Umm Al Quwain, UAE www.hycountpvc.com +971 6529 9340



Catalogue

2026

hycount

Introduction

Incorporated in 2008 by young, dynamic, and qualified professionals, Hycount Pipes offers a comprehensive product range including PE pipes manufactured to the highest international standards. This quality is the result of our continuous development and innovation in the piping and ducting industries. Today, Hycount manufactures a comprehensive range of uPVC and HDPE piping systems, including pressure pipes, drainage pipes, duct pipes, fabricated fittings, and accessories for infrastructure, utility, industrial, and construction applications.

Hycount products have been used extensively in the irrigation, construction, plumbing, and landscaping industries and are playing a significant role in the development of the Gulf region and Middle East

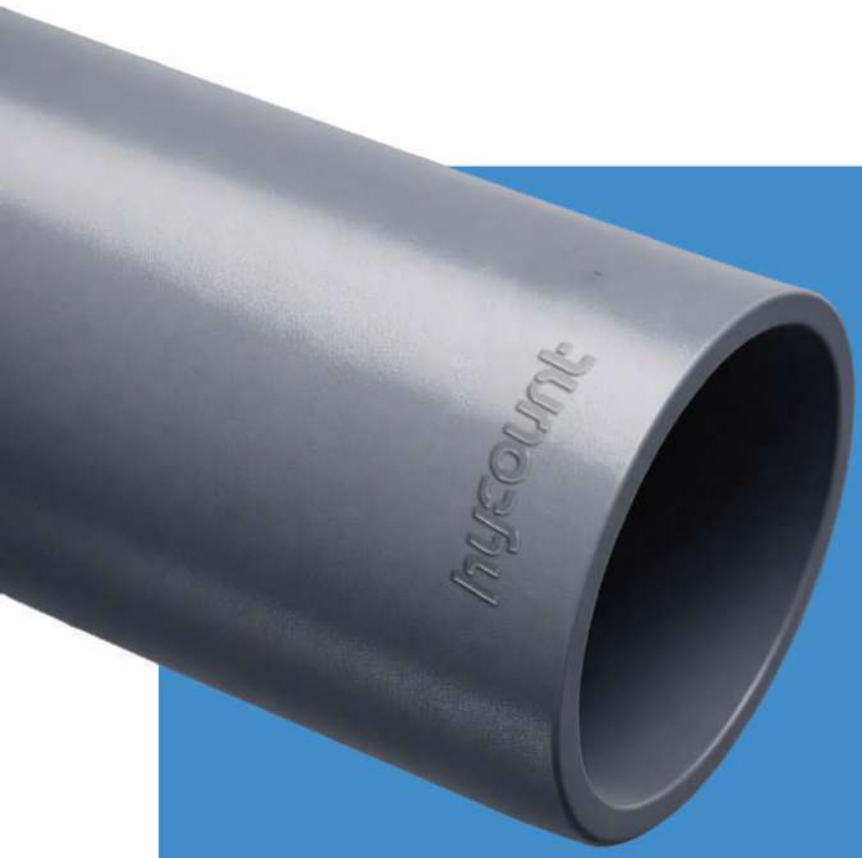
Quality Control

Hycount places great emphasis on customer satisfaction through quality products. Hycount's uPVC and HDPE piping systems are engineered to meet the demanding environmental and operational conditions of the GCC region. Our commitment to quality, reliability, and performance is supported by rigorous in-house quality control and independent third-ptarty testing.

In-House Quality Control

Hycount products are tested to maintain the quality level in the permissible standard tolerances. We perform the tests as per relevant international standards (BS, DIN, ISO) and acceptance sampling procedures for production quality control and lot testing are done during all production operations.





The following quality control tests are performed in our in-house laboratory for uPVC and HDPE piping systems in accordance with relevant international standards.

uPVC Testing

- Physical Test
- Dimensional Check
- Pressure Test
- Impact Test
- Heat Reversion Test
- Vicat Softening Temperature Test
- Dichloromethane Test

HDPE Testing

- Physical Test
- Dimensional Check
- Hydrostatic Pressure Test
- Melt Flow Index (MFI) Test
- Oxidation Induction Time (OIT) Test
- Density Test
- Carbon Black Dispersion Test

Apart from this, our products are being tested / assessed by BSI / other certification bodies on a regular basis.

A Complete Solution

With the growing demand to cater to the construction industry Hycount offers a complete range of uPVC and HDPE piping solutions manufactured in accordance with internationally recognized standards. Our product portfolio includes pressure pipes, drainage systems, ducting solutions, fabricated fittings, and custom-engineered products, providing a complete piping solution for infrastructure, utility, industrial, and construction projects



A Name For
Quality And Reliability

We, Hycount PVC Pipes Factory L.L.C., has been manufacturing uPVC pipes since 2008. The factory, located at New Industrial Area, UAQ, U.A.E. is equipped with the most modern machinery for the extrusion of uPVC/PVC Pipes.

The production is continuously monitored for quality assurance which ensures that the pipes are produced in accordance with the international standards and specifications such as DIN (German Standards), BS (British Standards), BS EN (European Standards), ASTM (American Standards), ISO (International Standards), etc. to suit various applications including pressure pipes for water distribution, soil/waste and ventilating pipes, underground drain and sewer pipes, cables and conduit for electrical wiring installation.

Mission

To deliver certified, specification-grade piping systems through disciplined manufacturing, rigorous quality control and dependable logistics — so builders and engineers can design and deliver safe projects without supply or compliance risk.

Vision

To be the GCC's benchmark for engineered piping solutions: the trusted, certified brand specified on major infrastructure, government and industrial projects — expanding to export markets while maintaining manufacturing integrity and dealer-led distribution.

Strength

Our Strength lies in pre-empting customer expectations and product demands. Hycount today is a hallmark of trust and reliability. This is why Hycount employs highly skilled and experienced workforce, Hycount utilizes the most advanced technology on its production line and maintains a modern management system



uPVC PIPES & FITTINGS

Engineered for Reliability, Performance & Long-Term Durability.

Hycount uPVC Pipes and Fittings are manufactured to meet the demanding requirements of water supply, drainage, sewerage, ducting, and industrial applications. Produced using high-quality raw materials and advanced manufacturing technology, our piping systems are designed to deliver consistent performance, dimensional accuracy, and long service life.

Manufactured in accordance with internationally recognized standards, Hycount uPVC systems provide excellent resistance to corrosion, chemicals, weathering, and environmental conditions. Their smooth internal surface ensures efficient flow with minimal friction loss, while their lightweight construction enables easy handling and installation.

Key Features

- High strength and durability
- Corrosion and chemical resistant
- Smooth bore for efficient flow performance
- Lightweight and easy to install
- Leak-proof jointing options
- Low maintenance and long service life
- Suitable for pressure, drainage, ducting, and industrial applications

Hycount delivers reliable uPVC piping solutions trusted across infrastructure, utility, construction, and industrial projects throughout the region.



Standards

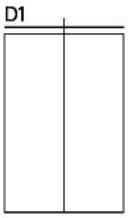
Hycount high-pressure, drainage, duct, PVC, and uPVC pipes and fittings are manufactured in accordance with the following standards:

Pipes & Fittings

- **DIN 8062 : 2009** Unplasticized polyvinyl chloride (PVC-U) pipes; dimensions
- **DIN 8061 : 2009** Unplasticized polyvinyl chloride pipes - General quality requirements and testing
- **BSEN 1452 : 2009** Plastic piping system for potable water (PVC-U)
- **ASTM D 1785** Standard Specification for Polyvinyl Chloride (PVC) Plastic Pipe, Schedules 40, 80, and 120
- **ASTM D 2241 96A** Polyvinyl Chloride (PVC) Pressure Rated Pipes, (SDR Series)
- **ASTM D 2467** Standard Specification for Polyvinyl Chloride (PVC) Plastic Pipe Fittings, Schedule 80
- **BS 3505 : 1986** Specification for unplasticized Polyvinyl Chloride (PVC-U) pressure pipes for cold potable water
- **BS 3506 : 1969** Specification for unplasticized PVC pipe for industrial uses
- **NEMA TC-2,6&8** PVC u Duct Pipe for telephone duct & Electrical conduit
- **BS 4346 : 1982** Joints and fittings for use with unplasticized PVC pressure pipes. Specification for solvent cement
- **ASTM D 2464** Standard Specification for Threaded Polyvinyl Chloride (PVC) Plastic Pipe Fittings, Schedule 80
- **DIN 8063: 2009** Pipe Joints and Pipe Fittings for Pipes under Pressure made of Unplasticized Polyvinyl Chloride (Rigid PVC)
- **ASTM D 2466** Standard Specification for Polyvinyl Chloride (PVC) Plastic Pipe Fittings, Schedule 40
- **ISO 4422-2** uPVC Pipes and fittings for water supply Superseded by ISO 1452-2/BSEN ISO 1452
- **ASTM D 2241 - 09** Standard Specification for Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)
- **BSEN 1401-1 : 2009** "Plastic Piping Systems for Non-pressure Underground Drainage and Sewerage- Unplasticized Polyvinyl Chloride (PVC-U). Specifications for Pipes, Fittings and the System"
- **BSEN 1329-1:2014** uPVC drainage pipes for above ground drainage.
- **BS - 5255** MuPVC and ABS Waste Pipe.
- **BS 5481 : 1977** Specification for Unplasticized PVC Pipe and Fitting for Gravity Sewers

For Water Supply, Irrigation, Drainage & Duct Cabling

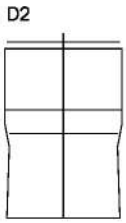




Standard Pressure Pipe

Designed for reliable water supply and irrigation systems.
Smooth internal surface ensures efficient flow with minimal friction loss.
Durable, pressure-resistant build for long-term underground installation.

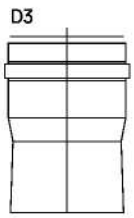




Socketed Joint Pipe

Integrated socket design for secure and leak-resistant connections.
Allows faster installation and improved joint alignment.
Ideal for structured pipeline layouts requiring stable coupling.





Reinforced Ring-Fit Pipe

Enhanced top profile with reinforced ring support for heavy-duty applications.
Built for higher load-bearing capacity and underground stress resistance.
Provides added joint stability and durability.

Pressure Pipes System

ISO 161/1 METRIC SERIES

Outside Diameter	Nominal Wall Thickness			
	Class: 4	Class: 6	Class: 10	Class. 16
20 mm	-	-	-	1.6 mm
25 mm	-	-	-	1.9 mm
32 mm	-	-	-	2.4 mm
40 mm	-	-	1.9 mm	3.0 mm
50 mm	-	1.5 mm	2.4 mm	3.2 mm
63 mm	-	1.7 mm	2.5 mm	3.8 mm
75 mm	-	1.9 mm	3.0 mm	4.5 mm
90 mm	1.7 mm	2.2 mm	3.5 mm	5.4 mm
110 mm	2.0 mm	2.7 mm	4.2 mm	6.6 mm
125 mm	2.5 mm	3.1 mm	4.8 mm	7.4 mm
140 mm	2.8 mm	3.5 mm	5.4 mm	8.3 mm
160 mm	2.8 mm	4.0 mm	6.2 mm	9.5 mm
180 mm	3.6 mm	4.4 mm	6.9 mm	10.7 mm
200 mm	2.9 mm	4.9 mm	7.7 mm	11.9 mm
225 mm	4.0 mm	5.5 mm	8.6 mm	13.4 mm
250 mm	4.5 mm	6.2 mm	9.6 mm	14.8 mm
280 mm	5.0 mm	6.9 mm	10.7 mm	16.6 mm
315 mm	5.2 mm	7.7 mm	12.1 mm	18.7 mm
355 mm	-	8.7 mm	13.6 mm	21.1 mm
400 mm	-	9.8 mm	15.3 mm	23.7 mm
450 mm	-	11.0 mm	17.2 mm	26.7 mm

Working pressures are given for a temperature of 20°C

This specification is supplied in 6 meter with solvent weld socket, rubber ring socket & plain end in dark gray. Length can be customized according to customer's requirements.

