

## DP-65



### Operation

The instruments, type DP-65, are target-disc flowmeters

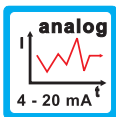
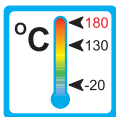


### Application

The flowmeters, type DP-65, are employed to monitor the volume flow of liquids.

The instruments are used in many different applications:

- water treatment
- chemical industry
- heating circuits
- pharmaceutical industry
- fire protection installations



### Features

The DP-65 prove themselves through reliability and simple handling. Further properties of this sturdy series are:

- suitable for high temperature applications
- product designated scale at no charge
- sandwich mounting

### Installation hints

The flowmeter can be installed in any position in the system. The flow direction must be observed (refer to page 3).

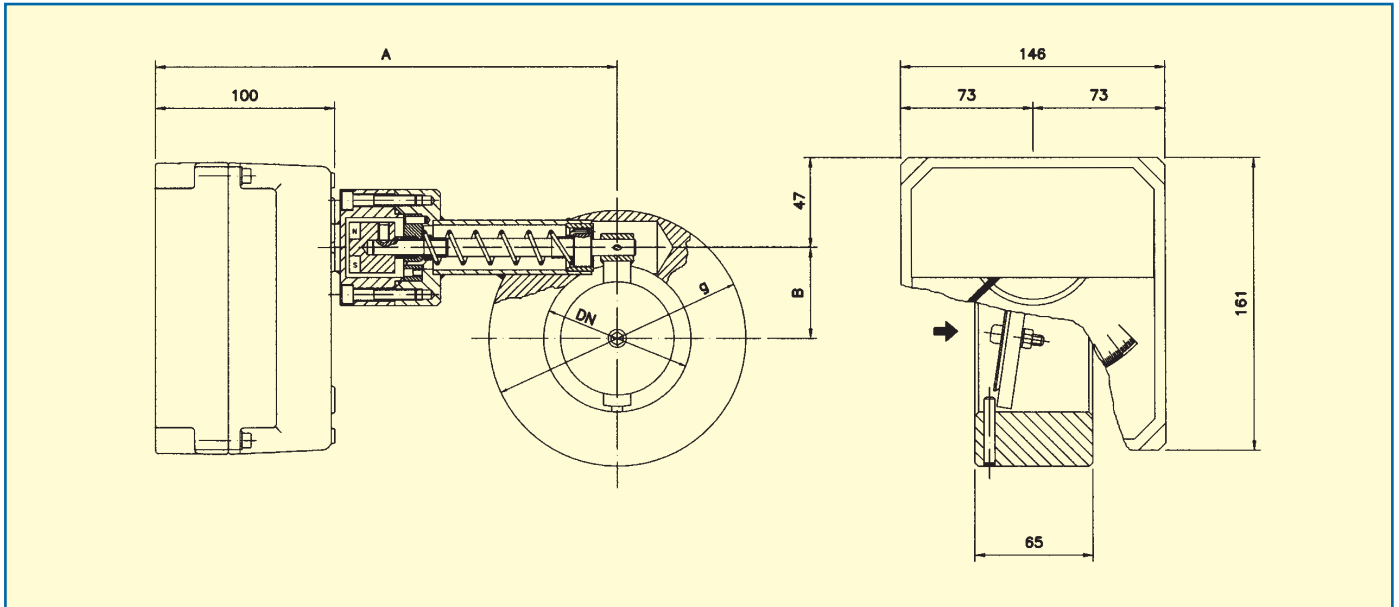
The flowmeter must not be used as a supporting part in a pipe construction!

Keep adequate distance to magnetic fields (e.g. electric-motors)!

The operating instruction for DP-65 must be observed!



