

# PD121

## INDUSTRIAL PERISTALTIC FILLING MACHINE

- No cross contamination
- Accuracy +/-0.5%
- 0,1 to 250 ml
- Drip-free
- Change of product in 1 minute

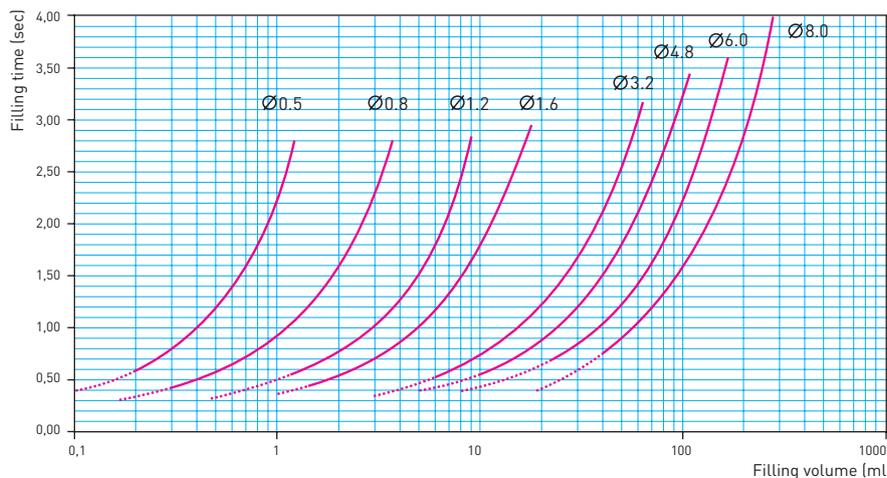


WORLD LEADERS IN ASEPTIC PERISTALTIC FILLING



# PD12I TECHNICAL SPECIFICATIONS

## PD12I – capacity diagram (based on water)



PD12I is part of Watson-Marlow Flexicon's Multi Filling System. The peristaltic filling principle is the fastest growing in the pharmaceutical industry due to well-established advantages such as sterility, guarantee against cross contamination and easy cleaning. These are achieved by the fact that the product is in contact only with the medically approved tubing and filling needle.

PD12I is an extremely flexible liquid filling station, which can fill volumes from 0.1 ml to more than 250 ml with an accuracy better than +/-1% in the range from 0.1 ml to 0.5 ml and better than +/-0.5% in the range from 0.5 ml and up. This outstanding flexibility and accuracy is achieved without having to change anything but the dimension of the tubing in use.

PD12I is equipped with the well-proven Watson-Marlow Flexicon quick-change peristaltic head in which two parallel tubes are squeezed by 12 offset rollers. This head design provides a very stable flow and handles the product gently.

Products with living cells can be filled without harming the cells. This feature makes the PD12I ideal to fill sensitive products such as bio-tech, genetic and blood products.

PD12I is operated through the MC12 control panel and it is only a matter of loading the tube and typing in the filling parameters on the key pad - all done in less than 3 minutes. As PD12I maintains a closed fluid path from the bulk product container to the end of the filling needle, substitution of this fluid path means that PD12I is instantly cleaned and ready for the next operation.

PD12I is designed for use in cleanroom environments for production complying with cGMP and its outstanding performance and reliability is demonstrated by the many hundreds of installations world-wide. PD12I is part of the product program, which has proved Watson-Marlow Flexicon to be the world's leading manufacturer of peristaltic filling systems.

**Filling volume:**  
 0.1 ml to more than 250 ml

**Accuracy:**  
 Better than +/-0.5% for fills above 0.5 ml  
 Better than +/-1% for fills below 0.5 ml

**Flow:**  
 80 to 4,200 ml/min.

**Pump head:**  
 Peristaltic quick-change head in anodised aluminium, 12 offset rollers in AISI304 stainless steel and on ball bearings

**Tubes:**  
 Watson-Marlow Flexicon peroxide or platinum cured silicone tubes with a 1.6 to 2.0 mm wall. The tubes are approved for pharmaceutical use, according to a.o. FDA and USP standards. The tubes are available in other materials as well

**Tube sizes:**  
 0.5 - 0.8 - 1.2 - 1.6 - 3.2 - 4.8 - 6.0 - 8.0 mm i.d.

**Mains:**  
 110/230 VAC earthed, 50/60 Hz

**Power consumption:**  
 Max. 150 W

**Cabinet:**  
 Anodised aluminium and stainless steel

**Ingress protection:**  
 IP54

**Weight:**  
 12 kg

**Interface:**  
 RS-485 multi-drop  
 1 x (5-50 VDC) input for start  
 1 x (5-50 VDC) input for disabling drive  
 2 x open collector outputs for status

**Accessories:**  
 Filling stands and needles, foot switch and tubes, etc.

