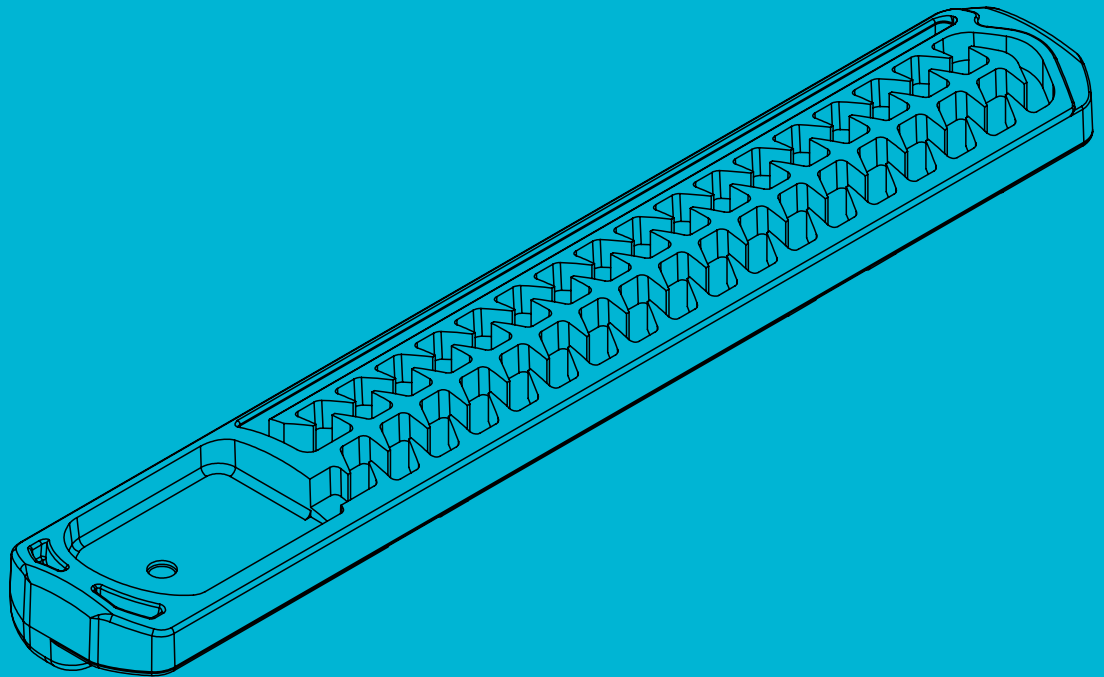


MINING

PRODUCT CATALOG



2014

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INTRODUCTION

Netafim mining dedicated products offers the industry broadest range of quality products, responsive customer service, global resources and a team of experts to support your mining operations.

- Total system solutions from Leach lines, micro-sprinklers, fittings, filters, valves and air vents to technical expertise.
- System Solutions including cost-savings initiatives, first class logistics services and application designs and consultation.
- Quality Commitment – Netafim is ISO 9001:2000 Certified - recognized today throughout the industry for our rigid quality-control measures. Every reel of material undergoes a battery of tests and over 30 quality checks before leaving the factory.

UNIRAM™ RC

HEAP LEACHING FOR GOLD & SILVER MINES

16012 - 20012



UniRam™ is pressure compensated for flexibility of uniform leaching even on sloping terrain – resulting in a uniform flow of solution from the top of the pad to the bottom of the slope. An anti-migration mechanism stops water from running down the tube, preventing bottom pooling.

Made with UV and acid resistant polyethylene tubing; the highest quality resins available.

Available diameters: 16, 20 mm OD (outside diameter).

Available flow rates: 1.0, 1.6, 2.3 and 3.5 l/h.

FEATURES & BENEFITS

- Pressure compensation over a wide pressure range (up to 4.0 bar) produces uniform dripper flow rates from each dripper outlet.
- Continuously self-flushing: Flushes debris as it is detected, throughout operation, ensuring uninterrupted dripper operation.
- Self-flushing system with wide filtration area improves resistance to clogging thus making UniRam™ highly resistant.
- TurboNet™ labyrinth assures wide water passages with large deep and wide cross section to improve clog resistance. Widest water passages within the dripper.
- Water is drawn in to the dripper from the center of the stream.
- Longer runs and steep topographies are irrigated with high uniformity.
- Seamless, one-piece construction prevents damage to drippers during installation and retrieval.
- Low coefficient of variability (Cv).
- Anti-migration technology prevents water runoff along pipe.

APPLICATIONS

- Subsurface or surface applications.
- Slopes.
- When high uniformity and longer runs are required.
- For long-term, re-use.

ANTI-MIGRATION DRIPPERLINE RING

Pre-installed ring

- Prevents solution migration on uneven surfaces and slopes.
- Economical – saves labor cost.
- Pre-installed on the dripperline.

DRIPPERS TECHNICAL DATA

FLOW RATE (L/H)	WORKING PRESSURE RANGE (BAR)	WATER PASSAGES DIMENSIONS			FILTRATION AREA (MM²)	CONSTANT K	EXPONENT X
		WIDTH (MM)	DEPTH (MM)	LENGTH (MM)			
1.0	0.5 - 4.0	0.83	0.74	40	130	1.0	0
1.6	0.5 - 4.0	1.26	0.70	40	130	1.6	0
2.3	0.5 - 4.0	1.26	0.95	40	130	2.3	0
3.5	0.5 - 4.0	1.59	1.15	40	150	3.5	0

DRIPPERLINES TECHNICAL DATA

MODEL	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR)	MAXIMUM FLUSHING PRESSURE (BAR)	KD
16012	14.2	1.2	16.6	4.0	5.2	1.3
20012	17.5	1.2	19.9	4.0	5.2	0.4

DRIPNET PC™

HEAP LEACHING FOR GOLD & SILVER MINES

16012 - 20012



DripNet PC™ pressure compensating for flexibility of uniform leaching even on sloping terrains – resulting in a uniform flow of solution from the top of the pad to the bottom of the slope. An anti-migration mechanism stops water from running down the tube, preventing bottom pooling.

