

# MP rotator Pop-up nozzle

Hunter



The MP Rotators are unique water-saving spray head nozzles that can be installed in a spray head pop-up holder (see information sheet). MP stands for 'Matched Precipitation', a unique method that enables an optimum and uniform precipitation with the water flow rate and spraying range being kept in ratio. It is possible to use nozzles designed for different sectors in between one another since the right ratio is maintained.

## APPLICATION

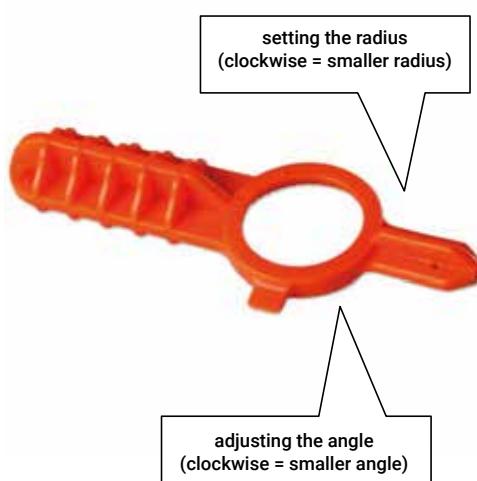
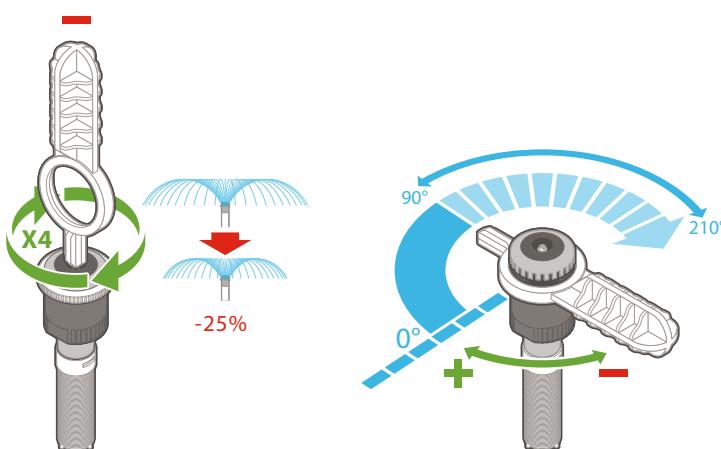
Park and garden irrigation

## TECHNICAL DATA

|                       |         | MP1000 Rotator     | MP2000 Rotator     | MP2000 Rotator     | MP2000 Rotator     |
|-----------------------|---------|--------------------|--------------------|--------------------|--------------------|
| Flow rate             | m³/h    | 0,04 - 0,20        | 0,07 - 0,38        | 0,16 - 0,97        | 0,24 - 0,9         |
| Spraying range/jet    | meters  | 2,5 - 4,5          | 4,0 - 6,4          | 6,7 - 9,1          | 9,4 - 10,7         |
| Variable sector       | degrees | 90-120 210-270 360 | 90-120 210-270 360 | 90-120 210-270 360 | 90-120 210-270 360 |
| Working pressure      | bar     | 2,0 - 3,8          | 2,0 - 3,8          | 2,0 - 3,8          | 2,0 - 3,8          |
| Max. working pressure | bar     | 4,0                | 4,0                | 4,0                | 4,0                |

## SETTING POSSIBILITIES AND TOOLS

MP wrench (02204-111242)



## OVERVIEW OF MP ROTATOR SPRINKLERS

Radius

|        | Circle         |                 |           |
|--------|----------------|-----------------|-----------|
| MP1000 | 90 ° tot 210 ° | 210 ° tot 270 ° | 360 °     |
| MP2000 | MP100090       | MP1000210       | MP1000360 |
| MP3000 | MP200090       | MP2000210       | MP2000360 |
| MP3500 | MP300090       | MP3000210       | MP3000360 |
|        | MP350090       |                 |           |

