

Mining Products

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Product Catalog



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About Netafim

Netafim, Orbia's Precision Agriculture business, is the world's largest irrigation company and the global leader in precision agriculture solutions committed to fight scarcity of food, water and land, for a sustainable future.

Founded in 1965, Netafim pioneered the drip revolution, creating a paradigm shift toward precision irrigation. Today, specializing in end-to-end solutions from the water source to the root zone, Netafim delivers irrigation and greenhouse projects, as well as landscape and mining solutions supported by engineering, project management and financing services. Netafim is also leading the way in digital farming, integrating real-time monitoring, analysis and automated control into one state-of-the-art system.

With 33 subsidiaries, 19 manufacturing plants, 2 recycling plants and 5000 employees worldwide, Netafim delivers innovative, tailor-made irrigation and fertigation solutions to millions of farmers, allowing smallholders to large-scale agricultural producers, in over 110 countries, to grow more with less™.

See how Netafim's solutions are driving sustainable agriculture and a food secure future at www.netafim.com

About Orbia

Orbia is a company driven by a shared purpose: to advance life around the world. Orbia operates in the Polymer Solutions (Vestolit and Alphagary), Building and Infrastructure (Wavin), Precision Agriculture (Netafim), Connectivity Solutions (Dura-Line) and Fluorinated Solutions (Koura) sectors.

The five Orbia business groups have a collective focus on expanding access to health and wellness, reinventing the future of cities and homes, ensuring food and water security, connecting communities to information and accelerating a circular economy with basic and advanced materials, specialty products and innovative solutions. Orbia has commercial activities in more than 110 countries and operations in over 50, with global headquarters in Boston, Mexico City, Amsterdam and Tel Aviv.

To learn more, visit: www.orbia.com



Introduction

Netafim™ offers a comprehensive products and services portfolio for Mining that includes the hydraulic design, driplines, sprinklers, connectors, pipes, valves, filters and system accessories.

The applications that are relevant for Netafim include:

- 1. Leaching**
 - A. Heap Leaching
 - B. Bio-Heap Leaching
 - C. Dump Leaching
 - D. In-Situ Leaching
- 2. Evaporation**
- 3. Dust control**

/ Leaching

A. Heap Leaching

The mined ore in copper, gold, nickel and uranium is crushed and heaped on an impermeable liner (geomembrane and geotextile) The pad is then irrigated with a leach solution, using drippers or sprinklers, to dissolve (extract) the metals.

This is a closed process that generally takes from one month for oxide ores and even several years in the case of sulfide ores.

The leach solution containing the dissolved minerals is then collected in a PLS pond (Pregnant Leaching Solution), treated in a process plant to recover the mineral and recycled to a Refine pond and from there to the heap after reagent levels are adjusted.

B. Bio Heap Leaching

Used for the extraction of Copper from sulfide ores, similar to the regular heap leaching process but with the help of bacteria, usually a long irrigation cycle is required.

C. Dump Leaching

Heap leaching of low-grade minerals. In this case the mined ore is not crushed.

D. In Situ Leaching

Used mainly for the extraction of Uranium in the USA, Australia and Kazakhstan. The leaching solution is pumped into or irrigated directly on ore body and then collected from a lower borehole.

/ Evaporation

Using sprinklers such as the Gyronet Turbo to help the mine dispose of large amounts of water from its tailings.

/ Dust Control

providing controlled water systems for dust generated on the mine's road by heavy trucks and machinery.

Mining irrigation characteristics compared to irrigation in agriculture:

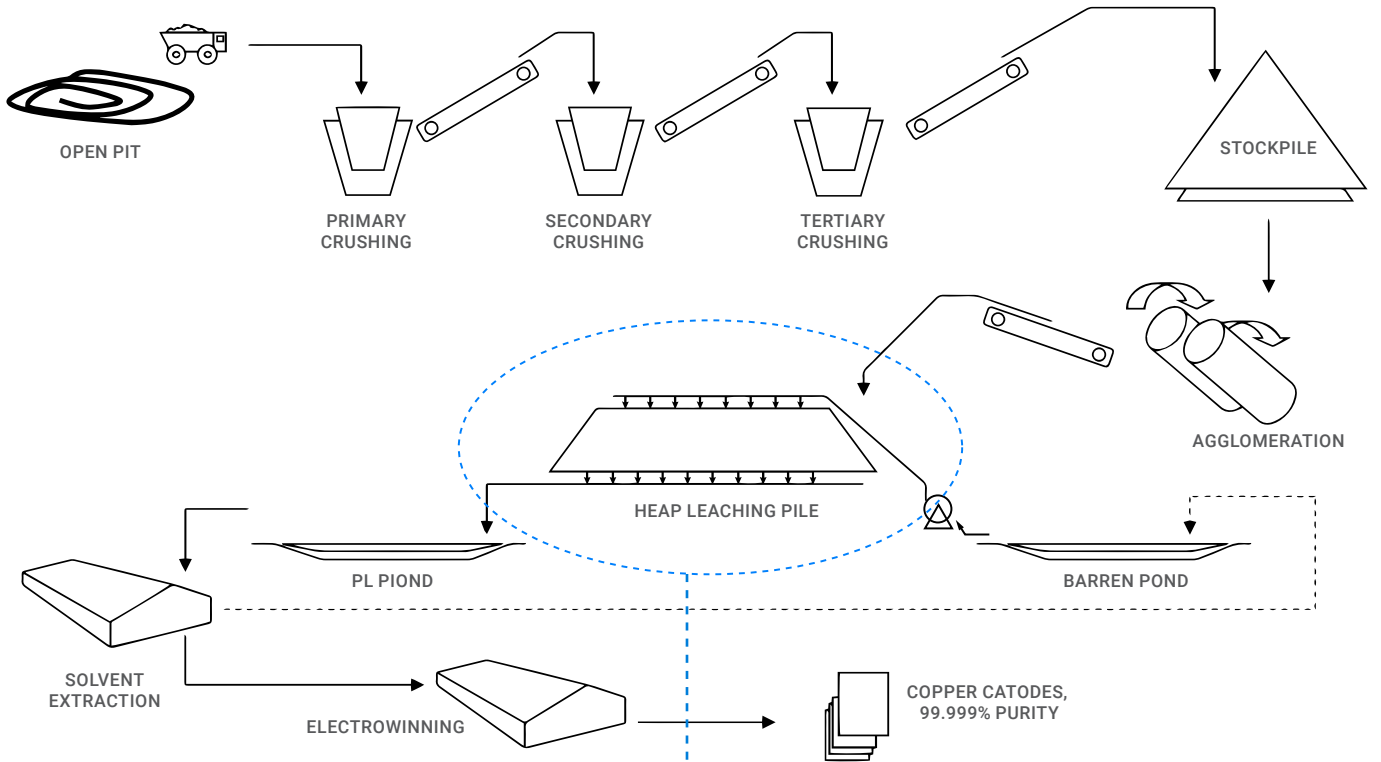
1. High flow rate and nonstop irrigation – flow rate can reach 10-12 l/hr/m², for a period of months and even years of nonstop irrigation
2. The solution used for irrigation contains chemicals such as sulfuric acid (for the extraction of copper, uranium and nickel) or cyanide (for the extraction of gold/silver)
3. Closed loop – the same drop goes through the dripper again and again, hence dirt is accumulated and with the chemicals that are involved in the process (activated carbon, organic leaching materials acids etc.), which can cause a high rate of clogging.
4. Non-even surface – the heap surface is not completely even and in some cases there is a need to irrigate also the slopes.

The design and components of the Netafim irrigation system include features tailored specifically to mining irrigation:

1. Special design aimed at reaching the highest level of uniformity to ensure high clogging resistance that assures high recovery rates.
2. All the products are made of chemical resistant raw materials.
3. The design includes filtration systems and constant flushing of the driplines, either automatic or manual
4. A drop migration prevention clip can be pre-installed on the drip line, to ensure the highest uniformity on non-even surfaces. Pressure compensated drippers can be used on slopes .

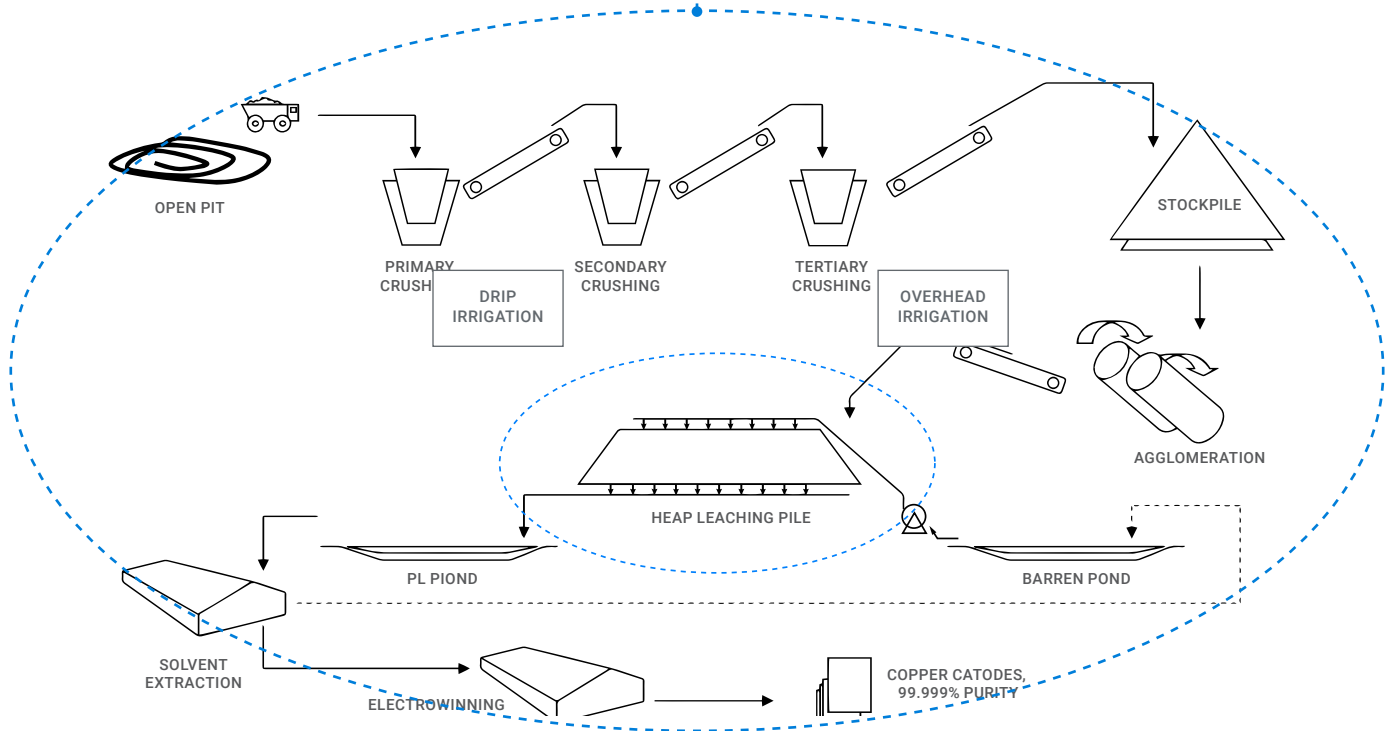
→ What do we do in Heap Leaching?

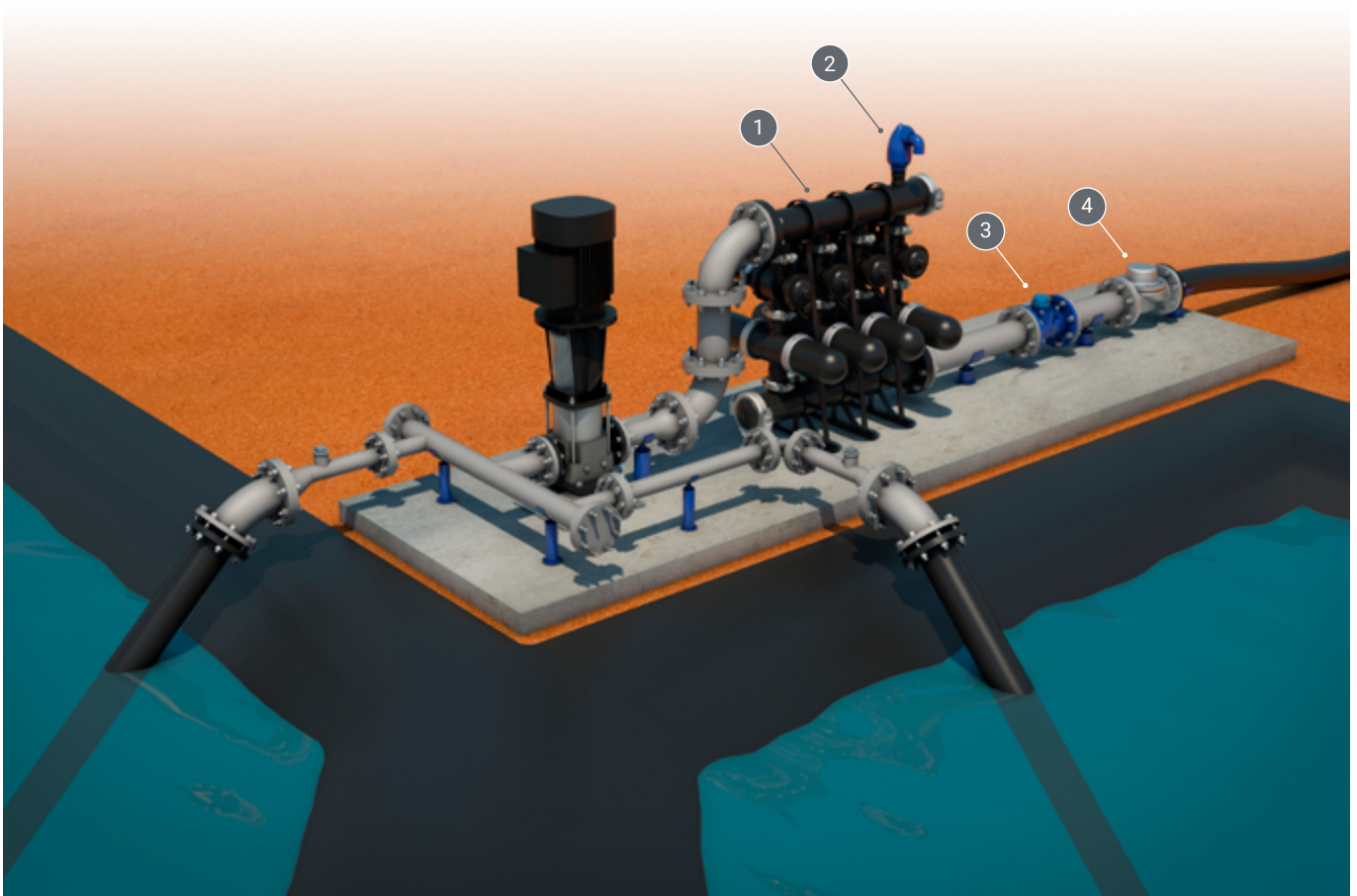
Hydrometallurgy – Sx/Ew Process For Metal Extraction



→ Uniform Precolation All Over the Pad

Heap Leaching Pad





1. Filtration System

Complete filtration portfolio including unique disc filters suitable for all heap leaching mines such as Copper, Gold and Silver

2. Air Valve

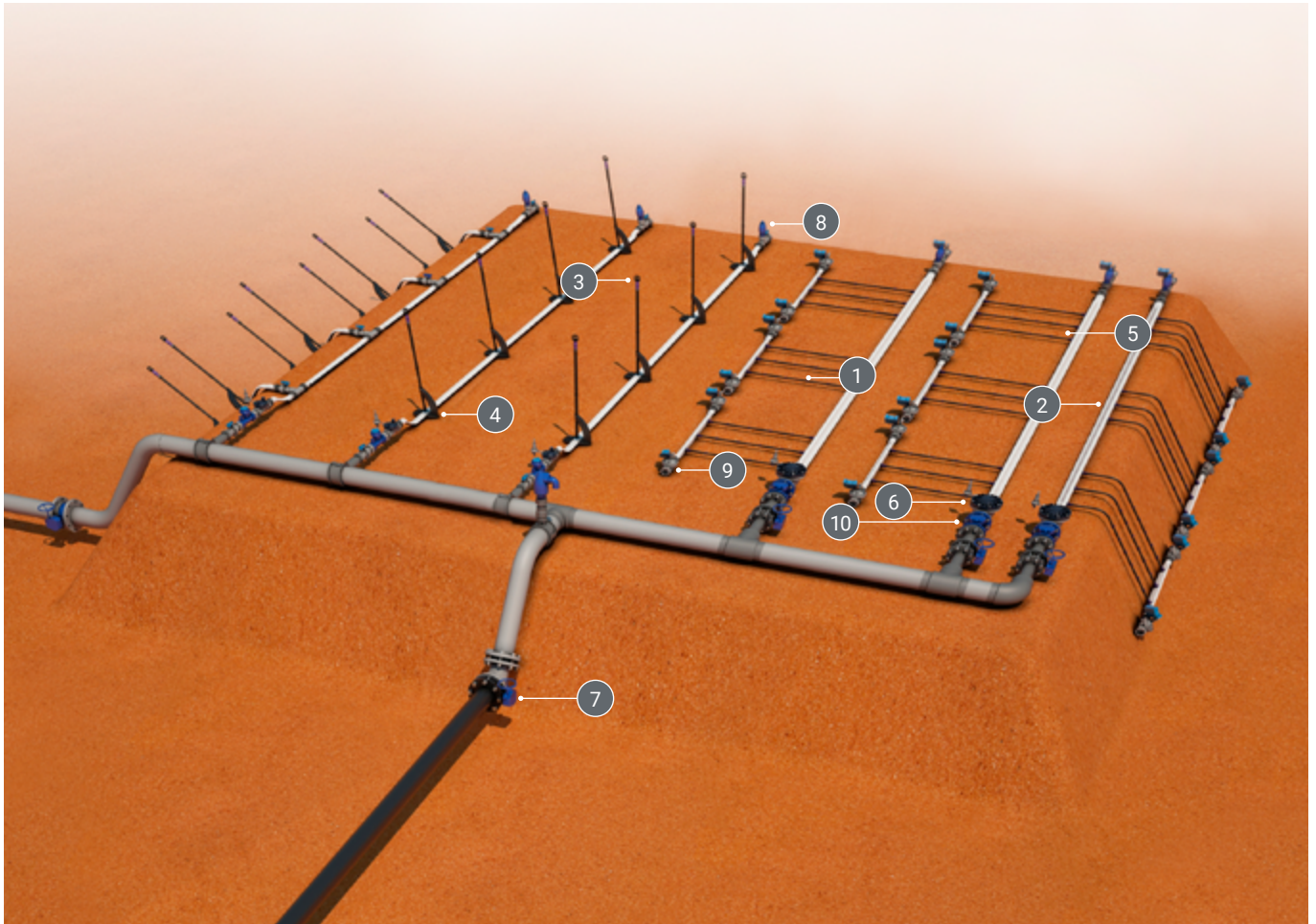
Polypropylene air valves, high chemical resistance, uniquely designed for any mining application

3. Water-Meter

Available with various pulse outputs. Including small diameters of PVC, chemical resistant meters

4. Hydraulic Control Valve

PVC, Polypropylene and stainless steel control valves. Suitable for any required control function



1. Leach Lines

A mining industry leading portfolio, of pressure compensated and non-pressure compensated drippers. For heap leaching of Copper, Gold and Silver

2. FlexNet™ Flexible Pipes

Simple & Reliable solution, as part of Netafim Innovative mainline and sub-mainline piping portfolio

3. Sprinklers

Wide variety of sprinklers suitable for all heap leaching requirements. For Copper, Gold and silver mines

4. MegaStand™

Unique, simple & reliable Sprinkler stands for installation with Netafim flexible pipes

5. Connectors

A full range of required pipe connecting solutions (barb, twist lock, compression). Including all the needed adapters and many additional accessories

6. Hydraulic Control Valves

PVC, Polypropylene and stainless steel control valves. Suitable for any required control function

7. Manual Valves

Wide range of Butterfly valves, made from PVC or highly resistant metals, with stainless steel shaft & disc and EPDM sealings. Various PVC ball valves, with Viton O-rings, designed especially for the mining industry

8. Air Valves

Polypropylene air valves, high chemical resistance, uniquely designed for any mining application

9. Flushing Valves

For an easy, automated flushing of the fluids in the system. With simple and reliable DC controller

10. Ultrasonic Water-Meters

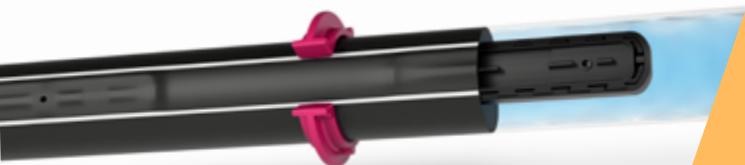
Full range of high-end, accurate and reliable meters, all made from highly resistant materials. Available with various pulse outputs. Including small diameters of PVC, chemical resistant meters

/ Leach Lines

Leach Line™ U

Heap leaching for gold and silver mines. Integral pressure-compensated high clogging resistance dripper, for superior uniform leaching even on sloping terrains in severe solution quality. Guarantee uniform flow from the top of the pad to the bottom of the slope.

