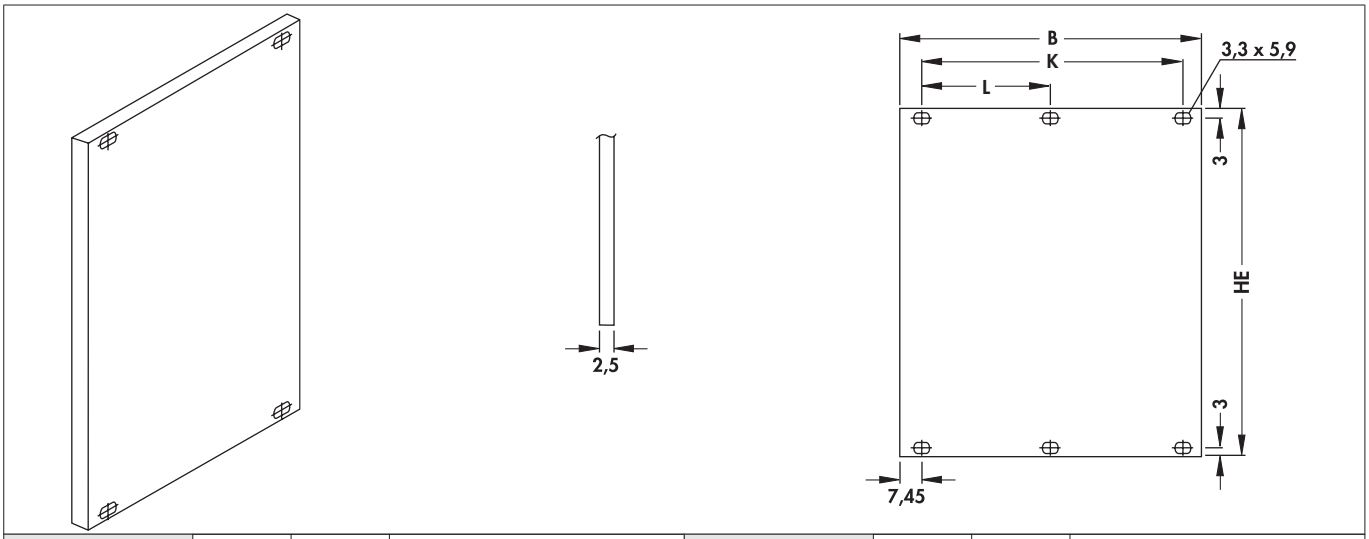
– 3 HE: H = 128.4 mm
– 6 HE: H = 261.8 mm
– **HP** = width unit = 5.08 mm
– **U** = heigth unit = 44.45 mm

