



Product Range
Export
1.11.2005

PVC-U
piping systems for
industrial application

**Pipe, Fittings,
Valves and Accessories**

40 Years of Application Know How



Our long experience in plastic piping systems applications is also for your security. Approvals and third party controls are guarantee for continuously high

quality. Many of our products have the necessary approvals of the relevant institutes and thanks to the batch identification they are traceable.

Fields of applications

Our specialists are proving their wide material knowledge and their application experience day by day in various industries:

- Water treatment
- Waste water treatment
- Galvanics
- Chemical industry
- Automotive industry
- Electronic industry
- Energy
- Swimming pools
- Cellulose and paper industry
- Photo industry
- Textile industry
- Shipbuilding
- Beverage industry
- Exhaust gas cleaning
- Chlorine industry
- Cooling and air conditioning
- Refrigeration plants
- Food
- Mining

Do you miss your application in the above list? No problem. Please call us, and we will find a solution according to your specifications.

GEORG FISCHER +GF+

Approvals

kiwa

IIP

NF



Lebensmittelzulassung

Drinking water approvals

WRAS
APPROVED
PRODUCT

MAIRIE DE PARIS

kiwa

Shipbuilding approvals



**BUREAU
VERITAS**



Germanischer Lloyd



DET NORSKE VERITAS

**Lloyd's
Register**

Quality Products with Advantages



Advantage of Wide Product Ranges

Fittings

Hand Operated Valves

Pipes

Joining Systems

Actuated Valves

Measure and Control Technology

Machines and Tools

available in four standards: ISO/DIN, ASTM/ANSI, BS and JIS



Quality management system
certified according to
ISO 9001/EN 29001
and ISO 14001



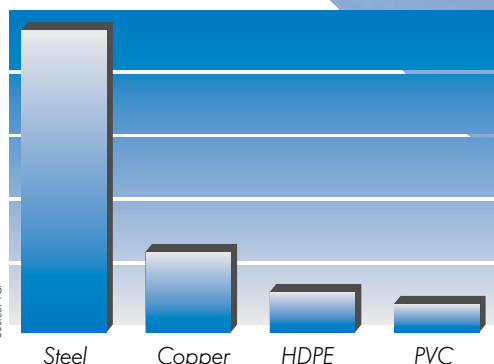
Advantage of Quality

Compound

Our own compound and strict quality controls for each raw material delivery form the basis for George Fischer's high quality products.

Production Know-How

Due to know-how gathered over 40 years we are able to produce our products to exceptionally high tolerances.

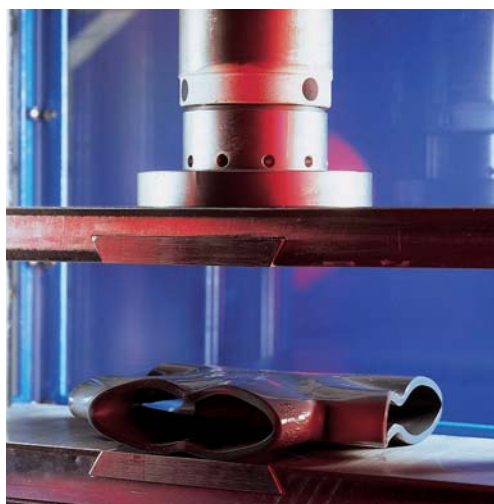


Energy required for 100 m pressurised pipe

Advantage for the Environment

In addition to the economical advantage of PVC-U, PVC-C and ABS there are also ecological advantages:

Preserving diminishing natural resources
Less energy required
Possibility of recycling
Very long life span



Advantage of Production Quality Control Tests

Pressure Pulsation Testing 1000 h Test
Chemical Resistance
Functions
Temperature Cycling Test
Cyclic Bending Test

Independently accredited test laboratory for components of plastic piping systems according to SN EN ISO 45001

for Professional Users

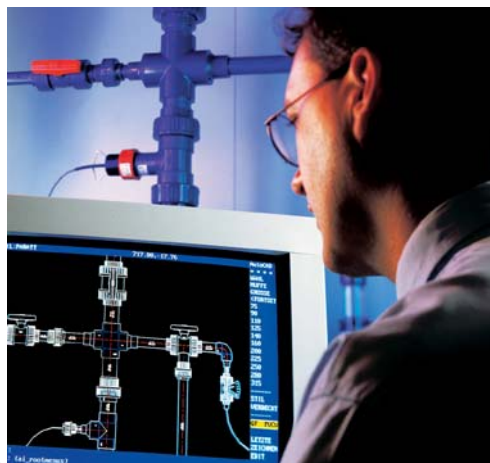
Advantage in Planning

One-stop-shopping for complete systems

Many customers prefer to purchase the complete piping system from one supplier. Because only systems that are designed to complement each other guarantee easy planning, installing and efficient functioning of the piping system.

CAD Product Library

For drawing and providing a list of orders Georg Fischer's CAD Product Library is an optimal solution. Can be used with AutoCAD and other CAD systems.



Up-to-date Know-how

+GF+ DIGICAT
CD-ROM catalogue

Online catalogue
www.piping.georgfischer.com



Advantage of Choosing the Right Material

For maximum safety and optimal durability of a piping system the choice of raw material and pressure class of the pipe parts is highly important. The raw material's suitability to the medium can be checked with the help of our chemical resistance list.



Advantage of Installation Technique

Cement jointing is simple, fast, economical and very reliable.

Over 100 million homogenous joints have been made over the total life time of piping systems, achieving the highest quality requirements.



Advantage of Support

Training

George Fischer offers training possibilities at our regional sales companies, in our own training center in Schaffhausen or at your premises. For cement jointing we can also provide you with a training video.

Worldwide Distribution

Sales companies, representatives and dealers from George Fischer can supply you with complete technical advice, punctual distribution and fast service in almost every corner of the world.



George Fischer quality is no coincidence!

More than 40 years of research, development and experience have shaped our high standard of quality. You will find the solution to your problem in our extensive product range:

Solvent Cemented Systems

PVC-U

Unplasticised
Polyvinyl Chloride

Range of sizes:

6–400 mm, BS $\frac{3}{8}$ " – 8"

Resistant to:

Acids and alkalis

Recommended applications:

Drinking water, distilled water, general purpose water, waste water, coolant brines, sea water, construction of plant and apparatus, foodstuffs, beverages. Universally applicable plastic with the widest range of fittings and valves

Not recommended for:

Aromatic solvents, ester, ketones, chlorinated hydrocarbons
low temperature uses ($< 0^{\circ}\text{C}$)
high temperature uses ($> 60^{\circ}\text{C}$)

PVC-C

post-chlorinated PVC-U

Range of sizes:

16–225 mm

Resistant to:

Acids and alkalis at high temps (max. 90°C) and high concentrations

Recommended applications:

Hot and aggressive mediums, high temperature, high corrosive environments, chemical industry generally (e.g. mixed acid waste) and hot water industrial applications

Not recommended for:

Aromatic solvents, ester, ketones, chlorinated hydrocarbons
low temperature uses ($< 0^{\circ}\text{C}$)

ABS

Acrylonitrile Butadiene
Styrene

Range of sizes:

16–315 mm

BS $\frac{3}{8}$ " – 8"

Resistant to:

Alkalis, weak acids, and salts

Recommended applications:

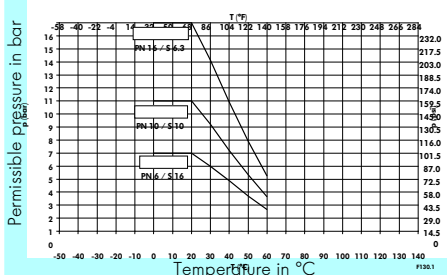
Low temperature brine, chilled water, refrigerants, air conditioning, drinking water, water treatment, process water, mining industry, and foodstuffs

Not recommended for:

High temperature uses ($> 60^{\circ}\text{C}$)
bleaches, aromatic solvents, ester, ketones and alcohols

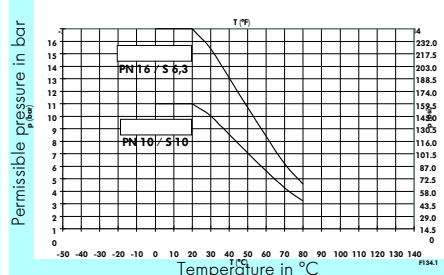
Application Limits for Pipes and Fittings in PVC-U

25-year values with Design Factor C
included at 20°C water



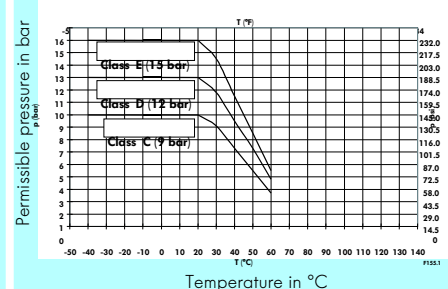
Application Limits for Pipes and Fittings in PVC-C

25-year values with Design Factor C
included at 20°C water



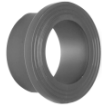
Application Limits for Pipes and Fittings in ABS

25-year values with Design Factor C
included at 20°C water



These diagrams are subject to adaptations to new European standards about to be issued. Ask your +GF+ dealer for more information.

Plastic Piping Systems PVC-U

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List of abbreviations

ANSI	American National Standard	DN	Nominal bore
ASTM	American Society for Testing and Materials	PN	Nominal pressure at 20°C, water
BS	British Standard	kg	Weight in kilograms
DIN	Deutsche Industrie-Normen	SP	Standard pack. The figure given indicates the quantity of fittings contained in a standard pack
ISO	International Standardization Organisation	GP	Gross pack. The figure given indicates the quantity of fittings contained in a gross pack
ABS	Acrylnitril Butadien Styrene	G	Pipe thread, not pressure tight in the thread to ISO 228-1
PVC-U	Polyvinyl Chloride	NPT	Taper male thread pressure tight in the thread to ANSI B 1.20.1
PVC-C	Polyvinyl Chloride chlorinated	R	Taper male thread, pressure tight in the thread to ISO 7-1/DIN 2999-1
PP	Polypropylene, heat stabilised	Rc	Taper female thread, pressure tight in the thread to ISO 7-1/DIN 2999-1
PE	Polyethylene	Rp	Parallel female thread, pressure tight in the thread to ISO 7-1/DIN 2999-1
PVDF	Polyvinylidene fluoride	Tr	Trapezoid thread
EPDM	Ethylene Propylene Rubber	SC	Size of hexagon bolts
FPM	Fluorine Rubber, e.g. Viton®	s	A/F
NBR	Nitrile Rubber	e	Wall thickness
IIR	Butyl Rubber	AL	Number of bolt holes
CSM	Chlore Sulphonyl Polythene, e.g. Hypalon®	®	Registered trade-mark
CR	Chloroprene Rubber, e.g. Neoprene®		
PTFE	Polytetrafluorethylene, e.g. Teflon®		
PBTP	Polybutylene terephthalate		
UP-GF	Unsaturated polyester resin glassfibre reinforced		
St	Steel		
Ms	Brass		
Tg	Malleable Iron		
d	Pipe outside diameter		

Fittings

General information

Materials

The material PVC-U conforms with the corresponding recommendations of the German Federal Board of Health.

Standards

All the main dimensions of solvent cement fittings and adaptor pipe fittings, such as nominal bore, z dimensions, socket depth and diameter, are in accordance with ISO Recommendations, ISO Draft Resolutions for millimetre pipes and DIN 8063.

Solvent cement joint	Threaded joint	Flange joints
ISO 727 DIN 8063 DIN EN ISO 15493 NF T54-028/016 DIN EN 1452-3 ASTM D-2464 ANSI B 1.20.1	ISO 7/1 ISO 228/1 DIN 2999 UNI 338 BSI 21	DIN 2501/8063 ISO 7005 BS 4504 ANSI / B16.5

For PVC-U Fittings in British Standard please request our special literature.

Joining

Solvent cement jointing:

Pipes with outside diameter tolerances in accordance with ISO 11922-3 can be readily jointed with George Fischer fittings.

Threaded joint:

Threaded plastic fittings should be jointed to plastic pipes or to other plastic parts. Jointing to metal pipes or fittings is permissible only where there is little stress, and should be carried out with great care.

Solvent Cement

A cement with gap-filling properties must be used.

Our instructions for solvent connections are based on the use of TANGIT solvent cement.

Nominal Pressure

Unless otherwise stated:

Conditional pressure for solvent cement fittings and adaptor fittings:

PN 16, i.e. 16 bar at 20°C (water).

Conditional pressure for threaded fittings:

PN 10, i.e. 10 bar at 20°C (water).

Marking

Solvent cement and adaptor pipe fittings from George Fischer are marked as follows:

- +GF+
- pipe o.d. or pipe thread size
- Material

Pressure rating:

M = PN 16

unmarked = PN 10

S 6.3/PN 16 = PN 16

S 10/PN 10 = PN 10

Threaded pipe fittings from George Fischer are marked as follows:

- +GF+
- pipe thread size
- Material

Reducing fittings are marked in the following sequence (Fig. 1):

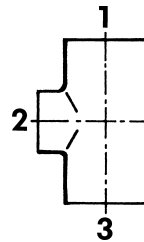


Fig. 1

Angle Marking

PVC fittings for solvent cement jointing from George Fischer are being supplied with a 45° angle marking (Fig. 2).

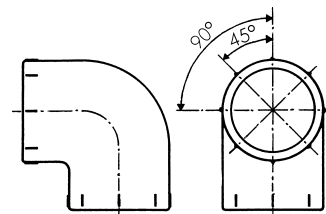


Fig. 2

Dimensions

All dimensions are given in mm.

Information Service

For detailed information see our Catalogue "Plastic Piping Systems".

Quality Mark

The George Fischer PVC-U fittings are tested to the following national standards institutes. The quality and test levels of our PVC-U fittings are constantly inspected by these institutes in our works.

BSI, Kite Mark, England

NF, Marque de qualité, France

KIWA, Netherlands

UNI, Istituto Italiano Plastici, Italy

ÖNORM, Austria Plastics Institute, Austria

DIBT, TÜV Bavaria, Germany

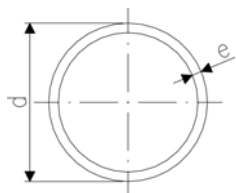
Orders

Always quote the George Fischer code number when placing orders.

Ordering example

90° bend 721 000 111

Pipes



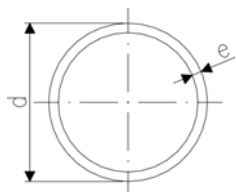
Pipes PVC-U, grey

Series S 10, SDR 21, nominal pressure PN 10

Model:

- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends

d [mm]	PN	Code	kg/m	e [mm]	
25	10	161 017 082	0.174	1.5	
32	10	161 017 083	0.264	1.8	
40	10	161 017 084	0.350	1.9	
50	10	161 017 085	0.552	2.4	
63	10	161 017 086	0.854	3.0	
75	10	161 017 087	1.220	3.6	
90	10	161 017 088	1.750	4.3	
110	10	161 017 089	2.610	5.3	
125	10	161 017 090	3.340	6.0	
140	10	161 017 091	4.180	6.7	
160	10	161 017 092	5.470	7.7	
180	10	161 017 093	6.880	8.6	
200	10	161 017 094	8.510	9.6	
225	10	161 017 095	10.800	10.8	
250	10	161 017 096	13.200	11.9	
280	10	161 017 097	16.000	13.4	
315	10	161 017 098	20.900	15.0	



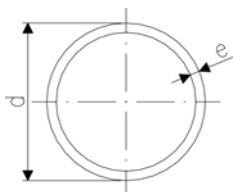
Pipes PVC-U, grey

Series S 6.3, SDR 13.6, nominal pressure PN 16

Model:

- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends

d [mm]	d [inch]	PN	Code	kg/m	e [mm]	
12		16	161 017 104	0.055	1.0	
16		16	161 017 105	0.090	1.2	
20		16	161 017 106	0.137	1.5	
25		16	161 017 107	0.212	1.9	
32		16	161 017 108	0.342	2.4	
40		16	161 017 109	0.525	3.0	
50		16	161 017 110	0.809	3.7	
63		16	161 017 111	1.290	4.7	
75	2 ½	16	161 017 112	1.820	5.6	
90		16	161 017 113	2.610	6.7	
110		16	161 017 114	3.900	8.1	
125		16	161 017 115	5.010	9.2	
140	5	16	161 017 116	6.270	10.3	
160		16	161 017 117	8.170	11.8	



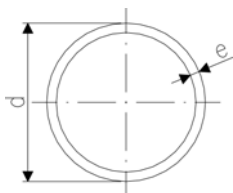
Pipes PVC-U, grey

Series S 4, SDR 9, nominal pressure PN 25

Model:

- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- Increased wall thickness for industrial use

d [mm]	PN	Code	kg/m	e [mm]	
6	25	161 017 126	0.025	1.0	
8	25	161 017 127	0.035	1.0	
10	25	161 017 128	0.053	1.2	
12	25	161 017 129	0.073	1.4	
16	25	161 017 130	0.123	1.8	
20	25	161 017 131	0.196	2.3	
25	25	161 017 132	0.294	2.8	
32	25	161 017 133	0.482	3.6	
40	25	161 017 134	0.750	4.5	
50	25	161 017 135	1.160	5.6	
63	25	161 017 136	1.820	7.0	
75	25	161 017 137	2.600	8.4	
90	25	161 017 138	-	10.0	
110	25	161 017 139	5.560	12.3	



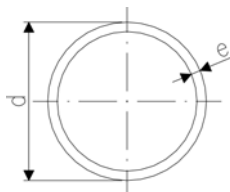
Pipes PVC-U, transparent

Series S 25, SDR 51, nominal pressure PN 4

Model:

- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- The material used fulfills the requirements of DIN 8061 in all aspects except longterm pressure test

d [mm]	PN	Code	kg/m	e [mm]	
63	4	192 017 036	0.532	1.8	
75	4	192 017 037	0.642	1.8	
90	4	192 017 038	0.774	1.8	
110	4	192 017 039	1.160	2.2	
125	4	192 017 040	1.480	2.5	
140	4	192 017 041	1.840	2.8	
160	4	192 017 042	2.410	3.2	
200	4	192 017 044	3.700	4.0	
225	4	192 017 045	-	4.5	
250	4	192 017 046	5.650	4.9	
280	4	192 017 047	-	5.5	

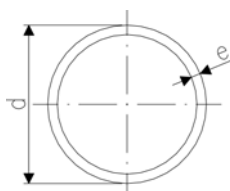


Pipes PVC-U, transparent Series S 16.7, SDR 34.3, nominal pressure PN 6

Model:

- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- The material used fulfills the requirements of DIN 8061 in all aspects except longterm pressure test

d [mm]	PN	Code	kg/m	e [mm]	
50	6	192 017 060	0.422	1.8	
160	6	192 017 080	3.440	4.7	

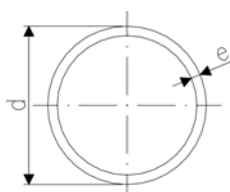


Pipes PVC-U, transparent Series S 10, SDR 21, nominal pressure PN 10

Model:

- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends

d [mm]	PN	Code	kg/m	e [mm]	
25	10	192 017 082	-	1.5	
32	10	192 017 083	-	1.8	
40	10	192 017 084	0.366	2.0	
50	10	192 017 085	-	2.4	
63	10	192 017 086	0.854	3.0	
75	10	192 017 087	1.220	3.6	
90	10	192 017 088	1.750	4.3	
110	10	192 017 089	2.610	5.3	



Pipes PVC-U, transparent Series S 6.25, SDR 13.5, nominal pressure PN 16

Model:

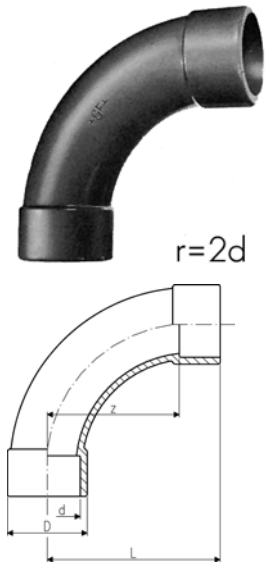
- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- The material used fulfills the requirements of DIN 8061 in all aspects except longterm pressure test

d [mm]	PN	Code	kg/m	e [mm]	
12	16	192 017 104	0.055	1.0	
16	16	192 017 105	0.090	1.2	
20	16	192 017 106	0.137	1.5	
25	16	192 017 107	0.212	1.9	
32	16	192 017 108	0.342	2.4	
40	16	192 017 109	0.525	3.0	
50	16	192 017 110	0.809	3.7	
63	16	192 017 111	1.290	4.7	

Fittings

21 00 01

Bends 90°, PVC-U metric



d [mm]	d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
20		16	721 000 106	10	0.028	40	27	56	
25		16	721 000 107	10	0.049	50	33	69	
32		16	721 000 108	10	0.067	64	38	86	
40		16	721 000 109	30	0.154	80	47	106	
50		16	721 000 110	5	0.277	100	61	131	
63		16	721 000 111	5	0.515	126	76	164	
75	2 ½	16	721 000 112	5	0.786	150	90	194	
90		16	721 000 113	5	1.334	180	108	231	
110		16	721 000 114	5	2.960	220	137	281	
140	5	16	721 000 116	2	5.100	280	168	356	
160		16	721 000 117	1	7.300	320	192	406	

21 01 01

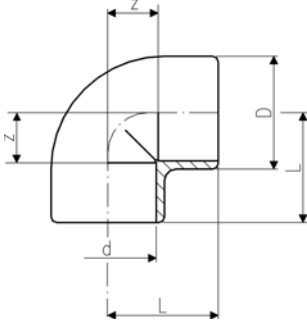
Bends 90° short pattern, PVC-U metric



d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
225	10	721 010 120	1	7.400	168	256	287	
280	10	721 010 122	1	16.100	210	318	357	
315	10	721 010 123	1	21.200	237	356	402	
400	6	721 010 125	-	37.000	300	442	521	

21 10 01

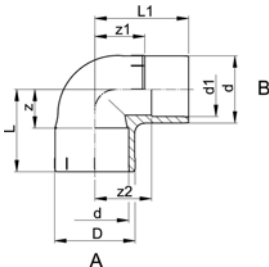
Elbows 90°, PVC-U metric



d [mm]	d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
6		16	721 100 101	10	0.004	4	11	16	
8		16	721 100 102	10	0.004	5	13	17	
10		16	721 100 103	10	0.004	6	14	18	
12		16	721 100 104	10	0.006	7	17	19	
16		16	721 100 105	10	0.009	9	21	23	
20		16	721 100 106	10	0.013	11	25	27	
25		16	721 100 107	10	0.025	14	32	33	
32		16	721 100 108	10	0.041	17	40	39	
40		16	721 100 109	10	0.061	23	47	49	
50		16	721 100 110	10	0.105	26	59	57	
63		16	721 100 111	10	0.204	33	73	71	
75	2 ½	16	721 100 112	5	0.329	40	87	83	
90		16	721 100 113	5	0.573	46	105	97	
110		16	721 100 114	4	1.215	55	128	116	
125		16	721 100 115	1	1.460	63	146	131	
140	5	16	721 100 116	4	2.340	70	162	146	
160		16	721 100 117	2	3.475	80	185	166	
200		10	721 100 119	1	4.700	101	225	207	
225		10	721 100 120	1	6.950	114	252	233	
250		10	721 100 121	1	9.500	131	282	263	

21 10 03

PRO-FIT Elbows 90°, PVC-U metric



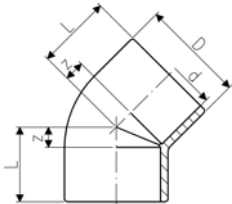
Model:

- Outlet: A = Solvent cemented socket metric
- Outlet: B = Solvent cemented spigot in combination with reducing socket metric
- Direct connection from fitting to fitting allowing shortest possible overall length

d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	
20	16	16	721 100 306	10	0.013	11	16	18	25	27	32	
25	20	16	721 100 307	10	0.022	14	18	21	31	33	37	
32	25	16	721 100 308	10	0.040	17	22	25	38	39	44	
40	32	16	721 100 309	10	0.070	23	30	34	47	49	56	
50	40	16	721 100 310	10	0.122	26	36	41	58	57	67	
63	50	16	721 100 311	10	0.237	33	45	52	73	71	83	

21 15 01

Elbows 45°, PVC-U metric



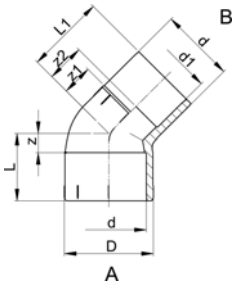
d [mm]	d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
16		16	721 150 105	10	0.008	5	21	19	
20		16	721 150 106	10	0.011	5	25	21	
25		16	721 150 107	10	0.018	6	31	25	
32		16	721 150 108	10	0.029	8	38	30	
40		16	721 150 109	10	0.049	10	47	36	
50		16	721 150 110	5	0.089	12	59	43	
63		16	721 150 111	5	0.161	14	73	52	
75	2 ½	16	721 150 112	5	0.250	17	87	61	
90		16	721 150 113	5	0.431	20	105	71	
110		16	721 150 114	5	0.733	25	127	86	
125		16	721 150 115	1	1.162	28	146	97	
140	5	16	721 150 116	1	1.639	32	162	108	
160		16	721 150 117	4	2.520	36	185	122	
200		10	721 150 119	2	3.300	43	225	149	
225		10	721 150 120	1	4.900	49	250	168	
250		10	721 150 121	1	7.150	60	282	192	
280		10	721 150 122	1	10.800	66	318	213	
315		10	721 150 123	1	14.900	74	356	239	
400		6	721 150 125	1	24.000	94	442	302	

21 15 03

PRO-FIT Elbows 45°, PVC-U metric

Model:

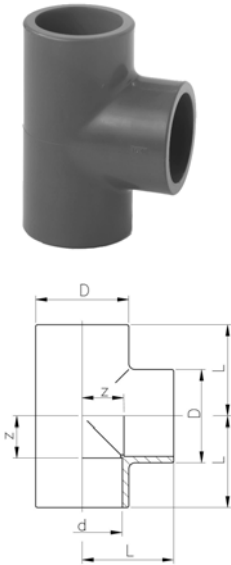
- Outlet: A = Solvent cemented socket metric
- Outlet: B = Solvent cemented spigot in combination with reducing socket metric
- Direct connection from fitting to fitting allowing shortest possible overall length



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	
20	16	16	721 150 306	10	0.010	5	9	11	25	21	25	
25	20	16	721 150 307	10	0.016	6	11	14	31	25	30	
32	25	16	721 150 308	10	0.030	8	13	16	38	30	35	
40	32	16	721 150 309	5	0.052	10	17	21	47	36	43	
50	40	16	721 150 310	5	0.090	12	18	23	58	43	49	
63	50	16	721 150 311	5	0.176	14	23	30	73	52	61	

21 20 01

Tees 90° equal, PVC-U metric



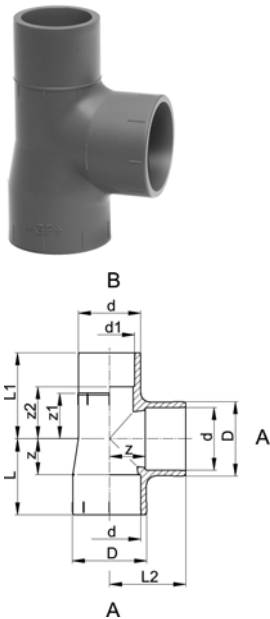
d [mm]	d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
6		16	721 200 101	10	0.004	4	11	16	
8		16	721 200 102	10	0.008	5	13	17	
10		16	721 200 103	10	0.008	6	16	18	
12		16	721 200 104	10	0.016	7	19	19	
16		16	721 200 105	10	0.012	9	21	23	
20		16	721 200 106	10	0.017	11	25	27	
25		16	721 200 107	10	0.029	14	31	33	
32		16	721 200 108	10	0.055	17	38	39	
40		16	721 200 109	10	0.100	23	48	49	
50		16	721 200 110	10	0.153	26	58	57	
63		16	721 200 111	10	0.334	33	73	71	
75	2 ½	16	721 200 112	5	0.473	39	87	83	
90		16	721 200 113	5	0.822	46	105	97	
110		16	721 200 114	6	1.392	55	127	116	
125		16	721 200 115	2	2.400	66	151	135	
140	5	16	721 200 116	1	3.333	71	169	147	
160		16	721 200 117	1	4.963	81	193	167	
200		10	721 200 119	1	5.763	101	225	207	
225		10	721 200 120	1	9.067	114	256	233	
250		10	721 200 121	-	12.500	132	282	263	
280		10	721 200 122	1	17.480	152	318	298	
315		10	721 200 123	1	24.350	168	356	332	
400		6	721 200 125	-	39.500	214	442	420	

21 20 03

PRO-FIT Tees 90° equal, PVC-U metric

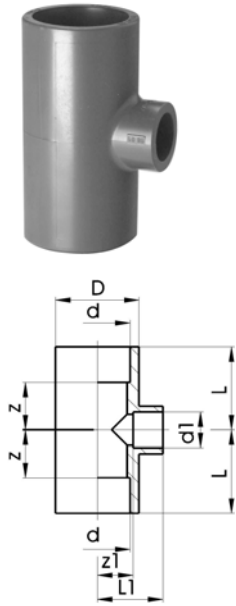
Model:

- Outlet: A = Solvent cemented socket metric
- Outlet: B = Solvent cemented spigot in combination with reducing socket metric
- Direct connection from fitting to fitting allowing shortest possible overall length



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	
20	16	16	721 200 306	10	0.017	11	17	19	25	27	33	27	
25	20	16	721 200 307	10	0.028	14	19	22	31	33	38	33	
32	25	16	721 200 308	10	0.052	17	24	27	38	39	46	39	
40	32	16	721 200 309	10	0.098	23	30	34	47	47	56	49	
50	40	16	721 200 310	10	0.173	26	36	41	58	57	67	57	
63	50	16	721 200 311	10	0.329	33	45	52	73	71	83	71	

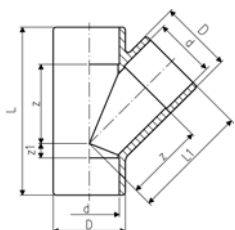
Tees 90° reducing, PVC-U metric



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	
25	20	16	721 200 134	10	0.055	14	14	33	33	30	
32	20	16	721 200 141	10	0.089	17	17	41	39	33	
32	25	16	721 200 138	10	0.092	17	17	41	39	36	
40	20	16	721 200 155	10	0.105	23	23	50	49	39	
40	25	16	721 200 151	10	0.107	23	23	50	49	42	
40	32	16	721 200 147	10	0.161	23	23	50	49	45	
50	20	16	721 200 009	5	0.180	28	28	62	59	44	
50	25	16	721 200 010	5	0.184	28	28	62	59	47	
50	32	16	721 200 164	5	0.189	28	28	62	59	50	
50	40	16	721 200 161	5	0.198	28	28	62	59	54	
63	25	16	721 200 011	10	0.330	35	34	77	73	53	
63	32	16	721 200 178	5	0.335	35	34	77	73	56	
63	40	16	721 200 174	5	0.340	35	34	77	73	60	
63	50	16	721 200 170	5	0.360	35	34	77	73	65	
75	32	16	721 200 181	9	0.520	40	41	92	84	63	
75	40	16	721 200 182	9	0.515	40	41	92	84	67	
75	50	16	721 200 183	8	0.510	40	41	92	84	72	
75	63	16	721 200 184	8	0.560	40	41	92	84	79	
90	32	16	721 200 142	6	0.830	46	55	110	97	77	
90	50	16	721 200 144	6	0.860	46	55	110	97	86	
90	63	16	721 200 145	5	0.890	46	55	110	97	93	
90	75	16	721 200 146	5	0.950	46	55	110	97	99	
110	32	16	721 200 135	3	1.400	56	67	133	117	89	
110	50	16	721 200 136	3	1.425	56	67	133	117	98	
110	63	16	721 200 132	-	1.490	56	65	133	117	103	
110	75	16	721 200 133	-	1.520	56	65	133	117	109	
110	90	16	721 200 137	3	1.500	56	65	133	117	116	
125	50	16	721 200 139	4	1.970	64	75	151	133	106	
125	90	16	721 200 140	4	2.200	64	75	151	133	126	
140	50	16	721 200 148	1	3.000	72	82	172	148	113	
140	75	16	721 200 149	1	3.000	72	78	172	148	122	
140	110	16	721 200 150	1	3.200	72	74	172	148	135	
160	110	16	721 200 152	1	4.100	81	81	192	167	142	
200	110	10	721 200 153	-	7.450	107	131	232	213	192	
200	160	10	721 200 154	-	8.230	107	106	232	213	192	
225	110	10	721 200 156	-	9.200	120	143	257	239	204	
225	160	10	721 200 157	-	10.000	120	119	257	239	205	
250	160	10	721 200 159	-	11.500	132	151	282	263	237	
250	200	10	721 200 162	-	12.300	132	131	282	263	237	
280	160	10	721 200 165	-	18.200	120	180	318	266	266	
280	225	10	721 200 167	-	16.200	120	148	318	266	268	
315	160	10	721 200 169	-	22.300	120	197	356	284	283	
315	225	10	721 200 172	-	20.300	120	165	356	284	284	
400	225	6	721 200 176	-	36.500	163	258	442	369	377	
400	315	6	721 200 180	-	32.000	163	213	442	369	377	

21 25 01

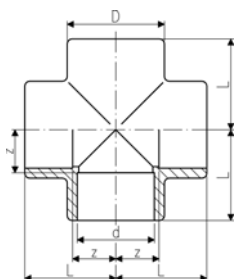
Tees 45°, PVC-U metric



d [mm]	d [inch]	PN	Code	SP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	
10	2 ½	10	721 250 103	100	0.013	18	4	16	46	30	
12		10	721 250 104	100	0.014	21	4	18	49	33	
16		10	721 250 105	100	0.023	25	5	23	58	39	
20		10	721 250 106	10	0.037	30	6	28	68	46	
25		10	721 250 107	10	0.057	36	9	33	83	55	
32		10	721 250 108	10	0.096	45	10	41	99	67	
40		10	721 250 109	10	0.157	56	10	50	118	82	
50		10	721 250 110	10	0.266	66	12	60	140	97	
63		10	721 250 111	5	0.435	85	14	74	175	123	
75		6	721 250 112	5	0.810	101	18	91	207	145	
90	5	6	721 250 113	1	1.290	122	20	107	245	173	
110		6	721 250 114	3	2.540	149	27	134	298	210	
125		6	721 250 115	2	3.605	167	30	147	335	236	
140		6	721 250 116	1	3.800	190	34	168	376	266	
160		6	721 250 117	1	6.600	213	41	190	428	300	
200		6	721 250 119	-	11.650	265	48	232	527	372	
225		6	721 250 120	-	15.800	296	54	260	590	416	
250		6	721 250 121	-	20.350	330	60	286	654	462	

21 30 01

Crosses, PVC-U metric



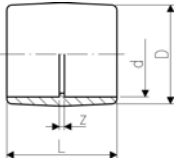
d [mm]	d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
10	2 ½	16	721 300 103	100	0.009	7	16	19	
12		16	721 300 104	100	0.011	8	18	20	
16		16	721 300 105	100	0.020	10	23	24	
20		16	721 300 106	10	0.037	11	29	27	
25		16	721 300 107	10	0.058	14	35	33	
32		16	721 300 108	10	0.092	17	43	39	
40		16	721 300 109	5	0.155	23	52	49	
50		16	721 300 110	5	0.265	28	63	59	
63		16	721 300 111	5	0.480	34	79	72	
75		10	721 300 112	3	0.660	40	92	83	
90	5	10	721 300 113	4	0.960	48	106	97	
110		10	721 300 114	4	1.600	58	128	117	

21 91 01

Sockets equal, PVC-U metric

Note:

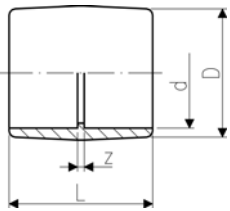
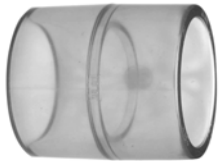
- * Socket d355 and d400 made from pipe



d [mm]	d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
6		16	721 910 101	10	0.004	3	12	27	
8		16	721 910 102	10	0.005	3	14	27	
10		16	721 910 103	10	0.005	3	16	27	
12		16	721 910 104	400	0.006	3	19	27	
16		16	721 910 105	10	0.007	3	22	31	
20		16	721 910 106	10	0.011	3	26	35	
25		16	721 910 107	10	0.015	3	32	41	
32		16	721 910 108	10	0.026	3	39	47	
40		16	721 910 109	10	0.046	3	48	55	
50		16	721 910 110	10	0.065	3	58	65	
63		16	721 910 111	10	0.119	3	73	79	
75	2 ½	16	721 910 112	10	0.191	4	87	92	
90		16	721 910 113	10	0.328	5	105	107	
110		16	721 910 114	5	0.560	6	128	128	
125		16	721 910 115	-	0.740	7	142	145	
140	5	16	721 910 116	2	1.200	7	162	159	
160		16	721 910 117	1	1.542	8	183	180	
200		10	721 910 119	4	2.031	9	221	221	
225		10	721 910 120	2	3.790	10	253	248	
250		10	721 910 121	1	5.600	16	284	284	
280		10	721 910 122	1	6.680	16	321	314	
315		10	721 910 123	1	8.300	16	356	348	
*355		6	721 910 124	-	8.000	68	377	454	
*400		6	721 910 125	-	8.300	73	425	505	

52 91 01

Sockets equal, PVC-U transparent metric



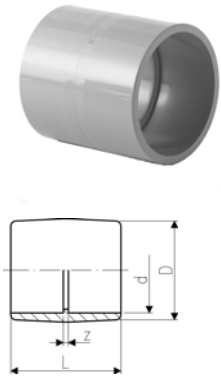
d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
16	16	752 910 105	10	0.009	3	23	31	
20	16	752 910 106	10	0.012	3	27	35	
25	16	752 910 107	10	0.021	3	32	41	
32	16	752 910 108	10	0.028	3	40	47	
40	16	752 910 109	10	0.057	3	52	55	
50	16	752 910 110	10	0.069	3	60	65	
63	16	752 910 111	5	0.138	3	75	79	

