



Rope blowing technique

The ideal addition to our support winch HSW-B750 series



When steel cables have to be laid over long distances i.e. more than 250 meters it is advisable to **blow in** the cable into an empty conduit than pulling it in with an ordinary cable pulling system.

With the blow in technique, a **sponge ball piston with an attached steel cable**, are blown into the empty conduit by using compressed air. Distances of **up to 1000 meters** can be reached effectively and quickly without great effort.

During the blowing process, the inner wall of the conduit is going to be pre-lubricated by adding cable lubricant to the sponge. Due to the reduced friction, the cable pulling process of energy cables or communication cables is considerably easier. The reduced pulling forces not only save time but also reduce the risk of damage to the cable or protective tube.

The rope blowing technique is the ideal addition to our support winch HSW-B750 series.



Rope blowing technique

Usage

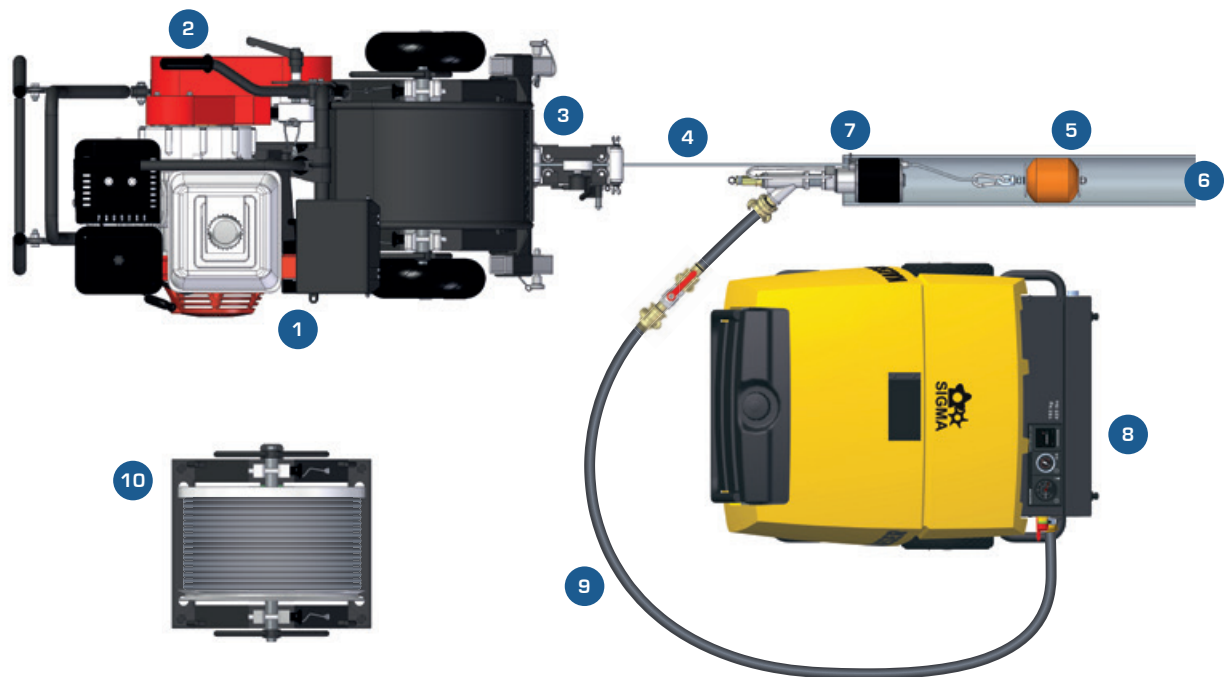
With the cable blowing technique via air compression, a steel cable is blown into a conduit by using a Sponge ball piston .

For this purpose, the clamping lever **2** of the free-wheeling rope-drum **3** has to be released from the support winch **1** and the steel rope **4** needs to be connected to the Sponge ball piston **5**.

Before inserting the Sponge ball piston into the conduit **6** the conduit has to be pre-lubricated by filling in cable lubricant. The conduit plug with slotted sleeves **7** seals the conduit **6** and guides the cable.

