

Flow Monitor

DKM



Operation

The flow monitors type DKM operate with the float measuring principle

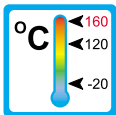


Application

The flow monitors type DKM are used for monitoring the flow of oils and other viscous media.



They are designed in such a way, that also with changes of viscosity, a reliable limit value monitoring is possible.



Here the kinematic viscosity may vary between 30 cSt and 600 cSt.

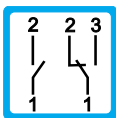


The instruments are predominantly used in lubricant systems.

Areas of application are:



– Central lubrication



– Circulation lubrication



– Transformers



Features

The DKM series proves itself through reliable function and easy handling. Further characteristics of this sturdy type are:

- universal orientation
- high reliability
- viscosity compensated
- high switch accuracy
- infinitely variable switchpoint adjustment through user
- EX-version to ATEX available
- Threaded connection
Special threads on request
- high pressure resistance

Installation hints

The installation of the instrument can be done in any way in the system. The flow direction must be observed.

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

The medium must not contain any solid particles!
We recommend the installation of strainers type SFD or SFM.

External magnetic fields influence the switch contact. Keep adequate distance to those magnetic fields (e.g. electromotors)!

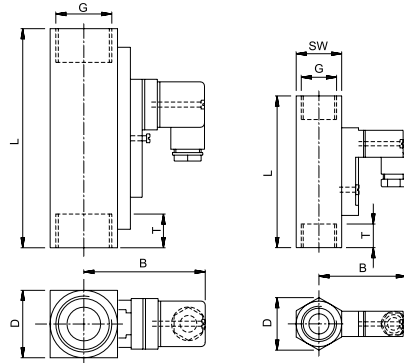
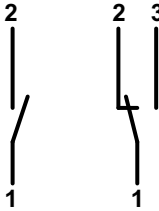
The operating instruction for DKM must be observed under any circumstances!



Measuring Ranges, Technical Data

Connection diagram

Normally open Change over



DKM-1

DKM-2

Summary of types DKM

Type	Switch range ⁽¹⁾ [l/min]	SW	D	B	G	DN	T	L	Weight approx. [g]
DKM-2/2	0,5 - 1,6	24	31	52	1/4"	8	14	98	400
		24			3/8"	10		108	450
		27			1/2"	15		90	350
DKM-2/3	0,8 - 3	27	31	52	1/2"	15	14	90	350
DKM-2/7	2 - 7								
DKM-1/2	0,5 - 1,5	34	40	76	1/4"	8	21	152	1500
DKM-1/4		1 - 4			34	15	21	152	1425
	34		20	21	152	1340			
	40		25	17	130	1160			
DKM-1/8	2 - 8	34	40	76	1/2"	15	21	152	1425
DKM-1/10	3 - 10				34	20	21	152	1340
DKM-1/15	5 - 15				40	25	17	130	1160
DKM-1/24	8 - 24	34	40	76	3/4"	20	21	152	1340
DKM-1/30	10 - 30				40	25	17	130	1160
DKM-1/45	15 - 45				40	40	76	1"	25
DKM-1/60	20 - 60								
DKM-1/90	30 - 90	40	40	76	1"	25	17	130	1160
DKM-1/110	35 - 110								

(1) Other switch ranges on request

Operating data	DKM-1	DKM-2
Operating pressure:	PN 250 bar (Brass) / PN 300 bar (SS)	PN 300 bar (Brass) / PN 350 bar (SS)
Pressure drop:	0,02 - 0,4 bar	0,02 - 0,2 bar
Maximum temperature:	120 °C (optional 160 °C)	
Viscosity range:	30 cSt to 600 cSt	
Accuracy:	±10% of full scale	
Electrical data		
Normally open:	max. 250V • 3A • 100VA	max. 230V • 3A • 60VA
Change over:	max. 250V • 1,5A • 50VA ⁽²⁾	max. 250V • 1,5A • 50VA ⁽²⁾
Atex II 2G EEx m II T6	Change over: 250V • 1A • 30VA, IP67 / Normally open: 250V • 2A • 60 VA, IP67	
EEx m II T6	Change over: 250V • 1A • 30VA, IP67 / Normally open: 250V • 2A • 60 VA, IP67	
Ingress Protection:	IP65 (plug connection DIN 43650 Form A or C) IP67 (1 m sealed in cable, with EEx-version 2 m)	
Output signal:	The contact opens / changes, when the flow falls below the set point.	
Power supply:	Not required (potentialfree reed contacts)	
Other plug types or cable lengths on request		
Material	Brass	Stainless Steel
Wetted parts:	Brass	1.4571
Spring: (wetted part)	1.4571	1.4571
Gaskets: (wetted part)	Viton (optional Perbunan, EPDM) ⁽³⁾	Viton (optional Perbunan, EPDM) ⁽³⁾
Magnets: (wetted part)	Hardferrit	Hardferrit
Housing: (wetted part)	Brass nickel-plated	1.4571

(2) Minimum load 3VA

(3) Other gasket materials on request

