



PRODUCT CATALOGUE

APEX PIPING SYSTEMS LIMITED





WHO WE ARE

Apex Piping Systems Ltd: Engineering The Future Of Water Management

Apex Piping Systems Limited began its journey in 2010 with the strategic takeover of KAP Plastics, a company known for its specialization in aluminium products and injection-molded plastics for household use. This transition marked the beginning of Apex's evolution into a comprehensive solutions provider for Kenya's construction and infrastructure sectors. By leveraging the legacy of KAP Plastics and introducing an expanded product range, Apex quickly became a one-stop shop for construction related needs in the region.





From 2012 to 2017, Apex entered a transformative partnership with Wavin—a global leader in piping systems. Operating under Wavin’s strong international quality standards, we significantly expanded our production capabilities at our Athi River facility, manufacturing PPR, PVC (for drainage, electrical conduits, and rainwater systems), and HDPE pipes. These products laid the foundation for what is now known as Apex Piping Systems, officially rebranded in 2018.

Our pioneering spirit dates back even earlier—in 2004, we became the first company in East Africa to locally produce PPR and HDPE pipes, radically changing the plumbing industry from galvanized pipes to plastic, thus bringing efficiency, durability, and cost-effectiveness to contractors and end-users alike.

Trademarked as “Hydro-Flo”, our flagship range of piping systems made exclusively from 100% virgin, lead-free materials. Engineered to last over 50 years and certified with the Diamond Mark of Quality, Hydro-Flo pipes represent our unwavering commitment to safety, reliability, and health. Today, Apex Piping Systems leads with a vision focused on sustainability, innovation, and the reduction of non-revenue water. Through smart partnerships and cutting-edge technologies, we provide integrated solutions that help water utilities and infrastructure developers manage losses, protect resources, and build a more water-secure future. Our offerings include a diverse range of products from fittings, valves, and water meters to pumps, wall plugs, garden hoses, and more. All designed to meet Kenya’s evolving construction and environmental demands.

Why Choose Apex?

Because water is life—and we believe in delivering only the best. At Apex Piping Systems Limited, we blend decades of experience with future-focused thinking to provide world-class, lead-free, sustainable piping systems that keep East Africa flowing today and for generations to come.

Testing Standards

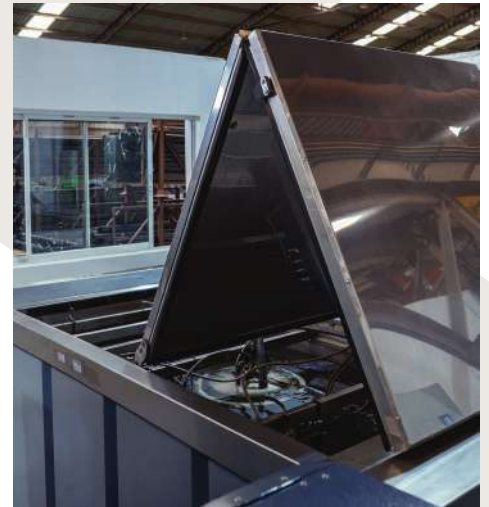
Quality. Durability. Flow. — Apex Piping Systems, Building East Africa's Future.

Product Testing Overview – HDPE, PPR, and PVC Pipes

At Apex Piping Systems LTD, our HDPE, PPR and PVC piping products undergo rigorous testing to ensure durability, safety, and compliance with global standards. These tests are designed to simulate real-world conditions and confirm long-term performance.

Why Testing is Essential:

Thermoplastic pipes (HDPE, PPR, PVC) expand, contract, and bear loads differently depending on their environment. Testing ensures that the molecular structure and mechanical properties remain stable over time, even under stress, heat or chemical exposure. This guarantees that our products remain reliable and safe for both residential and industrial applications.



Key Testing Processes

- 01. Hydrostatic Pressure Test:** Pipes are subjected to high internal pressure over time to assess their strength and leak resistance under continuous water flow.
- 02. Impact Resistance Test:** Measures the pipe's ability to withstand mechanical shocks, especially in cold environments.
- 03. Tensile Strength & Elongation Test:** Checks how much the material can stretch or withstand pulling forces before breaking, indicating ductility and flexibility.
- 04. Dimensional Accuracy Check:** Ensures uniform wall thickness, roundness, and proper fit with joints and fittings.
- 05. Leakage Test:** Conducted under pressure to confirm that there are no weak points or defects that could cause leaks.
- 06. Melt Flow Index (MFI) Test:** Assesses the flow characteristics of the plastic material during manufacturing, ensuring consistent quality and processability.
- 07. Chemical Resistance Test:** Verifies the pipe's resistance to various chemicals, making it suitable for industrial applications.

Note: The tests outlined represent the minimum quality checks conducted on APSL pipes. We carry out comprehensive testing on all our products in our state-of-the-art laboratory, ensuring each batch meets and exceeds industry standards for performance and safety.

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- 5. WILO Pumps
- 6. Injection Molded Products
- 7. Electrical Cables



HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1. Hydro-flo HDPE

Apex Piping Systems LTD (APSL) supplies high quality Hydro-flo HDPE pipes using PE100 raw material. Our pipes are successfully used in a variety of applications in multiple industry sectors. The application of HDPE pipes has grown enormously due to its versatility and the advantages it offers over iron, steel and cement systems.

Over the years, PE100 materials have become recognized as the preferred choice to solve key industry challenges such as corrosion issues and high leakage rates - offering a new generation of leak proof, maintenance free and energy efficient pipeline systems. This allows for cost savings in installation of pipework.

Trenchless technology can help avoid the need for open trenches and reduce the disturbance to the public and environment by pulling long lengths of PE pipes through holes below ground bored by mechanical moles.

APSL hydro-flo pipes are manufactured to KS-ISO 4427 standards, and carry the Kenya Bureau of Standards (KEBS) Diamond mark of trusted quality.

Because water is life—and we believe in delivering only the best. At Apex Piping Systems LTD, we blend decades of experience with future-focused thinking to provide world-class, lead-free, sustainable piping systems that keep East Africa flowing today and for generations to come.

HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)





HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1.1. HDPE Pressure Pipes

Available in diameters from 16 mm to 800 mm, with pressure ratings ranging from PN4 to PN25. Sizes between 20 mm and 90 mm are supplied in 100-metre coils, while larger diameters are cut to straight lengths, typically 6 or 12 metres.

Engineered to withstand a wide range of pressure conditions, these pipes are ideal for use in both residential and industrial infrastructure projects.

Features And Benefits

1. Good impact strength and easy installation
2. Excellent corrosion resistance
3. Good chemical resistance
4. Low mass
5. Long lengths available
6. Good abrasion resistance
7. Good UV resistance
8. Low friction losses
9. Several jointing methods
10. Extensive range of fittings



HYDRO-FLO HDPE Product Specifications

PIPE SERIES												
SDR 6		SDR 7,4		SDR 9		SDR 11		SDR 13, 6		SDR 17		
S 2,5		S 3,2		S 4		S 5		S 6,3		S 8		
Pipe Series / Nominal Pressure (PN)bar												
PE 40	—		PN 10		PN 8		—		PN 5		PN4	
PE 63	—		—		-		PN 10		PN 8		—	
PE 80	PN 25		PN 20		PN 16		PN 12,5		PN 10		PN 8	
PE 100	-		PN 25		PN 20		PN 16		PN 12.5		PN 10	
Nominal Size	Wall Thickness ^ø mm											
	*Min (mm)	*Max (mm)	*Min (mm)	*Max (mm)	*Min (mm)	*Max (mm)	*Min (mm)	*Max (mm)	*Min (mm)	*Max (mm)	*Min (mm)	*Max (mm)
16	3,0	3,4	2,3 ^c	2,7	2,0 ^c	2,3	-	-	-	-	-	-
20	3,4	3,9	3,0	3,4	2,3 ^c	2,7	2,0 ^c	2,3	-	-	-	-
25	4,2	4,8	3,5	4,0	3,0	3,4	2,3 ^c	2,7	2,0 ^c	2,3	-	-
32	5,4	6,1	4,4	5,0	3,6	4,1	3,0	3,4	2,8	3,2	2,0 ^c	2,3
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	10,3	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	11,6	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	16,4	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	48,5	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
710	—	—	—	—	79,3	87,4	64,5	71,1	52,2	57,6	42,1	46,5
800	—	—	—	—	89,3	98,4	72,6	80,0	58,8	64,8	47,4	52,3



HYDRO-FLO HDPE Product Specifications

PIPE SERIES								
	SDR 21		SDR 26		SDR 33		SDR 41	
	S 10		S 12,5		S 16		S 20	
Pipe Series / Nominal Pressure (PN)bar								
PE 40	PN 3,2		PN 2,5		-		-	
PE 63	PN 5		PN 4		PN 3,2		PN 2,5	
PE 80	PN 6 ^d		PN 5		PN 4		PN 3,2	
PE 100	PN 8		PN 6 ^d		PN 5		PN 4	
Nominal Size	Wall Thickness ^b mm							
	°Min	°Max	°Min	°Max	°Min	°Max	°Min	°Max
16	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-
40	2,0	2,3	-	-	-	-	-	-
50	2,4	2,8	2,0	2,3	-	-	-	-
63	3,0	3,4	2,5	2,9	-	-	-	-
75	3,6	4,1	2,9	3,3	-	-	-	-
90	4,3	4,9	3,5	4,0	-	-	-	-
110	5,3	6,0	4,2	4,8	-	-	-	-
125	6,0	6,7	4,8	5,4	-	-	-	-
140	6,7	7,5	5,4	6,1	-	-	-	-
160	7,7	8,6	6,2	7,0	-	-	-	-
180	8,6	9,6	6,9	7,7	-	-	-	-
200	9,6	10,7	7,7	8,6	-	-	-	-
225	10,8	12,0	8,6	9,6	-	-	-	-
250	11,9	13,2	9,6	10,7	-	-	-	-
280	13,4	14,9	10,7	11,9	-	-	-	-
315	15,0	16,6	12,1	13,5	9,7	10,8	7,7	8,6
355	16,9	18,7	13,6	15,1	10,9	12,1	8,7	9,7
400	19,1	21,2	15,3	17,0	12,3	13,7	9,8	10,9
450	21,5	23,8	17,2	19,1	13,8	15,3	11,0	12,2
500	23,9	26,4	19,1	21,2	15,3	17,0	12,3	13,7
560	26,7	29,5	21,4	23,7	17,2	19,1	13,7	15,2
630	30,0	33,1	24,1	26,7	19,3	21,4	15,4	17,1
710	33,9	37,4	27,2	30,1	21,8	24,1	17,4	19,3
800	38,1	42,1	30,6	33,8	24,5	27,1	19,6	21,7



