

Cable pulling capstan winches

Cable feeders





Hydraulic cable feeders for cable D 20-160, feeding 6 kN

Cable and round material feeders for cable D 8-37 mm

Electro bollard winches 10 kN

Cable bollard winches 10 kN with accessory

Cable double capstan winches 11 kN with accessory

Cable double capstan winches 20 kN with accessory

Cable double capstan winches 24-30 kN with accessory

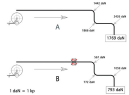
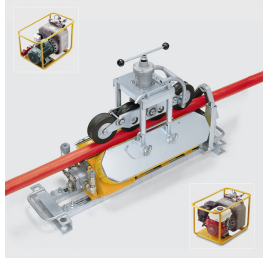
Accessory for cable capstan winches

Swivels only for underground cable pulling, D 25-45 mm

Steel ropes low torsion D 6-13 mm

Rope connecting sets for solder in ropes and shackles

Rope connecting shackles



Cable feeders, hydraulic, 6,0 kN

Cable feeders, hydraulic with adjustable pushing and pulling force and speed. High performance reduces significantly the pulling forces of the cable winch especially in long cable lines with many curves. Included hydraulic power pack, hoses and valves. Can be driven alternatively with petrol engine or electro motor hydraulic power pack. Hydr. power pack flow 8 l/min., 250 bar. Tank volume 13 l. Hose set 7 m. Pushing and pulling speed progressively adjustable from 4-18 m/min. One loading device is included which size you can select acc. to your cable-diameter ranges. See table below.

Due to the big driving length of the V-shaped belts of 485 mm, and a balancing vertical spring pressure, the radial pressure on all kind of cables is very low. Therefore the cables are transported carefully on the whole belt driving length.

- Pushing force 6,0 kN, what reduces winch pulling even more in winding lines.
- Can be driven outside with petrol power pack and inside with electro power pack.
- Light fractional weights of max. 60 kg, can be handled and be placed of 2 persons.
- Control with hoses, 7 m. Procedure easy to control from above ground.
- Dimension cable feeder 1170x380x700, small for fixing in trenches, shafts or cable trays.
- Dimension hydr. power pack 770x480x500, weight 65 kg.

Code	Type	C-D	Load device	Hydr. Unit	kg
425750	DF 6-90 HB	28-130	28-90	Petrol 6,3 kW	166,00
425752	DF 6-130 HB	28-130	45-130	Petrol 6,3 kW	168,00
425755	DF 6-160 HB	55-160	55-160	Petrol 6,3 kW	175,00
425800	DF 6-90 HE	28-130	28-90	Electro 4,0 kW	161,00
425802	DF 6-130 HE	28-130	45-130	Electro 4,0 kW	165,00
425805	DF 6-160 HE	55-160	55-160	Electro 4,0 kW	171,00

Cable loading device for cable feeders

Cable loading device for cable feeders. In feeders above there is one loading device included which you can choose according to your cable diameters. For further diameters the following loading devices are available as accessory.

Code	Type	C-D	Roller-D	Suitable for	kg
425190	DF 20-50	20-50	150x38, R17	DF 5/6-130	19,80
425200	DF 28-90	28-90	150x50, R33	DF 5/6-130	20,80
425210	DF 45-130	45-130	150x90, flat	DF 5/6-130	23,70
425215	DF 55-160	55-160	150x90, flat	DF 5/6-160	25,00





Cable feeders, hydraulic, 2,0 kN

Cable feeders, hydraulic for light cables. Pulling and pushing forces adjustable, high performance especially with very long cable lines. Included hydraulic power pack, hoses and valves.

Due to the big driving length of the belts of 330 mm, and a balancing vertical spring pressure, the radial pressure for all kind of cables is very low. Therefore the cables are transported carefully on the whole belt driving length. For this cable feeders many applications are possible, e.g.:

- For intermediate feeder in long cable lines, like along of railways.
- For pulling and pushing of cables, pipes, hoses of metal and other materials.
- DF 22 HB, with petrol hydr. power pack, 6,2 kW, 71, kg, 770x480x500.
- DF 22 HE, with electro-hydr. power pack, 4,0 kW, 67, kg, 710x400x440.

Code	Type	Mat.-D	Push	m/min.	L/W/H mm	kg
425062	DF 22 HB	8-37	2 kN	8,0-50,0	690/250/430	105,00
276215	DF 22 HB	8-37	2 kN	0,8-22,0	690/250/430	96,45
425092	DF 22 HE	8-37	2 kN	8,0-50,0	690/250/430	101,00
276230	DF 22 HE	8-37	2 kN	0,8-22,0	690/250/430	106,00



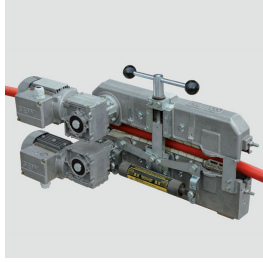
Feeders hydraulic for round materials

Feeders for round materials, hydraulic drive for pulling and pushing of cables, pipes, hoses of metal or plastic etc. Machine without basic construction and without hydraulic power pack and hoses.

