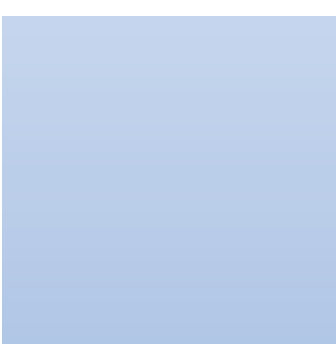
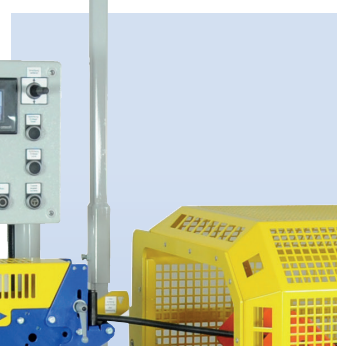
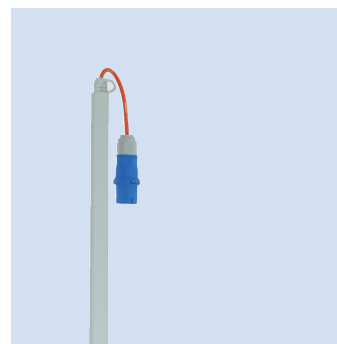
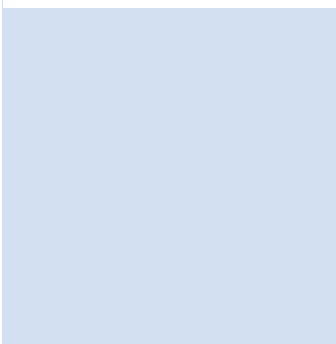
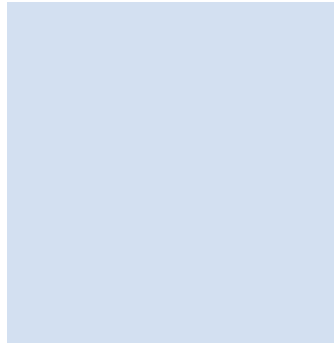
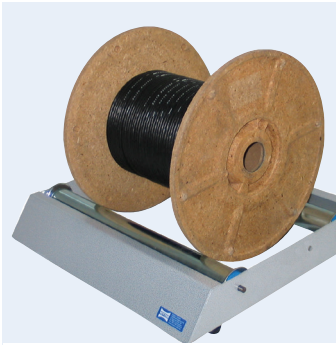


## Cable winding and length measuring devices



**Hand cable winding machines for cable D 3-30 mm**

**Hand cable winding machines for cable D 1-30 mm**

**Electric cable ring winding machines for cable D 1-30 mm**

**Cable drum and ring winding machines for drums to D 1400 mm**

**Cable drum and ring winding machines for drums to D 2000 mm**

**Cable drum and ring winding machines for drums to D 2500 mm**

**Accessory for all cable winding machines**

**Cable length measuring devices for cable-D 3-120 mm**

**Cable length measuring machines**

**Accessory electronic cable traversing**

**Cable drum storage stands for drums D 400-1600 mm**

**Cable and hose spooling stands for drums to D 1800 mm**

**Cable drum transport and winding units 3-15 t**

**Accessory for cable drum winding units KTU 3-15**

**Cable winding units for drums from 20-55 t and up to D 6000 mm**

**Accessory for cable drum winding units KTU 3-16**

**Accessory for cable drum winding units KTU 3-17**

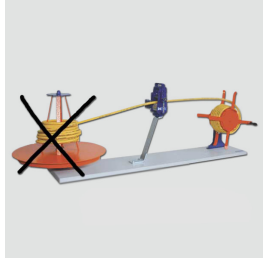
**Accessory for cable drum winding units KTU 3-18**

**Accessory for cable drum winding units KTU 3-19**

**Accessory for cable drum winding units KTU 3-20**

**Accessory for cable drum winding units KTU 3-21**

**Cable steel drums hot galv. D 1000-3200 mm**



### Manual cable coilers, cable-D 3-16 mm

These small, but effective manual winding devices are primarily intended for the occasional winding of smaller cables, wires or lines from delivery drums to rings. Using a spool as an accessory, lengths of cable can also be rewound from larger drums to smaller ones.

Manual cable coilers on table plate with coil winder DW 20S with crank for winding small cables from small drums on rings or from rings to rings. Without length measuring device, prepared to take length measuring equipment HK 11 or HD 11S optional. Accessory see table below.

- DH 15 on 28 mm base plate of glued wood, 1000x250 mm, without ring unwinder.
- DH 15A on 28 mm base plate of glued wood, 1250x250 mm, with ring unwinder D 380/150-170x100 mm.
- Prepared for mounting hand length measuring devices HK 11 or HD 11S.

Code	Type	C-D	Coil winder	C-winder dimens.	Cable D/m	kg
322303	DH 15	3-16	DW 20S	D 380/150-170x100	5/200, 15/20	12,30
322304	DH 15A	3-16	DW 20S	D 380/150-170x100	5/200, 15/20	21,90



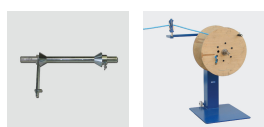
### Manual cable coilers, cable-D 1-16 mm

These small, but effective manual winding devices are primarily intended for the occasional winding of smaller cables, wires or lines from delivery drums to rings. Using a spool as an accessory, lengths of cable can also be rewound from larger drums to smaller ones.

Manual cable coilers on table plate with cable winder DW 20S with crank for winding small cables from small drums on rings or from rings to rings. Without length measuring device, prepared to take length measuring equipment MZ 20, MZ 20S or M 20, M 20S.

- DH 16 on 28 mm base plate of glued wood, 1000x250 mm, without ring unwinder.
- DH 16A on 28 mm base plate of glued wood, 1250x250 mm, with ring unwinder D 380/150-170x100 mm.
- Prepared for mounting length measuring machines MZ 20, MZ 20S or M 20, M 20S.

Code	Type	C-D	Coil winder	C-winder dimens.	Cable D/m	kg
322305	DH 16	1-16	DW 20S	D 380/150-170x100	5/200, 15/20	11,30
322307	DH 16A	1-16	DW 20S	D 380/150-170x100	5/200, 15/20	20,80



## Manual cable coiler, cable-D 3-30 mm

These small, but effective manual winding devices are primarily intended for the occasional winding of smaller cables, wires or lines from delivery drums to rings. Using a spool as an accessory, lengths of cable can also be rewound from larger drums to smaller ones.

Manual cable coiler, column type, without coil winder, without drum adapter shaft. Prepared for one of the manual length measuring device, see tables below. For cable-D 3-30 mm. Base plate 600x600 mm, through tilting easy moving by hand by 2 poly-wheels. Height to coiler centre approx. 850 mm. Basic machine without accessory, please select below according to your need.

- Length measuring device HK/HD 11S, cable-Ø to 21, or HK/HD 12S, cable-Ø 50, see table below
- Without coil winders, different coil winders, see table below
- DS 32H = adapter shaft for wooden or plastic spools, capacity 100 kg, see table below

Code	Type	Description	Cable D	Drum D/W	kg
322308	DH 28	Cable coiler	3-30 mm	---	60,00
322673	DS 32H	Adapter for	Wooden/plastic	D 800, W 400	5,60



## Manual cable coiler, cable-D 1-30 mm

Manual cable coiling machine, mobile steel construction. Without drum adapter shaft, without coil winder. Prepared for one of length measuring devices M/MZ 20-40 (S), see tables below. For cable-D 1-30 mm, or steel rope D 1-8 mm. L/W: 1600x660 mm. Cable entrance height approx. 1150 mm. Capacity 100 kg.

- Cable length measuring device M/MZ 20 for cable, or M/MZ 20 S for steel ropes
- Cable length measuring device M/MZ 40 for cable, or M/MZ 40S for steel ropes
- DS 32H = adapter shaft for wooden or plastic spools, see below
- For length measuring machines type M a power supply code 323110 is necessary

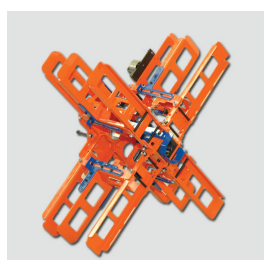
Code	Type	Description	Cable D	Drum D/W	kg
322313	DH 31	Cable coiler	1-30 mm	---	96,00
322673	DS 32H	Adapter for	Wooden/plastic	D 800, W 400	5,60



## Accessory to manual cable coiler to DH 28 and DH 31

Coil winders and adapter shaft for wooden or plastic spools. With these the hand cable coiler can be assembled by yourself in any configuration. For this please select accessories below. Capacity 100 kg.

Code	Type	Descript.	C-winder dims.	C-D/m	kg
322634	DW 26VK	Coil winder	D 600/200-420, int. 35-200	10/340, 20/65	27,00



## Coil winder collapsible to DH 28 and DH 31

Coil winder adjustable in diameter and width. Collapsible for fast serving of cable rings, including cable loop for fixing the cable head on the coil winder. Incl. eccentric clamp for cable-D 5-30 mm. Capacity 100 kg.

Code	Type	C-winder to	C-winder dims.	C-D/m	kg
322639	DW 30VK	DH 31	D 800/350, int. 80-200	10/600, 20/400	29,00





### Eccentric clamp to DH 28 and DH 31

Eccentric clamp for fixing the cable head to the coil winder for winding procedure.

Code	Type	Suitable for	For C-D	kg
322875	KE 41	Coil winder DW 26 VK	5-30	0,30



### Adapter for HK 11/HD 11S, or HK 12/HD 12S on DH 28

Support for mounting length measuring device HK 11/HD 11S or HK 12/HD 12S on coiler machine DH 28.

Code	Type	Suitable for	kg
322309	TK 28	HK 11/HD 11S or HK 12/HD 12S	2,40

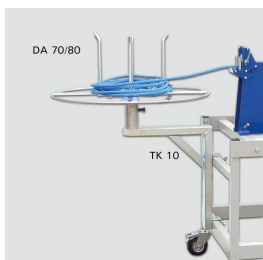


### Manual cable length measuring devices

Manual cable length measuring devices with counter up to 999,99 m. Accuracy  $\pm 1,0\%$ , figure height 4 mm.

- Types HK .. only for cables, types HD .. S with hardened rollers also for steel ropes.
- KB 01 Calibration before delivery through Vetter is possible, but this is not a conformity assessment module F1.
- Red hand grip can be unscrewed to screw the device on any other machine.
- The accuracy refers to a cable length of min. 10 m.

