



PRICE LIST E9.17
PVC-U LARGE BORE
PRESSURE FITTINGS





Since 1954 FIP produces injection moulded valves and fittings in thermoplastic materials for pressure pipeline systems thus becoming nowadays the largest European valves manufacturer.

FIP is a company of the Aliaxis Group: a worldwide industrial holding, gathering together a series of companies manufacturing and marketing plastic plumbing products for building, industrial and public utilities applications.

FIP products are manufactured on EU production sites, operating to the Quality Assurance System in compliance with ISO 9001 and with the Environmental Management System ISO 14001 standards requirements.

Moulded in FIP products there are over 50 years of know-how powered by a strong quest for innovation.

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Technical Support	technical.fip@aliaxis.com

Company Certificates		
	Cert. N° 1 in compliance with the Standard UNI EN ISO 9001	
	Cert. N° 70 in compliance with the Standard UNI EN ISO 14001	

CE Conformity	
	CE conformity according to European directives EC/2104/68.

ROO-02-2017

INDEX

General info

How to read FIP Fittings Commercial Codes	page 4
Reference standards	page 6
Approvals and quality marks	page 8

ISO-UNI FITTINGS

Solvent weld fittings - Equal socket	page 11
Solvent weld fittings - Reducers	page 13
Solvent weld fittings - Stubs	page 15
Flanges - ISO-DIN series	page 16
Packaging Information	page 18
Conditions of supply	page 19

PVC-U LARGE BORE PRESSURE FITTINGS

CODES

HOW TO READ FIP FITTINGS COMMERCIAL CODES

Ex: **BIV050E** PVC-U union, d50, socket for solvent welding, EPDM gasket

B TYPE OF FITTINGS		I JOINT SYSTEM		V MATERIALS	
A	Hose connector	C	Cieco	C	PVC-C
B	Socket union	F	BSP female threaded (inch)	E	PE
C	End cap	G	JIS socket threaded (inch)	F	PVDF
D	Reducer bush	I	ISO socket (metric)	M	PP-H
E	Ringnut	M	BS male (inch)	V	PVC-U
F	Fixed flange	P	Hose adaptor (metric)	B	PP-steel
F/B	Union bush	R	BSP male threaded (inch)	O	Brass
G	90° elbow	B	ISO butt welding (metric)		
H	45° elbow	D	ISO spigot (metric)		
J	Back nut	A	ASTM socket (inch)		
K	Transition fitting				
L	Tank connector				
M	Socket				
N	Nipple				
NR	Reduced nipple				
O	Free flange				
P	Plug				
Q	Collars				
Q/B	Union end connector				
R	Reduction				
S	90° bend				
T	90° tee				
TR	90° tee with reduced offtake				
U	Clamp saddles				
Z	Pipe clips				
Y	45° tee				
X	Cross				

050 SIZE		E SEAL MATERIAL	
METRIC SERIES d (mm)		INCH SERIES d/R (pollici)	
006	6		E EPDM
008	8		F FPM
010	10		N NBR
012	12	014 1/4"	P PTFE
016	16	038 3/8"	
020	20	012 1/2"	
025	25	034 3/4"	
032	32	100 1"	
040	40	114 1" 1/4	
050	50	112 1" 1/2	
063	63	200 2"	
		214 2" 1/4	
075	75	212 2" 1/2	
		234 2" 3/4	
090	90	300 3"	
110	110	400 4"	
125	125		
140	140	500 5"	
160	160	600 6"	
180	180		
200	200		
225	225	800 8"	
250	250		
280	280	810 10"	
315	315	812 12"	
355	355		
400	400		

E9.17

REFERENCE STANDARDS

The PVC-U production line operates to the highest quality standards, in full compliance with current legislation governing environmental issues and in accordance with standard **ISO 14001**. All products are manufactured in accordance with a quality assurance system complying with standard **ISO 9001**.

