

Flow Monitor Flow Indicator

DUM/A



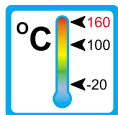
Operation

The flow monitors and indicators type DUM/A operate with the float measuring principle



Application

The flow monitors and indicators type DUM/A are used for measuring and monitoring volumeflow of liquid media.



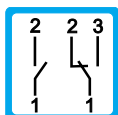
Areas of application:



– Coolingsystems and cooling-circuits



– Mechanical Engineering
e.g. Weldingmachinery
and Laserplants



– Medicine technology

– Pharma industry

– Chemical industry



– Research and development



Features

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

- universal orientation
- high reliability
- high switch accuracy
- wide measuring range
- infinitely variable switchpoint adjustment through user
- EX-version to ATEX available
- high pressure resistance
- Threaded connection
Special threads on request

Installation hints

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

The instrument 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)!

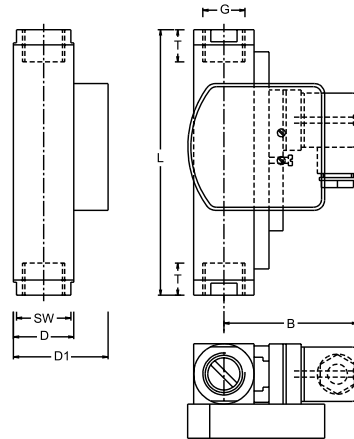
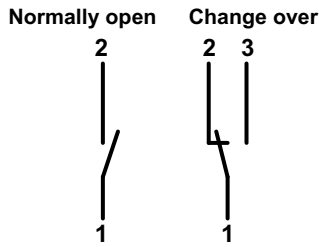
The operating instruction for DUM/A must be observed under any circumstances!

DUM/A 1 0002 10-04 E M



Measuring Ranges, Technical Data

Connection diagram



Summary of types DUM/A

Type	Switch range ⁽¹⁾ H ₂ O [l/min]	Overall dimensions mm								Weight approx. [g]
		SW	D	D1	B	G	DN	T	L	
DUM/A - 4	0,2 - 4	27	30	47	71	1/4"	8	14	130	900
DUM/A - 5	0,6 - 5									
DUM/A - 8	0,5 - 8									
DUM/A - 14	1 - 14									
DUM/A - 28	1 - 28	27	30	47	71	1/2"	15	14	148	950
DUM/A - 40	2 - 40									
DUM/A - 55	4 - 55									
DUM/A - 70	1 - 70									
DUM/A - 90	8 - 90	34	40	57	76	3/4"	20	18	152	1450
DUM/A - 110	5 - 110									
DUM/A - 150	10 - 150	40	40	57	76	1 1/4"	32	21	200	2800
DUM/A - 220	35 - 220									
DUM/A - 250	35 - 250	50	50	67	81	1 1/4"	32	21	200	3050
		60	60	77	82	1 1/2"	40	24	200	3850

(1) Other media on request

Operating data		DUM/A	
Operating pressure:		PN 200 bar (Brass)	PN 300 bar (Stainless Steel)
Pressure drop:		0,02 - 0,8 bar	
Maximum temperature:		100 °C (optional 160 °C)	
Accuracy:		± 5% of full scale	
Electrical data		Normally open	Change over
IP 65 (plug connection DIN 43650)		max. 250V • 3A • 100VA	max. 250V • 1,5A • 50VA ⁽²⁾
IP 67 (1 m sealed in cable)			
Atex II 2G EEx m II T6 (2 m sealed in cable)		max. 250V • 2A • 60VA	max. 250V • 1A • 30VA
EEx m II T6 (2 m sealed in cable)		max. 250V • 2A • 60VA	max. 250V • 1A • 30VA
Output signal:		The contact opens / changes, when the flow falls below the set point.	
Power supply:		Not required (potentialfree reed contact)	
Other plug types or cable lengths on request			
Material		Brass	Stainless Steel
Wetted parts:		Brass nickel-plated	1.4571
Spring:	(wetted part)	1.4571	1.4571
Gaskets:	(wetted part)	Perbunan (optional Viton, EPDM) ⁽³⁾	Viton (optional Perbunan, EPDM) ⁽³⁾
Thread rings DUM/A 70 and above	(wetted part)	Brass not nickel-plated	1.4571
Centering washer:	(wetted part)	Brass not nickel-plated DUM/A 70, 90 & 110	1.4571
Display:		Makrolon / Brass nickel plated	

(2) Minimum load 3VA

(3) Other gasket materials on request

