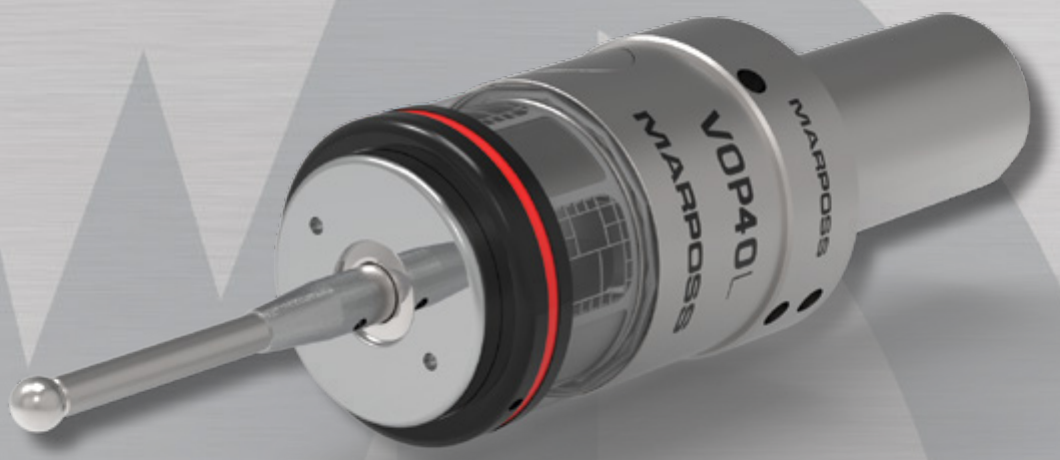
mida

VOP40L

TOUCH PROBE SYSTEM FOR LATHES WITH MULTICHANNEL OPTICAL TRANSMISSION



MARPOSS

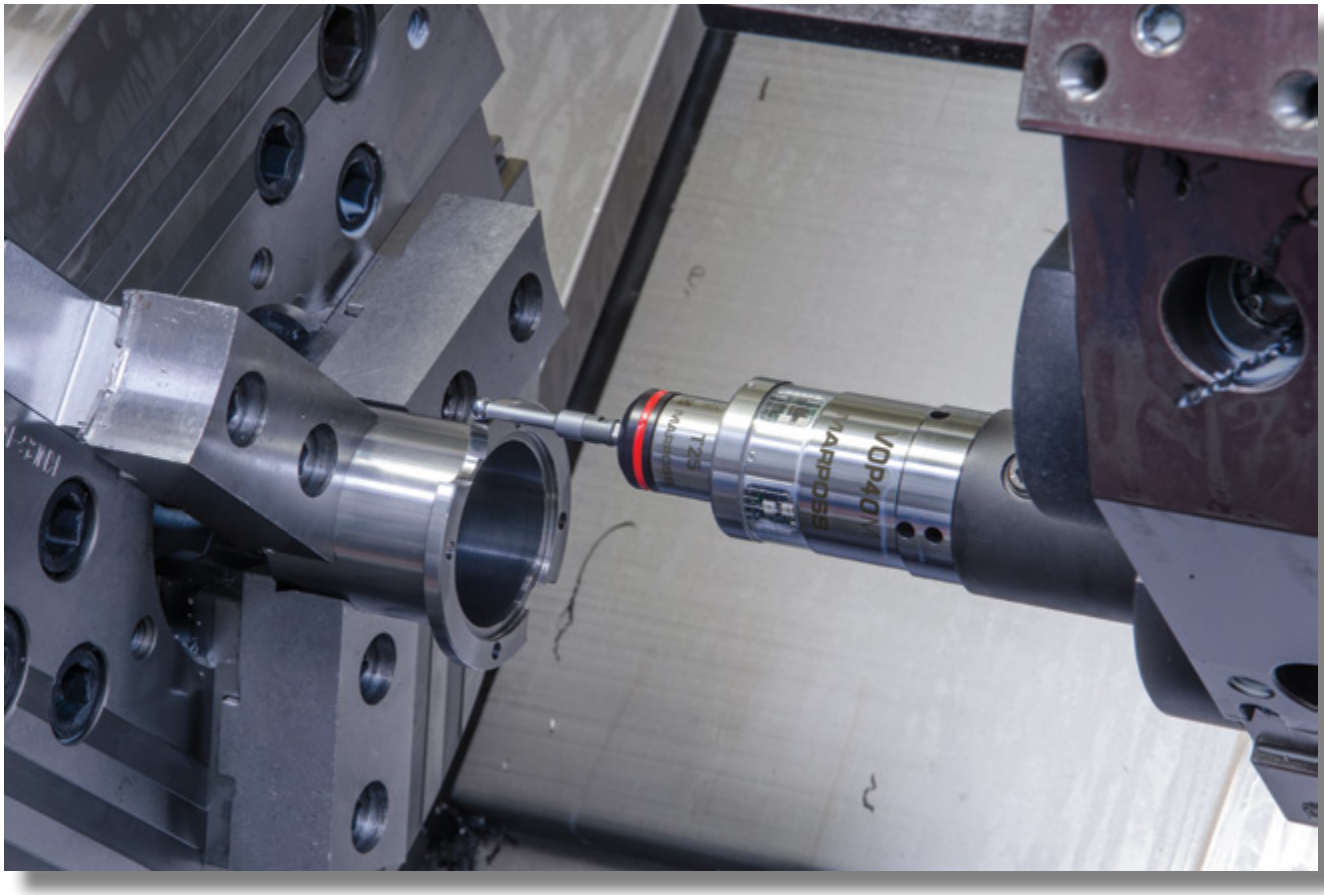
Description of the system

VOP40L is the new Marposs probing system, ideal for use on lathes and turning centres of all sizes.
Based on a compact design, VOP40L combines high performance specifications with robust build, making it suitable for use in demanding machining environments, where probes are continuously exposed to coolant oils and chips at extremely high temperatures.
Its innovative, modulated optical transmission system, guarantees high immunity to interference, a large operating range and a wide transmission angle.
A wide range of applications is possible:

- Multichannel system, each application can support up to 4 sequentially-managed probes