- **ASTM D 1785**
Standard specification for pipes in PVC, Sch. 40-80-120
- **ASTM D 2464**
Standard specification for threaded polyvinyl chloride (PVC) plastic pipe fittings
- **ASTM D 2467**
Standard specification for polyvinyl chloride (PVC) plastic pipe fittings, sch. 80
- **BS 10**
Specification for flanges and bolting for pipes, valves and fittings
- **BS 21**
Specification for pipe threads for tubes and fittings
- **BS 3505**
Specification for PVC-U pressure pipes for cold water supplies
- **BS 3506**
Specification for PVC-U pipes for industrial use
- **BS 4346-1**
Joints and fittings for use with solvent weld PVC pressure pipes
- **DIN 2501**
Flange dimensions and drilling
- **DIN 2999**
Whitworth pipe threads for threaded pipes and fittings
- **DIN 8062**
PVC-U pipes - dimensions
- **DIN 8063**
PVC-U pipe fittings - dimensions
- **DVS 2204 - DVS 2221**
Adhesive bonding of thermoplastic PVC-U pipes and fittings
- **EN 1092-1**
Flanges and their joints - Circular flanges for pipes, fittings, valves and accessories - Part 1: PN designated steel flanges
- **EN ISO 1452**
PVC-U pipes and fittings for water supply systems
- **EN ISO 15493**
Plastic piping systems (Pipes, Fittings and Valves) in ABS, PVC-U, PVC-C for industrial applications
- **ISO 7**
PVC-U fittings with pressure-tight threaded joints
- **ISO 161-1**
Dimensions of PVC-U pipes and fittings, metric series
- **ISO 228-1**
PVC-U pipe fittings with threaded joints

- **ISO 727**
PVC-U pipes and fittings Dimensions and tolerances, metric series
- **JIS K 6741**
PVC-U pipes
- **JIS B 0203**
Tapered pipe threads
- **JIS K 6743**
PVC-U pipe fittings for water supply systems
- **UNI 11242**
Solvent welding of PVC-U pipes, fittings and valves

APPROVALS AND QUALITY MARKS



- **ABS**

The FIP PVC-U system is recognised as suitable for conveying and treating sanitary and conditioning water onboard ships and other units classified by the American Bureau of Shipping (ABS)



- **ACS France (Attestation de conformité Sanitaire)**

Suitability of PVC-U for food and beverage applications



- **BSI (British Standards Institution UK)**

PVC-U fittings to BS 4346-1



- **BUREAU VERITAS (France)**

Suitability of PVC-U for conveying and treating sanitary and conditioning water in the maritime sector



- **CSTB**

PVC-U fittings to standard NF T 54-028



- **IIP N. 122 Istituto Italiano dei Plastici (Italian Plastics Institute)**

PVC-U fittings to standard UNI EN ISO 1452



- **KIWA (Keurings Instituut Voor Waterleiding Artikelen Holland)**

PVC-U fittings to standard KIWA BRL K17301



- **UKR-SEPRO**

FIP PVC-U fittings are certified in accordance with Ukrainian Health, Safety, Hygiene and Quality standards



- **WRAS (Water regulations advisory scheme - UK)**

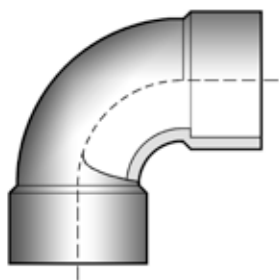
Suitability of PVC-U for transporting potable water

FITTINGS ISO-UNI

Series of fittings designed for conveying fluids under pressure with a cold chemical weld jointing system (solvent welding) using a suitable solvent cement and cleaner-primer.

SOLVENT WELD FITTINGS, METRIC SERIES

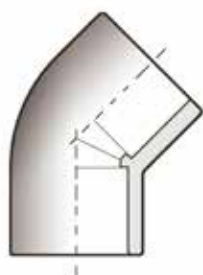
Technical specifications	
Size range	d 12 ÷ d 500 (mm)
Nominal pressure	PN 16 with water at 20 °C
Temperature range	0 °C ÷ 60 °C
Coupling standards	<p>Solvent welding: ISO 727, EN ISO 15493, DIN 8063, EN ISO 1452, ASTM D 2467, JIS K 6743, BS 4346-1. Can be coupled to pipes according to ISO 161-1, EN ISO 1452, EN ISO 15493, DIN 8062, ASTM D1785, JIS K6741, BS 3505-3506.</p> <p>Flanged couplings: DIN 2501, EN 1092-1</p>
Reference standards	<p>Construction criteria: EN ISO 1452, EN ISO 15493</p> <p>Test methods and requirements: EN ISO 1452, EN ISO 15493</p> <p>Installation criteria: DVS 2204, DVS 2221, UNI 11242</p>
Fitting material	PVC-U
Seal material	EPDM, FPM



