



A **valmont** COMPANY



MECHANICAL CATALOGUE

hrproducts.com.au



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DRIVE TRAIN

DRIVE TRAIN



ICI Helical

3/4 HORSEPOWER HELICALS

43 RPM, 40:1 Gear Ratio

1½ HORSEPOWER HELICALS

57 RPM, 30:1 Gear Ratio

68 RPM, 25:1 Gear Ratio

3 YEAR WARRANTY

Features

- Inverter duty, VFD suitable
- Improved water-tight seal
- Heat-dissipating, finned frame
- Thermally protected
- Greater load bearing capacity



ORDER CODE	DESCRIPTION	RPM	HP	VOLTS AC	AMP	HZ	PHASE
1014814251	ICII Helical Centerdrive, 43 RPM, 40:1	43/35	0.75/0.6	460/380	1.5	60/50	3
1014814252	ICII Helical Centerdrive, 57 RPM, 30:1	57/47	1.5/1.2	460/380	2.4	60/50	3
1014814253	ICII Helical Centerdrive, 68 RPM, 25:1	68/56	1.5/1.2	460/380	2.4	60/50	3



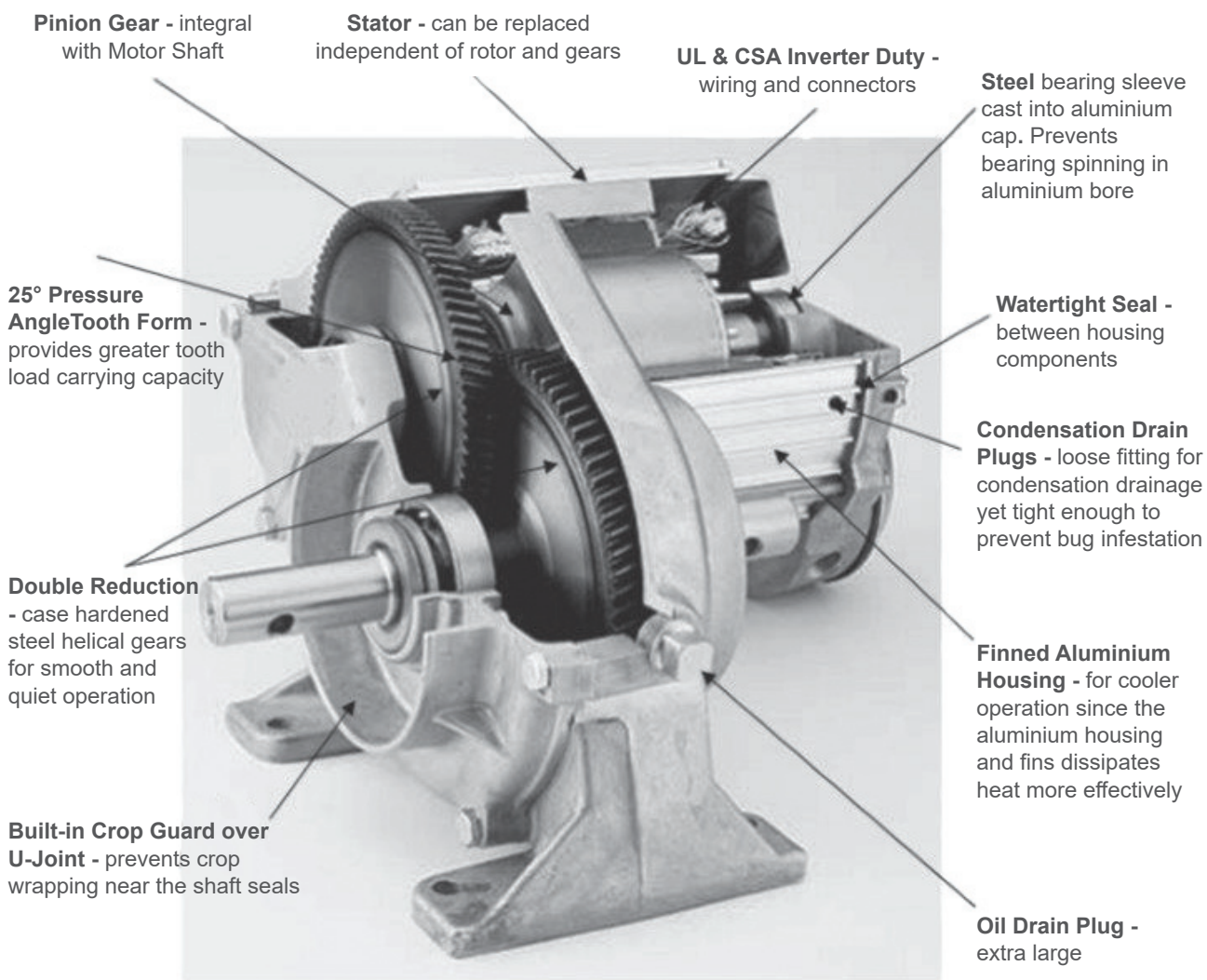
ICI Helical Gearmotor

3/4 & 1½ HORSEPOWER OFFERINGS

43 RPM, 40:1 Gear Ratio

57 RPM, 30:1 Gear Ratio

68 RPM, 25:1 Gear Ratio



ICI Stator

L STYLE

3/4 HP Stator

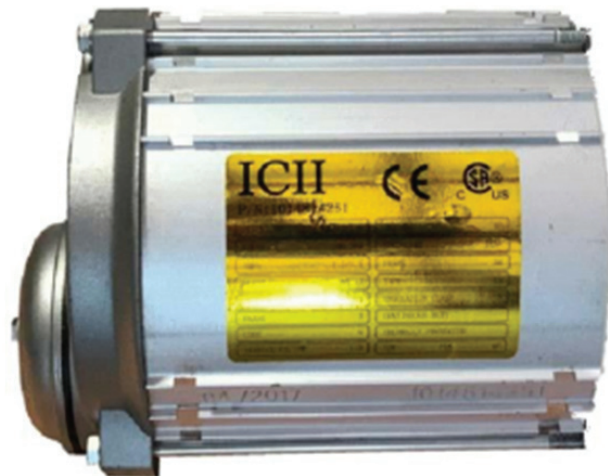
1½ HP Stator

V STYLE

3/4 HP Stator

1½ HP Stator

1 YEAR WARRANTY



Features

- Inverter duty, VFD suitable
- Improved water-tight seal
- Heat-dissipating, finned frame
- Thermally protected
- Two styles - fits most common gears

ORDER CODE	DESCRIPTION	RPM	HP	VOLTS AC	AMP	HZ	PHASE
1015814350	3/4 HP V Style Stator	1750/1455	0.75/0.6	460/380	1.5	60/50	3
1015814351	3/4 HP L Style Stator	1750/1455	0.75/0.6	460/380	1.5	60/50	3
1015814352	1½ HP V Style Stator	3500/2910	1.5/1.2	460/380	2.4	60/50	3
1015814353	1½ HP L Style Stator	3500/2910	1.5/1.2	460/380	2.4	60/50	3

ISO 9001 Certified



ICI Gearbox - Standard Series

50:1 Short Shaft

52:1 Long Shaft

3 YEAR WARRANTY

Features

- API cartridge input/output seals
- Oversized bearings on input shaft to handle higher loads
- Universal bolt mounting pattern
- 2 ¼" (5.72cm) high strength steel output & input shaft
- Filled with premium GL5 Mobile® Gear Oil
- Premium tapered bearings
- Ductile iron input shaft ends caps
- Designed to withstand 11,500 lbs (5200 kgs) tower weight, with 60% on one wheel

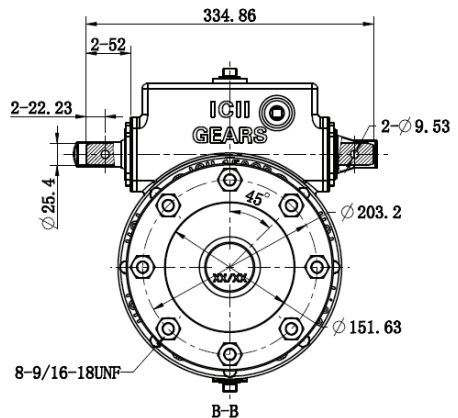
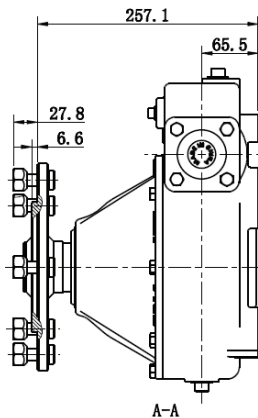
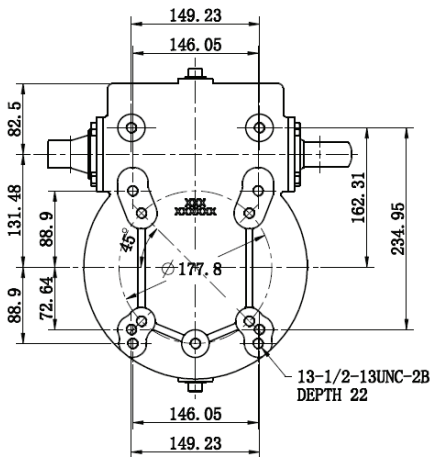


ORDER CODE	MODEL	DESCRIPTION
1011814150	ICII-150GB	ICII 150 Series Gearbox 50:1 Standard Duty, Non-Tow
1011814151	ICII-152GB	ICII 150 Series Gearbox 52:1 Standard Duty, Non-Tow

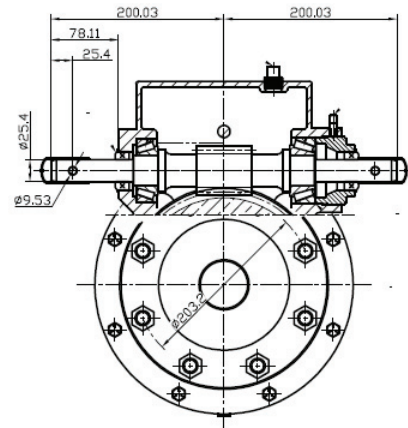
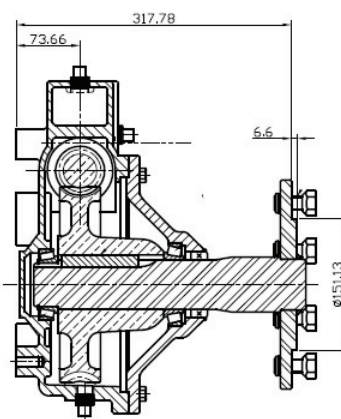
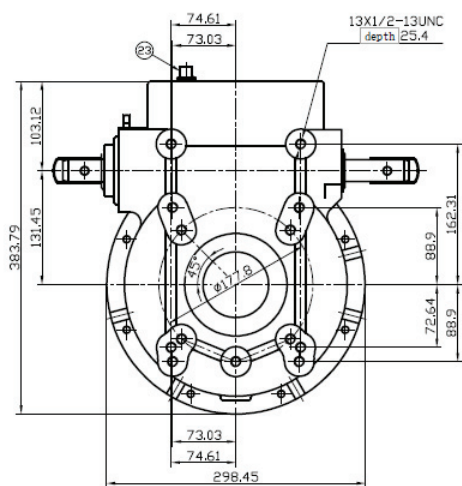


ICI Gearbox - Standard Series

50:1 Short Shaft Gearbox



52:1 Long Shaft Gearbox



*Dimension sizing in mm

ICI Gearbox - Super Series

50:1 Short Shaft

52:1 Long Shaft

3 YEAR WARRANTY

Features

- Vented external expansion chamber with rubber diaphragm
- API Cartridge input & output seals
- 2 ¼" (5.72 cm) high strength alloy steel input/output shafts
- Premium, oversized & tapered bearings on input shafts to handle extreme loads
- Alloy gear teeth for superior wear resistance & longevity
- Universal (13 Bolt) mounting
- Filled with Premium GL5 Gear Mobile® Oil
- Dual input shafts

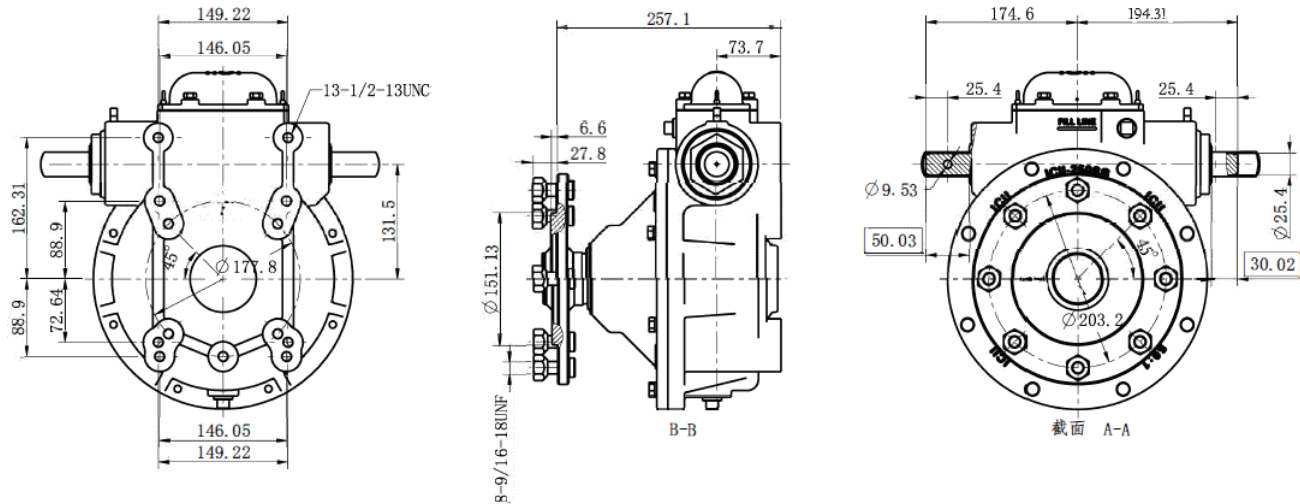


ORDER CODE	MODEL	DESCRIPTION
1011814250	ICII-250SS	ICII 250 Super Series Gearbox 50:1 Heavy Duty, Non-Tow
1011814252	ICII-252SS	ICII 250 Super Series Gearbox 52:1 Heavy Duty, Non-Tow

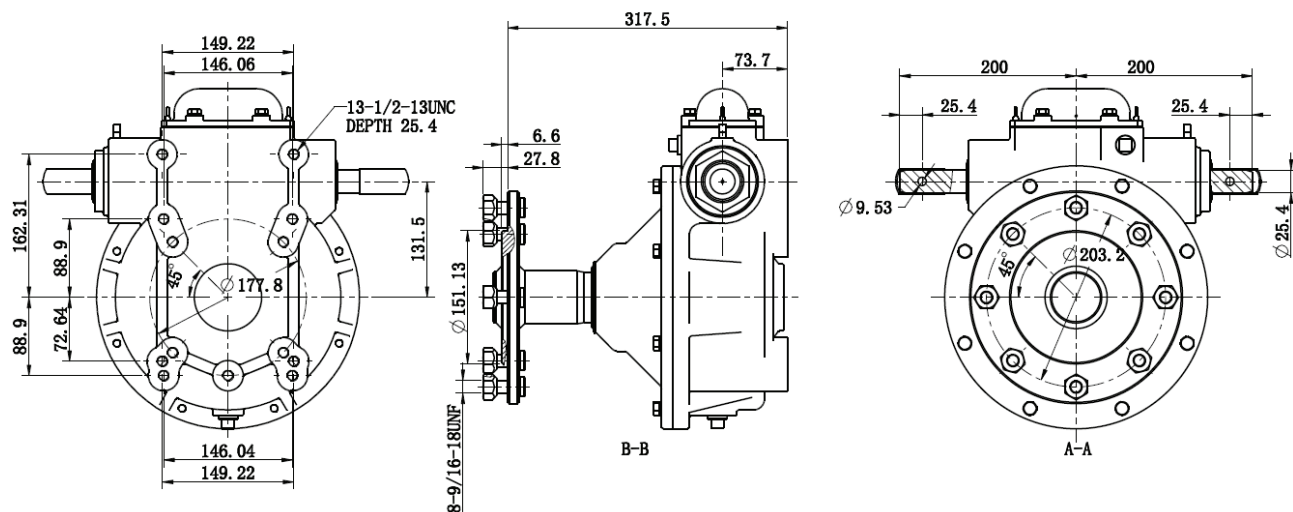


ICI Gearbox - Super Series

50:1 Short Shaft Gearbox



52:1 Long Shaft Gearbox



*Dimension sizing in mm

ICI Towable Gearbox - Super Series

50:1 Short Shaft

52:1 Long Shaft

3 YEAR WARRANTY

Features

- Specifically designed to allow for towing of Linear & Lateral move irrigation systems
- Vented external expansion chamber with rubber diaphragm
- API Cartridge input & output seals
- 2 ¼" (5.72 cm) high strength alloy steel input/output shafts
- Premium, oversized & tapered bearings on input shafts to handle extreme loads
- Alloy gear teeth for superior wear resistance & longevity
- Universal (13 Bolt) mounting
- Universal, top-fill oil plug
- Dual ended input shaft
- Ductile Iron end caps
- Filled with Premium GL5 Gear Mobile® Oil

