



IRRIGATION

WIDE RANGE SPRINKLERS ULTRA

FOR TRAVELLERS, PIVOTS AND SOLID-SETS



WIDE RANGE SPRINKLERS ULTRA

You harvest, we irrigate.
On that you can rely!

Growth due to efficient irrigation.

On our wide angle sprinkler you can rely. It works reliable in every situation. It ensures even water distribution, reacts to pressure fluctuations and nozzle sizes. It adapts perfectly to all operating conditions.

Convinces with reduced operating costs, is durable and easy to operate. Reaches new dimensions regarding spreading width, irrigates larger areas and convinces with our BAUER Balance System – operates in a balanced way for greater harvests and better quality.

Our wide range sprinkler TWIN:

Little maintenance and repair, big in performance and economic efficiency.



- 1 Vari-Angle System (optional)
- 2 Automatic brake system
- 3 Multi pitch flange
- 4 Large barrel cross section
- 5 High performance nozzle
- 6 Dynamic jet-breaker (optional)
- 7 Intuitive part-circle setting
- 8 Low inertia drive arm
- 9 Innovative drive system



EFFICIENCY ON ALL LEVELS

The purchase cost of a product has become the most important factor when purchasing equipment. This trend has changed the scope of many companies, moving to a short term market approach that focuses on the purchase cost instead of its real operating cost. We are firmly convinced that our customers generate greater benefit by optimizing the operating cost of the products they use.

Our priorities when developing products are to make sure that they are the most reliable, always operate at the optimum efficiency, are easy to use and minimize the waste of precious natural resources. It is surely less demanding and more economically feasible to concentrate a company's product lines with the short term market approach, but we believe that the credibility of our brand is based on the long term quality and performance of our products, and more importantly the return on investment our customers can realize.



PROGRAMMED ON FLEXIBILITY AND RELIABILITY

- Even and fine water distribution
- Very large spreading width
- Intelligent energy-efficiency-management
- High reliability
- Optimal adaptability

BAUER wide range sprinklers have been specially designed for a modern and, energy conscious irrigation and set new standards regarding handling and performance. The sprinklers are suitable for all irrigation systems alike, because due to a special drive system, an efficient and crop friendly jet resolution in all different pressure ranges can be achieved.

The operation is easy and does not require any regulation. BAUER wide range sprinklers react to pressure fluctuations and different nozzle sizes and adjust automatically. So far, there has not been a wide range sprinkler with comparable versatility.

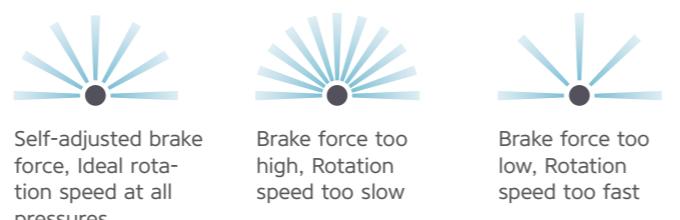


EVEN AND FINE WATER DISTRIBUTION

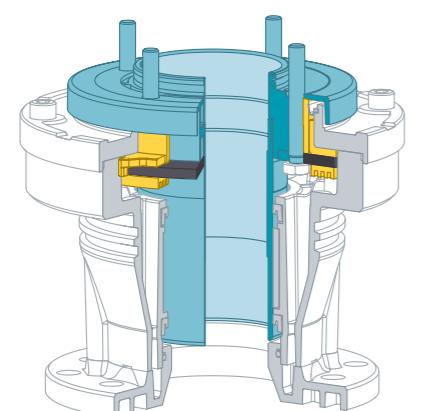
Efficient irrigation is an important factor to support crop growth. A uniform water distribution helps the soil to evenly absorb the water, consequently avoiding water run-offs. This greatly promotes even plant growth throughout the field and at the same time can increase the yield and its quality. A fine water application also allows to grow sensitive crops.

Automatic Brake

This mechanism is designed to allow the gun to maintain a constant rotation speed in all arising operating conditions independently of the prevailing pressure and flow levels.



