



Inspection & Locating

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Inspection & Locating

System Overview Video Inspection

ROSCOPE® 1000

Modular system for inspecting pipes and hollow spaces

KEY FEATURES

- Photos and videos can be easily stored on the SD card
- Various modules for different pipe dimensions and cable lengths
- Camera head and base unit are waterproof in accordance with IP 68 / 65
- Module TEC 1000 and Module Pipe 25/16 have self-leveling pictures
- Module ROLOC PLUS for precise locating of the camera head
- Headset connection for adding audio commentary to the inspection



Which ROSCOPE® system for which application area?



1 **Module TEC 1000**
Cable length / range: 0.9 m
Working range: hollow spaces
Page 196



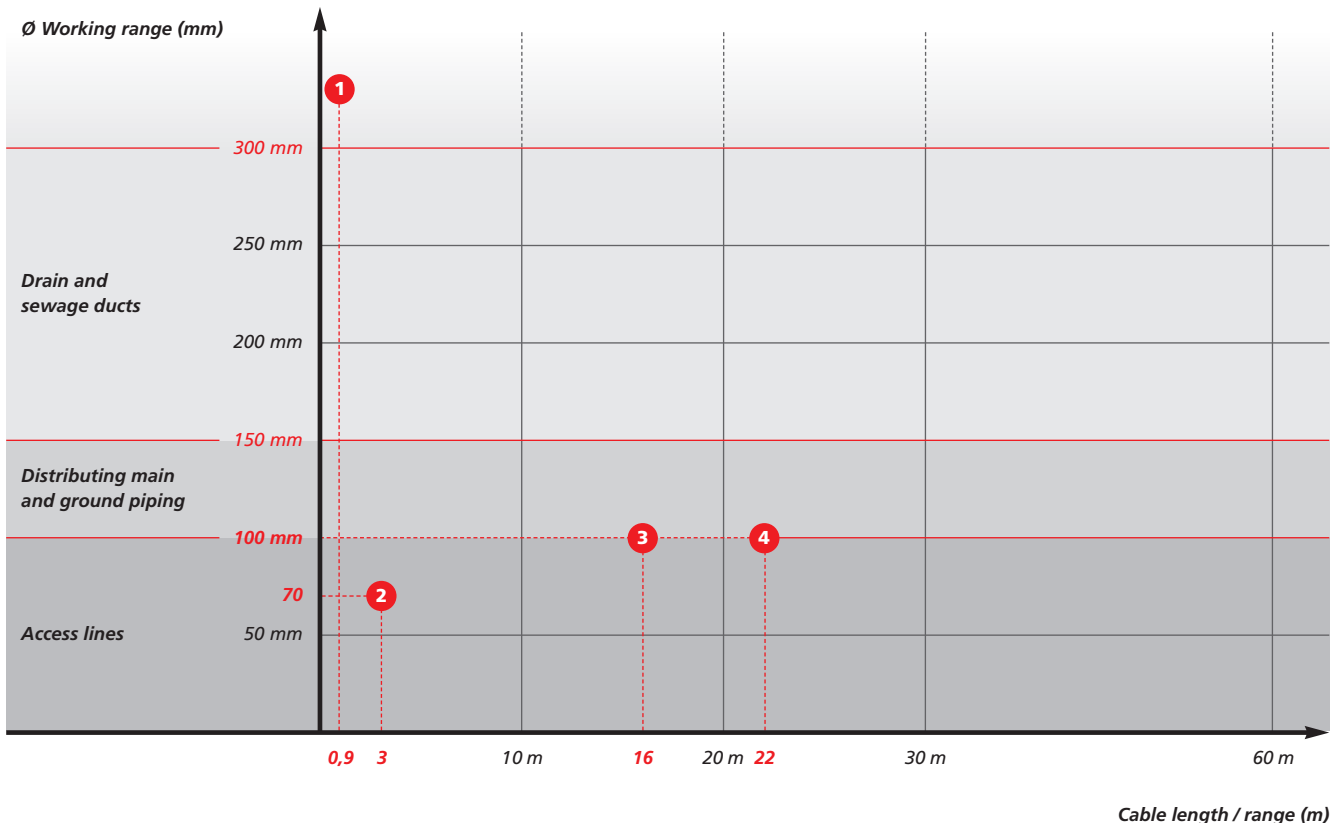
2 **Module Pipe 20/3**
Cable length / range: 3 m
Working range: up to Ø 70 mm