uPVC PRESSURE PIPES - DIN 8061/62

BASED ON ISO 161/1 METRIC SERIES

Outside Diameter	Nominal Wall Thickness			
	Series 2 PN: 4	Series 3 PN:6	Series 4 PN: 10	Series 5 PN: 16
20 mm	-	-	-	1.5 mm
25 mm	-	-	-	1.9 mm
32 mm	-	-	1.6 mm	2.4 mm
40 mm	-	-	1.9 mm	3.0 mm
50 mm	-	1.5 mm	2.4 mm	3.7 mm
63 mm	-	1.9 mm	3.0 mm	4.7 mm
75 mm	1.5 mm	2.2 mm	3.6 mm	5.6 mm
90 mm	1.8 mm	2.7 mm	4.3 mm	6.7 mm
110 mm	2.2 mm	3.2 mm	5.3 mm	8.1 mm
125 mm	2.5 mm	3.7 mm	6.0 mm	9.2 mm
140 mm	2.8 mm	4.1 mm	6.7 mm	10.3 mm
160 mm	3.2 mm	4.7 mm	7.7 mm	11.8 mm
180 mm	3.6 mm	5.3 mm	8.6 mm	13.3 mm
200 mm	3.9 mm	5.9 mm	9.6 mm	14.7 mm
225 mm	4.4 mm	6.6 mm	10.8 mm	16.6 mm
250 mm	4.9 mm	7.3 mm	11.9 mm	18.4 mm
280 mm	5.5 mm	8.2 mm	13.4 mm	20.6 mm
315 mm	6.2 mm	9.2 mm	15.0 mm	23.2 mm
355 mm	7.0 mm	10.4 mm	16.9 mm	26.1 mm
400 mm	7.9 mm	11.7 mm	19.1 mm	29.4 mm
450 mm	8.8 mm	13.2 mm	21.5 mm	

Pressure rating is based on working pressure at 20°C

"Pipes to this specification will be supplied in 6 meters with solvent weld socket, rubber ring socket or plain end in dark grey. Lengths can be customized according to customer requirements."

UPVC PRESSURE PIPES In accordance with BS EN 1452-2:2009

(Formerly BS 3505)
Equal to ISO 4422-2:1996
(Based on ISO 4065)

Nominal Outside Diameter (mm)	Nominal (minimum) Wall Thickness							
	S 16.7 (SDR 34.4)		S 16 (SDR 33)	S 12.5 (SDR26)	S 10 (SDR 21)	S 8 (SDR 17)	S 6.3 (SDR 13.6)	S 5 (SDR 11)
	Nominal Pressure PN based on service (design) coefficient C = 2.5							
			PN 6	PN 8	PN 10	PN 12.5	PN 16	PN 20
20 mm	-		-	-	-	-	1.5 mm	1.9 mm
25 mm	-		-	-	-	1.5 mm	1.9 mm	2.3 mm
32 mm	-		-	1.5 mm	1.6 mm	1.9 mm	2.4 mm	2.9 mm
40 mm	-		1.5 mm	1.6 mm	1.9 mm	2.4 mm	3.0 mm	3.7 mm
50 mm	-		1.6 mm	2.0 mm	2.4 mm	3.0 mm	3.7 mm	4.6 mm
63 mm	-		2.0 mm	2.5 mm	3.0 mm	3.8 mm	4.7 mm	5.8 mm
75 mm	-		2.3 mm	2.9 mm	3.6 mm	4.5 mm	5.6 mm	6.8 mm
90 mm	-		2.8 mm	3.5 mm	4.3 mm	5.4 mm	6.7 mm	8.2 mm
	Nominal Pressure PN based on service (design) coefficient C = 2.0							
	PN 6	PN 7.5	PN 8	PN 10	PN 12.5	PN 16	PN 20	PN 25
110 mm	2.7 mm	3.2 mm	3.4 mm	4.2 mm	5.3 mm	6.6 mm	8.1 mm	10.0 mm
125 mm	3.1 mm	3.7 mm	3.9 mm	4.8 mm	6.0 mm	7.4 mm	9.2 mm	11.4 mm
140 mm	3.5 mm	4.1 mm	4.3 mm	5.4 mm	6.7 mm	8.3 mm	10.3 mm	12.7 mm
160 mm	4.0 mm	4.7 mm	4.9 mm	6.2 mm	7.7 mm	9.5 mm	11.8 mm	14.6 mm
180 mm	4.4 mm	5.3 mm	5.5 mm	6.9 mm	8.6 mm	10.7 mm	13.3 mm	16.4 mm
200 mm	4.9 mm	5.9 mm	6.2 mm	7.7 mm	9.6 mm	11.9 mm	14.7 mm	18.2 mm
225 mm	5.5 mm	6.6 mm	6.9 mm	8.6 mm	10.8 mm	13.4 mm	16.6 mm	-
250 mm	6.2 mm	7.3 mm	7.7 mm	9.6 mm	11.9 mm	14.8 mm	18.4 mm	-
280 mm	6.9 mm	8.2 mm	8.6 mm	10.7 mm	13.4 mm	16.6 mm	20.6 mm	-
315 mm	7.7 mm	9.2 mm	9.7 mm	12.1 mm	15.0 mm	18.7 mm	23.2 mm	-
355 mm	8.7 mm	10.4 mm	10.9 mm	13.6 mm	16.9 mm	21.1 mm	26.1 mm	-
400 mm	9.8 mm	11.7 mm	12.3 mm	15.3 mm	19.1 mm	23.7 mm	29.4 mm	-
450 mm	11.0 mm	13.2 mm	13.8 mm	17.2 mm	21.5 mm	26.7 mm	33.1 mm	

- Pipes are available in standard lengths of 6 meters
- Overall Service (design) coefficient C = 2.5 used for sizes up to 90mm & C = 2.0 used for above 90 mm.
- Pipes are available with plain ends, Solvent Weld Sockets & Rubber Ring (From 75 mm & above) Sockets.
- Working Pressures are given for a temperature at 20°C.
- Colour: Dark Grey

UPVC PRESSURE PIPE SYSTEM

For cold potable water in accordance to
BS 3505: 1986/BS3506 : 1969
Imperial range - BS EN 1452: 2009

Normal Size	Mean Outside Diameter		Nominal Wall Thickness									
			Class 0 (non pressure)		Class B 6.0 bar*		Class C 9.0 bar*		Class D 12.0 bar*		Class E 15.0 bar*	
			Individual Value									
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Inches	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
½	21.2	21.5									1.7	2.1
¾	26.6	26.9									1.9	2.5
1	33.4	33.7									2.2	2.7
1¼	42.1	42.4							2.2	2.7	2.7	3.2
1½	48.1	48.4	1.8	2.2					2.5	3.0	3.1	3.7
2	60.2	60.5	1.8	2.2			2.5	3.0	3.1	3.7	3.9	4.5
2½	75.0	75.3	1.8	2.2			3.0	3.5	3.9	4.5	4.8	5.5
3	88.7	89.1	1.8	2.2	2.9	3.4	3.5	4.1	4.6	5.3	5.7	6.6
4	114.1	114.5	2.3	2.8	3.4	4.0	4.5	5.2	6.0	6.9	7.3	8.4
5	140.0	140.4	2.6	3.7	3.8	4.4	5.5	6.4	7.3	8.4	9.0	10.4
6	168.0	168.5	3.1	3.7	4.5	5.2	6.6	7.6	8.8	10.2	10.8	12.5
7	193.5	194.0	3.1	3.7	5.2	6.0	7.7	8.9	10.1	11.7	12.3	14.5
8	218.8	219.4	3.1	3.7	5.3	6.1	7.8	9.0	10.3	11.9	12.6	14.5
9	244.1	244.8	3.1	3.7	5.9	6.8	8.7	10.0	11.5	13.3	14.1	16.3
10	272.6	273.4	3.1	3.7	6.6	7.6	9.7	11.2	12.8	14.8	15.7	18.1
12	323.4	324.3	3.1	3.7	7.8	9.0	11.5	13.3	15.2	17.5	18.7	21.6
14	355.0	356.0	3.6	4.2	8.5	9.8	12.6	14.5	16.7	19.2	20.5	23.6
16	405.9	406.9	4.1	4.8	9.7	11.2	14.5	16.7	19.0	21.9	23.4	27.0

Stocks are available with plain ends, Solvent Sockets & Rubber Ring Sockets in Standard Lengths of 6 meters

Pressure ratings for working pressures at 20°C

Class C	9.0 bar	130.0 lbf/in²	300 ft head
Class D	12.0 bar	173.0 lbf/in²	400 ft head
Class E	15.0 bar	217.0 lbf/in²	500 ft head

UPVC PRESSURE PIPES
In accordance to ANSI/ASTM D-1785

1785 Schedule 40 / Schedule 80 / Schedule 120

ASTM D-1785								
Size	Min OD	Max OD	SCH-40		SCH-80		SCH-120	
			Min mm	Max mm	Min mm	Max mm	Min mm	Max mm
½	21.24	21.44	2.77	3.28	3.73	4.24	4.32	4.83
¾	26.57	26.77	2.87	3.38	3.91	4.42	4.32	4.83
1	33.27	33.53	3.38	3.89	4.55	5.08	5.28	5.69
1¼	42.03	42.29	3.56	4.07	4.85	5.43	5.46	6.12
1½	48.11	48.41	3.68	4.19	5.08	5.69	5.72	6.40
2	60.17	60.47	3.91	4.42	5.54	6.20	6.35	7.11
2½	72.84	73.20	5.16	5.77	7.01	7.85	7.62	8.53
3	88.7	89.10	5.49	6.15	7.62	8.53	8.89	9.96
3½	101.40	101.80	5.74	6.42	8.08	9.04	8.89	9.96
4	114.07	114.53	6.02	6.73	8.56	9.58	11.10	12.42
5	141.05	141.55	6.55	7.34	9.52	10.66	12.70	14.22
6	168.00	168.56	7.11	7.97	10.97	12.29	14.27	15.97
8	218.70	219.46	8.18	9.17	12.70	14.22	18.24	20.42
10	272.67	273.43	9.27	10.39	15.06	16.86	21.41	23.97
12	323.47	324.23	10.31	11.55	17.45	19.53	25.40	28.45
14	355.47	355.98	11.10	12.45	19.05	21.34		
16	405.92	406.88	12.70	14.22	21.41	23.98		
18	456.72	457.68	14.27	15.97	23.80	26.64		
20	507.42	508.58	15.06	16.86	26.19	29.34		
24	608.81	610.39	17.45	19.53	30.94	34.65		

Standard Length: 4, 5.8, & 6 Mtr.

