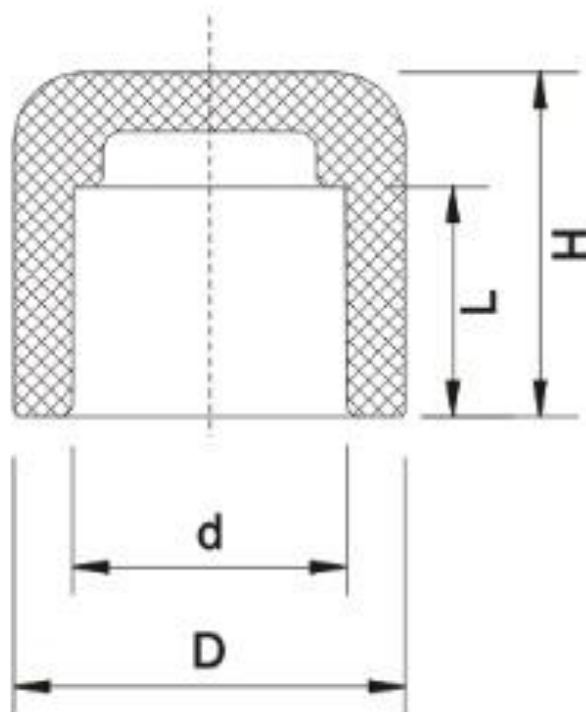
SKU	D (mm)	d (mm)	L (mm)
PPRE90020	27.4	19.0	16.1
PPRE90025	34.4	24.0	18.1
PPRE90032	42.1	31.0	20.1
PPRE90040	52.6	38.8	21.7
PPRE90050	66.1	48.9	25.1
PPRE90063	83.1	61.7	28.4
PPRE90075	99.2	73.4	32.0
PPRE90090	119.0	88.8	36.0
PPRE90110	146.7	108.3	42.0

## PPR PIPES & FITINGS

PPR END CAP

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	H (mm)
PPREC020	27.4	19.0	16.1	24.3
PPREC025	34.8	24.0	18.1	24.7
PPREC032	42.6	30.9	20.1	30.2
PPREC040	52.5	38.8	22.1	31.2
PPREC050	66.1	48.9	25.1	35.3
PPREC063	82.7	61.7	28.7	41.4
PPREC075	99.2	73.4	34.2	53.2
PPREC090	119.2	88.8	38.0	64.2
PPREC110	145.8	108.3	46.7	69.8

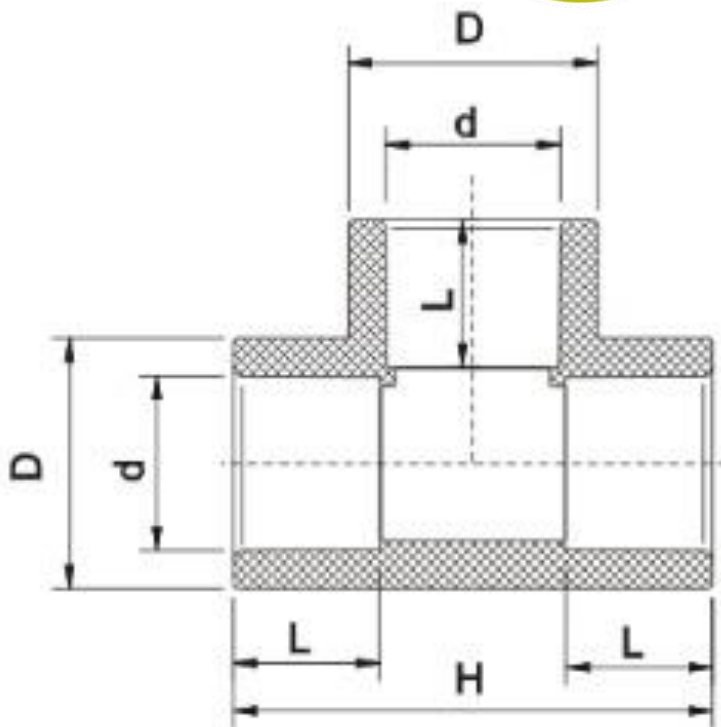


## PPR PIPES & FITINGS

PPR EQUAL TEE

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



### DIMENSIONS

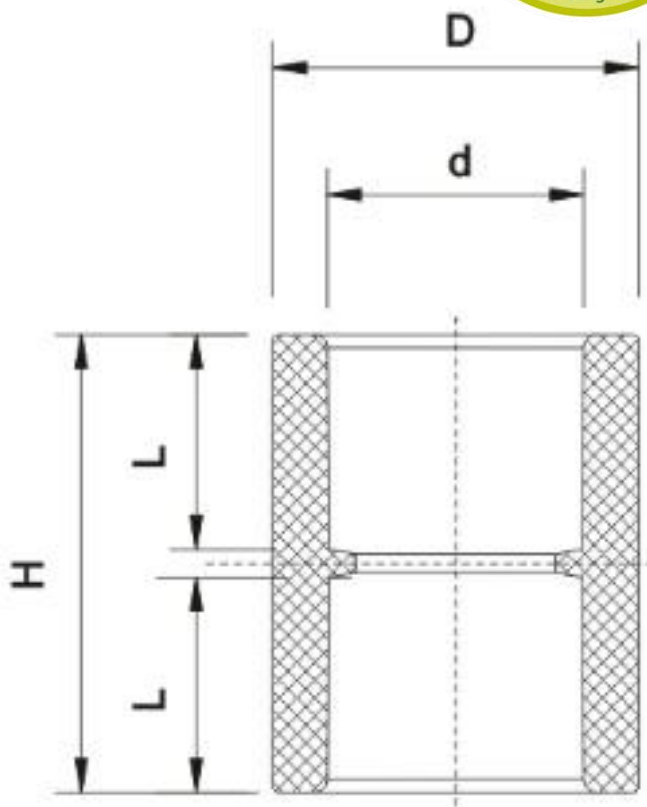
SKU	D (mm)	d (mm)	L (mm)	H (mm)
PPRET020	27.9	19.0	16.1	53.0
PPRET025	34.8	24.0	18.1	63.0
PPRET032	42.4	30.9	20.1	74.0
PPRET040	52.6	38.8	22.1	85.3
PPRET050	66.1	48.9	25.1	100.7
PPRET063	83.1	61.7	29.1	121.7
PPRET075	99.2	73.4	32.0	141.7
PPRET090	120.0	88.8	36.0	168.3
PPRET110	146.0	108.3	42.0	197.4