→ 16009 - 16010 - 16012 - 20010 - 20012



Pressure-compensated



Drainage mechanism



High clogging resistance

/ Benefits & Features

- **Pressure-compensated** Precise and equal amounts of water delivered over a broad pressure range, ensuring 100% uniformity of water and chemicals distribution along the laterals
- **Drainage mechanism** The dripper integrates a drainage mechanism that drains water from the pipe at the end of the cycle. Also helps in countries where temperatures may drop below zero
- **Continuously self-flushing** Flushes debris throughout operation, while ensuring constant dripper operation even in challenging water quality
- **Wide filtration area** Ensures optimal performance even under harsh water conditions, preventing the entrance of sediment into the labyrinths
- **TurboNet™** Labyrinth ensures wide water passages, to increase flushing efficiency. The water is drawn into the dripper from the stream center, preventing the entrance of sediments into the drippers
- **Anti-migration ring (optional)** Prevents solution migration on uneven surfaces and slopes
Economical - saves labor
Pre-installed on the dripline during production (optional)

/ Specifications

- ✓ Pressure-compensated range according to table below
- ✓ Largest filter in the industry. Recommended filtration: depending on dripper flow rate. Filtration method selected based on the kind and concentration of dirt particles contained in the water. Wherever sand exceeding 2ppm exists in the water, a Hydrocyclone shall be installed before the main filter. Where sand/silt/clay solids exceed 100 ppm, pre treatment shall be applied following Netafim expert instructions
- ✓ Double TurboNet™ labyrinth with large water passage
- ✓ Weldable into thick wall driplines (0.90, 1.00, 1.20mm)
- ✓ Injected dripper, very low CV with injected silicon diaphragm
- ✓ High UV resistant. Resistant to chemicals used in heap leaching gold and silver mines
- ✓ Meets ISO 9261 Standards with Israel Standard Institute (SII)-certified production

→ Drippers Technical Data

Flow Rate* (l/h)	Working Pressure Range (bar)	Water Passages Dimensions Width x Depth x Length (mm)	Filtration Area (mm ²)	Constant K	Exponent* X	Recommended Filtration (micron)/(mesh)
0.7	0.5 - 4.0	0.70 x 0.65 x 40	110	0.7	0	130/120
1.0	0.5 - 4.0	0.83 x 0.74 x 40	130	1.0	0	130/120
1.6	0.5 - 4.0	1.09 x 0.76 x 40	130	1.6	0	200/80
2.3	0.5 - 4.0	1.26 x 0.93 x 40	130	2.3	0	200/80
3.5	0.5 - 4.0	1.59 x 1.07 x 40	150	3.5	0	200/80

* Within working pressure range

→ Driplines Technical Data

Model	Inside Diameter (mm)	Wall Thickness (mm)	Outside Diameter (mm)	Max. Working Pressure (bar)	Max. Flushing Pressure (bar)	kd
16009	14.20	0.90	16.00	3.0	3.9	1.30
16010	14.20	1.00	16.20	3.5	4.6	1.30
16012	14.20	1.20	16.60	4.0	5.2	1.30
20010	17.50	1.00	19.50	3.5	4.6	0.40
20012	17.50	1.20	19.90	4.0	5.2	0.40

→ Driplines Packaging Data (on Bundles Coils)

Model	Wall Thickness (mm)	Distance Between Drippers (m)	Coil Length (m)	Average* Coil Weight (kg)	Coils in a 40 Feet Container (units)	Total in a 40 Feet Container (meters)
16009	0.90	0.15 to 1.00	500	20.3	330	165000
16010	1.00	0.15 to 1.00	500	22.1	330	165000
16012	1.20	0.15 to 1.00	400	21.2	352	140800
20010	1.00	0.15 to 1.00	300	17.4	330	99000
20012	1.20	0.15 to 1.00	300	20.2	330	99000

* Calculated weight average. For further details see "Average Coil Weight Disclaimer".

Leach Line™ D

Heap leaching for gold and silver mines. Integral compact pressure-compensated clogging resistance dripper, for uniform leaching even on sloping terrains. Guarantee uniform flow from the top of the pad to the bottom of the slope.

→ 16009 - 16010 - 16012 - 20010 - 20012



Pressure-compensated



Drainage mechanism



High clogging resistance

/ Benefits & Features

- **Pressure-compensated** Precise and equal amounts of water delivered over a broad pressure range, ensuring 100% uniformity of water and chemicals distribution along the laterals
- **Drainage mechanism** The dripper integrates a drainage mechanism that drains water from the pipe at the end of the cycle. Also helps in countries where temperatures may drop below zero
- **Continuously self-flushing** Flushes debris throughout operation, while ensuring constant dripper operation even in challenging water quality
- **Wide filtration area** Ensures optimal performance even under harsh water conditions, preventing the entrance of sediment into the labyrinths
- **TurboNet™** Labyrinth ensures wide water passages, to increase flushing efficiency. The water is drawn into the dripper from the stream center, preventing the entrance of sediments into the drippers
- **Anti-migration ring (optional)** Prevents solution migration on uneven surfaces and slopes
Economical - saves labor
Pre-installed on the dripline during production (optional)

/ Specifications

- ✓ Pressure-compensated range according to table below
- ✓ Recommended filtration: depending on dripper flow rate. Filtration method selected based on the kind and concentration of dirt particles contained in the water. Wherever sand exceeding 2ppm exists in the water, a Hydrocyclone shall be installed before the main filter. Where sand/silt/clay solids exceed 100 ppm, pre treatment shall be applied following Netafim expert instructions
- ✓ TurboNet™ labyrinth with large water passage
- ✓ Weldable into thick wall driplines (0.90, 1.00, 1.20mm)
- ✓ Injected dripper, very low CV with injected silicon diaphragm
- ✓ High UV resistant. Resistant to chemicals used in heap leaching gold and silver mines
- ✓ Meets ISO 9261 Standards with Israel Standard Institute (SII)-certified production

→ Drippers Technical Data

Flow Rate* (l/h)	Working Pressure Range (bar)	Water Passages Dimensions Width x Depth x Length (mm)	Filtration Area (mm ²)	Constant K	Exponent* X	Recommended Filtration (micron)/(mesh)
1.00	0.40 - 3.0	0.61 x 0.60 x 8	39	1.0	0	130/120
1.60	0.40 - 3.0	0.76 x 0.73 x 8	39	1.6	0	200/80
2.00	0.40 - 3.5	0.76 x 0.88 x 8	39	2.0	0	200/80
3.00	0.40 - 3.5	1.02 x 0.88 x 8	39	3.0	0	200/80
3.50	0.60 - 3.5	1.02 x 0.88 x 8	39	3.5	0	200/80
3.80	0.60 - 3.5	1.02 x 0.88 x 8	39	3.8	0	200/80

* Within working pressure range

→ Driplines Technical Data

Model	Inside Diameter (mm)	Wall Thickness (mm)	Outside Diameter (mm)	Max. Working Pressure (bar)	Max. Flushing Pressure (bar)	kd
16009	14.20	0.90	16.00	2.5/3.0/3.5*	3.9	0.72
16010	14.20	1.00	16.20	2.5/3.0/3.5*	4.6	0.72
16012	14.20	1.20	16.60	2.5/3.0/3.5*	5.2	0.72
20010	17.50	1.00	19.50	2.5/3.0/3.5*	4.6	0.25
20012	17.50	1.20	19.90	2.5/3.0/3.5*	5.2	0.25

* The maximum working pressure is defined by the dripper or by the dripline wall thickness

→ Driplines Packaging Data (on Bundles Coils)

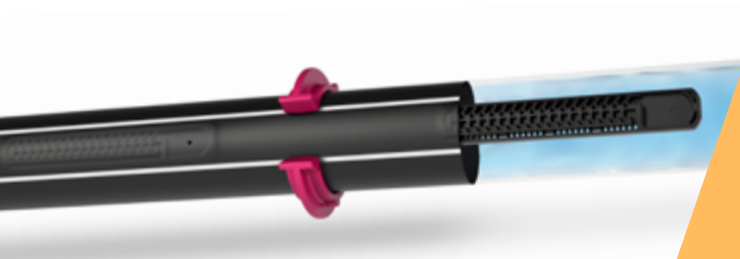
Model	Wall Thickness (mm)	Distance Between Drippers (m)	Coil Length (m)	Average* Coil Weight (kg)	Coils in a 40 Feet Container (units)	Total in a 40 Feet Container (meters)
16009	0.90	0.15 to 1.00	500	18.5	330	165000
16010	1.00	0.15 to 1.00	500	20.4	330	165000
16012	1.20	0.15 to 1.00	400	22.4	352	140800
20010	1.00	0.15 to 1.00	300	16.8	330	99000
20012	1.20	0.15 to 1.00	300	20.3	330	99000

* Calculated weight average. For further details see "Average Coil Weight Disclaimer".

Leach Line™ A

Integral non pressure-compensated high clogging resistance dripper, for on surface or sub surface installations in heap leached mines. For flat terrain or slopes of heap leached pads.

→ 16009 - 16010 - 16012 - 20010 - 20012



High clogging resistance



Self cleaning labyrinth



Anti-migration mechanism (optional)

/ Benefits & Features

- **High clogging resistance** Even with challenging water quality, with self-cleaning labyrinth that flushes debris throughout operation
- **Wide filtration area** Ensures optimal performance even under harsh water conditions, preventing the entrance of sediments into the drippers
- **TurboNet™** Labyrinth ensures wide water passages, to increase flushing efficiency. The water is drawn into the dripper from the stream center, preventing the entrance of sediment into the drippers
- **Anti-migration ring (optional)**
 - Prevents solution migration on uneven surfaces and slopes
 - Economical - saves labor
 - Pre-installed on the dripline during production (optional)

/ Specifications

- ✓ Maximum operating pressure according to driplines wall thickness. See tables below
- ✓ Recommended filtration: 200micron / 80mesh. Filtration method selected based on the kind and concentration of dirt particles contained in the water. Wherever sand exceeding 2ppm exists in the water, a Hydrocyclone shall be installed before the main filter. Where sand/silt/clay solids exceed 100ppm, pre treatment shall be applied following Netafim expert instructions
- ✓ TurboNext™ labyrinth with superior performance
- ✓ Weldable into thick wall driplines (0.90, 1.00, 1.20mm)
- ✓ Injected dripper, very low CV
- ✓ High UV resistance. Resistant to chemicals used in heap leaching mines
- ✓ Meets ISO 9261 Standards with Israel Standard Institute (SII)-certified production

→ Drippers Technical Data

16009, 16010, 20010 - 0.9, 1.0mm wall thickness driplines

Flow Rate* (l/h)	Max. Working Pressure (bar)**	Water Passages Dimensions Width x Depth x Length (mm)	Filtration Area (mm ²)	Constant K	Exponent X	Recommended Filtration (micron)/(mesh)
1.00	3.0 / 3.5	0.60 x 0.74 x 65	49	0.347	0.46	200 / 80
1.50		0.71 x 0.85 x 65	53	0.520	0.46	200 / 80
2.00		0.76 x 1.03 x 65	54	0.693	0.46	200 / 80
3.00		0.90 x 1.20 x 65	54	1.040	0.46	200 / 80
4.00		0.94 x 1.28 x 33	54	1.387	0.46	200 / 80
8.00		1.52 x 1.28 x 28	50	2.773	0.46	200 / 80

* Flow rate at 1.0 bar pressure ** According to dripline wall thickness

16012, 20012 - 1.2mm wall thickness driplines

Flow Rate* (l/h)	Max. Working Pressure (bar)	Water Passages Dimensions Width x Depth x Length (mm)	Filtration Area (mm ²)	Constant K	Exponent X	Recommended Filtration (micron)/(mesh)
1.05	4.0	0.60 x 0.74 x 65	49	0.364	0.46	200 / 80
1.60		0.71 x 0.85 x 65	53	0.554	0.46	200 / 80
2.10		0.76 x 1.03 x 65	54	0.728	0.46	200 / 80
3.15		0.90 x 1.20 x 65	54	1.092	0.46	200 / 80
4.20		0.94 x 1.28 x 33	54	1.455	0.46	200 / 80
8.40		1.52 x 1.28 x 28	50	2.912	0.46	200 / 80

* Flow rate at 1.0 bar pressure

→ Flow Rate (l/h) vs Pressure (bar)

16009, 16010, 20010 - 0.9, 1.0mm wall thickness driplines

Flow Rate* (l/h)	Working Pressure (bar)						
	0.4	0.6	0.8	1.0	1.5	2.0	2.5
1.00	0.66	0.79	0.90	1.00	1.21	1.38	1.53
1.50	0.98	1.19	1.35	1.50	1.81	2.06	2.29
2.00	1.31	1.58	1.80	2.00	2.41	2.75	3.05
3.00	1.97	2.37	2.71	3.00	3.61	4.13	4.57
4.00	2.62	3.16	3.61	4.00	4.82	5.50	6.10
8.00	5.25	6.32	7.22	8.00	13.26	12.19	11.00

* Nominal flow rate at 1.0 bar pressure ** 1.0 bar = 14.5 psi *** Q (flow rate) = K*P^X

16012, 20012 - 1.2mm wall thickness driplines

Flow Rate (l/h)	Working Pressure (bar)							
	0.4	0.6	0.8	1.0	1.5	2.0	2.5	3.0
1.05	0.69	0.83	0.95	1.05	1.27	1.44	1.60	1.74
1.60	1.05	1.26	1.44	1.60	1.93	2.20	2.44	2.65
2.10	1.38	1.66	1.89	2.10	2.53	2.89	3.20	3.48
3.15	2.07	2.49	2.84	3.15	3.80	4.33	4.80	5.22
4.20	2.75	3.32	3.79	4.20	5.06	5.77	6.40	6.96
8.40	5.51	6.64	7.58	8.40	10.12	11.55	12.80	13.92

* Nominal flow rate at 1.0 bar pressure ** 1.0 bar = 14.5 psi *** Q (flow rate) = K*P^X

→ Driplines Technical Data

Model	Inside Diameter (mm)	Wall Thickness (mm)	Outside Diameter (mm)	Max. Working Pressure (bar)	Max. Flushing Pressure (bar)	kd
16009	14.20	0.90	16.00	3.0	3.9	0.40
16010	14.20	1.00	16.20	3.5	4.6	0.40
16012	14.20	1.20	16.60	4.0	5.2	0.40
20010	17.50	1.00	19.50	3.5	4.6	0.10
20012	17.50	1.20	19.90	4.0	5.2	0.10

→ Driplines Packaging Data (on Bundles Coils)

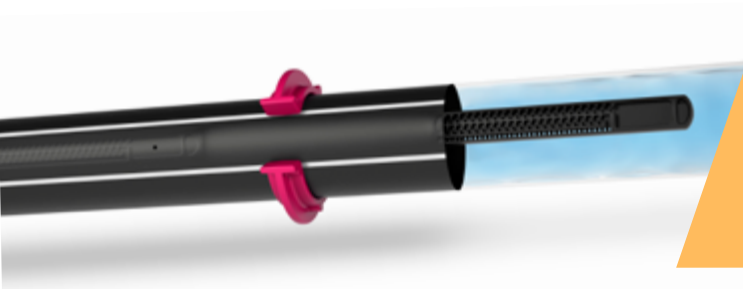
Model	Wall Thickness (mm)	Distance Between Drippers (m)	Coil Length (m)	Average* Coil Weight (kg)	Coils In A 40 Feet Container (units)	Total In A 40 Feet Container (meters)
16009	0.90	500	0.15 TO 1.00	20.7	330	165000
16010	1.00	500	0.15 TO 1.00	23.0	330	165000
16012	1.20	400	0.15 TO 1.00	22.3	352	140800
20010	1.00	300	0.15 TO 1.00	16.7	330	99000
20012	1.20	300	0.15 TO 1.00	20.2	330	99000

* Calculated weight average. For further details see "Average Coil Weight Disclaimer".

Leach Line™ X

Integral non pressure-compensated high clogging resistance dripper, for on surface or sub surface installations in heap leached mines. For flat terrain or slopes of heap leached pads.

→ 16009 - 16010 - 16012 - 20010 - 20012



High clogging resistance



Self cleaning labyrinth



Anti-migration mechanism (optional)

/ Benefits & Features

- **High clogging resistance** Even with challenging water quality, with self-cleaning labyrinth that flushes debris throughout operation
- **Wide filtration area** Ensures optimal performance even under harsh water conditions, preventing the entrance of sediments into the drippers
- **TurboNet™** Labyrinth ensures wide water passages, to increase flushing efficiency. The water is drawn into the dripper from the stream center, preventing the entrance of sediment into the drippers
- **Anti-migration ring (optional)** Prevents solution migration on uneven surfaces and slopes
Economical - saves labor
Pre-installed on the dripline during production (optional)

/ Specifications

- ✓ Maximum operating pressure according to driplines wall thickness. See tables below
- ✓ Recommended filtration: 200 micron / 80 mesh. Filtration method selected based on the kind and concentration of dirt particles contained in the water. Wherever sand exceeding 2ppm exists in the water, a Hydrocyclone shall be installed before the main filter. Where sand/silt/clay solids exceed 100ppm, pre-treatment shall be applied following Netafim expert instructions
- ✓ TurboNet™ labyrinth with large water passage
- ✓ Weldable into thick wall driplines (0.90, 1.00, 1.20mm)
- ✓ Injected dripper, very low CV
- ✓ High UV resistance. Resistant to chemicals used in heap leaching mines
- ✓ Meets ISO 9261 Standards with Israel Standard Institute (SII)-certified production

→ Drippers Technical Data

16009, 16010, 20010 - 0.9 and 1.0 mm wall thickness driplines

Flow Rate* (l/h)	Max. Working Pressure (bar)**	Water Passages Dimensions Width x Depth x Length (mm)	Filtration Area (mm ²)	Constant K	Exponent X	Recommended Filtration (micron)/(mesh)
1.00	3.0 / 3.5	0.60 x 0.80 x 75	70	0.348	0.46	200 / 80
1.50		0.73 x 0.90 x 75	70	0.520	0.46	200 / 80
2.00		0.76 x 1.09 x 75	70	0.693	0.46	200 / 80
4.00		1.06 x 1.40 x 75	76	1.387	0.46	200 / 80
8.00		1.68 x 1.40 x 37	76	2.774	0.46	200 / 80

* Flow rate at 1.0 bar pressure ** According to dripline wall thickness

16012, 20012 - 1.2mm wall thickness driplines

Flow Rate* (l/h)	Max. Working Pressure (bar)**	Water Passages Dimensions Width x Depth x Length (mm)	Filtration Area (mm ²)	Constant K	Exponent X	Recommended Filtration (micron)/(mesh)
1.05	4.0	0.60 x 0.80 x 75	70	0.364	0.46	200 / 80
1.50		0.73 x 0.90 x 75	70	0.520	0.46	200 / 80
2.10		0.76 x 1.09 x 75	70	0.728	0.46	200 / 80
4.20		1.06 x 1.40 x 75	76	1.456	0.46	200 / 80
8.40		1.68 x 1.40 x 37	76	2.913	0.46	200 / 80

* Flow rate at 1.0 bar pressure

→ Flow Rate (l/h) vs Pressure (bar)

16009, 16010, 20010 - 0.9 and 1.0mm wall thickness driplines

Flow Rate* (l/h)	Working Pressure (bar)							
	0.4	0.6	0.8	1.0	1.5	2.0	2.5	3.0
1.00	0.66	0.79	0.90	1.00	1.21	1.38	1.53	1.66
1.50	0.98	1.19	1.35	1.50	1.81	2.06	2.29	2.49
2.00	1.31	1.58	1.80	2.00	2.41	2.75	3.05	3.31
4.00	2.62	3.16	3.61	4.00	4.82	5.50	6.10	6.63
8.00	5.25	6.32	7.22	8.00	9.64	11.00	12.19	13.26

* Nominal flow rate at 1.0 bar pressure ** 1.0 bar = 14.5 psi *** Q (flow rate) = $K \cdot P^X$

16012, 20012 - 1.2mm wall thickness driplines

Flow Rate* (l/h)	Working Pressure (bar)							
	0.4	0.6	0.8	1.0	1.5	2.0	2.5	3.0
1.05	0.69	0.83	0.95	1.05	1.27	1.44	1.60	1.74
1.50	0.98	1.19	1.35	1.50	1.81	2.06	2.29	2.49
2.10	1.38	1.66	1.89	2.10	2.53	2.89	3.20	3.48
4.20	2.75	3.32	3.79	4.20	5.06	5.77	6.40	6.96
8.40	5.51	6.64	7.58	8.40	10.12	11.56	12.81	13.93

* Nominal flow rate at 1.0 bar pressure ** 1.0 bar = 14.5 psi *** Q (flow rate) = $K \cdot P^X$

→ **Driplines Technical Data**

Model	Inside Diameter (mm)	Wall Thickness (mm)	Outside Diameter (mm)	Max. Working Pressure (bar)	Max. Flushing Pressure (bar)	kd
16009	14.20	0.90	16.00	3.0	3.9	0.40
16010	14.20	1.00	16.20	3.5	4.6	0.40
16012	14.20	1.20	16.60	4.0	5.2	0.40
20010	17.50	1.00	19.50	3.5	4.6	0.10
20012	17.50	1.20	19.90	4.0	5.2	0.10

→ **Driplines Packaging Data (on Bundles Coils)**

Model	Wall Thickness (mm)	Distance Between Drippers (m)	Coil Length (m)	Average* Coil Weight (kg)	Coils in a 40 Feet Container (units)	Total in a 40 Feet Container (meters)
16009	0.90	500	0.15 TO 1.00	20.7	330	165000
16010	1.00	500	0.15 TO 1.00	23.0	330	165000
16012	1.20	400	0.15 TO 1.00	22.3	352	140800
20010	1.00	300	0.15 TO 1.00	16.7	330	99000
20012	1.20	300	0.15 TO 1.00	20.2	330	99000

* Calculated weight average. For further details see "Average Coil Weight Disclaimer".