GIV

Elbow 90°, plain socket for solvent welding

d	PN	Code	€	pack	n./box	box type
250	10	GIV250	278,71	-	1	01
280	10	GIV280	391,14	-	1	01
315	10	GIV315	486,88	-	1	00



HIV

Elbow 45°, plain socket for solvent welding

d	PN	Code	€	pack	n./box	box type
*180	10	HIV180	126,33	-	-	-
200	10	HIV200	See E3 price list	-	-	02
225	10	HIV225	164,49	-	2	01
250	10	HIV250	226,70	-	1	02
280	10	HIV280	310,29	-	1	01
315	10	HIV315	428,31	-	1	01

* Resale products



MIV

Double socket, plain socket for solvent welding

d	PN	Code	€	pack	n./box	box type
*180	10	MIV180	101,24	-	-	-
200	16	MIV200	See E3 price list	-	-	-
250	10	MIV250	169,07	-	2	02
280	10	MIV280	181,14	-	2	01
315	10	MIV315	210,89	-	1	01

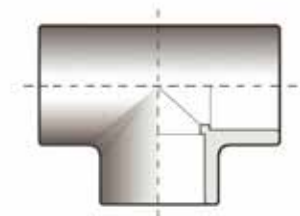
* Resale products

E9.17

ISO-UNI FITTINGS

PVC-U

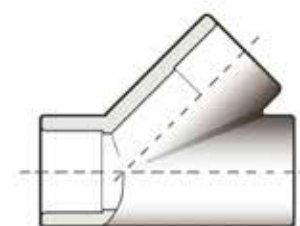
SOLVENT WELD FITTINGS - EQUAL SOCKET



TIV

Tee 90° equal, plain socket for solvent welding

d	PN	Code	€	pack	n./box	box type
180	10	TIV180	See E3 price list	-	-	-
200	16	TIV200	See E3 price list	-	-	-
225	16	TIV225	See E3 price list	-	-	-
250	10	TIV250	308,47	-	1	01
280	10	TIV280	462,70	-	1	01
315	10	TIV315	569,52	-	1	00



YIV

Tee 45°, plain socket for solvent welding

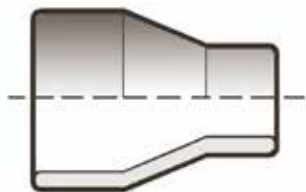
d	PN	Code	€	pack	n./box	box type
*160	10	YIV160	164,49	-	-	-

* Resale products

ISO-UNI FITTINGS

PVC-U

SOLVENT WELD FITTINGS - REDUCERS



MRIV

Reducer: solvent weld double socket (fig. A)

d x d ₁	PN	Code	€	pack	n./box	box type
110 x 90	16	MRIV110090	See E3 price list	-	-	-
*180 x 125	10	MRIV180125	on request	-	-	-
*180 x 140	10	MRIV180140	on request	-	-	-
*180 x 160	10	MRIV180160	on request	-	-	-
*200 x 110	10	MRIV200110	on request	-	-	-
*200 x 125	10	MRIV200125	on request	-	-	-
*200 x 140	10	MRIV200140	on request	-	-	-
*200 x 160	10	MRIV200160	on request	-	-	-
*200 x 180	10	MRIV200180	on request	-	-	-
*225 x 110	10	MRIV225110	on request	-	-	-
*225 x 140	10	MRIV225140	on request	-	-	-
*225 x 160	10	MRIV225160	on request	-	-	-
*225 x 180	10	MRIV225180	on request	-	-	-
*225 x 200	10	MRIV225200	on request	-	-	-
*250 x 110	10	MRIV250110	198,82	-	-	-
*250 x 125	10	MRIV250125	198,82	-	-	-
*250 x 140	10	MRIV250140	198,82	-	-	-
*250 x 160	10	MRIV250160	198,82	-	-	-
*250 x 180	10	MRIV250180	198,82	-	-	-
*250 x 200	10	MRIV250200	198,82	-	-	-
*250 x 225	10	MRIV250225	198,82	-	-	-
*280 x 110	10	MRIV280110	228,53	-	-	-
*280 x 125	10	MRIV280125	228,53	-	-	-
*280 x 140	10	MRIV280140	228,53	-	-	-
*280 x 160	10	MRIV280160	228,53	-	-	-
*280 x 180	10	MRIV280180	228,53	-	-	-
*280 x 225	10	MRIV280225	228,53	-	-	-
*280 x 250	10	MRIV280250	228,53	-	-	-
*315 x 160	8	MRIV315160	242,48	-	-	-
*315 x 180	8	MRIV315180	242,48	-	-	-
*315 x 200	8	MRIV315200	242,48	-	-	-
*315 x 225	8	MRIV315225	242,48	-	-	-
*315 x 250	8	MRIV315250	242,48	-	-	-
*315 x 280	8	MRIV315280	242,48	-	-	-
*355 x 315	5	MRIV355315	251,80	-	-	-
*400 x 315	5	MRIV400315	281,47	-	-	-
*400 x 355	5	MRIV400355	281,47	-	-	-

