

MZ 400 SERIES

# MZ401 1/2"

BSP NPT Male Thread

Vegetables

Nursery Plants

Irrigation and Crop Germination



The MZ401 is a versatile and highly efficient plastic impact sprinkler specifically designed for irrigation and crop germination in vegetables, flowers, and nursery plants. Available in a 1/2" male connection with multiple nozzle sizes, it delivers precision, durability, and ease of use.

## HIGHLIGHTS

- Uniform water distribution: Ensures even coverage with single or dual nozzles, of areas up to 14m, making it suitable for a wide range of applications
- Specially designed to resist clogging, enhancing reliability in various soil conditions
- High wind resistance, ensuring uninterrupted irrigation even in windy environments
- Ideal for short irrigation cycles, promoting efficient germination
- Color-coded bayonet nozzles for easier identification, cleaning, and maintenance
- Made of durable, heavy-duty, high-impact plastic that resists corrosion, chemicals, and radiation, ensuring a long lifespan and reducing replacement costs

## TECHNICAL DATA

- Pressure range: 20-40 m'
- Flow rate range: 520-1,500 lph
- Coverage diameter: 20.5-25 m'
- Trajectory angle: 24°, all models
- Available in three models:  
S and G for standard pressure.  
W for low pressure.

## PERFORMANCE TABLE MZ401-G (STANDARD MODEL)

Nozzle Color & Size	Pressure	Coverage Diameter	Flow Rate	Precipitation Rate (mm/hr.) / Spacing (m)				
				10 x 10	10 x 12	12 x 12	12 x 14	14 x 14
mm	bar	m	lph					
<b>Round - Purple</b> <b>Slit - Green</b> <b>2.5 x 1.8</b>	2.0	22.6	520	5.3	4.4	3.7		
	2.5	22.8	580	5.7	4.8	4		
	3.0	22.8	635	6.3	5.2	4.3		
	3.5	23.0	685	6.3	5.3	4.4		
	4.0	23.0	735	7.4	6.1	5.1		
<b>Round - Orange</b> <b>Slit - Green</b> <b>2.9 x 1.8</b>	2.0	22.8	610	6.2	5.1	4.3		
	2.5	23.0	680	6.8	5.7	4.7		
	3.0	23.0	745	7.5	6.2	5.2	4.4	
	3.5	23.2	805	8.1	6.7	5.6	4.8	4.1
	4.0	23.2	860	8.7	7.2	6	5.2	4.4
<b>Round - Green</b> <b>Slit - Green</b> <b>3.2 x 1.8</b>	2.0	23.0	725	7.2	6	5	4.3	3.7
	2.5	23.4	810	8.1	6.7	5.6	4.8	4.1
	3.0	23.8	890	8.9	7.4	6.2	5.3	4.6
	3.5	24.0	960	9.6	8	6.7	5.7	4.9
	4.0	24.0	1025	10.2	8.5	7.1	6.1	5.2
<b>Round - Blue</b> <b>Slit - Green</b> <b>3.5 x 1.8</b>	2.0	23.4	840	8.4	7	5.8	5	4.3
	2.5	23.8	940	9.4	7.8	6.5	5.6	4.8
	3.0	24.4	1030	10.4	8.6	7.2	6.2	5.3
	3.5	24.8	1110	11.1	9.3	7.7	6.6	5.7
	4.0	25.0	1190	11.9	9.9	8.3	7.1	6.1
<b>Round - Black</b> <b>Slit - Green</b> <b>4.0 x 1.8</b>	2.0	23.6	1060	10.6	8.8	7.4	6.3	5.4
	2.5	24.0	1180	11.8	9.8	8.2	7	6
	3.0	24.5	1300	13	10.8	9	7.7	6.6
	3.5	25.0	1400	14	11.7	9.7	8.4	7.2
	4.0	25.5	1500	15	12.5	10.4	8.9	7.7

- Performance based on ideal temperature, wind velocity, and humidity conditions
- Tested at a height of 100cm (3ft) above the ground. Rear Nozzle: 1.8 mm (9/128 in) - Green color

