# **APEX PIPING** PRODUCT CATALOGUE

# **CONNECT WITH FLOW**



# WHO WE ARE

# WELCOME TO APEX PIPING SYSTEMS. CONNECT WITH FLOW.

The story began in 1978 when Apex Piping Systems Ltd, formerly known as KAP Plastics, was founded in Industrial Area in Nairobi, Kenya.

The company initially focused on the importation, marketing, and distribution of aluminum products, specializing in injection molded plastics and the production of household products such as plastic hangers, jugs, plates, and rubber door stoppers.

Encouraged by the parent company's sustained success in producing high quality steel, Apex Steel directors made the decision to acquire KAP Plastics, in 2010, effectively becoming a onestop shop for all construction-related needs in Kenya. The company was later rebranded to Apex Piping Systems in 2018.

In 2004, Apex Piping became the first company in East Africa to make Poly Propylene Random (PPR) and High Density Polyethylene (HDPE) pipes, radically changing the plumbing industry from galvanized pipes to plastic, thus saving plumbers substantial time and money.

PPR, trademarked as 'Hydro-flo', is manufactured using only virgin materials, without any additives, making it the perfect fit for customers who are particular about quality and durability.

Hydro-Flo has been awarded KEBS certification and is the preferred choice for plumbers and contractors looking for quality and durability. It's manufactured from a virgin material with no fillers or additives, ensuring sustainability in quality and performance to last over 50 years.

Following Apex Piping's seamless integration into the Apex Steel family, the company has continued to be at the forefront of plumbing innovations, introducing a series of new plastic and piping solutions to the Kenyan market including round pipes, wall plugs, toilet seat covers, garden hose pipes, ferrules, and tubings.

The group's unwavering commitment to quality was eventually recognized by the Dutch-based global leader in piping and plumbing solutions, Wavin, leading to a partnership (from 2012 to 2017) that saw Apex Piping begin manufacturing PPR, PVC (drainage pipes, electrical conduits, pressure pipes, and rainwater downpipes) and HDPE pipes at its state of the art manufacturing facilities in Athi River under stringent quality measures and manufacturing direction from Wavin.

These pipes and fittings are marketed under the brand name 'Apex Piping'.

Water is the essence of life and it should only be handled with the world's best piping solutions.

# INDEX

DRINKING WATER

- PPR Hydro-flo
- UPVC pressure pipes
- HDPE
- UPVC Borehole Screens and Casings

# WASTE WATER

- PVC Waste Pipes
- PE Soil and Waste

# OTHER PRODUCTS

- Injection Moulded Products
- Extrusion Products
- Household Products

# WATER THE ESSENCE OF LIFE



# PPR HYDRO-FLO



# **ABOUT THE PRODUCT**

Polypropylene Random (PPR) pipes and fittings are most reliable in plumbing and water supply pipelines inside the building, due to their chemical features and fusion welding, which ensures the plumber has a perfect seal tight system.

The PPR type 3 used in the production of HYDRO-FLO PPR system has a high molecular weight and excellent creep resistance fundamental characteristics for the transportation of hot fluids under pressure. It also has good resilience which ensures ease of installation even with temperatures under 0°C. HYDRO-FLO pipes are made of 100% virgin material which guarantees they last long; durable and no deposits seen.

HYDRO-FLO PPR pipes are made to the standard KS-ISO 15874

### **APPLICATIONS**

Pipe & Fitting Networks for:

- Cold & Hot installations, i.e. in Residences, Complexes, Apartments, Offices, Hospitals, Hotels, Schools etc.
- Industrial, i.e. transportation of corrosive fluids (like acids) and liquid foods etc.
- Agriculture and Horticulture.
- Compressed air plants.
- Swimming pools
- Rain Water harvesting and utilization systems.

# **PRODUCT SPECIFICATIONS**

# PN 20

Ø	Wall Thickness	I.D
20	3.4	13.2
25	4.2	16.6
32	5.4	21.2
40	6.7	26.6
50	8.3	33.4
63	10.5	42.0
75	12.5	50.0
90	15	60.0
110	18.3	73.4

### **PN 16**

Ø	Wall Thickness	I.D
20	2.8	14.6
25	3.5	18.2
32	4.4	23.2
40	5.5	29.0
50	6.9	36.2
63	8.6	45.4
75	10.3	54.6
90	12.3	65.4
110	15.1	79.8





# PPR FITTINGS





**RANGE (MM)** 20 - 110

# 45° ELBOW



**RANGE (MM)** 20 - 110

# **T-FITTING**



**RANGE (MM)** 20 - 110

# **REDUCED "T" FITTING**



**RANGE (MM)** 20 - 110

# **REDUCER MALE/FEMALE**



**RANGE (MM)** 20 - 110

# MALE THREADED 90° ELBOW



**RANGE (MM)** 20 - 32

# FEMALE THREADED 90° ELBOW



**RANGE (MM)** 20 - 63

# MALE THREADED "T" FITTING



**RANGE (MM)** 20 - 32

# FEMALE THREADED 90° MALE ELBOW



**RANGE (MM)** 20 - 25



# PPR FITTINGS

# FEMALE THREADED "T" FITTING



**RANGE (MM)** 20 - 63

# MALE ADAPTOR



**RANGE (MM)** 20 - 75

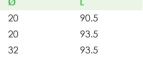
# COUPLING



**RANGE (MM)** 20 - 110

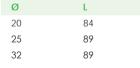
# BALL VALVE WALL RECESSED TYPE





# BALL VALVE WALL RECESSED TYPE





# **CROSS-OVER PIPE**



Specifications Size
1/2"
3/4"
1″
1 1/4"

# SHUT OFF VALVE WALL RECESSED TYPE, PPR WELDING MACHINE



**RANGE (MM)** 32 - 110

# PIPE CUTTERS FOR PPR



Ø	
32	cast iron
110	steel body





# UPVC PRESSURE PIPES





# **ABOUT THE PRODUCT**

UPVC pressure pipes are manufactured to KS - ISO 1452 and EN 1452 standards incorporating the traditional design stress of 10 and 12.5 Mpa respectively. The pipes are manufactured with a socketed-end and supplied complete with a pressure lock rubber seal for a superior joint. The product is ideally suited for applications in both pumping and gravity design.