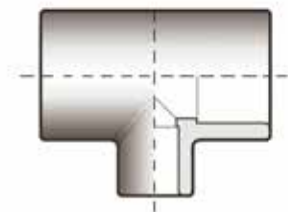
* Resale products

E9.17

ISO-UNI FITTINGS

PVC-U

SOLVENT WELD FITTINGS - REDUCERS

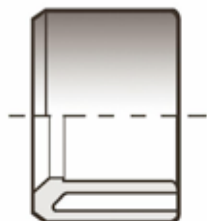


TRIV

Tee 90° reducing, plain socket for solvent welding with the plain socket offtake d1 reduced

d x d ₁	PN	Code	€	pack	n./box	box type
*250 x 110	10	TRIV250110	344,69	-	-	-
*250 x 160	10	TRIV250160	344,69	-	-	-
*250 x 200	10	TRIV250200	344,69	-	-	-
*280 x 160	10	TRIV280160	518,43	-	-	-
*280 x 225	10	TRIV280225	518,43	-	-	-
*315 x 160	8	TRIV315160	635,50	-	-	-
*315 x 200	8	TRIV315200	635,50	-	-	-
*315 x 250	8	TRIV315250	635,50	-	-	-

* Resale products



DIV

Reducing bush male spigot for solvent welding (d), female socket for solvent welding (d1 reduced)

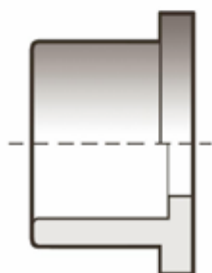
d x d ₁	PN	Code	€	pack	n./box	box type
*180 x 160	10	DIV180160	58,51	-	-	-
200 x 160	10	1RRC121000	63,58	-	10	02
*200 x 180	10	DIV200180	63,58	-	-	-
250 x 160	10	DIV250160	130,71	-	6	02
*250 x 180	10	DIV250180	130,71	-	-	-
250 x 200	10	DIV250200	130,71	-	6	02
250 x 225	10	DIV250225	130,71	-	6	02
*250 x 200	10	DIV280200	155,62	-	-	-
280 x 225	10	DIV280225	155,62	-	4	02
*280 x 250	10	DIV280250	155,62	-	-	-
315 x 200	10	DIV315200	162,07	-	3	01
315 x 225	10	DIV315225	162,07	-	3	01
315 x 250	10	DIV315250	162,07	-	4	01
315 x 280	10	DIV315280	162,07	-	4	01

* Resale products

ISO-UNI FITTINGS

PVC-U

SOLVENT WELD FITTINGS - STUBS



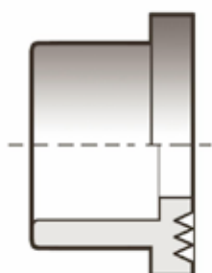
QPV

Serrated face for QPV/QRV and flat gaskets according to DIN 8063 PN10/16, plain socket for solvent welding

d	DN	PN	Code	€	pack	n./box	box type
*355	350	5	QPV355	194,14	-	-	-
*400	400	5	QPV400	235,06	-	-	-
*450	450	5	QPV450	251,81	-	-	-
*500	500	5	QPV500	272,13	-	-	-

