



The Durapipe Easyfit® valve allows customers to brand or label the valve through specialist software that is provided with the product. This innovative technology means that companies can easily 'own-brand' or alternatively label the valve with the chemical that the pipework is carrying, increasing plant efficiency as pipelines are instantly identifiable.

Durapipe Easyfit also simplifies the installation process through the versatile nature of the valve handle. In addition to opening and closing the valve itself, the handle can also be used to tighten the double union nuts during installation. This makes it an ideal solution for installations that require a valve to be fitted into tight corners as minimum space is needed to install it; the handle uses the valve stem as a pivot in order to tighten the valve ends.



VXE Easyfit® 2-way Ball Valve (DN15 - DN50)

The VXE Easyfit ball valve, is a fully unionised valve that stands up to the most severe industrial applications.

- In conjunction with Giugiaro Design we have designed and developed the VXE Easyfit ball valve, the innovative true union geared ball valve introducing an advanced method of installation for a long trouble free service
- Size range from $\frac{3}{8}$ " / d16mm up to 2" / d63mm
- Pressure rating: Maximum working pressure: 16 bar at 20°C
- New patented Easyfit system: The bevel gear pairing principle has been used as a mechanism to control the rotation of the union nuts during the installation of the valve

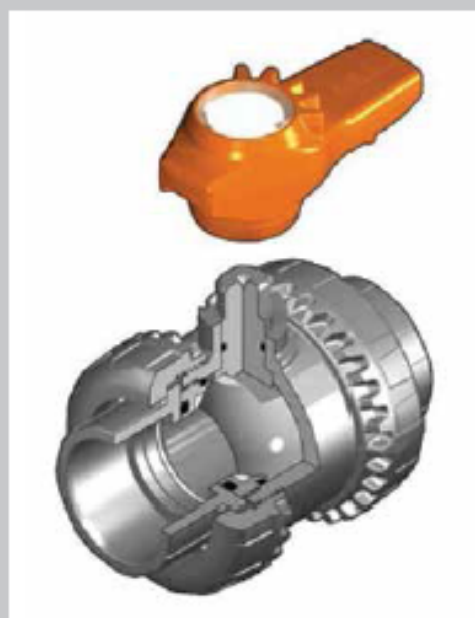
The use of the Easyfit multifunctional handle is the ideal way to carry out maintenance operations in small spaces with limited access to the valve

- Easy removal of the valve body from the pipe system, allowing replacement of the valve seals and seats without any additional equipment
- Compact true union design. With installation dimensions to EN1452 'Short Series'
- The pipeline downstream of the valve can be disconnected, with the valve in the closed position, without leakage
- Blocked seat carrier with adjustment of the ball seats
- Easyfit ergonomically designed multifunctional handle with integrated union nut tightening/untightening tool and ball seat adjusting tool
- Maintenance can be carried out while the valve body is installed in line
- For more information, please visit our website

www.durapipe.co.uk

Legend

d	Nominal outside diameter
DN	Nominal internal diameter in mm
R	Nominal size or the thread in inches
PN	Nominal pressure in bar (max. working pressure at 20°C - water)
gms	Weight in grams
PVC-U	Polyvinyl chloride unplasticised
C-PVC	Polyvinyl chloride chlorinated
ABS	Acrylonitrile Butadiene Styrene
PP	Polypropylene
HIPVC	High impact PVC
PE	Polyethylene
PTFE	Polytetrafluoroethylene
EPDM	Ethylene Propylene Diene Monomer (M-class) rubber
FPM	Fluorocarbon rubber
s	Wall thickness (mm)
SDR	Standard dimension ratio = d/s





Dimensions and Standards

Imperial

The Imperial System is manufactured in accordance with the relevant British Standards: BS 5392 fittings.

Metric

The Metric System is manufactured generally in accordance with the relevant International Standards: ISO 15493, KIWA 49 and 549, DIN 8062 and 8063.