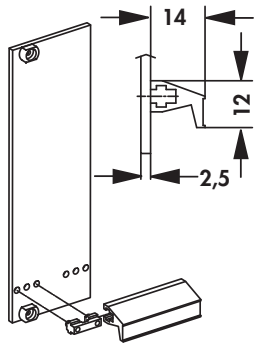



| art. no. | U | HP | dim. [mm] B | K | L | art. no. | U | HP | dim. [mm] B | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **TFP 3 3 ...** | | 3 | 14.9 | | | **TFP 6 3 ...** | | 3 | 14.9 | | |
| **TFP 3 4 ...** | | 4 | 20.0 | | | **TFP 6 4 ...** | | 4 | 20.0 | | |
| **TFP 3 5 ...** | | 5 | 25.1 | | | **TFP 6 5 ...** | | 5 | 25.1 | | |
| **TFP 3 6 ...** | | 6 | 30.2 | — | | **TFP 6 6 ...** | | 6 | 30.2 | — | |
| **TFP 3 7 ...** | | 7 | 35.3 | | | **TFP 6 7 ...** | | 7 | 35.3 | | |
| **TFP 3 8 ...** | | 8 | 40.3 | | | **TFP 6 8 ...** | | 8 | 40.3 | | |
| **TFP 3 9 ...** | | 9 | 45.4 | | | **TFP 6 9 ...** | | 9 | 45.4 | | |
| **TFP 3 10 ...** | | 10 | 50.5 | 35.6 | | **TFP 6 10 ...** | | 10 | 50.5 | 35.6 | |
| **TFP 3 12 ...** | | 12 | 60.7 | 45.7 | — | **TFP 6 12 ...** | | 12 | 60.7 | 45.7 | — |
| **TFP 3 14 ...** | | 14 | 70.8 | 55.9 | | **TFP 6 14 ...** | | 14 | 70.8 | 55.9 | |
| **TFP 3 16 ...** | 3 | 16 | 81.0 | 66.0 | | **TFP 6 16 ...** | 6 | 16 | 81.0 | 66.0 | |
| **TFP 3 18 ...** | | 18 | 91.1 | 76.2 | | **TFP 6 18 ...** | | 18 | 91.1 | 76.2 | |
| **TFP 3 20 ...** | | 20 | 101.3 | 86.4 | | **TFP 6 20 ...** | | 20 | 101.3 | 86.4 | |
| **TFP 3 21 ...** | | 21 | 106.4 | 91.4 | | **TFP 6 21 ...** | | 21 | 106.4 | 91.4 | |
| **TFP 3 24 ...** | | 24 | 121.6 | 106.7 | | **TFP 6 24 ...** | | 24 | 121.6 | 106.7 | |
| **TFP 3 28 ...** | | 28 | 141.9 | 127.0 | | **TFP 6 28 ...** | | 28 | 141.9 | 127.0 | |
| **TFP 3 40 ...** | | 40 | 202.9 | 188.0 | | **TFP 6 40 ...** | | 40 | 202.9 | 188.0 | |
| **TFP 3 42 ...** | | 42 | 213.1 | 198.1 | 101.8 | **TFP 6 42 ...** | | 42 | 213.1 | 198.1 | 101.8 |
| **TFP 3 60 ...** | | 60 | 304.5 | 289.6 | 147.3 | **TFP 6 60 ...** | | 60 | 304.5 | 289.6 | 147.3 |
| **TFP 3 63 ...** | | 63 | 319.7 | 304.8 | 152.4 | **TFP 6 63 ...** | | 63 | 319.7 | 304.8 | 152.4 |
| **TFP 3 84 ...** | | 84 | 426.4 | 411.5 | 203.2 | **TFP 6 84 ...** | | 84 | 426.4 | 411.5 | 203.2 |

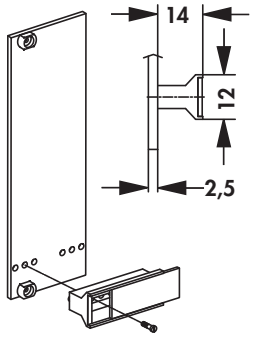
| | |
|---|---|
| **please indicate:** | **... metal nipples (optional)**<br>**MN 2 = pressed in** |
| **surface:** | natural colour anodised |

## Part front panel with handle

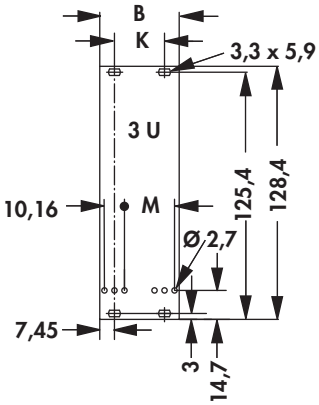
- **TFP OG** part front panel without handle with handle perforation
- **TFP AG** part front panel with anodised aluminium handle and fixing material
- **TFP KG** part front panel with plastic-handle, anodised insert strip and fixing material
- **TFP KG ...** only 4-8 and 10-14
- **HP** = width unit = 5.08 mm; **U** = heigth unit = 44.45 mm