1. While waiting to operate the gun's brake disc rests on the lower brake pads.
2. With increasing operating pressure, the brake disc is pushed upwards against the upper brake pads, generating a braking force.
3. A higher operating pressure will generate a higher brake force to compensate for the increased rotation force produced by the drivesystem.

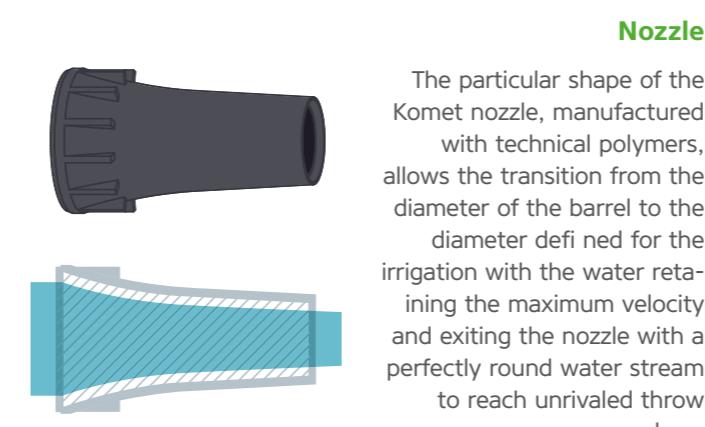
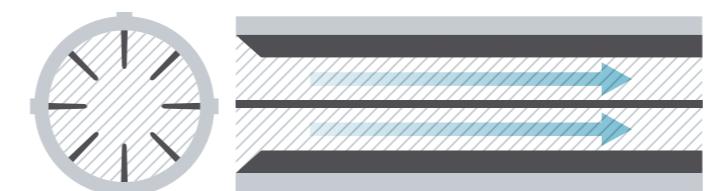


VERY LARGE SPREADING WIDTH

The length of the throw determines the area being irrigated. A longer throw increases the area covered by the irrigation with the effect of making the irrigation more cost effective. At the same time a longer throw determines also a reduction of the instantaneous water application rate thus improving the water take-in of the soil.

Barrel

The configuration of the barrel and its internal straightening vanes has been optimized with the use of the most advanced hydraulic simulation software allowing the water to reach the nozzle with the least possible turbulences and pressure losses.



INTELLIGENT ENERGY AND EFFICIENCY MANAGEMENT

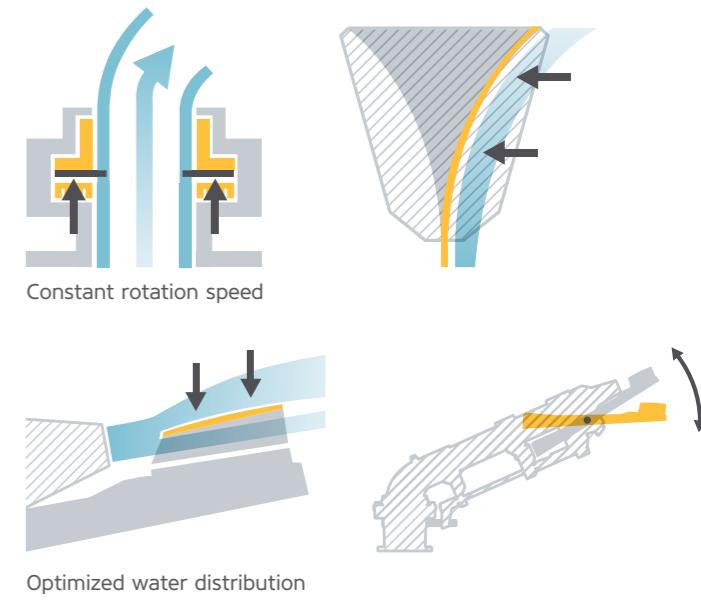
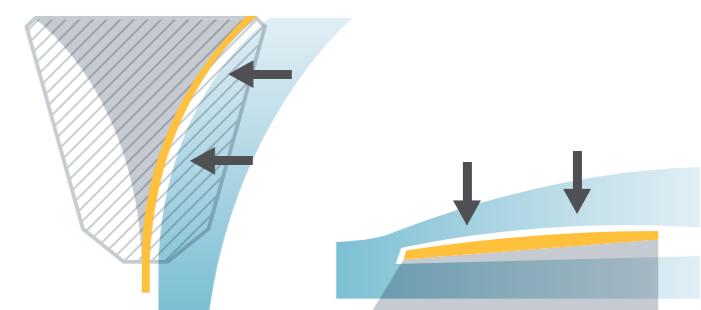
Pressure greatly determines the operating cost of an irrigation system: the higher the pressure required to operate it, the higher the operating cost will be. What makes the difference is to find a method to limit the operating pressure requirement without sacrificing the quality of the water distribution uniformity.

