

HEINE mirror probes and viewing probes for optical diagnosis in confined spaces:

**Mirror probes:**

HEINE mirror probes are used for examination through openings down to 9 mm in diameter. They are well established for examination in the industrial environment and allow detailed examination under magnification.

**Modular construction:**

HEINE mirror probes can be custom-made to suit individual needs. The basic module is the probe head, to which various probes fitted with XHL Xenon Halogen bulbs can be attached. Detachable mirrors can be so attached to the probe, that they can be rotated in any direction without the risk of their becoming loose. Magnification is provided by a high-quality focusable prism telescope or a compact swivel loupe.

**Viewing probes:**

The mini 2000 F.O. and BETA 200 F.O. viewing probes are designed for optical examination through openings down to 5 mm in diameter. The powerful XHL Xenon Halogen bulbs and the co-axial illumination reveal details of even the smallest objects in cavities or bores.





Light and mirror probes



Specification

∴ Working length:	100mm to 1000mm
∴ Direction of view:	90°
∴ Mirror diameter:	8mm to 30mm



Light and mirror probes for XHL Xenon Halogen illumination 3.5 V

Probe head	T-000.25.100
Probe dia. 5mm, 100mm long, with 3.5V bulb	T-002.25.120
same, 200mm long	T-002.25.121
same, 300mm long	T-002.25.122
same, 400mm long	T-002.25.123
same, 500mm long	T-002.25.124
Extension probe, 500mm long, dia. 8mm	T-000.25.129
Flexible light probe, 500mm long	T-002.25.130



Probe head



Probe dia. 5mm



Flexible light probe



Detachable steel mirror



Detachable glass mirror



Focusable prism telescope

Mirrors

Detachable mirrors with secure bayonet fitting, can be combined with all probes

Detachable steel mirror, dia. 8mm	T-000.25.300
same, dia. 12mm	T-000.25.301
Detachable glass mirror, dia. 16mm	T-000.25.305
same, dia. 20mm	T-000.25.306
same, dia. 25mm	T-000.25.307
same, dia. 30mm	T-000.25.308

Focusable prism telescope 3 – 5.5x (for all probes) T-000.25.350

XHL Xenon Halogen spare bulb 3.5V T-002.88.066

T-518 Inspection Set J

Consisting of:

Probe head, 5 probes 100 – 500 mm long, swivel loupe 2x, prism telescope, 2 detachable steel mirrors, dia. 8 and 12 mm, 4 detachable glass mirrors, dia. 16 to 30mm, XHL Xenon Halogen spare bulb 3.5V, in transparent pack with BETA Battery handle 3.5V

T-518.20.123



Power and light sources

∴ BETA Battery handle with 3 LR14 dry batteries	3.5V
∴ Rechargeable handles NiMH or Li-ion	

## Mirror probe with remote adjustment of mirror



### Specification

∴ Working length:	400mm
∴ Direction of view:	30° to 120°
∴ Mirror diameter:	20mm to 30mm

<b>Mirror probe with remote adjustment of mirror</b>	3.5V
Mirror probe with fixed head and remotely-adjustable mirror, dia. 5 mm, length 400mm, with 3.5V bulb, without handle	<b>T-002.25.200</b>
Screw-fitting glass mirror, dia. 20mm	<b>T-000.25.201</b>
same, dia. 25mm	<b>T-000.25.202</b>
same, dia. 30mm	<b>T-000.25.203</b>
Focusable prism telescope 3 – 5.5 x (for all probes)	<b>T-000.25.350</b>
XHL Xenon Halogen Spare Bulb 3.5V	<b>T-002.88.066</b>

### T-516 Inspektions-Set G

Consisting of:

Mirror probe with remote adjustment of mirror, length 400mm, 3 screw-fitting glass mirrors, dia. 20 to 30mm, Prism telescope, XHL Xenon Halogen spare bulb 3.5V, in transparent pack with BETA Battery handle 3.5V

**T-516.20.123**



### Power and light sources

∴ BETA Battery handle with 3 LR14 dry batteries	<b>3.5V</b>
∴ Rechargeable handles NiMH or Li-ion	



### Straight inspection mirror for 3.5V



Straight inspection mirror with plane mirror

#### Straight inspection mirror

with automatic connector for all 3.5 V handles. A screw-fitting is provided for either a plane or a concave mirror which provides 2-3 x magnification, depending on the distance to the object.

