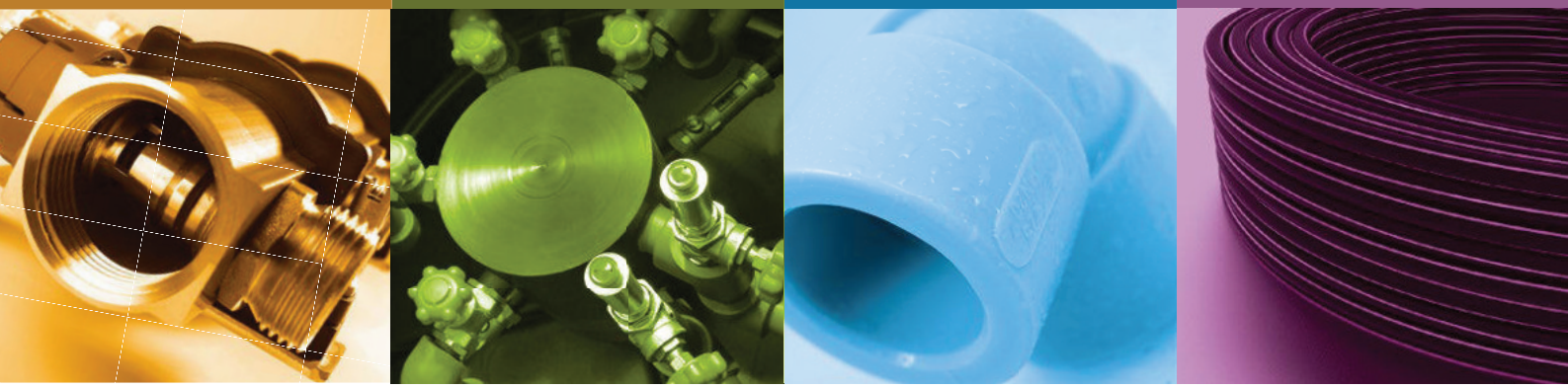
ALMATHERM

2017 - 2018

... more than pipes



SANITARY FITTINGS

NSO almanit

Hamburg - Germany

SANITARY FITTINGS
DSO
almanit
Hamburg - Germany

ALMATHERM
PPR Pipes & Fittings

almanit sanitary gmbh - Papenstrasse 23 - 22089 Hamburg - Germany
Tel.: +49 40 2513347 - Fax: +49 40 2513681 - Email: info@almatherm.de
www.almatherm.de

ALMATERHM Pipes & Fittings is a subsidiary company of almanit sanitary gmbh in Hamburg - Germany. We are specialized in supplying piping products and fittings for plastic piping systems of pressure and hot water (heating) distribution. Our main products are PP-R Fittings, PP-R Pipes, PP-R Stabi pipes with aluminum layer and PP-R Fiberglass composite pipes.

Both production and inspection are effected strictly according to Germany and European standards. For our PPR system production, we only use the highest-quality materials, such as HOSTALEN/Germany granulates with high molecular weight and highly heat stabilized; Colour: white/gray/green. The material is in compliance with the recommendations of KTW, the German Federal Public Health Department (BGA).

ALMATERHM pipes and fittings are in accordance to DIN and other international standards (example: the German Technical and Scientific Association for Gas and Water).

Problematic spots like plastic-metal transitions are handled without compromise - we use metal components manufactured from highest –quality brass tubes and rods from Germany.

The production process is fully automated and our technologies are improved constantly.

Nobody understands plumbing distributions better than those who work with them every day. We know that they appreciate it when their job is made easy and they don't have to deal with complaints.

EXPLANATORY NOTES FOR GRAPHICAL SYMBOLS

Dimension	Unit	Amount in a large package	Amount in a small package	Weight [kg]	Volume dm^3

Potable water	Heating, Cooling	Pools	Chemical industry	Marine architecture	Infrastructure	Industrial cooling	Service water	Geothermics

SANITARY FITTINGS
nso
almanit
Hamburg - Germany

CONTENTS

ALMATHERM
PPR Pipes & Fittings

ALMATHERM

PPR Pipes & Fittings

almanit sanitary gmbh

Hamburg - Germany

USE OF ALMATHERM ELEMENTS

		Potable water	Air conditioning, cooling water	Hot water	Underfloor heating	Low temperature heating	High temperature heating	Preasurized air	Probes and horizontal collectors	Watersupply and connections
ALMATHERM	PPR CLASSIC S2,5 SDR6 (PN 20)		●	●	●	●		●		
	PPR CLASSIC S3,2 SDR7 (PN 16)	●		●		●		●		
	PPR CLASSIC S5 SDR11 (PN 10)	●	●					●		
	PPR FASER S2,5 SDR6 (PN 20)	●		●		●	●	●		
	PPR FASER S3,2 SDR7 (PN 16)	●	●	●		●		●		
	PPR STABI S3,2 SDR7 STABI (test.PN 20)			●		●	●	●		
	PP-RCT UNI	●●	●	●	●	●		●		
	PP-RCT HOT	●		●●	●	●		●		
	PP-RCT FASER COOL	●	●●	●				●		
	PP-RCT FASER HOT			●●	●●	●●	●	●		
	PP-RCT STABIOXY			●	●	●	●●			
	MULTIPERT AL	●	●	●	●	●	●			
	MULTIPEX AL	●	●	●	●	●	●●			
	Fittings PPR	●●	●●	●●		●●	●●	●		
	Fittings P-PRESS									
	Fittings M-PRESS									
	Fittings M-PUSH									

NEW

PP-RCT

A NEW GENERATION OF DISTRIBUTIONS

A new generation of PP-RCT pipes utilizes superb properties of the PP-RCT material in smooth wall and multi-layer pipes. Compared to the PPR pipes, the PP-RCT material enables to achieve the same or better pressure and thermal endurance with lesser thickness.

ADVANTAGES:

- a flow cross-section is higher by 20 % compared to PPR pipes
- a proven way of connecting by polyfusion welding as in the case of PPR
- a higher range of working temperatures for a given application "HOT" or "COOL"
- a third as high thermal expansivity as in the case of PPR pipes (in the case of PP-RCT FASER and STABIOXY)
- a lifespan of more than 50 years

ALMATHERM PP-RCT pipes come in 5 modifications according to the purpose:

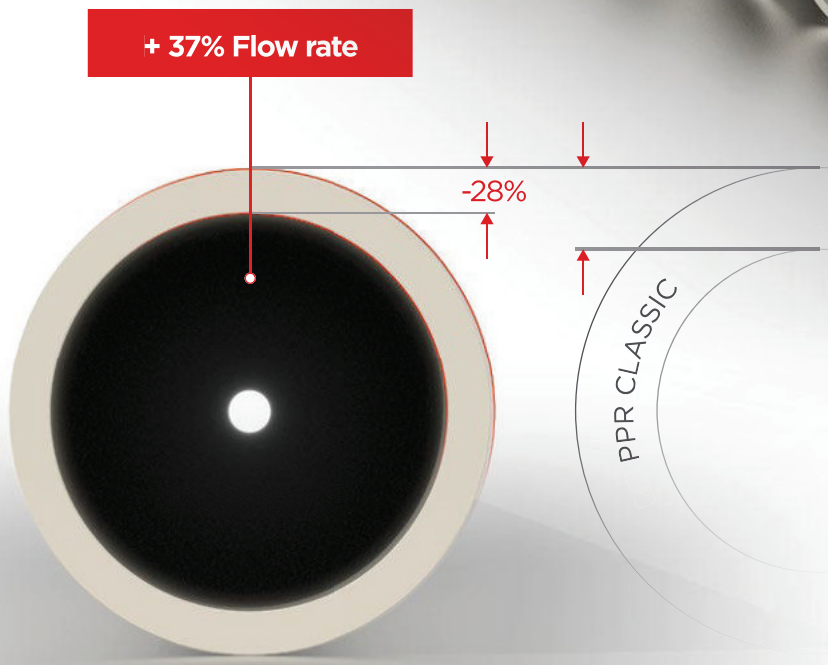
- ALMATHERM PP-RCT HOT
  Suitable for hot water distributions.
  For applications between 20°C/2,0MPa - 70°C/1,0MPa
- ALMATHERM PP-RCT FASER HOT with glass fiber
  Suitable for hot water distributions.
  For applications between 20°C/2,0MPa-70°C/1,0MPa with maximum diameter of D=125 and 20°C/1,6MPa-70°C/0,8MPa for diameters D=160 and higher
- ALMATHERM PP-RCT STABIOXY with Al-oxygen barrier.
  Suitable for high-temperature heating distributions
  For applications up to 70°C/10MPa - 90°C/8MPa
- ALMATHERM PP-RCT UNI
  A universal piping for water and air distributions.
  For applications up to 20°C/1,6MPa-60°C/0,8MPa
- ALMATHERM PP-RCT FASER COOL with glass fiber.
  Suitable for applications
  20°C/1,6 MPa-70°C/0,8MPa with maximum diameter of D=125 and
  20°C/1,0MPa-70°C/0,5MPa for diameters D=160 and higher.

SANITARY FITTINGS
nso
almanit
Hamburg - Germany

PP-RCT UNI ∅16 - ∅250mm

Unique pipe of a new generation PP-RCT

- FLOW RATE HIGHER BY 37%
- HIGHER PRESSURE RESISTANCE
- HEAT RESISTANCE
- PP-RCT – A NEW GENERATION OF POLYPROPYLENE



SANITARY FITTINGS
nso
almanit
Hamburg - Germany

ALMATHERM

PPR Pipes & Fittings

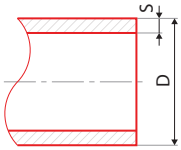
SANITARY FITTINGS
nso
almanit
Hamburg - Germany

ALMATHERM
PPR Pipes & Fittings

PIPES FOR POLYFUSION WELDING

PP-RCT

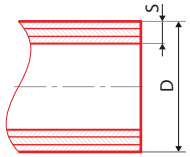
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Suitable for water distribution to 60°C and compressed air For application in systems to 20°C/1,6MPa - 60°C/0,8MPa



						#	#	#	D [mm]	s [mm]	SDR	l [m]
16x2,2	m	160		0,100	0,28	102116 G	102116 GR	102116 W	16	2,2	7	4
20x2,3	m	100		0,139	0,44	102120 G	102120 GR	102120 W	20	2,3	9	4
25x2,8	m	60		0,203	0,73	102125 G	102125 GR	102125 W	25	2,8	9	4
32x2,9	m	40		0,248	1,10	102132 G	102132 GR	102132 W	32	2,9	11	4
40x3,7	m	24		0,420	1,83	102140 G	102140 GR	102140 W	40	3,7	11	4
50x4,6	m	16		0,640	2,75	102150 G	102150 GR	102150 W	50	4,6	11	4
63x5,8	m	12		1,000	4,07	102163 G	102163 GR	102163 W	63	5,8	11	4
75x6,8	m	8		1,440	5,50	102175 G	102175 GR	102175 W	75	6,8	11	4
90x8,2	m	4		2,030	9,17	102190 G	102190 GR	102190 W	90	8,2	11	4
110x10	m	4		3,080	10,31	102110 G	102110 GR	102110 W	110	10,0	11	4
125x11,4	m	4		3,910	12,27		102125 GR		125	11,4	11	4
160x14,6	m	4		6,330	20,10		102160 GR		160	14,6	11	4
200x18,2	m	4		9,808	31,40		102200 GR		200	18,2	11	4
250x22,7	m	4		15,289	49,06		102250 GR		250	22,7	11	4

PP-RCT Faser COOL

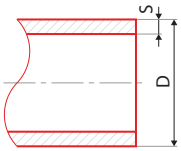
System: AQUA
Material: PP-RCT/GF/PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078, DIN 16962, DIN EN ISO 15874
Details: Suitable for cold water distribution and compressed air for application in systems 20°C/1,6MPa - 70°C/0,8 MPa to D=125 and 20°C/1,0MPa - 70°C/0,5MPa to D=160 even larger



						#	#	#	D [mm]	s [mm]	SDR	l [m]
40x3,7	m	24		0,513	1,83	107340 G	107340 GR		40	3,7	11	4
50x4,6	m	16		0,746	2,75	107350 G	107350 GR		50	4,6	11	4
63x5,8	m	12		1,190	4,07	107363 G	107363 GR		63	5,8	11	4
75x6,8	m	8		1,700	5,50	107375 G	107375 GR		75	6,8	11	4
90x8,2	m	4		2,400	9,17	107390 G	107390 GR		90	8,2	11	4
110x10	m	4		3,400	10,31	107310 G	107310 GR		110	10,0	11	4
125x11,4	m	4		4,430	12,27		129125 GR		125	11,4	11	4
160x9,5	m	6		4,900	12,27		129160 GR		160	9,5	17	4
200x11,9	m	4		7,630	20,10		129200 GR		200	11,9	17	4
250x14,8	m	6		11,900	20,10		129250 GR		250	14,8	17	4

PP-RCT HOT

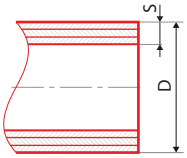
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Suitable for hot water distribution. For application in systems 20°C/2,0MPa - 70°C/1,0MPa



						#	#	#	D [mm]	s [mm]	SDR	l [m]
20x2,8	m	100		0,141	0,44	101120 G	101120 GR		20	2,8	7	4
25x3,5	m	60		0,238	0,73	101125 G	101125 GR		25	3,5	7	4
32x4,4	m	40		0,141	1,10	101132 G	101132 GR		32	4,4	7	4
40x5,5	m	24		0,587	1,83	101140 G	101140 GR		40	5,5	7	4
50x6,9	m	16		0,900	2,75	101150 G	101150 GR		50	6,9	7	4
63x8,6	m	12		1,377	4,07	101163 G	101163 GR		63	8,6	7	4
75x10,3	m	8		1,961	5,50	101175 G	101175 GR		75	10,3	7	4
90x12,3	m	4		2,938	9,17	101190 G	101190 GR		90	12,3	7	4
110x15,1	m	4		4,355	10,31	101210 G	101210 GR		110	15,1	7	4
125x17,1	m	4		5,555	12,27		101225 GR		125	17,1	7	4

PP-RCT FASER HOT

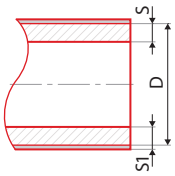
System: AQUA
Material: PP-RCT/GF/PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078, DIN 16962, DIN EN ISO 15874
Details: Suitable for hot water distribution. For application in systems 20°C/2,0MPa - 70°C/1,0MPa to D=125 and 20°C/1,6MPa - 70°C/0,8MPa to D=160 even larger

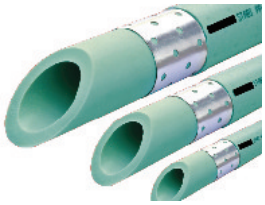


						#	#	#	D [mm]	s [mm]	SDR	l [m]
20x2,8	m	100		0,151	0,44	107220 G	107220 GR		20	2,8	7	4
25x3,5	m	60		0,232	0,73	107225 G	107225 GR		25	3,5	7	4
32x3,6	m	40		0,340	1,10	107232 G	107232 GR		32	3,6	9	4
40x4,5	m	24		0,439	1,83	107240 G	107240 GR		40	4,5	9	4
50x5,6	m	16		0,678	2,75	107250 G	107250 GR		50	5,6	9	4
63x7,1	m	12		0,996	4,07	107263 G	107263 GR		63	7,1	9	4
75x8,4	m	8		1,419	5,50	107275 G	107275 GR		75	8,4	9	4
90x10,1	m	4		2,039	9,17	107290 G	107290 GR		90	10,1	9	4
110x12,3	m	4		3,031	10,31	107210 G	107210 GR		110	12,3	9	4
125x14,0	m	4		5,270	12,27		1072125 GR		125	14,0	9	4
160x14,6	m	4		7,220	20,10		1072160 GR		160	14,6	11	4
200x18,2	m	4		11,250	31,40		1072200 GR		200	18,2	11	4
250x22,7	m	4		17,530	49,06		1072250 GR		250	22,7	11	4

PP-RCT STABIOXY

System: AQUA
Material: PP-RCT/Al/P-RCT
Standard: EN ISO 21003, DIN 4726
Details: Suitable for radiator heating. For application in systems 70°C/0,1MPa - 90°C/0,8MPa

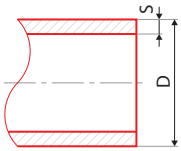




						#	#	#	D [mm]	d [mm]	s [mm]	SDR	l [m]
20x2,8	m	100		0,210	0,44	106120 G	106120 GR		20	22,2	2,8	7	4
25x2,8	m	60		0,310	0,73	106125 G	106125 GR		25	27,2	2,8	9	4
32x3,6	m	40		0,470	1,10	106132 G	106132 GR		32	34,2	3,6	9	4
40x4,5	m	24		0,690	1,83	106140 G	106140 GR		40	42,2	4,5	9	4
50x5,6	m	16		1,040	2,75	106150 G	106150 GR		50	52,3	5,6	9	4
63x7,1	m	12		1,570	4,07	106163 G	106163 GR		63	65,4	7,1	9	4
75x8,4	m	8		2,250	5,50	106175 G	106175 GR		75	77,5	8,4	9	4
90x10,1	m	4		3,370	9,17	106190 G	106190 GR		90	93,0	10,1	9	4
110x12,3	m	4		5,000	10,31	106210 G	106210 GR		110	113,6	12,3	9	4

PPR CLASSIC S2,5 SDR6 (PN 20) 4m

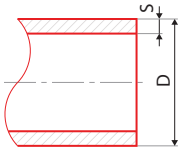
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A 4-m pipe from among the highest pressure range, suitable for hot water distribution systems, applications in high-rise buildings, apartment and panel buildings.



						#	#	#	D [mm]	S [mm]	l [m]
16 × 2,7	m	160		0,11	0,28	101016 G	101016 GR	101016 W	16	2,70	4
20 × 3,4	m	100		0,17	0,44	101020 G	101020 GR	101020 W	20	3,40	4
25 × 4,2	m	60		0,27	0,73	101025 G	101025 GR	101025 W	25	4,20	4
32 × 5,4	m	40		0,43	1,10	101032 G	101032 GR	101032 W	32	5,40	4
40 × 6,7	m	24		0,67	1,83	101040 G	101040 GR	101040 W	40	6,70	4
50 × 8,3	m	16		1,00	2,75	101050 G	101050 GR	101050 W	50	8,30	4
63 × 10,5	m	12		1,65	4,07	101063 G	101016 GR	101016 W	63	10,50	4
75 × 12,5	m	8		2,34	5,50	101075 G	101075 GR	101075 W	75	12,50	4
90 × 15	m	4		3,36	9,17	101090 G	101090 GR	101090 W	90	15,00	4
110 × 18,3	m	4		5,01	10,31	101110 G	101110 GR	101110 W	110	18,30	4

PPR CLASSIC S2,5 SDR6 (PN 20) 3m

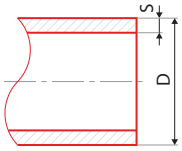
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A 3-m pipe from among the highest pressure range, suitable for hot water distribution systems, applications in high-rise buildings, apartment and panel buildings.



						#	#	#	D [mm]	S [mm]	l [m]
16 × 2,7	m	120		0,11	0,28	101017 G	101017 GR	101017 W	16	2,70	3
20 × 3,4	m	75		0,17	0,44	101021 G	101021 GR	101021 W	20	3,40	3
25 × 4,2	m	45		0,27	0,73	101026 G	101026 GR	101026 W	25	4,20	3
32 × 5,4	m	30		0,43	1,10	101033 G	101033 GR	101033 W	32	5,40	3
40 × 6,7	m	18		0,67	1,83	101041 G	101040 GR	101040 W	40	6,70	3
50 × 8,3	m	12		1,00	2,75	101051 G	101051 GR	101051 W	50	8,30	3
63 × 10,5	m	9		1,65	4,07	101064 G	101063 GR	101063 W	63	10,50	3

PPR CLASSIC S3,2 SDR7 (PN 16) 4m

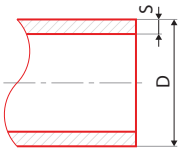
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A universal, most often used 4-m pipe for distribution systems for drinking, cold and hot industrial water of up to 60°C in family houses and apartment buildings.



