





## DIGI CROWN PROBING LINE

Marposs presents Digi Crown, an innovative digital-technology modular sensor system for dimensional measurements and quality control during production.

Digi Crown offers a new standard for the measurement of parts obtained by machining on machine tools or through molding processes, as in the glass, ceramic and plastic industry.

- EXCELLENT METROLOGICAL PERFORMANCE
- MODULARITY
- AFFORDABLE
- EASY ASSEMBLY
- RELIABILITY
- FLEXIBILITY
- EASY MAINTENANCE

Digi Crown is a flexible measuring system (from 1 to 372 sensors) configured in networks (from 1 to 12) that can be connected to a PC via RS232 serial interface or RS485

dedicated interface cards for PCI o ISA bus.

# Excellent metrological performance

All sensors, which are certified over the entire measuring range (from 1 to 20 mm), make it possible to measure different-sized parts without the need for zero-setting or retooling. The set up is easy and fast, and only one master is used.

#### Modularity

The measuring network can easily be modified by adding or removing elements, in order to create a network that is suitable for the needs of the new application.

Each element is tested individually, so all the components of the line are interchangeable.

Combinations of analog and digital sensors, and also logic I/Os, can be mixed within the same network.

### **Affordable**

The individual elements can be

combined, in order to use only the units that are needed to solve the application (modularity one).

#### Easy setup - one click to be ready!

The automatic identification of the components installed in the network is an exclusive feature of the Digi Crown driver. Just a simple CLICK for enabling the automatic configuration and the setup of the network becomes a quick task, reducing the possibility of configuration errors and manual operations. Moreover the sensors can be easily replaced without further changes in the configuration software, because they are automatically recognized by the system. The Digi Crown driver is supplied along with dedicated Marposs' software packages.

#### Reliability

Digi Crown sensors are sturdy and reliable. Thanks to Marposs' proven technology and the IP65 waterproof structure, they are suitable for use in shop floor environments. The measuring networks make use of the properties of RS485 serial communication, for a high-speed data exchange over distances up to 1 Km.

#### **Flexibility**

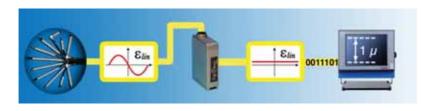
The measuring network can be connected, to Marposs E9066 industrial PCs or commercial PCs.

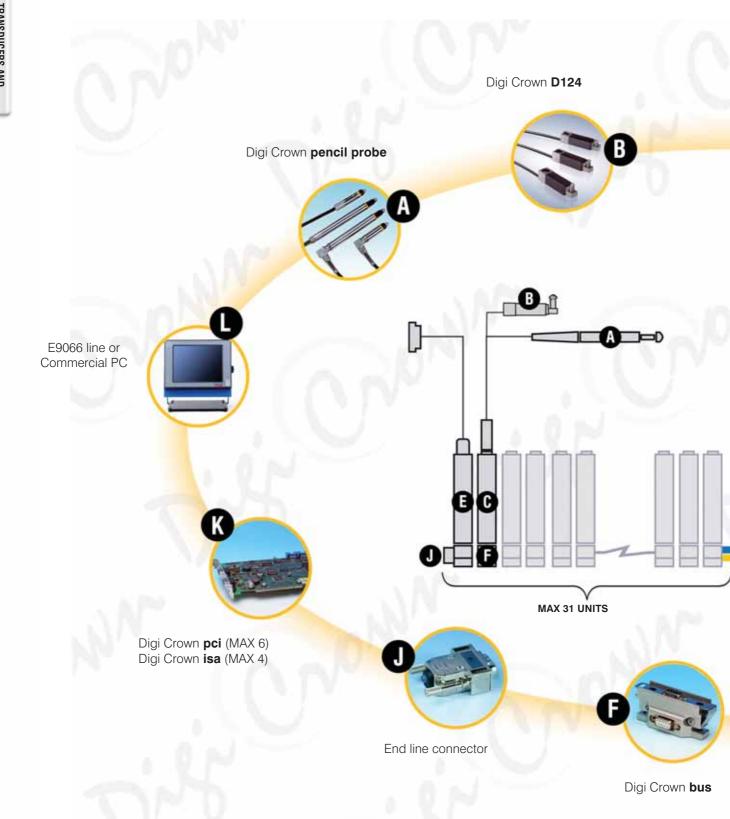
The connection is made via RS232 serial interface or dedicated interface cards for PCI or ISA bus.