The BAUER Balance System is based on the interaction between the self-adjusting brake and deflector. The resulting balanced operating mode allows for an excellent performance at all pressure and flow levels. The interactive balancing between the two elements is continuous and automatic.



Fluid Dynamics

While in operation the deflector is designed to minimize the oscillation originating from the interaction with the water stream. This is fundamental in order to obtain a laminar water stream exiting the nozzle generating unrivaled throw values.



HIGH RELIABILITY

It is important that every irrigation system operates reliably in order to avoid yield losses, waste of energy with its associated costs but more than anything to optimize the soil potential. The gun not being continuously monitored, has to operate always at its best without the necessity of adjustments or maintenance.

Self Control

With changing operating conditions such as pressure and flow the gun self-adjusts all systems in order to allow always for an operation at best efficiency level.

Design

Reliability is a main concern when designing our products. Each component is developed with the utmost care and the materials are selected to satisfy the requirements of the intended application environment.

Qualität

The precision tooling of every component, the strict quality control during every manufacturing step and the final water test of every single gun are our guarantee of a quality control at its best.



Automatic Brake

This mechanism is designed to allow the gun to maintain a constant rotation speed in all arising operating conditions independently of the prevailing pressure and flow levels.



Swinging arm

The interaction between the brake system and the swing arm causes a balanced operation of the sprinkler in all pressure ranges and flow rates.



Barrel

The configuration of the barrel and its internal straightening vanes has been optimized with the use of the most advanced hydraulic simulation software allowing the water to reach the nozzle with the least possible turbulences and pressure losses.

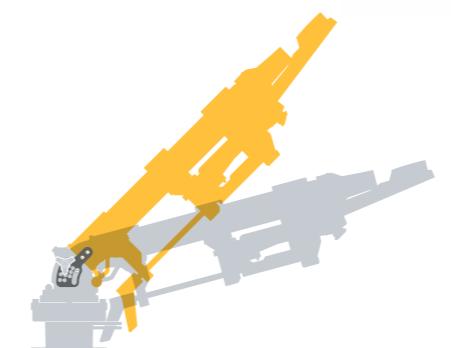


OPTIMAL ADAPTABILITY

It is fundamental that a gun adapts to every situation while keeping excellent performance in all types of irrigation systems and environmental conditions, also extreme ones.

BAUER Vari-Angle

The adjustment of the trajectory angle without internal flow restriction allows to adapt the irrigation to different climatic conditions including stronger winds. This capability to adjust is a real advantage also in cases where obstacles such as power lines need to be avoided.



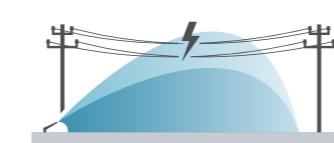
The trajectory angle can be manually adjusted between 15° and 45°.



Strong winds can cause substantial water drift.



Lowering the trajectory can reduce water drift.



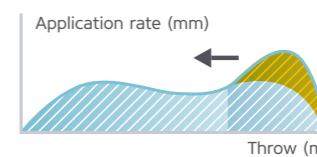
Adjustment of the trajectory in case of power lines.

Dynamic Jet-Breaker

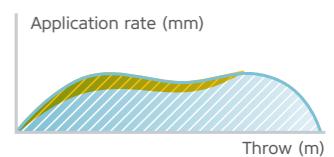
The patented working principle of the dynamic jet-breaker allows to redistribute some of the excessive water from the end of the throw typical in low pressure conditions towards the gun. Another important advantage of this device is that it allows to adapt the water distribution profile to suit the requirement of solid-set systems.