Made with UV and acid resistant polyethylene tubing; the highest quality resins available.

Available diameters: 16, 20 mm OD (outside diameter).

Available flow rates: 1.0, 1.6, 2.0 and 3.0 l/h.

FEATURES & BENEFITS

- Pressure compensation over a wide pressure range (up to 3.5 bar) produces uniform dripper flow rates from each dripper outlet.
- Continuously self-flushing: Flushes debris as it is detected, throughout operation, ensuring uninterrupted dripper operation.
- Self-flushing system with wide filtration area improves resistance to clogging thus making DripNet PC™ highly resistant.
- TurboNet™ labyrinth assures wide yet shorter water passages, with large deep and wide cross section that improves dripper's clog resistance.
- Water is drawn in to the dripper from the center of the stream.
- Longer runs and steep topographies are irrigated with high uniformity.
- Seamless, one-piece construction prevents damage to drippers during installation and retrieval.
- Low coefficient of variability (Cv).
- Anti-migration technology prevents water runoff along pipe.

APPLICATIONS

- Subsurface or surface applications.
- Ideal for slopes irrigation.
- When high uniformity and longer runs are required.
- For long-term, re-use.

ANTI-MIGRATION DRIPPERLINE RING

Pre-installed ring

- Prevents solution migration on uneven surfaces and slopes.
- Economical – saves labor cost.
- Pre-installed on the dripperline.

DRIPPERS TECHNICAL DATA

FLOW RATE (L/H)	WORKING PRESSURE RANGE (BAR)	WATER PASSAGES DIMENSIONS			FILTRATION AREA (MM²)	CONSTANT K	EXPONENT X
		WIDTH (MM)	DEPTH (MM)	LENGTH (MM)			
1.00	0.4 - 3.0	0.61	0.60	8	39	1.0	0
1.60	0.4 - 3.0	0.76	0.73	8	39	1.6	0
2.00	0.4 - 3.5	0.76	0.85	8	39	2.0	0
3.00	0.4 - 3.5	1.02	0.88	8	39	3.0	0

DRIPPERLINES TECHNICAL DATA

MODEL	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR)	MAXIMUM FLUSHING PRESSURE (BAR)	KD
16012	14.2	1.2	16.6	3.0/3.5*	4.6	0.72
20012	17.5	1.2	19.9	3.0/3.5*	4.6	0.25

*According to drippers flow rate



LEACH LINE X™ Ω

ANTI-MIGRATION DRIPPERLINE WITH CLIPS

12007 - 16009 - 16010 - 16012 - 20010 - 20012

Leach Line X™ dripper's flow path is the industry's widest allowing particles to pass easily through the dripper, virtually eliminating plugging.

Drippers are welded into a wall of seamless tubing, providing added strength and durability.

The dripperline is made with UV and acid resistant polyethylene tubing, the highest quality resins available.

Available diameters: 12, 16 and 20 OD (outside diameter).

Available flow rates: 1.0, 1.5, 2.0, 4.0 and 8.0 l/h.

FEATURES & BENEFITS

- Industry's widest dripper flow path:
 - Patented TurboNet™ technology allows for a wide labyrinth cross-section while keeping the labyrinth short - these features are critical for the proper performance of a dripper.
 - No laminar flow chambers in the dripper's flow path that can encourage clogging.
- Specially-designed filter located away from the wall of the tubing allows for reduced filter-slot width and long-term operation. Dripper performs properly even if 90% of the filter is plugged.
- Constructed of UV and acid resistant-durable polyethylene.
- Five dripper flow rates - provides the broadest range of flow rates available.
- Low coefficient of manufacturing variability (Cv).
- No special storage requirements - does not degrade if stored outdoors.

APPLICATIONS

- On-surface or subsurface installations.
- Heap leaches applications.
- Flat terrain or slopes.
- Reclamation projects.

ANTI-MIGRATION DRIPPERLINE RING

Pre-installed ring

- Prevents solution migration on uneven surfaces and slopes.
- Economical – saves labor cost.
- Available for 16 and 20 mm OD dripperlines.
- Pre-installed on the dripperline.

DRIPPERLINES TECHNICAL DATA

MODEL	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR)	MAXIMUM FLUSHING PRESSURE (BAR)	KD
12007	10.5	0.7	11.9	3.5	4.6	0.7
16009	14.2	0.9	16.0	3.0	3.9	0.4
16010	14.2	1.0	16.2	3.5	4.6	0.4
16012	14.2	1.2	16.6	4.0	5.2	0.4
20010	17.5	1.0	19.5	3.5	4.6	0.1
20012	17.5	1.2	19.9	4.0	5.2	0.1

DRIPPERS TECHNICAL DATA

12007, 16009, 16010, 20010 - 0.7, 0.9 AND 1.0 MM WALL THICKNESS DRIPPERLINES

FLOW RATE* (L/H)	MAX. WORKING PRESSURE RANGE (BAR)	WATER PASSAGES DIMENSIONS			FILTRATION AREA (MM ²)	CONSTANT K	EXPONENT X
		WIDTH (MM)	DEPTH (MM)	LENGTH (MM)			
1.00	3.5	0.60	0.80	75	70	0.348	0.46
1.50	3.5	0.73	0.85	75	70	0.520	0.46
2.00	3.5	0.76	1.08	75	70	0.693	0.46
4.00	3.5	1.06	1.40	75	76	1.387	0.46
8.00	3.5	1.68	1.40	37	76	2.774	0.46

*Flow rate at 1.0 bar pressure

FLOW RATE VS. PRESSURE (L/H VS. BAR)

