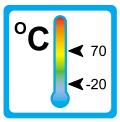
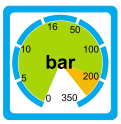
Flowmeter with analog output

DUM/TA

Function

The flowmeters type DUM/TA operate with the float measuring principle.





Application

The flowmeters type DUM/TA are employed to measure and monitor volume flow of liquids. An analog transmitter produces an appropriate signal for the respective flow.
The signal can be employed by the user for most different measuring applications and tasks of regulation.

Areas of application:

– Coolingsystems and cooling-circuits

– Medicine technology

– Pharma industry

– Chemical industry

– Research and development

Features

The DUM/TA series proves itself through reliable function and high repeatability.
Further characteristics of this series are:

– Analog output
(4 - 20 mA / 0 - 10 V)

– High electromagnetic compatibility

– Zero and span of the measuring range separately adjustable
(2 potentiometer)

– Universal mounting

– High pressure resistance

– Threaded connection
Special threads on request

Installation hints

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

The flowmeter 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.

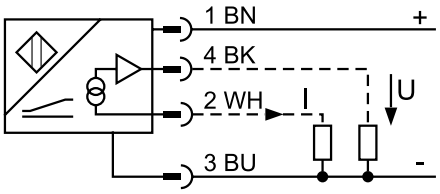
External magnetic fields influence the switch contact. Keep adequate distance to those magnetic fields (e.g. electromotors)!

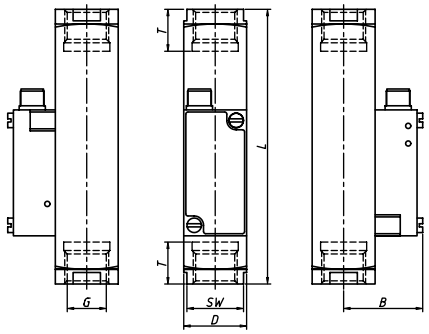
The operating instruction for DUM/TA must be observed under any circumstances!

DUM/TA 1 0001 04-05 E M

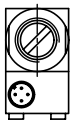
Ranges, Technical data

Connection diagram





DUM/TA

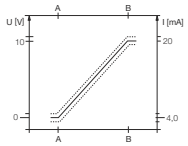


Summary of types DUM/TA

Type	Switch range* H_2O [l/min]	Overall dimensions mm SW	D	B	G	DN	T	L	Weight approx. [g]
DUM/TA - 4	0,2 - 4	27	30	37	1/4"	8	14	130	850
DUM/TA - 5	0,6 - 5								
DUM/TA - 8	0,5 - 8				3/8"	10			
DUM/TA - 14	1 - 14				1/2"	15			
DUM/TA - 28	1 - 28								
DUM/TA - 40	2 - 40	27	30	37	1/2"	15	14	148	900
DUM/TA - 55	4 - 55				3/4"	20	16		

* Other media on request

Technical data	**DUM/TA**
Measuring range [A...B]:	10...50 mm (adjustable by 2 potentiometers)
Repeatability:	≤ 0,5 % of range [A...B] (≤ depending on positioner)
Linearity error:	≤ 10 % of full scale of the flowmeter



Temperature drift:	≤ ± 0,09 % / K	Analog output (current):	4...20 mA
Operating temperature:	-20 °C...+70 °C	Load resistance voltage output:	≥ 4,7 kΩ
Operating voltage U_B:	15...30 VDC	Load resistance current output:	≤ 0,4 kΩ
Residual ripple:	≤ 10 % U_{SS}	Measuring frequency:	800 Hz
No-load current I_0:	≤ 23 mA	Recovery time at output:	≤ 12 ms
Design breakdown voltage:	≤ 0,5 kV	Housing material:	Plastic, PBT-GF20-V0
Output function:	four wire, analog output	Connection:	Plug, M12 x 1
Short-circuit protection:	yes	Vibration stability:	55 Hz (1 mm)
Wire rupture safety / polarity reversal protection:	yes / complete	Shock resistance:	30 x g (11 ms)
Analog output (voltage):	0...10 V	Ingress protection:	IP 67
Operating pressure:	PN 200 bar (Brass-Version), PN 300 bar (Stainless Steel-Version)		
Pressure drop:	0,02 - 0,8 bar		

Materials:	**Brass-Version**	**Stainless Steel-Version**
Wetted parts:	Brass nickel-plated	1.4571
Spring (wetted part)	1.4571	1.4571
Gasket (wetted part)	Perbunan (optional Viton, EPDM)*	Viton (optional Perbunan, EPDM)*

* Other gasket materials on request

DUM/TA 2 0001 04-05 E M

meister strömungstechnik gmbh
Im Gewerbegebiet 2
DE - 63831 Wiesen
Tel.: +49 (0) 6096 / 97 20 - 0
Fax: +49 (0) 6096 / 97 20 - 30
E-Mail: Info@meister-flow.com
Internet: www.meister-flow.com