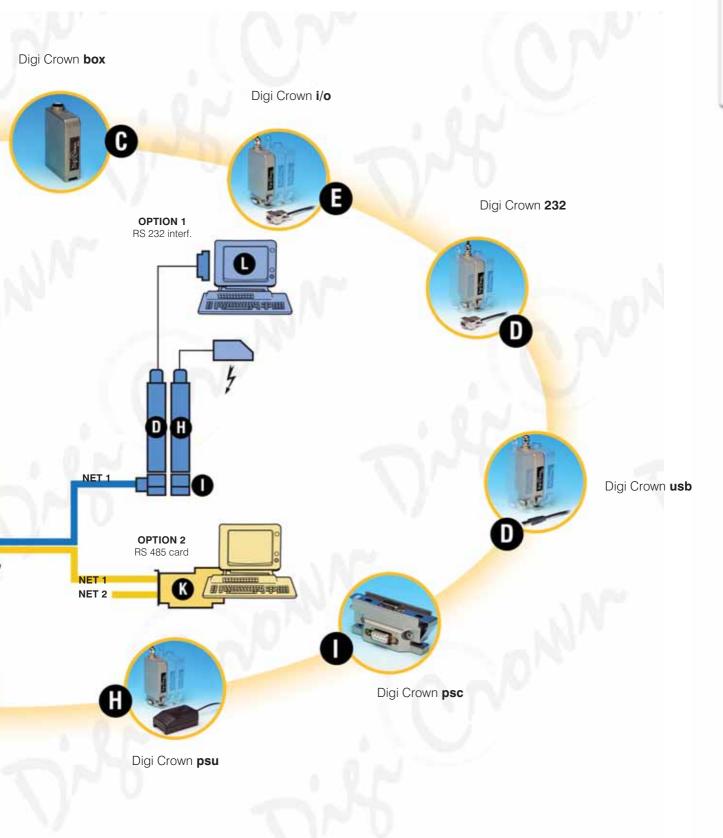
Besides the dedicated SW packages for measuring management, there is also the Digi Crown driver library, that makes it possible to integrate the network into application SW developed by third parties.

#### Easy maintenance

The modularity of the system makes it possible to replace the sensor alone, thus cutting down servicing time, maintenance and storage costs. The system is also equipped with a self-evident diagnostic function.







## SENSORS

A complete range of sensors, with 1, 2, 5, 10 and 20 mm measuring ranges, are available to meet all customers application needs.









There are 13 Standard models with Fluoroelastomer gaiters and 25 Soft Touch models without gaiters. Soft touch probes are used in applications where low measuring force is required; such as in the glass and plastic industry.

#### **Common characteristics**

All sensors are available in versions with spring or pneumatic push. The sensor body, made out of steel (Ø 8h6), is where the identification data (type, code and serial number) is laser marked. The transducer is an LVDT with excellent linearity. The 2 m cable, is made out of corrosive-resistant material and has been designed in compliance with the compatibility regulations (EMC standard – directive 89/336/EEC).

#### Standard version

All the models are equipped with carbide contacts.

The front actuation part is equipped with a Fluoroelastomer gasket that, in addition being highly resistant to chemical agents, ensures an IP65 waterproof integrity. Spring versions have a 0.8 N measuring force. Should a different force be needed, an extensive range of optional springs is available.



## A Soft Touch version

All the models are equipped with standard nylon contacts, but optional carbide contacts are available. The front part does not have a gaiter, in order to ensure repeatability and low measuring force.

Spring versions have a 0.3 N measuring force. There are also some springless PUSH/VACUUM versions that make it possible to measure even with a 0.1 N force. In this case, the measuring force is directly proportional to the pressure of the air.



#### A Miniature measuring cell

D124 is a miniature measuring cell that can be applied in simple as well as multidimensional measuring applications. The  $7 \times 7 \times 31$  mm compact dimensions, the IP67 protection degree, the replaceable contact and the shielded cable allow solving measuring tasks for limited space applications, still maintaining great accuracy and reliability.

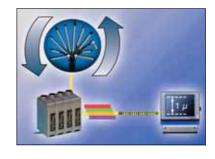
The fixing of the D124 is done with an M3 screw, while for the set-up a special tool is supplied with the measuring cell. Each D124 is provided with a calibration certificate, to guarantee the accuracy of the cell.



### B Plug&Play sensors

All models are interchangeable and can be adapted in any previously-configured network.

The Digi Crown box interface can automatically acquire both the identification data of the sensor and the mapping data for the linearization function. All the sensors are 100% tested and supplied in a dedicated package. The package also includes the calibration certificate, and the installation and user manual for correct use of the product.



## INTERFACES

This section includes all the interface modules, for configuring the Digi Crown digital network.

## C DIGI CROWN BOX

The Digi Crown box interfaces the sensors to the bus. A sturdy mechanism that is easily inserted into the Digi Crown bus, and manages the signal of the sensor. It is equipped with a  $\mu\text{-processor};$  its main functions include:

- acquisition of sensor identification data
- acquisition of measurement
- A/D conversion of signal and achievement of linearization
- achievement of RS485 serial transmission and, through the bus, of an active exchange of information with the PC in order to supply the data for measurement processing.

In the version with internal RAM, it can manage up to 9,000 pieces of sampling for vectorized dynamic measurements.

Digi Crown box	Digi Crown box						
Reading rate (s)	250						
Sampling storage	50 in standa	rd version					
Camping storage	9,000 in vers	ion with addit	tional RAM				
Current absorption	40 mA						
Operating temperature	0 to +60°C						
Storing temperature	-20 to +70° C						
Degree of protection	IP43						
Power supply	+ 7,5Vdc (-1	0% + 30%)					
Input	connection t	o sensor via l	_umberg IP68	connector			
Output - serial communication	communicat	ion towards b	ous via Digi Cr	own protocol			
Pencil probe range (mm)	1	2	5	10	20		
Resolution (µ)	0,05 0,05 0,2 0,2 0,5						
Dimensions	see specific	section (page	e 16)				



## D DIGI CROWN 232/USB

Communication interface to be used for connecting the Digi Crown network directly to an RS232 or a USB PC port.