FLOW RATE (L/H) / PRESSURE (BAR)	0.2	0.4	0.6	0.8	1.0	1.5	2.0	2.5	3.0	3.5	4.0
1.00	0.48	0.66	0.79	0.91	1.00	1.21	1.38	1.53	1.66	1.79	1.90
1.50	0.72	0.98	1.19	1.35	1.50	1.81	2.06	2.29	2.49	2.67	2.84
2.00	0.95	1.31	1.58	1.80	2.00	2.41	2.75	3.05	3.31	3.56	3.78
4.00	1.91	2.62	3.16	3.61	4.00	4.82	5.50	6.10	6.63	7.12	7.57
8.00	3.82	5.25	6.32	7.22	8.00	9.64	11.00	12.19	13.26	14.24	15.14

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

16012, 20012 - 1.2 MM WALL THICKNESS DRIPPERLINES

FLOW RATE* (L/H)	MAX. WORKING PRESSURE RANGE (BAR)	WATER PASSAGES DIMENSIONS			FILTRATION AREA (MM ²)	CONSTANT K	EXPONENT X
		WIDTH (MM)	DEPTH (MM)	LENGTH (MM)			
1.05	4.0	0.60	0.80	75	70	0.364	0.46
1.60	4.0	0.73	0.85	75	70	0.555	0.46
2.10	4.0	0.76	1.08	75	70	0.728	0.46
4.20	4.0	1.06	1.40	75	76	1.456	0.46
8.40	4.0	1.68	1.40	37	76	2.913	0.46

*Flow rate at 1.0 bar pressure

FLOW RATE VS. PRESSURE (L/H VS. BAR)

FLOW RATE (L/H) / PRESSURE (BAR)	0.2	0.4	0.6	0.8	1.0	1.5	2.0	2.5	3.0	3.5	4.0
1.05	0.50	0.69	0.83	0.95	1.05	1.27	1.44	1.60	1.74	1.87	1.99
1.60	0.76	1.05	1.27	1.44	1.60	1.93	2.20	2.44	2.65	2.85	3.03
2.10	1.00	1.38	1.66	1.89	2.10	2.53	2.89	3.20	3.48	3.74	3.97
4.20	2.00	2.75	3.32	3.79	4.20	5.06	5.78	6.40	6.96	7.47	7.95
8.40	4.01	5.51	6.64	7.58	8.40	10.12	11.56	12.81	13.93	14.95	15.90

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



GYRONET™ TURBO

THE ULTIMATE MICRO-SPRINKLER FOR FULL COVERAGE

FOR HEAP LEACHING IN GOLD, SILVER AND COPPER MINES

- Full coverage.
- Excellent distribution uniformity.
- Optimal drop size.
- Relatively low working pressure.
- Wear resistant with Everspin™ bearing including sapphire for wear resistance.
- Easy maintenance and cleaning.



Everspin™ bearing including sapphire for wear resistance

Bridge

Swivel

Nozzle

TECHNICAL DATA

MODEL	NOZZLE COLOR	NOZZLE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR)	CONSTANT K	EXPONENT X	WETTED DIAMETER AT 0.5M HEIGHT (M)	SWIVEL COLOR
200	Black	1.89	3.0	42.5	0.5	8.5	Orange
300	Black	2.31	3.0	64.1	0.5	10.5	Orange
400	Black	2.67	3.0	86.8	0.5	11.0	Orange
500	Black	3.00	3.0	108.5	0.5	11.5	Orange

FLOW RATE VS. PRESSURE (L/H VS. BAR)

MODEL	WORKING PRESSURE (BAR)				
	1.0	1.5	2.0	2.5	3.0
200	134	165	190	213	233
300	203	248	287	321	351
400	274	336	388	434	475
500	343	420	485	543	594



Description	Catalog number
Nozzle 200 l/h	64120-001020
Nozzle 300 l/h	64120-001220
Nozzle 400 l/h.	64120-001300
Nozzle 500 l/h.	64120-001360



Description	Catalog number
Upper bearing Everspin™ with sapphire stone	64120-001760



Description	Catalog number
Bridge	64120-002050



Description	Catalog number
Orange swivel with ring	64120-001590



GyroNet™ Turbo complete head
 Catalog number: 64100 + (any of the bellow 6 digits)
 Model
 200 001900
 300 003900
 400 005000
 500 005980

GYRONET™ TURBO PERFORMANCE DATA

MODEL	NOZZLE CODE COLOR	ROTOR CODE COLOR	WORKING PRESSURE (BAR)	HEIGHT ABOVE SOIL (M)	DISTANCE BETWEEN EMITTERS (M)	DISTANCE BETWEEN LATERALS (M)	CU	DU	SC (5%)	PRECIPITATION (L/M ² /H)
200	Yellow	Orange	2.0	0.5	4.0	4.0	96%	95%	1.1	11.6
200	Yellow	Orange	2.0	0.5	4.5	4.5	93%	89%	1.2	9.2
200	Yellow	Orange	2.0	0.5	5.0	5.0	94%	91%	1.1	7.5
300	Green	Orange	2.0	0.5	4.5	4.5	94%	93%	1.1	14.0
300	Green	Orange	2.0	0.5	5.0	5.0	93%	89%	1.2	11.3
300	Green	Orange	2.0	0.5	5.5	5.5	92%	88%	1.2	9.3
400	Blue	Orange	2.0	0.5	6.0	6.0	92%	87%	1.2	10.3
400	Blue	Orange	2.0	0.5	6.5	6.5	95%	93%	1.1	8.8
400	Blue	Orange	2.0	0.5	7.0	7.0	92%	88%	1.1	7.6
500	Brown	Orange	2.0	0.5	6.5	6.5	93%	92%	1.1	11.3
500	Brown	Orange	2.0	0.5	7.0	7.0	92%	91%	1.1	9.8
500	Brown	Orange	2.0	0.5	7.5	7.5	87%	82%	1.2	8.5