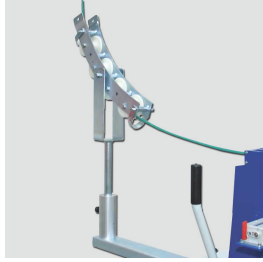
Code	Type	C-D	St-rope	L/W/H mm	kg
262460	HK 11	3-21	no	300x150x70	1,30
262400	HD 11S	3-21	3-12	300x150x70	1,40
262410	HD 12S	3-50	3-22	330x190x70	2,00
262470	HK 12	3-50	no	330x190x70	1,98
262480	KB 01	Calibration	---	---	0,01



### Cable ring unwinder

Cable ring unwinder, without support TK 10.

Code	Type	Suitable for	For cable rings	kg
322610	DA 70	DE 30F/SF	D 160-600, height 270	8,40
322611	DA 80	DE 30F/SF	D 160-700, height 270	9,40
322614	TK 10	DE 30F/SF	Support to DA 70, DA 80 + RB 45	8,20



### Roller bow with adapter

Roller bow with adapter for support for unwinding cables from drums of upper stands. Please order support TK 10, code 322.614 separately.

Code	Type	Suitable for	kg
322613	RB 45	DE 30F/SF	6,80



### Hand cutter

Cable or rope hand cutter including fixing plate for mounting on cable length measuring machines M/MO 20/40.

Code	Type	Suitable for	For C-D	St-rope	kg
322811	HK 31	M/MO 20/40	31	no	3,00
322813	HS 12	M/MO 20/40S	12	12	3,00



### Universal cable winding machine R 41M

Universal winding machine motor-driven with spool take-up and optional ring winder, optionally with manual length measuring device or digital counter with length preselection. Both versions are suitable for cable Ø up to 30 mm and are each without conformity assessment according to EU Directive 2014/32/EU, Annex MI-009..

This handy universal winding machine is mainly used in electrical wholesalers and in special machine construction. It is intended for frequent and professional winding of smaller cables, wires or ropes onto small spools or rings.

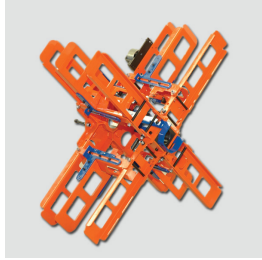
**R 41M**The universal spooling machine R 41M contains a hand-held length measuring device R41M-H12 with mechanical counter without storage of the measured data. The speed is adjusted via a potentiometer.

**R 41MCD**The R 41MCD can be controlled easily and safely via a touch display on the digital length measuring device, speed adjustment and length preselection are carried out via the touch display.

- Driving power of electric motor 230 V, 0,75 kW
- Steel construction as a driveable chassis with 4 steering brake rollers, LxWxH 1185 x 855 x 1475 mm
- Manual cable laying with electronically continuously variable drive
- Easy and safe machine operation via safety foot pedal
- Protective door with safety cut-off
- Spool holder for spool D max. 800 mm max. spool W 300 mm
- Coil winder RD 30M for tying cable rings and foldable core (optional)
- Load capacity to 150 kg

Code	Type	L-meter	For C-D	Traversing	kg
322321	R 41M	R41M-H12	3-30	manual	235,00
322323	R 41MCD	CD-Touch-TSG4	3-30	manual	235,22





### Coil winder adjustable, foldable

Coil winder adjustable in diameter and inside width. Front side foldable, for quick creation of cable rings. Incl. cable pull loop for fastening the beginning of the cable in the coiling head before coiling. Incl. clamping eccentric for cable D 1-30. Load capacity 150 kg.

Code	Type	Suitable to	Dimension	Cable D/m	kg
032232022	RD 30M	R 41M/MCD	D 800/350, B90-200	10/750, 20/180	20,00



### Cable coiling and spooling machine for cable-Ø 1-30 mm

This small but effective electrical ring coiler are primarily used by electrical wholesalers and industry. It is intended for the frequent and professional winding of smaller cables, wires or lines from delivery drums onto rings. Using a spool as an accessory, lengths of cable can also be rewound from larger drums to smaller ones.

This electrical cable and ring coiling machine DE 30 for cable diameters up to 30 mm is equipped with the latest technique and also sensitive fibre optic cables can be spooled very well. The frequency controlled drives enable gentle, automated start-up and braking to protect the cable and for highly accurate measurements. This machine can be equipped with an automatic cable layering feature that increases performance even further.

An universal cable coiling and spooling machine for cables from 1-30 mm. Suitable for coiling and spooling on smaller drums up to dia. 800 mm, of width to 340 mm. Two speed steps between 0-140 rpm can be adapted to the cable diameter and its sensitivity. An automatic blocking device avoids to work with the wrong speed. DE 30 therefore is a machine for two applications: spooling of small electronic or telecommunication cables with high speed and spooling of bigger cables with reduced speed. For sensitive cables there is a possibility to limit the pulling force.

Simple and easy understandable operation through touch-screen with additional mechanical push-button. Potentiometer mounted on a pivoting operator panel. Type DE 30SF with electronic automatic cable traversing provides an even alignment of the cable on the drum. Adjustment of the reversal points is done by push-buttons and input of the cable diameter by a control dial. Corrections of both parameters during the winding procedure are possible through laser pointer. On type DE 30 F cable traversing is done manually by the operator. Further technical details and accessory like coil winders and cable cutters see internet or pdf-leaflet no. 322

The appropriate length measuring equipment can be selected for this device. It is also possible to permanently mount cable cutting equipment to the measuring machines.

- Driving power of electric motor 230/400V, 0,75 kW, torque 130 Nm.
- Frequency controlled soft start and soft stop. Capacity 100 kg.
- For drums to 400 mm 0-140 rpm, for drums > 400, 0-80 rpm.
- Electronic pre-set counter for pre-selection of the cable length with automatic cut-off.
- Compact construction for easy rotating in shelf corridors. Dimension 1680x900x1200.

Code	Type	C-D	L-meter	Traversing	Drum-D	kg
323326	DE 30F	1-30	M/MZ 20-40	manual	D 800x340	212,00
323327	DE 30SF	1-30	M/MZ 20-40	automatic	D 800x340	252,00



### Power lead

Power lead from top to coiling machines DF 26-32 F/SF, two-piece. As accessory or for retrofitting of earlier supplied machines.

Code	Type	Suitable for	Height	kg
322371	SZ 3	DE 30F/SF	2,30 m	3,10



### Cable coiling and spooling machine with laser safety grid for cable-Ø 1-40 mm

NEW: Innovative laser safety grid for more safety and comfort!

The state-of-the-art DE 30LG electric ring coiling machine is the indispensable tool for electrical wholesalers and industry. This compact but extremely effective machine is designed to wind small cables, wires or ropes from supply reels onto rings. Alternatively partial lengths of cable can also be easily rewound from larger spools to smaller ones.

The universal cable coiling machine is suitable for cables with a diameter of 1 to 40 mm and is equipped with the latest technology. Even sensitive fibre optic cables can be coiled without any problems. The frequency-controlled drive ensures smooth, automatic acceleration and deceleration to protect the cables and ensure precise measurement. The option of automatic cable layering further increases the machine's performance.

The latest generation DE 30LG is equipped with a laser safety grid instead of a mechanical grid, which allows the operator to carry out work without opening a safety grid. This advanced safety function makes processes even easier and safer for the operator.

Contactless protection for increased safety:

The laser safety grid provides safe protection without a physical obstacle blocking the work area. It recognises movements and prevents people or objects from approaching the work area.

Unrestricted access and flexibility:

In contrast to a fixed mechanical safety cage, the laser safety grid allows unhindered access to the work area. This allows work to be carried out flexibly and efficiently without the operator having to remove physical protective cage.

Saves time and increases efficiency:

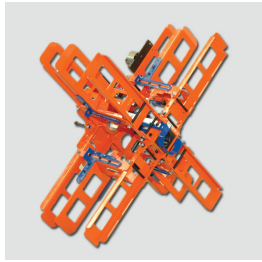
As no manual opening or closing of a protective cage is required, the working speed is increased. The operator can switch more smoothly between different tasks without losing time opening and closing protective devices.

The DE 30LG is perfect for coiling rings and spooling cable drums up to a diameter of 800 mm and a width of 350 mm.

- Operation via touchscreen
- Electronic preselection counter for setting the desired cable cutting length.
- Compact design for turning in narrow shelf aisles
- Equipped for small drums up to Ø 800 mm, 350 mm width and 200 kg capacity

Code	Type	C-D	L-meter	Traversing	Drums	kg
323350	DE 30LG	1-40	M/MO 20-40	manuell	D800/B350/200kg	345,00





## Coil winder collapsible

Coil winder collapsible, cylindrical, adjustable in width. For fast serving of cable rings. Capacity 150 kg

- inkl. Kabelzugschleife zur Befestigung des Kabelanfangs im Wickelkopf vor dem Aufwickeln
- inkl. Klemmexzenter für Kabel-D 5-30
- Tragfähigkeit 150 kg

Code	Type	Suitable for	C-winder demins.	C-D/m	kg
03233531	DW 30LG	DE 30LG	D 800/350, int. 90-200	10/750, 20/180	33,00



## Electronic cable traversing

Automatic electronic cable laying device for DE 30LG. The turning points and cable diameters are set using buttons and rotary switches on the control panel. In conjunction with a preset counter, the machine can work automatically so that the operator can carry out other tasks during winding

Code	Type	Suitable for	kg
032283282	REL 16D	DE 30LG	7,00



## Hydraulic cutting device

Hydraulic system for using a HKS 40 cable cutting head on a DE 30LG.

Hydraulic cable cutting head for attachment to length measuring machine type M 40, for cutting cables, not for wire ropes.

Both options must be ordered to equip the DE 30LG for hydraulic cutting.

Only possible in conjunction with M 4

Code	Type	Suitable for	K-D	St-rope	kg
032335041	HSD 30LG	M/MO 40	40	No	35,00



## Cable drum and coiling machines hand pump lifting

These types for trade and industry focus on rewinding cables from drum to winding heads. Quick and easy modification also allows each machine to be fitted for winding from drum to drum of Ø 400-1000 mm.

Cable drum and coiling machines for cables and wires. For use in cable stores at distributors, industrial plants etc. Winding and measuring from drum to drum or to coil. Machine in stable steel construction. Drum lifting by hydraulic hand pump. Drum shaft for bores from 60 mm with cones clamped by hand. Cable traversing with ball bearings to mount length measuring equipment MZ and M 20-40 / S, moving by hands. Electronic pre-set counter included as standard equipment. Included safety cage with automatic switch-off. Easy displacement through big wheels. Further accessory see below.

The appropriate length measuring equipment can be selected for this device. It is also possible to permanently mount cable cutting equipment to the measuring machines.

- For winding from drum to drum or von drum to coils.
- Frequency controlled drive with soft start and soft stop.
- Winding speed 15-80 rpm. Capacity to 400 kg.





