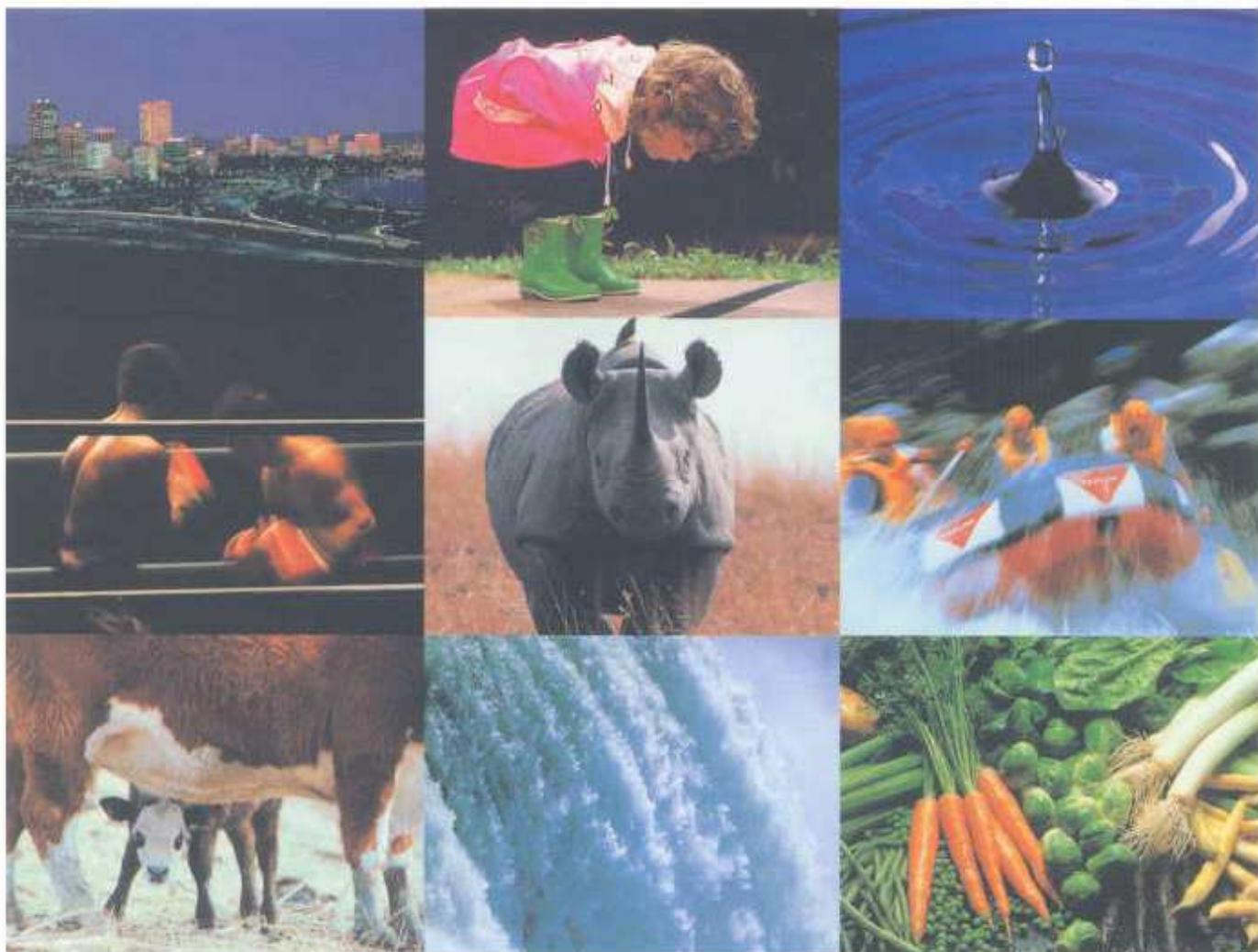


iPLEX

Pipelines

PRODUCT CATALOGUE



iPLEX

Pipelines

1. INTRODUCTION

Iplex systems are tested to the exacting specifications set down by the standards Association of New Zealand and these meet or exceed Australian, British, Japanese, Singapore and Papua New Guinea comparable standard requirements. Strict quality control is maintained by the Iplex Pipelines laboratory.

