



ABS

□	ABS INSTALLATION	INCH	4-6
□	ABS PRESSURE PIPES	INCH	7
□	ABS PRESSURE FITTINGS plain	INCH	8-13
□	ABS PRESSURE FITTINGS plain/threaded	INCH	14-19
□	ABS PRESSURE FITTINGS threaded	INCH	20-23
□	ABS MANUAL VALVES	INCH	24-27
□	ABS ACTUATED VALVES	INCH	28-29
□	ABS BALL VALVE SPARES	INCH	30
□	ABS ACCESSORIES		31-35

ABS JOINTING PROCEDURES

ABS pipework systems are designed to have an interference fit and are not designed to be dry fitted. ABS cement is not gap filling. ABS cement softens the inside of the fitting and the outside of the pipe to form a joint chemically. Strength of joint is reduced if surfaces are not cleaned and properly prepared.

1. Cut the pipe end square.
2. Remove burrs and clean out swarf. A chamfer must be filed approx 3mm x 45° (This will prevent the layer of cement being scraped away as the pipe is pushed into the fitting).
3. Use a felt marker pen or pencil to mark the pipe at the distance which will penetrate the socket to the root/stop.
4. Thoroughly clean the surfaces of both pipe and fittings with MEK cleaner on a clean lint-free cloth. Please note it is not necessary to abrade pipe or fitting unless pipes are discoloured/sun bleached
5. Stir the ABS Cement **SLOWLY** but thoroughly.
6. Use a clean brush approximately half as wide as the pipe to be jointed.
Apply cement to the pipe and fittings using longitudinal strokes.
The pipe should have a slightly thicker coating than the fitting.
The prepared areas should be completely covered with cement.
Note: It is important to apply cement quickly to enable assembly without excessive force being required.
7. Immediately after application of cement push pipe fully home into the fitting without rotating.
Hold the pipe and fitting for up to a minute, depending on size, to ensure fitting does not slide off the pipe.
Note: When working under cold conditions ensure the joints are free from frost and moisture and allow extra curing time.
8. Wipe off excess cement from both sides of the joint using a clean lint-free cloth.
9. Replace lids on tins.
10. Clean brush in MEK cleaner.

PRECAUTIONS

The jointing area must be well ventilated

Do not allow a naked flame or smoking in the jointing area

Ensure cement is used prior to its expiry date (shown on bottom of tin)

Wear rubber or latex gloves when applying MEK cleaner and ABS cement

Never dilute ABS solvent cement

Always replace lids on tins when not in use

Always use clean brushes

Always use clean lint-free cloth or absorbent paper

Use a shelter to keep jointing surfaces dry in wet weather

CEMENT SETTING TIMES

PIPE DIAMETER	UP TO 2"		2 1/2" TO 6"		8" AND ABOVE	
	Up to 5 bar	Up to 10 bar	Up to 5 bar	Up to 10 bar	Up to 5 bar	Up to 10 bar
Temperature >15°C	2 h	4 h	3 h	6 h	4 h	8 h
5°C to 15°C	4 h	8 h	6 h	12 h	8 h	16 h
0° to +5°C	6 h	12 h	9 h	18 h	12 h	24 h

These times are applicable to Griffon cement.

CEMENT USAGE RECOMMENDATIONS

The following is an estimation of the number of joints likely to be achieved per litre of solvent cement.

NOMINAL BORE	NUMBER OF JOINTS	TYPE AND SIZE OF BRUSH	NUMBER OF PEOPLE
3/8" - 1/2"	400	4mm Round	1
3/4" - 1"	400	8mm Round	1
1 1/4" - 2"	200	1" Flat	1
2 1/2" - 3"	60	2" Flat	1
4"	35	2" Flat	2
5" - 6"	20	3" Flat	2
8"	10	3" Flat	3

INSTALLING THREADED FITTINGS

1. Ensure all threads are clean.
2. Apply PTFE tape to the male thread for 1½ turns in a clockwise direction.
3. Screw the female threaded fitting by hand onto the male thread.
4. It should be possible to screw the fitting on by hand for ⅓ of the thread length.
5. After tightening by hand add an extra ½ turn with a suitable tool ie strap wrench

PRECAUTIONS

Use PTFE tape only. Do not use thread seal paste or any other jointing compound. Do not force tightening of the joint under any circumstances. For connecting plastic pipework systems to metal pipework systems composite unions and/or flanges must be used.



NOTE 2



NOTE 3



NOTE 4



NOTE 4



NOTE 6



NOTE 6



NOTE 7



NOTE 8



NOTE 8

MANUFACTURING STANDARDS

ABS products are generally manufactured in accordance with the following standards:

- Primeline Pipe - BS5391 Part 1
- Fittings - BS5392 Part 1
- Threaded Fittings - BS21, DIN2999, ISO7

Unless otherwise stated ABS Pressure Fittings have the following pressure ratings:

Solvent Weld - 1/2" to 8" = Class E/15 bar

Threaded = Class D/12 bar

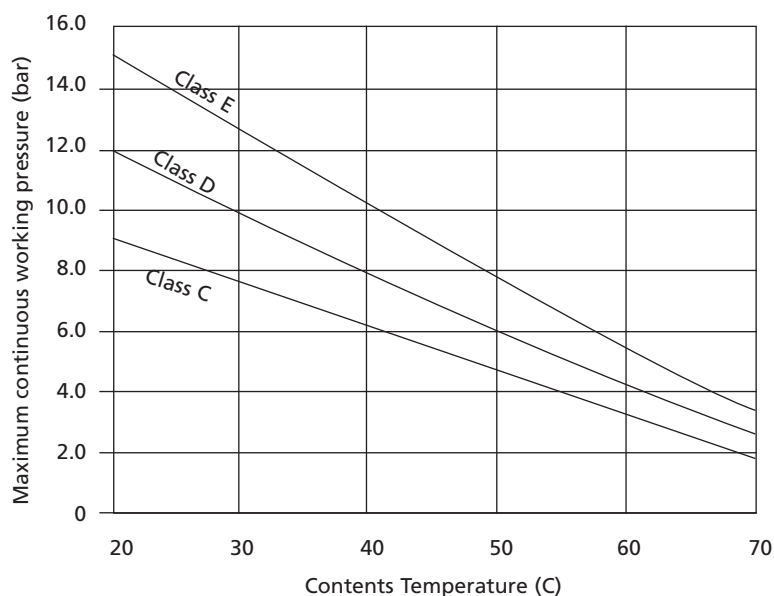
* All quoted at 20°C

ABS SYSTEM PRESSURE/TEMPERATURE RELATIONSHIP

Pressure ratings for plastic pipework systems are always quoted at 20°C, it is a fundamental principle of such systems that if the temperature is increased then the pressure rating must be reduced.

ABS systems should never be used for temperatures in excess of 70°C.

The following chart gives a rough guide as to the pressure/temperature relationship of ABS pipework systems.



In above ground installations it is essential to provide support to ensure that the weight of the pipe and its contents are adequately supported. The following recommended maximum spacings are for ABS pipes operating under the following conditions:

1. Fluid density of not more than 1g/cm³
2. PN15 pipe
3. Horizontal pipe runs

ABS PIPEWORK SUPPORT CENTRES

NOMINAL BORE	20°C	50°C	70°C
	SPACING GIVEN IN METRES		
3/8"	0.8	0.5	0.4
1/2"	0.9	0.6	0.5
3/4"	1.0	0.7	0.6
1"	1.1	0.8	0.7
1 1/4"	1.2	0.9	0.7
1 1/2"	1.3	1.0	0.7
2"	1.4	1.1	0.8
2 1/2"	1.5	1.2	0.8
3"	1.6	1.2	0.9
4"	1.8	1.3	1.0
5"	2.0	1.5	1.1
6"	2.1	1.6	1.2
8"	2.3	1.8	1.5

FOR VERTICAL PIPE RUNS SPACING SHOULD BE INCREASED BY 50%.

DIMENSIONS IN MM

NOMINAL BORE	MEAN O.D.
1/2"	21.4
3/4"	26.7
1"	33.6
1 1/4"	42.2
1 1/2"	48.3
2"	60.3
2 1/2"	75.2
3"	88.9
4"	114.3
5"	140.2
6"	168.3
8"	219.1

PRIMELINE ABS PRESSURE PIPE TO BS5391 PART 1

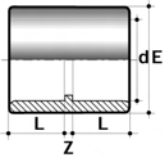


SIZE	PART NO	£/M	CLASS	PIPE OD mm	WALL mm	PIPE ID mm	Wt (Kg/m)
3/8"	011.P.01EPE	3.56	E	17.1	1.7	13.7	0.09
1/2"	011.P.02EPE	4.13	E	21.4	2.0	17.4	0.13
	011.P.02TPE	7.07	T	21.4	3.6	14.2	0.22
3/4"	011.P.03EPE	6.37	E	26.7	2.5	21.7	0.20
	011.P.03TPE	8.04	T	26.7	3.6	19.5	0.28
1"	011.P.04CPE	5.41	C	33.6	2.0	29.6	0.21
	011.P.04EPE	8.37	E	33.6	3.1	27.4	0.31
	011.P.04TPE	11.43	T	33.6	4.3	25.0	0.43
1 1/4"	011.P.05CPE	9.08	C	42.2	2.5	37.2	0.32
	011.P.05EPE	12.50	E	42.2	3.9	34.4	0.49
	011.P.05TPE	20.04	T	42.2	5.3	31.6	0.65
1 1/2"	011.P.06CPE	11.56	C	48.3	2.8	42.7	0.42
	011.P.06EPE	16.50	E	48.3	4.5	39.3	0.64
	011.P.06TPE	20.28	T	48.3	6.0	36.3	0.85
2"	011.P.07CPE	15.54	C	60.3	3.6	53.1	0.67
	011.P.07EPE	20.64	E	60.3	5.6	49.1	1.00
	011.P.07TPE	27.58	T	60.3	7.2	45.9	1.28
2 1/2"	011.P.08CPE	26.88	C	75.2	5.0	65.2	1.14
3"	011.P.09CPE	32.07	C	88.9	5.2	78.5	1.40
	011.P.09EPE	41.52	E	88.9	8.3	72.3	2.16
4"	011.P.10CPE	52.82	C	114.3	6.6	101.1	2.32
	011.P.10EPE	66.69	E	114.3	10.6	93.1	3.59
5"	011.P.11CPE	POA	C	140.2	9.3	121.6	3.97
6"	011.P.12CPE	104.46	C	168.3	9.9	148.5	5.12
	011.P.12DPE	POA	D	168.3	12.8	142.7	6.50
8"	011.P.13CPE	212.11	C	219.1	12.7	193.7	8.57

PIPE IS SUPPLIED PLAIN ENDED
 STANDARD PIPE LENGTH SUPPLIED IS 6 METRES OR 5.8 METRES
 ALL WALL THICKNESSES AND PIPE ID'S ARE APPROXIMATE VALUES.

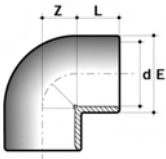
ABS PRESSURE FITTINGS PLAIN

SOCKET



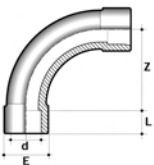
d	PART NO	PRICE	L	Z	E	Wt (g)							
1/2"	011.011.02	1.90	16	3	28	10							
3/4"	011.011.03	2.12	19	3	34	16							
1"	011.011.04	2.44	22	3	42	25							
1 1/4"	011.011.05	4.23	26	3	51	42							
1 1/2"	011.011.06	4.97	31	3	61	67							
2"	011.011.07	7.08	38	3	75	126							
2 1/2"	011.011.08	15.38	44	4	88	167							
3"	011.011.09	28.27	51	5	106	279							
4"	011.011.10	40.25	61	6	129	466							
5"	011.011.11	78.29	76	8	161	827							
6"	011.011.12	100.41	86	11	191	1247							
8"	011.011.13	210.78	119	11	258	3160							

90° ELBOW



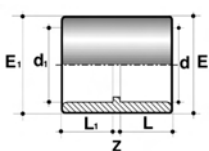
d	PART NO	PRICE	L	Z	E	Wt (g)							
1/2"	011.031.02	2.53	16	11	26.5	11							
3/4"	011.031.03	2.97	19	14	32.5	18							
1"	011.031.04	4.13	22	17	41	32							
1 1/4"	011.031.05	7.08	26	23	50	54							
1 1/2"	011.031.06	9.22	31	28	60	112							
2"	011.031.07	13.87	38	34	75	214							
2 1/2"	011.031.08	26.70	44	40	89	285							
3"	011.031.09	40.02	51	48	106	492							
4"	011.031.10	59.72	61	58	129	812							
5"	011.031.11	137.69	76	72	168	1500							
6"	011.031.12	239.38	86	81	188	3000							
8"	011.031.13	385.56	119	115	258	6465							

90° SHORT RADIUS BEND



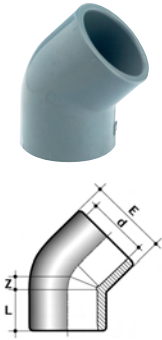
d	PART NO	PRICE	L	Z	E	Wt (g)							
1/2"	011.051.02	9.22	16	40	28	30							
3/4"	011.051.03	10.69	19	50	35	45							
1"	011.051.04	15.04	22	64	42	90							
1 1/4"	011.051.05	21.50	26	80	51	138							
1 1/2"	011.051.06	26.90	31	100	63	245							
2"	011.051.07	35.69	38	126	77	410							
2 1/2"	011.051.08	78.67	44	150	94	780							
3"	011.051.09	91.30	51	180	113	1220							
4"	011.051.10	150.40	61	220	132	2030							