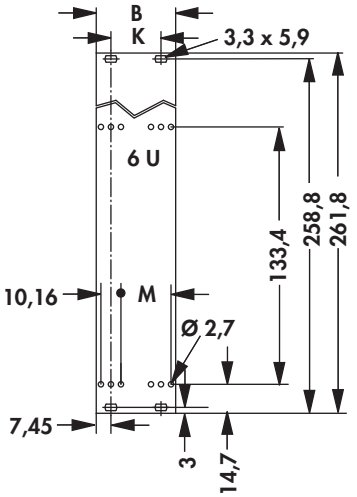



**TFP AG**




**TFP KG**




| art. no. | U | HP | dim. [mm] B | K | M | art. no. | U | HP | dim. [mm] B | K | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **TFP ... 3 4 ...** | 3 | 4 | 20.0 | — | 5.08 | **TFP ... 6 4 ...** | 6 | 4 | 20.0 | — | 5.08 |
| **TFP ... 3 5 ...** | | 5 | 25.1 | | 10.16 | **TFP ... 6 5 ...** | | 5 | 25.1 | | 10.16 |
| **TFP ... 3 6 ...** | | 6 | 30.2 | | 15.24 | **TFP ... 6 6 ...** | | 6 | 30.2 | | 15.24 |
| **TFP ... 3 8 ...** | | 8 | 40.3 | | 25.40 | **TFP ... 6 8 ...** | | 8 | 40.3 | | 25.40 |
| **TFP ... 3 9 ...** | | 9 | 45.4 | | 30.50 | **TFP ... 6 9 ...** | | 9 | 45.4 | | 30.50 |
| **TFP ... 3 10 ...** | | 10 | 50.5 | 35.6 | 35.60 | **TFP ... 6 10 ...** | | 10 | 50.5 | 35.6 | 35.60 |
| **TFP ... 3 12 ...** | | 12 | 60.7 | 45.7 | 45.70 | **TFP ... 6 12 ...** | | 12 | 60.7 | 45.7 | 45.70 |
| **TFP ... 3 14 ...** | | 14 | 70.8 | 55.9 | 55.90 | **TFP ... 6 14 ...** | | 14 | 70.8 | 55.9 | 55.90 |
| **TFP ... 3 16 ...** | | 16 | 81.0 | 66.0 | 66.00 | **TFP ... 6 16 ...** | | 16 | 81.0 | 66.0 | 66.00 |
| **TFP ... 3 20 ...** | | 20 | 101.3 | 86.4 | 86.40 | **TFP ... 6 20 ...** | | 20 | 101.3 | 86.4 | 86.40 |
| **TFP ... 3 21 ...** | | 21 | 106.4 | 91.4 | 91.40 | **TFP ... 6 21 ...** | | 21 | 106.4 | 91.4 | 91.40 |
| **TFP ... 3 24 ...** | | 24 | 121.6 | 106.7 | 106.70 | **TFP ... 6 24 ...** | | 24 | 121.6 | 106.7 | 106.70 |

**please indicate:**

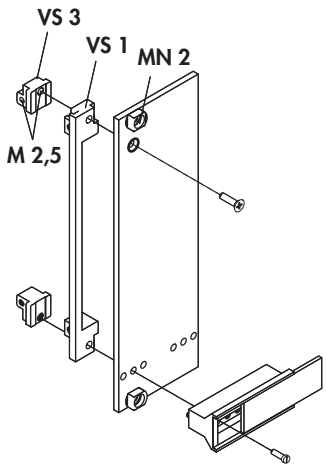
**... part front panels (optional)**
**KG = with plastic-handle, anodised insert strip and fixing material**
**AG = with anodised aluminium handle and fixing material**
**OG = without handle with handle perforation**

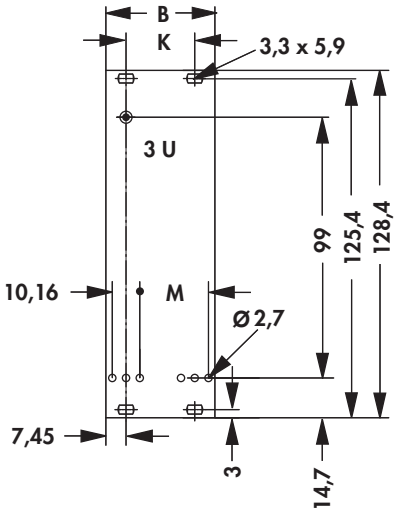
**... metal nipples (optional)**
**MN 2 = pressed in**

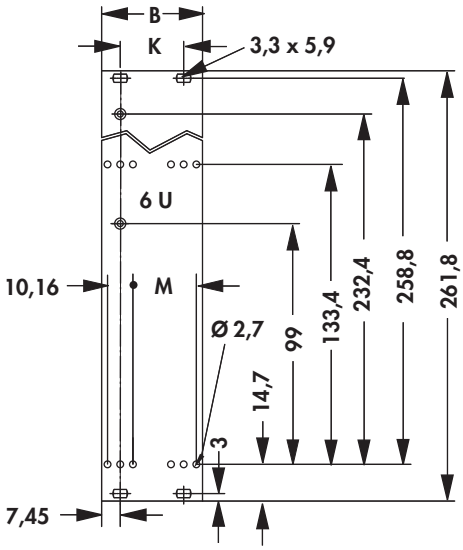
| | |
|---|---|
| **surface:** | natural colour anodised |