HYDRO-FLO HDPE Product Specifications

DN mm	Toleranslar (+)			SDR 41 PN 4			SDR 33 PN 5			SDR 27.6 PN 6			SDR 22 PN 8			SDR 17 PN 10			SDR 13,6 PN 12,5			SDR 11 PN 16			SDR 9 PN 20			SDR 7.4 PN 25			SDR 6 PN 32		
	A*	B*	O*	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m			
16	0.3	0.3	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
20	0.3	0.3	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
25	0.3	0.3	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
32	0.3	0.3	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
40	0.4	0.4	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
50	0.4	0.4	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
63	0.4	0.4	1.5	1.8	0.3	0.36	2.0	0.3	0.39	2.4	0.4	0.47	3.0	0.4	0.57	3.8	0.5	0.71	4.7	0.6	0.87	5.8	0.7	1.04	7.8	1.2	1.25	8.6	1.0	1.46			
75	0.4	0.5	1.6	1.9	0.3	0.45	2.3	0.4	0.54	2.7	0.5	0.63	3.6	0.4	0.81	4.5	0.6	1.01	5.6	0.7	1.23	6.8	0.8	1.46	8.4	1.0	1.75	10.3	1.2	2.08			
90	0.6	0.6	1.8	2.3	0.3	0.64	2.8	0.4	0.78	3.3	0.6	0.93	4.3	0.5	1.16	5.4	0.7	1.45	6.7	0.8	1.76	8.2	1.0	2.11	10.1	1.2	2.53	12.3	1.7	2.99			
110	0.7	0.6	2.2	2.7	0.4	0.93	3.4	0.5	1.16	4.0	0.7	1.37	5.3	0.6	1.74	6.6	0.8	2.15	8.1	1.0	2.60	10.0	1.1	3.13	12.3	1.4	3.76	15.1	1.7	4.47			
125	0.8	0.6	2.5	3.1	0.5	1.22	3.9	0.5	1.50	4.5	0.7	1.74	6.0	0.7	2.25	7.4	0.9	2.74	9.2	1.1	3.35	11.0	1.3	4.06	14.0	1.6	4.87	17.1	1.9	5.76			
140	0.9	0.9	2.8	3.5	0.5	1.52	4.3	0.6	1.86	5.1	0.8	2.21	6.7	0.8	2.81	8.3	1.0	3.44	10.3	1.2	4.20	12.7	1.4	5.06	15.7	1.7	6.09	19.2	2.1	7.23			
160	1.0	1.0	3.2	4.0	0.5	1.97	4.9	0.6	2.40	5.8	0.9	2.86	7.7	0.9	3.59	9.5	1.1	4.50	11.8	1.3	5.48	14.0	1.6	6.4	17.9	1.9	7.94	21.9	2.3	9.42			
180	1.1	1.1	3.6	4.4	0.6	2.46	5.5	0.7	3.04	6.5	1.0	3.61	8.6	1.0	4.64	10.7	1.2	5.69	13.3	1.5	6.96	16.4	1.8	8.40	20.9	2.2	10.04	24.6	2.6	11.91			
200	1.2	1.2	4.0	4.9	0.6	3.02	6.2	0.8	3.81	7.2	1.1	4.44	9.6	1.1	5.75	11.9	1.3	7.02	14.7	1.6	8.53	18.2	2.0	10.7	22.4	2.4	12.42	27.4	2.9	14.73			
225	1.4	1.4	4.5	5.5	0.7	3.82	6.9	0.8	4.74	8.2	1.2	5.68	10.8	1.2	7.26	13.4	1.5	8.90	16.6	1.8	10.83	20.3	2.2	13.00	27.4	2.7	15.72	30.8	3.2	18.61			
250	1.5	1.5	5.0	6.2	0.8	4.79	7.7	0.9	5.88	9.1	1.3	6.99	11.9	1.3	8.89	14.8	1.6	10.91	18.4	2.0	13.34	22.7	2.4	16.12	27.9	2.9	19.32	34.2	3.6	22.98			
280	1.7	1.7	9.8	6.9	0.8	5.94	8.6	1.0	7.35	10.1	1.5	8.71	13.4	1.5	11.18	16.8	1.8	13.70	20.6	2.2	16.72	25.4	2.7	20.21	31.3	3.3	24.28	38.3	4.0	28.82			
315	1.9	1.9	11.1	7.7	0.9	7.46	9.7	1.1	9.32	11.4	1.6	11.02	15.0	1.6	14.10	18.8	2.0	17.35	23.2	2.5	21.19	28.6	3.0	25.58	35.2	3.7	30.72	43.1	4.5	36.48			
355	2.2	2.2	12.5	8.7	1.0	9.49	10.9	1.2	11.78	12.9	1.8	14.05	16.9	1.7	17.86	21.1	2.3	22.90	26.1	2.8	26.20	32.2	3.4	32.47	39.7	4.1	39.01	48.5	5.0	46.25			
400	2.4	2.4	14.0	9.8	1.1	12.03	12.3	1.4	15.01	14.5	2.1	17.83	19.1	1.9	22.72	23.7	2.5	27.91	29.4	3.1	34.07	36.3	3.8	41.23	44.7	4.6	49.49	54.7	5.6	58.75			
450	2.7	2.7	15.6	11.0	1.2	15.17	13.8	1.5	18.90	16.3	2.3	22.52	21.5	2.2	28.81	26.7	2.8	35.36	33.1	3.5	43.16	40.9	4.2	52.21	50.3	5.2	62.66	61.5	6.3	74.32			
500	3.0	3.0	17.5	12.3	1.4	18.89	15.3	1.7	23.31	18.1	2.5	27.74	23.9	2.4	35.56	29.7	3.1	43.70	36.8	3.8	53.25	45.4	4.7	64.42	55.8	5.7	77.22	68.4	6.9	92.46			
560	3.4	3.4	19.6	13.7	1.5	23.52	17.2	1.9	29.34	20.3	2.8	35.84	26.7	2.7	44.51	33.3	3.5	54.74	41.2	4.3	66.81	50.8	5.2	80.70	61.0	6.3	96.43	74.3	7.7	114.46			
630	3.8	3.8	22.1	15.4	1.7	29.75	19.3	2.1	37.01	22.8	3.1	43.99	30.0	3.0	56.24	37.4	3.9	69.33	46.3	4.8	84.45	57.2	5.9	102.25	64.5	6.7	129.97	78.4	7.9	154.46			
710	6.4	6.4	24.9	17.4	1.9	37.86	21.8	2.3	47.04	25.7	3.5	55.89	33.9	3.3	71.52	42.71	4.4	87.97	52.2	5.4	107.28	64.5	6.7	129.97	78.4	7.9	154.46	78.4	7.9	154.46			
800	7.2	7.2	28.0	19.6	2.1	48.01	24.5	2.6	59.58	29.0	4.0	71.11	38.1	3.7	90.58	47.4	4.9	111.55	58.8	6.0	136.09	78.4	7.9	154.46	78.4	7.9	154.46	78.4	7.9	154.46			



HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1.2. HDPE Pressure Pipe Fittings

Recognizing that the joint is the most critical part of any piping system, Apex Piping System Ltd (APSL) offers a complete range of fittings and jointing systems designed for long-term performance and ease of installation. Our solutions include both permanent and detachable jointing options ensuring compatibility with major installation methods. The schematic below illustrates the available systems.

Compression Fittings

Polypropylene (PP) compression fittings are approved for use with drinking water and provide a secure, distortion-free seal for metric OD polyethylene (PE) pipes. Designed to maintain the pipe's internal diameter without restricting flow, these fittings ensure reliable performance and longevity in both potable water distribution mains and irrigation systems, Suitable for pipe sizes ranging from 16 mm to 110 mm.

Compression saddle clamps allow quick branch connections to HDPE pipelines without cutting the main line. Available with threaded, flanged, or plain outlets, they are made from corrosion-resistant materials and are perfect for live-line and retro-fit applications.

Product Specifications

Joints Body : Black Polypropylene

Lock-Nut : Blue Polypropylene (RAL 5012)

Gasket : 75 Shore Nitrile rubber (NBR)

Locking Ring : White Polyacetal (POM)

Clamp Saddles : Body and gasket: same as the joints.

Specifications: Available from 16 mm - 110mm

HYDRO-FLO HDPE Compression Fittings



Reducing Tee



Equal Tee



Male Tee



Female Tee



Elbow



Male Elbow



Female Elbow



Saddle Clamp



Coupler



Coupler Ball Valve



Reduced Coupler



End Cap



Female Adaptor



Male Adaptor



Flange Adaptor



Connect With Flow



HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1.2. HDPE Pressure Fittings

Buttfusion Fittings

The PE pressure pipe fittings comply fully with the relevant EN and ISO standards for water applications, including EN 12201-3 and ISO 4427. Extensive testing and strict quality control during production guarantee the reliability of these fittings, which are available in sizes ranging from 90 mm to 800 mm. They are offered in injection-molded and fabricated forms.