Iplex systems conforms to the following standards:

■ uPVC Pressure Pipe & Fittings

Australia Standard 1477
British Standard 3505 : 1986
British Standard 3506 : 1986
British Standard 4660 : 1989
British Standard 5481 : 1989
British Standard 4346 : 1969
Japanese Industrial Standard K6741

■ uPVC Soil, Waste & Ventilating Pipe & Fittings

New Zealand Standard 7641 : 1978
New Zealand Standard 7642 : 1971
Australian Standard 1415 : 1974
British Standard 4514 : 1983
British Standard 5255 : 1976
Singapore Standard 213 : 1979
Papua New Guinea Standard 1040 : 1982

Metric Numbering System

All Iplex fittings code numbers include the nominal millimeter dimensions. They are simple and quickly to identify, The order reference number expresses the purpose, shape, size, degree & type into an easily memorized set of digits. All fittings have body markings with the number and all cartons labeled accordingly.

.FIRST DIGIT GROUP

Purpose 1 —. = Soil, Waste & Ventilating System
 8 —. = Pressure System
Shape — 01. = Coupling or Joiner
 — 04. = Junction Tee or Branch
 — 10. = Coupling or Joiner
 — 12. = Female Thread Coupling to PVC & so on.

.SECOND DIGIT GROUP

Size .40. = 40 millimetres nominal pipe size
 .50. = 50mm
 .100. = 100mm & so on

.OTHER DIGIT GROUP

Either Degree .15 = Bend or Junction of 15 degrees (or 165°)
 .45 = 45° (or 135°)
 .88 = 88° (or 92°) & so on
or Size .50 = Second Size for Reducers or Like
or Type . —W = For Fittings with Inspection Openings

101.100.45 is a SWV bend 100mm diameter set at 45° angle.

170.80.50.40.88 is an unequal boss junction 80mm diameter with female top & male bottom joints plus 50mm & 40mm sockets entering at 88° angle to the main pipe.

Ordering

When ordering always use the order reference number and preferably order in carton multiples. The number simplifies writing, telexes and verbal instructions. The description may also be used for double checking but the number always takes preference if they do not agree. Standard carton quantities have been designed for consumer convenience.

2. SPECIFICATION

General

Iplex systems are light in weight and easy to handle. They are clean in use, taste free and odour free.

The material has good thermal insulation properties which inhibit the formation of condensation – an advantage when pipes are installed internally.

Iplex pipes and fittings have an exceptionally smooth inner surface, greatly reducing resistance to flow and giving considerably less tendency to blockage compared with metal systems.

The high chemical resistance and the extreme smoothness of the Iplex system's interior wall surfaces prevent corrosion and scale build-up, meaning that carrying capacities of the system will not diminish with age.

Mechanical Properties

The specific gravity of Iplex uPVC pipe is 1.4. It is approximately one fifth the weight of cast iron pipe. This becomes an important factor in major installations as it greatly simplifies transport and handling considerations.

Ultimate Tensile Strength: 52Mpa

Compressive Strength: 66Mpa

Elastic Modulus: 2750Mpa

Flexural Strength 69 – 110Mpa

Elongation of Yield: 5.5%

Elongation of Break: 80%

Hydrostatic Strength: 140kPa (14m of Water)

Thermal Properties

Expansion of uPVC pipe is significant as the temperature increases. However, this is easily countered at design stage by using of proper fittings. The impact strength of Iplex and fittings decreases with reduction in temperature. This is not normally significant but increased care should be exercised if installations are carried in areas subject to temperatures nearing 0°C.

UPVC remains stable under load to a temperature of approximately 75°C and is therefore satisfactory for use in soil or waste systems where continuous full bore discharges of effluent are unlikely to exceed this figure. The low thermal conductivity of the material does allow full bore discharges a higher temperatures provided the duration of discharge is limited to 2-3 minutes, as in domestic dish washers, but for sterilizing units and commercial dish washers uPVC should not be used on horizontal runs.