It is physically placed in the second position of the network, on the PC side, and is always preceded by a "Digi Crown psu" power supply interface unit. The connection to the PC is made by means of a 9-pole D-sub connector and a 2-m cable.

Its main functions include:

- managing the signal exchange between the RS232/USB port of the PC and the RS485 serial interface of the measuring bus
- supplying the synchronization sine wave for the Digi Crown box interfaces
- managing the network diagnostic information

Digi Crown 232/USB (to be used with Digi Crown psu interface)						
RTS/CTS)						
ole)						
Digi Crown protocol						
50 mA (**)						
0 to +60°C						
-20 to +70°C						
IP43						
Type "A" USB connector						
see specific section (page 16)						





## **E** DIGI CROWN I/O

I/O interface for logic signal management. It is used for controlling solenoid valves or lamps (not directly, but via power contacts) or pushbuttons for measuring cycle management (such as, during the START CYCLE or START ZERO-SETTING stage, or for PART TYPE).

#### SINK and SOURCE version:

- It can control up to 8 drivers, working as INPUT or OUTPUT (example: 4 IN and 4 OUT or 2 IN and 6 OUT...).
- Max output current 100mA.
- +24V external power supply, to be wired to the 15 poles connector.
- Cable length 0,5m.
- The IN/OUT connector is a 15 poles standard Cannon.

#### **ONLY INPUT version:**

- It can manage up to 8 INPUTS by means of the Digi Crown pbb pushbutton, or by generic push-buttons properly wired to the connector.
- No external power supply required (the Digi Crown bus supplies the unit)
- Cable length 2,5m.
- The push-button and the INPUTS are connected to the unit through the 15 poles male connector.

Digi Crown I/O	SINK type	SOURCE type	ONLY INPUT
Order code	7671000000	7671010000	7671020000
Bus power supply	-	+ 7,5 Vdc (-10% + 30%	)
Bus current absorption	40 mA	40 mA	50 mA
Power supply (EXT.)	24 Vdc (± 20%)	24 Vdc (± 20%)	-
Current absorption (without any output active)	15 mA	25 mA	-
l	Voff(>): V (I/O)-5V;	Voff(<): 5 V;	Off> 500 KΩ
Input specifications	Von(<): V(I/O)-15V	Von (>):15 V	On< 3300 KΩ
	100 mA	100 mA*	
Output specifications	(Vout < 0,4 Vdc)	(Vout > VI/O - 2V)	_
Output specifications	<ul> <li>Optoinsulated</li> </ul>	<ul> <li>Optoinsulated</li> </ul>	
	- Protected	- Protected	

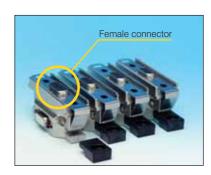
see page 16

Dimensions

## DIGI CROWN BUS

Regarded as the "basic element" of the network. It makes it physically possible to create the network, and in actual fact forms the bus through which the communication between the individual measuring points and the PC takes place (via a 232 serial interface or card for PCI/ISA bus). Main characteristics include:

- Mounting guides that facilitate the insertion of the Digi Crown box, Digi Crown i/o or Digi Crown 232 interface
- quick release spring; makes it possible to remove the interface simply



## **G** DIGI CROWN PBB

The DigiCrown pbb push button implements the I/O unit, allowing to control eight digital inputs by means of ON/OFF buttons and a four positions selector. Typically the buttons are used for START/STOP sequences and data acquisitions, while the selector for setting a different working piece to be measured. Besides the 15-pin female D-sub port used for connecting the I/O (ONLY INPUT) module, the push button includes a 9-pin female connector for linking an external footswitch.





<sup>\*</sup> Max output current 600 mA.

## H DIGI CROWN PSU

Network power supply interface, ALWAYS used in applications with Digi Crown RS232 serial interface.

Available in 2 versions:

- Vin 100÷ 240 Vac and Vout 7.5 Vdc
- Vin 24 Vdc and Vout 7,5 Vdc

The Digi Crown psu may also be used in an application with Digi Crown pci or isa interface card.

This need arises when the application has a very long cable (voltage drop along the cable) or when the PC power supply unit is not powerful enough.

Digi Crown psu	110-220 Vac	24 Vdc		
Power supply	100-240 Vac / 47-63 Hz /400 mA	24Vdc (-20% +20%)		
Output	7.5 Vdc / 1.7 A	7.5 Vdc / 1.8 A		
Current absorption	-	0.8 A		
Operating temperature	0 to +40°C			
Storing temperature	-20 to	+70°C		
Degree of protection	IP43 (on interfac	e side with bus)		
Inversion protection	-	with automatic reset		
Overload protection	with automatic reset			
Dimensions	see specific section (page 16)			



## DIGI CROWN PSC

This connection interface is used only in combination with the "Digi Crown PSU" power supply interface.

It is mechanically identical to the Digi Crown bus; only the connectors are male instead of female, in order to prevent an incorrect connection.

- These two connection elements can be fastened in two different ways:

   from under: by means of a nut integrated in the base
- from above: by means of two plastic clamps (included in the package), as shown in the figure



## **J** END-OF-NETWORK CONNECTOR

9-pole D-sub connector equipped with a control circuit and a warning LED. It is the last element of each measuring network, and is fitted on the last Digi Crown bus.