# **APPLICATIONS**

The PVC-U pressure pipes and fittings from Apex Water are suitable for the following applications:

- Potable Water Distribution Systems
- Industrial Process Pipelines
- Pressure Sewer
- Effluent Pipelines
- Slurry Pipelines
- Irrigation And Watering Systems

# SYSTEM BENEFITS

# Rubber rings

Apex PVC pipes comply to the EN 681 - 1 standard whereas they come with EPDM rubber seal.

# High reliability and proven service performance

PVC-U pipes and fittings are the preferred piping material world-wide for potable water supply and distribution pipes.

# Complete plastic system

Extensive range of pipes and fittings.

# Smooth bore, free from incrustations

Maintaining a smooth internal surface, preventing the build-up of deposits. Minimum maintenance required.

# **Corrosion resistant**

Durable and complete plastic system with smooth internal bore.

### Light weight

Which makes it easy to handle and install, resulting in reduced laying costs.

### **Reliable and durable**

Both, the easy rubber ring push-fit system and solvent cement ensure a tight and durable connection.

### Safe for potable water supply

PVC-U is proven to be one of the most reliable and safe piping materials for potable water.

### Effective rubber ring seal joint

Reduced jointing effort and improved reliability.

### High chemical resistance

Apex PVC-U pressure pipes and fittings are resistant to a great number of chemical agents.

### **Special projects**

A specialised team within Apex Water is dedicated to supplying all required products for large-scale pipe projects; Apex Water's own products can be combined with those of other manufacturers to supply a complete package to the customer. This team is experienced in arranging very large quantities of product "right on time" to complex construction projects. Upon request technical advice and training can be offered by Apex Water experts to assist in these projects.

# Licensing

Apex PVC pressure pipes are manufactured under license from Wavin.

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# UPVC PRESSURE PIPES

# PRODUCT SPECIFICATIONS

				Pipe series	5 S			
Nominal	Nominal (minimum) Wall thickness							
Outside	S 20	S 16		S 10	S 8	S 6,3	S 5	
Diameter	(SDR	(SDR	S 12,5	(SDR	(SDR	(SDR	(SDR	
Diamerer	41)	33)	(SDR 26)	21)	17)	13,6)	11)	
	No	ominal P	ressure PN k	pased on o	design co	efficient C=	2,5	
		PN 6	PN 8	PN 10	PN 12,5	PN 16	PN 20	
12		-	_	-	-	_	1,5	
16		-	-	-	-	-	1,5	
20		-	-	-		1,5	1,9	
25		-	-	-	1,5	1,9	2,3	
32		-	1,5	1,6	1,9	2,4	2,9	
40		1,5	1,6	1,9	2,4	3,0	3,7	
50		1,6	2,0	2,4	3,0	3,7	4,6	
63		2,0	2,5	3,0	3,8	4,7	5,8	
75		2,3	2,9	3,6	4,5	5,6	6,8	
90		2,8	3,5	4,3	5,4	6,7	8,2	
	No	ominal P	ressure PN k	based on a	design co	efficient C=	2,0	
	PN 6	PN 8	PN 10	PN 12,5	PN 16	PN 20	PN 25	
110	2,7	3,4	4,2	5,3	6,6	8,1	10,0	
125	3,1	3,9	4,8	6,0	7,4	9,2	11,4	
140	3,5	4,3	5,4	6,7	8,3	10,3	12,7	
160	4,0	4,9	6,2	7,7	9,5	11,8	14,6	
180	4,4	5,5	6,9	8,6	10,7	13,3	16,4	
200	4,9	6,2	7,7	9,6	11,9	14,7	18,2	
225	5,5	6,9	8,6	10,8	13,4	16,6	_	
250	6,2	7,7	9,6	11,9	14,8	18,4	-	
280	6,9	8,6	10,7	13,4	16,6	20,6	-	
315	7,7	9,7	12,1	15,0	18,7	23,2	-	
355	8,7	10,9	13,6	16,9	21,1	26,1	_	
400	9,8	12,3	15,3	19,1	23,7	29,4	-	
450	11,0	13,8	17,2	21,5	26,7	33,1	_	
500	12,3	15,3	19,1	23,9	29,7	36,8	_	
560	13,7	17,2	21,4	26,7	-	_	-	
630	15,4	19,3	24,1	30,0	_	_	_	
710	17,4	21,8	27,2	_	_	_	_	
800	19,6	24,5	30,6	_	_	-	_	
900	22,0	27,6	_	_	-	-	_	
1000	24,5	30,6	_	_	_	_	_	





# UPVC PRESSURE FITTINGS



ELBOW 90°

SIZES	
1/2″	
3/4"	
1″	
11/2″	
2″	
3"	



TEE EQUAL SIZES 1/2" 3/4" 1" 11/2" 2" 3"





VALVE SOC	KET/MTA	Y-TEE
SIZES		SIZES
1/2″		1/2″
3/4''		3/4"
1 ″		1 ″
11/2″		11/2″
2″		2″



**REDUCING SOCKET** 

SIZES
3/4" x 1/2"
1" x 3/4"
11/2″ x 1″
2" x 11/2"



**REDUCING BUSH** 



# FEMALE THREADED ADAPTOR

SIZES 1/2" x 1/2" 3/4" x 1/2" 3/4" x 3/4" 1" x 1" 11/2" x 11/2" 2" x 2"