Coefficient of Linear Expansion: $8.0 \times 10^{-5}/^{\circ}\text{C}$

Thermal Conductivity: 0.138W/m°C

Specific Heat: 1047J/kg°C

Softening Point: >79°C

Electrical Properties

Iplex pipe is a non-conductor of electricity and should not be used for earthing purposes or dissipation of static charges.

Volume Resistivity: $10\text{O} \cdot \text{Cm}$

Breakdown Voltage: 2000V/mm on 10mm Thick

Surface Resistivity: $10^{13} - 10^{14}\text{O}$

Power Factor: 0.02 at 10^6Hz

Dielectric Constant: 3.0 – 3.2 at 10^6Hz

Chemical Properties

All Iplex components have excellent chemical resistance to acids, alkalis, oxidizing and reducing agents. They are generally resistant to most oils, fats, alcohols and aromatic-free petrol but are unsuitable for use with aromatic and chlorinated hydrocarbons, ketones, esters and cyclic ethers which lead to marked swelling and softening of the material. As uPVC is a non-conductor, it is not subject to electrolytic corrosion when in contact with metal pipes or fittings.

Design

With internally smooth bores and bends, which ensure less turbulent discharges, and a low transference of sound using uPVC polymers, Iplex systems is quieter in operation than its metal counterparts. This gives a real benefit in high rise hotel and apartment installations where ducts close to sleeping areas. It needs no painting for protection but it can be painted to incorporate with colour of the building. Any good exterior finishing paint is suitable and undercoat is unnecessary.

Iplex system is resistant to insects, fungi and bacterial growth. uPVC does not support combustion and when the source of ignition is removed, it is self-extinguishing. It is non-toxic & odourless and has no effect on foodstuffs. It is design to give a material service life of a minimum of 50 years.

DRAINAGE PIPE

100 SOIL, WASTE & VENT PIPE

For draining soil, waste and rainwater. Venting
is another application..

Other pipe length is available upon request.

Size range for BS 5255: 32mm, 40mm & 50mm

Size range for BS 4514: 80mm, 100mm &
150mm

All dimensions are in mm unless otherwise specified

British Standard : BS 5255 & 4514

CODE	DN	OD	Length
100.32.6	32	36.5	5.5m
100.40.6	40	43	5.5m
100.50.6	50	56	5.5m
100.80.6	80	83	5.5m
100.100.6	100	110	5.5m
100.150.6	150	160	5.5m

180 UNDERGROUND DRAINAGE PIPE

For draining soil and waste.

Other pipe length is available upon request.

British Standard : BS 4660

CODE	DN	OD	Length
180.110.6	110	110.0—110.4	5.5m
180.160.6	160	160.0—160.6	5.5m

190 GRAVITY SEWERAGE PIPE

For draining soil, waste and rainwater.

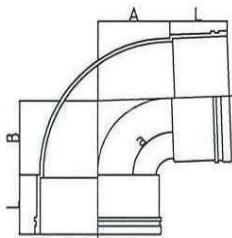
Other pipe length is available upon request.

British Standard : BS 5481

CODE	DN	OD	Length
190.200.6	200	200.3	5.5
190.250.6	250	250.3	5.5
190.315.6	315	315.4	5.5
190.400.6	400	400.5	5.5

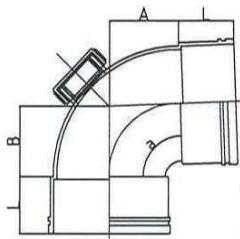
DRAINAGE PIPE FITTINGS

uPVC 88° Bend



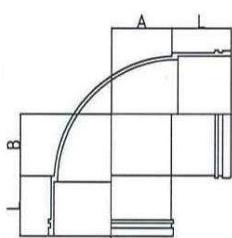
<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO023288BS	32	88°	26	22	22
DO024088BS	40	88°	27	29	29
DO025088BS	50	88°	33	38	38
DO026588W	65	88°	40	58	58
DO028088BS	80	88°	47	93	93
DO0210088BS	100	88°	52	73	73
DO0215088BS	150	88°	78	147	147
DO023245BS	32	45°	24	12	12
DO024045BS	40	45°	29	13	13
DO025045BS	50	45°	33	16	16
DO028045BS	80	45°	47	29	29
DO0210045BS	100	45°	51	28	28
DO0215045BS	150	45°	77	39	39