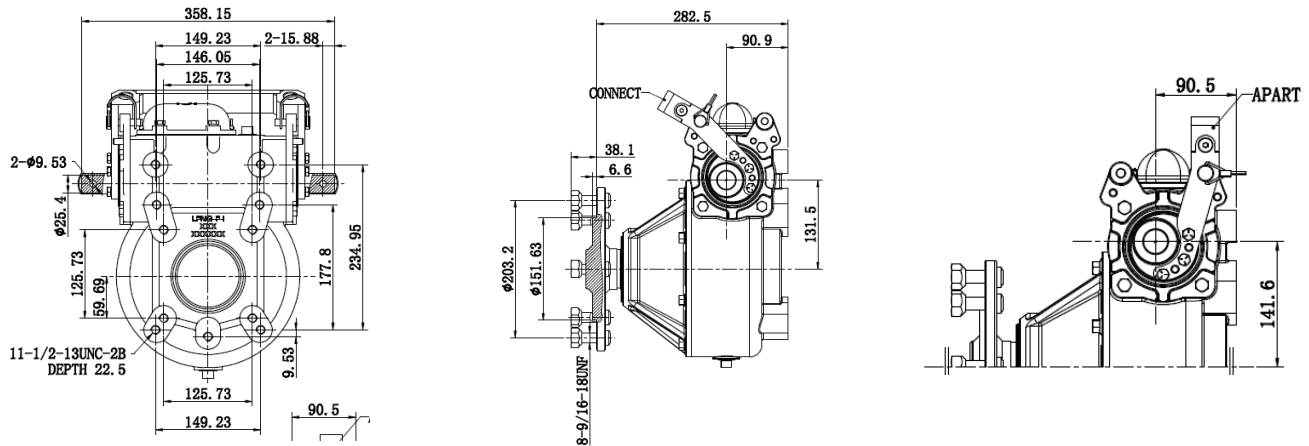


ORDER CODE	MODEL	DESCRIPTION
1011814450	ICII-450SST	ICII Super Series Towable Gearbox 50:1 Short Shaft
1011814452	ICII-452SST	ICII Super Series Towable Gearbox 52:1 Long Shaft

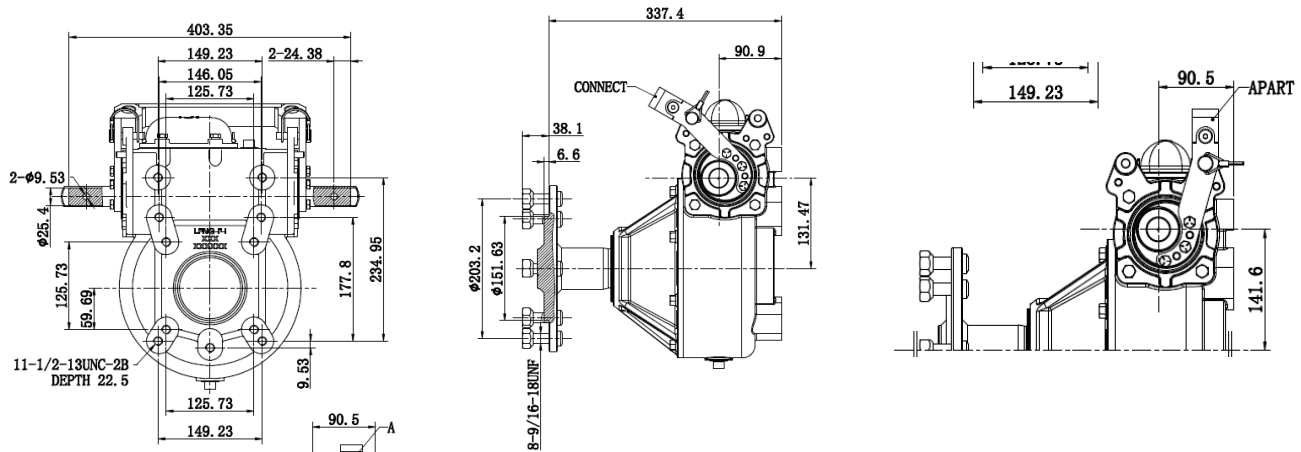


ICI Gearbox - Super Series

50:1 Towable Gearbox



52:1 Towable Gearbox



*Dimension sizing in mm

ICI Driveline Coupler

Driveline Coupler

Features

- Cast Aluminium Body
- Thermoplastic/Polyurethane Puck
- Pre-assembled for easy, one-size wrench installation
- Currently available for 7/8" units
- 3 Year Warranty



ORDER CODE	DESCRIPTION
1017953100	ICII Gear Coupler 1" x 7/8" Square

Black Max Coupler™

Features

- Constructed with a heat-treated anodized aluminum body
- Universal design (fits 3/4" - 7/8" - 1")
- Pre-assembled for easy, one size wrench installation
- In-flex thermoplastic disc is 30% more flexible than competitive brands
- In-flex technology keeps gearboxes and centre drives running longer
- 1 Year Warranty



ORDER CODE	DESCRIPTION
1017430010	Universal Coupler Torque Tough



CONTROLS



CONTROLS

2300V Main Control Panel

The HYDRUS 2300V is designed to work with all existing pivot safety systems.

Features

- Familiar internal electrical components and wiring layout
- Volt and hour meters
- Switches: forward/reverse, wet/dry, auto end gun, start/stop and pump control
- Integrated V-style auto-stop/auto-reverse
- 3 second delay circuit boards included

- Panel - 812.8mm x 508mm x 292.1mm
- Carton - 977.9mm x 698.5mm x 381mm
- Approximate Weight - 50 kgs

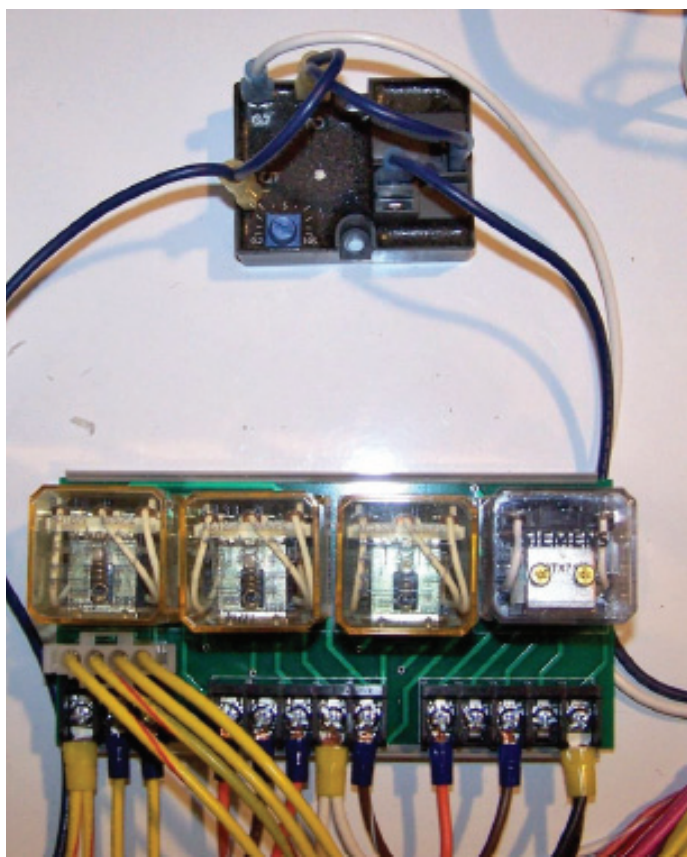


ORDER CODE	DESCRIPTION
3048300367	Hydrus 2300V Main Control Panel, Basic Model, Standard Features, UL approved

2300V Main Control Panel Options

ORDER CODE	ADDITIONAL OPTIONS
2034732002	Low Temperature Shutdown Kit
3052300602	Low Pressure Kit Option for 2300V
3052300603	Auto Restart Option for 2300V
3052300606	Auto Start/Auto Shutdown Kit for 2300V
3052300620	Auto Reverse End of Pivot Option

Auto Restart Option



Collector Rings

ICI design and quality - don't be fooled by imitations.

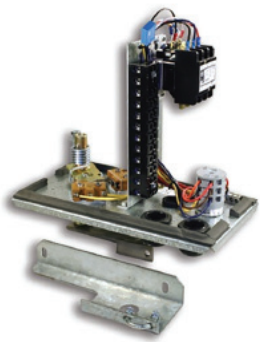
Features

- New aluminium cover adds greater impact resistance and is interchangeable with original plastic cover
- Specially designed cover latches
- UL listed to ensure safety and quality
- Large copper brushes are 80% copper and 20% graphite for less resistance
- Wires are numbered and/or colour coded for easy identification
- Greaseable Zerk fitting in the base stops shaft seizure
- Heavy duty die-cast aluminium base is more durable than the competition's plastic base
- J-Pipe conversion kits available

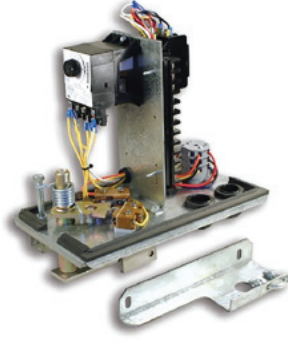


ORDER CODE	DESCRIPTION
CONDUCTOR COLLECTOR RING ASSEMBLY	
3022300111	Collector Ring 11C with Aluminium Cover
3022812001	Collector Ring 11C Slip Ring

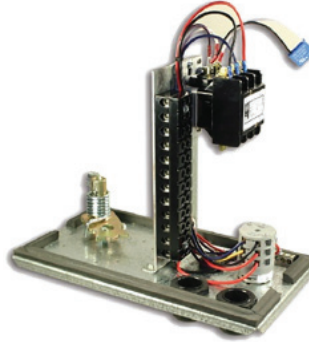
V-Style Tower Boxes



Intermediate



Stall Box

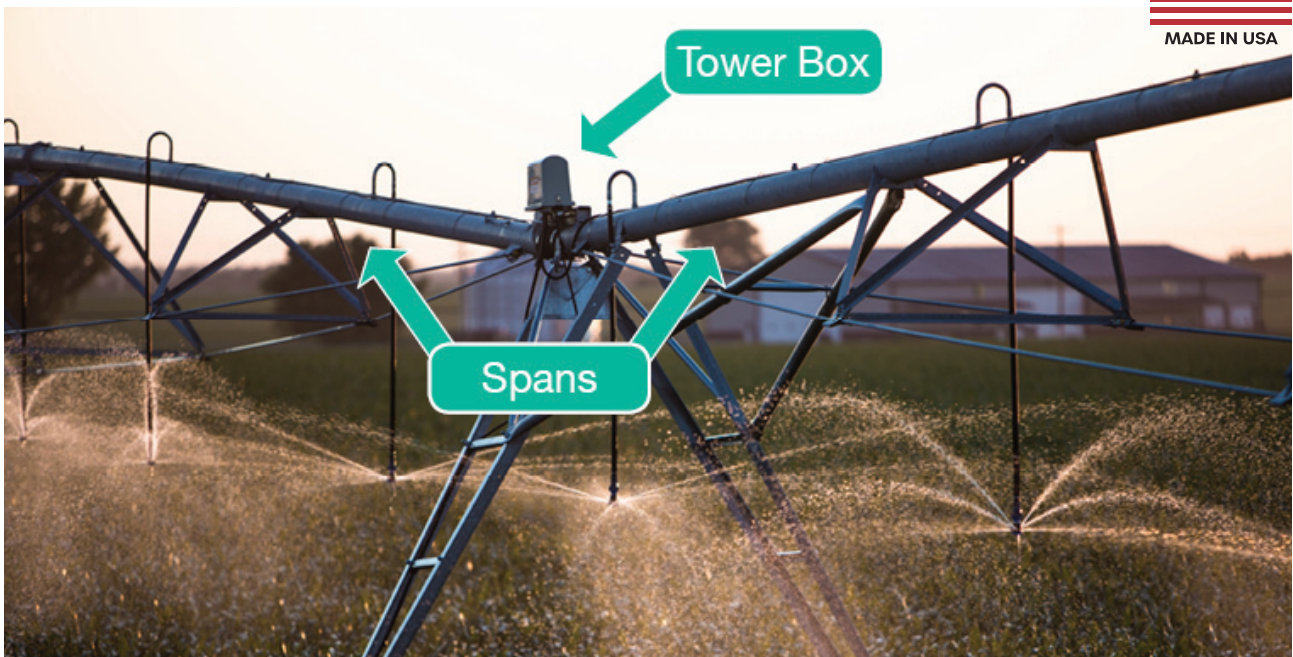


End Box



End/Booster

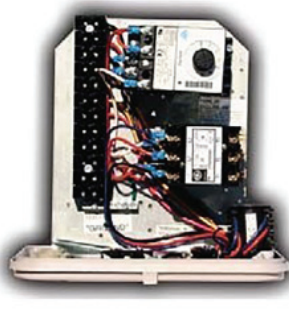
ORDER CODE	DESCRIPTION
3049300100	Intermediate Tower Box for Valley systems
3049300200	Stall Tower Box for Valley systems
3049300300	End Tower Box for Valley systems
3049300402	End Tower/Booster Pump Tower Box for Valley systems
3049300800	Auto Stop/Auto Reverse Tower Box for Valley systems
2049103003	Valley Style Alignment Rod Universal
2049722012	Valley Style T/Box Lid with Latches



L-Style Tower Boxes



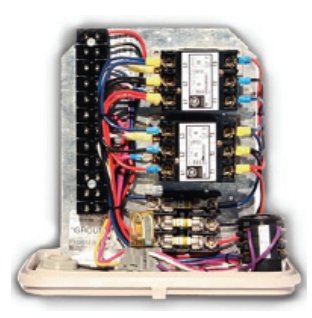
Intermediate



Stall Box



End Box



End/Booster

ORDER CODE	DESCRIPTION
3061300100	L Style Intermediate Tower Box
3061300200	L Style Stall Tower Box
3061300300	L Style End Tower Box
3052300612	L Style Stainless Steel Linkage Kit
2049722001	Linkage Rod - 16" Length Stainless Steel
2049722002	Swivel Ball Joint Stainless Steel 316
2049722007	Lindsay Style Springs
2049722008	Lindsay Style Cam
2049722009	Lindsay Style Cam Arm