## DESIGN SCHEMATICS OF MP ROTATOR SPRINKLERS

| MP1000 |              |          |            | MP2000     |                     |          |            | MP3000     |                     |          |            | MP3500     |                     |          |            |            |                     |      |      |       |    |    |
|--------|--------------|----------|------------|------------|---------------------|----------|------------|------------|---------------------|----------|------------|------------|---------------------|----------|------------|------------|---------------------|------|------|-------|----|----|
| Bow    | Pressure bar | Radius m | Flow m³/hr | Flow l/min | Precipitation mm/hr | Radius m | Flow m³/hr | Flow l/min | Precipitation mm/hr | Radius m | Flow m³/hr | Flow l/min | Precipitation mm/hr | Radius m | Flow m³/hr | Flow l/min | Precipitation mm/hr |      |      |       |    |    |
| 90°    | 1.7          | 170      | --         | --         | --                  | 5.2      | 0.07       | 1.18       | 11                  | 12       | 7.6        | 0.16       | 2.63                | 11       | 13         | 10.1       | 0.24                | 3.94 | 9    | 11    |    |    |
|        | 2.0          | 200      | 3.7        | 0.04       | 0.61                | 11       | 12         | 5.5        | 0.07                | 1.23     | 10         | 11         | 8.2                 | 0.17     | 2.77       | 10         | 11                  | 10.4 | 0.26 | 4.28  | 10 | 11 |
|        | 2.5          | 250      | 4.0        | 0.04       | 0.68                | 10       | 12         | 5.8        | 0.09                | 1.43     | 10         | 12         | 8.5                 | 0.19     | 3.08       | 10         | 12                  | 10.4 | 0.28 | 4.58  | 10 | 12 |
|        | 2.8          | 280      | 4.1        | 0.04       | 0.70                | 10       | 11         | 6.1        | 0.09                | 1.52     | 10         | 11         | 9.1                 | 0.20     | 3.25       | 9          | 11                  | 10.7 | 0.29 | 4.84  | 10 | 12 |
|        | 3.0          | 300      | 4.3        | 0.04       | 0.73                | 10       | 11         | 6.4        | 0.09                | 1.57     | 9          | 10         | 9.1                 | 0.20     | 3.38       | 10         | 11                  | 10.7 | 0.31 | 5.22  | 11 | 13 |
|        | 3.5          | 350      | 4.4        | 0.05       | 0.78                | 10       | 11         | 6.4        | 0.10                | 1.68     | 10         | 11         | 9.1                 | 0.22     | 3.67       | 11         | 12                  | 10.7 | 0.33 | 5.41  | 11 | 13 |
|        | 3.8          | 380      | 4.5        | 0.05       | 0.81                | 9        | 11         | 6.4        | 0.11                | 1.77     | 11         | 12         | 9.1                 | 0.23     | 3.80       | 11         | 13                  | 10.7 | 0.34 | 5.68  | 12 | 14 |
| 180°   | 1.7          | 170      | --         | --         | --                  | 4.9      | 0.13       | 2.22       | 11                  | 12       | 7.6        | 0.32       | 5.48                | 11       | 13         | 10.1       | 0.50                | 8.36 | 10   | 11    |    |    |
|        | 2.0          | 200      | 3.7        | 0.07       | 1.20                | 11       | 12         | 5.2        | 0.14                | 2.35     | 11         | 12         | 8.2                 | 0.35     | 5.88       | 10         | 12                  | 10.4 | 0.51 | 8.48  | 9  | 11 |
|        | 2.5          | 250      | 4.0        | 0.08       | 1.35                | 10       | 12         | 5.5        | 0.16                | 2.67     | 11         | 12         | 8.5                 | 0.4      | 6.55       | 11         | 12                  | 10.4 | 0.60 | 10.03 | 11 | 13 |
|        | 2.8          | 280      | 4.1        | 0.08       | 1.40                | 10       | 11         | 5.8        | 0.17                | 2.80     | 10         | 12         | 9.1                 | 0.41     | 6.88       | 10         | 11                  | 10.7 | 0.65 | 10.83 | 11 | 13 |
|        | 3.0          | 300      | 4.3        | 0.09       | 1.46                | 10       | 11         | 6.1        | 0.17                | 2.90     | 10         | 11         | 9.1                 | 0.43     | 7.18       | 10         | 12                  | 10.7 | 0.70 | 11.73 | 12 | 14 |
|        | 3.5          | 350      | 4.4        | 0.09       | 1.56                | 10       | 11         | 6.4        | 0.19                | 3.15     | 9          | 10         | 9.1                 | 0.47     | 7.77       | 11         | 13                  | 10.7 | 0.73 | 12.15 | 13 | 15 |
|        | 3.8          | 380      | 4.5        | 0.10       | 1.62                | 9        | 11         | 6.4        | 0.19                | 3.22     | 9          | 11         | 9.1                 | 0.45     | 8.02       | 12         | 13                  | 10.7 | 0.75 | 12.41 | 13 | 15 |
| 210°   | 1.7          | 170      | --         | --         | --                  | 4.9      | 0.16       | 2.58       | 11                  | 12       | 7.6        | 0.38       | 6.40                | 11       | 13         | 10.1       | 0.59                | 9.80 | 10   | 12    |    |    |
|        | 2.0          | 200      | 3.7        | 0.09       | 1.41                | 11       | 13         | 5.2        | 0.17                | 2.75     | 11         | 13         | 8.2                 | 0.41     | 6.85       | 10         | 12                  | 10.4 | 0.65 | 10.75 | 10 | 12 |