Due to the big driving length of the belts of 330 mm, and a balancing vertical spring pressure, the radial pressure for all kind of cables is very low. Therefore the goods are transported carefully on the whole belt driving length.

- For installing in production machineries for pushing, pulling of cables, tubes, hoses etc.
- For each kind of operation the feeding speed and the power can be adapted, see table below.
- Also for external hydraulics, for oil pressure to 160 bar, oil flow 0-20 l/min.

Code	Type	Mat.-D	Push	m/min.	L/W/H mm	kg
276200	DF 22 HY	8-37	2 kN	8,0-50,0	500/355/360	20,50
276235	DF 22 HY	8-37	2 kN	0,5-10,0	500/355/360	25,40
276250	DF 22 HY	8-37	2 kN	0,8-22,0	500/355/360	24,40
425054	VR 22-1	Forward-	Backward	Control	with hoses	11,40



Feeders electric for round materials

Feeders for round materials, with electric motors for frequency controlling, for pulling and pushing of cables, pipes, hoses of metal or plastic etc. Machines without basic construction. Frequency converter and control box as accessory, see next table below.

Due to the big driving length of the belts of 330 mm, and a balancing vertical spring pressure, the radial pressure for all kind of materials is very low. Therefore the goods are transported carefully on the whole belt driving length.

- For installing in production machineries for pushing, pulling of cables, tubes, hoses etc.
- For each kind of operation the feeding speed and power can be adapted, see table and drawing below.
- Electric motors 0,12 kW/400 Volt/50 Hz. Frequency control box as accessory see below.

Code	Type	Mat.-D	Push	m/min.	L/W/H mm	kg
276255	DF 22 EL	15-37	0,60-1,80 kN	0,23-10,10	660/300/360	29,00
276260	DF 22 EL	15-37	0,30-0,90 kN	0,46-20,30	660/300/360	29,00
276265	DF 22 EL	15-37	0,13-0,38 kN	1,10-48,00	660/300/360	29,00
276268	DF 22 EL	06-37	0,10-0,30 kN	1,40-60,00	550/445/360	29,00



Frequency control to feeders

Frequency control to feeder DF 22 EL. Mobile device with frequency converter 0,55 kW, switch pay-in, pay-out, potentiometer, foot switch, emergency stop. 3 m connection cable to motor, 3 m cable with Schuko-plug 16A.

Code	Type	Suitable for	Protection	Dimension	kg
276272	DF 22 FR	DF 22 EL	IP 54	400x300x220	0,01
279580	ADK 400	Adapter cable	400 to 230 volt	--	0,50



Hydraulic power packs mobile

Hydraulic power packs for cable feeders and drum drives without hoses and valves. Oil presser 210 bar, tank 13 Litre, oil flow 14 l/min.

Code	Type	Suitable for	Motor kW	L/W/H mm	kg
425302	HB 210	Feeders+Drum drives	Petrol 6,3	778/490/500	70,00
425312	HD 210	Feeders+Drum drives	Diesel 5,0	790/510/565	85,00
425351	HE 210	Feeders+Drum drives	Electro 4,0	733/405/433	67,00

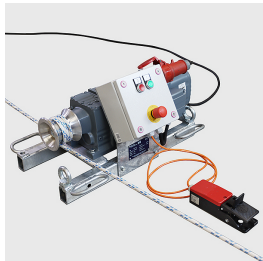




Hydraulic hose set

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 bollard winch without brake

Cable tray capstan winches, electric motors, mounted on base frame enabling alternative fixing, incl. footswitch.

- With 1 constant speed.
- Without lifting brake, therefore not allowed for vertical cable laying.

Code	Type	Pull/Speed	El-motor	Connection	kg
279503	PSW 7/8	7,0 kN/8 m/min	1,10 kW	230V/50-60Hz	60,00
279541	PSW 10/8	10,0 kN/8 m/min	1,10 kW	400V/50-60Hz	55,00



Cable bollard winch without brake

Cable tray capstan winches, electric motors, mounted on base frame enabling alternative fixing, incl. footswitch. Frequency converter allows two pulling speeds, one for heavy cable pulls up to 1 t and one for lighter cable pulls up to 400 kp. Not allowed for vertical pulls.

- Electric motor 1,5 kW, with 2 speeds, each variable through frequency convertor 20-100 Hz.
- Connectable on 230 volt net, or with adapter cable also on 400 volt net.
- Without lifting brake, therefore not allowed for vertical cable laying.