						#	#	#	D [mm]	S [mm]	l [m]
16 × 2,2	m	160		0,10	0,28	102016 G	102016 GR	102016 W	16	2,20	4
20 × 2,8	m	100		0,15	0,44	102020 G	102020 GR	102020 W	20	2,80	4
25 × 3,5	m	60		0,23	0,73	102025 G	102025 GR	102025 W	25	3,50	4
32 × 4,4	m	40		0,37	1,10	102032 G	102032 GR	102032 W	32	4,40	4
40 × 5,5	m	24		0,58	1,83	102040 G	102040 GR	102040 W	40	5,50	4
50 × 6,9	m	16		0,90	2,75	102050 G	102050 GR	102050 W	50	6,90	4
63 × 8,6	m	12		1,41	4,07	102063 G	102063 GR	102063 W	63	8,60	4
75 × 10,3	m	8		2,00	5,50	102075 G	102075 GR	102075 W	75	10,30	4
90 × 12,3	m	4		2,90	9,17	102090 G	102090 GR	102090 W	90	12,30	4
110 × 15,1	m	4		4,30	10,31	102110 G	102110 GR	102110 W	110	15,10	4

PPR CLASSIC S3,2 SDR7 (PN 16) 3m

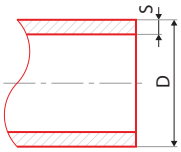
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A universal, most often used 3-m pipe for distribution systems for drinking, cold and hot industrial water of up to 60°C in family houses and apartment buildings.



						#	#	#	D [mm]	S [mm]	l [m]
20 × 2,8	m	75		0,15	0,44	102021 G	102021 GR	102021 W	20	2,80	3
25 × 3,5	m	45		0,23	0,73	102026 G	102026 GR	102026 W	25	3,50	3
32 × 4,4	m	30		0,37	1,10	102032 G	102032 GR	102032 W	32	4,40	3
40 × 5,5	m	18		0,58	1,83	102040 G	102040 GR	102040 W	40	5,50	3
50 × 6,9	m	12		0,90	2,75	102050 G	102050 GR	102050 W	50	6,90	3
63 × 8,6	m	9		1,41	4,07	102063 G	102063 GR	102063 W	63	8,60	3

PPR CLASSIC S5 SDR11 (PN 10) 4m

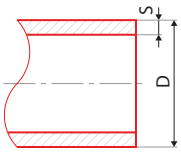
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A 4-m pipe that is designed, thanpcs to its larger inside diameter, mainly for drinking and cold industrial water distribution systems wherever higher flow rates are required.



						#	#	#	D [mm]	S [mm]	l [m]
20 × 2,3	m	100		0,12	0,44	103020 G	103020 GR	103020 W	20	2,30	4
25 × 2,3	m	60		0,16	0,73	103025 G	103025 GR	103025 W	25	2,30	4
32 × 2,9	m	40		0,26	1,10	103032 G	103032 GR	103032 W	32	2,90	4
40 × 3,7	m	24		0,41	1,83	103040 G	103040 GR	103040 W	40	3,70	4
50 × 4,6	m	16		0,64	2,75	103050 G	103050 GR	103050 W	50	4,60	4
63 × 5,8	m	12		1,00	4,07	103063 G	103063 GR	103063 W	63	5,80	4
75 × 6,8	m	8		1,40	5,50	103075 G	103075 GR	103075 W	75	6,80	4
90 × 8,2	m	4		2,03	9,17	103090 G	103090 GR	103090 W	90	8,20	4
110 × 10,0	m	4		3,00	10,31	103110 G	103110 GR	103110 W	110	10,00	4

PPR CLASSIC - PIPE IN COIL

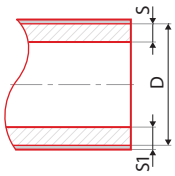
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A pipe packed in 200-m rolls suitable for floor heating systems.



						#	#	#	D [mm]	S [mm]	l [m]
16 × 2,0	m	200		0,09	2,01	105016 G	105016 GR	105016 W	16	2,00	200
20 × 2,0	m	200		0,11	3,14	105020 G	105020 GR	105020 W	20	2,00	200
20 × 2,8	m	200		0,15	3,14	105021 G	105021 GR	105021 W	20	2,80	200
20 × 3,4	m	200		0,17	3,14	105022 G	105022 GR	105022 W	20	3,40	200

PPR STABI S3,2 SDR7 STABI (test.PN 20) 4m

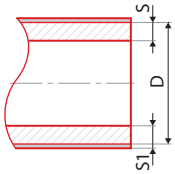
System: AQUA
Material: PP-R
Standard: DIN 16962, DIN EN ISO 15874
Details: A 4-m pipe suitable for hot water distribution systems in lower ceilings, heating and cooling water distribution systems in hot-water heating systems or air-conditioning systems

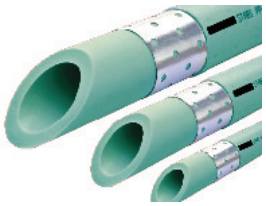


						#	#	#	D [mm]	S [mm]	l [m]
16 × 2,4	m	160		0,17	0,28	106016 G	106016 GR		16	2,40	4
20 × 3,0	m	100		0,21	0,44	106020 G	106020 GR		20	3,00	4
25 × 3,7	m	60		0,31	0,73	106025 G	106025 GR		25	3,70	4
32 × 4,8	m	40		0,47	1,10	106032 G	106032 GR		32	4,80	4
40 × 5,9	m	24		0,69	1,83	106040 G	106040 GR		40	5,90	4
50 × 7,4	m	16		1,04	2,75	106050 G	106050 GR		50	7,40	4
63 × 9,3	m	12		1,57	4,07	106063 G	106063 GR		63	9,30	4
75 × 11,0	m	8		2,25	5,50	106075 G	106075 GR		75	11,00	4
90 × 13,2	m	4		3,37	9,17	106090 G	106090 GR		90	13,20	4
110 × 16,2	m	4		5,00	10,31	106110 G	106110 GR		110	16,20	4

PPR STABI S3,2 SDR7 STABI (test.PN 20) 3m

System: AQUA
Material: PP-R
Standard: DIN 16962, DIN EN ISO 15874
Details: A 3-m pipe suitable for hot water distribution systems in lower ceilings, heating and cooling water distribution systems in hot-water heating systems or air-conditioning systems

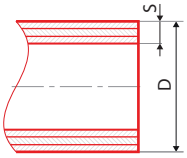




						#	#	#	D [mm]	S [mm]	l [m]
20 × 3,0	m	75		0,21	0,44	106021 G	106021 GR		20	3,00	3
25 × 3,7	m	45		0,31	0,73	106026 G	106026 GR		25	3,70	3
32 × 4,8	m	30		0,47	1,10	106033 G	106033 GR		32	4,80	3
40 × 5,9	m	18		0,69	1,83	106041 G	106041 GR		40	5,90	3
50 × 7,4	m	12		1,04	2,75	106051 G	106051 GR		50	7,40	3
63 × 9,3	m	12		1,57	4,07	106064 G	106064 GR		63	9,30	3
75 × 11,0	m	6		2,25	5,50	106076 G	106076 GR		75	11,00	3
90 × 13,2	m	3		3,37	9,17	106090 G	106090 GR		90	13,20	3

PPR FASER S2,5 SDR6 (PN 20) 4m

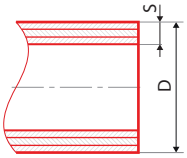
System: AQUA
Material: PP-R
Standard: DIN 16962, DIN EN ISO 15874
Details: A universal 4-m pipe for the most challenging drinking, hot and heating water distribution systems.



						#	#	#	D [mm]	S [mm]	l [m]
20 × 3,4	m	100		0,19	0,44	107020 G	107020 GR	107020 W	20	3,40	4
25 × 4,2	m	60		0,28	0,73	107025 G	107025 GR	107025 W	25	4,20	4
32 × 5,4	m	40		0,45	1,10	107032 G	107032 GR	107032 W	32	5,40	4
40 × 6,7	m	24		0,69	1,83	107040 G	107040 GR	107040 W	40	6,70	4
50 × 8,3	m	16		1,07	2,75	107050 G	107050 GR	107050 W	50	8,30	4
63 × 10,5	m	12		1,74	4,07	107063 G	107063 GR	107063 W	63	10,50	4
75 × 12,5	m	8		2,41	5,50	107075 G	107075 GR	107075 W	75	12,50	4
90 × 15,0	m	4		3,47	9,17	107090 G	107090 GR	107090 W	90	15,00	4
110 × 18,3	m	4		5,17	10,31	107110 G	107110 GR	107110 W	110	18,30	4

PPR FASER S2,5 SDR6 (PN 20) 3m

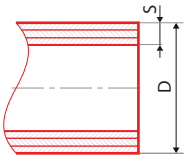
System: AQUA
Material: PP-R
Standard: DIN 16962, DIN EN ISO 15874
Details: A universal 3-m pipe for the most challenging drinking, hot and heating water distribution systems.



						#	#	#	D [mm]	S [mm]	l [m]
20 × 3,4	m	75		0,19	0,44	107021 G	107021 GR	107021 W	20	3,40	3
25 × 4,2	m	45		0,28	0,73	107026 G	107026 GR	107026 W	25	4,20	3
32 × 5,4	m	30		0,45	1,10	107033 G	107033 GR	107033 W	32	5,40	3
40 × 6,7	m	18		0,69	1,83	107041 G	107041 GR	107041 W	40	6,70	3
50 × 8,3	m	12		1,07	2,75	107051 G	107051 GR	107051 W	50	8,30	3
63 × 10,5	m	9		1,74	4,07	107064 G	107064 GR	107064 W	63	10,50	3

PPR FASER S3,2 SDR7 (PN 16) 4m

System: AQUA
Material: PP-R
Standard: DIN 16962, DIN EN ISO 15874
Details: Most often used 4-m pipe for distribution systems for drinking, cold and hot water of up to 60°C. It has 3 times lower thermal expansion.



						#	#	#	D [mm]	S [mm]	l [m]
20 × 2,8	m	100		0,15	0,44	107022 G	107022 GR	107022 W	20	2,80	4
25 × 3,5	m	60		0,23	0,73	107027 G	107027 GR	107027 W	25	3,50	4
32 × 4,4	m	40		0,37	1,10	107034 G	107034 GR	107034 W	32	4,40	4
40 × 5,5	m	24		0,55	1,83	107042 G	107042 GR	107042 W	40	5,50	4
50 × 6,9	m	16		0,89	2,75	107052 G	107052 GR	107052 W	50	6,90	4
63 × 8,6	m	12		1,44	4,07	107065 G	107065 GR	107065 W	63	8,60	4
75 × 10,3	m	8		2,02	5,50	107077 G	107077 GR	107077 W	75	10,30	4
90 × 12,3	m	4		2,88	9,17	107092 G	107092 GR	107092 W	90	12,30	4
110 × 15,1	m	4		4,29	10,31	107112 G	107112 GR	107112 W	110	15,10	4

SANITARY FITTINGS
nso
almanit
Hamburg - Germany

ALMATHERM
PPR Pipes & Fittings

SANITARY FITTINGS
NSO
almanit
Hamburg - Germany

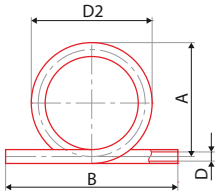
ALMATHERM

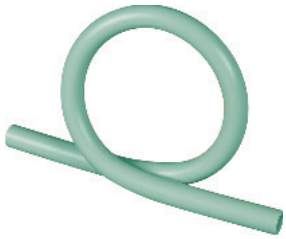
PPR Pipes & Fittings

ALMATHERM PLASTIC FITTINGS

PPR compensation pipe

System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Preventing deformations in a piping system caused by thermal expansion.

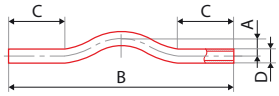




						#	#	#	D [mm]	D2 [mm]	A [mm]	B [mm]
16	pcs	10	1	0,07	1,60	232016 G	232016 GR	232016 W	16	188,0	180	290
20	pcs	6	1	0,11	1,60	232020 G	232020 GR	232020 W	20	210,0	200	300
25	pcs	5	1	0,21	3,20	232025 G	232025 GR	232025 W	25	217,5	205	370
32	pcs	4	1	0,43	8,00	232032 G	232032 GR	232032 W	32	231,0	215	400
40	pcs	2	1	0,67	8,00	232040 G	232040 GR	232040 W	40	295,0	275	420

PPR crossover

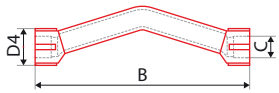
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For pipe crossing in case of branching, connection to a fitting.



						#	#	#	D [mm]	A [mm]	B [mm]	C [mm]
16	pcs	180	1	0,03	0,24	233016 G	233016 GR	233016 W	16	35	380	100
20	pcs	100	1	0,07	0,32	233020 G	233020 GR	233020 W	20	42	400	110
25	pcs	50	1	0,09	0,64	233025 G	233025 GR	233025 W	25	30	400	100
32	pcs	35	1	0,16	0,80	233032 G	233032 GR	233032 W	32	35	400	90
40	pcs	20	1	0,33	1,60	233040 G	233040 GR	233040 W	40	35	400	90

PPR crossover with socket

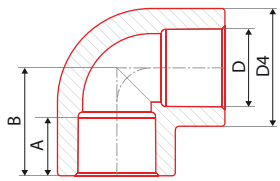
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For pipe crossing in case of branching, connection to a pipe.



						#	#	#	D4 [mm]	B [mm]	C [mm]
20	pcs	100	1	0,07	0,24	233120 G	233120 GR	233120 W	31	188	20
25	pcs	50	1	0,09	0,32	233125 G	233125 GR	233125 W	37	198	25

PPR elbow 90°

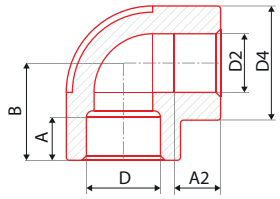
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for changing the pipeline direction.



						#	#	#				
16	pcs	200	50	0,01	0,03	202016 G	202016 GR	202016 W	16	24	13,3	22,0
20	pcs	300	50	0,02	0,07	202020 G	202020 GR	202020 W	20	29	14,5	25,5
25	pcs	150	25	0,03	0,12	202025 G	202025 GR	202025 W	25	37	16,0	29,0
32	pcs	80	10	0,06	0,24	202032 G	202032 GR	202032 W	32	46	18,1	34,2
40	pcs	40	4	0,11	0,53	202040 G	202040 GR	202040 W	40	60	20,5	41,5
50	pcs	30	2	0,19	0,96	202050 G	202050 GR	202050 W	50	73	23,5	48,5
63	pcs	10	2	0,37	1,92	202063 G	202063 G4	202063 W	63	94	27,4	59,2
75	pcs	6	1	0,52	3,20	202075 G	202075 GR	202075 W	75	108	31,0	67,7
90	pcs	6	1	0,79	4,80	202090 G	202090 GR	202090 W	90	126	35,5	78,4
110	pcs	3	1	1,38	5,50	202110 G	202110 GR	202110 W	110	151	41,5	98,0
125	pcs	1	1				202125 GR		125	165	40,0	124,0

PPR elbow 90° reduced

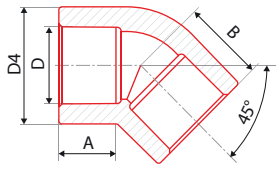
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for changing the pipeline direction and dimension.



						#	#	#	D [mm]	D2 [mm]	D4 [mm]	A [mm]	B [mm]
25	pcs	50	1	0,09	0,32	202025 G	202025 GR	202025 W	25	20	36,3	16	32,2

PPR elbow 45°

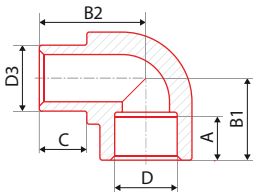
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for changing the pipeline direction.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]
16	pcs	200	50	0,01	0,03	203016 G	203016 GR	203016 W	16	24,3	13,3	17,5
20	pcs	300	50	0,02	0,07	203020 G	203020 GR	203020 W	20	29,1	14,5	19,5
25	pcs	150	25	0,03	0,12	203025 G	203025 GR	203025 W	25	36,8	16,0	22,0
32	pcs	80	10	0,06	0,24	203032 G	203032 GR	203032 W	32	46,0	18,1	25,5
40	pcs	40	4	0,11	0,53	203040 G	203040 GR	203040 W	40	59,0	20,5	30,0
50	pcs	30	2	0,19	0,96	203050 G	203050 GR	203050 W	50	74,85	23,5	34,5
63	pcs	10	2	0,37	1,92	203063 G	203063 G4	203063 W	63	94,0	27,4	44,5
75	pcs	6	1	0,52	3,20	203075 G	203075 GR	203075 W	75	99,0	30,0	48,0
90	pcs	6	1	0,79	4,80	203090 G	203090 GR	203090 W	90	120	33,0	54,1
110	pcs	3	1	1,38	5,50	203110 G	203110 GR	203110 W	110	148	37,0	69,0
125	pcs	1	1				203125 GR		125	165	40,0	77,0

PPR elbow 90° internal / external

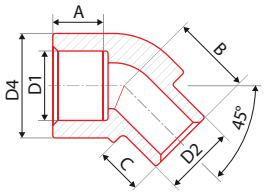
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for changing the pipeline direction.



						#	#	#	D, D3 [mm]	A [mm]	B1 [mm]	B2 [mm]	C [mm]
20	pcs	400	50	0,01	0,05	204020 G	204020 GR	204020 W	20	14,5	25,6	29,0	14,5
25	pcs	200	25	0,03	0,14	204025 G	204025 GR	204025 W	25	16,0	31,5	35,4	14,8
32	pcs	100	20	0,07	0,22	204032 G	204032 GR	204032 W	32	18,0	36,5	42,2	16,0

PPR elbow 45° internal / external

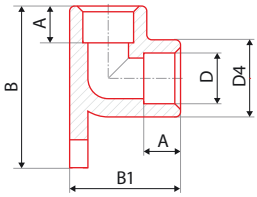
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for changing the pipeline direction.



						#	#	#	D1 [mm]	D2 [mm]	D4 [mm]	A [mm]	C [mm]
16	pcs	280	20	0,01	0,04	205016 G	205016 GR	205016 W	16	16	24,2	13,3	12,5
20	pcs	200	20	0,02	0,07	205020 G	205020 GR	205020 W	20	20	29,5	14,5	14,8

PPR elbow 90° for wall mounting welding

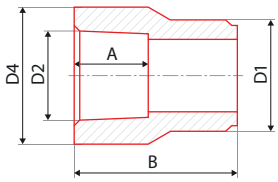
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Fixing fitting with tap connector for mixers.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	B1 [mm]
20	pcs	60	10	0,02	0,16	206016 G	206016 GR	206016 W	20	30,2	14,5	48,5	43,5
25	pcs	40	10	0,04	0,32	206020 G	206020 GR	206020 W	25	35,3	16,0	76,2	51,0

PPR reduction internal / external

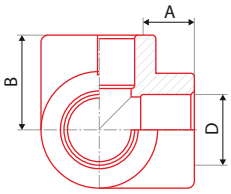
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for dimension change of pipeline.



						#	#	#	D1 [mm]	D2 [mm]	D4 [mm]	A [mm]	B [mm]
20 × 16	pcs	400	50	0,01	0,02	210020016 G	210020016 GR	210020016 W	20	16	24,0	13,3	28,4
25 × 16	pcs	300	50	0,01	0,03	210025016 G	210025016 GR	210025016 W	25	16	30,1	13,3	31,8
25 × 20	pcs	400	50	0,01	0,05	210025020 G	210025020 GR	210025020 W	25	20	30,1	14,5	34,2
32 × 20	pcs	300	10	0,03	0,13	210032020 G	210032020 GR	210032020 W	32	20	33,8	14,5	35,4
32 × 25	pcs	200	10	0,03	0,12	210032025 G	210032025 GR	210032025 W	32	25	36,0	16,0	38,9
40 × 20	pcs	180	10	0,02	0,13	210040020 G	210040020 GR	210040020 W	40	20	40,0	14,5	41,5
40 × 25	pcs	180	10	0,03	0,16	210040025 G	210040025 GR	210040025 W	40	25	37,9	16,0	43,5
40 × 32	pcs	120	10	0,04	0,24	210040032 G	210040032 GR	210040032 W	40	32	47,3	18,1	50,7
50 × 32	pcs	80	10	0,05	0,27	210050032 G	210050032 GR	210050032 W	50	32	50,3	18,1	50,6
50 × 40	pcs	60	10	0,05	0,30	210050040 G	210050040 GR	210050040 W	50	40	60,5	20,5	49,8
63 × 32	pcs	60	10	0,07	0,32	210063032 G	210063032 GR	210063032 W	63	32	48,2	18,1	43,5
63 × 40	pcs	50	10	0,08	0,40	210063040 G	210063040 GR	210063040 W	63	40	59,7	20,5	52,0
63 × 50	pcs	40	10	0,12	0,60	210063050 G	210063050 GR	210063050 W	63	50	74,3	23,5	62,0
75 × 40	pcs	20	5	0,12	0,60	210075040 G	210075040 GR	210075040 W	75	40	93,2	20,5	64,5
75 × 50	pcs	20	5	0,12	0,80	210075050 G	210075050 GR	210075050 W	75	50	93,2	23,5	57,5
75 × 63	pcs	24	2	0,21	1,37	210075063 G	210075063 GR	210075063 W	75	63	93,2	27,4	72,2
90 × 63	pcs	25	1	0,24	0,98	210090063 G	210090063 GR	210090063 W	90	63	94,8	27,4	70,8
90 × 75	pcs	20	1	0,27	2,40	210090075 G	210090075 GR	210090075 W	90	75	106,0	31,0	73,2
110 × 75	pcs	1	1	0,30	1,32	210110075 G	210110075 GR	210110075 W	110	75	125,8	30,0	64,0
110 × 90	pcs	9	1	0,50	2,80	210110090 G	210110090 GR	210110090 W	110	90	125,8	35,5	91,7
125 × 110	pcs	1	1				210125110 GR		125	110	134,6	85,0	225

PPR three-way elbow

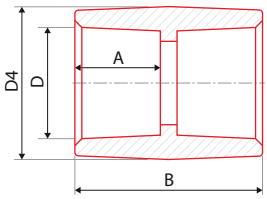
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for branching the pipeline.