3 **Module Pipe 25/16**
Cable length / range: 16 m
Working range: up to Ø 100 mm
Page 197



4 **Module Pipe 25/22**
Cable length / range: 22m
Working range: up to Ø 100 mm
Page 196



ROCAM®

Camera for the inspection of pipes

KEY FEATURES

- Professional documentation with the logging software and data recording
- Self-leveling picture
- Recording of videos and photos
- Can be used immediately, no mounting of the reel is necessary
- Fits various pipe diameters
- ROCAM® 3 Multimedia with an integrated transmitter for the precise locating of the camera head



Which ROCAM® for which application area?



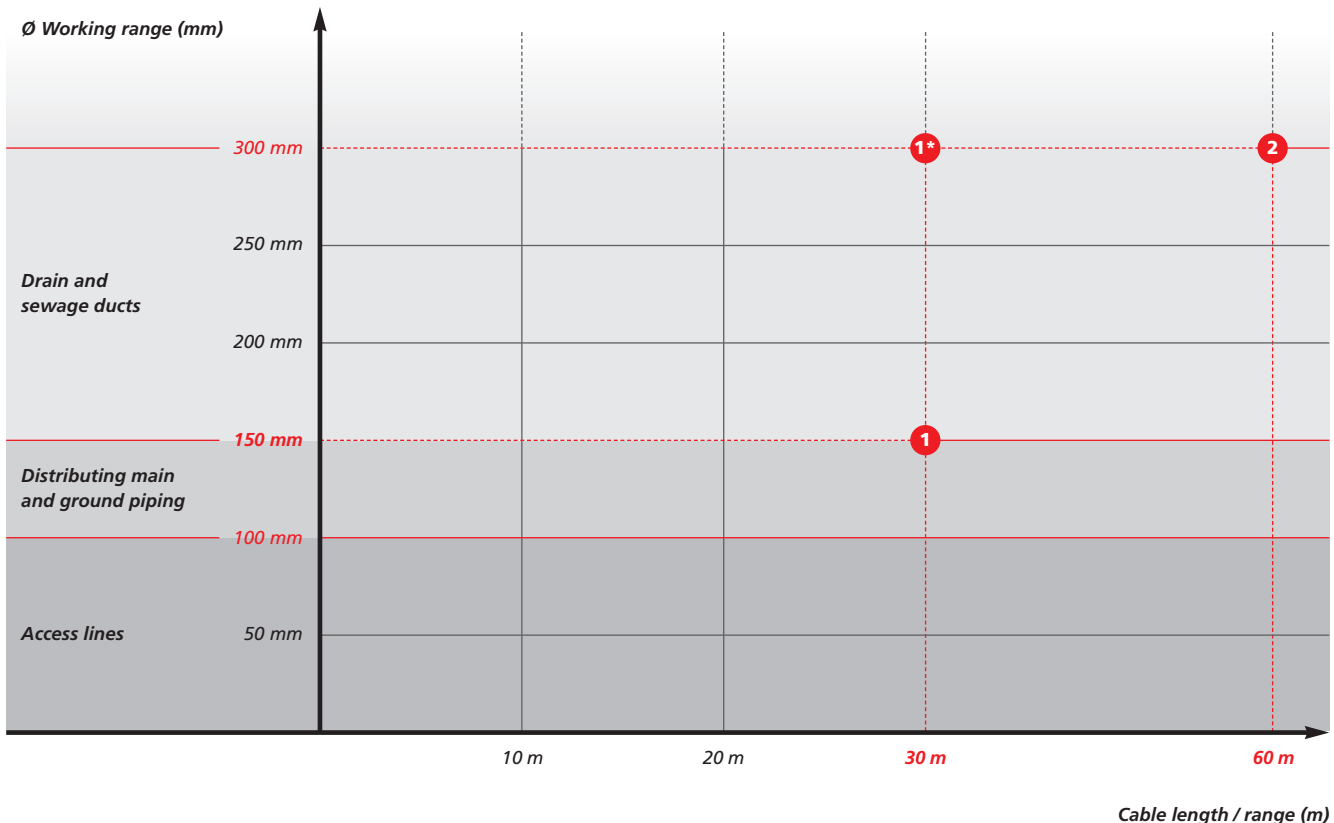
- 1** **ROCAM® 3 Multimedia**
Cable length / range: 30 m
Working range: up to Ø 150 mm
(*Can be optionally used with the SL-40 camera head up to Ø 300 mm)
Page 200



