

HOSE TECHNOLOGY

Sewer and industrial cleaning

Grünin **G+L** Oske
www.gruelo.de



Reliable, for sure!

★ friendly

★ flexible

★ fair

★ competent

★ reliable

5-STAR - SERVICE EVERY DAY!



For more than 60 years, Grünig & Loske GmbH has been standing for a successful combination of services and products in the business-to-business sector. Our declared intention is to turn our customers into delighted fans by our 5-Star-Service: friendly, flexible, fair, competent and reliable – from the first contact to on-time delivery!

Grünig & Loske GmbH has up to now been gaining practical experiences for decades and incorporated these into cooperation with selected vehicle manufacturers and users in the range of pipe and sewer cleaning. New and innovative products have been developed, resulting in a broad portfolio of products and services to meet your requirements and ease your daily work.

In case you need more detailed information about a particular product or would like to get a general idea about our extensive assortment, please visit us on www.gruelo.de.

In case you need help to choose the right product for your application area our kind and competent sales team provides assistance under:

Fon: +49 (0)5102-9199-01

Fax: +49 (0)5102-9199-90

Mail: info@gruelo.de

Enjoy our new range of products!

Dirk Loske
CEO



www.gruelo.de



REACHABILITY

- We are personally available from Monday to Thursday, 7:30 a.m. to 4:30 p.m., and Friday 7:30 a.m. to 2:00 p.m.
- You are welcome to make an appointment with your local sales representative.
- Detailed information can be found on www.gruelo.de around the clock.

SERVICES

- We deliver your goods on your requested date.
- Packaging is done according to your transport specifications.
- We also pack your orders neutrally and send them directly to your customer.
- We take care of customs formalities for your shipments abroad.
- We help you to plan and realise custom-made products and special fabrications.
- Feel free to arrange call or blanket orders with us.
- We assemble and test your hose lines in conformity with PED (Pressure Equipment Directive) and BetrSichV (German Operational Safety Regulations).

DELIVERY OPTIONS

- Delivery throughout Germany within 24 hrs./48 hrs.
- Orders with express shipment can be delivered the next day.
- It is possible to pick up goods directly from our warehouse.

CUSTOMISED LABELS

- On request we can produce your hose line with a transfer tape in your corporate colour and logo.
- With our in-house laser we mark fittings or hose clamps according to your specifications.

YOUR SALES DOCUMENTS

- We gladly create our sales documents with your corporate design.

OUR LOCATION

- In addition to the office building, our company headquarters in Laatzen consists of two production areas and three warehouses with a total area of approx. 4,000 m². Our storage area is equipped with the latest high-bay warehouse technology, to ensure the fastest possible processing of your order.



THE G+L SERVICES PROGRAM

A high quality standard and our wide range of product-oriented services makes **Grüning & Loske** the supplier you trust.

Our workshops offer efficient and high-quality results in short time. Thanks to our broad range of materials, we are always able to provide you with customized results for various applications.

Our aim is to reduce your process costs and thereby increase the productivity.



HOSE SERVICES Consultation and Assembly

Assembly is done under strong compliance with regulations applying to the manufacturing of complete hose lines (European Pressure Equipment Directive PED 2014/68/EU).

A safe operation of a hose line is only possible, considering the actual operation conditions. This includes resistance against the conducted media, working pressure, operating temperature, installation situation, bending frequency, duration and frequency of operation, environmental conditions and mechanical load.

All the advice and practical support you require for your individual operation purpose will be given by our skilled expert staff. The personnel in hose technology is "Qualified Person pursuant to the Ordinance on Industrial Safety and Health for pressure tanks and piping" and additionally „Certificated Expert Advisers for Hose and Fitting Technology“ (Certification through Trade Association).

Our services:

- Assembly of hose lines/swaging of hose lines up to DN 300 mm, with clamps, bolted clamps and all customary hose coupling systems: e.g. Storz, Perrot, Bauer, Anfor, Flange, Kamlok, GEKA
- Swaging of composite hoses up to DN 250 mm
- Assembly of hose packs and heatable hose lines
- Detailed advice by phone or personally on-site
- Management of hose lines
- Hose testing in conformity with European Pressure Equipment Directive PED 2014/68/EU as well as German BetrSichV (Occupational Safety Regulations)
- Labelling or marking of hoses
- Hose repair
- On-site mobile hose testing service
- Lasting security through maintenance contracts
- Hose recycling
- Hose winding and unwinding equipment



HOSE TESTING

Hose lines are subject to special requirements, as they are partly under severe stress by the predominant operational conditions, transported media, operating pressure, temperature and external influences.