## Part front panels with plastic handle and bracket

- **HP**= width unit = 5.08 mm
- **U**= heigth unit = 44.45 mm
- PCB holder **VS 1** → N 57; **VS 3** → N 57
- part front panels incl. fixing material




| art. no. | U | HP | dim. [mm] B | K | M | art. no. | U | HP | dim. [mm] B | K | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **TFP KG ... 3 4 ...** | 3 | 4 | 20.0 | — | 5.08 | **TFP KG ... 6 4 ...** | 6 | 4 | 20.0 | — | 5.08 |
| **TFP KG ... 3 5 ...** | | 5 | 25.1 | | 10.16 | **TFP KG ... 6 5 ...** | | 5 | 25.1 | | 10.16 |
| **TFP KG ... 3 6 ...** | | 6 | 30.2 | | 15.24 | **TFP KG ... 6 6 ...** | | 6 | 30.2 | | 15.24 |
| **TFP KG ... 3 7 ...** | | 7 | 35.3 | | 20.32 | **TFP KG ... 6 7 ...** | | 7 | 35.3 | | 20.32 |
| **TFP KG ... 3 8 ...** | | 8 | 40.3 | | 25.40 | **TFP KG ... 6 8 ...** | | 8 | 40.3 | | 25.40 |
| **TFP KG ... 3 10 ...** | | 10 | 50.5 | 35.6 | 35.60 | **TFP KG ... 6 10 ...** | | 10 | 50.5 | 35.6 | 35.60 |
| **TFP KG ... 3 12 ...** | | 12 | 60.7 | 45.7 | 45.70 | **TFP KG ... 6 12 ...** | | 12 | 60.7 | 45.7 | 45.70 |
| **TFP KG ... 3 14 ...** | | 14 | 70.8 | 55.9 | 55.90 | **TFP KG ... 6 14 ...** | | 14 | 70.8 | 55.9 | 55.90 |

**please indicate:** **... PCB holder**
**VS 1 = for 3 U Eurocards**
**VS 3 = with M2.5 thread**

**... metal nipples (optional)**
**MN 2 = pressed in**

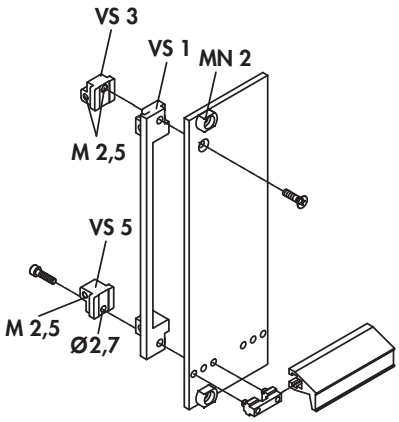
**surface:** natural colour anodised

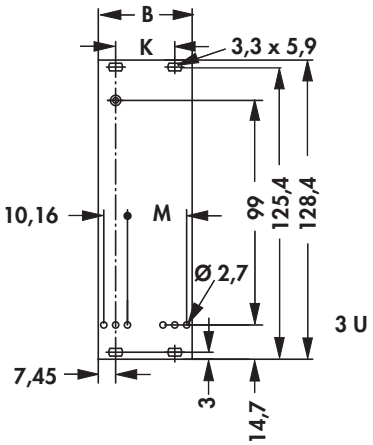
## Order example

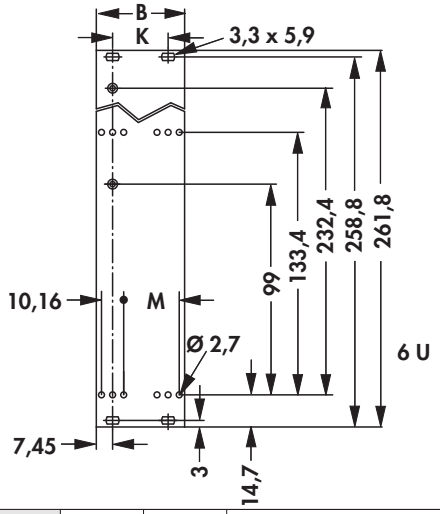
| TFP | KG | VS 1 | 3 | 4 | MN2 |
|---|---|---|---|---|---|
| | | PCB-bracket | heigth unit (U) | width unit (HP) | metal nipples |

