

По вопросам продаж и поддержки обращайтесь:  
Волгоград (844)278-03-48; Воронеж (473)204-51-73; Екатеринбург (343)384-55-89; Казань (843)206-01-48;  
Краснодар (861)203-40-90; Красноярск (391)204-63-61; Москва (495)268-04-70; Нижний Новгород (831)429-08-12;  
Новосибирск (383)227-86-73; Ростов-на-Дону (863)308-18-15; Самара (846)206-03-16; Санкт-Петербург (812)309-46-40;  
Саратов (845)249-38-78; Уфа (347)229-48-12  
Единый адрес: [kmk@nt-rt.ru](mailto:kmk@nt-rt.ru)

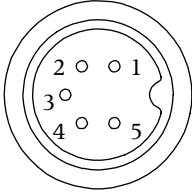
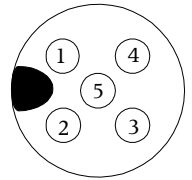
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## Technical Datasheet



**VTE\*-\*\*-\*-Ex**  
Pulse Amplifier

## Technical Data

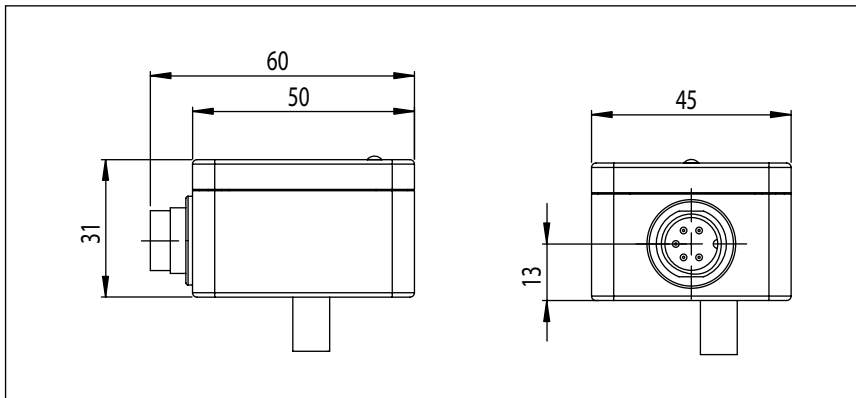
|                               |                                                                                                                                                                                                                       |                                                                                       |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Supply voltage $U_B$          | 10 up to 30 V DC, regulated                                                                                                                                                                                           |                                                                                       |
| Quiescent current             | < 2 mA                                                                                                                                                                                                                |                                                                                       |
| Frequency range               | 0.5 up to 5,000 Hz                                                                                                                                                                                                    |                                                                                       |
| Ambient temperature           | -40 up to +60°C                                                                                                                                                                                                       |                                                                                       |
| Medium temperature            | -40 up to +60°C (VTEF/C/M)<br>-40 up to +125°C (VTEK/L/R) <sup>1)</sup>                                                                                                                                               |                                                                                       |
| Housing                       | Aluminium                                                                                                                                                                                                             |                                                                                       |
| Dimensions<br>(w/o connector) | l = 50 mm; w = 45 mm; h = 30 mm (VTEF/K/L/R)<br>l = 50 mm; w = 50 mm; h = 25 mm (VTEC/M)                                                                                                                              |                                                                                       |
| Ingress protection            | IP 65                                                                                                                                                                                                                 |                                                                                       |
| Ex protection                 | ATEX:  II 2 G Ex ia IIC T4<br>IEC Ex:  ia IIC T4 Gb |                                                                                       |
| Electrical connection         | 5-pin plug M16 423 (S)<br>1 = +UB<br>2 = signal push pull<br>3 = 0 V<br>4 = nc<br>5 = nc                                                                                                                              |   |
|                               | 5-pin plug M12 SPEEDCON (H)<br>1 = +UB<br>2 = n.c.<br>3 = 0 V<br>4 = Signal Push Pull<br>5 = n.c.                                                                                                                     |  |

