

# Flow Monitor Flow Indicator

## RVO/U



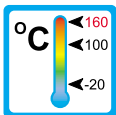
### Operation

The flow monitors and indicators type RVO/U operate with the float measuring principle



### Application

The flow monitors and indicators type RVO/U are used for indicating and monitoring volumeflow of liquid media.



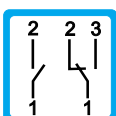
Areas of application:



– Coolingsystems and cooling-circuits



– Mechanical Engineering  
e.g. Weldingmachinery  
and Laserplants



- Medicine technology
- Pharma industry
- Chemical industry
- Research and development



### Features

The RVO/U series proves itself through reliable function and easy handling. Further characteristics of this sturdy type are:

- universal orientation
- high switch accuracy
- infinitely variable switchpoint adjustment through user
- EX-version to ATEX for RVO/U-1... available
- Scales are burned into the sightglass
- Threaded connection  
Special threads on request

### Installation hints

The installation of the flow monitor can be done in any way in the system. The flow direction must be observed.

The flow monitor must not be used as a supporting part in a pipeconstruction!

The medium must not contain any solid particles!  
We recommend the installation of strainers type SFD or SFM.

External magnetic fields influence the switch contact. Keep adequate distance to those magnetic fields (e.g. electromotors)!

The operating instruction for RVO/U must be observed under any circumstances!

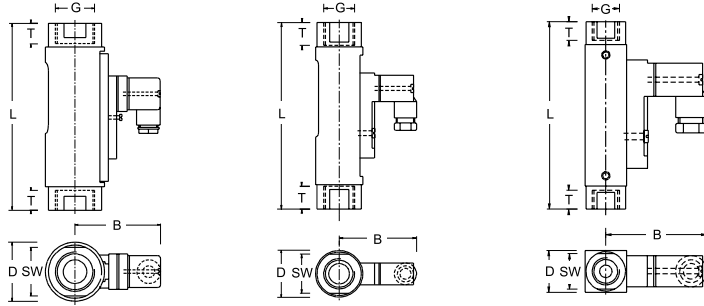
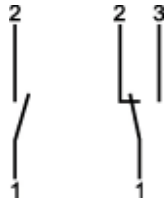
RVO/U 1 0002 10-04 E M



# Measuring Ranges, Technical Data

## Connection diagram:

Normally open      Change over:



## Summary of types RVO/U

Type	Switch range* l/min H <sub>2</sub> O	Overall dimensions mm							Weight approx. [g]
		SW	D	B	G	DN	T	L	
RVO/U-4/01	0,005 - 0,06	17	20	49	1/4"	8	10	90	140
RVO/U-4/02	0,02 - 0,14								
RVO/U-4/06	0,1 - 0,6								
RVO/U-4/1	0,2 - 1,2								
RVO/U-4/2	0,4 - 2,0								
RVO/U-4/3	0,5 - 3,0								
RVO/U-4/5	1,0 - 5,0	27	32	53	1/2"	15	14	114	300
RVO/U-2/05	0,1 - 0,5								
RVO/U-2/1	0,2 - 1								
RVO/U-2/2	0,4 - 1,6								
RVO/U-2/4	1 - 4								
RVO/U-2/8	2 - 8								
RVO/U-2/15	4 - 15	41	50	77	3/4"	20	18	139	800
RVO/U-1/30	8 - 30								
RVO/U-1/45	15 - 45								
RVO/U-1/90	30 - 90								
RVO/U-1/150	60 - 150	41	50	77	1"	25	18	158	900

\* Other switch ranges on request

Operating data	RVO/U-1	RVO/U-2	RVO/U-4
Operating pressure:	PN 10 bar	PN 10 bar	PN 16 bar
Pressure drop:	0,02 - 0,4 bar	0,02 - 0,3 bar	0,02 - 0,2 bar
Maximum temperature:	100 °C (optional 160 °C)		
Accuracy:	±10% of full scale		
Electrical data			
Normally open:	max. 250V • 3A • 100VA	max. 230V • 3A • 60VA	max. 200V • 1A • 20VA
Change over:	max. 250V • 1,5A • 50VA	max. 250V • 1,5A • 50VA	max. 200V • 1A • 20VA
Atex II 2G EEx m II T6	(only for RVO/U-1)	Change over: 250V • 1A • 30VA, IP67 / Normally open: 250V • 2A • 60 VA, IP67	
EEx m II T6	(only for RVO/U-1)	Change over: 250V • 1A • 30VA, IP67 / Normally open: 250V • 2A • 60 VA, IP67	
EEx ia IIC T6	(only for RVO/U-1)	Change over / Normally open: 45V • 1A, IP67	
Ingress Protection:	IP65 (plug connection DIN 43650 Form A or C) IP67 (1m sealed in cable, with EEx-version 2 m)		
Output signal:	The contact opens / changes, when the flow falls below the set point.		
Power supply:	Not required (potentialfree reed contacts)		
other plug types or cable lengths on request			
Material	Brass	Stainless Steel	
Wetted parts:	Brass nickel-plated	1.4571	
Sight glass:	(wetted part) Duran 50	Duran 50	
Spring:	(wetted part) 1.4571	1.4571	
Gaskets:	(wetted part) Perbunan (optional Viton, EPDM)*	Viton (optional Perbunan, EPDM)*	
Magnets:	(wetted part) Hardferrit	Hardferrit	
Housing:	(non wetted part) Aluminium anodized	Aluminium anodized	

\* Other gasket materials on request

