



GEJOS

PRODUCTS 2018

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15 YEARS OF GEJOS

Founded 15 years ago, today the once small 2-man business is a successful provider of pipe and sewer inspection systems with a proven track record.

Drawing on this experience, we offer user-friendly inspection equipment for a wide range of nominal diameters from DN30 to DN500; we thus satisfy diverse customer groups – from caretakers, plumbers and pipe cleaning firms to towns, communities and industrial companies. Our inspection equipment is sold by long-standing partners in more than 15 countries across the globe.

Marking our anniversary, we are pleased to announce new products to join our portfolio: as of now, GEJOS is offering its first crawler with an automatic cable drum. Thanks to a patented lifting arm, the crawler can be used to inspect DN100 to DN500, with all the features inside required for comprehensive sewer inspection.

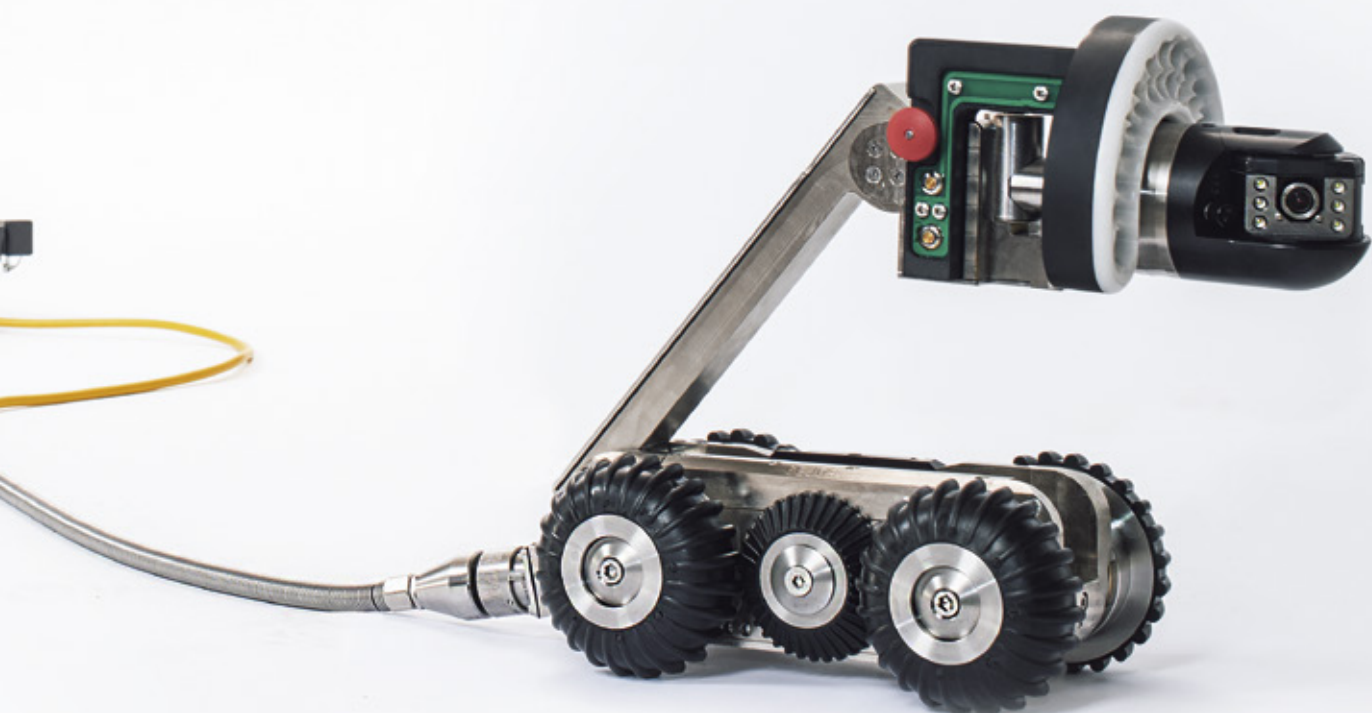
We have also taken our GEJOScan software to the next level for the GEJOS crawler, and now offer it in a 3D pipe route version. Easy intuitive operation means that any customer can probe pipe routes and capture and evaluate the findings. We took a well-considered decision not to use third-party software, but invest instead in developing our own. This ensures our flexibility and lets us respond to customer wishes quickly and directly.

