



# INDICATING FLOWMETERS type ROTROM-I

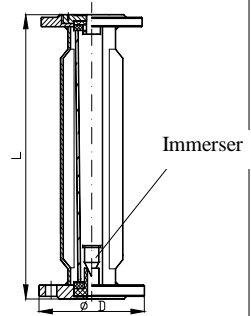


## DESCRIPTION

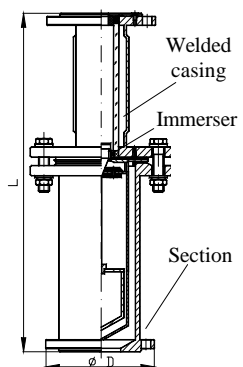
Indicating flowmeters apparatus are used to measure the fluid flows from the industrial installations.

Flow measurement is made on the revmetric principle , the flow value reading being on the horizontal in front of the immerser upper edge. The vertical stable position of the immerser correspond to the balance between its weight end the forces developed by the fluid: Archimedean , pressure and viscous friction

Indicating flowmeters are carried out in the constructive variants showed in the fig.1 and fig.2 and different typodimensions according to the nominal diameter and type of immerser.



**ROTROM - I 15/25/40**  
Fig. 1



**ROTROM-I 50/65/80/100**  
Fig. 2

## TECHNICAL DATA

- Gauging fluid : water at  $t=(20\pm 2)^{\circ}\text{C}$
- Measuring fluid : transparent and noncorrosive to the material coming into contact fluid
- Fluid temperature :  $(0\dots 100)^{\circ}\text{C}$  /  $(0\dots 60)^{\circ}\text{C}$  for the immerser of PVC
- Accuracy : 2,5% for ROTROM-I Dn 15...40  
: 2% for ROTROM-I Dn 50...100

### ROTROM-I Dn15...40

Table 1

Variant	Dn mm	Pmax bar	Water flow l/h (water)	Air flow Nm <sup>3</sup> /h (air)	Max. pressure drop		Dimensions ( $\phi D \times L$ ) mm	Connection flanges	Weight kg
					$\Delta p$ (water)	$\Delta p$ (air)			
					KPa				
15.9 PVC	15	16	3-40	0,36-2,6	4,22	0,40	$\phi 95 \times 325$	Dn15 STAS 8014-84	2
15.9 PTFE			5-80	0,35-3,5	4,46	0,60			
15.9 Al			8-120	0,44-4,7	4,46	0,80			
15.9 V2A			25-250	0,37-8,3	5,88	2,60			
15.10 PVC			6-80	0,61-5	4,31	0,50			
15.10 PTFE			9-120	0,54-5,2	4,6	0,75			
15.10 Al			15-180	0,7-6,9	4,6	0,85			
15.10 V2A			40-400	1-12,8	6,86	2,60			
25.1 PVC	25	10	9-120	0,87-7,5	4,12	0,60	$\phi 115 \times 325$	Dn25 STAS 8013-84	2,9
25.1 PTFE			20-250	1,1-10,6	4,56	0,70			
25.1 Al			25-300	1,2-11,6	4,61	0,90			
25.1 V2A			60-630	1,75-21,5	6,62	2,9			
25.2 PVC			16-200	1,4-12,5	4,22	0,60			
25.2 PTFE			32-400	1,6-16,7	4,61	0,75			
25.2 Al			40-500	1,7-18,9	4,66	1,00			
25.2 V2A			100-1000	2,8-33,5	6,86	3,50			
25.3 PVC			24-300	2-17,9	4,31	0,70			
25.3 PTFE			48-600	2,4-25	4,71	0,80			
25.3 Al			60-700	2,4-26,3	4,76	1,85			
25.3 V2A			160-1600	3,4-46,2	7,35	4,00			
40.1 PVC	40	6	40-500	3-29,5	4,31	1,10	$\phi 130 \times 328$	Dn40 STAS 8012-84	3,7
40.1 PTFE			80-1000	3,9-41,2	5,05	1,40			
40.1 Al			80-1200	3,5-44,8	5,10	1,95			
40.1 V2A			250-2500	4,3-72-8	7,85	6,00			
40.2 PVC			75-900	5,25-52,5	4,41	1,90			
40.2 PTFE			100-1600	4,8-65,5	5,15	2,70			
40.2 Al			140-1800	5,7-67,1	5,20	2,85			
40.2 V2A			400-4000	17,3-137	9,31	7,50			