INCH/METRIC ADAPTOR SOCKET



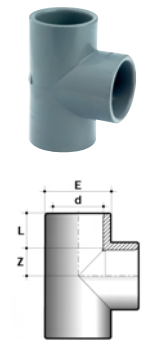
d x d ₁	PART NO	PRICE	L ₁	L ₂	Z	E	E ₁	Wt (g)					
1/2" x 20	013.011.02020	2.59	16	16	3	28	28	12					
3/4" x 25	013.011.03025	2.67	19	19	3	33	33	19					
1" x 32	013.011.04032	3.23	22	22	3	41	41	28					
1 1/4" x 40	013.011.05040	4.92	26	26	3	50	50	46					
1 1/2" x 50	013.011.06050	7.16	31	31	3	60.5	60.5	63					
2" x 63	013.011.07063	16.23	38	38	3	75	75	103					
3" x 90	013.011.09090	29.66	51	51	5	106	106	260					
4" x 110	013.011.10110	54.71	61	61	6	129	129	451					
6" x 160	013.011.12160	123.96	86	90	8	181	189	1062					

45° ELBOW



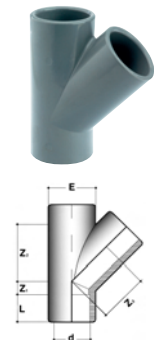
d	PART NO	PRICE	L	Z	E	Wt (g)					
1/2"	011.041.02	4.78	16	5.5	28	11					
3/4"	011.041.03	4.88	19	6	34	19					
1"	011.041.04	6.12	22	8	42	31					
1 1/4"	011.041.05	8.90	26	10	51	44					
1 1/2"	011.041.06	11.13	31	12	61	94					
2"	011.041.07	15.38	38	15	75	161					
2 1/2"	011.041.08	24.26	44	18	88	233					
3"	011.041.09	36.12	51	21	106	376					
4"	011.041.10	74.98	61	25	130	690					
5"	011.041.11	127.11	76	32	164	1230					
6"	011.041.12	155.69	86	36	197	1616					
8"	011.041.13	349.53	119	49	258	4600					

EQUAL TEE



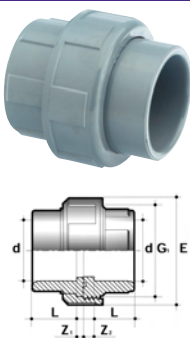
d	PART NO	PRICE	L	Z	E	Wt (g)					
1/2"	011.061.02	2.86	16	11	27.5	16					
3/4"	011.061.03	3.92	19	14	33.5	26					
1"	011.061.04	5.52	22	17	42	47					
1 1/4"	011.061.05	7.83	26	21	51	76					
1 1/2"	011.061.06	11.56	31	26	61	153					
2"	011.061.07	17.58	38	33	75	274					
2 1/2"	011.061.08	30.50	44	39	89	373					
3"	011.061.09	51.39	51	47	106	630					
4"	011.061.10	75.43	61	57	129	1083					
5"	011.061.11	200.19	76	71	162.5	1917					
6"	011.061.12	263.75	86	81	188	3720					
8"	011.061.13	431.09	119	114	258	8350					

Y PIECE/45° TEE



d	PART NO	PRICE	L	Z ₁	Z ₂	E	Wt (g)				
1/2"	011.071.02	13.49	16	7	29	27.5	28				
3/4"	011.071.03	14.26	19	7	36	33.5	38				
1"	011.071.04	16.16	22	8	44	42	71				
1 1/4"	011.071.05	19.54	26	10	54	50.5	115				
1 1/2"	011.071.06	24.46	31	12	65	61	230				
2"	011.071.07	37.37	38	14	80	74.5	397				

UNION

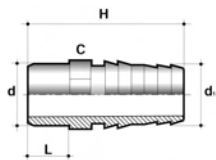


d	PART NO	PRICE	L	Z ₁	Z ₂	G ₁	E	Wt (g)			
1/2"	011.021.02	9.85	16	3	10	1"	42	42			
3/4"	011.021.03	10.69	19	3	10	1 1/4"	52	70			
1"	011.021.04	14.42	22	3	10	1 1/2"	59	97			
1 1/4"	011.021.05	17.58	26	3	12	2"	72	155			
1 1/2"	011.021.06	24.26	31	3	14	2 1/4"	79	216			
2"	011.021.07	31.69	38	3	18	2 3/4"	96	340			
2 1/2"*	011.021.08	76.67	44	3	18	3 1/2"	119	580			
3"*	011.021.09	117.35	51	5	18	4"	134	760			
4"*	011.021.10	158.04	61	5	18	5"	163	1280			

* PN10 RATED
SPARE PARTS FOR UNIONS AVAILABLE SEE PAGE 33

ABS PRESSURE FITTINGS PLAIN

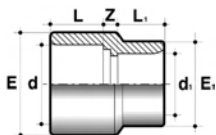
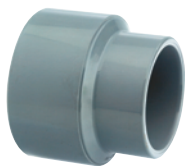
HOSE ADAPTOR – MALE SPIGOT x MM HOSE TAIL



d x d ₁	PART NO	PRICE	d	d ₁	L	H	C	Wt (g)
1/2" x 20	011.261.02020	4.83	1/2"	20	16	70	24	17
3/4" x 25	011.261.03025	5.63	3/4"	25	19	79	27	22
1" x 32	011.261.04032	6.05	1"	32	22	83	36	37
1 1/4" x 40	011.261.05040	7.53	1 1/4"	40	26	96	46	55
1 1/2" x 50	011.261.06050	11.12	1 1/2"	50	31	108	55	103
2" x 60	011.261.07060	18.06	2"	60	38	130	65	156

RANGE OF PP HOSE FITTINGS AVAILABLE SEE PAGE 308

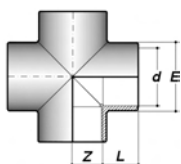
REDUCING SOCKET



d x d ₁	PART NO	PRICE	L	L ₁	Z	E	E ₁	Wt (g)
3/4" x 1/2"	011.601.0302	3.03	19	16	6	34	28	25
1" x 3/4"	011.601.0403	4.06	22	19	6	42	33	35
1 1/4" x 1"	011.601.0504	5.63	26	22	6	51	41	58
1 1/2" x 1 1/4"	011.601.0605	6.19	31	26	6	61	50	80
2" x 1 1/2"	011.601.0706	9.64	38	31	6	75	60.5	120
2 1/2" x 2"	011.601.0807	26.94	44	38	6	89	75	210
3" x 2 1/2"	011.601.0908	30.32	51	44	6	106	88	300
4" x 3"	011.601.1009	44.44	61	51	6	129	106	510
6" x 4"*	011.601.1210	242.51	92	65	51	204	141	1975

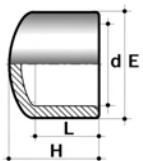
*MAY BE SUBJECT TO MINIMUM ORDER QUANTITIES. PLEASE CONTACT OUR SALES DEPT FOR DETAILS

CROSS



d	PART NO	PRICE	L	Z	E	Wt (g)
1/2"	011.191.02	10.56	16	11	27.5	20
3/4"	011.191.03	11.46	19	14	33.5	32
1"	011.191.04	13.81	22	17	42	56
1 1/4"	011.191.05	19.66	26	21	51	88
1 1/2"	011.191.06	24.81	31	26	61	180
2"	011.191.07	33.91	38	33	75	318

CAP



d	PART NO	PRICE	L	H	E	Wt (g)
1/2"	011.221.02	1.80	16	27	28	8
3/4"	011.221.03	2.12	19	31	33	12
1"	011.221.04	2.44	22	36	41	20
1 1/4"	011.221.05	3.92	26	43	50	30
1 1/2"	011.221.06	6.04	31	49	60.5	55
2"	011.221.07	7.83	38	57	75	96
2 1/2"	011.221.08	19.71	44	67	89	133
3"	011.221.09	23.20	51	80	106	228
4"	011.221.10	35.51	61	95	129	390
5"	011.221.11	63.05	76	114	161	713
6"	011.221.12	94.17	86	126	181	1021
8"	011.221.13	323.77	119	145	258	2615

• NON COMER PRODUCT

REDUCING BUSH

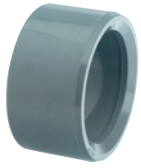


FIG A



FIG B

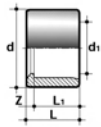


FIG A

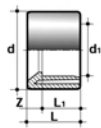
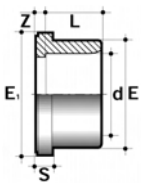


FIG B

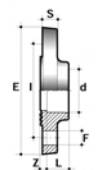
d x d ₁	PART NO	PRICE	L	L ₁	Z	FIG	Wt (g)				
3/4" x 1/2"	011.091.0302	1.90	19	16	3	A	4				
1" x 1/2"	011.091.0402	2.44	22	16	6	A	12				
1" x 3/4"	011.091.0403	2.44	22	19	3	A	8				
1 1/4" x 1/2"	011.091.0502	3.37	26	16	10	B	23				
1 1/4" x 3/4"	011.091.0503	3.37	26	19	7	A	22				
1 1/4" x 1"	011.091.0504	3.18	26	22	4	A	15				
1 1/2" x 3/4"	011.091.0603	4.13	31	19	12	B	29				
1 1/2" x 1"	011.091.0604	4.13	31	22	9	B	32				
1 1/2" x 1 1/4"	011.091.0605	4.13	31	26	5	A	17				
2" x 1"	011.091.0704	5.52	38	22	16	B	52				
2" x 1 1/4"	011.091.0705	5.52	38	26	12	B	53				
2" x 1 1/2"	011.091.0706	5.52	38	31	7	A	41				
2 1/2" x 1 1/2"	011.091.0806	10.67	44	31	13	B	89				
2 1/2" x 2"	011.091.0807	9.85	44	38	6	A	72				
3" x 1 1/2"	011.091.0906	16.95	51	31	20	B	159				
3" x 2"	011.091.0907	16.95	51	38	13	B	137				
3" x 2 1/2"	011.091.0908	16.95	51	44	7	A	116				
4" x 2"	011.091.1007	21.18	61	38	23	B	337				
4" x 2 1/2"	011.091.1008	22.57	61	44	17	B	266				
4" x 3"	011.091.1009	21.18	61	51	10	A	246				
5" x 3"	011.091.1109	64.98	76	51	25	B	455				
5" x 4"	011.091.1110	61.21	76	61	115	B	410				
6" x 4"	011.091.1210	65.24	86	61	25	B	683				
8" x 6"	011.091.1312	140.88	119	86	33	B	1540				

STUB FLANGE



d	PART NO	PRICE	L	Z	S	E	E ₁	Wt (g)			
1/2"	011.111.02	2.21	16	3	6	27	34	8			
3/4"	011.111.03	2.33	19	3	7	33	41	11			
1"	011.111.04	2.86	22	3	7	41	50	17			
1 1/4"	011.111.05	5.08	26	3	8	50	61	36			
1 1/2"	011.111.06	7.53	31	3	8	61	73	54			
2"	011.111.07	11.56	38	3	9	76	90	93			
2 1/2"	011.111.08	18.34	44	3	10	90	106	120			
3"	011.111.09	22.57	51	5	11	108	125	204			
4"	011.111.10	29.24	61	5	12	131	150	271			
5"	011.111.11	67.14	76	5	14	165	188	564			
6"	011.111.12	75.95	88	7	14	193	217	821			
8"	011.111.13	158.89	119	7	19	248	274	1573			

FULL FACE FLANGE – BS4504 NP10/16



d	PART NO	PRICE	L	Z	I	E	HOLE S	Bolt Dia	Wt (g)		
1/2"	011.141.02Z	10.49	16	4.5	65	95	4	M12	70		
3/4"	011.141.03Z	10.69	19	4.5	75	105	4	M12	105		
1"	011.141.04Z	11.24	22	4.5	85	115	4	M12	145		
1 1/4"	011.141.05Z	13.46	26	4.5	100	142	4	M16	176		
1 1/2"	011.141.06Z	15.66	31	4.5	110	152	4	M16	224		
2"	011.141.07Z	20.66	38	4.5	125	165	4	M16	304		
2 1/2"	011.141.08Z	34.62	44	6	145	185	4	M16	404		
3"	011.141.09Z	38.77	51	7	160	200	8	M16	548		
4"	011.141.10Z	51.68	61	8	180	220	8	M16	752		
6"*	011.141.12Z	198.32	92	8	240	285	8	M20	1218		

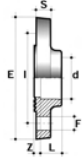
*MAY BE SUBJECT TO MINIMUM ORDER QUANTITIES. PLEASE CONTACT SALES DEPT FOR DETAILS.

• NON COMER PRODUCT

ABS PRESSURE FITTINGS PLAIN

ABS

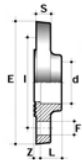
FULL FACE FLANGE – BS10 TABLES D & E



d	PART NO	PRICE	L	Z	I	E	HOLES	Bolt Dia	Wt (g)
1/2"	011.141.02W	10.49	16	4.5	67	95	4	M12	70
3/4"	011.141.03W	10.69	19	4.5	73	105	4	M12	105
1"	011.141.04W	11.24	22	4.5	83	115	4	M12	145
1 1/4"	011.141.05W	13.46	26	4.5	88	142	4	M12	176
1 1/2"	011.141.06W	15.66	31	4.5	98	152	4	M12	224
2"	011.141.07W	20.66	38	4.5	115	165	4	M16	304
2 1/2"	011.141.08W	34.62	44	6	127	185	4	M16	404
3"	011.141.09W	38.77	51	7	146	200	4	M16	548
4" E	011.141.10W	51.68	61	8	178	220	8	M16	752
6"*	011.141.12W	198.32	92	8	235	285	8	M20	1218

*MAY BE SUBJECT TO MINIMUM ORDER QUANTITIES. PLEASE CONTACT SALES DEPT FOR DETAILS.

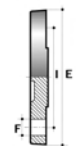
FULL FACE FLANGE – UNDRILLED



d	PART NO	PRICE	L	Z	I	E	HOLES	Bolt Dia	Wt (g)
6"*	011.141.12U	198.32	92	8	n/a	285	n/a	n/a	1270

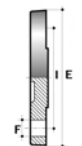
*MAY BE SUBJECT TO MINIMUM ORDER QUANTITIES. PLEASE CONTACT SALES DEPT FOR DETAILS.