Code	Type	C-D	Drum-D/W	kW/Volt	L/W/H m	kg
323400	DTR 80F	3-35	400-800/200-620	1,1/230	1,6/1,4/1,4	455,00



## Cable drum and coiling machines electro hydraulic lifting

These types for trade and industry focus on rewinding cables from drum to winding heads. Quick and easy modification also allows each machine to be fitted for winding from drum to drum of Ø 400-1000 mm.

Cable drum and coiling machines for cables and wires. For use in cable stores at distributors, industrial plants etc. Winding and measuring from drum to drum or to coil. Machine in stable steel construction. Drum lifting by electro-hydraulic pump. Drum shaft for bores from 60 mm with cones clamped by hand. Cable traversing with ball bearings to mount length measuring equipment MZ and M 20-40 / S, moving by hands. Electronic pre-set counter included as standard equipment. Included safety cage with automatic switch-off. Easy displacement through big wheels. Further accessory see below.

The appropriate length measuring equipment can be selected for this device. It is also possible to permanently mount cable cutting equipment to the measuring machines.

- For winding from drum to drum or von drum to coils.
- Frequency controlled drive with soft start and soft stop.
- Winding speed 15-80 rpm. Capacity DTR 80 to 400 kg, DTR 100 to 800 kg.

Code	Type	C-D	Drum-D/W	kW/Volt	L/W/H m	kg
323410	DTR 80FH	3-35	400-800/200-620	1,1/230	1,6/1,4/1,4	480,00
323430	DTR 100FH	3-40	600-1000/420-710	1,5/230	1,8/1,6/2,2	530,00



## Cable drum and coiling machines

These types for trade and industry focus on rewinding cables from drum to drum. Quick and easy modification also allows each machine to be fitted with winding heads in various diameters and adjustable versions, in order to make cable rings. There is almost no task that cannot be productively solved using these machines. Drums from 600 mm to 2500 mm can be wound on and off. Hydraulic raising and lowering of the drums, as well as automated layering of the cable, allow extensive automation of the work processes.

For more information, please see the following sections. If you tell us what sizes of drum you need to work with and your main type of cable, we can develop a tailor-made concept to meet your requirements.

Cable drum and coiling machines. For use in cable stores at distributors, industrial plants etc. Machine in stable steel construction. Electro-hydraulic drum and coil winder lifting by 2 arms. Cable traversing with ball bearings ready to mount length measuring equipment M 20 - M 60 / S, moving by hands. Electronic pre-set counter included as standard equipment. Included safety cage with automatic switch-off. Easy displacement through big wheels.

The appropriate length measuring equipment can be selected for this device. It is also possible to permanently mount cable cutting equipment to the measuring machines.

- For winding from drum to drum or from drum to coils.
- Frequency controlled drive with soft start and soft stop.
- Drum lifting by hand hydraulic.
- Winding speed 15-80 rpm. Capacity: TR 147F 1500 kg.

Code	Type	C-D	Drum-D	kW/V	L/W/H m	kg
323501	TR 147F	5-40	600-1400	2,2/400	2,3/2,0/2,0	700,00



## Cable drum and coiling machines

These types for trade and industry focus on rewinding cables from drum to drum. Quick and easy modification also allows each machine to be fitted with winding heads in various diameters and adjustable versions, in order to make cable rings. There is almost no task that cannot be productively solved using these machines. Drums from 600 mm to 2500 mm can be wound on and off. Hydraulic raising and lowering of the drums, as well as automated layering of the cable, allow extensive automation of the work processes.

For more information, please see the following sections. If you tell us what sizes of drum you need to work with and your main type of cable, we can develop a tailor-made concept to meet your requirements.

Cable drum and coiling machines. For use in cable stores at distributors, industrial plants etc. Machine in stable steel construction. Electro-hydraulic drum and coil winder lifting by 2 arms. Cable traversing with ball bearings ready to mount length measuring equipment M 20 - M 60 / S, moving by hands. Electronic pre-set counter included as standard equipment. Included safety cage with automatic switch-off. Easy displacement through big wheels. Further accessory see below.

The appropriate length measuring equipment can be selected for this device. It is also possible to permanently mount cable cutting equipment to the measuring machines.

- For winding from drum to drum or from drum to coils.
- Frequency controlled drive with soft start and soft stop.
- Electro-hydraulic drum lifting and hand clamping centric seals.
- Quick clamp of the drum with mechanical ratchet seals and hydraulic seals
- Capacity: TR 147FH, 1500 kg, TR 167FH, 2000 kg, TR 207FH, 3000 kg.
- Winding speed: TR 147FH 15-80 rpm, TR 167FH 15-80 rpm, TR 207FH 10-60 rpm

Code	Type	C-D	Drum-D	kW/V	L/W/H, m	kg
323511	TR 147FH	5-40	600-1400	2,2/400	2,3/2,0/2,0	700,00
323531	TR 167FH	10-45	700-1600	3,0/400	2,8/2,0/2,1	800,00
323551	TR 207FH	10-60	700-2000	5,5/400	3,0/2,4/2,2	1.200,00

## Cable drum and coiling machines

These types for trade and industry focus on rewinding cables from drum to drum. Quick and easy modification also allows each machine to be fitted with winding heads in various diameters and adjustable versions, in order to make cable rings. There is almost no task that cannot be productively solved using these machines. Drums from 600 mm to 2500 mm can be wound on and off. Hydraulic raising and lowering of the drums, as well as automated layering of the cable, allow extensive automation of the work processes.

For more information, please see the following sections. If you tell us what sizes of drum you need to work with and your main type of cable, we can develop a tailor-made concept to meet your requirements.

Cable drum and coiling machines for cables and wires, series TRG. Automatic working machine for bigger cable drums. Automatic cable traversing with infinitely variable electronic setting of the cable diameter. Cable traversing ready to mount length measuring equipment M 40 - M 80. Electronic pre-set counter included as standard equipment and many other special functions. Control through central touch panel 7" with option to connection on PC. Protecting cover with automatic switch-off. Further accessory see below.

The appropriate length measuring equipment can be selected for this device. It is also possible to permanently mount cable cutting equipment to the measuring machines.

- Frequency controlled drive with soft start and soft stop.
- incl. automatic measuring unit for cable diameter detection
- incl. laser pointer for exact adjustment of cable laying
- Hydraulic open and closing of the lifting arms with automatic drum fixing.
- Automatic swivelling of the coil winder into working position.
- Coil winder speed on all machines TRG 160-250FH is 15-100 rpm.
- Capacity: TRG 160FH 2000 kg, TRG 200FH 3000 kg, TRG 250FH 4000 kg.

- Winding speed: TRG 160FH 10-45 rpm, TRG 200FH 10-70 rpm, TRG 250FH 7-60 rpm

Code	Type	C-D	Drum-D	kW/V	L/W/H m	kg
323630	TRG 160FH	10-45	600-1600	3,0/400	2,6/2,7/2,2	1.050,00
323650	TRG 200FH	10-60	600-2000	5,5/400	3,0/2,4/2,4	1.250,00
323670	TRG 250FH	10-80	600-2500	7,5/400	3,6/2,7/2,7	1.650,00

### Coil winder fixed centre

Conical coil winder with fixed centre and foot. Capacity 20 kg.

Code	Type	C-winder to	C-winder dims.	C-D/m	kg
322625	DW 20S	DH 15-16	D 380/150-170, int. 100	5/200, 10/50	4,50
322626	DW 20	DE 30F/SF	D 380/150-170, int. 100	5/200, 10/50	3,30

### Adapter for coil winders

Adapter for coil winders on electric coil winding machines

Code	Type	Suitable for	On machine	kg
322620	DWA 20	DW 18+DW 20	DE 30	3,00

### Adapter for drums

Adapter for wooden or plastic drums on electric coil winding machines DE 30. Capacity 100 kg.

Code	Type	Suitable for	Drum-D max.	Drum width	kg
322672	DS 32	DE 30F/SF	800	330-400	5,50

### Coil winder collapsible

Coil winder collapsible, cylindrical, adjustable in width. For fast serving of cable rings. Capacity 100 kg.

- After winding procedure the ring will be served through the spokes.
- To take away the ring the coil winders flange will be folded down.

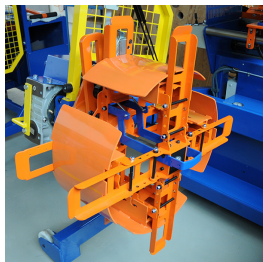
Code	Type	Suitable to	C-winder dims.	C-D/m	kg
322654	DTW 80VK	DTR 80-100	D 800/420, int. 90-200	10/600, 20/140	37,00
322655	DTW 90VK	DTR 100	D 800/350-420, B 90-200	10/600, 20/140	37,00



## Coil winder collapsible

Coil winder collapsible, cylindrical, adjustable in width. For fast serving of cable rings, including eccentric clamp for fixing the cable head on the coil winder. Capacity 100 kg.

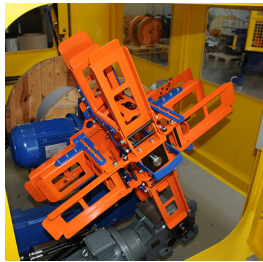
Code	Type	Suitable for	Dimension	Cable D/m	kg
3226621	RW 36VK	TR 147-207 FH	D 800/350, int. 90-200	15/260, 30/60	32,00
3226631	RW 46VK	TR 147-207 FH	D 900/420, int. 100-250	15/390, 30/100	35,00
3226641	RW 56VK	TR 147-207 FH	D 1000/460, int. 100-250	15/530, 30/130	37,00



## Adapter to coil winder RW 56VK

Adapter for coil winder RW 56VK for achieving better, rounder winding core. Especially for sensitive cables and aluminium cables.

Code	Type	For	Dimension	Cable D/m	Cap.	kg
03226643	Adapter	RW 56VK	D 1000/630, In 250	15/350, 30/100	100 kg	25,00



## Coil winder with drive

Coil winder with drive for optional mounting on lifting arms of TRG 160-250

- Coil winder with separate drive. D 800/350, int. width 100-200
- Hinged mounted on the machine.
- High winding speed of 15-100 rpm. Capacity 150 kg.

Code	Type	Suitable for	Capac. cable D/m	kg
322666	RWG 80VK	TRG 160-250	10/750, 30/80	80,00



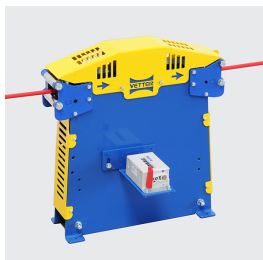
## Cable length measuring machines, mechanical counter

Cable and wire length measuring machines with mechanical counter without data storage, for stationary applications. Very robust steel construction. Due to the big perimeter of 1 m, high accuracy of  $\pm 0,5 \%$ , accuracy class III, at temperatures of 5-40°C.