It supplies 3 pieces of information about the operation of the bus:

- 1. LED off= voltage in bus "NOT OK";
- 2. LED on, green light= voltage in bus "OK"
- 3. LED flashing, green/orange light= communication in bus active This connector is particularly useful for monitoring the network in order to ensure correct operation, and for finding out when the voltage in the bus is not adequate (LED off). In the latter case an auxiliary power supply unit (Digi Crown psu) must be added.



## K DIGI CROWN PCI AND DIGI CROWN ISA

RS485 serial interface cards for PC bus, available in two versions:

- "Digi Crown pci" for PCI bus
- "Digi Crown isa" per ISA bus

Each card can manage 2 networks, therefore up to 31+31 sensors (via 2 9-pole D-sub connectors).

These interfaces achieve the RS485 serial communication with the network, which can manage the measuring device from a distance of up to 1 Km. They are designed to supply power directly to the network and to manage the communication protocol.

They supply power to all the sensors (31+31) directly using the PC power supply, up to a maximum distance of 10 m. The performance depends on the specifications of the PC that has been chosen (the rating of the power supply unit must be adequate).

One of the most important characteristics of these interfaces is the possibility of carrying out measurements where there is a synchronization between:

- · sensors of the same network
- · sensors of different networks
- · sensors of networks connected to different cards.

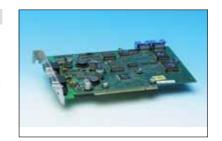
The interfaces are easily installed, because their drivers are already integrated in the measurement managing SW packages that are provided, such as:

- QSPC
- Easy Acquisition
- Marposs DLL.

Digi Crown pci	
Power supply	from standard PCI bus 5 V
Power absorption	1.5 W + power towards networks
Inputs/Outputs	Digi Crown HW&protocol compatible
RS485 speed	see Digi Crown HW&protocol definition
Operating temperature	0 to 50°C
Maximum network length	see Digi Crown HW&protocol definition
Number of networks per card	2
Dimensions	Standard short PCI slot
Required power	25 W (31+31 units with max. cable length 10 m)

Digi Crown isa	
Power supply	from standard ISA bus
Power absorption	1.5 W + power towards networks
Inputs/Outputs	Digi Crown HW & protocol compatible
RS485 speed	see Digi Crown HW&protocol definition
Operating temperature	standard PC
Maximum network length	see Digi Crown HW&protocol definition
Number of networks per card	2
Dimensions	Standard short ISA slot
Required power	25 W (31+31 units with max. cable length 10 m)

Digi Crown protocol					
Protocol	easy ASCII strings < CR> terminated, single unit addressing with				
	broadcast command capability				
RS232 Mode	E,8,1 with baud 4.800, 9.600,, 115.200 bit/s				
RS232 comm. protocol	full-duplex, hardware handshake capability, break capability				
RS485 Mode	I,8,1 with baud 9.600 or 208.333 bit/s				
RS485 comm. protocol	half-duplex, automatic multiprocessor addressing capability				
RS485 Network length	up to 1km ( depending on configuration )				
Number of units per network	max 31				
Measurement syncronization	75kHz on RS485 bus				





## ■ INDUSTRIAL PCs FOR MEASUREMENT ACQUISITION

#### **E9066 INDUSTRIAL PCs**

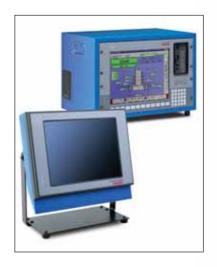
The family of E9066<sup>TM</sup> Industrial Computers are a rugged, PC-based industrial system, designed to provide highly accurate and repeatable gauging results for a wide variety of measuring applications, even under harsh shop floor environments.

These Industrial Computers can be provided with various IP-rated cabinets for desktop solutions, or be directly deployed in panel-mount and swingarm applications.

All devices are designed to withstand the abuse of severe shop floor environments, while complying to international standards for EMC, safety and noise immunity.

When bundled with our Quick SPC<sup>TM</sup> software package, they offer unparalleled performance for real-time data acquisition and measuring applications, industrial process control, real-time SPC and closed-loop machine tool control.

From simple, manual gauging to complex automatic gauging applications or network requirements, the E9066<sup>TM</sup> scalable hardware and open connectivity provides a cost-effective solution for any need."



## ■ MERLIN

8.4" colour LCD display unit designed for simple measuring applications up to 16 sensors/measurements and basic statistic analysis. Merlin represents a new concept of gage computer using the same technologies created for PDA and portable electronics, for data collection from traditional or wireless measuring devices. Embedded technology allows small dimensions (the whole system footprint is smaller than an A4 sheet of paper). Merlin gage software based on Microsoft® Windows® CE 5.0 guarantees a friendly and easy to use operator interface. It features the following ports:

- 10/100Mbps Ethernet LAN
- 4 USB
- 1 RS232C



## SOFTWARE PACKAGES FOR MEASUREMENT ACQUISITION

The Digi Crown driver is available in any of the MARPOSS' software packages for measurement acquisition, such as: QUICK SPC, EASY ACQUISITION or MARPOSS DLL. Digi Crown allows the automatic identification of the components installed in the network. Thanks to this exclusive feature the setup of the network becomes a quick and easy task.

