



ERHARD VALVES



Flow Indicators



ERHARD Flow Indicators for Reliability and Safety

Convincing Arguments

- ⇒ Installation irrespective of position
 - ⇒ Rugged vane-type measuring mechanism
 - ⇒ Shakeproof
 - ⇒ Large visual indicating range in % or l/min.
 - ⇒ Contacts adjustable from the outside
 - ⇒ Adaptation to pipeline characteristic curve during commissioning
 - ⇒ Field-approved
 - ⇒ No magnets – insensitive to abrasion and rust
 - ⇒ Low head loss
 - ⇒ DIN plug connector for electrical connection
 - ⇒ Double snap-action contact (1 break contact and 1 make contact)
 - ⇒ Available from stock
- Upon request:
- ⇒ with inductive contact, enclosure rating (Ex) IIC2G EEx ia IIC T6
 - ⇒ 3-wire slot initiator for direct PLC control



Application

To be used for monitoring flow in lubricating systems, gearboxes and cooling circuits in rolling mills, turbine plants, power plants, chemical plants, etc.

The flow rate is indicated visually. The built-in limit contacts can be set to the required flow rate,

e.g. in order to switch on or off a pump or a machine.

Your advantages:

- ⇒ Prevents high costs for shut-down and repair, which would arise if the flow rates were not controlled.

- ⇒ Trouble-free indication since the design is strictly mechanical.

- ⇒ The flow indicator signals pipe bursts by transmitting a contact when the flow rate rises heavily.

Mode of operation

As flow begins, the shaft-mounted vane is moved against the force of the return spring. Depending on the flow rate, it deflects by up to 120° ($\hat{=}$ 100%). A continuous journal shaft transmits this motion to the pointer.

Two grooved rings seal the shaft from the flow medium. The pointer tripping pin actuates the electrical contacts. When flow diminishes or stops, the return spring moves vane and pointer back to zero position.

Range of Application

Neutral water up to 70° C and lubricating oil (any viscosity) up to 80° C.
To be installed in any position. Ambient temperature -30° C up to + 80° C.

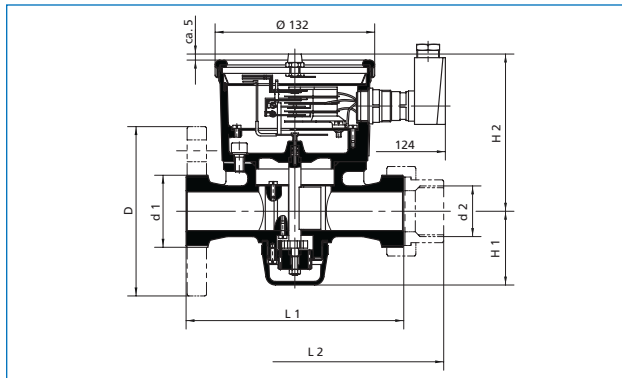
Size DN	Pressure rating PN	Hydr. test pressure in bars on the body	Max. admissible working pressure in bars
10 - 150	16	24	16

Materials, Electrical Data

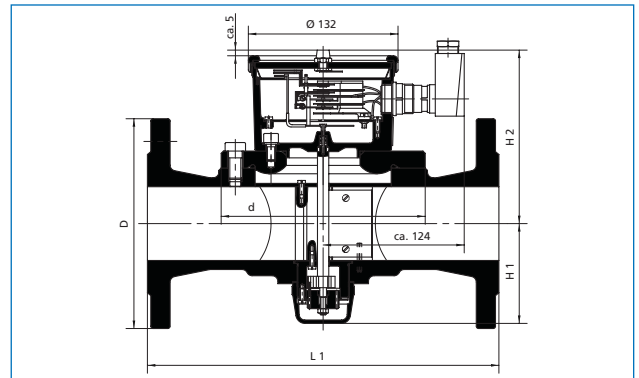
Body	DN 10-50: Bronze Rg5 DN 65-150 cast iron GG-25 鋳鋼	Fastening ring	PBTB
Trim	Bronze/brass	Sight glass	PC
Wing-shaft bearing	PTFE	Contact type	2 snap-action contacts, in zero position: lower contact closed, upper contact open
Grooved rings	NBR	Enclosure rating	IP 65 DIN 40050
Cap nut	Brass	Connection	Plug connector to DIN 43651
Indicator casing	Brass	Switching voltage	AC/DC 24-250 V
		Breaking capacity	30 VA (W), max. 1 A

Dimensions, Scope of Delivery, Flow Rates, Weights

Prod. No.: 8622 79..³⁾
DN 10-50



Prod. No.: 8623 0191
DN 65-150



Size DN	Connection		Face-to-face dimension approx.		Construction height approx.		Flange dia. D mm	Q1 ¹⁾ l/min.	Q2 ²⁾ l/min.	Flow indicator kg	Pipe union kg	Flanges kg
	d1 GA	d2 Rp	L1 mm	L2 mm	H1 mm	H2 mm						
10	3/4	3/8	180	225	50	120	90	3- 15	38	4,6	0,10	0,90
15	1	1/2	180	230	55	125	95	7- 25	80	4,7	0,15	1,00
20	1 1/4	3/4	180	230	60	130	105	12- 45	150	5,1	0,30	1,45
25	1 1/2	1	180	240	60	130	115	15- 70	230	5,2	0,40	1,70
32	2	1 1/4	180	245	65	135	140	15- 100	380	5,6	0,65	2,80
40	2 1/4	1 1/2	200	270	70	140	150	15- 140	600	6,4	0,85	3,20
50	2 3/4	2	230	305	75	145	165	15- 200	900	7,9	1,40	3,70
65			310		90	155	185	40- 350	1200	20,0		
80			360		100	160	200	80- 650	1500	28,0		
100			360		110	170	220	260-1000	2000	34,0		
125			450		120	190	250	380-1400	2600	53,0		
150			580		130	210	285	440-2000	3300	73,0		

¹⁾ Indicating or contact range.

²⁾ Max. flow rate without cavitation.

³⁾ 8622 7900 with external thread, 8622 7985 with pipe unions, 8622 7991 with flanges.

Characteristic Curves for Water and Oil (Decreasing Flow Conditions)

