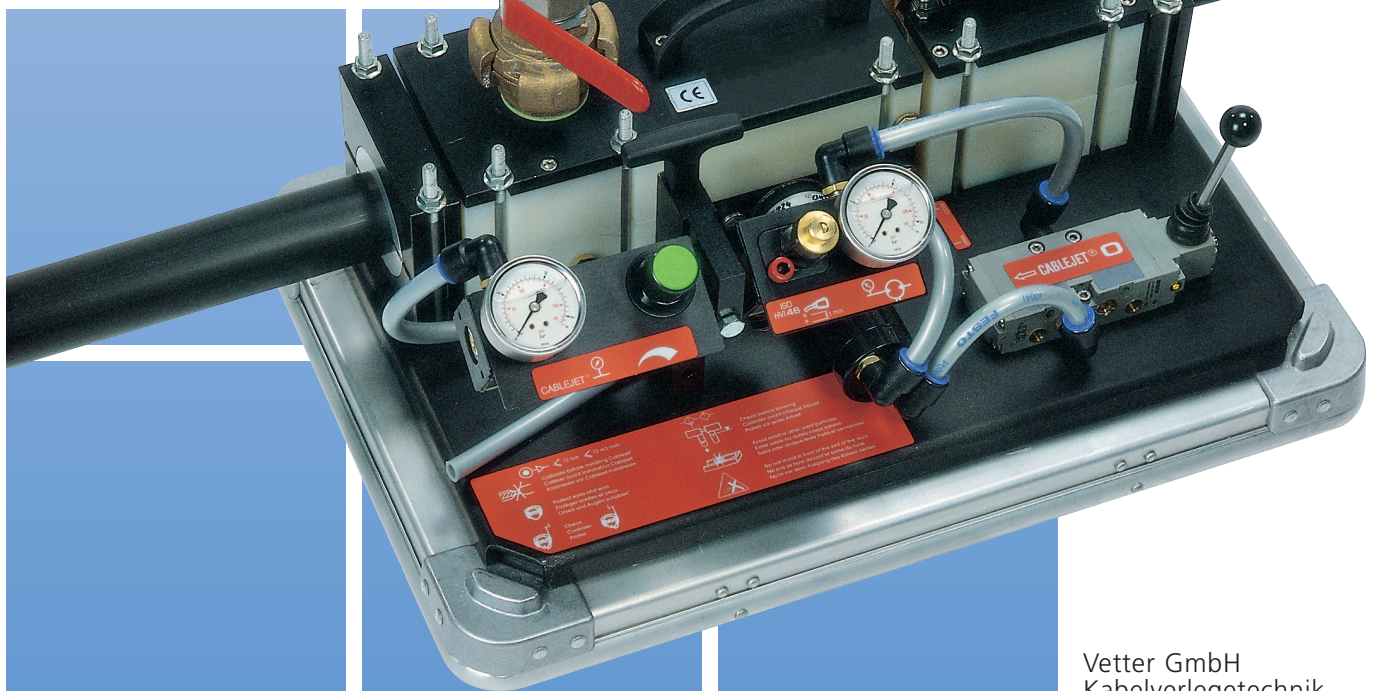
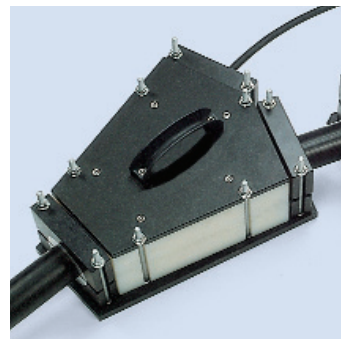
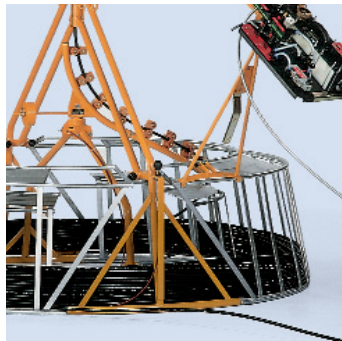


Fibre optic cable blowing-in devices

410





FOC CableJet blowing units for cable D 9-19 mm

FOC SuperJet blowing units for cable D 14-34 mm

Sonic heads for blowing-in thin and soft fibre optic cables

Duct cleaning and lubricating sponge

Cable crash test tube for limiting the pushing force

Metallic hinged duct coupler for coupling two cable ducts

Conduit cutters and burring tools for ducts up to D 70 mm

FigarO - the cable basket replaces laying figure of 8

Cable lubricant for blowing-in fibre optic cables

Duct calibration and leakage test units

Compressor for blowing-in conventional fibre optic cables



CableJet for FOC D 9-19 mm

CableJet for tension-free blowing-in of fibre optic cables D 9-19 mm. Worldwide thousand fold proven blowing machine. Basic machine without cable and duct inserts. See accessory below.