uPVC 88° Door Bend



<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO013288BS	32	88°	26	22	22
DO014088BS	40	88°	27	29	29
DO015088BS	50	88°	35	36	36
DO016588W	65	88°	40	58	58
DO018088BS	80	88°	54	86	86
DO0110088BS	100	88°	52	73	73
DO0115088BS	150	88°	79	146	146
DO013245BS	32	45°	24	12	12
DO014045BS	40	45°	29	13	13
DO015045BS	50	45°	33	16	16
DO018045BS	80	45°	51	25	25
DO0110045BS	100	45°	52	27	27
DO0115045BS	150	45°	77	39	39

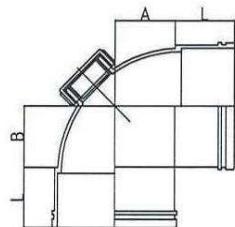
uPVC 90° Elbow



<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO023290BS	32	90°	26	15	15
DO024090BS	40	90°	30	21	21
DO025090BS	50	90°	32	28	28
DO028090BS	80	90°	48	41	41
DO0210090BS	100	90°	55	58	58
DO0215090BS	150	90°	83	80	80

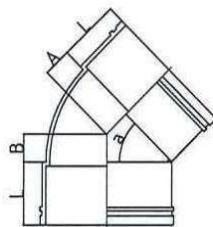
DRAINAGE PIPE FITTINGS

uPVC 90° Door Elbow



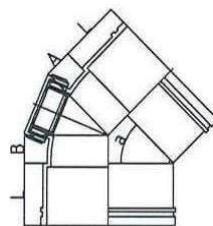
<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO16105090BS	100 x 50	90°	57	59	59

uPVC 45° Bend



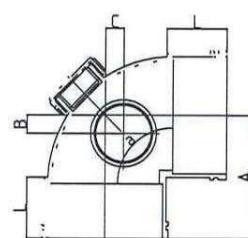
<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO023245BS	32	45°	26	10	10
DO024045BS	40	45°	31	11	11
DO025045BS	50	45°	35	14	14
DO028045BS	80	45°	54	21	21
DO0210045BS	100	45°	55	24	24
DO0215045BS	150	45°	77	39	39

uPVC 45° Door Bend



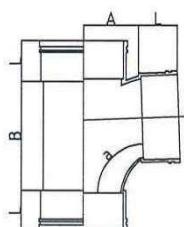
<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO013245BS	32	45°	26	10	10
DO014045BS	40	45°	31	11	11
DO015045BS	50	45°	35	14	14
DO018045BS	80	45°	54	21	21
DO0110045BS	100	45°	55	24	24
DO0115045BS	150	45°	77	39	39

uPVC 90° Side Vent Door Elbow



<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>	<u>C</u>
DO15105090BS	100 x 50	90°	57	116	17	17

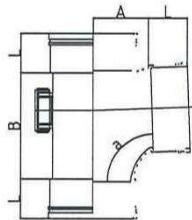
uPVC 88° Tee



<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO243288BS	32	88°	26	30	48
DO244088BS	40	88°	30	32	60
DO245088BS	50	88°	35	35	61
DO248088BS	80	88°	50	66	101
DO2410088BS	100	88°	53	75	143

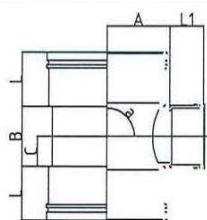
DRAINAGE PIPE FITTINGS

uPVC 88° Door Tee



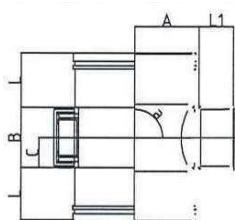
<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>A</u>	<u>B</u>
DO183288BS	32	88°	26	30	48
DO184088BS	40	88°	30	32	60
DO185088BS	50	88°	35	35	61
DO186588W	65	88°	40	62	92
DO188088BS	80	88°	50	66	101
DO1810088BS	100	88°	53	75	143
DO1815088BS	150	88°	80	142	225