21 91 31

Adaptor Socket, PVC-U metric - (inch BS)

Model:

- With solvent cement socket metric and inch (BS)



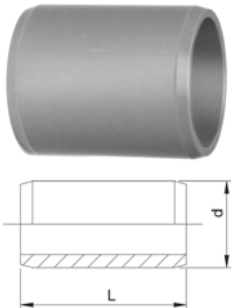
d [mm]	Inch	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
16	3/8	16	721 913 105	10	0.010	5	23	35	
20	1/2	16	721 913 106	10	0.013	5	27	38	
25	3/4	16	721 913 107	10	0.020	5	33	45	
32	1	16	721 913 108	10	0.031	5	41	51	
40	1 1/4	16	721 913 109	10	0.054	5	51	60	
50	1 1/2	16	721 913 110	10	0.076	4	59	65	
63	2	16	721 913 111	5	0.154	5	75	79	
90	3	16	721 913 113	10	0.340	6	104	108	
110	4	16	721 913 115	5	0.485	4	128	128	

21 90 09

Barrel Nipples, PVC-U metric

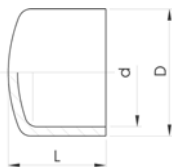
Model:

- With solvent cement spigots on both sides
- For the shortest possible distance between fittings
- Overall length L = 2 x socket length



d [mm]	d [inch]	PN	Code	SP	kg	L [mm]	
16		16	721 900 905	-	0.002	28	
20		16	721 900 906	-	0.004	32	
25		16	721 900 907	-	0.008	38	
32		16	721 900 908	-	0.015	44	
40		16	721 900 909	-	0.027	52	
50		16	721 900 910	-	0.050	62	
63		16	721 900 911	-	0.098	76	
75	2 1/2	16	721 900 912	-	0.160	88	
90		16	721 900 913	-	0.266	102	
110		16	721 900 914	-	0.476	122	
125		16	721 900 915	-	0.691	138	
140	5	16	721 900 916	-	0.953	152	
160		16	721 900 917	-	1.569	192	
200		10	721 900 919	-	1.804	212	
225		10	721 900 920	-	2.570	238	

Caps, PVC-U metric



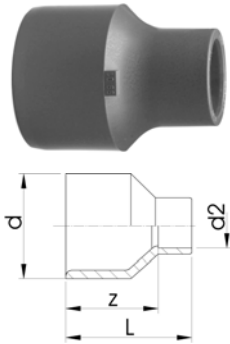
d [mm]	d [inch]	PN	Code	SP	kg	D [mm]	L [mm]	
12		16	721 960 104	10	0.004	19	15	
16		16	721 960 105	10	0.006	23	21	
20		16	721 960 106	10	0.009	27	24	
25		16	721 960 107	10	0.014	33	28	
32		16	721 960 108	10	0.021	40	32	
40		16	721 960 109	10	0.031	47	38	
50		16	721 960 110	10	0.052	59	45	
63		16	721 960 111	5	0.092	74	56	
75	2 ½	16	721 960 112	50	0.152	87	65	
90		16	721 960 113	5	0.270	105	77	
110		16	721 960 114	5	0.460	128	94	
140	5	10	721 960 116	10	0.880	164	92	
160		10	721 960 117	2	1.490	188	130	

21 91 03

Reducing Bushes, PVC-U metric

Model:

- With spigot and solvent cement socket



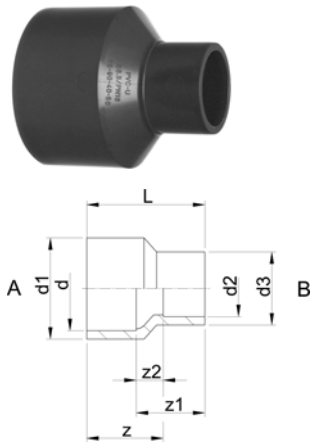
d [mm]	d2 [mm]	PN	Code	SP	kg	z [mm]	L [mm]	
8	6	16	721 910 323	10	0.003	15	27	
10	6	16	721 910 326	10	0.003	15	27	
10	8	16	721 910 325	10	0.003	15	27	
20	16	16	721 910 334	10	0.010	21	35	
25	20	16	721 910 337	10	0.015	25	41	
32	25	16	721 910 341	10	0.025	30	49	
40	32	16	721 910 346	10	0.044	36	58	
50	40	16	721 910 352	10	0.075	44	70	
63	50	16	721 910 358	5	0.146	54	85	
75	63	16	721 910 364	5	0.220	62	100	
90	75	16	721 910 370	5	0.335	74	118	
140	110	16	721 910 385	2	0.814	111	172	

21 91 09

PRO-FIT Reducing Bushes, PVC-U metric

Model:

- Outlet: A and B = Solvent cemented spigot in combination with reducing socket metric



d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	z2 [mm]	L [mm]	
8	12	10		16	721 910 903	10	0.003	15	15	3	27	
12	16	8	12	16	721 910 905	10	0.003	18	18	6	30	
12	16	10	16	16	721 910 906	10	0.006	18	18	6	30	
16	20	10	16	16	721 910 908	10	0.005	21	19	7	33	
16	20	12	16	16	721 910 909	10	0.005	21	19	7	33	
20	25	12	16	16	721 910 910	10	0.008	25	21	9	37	
20	25	16	20	16	721 910 911	10	0.008	25	23	9	39	
25	32	12	16	16	721 910 912	10	0.014	30	23	11	42	
25	32	16	20	16	721 910 913	10	0.015	30	26	12	44	
25	32	20	25	16	721 910 914	10	0.017	30	27	11	46	
32	40	16	20	16	721 910 915	100	0.025	36	28	14	50	
32	40	20	25	16	721 910 916	10	0.027	36	30	14	52	
32	40	25	32	16	721 910 917	10	0.032	36	33	14	55	
40	50	20	25	16	721 910 918	10	0.046	44	34	18	60	
40	50	25	32	16	721 910 919	10	0.052	44	37	18	63	
40	50	32	40	16	721 910 920	10	0.059	44	40	18	66	
50	63	25	32	16	721 910 921	5	0.092	54	42	23	73	
50	63	32	40	16	721 910 922	5	0.099	54	45	23	76	
50	63	40	50	16	721 910 923	5	0.112	54	49	23	80	
63	75	32	40	16	721 910 924	5	0.128	62	46	24	84	
63	75	40	50	16	721 910 925	5	0.139	62	50	24	88	
63	75	50	63	16	721 910 926	5	0.169	62	55	24	93	
75	90	40	50	16	721 910 927	10	0.232	74	56	30	100	
75	90	50	63	16	721 910 928	10	0.260	74	61	30	105	
75	90	63	75	16	721 910 929	10	0.275	74	68	30	112	

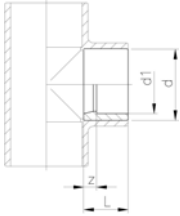
Reducing Bushes short, PVC-U metric

Model:

- With spigot and solvent cement socket



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	L [mm]	
*12	8	16	721 900 329	10	0.002	2	14	
*16	12	16	721 900 331	10	0.002	2	14	
*20	16	16	721 900 334	10	0.003	2	16	
*25	20	16	721 900 337	10	0.005	3	19	
*32	20	16	721 900 342	10	0.014	6	22	
*32	25	16	721 900 341	10	0.009	3	22	
40	20	16	721 900 348	10	0.021	10	26	
40	25	16	721 900 347	10	0.021	7	26	
*40	32	16	721 900 346	10	0.016	4	26	
50	20	16	721 900 355	10	0.033	15	31	
50	25	16	721 900 354	10	0.034	12	31	
50	32	16	721 900 353	10	0.037	9	31	
*50	40	16	721 900 352	100	0.030	5	31	
63	32	16	721 900 360	10	0.061	16	38	
63	40	16	721 900 359	10	0.068	12	38	
*63	50	16	721 900 358	10	0.058	7	38	
75	50	16	721 900 365	10	0.106	13	44	
*75	63	16	721 900 364	10	0.077	6	44	
90	50	16	721 900 372	10	0.179	20	51	
90	63	16	721 900 371	10	0.183	13	51	
*90	75	16	721 900 370	10	0.136	7	51	
110	50	16	721 900 379	5	0.309	30	61	
110	63	16	721 900 378	5	0.313	23	61	
110	75	16	721 900 377	-	0.255	17	61	
*110	90	16	721 900 376	5	0.259	10	61	
125	90	16	721 900 381	5	0.484	18	69	
*125	110	16	721 900 380	5	0.266	8	69	
140	90	16	721 900 386	5	0.560	25	76	
*140	110	16	721 900 385	5	0.599	15	76	
*140	125	16	721 900 384	5	0.480	7	76	
160	90	16	721 900 391	5	0.750	35	86	
160	110	16	721 900 390	5	0.868	25	86	
*160	140	16	721 900 388	5	0.547	10	86	
200	110	10	721 900 393	-	1.900	45	106	
200	125	10	721 900 325	-	1.940	37	106	
200	140	10	721 900 394	-	1.850	30	106	
200	160	10	721 900 392	2	1.070	20	106	
225	110	10	721 900 397	4	2.450	58	119	
225	125	10	721 900 399	-	2.500	50	119	
225	140	10	721 900 398	4	2.500	43	119	
225	160	10	721 900 396	2	2.200	33	119	
*225	200	10	721 900 181	4	1.400	13	119	
250	125	10	721 900 326	-	3.150	62	131	
250	140	10	721 900 300	4	3.200	55	131	
250	160	10	721 900 301	4	3.080	45	131	
*250	200	10	721 900 302	4	3.150	25	131	
*250	225	10	721 900 303	4	1.700	12	131	
280	140	10	721 900 307	-	4.000	69	148	
280	160	10	721 900 308	1	4.100	59	148	
280	200	10	721 900 304	-	4.250	40	146	
*280	225	10	721 900 305	1	4.300	27	146	
*280	250	10	721 900 306	1	2.500	15	146	
315	160	10	721 900 313	1	2.050	77	166	
315	200	10	721 900 309	1	5.300	57	166	
315	225	10	721 900 310	-	5.500	45	164	
*315	250	10	721 900 311	1	6.300	33	164	
*315	280	10	721 900 312	1	3.550	17	164	

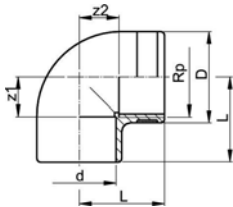


d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	L [mm]	
355	315	6	721 900 315	-	5.300	20	184	
400	250	6	721 900 319	-	9.000	75	206	
400	280	6	721 900 320	-	9.200	60	206	
400	315	6	721 900 321	-	13.100	42	206	
*400	355	6	721 900 322	-	7.600	22	206	

Adaptor Fittings

21 10 02

Elbows 90°, PVC-U metric - Rp



Model:

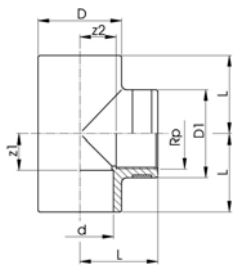
- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

*** without reinforcement, connection only for plastic threads**

d [mm]	Rp [inch]	PN	Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]	
12	1/4	16	721 100 204	10	0.011	7	7	20	19	
16	3/8	16	721 100 205	10	0.015	9	9	25	23	
20	1/2	16	721 100 206	10	0.025	13	11	30	27	
25	3/4	16	721 100 207	10	0.034	16	15	35	33	
32	1	16	721 100 208	10	0.060	19	19	45	39	
40	1 1/4	16	721 100 209	10	0.123	23	27	55	50	
50	1 1/2	16	721 100 210	5	0.185	27	36	62	58	
63	2	16	721 100 211	10	0.326	33	46	75	73	
*75	2 1/2	10	721 100 212	5	0.438	40	56	90	84	
*90	3	10	721 100 213	5	0.800	48	68	108	99	
*110	4	10	721 100 214	1	1.245	58	82	132	119	

21 20 02

Tees 90°, PVC-U metric - Rp



Model:

- With solvent cement socket metric, branch with parallel female thread Rp
- Leaving with cylindrical pipe internal thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

*** without reinforcement, connection only for plastic threads**

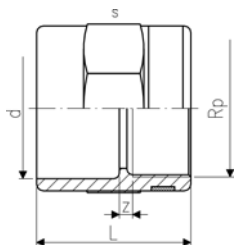
d [mm]	Rp [inch]	PN	Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	D1 [mm]	L [mm]	
12	1/4	16	721 200 204	10	0.015	7	7	17	20	19	
16	3/8	16	721 200 205	10	0.027	9	9	21	25	23	
20	1/2	16	721 200 206	10	0.025	11	13	26	30	29	
25	3/4	16	721 200 207	10	0.039	14	15	32	35	33	
32	1	16	721 200 208	10	0.071	17	19	40	45	39	
40	1 1/4	16	721 200 209	10	0.188	23	26	47	55	49	
50	1 1/2	16	721 200 210	5	0.190	27	36	59	59	59	
63	2	16	721 200 211	5	0.360	33	46	74	75	71	
*75	2 1/2	10	721 200 212	5	0.609	40	56	92	92	84	
*90	3	10	721 200 213	5	1.076	48	68	110	110	99	
*110	4	10	721 200 214	1	1.686	58	82	133	132	119	

21 91 02

Adaptor Sockets, PVC-U metric - Rp

Model:

- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



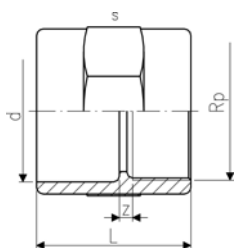
d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
12	1/4	16	721 910 204	10	0.010	4	27	22	
16	3/8	16	721 910 205	10	0.017	5	31	27	
20	1/2	16	721 910 206	10	0.025	5	36	32	
25	3/4	16	721 910 207	10	0.032	5	40	36	
32	1	16	721 910 208	10	0.070	5	45	46	
40	1 1/4	16	721 910 209	10	0.085	5	51	55	
50	1 1/2	16	721 910 210	10	0.125	7	59	65	
63	2	16	721 910 211	5	0.170	7	69	80	

21 91 60

Adaptor Sockets, PVC-U metric - Rp

Model:

- With solvent cement socket metric and parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



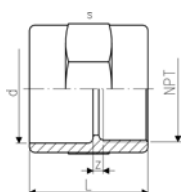
d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
75	2 1/2	10	721 916 012	10	0.223	7	82	90	
90	3	10	721 916 013	5	0.374	9	94	110	
110	4	10	721 916 014	5	0.542	9	110	130	

21 91 42

Adaptor Sockets, PVC-U metric - NPT

Model:

- With solvent cement socket metric and NPT (ASTM) taper female thread
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



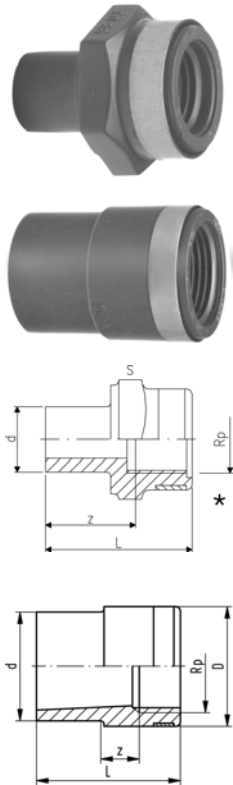
d [mm]	NPT [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
20	1/2	10	721 914 206	10	0.022	5	35	32	
25	3/4	10	721 914 207	10	0.027	6	40	36	
32	1	10	721 914 208	10	0.050	6	45	46	
40	1 1/4	10	721 914 209	10	0.075	6	51	55	
50	1 1/2	10	721 914 210	10	0.109	10	59	65	
63	2	10	721 914 211	5	0.176	10	69	80	
75	2 1/2	10	721 914 212	10	0.247	11	82	90	
90	3	10	721 914 213	5	0.381	14	94	110	
110	4	10	721 914 214	5	0.557	18	110	130	

21 91 04

Reducing Bushes, PVC-U metric - Rp

Model:

- With solvent cement spigot metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



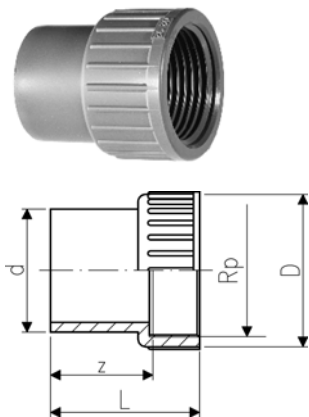
d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	s [mm]	
*12	1/4	16	721 910 404	10	0.007	17	20	27	22	
20	3/8	16	721 910 434	10	0.014	24	25	35	15	
25	1/2	16	721 910 437	10	0.021	27	30	41	21	
32	3/4	16	721 910 441	10	0.032	32	35	48	33	
40	1	16	721 910 446	10	0.060	38	45	56	60	
50	1 1/4	16	721 910 452	10	0.097	46	55	66	99	
63	1 1/2	16	721 910 458	5	0.148	57	62	77	150	

21 90 04

Adaptor Bushes equal, PVC-U metric - Rp

Model:

- With solvent cement spigot metric and parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



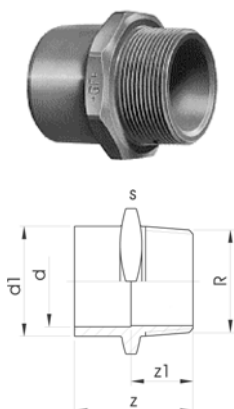
d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
20	1/2	10	721 900 406	10	0.019	22	28	37	
25	3/4	10	721 900 407	10	0.028	25	34	41	
32	1	10	721 900 408	10	0.041	29	42	48	
40	1 1/4	10	721 900 409	10	0.065	34	52	56	
50	1 1/2	10	721 900 410	-	0.103	40	62	61	
63	2	10	721 900 411	5	0.170	49	77	74	

21 91 05

Adaptor Socket-Nipple, PVC-U metric - R

Model:

- With solvent cement spigot/socket reducing metric and taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



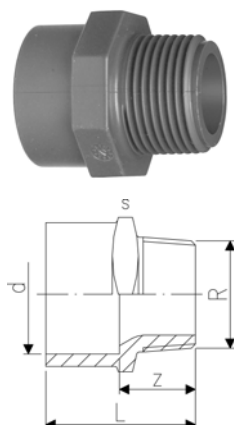
d [mm]	R [inch]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	s [mm]	
12	3/8	16	16	721 910 555	10	0.011	35	23	27	
16	1/2	20	16	721 910 556	10	0.019	42	28	32	
20	3/4	25	16	721 910 557	10	0.025	47	31	36	
25	1	32	16	721 910 558	10	0.040	54	35	46	
32	1 1/4	40	16	721 910 559	10	0.062	60	38	55	
40	1 1/2	50	16	721 910 560	10	0.093	66	40	65	
50	2	63	16	721 910 561	5	0.165	78	47	80	

21 91 07

Adaptor Bushes equal, PVC-U metric - R

Model:

- With solvent cement socket metric and taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