|        | 2.5          | 250      | 4.0        | 0.10       | 1.58                | 10       | 12         | 5.5        | 0.19                | 3.08     | 10         | 12         | 8.5                 | 0.46     | 7.65       | 11         | 12                  | 10.4 | 0.70 | 11.66 | 11 | 13 |
|        | 2.8          | 280      | 4.1        | 0.10       | 1.63                | 10       | 11         | 5.8        | 0.20                | 3.25     | 10         | 12         | 9.1                 | 0.48     | 8.02       | 10         | 11                  | 10.7 | 0.75 | 12.45 | 11 | 13 |
|        | 3.0          | 300      | 4.3        | 0.10       | 1.71                | 10       | 11         | 6.1        | 0.21                | 3.42     | 10         | 11         | 9.1                 | 0.50     | 8.37       | 10         | 12                  | 10.7 | 0.80 | 13.40 | 12 | 14 |
|        | 3.5          | 350      | 4.4        | 0.11       | 1.82                | 10       | 11         | 6.4        | 0.22                | 3.70     | 9          | 10         | 9.1                 | 0.54     | 9.03       | 11         | 13                  | 10.7 | 0.85 | 14.23 | 13 | 15 |
|        | 3.8          | 380      | 4.5        | 0.11       | 1.89                | 9        | 11         | 6.4        | 0.23                | 3.80     | 10         | 11         | 9.1                 | 0.56     | 9.37       | 12         | 13                  | 10.7 | 0.90 | 14.91 | 13 | 16 |
| 270°   | 1.7          | 170      | --         | --         | --                  | 4.9      | 0.20       | 3.32       | 11                  | 12       | 7.6        | 0.50       | 8.35                | 12       | 13         | 10.1       | 0.59                | 9.80 | 10   | 12    |    |    |
|        | 2.0          | 200      | 3.7        | 0.11       | 1.80                | 11       | 13         | 5.2        | 0.21                | 3.53     | 11         | 13         | 8.2                 | 0.53     | 8.83       | 10         | 12                  | 10.4 | 0.65 | 10.75 | 10 | 12 |
|        | 2.5          | 250      | 4.0        | 0.12       | 2.05                | 10       | 12         | 5.5        | 0.24                | 3.97     | 10         | 12         | 8.5                 | 0.59     | 9.82       | 11         | 12                  | 10.4 | 0.70 | 11.66 | 11 | 13 |
|        | 2.8          | 280      | 4.1        | 0.13       | 2.10                | 10       | 11         | 5.8        | 0.25                | 4.15     | 10         | 12         | 9.1                 | 0.62     | 10.32      | 10         | 11                  | 10.7 | 0.75 | 12.45 | 11 | 13 |
|        | 3.0          | 300      | 4.3        | 0.13       | 2.20                | 10       | 11         | 6.1        | 0.26                | 4.35     | 10         | 11         | 9.1                 | 0.65     | 10.77      | 10         | 12                  | 10.7 | 0.80 | 13.40 | 12 | 14 |
|        | 3.5          | 350      | 4.4        | 0.14       | 2.35                | 10       | 11         | 6.4        | 0.28                | 4.70     | 9          | 10         | 9.1                 | 0.70     | 11.68      | 11         | 13                  | 10.7 | 0.85 | 14.23 | 13 | 15 |
|        | 3.8          | 380      | 4.5        | 0.15       | 2.45                | 9        | 11         | 6.4        | 0.29                | 4.88     | 9          | 11         | 9.1                 | 0.73     | 12.12      | 12         | 13                  | 10.7 | 0.90 | 14.91 | 13 | 16 |
| 360°   | 1.7          | 170      | --         | --         | --                  | 4.9      | 0.27       | 4.42       | 11                  | 12       | 7.6        | 0.66       | 10.98               | 11       | 13         | 10.1       | 0.59                | 9.80 | 10   | 12    |    |    |
|        | 2.0          | 200      | 3.7        | 0.14       | 2.40                | 12       | 14         | 5.2        | 0.28                | 4.72     | 11         | 13         | 8.2                 | 0.70     | 11.72      | 10         | 12                  | 10.4 | 0.65 | 10.75 | 10 | 12 |
|        | 2.5          | 250      | 4.0        | 0.16       | 2.69                | 10       | 12         | 5.5        | 0.32                | 5.28     | 10         | 12         | 8.5                 | 0.76     | 13.10      | 11         | 12                  | 10.4 | 0.70 | 11.66 | 11 | 13 |
|        | 2.8          | 280      | 4.1        | 0.17       | 2.81                | 10       | 12         | 5.8        | 0.33                | 5.55     | 10         | 12         | 9.1                 | 0.83     | 13.75      | 10         | 11                  | 10.7 | 0.75 | 12.45 | 11 | 13 |
|        | 3.0          | 300      | 4.3        | 0.18       | 2.94                | 10       | 11         | 6.1        | 0.35                | 5.80     | 10         | 11         | 9.1                 | 0.87     | 14.37      | 10         | 12                  | 10.7 | 0.80 | 13.40 | 12 | 14 |
|        | 3.5          | 350      | 4.4        | 0.19       | 3.17                | 10       | 11         | 6.4        | 0.37                | 6.25     | 9          | 10         | 9.1                 | 0.93     | 15.52      | 11         | 13                  | 10.7 | 0.85 | 14.23 | 13 | 15 |
|        | 3.8          | 380      | 4.5        | 0.20       | 3.25                | 10       | 11         | 6.4        | 0.38                | 6.40     | 9          | 10         | 9.1                 | 0.96     | 16.07      | 12         | 13                  | 10.7 | 0.90 | 14.91 | 13 | 16 |