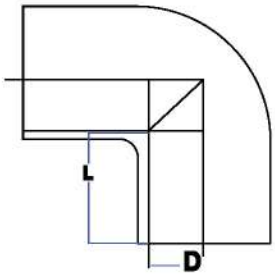
Color : Schedule 40 Dark Grey or White Schedule 80 & 120 Dark Grey

Socket Type : Solvent Weld / Plain End

UPVC PRESSURE PIPES AND FITTINGS

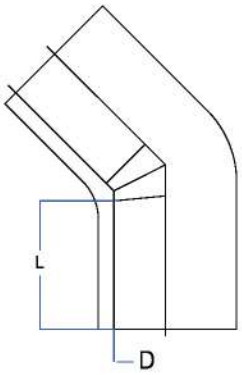
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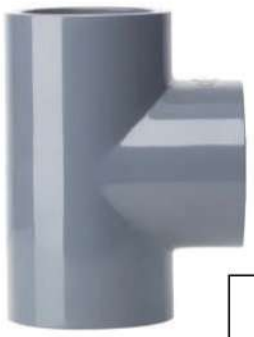


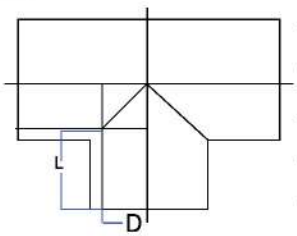
Elbow 90° Plain			
Size mm	**Size Inch**	**D**	**L**
20mm	½"	20.1	16.0
25mm	¾"	25.1	19.0
32mm	1"	32.1	22.0
40mm	1¼"	40.1	26.0
50mm	1½"	50.1	31.0
63mm	2"	63.1	38.0
75mm	2½"	75.1	44.0
90mm	3"	90.1	51.0
110 mm	4"	110.1	61.0
160 mm	6"	160.2	86.0





Elbow 45° Plain			
Size mm	**Size Inch**	**D**	**L**
20mm	½"	21.3	16.5
25mm	¼"	26.7	19.5
32mm	1"	33.5	22.5
40mm	1¼"	42.2	27.0
50mm	1½"	48.2	30.0
63mm	2"	60.3	36.0
75mm	2½"	75.1	44.0
90mm	3"	88.8	50.5
110 mm	4"	114.2	63.0
160 mm	6"	168.2	90.0



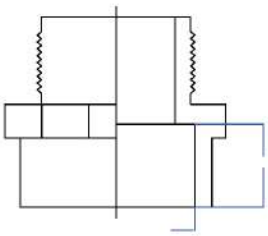


Tee 90° Plain			
Size mm	**Size Inch**	**D**	**L**
20mm	½"	21.3	16.5
25mm	¼"	26.7	19.5
32mm	1"	33.5	22.5
40mm	1¼"	42.2	27.0
50mm	1½"	48.2	30.0
63mm	2"	60.3	36.0
75mm	2½"	75.1	44.0
90mm	3"	88.8	50.5
110 mm	4"	114.2	63.0
160 mm	6"	168.2	90.0

UPVC PRESSURE PIPES AND FITTINGS

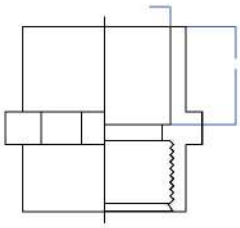
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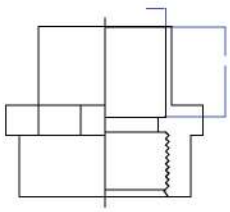
Male Thread Adapter / Nipple Socket; BSP male thread/plain socket			
Size mm	**Size inch**	**L**	**D**
20	½"	21.3	16.5
25	¼"	26.7	19.5
32	1"	33.5	22.5
40	1¼"	42.2	27.0
50	1½"	48.2	30.0
63	2"	60.3	36.0
75	2½"	75.1	44.0
90	3"	88.8	50.5
110	4"	114.2	63.0





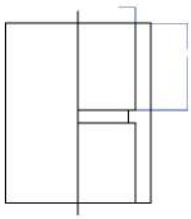
Female Socket Adapter; BSP female thread/plain socket			
Size mm	**Size inch**	**D**	**L**
20	½"	21.3	16.5
25	¼"	26.7	19.5
32	1"	33.5	22.5
40	1¼"	42.2	27.0
50	1½"	48.2	30.0
63	2"	60.3	36.0
75	2½"	75.1	44.0
90	3"	88.8	50.5
110	4"	114.2	63.0





Female Socket Adapter; BSP female thread/plain socket			
Size mm	**Size inch**	**D**	**L**
20	½"	21.3	16.5
25	¼"	26.7	19.5
32	1"	33.5	22.5
40	1¼"	42.2	27.0
50	1½"	48.2	30.0
63	2"	60.3	36.0





Socket			
Size mm	**Size inch**	**D**	**L**
20mm	½"	21.3	16.5
25mm	¼"	26.7	19.5
32mm	1"	33.5	22.5
40mm	1¼"	42.2	27.0
50mm	1½"	48.2	30.0
63mm	2"	60.3	36.0
75mm	2½"	75.1	44.0
90mm	3"	88.8	50.5
110 mm	4"	114.2	63.0
160 mm	6"	168.2	90.0

TELEPHONE DUCT & ELECTRICAL CONDUIT NEMA TC-2 :2003

NOMINAL SIZE	MEAN OUTSIDE Diameter (mm)		WALL THICKNESS(mm)					
			EPT		EPC 40		EPC 80	
Inch	Min	Max	Min	Max	Min	Max	Min	Max
½"	21.24	21.44	1.52	2.03	2.77	3.28	3.73	4.24
¾"	26.57	26.77	1.52	2.03	2.87	3.38	3.91	4.42
1"	33.27	33.53	1.52	2.03	3.38	3.89	4.55	5.08
1 ¼"	42.03	42.29	1.78	2.29	3.56	4.07	4.85	5.43
1 ½"	48.11	48.41	2.03	2.54	3.68	4.19	5.08	5.69
2"	60.17	60.47	2.54	3.05	3.91	4.42	5.54	6.20
2 ½"	72.84	73.20	2.79	3.30	5.16	5.77	7.01	7.85
3"	88.70	89.10	3.18	3.68	5.49	6.15	7.62	8.53
4"	114.07	114.53	3.81	4.32	6.02	6.73	8.56	9.58
6"	168.00	168.56	-	-	7.11	7.97	10.97	12.29
8"	218.62	219.38	-	-	-	9.17	12.70	14.22

Standardize:

- Colour : Grey & Black
- Socket Type : Solvent Weld
- Standard Length : 5.8 & 6 meters

NEMA TC - 6 & 8 / ASTM F512: PVC-U Duct Pipe for Underground Installations

Nominal Size (Inch)	Min OD (mm)	Max OD (mm)	Type: EB 20	Type: EB 35	Type: DB 60	Type: DB 100	Type: DB 120
			Wall Thickness (minimum) (mm)	Wall Thickness (minimum) (mm)	Wall Thickness (minimum) (mm)	Wall Thickness (minimum) (mm)	Wall Thickness (minimum) (mm)
1"	33.68	33.94					1.52
1 ½"	48.11	48.41					1.52
2"	60.18	60.48	1.52	1.52	1.52		1.96
3 ½"	101.40	101.80	1.55	1.93	2.34	2.84	3.00
4"	114.07	114.53	2.08	2.54	3.07	3.68	3.91
5"	141.05	141.55	2.62	3.20	3.86	4.55	4.85
6"	168.00	168.56	3.18	3.86	4.62	5.41	5.77

Standardize:

- Colour : Grey & Black
- DB: Direct Burial (without concrete encasement)
- Socket Type : Solvent Weld
- Standard Length : 5.8 & 6 meters
- EB: Encased Burial (in concrete)

ASTM D 2241

Class 100 / Class 125 / Class 160 / Class 200 / Class 315

NOMINAL SIZE	OUTSIDE Diameter	WALL THICKNESS				
		SDR-41 - 100psi	SDR-32.5 - 125psi	SDR-26 - 160psi	SDR-21 - 200psi	SDR-13.5 - 315psi
Inch	mm	mm	mm	mm	mm	mm
½	21.3					1.6
¾	26.7				1.5	2.0
1	33.4			1.5	1.6	2.5
1¼	42.2		1.5	1.6	2.0	3.1
1½	48.3		1.5	1.9	2.3	3.6
2	60.3		1.9	2.3	2.9	4.5
2½	73.0		2.2	2.8	3.5	5.4
3	88.9	2.2	2.7	3.4	4.2	6.6
4	114.3	2.8	3.5	4.4	5.4	8.5
6	168.3	4.1	5.2	6.5	8.0	12.5
8	219.1	5.3	6.7	8.4	10.4	
10	273.1	6.6	8.4	10.5	13.0	
12	323.9	7.9	9.9	12.5	15.4	
14	355.6	8.7	10.9	13.7	16.9	
16	406.4	9.9	12.5	15.6	19.3	

uPVC PRESSURE PIPES FOR COLD POTABLE WATER

WHITE COLOUR - CLASS - E (Metric Range)



Normal Size	Mean outside Diameter		Wall Thickness	
	Min	Max	Min	Max
½	21.2	21.5	1.7	2.1
¾	26.6	26.9	1.9	2.5
1	33.4	33.7	2.2	2.7
1 ¼	42.1	42.4	2.7	3.2
1 ½	48.1	48.4	3.1	3.7
2	60.2	60.5	3.9	4.5



Conduit Pipe BS 6099- 2

Size (mm)	Wall Thickness (mm)		
	Light	Medium	Heavy
20	1.30	1.55	2.10
25	1.45	1.80	2.20
32	1.70	2.10	2.70
38	2.0	2.20	2.50
40	2.10	2.30	2.80
50	2.45	2.85	3.40

PVC-U Duct Pipes For Electrical and Telephone Cables

(Specification as per ETISALAT & DU TELECOMMUNICATION)



Duct No.	Avg. Outside Diameter	Wall Thickness	
mm	mm	Min (mm)	Max(mm)
54 - D	96.5	3.25	3.65
56	53.9	1.55	1.70
57	114.5	3.40	3.60

UPVC DUCT-BENDS & COUPLINGS ETISALAT Specifications MS 7A

LONG RADIUS BEND 90°

BEND DUCT NO.	A	B	C	D	E	F	G
	Radius to Axis mm	Length of Straight ends mm	Length of Socket mm	Inside dia of Socket at Shoulder mm	Inside of Socket at Entry mm	"Wall Thickness of Bend	"Outside dia of Bend
54A	457	100	100	96±0.1	97±0.1	3.25±0.4./0.0	96.5±0.2
56A	622	125	70	53.7±0.1	54.1±0.1	1.55±0.15./0.0	53.9±0.2
56	229	125	70	53.7±0.1	54.1±0.1	1.55±0.15./0.0	53.9±0.2



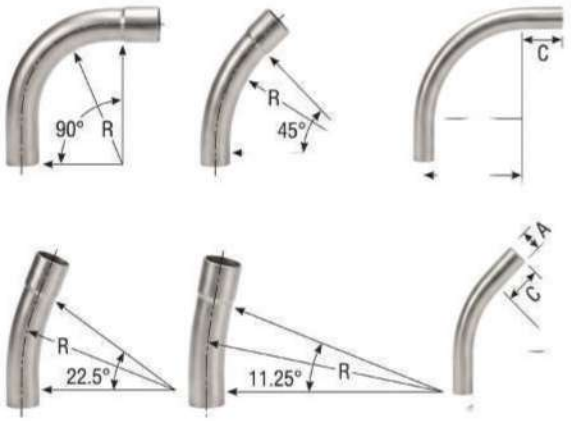


Coupler

Coupling for Duct	A	B	C	D	E	F	Wall Thickness
54A	100	100	100	96+0.1	97+0.1	90.0+01	3.25+0.4./0.0
56	70	70	70	53.7+0.1	54.1+0.1	50.8+01	1.55+o.15./0.0

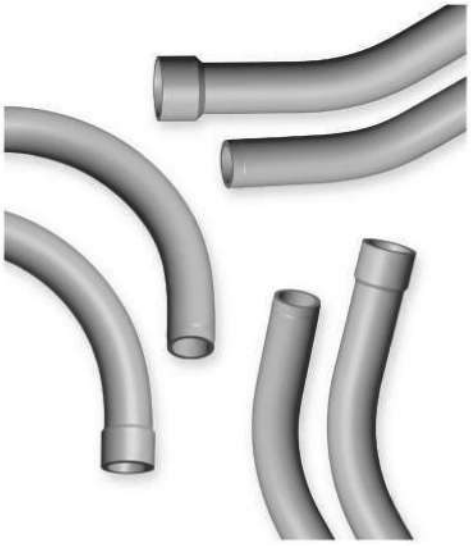
U-PVC FABRICATED BENDS
TO NEMA TC-CL-C DUCT BENDS

Long Radius Bends
For Use with: BS Standard Duct Pipes
NEMA TC 2 Rigid PVC Tubing and Conduits
EPT-A, EPC-40 and EPC-80



Nominal Inch	Outside Diameter		Radius (R)	
	Inch	mm	Inch	mm
½	0.84	21.34	4	**102**
¾	1.05	26.67	4.5	114
1	1.315	33.4	5.75	146
1½	1.9	48.26	8.25	210
2	2.375	60.32	9.5	241
2½	2.875	73.02	10.5	267
3	3.5	88.9	13	330
4	4.5	114.3	16	406
5	5.63	141.3	24	610
6	6.628	168.28	30	762

Pipes conforming to ISO 161/1, DIN 8062, ISO 4422, EN 1452



Nominal Inch	Minimum bend radius	Minimum	Design	Length	Zd Min
		11°	"Angle(22°)	45°	90°
50	221	169	182	230	**359**
63	221	169	182	230	359
75	263	176	198	254	408
90	315	185	217	285	469
110	385	204	243	326	551
140	560	252	308	428	756
160	560	252	308	428	756
200	700	280	360	510	920
225	788	313	392	562	1023
280	980	365	463	674	1248
315	1103	398	509	746	1392