Fabricated ButtFusion Fittings

In addition, to the Butt fusion fittings range that is suitable for all sorts of applications in combination with PE pressure pipelines. We also have electro-fusion fittings, that range from 110 to 800mm, that are all-round compatible with the majority of the (40V) fusion machines in the market.



Buttfusion fittings / Fabricated Buttfusion Fittings

Injection Molded Buttfusion



Tees 90°



Tees 45°



Reducing Tee



Equal Tee



Reducer



45° Elbow



90° Elbow



End cap



Flange



Saddle Coupling



Coupling



Backing Ring

Fabricated Buttfusion



Bend 90°



Bend 45°



Tee



Y Tee



Butt Fusion Machine



HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1.3 HDPE DWC Pipes

Double Wall Corrugated (DWC) is a low-cost product with the excellent quality solution for underground drainage, rainwater, sewerage, electrical, industrial, roads and highways. It is used for the construction of the underground flow channels for the transportation of sewage water. These pipes are manufactured as per IS 16098 (Part-2), have a smooth internal surface and corrugated external surface. DWC pipes are available in the size range from 110 mm to 800 mm with stiffness classes of SN-4 KN/m² and SN-8 KN/m².

Features And Benefits

1. Excellent earth load bearing strength and abrasion resistant
2. Ease of installation
3. Excellent connectivity with manholes and chambers
4. Corrosion resistance
5. Durability (50+ years life)
6. Watertight joints
7. Minimize excavation cost
8. Hygienic, Safe, light in weight and are economical
9. Flexible yet strong
10. No root intrusion
11. 100% watertight joints and free from underground ill effects
12. Rodent deterrent DWC pipes (On request)

Specifications

Material : HDPE (High-Density Polyethylene).

Load-bearing : High external load resistance for deep underground applications.

Joining : Double socket couplers, rubber gaskets, or welding for secure and leak-proof connections.

Size range : 110 mm to 800 mm.

Stiffness classes : SN-4 KN/m² and SN-8 KN/m².





1.4 HDPE DWC Pipe Fittings



Coupler



Bend 90°



Bend 45°



End Cap



Equal Tee



Cross Tee







HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1.5 HDPE Drip Irrigation Pipes

We offer high-quality drip lines, designed to efficiently irrigate various crops while conserving water and reducing labor. Their drip lines are suitable for both smallholder and commercial farming operations, including open fields and greenhouses. The drip lines deliver water directly to the plant root zone through a network of pipes, valves, and emitters. This method minimizes water wastage due to evaporation or runoff, making it ideal for water-scarce regions. The system operates effectively under low pressure, utilizing gravity-fed tanks or water pumps.

Features And Benefits

- 1. Material & Construction :** UV-treated HDPE pipes.
- 2. Flow Rate :** 0.8 to 1.5 liters per hour.
- 3. Emitter Spacing :** Options include 10cm, 15cm, 20cm, and 30cm, tailored to crop requirements.
- 4. Emitter Type :** Double emitters enhance water distribution and reduce clogging risks.
- 5. Roll Length :** Typically 500 and 1,000 meters per roll.

Crop Sustainability

Vegetables : Onions, garlic, spinach, cabbage, capsicum, tomatoes, and strawberries.

Fruits & Trees : Watermelon, sweet melon, butternut, and various orchard crops.

Spacing Recommendations

10cm : Ideal for closely spaced crops like onions and garlic.

15cm : Suitable for crops such as onions, garlic, sukuma, and cabbage.

20cm : Versatile for most crops, including tomatoes and peppers.

30cm : Best for wide-spaced plants like watermelon and certain fruit trees.



HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1.6 HDPE Cable Duct Pipes

Microducts HDPE

HDPE MicroDucts feature co-extruded SILICORE ULF (ultra-low friction) inner lining, enabling smoother and more efficient cable installation. Designed to maximize space within existing ducts, they offer an ideal solution for network expansion using overrides without the need for extensive civil works. These ducts support the installation of up to 432-count fiber MicroCables, significantly reducing both deployment time and construction costs.

Available in sizes ranging from 5mm – 27mm.

Installation Types

Size Range Available (OD/ID MM)

Subdivided Conduit	27/20	12.7/10
OverRides	22/18	12.7/8
Plow Installations	22/16	12/10
Trench Installations	18/14	10/8
Directional Bore	18/10	8.5/6
MicroTrench	16/13	8/6
Tray Installations	16/12	5/3.5

Features And Benefits

- Specifications :** MicroDucts are smaller diameter conduit, manufactured from flexible HDPE (High Density Polyethylene).
- Fill Ratio :** 50% to 75% fill ratio ensures optimal cable jetting performance. Factors such as route condition, bends and jetting equipment may influence results.
- Conduit Markings :** Permanent marking along MicroDuct includes: material, relevant standards, production info and sequential feet or meter markings. Custom options available.
- Co-extruded Lining :** SILICORE ULF (Ultra-Low Friction) is co-extruded inside the HDPE wall creating a slick, permanent, interior lining. Exhibiting no loss in performance over time or in extreme temperature conditions.
- Internal Ribs :** All sizes feature internal ribs for enhanced cable placement, except the 3.5 mm ID MicroDuct, which is designed with a smooth interior.



HYDRO-FLO HDPE Product Specifications

MICRODUCT SIZE (MM)	APPLICATION	NOM OD (MM/IN)	MIN ID (MM/IN)	WEIGHT (LB/FT)	BEND RADIUS SUP (IN)	BEND RADIUS UNSUP (IN)	SWPS (LBS)
5/3.5	DI	5/0.20	3.4/0.13	0.006	2	4	33
8/6	DI	8/0.31	5.8/0.23	0.014	3	6	76
8.5/6	DI, DB	8.5/0.34	5.9/0.23	0.018	3	7	96
10/8	DI	10/0.39	8.1/0.32	0.018	4	8	93
12/10	DI	12/0.47	9.9/0.39	0.021	5	9	114
12.7/8	DB	12.7/0.50	7.9/0.31	0.050	5	10	268
12.7/10	DI, DB	12.7/0.50	9.8/0.39	0.032	5	10	167
14/10	DB	14/0.55	9.8/0.39	0.050	6	11	264
16/12	DB	15.9/0.63	11.6/0.46	0.058	6	13	305
16/13	DI	16/0.63	12.8/0.50	0.043	6	13	229
18/10	DB	18/0.71	10/0.39	0.110	7	14	581
18/14	DB	18/0.71	13.6/0.54	0.066	7	14	352
22/16	DB	22/0.87	15.4/0.61	0.116	9	18	615
22/18	DB,DI	22/0.87	16/0.71	0.083	9	17	425
27/20	DB	26.7/1.05	20.7/0.81	0.132	11	21	701



HYDRO - FLO HDPE (HIGH DENSITY POLYETHYLENE)

1.7 Multi-Layer HDPEs

Multi-Layer HDPE pipes are designed for environments that pose a risk of external damage, such as rocky terrain or areas requiring trenchless installation. These pipes feature a tough, three-layer structure that enhances durability, making them ideal for infrastructure projects with demanding performance needs.

Features And Benefits

1. Multi-layer construction with PE 100RC inner and outer layers.
2. High resistance to point loads and crack formation.
3. Suitable for installations without fine bedding materials.
4. Supports butt fusion, electrofusion, and other jointing methods.
5. Available in color-coded options for various utilities.
6. Long-lasting performance even in harsh soil conditions.
7. Wide applicability across water, gas, sewer, and industrial sectors.
8. Easy integration with standard PE 100 fittings and equipment.
9. Reduced installation cost and time.

Applications

Municipal water supply systems

Gas pipelines

Sewage and wastewater networks

Mining and dredging operations

Horizontal directional drilling and trenchless methods

Product Specifications

Material Composition : Co-extruded PE 100 and PE 100RC

Pressure Ratings : Available from PN4 to PN25

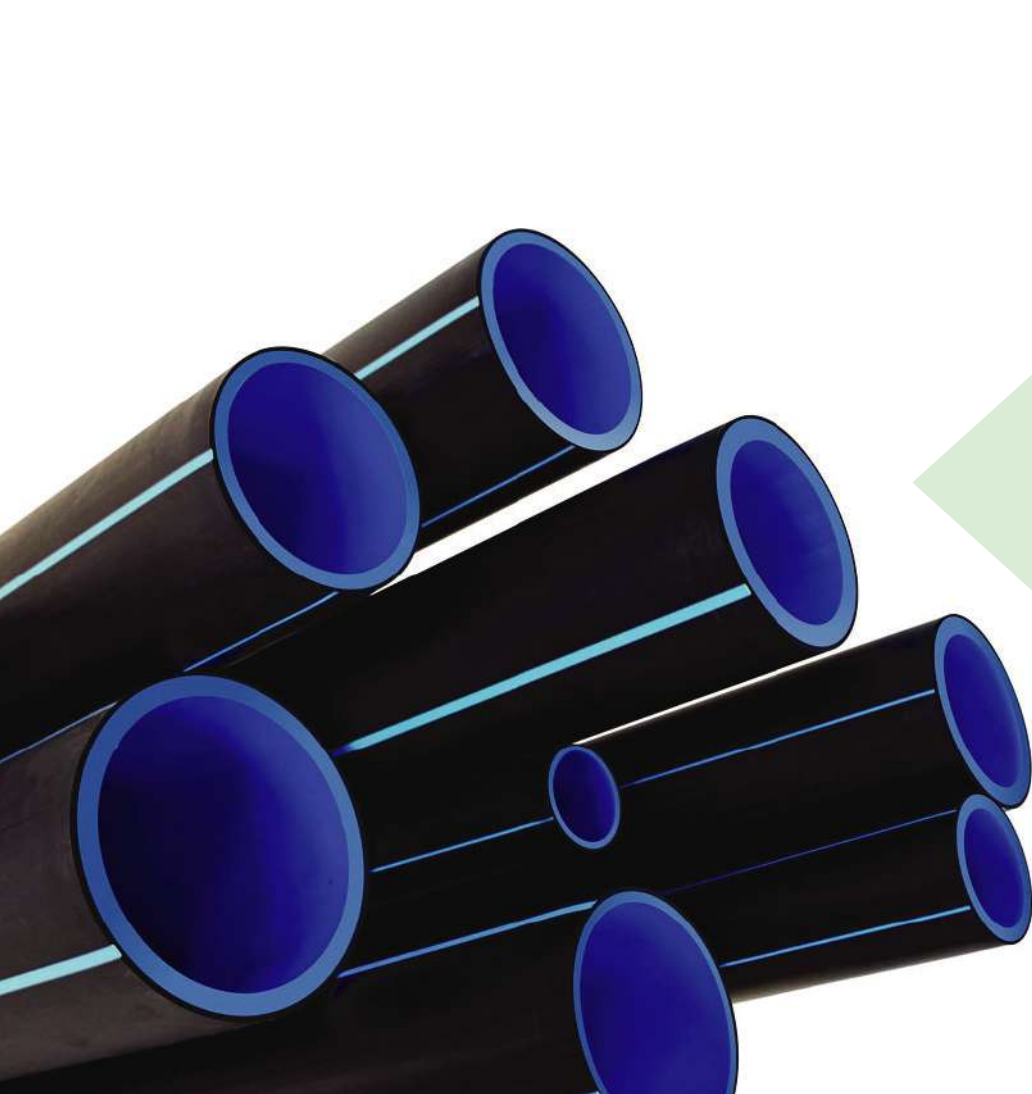
Pipe Sizes : Typically, available from 20mm to 800mm (confirm availability on larger sizes)


