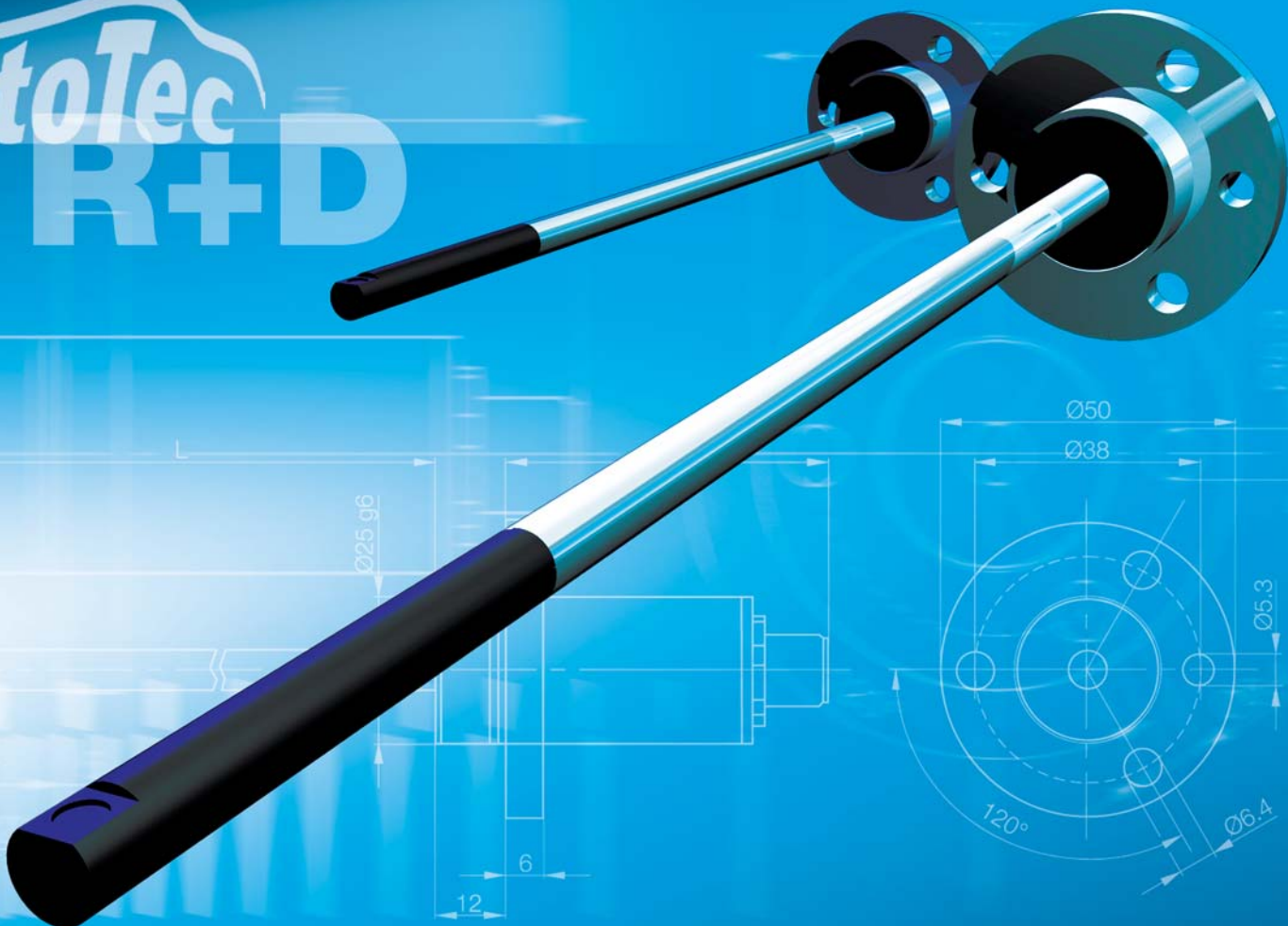


BALLUFF

Inductive Burr Probe Project

... awarded 1st prize for innovative automotive technology

AutoTec
R+D



Inductive Burr Probe Project

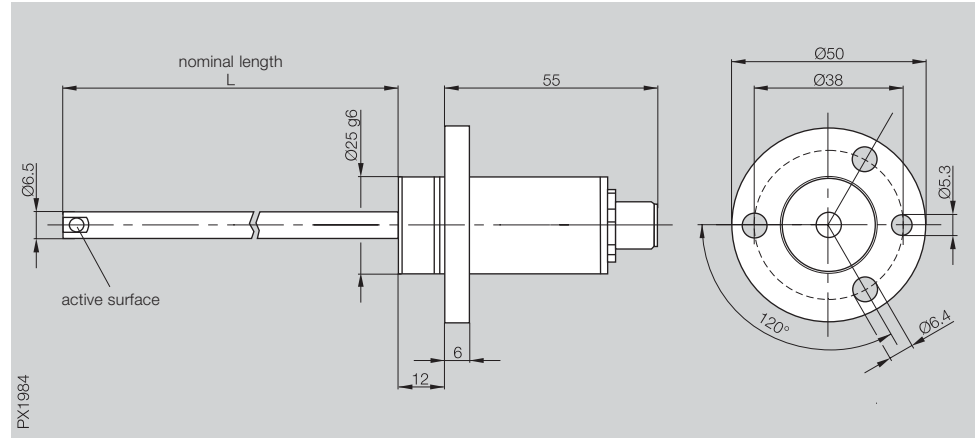
Size	Rod diameter 6.5 mm
Linear range s_i	0.1...2.1 typ.*

Applications

Burr sensing an intersecting internal bore holes (main bore greater than $\varnothing 7.5$ mm)

Geometry detection (Checking for presence of slots, bore holes, etc.)

Integrating the probe into the manufacturing process as part of a redundant quality assurance system.



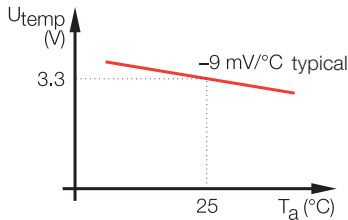
Advantages of the inductive measuring principle

- non-contact
- wear-free
- Virtually unaffected by oil and lubricants

Ordering code	BIG P-A065E-__UAF020-M10-S115-K01
Rated operational voltage U_e	24 V DC
Supply voltage U_B	24 V DC ± 10 %
Ambient temperature range T_a	+20...+50 °C
Temperature drift at S_i	± 5 %
Repeat accuracy R_{BWN}	0.2 %
Housing material	stainless steel/plastic
Material of sensing face	PA
Connection	M12, 8-pin connector