PVC DUCT – LONG RADIUS BENDS-30,4&5 9 0 DEG

BS 3506, / CL-C & CL-D



SIZE	L1	L2	L3	L4	R
Dia	(mm)	(mm)	(mm)	(mm)	(mm)
2"	481	481	567	567	300
3"	638	638	755	755	400
4"	626	626	683	683	400
6"	699	699	717	717	400
8"	914	914	1090	1090	600

3"/ 75mm dia UPVC CL-C Duct Street Lighting Bend



Poles	Size/Dia	Radius	H	w
3.50mtr	3" CL-C	600mm	700mm	600mm
5.00mtr	3" CL-C	600mm	700mm	600mm
6.00mtr	3" CL-C	600mm	1050mm	600mm
8.00mtr	3" CL-C	600mm	1050mm	600mm
10.00mtr	3" CL-C	600mm	1050mm	600mm

4"/ 100mm dia UPVC CL-C Duct Street Lighting Bend



Poles	Size/Dia	Radius	H	w
12.00mtr	4" CL-C	600mm	1050mm	600mm
14.00mtr	4" CL-C	600mm	1050mm	600mm
16/18mtr	4" CL-C	600mm	1070mm	600mm
25.00mtr	4" CL-C	600mm	1050mm	1150mm



PVC CONDUIT ACCESSDRIES AS PER ASTM/NEMA STANDARD

PVC - COUPLER - ASTM F 512-12



Size	M1	SH	N
Dia	(Max) mm	(Max)mm	(Max) mm
	30.55	1.77	1.58
1½	57.94	1.77	1.58
2	69.45	1.90	2.38
3	100.80	1.93	2.77
3½	114.30	2.20	2.77
4	127.79	2.46	2.77
5	158.75	2.99	3.17
6	190.50	3.55	3.17
5	141.3	610	
6	168.28	762	

PVC - BELL MOUTH- ASTM F 512-12



Size	M1	SH	N
Dia	Max mm	Max mm	Max mm
	57.15	1.77	4.76
1½	63.50	1.77	4.76
2	78.97	1.90	7.93
3	104.77	1.93	7.93
3½	117.47	2.20	7.93
4	135.73	2.46	11.11
5	162.72	2.99	11.11
6	188.12	3.55	11.11

PVC - SOCKET END BELL MOUTH ASTM F 512-12



Size	M1	SH	N
Dia	(Max) mm	(Max)mm	(Max) mm
2	108.74	70.64	55.19
3	134.14	58.73	81.48
3½	120.65	76.20	93.16
4	139.70	76.20	104.87
5	165.10	107.95	131.95
6	190.50	82.55	157.27

PVC DUCT - BELLMOUTH BS 3506, CL-C & CL-D



Size (DIA)	O.D(MM)	I.D(MM)	L(MM)	"Wall Thickness(mm)"
2"	**115.0**	110.0	169	2.5
3"	168.0	161.0	222	3.5
4"	210.0	201.0	265	4.5
6"	263.2	250.0	340	6.6
8"	330.6	315.0	370	7.8

PVC DUCT - COUPLER

BS 3506, CL-C & CL-D



Size	Socket DIA	L	L1	L2
Dia	ID (mm)	mm	mm	(mm)
2"	60.5	116.5	50	14
3"	89.1	162	65	30
4"	114.5	172	76	24
6"	168.5	258	116	34
8"	219.4	294	132	45

BSEN 1401



Size	Socket DIA	L	L1	L2
Dia	ID (mm)	mm	mm	(mm)
2"	56	116.5	50	14
3"	82	162	65	30
4"	110	172	76	24
6"	160	258	116	34
8"	200	294	132	45

PVC DOUBLE BELL COUPLINGS Rubber Ring Sealed Sockets

DIN8062 / BSEN 1452

CL-6, 10 & 16

Pipe dia	Registere coupling	Repair coupling
(D)mm	Lmm	Lmm
110	350	350
160	410	410
200	450	450
225	460	460
280	500	500
315	570	570



8S3505 / 8S3506

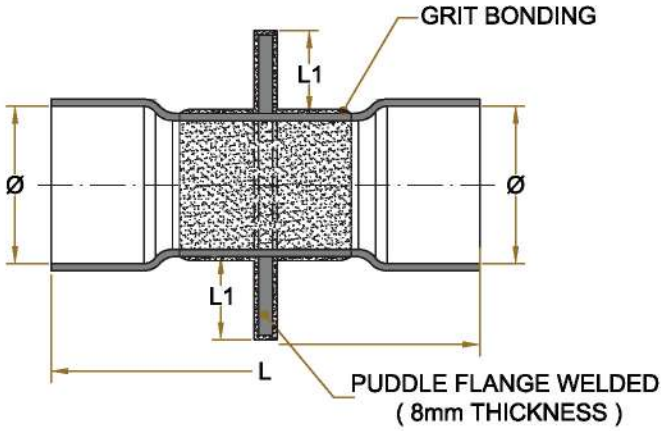
CL-C, D & E

Pipe dia	Registere coupling	Repair coupling
(D)mm	Lmm	Lmm
3"	350	350
4"	410	410
6"	450	450
8"	460	460
10"	500	500



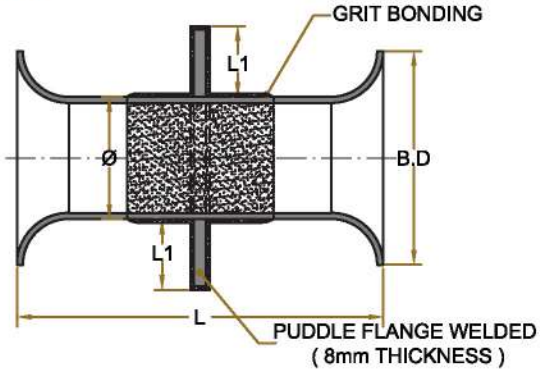
uPVC CLASS 'C' SOCKET WITH PUDDLE FLANGE & GRIT BONDING

uPVC CLASS 'C' SOCKET x SOCKET WITH PUDDLE FLANGE & GRIT BONDING 4" 6" & 8"			
SL.NO	DIA (O)	Length (L)	L1
1	4" C	200/250/300 mm	50 mm
2	6" C	200/250/300 mm	50 mm
3	8" C	200/250/300 mm	50 mm



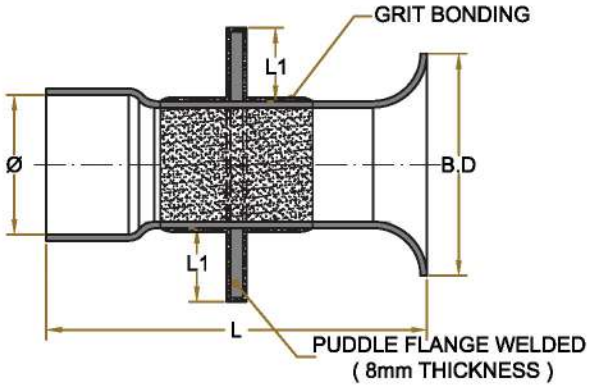
uPVC CLASS 'C' SOCKET X SOCKET WITH PUDDLE FLANGE & GRIT BONDING

uPVC CLASS 'C' SOCKET x SOCKET WITH PUDDLE FLANGE & GRIT BONDING 4" 6" & 8"				
SL.NO	DIA (O)	Length (L)	L1	B.D
1	4" C	200/250/300 mm	50 mm	162 mm
2	6" C	200/250/300 mm	50 mm	232 mm
3	8" C	200/250/300 mm	50 mm	275 mm



uPVC CLASS 'C' BELL MOUTH BELL MOUTH WITH PUDDLE FLANGE & GRIT BONDING

uPVC CLASS 'C' BELL MOUTH X BELL MOUTH WITH PUDDLE FLANGE & GRIT BONDING 4" 6" & 8"				
SL.NO	DIA (O)	Length (L)	L1	B.D
1	4" C	200/250/300 mm	50 mm	162 mm
2	6" C	200/250/300 mm	50 mm	232 mm
3	8" C	200/250/300 mm	50 mm	275 mm



PVC DUCT - END CAPS

BS 3506,CL-C&CL-D

SIZE (DIA)	I.D. (MM)	H (MM)
2"	60.50	30
3"	89.10	30
4"	114.50	30
6"	168.50	40
8"	219.40	45



uPVC DRAINAGE END CAP BSEN1401

SIZE (DIA)	I.D. (MM)	H (MM)
2"	60.50	30
3"	89.10	30
4"	114.50	30
6"	168.50	40
8"	219.40	45





Spacers

Wheel Spacers

Wheel Spacers (Open) for Reinforcing Bars (Construction/Piling) A full range of wheel spacers are designed for accurate positioning of vertical reinforcing bars.

Size	Item	Colour
25mm	4 to 8	Black
30mm	4to 12	Black
30mm	4to 12	Black
40mm	4to 12	Black
50mm	41012	Black
60mm	4 to 20	Black



Wheel Spacers for Piling

These spacers are specially designed for foundation and piling works.

Size	Item	Colour
75mm	Closed Std	Black
75mm	Open Std	Black
75mm	Closed Now	Black
75mm	Open Now	Black
100mm	Closed	Black
75mm	Open	Black
100mm	Closed Heavy Duty	Black
100mm	Closed Heavy Duty	Black
5 Stands	Anchor Spacer	Black
7 Stands	Anchor Spacer	Black



Chair Spacers

Are specially designed for accurate positioning of horizontal reinforcing bars.

Size	Item	Colour
25mm	4to 12	Black
30mm	4to 12	Black
40mm	4to 12	Black
50mm	4to 12	Black
60mm	4 to 20	Black
75mm	4 to 26	Black

SPACERS

Base Spacers



Size	Unit	Packing	Color	L	H	R
4"	Nos	40 Nos/bag	Grey Cement	150	100	55
6"	Nos	40 Nos/bag	Grey Cement	205	155	207

Interlock Spacer



Size	Unit	Packing	Color	L	H	R
4"	Nos	40 Nos/bag	Grey Cement	100	140	55
6"	Nos	40 Nos/bag	Grey Cement	100	207	207

Modular Industrial Black Plastic System





Multi-Tooth
Vertical Locks



Offset
Slide Stops



uPVC Drainage System

Hycount uPVC Drainage pipes are manufactured and tested in accordance with the new British - European Standards BS EN which have replaced the previous British Standards for Drainage applications. The new BS EN Standards cover all the sizes and applications of the BS Standards

Mechanical and Physical Characteristic

Characteristic	Requirement	Test Method
Impact Resistance	TIR < 10%	EN 744
Vicat Softening	> 79°c	EN 727
Longitudinal Reversion	<5%	EN 743
Dichloromethane Acid Resistance water	No attack	EN 580
Tightness of Rubber Ring Joint	No leakage	EN 1277
Elevated Temp. Cycling	1.90 days > 1.3 bar	EN 1055
Long Term Performance of TPE Seals	2.100 years >0.6 bar No failure during the test	prEN 1989
Resistance to internal pressure	10.0MPA for 1000 hours, at 60°C	EN 921

BSEN-1401-1
(Formerly BS-4660 & BS-5481) uPVC for Underground Drainage & Sewerage)

Size	Min.OD	Max.OD	SDR 51		SDR 41		SDR 34	
			SN-2		SN-4		SN-8	
			Min	Max	Min	Max	Min	Max
110	110	110.3			3.2	3.8	3.2	3.8
125	125	125.3			3.2	3.8	3.7	4.3
160	160	160.4	3.2	3.8	4.0	4.6	4.7	5.4
200	200	200.5	3.9	4.5	4.9	5.6	5.9	6.7
250	250	250.5	4.9	5.6	6.2	7.1	7.3	8.3
315	315	315.6	6.2	7.1	7.7	8.7	9.2	10.4
355	355	355.7	7.0	7.9	8.7	9.8	10.4	11.7
400	400	400.7	7.9	8.9	9.8	11.0	11.7	13.1
450	450	450.8	8.8	9.9	11.0	12.3	13.2	14.8



For applications outside the building structure
"U" SN2= Ring stiffness of 2KN/m2
SN4 = Ring stiffness of 4KN/m2

Pipe to this specification will be supplied in 4 meter & 5.8 meter with solvent weld socket, rubber ring socket or plain end. Color in Orange.