## Part front panels with aluminium handle and bracket

- **HP**= width unit = 5.08 mm
- **U**= heights unit = 44.45 mm
- PCB holder VS ... ➔ N 57
- part front panel incl. fixing material




| art. no. | U | HP | dim. [mm] B | K | M | art. no. | U | HP | dim. [mm] B | K | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **TFP AG ... 3 4 ...** | 3 | 4 | 20.0 | — | 5.08 | **TFP AG ... 6 4 ...** | 6 | 4 | 20.0 | — | 5.08 |
| **TFP AG ... 3 5 ...** | | 5 | 25.1 | | 10.16 | **TFP AG ... 6 5 ...** | | 5 | 25.1 | | 10.16 |
| **TFP AG ... 3 6 ...** | | 6 | 30.2 | | 15.24 | **TFP AG ... 6 6 ...** | | 6 | 30.2 | | 15.24 |
| **TFP AG ... 3 7 ...** | | 7 | 35.3 | | 20.32 | **TFP AG ... 6 7 ...** | | 7 | 35.3 | | 20.32 |
| **TFP AG ... 3 8 ...** | | 8 | 40.3 | | 25.40 | **TFP AG ... 6 8 ...** | | 8 | 40.3 | | 25.40 |
| **TFP AG ... 3 9 ...** | | 9 | 45.4 | | 30.50 | **TFP AG ... 6 9 ...** | | 9 | 45.4 | | 30.50 |
| **TFP AG ... 3 10 ...** | | 10 | 50.5 | 35.6 | 35.60 | **TFP AG ... 6 10 ...** | | 10 | 50.5 | 35.6 | 35.60 |
| **TFP AG ... 3 12 ...** | | 12 | 60.7 | 45.7 | 45.70 | **TFP AG ... 6 12 ...** | | 12 | 60.7 | 45.7 | 45.70 |
| **TFP AG ... 3 14 ...** | | 14 | 70.8 | 55.9 | 55.90 | **TFP AG ... 6 14 ...** | | 14 | 70.8 | 55.9 | 55.90 |
| **TFP AG ... 3 16 ...** | | 16 | 81.0 | 66.0 | 66.00 | **TFP AG ... 6 16 ...** | | 16 | 81.0 | 66.0 | 66.00 |
| **TFP AG ... 3 18 ...** | | 18 | 91.1 | 76.2 | 76.20 | **TFP AG ... 6 18 ...** | | 18 | 91.1 | 76.2 | 76.20 |
| **TFP AG ... 3 20 ...** | | 20 | 101.3 | 86.4 | 86.40 | **TFP AG ... 6 20 ...** | | 20 | 101.3 | 86.4 | 86.40 |

**please indicate:**

**... PCB holder**
**VS 1 = for 3 U Eurocards**
**VS 35 = (VS 3/VS 5) with M2.5 threads for front panel and circuit board mounting**

**... metal nipples (optional)**
**MN 2 = pressed in**

| | |
|---|---|
| **surface:** | natural colour anodised |

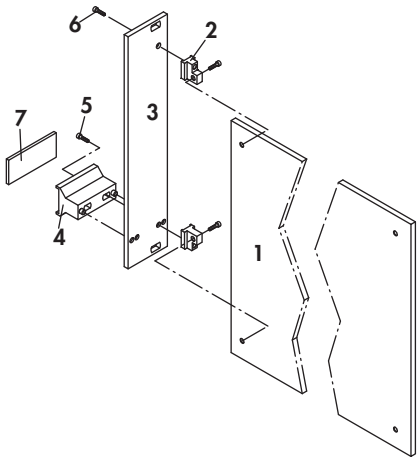
## Order example

| TFP | AG | VS 1 | 3 | 4 | MN2 |
|---|---|---|---|---|---|
| | | PCB-bracket | heigth unit (U) | width unit (HP) | metal nipples |

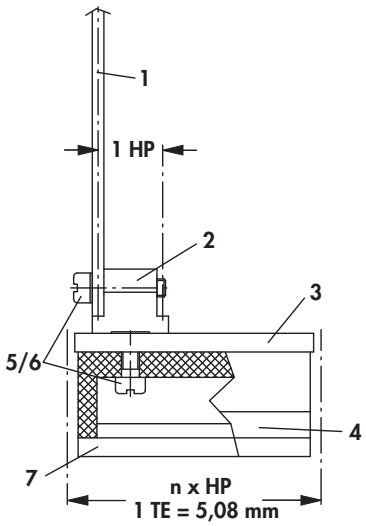
## Part front panels 3 U with SMD bracket