Without conformity assessment. May only be used for purely internal use, not for sales of cables. Conformity assessment procedure according to Module F1 is possible, which allows direct sales of cables.

- Types MZ ... only for insulated cables, types MZ ... S also for bare metal goods.
- The accuracy refers to a calibrated cable of a length of at least 10 m.
- Measuring machines for cable bigger than  $\varnothing 60$  mm are available on request.
- In the winding machines DTR/TR/TRG the electronic pre-set counter is installed as standard.

Code	Type	C-D	St-rope	L/W/H mm	kg
323730	MZ 20	1-20	no	360/280/400	16,00
323735	MZ 20S	1-20	1-8	360/280/400	16,00
323750	MZ 40	3-40	no	550/300/420	28,00



323755	MZ 40S	3-40	3-22	550/300/420	28,00
323770	MZ 60	10-60	no	700/360/600	54,00
323775	MZ 60S	10-60	6-32	700/360/600	54,00

### Cable length measuring machines, electronical counter

Cable and wire length measuring machines with electronic counter for mounting on all cable winding machines and for stationary use. For this the power supply device 323.110 is necessary. Mounted on a spooling machine the power supply comes from the machine. Very robust steel construction. Due to the big perimeter of 1 m high accuracy of  $\pm 0,5\%$ , accuracy class III at temperature of 5-40°C.

With conformity assessment according to EU Directive 2014/32/EU, Annex MI-009, valid throughout Europe. Conformity assessment procedure with type examination according to module B and product test according to module F. Equipped as standard with 3.5 inch colour touch screen incl. electronic pre-selection counter.

- Types M ... only for insulated cables, types M ... S also for bare metal goods.
- The accuracy refers to a calibrated cable of a length of at least 5 m.
- Measuring machines for cable bigger than  $\varnothing 60$  mm are available on request.
- Power supply given below is only necessary if measuring machines are used with external devices.

Code	Type	C-D	Wire	L/W/H mm	kg
323720	M 20	1-20	no	360/280/400	17,00
323725	M 20S	1-20	1-8	360/280/400	17,00
323740	M 40	3-40	no	550/300/420	28,00
323745	M 40S	3-40	3-22	550/300/420	28,00
323760	M 60	10-60	no	700/630/600	54,00
323765	M 60S	10-60	6-32	700/630/600	54,00
323110	Power unit	24/230 Volt	on M counter	110/110/90	1,00

### Cable and wire length measuring machines with electronical counter

Cable and wire length measuring machines with electronic counter for mounting on all cable winding machines and for stationary use. For this the power supply device 323.110 is necessary. Mounted on a spooling machine the power supply comes from the machine. Very robust steel construction. Due to the big perimeter of 1 m high accuracy of  $\pm 0,5\%$ , accuracy class III at temperature of 5-40°C.

Without conformity assessment according to EU Directive 2014/32/EU, Annex MI-009, marked as types MO. Subsequent conformity assessment according to Annex MI-009 is possible at any time. Equipped as standard with 3.5 inch colour touch screen incl. electronic pre-selection counter.

- Types MO ... only for insulated cables, types MO ... S also for bare metal goods.
- The accuracy refers to a calibrated cable of a length of at least 5 m.
- Measuring machines for cable bigger than  $\varnothing 60$  mm are available on request.
- Power supply given below is only necessary if measuring machines are used with external devices.

Code	Type	C-D	Wire	L/W/H mm	kg
32372005	MO 20	1-20	no	360/280/400	17,00
32372505	MO 20S	1-20	1-8	360/280/400	17,00
32374005	MO 40	3-40	no	550/300/420	28,00
32374505	MO 40S	3-40	3-22	550/300/420	28,00
32376005	MO 60	10-60	no	700/630/600	54,00



## Measuring machines delivered from 2017

32376505	MO 60S	10-60	6-32	700/630/600	54,00
323110	Power unit	24/230 Volt	on M counter	110/110/90	1,00

### Conformity assessment for M/MZ 20-60 S

Application of the new EU directive 2014/32/EU (MID) has become compulsory on 1 November 2016 and it has been implemented in German law in the Verification Act (MessEG) as well as the Verification Ordinance (MessEV). Apart from the correct measurement of lengths, the requirements for the recording, confirmability and traceability of the measurements have been tightened considerably. The main change is the demand for permanent and non-corruptible storage of all measurements.

Specifically, the legislator demands that information on each measurement be stored securely, permanently and unchangeably. Apart from the actual length, the date and time of the measurement as well as information about the measuring instrument used are of relevance. All of these data are to be identified by means of an unambiguous and unique identifier, the objective being to ensure continuous traceability of each measurement. This means that machines may only be brought onto the market if they meet these requirements and have been accepted by a conformity assessment body (e.g. German Physical and Technical Institute, PTB, or the verification office) by way of a conformity assessment. The successful assessment of the measuring instruments is confirmed by the declaration of conformity issued by the manufacturer (e.g. Vetter) and is valid throughout Europe.

For companies who wish to sell the cables to third parties in the normal course of business, this means that only length measuring instruments meeting these requirements may be procured in future. The purchaser of a measuring machine with declaration of conformity is obliged to register the measuring machine with the competent verification office (in Germany [www.eichamt.de](http://www.eichamt.de)) immediately following the acquisition. Machines with a declaration of conformity from Vetter are deemed duly verified until expiry of the respective nationally regulated verification period. In Germany the rule is that validity of the conformity assessment is of two years. In retail sale the validity is unlimited as long as no seal is damaged or the maximum number of errors permitted in service is not exceeded. Divergent regulations may apply in other countries. These are obtainable from the applicable national laws.

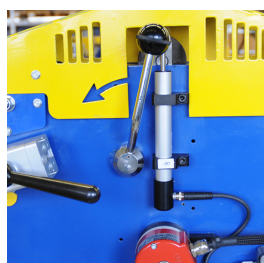
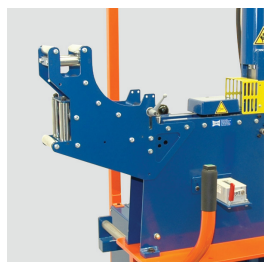
On expiry of the conformity assessment for the above-mentioned reasons, the competent verification office must carry out a reverification. Before this reverification, examination, adjustment and calibration of the measuring machine by trained personnel is recommended.

Thanks to the EU type examination certificate issued by the Federal Institute of Metrology METAS in Switzerland, machines of the new M series from Vetter can be used throughout Europe, irrespective of whether for use as measuring instruments on coiling machines or as a stand-alone solution for individual use. They offer the demanded uniformity, security, transparency and confirmability for buyers and sellers of cables within the European Economic Area. At the same time, the modular concept of the new series also enables use in direct sales or purely internal use and thus rounds off the complete range of applications for cable length measurement.

The Vetter cable measuring machines from the M 20-M60S series correspond to accuracy class III (+/- 0.5 %) according to EU Directive 2014/32/EU (MID) at temperatures of 5-40 °C with a minimum cable measuring length of 5 m for M machines and 10 m for MZ 20-M60S machines.

- KT 001 - Declaration for MZ-MZ/S, with mechanical counter, only for direct sales or purely internal use.
- KT 002 - Declaration for M-M/S, with electronical counter, for business use in absence of the buyer.

Code	Type	Module	For	kg
323700	KT 001	F1	MZ 20-MZ 60S	0,01
323705	KT 002	B+F	MZ 20-MZ 60S	0,01

[illegible]

## Calibration of length measuring machines HK/HD/KDM/KLM/MZ

To confirm the testing of length measuring devices, HK/HD/KDM/KLM/MZ, according to ISO 9001 and other QM systems the calibration (KA 001) executed by Vetter is sufficient in most cases. On the other hand the calibration does not replace the EU conformity assessment whenever it comes to commercial sales of cables.

Code	Type	kg
323710	KA 001	0,01

## Roller bow

Roller bow for unwinding cables from drum of upper drum stands. For fitting at cable length measuring machines MZ or M.  
Steel rollers D 25 mm.

- Type RB 4090 and 6090 - 90° deviation for unwinding from upper drum stands, 15 steel rollers.

Code	Type	Suitable for	C-D	Pass	Bend	L/W/H mm	kg
322783	RB 4090	M/MZ 40	max. 40	45x45	90°	400x180x380	10,10
3227831	RBS 4090	M/MZ 40/40S	max. 40	45x45	90°	400x180x380	10,50
322781	RB 6090	M/MZ 60	max. 60	65x65	90°	450x200x500	30,50

## Electronic cable traversing

Automatic electronic cable laying device to DTR spooling machines. Adjustment of turning points and cable diameters via push-buttons and rotary switches on the control panel.

Incl. automatic measuring unit for channel diameter detection on length measuring machines. The measured value of the cable diameter is entered directly into the electronic laying device. A correction of the cable diameter is also possible via the potentiometer on the control panel.

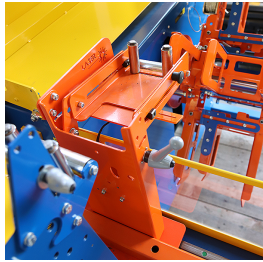
Incl. laser pointer for easy and accurate adjustment or control of cable laying. Attachment to the laying arm or measuring device.

Code	Type	Suitable for	For C-D	kg
322834	REL 26D	DTR 80FH-100FH	3-40	16.00

### Automatic Cable diam. measuring unit

Automatic measuring unit for cable diameter detection (accessory) for all length measuring machines built into cable spooling machines. The measured value of the cable diameter is entered directly into the electronic laying device. A correction of the cable diameter is also possible via potentiometer in the control panel.

Code	Type	For mounting on	kg
322930	ACD 100	DTR 80-100 + TR/TRG 147-207	1,10



## Layering-over arm telescopic

Layering-over arm telescopic for traversing sensitive cables on DTR machines

Code	Type	Suitable for	Machine	C-D	kg
322790	BRD 20	DTR	M/MZ20	1-20	8,00
322791	BRD 20S	DTR	M/MZ20S	1-20	8,00
322792	BRD 40	DTR	M/MZ 40	3-40	8,00
322793	BRD 40S	DTR	M/MZ 40S	3-40	8,00



## Layering arms

Layering arms on cable length measuring machines M/MZ 40-60 S, for better cable traversing on winding machines TR/TRG, especially for soft or thin cables.