BSEN 1329 - 1
(BS-4514 uPVC Drainage Pipes for Above Ground Drainage)

Size	B		BD	
	Min. WT	Max.WT	Min. WT	Max.WT
32	3.0	3.5	-	-
36	3.0	3.5	-	-
40	3.0	3.5	-	-
43	3.0	3.5	-	-
50	3.0	3.5	-	-
56	3.0	3.5	-	-
63	3.0	3.5	-	-
75	3.0	3.5	3.0	3.5
80	3.0	3.5	3.0	3.5
82	3.0	3.5	3.0	3.5
90	3.0	3.5	3.0	3.5
100	3.0	3.5	3.0	3.5
110	3.2	3.8	3.2	3.8
125	3.2	3.8	3.2	3.8
140	3.2	3.8	3.5	4.1
160	3.2	3.8	4.0	4.6
180	3.6	4.2	4.4	5.0
200	3.9	4.5	4.9	5.6
250	4.9	5.6	6.2	7.1
315	6.2	7.1	7.7	8.7

BS-5255
mUPVC and ABS Waste Pipes

Normal Size mm	W.T (mm)	O.D (mm)		Wall Thickness (mm)	
		Min	Max	Min	Max
11/4" / 36mm	1.80	36.15	36.45	1.80	2.20
11/2" / 43mm	1.90	42.75	43.05	1.90	2.30
2" / 56mm	2.00	55.75	56.05	2.00	2.40



V

Normal Size mm	W.T (mm)	O.D (mm)		Wall Thickness (mm)	
		Min	Max	Min	Max
50mm	1.80	50.00	50.20	1.80	2.20
75mm	1.80	75.00	75.30	1.80	2.20

u-PVC solvent weld drainage system

WASTE, SOIL, VENT AND UNDERGROUND

Equivalent to BSEN 1329 & BSEN 1401



Elbow 90° Plain						
Code	**Nom. Size**	**Height**	**Width**	**Length**	**Dimensions**	**Colour**
E9015	1½"	090	090	052	43mm	G
E902	2"	102	102	063	56mm	G
E903	3"	152	153	092	82mm	G
E904	4"	180	180	120	110mm	G &O
E906	6"	244	245	172	160mm	G &O



Elbow 45° Plain						
Code	**Nom. Size**	**Height**	**Width**	**Length**	**Dimensions**	**Colour**
E4515	1½"	078	068	052	43mm	G
E452	2"	096	084	063	56mm	G
E453	3"	150	127	092	82mm	G
E454	4"	165	155	120	110mm	G &O
E456	6"	260	215	172	160mm	G &O



Coupler (Socket)						
Code	**Nom. Size**	**Height**	**Width**	**Length**	**Dimensions**	**Colour**
S15	1½"	048	052	052	43mm	G
S2	2"	063	063	063	56mm	G
S3	3"	092	092	092	82mm	G
S4	4"	100	119	119	110mm	G &O
S6	6"	119	172	172	160mm	G &O

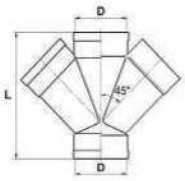


Tee Junction						
Code	**Nom. Size**	**Height**	**Width**	**Length**	**Dimensions**	**Colour**
T15	1½"	100	082	052	43mm	G
T2	2"	134	107	063	56mm	G
T3	3"	190	145	092	82mm	G
T4	4"	219	195	182	110mm	G &O
T6	6"	295	246	172	160mm	G &O



Y Junction						
Code	Nom. Size	Height	Width	Length	Dimensions	Colour
Y15	1½"	122	105	052	43mm	G
Y2	2"	152	133	063	56mm	G
Y3	3"	202	180	092	82mm	G
Y4	4"	270	235	119	110mm	G&O
Y6	6"	-	-	-	160mm	G&O





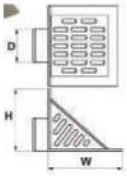
Double Y Junction						
Code	Nom. Size	Height	Width	Length	Dimensions	Colour
DY4	4"	270	350	120	110mm	G&O
DY6	6"	-	-	-	160mm	G&O





Rainwater Roof Outlet						
Code	Nom. Size	Height	Width	Length	Dimensions	Colour
RO3	3"	90.0	178	178	82mm	G
RO4	4"	114	238	238	110mm	G





Corner Roof Outlet						
Code	Nom. Size	Height	Width	Length	Dimensions	Colour
CR3	3"	154	193	193	82mm	G
CR4	4"	154	-	193	110mm	G



Floor Trap Gully					
Code	Nom. Size	Dimensions	Colour		
FT432	4 x 3 x 2"	-	G	-	-
FTS	4 x 3 x 1½"	-	G	-	-



P - Trap			
Code	Nom. Size	Dimensions	Colour
PT4	4"	110mm	O

Our skilled technicians are able to design, weld, bend, shape, adapt a wide range of plastics products to precise specifications and many more materials, available upon request.



STREET LIGHTING CONDUIT BENDS



FABRICATED REDUCER Y-BRANCHES & TEES



GULLY TRAPS



GREASE TRAP TYPE A



GREASE TRAP TYPE B



GREASE TRAP TYPE C



DOUBLE WAY GULLY TRAP



FABRICATED CROSS TEE



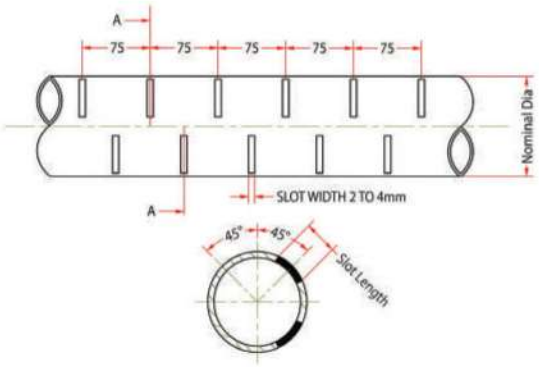
SPECIAL P-TRAPS

HYCOUNT FABRICATION PRODUCTS

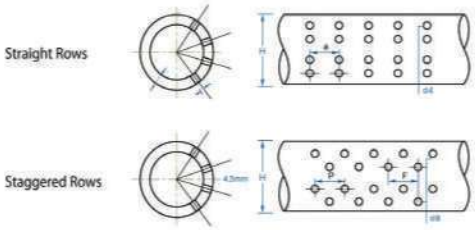
HYCOUNT perforated & slotted uPVC Pipes are manufactured upon request depending on the size and class for multi-purpose applications.

DN (Inch)	Outside dia(mm)	Thicknes (mm)	Sloth Length(mm)	Sloth Width (mm)	Pitch
4	110	3.2	33	2.7	75
6	160	4.1	48	2.7	75
8	200	4.9	59	2.7	75
8	225	10.8	67	2.7	75
10	250	6.1	74	2.7	75
10	280	13.4	83	2.7	75
12	315	7.7	94	2.7	75
12	315	9.2	94	2.7	75
16	400	9.8	119	2.7	75
16	400	19.1	119	2.7	75









Range of sizes:	75 mm to 500 mm
Longitude Pitch of Wholes [LP]:	10 mm to 200 mm
Hole Diameter:	05 mm to 13 mm
Number of Rows:	1 to 6
Angular Pitch of Holes:	40 degree for 3 or 4 rows 40, 80 or 120 Degree for 2 rows



DRY MANHOLES



CATCH BASINS



SAND TRAPS



TRAP CONNECTOR



BOSS CONNECTOR



PUDDLE FLANGES



FABRICATED COUPLER



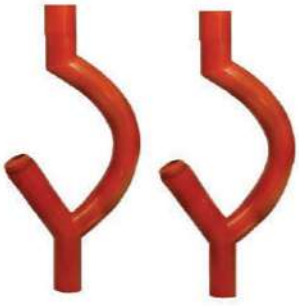
REPAIR SOCKETS



BELL MOUTH FLANGES



LONG RADIUS BENDS



INTERCEPTORS



FABRICATED END CAPS AND PLUGS

Chemical Resistance of uPVC pipe

Chemicals	Concentration %	Temperature°F (°C)			
		68 °F (20 °C)	104 °F (40 °C)	140 °F (60 °C)	176 °F (80 °C)
Acetaldehyde	100	NG	-	NG	-
Acetaldehyde	40	-	G	-	NG
Acetaldehyde	100	G	NG	-	-
Acetaldehyde	25	E	E	G	E
Acetaldehyde	25-60	E	E	E	-
Acetaldehyde	80	E	G	G	-
Acetaldehyde	85	-	-	-	NG
Acetaldehyde (crude)	95	-	G	-	-
Acetic acid anhydride	100	NG	-	NG	-
Acetone	trace	NG	-	-	-
Acetone	100	NG	-	-	-
Adipic acid	sat.	E	-	G	-
Allyl alcohol	96	G	-	NG	-
Alum	19	-	E	G	-
Alum	sat.	-	-	E	NG
Aluminium chloride	10	-	E	G	-
Aluminium chloride	sat.	E	E	E	NG
Aluminium hydroxide	sat.	E	E	-	-
Aluminium sulfate	10	-	E	G	-
Aluminium sulfate	sat.	-	-	E	NG
Ammonia (gas)	100	-	-	E	-
Ammonia (liquid)	100	G	-	-	-
Ammonia water	sat.	-	E	G	NG
Ammonium chloride	10	E	E	G	-
Ammonium chloride	sat.	-	-	G	NG
Ammonium fluoride	not more than 20	E	-	G	NG
Ammonium nitrate	10	-	E	G	-
Ammonium nitrate	sat.	-	-	E	NG
Ammonium sulfide	10	E	E	G	(212°F) NG
Ammonium sulfide	sat.	E	E	E	(212°F) NG
Amyl acetate	100	NG	-	-	-
Amyl alcohol	100	E	E	-	-
Aniline (pure)	100	NG	-	-	-
Aniline	sat.	NG	-	-	-
Aniline hydrochloride	sat.	G	-	NG	-
Antimony trichloride	90	E	-	-	-
Arsenic acid	10	-	E	G	-
Arsenic acid	80	-	E	G	NG
Barium hydroxide	10	E	E	E	-
Beer		E	E	E	-
Benzaldehyde	0.1	-	-	NG	-
Benzine (Benzol)	100	NG	-	-	-
Benzine	100	-	-	E	-
Benzine sulfanic acid	10	E	E	-	-
Benzoic acid	in all concentrations	E	E	G	(212°F) NG
Bleaching Soln	...	E	G	-	
Borax	10	-	E	G	-

E Excellent G Good NG Not Good

Chemicals	Concentration %	Temperature°F (°C)			
		68 °F (20 °C)	104 °F (40 °C)	140 °F (60 °C)	176 °F (80 °C)
Borax	sat.	-	E	G	-
Boric acid	10	-	E	G	-
Boric acid	sat.	-	-	G	-
Bromine (liquid)	100	NG	-	-	-
Bromine (vapor)	trace	G	-	-	-
Butane (gas)	50	E	-	-	-
Butadiene	100	-	-	E	-
Butanol	100	E	E	G	-
Butanol diol	100 or Below	G	-	-	NG
Butanol diol	100 or Below	-	G	-	-
Butyl acetate	100	NG	-	-	-
Butyl Phenol	100	G	-	-	-
Butylene (liquid)	100	(-40F) E	-	-	-
Butyric acid	20	E	-	-	-
Butyric acid	conc.	NG	-	-	-
Calcium bisulfite	sat.	E	E	-	-
Calcium chloride	10	-	E	G	-
Calcium chloride	sat.	-	-	E	NG
Calcium nitrate	50	-	E	-	-
Carbon dioxide (dry)	100	-	-	E	NG
Ammonia (gas)	in all concentrations	-	E	G	(212°F) NG
Ammonia (wet)	under 8 atm.	E	-	-	-
Carbon dioxide staurated in water	100	G	-	NG	-
Carbon tetrachloride	100	-	G	-	-
Carbon tetrachloride (wet gas)	0.5	E	-	-	-
Carbon tetrachloride	1	G	-	-	-
Carbon tetrachloride	5	G	-	-	-
Chlorine water	sat.	G	-	-	-
Chloric acid	1	-	E	G	(212°F) NG
Chloric acid	10	-	E	G	NG
Chloric acid	20	-	E	G	NG
Chlorosulfonic acid	100	G	-	-	-
Chrome alum	sat.	E	E	-	-
Chrome acid	50	E	E	G	-
Carbon dioxide staurated in water	50/15/35	-	E	G	-
Citric acid	10 or below	-	E	G	-
Citric acid	sat.	-	-	E	-
Cresol	90 or below	-	G	-	-
Crotonaldehyde	100	NG	-	-	-
Crude oil (sour)		E	E	-	-
Cupric chloride	sat.	E	-	-	-
Cupric sulfate	10	-	E	G	-
Cupric sulfate	sat.	E	-	E	NG
Cyclohexanol	100	NG	-	-	-
Cyclohexanone	100	NG	-	-	-
Dextrin	sat.	E	-	-	-
Diglycolic acid	30	-	-	G	-