						#	#	#	D [mm]	A [mm]	B [mm]
20	pcs	50	10	0,03	0,13	242020 G	242020 GR	242020 W	20	14,5	26,8
25	pcs	50	10	0,04	0,17	242025 G	242025 GR	242025 W	25	16,0	29,5
32	pcs	20	5	0,05	0,20	242032 G	242032 GR	242032 W	32	18,0	35,0

PPR socket

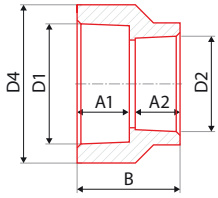
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for pipe connection.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]
16	pcs	300	50	0,01	0,03	201016 G	201016 GR	201016 W	16	24,10	13,3	29,6
20	pcs	400	50	0,01	0,05	201020 G	201020 GR	201020 W	20	29,10	14,5	32,0
25	pcs	200	25	0,03	0,10	201025 G	201025 GR	201025 W	25	36,70	16,0	35,5
32	pcs	100	10	0,04	0,19	201032 G	201032 GR	201032 W	32	46,20	18,1	38,3
40	pcs	100	10	0,06	0,24	201040 G	201040 GR	201040 W	40	59,50	20,5	45,4
50	pcs	40	4	0,11	0,60	201050 G	201050 GR	201050 W	50	73,00	23,5	50,8
63	pcs	30	2	0,19	0,87	201063 G	201063 GR	201063 W	63	90,30	27,4	58,5
75	pcs	15	1	0,27	1,92	201075 G	201075 GR	201075 W	75	108,5	31,0	66,5
90	pcs	10	1	0,42	2,40	201090 G	201090 GR	201090 W	90	127,3	35,5	73,6
110	pcs	4	1	0,67	2,80	201110 G	201110 GR	201110 W	110	152,7	41,5	87,2
125	pcs	1	1				201250 GR		125	165,0	40,0	90,0

PPR reduction

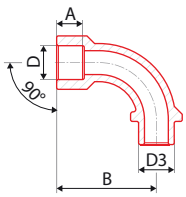
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for dimension change of pipeline.



						#	#	#	D1 [mm]	D2 [mm]	D4 [mm]	A1/A2 [mm]	B [mm]
20 × 16	pcs	200	50	0,01	0,05	209020016 G	209020016 GR	209020016 W	20	16	29,0	14,5/13,3	33,0
25 × 20	pcs	300	50	0,02	0,11	209025020 G	209025020 GR	209025020 W	25	20	36,7	16,0/14,5	34,3
32 × 20	pcs	180	10	0,02	0,13	209032020 G	209032020 GR	209032020 W	32	20	46,3	18,1/14,5	35,0
32 × 25	pcs	150	10	0,03	0,13	209032025 G	209032025 GR	209032025 W	32	25	47,10	18,1/16,0	33,0
40 × 32	pcs	order equivavelnt adaptor inner / outer 63 x 32											
50 × 40	pcs	40	4	0,09	0,60	209050040 G	209050040 GR	209050040 W	50	40		23,5/20,5	47,0
63 × 50	pcs	24	2	0,17	0,80	209063050 G	209063050 GR	209063050 W	63	50	93,20	27,4/23,5	54,0

PPR bend

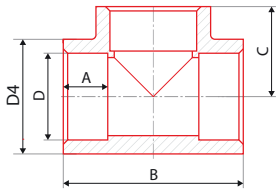
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For change of direction with lower pressure losses.



						#	#	#	D [mm]	D3 [mm]	A [mm]	C [mm]
20	pcs	100	10	0,03	0,12	241020 G			20	20	13	56

PPR tee

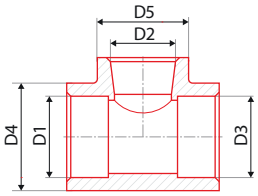
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for branching the pipeline.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	C [mm]
16	pcs	150	50	0,02	0,08	208016 G	208016 GR	208016 W	16	24,6	13,3	44	23,0
20	pcs	160	20	0,03	0,12	208020 G	208020 GR	208020 W	20	29,0	14,5	51	25,5
25	pcs	120	20	0,04	0,24	208025 G	208025 GR	208025 W	25	36,5	16,0	59	31,4
32	pcs	60	10	0,08	0,40	208032 G	208032 GR	208032 W	32	45,3	18,1	71	35,0
40	pcs	48	4	0,13	0,96	208040 G	208040 GR	208040 W	40	58,0	20,5	83	41,5
50	pcs	22	2	0,25	1,60	208050 G	208050 GR	208050 W	50	74,0	23,5	99	49,0
63	pcs	9	1	0,46	2,74	208063 G	208063 GR	208063 W	63	93,0	27,4	120	60,0
75	pcs	6	1	0,62	3,20	208075 G	208075 GR	208075 W	75	108,0	31,0	137	68,5
90	pcs	5	1	0,99	4,80	208090 G	208090 GR	208090 W	90	128,5	35,5	163	80,5
110	pcs	2	1	1,78	5,50	208110 G	208110 GR	208110 W	110	152,6	41,5	186	97,0
125	pcs	1	1				208125 GR		125	165,0	40,0	248	124

PPR tee reduced

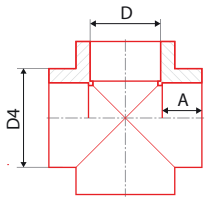
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for branching the pipeline.



						#	#	#	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]
20 × 16 × 20	pcs	100	10	0,03	0,10	212020016 G	212020016 GR	212020016 W	20	16	20	28,3	24,1
20 × 25 × 20	pcs	100	25	0,03	0,24	212020025 G	212020025 GR	212020025 W	20	25	20	28,3	38,0
25 × 20 × 20	pcs	50	10	0,05	0,24	212025021 G	212025021 GR	212025021 W	25	20	20	37,5	31,2
25 × 20 × 25	pcs	120	20	0,04	0,24	212025020 G	212025020 GR	212025020 W	25	20	25	36,6	30,2
32 × 20 × 32	pcs	90	10	0,07	0,38	212032020 G	212032020 GR	212032020 W	32	20	32	46,0	30,5
32 × 25 × 32	pcs	80	10	0,07	0,38	212032025 G	212032025 GR	212032025 W	32	25	32	45,6	38,0
40 × 20 × 40	pcs	60	10	0,09	0,46	212040020 G	212040020 GR	212040020 W	40	20	40	57,2	30,0
40 × 25 × 40	pcs	50	10	0,13	0,64	212040025 G	212040025 GR	212040025 W	40	25	40	57,5	38,0
40 × 32 × 40	pcs	50	10	0,13	0,64	212040032 G	212040032 GR	212040032 W	40	32	40	57,5	46,5
50 × 25 × 50	pcs	40	4	0,18	0,96	212050025 G	212050025 GR	212050025 W	50	25	50	73,0	37,2
50 × 32 × 50	pcs	30	2	0,19	0,96	212050032 G	212050032 GR	212050032 W	50	32	50	73,5	49,0
50 × 40 × 50	pcs	14	2	0,21	0,96	212050040 G	212050040 GR	212050040 W	50	40	50	75,5	61,0
63 × 32 × 63	pcs	10	2	0,35	1,92	212063032 G	212063032 GR	212063032 W	63	32	63	93,0	49,0
63 × 40 × 63	pcs	10	2	0,34	1,92	212063040 G	212063040 GR	212063040 W	63	40	63	93,5	60,0
63 × 50 × 63	pcs	10	2	0,39	1,92	212063050 G	212063050 GR	212063050 W	63	50	63	93,0	74,2
90 × 63 × 90	pcs	5	1	0,77	4,80	212090063 G	212090063 GR	212090063 W	90	63	90	126,3	95,0
90 × 75 × 90	pcs	5	1	0,85	4,80	212090075 G	212090075 GR	212090075 W	90	75	90	127,3	106,7
125 × 75 × 125	pcs	1	1				212125075 GR		125	75	125	165,0	100,0
125 × 90 × 125	pcs	1	1				212125090 GR		125	90	125	165,0	120,0
125 × 110 × 125	pcs	1	1				212125110 GR		125	110	125	165,0	148,0

PPR cross piece

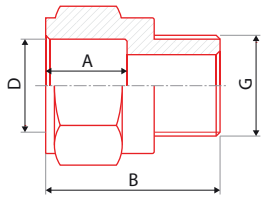
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for branching the pipeline.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]
20	pcs	100	10	0,03	0,16	235020 G	235020 GR	235020 W	20	31	14,5	51,0
25	pcs	100	10	0,04	0,24	235025 G	235025 GR	235025 W	25	38	16,0	59,2
32	pcs	50	10	0,06	0,32	235032 G	235032 GR	235032 W	32	42	18,0	64,0

PPR reducing sleeve with plastic male thread

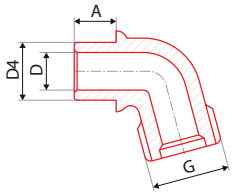
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A fitting for temporary threaded connection.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
20 × 1/2"	pcs	300	20	0,01	0,03	213020 G	213020 GR	213020 W	20	30,8	14,5	34,5	1/2"
20 × 3/4"	pcs	100	20	0,02	0,04	213021 G	213021 GR	213021 W	20	36,4	14,5	44,5	3/4"
25 × 3/4"	pcs	100	20	0,02	0,05	213025 G	213025 GR	213025 W	25	40,5	16,0	45,0	3/4"
32 × 1"	pcs	100	10	0,03	0,10	213032 G	213032 GR	213032 W	32	50,0	18,1	55,0	1"
40 × 5/4"	pcs	60	10	0,07	0,20	213040 G	213040 GR	213040 W	40	68,2	20,5	56,8	5/4"
50 × 6/4"	pcs	40	10	0,12	0,35	213050 G	213050 GR	213050 W	50	84,8	23,5	65,0	6/4"
63 × 2"	pcs	20	2	0,22	0,50	213063 G	213063 GR	213063 W	63	107,0	27,4	75,0	2"

PPR tap elbow for welding internal

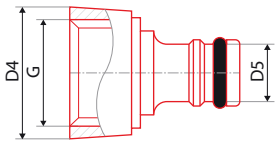
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A fitting for temporary threaded connection.



						#	#	#	D [mm]	D4 [mm]	A [mm]	G [mm]
20 × 3/4"	pcs	150	10	0,02	0,08	207020 G	207020 GR	207020 W	20	23,0	14,5	3/4"
25 × 1"	pcs	100	10	0,03	0,10	207025 G	207025 GR	207025 W	25	28,5	16,0	1"

PPR threaded tap connector (fast)

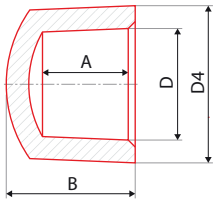
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A connecting fitting for garden irrigation systems.



						#	#	#	D4 [mm]	D5 [mm]	G [mm]
20 × 3/4"	pcs	250	50	0,01	0,05	281020 G	281020 GR	281020 W	32,7	15,6	3/4"
25 × 1"	pcs	250	50	0,01	0,08	281020 G	281020 GR	281020 W	38,6	15,6	1"

PPR blinding

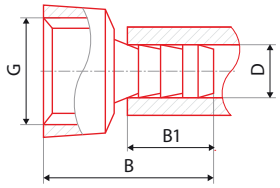
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For permanent or temporary blinding of a branch.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]
16	pcs	500	50	0,01	0,02	229016 G	229016 GR	229016 W	16	23,5	13,3	18,5
20	pcs	300	20	0,01	0,04	229020 G	229020 GR	229020 W	20	30,3	14,5	21,0
25	pcs	200	20	0,01	0,05	229025 G	229025 GR	229025 W	25	37,0	16,0	25,0
32	pcs	120	10	0,03	0,12	229032 G	229032 GR	229032 W	32	46,0	18,1	31,0
40	pcs	60	10	0,05	0,24	229040 G	229040 GR	229040 W	40	57,3	20,5	32,5
50	pcs	60	4	0,09	0,30	229050 G	229050 GR	229050 W	50	73,5	23,5	41,0
63	pcs	30	2	0,15	0,40	229063 G	229063 GR	229063 W	63	89,3	27,4	46,0
75	pcs	5	1	0,26	0,50	229075 G	229075 GR	229075 W	75	107,0	30,0	60,0
90	pcs	5	1	0,42	0,60	229090 G	229090 GR	229090 W	90	127,0	33,0	69,0
110	pcs	1	1	0,53	0,70	229110 G	229110 GR	229110 W	110	151,3	37,0	79,0
125	pcs	1	1				229125 GR		125	165,0	40,0	87,0

PPR threaded tap connector

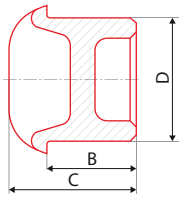
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A connecting fitting for garden irrigation systems.



						#	#	#	D [mm]	B [mm]	B1 [mm]	G [mm]
20 × 3/4"	pcs	450	50	0,01	0,05	280020034 G	280020034 GR	280020034 W	20	41,1	24,0	3/4"
25 × 1"	pcs	300	25	0,01	0,08	280025001 G	280025001 GR	280025001 W	25	46,0	27,4	1"

PPR blinding internal

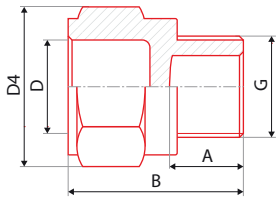
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For permanent or temporary blinding of a branch.



						#	#	#	D [mm]	B [mm]	C [mm]
20	pcs	160	40	0,01	0,04	229021 G	229021 GR	229021 W	20	23,5	14,5
25	pcs	200	50	0,01	0,06	229026 G	229026 GR	229026 W	25	29,0	16,0

PPR pressure plug short

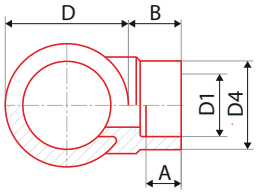
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For protection against mechanic impurities, non-pressure fitting.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
1/2"	pcs	400	50	0,01	0,04	25300000 G	25300000 GR	25300000 W	20	30,8	14,5	34,5	1/2"

PPR all plastic weld in saddle

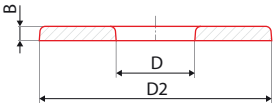
System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For additional branches from existing pipeline.



						#	#	#	D [mm]	D1 [mm]	D4 [mm]	A [mm]	B [mm]
20	pcs	160	40	0,01	0,04	238063032 G	238063032 GR	238063032 W	63	32	46	18	27
25	pcs	200	50	0,01	0,06	238075032 G	238075032 GR	238075032 W	75	32	46	18	27
20	pcs	160	40	0,01	0,04	238090032 G	238090032 GR	238090032 W	90	32	46	18	27
25	pcs	200	50	0,01	0,06	238110032 G	238110032 GR	238110032 W	110	32	46	18	25,7
20	pcs	160	40	0,01	0,04		238125020 GR		125	20	28,3	18	29
25	pcs	200	50	0,01	0,06		238125025 GR		125	25	37,5	18	29
20	pcs	160	40	0,01	0,04		238125032 GR		125	32	46,0	18	35
25	pcs	200	50	0,01	0,06		238125040 GR		125	40	57,2	18	38
20	pcs	160	40	0,01	0,04		238125050 GR		125	50	67,0	18	39
25	pcs	200	50	0,01	0,06		238125063 GR		125	63	93,0	18	45

PR washer

System: AQUA
Material: PPR
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Delimitation of strengthening distribution within the installation in core housing.



						#	#	#	D [mm]	D2 [mm]	B [mm]
66 × 22	pcs	300	1	0,01	0,01	251000000	251000000	251000000	21,3	64,8	4,3

PPR pressure plug long

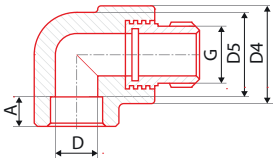
System: AQUA
Material: PPR
Standard: -
Details: Temporary closure of threaded fittings for pressure test.

						#	#	#		
1/2"	pcs	120	10	0,02	0,14	914060000			blue	
1/2"	pcs	120	10	0,02	0,14		914050000		red	
1/2"	pcs	120	10	0,02	0,12			914070000	black ECO	

THREADED FITTINGS

PPR elbow 90° with metal female thread

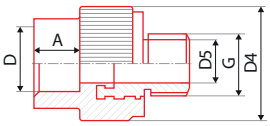
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	G [mm]
16 × 1/2"	pcs	120	10	0,07	0,16	216016 G	216016 GR	216016 W	16	39,0	30,4	13,5	1/2"
20 × 1/2"	pcs	70	10	0,09	0,16	216020 G	216020 GR	216020 W	20	35,0	30,8	14,5	1/2"
20 × 3/4	pcs	50	10	0,14	0,32	216021 G	216021 GR	216021 W	20	45,5	30,2	14,5	3/4"
25 × 1/2"	pcs	60	10	0,13	0,32	216026 G	216026 GR	216026 W	25	37,5	36,0	16,0	1/2"
25 × 3/4"	pcs	40	10	0,15	0,32	216025 G	216025 GR	216025 W	25	45,7	36,5	16,0	3/4"
32 × 1"	pcs	40	5	0,22	0,60	216032 G	216032 GR	216032 W	32	56,6	49,0	18,1	1"

PPR reducing sleeve with metal male thread

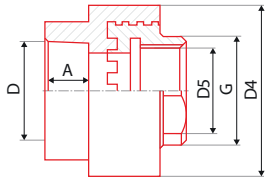
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	G [mm]
16 × 1/2"	pcs	100	10	0,09	0,10	215016 G	215016 GR	215016 W	16	36,0	32,3	13,3	1/2"
20 × 1/2"	pcs	100	10	0,08	0,10	215020 G	215020 GR	215020 W	20	34,3	29,9	14,5	1/2"
20 × 3/4"	pcs	70	10	0,14	0,16	215021 G	215021 GR	215021 W	20	41,3	29,4	14,5	3/4"
25 × 1/2"	pcs	50	10	0,10	0,15	215026 G	215026 GR	215026 W	25	35,2	35,5	16,0	1/2"
25 × 3/4"	pcs	60	10	0,14	0,16	215025 G	215025 GR	215025 W	25	42,4	36,2	16,0	3/4"
32 × 1"	pcs	80	10	0,19	0,27	215032 G	215032 GR	215032 W	32	50,6	46,3	18,1	1"
40 × 5/4"	pcs	40	4	0,31	0,46	215040 G	215040 GR	215040 W	40	66,8	59,2	20,5	5/4"
50 × 6/4"	pcs	20	4	0,34	0,69	215050 G	215050 GR	215050 W	50	67,4	74,5	23,5	6/4"
63 × 2"	pcs	12	1	0,73	1,37	215063 G	215063 GR	215063 W	63	85,8	92,0	27,4	2"
75 × 2,5"	pcs	9	1	1,11	2,74	215075 G	215075 GR	215075 W	75	106,0	106,8	31,0	2,5"
90 × 3"	pcs	6	1	1,64	3,20	215090 G	215090 GR	215090 W	90	123,0	126,0	35,5	3"
125 × 5"	pcs	1	1				215125 GR		125	168,0	206	40	5"

PPR reducing sleeve with metal female thread

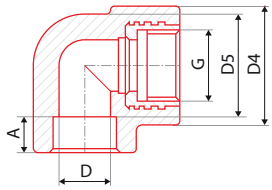
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	G [mm]
16 × 1/2"	pcs	100	10	0,06	0,10	217016 G	217016 GR	217016 G	16	39,2	32,2	13,3	1/2"
20 × 1/2"	pcs	100	10	0,06	0,10	217020 G	217020 GR	217020 G	20	40,0	30,0	14,5	1/2"
20 × 3/4"	pcs	70	10	0,11	0,16	217021 G	217021 GR	217021 G	20	45,5	29,3	14,5	3/4"
25 × 1/2"	pcs	100	10	0,06	0,16	217026 G	217026 GR	217026 G	20	39,5	36,0	16,0	1/2"
25 × 3/4"	pcs	60	10	0,10	0,16	217025 G	217025 GR	217025 G	25	45,4	36,0	16,0	3/4"
32 × 1"	pcs	60	10	0,18	0,27	217032 G	217032 GR	217032 G	32	57,5	46,5	18,1	1"
40 × 5/4"	pcs	25	5	0,31	0,46	217040 G	217040 GR	217040 G	40	76,8	60,3	20,5	5/4"
50 × 6/4"	pcs	20	2	0,37	0,69	217050 G	217050 GR	217050 G	50	82,7	74,3	23,5	6/4"
63 × 2"	pcs	10	1	0,66	1,37	217063 G	217063 GR	217063 G	63	107,0	94,0	27,4	2"
125 × 5"	pcs	1	1				217125 GR		125	206,0	168,0	40,0	5"

PPR elbow 90°
with metal female thread

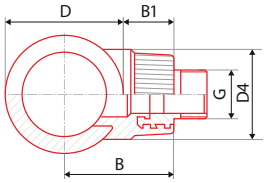
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.