## PPR PIPES & FITINGS

PPR EQUAL SOCKET

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	H (mm)
PPRES020	27.4	19.0	15.7	34.3
PPRES025	34.8	24.0	17.5	38.0
PPRES032	42.4	30.9	19.2	41.8
PPRES040	52.5	38.8	22.1	47.3
PPRES050	66.3	48.9	25.1	53.8
PPRES063	83.3	61.7	29.1	61.3
PPRES075	99.2	73.4	32.0	68.4
PPRES090	119.0	88.8	36.0	77.0
PPRES110	147.0	108.3	42.0	89.8



## PPR PIPES & FITINGS

PPR MI SOCKET

Colour- Green

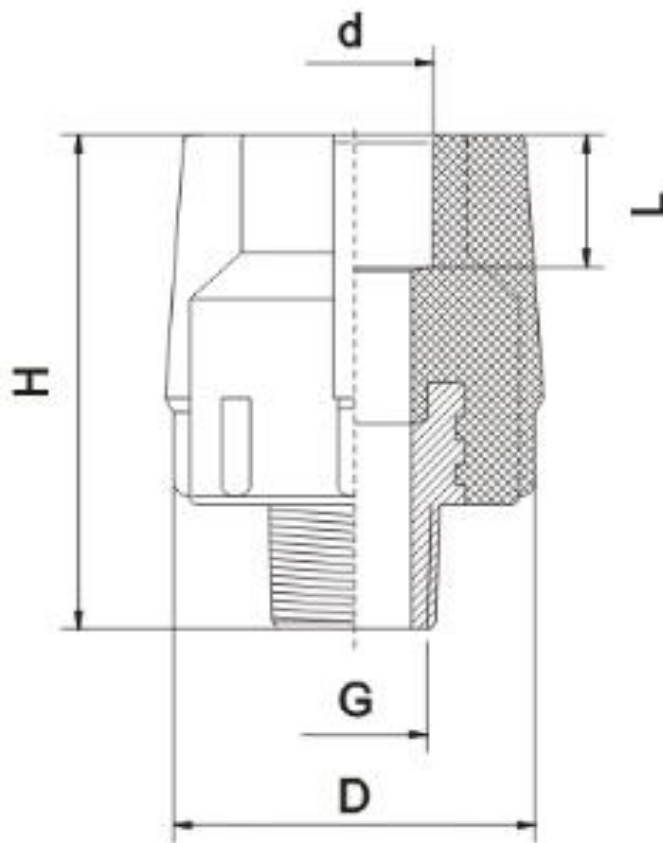
Type of metal – DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



### DIMENSIONS

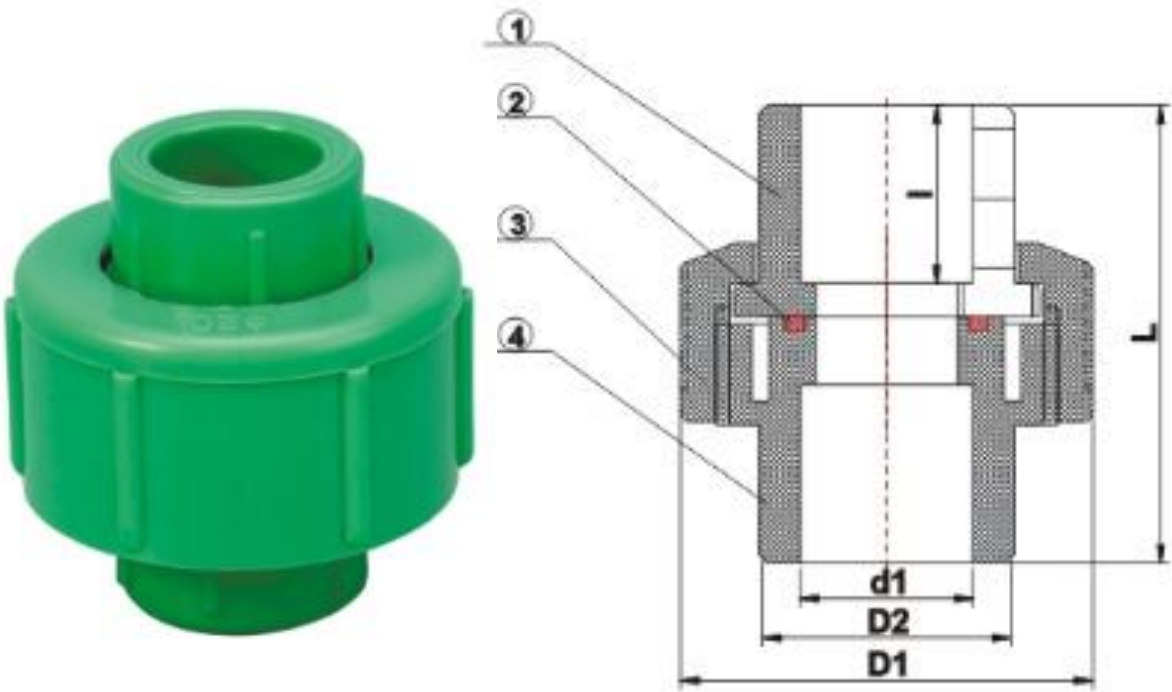
SKU	D (mm)	d (mm)	G (mm)	L (mm)	H (mm)
PPRMIS02015	44.0	19.0	½"	16.1	61.7
PPRMIS020	48.7	19.0	¾"	16.1	62.0
PPRMIS02515	44.0	24.0	½"	18.1	62.0
PPRMIS02520	49.0	24.0	¾"	18.1	61.5
PPRMIS03215	46.4	30.5	½"	20.1	64.0
PPRMIS03220	49.1	30.5	¾"	20.1	62.0
PPRMIS03225	64.4	30.9	1"	20.1	78.3
PPRMIS04032	76.8	38.8	1¼"	22.1	93.5
PPRMIS05040	86.0	48.9	1½"	25.1	94.4
PPRMIS06350	95.0	61.7	2"	29.1	112.0