MODEL	NOZZLE CODE COLOR	ROTOR CODE COLOR	WORKING PRESSURE (BAR)	HEIGHT ABOVE SOIL (M)	DISTANCE BETWEEN EMITTERS (M)	DISTANCE BETWEEN LATERALS (M)	CU	DU	SC (5%)	PRECIPITATION (L/M ² /H)
200	Yellow	Orange	1.5	0.5	3.0	3.0	95%	91%	1.2	15.6
200	Yellow	Orange	1.5	0.5	3.5	3.5	93%	87%	1.4	11.4
200	Yellow	Orange	1.5	0.5	4.0	4.0	87%	81%	1.3	8.8
300	Green	Orange	1.5	0.5	5.0	5.0	90%	86%	1.4	9.8
300	Green	Orange	1.5	0.5	5.5	5.5	92%	87%	1.3	8.1
300	Green	Orange	1.5	0.5	6.0	6.0	90%	87%	1.2	6.8
400	Blue	Orange	1.5	0.5	6.0	6.0	90%	84%	1.4	9.3
400	Blue	Orange	1.5	0.5	6.5	6.5	93%	90%	1.2	7.9
400	Blue	Orange	1.5	0.5	7.0	7.0	91%	85%	1.2	6.8
500	Brown	Orange	1.5	0.5	6.5	6.5	89%	84%	1.5	9.9
500	Brown	Orange	1.5	0.5	7.0	7.0	92%	86%	1.2	8.5
500	Brown	Orange	1.5	0.5	7.5	7.5	89%	85%	1.2	7.4

MEGASTAND™

SPRINKLER STAND FOR INSTALLATION WITH NETAFIM™ FLEXIBLE PIPES

Combination between GyroNet™ Turbo or others sprinklers (with male thread inlet connector 1/2") and flexible pipes: FlatNet™.

The stand consists of the following parts:

- a) Base
- b) Arm
- c) Riser – several units (1, 2 or 3) can be installed together to achieve the desired sprinkler height

If the stand installed comprises only Netafim™ made parts, Teflon is not needed. The parts will be supplied as individual components to allow ordering a stand with height according to requirement (40, 80 or 120 cm).

The Netafim™ MegaStand™ can be connected to field sprinklers with 2" and 3" FlatNet™ pipes.



BASE

Catalog number per 1 unit: 64520-002480

Unit quantity per box: 20 units

ARM

Catalog number per single 1 unit: 64520-002485

Unit quantity per box: 50 units

RISER:

Catalog number per single 1 unit: 64520-002490

Unit quantity per box: 100 units

MEGA-RISER 1/2" 0.4 meter length 1/2" male threaded - 1/2" female threaded		MEGA-SUPPORTING ARM		MEGA-BASE	
64520-002490		64520-002485		64520-002480	

MISTNET™

FINE STATIC MISTER

Water flow is distributed into the atmosphere as micro sized droplets evaporating with minimal wetting the ground.

Bridgeless design eliminates dripping.

Acid resistant (AA) raw materials allow applied chemicals to pass through the system.

With a relatively low pressure of 3.0 bar, the MistNet™ uniformly distributes an average drop size of 150 micron.



MISTNET™

Head only (with male inlet connector)

Catalog number: **63100** - (any of below 6 digits)

MODEL	SINGLE	SINGLE
	"S"	"S" 100units/bag
015	040100	040120
025	040000	040020

PACKAGING DATA

MISTNET™	QUANTITY P/BOX UNITS	BOX SIZE (CM X CM X CM)	BOX WEIGHT (KG)	BOXES P/PALLET	TOTAL UNITS P/PALLET	PALLET WEIGHT (KG)
Head only	4500	18 x 34 x 79	19.5	20	90000	390

CONNECTORS

WIDE RANGE OF CONNECTORS



INTRODUCTION




Netafim™™ comprehensive range of pipe connector systems is made of high resistance and durability polymers. They are functional and viable, modeled under the highest market standards and available for all pipe types.




CONNECTORS TECHNICAL DATA

	DRIPPERLINE		SUBSURFACE INSTALLATION		LAYOUT/RECOILING	REUSABLE
	INTERNAL DIAMETER (MM)	WALL THICKNESS (MM)	DEEP BURYING	SHALLOW BURYING		
Connectors for Thick walled dripperlines						
BARB for MINING (VIOLET)						
12	10.2	1.0-1.2	√	√	√	X
16	14.2	0.9-1.2	√	√	√	X
17	14.6	1.2	√	√	√	X
18	15.5	1.1	√	√	√	X
20	17.5	1.0-1.2	√	√	√	X

- √ Suitable
- X Not suitable
- X/√ Suitable but not recommended

TWIST LOCK CONNECTORS

DESCRIPTION	Coupling Nut 16 X Nut 16		
CATALOG NUMBERS	1 units	32500-016010	
DESCRIPTION	Nut 16 threaded male 1/2"		
CATALOG NUMBERS	1 units	32500-016020	
DESCRIPTION	Elbow nut 16 X MTH 1/2"		
CATALOG NUMBERS	1 units	32500-011380	

DESCRIPTION	Nut twist x barb adaptor 16/17x16		
CATALOG NUMBERS	1 units	32500-015950	
DESCRIPTION	Nut 16 threaded male 3/4"		
CATALOG NUMBERS	1 units	32500-016030	
DESCRIPTION	"T" 16 X 1/2" MTH X 16		
CATALOG NUMBERS	1 units	32500-011370	



BARB CONNECTORS 12, 16, 17, 18, 20 MM FOR MINING (VIOLET COLOR)