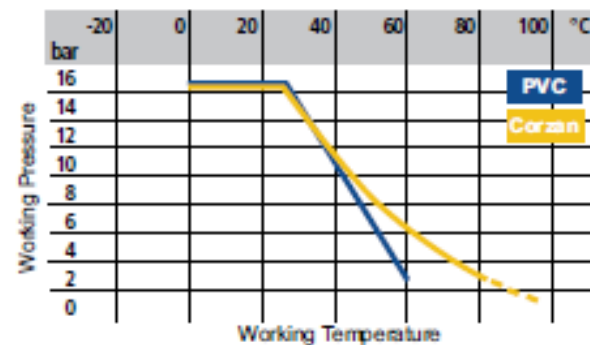
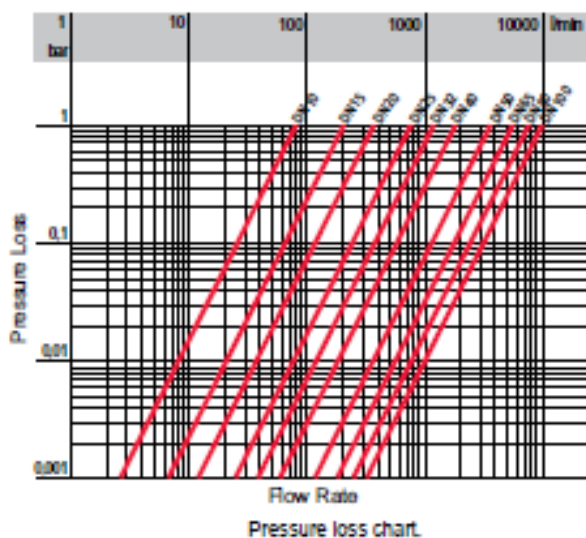
BSP Thread

Threaded fittings conform to the requirements of BS 21/DIN 2999/ISO7. Socket dimensions of metric fittings for solvent welding comply with ISO/DIS 727-1.

Interchangeability

Components in the imperial and metric ranges are not interchangeable.

Technical Data



Pressure/temperature rating for water and harmless fluids to which the material is RESISTANT. In other cases a reduction of the PN is required. (25 years with safety factor).

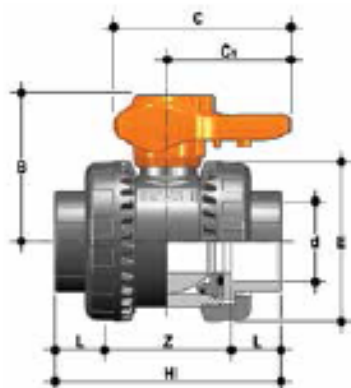
DN	10	15	20	25	32	40	50
k_{v100}	80	200	385	770	1100	1750	3400

Flow coefficient k_{v100}

k_{v100} is the number of litres per minute of water at a temperature of 20°C that will flow through a valve with a one bar pressure differential at a specified rate. The k_{v100} values shown in the table are calculated with the valve fully open.



BS Series Female Ends

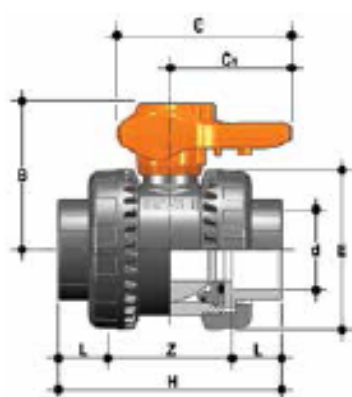


VXELV **PVC-U**
VXELA **ABS**

Easyfit 2-way ball valve with BS series female ends for solvent weldin

d	DN	PN	L	Z	H	E	B	C	C ₁	PVC-U			ABS		
										gms	EPDM Code	FPM Code	gms	EPDM Code	FPM Code
1/2	15	16	16.5	49	82	54	49	64	20	175	H0 XEE 102	H0 XEF 102	170	H0 XEA 102	H0 XEB 102
3/4	20	16	19	53	91	63	62	78	23	260	H0 XEE 103	H0 XEF 103	252	H0 XEA 103	H0 XEB 103
1	25	16	22.5	58	103	72	71	87	27	365	H0 XEE 104	H0 XEF 104	354	H0 XEA 104	H0 XEB 104
1 1/4	32	16	26	68	120	85	82	102	30	565	H0 XEE 105	H0 XEF 105	548	H0 XEA 105	H0 XEB 105
1 1/2	40	16	30	79	139	100	92	109	33	795	H0 XEE 106	H0 XEF 106	771	H0 XEA 106	H0 XEB 106
2	50	16	36	102	174	118	110	133	39	1325	H0 XEE 107	H0 XEF 107	1285	H0 XEA 107	H0 XEB 107