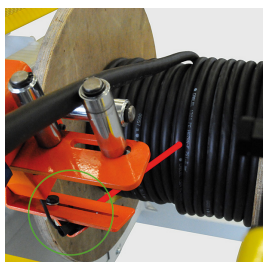
Code	Type	Suitable for	On machine	C-D	kg
322802	BRT 40	TR/TRG	M/MZ 40	3-40	8,00
322803	BRT 40S	TR/TRG	M/MZ 40S	3-40	8,00
322804	BRT 60	TR/TRG	M/MZ 60	10-60	8,00
322805	BRT 60S	TR/TRG	M/MZ 60S	10-60	8,00



## Control arm

Control arm with nivomat to prevent from damage of Fibre Optic and sensitive CU-cables up to D 12 mm during winding process. Light control arm of aluminium, length approx. 1050 mm, bending radius R 150 mm, with adjustable weights to the winding process. Arm is easy removable for winding of heavier cables.

Code	Type	Suitable for	For C-D	Length	kg
322720	SAA 20	MZ 20	12	1050	8,00
322723	SAA 40	MZ 40	12	1050	10,00



## Laser-Pointer

Laser-Pointer for easy and accurate adjustment of cable traversing on cable winding machines. Fixing on layering arm or length measuring device M/MZ 20-40

Code	Type	Colour	To mount	kg
322839	LP 10	red	M/MZ 20-60 S	5,00



### Moving equipment, hydr.

Moving equipment for electro-hydraulic lift of the winding machine and for displacement by a hand draw bar.

- The moving equipment exists of the following parts:
- Fixed hand steering pole with hydraulically lifting jack and a polyamide wheel
- On the opposite side the machines are equipped with two fixed polyamide wheels
- The retrofitting of this equipment is not possible

Code	Type	Suitable for	Lifting	Running	kg
323440	HG 100HID	DTR 80-100	Hydraulic	manual	25,00



### Centring sleeves for drums

Standard all drum winding units are equipped with the following centring sleeves:

- TR 147-167 standard for centre holes of D 80
- TR 200-207 standard for centre holes of D 80 and D 125.
- For other centre holes special sleeves see below have to be ordered.

Code	Type	Suitable for	Fixing	Form	For hole	kg
322864	AKZ 66	TR 147-207	D 40	conic	D 85-35	5,40



### Hand cutter

Cable or rope hand cutter including fixing plate for mounting on cable length measuring machines M/MZ 20-40.

Code	Type	Suitable for	For C-D	St-rope	kg
322815	BRD S35	M/MZ 20-40	35	no	10,00



### Cable cutting head, hydraulic

Cable cutting head, hydraulic for mounting on cable length measuring machines types M, for cutting insulated CU- and AL-cables, not for steel ropes.

Code	Type	Suitable for	For C-D	St-rope	kg
322820	HKS 40	M/MZ 40	40	no	11,00
322821	HKS 60	M/MZ 60	60	no	14,50

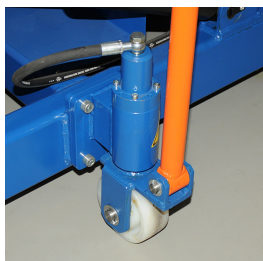


### Moving equipment, mech.

Moving equipment for mechanical lift of the winding machine and for displacement by a hand draw bar.

- The moving equipment exists of the following parts:
- Loose hand steering pole with two polyamide wheels
- On the opposite side the machines are equipped with two fixed polyamide wheels
- The retrofitting of this equipment is not possible

Code	Type	Suitable for	Lifting	Running	kg
322962	HG 90	TR 147	Tilting draw bar	manual	18,00



### Moving equipment, hydr.

Moving equipment for electro-hydraulic lift of the winding machine and for displacement by a hand draw bar.

- The moving equipment exists of the following parts:
- Fixed hand steering pole with hydraulically lifting jack and a polyamide wheel
- On the opposite side the machines are equipped with two fixed polyamide wheels
- The retrofitting of this equipment is not possible

Code	Type	Suitable for	Lifting	Running	kg
322965	HG 100HI	TR 167/TRG 160	Hydraulic	manual	25,00
322966	HG 125HI	TR 207	Hydraulic	manual	26,00



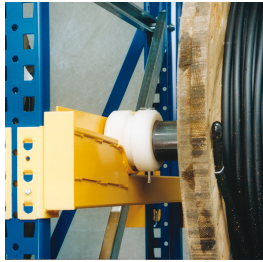
### Cable drum stands

Cable drum stands for storage and unwinding cables directly from the storage position into the cable winding machines. Length of the stands unlimited, height max. 6 m. In these stands standard cable drums can be shelved. Tell us your needs we submit you a solution.

- Suitable for all standard drums of D 400-1600
- Special polyamide bushings allow safe unwinding of the cable even from above.
- Each cable stand can be adapted to your needs.
- For optimizing of your stock we would like to mail you our check list.
- You will receive a list of standard components with an offer.

Code	Type	Drum-D	Drum weight	Int. width	
324000	KTR-Syst	400-1600	max. 2 t each	900/1100/1300	0,00





## Accessory to cable drum stands

Cable drum shaft for drum stand and polyamide bearings to cable drum stands

- Light thin-walled steel tubes
- Special polyamide bushings allow safe unwinding of the cables

Code	Type	Shaft	Bearings	kg
03259230	38/900	D 38x900	see below	2,00
03259232	51/900	D 51x900	see below	2,61
03259234	76/900	D 76x900	see below	4,50
03259236	51/1100	D 51x1100	see below	5,03
03259237	76/1100	D 76x1100	see below	5,50
03259238	76/1300	D 76x1300	see below	6,50
03259245	LAB 38	---	for shaft-D 38	1,00
03259246	LAB 51	---	for shaft-D 51	0,82
03259247	LAB 76	---	for shaft-D 76	0,60



## Cable winding stands

Cable winding and unwinding stands, stationary or for mounting on lorries etc. For drums up to 1,5 t. Drum drives in electric, hydraulic or pneumatic version available. Techn. details see table below. Please ask for our more extensive offers.

- Winding and unwinding equipment in many designs.
- Suitable also for multiple drums for cables or hoses.
- Drum drives electric, hydraulic or pneumatic version, see code 329.5xxx as accessory.
- The drum has to be loaded from the top by a hoist.
- The switch board can be replaced on the site at any of the three frame corners.
- Accessory rotating alu-drum shaft, select 0350.692xxx depending on internal width.

Code	Type	Cap.	Drum-D	Int. width	L/W/H mm	kg
329100	KTA 1,0 ST	1,0 t	630-1400	1000	1320/1140/1100	108,00
329200	KTA 1,5 ST	1,5 t	630-1800	1310	1620/1450/1300	138,00



## Rotating drum shafts

Rotating drum shafts suitable to cable winding stands KTA 1,0 ST and KTA 1,5 ST. Please order clamps separately.

Code	Type	Suitable for	D/length	SWL	kg
350684	TAS 7511	KTA 1,0 ST	75/1140	to 5 t	23,50
3506845	TAS 7514	KTA 1,5 ST	75/1450	to 5 t	24,00



### Cable winding stand for 2 drums

Cable winding and unwinding stand for 2 drums, stationary or for mounting on trucks etc. For drums up to 1,0 t. Drum drives in electric, hydraulic or pneumatic version available. Techn. details see table below. Please ask for our more extensive offers.

- Winding and unwinding equipment in many designs.
- Suitable for 2 drums and also for multiple drums for cables or hoses.
- Drum drives electric, hydraulic or pneumatic version, see code 329.5xxx as accessory.
- The drums have to be loaded from the top by a hoist.
- accessory rotating alu-drum shaft, select 0350.692xxx depending on internal width.

Code	Type	Cap.	Drum-D	Int. width	L/W/H mm	kg
329054	KTA 1,2 ST	1,0 t	630-1400	any width	1400/1200/1430/1100	111,00



### Cable drum drive to KTA 1.2

Cable drum drive to drum stand KTA 1.2, electric motor 0,75 kW, 400 V/50 Hz, with control box with frequency convertor, for winding and unwinding cables or hoses from KTA stand. Techn. details see table below. Please ask for our more extensive offers.

Code	Type	Drive	Pulley	Pull kN	Pull KN	m/min.	kg
329540	TEA 204	electric	D 220/80	bottom 2,5	on top 1,25	2-60	90,00



### Hose winding units with rotary transmission lead through

Hose winding units with rotary transmission lead through for air, water and suction tubes. Stationary or for mounting on lorries etc. For drums up to 1,0 t. Drum drives in electric, hydraulic or pneumatic version available. Techn. details see table below. Please ask for our more extensive offers.

- Any adaptation according to your application is possible.
- Suitable for single, multiple or several single drums for hoses and cables.
- Drum drives electric, hydraulic or pneumatic version, see code 329.5xxx as accessory.
- The drum has to be loaded from the top by a hoist.
- accessory drum shaft, to be selected acc. to technical needs.

Code	Type	Cap.	Drum-D	Int. width	L/W/H mm	kg
329050	KTA 0.5 DE	0,5 t	750-1300	640	1325/800/1150/1000	87,00
329051	KTA 1.0 DE	1,0 t	750-1300	840	1525/1000/1350/1200	106,00



## Cable winding stands

Cable winding and unwinding stands, mobile by 2 steering and 2 fixed wheels with parking brake. Wheels are coated with high wattage polyurethane. Suitable for drums up to 1,5 t and speeds up to 6 km/h. See accessories like: electro-, hydraulic- or pneumatic drum drives. Techn. details see table below. Please ask for our more extensive offers.

- Winding and unwinding equipment in many designs.
- Suitable also for multiple drums for cables or hoses.
- Drum drives electric, hydraulic or pneumatic version, see below
- The drum has to be loaded from the top by a hoist.
- accessory rotating alu-drum shaft, select 350.684xxx depending on internal width.

Code	Type	Cap.	Drum-D	Int. width	L/W/H mm	kg
329150	KTA 1,0 FA	1,0 t	630-1400	1000	1330/1180/1200	144,00
329250	KTA 1,5 FA	1,5 t	630-1800	1310	1630/1490/1400	174,00



## Cable drum drives

Cable drum drives for winding and unwinding cables from KTA stands. Techn. details see table below. Please ask for our more extensive offers.

- TEA 208 - Electro 1,5 kW/400V, with frequency converter 25-100 Hz
- TZ 200 - Hydraulic motor, 12 l/min. 160 bar, without hydraulic power pack
- TP 205 - Pneumatic motor, max. 1 m³/min., 6 bar, incl. air equipment

Code	Type	Drive	Pulley	Pull kN	Pull kN	rpm	kg
329550	TEA 208	electric	D 240/200	bottom 2,5	on top 1,25	0-15	118,00
351210	TZ 200	hydraulic	D 150/205	bottom 2,5	on top 1,25	0-15	69,00



## Hydraulic power packs mobile

Hydraulic power pack for cable drum drive, with petrol- diesel engine, or electric motor, equipped with rapid hose couplings.