*measured to DIN EN 60947-5-2 for axial approach to the active surface using a ferromagnetic calibration plate.

Temperature output



Sensors with temperature output provide a precise measurement of temperature change.

Please indicate the nominal length in the ordering code!

- 0050 = 50 mm
- 0100 = 100 mm
- 0150 = 150 mm
- 0200 = 200 mm
- 0250 = 250 mm

Pin functions	Pin	Signal
probe	1	Burr signal (output signal 0...10 V DC)
	2	nc
	3	nc
	4	Tube potential RP (connected through)
	5	Temperature signal T_\varnothing (see diagram)
	6	+24 V (probe supply voltage)
	7	nc
	8	GND

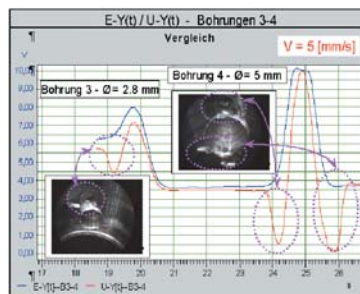
Balluff was presented with the 1st Prize for Innovative Automobile Technology.
www.autotec-aktuell.de



Research & Development 100 Award, recognizing the hundred internationally best and most innovative products of the year.



Type 1 Type 2 Type 3 Type 4 Type 5
Classification for burrs at the bore exit according to height and form



Sensor signal Source: Industrie Working Group for Burr Minimization

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