Another new product is the PIC 6.0 „spherical head“ – a special version consisting of a wide-angle rotating camera head with a digital swivel function, which can be used to inspect Geberit toilet connection pipes (bend-capable at DN70 and higher). Exactly like the PIC 6.0 swivel head, it enables permanent automatic nominal diameter measurement via laser in real time.

We should like to thank all our customers for the trust they have placed in us, and the constructive cooperation over the years; and we look forward to the future as a full-range provider of pipe and sewer inspection equipment with more new products in the offing.



GEJOS CRAWLER



GEJOS CABLE DRUM



Technical data

- ⊕ Fully automatic cable drum with integrated cable guiding
- ⊕ Rugged aluminium/stainless steel frame
- ⊕ 250m cable (with an optional length of up to 350m)
- ⊕ Plug-in lithium-ion battery (48V)
- ⊕ Speed and power manually adjustable
- ⊕ Integrated electronic meter counter
- ⊕ Pelicase with control unit can be fitted onto the cable drum
- ⊕ Adjustable transport wheels

GEJOS CRAWLER (DN 100 TO DN 500)

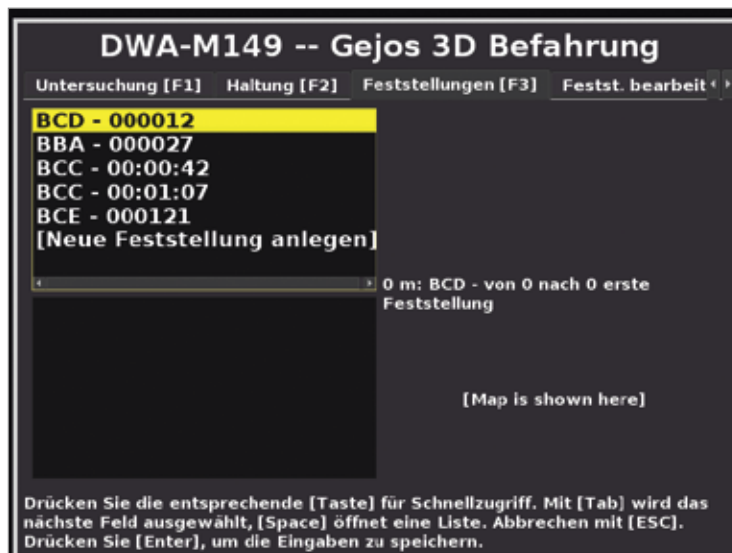
The little one for the big tasks



Technical data

- ⊕ Suitable for DN 100 to DN 500
- ⊕ Bend-capable at DN 150 and higher ($2 \times 45^\circ$)
- ⊕ High weight (approx. 9kg)
- ⊕ Patented robotic arm (height 190mm) with angle display and fully automatic, centred positioning inside the pipe/ sewer
- ⊕ Rear-view camera integrated
- ⊕ Automatic levelling (prevents toppling over)
- ⊕ Infinitely variable advancing and reversing speed (automatic speed control)
- ⊕ Continuous, real-time laser nominal diameter measurement (output in mm)
- ⊕ Compatible with the following GEJOS camera heads: PIC 6.0 swivel head, PIC 6.0 spherical head, PIC 5.5 axial head, PIC 3.0 axial head
- ⊕ Internal pressure monitoring displayed by the control unit
- ⊕ Bendable cable quick coupling
- ⊕ Switchable tracking (33kHz / 512Hz)
- ⊕ Additional LED lighting ring (push-on)
- ⊕ Mountable, additional weights
- ⊕ Additional wheels in various sizes (push-on)

GEJOSCAN 3D DATA CAPTURE SOFTWARE



Integrated in the
GEJOS control unit
pelicase



Easy pipe route cap-
turing with automatic
generation of relevant
findings



Real-time display of
the pipe route on the
map (geocoding)



Intuitive project ma-
nagement: Correspon-
ding sections of se-
wers/pipes are saved
in one project



