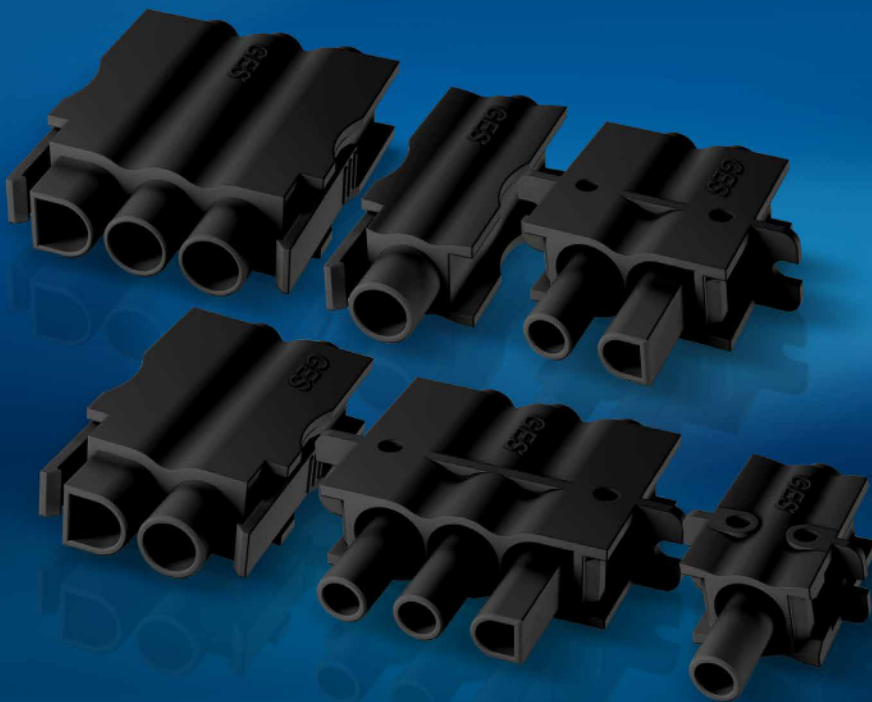


# Series



MOD Series M Series MC Series MCS Series VP Series 100 Series S Series

- Operating voltages up to 13 kVDC
- Operating current 13 Amps / 30 Amps
- Ideal for internal cabling
- Quick assembly
- Several mounting options offering enhanced flexibility

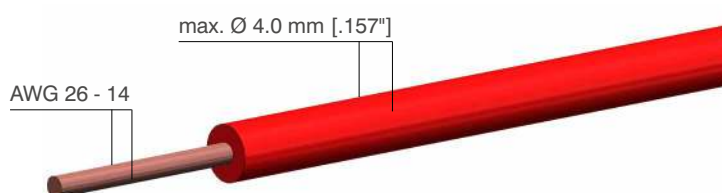
# General characteristics and technical data Series VarioPro CL

| Electrical values      |       |
|------------------------|-------|
| Operating voltage (DC) | 13 kV |
| Test voltage (DC)      | 20 kV |

| Housing                   |                   |
|---------------------------|-------------------|
| Number of HV contacts     | 1 - 3             |
| Insulation material       | PBT               |
| Flammability class        | UL94 V-0          |
| Operating temperature     | -40°C to +150°C   |
| Insulating material group | I (DIN IEC 60664) |