- Multi-turret applications, allows users to install two applications on the same machine by enabling two probes to be used simultaneously

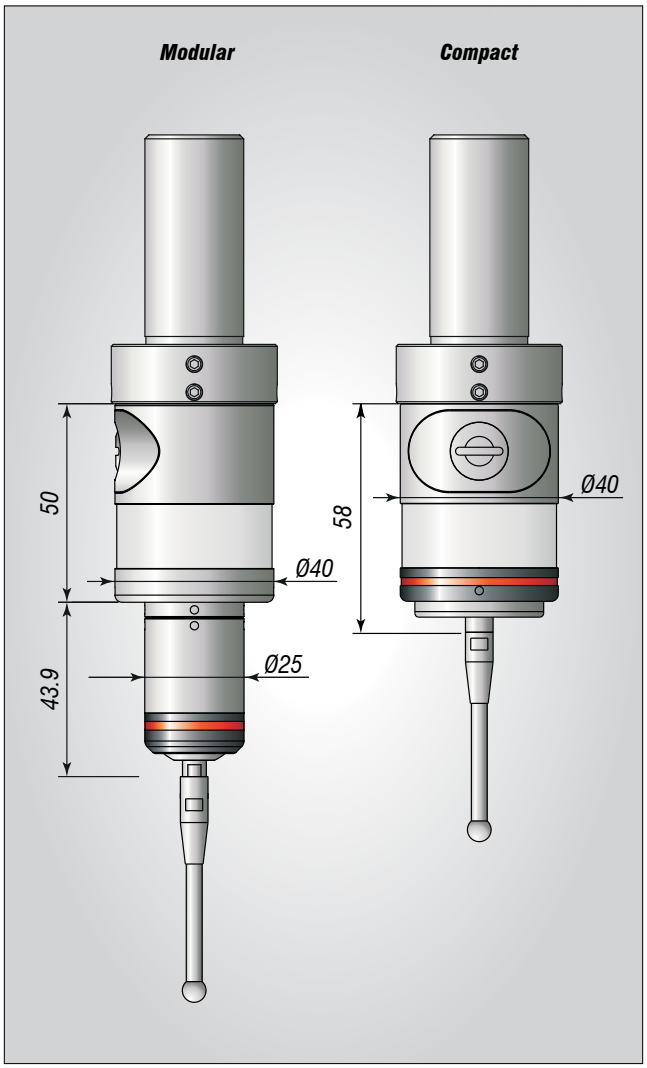
Advantages

- Compact and robust design
- Extended battery life
- Compatible with all Marposs VOS and E83 systems



VOP40L touch probe system for lathes and machining centres

VOP40L is ideal for use on lathes and turning centres of all sizes. Two versions are available, compact and modular, in order to satisfy all operative requirements and always ensure high mechanical sturdiness.
The system is designed to be used with the VOI optical receiver with integrated interface, but is also backward compatible with the Marposs E83 system, which means that existing systems can be upgraded rapidly and and easily.