- Average lengths are 2000 m and more.
- Pneumatic cable drive, easy to control.
- Electronic digital length- and speed measuring device
- For ducts up to D 50 mm, compressors of a pressure of 12 bar at 10 m³/min. is necessary.
- For ducts up to D 63 mm, compressors of a pressure of 12 bar at 14 m³/min. is necessary.

Code	Type	Cable-D	For duct-OD	Compressed air	kg
410100	CJS 19	9-19 mm	28-63 mm	10 m³/12 bar	47,00



Driving shafts for cable D 6-9 mm

Driving shafts for smaller cables D 6-9 mm, suitable to CableJet.

Code	Type	Cable-D	kg
41015005	AWS 6-9	6-9 mm	1,40

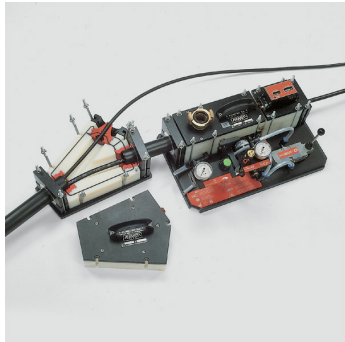


accessory for FOC-floating

accessory for FOC-floating with water for CableJet and SuperJet.

- The CableJet and SuperJet are also able to float-in very long lengths of cables with water.
- Cable lengths of 10 km were floated very successfully.
- The procedure is very simple and big length will certainly be achieved.
- Please ask for our special systems documents.

Code	Type	Suitable to	C-D	Duct-D	Pressure	kg
275210	REC 15/1W	Cablejet	9-19	28-63	4-8 bar	4,80
275213	RES 15/1W	SuperJet	14-34	28-63	4-8 bar	3,45



Y-duct connector

Y-duct connector for blowing-in a second or third cable in occupied ducts. Please select for this the corresponding cable and duct inserts. See table below of CableJet or SuperJet.

- Allows to blow-in second or third cable in the same duct.
- Also necessary for blowing of additional subducts in occupied ducts.

Code	Type	Duct inserts	Cable inserts	kg
410220	YK 5050	2 x for duct-OD 50 incl.	for 2 cables order separately	16,00
41024510	KEY 18	-	for 3rd cable order separately	0,46



SuperJet for FOC D 12-34 mm

SuperJet for tension-free blowing-in of bigger fibre optic cables and bundles of sub ducts D 7-14 mm each. A very long belt drive of 330 mm secures a correct guide of cables and sub ducts. With digital length and speed meter. Including hydraulic power pack with petrol engine and control instruments. Worldwide thousand fold proven blowing machine. For successful blowing-in of big length, in ducts of D 50 mm a compressor of 12 bar and 10 m³/min. is necessary. Basic machine without belts, cable and duct inserts. See accessory below. Basic equipment consist of the following details:

- Petrol-hydraulic pack with hoses
- Length- and speed meter
- Ball valve 1 1/2" with screw couplings.
- Air pressure hose 1 1/2", length 10 m.
- Compressor of min. 10 m³/12 bar for duct dia. 50x4,6 mm

Code	Type	Cable-D	Sub ducts	Creeper band	Duct-D	kg
410314	SJH 34	14-34 mm	D 7-14 mm	330 mm	28-63 mm	125,00



Creeper chain for cables

Creeper chain with rubber cams for blowing-in cables of D 14-34 mm with the SuperJet. Two are required.

Code	Type	Suitable for	Cable-D	Required	kg
042500209	PRO 0820	SuperJet	14-34 mm	2 pcs.	1,60
0425002095	PRS 0821	SuperJet	Chain joint	2 pcs.	0,02



Driving chains for sub ducts

Driving chains of aluminium for blowing-in subducts with the SuperJet, combination see table below.