/ Pipes

Flexnet™ HP Flexible Pipes

Innovative mainline and sub-mainline piping solutions that are easy to install, recoil and relocate.



Flexible



Portable



Leak free

/ Benefits & Features

- ✓ Reduced labor through simple and fast installation and retrieval, that is achieved due to low product weight, pre-ordered welded outlets at a spacing that match farmer needs, and specially-designed dripperline connectors that require no glue or Teflon
- ✓ Sealed outlets that ensures uniform irrigation maintain uniform percolation of the solution through the pad and increase mineral extraction efficiency
- ✓ Dripperlines remain in the same position throughout the entire season due to avoidance of the "snaking" phenomenon that is prevalent with other sub-main pipes in the market
- ✓ Product longevity is achieved through unique weaving that provides both strength and light weight and thus allow numerous layings and retrievals
- ✓ White colored for high thermal resistance, high chemical resistance and UV resistance
- ✓ Full suite of auxiliary products that ensure simplicity, connectivity and maintenance that guarantees product's extended performance

/ Specifications & Recommendations

ISO 16438 Standard Compatibility	✓
Available Diameters	2", 3", 4", 6", 8"
Coil Length	50 or 100meter
Welded Outlet Color	Green
Colored Strip for Easy Identification	Red
Raw Material	PP
Maximum Working Pressure	Based on diameter

→ Technical Data

FlexNet™ HP	Inside Diameter (mm)	Wall Thickness (mm)	Outside Diameter (mm)	Max. Working Pressure (bar)
2" / 51 mm	51.5	1.1	53.7	4.0
3" / 78 mm	78.3	1.1	80.5	4.0
4" / 102 mm	102.5	1.1	104.7	4.0
6" / 163 mm	163.0	1.1	165.2	2.8
8" / 209 mm	209.0	1.1	210.7	2.0

→ Packaging Data

FlexNet™ HP	Coil Length	Dimensions Width x Diameter (cm x cm)	Coil Weight Blank / With Connectors (kg)	Coils Per Pallet (units)	Coil Length	Dimensions Width x Diameter (cm x cm)	Coils Per Pallet (units)
	(m)				(m)		
2" / 51 mm	100	9.0*70	15 / 16	22	50	9.0*55	36
3" / 78 mm	100	14.0*70	27 / 28	14	50	14.0*55	28
4" / 102 mm	100	18.5*70	35 / 36	12	50	18.5*55	24
6" / 163 mm	100	27.5*70	52 / 53	6	50	27.5*55	12
8" / 209 mm	100	33.5*70	62 / 63	6	50	33.5*55	12

→ Pipes with Integral Welded Connectors

FlexNet™ HP	0.50 (m) Between Connections		1.00 (m) Between Connections		5.00 (m) Between Conn.
	50 meter	100 meter	50 meter	100 meter	100 meter
2" / 51 mm	43000-006100	43000-006200	43000-006760	43000-006800	43000-007240
3" / 78 mm	43000-009460	43000-009470	43000-008504	43000-010015	43000-010225
4" / 102 mm	43000-011850	43000-013870			
6" / 163 mm					
8" / 209 mm			43000-015100	43000-015102	

→ Blank Pipes Catalog Numbers

FlexNet™ HP	Blank Pipe 50 meter	Blank Pipe 100 meter
2" / 51 mm	43000-000510	43000-000530
3" / 78 mm	43000-000550	43000-000560
4" / 102 mm	43000-000580	43000-000600
6" / 163 mm	43000-000650	43000-000670

* Missing catalog numbers available upon request

** Other distances and configurations between integral welded connectors available upon request

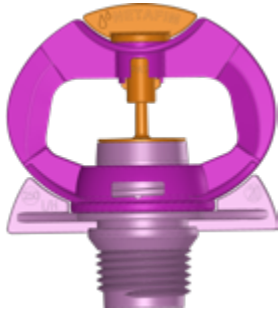
Additional catalog numbers can be configured by the FlexNet™ on-line configurator: <http://productconfig.netafim.com/>

/ Sprinklers



GyroNet™ Turbo

Heap leaching for copper, gold & silver mines.



Made of resistible material



EverSpin™ Sapphire stone technology

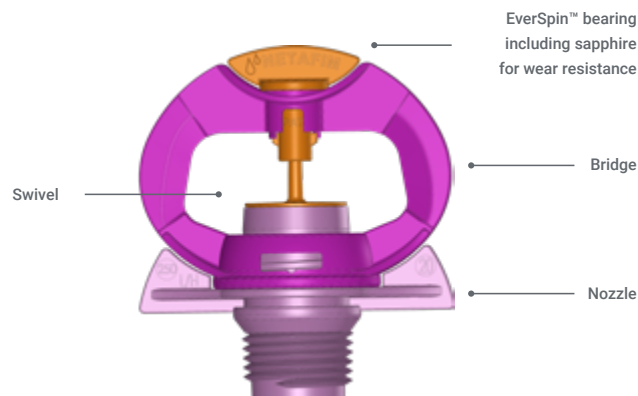


Perfect distribution

/ Benefits & Features

- ✓ The ultimate Midi-Sprinkler for full coverage
- ✓ Excellent distribution uniformity
- ✓ Optimal drop size
- ✓ Relatively low working pressure
- ✓ Wear resistant with EverSpin™ upper bearing
- ✓ Easy maintenance and cleaning

→ The Gyronet™ Structure



→ Catalog Numbers

Description	Catalog Number
GYR TRB LR 1/2IC 200L/H HEAD ONLY FOR MINE	64100-001900
GYR TRB LR 1/2IC 250L/H HEAD ONLY FOR MINE	64100-003040
GYR TRB LR 1/2IC 300L/H HEAD ONLY FOR MINE	64100-003900
GYR TRB LR 1/2IC 400L/H HEAD ONLY FOR MINE	64100-005000
GYR TRB LR 1/2IC 500L/H HEAD ONLY FOR MINE	64100-005980

→ Technical Data

Model	Nozzle Color	Nozzle Diameter (mm)	Max. Working Pressure (bar)	Constant k	Component x	Wetted Diameter at 0.5m Height (m)	Swivel Color
200	Black	1.89	3.0	42.5	0.5	8.5	Orange
250	Light Purple	2.14		54.5		10.0	
300	Black	2.31		64.1		10.5	
400	Black	2.67		86.8		11.0	
500	Black	3.00		108.5		11.5	

→ Flow Rate (l/h) vs Pressure (bar)

Model	Working Pressure (bar)				
	1.0	1.5	2.0	2.5	3.0
200	134	165	190	213	233
250	172	211	244	273	299
300	203	248	287	321	351
400	274	336	388	434	475
500	343	420	485	543	594

→ Performance Data

Model	Nozzle Color Code	Rotor Color Code	Working Pressure (bar)	Height Above Soil (m)	Distance Between Emitters (m)	Distance Between Laterals (m)	Cu	Du	Sc (5%)	Precipitation (l/h ² /h)
200	Black	Orange	1.5	0.5	3.0	3.0	95%	91%	1.2	15.6
					3.5	3.5	93%	87%	1.4	11.4
					4.0	4.0	87%	81%	1.3	8.8
			2.0		4.0	4.0	96%	95%	1.1	11.6
					4.5	4.5	93%	89%	1.2	9.2
					5.0	5.0	94%	91%	1.1	7.5
250	Light Purple	Orange	1.5	0.5	3.5	3.0	96%	94%	1.1	17.1
					4.0	3.5	96%	94%	1.1	13.1
					4.5	4.0	90%	87%	1.2	10.4
			2.0		4.0	4.0	95%	92%	1.1	13.5
					4.5	4.5	92%	87%	1.2	10.6
					5.0	5.0	93%	90%	1.2	8.6
300	Black	Orange	1.5	0.5	5.0	5.0	90%	86%	1.4	9.8
					5.5	5.5	92%	87%	1.3	8.1
					6.0	6.0	90%	87%	1.2	6.8
			2.0		4.5	4.5	94%	93%	1.1	14.0
					5.0	5.0	93%	89%	1.2	11.3
					5.5	5.5	92%	88%	1.2	9.3
400	Black	Orange	1.5	0.5	6.0	6.0	90%	84%	1.4	9.3
					6.5	6.5	93%	90%	1.2	7.9
					7.0	7.0	91%	85%	1.2	6.8
			2.0		6.0	6.0	92%	87%	1.2	10.3
					6.5	6.5	95%	93%	1.1	8.8
					7.0	7.0	92%	88%	1.1	7.6
500	Black	Orange	1.5	0.5	6.5	6.5	89%	84%	1.5	9.9
					7.0	7.0	92%	86%	1.2	8.5
					7.5	7.5	89%	85%	1.2	7.4
			2.0		6.5	6.5	93%	92%	1.1	11.3
					7.0	7.0	92%	91%	1.1	9.8
					7.5	7.5	87%	82%	1.2	8.5

MegaNet™

Heap leaching for gold & silver mines.



Balanced
sprinkler



Excellent
distribution for
wider installation
spacing



Integral inlet filter
to avoid nozzle
clogging

/ Benefits & Features

- ✓ The optimal sprinkler for full coverage, with wide spacing installation
- ✓ Optimal drop size
- ✓ **One-of-a-kind integral filter:** MegaNet's unique built-in filter protects the sprinkler nozzle from being clogged - reducing repair and maintenance costs
- ✓ **Duble-damage protection:** Unique pop-up mechanism - that opens only during watering
- ✓ **High water distribution:** Unique symmetrical structure splits water into two equal jets, creating more balanced water distribution
- ✓ 2 options of trajectory angles: 15 Deg & 24 Deg

→ Catalog Numbers

Model	MegaNet™ 15d ½" Threaded Inlet Connector	MegaNet™ 24d ½" Threaded Inlet Connector
200	63600-004900	63600-001700
250	63600-004950	63600-001750
350	63600-005000	63600-001000
450	63600-006000	63600-002000
550	63600-007000	63600-003000
650	63600-008000	63600-004000
750	63600-009000	63600-004500

→ Flow Rate (l/h) vs Pressure (bar)

Model	2.0	2.5	3.0
200	163	188	230
250	200	231	283
350	280	323	396
450	357	412	505
550	428	494	605
650	525	606	743
750	608	702	860

→ Technical Data

Model	Nozzle Color	Nozzle Size	Max. Working Pressure	Constant	Component	Meganet 15d Wetted Diameter at 0.5m Height (m)	Meganet 24d Wetted Diameter at 0.5m Height (m)
		(mm)					
200	Yellow	1.85	3.0	42.0	0.5	14.0	11.0
250	Purple	2.06		51.6			102.0
350	Green	2.44		72.3			14.0
450	Blue	2.79		92.2		17.0	
550	Brown	3.08		110.5		16.0	18.0
650	Orange	3.37		135.6			
750	Red	2.68		157.0			

→ MegaNet™ 15D Performance Data

Nozzle Size (mm)	Color Code	Working Pressure (bar)	Flow Rate (l/h)	Wattted Diameter* (m)	Precipitation (mm/h)						
					Spacing (m x m)						
					7 x 8	8 x 8	8 x 10	9 x 9	10 x 10	10 x 11	10 x 12
1.85	Yellow	2.5	210	14.0	3.8	3.3	2.6	2.6	2.1	1.9	1.8
		3.0	230		4.1	3.6	2.9	2.8	2.3	2.1	1.9
2.06	Purple	2.5	258		4.6	4.0	3.2	3.2	2.6	2.3	2.2
		3.0	283		5.1	4.4	3.5	3.5	2.8	2.6	2.4
2.44	Green	2.5	362		6.5	5.7	4.5	4.5	3.6	3.3	3.0
		3.0	396		7.1	6.2	5.0	4.9	4.0	3.6	3.3
2.79	Blue	2.5	461		8.2	7.2	5.8	5.7	4.6	4.2	3.8
		3.0	505	9.0	7.9	6.3	6.2	5.1	4.6	4.2	
3.08	Brown	2.5	553	9.9	8.6	6.9	6.8	5.5	5.0	4.6	
		3.0	605	10.8	9.5	7.6	7.5	6.1	5.5	5.0	
3.37	Orange	2.5	678	12.1	10.6	8.5	8.4	6.8	6.2	5.7	
		3.0	743	13.3	11.6	9.3	9.2	7.4	6.8	6.2	
3.68	Red	2.5	785	14.0	12.3	9.8	9.7	7.9	7.1	6.5	
		3.0	860	15.4	13.4	10.8	10.6	8.6	7.8	7.2	

→ MegaNet™ 24D Performance Data

Nozzle Size (mm)	Color Code	Working Pressure (bar)	Flow Rate (l/h)	Wattted Diameter* (m)	Precipitation (mm/h)						
					Spacing (m x m)						
					7 x 8	8 x 8	8 x 10	9 x 9	10 x 10	10 x 11	10 x 12
1.85	Yellow	2.5	210	11.0	3.6	3.3					
		3.0	230		3.8	3.6					
2.06	Purple	2.5	258	12.0	4.4	4.0					
		3.0	283	4.8	4.4						
2.44	Green	2.5	362	14.0	5.9	5.6	4.5	4.4	3.6		
		3.0	396		6.5	6.2	5.0	4.9	4.0		
2.79	Blue	2.5	461	17.0	8.1	7.2	5.8	5.7	4.6	4.2	3.9
		3.0	505		8.7	7.9	6.3	6.2	5.0	4.6	4.2
3.08	Brown	2.5	553	17.0	10.0	8.6	6.9	7.2	5.5	5.0	4.6
		3.0	605		10.1	9.5	7.6	7.5	6.1	5.5	5.1
3.37	Orange	2.5	678	18.0	11.5	10.6	8.5	8.4	6.8	6.2	5.7
		3.0	743		12.3	11.6	9.3	9.2	7.4	6.8	6.2
3.68	Red	2.5	785	18.0	13.4	12.3	9.8	9.7	7.9	7.1	6.6
		3.0	860		15.0	13.4	10.7	10.6	8.6	7.8	7.2

* at least 0.5 mm/h

** Performance table prepared under laboratory conditions, sprinkler head 1.0 meter above ground

color legend:

CU = OR > THAN 92%	CU = OR > 88% AND <92%	CU = OR > 86% AND < 88%	CU < 86%
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MegaStand™

Sprinkler stand for installation with Netafim™ flexible pipes.



Easy to install & collect



Rigid and stable






Flexible heights installation

/ Benefits & Features

- ✓ MegaStand™ is used for combination between GyroNet™ Turbo or others sprinklers (with male thread inlet connector ½") and flexible pipes: FlexNet™
- ✓ MegaStand™ is the ultimate solution for overhead irrigation over heat leaching pads
- ✓ MegaStand™ is made from acid resisting materials making it suitable for multiple leaching of minerals

→ Components Catalog Numbers & Packaging Data

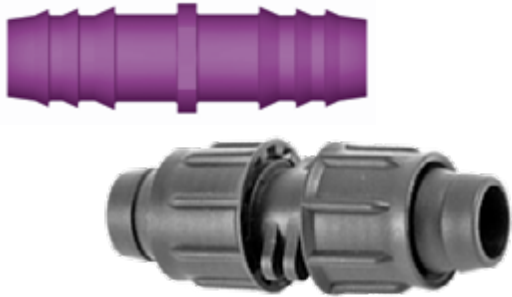
Illustration	Description	Units / Qty. Per Box	Catalog Number
	Mega-Riser ½" 0.4meter length ½" male threaded - ½" female threaded	20	64520-002490
	Mega supporting arm	50	64520-002485
	Mega-base	100	64520-002480

/ Connectors



Dripline Connectors

Suitable for thin, medium and heavy wall driplines, our user-friendly and highly reliable connectors prevent leakage for a full range of applications.



Reliable



High durability



Superb quality

/ Overview

Netafim™ offers a comprehensive range of dripline connectors made of highly resistant durable polymers. Designed to be extremely user-friendly, functional and reliable, our products meet the highest market standards and are suitable for all types of driplines and pipes.


