



IRRIGATION SYSTEMS
A member of ICMS Group



Product Catalogue

"SPECIALITY IS OUR STRENGTH"

www.icmstray.com

- 1 Thin - Wall Flat Drip Irrigation Pipes
- 2 Pressure Compensating Drip Irrigation Pipes
- 3 Non Pressure Compensating Drip Irrigation Pipes
- 4 Blank Pipes
- 5 On-Line Emitters
- 6 Barbed Fittings
- 7 Valve Boxes

Riding on the success of Cable Management Systems business, ICMS ventured on to an entirely new domain of manufacturing of irrigation materials. The brand name ZETA was associated with this new line of products, which in a short duration has become the market leader in Qatar. So far we have also exported to many middle east and african countries with very good positive feedback from our business partners.

The availability of 100% virgin raw materials from Qatar Petrochemical company (QAPCO), combined with our state of the art production and testing facilities enables us to produce superior quality products. Our products excel in quality in terms of maximum work life expectancy, however making sure that the pricing is very competitive in the Industry.

The current product line consist of Drip pipes (emitting pipes), blank tubes, barbed fittings, online emitters, valve boxes, compression valves and fittings etc., and we have ambitious plans to expand this range to include all aspects of irrigation.

Also our team of talented individuals embodies our core values of integrity, innovation and customer-centricity. Together we collaborate to bring ground breaking solutions for our customers we serve.



Succeed with Quality

CERTIFICATE

Quality Austria - Trainings, Zertifizierungs und Begutachtungs GmbH awards this **qualityaustria** certificate to the following organisation



Industrial Cable Management Systems Co. W.L.L.
P.O. Box. 22106, Doha, Qatar
Sole: Zeta Irrigation Systems (A member of ICMS)



ZETA
Zeta Irrigation Systems

Manufacture and Supply of Irrigation Systems Products

The validity of the **qualityaustria** certificate will be maintained by annual surveillance audits and one renewal audit after three years.

This **qualityaustria** certificate confirms the application and further development of an effective

QUALITY MANAGEMENT SYSTEM
complying with the requirements of standard
ISO 9001:2015

Registration No. 09612/1
Date of initial issue: 13 October 2022
Valid until: 05 October 2025

Vienna, 13 October 2022

Quality Austria - Trainings, Zertifizierungs und Begutachtungs GmbH,
AT-1050 Vienna, Zetkagasse 10/3

Mag. Christoph Mondl
CEO

Mag. Dr. Werner Pauer
CEO

Mag. Dr. Axel Kradok
Specialist representative

The current validity of the certificate is documented exclusively on the internet under <http://www.qualityaustria.com/cert/>



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Registration No. 02430/1
Date of initial issue: 06 December 2022
Valid until: 12 October 2025

Vienna, 13 October 2022

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Industrial Cable Management Systems Co. W.L.L.
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Sole: Zeta Irrigation Systems (A member of ICMS)



ZETA
Zeta Irrigation Systems

Manufacture and Supply of Irrigation Systems Products

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OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEMS
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ISO 45001:2018

Registration No. 30456/1
Date of initial issue: 05 December 2022
Valid until: 12 October 2025

Vienna, 13 October 2022

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The current validity of the certificate is documented exclusively on the internet under <http://www.qualityaustria.com/cert/>

ZETA PRIME

Thin - Wall Flat Drip Irrigation Pipes

ZETA PRIME Thin-wall flat drip irrigation pipes, offering a highly efficient and cost-effective method to deliver water directly to the plant roots, ensuring optimal growth while conserving water, designed with precision-engineered emitters that provide uniform water distribution across the entire field making them ideal for a wide range of crops and terrains.

ZETA PRIME emitters are intelligently designed and constructed from durable materials with a wide filtration surface, making them the ultimate choice for durability and effectiveness. ZETA PRIME withstands various environmental conditions, offering longevity and reliability.