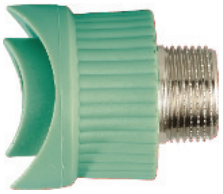


						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	G [mm]
16 × 1/2"	pcs	150	10	0,07	0,16	218016 G	218016 GR	218016 W	16	39,0	30,2	13,5	1/2"
20 × 1/2"	pcs	80	10	0,06	0,16	218020 G	218020 GR	218020 W	20	35,0	29,8	14,5	1/2"
20 × 3/4	pcs	50	10	0,13	0,32	218021 G	218021 GR	218021 W	20	45,5	30,0	14,5	3/4"
25 × 1/2"	pcs	60	10	0,10	0,32	218026 G	218026 GR	218026 W	25	37,5	36,4	16,0	1/2"
25 × 3/4"	pcs	50	10	0,12	0,32	218025 G	218025 GR	218025 W	25	45,7	36,0	16,0	3/4"
32 × 1"	pcs	40	5	0,20	0,60	218032 G	218032 GR	218032 W	32	56,6	49,0	18,1	1"

PPR weld in saddle
with metal male thread

System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline, for additional branches.

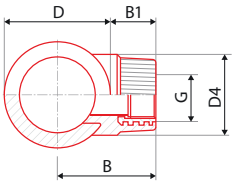




						#	#	#	D [mm]	D4 [mm]	B [mm]	B1 [mm]	G [mm]
63 × 3/4"	pcs	120	10	0,11	0,17	237063032 G	237063032 GR	237063032 W	63		58,5	27	3/4"
75 × 3/4"	pcs	120	10	0,11	0,17	237075032 G	237075032 GR	237075032 W	75		64,5	27	3/4"
90 × 3/4"	pcs	120	10	0,11	0,17	237090032 G	237090032 GR	237090032 W	90		72,0	27	3/4"
125 × 25 × 1/2"	pcs	1	1				237125025 GR		125			43	1/2"
125 × 32 × 3/4"	pcs	1	1				237125032 GR		125			50	3/4"
125 × 40 × 1"	pcs	1	1				237125040 GR		125			56	1"
125 × 40 × 5/4"	pcs	1	1				237125041 GR		125			58	5/4"
125 × 50 × 5/4"	pcs	1	1				237125050 GR		125			59	5/4"
125 × 50 × 6/4"	pcs	1	1				237125051 GR		125			59	6/4"
125 × 63 × 2"	pcs	1	1				237125063 GR		125			70	2"

PPR weld in saddle
with metal female thread

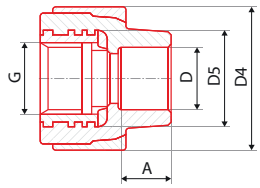
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline, for additional branches.



						#	#	#	D [mm]	D4 [mm]	B [mm]	B1 [mm]	G [mm]
63 × 3/4"	pcs	120	10	0,08	0,17	236063032 G	236063032 GR	236063032 W	63		58,5	27	3/4"
75 × 3/4"	pcs	120	10	0,08	0,17	236075032 G	236075032 GR	236075032 W	75		64,5	27	3/4"
90 × 3/4"	pcs	120	10	0,08	0,17	236090032 G	236090032 GR	236090032 W	90		72,0	27	3/4"
125 × 25 × 1/2"	pcs	1	1				236125025 GR		125			43	1/2"
125 × 32 × 3/4"	pcs	1	1				236125032 GR		125			50	3/4"
125 × 40 × 1"	pcs	1	1				236125040 GR		125			38	1"
125 × 40 × 5/4"	pcs	1	1				236125041 GR		125			38	5/4"
125 × 50 × 5/4"	pcs	1	1				236125050 GR		125			39	5/4"
125 × 50 × 6/4"	pcs	1	1				236125051 GR		125			39	6/4"
125 × 63 × 2"	pcs	1	1				236125063 GR		125			45	2"

PPR reducing sleeve
with metal female thread with cross

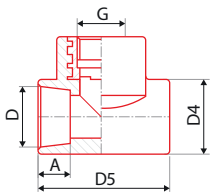
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	G [mm]
20 × 1/2" cross	pcs	100	10	0,06	0,11	217022 G	217022 GR	217022 W	20	38	28,1	14,5	1/2"

PPR tee with metal female thread

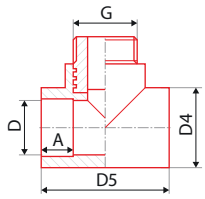
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	G [mm]
20 × 1/2"	pcs	60	10	0,07	0,19	222020 G	222020 GR	222020 W	20	29,0	37,0	14,5	1/2"
25 × 1/2"	pcs	40	10	0,08	0,24	222026 G	222026 GR	222026 W	25	36,0	37,0	16,0	1/2"
25 × 3/4"	pcs	30	10	0,13	0,32	222025 G	222025 GR	222025 W	25	38,4	46,5	16,0	3/4"
32 × 1"	pcs	40	5	0,22	0,60	222032 G	222032 GR	222032 W	32	48,4	58,0	18,1	1"

PPR tee with metal male thread

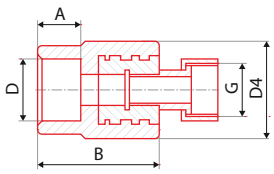
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	G [mm]
20 × 1/2"	pcs	100	10	0,09	0,19	222520 G	222520 GR	222520 W	20	29,2	36,8	14,5	1/2"
25 × 1/2"	pcs	40	10	0,10	0,24	222526 G	222526 GR	222526 W	25	37,0	41,0	16,0	1/2"
25 × 3/4"	pcs	30	10	0,17	0,32	222525 G	222525 GR	222525 W	32	37,0	41,0	16,0	3/4"

PPR metal reducer with cap nut

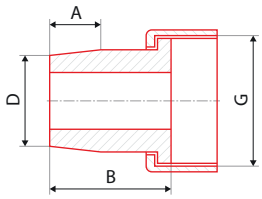
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
16 × 1/2"	pcs	120	10	0,05	0,05	223016 G	223016 GR	223016 W	16	37	13,3	33,6	1/2"
16 × 3/4"	pcs	100	10	0,08	0,06	223017 G	223017 GR	223017 W	16	37	13,3	37,0	3/4"
20 × 1/2"	pcs	120	10	0,05	0,05	223020 G	223020 GR	223020 W	20	37	14,5	33,6	1/2"
20 × 3/4"	pcs	100	10	0,08	0,06	223021 G	223021 GR	223021 W	20	37	14,5	37,0	3/4"
20 × 1"	pcs	50	10	0,23	0,06	223022 G	223022 GR	223022 W	20	43	14,5	43,0	1"
25 × 3/4"	pcs	100	10	0,26	0,06	223026 G	223026 GR	223026 W	25	37	16,0	39,0	3/4"
25 × 1"	pcs	40	10	0,26	0,07	223025 G	223025 GR	223025 W	25	43	16,0	44,0	1"
32 × 5/4"	pcs	25	5	0,38	0,12	223032 G	223032 GR	223032 W	32	52	18,1	47,5	5/4"

PPR union plastic / brass unwelded

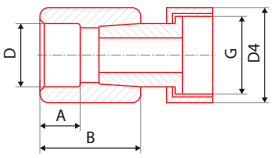
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline. | * with a hole for seal



						#	#	#	D [mm]	A [mm]	B [mm]	G [mm]
20 × 3/4"	pcs	150	50	0,04	0,05	225021 G	225021 GR	225021 W	20	1 4,5	35,5	3/4"
25 × 1"	pcs	80	20	0,07	0,10	225026 G	225026 GR	225026 W	25	16,0	45,2	1"
32 × 5/4"	pcs	45	15	0,10	0,18	225033 G	225033 GR	225033 W	32	18,0	45,3	5/4"
40 × 6/4"	pcs	40	1	0,16	0,22	225040 G	225040 GR	225040 W	40	20,5	51,5	6/4"
50 × 2"	pcs	20	1	0,30	0,41	225050 G	225050 GR	225050 W	50	23,5	60,5	2"
* 20 × 3/4"	pcs	150	50	0,04	0,05	225022 G	225022 GR	225022 W	20	14,8	35,5	3/4"

PPR plastic reducing sleeve with cap nut

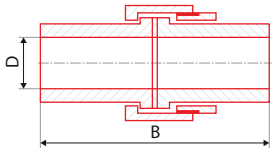
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline | * with a hole for seal



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
16 × 3/4"	pcs	220	20	0,05	0,16	226017 G	226017 GR	226017 W	16	29,2	13,0	33,1	3/4"
20 × 1/2"	pcs	300	25	0,04	0,16	226020 G	226020 GR	226020 W	20	29,2	14,5	34,0	1/2"
20 × 3/4"	pcs	200	20	0,05	0,16	226021 G	226021 GR	226021 W	20	28,6	14,5	32,4	3/4"
25 × 3/4"	pcs	150	10	0,05	0,19	226025 G	226025 GR	226025 W	25	36,8	16,0	34,4	3/4"
25 × 1"	pcs	120	10	0,09	0,19	226026 G	226026 GR	226026 W	25	36,7	16,0	35,0	1"
32 × 1"	pcs	100	10	0,10	0,48	226032 G	226032 GR	226032 W	32	47,0	18,0	38,0	1"
* 20 × 3/4"	pcs	200	20	0,05	0,16	226022 G	226022 GR	226022 W	20	28,6	14,5	32,0	3/4"
* 25 × 3/4"	pcs	150	10	0,05	0,19	226027 G	226027 GR	226027 W	32	36,8	16,0	34,0	3/4"

PPR coupling with nut

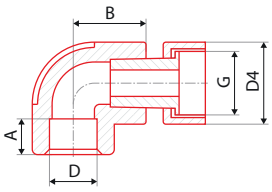
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Mountable and demountable joint.



						#	#	#	D [mm]	B [mm]	
20	pcs	200	10	0,08	0,15	224020 G	224020 GR	224020 W	20	73,0	
25	pcs	120	5	0,12	0,20	224025 G	224025 GR	224025 W	25	93,5	
32	pcs	70	5	0,19	0,25	224032 G	224032 GR	224032 W	32	93,5	
40	pcs	50	5	0,27	0,35	224040 G	224040 GR	224040 W	40	105,0	
50	pcs	25	5	0,49	0,65	224050 G	224050 GR	224050 W	50	123,0	

PPR elbow 90° plastic reducing sleeve with cap nut

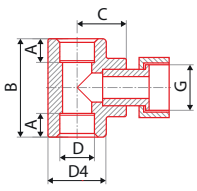
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline | * with a hole for seal



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
20 × 1/2"	pcs	250	25	0,04	0,02	227020 G	227020 GR	227020 W	20	29,0	14,5	29,3	1/2"
20 × 3/4"	pcs	180	20	0,06	0,03	227021 G	227021 GR	227021 W	25	30,0	14,5	25,5	3/4"
25 × 3/4"	pcs	120	10	0,06	0,10	227025 G	227025 GR	227025 W	32	36,6	16,0	32,0	3/4"
* 20 × 3/4"	pcs	180	20	0,06	0,02	227022 G	227022 GR	227022 W	20	30,0	14.5	25,5	3/4"

PPR tee plastic reducing sleeve with cap nut

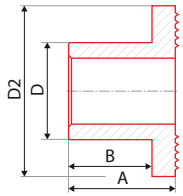
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline | * with a hole for seal



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
20 × 3/4" × 20	pcs	130	10	0,07	0,24	228021 G	228021 GR	228021 W	20	29,0	14,5	51,0	3/4"
25 × 3/4" × 25	pcs	80	10	0,08	0,32	228025 G	228025 GR	228025 W	25	36,6	16,0	58,0	3/4"
32 × 3/4" × 32	pcs	60	10	0,11	0,38	228033 G	228033 GR	228033 W	32	46,0	18,1	61,4	3/4"
32 × 1" × 32	pcs	50	10	0,13	0,38	228032 G	228032 GR	228032 W	32	45,6	18,1	69,0	1"
* 20 × 3/4" × 20	pcs	120	20	0,07	0,24	228022 G	228022 GR	228022 W	20	29,0	14,5	51,0	3/4"
* 25 × 3/4" × 25	pcs	80	10	0,08	0,32	228026 G	228026 GR	228026 W	25	36,6	16,0	58,0	3/4"

PPR flange adaptor

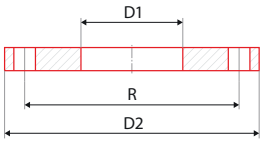
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Plastic fitting for flange dismountable joints.



						#	#	#	D [mm]	D2 [mm]	A [mm]	B [mm]
40	pcs	40	4	0,07	0,35	230040 G	230040 GR	230040 W	40	78	50	38,0
50	pcs	40	2	0,10	0,55	230050 G	230050 GR	230050 W	50	98	55	43,0
63	pcs	20	2	0,15	0,67	230063 G	230063 GR	230063 W	60	112	60	46,5
75	pcs	15	1	0,26	1,20	230075 G	230075 GR	230075 W	75	122	66	50,0
90	pcs	10	1	0,37	1,35	230090 G	230090 GR	230090 W	90	135	82	63,0
110	pcs	5	1	0,62	2,45	230110 G	230110 GR	230110 W	110	163	100	82,0
125	pcs	1					230125 GR		125	188	165	185,0

PPR flange

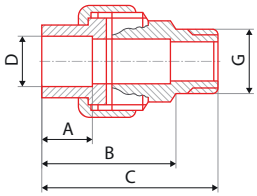
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Metal fitting for flange dismountable joints.



						#	#	#	D1 [mm]	D2 [mm]	R [mm]	d	počet děr
40	pcs	1	1	1,42	0,35	231040			43	140	100	M 16	4
50	pcs	1	1	1,82	0,38	231050			53	150	110	M 16	4
63	pcs	1	1	2,23	0,45	231063			66	165	125	M 16	4
75	pcs	1	1	2,48	0,55	231075			78	185	145	M 16	4
90	pcs	1	1	3,25	0,80	231090			95	200	160	M 16	8
110	pcs	1	1	3,60	0,97	231110			114	220	180	M 16	8
125	pcs	1	1						129	250	210	M 16	8

PPR transition union male

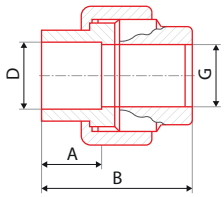
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition demountable fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	A [mm]	B [mm]	C [mm]	G [mm]
20 × 1/2"	pcs	125	1	0,11	0,09	237020 G	237020 GR	237020 W	20	14,5	41	53	1/2"
25 × 3/4"	pcs	65	1	0,19	0,17	237025 G	237025 GR	237025 W	25	16,0	44	59	3/4"
32 × 1"	pcs	50	1	0,25	0,22	237032 G	237032 GR	237032 W	32	18,1	46	63	1"
40 × 5/4"	pcs	25	1	0,36	0,44	237040 G	237040 GR	237040 W	40	20,5	51	68	5/4"
50 × 6/4"	pcs	20	1	0,59	0,55	237050 G	237050 GR	237050 W	50	23,5	52	70	6/4"
63 × 2"	pcs	8	1	1,03	1,37	237063 G	237063 GR	237063 W	63	27,4	64	90	2"

PPR transition union female

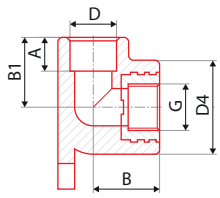
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition demountable fitting from plastic part to metal part of pipeline.



						#	#	#	D [mm]	A [mm]	B [mm]	G [mm]
20 × 1/2"	pcs	150	1	0,10	0,07	236020 G	236020 GR	236020 W	20	14,5	41	1/2"
25 × 3/4"	pcs	75	1	0,16	0,15	236025 G	236025 GR	236025 W	25	16,0	44	3/4"
32 × 1"	pcs	50	1	0,19	0,22	236032 G	236032 GR	236032 W	32	18,1	46	1"
40 × 5/4"	pcs	30	1	0,32	0,36	236040 G	236040 GR	236040 W	40	20,5	51	5/4"
50 × 6/4"	pcs	25	1	0,48	0,55	236050 G	236050 GR	236050 W	50	23,5	52	6/4"
63 × 2"	pcs	8	1	0,82	1,37	236063 G	236063 GR	236063 W	63	27,4	64	2"

PPR elbow 90° for wall mounting

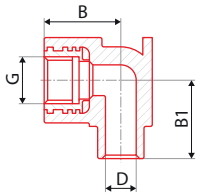
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Fixing fitting with tap connector for mixers.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	B [mm]	G [mm]
16 × 1/2"	pcs	50	10	0,07	0,22	219016 G	219016 GR	219016 W	16	38,6	28,2	35,0	1/2"
20 × 1/2"	pcs	100	10	0,07	0,36	219020 G	219020 GR	219020 W	20	39,6	30,2	34,3	1/2"
25 × 1/2"	pcs	30	10	0,12	0,55	219025 G	219025 GR	219025 W	25	46,4	37,2	40,0	1/2"
25 × 3/4"	pcs	30	10	0,13	1,37	219026 G	219026 GR	219026 W	25	46.,4	37,2	40,0	3/4"

PPR elbow 90° for wall mounting intenal / external

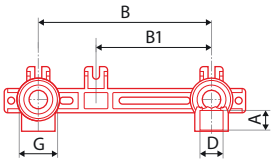
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Fixing fitting with tap connector for mixers.



						#	#	#	D [mm]	B [mm]	B1 [mm]	C [mm]	G [mm]
20 × 1/2"	pcs	100	10	0,06	0,21	239020 G	239020 GR	239020 W	20	35	35	11	1/2"

PPR wall elbows with holder

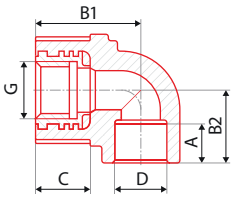
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Tap water connectors with adjustable distance of 100 or 150 mm.

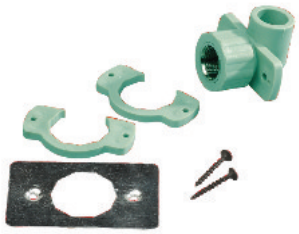


						#	#	#	D [mm]	A [mm]	B [mm]	B1 [mm]	G [mm]
20 × 1/2"	pcs	30	5	0,13	1,02	219120 G	219120 GR	219120 W	20	15	15	100	1/2"

PPR elbow for gypsum wall mounting

System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Fixing fitting with tap connector for mixers, for gypsum walls

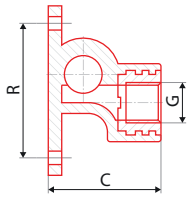




						#	#	#	D [mm]	A [mm]	B1,B2 [mm]	C [mm]	G [mm]
20 × 1/2"	pcs	50	1	0,13	1,02	240020 G	240020 GR	240020 W	20	15	42, 27	25	1/2"

PPR tee with tap connector

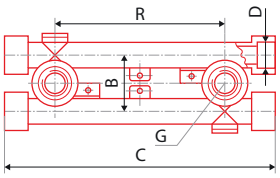
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Fixing fitting with tap connector for mixers.



						#	#	#	D [mm]	A [mm]	C [mm]	R [mm]	G [mm]
20 × 1/2"	pcs	60	10	0,08	0,21	220020 G	220020 GR	220020 W	20	14,5	50	61,5	1/2"
25 × 1/2"	pcs	50	10	0,09	0,36	220026 G	220026 GR	220026 W	25	16,0	56	75,0	1/2"

PPR wall mounting group with tap connectors

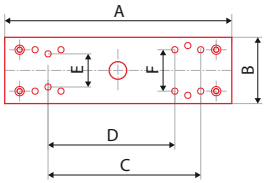
System: AQUA
Material: PPR - brass
Standard: -
Details: Tap water connectors with adjustable distance of 100, 125 or 140mm.



						#	#	#	D [mm]	A [mm]	B [mm]	B1 [mm]	G [mm]
2 × 20 × 1/2"	pcs	15	1	0,20	1,37	221020 G	221020 GR	221020 W	20	14,5	46	222	1/2"
2 × 25 × 1/2"	pcs	10	1	0,31	1,32	221025 G	221025 GR	221025 W	25	16,0	51	230	1/2"

PPR assembling plate for elbow 90° for wall mounting

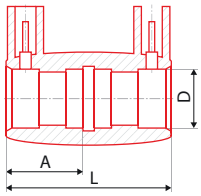
System: AQUA
Material: PPR
Standard: -
Details: A practical accessory for an easy installation into dry building systems.