Booster Pumps



6066430003



6066430008



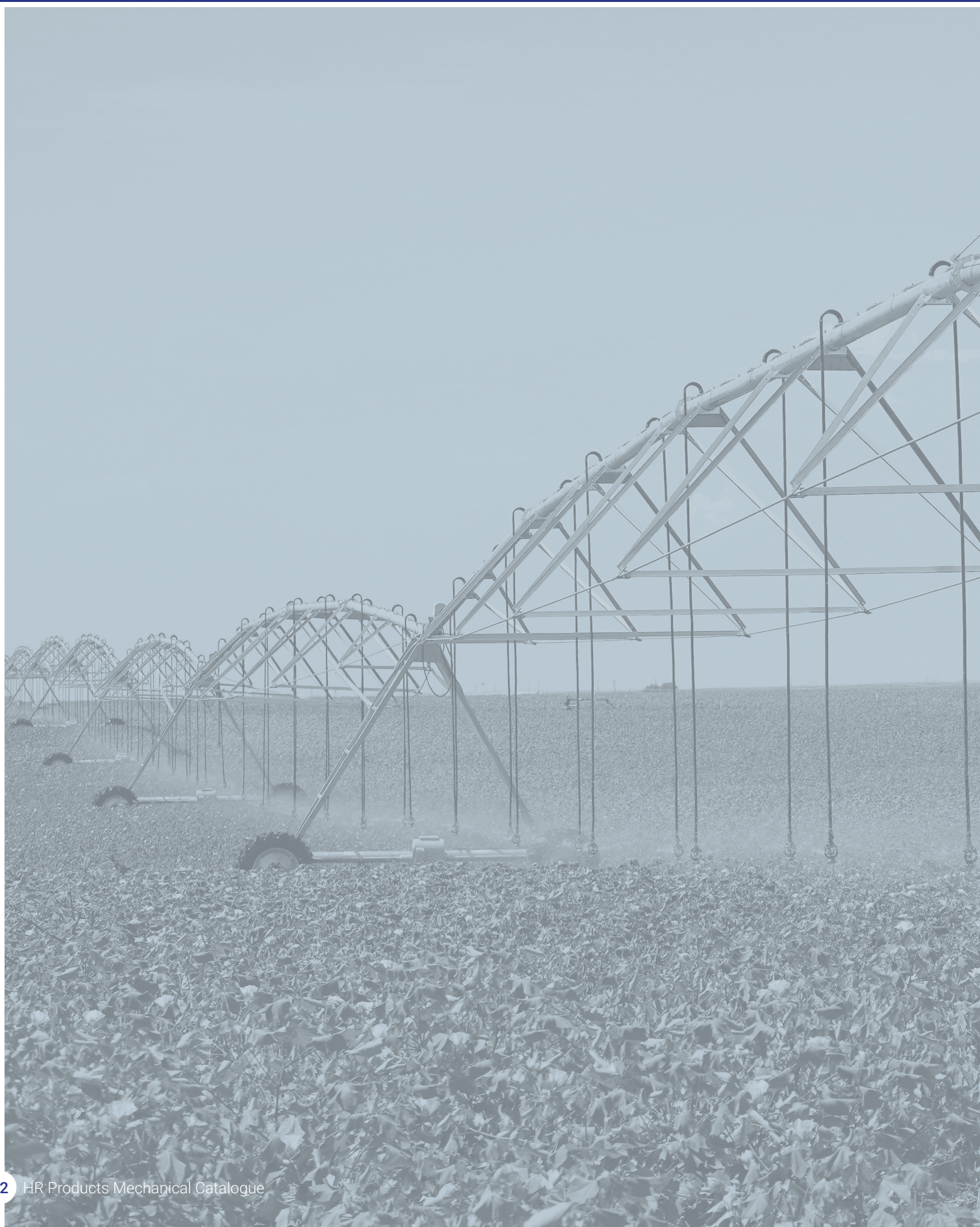
6066430009

ORDER CODE	DESCRIPTION
6066430003	Booster Pump, 2HP w/ Volute & SS Impeller & Leeson TEFC Motor, MODEL 112921, 2-HP, 130 GPM (492 LPM)
6066430008	Booster Pump, 2HP w/ Volute & SS Impeller & Bluffton TEFC Motor, MODEL 1313007404, 2-HP, 130 GPM (492 LPM)
6066430009	Hydrus Booster Pump, 2 HP without Volute, SS Impeller, Bluffton TEFC Motor, 130 GPM (492 LPM) , MODEL #1313007404
6066430012	Booster Pump, 2 HP, 3-PHASE, MODEL BP2HP-U
6066430110	Booster Pump 2HP 130GPM (492 LPM) w/SS Impeller XCAD Motor

*Flow rates shown in US GPM

ELECTRICAL

ELECTRICAL



Hydrus Contactors

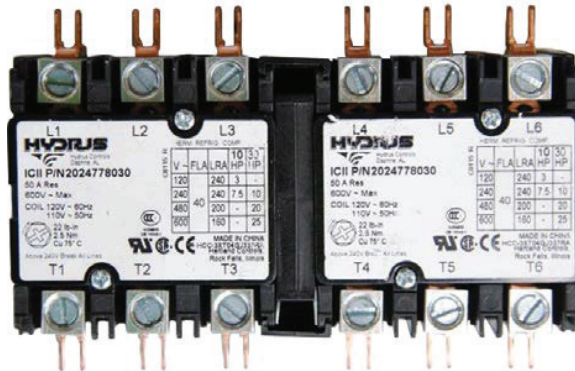
Features

- Compact size
- Quiet operation
- Interchangeable mounting on durable metal back plastic
- Optional din rail mounting
- Meets ARI - 782, UL C5AM CE and Sasso standards
- 500,000 endurance life cycle tested



2024778010

ORDER CODE	DESCRIPTION
2024778010	Contactors, Hydrus DP, 3-Pole, 30 Amp, 120V Coil



ORDER CODE	DESCRIPTION
2024778030	Contactors, Hydrus DP, 3-Pole, 40 Amp, Reverser, 120V, 1 NO + 1 NC

Contactors



2024697007

ORDER CODE	DESCRIPTION
2024697007	Contactor, Schneider, IEC 3-Pole, 9 Amp, 120V Coil, 1 NO + 1 NC, LC1D09G7

Reversing Contactors



2024697009

ORDER CODE	DESCRIPTION
2024697009	Reversing Contactor, IEC 25 Amp, 15 HP Din Rail Mount, with 1 NO + 1 NC Contacts, LC2D25F7

Overwatering Timers



2041695004



2041726005

ORDER CODE	DESCRIPTION
2041695004	Timer, Overwatering (Stall) 0-60 Minutes, Solid State, Reverse Start, BRE10A601
2041726005	Timer, Overwatering, Macromatic, 0.6-60 Minutes, 120 VAC, 10 Amp SPDT with Memory, RT26A-16, E109466

Percentage Timers



2041695102

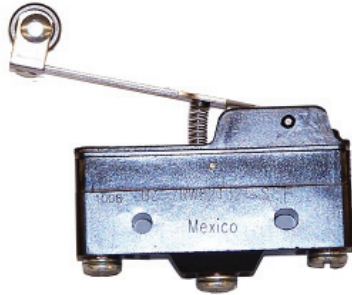


2041726002



ORDER CODE	DESCRIPTION
2041695102	Percentage Timer, 60 Second, CYCL-Timer, Eagle, 120 VAC, CT403S48A6
2041726002	Percentage Timer, 60 Second, Memory, Macromatic 120 VAC, PTA2001M

Microswitches



2031241002



2031241004

ORDER CODE	DESCRIPTION
2031241002	Microswitch, Long Arm, Black Body, Lindsay Style, BZ-7RW82132T-S
2031241004	Microswitch, Short Arm, Adjustable, Brown Body, Valley Style, BZ-3RW8995518-PC2-S

Tower Disconnect Switches

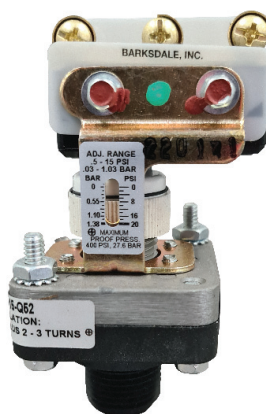


ORDER CODE	DESCRIPTION
2035724001	Tower Disconnect Switch, L-Style / V Style Tower Box

Pressure Switches



2033260003



2033200003

ORDER CODE	DESCRIPTION
2033260003	Pressure Switch, 6-30 PSI, Adjustable, Nason, SQ-2
2033200003	Pressure Switch, 0.5-15 PSI, Barksdale, E1S-H15

Hour Meter



ORDER CODE	DESCRIPTION
2028737001	Hour Meter, LCD Display, 120V, 50/60 HZ Reddington Model

Tower Strobe Lights & Light Kits

The Standard End Tower Light Kit comes complete with the flange adapter, extended gooseneck, shielded cable, globe assembly and rough duty light bulb.

The Strobe End Tower Light Kit comes with the above parts and a specified, coloured bulb.



ORDER CODE	DESCRIPTION
3020300600	End Tower Light Kit, Standard Rough Duty Bulb
3020300701	End Tower Light Kit, Strobe Light, Blue
2032698001	Strobe Light, Amber 120VAC Micro
2032698009	Strobe Light Amber Pipe Mount 120VAC Micro
2032698010	Strobe Light Amber Pipe Mount 230VAC Micro
2045731001	Rough Duty Light Bulb 100 Watt
2045731103	LED A19 L/Bulb 100W 120V Med Base

Lightning Arrestors

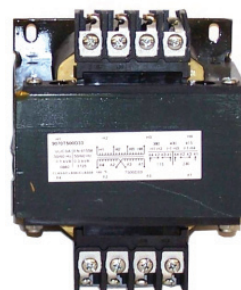
ORDER CODE	DESCRIPTION
2029745001	Lightning Arrestor, 4-Wire 3-Phase, 0-650 Volts, 36" Leads, LA603
2024210001	Surge Suppressor fits K3-10A-10 110 Contactor



2029745001

Transformers

ORDER CODE	DESCRIPTION
2044697001	Transformer 0.5KVA 380/400/415V Primary x 115/230V Secondary



2044697001

Relays

ORDER CODE	DESCRIPTION
2034697005	Relay 25 Amp 24VDC SPDT



2034697005

STRUCTURES

STRUCTURES



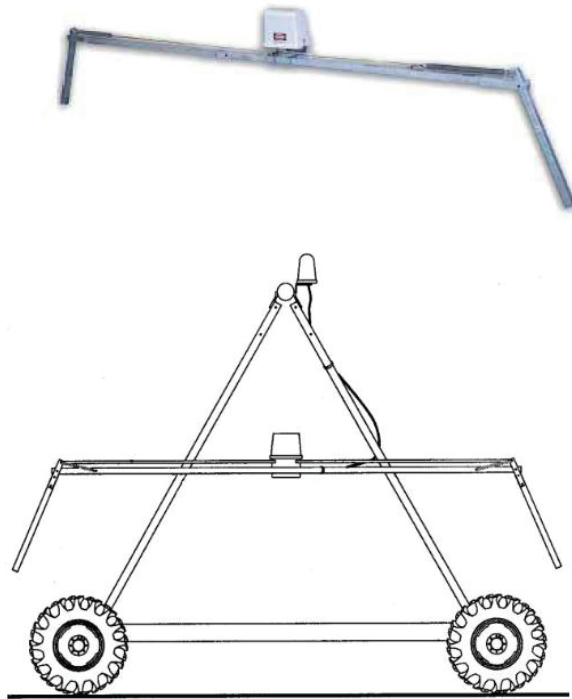
End Tower Auto Reverse/Auto Stop

Features

- Allows pivot to auto reverse or stop from any tower on the machine
- Unique four-piece control arm configuration for ease of shipping and assembly
- Adjustable for broader base beams

Kit Includes:

- Arm assembly
- Tower box mounting bracket
- Tower box
- Springs
- Turnbuckles
- Seven-conductor cable
- Hardware and installation instructions



ORDER CODE

3047300802

DESCRIPTION

Auto Reverse/Auto Stop Complete Kit

Accessories

Boot Hose

ORDER CODE	DESCRIPTION
LONG, 4-PLY RUBBER	
5062240006	6-5/8" ID X 14"
5062805023	6-5/8" ID X 16"
5062805040	8-5/8" ID x 16"



Clamps

ORDER CODE	DESCRIPTION
T-BOLT CLAMP	
5062051003	6-5/8"
5062051006	8-5/8"



50622051003

GATES & GASKETS



Gates & Gaskets

Flange Gaskets

Lindsay Style

ORDER CODE	DESCRIPTION
5562348003	Flange Gasket 6-5/8" Lindsay Style
5562348008	Flange Gasket 8" Lindsay Style



Valley Style

ORDER CODE	DESCRIPTION
5562348200	Flange Gasket 6-5/8" Valley Style



Pierce Triple Lip Gaskets

ORDER CODE	DESCRIPTION
5579008017	Gasket 8" Triple Lip Pierce



VALVES & FILTERS



Galvanised Screen Filters

These versatile, galvanised screen filters can be used as pre-filters or primary filters, depending on application and water quality. Also used with centre pivot systems.



ORDER CODE	DESCRIPTION
6" / 800 GPM (3000LPM) WITH 1/16 SCREEN	
4060008001	Inlet-Flange, Outlet-Flange
6" / 800 GPM (3000LPM) WITH 3/32 SCREEN	
4060008002	Inlet-Flange, Outlet-Flange
8" / 1200 GPM (4542LPM) WITH 1/16 SCREEN	
4060008003	Inlet-Flange, Outlet-Flange
4060008004	Inlet-Plain End, Outlet-Plain End
4060008005	Inlet-Ring-Lock Male, Outlet-Ring-Lock Bell
8" / 1200 GPM (4542LPM) WITH 3/32 SCREEN	
4060008006	Inlet-Flange, Outlet-Flange
4060008007	Inlet-Plain End, Outlet-Plain End
4060008008	Inlet-Ring-Lock Male, Outlet-Ring-Lock Bell
8" / 1750 GPM (6624LPM) WITH 1/16 SCREEN	
4060008009	Inlet-Flange, Outlet-Flange
4060008010	Inlet-Plain End, Outlet-Plain End
4060008011	Inlet-Ring-Lock Male, Outlet-Ring-Lock Male
8" / 1750 GPM (6624LPM) WITH 3/32 SCREEN	
4060008012	Inlet-Flange, Outlet-Flange
4060008013	Inlet-Plain End, Outlet-Plain End
4060008014	Inlet-Ring-Lock Male, Outlet-Ring-Lock Male

Clamps

ORDER CODE	DESCRIPTION
4060008015	1200 GPM(4542LPM)-1/16" Screen
4060008016	1200 GPM(4542LPM)-3/32" Screen
4060008017	1750 GPM(6624LPM)-1/16" Screen
4060008018	1750 GPM(6624LPM)-3/32" Screen

Banjo Valves

ORDER CODE	DESCRIPTION
4080006001	2" Banjo Ball Valve
4080006002	3" Banjo Ball Valve
4080006003	4" Banjo Ball Valve

*Flow rates shown in US GPM

Please note: These are a non stocked item but can be purchased as an "Order In" item only.

SPRINKLERS



SPRINKLERS

i-Wob[®]2

Introducing the i-Wob[®]2, the next generation of Wobbler[®] technology. Wear surfaces have been improved and a protective shroud doubles as a nozzle carrier for two extra nozzles. The i-Wob2 is designed for areas where poor water quality may cause higher wear on irrigation components. Available with four different deflectors allowing you to customize to your specific soil and crop needs.



Standard Angle
9-groove
Black deflector
Medium droplets
Nozzle sizes #6-26

Standard Angle
6-groove
Grey deflector
Small droplets
Nozzle sizes #10-26

Low Angle
9-groove
Blue deflector
Medium droplets
Nozzle sizes #6-26

Low Angle
6-groove
White deflector
Large droplets
Nozzle sizes #12-26

Features

- Wobbler[®] technology produces low application intensity to preserve soil integrity
- Low pressure operation - 0.41 to 1.03 bar - saves money and energy
- Unique rotary action with the wobbling grooved deflectors deliver a consistent droplet size
- Outstanding uniformity over a large area of coverage
- Four different models available based on desired trajectory and droplet size
- Exclusive below-the-nozzle weight eliminates the need for heavier, conventional drop weights
- UP3 snap-in nozzle is easy to remove for cleaning or changing. To remove the nozzle simply pinch and pull, then place and click to install

i-Wob2 System Assembly

- The i-Wob2 must be mounted with a minimum of 0.6m reinforced flexible hose above the applicator because of its off-centre rotary action. The hose must always be on outlet end of semi-rigid or rigid drop
- When using the Universal Magnum Weight or One Weight, never use another weight above the i-Wob2. Always be sure the weight is tightly threaded in the bottom of the i-Wob2. (140 inch-lbs torque recommended)
- If you are using a conventional weight above the i-Wob2, only use a threaded weight weighing at least 0.7kgs, but not exceeding 0.31m in length. A slipover drop weight is not recommended



Use the Magnum Weight on flexible hose installations.

Four different deflector models based on desired trajectory and droplet size.