- 2** **ROCAM® Plus**
Cable length / range: 60 m
Working range: up to Ø 300 mm
Page 202



ROCAM® 3 Multimedia with removable control unit



Inspection & Locating

Video Inspection

ROSCOPE® 1000

The MULTIFUNCTION technology unites inspection technology and locating technology in one unit



Product Profile

APPLICATION AREA

The ROSCOPE® 1000 System covers almost all inspection techniques within living and working spaces. The ROSCOPE® 1000 can also be used with the ROLOC PLUS module for locating piping and camera head systems

KEY FEATURES

- The ROSCOPE® system is very handy and highly versatile
- Numerous inspections can be documented professionally and with multimedia

TECHNICAL DATA

Display: 3.5" TFT-LCD colour display
Video format: AVI
Picture format: JPEG, 720 x 480 pixels
Connection: Mini-USB, AV-Out, SD-card slot, headset plug
Power supply: Li-ion battery 3.7 V / 4.2 Ah

Versatile and user-friendly!

3.5" TFT-LCD colour display

720 x 480 pixel resolution (JPEG)

Ergonomically arranged function keys

Single handed use without problem

Slip-free, ergonomical handle

For comfortable and effort saving operation - even over long periods of time

Protection against splash water as per IP 65

For safe use in wet surroundings

5-pin connection

Previous ROTHENBERGER modules can be used

Can be switched to black and white

Improves contrast by difficult lighting conditions

SD-card slot

Even more storage space for your recordings

Headset connection

Personal, explanatory audio commentary can be added

Powerful Li-ion battery

For an extra long battery life of 3-5 hours



Accessories



Model		No.
Headset	1	69616
Li-ion battery	1	69618
Charger	1	69619

For Inspection: MULTIVIEW

Modular concept for visual inspection of pipes, hollow spaces and pipes

KEY FEATURES

5 different modules for the ROSCOPE® 1000 base unit

- With the Module Micro 5.5/1 you have access to the tightest spaces, for example in engine compartments
- Hollow space inspection with self-leveling picture with the Module TEC 1000
- Inspection of pipes up to \varnothing 100 with Module Pipe 25/16 or 25/22
- Waterproof pipe module for pipe inspection in 90° bends from \varnothing 40

Hollow spaces

Module Micro 5.5/1



Module TEC 1000



Pipes

Module TEC 1000 (extended)



Module Pipe 20/3



Module Pipe 25/16



Module Pipe 25/22



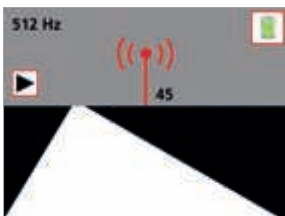
For Locating: ROLOC PLUS

Positioning module for sondes and pipelines

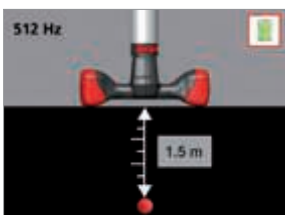
KEY FEATURES

- The unit guides through the locating process reliably
- Minimises the effort needed for evacuations or locating damaged areas on the pipe with pin-point locating of the camera head
- Pin-point locating of the specific location with the depth measurement function

Target is right of the running direction. Correction of your direction to the right is necessary



Camera head is 1.5 m deep



Inspection & Locating

Video Inspection

Self-leveling camera head



No. 69615

Inspection of hollow spaces



Camera head with high-performance LEDs



ROSCOPE® 1000 Set TEC 1000

High-performance camera for the inspection of hollow spaces and hard to reach areas

Product Profile

KEY FEATURES

- Self-leveling camera head
- Waterproof camera head as per IP 68
- Recording and playback of the inspection on video (AVI) or photo (JPEG)
- Extension of the goose neck up to a maximum of 9 m

TECHNICAL DATA

Display:	3.5" TFT LCD colour display (technical data about basic unit available on page 194)
Camera head:	Ø 17 mm, self-leveling and waterproof, with 4 LED lights
Brightness:	100 LUX (0.5 m)
Cable length:	0.9 m
Power supply:	Li-ion battery 3.7 V / 4.2 Ah
Weight:	0.9 kg

Scope of delivery ROSCOPE® 1000 set TEC 1000 (No. 69600): ROSCOPE® 1000 basic unit, Module TEC 1000, battery, charger, plastic carrying case

Model		No.
ROSCOPE® 1000 Set TEC 1000	1	69600
Module TEC 1000	1	69601
Extension TEC 1.8 m	1	1500000010
Set (hook, magnet, mirror)	1	69615
Module Pipe 20/3	1	69385
Module Micro 5.5/1	1	69376

7



22 m long cable!