→ Technical Data

Connectors for HWD	Dripline	
	Internal Diameter (mm)	Wall Thickness (mm)
Barb for mining (Purple)		
16	14.2	0.9 - 1.2
20	17.5	1.0 - 1.2
Twist Lock (Black Nut)		
16	14.2	0.9 - 1.2

Connectors for TWD & MWD	Dripline	
	Internal Diameter (mm)	Wall Thickness (mm)
Twist Lock (Black Nut)		
16	16.2	5.0 - 15.0
	15.5	20.0 - 25.0


→ Barb Connectors for Mining (Purple)

Maximum working pressure: 3bar


Barb Coupling		16mm	17mm	20mm
	1 Unit	32500-010680	32500-003900	32500-007700
	50 Units/Bag	32500-010685	32500-003915	32500-007721
	100 Units/Bag	32500-010690	32500-003930	32500-007730

→ Start Connectors


Seal for Start Barb Connector Model P

	1 Unit	32500-010450
	50 Units/Bag	32500-010455
	100 Units/Bag	32500-010460

Start Connector Barb 16mm w/o Seal, Model P

	1 Unit	32500-014120
	50 Units/Bag	-
	100 Units/Bag	-


Seal EPDM f/16 mm Start Connector f/mines

	1 Unit	32500-013850
	50 Units/Bag	-
	100 Units/Bag	-

Compatible with 32500-010680

Recommended hole for barb start connectors - 19mm in PE pipe up to 10mm wall thickness

→ Twist Lock (TL) TWD & MWD Connectors

TL Coupling	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16		32520-000010

TL 16 Barb LDPE 16	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16		32520-000340

TL 16 MTH ½"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	½" MTH	32520-000060

TL 16 MTH ¾"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	¾" MTH	32520-000070

TL Elbow 16 MTH ½"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	½" MTH	32520-000160

TL Tee 16 MTH ½"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	½" MTH	32520-000260

→ Twist Lock (TL) HWD Connectors

TL HWD Coupling	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16		32530-000010

TL HWD 16 Barb LDPE 16	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16		32530-000410

TL HWD 16 MTH ½"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	½" MTH	32530-000060

TL HWD 16 MTH ¾"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	¾" MTH	32530-000070

TL HWD Elbow 16 MTH ½"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	½" MTH	32530-000150

TL HWD Tee 16 MTH ½"	Size (mm)	Thread	Cat. Number 50 Units/Bag
	16	½" MTH	32530-000250

→ FlexNet™ Connectors Kits

Note: All the products are supplied as a kit including the seal and metal band

Product Picture	Product Description	Catalog Number	FlexNet™	FlexNet™ HP
Coupling Connector				
	FXN COUPLING 2" X 2" KIT	43040-018000	✓	✓
	FXN COUPLING 3" X 3" KIT	43040-018150	✓	✓
	FXN COUPLING 4" X 4" KIT	43040-018300	✓	✓
	FXN COUPLING 6" X 6" KIT	43040-031600	✓	✗
	FXN COUPLING 8" X 8" KIT	43040-031700	✓	✗
	FXN COUPLING 10" X 10" KIT	43040-031800	✓	✗
	FXN COUPLING 12" X 12" KIT	43040-031900	✓	✗
	FXN HP COUPLING 6" X 6" KIT 4 CLAMP	43040-100600	✓	✓
	FXN HP COUPLING 8" X 8" KIT 4 CLAMP	43040-100700	✓	✓
Coupling Connector with Ready Made Port*				
	FXN COUPLING 2"+½" FTH BSP KIT	43040-030600	✓	✓
	FXN COUPLING 3"+½" FTH BSP KIT	43040-030700	✓	✓
	FXN COUPLING 4"+½" FTH BSP KIT	43040-030800	✓	✓
Line End Cap Conector				
	FXN LINE END CAP 2" KIT	43040-020710	✓	✓
	FXN LINE END CAP 3" KIT	43040-020720	✓	✓
	FXN LINE END CAP 4" KIT	43040-020730	✓	✓
	FXN LINE END CAP 6" KIT	43040-000400	✓	✗
	FXN LINE END CAP 8" KIT	43040-000401	✓	✗
	FXN LINE END CAP 10" KIT	43040-000402	✓	✗
	FXN LINE END CAP 12" KIT	43040-000403	✓	✗
Barb x MTH BSP Adaptor				
	FXN MTH 2" BSP X 2" KIT	43040-018050	✓	✓
	FXN MTH 3" BSP X 3" KIT	43040-018200	✓	✓
	FXN MTH 4" BSP X 4" KIT	43040-018350	✓	✓
Barb x MTH NPT Adaptor				
	FXN MTH 2" NPT X 2" KIT	43040-018205	✓	✓
	FXN MTH 3" NPT X 3" KIT	43040-018210	✓	✓
	FXN MTH 4" NPT X 4" KIT	43040-018380	✓	✓
Barb x MTH BSP Adaptor with Ready Made Port				
	FXN MTH 2" BSP X 2"+½" FTH BSP KIT	43040-030900	✓	✓
	FXN MTH 3" BSP X 3"+½" FTH BSP KIT	43040-031000	✓	✓
	FXN MTH 4" BSP X 4"+½" FTH BSP KIT	43040-031100	✓	✓

*½" threaded outlet

Product Picture	Product Description	Catalog Number	FlexNet™	FlexNet™ HP
Barb x PVC SW Adaptor				
	FXN SW ADAPTER ISO 50/63 X 2" KIT	43040-018100	✓	✓
	FXN SW ADAPTER ISO 75/90 X 3" KIT	43040-018250	✓	✓
	FXN SW ADAPTER ISO 110" X 4" KIT	43040-018400	✓	✓
	FXN SW ADAPTER ASTM 1½/2" X 2" KIT	43040-018605	✓	✓
	FXN SW ADAPTER ASTM 2½/3" X 3" KIT	43040-018610	✓	✓
	FXN SW ADAPTER ASTM 4" X 4" KIT	43040-018381	✓	✓
	FXN SW ADAPTER ISO 160MM X 6" KIT	43040-032000	✓	✗
	FXN SW ADAPTER ISO 200MM X 8" KIT	43040-032100	✓	✗
	FXN SW ADAPTER ISO 250MM X 10" KIT	43040-032200	✓	✗
	FXN SW ADAPTER ISO 315MM X 12" KIT	43040-032300	✓	✗
	FXN SW ADAPTER ASTM 6" KIT	43040-032400	✓	✗
	FXN SW ADAPTER ASTM 8" KIT	43040-032500	✓	✗
	FXN SW ADAPTER ASTM 10" KIT	43040-032600	✓	✗
	FXN HP SW ISO 160MM X 6" KIT 2 CLAMP	43040-100601	✓	✓
	FXN HP SW ISO 200MM X 8" KIT 2 CLAMP	43040-100701	✓	✓
	FXN HP SW ASTM 6" X 6" KIT 2 CLAMP	43040-100602	✓	✓
	FXN HP SW ASTM 8" X 8" KIT 2 CLAMP	43040-100702	✓	✓
Barb X PVC SW ISO Adaptor with Ready Made Port				
	FXN SW ADAPTER ISO 50/63 X 2"+½" FTH KIT	43040-031200	✓	✓
	FXN MTH 3" BSP X 3"+½" FTH BSP KIT	43040-031300	✓	✓
	FXN SW ADAPTER ISO 110" X 4"+½" FTH KIT	43040-031400	✓	✓
Elbow Connector				
	FXN ELBOW 2" X 2" KIT	43040-018900	✓	✓
	FXN ELBOW 3" X 3" KIT	43040-019000	✓	✓
	FXN ELBOW 4" X 4" KIT	43040-019100	✓	✓
	FXN ELBOW 6" X 6" KIT	43040-000410	✓	✗
	FXN ELBOW 8" X 8" KIT	43040-000411	✓	✗
	FXN ELBOW 10" X 10" KIT	43040-000412	✓	✗
	FXN ELBOW 12" X 12" KIT	43040-000413	✓	✗
"T" Connector				
	FXN TEE 2" X 2" X 2" KIT	43040-019500	✓	✓
	FXN TEE 3" X 3" X 3" KIT	43040-019600	✓	✓
	FXN TEE 4" X 4" X 4" KIT	43040-019700	✓	✓
	FXN TEE 6" X 6" X 6" KIT	43040-000420	✓	✓
	FXN TEE 8" X 8" X 8" KIT	43040-000421	✓	✗
	FXN TEE 10" X 10" X 10" KIT	43040-000422	✓	✗
	FXN TEE 12" X 12" X 12" KIT	43040-000423	✓	✗
"T" Transition Connector				
	FXN TEE 3" X 2" X 3" KIT	43040-020100	✓	✓
	FXN TEE 4" X 3" X 4" KIT	43040-020200	✓	✓



* Two clamps on each side are needed due to the FlexNet HP™ nominal pressure

→ FlexNet™ Connectors Kits



Note: All the products are supplied as a kit including the seal and metal band

Product Picture	Product Description	Catalog Number	FlexNet™	FlexNet™ HP
Transition Connector				
	FXN REDUCING ADAPTER 3" X 2" KIT	43040-020300	✓	✓
	FXN REDUCING ADAPTER 4" X 3" KIT	43040-020400	✓	✓
	FXN REDUCING ADAPTER 6" X 4" KIT	43040-031608	✓	✗
	FXN REDUCING ADAPTER 8" X 6" KIT	43040-000430	✓	✗
	FXN REDUCING ADAPTER 10" X 8" KIT	43040-000431	✓	✗
	FXN REDUCING ADAPTER 10" X 12" KIT	43040-000435	✓	✗
Flange-Barb				
	FXN FLANGE ISO 63 X 2" KIT	43040-030000	✓	✓
	FXN FLANGE ISO 90 X 3" KIT	43040-030100	✓	✓
	FXN FLANGE ISO 110 X 4" KIT	43040-030200	✓	✓
	FXN FLANGE ISO 160 X 6" KIT	43040-000300	✓	✗
	FXN FLANGE ISO 200 X 8" KIT	43040-000301	✓	✗
	FXN FLANGE ISO 260 X 10" KIT	43040-000302	✓	✗
	FXN FLANGE ISO 260 X 10" KIT	43040-000303	✓	✗
Flushing Line End				
	FXN FLUSH VALVE X 2" KIT	43040-030300	✓	✓
	FXN FLUSH VALVE X 3" KIT	43040-030400	✓	✓
	FXN FLUSH VALVE X 4" KIT	43040-030500	✓	✓
	FXN FLUSH VALVE X 6" KIT	43040-030501	✗	✓
	FXN FLUSH VALVE X 8" KIT	43040-030502	✗	✓
	FXN FLUSH VALVE X 10" KIT	43040-030503	✗	✓
	FXN FLUSH VALVE X 12" KIT	43040-030504	✗	✓



→ FlexNet™ Connector Threading Tools

Product Picture	Product Description	Catalog Number	FlexNet™	FlexNet™ HP
	½" BSP HAND TAP (THREAD)	45000-003185	✓	✓
	FLAT WOOD DRILL BIT 18MM FOR BSP ½" TAP	45000-003162	✓	✓




→ FlexNet™ Complementary Products

Product Picture	Product Description	Catalog Number	FlexNet™	FlexNet™ HP
	FXN PLUG ½" MTH+O RING/50 BAG	42000-027105	✓	✓
	FXN PLUG ½" MTH+O RING/100 BAG	42000-027110	✓	✓
	NETAFIX NFP PUNCTURE FIX KIT BOX	42000-007000	✓	✓
	NETAFIX NFP SPARE PARTS /20 BAG	42000-007010	✓	✓

→ FlexNet™ Spare Parts



Product Picture	Product Description	Catalog Number	FlexNet™	FlexNet™ HP
	FXN SS304 CLAMP 2"	43040-100000	✓	✓
	FXN SS304 CLAMP 3"	43040-100010	✓	✓
	FXN SS304 CLAMP 4"	43040-100020	✓	✓
	FXN SS304 CLAMP 6"	43040-100030	✓	✓
	FXN SS304 CLAMP 8"	43040-100040	✓	✗
	FXN SS304 CLAMP 10"	43040-100050	✓	✗
	FXN SS304 CLAMP 12"	43040-100060	✓	✗
	FXN ORING SEAL EPDM 40*4.538 FOR 2"	43040-006200	✓	✓
	FXN ORING SEAL EPDM 60X4.5 FOR 3"	43040-006230	✓	✓
	FXN ORING SEAL EPDM 80X4.5 FOR 4"	43040-006260	✓	✓
	FXN RUBBER SEAL F/BARB CONN. 6"	43020-010000	✓	✓
	FXN RUBBER SEAL F/BARB CONN. 8"	43020-010050	✓	✗
	FXN RUBBER SEAL F/BARB CONN.10"	43020-010100	✓	✗
	FXN RUBBER SEAL F/BARB CONN.12"	43020-010150	✓	✗


→ FlexNet™ Accessories for Sprinklers System

Product Picture	Product Description	Catalog Number
	MEGA-BASE	64520-002480
	MEGA-SUPPORTING ARM	64520-002485
	MEGA-RISER ½" 0.4 METER LENGTH ½" MALE THREADED - ½" FEMALE THREADED	64520-002490

* For more information please see Netafim™ Micro Sprinklers, Micro Emitters & Sprinklers catalogue

→ Laying and Retrieving Machine

Product Picture	Product Description	Catalog Number
Hydraulic Machine		
	LAYING & RECOILING MACHINE FOR FLEXNET 2"-4"	77200-001130
Electrical Machine		
	ELECTRICAL RETRIEVAL MACHINE FOR FLEXNET 2"-4"	77200-000065

Product Picture	Product Description	Catalog Number
Manual Machine		
	MANUAL RETRIEVAL MACHINE FOR FLEXNET 2"-4"	77200-001131

/ Pressure Regulator



In-Line PRV Pressure Regulator

Ensures uniform pressure at the inlet of each lateral.



High
performance



Extremely
reliable



Extremely
durable

/ Benefits & Features

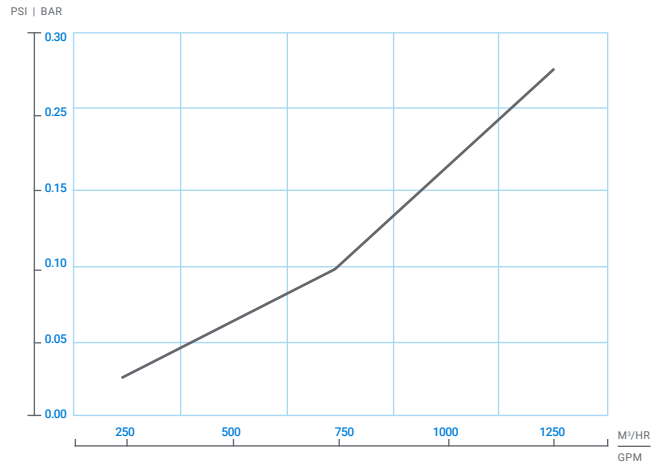
- ✓ Provides constant pressure to the laterals regardless of upstream pressure rises
- ✓ Uniform pressure ensures efficient leaching
- ✓ Made of acid and cyanide resistant materials
- ✓ Available in 5 optional output pressures: 1.1bar/15psi, 1.4bar / 20psi, 1.8bar / 26psi, 2.5bar / 35psi, 3bar / 43psi (only in the 3/4" x 3/4" version)

/ Specifications & Recommendations

- Provides required inlet pressure in each lateral
- Provides required pressure in each sprinkler
- **Maximum Inlet Pressure** – 4bar / 60psi
- **Flow Rate Range** – 100-1000l/h
- **Length** – 7cm
- **Material** – PBT

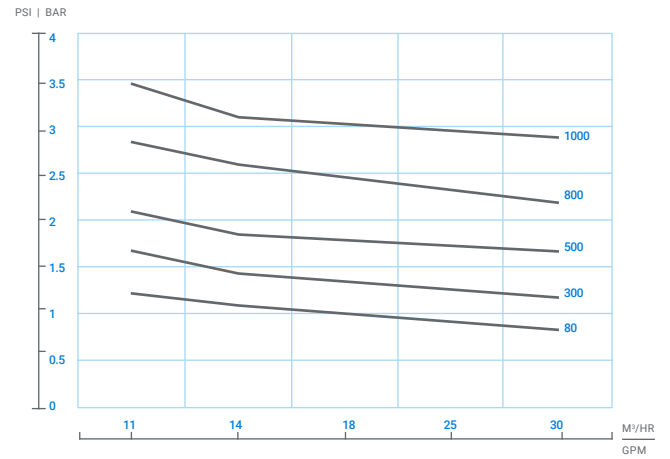
→ Head Loss

(bar) vs. Flow Rate (l/h)



→ Head Loss

Outlet Pressure (bar) vs. Flow Rate (l/h)



→ Catalog Numbers

Description	Flow Range (m ³ /h/gpm)	Nominal Output Pressure (bar/psi)	Max Operating Pressure (bar/psi)	Regulating Units Quantity	Catalog Numbers
INLINE P.R.V 3/4" 1.1 BAR 15 PSI MINING	0.05-1 / 0.25-4.4	1.1 / 15	4 / 60	1	31000-001100
INLINE P.R.V 3/4" 1.1 BAR 15 PSI MIN VITON					31000-001115
INLINE P.R.V 3/4" 1.4 BAR 20 PSI MINING		1.4 / 20			31000-001140
INLINE P.R.V 3/4" 1.8 BAR 25 PSI MINING		1.8 / 25			31000-001180
INLINE P.R.V 3/4" 2.5 BAR 35 PSI MINING		2.5 / 35			31000-001300
INLINE P.R.V 3/4" X 1/2" 1.1 BAR MINING		1.1 / 15			31000-002300
INLINE P.R.V 3/4" X 1/2" 1.4 BAR MINING		1.4 / 20			31000-002330
INLINE P.R.V 3/4" X 1/2" 1.8 BAR MINING		1.8 / 25			31000-002360
INLINE P.R.V 3/4" X 1/2" 2.5 BAR MINING	2.5 / 35	31000-002390			

/ Valves

75 Series Control Valves

The strong and versatile polypropylene valves of 75 series, exhibit exceptional hydraulic characteristics and provide optimal control of leaching systems.



Outstanding
performances



Ultimate
durability



Extremely
versatile

/ Benefits & Features

- **Outstanding performance** High flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body
- **Ultimate durability** Structure materials resistant to strong acids used in the leaching process
- **Extremely versatile** Gal plastic valves are available with full selection of control functions and various end connections

/ Specifications & Recommendations

- **Maximum Pressure** – 8bar (115psi)
- **Minimum Recommended Flow** – 1m³/h (5gpm)
- **Maximum Operating Temperature** – 60°C (140°F)

→ Hydraulic Performance

Diameter	inch	¾	1	1½	2	2½	3R	3	4R*	3H**	4	6R*
	mm	20	25	40	50	65	80	80	100	80	100	150
Flow rate factor***	Kv	7.5	15	60	70	75	80	120		250	350	
	Cv	9	17.5	70	80	90	95	140		290	410	

* R - "Reduced" - 3R = 323", 4R = 434", 6R = 646"

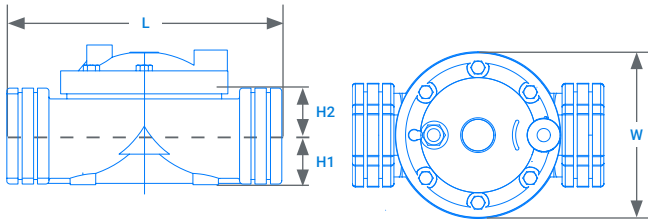
** H - "High Flow" - 3H = 434"

*** In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)²

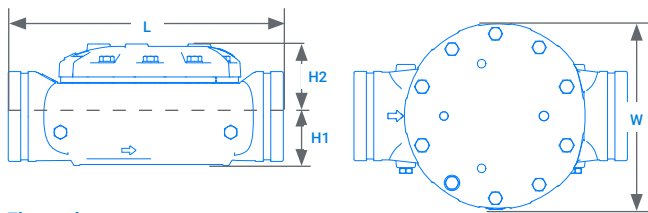
→ Technical Dimensions

Diameter	inch	¾	1	1½	2	2½	3R*	3*	4R*	4*	6R*	6*	8R*
	mm	20	25	40	50	65	80	80	100	100	150	150	200
Height	H	60.5/2.42		122.6/4.90	117.6/4.70	118.7/4.75	124.9/5.00	174/6.90	227/9.10	229/9.00	284/11.18	142/5.6	173/6.8
Width	W	89.5/3.58		130.8/5.23				170/6.80		236/9.29	285/11.22	285/11.22	347/13.7
Length	L	113/4.50	124/4.87	188/7.37	199/7.87	228/9.00	236/9.25	258/10.30	291.5/11.66	370/14.56	420/16.53	423/16.6	504/19.8
Vol. control chamber	cc / gal	36/0.01		180/0.04				250/0.05		400/0.11		1110/0.29	
Weight	kg / lbs	0.2/0.44		0.9/2		1.2/2.6		1.4/3.1	3.1/6.8	2/4.4	5.95/13.1	7.95/17.5	13.2/29.1

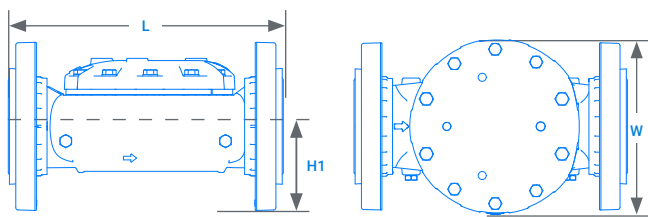
Threaded



Grooved

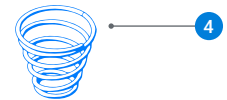
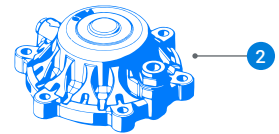


Flanged

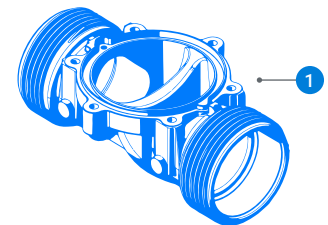
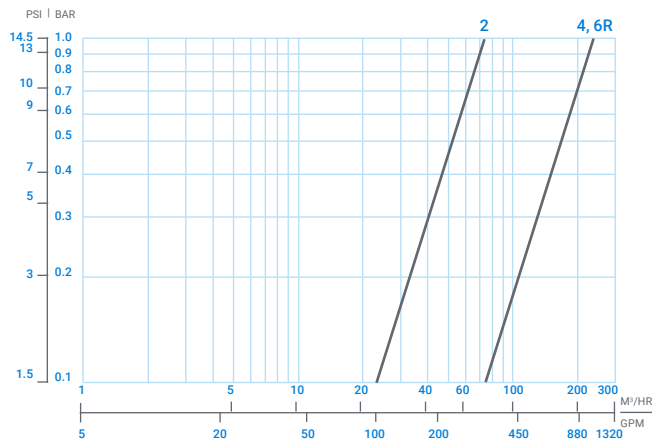


→ Material Specifications

#	Part Name	Material
1	Body	Polypropylene
2	Bonnet	Polypropylene
3	Diaphragm	ALD70
4	Spring	SST 316



→ Head Loss



90 Series Control Valves

Solvent welded and threaded valves of the 90 series, made of PVC and provide reliable control for leaching system.