FEATURES AND BENEFITS

- **Premium Quality Material:** Manufactured from high-grade polyethylene, making it a superior choice for agricultural irrigation systems.
- **Various Emitter Options:** Available with both short and long emitters with wide filtration area maximizing pipe performance and efficiency.
- **Wide Flow Rate Selection:** With flow rates ranging from 1 to 3.5 L/H (liters per hour), the ZETA PRIME offers versatility and adaptability, allowing users to select the optimal flow rate to suit their specific crop and soil needs.
- **Clog-Resistant Design:** Engineered for high resistance to clogging, the ZETA PRIME ensures turbulent water flow, minimizing maintenance requirements and maximizing operational efficiency.
- **UV Resistance:** The ZETA PRIME exhibits exceptional UV resistance, ensuring longevity and consistent performance even under prolonged exposure to sunlight.
- **Effortless Installation and Maintenance:** Designed for ease of use, the ZETA PRIME facilitates simple installation and maintenance, saving time and effort for farmers and agricultural professionals.
- **ISO 9261 Compliance:** Complying with ISO 9261 standards, the ZETA PRIME guarantees quality and reliability, meeting international benchmarks for irrigation system effectiveness and performance.

Technical Specification

Nominal Diameter (mm)	Internal Diameter (mm)	Wall Thickness	Emitter Spacing (cm)	Roll Length (m)	Maximum Working Pressure (Bar)
17	16.1	6 mil (0.15 mm)	10	2300	0.8
			15	2500	
			20	2500	
			25	2500	
			30	2500	
			40	2500	
			50	2500	
17	16.1	7 mil (0.175 mm)	10	2200	0.8
			15	2200	
			20	2400	
			25	2400	
			30	2400	
			40	2400	
			50	2400	
17	16.1	8 mil (0.20 mm)	10	2000	1.0
			15	2300	
			20	2300	
			25	2300	
			30	2300	
			40	2300	
			50	2300	
17	16.1	10 mil (0.25 mm)	20	2000	1.2
			25	2000	
			30	2000	
17	16.1	12 mil (0.30 mm)	20	1700	1.4
			25	1700	
			30	1700	
17	16.1	15 mil (0.375 mm)	20	1300	1.4
			25	1300	
			30	1300	
22	22.0	8 mil (0.20 mm)	20	1800	1.0
			25	1800	
			30	1800	
22	22.0	10 mil (0.25 mm)	30	1500	1.2
			40	1500	
			50	1500	
22	22.0	12 mil (0.30 mm)	30	1200	1.4
			40	1200	
			50	1200	



Coils packed on pallets,
Easy Loading and Transportation

* For other specifications approach sales team

Pressure Compensating Drip Irrigation Pipes (ULTRA-PC)

The most durable Pressure Compensating drip pipes, designed for steep and rocky terrain, permanent crops with long laterals, precision irrigation needs, and inclined topography.

Pressure compensating drip Pipes

The ULTRA-PC drip pipes come with pressure compensating flow emitters with a self-cleaning silicone rubber diaphragm that regulates water discharge at different pressures.

The ULTRA-PC non-drain remains full of water during irrigation intervals, ensuring immediate and uniform irrigation along the drip line. To achieve the non-drain function, the emitter opens at 0.30 bar and closes at 0.18 bar.



Benefits and features

- ULTRA-PC provides equal and precise amounts of water delivered over a broad pressure range.
- ULTRA-PC provides a continuous self-cleaning mechanism that ensures non-clogging uninterrupted operation.
- ULTRA-PC is manufactured from the finest raw materials that provide durability and long-lasting performance.
- ULTRA-PC drippers provide wide and accurate water passages along the labyrinth.

Specifications

- Available in two flow rates 2 and 4 L/H.
- Pressure compensating range according to below models and technical tables.
- Available in variable wall thicknesses 0.80, 0.90, 1.00, 1.10, 1.20, 1.40mm.
- High UV resistance.
- Resistant to all nutrients used in agriculture.
- Injected molded emitters with an excellent coefficient of Variation (CV).
- Excellent for effluent water reuse.
- Special labyrinth design that ensures the high turbulent flow of the water.

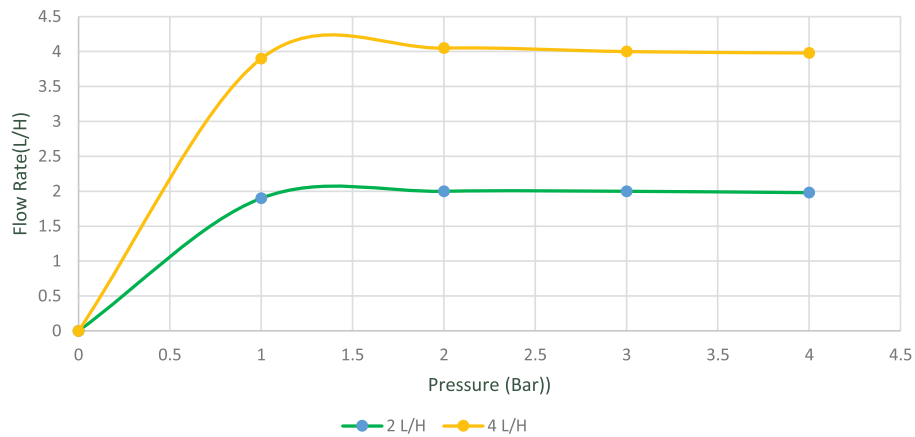
Product Application

- Landscaping
- Precision irrigation
- Uneven terrain
- Row crops
- Orchards
- Gardening
- Pulse irrigation

