



Flow Monitor / Flow Indicator DKM/A-2 for Oil

Flow monitor / flow indicator operating with the float measuring principle for oil



- Universal orientation
- High reliability
- High switch accuracy
- Viscosity compensated
- Infinitely variable switch point adjustment by operator
- EX-version according to ATEX directive available
- High pressure resistance
- Threaded connection, special thread on request

D-EN-DKMA2-20200603



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Application

- Mechanical engineering
- Central lubrication
- Circulation lubrication
- Transformers

Installation information

The operating instructions for DKM/A-2 Module BASICS / ...ATEX must be observed!
Download: www.schmidt.messtechnik.de

Operating data	
Operating pressure max.	300 bar (brass version), 350 bar (stainless steel version)
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 device in explosion-proof design according to ATEX directive. Refer to the Operating Instructions for DKM/A-2 Module ATEX.	



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Measuring ranges			
Type	Switch range for oil, density 0,9 kg/dm ³ (1)		
	[l/min]	[gph]	[gpm]
DKM/A-2/2	0,5 – 1,6	8,0 – 25,5	
DKM/A-2/3	0,8 – 3	13,0 – 48,0	
DKM/A-2/7	2 – 7	32,0 – 111,0	

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		
Wetted parts	Brass version	Stainless steel version
Spring	1.4571	1.4571
Gaskets	FKM (optional: NBR, EPDM) ⁽²⁾	FKM (optional: NBR, EPDM) ⁽²⁾
Magnets	Hard ferrite	Hard ferrite
Device body	Brass, nickel-plated	1.4571
All other wetted parts	Brass	1.4571
Non-wetted parts		
Display	Makrolon® / brass, nickel-plated	Makrolon® / brass, nickel-plated

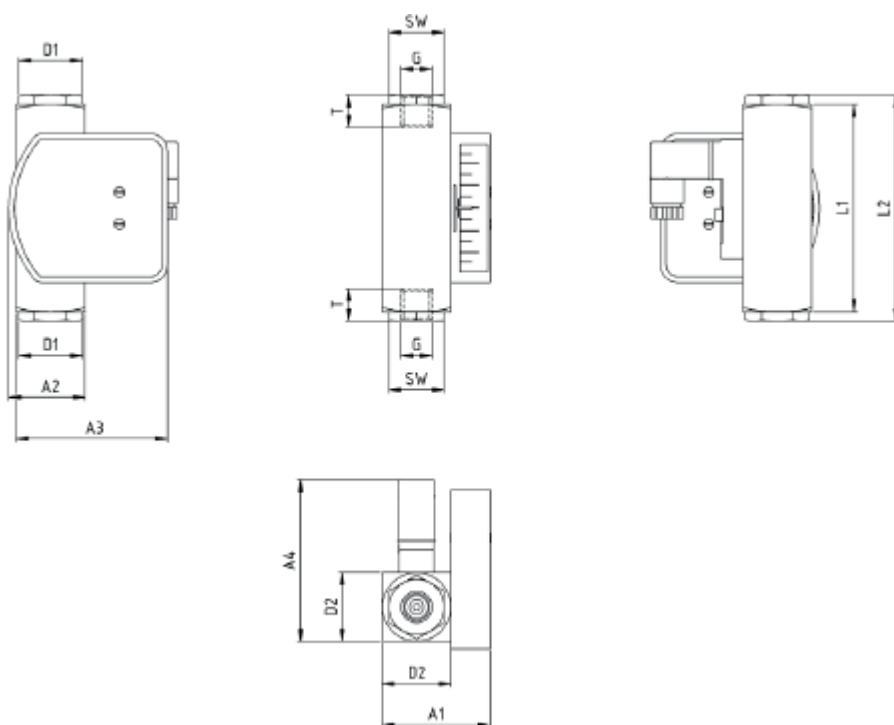
(2) Other gasket material on request



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Technical drawing



Summary of types

Type	Overall dimensions [mm]												Weight approx. [g]
	G	DN	SW	L1	L2	T	D1	D2	A1	A2	A3	A4	
DKM/A-2/2	1/4"	8	24	90	98	10	27,5	30	47	33	66	~70	620
	3/8"	10	24	90	119	11	27,5	30	47	33	66	~70	670
	1/2"	15	-	90	-	14	-	30	47	33	66	~70	570
DKM/A-2/3	1/2"	15	-	90	-	14	-	30	47	33	66	~70	570
DKM/A-2/7													