Hotkeys can be confi-
gured individually in
order to enter a whole
set of findings with a
single keystroke

GEJOSCAN 3D OFFICE SOFTWARE

- ⊕ 3D display and editing of a pipe route
- ⊕ Modular software (individual modules can be hidden or moved to a separate screen)
- ⊕ State-of-the-art WPF components (individually scalable, moveable, minimizable)
- ⊕ Layout elements (shafts, ground plan, dimensioning elements) can be drawn manually
- ⊕ 3D pipe route view in one map from several map sources
- ⊕ Interactive graphical representation of the sewer section (synchronised with video and photo views and findings list)
- ⊕ Reports about the sewer section can be printed in different formats and in highest resolution
- ⊕ Import/display/export of 3D data in ESRI shape file format
- ⊕ Identical representation (read-only format) for the end customer
- ⊕ No video codec installation required



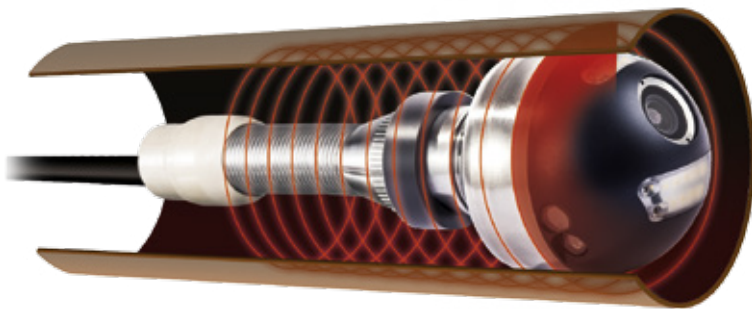
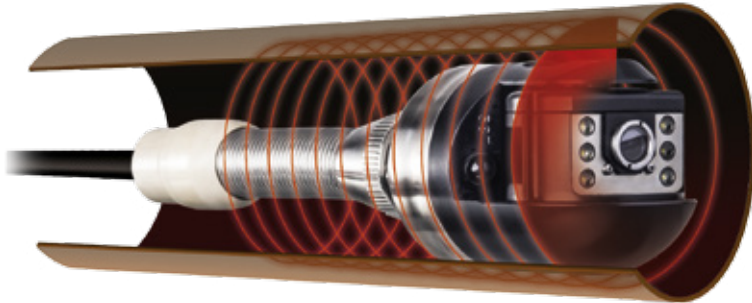
Scan QR-Code to view a sample report

The screenshot displays the GEJOSCAN 3D Office Software interface. The top menu bar includes options like 'Datei', 'Bearbeiten', 'Video', 'Kartenansicht', and '3D Ansicht'. The main workspace is divided into several panels:

- Left Panel:** A vertical diagram of a pipe route with labels BCD, BCC, BDD, BAJ, BAS, BBS, BCA, and BCE. A red line indicates a specific section.
- Video Panel:** A live video feed showing the interior of a pipe.
- Photo Panel:** A photo of the pipe interior with overlaid text: '11.11.14 14:16', '0.30m BDD Wasserschp', and 'Klar. 10%'. Below the photo is a timestamp '00:00:00 / 00:03:08'.
- Map Panel:** A street map showing the location of the pipe route.
- 3D Editor Panel:** A 3D perspective view of the pipe route.
- Findings List Panel:** A table with columns: METTER, ZEITSTAMPFEL, KODE, TEXT, QUANT. 1, QUANT. 2, STRECKENGEHÄREN NR., and KLASSIFIZIERUNG.