- Petrol power pack, oil pressure 160 bar, tank 10 Litre, oil flow 12 l/min.
- With diesel engine oil pressure 160 bar, tank 13 Litre, oil flow 12 l/min.
- With electric motor oil pressure 210 bar, tank 13 Litre, oil flow 14 l/min.
- The hydraulic power pack must not be mounted on drawing bar of the trailer, the hitch load would be too high.
- For controlling the speed please order the following hose set.

Code	Type	Suitable for	Motor kW	L/W/H mm	kg
351330	THF 203B	drum drives	Petrol 9,6	854/457/507	74,00
351332	THF 203D	drum drives	diesel 6,8 kW	854/457/507	95,00
425351	HE 210	drum drives	Electro 4,0	733/405/433	67,00





## Hydraulic hose set

Hydraulic hose set 7 m, with volume governor for hydraulic power packs.

Code	Type	Length	Flow governor	kg
425381	SL 7	7 m	to 30 l/min	13,20



## Cable winding units stationary

Cable winding units stationary or for mounting on vehicles etc. For drums up to 3.0 t. This special unit is especially prepared for a drum drive through the centre shaft of the drum. With this drive heavy cables loads can be safety lifted and lowered. Only customer selected steel drums will be fix mounted and cannot be replaced by a standard cable drum. On demand different steel drums can be supplied, which can be replaced in the KTU 3 ZE within 3-4 hours. Please ask for a more extensive offer.

- Mainly used for lowering and lifting of cables and hoses in shafts and ground drillings.
- Through this high lifting and lowering forces can be safely controlled.

Code	Type	Cap.	Drum-D	Int. width	kg
331445	KTU 3 ZE	3 t	to 2000	any width	403,00



## Cable drum drive through the centre

Drum drive for winding or unwinding of cables, hoses or other goods. Suitable for cable winding stands KTU 3 ZE. Electric braking motor 4,0 kW, 230/400 volts, frequency convertor, switch cupboard, mobile control panel with 10 m cable. Protection IP 55 hose proofed. This drum drive transmits the winding force through the central drum shaft. With this drive big cable loads can be safety lifted and lowered. Techn. details see below. Please ask for a more extensive offer.

- Electric-brake motor with mitre gear 4,0 kW, 230/400 volt.
- Frequency convertor, control box, mobile remote control with 10 m cable.
- Protection IP 55 hose proof

Code	Type	For KTU	Pull force	m/min.	kg
333227	TEZ 201	3 ZE	max. 13 kN	0-25	345,00



## Cable winding units stationary

Cable winding unit, stationary without wheels, for drum weights up to 10 t. Technical data and accessories, such as drum drives, drum brakes, drum axles etc. see below. Please ask for our detailed offers.

- As winding unit with drum drive, accessory see below.
- As unwinding unit with drum disc brake, accessory see below.
- The both units can be combined to a complete cable winding plant.
- Between the units a traversing table with length measuring and control instruments can be placed.

Code	Type	Cap.	Drum-D	Int./ext. width/length	kg
331350	KTU 3 ST	3 t	800-2500	1740/1960/2000	420,00
331500	KTU 6 ST	6 t	800-3000	1740/2000/2200	470,00
331650	KTU 10 ST	10 t	800-3300	1940/2240/2600	540,00





## Cable winding units mobile

Cable rewinding device, mobile, with 2 swivel and 2 fixed lockable castors. Suitable for drum weights up to 15 t. Drum drives, drum brakes, drum axles etc. are available as accessories. Technical data see below. Please ask for our detailed offers.

- Wheels are coated with high wattage polyurethane.
- Suitable for speeds to 6 km/h.
- See accessories like drum electric, hydraulic drives, drum brakes etc.

Code	Type	Cap.	Drum-D	Int./ext. width/length	kg
331400	KTU 3 FA	3 t	1000-2500	1740/1960/2100	450,00
331550	KTU 6 FA	6 t	1000-3000	1740/2000/2340	500,00
331700	KTU 10 FA	10 t	1000-3300	1915/2240/2670	570,00



## Cable winding units for superstructure

Cable rewinding device with hydraulic lift (LH), stationary without wheels, for placing on the ground, for mounting on trucks, wagons, etc. For drum weights up to 6 t. The following accessories can be fitted: electric, electro-hydraulic, petrol or diesel-hydraulic drum drives, as well as drum disc brakes. Ask for our detailed offers.

Code	Type	Cap.	Drum-D	Int./ext. width/length	kg
331442	KTU 3 LH	3 t	800-2800	1740/2000/2200	470,00
331562	KTU 6 LH	6 t	800-3300	1740/2040/2600	520,00
331563	KTU 6 LH	6 t	800-3300	1940/2240/2600	540,00



## Cable winding units for superstructure

Cable rewinding device without hydraulic lift (LS), stationary without wheels, for placing on the ground, for mounting on trucks, wagons, etc. For drum weights up to 6 t. The following accessories can be fitted: electric, electro-hydraulic, petrol or diesel-hydraulic drum drives, as well as drum disc brakes. Ask for our detailed offers.

Code	Type	Cap.	Drum-D	Int./ext. width/length	kg
331454	KTU 3 LS	3 t	800-2800	1740/2000/2200	390,00
331566	KTU 6 LS	6 t	800-3300	1740/2040/2600	460,00

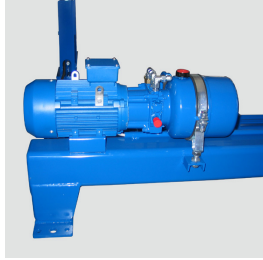


## Retainer for fork lifts

Retainer for fork lifts for KTU 3-10 ST, LH and LS, not for FA. for loading the unloaded machines without a cable drum on lorries or wagons. Max. size of the fork tooth see table below. Applicable from the front and the side part. This support can be mounted also as retrofitting part on all machines supplied after 01.08.2012.

Code	Type	Suitable to	For fork tooth	kg
331458	GAB 3-ST	KTU 3 ST	125x50	64,00
331590	GAB 6-ST	KTU 6 ST	150x50	55,00
331715	GAB 10-ST	KTU 10 ST	150x50	60,00





## Hydraulic jack lifter

Hydraulic jack lifting device. Electro-hydraulic power pack, 3 kW/400V motor. Individual control of the lifting jacks. Only for initial configuration, not for retrofitting.

Code	Type	Suitable for	kg
333287	HAE 310	KTU 3-10 without drum drive	24,00
333288	HAE 311	KTU 3-10 with drum drive	24,00

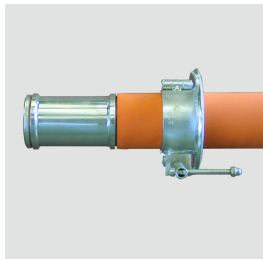


## Drum drive over flange

Drum drive for winding or unwinding of cables up to D 120 mm over the drum flanges. Suitable for cable winding stands KTU. Infinitely variable speed. Techn. details see below. Please ask for a more extensive offer.

- Driving drum diameter, see individual KTU-Types ..ST, or ..FA.
- TEEL 502 available as retrofitting part, for mounting on customers equipment, see pdf-drawing on the left.
- Winding force 5,0 kN on core diam. and 2,5 kN on ext. diameter
- Winding speed adjustable from 2-40 m/min.
- Hand pump can be replaced by electro-motor-hydraulic Code 333.288
- 333248 TEE 502/MID equipped acc. to EU directive 2014/32/EU (MessEG) see length measuring devices types M

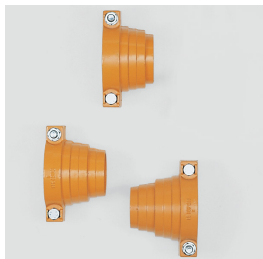
Code	Type	For	Drive kW	Drum lift	kg
333250	TEE 502	KTU 3-6	El.-mech. 1,5	without	263,00
333254	TEE 534	KTU 10	El.-mech. 1,5	without	284,00
333248	TEE 502/MID	KTU 3-6	El.-mech. 1,5	without	265,00



## Standard shafts for KTU 3-10

Cable drum tubular steel shaft rotatable, with plain bearings, without clamps. Other lengths on request.

Code	Type	D/L mm	SWL	For	kg
350390	TSK 7610	76/1888	4,9 t	KTU 3 ST/FA/LH/LS	33,00
350480	TSK7620	76/1888	8,7 t	KTU 6 ST/FA/LH/LS	51,80
350490	TSK 7620	76/2088	6,5 t	KTU 6 LH (331563)	57,90
350530	TSK 8917	76/2088	10,0 t	KTU 10 ST/FA	65,00



## Locating cones

Locating cone for drum shafts made of cast steel including clamp. With several steps for drum bores according to DIN.

2 pieces need to be ordered

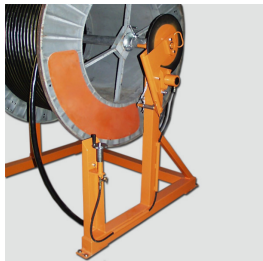
Code	Type	For shaft	Steps-D	kg
315430	ZKO 76	D 75-76	140/130/125/105/100/90	5,50
315460	ZKO 90	D 89-90	140/130/125/105/100	4,80



### Cable drum disc brake

Cable drum disc brake with drum fork for controlled unwinding of cable or line drums. Hand mechanical setting of the braking force. To use it with KVH-types code 350.790 APR 690 is necessary.

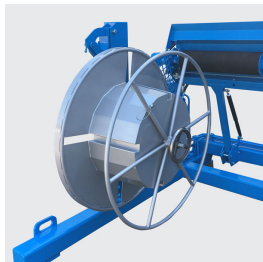
Code	Type	Operation	Braking	At the cable	kg
350860	STB 400	mechanic	3200 Nm	approx. 4 kN	46,00



### Cable drum disc brake hydraulic

Cable drum disc brake without drum fork for controlled unwinding of cable drums. Hand mechanic or hand hydraulic setting of the braking force. Suitable for all KTU 3-10 ST und FA. To use it with KTU code 350.800, VAB 760 and a drum fork are necessary. Techn. details see table below.

Code	Type	Operation	Braking	At the cable	kg
350870	STC 400	hand-hydraulic	3200 Nm	approx. 4 kN	39,00



### Coil winders for KTU

Coil winder for cable winding stands KTU 3-10, for serving cable rings. Steel construction galvanized. Order support RA 8014 separately, see table below.

Code	Type	C-winder dim.	kg
331250	RW 800	D 800/500, IW 250	37,00
331280	RW 1000	D 1000/600, IW 300	56,00
331310	RW 1400	D 1400/1050, IW 300	86,00
331330	RA 8014	Locating device for coil winders	8,00

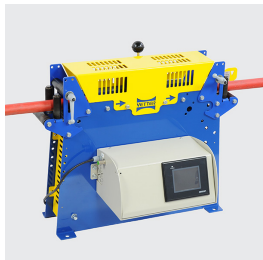
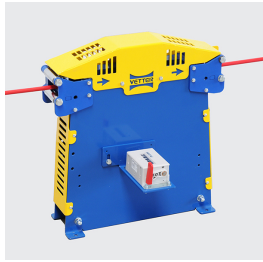


### Cable traversing table

Cable traversing table for mounting cable length measuring machines. Moving manual according to the natural cable layering on the drum. Mobile equipment, to fix on the floor. Height adjustable by hand crank. Without cable length measuring device.