Code	Type	Duct-OD	Subducts	In duct-OD	kg
42107007	KET 7/007	7 mm	7 pcs.	50 or 40	4,70
42107010	KET 7/010	7 mm	10 pcs.	50 or 40	4,70
42111005	KET 10/345	10 mm	3/4/5 pcs.	50 or 40	4,85
42111007	KET 10/007	10 mm	7 pcs.	50	4,70
42111203	KET 12/023	12 mm	2/3 pcs.	50 or 40	3,72
42111204	KET 12/004	12 mm	4 pcs.	50 or 40	5,70
42111205	KET 12/345	12 mm	3/4/5 pcs.	50 or 40	10,20
42111403	KET 14/023	14 mm	2/3 pcs	50	5,20
42111404	KET 14/004	14 mm	4 pcs.	50	11,00



Flat rubber chain

Flat rubber chain single incl. chain joint. This chain is mounted on the bottom to complete the existing chain of 5x7 / 5x10 and 5x12 for further subducts of 2x7 / 3x7 / 2x10 and 2x12 mm.

Code	Type	Duct-OD	Subducts	In duct-OD	kg
042113931	Flat chain	see text	see text	50 or 40	1,00



Cable inserts

Cable inserts suitable to CableJet and SuperJet. Also necessary for the Y-piece to blow-in a second or third cable in one duct. One set of cable sealing for the hole range of cable diameters is included.

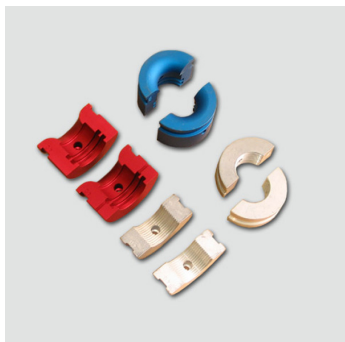
Code	Type	Cable-D	kg
41015009	KEJ 9	6,0- 9,0	0,46
41015011	KEJ 11	9,0-11,0	0,43
41015012	KEJ 12	11,0-12,5	0,44
41015014	KEJ 14	12,5-14,0	0,44
41015015	KEJ 15	14,0-15,5	0,44
41015018	KEJ 18	15,5-18,0	0,45
41015022	KEJ 22	17,5-22,0	0,41
41015024	KEJ 24	22,0-24,0	0,45
41015028	KEJ 28	24,0-28,0	0,41
41015032	KEJ 32	28,0-32,0	0,41
41015035	KEJ 36	32,0-36,0	0,36
41015042	KEJ 42	38,0-42,0	0,36



Cable sealing

Cable sealing for CableJet and SuperJet. These are also useable in the Y-piece for blowing-in of further cables in the same duct.

Code	Type	Cable-D	Set of	kg
415107	KDR 07	6,0-7,0	20 halved seals	0,01
415108	KDR 08	7,0-8,0	10 complete uncut seals	0,01
415109	KDR 09	8,0-9,0	20 halved seals	0,01
415110	KDR 11	9,0-11,0	20 halved seals	0,01
415120	KDR 12	11,0-12,5	20 halved seals	0,01
415140	KDR 14	12,5-14,0	20 halved seals	0,01
415150	KDR 15	14,0-15,5	20 halved seals	0,02
415180	KDR 18/16	15,0-16,0	20 halved seals	0,02
41518018	KDR 18/18	16,0-18,0 mm	20 halved seals	0,02
415200	KDR 20/18	17,0-18,0	20 halved seals	0,04
41520020	KDR 20/20	18,0-20,0 mm	20 halved seals	0,04
41522022	KDR 20/22	20,0-22,0 mm	20 halved seals	0,04
415230	KDR 24	22,0-24,0	20 halved seals	0,03
415280	KDR 25	23,0-25,0	20 halved seals	0,05
41528028	KDR 28	25,0-28,0 mm	20 halved seals	0,05
41535030	KDR 32/30	28,0-30,0 mm	20 halved seals	0,12
41535033	KDR 32/32	30,0-32,0 mm	20 halved seals	0,12
41535035	KDR 36/35	32,0-35,0 mm	20 halved seals	0,09
41535038	KDR 36/38	35,0-38,0 mm	20 halved seals	0,10



Duct inserts

Duct inserts suitable to CableJet, SuperJet. Also necessary for the Y-piece to blow-in a second or third cable in one duct.