BLANK FLANGE – BS4504 NP10/16



SIZE	PART NO	PRICE	E	I	HOLES	Bolt Dia	Wt (g)
1/2"•	011.161.02Z	27.06	95	65	4	M12	75
3/4"•	011.161.03Z	30.69	105	75	4	M12	100
1"•	011.161.04Z	33.78	115	85	4	M12	137
1 1/4"•	011.161.05Z	34.58	142	100	4	M16	225
1 1/2"•	011.161.06Z	41.89	152	110	4	M16	280
2"•	011.161.07Z	47.03	165	125	4	M16	355
2 1/2"•	011.161.08Z	61.07	185	145	4	M16	488
3"•	011.161.09Z	82.62	200	160	8	M16	640
4"•	011.161.10Z	104.86	220	180	8	M16	825
6"•	011.161.12Z	183.88	283	240	8	M20	1589

BLANK FLANGE – BS10 TABLES D & E



SIZE	PART NO	PRICE	E	I	HOLES	Bolt Dia	Wt (g)
1/2"•	011.161.02W	27.06	95	67	4	M12	75
3/4"•	011.161.03W	30.69	105	73	4	M12	100
1"•	011.161.04W	33.78	115	83	4	M12	137
1 1/4"•	011.161.05W	34.58	142	88	4	M12	225
1 1/2"•	011.161.06W	41.89	152	98	4	M12	280
2"•	011.161.07W	47.03	165	115	4	M16	355
3"•	011.161.09W	82.62	200	146	4	M16	640
4" D•	011.161.10V	104.86	220	178	4	M16	825
4" E•	011.161.10W	104.86	220	178	8	M16	825
6"•	011.161.12W	183.88	283	235	8	M20	1589

• NON COMER PRODUCT

BLANK FLANGE - ASA 150

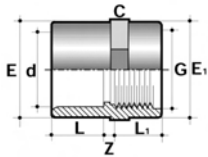


SIZE	PART NO	PRICE	E	I	HOLES	Bolt Dia	Wt (g)				
1/2"•	011.161.02X	27.06	95	60	4	M12	75				
3/4"•	011.161.03X	30.69	105	70	4	M12	100				
1"•	011.161.04X	33.78	115	79	4	M12	137				
1 1/4"•	011.161.05X	34.58	142	89	4	M12	225				
1 1/2"•	011.161.06X	41.89	152	98	4	M12	280				
2"•	011.161.07X	47.03	165	121	4	M16	355				
3"•	011.161.09X	82.62	200	152	4	M16	640				
4"•	011.161.10X	104.86	220	190	8	M16	825				
6"•	011.161.12X	183.88	283	241	8	M20	1589				

• NON COMER PRODUCT

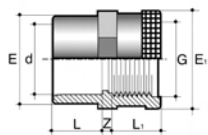
ABS PRESSURE FITTINGS PLAIN/THREADED (BSP)

SOCKET



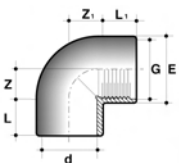
d	PART NO	PRICE	L	L ₁	Z	E	E ₁	C	Wt (g)
1/2"	011.012.02	5.19	16	15	4	28	28	30	11
3/4"	011.012.03	5.71	19	16.3	4	34	34	34	16
1"	011.012.04	7.08	22	19.1	5	42	42	42	24
1 1/4"	011.012.05	11.13	26	21.4	5	50	50	55	47
1 1/2"	011.012.06	13.01	31	21.4	5	61	61	65	75
2"	011.012.07	17.17	38	25.7	5	75	75	75	118
2 1/2"	011.012.08	44.58	44	30.2	5	89	89	90	161
3"	011.012.09	46.93	51	33.3	8	106	106	110	261
4"	011.012.10	55.09	61	39.3	8	129	129	129	382

SOCKET – S/S REINFORCED



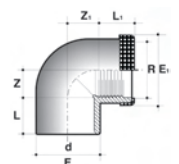
d	PART NO	PRICE	L	L ₁	Z	E	E ₁	Wt (g)
1/2"	011.342.02	7.75	16	15	4	28	29	16
3/4"	011.342.03	8.42	19	16.3	6	34	35	24
1"	011.342.04	9.94	22	19.1	6	42	43	37
1 1/4"	011.342.05	14.50	26	21.4	8	50.5	51.5	60
1 1/2"	011.342.06	16.76	31	21.4	13	61	62	97
2"	011.342.07	21.27	38	25.7	15	75	76	160

90° ELBOW



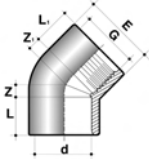
d	PART NO	PRICE	L	L ₁	Z	Z ₁	E	Wt (g)
1/2"	011.032.02	6.46	16	15	11	12	26.5	11
3/4"	011.032.03	6.89	19	16.3	14	16	32.5	20
1"	011.032.04	8.90	22	19.1	17	19.7	41	36
1 1/4"	011.032.05	18.23	26	21.4	23	24.9	50	54
1 1/2"	011.032.06	20.35	31	21.4	28	30.6	60	122
2"	011.032.07	28.81	38	25.7	34	37.6	75	233
2 1/2"	011.032.08	48.27	44	30.2	40	46.3	89	308
3"	011.032.09	53.28	51	33.3	48	53.8	106	538
4"	011.032.10	107.99	61	39.3	58	65.7	129	810

90° ELBOW – S/S REINFORCED



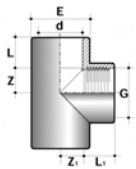
d	PART NO	PRICE	L	L ₁	Z	Z ₁	E	E ₁	Wt (g)
1/2"	011.352.02	9.08	16	15	11	12	26.5	27.5	19
3/4"	011.352.03	9.56	19	16.3	14	16.7	32.5	33.5	32
1"	011.352.04	11.71	22	19.1	17	19.9	41	42	54
1 1/4"	011.352.05	21.54	26	21.4	21	25.6	50	51	77
1 1/2"	011.352.06	24.07	31	21.4	26	35.6	60	61	140
2"	011.352.07	32.86	38	25.7	33	45.3	75	76	250

45° ELBOW



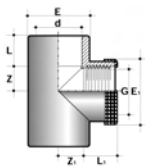
d	PART NO	PRICE	L	L ₁	Z	Z ₁	E	Wt (g)			
1/2"	011.042.02	10.05	16	15	5.5	6.5	28	11			
3/4"	011.042.03	10.69	19	16.3	6	8.7	34	19			
1"	011.042.04	13.39	22	19.1	8	10.9	42	31			
1 1/4"	011.042.05	18.44	26	21.4	10	14.6	51	54			
1 1/2"	011.042.06	23.40	31	21.4	12	21.6	61	94			
2"	011.042.07	34.84	38	25.7	15	27.3	75	181			
2 1/2"	011.042.08	73.33	44	30.2	18	31.8	89	275			
3"	011.042.09	94.42	51	33.3	21	38.7	106	410			
4"	011.042.10	168.37	61	39.3	25	46.7	129	770			

EQUAL TEE



d	PART NO	PRICE	L	L ₁	Z	Z ₁	E	Wt (g)			
1/2"	011.062.02	6.89	16	15	11	12	27.5	19			
3/4"	011.062.03	7.64	19	16.3	14	16	33.5	29			
1"	011.062.04	9.22	22	19.1	17	19.7	42	52			
1 1/4"	011.062.05	19.29	26	21.4	23	19.9	51	80			
1 1/2"	011.062.06	21.28	31	21.4	28	24	61	160			
2"	011.062.07	29.88	38	25.7	34	30	75	286			
2 1/2"	011.062.08	46.59	44	30.2	40	38	89	380			
3"	011.062.09	55.93	51	33.3	48	44	106	663			
4"	011.062.10	125.37	61	39.3	58	57	129	1094			

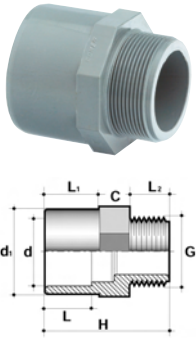
EQUAL TEE – S/S REINFORCED



d	PART NO	PRICE	L	L ₁	Z	Z ₁	E	E ₁	Wt (g)		
1/2"	011.362.02	9.46	16	15	11	12	27.5	28.5	28		
3/4"	011.362.03	10.30	19	16.3	14	16.7	33.5	34.5	41		
1"	011.362.04	12.00	22	19.1	17	19.9	42	43	65		
1 1/4"	011.362.05	22.65	26	21.4	21	25.6	51	52	105		
1 1/2"	011.362.06	24.99	31	21.4	26	35.6	61	62	190		
2"	011.362.07	33.99	38	25.7	33	45.3	75	76	300		

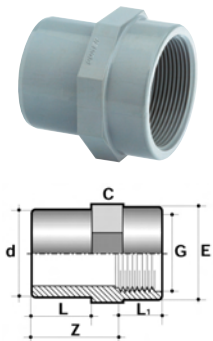
ABS PRESSURE FITTINGS PLAIN/THREADED (BSP)

ADAPTOR – FEMALE PLAIN/MALE PLAIN/MALE THREADED



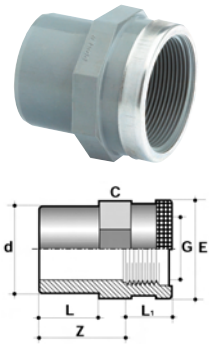
d x d ₁ x G	PART NO	PRICE	d ₁	L	L ₁	L ₂	H	C	Wt (g)
1/2" x 3/4" x 1/2"	011.202.02	2.97	3/4"	16	19	15	46	27	11
1/2" x 3/4" x 3/4"	011.202.0203	2.97	3/4"	16	19	16.3	47	30	12
3/4" x 1" x 3/4"	011.202.03	3.92	1"	19	22	16.3	50	36	20
3/4" x 1" x 1"	011.202.0304	3.92	1"	19	22	19.1	53	36	22
1" x 1 1/4" x 1"	011.202.04	5.40	1 1/4"	22	26	19.1	57	42	32
1" x 1 1/4" x 1 1/4"	011.202.0405	5.40	1 1/4"	22	26	21.4	60	46	39
1 1/4" x 1 1/2" x 1 1/4"	011.202.05	7.53	1 1/2"	26	31	21.4	66.5	55	46
1 1/4" x 1 1/2" x 1 1/2"	011.202.0506	7.53	1 1/2"	26	31	21.4	66.5	55	48
1 1/2" x 2" x 1 1/2"	011.202.06	9.75	2"	31	38	21.4	74	65	83
1 1/2" x 2" x 2"	011.202.0607	9.75	2"	31	38	25.7	78	65	93
2" x 2 1/2" x 2"	011.202.07	13.98	2 1/2"	38	44	25.7	84	75	114
2" x 2 1/2" x 2 1/2"	011.202.0708	13.98	2 1/2"	38	44	30.2	91	80	135
2 1/2" x 3" x 2 1/2"	011.202.08	33.56	3"	44	51	30.2	99	95	195
2 1/2" x 3" x 3"	011.202.0809	33.56	3"	44	51	33.3	102	95	206
3" x 4" x 3"	011.202.09	40.25	4"	53	61	33.3	113	119	434
3" x 4" x 4"	011.202.0910	40.25	4"	51	61	39.3	118	115	438
4" x 5" x 4"	011.202.10	54.02	5"	61	69	39.3	120	130	320
4" x 5" x 5"	011.202.1011	59.38	5"	61	64	43.6	124	140	420

ADAPTOR – MALE PLAIN/FEMALE THREADED



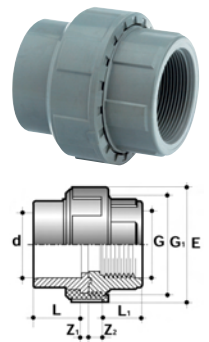
d x G	PART NO	PRICE	L	L ₁	E	Z	C	Wt (g)
1/2"	011.212.02	3.40	16	15	28	24	30	19
1/2" x 3/4"	011.212.0203	5.27	16	16.3	34	24	36	22
3/4" x 1/2"	011.212.0302	5.27	19	15	28	27	30	19
3/4"	011.212.03	4.33	19	16.3	34	27	36	22
3/4" x 1"	011.212.0304	6.04	19	19.1	42	27	46	32
1" x 3/4"	011.212.0403	6.04	22	16.3	34	30	36	29
1"	011.212.04	6.04	22	19.1	42	30	46	36
1 1/4" x 1"	011.212.0504	7.64	26	19.1	42	36	46	45
1 1/4"	011.212.05	7.64	26	21.4	51	36	55	52
1 1/2" x 1 1/4"	011.212.0605	10.28	31	21.4	51	41	55	57
1 1/2"	011.212.06	10.28	31	21.4	58	41	60	57
1 1/2" x 2"	011.212.0607	13.29	31	25.7	75	41	75	95
2" x 1 1/2"	011.212.0706	14.42	38	21.4	60	49	65	100
2"	011.212.07	14.42	38	25.7	75	48	75	100
2 1/2" x 2"	011.212.0807	39.40	44	25.7	75	53	75	120
2 1/2"	011.212.08	40.77	44	30.2	89	58	90	190
2 1/2" x 3"	011.212.0809	41.27	44	33.3	103	58	105	240
3" x 2 1/2"	011.212.0908	50.33	51	30.2	89	65	95	245
3"	011.212.09	50.84	51	33.3	103	66	105	255
3" x 4"	011.212.0910	53.72	51	39.3	130	65	130	360
4" x 3"	011.212.1009	78.21	61	33.3	103	76	130	390
4"	011.212.10	80.48	61	39.3	130	76	130	410