Sat. Saturated **comm.: commercial grade** **cone: concentrated**

Chemical Resistance of uPVC pipe

Chemicals	Concentration %	Temperature°F (°C)			
		68 °F (20 °C)	104 °F (40 °C)	140 °F (60 °C)	176 °F (80 °C)
Diglycolic acid	sat.	-	-	E	NG
Dimethyl aminee (liquid)	100	(212F°) G	-	-	-
Ethyl acetate	100	NG	-	-	-
Ethylene chloride	100	NG	-	-	-
Ethyl ether	100	NG	-	-	-
Ethylene oxide (liquid)	100	(-4F°) NG	-	-	-
Ethylene glycol	100	E	E	-	-
Ethyl acrylate	100	NG	-	-	-
Ethyl alcohol	In all concentrations	E	G	-	-
Ethyl alcohol	96	-	-	G	NG
Ethyl alcohol (denatured with 2 % toluene)	96	E	-	-	-
Fats and Oil		-	E	-	-
Fatty acid	100	-	-	E	-
Ferric chloride	10 or Below	-	E	G	-
Ferric chloride	sat.	-	-	E	NG
Fluosilicic acid	30 or Below	-	-	E	-
Formaldehyde	10	-	E	G	-
Formaldehyde	40	-	-	E	-
Formic acid	50 or below	-	E	G	-
Formic acid	100	E	-	NG	-
Forfural	100	NG	-	-	-
Gas liquor		-	G	-	-
Gasoline		E	-	-	-
Glucose	sat.	-	E	-	-
Glycerine	In all concentrations	-	-	E	(212F°) NG
Glycine	10	-	E	-	-
Hexanetriol	comm.	-	-	E	(212F°) NG
Hydrobromic acid	10 or below	-	E	G	(212F°) NG
Hydrobromic acid	50	-	-	E	NG
Hydrochloric acid	30 or below	-	E	G	-
Hydrochloric acid	10 or over	E	-	E	NG
Hydrochloric acid	40 or below	E	-	-	-
Hydrochloric acid	40	-	-	G	-
Hydrochloric acid	60	G	-	-	-
Hydrochloric acid	70	G	-	-	-
Hydrogen	100	-	-	E	(212F°) NG
Hydrogen peroxide	30	E	-	-	-
Hydrogen peroxide	20	-	E	-	-
Hydroxylamine sulfate	10 or below	-	E	-	-
Kerosene	100	E	E	-	-
Lactic acid	10 or below	-	E	G	-
Lactic acid	90	-	-	NG	-
Lead acetate	10 or below	-	E	G	-
Lead acetate	sat.	-	E	E	NG
Liqueur	comm.	E	E	-	-
Linseed oil	100	E	-	-	-
Magnesium chloride	10	-	E	G	-

E Excellent G Good NG Not Good

Chemicals	Concentration %	Temperature°F (°C)			
		68 °F (20 °C)	104 °F (40 °C)	140 °F (60 °C)	176 °F (80 °C)
Magnesium chloride	sat.	-	-	E	NG
Magnesium sulfate	10	-	E	G	-
Magnesium sulfate	sat.	-	-	E	NG
Maleic acid	sat.	-	E	G	NG
Maleic acid	1	E	-	-	-
Mercury	100	E	E	-	-
Methyl alcoholi	100	-	E	G	(149F°) NG
Methyl amine	32	G	-	-	-
Methyl chloride	100	NG	-	-	-
Methylene chloride	100	NG	-	-	-
Methyl sulfuric acid	50 or Below	E	G	-	(212F°) NG
Methyl sulfuric acid	100	-	E	G	NG
Mineral oils		E	E	-	-
Mixed acid H2SO4	HNO3	H2O	48/49/3	E	G
Mixed acid H2SO4	HNO3	H2O	50/50/0	G	NG
Mixed acid H2SO4	HNO3	H2O	10/20/70	-	E
Mixed acid H2SO4	HNO3	H2O	10/87/3	G	-
Mixed acid H2SO4	HNO3	H2O	50/31/19	E	-
Nickel sulfate	10	-	E	G	-
Nickel sulfate	sat.	-	-	E	NG
Nicotine		E	E	-	-
Nitric acid	30-50	-	E	-	-
Nitric acid	40	-	-	-	NG
Nitric acid	98	NG	-	-	-
Nitrobenzene	100	NG	-	-	-
Oleic acid	comm.	-	-	E	-
Oleum	10	NG	-	-	-
Oxalic acid	10	-	E	G	-
Oxalic acid	sat.	-	-	E	NG
Oxygen	In all concentrations	-	-	E	-
Perchloric acid	10 or below	-	E	G	(212F°) NG
Perchloric acid	sat.	-	-	E	NG
Phenol	90 or below	-	G	-	-
Phenol	1	E	-	-	NG
Phenylhydrazine	100	NG	-	-	-
Phenylhydrazine Hydrochloride	sat.	G	-	NG	-
Phogene (liquid)	100	NG	-	-	-
Phogene (gas)	100	E	-	G	-
Perchloric acid	30 or below	-	E	G	-
Perchloric acid	30 or over	-	-	E	-
Perchloric acid	80	-	E	-	NG
Phosperus pentoxide	100	E	-	-	-
Phosphorus chloride	100	NG	-	-	-
Photo-developer		-	E	-	-
Photo-fixing bath		-	E	-	-
Picric acid	1	E	-	-	-
Potassium borate	1	-	E	G	-

Sat. Saturated **comm.: commercial grade** **cone: concentrated**

Chemicals	Concentration %	Temperature°F (°C)			
		68 °F (20 °C)	104 °F (40 °C)	140 °F (60 °C)	176 °F (80 °C)
Potassium bromade	10 or Below	-	E	G	NG
Potassium bromide	10	-	E	G	-
Potassium bromide	sat.	-	-	E	NG
Potassium chloride	10	-	E	G	-
Potassium chloride	sat.	-	-	E	(212F°) NG
Potassium chromate	40	E	-	-	-
Potassium dichromate	40	E	-	-	-
Potassium ferro (ferry) cyanide	10	-	-	G	-
Potassium ferro (ferry) cyanide	sat.	-	-	E	NG
Potassium hydroxide	40 or Below	-	E	G	-
Potassium hydroxide	50-60	-	-	E	-
Potassium hydroxide	50	-	-	-	(212F°) NG
Potassium nitrate	10	-	E	G	-
Potassium nitrate	sat.	-	-	E	-
Potassium perchorate	1	-	E	G	NG
Potassium permonganate	6 or Below	E	E	E	-
Potassium permonganate	18 or Below	-	E	-	-
Potassium persulfate	10	-	E	G	-
Potassium persulfate	sat.	-	E	G	(212F°) NG
Propane (liquid)	100	E	-	-	-
Propane (gas)	100	E	-	-	-
Propargyl alcohol	7	-	-	-	(212F°) NG
Payon spinning soln containing CS_2	100 mg/l	-	(112F°) E	-	-
Payon spinning soln containing CS_2	200 mg/l	-	(112F°) G	-	-
Payon spinning soln containing CS_2	700 mg/l	-	(112F°) NG	-	-
Sea water		-	E	G	-
Silver nitrate	8 or Below	-	E	G	NG
Spermoil alcohol	comm.	E	-	-	-
Sodium benzoate	10 or below	-	E	G	-
Sodium benzoate	36	-	-	G	-
Sodium bisulfite	10	-	E	G	-
Sodium bisulfite	sat.	-	-	E	NG
Sodium chlorate	10 or below	-	E	G	-
Sodium chlorate	sat.	-	-	E	(212F°) NG
Sodium chlorate	10	G	-	-	-
Sodium ahydroxide	40 or below	-	E	G	-
Sodium ahydroxide	50-60	-	-	E	-
Sodium ahydroxide	50	-	-	-	(212F°) NG
Sodium hypochlorite	10	E	-	-	-
Sodium sulfide	10	-	E	G	-
Sodium sulfide	sat.	-	-	E	(212F°) NG
Stannic chloride	10	-	E	G	-
Srearic acid	100	-	-	E	-
Tartanic acid	10 or below	-	E	G	-
Tartanic acid	sat.	-	-	E	-
Toluene	100	G	-	-	-

E Excellent G Good NG Not Good

Chemicals	Concentration %	Temperature°F (°C)			
		68 °F (20 °C)	104 °F (40 °C)	140 °F (60 °C)	176 °F (80 °C)
Trichloroethylene	100	E	-	-	-
Triethanol amine	100	NG	-	-	-
Trimethylol propane	10 or below	-	-	G	-
Trimethylol propane	comm.	-	G	G	(212F°) NG
Urea	10 or below	-	E	G	-
Urea	33	-	-	E	-
Vinegar		-	E	-	-
Vinyl acetate	100	NG	-	-	-
Waste gas containing HCl	In all concentrations	-	-	E	NG
Waste gas containing H_2SO_4	In all concentrations	-	-	E	-
Wax alcohol	100	-	-	E	-
Whisky		-	E	E	-
Wine	comm.	E	-	-	-
Zinc chloride	10	-	E	G	-
Zinc chloride	sat.	-	-	E	NG
Zinc sulfate	10	-	E	G	-
Zinc sulfate	sat.	-	-	E	NG

Sat. Saturated **comm.: commercial grade** **cone: concentrated**

Mechanical Resistance of uPVC Flow Resistance of uPVC

The smooth bore of uPVC "PRESSURE" PIPE offers less resistance to flow than conventional pipes. For a given bore and flow rate, a reduction of up to 30% in the loss of head is frequently attainable. Since accretion and buildup are almost unknown and corrosive attacks on the pipe surface do not occur, this superior rate of performance will not be diminished during the life of uPVC piping. In order to calculate the resistance through UPVC "PRESSURE" pipes, reference should be made to the flow charts reproduced hereafter. These have been calculated on the viscosity of water, and adjustments should made where more viscous liquids are being conveyed.