I-WOB [®] 2 SYSTEM DESIGN CRITERIA	Standard Angle 6 Groove - Grey Small Droplet	Standard Angle 9 Groove - Black Medium Droplet	Low Angle 9 Groove - Blue Medium Droplet	Low Angle 6 Groove - White Large Droplet
Nozzle Sizes*				
0.41 bar **	#12 - 26 4.76 - 10.32 mm	#12 - 26 4.76 - 10.32 mm	#12 - 26 4.76 - 10.32 mm	#12 - 26 4.76 - 10.32 mm
0.69 - 1.03 bar	#10 - 26 3.97 - 10.32 mm	#6 - 26 2.38 - 10.32 mm	#6 - 26 2.38 - 10.32 mm	#12 - 26 4.76 - 10.32 mm
Flows				
0.41 bar **	570 - 2635 L/hr	570 - 2635 L/hr	570 - 2635 L/hr	570 - 2635 L/hr
0.69 - 1.03 bar	509 - 4168 L/hr	182 - 4168 L/hr	182 - 4168 L/hr	736 - 4168 L/hr
Diameters				
0.91 m height at 0.41 bar **	8.0 - 9.1 m	9.1 - 10.4 m	8.5 - 9.1 m	8.5 - 9.8 m
0.91 m height at 0.69 - 1.03 bar	11.0 - 14.0 m	9.5 - 16.2 m	9.5 - 14.3 m	12.2 - 14.9 m
1.83 m height at 0.41 bar **	9.1 - 10.4 m	11.0 - 12.8 m	9.8 - 10.7 m	9.8 - 11.9 m
1.83 m height at 0.69 - 1.03 bar	10.7 - 15.2 m	10.4 - 17.4 m	10.7 - 15.2 m	13.4 - 16.2 m
2.74 m height at 0.41 bar **	10.4 - 11.0 m	12.2 - 14.0 m	11.0 - 12.8 m	10.4 - 13.4 m
2.74 m height at 0.69 - 1.03 bar	11.0 - 15.8 m	11.6 - 18.0 m	11.9 - 16.8 m	14.0 - 17.4 m
Maximum Spacing***				
at 0.41 bar **	3.0 m	3.0 m	3.0 m	3.0 m
at 0.69 - 1.03 bar	5.5 m	6.1 m	5.5 m	4.6 m
Pressure at the nozzle				
Minimum	0.41 bar	0.41 bar	0.41 bar	0.41 bar
Maximum	1.03 bar	1.03 bar	1.03 bar	1.03 bar

* It is recommended that larger nozzle sizes be used only on soils that can handle higher application rates.

** Senninger recommends 0.69 bar for optimum performance. 0.41 bar can be used for nozzles #12 and larger.

*** For optimum performance, Senninger recommends the use of maximum spacing for 1-2 spans only.

Note: Always mount the i-Wob2 on a minimum of 0.6 m reinforced flexible hose. The hose must be on the outlet end of any semi-rigid or rigid drop. Keep the i-Wob2 above crop canopy when outlet spacing exceeds 3.0 m. This is especially important on high profile crops.

ORDER CODE	DESCRIPTION
IWOB200B3UP3	iWob 2 UP3 - Standard Angle 9 Groove Black Deflector
IWOB200B3SA6UP3	iWob 2 UP3 - Standard Angle 6 Groove Grey Deflector
IWOB200B3LA9UP3	iWob 2 UP3 - Low Angle 9 Groove Blue Deflector
IWOB200B3LAUP3	iWob 2 UP3 - Low Angle 6 Groove White Deflector
UP3 NOZZLES	
UP3NZXX	UP3 nozzles pinch & pull - sizes from #00 to #26 (including half sizes)
UP3NZCD	UP3 dual nozzle carrier for fast nozzle change at sprinkler
PIVOT DROP WEIGHTS	
MAGWGTRB	Magnum weight for I-Wob and Xi-Wob
UNIMAGWGT	Universal Magnum Weight 0.39kg, fits all Senninger Pivot Sprinklers

Xi-Wob™

The Senninger® Xi-Wob provides the same low application intensity and uniform distribution pattern that has made the i-Wob the leading pivot sprinkler on the market. The Xi-Wob's patented counter balance technology makes it ideal for installation on semi-rigid PE drops, steel drops and flexible hose drops when used with the Magnum weight.



Model 610 (Black)
6-groove
15° Trajectory
Large droplets

Model 615 (Blue)
6-groove
10° Trajectory
Medium droplets

Model 910 (Grey)
9-groove
10° Trajectory
Smaller droplets

Features

- Uses Wobbler® Technology - unique rotary action combined with wobbling grooved deflectors
- Outstanding uniformity over a large area for low application intensity
- Low pressure operation saves money and energy - 10 to 15 psi (0.69 to 1.03 bar)
- Three different models available based on desired trajectory and droplet size
- UP3 snap-in nozzle is easy to remove for cleaning or changing. To remove the nozzle simply pinch and pull, then place and click to install

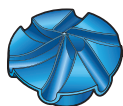
Xi-Wob System Assembly

- *The Xi-Wob must be mounted no more than 0.3m below the truss rod on semi-rigid Polyethylene or steel drops. Do not PVC drops*
- *The Xi-Wob can also be mounted on flexible hose drops when used with the Universal Magnum Weight.*



Use the Magnum Weight on flexible hose installations.

Three different deflector models based on desired trajectory and droplet size.



XI-WOB™ DESIGN CRITERIA	Model 610 (Blue) 6-Groove 10° Trajectory Medium Droplets	Model 615 (Black) 6-Groove 15° Trajectory Large Droplets	Model 910 (Grey) 9-Groove 10° Trajectory Small Droplets
Nozzle sizes			
Minimum	#7 2.78 mm	#10 3.97 mm	#10 3.97 mm
Maximum*	#24 9.53 mm	#24 9.53 mm	#24 9.53 mm
Flows			
Minimum	248 L/hr	509 L/hr	509 L/hr
Maximum	3584 L/hr	3584 L/hr	3584 L/hr
Diameters			
Minimum at 0.91 m	9.1 m	11.6 m	0.1 m
Maximum at 0.91 m	12.5 m	13.1 m	11.0 m
Minimum at 1.83 m	10.7 m	13.1 m	11.6 m
Maximum at 1.83 m	13.7 m	15.2 m	13.1 m
Minimum at 2.74 m	11.3 m	14.0 m	13.1 m
Maximum at 2.74 m	14.3 m	16.8 m	15.2 m
Maximum Spacing**			
at 1.8 m ground clearance	5.5 m	6.1 m	5.5 m
at 2.74 m ground clearance	5.5 m	6.1 m	5.5 m
Pressure at the Nozzle			
Minimum	0.69 bar	0.69 bar	0.69 bar
Maximum	1.03 bar	1.03 bar	1.03 bar

* It is recommended that larger nozzle sizes be used only on soils that are suited for higher application rates.

** For optimum performance, Senninger recommends the use of maximum spacing for 1-2 spans only.

Note: When outlet spacing exceeds 3.0 m, keep the Xi-Wob above crop canopy. This is especially important on high profile crops. Not warranted for rigid installation on offsets or booms larger than 3.2 m. Longer offsets and booms require a minimum of 0.61 m reinforced flex hose.

ORDER CODE	DESCRIPTION
XIWOB00B3610UP3	XI-Wobb 2 UP3 - 6 groove 10° blue deflector
XIWOB00B3615UP3	XI-Wobb 2 UP3 - 6 groove 15° black deflector
XIWOB00B3910UP3	XI-Wobb 2 UP3 - 9 groove 10° grey deflector
UP3 NOZZLES	
UP3NZXX	UP3 nozzles pinch & pull - sizes from #00 to #26 (including half sizes)
UP3NZCD	UP3 dual nozzle carrier for fast nozzle change at sprinkler
PIVOT DROP WEIGHTS	
MAGWGTRB	Magnum weight for I-Wob and Xi-Wob
UNIMAGWGT	Universal Magnum Weight 0.39kg, fits all Senninger Pivot Sprinklers

LDN[®] Dynamic Drive

The LDN[®] Dynamic Drive is an economical solution that doesn't sacrifice performance. Built on the LDN sprinkler platform, the Dynamic Drive features a modular design and easy clean nozzles that make maintenance easier and more efficient. Its advanced brake technology ensures a smooth and consistent movement, offering optimum control for a wide and uniform application.



Low Pressure DROP
(Green deflector)

High Pressure DROP
(Orange deflector)

Part Circle
(Mustard deflector)

DROP HOSE AND PART-CIRCLE ASSEMBLY

Features

- Interchangeable parts make maintenance easier and allow for tool-free assembly and disassembly
- One sprinkler model and one pressure regulator model can be installed across the machine
- The LDN[®] Dynamic Drive drop models can be mounted on rigid drops or flexible hose drops
- When using flexible hose, a weight is recommended
- When using the Senninger[®] Universal Magnum Weight[™], thread onto the LDN bracket base
- Conventional slip over weights can be used with the LDN Dynamic Drive drop models
- Mount the LDN Dynamic Drive drop models no less than 0.91m above the ground
- Mount the LDN Dynamic Drive part-circle model on a semi-rigid or rigid drop to ensure proper distribution



Use the Magnum Weight on flexible hose installations.

LDN[®] Dynamic Drive



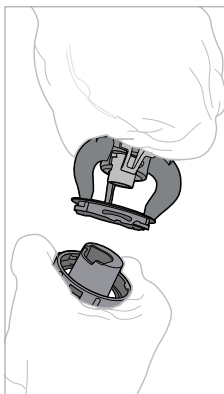
DROP HOSE SYSTEM DESIGN CRITERIA	Low Pressure DROP (Green Deflector)	High Pressure DROP (Orange Deflector)
Nozzle Sizes		
Minimum	#6 2.38 mm	#6 2.38 mm
Maximum*	#26 10.32 mm	#26 10.32 mm
Flow Range		
Minimum	182 L/hr	223 L/hr
Maximum	3402 L/hr	5892 L/hr
Diameters		
0.91 m height	7.6 - 11.9 m	7.9 - 14.3 m
1.83 m height	8.2 - 14.9 m	8.5 - 18 m
2.74 m height	9.4 - 15.5 m	11.6 - 18 m
Maximum Spacing		
2.74 m ground clearance	4.6 m	6.1 m
Pressure at the nozzle		
Minimum and Maximum	0.69 bar	1.03 - 2.07 bar

* It is recommended that larger nozzle sizes be used only on soils that are suited for higher application rates.

Note: When outlet spacing exceeds 3.0 m, keep Dynamic Drive sprinklers above crop canopy. This is especially important on high profile crops. Not warranted for rigid installation on offsets or booms larger than 3.2 m.

REMOVE ENGINE MODULE

To remove the engine module, grasp the LDN bracket base with one hand and the engine modules extension bracket ring with the other. Then twist in opposite directions.



PART-CIRCLE SYSTEM DESIGN CRITERIA	Part-Circle (Mustard Deflector)
Nozzle Sizes	
Minimum	#8 3.18 mm
Maximum*	#15 5.95 mm
Flow Range	
Minimum	325 L/hr
Maximum	1996 L/hr
Radius	
2.74 m height	6.4 to 8.2
Pressure at the nozzle	
Minimum and Maximum	0.69 - 2.07 bar

* It is recommended that larger nozzle sizes be used only on soils that are suited for higher application rates.

DROP HOSE AND PART-CIRCLE ASSEMBLIES



Minimum ground clearance of 3.0 ft (0.91 m)

ORDER CODE	DESCRIPTION
LDN DYNAMIC DRIVE ASSEMBLIES	
LDNDEMAMSDLP3G	Low Pressure 69kPa dynamic drive module - Green deflector
LDNDEMAMSDHP3G	High Pressure 103kPa > 200kPa dynamic drive module - Orange deflector
LDNDEMAMSDPC12G	Part Circle 69kPa > 200kPa dynamic drive module - Mustard deflector
PIVOT DROP WEIGHTS	
MAGWGTSPLP	Magnum weight for LDN series, slides over the top
UNIMAGWGWT	Universal Magnum Weight 0.39kg, fits all Senninger Pivot Sprinklers

LEPA & Close Spacing

LEPA (Low Energy Precision Application) Close Spacing is a water efficient irrigation practice that relies on bubble applicators. LEPA system gently deliver water from a height of 20 to 46 cm above the ground, without spraying, to combat wind-drift and prevent evaporation loss.



Features

- Prevent wind-drift losses
- Minimise evaporative loss
- Avoid wetting plant canopy in row crops
- Achieve a more uniform root zone coverage
- Can increase yield using less water

Easy Conversion to and from Spray Irrigation

By combining a LEPA surface with a deflector pad, each of these allows for easy conversion between LEPA application and spray irrigation. Simply twist and unlock the deflector pad. Flip it over and twist it to lock it back in place. The choice of deflector pads is based on the desired trajectory and spray pattern.

LDN® Wide Spray Bubble Assemblies

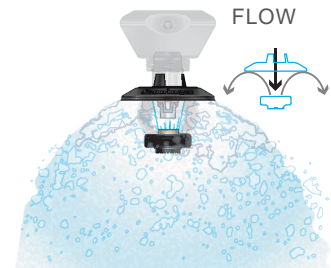
The Wide Spray Bubble provides a total coverage solution for 0.76 to 1.5m spacing. It produces a wide gentle aerated pattern suitable for most crops and soils.



LEPA & Close Spacing

LDN® Shroud™ with Pad Inserts

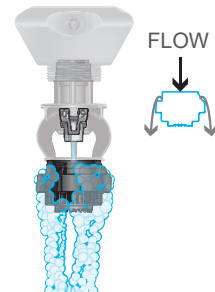
The Shroud is used in conjunction with deflector pads containing a bubble or chem pad insert. The Shroud deflects the water from the insert down in a gentle dome-shaped pattern, providing complete coverage of the field. Due to its less concentrated distribution, it can be used on fields without furrows and is often used for germination as well as irrigation.



 LDNSCUP3 LDN Shroud with clips	CONCAVE	FLAT	CONVEX	
				Beige Bubble Insert
				Red CM1 Insert
				Maroon CM2 Insert

LDN® with UP3® Bubbler Pad Inserts

The bubbler side of the deflector pad gently deposits water onto the soil surface in a bubbling stream. This aerated cascading stream resists the effects of wind and evaporation.



CONCAVE	FLAT	CONVEX
		

ORDER CODE	DESCRIPTION
LDNBRASMUP3	LDN UP3 20mm Sprinkler Bracket (no deflector pad or nozzle)
LDNPHDFUP3B	Bubbler pad assembly, flat black, 33 grooves
LDNPHDCUP3B	Bubbler pad assembly, concave blue, 33 grooves
LDNPHDCBB	Bubbler pad assembly, concave blue with beige bubble insert, 33 grooves
LDNSCUP3	LDN Shroud with Clips
LDNPHDB	LDN Bubbler pad beige insert
PIVOT DROP WEIGHTS	
MAGWGTSLP	Magnum weight for LDN series, slides over the top
UNIMAGWGT	Universal Magnum Weight 0.39kg, fits all Senninger Pivot Sprinklers

Other bubbler pads available, also complete bubbler sprinkler assemblies

LDN[®] Spray Irrigation

The LDN[®] was the first spray nozzle for pivots providing the option to stack multiple deflector pads. Each additional pad has extra grooves that divide larger flows into multiple streams.

Features

- Widens the wetted footprint of larger flows to help match the soil's infiltration rate to reduce runoff
- The additional streams also help eliminate small droplets to reduce wind drift and maintain pattern integrity
- Low pressure operation of 0.41 to 1.38 bar can reduce pumping costs
- UP3[®] snap-in nozzle is easy to remove for cleaning. To remove the nozzle, simply pinch and pull, then place and click to install

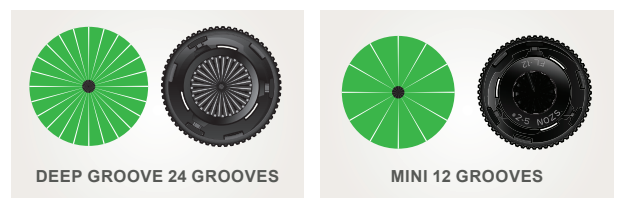
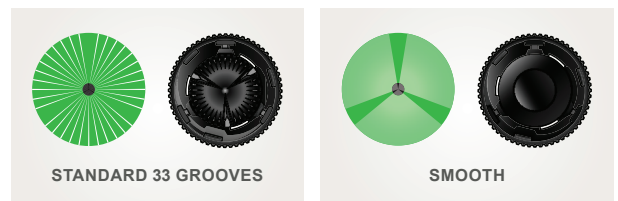
NOZZLE NUMBER & SIZE			PADS
02	1/32"	0.79 mm	Mini 12
03	3/64"	1.19 mm	
04	1/16"	1.59 mm	Mini 24
05	5/64"	1.98 mm	
06	3/32"	2.38 mm	Single
07	7/64"	2.78 mm	
08	1/8"	3.18 mm	
09	9/64"	3.57 mm	
10	5/32"	3.97 mm	
11	11/64"	4.37 mm	
12	3/16"	4.76 mm	
13	13/64"	5.16 mm	
14	7/32"	5.56 mm	
15	15/64"	5.95 mm	
16	1/4"	6.35 mm	
17	17/64"	6.75 mm	Triple
18	9/32"	7.14 mm	
19	19/64"	7.54 mm	
20	5/16"	7.94 mm	
21	21/64"	8.33 mm	
22	11/32"	8.73 mm	
23	23/64"	9.13 mm	
24	3/8"	9.53 mm	
25	25/64"	9.92 mm	
26	13/32"	10.32 mm	



The LDN is incredibly versatile thanks to its various deflector pad options. Each surface is also available in three basic geometries based on the desired trajectory of throw – flat (black), concave (blue) for a slightly upward spray, and convex (green) for a slightly downward spray.