						#	#	#	A [mm]	B [mm]	C [mm]	D [mm]	E, F [mm]
	pcs	60	1	0,08	0,15	9120000			220	64	135	110	40, 45

PPR electro-fusion socket

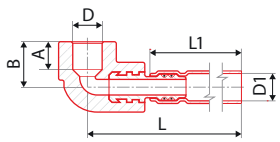
System: AQUA
Material: PPR - brass
Standard: -
Details: A fiiting for pipe connection under electro-fusion welding condition.



						#	#	#	D [mm]	A [mm]	L [mm]
20	pcs	1	1	0,03	0,02	234020 G			20	26,5	55
25	pcs	1	1	0,04	0,05	234025 G			25	26,5	55
32	pcs	1	1	0,05	0,10	234032 G			32	25,0	52
40	pcs	1	1	0,06	0,20	234040 G			40	25,0	52
50	pcs	1	1	0,08	0,30	234050 G			50	25,0	52
63	pcs	1	1	0,12	0,60	234063 G			63	30,0	63
75	pcs	1	1	0,16	0,90	234075 G			75	33,0	70
90	pcs	1	1	0,21	1,10	234090 G			90	36,0	75
110	pcs	1	1	0,36	1,80	234110 G			110	40,0	87
120	pcs	1	1	0,48	2,26		234125 GR		125	65,0	152,3

PPR joining elbow 90° to the radiator, 270mm

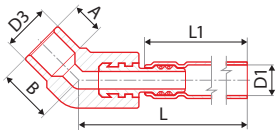
System: AQUA
Material: PPR - brass
Standard: -
Details: For radiator connection.



						#	#	#	A [mm]	B [mm]	D1, D1 [mm]	L [mm]	L1 [mm]
20						2440200 G		244020 W	14,5	24	15, 20	300	270

PPR joining elbow 90° to the radiator, 720mm

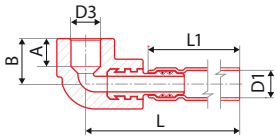
System: AQUA
Material: PPR - brass
Standard: -
Details: For radiator connection.



						#	#	#	A [mm]	B [mm]	D1, D1 [mm]	L [mm]	L1 [mm]
20	ks	10	1	0,273				WA244020720	14,5	24	15, 20	750	720

PPR joining elbow 45° to the radiator, 270mm

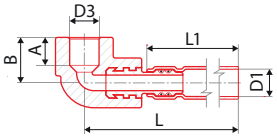
System: AQUA
Material: PPR - brass
Standard: -
Details: For radiator connection.



						#	#	#	A [mm]	B [mm]	D1, D3 [mm]	L [mm]	L1 [mm]
20	ks	20	1	0,123				WA243020270	13	22,5	15,20	298	270

PPR joining elbow 45° to the radiator, 720mm

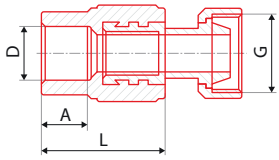
System: AQUA
Material: PPR - brass
Standard: -
Details: For radiator connection .



						#	#	#	A [mm]	B [mm]	D1, D3 [mm]	L [mm]	L1 [mm]
20	ks	10	1	0,270				WA243020720	13	22,5	15, 20	748	720

PPR sleeve euroconus with metal thread

System: AQUA
Material: PPR - brass
Standard: -
Details: Transition fitting for radiator connection.

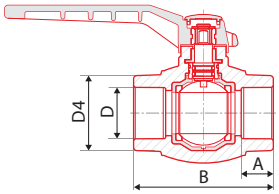


						#	#	#	D [mm]	A [mm]	G [mm]	L [mm]
20 × 3/4"	ks	100	10	0,091	0,154	2444020 G		2444020 W	20	14,5	3/4"	40

VALVES

PPR ball valve plastic with a butterfly
PPR ball valve plastic with a lever

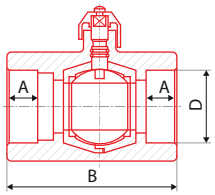
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A ball cock with a chromed ball and teflon seals.



						#	#	#		D4 [mm]	A [mm]	B [mm]
16	pcs	40	10	0,12	0,17	301016 G	301016 GR	301016 W	Butterfly	22,8	13,0	58,6
20	pcs	40	10	0,12	0,34	301020 G	301020 GR	301020 W	Butterfly	31,2	14,5	61,1
20	pcs	40	10	0,12	0,34	301021 G	301021 GR	301021 W	Lever Handle	31,2	14,5	61,1
25	pcs	40	4	0,21	0,69	301025 G	301025 GR	301025 W	Lever Handle	37,4	16,0	74,5
32	pcs	20	2	0,36	0,69	301032 G	301032 GR	301032 W	Lever Handle	48,5	18,0	85,0
40	pcs	15	1	0,36	1,60	301040 G	301040 GR	301040 W	Lever Handle	60,4	20,5	98,0
50	pcs	9	1	0,65	1,60	301050 G	301050 GR	301050 W	Lever Handle	75,0	23,5	116,3
63	pcs	6	1	1,12	4,80	301063 G	301063 GR	301063 W	Lever Handle	92,5	27,5	131,0
75	pcs	4	1	1,83	4,80	301075 G	301075 GR	301075 W	Lever Handle	108,0	30,0	165,0

PPR ball valve plastic with PV valve

System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A ball cock with a chromed ball and teflon seals.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]
20	pcs	60	10	0,14	0,37	302020 G	302020 GR	302020 W	20	31,4	14,5	74,5
25	pcs	60	10	0,14	0,40	302025 G	302025 GR	302025 W	25	38,2	16,0	78,5
32	pcs	30	2	0,24	0,80	302032 G	302032 GR	302032 W	32	49,0	18,0	91,0
40	pcs	20	2	0,38	1,60	302040 G	302040 GR	302040 W	40	60,0	20,5	105,0
50	pcs	18	1	0,66	1,60	302050 G	302050 GR	302050 W	50	76,0	23,5	121,5
63	pcs	8	1	1,14	4,80	302063 G	302063 GR	302063 W	63	94,0	27,5	144,0
75	pcs	5	1	1,85	4,80	302075 G	302075 GR	302075 W	75	108,0	30,0	165,0

PPR radiator ball valve straight

System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A ball cock with a chromed ball and teflon seals.

						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
20x1/2"	pcs	60	1	0,154	0,12	2890020 G		2890020 W	20	29	16,1	55,1	52
25x3/4"	pcs	40	1	0,198	0,16	2890025 G		2890025 W	25	36,5	17,1	60,2	56

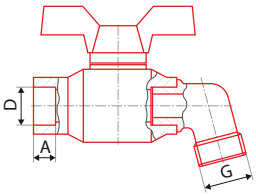
PPR radiator ball valve elbow

System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A ball cock with a chromed ball and teflon seals.

						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
20x1/2"	pcs	50	1	0,16	0,13	2900020 G		2900020 W	20	29	15,1	51,0	52
25x3/4"	pcs	40	1	0,198	0,18	2900025 G		2900025 W	25	36,5	17,1	60,5	56

PPR ball valve with threaded elbow for hose connection

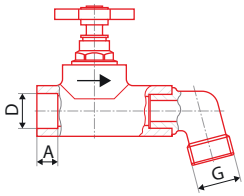
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A plastic tap for garden purposes.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
20	pcs	40	1	0,14	0,39	303020 G	303020 GR	303020 W	20	31,2	14,5	96	3/4×
25	pcs	30	1	0,15	0,77	303025 G	303025 GR	303025 W	25	37,4	16,0	117	1×

PPR valve with threaded elbow for hose connection

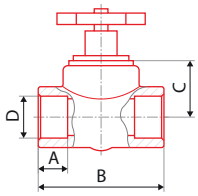
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A plastic tap for garden purposes.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	G [mm]
20	pcs	50	10	0,17	0,65	306020 G	306020 GR	306020 W	20	30,0	14,5	112,5	3/4×
25	pcs	40	10	0,24	0,68	306025 G	306025 GR	306025 W	25	37,3	16,0	125,0	1×

PPR straight-way valve

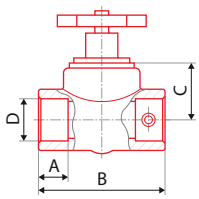
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A valve allowing closing or regulation of the flow of water.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	C [mm]
20	pcs	60	10	0,15	0,60	304020 G	304020 GR	304020 W	20	30	14,5	76,0	26
25	pcs	40	10	0,21	0,60	304025 G	304025 GR	304025 W	25	37	16,0	83,5	35
32	pcs	35	5	0,32	0,96	304032 G	304032 GR	304032 W	32	46	18,0	94,0	38
40	pcs	20	2	0,40	1,07	304040 G	304040 GR	304040 W	40	60	20,5	107,0	38
50	pcs	10	0	0,75	1,92	304050 G	304050 GR	304050 W	50	71	23,5	135,0	56
63	pcs	6	0	1,29	2,10	304063 G	304063 GR	304063 W	63	84	27,5	160,0	60

PPR straight-way valve with PV valve

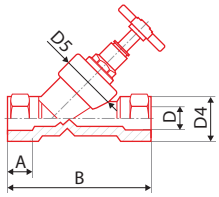
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A valve allowing closing or regulation of the flow of water.



						#	#	#	D [mm]	D4 [mm]	A [mm]	B [mm]	C [mm]
20	pcs	50	10	0,17	0,60	305020 G	305020 GR	305020 W	20	30	14,5	76,0	26
25	pcs	40	10	0,24	0,60	305025 G	305025 GR	305025 W	25	37	16,0	83,5	35
32	pcs	30	2	0,35	0,96	305032 G	305032 GR	305032 W	32	46	18,0	94,0	38
40	pcs	20	2	0,42	1,07	305040 G	305040 GR	305040 W	40	60	20,5	107,0	38

PPR angle straight-way valve

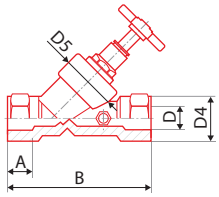
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A valve allowing closing or regulation of the flow of water.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	B [mm]
20	pcs	50	1	0,19	0,25	277020 G	277020 GR	277020 W	20	35,3	46,8	14,5	83,6
25	pcs	40	1	0,16	0,56	277025 G	277025 GR	277025 W	25	35,3	46,8	16,0	83,6

PPR angle straight-way valve with PV valve

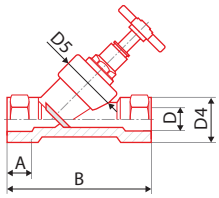
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A valve allowing closing or regulation of the flow of water.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	B [mm]
20	pcs	50	1	0,19	0,25	278020 G	278020 GR	278020 W	20	35,3	46,8	14,5	83,6
25	pcs	40	1	0,16	0,56	278025 G	278025 GR	278025 W	25	35,3	46,8	16,0	83,6

PPR angle straight-way valve with back flow

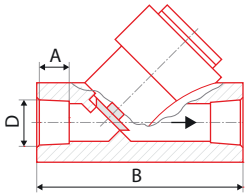
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A valve allowing closing or regulation of the flow of water.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	B [mm]
20	pcs	50	1	0,19	0,25	279020 G	279020 GR	279020 W	20	35,3	46,8	14,5	83,6
25	pcs	40	1	0,16	0,56	279025 G	279025 GR	279025 W	25	35,3	46,8	16,0	83,6

PPR back flow valve

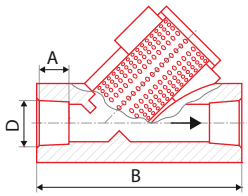
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For prevention of back flow.



						#	#	#	D [mm]	D4 [mm]	D5 [mm]	A [mm]	B [mm]
20	pcs	40	1	0,19	0,25	308020 G	308020 GR	308020 W	20	35,3	46,8	14,5	83,6
25	pcs	40	1	0,19	0,25	308025 G	308025 GR	308025 W	25	35,3	46,8	16,0	83,6
32	pcs	40	1	0,16	0,56	308032 G	308032 GR	308032 W	32	42,0	46,8	18,0	94,0

PPR filter

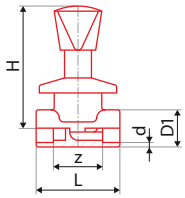
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Combined fitting with stainless strainer.



20	pcs	40	1	0,19	0,25	308120 G	308120 GR	308120 W	20	35,3	46,8	14,5	83,6
25	pcs	40	1	0,19	0,25	308125 G	308125 GR	308125 W	25	35,3	46,8	16,0	83,6
32	pcs	40	1	0,16	0,56	308132 G	308132 GR	308132 W	32	42,0	46,8	18,0	94,0

PPR shut off valve lux straight with chrome handle

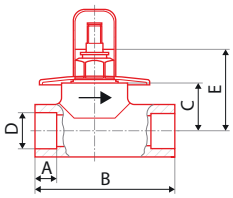
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: An elegant above-plaster valve for closing branches of a distribution system.



20	pcs	15	1	0,25		322020 G	322020 GR	322020 W	20/36	14,5	76,0	26	42
25	pcs	12	1	0,30		322025 G	322025 GR	322025 W	25/37,3	16,0	83,5	35	61

PPR shut off valve straight with cover

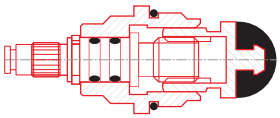
System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: An elegant above-plaster valve for closing branches of a distribution system.



20	pcs	20	1	0,17		313020 G	313020 GR	313020 W	Metal Pl.	20	15	75,6	26
20L	pcs	20	1	0,17		313021 G	313021 GR	313021 W	Metal Pl.	20	15	75,6	25
25	pcs	15	1	0,21		313025 G	313025 GR	313025 W	Metal Pl.	25	16	83,3	36
25L	pcs	15	1	0,21		313026 G	313026 GR	313026 W	Metal Pl.	25	16	83,3	35
20	pcs	20	1	0,17		323020 G	323020 GR	323020 W	Plastic Pl.	20	15	75,6	26
20L	pcs	20	1	0,17		323021 G	323021 GR	323021 W	Plastic Pl.	20	15	75,6	26
25	pcs	15	1	0,21		323025 G	323025 GR	323025 W	Plastic Pl.	25	16	83,3	34
25L	pcs	15	1	0,21		323026 G	323026 GR	323026 W	Plastic Pl.	25	16	83,3	36

PPR inside the valve

System: AQUA
Material: PPR - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Spare part for straight-way valve.

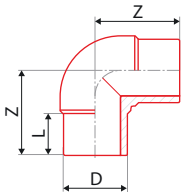


20	pcs		1	0,075		2880020			20		
25	pcs		1	0,097		2880025			25		
32/40	pcs		1	0,159		2880032			32/40		

ALMATHERM PP-RCT FITTINGS FOR BUT WELDING

PP-RCT butt welding elbow 90°

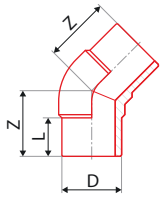
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for changing the pipeline direction.



						#	D [mm]	Z [mm]	L [mm]
160	pcs		1	2,21	9	202161 GR	160	212	110
200	pcs		1	2,96	20	202201 GR	200	255	127
250	pcs		1	3,42	30	202251 GR	250	294	140

PP-RCT butt welding elbow 45°

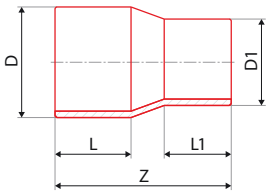
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for changing the pipeline direction.



						#	D [mm]	Z [mm]	L [mm]
160	pcs		1	1,95	7	203161 GR	160	168	110
200	pcs		1	2,54	16	203201 GR	200	217	127
250	pcs		1	3,09	25	203251 GR	250	223	140

PP-RCT butt welding reduction

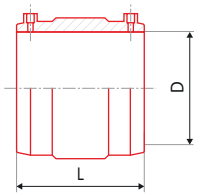
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for dimension change of pipeline.



						#	D [mm]	D1 [mm]	Z [mm]	L [mm]	L1 [mm]
160 x 110	pcs		1	1,14	5	210160111 GR	160	110	255	110	93
160 x 125	pcs		1	1,16	5	210160126 GR	160	125	255	110	97
200 x 160	pcs		1	2,61	9	210200161 GR	200	160	275	122	100
250 x 160	pcs		1	3,95	14	210250161 GR	250	160	330	137	111
250 x 200	pcs		1	4,45	15	210250201 GR	250	200	330	137	128

PP-RCT electro-fusion socket

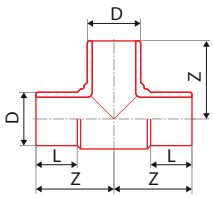
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A fiiting for pipe connection under electro-fusion welding condition.



						#		D [mm]	L [mm]
160	pcs		1	1,82	5	201161 GR	160	168	175
200	pcs		1	2,58	9	201201 GR	200	217	185
250	pcs		1	4,42	14	201251 GR	250	223	213

PP-RCT butt welding tee

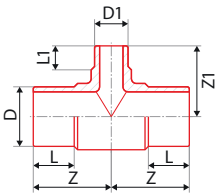
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for branching the pipeline.



						#	D [mm]	Z [mm]	L [mm]
160	pcs		1	3,99	12	208161 GR	160	225	124
200	pcs		1	7,38	18	208201 GR	200	251	127
250	pcs		1	9,80	23	208250 GR	250	314	148

PP-RCT polyfusion/butt welding tee reduced

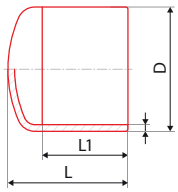
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: A simple, reliable fitting for branching the pipeline.



						#	D [mm]	D1 [mm]	Z [mm	L [mm]	L1 [mm]
160 x 90 x 160	pcs		1	3,20	9	212160091 GR	160	90	212	110	85
160 x 110 x 160	pcs		1	3,34	10	212160111 GR	160	110	212	110	95
200 x 90 x 200	pcs		1	6,20	14	212200091 GR	200	90	255	127	95
200 x 110 x 200	pcs		1	6,40	15	212200111 GR	200	110	255	127	95
200 x 125 x 200	pcs		1	6,80	16	212200126 GR	200	125	255	127	100
200 x 160 x 200	pcs		1	7,12	17	212200161 GR	200	160	255	127	110

PP-RCT butt welding blinding

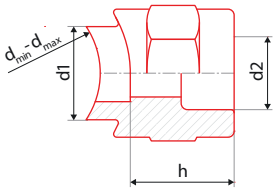
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For permanent or temporary blinding of a branch.



						#	D [mm]	L [mm]	L1 [mm]
160	pcs		1	0,90	2,9	229161 GR	160	140	100
200	pcs		1	2,03	6,2	229201 GR	200	190	145
250	pcs		1	3,28	12,7	229251 GR	250	2187	263

PP-RCT weld in saddle polyfusion

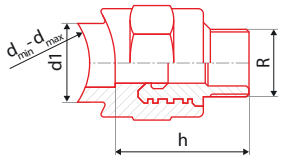
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: For additional branches from existing pipeline.



						#	dmin [mm]	dmax [mm]	d1 [mm]	d2 [mm]	h [mm]
125 x 32	pcs		1	0,04	0,4	238125032 GR	75	125	32	32	35
125 x 40	pcs		1	0,04	0,4	238125040 GR	75	125	40	40	38
125 x 50	pcs		1	0,04	0,4	238125050 GR	110	125	50	50	39
125 x 63	pcs		1	0,04	0,4	238125063 GR	125	125	50	63	45
160-250 x 20	pcs		1	0,04	0,4	238160020 GR	160	250	20	20	29
160-250 x 25	pcs		1	0,04	0,4	238160025 GR	160	250	25	25	29
160-250 x 32	pcs		1	0,04	0,4	238160032 GR	160	250	32	32	35
160-250 x 40	pcs		1	0,04	0,4	238160040 GR	160	250	40	40	38
160-250 x 50	pcs		1	0,04	0,4	238160050 GR	160	250	50	50	39
160-250 x 63	pcs		1	0,04	0,4	238160063 GR	160	125	63	63	45

PP-RCT weld in saddle with metal male thread polyfusion

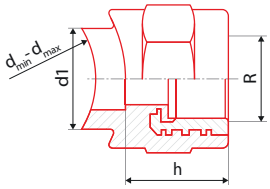
System: AQUA
Material: PP-RCT - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline, for additional branches.