Inspection of rain downpipes



Inspection of rain drainage pipes



ROSCOPE® 1000 Set Pipe 25/22

High-performance camera for the inspection of pipes from Ø 40 up to 100 mm. With the Module TEC 1000

Product Profile

KEY FEATURES

- Recording and playback of the inspection on video (AVI) or photo (JPEG)
- Extremely flexible camera head for 90° bends starting from Ø 40 mm

TECHNICAL DATA

Display:	3.5" TFT LCD colour display (technical data about basic unit available on page 194)
Camera head:	Ø 25 mm, waterproof, with 8 LED lights
Brightness:	100 LUX (0.5 m)
Cable length:	22 m
Cable diameter:	5.5 mm
Power supply:	Li-ion battery 3.7 V / 4.2 Ah
Weight:	3.1 kg

Scope of delivery ROSCOPE® 1000 set Pipe 25/22 (No. 1000000009): ROSCOPE® 1000 basic unit, Module Pipe 25/22, Module TEC 1000, battery, charger, plastic carrying case

Model		No.
ROSCOPE® 1000 Set Pipe 25/22 + Module TEC	1	1000000009
Module Pipe 25/22	1	69603
Guide skid for Module Pipe 25/16 and 25/22	1	74629

ROSCOPE® 1000 Set Pipe 25/16

High-performance camera for the inspection of pipes from Ø 40 up to 100 mm. With an integrated transmitter for the precise locating of the camera head. With Module TEC 1000



Product Profile

KEY FEATURES

- Recording and playback of the inspection on video (AVI) or photo (JPEG)
- Extremely flexible camera head for 90° bends starting from Ø 40 mm
- Can be used with guide skid up to Ø 100 mm
- Self-leveling picture
- Integrated transmitter for the precise locating of the camera head
- ROSCOPE® 1000 basic unit can also be used as control unit for the ROLOC PLUS locating module

TECHNICAL DATA

Display:	3.5" TFT LCD colour display (technical data about basic unit available on page 194)
Camera head:	Ø 25 mm, self-leveling and waterproof, with 4 extra bright LED lights
Brightness:	125 LUX (0.5 m)
Cable length:	16 m
Cable diameter:	8.5 mm
Frequency:	512 Hz
Power supply:	Li-ion battery 3.7 V / 4.2 Ah, 2 AA batteries (transmitter)
Weight:	3.9 kg

Switch to black and white

Improves the contrast by difficult lighting conditions

Simple locating of the camera head with the integrated transmitter!

Battery compartment

For the power supply of the integrated transmitter (2 AA batteries included in delivery)

Rubberized base

Stable stand without slipping and damaging the surface

Inspection from floor drains



Inspection of rain drainpipes



Integrated transmitter

For the precise locating of the camera head



Self-leveling camera head

Picture is always upright, no loss of orientation



Guide skid for Module Pipe 25/16 and 25/22

For centring of the camera head, better illumination of the pipe



No. 74629

Scope of delivery ROSCOPE® 1000 Set Pipe 25/16 (No. 1000000064): ROSCOPE® 1000 basic unit, Module Pipe 25/16, Module TEC 1000, battery, charger, plastic carrying case

Model		No.
ROSCOPE® 1000 Set Pipe 25/16 + Module TEC	1	1000000064
Module Pipe 25/16	1	1500000052
Guide skid for Module Pipe 25/16 and 25/22	1	74629

Inspection & Locating

Video Inspection

ROSCOPE® 1000 Set ROLOC PLUS

Easy to use pipe and sonde locating device. Available as a complete unit, as well as locating module for the ROSCOPE® 1000 base unit

Product Profile

KEY FEATURES

- Pin-point location of the sonde
- Precise depth measurement
- Different frequencies can be chosen
- Simple and clear menu design guides step-by-step through the locating process
- Telescopic function makes transporting in case easier