Color Coding :

- Blue with a black colored middle layer : Potable Water
- Orange : Gas
- Dark Green : Sewer

Jointing Methods : Compatible with butt fusion, electrofusion, and mechanical fittings.

➤ Multi Layer HDPE Pipes





HYDRO FLO PVC U KS ISO 2199 110 X 2.0



HYDRO FLO PVC-U (POLYVINYL CHLORIDE)

1.8 Hydro-Flo PVC-U

Apex Piping Systems Ltd (APSL) supplies high-quality Hydro-Flo PVC (Polyvinyl Chloride) pipes suitable for a wide range of applications across multiple industry sectors. Known for their strength, durability, and cost-effectiveness, Hydro-Flo PVC pipes are widely used in water supply, drainage, irrigation, and industrial piping systems.

PVC has become a preferred piping material due to its resistance to corrosion, low thermal conductivity, and lightweight nature—offering a reliable alternative to traditional materials like concrete and metal. Its smooth internal surface reduces friction loss, enabling efficient fluid flow and energy savings.

The ease of handling, cutting, and joining Hydro-Flo PVC pipes significantly reduces installation time and labor costs. Hydro Flo PVC systems are compatible with solvent cement joint and rubber ring joint making them versatile and easy to work with on-site.

Hydro Flo PVC pipes are also ideal for both new infrastructure and the rehabilitation of existing pipelines. Also, delivering proven performance, safety, and long service life.

Manufactured in compliance with Kenyan standards and certified by KEBS.



HYDRO FLO PVC-U (POLYVINYL CHLORIDE)

2.1 HYDRO FLO PVC-U Pressure Pipes

Hydro-Flo PVC-U pressure pipes are manufactured to KS - ISO 1452 and EN 1452 standards. The pipes are manufactured with a socketed-end and supplied complete with a pressure lock rubber seal (DN 63mm onwards) or solvent joint (DN 20 mm to DN 63mm). The product is ideally suited for applications in both pumping and gravity.

Applications

Hydro-Flo PVC-U pressure pipes from Apex Piping Systems Ltd (APSL), are suitable for the following applications:

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



Features And Benefits

1. Rubber Rings
2. Proven Reliability
3. Complete Plastic System
4. Low Maintenance
5. Corrosion Resistant
6. Light Weight
7. Reliable And Durable
8. Effective Jointing System
9. High Chemical Resistance



HYRO - FLO PVC-U Product Specifications

Pipe Series S							
Nominal (minimum) Wall thickness							
SDR 41	SDR 33	SDR 26	SDR 21	SDR 17	SDR 13.6	SDR 11	
S 20	S 16	S 12,5	S 10	S 8	S 6,3	S 5	
Nominal Pressure PN based on design coefficient C=2,5							
Nominal Outside Diameter	PN 6	PN 8	PN 10	PN 12.5	PN 16	PN 20	
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	
Nominal Pressure PN based on design coefficient C=2,0							
Nominal Outside Diameter	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	10,7	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	-	-	-



**HYDRO FLO PVC-U
(POLYVINYL CHLORIDE)**

2.2 PVC-U Pressure Pipe Fittings

The PVC-U pressure pipe fittings are available in sizes ranging from ½ - 4 inches in Imperial standards while 20 - 400 mm in metric standards.



Elbow 90°



Equal Tee



Y Tee



Tee Equal



Reducing Bush



Reducing Socket



Female Adpator



Valve Socket





HYDRO FLO PVC-U (POLYVINYL CHLORIDE)

2.3 HYDRO FLO PVC-U Waste and Drainage Pipes

Hydro-Flo PVC pipes are optimally used in residential and industrial discharge systems for soil, waste and vent applications. We offer multiple complete PVC soil and waste systems, which comply with all the Kenyan standards, offering mechanical engineers and plumbers all possible solutions.

1. **Soil and waste standard KS ISO 3633**
2. **Drainage standard KS ISO 4435**

Hydro-Flo PVC-U waste and drainage pipes come in a range of sizes, from 1¼ to 3 inches (imperial) and 36 mm to 630 mm (metric), ensuring compatibility for various applications.

Features And Benefits

1. **Good chemical and corrosion resistance :** Hydro-Flo PVC-U offers a considerable resistance to a large number of chemical agents.
2. **Reliable :** The Hydro-Flo PVC-U system is lightweight yet maintains high strength.
3. **Easy to install Requires no special tools for cutting :** Jointing can be done with solvent weld or rubber ring push-fit, reducing installation time and costs.
4. **Complete plastic system :** Extensive range of PVC pipes and fittings.
5. **Reliable and durable :** High tensile strength ensures durability whether using push-fit or solvent cemented joints.
6. **Smooth interior, free of incrustations :** Prevents incrustations and buildup, ensuring low friction loss and maintaining high flow rates throughout the pipe's service life.
7. **Fire resistance :** Classed as self-extinguishing and does not support combustion.
8. **Cost effective :** lower installation cost compared to other piping systems.
9. **Maintenance free :** Resistant to rust, corrosion, and internal deposit buildup, minimizing maintenance needs.

2.4 PVC-U Waste And Drainage Pipe Fittings



Floor Trap Complete



Floor Trap One Way



Inspection Tee



Cross Tee



Bossed Pipe



Boss Connector



Access Plug



Vent Cowl



Bent 90°



Bend 45°



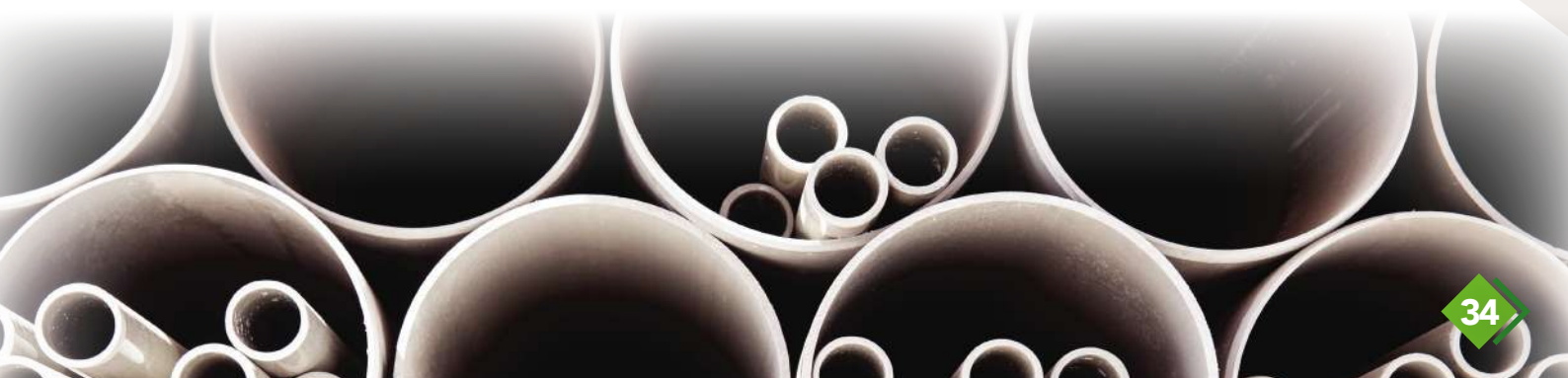
Coupler



Pipe Clip



Reducing Bush



HYDRO FLO PVC-U (POLYVINYL CHLORIDE)





HYDRO FLO PVC-U (POLYVINYL CHLORIDE)

2.5 HYDRO FLO PVC Electrical Conduit Pipes

Electrical conduit pipes & fittings are manufactured under strict quality control adhering with Kenyan Standards. Electrical conduits are best preferred for concealed wiring in houses, residential and commercial buildings, industries, traffic signals, street lighting etc.

PVC-U 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: KS 04-179

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.

Features And Benefits

1. Strong and durable
2. Light weight and flexible
3. Convenient joining
4. Safe
5. Resistant to rusting, wear, abrasion and water
6. Excellent surface
7. Cost saving
8. Temperature stable
9. Smoke suppressing
10. Maintenance free

Electrical conduit pipes and fittings are available in sizes ranging from 20 mm onwards, with corresponding fittings to ensure a complete installation system.