3.5 V

Straight mirror-holder, 100mm long, with 3.5V bulb

T-002.12.109

Straight inspection mirror, complete with bulb and plane mirror, dia. 20mm

T-002.12.101

Screw fitting mirror, dia. 20mm, plane same, concave (magnifying)

T-000.12.103

T-000.12.104

XHL Xenon Halogen spare bulb 3.5V

T-002.88.063

#### Power and light sources

- ✦ BETA Battery handle with 3 LR14 dry batteries
- ✦ Rechargeable handles NiMH or Li-ion

3.5V

### mini light and mirror probes 2.5V

The **mini light and mirror probe for the mini 2000 handle** is a particularly light and compact instrument, which is instantly ready for use anywhere.

Compact, handy instruments for the toolbag.



#### mini light and mirror probe

2.5V

mini probe, dia. 5mm, 125mm long, complete with mini 2000 battery handle (with batteries)

T-001.25.142

mini probe with 2.5V bulb, without handle

T-001.25.140

mini 2000 battery handle (with batteries)

T-001.79.009

XHL Xenon Halogen spare bulb 2.5V

T-001.88.057

Mirrors see page 18.

#### Inspection Set D

Consisting of:

mini probe with battery handle mini 2000 (with batteries), detachable mirrors T-000.25.305 and T-000.25.307, XHL Xenon Halogen spare bulb T-001.88.057, in transparent pack

T-513.10.052



## Viewing probe HEINE mini 2000® F.O.



The mini 2000 F.O. Viewing probe, manufactured from robust polyamid, is a handy instrument which is ideal for the pocket with a weight of only 100g. With a direction of view of 0°, the object inspected may be at a distance of up to 45mm.

**Magnification lens for 0° and 90°: 4 to 5x magnification.**

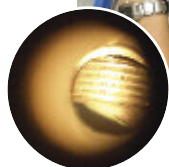
<b>Viewing probe mini 2000 F.O.</b>	2.5V
Viewing probe mini 2000 F.O. with bulb 2.5V, without handle	<b>T-001.70.105</b>
Viewing probe mini 2000 F.O. on mini 2000 battery handle	<b>T-001.70.109</b>
Viewing probe mini 2000 F.O. with mirror probe 90°, Ø 5/25 mm on mini 2000 battery handle	<b>T-001.24.222</b>
Viewing probe mini 2000 F.O. with mirror probe 90°, Ø 5/25 mm and 2.5V spare bulb, without handle	<b>T-001.24.220</b>
XHL Xenon Halogen spare bulb 2.5V	<b>T-001.88.037</b>

### Inspection Set C

Consisting of:

mini 2000 F.O. viewing probe complete with battery handle mini 2000  
90° mirror probes (25 mm and 30 mm),  
XHL Xenon Halogen spare bulb, in transparent pack

**T-512.10.052**





Viewing probe HEINE BETA 200® F.O.

For apertures from 5 mm diameter. Direction of view 0° and 90°



This robust metal head with its 3.5V XHL Xenon Halogen bulb gives a remarkably bright, white light when used with a 3.5 handle. The brightness can be adjusted by a rheostat control to suit the application. The instrument is especially well-suited for workshop use but is also portable. With 0° direction of view, the object distance is up to 70mm max.

Magnification lens for 0° and 90° direction of view: 3 to 4x magnification.

Viewing probe BETA 200 F.O.	3.5V
BETA 200 F.O. with 3.5V bulb and magnifying lens	T-002.24.250
as above, with mirror probes, 30mm and 50mm	T-002.24.251
XHL Xenon Halogen spare bulb 3.5V	T-002.88.078

Inspection Set E

Consisting of: viewing probe BETA 200 F.O., 3 mirror probes with 90° direction of view (working length 25 mm, 30 mm and 50 mm), XHL Xenon Halogen spare bulb and BETA Battery handle 3.5V

T-524.20.123



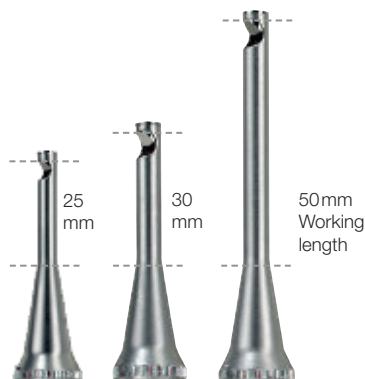
Power and light sources

- BETA Battery handle with 3 LR14 dry batteries
- Rechargeable handles NiMH or Li-ion

3,5V



Accessories for viewing probes



A range of three mirror probes provides a 90° direction of view. They are simply attached to the far end of the instrument.

Mirror probes

Mirror probe 90° – dia. 5 mm, working length 25 mm	T-000.24.240
Mirror probe 90° – dia. 6 mm, working length 30 mm	T-000.24.241
Mirror probe 90° – dia. 6 mm, working length 50 mm (BETA 200 only)	T-000.24.242