Code	Type	Pull1 (50Hz)	Pull2 (80Hz)	Connection	kg
279561	PSW 10-13	10 kN/7 m/min.	4 kN/13 m/min.	230V/50-60Hz	68,00
279580	ADK 400	Adapter cable	400 to 230 volt	400-230V/50Hz	0,50

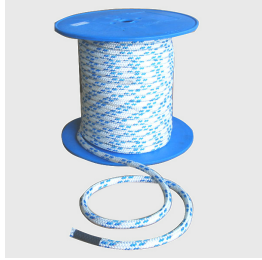


Cable bollard winch with brake

Cable tray capstan winches, electric motors, mounted on base frame enabling alternative fixing, incl. footswitch. Frequency converter allows two pulling speeds, one for heavy cable pulls up to 1 t and one for lighter cable pulls up to 400 kp. This PSW 10-13S is approved as cable hoisting winch also for vertical cable pulls up to 500 kp.

- Electric motor 1,5 kW, with 2 speeds, each variable through frequency convertor 20-100 Hz.
- Connectable on 230 volt net, or with adapter cable also on 400 volt net.
- With rope holding safety clamp, suitable to lift cables vertical to 5,0 kN.

Code	Type	Pull1 (50Hz)	Pull2 (80Hz)	Connection	kg
279566	PSW 10-13S	10 kN/7 m/min.	4 kN/13 m/min.	230V/50-60Hz	72,00
279580	ADK 400	Adapter cable	400 to 230 volt	400-230V/50Hz	0,50



Polyester ropes

Polyester rope double braided, with two spliced loops, (one each end). Suitable for cable tray capstan winches especially when using them as hoists. Stocked lengths are 250 and 500 m. The particular rope drum is included in the rope price. Can be used with swivels with ball bearings. kN = Minimum Breaking Load

Code	Type	Rope	Stretch	kN	Length	kg
27968512	PKG12-125	12	4-6 %	32	125 m	11,30
27968525	PKG12-250	12	4-6 %	32	250 m	22,50
27968530	PKG12-300	12	4-6 %	32	300 m	30,50
27968550	PKG12-500	12	4-6 %	32	500 m	45,00



Polypropylene ropes

Polypropylene-rope with one spliced loop. Not suitable for hoisting pulls. Stocked length are 150 and 250 m. For this swivel with ball bearings must not be used, but swivels with friction bearings. kN = Minimum Breaking Load

Code	Type	Rope	Stretch	kN	Length	kg
27969015	PKT 14-150	14	15 %	27	150 m	14,00
27969025	PKT 14-250	14	15 %	27	250 m	24,00

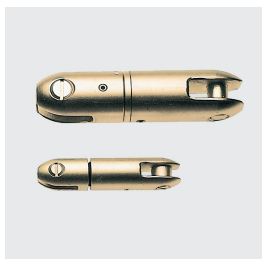


Swivel for Polyester rope

Swivels with ball bearings suitable for twist-free polyester rope D 12 mm, (not for polypropylene rope). kN = Minimum Breaking Load

kN = Minimum Breaking Load

Code	Type	Rope	D/length/fork	kN	kg
537360	FVD 30	12	30/128/12	60	0,50



Swivel for Polypropylene-rope

Swivels with friction bearings, turnable connector between winch rope and cable grip. The friction bearing guarantees that the swivel reduces rotation and torsion with increasing pulling force. Only for underground cables, not suitable for pulling overhead lines.

kN = Minimum Breaking Load

Code	Type	Rope	D/length/fork	kN	kg
243130	V 45 D	16	45/180/16	150	1,50



Reel for plastic ropes

Reel stand for ropes, steel galvanized with 2 rubber wheels. Plastic ropes must not be spooled with high tensions on drums. Depending on temperatures there are volume dilatations which will crush the drum core and also the flanges. Rope capacities of this drum are:

- Plastic rope diameter 6, approx. 1200 m, total rope weight approx. 48 kg
- Plastic rope diameter 7, approx. 1000 m, total rope weight approx. 40 kg
- Plastic rope diameter 8, approx. 700 m, total rope weight approx. 35 kg
- Plastic rope diameter 10, approx. 500 m, total rope weight approx. 35 kg
- Plastic rope diameter 12, approx. 350 m, total rope weight approx. 35 kg
- Plastic rope diameter 14, approx. 250 m, total rope weight approx. 35 kg

Code	Type	Rope cap.	Reel-D	L/W/H mm	kg
279720	PSH 600	s. above	600/150/240	727/331/790	19,20

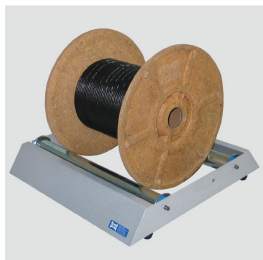


Drum for plastic ropes

Rope drum of plywood for plastic ropes. Plastic ropes must not be spooled with high tensions on drums. Depending on temperatures there are volume dilatations which will crush the drum core and also the flanges. Rope capacities of this drum are:

- Plastic rope diameter 7, approx. 2000 m, total rope weight approx. 80 kg
- Plastic rope diameter 8, approx. 1500 m, total rope weight approx. 75 kg
- Plastic rope diameter 10, approx. 1000 m, total rope weight approx. 70 kg
- Plastic rope diameter 12, approx. 750 m, total rope weight approx. 75 kg
- Plastic rope diameter 14, approx. 550 m, total rope weight approx. 77 kg

Code	Type	Rope cap.	Drum-D	Width	Hole	kg
279740	STR 750	s. above	750/315	395/420	80	20,00



Drum wind off roller

Cable drum wind-off roller for cables or ropes. Steel construction, powder coated. Steel rollers galvanized with ball bearings.

