

Flowmeters with Loose Flanges

The type **RL** fixing device is mainly used for industrial applications of the flowmeters with loose flange, where the aggressive media prevents the use of stainless steel. Primarily we propose its use in the pharmaceutical and chemical industry to measure strong organic, non-organic acids, corrosive liquids and gases. The measuring tube within the Plexiglas and stainless steel housing is well protected against the mechanical impacts of industrial environment and depending on the design, the media will only be in direct contact (in addition to the borosilicate glass-tube and the seals) with the PTFE or PVC or stainless steel. The selection of seals is in all cases made in accordance with the specification of the measured media (i.e. Viton, EPDM, Teflon, etc.) The loose flanges, which are not in contact with the media, are made of PVC or stainless steel with PN16 pressure range. The fixing devices are fitted with **opto sensors** upon request.



Measurable media (except for water and air):

The aggressive gases, organic and non-organic acids, concentrated salt solutions, organic liquids etc., against which the PTFE and the borosilicate glass are resistant. **If the media permits the use of stainless steel, the max. values of the measuring ranges for liquid might be increased significantly!**

Max. pressure: 6 bar

Max temperature: 65°C – 100°C

Minimum pressure demand:

Depending on the measuring range

for liquid: 0,05...0,5 bar

for gases: 0,01...0,1 bar

type	max. measurable flow		built-in size	connection			
	20°C water	20°C air 1,013 bar		nominal diameter	nominal pressure	flange diameter	pitch circle
RL-15	...40 l/h	...2 Nm ³ /h	400	DN15	PN16	95	65
RL-25	...300 l/h	...20 Nm ³ /h	420	DN25		115	85
RL-32	...500 l/h	...30 Nm ³ /h	440	DN32		140	100
RL-40	...2,5 m ³ /h	...100 Nm ³ /h	460	DN40		150	110

The lower measuring point of the measuring tubes is generally 10% of the top measuring point.

In the case of media whose density and viscosity are significantly different from that of water of 20°C and air of 20°C with 1,013 bar (abs), the limits of measurement ranges may vary **significantly** both in positive and negative directions.