## Technical Data



### Flow ranges, dimensions and weights

DN	Flow ranges (water at 20 °C)				g	Dimensions		Weight [kg]
	[m³/h]	[m³/h]	[m³/h]	[m³/h]		B	A	
40	0,8 - 4 / 6	1 - 8	2 - 10	3 - 16	88	28	250	5
50	0,8 - 6	2 - 10	3 - 16	3 - 25	102	33	250	6
65	2 - 10	3 - 16	3 - 25	4 - 30	122	40	250	7
80	2 - 16	3 - 25	5 - 40	10 - 60	138	50	250	8
100	5 - 40	8 - 60	10 - 80	12 - 90	158	60	250	10
125	8 - 60	15 - 100	15 - 120	20 - 135	188	70	280	12
150	15 - 100	20 - 160	25 - 200	40 - 220	212	78	280	14
200	20 - 160	30 - 250	40 - 350	—	268	90	320	20
250	25 - 200	50 - 400	60 - 500	80 - 600	320	102	350	29
300	30 - 250	50 - 400	80 - 600	100 - 800	370	115	370	35

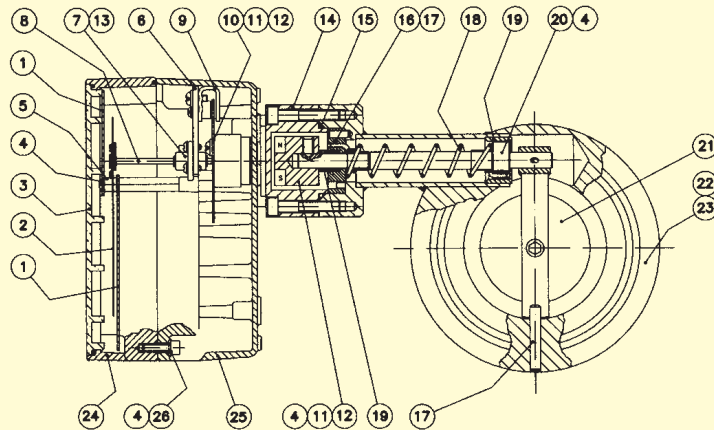
### Technical data

<b>Measuring ranges:</b>		<b>Accuracy:</b>	
Water	refer to table above	standard	± 2,5 % of full scale
		optional	± 1,6 % of full scale
<b>Medium temperature:</b>		<b>Ambient temperature:</b>	
Steel coated (beschichtet)	-20 °C to +130 °C	Steel (coated)	-20 °C to +80 °C
Stainless Steel	-20 °C to +180 °C	Stainless Steel	-20 °C to +80 °C
<b>Pressure:</b>		<b>Viscosity max.:</b>	
DN-40 to DN-80	PN40	DN-100 to DN-200	PN16
DN-250 to DN-300	PN10		
<b>Pressure drop</b>	low pressure drop		
<b>Connection (standard):</b>	sandwich mounting		
<b>Scale:</b>	medium customised, 120 mm, various units e.g.: l/h, m³/h, kg/h		
<b>Special versions (on request):</b>			
High temperature version	-20 °C to +250 °C (in Stainless Steel only)		
<b>Ingress protection housing:</b>	IP 65	<b>Cable entry:</b>	PG9-cable gland

DP-65 2 0001 08-04 E M



# Materials, flow directions

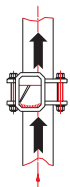


## Materials

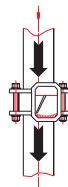
No.	Description	Steel	Stainless Steel	No.	Description	Steel	Stainless Steel
1	Scale	Aluminum	Aluminum	14	Cocking bolt	1.4404	1.4404
2	Pointer	Aluminum	Aluminum	15	Gasket	NBR	NBR
3	Show glass	Polycarbonate	Polycarbonate	16	Spring pad	1.4404	1.4404
4	Screw	1.4401	1.4401	17	Pin	1.4404	1.4404
5	Scale carrier (2-parts)	Brass chrome plated	Brass chrome plated	18	Spring	1.4310 NS	1.4310 NS
6	Linkage	Aluminum	Aluminum	19	Bushing	PTFE	PTFE
7	Bearing	Brass chrome plated	Brass chrome plated	20	Axle	1.4404	1.4404
8	Axle	1.4404	1.4404	21	Target disc	1.4404	1.4404
9	Magnet	Alnico	Alnico	22	Armature	Steel	1.4401
10	Brake disc	Aluminum	Aluminum	23	Coating	Polyamid 11	—
11	Magnet seat	Aluminum	Aluminum	24	Cover	Aluminum	Aluminum
12	Magnet	Alnico	Alnico	25	Housing	Aluminum	Aluminum
13	Bearing	1.4037	1.4037	26	Washer	Akulon	Akulon

wetted parts

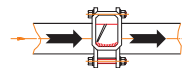
## Flow directions



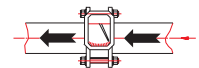
from bottom to top



from top to bottom



from left to right



from right to left

Please advise flow direction when ordering !