Superior performances



Exceptional efficiency



Improved resistance

/ Benefits & Features

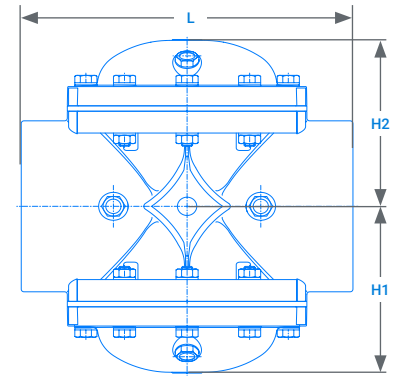
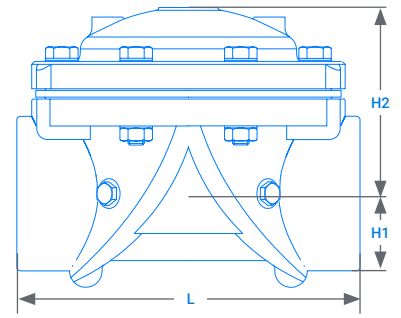
- **Superior performance** Excellent regulation capabilities achieved by a flexible diaphragm mechanism that is designed to allow maximal to near zero flow while operating at very low head losses
- **Exceptional efficiency** Available with full selection of control functions and various end connections
The optional underground installation reduces both costs and friction losses by eliminating the use of elbow joints
- **Improved resistance** Resistance to corrosive fluids is accomplished by using high quality corrosion-free materials, both externally and internally

/ Specifications & Recommendations

- **Maximum Pressure**
3" (90mm) & 4" (110mm) - 8bar / 115psi
6" (160mm) - 10bar / 145psi
- **Minimum Recommended Flow** – 1m³/h (5gpm)
- **Minimum Operating Pressure** – 0.6bar (8psi)
- **Maximum Operating Temperature** – 40°C (104°F)

→ Technical Dimensions

Diameter	inch	3	4	6
	mm	90	110	160
Height	H1	138/5.43	138/5.43	191/7.52
	H2	70/2.75	70/2.75	191/7.52
Width	W	229/9.16		260/10.40
Length	L	258/10.18	258/10.18	360/14.18
Volume control chamber	cc / gal	0.7/0.18		2.6/0.68
Weight	kg / lbs	4/8.8	4.2/9.2	11.8/26

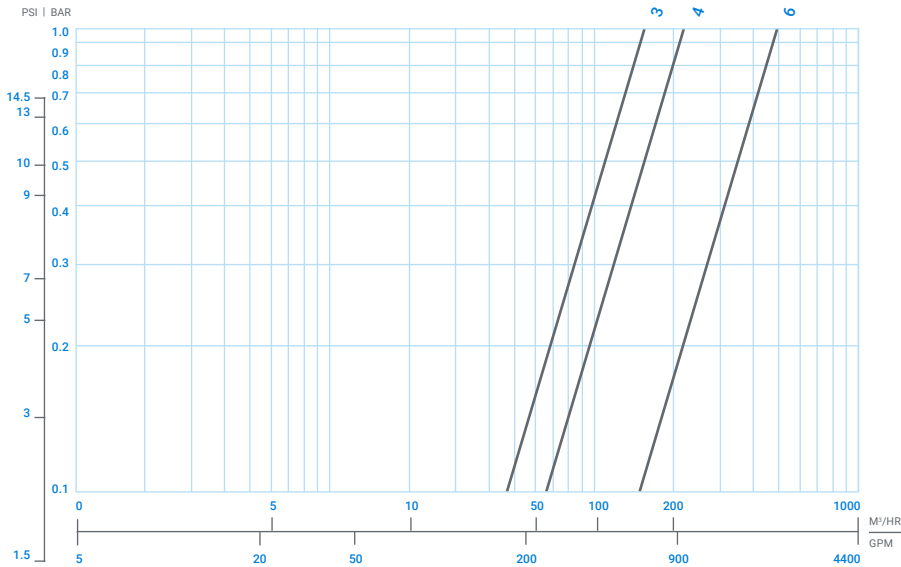


→ Hydraulic Performance

Diameter	inch	3	4	6
	mm	90	110	160
Flow rate factor*	Kv (metric)	152	215	480
	Cv (US)	177	250	560
Pressure range	WMC	6-80		5-100
	PSI	9-115		7-150

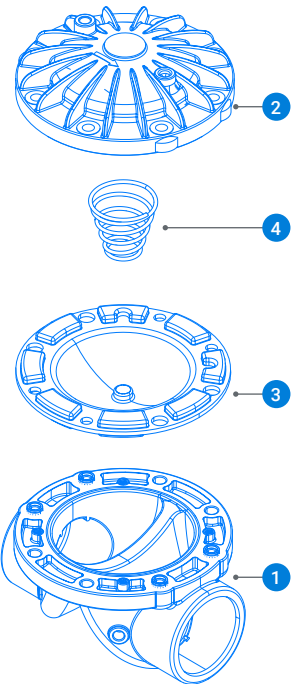
* In order to calculate the head loss at any desired flow rate, use the following equation:
Head loss = (Flow rate/Flow rate factor)²

→ Head Loss



→ Material Specifications

#	Part Name	Material
1	Body	PVC
2	Bonnet	PPS
3	Diaphragm	GRP, ALD70
4	Spring	SST 316



100 Series Control Valves

The powerful and reliable metal valves of 100 series, display remarkable hydraulic performances and provide impeccable control of leaching systems.



Stainless Steel



Ductile Iron



Outstanding performances



Extremely versatile



Ultimate durability

/ Benefits & Features

- **Outstanding performance** High flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body
- **Extremely versatile** The valves are available in globe and angle shapes, with an extensive selection of materials, a full range of control functions and various end connections
- **Ultimate durability** Long life and easy inline maintenance accomplished by structural simplicity and the use of high-quality materials that can withstand the harshest conditions

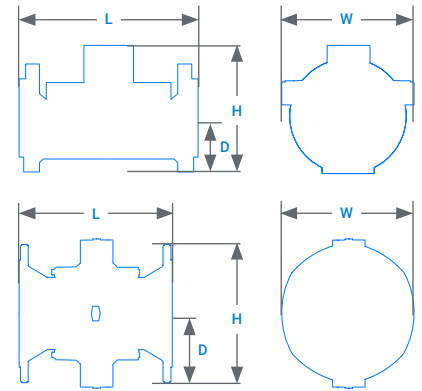
/ Specifications & Recommendations

- **Maximum Pressure** – 16bar (230psi) and 25bar (365psi)
- **Minimum Recommended Flow** – 1m³/h (5gpm)
- **Minimum Operating Pressure** – 0.4bar (6psi)

→ Technical Dimensions

Straight Flow, Flanged Connection - Standard Models 16 Bar / 250 psi

Valve Size		L		H		D		W		Weight	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
50	2	200	7.87	166	6.54	85	3.35	166	6.54	8	18
65	2.5	214	8.43	185	7.28	92.5	3.64	185	7.28	12	25
80	3	285	11.22	200	7.87	105	4.13	200	7.87	19	42
100	4	395	15.55	230	9.06	110	4.33	230	9.06	25	54
150	6	535	21.06	314	12.36	145	5.71	300	11.8	51	113
200	8	660	25.98	400	15.75	170	6.69	365	14.4	89	197
250	10	815	32.09	445	17.52	205	8.07	440	17.3	131	288
300	12	960	37.80	495	19.49	240	9.45	490	19.3	174	384
350	14	1110	43.70	495	19.49	270	10.6	530	20.9	203	448



→ Hydraulic Performance

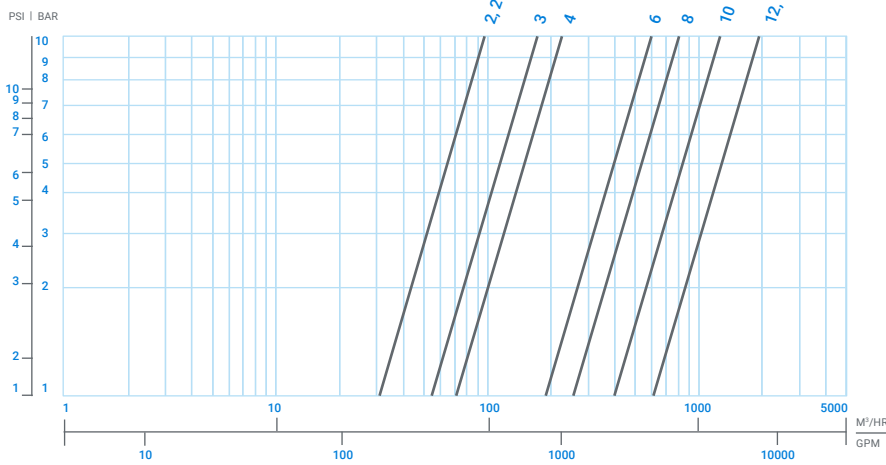
Shape	Straight											Angle		
	inch	2	2½	3R*	3	4	6	8	10	12	14	3	4	6
Diameter	mm	50	65	80	80	100	150	200	250	300	350	80	100	150
Flow rate factor**	Kv	95	95	95	170	220	600	800	1250	1900	1900	150	200	570
	Cv	110	110	110	200	255	695	925	1445	2195	2195	175	230	660

* R - "Reduced" - 3R = 323"

* In order to calculate the head loss at any desired flow rate, use the following equation:

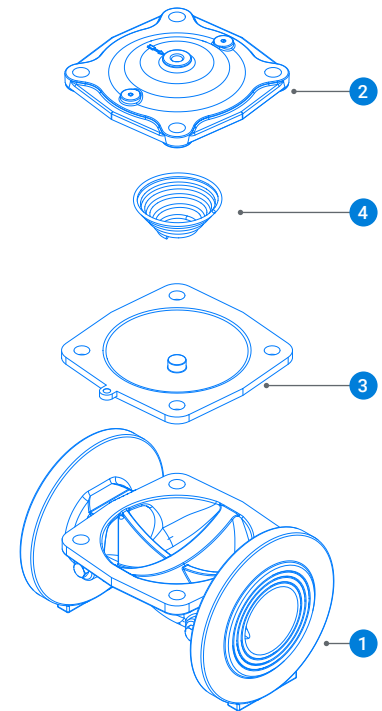
$$\text{Head loss} = (\text{Flow rate} / \text{Flow rate factor})^2$$

→ Head Loss



→ Material Specifications

#	Part Name	Stainless Steel	Optional (Ductile Iron)
1	Body	SST 316	Ductile iron
2	Bonnet	SST 316	Ductile iron
3	Diaphragm	ALD70	Natural rubber
4	Spring	SST 316	SST 302



ALD Diaphragm Resistance

	Chemical Formula	Remarks
1	Sewage	
2	Sodium Bisulphite NaHSO ₃	60°C Max
3	Aluminum Sulphate Al ₂ (SO ₄) ₃	60°C Max
4	Ca-NH ₃	38°C Max
5	Salt Water NaCl/H ₂ O	70°C Max
6	Sea Water	70°C Max
7	Urea CO (NH ₂) ₂	60°C Max
8	Ammonium Nitrate Solvations NH ₄ NO ₃	70°C Max
9	Sodium Hypochlorite NaOCl	Limit to 80°C 100mg/liter
		Limit to 30°C 170mg/liter
10	Hydrochloric Acid HCl	Limit 10% 70°C
		Good 10% 25°C
		Good 20% 100°C
		Good 35% 25°C
		Not Good 35% 100°C
11	Sulphoric Acid H ₂ SO ₄	38°C Max
12	Phosphoric Acid H ₃ PO ₄	Limit 10% 60°C
		Limit 50% 22°C
		Not Good 85%
13	Copper Solplate C ₄ S ₀₄	70°C Max
14	Potassium Permanganate KMnO ₄	10%, 25%, 35% Max
15	Caustic Soda NaOH	Limit 15%-50% 70°C
		Limit 70% 38°C
		According German research
		Good to 5% 50°C
		Good to 50% 100°C
		Good to 70% 50°C
Good to 70% 100°C		
16	Nitric Acid HNO ₃	Not Good 10%
17	Chloric Dioxide ClO ₂	Not Good
18	Chlorin Gas Cl ₂	Not Good
19	Potassium Sulphate K ₂ SO ₄	60°C Max

* for other solution please contact your local Netafim representative.

True Union Ball Valve

Physical shut off, manual restriction, control or service needs of any fluid conveyance system.



High quality



Ultimate durability



Reliable

/ Benefits & Features

- **Saves operation costs**
 - A quarter turn shut off valve, threaded or glued socket, user friendly design allowing smooth handle operation
 - Corrosion resistant and UV stabilized
 - A true union ball valve, specifically designed for water application and for safe pipe line operation
- **Saves labor costs and multiple investments in maintenance**
 - In the closed position, the pipeline can be disconnected downstream from the valve without any leakage
 - The valve is removable from the pipeline, allowing quick maintenance
 - Highly reliable operation and durable over time

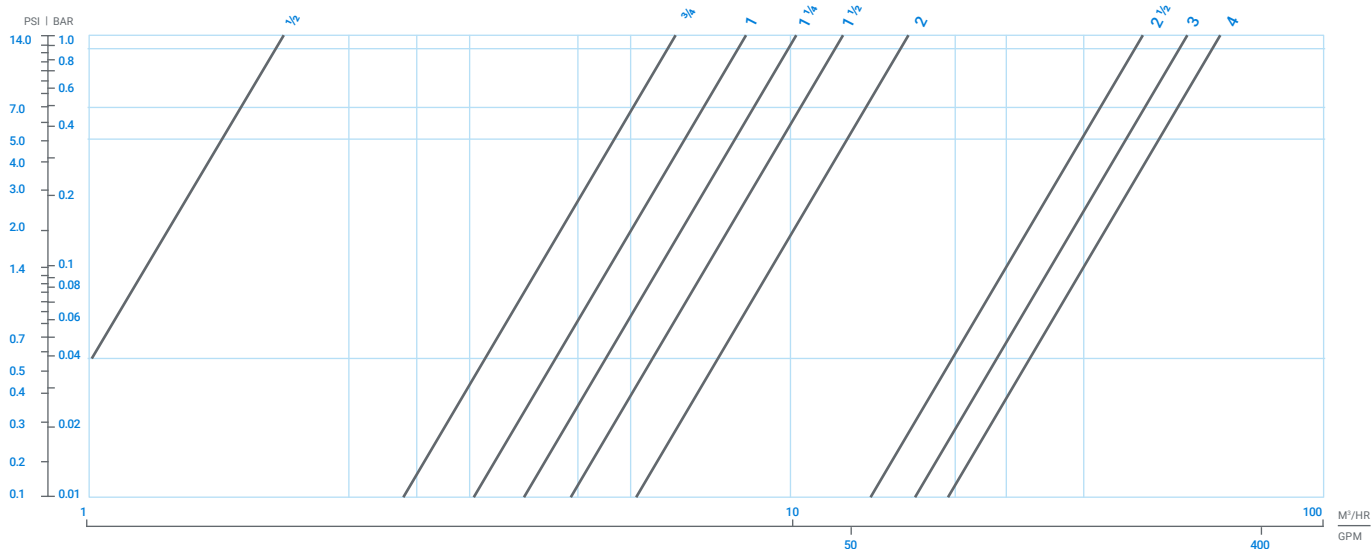
/ Specifications

- Ideal for application in temperature range of -5°C and 50°C, guaranteeing optimal performance in terms of mechanical resistance, good rigidity, low coefficients of thermal expansion and optimal safety factors in service
- Operational up to 10bar
- Low head losses
- **Wide Range of Connections** – Threaded (BSP or NPT standards) or SG, socket glued (ISO/DIN, ASTM, BS)

→ Packaging Data

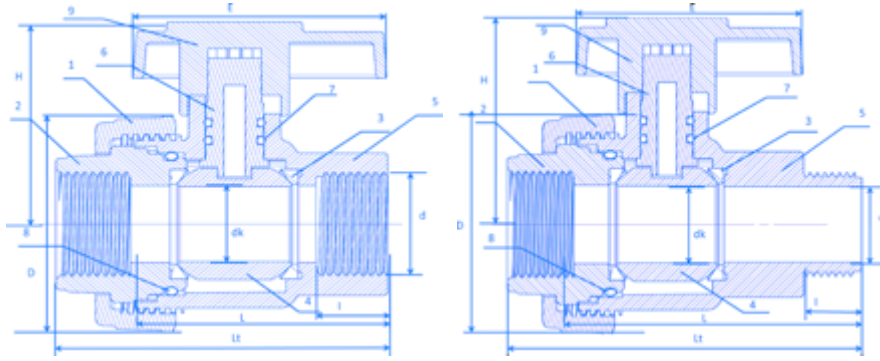
Model	Quantity P/Box unit	Box Sizes (cm x cm x cm)	Female-Female Threaded Connection Box Weight (kg)	Male-Female Threaded Connection Box Weight (kg)	Socket Glued Connection Box Weight (kg)	Boxes P/Pallet
½" - 20MM	150	43.0 X 33.0 X 39.0	24.55	26.00	24.70	12
¾" - 25MM	150		22.11	23.83	22.33	
1" - 32MM	75		17.03	17.74	16.84	
1¼" - 40MM	50		17.54	18.09	17.34	
1½" - 50MM	16		10.91	10.58	10.53	
2" - 63MM	8		8.68	8.90	8.52	
2½" - 75 MM	8		12.08	12.04	11.86	
3" - 90MM	4		15.93	13.09	12.85	
4" - 110MM	2		9.84	9.64	9.84	

→ Head Loss



→ Technical Dimensions

True Union Ball Valves ½", ¾", 1", 1¼" for mining



Inlet Connector - Threaded Male / Outlet Connector - Threaded Female

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
½"	14.00	14.00	20.00	60.00	16.00	80.20	99.15	60.80	56.50
¾"	14.00	14.00	20.00	60.00	18.00	80.20	99.15	60.80	56.50
1"	11.00	11.50	24.50	69.00	17.70	89.00	110.40	71.00	66.45
1¼"	11.00	11.50	31.80	79.50	25.70	88.00	122.80	105.00	70.30

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
½"	14.00	14.00	20.00	60.00	16.00	63.50	82.60	60.80	56.50
¾"	14.00	14.00	20.00	60.00	18.00	63.50	82.60	60.80	55.50
1"	11.00	11.50	24.50	69.00	19.55	70.50	93.00	71.00	66.45
1¼"	11.00	11.50	31.80	79.50	27.40	88.00	122.80	105.00	70.30

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
20MM	20.20	20.20	20.00	60.00	16.00	63.50	82.60	60.80	56.60
25MM	25.00	25.00	20.00	60.00	18.00	63.50	82.60	60.80	55.60
32MM	32.00	32.00	24.50	69.00	19.55	70.50	93.00	71.00	66.45
40MM	40.00	40.00	31.80	79.50	27.40	88.00	122.80	105.00	70.30

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
½"	21.20	21.40	20.00	60.00	18.00	63.50	82.60	60.80	55.60
¾"	26.67	26.00	20.00	60.00	18.00	63.50	82.60	60.80	55.60
1"	33.40	34.00	24.50	69.00	19.55	70.50	93.00	71.00	66.45
1¼"	42.16	42.00	31.80	79.50	27.40	88.00	122.80	105.00	70.30