- Rollers adjustable for smaller spools down to Ø 100
- Rubber feet for stable and quiet running

Code	Type	For drum-D	Drum width	SWL	L/W/H mm	kg
320660	KTA 7	100-1200	max. 500	150 kg	530/550/110	8,80



Cable bollard winch

Cable bollard winch with petrol engine, without rope, for endless lengths. On base frame, portable or mobile on two pneumatic wheels. This winch is equipped with two bollards. Techn. details see table below.

- Honda petrol engine 3,25 kW. Sound level 78 db(A)
- One bollard of D 120 for heavy pulls to 10,0 kN, speed 15 m/min.
- One bollard D 195 for lighter cable pulls to 5,0 kN, speed 30 m/min.
- Accessory, see below: Dynamometer, Chassis, Polyester ropes.

Code	Type	Small bollard	Big bollard	kg
233300	SPW 10B	10,0 kN/15 m/min.	5 kN/30 m/min.	110,00

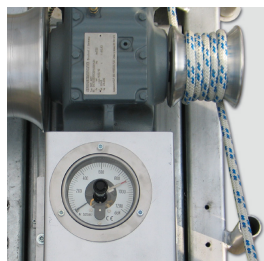


Cable bollard winch

Cable bollard winch inclusive Dynamometer and with petrol engine, without rope, for endless lengths. On base frame, portable or mobile on two pneumatic wheels. This winch is equipped with two bollards. Techn. details see table below.

- inclusive Dynamometer ZKD 10/12
- Honda petrol engine 3,25 kW. Sound level 78 db(A)
- One bollard of D 120 for heavy pulls to 10,0 kN, speed 15 m/min.
- One bollard D 195 for lighter cable pulls to 5,0 kN, speed 30 m/min.
- Accessory, see below: Chassis, Polyester ropes.

Code	Type	Small bollard	Big bollard	kg
233305	SPW 10BZ	10,0 kN/15 m/min.	5 kN/30 m/min.	112,00



Dynamometer

Dynamometer adjustable with automatic overload cut off, accessory to SPW 10B

Code	Type	Suitable for	For pulls	Adjustable	kg
233320	ZKD 10/12	SPW 10 B	to 12 kN	Scale 20 daN	1,12



Chassis for bollard winch

Axle with two pneumatic wheels for a.m. cable bollard winch SPW 10B

Code	Type	Wheel-D	kg
233310	FAG 10B	260x85	8,30



Polyester ropes

Polyester rope double braided, with two spliced loops, (one each end). Suitable for cable tray capstan winches especially when using them as hoists. Stocked lengths are 250 and 500 m. The particular rope drum is included in the rope price. Can be used with swivels with ball bearings. kN = Minimum Breaking Load

Code	Type	Rope	Stretch	kN	Length	kg
27968512	PKG12-125	12	4-6 %	32	125 m	11,30
27968525	PKG12-250	12	4-6 %	32	250 m	22,50
27968530	PKG12-300	12	4-6 %	32	300 m	30,50
27968550	PKG12-500	12	4-6 %	32	500 m	45,00



Swivel for Polyester rope

Swivels with ball bearings suitable for twist-free polyester rope D 12 mm, (not for polypropylene rope). kN = Minimum Breaking Load

kN = Minimum Breaking Load

Code	Type	For rope	D/length/fork	kN	kg
537360	FVD 30	12	30/128/12	60	0,50



Reel for plastic ropes

Reel stand for ropes, steel galvanized with 2 rubber wheels. Plastic ropes must not be spooled with high tensions on drums. Depending on temperatures there are volume dilatations which will crush the drum core and also the flanges. Rope capacities of this drum are:

- Plastic rope diameter 6, approx. 1200 m, total rope weight approx. 48 kg
- Plastic rope diameter 7, approx. 1000 m, total rope weight approx. 40 kg
- Plastic rope diameter 8, approx. 700 m, total rope weight approx. 35 kg
- Plastic rope diameter 10, approx. 500 m, total rope weight approx. 35 kg
- Plastic rope diameter 12, approx. 350 m, total rope weight approx. 35 kg
- Plastic rope diameter 14, approx. 250 m, total rope weight approx. 35 kg