Metric Series Female Ends



VXEIV **PVC-U**
VXEIA **ABS**
VXEIC **Corzan**

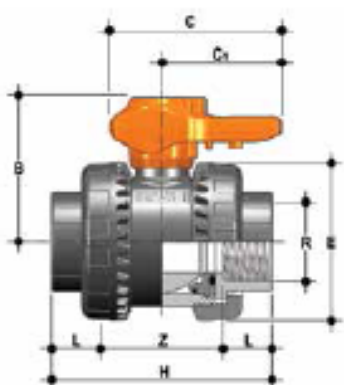
Easyfit 2-way ball valve with Metric series female ends for solvent weldin

d	DN	PN	L	Z	H	E	B	C	C ₁
16	10	16	14	54	82	54	49	64	20
20	15	16	16	50	82	54	49	64	20
25	20	16	19	53	91	63	62	78	23
32	25	16	22	59	103	72	71	87	27
40	32	16	26	68	120	85	82	102	30
50	40	16	31	77	139	100	92	109	33
63	50	16	38	98	174	118	110	133	39

d	PVC-U			ABS			Corzan		
	gms	EPDM Code	FPM Code	gms	EPDM Code	FPM Code	gms	EPDM Code	FPM Code
16	180	H0 XEE 305	H0 XEF 305	175	H0 XEA 305	H0 XEB 305	180	H0 XEJ 305	H0 XEK 305
20	175	H0 XEE 306	H0 XEF 306	170	H0 XEA 306	H0 XEB 306	175	H0 XEJ 306	H0 XEK 306
25	260	H0 XEE 307	H0 XEF 307	252	H0 XEA 307	H0 XEB 307	260	H0 XEJ 307	H0 XEK 307
32	365	H0 XEE 308	H0 XEF 308	354	H0 XEA 308	H0 XEB 308	365	H0 XEJ 308	H0 XEK 308
40	565	H0 XEE 309	H0 XEF 309	548	H0 XEA 309	H0 XEB 309	565	H0 XEJ 309	H0 XEK 309
50	795	H0 XEE 310	H0 XEF 310	771	H0 XEA 310	H0 XEB 310	795	H0 XEJ 310	H0 XEK 310
63	1325	H0 XEE 311	H0 XEF 311	1285	H0 XEA 311	H0 XEB 311	1325	H0 XEJ 311	H0 XEK 311



BSP Threaded Socket Ends



VXE FV **PVC-U**

VXE FA **ABS**

Easyfit 2-way ball valve with BSP parallel female threaded ends

Z***										
d	DN	PN	L	Z	H	E	B	C	C ₁	gms
1/2"	15	16	15	60	82	54	49	64	20	73
3/4"	20	16	16.3	60.4	91	63	62	78	23	82.4
1"	25	16	19.1	71.8	103	72	71	87	27	89.8
1 1/4"	32	16	21.4	84.2	120	85	82	102	30	103.2
1 1/2"	40	16	21.4	88.2	139	100	92	109	33	121.2
2"	50	16	25.7	109.6	174	118	110	133	39	147.6

Z*** For ABS sizes only.

PVC-U			ABS		
gms	EPDM Code	FPM Code	gms	EPDM Code	FPM Code
175	H0 XEE B02	H0 XEF B02	170	H0 XEA B02	H0 XEB B02
260	H0 XEE B03	H0 XEF B03	252	H0 XEA B03	H0 XEB B03
365	H0 XEE B04	H0 XEF B04	354	H0 XEA B04	H0 XEB B04
565	H0 XEE B05	H0 XEF B05	548	H0 XEA B05	H0 XEB B05
795	H0 XEE B06	H0 XEF B06	771	H0 XEA B06	H0 XEB B06
1325	H0 XEE B07	H0 XEF B07	1285	H0 XEA B07	H0 XEB B07

LCE

Transparent Service Plug with tag holder



d	DN	Product Code
3/8" - 1/2"	10-15	LCE020
3/4"	20	LCE025
1"	25	LCE032
1 1/4"	32	LCE040
1 1/2"	40	LCE050
2"	50	LCE063

LSE

Label design and print kit



d	DN	Product Code
3/8" - 1/2"	10-15	LSE020
3/4"	20	LSE025
1"	25	LSE032
1 1/4"	32	LSE040
1 1/2"	40	LSE050
2"	50	LSE063



Connection to the System

Before proceeding with the installation, please read and familiarise yourself with these instructions.