# WATER THE ESSENCE OF LIFE





HDPE PIPES

# PRODUCT SPECIFICATION

	Pipe series											
	SD	R 6	SDF	R 7,4	SD	R 9	SDI	א 11	SDR	13,6	SDI	R 17
	S	2,5	S	3,2	S	4	S	5	S 6,3		S 8	
					Noi	-	e <b>ssure (P</b> ar	<b>N)</b> <sup>a</sup>				
PE 100	-	-	PN	25	PN	20	PN	16	PN	12,5	PN	10
Nominal size		I	I	I			<b>knesses</b> m	b	I	I	I	
	e <sub>min</sub>	e <sub>max</sub>	e <sub>min</sub>	e <sub>max</sub>	e <sub>min</sub>	e <sub>max</sub>	e <sub>min</sub>	e <sub>max</sub>	e <sub>min</sub>	e <sub>max</sub>	e <sub>min</sub>	e <sub>max</sub>
16	3,0	3,4	2,3 <sup>c</sup>	2,7	2,0 <sup>c</sup>	2,3	—	—	—	—	—	—
20	3,4	3,9	3,0	3,4	2,3 <sup>c</sup>	2,7	2,0 <sup>c</sup>	2,3	—	—	—	—
25	4,2	4,8	3,5	4,0	3,0	3,4	2,3 <sup>c</sup>	2,7	2,0 <sup>c</sup>	2,3	—	—
32	5,4	6,1	4,4	5,0	3,6	4,1	3,0	3,4	2,4	2,8	2,0 <sup>c</sup>	2,3
10	0.7	7 5		<u> </u>	4.5	<b>F</b> 4	0.7	4.0	2.0	0 F	0.4	0.0
40	6,7	7,5	5,5	6,2	4,5	5,1	3,7	4,2	3,0	3,5	2,4	2,8
50	8,3	9,3	6,9	7,7	5,6	6,3	4,6	5,2	3,7	4,2	3,0	3,4
63	10,5	11,7	8,6	9,6	7,1	8,0	5,8	6,5	4,7	5,3	3,8	4,3
75	12,5	13,9	10,3	11,5	8,4	9,4	6,8	7,6	5,6	6,3	4,5	5,1
90	15,0	16,7	12,3	13,7	10,1	11,3	8,2	9,2	6,7	7,5	5,4	6,1
110	18,3	20,3	15,1	16,8	12,3	13,7	10,0	11,1	8,1	9,1	6,6	7,4
125	20,8	23,0	17,1	19,0	14,0	15,6	11,4	12,7	9,2	10,3	7,4	8,3
140	23,3	25,8	19,2	21,3	15,7	17,4	12,7	14,1	10,3	11,5	8,3	9,3
160	26,6	29,4	21,9	24,2	17,9	19,8	14,6	16,2	11,8	13,1	9,5	10,6
180	29,9	33,0	24,6	27,2	20,1	22,3	16,4	18,2	13,3	14,8	10,7	11,9
200	33,2	36,7	27,4	30,3	22,4	24,8	18,2	20,2	14,7	16,3	11,9	13,2
225	37,4	41,3	30,8	34,0	25,2	27,9	20,5	22,7	16,6	18,4	13,4	14,9
250	41,5	45,8	34,2	37,8	27,9	30,8	22,7	25,1	18,4	20,4	14,8	16,4
280	46,5	51,3	38,3	42,3	31,3	34,6	25,4	28,1	20,6	22,8	16,6	18,4
315	52,3	57,7	43,1	47,6	35,2	38,9	28,6	31,6	23,2	25,7	18,7	20,7
355	59,0	65,0	48,5	53,5	39,7	43,8	32,2	35,6	26,1	28,9	21,1	23,4
400	—	—	54,7	60,3	44,7	49,3	36,3	40,1	29,4	32,5	23,7	26,2
450	—	—	61,5	67,8	50,3	55,5	40,9	45,1	33,1	36,6	26,7	29,5
500	—	—	—	—	55,8	61,5	45,4	50,1	36,8	40,6	29,7	32,8
560	—	—	—	—	62,5	68,9	50,8	56,0	41,2	45,5	33,2	36,7
630	—	_	—	_	70,3	77,5	57,2	63,1	46,3	51,1	37,4	41,3



# HDPE PIPES



# **ABOUT THE PRODUCT**

Apex manufactures HDPE pipes which are available in various sizes. These are suitable to work under different working pressure for both residential and industrial purposes. Manufactured as per KS-ISO 4427.

- Available from size 25mm to 800mm
- Corrosion resistant
- Leak proof
- Light in weight.

# **PRODUCT SPECIFICATION**

Application 1)	PN 6	Dimensions (OE PN 10	D) mm <sup>2</sup> ) PN 16	PN 25	
Water, Industrial	-	ø 32 - 800	ø 20 - 800	ø 16 - 450	
Gas <sup>3</sup> )	ø 16 - 630	ø 20 - 500	-	-	
Pressure sewer	ø 90 - 800	ø 50 - 630	-	-	

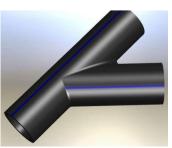
# METHODS OF JOINING

**1. COMPRESSION FITTING** 





3. BUTTFUSION



4. MECHANICAL JOINT







# HDPE COMPRESSION FITTINGS



### **ABOUT THE PRODUCT**

Polypropylene (PP) Compression fittings are approved for use in contact with drinking water. These fittings offer exceptional joint security for metric OD polyethylene (PE) pipes and form a seal without distorting the pipe or restricting the pipe bore. The PP Compression fittings range is suitable for potable water distribution mains and irrigation systems

### **PRODUCT SPECIFICATION**

Joints Body: black Polypropylene Lock-nut: blue Polypropylene (RAL 5012) Gasket: 75 Shore (NBR) nitric rubber Locking ring: white polyacetale Reinforced rings: Stainless steel AISI 430 Clamp Saddles Body and gasket: same as the joints.