PPR PIPES & FITINGS

PPR UNION

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



DIMENSIONS					
SKU	D1 (mm)	D2 (mm)	d1 (mm)	l (mm)	L (mm)
PPRU020	47.7	28.3	19.0/20.8/21.2	22.5	58.7
PPRU025	57.3	34.8	24.0/25.2/25.8	24.0	64.2
PPRU032	68.2	42.4	30.9/32.6/33.0	27.4	71.2
PPRU040	82.2	52.0	38.8/40.9	31.0	86.4
PPRU050	98.3	61.5	46.9/48.9	34.0	90.5
PPRU063	120	75.8	58.5/61.7	38.6	107.0



## PPR PIPES & FITINGS

PPR FI SOCKET

Colour- Green

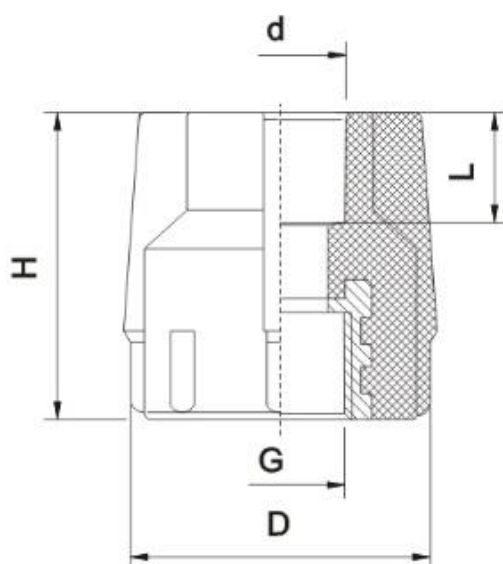
Type of metal - DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



### DIMENSIONS

SKU	D (mm)	d (mm)	G (mm)	L (mm)	H (mm)
PPRFIS02015	43.6	19.0	½"	16.1	45.9
PPRFIS020	49.0	19.0	¾"	16.1	46.3
PPRFIS02515	43.6	24.0	½"	19.2	45.4
PPRFIS02520	49.5	24.0	¾"	17.8	45.6
PPRFIS03215	46.8	30.5	½"	21.0	46.7
PPRFIS03220	48.8	30.5	¾"	20.7	47.4
PPRFIS03225	64.4	30.9	1"	20.1	58.3
PPRFIS04032	76.8	38.8	1¼"	22.1	71.5
PPRFIS05040	86.0	48.9	1½"	25.1	71.5
PPRFIS06350	95.0	61.7	2"	29.1	94.5

## PPR PIPES & FITINGS

PPR MI ELBOW

Colour- Green

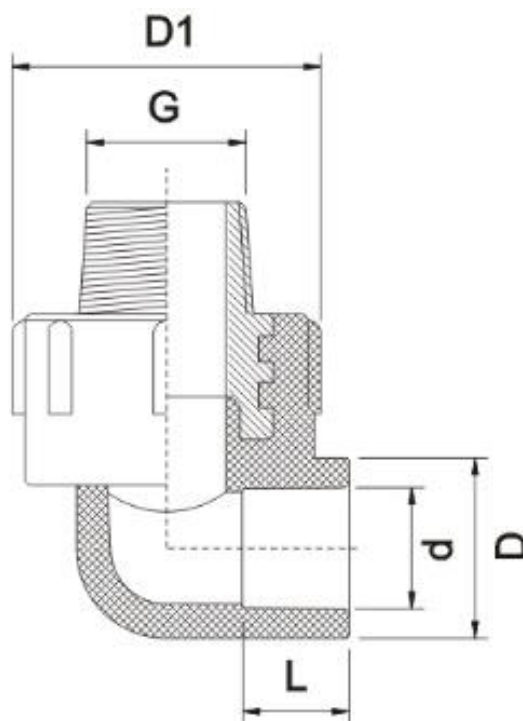
Type of metal - DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



### DIMENSIONS

SKU	D (mm)	d (mm)	G (mm)	L (mm)	D1 (mm)
PPRMIE02015	28.1	19.0	½"	16.1	43.5
PPRMIE020	27.4	18.2	¾"	16.2	47.0
PPRMIE02515	34.8	24.0	½"	18.1	44.0
PPRMIE02520	34.8	24.0	¾"	18.1	49.0
PPRMIE03215	43.0	30.4	½"	20.2	48.6
PPRMIE03220	43.0	30.4	¾"	20.2	49.0
PPRMIE03225	42.4	30.4	1"	20.8	65.1

