



## ...the complete range of measuring armsets with parallel guide

Quick Block is a universal measuring element, equipped with high precision linear guides, for checking internal and external diameters and distances.

The product family has been enhanced with the 10 mm range version to meet the most demanding customers' application requirements.

### PRODUCT FEATURES

- The product, IP65 certified, is available in two versions:
  - With built-in full-bridge (LVDT) or half-bridge (HBT) transducer featuring  $\pm 1$  mm ( $\pm 0.04$ " ) and  $\pm 5$  mm ( $\pm 0.2$ " ) measuring range, compatible with any third party electronic amplifiers;
  - as simple mechanical transmission featuring  $\pm 3$  mm ( $\pm 0.12$ " ) and  $\pm 5$  mm ( $\pm 0.2$ " ) measuring range, to be used with linear probes having clamping diameter 8mm or 3/8" , such as Red Crown and Quick Digit.
- The built-in transducer model is also available in digitized version, to be connected to Marposs DigiCrown network, and in USB version for direct connection to electronic display units and industrial/commercial pc.
- Each version can be equipped with pneumatic actuation to facilitate part loading/unloading in the measuring station. A wide range of spring, measuring arms and contacts is also available, allowing to reach any measuring position keeping the arm ratio unchanged.
- Its measurement axis can be oriented in any spatial direction, while the contacts support has a retooling range of 20 mm.
- The  $\pm 5$  mm version features a 5 mm diameter double guide and a ball cage anti-rotation system providing a repeatability range (max-min) lower than  $0,5 \mu\text{m}$  with direct contact. This version can be supplied with axial or radial cable outlet for transducer and pneumatic cylinder.
- Particularly suitable as a Quick Set component for Post-Process applications with robot part loading and unloading. By means of specific interfaces it can be assembled on two different support brackets to measure diameters up to 40 mm and 90mm respectively.
- A special version with dovetail compatible with TESA supports and contacts is also available.