Effect of the dynamic jet-breaker at low pressures

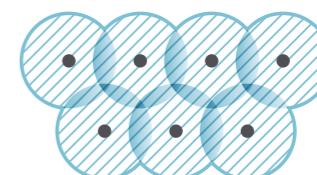


Schematic water distribution profile **WITHOUT** dynamic jet-breaker

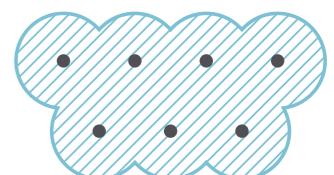


Schematic water distribution profile **WITH** dynamic jet-breaker

Effect of the dynamic jet-breaker in solid-set systems



Solid-set system without jet-breaker



Solid-set system with jet-breaker



Action of the deflector



Action of the dynamic jet-breaker

BAUER ULTRA101

Available Models



24°/21°



Vari-Angle

High Performance Nozzles, Trajectory angle 24°

Pressure bar	Nozzle 12 mm		Nozzle 14 mm		Nozzle 16 mm		Nozzle 18 mm		Nozzle 20 mm		Nozzle 22 mm		Nozzle 24 mm	
	Flow m³/h	Radius m												
2,0	7,8	24,2	10,6	26,5	13,8	28,9	17,5	29,1	21,7	29,4	26,1	29,8	31,1	30,2
2,5	8,7	26,8	11,9	29,0	15,4	31,3	19,5	32,5	24,2	33,8	29,2	34,4	34,7	35,1
3,0	9,6	29,4	13,0	31,6	16,9	33,7	21,4	35,9	26,5	38,2	31,9	39,1	38,0	39,9
3,5	10,3	31,2	14,1	33,3	18,2	35,5	23,1	37,9	28,7	40,4	34,5	41,6	41,1	42,9
4,0	11,1	32,9	15,1	35,1	19,5	37,3	24,7	39,9	30,7	42,5	36,9	44,2	43,9	45,8
4,5	11,7	33,9	16,0	36,2	20,7	38,6	26,2	41,2	32,5	43,9	39,1	45,7	46,6	47,6
5,0	12,4	34,8	16,8	37,3	21,8	39,8	27,6	42,5	34,3	45,2	41,2	47,3	49,1	49,3
5,5	13,0	35,7	17,7	38,4	22,9	41,1	29,0	43,8	35,9	46,5	43,2	48,7	51,5	50,9
6,0	13,5	36,6	18,4	39,5	23,9	42,4	30,3	45,0	37,5	47,7	45,2	50,1	53,8	52,5
6,5	14,1	37,4	19,2	40,4	24,9	43,3	31,5	46,0	39,1	48,7	47,0	51,2	56,0	53,7
7,0	14,6	38,2	19,9	41,2	25,8	44,2	32,7	46,9	40,6	49,7	48,8	52,3	58,1	54,9

Pressure bar	Nozzle 26 mm		Nozzle 28 mm	
	Flow m³/h	Radius m	Flow m³/h	Radius m
2,0	36,7	30,6	42,3	30,9
2,5	41,0	35,8	47,3	36,5
3,0	44,9	41,0	51,8	42,1
3,5	48,5	44,4	56,0	45,9
4,0	51,8	47,8	59,8	49,7
4,5	55,0	49,8	63,5	52,0
5,0	58,0	51,8	66,9	54,3
5,5	60,8	53,5	70,2	56,2
6,0	63,5	55,3	73,3	58,1
6,5	66,1	56,5	76,3	59,3
7,0	68,6	57,7	79,2	60,6