						#	dmin [mm]	dmax [mm]	d1 [mm]	R [mm]	h [mm]
125 x 40 x 5/4"	pcs		1	0,08	0,4	248125040 GR	75	125	40	1.1/4"	58
125 x 50 x 5/4"	pcs		1	0,08	0,4	248125050 GR	90	125	50	1.1/4"	59
125 x 50 x 6/4"	pcs		1	0,08	0,4	248125051 GR	110	125	50	1.1/2"	59
125 x 63 x 2"	pcs		1	0,08	0,4	248125063 GR	125	125	63	2"	70
160-250 x 25 x 1/2"	pcs		1	0,08	0,4	248160020 GR	160	250	25	1/2"	43
160-250 x 32 x 3/4"	pcs		1	0,08	0,4	248160025 GR	160	250	32	3/4"	50
160-250 x 40 x 1"	pcs		1	0,08	0,4	248160032 GR	160	250	40	1"	56
160-250 x 40 x 5/4"	pcs		1	0,08	0,4	248160040 GR	160	250	40	1.1/4"	58
160-250 x 50 x 5/4"	pcs		1	0,08	0,4	248160050 GR	160	250	50	1.1/4"	59
160-250 x 50 x 6/4"	pcs		1	0,08	0,4	248160051 GR	160	250	50	1.1/2"	59
160-250 x 63 x 2"	pcs		1	0,08	0,4	248160063 GR	160	250	63	2"	70

PP-RCT weld in saddle with metal female thread polyfusion

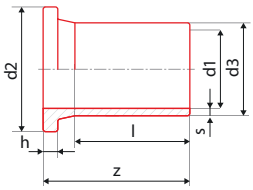
System: AQUA
Material: PP-RCT - brass
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Transition fitting from plastic part to metal part of pipeline, for additional branches.



						#	dmin [mm]	dmax [mm]	d [mm]	R [mm]	h [mm]
125 x 25 x 1/2"	pcs		1	0,07	0,4	247125025 GR	75	125	25	1/2"	43
125 x 32 x 3/4"	pcs		1	0,07	0,4	247125032 GR	75	125	32	3/4"	50
125 x 40 x 1"	pcs		1	0,07	0,4	247125040 GR	75	125	40	1"	38
125 x 40 x 5/4"	pcs		1	0,07	0,4	247125041 GR	75	125	40	1.1/4"	38
125 x 50 x 5/4"	pcs		1	0,07	0,4	247125050 GR	90	125	50	1.1/4"	39
125 x 50 x 6/4"	pcs		1	0,07	0,4	247125051 GR	110	125	50	1.1/2"	39
125 x 63 x 2"	pcs		1	0,07	0,4	247125063 GR	125	125	63	2"	45
160-250 x 25 x 1/2"	pcs		1	0,07	0,4	247160025 GR	160	250	25	1/2"	29
160-250 x 32 x 3/4"	pcs		1	0,07	0,4	247160032 GR	160	250	32	3/4"	35
160-250 x 40 x 1"	pcs		1	0,07	0,4	247160040 GR	160	250	40	1"	38
160-250 x 40 x 5/4"	pcs		1	0,07	0,4	247160041 GR	160	250	40	1.1/4"	38
160-250 x 50 x 5/4"	pcs		1	0,07	0,4	247160050 GR	160	250	50	1.1/4"	39
160-250 x 50 x 6/4"	pcs		1	0,07	0,4	247160051 GR	160	250	50	1.1/2"	39
160-250 x 63 x 2"	pcs		1	0,07	0,4	247160063 GR	160	250	63	2"	45

PP-RCT butt welding flange adaptor

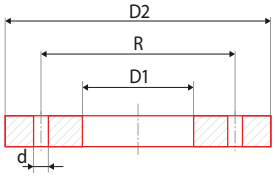
System: AQUA
Material: PP-RCT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Plastic fitting for flange dismountable joints.



						#	d1 [mm]	l [mm]	z [mm]	d2 [mm]	d3 [mm]	h [mm]	s [mm]
160	pcs		1	1,20	3,8	230161 GR	160	110	182	212	175	25	14,6
200	pcs		1	1,89	4,7	230201 GR	200	127	205	268	233	32	18,2
250	pcs		1	2,67	5,8	230251 GR	250	146	235	320	285	35	20,5

PP-RCT flange

System: AQUA
Material: PP coated steel
Standard: EN ISO 15874, DIN 8077, DIN 8078
Details: Metal fitting for flange dismountable joints.



						#	D1 [mm]	D2 [mm]	R [mm]	d	number of holes
160	pcs		1	3,1	1,0	231160	178	285	240	M16	8
200	pcs		1	4,6	1,2	231200	235	340	295	M16	8
250	pcs		1	6	1,7	231250	288	406	350	M16	12

SM 21

SM 41

SE 21

SE 41

SANITARY FITTINGS
nso
almanit
Hamburg - Germany

TOOLS SUITABLE FOR PPR

Welding machine 650W for non-paired adapter 16-63mmø

Welding machine for non-paired adapter, manual adjustment (SM21), ele ctronics adjustment (SE21)
The most favourite welding machine, especially th e model SM21
with direct control. Offered also as a set with a case.

						#	P [W]	
SM21	pcs	1	1	1,60	4,55	401001650	650	thermostat
SE21	pcs	1	1	1,60	4,55	401002650	650	electronic regulation

Welding machine 850W for paired adapter 16-75mm ø

Welding machine for paired adapter, manual adjustment (SM41), electronics adj. (SE41). An efficient welding machine , suitable for welding diameters of d 75 - d 110.

						#	P [W]	
SM41	pcs	1	1	2,00	4,55	402001850	850	thermostat
SE41	pcs	1	1	2,00	4,55	402002850	85	electronic regulation

Dytron Welder Polys P-4 650W

A welding machine by a renowned producer.

						#	P [W]	
P-4a	pcs	1	1	1,60	63,00	403001650	650	thermostat
P-4b	pcs	1	1	2,00	63,00	403002650	65	electronic regulation

Dytron Welder Polys P-4 850W

A welding machine by a renowned producer.

						#	P [W]	
P-4a	pcs	1	1	2,00	63,00	404001850	850	electronic regulation

Dytron Welder Polys P-4 1200W

A welding machine by a renowned producer.

						#	P [W]	
P-4a	pcs	1	1	2,10	63,00	405001120	1200	electronic regulation

Dytron Welder Polys P-1b 500W

A welding machine by a renowned producer, suitable also for welding in installation shafts.

						#	P [W]	
P-1b	pcs	1	1	1,58	63,00	406001500	500	thermostat

Mini set SM21M

Practical set for socket welding designed for hobbyists and unpretentious Professionals. Traditional metal case please durability and welder his life. Contents: thorns welder SM 21, jaw adaptors ø 20, 25 and 32 mm, metal case MINI, scissors, stand, 4 mm Allen key.

						#
SM21M	set	1	1	5,10	7,56	thermostat

Mini set SM41M

Practical set for socket welding designed for hobbyists and unpretentious Professionals. Traditional metal case please durability and welder his life. Contents: flat welder SM 41, jaw adaptors ø 20, 25, 32 and 40 mm, metal case MINI, scissors, stand, 4 mm Allen key.

						#
SM41M	set	1	1	5,10	7,56	thermostat

Profi set SE21P

Practical professional set for socket welding designed for all-day use in the most demanding craftsmen. Robust metal suitcase please durability and welder his life. Contents: 21 SE thorns welder, jaw adaptorss ø 16, 20, 25, 32, 40, 50, 63 mm metal case PROFI, foot stand, scissors DYNO, 4 mm Allen key.

						#
SE21P	set	1	1	5,10	7,56	electronic regulation

Profi set SE41P

Practical professional set for socket welding designed for all-day use in the most demanding craftsmen. Robust metal case please durability and welder his life. Contents: 41 SE thorns welder, jaw adaptors ø 16, 20, 25, 32, 40, 50, 63 mm metal case PROFI, foot stand, scissors DYNO, 4 mm Allen key.

						#
SE41P	set	1	1	5,10	7,56	electronic regulation

Adapter paired for SM41 and SE41

Pair adapter can only be used for flat welder. Allow welding of pipes from the lowest d16 to the diameter d125. Depending on the size can be fitted to the welder suddenly one to two adapters.

						#
16	set	1	1	0,06	0,03	411016000
20	set	1	1	0,06	0,03	411020000
25	set	1	1	0,10	0,06	411025000
32	set	1	1	0,18	0,10	411032000
40	set	1	1	0,23	0,14	411040000
50	set	1	1	0,34	0,20	411050000
63	set	1	1	0,63	0,32	411063000
75	set	1	1	0,84	0,45	411075000
90	set	1	1	1,52	0,73	411090000
110	set	1	1	1,70	1,69	411110000
125	set	1	1	1,92	2,13	411110000

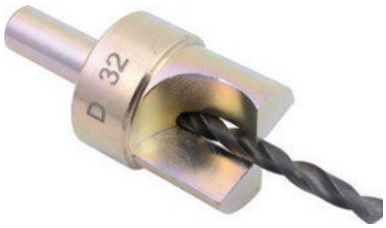
Adapter paired for weld in saddle

Pair adapters can only be used for flat welder. Allow welding additional seats branches from d20 to d63 to pipe from d63 to d250. Depending on the size can be fitted to the welder suddenly one to two adapters.

						#
63 × 32	set	1	1	0,13	0,13	412063032
75 × 32	set	1	1	0,15	0,15	412075032
90 × 32	set	1	1	0,16	0,19	412090032
110 × 32	set	1	1	0,40	0,41	412110032
110 × 40	set	1	1	0,77	0,85	412110040
160 - 250 × 20	set	1	1	0,23	0,23	412160020
160 - 250 × 25	set	1	1	0,23	0,23	412160025
160 - 250 × 32	set	1	1	0,23	0,23	412160032
160 - 250 × 40	set	1	1	0,23	0,23	412160040
160 - 250 × 50	set	1	1	0,23	0,23	412160050
160 - 250 × 63	set	1	1	0,23	0,23	412160063

Drill for weld in saddle

Special drill for perfect drilling of holes in the main pipe to mount weld-in saddles of all types. Necessary tools to create the correct hole.



						#
25	pcs	1	1	0,42	0,10	414025000
32	pcs	1	1	0,21	0,10	414032000
40	pcs	1	1	0,30	1,10	414040000
50	pcs	1	1	0,44	0,46	414050000
6	pcs	1	1	0,48	0,46	414063000

Adapter non-paired for SM21 and SE21

Jaw adapters can only be used for a rod type welders. Allow welding of pipes from the lowest diameters d16 to d63. Depending on the size can be fitted to the welder suddenly one to three extensions

						#
16	pcs	1	1	0,13	0,13	415016000
20	pcs	1	1	0,15	0,15	415020000
25	pcs	1	1	0,16	0,19	415025000
32	pcs	1	1	0,17	0,30	415032000
40	pcs	1	1	0,30	0,41	415040000
50	pcs	1	1	0,40	0,57	415050000
63	pcs	1	1	0,77	0,85	415063000

Case for welding machine flat type SM41,SE41/ rod type SM21, SE21

If you decide to build your PRO kit for socket welding gradually, a rugged metal case will be suitable.

						#
for type SM41, SE41	pcs	1	1	1,85	14,00	417001000
for type SM21, SE21	pcs	1	1	1,85	14,00	417002000

Repairing set

A set for fast and reliable repairs of drill-damaged distribution systems. Allows easy repair pipes due to unintentional drilling without changing the pipe in the wall. Can only be used with a rod welders.

						#
	pcs	1	1	0,29		AA418000000

Repairing stake

Expendable supplies for a repair set.

						#
	set	1	5	0,07		AA419000000

STABI pipes shaver

Essentially accurate, calibratable tool designed to remove the top layer of plastic and aluminum foil before welding pipes STABI and STABIOXY. Always two dimensions in a single instrument. Quality carbide blades. Before the first use, it is necessary to calibrate onto pipe PPR CLASSIC.

						#
16 - 20	pcs	1	1	0,15	0,19	420016020
20 - 25	pcs	1	1	0,19	0,19	420020025
25 - 32	pcs	1	1	0,23	0,25	420025032
32 - 40	pcs	1	1	0,24	0,30	420032040
50	pcs	1	1	0,20	0,30	420050000
63	pcs	1	1	0,30	0,42	420063000
75	pcs	1	1	0,34	0,57	420075000
90	pcs	1	1	0,66	0,91	420090000
110	pcs	1	1	0,72	1,33	420110000

Shavers to drill machine for STABI pipes

Essentially accurate, calibratable tool for attachment to the drill. It is designed to remove the top layer of plastic and aluminum foil before welding pipes STABI and STABIOXY. Quality carbide blades. Before the first use, it is necessary to calibrate onto pipe PPR CLASSIC.

						#
16	pcs	1	1	0,15	0,19	421016000
20	pcs	1	1	0,19	0,19	421020000
25	pcs	1	1	0,23	0,25	421025000
32	pcs	1	1	0,24	0,30	421032000
40	pcs	1	1	0,20	0,30	421040000
50	pcs	1	1	0,30	0,42	421050000
63	pcs	1	1	0,72	1,33	421063000

Cordless pipe shears d40

Cordless pipe shears for fast, effortless cutting of plastic and multi-layer pipes Ø ≤ 40mm, Ø ≤ 15/8". Quality NiMh battery gives up to 40 minutes of work, or 400 cuts per charge.

						#
	pcs	1	1	1,57	8,00	422000000

Pipe cutter REMS

A quality tool for reliable separation of pipes with larger dimensions.

						#
d50 - 110	pcs	1	1	1,20	3,65	423000000

Shears

Quality tested tools with sufficient performance and comfort for professional cutting of PPR, PP-RCT, PE-RT, HDPE and PEX pipes of all supplied dimensions.

						#
M1 d32	pcs	15	1	0,34	0,96	424032000
MS d40	pcs	10	1	0,42	0,96	424040000
STANDARD d40	pcs	6	1	0,40	0,96	424040001
ROTURBO d40	pcs	6	1	0,45	0,92	424040002
M4 d63	pcs	2	1	1,17	3,17	424063000

Tightening spanner with belt

A tool for safe tightening of plastic nuts. Essential tool for proper fixation and tightening fittings containing a plastic with brass thread.

						#
	pcs	20	1	0,33	0,72	425000000

Spiral for sewer cleaning

Practical helper of each plumber.

						#
2,5 m	pcs	1	1	0,64	1,88	426000003
5,0 m	pcs	1	1	1,21	2,50	426000005
10,0 m	pcs	1	1	4,73	6,48	426000010
20,0 m	pcs	1	1	9,40	10,11	426000020
25,0 m	pcs	1	1	11,93	11,55	426000025

Assembly MP 75

Light fixation apparatus operated by a lever, with infinitely adjusta ble clamping jaws provide a firm grip and mutual welding fittings and pipes with 40-75mm. The advantage of this device is a low weight, which can be further reduced by removing the clamping jaws, it is therefore advantageous with this device works in positional welds, e.g. under the ceiling.

						#
32 - 70	pcs	1	1	22,00	160,00	427032070

Assembly MP 110 UD

Robust professional equipment designed for socket welding of pipes and fittings up to dimension 110mm. The set comes with a set of necessary accessories, which is stored in a practical case. As a special accessory can be ordered reduction inserts for the STABI pipes. Set includes: clamping slide (incl uding selected fixtures) welder POLYS P-4a 1250 W, paired adapters of DT coatings 40, 50, 63, 75, 90 and 110 mm, insert according to the selected design, stand welder, centering pin, clamping inserts, metal case for accessories, allen keys 5, 6, 8mm.

						#
40 - 110	pcs	1	1	47,00	240,00	428040110


SANITARY FITTINGS
nso
almanit
Hamburg - Germany
PN20

ASSEMBLY INSTRUCTIONS

1. USE OF THE SYSTEM

System ALMATHERM PPR & PP-RCT enables distribution implementations in residential houses, administrative and public buildings, in industry and agriculture.

It is intended for delivery of cold and hot water and also for central heating, provided that the prescribed rules are met. It is necessary to select suitable kind of pipes with corresponding parameters of limit operating temperatur e and pressure. The system ALMATHERM offers pipes PPR, PPR-RCT Hot, PP-RCT UNI, FASER, STABI and STABIOXY.

The system can also be used for air distributions. A possibility of leading other liquids, gases or solids needs to be assessed individually in every particular example.

All pipes can be connected by a complete range of PPR pipe fittings by a polyfusion welding (up to the diameter of 125 mm) or by butt welding (diameters beyond 160 mm).

Water distributions

The system can be used for all inner water piping systems (cold drinking water, cold service water, hot water, circulation). An expected lifespan for a plastic piping system is 50 years providing the right material, type of a piping and correct implementation.

Type of a pipe according to the system of the hot water heating and its temperature regulation is selected by a project architect. In the case of hot water distribution, the expected maximum water temperature at the outflow tap is 57 °C as a protection against scalding, and inside the distributions themselv es, there is a possibility of short-term water overheating to higher temperatures (70 °C) at the point of heating due to the hygiene, mainly in order to eliminate pathological organisms.

Heating distributions

When considering the suitability of a particular type of piping for heating, it is necessary to use the value of input calculating temperature of the heating water, which is the highest temperature that is reached in the system. A project architect of the heating system chooses it depending on the required temperature at the input of the heating units, according to technical possibilities of the source of heat and the type of expansion vessel.

Recommended values for heating			
Temperature range			
70/50°C	70/60°C	75/65°C	80/60°C
And for low temperature systems			

During the installation of a plastic piping behind a boiler we recommend, with respect to protection against the system overheating, to install 1.5 m – 2.m of metal pipings behind the boiler.

Ways of leading of the pipings for water and heating distributions are identical. The basic requirements are securing of the mechanical protection of the piping and securing the support of the pipings and dilatation compensations.

Piping can be led:

- in the grooves of walls
- in installation dividers (prewall assembly)
- in floors and ceilings
- along the walls (freely or in covers)
- in installation shafts and sewerages

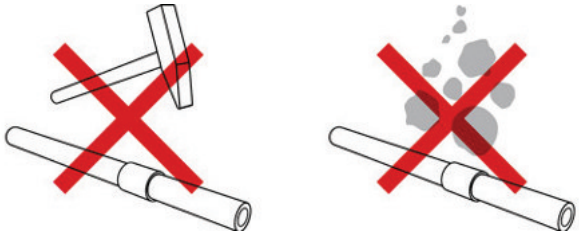
It is necessary to assess the leading of the piping outside the object according to specific conditions.

2. ASSEMBLY INSTRUCTION

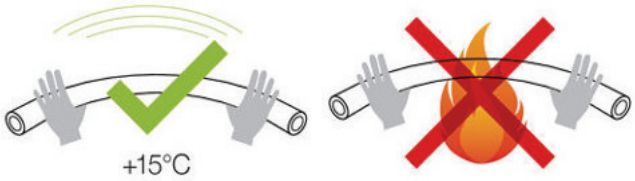
2.1. Warning

During the assembly, it is only possible to use elements which were not damaged or polluted during the transport and storage.

In view of welding, the minimal temperature for the assembly of plastic distributions is +5 °C. At lower temperatures, it is difficult to ensure the conditions for the formation of quality links.



Over the whole course of assembly and transport, the elements of the plastic system must be protected against impact, shocks, falling material and other ways of mechanical damage.

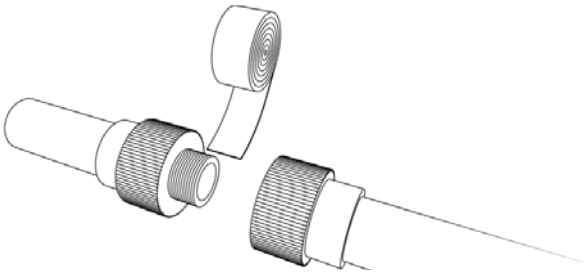


Bending of a pipe is carried out without preheating at the temperature +15°C minimum. For pipes of a diameter 16-32mm, the minimal bending diameter is 8 times the diameter of the piping (D).

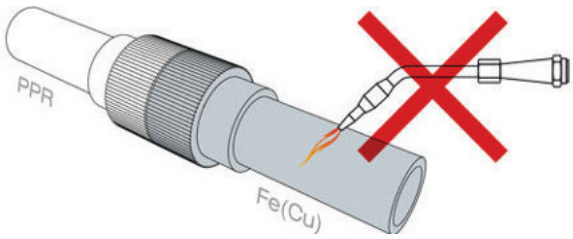
It is unacceptable to bend a pipe with the aid of heating with an open flame or with hot air.

Crossing of pipes is carried out by elements designed specifically for this purpose.

Connecting of plastic parts is carried out by polyfusion welding, and also by welding with electro pipe fittings and butt welding. In the process of welding, a high-quality homogeneous link arises. For connecting, it is necessary to observe the strict procedures and use appropriate tools.

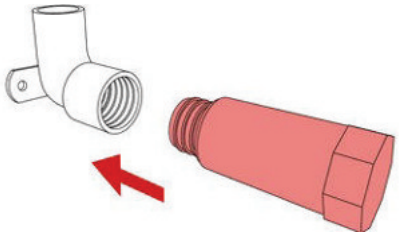


For threaded links, it is necessary to use pipe fittings with a thread. Cutting of threads on plastic elements is forbidden. Threads are sealed by Teflon tape , sealing thread or special sealants.