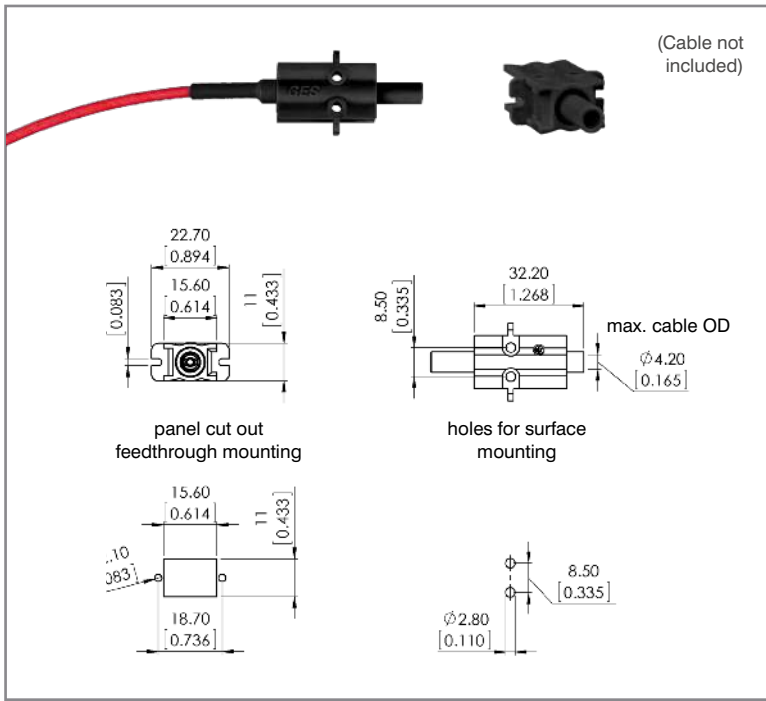
| Contacts 1.6 mm                 |   |
|---------------------------------|---|
| Termination method              | crimp                                     |
| Rated current                   | 13 A                                      |
| Contact resistance              | ≤ 5 mΩ                                    |
| Contact diameter                | 1.6 mm [.063"]                            |
| Wire size (AWG / cross section) | AWG 26 - 14 (0.14 - 2.5 mm <sup>2</sup> ) |
| Contact material                | brass (CuZn)                              |
| Contact plating                 | silver (Ag), gold (Au)                    |
| Mating cycles                   | ≥ 1,000                                   |
| Rated temperature               | +120°C                                    |

## Suitable cable dimensions



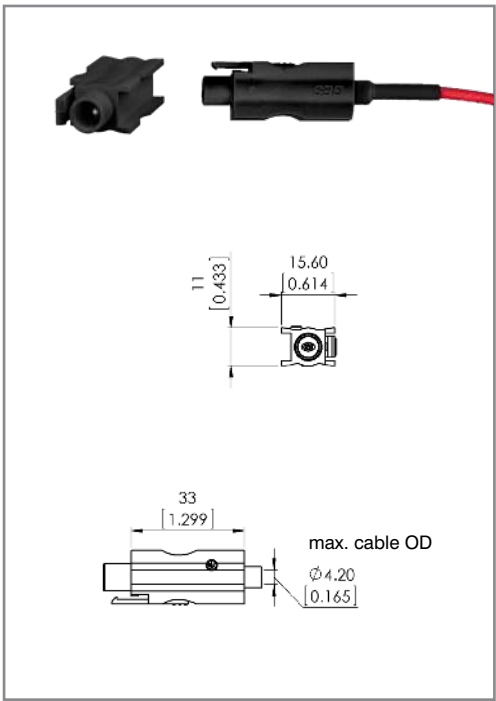
## VarioPro CL1 - receptacle

### Drawing



## VarioPro CL1 - plug

### Drawing



drawing - dimensions in mm [inch]

| P/N            | Description                   | Plug male contact | Receptacle female contact | Number of contacts | Including contacts | Contacts silver plated | Contacts gold plated |
|----------------|-------------------------------|-------------------|---------------------------|--------------------|--------------------|------------------------|----------------------|
| 5000440        | VP-CL-1HV-BU AWG 26 - 22 Ag   |                   | •                         | 1                  | •                  | •                      |                      |
| 5000441        | VP-CL-1HV-BU AWG 20 Ag        |                   | •                         | 1                  | •                  | •                      |                      |
| 5000442        | VP-CL-1HV-BU AWG 20 - 16 Ag   |                   | •                         | 1                  | •                  | •                      |                      |
| 5000443        | VP-CL-1HV-BU AWG 16 - 15 Ag   |                   | •                         | 1                  | •                  | •                      |                      |
| <b>5000444</b> | <b>VP-CL-1HV-BU AWG 14 Ag</b> |                   | •                         | 1                  | •                  | •                      |                      |
| 5000445        | VP-CL-1HV-BU AWG 26 - 22 Au   |                   | •                         | 1                  | •                  |                        | •                    |
| 5000446        | VP-CL-1HV-BU AWG 20 Au        |                   | •                         | 1                  | •                  |                        | •                    |
| 5000447        | VP-CL-1HV-BU AWG 20 - 16 Au   |                   | •                         | 1                  | •                  |                        | •                    |
| 5000448        | VP-CL-1HV-BU AWG 16 - 15 Au   |                   | •                         | 1                  | •                  |                        | •                    |
| 5000449        | VP-CL-1HV-BU AWG 14 Au        |                   | •                         | 1                  | •                  |                        | •                    |
| 5000450        | VP-CL-1HV-ST AWG 26 - 22 Ag   | •                 |                           | 1                  | •                  | •                      |                      |
| 5000451        | VP-CL-1HV-ST AWG 20 Ag        | •                 |                           | 1                  | •                  | •                      |                      |
| 5000452        | VP-CL-1HV-ST AWG 20 - 16 Ag   | •                 |                           | 1                  | •                  | •                      |                      |
| 5000453        | VP-CL-1HV-ST AWG 16 - 15 Ag   | •                 |                           | 1                  | •                  | •                      |                      |
| 5000454        | VP-CL-1HV-ST AWG 14 Ag        | •                 |                           | 1                  | •                  | •                      |                      |
| 5000455        | VP-CL-1HV-ST AWG 26 - 22 Au   | •                 |                           | 1                  | •                  |                        | •                    |
| 5000456        | VP-CL-1HV-ST AWG 20 Au        | •                 |                           | 1                  | •                  |                        | •                    |
| 5000457        | VP-CL-1HV-ST AWG 20 - 16 Au   | •                 |                           | 1                  | •                  |                        | •                    |
| 5000458        | VP-CL-1HV-ST AWG 16 - 15 Au   | •                 |                           | 1                  | •                  |                        | •                    |
| 5000459        | VP-CL-1HV-ST AWG 14 Au        | •                 |                           | 1                  | •                  |                        | •                    |



