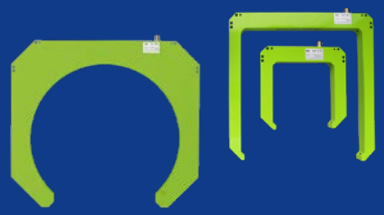


advintec® TCP precision infrared sensors
Available in three sizes (internal dimensions):
- *120 mm x 120 mm*
- *240 mm x 240 mm*
- *320 mm round*

advintec® TCP high precision laser sensors
Available in two sizes (internal dimensions):
- *120 mm x 120 mm*
- *320 mm round*

advintec® TCP XS sensor only available in 120 mm x 120 mm infrared

Advantages at a glance

- **Automatic absolute calculation of robotic tools and fixtures**
- **Ease of commissioning and use**
- **Simplified Integration**
  in the production line due to small footprint
- **Robust precision infrared sensor available in three sizes**
- **Multi-sensor-system**
  Connection of additional sensors possible
- **Network connection of the calibration system directly to the robot controller**, i.e. the calibration procedure takes place in an evaluation unit and transfers correction values to robot controller
  - High process reliability
  - No additional PC's required
  - Logging and data evaluation possible
- **Automatic correction of the trajectory**
  due to wear and tear or tool-replacement
  - no failures caused by positioning factors
  - 100 % quality assurance
- **Reduction of costs**
  - Prevents the production of defective parts
  - Reduces scrap and rework
  - Short setup times

Please scan for technical details

Watch the video

Factory Automation
www.**leoni-factory-automation**.com
@LeoniFactoryAut
LEONI Factory Automation

Business Unit Robotic Solutions
LEONI protec cable systems GmbH

Brüsseler Strasse 12
30539 Hanover, Germany
+49 511 820793-30

Hausinger Strasse 4
40764 Langenfeld, Germany
+49 2173 1010-791

An der Auehütte 10
98574 Schmalkalden, Germany
+49 3683 6505-0

06. 2020 / en

advintec® TCP

Calculation and calibration of robotic tools and fixtures in up to 6 dimensions

Applicable for all robot brands

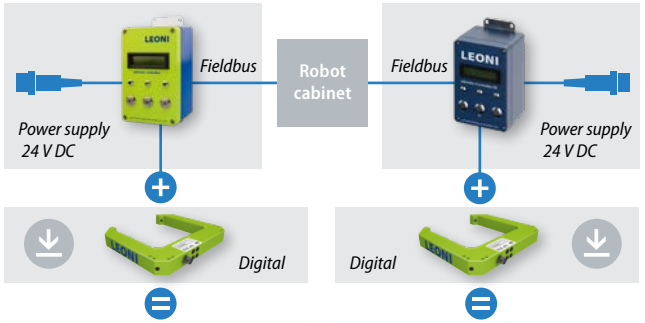
Fast and simple

NEW
advintec® TCP XS
2D / 3D best price

The Quality Connection

LEONI

advintec® TCP & advintec® TCP XS
Our calibration systems



advintec® TCP
Highest flexibility for upgrades and activation of various applications in up to 6D

advintec® TCP XS
Best price for simple 2D or 3D applications

The challenge

Continually securing the correct operating position for robotic tools

The solution

The advintec TCP tool calibration system calibrates the tool and fixture in up to six dimensions in the ongoing production process

- Electronic, precise and fast
- Simple application – low-cost solution

The tool is automatically corrected by the measured offset and thus always operates at the correct position.

Mobile calibration case for the initial calibration of unknown tools and fixtures (TCP & Base) Flexible, mobile calibration for unknown tools and fixtures is now also possible with our mobile calibration case. Ideal for use when setting up new production lines.

advintec® TCP & advintec® TCP XS

Robotic tool and fixture calibration systems


Sealing


Stud welding


Drilling / Milling


Gripper calibration


Calibration of tandem torch / double wire torch


Blade measurement

Important information:

advintec® TCP Basic 3D kit can be extended via activation codes for additional applications at a later stage.

advintec® TCP XS can not be extended by activation codes.

	2D Calibration	3D Calibration	5D Calibration	6D Gripper Calibration	Milling	Ext. x-y Mode Stud Welding	Ext. z Mode Gluing 5D Hook Nozzle	Arc Welding Tandem Torch	Cutting Tool Blades	Initial Tool Calibration
TCP XS 2D kit incl. standard IR sensor	■									
TCP XS 3D kit incl. standard IR sensor	■	■								
TCP basic 3D kit incl. standard IR sensor*	■	■								
TCP 5D kit incl. standard IR sensor	■	■	■							
TCP 6D kit Gripper incl. standard IR sensor	■	■	■	■						
TCP 5D kit Milling incl. standard IR sensor	■	■	■		■					
TCP kit Stud Welding (ext. x-y mode) incl. standard IR sensor*	■	■				■				
TCP 5D kit Gluing – Hook Nozzle incl. standard IR sensor	■	■	■				■			
TCP kit Arc Welding – Tandem Torch incl. standard IR sensor*	■	■						■		
TCP kit Cutting Tool Blades incl. standard IR sensor	■	■	■						■	
TCP kit Initial Tool Calculation – "all in" incl. standard IR sensor	■	■	■	■	■	■	■	■	■	■
TCP kit Automotive Body in White incl. standard IR sensor	■	■	■	■		■		■		
TCP kit Automotive Powertrain incl. standard IR sensor	■	■	■	■	■	■		■		
TCP kit Automotive Paint Shop incl. standard IR sensor	■	■	■				■			

** Upgrade to 5D possible via additional activation code*