Loss in Straight Pipes

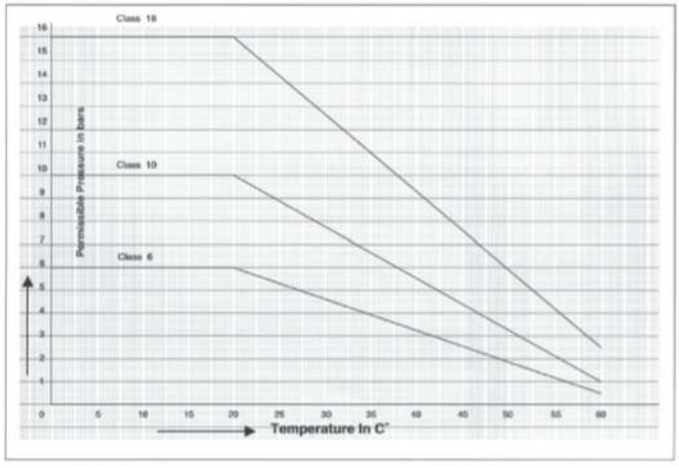
The Kinematic or static energy of a fluid flowing in a pipe decreases with the increasing distance from the starting flow point. This decrease is due to the friction between the fluid and the pipe wall.
The smoother the inner surfaces of the pipe, the less the friction. This loss of energy is called friction or head loss, and is calculated from the following formulas.

$$hr = \frac{L}{D} \frac{V^2}{2g} \quad \text{(Darcy–Weisbach Formula)} \ldots\ldots\ldots\ldots (1)$$

Where
hr - Loss of head in straight pipe (m).
λ -, Friction factor of pipe see formulas (2 and 3)
L - Length of pipe line (m). 0 - Inside Diameter of pipe (M)
g - Gravitational acceleration (m./sec2) = 9.80 ml sec2 for Latitude 35°
V - Velocity of liquid (m./sec.)
- if Re (Reynolds Number) is less than (3-4)x103
λ - the flow is called Laminar. $\lambda = 64 / Re$ ..... / (2)
- if Re is more than (3-4) $x10^3$ the flow is called Turbulent

$$\lambda = 0.0096 + 0.0057 \frac{K}{D} + \frac{288}{Re} \quad \ldots (3)$$

Re - Reynolds - Number = VD/λ



Permissible working pressure for "uPVC" PIPES according to DIN 8062 class 6, 10 and 16 atm. 16 24 z

λ- Coefficient of Kinematic viscosity = (1.01×10^6 m^2/sec.for water at 20°c)
D - Inside diameter of pipe (em).
K - Roughness coefficient of inner wall of pipe = 0.35 - 0.40

Loss in Fittings and Valves

$$hr = \frac{K.V^2 N}{2g}$$

Where

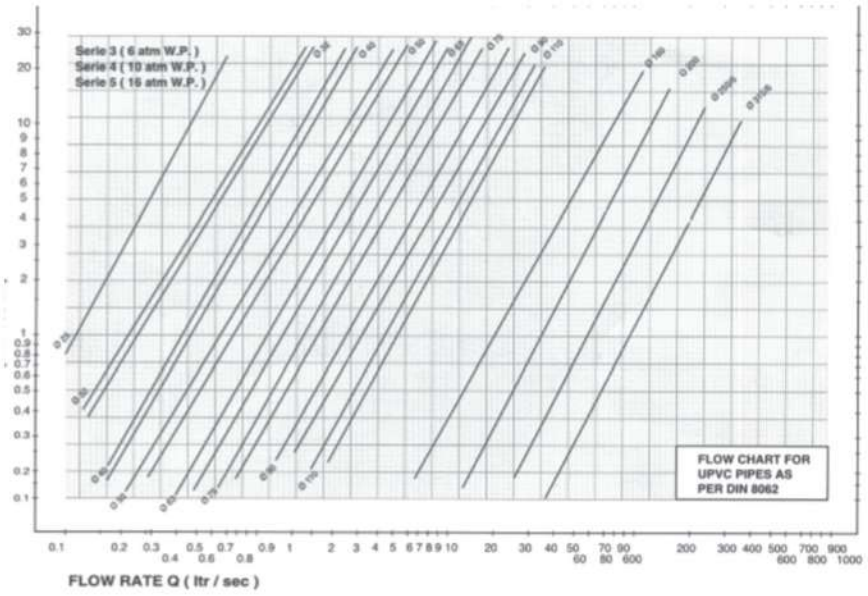
N - Number of fittings (bends, elbows, tees, valves, etc.
K - Constant depending on the type of fittings.

Elbow 45°	K = 0.40
Elbow 90°	K = 1.00
Long Bends 22 1/2°	K = 0.10
Long Bends 45°	K = 0.20
Long Bends 90°	K = 0.40
Tees go0 flow in Line	K = 0.35
Flow in line to branch	K = 1.20
Flow in branch to line	K = 0.80
Valve	K = 0.70

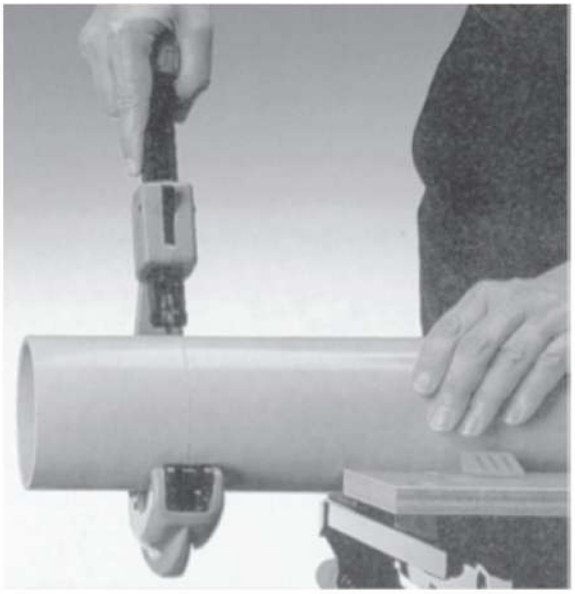
Fully open valve K = 0.50

HEAD LOSS H (m/l00m)

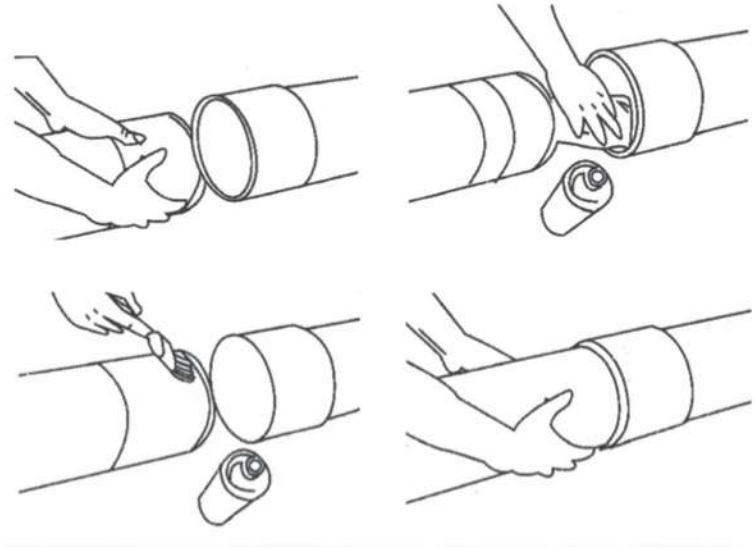
FLOW RATE Q (ltr / sec)



Techniques of Cutting, Joining & Fixing



- Appropriate pipe cutter or saw should be used
- Cut pipes square and perpendicular to their axis.
- After cutting pipes, clean the edge.



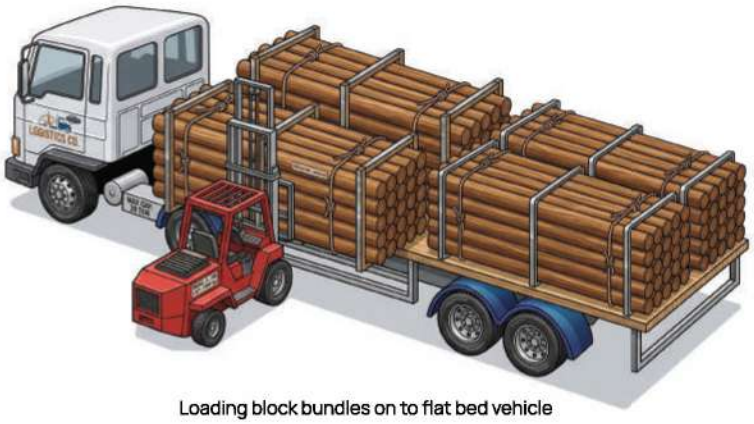
- Clean the Pipe edge and spigot
- Apply solvent cement using recommended brush
- Push the spigot into the socket smoothly
- Allow 6 minutes for the cement to weld the joint

Suitable brackets with rubber lining should be used to support pipes for fixing

Storage And Handling

Resources and Planning

- The main contractor, or sub-contractor, needs no special equipment or power. Contractors are responsible for checking layout drawings to ensure they are correct so that expensive site alterations do not have to be made after laying.
- Contractors may make up **Hycount** components such as gully assemblies offsite and in clean working conditions - particularly when components have solvent welded joints.
- Pipes and fittings made from PVC-U, Polypropylene and/or Polyethylene are lightweight - between one sixth and one tenth the weight of equivalent clay pipes. Nevertheless, care must be taken during transport, handling and storage.



Loading block bundles on to flat bed vehicle

Transport

Block Bundles

Generally, pipes are delivered pre-packed in block bundles of standard quantities. In these bundles, pipes are held by straps and timber stretchers.

Loose pipes and fittings

When vehicles with a flatbed are used for transporting loose pipes, make sure the bed is free of nails and other projections.

- Support pipes throughout their length. Load pipes so that they do not overhang the vehicle by more than one meter.
- Always load pipes with larger diameters and thicker walls before those of smaller diameters and thinner walls. Hycount pipes should always be lifted off the vehicle, not dragged, thus avoiding damage to the pipe ends.
- Make sure vehicles have adequate side supports at approximately 2 meter spacing, and that all uprights are flat, with no sharp edges. Secure pipes during transit. Fittings are supplied in cardboard boxes or plastic bags.

Handling

- Always be careful to avoid damage when handling pipe. Cold weather reduces their impact strength, so take extra care when handling pipe in wintry conditions.
- When unloading block bundles mechanically, use either nylon belt slings or fork lift trucks with smooth forks. Metal slings, hooks or chains must not come into direct contact with the pipe.
- Load and unload loose pipes by hand and avoid using skids. When loose pipes have been transported one inside another, always remove the inner pipes first.
- Do not drop or drag pipes.

Storage

Block Bundles

- Store block bundles on a reasonably flat surface free from sharp projections likely to damage the pipes.
- Block bundles can be stored up to three meters high without extra side supports or bearers. In addition, block bundles will remain free standing when cut.
- Take care when removing pipes from bundles as the straps are under considerable tension and may flail when cut.

Figure. 1

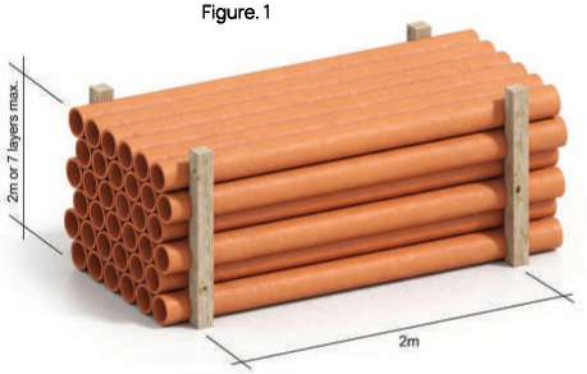
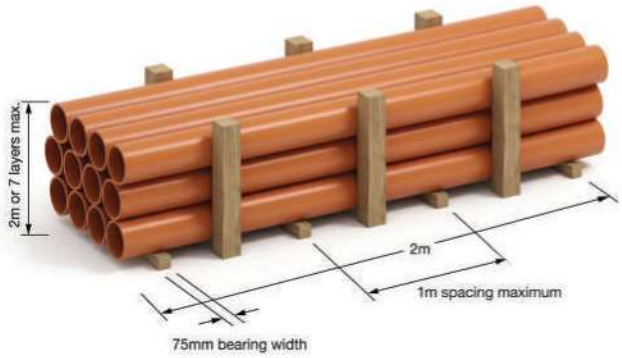


Figure. 2



Loose pipes

Store loose pipes on a reasonably flat surface free of sharp projections. Provide side supports at least every 2 meters. These supports should preferably consist of battens at least 75mm wide (See Figure. 1).

Ideally, loose pipes should be uniformly supported throughout their entire length. If this is not possible, place timber supports at least 75mm wide at - 1 meter maximum centers beneath the pipes (See Figure. 2).

Stack pipes of different size and wall thickness separately. If this is not possible, stack pipes with larger diameters and thicker walls under those with smaller diameters and thinner walls.

Do not stack pipes more than seven layers in height or above a maximum height of 2 meters.

Storage in areas of high temperature (above °23 C) is anticipated the stack height should never exceed 4 layer or 1 meter maximum height. Such stacks should be protected from the effects of weathering (particularly ultra violet exposure) by placing tarpaulins or similar sheets over them, securely fixed to the timber support posts, to provide protected and shaded conditions, which allow a free passage of air around the pipes.

Fittings

- Store fittings supplied in plastic bags away from direct sunlight.
- If fittings have to be stored outside in their plastic bags, open the bags to prevent a build-up of temperature.
- The above storage requirements apply to the European climatic conditions. In tropical climates reduce the stack height and store pipes and fittings under cover or in the shade.