Technical information

Diameter (Nominal)	16 mm, 20 mm
Inside Diameter	13.8 mm, 17.6 mm
Roll Length	400 meters, 100 meters
Maximum Working Pressure	4 Bar

ZETA PC DRIPLINE FLOWRATE VS PRESSURE GRAPH



Pressure Compensating Dripline Ordering Way

Emitter Type	Pipe Diameter(mm)	Flow Rate(L/H)	Emitter Spacing(cm)	Wall Thickness(mm)	Coil Length(M)
PC: Dripline ULTRA PC	16: 16mm diameter	2: 2 Litre per Hour	20: 20cm emitter spacing	08: 0.8mm Wall Thickness	40: 400M Coil Length
	20: 20mm diameter	4: 4 Litre per Hour	30: 30cm emitter spacing	09: 0.9mm Wall Thickness	10: 100M Coil Length
			40: 40cm emitter spacing	10: 1.0mm Wall Thickness	
			50: 50cm emitter spacing	11: 1.1mm Wall Thickness	
			75: 75cm emitter spacing	12: 1.2mm Wall Thickness	
			100: 100cm emitter spacing	14: 1.4mm Wall Thickness	

* For other specifications approach sales team

Non Pressure Compensating Drip Irrigation Pipes (NORD-NON-PC)

The most durable non-pressure compensating drip lines, suitable for light soil come with an internal filter to avoid clogging or irrigation non-uniformity.

Non-Pressure Compensating (NON-PC)

The NORD-NON-PC emitters Compact and economical emitters for a wide range of applications. Suitable for permanent crops and multi-seasonal usage provides easy and trouble-free installations for inexperienced farmers. One of the most important elements in the design of an emitter is the flow path. Its width depth and length determine the flow rate of the emitter in liters per hour but most importantly determine their anticlogging ability. A high turbulent flow path design creates a vortex effect inside the emitter and therefore prevents clogging.



Benefits and features

- NORD-NON-PC Provides extreme tensile strength since it is produced with high-quality resins. Offers excellent performance on the field due to the flawlessly designed, injected molded emitter with very low CV.
- NORD-NON-PC design provides high clogging resistance and offers the highest emission uniformity.
- NORD-NON-PC is manufactured from the finest raw materials that provide durability and long-lasting performance.
- NORD-NON-PC drippers provide wide and accurate water passages along the labyrinth.

Specifications

- Available in 3 flow rates 2,4 and 8 l/h.
- Available in variable wall thicknesses 0.80, 0.90, 1.00 ,1.10 ,1.20,1.40 mm.
- High UV resistance.
- Resistant to all nutrients used in agriculture.
- Injected molded emitters with an excellent coefficient of Variation (CV).
- Excellent for effluent water reuse.
- Special labyrinth design that ensures the high turbulent flow of the water.

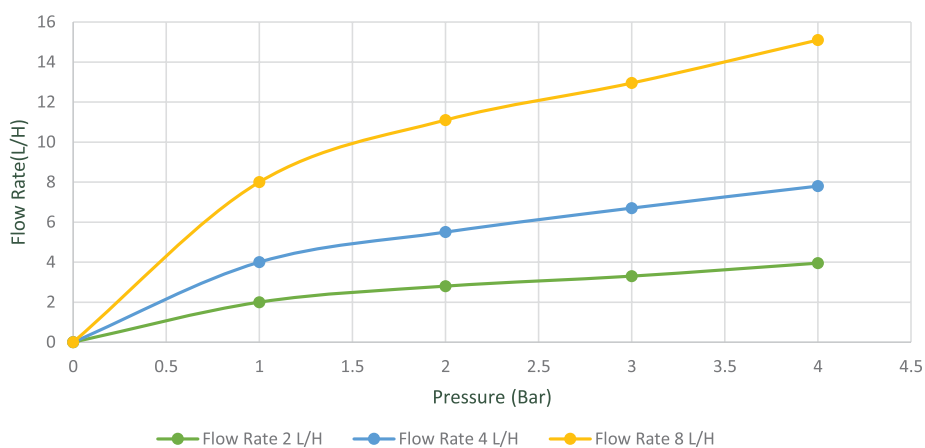
Product Application.

