

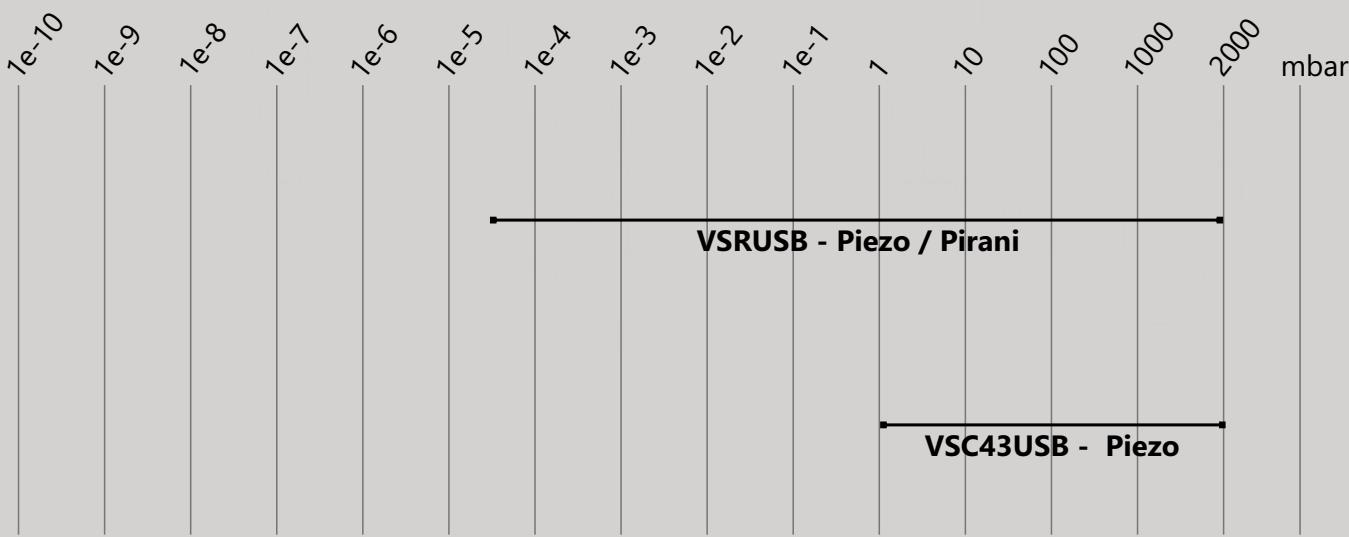
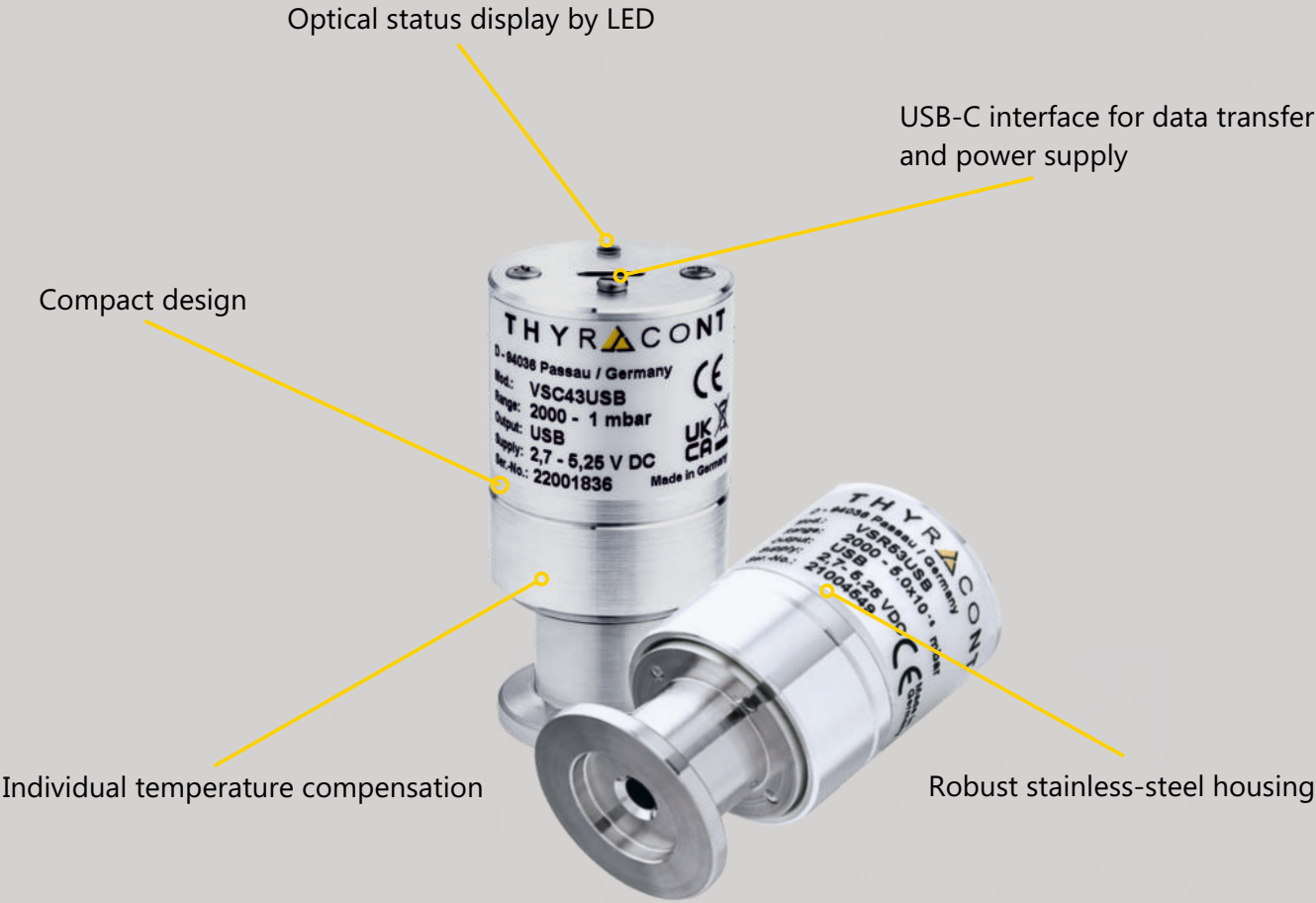
USB Vacuum Transducers