Code	Type	Rope cap.	Reel-D	L/W/H mm	kg
279720	PSH 600	s. above	600/150/240	727/331/790	19,20

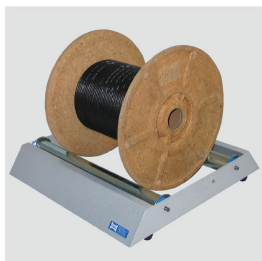


Drum for plastic ropes

Rope drum of plywood for plastic ropes. Plastic ropes must not be spooled with high tensions on drums. Depending on temperatures there are volume dilatations which will crush the drum core and also the flanges. Rope capacities of this drum are:

- Plastic rope diameter 7, approx. 2000 m, total rope weight approx. 80 kg
- Plastic rope diameter 8, approx. 1500 m, total rope weight approx. 75 kg
- Plastic rope diameter 10, approx. 1000 m, total rope weight approx. 70 kg
- Plastic rope diameter 12, approx. 750 m, total rope weight approx. 75 kg
- Plastic rope diameter 14, approx. 550 m, total rope weight approx. 77 kg

Code	Type	Rope cap.	Drum-D	Width	Hole	kg
279740	STR 750	s. above	750/315	395/420	80	20,00



Drum wind off roller

Cable drum wind-off roller for cables or ropes. Steel construction, powder coated. Steel rollers galvanized with ball bearings.

- Rollers adjustable for smaller spools down to Ø 100
- Rubber feet for stable and quiet running

Code	Type	Drum-D	Drum width	SWL	L/W/H mm	kg
320660	KTA 7	100-1200	max. 500	150 kg	530/550/110	8,80



Cable drum tipping stand

Cable drum tipping stands. Simple drum unwinding equipment at installation works. Excellent tipping leverage due to optimum positioning of centre of gravity. Capable of lifting heavy loads. Tubular steel construction galvanized.

Code	Type	Drum-D	Shaft	Max.	Int./ext.width	kg
320300	KW 6-8	600-800	D 48	300 kg	600/880	13,00



Stepped bushes

Stepped bushes of polyamide for shaft-D 48, one step D 80, for drum tipping stands KW 6-12.

Code	Type	For shaft	For drum bore	kg
315503	ZBP 48	48	D 80	0,37





Cable capstan winch 11 kN , mechanical

Cable capstan winch, mechanical drive through Honda petrol engine or electro motor. Supply including a swivel with friction bearing. Other accessory see below.?

This winch can be selected with a suitable pulling force measuring or registration device.

- Types TL ...D with Honda petrol engine, Types TL ... DE with electro motors
- With steel rope D 6 / length 900 m
- Rope retaining brake with free-wheel.
- Easy pay out of the rope without energy. Automatic unwinding of the drum.
- On a mobile, sturdy base frame incl. 2 pneumatic-tyre, lift able wheels.
- Finishing RAL 1007 yellow.

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450100	TL 1118 D/MP	MP 50	11 kN/7-16	5,5 kN/14-33	340,00
450105	TL 1118 D/DY	Dynamo.	11 kN/7-16	5,5 kN/14-33	340,00
450108	TL 1118 D/MPDY	MP50+Dyn.	11 kN/7-16	5,5 kN/14-33	340,00

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450110	TL 1118 DE/MP	MP 50	11 kN/0-13	5,5 kN/0-26	360,00
450115	TL 1118 DE/DY	Dynamo.	11 kN/0-13	5,5 kN/0-26	360,00
450118	TL 1118 DE/MPDY	MP50+Dyn.	11 kN/0-13	5,5 kN/0-26	360,00



Cable capstan winch 20 kN , mechanical

Cable capstan winch, mechanical drive through Honda petrol engine or electro motor. Supply including a swivel with friction bearing. Other accessory see below.?

This winch can be selected with a suitable pulling force measuring or registration device.

- Types TL ...D with Honda petrol engine, Types TL ... DE with electro motors
- With steel rope D 6 / length 900 m
- Rope retaining brake with free-wheel.
- Easy pay out of the rope without energy. Automatic unwinding of the drum.
- On a mobile, sturdy base frame incl. 2 pneumatic-tyre, lift able wheels.
- Finishing RAL 1007 yellow.

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450120	TL 2018 D/MP	MP 50	20 kN/5-12	10 kN/10-23	360,00
450125	TL 2018 D/DY	Dynamo.	20 kN/5-12	10 kN/10-23	360,00
450128	TL 2018 D/MPDY	MP50+Dyn.	20 kN/5-12	10 kN/10-23	360,00

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450130	TL 2018 DE/MP	MP 50	20 kN/0-10	10 kN/0-19	370,00
450135	TL 2018 DE/DY	Dynamo.	20 kN/0-10	10 kN/0-19	370,00
450138	TL 2018 DE/MPDY	MP50+Dyn.	20 kN/0-10	10 kN/0-19	370,00



Cable capstan winch 20 kN , mechanical

Cable capstan winch, mechanical drive through Honda petrol engine. Supply including a swivel with friction bearing. Other accessory see below.?

