

HEINE QUALITY
MADE IN GERMANY



∴ HEINE 4/4,5 MM ENDOSCOPES
Rigid F.O. Endoscopes

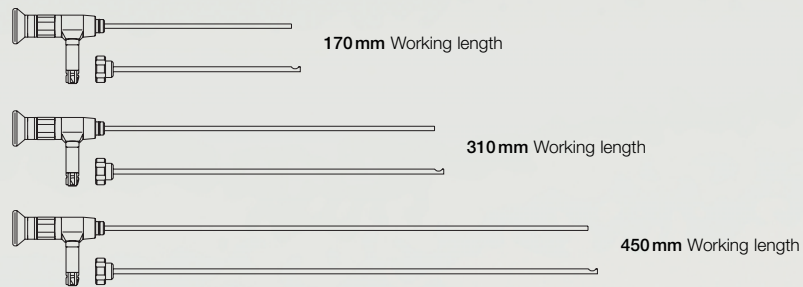


∴ HEINE 4/4,5 MM ENDOSCOPES

Rigid F.O. Endoscopes

The small diameter, multi-coated, high-resolution, achromatic optics produce excellent-quality images. The smooth, adjustable eyepiece and the 360° rotating mirror probe produce highly-detailed images of details in cavities. The range of applications is almost infinite with heat-resistant and liquid-proof optics (up to 120°).





APPLICATIONS

In automobile workshops for all conventional engines including modern diesels with direct injection. Engines, Gearboxes, Differentials, Clutches, Cavities and many other areas.

Ideal for locksmiths for opening safes as only a 4.8mm opening is necessary.

ADVANTAGES OF USING ENDOSCOPES

Rapid diagnosis without dismantling, improved planning for work procedures and personnel. Cost savings through increased efficiency. Immediate estimates of work required. Reduced down-time in workshop. Ordering of spare parts before dismantling.

A CHOICE OF THREE DIFFERENT POWER SOURCES

A choice of different power sources provides an ideal solution for either mobile or stationary use. All combinations of power sources and endoscopes have one thing in common: Any danger of fire from a short-circuit in the bulb is eliminated because the bulb is not located in the tip of the endoscope .

3.5V-version:

Battery handle with 3 LR14 dry batteries or rechargeable handles with NiMH or Li-ion rechargeable batteries (AV-adaptor with 3.5V bulb required).

12V-version:

Connecting cable for cigarette lighter socket (5m) or Accubox I with brightness control and Accubox II with on/off switch (AV-Adaptor 12V bulb required).

220V-version:

F.O. projector HK 7000 (150W) and F.O. light guide.



[01]



[02]

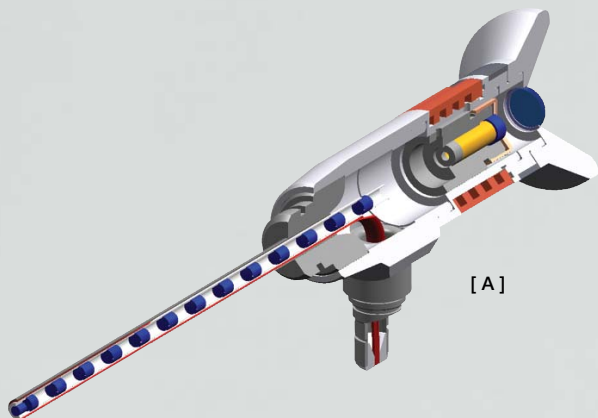
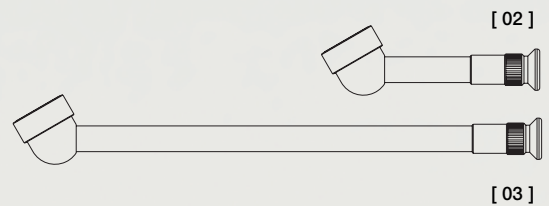
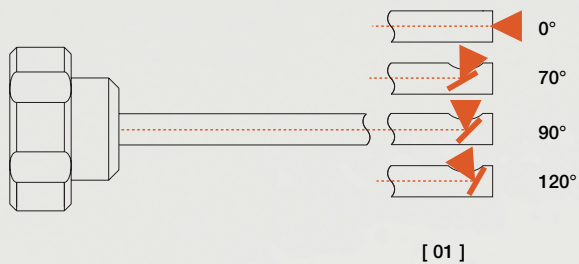