uPVC 90° Reducing Tee



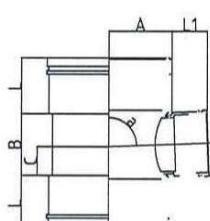
<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>L1</u>	<u>A</u>	<u>B</u>
DO25403290BS	40 x 32	90°	30	25	24	39
DO25503290BS	50 x 32	90°	33	25	28	52
DO25504090BS	50 x 40	90°	33	28	28	52

uPVC 90° Reducing Door Tee



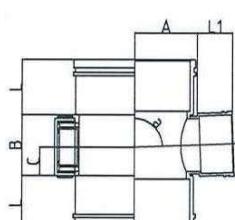
<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>L1</u>	<u>A</u>	<u>B</u>
DO17503290BS	50 x 32	90°	33	25	28	52
DO17504090BS	50 x 40	90°	33	28	28	52

uPVC 88° Reducing Tee



<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>L1</u>	<u>A</u>	<u>B</u>
DO42805088BS	80 x 50	88°	48	29	45	60
DO42105088BS	100 x 50	88°	53	35	55	59

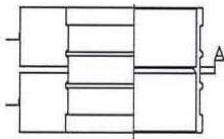
uPVC 88° Reducing Door Tee



<u>Code</u>	<u>Size</u>	<u>Angle</u>	<u>L</u>	<u>L1</u>	<u>A</u>	<u>B</u>
DO17805088BS	80 x 50	88°	48	29	45	60
DO17105088BS	100 x 50	88°	53	35	55	59
DO17151088W	150 x 100	88°	53	35	55	59

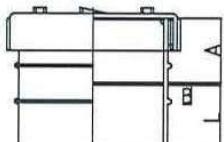
DRAINAGE PIPE FITTINGS

uPVC Straight Socket



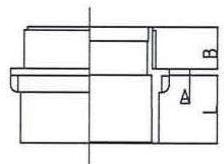
<u>Code</u>	<u>Size</u>	<u>L</u>	<u>A</u>
DO5732BS	32	25	3
DO5740BS	40	28	1
DO5750BS	50	31	4
DO5765W	65	40	3
DO5780BS	80	45	3
DO57100BS	100	52	5
DO57150BS	150	95	6

uPVC Access Pipe Caps



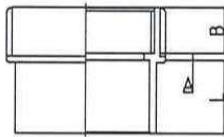
<u>Code</u>	<u>Size</u>	<u>Thread</u>	<u>L</u>	<u>A</u>	<u>B</u>
		<u>BSP</u> (inches)			
DO6340BS	40	1-1/4"	29	18	2
DO6350BS	50	1-1/2"	32	18	2
DO6380BS	80	2"	35	19	2
DO63100BS	100	4"	50	50	2

uPVC Male Socket



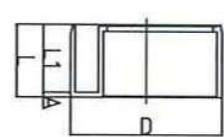
<u>Code</u>	<u>Size</u>	<u>Thread</u>	<u>L</u>	<u>A</u>	<u>B</u>
		<u>BSP</u> (inches)			
DO663232BS	32	1-1/4"	25	3	19
DO664040BS	40	1-1/2"	28	3	19
DO665050BS	50	2"	31	3	19

uPVC Female Socket



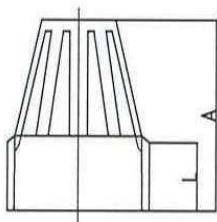
<u>Code</u>	<u>Size</u>	<u>Thread</u>	<u>L</u>	<u>A</u>	<u>B</u>
		<u>BSP</u> (inches)			
DO673232BS	32	1-1/4"	25	2	21
DO674040BS	40	1-1/2"	29	2	22
DO675050BS	50	2"	32	3	20

uPVC Bushing

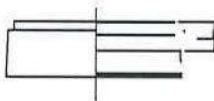


<u>Code</u>	<u>Size</u>	<u>L</u>	<u>L1</u>	<u>A</u>	<u>D</u>
DO733220BS	32 x 20	25	21	4	37
DO734032BS	40 x 32	29	27	2	43
DO735032BS	50 x 32	30	27	3	56
DO735040BS	50 x 40	30	27	3	56
DO736550W	65 x 50	40	37	3	69
DO738050BS	80 x 50	48	45	3	82
DO738065W	80 x 65	48	45	3	83
DO7310050BS	100 x 50	53	33	20	110
DO7310080BS	100 x 80	53	48	5	110
DO73150100W	150 x 100	76	50	26	160