1. Check that the pipes either side of the valve are axially aligned, in order to avoid mechanical stress on the threaded union joints.
2. Unscrew the union nuts (13 on p57) from the valve body and slide them onto the pipe.
3. Solvent weld or screw the valve end connectors (7 on p57) onto the pipe ends. For correct jointing see the relevant Durapipe material technical catalogues.
4. Position the valve between the two end connectors (Fig. 1) and screw the union nuts clockwise by hand until a resistance is felt; do not use keys or other tools which may damage the nut surface (Fig. 2).

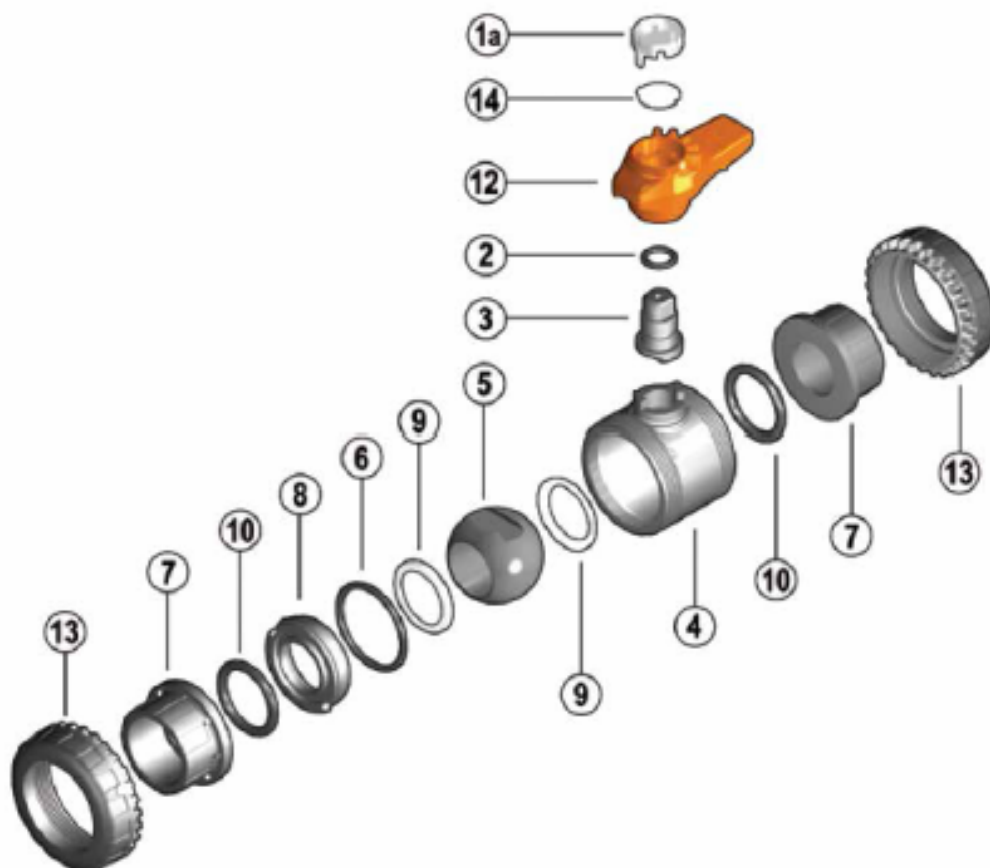
Caution: when testing under high pressure levels, the "ADJUST" mark on the valve must be installed facing upstream.

