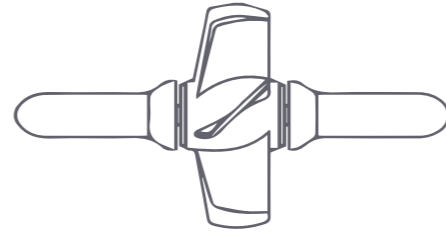




Small turbine, big possibilities.

# Turbine meters for low viscosity, non-aggressive liquids



## The VISION series

The VISION turbine meters are ideal for the metering of small quantities of liquids. Instant and total flow can be displayed. The VISION 1000 series is most suited for small flow rates up to 2,5 l/min. The VISION series 2000 can be used in applications from 0,5 to 35 l/min and the VISION 3000 series offers a wider flow range of 5 to 65 l/min. These meters are best suited for flow measurement of demineralized water, alkaline solutions, oils/salad oil, fuel oil,

beverages, water solutions or for fuel and fuel consumption. They are especially ideal for washing machines and dish washers, coffee machines, laser cooling systems, solar plants, bakery and steam cooking machines in large kitchen plants and also CD cleaning.

- Excellent price/performance ratio
- Compact construction
- Easy installation
- No maintenance
- High operating pressure
- Operates in any mounting position
- Quick response time



VISION 1000 with DIN connector

VISION 2000 with DIN connector

VISION 3000 with DIN connector



VISION 2000 with AMP Faston



VISION 2000 with cable connection



VISION 2000 with cable connection

## The ILR 700 electronic display is available in three versions:

- For VISION 1000, 2000 and 3000 meters as a wireless, battery-powered (1 x CR123A battery) display, with 2.4 GHz radio frequency, for remote reading of instant and total flow rate over a 5 m range
- For the VISION 3000 as battery-powered, on meter mounted display providing instant and total flow rate
- For all VISION turbine meters as a cabled version for remote reading.



Displays for the VISION series  
The ILR 700 series electronic register

# Applications



## Food & Beverage

- Coffee machines
- Dispensing systems
- Vending machines
- Bakery machines
- Steamers



## Automotive

- Fuel consumption measurement
- Fuel injection systems
- Common rail test equipments
- Compressors



## Chemical, pharma & cosmetic industry

- Dosing systems
- Bottling plants
- Process industry
- Research or development



## Sanitary industry

- Instant electric water heaters
- Bathroom fittings
- Whirlpools
- Electric shower mixers



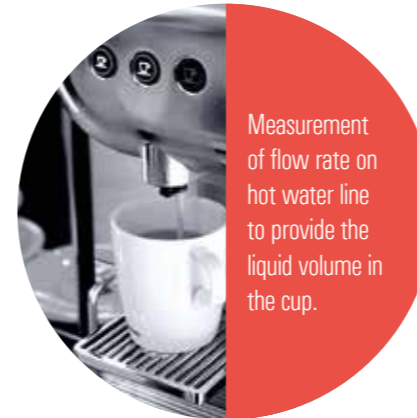
## Industrial applications

- Cooling and heating systems
- Laser cooling
- Water Treatment/leakage monitoring
- Osmosis systems
- Filter monitoring systems
- Solarplants
- Washing machines/dishwashers
- Oil burners

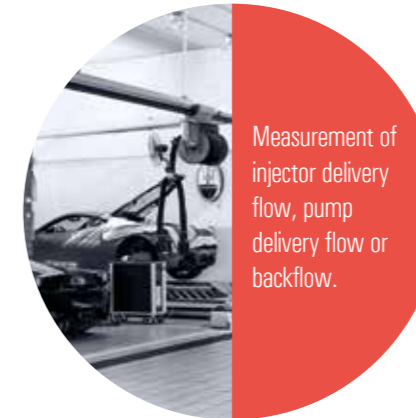


## Medical applications

- Sterilizers
- Dental water jets
- Dialysis machines
- Disinfectors
- ENT treatment units
- Cleaning devices



Measurement of flow rate on hot water line to provide the liquid volume in the cup.



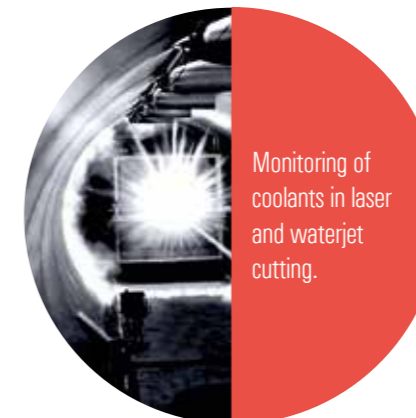
Measurement of injector delivery flow, pump delivery flow or backflow.



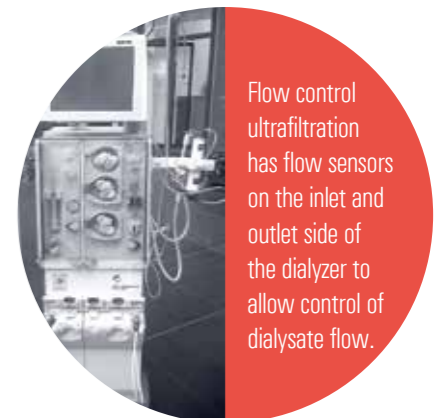
Measuring and controlling low viscosity and non-aggressive liquids up to 15 cSt.