The surfaces of the deflector pads (smooth, grooved, medium groove, or deep groove) each delivers a different spray pattern and droplet size.



LDN[®] Spray Irrigation

LDN DESIGN CRITERIA	Standard or Medium 33 Groove	24 Deep Groove	Mini 24 Groove	Mini 12 Groove
Nozzle sizes				
Minimum	#10 3.97 mm	#10 3.97 mm	#4 1.59 mm	#2 0.79 mm
Maximum*	#26 10.32 mm	#26 10.32 mm	#9.5 3.76 mm	#5 1.98 mm
Flows				
Minimum	395 L/hr	395 L/hr	61 L/hr	16 L/hr
Maximum	4811 L/hr	4811 L/hr	650 L/hr	177 L/hr
Pressure at the Nozzle				
Minimum	0.41 bar	0.41 bar	0.41 bar	0.41 bar
Maximum	1.38 bar	1.38 bar	1.38 bar	1.38 bar
Maximum Spacing				
Above crop canopy**	3.4 bar	3.4 bar	3.4 bar	2.1 bar
Below crop canopy	2.1 bar	2.1 bar	2.1 bar	2.1 bar



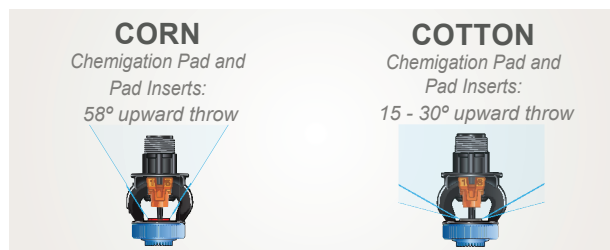
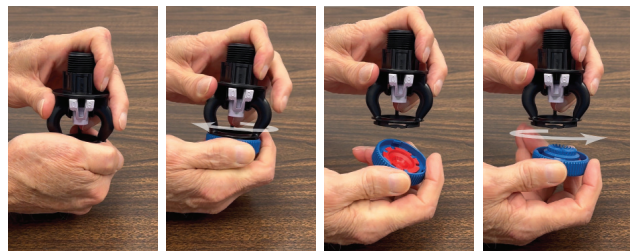
Use the Magnum Weight on flexible hose installations.

* It is recommended that larger nozzle sizes be used only on soils that can handle higher application rates. The LDN is not recommended for surface water or effluent application.

** Maximum spacing for convex pads above crop canopy is 3 m

Chemigation

The LDN[®] offers chemigation pad inserts for corn or cotton. These are designed to produce an upward spray under the crop canopy to wash the underside of the leaves, where pests might hide. To change from irrigation to chemigation mode, simply twist and unlock the deflector pad. Flip it over and twist to lock it back in place. Any LDN Pad can be backed with a corn chemigation pad or a cotton chemigation pad insert.



ORDER CODE	DESCRIPTION
LDN LOW DRIFT PIVOT SPRINKLERS - 20MM MALE THREAD	
LDNBRASMUP3	LDN UP3 20mm sprinkler bracket (no deflector pad or nozzle)
LDNHDCON	LDN heavy duty connector for double and triple pad sprinklers
LDNPHDMC	Concave blue deflector pad, 24 mini grooves, nozzles 04>09
LDNPHDCDG	Concave blue deflector pad, 24 deep grooves
LDNPHDC	Concave blue deflector pad, 33 standard grooves
LDNPHDCMG	Concave blue deflector pad, 33 medium grooves
LDNPHDMF	Flat black deflector pad, 24 mini grooves, nozzles 04>09
LDNPHDFDG	Flat black deflector pad, 24 deep grooves
LDNPHDFS	Flat black deflector pad, smooth
Other LDN pads available, also complete LDN sprinklers with single, double or triple pad combinations	
PIVOT DROP WEIGHTS	
MAGWGTSPL	Magnum weight for LDN series, slides over the top
UNIMAGWGT	Universal Magnum Weight 0.39kg, fits all Senninger Pivot Sprinklers

LDN[®] Part Circle

The Senninger Part-Circle LDN is specifically designed to distribute water away from wheel tracks to minimize tracking.

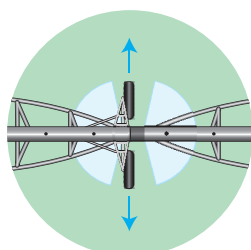
Features

- Can be used in conjunction with standard full circle LDNs or other Senninger sprinklers on the remainder of a pivot
- Distributes water in a 170° pattern with 17 streams at a 10° trajectory for minimum evaporative loss
- Integrated base allows the applicator to be installed directly into a pressure regulator or onto a standard 3/4" NPT female connection with no special threads or fittings required
- Maximum radius of throw: up to 29 ft (8.8m)
- UP3 snap-in nozzle is easy to remove for cleaning or changing. To remove the nozzle simply pinch and pull, then place and click to install. *Dual Nozzle Carrier available.*

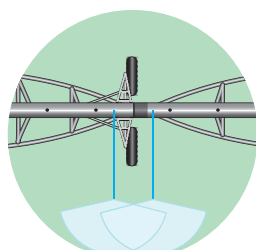


THE PART-CIRCLE LDN DISTRIBUTES WATER AWAY FROM WHEEL TRACKS.

For use on rigid drops only. Distribution pattern varies by nozzle size and pressure.



Mount the Part Circle LDN to spray away from the towers regardless of the direction of the pivot.



Mount the Part Circle LDN to spray in the opposite direction the pivot is travelling.



LDN PART-CIRCLE DESIGN CRITERIA

	Part-Circle
Nozzle sizes	
Minimum	#6 2.38mm
Maximum*	#18 7.14mm
Flows	
Minimum	141 L/hr
Maximum	2351 L/hr
Radius	
Minimum at 0.91 m	2.7m
Maximum at 0.91 m	7.6m
Minimum at 1.83 m	3.4m
Maximum at 1.83 m	8.5m
Minimum at 2.74 m	4.1m
Maximum at 2.74 m	8.8m
Pressure at Nozzle	
Minimum	0.41 bar
Maximum	1.03 bar

Part Circle Solutions

PART CIRCLE	I-WOB2	XI-WOB	DYNAMIC DRIVE	LDN
LDN Part Circle	●	●	●	●
Dynamic Drive PC	●	●	●	●
Fan Spray	●	●	●	●

- Recommended Performance
- Average Performance
- Low Performance

* For Part Circle Option Part Numbers please speak to your HR Products Representative

*It is recommended that larger nozzle sizes be used only on soils that can handle higher application rates.

Fan Spray

Used to assist with end-of-pivot flush. The directional spray pattern of the Senninger Fan Spray makes it ideal for distributing water away from wheel tracks to minimize tracking.

Features

- Versatile: Can be mounted upright or inverted
- Durable: No moving parts for longer product life
- Flows: 93 to 5281 L/hr
- Colour coded nozzle for easy size identification
- Nozzle warranted for five years to retain original orifice size



Nozzle Number and Nozzle color	Nozzle Orifice Size	0.41 bar	0.69 bar	1.03 bar	1.38 bar	2.07 bar	2.76 bar
#5 Beige	1.98 mm	93	120	143	166	211	245
#6 Gold	2.38 mm	139	179	213	248	304	354
#7 Lime	2.78 mm	191	245	293	341	413	479
#8 Lavender	3.18 mm	245	316	377	438	534	622
#9 Grey	3.57 mm	307	397	472	550	668	790
#10 Turquoise	3.97 mm	379	491	645	681	831	970
#11 Yellow	4.47 mm	447	577	700	820	997	1163
#12 Red	4.76 mm	534	688	831	970	1192	1397
#13 White	5.16 mm	636	822	981	1140	1404	1647
#14 Blue	5.56 mm	740	956	1142	1329	1644	1919
#15 Dk. Brown	5.95 mm	852	1102	1315	1526	1883	2208
#16 Orange	6.35 mm	977	1263	1506	1751	2142	2505
#17 Dk. Green	6.75 mm	1097	1417	1692	1965	2405	2800
#18 Purple	7.14 mm	1226	1581	1885	2189	2671	3107
#19 Black	7.54 mm	1349	1742	2080	2417	2955	3432
#20 Dk. Turquoise	7.94 mm	1479	1908	2276	2644	3268	3779
#21 Mustard	8.33 mm	1608	2076	2478	2878	3577	4127
#22 Maroon	8.73 mm	1737	2244	2678	3112	3902	4520
#23 Cream	9.13 mm	1933	2437	2909	3380	4250	4892
#24 Dk. Blue	9.53 mm	2037	2630	3139	3648	4586	5281

FAN SPRAY DESIGN CRITERIA

	Upright	Inverted
Nozzle size		
Minimum	#5 1.98mm	#5 1.98mm
Maximum*	#24 9.53mm	#24 9.53mm
Flows		
Minimum	93 L/hr	93 L/hr
Maximum	5281 L/hr	5281 L/hr
Average Radius		
Minimum at 1.83 m	3.0 m	1.9 m
Maximum at 1.83 m	8.2 m	4.7 m
Pressure at Nozzle		
Minimum	0.41 bar	0.41 bar
Maximum	2.76 bar	2.76 bar

Distribution pattern varies by nozzle size and pressure.

ORDER CODE	DESCRIPTION
	FAN SPRAY 180° FIXED ARC SPRAY
SNXX	15mm body complete with nozzle, select #5 through #24

Nozzle Flow Chart

Features

- Patented easy change nozzle
- Colour coded for easy size identification
- Excellent durability
- Warranted to maintain correct orifice size for five years



EASY-CLEAN / EASY-CHANGE UP3 NOZZLE

Just pinch and pull to remove the nozzle then place and click to re-install. Cleaning and changing nozzles is easy and convenient. There is no need to disassemble or remove the sprinkler.

The colour coded nozzles are highly visible and easy to identify. The nozzle numbers (corresponding to orifice sizes in 64ths of an inch) are visible on the ears, with half sizes denoted beneath the second digit and the notches on the lower edge of the nozzle.

Nozzle Number and Nozzle color	Nozzle Size	L/hr								
		0.41 bar	0.69 bar	1.03 bar	1.38 bar	1.72 bar	2.07 bar	2.42 bar	2.76 bar	3.45 bar
#2 Pink	0.79 mm	16	20	25	27	32	34	36	41	45
#2.5	0.99 mm	25	32	39	43	50	55	59	64	70
#3 Ice	1.19 mm	34	45	55	64	70	77	84	91	100
#3.5	1.4 mm	48	61	75	86	98	107	114	123	136
#4 Light Blue	1.59 mm	61	79	98	114	127	139	150	159	179
#4.5	1.78 mm	79	102	125	143	161	175	191	202	227
#5 Beige	1.98 mm	98	125	154	177	198	218	236	252	282
#5.5	2.16 mm	118	152	186	216	241	263	286	304	341
#6 Gold	2.38 mm	141	182	223	257	286	313	341	363	407
#6.5	2.59 mm	166	213	261	302	338	370	400	427	477
#7 Lime	2.78 mm	193	248	304	350	393	429	463	495	554
#7.5	2.97 mm	220	286	350	402	450	493	534	570	638
#8 Lavender	3.18 mm	252	325	397	459	513	563	609	650	727
#8.5	3.38 mm	284	368	450	520	581	636	686	734	820
#9 Grey	3.57 mm	318	411	504	581	652	713	770	824	922
#9.5	3.76 mm	357	459	563	650	727	795	859	918	1027
#10 Turquoise	3.97 mm	395	509	625	720	806	881	954	1020	1138
#10.5	4.17 mm	436	561	688	795	888	974	1052	1124	1256
#11 Yellow	4.37 mm	477	618	756	872	977	1070	1154	1233	1381
#11.5	4.57 mm	522	675	827	954	1067	1170	1263	1349	1510
#12 Red	4.76 mm	570	736	902	1040	1163	1274	1376	1472	1644
#12.5	4.95 mm	618	799	979	1129	1263	1383	1494	1597	1785
#13 White	5.16 mm	670	865	1058	1222	1367	1497	1617	1728	1933
#13.5	5.36 mm	722	933	1142	1320	1474	1615	1744	1865	2085
#14 Blue	5.56 mm	777	1004	1229	1420	1588	1738	1878	2008	2244
#14.5	5.77 mm	834	1077	1320	1524	1703	1865	2015	2153	2408
#15 Dk. Brown	5.95 mm	893	1154	1413	1631	1824	1996	2158	2305	2578
#15.5	6.15 mm	954	1231	1508	1742	1946	2133	2303	2462	2753
#16 Orange	6.35 mm	1018	1313	1608	1856	2076	2274	2455	2626	2934
#16.5	6.55 mm	1081	1397	1710	1974	2208	2419	2612	2794	3123
#17 Dk. Green	6.75 mm	1149	1483	1815	2096	2344	2569	2773	2966	3316
#17.5	6.93 mm	1217	1572	1924	2221	2485	2721	2939	3143	3514
#18 Purple	7.14 mm	1288	1663	2035	2351	2628	2880	3109	3325	3718
#18.5	7.34 mm	1360	1756	2151	2482	2775	3041	3284	3511	3925
#19 Black	7.54 mm	1433	1851	2267	2619	2928	3207	3464	3702	4140
#19.5	7.75 mm	1510	1949	2387	2757	3082	3375	3645	3897	4359
#20 Dk. Turquoise	7.94 mm	1588	2049	2510	2898	3241	3550	3834	4100	4583
#20.5	8.13 mm	1667	2151	2635	3043	3402	3727	4025	4304	4811
#21 Mustard	8.33 mm	1749	2255	2764	3191	3568	3909	4222	4513	5044
#21.5	8.53 mm	1831	2362	2894	3341	3736	4093	4420	4724	5283
#22 Maroon	8.73 mm	1915	2471	3028	3495	3907	4281	4624	4942	5526
#22.5	8.94 mm	2001	2582	3162	3652	4084	4472	4831	5165	5774
#23 Cream	9.13 mm	2087	2696	3302	3811	4263	4670	5042	5392	6028
#23.5	9.32 mm	2176	2810	3441	3972	4443	4867	5256	5619	6282
#24 Dk. Blue	9.53 mm	2267	2925	3584	4138	4627	5067	5474	5853	6543
#24.5	9.73 mm	2358	3043	3727	4304	4811	5269	5692	6085	6805
#25 Copper	9.92 mm	2448	3162	3872	4472	4999	5476	5914	6323	7070
#25.5	10.11 mm	2542	3282	4018	4640	5188	5683	6139	6562	7336
#26 Bronze	10.32 mm	2635	3402	4168	4811	5378	5892	6364	6805	7606

End Spray

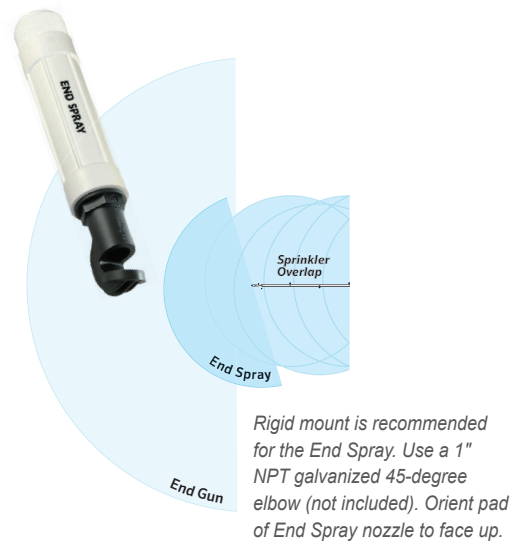
Senninger’s low pressure End Spray is designed for use at the end of a machine. It can help irrigate the area between the last sprinkler and the end gun. The low angle design resists the effects of wind and the large orifice resists clogging.