| METTER | ZEITSTAMPFEL | KODE | TEXT | QUANT. 1 | QUANT. 2 | STRECKENGEHÄREN NR. | KLASSIFIZIERUNG |
|--------|--------------|------|---|----------|----------|---------------------|-----------------|
| 0 | 00:00:20 | BCD | Anfangsstation, Rohraufgang | | 0 | 0 | |
| 0,1 | 00:00:38 | BDD | Wasserspiegel klar, Wasserstand: 10%, Foto angelegt | 10 | 0 | 0 | |
| 0,5 | 00:00:50 | BAJ | Verschiebener Verbindung im Winkel, Winkel zwischen den beiden Rohrschüssen 50 Grad, bei 0 Uhr, Foto angelegt | 5 | 0 | 0 | |
| 0,3 | 00:01:06 | BCC | Klemmung der Leitung, nach links, Winkel der Richtungsänderung: 90 Grad, Foto angelegt | 30 | 0 | 0 | |
| 0,6 | 00:01:26 | SAB | Rissbildung, Risslinien an der Rohrwand erkennbar, am Rohrumfang, Breite des Risses: 1mm, bei 0 Uhr, Schaden tritt an Verbindung auf, Foto angelegt 1 | | 0 | 0 | |
| 2,2 | 00:02:17 | SAB | Rissbildung, Risslinien an der Rohrwand erkennbar, am Rohrumfang, Breite des Risses: 2mm, bei 0 Uhr, Schaden tritt an Verbindung auf, Foto angelegt 2 | | 0 | 0 | |
| 2,3 | 00:02:55 | BCA | Anschluss, unbekannter Anschluss, Anschluss geschlossen, bei 0 Uhr, Foto angelegt | | 0 | 0 | |
| 2,3 | 00:03:00 | BCE | Endstation, Rohrende | | 0 | 0 | |

GEJOS NOMINAL DIAMETER MEASUREMENT



Laser nominal diameter measurement – permanent display on the screen



Fully automatic and in real-time: Any pipe size change is instantly indicated when the camera is pushed into the pipe



Output in millimetres



Optionally available for PIC 6.0 swivel head and PIC 6.0 spherical head (new!)



Compatible with push-rod inspection system and crawler system



Older PIC 6.0 swivel heads can easily be upgraded with laser nominal diameter measurement

GEJOS-COMPATIBILITY

| | PIC 6.0 | PIC 5.5 | PIC 3.0 | PIC 1.9 | CRAWLER |
|---|---------|---------|---------|---------|---------|
| REEL CAGES | | | | | |
| Reel cage large 70 m, ø 9 mm | + | + | | | |
| Reel cage large 70 m, ø 7,5 mm | + | + | | | |
| Reel cage small 40 m, ø 6 mm | + | + | + | + | |
| Reel cage small 40 m, ø 4,5 mm | + | + | + | + | |
| Cable drum for cra- wler, 250m | | | | | + |
| CAMERA HEADS | | | | | |
| PIC 6.0 Camera head (with/without laser) | + | + | | | + |
| PIC 6.0 Spherical head (with/without laser) | + | + | | | + |
| PIC 5.5 Camera head | + | + | + | | + |
| PIC 3.0 Camera head (push-on or via interchange- able cage) | + | + | + | + | + |
| PIC 1.9 Camera head (via interchangeable cage) | + | + | + | + | |
| CONTROLUNITS / MONITORS | | | | | |
| PELI | + | + | + | + | + |
| LC | + | + | + | + | |
| LCI | | | + | + | |
| BNC (BNC output, without monitor) | | | + | + | |
| ACCESSORIES | | | | | |
| Tracking | + | + | + | + | + |
| Sliding sleeves | + | + | + | + | |
| Roller slides | + | + | + | | |
| Roller slides large | + | + | | | |
| Deflection guide with alignment pins | + | | | | |
| GEJOScan-Software | + | + | + | + | + |
| | (PELI) | (PELI) | (PELI) | (PELI) | (PELI) |

SWIVEL HEAD CAMERA PIC 6.0 PELI SPECIAL SPHERICAL HEAD VERSION



Wide angle rotary head with digital swivel function



Bend-capable at DN 70/87° and higher



Suitable to inspect Geberit toilet drain pipes



Instant real-time laser nominal diameter measurement



Pressure resistant up to 5 bar



CONTROLUNIT + Weight: 7,3 kg + Size: 57cm x 17cm x 34 cm

REEL + Weight: ca. 19 kg

+ Size: Length 60 cm, Width 38 cm with wheel (22 cm w.n. w.), Height 74 cm

EXTENDABLE PIC 6.0 PELI SPECIAL AXIAL HEAD VERSION



Swivel head basic system with axial camera head (Ø 55 mm)