For cables and tools - please see page 69

# Assembly Instructions Series VP ClipLock - plug

1.



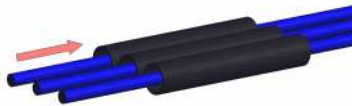
**Part as supplied**  
Shrinking tube (1), male contact (2),  
connector shell (3)

5.



**Slide contact (2) completely into connector shell (3) until contact snaps**  
☞ Pull gently to check that contact is correctly located and remains in position

2.



Place shrinking tube (1) on cable

6.



Slide shrinking tube (1) on connector shell (3)

3.



Remove dielectric insulation (L1 = 5-8 mm)

7.



Shrink tube - shrinking temperature 110°C

4.



**Solder or crimp contact (2) on conductor**  
⚠ Please notice for soldering: Tin-solder must not remain on contact surface

8.



Assembly finished



## Note – important!

1. Please carefully read assembly instructions before cable assembly.

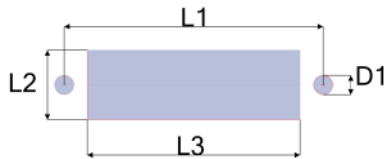
2. Cable assembly must only be done by trained and qualified personnel.

1.



**Part as supplied**  
Shrinking tube (1), female contact (2),  
connector shell (3)

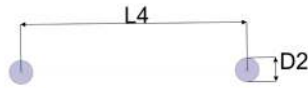
2.



Panel cut out – feedthrough mounting

| Type         | D1 mm [inch] | L1 mm [inch]   | L2 mm [inch]  | L3 mm [inch]   |
|--------------|--------------|----------------|---------------|----------------|
| VP-CL-1HV-BU | 2.10 [.083"] | 18.70 [.736"]  | 11.20 [.441"] | 15.80 [.622"]  |
| VP-CL-2HV-BU | 3.10 [.122"] | 33.00 [1.299"] | 11.20 [.441"] | 25.50 [1.004"] |
| VP-CL-3HV-BU | 3.10 [.122"] | 42.00 [1.654"] | 11.20 [.441"] | 34.50 [1.358"] |

3.



Panel cut out – surface mounting

| Type         | D2 mm [inch] | L4 mm [inch]   |
|--------------|--------------|----------------|
| VP-CL-1HV-BU | 2.80 [.110"] | 8.50 [.335"]   |
| VP-CL-2HV-BU | 2.80 [.110"] | 17.50 [.689"]  |
| VP-CL-3HV-BU | 2.80 [.110"] | 26.50 [1.043"] |

4.



Place shrinking tube (1) on cable

5.



Remove dielectric insulation  
(L5 = 5-8 mm [.197" - .315"])

6.



**Solder or crimp contact (2) on conductor**  
⚠ Please notice for soldering: Tin-solder must not remain on contact surface

7.



**Slide contact (2) completely into connector shell (3) until contact snaps**  
🗨 Pull gently to check that contact is correctly located and remains in position

8.



Slide shrinking tube (1) on connector shell (3)

9.



Shrink tubes - shrinking temperature 110°C

10.



Assembly finished



**Note – important!**

1. Please carefully read assembly instructions before cable assembly.

2. Cable assembly must only be done by trained and qualified personnel.