1) Minimum distance between VTE\* housing and meter: 25 mm

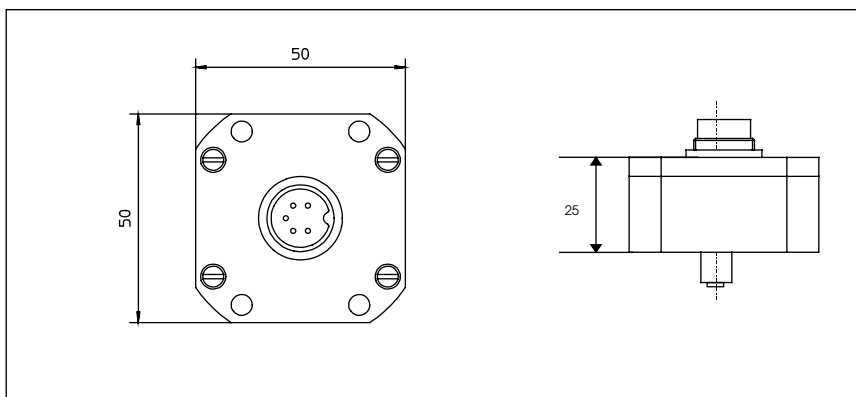
| Ex-Supply Data                                                                  |                                |                                 |
|---------------------------------------------------------------------------------|--------------------------------|---------------------------------|
| Supply circuit (pin 1 and 3)                                                    | Voltage                        | $U_i = \text{DC } 30 \text{ V}$ |
|                                                                                 | Current                        | $I_i = 120 \text{ mA}$          |
|                                                                                 | Power                          | $P_i = 850 \text{ mW}$          |
|                                                                                 | effective internal capacitance | $C_i = 8 \text{ nF}$            |
| Signal current circuit push/pull (pin 2 and 3 Version S/ pin 3 and 4 version H) | Voltage                        | $U_i = 30 \text{ V}$            |
|                                                                                 | Current                        | $I_i = 24.6 \text{ mA}$         |
|                                                                                 | Power                          | $P_i = 185 \text{ mW}$          |
|                                                                                 | effective internal capacitance | $C_i = 8 \text{ nF}$            |

## Dimensional Drawings (mm)

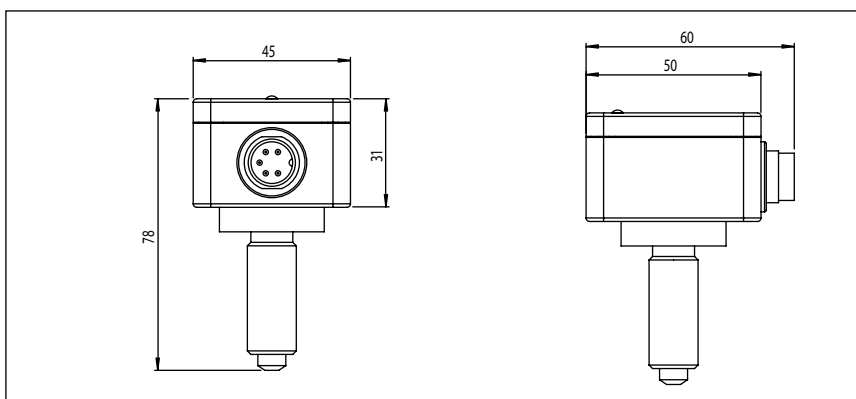
### VTEF (Diecast for direct mount)



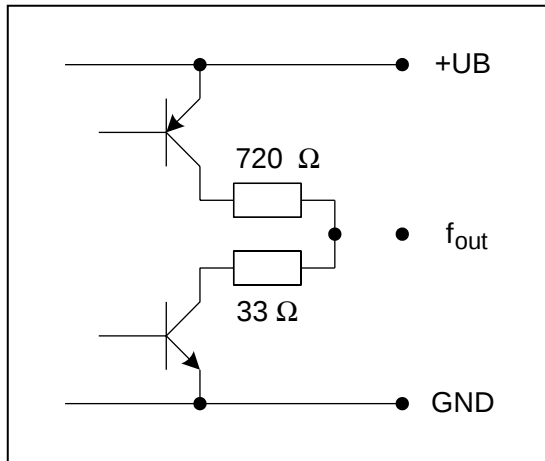
### VTEC/M (Cartridge for direct mount)