5. Pull the handle (12 on p57) upwards to remove it from the valve and remove the transparent cover (1a on p57) (Fig. 3)
6. Turn the handle upside-down and insert it on the valve stem in order to match the gear of the handle with the gear of the nut (Fig. 4-5)
7. Turn the handle ANTICLOCKWISE to fully tighten the nut (Fig. 5). On the handle the direction of rotation to tighten (TIGHTEN) and to loosen (UNTIGHTEN) the nuts is shown (Fig. 6). Usually, if the pipeline is correctly aligned, one rotation could be enough to tighten the nut.
8. Repeat step 7 for the other union nut.
9. Push in the transparent 'service plug' (1a on p57) into the handle, aligning the two male connections one large and one small into the matching slots in the handle.
10. Fit the handle (12 on p57) onto the valve stem (3 on p57).

Note: the first time the Easyfit system is used, it is advised to try to loosen the nut just tighten, by hand, in order to understand the efficiency of the mechanism: a low input torque on the handle generates a much higher output torque than simple hand tightening. It is also possible, using the Easytorque kit, supplied by Durapipe (see page 54), to do the nut tightening with the supplied Torque wrench, so as to apply the correct force on the thermoplastic threads according to the installation guideline supplied with the Easytorque kit.

easyfit System





Position	Components	Material
1a	Transparent service plug	PVC
2*	Stem O-ring	EPDM/FPM
3	Stem	Valve Material
4	Body	Valve Material
5	Ball	Valve Material
6*	Radial seal O-ring	EPDM/FPM
7	End connector	Valve Material
8	Ball seat carrier	Valve Material
9*	Ball seat	PTFE
10	Socket seal O-ring	EPDM/FPM
12	Handle	HIPVC
13	Union nut	Valve Material
14	Tag	PVC

*Spare Parts



VXE Easyfit® 2-way Ball Valve (DN65 - DN100)

The VXE Easyfit ball valve, is a fully unionised valve that stands up to the most severe industrial applications.

- FIP has extended the VXE Easyfit ball valve range to cover the larger sizes, the innovative true union installation with union nut rotation control a new advanced method of installation
- Size range from 2½" / d75mm up to 4" / d110mm
- Pressure rating: Maximum working pressure: 16 bar at 20°C
- New patented **Easyfit** system: the innovative quick release multifunctional handle, allows the installer to easily tighten nuts and adjust the ball seat carrier
- Innovative handle composes of a central hub coupled to the valve stem which houses the transparent module for self branding, the double spoke handle that can be released from the hub with a simple operation and by utilising a hooked insert housed in the handle, is transformed into a key for tightening union nuts
- Easyfit custom labelling system
- In the closed position the pipeline can be disconnected downstream from the valve without leakage
- Threaded insert block for the adjustment of the ball seal
- Handle can be locked with the installation of a padlock
- The valve is available in PVC-U and Corzan C-PVC and is suitable for conveying a variety of chemicals, foodstuffs and drinking water and meets the necessary standards and regulations
- For more information, please visit our website www.durapipe.co.uk

Legend

d	Nominal outside diameter
DN	Nominal internal diameter in mm
R	Nominal size or the thread in inches
PN	Nominal pressure in bar (max. working pressure at 20°C - water)
gms	Weight in grams
PVC-U	Polyvinyl chloride unplasticised
C-PVC	Polyvinyl chloride chlorinated
HIPVC	High impact PVC
PE	Polyethylene
PTFE	Polytetrafluoroethylene
PP-GR	polypropylene fibre glass reinforced
EPDM	Ethylene Propylene Diene Monomer (M-class) rubber
FPM	Fluorocarbon rubber
s	Wall thickness (mm)
SDR	Standard dimension ratio = d/s





Dimensions and Standards

Imperial

The Imperial System is manufactured in accordance with the relevant British Standards: BS 5392 fittings.

Metric

The Metric System is manufactured generally in accordance with the relevant International Standards: ISO 15493, KIWA 49 and 549, DIN 8062 and 8063.