2.6 PVC Electrical Conduit Fittings



Coupler



Bend



**Switch Box
Single**



Switch Box - Twin



**Male & Female
Adaptor**



Female Adaptor



**1 Way Circular
Junction Box**



**2 Way Circular
Junction Box**



**3 Way Circular
Junction Box**



**4 Way Circular
Junction Box**



**Angle Way Circular
Junction Box**



Looping Box



Extension Ring



**Space Bar
Saddle**



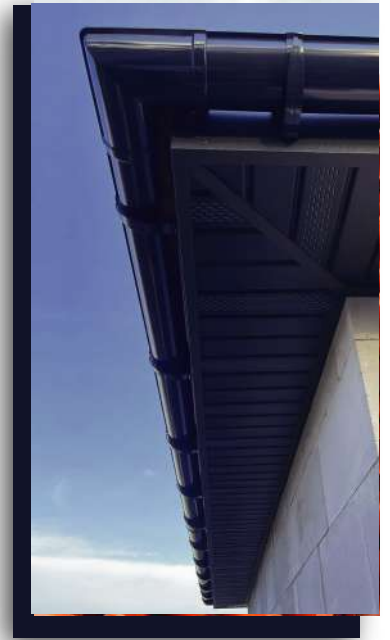
**Square Blanking
Plate**



Surface Box



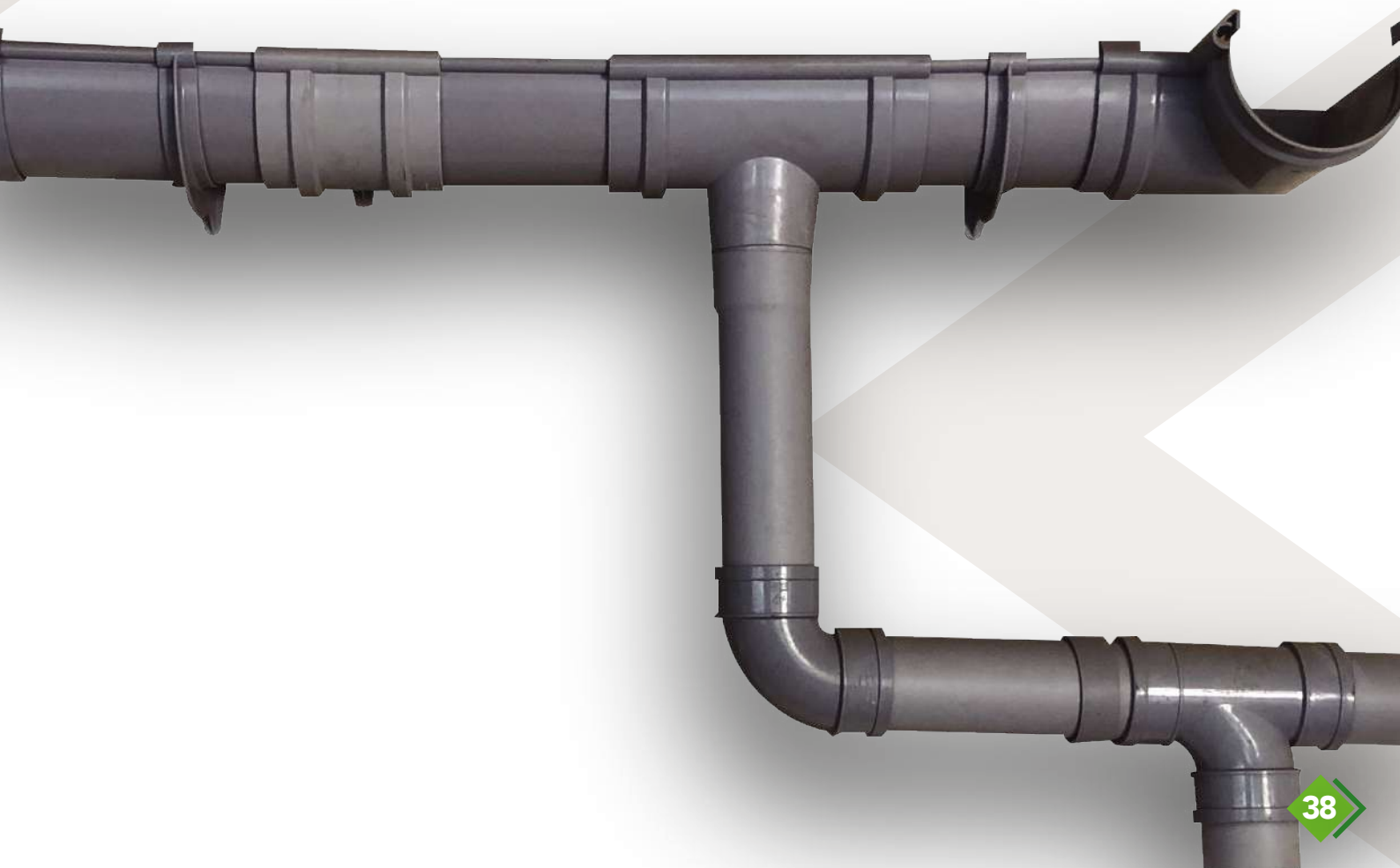
Twin Lid



HYDRO FLO PVC-U (POLYVINYL CHLORIDE)

2.7 HYDRO FLO PVC Gutters

Durable, lightweight, and easy to install, our PVC gutters offer a cost-effective solution for efficient rainwater management. Designed to resist corrosion, UV damage, and harsh weather, these low-maintenance gutters are ideal for residential and commercial applications.



2.8 PVC Gutter Fittings



Outlet



Angle Bracket



Clip



Elbow 90°



Connector



Inside Corner



Elbow 65°



Gutter Hopper



Pipe Socket

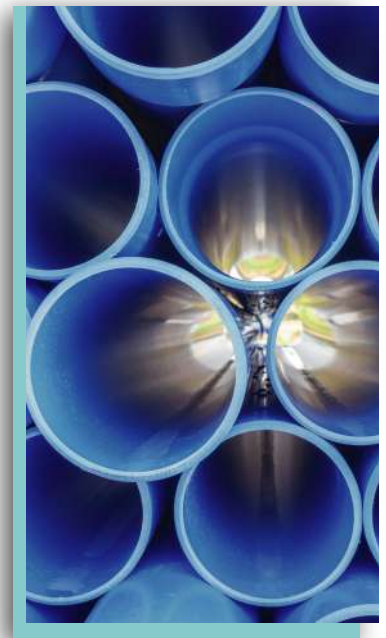


Equal Tee



Gutter Box





HYDRO FLO PVC-U (POLYVINYL CHLORIDE)

2.9 HYDRO FLO PVC - U Borehole Casings

PVC-U borehole casings are manufactured to standard KS-2210 and DIN 4925 with trapezoidal threads and female belled-ends that are joined with the male threaded ends for a superior leak-free joint to ensure that every drop of ground water or from the well is extracted at the greatest possible depth.

Features And Benefits

1. **Corrosion** : the chemical inertness of PVC-U makes them insensitive to all forms of corrosion, thus making them excellent products for use in high PH applications
2. **Mechanical properties** : excellent resistance to high collapse pressures, together with high tensile loads
3. **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
4. **Cost effective** : lower installed cost compared to conventional (steel) casings.
5. **Reliable**: the trapezoidal threaded joints can be used for over 20 years in demanding conditions.
6. **Easy handling and installation** : Tough, rugged material, with easy to assemble joints.
7. **Light weight** : much lighter than steel casings makes for user friendly installations and savings n time.
8. **High modulus of elasticity** : makes for stiffer casings and screens which can be designed for boreholes up to at least 200 m deep.
9. **Can be solvent welded.**

Applications

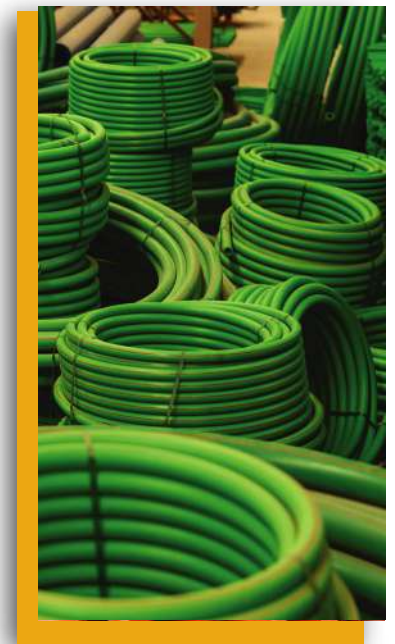
Waterwells and Water monitoring

Mine dewatering

Sea water abstraction

Geotechnical drilling





HYDRO FLO PPR (POLYPROPYLENE RANDOM)

3. HYDRO FLO PPR

Apex Piping Systems LTD (APSL) supplies high-quality Hydro-flo PPR pipes made from premium-grade Polypropylene Random Copolymer (PPR) material. Our PPR piping systems are widely used across various sectors in plumbing and water supply pipelines due to their durability, safety, and reliability in transporting both hot and cold water.

Hydro-flo PPR pipes have proven effective in solving key infrastructure challenges like scaling, corrosion, and thermal expansion, delivering long-lasting, leak-proof and maintenance-free solutions. Their lightweight nature and ease of installation process contribute to reduced costs and improved operational efficiency.

When combined with modern installation methods, Hydro-flo PPR systems offer airtight and watertight joints, reducing the risk of leakage and ensuring system longevity even under high pressure and temperature.

APSL Hydro-flo PPR pipes are manufactured in compliance with international quality standards ISO 15874-2, and comply with all KEBS standards for assured quality and performance. The PP Random type 3 used in the production of the 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. The modern construction technologies require for hydro-sanitary installations standardized products easy to work as well as cost effective.