## QUICK SPC

STATISTICAL PROCESS CONTROL (SPC) AND QUALITY CONTROL SOFTWARE

#### **READY TO RUN**

**Templates and wizard** driven programming interfaces allow an easy, safe and ready to use software.

**Self explanatory** with its spreadsheet programming interface, Explorer-like navigation and on-line manuals.

Mouse-free Interface.

**Safe and reliable** with checks on programmed data consistency, data back-up and restore utility; multi-level user security access.

#### REDEFINING THE CONCEPT OF FLEXIBILITY

**Fully customizable** software environment to change: page layouts, function keys, application templates, printouts, customers' based statistical evaluations and more.

**Powerful and versatile**: capable of connecting to a variety of analog and digital measuring devices and machine tool CNC's.

Native 32-bit Windows® software.

**Comprehensive** fully integrated software modules for data acquisition, measurement elaboration, statistical analysis, machine tool compensation, network integration and data storage.

## EASY ACQUISITION

This software package allows data collection and statistical analysis (SPC) It works on an Excel<sup>®</sup> platform and makes it possible to use a normal worksheet for carrying out the following functions:

- acquisition of measurement values from network
- creation and display of static and dynamic measurements with tolerance and status values
- management of measurement zero-setting (if required)
- data collection relevant to acquired measurement values
- statistical analysis (SPC) of the measurement values stored in the data collection (available only with Easy Acquisition SPC)
- printing, customized if wished, of data collection and SPC values.



## ■ MARPOSS DRIVER LIBRARY

Allows third-party software to interface with the following Marposs devices:

- 1.E4N
- 2.Easy box
- 3.Gage box
- 4. Quick Read
- 5. Quick Digit
- 6.Digi Crown

## Digi Crown probe - SPRING

		MEASURING RANGE (MM)	1	2	5	10	20
	A 0.0.5	TRADE NAME	D01L	D02L	D05L	D10L	D20L
SOFT TOUCH	AXIAL CABLE	ORDER CODE	3447701000	3447701050	3447701250	3447701450	3447701650
30/11000/1	RADIAL CABLE	TRADE NAME		RD02L	RD05L	RD10L	RD20L
		ORDER CODE		3447701090	3447701290	3447701490	34417701690
	AVIAL CARLE	TRADE NAME	D01	D02	D05	D10	D20
STANDARD	AXIAL CABLE	ORDER CODE	3447700000	3447700050	3447700250	3447700450	3447700650
STANDARD	D	TRADE NAME		RD02 (**)	RD05 (**)	RD10 (**)	RD20
	RADIAL CABLE	ORDER CODE		3447700090	3447700290	3447700490	3447700690

(\*\*) The Vacuum Retract function (contact pneumatic retraction) can be added by using the accessories code 4430245031 or 4430240679. It is also necessary to substitute the standard springs with the following ones.

RD 02	spring 1024099711
RD 05	spring 1024099721
RD 10	spring 1024099735 + spring-guide 1024099660

Range of accuracy (mm)	Range of accuracy (mm)		2	5	10	20
Accuracy error*(μm)		± (0,2 +k*1)	± (0,2 +k*1)	± (0,6 +k*2)	± (0,6 +k*2)	± (1,2 +k*2)
Total travel (mm)		1,25	2,6	5,6	10,6	20,6
Repeatability error (μm)		<0,15	<0,15	<0,2	< 0,4	< 0,4
Thermal drift at 0 (µm/°C)		<0,25	<0,25	< 0,25	< 0,5	0,5
Measuring force at natural zero (N± 25%)	STANDARD	1	0,75	0,7	0,7	0,7
Spring strength (N/mm)± 15%	STANDARD	0,17	0,14	0,08	0,06	0,03
Measuring force at natural zero (N± 25%)	SOFT TOUCH	0,29	0,29	0,29	0,29	0,29
Spring strength(N/mm)± 15%	SOFT TOUCH	0,17	0,12	0,033	0,034	0,012
Cable lenght (m)		2	2	2	2	2
STd. connector Lumberg IP68		SV60	SV60	SV60	SV60	SV60

Calibration frequency (KHz)	7,5				
Calibration to (V RMS)	3.54 (with load 1 MOhm/360 pF)				
Current (mA RMS)	9				
Input/Output phase displacement	<10				
Specific sensitivity (mV/V/mm)	230 115 23				