All requirements for swivel head operation already integrated in this special version



Connection of swivel head possible any time



CONTROLUNIT + Weight: 7,3 kg + Size: 57cm x 17cm x 34 cm

REEL + Weight: ca. 19 kg

+ Size: Length 60 cm, Width 38 cm with wheel (22 cm w.n. w.), Height 74 cm

DEFLECTION SWIVEL HEAD CAMERA PIC 6.0 PELI



Data recording with
location (in meter)
overlay



128 GB internal hard
disk storage



Control unit with 10"
monitor



Automatic horizon
compensation function



Wi-Fi capable



Instant real-time laser
nominal diameter
measurement



Deflection guide
with a set of align-
ment pins

CONTROLUNIT + Weight: 4 kg + Size: 23 cm x 14 cm x 23 cm

REEL + Weight: ca. 19 kg + Size: Length 60 cm, Width 38 cm with wheel (22 cm w.n. w.), Height 74 cm

ACCESSORIES SWIVEL HEAD PIC 6.0 PELI



PELI-Controlunit



PIC 6.0 swivel head



Deflection guide (alignment pins)



Instant realtime laser nominal measurement

Technical data

Deflection swivel head camera PIC 6.0 PELI – from DN 70 to- DN 500 (optional)

- ⊕ Fully tiltable camera head made of stainless steel and aluminium Ø 60 mm
- ⊕ Infinite rotation / infinite tilting
- ⊕ Automatic zero function
- ⊕ Automatic 360° rotation function
- ⊕ Instant, fully automatic real-time laser nominal diameter measurement (output in mm)
- ⊕ Pressure-resistant up to 1 bar
- ⊕ Bend-capable at DN 100/87° and higher
- ⊕ Can be plugged on the push rod due to connection for various camera heads
- ⊕ Pressure control – pressure valve
- ⊕ Rotation and tilting position indicator in degrees
- ⊕ Pipe inclination measurement in degrees
- ⊕ Shutter/aperture mode settable via the control unit
- ⊕ 70 m fibreglass rod Ø 9 mm with integrated camera cable
- ⊕ Digital module 0.1 lux
- ⊕ Adjustable reel wheels for easy transport
- ⊕ Accessory bag on the reel- Vertically adjustable handle for transportation and attachment of the control case with 360° rotation function
- ⊕ Detachable control unit in a rugged Pelicase
- ⊕ 10" Sunreflect Monitor
- ⊕ Keypad, optionally with external wireless keyboard
- ⊕ Video output- Infinitely variable lighting control
- ⊕ 220 V / 50 Hz mains connection- High-capacity LFP battery- Video recording and image storage, 2x USB connection
- ⊕ 128 GB internal hard disk storage (extendable)
- ⊕ Wi-Fi data transfer
- ⊕ Update via Wi-Fi
- ⊕ Data recording with location (in meter) overlay
- ⊕ Pre-installed 3D pipe routing software with GPS position indicator (optional, unlockable any time)

DEFLECTION SWIVEL HEAD CAMERA PIC 6.0 LC



Location (in meter)
overlay



Control unit with 7"
monitor



Automatic horizon
compensation function



Deflection guide with
a set of alignment
pins



Video- and image
storage on SD card

CONTROLUNIT + Weight: 4 kg + Size: 23 cm x 14 cm x 23 cm

REEL + Weight: ca. 19 kg + Size: Length 60 cm, Width 38 cm with wheel (22 cm w.n. w.), Height 74 cm

ACCESSORIES DEFLECTION SWIVEL HEAD CAMERA PIC 6.0 LC



LC-Controlunit



PIC 6.0 swivel head



Deflection guide (alignment pins)

Technical data

Deflection swivel head camera PIC 6.0 LC – from DN 70 to- DN 500 (optional)