ADAPTOR – S/S REINFORCED - MALE PLAIN/FEMALE THREADED



d x G	PART NO	PRICE	L	L ₁	E	Z	C	Wt (g)			
1/2"	011.372.02	6.00	16	15	29	24	30	19			
3/4" x 1/2"	011.372.0302	6.84	19	15	29	27	30	19			
3/4"	011.372.03	7.03	19	16.3	35	27	36	24			
1" x 3/4"	011.372.0403	7.23	22	16.3	35	30	36	25			
1"	011.372.04	8.81	22	19.1	43	30	46	38			
1 1/4" x 1"	011.372.0504	9.23	26	19.1	43	36	46	50			
1 1/4"	011.372.05	10.94	26	21.4	51.5	36	55	67			
1 1/2" x 1 1/4"	011.372.0605	12.39	31	21.4	51.5	41	55	65			
1 1/2"	011.372.06	14.05	31	21.4	61	41	60	73			
2" x 1 1/2"	011.372.0706	17.91	38	21.4	61	48	75	105			
2"	011.372.07	18.53	38	25.7	76	48	75	115			

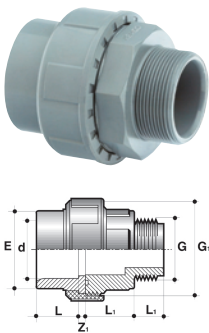
UNION



d	PART NO	PRICE	L	L ₁	Z ₁	Z ₂	G ₁	E	Wt (g)		
1/2"	011.022.02	15.27	16	15	3	11	1"	42	31		
3/4"	011.022.03	16.95	19	16.3	3	12.7	1 1/4"	52	51		
1"	011.022.04	21.23	22	19.1	3	12.9	1 1/2"	59	70		
1 1/4"	011.022.05	25.82	26	21.4	3	16.6	2"	72	109		
1 1/2"	011.022.06	34.11	31	21.4	3	23.6	2 1/4"	79	176		
2"	011.022.07	47.37	38	25.7	3	30.3	2 3/4"	96	293		
2 1/2"*	011.022.08	115.77	44	30.2	3	31.8	3 1/2"	119	470		
3"*	011.022.09	132.87	51	33.3	5	35.7	4"	134	610		
4"*	011.022.10	155.83	61	39.3	5	39.7	5"	163	970		

* PN10 RATED
SPARE PARTS FOR UNIONS AVAILABLE SEE PAGE 33

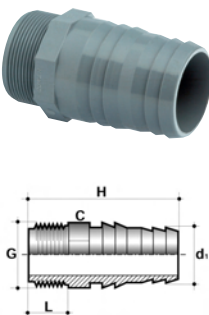
UNION – MALE THREAD ONE END



d	PART NO	PRICE	L	L ₁	L ₂	Z ₁	C	G ₁	E	Wt (g)	
1 1/2"	011.592.06	23.88	31	21.4	40	3	65	2 1/4"	79	240	
1 1/2" x 2"	011.592.0607	23.88	31	25.7	40	3	65	2 1/4"	79	250	
2"	011.592.07	33.15	38	25.7	42	3	70	2 3/4"	96	330	

SPARE PARTS FOR UNIONS AVAILABLE SEE PAGE 33

HOSE ADAPTOR – MALE BSP X MM HOSE TAIL



G x d ₁	PART NO	PRICE	L	H	C	Wt (g)				
1/4" x 12	011.262M.00012	3.03	11	52	19	8				
3/8" x 16	011.262M.01016	3.26	11.4	64	19	15				
1/2" x 20	011.262M.02020	4.94	15	70	24	20				
3/4" x 25	011.262M.03025	6.51	16.3	76	30	30				
1" x 32	011.262M.04032	7.41	19.1	80	36	50				
1 1/4" x 40	011.262M.05040	8.11	21.4	92	46	70				
1 1/2" x 50	011.262M.06050	13.23	21.4	99	55	118				
2" x 60	011.262M.07060	20.10	25.7	118	65	190				

RANGE OF PP HOSE FITTINGS AVAILABLE SEE PAGE 308

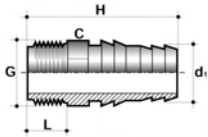
ABS PRESSURE FITTINGS PLAIN/THREADED (BSP)

HOSE ADAPTOR - MALE BSP X INCH HOSE TAIL



d ₁	PART NO	PRICE	H	C	L	G	d ₁	Wt (g)						
1/2"•	011.262M.0202	22.24	60	6	13	26	14	8						
3/4"•	011.262M.0303	29.17	66	9	16	28	20	15						
1"•	011.262M.0404	33.80	73	8	19	40	27	28						

RANGE OF PP HOSE FITTINGS AVAILABLE SEE PAGE 308

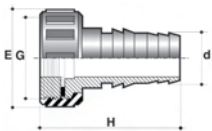


HOSE ADAPTOR - FEMALE BSP X MM HOSE TAIL

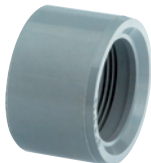


G x d	PART NO	PRICE	H	E	Wt (g)									
3/4" x 16	011.872.03016	13.14	54	34	22									
1" x 20	011.872.04020	14.49	59	42	31									
1 1/4" x 25	011.872.05025	17.41	63	52	47									
1 1/2" x 30	011.872.06030	23.68	68	59	66									
2" x 40	011.872.07040	32.78	77	72	105									
2 1/4" x 50	011.872.08050	54.53	80	79	140									
2 3/4" x 60	011.872.08060	62.35	84	96	215									

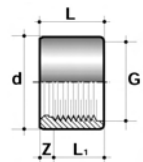
RANGE OF PP HOSE FITTINGS AVAILABLE SEE PAGE 308



REDUCING BUSH



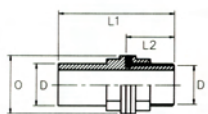
d x G	PART NO	PRICE	L	L ₁	Z	Wt (g)								
3/8" x 1/4"•	011.092.0100	11.88												
1/2" x 1/4"•	011.092.0200	11.88												
1/2" x 3/8"•	011.092.0201	3.72	16	13.5	2.5	2								
3/4" x 1/2"•	011.092.0302	4.33	19	15	4	6								
1" x 3/4"•	011.092.0403	5.71	22	16.3	5.7	9								
1 1/4" x 1"•	011.092.0504	9.83	26	19.1	6.9	16								
1 1/2" x 1 1/4"•	011.092.0605	10.05	31	21.4	9.6	34								
2" x 1 1/2"•	011.092.0706	13.35	38	21.4	16.6	51								
2 1/2" x 2"•	011.092.0807	24.26	44	25.7	18.3	72								
3" x 2 1/2"•	011.092.0908	39.18	51	30.2	20.8	114								
4" x 3"•	011.092.1009	55.80	61	33.3	27.7	212								



TANK CONNECTOR



D	PART NO	PRICE	L1	L2	O	Wt (g)								
1/2"•	011.242.02	6.46	77	42	38	31								
3/4"•	011.242.03	7.08	77	42	42	37								
1"•	011.242.04	15.37	103	55	55	71								
1 1/4"•	011.242.05	38.97	121	70	65	112								
1 1/2"•	011.242.06	42.90	128	73	72	168								
2"•	011.242.07	51.27	154	85	93	317								
2 1/2"•	011.242.08	67.27	164	88	106	358								
3"•	011.242.09	76.90	202	112	125	674								
4"•	011.242.10	115.35	230	130	154	1214								



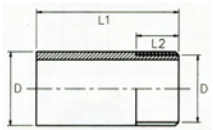
• NON COMER PRODUCT

PP TANK CONNECTOR



D	PART NO	PRICE	D	E	H	P	L	H ₁	Wt (g)
1 1/2"	031.242.06	27.11	48	80	90	37	56	25	125

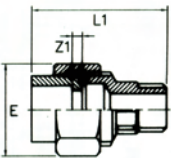
NIPPLE*



D	PART NO	PRICE	L2	L1	Wt (g)
3/8"	011.252.01	3.40	13	42	8
1/2"	011.252.02	3.72	17	50	14
3/4"	011.252.03	4.67	16	56	25
1"	011.252.04	6.04	20	63	38
1 1/4"	011.252.05	8.26	24	75	52
1 1/2"	011.252.06	9.01	30	88	80
2"	011.252.07	11.64	32	88	115
2 1/2"	011.252.08	27.22	35	106	197
3"	011.252.09	30.73	39	128	300
4"	011.252.10	40.89	43	153	560

* MACHINED FROM PIPE

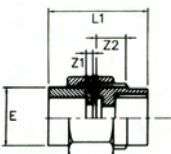
COMPOSITE UNION – MALE BRASS



SIZE	PART NO	PRICE	E	L1	Z1	Wt (g)
1/2"	011.762.02	31.93	40	56	3	175
3/4"	011.762.03	46.05	48	67	3	320
1"	011.762.04	51.94	55	68	9	420
1 1/4"	011.762.05	72.54	65	84	10	620
1 1/2"	011.762.06	102.43	78	92	12	571
2"	011.762.07	158.02	88	109	14	964
2 1/2"	011.762.08	336.58	108	127	18	1632
3"	011.762.09	485.28	122	138	18	2135

PLEASE NOTE: FOR CONNECTING PLASTIC PIPEWORK SYSTEMS TO METAL PIPEWORK SYSTEMS COMPOSITE UNIONS AND/OR FLANGES MUST BE USED.

COMPOSITE UNION – FEMALE BRASS



SIZE	PART NO	PRICE	E	L1	Z1	Z2	Wt (g)
1/2"	011.752.02	28.29	40	43	3	9	165
3/4"	011.752.03	43.04	48	48	3	10	290
1"	011.752.04	49.52	55	59	9	11	310
1 1/4"	011.752.05	66.86	65	68	10	11	450
1 1/2"	011.752.06	92.31	78	76	12	12	486
2"	011.752.07	140.00	88	90	14	14	950
2 1/2"	011.752.08	272.95	108	95	14	4	1325
3"	011.752.09	393.77	124	112	16	5	1607

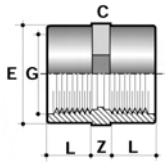
PLEASE NOTE: FOR CONNECTING PLASTIC PIPEWORK SYSTEMS TO METAL PIPEWORK SYSTEMS COMPOSITE UNIONS AND/OR FLANGES MUST BE USED.

• NON COMER PRODUCT

ABS PRESSURE FITTINGS THREADED (BSP)

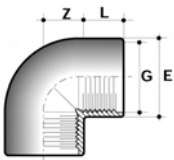
ABS

SOCKET



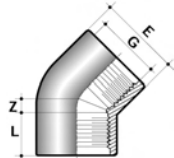
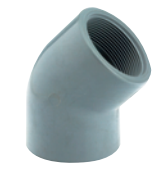
G	PART NO	PRICE	L	Z	E	C	Wt (g)						
3/8"	011.013.01	6.66	11.4	6	23.5	24	8						
1/2"	011.013.02	6.89	15	7	28	30	11						
3/4"	011.013.03	7.72	16.3	7	34	36	16						
1"	011.013.04	9.63	19.1	8	42	46	24						
1 1/4"	011.013.05	13.23	21.4	8	50.5	55	47						
1 1/2"	011.013.06	14.93	21.4	8	57.5	60	75						
2"	011.013.07	18.73	25.7	8	71.5	75	118						
2 1/2"	011.013.08	41.62	30.2	9	88	90	161						
3"	011.013.09	51.38	33.3	10	102	105	261						
4"	011.013.10	94.87	39.3	11	129	130	382						

90° ELBOW



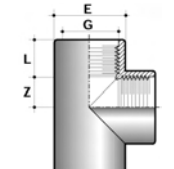
G	PART NO	PRICE	L	Z	E	Wt (g)							
3/8"	011.033.01	6.57	11.4	11.6	23.5	10							
1/2"	011.033.02	6.78	15	12	26.5	11							
3/4"	011.033.03	6.89	16.3	16.7	32.5	20							
1"	011.033.04	9.01	19.1	19.9	41	36							
1 1/4"	011.033.05	15.88	21.4	27.6	50	54							
1 1/2"	011.033.06	17.90	21.4	37.6	60	122							
2"	011.033.07	26.90	25.7	46.3	75	233							
2 1/2"	011.033.08	49.02	30.2	53.8	89	308							
3"	011.033.09	73.81	33.3	65.7	106	538							
4"	011.033.10	105.47	39.3	79.7	129	810							

45° ELBOW



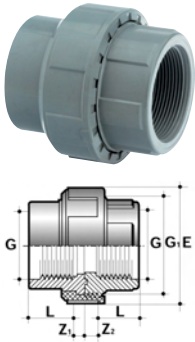
G	PART NO	PRICE	L	Z	E	Wt (g)							
3/8"	011.043.01	8.46	11.4	8.1	23.5	9							
1/2"	011.043.02	8.79	15	6.5	28	14							
3/4"	011.043.03	9.75	16.3	8.7	34	22							
1"	011.043.04	11.86	19.1	10.9	42	39							
1 1/4"	011.043.05	16.42	21.4	14.6	51	58							
1 1/2"	011.043.06	21.08	21.4	21.6	61	110							
2"	011.043.07	30.50	25.7	27.3	75	191							
2 1/2"	011.043.08	73.17	30.2	31.8	89	254							
3"	011.043.09	92.75	33.3	38.7	106	446							
4"	011.043.10	132.22	39.3	46.7	128	665							

EQUAL TEE



G	PART NO	PRICE	L	Z	E	Wt (g)							
3/8"	011.063.01	6.57	11.4	11.6	23.5	14							
1/2"	011.063.02	6.89	15	12	27	19							
3/4"	011.063.03	7.60	16.3	16.7	33.5	29							
1"	011.063.04	10.38	19.1	19.9	42	52							
1 1/4"	011.063.05	17.58	21.4	27.6	51	80							
1 1/2"	011.063.06	22.65	21.4	37.6	61	160							
2"	011.063.07	38.97	25.7	46.3	75	286							
2 1/2"	011.063.08	69.57	30.2	53.8	89	380							
3"	011.063.09	99.94	33.3	65.7	106	663							
4"	011.063.10	166.77	39.3	79.7	129	1094							

