

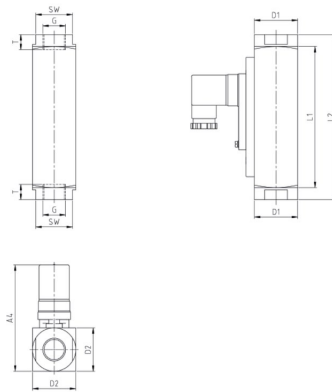
## Flow monitor for oils made of brass Series DKM-MS



|                            |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design type                | Flow monitor with reed switch contact, all-metal design, float measuring principle, pressure-independent, viscosity-compensated                                                                                                                                                                                                                                                                                              |
| Connection                 | G1/4"...G1"                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Materials                  | Body nickel-plated brass, internal parts brass, spring 1.4571, magnet hard ferrite, seals FKM                                                                                                                                                                                                                                                                                                                                |
| Application range          | Oil free of solid or magnetic particles                                                                                                                                                                                                                                                                                                                                                                                      |
| Viscosity                  | 30...600cSt                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Medium temperature         | -20...+120°C                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Ambient temperature        | -20...+120°C                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Switching contact          | Normally closed (changeover contact as special version)                                                                                                                                                                                                                                                                                                                                                                      |
| Switching point adjustment | Switching point adjustment by shifting the switching contact                                                                                                                                                                                                                                                                                                                                                                 |
| Accuracy                   | ±10% from the full-scale value                                                                                                                                                                                                                                                                                                                                                                                               |
| max. operating pressure    | 250 or rather 300bar see table                                                                                                                                                                                                                                                                                                                                                                                               |
| Pressure drop              | see table                                                                                                                                                                                                                                                                                                                                                                                                                    |
| max. voltage               | see table                                                                                                                                                                                                                                                                                                                                                                                                                    |
| max. current               | see table                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Power                      | see table                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Degree of protection       | IP65 according to EN 60529 with correctly installed cable entry (protection against dust ingress and splashing water)                                                                                                                                                                                                                                                                                                        |
| Mounting                   | Installation in rigid piping system                                                                                                                                                                                                                                                                                                                                                                                          |
| Mounting position          | any                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Scope of delivery          | including device socket                                                                                                                                                                                                                                                                                                                                                                                                      |
| Special version            | Seals NBR or EPDM, Electrical contact for media temperatures up to 160°C, more contacts, Changeover contact, Switch in ATEX version, Switch with UL approval, IP67 with 1 m molded-on cable or rather Reed switch with M12 connection                                                                                                                                                                                        |
| Application note           | Provide a straight pipe length of 10xDN upstream of the device and 5xDN downstream of the device. Never reduce the pipe diameter upstream of the device.<br>The reed switches used in the switching contacts are, by design, very sensitive to overload. None of the values for voltage, current and power may be exceeded.<br>Appropriate contact protection measures must be implemented depending on the electrical load. |



## Dimensions - Reed switch 30x70, connector according to EN175301-803 Form A



| Connection G | Nominal size DN[mm] | A4 | D1 | D2 | L1  | L2  | T    | SW | Weight [approx. g] |
|--------------|---------------------|----|----|----|-----|-----|------|----|--------------------|
| G1/4"        | 8                   | 98 | 40 | 40 | 130 | 152 | 10   | 34 | 1500               |
| G1/2"        | 15                  | 98 | 40 | 40 | 130 | 152 | 14   | 34 | 1425               |
| G3/4"        | 20                  | 98 | 40 | 40 | 130 | 152 | 15   | 34 | 1340               |
| G1"          | 25                  | 98 | 40 | 40 | 17  | 130 | 18,5 | 40 | 1160               |