Max. working pressure: 3 bar with 1.2 mm wall thickness dripperlines

DESCRIPTION	Coupling barb 12 x 12		
CATALOG NUMBERS	1 unit	32500-002250	
	50 units/bag		
	100 units/bag	32500-002270	

DESCRIPTION	Coupling barb 16 x 16		
CATALOG NUMBERS	1 unit	32500-010680	
	50 units/bag	32500-010685	
	100 units/bag	32500-010690	

DESCRIPTION	Coupling barb 17 x 17		
CATALOG NUMBERS	1 unit	32500-003900	
	50 units/bag	32500-003915	
	100 units/bag	32500-003930	

DESCRIPTION	Coupling barb 18 x 18		
CATALOG NUMBERS	1 unit	32500-014217	
	50 units/bag		
	100 units/bag	32500-014227	

DESCRIPTION	Coupling barb 20 x 20		
CATALOG NUMBERS	1 unit	32500-007700	
	50 units/bag	32500-007721	
	100 units/bag	32500-007730	

DESCRIPTION	"T" barb 12 x 12 x 12		
CATALOG NUMBERS	1 unit	32500-002533	
	50 units/bag		
	100 units/bag		

DESCRIPTION	Elbow barb 12 x 12		
CATALOG NUMBERS	1 unit	32500-003250	
	50 units/bag	32500-003260	
	100 units/bag		

DESCRIPTION	Elbow barb 16 x 16		
CATALOG NUMBERS	1 unit	32500-012480	
	50 units/bag		
	100 units/bag		

DESCRIPTION	Elbow barb 17 x 17		
CATALOG NUMBERS	1 unit	32500-005970	
	50 units/bag		
	100 units/bag		

DESCRIPTION	Elbow barb 18 x 18		
CATALOG NUMBERS	1 unit	32500-014261	
	50 units/bag		
	100 units/bag		


DESCRIPTION	"T" barb 16 x 16 x 16		
CATALOG NUMBERS	1 unit	32500-011340	
	50 units/bag		
	100 units/bag		


DESCRIPTION	Elbow barb 20 x 20		
CATALOG NUMBERS	1 unit	32500-010050	
	50 units/bag		
	100 units/bag		





BARB CONNECTORS 12, 16, 17, 18, 20 MM FOR MINING (VIOLET COLOR)


Max. working pressure: 3 bar with 1.2 mm wall thickness dripperlines


DESCRIPTION	Straight barb 12 threaded male 1/2"		
CATALOG NUMBERS	1 unit	32500-002360	
	50 units/bag		
	100 units/bag		


DESCRIPTION	Straight barb 16 threaded male 1/2"		
CATALOG NUMBERS	1 unit	32500-010935	
	50 units/bag		
	100 units/bag		


DESCRIPTION	Straight barb 16 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-011050	
	50 units/bag		
	100 units/bag		


DESCRIPTION	Straight barb 17 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-004520	
	50 units/bag	32500-004530	
	100 units/bag		


DESCRIPTION	Straight barb 18 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-014150	
	50 units/bag	32500-014170	
	100 units/bag		


DESCRIPTION	Straight barb 20 threaded male 1/2"		
CATALOG NUMBERS	1 unit	32500-008040	
	50 units/bag		
	100 units/bag		


DESCRIPTION	"Y" barb 12 x 2 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-002750	
	50 units/bag		
	100 units/bag		


DESCRIPTION	Straight barb 20 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-008250	
	50 units/bag		
	100 units/bag		


DESCRIPTION	"Y" barb 17 x 2 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-004650	
	50 units/bag		
	100 units/bag		

DESCRIPTION	"Y" barb 16 x 2 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-011240	
	50 units/bag		
	100 units/bag		


DESCRIPTION	"Y" barb 20 x 2 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-008350	
	50 units/bag		
	100 units/bag		


DESCRIPTION	"Y" barb 18 x 2 threaded male 3/4"		
CATALOG NUMBERS	1 unit	32500-014251	
	50 units/bag		
	100 units/bag		

DESCRIPTION	Reducing coupling barb 16 barb 20		
CATALOG NUMBERS	1 unit	32500-007790	
	50 units/bag		
	100 units/bag		

DESCRIPTION	Reducing coupling barb 12 barb 16		
CATALOG NUMBERS	1 unit	32500-010870	
	50 units/bag		
	100 units/bag		


LINE END

DESCRIPTION	"8" line end 16 mm		
CATALOG NUMBERS	1 unit	32500-013000	
	50 units/bag	32500-013020	
	100 units/bag	32500-013030	


DESCRIPTION	"8" line end 20 mm		
CATALOG NUMBERS	1 unit	32500-014400	
	50 units/bag	32500-014420	
	100 units/bag	32500-014430	

START CONNECTORS


DESCRIPTION	Seal for start barb connector Model P	Description	Start connector, barb 16, model P, without seal
CATALOG NUMBERS	1 unit 32500-010450 50 units/bag 32500-010455 100 units/bag 32500-010460		Catalog numbers 1 unit 32500-014120 50 units/bag 32500-014120 100 units/bag 32500-014120

DESCRIPTION	Gromet EPDM f/16mm start conn f/mines	DESCRIPTION	Coupling barb 16 x 16
CATALOG NUMBERS	1 unit 32500-013850		CATALOG NUMBERS 1 unit 32500-010680 50 units/bag 32500-010685 100 units/bag 32500-010690


DESCRIPTION	Straight ring lock 16-1/2 mth
CATALOG NUMBERS	1 unit 32500-004410 50 units/bag 100 units/bag




DESCRIPTION	Straight ring lock 16-3/4 mth
CATALOG NUMBERS	1 unit 32500-015910 50 units/bag 100 units/bag




DESCRIPTION	Lay flat starter 16
CATALOG NUMBERS	1 unit 32500-018100




DESCRIPTION	LYF START CON 3/4 MTH OD 3/8 ID
CATALOG NUMBERS	1 unit 32500-018087



DESCRIPTION	LAYFLAT PUNCH 14MM/0.5
CATALOG NUMBERS	1 unit 45000-001540



DESCRIPTION	LYF START CON OS 3/4 MTH OD 1/2 ID
CATALOG NUMBERS	1 unit 32500-023100



NETAFIM™ FLEXIBLE PIPES

FLATNET™

REINFORCED POLYETHYLENE FLEXIBLE PIPE & FITTINGS



APPLICATIONS

For use in agricultural, horticultural and other portable water application systems.

