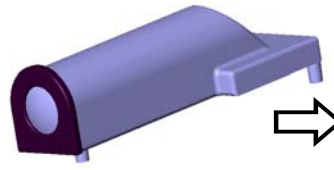


OPTI-KEN – Services in Technical Optics

Focus: Injection Moulded Polymer Optics

- Cost-efficient in high volumes
- Mechanical features facilitate assembly
- Reduced number of components in an assembly
- Operating temperatures possible up to ~190°C
- Useful in the spectral range of ~0.3µm...1µm
- Reduced weight compared with glass optics
- Can be metallized for mirrors and AR coated
- Integration of aspheric and diffractive surfaces



injection moulded imaging system



OCR reader for telebanking

Fields of Application of Polymer Optics

- Opto-electronic sensor systems
- OCR and barcode readers
- Position encoders
- Colour meters
- Automotive optical sensors
- Lenses for micro cameras
- Pick-up lenses
- Light grids and light curtains
- Light guides
- Beam shaping elements for LEDs and LDs
- ...and many more

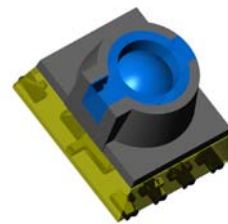


injection moulded imaging system



Digitalizer™ absolute shaft encoder

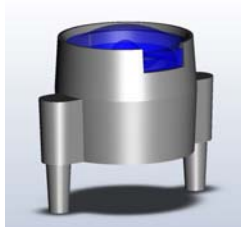
Baumer electric



injection moulded imaging system upon dedicated sensor clear mould package

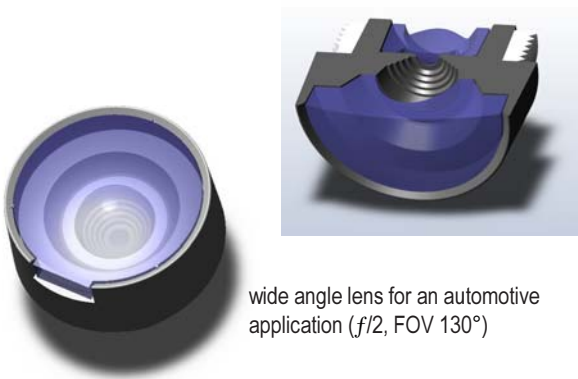


InVISION™ water meter with OCR system for remote readout



lens with housing for direct PCB assembly

AMCO



wide angle lens for an automotive application ($f/2$, FOV 130°)

OPTI-KEN Services

- Consulting in Technical Optics
- Consulting in Optical Metrology
- Feasibility Studies
- Sequential and Non-Sequential Raytracing
- Optical Design Services
 - Imaging systems
 - Illumination systems
 - Micro lens arrays
 - Injection moulded polymer optics:
 - System design, simulation, tolerancing,
 - 3-D CAD, optimization of component shape
 - for best optical and moulding properties

v040719