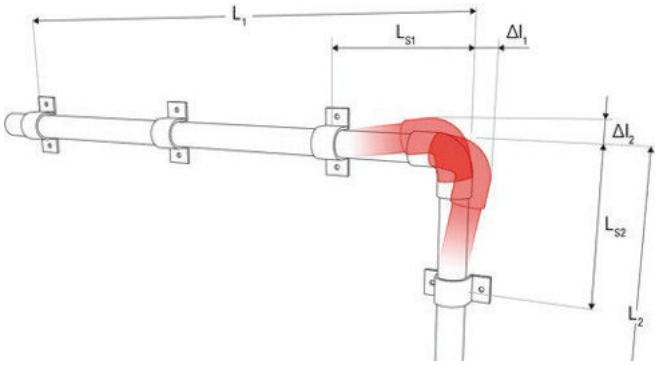
If a combined pipe fitting is followed by a metal pipe, it is not possible to connect the metal pipe in the vicinity of a pipe fitting by soldering or welding, because of possible heat transfer into the pipe fitting.

For closure of wall bends or alternatively of universal wall set before the assembly of outlet fixtures, we recommend to use plastic plugs (plastic plugs are intended only for a temporary use – e. g. pressure test). For long-term closure, plugs with a metal thread must be used.



2.2 Longitudinal expansivity and contractivity

A temperature difference during the assembly and during the operation, when a medium with a different temperature than the assembly temperature is transported through the piping, causes longitudinal differences – lengthening or shortening (l).



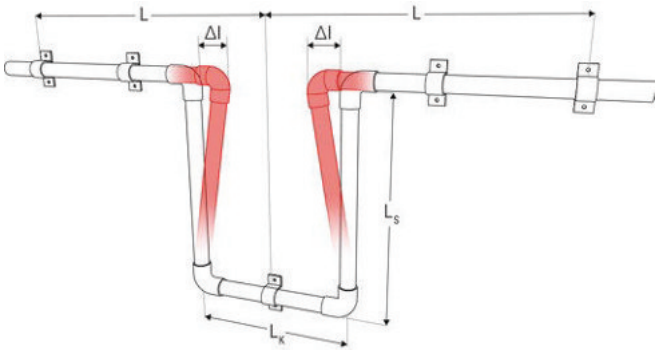
$$\Delta l = \alpha \cdot L \cdot t \text{ [mm]}$$

- ΔI longitudinal chang [mm]
- α coefficient of thermal longitudinal expansion [mm/m °C], or the all- plastic piping PPR design α = 0,15 | for STABI, STABIOXY and FASER α = 0,05
- L calculating length (distance of two neighbouring fixed points in line) [m]
- t a temperature difference at assembly and at operation [°C]

$$L_S = k \cdot \sqrt{(D \cdot \Delta l)} \text{ [mm]}$$

- L_S free compensatory length
- k material constant, for PPR k = 20
- D outer diameter of piping [mm]
- ΔI longitudinal difference [mm] calculated from the previous formula

U - compensator



$$L_k = 2 \cdot \Delta l + 150 \text{ [mm] and also Lk} \geq 10 \cdot D$$

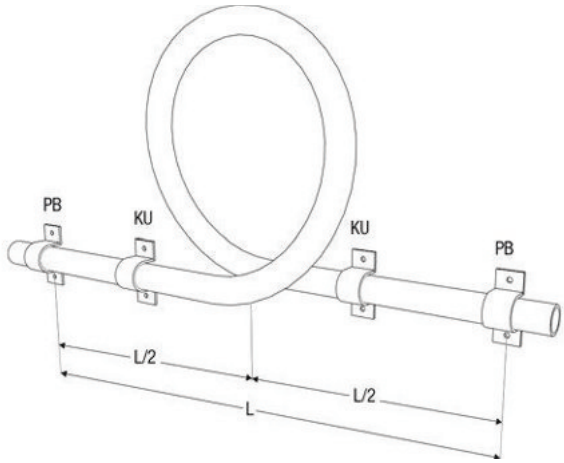
A suitable way of compensation: piping is deflected in the direction perpendicular to the original route and at this perpendicular, a free compensatory length (marked L) is left, which ensures that no significant additional pressure and tractional tensions arise in the wall of the piping. Compensatory length LK depends on the calculated lengthening (shortening) of the route, material and the diameter of the piping. In the case of polypropylene, for compensation of longitudinal changes flexibility of the material is used. Apart from the compensation at the bending, bending "U" compensators and loop compensators are used.

The value of the longitudinal change and the value of the compensatory length can also be read from the graphs.

Table for installation of a loop compensator

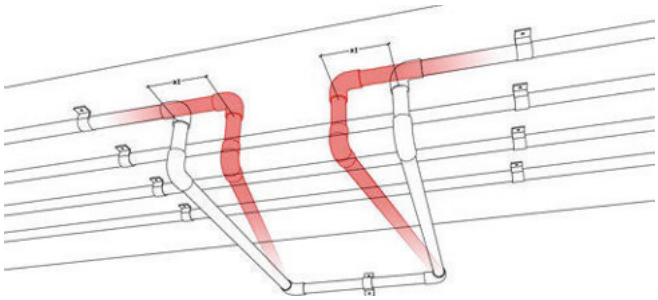
Piping diameter [mm]	Fixed points distance L [[m]	
	FASER, STABI, SABIOXY	PPR and PP-RCT
16	24	8
20	27	9
25	30	10
32	36	12
40	42	14

Loop compensator LC



- P_B Fixed point
- K_U Sliding bearing
- L Calculating length of the piping
- L_s Compensatory length
- ΔI Longitudinal difference
- L_K Width of the compensator

An example of a compensation by changing the route adapted to the building structure

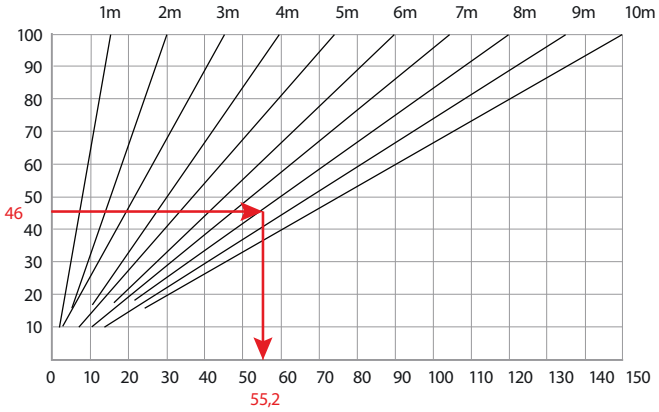


„U" compensator

Calculated free length L means the length without any fixed supports or suspensions, which could impede the dilatation. Free length L should not exceed the maximum distance of supports according to the piping diameter and the temperature of the medium.

Longitudinal lengthening: an all-plastic piping PPR and PP-RCT

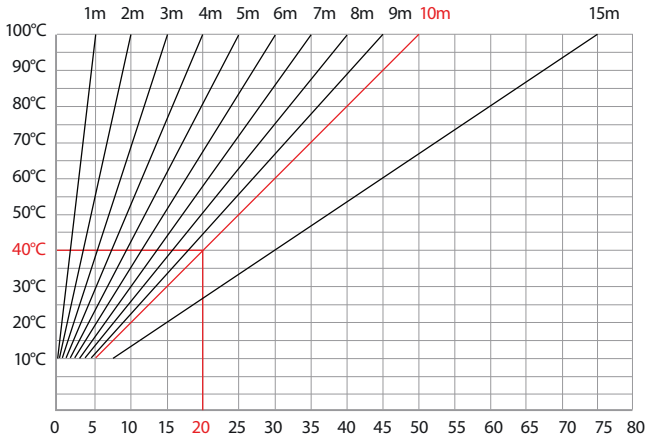
Example: L = 10m, Δt = 40 °C



Length of piping [m]	Temperature difference Δt							
	10 °C	20 °C	30 °C	40 °C	50 °C	60 °C	70 °C	80 °C
	Length difference Δl [mm]							
1	1,5	3	5	6	8	9	11	12
2	3	6	9	12	15	18	21	24
3	5	9	14	18	23	27	32	36
4	5	9	14	18	23	27	32	36
5	8	15	23	30	38	45	53	60
6	9	18	27	36	45	54	63	72
7	11	21	32	42	53	63	74	84
8	12	24	36	48	60	72	84	96
9	14	27	41	54	68	81	95	108
10	15	30	45	60	75	90	105	120
15	23	45	68	90	113	135	158	150

Longitudinal lengthening: pipings STABI, STABIOXY and FASER

Example: L = 10m, Δt = 40 °C



Length of piping [m]	Temperature difference Δt							
	10 °C	20 °C	30 °C	40 °C	50 °C	60 °C	70 °C	80 °C
	Longitudinal difference Δl [mm]							
1	1	1	2	2	3	3	4	4
2	1	2	3	4	5	6	7	8
3	2	3	5	6	8	9	11	12
4	2	4	6	8	10	12	14	16
5	3	5	8	10	13	15	18	20
6	3	6	9	12	15	18	21	24
7	4	7	11	14	18	21	25	28
8	4	8	12	16	20	24	28	32
9	5	9	14	18	23	27	32	36
10	5	10	15	20	25	30	35	40
15	8	15	23	30	38	45	53	60

2.3. Distances of the piping supports

Maximum distance of the supports of all-plastic pipings PPRS5 (PN10) and PP--RCT COOL horizontal piping

Piping diameter [mm]	Distance of supports [cm] at the water temperature		
	20 °C	30 °C	40 °C
16	75	70	70
20	80	75	70
25	85	85	85
32	100	95	95
40	110	110	105
50	125	120	115
63	140	135	130
75	155	150	145
90	165	165	155
110	185	180	175
125	200	195	185

Maximum distance of the piping supports PPR S 3,2 (PN 16) horizontal piping

Piping diameter [mm]	Distance of supports [cm] at the water temperature					
	20 °C	30 °C	40 °C	50 °C	60 °C	80 °C
16	80	75	75	70	70	60
20	90	80	80	80	70	65
25	95	95	95	90	80	75
32	110	105	105	100	95	80
40	120	120	115	105	100	95
50	135	130	125	120	115	100
63	155	150	145	135	130	115
75	170	165	160	150	145	125
90	180	180	170	165	160	135
110	200	195	190	180	175	155
125	220	215	200	195	190	165

Maximum distance of the piping supports PPRS 2.5 (PN20) and PP-RCT HOT horizontal piping

Piping diameter [mm]	Distance of supports [cm] at the water temperature					
	20 °C	30 °C	40 °C	50 °C	60 °C	80 °C
16	90	85	85	80	80	65
20	95	90	85	85	80	70
25	100	100	100	95	90	85
32	120	115	115	110	100	90
40	130	130	125	120	115	100
50	150	150	140	130	125	110
63	170	160	155	150	145	125
75	185	180	175	160	155	140
90	200	200	185	180	175	150
110	210	215	210	195	190	165
125	235	230	225	210	200	170

Maximum distance of the piping supports STABI and FASER (independent of the water temperature).

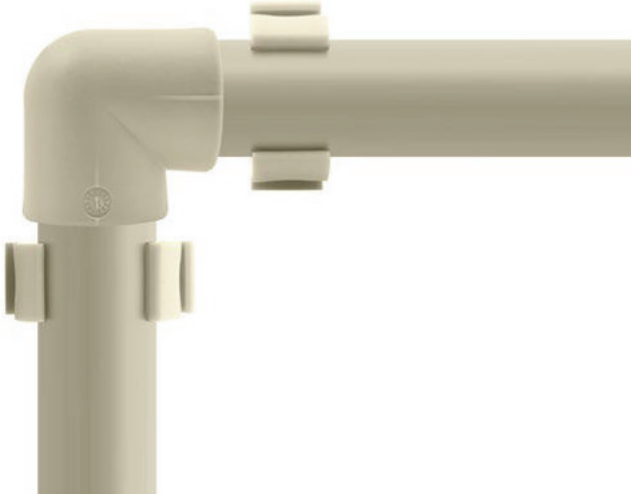
Piping diameter [mm]	Distance of supports [cm] at the water temperature	
	STABI (current values)	FASER
16	110	
20	120	80
25	140	100
32	145	110
40	150	120
50	155	130
63	165	150
75	170	145
90	190	155
110	205	160
125	220	165

For vertical piping the maximum distance of supports is multiplied by the co efficient 1.3.

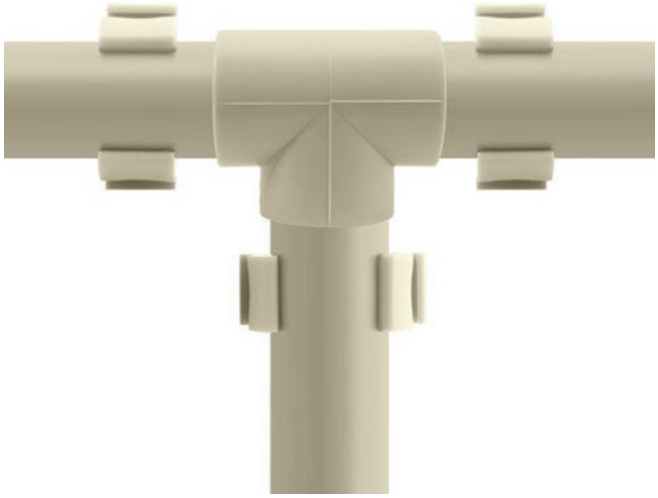
2.4 Attaching of piping

It is necessary to respect the material of distribution syste ms, i.e. primarily longitudinal thermal expansivity, necessity of compensations, given operational conditions (combination of pressure and temperature) and the way of connecting.

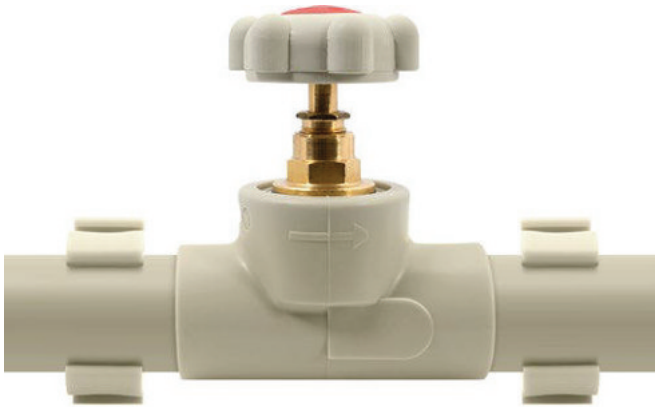
Attaching of distributions is carried out so as the fixed points and sliding bearing are distinguished, for the expected longitudinal difference of the piping.



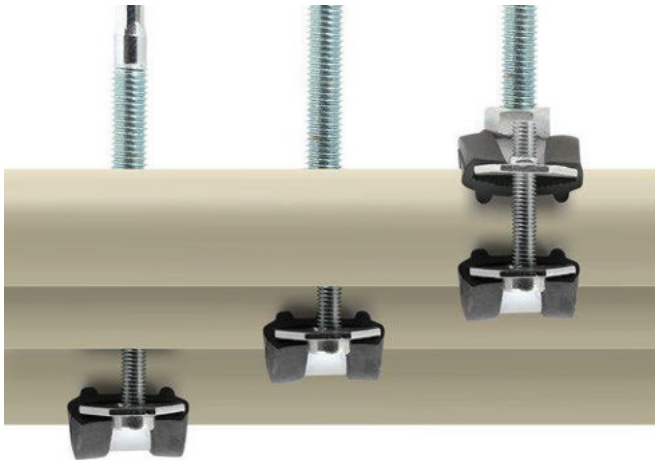
At the bend of the piping



At the branch point

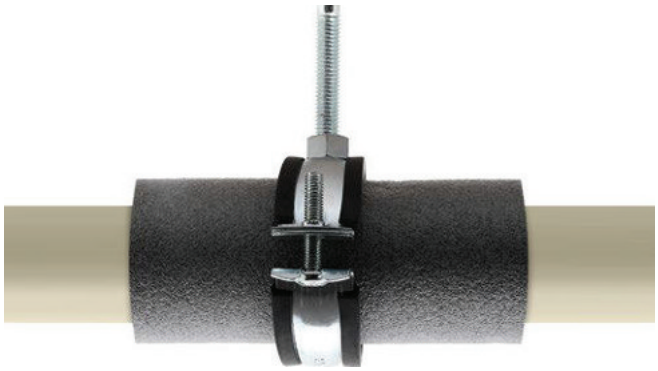


At the point of placing of the fitting on the piping



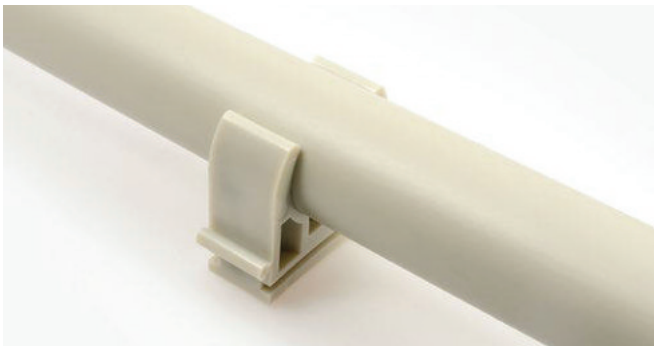
Thanks to the tightly tied sleeves (only horizontal piping)

Attaching of the pipe fitting

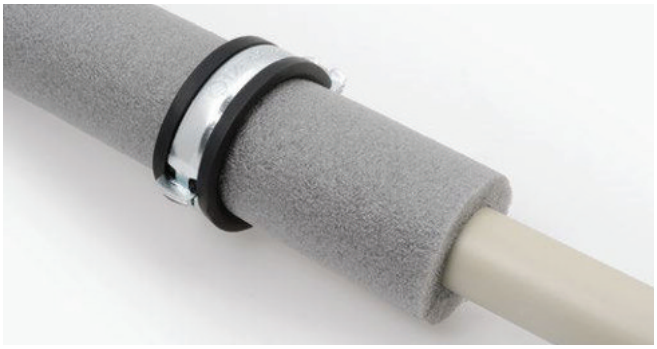


Free sleeve

Use of plastic sleeves

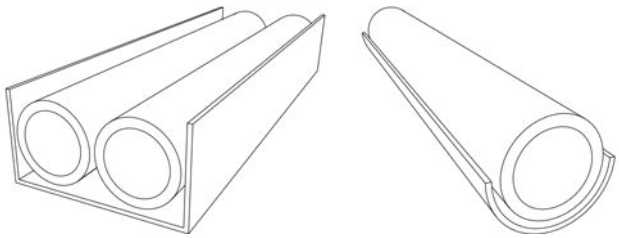


Suitable for cold water distribution systems

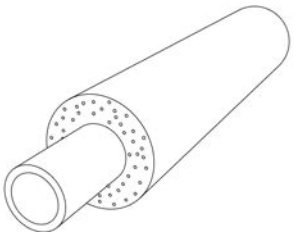


In the case of hot water, sleeve is installed with insulation that is larger by o ne dimension.

Another way of laying of plastic piping



Laying of a pipe into a free gutter.



Leading of piping in insulation under plastering

Leading of piping

Piping has to be assembled with a decline of at least 0.5 % towards the lowest places, where it is possible to drain it through an independent draining or through closing valves with draining.

Piping must be divided into parts which can be closed independently. For closing, direct valves or cocks are used, for the instalation under plastering under-plastering valves or cocks are used. Before the assembly of the elements, it is necessary to test their closability.

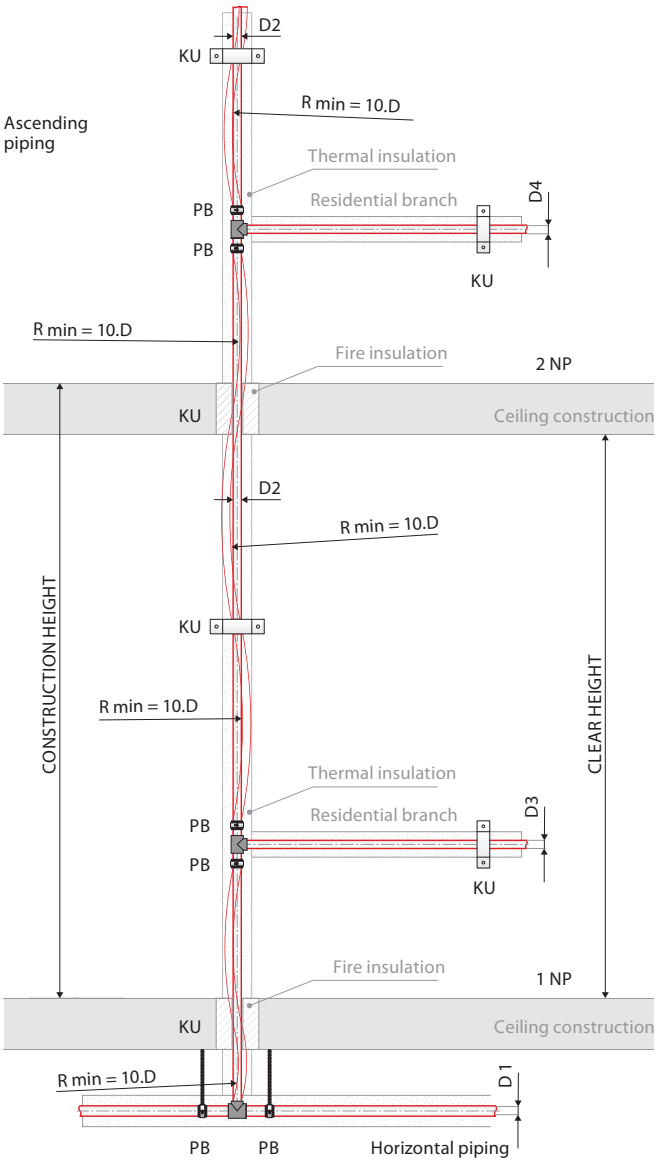
For termination of the piping at a place of mixing outlet fixture, it is recommended to use UNIVERSAL WALL SET, where the pitch of threads is slided under in such a way that after a potential deflection from the horizontal axis the distribution could be balanced by levels. For assemblies under plasterboard, a WALL SET FOR PLASTERBOARD should be used.

