

**Blower units
for winch
ropes**

**Cable lubri-
cants**





Blower units for winch ropes Cable lubricants

Pilot rope winches 500 daN - ropes and accessory

Conduit plugs divided and ball pistons for blowing ropes

Cable and pipe lubricant, gel and liquid

Duct cleaning and lubricating sponge for duct D 4-210 mm



Pilot rope winch petrol engine

Latest design of pilot rope winch with petrol engine. This winch is not any more driven by a V-belt, but with a better positive mode transmission chain drive. This guarantees higher power train to the drum. For blowing-in pilot ropes from declutched drum through conduits for afterwards introducing bigger pulling ropes from cable winches or for direct pulling-in of smaller cables such as fibre optic cables or single or bundle subducts. The drum is divisible for coiling cords, ropes or cables and can easy be removed from the winch e.g. for using drums with other ropes. Capacity up to 1100 m D 4 mm or 750 m D 5 mm. Mobile on two pneumatic wheels. As standard the winch is supplied with a dynamometer with overload cut-off.

The standard rope winch is equipped with hand operated rope guide and a rope protection cover according to the rules. The winch can be equipped with the mechanical rope length measuring device SLM 510. For pulling-in fibre optic cables, subducts or delicate cables the electronic digital line pull data recorder with USB interface as accessory, see below. For safety reason the pulling force on the drum bottom is limited to 500 daN.

- accessory: SLM 510 - Mechanical rope length meter measuring for blowing and pulling for rope-D 3-12 mm
- accessory: APR 530 - Electronic digital line pull data recorder with USB to import in PC

Code	Type	Pull bottom/top	Speed	Petrol	kg
232310	SBS 510	500 / 400 daN	18-65 m/min.	4,1 kW	158,00



Pilot rope winch electric motor

Latest design of pilot rope winch with electric motor with frequency regulation. This winch is not any more driven by a V-belt, but with a better positive mode transmission chain drive. This guarantees higher power train to the drum. For blowing-in pilot ropes from declutched drum through conduits for afterwards introducing bigger pulling ropes from cable winches or for direct pulling-in of smaller cables such as fibre optic cables or single or bundle subducts. The drum is divisible for coiling cords, ropes or cables and can easy be removed from the winch e.g. for using drums with other ropes. Capacity up to 1100 m D 4 mm or 750 m D 5 mm. Mobile on two pneumatic wheels. As standard the winch is supplied with a dynamometer with overload cut-off.

The standard rope winch is equipped with hand operated rope guide and a rope protection cover according to the rules. The winch can be equipped with the mechanical rope length measuring device SLM 510. For pulling-in fibre optic cables, subducts or delicate cables the electronic digital line pull data recorder with USB interface as accessory, see below. For safety reason the pulling force on the drum bottom is limited to 500 daN.

- Portable frequency converter allows to adapt the speed infinitely variable to the cable pull
- accessory: SLM 510 - Mechanical rope length meter measuring for blowing and pulling for rope-D 3-12 mm
- accessory: APR 530 - Electronic digital line pull data recorder with USB to import in PC

Code	Type	Pull bottom/top	Speed	Electric	kg
232315	SES 410	500 / 300 daN	4-59 m/min.	1,5 kW	187,00



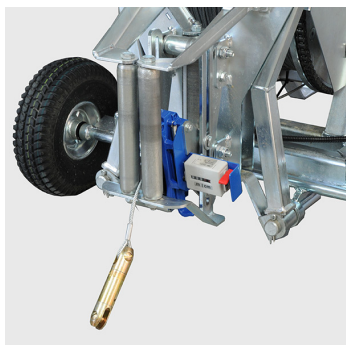


Electronic pull recorder MP 30 USB

Electronic digital line pull data recorder with USB. Digital display and storage of pulling force, pulling speed and cable length.

- The APR 530 saves the cable pull dates on an USB stick. Afterwards they can be imported in a PC.
- The OpenOffice software can be used independent of the operation system.
- In this report as PDF file company name and logo can be inserted.
- There is also possible to write a comment in the report of e.g. site or cable details.
- You will find all the programmes on the provided CD.

Code	Type	Suitable for	For pulls to	Adjustable	kg
232350	APR 530	SBS 510 + SES 410	500 daN	per 1 daN	7,30



Mechanical length meter

Rope length measuring device for pilot ropes D 3-12 mm, only for pilot rope winches with dynamometer.

