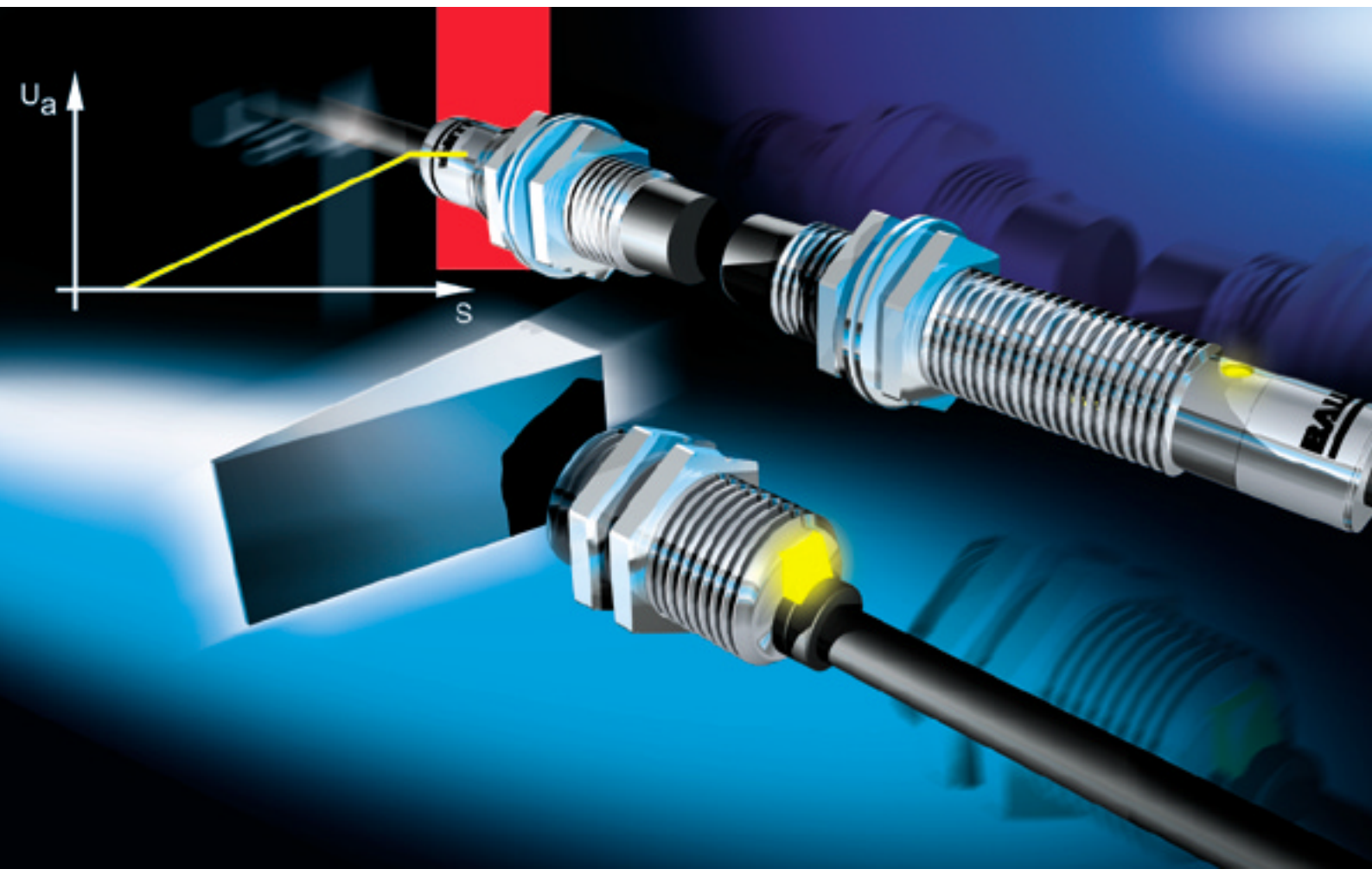


Remote Transmission
for analog sensors –
detecting
moving components



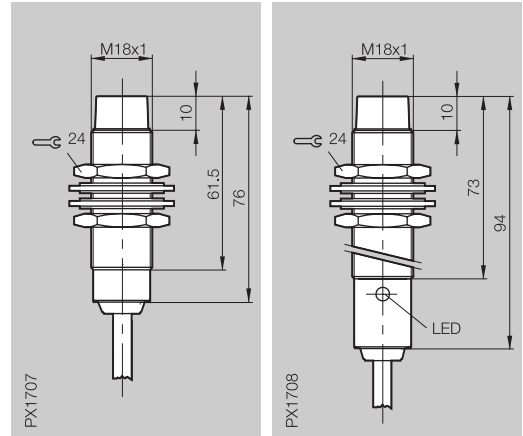
Remote – sense moving components

Not only digital switchpoints can be detected with a Remote System. Now you can also process analog signals.

The necessary energy for the analog sensor Series BAW with a voltage output of 0...10 V is provided inductively and the sensor's analog signal is sent back over the same air gap.

The use of BAW sensors for moving components is now possible, for example in monitoring the clamping distance during processing. The transmitter and output sensor built into the axis transmit the energy and information regardless of the rotational speed.

| | | |
|-----------------------|---------------------|---------------|
| Housing size | M18x1 | M18x1 |
| Type | transmitter ←.....→ | output sensor |
| Transmission distance | 2.5 mm | |
| Mounting | non-flush | non-flush |



| | | |
|--|--------------------------------|--------------------------|
| Transmitter | RNT 1803-VS10-PU-05 | |
| Output sensor | | RNE 1803A-PU-05 |
| Assured transmission distance | 0...2.5 mm | 0...2.5 mm |
| Supply voltage U_B incl. ripple | | 24 V DC $\pm 5\%$ |
| Output signal | | voltage 0...10 V DC |
| No-load supply current I_0 max. | | ≤ 150 mA |
| Short circuit protected | | yes |
| Contamination class | 3 | 3 |
| Tightening torque | 40 Nm | 40 Nm |
| Radial offset | ± 2 mm | |
| Operating current (for sensor) | ≤ 10 mA | |