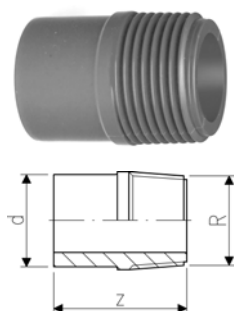
d [mm]	R [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
16	3/8	16	721 910 705	10	0.012	20	34	27	
20	1/2	16	721 910 706	10	0.018	24	40	32	
25	3/4	16	721 910 707	10	0.024	25	44	36	
32	1	16	721 910 708	10	0.039	28	50	46	
40	1 1/4	16	721 910 709	10	0.063	31	57	55	
50	1 1/2	16	721 910 710	10	0.088	32	63	65	
63	2	16	721 910 711	5	0.158	38	76	80	
75	2 1/2	10	721 910 712	5	0.223	42	86	90	
90	3	10	721 910 713	5	0.355	46	97	110	
110	4	10	721 910 714	5	0.572	53	114	130	

21 91 35

Adaptor Nipples, PVC-U metric - R

Model:

- With solvent cement spigot metric and taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [mm]	R [inch]	PN	Code	SP	kg	z [mm]	
16	3/8	10	721 913 505	10	0.006	31	
20	1/2	10	721 913 506	10	0.010	35	
25	3/4	10	721 913 507	10	0.015	40	
32	1	10	721 913 508	10	0.029	46	

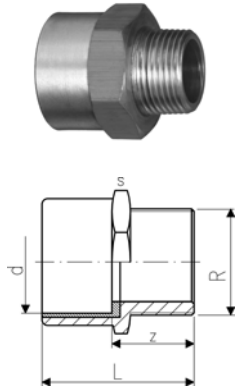
20 91 07

Adaptor Sockets, Brass/PVC-U metric - R

Model:

- Brass with taper male thread R and PVC-U solvent cement socket insert, metric
- Install with low mechanical stress and avoid large cyclic temperature changes

* Article to be discontinued



d [mm]	R [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
*16	3/8	16	720 910 705	-	0.128	24	40	32	
20	1/2	16	720 910 706	-	0.159	27	45	36	
25	3/4	16	720 910 707	-	0.193	28	49	40	
32	1	16	720 910 708	-	0.305	33	57	48	
40	1 1/4	16	720 910 709	-	0.306	36	64	58	
50	1 1/2	16	720 910 710	-	0.680	38	72	70	
63	2	16	720 910 711	-	0.960	43	84	85	

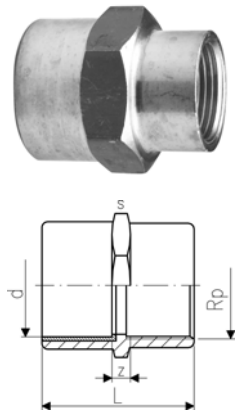
20 91 02

Adaptor Sockets, Brass/PVC-U metric - Rp

Model:

- Brass with parallel female thread Rp and PVC-U solvent cement socket insert, metric
- Install with low mechanical stress and avoid large cyclic temperature changes

* Article to be discontinued



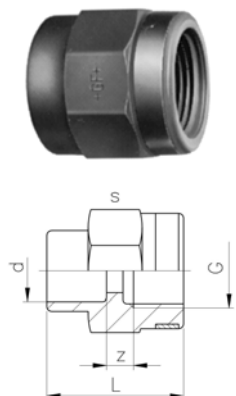
d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
*16	3/8	16	720 910 205	-	0.132	14	40	32	
20	1/2	16	720 910 206	-	0.162	14	46	36	
25	3/4	16	720 910 207	-	0.204	14	50	40	
32	1	16	720 910 208	-	0.323	16	58	48	
40	1 1/4	16	720 910 209	-	0.489	17	66	58	
50	1 1/2	16	720 910 210	-	0.767	19	74	70	
63	2	16	720 910 211	-	1.102	19	86	83	

21 91 62

Manometer Adaptor Sockets, PVC-U metric - G

Model:

- With solvent cement socket metric and female thread G
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



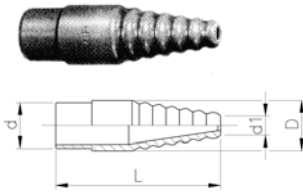
d [mm]	G [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
12	1/4	16	721 916 204	10	0.010	4	27	22	
16	1/2	16	721 916 206	10	0.028	7	36	32	

21 96 03

Hose Connectors, PVC-U metric

Model:

- With solvent cement spigot metric and tapered hose connection



d [mm]	PN	Code	SP	kg	d1 [mm]	D [mm]	L [mm]	
10	16	721 960 303	10	0.004	6	12	51	
12	16	721 960 304	10	0.004	6	12	51	
16	16	721 960 305	10	0.007	8	16	57	
20	16	721 960 306	10	0.016	11	22	73	

21 96 04

Hose Connectors, PVC-U metric

Model:

- With solvent cement spigot metric and parallel hose connection



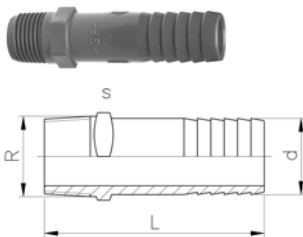
d [mm]	PN	Code	SP	kg	D [mm]	L [mm]	
10	16	721 960 403	10	0.002	8	47	
12	16	721 960 404	10	0.004	12	51	
16	16	721 960 405	10	0.009	16	57	
20	16	721 960 406	10	0.015	20	73	
25	16	721 960 407	10	0.021	25	79	
32	16	721 960 408	10	0.036	30	89	
40	16	721 960 409	5	0.061	40	100	
50	16	721 960 410	5	0.111	50	105	
63	16	721 960 411	5	0.178	60	120	

21 96 07

Hose Connectors, PVC-U R

Model:

- With taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U

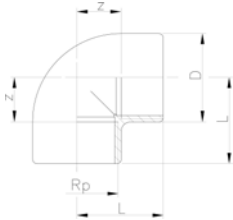


R [inch]	PN	Code	SP	kg	d [mm]	L [mm]	s [mm]	
¼	10	721 960 704	10	0.005	12	59	14	
⅜	10	721 960 705	10	0.011	16	67	19	
½	10	721 960 706	10	0.020	20	86	22	
¾	10	721 960 707	10	0.028	25	92	27	
1	10	721 960 708	5	0.048	30	103	36	
1 ¼	10	721 960 709	5	0.078	40	115	46	

Threaded Fittings

21 10 16

Elbows 90°, PVC-U Rp



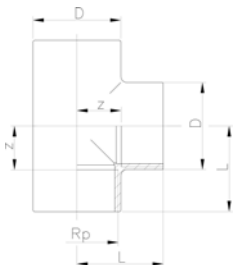
Model:

- With parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes
- * To be discontinued

Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
3/8	10	721 101 605	10	0.013	9	23	23
1/2	10	721 101 606	10	0.018	12	27	27
3/4	10	721 101 607	10	0.028	15	33	33
1	10	721 101 608	10	0.042	19	39	39
1 1/4	10	721 101 609	10	0.069	27	48	49
1 1/2	10	721 101 610	5	0.176	35	61	59
2	10	721 101 611	5	0.319	44	75	72
*2 1/2	10	721 101 612	24	0.450	56	90	84
*3	10	721 101 613	5	0.858	68	108	99
*4	10	721 101 614	1	1.233	82	132	119

21 20 16

Tees 90° equal, PVC-U Rp

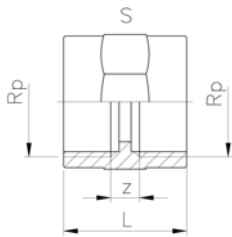


Model:

- With parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes
- * To be discontinued

Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
3/8	10	721 201 605	10	0.017	9	23	23
1/2	10	721 201 606	10	0.027	12	28	27
3/4	10	721 201 607	10	0.041	15	33	33
1	10	721 201 608	10	0.070	19	41	39
1 1/4	10	721 201 609	10	0.117	27	50	49
1 1/2	10	721 201 610	10	0.290	36	62	60
2	10	721 201 611	10	0.497	44	77	72
*2 1/2	10	721 201 612	8	0.642	56	92	84
*3	10	721 201 613	-	1.149	68	110	99
*4	10	721 201 614	-	1.662	82	133	119

21 91 06



Sockets, PVC-U

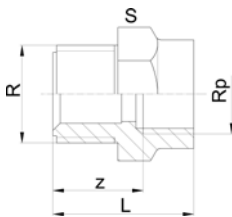
Rp

Model:

- With parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

Rp [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
1/4	10	721 910 604	10	0.010	7	27	22	
3/8	10	721 910 605	10	0.015	7	29	27	
1/2	10	721 910 606	10	0.025	9	35	32	
3/4	10	721 910 607	10	0.030	9	39	36	
1	10	721 910 608	10	0.055	11	45	46	
1 1/4	10	721 910 609	10	0.076	11	49	55	
1 1/2	10	721 910 610	10	0.106	11	49	65	
2	10	721 910 611	5	0.181	11	57	80	

21 91 08



Reducing Bushes, PVC-U

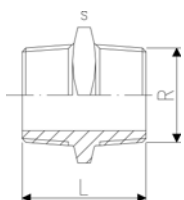
R - Rp

Model:

- With taper male thread R and parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

R [inch]	Rp [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]	
1/2	3/8	10	721 910 834	10	0.015	25	36	27	
3/4	1/2	10	721 910 837	10	0.021	25	39	32	
1	1/2	10	721 910 842	10	0.028	31	45	32	
1	3/4	10	721 910 841	10	0.030	29	45	36	
1 1/4	1	10	721 910 846	10	0.051	32	50	46	
1 1/2	1 1/4	10	721 910 852	10	0.071	35	55	55	
2	1 1/2	10	721 910 858	5	0.126	45	65	65	

21 91 19



Hexagon Nipples, PVC-U

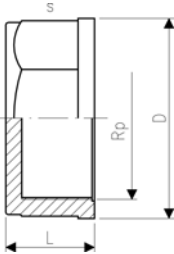
R

Model:

- With taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

R [inch]	PN	Code	SP	kg	L [mm]	s [mm]	
3/8	10	721 911 905	10	0.007	37	19	
1/2	10	721 911 906	10	0.012	45	22	
3/4	10	721 911 907	10	0.019	49	27	
1	10	721 911 908	10	0.035	57	36	
1 1/4	10	721 911 909	10	0.053	62	46	
1 1/2	10	721 911 910	10	0.071	67	50	
2	10	721 911 911	5	0.124	76	65	

21 96 06



Caps, PVC-U

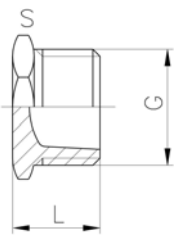
Rp

Model:

- With parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

Rp [inch]	PN	Code	SP	kg	D [mm]	L [mm]	s [mm]
1/8	10	721 960 603	10	0.013	20	14	17
1/4	10	721 960 604	10	0.024	25	16	22
3/8	10	721 960 605	10	0.012	31	19	27
1/2	10	721 960 606	10	0.018	37	21	32
3/4	10	721 960 607	10	0.024	42	24	36
1	10	721 960 608	10	0.040	50	26	46
1 1/4	10	721 960 609	10	0.060	60	29	55
1 1/2	10	721 960 610	10	0.073	65	31	60
2	10	721 960 611	5	0.128	81	36	75

21 96 09



Plugs, PVC-U

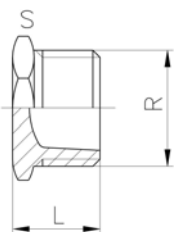
G

Model:

- With parallel male thread G
- Connection to plastic thread only
- Flat gasket necessary for sealing
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

G [inch]	PN	Code	SP	kg	L [mm]	s [mm]
3/8	10	721 960 905	10	0.006	21	22
1/2	10	721 960 906	10	0.010	25	27
3/4	10	721 960 907	10	0.019	29	36
1	10	721 960 908	10	0.030	32	41
1 1/4	10	721 960 909	10	0.048	36	50
1 1/2	10	721 960 910	10	0.069	37	60
2	10	721 960 911	5	0.120	42	75

21 96 19



Plugs, PVC-U

R

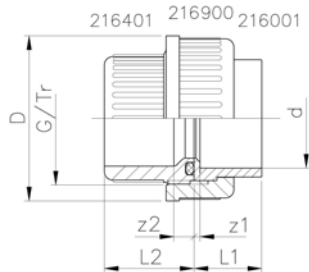
Model:

- With taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

R [inch]	PN	Code	SP	kg	L [mm]	s [mm]
3/8	10	721 961 905	10	0.006	21	22
1/2	10	721 961 906	10	0.010	25	27
3/4	10	721 961 907	10	0.019	29	36
1	10	721 961 908	10	0.030	32	41
1 1/4	10	721 961 909	10	0.048	36	50
1 1/2	10	721 961 910	10	0.070	37	60
2	10	721 961 911	5	0.117	42	75

Unions

21 51 01



Unions for solvent cement jointing, PVC-U metric

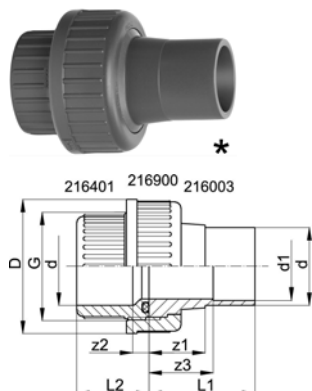
Model:

- Union End: solvent socket metric
- Union Bush: Solvent socket metric
- Jointing face: with O-ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	d [inch]	PN	EPDM Code	FPM Code	SP	kg	
10		16	721 510 103	721 510 128	10	0.020	
12		16	721 510 104	721 510 129	10	0.019	
16		16	721 510 105	721 510 130	10	0.025	
20		16	721 510 106	721 510 131	10	0.040	
25		16	721 510 107	721 510 132	10	0.066	
32		16	721 510 108	721 510 133	10	0.090	
40		16	721 510 109	721 510 134	10	0.153	
50		16	721 510 110	721 510 135	2	0.204	
63		16	721 510 111	721 510 136	10	0.367	
75	2 ½	10	721 510 112	721 510 137	2	0.615	
90		10	721 510 113	721 510 138	2	0.925	
110		10	721 510 114	721 510 139	1	1.425	

d [mm]	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr	
10	3	10	31	15	22	5/8	
12	3	10	31	15	22	5/8	
16	3	10	35	17	24	3/4	
20	3	10	43	19	26	1	
25	3	10	51	22	29	1 1/4	
32	3	10	58	25	32	1 1/2	
40	3	12	72	29	38	2	
50	3	14	83	34	45	2 1/4	
63	3	18	100	41	56	2 3/4	
75	3	18	135	47	62	Tr108x5	
90	5	18	158	56	69	Tr128x5	
110	5	11	188	66	72	Tr154x6	

21 51 03



PRO-FIT Unions for solvent cement jointing, PVC-U metric

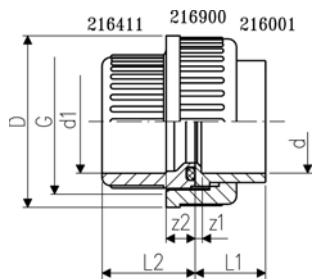
Model:

- Union End: Solvent cemented spigot in combination with reducing socket metric
- Union Bush: Solvent socket metric
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	d1 [mm]	PN	EPDM Code	FPM Code	SP	kg	
*16	12	16	721 510 305	721 510 330	10	0.029	
*20	16	16	721 510 306	721 510 331	10	0.044	
*25	20	16	721 510 307	721 510 332	10	0.073	
*32	25	16	721 510 308	721 510 333	10	0.105	
40	32	16	721 510 309	721 510 334	10	0.171	
50	63	16	721 510 310	721 510 335	10	0.250	
63	50	16	721 510 311	721 510 336	10	0.449	

d [mm]	z1 [mm]	z2 [mm]	z3 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]	
*16	22	10	24	35	36	24	¾	
*20	24	10	26	43	40	26	1	
*25	25	10	28	51	44	29	1 ¼	
*32	27	10	30	58	49	32	1 ½	
40	31	12	35	74	57	38	2	
50	35	14	40	83	66	45	2 ¼	
63	39	18	46	100	77	56	2 ¾	

21 51 31



Unions for solvent cement jointing, PVC-U metric - BS

Model:

- Union End: Solvent cement socket metric
- Union Bush: Solvent cement socket BS
- Gasket: O-ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00

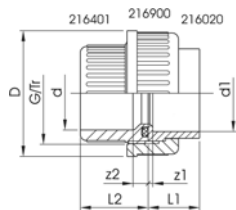
d [mm]	d1 [inch]	PN	Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]	
16	¾	16	721 513 105	100	0.025	3	8	35	17	24	¾	
20	½	16	721 513 106	10	0.040	3	9	43	19	26	1	
25	¾	16	721 513 107	50	0.065	3	9	51	22	29	1 ¼	
32	1	16	721 513 108	35	0.090	3	9	58	25	32	1 ½	
40	1 ¼	16	721 513 109	20	0.155	3	10	72	29	38	2	
50	1 ½	16	721 513 110	15	0.200	3	10	83	34	40	2 ¼	
63	2	16	721 513 111	10	0.355	3	10	100	41	46	2 ¾	

21 51 41

Unions for solvent cement jointing, PVC-U metric - ASTM

Model:

- Union End: Solvent cement socket ASTM
- Union Bush: Solvent socket metric
- Gasket: O-ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00



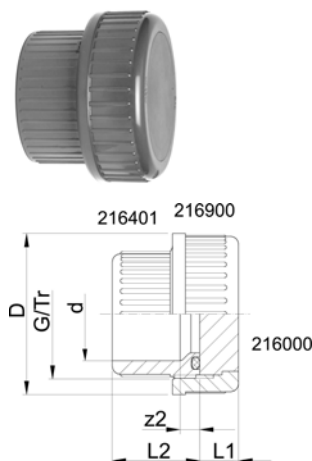
d [mm]	d1 [inch]	PN	Code	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]	
16	5/8	16	721 514 105	0.022	3	10	35	22	24	3/4	
20	1/2	16	721 514 106	0.047	3	10	43	25	26	1	
25	3/4	16	721 514 107	0.065	3	10	51	28	29	1 1/4	
32	1	16	721 514 108	0.103	3	10	58	32	32	1 1/2	
40	1 1/4	16	721 514 109	0.174	3	12	72	35	38	2	
50	1 1/2	16	721 514 110	0.239	3	14	83	38	45	2 1/4	
63	2	16	721 514 111	0.435	3	18	100	41	56	2 3/4	

21 51 00

Unions with Union Ends Blank, PVC-U metric

Model:

- Union Bush: Solvent socket metric
- Jointing face: with O-ring groove



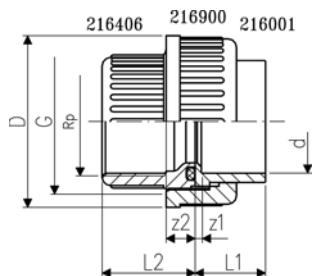
d [mm]	PN	EPDM Code	FPM Code	SP	kg	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr	
10	16	721 510 003	721 510 028	10	0.020	9	31	10	22	5/8	
12	16	721 510 004	721 510 029	10	0.020	9	31	15	22	5/8	
16	16	721 510 005	721 510 030	10	0.026	10	35	10	24	3/4	
20	16	721 510 006	721 510 031	10	0.041	10	43	11	26	1	
25	16	721 510 007	721 510 032	10	0.068	10	51	11	29	1 1/4	
32	16	721 510 008	721 510 033	10	0.095	10	58	12	32	1 1/2	
40	16	721 510 009	721 510 034	10	0.159	12	72	13	38	2	
50	16	721 510 010	721 510 035	5	0.227	14	83	16	45	2 1/4	
63	16	721 510 011	721 510 036	10	0.405	18	100	18	56	2 3/4	
75	10	721 510 012	721 510 037	2	0.693	18	135	22	62	Tr108x5	
90	10	721 510 013	721 510 038	2	1.022	18	158	24	69	Tr128x5	
110	10	721 510 014	721 510 039	1	1.573	11	188	26	72	Tr154x6	

21 51 02

Adaptor Unions, PVC-U metric - Rp

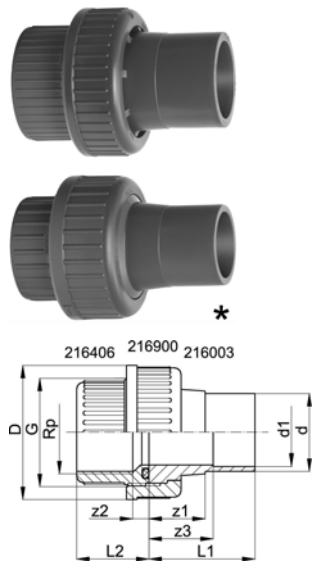
Model:

- Union End: Solvent cement socket metric
- Union Bush: Parallel female thread Rp
- Gasket: O-Ring No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U



d [mm]	Rp [inch]	PN	Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]	
12	1/4	10	721 510 204	10	0.021	3	12	31	15	22	5/8	
16	3/8	10	721 510 205	10	0.028	3	13	35	17	24	3/4	
20	1/2	10	721 510 206	10	0.042	3	13	43	19	26	1	
25	3/4	10	721 510 207	10	0.072	3	14	51	22	29	1 1/4	
32	1	10	721 510 208	10	0.101	3	15	58	25	32	1 1/2	
40	1 1/4	10	721 510 209	10	0.174	3	19	72	29	38	2	
50	1 1/2	10	721 510 210	2	0.255	3	26	83	34	45	2 1/4	
63	2	10	721 510 211	2	0.414	3	33	100	41	56	2 3/4	

21 51 04



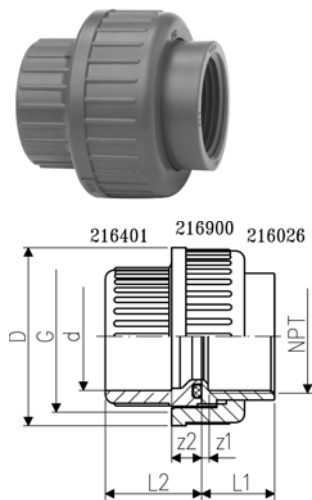
PRO-FIT Adaptor Unions, PVC-U metric - Rp

Model:

- Union End: Solvent cemented spigot in combination with reducing socket metric
- Union Bush: Threaded socket with parallel female thread Rp
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U

d	d1	Rp	PN	EPDM Code	SP	kg	z1	z2	z3	D	L1	L2	G
[mm]	[mm]	[inch]					[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[inch]
*16	12	3/8	10	721 510 405	10	0.032	22	13	24	35	36	24	3/4
*20	16	1/2	10	721 510 406	10	0.046	24	13	26	43	40	26	1
*25	20	3/4	10	721 510 407	10	0.079	25	14	28	51	44	29	1 1/4
*32	25	1	10	721 510 408	10	0.116	27	15	30	58	49	32	1 1/2
40	32	1 1/4	10	721 510 409	10	0.192	31	19	35	74	57	38	2
50	40	1 1/2	10	721 510 410	10	0.301	35	26	40	83	66	45	2 1/4
63	50	2	10	721 510 411	2	0.496	39	33	46	100	77	56	2 3/4

21 51 42



Adaptor Unions, PVC-U metric - NPT

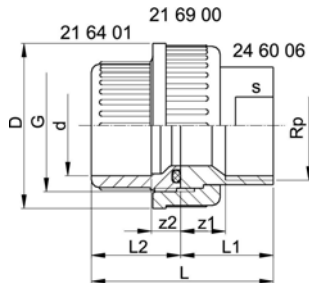
Model:

- Union End: Taper female thread NPT (ASTM)
- Union Bush: Solvent socket metric
- Gasket: O-ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U

d	NPT	PN	Code	kg	z1	z2	D	L1	L2	G
[mm]	[inch]				[mm]	[mm]	[mm]	[mm]	[mm]	[inch]
16	3/8	10	721 514 205	0.026	4	10	35	17	24	3/4
20	1/2	10	721 514 206	0.042	2	10	43	19	26	1
25	3/4	10	721 514 207	0.068	4	10	51	22	29	1 1/4
32	1	10	721 514 208	0.093	4	10	58	25	32	1 1/2
40	1 1/4	10	721 514 209	0.163	6	12	72	29	38	2
50	1 1/2	10	721 514 210	0.221	11	14	83	34	40	2 1/4
63	2	10	721 514 211	0.395	17	18	100	41	46	2 3/4

21 54 02

Adaptor Unions, PVC-U / Stainless Steel metric - Rp



Model:

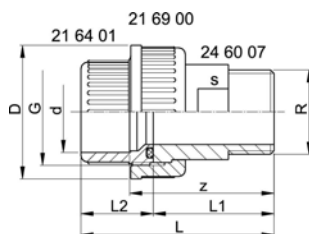
- Union End: Stainless steel 1.4404 (316L), parallel female thread Rp
- Union Bush: Solvent cement socket PVC-U metric
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	Rp [inch]	PN	EPDM Code	FPM Code	SP	kg			
16	3/8	16	721 540 205	721 540 230	-	0.053			
20	1/2	16	721 540 206	721 540 231	-	0.096			
25	3/4	16	721 540 207	721 540 232	-	0.154			
32	1	16	721 540 208	721 540 233	-	0.212			
40	1 1/4	16	721 540 209	721 540 234	-	0.356			
50	1 1/2	16	721 540 210	721 540 235	-	0.455			
63	2	16	721 540 211	721 540 236	-	0.721			

d [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	s [mm]		
16	9	10	35	43	19	24	3/4	19		
20	11	10	43	50	24	26	1	24		
25	11	10	51	55	26	29	1 1/4	29		
32	12	10	58	61	29	32	1 1/2	36		
40	14	12	72	71	33	38	2	45		
50	15	14	83	79	34	45	2 1/4	54		
63	15	18	100	95	39	56	2 3/4	63		

21 54 07

Adaptor Unions, PVC-U / Stainless Steel metric - R



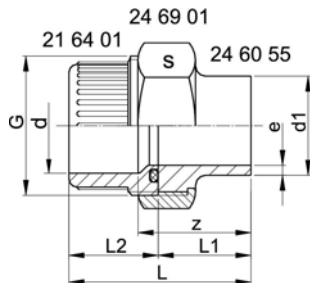
Model:

- Union End: Stainless steel 1.4404 (316L), taper male thread R
- Union Bush: Solvent cement socket PVC-U metric
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	R [inch]	PN	EPDM Code	FPM Code	SP	kg			
16	3/8	16	721 540 705	721 540 730	-	0.073			
20	1/2	16	721 540 706	721 540 731	-	0.126			
25	3/4	16	721 540 707	721 540 732	-	0.174			
32	1	16	721 540 708	721 540 733	-	0.262			
40	1 1/4	16	721 540 709	721 540 734	-	0.476			
50	1 1/2	16	721 540 710	721 540 735	-	0.535			
63	2	16	721 540 711	721 540 736	-	0.931			

d [mm]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	s [mm]		
16	40	35	54	30	24	3/4	19		
20	44	43	60	34	26	1	24		
25	46	51	65	36	29	1 1/4	32		
32	50	58	72	40	32	1 1/2	37		
40	58	72	84	46	38	2	48		
50	62	83	93	48	45	2 1/4	54		
63	73	100	111	55	56	2 3/4	69		

21 54 55



Adaptor Unions, PVC-U / Stainless Steel metric - Welding End

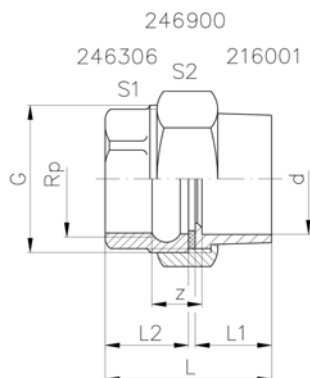
Model:

- Union End: Stainless steel 1.4404 (316L) with welding end
- Union Bush: Solvent cement socket PVC-U metric
- Union Nut: stainless steel WN 1.4404 (316L)
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	d1 [mm]	PN	EPDM Code	FPM Code	SP	kg	
16	17	16	721 545 505	721 545 530	-	0.101	
20	21	16	721 545 506	721 545 531	-	0.176	
25	27	16	721 545 507	721 545 532	-	0.204	
32	34	16	721 545 508	721 545 533	-	0.313	
40	42	16	721 545 509	721 545 534	-	0.493	
50	48	16	721 545 510	721 545 535	-	0.566	
63	60	16	721 545 511	721 545 536	-	0.902	

d [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	G [inch]	s [mm]	
16	28	42	18	24	1.6	3/4	32	
20	32	48	22	26	2.0	1	41	
25	33	52	23	29	2.0	1 1/4	46	
32	36	58	26	32	2.0	1 1/2	55	
40	38	64	26	38	2.0	2	68	
50	42	73	28	45	2.0	2 1/4	74	
63	50	88	32	56	2.6	2 3/4	88	

21 53 02



Adaptor Unions, PVC-U / malleable iron metric - Rp

Model:

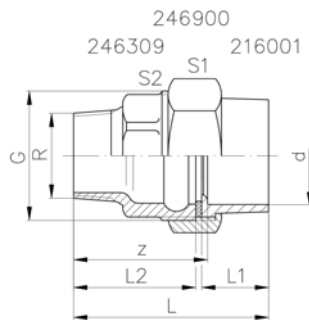
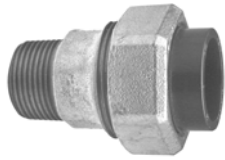
- Union End: Solvent cement socket PVC-U metric
- Union Bush: malleable iron galvanized, parallel female thread Rp
- Union Nut: malleable iron galvanized
- Gasket: flat gasket EPDM No. 48 40 00

d [mm]	d [inch]	Rp [inch]	PN	d [inch]	Code	SP	kg	
20		1/2	16		721 530 206	10	0.127	
25		3/4	16		721 530 207	5	0.205	
32		1	16		721 530 208	2	0.266	
40		1 1/4	16		721 530 209	2	0.420	
50		1 1/2	16		721 530 210	2	0.545	
63		2	16		721 530 211	2	0.840	
75	2 1/2	2 1/2	16		721 530 212	2	1.460	
90		3	16		721 530 213	2	1.797	

d [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	S1 [mm]	S2 [mm]	
20	18	47	19	25	1	25	38	
25	19	53	22	28	1 1/4	31	47	
32	20	59	25	31	1 1/2	38	53	
40	20	65	29	33	2	47	66	
50	23	73	34	36	2 1/4	53	72	
63	24	86	41	42	2 3/4	66	89	
75	25	96	47	46	3 1/2	82	109	
90	30	111	56	52	4	96	123	

21 53 07

Adaptor Unions, PVC-U / malleable iron metric - R



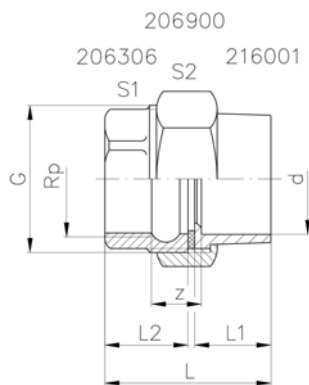
Model:

- Union End: Solvent cement socket PVC-U metric
- Union Bush: malleable iron galvanized, taper male thread R
- Union Nut: malleable iron galvanized
- Gasket: flat gasket EPDM No. 48 40 00

d [mm]	d [inch]	R [inch]	PN	Code	kg	z [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	S1 [mm]	S2 [mm]
20		1/2	16	721 530 706	0.156	49	65	19	43	1	38	25
25		3/4	16	721 530 707	0.253	55	74	22	49	1 1/4	47	31
32		1	16	721 530 708	0.352	59	81	25	53	1 1/2	53	38
40		1 1/4	16	721 530 709	0.569	64	90	29	58	2	66	47
50		1 1/2	16	721 530 710	0.697	68	99	34	62	2 1/4	72	53
63		2	16	721 530 711	1.050	77	115	41	71	2 3/4	89	66
75	2 1/2	2 1/2	16	721 530 712	1.775	84	128	47	78	3 1/2	109	82
90		3	16	721 530 713	2.286	95	146	56	87	4	123	96

21 55 02

Adaptor Unions, PVC-U / Brass metric - Rp



Model:

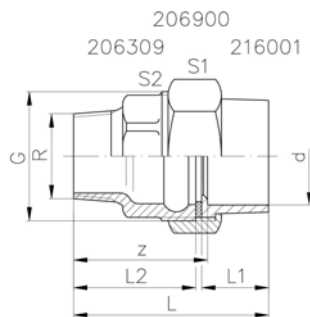
- Union End: Solvent cement socket PVC-U metric
- Union Bush: brass, parallel female thread Rp
- Union Nut: brass
- Gasket: flat gasket EPDM No. 48 40 00

d [mm]	d [inch]	Rp [inch]	PN	d [inch]	Code	SP	kg
16		3/8	16		721 550 205	10	0.093
20		1/2	16		721 550 206	10	0.139
25		3/4	16		721 550 207	5	0.235
32		1	16		721 550 208	2	0.290
40		1 1/4	16		721 550 209	2	0.484
50		1 1/2	16		721 550 210	2	0.536
63		2	16		721 550 211	2	0.856
75	2 1/2	2 1/2	16		721 550 212	2	1.578
90		3	16		721 550 213	2	1.687

d [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	S1 [mm]	S2 [mm]
16	12	36	17	17	3/4	30	27
20	13	42	19	20	1	38	27
25	14	48	22	23	1 1/4	47	32
32	15	55	25	27	1 1/2	52	38
40	15	60	29	28	2	66	47
50	16	66	34	29	2 1/4	72	53
63	17	78	41	34	2 3/4	87	65
75	17	88	47	38	3 1/2	110	82
90	21	102	56	43	4	120	95

21 55 07

Adaptor Unions, PVC-U / Brass metric - R



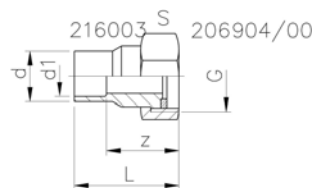
Model:

- Union End: Solvent cement socket PVC-U metric
- Union Bush: brass, taper male thread R
- Union Nut: brass
- Gasket: flat gasket EPDM No. 48 40 00

d	d	R	PN	Code	SP	kg	z	L	L1	L2	G	S1	S2
[mm]	[inch]	[inch]					[mm]	[mm]	[mm]	[mm]	[inch]	[mm]	[mm]
16		3/8	16	721 550 705	10	0.117	34	48	17	29	3/8	30	27
20		1/2	16	721 550 706	10	0.148	38	54	19	32	1	38	26
25		3/4	16	721 550 707	5	0.289	55	74	22	49	1 1/4	47	32
32		1	16	721 550 708	5	0.358	59	81	25	53	1 1/2	52	38
40		1 1/4	16	721 550 709	2	0.560	60	86	29	54	2	66	60
50		1 1/2	16	721 550 710	2	0.739	67	98	34	61	2 1/4	72	66
63		2	16	721 550 711	5	1.142	75	113	41	69	2 3/4	87	83
75	2 1/2	2 1/2	16	721 550 712	2	2.087	82	126	47	76	3 1/2	110	80
90		3	16	721 550 713	2	2.293	91	142	56	83	4	120	80

21 55 03

Tap Connectors, PVC-U / Brass metric - G



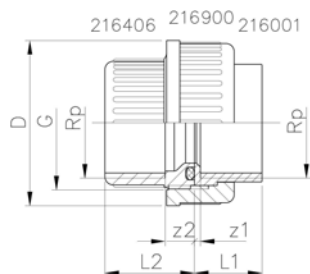
Model:

- Union End: PVC-U, solvent cement socket / spigot metric
- Union Nut: brass with female thread G
- Gasket: flat gasket EPDM No. 48 40 02

d	d1	G	PN	Code	SP	kg	z	L	s
[mm]	[mm]	[inch]					[mm]	[mm]	[mm]
16	12	1/2	16	721 550 305	10	0.031	22	34	24
20	16	3/4	16	721 550 306	10	0.049	24	38	30
25	20	1	16	721 550 307	10	0.079	27	43	38

21 51 06

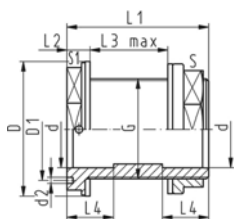
Thread Unions, PVC-U Rp-Rp



Model:

- Union End: Parallel female thread Rp
- Union Bush: Parallel female thread Rp
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U

Rp	PN	Code	SP	kg	z1	z2	D	L1	L2	G
[inch]					[mm]	[mm]	[mm]	[mm]	[mm]	[inch]
1/4	10	721 510 604	10	0.019	3	12	31	22	15	5/8
3/8	10	721 510 605	10	0.027	3	13	35	24	17	3/4
1/2	10	721 510 606	10	0.042	3	13	43	26	19	1
3/4	10	721 510 607	10	0.065	3	14	51	29	22	1 1/4
1	10	721 510 608	10	0.093	3	15	58	32	25	1 1/2
1 1/4	10	721 510 609	10	0.160	3	19	72	38	29	2
1 1/2	10	721 510 610	2	0.243	3	26	83	45	34	2 1/4
2	10	721 510 611	2	0.446	3	33	100	56	41	2 3/4



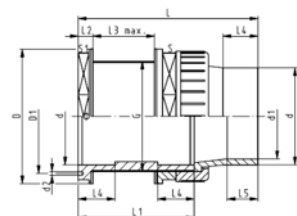
Tank Adaptors Type 050 Compact, PVC-U metric

Model:

- End connection: solvent cement socket, metric
- Gasket: flat gasket EPDM
- Washer: PP
- Run-out holes: Two holes in octagonal head

d [mm]	PN	EPDM Code	SP	kg
16	16	161 050 445	-	0.041
20	16	161 050 446	-	0.066
25	16	161 050 447	-	0.109
32	16	161 050 448	-	0.153
40	16	161 050 449	-	0.225
50	16	161 050 450	-	0.260
63	16	161 050 451	-	0.390

d [mm]	d2 [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29	58	11	28	14	¾	32	40	28
20	5	54	35	61	12	28	16	1	40	50	35
25	5	60	42	65	13	28	19	1 ¼	50	55	43
32	5	69	49	67	13	28	22	1 ½	56	65	49
40	5	84	59	72	13	29	26	2	69	80	61
50	5	92	70	76	15	30	31	2 ¼	76	85	67
63	5	108	82	84	15	35	38	2 ¾	95	100	83