PE PIPES & FITTINGS

Engineered for Strength, Flexibility & Long-Term Performance

Hycount Polyethylene (PE) Pipes and Fittings are designed for high-performance applications including water supply, irrigation, infrastructure, and industrial systems. Manufactured using high-grade PE 80 and PE 100 materials, they offer excellent durability, flexibility, and resistance to environmental stress.

Advanced fusion welding ensures strong, leak-proof joints, delivering reliable performance under high pressure and varying site conditions.

Key Features:

- Lightweight and easy to install
- Corrosion and chemical resistant
- Long service life with minimal maintenance
- Smooth inner surface for efficient flow
- Suitable for above and underground applications







PHYSICAL & MECHANICAL PROPERTIES OF HDPE MATERIAL

The following table shows the main physical, mechanical and chemical properties of polyethylene material:

Property	Test Method	Units	PE 80	PE 100
Density (Compound)	ISO 1183	Kg/m3	956	959
Melt Flow Rate (190'C/5kg)	ISO 1133	g/10 min	0.3	0.25
Tensile Stress at Yield (50mm/min)	WF 527-2	MPa	22	25
Elongation at Break	ISO 527-2	%	> 600	> 600
Charpy Impact Strength, notched	ISO179/1eA	kj/m2	14	16
Carbon Black Content	ASTM D 1603	%	2-2.5	2-2.5
Vicat Softening Point	ASTM D 1525	'C	118	122
Brittleness Temperature	ASTM D 746	'C	< -70	< -70
ESCR (10% Igepal), F50	ASTM D 1693A	Hrs.	> 10.000	> 10.000
Thermal Conductivity	DIN 52612	W/m'K	0.4	0.4
Linear Thermal Expansion	ASTM D 696	mm/mm/k	1.5x10-4	1.5x10-4

PIPE SDR* AND RATED PRESSURE RELATIONSHIP

Material	Design stress N/ mm2	NOMINAL PRESSURE (PN)					
		4	6	8	10	12.5	16
PE 100**	8.0	SDR41	SDR26	SDR 21	SDR17	SDR 13.6	SDR 11
PE 80**	6.3	SDR33	SDR21	SDR17	SDR 13.6	SDR 11	SDR9

*SDR (standard dimensional ratio) = OD/e where OD= outside diameter (mm) e= wall thickness (mm)
Example 110mm OD pipe of 10mm wall thickness SDR=110/10=11
**As per ISO 4427 : 2007

The above is for use in designing water distribution systems with a safety factor 1 .25 as per ISO 4427 or DIN 807 4 standards. For use with gas distribution systems please review ISO 4437 specification tables on following pages

PRESSURE REDUCTION CO-EFFICIENTS FOR PE 100 & PE 80 AS PER ISO 4427 - 2:2007 (E)

PE 100					
Temp (°C)	20	25	30	35	40
Pressure Reduction Co-efficient	1	0.93	0.87	0.8	0.74
SDR	**Pressure (bar)**				
7.4	25	23.3	21.8	20.0	18.5
9	20	18.6	17.4	16.0	14.8
11	16	14.9	13.9	12.8	11.8
13.6	12.5	11.6	10.9	10.0	9.3
17	10	9.3	8.7	8.0	7.4
21	8	7.4	7.0	6.4	5.9
26	6	5.6	5.2	4.8	4.4
33	5	4.7	4.4	4.0	3.7
41	4	3.7	3.5	3.2	3.0

PE 80					
Temp (°C)	20	25	30	35	40
Pressure Reduction Co-efficient	1	0.93	0.87	0.8	0.74
SDR	**Pressure (bar)**				
6	25	23.3	21.8	20.0	18.5
7.4	20	18.6	17.4	16.0	14.8
9	16	14.9	13.9	12.8	11.8
11	12.5	11.6	10.9	10.0	9.3
13.6	10	9.3	8.7	8.0	7.4
17	8	7.4	7.0	6.4	5.9
21	6	5.6	5.2	4.8	4.4
26	5	4.7	4.4	4.0	3.7
33	4	3.7	3.5	3.2	3.0
41	3.2	3.0	2.8	2.6	2.4

Parameter Selection

- Starting from known pipe size and pressure rating.
- Find SDR of required pressure rating (table1) make material choice PE 100 or PE 80.
- Cross tabulate SDR against pipe size to give wall thickness (Table 3).
- Review temperature reduction factors in relation to expected environmental conditions and pressure rating (Table 2)

HDPE Pipes According to ISO 4427 - 2 : 2007(E) / DIN-8074 /BSEN 12201 : 2 : 2003

SDR	6	7.4	9	11	13.6	17	21	26	33	41
Pipe Series(S)	2.5	3.2	4	5	6.3	8	10	12.5	16	20
					Nominal Pressure (P N)[a] (bar)					
PE 80	PN 25	PN 20	PN 16	PN 12.5	PN 10	PN 8	PN 6[c]	PN 5	PN 4	PN 3.2
PE 100	-	PN 25	PN 20	PN 16	PN 12.5	PN 10	PN 8	PN 6[c]	PN 5	PN 4
Nominal Size/ OD (mm)					Wall Thickness [e]min (mm)					
20	3.4	3.0	2.3[b]	2.0	-	-	-	-	-	-
25	4.2	3.5	3.0	2.3[b]	2.06	-	-	-	-	-
32	5.4	4,4	3.6	3.0	2.4	2.0	-	-	-	-
40	6.7	5.5	4.5	3.7	3.0	2.4	2.0	-	-	-
50	8.3	6.9	5.6	4.6	3.7	3.0	2.4	2.0	-	-
63	10.5	8.6	7.1	5.8	4.7	3.8	3.0	2.5	-	-
75	12.5	10.3	8.4	6.8	5.6	4.5	3.6	2.9	-	-
90	15.0	12.3	10.1	8.2	6.7	5.4	4.3	3.5	-	-
110	18.3	15.1	12.3	10.0	8.1	6.6	5.3	4.2	-	-
125	20.8	17.1	14.0	11.4	9.2	7.4	6.0	4.8	-	-
140	23.3	19.2	15.7	12.7	10.3	8.3	6.7	5.4	-	-
160	26.6	21.9	17.9	14.6	11.8	9.5	7.7	6.2	-	-
180	29.9	24.6	20.1	16.4	13.3	10.7	8.6	6.9	-	-
200	33.2	27.4	22.4	18.2	14.7	11.9	9.6	7.7	-	-
225	37.4	30.8	25.2	20.5	16.6	13.4	10.8	8.6	-	-
250	41.5	34.2	27.9	22.7	18.4	14.8	11.9	9.6	-	-
280	46.5	38.3	31.3	25.4	20.6	16.6	13.4	10.7	-	-
315	52.3	43.1	35.2	28.6	23.2	18.7	15.0	12.1	9.7	7.7
355	59.0	48.5	39.7	32.2	26.1	21.1	16.9	13.6	10.9	8.7
400	-	54.7	44.7	36.4	29.4	23.7	19.1	15.3	12.3	9.8
450	-	61.5	50.3	40.9	33.1	26.7	21.5	17.2	13.8	11.0
500	-	-	55.8	45.4	36.8	29.7	23.9	19.1	15.3	12.3
560	-	-	62.5	50.8	41.2	33.2	26.7	21.4	17.2	13.7
630	-	-	70.3	57.2	46.3	37.4	30.0	24.1	19.3	15.4

[a]= PN values are based on C = 1.25

[b]= The calculated value of emin according to ISO 4065 is rounded up to the nearest value of either 2.0, 2.3 or 3.0. This is to satisfy certain national requirements. For practical reasons, a wall thickness of 3.0mm is recommended for electrofusion joining and lining applications

[c]= Actual calculated values are 6.4 bar for PE 100 and 6.3 bar for PE 80

1 bar = 0.1 MPa; 1 MPa = 1 0^5a; 1 MPa = 1 N/mm^2

LDPE for irrigation systems according to BS 1972

Nominal Size (Inch)	Outside diameter mm		Wall Thickness (mm)					
			Class B 6.1 kgf/ cm		Class C 9.1 kgf/cm		Class D 12.2 kgf/cm	
	Min	Max	Min	Max	Min	Max	Min	Max
½"	21.2	21.5	-	-	2.7	3.0	3.4	3.7
¾"	26.6	26.9	2.3	2.6	3.4	3.7	4.3	4.7
1"	33.4	33.7	3.0	3.3	4.2	4.6	5.4	5.9
1¼"	42.1	42.5	3.7	4.1	5.3	5.8	6.8	7.5
1½"	48.1	48.5	4.3	4.7	6.1	6.7	7.8	8.6
2"	60.1	60.6	5.3	5.8	7.6	8.4	-	-
3"	88.6	89.3	7.8	8.6	11.2	12.3	-	-
4"	113.9	114.7	10.0	11.0	-	-	-	



Material: LDPE

Color: Black

Length: sizes from 1/2" to 1" are available in coils of 100 & 200 & 30 meters. Sizes from 1 1/4" to 4" are available in coils of 100 meters. Different lengths can be supplied on request.

LDPE for irrigation systems according to BS 3284

Nominal Size (Inch)	Outside diameter mm		Wall Thickness (mm)			
			ClassC 9.1 kgf/cm		Class D 12.2 kgf/cm	
	Min	Max	Min	Max	Min	Max
½"	21.2	21.5	1.8	2.0	2.3	2.6
¾"	26.6	26.9	2.3	2.6	2.9	3.2
1"	33.4	33.7	2.8	3.1	3.7	4.1
1¼"	42.1	42.5	3.6	4.0	4.6	5.1
1½"	48.1	48.5	4.1	4.5	5.3	5.8
2"	60.1	60.6	5.1	5.6	6.6	7.3
3"	88.6	89.3	7.5	8.2	9.7	10.7
4"	113.9	114.7	9.6	10.6		



Material: LDPE

Color: Black

Length: Sizes from½" to 1" are available in coils of 100 & 200 & 300 meters. sizes from 1 1/4" to 4" are available in coils of 100 meters. Different lengths can be supplied on request.

HDPE drainage pipes and fittings are manufactured according to the European Standard. EN1519-1 which superseded the German Standards DIN19535-1 and DIN19535-2.

HDPE drainage pipes according to EN 1519-1

Nominal Size (Inch)	Outside diameter mm		Wall Thickness (mm)			
			Series S 16**		Series S 12.5	
	Min	Max	Min	Max	Min	Max
32	32.0	32.3	3.0	3.5	3.0	3.5
40	40.0	40.4	3.0	3.5	3.0	3.5
50	50.0	50.5	3.0	3.5	3.0	3.5
56	56.0	56.5	3.0	3.5	3.0	3.5
63	63.0	63.6	3.0	3.5	3.0	3.5
75	75.0	75.7	3.0	3.5	3.0	3.5
80	80.0	80.8	3.0	3.5	3.1	3.6
90	90.0	90.9	3.0	3.5	3.5	4.1
100	100.0	100.9	3.2	3.8	3.8	4.4
110	110.0	111.0	3.4	4.0	4.2	4.9
125	125.0	125.2	3.9	4.5	4.8	5.5
160	160.0	160.5	4.9	5.6	6.2	7.1
200	200.0	201.8	6.2	7.1	7.7	8.7
250	250.0	252.0	7.7	8.7	9.6	10.8
315	315.0	317.9	9.7	10.9	12.1	13.6

Notes:

Series 16 (S 16) is suitable for application area inside buildings and outside buildings fixed on the wall (application area B).

Series 12.5 (S 12.5) is suitable for application area under and within 1metre from the building where the pipes and fitting are underground and connected to the soil and waste discharge system of the building (application area D).

BUTFUSION FITTINGS

SDR 11 (PN16) / SDR 17 (PN 10) PE 100

Elbow 90°	Elbow 45°	End Cap







Equal TEE	Reducer TEE	Stub Flange







Floor Trap	Reducer	Y Branch







ELECTROFUSION FITTINGS

SDR 11 (PN) / SDR 17 (PN 10) PE 100

Coupler	Reducer	Branch Saddle







Equal TEE	Reducer TEE	End Cap







Elbow 90°	Elbow 45°	Galvanized Backing Ring









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