HYDRO FLO PPR (POLYPROPYLENE RANDOM)

Features And Benefits

Portability : Hydro-flo PPR system is in full compliance with the Kenyan standards for the use of plastic materials for the transportation of drinking water.

Welding capacity : This is a fundamental characteristic of the system. It enables all the elements in the system to be joined by the polyfusion welding or the use of electric coupling.

Versatility : The low specific weight means easy transport and handling. The system can be used in traditional site installation, for the preparation of prefabricated constructions and in the creation of modules or fitted walls.

Head loss : The internal surfaces of the pipes and fittings are smooth so limestone or other deposits cannot form and head loss is reduced to the minimum.

Resistance to abrasion and corrosion : This characteristic allows high flow velocities of the transported fluid, without any problem of erosion, even in the presence of acid and alkaline substances

Energy saving : The reduced heat dispersion, in association with a low thermic inertia, allows supply hot water even if the pipe has not yet reached the average working temperature.

Resistance to stray currents : The Hydro-Flo PP-R system is a poor conductor of electricity;

Low conductivity of the heat : Since PP-R is a poor conductor of heat, condensation and heat dispersion of the transported fluid are considerably reduced.

Resistance to chemical agents : It offers a considerable resistance to a great number of chemical agents even at high temperatures. It is neither affected by boiling detergent solutions nor by basic acid substances (such as limestone or cement).



HYDRO FLO PPR (POLYPROPYLENE RANDOM)

3.1 HYDRO FLO PPR Applications

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.

Hydro-flo PPR pipes are offered in diameters ranging from 20 mm to 110 mm, accompanied by compatible fittings to ensure a seamless and fully integrated installation system. Standard pipe lengths are 4 metres, with 100-metre coil options available upon request for select sizes.

PPR PIPE WALL THICKNESS AND WEIGHT CHART

PPR PIPE AS PER STANDARD ISO 15874

Nominal Size (mm)	PN- Wall Thickness (mm)	PN10 Wall Thickness (mm)
20	2.80 - 3.30	3.40 - 4.00
25	3.50 - 4.10	4.20 - 4.90
32	4.40 - 5.10	5.40 - 6.20
40	5.50 - 6.30	6.70 - 7.60
50	6.90 - 7.80	8.30 - 9.40
63	8.60 - 9.70	10.50 - 11.80
75	10.3 - 11.5	12.50 - 13.90
90	12.3 - 13.7	15.00 - 16.70
110	15.1 - 16.8	18.30 - 20.30
Nominal Size (mm)		
20	0.149	0.174
25	0.232	0.268
32	0.372	0.437
40	0.579	0.676
50	0.902	1.048
63	1.41	1.654
75	2.01	2.35
90	2.875	3.36
110	4.3	5

3.2 PPR Pipe Fittings



Female Tee



Male Tee



Tee



Reducer Tee



Union



Ball Clock



Male Adaptor



Female Adaptor



Female Elbow



Male Elbow



Elbow 45°



Elbow 90°



Reducing Bush



**Male-Female
Threaded Union**



Socket



End Caps

EXTRUSION MOLDED PRODUCTS

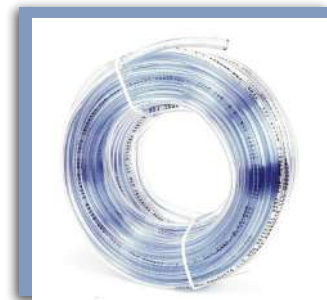
4. HYDRO FLO PVC Hoses

Extrusion-molded PVC hoses are flexible tubing products manufactured using precision extrusion techniques. These hoses are lightweight and durable for domestic purposes. Their flexibility and ease of handling make them suitable for gardening purposes.

Zebra Hoses : Zebra hoses feature alternating colored stripes (often black and transparent) along their length, making them easy to identify and aesthetically distinctive. They are highly flexible and used for low-pressure water flow.



Clear Hoses : Clear PVC hoses offer full visibility of the contents flowing through them, allowing for easy inspection and monitoring. They are highly flexible and used for low-pressure water flow.



Nylon Braided Hoses : These are flexible PVC hoses reinforced with a layer of high-strength nylon braiding. The added reinforcement provides excellent pressure resistance and durability, making them suitable for air, water, oil, and chemical transfer in industrial and agricultural settings.









OTHER PRODUCTS

AVK Valves

AVK – Expect More

AVK is a global leader in valves and fittings, combining decades of know-how, technical expertise, and dedication to excellence. Built on five core principles—quality, reliability, innovation, sustainability, and customer service. AVK consistently exceeds market expectations.

All AVK products are manufactured to EN and ISO standards and certified by leading authorities including GSK, WRAS, DVGW, and KIWA. Designed for long-term, low-maintenance performance, AVK solutions deliver proven reliability and are backed by a 10-year warranty on own-manufactured products.





AVK Gate Valve – Flanged PN10/16 (DN50–1200)

The AVK gate valve is a high-performance, resilient-seated valve designed for drinking water and neutral liquids to max. 70 degrees C.



- Compliant with EN 1074 standards.
- Fixed, integral wedge nut prevents vibration and ensures durability
- Triple stem sealing system for long-term reliability and leak prevention.
- Wedge - ductile iron core fully encapsulated in EPDM rubber – prevents corrosion and contamination.
- Durable stainless-steel stem with rolled threads and wedge stop for strength and smooth operation.
- Fusion bonded epoxy coating in compliance with DIN 3476 part 1 and EN 14901, GSK approved
- Robust wedge design with guides ensuring uniform closure and minimal operating torque.

Available in DN 50–1200, pressure rated PN10/16, with accessories such as hand wheels, stem caps, and extension spindles.

AVK GATE VALVE, PE PIPE ENDS, PN16 Black/blue SDR11 PE100 pipes



PE piped connections. A fully welded PE pipe system offers a lot of benefits such as reduced risk of leakage, ease of installation and a high durability ready for butt- or electrofusion welding

- Fixed, integral wedge nut prevents vibration and ensures durability
- Fusion bonded epoxy coating in compliance with DIN 3476 part 1 and EN 14901, GSK approved
- Anti-blowout stem design
- Triple safety stem sealing with an NBR wiper ring, a polyamide bearing with four NBR O-rings, and an EPDM rubber manchette
- DN65-500



SWING CHECK VALVE



- Resilient seat provides a drop tight closure and due to the light weight it requires a minimum of force to open/close
- Shaft fitted in the bonnet allowing for easy maintenance without removing valve from pipeline
- Disc is designed with a steel or ductile iron insert fully vulcanized with EPDM rubber
- 250 µm fusion bonded epoxy coating
- Hinge in stainless steel for sizes \leq DN 200; ductile iron coated with drinking water approved epoxy for larger

BUTTERFLY VALVE



- Integral seat, IP67 gearbox, DN150-2400
- WRAS approved EPDM rubber
- Body and disc of ductile iron with fusion bonded epoxy coating 250µm RAL 5017 in compliance with DIN 3476 part 1 and EN 14901, approved by GSK and WRAS-DVGW/W270/UBA
- IP67 Rotork gear with position indicator, operated by handwheel. Coated black RAL9005, 50-60µm. Input shaft, bolts and nuts in stainless steel AISI 303

CONTROL VALVES PRV (Pressure Reducing Valve)



- AVK control valves are available in DN50-600 (larger on request)
- Reduced or full bore
- Body and bonnet of ductile iron with fusion bonded epoxy, 300micron, GSK approved, RAL 5017, according to DIN 3476 and WRAS-DVGW/W270/UBA.made of drinking water approved EPDM
- All non-coated internals made of stainless steel AISI 316
- Lifted seat to avoid damage due to cavitation
- Non-symmetric axial position of rubber diaphragm results in less stretch/stress near closed position



AVK SUPA MAXI™ STRAIGHT, STEP OR FLANGED COUPLING



- Fully universal and tensile on all pipe materials
- Patented SupaGrip™ sealing support system with flexible bracket
- $\pm 4^\circ$ (8° in total) angular deflection on each side, even at minimum pipe size
- Permanent protection caps protect during handling and installation
- No re-tightening of bolts needed
- Tensile strength on all pipes is ensured by two different metal grip segments - every second of brass for PE/PVC/GRP and of hardened stainless steel for cast iron/ductile iron/steel/stainless steel/asbestos cement pipes with exception for DN800, as the dimension is dedicated to give tensile strength on either metal/AC pipes or plastic pipes. For PE pipes a support bush is to be used

AVK SUPA PLUS™ FLANGE ADAPTOR / SUPA PLUS COUPLING



- Supa Plus™ flange adaptor / coupling, tensile dedicated for PE/uPVC pipes
- Standard flange drilling to EN1092
- Sleeve and bracket of ductile iron with fusion bonded epoxy coating in compliance with DIN 3476 part 1 and EN 14901
- The design with external bolts prevents corrosion between sleeve and bolts
- The combined gasket of drinking water approved EPDM rubber with tensile grip segments of RG5 bronze enables $\pm 3.5^\circ$ angular deflection

NEEDLE VALVE

Needle Valve – for functions as: Flow control, pressure regulation, pump start, reservoir inlets, discharge, air regulation etc. PN10/PN16 – DN80-1600 (also available in PN25/PN40 – up to DN600-700)



- Gearbox with bronze worm wheel for continuously modulating duty, minimum 1.2 million modulating steps
- One-piece body construction
- Symmetrical flow path ensures evenly distributed flow around the entire seat in any open position
- Pressure balance in chamber inside for low operating torque
- Internal body shape is optimized to give low head loss coefficient
- 4 - 6 guide rails ensure very low vibration
- Main seal mounted on the piston as opposed to on the seat preventing abrasion when fitted with anti-cavitation trim
- Gaskets in polyurethane for high resistance to abrasion
- Easy access for maintenance
- Double O-rings sealed drive shaft
- Stainless steel internal parts and fasteners