TECHNICAL DATA

Display:	3.5" TFT LCD colour display (technical data about basic unit available on page 194)
Frequencies:	512 and 650 Hz, 33 kHz active, 50/60 Hz passive
Power supply:	Li-ion battery 3.7 V / 4.2 Ah
Dimensions:	95 x 32 x 30 cm (operating mode) 67 x 32 x 9 (transportation mode)
Weight:	1.4 kg

Included in set: Module TEC 1000

Formable camera module for the ROSCOPE® 1000 basic unit for the inspection from hollow spaces and hard to reach areas

TECHNICAL DATA

Camera head:	Ø 17 mm self-leveling and waterproof, with 4 LED lights
Brightness:	100 LUX (0.5 m)
Cable length:	0.9 m



Locating module is included with the ROSCOPE® 1000 basic unit!

Simple menu guidance

Guides step-by-step to targeted position



Multi-frequencies

Locating of the most common camera heads

Telescopic function

For easier transport in case

Depth measurement

Pin-point location of the transmitter position

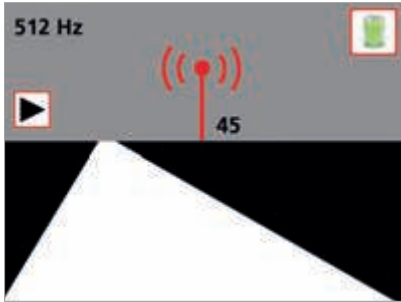
Scope of delivery ROSCOPE® 1000 Set ROLOC PLUS (No. 1000000065): ROSCOPE® 1000 basic unit, Module ROLOC PLUS; Module TEC 1000, battery, charger, plastic carrying case

Model		No.
ROSCOPE® 1000 Set ROLOC PLUS + Module TEC 1000	1	1000000065
Module ROLOC PLUS	1	1500000057

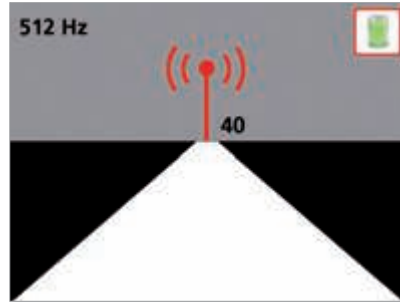
Self explanatory and simple:

- The 3.5" colour display shows the direction of the transmitter
- The highest peak of the signal strength shows the position of the transmitter
- With a push of a button the depth of the camera head is displayed

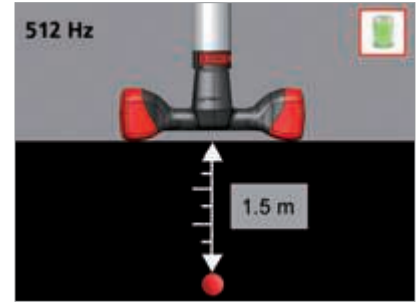
Target is right of the running direction. Correction of your direction to the right is necessary



Target is in the running direction. No correction is necessary



Depth measurement with a push of the button



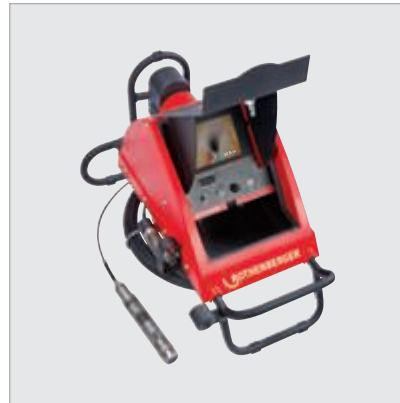
Positioning of camera heads:

- Module ROLOC PLUS is adjustable to different frequencies and thereby compatible with the most common camera heads
- Even sondes from other suppliers can be located (manufacturer independent)

512 Hz: ROSCOPE® 1000
Set Pipe 25/16



640 Hz: ROCAM® mobile



33 kHz: ROCAM® 3 Multimedia



33 kHz: ROCAM® Plus



Inspection & Locating

Video Inspection

ROCAM® 3 Multimedia

Inspection camera for pipes from Ø 50 up to 150 mm and/or from Ø 150 up to 300 mm. With integrated transmitter for the precise locating of the camera head