## Digi Crown probe - PNEUMATIC PUSH

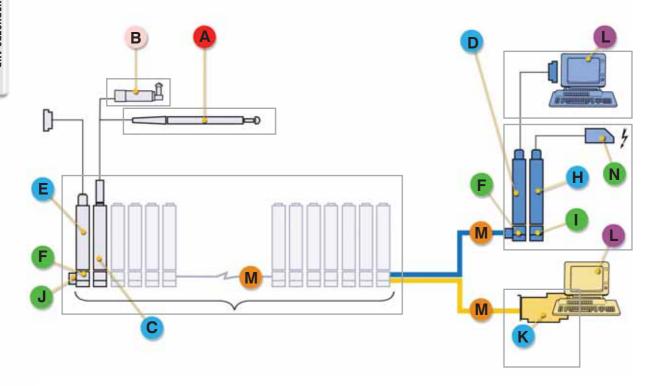
		Measuring range (mm)	2		5		10		20	
_	CABLE	TRADE NAME	PAD02L	PVAD02L	PAD05L	PVAD05L	PAD10L	PVAD10L	PAD20L	PVAD20L
받호	AXIAL	ORDER CODE	3447701190	3447701220	3447701390	3447701420	3447701590	3447701620	3447701790	3447701820
SOF	CABLE	TRADE NAME	PD02L	PVD02L	PD05L	PVD05L	PD10L	PVD10L	PD20L	PVD20L
	RADIAL	ORDER CODE	3447701130	3447701160	3447701330	3447701360	3447701530	3447701560	3447701730	3447701760
유	CABLE	TRADE NAME	PAD02	-	PAD05	-	PAD10	-	PAD20	-
18	AXIAL	ORDER CODE	3447700190	-	3447700390	-	3447700590	-	3447700790	-
₹	CABLE	TRADE NAME	PD02	-	PD05	-	PD10	-	PD20	-
ST	RADIAL	ORDER CODE	3447700130	-	3447700330	-	3447700530	-	3447700730	-

Measuring range (mm)		2		5		10		20	
Accuracy error *(µm)		± (0,2	+k*1)	± (0,6 +k*2)		± (0,6 +k*2)		± (1,2 +k*2)	
Total travel (mm)		2	,6	5	,6	10	),6	20,6	
Repeatability error (μm)		<(	),15	<	0,2	<(	0,4	<	0,4
Thermal drift at zero (µm/	/°C)	<(	),25	<(	),25	<(	0,5	<0,5	
Measuring force at		0,4÷ 1 bar	-	0,4÷ 1 bar	-	0,4÷ 1 bar	-		-
natural zero (N± 25%)	ARD	6÷ 14,5 psi	-	6÷ 14,5 psi	-	6÷ 14,5 psi	-		-
Haturai 2610 (14± 2076)	AND/	0,8÷ 2,5	-	0,6÷ 2,3	-	0,7÷ 2,4	-		-
Spring strength (N/mm ± 15%)	STA	0,08	-	0,03	-	0,02	-		-
Measuring force at	표	0,5÷ 2 bar	0,125÷ 2 bar	0,5÷ 2 bar	0,125÷ 2 bar	0,5÷ 2 bar	0,125÷ 2 bar	0,5÷ 2 bar	0,125÷ 2 bar
natural zero (N± 25%)	HONG	7,3÷ 29 psi	1,825÷ 29 psi	7,3÷ 29 psi	1,825÷ 29 psi	7,3÷ 29 psi	1,825÷ 29 psi	7,3÷ 29 psi	1,825÷ 29 psi
Tracara 2010 (142 2070)	11	0,18÷ 1,23	0,09÷ 1,41	0,18÷ 1,23	0,09÷ 1,41	0,18÷ 1,23	0,09÷ 1,41	0,18÷ 1,23	0,09÷ 1,41
Spring strength (N/mm ± 15%)	SOF	0,045	-	0,014	-	0,014	-	0,008	-

Calibration frequency (KHz)		7,5						
Calibrated to (V RMS)		3.54 (with load 1 MOhm/360 pF)						
Current (mA RMS)		9						
Input/Output phase displacement		<10						
Specific sensitivity (mV/V/mm)	230	115	23					

(\*) K= difference in mm between master zero and dimension to be measured.

## How to order



### INTERFACES

DE	SCRIPTION	ORDER CODE
С	DIGI CROWN BOX	767X000010
С	DIGI CROWN BOX (+ ram)	767X000210
D	DIGI CROWN 232	767Y000000
D	DIGI CROWN USB	767Y010000
Н	DIGI CROWN PSU (110-240 Vac / 7,5 Vdc)	767W000000
Н	DIGI CROWN PSU (24 Vdc / 7,5 Vdc)	767W010000
Е	DIGI CROWN I/O SINK	7671000000
Е	DIGI CROWN I/O SOURCE	7671010000
Е	DIGI CROWN ONLY INPUT	7671020000
K	DIGI CROWN PCI	6355321000
K	DIGI CROWN ISA	6355322000

#### **A**CCESSORIES

DE	SCRIPTION	ORDER CODE
G	DIGI CROWN PBB	6139013200
J	END LINE CONNECTOR	6355200000
F	DIGI CROWN BUS (FOR DIGI CROWN BOX, 232, I/O)	6872030010
ı	DIGI CROWN PSC (FOR DIGI CROWN PSU)	6872030011
N	EU PLUG	4147000013
N	USA PLUG	4147000014
N	UK PLUG	4147000015
N	EU CABLE	4147000016
N	USA CABLE	4147000017

#### Sw packages

DE	SCRIPTION	ORDER CODE
L	QSPC	CM2A23MA00
L	EASY ACQUISITION	CM2F23MA02
L	MARPOSS DRIVER LIBRARY	CM2A13MA01

#### **C**ONNECTION CABLE

DE	SCRIPTION	Order code
M	CONNECTION CABLE 2 mt.	6738057016
М	CONNECTION CABLE 6 mt.	6738057024
М	CONNECTION CABLE 10 mt.	6738057023
М	CONNECTION CABLE 15 mt.	6738057022
М	CONNECTION CABLE 25 mt.	6738057017