### PERFORMANCE TABLE MZ411-S (FOR AGRO STAND)

Nozzle	Pressure	Coverage Diameter	Discharge Rate
mm	bar	m	lph
<b>Round - Silver</b> <b>Slit - Green</b> <b>2.3 x 1.8</b> 	2.0	19.6	460
	2.5	20	510
	3.0	20.4	560
	3.5	20.6	600
	4.0	21	640
<b>Round- Yellow</b> <b>Slit - Green</b> <b>2.4 x 1.8</b> 	1.0	17.5	384
	1.5	18	474
	2.0	19	534
	2.5	19.5	600
	3.0	20	654
<b>Round - Purple</b> <b>Slit - Green</b> <b>2.5 x 1.8</b> 	2.0	20	520
	2.5	20.6	580
	3.0	21	640
	3.5	21.4	679
	4.0	21.6	762

\* Performance is based on ideal conditions of Temperature, wind velocity and Humidity.

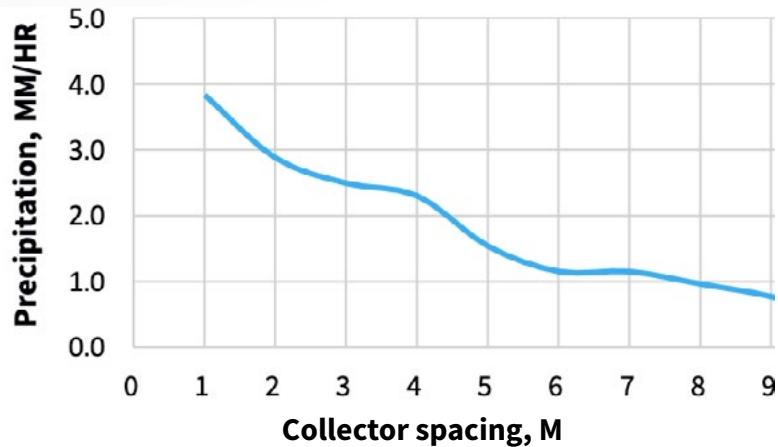
### PERFORMANCE TABLE MZ401-W (FOR LOW PRESSURE APPLICATIONS)

Nozzle Color & Size	Pressure	Coverage Diameter	Flow Rate
mm	bar	m'	lph
<b>Round - White</b> <b>Slit - Green</b>  <b>2.0 x 1.8</b>	1.0	17.5	294
	1.5	19.5	348
	2.0	20.5	405
	2.5	21	450
	3.0	21	495
<b>Round - Brown</b> <b>Slit - Green</b>  <b>2.2 x 1.8</b>	1.0	18.5	309
	1.5	20	378
	2.0	21	435
	2.5	21	486
	3.0	21.5	528
<b>Round - Purple</b> <b>Slit - Green</b>  <b>2.5 x 1.8</b>	1.0	18.5	370
	1.5	21	450
	2.0	21.5	520
	2.5	21.5	580
	3.0	22	635

- Performance based on ideal temperature, wind velocity, and humidity conditions
- Tested at a height of 100cm above the ground. Rear Nozzle: 1.8 mm - Green color

## DISTRIBUTION CURVE

Nozzle size: 2.2x1.8mm | Pressure: 2.0 kg/cm<sup>2</sup>



## UNIFORMITY CHART

Spacing (m)	CU	DU	SC (5%)	PR (mm/hr)
09 x 09	94%	91%	1.1	5.4
10 x 10	91%	84%	1.2	4.4
11 x 11	89%	80%	1.2	3.6
10 x 12	89%	80%	1.3	3.7
12 x 12	89%	81%	1.2	3.1

## CODES OF DISTRIBUTION UNIFORMITY

CDU < 75%	75% ≤ CDU < 80%	80% ≤ CDU < 85%	CDU ≥ 90%
-----------	-----------------	-----------------	-----------

**Keep in touch!**



info@metzeralas.com



metzer-group.com



Notwithstanding anything to the contrary, (A) any information, data, figures, descriptions or any other content included in, or referred to, this document (collectively - "Information") are provided merely (i) on an "as is", "as available" basis only, without any kind of representation, warranty, liability, responsibility and/or undertaking on the part of Metzeralas and/or anyone acting on its behalf, and (ii) for general, informational purposes only, and (B) the Information or any content contained in this document do not constitute, in any way, any professional advice, recommendation or guidance and/or any sort of consultancy and must not be relied on as such. In making a decision, the recipient or reader of the Information must rely solely on its own calculations and examination of the Information, including the merits and risks involved.