Code	Type	For KTU	Length meter	L/W/H mm	kg
335575	LST 125	3-10 ST/FA	MZ 60-80/KLM 120	1940x1230x945-1375	145,00





## Cable and wire length measuring machines, mech. counter

Cable and wire length measuring machines with mechanical counter without data storage, for stationary applications. Very robust steel construction. Due to the big perimeter of 1 m, high accuracy of  $\pm 0,5 \%$ , accuracy class III, at temperatures of 5-40°C.

Without conformity assessment. May only be used for purely internal use, not for sales of cables. Conformity assessment procedure according to Module F1 is possible, which allows direct sales of cables.

- Types MZ ... only for insulated cables, types MZ ... S also for bare metal goods.
- The accuracy refers to a calibrated cable of a length of at least 10 m.
- Measuring machines for cable bigger than  $\varnothing 60$  mm are available on request.
- In the winding machines DTR/TR/TRG the electronic pre-set counter is installed as standard.

Code	Type	C-D	St-rope	L/B/H mm	kg
323750	MZ 40	3-40	no	550/300/420	28,00
323755	MZ 40S	3-40	3-22	550/300/420	28,00
323770	MZ 60	10-60	no	700/360/600	54,00
323775	MZ 60S	10-60	6-32	700/360/600	54,00

## Cable and wire length measuring machines, electron. counter MID

Cable and wire length measuring machines with electronic counter for mounting on all cable winding machines and for stationary use. For this the power supply device 323.110 is necessary. Mounted on a spooling machine the power supply comes from the machine. Very robust steel construction. Due to the big perimeter of 1 m high accuracy of  $\pm 0,5 \%$ , accuracy class III at temperature of 5-40°C.

With conformity assessment according to EU Directive 2014/32/EU, Annex MI-009, valid throughout Europe. Conformity assessment procedure with type examination according to module B and product test according to module F. Equipped as standard with 3.5 inch colour touch screen incl. electronic pre-selection counter.

- Types M ... only for insulated cables, types M ... S also for bare metal goods.
- The accuracy refers to a calibrated cable of a length of at least 5 m.
- Measuring machines for cable bigger than  $\varnothing 60$  mm are available on request.
- In the winding machines DTR/TR/TRG the electronic pre-set counter is installed as standard.

Code	Type	C-D	St-rope	L/B/H mm	kg
323740	M 40	3-40	no	550/300/420	28,00
323745	M 40S	3-40	3-22	550/300/420	28,00
323760	M 60	10-60	no	700/360/600	54,00
323765	M 60S	10-60	6-32	700/360/600	54,00
323110	Power unit	24/230 Volt	on M counter	110/110/90	1,00

## Messmaschinen geliefert ab 2017

### Conformity assessment for M/MZ 20-60 S

Application of the new EU directive 2014/32/EU (MID) has become compulsory on 1 November 2016 and it has been implemented in German law in the Verification Act (MessEG) as well as the Verification Ordinance (MessEV). Apart from the correct measurement of lengths, the requirements for the recording, confirmability and traceability of the measurements have been tightened considerably. The main change is the demand for permanent and non-corruptible storage of all measurements.

Specifically, the legislator demands that information on each measurement be stored securely, permanently and unchangeably. Apart from the actual length, the date and time of the measurement as well as information about the measuring instrument used are of relevance. All of these data are to be identified by means of an unambiguous and unique identifier, the objective being to ensure continuous traceability of each measurement. This means that machines may only be brought onto the market if they meet these requirements and have been accepted by a conformity assessment body (e.g. German Physical and Technical Institute, PTB, or the verification office) by way of a conformity assessment. The successful assessment of the measuring instruments is confirmed by the declaration of conformity issued by the manufacturer (e.g. Vetter) and is valid throughout Europe.

For companies who wish to sell the cables to third parties in the normal course of business, this means that only length measuring instruments meeting these requirements may be procured in future. The purchaser of a measuring machine with declaration of conformity is obliged to register the measuring machine with the competent verification office (in Germany [www.eichamt.de](http://www.eichamt.de)) immediately following the acquisition. Machines with a declaration of conformity from Vetter are deemed duly verified until expiry of the respective nationally regulated verification period. In Germany the rule is that validity of the conformity assessment is of two years. In retail sale the validity is unlimited as long as no seal is damaged or the maximum number of errors permitted in service is not exceeded. Divergent regulations may apply in other countries. These are obtainable from the applicable national laws.

On expiry of the conformity assessment for the above-mentioned reasons, the competent verification office must carry out a reverification. Before this reverification, examination, adjustment and calibration of the measuring machine by trained personnel is recommended.

Thanks to the EU type examination certificate issued by the Federal Institute of Metrology METAS in Switzerland, machines of the new M series from Vetter can be used throughout Europe, irrespective of whether for use as measuring instruments on coiling machines or as a stand-alone solution for individual use. They offer the demanded uniformity, security, transparency and confirmability for buyers and sellers of cables within the European Economic Area. At the same time, the modular concept of the new series also enables use in direct sales or purely internal use and thus rounds off the complete range of applications for cable length measurement.

The Vetter cable measuring machines from the M 20-M60S series correspond to accuracy class III ( $\pm 0.5\%$ ) according to EU Directive 2014/32/EU (MID) at temperatures of 5-40 °C with a minimum cable measuring length of 5 m for M machines and 10 m for MZ 20-M60S machines.

- KT 001 - Declaration for MZ-MZ/S, with mechanical counter, only for direct sales or purely internal use.
- KT 002 - Declaration for M-M/S, with electronical counter, for business use in absence of the buyer.

Code	Type	Module	For	kg
323700	KT 001	F1	MZ 20-MZ 60S	0,01
323705	KT 002	B+F	MZ 20-MZ 60S	0,01

Kalibrierung / Calibration  
LM 20-80 (S)  
LM 20-80 (B)

Von: 10.02.2024

Benutzer/Client: \_\_\_\_\_  
Firma/Company: \_\_\_\_\_  
Ort/Place: \_\_\_\_\_

Typ/Type: LM 20-80 (S) (B) (M) (Z)  
Bezeichnung of designation: \_\_\_\_\_

Hersteller/Producer: Vetter GmbH  
Seriennummer/Serial number: \_\_\_\_\_  
Date/Timestamp: \_\_\_\_\_

Erkennungsnummer/Recognition number: \_\_\_\_\_  
Messwert/Measurement value: \_\_\_\_\_  
Messwert/Messwert (Zu-/Abweichung) (Measurement value (plus/minus deviation))

Prüfung/Probe 1: \_\_\_\_\_  
Prüfung/Probe 2: \_\_\_\_\_

Abweichung (max.) (Deviation (max.))

Die Messergebnisse liegen innerhalb der zul. Toleranz!  
The measuring result is within the permissible tolerance.

Kalibrierung durchgeführt/Calibration carried out: \_\_\_\_\_  
Vetter GmbH

Geprüft/Checked: \_\_\_\_\_  
Unterschrift/Signature: \_\_\_\_\_

## Calibration of length measuring machines KDM/KLM/M/MZ

To confirm the testing of length measuring devices, KDM/KLM/M/MZ, according to ISO 9001 and other QM systems the calibration (KA 001) executed by Vetter is sufficient in most cases. On the other hand the calibration does not replace the EU conformity assessment whenever it comes to commercial sales of cables.

Code	Type	kg
323710	KA 001	0,01

## Roller bow

Roller bow for unwinding cables from drum of upper drum stands. For fitting at cable length measuring machines MZ or M. Steel rollers D 25 mm.

- Type RB 6090 - 90° deviation for unwinding from upper drum stands, 15 steel rollers D 25.

Code	Type	Suitable for	C-D	Pass	Bend	L/W/H mm	kg
322781	RB 6090	M/MZ 60	max. 60	65x65	90°	450x200x500	30,50

## Cable length measuring machine without MID

Cable length measuring machine, very robust construction, measuring wheel circumference of 500 mm, with mechanical counter up to 9999,99 m. Accuracy  $\pm 1,0$  %. Figure height 7 mm.

Code	Type	C-D	St-rope	L/W/H mm	kg
262610	KLM 120	20-120	no	505/280/600	67,00

## Cable winding units stationary

Cable winding and unwinding stands, stationary or for mounting on lorries etc. For drums from 20-55 t. See accessories like drum drives, drum brakes etc. Techn. details see table below. Please ask for our more extensive offers.

- Possible configurations:
- Drum flange brakes, one or both sides, breaking force 12,5 resp. 25,0 kN at cable.
- With an additional pre- and emergency brake braking forces to 50 kN are possible.
- Drive of the brakes per manual hydraulic pump or by electro-hydraulic drive
- Drum drives one-side or double sides, pulling force 16,0 kN resp. 32,0 kN
- Adjustable on the site to any drum width.

Code	Type	Cap.	Drum-D	Int. width	kg
331736	KTU 20 ST	20 t	2000-3700	any adjustable	1.870,00
331738	KTU 20 ST	20 t	2800-4300	any adjustable	1.880,00
331740	KTU 25 ST	25 t	3600-5100	any adjustable	1.945,00
331750	KTU 55 ST	55 t	3600-5100	any adjustable	1.980,00
331752	KTU 55 ST	55 t	4300-6000	any adjustable	1.980,00





## Drum shafts for KTU 20-55

Drum shafts for KTU 20-55. The height adjustable drum supports are equipped with ball bearing rollers in which the drum shafts turn easily. The stand can be adapted to any drum width. Drum shafts are available in length from 3000 to 5000 mm in partition of any 500 mm. The shaft must be of min. 1 m longer than the widest drum width. In standard it is equipped with 4 clamps for fixing the shaft and the drum. Centring bushes have to be ordered separately according to the drum shaft diameter and the bore diameter of the drums. See below.