- ⊕ Fully tiltable camera head made of stainless steel and aluminium Ø 60 mm
- ⊕ Infinite rotation / infinite tilting
- ⊕ Automatic zero function
- ⊕ Automatic 360° rotation function
- ⊕ Pressure-resistant up to 1 bar- Bend-capable at DN 100/87° and higher
- ⊕ Can be plugged on the push rod due to connection for various camera heads
- ⊕ Pressure control – pressure valve
- ⊕ 70m fibreglass rod Ø 9 mm with integrated camera cable
- ⊕ Digital module 0.1 lux
- ⊕ Adjustable reel wheels for easy transport
- ⊕ Accessory bag on the reel- Vertically adjustable handle for transportation and attachment of the control case with 360° rotation function
- ⊕ Handy, detachable control unit with integrated 7" colour monitor
- ⊕ Keypad, optionally with external wireless keyboard
- ⊕ Video output- Infinitely variable lighting control
- ⊕ High-capacity LFP battery- Video- and image storage on SD card

AXIAL HEAD CAMERA PIC 5.5 PELI



CONTROLUNIT + Weight: 7,3 kg + Size: 57 cm x 17 cm x 34 cm
REEL + Weight: ca. 19 kg + Size: Length 60 cm,
Width 38 cm with wheel (22 cm w.n. w.), Height 74 cm



Data recording with
location (in meter)
overlay



Automatic horizon
compensation function



Wi-Fi capable



Control unit with
10" monitor



128GB internal hard
disk storage (extenda-
ble)

Technical data Axial head camera PIC 5.5 from DN 70 to DN 300

- + Stainless steel axial camera head, Ø 55 mm
- + Automatic horizon compensation function
- + Pressure-resistant up to 5 bar (optional)
- + Bend-capable at DN 90/87° and higher
- + Can be plugged on the push rod due to connection for various camera heads
- + Digital module 0.1 lux
- + 70 m fibreglass rod Ø 7.5 mm with integrated camera cable

AXIAL HEAD CAMERA PIC 5.5 LC



Location (in meter)
overlay



Control unit with
7" monitor



Automatic horizon
compensation function



Video- and image
storage on SD card

CONTROLUNIT + Weight: 4 kg + Size: 23 cm x 14 cm x 23 cm
REEL + Weight: ca. 19 kg + Size: Length 60 cm,
Width 38 cm with wheel (22 cm w.n. w.), Height 74 cm

- + Adjustable reel wheels for easy transport
- + Accessory bag on the reel
- + Vertically adjustable handle for transportation and attachment of the control case with 360° rotation function
- + Detachable control unit

- + Video output
- + Infinitely variable lighting control
- + 220 V / 50 Hz mains connection
- + High-capacity LFP battery

PUSH ROD INSPECTION CAMERA PIC 3.0 LC



Recording (video/picture) on SD card



Handy, detachable control unit with integrated 7" colour monitor

PUSH ROD INSPECTION CAMERA PIC 3.0 LCI



7" colour monitor integrated into the reel frame



Recording (video/picture) on SD card

PUSH ROD INSPECTION CAMERA PIC 3.0 BNC



For use with external display and recording devices

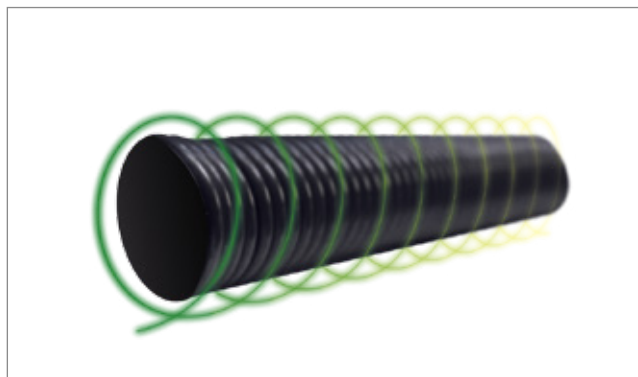


Connection via BNC video output

ACCESSORIES PUSH ROD INSPECTION CAMERA PIC 3.0



PIC 3.0 sliding sleeve from DN 70 (left) / DN 100 (right)



PIC 3.0 Switchable tracking (33 kHz/512 Hz)



Reel cage small with PIC 1.9 axial camera head
Ø 19mm, 40 m push rod Ø 4,5 mm



Roller slide with/without additional illumination from DN 150

Technical data

(from DN50 to DN200)