When leading a water pipe through installation partitions, it is necessary to fix the position of the pipe by suitable attaching, for example by a system of metal sleeves with supporting elements. Piping has to be led with a potential dilatation and insulated.

When leading a water pipe in floor or ceiling constructions, bendable plastic cable ducts (from polyethylene) are used, which ensure mechanical protection of the pipe and at the same time the air gap between the pipe and the cable duct creates thermal insulation. Free plastic water piping has to be furnished with quality insulation (if for example a cold water pipe is led freely at a wall in a heated room, there is a great danger of condensation of humidity at the walls of the pipe). Piping can be led freely at a wall only in premises without the danger of mechanical damage because of operation.

2.5 Leading of an ascending pipe

In the case of an ascending pipe, close attention has to be paid to the layout of fixed points, sliding bearings and to creating a suitable way of compensation. For ascending pipes, compensation is ensured either by a sliding bearing at the foot of a standpipe or by using a compensational loop.



EXPLANATORY NOTES:

Piping before heating

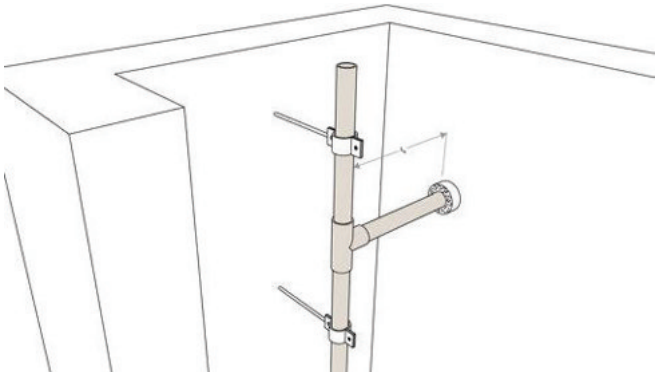
Piping after heating

PB	Fixed point
KU	Sliding bearing
D	Outer diameter of the piping
R min	Minimum bend radius

Assembly regulation

If a standpipe needs to be divided into several dilatation sections, this placing of fixed points is carried out. Fixed point at an ascending pipe is installed below and above a T-piece at the branch or at a coupling sleeve at a place of pipe connection, which simultaneously prevents the standpipe from falling. Dilatation between the fixed points then needs to be enabled.

At a place of branching of a connecting pipe, a standpipe dilatation needs to be taken into account:



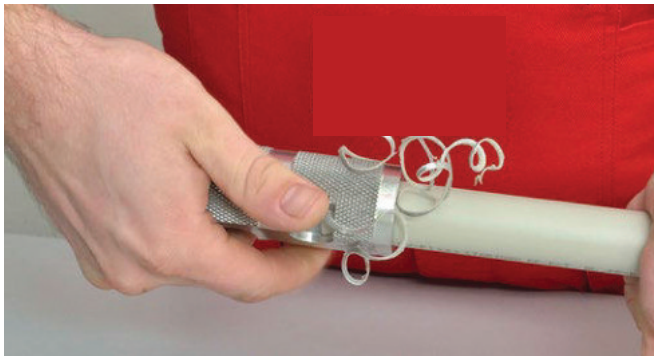
Sufficient distance of a standpipe from a wall penetration

Pipes STABI and FASER have 3x smaller expansivity and 3x higher toughness than all-plastic pipes . Therefore, the pipes can be assembled according to the same principles that were described above in the case of all-plastic pipes, that is to say in a classical procedure of a compensation solution, where a possible larger distance of supports and dilatation and compensational length will be significantly lower. When the piping is led in a groove, so called solid assem bly can also be utilized – fixed points are attached to the pipe in such a way that the thermal expansivity is transferred to the pipe material and it does not manifest. This assembly assumes sleeves which will be able to truly hold the pipe and which will be anchored firmly enough.

2.6 Connecting into a system

A piping system can be connected by welding or by mechanical links.

Connecting a pipe with a pipe fitting is carried out in the same way for all types of pipes, pipe fittings are identical. Before welding, in the case of the STABI and STABIOXY pipes, it is necessary to remove the outer PPR and the middle aluminium layer using special trimmers to the length of the insertion.



Pipes and pipe fittings are being connected by polyfusion welding, larger diameters by means of electro pipe fitting or by butt welding. All the methods have to be carried out exactly in accordance with approved working procedures.

Dividing of pipes

Pipes can be divided (cut) only by sharply ground tools. It is recommended to use special scissors or a cutter for plastic pipes.

For plastic – metal transitions in hot water and heating piping systems, plumber's unions with impressed brass nickel-plated inner and outer threads are strictly used.

For tightening of threaded links with impressed threads, tightening spanners with tape are used, if the plumber's union is not furnished with a polyhedron directly at its metal part.

WARNING:

Using of plumber's unions with plastic threads is unacceptable for sanitary technology, because of thermal-technical and physical-mechanical reasons. Plumber's unions with plastic threads can be used for example in the case of establishing temporary distribution systems.

Link sealing

Sealing of threaded links is carried out exclusively by Teflon tape, Teflon thread or by a special sealant. .

SANITARY FITTINGS
NSO
almanit
Hamburg - Germany

ALMATHERM
PPR Pipes & Fittings

ACCESSORIES

Pipe insulation Tubex (foamed PE)

System: AQUA
Material: -
Standard: -
Details: An accessory for thermal insulation of a water or heating distribution system.

						#	D [mm]	A [mm]	L [mm]
18 × 6	m	520	2	0,01	0,92	970018006			
18 × 10	m	320	2	0,02	1,50	970018010			
22 × 6	m	400	2	0,02	1,20	970022006			
22 × 10	m	270	2	0,04	1,78	970022010			
28 × 6	m	280	2	0,02	1,71	970028006			
28 × 10	m	190	2	0,04	2,53	970028010			
35 × 6	m	210	2	0,03	2,29	970035006			
35 × 10	m	150	2	0,04	3,20	970035010			
42 × 10	m	120	2	0,04	4,00	970042010			
42 × 15	m	80	2	0,07	6,00	970042015			
52 × 10	m	80	2	0,07	6,00	970052010			
52 × 15	m	70	2	0,10	6,86	970052015			
65 × 10	m	66	2	0,08	7,27	970065010			
65 × 15	m	54	2	0,11	8,89	970065015			
76 × 10	m	50	2	0,11	9,60	970076010			
76 × 15	m	38	2	0,11	12,63	970076015			
92 × 15	m	28	2	0,14	17,14	970092015			
92 × 20	m	24	2	0,20	20,00	970092020			
114 × 15	m	20	2	0,56	24,00	970114015			

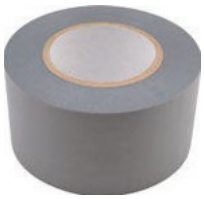
Adhesive tape

System: AQUA
Material: -
Standard: -
Details: An accessory for thermal insulation of a water or heating distribution system.

						#			
	m	25	25	0,01	3,60	971000000			

Insulation adhesive tape

System: AQUA
Material: -
Standard: -
Details: An accessory for thermal insulation of a water or heating distribution system.



						#			
	m	25	25	0,01	3,60	972000020			

Insulation clip

System: AQUA
Material: PPR
Standard: -
Details: An accessory for thermal insulation of a water or heating distribution system.

						#			
	pcs	10000	100	0,01	0,01	973000000			

Insulation felt

System: AQUA
Material: -
Standard: -
Details: An accessory for thermal insulation of a water or heating distribution system.

						#			
	pcs	50	50	0,16	3,10	974000000			

O-ring Taboren

System: AQUA
Material: PE
Standard: -
Details: Sealing material.

						#			
1/2×	pcs	6000	200	0,01	0,01	975000012			
3/4×	pcs	3000	300	0,01	0,01	975000034			
1×	pcs	2000	300	0,01	0,01	975000010			
5/4×	pcs	1400	300	0,01	0,01	975000054			
6/4×	pcs	1000	300	0,01	0,01	975000064			
2×	pcs	600	300	0,01	0,01	975000020			

Teflon insulation tape

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
10 m	pcs	300	10	0,01	0,06	976000010			

Plastic clip

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						# ●	# ●	# ●	
16	pcs	750	50	0,02	0,03	976016001 G			
20	pcs	400	50	0,03	0,05	976020001 G			
20	pcs	400	50	0,03	0,05		976020001 W		
20	pcs	400	50	0,03	0,05			976020001 B	
25	pcs	400	50	0,05	0,06	976025001 G			
25	pcs	400	50	0,05	0,06		976025001 W		
25	pcs	400	50	0,05	0,06			976025001 B	

Plastic double clip

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
2x16	pcs	500	50	0,01	0,04	976016002			
2x20	pcs	450	50	0,02	0,05	976020002			
2x25	pcs	200	50	0,03	0,06	976025002			

Plastic clip with stirrup

System: AQUA
Material: -
Standard: -
Details: -

						#			
15	pcs	600	50	0,01	0,03	977015001			
18	pcs	600	50	0,01	0,03	977018001			
20	pcs	400	50	0,02	0,04	977020001			
22	pcs	400	50	0,02	0,04	977022001			
25	pcs	400	50	0,02	0,04	977025001			

Plastic double clip with stirrup

System: AQUA
Material: -
Standard: -
Details: -

						#			
15	pcs	200	50	0,02	0,06	977015002			
18	pcs	300	50	0,02	0,06	977018002			
20	pcs	300	50	0,04	0,08	977020002			
22	pcs	300	50	0,04	0,08	977022002			
25	pcs	150	50	0,04	0,08	977022002			

Spacing clamp for cold water

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
16-25	pcs	200	50	0,01	0,05	978016025			
25-50	pcs	50	25	0,05	0,20	978025050			

Plastic clip with strap

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
32	pcs	400	50	0,02	0,05	979032000			
40	pcs	300	50	0,03	0,06	979040000			
50	pcs	150	25	0,04	0,16	979050000			
63	pcs	100	25	0,05	0,19	979063000			
75	pcs	60	1	0,10	0,38	979075000			
90	pcs	40	1	0,12	0,50	979090000			
110	pcs	30	1	0,15	0,64	979110000			

Metal sleeve

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
20	pcs	100	1	0,04	0,04	980020000			
25	pcs	100	1	0,04	0,04	980025000			
32	pcs	100	1	0,05	0,05	980032000			
40	pcs	100	1	0,06	0,06	980040000			
50	pcs	50	1	0,07	0,16	980050000			
63	pcs	50	1	0,11	0,19	980063000			
75	pcs	50	1	0,16	0,38	980075000			
90	pcs	50	1	0,19	0,50	987090000			
110	pcs	50	1	0,25	0,64	980110000			

Screw combi

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
M8 × 100	pcs	100	1	0,04	0,04	9180010			

Dowels

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
6 mm	set	800	20	0,01	0,03	982006000			
8 mm	set	480	20	0,02	0,04	982008000			
10 mm	set	170	10	0,03	0,07	982010000			
12 mm	set	120	10	0,04	0,13	982012000			

Threaded bar

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for fastening pipes.

						#			
M8 × 1000	pcs	50	1	0,04	0,33	983008000			

Plastic trough

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for supporting and fastening pipes.

						#			
12 × 8 × 400 cm	m	16 m	4	0,90	4,90	985012004			

Trough cover plastic

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for supporting and fastening pipes.

						#			
13 × 2 × 100 cm	m	2 m	1	0,80	3,38	986013001			

Galvanized trough (2 m length)

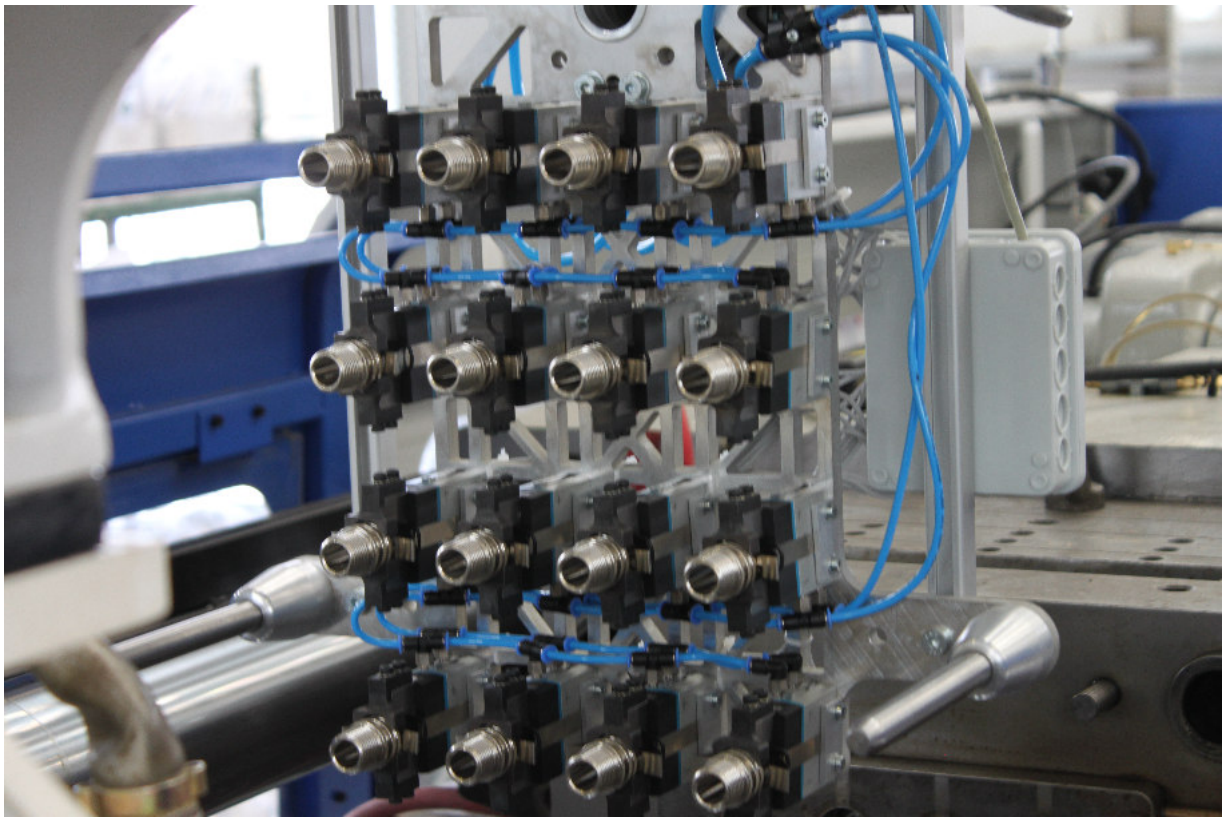
System: AQUA
Material: -
Standard: -
Details: A PPR system accessory for supporting and fastening pipes.

						#			
16 × 2 m	pcs	25	2	0,29	0,26	987026002			
20 × 2 m	pcs	25	2	0,34	0,40	987020002			
25 × 2 m	pcs	25	2	0,44	0,63	987025002			
32 × 2 m	pcs	25	2	0,53	1,02	987032002			
40 × 2 m	pcs	20	2	0,62	1,60	987040002			
50 × 2 m	pcs	20	2	0,76	2,50	987050002			
63 × 2 m	pcs	15	2	0,90	3,97	987063002			
75 × 2 m	pcs	15	2	1,07	5,63	987075002			
90 × 2 m	pcs	10	2	1,11	5,63	987090002			

RPE pipe

System: AQUA
Material: -
Standard: -
Details: A PPR system accessory.

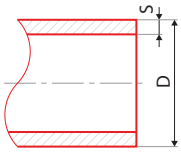
						#			
	kg	1	1	1,00		988000000AA			



SYSTEM PIPES FOR HEATING & WATER INSTALLATIONS

MULTIPERT 5

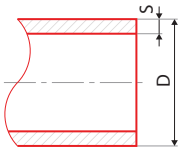
System: HEAT
Material: PE-RT/EVOH/PE-RT
Standard: EN ISO 22391, DIN 4726
Five-layer, highly flexible polyethylene pipe PE-RT II with high heat resistance (acc. to EN ISO 22391), with an oxygen barrier of ethylene vinyl alcohol (EVOH) according to DIN 4726. Tmax 95°C.



						#	D	s	SDR	l
8 × 1,0	m	200	cardboard	0,06	0,60	120008200	8	1,0	8	200
8 × 1,0	m	400	foil	0,06	0,60	120008400	8	1,0	8	400
10 × 1,3	m	200	cardboard	0,06	0,60	120010200	10	1,3	8	200
10 × 1,3	m	400	foil	0,06	0,60	120010200	10	1,3	8	400
12 × 1,5	m	200	cardboard	0,07	0,60	120012200	12	1,5	8	200
12 × 1,5	m	400	foil	0,07	0,60	120012400	12	1,5	8	400
14 × 1,8	m	200	cardboard	0,07	0,60	120014200	14	1,8	8	200
14 × 1,8	m	400	foil	0,07	0,60	120014400	14	1,8	8	400
15 × 1,8	m	200	cardboard	0,08	0,60	120015200	15	1,8	8	200
15 × 1,8	m	400	foil	0,08	0,60	120015400	15	1,8	8	400
16 × 2,0	m	200	cardboard	0,09	0,60	120016200	16	2,0	8	200
16 × 2,0	m	400	foil	0,60	0,60	120016400	16	2,0	8	400
17 × 2,0	m	200	cardboard	0,09	0,60	120017200	17	2,0	9	200
17 × 2,0	m	400	foil	0,09	0,60	120017400	17	2,0	9	400
20 × 2,0	m	200	cardboard	0,09	0,60	120020200	20	2,0	10	200

MULTIPEX 5

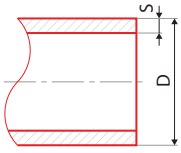
System: HEAT
Material: PE-Xa/EVOH/PE-Xa
Standard: EN ISO 15875, DIN 4726
Five-layer, particularly resistant pipe of cross-linked polyethylene PE-Xa with increased heat resistance (acc. to ČSN EN ISO 15875), with an oxygen barrier of EVOH according to DIN 4726. Tmax 110°C.



						#	D	s	SDR	l
16 × 2,0	m	200	cardboard	0,09	0,60	121016200	16	2,0	8	200
16 × 2,0	m	400	foil	0,09	0,60	121016400	16	2,0	8	400
17 × 2,0	m	200	cardboard	0,10	0,60	121017200	17	2,0	9	200
17 × 2,0	m	400	foil	0,10	0,60	121017400	17	2,0	9	400
20 × 2,0	m	200	foil	0,11	0,60	121020200	20	2,0	10	200

MULTIPERT-AL

System: HEAT
Material: PE-RT/AL/PE-RT
Standard: EN ISO 15874, DIN 8077, DIN 8078
Five-layer, polyethylene pipe PE-RT II with an longitudinally welded aluminium layer. Increased heat resistance (acc. to EN ISO 22391). Oxygen barrier of aluminum according to DIN 4726. Tmax 95°C.



						#	D	s	SDR	l
16 × 2,0	m	200	cardboard	0,112	0,60	130016200	16	2,0	8	200
16 × 2,0	m	400	foil	0,112	0,60	130016400	16	2,0	8	400
18 × 2,0	m	200	cardboard	0,136	0,60	130018200	18	2,0	9	200
20 × 2,0	m	200	cardboard	0,154	0,60	130016200	20	2,0	10	200

SANITARY FITTINGS
nso
almanit
Hamburg - Germany

SANITARY FITTINGS
DIN
almanit
Hamburg - Germany

ALMATHERM
PPR Pipes & Fittings

almanit sanitary gmbh
Papenstrasse 23
22089 Hamburg
Germany
Tel.: +49 40 2513347
Fax: +49 40 2513681
Email: info@almanit.com
www.almatherm.almanit.com