* Resale products

E9.17



QRV

Serrated face for QPV/QRV and flat gaskets according to DIN 8063 PN10/16 for flat gasket, plain socket for solvent welding

d	DN	PN	Code	€	pack	n./box	box type
250	250	10	QRV250	91,09	-	6	01
280	250	10	QRV280	117,98	-	4	01
315	300	10	QRV315	136,58	-	3	01

** Reduced safety factor

ISO-UNI FITTINGS

PVC-U

FLANGES - ISO-DIN SERIES



ODV

Backing ring for stub flange QPV, QRV or QLV EN/ISO/DIN. Drilled: PN 10/16 up to DN 150 - PN 10 from DN 200

d	DN	*PMA (bar)	Code	€	pack	n./box	box type
250	250	10	ODV250	88,27	-	11	01
280	250	10	ODV280	104,48	-	12	01
315	300	10	ODV315	116,15	-	8	01
**355	350	5	ODV355	156,97	-	-	-
**400	400	5	ODV400	165,39	-	-	-
**450	450	5	ODV450	206,42	-	-	-
**500	500	5	ODV500	236,08	-	-	-

*PMA: maximum allowable pressure
** Resale products



ODB

Backing ring in PP/FRP black with steel core according to EN/ISO/DIN to be used with stub flange QRV and QPV. Drilled: PN 10/16 up to DN 150 - PN 10 from DN 200

d	DN	*PMA (bar)	Code	€	pack	n./box	box type
280	250	10	SWODBD280DN250	116,14	-	4	-
315	300	10	SWODBD315DN300	159,91	-	2	-

*PMA: maximum allowable pressure



FCV

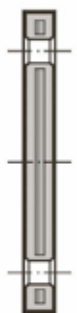
Blind flange drilled EN/ISO/DIN raised serrated face for flat gaskets. Foratura: PN 10/16 up to DN 175; PN10 from DN 200

d	DN	*PMA (bar)	Code	€	pack	n./box	box type
**180	175	10	FCV180	107,75	-	-	-
**200/225	200	10	FCV200	116,15	-	-	-

*PMA: maximum allowable pressure

** Resale products

E9.17



ODBC

Blind flange EN/ISO/DIN in PP/FRP black with steel core for stub QRV, QPV. Drilled: PN 10/16 up to DN 150; PN 10 from DN 200

d	DN	*PMA (bar)	Code	€	pack	n./box	box type
250/280	250	10	ODBC250	See EB price list	-	-	-
315	300	10	ODBC315	See EB price list	-	-	-

*PMA: maximum allowable pressure

PACKAGING INFORMATION

	pack	n./ box	box type
Q.ty of products per Pack	1		
Q.ty of products per Carton Box		22	
Carton Box type			03

Please note that pack and n./box quantities could be modified during the validity of the price list



Carton box dimensions

Box Type	L (mm)	P (mm)	H (mm)	Volume (m ³)
00	800	600	400	0,1920
01	590	390	500	0,1151
02	590	390	300	0,0690
03	390	290	300	0,0339
04	390	290	200	0,0226
05	295	195	200	0,0115
08	680	600	280	0,1142
K01	200	200	130	0,0052
K02	200	200	200	0,0080
K03	300	200	200	0,0120
K04	300	260	200	0,0156
K05	400	300	200	0,0240
K06	400	300	250	0,0300
K07	200	150	100	0,0030
K08	300	100	100	0,0030
K09	300	260	300	0,0234
K10	400	200	200	0,0160
K11	400	400	130	0,0208
K12	400	400	250	0,0400
K13	400	260	420	0,0437
K14	400	300	250	0,0300
K15	400	300	300	0,0360
K16	400	400	250	0,0400
K17	400	400	300	0,0480
K18	600	400	300	0,0720
K19	600	400	500	0,1200
K20	800	600	350	0,1680
N01	160	160	350	0,0090
N02	170	170	300	0,0087
N03	190	190	300	0,0108
N04	210	210	300	0,0132
N05	220	220	220	0,0106
N06	240	240	240	0,0138
N07	280	280	170	0,0133
N08	300	300	180	0,0162
N09	350	350	130	0,0159
N10	410	410	150	0,0252
N11	470	470	90	0,0199