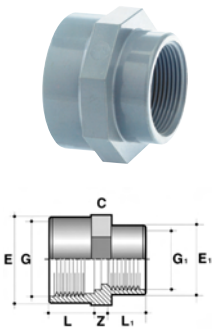
UNION



G	PART NO	PRICE	L	Z ₁	Z ₂	G ₁	E	Wt (g)			
3/8"	011.023.01	14.84	11.4	5.6	12.6	3/4"	67	29			
1/2"	011.023.02	17.17	15	4	11	1"	42	31			
3/4"	011.023.03	18.73	16.3	5.7	12.7	1 1/4"	52	51			
1"	011.023.04	26.72	19.1	5.9	12.9	1 1/2"	59	70			
1 1/4"	011.023.05	32.78	21.4	7.6	16.6	2"	72	109			
1 1/2"	011.023.06	46.13	21.4	12.6	23.6	2 1/4"	79	176			
2"	011.023.07	64.98	25.7	15.3	30.3	2 3/4"	96	293			
2 1/2"*	011.023.08	131.32	30.2	16.8	31.8	3 1/2"	119	470			
3"*	011.023.09	151.09	33.3	22.7	35.7	4"	134	610			
4"*	011.023.10	173.62	39.3	26.7	39.7	5"	163	970			

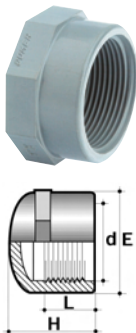
* PN10 RATED
SPARE PARTS FOR UNIONS AVAILABLE SEE PAGE 33

REDUCING SOCKET



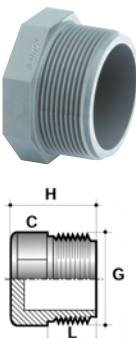
G x G ₁	PART NO	PRICE	L	L ₁	Z	C	E	E ₁	Wt (g)		
1/2" x 3/8"	011.603.0201	7.41	15	11.4	6	24	28	23	14		
3/4" x 1/2"	011.603.0302	7.41	16.3	15	7	30	34	28	20		
1" x 3/4"	011.603.0403	8.09	19.1	16.3	7	36	42	34	34		
1 1/4" x 1"	011.603.0504	9.87	21.4	19.1	8	46	51	42	48		
1 1/2" x 1 1/4"	011.603.0605	14.50	21.4	21.4	8	55	58	51	55		
2" x 1 1/2"	011.603.0706	20.42	25.7	21.4	8	60	72	58	92		
2 1/2" x 2"	011.603.0807	43.68	30.2	25.7	8	75	89	72	150		
3" x 2 1/2"	011.603.0908	52.64	33.3	30.2	9	105	103	89	206		
4" x 3"	011.603.1009	75.55	39.3	33.3	10	130	130	103	324		

CAP



d	PART NO	PRICE	L	H	E	Wt (g)				
3/8"	011.223.01	5.29	11.4	22	23	7				
1/2"	011.223.02	6.89	15	26	28	12				
3/4"	011.223.03	7.85	16.3	28	34	17				
1"	011.223.04	8.37	19.1	32	42	30				
1 1/4"	011.223.05	9.01	21.4	35	51	44				
1 1/2"	011.223.06	11.64	21.4	35	58	52				
2"	011.223.07	14.72	25.7	39	72	93				
2 1/2"	011.223.08	36.63	30.2	52	89	144				
3"	011.223.09	50.92	33.3	56	103	210				
4"	011.223.10	62.05	39.3	64	130	318				

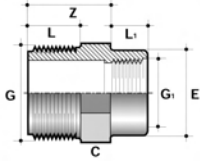
PLUG



G	PART NO	PRICE	L	H	C	Wt (g)				
3/8"	011.233.01	3.40	11.4	23	19	5				
1/2"	011.233.02	4.01	15	29	24	9				
3/4"	011.233.03	4.86	16.3	30	30	13				
1"	011.233.04	5.82	19.1	33	36	19				
1 1/4"	011.233.05	7.72	21.4	39	46	34				
1 1/2"	011.233.06	9.75	21.4	39	55	36				
2"	011.233.07	11.01	25.7	43	65	66				
2 1/2"	011.233.08	29.76	30.2	53	80	108				
3"	011.233.09	35.92	33.3	58	95	163				
4"	011.233.10	66.60	39.3	65	120	255				

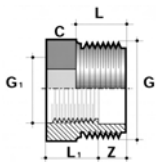
ABS PRESSURE FITTINGS THREADED (BSP)

REDUCING BUSH - LONG PATTERN



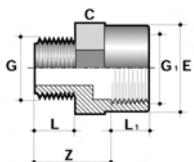
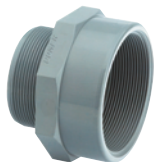
G x G ₁	PART NO	PRICE	L	L ₁	Z	C	E	Wt (g)			
1/2" x 3/8"	011.613.0201	4.27	15	11.4	24	24	23	9			
3/4" x 3/8"	011.613.0301	4.73	16.3	11.4	25	30	23	12			
3/4" x 1/2"	011.613.0302	4.73	16.3	15	26	30	28	16			
1" x 3/8"	011.613.0401	5.15	19.1	11.4	28	36	23	19			
1" x 1/2"	011.613.0402	5.15	19.1	15	29	36	28	20			
1" x 3/4"	011.613.0403	5.15	19.1	16.3	30	36	34	20			
1 1/4" x 1/2"	011.613.0502	8.29	21.4	15	33	46	28	31			
1 1/4" x 3/4"	011.613.0503	8.29	21.4	16.3	34	46	34	32			
1 1/4" x 1"	011.613.0504	8.29	21.4	19.1	33	46	42	34			
1 1/2" x 3/4"	011.613.0603	10.90	21.4	16.3	34	50	34	45			
1 1/2" x 1"	011.613.0604	10.90	21.4	19.1	34	50	42	43			
1 1/2" x 1 1/4"	011.613.0605	10.90	21.4	21.4	34	55	51	45			
2" x 1"	011.613.0704	17.09	25.7	19.1	37	65	42	72			
2" x 1 1/4"	011.613.0705	17.09	25.7	21.4	37	65	51	71			
2" x 1 1/2"	011.613.0706	17.09	25.7	21.4	37	65	58	72			
2 1/2" x 1 1/4"	011.613.0805	30.32	30.2	21.4	43	80	51	106			
2 1/2" x 1 1/2"	011.613.0806	30.32	30.2	21.4	43	80	58	105			
2 1/2" x 2"	011.613.0807	30.32	30.2	25.7	43	80	72	107			
3" x 1 1/2"	011.613.0906	37.49	33.3	21.4	47	95	58	147			
3" x 2"	011.613.0907	37.49	33.3	25.7	47	95	72	155			
3" x 2 1/2"	011.613.0908	37.49	33.3	30.2	47	95	89	161			
4" x 2"	011.613.1007	60.50	39.3	25.7	53	120	72	250			
4" x 2 1/2"	011.613.1008	60.50	39.3	30.2	53	120	89	265			
4" x 3"	011.613.1009	60.50	39.3	33.3	53	120	103	270			

REDUCING BUSH - SHORT PATTERN



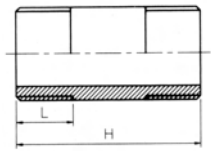
G x G ₁	PART NO	PRICE	L	L ₁	Z	C	Wt (g)			
3/4" x 1/2"	011.093.0302	4.56	16.3	15	13.3	30	10			
1" x 3/4"	011.093.0403	5.94	19.1	16.3	14.8	36	15			
1 1/4" x 1"	011.093.0504	13.01	21.4	19.1	16.3	46	27			
1 1/2" x 1 1/4"	011.093.0605	14.29	21.4	21.4	14	50	30			
2" x 1 1/2"	011.093.0706	18.32	25.7	21.4	18.3	65	55			
2 1/2" x 2"	011.093.0807	24.61	30.2	25.7	20.5	80	100			
3" x 2 1/2"	011.093.0908	30.07	33.3	30.2	20.1	95	117			
4" x 3"	011.093.1009	48.82	39.3	33.3	24	120	280			

REDUCING PIECE - MALE/FEMALE



G x G ₁	PART NO	PRICE	L	L ₁	Z	C	E	Wt (g)			
3/8" x 1/2"	011.293.0201	6.48	11.4	15	22	30	28	8			
1/2" x 3/4"	011.293.0302	7.37	15	16.3	24	36	34	13			
3/4" x 1"	011.293.0403	8.78	16.3	19.1	26	46	42	19			
1" x 1 1/4"	011.293.0504	11.94	19.1	21.4	30	55	51	31			
1 1/4" x 1 1/2"	011.293.0605	13.87	21.4	21.4	33	60	58	36			
1 1/2" x 2"	011.293.0706	17.01	21.4	25.7	34	75	72	65			
2" x 2 1/2"	011.293.0807	36.59	25.7	30.2	38	90	89	105			
2 1/2" x 3"	011.293.0908	46.75	30.2	33.3	44	105	103	153			
3" x 4"	011.293.1009	81.33	33.3	39.3	48	130	130	268			

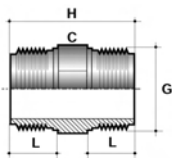
NIPPLE*



SIZE	PART NO	PRICE	L	H	Wt (g)								
1/4"•	011.253.00	15.34											
3/8"•	011.253.01	4.01	12	43	6								
1/2"•	011.253.02	4.13	13	50	10								
3/4"•	011.253.03	4.88	14	56	15								
1"•	011.253.04	6.46	17	63	25								
1 1/4"•	011.253.05	8.38	19	75	50								
1 1/2"•	011.253.06	9.12	19	88	72								
2"•	011.253.07	11.64	23	88	109								
2 1/2"•	011.253.08	26.36	30	106	115								
3"•	011.253.09	30.73	30	128	268								
4"•	011.253.10	41.31	36	153	520								

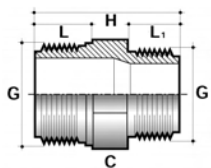
* MACHINED FROM PIPE

HEXAGON NIPPLE



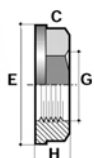
G	PART NO	PRICE	L	H	C	Wt (g)							
3/8"	011.273.01	3.26	11.4	31.7	8.9	5							
1/2"	011.273.02	4.15	15	42	12	9							
3/4"	011.273.03	5.15	16.3	44	11.4	15							
1"	011.273.04	6.19	19.1	50	11.8	23							
1 1/4"	011.273.05	8.87	21.4	58	15.2	38							
1 1/2"	011.273.06	10.34	21.4	58	15.2	41							
2"	011.273.07	11.56	25.7	66	14.6	83							
2 1/2"	011.273.08	26.72	30.2	78	17.6	120							
3"	011.273.09	37.83	33.3	85	18.4	176							
4"	011.273.10	58.46	39.3	96	17.4	270							

REDUCING NIPPLE



G x G ₁	PART NO	PRICE	L	L ₁	H	C	Wt (g)						
1/2" x 3/8"	011.283.0201	4.83	15	11.4	38	24	7						
3/4" x 1/2"	011.283.0302	5.63	16.3	15	43	30	12						
1" x 3/4"	011.283.0403	7.86	19.1	16.3	47	36	20						
1 1/4" x 1"	011.283.0504	8.74	21.4	19.1	56	46	35						
1 1/2" x 1 1/4"	011.283.0605	12.36	21.4	21.4	58	50	40						
2" x 1 1/2"	011.283.0706	16.83	25.7	21.4	62	65	70						
2 1/2" x 2"	011.283.0807	30.74	30.2	25.7	73	80	110						
3" x 2 1/2"	011.283.0908	37.83	33.3	30.2	82	95	165						
4" x 3"	011.283.1009	57.35	39.3	33.3	90	120	270						

BACKNUT



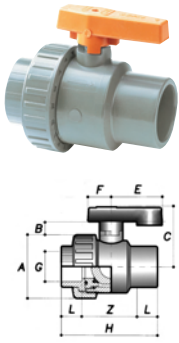
G	PART NO	PRICE	E	H	C	Wt (g)							
3/8"	011.323.01	2.64	34	12	24	8							
1/2"	011.323.02	2.75	38	13	29	9							
3/4"	011.323.03	2.97	43	14	34	10							
1"	011.323.04	5.19	56	16	46	21							
1 1/4"	011.323.05	11.24	65	18	50	24							
1 1/2"	011.323.06	12.82	72	19	60	36							
2"	011.323.07	13.46	94	21	80	70							
2 1/2"	011.323.08	20.35	115	24	94	74							
3"	011.323.09	22.98	130	27	108	105							
4"	011.323.10	28.92	162	30	135	150							

• NON COMER PRODUCT

ABS MANUAL VALVES

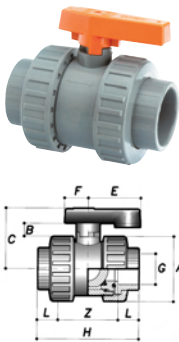
ABS

STANDARD BALL VALVE – SINGLE UNION – PTFE SEAT – EPDM SEALS – PLAIN ENDS



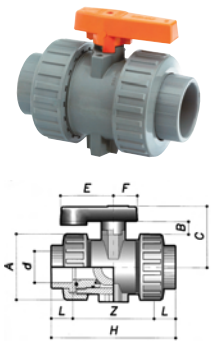
G	PART NO	PRICE	L	Z	H	A	B	C	E	F	PN	Wt (g)
3/8"	011.82S1.01Q	21.60	14	47	75	50	10	48	39	19	15	80
1/2"	011.82S1.02Q	21.60	16	46	78	50	10	48	39	19	15	88
3/4"	011.82S1.03Q	26.81	19	52	90	60	11	54	47	22	15	136
1"	011.82S1.04Q	41.42	22	59	103	68	13	62	55	25	15	200
1 1/4"	011.82S1.05Q	49.51	26	68	120	80	18	75	60	30	15	296
1 1/2"	011.82S1.06Q	62.87	31	75	137	96	20	87	68	35	15	448
2"	011.82S1.07Q	93.43	38	92	168	116	20	101	80	40	15	784
2 1/2"	011.82S1.08Q	261.19	44	124	212	145	25	123	90	45	10	1460
3"	011.82S1.09Q	318.47	51	147	249	166	28	138	100	50	10	2320
4"	011.82S1.10Q	476.83	61	159	281	210	28	160	120	60	10	3832

