PLOVÁKOVÝ PRŮTOKOMĚR / INDIKÁTOR PRŮTOKU DKG-2

Flow Monitor & Flow Indicator

DKG-2

OIL

OVERVIEW

Operation

– Float measuring principle

Application

– Mechanical engineering
– Central lubrication
– Circulation lubrication
– Transformers

Features

– Universal orientation
– High reliability
– Viscosity compensated
– Infinitely variable switch point adjustment by operator
– EX-version according to ATEX directive available
– Scales are burned onto the sight glass
– Threaded connection, special thread on request

Installation information

– The operating instructions for DKG-2 Module BASICS / ...ATEX must be observed!

OPERATING DATA

Operating pressure, max.	16 bar
Pressure drop	0,02 – 0,2 bar
Viscosity range	30 cSt to 600 cSt
Temperature, max.	120 °C (optional 160 °C)
Measuring accuracy	±10 % of full scale

Changed operating data apply to the devices in explosion-proof design according to ATEX directive. Refer to the Operating Instructions for DKG-2 Module ATEX.

Download: www.meister-flow.com

MEASURING RANGES

Type	**Switch range for Oil, density 0,9 kg/dm³ (1)**		
	l/min	**gph**	**gpm**
DKG-2/2	0,5 – 1,7	8 – 27	
DKG-2/3	0,8 – 2,5	13 – 40	
DKG-2/4	1,3 – 4	21 – 63	
DKG-2/8	2,5 – 8	40 – 127	

(1) The specified measuring- /switch ranges are valid for oils having a density of 0.9 kg/dm³ and a kinematic viscosity of 30 to 600 cSt, vertical installation of the device and flow direction from bottom to top.
Other installation positions or deviation from the operating densities and operating viscosities will increase the measurement error specified in the data sheet. Excessive operating viscosities will influence or may prevent function of the device.
Upon request, special scales for deviating media, different operating conditions and installation positions (only for devices which can be installed in any position) are available.
The specified switch values are switch-off points, i.e. switch values by decreasing flow.
Other measuring- /switch ranges are available upon request.

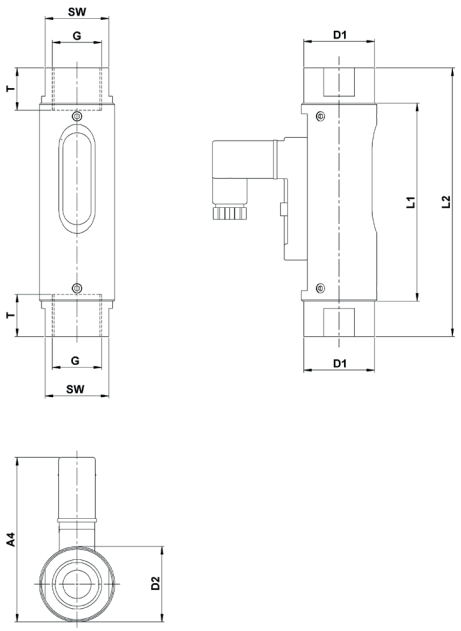
MATERIALS

Brass version, wetted parts	
Spring:	1.4571
Sight glass:	DURAN® 50
Gaskets:	FKM (optional NBR, EPDM) (2)
Magnets:	Hard ferrite
all other wetted parts:	Brass, nickel-plated
Brass version, non-wetted parts	
Device housing:	Aluminium, anodized

Stainless steel version, wetted parts	
Spring:	1.4571
Sight glass:	DURAN® 50
Gaskets:	FKM (optional NBR, EPDM) (2)
Magnets:	Hard ferrite
all other wetted parts:	1.4571
Stainless steel version, non-wetted parts	
Device housing:	Aluminium, anodized

(2) Other gasket materials on request

TECHNICAL DRAWING



SUMMARY OF TYPES

Type	Overall dimensions [mm]												Weight approx.
	G	DN	SW	L1	L2	T	D1	D2	A1	A2	A3	A4	[g]
DKG-2/2 DKG-2/3 DKG-2/4 DKG-2/8	1/2"	15	27	84	114	14	30	32	–	–	–	~70	300

ELECTRICAL DATA

For devices with switch contact 15x50

Change over (COC)	250V · 1,5A · 50VA [3]
Normally open (NOC)	230V · 3A · 60VA
Change over M12x1 (-20 °C – 85 °C)	125V · 1,5A · 50VA [3]
Normally open M12x1 (-20 °C – 85 °C)	125V · 3A · 60VA
Change over PLC	250V · 1A · 60VA

EX-version in compliance with ATEX directive

EC-Type examination

EPS 13 ATEX 1 596 U

Connection to certified intrinsically safe circuits

Li = 0 Ci = 0

Gas			Dust		
Ui	**Ii**	**Pi**	**Ui**	**Ii**	**Pi**
< 12,1 V	1,0 A	3,0 W	< 12,1 V	0,25 A	0,75 W
< 20 V	0,309 A	1,55 W	< 20 V	0,25 A	0,75 W
< 25 V	0,158 A	0,99 W	< 25 V	0,25 A	0,75 W
< 30 V	0,101 A	0,76 W	< 30 V	0,25 A	0,75 W

Operating temperature

-5 °C < $T_{Service}$ < 45 °C

Marking

⟨Ex⟩ II 2G Ex ib IIC
⟨Ex⟩ II 2D Ex ib IIIC

[3] Minimum load 3VA

ELECTRICAL CONNECTION

For devices with switch contact 15x50

- Connector in compliance with EN 175301-803, Form C (DIN 43650, Form C)
- Connector M12x1
- Cable (1 m) [4]

EX-version in compliance with ATEX directive

- Connector in compliance with EN 175301-803, Form C (DIN 43650, Form C)
- Connector M12x1
- Cable (1 m) [4]

Ingress Protection

IP65: Connector in compliance with EN 175301-803, Form C or Connector M12x1
IP67: Cable

Output signal

The contact opens / changes when the flow decreases below the set point.

Power supply

Not required (potential-free reed contacts)

Connector types

Other connector types or cable lengths on request

[4] Available as Normally Open Contact (NOC) only

CONNECTION DIAGRAM