DOUBLE ORIFICE AIR RELIEF VALVE



- AVK double orifice, triple acting air valves are designed for automatic rapid pipe filling and pipe draining as well as for automatic discharge of accumulated air during normal working conditions. The unique 'Aerokinetic' design, where air rushing out of the system cannot force the float upwards and close it prematurely, makes sure that the valve closes only after all air has left the system and water has entered the chamber.
- A clever float design prevents air rushing out of the system from prematurely closing the valve
- Large air flow capacity
- All iron parts with contact to the water are coated with drinking water approved, fusion bonded epoxy
- The resilient seals are made of EPDM rubber and the seat is ABS, all drinking water approved
- All other internal parts are highly corrosion resistant AISI 316 stainless steel or ABS
- No moving parts are touching the internal coating

COMBINATION AIR VALVE



DN 20-25

DN 50

- For water, reinforced polyamide, DN12-50
- AVK combination air valves are combined air release and air and vacuum valves. The air release function releases accumulated air from the system while it is under pressure. The air and vacuum function discharges and admits large volumes of air during the filling or draining of pipelines.
- Orifice sizes: DN 12 and 19: Air and vacuum 100 mm², automatic 8 mm². DN 25: Air and vacuum 100 mm², automatic 8 mm². DN 50: Air and vacuum 804 mm², automatic 12 mm²
- The enlarged orifice is less exposed to obstruction by debris
- The orifice in the automatic valve releases small volumes of air at high flow rates when the line is under pressure

ZENNER





OTHER PRODUCTS

Water Meters

ZENNER Water Meters: Precision and Innovation in Flow Measurement

ZENNER stands at the forefront of water metering technology, offering a diverse range of meters designed for residential, commercial, and industrial applications. With a commitment to accuracy, durability, and smart technology integration, ZENNER meters facilitate efficient water management and data acquisition.



ZENNER



Water Meters

WPD / WPHD – Woltman Bulk Water Meters



- Use:** High flow drinking & industrial water metering
- Design:** Parallel impeller for steady flow, low pressure loss
- Register:** 6-roller dry dial (IP68) with modulator disc
- Comms:** LoRaWAN®, wM-Bus, M-Bus, pulse-ready
- Performance:** Wide range, low start flow, high overload protection
- Install:** Horizontal or vertical
- Durability:** Hydraulic bearing for long-term stability
- Compliance:** MID & OIML certified

RTKD-L – Positive Displacement Dry Dial Meter



- Use:** High-precision volumetric rotary piston measurement
- Design:** Dry dial with UV-resistant plastic cap (IP65) or copper-glass counter (IP68)
- Housing:** Durable glass-fiber reinforced polymer
- Install:** All positions except overhead
- Comms:** LoRaWAN®, wM-Bus, M-Bus, pulse modules
- Temp:** Cold water up to 30°C
- Compliance:** MID certified

MTKD-SI-L-N – Multi-Jet Dry Dial Water Meter



- Use:** Precise residential water metering
- Design:** Multi-jet dry dial for reliability
- Temp:** For cold/service water up to 50°C
- Comms:** LoRaWAN® / wM-Bus compatible
- Build:** Durable, long-lasting construction
- Compliance:** MID approved

IUW – Ultrasonic Bulk Water Meter



- Use:** High & fluctuating flow measurement for drinking & industrial water
- Tech:** Dual ultrasonic sensor pairs for accuracy
- Display:** 9-digit LCD with NFC interface
- Comms:** LoRaWAN® / wM-Bus compatible
- Install:** Any position approved



Water Meters

IUWS – Ultrasonic Water Meter



Use: Precise metering for residential/domestic water

Tech: Ultrasonic flow measurement

Comms: Built-in LoRaWAN® / wM-Bus

Install: Any position

Compliance: Meets drinking water standards

MNK-L-RP-N – Multi-Jet Water Meter



Use: For cold/service water up to 50°C

Design: Semi-dry dial with protected rollers

Performance: Clear reading in dirty water

Comms: LoRaWAN® / wM-Bus compatible

Compliance: MID approved

RNK-L-RP-N – Rotary Piston Water Meter



Use: High precision, reliable at low flow

Design: Semi-dry dial with rotary piston

Comms: Reed switch for LoRaWAN® / wM-Bus

Compliance: MID & OIML approved

ETKD-L-M-CC R160 – Single-Jet Water Meter



Use: High-precision single-jet dry dial

Register: 8-digit with magnetic pointer

Comms: LoRaWAN® / wM-Bus ready

Install: Horizontal or vertical

Compliance: MID approved

GROHE





Pure Freude
an Wasser

GROHE



GROHE Essentials Master
Bathroom Accessories

G-40344000



GROHE Euphoria Cube
150 Head Shower 1 spray

G-27705000



GROHE Tempesta
Cosmopolitan 200 Head
Shower 1 spray

G-27541001



GROHE Tempesta
Cosmopolitan 100 Head
Shower Set
3 spray

G-26090001



GROHE
Tempesta
Cosmopolitan
100 Shower Set
3 spray

G-27584002



GROHE
Tempesta
Rustic 100
Shower Rail Set 4
spray

G-27609001



GROHE Tempesta
Shower Arm 400mm
Chrome

G-27851000



GROHE Rainshower
Shower Arm 286mm

G-27709000



GROHE Arena
Cosmopolitan
Flush Plate Chrome

G-38858000



GROHE Nova
Cosmopolitan
Flush Plate Chrome

G-38765000



GROHE Shower arm
218mm

G-27406000



GROHE Universal Angle
Valve 1/2" Chrome

G-2201700M



GROHE Universal Angle
Valve 1/2" Chrome

G-2201600M



GROHE Press
Urinal Flush
Valve Chrome

G-37396000



GROHE
Flush Valve For
WC

G-37153000



GROHE
Flush Valve
For WC

G-37157000



GROHE
Mousseur
Chrome

G-48159000



GROHE
Concealed
Valve

G-29032000

MADE IN
GERMANY





GROHE Bauedge
Single - Lever
Basin Mixer

G-32819000



GROHE Bauedge
Single - Lever
Raised Basin
Mixer

G-32860000



GROHE Bauedge Single -
Lever Bath/Shower Mixer.
Compatible with 32963001
Concealed body

G-29039000



GROHE Bauedge Single -
Lever Shower Mixer.
Compatible with 32962001
Concealed body

G-29040000



GROHE New
Bauedge
Single - Lever
Sink Mixer

G-31367001



GROHE
Bauclassic Basin Mixer
1/2" Chrome

G-32862000



GROHE Bauflow Basin
Mixer 1/2" Chrome

G-32810000



GROHE Bauflow Basin
Mixer

G-32851000



GROHE Bauflow Single -
Lever Shower Mixer.
Compatible with 32962001
Concealed body

G-29046000



GROHE Bauflow
Single - Lever
Sink Mixer

G-31538001



GROHE Bauflow Single-
Lever Bath/Shower Mixer.
Compatible with 32963001
Concealed body