→ Material Specifications

PVC Ball Valves ½", ¾", 1", 1¼" for mining

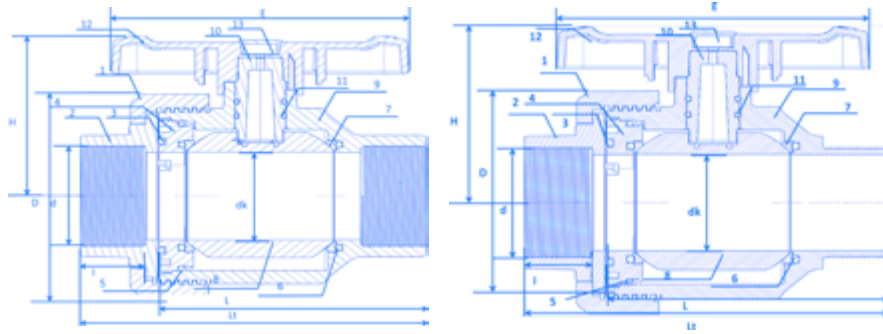
#	Part Name	Material	Qty.
1	Ring	UPVC	1
2	Bush**	UPVC	1
3	Seal	PTFE	2
4	Ball	UPVC	1
5	Body	UPVC	1
6	Shaft	UPVC	1
7	Shaft o-ring	VITON	2
8	Main o-ring**	VITON	1
9	Handle	PPFG	1
10	Threaded bush*	UPVC	1
11	Bush big o-ring*	VITON	1
12	Bush small o-ring*	VITON	1
13	Socket*	UPVC	1

* 1¼" Ball Valve

**¾" Ball Valve

→ **Technical Dimensions**

True Union Ball Valves 1½", 2", 2½", 3" for mining



Inlet - Threaded Male / Outlet Connector - Threaded Female

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
1½"	11.00	11.50	39.40	94.40	32.00	98.50	136.60	121.00	90.80
2"	11.00	11.50	49.50	116.00	35.40	119.00	164.80	150.00	97.00
2½"	11.00	8.00	59.00	131.60	45.50	139.50	197.20	162.00	110.00
3"	11.00	8.00	76.00	178.80	42.80	180.00	230.40	200.40	139.00

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
1½"	11.00	11.50	39.40	94.40	32.00	76.60	148.80	121.00	88.30
2"	11.00	11.50	49.50	116.00	35.40	119.00	164.80	150.00	97.00
2½"	11.00	8.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
3"	11.00	8.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
50MM	50.00	50.00	39.40	94.40	32.00	76.60	148.80	121.00	88.30
63MM	63.00	63.00	49.50	116.00	35.40	88.00	175.40	150.00	97.00
75MM	75.00	75.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
90MM	90.00	90.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	l (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
1½"	48.26	48.00	39.40	94.40	32.00	76.60	148.80	121.00	88.30
2"	60.33	60.00	49.50	116.00	35.40	88.00	175.40	150.00	97.00
2½"	73.03	75.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
3"	88.90	89.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

→ **Material Specifications**

PVC Ball Valves 1½", 2", 2½", 3" for mining

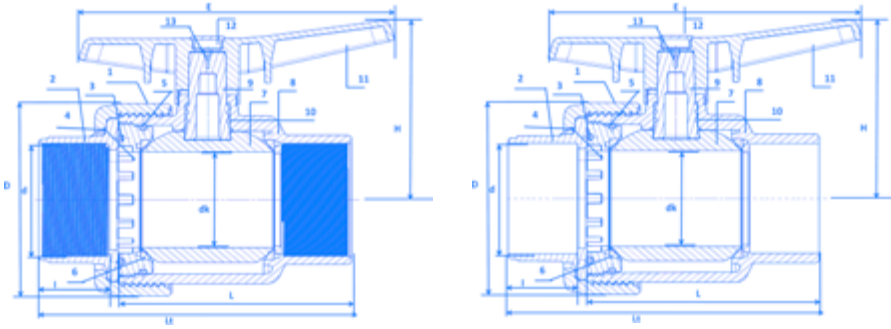
#	Part Name	Material	Qty.
1	Ring	UPVC	1
2	Socket	UPVC	1
3	Bush small o-ring	VITON	1
4	Bush	UPVC	1
5	Bush big o-ring	VITON	1
6	Seal washer*	VITON	2
7	Seal	PTFE	2
8	Ball	UPVC	1
9	Body	UPVC	1
10	Shaft	UPVC	1
11	Shaft o-ring**	VITON	1
12	Handle	PPFG	1
13	Handle logo	PPFG	1

* 3" ball valve

** 2" Model

→ Technical Dimensions

True Union Ball Valves 4" for mining



Inlet Connector - Threaded Male / Outlet Connector - Threaded Female

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
4"	11.00	8.00	98.30	197.00	60.00	200.00	268.00	270.10	186.00

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
4"	11.00	8.00	98.30	197.00	60.00	200.00	268.00	270.10	186.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
110MM	110.00	110.00	98.30	196.50	60.00	200.00	268.00	270.10	186.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

size \ nom	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
4"	114.30	114.00	98.30	196.50	60.00	200.00	268.00	270.10	186.00

→ Material Specifications

PVC Ball Valves 4" for mining

#	PART NAME	MATERIAL	QTY.
1	Ring	UPVC	1
2	Socket	UPVC	1
3	Bush small o-ring	VITON	1
4	Bush	UPVC	1
5	Bush big o-ring	VITON	1
6	Seal	PTFE	2
7	Ball	UPVC	1
8	Body	UPVC	1
9	Shaft	UPVC	1
10	Shaft o-ring	VITON	3
11	Handle	PPFG	1
12	Handle logo	PPFG	1

Angle Seat "Y" Valves

Actuated piston valves. The piston actuator provides a linear motion to lift the seal off its seat.



High quality



Ultimate durability



Reliable

/ Benefits & Features

- ✓ The flow is minimally impeded in the open position, resulting in an excellent flow rate and a low-pressure loss
- ✓ Sturdy and solid design
- ✓ Multi turn liner motion throttling valve
- ✓ Engineering plastic raw material used for strength and durability
- ✓ Easy to open and clean when used in underground valve box
- ✓ Smooth movement using throttling wheel, makes the user operate the valve easily
- ✓ No leakage within operating pressure range, when valve completely shut off
- ✓ Direction of flow mentioned
- ✓ Can be installed in horizontal and vertical lines
- ✓ Does not cause water hammering when operated
- ✓ Has lesser turbulence during throttling
- ✓ Chemical / Corrosion Resistant & UV protected

/ Specifications & Recommendations

- **Operating Pressure Range** – up to 10 bars (PN10)
- High strength polypropylene
- 2" BSP or NPT male threaded
- Manual, hand operated
- **Recommended Flow** – up to 50m³/h
- High quality Nitrile seal

→ **Technical Dimensions**

Inlet - Threaded Male / Outlet Connector - Threaded Male

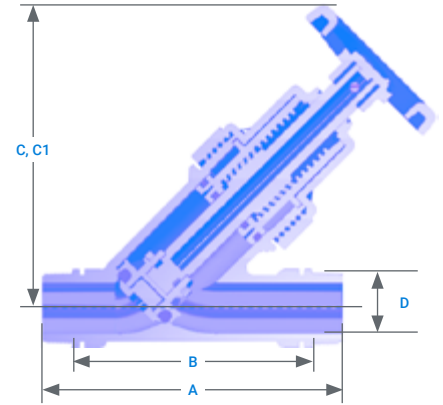
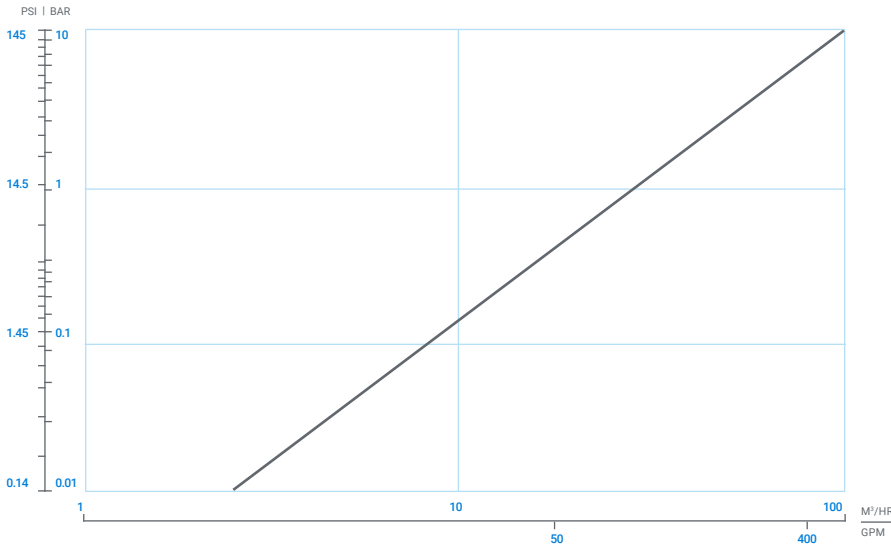
nom size	BSP (TPI)	NPT (TPI)	A (mm)	B (mm)	C* (mm)	C1** (mm)
2"	11.00	11.50	252.0	200.0	254.0	292.0

* When valve is fully closed
 ** When valve is fully opened

→ **Packaging Data**

Model	Qty. p/box (units)	Box sizes (cm x cm x cm)	Box weight (kg)	Boxes p/pallet
2"	2	39.5 X 36.5 X 14.5	2.8	63

→ **Head Loss**

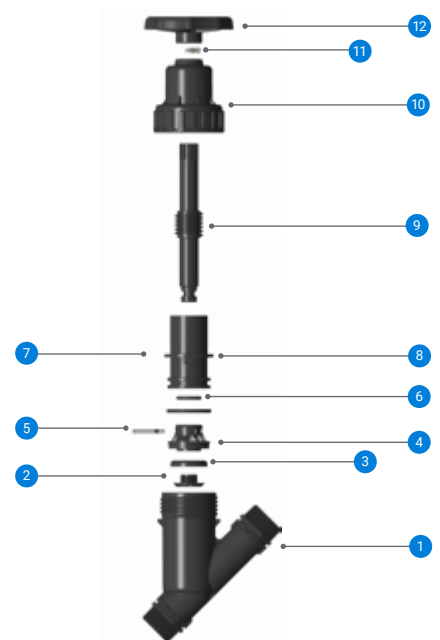


→ **Material Specifications**

Angle seat "Viton" version

#	Part Name	Material	Qty.
1	Body	PP	1
2	Seal cup lock	PP	1
3	Seal	VITON	1
4	Seal cup	PP	1
5	Lock clip	PP	1
6	Stem housing o-ring (outer)	VITON	1
7	Stem housing o-ring (inner)	VITON	1
8	Stem housing	PP	1
9	Shaft	PP	1
10	Cap	PP	1
11	Lock pin	PP	1
12	Throttle wheel (purple color)	PP	1

PP = Polypropylene



PVC Butterfly Valves

Physical shut off, manual restriction, control or service needs of any fluid conveyance system.



Resistant



Ultimate durability



Easy installation

/ Benefits & Features

→ Saves operation costs

A quarter turn shut off valve, user friendly design allowing smooth handle operation
Corrosion resistant and UV stabilized
Light weight and very easy to install between two flanges, at any position, saves labor costs and multiple investments in maintenance
Highly reliable operation and durable over time

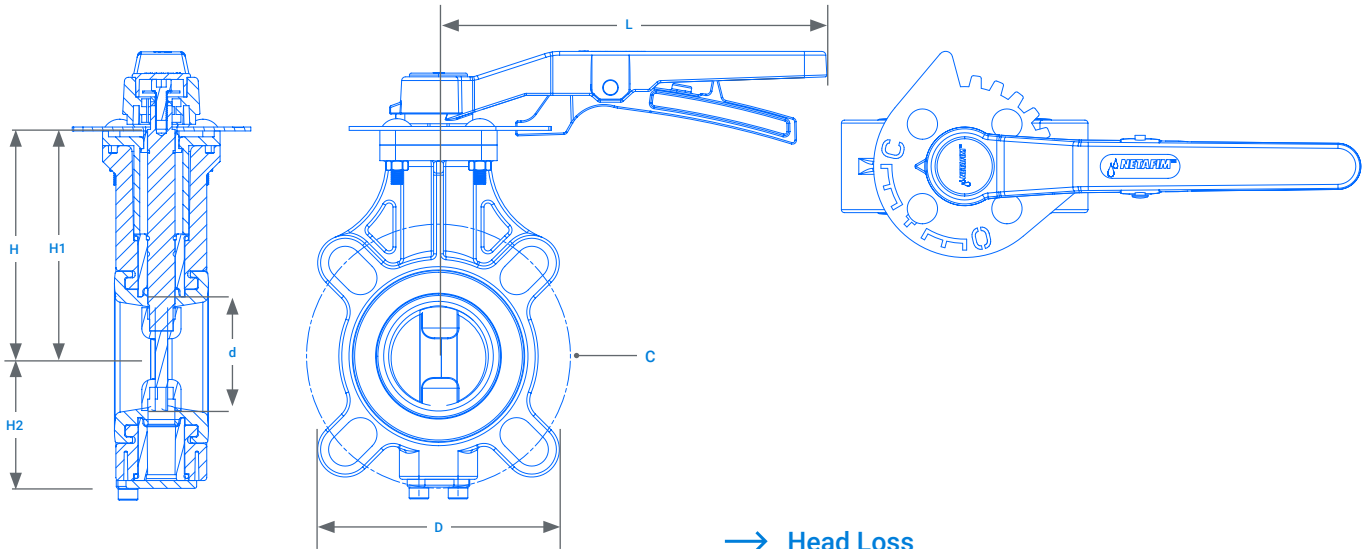
/ Specifications & Recommendations

- For shutting off or manual regulating flow. Specifically designed for water and irrigation systems applications
- Ergonomic multifunctional handle enabling quick operation, with 15 degrees' adjustment graduations
- Drilling pattern with oval slots allowing coupling to flanges and complying with numerous international standards
- Can also be installed as an end line valve, bottom discharge valve or tank dump valve
- Operational up to 10bar
- Low torque required to activate the valve under pressure, due to low-friction stem bushing
- PVC resins feature high value material strength and extremely long lifetime
- Low head losses
- One-piece body made of PVC-U
- Disc designed ensuring low torque and low head loss
- Suitable for piping in a limited space: 46mm (models 2", 2½", 3") and 56mm (model 4")

→ Packaging Data

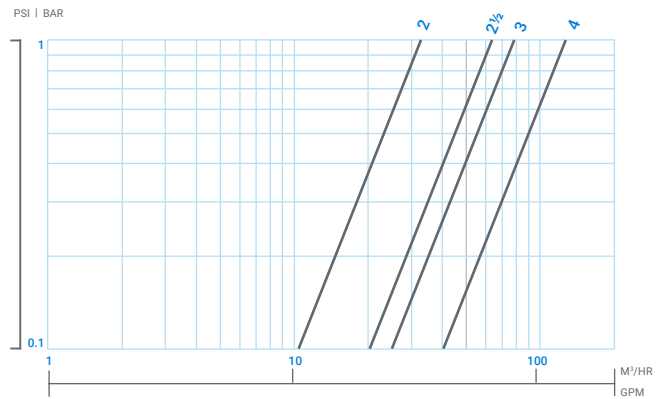
Model	Quantity p/box (units)	Box sizes (cm x cm x cm)	Box weight (kg)	Boxes p/pallet
2"	2	39.5 x 28.5 x 13.0	2.98	48
2½"			3.40	
3"			3.73	
4"		40.0 x 37.5 x 13.5	5.79	30

→ Technical Dimensions



part \ mod	2"	2½"	3"	4"
d	50	65	80	100
D	117	112	128	162
H1	130	134	144	152
H2	71	88	91	106
H	165	174	182	197
L	198.5	198.5	198.5	279.0
C(POD)	120.8	137.5	155.5	183.0

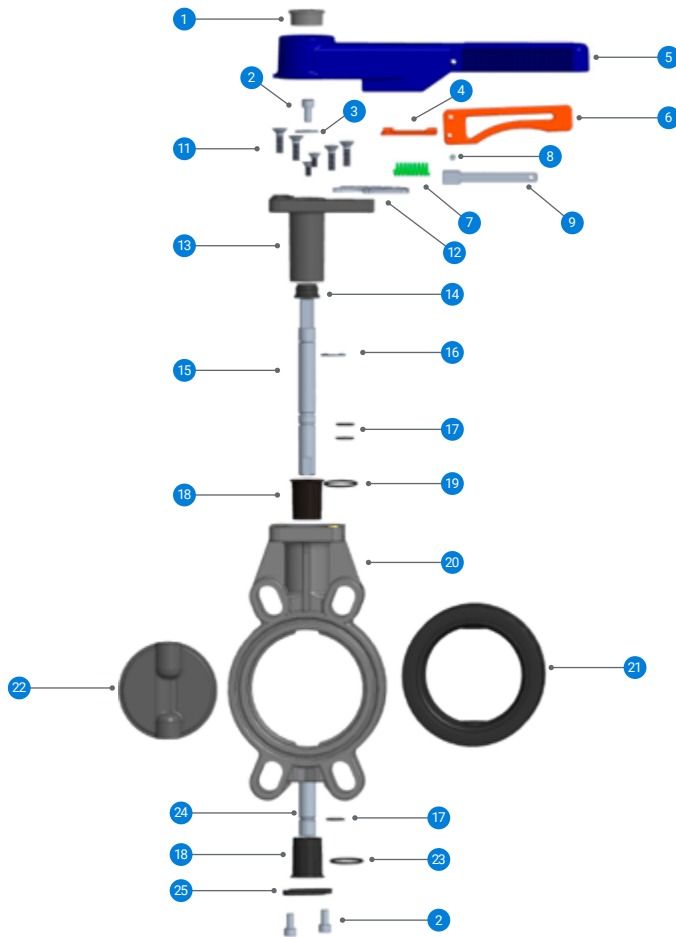
→ Head Loss



→ Catalog Numbers

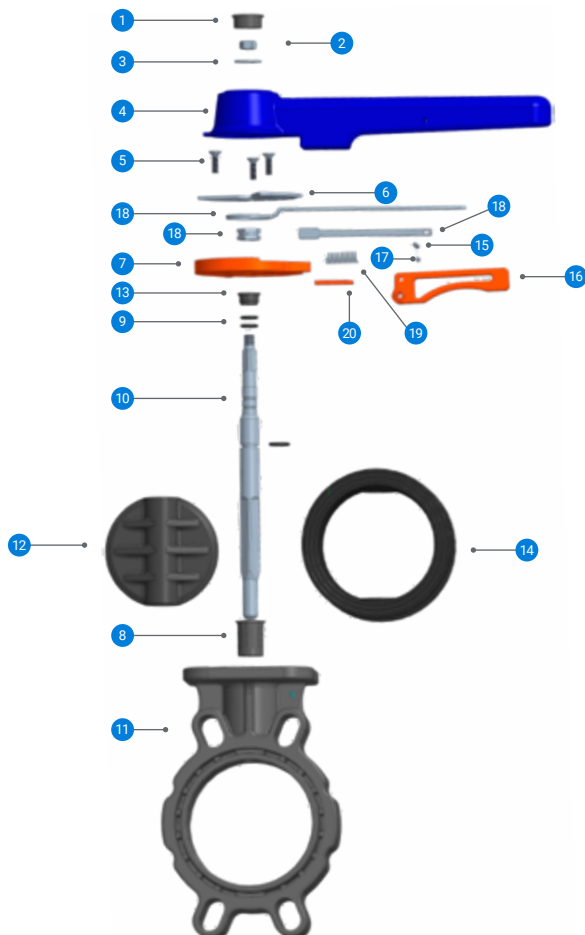
Product Illustration	Product Description	Catalog Number
	NMV PVC B.FLY VLV 2" 4 S BTW FLNG	77452-000100
	NMV PVC B.FLY VLV 2½" 4 S BTW FLNG	77452-000101
	NMV PVC B.FLY VLV 3" 4 S BTW FLNG	77452-000102
	NMV PVC B.FLY VLV 4" 4/8 S BTW FLNG	77452-000103

→ Material Specifications PVC Butterfly Valves 2", 2½", 3"



#	Part Name	Material
1	Logo cap	ABS
2	Allen screw	SS304
3	Handle washer	SS304
4	Handle dowel	SS304/316
5	Handle	PPGF
6	Lever	ABS
7	Spring	SS304/316
8	Lever pin	SS304/316
9	Lever patti	SS304/316
10	Spring cover	PPGF
11	Csk screw	SS304/316
12	Cutch plate	SS304/316
13	Sleeve	PVC
14	Locking bush	MOS2
15	Big shaft	SS304/316
16	E-ring	SS304/316
17	Shaft oring	NBR
18	Big bush	MOS2
19	Bush oring	NBR
20	Body	PVC
21	Seal	EPDM
22	Disc	SS304/316
23	Bush oring	NBR
24	Small shaft	SS304
25	Base plate	POM

→ Material Specifications PVC Butterfly Valves 4"



#	Part Name	Material
1	Logo cap	ABS
2	Hex bolt	SS304
3	Handle washer	SS304
4	Handle	ABS
5	Csk bolt	SS304/316
6	Clutch plate	SS304/316
7	Handle guider	ABS
8	Big bush	MOS2
9	Shaft o-ring	NBR
10	Shaft	SS304/316
11	Body	PVC
12	Disc	PVC
13	Locking bush	MOS2
14	Rubber seal	EPDM
15	Handle dowel	SS304/316
16	Lever	ABS
17	Lever dowel	SS304/316
18	Lever patti	SS304/316
19	Spring	SS304/316
20	Spring lock plate	ABS

Metal Butterfly Valves

Simple, light and reliable for installation wherever there is a need to cut the flow passage in pipes and equipment.



