

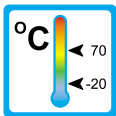
# Analog transmitter

## ATD



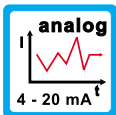
### Operation

Magnet-inductive linearway sensors detect the position of the magnet float and provide an analog signal.



### Application

The analog transmitter type ATD can be used in combination with various flowmeters (see table page 2).



Then they produce 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
- Pharmaceutical industry
- Chemical industry
- Research and development

### Features

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

- analog output (4 - 20 mA / 0 - 10 V)
- high temperature range
- high electromagnetic compatibility
- Zero and span of the measuring range separately adjustable (2 potentiometer)

### Installation hints

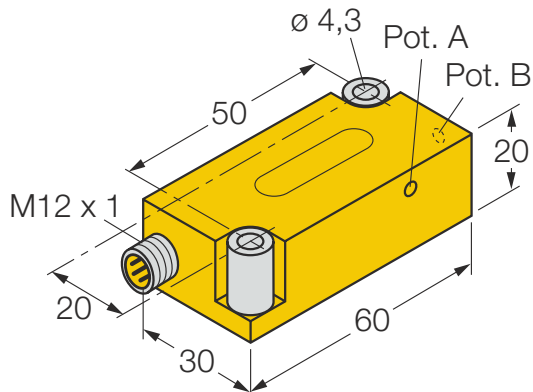
The analog transmitter type ATD must be used only in combination with the flowmeters indicated on page 2 (table).

The operating instruction for ATD must be observed under any circumstances!



# Technical Data

## Dimensions



## Application- / combination options

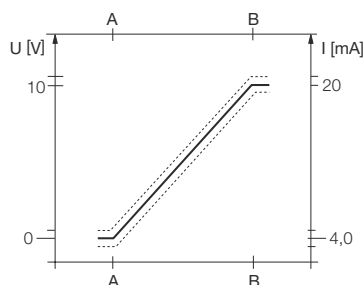
Type		Type		Type	
DKG-1	+	DWG-1,5 to DWG-18	+	RVO/U-1	+
DKG-2	-	DWG-35 to DWG-150	-	RVO/U-2	-
DKM-1	+	DWG-L1,5 to DWG-L18	+	RVO/U-L1	+
DKM-2	-	DWG-L35 to DWG-L150	-	RVO/U-L2	-
DKM/A	+	DWM-1,5 to DWM-18	+		
DKME	+	DWM-35 to DWM-150	-		
DKME/A	+	DWM-L1,5 to DWM-L18	+	RVM/U-1	+
		DWM-L35 to DWM-L150	-	RVM/U-2	-
		DWM/A-1,5 to DWM/A-18	+	RVM/U-L1	+
DUG-4 to DUG-45	+	DWM/A-35 to DWM/A-150	-	RVM/U-L2	-
DUG-70 to DUG-250	-	DWM/A-L1,5 to DWM/A-L18	+		
DUM-4 to DUM-55	+	DWM/A-L35 to DWM/A-L150	-		
DUM-70 to DUM-250	+				
DUM/A-4 to DUM/A-55	+				
DUM/A-70 to DUM/A-250	-				

+ Combination possible    - Combination not possible

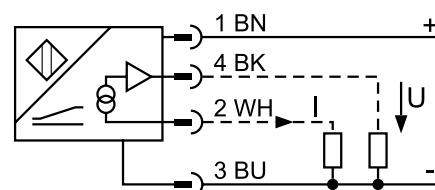
## Technical Data

Measuring range [A...B]:	10...50 mm (adjustable 2 Potentiometer)
Repeatability:	≤ 0,5 % of range [A...B] (≤ depending on positioner)
Linearity error:	≤ 10% of full scale of the flowmeter
Temperature drift:	≤ ± 0,09 % / K
Operating temperature:	-20 °C...+70 °C
Operating voltage $U_B$ :	15...30 VDC
Residual ripple:	≤ 10 % $U_{SS}$
No-load current $I_0$ :	≤ 23 mA
Design breakdown voltage:	≤ 0,5 kV
Output function:	4 wire, analog output
Short-circuit protection:	yes
Wire rupture safety / polarity reversal protection:	yes / complete
Analog output (voltage):	0...10 V
Analog output (current):	4...20 mA
Load resistance voltage output:	≥ 4,7 kΩ
Load resistance current output:	≤ 0,4 kΩ
Measuring frequency:	800 Hz
Recovery time at output:	≤ 12 ms
Housing material:	Plastic, PBT-GF20-V0
Connection:	Plug, M12 x 1
Vibration stability:	55 Hz (1 mm)
Shock resistance:	30 x g (11 ms)
Ingress protection:	IP 67

## Measuring range



## Connection diagram



ATD 2 0001 06-04 E M