

Explanations

In our catalogue you will find several pictograms beside the text description. They should be helpful for a quick and easier explanation of the articles and their attributes.

Protection (IP-Code) acc. to DIN 40050 / IEC 60529 etc.	
	Protected against solid particles $\varnothing > 1 \text{ mm}$
	Protected against solid particles $\varnothing > 1 \text{ mm}$ and drop water resistant
	Splash water resistant
	Drop water resistant
	Drop water resistant
	Dust and spray water resistant
	Dust and spray water resistant
	Dust and drop water proof
	Dust and spray water proof
	Dust and splash water proof
	Dust and jet water proof
	Water and oil tight (at times)
	Water and oil tight (permanent)
	Article is explosion proof
	Article with UL-certificate (american safety norm)

Manufacturing process	
	Article with laser engraved scale / graduation
	Article with etched scale / graduation
	Article with printed scale / graduation (Pad print)
	Hardened
	Stainless steel

Icons for data process	
	RS232 data output by data cable
	Opto RS232 data output
	Proximity data output, inductive, contactless
	Data output by USB and data cable
	Data output by USB and Mini USB (compatible with Mitutoyo Digimatic)
	wireless communication (WiFi) possible
	Software on CD-Rom

Several Icons	
	Article-Number
	Reading / Resolution
	Weight in kg
	Cross section of the article
	Max. total accuracy(±)
	Repeatability (±)
	Individual measuring range
	Article dimension
	Measuring- and weighing-unit selectable or swichtable
	Corresponding battery included
	Corresponding battery included
	Corresponding cell battery included
	Corresponding cell battery included
	Corresponding lithium battery included
	Corresponding lithium battery included
	Accu
	Power supply
	Laser protection class
	Magnet power
	Induction
	Laser wavelength
	Shock proof
	Stand out
	Reading in mm and inch
	Reading in cm and inch
	Article with ABS/INC measuring system
	Article with ABSOLUTE measuring function

ATTENTION
We charge transport and packing costs for articles marked with *!














About the Certification:













We are also able to quote all DIN measuring tools with a certificate to VDI/VDE/DGQ 2618. Measuring tools manufactured at works standard will be certificated according to this norm. The calibrations will be done by an external calibration laboratory. The delivery time for external calibration will take approx one week. Calibration orders can't be cancelled and calibrated goods are excluded from sale of return. Whether you expect a calibration by laboratory of your choice, we are unable to guarantee for passing. Compensation of refund of costs are also impossible.

Norms, accuracy-classes, regulations	
EC I	Article fulfils the respective EC Class standard
EC II	Article fulfils the respective EC Class standard
E1	Article fulfils the respective verification standard
CC	Workshop calibration certificate, inclusive
TC	Article with test certificate, marked with Ident.-No.
CE	Article with CE classification
MID CODE	Directive of the European Parliament and of the council on measuring instruments
T2	Article with strengths tolerances acc. to DIN 2275
T3	Article with strengths tolerances acc. to DIN 2275
ASTM	Article fulfils the respective American standard
BS	Article fulfils the respective British standard
JIS K	Article fulfils the respective Japanese standard
DIN	Article fulfils the respective DIN standard
DIN EN	Article fulfils the respective DIN EN standard
ISO	Article fulfils the respective ISO standard
DIN ISO	Article fulfils the respective DIN ISO standard
NORM	Article manufactured acc. to tolerances of workshop standard
TÜV GS	Article with seal: "TÜV/Geprüfte Sicherheit (GS)"
vd TÜV	Article with seal: "TÜV"
IEC / EN	Article fulfils the respective norm standard

**Workshop or „DAkKS“-Calibration
(German Calibration Service)**
Calibrated instruments available for extra charge.
Please send us your specific inquiry.