DRAINAGE PIPE FITTINGS

uPVC Vent Cowl

<u>Code</u>	<u>Size</u>	<u>L</u>	<u>A</u>
DO7940BS	40	22	61
DO7950BS	50	25	64
DO7980BS	80	25	73
DO79100BS	100	25	85
DO79150BS	150	25	100

Seal Ring Adaptor

<u>Code</u>	<u>Size</u>	<u>L</u>
DO6580BS	80	20
DO65100BS	100	20
DO65150BS	150	26

PRESSURE PIPE

800 GENERAL PURPOSE PRESSURE PIPE

All dimensions are in mm unless otherwise specified

British Standard : BS 3505

For fluid delivery in general purposes with pressure rating up to 12bar for Class D, 15bar for Class E & 18bar for Class F and solvent welding to PVC fittings.

Other pipe length is available upon request.

Class or pressure rating should be specified in your order.

CODE	DN	OD	Length
800.15.5.5M	15	21.3	5.5m
800.20.5.5M	20	26.8	5.5m
800.25.5.5M	25	33.6	5.5m
800.32.5.5M	32	42.3	5.5m
800.40.5.5M	40	48.3	5.5m
800.50.5.5M	50	60.3	5.5m
800.65.5.5M	65	75.3	5.5m
800.80.5.5M	80	88.9	5.5m
800.100.5.5M	100	114.3	5.5m
800.125.5.5M	125	140.2	5.5m
800.150.5.5M	150	168.3	5.5m
800.200.5.5M	200	200	5.5m
800.250.5.5M	250	250.3	5.5m
800.300.5.5M	300	315.5.	5.5m

890 INDUSTRIAL PURPOSE PRESSURE PIPE

British Standard : BS 3506

For fluid delivery in industrial purposes with pressure rating up to 6.0bar for Class B, 9.0bar for Class C & non-pressure for Class O and solvent welding to PVC fittings.

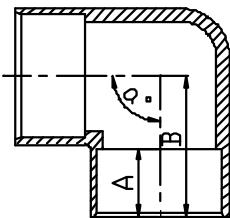
Other pipe length is available upon request.

Class or pressure rating should be specified in your order.

CODE	DN	OD	Length
890.15.5.5M	15	21.3	5.5m
890.20.5.5M	20	26.8	5.5m
890.25.5.5M	25	33.6	5.5m
890.32.5.5M	32	42.3	5.5m
890.40.5.5M	40	48.3	5.5m
890.50.5.5M	50	60.3	5.5m
890.65.5.5M	65	75.3	5.5m
890.80.5.5M	80	88.9	5.5m
890.100.5.5M	100	114.3	5.5m
890.125.5.5M	125	140.2	5.5m
890.150.5.5M	150	168.3	5.5m
890.200.5.5M	200	200	5.5m
890.250.5.5M	250	250.3	5.5m
890.300.5.5M	300	315.5.	5.5m

801 PLAIN ELBOW

For solvent welding to PVC pipe.



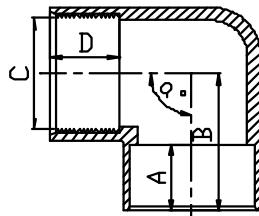
All dimensions are in mm unless otherwise specified

British Standard : BS 4346

CODE	a°	A	B
801.15.45	45	19	28
801.15.90	90	17	28
801.20.45	45	23	30
801.20.90	90	20	36
801.25.45	45	24	35
801.25.90	90	23	42
801.32.45	45	35	45
801.32.90	90	27	48
801.40.45	45	40	52
801.40.90	90	30	54
801.50.45	45	45	60
801.50.90	90	40	72
801.65.90	90	48	87
801.80.45	45	53	80
801.80.90	90	53	110
801.100.45	45	61	90
801.100.90	90	64	124
801.150.45	45	88	126
801.150.90	90	88	175

808 FAUCET ELBOW

For solvent welding to PVC pipe & screw on other connection.