Code	Type	Duct-OD	kg
41018032	REJ 32	32 mm	1,40
41018040	REJ 40	40 mm	1,40
41018050	REJ 50	50 mm	1,40
41018063	REJ 63	63 mm	1,40



Cable guiding heads

Cable guiding heads for screwing on the cable heads for friction-low sliding during cable-blowing.

Code	Type	Head-D	Head OD	Set of	kg
410270	KFM 82	8,5-20 mm	15-22 mm	6 pcs.	0,11



Sonic heads

Sonic heads for successful blowing-in of thin and soft fibre optic cables with the CableJet or the SuperJet for achieving of bigger lengths.

- The sonic head opens and allows to pass 90 % of the cable supporting Jet-stream.
- The pulling force exerting on the cable head is therefore only of some daN.
- This pull as pre-tension is enough to carry soft cable straight on through the duct.

Code	Type	Duct-OD	Duct-ID	kg
410600	SKO 40	32 + 40	26 - 32	0,48
410620	SKO 50	40 + 50	32 - 40	0,59
410640	SKO 63	63 mm	40 - 51	0,88



Duct cleaning sponge

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

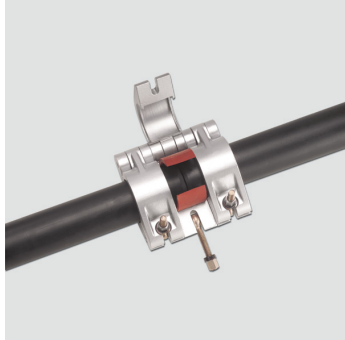
Code	Type	Duct-OD	Duct-ID	Cellular	kg
275408	RSM 32	32 mm	28 mm	D 45x90 mm	0,01
275410	RSM 40	40 mm	35 mm	D 55x90 mm	0,01
275412	RSM 50	50 mm	40 mm	D 65x90 mm	0,01
275414	RSM 63	63 mm	51 mm	D 78x90 mm	0,02



Cable crash test tube

Cable crash test tube transparent with sealing end. For limiting the pushing force of the blowing-in machines. Tests without compressed air. For determination of the cable stiffness up to the crash. Safe packed in reusable plastic duct.

Code	Type	Duct-OD	Length	kg
275312	CTR 32	32 mm	1,65 m	0,80
275315	CTR 40	40 mm	1,65 m	1,10
275318	CTR 50	50 mm	1,65 m	1,30
275321	CTR 63	63 mm	1,65 m	1,70



Duct coupler

Metallic duct coupler of aluminium, hinged, for coupling two cable ducts for blowing through cables. Up to air pressures 12 bars.

Code	Type	Duct-OD	kg
275200	RK 4040	40 mm	1,35
275203	RK 5050	50 mm	1,10
275206	SW 11	Socked spinner wrench	0,18



Cable duct connecting nipple

Cable duct connecting nipple for duct-OD 50 mm, which are cut plain with the manhole wall. This connecting nipple with right- and left-hand thread enables a through-connection to blow-through cables. Afterwards the nipple can be opened lengthwise and be separated. Included are: 1 sickle spanner, 1 allen key and 2 pipe clamps.

Code	Type	For duct OD	Length	kg
410260	VB 5050	50 mm	220 mm	1,60



Conduit cutters

Conduit cutters for plain cuts.

Code	Type	Duct-OD	Length	kg
273171	MRS 43	to 42	215 mm	0,45
273172	MRS 50	to 50	265 mm	0,60
273173	MRS 63	to 63	285 mm	0,70
273174	MRS 75	to 75	485 mm	1,60



Burring tools

Burring tools for in- and outside of plastic conduits.

Paring knife MSM 40, for separating multiple conduits.

Code	Type	Duct-OD	Burring	Mat.	kg
273180	MRE 50	28-50	ext. /intern	Alu	0,43
273190	MRE 63	28-63	only extern	Poly	0,20
273200	MSM 40	Paring knife	-	-	0,50



Conduit and cable slitter

Conduit slitter for lengthwise and circumferential slitting of plastic conduits and cable covers. Complete reinforced steel version. In case 195x75x45 mm.