Size (mm)

16

20

25

32

40

### COUPLING



#### FLANGED JOINT WITH METAL FLANGE



### FEMALE ADAPTOR



Size (mm)
16
20
25
32
40
50
63
75
90
110



# HDPE COMPRESSION FITTINGS





**END CAP** 

Size(mm)

25

32

40

50

63

120

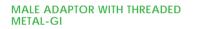


90° REDUCING ELBOW



Size(mm)

20 - 15 25 - 20



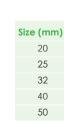


FEMALE ADAPTOR WITH METAL OFFTAKE (BRASS)



### **BLANKING PLUG**





20

25

32

40

50

63





90° MALE ELBOW WITH THREADED METAL (NICKELED BRASS)



### METAL TIGHTENING WRENCH



45° ELBOW



### FEMALE ADAPTOR WITH METAL-(NICKELED BRASS)



#### 90° MALE ELBOW WITH THREADED **METAL (BRASS)**





Size

Size



# HDPE COMPRESSION FITTINGS

#### 90° TEE





Size

#### **MALE ADAPTOR**



Size	
16	
20	
25	
32	
40	
50	
63	
75	
90	
110	

### 90° TEE WITH THREADED FEMALE OFFTAKE



# 90° REDUCING-INCREASING TEE



#### **REDUCING COUPLING**



#### 90° ELBOW WITH THREADED FEMALE OFFTAKE



#### 90° ELBOW WITH THREADED MALE OFFTAKE



90° ELBOW



Size
16
20
25
32
40
50
63
75
90
110



# ELECTRO FUSION FITTINGS



#### ABOUT THE PRODUCT

The PE pressure pipe fittings supplied by Wavin meet all requirements in accordance with the respective EN and ISO standards for water and gas applications, respectively: EN 12201-3, ISO 4427 and EN1555-3, ISO 4437. Rigorous testing and quality control throughout the entire production process ensure the reliability of the fittings.

#### **APPLICATIONS**

The Wavin fitting range is suitable for all sorts of applications in combination with PE pressure pipelines. The Wavin electro-fusion fittings are all-round compatible with the majority of the (40V) fusion machines in the market.

Size



Coupler E+ PE100 SDR11 d20 Coupler E+ PE100 SDR11 d25 Coupler E+ PE100 SDR11 d32 Coupler E+ PE100 SDR11 d40 Coupler E+ PE100 SDR11 d63 Coupler E+ PE100 SDR11 d75 Coupler E+ PE100 SDR11 d10 Coupler E+ PE100 SDR11 d110 Coupler E+ PE100 SDR11 d140 Coupler E+ PE100 SDR11 d140 Coupler E+ PE100 SDR11 d160 Coupler E+ PE100 SDR11 d180 Coupler E+ PE100 SDR11 d180

#### Size

T 90° Equal E+ PE100 SDR11 d75 T 90° Equal E+ PE100 SDR11 d90 T 90° Equal E+ PE100 SDR11 d110 T 90° Equal E+ PE100 black SDR11 d125 T 90° Equal E+ PE100 SDR11 d160 T 90° Equal E+ PE100 SDR11 d180 T 90° Equal E+ PE100 SDR11 d200





#### Size

Elbow 90° E+ PE100 SDR11 d20 Elbow 90° E+ PE100 SDR11 d25 Elbow 90° E+ PE100 SDR11 d32 Elbow 90° E+ PE100 SDR11 d30 Elbow 90° E+ PE100 SDR11 d50 Elbow 90° E+ PE100 SDR11 d75 Elbow 90° E+ PE100 SDR11 d100 Elbow 90° E+ PE100 SDR11 d110 Elbow 90° E+ PE100 SDR11 d125 Elbow 90° E+ PE100 SDR11 d160 Elbow 90° E+ PE100 SDR11 d160 Elbow 90° E+ PE100 SDR11 d180 Elbow 90° E+ PE100 SDR11 d180

#### Size

Reducer E+ PE100 SDR11 d25-20 Reducer E+ PE100 SDR11 d32-20 Reducer E+ PE100 SDR11 d32-25 Reducer E+ PE100 SDR11 d40-20 Reducer E+ PE100 SDR11 d40-25 Reducer E+ PE100 SDR11 d40-32 Reducer E+ PE100 SDR11 d50-32 Reducer E+ PE100 SDR11 d50-40 Reducer E+ PE100 SDR11 d63-32 Reducer E+ PE100 SDR11 d63-40 Reducer E+ PE100 SDR11 d63-50 Reducer E+ PE100 SDR11 d90-63 Reducer E+ PE100 SDR11 d110-90 Reducer E+ PE100 SDR11 d160-110 Reducer E+ PE100 SDR11 d180-125 Reducer E+ PE100 SDR11 d125-90 Reducer E+ PE100 SDR11 d200-160







# SADDLE CLAMPS AND MECHANICAL JOINTS





# **ABOUT THE PRODUCT**

Polypropylene (PP) Compression fittings are approved for use in contact with drinking water. These fittings offer exceptional joint security for metric OD polyethylene (PE) pipes and form a seal without distorting the pipe or restricting the pipe bore. The PP Compression fittings range is suitable for potable water distribution mains and irrigation systems. Fittings suitable for drinking water according to standards and regulations currently in force in Italy (Circolare n. 102 dated 2/2/1978 from Ministry of Health), Germany (Mitteilungen aus dem Bundesgesundheitsamt, 108. / 109. Mitteilung), United Kingdom (WRC), Netherlands (KIWA), USA (NSF).



ications Size	Specifications Size	Specifications Size	Specifications Size	Sp
1/2 "	63 x 1/ "	90 x 1/2 "	110 x 2″	20
5 x 3/4 "	63 x 3/4 "	90 x 3/4 "	110 x 3"	20
2 x 1/2 "	63 x 1"	90 x 1"	160 x 1/2 "	20
2 x 3/4"	63 x 1 1/2 "	90 x 1 1/4"	160 x 3/ "	2
2 x 1"	63 x 1 1/2 "	90 x 1 1/2 "	160 x 1"	2
0 x 1/2"	75 x 1/2"	90 x 2"	160 x 1 1/4 "	
) x 3/4"	75 x 3/4 "	110 x 1/2"	160 x 1 1/2 "	
) x 1"	75 x 1"	110 x 3/4 "	160 x 2"	
) x 1/2"	75 x 1 1/4 "	110 x 1"	160 x 3" - pn 10	
) x 3/4"	75 x 1 1/2"	110 x 1 1/4 "	160 x 4" - pn 10	
0 x 1"	75 x 2"			
0 x 1 1/4"	, o , (2	110 x 1 1/2"	200 x 1 1/2 " - pn 10	



# UPVC BOREHOLE SCREEN AND CASINGS





# ABOUT THE PRODUCT

UPVC borehole casings are manufactured to standard KS-2210 and DIN 4925 with trapezoidal threads and female belled-ends. The male threaded ends can also be fitted with a rubber O-ring for a superior leak-free joint if required to ensure that every drop of ground water that enters the well has been extracted at the greatest possible depth.