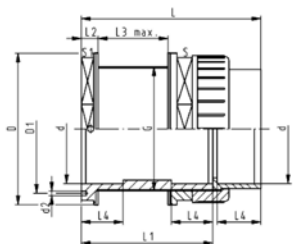
Tank Adaptors Type 050, PVC-U Union End with Spigot, metric

Model:

- Run-out holes: Two holes in octagonal head
- End connection: union with union end spigot/reducing socket, metric
- Gasket: flat gasket EPDM
- Washer: PP

d [mm]	d1 [mm]	PN	EPDM Code	SP	kg
16	12	16	161 050 345	-	0.064
20	16	16	161 050 346	-	0.102
25	20	16	161 050 347	-	0.157
32	25	16	161 050 348	-	0.220
40	32	16	161 050 349	-	0.333
50	40	16	161 050 350	-	0.438
63	50	16	161 050 351	-	0.680

d [mm]	d2 [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	L5 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29	96	58	11	19	14	12	¾	32	40	28
20	5	54	35	104	61	12	17	16	14	1	40	50	35
25	5	60	42	112	65	13	18	19	16	1 ¼	50	55	43
32	5	69	49	119	67	13	19	22	19	1 ½	56	65	49
40	5	84	59	132	72	13	16	26	22	2	69	80	61
50	5	92	70	145	76	15	16	31	26	2 ¼	76	85	67
63	5	108	82	163	84	15	19	38	31	2 ¾	95	100	83



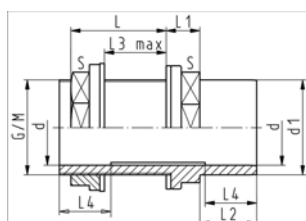
Tank Adaptors with union, PVC-U metric

Model:

- Run-out holes: Two holes in octagonal head
- End connection: union with solvent cement socket, metric
- Gasket: flat gasket EPDM
- Washer: PP

d [mm]	PN	Code	SP	kg
16	16	161 050 245	-	0.040
20	16	161 050 246	-	0.070
25	16	161 050 247	-	0.100
32	16	161 050 248	-	0.196
40	16	161 050 249	-	0.240
50	16	161 050 250	-	0.350
63	16	161 050 251	-	0.530

d [mm]	d2 [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29	77	58	11	19	14	¾	32	40	28
20	5	54	35	83	61	12	17	16	1	40	50	35
25	5	60	42	90	65	13	18	19	1 ¼	50	55	43
32	5	69	49	95	67	13	19	22	1 ½	56	65	49
40	5	84	59	104	72	13	16	26	2	69	80	61
50	5	92	70	113	76	15	16	31	2 ¼	76	85	67
63	5	108	82	128	84	15	19	38	2 ¾	95	100	83



Tank Adaptors, PVC-U metric

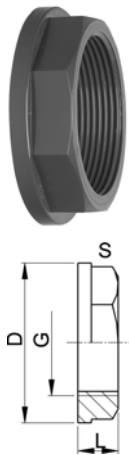
Model:

- End connection: solvent cement socket and spigot, metric
- Gasket: flat gasket EPDM
- Washer: PP

d [mm]	d1 [mm]	Code	SP	kg
20	25	161 050 206	-	0.040
25	32	161 050 207	-	0.070
32	40	161 050 208	-	0.100
40	50	161 050 209	-	0.190
50	63	161 050 210	-	0.240
63	75	161 050 211	-	0.350
75	90	161 050 212	-	0.530
90	110	161 050 213	-	1.050
110	125	161 050 214	-	1.350

d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	M	s [mm]	Diameter of bore in tank side [mm]
20	42	13	19	23	16	¾		32	28
25	45	15	22	23	19	1		40	35
32	27	17	26	24	22	1 ¼		50	43
40	48	19	31	21	26	1 ¾		60	55
50	52	21	38	21	31	2		69	61
63	53	23	44	23	38	2 ½		85	77
75	56	26	51	20	44	3		100	89
90	62	32	61	20	51		M113	125	115
110	66	36	69	22	61		M133	147	135

61 49 06



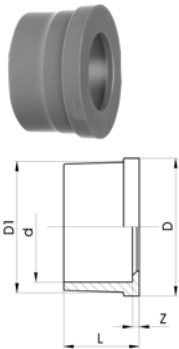
Backing Nut, PVC-U

Model:

- With G thread ISO 228/1
- For Tank Adaptor Type 050

G [inch]	Code	SP	kg	D [mm]	L [mm]	s [mm]	
¾	161 490 630	400	0.007	39	13	32	
1	161 490 632	200	0.012	48	15	40	
1 ¼	161 490 634	100	0.020	58	17	50	
1 ½	161 490 635	100	0.025	65	18	56	
1 ¾	161 490 636	75	0.036	72	19	64	
2	161 490 637	50	0.044	79	21	69	
2 ¼	161 490 638	50	0.053	86	21	76	
2 ½	161 490 639	25	0.063	94	23	85	
2 ¾	161 490 640	-	0.080	106	25	95	
3	161 490 641	20	0.101	112	26	100	
4	161 490 644	10	0.164	139	32	126	

21 60 01



Union Ends, PVC-U metric

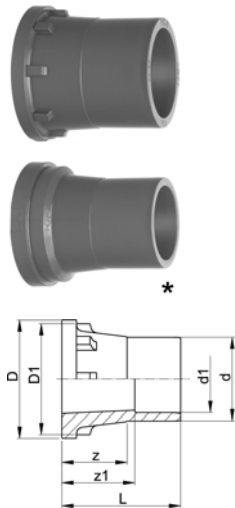
Model:

- Solvent cement socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

* for Adaptor Unions 21 53 02, 21 53 07, 21 55 02, 21 55 07

d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	
10	16	721 600 103	-	0.004	3	20	18	15	
12	16	721 600 104	-	0.004	3	20	18	15	
16	16	721 600 105	-	0.006	3	24	22	17	
20	16	721 600 106	-	0.009	3	30	28	19	
25	16	721 600 107	-	0.015	3	39	36	22	
32	16	721 600 108	-	0.020	3	45	42	25	
40	16	721 600 109	-	0.038	3	57	53	29	
50	16	721 600 110	-	0.039	3	63	59	34	
63	16	721 600 111	-	0.072	3	78	74	41	
75	10	721 600 162	-	0.140	3	101	90	47	
90	10	721 600 163	-	0.242	5	121	108	56	
110	10	721 600 164	-	0.390	5	146	131	66	
*75	10	721 600 112	110	0.155	3	97	90	47	
*90	10	721 600 113	-	0.184	5	110	105	56	

21 60 04



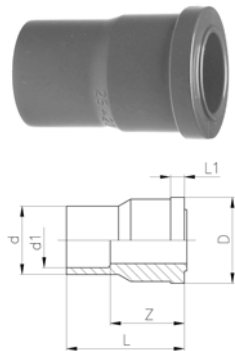
Union Ends with Spigot, PVC-U metric

Model:

- Cemented spigot in combination with reducing socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	D [mm]	D1 [mm]	L [mm]	
*16	12	16	721 600 405	1800	0.010	22	24	24	22	36	
*20	16	16	721 600 406	2100	0.013	24	26	30	28	40	
*25	20	16	721 600 407	1200	0.022	25	28	39	36	44	
*32	25	16	721 600 408	740	0.035	27	30	45	42	49	
40	32	16	721 600 409	260	0.057	31	35	57	53	57	
50	40	16	721 600 410	190	0.086	35	40	63	59	66	
63	50	16	721 600 411	110	0.153	39	46	79	74	77	

21 60 03



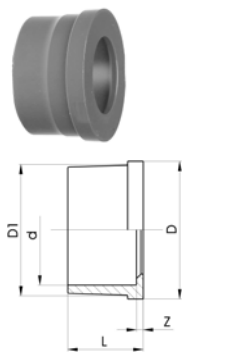
Union Ends, PVC-U metric

Model:

- For tap connector No. 21 55 03

d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	L1 [mm]	
16	12	16	721 600 305	-	0.005	22	19	34	3	
20	16	16	721 600 306	-	0.009	24	24	38	5	
25	20	16	721 600 307	-	0.016	27	30	43	5	

21 60 20



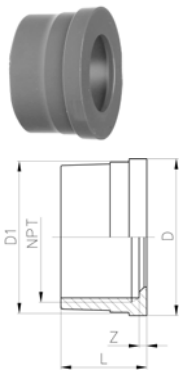
Union Ends, PVC-U ASTM

Model:

- Solvent cement socket ASTM

d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	
3/8	16	721 602 005	-	0.006	3	24	22	22	
1/2	16	721 602 006	-	0.009	3	30	28	25	
3/4	16	721 602 007	-	0.016	3	39	36	28	
1	16	721 602 008	-	0.022	3	45	42	32	
1 1/4	16	721 602 009	-	0.037	3	57	53	35	
1 1/2	16	721 602 010	-	0.052	3	63	59	38	
2	16	721 602 011	-	0.088	3	78	74	41	
2 1/2	10	721 602 012	-	0.140	3	101	90	47	
3	10	721 602 013	-	0.255	5	121	108	56	
3 1/2	10	721 602 014	-	0.390	5	146	131	66	

21 60 26



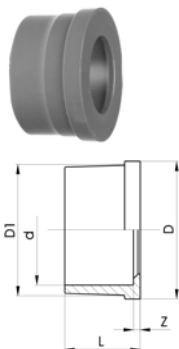
Union Ends, PVC-U NPT (ASTM)

Model:

- Taper female thread NPT (ASTM)

NPT [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	
3/8	10	721 602 655	-	0.005	4	24	22	17	
1/2	10	721 602 656	-	0.008	2	30	28	19	
3/4	10	721 602 657	-	0.016	4	39	36	22	
1	10	721 602 658	-	0.022	3	45	42	25	
1 1/4	10	721 602 659	-	0.040	6	57	53	29	
1 1/2	10	721 602 660	-	0.058	11	63	59	34	
2	10	721 602 661	-	0.128	17	78	74	41	

21 60 11



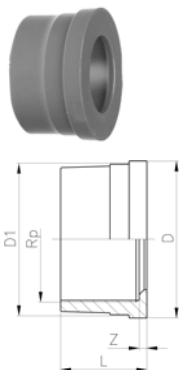
Union Ends, PVC-U BS Inch

Model:

- Solvent cement socket BS

d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	
3/8	15	721 601 105	-	0.005	3	24	22	19	
1/2	15	721 601 106	-	0.008	3	30	27	21	
3/4	15	721 601 107	-	0.014	3	38	36	24	
1	15	721 601 108	-	0.019	3	44	41	27	
1 1/4	15	721 601 109	1	0.033	3	56	53	32	
1 1/2	15	721 601 110	-	0.043	3	62	59	33	
2	15	721 601 111	-	0.082	3	78	74	40	

21 60 06



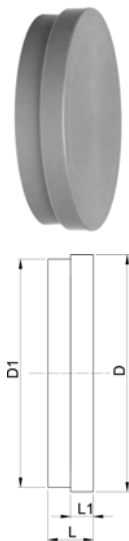
Union Ends, PVC-U Rp

Model:

- Parallel female thread Rp

Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	
1/4	10	721 600 654	-	0.004	5	20	18	15	
3/8	10	721 600 655	-	0.005	6	24	22	17	
1/2	10	721 600 656	1430	0.010	6	30	28	19	
3/4	10	721 600 657	-	0.013	7	39	36	22	
1	10	721 600 658	-	0.021	8	45	42	25	
1 1/4	10	721 600 659	-	0.038	10	57	53	29	
1 1/2	10	721 600 660	-	0.045	11	63	59	34	
2	10	721 600 661	-	0.110	18	78	74	41	

21 60 00



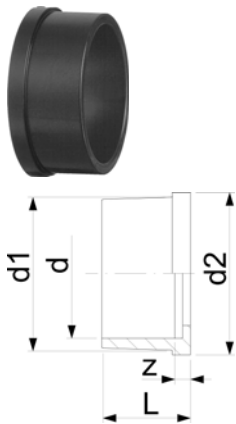
Union Ends Blank, PVC-U

Model:

- For Unions, Tank Adaptor, Ball Valve Type 370 and Diaphragm Valve Type 314
- Jointing face flat

d [mm]	DN [mm]	Inch	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	
10	6	1/8	16	721 600 004	-	0.004	20	18	9	4	
16	10	3/8	16	721 600 005	-	0.006	24	22	10	5	
20	15	1/2	16	721 600 006	-	0.010	30	28	11	5	
25	20	3/4	16	721 600 007	-	0.017	39	36	11	6	
32	25	1	16	721 600 008	-	0.025	45	42	12	6	
40	32	1 1/4	16	721 600 009	-	0.043	57	53	13	7	
50	40	1 1/2	16	721 600 010	-	0.062	63	59	16	7	
63	50	2	16	721 600 011	-	0.110	78	74	18	8	
75	65	2 1/2	10	721 600 012	-	0.218	101	90	22	10	
90	80	3	10	721 600 013	-	0.339	121	108	24	11	
110	100	4	10	721 600 014	-	0.538	146	131	26	12	

34 60 01

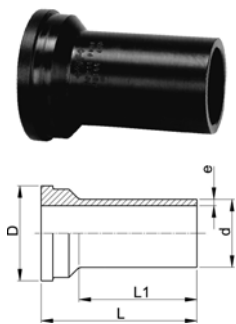


Union Ends, PE80

Model:

- With fusion socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

d [mm]	PN	Code	SP	kg	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	z [mm]	
20	10	734 600 106	-	0.006	28	30	19	5	5	
25	10	734 600 107	-	0.012	36	39	21	5	5	
32	10	734 600 108	-	0.015	42	45	23	6	5	
40	10	734 600 109	-	0.026	53	57	25	6	5	
50	10	734 600 110	-	0.027	59	63	28	7	5	
63	10	734 600 111	-	0.045	74	79	32	8	5	



Union Ends long, PE100

Model:

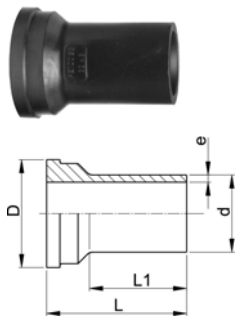
- For butt-, (IR Plus®) and electro fusion
- Suitable for unions, tank connectors and diaphragm valves Type 314

d [mm]	PN	FM	Code	SP	kg	D [mm]	L [mm]	L1 [mm]	e [mm]	
20	16	IR	753 608 616	-	0.011	30	67	52	1,9	
25	16	IR	753 608 617	-	0.018	39	71	53	2,3	
32	16	IR	753 608 618	-	0.027	45	73	55	2,9	
40	16	IR	753 608 619	-	0.045	57	81	60	3,7	
50	16	IR	753 608 620	-	0.062	63	87	66	4,6	
63	16	IR	753 608 621	-	0.100	78	93	70	5,8	

53 60 86

Union Ends, PE100 SDR11**Model:**

- Suitable for unions, tank connectors and diaphragm valves Type 314
- Conventional butt-welding according to DVS 2207 part 1
- IR = Infrared- (IR Plus®) compatible.
- **For the dimensions d75-110 please see instructions for the installation**

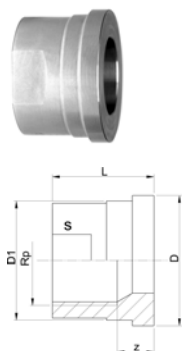


d [mm]	PN	FM	Code	SP	kg	D [mm]	L [mm]	L1 [mm]	e [mm]	
20	16	IR	753 608 606	-	0.011	30	54	38	1,9	
25	16	IR	753 608 607	-	0.018	39	57	42	2,3	
32	16	IR	753 608 608	-	0.027	45	60	41	2,9	
40	16	IR	753 608 609	-	0.045	57	63	42	3,7	
50	16	IR	753 608 610	-	0.062	63	66	44	4,6	
63	16	IR	753 608 611	-	0.100	78	69	45	5,8	
75	10	IR	753 608 612	-	0.147	101	66	34	6,8	
90	10	IR	753 608 613	-	0.156	101	66	45	8,2	
110	10	IR	753 608 614	-	0.226	121	66	40	10,0	

24 60 06

**Union Ends, Stainless Steel 1.4404 (316L)
Rp****Model:**

- Parallel female thread Rp

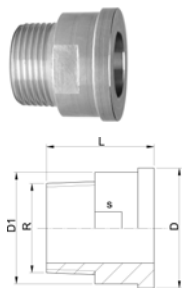


Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	s [mm]	
3/8	16	724 600 655	-	0.030	9	24	22	19	19	
1/2	16	724 600 656	-	0.060	11	30	28	24	24	
3/4	16	724 600 657	-	0.100	11	39	36	26	29	
1	16	724 600 658	-	0.140	12	45	42	29	36	
1 1/4	16	724 600 659	-	0.230	14	57	53	33	45	
1 1/2	16	724 600 660	-	0.320	15	63	59	34	54	
2	16	724 600 661	-	0.450	15	78	74	39	63	

24 60 07

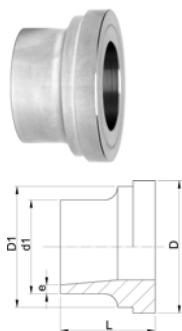
**Union Ends, Stainless Steel 1.4404 (316L)
R****Model:**

- Taper male thread R



R [inch]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	s [mm]	
3/8	16	724 600 705	-	0.050	24	22	30	19	
1/2	16	724 600 706	-	0.090	30	28	34	24	
3/4	16	724 600 707	-	0.120	39	36	36	32	
1	16	724 600 708	-	0.190	45	42	40	37	
1 1/4	16	724 600 709	-	0.350	57	53	46	48	
1 1/2	16	724 600 710	-	0.400	63	59	48	54	
2	16	724 600 711	-	0.660	78	74	55	69	

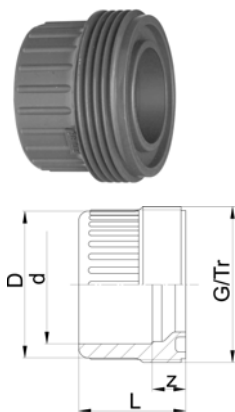
24 60 55



Union Ends, Stainless Steel 1.4404 (316L) Welding End

d [mm]	d1 [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	e [mm]	
16	17	16	724 605 505	-	0.030	24	22	18	1.6	
20	21	16	724 605 506	-	0.050	30	28	22	2.0	
25	26	16	724 605 507	-	0.080	39	36	23	2.0	
32	33	16	724 605 508	-	0.110	45	42	26	2.0	
40	42	16	724 605 509	-	0.190	57	53	26	2.0	
50	48	16	724 605 510	-	0.220	63	59	28	2.0	
63	60	16	724 605 511	-	0.370	78	74	32	2.6	

21 64 01



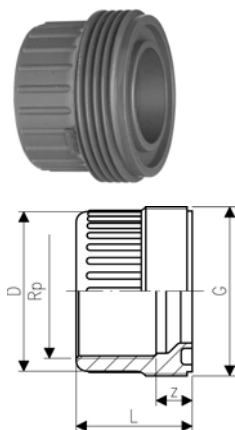
Union Bushes, PVC-U metric

Model:

- Solvent cement socket metric
- Jointing face: with O-Ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	G/Tr	
10	16	721 640 103	-	0.007	10	20	22	5/8	
12	16	721 640 104	-	0.007	10	20	22	5/8	
16	16	721 640 105	-	0.009	10	24	24	3/4	
20	16	721 640 106	-	0.014	10	29	26	1	
25	16	721 640 107	-	0.023	10	34	29	1 1/4	
32	16	721 640 108	-	0.032	10	42	32	1 1/2	
40	16	721 640 109	-	0.058	12	52	38	2	
50	16	721 640 110	-	0.039	14	62	45	2 1/4	
63	16	721 640 111	-	0.132	18	78	56	2 3/4	
75	10	721 640 112	-	0.210	18	93	62	Tr108x5	
90	10	721 640 113	-	0.315	18	110	69	Tr128x5	
110	10	721 640 114	-	0.445	11	133	72	Tr154x6	

21 64 06



Union Bushes, PVC-U Rp

Model:

- With parallel female thread Rp
- Jointing Face: with O-Ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U

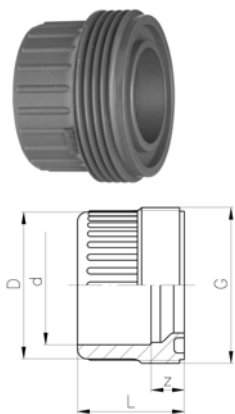
Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	G [inch]	
1/4	10	721 640 604	-	0.006	12	20	22	5/8	
3/8	10	721 640 605	-	0.008	13	24	24	3/4	
1/2	10	721 640 606	-	0.013	13	29	26	1	
3/4	10	721 640 607	-	0.021	14	34	29	1 1/4	
1	10	721 640 608	-	0.032	15	42	32	1 1/2	
1 1/4	10	721 640 609	-	0.057	19	53	38	2	
1 1/2	10	721 640 610	-	0.086	26	63	45	2 1/4	
2	10	721 640 611	-	0.160	33	78	56	2 3/4	

21 64 11

Union Bushes, PVC-U BS Inch

Model:

- Solvent cement socket BS
- Jointing face: with O-Ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00



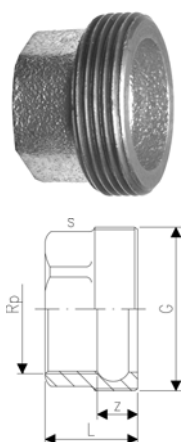
d [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	G [inch]	
3/8	16	721 641 105	-	0.008	8	24	24	3/4"	
1/2	16	721 641 106	-	0.012	9	29	26	1"	
3/4	16	721 641 107	-	0.021	9	34	29	1 1/4"	
1	16	721 641 108	-	0.029	9	42	32	1 1/2"	
1 1/4	16	721 641 109	-	0.052	10	52	38	2"	
1 1/2	16	721 641 110	-	0.068	10	62	40	2 1/4"	
2	16	721 641 111	-	0.137	10	78	46	2 3/4"	

24 63 06

Union Bushes, Malleable Iron Galvanized Rp

Model:

- Parallel female thread Rp



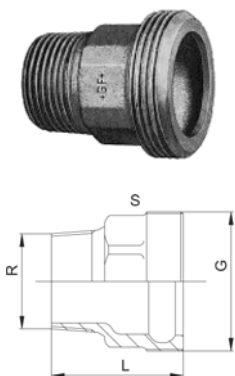
d [mm]	Rp [inch]	PN	Code	kg	z [mm]	L [mm]	G [inch]	s [mm]	
20	1/2	16	724 630 606	0.058	12	25	1	25	
25	3/4	16	724 630 607	0.096	13	28	1 1/4	31	
32	1	16	724 630 608	0.127	14	31	1 1/2	28	
40	1 1/4	16	724 630 609	0.204	14	33	2	47	
50	1 1/2	16	724 630 610	0.268	17	36	2 1/4	53	
63	2	16	724 630 611	0.550	18	42	2 3/4	66	
75	2 1/2	16	724 630 612	0.737	19	46	3 1/2	82	
90	3	16	724 630 613	0.913	22	52	4	96	

24 63 09

Union Bushes, Malleable Iron Galvanized R

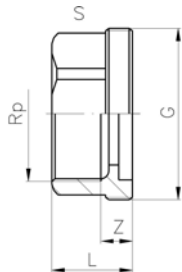
Model:

- Taper male thread R



d [mm]	R [inch]	PN	Code	kg	L [mm]	G [inch]	s [mm]	
20	1/2	16	724 630 906	0.085	43	1	25	
25	3/4	16	724 630 907	0.147	49	1 1/4	31	
32	1	16	724 630 908	0.210	53	1 1/2	38	
40	1 1/4	16	724 630 909	0.315	58	2	47	
50	1 1/2	16	724 630 910	0.411	62	2 1/4	53	
63	2	16	724 630 911	0.665	71	2 3/4	66	
75	2 1/2	16	724 630 912	0.897	78	3 1/4	82	
90	3	16	724 630 913	1.300	87	4	96	

20 63 06



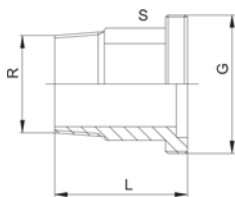
Union Bushes, Brass Rp

Model:

- Parallel female thread Rp

d [mm]	Rp [inch]	PN	Code	kg	z [mm]	L [mm]	G [inch]	s [mm]	
16	3/8	16	720 630 605	0.053	7	17	3/4	27	
20	1/2	16	720 630 606	0.070	7	20	1	27	
25	3/4	16	720 630 607	0.111	8	23	1 1/4	32	
32	1	16	720 630 608	0.140	9	26	1 1/2	38	
40	1 1/4	16	720 630 609	0.234	9	28	2	47	
50	1 1/2	16	720 630 610	0.279	10	29	2 1/4	53	
63	2	16	720 630 611	0.437	11	34	2 3/4	65	
75	2 1/2	16	720 630 612	0.722	11	38	3 1/2	82	
90	3	16	720 630 613	0.954	13	43	4	95	

20 63 09



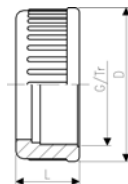
Union Bushes, Brass R

Model:

- Taper male thread R

d [mm]	R [inch]	PN	Code	kg	L [mm]	G [inch]	s [mm]	
16	3/8	16	720 630 905	0.068	29	3/4	27	
20	1/2	16	720 630 906	0.078	32	1	26	
25	3/4	16	720 630 907	0.172	49	1 1/4	32	
32	1	16	720 630 908	0.223	53	1 1/2	38	
40	1 1/4	16	720 630 909	0.376	54	2	60	
50	1 1/2	16	720 630 910	0.481	61	2 1/4	66	
63	2	16	720 630 911	1.078	69	2 3/4	83	
75	2 1/2	16	720 630 912	1.217	76	3 1/2	79	
90	3	16	720 630 913	1.525	83	4	80	

21 69 00



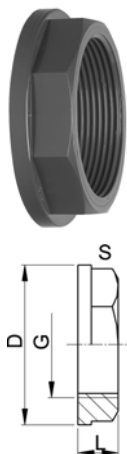
Union Nuts, PVC-U

d [mm]	PN	Code	SP	kg	D [mm]	L [mm]	G [inch]	Tr	
10-12	16	721 690 004	-	0.009	31	19	5/8		
16	16	721 690 005	-	0.013	35	21	3/4		
20	16	721 690 006	-	0.020	43	23	1		
25	16	721 690 007	-	0.022	51	24	1 1/4		
32	16	721 690 008	-	0.031	58	26	1 1/2		
40	16	721 690 009	-	0.050	72	29	2		
50	16	721 690 010	-	0.087	83	34	2 1/4		
63	16	721 690 011	-	0.130	100	38	2 3/4		
75	10	721 690 012	-	0.130	135	40		Tr 108x5	
90	10	721 690 013	-	0.355	158	43		Tr 128x5	
110	10	721 690 014	-	0.575	188	48		Tr 154x6	

61 49 06

Backing Nut, PVC-U**Model:**

- With G thread ISO 228/1
- For Tank Adaptor Type 050

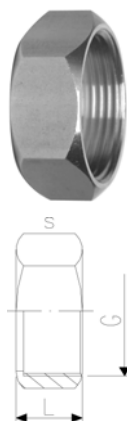


G [inch]	Code	SP	kg	D [mm]	L [mm]	s [mm]	
¾	161 490 630	400	0.007	39	13	32	
1	161 490 632	200	0.012	48	15	40	
1 ¼	161 490 634	100	0.020	58	17	50	
1 ½	161 490 635	100	0.025	65	18	56	
1 ¾	161 490 636	75	0.036	72	19	64	
2	161 490 637	50	0.044	79	21	69	
2 ¼	161 490 638	50	0.053	86	21	76	
2 ½	161 490 639	25	0.063	94	23	85	
2 ¾	161 490 640	-	0.080	106	25	95	
3	161 490 641	20	0.101	112	26	100	
4	161 490 644	10	0.164	139	32	126	

24 69 01

Union nut stainless steel 1.4404 (316L)

* Octagon union nut

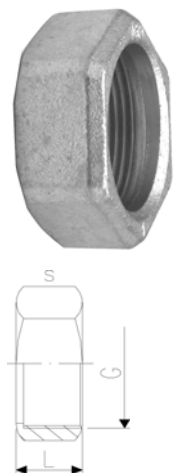


d [mm]	PN	Code	SP	kg	L [mm]	G [inch]	s [mm]	
16	16	724 690 105	-	0.060	19	¾	32	
20	16	724 690 106	-	0.110	21	1	41	
25	16	724 690 107	-	0.100	23	1 ¼	46	
32	16	724 690 108	-	0.170	24	1 ½	55	
*40	16	724 690 109	-	0.240	27	2	68	
*50	16	724 690 110	-	0.300	31	2 ¼	74	
*63	16	724 690 111	-	0.390	35	2 ¾	88	

246900

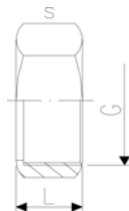
Union nut malleable iron galvanized**Model:**

- Malleable iron galvanized



d [mm]	PN	G [inch]	Code	SP	kg	L [mm]	s [mm]	
20	16	1	724 690 006	-	0.061	18	39	
25	16	1 ¼	724 690 007	-	0.096	20	48	
32	16	1 ½	724 690 008	-	0.125	22	55	
40	16	2	724 690 009	-	0.300	24	67	
50	16	2 ¼	724 690 010	-	0.245	25	74	
63	16	2 ¾	724 690 011	-	0.500	27	90	
75	16		724 690 012	-	0.700	30	111	
90	16		724 690 013	-	0.695	31	131	

20 69 00
20 69 04

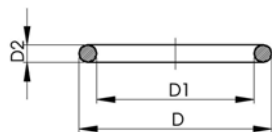


Union nut brass

- For tap connector No. 21 55 03 and for adaptor unions brass/PVC

d [mm]	G [inch]	PN	Code	SP	kg	L [mm]	s [mm]	
12	1/2	16	720 690 405	-	0.026	16	24	
16	3/4	16	720 690 005	-	0.042	17	30	
20	1	16	720 690 006	-	0.060	19	38	
25	1 1/4	16	720 690 007	-	0.108	20	47	
32	1 1/2	16	720 690 008	-	0.105	22	52	
40	2	16	720 690 009	-	0.199	25	66	
50	2 1/4	16	720 690 010	-	0.268	25	72	
63	2 3/4	16	720 690 011	-	0.280	27	87	
75	3 1/2	16	720 690 012	-	0.675	34	110	
90	4	16	720 690 013	-	0.582	36	120	

EPDM 48 41 00
FPM 49 41 00



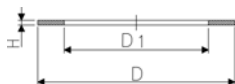
O-Ring Gaskets

Model:

- For unions
- Hardness approx. 65° Shore
- EPDM minimum temperature -40°C
- FPM minimum temperature -15°C

d [mm]	DN [mm]	EPDM Code	FPM Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]	
10-12	8	748 410 004	749 410 004	-	0.002	18	12	3	
16	10	748 410 005	749 410 005	-	0.002	21	16	3	
20	15	748 410 006	749 410 006	-	0.002	27	20	4	
25	20	748 410 007	749 410 007	100	0.002	35	28	4	
32	25	748 410 008	749 410 008	100	0.002	40	33	4	
40	32	748 410 009	749 410 009	-	0.006	51	41	5	
50	40	748 410 010	749 410 010	-	0.007	58	47	5	
63	50	748 410 011	749 410 011	100	0.010	70	60	5	
75	65	748 410 014	749 410 014	100	0.012	93	82	5	
90	80	748 410 015	749 410 015	100	0.015	112	101	5	
110	100	748 410 016	749 410 016	50	0.031	134	120	7	

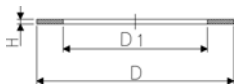
EPDM 48 40 00
FPM 49 40 00



Flat Gaskets

Model:

- Hardness approx. 65° Shore
- For adaptor unions



d [mm]	Inch	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]	
12	1/4	748 400 004	-	0.002	20	13	2	
16	3/8	748 400 005	749 400 005	0.002	24	17	2	
20	1/2	748 400 006	749 400 006	0.003	30	21	3	
25	3/4	748 400 007	749 400 007	0.004	38	27	3	
32	1	748 400 008	749 400 008	0.002	44	32	3	
40	1 1/4	748 400 009	749 400 009	0.003	55	42	3	
50	1 1/2	748 400 010	749 400 010	0.004	62	46	3	
63	2	748 400 011	749 400 011	0.006	78	60	3	
75	2 1/2	748 400 012	749 400 012	0.009	97	75	3	
90	3	748 400 013	749 400 013	0.011	109	88	3	

EPDM 48 40 02

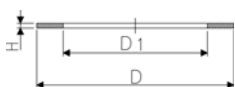
Flat Gaskets

Model:

- Hardness approx. 65° Shore
- For tap connectors No. 21 55 03

Attention:

- For tap connector d16 - 1/2": 748 400 030
- For tap connector d20 - 3/4": 748 400 005
- For tap connector d25 - 1": 748 400 006



EPDM Code	SP	kg	D [mm]	D1 [mm]	H [mm]	
748 400 030	-	0.003	18	14	2	
748 400 005	-	0.001	24	17	2	
748 400 006	-	0.003	30	21	3	

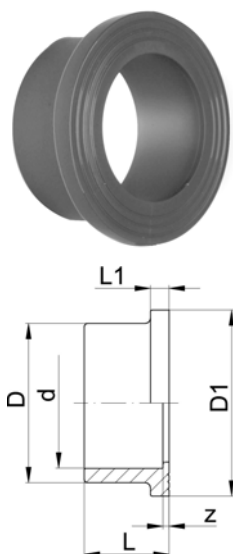
Flange Adaptors and Flanges

21 79 01

Flange Adaptors, PVC-U Jointing face serrated, metric

Model:

- Solvent cement socket metric
- d16 - d50: Jointing face flat
- d63 - d400: Combined Jointing face serrated and flat
- Gasket: Flange Gasket EPDM No. 48 44 01, FPM No. 49 44 01 or Flat Gasket EPDM No. 48 40 01, FPM No. 49 40 01
Only use O-ring EPDM No. 48 41 01, FPM No. 49 41 01 in combination with counterpart Flange Adaptor No. 21 81 01
- Flange: PVC-U No. 21 70 00, PP with steel ring No. 27 70 02, Backing Flange PP-V for socket systems metric No. 27 70 04



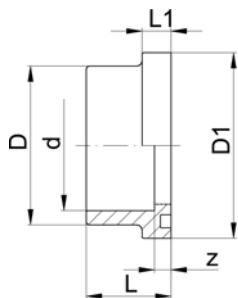
Note: The flat gasket affects the maximum allowable operating pressure!

d [mm]	d [inch]	DN [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	
63	2 ½	50	16	721 790 111	10	0.103	3	77	90	41	9	
75		65	16	721 790 112	10	0.155	3	91	106	47	10	
90		80	16	721 790 113	10	0.254	5	108	125	56	11	
110		100	16	721 790 114	10	0.418	5	131	150	66	12	
125		100	16	721 790 115	2	0.548	5	148	170	74	13	
140	5	125	16	721 790 116	6	0.740	5	165	188	81	14	
160		150	16	721 790 117	2	1.077	5	188	213	91	16	
200		200	10	721 790 119	2	1.476	6	224	250	112	24	
225		200	10	721 790 120	2	1.758	6	248	274	125	25	
250		250	10	721 790 121	-	2.150	9	274	303	140	23	
280		250	10	721 790 122	1	2.895	5	308	329	151	23	
315		300	6	721 790 123	1	4.450	8	346	379	172	27	
355		350	6	721 790 124	-	5.800	10	384	430	194	32	
400		400	6	721 790 125	-	8.900	10	438	482	216	34	

21 81 01

Flange Adaptors, PVC-U

Jointing face with O-ring groove, metric

**Model:**

- Solvent cement socket metric
- Counterpart: Flange Adaptor flat No. 21 80 01
Combined Flange Adaptor (d160, d200, d225, d280, d315)
- Gasket: O-ring EPDM No. 48 41 01, FPM No. 49 41 01
- Flange: PVC-U No. 21 70 00, PP/Steel Nr. 27 70 02, PP-V for socket systems metric No. 27 70 04

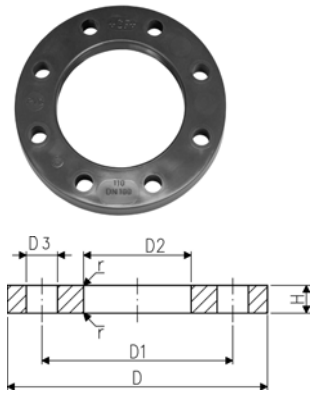
d [mm]	DN [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	
16	10	16	721 810 105	10	0.008	6	22	29	20	9	
20	15	16	721 810 106	100	0.011	6	27	34	22	9	
25	20	16	721 810 107	10	0.018	6	33	41	25	10	
32	25	16	721 810 108	10	0.027	6	41	50	28	10	
40	32	16	721 810 109	10	0.045	8	50	61	34	13	
50	40	16	721 810 110	10	0.068	8	61	73	39	13	
63	50	16	721 810 111	10	0.120	8	77	90	46	14	
75	65	16	721 810 112	10	0.182	8	91	106	52	15	
90	80	16	721 810 113	10	0.291	10	108	125	61	16	
110	100	16	721 810 114	10	0.468	11	131	150	72	18	
125	100	16	721 810 115	5	0.753	11	148	170	80	19	
140	125	16	721 810 116	6	0.830	11	165	188	87	20	
160	150	16	721 810 117	2	1.180	11	188	213	97	22	
200	200	10	721 810 119	2	1.593	12	224	250	118	30	
225	200	10	721 810 120	2	1.895	12	248	274	131	31	
250	250	10	721 810 121	-	2.150	9	274	303	140	23	
280	250	10	721 810 122	1	3.100	13	308	329	158	30	
315	300	6	721 810 123	1	4.830	17	346	379	180	35	

Backing Flanges, PVC-U metric

Model:

- For socket systems
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Maximum medium- or ambient temperature 45 °C