| Output voltage (for sensor) | 18 ± 1.5 V DC | |
| Rated insulation voltage U_i | 75 V DC | |
| Voltage input | 0...10 V DC | |
| Load resistance R_L | ≥ 2 k Ω | |
| Max. non-linearity | $\leq \pm 0.8\%$ of U_a max. | |
| Resolution | $\leq \pm 0.05$ V DC | $\leq 0.1\%$ |
| Temperature drift | $\leq \pm 0.04\%$ / °C | |
| Response time | | ≤ 0.2 s |
| Ambient temperature range T_a | 0...+60 °C | 0...+60 °C |
| Function indication | | yes |
| Degree of protection per IEC 60529 | IP 67 | IP 67 |
| Housing material | CuZn nickel plated | CuZn nickel plated |
| Material of sensing face | ABS/PBT | ABS/PBT |
| Connection | 5 m cable, PUR | 5 m cable, PUR |
| No. of wires x conductor cross-section | 3 x 0.34 mm ² | 3 x 0.34 mm ² |

Please request the user's manual for your electronic design and layout!

Compatible analog sensors

| Ordering code | Housing size | Output signal | Linear range s _i |
|-----------------------|--------------|---------------|-----------------------------|
| BAW M08EI-UAD15B- | M8x1 | 0...10 V | 0.5 ... 1.5 mm |
| BAW M12MG2-UAC20B- | M12x1 | 0...10 V | 0.5 ... 2.0 mm |
| BAW M12MF2-UAC40F- | M12x1 | 0...10 V | 1.0 ... 4.0 mm |
| BAW M18MI-UAC50B-S04G | M18x1 | 0...10 V | 1.0 ... 5.0 mm |
| BAW M18ME-UAC50B- | M18x1 | 0...10 V | 1.0 ... 5.0 mm |
| BAW M18MG-UAC80F-S04G | M18x1 | 0...10 V | 2.0 ... 8.0 mm |
| BAW M30ME-UAC10B-S04G | M30x1.5 | 0...10 V | 2.0 ... 10.0 mm |

For more sensors see main catalog
"The Sensor Program"
on CD-ROM or online!