## Digi Crown pencil probe heads

#### STANDARD

DE	SCRIPTION	Range (mm)	Trade name	Order code
Α	AXIAL - SPRING	1	D01	3447700000
Α	AXIAL - SPRING	2	D02	3447700050
Α	AXIAL - SPRING	5	D05	3447700250
Α	AXIAL - SPRING	10	D10	3447700450
Α	AXIAL - SPRING	20	D20	3447700650
Α	RADIAL - SPRING	2	RD02	3447700090
Α	RADIAL - SPRING	5	RD05	3447700290
Α	RADIAL - SPRING	10	RD10	3447700490
Α	RADIAL - SPRING	20	RD20	3447700690
Α	RADIAL PNEUM.	2	PD02	3447700130
Α	RADIAL PNEUM.	5	PD05	3447700330
Α	RADIAL PNEUM.	10	PD10	3447700530
Α	RADIAL PNEUM.	20	PD20	3447700730
Α	AXIAL PNEUM.	2	PAD02	3447700190
Α	AXIAL PNEUM.	5	PAD05	3447700390
Α	AXIAL PNEUM.	10	PAD10	3447700590
Α	AXIAL PNEUM.	20	PAD20	3447700790

## SOFT TOUCH

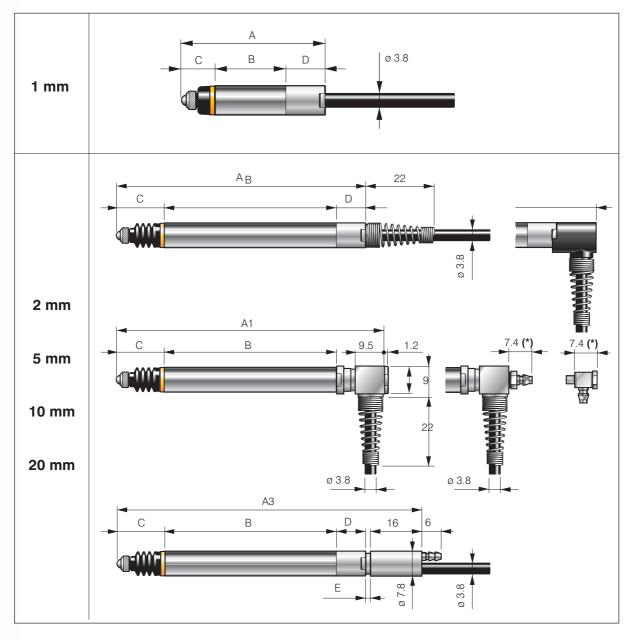
_			_	
Di	ESCRIPTION	RANGE (mm)	Trade name	ORDER CODE
Α	AXIAL - SPRING 1		D01L	3447701000
Α	AXIAL - SPRING	2	D02L	3447701050
Α	AXIAL - SPRING	5	D05L	3447701250
Α	AXIAL - SPRING	10	D10L	3447701450
Α	AXIAL - SPRING	20	D20L	3447701650
Α	RADIAL - SPRING	2	RD02L	3447701090
Α	RADIAL - SPRING	5	RD05L	3447701290
Α	RADIAL - SPRING	10	RD10L	3447701490
Α	RADIAL - SPRING	20	RD20L	3447701690
Α	RADIAL PNEUM.	2	PD02L	3447701130
Α	RADIAL PNEUM.	5	PD05L	3447701330
Α	RADIAL PNEUM.	10	PD10L	3447701530
Α	RADIAL PNEUM.	20	PD20L	3447701730
Α	AXIAL PNEUM.	2	PAD02L	3447701190
Α	AXIAL PNEUM.	5	PAD05L	3447701390
Α	AXIAL PNEUM.	10	PAD10L	3447701590
Α	AXIAL PNEUM.	20	PAD20L	3447701790
Α	RADIAL PUSH/VACUUM	2	PVD02L	3447701160
Α	RADIAL PUSH/VACUUM	5	PVD05L	3447701360
Α	RADIAL PUSH/VACUUM	10	PVD10L	3447701560
Α	RADIAL PUSH/VACUUM	20	PVD20L	3447701760
Α	AXIAL PUSH/VACUUM	2	PVAD02L	3447701220
Α	AXIAL PUSH/VACUUM	5	PVAD05L	3447701420
Α	AXIAL PUSH/VACUUM	10	PVAD10L	3447701620
Α	AXIAL PUSH/VACUUM	20	PVAD20L	3447701820

