

Certified according to DIN EN ISO 9001

## Technical Datasheet



## VTE02 / VIE02

Carrier-Frequency and Inductive Pulse Amplifiers

## Technical Data

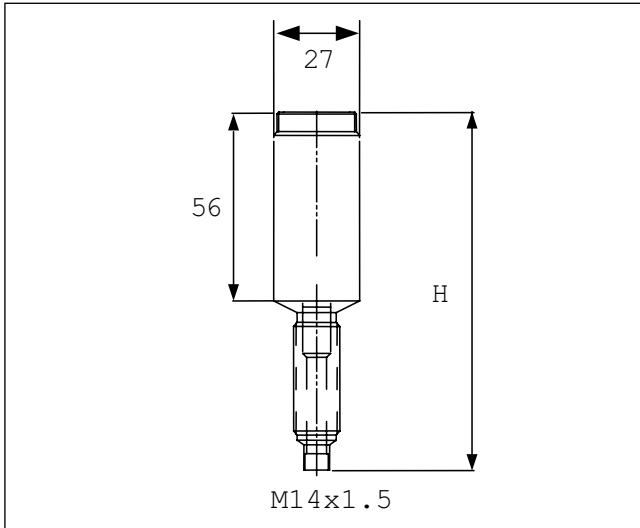
Supply voltage $U_B$	10 up to 30 V DC, regulated 7 up to 30 V DC („U“, NAMUR operation) 5 up to 10,5 V („N“)	
Quiescent current	< 1 mA	
Frequency range	0.5 up to 5,000 Hz	
Ambient temperature	-40 up to +80°C (T3) -40°C up to +60°C (T4)	
Medium temperature	-40 up to +125°C <sup>1)</sup>	
Housing	Stainless steel as per DIN 1.4104	
Dimensions	see drawing	
Ingress protection	IP 65	
Ex protection	CSA: pending; ATEX, IECEx: in preparation	
Electrical Connection <sup>2)</sup>	5-pin plug M12 SPEEDCON 1 = +UB 2 = n.c. / NAMUR- („N“, „U“) 3 = 0 V (not „N“) 4 = Signal Push Pull (not „N“) 5 = n.c. (option: PE)	

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

2) Other connectors on request.

Ex-Supply Data		
Supply circuit (pin 1 and 3) (Version P, U)	Voltage Current Power effective internal capacitance	$U_i = DC\ 30\ V$ $I_i = 120\ mA$ $P_i = 850\ mW$ $C_i = 8\ nF$
Signal current circuit push/ pull/pin 3 and 4 version, P, U)	Voltage Current Power effective internal capacitance	$U_i = 30\ V$ $I_i = 24.6\ mA$ $P_i = 185\ mW$ $C_i = 8\ nF$
Ex-Supply Data Version „N“ NAMUR		
Supply and signal circuit (pin 1 and 2)	Voltage Current Power effective internal capacitance	$U_i = DC\ 10,5\ V$ $I_i = 16\ mA$ $P_i = 40\ mW$ $C_i = 8\ nF$

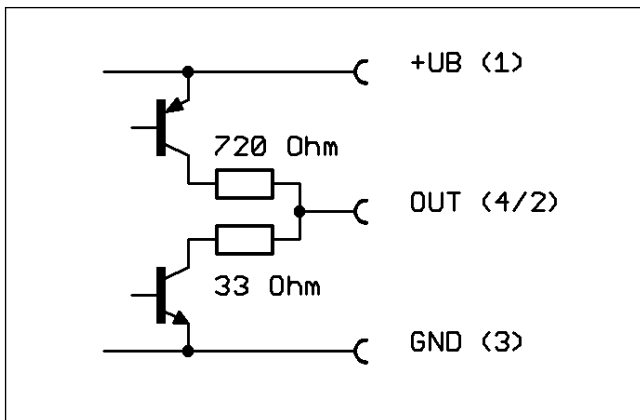
## Dimensional drawing (mm)



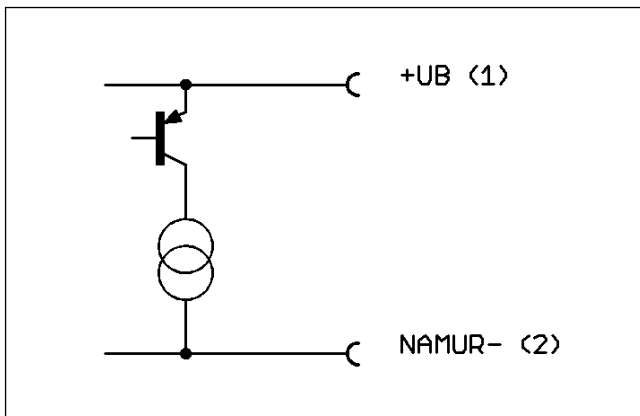
Type	H
V*E 02 - K	110 mm
V*E 02 - R	110 mm
V*E 02 - L	149 mm
V*E 02 - S	149 mm

## Output (short-circuit proof)

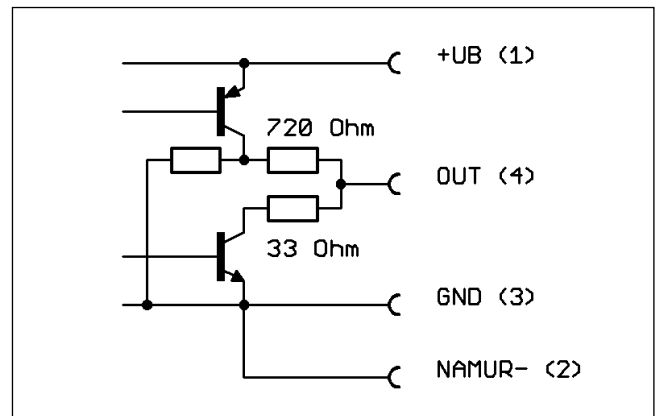
Push Push



NAMUR

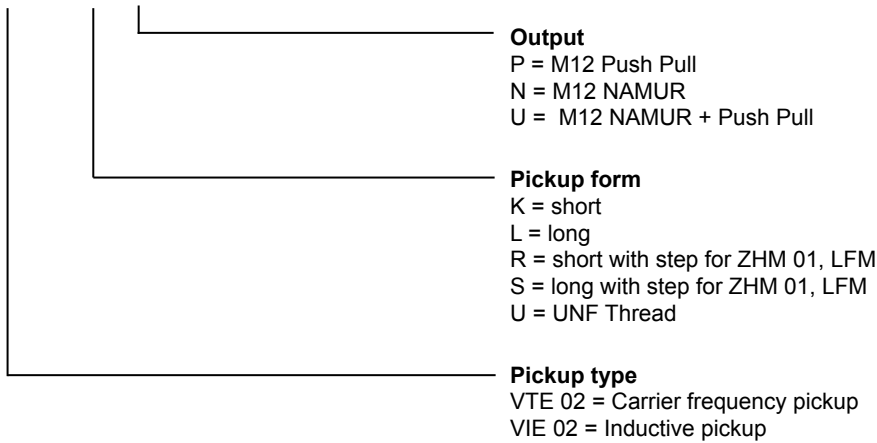


Push pull + NAMUR



## Ordering Information

V\*E 02 - \* - \*



For other connectors and other output stages, please contact KEM

## Notes on Installation

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 +50°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. Exceeding or falling below the regular measuring range 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.



# Contact

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