# SYSTEM BENEFITS

- Corrosion: the chemical inertness of uPVC makes them insensitive to all forms of corrosion, thus making them excellent products for use in Acid Mine drainage wells or high PH applications
- Mechanical properties: excellent resistance to high collapse pressures, together with high tensile loads with the "DIN" threading.
- Accurate slot sizes: with our various slotting machines we are able to produce accurate slot sizes which are consistent and therefore easily matched up to calculated flow rates which designers can use when designing systems
- Cost effective: lower installed cost compared to conventional (steel) casings.
- Reliable: the trapezoidal threaded joints can be used for over 20 years in demanding conditions.
- Easy handling and installation: tough, rugged material, with easy to assemble joints.
- Light weight: much lighter than steel casings makes for user friendly installations and savings

in time.

- PVC plastic material: resistant to corrosion as well as acids and alkalis found in some soils. No additional protection required.
- Internally and externally flush jointed: easy installation in borehole and improved flow of pumped water.
- High modulus of elasticity: makes for stiffer casings and screens which can be designed for boreholes up to at least 200 m deep.
- Can be solvent welded

# **APPLICATIONS**

- Waterwells
- Mine dewatering
- Sea water abstraction
- Geotechnical drilling
- Water monitoring





# UPVC BOREHOLE SCREEN AND CASINGS

# PRODUCT SPECIFICATIONS

	TYPE OF		WALL THICK-	THREAD DEPTH	THREAD PITCH	- ARD SLOT WIDTH	APPROX AREA OF WITH STD SLOT WIDTH	DIAMETER OVER SOCKET
BELLED END DIN 4925 CASE		113	5.0	2.0	6.0	-	-	121
BELLED END DIN 4925 SCREEN	В	113	5.0	2.0	6.0	0.8 - 1.0	8.0	121
FLUSH FITTING DIN 4925 CASE	С	113	7.0	2.0	6.0	-	-	
FLUSH FITTING DIN 4925 SCREEN	В	113	7.0	2.0	6.0	0.8 - 1.0	8.0	
BELLED END DIN 4925 CASE	С	125	5.0	2.0	6.0	-	-	132
BELLED END DIN 4925 SCREEN	В	125	5.0	2.0	6.0	0.8 - 1.0	7.5	132
FLUSH FITTING DIN 4925 CASE	С	125	7.5	2.0	6.0	-		
FLUSH FITTING DIN 4925 SCREEN	В	125	7.5	2.0	6.0	0.8 - 1.0	7.5	
BELLED END DIN 4925 CASE	С	140	6.5	2.6	6.0	-		149
BELLED END DIN 4925 SCREEN	В	140	6.5	2.6	6.0	0.8 - 1.0	7.5	149
FLUSH FITTING DIN 4925 CASE	С	140	8.0	2.6	6.0	-		
FLUSH FITTING DIN 4925 SCREEN	В	140	8.0	2.6	6.0	0.8 - 1.0	7.5	
BELLED END DIN 4925 CASE	С	165	7.5	2.6	6.0	-	-	176
BELLED END DIN 4925 SCREEN	В	165	7.5	2.6	6.0	0.8 - 1.0	7.5	176
FLUSH FITTING DIN 4925 CASE	С	165	9.5	2.6	6.0	-	-	
FLUSH FITTING DIN 4925 SCREEN	В	165	9.5	2.6	6.0	0.8 - 1.0	7.5	
BELLED END DIN 4925 CASE	С	200	9.0	2.6	6.0	-	-	212
BELLED END DIN 4925 SCREEN	В	200	9.0	2.6	6.0	0.8 - 1.0	7.5	212
FLUSH FITTING DIN 4925 CASE	С	200	11.5	2.6	6.0	-	-	
FLUSH FITTING DIN 4925 SCREEN	В	200	11.5	2.6	6.0	0.8 - 1.0	7.5	
BELLED END DIN 4925 CASE	С	225	10.0	2.6	6.0	-	-	241
BELLED END DIN 4925 SCREEN	В	225	10.0	2.6	6.0	0.8 - 1.0	7.0	241
FLUSH FITTING DIN 4925 CASE	С	225	13.0	2.6	6.0	-	-	
FLUSH FITTING DIN 4925 SCREEN	В	225	13.0	2.6	6.0	0.8 - 1.0	7.0	
BELLED END DIN 4925 CASE	С	280	12.5	4.5	12.0	-	-	297
BELLED END DIN 4925 SCREEN	В	280	12.5	4.5	12.0	1.5 -1.7	7.0	
FLUSH FITTING DIN 4925 CASE	С	280	16.0	4.5	12.0	-	-	
FLUSH FITTING DIN 4925 SCREEN		280	16.0	4.5	12.0	1.5 -1.7	7.0	







# PVC WASTE AND DRAINAGE PIPES



# **ABOUT THE PRODUCT**

Apex PVC pipes are optimally used in residential and industrial discharge systems for soil, waste and vent applications. Apex offers multiple complete PVC soil and waste systems, which comply with all major standards, offering mechanical engineers and plumbers all possible solutions.

1. Soil and waste standard KS-ISO 3633

2. Drainage standard KS-ISO 1452

# SYSTEM BENEFITS Complete plastic system

### Extensive range of PVC pipes and fittings.

# Good chemical and corrosion resistance

Apex PVC offers a considerable resistance to a large number of chemical agents up to 60° C for continuous and 90° C for discontinuous discharge.

### **Light weight**

The APEX PVC system is lightweight yet strong. The weight is approximately one-sixth the weight of steel.