CONDITIONS OF SUPPLY

- **INTRODUCTORY STATEMENT:** our supplies include the products specified in our Sales confirmation and are governed by the following Terms and Conditions which the Customer declares to understand and to accept, except for possible derogations stated in an explicitly written agreement. In particular all foreign supplies will be governed by INCOTERMS, as defined by the International Chamber of Commerce.
- **PRODUCTS:** to prevent regrettable misunderstandings, **it is advisable to refer to the nomenclature and codes of our catalogues and/or price lists** for the identification of our products. The items featuring an asterisk (*), though currently on hand, are not included in our wide range of products for which stock rebuild is scheduled. Therefore our order acceptance depends upon the actual availability of the product.
- **PACKAGING:** to speed-up delivery and to facilitate warehousing at the Customer's, we reserve the right to convert the ordered quantities into multiples of the standard packages, as shown in our price list next to each item.
- **MINIMUM PURCHASE:** for orders involving a net amount of less than € 516,46 we will charge € 31 as partial recovery of the handling costs.
- **PRICES:** prices will be those in force at the time when the order was placed, except in case of forward delivery. In the latter case, the prices in force at the time of shipment will be invoiced. Our prices include normal packing; special packing, if required by the customer will be charged at cost price.
- **DELIVERY:** delivery is intended ex our Warehouse or Stores and is normally prompt, subject to being unsold. The anticipated delivery terms for unavailable items will be indicated, but these will be in no way binding or firm. If these delivery schedules cannot be kept for any reason whatsoever, the Purchaser can cancel the order only if the delay exceeds three months from the anticipated delivery date stated in our Order Confirmation. After this time lapse, we too shall be entitled to cancel any orders for items which delayed deliveries due to serious production problems.
- **SHIPMENT:** if the mode of shipment is not specifically indicated by the Customer, shipment will be effected as deemed most suitable by us. Even if the goods are sold free to destination, their transport will be at the Customer's risk. Insurance coverage will only be effected if specifically requested by the Customer.
- **PAYMENT:** the Customer cannot, for any reason whatsoever, defer payments beyond the established dates. Furthermore, we shall be fully entitled to charge interests in arrears on any and all delayed payments. These interests will be based upon the discount rate in force at that time in Italy, plus 3 unit % .
 - Unless otherwise specified, payments shall be made by opening of an irrevocable credit at call (for Foreign Countries).
 - Unless otherwise specified, payment shall be telegraphic transfer not later than 30 days after the date of invoicing (for Italy)
- **OWNERSHIP CLAUSE:** the products supplied by us will remain our property until fully paid for.
- **GUARANTEE CLAUSE:** we guarantee the good quality of our products in compliance with the standards publicized in our catalogues. However, our guarantee is limited to the repair and/or replacement of our materials, excluding any other liability, in particular for damages caused in any way whatsoever by utilization of our products. This guarantee terminates and will be no longer valid:
 - one year after the delivery of the material in question;
 - if the material is used in other way than the operating conditions specified by us;
 - if the materials are modified by people not belonging to our Company. On this subject, it should be noted that the Purchaser will incur all liabilities provided by Law for any modification of our products.We shall be duly informed about any accidents in which our products are involved and such accidents shall be reported to us immediately and within 24 Hours of their occurrence.
- **CLAIMS:** only complaints/claims reaching us by registered letter within 30 days after invoicing date will be taken into consideration. In particular, we will not accept any materials returned to us, unless their reshipment - free at our warehouses - has been duly authorized by our appropriate executive.
- **DISPUTES:** any disputes which cannot be amicably settled or settled by a court of arbitration, shall be handled by the Court of Genoa which will have jurisdiction.
- **CUSTOMER SERVICE:** our Technical and Commercial Services are available to all our Customers to provide any information on the characteristics and application sectors of our products.

The above General Terms and Conditions may be changed without previous notice.

All information contained in this collection are given in good faith and are correct at date of publication thereof.

The drawings and photographs contained in this price list are provided for illustrative purposes.

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