



### Stationary systems for vertical based discharge measurements

- **Usage Type**  
Fixed installation
- **Product Highlights**  
Maintenance-free cable way system for span lengths of up to 160 m. All components are maintenance free. Oil-free gas pressure spring tensioner for span lengths of above 20 m. Electrical or optionally mechanical double-drum winch.
- **Application fields**  
Vertical method based discharge measurements
- **Location**  
Rivers and canals

OTT cable way systems provide safety where mobile discharge measurements in water or from a bridge cannot be performed. They are driven mechanically or electrically and are available for span lengths of up to 160 m. The systems are DEKRA type approved and meet all applicable safety requirements. The components do not require any maintenance; lubrication or oil changes are not necessary.

Application	Cable way systems for for vertical method based discharge measurements in rivers and canals
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#### Cable way system

Span length including turnbuckle tensioner	up to 20 m
Span length including gas pressure spring tensioner	up to 160 m

Cable diameter	
Track Cable	16 mm
Towing Cable	6 mm
Current Meter Cable	3.5 mm

Double-drum Winch	
Installation	Right-hand side or left-hand side
Cable exit	Horizontal or vertical

Current meter cable drum	
Rated tension force	1250 N
Maximum tension force	3000 N $\pm$ 20 %
Tripping force of safety friction clutch	3000 N $\pm$ 20 %
Maximum useable cable length	164 m
Maximum number of cable layers	6
Minimum number of windings remaining	3 ( $\approx$ 3.1 m)
Torque required on crank	11 N/m (for 100 kg of weight)
Crank length	0.3 m

### Mechanical Double-drum Winch

Distance/depth meter	
Design	5-digit LCD; incl. Reset keys
Resolution:	1 cm
Back-up battery	9 V Battery (alkaline type)

Mechanical data	
Dimensions (W x H x D)	
incl. hand crank	approx. 570 x 770 x 670 mm
without hand crank	approx. 450 x 750 x 560 mm
Weight	approx. 100 kg (without current meter cable and hand crank)

Environmental conditions	
Operating temperature	-20 °C ... +60 °C
Storage temperature	-40 °C ... +85 °C
Air humidity	0 % ... 95 % RH (non-condensing)

### Electrical Double-drum Winch

Electrical drive	
Supply voltage	230 V / 50 Hz
Control voltage	24 V DC
Motor power	1.5 kW
Degree of protection	IP54
Sound pressure level	70 dB (A)

Mechanical data	
Dimensions (W x H x D)	
Electrical double-drum winch	approx. 570 x 900 x 670 mm (without hand-crank for emergency operation)
Control cabinet	600 x 600 x 250 mm
Weight	
Winch (incl. Motor)	approx. 135 kg (without current meter cable and hand crank)
Motor	35 kg
Control cabinet	approx. 30 kg

Operating unit (including chest strap)	
Dimensions (W x H x D)	280 x 200 x 130 mm (without joystick and chest strap)
Display	5 rows, monochrome, incl. function key assignments
Operating controls	Joystick, Emergency Stop pushbutton, 10 function keys (may also be used as numerical keys), cursor keys, permanent function keys, additional potential meter for speed setting
Acoustic alert	internal buzzer sounds in case of ground contact

Environmental conditions	
Operating temperature	
Standard	0 °C ... +50 °C
With opt. Heater	-20 °C ... +50 °C
With opt. cooler	0 °C ... +60 °C
Storage temperature	-40 °C ... +85 °C
Air humidity	0 % ... 95 % RH (non-condensing)