|   |          |   |            |   |          |            |            |                     |          |            |            |                     |          |            |            |                     |  |  |  |
|---|----------|---|------------|---|----------|------------|------------|---------------------|----------|------------|------------|---------------------|----------|------------|------------|---------------------|--|--|--|
| MP3500<br>Radius: 9.4 to 10.7 m<br>Adjustable bow<br>● Brown: 90° to 210° | 90°      | MP3500<br>Radius: 9.4 to 10.7 m<br>Adjustable bow<br>● Brown: 90° to 210° | 180°       | MP3500<br>Radius: 9.4 to 10.7 m<br>Adjustable bow<br>● Brown: 90° to 210° | 210°     |            |            |                     |          |            |            |                     |          |            |            |                     |  |  |  |
| Pressure bar kPa  | Radius m | Flow m³/hr  | Flow l/min | Precipitation mm/hr   | Radius m | Flow m³/hr | Flow l/min | Precipitation mm/hr | Radius m | Flow m³/hr | Flow l/min | Precipitation mm/hr | Radius m | Flow m³/hr | Flow l/min | Precipitation mm/hr |  |  |  |
| 1.7 170   | 10.1     | 0.24  | 3.94       | 9   | 11       | 10.1       | 0.50       | 8.36                | 10       | 11         | 10.1       | 0.59                | 9.80     | 10         | 12         |                     |  |  |  |
| 2.0 200   | 10.4     | 0.26  | 4.28       | 10  | 11       | 10.4       | 0.51       | 8.48                | 9        | 11         | 10.4       | 0.65                | 10.75    | 10         | 12         |                     |  |  |  |
| 2.5 250   | 10.4     | 0.28  | 4.58       | 10  | 12       | 10.4       | 0.60       | 10.03               | 11       | 13         | 10.4       | 0.70                | 11.66    | 11         | 13         |                     |  |  |  |
| 2.8 280   | 10.7     | 0.29  | 4.84       | 10  | 12       | 10.7       | 0.65       | 10.83               | 11       | 13         | 10.7       | 0.75                | 12.45    | 11         | 13         |                     |  |  |  |
| 3.0 300   | 10.7     | 0.31  | 5.22       | 11  | 13       | 10.7       | 0.70       | 11.73               | 12       | 14         | 10.7       | 0.80                | 13.40    | 12         | 14         |                     |  |  |  |
| 3.5 350   | 10.7     | 0.33  | 5.41       | 11  | 13       | 10.7       | 0.73       | 12.15               | 13       | 15         | 10.7       | 0.85                | 14.23    | 13         | 15         |                     |  |  |  |
| 3.8 380   | 10.7     | 0.34  | 5.68       | 12  | 14       | 10.7       | 0.75       | 12.41               | 13       | 15         | 10.7       | 0.90                | 14.91    | 13         | 16         |                     |  |  |  |

## INSTALLATION & MAINTENANCE

### Installation

- ✓ Please contact Netafim for more information regarding design and installation.
- ✓ Flush the installation before operation.
- ✓ Please do not use any detergents when applying sprinklers in combination with PE lines.

### Maintenance

- ✓ For cleaning methods, please refer to chapter "Installation and maintenance of sprinkler system", section: Cleaning instructions.
- ✓ Check at regular intervals whether the sprinklers are set to the correct working pressure.