

## KEM Pharmaceutical Industry



# Application Spotlight

## Filling saline infusion solutions

# HIGHLY ACCURATE DOSING IN HYGIENIC APPLICATION

## Technical Data

<b>Medium:</b>	Saline infusion solution (0.9 % sodium chloride solution)
<b>Temperature:</b>	+20 °C [68 °F]
<b>Pressure:</b>	5 bar [15 psi]
<b>Measuring range:</b>	1 l/min
<b>Viscosity:</b>	1 mPa*s
<b>Density at 20 °C:</b>	1.005 g/cm³

## Application

After the production of saline infusion solutions in the pharmaceutical sector, they must be filled with high precision into special 100 millilitres or 1 litre polyethylene bottles. These are delivered to end customers such as hospitals, medical institutions, medical personnel and also patients directly in their homes

If the filling is done by a manual dosing station, the exact volume flow can be controlled by KEM Turbine Flow Meters.

## Solution

KEM Turbine Flow Meter (HM TRI Series).

The Turbine Flow Meter made of high-quality stainless steel with TriClamp connections measures the volume flow. The frequency signal from a carrier frequency pulse amplifier is used to transmit actual values and to control the pneumatic membrane pump with integrated control valve.

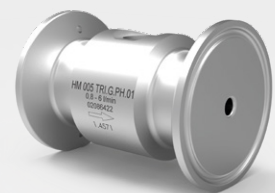
## Advantages

- Clamp process connection for hygienic application
- Easy integration into a manual dosing station
- Fast, dynamic response in intermittent operation
- Dead space optimized design with flush holes for optimal cleaning
- CIP capable



## Certificates:

- Pressure Equipment Directive 97/23/EC, 2014/68/EU
- HP0 - Certification
- Explosion protection according to 2014/34/EU
- CSA/UL - Certification
- Accreditation according to ISO 17025



Turbine Flow Meter  
for pharmaceutical applications  
(HM TRI Series)