

## Product information 11/2011

### **New ORION generation: Impressive image quality, mega wide angle, 10x greater light sensitivity, outstanding depth of focus.**

*The IBAK product portfolio has been expanded to incorporate two new ORION models: The ORION 2.7 and ORION L 2.6.*

These products quite literally bring with them entirely new perspectives. Due to their increased light sensitivity and the improved image quality, an even greater spectrum of inspection requirements can now be met with a

single camera. The inspection videos are generated in a quality that is unique in the market. Furthermore, the combination of a greater opening angle and the zoom function scores additional points in user tests.

As with the previous ORION generation, it is also possible to obtain the ORION 2.7 and the ORION L 2.6 in an explosion-proof version.

#### **What is new?**

- 10x greater light sensitivity than the conventional ORION cameras
- => this facilitates inspections up to 600 mm pipes without auxiliary lighting
- Larger opening angle (90°)
- With 3-times digital zoom
- Improved image quality (560 lines resolution PAL)



New  
**IBAK ORION**  
generation

Owners of an IBAK system are able to connect the new ORION models to their existing systems (BOP, BK 3.5, BS 3.5, BS 5, BS 7). It is merely necessary to implement a firmware update, which can be carried out at any IBAK branch or service point.

## Diameter measurement with MiniLite

Using the IBAK MiniLite in combination with an ORION 2.5 or 2.7, it is possible to carry out a diameter measurement fully automatically with just the touch of a button.

This option can be additionally purchased when buying the new MiniLite - and upgrading the control panel is also possible.



| Technical system data       | ORION 2.7  | ORION L 2.6   |
|-----------------------------|--|---|
| Range of application        | from DN 100 upwards                                      | from DN 100 upwards                                     |
| Dimensions                  | Ø 60 mm / length 100 mm                                  | Ø 60 mm / length 100 mm (without guide unit)            |
| Weight                      | 500 g  | 500 g   |
| Push operation              | yes  | yes   |
| Camera tractor operation    | yes  | yes   |
| Upright image               | yes  | yes   |
| Zoom                        | 3-times digital  | 3-times digital   |
| F (aperture)                | 3,5  | 3,5   |
| f (focal width) (mm)        | 3,0  | 3,0   |
| Lighting                    | 40 white LEDs, controllable                              | 40 white LEDs, controllable                             |
| Light sensitivity (lux)     | 0.1 lux (F 2.0)  | 0.1 lux (F 2.0)   |
| Luminous intensity (lumen)  | 90 lm  | 90 lm   |
| Protection class            | IP 68  | IP 68   |
| Pressure monitoring         | yes <sup>1)</sup>  | yes <sup>1)</sup>                                       |
| Aperture functionality      | Fixed aperture, electronic shutter remote control        | Fixed aperture, electronic shutter remote control       |
| Panning range               | +/-120°  | +/-45° <sup>2)</sup> , +120°/-45° <sup>3)</sup>         |
| Opening angle               | approx. 90° diagonal                                     | approx. 90° diagonal                                    |
| Field of vision             | +/-155°  | +155°/-75° <sup>2)</sup> , +/-155° <sup>3)</sup>        |
| Angle of rotation           | endless  | endless   |
| Focus function/area         | manual, 1 cm – ∞, remote controlled in endless operation | manual 1 cm – ∞, remote controlled in endless operation |
| Sensor (inches)             | 1/4"   | 1/4"  |
| TV standard                 | NTSC or PAL  | NTSC or PAL   |
| Image resolution horizontal | 570 Lines NTSC<br>560 Lines PAL                          | 570 Lines NTSC<br>560 Lines PAL                         |
| Integrated laser            | yes  | no  |
| Integrated transmitter      | yes  | yes   |
| Explosion-proof             | optional   | optional  |

### Can be combined with

|                        |   |   |
|------------------------|---|---|
| IBAK camera tractors   | KRA 65, KRA 75, KRA 85, T66, T76, T86                     | KRA 65, KRA 75, KRA 85, T66, T76, T86                     |
| IBAK coilers/winches   | HSP 40, HSP 60, KT 220, KW LISY Sync., MiniLite, MobiLite | HSP 40, HSP 60, KT 220, KW LISY Sync., MiniLite, MobiLite |
| IBAK operating systems | BOP, BK3.5, BS 3.5, BS5, BS7                              | BOP, BK3.5, BS 3.5, BS5, BS7                              |

### Accessories (optional):

|                  |                |             |
|------------------|----------------|-------------|
| Pipe guidance    | from DN 150    | from DN 150 |
| Additional light | ZSW 65, ZSW 75 |             |



# IBAK



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1) LCD display & acoustic signal in the operating unit  
2) with rod, dependent on pipe diameter  
3) without rod and bracket, on the camera tractor