## PPR PIPES & FITINGS

PPR FI ELBOW

Colour- Green

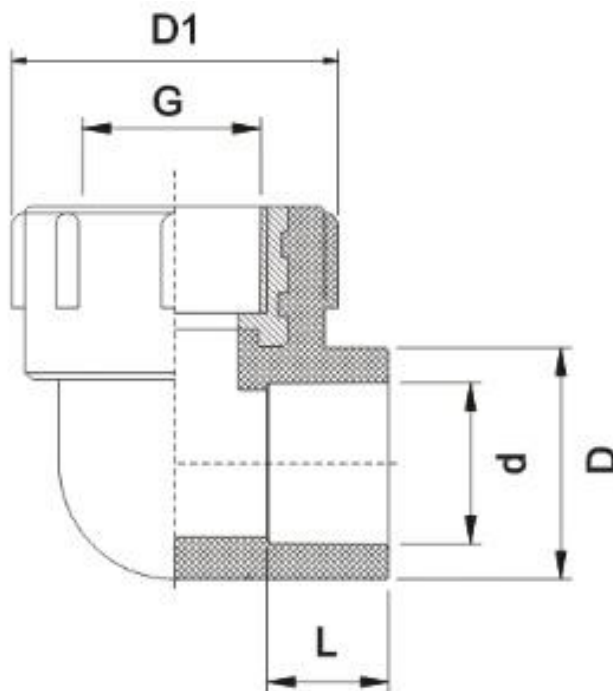
Type of metal - DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



### DIMENSIONS

SKU	D (mm)	d (mm)	G (mm)	L (mm)	D1 (mm)
PPRFIE02015	27.4	19.0	½"	16.1	43.5
PPRFIE020	28.0	18.6	¾"	16.2	47.0
PPRFIE02515	34.8	24.0	½"	18.1	44.0
PPRFIE02520	34.8	24.0	¾"	18.1	49.0
PPRFIE03215	42.6	30.6	½"	20.1	49.7
PPRFIE03220	42.6	30.6	¾"	20.1	48.3
PPRFIE03225	42.6	30.6	1"	20.6	65.0

## PPR PIPES & FITINGS

PPR FI TEE

Colour- Green

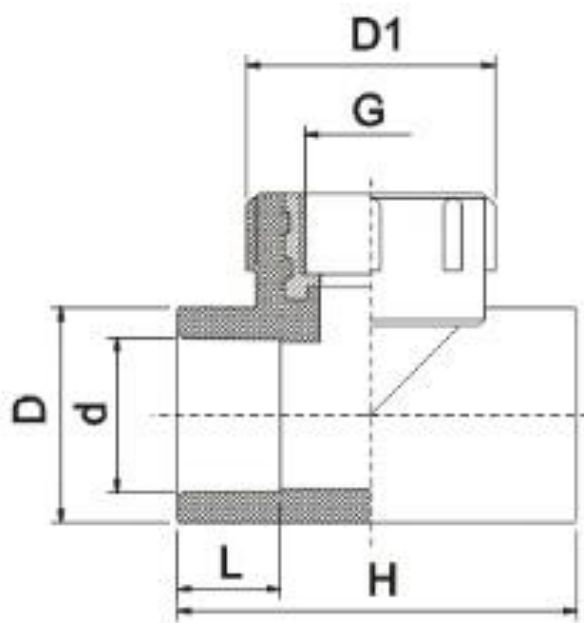
Type of metal - DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	G (mm)	H (mm)	D1 (mm)
PPRFIT02015	27.4	19.0	16.1	½"	56.0	43.6
PPRFIT020	27.8	19.0	16.2	¾"	62.0	47.0
PPRFIT02515	34.8	24.0	18.1	½"	64.2	44.0
PPRFIT02520	34.8	24.0	18.1	¾"	64.2	49.0
PPRFIT03215	42.8	30.4	20.2	½"	70.0	46.4
PPRFIT03220	42.4	30.4	20.1	¾"	76.0	49.0
PPRFIT03225	42.8	30.4	20.6	1"	81.2	64.5



## PPR PIPES & FITINGS

PPR MI TEE

Colour- Green

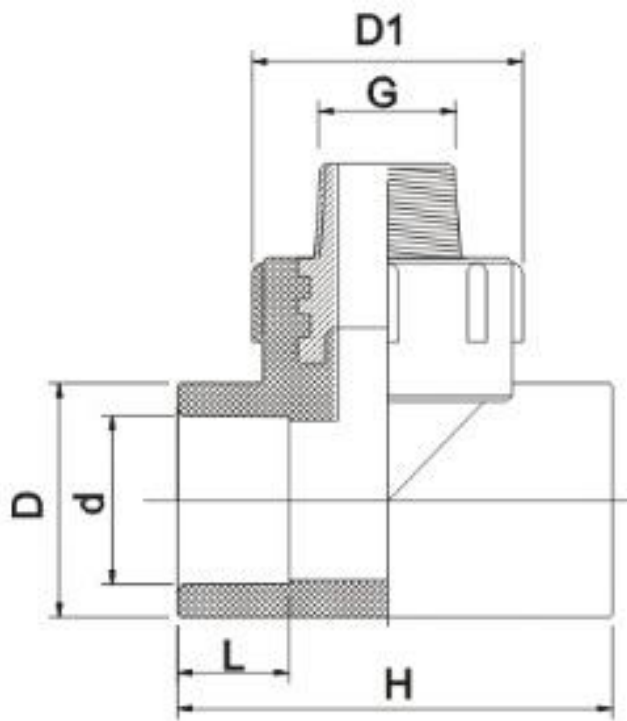
Type of metal – DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	G (mm)	H (mm)	D1 (mm)
PPRMIT02015	27.9	19.0	16.1	½"	56.4	43.5
PPRMIT020	27.4	19.0	16.1	¾"	62.0	47.0
PPRMIT02515	35.2	24.0	18.1	½"	64.2	44.0
PPRMIT02520	35.2	24.0	18.1	¾"	64.2	49.0
PPRMIT03215	42.6	30.2	20.2	½"	70.0	46.4
PPRMIT03220	42.6	30.2	20.2	¾"	76.5	49.0
PPRMIT03225	42.6	30.9	21.2	1"	81.2	65.1