SPECIFICATIONS

- Compatible with ISO 16438 standard.
- Available diameters: 2", 3" and 4".
- Maximum working pressure 3.0 bar at 50 Celsius degrees.
- Coil length: 50, 80 or 100 meter.
- Can be used as transportation blank pipe, as a distribution pipe with in-field stat connectors or as a distribution pipe with integral 1/2" female threaded connectors, distance between connectors must be defined at ordering time, according to the user needs.
- Robust and durable reinforced polyethylene weaves.
- White colored for high solar resistance, high chemical resistance and UV resistance.
- The pipe and the integral connectors are made of 100% Polyethylene, totally recyclable material.
- Red strip for easy identification.

FEATURES AND BENEFITS

- Low expansion and zero axial elongation, no snaking.
- Flat and compact coil design, reduces freight and storage costs.
- Integral connectors reduce significant labor time and increase confidence in the connections between distribution pipes and laterals.
- Light and flexible, easily moved from one installation to another.
- User friendly and faster layout and retrieving process.
- Up to 80% lighter than other similar products.
- Complete package, pipes, full range of branching connectors and a complete line of connectors for dripperlines and laterals.

FLATNET™ TECHNICAL DATA

FLATNET™	INSIDE DIAMETER (MM)	WALL THICKNESS (MM)	OUTSIDE DIAMETER (MM)	MAX. WORKING PRESSURE (BAR) AT 50 DEGREES CELSIUS
2" / 51mm.	51.5	1.1	53.7	3.0
3" / 78mm.	78.3	1.1	80.5	3.0
4" / 102mm.	102.5	1.1	104.7	3.0

FLATNET™ PACKAGE DATA

FLATNET™	COIL LENGTH (M)	DIMENSIONS WIDTH*DIAMETER (CM*CM)	COIL WEIGHT (KG)	COIL PER PALLET (UNITS)	COIL LENGTH (M)	DIMENSIONS WIDTH*DIAMETER (CM*CM)	COIL WEIGHT (KG)	COIL PER PALLET (UNITS)
2" / 51mm.	100	9.0*78	16.5	22	50	9.0*57	9.0	36
3" / 78mm.	100	14.0*78	29.5	14	50	14.0*57	15.0	28
4" / 102mm.	100	18.5*78	37.5	12	50	18.5*57	19.0	24

* 80 meter coils length can also be ordered

FLATNET™ BLANK PIPES

Catalog number : 43000-(any of bellow 6 digits)

FLATNET™	BLANK PIPE 100 METER	BLANK PIPE 80 METER	BLANK PIPE 50 METER
2" / 51mm.	000530	000520	000510
3" / 78mm.	000560	000555	000550
4" / 102mm.	000600	000590	000580

FLATNET™ PIPES WITH INTEGRAL WELDED CONNECTORS

Catalog number : 43000-(any of bellow 6 digits)

FLATNET™	0.5 (M) BETWEEN CONN. 100 METER	1.0 (M) BETWEEN CONN. 100 METER	1.2 (M) BETWEEN CONN, 100 METER	1.5 (M) BETWEEN CONN. 100 METER	1.8 (M) BETWEEN CONN. 100 METER	5.0 (M) BETWEEN CONN. 100 METER	8.0 (M) BETWEEN CONN. 100 METER	10.0 (M) BETWEEN CONN. 100 METER
2" / 51mm.	006200	006800	006900		006980	007240	007275	007360
3" / 78mm.	009470	010015	010030	010050	010100	010225	010280	010300
4" / 102mm.	013870		014035	014050	014100		014270	014300

*Missing catalog numbers available upon request **Other distances between integral welded connectors available upon request

FLATNET™	0.5 (M) BETWEEN CONN. 50 METER	1.0 (M) BETWEEN CONN. 50 METER	1.2 (M) BETWEEN CONN, 50 METER	1.5 (M) BETWEEN CONN. 50 METER	1.8 (M) BETWEEN CONN. 50 METER	5.0 (M) BETWEEN CONN. 50 METER	8.0 (M) BETWEEN CONN. 50 METER	10.0 (M) BETWEEN CONN. 50 METER
2" / 51mm.	006100	006760	006860		006940	007200	007265	007320
3" / 78mm.	009460	008504	008507	008550	008600	008735	008780	008800
4" / 102mm.	011850			012050	012100		012270	012300

*Missing catalog numbers available upon request **Other distances between integral welded connectors available upon request



FLATNET™ CONNECTORS

CATALOG NUMBER	PRODUCT DESCRIPTION	PRODUCT PICTURE
43040-018000 43040-018150 43040-018300	PLN/FTN Coupling Barb Con. 2" kit PLN/FTN Coupling Barb Con. 3" kit PLN/FTN Coupling Barb Con. 4" kit	
43040-018070 43040-018170 43040-030820	PLN/FTN Coupling Barb Con.2" Kit (Viton) PLN/FTN Coupling Barb Con.3" Kit (Viton) PLN/FTN Coupling Barb Con.3" Kit (Viton)	
43040-018050 43040-018200 43040-018350	PLN/FTN Barb Con. 2" * MTH BSP 2" kit PLN/FTN Barb Con. 3" * MTH BSP 3" kit PLN/FTN Barb Con. 4" * MTH BSP 4" kit	
43040-018100 43040-018250 43040-018400	PLN/FTN Barb Con. 2" * SW ISO 50/63 kit PLN/FTN Barb Con. 2" * SW ISO 75/90 kit PLN/FTN Barb Con. 2" * SW ISO 110 kit	
43040-018900 43040-019000 43040-019100	PLN/FTN Elbow Barb Con 2" kit PLN/FTN Elbow Barb Con 3" kit PLN/FTN Elbow Barb Con 4" kit	
43040-019200 43040-019300 43040-019400	PLN/FTN Elbow Barb Con 2"*FTH BSP 2" kit PLN/FTN Elbow Barb Con 3"*FTH BSP 3" kit PLN/FTN Elbow Barb Con 4"*FTH BSP 4" kit	