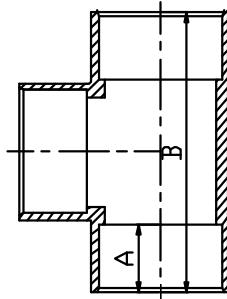


CODE	a°	A	B	C	D
808.15.90	90	18	29	$\frac{1}{2}''$	16
808.20.90	90	20	36	$\frac{3}{4}''$	19
808.25.90	90	24	44	1"	24

PRESSURE PIPE FITTINGS

804 PLAIN TEE

For solvent welding to PVC pipe.



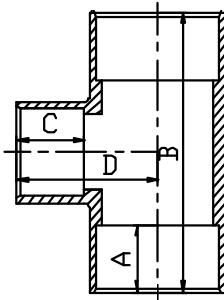
All dimensions are in mm unless otherwise specified

British Standard : BS 4346

CODE	A	B
804.15	17	56
804.20	20	72
804.25	23	84
804.32	27	96
804.40	30	108
804.50	40	143
804.65	48	178
804.80	53	200
804.100	64	250
804.150	88	350

805 REDUCING TEE

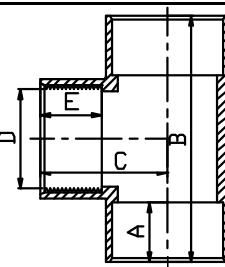
For solvent welding to PVC pipe.



CODE	A	B	C	D
805.20.15	23	75	23	37
805.25.15	24	76	28	36
805.25.20	27	87	28	43
805.32.15	29	100	19	45
805.32.20	29	100	22	47
805.32.25	29	100	25	50
805.40.15	32	99	19	49
805.40.20	32	99	22	51
805.40.25	33	96	25	57
805.40.32	33	111	32	57
805.50.15	37	97	20	51
805.50.20	38	120	22	60
805.50.25	38	120	24	60
805.50.32	37	119	28	63
805.50.40	37	125	32	65
805.65.32	48	178	32	89
805.65.40	48	178	37	89
805.80.40	53	200	33	81
805.80.50	53	200	38	87
805.150.100	88	350	61	145

807 FAUCET TEE

For solvent welding to PVC pipe & screw on other connection.



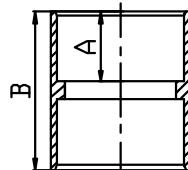
All dimensions are in mm unless otherwise specified

British Standard : BS 4346

CODE	A	B	C	D	E
807.20	20	72	36	3/4"	19
807.25	29	94	47	1"	23

810 COUPLING

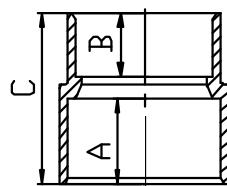
To connect by solvent welding two lengths of pipe.



CODE	A	B
810.15	26	56
810.20	20	43
810.25	23	49
810.32	28	58
810.40	31	66
810.50	36	76
810.65	48	103
810.80	51	108
810.100	61	128
810.150	88	184

823 REDUCING COUPLING

To connect by solvent welding two lengths of pipe with different size.

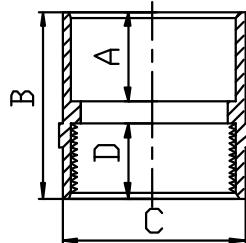


CODE	A	B	C
823.20.15	22	20	46
823.25.15	23	20	48
823.25.20	24	21	51
823.32.25	33	30	70
823.40.32	36	33	74
823.50.25	37	28	71
823.50.32	38	29	78
823.50.40	38	32	78
823.65.50	48	40	94
823.80.50	55	39	107
823.80.65	55	47	115
823.100.50	65	39	122
823.100.80	64	52	117
823.150.100	103	61	175

PRESSURE PIPE FITTINGS

806 FAUCET COUPLING

For solvent welding to PVC pipe & screw on other connection.