Product Profile

KEY FEATURES

- Removable monitor unit for working in confined spaces
- Recording of photos and videos
- Logging software
- Data recording with the keyboard
- Audio commentary of the inspection is possible
- 4x zoom function
- Precise determination of the camera head distance with the digital meter counter fade-in on display

TECHNICAL DATA

Display:	10.4" TFT LCD colour display, removable
Camera head:	Ø 30 mm (standard) with 25 LED lights, Ø 40 mm (optional) with 36 LED lights, self-leveling and waterproof
Brightness:	175 LUX (0.5 m), camera head Ø 30 mm 666 LUX (0.5 m), camera head Ø 40 mm
Cable length:	30 m
Cable diameter:	7 mm
Power supply:	NiMH battery 12 V / 6 Ah
Weight:	13 kg

Simple locating of the camera head with the integrated transmitter!

Removable control unit with 10.4" TFT LCD colour display

Simple use in hard to reach places

Recording of photos and videos

Simple documentation of the inspection on a USB stick

Digital meter count fade-in

Precise determination of the camera head distance

Protection against splash water (IP65)

For use in wet, dirty surroundings and easy, fast cleaning

Strong push cable Ø 7 mm, 30 m long

Precise and reliable camera guidance in pipe and duct



Integrated transmitter

For the precise locating of the camera head

Mechanical self-leveling of the picture

Picture is always upright, no loss of orientation

Exchangeable head system

Universal connection for attaching various camera heads

Model

No.

ROCAM® 3 Multimedia

1500000118

With large 10.4" colour display!

Removable control unit

Makes working in tight spaces easier

- The camera base does not need to be near the user since all of the control elements such as recording, playback or LED regulation are integrated in the compact control unit
- Photos and videos of the inspection can be saved on the USB stick and immediately played back with just a push of a button
- The 10.4" TFT LCD colour display offers optimum conditions for a quick and simple analysis of the observations

ROCAM® 3 Multimedia with removable control unit



Keypad of the control unit



Locating of the integrated camera head with Module ROLOC PLUS



With exchangeable head system!

Product Profile

KEY FEATURES

- Exchangeable head system: Universal connection for attaching various camera heads
- The mechanical, **self-leveling** picture enables a quick adjustment of the picture in comparison to digital technology
- Optional Ø 40 mm camera head for large pipe diameters



Mechanical leveling of the picture



7



Model	No.
Camera head Ø 30 mm	1500000123
Camera head Ø 40 mm	1500000122

Logging software included!

Logging software

- Simple creation of a log during the inspection and as a supplement to photos and videos
- Listing of observations, including automatic transfer of the meter count
- Preloaded terms for a saved damage catalogue for uniform logging

Inspection & Locating

Video Inspection

ROCAM® Plus

Inspection camera with battery and mains operation for pipes from Ø 25 up to 300 mm



Product Profile

APPLICATION AREA

Camera system for cost-effective inspection and damage analysis over long distances with self-leveling camera head and optional data archiving per ATV

KEY FEATURES

- Powerful, self-leveling camera head
- Precise and reliable guidance of the camera in pipe and drains
- Curve flexibility 90° starting from 40 mm with the Mini Module 1.4 (as standard included)
- Conserves battery: saves energy with the automatic shut-off
- Mobile and battery operation up to 2.5 hours, 12 V adaptor with on-board charger
- Precise determination of the camera head distance with the digital meter count fade-in on display
- Excellent contrast and sharp, continuously adjustable light intensity of the diodes

KEY FEATURES

- For the documentation of the inspection on video
- Direct data exchange with laptop / PC, etc., possible

TECHNICAL DATA

Display:	5.6" TFT LCD colour display
Camera head:	Ø 40 mm, self-leveling and waterproof, with 35 LED lights
Brightness:	666 LUX (0.5 m)
Cable length:	60 or 100 m
Cable diameter:	7.5 mm
Frequency:	33 kHz (optional)
Power supply:	NiMH battery 12 V / 3 Ah or Mains operation 100-240 V / 50-60 Hz starting at 20 kg
Weight:	

7



Duo-Power

Portable and mobile operation up to 2.5 hours. 12 V adaptor for on-board charger

Automatic shut-off when the hub is closed

Conserves battery and saves energy

Mini Module 1.4, 5 m long

Curve flexibility 90° starting from Ø 40 mm

Strong push cable 60 or 100 m long

Precise and reliable guidance of the camera in pipe and drains, even over long distances