Connectors



Quick Block used as Quick Set component

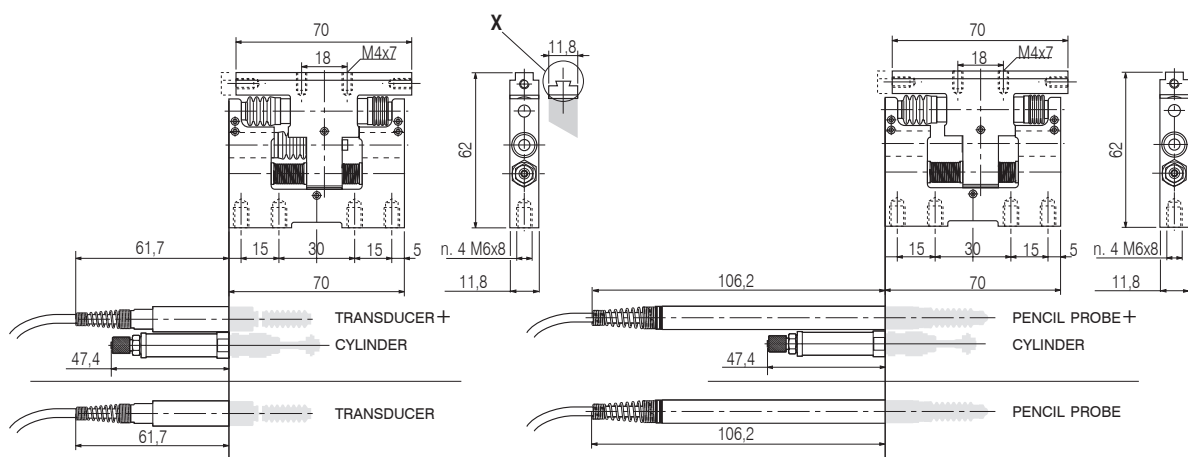
# TECHNICAL SPECIFICATIONS

Total stroke	mm	6				10,6																
Measuring range	mm	2				10																
Transducer		LVDT		HBT Std. Marpos		LVDT		HBT Std. Marpos														
Pretravel	mm	1,1 ÷ 1,2				5,1 ÷ 5,2																
Contact support fixing system		Square guide		TESA Dovetail		Square guide																
Guiding system		Ball cage				Ball cage																
Antirotation system		Allen screw				Ball cage																
Repeatability	μm	<0,5				<0,5																
Tip Force	N	1 (±20%) with std. spring				1,7 (±20%) with std. spring																
Thermal drift	μm/°C	<0,25				<0,25																
Actuation*		S	PA	S	PA	S	PA	S	PA	PR	S	PA	PR	S	PA	PR						
Cable outlet**		A	A	A	A	A	A	A	A	R	A	R	A	R	A	R						
Operating pressure	bar	3 ÷ 6				3 ÷ 6																
Total weight	g (N)	<260 (<2,548)				<260 (<2,548)																
Mobile parts weight	g (N)	100 (0,98)				110 (1,078)																
Operating temperature	°C	-10/65				-10/+65																
Protection degree	guides	IP65				IP40	IP65	IP40	IP65													
	transducer	IP65				IP65																
Cable lenght	m	2				2																
Connector		Lumberg SV50/6				Lumberg SV50/6																
Sensitivity	mV/V/mm	230		73,75		115		29,5														
Accuracy	μm	±MAX(1+ 10·K ; 15·K )***				±MAX(8+ 3·K ; 8·K )***																
Calibration specs.		3,5V RMS @7,5kHz with load 1MΩ//360pF		3,5V RMS @7,5kHz with load 2KΩ±0,1%		3,5V RMS @7,5kHz with load 1MΩ//360pF		3,5V RMS @7,5kHz with load 2KΩ±0,1%														
		3419883300	3419883305	3419883350	3419883355	3419883360	3419883365	3419883800	3419883801	3419883805	3419883806	3419883810	3419883811	3419883815	3419883816	3419883850	3419883851	3419883855	3419883856	3419883860	3419883861	3419883865

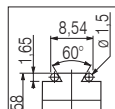
\*S=spring; PA=pneumatic cylinder with axial inlet; PR=pneumatic cylinder with radial inlet; \*\*A=axial; R=radial; \*\*\* K = reading value (mm)