To minimise the risks at the operating hose lines, a constant inspection of the work capability is essential. A recurrent inspection of hose lines is even regulated by law. Grüning & Loske inspects your hose lines pursuant to the Ordinance on Industrial Safety and Health and Pressure Equipment Directive PED PED 2014/68/EU.

Following the inspection each hose line gets an identification number which is permanently attached to the line by a marking strip. We hand out a certification report after inspection. Furthermore we keep records of all inspections we accomplished. Through the given identification number we can recall your master and test data any time.

Our mobile testing unit enables us to inspect your hose lines on-site without any circumstances.

Take advantage of this Grüning & Loske service. It saves you time and effort - and thus lowers your costs!

Our services:

- Hose line testing according to European Pressure Equipment Directive PED 2014/68/EU:
 - Inspection
 - External and internal testing (visual examination)
 - Electrical conductivity test
 - Pressure test (strength test) up to 2.800 bar
 - Vacuum test
- Individual labeling
- Documentation by itemised report according to EN 10204
- Consultancy on CE-identification marks
- Variant inspections conforming to your works standard specification
- Repair on-site through our mobile testing and installation service
- Supervision of your inspection dates and punctual email reminder



MANUFACTURING COMPONENTS

We produce almost all types of screwing components, cast and welded assemblies as well as outsourced assemblies for you. Thus, you avoid the costly storage of articles, obtain the desired components in a consistent high quality at the desired date and at low costs. As component production specialists we always guarantee optimum project development in terms of quality, scheduling and logistics.



CORROSION AND WEAR PROTECTION

GrüloCoat Systeme - the solution for high-quality surface protection. Use our knowledge advantage and our experience to protect your surfaces against various negative influences such as mechanical abrasion, chemical influences and corrosion in the long term. Successful coatings result from the interaction of many factors. As a specialist company for high-quality wear protection for the most diverse demands, we offer you extremely resistant and high-quality coating systems made of **polyurea**, **polyurethane**, **rubber** or **ceramics**.



SANDBLAST AND FINISHING TECHNIC

Before and after coating we directly continue processing your steel parts in our sandblasting and painting unit. Thus, we provide you with a ready-to-install end product.



CONVEYOR TECHNOLOGY

In materials handling technology, we have decades of experience in the design, maintenance composition and assembly of rubber and PVC / PU conveyor belts. In addition, we stock common repair materials and technical accessories in our extensive stock. In case you cannot find what you need in our program, we gladly manufacture or procure it according to your requirements. And if quick solutions are necessary: our team provides a fast response service and is at your disposal around the clock.

- Calculation and optimisation of material handling equipment
- 24-hour maintenance and installation services
- Assembly of rubber and PVC / PU conveyor and processing belts
- Production of corrugated edge belts (applying cleats and corrugated edges)
- Drum and roller rubber coatings
- Preparation and vulcanization of elastomer profiles and customized moulded parts
- Conveyor belt splicing and repairing by hot vulcanization, cold bonding or mechanical processing
- Manufacturing of Para hoses, concrete outlet hoses, rubber sleeves, seals, compensators, as well as inflatable seals for dosing systems



PRESSROOM AND PLOTTING SERVICE

Individual sealing solutions in nearly any rubber or plastic quality and geometry can be manufactured by our stamping press. We plan and implement alike. Whether individual pieces or series production – no problem for us.

As an additional service we offer you your individual seal design.



CONSTRUCTIONAL STEELWORK

In our metal construction and special engineering workshop we manufacture our own machines, winding brackets and turntables for winding and unwinding hoses. Furthermore, we process sheet metal of all kinds and round bars.