Features

- No moving parts for longer product life
- Provides a 180° distribution with good uniformity over a large area to help reduce compaction and run-off
- End Spray must be installed on a 1” F NPT connection
- One year warranty on materials and workmanship



END SPRAY DESIGN CRITERIA	
Nozzle Sizes	
Minimum	#20 7.94 mm
Maximum	#38 15.08 mm
Flows	
Minimum	1840 L/hr
Maximum	11106 L/hr
Average Radius	
at 2.13 - 3.66 m	7.6 - 8.8 m
Pressure at the Nozzle	
Minimum	0.69 bar
Maximum	1.72 bar



ORDER CODE	DESCRIPTION
END SPRAYS	
ESPA4MXX	End spray complete with nozzle (quote nozzle number)
ESPNZXX	End spray nozzle with O-ring #20,#26,#32 or #38

Goosenecks

Senninger goosenecks are constructed of non-corrosive, UV-resistant thermoplastic materials for long life. This reduces plugging from rust flaking sometimes associated with galvanized goosenecks.

Features

- Three models available: 180° single, 125° single and 125° double
- Lightweight for easier handling and installation
- Lower freight costs
- Inlet connections: 3/4" NPT male
- Outlet connections: 3/4" NPT male or barb



180° Single

The Senninger line of 125° goosenecks and truss rod hose slings allow the conversion of wide-spaced machines to closer drop spacing and reduces or eliminates the need for adding extra outlets.



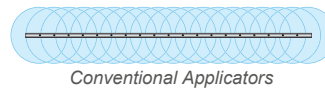
125° Double

Use only with Truss Rod Hose Slings

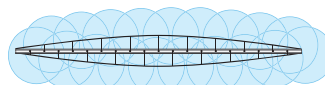


125° Single

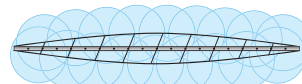
Water Patterns



Conventional Applicators



Single 125° Goosenecks
(with Truss Rod Hose Slings)



Double 125° Goosenecks
(with Truss Rod Hose Slings)

GOOSENECK SYSTEM ASSEMBLY

- Max recommended pressure: 120 psi (8.27 bar)
- Max recommended flow: 20 gpm (4543 L/hr) or 15 gpm per side for the double model
- Max recommended water temperature: 110° F (43° C)
- Ambient temperatures to 150° F (66° C) will not damage goosenecks
- Attaches to mainline using galvanized nipple or Senninger's impact-modified thermoplastic nipple (PVC nipples not recommended)
- Wrench tighten using nipple hex until snug. Overtightening may cause issues
- If using a sealant, use only Teflon tape
- When using rigid drops in high profile crops, drop length should not exceed one foot below truss rod.

Note: Any modifications or deletions regarding installation requirements will void warranty.

Goosenecks shown are pre-assembled with Senninger's impact-modified thermoplastic nipple. Use of other plastic nipples is not recommended. Also available without nipple.

ORDER CODE	DESCRIPTION
GNAP125DB	Gooseneck 125° double 20mm M inlet x 20mm barb outlet
GNAP125DM	Gooseneck 125° double 20mm M inlet x 20mm M outlet
GNAP125SB	Gooseneck 125° single 20mm M inlet x 20mm barb outlet
GNAP125SM	Gooseneck 125° single 20mm M inlet x 20mm M outlet
GNAP180X6B	Gooseneck 180° single 20mm M inlet x 20mm barb outlet
GNAP180X6M	Gooseneck 180° single 20mm M inlet x 20mm M outlet

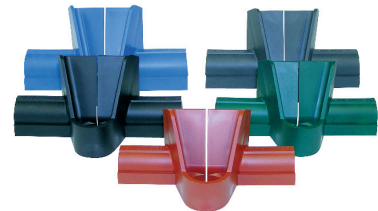
Truss Rod Hose Slings

Senninger’s single and double 125° goosenecks used with truss rod hose slings provide easy positioning of drops along the span. They help lower application intensity by increasing the wetted area of coverage to promote better soil infiltration.



Features

- Easy to install
- Colour coded models for various truss rod sizes:
5/8" (rust), 1 1/16" (green), 3/4" (black), 1 3/16" (grey), 7/8" (blue)
- Securely fastens 3/4" flexible hose to the truss rod to maintain the drop/sprinkler position and allows for easy adjustments
- Supports flexible hose to prevent kinking and abrasive wear
- Used in conjunction with the 125° model goosenecks
- Helps reduce pattern interruption from colliding streams



ORDER CODE	DESCRIPTION
TRHS625	Truss rod hose sling for 5/8" rod, colour Rust
TRHS687	Truss rod hose sling for 1 1/16" rod, colour Green
TRHS750	Truss rod hose sling for 3/4" rod, colour Black
TRHS812	Truss rod hose sling for 1 3/16" rod, colour Grey
TRHS875	Truss rod hose sling for 7/8" rod, colour Blue

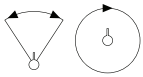
KOMET ULTRA SPRINKLERS

SPRINKLERS

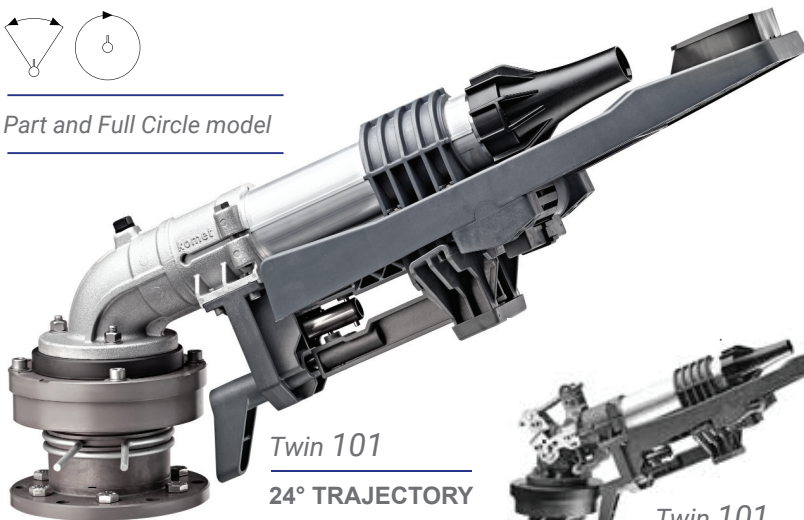


Komet Ultra Sprinklers

Twin 101 Ultra | Part or Full Circle



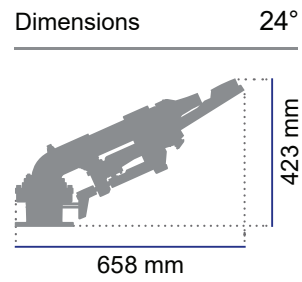
Part and Full Circle model



Twin 101
24° TRAJECTORY



Twin 101
VARI ANGLE 15° - 45°



Dimensions 24°



Twin 101
PIVOT 18°

The Twin Ultra models are suitable for travelers, pivot end-guns or solid set installations. In addition to the agricultural sector, they also excel in sports/turf irrigation and industrial environments - for dust suppression, log irrigation, waste water applications and mining.

Features

- Automatic speed control is a function of the materials used, internal parts are made from chemically treated stainless steel and inserted into an anodized housing to increase resistance to corrosion and wear.
- Ultra-long throw and uniform water distribution
- Made from high quality materials including technical polymers, marine grade aluminium and chemically treated stainless steel for a long product lifespan
- Dynamic jet breaker ensures better performance in low pressure operation - OPTIONAL
- Nozzles: 12mm - 28mm
- Optional 50mm BSP female connection available
- Twin 101 trajectory angle 24°
- Twin 101-VA trajectory angle 15° - 45°
- Twin 101 Pivot End Gun trajectory angle 18°

ORDER CODE	DESCRIPTION
TW10124	Full circle 101 Ultra Series sprinkler 24m > 60m radius
TW101-VA	Full / Part circle 101 Ultra Series - user settable vari angle 15° - 45°
TW101PC-18PIVOT	Twin 101 Ultra 18° fixed angle pivot end gun, part circle
KOMET NOZZLES AND FLANGES	
TW101NU-XX	Nozzles for 101 series , 12mm > 28mm (increments of 2mm)
TW101U-0-B5	Flange Adaptor converts flange to 50mm female BSP
KWF	Komet flat face weldable steel flange

Komet Ultra Sprinklers

Twin 101 Ultra | Part or Full Circle

Twin 101 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 12mm		Nozzle 14mm		Nozzle 16mm		Nozzle 18mm	
	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)
200	7.8	24.2	10.6	26.5	13.8	28.9	17.5	29.1
250	8.7	26.8	11.9	29.0	15.4	31.3	19.5	32.5
300	9.6	29.4	13.0	31.6	16.9	33.7	21.4	35.9
350	10.3	31.2	14.1	33.3	18.2	35.5	23.1	37.9
400	11.1	32.9	15.1	35.1	19.5	37.3	24.7	39.9
450	11.7	33.9	16.0	36.2	20.7	38.6	26.2	41.2
500	12.4	34.8	16.8	37.3	21.8	39.8	27.6	42.5
550	13.0	35.7	17.7	38.4	22.9	41.1	29.0	43.8
600	13.5	36.6	18.4	39.5	23.9	42.4	30.3	45.0
650	14.1	37.4	19.2	40.4	24.9	43.3	31.5	46.0
700	14.6	38.2	19.9	41.2	25.8	44.2	32.7	46.9

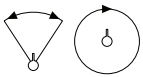
Twin 101 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 20mm		Nozzle 22mm		Nozzle 24mm		Nozzle 26mm		Nozzle 28mm	
	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)
200	21.7	29.4	26.1	29.8	31.1	30.2	36.7	30.6	42.3	30.9
250	24.2	33.8	29.2	34.4	34.7	35.1	41.0	35.8	47.3	36.5
300	26.5	38.2	31.9	39.1	38.0	39.9	44.9	41.0	51.8	42.1
350	28.7	40.4	34.5	41.6	41.1	42.9	48.5	44.4	56.0	45.9
400	30.7	42.5	36.9	44.2	43.9	45.8	51.8	47.8	59.8	49.7
450	32.5	43.9	39.1	45.7	46.6	47.6	55.0	49.8	63.5	52.0
500	34.3	45.2	41.2	47.3	49.1	49.3	58.0	51.8	66.9	54.3
550	35.9	46.5	43.2	48.7	51.5	50.9	60.8	53.5	70.2	56.2
600	37.5	47.7	45.2	50.1	53.8	52.5	63.5	55.3	73.3	58.1
650	39.1	48.7	47.0	51.2	56.0	53.7	66.1	56.5	76.3	59.3
700	40.6	49.7	48.8	52.3	58.1	54.9	68.6	57.7	79.2	60.6

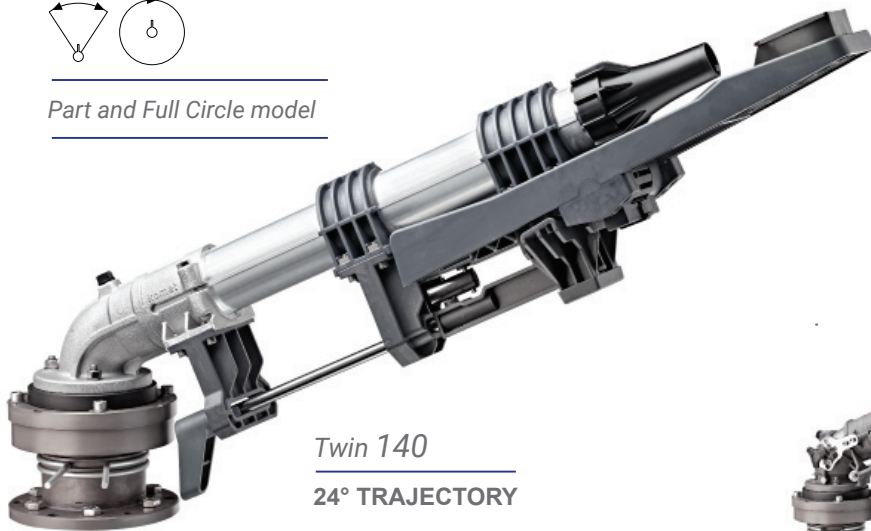
N.B. The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. A lowered trajectory angle improves the irrigation efficiency in windy conditions. For every 3° drop of the trajectory angle the throw is reduced by approximately 3 to 4%

Komet Ultra Sprinklers

Twin 140 Ultra | Part or Full Circle

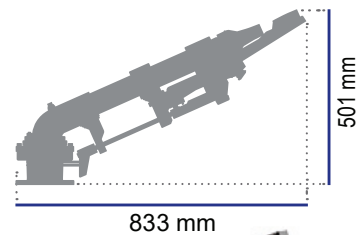


Part and Full Circle model



Twin 140
24° TRAJECTORY

Dimensions 24°



Twin 140
VARI ANGLE 15° - 45°

The Twin Ultra models are suitable for travelers, pivot end-guns or solid set installations. In addition to the agricultural sector, they also excel in sports/turf irrigation and industrial environments - for dust suppression, log irrigation, waste water applications and mining.

Features

- Automatic speed control is a function of the materials used, internal parts are made from chemically treated stainless steel and inserted into an anodized housing to increase resistance to corrosion and wear.
- Ultra-long throw and uniform water distribution
- Made from high quality materials including technical polymers, marine grade aluminium and chemically treated stainless steel for a long product lifespan
- Dynamic jet breaker ensures better performance in low pressure operation - OPTIONAL
- Nozzles: 16mm - 34mm
- Optional 50mm BSP female connection available
- Twin 140 trajectory angle 24°
- Twin 140-VA trajectory angle 15° - 45°

ORDER CODE	DESCRIPTION
TW14024	Full / Part circle 140 Ultra Series sprinkler - 24° Trajectory
TW140VA	Full / Part circle 140 Ultra Series - user settable vari angle 15° - 45°
KOMET NOZZLES AND FLANGES	
TW140NU-XX	Nozzles for 140 series , 16mm - 34mm for TW140Ultra & TW101 Ultra
TW101U-0-B5	Flange Adaptor converts flange to 50mm female BSP
KWF	Komet flat face weldable steel flange

Komet Ultra Sprinklers

Twin 140 Ultra | Part or Full Circle

Twin 140 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 16mm		Nozzle 18mm		Nozzle 20mm		Nozzle 22mm		Nozzle 24mm	
	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)
200	13.8	29.0	17.5	29.3	21.7	29.5	26.1	30.0	31.1	30.4
250	15.4	32.3	19.5	33.4	24.2	34.6	29.2	35.4	34.7	36.1
300	16.9	35.5	21.4	37.6	26.5	39.7	31.9	40.8	38.0	41.8
350	18.2	36.5	23.1	38.6	28.7	40.8	34.5	42.3	41.1	43.8
400	19.5	37.5	24.7	39.7	30.7	41.8	36.9	43.8	43.9	45.7
450	20.7	38.7	26.2	41.1	32.5	43.5	39.1	45.6	46.6	47.6
500	21.8	40.0	27.6	42.6	34.3	45.1	41.2	47.3	49.1	49.5
550	22.9	41.3	29.0	43.9	35.9	46.5	43.2	48.8	51.5	51.1
600	23.9	42.6	30.3	45.3	37.5	48.0	45.2	50.3	53.8	52.7
650	24.9	43.5	31.5	46.2	39.1	48.9	47.0	51.4	56.0	53.9
700	25.8	44.4	32.7	47.2	40.6	49.9	48.8	52.5	58.1	55.2

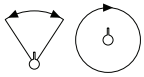
Twin 140 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 26mm		Nozzle 28mm		Nozzle 30mm		Nozzle 32mm		Nozzle 34mm	
	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)
200	36.7	30.7	42.3	31.0	48.6	31.3	55.7	31.7	62.5	32.0
250	41.0	36.4	47.3	36.7	54.3	37.0	62.3	37.3	69.8	37.6
300	44.9	42.1	51.8	42.3	59.5	42.6	68.2	42.9	76.5	43.3
350	48.5	45.0	56.0	46.1	64.3	47.0	73.7	47.8	82.6	48.9
400	51.8	47.8	59.8	50.0	68.7	51.3	78.8	52.7	88.3	54.6
450	55.0	50.0	63.5	52.3	72.9	54.1	83.6	56.0	93.7	57.9
500	58.0	52.1	66.9	54.6	76.8	56.9	88.1	59.3	98.7	61.3
550	60.8	53.8	70.2	56.5	80.5	58.9	92.4	61.2	103.6	63.5
600	63.5	55.6	73.3	58.4	84.1	60.8	96.5	63.2	108.2	65.7
650	66.1	56.8	76.3	59.6	87.6	62.1	100.4	64.5	112.6	67.2
700	68.6	58.0	79.2	60.9	90.9	63.3	104.2	65.8	116.8	68.7

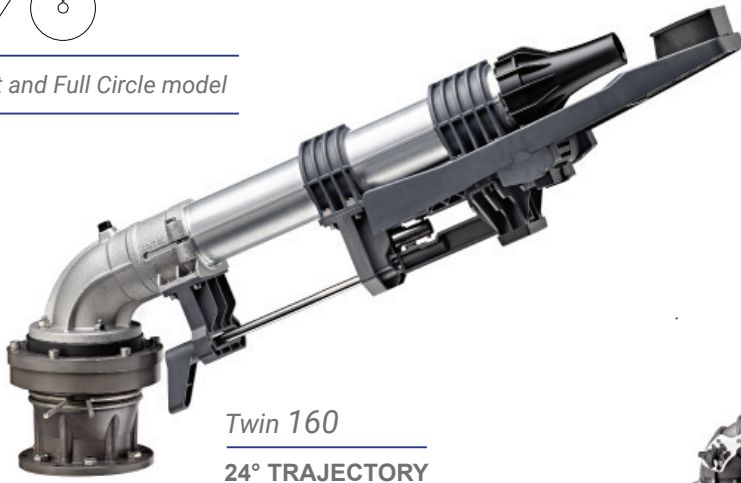
N.B. The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. A lowered trajectory angle improves the irrigation efficiency in windy conditions. For every 3° drop of the trajectory angle the throw is reduced by approximately 3 to 4%

Komet Ultra Sprinklers

Twin 160 Ultra | Part or Full Circle

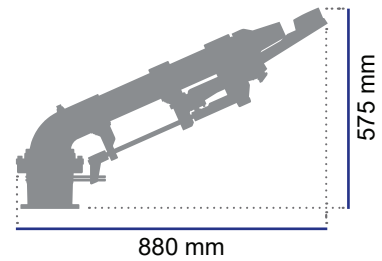


Part and Full Circle model



Twin 160
24° TRAJECTORY

Dimensions 24°



Twin 160
VARI ANGLE 15° - 45°

The Twin Ultra models are suitable for travelers, pivot end-guns or solid set installations. In addition to the agricultural sector, they also excel in sports/turf irrigation and industrial environments - for dust suppression, log irrigation, waste water applications and mining.