- Row crops
- Orchards
- Landscaping
- Vegetables
- Gardening

Technical information

Diameter (Nominal)	16 mm, 20 mm
Inside Diameter	13.8 mm, 17.6 mm
Roll Length	400 meters, 100 meters
Maximum Working Pressure	4 Bar

ZETA NPC DRIPLINE FLOWRATE VS PRESSURE GRAPH



Non Pressure Compensating Dripline Ordering Way

Emitter Type	Pipe Diameter(mm)	Flow Rate(L/H)	Emitter Spacing(cm)	Wall Thickness(mm)	Coil Length(M)
NPC: Dripline Nord Non PC	16: 16mm diameter	2: 2 Litre per Hour	20: 20cm emitter spacing	08: 0.8mm Wall Thickness	40: 400M Coil Length
	20: 20mm diameter	4: 4 Litre per Hour	30: 30cm emitter spacing	09: 0.9mm Wall Thickness	10: 100M Coil Length
		8: 8 Litre per Hour	40: 40cm emitter spacing	10: 1.0mm Wall Thickness	
			50: 50cm emitter spacing	11: 1.1mm Wall Thickness	
			75: 75cm emitter spacing	12: 1.2mm Wall Thickness	
			100: 100cm emitter spacing	14: 1.4mm Wall Thickness	

* For other specifications approach sales team

Blank Pipes

16 and 20 mm polyethylene pipes (without drippers) are manufactured from the finest polyethylene grades with UV protection.

Zeta bank tubes are the finest option for installing on-line emitters without leaking and efficiently connect the surface irrigation system to the downstream network.

High UV resistance and 100% crack-resistant. Resists kinks and damage caused by routine landscape maintenance activities.



BENEFITS AND FEATURES

- ZETA Blank Tube is made from the finest polyethylene raw material grades to avoid cracking and kinking and to ensure long-term reliability.
- ZETA Blank Tube is protected against solar radiation with a UV stabilizer.

SPECIFICATIONS

- 100 % high-quality polyethylene made.
- Available in variable wall thicknesses of 0.8, 0.9, 1.1, 1.2, and, 1.4, 1.5 mm.
- High UV resistance.
- Resistant to all nutrients used in agriculture.
- The pipes are available in black and maroon colors.