Code	Type	D/L mm	SWL	Drum width	kg
031483334	KSR 10122	101/4000	16 t	max. 3000	187,00
031483344	KSR 10825	108/4000	20 t	max. 3000	221,00
031483354	KSR 11417	114/4000	20 t	max. 3000	184,00
031483364	KSR 12120	121/4000	24 t	max. 3000	219,00
031483374	KSR 12714	127/4000	22 t	max. 3000	178,00
031483384	KSR 12725	127/4000	30 t	max. 3000	273,00
031483424	KSR 13917	139/4000	31 t	max. 3000	231,00
031483454	KSR 13930	139/4000	38 t	max. 3000	348,00
031483464	KSR 15925	159/4000	54 t	max. 3000	355,00
031483466	KSR 15925	159/4500	54 t	max. 3500	397,00
031483476	KSR 15930	159/4500	59 t	max. 3500	454,00
031483478	KSR 15930	159/5000	59 t	max. 4000	502,00



## Centring bushes for drum shafts D 101-159

Centring bushes for drum shafts to fit with the drum bore, see table below. Also available in other diameters. Bush length 80 mm

Code	Type	For shaft	Drum bore	kg
315765	ZBS 101/125	D 101	D 125	10,00
315780	ZBS 101/140	D 101	D 140	12,00
315815	ZBS 108/145	D 108	D 145	15,00
315818	ZBS 108/200	D 108	D 200	9,00
315850	ZBS 114/150	D 114	D 150	15,00



## Cable and wire length measuring machines with electronic counter

Cable and wire length measuring machines with electronic counter for mounting on all cable winding machines and for stationary use. For this the power supply device 323.110 is necessary. Mounted on a spooling machine the power supply comes from the machine. Very robust steel construction. Due to the big perimeter of 1 m high accuracy of  $\pm 0,5 \%$ , accuracy class III at temperature of 5-40°C.

Without conformity assessment according to EU Directive 2014/32/EU, Annex MI-009, marked as types MO. Subsequent conformity assessment according to Annex MI-009 is possible at any time. Equipped as standard with 3.5 inch colour touch screen incl. electronic pre-selection counter.

- Types MO ... only for insulated cables, types MO ... S also for bare metal goods.
- The accuracy refers to a calibrated cable of a length of at least 5 m.
- Measuring machines for cable bigger than  $\varnothing 60$  mm are available on request.
- Power supply given below is only necessary if measuring machines are used with external devices.

Code	Type	C-D	Wire	L/W/H mm	kg
32374005	MO 40	3-40	no	550/300/420	28,00
32374505	MO 40S	3-40	3-22	550/300/420	28,00
32376005	MO 60	10-60	no	700/630/600	54,00
32376505	MO 60S	10-60	6-32	700/630/600	54,00
323110	Power unit	24/230 Volt	on M counter	110/110/90	1,00



## Centring bushes for drum shafts D 101-159

Centring bushes for drum shafts to fit with the drum bore, see table below. Also available in other diameters. Bush length 80 mm

Code	Type	For shaft	Drum bore	kg
315880	ZBS 114/200	D 114	D 200	15,00
315920	ZBS 121/200	D 121	D 200	15,00
315945	ZBS 127/150	D 127	D 150	4,00
315952	ZBS 127/200	D 127	D 200	12,00
315978	ZBS 139/200	D 139	D 200	12,00
315987	ZBS 159/185	D 159	D 185	16,00
315989	ZBS 159/200	D 159	D 200	18,00



## Clamps for drum shafts D 101-159 mm

Clamp for drum shafts for lateral fixing of the cable drum on drum shafts of steel or alu. Steel coated. Width 50 mm.

Code	Type	For shaft	Width	kg
315340	KLS 101	D 101-105	50	2,00
315350	KLS 108	D 108-110	50	2,40
315360	KLS 114	D 114-115	50	3,00
315370	KLS 121	D 121-123	50	5,00
315380	KLS 127	D 127-130	50	3,40
315384	KLS 135	D 135-137	50	4,00
315385	KLS 139	D 139-140	50	3,60

315390 KLS 159 D 159-160 50 3,90



## Drum brakes for KTU 20-55

Drum brakes for KTU 20-55, operated by hand pump or electro-hydraulic pump by separate hydraulic power pack. Per drum flange 1 brake shoe in front and behind. The drum can be braked on one or on both flanges. If high braking forces are required, e.g. at cable lowering in shafts etc. the pre- and emergency brake with independent hand pump should be installed. Electric power packs for one or two flange brakes have to be ordered separately.

- Drum flange brake on one or both sides, 12,5 resp. 25,0 kN braking force on the cable.
- Hydraulic by hand pump or by electro-motor-hydraulic.

Code	Type	Drum-D	Brake	Braking	kg
331753	TRB 3701	2000-3700	one-side	min. 12,5 kN	135,00
331754	TRB 4301	2800-4300	one-side	min. 12,5 kN	135,00
331756	TRB 5101	3600-5100	one-side	min. 12,5 kN	136,00
3317561	TRB 6001	4300-6000	one-side	min. 12,5 kN	149,00
3317564	TRB 3702	2000-3700	both-sides	min. 12,5 kN	250,00
331757	TRB 4302	2800-4300	both-sides	min. 25,0 kN	270,00
331758	TRB 5102	3600-5100	both-sides	min. 25,0 kN	270,00
3317581	TRB 6002	4300-6000	both-sides	min. 25,0 kN	270,00



## Drum brake shoes for drum brakes to KTU 20-55

Drum brake shoes to KTU 20-55. Each brake shoe is suitable for a certain range of drum diameter, see table below. They can easily be replaced by bigger or smaller ones. They are equipped by high performance brake linings of a long service life and can simply be changed by screwing right on the field.

For drum brakes one-side there are 2 brake shoes necessary, for brakes both-sides 4 brake shoes. Getting to the biggest drum diameter, please select the next bigger brake shoe. E.g. drum Ø 2400 mm, select brake shoe for drum Ø 2400-2800 mm.

Code	Type	Drum-D	Rad.	kg
331798	TBS 2400	2000-2400	1100	17,00
331799	TBS 2800	2400-2800	1300	17,00
331800	TBS 3200	2800-3200	1500	17,00
331804	TBS 3600	3200-3600	1700	17,00
331808	TBS 4100	3600-4100	1920	17,00
331812	TBS 4600	4100-4600	2170	17,00
331816	TBS 5100	4600-5100	2420	17,00
331818	TBS 5600	5100-5600	2675	17,00
331820	TBS 6100	5600-6100	2920	17,00

## Accessory without photo

### Drum pre-and emergency brake to KTU 20-55

Drum pre-and emergency brake to KTU 20-55, operated by an independent hand pump. The drum is braked from the bottom with two brake shoes on both flanges, when lowering cables in shafts etc. The brake shoes according to drum diameter have to be ordered separately.

- Drum flange brakes on both sides, min. 25,0 kN braking force on the cable.
- Hydraulic only by hand pump.

Code	Type	Drum-D	Brake	Braking	kg
3317584	TRV 3702	2000-3700	both-sides	min. 25,0 kN	213,00
331759	TRV 4302	2800-4300	both-sides	min. 25,0 kN	213,00
331760	TRV 5102	3600-5100	both-sides	min. 25,0 kN	213,00
331761	TRV 6002	4300-6000	both-sides	min. 25,0 kN	213,00

### Drum drives for KTU 20-55

Drum drives for KTU 20-55, for electro-hydraulic drives of separate hydraulic power packs. Per drum flange there are 1 tandem rubber drive rollers in front and 1 behind. With this drive the drum can be driven or braked with the same force, see table below. If high braking forces are required, e.g. at cable lowering in shafts etc. the pre- and emergency brake with independent hand pump should be installed. Electric power packs for one or two flange drives have to be ordered separately.

- Drum drives, on one side or both sides, breaking force at the cable min. 8,0 resp. 16,0 kN
- Accessory: hydraulic drive by electro-motor, continuous control.
- The drive is able to brake, braking forces are equal to the drum drive forces.

Code	Type	Drum-D	Drive	Below/top	m/min.	kg
331764	TAH 0802	2000-3700	one-side	16/8 kN	8/16	265,00
331765	TAH 1604	2000-3700	both-sides	32/16 kN	8/16	450,00
331766	TAH 0802	2800-4300	one-side	16/8 kN	8/16	260,00
331768	TAH 1604	2800-4300	both-sides	32/16 kN	8/16	530,00
331770	TAH 0802	3600-5100	one-side	16/8 kN	8/16	260,00
331772	TAH 1604	3600-5100	both-sides	32/16 kN	8/16	535,00
331773	TAH 0802	4300-6000	one-side	16/8 kN	8/16	260,00
3317732	TAH 1604	4300-6000	both-sides	32/16 kN	8/16	530,00

### Hand pump hydraulic for drum brakes

Hand pump hydraulic for drum brakes for KTU 20-55. The drum can be braked on one or on both flanges.

Code	Type	Drive	Brake	Below/top	kg
331776	THH 4501	Hand pump	one-side	16/8 kN	29,00
331778	THH 4502	Hand pump	both-sides	32/16 kN	29,00





## Electro-hydraulic for drum brakes

Electro-hydraulic for drum brakes for KTU 20-55. The drum can be braked on one or on both flanges.

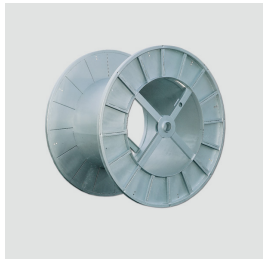
Code	Type	Drive	Brake	Below/top	E-Motor	kg
331782	TEH 4501	El.-hydraulic	one-side	16/8 kN	5,5 kW	65,00
331784	TEH 4502	El.-hydraulic	both-sides	32/16 kN	11,0 kW	62,00



## Electro-hydraulic for drum drives

Electro-hydraulic for drum drives for KTU 20-55. The drum can be driven on one or on both flanges.

Code	Type	Drive	Drive	Below/top	E-Motor	kg
331786	TTH 0802	El.-hydraulic	one-side	16/8 kN	5,5 kW	137,00
331788	TTH 1604	El.-hydraulic	both-sides	32/16 kN	11,0 kW	137,00



## Cable steel drums

Cable steel drums, robust steel profile construction, with even parallel flanges inside, galvanized. All welded construction not dismountable.

- Drums are in main dimensions acc. to DIN 46391-1.
- All other dimension are available.
- Drums to D 4500, also in furnished construction are available.

Code	Type	d1/d2	d4	L1/L2	dm³	Cap.	kg
376100	TPC 100	1000/500	80+2	736/630	280	1000 kg	105,00
376120	TPC 120	1200/630	80+2	736/630	460	1500 kg	130,00
376140	TPC 140	1400/710	80+2	8,60/750	700	2000 kg	175,00
376160	TPC 160	1600/800	80+2	1006/900	1060	2500 kg	225,00
376180	TPC 180	1800/1120	80+2	1226/1120	1500	3500 kg	280,00
376200	TPC 200	2000/1250	125+2	1246/1120	1800	4000 kg	445,00
376220	TPC 224	2240/1400	125+2	1366/1220	2510	6000 kg	550,00
376250	TPC 250	2500/1600	125+2	1366/1220	3880	10000 kg	670,00
376280	TPC 280	2800/1800	125+2	1540/1380	4500	12000 kg	825,00