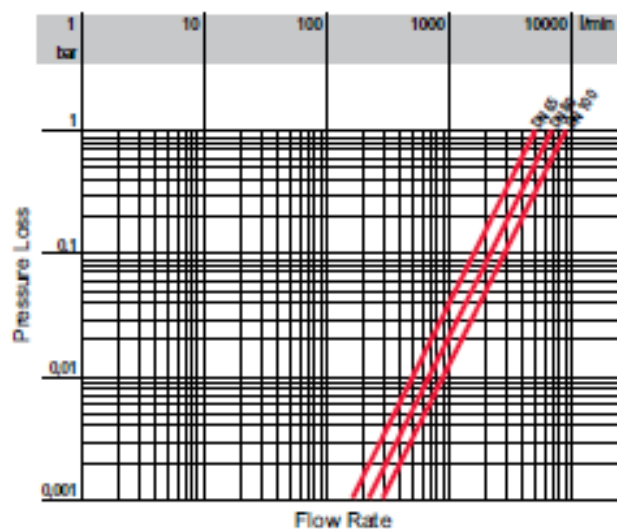
BSP Thread

Threaded fittings conform to the requirements of BS 21/DIN 2999/ISO7. Socket dimensions of metric fittings for solvent welding comply with ISO/DIS 727-1.

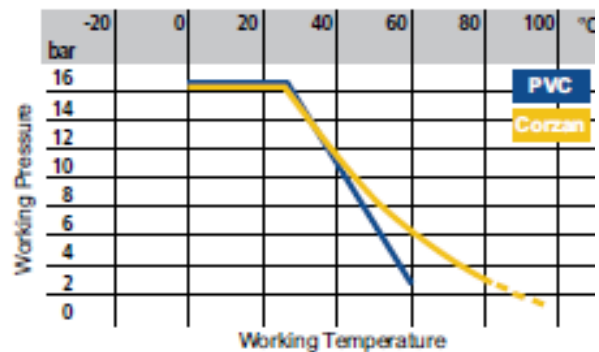
Interchangeability

Components in the imperial and metric ranges are not interchangeable.

Technical Data



Pressure loss chart.



Pressure/temperature rating for water and harmless fluids to which the material is RESISTANT. In other cases a reduction of the PN is required (25 years with safety factor).

DN	65	80	100
Nm (PN16)	20-25	25-30	50-55
Nm (PN10)	15-20	20-25	35-40
Nm (PN6)	15-20	15-20	20-25

Torque.

DN	65	80	100
k_{v100}	5000	7000	9400

Flow coefficient k_{v100}

k_{v100} is the number of litres per minute of water at a temperature of 20°C that will flow through a valve with a one bar pressure differential at a specified rate.

The k_{v100} values shown in the table are calculated with the valve fully open.



BS Series Female Ends



VXELV **PVC-U**

Easyfit 2-way ball valve with BS series female ends for solvent welding

										PVC-U		
d	DN	PN	L	Z	H	E	B	C	C ₁	gms	EPDM Code	FPM Code
2 1/2	65	16	44	123	211	157	142	214	115	2750	H0 XEE 312	H0 XEF 312
3	80	16	51	146	248	174	151	239	126	3432	H0 XEE 109	H0 XEF 109
4	100	16	63	157	283	212	174.5	270	145	5814	H0 XEE 110	H0 XEF 110

Metric Series Female Ends

VXEIV **PVC-U**

VXEIC **Corzan**

Easyfit 2-way ball valve with Metric series female ends for solvent welding

										PVC-U			Corzan		
d	DN	PN	L	Z	H	E	B	C	C ₁	gms	EPDM Code	FPM Code	gms	EPDM Code	FPM Code
75	65	16	44	123	211	157	142	214	115	2750	H0 XEE 312	H0 XEF 312	2998	H0 XEJ 312	H0 XEK 312
90	80	16	51	146	248	174	151	239	126	3432	H0 XEE 313	H0 XEF 313	3741	H0 XEJ 313	H0 XEK 313
110	100	16	63	161	283	212	174.5	270	145	5814	H0 XEE 314	H0 XEF 314	6337	H0 XEJ 314	H0 XEK 314

BS Series Female Ends



VXEIV **PVC-U**

Easyfit 2-way ball valve with BSP parallel female threaded ends

										PVC-U		
d	DN	PN	L	Z	H	E	B	C	C ₁	gms	EPDM Code	FPM Code
2 1/2	65	16	30.2	150.6	211	157	142	214	115	2750	H0 XEE B08	H0 XEF B08
3	80	16	33.3	181.4	248	174	151	239	126	3432	H0 XEE B09	H0 XEF B09
4	100	16	39.3	204.4	283	212	174.5	270	145	5814	H0 XEE B10	H0 XEF B10