## DFC 17B, 27B: Heavy-duty pressure switch

## Features

- For regulating and monitoring pressure in liquids, gases and vapours
- Especially suitable for installations subject to vibrations
- Contact rating $1 \mathrm{~mA} / 6 \mathrm{~V}$ to $10 \mathrm{~A} / 400 \mathrm{~V}$
- Gold-plated silver contacts, vibration-proof snap-action switch with single-pole change-over switch
- Upper and lower switching points can be set independently of each other
- Sealable
- Splashproof
- DFC17B**FOO 1: Pressure sensor made of brass for non-aggressive media
- DFC27B**F002: Pressure sensor made of stainless steel for aggressive media


## Technical data

| Power supply |  |  |
| :---: | :---: | :---: |
|  | Maximum load with gold-plated contacts ${ }^{11}$ | $200 \mathrm{~mA}, 50 \mathrm{~V}$ |
|  | Minimum load with gold-plated contacts | $1 \mathrm{~mA}, 6 \mathrm{~V}$ |
|  | Maximum load with silver-plated contacts ${ }^{2)}$ | $\begin{aligned} & 10(2) \mathrm{A}, 400 \mathrm{~V} \sim \\ & (25 \mathrm{~W}), 250 \mathrm{~V}= \end{aligned}$ |
|  | Minimum load with silver-plated contacts | $100 \mathrm{~mA}, 24 \mathrm{~V}$ |
| Ambient conditions |  |  |
|  | Temperature of medium | $\leq 110^{\circ} \mathrm{C}$ |
|  | Admissible ambient temperature | $-40 . . .70^{\circ} \mathrm{C}$ |
| Construction |  |  |
|  | Housing | Transparent cover |
|  | Housing material | Light metal |
|  | Cable inlet | PG 13.5 |
|  | Screw terminals | For wire of up to $2.5 \mathrm{~mm}^{2}$ |
|  | Pressure connection | G $1 / 2$ " male |
| Standards and directives |  |  |
|  | Type of protection ${ }^{31}$ | IP44 (EN 60529) |
|  | Protection class | 1 (IEC 60730) |
|  | Test marks ${ }^{4}$ | TÜV <br> DWFS (SDBF) ID: 0000006018 <br> DWFS (SDB) ID: 0000006019 <br> DB (SDBF) ID: 0000006017 |
|  | Mode of operation | Type 2 B (EN 60730) |
|  | Ship-approved | Germanischer Lloyd (GL) ID: $99589-84 \mathrm{HH}, 99588-84 \mathrm{HH}$, $99587-84 \mathrm{HH}$ |



DFC17B76F001


TÜVRheinland ZERTIFIZIERT

CERTIFIED
Type Approval

[^0]| CE conformity as per | Low-voltage directive 2006/95/EC | EN 60730-1, 60730-2-6 |
| :--- | :--- | :--- |
|  | EMC Directive 2004/108/EC | EN 6100-6-1, EN61000-6-2 |
|  |  | EN 61000-6-3, EN 61000-6-4 |
|  | PED 97/23/EC, cat. IV | VdTÜV pressure information sheet 100, |
| sheet 1, cat. IV, DIN 3398 T4 |  |  |
|  |  | EN 12952-11, EN 12953-9 |


| Overview of types |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Setting range (bar) | Switching difference (bar) | Maximum pressure (bar) | Max. temp., sensor ( ${ }^{\circ} \mathrm{C}$ ) | Admissible vacuum loading (bar) | Weight (kg) |
| DFC17B54F001 | 0...2.5 | 0.14 | 16 | 70 | -0.7 | 1.2 |
| DFC17B58F001 | 0...6.0 | 0.18 | 16 | 70 | -1.0 | 1.2 |
| DFC17B59F001 | -1...5.0 | 0.2 | 16 | 70 | -1.0 | 1.2 |
| DFC17B76F001 | 0... 10 | 0.5 | 40 | 70 | -1.0 | 1.1 |
| DFC17B78F001 | 0... 16 | 0.5 | 40 | 70 | -1.0 | 1.1 |
| DFC17B79F001 | 16... 32 | 0.8 | 42 | 70 | -1.0 | 1.1 |
| DFC17B96F001 | 0... 25 | 1.7 | 100 | 70 | -1.0 | 1 |
| DFC17B97F001 | 25... 50 | 2 | 100 | 70 | -1.0 | 1 |
| DFC17B98F001 | 0... 40 | 1.8 | 100 | 70 | -1.0 | 1 |
| DFC27B26F002 | -1...2.5 | 0.3 | 21 | 110 | -1.0 | 0.9 |
| DFC27B43F002 | 0.5...6.0 | 0.3 | 21 | 110 | -1.0 | 0.9 |
| DFC27B46F002 | 1... 10 | 0.3 | 21 | 110 | -1.0 | 0.9 |
| DFC27B52F002 | 2... 16 | 0.3 | 21 | 110 | -1.0 | 0.9 |

- The switching difference must be within the setting range of the switching point. The minimum values of the switching difference are only possible in the lower setting range.

| Accessories |  |
| :---: | :---: |
| Type | Description |
| 0192222000 | Cap nut with solder connector |
| 0259239000 | Reduction piece $\mathrm{G}^{1 / 2}{ }^{\prime \prime}$ on 7/16" 20-UNF-2A for copper tubes of $\varnothing 6 \mathrm{~mm}$, brass |
| 0311572000 | Screw fitting for copper tubes of $\varnothing 6 \mathrm{~mm}$, brass |
| 0035465000 | Throttle screw for absorbing pressure surges, brass |
| 0214120000 | Throttle screw for absorbing pressure surges, stainless steel |
| 0192700000 | 1 m capillary tube for absorbing pressure surges, copper |
| 0292018001 | Damping screw for absorbing pressure surges in low viscosity media |
| 0259189000 | Holder for raised wall mounting |
| 0259409000 | Fixing bracket (provides 3-point fixing with accessory 0259189 ) |
| 0259299000 | Cable screw fitting PG 13.5 |
| 0292019001 | Setpoint adjustment for each switching point according to customer's wishes (setting accuracy: $\pm 3 \%$ of the setting range) |
| 0292019002 | Sealing of the adjustment screw for each switching point (only with accessory 0292019001 ) |
| 0381141001 | Profile sealing ring, copper, for $\mathrm{G}^{1 / 2 "}$ |


[^0]:    1) If the contacts are subjected to a load greater than $200 \mathrm{~mA}, 50 \mathrm{~V}$, the gold plating will be destroyed. They are then classed merely as silver contacts and lose the properties of gold-plated contacts
    ${ }^{2)}$ Take the RC circuitry into account for inductive loads 230/400 V networks
    From $70^{\circ} \mathrm{C}$ media temperature, the current must be reduced to 6 A
    2) IP 54 with accessory 0259299000
    3) Certificates can be downloaded from www.tuv.com