Code	Type	Up to wall thickness	L/W/H mm	kg
255905	KMS 6	6 mm	195x75x45	0,35
255910	ERM 6	Spare knife	--	0,10



Cable conduit saw

The cable conduit saw SRS 6 is suitable for cutting occupied and unoccupied cable conduits at an outer diameter of 32-150 mm and at a wall thickness up to 6 mm. The saw can precisely cut lengthwise and crosswise and can also precisely cut windows into the cable conduit. Especially for long cuts on the cable conduits which are necessary for cable line redirections the great benefits of this saw pay off. The cutting depth can be precisely adjusted to a tense of a millimetre by an adjustment mechanism thus the cables inside the cable conduit are well-protected. The cutting depth has always to be set 0,2 mm less than the conduits wall thickness. The remaining very thin plastic membrane will be removed by a lifter tool thus the cable is also protected during this final step.

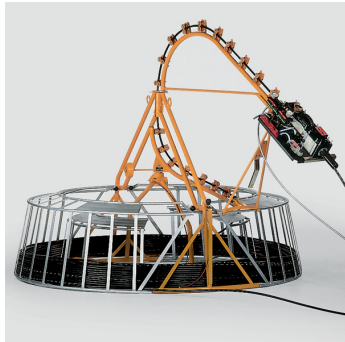
The conduit guiding plates allow a high safety at work as well as accurate cuts. The guiding plates are available for the below mentioned conduit-diameters. The cordless saw is handy and small in order to be fit for application also in narrow working conditions its weight is below 2 kg. Included in delivery are the following parts:

- Accu-saw with high-quality blade hard metal equipped and 2 accus with 1 charger
- Adapter for the conduit guiding plates with precise adjustment of the cutting depth
- Sliding calliper and lifter for the window-cutting
- Packed and delivered in robust box, 445x355x255 mm, weight app.. 6,0 kg
- Only approx. 1,9 kg of weight for comfortable application



Code	Type	Device	For cond-OD	kg
273210	SRS 6	Saw as described above	32-150 mm	8,00
273228	RFP 32	Conduit guide plate	32 mm	0,35
273230	RFP 40	Conduit guide plate	40 mm	0,32
273232	RFP 50	Conduit guide plate	50 mm	0,26
273234	RFP 63	Conduit guide plate	63 mm	0,26
273237	RFP 64+	Conduit guide plate	64-150 mm	0,20
273222	ESB 6	Spare blade	--	0,03





Figaro the cable basket

Figaro. The FOC basket is used if the cable is too long to be blown completely with only one blowing machine. If half of the cable is installed in one direction the remaining cable is pushed into the Figaro with the blowing machine. Out of the Figaro this part of the cable can be blown uncut in the opposite direction to finish the installation.

- To handle the Figaro see suitable trailer below.
- Cable Cap.: 3000 m D 8 mm / 2700 m D 12 mm / 2300 m D 14 mm.
- The Figaro replaces laying figure of 8 on the ground, is clean and space saving.
- The Figaro is always placed besides the cable drum.

Code	Type	Basket-D	kg
411210	SLK 225	2250 mm	159,00



Trailer for Figaro

Trailer for the Figaro. After folding down both Figaro halves the cable can be pushed directly into the Figaro on an agreeable and safe height. Under the same condition the cable can afterwards also be blown into the duct. Trailer with alu platform, all side walls can be folded down. Height adjustable drawbar with ball coupling and parking brake.

- On this trailer the Figaro can be replaced from pit to pit.
- The cables stay away from mud on a good working height.

Code	Type	Platform size	Total	Hitch load	kg
275800	FAN 440	2300x1520x400 mm	750 kg	75 kg	320,00



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 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 calibration set

Conduit calibration and leakage-test unit. Calibration and leakage-test before starting the cable blowing-in procedure is the safest guarantee for successful installation of fibre optic cables. Unit consisting of:

- Compressed air regulator with adjustable tripod.
- 5 m high pressure hose, calibre D 35 mm, transmitter, for duct-D 50x4,6 mm.
- All other diam. of calibres are available, please see extensions below.
- With conduit plug and catch box for the piston.
- With electronic detector 33 kHz . Compl. set in alu-case 780x380x330 mm.