Resilient



Robust



Resistant

/ Benefits & Features

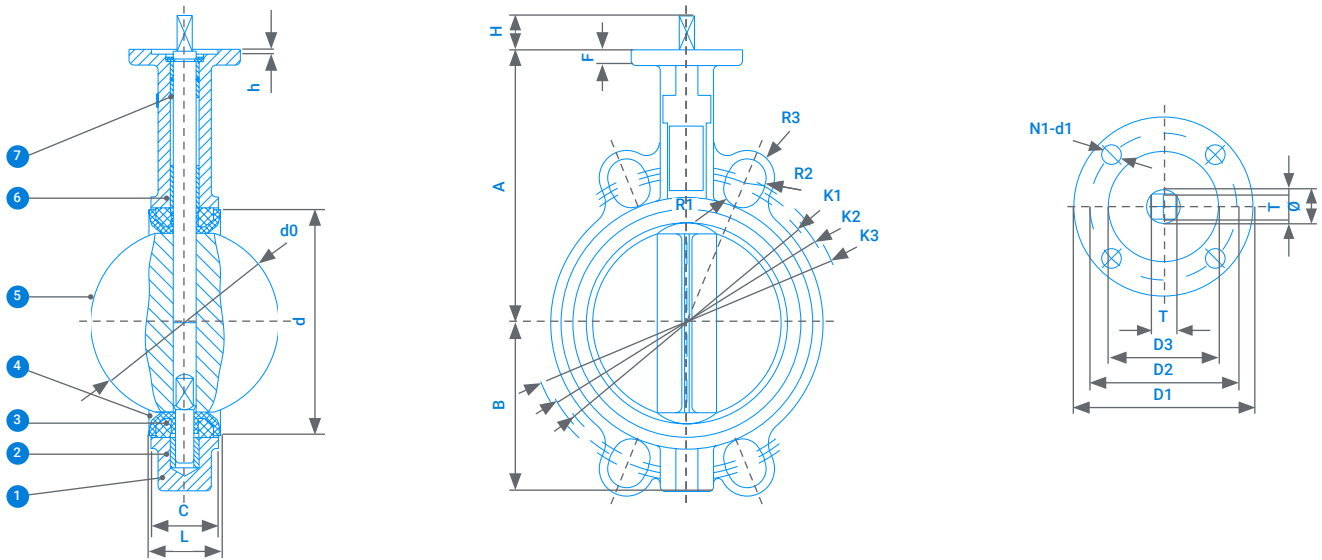
- **Outstanding performance** Netafim manual valves are manufactured using materials of the highest quality, always complying with the standards for hydraulically operated devices
- **Ultimated durability** The quality of the Netafim butterfly valve gives it great resistance over time. The replaceable seat guarantees bidirectional watertightness, easy maintenance due to its innovative design and longer life of the valve
- **Extremely versatile** Different disc material options: ductile iron, stainless steel or aluminum bronze

/ Specifications & Recommendations

Type	Concentric
Pressure Grade	PN16
Working Pressure	16bar
Available Diameters	DN50 to DN600
Working Temperature	0°C to 80°C
Connection	Wafer
Coating	Fusion bonded epoxy 250 µm

* Other materials and specifications on request.

→ Technical Dimensions for Body

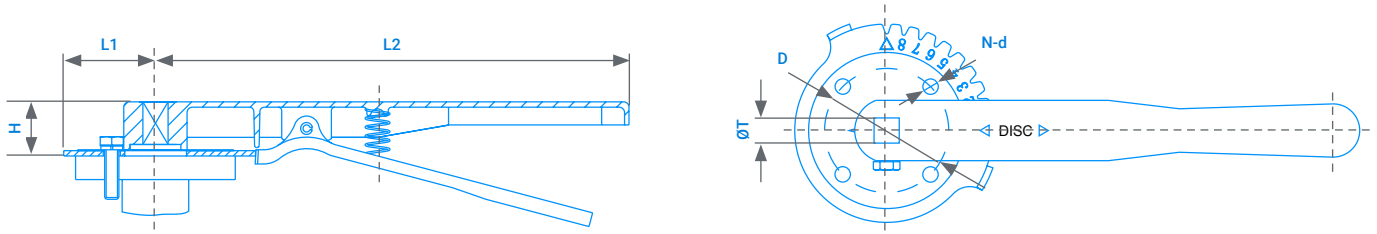


dn	A	B	h	d0	c	l	d	k1	k2	k3	r1	r2	r3	f	d1	d2	d3	h	4-d1	Ø	t
50	125	73	28	52.6	43	46	73.3	120.6	125	124	10.5	-	10.5	10	65	50	35	4	7	12.6	9
65	136	82	28	64.3	46	49	86.0	139.7	145	145	10.5	-	10.5	10	65	50	35	4	7	12.6	9
80	142	91	28	78.8	46	49	100.9	152.4	160	160	10.5	-	10.5	10	65	50	35	4	7	12.6	9
100	163	107	28	104	52	55	132	180	180	190.5	10.5	-	10.5	12	90	70	55	4	10	15.77	11
125	176	127	28	123.3	56	59	156	210	210	215.9	12.2	-	12.2	12	90	70	55	4	10	18.92	14
150	197	143	28	155.7	56	59	185.4	240	240	241.3	12.2	-	12.2	12	90	70	55	4	10	18.92	14
200	230	170	38	202.4	60	64	235.2	295	295	298.5	12.2	12.5	12.2	15	125	102	70	4	12	22.1	17
250	260	204	38	250.4	68	72	289.4	350	355	361.9	13.7	15	13.7	15	125	102	70	4	12	28.45	22
300	292	240	38	301.5	78	82	341.2	400	410	431.8	13.7	15	13.7	15	125	102	70	4	12	31.6	22

→ Material Specifications

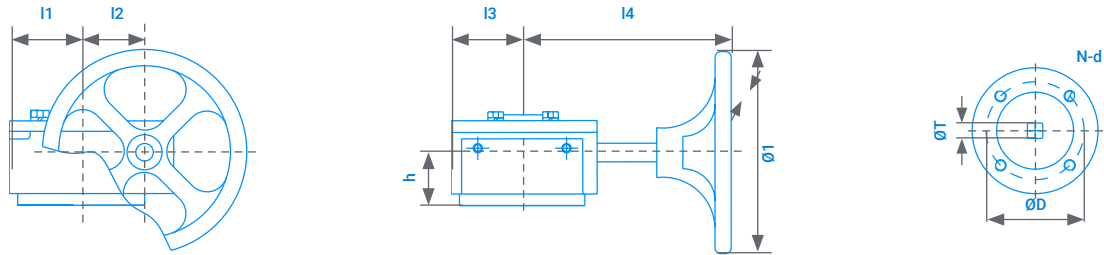
#	Component	Material	Specification
1	Body	Ductile Iron	GGG40
2	Shaft	Stainless Steel	AISI 420
3	Disc	Stainless Steel	AISI 316
4	Seat	EPDM	EN681
5	Bearing	PFTE	Commercial
6	Ring seal	EPDM	EN681
7	Indicator plate	Stainless Steel	AISI 420

→ Technical Dimensions for Lever



dn	h	l1	l2	d	N-d	ØT
50	28	52	267	50	4-7	9
65	28	52	267	50	4-7	9
80	28	52	267	50	4-7	9
100	28	52	267	70	4-10	11
125	28	52	267	70	4-10	14
150	28	52	267	70	4-10	14
200	38	75	359	102	4-12	17
250	38	75	359	102	4-12	22
300	38	75	359	102	4-12	22

→ Technical Dimensions for Gearbox



dn	h	l1	l2	l3	l4	Ø1	d1	N-d	ØT
50	35	51	43	51	151	154	50	4-M6	9
65	35	51	43	51	151	145	50	4-M6	9
80	35	51	43	51	151	145	50	4-M6	9
100	35	51	43	51	151	145	70	4-M8	11
125	35	51	43	51	151	145	70	4-M8	14
150	35	51	43	51	151	145	70	4-M8	14
200	42	72	65	72	210	285	102	4-M10	17
250	42	72	65	72	210	285	102	4-M10	22
300	45	94	79	94	190	285	102	4-M10	22

→ Catalog Numbers

Description	Catalog Number
GAER BUTTERFLY VALVE 2" LEVER - SST DISC	71660-000970
GAER BUTTERFLY VALVE 3" LEVER - SST DISC	71660-000971
GAER BUTTERFLY VALVE 4" LEVER - SST DISC	71660-000972
GAER BUTTERFLY VALVE 6" LEVER - SST DISC	71660-000973
GAER BUTTERFLY VALVE 8" LEVER - SST DISC	71660-000974
GAER BUTTERFLY VALVE 10" LEVER - SST DISC	71660-000975
GAER BUTTERFLY VALVE 2" GEAR - SST DISC	71660-000980
GAER BUTTERFLY VALVE 3" GEAR - SST DISC	71660-000981
GAER BUTTERFLY VALVE 4" GEAR - SST DISC	71660-000982
GAER BUTTERFLY VALVE 6" GEAR - SST DISC	71660-000983
GAER BUTTERFLY VALVE 8" GEAR - SST DISC	71660-000984
GAER BUTTERFLY VALVE 10" GEAR - SST DISC	71660-000985

* Additional diameters, materials and specifications are available upon request.

Air Valves

Innovative, durable air valves for ensuring advanced air control.



High performance



Extremely reliable



Extremely durable

/ Benefits & Features

- **High reliability** These type of air valves discharge large quantities of air from non-pressurized dripperlines and are used mainly during pipe filling. Air discharge is critical for efficiently filling pipelines with liquid. Air and Vacuum Valves also enable the intake of large quantities of air when lines are drained, when the pressure drops suddenly and at water column separation. Air intake is essential when draining lines during maintenance and for preventing pipe collapse when vacuum conditions exist. These valves operate when the line is NOT pressurized and remain closed when the line is under pressure. When pressure drops below atmospheric pressure, the valves open
- **Easy installation**
- **Wide application range**
- **Long lifespan**
- **Low maintenance**

→ Kinetic Air Valves

These type of air valves continuously release accumulated air entrapped in a pressurized line. This entrapped air is found mostly at the peaks of the pipeline. As air accumulates in the air release valve, water is displaced, the float lowers with the drop in the water level and air is released from the exposed orifice. As water refills the air release valve, the float rises and reseals the valve.

→ Combination Air Valves

These type of air valves fulfill the tasks required of both types - Air and Vacuum and Automatic Air Release Valves. They discharge large volumes of air when the system is being filled, admit large volumes of air during system drainage and continuously release entrapped air when the system is under pressure.

DAV-C

AIR RELEASE & VACUUM BREAKER VALVES

The DAV-C were designed to withstand corrosive media and harsh environments in mining, desalination plants and chemical industry.



DAV-C-SA

SURGE ARRESTING DEVICE

The DAV-C-SA valves automatically prevents water hammer pressure surges associated with air release valves operation and offers optimum performance due to its air outlet that can be custom-made adjusted according to surge analysis results.



/ Benefits & Features

- ✓ High corrosion resistance in wide range of liquids
- ✓ Simple structure, easy maintenance
- ✓ Large variety of offered sizes
- ✓ Optimum aero-dynamic performance
- ✓ Variety of Operation Modes:
 - 1st: Venting air from a filling pipeline
 - 2nd: Vacuum Breaking (Air Intake) of a draining pipeline
 - 3rd: Release of dissolved air from a pressurized pipeline
- ✓ Custom-made for multiple applications
- ✓ Simple, durable mechanism, fabricated from high grade materials
- ✓ Can be serviced without having to put the air valve out of service
- ✓ Automatically prevents water hammer pressure surges associated with air release valves operation
- ✓ Air outlet can be adjusted according to surge analysis results onsite to the required aero-dynamic performance. The SA addition is assembled on user selected valves only (at local high elevated points). The flow through other valves remains unrestricted
- ✓ Can be easily assembled on any of DAV-C series air valves

/ Specifications

Available Sizes	DAV-CH (high capacity combination and kinetic valves): 2" / 50 mm to 10" / 250 mm	DAV-CH-KA-SA (high capacity combination and kinetic valves): 2" / 50 mm to 10" / 250 mm
	DAV-CS (combination and kinetic valve): 3" / 80 mm to 12" / 300 mm	DAV-CS-KA-SA (combination and kinetic valve): 3" / 80 mm to 12" / 300 mm
Pressure Rating	PN16 (rated 230 psi), PN25 (360 psi) and PN40 (580 psi)	PN16 (rated 230 psi), PN25 (360 psi) and PN40 (580 psi)
Minimal Pressure for Drip-Tight Sealing	0.1bar	0.1bar
Temp. Range Operating	0-60°C / 32-140°F	0-60°C / 32-140°F
Storage	10-70°C / 15-160°F	-10-70°C / 15-160°F
Connections	ISO, ANSI, BS, JIS Flanges, BSP, NPT Threads (50 mm valves only)	ISO, ANSI, BS, JIS Flanges, BSP, NPT Threads (50 mm valves only)

/ Water Meters



Octave™

ULTRASONIC TYPE

Octave™, a high-end ultrasonic meter, with a revolutionary technology and no moving parts, designed for maximum accuracy and minimal maintenance.



Stainless Steel

Cast Iron



Accurate



Durable



Remarkable

/ Benefits & Features

- ✓ Suitable to changing conditions (high & low flows)
- ✓ Extremely high accuracy & negligible head loss
- ✓ Programmable features and clear display

/ Specifications & Recommendations

- **Maximum Working Pressure** – 16bar
- **Liquid Temperature** – 0.1 up to 50°C
- **Power Source** – 2 D size Li-battery: up to 15 years life time
- **Volume Display Options** – 1. Net (Forward less reverse) 2. Forward only 3. Reverse only 4. Forward & reverse alternating
- The meter must be full with water all the time
- For details view the installation manual

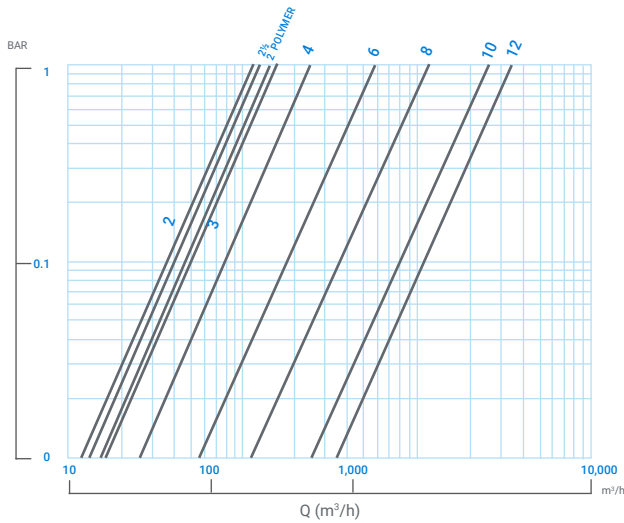
→ Performance Data

Meter Size	Q1 Min. Flowrate (m³/h)	Q2 Transitional Flowrate (m³/h)	Q3 Permanent Flow Rate (m³/h)	Q4 Overload Flow Rate (m³/h)	Q3/Q1 (R Value)	Starting Flow (m³/h)
DN 40-1½"	0.160	0.256	40	50	250	0.025
DN 50-2"	0.080	0.125	40	50	500	0.025
DN 65-2½"	0.080	0.125	40	50	500	0.025
DN 80-3"	0.125	0.200	63	80	500	0.025
DN 100-4"	0.200	0.320	100	125	500	0.025
DN 150-6"	0.500	0.800	250	313	500	0.2
DN 200-8"	0.800	1.280	400	500	500	0.2
DN 250-10"	2	3.2	1000	1250	500	0.5
DN 300-12"	2	3.2	1000	1250	500	0.5

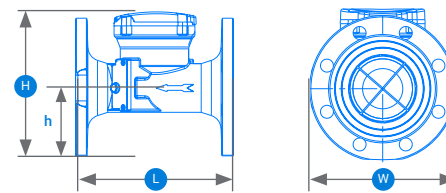
→ Technical Dimensions

Diameter	mm	40 Thrd.	50 Thrd.	50	65	80	100	150	200	250	300
	inch	1½ Thrd.	2 Thrd.	2	2½	3	4	6	8	10	12
L - Length without couplings (mm)		300	300	200	200	225	250	300	350	449	499
W - Width (mm)		113	113	165	185	200	220	285	340	406	489
H - Height (mm)		155	155	194	210	210	223	282	332	383	456
h - Height (mm)		35	35	40	90	90	103	140	165	203	245
Weight (kg) - Cast iron body			8	9	11.5	13	15	32	45	68	96
Weight (kg) - Polymer body		1.4	1.45								
Weight (kg) - Stainless Steel body		4	4	6		7	9.5	16			

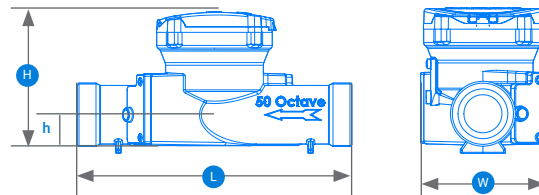
→ Head Loss



Flanged



Threaded



→ Catalog Numbers

Material	Diameter	Connection Type	Catalog Number
Cast Iron	2"	ISO	70240-014020
		BSTD	70240-014000
		ANSI	70240-013975
	3"	ISO	70240-014120
		BSTD	70240-014100
		ANSI	70240-014155
	4"	ISO	70240-014250
		BSTD	70240-014200
		ANSI	70240-021452
	6"	ISO	70240-014300
		BSTD	70240-014350
		ANSI	70240-021453
	8"	ISO	70240-014400
		BSTD	70240-014450
		ANSI	70240-021454
	10"	ISO	70240-014490
		BSTD	70240-014500
		ANSI	70240-021455
	12"	ISO	70240-014550
		BSTD	70240-014560
		ANSI	70261-000485

Material	Diameter	Connection Type	Catalog Number
Plastic	1½"	BSP	70240-013910
	2"		70240-013982
Stainless Steel	2"	BSP	70240-000205
		ISO	70240-000206
		BSTD	70240-000200
		ANSI	70240-021490
		ANSI	70240-021490
	3"	ISO	70240-000207
		BSTD	70240-000201
		ANSI	70240-021491
	4"	ISO	70240-000208
		BSTD	70240-000202
		ANSI	70240-021492
	6"	ISO	70240-000209
		BSTD	70240-000203
		ANSI	70240-021493

→ Module Type

Module Type	Catalog Number
Solid state relay	70220-060410
Open drain	70220-060400
4-20MA	70220-011565

Ultraf™

An ultrasonic water meter, a hydraulic valve, and a smart system for water measurement, pressure control and pressure management.