BAUER ULTRA140

Available Models



24°/21°



Vari-Angle

High Performance Nozzles, Trajectory angle 24°

Pressure bar	Nozzle 16 mm		Nozzle 18 mm		Nozzle 20 mm		Nozzle 22 mm		Nozzle 24 mm		Nozzle 26 mm		Nozzle 28 mm	
	Flow m³/h	Radius m												
2,0	13,8	29,0	17,5	29,3	21,7	29,5	26,1	30,0	31,1	30,4	36,7	30,7	42,3	31,0
2,5	15,4	32,3	19,5	33,4	24,2	34,6	29,2	35,4	34,7	36,1	41,0	36,4	47,3	36,7
3,0	16,9	35,5	21,4	37,6	26,5	39,7	31,9	40,8	38,0	41,8	44,9	42,1	51,8	42,3
3,5	18,2	36,5	32,1	38,6	28,7	40,8	34,5	42,3	41,1	43,8	48,5	45,0	56,0	46,1
4,0	19,5	37,5	24,7	39,7	30,7	41,8	36,9	43,8	43,9	45,7	51,8	47,8	59,8	50,0
4,5	20,7	38,7	26,2	41,1	32,5	43,5	39,1	45,6	46,6	47,6	55,0	50,0	63,5	52,3
5,0	21,8	40,0	27,6	42,6	34,3	45,1	41,2	47,3	49,1	49,5	58,0	52,1	66,9	54,6
5,5	22,9	41,3	29,0	43,9	35,9	46,5	43,2	48,8	51,5	51,1	60,8	53,8	70,2	56,5
6,0	23,9	42,6	30,3	45,3	37,5	48,0	45,2	50,3	53,8	52,7	63,5	55,6	73,3	58,4
6,5	24,9	43,5	31,5	46,2	39,1	48,9	47,0	51,4	56,0	53,9	66,1	56,8	76,3	59,6
7,0	25,8	44,4	32,7	47,2	40,6	49,9	48,8	52,5	58,1	55,2	68,6	58,0	79,2	60,9

Pressure bar	Nozzle 30 mm		Nozzle 32 mm		Nozzle 34 mm	
	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m
2,0	48,6	31,3	55,7	31,7	62,5	32,0
2,5	54,3	37,0	62,3	37,3	69,8	37,6
3,0	59,5	42,6	68,2	42,9	76,5	43,3
3,5	64,3	47,0	73,7	47,8	82,6	48,9
4,0	68,7	51,3	78,8	52,7	88,3	54,6
4,5	72,9	54,1	83,6	56,0	93,7	57,9
5,0	76,8	56,9	88,1	59,3	98,7	61,3
5,5	80,5	58,9	92,4	61,2	103,6	63,5
6,0	84,1	60,8	96,5	63,2	108,2	65,7
6,5	87,6	62,1	100,4	64,5	112,6	67,2
7,0	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 approx. 3 to 4%.

BAUER ULTRA160

Available Models



24°/21°

Vari-Angle

High Performance Nozzles, Trajectory angle 24°

Pressure bar	Nozzle 18 mm		Nozzle 20 mm		Nozzle 22 mm		Nozzle 24 mm		Nozzle 26 mm		Nozzle 28 mm		Nozzle 30 mm	
	Flow m³/h	Radius m												
3,0	21,7	37,8	26,9	39,9	32,4	41,0	38,5	42,0	45,6	42,3	52,6	42,5	60,4	42,8
3,5	23,4	39,4	29,0	41,6	34,9	43,1	41,6	44,6	49,2	45,9	56,8	47,1	65,2	48,0
4,0	25,1	41,0	31,0	43,2	37,4	45,3	44,5	47,3	52,6	49,5	60,7	51,7	69,7	53,1
4,5	26,6	42,3	32,9	44,7	39,6	46,9	47,2	49,0	55,8	51,4	64,4	53,8	74,0	55,7
5,0	28,0	43,6	34,7	46,2	41,8	48,5	49,7	50,8	58,8	53,4	67,9	55,9	78,0	58,3
5,5	29,4	44,7	36,4	47,3	43,8	49,7	52,1	52,0	61,7	54,7	71,2	57,5	81,8	59,9
6,0	30,7	45,7	38,0	48,4	58,8	50,9	54,4	53,3	64,4	56,1	74,4	59,0	85,4	61,4
6,5	31,9	46,7	39,5	49,4	47,6	52,0	56,7	54,5	67,1	57,4	77,4	60,2	88,9	62,7
7,0	33,2	47,7	41,0	50,4	49,4	53,1	58,8	55,7	69,6	58,6	80,3	61,5	92,2	64,0
7,5	34,3	48,5	42,5	51,4	51,2	54,1	60,9	56,8	72,0	59,7	83,1	62,5	95,5	65,0
8,0	35,4	49,3	43,9	52,3	52,8	55,1	62,9	57,9	74,4	60,7	85,9	63,6	98,6	66,1
8,5	36,5	50,2	45,2	53,2	54,5	56,0	64,8	58,9	76,7	61,7	88,5	64,4	101,6	66,9
9,0	37,6	51,0	46,5	54,1	56,0	57,0	66,7	59,9	78,9	62,6	91,1	65,3	104,6	67,8

