

RN7 HYGIENIC FLOWMETER



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The RN7 hygienic turbine flowmeters are specifically designed for the measurement of liquid flow in the food and pharmaceutical industries.

FEATURES & BENEFITS

- Hygienic stainless steel construction
 - Polished internals
 - Easy to clean with steam or CIP
 - Hygienic end connections
 - Very low maintenance and down time
- Highly accurate measurement of flow
 - Reduce waste and costs
 - Improve product quality
- High quality manufacture
 - ISO9001 certified company
 - Individual calibration certificates
- Bi-directional flow capability

PRODUCT CONFIGURATION

1 MATERIAL (Body/Gears/Bearing)

Body: 316/316L dual certified stainless steel

2 BEARING TYPE

PTFE with carbon graphite filler 180°C
Tungsten carbide option for a maximum temperature of 232°C

3 ROTOR/ROTOR SHAFT MATERIAL

431 Stainless steel or ferralium / Tungsten carbide

4 HANGERS/CIRCLIPS

316 stainless steel / 316 stainless steel

5 INSTRUMENTATION

The signal can be used for a local display, remote display or converted for transmission to a separate control system. Apollo have a range of instruments to suit all your requirements.

6 PRINCIPLE OF OPERATION

When liquid flows and the rotor turns, the sensor detects the movement of the blade tips and generates pulses. The frequency of the pulses is proportional to the flow rate.

7 CALIBRATION

All Apollo RN7 turbine flowmeters are individually calibrated on water and are traceable to National Standards. We provide you with a test certificate for each meter showing the number of pulses per litre, which is used to set the instrumentation.

8 INSTALLATION

The RN7 flowmeters have hygienic tri-clamp, RJT, ISS or ACME end connections for mounting directly into the flow line.

For best performance and to reduce turbulence we recommend that the flowmeter is installed in a straight section of pipe with at least 10 pipe diameters upstream and 5 pipe diameters downstream.

All control valves should be installed downstream of the flowmeter. Pre-amplifiers are only needed for installations with very long transmission distances or where the installation is in an electrically or magnetically noisy environment close to pumps, motors, generator, switchgear or heavy current carrying cables.

9 CONSTRUCTION

The stainless steel construction is durable and gives excellent corrosion resistance. The rotor is machined from solid making it virtually indestructible. The sleeve bearings provide you with highly reliable performance over long periods. The design minimises bacterial growth crevices.

ADDITIONAL OPTIONS

- mV sinewave pickup
- Ex - mV sinewave ATEX approved (EXia)
- HT - mV sinewave high temp (232°C)
- PPW - square wave pulse
- FC7 - 4-20 mA analogue outputs
- R6-FRT141D0FMI intrinsically safe battery powered display of flow rate & total, pulse & 4-20mA analogue outputs
- R4-FRT401D0FABattery powered display of flow rate & total, pulse output
- R5-FRT141D0FABattery powered display of flow rate & total, pulse & 4-20mA analogue outputs
- Tri-clamp flanges (standard)
- ISS flanges
- RJT flanges

APPLICATIONS

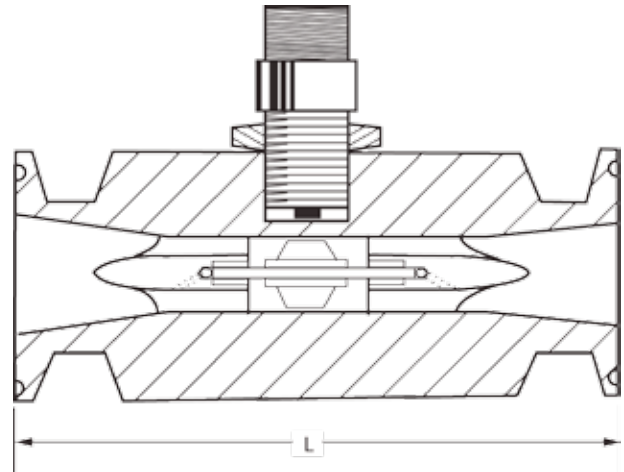
- Dairy/berages
- Food processing
- Pharmaceutical
- Brewing and soft drinks
- Ratio blending
- Tanker loading
- Low pressure steam sterilisation

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SPECIFICATIONS

	RN7 Flowmeter
Linearity	Better than +/- 0.5% of reading
Repeatability	+/- 0.1% of reading
Pressure drop	0.5 bar at maximum flow
Maximum overrange	Up to 110% of the maximum flow rate for short durations
Maximum working pressure	16 bar
Temperature range	Standard pickoff coil -30°C to 110°C High temp. pickoff -30°C to 232°C
Body Connections	Tri-clamp (standard) ISS threaded RJT (ring joint thread) ACME thread