This winch can be selected with a suitable pulling force measuring or registration device.

- Types TL ...DR with Honda petrol engine.
- With steel rope D 8 / Length 730 m.
- Rope retaining brake with free-wheel.
- Easy pay out of the rope without energy. Automatic unwinding of the drum.
- On a single-axle trailer, incl. height-adjustable drawbar, overrunning brake and GFK-hood.
- Finishing RAL 1007 yellow.
- Incl. ball coupling as standard, eye coupling optional as accessory.
- Chassis incl. shock absorber allows approval for 100 km/h. Accessory (APR 100).

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450150	TL 2019 DR73/MP	MP 50	20 kN/5-12	10 kN/10-23	700,00
450155	TL 2019 DR73/DY	Dynamo.	20 kN/5-12	10 kN/10-23	700,00
450158	TL 2019 DR73/MPDY	MP50+Dyn.	20 kN/5-12	10 kN/10-23	773,00
474745	APR 100	Approval	100 km/h	--	0,01



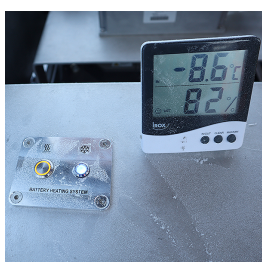
Capstan winch 30 kN, mechanical

Cable capstan winch, mechanical drive through Honda petrol engine. Supply including a swivel with friction bearing. Other accessory see below.?

This winch can be selected with a suitable pulling force measuring or registration device.

- Types TL ...DR with Honda petrol engine.
- With steel rope D 9 / Length 570 m.
- Rope retaining brake with free-wheel.
- Easy pay out of the rope without energy. Automatic unwinding of the drum.
- On a single-axle trailer, incl. height-adjustable drawbar, overrunning brake and GFK-hood.
- Finishing RAL 1007 yellow.
- Incl. ball coupling as standard, eye coupling as accessory.
- Chassis incl. shock absorber allows approval for 100 km/h. Accessory (APR 100).

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450220	TL 3119 DR57/MP	MP 50	30 kN/5-12	15 kN/10-23	780,00
450225	TL 3119 DR57/DY	Dynamo.	30 kN/5-12	15 kN/10-23	780,00
450228	TL 3119 DR57/MPDY	MP50+Dyn.	30 kN/5-12	15 kN/10-23	780,00
474745	APR 100	Approval	for	100 km/h	0,01



E-Winch - fully electric capstan winch 30 kN

The first fully-electric, compact and lightweight cable capstan winch on trailer with strong noise reduction, emission-free motor and excellent performance.

This new fully-electric winch enables emission-free, quiet work with the usual pulling force of 30 kN and independently for up to four hours. This makes it particularly suitable for use in urban areas, tunnels, galleries or especially for working at night. Special permits, exhaust discharges and more are no longer necessary.

Radio communication for the operator at the winch is greatly facilitated by the low noise level. Maintenance of the winch is very low maintenance and items such as filter changes, oil changes, spark plugs, etc. are no longer necessary. The winch can be charged via a generator, a house connection or a charging point for e-vehicles.

Prepared for electronic assistant MP 50 as a tractive force measuring and recording device for simple and safe machine operation. Permanently monitors the pulling force and stops the winch when the preset pulling force is reached. (See more on MP 50 below). The winch uses the proven double capstan drive.

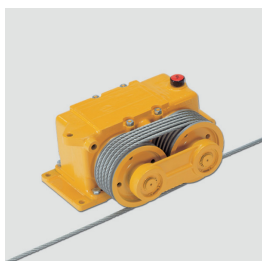
The electronic measuring and recording device MP 50 must be ordered separately.

Supplied as standard with battery heater for working even at minus temperatures, with 5-year warranty on battery and charger, incl. swirl catcher - also called swivel - with plain bearing.

A charging cable for charging stations for electric vehicles and a radio remote control FST 50E are optionally available. For further accessories see below.

- Motor power: 9 kW
- Battery: LMO-NM (10,5 kWh)
- Input voltage: 100-240 V AC
- Charging time: 5,5 h
- Ambient temp. discharge: -10° to +50° C ±1.5° C
- Autonomy 1. Corridor / 10 m/min: 1000 daN (4h) / 2000 daN (3h) / 3000 daN (1.5h)
- On single-axle trailer incl. height-adjustable drawbar with overrun brake and GRP bonnet
- With car ball head coupling, truck towing eye at extra charge
- without steel rope, rope capacities: D 9/1050 m
- Easy rope unwinding without effort. Automatic reel rotation monitoring

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450300	TL 3022 DRE/MP	MP 50	30 kN/0-20	5 kN/0-75	912,50



Capstan winch 24 kN and 30 kN, hydraulic

Radio communication for the operator at the winch is greatly facilitated by the low noise level. Maintenance of the winch is very low maintenance and items such as filter changes, oil changes, spark plugs, etc. are no longer necessary. The winch can be charged via a generator, a house connection or a charging point for e-vehicles.?