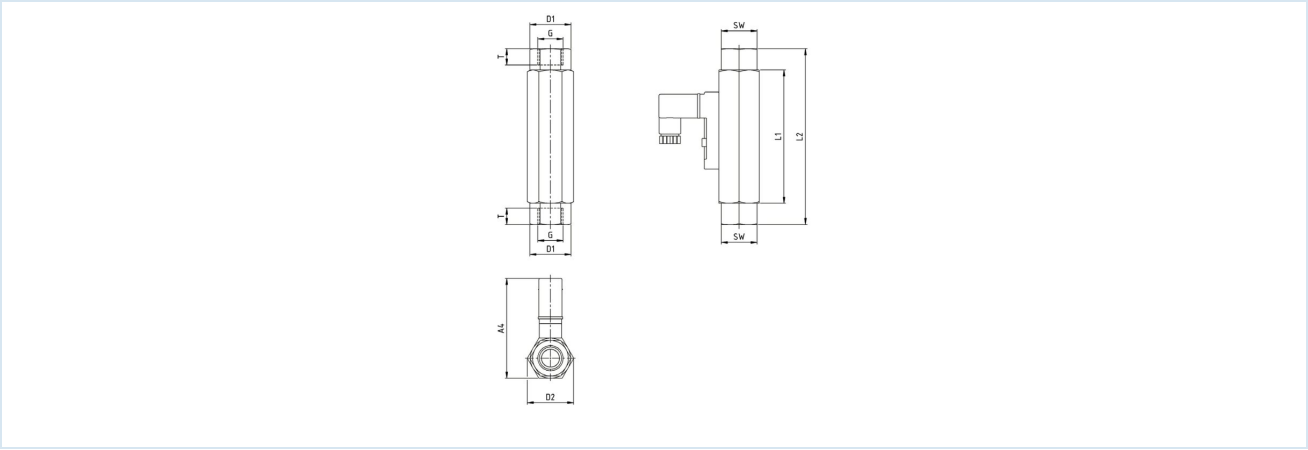
| Connection | Switching range [l/min]* | Pressure drop [bar] | max. operating pressure [bar] | max. voltage [V]** | max. current [A]** | max. power [VA]** | Type           |
|------------|--------------------------|---------------------|-------------------------------|--------------------|--------------------|-------------------|----------------|
| G1/4"      | 0,5...1,5                | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/2-14-MS  |
| G1/4"      | 1...4                    | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/4-14-MS  |
| G1/2"      | 0,5...1,5                | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/2-12-MS  |
| G1/2"      | 1...4                    | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/4-12-MS  |
| G1/2"      | 2...8                    | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/8-12-MS  |
| G1/2"      | 3...10                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/10-12-MS |
| G1/2"      | 5...15                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/15-12-MS |
| G1/2"      | 8...24                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/24-12-MS |
| G3/4"      | 0,5...1,5                | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/2-34-MS  |
| G3/4"      | 1...4                    | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/4-34-MS  |
| G3/4"      | 2...8                    | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/8-34-MS  |
| G3/4"      | 3...10                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/10-34-MS |
| G3/4"      | 5...15                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/15-34-MS |
| G3/4"      | 8...24                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/24-34-MS |
| G3/4"      | 10...30                  | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/30-34-MS |
| G3/4"      | 15...45                  | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/45-34-MS |
| G3/4"      | 20...60                  | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/60-34-MS |
| G1"        | 0,5...1,5                | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/2-MS     |
| G1"        | 1...4                    | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/4-MS     |
| G1"        | 2...8                    | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/8-MS     |
| G1"        | 3...10                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/10-MS    |
| G1"        | 5...15                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/15-MS    |
| G1"        | 8...24                   | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/24-MS    |
| G1"        | 10...30                  | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/30-MS    |
| G1"        | 15...45                  | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/45-MS    |
| G1"        | 20...60                  | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/60-MS    |
| G1"        | 30...90                  | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/90-MS    |
| G1"        | 35...110                 | 0,02...0,4          | 250                           | 250                | 3                  | 100               | DKM-1/110-MS   |

\* The specified switching values apply for decreasing flow, for oils with a density of 0.9 kg/dm<sup>3</sup> and for flow from bottom to top. Other densities or other installation situations reduce the accuracy. Special scales for deviating media, operating conditions and installation situations are available on request.

\*\* Switching capacity Changeover contact: 250V, 1,5A, 3...50VA



Dimensions - Reed switch 15x50, connector according to EN175301-803 Form C

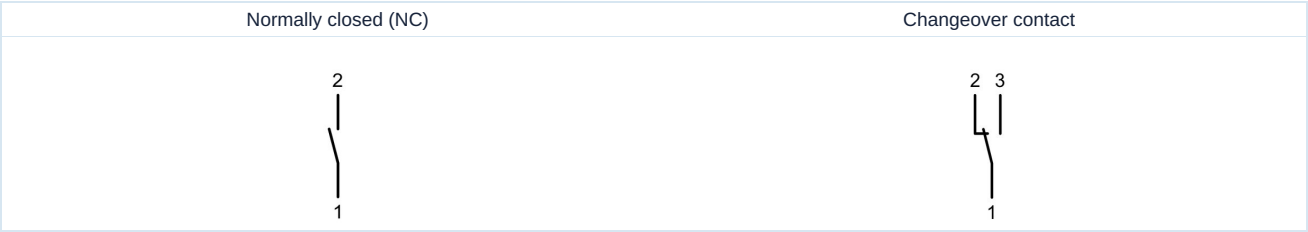


| Connection<br>G | Nominal size<br>DN[mm] | A4 | D1   | D2   | L1 | L2    | T  | SW | Weight<br>[approx. g] |
|-----------------|------------------------|----|------|------|----|-------|----|----|-----------------------|
| G1/4"           | 8                      | 67 | 27,7 | 31,2 | 90 | 98    | 10 | 24 | 350                   |
| G3/8"           | 10                     | 67 | 27,7 | 31,2 | 90 | 118,6 | 11 | 24 | 350                   |
| G1/2"           | 15                     | 67 | -    | 31,2 | 90 | -     | 14 | 27 | 350                   |

| Connection | Switching range<br>[l/min]* | Pressure drop<br>[bar] | max. operating pressure<br>[bar] | max. voltage<br>[V]** | max. current<br>[A]** | max. power<br>[VA]** | Type           |
|------------|-----------------------------|------------------------|----------------------------------|-----------------------|-----------------------|----------------------|----------------|
| G1/4"      | 0,5...1,6                   | 0,02...0,2             | 300                              | 230                   | 3                     | 60                   | DKM-2/2-1/4-MS |
| G3/8"      | 0,5...1,6                   | 0,02...0,2             | 300                              | 230                   | 3                     | 60                   | DKM-2/2-3/8-MS |
| G1/2"      | 0,5...1,6                   | 0,02...0,2             | 300                              | 230                   | 3                     | 60                   | DKM-2/2-MS     |
| G1/2"      | 0,8...3                     | 0,02...0,2             | 300                              | 230                   | 3                     | 60                   | DKM-2/3-MS     |
| G1/2"      | 0,8...7                     | 0,02...0,2             | 300                              | 230                   | 3                     | 60                   | DKM-2/7-MS     |

\* The specified switching values apply for decreasing flow, for oils with a density of 0.9 kg/dm3 and for flow from bottom to top. Other densities or other installation situations reduce the accuracy. Special scales for deviating media, operating conditions and installation situations are available on request.  
\*\* Switching capacity Changeover contact: 250V, 1,5A, 3...50VA

Electrical connection



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