- ⊕ Stainless steel camera head, Ø 30 mm
- ⊕ Automatic horizon compensation function
- ⊕ Pressure-resistant up to 1 bar
- ⊕ Bend-capable at DN 50/87° and higher
- ⊕ Digital module 0.01 lux
- ⊕ Reel brake
- ⊕ 40 m fibreglass rod Ø 6 mm with integrated cable
- ⊕ Interchangeable cage (for all GEJOS camera systems)

- ⊕ Accessory bag on the reel
- ⊕ Handle for transportation and attachment of the control case
- ⊕ 7" colour monitor
- ⊕ Video input/output
- ⊕ Infinitely variable lighting control
- ⊕ 220V/50Hz mains connection
- ⊕ High-capacity LFP battery
- ⊕ Location (in meter) overlay

CONTROLUNIT ⊕ Weight: 4 kg ⊕ Size: 23 cm x 14 cm x 23 cm

REEL ⊕ Weight: ca. 10 kg ⊕ Size: Length 48 cm, Width 22 cm, Height 44 cm

PUSH ROD INSPECTION CAMERA PIC 1.9 LC



**Recording (video/
image) on SD card**



**Handy, detachable control unit with
integrated 7" colour
monitor**

PUSH ROD INSPECTION CAMERA PIC 1.9 LCI



**7" colour monitor
integrated into the
reel frame**



**Recording (video/pic-
ture) on SD card**

PUSH ROD INSPECTION CAMERA PIC 1.9 BNC



**For use with external
display and recording
devices**

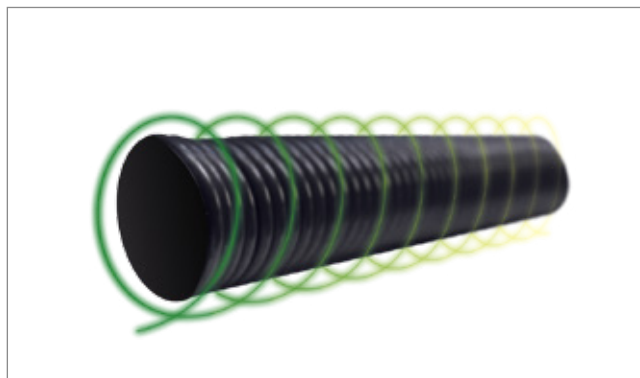


**Connection via
BNC video output**

ACCESSORIES PUSH ROD INSPECTION CAMERA PIC 1.9



PIC 1.9 Sliding sleeve from DN 50



PIC 1.9 Switchable tracking (33 kHz/512 Hz)



Reel cage small with PIC 3.0 axial camera head Ø 30mm ,
40 m push rod Ø 6 mm

Technical data

(from DN30 to DN200)

- ⊕ Stainless steel camera head, Ø 19 mm
- ⊕ Pressure-resistant up to 2 bar
- ⊕ Bend-capable at DN 30/87° and higher
- ⊕ Digital module 0.01 lux
- ⊕ Reel brake
- ⊕ 40 m fibreglass rod Ø 4.5 mm with integrated cable
- ⊕ Interchangeable cage (for all GEJOS camera systems)
- ⊕ Accessory bag on the reel
- ⊕ 7" colour monitor
- ⊕ Video input/output
- ⊕ Infinitely variable lighting control
- ⊕ 220 V / 50 Hz mains connection
- ⊕ High-capacity LFP battery
- ⊕ Location (in meter) overlay

CAMERA HEADS



| PIC 6.0 SWIVEL HEAD (with/without laser) | PIC 6.0 SPHERICAL HEAD (with/without laser) | PIC 5.5 AXIAL HEAD | PIC 3.0 AXIAL HEAD | PIC 1.9 AXIAL HEAD |
|--|---|-------------------------------------|-------------------------------------|-------------------------------------|
|--|---|-------------------------------------|-------------------------------------|-------------------------------------|