DIAGRAM



Performance Data

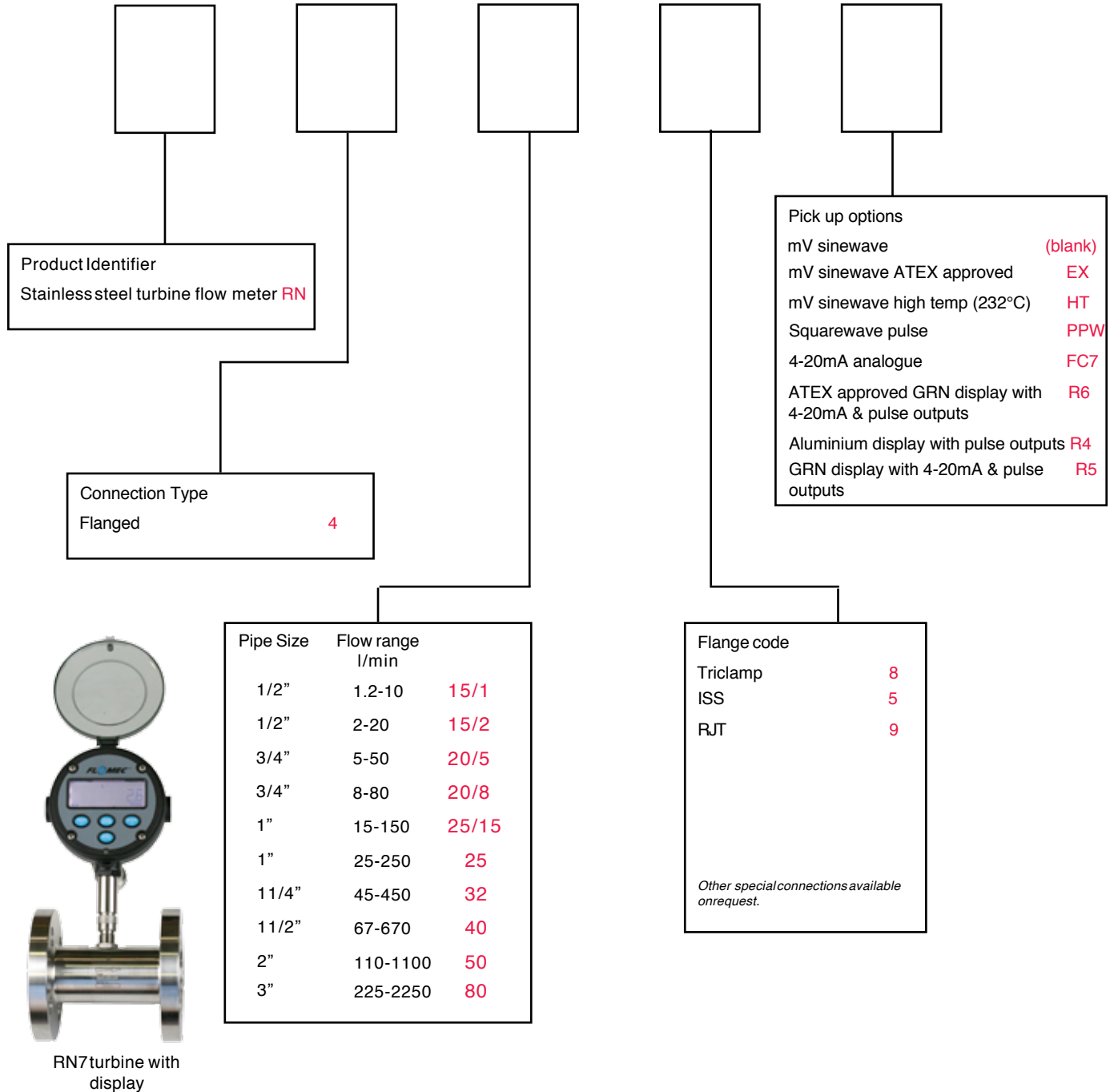
Model no	Pipe size mm	Linear Flow Range	K factor pulses/litre
RN7/15/1	25	1-10	6000
RN7/15/2	25	2-20	3000
RN7/20/5	25	5-50	1080
RN7/20/8	25	8-80	1080
RN7/25/15	25	15-150	520
RN7/25	25	25-250	362
RN7/40	40	65-650	72
RN7/50	80	110-1100	41
RN7/80	80	225-2250	16

Dimensions

Model no	Standard Triclamp Size	L mm	Weight Kg
RN7/15/1	1"	127	1.4
RN7/15/2	1"	127	1.4
RN7/20/8	1"	127	1.4
RN7/20/5	1"	127	1.4
RN7/25/15	1 1/2"	127	1.8
RN7/25	1 1/2"	127	1.7
RN7/40	2"	155	3.0
RN7/50	2 1/2"	216	5.2
RN7/80	3"	250	8.0

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OPTIONS AND ORDERING INFORMATION



Service & Warranty: For technical assistance, warranty replacement or repair contact your distributor:
UK Flowtechnik Ltd. 1 Central Park, Lenton Lane, Nottingham, NG7 2NR, UK.
Tel: +44 (0) 115 901 7111. Email: sales@ukflowtechnik.com. Web: www.ukflowtechnik.com



ISO 9001