Code	Type	Suitable for	For rope-D	kg
232380	SLM 510	SBS 510 + SES 410	3-12 mm	6,00



Accessories to pilot rope winches

Steel rope drum alone, divisible for coiling cords, ropes or cable rings, suitable to pilot rope winches SBS 510 and SES 410. Dimension D 410/100x210 mm, for rope up to 1100 m D 4 mm, or 750 m D 5 mm. For coiling rings there will be mounted 3 segments into the drum. With this mounted segments the capacity will be reduced to app. 900 m D 4 or 500 m D 5 mm.

- Using some of these loose drums it is possible to blow-in pilot ropes in multi manholes and conduits.
- With the drums it is possible to blow ropes without the winch.
- The drum support is equipped with a foot brake to control the pay-out of the rope.
- With built-in segment stronger pulls than 100 daN are not possible.
- The segments must only be used for coiling cords or small cables.

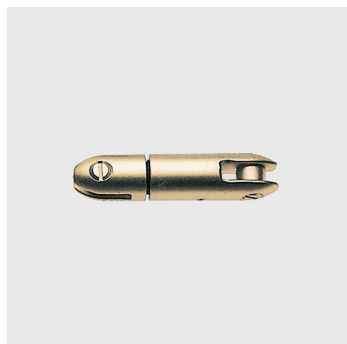
Code	Type	accessory	Detail	kg
232320	SWT 510	Drum alone	D 410x100x210 mm	41,00
232322	TRS 208	Segment	3 needed	1,10
232340	TWG 510	Drum support	with foot brake	11,00



Accessory to pilot winches

Steel ropes galvanized for pilot rope winches, daN = minimum breaking load

Code	Type	Rope-D	daN	Length	kg
232880	STC 4-6	4 mm	1140	per 1 m	0,07
23288011	STC 4-6	4 mm	1140	1100 m	66,00
232890	STC 5-6	5 mm	1770	per 1 m	0,10
23289007	STC 5-6	5 mm	1770	750 m	67,60
232900	STC 6-6	6 mm	2550	per 1 m	0,14
23290005	STC 6-6	6 mm	2550	500 m	70,00



Swivels to pilot rope winches

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. Swivels with ball bearings turn off and destroy the steel ropes, they can only be used in connection with absolute twist free steel ropes.

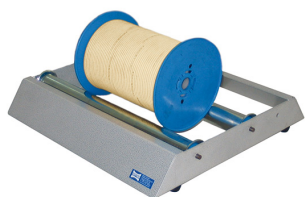
kN = Minimum Breaking Load

Code	Type	D mm	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

accessory to pilot winches

Polyester ropes for blowing through ducts, spools of 500 or 1000 m. daN = Minimum Breaking Load

Code	Type	Rope-D	Spool	daN	kg
23297005	KSP 04-40	4 mm	500 m	280	4,70
23297010	KSP 04-40	4 mm	1000 m	280	10,22
23298005	KSP 05-40	5 mm	500 m	450	7,80
23298010	KSP 05-40	5 mm	1000 m	450	14,52
23299005	KSP 06-40	6 mm	500 m	640	18,00





Conduit plugs divided

Conduit plug divided with lateral rope passage. Included 1 slotted sleeve and tools. With these plugs ropes from D 4 can be blown. It is also possible to blow bigger ropes up to D 9 mm directly through the ducts, but only from capstan winches which allows to pay out the ropes stress less.

An air pressure of approx. 0,5-1,5 bar must not be exceeded. The bigger the duct the lower has to be the pressure.

Code	Type	Duct-ID	Connection	kg
234295	KRS 50	50-55	1/4"	1,50
234297	KRS 54	54-61	1/4"	1,50
234312	KRS 61	61-69	1/4"	1,65
234315	KRS 70	70-80	3/8"	2,60
234325	KRS 76	76-85	3/8"	2,70
234330	KRS 86	86-95	1/2"	3,10
234372	KRS 96	96-103	3/4"	4,90
234385	KRS 103	103-112	3/4"	4,90
234395	KRS 113	113-120	3/4"	5,30
234402	KRS 118	118-128	3/4"	5,30
234405	KRS 128	128-136	3/4"	6,10
234422	KRS 135	135-147	3/4"	6,30
234432	KRS 146	146-159	3/4"	7,00
234445	KRS 160	158-172	1"	9,50
234462	KRS 173	173-184	1"	9,80
234485	KRS 198	199-208	1"	11,10
234489	KRS 220	220-225	1"	12,30
234490	KRS 240	230-240	1"	13,00
234491	KRS 250	240-250	1"	13,50
2344912	Bigger	diameters	not possible!	0,00



Slotted sleeves

Slotted sleeve, accessory to KRS-plugs for blowing-in different rope diameters.