Pressure bar	Nozzle 32 mm		Nozzle 34 mm		Nozzle 36 mm		Nozzle 38 mm	
	Flow m³/h	Radius m						
3,0	69,1	43,2	77,5	43,5	86,8	43,8	97,0	44,1
3,5	74,6	48,8	83,7	50,0	93,7	51,1	104,7	52,1
4,0	79,8	54,5	89,4	56,5	100,2	58,3	112,0	60,2
4,5	84,6	57,6	94,9	59,6	106,3	61,6	118,8	63,6
5,0	89,2	60,8	100,0	62,8	112,0	64,9	125,2	67,0
5,5	93,5	62,3	104,9	64,6	117,5	66,9	131,3	69,2
6,0	97,7	63,8	109,5	66,3	122,7	68,8	137,1	71,4
6,5	101,7	65,1	114,0	67,9	127,7	70,6	142,7	73,2
7,0	105,5	66,5	118,3	69,4	132,5	72,3	148,1	75,1
7,5	109,2	67,5	122,5	70,6	137,2	73,6	153,3	76,6
8,0	112,8	68,6	126,5	71,8	141,7	74,9	158,3	78,0
8,5	116,3	69,4	130,4	72,7	146,0	75,8	163,2	78,9
9,0	119,6	70,3	134,2	73,5	150,3	76,7	168,0	79,8

BAUER ULTRA202

Available Models



24°

Vari-Angle

High Performance Nozzles, Trajectory angle 24°

Pressure bar	Nozzle 22 mm		Nozzle 24 mm		Nozzle 26 mm		Nozzle 28 mm		Nozzle 30 mm		Nozzle 32 mm		Nozzle 34 mm	
	Flow m³/h	Radius m												
3,0	32,4	41,5	38,5	42,6	45,6	42,9	52,6	43,1	60,4	43,5	69,1	43,8	77,5	44,1
3,5	34,9	43,6	41,6	45,2	49,2	46,4	56,8	47,6	65,2	48,5	74,6	49,4	83,7	50,5
4,0	37,4	45,7	44,5	47,7	52,6	49,9	60,7	52,1	69,7	53,6	79,8	55,0	89,4	57,0
4,5	39,6	47,2	47,2	49,4	55,8	51,8	64,4	54,2	74,0	56,1	84,6	58,1	94,9	60,0
5,0	41,8	48,7	49,7	51,0	58,8	53,6	67,9	56,2	78,0	58,6	89,2	61,1	100,0	63,1
5,5	43,8	49,9	52,1	52,3	61,7	55,0	71,2	57,7	81,8	60,2	93,5	62,6	104,9	64,9
6,0	45,8	51,1	54,4	53,5	64,4	56,4	74,4	59,3	85,4	61,7	97,7	64,1	109,5	66,7
6,5	47,6	52,2	56,7	54,8	67,1	57,7	77,4	60,5	88,9	63,0	101,7	65,5	114,0	68,2
7,0	49,4	53,4	58,8	56,0	69,6	58,9	80,3	61,8	92,2	64,3	105,5	66,8	118,3	69,8
7,5	51,2	54,5	60,9	57,3	72,0	60,1	83,1	63,0	95,5	65,5	109,2	68,1	122,5	71,1
8,0	52,8	55,7	62,9	58,5	74,4	61,4	85,9	64,2	98,6	66,8	112,8	69,3	126,5	72,5
8,5	54,5	56,6	64,8	59,5	76,7	62,3	88,5	65,1	101,6	67,6	116,3	70,2	130,4	73,4
9,0	56,0	57,6	66,7	60,5	78,9	63,3	91,1	66,0	104,6	68,5	119,6	71,0	134,2	74,3

| Pressure bar | Nozzle 36 mm | |
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PRODUCTS FROM OUR IRRIGATION PROGRAM



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