Self-leveling camera head

Picture is always upright, no loss of orientation

TFT LCD colour display

Excellent contrast and sharpness

Digital meter count fade-in

Precise determination of the camera head distance

Video In / Video Out

For the documentation of the inspection on video. On laptop / PC with accessory No. 100000082

COM port / RS232

Direct data exchange with laptop / PC, etc., possible



Pivoting Rotor Head

Steerable camera head for the inspection of pipes from Ø 100 up to 400 mm

Product Profile

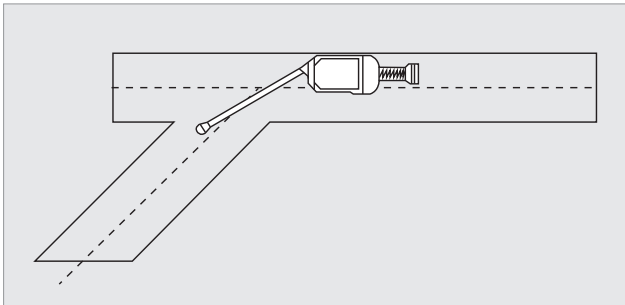
APPLICATION AREA

Camera head for the inspection of private drainage systems with pivoting rotor head function as per DIN EN 1610

KEY FEATURES

- With the rotation and pivot function it is optimal for the visual inspection of pipe connections
- Simply look in pipe branches
- Effortless inspection of individual details
- Bending rod (optional) enables branches to be navigated

Functional principle of the bending rod



DIN EN 1610 capable!



Optimal overview with 360° rotatable and 270° pivotal area



Model	No.
Pivoting rotor head for ROCAM® Plus	1500000242
Bending rod for pivoting rotor head	1500000243

*69740 und 69840

Model	Ausführung	kg		No.
ROCAM® Plus with meter counter	60 m cable length	20	1	69725
ROCAM® Plus with meter counter	60 m cable length, with PC keyboard and professional drain software	21	1	69740
ROCAM® Plus with meter counter	100 m cable length	25	1	69825
ROCAM® Plus with meter counter	100 m cable length, with PC keyboard and professional drain software	26	1	69840

Accessories see 204 – 205

ROCAM® Plus in use



Mini Module 1.4 for the inspection of the smallest pipes



Inspection of a rainfall drains



Professional drain software in accordance with ATV



Functional principle of the camera head



ROCAM® Camera Heads

Camera heads made of high-quality materials for professional inspection of pipes from Ø 70 up to 300 mm

Product Profile

KEY FEATURES

Excellent brightness:

- The ROCAM® camera head Ø 30 mm has over 25 ultra bright LED lights, that effortlessly illuminate pipes up to Ø 150
- The camera head can be mounted with a Ø 40 mm camera head for larger pipe diameters

Pressure tight screw slip-ring connection:

- Pressure tight connection (3 bar) between camera head and push cable
- High resistance to shock and impact
- Quick and tool-less exchange of the camera heads
- No burden from electrical connections

High flexibility and resistant:

- Flexible spring provides 90° curveability in pipes up to Ø 70 mm when enough stability is provided
- Pressure tight up to 3 bar with the stainless steel casing
- Scratch and impact resistant with the sapphire glass objective

KEY FEATURES

Mountable transmitter:

- Optional 33 kHz transmitter can be used to determine the length of the camera head (90° from Ø 70)
- In small pipe diameters the transmitter can also be used without the camera head to determine the course of the pipe without a visual inspection

TECHNICAL DATA

Camera head:	Ø 30 mm (standard) with 25 LED lights Ø 40 mm (optional) with 36 LED lights self-leveling and waterproof
Brightness:	175 LUX (0.5 m), camera head Ø 30 mm 666 LUX (0.5 m), camera head Ø 40 mm

Always an upright picture!

Sapphire glass

Scratch and impact resistant for a long service life and professional use

Screw slip-ring connection

Pressure tight, durable connection without the burden of an electrical circuit

Stainless steel casing

Robust, durable and pressure tight (3 bar)

Flexible spring

90° curveability in pipes starting from Ø 70 mm

High-performance LED lights

High-performance LED lights for pipes up to Ø 300 mm

Model

No.

