MARPOSS

THRU-SPINDLE MEASUREMENT SOLUTIONS FOR INTERNAL DIAMETERS



SYSTEM DESCRIPTION

Aeveraging extensive expertise in precision measurement for grinding machines, Marposs offers a comprehensive range of gauges designed for in-process control of internal diameters. The Thruvar series delivers state-of-the-art solutions, accommodating a wide variety of internal diameter measurements across different grinding machine setups.

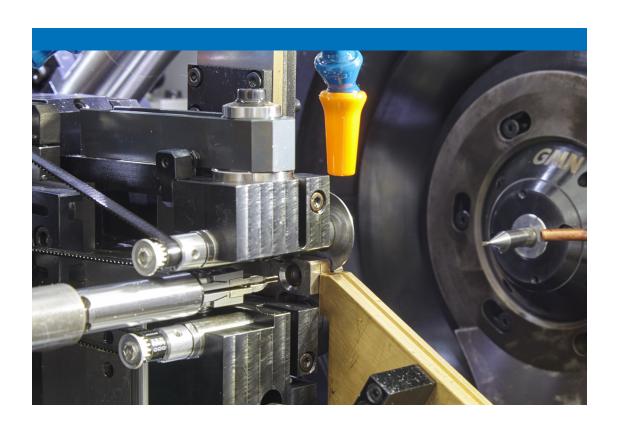
Thruvar measuring gauges are integrated within the spindle, providing easy access to the workpiece. The Quick-Set system minimizes re-tooling time when switching between different workpiece types, significantly reducing machine downtime and boosting productivity.

Measurement values are acquired during the grinding cycle, with the gauge exchanging signals with the machine logic, optimizing overall machine performance.

Each Thruvar head is crafted from high-strength materials engineered for superior thermal stability and resistance to wear, ensuring optimal reliability and precision in harsh grinding environments.

The internal diameter measurement system consists of a spindle-mounted measuring head and an electronic amplifier.

The figure shows the working principle: the Thruvar gauge, positioned opposite the grinding wheel, monitors the size of the workpiece during the grinding process. It transmits realtime measurement data to the amplifier unit, which controls the grinding cycle and stops the process once the target dimension is achieved, minimizing the risk of producing defective parts.

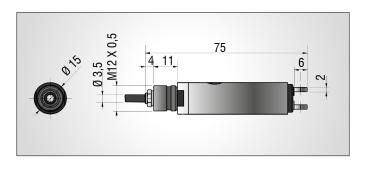


AVAILABLE MODELS

MODEL	Ø BODY [mm]	ZEROING	PIECE CHANGE	MEASUREMENT RANGE Ø [mm]	REPEATABILI- TY [µm]	MAX OSCILLA- TION [1/min]	INTERRUPTED SURFACE
PICOTHRUVAR	15	Mechanical guides	Manual	1,5÷8	0,5	800	No
MICROTHRUVAR	24	Mechanical guides	Manual	2÷15	0,5	800	No
MINITHRUVAR	32	Mechanical guides	Manual	3÷32 (interrupted surf.) 8÷88 (smooth surf.)	0,5	600	Yes
THRUVAR 8	50,8	Quick set up	Quick set up	9,6÷160	0,5	No	No

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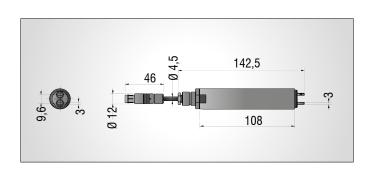
PICOTHRUVAR





TECHNICAL SPECIFICATIONS		
ZEROING	Mechanical guides	
PIECE CHANGE	Manual	
MEASUREMENT RANGE	Ø 1,5÷8 mm (Ø 0,06"÷31")	
REPEATABILITY	0,5 μm	

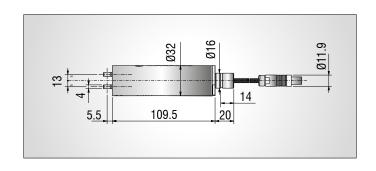
MICROTHRUVAR





TECHNICAL SPECIFICATIONS		
ZEROING	Mechanical guides	
PIECE CHANGE	Manual	
MEASUREMENT RANGE	Ø 2÷15 mm (Ø 0,08÷0,59")	
REPEATABILITY	0,5 μm	

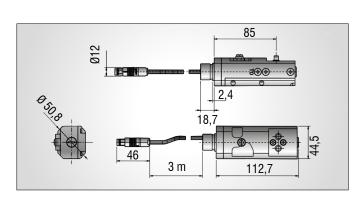
MINITHRUVAR





TECHNICAL SPECIFICATIONS				
ZEROING	Mechanical guides			
PIECE CHANGE	Manual			
MEASUREMENT RANGE	3÷32 (interrupted surf.) 8÷88 (smooth surf.)			
REPEATABILITY	0,5 μm			

THRUVAR 8





TECHNICAL SPECIFICATIONS		
ZEROING	Quick set up	
PIECE CHANGE	Quick set up	
MEASUREMENT RANGE	Ø9,6÷160 mm (Ø0,37"÷6,22")	
REPEATABILITY	0,5 µm	



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