G-29045000



GROHE Bauloop
Single - Lever
Basin Mixer

G-32814000



GROHE Grohe Single
- Lever Mixer 1/2",
Concealed Body

G-33963000



GROHE Single - Lever
Mixer 1/2",
Concealed Body

G-33964000



GROHE Concetto Single
- Lever
Basin Mixer

G-23450001



GROHE Costa L Bibtap

G-30098001



GROHE Costa L
Concealed Stop-Valve
Trim

G-19854001



GROHE Eurocube Single
- Lever
Basin Mixer

G-23445000



GROHE Eurostyle
Cosmopolitan Single
- Lever Basin Mixer

G-33552002



COBRA

HERE FOR YOU





COBRA

HERE FOR YOU

SHOWERS AND BATH ACCESSORIES



Cobra Liana Shower Head Round Chrome

073-LIANA-R



Cobra Zambezi Shower Head Round 85mm Chrome

076ZM-RND



Cobra Liana Shower Head Square Chrome

073-LIANA-SQ



Cobra Zambezi Shower Head Square Chrome

076ZM-SQ



Cobra Seine Shower Arm Round 300mm Matte Black

029SEINE/EB



Cobra Shower Arm Round 300 Brass Chrome

029ROUND



Cobra Zambezi Wall Mounted Shower Arm Short

027ZM-SHORT



Cobra Zambezi Wall Mounted Shower Arm Long

027ZM-LONG



Cobra Shower Arm Square 400 Chrome

2221CH/N



Cobra Zambezi Bath Spout Wall Type Long

066ZM-LONG



Cobra Zambezi Hand Shower Set

007COB/CP



Cobra Zambezi Outlet Elbow For Hand Shower

AP8-ZM



Cobra Waste Bath/Sink Unslotted

316/N



Shower P Trap Square 1 & 1/2 Fi Chrome

373SQ

MEDICAL MIXERS



Cobra Medical Light Pattern Mixer Pillar Type Chrome

515-21/N



Cobra Medical Light Pattern Mixer Wall Type Chrome

515/055-21/N

GATE VALVES



Cobra Gate Valve 1002 FXF 15mm

1002/125-15



Cobra Gate Valve 1002 FXF 32mm

1002/125-32



Cobra Gate Valve 1002 FXF 40mm

1002/125-40



SCREWDOWNS



Cobra Metsi Original Light Pattern Wall Type Chrome

MI-266/041/10/NV



Cobra Metsi Light Pattern Bath Diverter Mixer Wall Type

MI-251-15-HQ/N



Cobra Metsi Original Light Pattern Pillar Tap Chrome

MI-211-15/NV



Cobra Star Original Light Pattern Stoptap Underwall Chrome

238-15/NV



Cobra Star Heavy Pattern Stoptap Underwall Chrome

128-20/NV



Cobra Star Original Light Pattern Bibtap Chrome

206-15/NV



Cobra Star Original Light Pattern Pillar Tap Swivel Chrome

P-219/041/10E/NV



Cobra Star Heavy Pattern Sink Mixer Wall Type Chrome

166/041/NV



Cobra Stella Original Light Pattern Stoptap Chrome

3328ST-15/NV

SINGLE LEVERS



Cobra Amazon Basin Mixer Chrome

AM-951



Cobra Amazon Bath/Shower Concealed Mixer Chrome

AM-956



Cobra Amazon Sink Mixer Pillar Type Chrome

AM-970



Cobra Nile Basin Mixer Chrome

NL-951



Cobra Nile Bath/Shower Concealed Diverter Mixer Chrome

NL-961



Cobra Nile Sink Mixer Pillar Type Chrome

NL-970



Cobra Seine Basin Mixer Matte Black

5819EB/N



Cobra Seine Concealed Shower/Bath Mixer Matte Black

5800EB/N



Cobra Zambezi Bath Mixer Exposed Wall Type No Handshower Chrome

ZM-959



Cobra Zambezi Sink Mixer Pillar Type Chrome

ZM-970



wilo



Wilo-HiPeri



Wilo-HiMulti 3 C



Wilo Jet WJ



Wilo-Rexa PRO



Wilo-RainSystem AF 150



Wilo-Initial Drain



Wilo-Initial Jet System



Wilo-Initial Jet

Injection Moulded Products



Injection Moulded Products



Wall Plug



Tile Spacer



Roofing Washers



Door Wedge



Door Stop

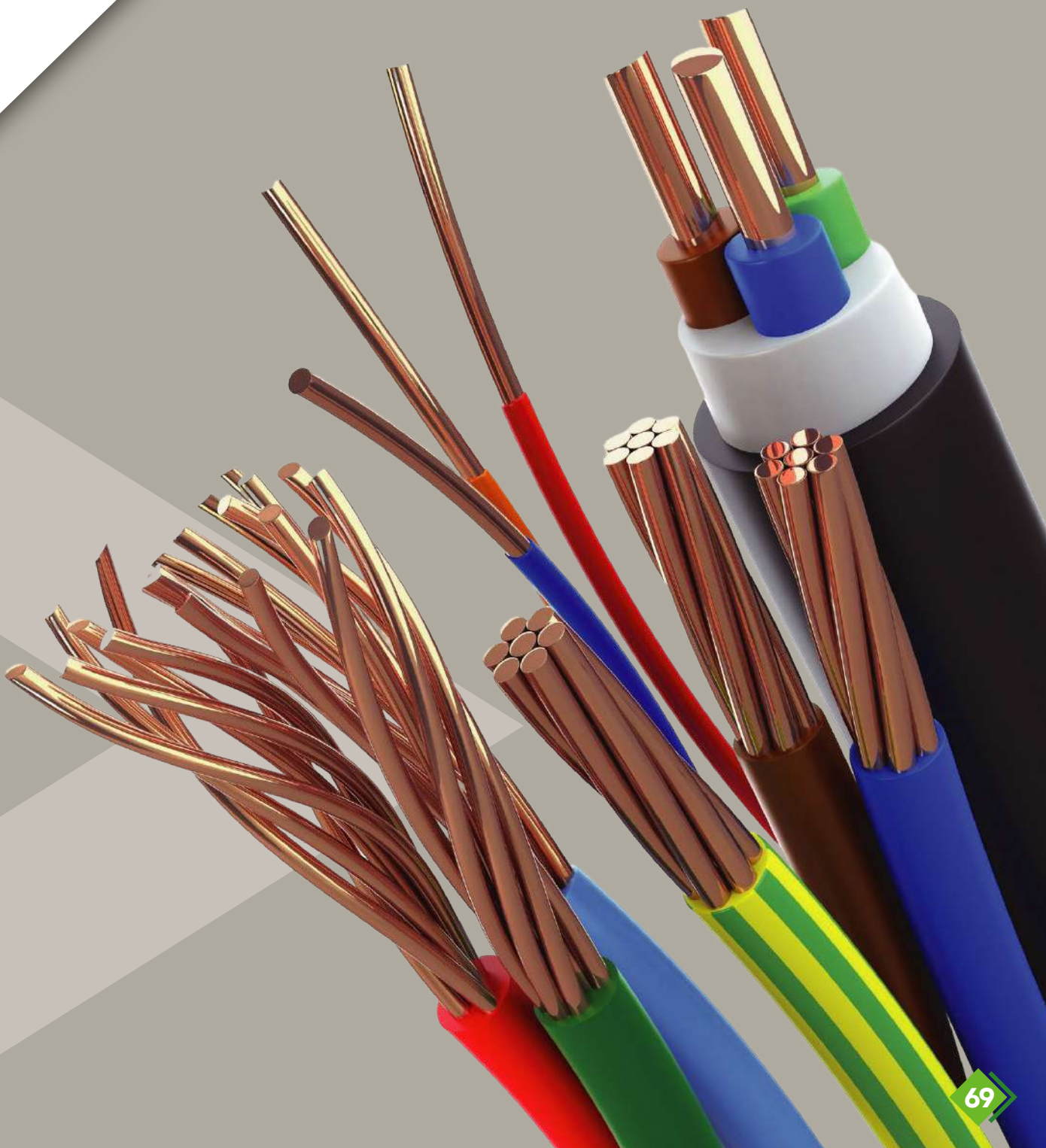


Flower Pot





Cables





CABLES

Single Core Cables

Solid/Stranded Copper Conductors and PVC Insulated Non-sheathed



PVC Insulated and PVC Sheathed Flat Wiring Cables

Twin Flat (without earth) and Twin with earth



XLPE (Cross Linked Polyethylene) Insulated

Non-Armoured Cables



Armoured Copper Cables

XLPE/PVC Insulated, PVC Bedded, Steel Wire Armoured and PVC Sheathed Cables with Stranded Copper Conductors. Three Core Cables, with stranded Circular copper or Aluminium conductors, XLPE insulated, Medium Voltage Cables Steel Wire Armoured and PVC Sheath



Solar-Photovoltaic Cables



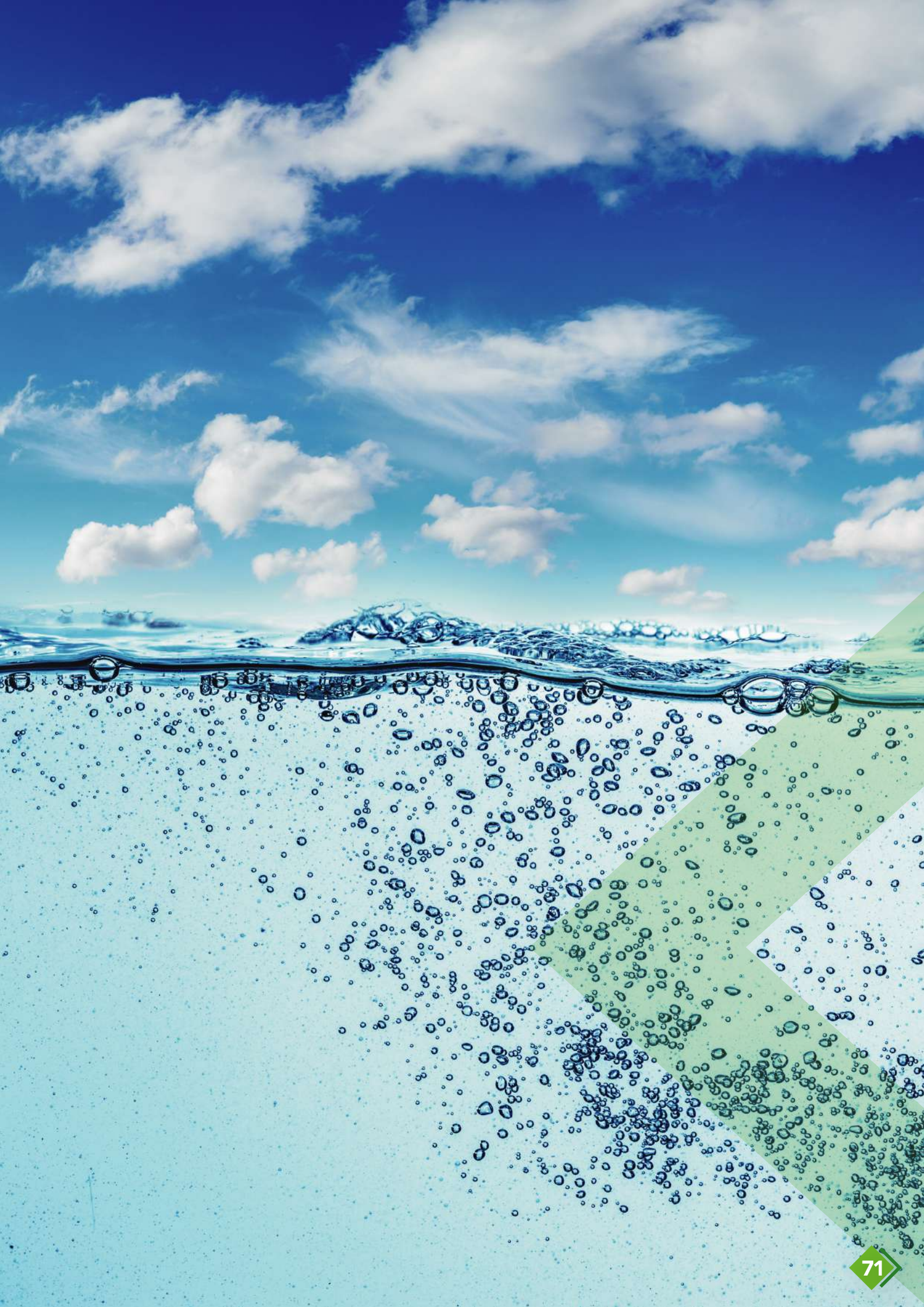
Copper Tape/Copper Flat Strip



Enameled Copper Winding Wires



Bare Copper Conductor Soft Drawn conductor





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APEX PIPING SYSTEMS LIMITED