



GAUGE SYSTEM FOR CYLINDRICAL PARTS

Flexible modular measuring system for multidimensional and geometric

checks of cylindrical parts such as bushings, hubs, gear wheels.

Its flexibility guarantees quick retooling without any special tools,

and easy reconfiguration through standard components.

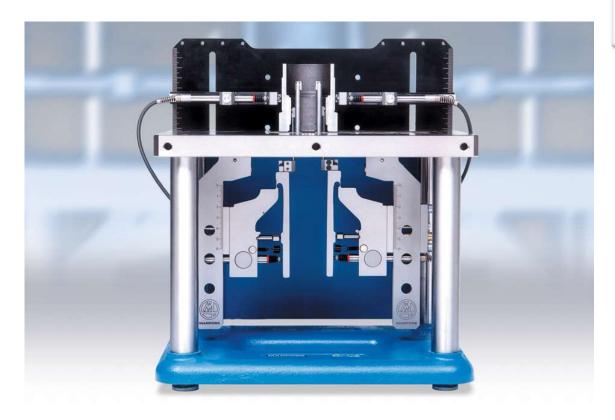
Parts with:

- internal diameter 10 ÷ 100 mm
- external diameter 14 ÷ 160 mm
- max. height 130 mm

can be measured.

It can accomodate any electronic pencil probe with clamping diameter 8 mm or 3/8" such as TESTAR Red Crown™ or Quick Probe™.

Special versions with dedicated nosepieces, automatic part rotation for dynamic measurements, pneumatic slide, pneumatic part lifting device for automatic part loading and unloading can be supplied on request.



BENCH GAUGES

COMPONENTS AND ACCESSORIES

1. BASE

	BASE	
SIZE	Dimensions (mm)	ORDER CODE
SMALL MEDIUM	280 X 230 350 X 230	3024070025 3024070020

2. BASE PLATE

It holds all components used for part referencing and measuring.

BASE PLATE		
Size	DIMENSIONS (mm)	ORDER CODE
SMALL MEDIUM	280 X 230 350 X 230	3024070051 3024070050



3. GUARDS

GUARDS		
Size	Dimensions (mm)	ORDER CODE
LONG SIDE FOR SMALL BASE	213 X 171	2924070026
LONG SIDE FOR MEDIUM BASE	283 X 171	2924070021
SHORT SIDE FOR BOTH SMALL AND MEDIUM BASE	163 X 171	2924070022



4. RETOOLABLE NOSEPIECE

This unit allows correct part referencing and protects the contacts.

RETOOLABLE NOSEPIECE		
Range (mm)	ORDER CODE	
10 ÷ 14	3024070100	
14 ÷ 18	3024070105	
18 ÷ 25	3024070110	
25 ÷ 32	3024070115	
32 ÷ 45	3024070120	
45 ÷ 75 (*)	3024070125	
75 ÷ 100 (*)	3024070130	



5. Guide for transmission unit for internal diameters

This guide is mounted on the underside of the base plate and holds the transmission units for checking internal diameters.

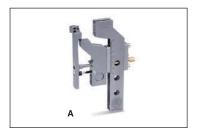
GUIDE
ORDER CODE
2924070040



6. Transmission unit for checking internal diameters

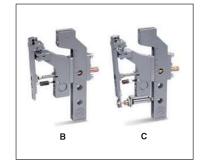
Internal diameters in the range 10 to 100 mm can be measured using two of this components. When the size is between 25 and 100 mm, up to 3 inside diameters can be measured. Transmissions with integral fulcrum have ± 1 mm measuring range, transmissions with cross fulcrum have ± 5 mm measuring range.

(A) TRANSMISSION WITH INTEGRAL FULCRUM	
Ø PROBE ORDER CODE	
8 mm 3/8"	3024070000 3024070001



(B) TRANSMISSION WITH CROSS FULCRUM	
Ø PROBE ORDER CODE	
8 mm 3/8"	3024070011 3024070013

(C) TRANSMISSION WITH CROSS FULCRUM AND PNEUMATIC ACTUATION	
ø Р кове	ORDER CODE
8 mm 3024070010 3/8" 3024070012	



7. FINGERS AND CONTACTS

Using standard fingers and contacts the arm ratio is 1:1.

	FINGERS		
DIAMETER (mm)	Түре	ORDER CODE	
3	STRAIGHT	3192407004	
4	STRAIGHT	3192407007	
4	LEFT OFFSET	3192407005	
4	RIGHT OFFSET	3192407006	

CONTACTS			
LENGTH (mm)	Radius (mm)	Түре	ORDER CODE
1.8 2.8 3.5	2 2 2	CARBIDE CARBIDE DIAMOND	3392407001 3392407002 3392407010

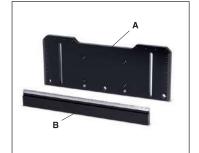
CONTACT EXTENSION	
Length (mm)	ORDER CODE
6.2	1024070014



8. SUPPORT PLATE AND GUIDE FOR EXTERNAL MEASUREMENTS

The support plate can be mounted directly on the base plate or on the manual slide. On this plate (A) up to six guides (B) can be fixed. On the guides the Quick Set measuring elements and transmissions for checking external diameters and thickness are mounted.

SUPPORT PLATE AND GUIDE	
	ORDER CODE
PLATE (A)	2924070045
GUIDE (B)	2924070046



9. MANUAL SLIDE FOR EXTERNAL MEASUREMENTS

This unit must be used when the measuring components will interfere with part loading (i.e. measuring a groove diameter). It holds the support plate and the guides for the measuring transmissions for checking external diameters and thickness.





10. Transmission unit for Checking external diameters

Two units are needed for checking one diameter. The maximum measurable diameter is 160 mm.

TRANSMISSION UNIT FOR EXTERNAL DIAMETERS		
Ø Probe (mm)	ORDER CODE	
8 mm 3/8"	3024017155 3024017157	

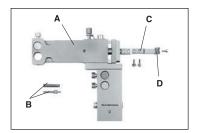
CONTACTS				
LENGTH (mm)	Radius (mm)	Түре	ORDER CODE	
2.8	10	CARBIDE	3392401702	
2.8	10	DIAMOND	3392401722	
2.8	50	CARBIDE	3392401705	
2.8	50	DIAMOND	3392401725	



11. Transmission unit for thickness measurements

It has to be fixed onto the guide for external measurements.

(A+B) TRANSMISSION FOR THICKNESS		
Ø P ROBE (mm)	ORDER CODE	
8 mm 3/8"	3024017330 3024017331	
Description	ORDER CODE	
(C) FINGER (D) CONTACT	2924017302 3292401702	

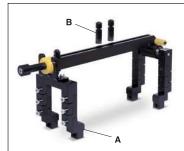


12. PIVOTING ARM FOR THICKNESS MEASUREMENTS

This arm holds the probes which carry out the thickness measurements; it is mounted onto the base plate and brings the probes in measuring position after having loaded the part on the referencing nosepiece.

(A) PIVOTING ARM

ORDER CODE				
2924070060				
(B) PROBE SUPPORT				
Length (mm)	ø Р кове	ORDER CODE		
60	8 mm 3/8"	2924019070 2924019072		
85	8 mm 3/8"	2924019071 2924019073		



13. PROBE SUPPORT FOR PLATE

This support is fixed under the base plate and allows to measure thickness.

PROBE SUPPORT FOR PLATE		
ø Ркове (mm)	ORDER CODE	
8 mm 3/8"	2924019075 2924019076	



Description	ORDER CODE
WRENCH SET	2924070990
USER MANUAL	D0QS0005X1 (*)

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