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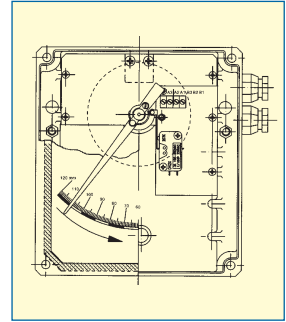
# Electronic measuring transducers and limitswitches

## Adjustable micro-limitswitch type DP-AMM

Bistable microswitch (change over) installed in the indicator housing of the flowmeter

- DP-AMM1: 1 adjustable limitswitch
- DP-AMM2: 2 adjustable limitswitches
- Switch values: 3 (1) A / 250 V (VDE/CEE)
- Hysteresis:  $\pm 10\%$  of endvalue
- Ambient temperature:  $-25\text{ }^{\circ}\text{C}$  to  $+80\text{ }^{\circ}\text{C}$
- Mechanical lifetime:  $10^7$  switch operations

(gold plated on request)



## Adjustable inductive limitswitch type DP-AMD

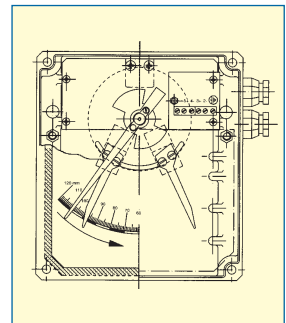
Inductive proximity switch, 3,5 mm, according to standard NAMUR DIN 19234, installed in the indicator housing of the flowmeter

- DP-AMD1...2: 1...2 adjustable limitswitches
- Power supply: 8 V DC (via amplifier)
- Temperature:  $-25\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$

### Amplifier (on request)

Model NAMUR (DIN 19234) for 1 or 2 adjustable inductive contacts

- Power supply: 24...230 V AC, 50 - 60 Hz      24...250 V DC
- Input: intrinsic safe circuit EEx ia IIC
- Output: 1 or 2 relays
- Load: 2...5 A / 40 V DC
- Temperature:  $-25\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$



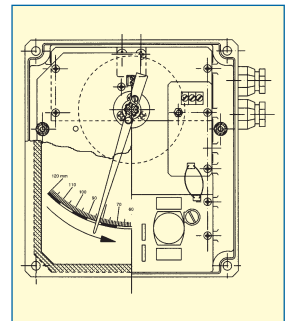
## Electronic measuring transducer HALLTEC IV

The HALLTEC IV is a transducer in 2 wire technique with a hall effect sensor. The hall sensor is based on the non contact sensing through the indicator mechanism.

### Model:

- TH4 transducer
- TH4T transducer + totalizer

- Power supply: 12...36 V DC
- max. current / load consumption: max. 20 mA
- Analog output: 4 - 20 mA
- Accuracy:  $< 0,6\%$  referenced to the magnet position
- Load max.: 1,1 k $\Omega$  at 36 V DC
- Pulse output: MOSFET potentialfree N-channel
- I max.: 200 mA
- max. frequency: 2 Hz
- Pulse length: approx. 250 ms
- Totalizer: 9 digits (8 + 1 decimal), 4,5 mm peak with reset via potentialfree contact
- Ambient temperature:  $-5\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$



## Electronic measuring transducer HALLTEC III (EEx ia IIC T4 ATEX)

The HALLTEC III is a transducer in 2 wire or 4 wire technique with a hall effect sensor. The hall sensor is based on the non contact sensing through the indicator mechanism.

### Model:

- 2 wire:
- TH32Ex transducer
- TH32TEEx transducer + totalizer

- max. current: 20 mA
- Analog output: 4 - 20 mA
- Accuracy: 0,6 % referenced to the magnet position
- Load max.: 700  $\Omega$  at 24 V DC power supply
- Totalizer: 9 digits, 4,5 mm peak with reset via potentialfree contact
- Ambient temperature:  $-5\text{ }^{\circ}\text{C}$  to  $+40\text{ }^{\circ}\text{C}$