## QBH100 - QBF100 Std. Marpos

## QB 600



X= QBH100 WITH  
STD. TESA DOVETAIL

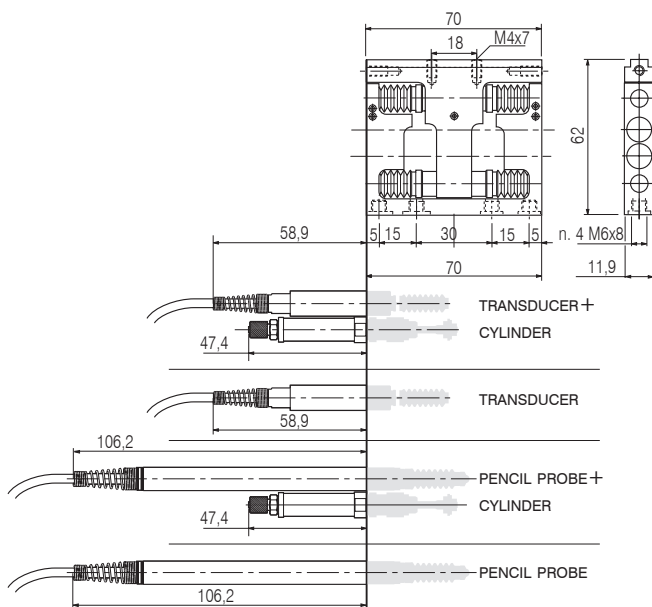


# Dimension valid for Red Crown 2,  
different size according to pencil probe

10,6												10,6						6																	
10												10						depends on the probe																	
HBT Std. TESA						DIGITIZED						USB						TRANSMISSION ONLY																	
5,1 ÷ 5,2												depends on the probe																							
Square guide												Square guide																							
Ball cage												Ball cage																							
Ball cage												Ball cage						Allen screw																	
<0,5												<0,5																							
1,7 (±20%) with std. spring												1,7 (±20%) without pencil probe																							
<0,25												<0,25																							
S	PA	PR	S	PA	PR	S	PA	PR	S	PA	PR	S	PA	PR	S	PA	PR	S	PA	PR	S	PA	PR	S	PA	PR	S	PA	PR						
A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R				
3÷6												3÷6																							
<260 (<2,548)												<260 (<2,548)																							
110 (1,078)												100 (0,98)						95 (0,931)																	
-10/+65												-10/+65																							
IP40				IP65				IP40				IP65				IP40				IP65															
IP65												IP65																							
2												depends on the probe																							
Lumberg SV50/6						Lumberg O332/06						Standard USB						depends on the probe																	
29,5												-																							
±MAX(8+ 3·K ; 8·K )***												±(1,2+K·2)***												±(1,2+K·2)***											
3V RMS @13kHz with load 2KΩ±0,1%												-												-											
3419883900	3419883901	3419883905	3419883906	3419883910	3419883911	3419883915	3419883916	3419883970	3419883971	3419883975	3419883976	3419883980	3419883981	3419883985	3419883986	3419883972	3419883973	3419883977	3419883978	3419883982	3419883983	3419883987	3419883989	3019883711	3019883712	3019883714	3019883721	3019883722	3019883724	3019883001	3019883002				

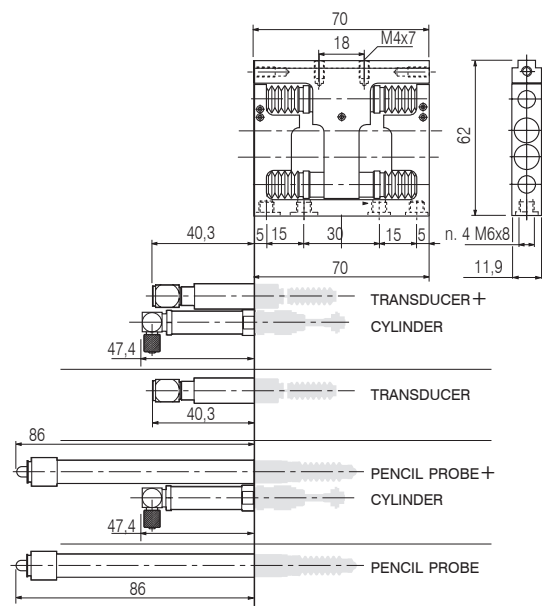
**QB1000 • QBH1000 Std. Marposs -  
QBH1000 Std. Tesa - QBF1000 - DB1000 - UB1000**

