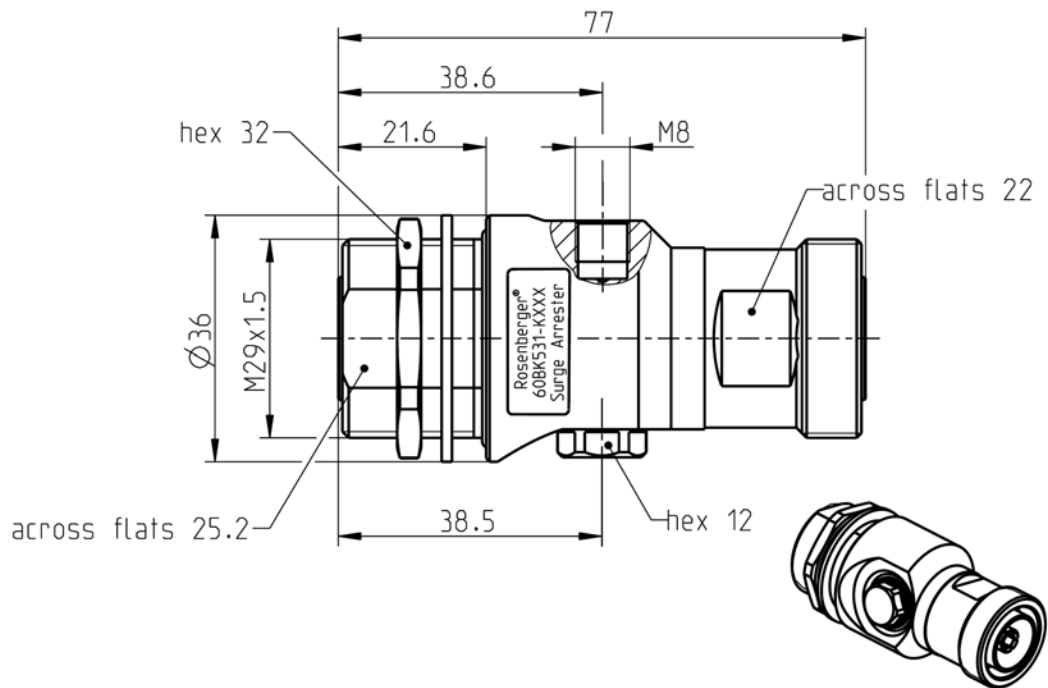




All dimensions are in mm; tolerances according to ISO 2768 m-H

### Available Variants

| Order No.      | Nom. DC spark over voltage | Gas capsule |
|----------------|----------------------------|-------------|
| 60BK531-K090N1 | 90 V                       | 53ZB01-090  |
| 60BK531-K230N1 | 230 V                      | 53ZB01-230  |
| 60BK531-K350N1 | 350 V                      | 53ZB01-350  |

### Interface

According to

IEC 61169-4, EN 122190, DIN 47223

### Documents

Assembly instruction  
Panel piercing

53 MV-A001  
B 75

### Material and Plating

#### Connector parts

Center contact  
Outer contact  
Body  
Dielectric  
Gasket

#### Material

Spring bronze  
Brass  
Brass  
PTFE  
Silicone

#### Plating

Silver, 3-6 µm  
Flash white bronze over silver(e.g. Optargen®)  
Flash white bronze over silver(e.g. Optargen®)

### Electrical Data

|                                                |                                                        |
|------------------------------------------------|--------------------------------------------------------|
| Impedance                                      | 50 Ω                                                   |
| Frequency                                      | DC to 2.2 GHz                                          |
| Return loss                                    | ≥ 30 dB @ DC to 1.5 GHz                                |
|                                                | ≥ 22 dB @ 1.5 GHz to 1.9 GHz                           |
|                                                | ≥ 16 dB @ 1.9 GHz to 2.2 GHz                           |
| Insertion loss                                 | ≤ 0.1 x $\sqrt{f}$ [GHz] dB                            |
| Insulation resistance                          | ≥ 10 GΩ                                                |
| Center contact resistance                      | ≤ 0.4 mΩ                                               |
| Outer contact resistance                       | ≤ 1.5 mΩ                                               |
| Power handling (at 20 °C, sea level, VSWR 1.0) | P=U <sup>2</sup> /R (W) (depending on the gas capsule) |
| RF-leakage                                     | ≥ 128 dB @ DC to 1 GHz                                 |
| Nominal impulse discharge current              | 20 kA (8/20 μs)                                        |
| Nom. DC spark over voltage                     | see table on page one                                  |

### Mechanical Data

|                                          |             |
|------------------------------------------|-------------|
| Mating cycles                            | ≥ 500       |
| Coupling nut retention                   | ≥ 1000 N    |
| Center contact captivation: axial        | ≥ 200 N     |
| radial                                   | ≥ 2 Ncm     |
| Coupling torque (recommended)            | 25 to 30 Nm |
| Proof torque                             | ≤ 35 Nm     |
| Screw tightening torque with gas capsule | 9 Nm min.   |

### Environmental Data

|                                   |                                            |
|-----------------------------------|--------------------------------------------|
| Temperature range                 | -45 °C to +85 °C                           |
| Rapid change of temperature       | DIN EN 122190, Sub-clause 4.6.7            |
| Corrosion resistance              | DIN EN 122190, Sub-clause 4.6.10           |
| Vibration                         | DIN EN 122190, Sub-clause 4.6.3            |
| Climatic category                 | DIN EN 122190, Sub-clause 4.6.5 (45/85/56) |
| Damp heat                         | DIN EN 122190, Sub-clause 4.6.6            |
| Degree of protection (mated pair) | IEC 60529, IP68 2.5 bar                    |
| RoHS                              | compliant                                  |

### Weight

|        |           |
|--------|-----------|
| Weight | 332 g/pce |
|--------|-----------|

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

| Draft                                                                                                                                                  | Date     | Approved          | Date     | Rev.                                                                                                                  | Engineering change number | Name      | Date          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|----------|-----------------------------------------------------------------------------------------------------------------------|---------------------------|-----------|---------------|
| M. Wimmer                                                                                                                                              | 07.05.13 | Sa. Krautenbacher | 20.03.14 | 300                                                                                                                   | 14-0352                   | T. Krojer | 20.03.14      |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG<br>P.O.Box 1260 D-84526 Tittmoning Germany<br><a href="http://www.rosenberger.de">www.rosenberger.de</a> |          |                   |          | Tel. : +49 8684 18-0<br>Fax : +49 8684 18-499<br>Email : <a href="mailto:info@rosenberger.de">info@rosenberger.de</a> |                           |           | Page<br>2 / 2 |