STANDARD BALL VALVE – DOUBLE UNION – PTFE SEAT – EPDM SEALS – PLAIN ENDS



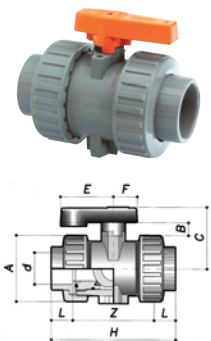
G	PART NO	PRICE	L	Z	H	A	B	C	E	F	PN	Wt (g)
3/8"	011.66S1.01Q	25.70	14	40	68	50	10	48	39	19	15	112
1/2"	011.66S1.02Q	25.70	16	40	72	50	10	48	39	19	15	104
3/4"	011.66S1.03Q	31.51	19	48	86	60	11	54	47	22	15	160
1"	011.66S1.04Q	48.62	22	54	98	68	13	62	55	25	15	245
1 1/4"	011.66S1.05Q	58.26	26	62	114	80	18	75	60	30	15	360
1 1/2"	011.66S1.06Q	72.12	31	73	135	96	20	87	68	35	15	574
2"	011.66S1.07Q	109.88	38	85	161	116	20	101	80	40	15	945
2 1/2"	011.66S1.08Q	307.32	44	115	203	145	25	123	90	45	10	1770
3"	011.66S1.09Q	374.59	51	129	231	166	28	138	100	50	10	2784
4"	011.66S1.10Q	561.00	61	149	271	210	28	160	120	60	10	4590

INDUSTRIAL BALL VALVE – DOUBLE UNION - PTFE SEAT - EPDM SEALS - PLAIN ENDS



d	PART NO	PRICE	L	Z	H	A	B	C	E	F	PN	Wt (g)
3/8"	011.66I1.01Q	61.25	14	62	90	50	10	48	39	19	15	145
1/2"	011.66I1.02Q	63.05	16	62	94	50	10	48	39	19	15	135
3/4"	011.66I1.03Q	74.95	19	74	112	60	11	54	47	22	15	212
1"	011.66I1.04Q	89.46	22	77	121	68	13	62	55	25	15	301
1 1/4"	011.66I1.05Q	114.66	26	87	139	80	18	75	60	30	15	436
1 1/2"	011.66I1.06Q	147.77	31	93	155	96	20	87	68	35	15	708
2"	011.66I1.07Q	187.98	38	113	189	116	20	101	80	40	15	1152
2 1/2"	011.66I1.08Q	373.55	44	116	204	145	25	123	90	45	10	1840
3"	011.66I1.09Q	479.42	51	130	232	166	28	138	100	50	10	2924
4"	011.66I1.10Q	666.19	61	150	272	210	28	160	120	60	10	4800

INDUSTRIAL BALL VALVE – DOUBLE UNION - PTFE SEAT - FPM SEALS - PLAIN ENDS



d	PART NO	PRICE	L	Z	H	A	B	C	E	F	PN	Wt (g)
3/8"	011.66I1.01R	73.88	14	62	90	50	10	48	39	19	15	145
1/2"	011.66I1.02R	76.59	16	62	94	50	10	48	39	19	15	135
3/4"	011.66I1.03R	88.97	19	74	112	60	11	54	47	22	15	212
1"	011.66I1.04R	111.58	22	77	121	68	13	62	55	25	15	301
1 1/4"	011.66I1.05R	135.38	26	87	139	80	18	75	60	30	15	436
1 1/2"	011.66I1.06R	178.69	31	93	155	96	20	87	68	35	15	708
2"	011.66I1.07R	241.29	38	113	189	116	20	101	80	40	15	1152
2 1/2"	011.66I1.08R	428.98	44	116	204	145	25	123	90	45	10	1840
3"	011.66I1.09R	593.63	51	130	232	166	28	138	100	50	10	2924
4"	011.66I1.10R	763.74	61	150	272	210	28	160	120	60	10	4800

ELECTRICALLY AND PNEUMATICALLY ACTUATED BALL VALVES ALSO AVAILABLE - SEE PAGES 28-29

INDUSTRIAL DIAPHRAGM VALVE – HANDWHEEL OPERATED – EPDM DIAPHRAGM



SIZE	PART NO	PRICE	DIA.SIZE															
1/2"	011.681.02Q	58.97	3/4"															
3/4"	011.681.03Q	63.18	3/4"															
1"	011.681.04Q	70.20	3/4"															
1 1/4"	011.681.05Q	84.24	1"															
1 1/2"	011.681.06Q	126.36	1 1/2"															
2"	011.681.07Q	134.79	1 1/2"															
2 1/2"	011.681.08Q	275.19	2"															
3"	011.681.09Q	508.26	3"															
4"	011.681.10Q	697.80	3"															

PRICES FOR UNION ENDS ARE AVAILABLE ON REQUEST
 FPM DIAPHRAGM AVAILABLE. PRICES ON APPLICATION
 PNEUMATICALLY ACTUATED DIAPHRAGM VALVE ALSO AVAILABLE - PRICES ON APPLICATION

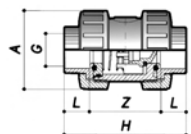
INDUSTRIAL DIAPHRAGM VALVE – HANDWHEEL OPERATED – PTFE DIAPHRAGM



SIZE	PART NO	PRICE	DIA.SIZE															
1/2"	011.681.02S	117.94	3/4"															
3/4"	011.681.03S	122.15	3/4"															
1"	011.681.04S	129.17	3/4"															
1 1/4"	011.681.05S	162.87	1"															
1 1/2"	011.681.06S	242.90	1 1/2"															
2"	011.681.07S	251.32	1 1/2"															
2 1/2"	011.681.08S	415.59	2"															
3"	011.681.09S	711.84	3"															
4"	011.681.10S	936.49	3"															

PRICES FOR UNION ENDS ARE AVAILABLE ON REQUEST
 FPM DIAPHRAGM AVAILABLE. PRICES ON APPLICATION
 PNEUMATICALLY ACTUATED DIAPHRAGM VALVE ALSO AVAILABLE - PRICES ON APPLICATION

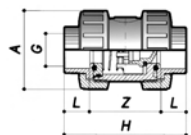
STANDARD SPRING CHECK NON RETURN VALVE - DOUBLE UNION – STAINLESS STEEL SPRING – EPDM SEALS – PLAIN ENDS



G	PART NO	PRICE	L	Z	H	A	CLASS	Wt (g)										
3/8"	011.671.01Q	62.63	14	48	76	50	E	96										
1/2"	011.671.02Q	64.24	16	48	80	50	E	87										
3/4"	011.671.03Q	75.74	19	53	91	60	E	135										
1"	011.671.04Q	80.04	22	58	102	68	E	196										
1 1/4"	011.671.05Q	113.69	26	68	120	80	E	290										
1 1/2"	011.671.06Q	128.65	31	78	140	96	E	476										
2"	011.671.07Q	177.47	38	93	169	116	E	777										
2 1/2"	011.671.08Q	453.70	44	126	214	145	C	1392										
3"	011.671.09Q	585.25	51	139	269	166	C	2248										
4"	011.671.10Q	866.17	61	159	290	210	C	3752										

DETAILS FOR CHECK VALVE WITH PTFE COATED STAINLESS STEEL SPRING ARE AVAILABLE ON REQUEST

STANDARD SPRING CHECK NON RETURN VALVE - DOUBLE UNION – STAINLESS STEEL SPRING – FPM SEALS – PLAIN ENDS

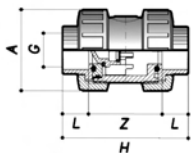


G	PART NO	PRICE	L	Z	H	A	CLASS	Wt (g)										
3/8"	011.671.01R	79.38	14	48	76	50	E	96										
1/2"	011.671.02R	82.85	16	48	80	50	E	87										
3/4"	011.671.03R	89.78	19	53	91	60	E	135										
1"	011.671.04R	95.59	22	58	102	68	E	196										
1 1/4"	011.671.05R	147.69	26	68	120	80	E	290										
1 1/2"	011.671.06R	171.00	31	78	140	96	E	476										
2"	011.671.07R	203.07	38	93	169	116	E	777										
2 1/2"	011.671.08R	517.21	44	126	214	145	C	1392										
3"	011.671.09R	667.19	51	139	269	166	C	2248										
4"	011.671.10R	987.43	61	159	290	210	C	3752										

DETAILS FOR CHECK VALVE WITH PTFE COATED STAINLESS STEEL SPRING ARE AVAILABLE ON REQUEST

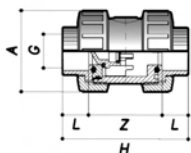
• NON COMER PRODUCT

STANDARD AIR RELEASE VALVE - DOUBLE UNION - EPDM SEALS - PLAIN ENDS



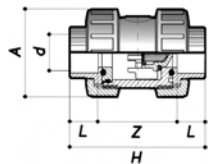
G	PART NO	PRICE	L	Z	H	A	CLASS	Wt (g)				
3/8"	011.67A1.01Q	62.63	14	48	76	50	E	68				
1/2"	011.67A1.02Q	64.24	16	48	80	50	E	68				
3/4"	011.67A1.03Q	75.75	19	53	91	60	E	112				
1"	011.67A1.04Q	80.03	22	58	102	68	E	192				
1 1/4"	011.67A1.05Q	113.69	26	68	120	80	E	316				
1 1/2"	011.67A1.06Q	128.65	31	78	140	96	E	536				
2"	011.67A1.07Q	177.47	38	93	169	116	E	904				
2 1/2"	011.67A1.08Q	453.70	44	126	214	145	C	1392				
3"	011.67A1.09Q	585.25	51	139	269	166	C	2248				
4"	011.67A1.10Q	866.17	61	159	290	210	C	3752				

STANDARD AIR RELEASE VALVE - DOUBLE UNION - FPM SEALS - PLAIN ENDS



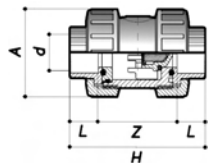
G	PART NO	PRICE	L	Z	H	A	CLASS	Wt (g)				
3/8"	011.67A1.01R	79.38	14	48	76	50	E	68				
1/2"	011.67A1.02R	82.85	16	48	80	50	E	68				
3/4"	011.67A1.03R	89.78	19	53	91	60	E	112				
1"	011.67A1.04R	95.60	22	58	102	68	E	192				
1 1/4"	011.67A1.05R	147.69	26	68	120	80	E	316				
1 1/2"	011.67A1.06R	171.00	31	78	140	96	E	536				
2"	011.67A1.07R	203.07	38	93	169	116	E	904				
2 1/2"	011.67A1.08R	517.21	44	126	214	145	C	1392				
3"	011.67A1.09R	667.19	51	139	269	166	C	2248				
4"	011.67A1.10R	987.43	61	159	290	210	C	3752				

STANDARD FOOTVALVE - DOUBLE UNION - EPDM SEALS - PLAIN ENDS



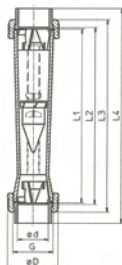
d	PART NO	PRICE	L	Z	H	A	CLASS	Wt (g)				
3/8"	011.67F1.01Q	62.63	14	48	76	50	E	76				
1/2"	011.67F1.02Q	64.24	16	48	80	50	E	76				
3/4"	011.67F1.03Q	75.74	19	53	91	60	E	120				
1"	011.67F1.04Q	80.03	22	58	102	68	E	208				
1 1/4"	011.67F1.05Q	113.69	26	68	120	80	E	368				
1 1/2"	011.67F1.06Q	128.65	31	78	140	96	E	624				
2"	011.67F1.07Q	177.47	38	93	169	116	E	1080				
2 1/2"	011.67F1.08Q	453.70	44	126	214	145	C	1392				
3"	011.67F1.09Q	585.26	51	139	269	166	C	2248				
4"	011.67F1.10Q	866.17	61	159	290	210	C	3752				

STANDARD FOOTVALVE - DOUBLE UNION - FPM SEALS - PLAIN ENDS



d	PART NO	PRICE	L	Z	H	A	CLASS	Wt (g)				
3/8"	011.67F1.01R	79.38	14	48	76	50	E	76				
1/2"	011.67F1.02R	82.85	16	48	80	50	E	76				
3/4"	011.67F1.03R	89.78	19	53	91	60	E	120				
1"	011.67F1.04R	95.60	22	58	102	68	E	208				
1 1/4"	011.67F1.05R	147.69	26	68	120	80	E	368				
1 1/2"	011.67F1.06R	171.00	31	78	140	96	E	624				
2"	011.67F1.07R	203.07	38	93	169	116	E	1080				
2 1/2"	011.67F1.08R	517.21	44	126	214	145	C	1392				
3"	011.67F1.09R	667.19	51	139	269	166	C	2248				
4"	011.67F1.10R	987.43	61	159	290	210	C	3752				