### Easy to install

The low weight of the system reduces transportation,

handling and installation costs. The systems require no specific tools for cutting and are jointed with solvent weld or rubber ring push fit.

# **Reliable and durable**

Whether using the easy rubber ring push fit system or solvent cement, APEX PVC is highly durable with high tensile and high impact strength.

# Smooth interior, free of incrustations

The smooth interior of APEX PVC pipes and fittings prevents the buildup of deposits, assuring low friction loss and high flow rates. These high flow rates continue for the life of the pipe system.

### Fire resistance classification

PVC pipes and fittings are classed as selfextinguishing and do not support combustion.

# **Cost effective**

The many advantages of APEX PVC ensure a lower installed cost compared to other piping systems.

### Maintenance free

APEX PVC pipes and fittings do not rust, corrode or promote build-up of deposits on the system interior.



# PVC WASTE AND DRAINAGE PIPES

# **APPLICATIONS**

The APEX PVC systems are used across the continent for all soil, waste and vent applications in residential and industrial buildings:

- Sanitary facilities
- Washing machines and dishwashers
- Waste water (laundries, industrial plants, etc)
- Aggressive fluids in schools, laboratories and industrial buildings.

Brand	Jointing Method	Sizes(mm)
APEX PVC	Rubber Ring/Solvent Weld	32-450
Accessories	• WC Connectors	
	<ul> <li>Vent pipes and caps</li> </ul>	
	<ul> <li>Air admittance valves</li> </ul>	
	<ul> <li>Traps/siphons</li> </ul>	
	Floor gullies	
	<ul> <li>Access fittings</li> </ul>	
	Connectors and reducers	

# **PRODUCT SPECIFICATIONS**

Raw material	<ul> <li>Polyvinyl chloride (PVC)</li> </ul>
Stabilizers	- Non-lead/ Organic
Jointing method	- Rubber ring or Solvent Weld
Density (g/cm3)	- 1.40
Yield strength (N/mm2)	- 50 – 55
E-modulus (N/mm2)	- 3000
Melting point	- Ca. 90°C
Vicat softening point	- 80°C
Specific heat	- 1.00 kJ/kg • K
Coefficient of heat conduction	- 0.16 W/mK





# PVC WASTE FITTINGS







REDUCING BUSH - SWR



W.C. CONNECTOR - SWR Sizes W.C. Connector Straight 4" (110mm)



SHOWER TRAP - SWR Sizes 4" (110mm) Tee



Sizes 11/4" 11/2" 2" 3" (82mm) BEND 45° - SWR Sizes 4" (110mm) Bend 45°

Sizes 11/4" 11/2" 2" 3" (82mm)



# **BOSS CONNECTOR - SWR**

Sizes

- 4' (110mm) x 11/4"
- 4' (110mm) x 11/2"
- 4' (110mm) x 2"



ACCESS PLUG - SWR





FLOOR TRAP - SWR

**TEE SWR** 

Sizes

11/4"

11/2"

3" (82mm)

2″

Description Complete with Grill and Tile Grill and Tile (inlet) Main Trap Grill



**INSPECTION BEND 90° - SWR** 

Sizes 4" (110mm) Inspection Bend 90°



VENT COWL - SWR Description 4' (110mm)



TEE Size 4" (



TEE SWR Sizes 4" (110mm) Tee



INSPECTION TEE Sizes 4" (110mm) Bend 90°



# PE SOIL AND WASTE



# **ABOUT THE PRODUCT**

Wavin PE is a complete soil, waste and vent system of pipes and fittings, manufactured from high-density polyethylene. This tough and durable PE system offers an extraordinary chemical resistance in combination with a high flexibility level and great impact resistance. Wavin PE pipes and fittings are joined by welding, making the joints resistant to tension. There are two methods of welding: butt welding (hot plate welding) and electro-fusion welding.

# SYSTEM BENEFITS

# Excellent chemical and corrosion resistance

Durable system with a wide range of applications

### High material flexibility

Options for rigid and flexible installation methods

### High impact resistance

Impact resistance is high even at low temperatures.

# Easy to install

Fittings are marked for easy cutting and positioning



**Corrosion resistant** Wavin PE is a durable, complete plastic system.

### Smooth bore, free of incrustations

Maintains a smooth internal surface, preventing the build-up of deposits which could restrict flow.

# Welded system

Secure joints by butt-welding or electro-fusion welding.

# Excellent for casting into concrete

Single system with a wide range of applications.

# **APPLICATION**

The Wavin PE range for soil, waste and vent pipes and fittings is suitable for the following applications in residential and industrial buildings:

- Sanitary facilities
- Washing machines and dishwashers
- Waste water in commercial kitchens, laundries and industrial plants
- Aggressive fluids in schools, laboratories and industrial buildings.

Most Wavin PE products can also be used as part of under-pressure installations like the siphonic





# PE SOIL AND WASTE

roof drainage system Wavin QuickStream. To meet this requirement these items are designed te meet a PN4 pressure classification and are structurally stronger than those offered in other PE Soil and Waste systems.

# RANGE

Wavin PE is available in a range of nominal pipe sizes from 32-315 mm. The system consists of a large variety of fittings / electro-fusion couplers e.g. reducers, elbows, branches, expansion sockets, access fittings and many other products.