The air compressor hose **9** connected to the compressor **8** delivers the required amount of air pressure (depending on the conduit diameter and blow in length). To keep the steel cable taut, the blowing speed can be adjusted by the V-belt tension lever **2** of the support winch **1**.

Instead of the support winch **1** the reel stand for rope reel **10** can also be used.



- 1** Support winch (Here: HSW-B 750 ZP)
- 2** Clamping lever locking mechanism
- 3** Free-wheeling rope drum
- 4** Steel rope
- 5** Sponge ball piston

- 6** Conduit
- 7** Conduit plug with slotted sleeve
- 8** Compressor
- 9** Air compressor hose
- 10** Reel stand for rope reel



Rope blowing technique

Conduit plug standard

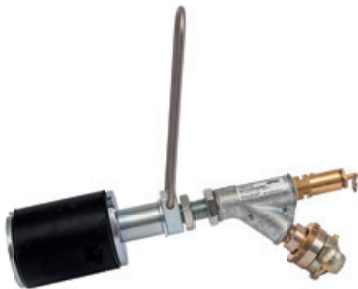


Conduit plug with offset cable entry. Suitable for steel or plastic ropes from Ø 4 to 8 mm. Slotted sleeve is not included. Please order according to the rope diameter. Suitable for support winches with free-wheeling rope drum and with drum brake. Air pressure max. 2 bar. For distances of up to approx. 1000 m. Galvanized steel.

Dimensions [LxWxH]: max. 340 x 170 x 150 mm depending on the conduit plug diameter

article	subduct - Ø	plug - Ø	weight	art.no.
Conduit plug 50	38-45 mm	38 mm	1,2 kg	105760
Conduit plug 63	50-55 mm	50 mm	1,4 kg	105761
Conduit plug 75	60-70 mm	60 mm	1,5 kg	105762
Conduit plug 90	74-82 mm	74 mm	2,0 kg	105763
Conduit plug 110	93-100 mm	93 mm	2,8 kg	105764
Conduit plug 120	97-108 mm	97 mm	3,5 kg	105765
Conduit plug 125	105-112 mm	105 mm	3,7 kg	105766
Conduit plug 145	123-131 mm	123 mm	4,3 kg	105767
Conduit plug 160	136-147 mm	136 mm	4,8 kg	105768
Conduit plug 175	147-158 mm	147 mm	5,2 kg	105769

Conduit plug plus



Conduit plug with offset cable entry, and safety valve with locking lever, that can be tensioned without further tools. Slotted sleeve is not included. Please order according to the rope diameter. Suitable for support winches with free-wheeling rope drum and with drum brake. Air pressure max. 2 bar. For distances of up to approx. 1000 m. Galvanized steel.

Dimensions [LxWxH]: max. 340 x 170 x 150 mm depending on the conduit plug diameter

article	subduct - Ø	plug - Ø	weight	art.no.
Conduit plug P50	38-45 mm	38 mm	1,2 kg	105770
Conduit plug P63	50-55 mm	50 mm	1,4 kg	105771
Conduit plug P75	60-70 mm	60 mm	1,5 kg	105772
Conduit plug P90	74-82 mm	74 mm	2,0 kg	105773
Conduit plug P110	93-100 mm	93 mm	2,8 kg	105774
Conduit plug P120	97-108 mm	97 mm	3,5 kg	105775
Conduit plug P125	105-112 mm	105 mm	3,7 kg	105776
Conduit plug P145	123-131 mm	123 mm	4,3 kg	105777
Conduit plug P160	136-147 mm	136 mm	4,8 kg	105778
Conduit plug P175	147-158 mm	147 mm	5,2 kg	105779

Sponge ball piston with shackle



For blowing in winch ropes and simultaneously lubricating the duct. Ball adapts to the conduit diameter. Even for difficult pipe runs. Ranges of up to max. 1000 m. Max. Air pressure 2 bar.