C-PARTS MANAGEMENT

C-Parts do not cost a lot themselves, but the sourcing effort is very high. In times of high requirements coordinating stockpile and reorders of these small parts is difficult to cope with. Reduce your costs of replacement by a successful C-Parts management together with the supplier you can rely on.





Do you know these problems? Two men = One hour! Use **GrüloReelTec** ...

...and find out how easy and quick changing your sewer cleaning hose is possible. Use our reeling and unwinding unit **GrüloReelWinder**, save time and costs by a significant lower workload.



What is GrüloReelTec?

The deployment of our winding and reeling unit **GrüloReelWinder** or using one of our services **GrüloReelTec** will considerably ease the exchange of your sewer cleaning hoses!

Our specifically constructed **GrüloReelWinder** makes reeling and unwinding a snap. Therefore our staff needs only about

one hour to exchange a hose of 32 mm nominal size and 180 m length.

You know yourself how much time this usually takes!

To use the machine we deliver our sewer cleaning hoses - be they of plastic or rubber - on a reel.

GrüloReelWinder MACHINE FOR WINDING AND UNWINDING

GrüloReelWinder is available **with** (230 V / 380 V) or **without** engine. The motor-driven model has a preset rotation speed. This can be adapted on demand. For assembly and disassembly of the reel a crane, forklift or wheel loader should be available. **GrüloReelWinder** is easy to move by means of a lift truck. Storage should be dust-free and dry.

With CE-Label and electrically certified. Manufactured in Germany.



You can find further information in our film.

GrüloReelWrapper ALTERNATIVES FOR EVERYBODY

The manually operable reeler **GrüloReelWrapper (type 1)** and the **rotary plate (type 2)** simplify the work in exchange of hoses on your vehicles.

For detailed informations please contact us!



Type 1



Type 2

GrüloReelTec Overview of our services

GrüloReelLocal

Within a radius up to 200 km radius of Hannover we offer our service **GrüloReelLocal**. We come to your site, deliver the ordered hose and exchange the used one. This is done quickly and without any problems directly on your doorstep.

GrüloReelBase

Quick and convenient is our local service **GrüloReelBase** in Laatzen. After a prior made appointment come along with your sewer cleaning vehicle and let us do the work. Our staff undertakes the rewinding of your hose and of course we take care of the disposal.

GrüloReelRent

Use **GrüloReelRent** and we deliver one of our reel winding units **GrüloReelEngine**. With the same shipment you get the newly ordered hose mounted on a reel. You exchange the sewer cleaning hose at your vehicle on site yourself. After usage you simply return the machine to us!



GrüloJet

THERMOPLASTIC SEWER JETTING HOSES

GrüloJet-series are thermoplastic sewer jetting hoses with pressure carrier, consisting of doublebraided highly tearproof synthetic fibres and an extremely abrasion- and cut resistant polyurethane cover. They are ideally suited for equipping sewer cleaning vehicles. Due to their extremely smooth thermoplastic lining they show a lower pressure drop than usual rubber sewer cleaning hoses. Furthermore their lower weight enables you to increase your load capacity and a more efficient work.

All hoses are assembled with BSP female/male and ferrules. Delivery takes place with test certificate on each assembled hose.

GrüloJet 200

The economic alternative, 200 bar

Technical characteristics

Temperature range: -40 °C to +55 °C

Standard length: 120 m, 160 m, 180 m, 200 m, 240 m
further lengths on request

Maximum length: DN 25 up to 350 m, DN 32 up to 250 m,
DN 38 up to 200 m



Construction

Cover: Polyurethane, extremely cut- and abrasion resistant

Reinforcement: Highly tear resistant synthetic fibres, braided

Lining: Thermoplastic elastomer

Marking: - - GrüloJet 200 - - DN [...] | WP [...] bar | BP [...] bar

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	4,70	275	690	75	0,277	10063-013
16	5/8	5,25	220	550	100	0,372	10063-016
19	3/4	5,30	200	500	120	0,431	10063-019
25	1	5,85	200	500	150	0,550	10063-025
32	1 1/4	7,00	200	500	235	0,848	10063-032
38	1 1/2	8,00	200	500	375	1,211	10063-038

GrüloJet 250

PU jetting hose 250 bar

Technical characteristics

Temperature range: -40 °C to +55 °C

Standard length: 80 m, 120 m, 160 m, 180 m, 200 m, 240 m
further lengths on request