Camera head Ø 30 mm	1500000123
Camera head Ø 40 mm	1500000122

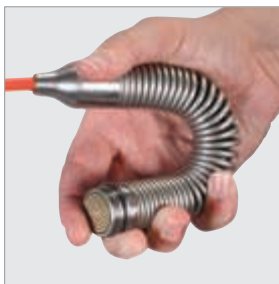
Excellent illumination



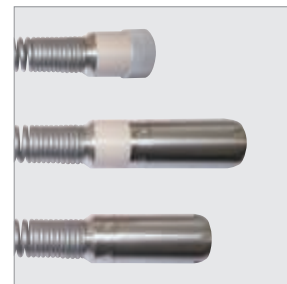
Pressure tight screw slip-ring connection



High flexibility and durability



Mountable transmitter



Rolling Skids

Recommended for distances from 30 m

APPLICATION AREA

Rolling skids RS40/150 for pipe diameters Ø 150 - 200 mm
Rolling skids RS40/200 for pipe diameters Ø 200 - 300 mm

KEY FEATURES

- Optimized view of the pipe section
- Less pushing resistance with the fully rubberized wheels



Model			No.
For camera heads Ø 40 mm:			
Rolling skids RS40/150	700	1	69118
Rolling skids RS40/200	700	1	69119

Brush Attachments

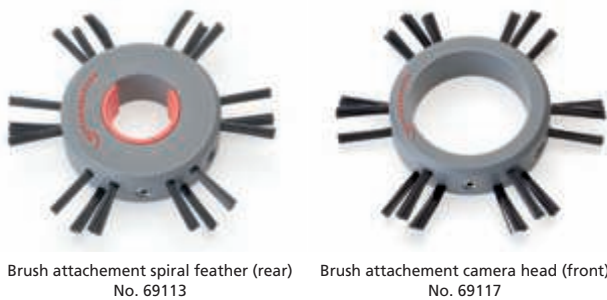
To improve the overview in pipes from Ø 100 – 200 mm

APPLICATION AREA

Brush attachment Ø 100 for use in pipe 100 - 150 mm
Brush attachment Ø 150 for use in pipe 150 - 200 mm

KEY FEATURES

- Optimized view of the pipe section through centring in the pipe
- Dirt will not accumulate in front of the lens
- Good curveability with the brush flexibility



*Use with guidance skid No. 69112

Model			No.
For camera heads Ø 100*:			
Brush attachment Ø 100*	200	1	69113
For camera heads Ø 150*:			
Brush attachment Ø 150*	300	1	69117

Rolling Skids ROCAM® 3 Multimedia and ROCAM® Plus

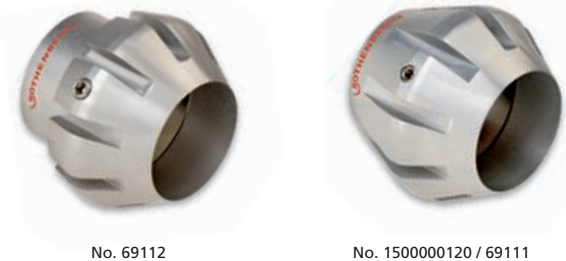
For centring of the camera head in pipes for a better overview and illumination

APPLICATION AREA

Guide skid for pipe diameters Ø 70 - 150 mm
Guide skid with brush attachment for pipe diameters Ø 70 - 200 mm

KEY FEATURES

- Optimized view of the pipe section through centring in the pipe
- Dirt will not accumulate in front of the lens



Model			No.
For camera head Ø 30 mm:			
Guidance skid for Ø 150 mm	200	1	1500000120
For camera head Ø 40 mm:			
Guidance skid for Ø 70 mm	200	1	69111
Guidance skid for Ø 70 mm, extended	200	1	69112

Battery and Charger ROCAM® 3 Multimedia and ROCAM® Plus

KEY FEATURES

- Extend the mobile operation spare battery
- No unintentional release of the battery, battery lock with click mechanism
- External battery charger, independent charging of the battery, higher mobility

TECHNICAL DATA

Battery: 12 V / 3 or 6 Ah NiMH
Running time: up to 2.5 hours
Charger / charging time: 12 V / 1-1.5 Std.



Model			No.
ROCAM® Plus NiMH battery 12 V / 3 Ah	800	1	69550
ROCAM® Plus charger 12 V	750	1	69555
ROCAM® 3 M. NiMH battery 12 V / 6 Ah	800	1	1500000121