Code	Type	Rope-D	kg
234492	SBU 04	4 mm	0,15
234493	SBU 05	5 mm	0,14
234494	SBU 06	6 mm	0,13
234495	SBU 07	7 mm	0,12
234496	SBU 08	8 mm	0,11
234497	SBU 09	9 mm	0,10



Air-regulator valve

Air-regulator valve for blowing-in of pilot ropes and winch ropes. Equipped with one screw coupling and one standard quick coupling. This regulator valve must not be served in the shaft, but only outside. It is to be connected between two hoses.

Code	Type	Size	kg
234080	REV 34	1/2-3/4"	0,82



Ball pistons

Ball piston for blowing-in rope winches and simultaneously lubricating the ducts. Ball pistons go easier through the ducts they adapt better to the different duct shapes. Distances can be very long, the air pressures are low approx. 0,5-1,5 bar max.

Code	Type	Duct-ID	kg
234562	BKO 50	40-50 mm	0,20
234567	BKO 60	50-60 mm	0,24
234572	BKO 70	60-70 mm	0,26
234602	BKO 80	70-80 mm	0,30
234612	BKO 90	80-90 mm	0,35
234632	BKO 110	90-110 mm	0,52
234692	BKO 125	110-125 mm	0,55
234712	BKO 150	130-150 mm	0,72
234722	BKO 160	150-160 mm	0,95
234726	BKO 190	170-190 mm	1,35
234732	BKO 210	190-210 mm	1,60
234734	BKO 225	200-225 mm	2,40
234738	BKO 250	230-250 mm	3,20
234742	Bigger	diameters not possible!	0,01



Conduit plugs divided

Conduit plug divided, with coupling, for blowing-in ropes of D 4 mm in ducts.

Code	Type	Duct-ID	kg
234240	KRG 28	27-28	1,00
234250	KRG 35	34-35	1,05
234260	KRG 40	40-41	1,23



Pistons

Pistons with cup rings for blowing ropes in connection with divided plugs KRG 28-40.

Code	Type	Duct-ID	kg
234510	MKO 28	27-28 mm	0,13
234530	MKO 35	34-35 mm	0,13
234550	MKO 40	40-41 mm	0,14



Lubricant for indoor installation

Lubricant gel like, for smaller indoor installation cables, in battle. Up to 80 % friction reducing.

For lubrication unique and ultimate classification, Water pollution class - non-hazardous, acc. to VCI-Conception. Safety data sheets are available.

Code	Type	Quantity	kg
235130	J-35V	0,95 l	1,00



Lubricant gel for cable and ducts

Lubricant gel like, for medium up to heaviest cables, up to 80 % friction reducing. Also suitable to reduce strongly the friction pulling-in ducts in ducts.

For lubrication unique and ultimate classification, Water pollution class - non-hazardous, acc. to VCI-Conception. Safety data sheets are available.

Code	Type	Packing drums	Units	kg
235140	J-128V	1 pail 3,8 l	Single pail	4,00
235142	J-128V	4 pails à 3,8 l	Single pail	17,00
235150	J-640V	1 pail 19 l	Single pail	20,00
235152	J-640V	33 pails à 19 l	1 Pallet	685,00



Lubricant pump

Hand operated lubricant pump for mounting on the pails J-640V or SP-640V. Three different ration settings allow the user to pump lubricants with a variety of viscosities, from liquids to gels. Most lubricants can be pumped directly to the conduit or onto the cable during installation. Two hand-free applicators for conduits from diameter 40 to 150 mm are included.

Code	Type	Capability	Hose	kg
235334	LP-3	6-8 l/min.	3 m	4,00



Lubricant liquid for cables and ducts

Lubricant liquid, for medium up to heaviest cables, excellent distribution on the cable and in the duct, up to 80 % friction reducing. Also suitable to reduce strongly the friction pulling-in ducts in ducts.

For lubrication unique and ultimate classification, Water pollution class - non-hazardous, acc. to VCI-Conception. Safety data sheets are available.

Code	Type	Packing drums	Units	kg
235200	SP-128V	1 bottle 3,8 l	Single bottle	4,00
235202	SP-128V	4 bottles à 3,8 l	Single bottle	17,00
235220	SP-640V	1 pail 19 l	Single pail	20,00
235222	SP-640V	33 pails 19 l	1 Pallet	685,00
235230	SP-190V	1 barrel 190 l	Barrel	220,00



Lubricant for FOC

Jettinglube lubricant for blowing-in fibre optic cables. Excellent lubricating effect. Adheres to the duct wall and leaves the cable nearly dry, an advantage for over blowing and working in cascades with further blowing machines. Consumption approx. 0,5 l per 1000 m at duct-ID 40 mm. For other duct-ID analogue

For lubrication unique and ultimate classification, Water pollution class - non-hazardous, acc. to VCI-Conception. Safety data sheets are available.