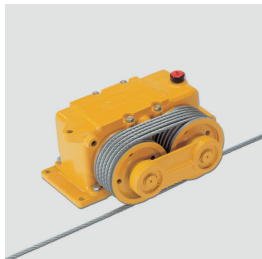
For further accessories see below.

- Types TL ...DRH with Honda petrol engine, Types TL ...DRHZ with Diesel engine.
- Without steel rope, rope capacity: D 8/1300 m, D 9/1050 m.
- Easy pay out of the rope without energy. Automatic unwinding of the drum.
- On a single-axle trailer, incl. height-adjustable drawbar, overrunning brake and GFK-hood.
- Finishing RAL 1007 yellow.
- Incl. ball coupling as standard, eye coupling optional as accessory.
- Chassis incl. shock absorber allows approval for 100 km/h. Accessory (APR 100).

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450170	TL 2422 DRH/MP	MP 50	24 kN/0-20	5 kN/0-80	860,00

450175	TL 2422 DRH/DY	Dynamo.	24 kN/0-20	5 kN/0-80	860,00
450178	TL 2422 DRH/MPDY	MP50+Dyn.	24 kN/0-20	5 kN/0-80	860,00
450180	TL 2422 DRHZ/MP	MP 50	24 kN/0-15	5 kN/0-60	930,00
450185	TL 2422 DRHZ/DY	Dynamo.	24 kN/0-15	5 kN/0-60	930,00
450188	TL 2422 DRHZ/MPDY	MP50+Dyn.	24 kN/0-15	5 kN/0-60	930,00
474745	APR 100	Approval	for	100 km/h	0,01

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
450190	TL 3022 DRH/MP	MP 50	30 kN/0-14	7 kN/0-80	860,00
450195	TL 3022 DRH/DY	Dynamo.	30 kN/0-14	7 kN/0-80	860,00
450198	TL 3022 DRH/MPDY	MP50+Dyn.	30 kN/0-14	7 kN/0-80	860,00
450200	TL 3022 DRHZ/MP	MP 50	30 kN/0-12	7 kN/0-68	930,00
450205	TL 3022 DRHZ/DY	Dynamo.	30 kN/0-12	7 kN/0-68	930,00
450208	TL 3022 DRHZ/MPDY	MP50+Dyn.	30 kN/0-12	7 kN/0-68	930,00
474745	APR 100	Approval	for	100 km/h	0,01



Capstan placing winches 24 kN + 30 kN, hydraulic

Cable capstan placing winch, hydraulic drive through Honda petrol or Hatz diesel engine. Supply including a swivel with friction bearing. Other accessory see below.?

This winch can be selected with a suitable pulling force measuring or registration device.

- Types TL ...DH with Honda petrol engine, Types TL ...DHZ with Diesel engine.
- Without steel rope, rope capacity TL 2422: D 8/1300 m, D 9/1050 m, D 10/850 m.
- Without steel rope, rope capacity TL 3022: D 8/1300 m, D 9/1050 m, D 10/850 m.
- Easy pay out of the rope without energy. Automatic unwinding of the drum.
- Superstructure on base frame for placement on truck flatbed, trailer or floor incl. GFK-hood.
- Finishing RAL 1007 yellow.

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
451170	TL 2422 DH/MP	MP 50	24 kN/0-20	5 kN/0-80	930,00
451175	TL 2422 DH/DY	Dynamo.	24 kN/0-20	5 kN/0-80	930,00
451178	TL 2422 DH/MPDY	MP50+Dyn.	24 kN/0-20	5 kN/0-80	930,00
451180	TL 2422 DHZ/MP	MP 50	24 kN/0-15	5 kN/0-60	930,00
451185	TL 2422 DHZ/DY	Dynamo.	24 kN/0-15	5 kN/0-60	930,00
451188	TL 2422 DHZ/MPDY	MP50+Dyn.	24 kN/0-15	5 kN/0-60	930,00

Code	Type	Measuring	V1/m/min.	V2/m/min.	kg
451190	TL 3022 DH/MP	MP 50	30 kN/0-14	7 kN/0-52	930,00
451195	TL 3022 DH/DY	Dynamo.	30 kN/0-14	7 kN/0-52	930,00
451198	TL 3022 DH/MPDY	MP50+Dyn.	30 kN/0-14	7 kN/0-52	930,00
451200	TL 3022 DHZ/MP	MP 50	30 kN/0-12	7 kN/0-46	930,00
451205	TL 3022 DHZ/DY	Dynamo.	30 kN/0-12	7 kN/0-46	930,00
451208	TL 3022 DHZ/MPDY	MP50+Dyn.	30 kN/0-12	7 kN/0-46	930,00

Charging cable for charging columns

Charging cable for charging at standard charging points for electric vehicles.