Maximum length: DN 25 up to 350 m, DN 32 up to 250 m



Construction

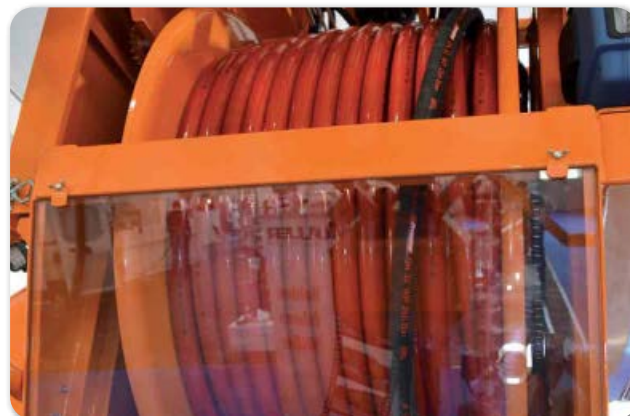
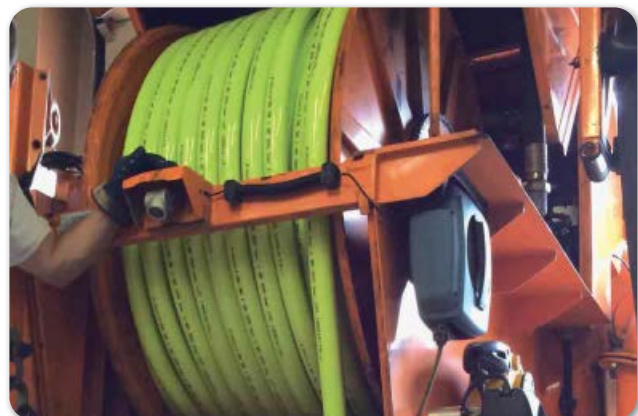
Cover: Polyurethane, extremely cut- and abrasion resistant

Reinforcement: Highly tear resistant synthetic fibres, braided

Lining: Thermoplastic elastomer

Marking: - - GrüloJet 250 - - DN [...] | WP 250 bar | BP 625 bar | [Datum]

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
19	3/4	5,30	250	625	120	0,460	10089-019
25	1	5,85	250	625	150	0,643	10089-025
32	1 1/4	7,00	250	625	235	0,985	10089-032



GrüloJet 175

PU jetting hose up to 175 bar

GrüloJet 175 is a thermoplastic cleaning hose with a working pressure up to 175 bar. Perfectly, suited for cleaning in the range of house connections.

As a service we offer you various connection options.

Technical characteristics

Temperature range: -40 °C to +55 °C

Standard length: 80 m, 100 m, 120 m | further lengths on request

Colour: Green



Construction

Cover: Polyurethane, extreme cut- and abrasion resistant

Reinforcement: Highly tear resistant double textile fibre braids

Lining: Thermoplastic elastomer

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
9,7	3/8	3,15	175	437	90	0,132	10064-010

GrüloJet 400

PU sewer jetting hose up to 400 bar

GrüloJet 400 is a thermoplastic sewer cleaning hose with a working pressure of up to 400 bar. The pressure carrier, consisting of double-braided highly tearproof aramid- and synthetic fibres, guarantees long endurance and therefore decreases your expenses.

As a service we offer you various connection options.

Technical characteristics

Temperature range: -40 °C to +55 °C

Standard length: 80 m, 100 m, 120 m, 150 m, 180 m, 200 m, 250 m

Colour: Orange



Construction

Cover: Polyurethane, highly cut and abrasion resistant

Reinforcement: Highly tear resistant synthetic fibres

Lining: Thermoplastic elastomer

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	4,70	345	862	100	0,292	10065-013
19,2	3/4	5,40	400	1000	185	0,442	10065-019
25,8	1	6,90	400	1000	250	0,735	10065-025
32,0	1 1/4	7,90	400	1000	400	1,054	10065-032



PRESS COUPLINGS FOR SEWER JETTING HOSES

High pressure press couplings for use in case of repair of thermoplastic or rubber sewer cleaning hoses up to a working pressure of 250 bar. Consisting of one piece press coupling BSP female, BSP male and ferrule, steel plated finish.