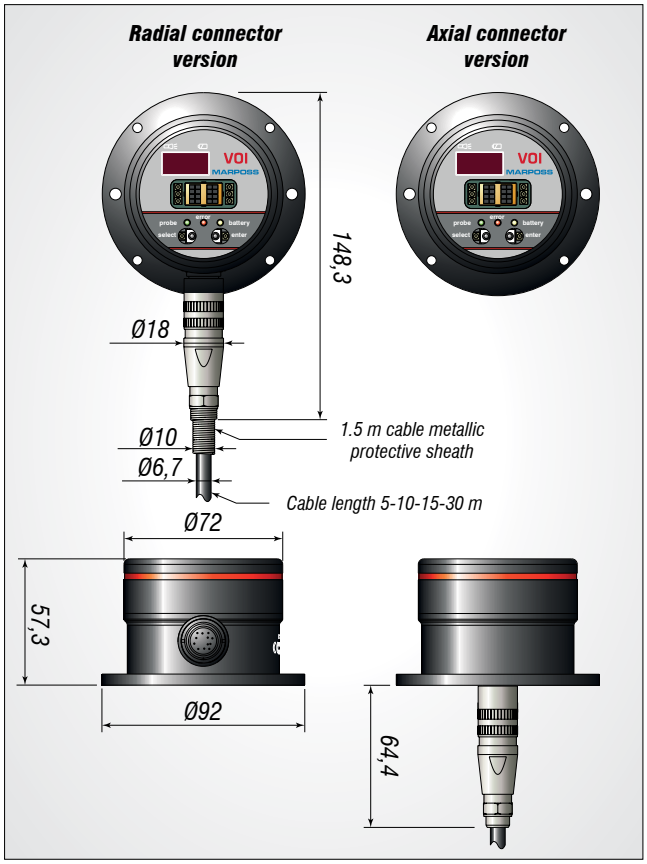


		Modular	Compact
UNIDIRECTIONAL REPEATABILITY (2σ) *using standard 35 mm finger at 600 mm/min*		0,5 µm	1 µm
MEASUREMENT FORCE *using standard 35 mm finger*		2 N *(XY)* 12 N *(Z)*	0.5-0.95 N *(XY)* 5.8 N *(Z)*
OVERTRAVEL *using standard 35 mm finger*		12° *(XY)* 4 mm *(Z)*	12° *(XY)* 6 mm *(Z)*
TRANSMISSION TYPE		Multi-channel optical transmission	
TRANSMISSION ACTIVATION/ DEACTIVATION DISTANCE		6 m (HP) 3.5 m (LP)	
TRANSMISSION ANGLE		360° on the probe axis 110° on a perpendicular axis	
NUMBER OF TRANSMISSION CHANNELS		6 *max.*	
TRANSMISSION ACTIVATION		Automatic Machine M code	
TRANSMISSION DEACTIVATION		Programmable timer Machine M code	
BATTERY TYPE		2 x ½ AA lithium thionyl	
BATTERY LIFE*	*Stand-by*	230 d (HP) 380 d (LP)	
	5% usage	190 d (HP) 320 d (LP)	
	Continuous usage	1060 h (HP) 2100 h (LP)	
PROTECTION DEGREE *(Standard IEC 60529)*		IP67	
OPERATING TEMPERATURE		0 - 60 °C	

(HP) = High Power mode
(LP) = Low Power mode
(*) = Typical performances which may vary on programming modes basis

VOI receiver with integrated interface

The VOI integrated interface receiver is supplied with a magnetic base for ease of installation and greater control over positioning within the machine.
VOI must be installed inside the machine tool working area and within the field of vision of the VOP during the measurement process. There are also four holes so that it can be secured permanently in position using M4 screws.
VOI is available in two versions with axial or radial connector, and is used to set-up the system operation. You can set the system up by using the optical buttons, or by remote control.
The set-up and troubleshooting procedures are very simple due to the practical 4 digit display and remote control unit.



Receiver with integrated interface (VOI) kit

P1SIV70000	VOI kit with lateral connector
P1SIV70001	VOI kit with rear connector

The kits are supplied complete with batteries and operator and instruction manual
Only VOI kits with lateral connector include the 1.5 m cable protective sheath.

POWER SUPPLY	13.5 - 30 Vdc max current 100 mA Power consumption 2 W	
INPUT SIGNALS *(SINK or SOURCE)*	Opto-isolated 13.5 - 30 Vdc 1 mA at 15 V	Start/Stop SEL 0 and SEL 1
OUTPUT SIGNALS *(may be set to N.C. or N.O. with the exception of the error, which is always set to N.C.)*	Solid State Relay (SSR) 4 - 30 V 40 mA	Probe 1 State/Pulse Probe 2 State/Pulse Battery discharged Error
PROTECTION DEGREE *(Standard IEC 60529)*	IP68	

System part numbers

Probe kit

6871844290	VOP40L compact
P1SIV00006	VOP40M modular + T25S

All VOP kits are supplied complete with batteries and the necessary tools
For fingers, shear pins and other accessories, consult the catalogue D6C00601I0

Spares

6871844241	VOP40M modular transmitter
3415335201	T25S probe

Extensions and supports

6180890104	5 m CN connector cable
6180890112	10 m CN connector cable
6180890103	15 m CN connector cable
6180890105	30 m CN connector cable
6134232000	Receiver support

Adaptors for VDI and tool holder

2027885167	VDI flange for VOP40 with adjustment X/Y diam. 25 mm
2027885168	VDI flange for VOP40 with adjustment X/Y diam. 10 mm

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

D6C08600G0 - *Edition 06/2020 - Specifications are subject to modifications*

Marposs has an integrated system for Company quality, environmental and safety management, with ISO 9001, ISO 14001 and OHSAS 18001 certification.

www.marposs.com

Download the latest version of this document