Code	Type	Duct-ID	kg
231601	RKV 40	40-41 mm	27,00



Calibre extension set

Supplementary extension set for calibration and leakage test unit.

Code	Type	Duct-ID	kg
231602	RKVE 33	33-34 mm	2,60
231603	RKVE 27	27-28 mm	2,00



Calibre housings

Calibre housings of polyamide with sleeve rings, without transmitter. Calibre length 145 mm, total length 250 mm

Code	Type	Calibre-D	Duct-ID	kg
231646	MKV 35	35 mm	40-41	0,36
2316475	MKV 28	28 mm	33-34 mm	0,29
231648	MKV 25	25 mm	27-28	0,32



Miniature transmitter D 18 mm

Miniature transmitter D 18, suitable for all a. m. calibres.

Code	Type	Calibre-D/L	Thread	For depths	kg
231620	SKS 18	18/100 mm	M 10	up to 4,0 m	0,07



Piston for loosening cables

Pistons for loosening old cables in ducts before blowing or pulling them out.

Code	Type	Duct-OD	Duct-ID	Cable-D	kg
275230	LKO 40	40 mm	33-35 mm	10-21 mm	0,10
275232	LKO 50	50 mm	40-42 mm	10-21 mm	0,10



Conduit plug for duct-OD

Conduit plug for fixing on duct-OD with hose safety coupling applicable for duct calibration, duct pressure tests, duct cleaning etc.

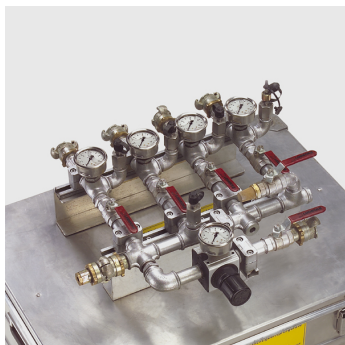
Code	Type	Duct OD	Pressure	kg
2316513	KRA 32	32 mm	up to 10 bar	0,50
231651	KRA 40	40 mm	up to 10 bar	0,84
231650	KRA 50	50 mm	up to 10 bar	0,90
231649	KRA 63	63 mm	up to 10 bar	1,00
2316541	KRA 110	110 mm	up to 10 bar	3,20



Sealing plug

Conduit sealing plug applicable for duct pressure tests.

Code	Type	Duct OD	Pressure	kg
273572	ENSA 32	32 mm	up to 10 bar	0,10
273575	ENSA 40	40 mm	up to 10 bar	0,23
273580	ENSA 50	50 mm	up to 10 bar	0,29
273585	ENSA 63	63 mm	up to 10 bar	0,40
273586	ENSA 110	110 mm	up to 10 bar	1,93



Pipe leakage test set

Pipe leakage test set 0-10 bar, for testing of 1-4 ducts simultaneously, independent of the diameter.

Code	Type	For	kg
2316291	RDP 10/1	1 duct	16,50
2316292	RDP 10/2	2 ducts	30,60
2316293	RDP 10/4	4 ducts	47,60



Pressure recorder

Pressure recording device in completion to a. m. calibration and leakage unit. Electronic measuring of pressure and hardcopy on paper and storage for further computer handling of the data.

Code	Type	For	Max. test pressure	kg
231733	DRG 10	all duct-D	10 bar	8,60



Compressor diesel engine

High powered compressors for blowing-in bigger fibre optic cables. Suitable for MiniJet, for duct ID up to 20 mm. Mounted on single axle trailer with height adjustable drawbar, without overrun brake.

- Deutz Diesel-engine, 88 kW. Compressor dimension: 4720x1900x1590
- Flow rate 9,70 m³, at 12 bar working pressure
- With integrated after cooler and water separator.

Code	Type	Compressed air	Pressure	Duct-D	Cable-D	kg
960134	M 123	9,70 m³/min.	12 bar	up to ID 40	to 30 mm	1.945,00



Pressure release valve

Pressure release valve for compressors with thread Rd 55, equipped with union nut Rd 55, with ball valve 3/4" with sound absorber. Connecting nipple with external thread Rd 55. For Vetter flat hoses 1 1/2". Max. pressure 12 bar.

Code	Type	Pressure	Thread	kg
275220	EVK 15	12 bar	Rd 55	2,70