IMPORTANT!

The press diameters only apply to new hoses. For used hoses or in case of repair the correct press diameters have to be determined individually again!

Technical characteristics

BSP straight female, 60° cone

BSP male parallel, 60° cone seat

GrüloJet 200/250		Press couplings				
DN mm	DN Inch	Part	Thread Inch	Press Ø mm	Weight/piece kg	Article no.
13	1/2	Male AGR	R 1/2	-	0,090	20464-04-013
		Female DKR		-	0,090	20463-04-013
		Ferrule		25,3	0,060	20465-04-013
16	1/2	Male AGR	R 5/8	-	0,100	20464-05-016
		Female DKR		-	0,100	20463-05-016
		Ferrule		29,0	0,070	20465-05-016
19	3/4	Male AGR	R 3/4	-	0,170	20464-06-019
		Female DKR		-	0,140	20463-06-019
		Ferrule		33,5	0,090	20465-06-019
25	1	Male AGR	R 1	-	0,300	20464-10-025
		Female DKR		-	0,300	20463-10-025
		Ferrule		41,0	0,150	20465-10-025
32	1 1/4	Male AGR	R 1 1/4	-	0,500	20464-12-032
		Female DKR		-	0,400	20463-12-032
		Ferrule		51,0	0,270	20465-12-032
38	1 1/2	VT AGR	R 1 1/2	-	0,600	20464-14-038
		MT DKR		-	0,450	20463-14-038
		Presshülse		58,0	0,350	20465-14-038

GrüloKan 250		Press couplings				
DN mm	DN Inch	Part	Thread Inch	Press Ø mm	Weight/piece kg	Article no.
13	1/2	Male AGR	R 1/2	-	0,090	20481-04-013
		Female DKR		-	0,090	20480-04-013
		Ferrule		27,5	0,070	20482-04-013
16	1/2"	Male AGR	R 5/8	-	0,100	20481-04-016
		Female DKR		-	0,100	20480-04-016
		Ferrule		31,3	0,090	20482-05-016
19	3/4	Male AGR	R 3/4	-	0,170	20481-06-019
		Female DKR		-	0,140	20480-06-019
		Ferrule		33,8	0,100	20482-06-019
25	1	Male AGR	R 1	-	0,300	20481-10-025
		Female DKR		-	0,300	20480-10-025
		Ferrule		41,2	0,170	20482-10-025
32	1 1/4	Male AGR	R 1 1/4	-	0,500	20481-12-032
		Female DKR		-	0,400	20480-12-032
		Ferrule		51,8	0,290	20482-12-032
38	1 1/2	VT AGR	R 1 1/2	-	0,650	20481-14-038
		MT DKR		-	0,700	20480-14-038
		Presshülse		59,2	0,290	20482-14-038

GrüloKan 250

RUBBER SEWER CLEANING HOSE

The **GrüloKan 250** offers you all benefits of a professional rubber sewer cleaning hose. The specially developed rubber compound guarantees a long operating life, high abrasion resistance and extreme flexibility. **GrüloKan 250** is characterized by its easy handling, light weight and excellent pressure resistance. In addition **GrüloKan 250** has a very small bending radius. The hose cover is resistant to abrasion and cut exposure, aging and weather resistant.

All hoses are assembled with BSP female/male and ferrules. Delivery takes place with test certificate on each assembled hose. As a service we offer you various connection options.



GrüloKan 250 Classical cleaning hose



GrüloLine

Technical characteristics

Temperature range: -40 °C to +70 °C
 Standard length: 60 m, 80 m, 120 m, 160 m, 180 m, 200 m, 240 m
 further lengths on request
 Availability: 10 m up to 240 m, DN 32 up to 200 m, DN 38 up to 150 m
 Colour: Black

Construction

Cover: NR/SBR, highly abrasion resistant
 Reinforcement: Twofold braided synthetic fibres
 Lining: NR/SBR, black, smooth
 Transfer tape: G+L Ellipse GrüloKan 250 bar DN [...]