FLATNET™ CONNECTORS

CATALOG NUMBER	PRODUCT DESCRIPTION	PRODUCT PICTURE
43040-018600 43040-018700 43040-018800	PLN/FTN Barb Con. 2" * FTH BSP 2" kit PLN/FTN Barb Con. 3" * FTH BSP 3" kit PLN/FTN Barb Con. 4" * FTH BSP 4" kit	
43040-020500 43040-020600 43040-020700	PLN/FTN Cap Barb Con 2" kit PLN/FTN Cap Barb Con 3" kit PLN/FTN Cap Barb Con 4" kit	
43040-019500 43040-019600 43040-019700	PLN/FTN Tee Barb Con 2" kit PLN/FTN Tee Barb Con 3" kit PLN/FTN Tee Barb Con 4" kit	
43040-019800 43040-019900 43040-020000	PLN/FTN Tee Barb Con 2" * FTH BSP 2" kit PLN/FTN Tee Barb Con 3" * FTH BSP 3" kit PLN/FTN Tee Barb Con 4" * FTH BSP 4" kit	
43040-020100 43040-020200	PLN/FTN Tee Barb Con 3" * 2" * 3" kit PLN/FTN Tee Barb Con 4" * 3" * 4" kit	
43040-020300 43040-020400	PLN/FTN Reducer Barb Con 3" * 2" kit PLN/FTN Reducer Barb Con 4" * 3" kit	
43040-018500	PLN/FTN Barb Con. 4" * MTH BSP 3" kit	
43040-030000 43040-030100 43040-030200	PLN/FTN Barb con. 2" X Flange ISO 63 kit PLN/FTN Barb con. 3" X Flange ISO 90 kit PLN/FTN Barb con. 4" X Flange ISO 110 kit	

SPARE PARTSS

CATALOG NUMBER	PRODUCT DESCRIPTION	PRODUCT PICTURE
43020-010380 43020-010390 43020-010405	SST Hose Clamp for Barb Conn 2" SST Hose Clamp for Barb Conn 3" SST Hose Clamp for Barb Conn 4"	
43040-006200 43040-006230 43040-006260	O-ring Seal EPDM 40*4.5 For Barb Conn 2" O-ring Seal EPDM 60X4.5 for Barb Conn 3" O-ring Seal EPDM 80X4.5 for Barb Conn 4"	

NETAFIM™ PE PIPES

POLYETHYLENE PIPES, TUBES AND MICRO-TUBES



APPLICATIONS

For use in agricultural irrigation systems, water delivery systems, sprinkler and micro-sprinkler stands, assembly dripper sets and automation application.

SPECIFICATIONS

- Standard irrigation pipes, produced according to SI 8779 that fit the International Standard ISO 8779.
- Tubes and Micro-tubes 3*5, 4*6.5, 6*8 and 9*12, produced according to Netafim™ quality standards for drippers, sprinkler and micro-sprinkler stands.
- Micro-tubes 8mm, produced according to Netafim™ quality standards for hydraulic command and automation systems.

FEATURES AND BENEFITS

- All pipes are manufactured with UV and oxidation protection making them durable to solar radiation without significant damage for at least 50 years.
- Microorganisms or fungi do not attack PE pipes, either internally or externally.
- PE pipes are resistant to saline water, acid or alkaline solutions (excluding highly concentrated solutions) and to most substances employed in agricultural applications.
- Available in standard coil lengths, large diameter reels or pipe rods, to meet specific requirements.
- Made with the finest available low/medium density polyethylene resin, especially formulated to resist cracking and kinking, and to ensure long-term reliability.
- Precision manufacturing to ensure the uniformity of internal diameter and wall thickness.

STANDARD IRRIGATION PE PIPES

Tie coils , catalog number : 40500-(any of bellow 6 digits)

MODEL	PIPE OD (MM)	PN (CLASS)	MINIMUM WALL THICKNESS* (MM)	I.D (MM)	MAX. WORKING PRESSURE (BAR)	RAW MATERIAL	TIE COILS PIPE LENGTH				
							25 METER	50 METER	100 METER	200 METER	400 METER
16/4	16	4	1.20	13.60	4.00	LDPE	004110	004210	004310	004410	004510
20/2.5	20	2.5	1.30	17.40	2.50	LDPE		003010	003110	003210	003330
20/4	20	4	1.50	17.00	4.00	LDPE	004810	004910	005010	005110	005130
25/2.5	25	2.5	1.40	22.20	2.50	LDPE	003465	003475	003480	003490	
25/4	25	4	1.90	21.20	4.00	LDPE	005510	005610	005710	005910	
32/4	32	4	1.30	29.40	4.00	MDPE	006205	006310	006410		
32/4 Soft	32	4	2.40	27.20	4.00	LDPE					
40/4	40	4	1.60	36.80	4.00	MDPE	006650	006700	006900	007000	N/A
40/4 Soft	40S	4	3.00	34.00	4.00	LDPE		007300	007400		N/A
50/4	50	4	2.00	46.00	4.00	MDPE	007550	007600	007800	007900	N/A
50/4 Soft	50S	4	3.70	42.60	4.00	LDPE		008200	008300		N/A
50/5	50	5	2.40	45.20	5.00	MDPE					N/A
63/4	63	4	2.50	58.00	4.00	MDPE		008500	008700		N/A

Missing catalog numbers available upon request

* According to the new standard Minimum Wall Thickness should be declared

IN-LINE PRESSURE REGULATOR

ENSURES UNIFORM PRESSURE AT THE INLET OF EACH LATERAL

APPLICATIONS

- Provides required inlet pressure in each lateral
- Provides required pressure in each sprinkler.