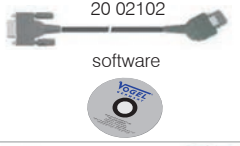












Quality categories	
★★★★★	Product for highest demands
★★★★☆	Industry and craft
★★★☆☆	Craft
★★☆☆☆	DIY and training

Art of package for each article	
	Article will be packed in a carton box
	Article will be packed in a sturdy box (wood, plastic or aluminum)
	Article will be packed in a leatherette pouch
	Article will be packed in a PVC pouch
	Article will be packed in a sleeve
	Article will be sealed in a foil
	Article will be packed in a DIY plastic pouch with hanging card
	Article will be packed in a plastic film pouch with hanging card
	Article comes with wall hanging card
	Article will be packed in a blister packing
	Article will be packed a clear plastic box
	Carry bag, for outdoor use
	Article delivered on a pallet

Product specifications	
	Caliper jaw length
	Measuring internal dimension
	Caliper jaws (cross shape)
	Caliper jaws (knife shape)
	Depth Gauge
	Thumbroll
	Fine adjustment
	Thread pitch
	Measuring Inside
	Measuring outside
	Pointer rotation
	Setting gauge

1
2
3
4
5
6
7
8
9
10
11

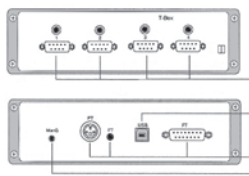
Data Cables and Accessories for Electr. Digital Devices

1	2	3	4	5	6	7	8	9	10	11a			
		ART N°	article description	20 0250 - 20 0253 23 0101 - 23 0103 24 0205 - 24 0209 / 24 0215 - 24 0219 24 0230 - 24 0233 / 24 0680 - 24 0681 23 1070 - 23 1081 / 23 2070 - 23 2072 23 2871 - 23 2876 / 23 2971 - 23 2972 23 2381 - 23 2387 / 23 2381/1 - 23 2384/1 23 1171 - 23 1174 / 23 2180 - 23 2185 23 2186 - 23 2190 / 23 2191 - 23 2194 23 2813 / 23 1031 - 23 1032 / 23 1285 23 1830 - 23 1836 / 23 1620 - 23 1627 23 2061 / 23 6611 - 23 6668 23 6620 - 23 6621 23 6631 - 23 6643 / 23 6644 - 23 6650 24 2140 - 24 2150 / 24 2055 - 24 2164 472120 / 32 0100 20 2150 - 20 2152 / 23 0580 - 23 0583 24 0250 - 24 0257 20 2040.3 - 20 2043.3 20 2110 - 20 2112 / 20 2020.3 20 2025 / 20 2026 / 20 2027 34 1103 - 34 1109 / 20 7021 20 2040.3 - 20 2043.3 / 20 2110 - 20 2112 / 20 2020.3 / 20 2025 / 20 2026 / 20 2027									
		20 23100	PROXIMITY - RS232 software	●									
		20 20188	USB - RS232, adapter (optional suitable for 20 23100)	●									
		20 23101	PROXIMITY - USB software	●									
		24 24100	POWER - RS232, external power software	●									
		20 20188	USB - RS232, adapter (optional suitable for 24 24100)	●									
		24 24101	POWER - USB, external power software	●									
		23 23100	RS232 - cinch plug 90° (3-wire) software			●							
		20 20188	USB - RS232, adapter (optional suitable for 23 23100)			●							
		24 20192	USB - Mini-USB (with data key) optional, additional available: foot switch (art. no. 20 9011)				●						
		24 20194	USB-PC - <i>Vocom-s</i> Duo-Data output interface box with data key and with foot switch port (connectivity also for Mitutoyo Digimatic measuring devices) optional, additional available: foot switch (art. no. 20 9011)					●					
		20 9001	Interface USB - Mini-USB, 0.01 mm / 0.001 mm, with data key optional, additional available: foot switch (art. no. 20 9010)						●				
		20 40100	wireless data transfer (20 9003), interface with data key and receiver (20 9004) software							●			
		20 9010 or 20 9011	foot switch made of metal, with cinch plug							Art. No. 20 9010 for connection to Art. No. 20 9001 Art. No. 20 9011 for connection to Art. No. 24 20192 + 24 20194			

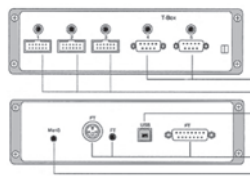
★★★★★ VOCOM-S T-BOX, Interface box

- data transfer device through keyboard codes, that means the T-Box, can be used with any software by manual input, e.g. MS-Excel®
- USB keyboard interface with different inputs
- power supply via USB interface
- no special software for the USB interface is needed
- the USB interface is seen as a key board
- other settings such as language, separators, measuring devices and timer
- foot switch port, data key at measuring device/cable for data transfer or via timer
- RS232C interface* for over 60 measuring devices
- incl. USB cable and operation manual

* plug assignment like at a PC interface (COM). For various OptoRS232 and RS232 measuring devices. Original data cables can be used.