Code	Type	For capstan winches	Connector 1	Connector 2	kg
450310	LEW 3022	TL 3022 DRE	CEE 16-3	Type 2 (EN 62196)	1,50



Accessory for winch trailers

Car change coupling for ball D 50 mm incl. installation kit for all types.

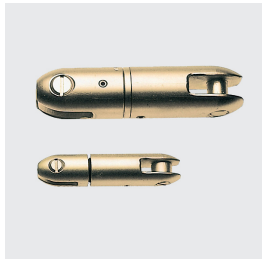
Code	Type	Suitable for	kg
349190	PK 26	TL 2422/3022	2,90



Accessory for winch trailers

Interchangeable eye coupling, hole-D 40 mm, including screws for cable capstan winches.

Code	Type	For capstan winches	Version	Hole	kg
480720	LK 27	TL 2422/3022	MP/DY/MPDY	D 40 mm	4,00



Swivels for underground cables

Swivels with friction bearings, turnable connector between winch rope and cable grip. The friction bearing guarantees that the swivel reduces rotation and torsion with increasing pulling force. Only for underground cables, not suitable for pulling overhead lines.

kN = Minimum Breaking Load

- Swivels for underground cables must be equipped only with friction bearings.
- With increasing pulling force friction bearings twist harder and thus avoid the untwisting of the pulling rope
- Ball bearings let untwist the ropes and leads to destruction.
- kN = minimum breaking load

Code	Type	D	L	Fork	Bolt	kN	kg
243020	V 20 D	20	86	7	8	21	0,16
243040	V 25 D	25	120	9	10	30	0,32
243050	V 35 D	35	130	12	14	60	0,60
243130	V 45 D	45	180	16	16	150	1,50
243170	V 60 D	60	217	23	20	225	3,10
243180	V 65 D	65	235	26	24	300	3,42
243190	V 75 D	75	270	30	27	320	6,70
243200	V 85 D	85	315	34	30	400	9,40



Steel rope slings

Steel rope slings for connection from swivel to the cable grips. kN = Minimum Breaking Load

Code	Type	D	L	kN	kg
276800	SST 06	6	500	23	0,13
276810	SST 08	8	500	45	0,28
276820	SST 09	9	500	56	0,35
276830	SST 10	10	500	66	0,40

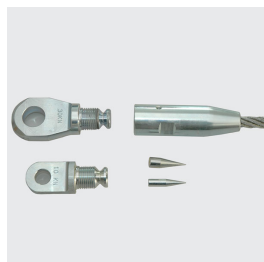
276840 SST 12 12 600 104 1,10



Steel rope low torsion

Steel rope for cable capstan winches, low torsion quality, galvanized, rated strength of wire 1960 N. kN = Minimum Breaking Load

Code	Type	Rope	kN	Length	kg
487430	STC 6-6	6	25,5	per 1 m	0,14
487580	STC 7-6	7	34,8	per 1 m	0,20
487680	STC 8-6	8	45,4	per 1 m	0,24
48768005	STC 8-6	8	45,4	520 m	124,80
48768013	STC 8-6	8	45,4	1300 m	312,00
487810	STC 9-6	9	57,5	per 1 m	0,35
48781010	STC 9-6	9	57,5	1050 m	367,50
487930	STC 10-6	10	65,1	per 1 m	0,38
488060	STC 11-6	11	85,8	per 1 m	0,46
488180	STC 12-6	12	101,0	per 1 m	0,60
488310	STC 13-6	13	118,0	per 1 m	0,70



Rope connecting set

Rope connecting set for solder in ropes, for pulling forces up to 30,0 kN, 5 parts for rope-D 6-9 mm.

- Consisting of:
- 1 Rope cone D 25 with 2 expanding mandrels, to solder in ropes-D 6-9.
- 1 changeable eye nut D 25 for pulling through small ducts to max. 10,0 kN.
- 1 changeable eye nut D 35 for pulling forces to 30,0 kN.

Code	Type	For pull	For rope	kg
243490	SVB 25/5	max. 30 kN	D 6-9	0,60



Shackle slim version

Shackle galvanized, special slim version with slotted screw for easy passing ducts and cable rollers.

SWL of all shackles includes a safety factor of 5

Code	Type	d2	d1/d5	b	h	WLL	kg
254879	SHB 04	10	8/10	14	30	400 kg	0,09
254880	SHB 06	12	10/12	17	36	630 kg	0,16
254881	SHB 10	16	13/15	21	49	1000 kg	0,34
254882	SHB 16	20	17/19	27	61	1600 kg	0,72
254883	SHB 20	22	19/21	30	67	2000 kg	1,00
254885	SHB 30	27	24/26	38	83	3150 kg	1,85