Category	Product	Dimensions	
	(mm)		
Pipes	<ul> <li>Plain ended</li> </ul>	32 - 315	
Bends	• Bends	15° - 90°	
	<ul> <li>Bends extended</li> </ul>		
	<ul> <li>Bends reduced</li> </ul>		
	• U-bend	32 - 315	
Branches	<ul> <li>Branches</li> </ul>	45°, 67°, 87°	
	<ul> <li>Corner branches</li> </ul>		
	<ul> <li>Double branches</li> </ul>		
	<ul> <li>Y-branches</li> </ul>		
	<ul> <li>Spherical branches</li> </ul>	32/32 - 315/315	
Couplers	<ul> <li>Electro-fusion coupler</li> </ul>		
	(WaviDUO, Wavin SOLO)		
	<ul> <li>Connection with 4 stubs</li> </ul>	40 - 315	
		110/40 - 110/50	
Reducers	<ul> <li>Reducers concentric</li> </ul>		
	and eccentric)	40/32 - 315/250	
Accessories	Electro-fusion welding mad	chines	
	<ul> <li>Butt-welding machines</li> </ul>		
	<ul> <li>Access fittings</li> </ul>		
	• WC connectors		
	<ul> <li>Siphons / Traps</li> </ul>		
	Transition fittings		
	External and concealed ci	sterns	
	Wavin QuickStream roof or	utlets	



and the states

WATER THE ESSENCE OF LIFE



# ELECTRICAL CONDUIT PIPES AND FITTINGS







# **ABOUT THE PRODUCT**

Electrical Conduits are manufactured under strict quality control with latest technology. Electrical Conduits are best preferred for concealed wiring in houses, residential and commercial buildings, industries, traffic signals, street lighting etc.

UPVC Electrical Conduits have been preferred over other available resources due to varied salient features, key among them being that it is not a 'fire catalyst'.

Standard: KS04 -179

# **APPLICATION**

Domestic: concealed wiring in houses, residential and commercial buildings. Industrial: concealed wiring in plants Other: Traffic signal connections, street light and wiring at public places

- Strong and durable
- Light weight and flexible
- Convenient joining
- Safe
- Resistant to rusting, wear, abrasion and water
- Excellent surface
- Cost saving
- Temperature stable
- Smoke suppressing
- Maintenance free

Sizes available: From 20mm to 50mm



# **INJECTION MOLDED PRODUCTS**











PRODUCT		PACKING
PLASTIC CHAIR FERRULESRound ferruleexternalRound ferruleexternalRound ferruleexternalRound ferruleexternalRound ferruleinsertRound ferruleinsertRound ferruleinsertRound ferruleinsertRound ferruleinsertRound ferruleinsertRound ferruleinsertRound ferruleinsertRound ferruleinsert	5/8" 1/4" 7/8" 1" 11/4" 3/4" 7/8" 1" 11/4"	2500 pcs 2000 pcs 1200 pcs 1000 pcs 500 pcs 2500 pcs 2500 pcs 1500 pcs 1500 pcs
Wall plugs Wall plug Wall plug Wall plug Wall plug Wall plug Wall plug Wall plug Wall plug Wall plug Wall plug expand Wall plug expand Wall plug expand	6mmx 1" red 6mmx 1 1/4" red 6mmx 1 1/2" red 7mmx 1" yellow 7mmx 1 1/2" yellow 7mmx 1" yellow 8mmx 1 1/2" green 8mmx 2" green 8mmx 1" red 6mmx 1 1/4" 8mmx 1 1/2" 10mmx 2"	1000 pcs 1000 pcs
TERRAZZO STRIPS black white black white black white	1/2" X 2mt 1/2" X 2mt 3/4" X 2mt 3/4" X 2mt 1" X 2mt 1" X 2mt	50 pcs 50 pcs 50 pcs 50 pcs 50 pcs 50 pcs
ROOFING WASHERS R/washer dome shape R/washer dome shape R/washer dome shape R/washer dome shape R/washer with cap black R/washer with cap red R/washer and cap R/washer and cap R/washer and cap R/washer and cap R/washer and cap R/washer for stud cap R/washer flat for nails Roofing stud cap	6mm black 6mm red 8mm black 8mm red 6mm black 6mm red 6mm red 8mm	3000 pcs 3000 pcs 3000 pcs 3000 pcs 1000 pcs 1000 pcs 2000 pcs 2000 pcs 2000 pcs 2000 pcs 3000 pcs 15000 pcs 1000 pcs
OTHER PRODUCTS Air vents black Air vents brown Air vents white Plastic toilet roll holder Plastic soap dish Basic plug 1 1/2"		100 pcs 100 pcs 100 pcs 1 pc 1 pc 20 pcs

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# **INJECTION MOLDED PRODUCTS**

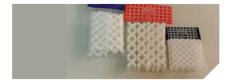












PRODUCT		PACKING
Basic plug 1 5/8" Basic plug 1 3/4" Basin stopper "Kap" catch Cupboard catch Door stops Door stops Door stops Door stops Door stops Door stops Guide:key w741 Guide:triangular Guide:triangular Guide:d341{gaf} Guide:08 series Guide:for x-trail Hose connector 1/2 " Hose connector 3/4" Knobs- plain Knobs-designed Mirror screw cap Mattex rollers Mattex rollers Mattex rollers Mop handlers Profile for g/house "u"	3/ 4" black 3/ 4"red 1" black 1" red 1 1/2" black 1 1/2" red 4mm 6mm white 6mm green	20 pcs 20 pcs
Profile for g/house "o" Shovel handle Stationery tray Step nozzing Skirting 4" Sliding door rail stop end Sliding door rail guide whit Sliding door rail guide whit Sliding door rail "t" profile Slate panel x3.8Mtr Handle for paint tin - white Strike plate, black /white Stud with nail for chair Door strip 1" Table reading 1" Cabinet handle x100pcs Tile edge trim 9mmx 2.5Mt Tile edge trim 9mmx 2.5Mt Tile spacers 2mmx250pcs Tile spacers 3mmx200pcs Tile spacers 5mmx100pcs Vent:duct x100pcs Vent:for alum.Window bla Vent:for alum.Window gre Wheel barrow handle grip	2mtr Þ/black r Itr ck y	50pcs 50pcs 1pcs 80pcs 10mtrs 50mtrs 100pcs 1 length 1 length 1 length 100pcs 200pcs 30mtrs 100pcs 50pcs 50pcs 50pcs 100pcs 50pcs 100pcs 50pcs 200pcs 200pcs 200pcs 200pcs 200pcs 200pcs 200pcs 200pcs 200pcs 200pcs 150pcs