ART No 20 02095



ART No 20 02097



ART No	data ports	mm	KG
20 02095	4x Opto RS232C, 9-pin	168 x 122 x 52	0.630
20 02097	3x Mitutoyo Digimatic; 2x Opto RS232C, 9-pin	168 x 122 x 52	0.630

★★★★★ VOCOM-S Keyboard Interface

- with measuring equipment cable and data key in one device
- USB keyboard interface with various ports (optional)
- power supply via USB interface
- no special software for the USB interface is needed
- the USB interface is seen as a key board
- other settings such as language, separators, measuring devices and timer
- data key at measuring device/cable for data transfer or via timer
- with operation manual



ART No	data ports	KG
20 02610	Opto RS232 C	0.060
20 02611	Proximity	0.060

★★★★★ VOCOM-S Electr. Digital LCD Display

- better reading over long distances, for quality control
- display with red, green or yellow digits available
- operation with data cable or wireless
- data ports for Opto RS232C, RS232C or (Mitutoyo Digimatic on request!)
- digit height 25 mm, 7-digits or digit height 57 mm, 6-digits (incl. pre-signs)
- two tolerance limits -OT / UT- for good- / bad evaluation
- display with 3 LED's in red / green and yellow
- housing form is designed as stand alone or for wall mounting
- incl. power supply 220 V and operation manual