SPECIFICATIONS

- Maximum inlet pressure: 4bar/60psi.
- Flow Rate range: 100-1000 L / H.
- Connections: 3/4" Female.
- Length: 7 cm.
- Material: PBT.



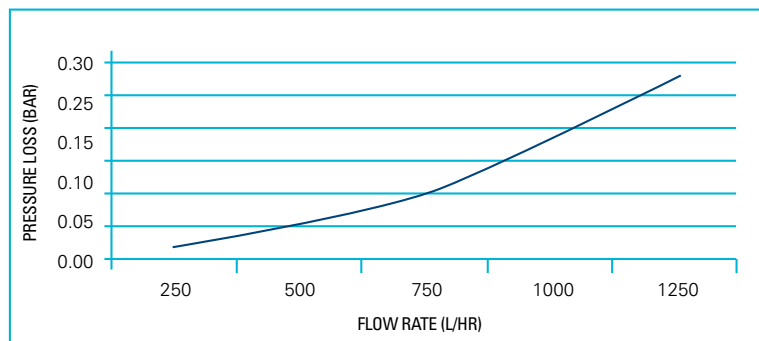
FEATURES AND BENEFITS

- 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"*3/4" version)

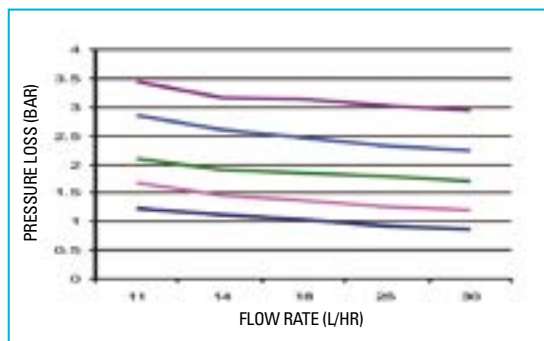
HEAD LOSS 3/4" IN-LINE PRV

FLOW RATE (L/HR)	PRESSURE LOSS (BAR)
250	0.02
500	0.05
750	0.1
1000	0.18
1250	0.28

HEAD LOSS (BAR) VS. FLOW RATE (L/H.)



OUTLET PRESSURE (BAR) VS. FLOW RATE (L/H.)



- 1.1
- 1.4
- 1.8
- 2.5
- 3.0

HYDRAULIC PRESSURE REDUCING VALVE

The valve maintains a preset downstream pressure, regardless of upstream pressure or flow rate fluctuation. The main valve is controlled by a 3-way pilot, allowing full opening when the pressure drops below a downstream pressure set-point.

FEATURES & BENEFITS

- Accurate, stable control from no-flow to full-flow.
- Exceptionally low head losses at high flows.
- High resistance to corrosive water and other acid media(including 3-way pilot).
- Simple to install - manufactured with threaded or socket (slip) connections.
- Simple and reliable design - diaphragm is the only moving component. Shaft, seals or bearings are not located within the water's passage way.

PURCHASE SPECIFICATIONS

- Hydraulic valve with direct sealing flexible diaphragm.
- Inline maintenance.
- Stem, shaft or guide bearing are not located within the water passage.
- Activated by the line pressure or by an external hydraulic or pneumatic pressure.
- Operated by a pressure reducing pilot valve to achieve constant outlet pressure, regardless of upstream pressure or flow variations.

QUICK SIZING

- Valve size same as line size or one size smaller.
- Maximum flow speed for continuous operation of 5.5 m/sec.

DESIGN CONSIDERATIONS

- The valve should be suited for the maximal flow and allowed headloss.
- Large pressure differentials may cause cavitation damage. Consult with Netafim if such conditions are expected.



HYDRAULIC FLUSH VALVE

Netafim Flush Valves for Mining are electric on-off valves, operated by a latching solenoid. This solenoid is activated by an electric pulse generated by a battery-operated controller, opening and closing the main valve. The standard valve is supplied in the "normally closed" position, and includes a latching solenoid and a battery operated single valve controller.

FEATURES & BENEFITS

- Low power electric activation (battery operated, latching solenoid).
- High resistance to corrosive water and other acid media (including 3-way solenoid).
- Simple to install - manufactured with threaded or socket (slip) connections.
- Simple and reliable design - diaphragm is the only moving component. Shaft, seals or bearings are not located within the water's passage way.
- A wide selection of materials, coating and diaphragm types.
- All valve models fit a wide variety of control applications using pilot valves.

PURCHASE SPECIFICATIONS

- Hydraulic valve with direct sealing flexible diaphragm.
- Inline maintenance.
- Stem, shaft or guide bearing are not located within the water passage.
- Activated by the line pressure or by an external hydraulic or pneumatic pressure.
- Operated by a latching solenoid valve and a battery operated single valve controller.

QUICK SIZING

- Valve size same as line size or one size smaller.
- Maximum flow speed for continuous operation of 5.5 m/sec.

DESIGN CONSIDERATIONS

- The valve should be suited for the maximal flow and allowed headloss.
- Large pressure differentials may cause cavitation damage. Consult with Netafim if such conditions are expected.



AIR VALVES

AIR AND VACUUM AIR VALVES

These type of air valves discharge large quantities of air from non-pressurized pipelines 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.

AUTOMATIC 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 line is under pressure.