Y

# **EXTRUSION MOLDED PRODUCTS**







PRODUCT		PACKING
PVC GARDEN HOSES Garden hose zebra Garden hose zebra Garden hose zebra Garden hose zebra Garden hose zebra Garden hose clear Garden hose clear Garden hose clear Garden hose clear Garden hose clear	1/2" x 60 ft 1/2" x 120 ft 3/4" x 60 ft 1" x 60 ft 1" x 120 ft 1/2" x 60 ft 1/2" x 120 ft 1/2" x 120 ft 3/4" x 60 ft 3/4" x 120 ft 1" x 60 ft 1" x 120 ft	
Nylon braided hoses Nylon braided hose Nylon braided hose	1/4" x 50mts 5/16" x 50mts 3/8" x 50mts 1/2" x 50mts 5/8" x 50mts 3/4" x 50mts 11/4" x 30mts 11/4" x 30mts 11/2" x 30mts 2" x 30mts	50 mts 50 mts 50 mts 50 mts 50 mts 50 mts 50 mts 50 mts 50 mts 50 mts
SUCTION/DELIVERY HOSES Suction hose Suction hose Suction hose Suction hose Suction hose Suction hose Suction hose Delivery hose Delivery hose Delivery hose Delivery hose Delivery hose Delivery hose Delivery hose Delivery hose	1" 11/4" 11/2" 2" 21/2" 3" 4" 6" 1" 11/4" 11/4" 11/2 " 2" 21/2" 3"	6mts, 12Mts and 18 Mts

# PVC CLEAR TUBING

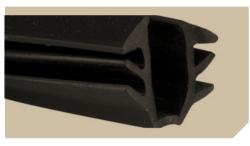
Delivery hose Delivery hose

Clear fubing	3mm	50 mfs
Clear tubing	4mm	50 mts
Clear tubing	5mm	50 mts
Clear tubing	6mm	50 mts
Clear tubing	8mm	50 mts
Clear tubing	10mm	50 mts
Clear tubing	13mm	50 mts
Clear tubing	16mm	50 mts
Clear tubing	20mm	50 mts
Clear tubing	24mm	50 mts

4" 6"



# **EXTRUSION MOLDED PRODUCTS**









PRODUCT		PACKING
PVC GLAZING VINYLS Profile 'xmas' tree Profile 'u' tree Profile 'u' tree Profile 'u' tree Profile 'u' tree Profile ribbed solid Profile ribbed solid Profile ribbed hollow Partition filler black Partition filler pold Partition filler poly Partition filler prown Partition filler grey Partition filler grey Partition filler grey Partition filler met-blue Glass vinyl for matatu Profile hd o.E red/black	3.0Mm 4.0Mm 4.5Mm 5.0Mm 6.0Mm 6.5Mm 3mm 4mm 5mm 6mm 3.5Mm 5mm	50 mts 50 mts 25 mts 25 mts 25 mts 25 mts 25 mts 25 mts 25 mts 50 mts 50 mts
OTHER PRODUCTS Body filler centre large Body filler small - red Body filler small - black Body filler side – blue Body filler side – red Body filler side – yellow Body filler side – green Body filler side – black		50 mts 50 mts 50 mts 50 mts 50 mts 50 mts 50 mts 50 mts
Table edging: "t"28mmx1 Table edging: "t"28mmx1 Table edging: "t"28mmx1 Table edging: "t"28mmx1 Table edging: "t"28mmx1 Table edging: "t"30mmx1 Table edging: "t"30mmx1 Table edging: "t"30mmx1 Table edging: "t"30mmx1 Table edging: "t"30mmx1 Table edging: rigid 20mm Table edging: rigid 23mm Table edging: soft 25mm Table edging: soft 25mm Table edging: soft 28mm Table edging: rigid 25mm Table edging: rigid 25mm	Omt grey Omt brown Omt biege Omt black Omt grey Omt blue Omt blue brown black grey brown beige black black black black black tr	10mtrs 10mtrs 10mtrs 10mtrs 10mtrs 10mtrs 10mtrs 10mtrs 50

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# **INJECTION MOLDED** (HOUSEHOLD PRODUCTS)



# PRODUCT

PRODUCT		PACKING
Hangers	hanger "a"	240 pcs
Hangwell'	hanger "b"	240 pcs
Hangwell'	hanger "b"	50 pcs
Hangwell'	hanger "d"	144 pcs
Hangwell'	hanger "d"	350 pcs
HOUSEHOLD PRODUCTS Magic bowl – Magic bowl – Magic bowl – Magic bowl – Magic bowl – Magic glass – Magic glass – Magic glass – Magic glass – Magic glass – Magic jug – Magic jug – Magic jug – Magic mug – Magic mug – Magic soup plate – Magic soup plate – Magic soup plate –	extra large large medium small extra small clear coloured tinted luminious clear coloured luminious tinted clear coloured clear coloured luminious	36 pcs 72 pcs 96 pcs 100 pcs 200 pcs 500 pcs 500 pcs 500 pcs 24 pcs 24 pcs 24 pcs 24 pcs 216 pcs 300 pcs 300 pcs 300 pcs
Curtain trail 5mt length		1pcs
Curtain rail fittings set		1set
Curtain rail fittings bracket		100pcs
Curtain rail fittings gliders		500pcs
Curtain rail fittings stop- ends		100pcs
Curtain hooks		80x150
Curtain hooks clip type		12x1000
Curtain hook round type		12x1000
Flower pot		12x1000
Flower tube		1pc
Flower tube		500pcs
Flower tube cap		500pcs
Flower bed fence		10pktsx10
Shower curtain ring "s" type		2000pcs
Shower curtain ring "c" type		2000pcs

Door wedge black 10pcs Door wedge grey Door wedge brown 10pcs 10pcs Door wedge white 10pcs

Waste paper basket coloured

30pcs





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INFRA RED BASIN TAP



PILLAR TAP EUROECO BAULOOP BATH MIXER



TECTRA INFRA RED FOR URINAL



EUROCUBE SINGLE LEVER



COSMO WALL PLATE

WALL MOUNTED





ACCESSORY SET

CONCEALED BODY





