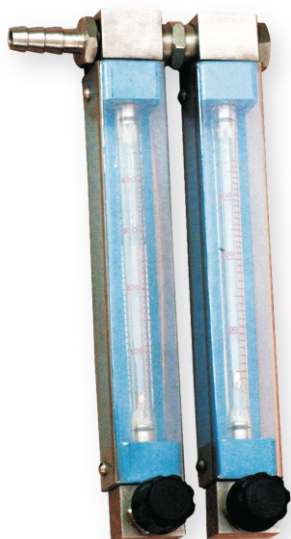


## ROTAMETERS RUM TYPE

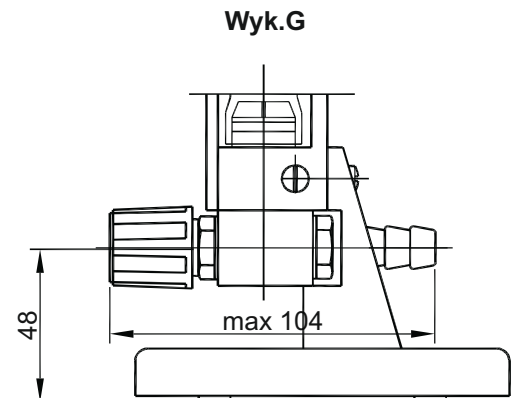
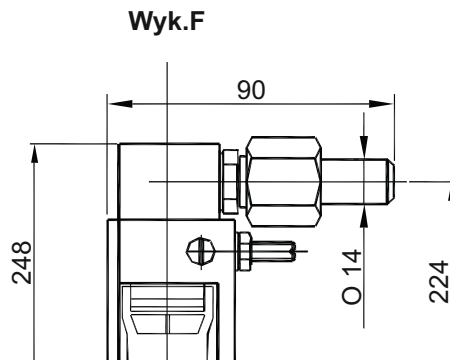
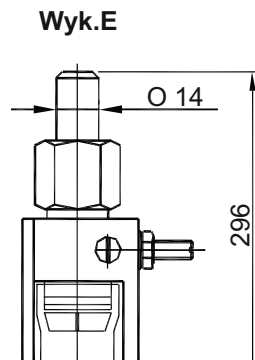
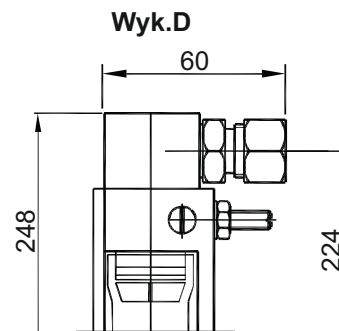
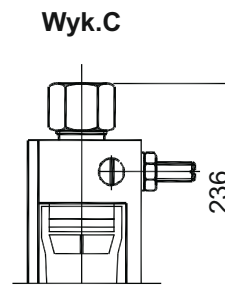
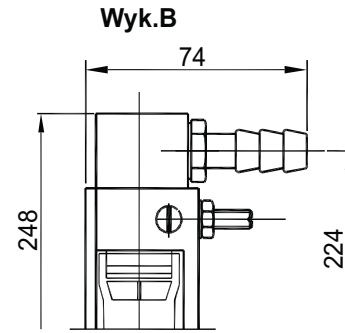
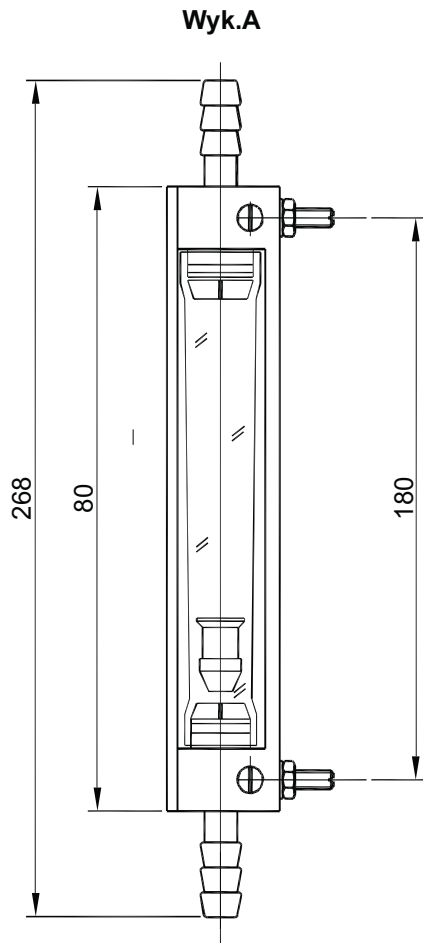


The rotameters RUM are used to measurement of volume fluxes or mass fluxes of gases and liquids in laboratorial, experimental and industrial installations.