Innovative



Simplifying



Reliable

/ Benefits & Features

- ✓ Simple to install and operate
- ✓ Single compact unit, space saving
- ✓ No moving parts
- ✓ Battery operated with extended battery life
- ✓ Minimal maintenance
- ✓ High level protection, according to IP68
- ✓ Pressure control
- ✓ Bluetooth App for field programming
- ✓ Optional cards (digital and analog output)
- ✓ Low head loss

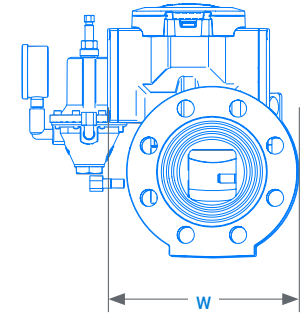
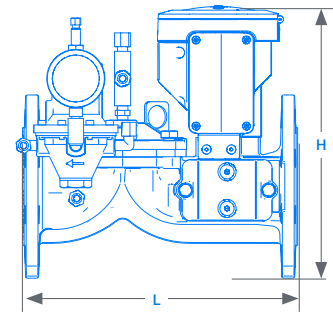


→ Technical Dimensions

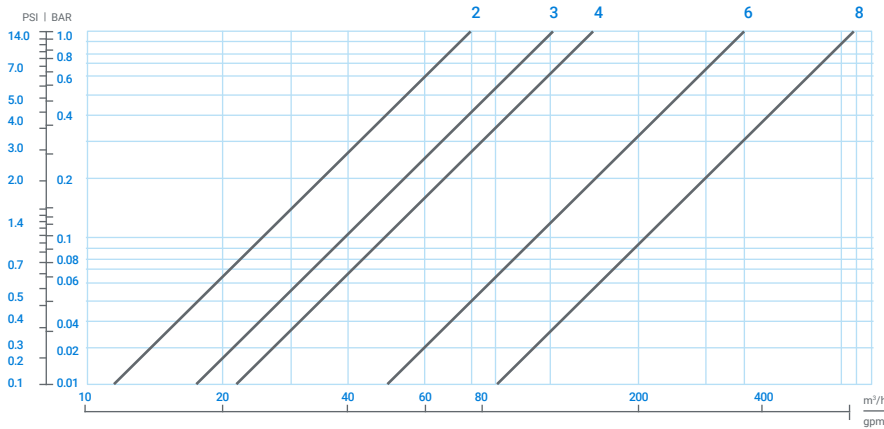
Diameter	mm	50	80	100	150	200
	inch	2	3	4	5	8
Length (mm)		260	300	350	500	600
Height (mm)		270	300	320	380	420
Width (mm)		190	223	240	320	370
Weight (kg)		10	15	23	44	67

→ Hydraulic Performance

Flowrate (m ³ /h)	DN 40-1½"	DN 50-2"	DN 80-3"	DN 100-4"	DN 150-6"	DN 200-8"
Q1 Minimum Flow Rate	0.16	0.25	0.63	0.8	2	3.2
Q2 Transitional Flow Rate	0.256	0.4	1	1.28	3.2	4
Q3 Permanent Flow Rate	16	25	63	100	250	400
Q4 Overload Flow Rate	20	31.25	78.75	125	312.5	500
Max. Flow for Short Period (m ³ /h)	30	50	125	200	400	600



→ Head Loss



/ Filters



Manual Disc Filters

Netafim manual disc filters, Leader and Super Leader offer large filtration area with high efficiency which leads to better irrigation uniformity with much less maintenance. Netafim filters help to protect the irrigation system from activated carbon and by that increase dripper lines longevity and irrigation uniformity.



High efficiency



Durable materials



Ease of maintenance

/ Benefits & Features

- **Innovative filter design** Suitable for all commonly used fertilizers and acids
Suitable for sea and brackish water, high and low pH 2-13
- **Easy operation** Easy to open, clean and close
- **Long life span** Polypropylene housing - excellent chemical resistance

/ Specifications & Recommendations

- **Inlet/Outlet Diameter** – 90mm / 3", 110mm / 4", 160mm / 6"
- **Maximum Pressure** – 10bar / 145psi
- **Maximum Flow Rate** – 60m³/h / 264gpm
- **Maximum Temperature** – 60°C / 140°F
- **pH** – 2-13 (at 20°C) / 2-13 (at 68°F)

→ **Technical Dimensions**

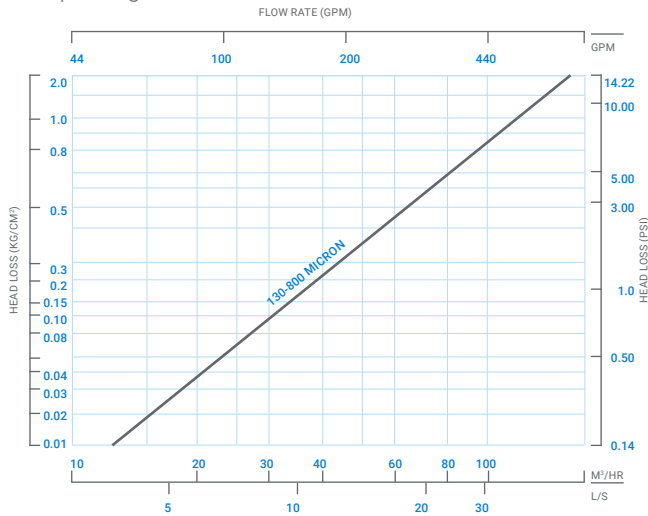
Diameter		3" Leader Twin	3" Super Angle	4" Super Angle	4" Super Leader	6" Super Leader
Width	W	226 / 8 ^{7/8"}		700 / 27 ^{9/16"}		330 / 13"
Length	L	742 / 29 ^{7/32"}		410 / 15 ^{3/4"}		1190 / 47"
Distance between connections	A	320 / 12 ^{19/32"}	-	-	445 / 17.5"	415 / 16.3"
Weight (victaulic, threaded)		6.3 kg / 14 lbs	10 kg / 22 lbs	10.6 kg / 23.32 lbs	22 kg / 48.4 lbs	26 kg / 57.2 lbs
Weight (flanged)		10 kg / 22 lbs	11.47 kg / 25.28 lbs	14.1 kg / 31.02 lbs	24 kg / 52.8 lbs	26 kg / 57.2 lbs

→ **Hydraulic Performance**

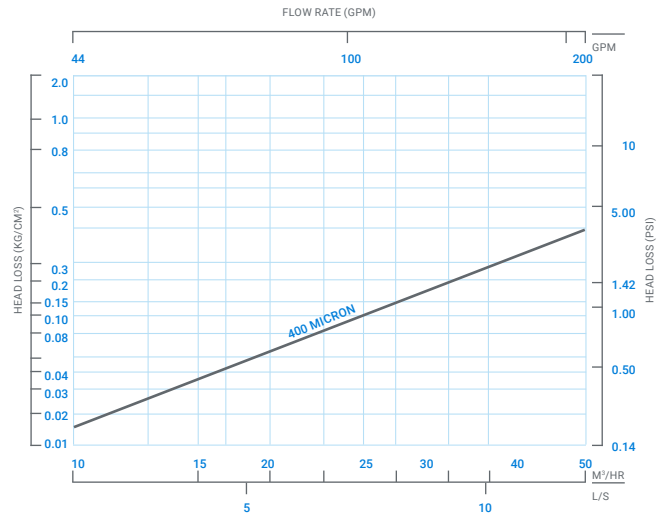
Diameter		3" Leader Twin	3" Super Angle	4" Super Angle	4" Super Leader	6" Super Leader
Max Pressure		10 bar / 145 psi		10 bar / 145 psi		
Max. Flow Rate			60 m ³ /h / 246 gpm	90 m ³ /h / 396 gpm	100 m ³ /h / 440 gpm	160 m ³ /h / 704 gpm
Filtration Area		1900 cm ² / 294.5 in. ²	1852 cm ² / 287 in. ²		3704 cm ² / 574 in. ²	
Filtration Volume		2450 cm ³ / 174 in. ³	1744 cm ³ / 108 in. ³		3548 cm ³ / 216 in. ³	

→ **Head Loss**

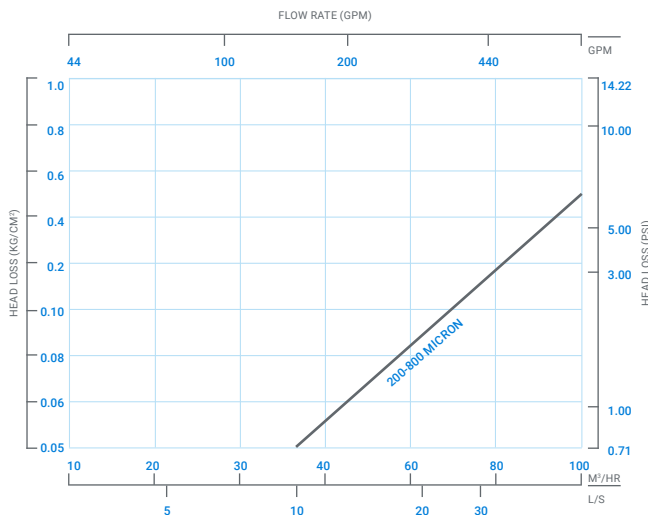
3" Super Angle Filter



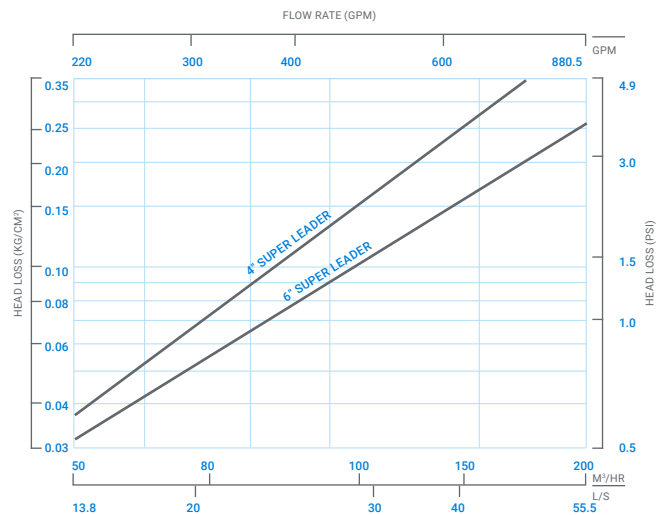
3" Leader Twin



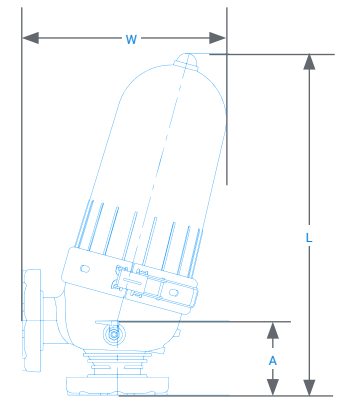
4" Super Angle Filter



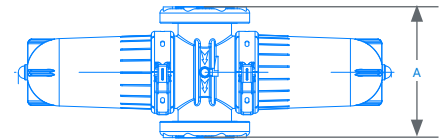
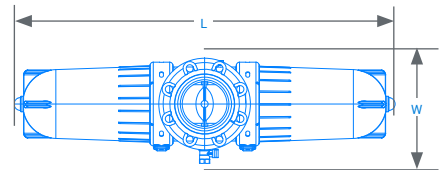
4", 6" Super Leader Filter



3" & 4" Super Angle Filter



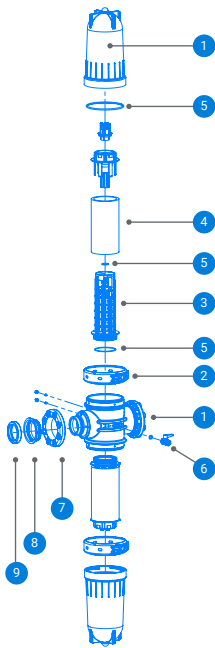
3" & 4" & 6" leader twin / super leader filters



→ **Material Specification**

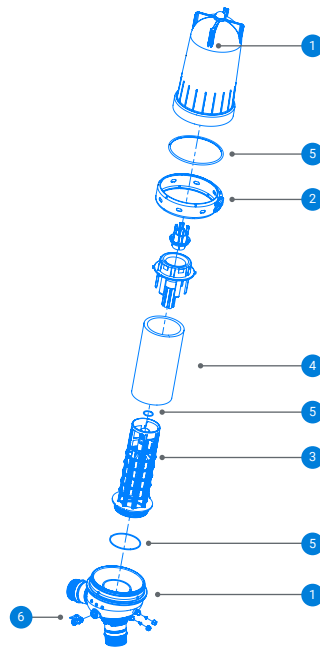
3" leader twin

#	Part Name	Material
1	Body & cover	PP
2	Clamp	-
3	Spine	PP
4	Discs	PP
5	Seals & o-rings	EPDM
6	Ball valve	BRASS
7	Loose flange	R.PA
8	Flange cone	POM
9	Flange seal	EPDM



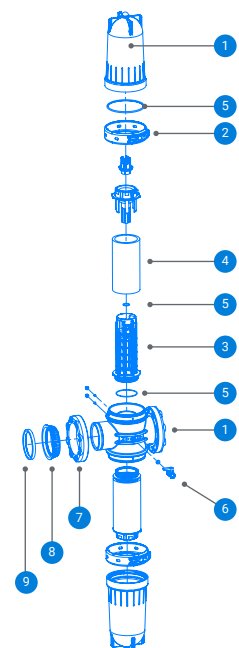
3" & 4" super angle

#	Part Name	Material
1	Body & cover	PP
2	Clamp	SST
3	Spine	R.PP
4	Discs	PP
5	Seals & o-rings	EPDM
6	Ball valve	BRASS
7	Loose flange	R.PA
8	Flange cone	POM
9	Flange seal	EPDM



4" & 6" super leader

#	Part Name	Material
1	Body & cover	PP
2	Clamp	SST
3	Spine	R.PP
4	Discs	PP
5	Seals & o-rings	EPDM
6	Ball valve	BRASS
7	Loose flange	R.PA
8	Flange cone	POM
9	Flange seal	EPDM



→ **Materials**

Short Name	Material
R.PP	Reinforced Polypropylene
R.PA	Reinforced Polyamide
SST	Stainless Steel
PP	Polypropylen
POM	Polyacetal
EPDM	EPDM
Loose Flange	R.PA
Flange Cone	POM
Flange Seal	EPDM

Circulating Screen Filters

During the gold extraction process, activated carbon particles are returned to the irrigation system. Netafim metal screen filters help to retain these particles for better leaching process performance. The results - better protection to the irrigation system and better irrigation (leaching process) uniformity.



High quality



Automatic back wash



High efficiency

/ Benefits & Features

- **High quality carbon steel** With two layered polyester-epoxy powder coating with a thickness of 150-200microns
- **High quality stainless steel screen** High quality stainless steel screen for better longevity and protection to the irrigation system
- **Saves operation costs** Keeps harmful particles out of the system and automatically remove them from the filter

/ Specifications & Recommendations

- **Carbonates Max.** - 2000ppm
- **pH** - 10.5-11.5
- **Temperature** - 2-14°C
- **Filtration Degree** - 80 - 200microns
- **Available Connections** - VIC, Threaded, Flange (female)
- **Controller** - Filtrón 1-10 with industrial pressostat
- **Solenoid** - GALSOL DC Latch

→ Flow Range Data

Inlet/Outlet		Maximum Flow Rate	
mm	inch	m ³ /h	gpm
1.5	30	3-10	13-44
2	50	11-28	48-123
3	75	12-39	53-172
4	100	18-70	80-308
6	150	31-210	136-925
8	200	163-299	720-1320
10	250	270-500	1189-2202

* Maximum recommended flow rate - 120 micron in good quality water

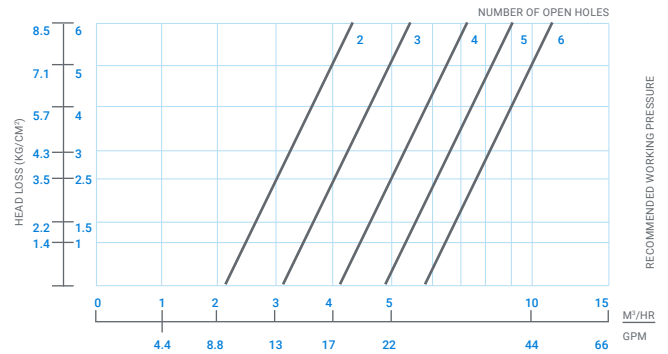
→ Material Specification

#	Part Name	Material
1	Body	Carbon Steel ST37.2
2	Joints	NBR
3	Filtering element	Stainless Steel 316I PVC supporting base
4	Drain valve	Configuration globe, GRP (reinforced Plastic with Glass)

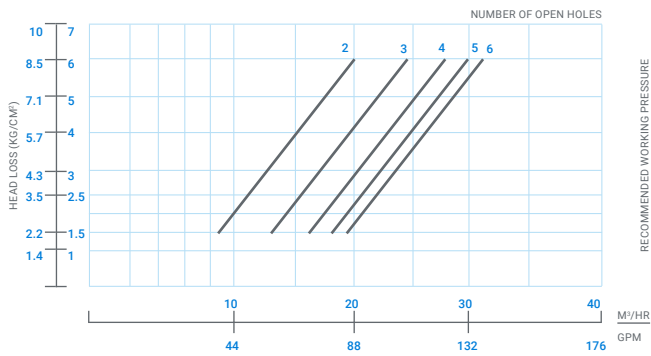
→ Head Loss

- ✓ Optimal operation is when pressure difference between inlet and outlet is 2.5 to 5m
- ✓ Measure the filter pressure difference, during irrigation, using the pressure gauge
- ✓ If the pressure difference is not within the pressure range limits, add or remove plugs

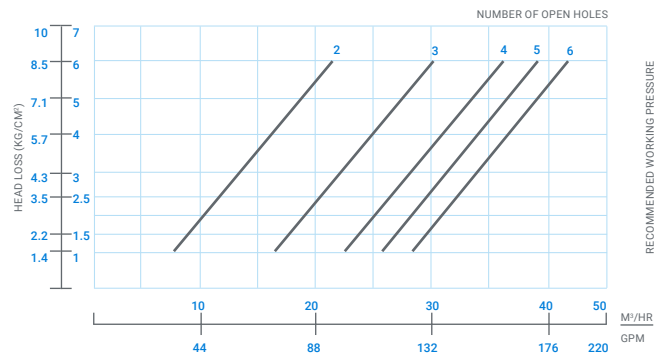
1.5" Model



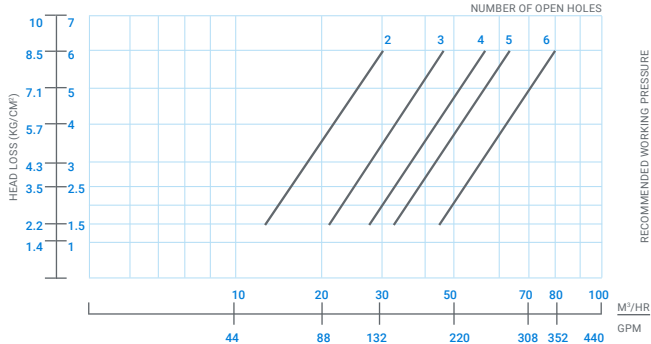
2" Model



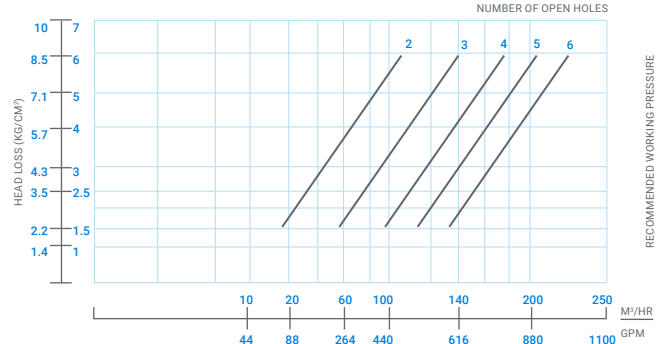
3" Model



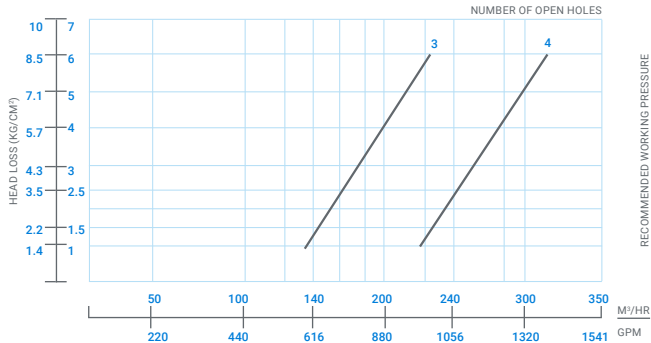
4" Model



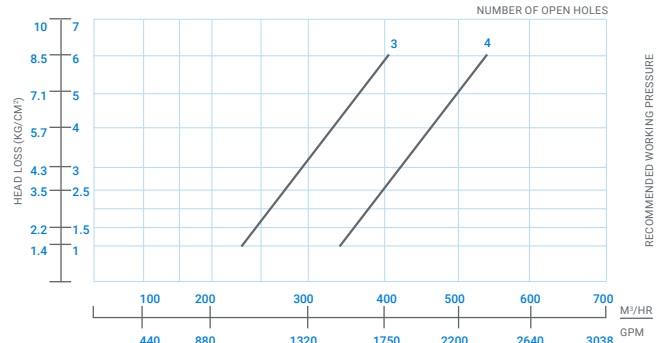
6" Model



8" Model



10" Model





www.netafim.com