



**M1 AIR BORE GAUGES**

M1 Air, pneumatic bore gauge, is particularly suitable to test components within very tight tolerances (from IT2 to IT7), and roughness  $\leq 0,8 \text{ mm Ra}$ .

The measurement principle is based on the variation of pressure, that is proportional to the distance between the bore gauge nozzles and the part under test.

The measurement is obtained by means of the so called "balanced pneumatic bridge" system, with differential pressure transducers and electronic amplification of the signal.

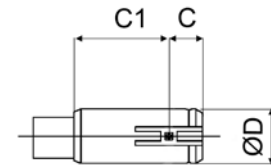
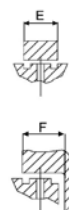
The signal is converted from analogue to digital through electronic converters.

M1 Air bore gauges are entirely manufactured by:

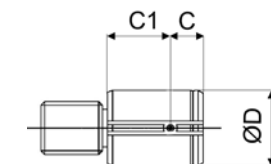
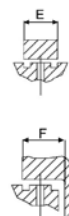


**TPS - PNEUMATIC PLUG GAUGES**

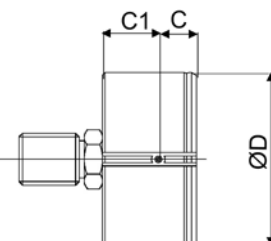
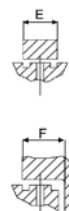
		Through bore			Blind bore				
→ D	range	C	C1	E	Type	C	C1	F	Type
3 - 4,15	0,03	6,5	31,5	1,8	T	3,5	34,5	4,4	B
4,15 - 6,3	0,05	9,5	28,5	2,5		3,5	34,5	4,8	
6,3 - 10	0,1	13	25	3		3,5	34,5	5	



		Through bore			Blind bore				
→ D	range	C	C1	E	Type	C	C1	F	Type
10 - 20	0,1	13	25	3	T	4	34	5,5	B
20 - 30	0,1	13	25	3		4	34	5,5	
30 - 42	0,1	13	25	3		4	34	5,5	
42 - 55	0,1	13	25	3		4	34	5,5	



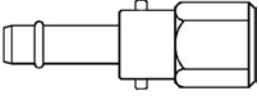
		Through bore			Blind bore				
→ D	range	C	C1	E	Type	C	C1	F	Type
55 - 70	0,1	13	25	3	T	4	34	5,5	B
70 - 85	0,1	13	25	3		4	34	5,5	
85 - 100	0,1	13	25	3		4	34	5,5	

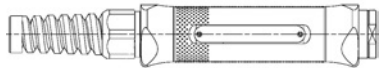
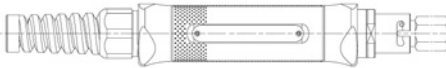
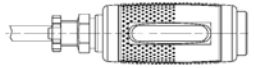


## TPS - TECHNICAL SPECIFICATIONS

RETOOLING RANGE	<b>3 - 4,15</b>	<b>4,15 - 6,3</b>	<b>6,3 - 100</b>
MEASURING RANGE	max. 0,03 mm	max. 0,05 mm	max. 0,1 mm
REPEATABILITY	≤ 0,5 μm		
AIR SUPPLY	Dry air carefully filtered and purified (filtering degree < 5 μm)		
PIPE FOR AIR SUPPLY	Internal → 4 mm - length 2 meters		
AVERAGE CONSUMPTION	< 1000 l/h		

## ACCESSORIES

EXTENSIONS			QUICK CONNECTION
→ D	L	code	
20	50	PLPM-50	
20	100	PLPM-100	
20	200	PLPM-200	


HANDLES		
 <p>STANDARD</p>	 <p>WITH QUICK CONNECTION</p>	 <p>MINI</p>

## EXTERNAL AIR / ELECTRONIC CONVERTERS (TYPE: SENSOR'S PRESSURE)




**E4N Air**


E4N Air column with analog and digital display for manual applications. It can connect one air gauge and elaborate both static and dynamic measurements, featuring also optionally a BCD Relais or an optoinsulated digital output.



**Easy Box U1 Air**



**Easy Box U3 Air**



**Easy Box U4 Air**

These interface boxes allow easy management via USB port of air gauges with one, three and four transducers respectively.

**Air Converter**



Air Converter for automatic applications. It is available in different layouts accomodating up to four units.

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

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