## PPR PIPES & FITINGS

PPR STOP VALVE WITH CHROME HANDLE

Colour- Green

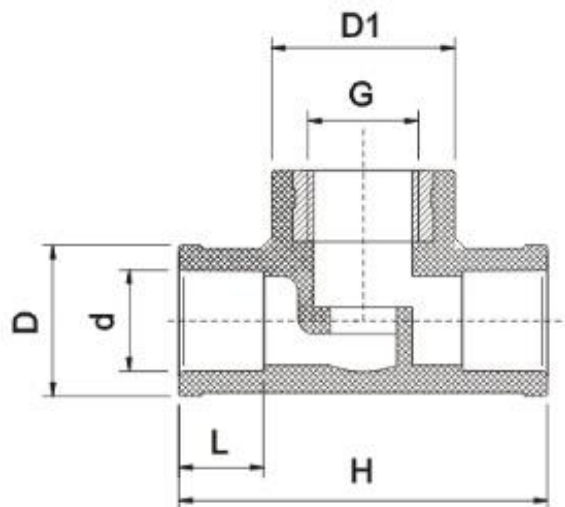
Type of metal – DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	G (mm)	H (mm)	D1 (mm)
PPRSV020CP	29.0	19.0	16.1	½"	70.7	34.8
PPRSV025CP	36.8	24.0	18.1	¾"	83.0	44.7
PPRSV032CP	43.4	30.9	20.1	¾"	86.5	45.2

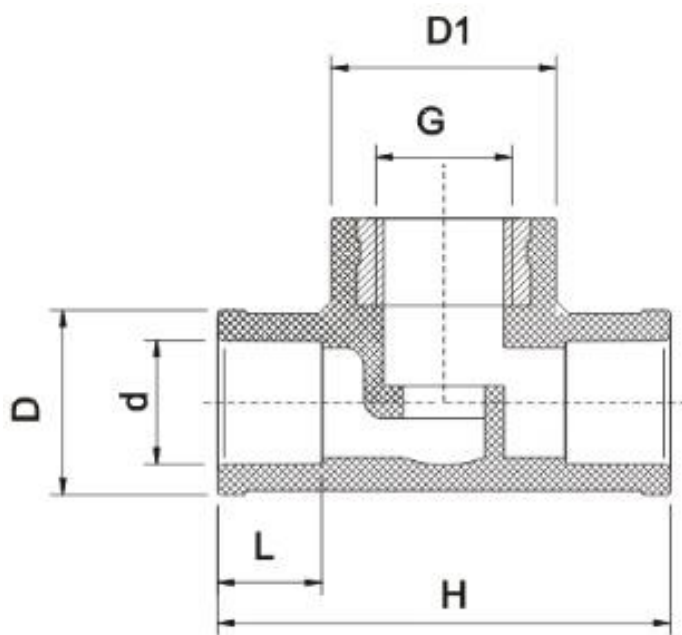
## PPR PIPES & FITINGS

PPR STOP VALVE

Colour- Green

Type of metal – DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375  
AS/ NZS 4020  
BS EN 12165



### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	G (mm)	H (mm)	D1 (mm)
PPRSV020	29.0	19.0	16.1	½"	70.7	34.8
PPRSV025	36.8	24.0	18.1	¾"	83.0	44.7
PPRSV032	43.4	30.9	20.1	¾"	86.5	45.2
PPRSV040	55.6	38.6	22.5	1"	97.4	55.5
PPRSV050	70.1	48.9	25.5	1¼"	121.6	66.3
PPRSV063	87.1	61.7	28.7	1½"	133.1	74.8

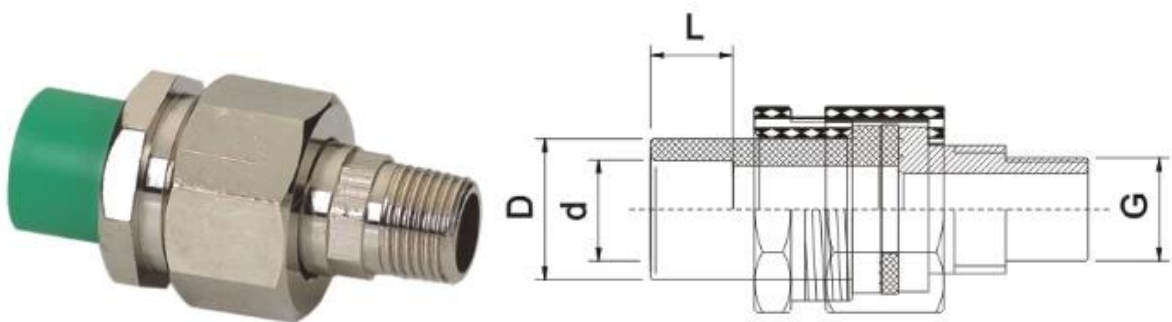
**PPR PIPES & FITINGS**

PPR COMBINING JOINT

Colour- Green

Type of metal – DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375  
AS/ NZS 4020  
BS EN 12165



DIMENSIONS				
SKU	D (mm)	d (mm)	L (mm)	G (mm)
PPRCJ020	27.4	19.0	16.1	1/2"
PPRCJ025	34.8	24.0	18.1	3/4"
PPRCJ032	42.4	30.9	20.1	1"