ANLAGE

| | | | | | |
|-----------|---|---|---|---------------------------------------|----------------------------|
| PIC 6.0 | + | + | + | + | + |
| | | | | (push-on or via interchangeable cage) | (via interchangeable cage) |
| PIC 5.5 | + | + | + | + | + |
| | | | | | (via interchangeable cage) |
| PIC 3.0 | | | + | + | + |
| | | | | | (via interchangeable cage) |
| PIC 1.9 | | | | + | + |
| | | | | (via interchangeable cage) | (via interchangeable cage) |
| Fahrwagen | + | + | + | + | |

TECHNICAL DATA

| | | | | | |
|-----------------------------|---------------------|--------|--------|--------|--------|
| Diameter Ø | 60 mm | 60 mm | 55 mm | 30 mm | 19 mm |
| Weight | 550 g | 350 g | 300 g | 150 g | 100 g |
| Suitable from | DN 70 | DN 70 | DN 70 | DN 40 | DN 30 |
| Suitable to | DN 500 | DN 500 | DN 300 | DN 200 | DN 200 |
| Navigates pipe bends from | DN 100 | DN 70 | DN 90 | DN 50 | DN 30 |
| Deflectability | + | | | | |
| Rotation | 360° | 360° | | | |
| Tilting | 360° | 110° | | | |
| Shutter / aperture | + | | | | |
| | (for laser version) | | | | |
| Focus | + | + | | | |
| Autom. horizon compensation | + | + | + | + | |

ACCESSORIES PUSH-ROD SYSTEMS



Sliding sleeves DN 50, 70, 100 – PIC 1.9, 3.0, 5.5



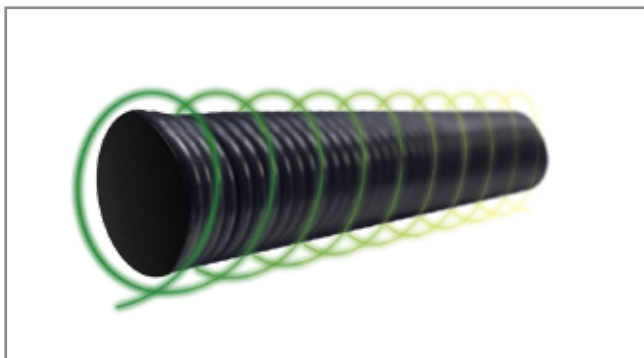
Deflection guide (alignment pins)



Roller slide with/without additional illumination from DN 150 – PIC 3.0, 5.5



Roller slide adjustable from DN 150 - 500 (with/without additional illumination) – PIC 5.5, 6.0



Switchable tracking 33 kHz / 512 Hz
PIC 1.9, 3.0, 5.5, 6.0



SPE flushing nozzle - cleaning and bend-capable – PIC 6.0



Accessory suitcase – PIC 1.9, 3.0, 5.5, 6.0



Break for combo-reel – PIC 6.0

CONTROL UNITS

LC-Controlunit (with/without swivel head control)



PELI-Controlunit (with/without swivel head control)



PELI-Controlunit – crawler version



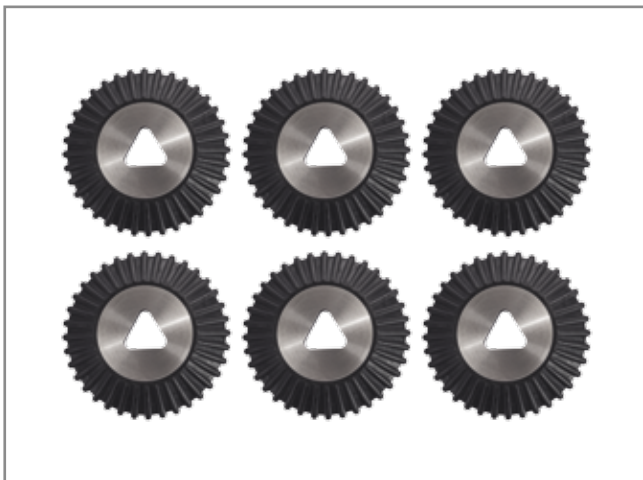
ACCESSORIES CABLE DRUM AND CRAWLER



Cable drum – Plugin lithium-ion battery



Cable drum – outrigger for cable guiding



Crawler – wheels small



Crawler – wheels big



Crawler – additional LED-lighting ring (push-on)



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