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Flow Monitor / Flow Indicator DKM/A-2 for Oil

Flow monitor / flow indicator operating with the float measuring principle for oil

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)

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) ⁽⁷⁾

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

(7) Available as Normally Open Contact (NOC) only



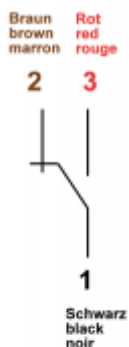
Flow Monitor / Flow Indicator DKM/A-2 for Oil

Flow monitor / flow indicator operating with the float measuring principle for oil

Connection diagram (for devices with switch contact 15x50)

Connector in compliance with EN 175301-803 and cable

Change over (COC)



Normally open (NOC)



M12x1

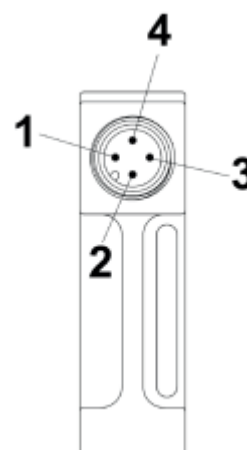
Change over (COC)



Normally open (NOC)



Pin-assignment





Flow Monitor / Flow Indicator DKM/A-2 for Oil

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Electrical data (for devices with switch contact 30x70)	
Change over (COC)	250 V • 1,5 A • 50 VA (8)
Normally open (NOC)	250 V • 3 A • 100 VA
Change over M12x1 (-20 °C – 85 °C)	250 V • 1,5 A • 50 VA (8)
Normally open M12x1 (-20 °C – 85 °C)	250 V • 3 A • 100 VA
Change over PLC	250 V • 1 A • 60 VA
EX-version in compliance with ATEX directive ATEX II 2 G Ex mb II T6 & ATEX II 2 D Ex tD A21 IP67 T80 °C ATEX II 2 G Ex mb II T5 & ATEX II 2 D Ex tD A21 IP67 T100 °C	
Change over	250 V • 1 A • 30 VA ⁽⁸⁾
Normally open	250 V • 2 A • 60 VA ⁽⁸⁾

(8) Minimum load 3 VA



Flow Monitor / Flow Indicator DKM/A-2 for Oil

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Electrical connection (for devices with switch contact 30x70)

- Connector in compliance with EN 175301-803, Form A (DIN 43650, Form A)
- Connector M12x1
- Cable (1 m)

EX-version in compliance with ATEX directive

- Cable (2 m)

Ingress Protection

IP65: Connector in compliance with EN 175301-803, Form A

IP67: Cable or connector M12x1

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



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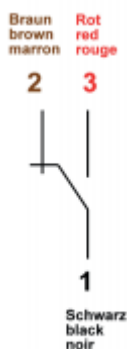
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Connection diagram (for devices with switch contact 30x70)

Connector in compliance with EN 175301-803 and cable

M12x1

Change over (COC)



Change over (COC)



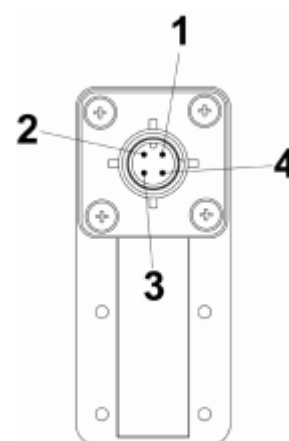
Normally open (NOC)



Normally open (NOC)



Pin-assignment



Important instructions!

Technical changes and errors reserved.

Pictures can be similar.

The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.