PPR PIPES & FITINGS

PPR BALL COCK

Colour- Green

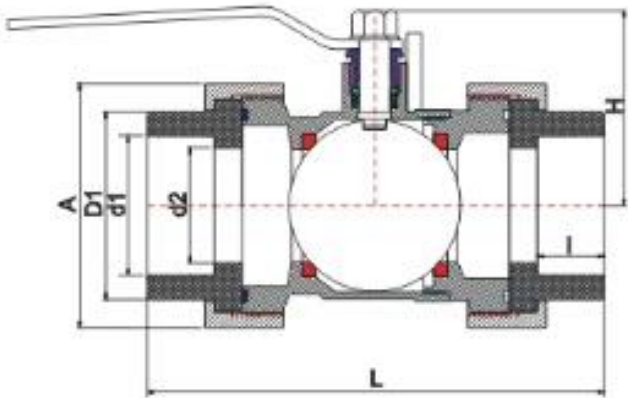
Type of metal - DZR Brass

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



DIMENSIONS

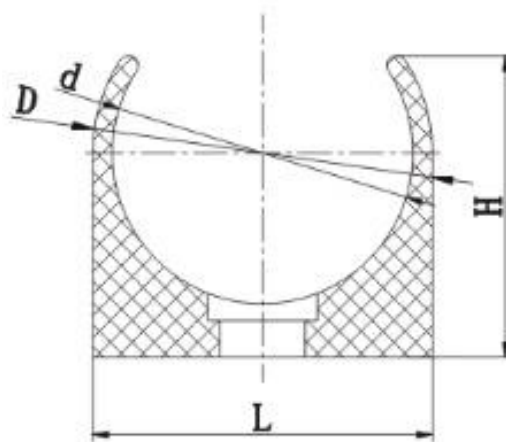
SKU	D1 (mm)	d1 (mm)	d2 (mm)	l (mm)	L (mm)	H (mm)	A (mm)
PPRBV020	27.4	19.0	15.0	19.0	92.8	37.5	40.5
PPRBV025	34.8	24.0	20.0	19.0	101.2	45.2	48.4
PPRBV032	42.4	30.9	26.9	21.0	114.5	51.7	57.3
PPRBV040	52.6	38.8	32.0	22.7	144.1	62.0	75.1
PPRBV050	66.1	48.9	42.0	25.7	175.8	69.8	92.7
PPRBV063	83.0	61.7	51.0	29.7	202.8	86.25	108.0

## PPR PIPES & FITINGS

### PPR U-PIPE TRACKET

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



#### DIMENSIONS

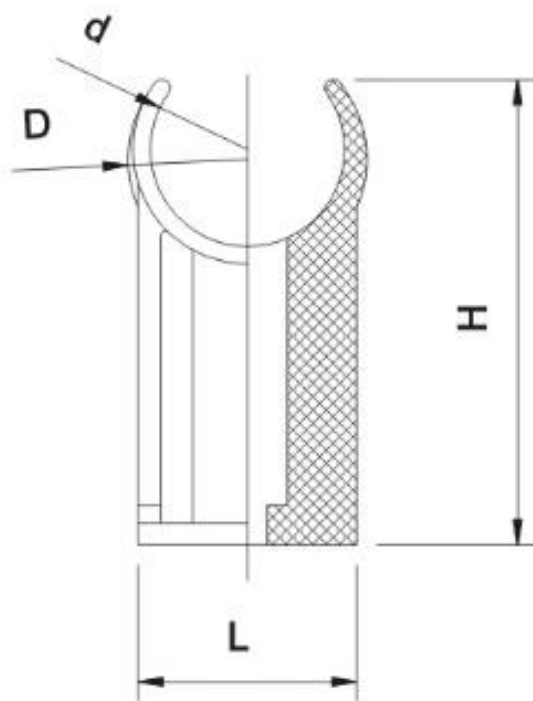
SKU	D (mm)	d (mm)	L (mm)	H (mm)
PPRUC020	24.7	20.0	24.7	25.0
PPRUC025	30.1	25.0	30.1	29.0
PPRUC032	36.8	32.0	36.8	32.6
PPRUC040	45.5	40.0	45.5	40.5
PPRUC050	55.9	50.0	55.9	49.5

## PPR PIPES & FITINGS

PPR U-PIPE TRACKET

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



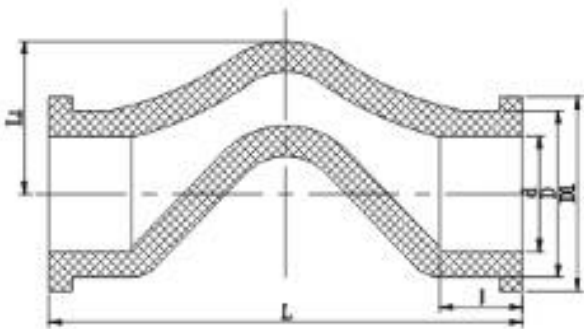
### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	H (mm)
PPRUC020H	24.0	19.5	22.0	46.8
PPRUC025H	32.8	24.5	29.8	52.4
PPRUC032H	40.5	31.5	37.0	57.0
PPRUC040H	50.0	39.5	40.3	64.0
PPRUC050H	61.2	49.5	44.0	69.8
PPRUC063H	77.0	62.5	60.0	80.0

**PPR PIPES & FITINGS**

PPR CROSS BEND  
Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



DIMENSIONS						
SKU	D1 (mm)	D (mm)	d (mm)	l (mm)	L1 (mm)	L (mm)
PPRSCB020	32.3	28.0	19.0	15.3	27.4	82.3
PPRSCB025	40.7	34.8	24.0	17.3	32.0	99.2
PPRSCB032	49.2	43.5	30.9	19.9	40.2	118.4

