



INDUCTIVE SENSORS FOR POWER CLAMP MONITORING

In all power clamping systems it is necessary to monitor "open" and "closed" positions of the gripper and clamping device continuously to ensure integrity of the production process. TURCK offers a wide range of devices perfectly adapted to this sensing task. These can be used in all industrial clamping systems (for example in the automotive industry).

The new BDS set and the proven BS block comprise stand-alone sensor modules, so that any of TURCK's sensor types can be combined with the power block.

This ensures convenient adaptation to new clamping systems: the user can be sure to have a solution that matches his specific needs. An example of such a customised system is our sensing set for base clamps from Tünkers and many other special designs.

TURCK's sensor sets consist of a power block and two stand-alone sensor modules:

- The sensor modules monitor the "open" and "closed" positions of the gripper or clamp. The most popular sensor styles for this application are our types Q5.5, Q6.5, Q9.5 and EH08/6.5. Combinations with other types can be implemented promptly because complete sensor modules are used.
- The power block is especially designed for connection of two sensor modules via a single connector. Three highly visible LEDs indicate "open" and "closed" positions and signal power availability. In order to install the cable optimally, the connector features a knurled nut and can be rotated at angles of 45 and 90 degrees without a tool.

Depending on the type and make of power clamp and the specific application requirements, TURCK's sensor sets are mounted either via plug-in units or directly to the mechanical construction. These flexible mounting possibilities help save time and money.

Convince yourself of the large variety of application specific products for clamping technology: TURCK has the right solution to your sensing problem - that's for sure.



- Power block with three highly visible LEDs for "open", "closed" and "power-on" indication
- Robust connector, rotatable at fixed angles of 0°, 45°, 90° for optimum cable routing, with a double guide mechanism and knurled nut for unfastening without an extra tool
- Unlimited combination possibilities with four different power blocks and more than forty sensor modules
- Weld-field immune versions (magnetic field resistance)
- Halogen-free materials
- Listed in nearly all automotive plants in Europe and the USA
- Perfectly matched sets for all clamping systems
- Special solutions for applications with two monitoring positions

Inductive sensors for power clamp monitoring

Power block – connection systems

The power block is designed for secure connection of two sensor modules via a single connector. We offer matching systems for all kinds of applications.



Power block BDS

New housing style

- 0° – 45° – 90°: *rotatable connector*, with a double guide mechanism, extremely robust, no tools needed for fastening
- 3 LEDs, highly visible, for "power on", "open" and "closed" indications
- Cable chamber for individual cable outlet positions

Power block BS

- Complete block rotatable, 0° – 90°, with cross holes for various connector outlets
- 3 LEDs, highly visible, for "power on", "open" and "closed" indications

Duo flange connector FSF44K

- A universal solution
- Compact housing design
- Customised lengths

Sensor modules

The right sensor module for all clamping systems: the sensor modules can be combined with any of the power blocks.



- A complete product line for monitoring of clamps and grippers, e.g. from Destaco, Tünkers, SMC, Festo, VEP, ISI
- Various housing designs, e.g. smooth barrel, rectangular and special housing styles
- Switching distances of $S_n = 2 \text{ mm}$ up to 75 mm, depending on type
- Universal styles for special solutions, not only for gripper and clamping applications

Technical data

General data

- Protection degree IP67
- Standard temperature range: -25 ... +70 °C
- Customised cable lengths

Electrical data

- 4-wire DC, pnp/npn or 2 x 2-wire AC/DC
- M12 x 1 or 1/2" connectors

Convince yourself of the capabilities of our programme. Contact us: we will be pleased to give you further information.