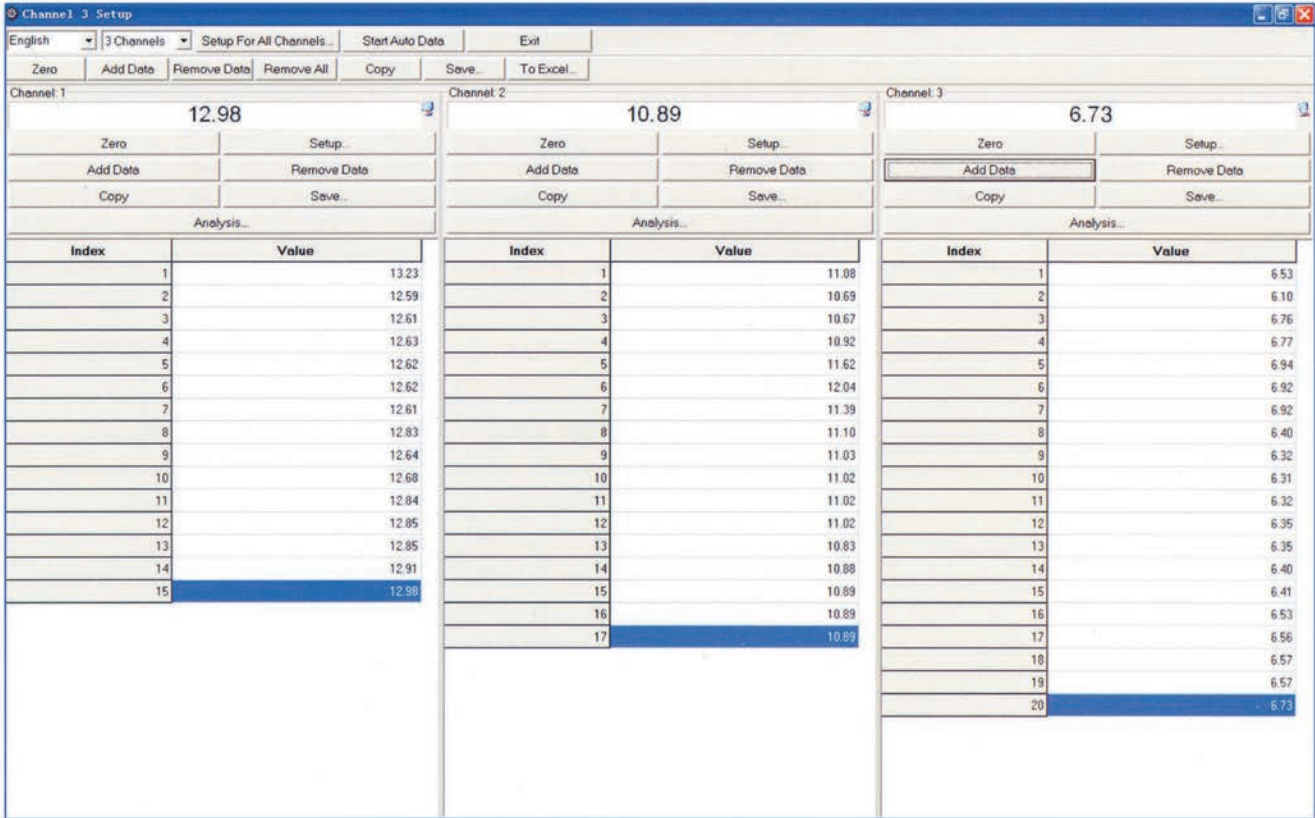



ART No	ART No	ART No	ART No	mm	KG
OPTO RS232C without LED's	OPTO RS232C with LED's	RS232C with LED's	Opto RS 232 + RS 232 without LED's		
with cable connection			wireless operation	254 x 56 x 91.5	1.210
20 02220	20 02221	20 02222	20 02230		

Data Processing and Batteries


VOCOM-S Software „W-STAT 1.0“

- wireless data processing („W-DAS“) from measuring instrument to PC
- used for data acquisition with our system of article-series 20 9003/20 9004
- data fields can be controlled by the user
- software for data collection and for statistical analysis
- only in english language available



ART N°	language version	
20 02995	english	0.018

Batteries

ART N°	battery type	voltage	
60 9281	6LR61 (Alkaline)	9.0	0.019
60 9282	AA (Alkaline)	1.5	0.025
60 9283	AAA (Alkaline)	1.5	0.010
60 9291	AAA (rechargeable)	1.5	0.011
60 9278	AAAA (Alkaline), LR61	1.5	0.005
20 20192/B	LR44	1.5	0.002
20 02193	CR1632	3.00	0.003
20 02194	CR2016	3.00	0.003
20 02093	CR2032	3.0	0.003
27 2015	MN21 23 (Alkaline)	12	0.008
60 9285	LR14 (C-Cell)	1.5	0.015



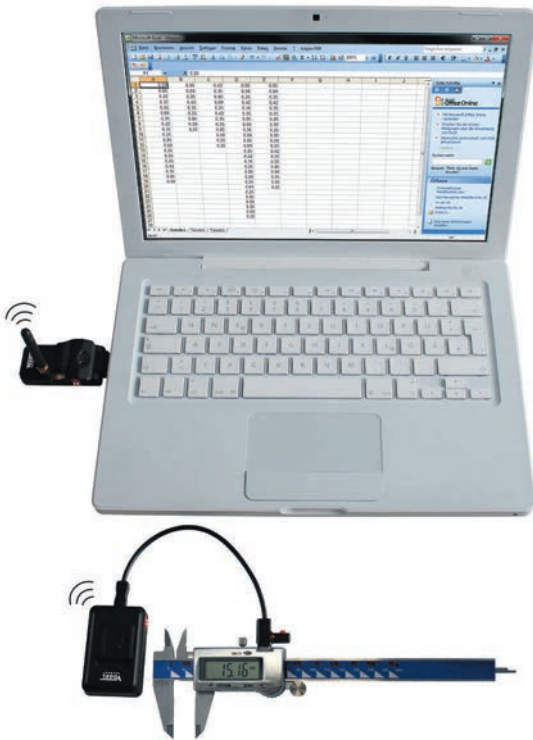
VOCOM-S Data Processing System

- „W-DAS“, wireless data processing from measuring instrument to PC with „W-STAT 1.0“ software
- „I-DAS“, Data Processing via USB interface to PC data management with standard software, e.g. MS-Excel®
- data cables and interfaces, see on pages 312-313
- appropriate software, see on page 314

1. example data processing via USB interface



example wireless data transfer using „W-STAT 1.0“ software



2. example data processing via Duo-Data output (for our USB interfaces or for Mitutoyo Digimatic)



Connection options, see the table on page 312. If you have questions or you want individual solutions, please contact our technical support!