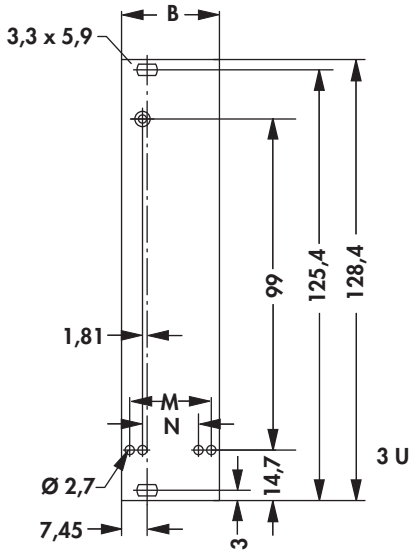
– part front panel with plastic handle, anodised insert strip, PC-board holder made of zinc diecast and mounting material
– PC-board holder for the double-sided assembly of circuit boards in grid of 1 HP
– particularly suited for SMD technique as the circuit board is usable for double-sided insertion
– **HP**= width unit = 5.08 mm
– **U**= height unit = 44.45 mm
– PCB holder VS 6/7 ➔ N 58
– part front panel incl. fixing material

**1** = circuit board; **2** = circuit board holder VS 6 (VS 7); **3** = front panel; **4** = plastic handle **GLK**;
**5** = cheese head screw M2.5 x 12; **6** = vertical lens screw M2.5 x 8; **7** = insert strip




TFP KG R




| art. no. | U | HP | dim. [mm] B | M | N |
|---|---|---|---|---|---|
| **TFP KG R ... 3 8 ...** | 3 | 8 | 40.3 | 35.6 | 29.0 |
| **TFP KG R ... 3 14 ...** | | 14 | 70.8 | 66.0 | 59.5 |

**please indicate:**
**... PCB holder**
**VS 6 = with M2.5 thread**
**VS 7 = with M2.5 thread and through-hole**

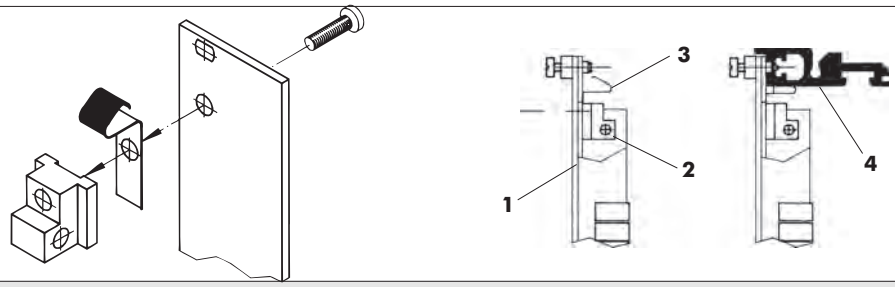
**... metal nipples (optional)**
**MN 2 = pressed in**

**surface:** natural colour anodised

## Contact spring

– made of phosphorus bronze is mounted between die-cast PC-bracket VS 3-7 ➔ N 58 and electrically conductive front panel
– serves as capacitive contact as well as for electrostatic discharge **ESD**
– electrical contact is achieved by conductive (chrome-free transparent passivated) module rails

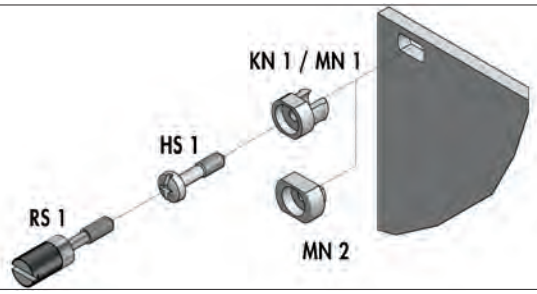
**1** = front panel; **2** = bracket; **3** = contact spring; **4** = module rail




| art. no. |
|---|
| **FEK 1** |

## Mounting material

– for locking insert modules and part front panels into the subrack
– **KN 1**: plastic sleeves for clipping in
– **MN 1**: metal sleeves / **MN 2**: metal sleeves for pressing in; fixed connection to the front panel
– **HS 1**: captive screw, brass nickel plated / **RS 1**: knurled screw with slot, brass nickel plated
– **VPE**: packing unit




| art. no. | VPE |
|---|---|
| **HS 1** | 100 pcs./bag |
| **KN 1** | |
| **MN 1** | 10 pcs./bag |
| **MN 2** | |
| **RS 1** | 100 pcs./bag |

| | **FEK 1** | **HS 1/ MN 1+2/ RS 1** | **KN 1** |
|---|---|---|---|
| **material** | special bronze | brass, nickel plated | polyamide |