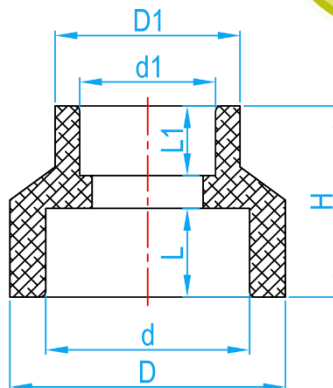


## PPR PIPES & FITINGS

### PPR REDUCING SOCKET

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



#### DIMENSIONS

SKU	D (mm)	d (mm)	L (mm)	D1 (mm)	d1 (mm)	L1 (mm)	H (mm)
PPRRS02520	34.8	24.0	18.1	27.4	19.0	16.1	34.4
PPRRS03220	42.4	30.9	20.1	27.4	19.0	16.1	38.0
PPRRS03225	42.4	30.9	20.1	34.8	24.0	17.4	39.6
PPRRS04020	52.6	38.8	22.1	27.4	19.0	16.1	50.0
PPRRS04025	52.6	38.8	22.1	34.8	24.0	18.1	49.6
PPRRS04032	52.6	38.8	22.1	42.4	30.9	20.1	44.3
PPRRS05020	66.0	48.9	25.1	27.4	19.0	16.1	55.9
PPRRS05025	66.0	48.9	25.1	34.8	24.0	18.1	57.0
PPRRS05032	66.0	48.9	25.1	42.4	30.9	20.1	56.0
PPRRS05040	66.0	48.9	25.1	52.6	38.8	22.1	50.2
PPRRS06325	82.7	61.7	29.1	34.8	24.0	18.1	62.7
PPRRS06332	82.7	61.7	29.1	42.4	30.9	20.1	63.4
PPRRS06340	82.7	61.7	29.1	53.0	38.8	22.1	63.3
PPRRS06350	82.7	61.7	29.1	66.7	48.9	25.1	56.7
PPRRS07540	99.2	73.4	32.0	53.2	38.8	22.1	69.0
PPRRS07550	99.2	73.4	32.0	66.6	48.9	25.1	69.0
PPRRS07563	99.2	73.4	32.0	83.1	61.7	29.1	66.5
PPRRS09050	119.0	88.8	36.0	66.8	48.9	25.1	78.5
PPRRS09063	119.6	88.8	39.0	83.1	61.7	29.1	82.7
PPRRS09075	119.6	88.8	39.0	99.2	73.4	32.0	74.8
PPRRS11063	145.5	108.3	42.0	84.4	61.7	30.0	91.0
PPRRS11075	145.5	108.3	42.0	100.0	73.4	32.0	91.4
PPRRS11090	146.0	108.3	42.0	121.0	88.8	37.0	82.0

## PPR PIPES & FITINGS

PPR DOUBLE FEMALE THREADED ELBOW  
FOR SHOWER MIXER

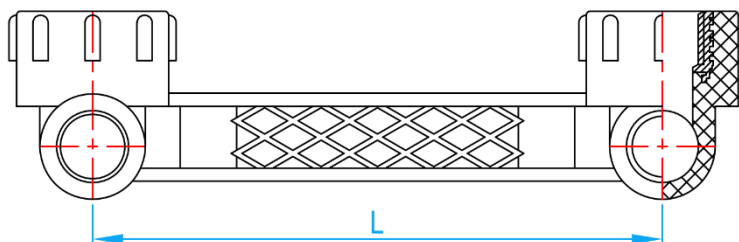
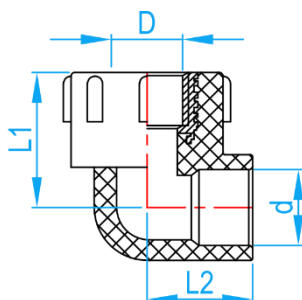
Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5

SS 375

AS/ NZS 4020

BS EN 12165



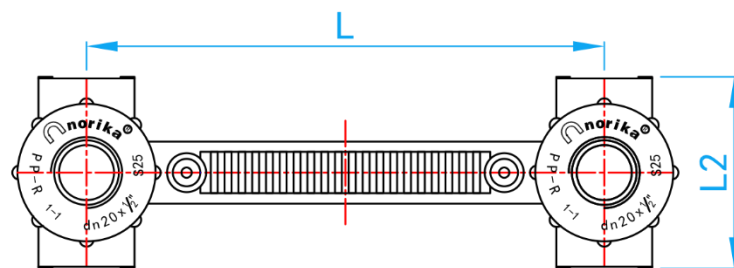
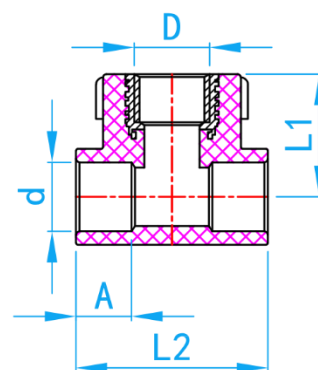
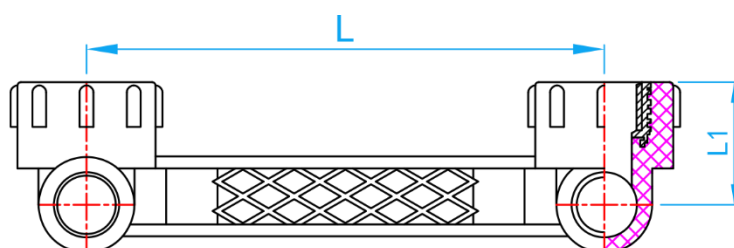
### DIMENSIONS

SKU	D (mm)	d (mm)	L1 (mm)	L2 (mm)	L (mm)
PPRFE02015S	G ½"	20	35.6	27.8	150

## PPR PIPES & FITINGS

### PPR DOUBLE FEMALE THREADED TEE Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375  
AS/ NZS 4020  
BS EN 12165



#### DIMENSIONS

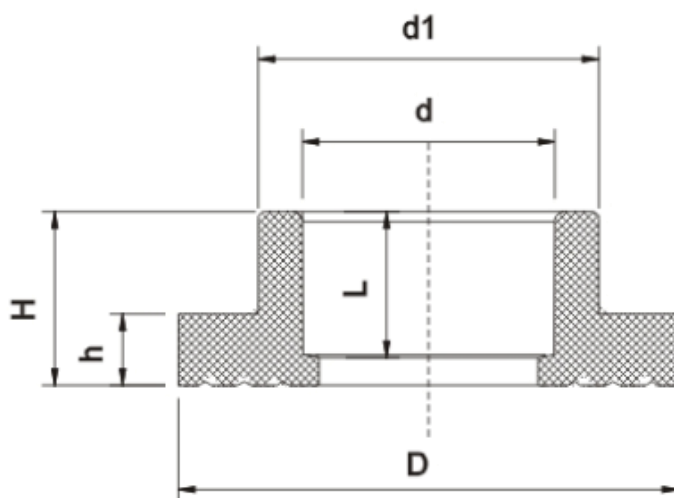
SKU	D (mm)	d (mm)	A (mm)	L1 (mm)	L2 (mm)	L (mm)
PPRFT02015S	G ½"	20.0	16.1	35.6	55.6	150