[03]



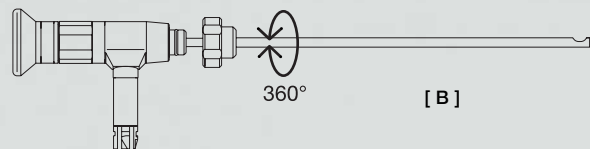
- [01] Gearbox damage with evidence of wear
- [02] Valves: Check condition without dismantling
- [03] Piston crown





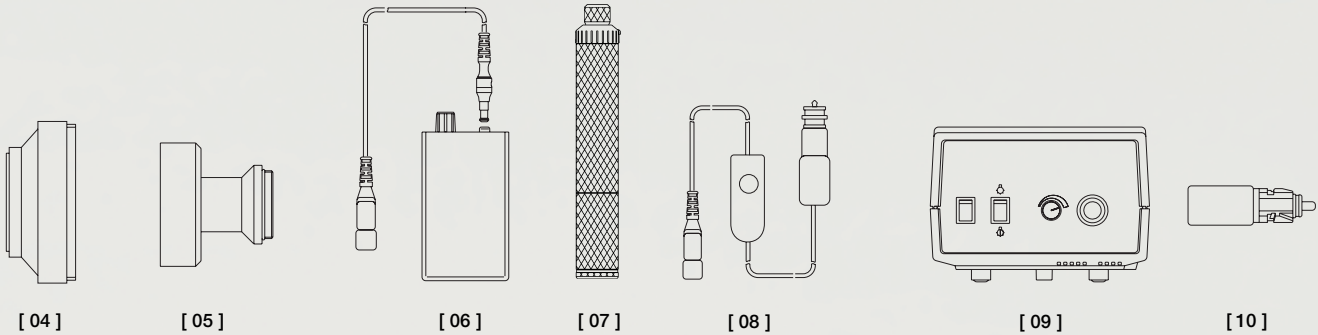
SPECIAL FEATURES

- ∴ **Brilliant images.**
Through the use of specially-sealed, high-resolution achromatic lenses.
- ∴ **Sharp, clear images.**
Through the infinite and smooth focal control of the eyepiece.
- ∴ **Angle of view: 40°**
- ∴ **Complete overview: 0° viewing direction.**
Viewing direction with mirror tubes 70°, 90° or 120°. Rotate mirror tubes for a 360° view.
- ∴ **View into the smallest openings (down to 4.8mm diameter).**
Easy viewing through glow plug, injector and spark plug openings.
- ∴ **Compatibility.**
Currently-available HEINE battery packs, camera adaptors and Angled Attachments fit all the new generation of HEINE F.O. Endoscopes. HEINE F.O. Endoscopes can be used with most other manufacturers' projectors when fitted with an optional adaptor.



- [A] Sharp and clear images through the infinite and smooth focal control of the eyepiece
- [B] Rotate mirror tubes for a 360° view

- [01] Viewing direction protective tube 0° and mirror tube 70°/90°/120°
- [02] Angled Attachment 120°/120mm
- [03] Angled Attachment 120°/360mm
- [04] Camera Adaptor
- [05] CCD Camera Adaptor
- [06] Accubox I with connecting cord
- [07] Battery handle 3.5V
- [08] Connecting cable for cigarette lighter socket (5m)
- [09] HK 7000 F.O. Projector
- [10] AV Adaptor



[ORDERING INFORMATION]