PRODUCT APPLICATION

- Drip and sprinklers outlets
- On-Line Emitters installation
- Micro-irrigation

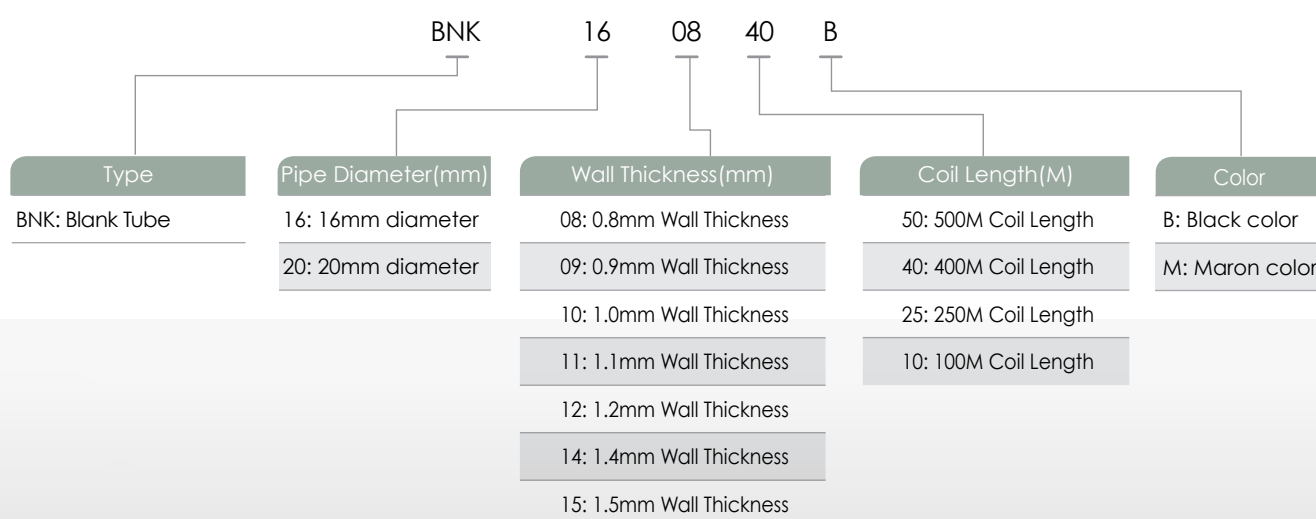
Technical information

Diameter (Nominal)	16 mm
Inside Diameter	13.8 mm
Roll Length	500 meters, 400 meters, 250 meters, 200 meters , 100 meters
Color	Black, Maroon
Maximum Working Pressure	4 Bar, 6 Bar, 8 Bar

Technical information

Diameter (Nominal)	20 mm
Inside Diameter	17.6 mm
Roll Length	500 meters, 400 meters, 250 meters, 200 meters , 100 meters
Color	Black, Maroon
Maximum Working Pressure	4 Bar, 6 Bar, 8 Bar

Pressure Compensating Dripline Ordering Way



* For other specifications approach sales team

On-Line Emitters

Pressure Compensating (PC)

On-Line PC emitters incorporate a silicone membrane which enables the delivery of precise and equal amounts of water over a broad pressure range.

On-Line PC emitters are designed for precision irrigation needs, ranging from a home garden to the most advanced hydroponic applications.

With the Non-Drain system of the On-Line PC, the pipe remains full of water during irrigation intervals, ensuring immediate and uniform irrigation along the pipe. Non-Drain emitters eliminate drainage and refill effect, and improve efficiency in pulse irrigation. In order to achieve the Non-Drain function, the emitter closes at 0,15 bar.

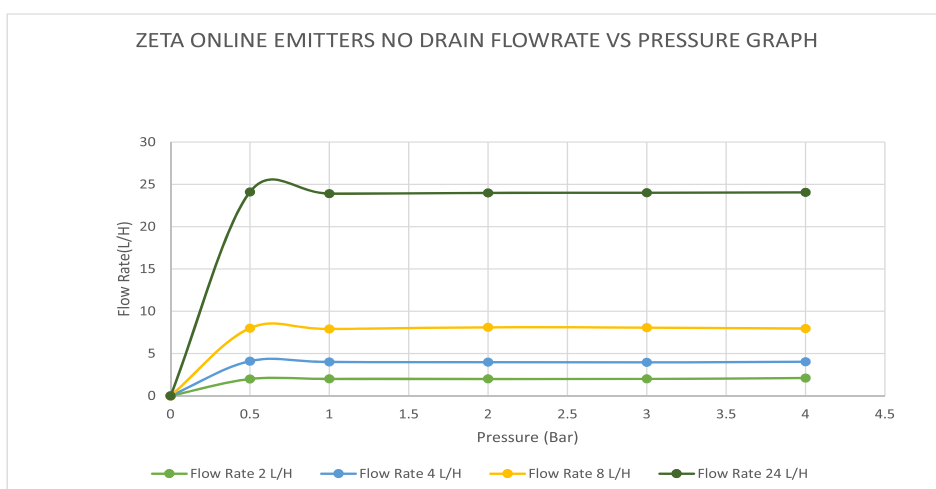


Emitter Characteristics

- Wide range of flow rates 2, 4, 8 and 24 l/h.
- On-Line PC is designed for installation in pipes from 12 mm up to 32 mm diameter and wall thickness from 0.9 mm up to 1.2 mm.
- Wide pressure compensation range.
- Cross shaped water inlet.
- Wide and accurate water passages along the labyrinth.
- Special labyrinth design that ensures highly turbulent flow of the water.
- Continuous self cleaning mechanism ensures non-clogging uninterrupted emitter operation.
- High UV resistance.
- Resistant to standard nutrients used in agriculture. Injected emitter that provides very low Coefficient of Variation (CV), less than 5%.
- On-Line PC emitters can be installed manually exactly where they are required. The number of emitters can be increased in order to increase water supply aimed at meeting tree growth rate requirements.
- On-Line PC design allows the installation of manifold outlet with multiple outputs.
- One type of outlet suitable for 3 mm internal diameter micro-tube and for press-fit nipple connectors.