Dosing and mixing of hot and cold water.



Monitoring of coolants in laser and waterjet cutting.



Flow control ultrafiltration has flow sensors on the inlet and outlet side of the dialyzer to allow control of dialysate flow.

## Technical information: VISION turbine meters

Type	VISION 1000	VISION 2000	VISION 3000
Body material	Trogamid	Grilamid / Trogamid / Brass	Trogamid
Viscosity range	0,8 – 16 mm <sup>2</sup> /s	0,8 – 16 mm <sup>2</sup> /s	0,8 – 16 mm <sup>2</sup> /s
Accuracy	± 3 % of value	± 3 % of value	± 3 % of value
Repeatability	< 0,5 % of reading	< 0,5 % of reading	< 0,5 % of reading
Temperature range	-20 °C to +100 °C	-20 °C to +100 °C	-20 °C to +100 °C
Operating pressure	25 bar max.	25 bar max.	25 bar max.
Electrical connection	Electrical connector EN 60529 or cable connection	Electrical connector EN 60529 / AMP Faston or cable connection	Electrical connector EN 60529 or cable connection
Power supply	5 – 24 VDC	5 – 24 VDC	5 – 24 VDC
Output signal	Open collector NPN pulse	Open collector NPN pulse	Open collector NPN pulse
Process connections	G ¼", NPT ¼"	G 3/8", NPT 3/8", o-ring, hose nipples	G ¾", NPT ¾"
Approvals	KTW, NSF 61, WRAS	KTW, NSF 61, WRAS	—

## Specifications

Type	VISION 1000	VISION 2000						VISION 3000
	1005 2F 66	2006 4F 44	2006 2F 66	2008 4F 17	2008 4F 22	2008 4F 44	2008 2F 66	3012 4F 16
Measuring range l/min	0,1 – 2,5	1 – 10	0,5 – 5	2 – 35	1 – 25	1 – 15	0,5 – 7,5	5 – 65
K factor PPL*	22.000	3300	6900	750	1000	2200	4700	210
Size DN (mm)	5	6	6	8	8	8	8	12

\* PPL = pulses / litre



### Badger Meter Europa

#### Badger Meter Europa GmbH

Nürtinger Str. 76  
72639 Neuffen  
Germany  
Tel. +49-70 25-92 08-0  
Fax +49-70 25-92 08-15  
badger@badgermeter.de  
www.badgermeter.de

For Switzerland  
Badger Meter Swiss AG  
Mittelholzerstr. 8  
3006 Bern  
Switzerland  
Tel. +41 31 932 01 11  
Fax +41 31 931 08 67  
info@badgermeter.ch  
www.badgermeter.ch

For the USA and Canada  
Badger Meter, Inc.  
P.O. Box 245036  
Milwaukee, WI 53224-9536  
USA  
Tel. +1-414-355-04 00  
Fax +1-414-355-74 99  
infocentral@badgermeter.com  
www.badgermeter.com

For Asia  
Badger Meter Europa GmbH  
Singapore Branch  
80 Marine Parade Road  
#21-06 Parkway Parade  
Singapore 449269  
Singapore  
Tel. +65-63 46 48 36  
Fax +65-63 46 48 37  
awang@badgermeter.com

For Slovakia  
Badger Meter Slovakia s. r. o.  
Racianska 109 / B  
83102 Bratislava  
Slovakia  
Tel. +421-2-44 63 83 01  
Fax +421-2-44 63 83 03  
badgermeter@badgermeter.sk  
www.badgermeter.sk

For the United Arab Emirates  
Badger Meter Europe  
Middle East Branch Office  
Dubai Silicon Oasis  
Head Quarter Building  
Wing C, Office #C209  
Dubai / UAE  
Tel. +971-4-371 2503  
Fax +971-4-371 2504  
gramaswamy@  
badgermeter.com

For Mexico  
Badger Meter de las  
Americas S. A. de C. V.  
Pedro Luis Ogazon #32  
Col. Guadalupe Inn  
Mexico, D. F. 01020  
Mexico  
Tel. +52-55-56 62-08 82  
Fax +52-55-56 62-75 81  
bmdla@badgermeter.com

For China  
Badger Meter, Inc.  
Shanghai Representative  
Office 7-1202  
99 Hangzhong Road  
Minhang District  
Shanghai 201101  
China  
Tel. +86-21-57 63-54 12  
Fax +86-21-57 63-54 12  
rjiang@badgermeter.com

For the Czech Republic  
Badger Meter Czech  
Republic s. r. o.  
Marikova 2082/26  
62100 Brno  
Czech Republic  
Tel. +420-5-41 42 04 11  
Fax +420-5-41 22 97 24  
obchod@badgermeter.cz  
www.badgermeter.cz

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Every drop counts.