Code	Type	Packing drums	kg
234960	CJL 1032	1 bottle 0,95 l	1,00
234965	CJL 1032	12 bottles 0,95 l	12,00
234970	CJL 378	4 bottles 3,80 l	16,00



Lubricant for FOC

Micro Jetting Lube, lubricant for blowing-in fibre optic cables. Excellent lubricating effect. Adheres to the duct wall and leaves the cable nearly dry, an advantage for over blowing and working in cascades with further blowing machines. Consumption approx. 10 ml per 1000 m at duct-ID 10 mm. For other duct-ID analogue

For lubrication unique and ultimate classification, Water pollution class - non-hazardous, acc. to VCI-Conception. Safety data sheets are available.

Code	Type	Packing drums	kg
234975	MJL 240	1 bottle 0,24 l	0,32
234977	MJL 424	24 bottles 0,24 l	7,50



Lubricant liquid

Cable lubricant Softenol, liquid, for blowing-in and for pulling-in fibre optic cables.

For lubrication unique and ultimate classification, Water pollution class - non-hazardous, acc. to VCI-Conception. Safety data sheets are available.

Code	Type	Packing drums	kg
235800	SOF 05	1 canister 5 l	5,60
235810	SOF 10	1 canister 10 l	11,00
235830	SOF 25	1 canister 25 l	26,50
235890	SOF 190	1 barrel 190 l	200,00



Duct cleaning sponge

Sponge for sub duct cleaning and pre-lubricating prior to cable blowing

Code	Type	Duct OD	Duct-ID	Cellular	Qty.	kg
275398	RSM 04	7,0 mm	4,0 mm	D 8x30 mm	20 pcs.	0,01
275400	RSM 06	7,0-10,0 mm	5,5-6,0 mm	D 8x50 mm	20 pcs.	0,01
275402	RSM 08	10,0-12,0 mm	8,0 mm	D 16x50 mm	20 pcs.	0,02
275404	RSM 10	12,0-16,0 mm	10,0-12,0 mm	D 20x50 mm	20 pcs.	0,04
275406	RSM 16	20,0 mm	15,0-16,0 mm	D 32x50 mm	20 pcs.	0,06
275408	RSM 32	32 mm	28 mm	D 45x90 mm	1 pc.	0,01
275410	RSM 40	40 mm	35 mm	D 55x90 mm	1 pc.	0,01
275412	RSM 50	50 mm	40 mm	D 65x90 mm	1 pc.	0,01
275414	RSM 63	63 mm	51 mm	D 78x90 mm	1 pc.	0,02



Duct lubricator

Duct lubricator and cleaner, two independent balls, especially for passing narrow duct bows. After pulling through these lubricators there is an equal lubrication of the duct wall on the complete length, which reduces the pulling forces up to 80 %.

Code	Type	Duct-ID	Length	Connection	kg
234820	RSB 50/2	40-50	130 mm	Clipper	0,56
234828	RSB 75/2	60-70	150 mm	Clipper	0,60



Duct lubricator

Duct lubricator and cleaner. Other diameters are available. After pulling through these lubricators there is an equal lubrication of the duct wall on the complete length, which reduces the pulling forces up to 80 %.

Code	Type	Duct-ID	Length	kg
234856	RSG 50	40-50	220 mm	0,28
234858	RSG 60	50-60	240 mm	0,36
234860	RSG 70	60-70	260 mm	0,44
234862	RSG 80	70-80	280 mm	0,85
234864	RSG 100	80-100	370 mm	0,95
234866	RSG 120	100-120	390 mm	1,10
234868	RSG 140	120-140	430 mm	1,40
234870	RSG 160	140-160	480 mm	1,70
234872	RSG 180	160-180	510 mm	2,15
234874	RSG 200	180-200	550 mm	2,75
234876	RSG 220	200-220	590 mm	3,15
234878	RSG 250	220-250	530 mm	3,85
234880	Bigger	diameters	not possible!	8,60



Funnel for liquid lubricant

Funnel of steel sheet, 3,2 litre, with 2 m hose for introduction of liquid lubricant, type SP 128-SP 190, which can be distributed with the duct lubricator RSG on the whole length of the conduit.

Code	Type	For ducts	kg
234810	GET 32	of any size	0,90