Features

- Automatic speed control is a function of the materials used, internal parts are made from chemically treated stainless steel and inserted into an anodized housing to increase resistance to corrosion and wear.
- Ultra-long throw and uniform water distribution
- Made from high quality materials including technical polymers, marine grade aluminium and chemically treated stainless steel for a long product lifespan
- Dynamic jet breaker ensures better performance in low pressure operation - OPTIONAL
- Nozzles: 18mm - 38mm
- Optional 50mm BSP female connection available
- Twin 160 trajectory angle 24°
- Twin 160-VA trajectory angle 15° - 45°

ORDER CODE	DESCRIPTION
TW16024PC	Full / Part circle 160 Ultra Series sprinkler 37m > 79m radius
TW160-VA	Full / Part circle 160 Ultra Series - user settable vari angle 15° - 45°
KOMET NOZZLES AND FLANGES	
TW160NU-XX	Nozzles for 160 series, 18mm > 40mm (increments of 2mm)
TW101U-0-B5	Flange Adaptor converts flange to 50mm female BSP
KWF	Komet flat face weldable steel flange

Komet Ultra Sprinklers

Twin 160 Ultra | Part or Full Circle

Twin 160 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 18mm		Nozzle 20mm		Nozzle 22mm		Nozzle 24mm		Nozzle 26mm		Nozzle 28mm	
	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)
300	21.7	37.8	26.9	39.9	32.4	41.0	38.5	42.0	45.6	42.3	52.6	42.5
350	23.4	39.4	29.0	41.6	34.9	43.1	41.6	44.6	59.2	45.9	56.8	47.1
400	25.1	41.0	31.0	43.2	37.4	45.3	44.5	47.3	52.6	49.5	60.7	51.7
450	26.6	42.3	32.9	44.7	39.6	46.9	47.2	49.0	55.8	51.4	64.4	53.8
500	28.0	43.6	34.7	46.2	41.8	48.5	49.7	50.8	58.8	53.4	67.9	55.9
550	29.4	44.7	36.4	47.3	43.8	49.7	52.1	52.0	61.7	54.7	71.2	57.5
600	30.7	45.7	38.0	48.4	45.8	50.9	54.4	53.3	64.4	56.1	74.4	59.0
650	31.9	46.7	39.5	49.4	47.6	52.0	56.7	54.5	67.1	57.4	77.4	60.2
700	33.2	47.7	41.0	50.4	49.4	53.1	58.8	55.7	69.6	58.6	80.3	61.5
750	34.3	48.5	42.5	51.4	51.2	54.1	60.9	56.8	72.0	59.7	83.1	62.5
800	35.4	49.3	43.9	52.3	52.8	55.1	62.9	57.9	74.4	60.7	85.9	63.6
850	36.5	50.2	45.2	53.2	54.5	56.0	64.8	58.9	76.7	61.7	88.5	64.4
900	37.6	51.0	46.5	54.1	56.0	57.0	66.7	59.9	78.9	62.6	91.1	65.3

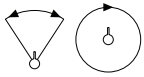
Twin 160 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 30mm		Nozzle 32mm		Nozzle 34mm		Nozzle 36mm		Nozzle 38mm		Nozzle 40mm	
	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)	m³/h	RAD (m)
300	60.4	42.8	69.1	43.2	77.5	43.5	86.8	43.8	97.0	44.1	106.6	44.5
350	65.2	48.0	74.6	48.8	83.7	50.0	93.7	51.1	104.7	52.1	115.1	53.1
400	69.7	53.1	79.8	54.5	89.4	56.5	100.2	58.3	112.0	60.2	123.1	61.4
450	74.0	55.7	84.6	57.6	94.9	59.6	106.3	61.6	118.8	63.6	130.5	64.7
500	78.0	58.3	89.2	60.8	100.0	62.8	112.0	64.9	125.2	67.0	137.6	68.1
550	81.8	59.9	93.5	62.3	104.9	64.6	117.5	66.9	131.3	69.2	144.3	70.5
600	85.4	61.4	97.7	63.8	109.5	66.3	122.7	68.8	137.1	71.4	150.7	72.9
650	88.9	62.7	101.7	65.1	114.0	67.9	127.7	70.6	142.7	73.2	156.9	75.0
700	92.2	64.0	105.5	66.5	118.3	69.4	132.5	72.3	148.1	75.1	162.8	77.0
750	95.5	65.0	109.2	67.5	122.5	70.6	137.2	73.6	153.3	76.6	168.5	78.7
800	98.6	66.1	112.8	68.6	126.5	71.8	141.7	74.9	158.3	78.0	174.1	80.4
850	101.6	66.9	116.3	69.4	130.4	72.7	146.0	75.8	163.2	78.9	179.4	81.4
900	104.6	67.8	119.6	70.3	134.2	73.5	150.3	76.7	168.0	79.8	184.6	82.4

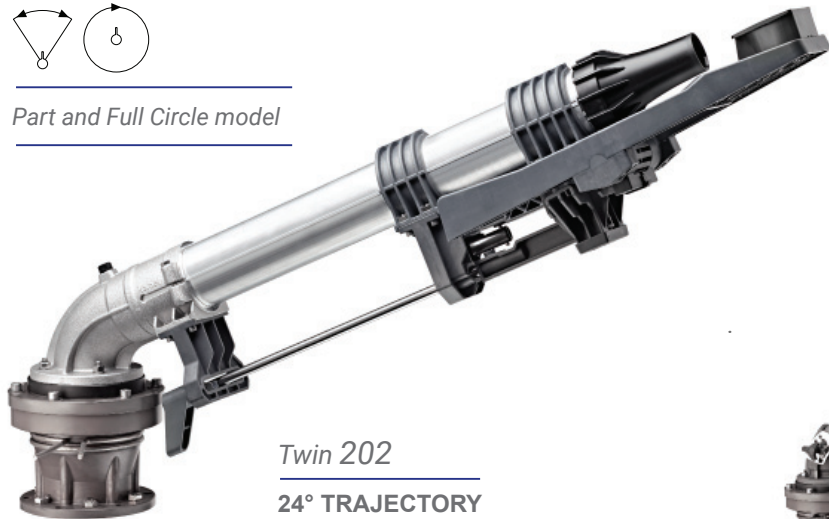
N.B. The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. A lowered trajectory angle improves the irrigation efficiency in windy conditions. For every 3° drop of the trajectory angle the throw is reduced by approximately 3 to 4%

Komet Ultra Sprinklers

Twin 202 Ultra | Part or Full Circle

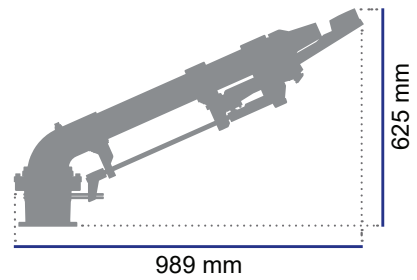


Part and Full Circle model



Twin 202
24° TRAJECTORY

Dimensions 24°



Twin 202
VARI ANGLE 15° - 45°

The Twin Ultra models are suitable for travelers, pivot end-guns or solid set installations. In addition to the agricultural sector, they also excel in sports/turf irrigation and industrial environments - for dust suppression, log irrigation, waste water applications and mining.

Features

- Automatic speed control is a function of the materials used, internal parts are made from chemically treated stainless steel and inserted into an anodized housing to increase resistance to corrosion and wear.
- Ultra-long throw and uniform water distribution
- Made from high quality materials including technical polymers, marine grade aluminium and chemically treated stainless steel for a long product lifespan
- Dynamic jet breaker ensures better performance in low pressure operation - OPTIONAL
- Nozzles: 22mm - 45mm
- Optional 50mm BSP female connection available
- Twin 202 trajectory angle 24°
- Twin 202VA trajectory angle 15° - 45°

ORDER CODE	DESCRIPTION
TW20224PC	Full / Part circle 202 Ultra Series sprinkler - 24° Trajectory
TW202VA	Full / Part circle 202 Ultra Series - user settable vari angle 15° - 45°
KOMET NOZZLES AND FLANGES	
TW202NU-XX	Nozzles for 202 series , 22mm - 45mm for TW202Ultra & TW160 Ultra
TW101U-0-B5	Flange Adaptor converts flange to 50mm female BSP
KWF	Komet flat face weldable steel flange

Komet Ultra Sprinklers

Twin 202 Ultra | Part or Full Circle

Twin 202 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 22mm		Nozzle 24mm		Nozzle 26mm		Nozzle 28mm		Nozzle 30mm		Nozzle 32mm	
	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)
300	32.4	41.5	38.5	42.6	45.6	42.9	52.6	43.1	60.4	43.5	69.1	43.8
350	34.9	43.6	41.6	45.2	49.2	46.4	56.8	47.6	65.2	48.5	74.6	49.4
400	37.4	45.7	44.5	47.7	52.6	49.9	60.7	52.1	69.7	53.6	79.8	55.0
450	39.6	47.2	47.2	49.4	55.8	51.8	64.4	54.2	74.0	56.1	84.6	58.1
500	41.8	48.7	49.7	51.0	58.8	53.6	67.9	56.2	78.0	58.6	89.2	61.1
550	43.8	49.9	52.1	52.3	61.7	55.0	71.2	57.7	81.8	60.2	93.5	62.6
600	45.8	51.1	54.4	53.5	64.4	56.4	74.4	59.3	85.4	61.7	97.7	64.1
650	47.6	52.2	56.7	54.8	67.1	57.7	77.4	60.5	88.9	63.0	101.7	65.5
700	49.4	53.4	58.8	56.0	69.6	58.9	80.3	61.8	92.2	64.3	105.5	66.8
750	51.2	54.5	60.9	57.3	72.0	60.1	83.1	63.0	95.5	65.5	109.2	68.1
800	52.8	55.7	62.9	58.5	74.4	61.4	85.9	64.2	98.6	66.8	112.8	69.3
850	54.5	56.6	64.8	59.5	76.7	62.3	88.5	65.1	101.6	67.6	116.3	70.2
900	56.0	57.6	66.7	60.5	78.9	63.3	91.1	66.0	104.6	68.5	119.6	71.0

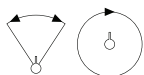
Twin 202 Ultra - Taper bore nozzle 24° Trajectory

kPa	Nozzle 34mm		Nozzle 36mm		Nozzle 38mm		Nozzle 40mm		Nozzle 42mm		Nozzle 44mm		Nozzle 45mm	
	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)	m ³ /h	RAD (m)
300	77.5	44.1	86.8	44.4	97.0	44.7	106.6	45.1	117.5	45.4	129.9	45.8	135.7	46.0
350	83.7	50.5	93.7	51.6	104.7	52.7	115.1	53.5	126.9	54.3	140.3	55.0	146.5	55.4
400	89.4	57.0	100.2	58.9	112.0	60.7	123.1	61.8	135.7	63.1	150.0	64.3	156.7	64.9
450	94.9	60.0	106.3	62.0	118.8	64.0	130.5	65.3	143.9	66.8	159.1	68.2	166.2	68.9
500	100.0	63.1	112.0	65.2	125.2	67.3	137.6	68.8	151.7	70.5	167.7	72.1	175.1	73.0
550	104.9	64.9	117.5	67.2	131.3	69.5	144.3	71.3	159.1	73.1	175.8	75.0	183.7	75.9
600	109.5	66.7	122.7	69.2	137.1	71.7	150.7	73.7	166.2	75.7	183.7	77.8	191.9	78.8
650	114.0	68.2	127.7	70.9	142.7	73.6	156.9	75.7	173.0	77.9	191.2	80.1	199.7	81.2
700	118.3	69.8	132.5	72.6	148.1	75.5	162.8	77.8	179.5	80.1	198.4	82.5	207.2	83.7
750	122.5	71.1	137.2	74.1	153.3	77.2	168.5	79.5	185.8	82.0	205.3	84.5	214.5	85.7
800	126.5	72.5	141.7	75.7	158.3	78.8	174.1	81.3	191.9	83.8	212.1	86.4	221.5	87.7
850	130.4	73.4	146.0	76.6	163.2	79.7	179.4	82.2	197.8	84.9	218.6	87.5	228.4	88.8
900	134.2	74.3	150.3	77.4	168.0	80.6	184.6	83.2	203.5	85.9	224.9	88.6	235.0	90.0

N.B. The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. A lowered trajectory angle improves the irrigation efficiency in windy conditions. For every 3° drop of the trajectory angle the throw is reduced by approximately 3 to 4%

Komet Ultra Sprinklers

Twin AP 101 Ultra | Part or Full Circle Dust Control

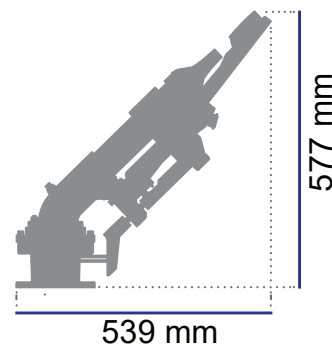


Part and Full Circle model



Twin AP 101
44° TRAJECTORY

Dimensions 44°



The AP101 Twin Ultra model is suitable for travelling irrigators, open field watering applications and industrial and mining dust suppression systems.