* Connecting dimension: ISO 2536



d [mm]	DN [mm]	Inch	PN	Code	kg	kg/m	
16	10	3/8	10	721 700 005	0.055	0.055	
20	15	1/2	10	721 700 006	0.069	0.069	
25	20	3/4	10	721 700 007	0.092	0.092	
32	25	1	10	721 700 008	0.132	0.132	
40	32	1 1/4	10	721 700 009	0.194	0.194	
50	40	1 1/2	10	721 700 010	0.245	0.245	
63	50	2	10	721 700 011	0.311	0.311	
75	65	2 1/2	10	721 700 012	0.375	0.375	
90	80	3	10	721 700 013	0.471	0.471	
110	100	4	10	721 700 014	0.554	0.554	
125	125	4 1/2	10	721 700 015	0.995	0.995	
140	125	5	10	721 700 016	0.746	0.746	
160	150	6	10	721 700 017	1.016	1.016	
200	200	7	10	721 700 019	1.658	1.658	
225	200	8	10	721 700 020	1.380	1.380	
250	250	9	6	721 700 021	1.700	1.700	
*250	225	9	6	721 700 136	1.700	1.700	
280	250	10	6	721 700 137	1.730	1.730	
315	300	12	6	721 700 138	2.350	2.350	
355	350	14	6	721 700 139	3.400	3.400	
400	400	16	6	721 700 140	4.500	4.500	

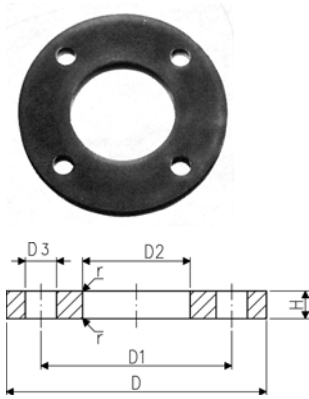
d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	r [mm]	AL	SC	
16	90	60	23	14	10	1	4	M12	
20	95	65	28	14	11	1	4	M12	
25	105	75	34	14	12	2	4	M12	
32	115	85	42	14	14	2	4	M12	
40	140	100	51	18	15	2	4	M16	
50	150	110	62	18	16	2	4	M16	
63	165	125	78	18	18	3	4	M16	
75	185	145	92	18	19	3	4	M16	
90	200	160	110	18	20	3	8	M16	
110	220	180	133	18	22	3	8	M16	
125	250	210	150	18	26	5	8	M16	
140	250	210	167	18	26	4	8	M16	
160	285	240	190	22	28	4	8	M20	
200	340	295	226	22	32	4	8	M20	
225	340	295	250	22	32	4	8	M20	
250	395	350	277	22	36	4	12	M20	
*250	370	325	277	22	36	4	8	M20	
280	395	350	310	22	36	4	12	M20	
315	445	400	348	22	36	4	12	M20	
355	505	460	388	22	38	5	16	M20	
400	565	515	442	26	42	5	16	M24	

Backing Flanges, PVC-U Inch ASTM / ANSI

Model:

- For socket systems
- For Flange Adaptors BS (ANSI)
- Connecting dimension: ANSI/ASME B 16.5 class 150 (ASTM D 4024), BS EN 1759

* Only for use with metric flange adaptors



Inch	DN [mm]	d [mm]	PN	Code	SP	kg	kg/m
½	15		10	721 702 206	90	0.067	0.067
¾	20		10	721 702 207	50	0.088	0.088
1	25		10	721 702 208	40	0.128	0.128
1 ¼	32		10	721 702 209	25	0.208	0.208
1 ½	40		10	721 702 210	20	0.253	0.253
2	50		10	721 702 211	30	0.305	0.305
2 ½	65		10	721 702 212	27	0.382	0.382
3	80		10	721 702 213	20	0.498	0.498
4	100		10	721 702 214	-	0.515	0.515
*4	100	110	10	161 483 180	30	0.563	0.563
5	125		10	721 702 216	12	0.727	0.727
6	150		10	721 702 217	9	1.910	1.910
*6	150	160	10	161 483 181	9	1.013	1.013
8	200		10	721 702 220	8	1.349	1.349

Inch	DN [mm]	d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	r [mm]	AL
½	15		95	60	28	16	11	1	4
¾	20		105	70	34	16	12	2	4
1	25		115	79	42	16	14	2	4
1 ¼	32		140	89	51	16	15	2	4
1 ½	40		150	98	62	16	16	2	4
2	50		165	121	78	19	18	3	4
2 ½	65		185	140	92	19	19	3	4
3	80		200	152	110	19	20	3	4
4	100		220	190	138	19	22	3	8
*4	100	110	220	190	133	19	22	3	8
5	125		250	216	167	22	26	4	8
6	150		285	241	200	22	28	4	8
*6	150	160	285	241	190	22	28	4	8
8	200		340	298	250	22	32	4	8

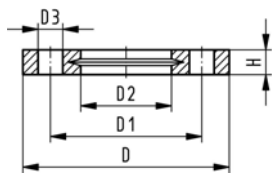
27 70 04
27 70 05

Backing Flanges, PP-V for Socket Systems metric

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt retainers as an assembly aid
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)



d [mm]	Inch	DN [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 406	0.080	0.080	95	65	28	14	16	4	M12
25		20	16	727 700 407	0.100	0.100	105	75	34	14	17	4	M12
32		25	16	727 700 408	0.140	0.140	115	85	42	14	18	4	M12
40		32	16	727 700 409	0.220	0.220	140	100	51	18	20	4	M16
50		40	16	727 700 410	0.210	0.210	150	110	62	18	22	4	M16
63		50	16	727 700 411	0.380	0.380	165	125	78	18	24	4	M16
75		65	16	727 700 412	0.480	0.480	185	145	92	18	26	4	M16
90		80	16	727 700 413	0.520	0.520	200	160	110	18	27	8	M16
110		100	16	727 700 414	0.680	0.680	220	180	133	18	28	8	M16
140		125	16	727 700 416	0.800	0.800	250	210	167	18	30	8	M16
160	6	150	16	727 700 417	1.200	1.200	285	241	190	22	32	8	M20
200		200	16	727 700 419	1.500	1.500	340	296	226	22	34	8	M20
225	9	200	16	727 700 420	1.400	1.400	340	295	250	22	34	8	M20
250		250	16	727 700 421	1.700	1.700	395	350	277	22	38	12	M20
280		250	16	727 700 422	1.700	1.700	395	350	310	22	38	12	M20
315		300	16	727 700 423	2.400	2.400	445	400	348	22	42	12	M20

27 70 02

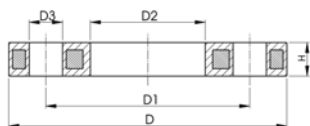
Backing Flanges, PP/Steel for Socket Systems metric

Model:

- PP-GF (30% glass-fibre reinforced) with steel ring
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

¹ Connecting dimension: ISO 2536 DN125

* Connecting dimension: ISO 2536



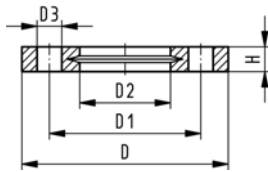
d [mm]	DN [mm]	PN	Code	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC	
20	15	16	727 700 206	95	65	28	14	12	4	M12	
25	20	16	727 700 207	105	75	34	14	12	4	M12	
32	25	16	727 700 208	115	85	42	14	16	4	M12	
40	32	16	727 700 209	140	100	51	18	16	4	M16	
50	40	16	727 700 210	150	110	62	18	18	4	M16	
63	50	16	727 700 211	165	125	78	18	18	4	M16	
75	65	16	727 700 212	185	145	92	18	18	4	M16	
90	80	16	727 700 213	200	160	110	18	20	8	M16	
110	100	16	727 700 214	220	180	133	18	20	8	M16	
125	100	16	727 700 215	250	210	150	18	24	8	M16	
140	125	16	727 700 216	250	210	167	18	24	8	M16	
160	150	16	727 700 217	285	240	190	22	24	8	M20	
200	200	16	727 700 219	340	295	226	22	27	8	M20	
225	200	16	727 700 220	340	295	250	22	27	8	M20	
*250	250	16	727 700 221	395	325	277	22	30	8	M20	
280	250	16	727 700 222	395	350	310	22	30	12	M20	
315	300	16	727 700 223	445	400	348	22	34	12	M20	
355	350	16	727 700 224	515	460	388	23	40	16	M20	
400	400	16	727 700 225	574	515	442	26	40	16	M24	

27 70 14
27 70 15

Backing Flanges, PP-V for Socket Systems Inch/ANSI

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt-fixing as an assembly aid
- Connection dimensions according to ASME B16.5, ASTM D 4024; bolt circle class 150



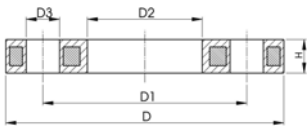
¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)

Inch	DN [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
¹ / ₂	15	16	727 701 406	0.080	0.080	95	60	28	16	16	4	M12
³ / ₄	20	16	727 701 407	0.100	0.100	105	70	34	16	17	4	M12
¹	25	16	727 701 408	0.140	0.140	115	79	42	16	18	4	M12
¹ ¹ / ₄	32	16	727 701 409	0.220	0.220	140	89	51	16	20	4	M16
¹ ¹ / ₂	40	16	727 701 410	0.210	0.210	150	98	62	16	22	4	M16
¹ / ₂	50	16	727 701 411	0.380	0.380	165	121	78	19	24	4	M16
³ / ₂	65	16	727 701 412	0.480	0.480	185	140	92	19	26	4	M16
¹	80	16	727 701 413	0.520	0.520	200	152	110	19	27	4	M16
¹ / ₂	100	16	727 701 414	0.680	0.680	229	190	133	19	28	8	M16
³ / ₄	150	16	727 700 417	1.200	1.200	285	241	190	22	32	8	M20
¹	250	16	727 701 422	1.700	1.700	406	362	310	26	38	12	M20
³ / ₂	300	16	727 701 423	2.400	2.400	483	432	348	26	42	12	M20

Backing Flanges, PP/Steel for Socket Systems Inch/ANSI

Model:

- For socket systems
- For Flange Adaptors BS (ANSI)
- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024
- DN100 and DN150: only for use with original metric flange adaptors



Inch	DN [mm]	d [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	
1/2	15	20	16	727 701 206	0.210	0.210	95	60	28	16	12	4	
3/4	20	25	16	727 701 207	0.250	0.250	105	70	34	16	12	4	
1	25	32	16	727 701 208	0.420	0.420	115	79	42	16	16	4	
1 1/4	32	40	16	727 701 209	0.670	0.670	140	89	51	16	16	4	
1 1/2	40	50	16	727 701 210	0.860	0.860	150	98	62	16	18	4	
2	50	63	16	727 701 211	0.930	0.930	165	121	78	19	18	4	
2 1/2	65	75	16	727 701 212	1.340	1.340	185	140	92	19	18	4	
3	80	90	16	727 701 213	1.550	1.550	200	152	110	19	20	4	
4	100	110	16	727 701 214	1.810	1.810	229	190	133	19	20	8	
6	150	180	16	727 701 217	3.390	3.390	285	241	190	22	24	8	
8	200	200	16	727 701 220	4.410	4.410	340	298	250	22	27	8	

21 73 02

Fixed Flanges, PVC-U Jointing face flat, metric

Model:

- Solvent cement socket metric
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

* Combined Flange, connecting dimensions DIN 2501 PN 10 and ANSI B 16.5



d [mm]	DN [mm]	Inch	PN	Code	kg	kg/m	
20	15	½	16	721 730 206	0.105	0.105	
25	20	¾	16	721 730 207	0.130	0.130	
32	25	1	16	721 730 208	0.183	0.183	
40	32	1 ¼	16	721 730 209	0.305	0.305	
50	40	1 ½	16	721 730 210	0.365	0.365	
63	50	2	16	721 730 211	0.510	0.510	
*75	65	2 ½	10	721 730 212	0.520	0.520	
*90	80	3	10	721 730 213	0.720	0.720	
*110	100	4	10	721 730 214	0.920	0.920	
*140	125	5	10	721 730 216	1.380	1.380	
*160	150	6	10	721 730 217	2.020	2.020	

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	z [mm]	H [mm]	H1 [mm]	AL	SC	
20	95	65	27	14	3	12	19	4	M12	
25	105	75	33	14	3	13	22	4	M12	
32	115	85	41	14	3	14	25	4	M12	
40	140	100	51	18	3	17	29	4	M16	
50	150	110	62	18	3	17	34	4	M16	
63	165	125	77	18	3	20	41	4	M16	
*75	185	142	91	22	3	21	47	4	M20	
*90	200	156	108	22	5	22	56	8	M20	
*110	220	186	131	24	5	24	66	8	M20	
*140	250	215	165	23	5	28	91	8	M20	
*160	285	240	188	23	5	30	91	8	M20	

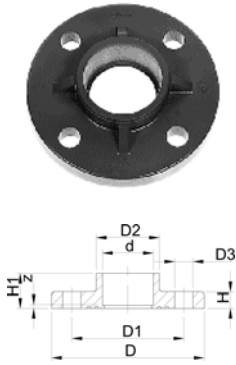
Fixed Flanges, PVC-U

Jointing face serrated, metric

Model:

- Solvent cement socket metric
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

* Combined Flange, connecting dimensions DIN 2501 PN 10 and ANSI B 16.5



d [mm]	DN [mm]	Inch	PN	Code	kg	kg/m	
20	15	1/2	16	721 740 106	0.100	0.100	
25	20	3/4	16	721 740 107	0.130	0.130	
32	25	1	16	721 740 108	0.185	0.185	
40	32	1 1/4	16	721 740 109	0.305	0.305	
50	40	1 1/2	16	721 740 110	0.368	0.368	
63	50	2	16	721 740 111	0.510	0.510	
*75	65	2 1/2	10	721 740 112	0.520	0.520	
*90	80	3	10	721 740 113	0.720	0.720	
*110	100	4	10	721 740 114	0.920	0.920	
*140	125	5	10	721 740 116	1.380	1.380	
*160	150	6	10	721 740 117	2.020	2.020	

d [mm]	z [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	AL	SC	
20	3	95	65	27	14	12	19	4	M12	
25	3	105	75	33	14	13	22	4	M12	
32	3	115	85	41	14	14	25	4	M12	
40	3	140	100	51	18	17	29	4	M16	
50	3	150	110	62	18	17	34	4	M16	
63	3	165	125	77	18	20	41	4	M16	
*75	3	185	142	91	22	21	47	4	M20	
*90	5	200	156	108	22	22	56	8	M20	
*110	5	220	186	131	24	24	66	8	M20	
*140	5	250	215	165	23	28	91	8	M20	
*160	5	285	240	188	23	30	91	8	M20	

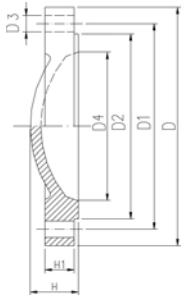
Blanking Flanges, PVC-U

Jointing face serrated, metric

Model:

- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- **d63 to d160: combined jointing face (serrated and flat)**

* Combined Flange, connecting dimensions DIN 2501 PN 10 and ANSI B 16.5

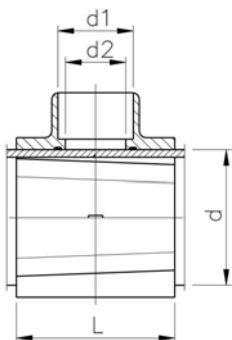


d [mm]	DN [mm]	Inch	PN	Code	kg	kg/m	
*20	15	1/2	10	721 700 506	0.075	0.075	
*25	20	3/4	10	721 700 507	0.097	0.097	
*32	25	1	10	721 700 508	0.145	0.145	
*40	32	1 1/4	10	721 700 509	0.225	0.225	
*50	40	1 1/2	10	721 700 510	0.280	0.280	
*63	50	2	10	721 700 511	0.380	0.380	
*75	65	2 1/2	10	721 700 512	0.535	0.535	
*90	80	3	10	721 700 513	0.670	0.670	
*110	100	4	10	721 700 514	0.875	0.875	
*140	125	5	10	721 700 516	1.315	1.315	
*160	150	6	10	721 700 517	1.730	1.730	
225	200	8	10	721 700 520	2.600	2.600	
250	250	10	10	721 700 521	3.300	3.300	
280	250	10	10	721 700 522	4.650	4.650	
315	300	12	6	721 700 523	5.750	5.750	
355	350	14	6	721 700 524	6.800	6.800	
400	400	16	6	721 700 525	9.000	9.000	

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	AL	
*20	95		61.0	63.0	34	16	15	15	12	4	
*25	105		70.0	73.0	41	16	20	16	13	4	
*32	115		79.0	83.0	50	16	25	19	15	4	
*40	140		91.0	100.0	61	18	34	20	16	4	
*50	150		101.0	110.0	74	18	44	22	17	4	
*63	165		121.0	124.0	91	19	57	25	20	4	
*75	185		140.0	145.0	106	22	69	29	21	4	
*90	200		152.0	160.0	125	22	82	32	22	8	
*110	220		180.0	191.0	150	24	102	36	24	8	
*140	250	215			184	23	120	41	28	8	
*160	285	240			212	23	152	45	30	8	
225	340	295			273	22	213	63	36	8	
250	370	325			303	22	238	63	36	8	
280	395	350			328	22	266	65	36	12	
315	445	400			378	22	299	65	36	12	
355	505	460			430	22	341	67	38	16	
400	565	515			482	26	384	71	42	16	

Branch and Tapping Saddles

21 111

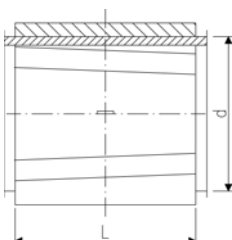


Branch Saddle

- Outlet with solvent cement socket metric
- For operating pressure up to 10 bar water
- Top saddle with rubber seal
- Seal: NBR (Nitrile-Rubber) shore hardness: 60 ±5 Shore A

d [mm]	Code	SP	kg	d1 [mm]	d2 [mm]	L [mm]	
63	161 111 035	1	0.699	40	22	105	
63	161 111 036	1	0.730	50	22	105	
75	161 111 046	1	0.797	50	31	105	
90	161 111 055	1	0.826	40	31	105	
90	161 111 056	1	0.856	50	31	105	
110	161 111 065	1	0.935	40	31	105	
110	161 111 066	1	0.949	50	40	105	
110	161 111 067	1	0.995	63	40	105	
160	161 111 095	1	1.430	40	31	120	
160	161 111 096	1	1.260	50	40	120	
160	161 111 097	1	1.300	63	40	120	
225	161 111 116	1	1.587	50	40	120	
225	161 111 117	1	1.624	63	40	120	

21 110 200



Repair Saddle

- For operating pressure up to 10 bar water
- For repair of damaged pipes
- Saddle valves can be solvent cemented
- Cementing only possible on dry mains without pressure

d [mm]	Code	SP	kg	Max. pipe aperture [mm]	L [mm]	
63	161 110 230	1	0.584	39	105	
90	161 110 250	1	0.678	48	105	
110	161 110 260	1	0.795	48	105	
160	161 110 290	1	1.213	60	120	
225	161 110 310	1	1.340	60	120	