Absolute Pressure 2000 - $5\text{e-}5$ mbar



USB Vacuum Transducers

At a Glance



Ultra-high-vacuum	High-vacuum	Fine-vacuum	Rough-vacuum
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USB Vacuum Transducers

Features

The USB-C transducers measure in a range of 2000 to 5e-5 mbar. Their compact construction is ideally suited for industrial applications with reduced space.

Extended measuring range

Due to their extended measuring range, the USB-transducers are suited for a variety of applications. Their excellent reproducibility and reliability ensure stable production processes.

Robust and reliable

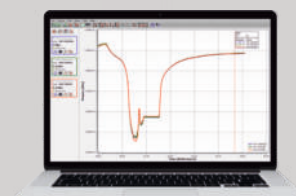
Their robust metal housing and IP40 protection class electrical connectors make them the perfect choice for rough industrial environments.

USB-C interface

Measured data can fast and easily be read-out by their USB-C interface. Also, a precise, digital adjustment to zero pressure and atmosphere is possible via USB connection. The transducer recognizes automatically which adjustment point is relevant.

Intuitive handling via Software or App

The VacuGraph™ software allows an easy visualisation and analysis of the measured data. Measurement curves can be compared or saved for quality management. The Android app VacuSniff™ complements the software.



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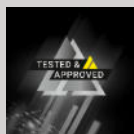
Accessories and Services



- **WUSBC0002**
interface cable, 2 m, USB



- **VGR VacuGraph™** software for Windows, Linux and MacOS, full version for download, single or triple license (VGRX3)



- **Calibration:**
 - **DCERT** works calibration
4 reference points
per pressure decade
 - **DKDCERT**
DAkkS calibration

You will find further accessories in our brochure for vacuum components.

USB Vacuum Transducers

Technical Data

	VSCUSB	VSRUSB
Measurement principle	Piezo-resistive, independent of gas type	Piezo-resistive, heat conduction Pirani (depending on gas type)
Measurement range	Abs. 2000 - 1 mbar (1500 - 1 Torr) Rel. -1600 ... +1200 mbar (-795 ... +900 Torr)	2000 - 5e-5 mbar (1500 - 5e-5 Torr)
Max. overload	4 bar absolute	10 bar absolute
Materials in contact with vacuum	Stainless steel, 1.4305, Al ₂ O ₃ , ceramic, FKM	Stainless steel 1.4307, tungsten, nickel, glass, silicon oxide, epoxy Polyimide, SnAg
Accuracy	Absolute pressure: 2000 ... 1200 mbar: 1% f. s. 1200 ... 1 mbar: 0.1% f. s. (linearity, hysteresis, repeatability) Relative pressure: +1200 ... 0 mbar: 1% f span 0 ... -1060 mbar: 0.15% f. span	2000 - 1200 mbar: 0.5% f. s. 1200 - 30 mbar: 0.15% f. s. 30 - 1e-3 mbar: 10% f. r.
Repeatability		2000 - 30 mbar: 0.1% f. s. 30 - 1e-2 mbar: 2% f. r.
Response time	<20 ms	< 18 ms
Voltage supply	2.7 - 5.25 V	2.7 - 5.25 V
Electrical connection	USB-C, lockable	USB-C, lockable
Power consumption	Max. 0.1 W	< 0.3 W
Operating temperature	+5...+60 °C	+5...+60 °C
Storage temperature	-40...+70 °C	-40...+65 °C
Bake out temperature		Max. 125 °C at the flange transducer seperated from voltage supply
Serial interface	USB-UART: 9.6 ... 115 kBd, 8 databits, 1 stopbit, no parity	USB-UART: 9.6 ... 115 kBd, 8 databits, 1 stopbit, no parity
Vacuum connection	DN 16 ISO-KF	DN 16 CF-F (VSR54USB) DN 16 ISO-KF (VSR53USB)
Protection class	IP40	IP40
Weight	100 g	96 g

Notes

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Notes

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