**AXIAL TRANSDUCER/CYLINDER CABLE OUTLET**



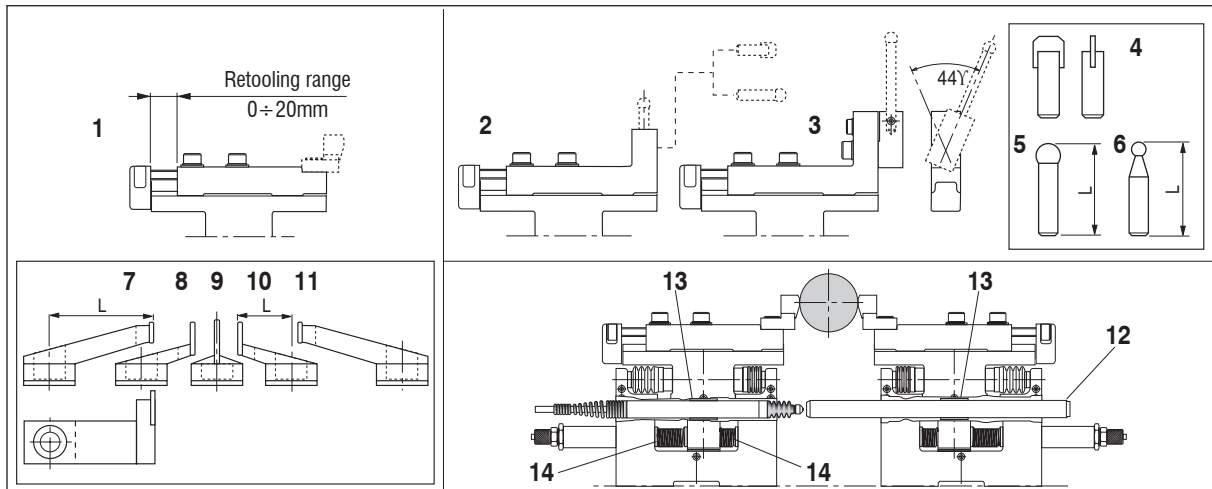
**QB1000 • QBH1000 Std. Marposs -  
QBH1000 Std. Tesa - QBF1000 - DB1000 - UB1000**

**RADIAL TRANSDUCER/CYLINDER CABLE OUTLET**



# Dimension valid for Red Crown 2,  
different size according to pencil probe

## ACCESSORIES



REF.	DESCRIPTION	ORDER CODE
1	Support for off-set cut contact 7, 8, 9, 10, 11 M4 thread [retooling range 0-20 mm (0-,79")]	2019883060
2	Support for simple cut contact 4 or spherical contact 5, 6 [retooling range 0-20 mm (0-,79")]	2019883050
3	Contacts support with side rotation [retooling range 0-20 mm (0-,79")]	2019883550
4	Simple cut contact	3391988325
5	Spherical contact L 20mm, Diameter 5 mm	3391988301
	Spherical contact L 40mm, Diameter 5 mm	3391988302
	Spherical contact L 60mm, Diameter 5 mm	3391988303
6	Spherical contact L 20mm, Diameter 3 mm	3391988310
	Spherical contact L 40mm, Diameter 3 mm	3391988311
	Spherical contact L 60mm, Diameter 3 mm	3391988312
7	Left off-set cut contact L = 24 mm	3391988336
8	Left off-set cut contact L = 12 mm	3391988335
9	Off-set cut contact	3391988330
10	Right off-set cut contact L = 12 mm	3391988337
11	Right off-set cut contact L = 24 mm	3391988338
12	Mechanical reference shaft (external dia. 8 mm, L = 120 mm)	1119883071
13	Adapting bushing for pencil probes diameter 8 mm	* 1019826001
	Adapting bushing for pencil probes dia. 3/8"	* 1019883072
14	Spring 0,6 N (Blue)	1019883035
	Spring 1 N (Inox)	1019883030
	Spring 1,7 N (Black)	1019883034
	Spring 2 N (Green)	1019883031
	Spring 2,6 N (Red)	1019883032
	Spring 4 N (Yellow)	1019883036
Extension cables and user manuals	Extension cable LVDT/HBT L = 2 m	6735932015
	Extension cable LVDT/HBT L = 5 m	6735932016
	Extension cable LVDT/HBT L = 10 m	6735932017
	User manual QBF/QBH100	** D4340013X1
	User manual QB600	** D4340014X1
Quick Set	User manual QBF/QBH/DB/UB/Q1000	** D4340064XF
	Support bracket L = 200 mm for diameters up to 40 mm, with interface for two Quick Block	3024017100
	Support bracket L = 250 mm for diameters up to 90 mm (without interface for Quick Block)	3024018100
	Mounting interface for one Quick Block for support bracket L = 250 mm	2924018110

\* To be always used with QB600 and QB1000, to fix the pencil probe or the mechanical reference shaft

\*\* X = I (Italian); U (English); D (German); F (French); E (Spanish)

For a full list of address locations, please consult the Marposs official website

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