Features

- Automatic speed control is a function of the materials used, internal parts are made from chemically treated stainless steel and inserted into an anodized housing to increase resistance to corrosion and wear.
- Ultra-long throw and uniform water distribution
- Made from high quality materials including technical polymers, marine grade aluminium and chemically treated stainless steel for a long product lifespan
- Nozzles: 12mm - 28mm
- Optional 50mm BSP female connection available

ORDER CODE	DESCRIPTION
AP101-44	Part circle AP101 Ultra Series factory set 44° trajectory
KOMET NOZZLES AND FLANGES	
AP101-N-XX	Nozzles for AP101 series , 12mm - 28mm
TW101U-0-B5	Flange Adaptor converts flange to 50mm female BSP
KWF	Komet flat face weldable steel flange

Komet Ultra Sprinklers

Twin AP 101 Ultra | Part or Full Circle Dust Control

AP101 Ultra - Taper bore nozzle 44° Trajectory

kPa	Nozzle 12mm			Nozzle 14mm			Nozzle 16mm			Nozzle 18mm		
	m³/h	RAD (m)	Height	m³/h	RAD (m)	Height	m³/h	RAD (m)	Height	m³/h	RAD (m)	Height
300	9.6	26.1	11.9	13.0	28.5	12.1	16.9	31.0	12.3	21.4	33.5	12.5
350	10.3	27.7	13.1	14.1	30.3	13.4	18.2	33.0	13.7	23.1	35.6	14.0
400	11.1	29.3	14.3	15.1	32.1	14.7	19.5	34.9	15.1	24.7	37.8	15.6
450	11.7	30.4	15.1	16.0	33.4	15.6	20.7	36.3	16.1	26.2	39.3	16.7
500	12.4	31.5	15.9	16.8	34.6	16.5	21.8	37.7	17.1	27.6	40.8	17.8
550	13.0	32.4	16.4	17.7	35.6	17.2	22.9	38.7	17.9	29.0	41.9	18.6
600	13.5	33.3	17.0	18.4	36.5	17.8	23.9	39.8	18.7	30.3	43.0	19.5
650	14.1	33.9	17.4	19.2	37.2	18.3	24.9	40.5	19.2	31.5	43.8	20.1
700	14.6	34.5	17.9	19.9	37.8	18.8	25.8	41.2	19.8	32.7	44.6	20.7
750	15.1	34.8	18.1	20.6	38.2	19.1	26.7	41.7	20.2	33.8	45.1	21.2
800	15.6	35.2	18.4	21.3	38.7	19.5	27.6	42.1	20.6	34.9	45.5	21.6

AP101 Ultra - Taper bore nozzle 44° Trajectory

kPa	Nozzle 20mm			Nozzle 22mm			Nozzle 24mm			Nozzle 26mm			Nozzle 28mm		
	m³/h	RAD (m)	Height	m³/h	RAD (m)	Height	m³/h	RAD (m)	Height	m³/h	RAD (m)	Height	m³/h	RAD (m)	Height
300	26.5	35.9	12.7	31.9	37.2	12.9	38.0	38.5	13.1	44.9	39.7	13.3	51.8	41.0	13.4
350	28.7	38.2	14.4	34.5	39.7	14.6	41.1	41.1	14.9	48.5	42.6	15.1	56.0	44.0	15.3
400	30.7	40.6	16.0	36.9	42.2	16.3	43.9	43.8	16.6	51.8	45.5	17.0	59.8	47.1	17.3
450	32.5	42.2	17.2	39.1	43.9	17.6	46.6	45.6	18.1	55.0	47.3	18.5	63.5	49.0	18.9
500	34.3	43.9	18.4	41.2	45.7	19.0	49.1	47.4	19.5	58.0	49.2	20.0	66.9	51.0	20.5
550	35.9	45.1	19.4	43.2	46.9	20.0	51.5	48.7	20.6	60.8	50.5	21.2	70.2	52.3	21.8
600	37.5	46.3	20.3	45.2	48.1	21.0	53.8	50.0	21.7	63.5	51.8	22.3	73.3	53.6	23.0
650	39.1	47.1	21.0	47.0	49.0	21.8	56.0	50.9	22.5	66.1	52.7	23.3	76.3	54.6	24.1
700	40.6	48.0	21.7	48.8	49.9	22.5	58.1	51.8	23.4	68.6	53.7	24.2	79.2	55.6	25.1
750	42.0	48.5	22.2	50.5	50.4	23.1	60.1	52.4	24.0	71.0	54.3	24.9	82.0	56.3	25.8
800	43.4	49.0	22.7	52.2	51.0	23.6	62.1	53.0	24.6	73.3	55.0	25.5	84.6	57.0	26.4

N.B. The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. Radius=radius of throw in meters. Nozzle at 1.5m above ground level. Height=maximum stream height in metres above nozzle.

PRESSURE REGULATORS



PRESSURE REGULATORS

Pressure Regulation



What causes pressure fluctuations?

Some causes include elevation changes within the irrigated area; pressure loss through pipes and fittings; fluctuations when zones cycle on or off; system demand change on large projects with multiple wells providing water; and activation of end guns and corner arms on mechanised systems.

How do pressure regulators work?

Water travels through the inlets of the regulator across a fixed seat into the critical flow area. Water then enters a hollow cylinder or throttling stem attached to a diaphragm. Increasing inlet pressure causes the valve to close. Decreasing inlet pressure allows the valve to open. The regulated outlet pressure is determined by the spring's compressive strength.



PSR™ 2 - Pivot Special Regulator

The Senninger PSR2 (Pivot Special Regulator) is ideal for mechanical move installations. Its wide flow range allows irrigators to use one model along the entire length of the machine. Its patented design is ideal for systems pumping surface water.

Features

- Flows: 114 to 3407 L/Hr allows the use of the same model along the entire machine
- Each regulator maintains a constant preset outlet pressure based on its flow/inlet pressure
- Outlet pressures: 6 to 50 psi (0.41 to 3.45 bar)
- Tamper proof housing
- Very low hysteresis and friction losses
- 100% Pressure tested, to ensure quality and performance



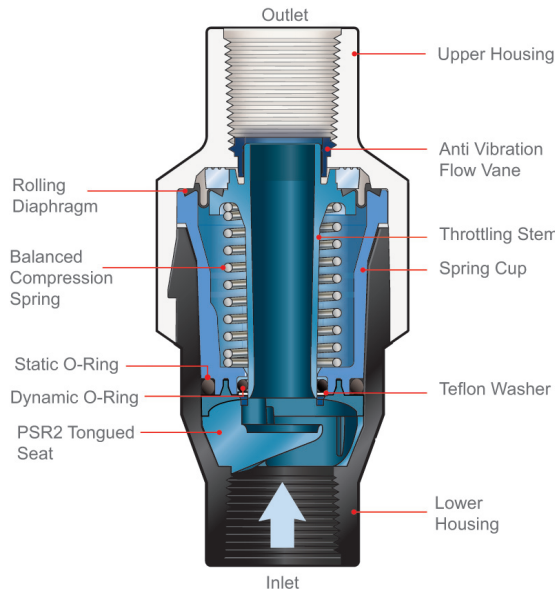
The pressure regulator shall maintain the predetermined operating pressure provided that the inlet pressure is at least 34 kPa above the expected outlet pressure, but not exceeding the maximum inlet pressure as shown above.

CAUTION: Always install downstream from all shut-off valves. Not NSF certified. Recommended for outdoor use only.

PSR2 DESIGN CRITERIA (ORDER CODE)	Preset Operating Pressure	Maximum Inlet Pressure	Flow Range LPM	Inlet mm	Outlet mm
PSR2063F3F	41kPa	551 kPa	1.9 to 56.78	20 F	20 F
PSR2103F3F	69kPa	620 kPa	1.9 to 56.78	20 F	20 F
PSR2153F3F	103kPa	655 kPa	1.9 to 56.78	20 F	20 F
PSR2203F3F	138kPa	689 kPa	1.9 to 56.78	20 F	20 F
PSR2253F3F	172kPa	724 kPa	1.9 to 56.78	20 F	20 F
PSR2303F3F	207kPa	758 kPa	1.9 to 56.78	20 F	20 F
PSR2403F3F	276kPa	827 kPa	1.9 to 56.78	20 F	20 F
PSR2503F3F	345kPa	896 kPa	1.9 to 56.78	20 F	20 F

APPLICATION INTENSITY

Uncontrolled pressure fluctuations in irrigation systems result in unwanted flow deviations and over and under watering. These fluctuations occur with the cycling on/off of an end gun, activation of a corner arm, variations in field elevation or water supply. Proper use of pressure regulators helps maintain the overall efficiency of an irrigation system.



*For full Pressure Regulator product range please refer to the HR Products Price List Catalogue

Filter Regulator

The Senninger new Filter Regulator helps prevent clogging of the small nozzles on the first few spans of a centre pivot. This solution integrates filtration and pressure regulation in one product to provide installation convenience and help ensure optimal system performance.



Features

- Field proven PSR2 internal components
- Durable stainless steel mesh screens
- Convenient installation above the sprinkler
- Three pressure models: 6, 10 and 15 psi (0.41, 0.69 and 1.03 bar)
- Choice of three stainless steel screen models: 20, 30 and 40 mesh
- Easy access to mesh screens with a twist of the bonnet no tools required; no need to dismantle the drop assembly
- 3/4" M NPT inlet x 3/4" F NPT outlet



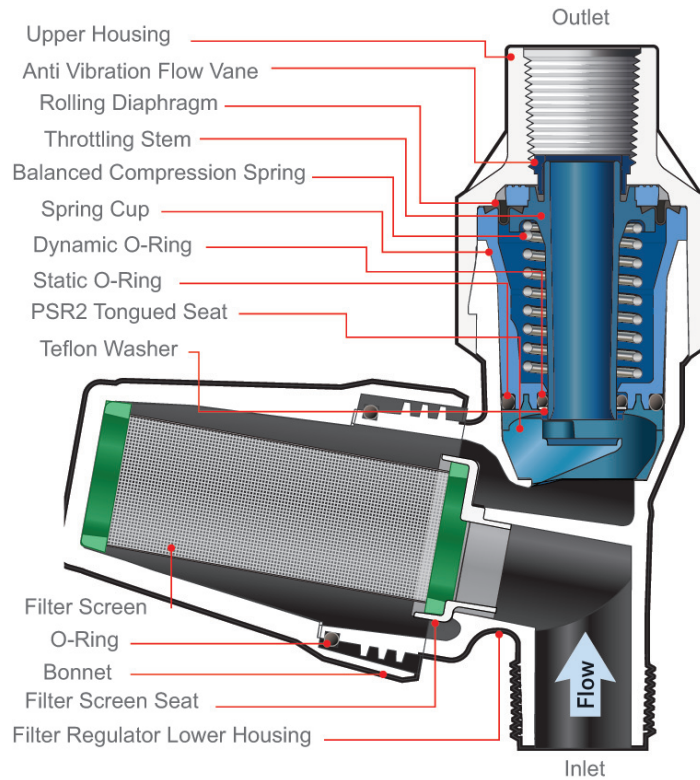
FILTER REGULATOR DESIGN CRITERIA (ORDER CODE)

Filter Regulator Design Criteria (Order Code)	Preset Operating Pressure	Maximum Inlet Pressure	Flow Range LPM	Inlet mm	Outlet mm
FPSR2063M3F20	41kPa (20 mesh)	551 kPa	11.16 to 34.78	20 M	20 F
FPSR2063M3F30	41kPa (30 mesh)	551 kPa	2.35 to 10.3	20 M	20 F
FPSR2063M3F40	41kPa (40 mesh)	551 kPa	0.26 to 1.96	20 M	20 F
FPSR2103M3F20	69kPa (20 mesh)	620 kPa	14.41 to 44.93	20 M	20 F
FPSR2103M3F30	69kPa (30 mesh)	620 kPa	3.03 to 13.31	20 M	20 F
FPSR2103M3F40	69kPa (40 mesh)	620 kPa	0.33 to 2.53	20 M	20 F
FPSR2153M3F20	103kPa (20 mesh)	655 kPa	17.63 to 55.03	20 M	20 F
FPSR2153M3F30	103kPa (30 mesh)	655 kPa	3.71 to 16.31	20 M	20 F
FPSR2153M3F40	103kPa (40 mesh)	655 kPa	0.41 to 3.1	20 M	20 F
FPSR2203M3F20	138kPa (20 mesh)	689 kPa	20.36 to 63.51	20 M	20 F
FPSR2203M3F30	138kPa (30 mesh)	689 kPa	4.28 to 18.81	20 M	20 F
FPSR2203M3F40	138kPa (40 mesh)	689 kPa	0.45 to 3.6	20 M	20 F

The pressure regulator shall maintain the predetermined operating pressure provided that the inlet pressure is at least 34 kPa above the expected outlet pressure, with flows up to 41.63lpm but not exceeding the maximum inlet pressure as shown above.

Higher flows require additional inlet pressure to engage the regulator. Where flows are greater than 41.63lpm, the inlet pressure should be at least 62 kPa above the expected outlet pressure but not exceeding the maximum inlet pressure as shown above.

Filter Regulator



Filter Regulator Screens



SCREEN MODELS	Description	UP3® Nozzle Numbers
FPSR220SCREEN	Filter PSR2 20 mesh screen, black rings	#13 - #23
FPSR230SCREEN	Filter PSR2 30 mesh screen, green rings	#6 - #12.5
FPSR240SCREEN	Filter PSR2 40 mesh screen, grey rings	#2 - #5.5

Features

- Replacement filter screens also available with colour coded rubber seals to readily identify mesh size
- Colour coded stickers available for the outer bonnet to assist installers in matching the mesh size to the correct nozzle
- Easy in-field maintenance to exchange installed filter screens for new or cleaned screens; clean screens for reinstallation during the next scheduled maintenance cycle

PIVOT COMPONENTS

PIVOT COMPONENTS



Pivot Components

Hose

Features

- Durable 3/4" reinforced flex hose
- Long lasting construction with a UV resistant PVC cover, polyester reinforcement yarns and PVC core tube
- Lightweight with good abrasion resistance

ORDER CODE	DESCRIPTION
HS3RA	Senninger Dropper Hose 19mm x 76m Black
HRDH1976BL	Dropper Hose 19mm x 76m Blue
HRDH1976RD	Dropper Hose 19mm x 76m Red
6072008120	Hose 3/4" ID Blue Premium Per Roll



HS3RA

Adaptors & Fittings

Features

- Constructed from non-corrosive UV resistant thermoplastic for a longer life
- 3/4" barb inlet x M NPT or F NPT outlets on selected fittings

ORDER CODE	DESCRIPTION
FTA3F3B	20mm Female x 20mm Hose Adaptor
FTA3B3B	20mm Barb x 20mm Barb Hose Adaptor
FTA3M3B	20mm Male x 20mm Hose Adaptor
FTA3M3BUP3NZ	20mm Male x 20mm Hose Barb Adaptor with UP3 nozzle holders (nozzles sold separately)
FTN33	20mm NPT Gooseneck Nipple
FTP3	20mm NPT Plug



FTA3F3B



FTA3B3B



FTA3M3B



FTA3M3BUP3NZ



FTN33



FTP3

Pivot Components

Hose Clamps

ORDER CODE	DESCRIPTION
T-BOLT CLAMP	
5062051003	6-5/8"
5062051006	8-5/8"
OETIKER CLAMP	
HSC4OET	Hose Clamp 1" Crimp Style
HSCTOET11	Crimp Tool Red Grip
HSCTOET386	Crimp Tool Blue Grip



50622051003



HSC4OET



HSCTOET386

Weights

Features

- Unique fit technology installs on all Senninger pivot sprinklers - i-Wob2, Xi-Wob, LDN and Dynamic Drive
- Design allows weight to remain on applicator during nozzle changes
- Easy to install
- Reuse weights when sprinklers need replacing to save money
- 0.39kgs

ORDER CODE	DESCRIPTION
MAGWGTRB	Magnum Weight for i-Wob2 and Xi-Wob
MAGWGTSLP	Magnum Weight for LDN series, slides over top
UNIMAGWGT	Universal Magnum Weight 0.39kgs, fits all Senninger Pivot Sprinklers



MAGWGTRB



MAGWGTSLP



UNIMAGWGT

Pivot Components

Ball Valve

Features

The dial shut off knob makes changing or cleaning sprinklers and spray nozzles easy while the system is operating.

- Streamlined design reduces snagging and unintentional operation
- Smooth bore design maximises bi-directional flow efficiency
- UV resistant
- 125 psi pressure rating
- Available with a 3/4" F NPT female x 3/4" M NPT male connection



FTV3F3M

ORDER CODE	DESCRIPTION
FTV3F3M	Shutoff Ball Valve, 20mm NPT Female x 20mm NPT Male

Pressure Drops

Features

Provides a quick and easy check of end-of-system pressure

- Includes glycerin filled 2.5" diameter gauge
- Several pressure models available
- 3/4" F NPT inlet x 3/4" F NPT outlet connection
- Freeze proof design on selected models
- Backed by a one year warranty

ORDER CODE	DESCRIPTION
PRESDRP30FP	Pressure Drop with 0-206 kPa gauge, 20mm F NPT inlet/outlet Freeze Proof
PRESDRP60FP	Pressure Drop with 0-413 kPa gauge, 20mm F NPT inlet/outlet Freeze Proof
PRESDRP30B	Pressure Drop with 0-206 kPa gauge, 20mm F NPT inlet/outlet
PRESDRP60B	Pressure Drop with 0-413 kPa gauge, 20mm F NPT inlet/outlet



PRESDRP30FP



PRESDRP30B



A valmont COMPANY

Agricultural Product Range Available

CONTROL & COMMUNICATION



VALVES



FILTRATION



SPRINKLERS



*For full product range please refer to the HR Products Price List Catalogue



A valmont COMPANY

Agricultural Product Range Available

FLOAT / TROUGH VALVES



SENSORS & TREATMENT



METERS



FITTINGS



*For full product range please refer to the HR Products Price List Catalogue



A **valmont**  COMPANY



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