article	subduct - Ø	ball - Ø	weight	art.no.
Sponge ball piston 50	40-50 mm	50 mm	1,2 kg	105785
Sponge ball piston 63	50-60 mm	60 mm	1,4 kg	105786
Sponge ball piston 75	60-70 mm	70 mm	1,5 kg	105787
Sponge ball piston 90	70-80 mm	85 mm	2,0 kg	105788
Sponge ball piston 110	90-105 mm	110 mm	2,8 kg	105789
Sponge ball piston 120	100-115 mm	120 mm	3,5 kg	105790
Sponge ball piston 125	110-125 mm	130 mm	3,7 kg	105791
Sponge ball piston 145	125-145 mm	150 mm	4,3 kg	105792
Sponge ball piston 160	145-155 mm	160 mm	4,8 kg	105793
Sponge ball piston 175	155-170 mm	175 mm	5,2 kg	105794

Rope blowing technique

Slotted sleeve



Slotted sleeve for Conduit plugs. For blowing in steel cables and plastic ropes from Ø 4 to 8 mm. Divisible slot sleeve to protect the rubber piston during the blowing process. Slotted sleeve has to match the rope diameter to avoid unnecessary air leakage.
Galvanized steel.

Dimensions [LxWxH]: 230 x 60 x 40 mm

article	inner - Ø	weight	art.no.
Slotted sleeve 4	4 mm	0,2 kg	105780
Slotted sleeve 5	5 mm	0,2 kg	105781
Slotted sleeve 6	6 mm	0,2 kg	105782
Slotted sleeve 7	7 mm	0,2 kg	105783
Slotted sleeve 8	8 mm	0,2 kg	105784

Compressed air hose

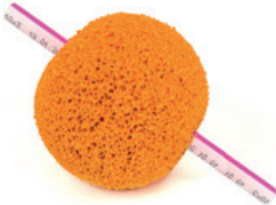


Syntex universal compressed air hose. 100% high tenacity polyester yarn. Extremely high abrasion resistance. UV-resistant. Temperature range: -40 ° C to + 100 ° C. Burst pressure: 50 bar. Area of use: construction.

Dimensions [LxWxH]: 500 x 500 x 50 mm

article	length	hose - Ø	weight	art.no.
Compressed air hose 5	5 m	3/4 inch	2 kg	105796
Compressed air hose 10	10 m	3/4 inch	3,5 kg	105797
Compressed air hose 15	15 m	3/4 inch	5,5 kg	105798

Spare Sponge ball with tube



Spare part, suitable for Sponge ball piston with shackle. Including guide tube for easy exchange.

article	subduct - Ø	ball - Ø	weight	art.no.
Spare Sponge ball 50	40-50 mm	50 mm	0,2 kg	105805
Spare Sponge ball 63	50-60 mm	60 mm	0,2 kg	105806
Spare Sponge ball 75	60-70 mm	70 mm	0,3 kg	105807
Spare Sponge ball 90	70-80 mm	85 mm	0,3 kg	105808
Spare Sponge ball 110	90-105 mm	110 mm	0,3 kg	105809
Spare Sponge ball 120	100-115 mm	120 mm	0,3 kg	105810
Spare Sponge ball 125	110-125 mm	130 mm	0,4 kg	105811
Spare Sponge ball 145	125-145 mm	150 mm	0,5 kg	105812
Spare Sponge ball 160	145-155 mm	160 mm	0,6 kg	105813
Spare Sponge ball 175	155-170 mm	175 mm	0,6 kg	105814

Compressed air regulator



Compressed air regulator with couplings. Controls the amount of air during the blowing process. 3/4 inch connection, with one screw coupling and one standard coupling.

Attention:

The operator must be outside the shaft/manhole!

article	connection	weight	art.no.
Compressed air regulator	3/4 inch	1 kg	105795

Reel stand for rope reel



For storing or safely transporting a rope drum. For unwinding from steel cables during the blowing-in process, even without support winch. Incl. reel brake with foot pedal; without rope drum [optionally available].

Dimensions [LxWxH]: 440 x 350 x 370 mm

article	weight	art.no.
Reel stand for rope reel	25 kg	105590