4/4.5 mm F.O. Endoscopes

12V

Endoscope, dia. 4 mm, incl. protective tube dia. 4.5mm, working length 170mm without bulb	T-00.26.409
Mirror tube, dia. 4.5mm, length 170mm, 70° viewing direction	T-00.26.414
Mirror tube, dia. 4.5mm, length 170mm, 90° viewing direction	T-00.26.415
Mirror tube, dia. 4.5mm, length 170mm, 120° viewing direction	T-00.26.416
Endoscope, dia. 4 mm, incl. protective tube dia. 4.5mm, working length 310mm without bulb	T-00.26.419
Mirror tube, dia. 4.5mm, length 310mm, 70° viewing direction	T-00.26.424
Mirror tube, dia. 4.5mm, length 310mm, 90° viewing direction	T-00.26.425
Mirror tube, dia. 4.5mm, length 310mm, 120° viewing direction	T-00.26.426
Endoscope, dia. 4 mm, incl. protective tube dia. 4.5mm, working length 450mm without bulb	T-00.26.429
Mirror tube, dia. 4.5mm, length 450mm, 70° viewing direction	T-00.26.434
Mirror tube, dia. 4.5mm, length 450mm, 90° viewing direction	T-00.26.435
Mirror tube, dia. 4.5mm, length 450mm, 120° viewing direction	T-00.26.436
XHL Xenon Halogen spare bulb, 3.5 V	T-02.88.078
XHL Xenon Halogen spare bulb, 12 V	T-05.88.103

Information about Adaptors for Endoscopes/Projectors and Fiber Optic light guides please see HEINE Master Catalogue Technical Products.

Accessories

Angled Attachment, 120°/120 mm	T-00.26.090
Angled Attachment, 120°/360 mm	T-00.26.093
Rubber eyepiece	T-00.26.175
Camera Adaptor for 49 mm filter thread	T-00.26.176
Camera Adaptor for 52 mm filter thread	T-00.26.177
Camera Adaptor for 55 mm filter thread	T-00.26.178
Camera Adaptor Nikon Coolpix/Endoscope	T-00.26.186
CCD Camera Adaptor F=35 mm	T-00.26.190
AV Adaptor incl. 3.5V XHL Xenon Halogen bulb	T-02.26.402
AV Adaptor incl. 12V XHL Xenon Halogen bulb	T-05.26.402
BETA battery handle (3.5V) for 3 alkali-manganese dry batteries LR14 (batteries not included)	T-02.25.369
Connecting cable for cigarette lighter socket (12V)	T-00.99.246
Accubox I (12V) with mains transformer, without connecting cord	T-05.99.629
Connecting cord between Accubox and Techno-Endoscope, with cinch- and HEINE-automatic plug	T-00.99.241
Fiber Optic light guide	T-03.26.403
F.O. Projector HK 7000 (150W)	T-96.15.121

4/4.5 mm Endoskop-Sets

12V

Endoscope-Set 310/4.5 MW/Z, contents: Endoscope dia. 4.5/310mm working length including protective tube, AV Adaptor incl. 12V XHL Xenon Halogen spare bulb. 310mm Mirror tubes 70° und 120°, Angled Attachment 120°/120mm, connecting cable for cigarette light socket (5m), rubber eyepiece, 12V XHL Xenon Halogen spare bulb, storage and transport case	T-546.50.246
Endoscope-Set 450/4.5 MW/Z, contents as T-546.50.246, however with Endoscope dia. 4.5/450mm working length with protective tube and 450mm mirror tubes 70° und 120°	T-547.50.246

A company makes history and gives a name to outstanding product quality: HEINE. Founded in 1946, family owned, rich in tradition and today international market leader in a complete range of diagnostic instruments. HEINE products meet all international standards (ISO/CE) and represent the leading edge in precision and ergonomic design. Ongoing dedication to research and development has created a solid and diverse technology base for continued quality and product leadership. Over 500 employees worldwide contribute to this success.

HEINE QUALITY
MADE IN GERMANY



We reserve the right to change specification without notice.

Your distributor

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