## PPR PIPES & FITINGS

### PPR FLANGE SOCKET

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



#### DIMENSIONS

SKU	D (mm)	d (mm)	d1 (mm)	L (mm)	H (mm)	h (mm)
PPRFLS040	77.3	38.8	52.6	22.2	26.8	11.4
PPRFLS050	86.6	48.9	66.7	24.3	30.0	13.0
PPRFLS063	99.8	61.7	83.1	28.7	33.7	14.3
PPRFLS075	121.6	73.4	99.9	31.5	36.7	16.8
PPRFLS090	140.5	88.8	120.8	36.0	41.6	18.3
PPRFLS110	166.6	107.5	146.4	42.0	48.2	20.1

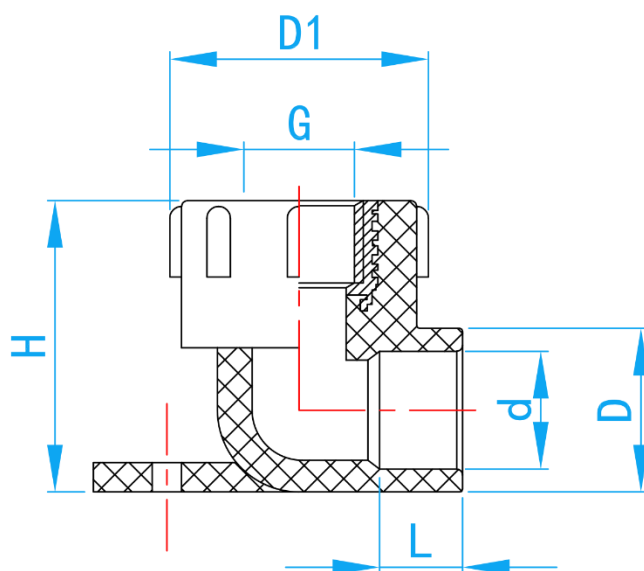


## PPR PIPES & FITINGS

### PPR FI ELBOW WITH BRACKET

Colour- Green

COMPLY WITH ISO 15874-2, 3 & 5  
SS 375



#### DIMENSIONS

SKU	D (mm)	d (mm)	G (mm)	L (mm)	H (mm)	D1 (mm)
PPRFE02015	27.4	19.0	½"	16.1	49.3	43.0

# ERA PPR PIPES

## Projected Service Life

The following table provides more detailed information with regards to the permissible pressure of various pipe pressure rating at various temperatures. These values are derived from the hoop stress chart and formula.

Under normal working pressures and conditions, the average service life of ERA pipes is projected to be 50 years or more.

### Examples:

A PN20 hot water pipe, transporting water at a temperature of 70°C can last for more than 25 years under normal conditions with an operating pressure of 4.8bars or 69psi.

Temperature	Service life in years	PN10 (bars)	PN20 (bars)
10°C	1	16.8	33.6
	5	15.6	31.2
	10	15.0	30.0
	25	14.2	28.4
	50	13.8	27.6
20°C	1	13.6	27.2
	5	12.6	25.2
	10	12.4	24.8
	25	11.6	23.6
	50	10.0	20.0
30°C	1	10.8	21.6
	5	10.0	20.0
	10	9.6	19.2
	25	9.2	18.4
	50	9.0	18.0
40°C	1	8.4	16.8
	5	8.0	16.0
	10	7.6	15.2
	25	7.2	14.4
	50	6.6	13.2
50°C	1	7.0	14.0
	5	6.2	12.4
	10	6.0	12.0
	25	5.2	10.4
	50	4.6	9.2
60°C	1	5.6	11.2
	5	5.0	10.0
	10	4.4	8.8
	25	3.6	7.2
	50	3.2	6.4
70°C	1	4.4	8.8
	5	3.4	6.8
	10	3.0	6.0
	25	2.4	4.8
80°C	1	3.4	6.8
	5	2.4	4.8
	10	2.0	4.0
	20	1.8	3.6
95°C	1	2.0	4.0
	5	1.4	2.8
	10	1.2	2.4

## ERA PPR pipes comply with DIN 8077 & DIN 8078

Nominal Pressure	PN10	PN20
Pipes OD (mm)	Wall Thickness (mm)	Wall Thickness (mm)
20	2.3	2.8
25	2.8	3.5
32	3.6	4.4
40	4.5	5.5
50	5.6	6.9
63	7.1	8.7
75	8.4	10.3
90	10.1	12.3
110	12.3	15.1

To ensure long service life of ERA PPR pipes, it is necessary to refer following graph which is based on DIN 8077:1999

### PPR pipes -PN10 as per DIN 8077 & 8078

Service life in years	10°C	20°C	30°C	40°C	50°C	60°C	70°C	80°C	95°C
1	16.8	13.6	10.8	8.4	7.0	5.6	4.4	3.4	2.0
5	15.6	12.6	10.0	8.0	6.2	5.0	3.4	2.4	1.4
10	15.0	12.4	9.6	7.6	6.0	4.4	3.0	2.0	1.2
20								1.8	
25	14.2	11.6	9.2	7.2	5.2	3.6	2.4		
50	13.8	10.0	9.0	6.6	4.6	3.2			

### PPR pipes -PN20 as per DIN 8077 & 8078

Service life in years	10°C	20°C	30°C	40°C	50°C	60°C	70°C	80°C	95°C
1	33.6	27.2	21.6	16.8	14.0	11.2	8.8	6.8	4.0
5	31.2	25.2	20.0	16.0	12.4	10.0	6.8	4.8	2.8
10	30.0	24.8	19.2	15.2	12.0	8.8	6.0	4.0	2.4
20								3.6	
25	28.4	23.6	18.4	14.4	10.4	7.2	4.8		
50	27.6	20.0	18.0	13.2	9.2	6.4			