### EXEMPLARY MEASURING RANGES

Type	Air, dm <sup>3</sup> /h 293K, 0,1013 MPa		Water, dm <sup>3</sup> /h 293 K, 0,1013 MPa		Pressure drop, Pa	Permissible conditions (pressure, temperature)
	min	max	min	max		
RUM-06	10	100	0,2	2,5	10	0,6 MPa 363 K
	30	300	1	6	245	
	63	630	2	20	196	
	80	800	2,5	25	245	
	100	1000	3,15	31,5	392	
	50	500	1,25	12,5	98	
	63	630	2,8	28	304	
RUM-10	200	2000	6,3	63	394	
	250	2500	8	80	441	
	300	3000	10	100	598	
	160	1600	4	40	186	
	200	2000	9	90	392	
RUM-16	400	4000	16	160	431	
	500	5000	20	200	686	
	600	6000	22	220	1010	
	300	3000	8	80	294	

On demand it is possible to fit the measuring range to individual needs of customer.





- A** - vertical connections on hose; material: brass ( mark A ) or acidproof steel ( mark AK )
- B** - horizontal connections on hose; material: brass ( mark B ) or acidproof steel ( mark BK )
- C** - vertical connections for metal pipes; material: brass – copper
- D** - horizontal connections for metal pipes; material: brass – copper
- E** - decomposed vertical connection with ending to welding; material: acidproof steel
- F** - decomposed horizontal connection with ending to welding; material: acidproof steel
- H** - ramification for connections B or F type. It is possible to creating combination of several rotameters which are connected together on the inlet side or outlet side. Material: brass ( mark H ) or acidproof steel ( mark HK )
- G** - rotameter with valve which is placed in base

**There is possible to supply the rotameters with additional equipment ( mark B or BK ):**

**ZK** - control valve of acidproof steel in case of connections BK

**ZM** - control valve of brass in case of connections B

## EXEMPLARY MEASURING RANGES

**Basic elements of rotameters:** glass pipe and float.

**Material of pipe:** glass (allay of boron and silicon) in sort simax or termisil.

**Float's material:** allay of Al, chromium-nickel steel sort 1H18N9T, tarflen, PCV.

**Seal of glass pipe:** rings for suitable factor.

## ACCURACY OF READING

The standard accuracy class is 2,5 according with PN-85/M-42371.

On demand there is possible to execute the rotameter in higher accuracy class with calibration certificate from our laboratory, Weights and Measures Office or from Accredited Laboratory.

## INSTALLATION DIRECTIONS

The rotameters RUM type can be join with the installation with the aid of:

- elastic hoses
- decomposed joint with ending to welding
- brass joints for metal pipes  $\varnothing 10$  with brass bushing

- 1)The rotameter should be install in vertical position. The permissible devotion: 1.
- 2)In all types of rotameters the most profitable is ( in case of industrial rotameters it is necessary ) shount of rotameters (fig.1). It makes possible to exchange rotameter without the interruption in technological process. The detour valve in closed condition must be completely tight.
- 3)The rotameter's stresses and vibrations are not allowed. In industrial constructions it is necessary (in front of and behind of rotameter) to join the pipeline with supporting structure and installing the elastic parts in adjoining segments.
- 4)For rotameter reading we used the biggest dimension of float. Very often it is the upper edge of float. In reading time the float has to assume a steady position without vertical osscilation. The flux of fluid can not contains the gas bubbles.
- 5)Pollutants which flows through the rotameter creating the sediments on measuring elements so it is necessary disassemble the rotameter and flush it by dissolving substances. If the user is not able to clean up the rotameter there is possible to clean the rotamater by producent. The sediments in rotameter causes falsility measurements.
- 6)The strong blows of floats by buffer can cause breakage of glass pipe. We can avoid this situation by installing additional cut-off valve (fig.2). In periods, in which occur strong changes of flux the cut-off valve should be open. After fixing of flux the cut-off valve has to be closed and the rotameter indication should be read.
- 7)The rotameter which works in higher temperature should be protected against sudden cooling down for example treated by cold water.

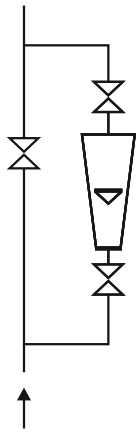


fig. 1

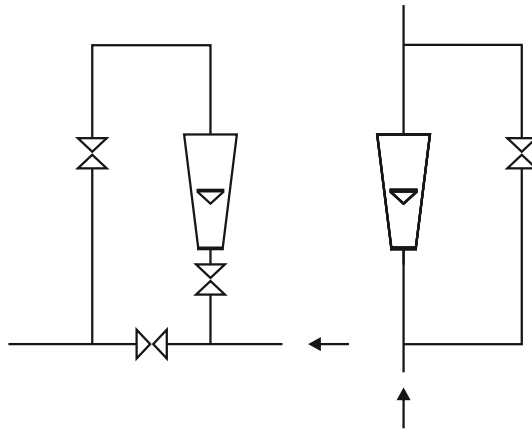


fig. 2