

# VacTest

## Digital Transmitter Cold Cathode DCC 400



The Digital Transmitter DCC 400 is a reliable cold cathode ionization gauge based on the latest generation of micro-controller architecture. This transmitter is equipped with an inverted magnetron sensor perfectly suited for pressure measurement in applications between  $2 \cdot 10^{-3}$  mbar and  $5 \cdot 10^{-9}$  mbar.

- Fast ignition of the cold cathode sensor
- Fully customizable parameters and output signal for easy integration
- Optional display version (DCC 400 D)
- 0 – 10 V signal and RS485 interface
- Bake-out up to 160°C without electronics removal
- 2 setpoint relays as standard
- Plug and play sensor replacement



VacTest DCC 400

VacTest DCC 400 D

Technical data		DCC 400, DCC 400 D
Measurement principle		Inverted magnetron
Materials exposed to vacuum		Stainless steel 1.4307, nickel, tungsten, molybdenum, glass, ceramic
Measurement range	mbar	$2 \cdot 10^{-3}$ – $5 \cdot 10^{-9}$
Overpressure limit	bar abs.	10
Measurement uncertainty	% of reading	< 25% ( $2 \cdot 10^{-3}$ – $1 \cdot 10^{-8}$ mbar)
Repeatability of measurement	% of reading	$\pm 5\%$ ( $2 \cdot 10^{-3}$ – $1 \cdot 10^{-8}$ mbar)
Leakage rate	mbar · l/s	< $5 \cdot 10^{-10}$
Reaction time	ms	< 50
Serial interface		RS485
Electrical connection		D-Sub, 15 poles, male
Supply voltage	V	20–30
Cathode voltage	kV	2.5
Max. power consumption	W	3/0.8 (relays/display)
Output signal		0–10 V, RS485
Setpoint relay		2 dry contacts
Relay contact rating		2A, 50VAC/2A, 30VDC, max. 60 VA
Operating temperature	°C	+5 ... +60
Max. bake-out temperature	°C	160
Protection class		IP40 (IP54 with appropriate D-Sub connector)
Weight approx.	g	555
Dimensions (L x W x H)	mm	45 x 66 x 139
Vacuum connection		DN 40 ISO-KF / DN 25 ISO-KF

Vacuum gauges	Part number
DCC 400, DN 25 ISO-KF	0656211287
DCC 400, DN 40 ISO-KF	0656211288
DCC 400 D, with display, DN 25 ISO-KF	0656211289
DCC 400 D, with display, DN 40 ISO-KF	0656211290

Spare parts	Part number
Spare sensor, DN 25 ISO-KF	0680204598
Spare sensor, DN 40 ISO-KF	0680204599

Controllers	Part number
Active Sensor Controller CTR 002, 2 channels	0656202928
Active Sensor Controller CTR 004, 4 channels	0656202929

Connection	Part number
Connecting cable 2 x D-Sub 15 poles, 2 m	0671204577
Connecting cable 2 x D-Sub 15 poles, 6 m	0671204578
Connecting cable 2 x D-Sub 15 poles, 10 m	0671204580
Connecting cable 2 x D-Sub 15 poles, 20 m	0671204581
RS485 Interface converter to Bluetooth	0680204592
RS485 Interface converter to USB	0671204593
Power supply 100–240 VAC / 50–60Hz, with EU/US/UK/AUS plugs	0671204594

Software	Part number
VacTest explorer, Pro version	0870203191

Calibration	Part number
Calibration certificate, 1000 to $1 \cdot 10^{-5}$ mbar	0656204609

For the entire product range please refer to the corresponding leaflets.

[www.buschvacuum.com](http://www.buschvacuum.com)

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Technical data is subject to change. Created in Germany. MG SPAL VACTESTDCC400 Len 08/2018 8Ba