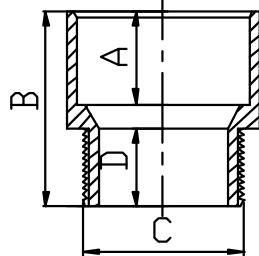
All dimensions are in mm unless otherwise specified

British Standard : BS 4346

CODE	A	B	C	D
806.15	25	46	½"	19
806.20	26	48	¾"	19
806.25	30	58	1"	30
806.32	31	59	1¼"	26
806.40	37	67	1½"	27
806.50	40	71	2"	27
806.80	51	94	3"	36
806.100	61	112	4"	41

813 VALVE SOCKET

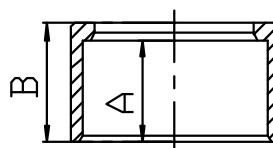
For solvent welding to PVC pipe & screw on other connection.



CODE	A	B	C	D
813.15	25	49	½"	17
813.20	33	58	¾"	16
813.25	34	64	1"	19
813.32	29	63	1¼"	23
813.40	32	67	1½"	23
813.50	38	78	2"	27
813.80	51	94	3"	35
813.100	61	111	4"	40

824 REDUCING BUSH

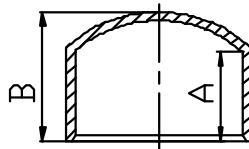
For solvent welding to PVC pipes & fittings.



CODE	A	B
824.20.15	18	20
824.20.15	20	23
824.25.20	20	23
824.32.20	20	29
824.32.25	23	28
824.40.25	27	30
824.40.32	27	30
824.50.25	28	37
824.50.40	41	45
824.65.50	37	44
824.80.50	37	52
824.100.50	43	61
824.100.80	50	63

830 END CAP

For solvent welding to PVC pipes.



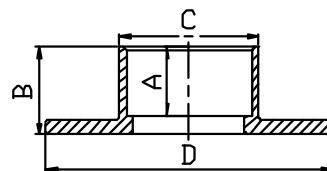
All dimensions are in mm unless otherwise specified

British Standard : BS 4346

CODE	A	B
830.15	25	38
830.20	32	35
830.25	34	39
830.32	28	35
830.40	31	38
830.50	37	52
830.80	54	73
830.100	64	91

825 FULL FACE FLANGE

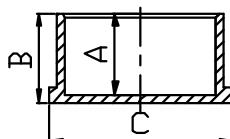
For solvent welding to PVC pipe & flange joint to other connection.



CODE	A	B	C	D
825.50	37	43	72	150
825.80	60	68	106	184

826 STUB FLANGE

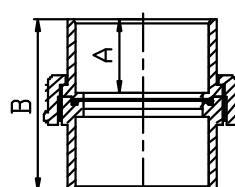
For solvent welding to PVC pipe & flange joint to other connection with ring flange.



CODE	A	B	C
826.65	48	55	106
826.80	60	69	129
826.100	63	77	160
826.150	88	98	215

811 BARREL UNION

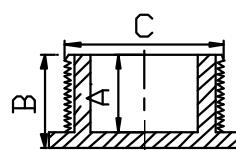
To connect by solvent welding two lengths of pipe.



CODE	A	B
811.15	27	69
811.20	27	69
811.25	28	72
811.32	31	77
811.40	33	81
811.50	37	89

837 SCREW PLUG

For solvent welding to PVC pipe & screw on other connection.



CODE	A	B	C
837.20	20	25	9/16"

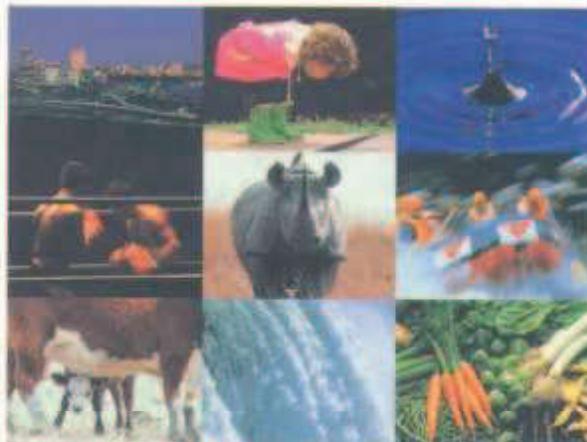
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