Product Applications

- Greenhouses and nurseries
- Orchards
- Landscaping
- Gardening
- Hydroponics
- Soilless culture
- Pulse irrigation



Nominal Flow Rate(L/H)	Constant k(bar) No Drains	Exponent(x)	Water Passage WidthxDepthxLength(mm)	Filtration Area(mm)	Recommended Filtration(mesh/microns)
2	2	0	1.00x1.00x55.4	3.8	130/120
4	3.8	0	1.30x1.10x50.6	3.8	131/120
8	8.4	0	1.50x1.15x46.5	3.8	132/120
24	23.5	0	1.35x1.20x35	3.8	133/120

Non Pressure Compensating (NPC)

Description	Flow Rate
 REGULATED NAILED DRIPPER	0-70 L/H
	0-100 L/H
 ON LINE DRIPPER WITH ADJUSTABLE FLOW	0-150 L/H
 AUTO REGULATED DRIPPER	4 L/H
	8 L/H
	12 L/H

Barbed Irrigation Fittings

ICMS Barbed Irrigation Fittings offer user-friendly and efficient connectivity. They stand out for their affordability and minimal upkeep requirements, making them an ideal choice for irrigation barb connections. These straightforward slip-in fittings are compatible with Oval Hose, Polyethylene Mainline Tubing, and 1/2" Emitter Tubing, ensuring versatility and ease of use.

Barbed Tee Coupling

Part No	Description
B-T-16-16-16	Barbed Tee Coupling, 16mmx16mmx16mm
B-MTT-16-1-2	Barbed Male Threaded Elbow Coupling, 16mm x 1/2"x16mm
B-MTT-16-3-4	Barbed Male Threaded Elbow Coupling, 16mm x 3/4"x16mm



Barbed Elbow Coupling

Part No	Description
B-E-16-16	Barbed Elbow Coupling, 16mmx16mm
B-MTE-16-1-2	Barbed Male Threaded Elbow Coupling, 16mm x 1/2"
B-MTE-16-3-4	Barbed Male Threaded Elbow Coupling, 16mm x 3/4"



Barbed Coupling

Part No	Description
B-C-16-16	Barbed Coupling 16mm
B-MTC-16-1-2	Barbed Male Threaded Coupling 16mmx1/2"
B-MTC-16-3-4	Barbed Male Threaded Coupling 16mmx3/4"



Bubbler Stake

Part No	Description
B-BS-16	Bubbler Stake, 16mm x 1/2"



Non-PC Adjustable Bubbler Head

Part No	Description
B-BSH-1/2	Non-PC Adjustable Bubbler Head , 1/2"



Drip Pipe Stake

Part No	Description
B-DS-16	Drip Pipe Stake 16mm



Ratchet Clip

Part No	Description
B-RC-16	Ratchet Clip 16mm



Barbed End Plug

Part No	Description
B-EP-16	Barbed End Plug 16mm



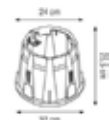
Irrigation Valve Boxes

ZETA valve boxes are made of high-quality materials and are simple to install and maintain. They also include an extra side support for sustainability and are durable. Various sizes are available to accommodate varying valve assembly requirements and agricultural irrigation installation requirements.

Features

- Unaffected by extreme strength.
- Made of HDPE.
- UV protection against sunshine.
- The ability to resist breaking, buckling, and cracking.
- The pipe sections are drawn and the points are individually selected based on the pipe diameter in order to guarantee a pleasant installation.
- Excellent resistance to large weights.
- The covers are tightly closed to prevent dust or dirt from entering the box.
- Several sizes for varying usage.
- The best possible performance under all-weather situation.
- Made with premium quality.
- In all types of soil, the bottom flange effectively resists sinking.
- Intelligent cover lock design.
- Added tag identification for multilingual box usage.

CODE	Features	SIZE
I-VB-6	• Two side openings. • Simple opening and closing. • Strong box body.	6"
I-VB-10	• Two side openings. • Simple opening and closing. • Strong box body.	10"
I-VB-12	• Beside the two-side opening there is an optional to open three opening cross side to side for more valves installation. • Strong box body.	12"
I-VB-14	• Beside the two-side opening there is an optional to open four opening cross side to side for more valves installation. • Strong box body.	14"
I-VB-16	• Two side opening suitable for 4" pipe diameter. • The cover has a shovel access slot and is used to Easily remove the cover.	16"



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2024 Product Catalogue

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JULY 2024