VARIABLE AREA FLOWMETER – STANDARD PATTERN – TROGAMID TUBE – STAINLESS STEEL FLOAT – EPDM SEALS



SIZE	PART NO	PRICE	SCALE	G	D	L1	L2	L3	L4	Wt (g)
3/4"•	011.1161.03A	137.50	20-250 L/HR	1 1/4"	53	350	356	375	394	450
3/4"•	011.1161.03B	137.50	40-400 L/HR	1 1/4"	53	350	356	375	394	450
3/4"•	011.1161.03C	137.50	60-640 L/HR	1 1/4"	53	350	356	375	394	450
3/4"•	011.1161.03D	137.50	75-1000 L/HR	1 1/4"	53	350	356	375	394	440
1"•	011.1161.04A	157.72	40-400 L/HR	1 1/2"	60	350	356	376	400	620
1"•	011.1161.04B	157.72	60-640 L/HR	1 1/2"	60	350	356	376	400	610
1"•	011.1161.04C	157.72	100-1000 L/HR	1 1/2"	60	350	356	376	400	600
1"•	011.1161.04D	157.72	150-1600 L/HR	1 1/2"	60	350	356	376	400	590
1 1/4"•	011.1161.05A	212.18	150-1600 L/HR	2"	74	350	356	380	408	1110
1 1/4"•	011.1161.05B	212.18	200-2500 L/HR	2"	74	350	356	380	408	1090
1 1/4"•	011.1161.05C	212.18	400-4000 L/HR	2"	74	350	356	380	408	1070
1 1/2"•	011.1161.06A	249.36	200-2500 L/HR	2 1/4"	83	350	356	382	418	1420
1 1/2"•	011.1161.06B	249.36	400-4000 L/HR	2 1/4"	83	350	356	382	418	1390
1 1/2"•	011.1161.06C	249.36	500-5000 L/HR	2 1/4"	83	350	356	382	418	1380
2"•	011.1161.07A	337.27	0.4-4.0 M ³ /HR	2 3/4"	103	350	356	386	433	2000
2"•	011.1161.07B	337.27	0.6-6.4 M ³ /HR	2 3/4"	103	350	356	386	433	1970
2"•	011.1161.07C	337.27	1.0-10.0 M ³ /HR	2 3/4"	103	350	356	386	433	1920
2 1/2"•	011.1161.08A	605.18	1.5-14.0 M ³ /HR	3 1/2"	122	350	356	388	445	3310
2 1/2"•	011.1161.08B	605.18	2.0-20.0 M ³ /HR	3 1/2"	122	350	356	388	445	3310

OPTIONAL ITEMS ON REQUEST: POLYSULFONE TUBE, PP FLOAT, MAGNETIC FLOAT, SWITCHES, SENSORS, SPECIAL SCALES.

VARIABLE AREA FLOWMETER – SHORT PATTERN – TROGAMID TUBE – STAINLESS STEEL FLOAT – EPDM SEALS



SIZE	PART NO	PRICE	SCALE	G	D	L1	L2	L3	L4	Wt (g)
3/8"•	011.1171.01A	100.84	4-40 L/HR	3/4"	35	165	171	186	199	80
3/8"•	011.1171.01B	100.84	5-60 L/HR	3/4"	35	165	171	186	199	80
3/8"•	011.1171.01C	100.84	10-100 L/HR	3/4"	35	165	171	186	199	80
3/8"•	011.1171.01D	100.84	15-160 L/HR	3/4"	35	165	171	186	199	80
3/8"•	011.1171.01E	100.84	20-250 L/HR	3/4"	35	165	171	186	199	80
1/2"•	011.1171.02A	98.33	10-100 L/HR	1"	43	170	176	192	208	130
1/2"•	011.1171.02B	98.33	15-160 L/HR	1"	43	170	176	192	208	130
1/2"•	011.1171.02C	98.33	20-250 L/HR	1"	43	170	176	192	208	130
1/2"•	011.1171.02D	98.33	40-400 L/HR	1"	43	170	176	192	208	130
1/2"•	011.1171.02E	98.33	50-500 L/HR	1"	43	170	176	192	208	130
3/4"•	011.1171.03A	104.60	20-250 L/HR	1 1/4"	53	185	191	210	229	240
3/4"•	011.1171.03B	104.60	40-400 L/HR	1 1/4"	53	185	191	210	229	240
3/4"•	011.1171.03C	104.60	60-600 L/HR	1 1/4"	53	185	191	210	229	240
3/4"•	011.1171.03D	104.60	100-1000 L/HR	1 1/4"	53	185	191	210	229	240
1"•	011.1171.04A	114.81	40-400 L/HR	1 1/2"	59	200	206	226	250	340
1"•	011.1171.04B	114.81	50-650 L/HR	1 1/2"	59	200	206	226	250	340
1"•	011.1171.04C	114.81	100-1000 L/HR	1 1/2"	59	200	206	226	250	340
1"•	011.1171.04D	114.81	150-1600 L/HR	1 1/2"	59	200	206	226	250	340

OPTIONAL ITEMS ON REQUEST: POLYSULFONE TUBE, PP FLOAT, MAGNETIC FLOAT, SPECIAL SCALES.

• NON COMER PRODUCT

ABS ACTUATED VALVES

ELECTRICALLY ACTUATED BALL VALVE

EPDM SEALS- PLAIN ENDS - 110-240V AC



d	PART NO	PRICE
3/8"	011.6611.EAJ.01Q	461.67
1/2"	011.6611.EAJ.02Q	461.67
3/4"	011.6611.EAJ.03Q	465.99
1"	011.6611.EAJ.04Q	624.92
1 1/4"	011.6611.EAJ.05Q	662.16
1 1/2"	011.6611.EAJ.06Q	671.69
2"	011.6611.EAJ.07Q	682.79
2 1/2"	011.6611.EAJ.08Q	838.64
3"	011.6611.EAJ.09Q	891.85
4"	011.6611.EAJ.10Q	1082.06

EPDM SEALS- PLAIN ENDS - 24V AC/DC



d	PART NO	PRICE
3/8"	011.6611.EAC.01Q	413.67
1/2"	011.6611.EAC.02Q	413.67
3/4"	011.6611.EAC.03Q	417.99
1"	011.6611.EAC.04Q	576.92
1 1/4"	011.6611.EAC.05Q	616.83
1 1/2"	011.6611.EAC.06Q	626.36
2"	011.6611.EAC.07Q	637.45
2 1/2"	011.6611.EAC.08Q	769.30
3"	011.6611.EAC.09Q	819.85
4"	011.6611.EAC.10Q	999.39

FPM SEALS- PLAIN ENDS - 110-240V AC



d	PART NO	PRICE
3/8"	011.6611.EAJ.01R	473.37
1/2"	011.6611.EAJ.02R	474.21
3/4"	011.6611.EAJ.03R	478.97
1"	011.6611.EAJ.04R	645.40
1 1/4"	011.6611.EAJ.05R	681.34
1 1/2"	011.6611.EAJ.06R	700.32
2"	011.6611.EAJ.07R	732.14
2 1/2"	011.6611.EAJ.08R	889.96
3"	011.6611.EAJ.09R	997.60
4"	011.6611.EAJ.10R	1172.39

FPM SEALS- PLAIN ENDS - 24V AC/DC



d	PART NO	PRICE
3/8"	011.6611.EAC.01R	425.37
1/2"	011.6611.EAC.02R	426.21
3/4"	011.6611.EAC.03R	430.97
1"	011.6611.EAC.04R	597.40
1 1/4"	011.6611.EAC.05R	636.01
1 1/2"	011.6611.EAC.06R	654.99
2"	011.6611.EAC.07R	686.80
2 1/2"	011.6611.EAC.08R	820.62
3"	011.6611.EAC.09R	925.60
4"	011.6611.EAC.10R	1089.72

OPTIONAL ITEMS ON REQUEST: FAILSAFE BATTERY SPRING RETURN KIT, MODULATING DIGITAL POSITIONING SYSTEM KIT.

PNEUMATICALLY ACTUATED BALL VALVE - SPRING RETURN ACTUATOR

EPDM SEALS- PLAIN ENDS - FAIL SAFE CLOSE



d	PART NO	PRICE
3/8"	011.66I1.PANC.01Q	277.67
1/2"	011.66I1.PANC.02Q	277.67
3/4"	011.66I1.PANC.03Q	282.00
1"	011.66I1.PANC.04Q	286.26
1 1/4"	011.66I1.PANC.05Q	344.83
1 1/2"	011.66I1.PANC.06Q	413.02
2"	011.66I1.PANC.07Q	424.12
2 1/2"	011.66I1.PANC.08Q	529.30
3"	011.66I1.PANC.09Q	649.18
4"	011.66I1.PANC.10Q	791.39

EPDM SEALS- PLAIN ENDS - FAIL SAFE OPEN



d	PART NO	PRICE
3/8"	011.66I1.PANO.01Q	277.67
1/2"	011.66I1.PANO.02Q	277.67
3/4"	011.66I1.PANO.03Q	282.00
1"	011.66I1.PANO.04Q	286.26
1 1/4"	011.66I1.PANO.05Q	344.83
1 1/2"	011.66I1.PANO.06Q	413.02
2"	011.66I1.PANO.07Q	424.12
2 1/2"	011.66I1.PANO.08Q	529.30
3"	011.66I1.PANO.09Q	649.18
4"	011.66I1.PANO.10Q	791.39

FPM SEALS- PLAIN ENDS - FAIL SAFE CLOSE



d	PART NO	PRICE
3/8"	011.66I1.PANC.01R	289.37
1/2"	011.66I1.PANC.02R	290.21
3/4"	011.66I1.PANC.03R	294.98
1"	011.66I1.PANC.04R	306.74
1 1/4"	011.66I1.PANC.05R	364.01
1 1/2"	011.66I1.PANC.06R	441.65
2"	011.66I1.PANC.07R	473.47
2 1/2"	011.66I1.PANC.08R	580.62
3"	011.66I1.PANC.09R	754.93
4"	011.66I1.PANC.10R	881.72

FPM SEALS- PLAIN ENDS - FAIL SAFE OPEN



d	PART NO	PRICE
3/8"	011.66I1.PANO.01R	289.37
1/2"	011.66I1.PANO.02R	290.21
3/4"	011.66I1.PANO.03R	294.98
1"	011.66I1.PANO.04R	306.74
1 1/4"	011.66I1.PANO.05R	364.01
1 1/2"	011.66I1.PANO.06R	441.65
2"	011.66I1.PANO.07R	473.47
2 1/2"	011.66I1.PANO.08R	580.62
3"	011.66I1.PANO.09R	754.93
4"	011.66I1.PANO.10R	881.72

PNEUMATICALLY ACTUATED BALL VALVE - DOUBLE ACTING ACTUATOR

EPDM SEALS- PLAIN ENDS



d	PART NO	PRICE
3/8"	011.66I1.PADA.01Q	269.67
1/2"	011.66I1.PADA.02Q	269.67
3/4"	011.66I1.PADA.03Q	274.00
1"	011.66I1.PADA.04Q	278.26
1 1/4"	011.66I1.PADA.05Q	336.83
1 1/2"	011.66I1.PADA.06Q	346.36
2"	011.66I1.PADA.07Q	357.45
2 1/2"	011.66I1.PADA.08Q	483.97
3"	011.66I1.PADA.09Q	537.18
4"	011.66I1.PADA.10Q	610.06

FPM SEALS - PLAIN ENDS



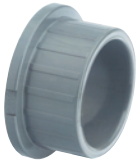
d	PART NO	PRICE
3/8"	011.66I1.PADA.01R	281.37
1/2"	011.66I1.PADA.02R	282.21
3/4"	011.66I1.PADA.03R	286.98
1"	011.66I1.PADA.04R	298.74
1 1/4"	011.66I1.PADA.05R	356.01
1 1/2"	011.66I1.PADA.06R	374.99
2"	011.66I1.PADA.07R	406.80
2 1/2"	011.66I1.PADA.08R	535.29
3"	011.66I1.PADA.09R	642.93
4"	011.66I1.PADA.10R	700.39

OPTIONAL ITEMS ON REQUEST: LIMIT SWITCHBOXES, POSITIONERS, PILOT SOLENOIDS
FOR HAZARDOUS AREA ITEMS PLEASE CONTACT OUR SALES DEPT

ABS INDUSTRIAL BALL VALVE SPARES

ABS

IMPERIAL VALVE END PLAIN



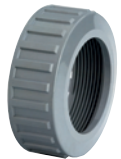
SIZE	PART NO	PRICE
3/8"	VEIPABS001	3.69
1/2"	VEIPABS002	4.02
3/4"	VEIPABS003	4.38
1"	VEIPABS004	5.70
1 1/4"	VEIPABS005	8.86
1 1/2"	VEIPABS006	11.58
2"	VEIPABS007	13.38
2 1/2"	VEIPABS008	37.92
3"	VEIPABS009	47.28
4"	VEIPABS010	59.02

EPDM SEAL KIT



SIZE	PART NO	PRICE
3/8"	BIG/E016	18.91
1/2"	BIG/E020	19.26
3/4"	BIG/E025	24.25
1"	BIG/E032	32.92
1 1/4"	BIG/E040	48.31
1 1/2"	BIG/E050	56.99
2"	BIG/E063	85.73
2 1/2"	BIG/E075	151.34
3"	BIG/E090	166.03
4"	BIG/E110	183.09

VALVE NUT



SIZE	PART NO	PRICE
3/8"-1/2"	VNABS020	3.28
3/4"	VNABS025	4.02
1"	VNABS032	5.05
1 1/4"	VNABS040	6.52
1 1/2"	VNABS050	8.06
2"	VNABS063	12.51
2 1/2"	VNABS075	41.10
3"	VNABS090	41.10
4"	VNABS110	76.65

FPM SEAL KIT



SIZE	PART NO	PRICE
3/8"	BIG/F016	30.27
1/2"	BIG/F020	30.92
3/4"	BIG/F025	38.93
1"	BIG/F032	52.49
1 1/4"	BIG/F040	77.38
1 1/2"	BIG/F050	92.55
2"	BIG/F063	136.95
2 1/2"	BIG/F075	242.38
3"	BIG/F090	265.71
4"	BIG/F110	292.97

VALVE HANDLE



SIZE	PART NO	PRICE
3/8"-1/2"	BDH.020	4.19
3/4"	BDH.025	4.71
1"	BDH.032	6.21
1 1/4"	BDH.040	7.04
1 1/2"	BDH.050	9.04
2"	BDH.063	10.75
2 1/2"	BDH.075	22.28
3"	BDH.090	25.25
4"	BDH.110	33.76

