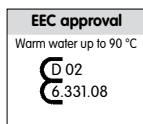


# M 190 Multi-jet meter

Dry-dial meter for warm water



- Multi-jet dry-dial meter for warm water
- Nominal flowrate  $Q_n$  1.5 to 15 m<sup>3</sup>/h
- EEC approval metrological Class B·H
- ELSTER conText® inscription system

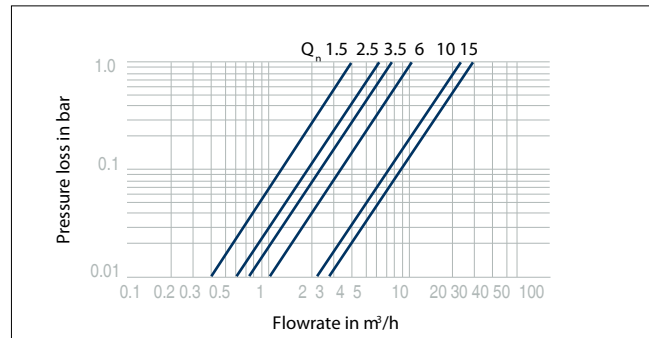


Reed Disc with tamper detection  
 Type Reeds witch potted,  
 protection IP 68  
 max. 24 V DC,  
 50 mA

Contact load  
 Resistance 100 Ohm  
 Cable 3 x 0.14 mm  
 Ø 3.3 mm  
 Pulse contact brown – white  
 Tamper contact green – white  
 Cable length 3 m



Ordering number  
 100 litres/1 pulse 0000998  
 1000 litres/1 pulse 0000999



| Multi-jet meter M190<br>Meter size / Nominal flowrate<br>Nominal size | Q <sub>n</sub> m <sup>3</sup> /h<br>DN mm<br>DN inches | MTHR    |         |           |           |         |           | MTHR-S  |         |         |           |         |
|---|--|---------|---------|-----------|-----------|---------|-----------|---------|---------|---------|-----------|---------|
|   |  | 1.5     | 2.5     | 3.5       | 6         | 10      | 15        | 15      | 1.5     | 2.5     | 6         | 10      |
|   |  | 15      | 20      | 25        | 25        | 40      | 50        | 50      | 20      | 20      | 25        | 40      |
|   |  | 1/2     | 3/4     | 1         | 1         | 1 1/2   | 2         | 2       | 3/4     | 3/4     | 1         | 1 1/2   |
| Ordering number<br>Initial calibration class B-H                      |  | 0770574 | 0770582 | 0770590   | 0794287   | 0770620 | 0770647   | 0794295 | 0794309 | 0794317 | 0794325   | 0794333 |
| Dimensions  |  |         |         |           |           |         |           |         |         |         |           |         |
| D <sub>1</sub> Meter conn. thread                                     | ISO 228/1 inches                                       | G 3/4 B | G 1 B   | G 1 1/4 B | G 1 1/4 B | G 2 B   | G 2 1/2 B | Flange  | G 1 B   | G 1 B   | G 1 1/4 B | G 2 B   |
| Conn. pipe thread   | ISO 7/1 inches   | R 1/2   | R 3/4   | R 1       | R 1       | R 1 1/2 | R 2       | —       | R 3/4   | R 3/4   | R 1       | R 1 1/2 |
| L <sub>1</sub> Meter length   | mm   | 165     | 190     | 260       | 260       | 300     | 270       | 270     | 105     | 105     | 150       | 200     |
| Connector length  | mm   | 40      | 50      | 60        | 60        | 70      | 60        | —       | 50      | 50      | 60        | 70      |
| B <sub>1</sub> Width  | mm   | 100     | 100     | 100       | 100       | 100     | 100       | 100     | 100     | 100     | 100       | 100     |
| B <sub>2</sub> Distance Pipe axis to meter axis                       | mm   | —       | —       | —         | —         | —       | —         | —       | 80      | 80      | 94        | 120     |
| H <sub>1</sub> Centerline height                                      | mm   | 31      | 31      | 43        | 43        | 46      | 46        | 68      | —       | —       | —         | —       |
| H <sub>2</sub> Overall height   | mm   | 115     | 115     | 130       | 130       | 153     | 153       | 160     | 135     | 135     | 151       | 195     |
| Weight  | kg   | 1.5     | 1.6     | 2.5       | 2.5       | 3.7     | 4.5       | 8.5     | 1.8     | 1.8     | 2.6       | 5.5     |
| Performance characteristics   |  |         |         |           |           |         |           |         |         |         |           |         |
| Maximum flow rate   | Q <sub>max</sub> m <sup>3</sup> /h                     | 3       | 5       | 7         | 12        | 20      | 30        | 30      | 3       | 5       | 12        | 20      |
| Transitional flow rate  | Q <sub>t**</sub> l/h                                   | 120     | 200     | 200       | 480       | 800     | 1 500     | 1 500   | 120     | 200     | 480       | 800     |
| Minimum flow rate   | Q <sub>min**</sub> l/h                                 | 25      | 35      | 35        | 80        | 150     | 200       | 200     | 25      | 35      | 80        | 150     |
| Starting flow   | l/h  | 10      | 15      | 15        | 50        | 50      | 100       | 100     | 10      | 15      | 30        | 50      |
| Continuous load approx. 1.6 x Q <sub>n</sub>                          | l/h  | 2 500   | 4 000   | 5 600     | 10 000    | 16 000  | 25 000    | 25 000  | 2 500   | 4 000   | 10 000    | 16 000  |
| Temperature   | T <sub>max</sub> °C                                    | 90      | 90      | 90        | 90        | 90      | 90        | 90      | 90      | 90      | 90        | 90      |
| Pressure rating   | PN bar   | 16      | 16      | 16        | 16        | 16      | 16        | 16      | 16      | 16      | 16        | 16      |
| Flow capacity at 1 bar pressure loss                                  | m <sup>3</sup> /h 4.4                                  | 6.7     | 7.2     | 12.8      | 22        | 32      | 32        | 4.0     | 6.7     | 12.8    | 22        | 40      |

\*\* typical performance characteristics, exceeds the demands of the metrological class B