**ROTROM-I Dn50 ... 100**

Table 2

<i>ROTROM-I type</i>	<i>Dn mm</i>	<i>Pmax bar</i>	<i>Measuring range kg/h water</i>	<i>Max. pressure drop kPa</i>	<i>Dimension (Dφ×L)</i>	<i>Connection flanges</i>	<i>Weight kg</i>
50 - V <sub>2</sub> A	50	10	500 - 6300	14	φ183×555	Dn 50 STAS 8013-83	13,1
65 - V <sub>2</sub> A	65	10	800 - 10000	25	φ200×595	Dn 65 STAS 8013-83	17,9
80 - V <sub>2</sub> A	80	10	1200 - 16000	47	φ222×645	Dn 80 STAS 8013-83	25
100.1 - V <sub>2</sub> A	100	10	1600 - 20000	52	φ230×645	Dn 100 STAS 8013-83	29,5
100.2 - V <sub>2</sub> A	100	10	I : 480 - 6000 II : 2000 - 25000	75	φ462×645	Dn 100 STAS 8013-83	34,5

For the working fluids others than water at t+(20±2)° C, depending on their parameters (density, viscosity, pressure and temperature) the FLOW SCALE SHEET is determined analytically, on the computer for flowmeters type ROTROM-I Dn15; 25; 40.

To read the flow for the working fluid directly on the glass measurement tube , the indicating flowmeters ROTROM-I Dn15; 25; 40 type are delivering with the FLOW SCALE SHEET listed on transparent printing film stuck on the tube, on the opposite side of the millimetres scale and water flow , which were initially engraved.

**ORDERING**

In the case of the working fluid - water , in the order it will be indicated the constructive variant according to the 1/2 table.

For the working fluids others than water , the ordering specification constituting the base of the FLOW SALE SHEET , will be completed.

**APPLICATION**

At the mounting it will take into account the following conditions :

Revmeters must be in a rigorous vertical position.

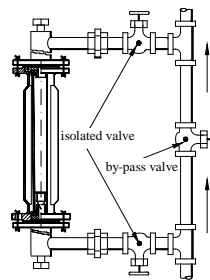
Pipeline , on which the revmeter is mounted , must be vertical and with the nominal diameter identical with the revmeter , on a length of min, 10 Dn upstream , respective 5 Dn downstream of the apparatus.

Measuring fluids must be filtered (particles must have the diameter smaller than 50µm)

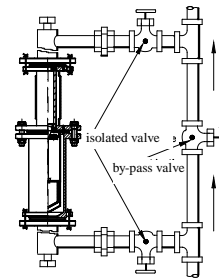
Pipeline /equipment on which the revmeter is mounted do not vibrate and do not lead after words to the mechanic stresses.

**The mounting of flowmeter type ROTROM-I**

a) vertical

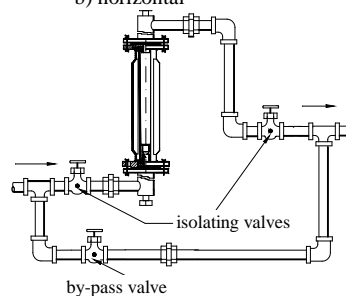


Application ROTROM-I (15/25/40)

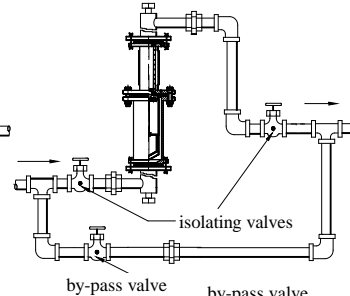


Application ROTROM-I (50/65/80/100)

b) horizontal



Application ROTROM-I (15/25/40)



Application ROTROM-I (15/65/80/100)