### VTEK/L/R (Diecast for screw-in mount)

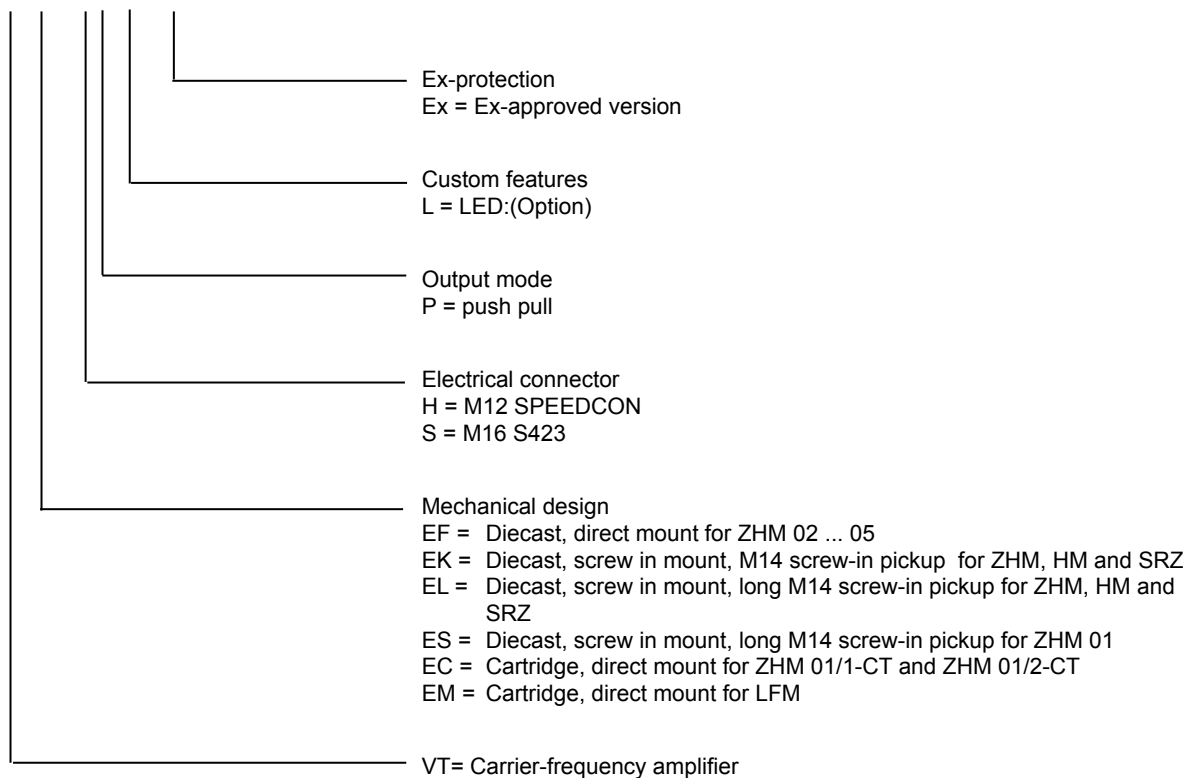


## Output (short-circuit proof)



## Ordering Information

### V\*\* - \*\* - \* - Ex



## Notes

The following has to be adhered to:

- a. Installation instructions for electrical devices.  
Installation instructions for associated intrinsically-safe devices.  
The »Special conditions for safe use« as per EC-Type Examination Certificate
- b. The amplifier has to be installed in a way that the max. ambient temperature does under no circumstances exceed +60°C (consider self heating).
- c. With cables care should be taken, that the max inductivity and capacity of the respective voltage or gas group are not exceeded.
- d. Input frequencies outside the specified range (see technical data) will cause invalid frequency output signals.
- e. Shielded cables are to be used as connecting lines.
- f. Generally, supplied units have to be connected by an expert according to EMC stipulations..
- g. Disconnect power supply before soldering the electrical connector.

## Marking

KEM Küppers Elektromechanik GmbH

 0123  II 2G ia IIC T4

BVS 08 ATEX E 101

V\* \*\*\_\*\*-\*-Ex Ser.Nr.

-20 °C ≤ Ta ≤ +60 °C

Ui=30V/DC; Ii = 120mA; Pi = 850mW; Pin 1 and 3

Ui=30V/DC; Ii = 24.6mA; Pi = 185mW; Pin 2 and 3, 4 and 3

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