GRIFTON – B-25 ABS CEMENT



SIZE	PART NO	PRICE
500ml*	96.E105080	15.57
500ml=	96.E105081	14.50

* WITH SPECIAL BRUSH
= WITH TT CLOSURE

12mm WIDE PTFE THREAD SEAL TAPE



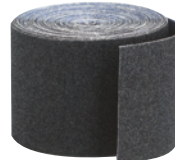
SIZE	PART NO	PRICE
12m	96.50.0012	1.36

GRIFTON CLEANING FLUID



SIZE	PART NO	PRICE
500ml	96.E200021	12.19
5000ml	96.E200035	64.39

5 METRE ROLL OF EMERY TAPE – 80 GRIT



SIZE	PART NO	PRICE
50mm wide	96.51.08015	6.36

GRIFTON CLEANER CLOTHS



SIZE	PART NO	PRICE
1x100	96.E6307417	45.90

GLUE BRUSHES



SIZE	PART NO	PRICE
4mm	96.49.004R	3.42
8mm	96.49.008R	5.26
1/2"	96.49.015F	5.30
1"	96.49.025F	5.50
1 1/2"	96.49.040F	8.26
2"	96.49.050F	9.54
3"	96.49.075F	14.54

GRIFTON MULTI-FUNCTIONAL WIPES



SIZE	PART NO	PRICE
1x75	96.E6307282	24.30

GRIFTON CABLE SAW



SIZE	PART NO	PRICE
	96.E6307762	32.64

GRIFTON CHAMFERING TOOL*



SIZE	PART NO	PRICE
1/2"-2"	96.E6307771	351.66

*FOR SIZES 3/4" AND 1 1/4" THE NEXT SIZE INSERT NEEDS TO BE USED IE
3/4" - 32MM, 1 1/4" - 50MM

GRIFTON DE-BURRING TOOL



SIZE	PART NO	PRICE
	96.E6307765	43.59

GRIFTON AQUA-MAX POOL SEALANT



SIZE	PART NO	PRICE
425g	96.E6308214	34.33

GRIFTON HAND CLEANER



SIZE	PART NO	PRICE
500ml	96.E6307283	16.74

INDUSTRIAL PIPE CLIP – BLACK P/P



TYPE B



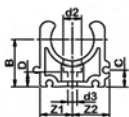
TYPE C



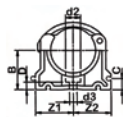
TYPE D

SIZE	PART NO	PRICE	TYPE	D ₂	D ₃	Z ₁	Z ₂	B	C	D	E	Wt (g)
3/8"	961.41.01	1.61	B	10.5	5.5	14	16.5	23.5	10	6	16	6
1/2"	961.41.02	1.92	B	10.5	5.5	16.5	19	23.5	10	6	16	8
3/4"	961.41.03	2.04	B	10.5	5.5	19	21.5	28.5	10	6	16	10
1"	961.41.04	2.25	B	10.5	5.5	24	26.5	32	10	6	16	12
1 1/4"	961.41.05	3.01	C	14	6.5	33.5	33.5	36	10	6.5	22	26
1 1/2"	961.41.06	3.26	C	14	6.5	37	37	39	10	6.5	22	29
2"	961.41.07	4.12	C	17	8.5	44.5	44.5	50	10	10	25	48
2 1/2"	961.41.08	7.89	C	17	8.5	52	52	57.5	10	10	25	73
3"	961.41.09	9.61	C	17	8.5	64.5	64.5	65	10	10	28	107
4"	961.41.10	13.35	C	17	8.5	78	78	82	10	10	28	120
5"	961.41.11	23.54	D		11	120.5	97.5	130		20	35	270
6"	961.41.12	30.03	D		11	136	111	147		20	35	360
8"	961.41.13	51.71	D		13	165	135	177		25	40	560

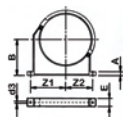
SIZES 1/4" TO 1" INCLUSIVE ARE NOT SUPPLIED WITH RETAINING STRAPS
 SIZES 5" TO 8" INCLUSIVE ARE SUPPLIED COMPLETE WITH STRAP AND BZP STRAP BOLT



TYPE B

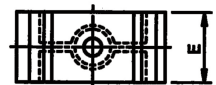
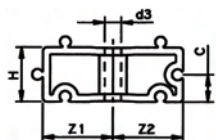


TYPE C



TYPE D

INDUSTRIAL SPACING BLOCK – BLACK P/P



SIZE	PART NO	PRICE	d ₃	Z ₁	Z ₂	H	C	E	Wt (g)
3/8"	961.42.01	0.82	5.5	14	16.5	20	10	16	4.5
1/2"	961.42.02	0.97	5.5	16.5	19	20	10	16	5
3/4"	961.42.03	1.16	5.5	19	21.5	20	10	16	6
1"	961.42.04	1.44	5.5	24	26.5	20	10	16	8
1 1/4"	961.42.05	1.68	6.5	33.5	33.5	20	10	22	16
1 1/2"	961.42.06	2.25	6.5	37	37	20	10	22	17
2"	961.42.07	3.12	8.5	44.5	44.5	20	10	25	24
2 1/2"	961.42.08	4.51	8.5	52	52	20	10	25	28
3"	961.42.09	4.66	8.5	64.5	64.5	20	10	28	42
4"	961.42.10	5.34	8.5	78	78	20	10	28	49

EPDM O RINGS TO SUIT ABS UNIONS



SIZE	PART NO	PRICE
1/2"	G/UN020	2.01
3/4"	G/UN025	2.01
1"	G/UN032	2.25
1 1/4"	G/UN040	2.42
1 1/2"	G/UN050	2.64
2"	G/UN063	2.84
2 1/2"	G/UN075	4.42
3"	G/UN090	4.99
4"	G/UN0110	5.65

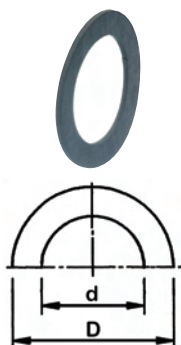
RUBBER LINED PIPE CLIPS



SIZE	PART NO	PRICE
3/8"	962.123.016	2.99
1/2"	962.123.020	3.09
3/4"	962.123.025	3.11
1"	962.123.032	3.15
1 1/4"	962.123.040	3.25
1 1/2"	962.123.050	3.69
2"	962.123.063	4.05
2 1/2"	962.123.075	5.06
3"	962.123.090	6.11
4"	962.123.110	7.93
5"*	962.123.140	8.74
6"*	962.123.160	8.99
8"*	962.123.225	17.80

* 2 SCREW TYPE

EPDM STUB GASKET



SIZE	PART NO	PRICE	D	d	Wt (g)										
1/2"	983.151.02	1.49	33	18	2										
3/4"	983.151.03	1.82	40	23	3										
1"	983.151.04	2.44	48	30	4										
1 1/4"	983.151.05	2.86	58	33	6										
1 1/2"	983.151.06	2.96	70	44	8										
2"	983.151.07	3.07	87	60	11										
2 1/2"	983.151.08	3.27	103	77	16										
3"	983.151.09	3.71	121	85	21										
4"	983.151.10	5.30	147	105	31										
5"	983.151.11A	7.60	183	143	37										
6"	983.151.12	7.72	210	170	43										
8"	983.151.13A	16.09	265	215	80										

STANDARD GASKETS ARE 3.0mm THICK
 PRICES ARE ALSO AVAILABLE ON REQUEST FOR OTHER GASKET MATERIALS (IE FPM, PTFE ETC.)

EPDM FULL FACE GASKET – BS4504 NP10/16



SIZE	PART NO	PRICE	d3	d1	d2	HOLES	Wt (g)						
1/2"	983.171.02Z	2.86	91	22	65	4	22						
3/4"	983.171.03Z	2.95	101	26	75	4	31						
1"	983.171.04Z	3.45	116	36	85	4	34						
1 1/4"	983.171.05Z	4.01	140	43	100	4	48						
1 1/2"	983.171.06Z	5.50	150	50	110	4	51						
2"	983.171.07Z	6.03	165	60	125	4	66						
2 1/2"	983.171.08Z	8.16	185	77	145	4	80						
3"	983.171.09Z	8.37	200	89	160	8	86						
4"	983.171.10Z	12.19	220	115	180	8	95						
5"	983.171.11AZ	14.68	250	141	210	8	108						
6"	983.171.12Z	19.49	286	170	240	8	136						
8" NP10	983.171.13AY	21.71	341	221	295	8	177						
8" NP16	983.171.13AZ	21.71	341	221	295	12	177						

EPDM FULL FACE GASKET – BS10 TABLES D & E



SIZE	PART NO	PRICE	d3	d1	d2	HOLES	Wt (g)						
1/2"	983.171.02W	2.86	91	22	67	4	22						
3/4"	983.171.03W	2.95	101	26	73	4	31						
1"	983.171.04W	3.45	116	36	83	4	34						
1 1/4"	983.171.05W	4.01	140	43	88	4	48						
1 1/2"	983.171.06W	5.50	150	50	98	4	51						
2"	983.171.07W	6.03	165	60	115	4	66						
2 1/2"	983.171.08W	8.16	185	77	127	4	80						
3"	983.171.09W	8.37	200	89	146	4	86						
4" D	983.171.10V	12.19	220	115	178	4	95						
4" E	983.171.10W	12.19	220	115	178	8	95						
5"	983.171.11AW	14.68	250	141	210	8	108						
6"	983.171.12W	19.49	286	170	235	8	136						
8"	983.171.13AW	21.71	341	221	292	8	177						

EPDM FULL FACE GASKET - ASA 150



SIZE	PART NO	PRICE	d3	d1	d2	HOLES	Wt (g)						
1/2"	983.171.02X	2.86	91	22	60	4	22						
3/4"	983.171.03X	2.95	101	26	70	4	31						
1"	983.171.04X	3.45	116	36	79	4	34						
1 1/4"	983.171.05X	4.01	140	43	89	4	48						
1 1/2"	983.171.06X	5.50	150	50	98	4	51						
2"	983.171.07X	6.03	165	60	121	4	66						
2 1/2"	983.171.08X	8.16	185	77	140	4	80						
3"	983.171.09X	8.37	200	89	152	4	86						
4"	983.171.10X	12.19	220	115	190	8	95						
5"	983.171.11AX	14.68	250	141	216	8	108						
6"	983.171.12X	19.49	286	170	241	8	136						
8"	983.171.13AX	21.71	341	221	298	8	177						

STANDARD GASKETS ARE 3.0mm THICK
 OTHER DRILLINGS ARE AVAILABLE TO ORDER
 PRICES ARE ALSO AVAILABLE ON REQUEST FOR OTHER GASKET MATERIALS (IE FPM, PTFE ETC.)

GALVANISED MILD STEEL BACKING RING – BS4504 NP10/16



SIZE	PART NO	PRICE	d3	d1	d2	HOLES	Wt (g)						
1/2"	991.331.02Z	9.54	95	28	65	4	300						
3/4"	991.331.03Z	9.83	104	34	75	4	400						
1"	991.331.04Z	11.00	111	42	85	4	500						
1 1/4"	991.331.05Z	11.24	140	51	100	4	750						
1 1/2"	991.331.06Z	14.72	152	62	110	4	900						
2"	991.331.07Z	19.58	164	78	125	4	1000						
2 1/2"	991.331.08Z	26.90	185	92	145	4	1200						
3"	991.331.09Z	29.76	199	110	160	8	1300						
4"	991.331.10Z	38.55	218	133	180	8	1400						
5"	991.331.11Z	60.79	249	167	210	8	1650						
6"	991.331.12Z	63.53	283	196	240	8	2600						
8" NP10	991.331.13Y	87.04	339	250	295	8	3000						
8" NP16	991.331.13Z	87.04	339	250	295	12	3000						

GALVANISED MILD STEEL BACKING RING – BS10 TABLES D & E



SIZE	PART NO	PRICE	d3	d1	d2	HOLES	Wt (g)						
1/2"	991.331.02W	9.54	95	28	67	4	300						
3/4"	991.331.03W	9.83	104	34	73	4	400						
1"	991.331.04W	11.00	111	42	83	4	500						
1 1/4"	991.331.05W	11.24	140	51	88	4	750						
1 1/2"	991.331.06W	14.72	152	62	98	4	900						
2"	991.331.07W	19.58	164	78	115	4	1000						
2 1/2"	991.331.08W	26.90	185	92	127	4	1200						
3"	991.331.09W	29.76	199	110	146	4	1300						
4" D	991.331.10V	38.55	218	133	178	4	1400						
4" E	991.331.10W	38.55	218	133	178	8	1400						
5"	991.331.11W	60.79	249	167	210	8	1650						
6"	991.331.12W	63.53	283	196	235	8	2600						
8"	991.331.13W	87.04	339	250	292	8	3000						

GALVANISED MILD STEEL BACKING RING – ASA 150



SIZE	PART NO	PRICE	d3	d1	d2	HOLES	Wt (g)						
1/2"	991.331.02X	9.54	95	28	60	4	300						
3/4"	991.331.03X	9.83	104	34	70	4	400						
1"	991.331.04X	11.00	111	42	79	4	500						
1 1/4"	991.331.05X	11.24	140	51	89	4	750						
1 1/2"	991.331.06X	14.72	152	62	98	4	900						
2"	991.331.07X	19.58	164	78	121	4	1000						
2 1/2"	991.331.08X	26.90	185	92	140	4	1200						
3"	991.331.09X	29.76	199	110	152	4	1300						
4"	991.331.10X	38.55	218	133	190	8	1400						
5"	991.331.11X	60.79	249	167	216	8	1650						
6"	991.331.12X	63.53	283	196	241	8	2600						
8"	991.331.13X	87.04	339	250	298	8	3000						