### MINI CELL - D124

DES	CRIPTION	RANGE (mm)	TRADE NAME	ORDER CODE			
В	CONTACT UP	0,4	D124	3419886400			

## PROBES DIMENSIONS (mm)

### Digi Crown Probe - STANDARD VERSION



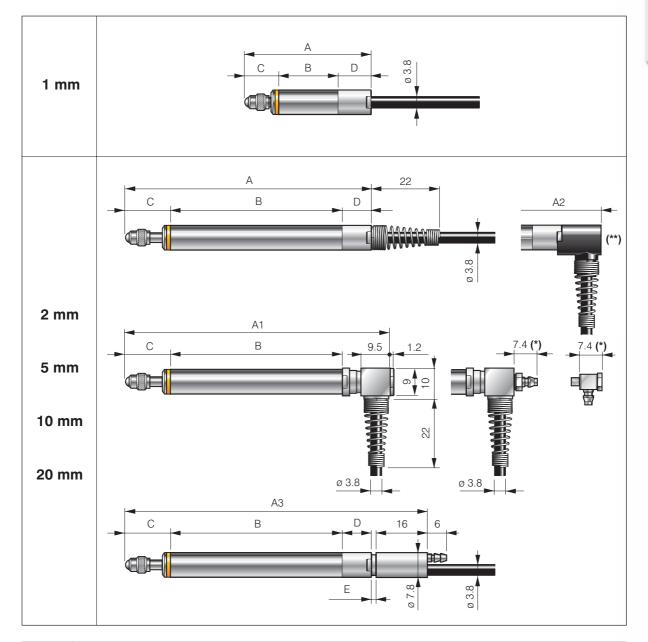
DIMENSIONS	RANGE										
	1 mm 2 mm				5 n	nm	10	mm	20	mm	
				Long Range (CL)							
	Standard	Standard	Pneumatic	Standard	Pneumatic	Standard	Pneumatic	Standard	Pneumatic	Standard	Pneumatic
А	39.2	80	-	-	-	92.5	-	118	-	168.3	-
A1	42.8	86	86	116.6	116.6	98.9	98.9	124	124	173.9	173.9
A2	-	92.5	-	-	-	105	-	130.5	-	180.8	-
A3	-	-	-	-	-	-	-	-	-	-	186.6
В	19.2	57	57	76	76	68	68	84.5	84.5	119.9	120.25
C	9.2	13.5	13.5	25	25	15	15	21	21	35.9	21.2
D	10.8	9.5	-	-	-	9.5	-	12.5	-	12.5	12.5
Е	-	-	1.475	-	1.375	-	1.55	-	1.95	-	2.35

<sup>(\*)</sup> Only for pneumatic version.

A/A1/A2/A3/C refer to the electrical zero

<sup>(\*\*)</sup> The 90° cable deflector is always supplied with the axial-cable heads.

## Digi Crown probe - SOFT TOUCH VERSION



DIMENSIONS	RANGE										
	1 mm	mm 2 mm					nm	10	mm	20	mm
		Long Range (CL)									
	Standard	Standard	Pneumatic	Standard	Pneumatic	Standard	Pneumatic	Standard	Pneumatic	Standard	Pneumatic
А	42.15	78.5	-	-	-	91	-	113	-	153.95	-
A1	-	84.5	84.5	111.6	111.6	97.35	97.35	119.45	119.45	159.25	159.25
A2	-	91	-	-	-	103.5	-	125.5	-	166.45	-
A3	-	-	96	-	122.8	-	108.6	-	130.95	-	172
В	19.2	57	57	76	76	68	68	84.5	84.5	120.25	120.25
С	12.15	12	12	19.9	19.9	13.5	13.5	16	16	21.2	21.2
D	10.8	9.5	9.5	9.5	9.5	9.5	9.5	12.5	12.5	12.5	12.5
Е	-	-	1.475	-	1.375	-	1.55	-	1.95	-	2.05

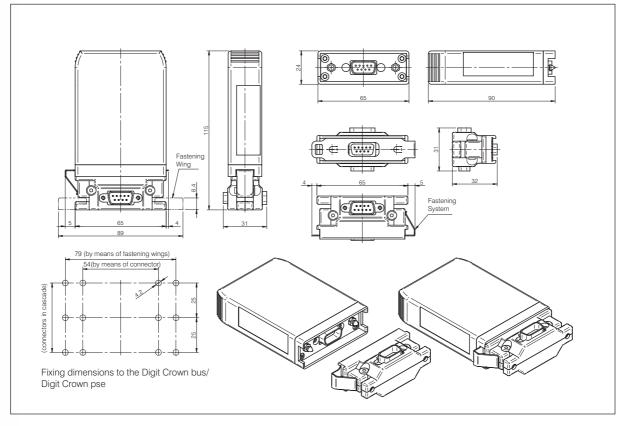
<sup>(\*)</sup> Only for pneumatic version.

(\*\*) The 90° cable deflector is always supplied with the axial-cable heads.

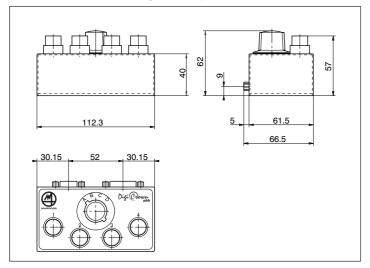
A/A1/A2/A3/C refer to the electrical zero

## INTERFACES OVERALL DIMENSIONS (mm)

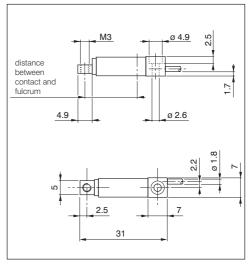
Overall dimensions of Digi Crown box, Digi Crown 232, Digi Crown psu, Digi Crown i/o, Digi Crown bus and Digi Crown psc interfaces.



Overall dimensions of Digi Crown pbb.



Overall dimensions of Digi Crown D124.



For a full list of address locations, please consult the Marposs official website: www.marposs.com - www.testar.com

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