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	6,00	250	625	70	0,450	10066-013
16	5/8	6,00	250	625	80	0,530	10066-016
19	3/4	6,00	250	625	90	0,600	10066-019
25	1	7,00	250	625	100	0,810	10066-025
32	1 1/4	7,50	250	625	140	1,080	10066-032
38	1 1/2	8,00	250	625	160	1,250	10066-038

GrüloKan 250 Premium

The Extreme

GrüloKan 250 Premium offers you much more than all common rubber sewer cleaning hoses. The especially developed composite bilayers structure of the cover enables a very high abrasion resistance. This guarantees a long lifetime at equal flexibility in comparison to our classic **GrüloKan 250**. Therefore our **GrüloKan 250 Premium** can be used in any situation, where all others fail.



GrüloLine

Technical characteristics

Norm: EN ISO 6945
 Temperature range: -40 °C to +70 °C
 Standard length: 60 m, 80 m, 120 m, 160 m, 180 m, 200 m, 240 m
 further lengths on request
 Availability: 10 m up to 240 m | DN 32 up to 180 m
 Colour: Black

Construction

Cover: Composite bi-layers structure with outstanding abrasion resistance
 Reinforcement: Twofold braided synthetic fibres
 Lining: NR/SBR, black, smooth
 Transfer tape: G+L Ellipse GrüloKan Premium 250 bar DN [...]

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	6,00	250	625	80	0,430	10866-013
19	3/4	6,50	250	625	100	0,555	10866-019
25	1	7,00	250	625	110	0,775	10866-025
32	1 1/4	8,00	250	625	140	1,095	10866-032

GrüloKan 250 PROtect

For your own safety

GrüloKan 250 PROtect offers all the benefits of our classical rubber sewer cleaning hose **GrüloKan 250**. The yellow protection layer underneath the cover allows you to handle a high pressure hose in accordance with the requirements of working safety. As soon as the cover gets thinner – in consequence of rough operating conditions – the yellow protection layer becomes visible signaling that it is time to change the hose. So you and your staff members are always on the safe side.

Technical characteristics

Temperature range: -40 °C to +70 °C
Standard length: 60 m, 80 m, 120 m, 160 m, 180 m, 200 m, 240 m
 further lengths on request
Availability: 10 m up to 240 m, DN 32 up to 200 m
Colour: Black



GrüloLine

Construction

Cover: NR/SBR, highly abrasion resistant, smooth
Protection layer: SBR/EPDM, yellow
Reinforcement: Twofold braided synthetic fibres
Lining: NR/SBR, black, smooth
Transfer tape: G+L Ellipse GrüloKan PROtect 250 bar DN [..]

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
25	1	7,50	250	625	100	0,880	10766-025
32	1 1/4	8,50	250	625	130	1,190	10766-032

GrüloKan 250 Inliner

Saves you money

GrüloKan 250 Inliner offers an extremely smooth polyamide inliner, which guarantees a significant lower pressure drop. This minimisation of the pressure drop leads to a reduced engine speed which means considerable savings in fuel costs. **GrüloKan 250 Inliner** is recommended especially for water conditioning and water recycling vehicles.

Technical characteristics

Temperature range: -40 °C to +70 °C
Standard length: 60 m, 80 m, 120 m, 160 m, 180 m, 200 m, 240 m
 further lengths on request
Availability: 10 m up to 240 m
Colour: Black



GrüloLine

Construction

Cover: NR/SBR, highly abrasion resistant, smooth
Inliner: Polyamide, white
Reinforcement: Twofold braided synthetic fibres
Lining: NR/SBR, black, smooth
Transfer tape: G+L Ellipse GrüloKan Inliner 250 bar DN [..]

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
25	1	7,00	250	625	100	0,830	10666-025

GrüloClean 2SC

With special sliding layer

GrüloClean 2SC is flexible, abrasion-, pressure- and oil-resistant and extra smooth due to a UHMWPE film coating. With an operating pressure of 250 bar, it is ideal for use as a sewer cleaning hose. This hose meets the requirements of EN 857.

As a service we offer you various connection options!

Technical characteristics

Norm: EN 857
Temperature range: -40 °C to +100 °C
Standard Length: 120 m
Colour: Black



Construction

Cover: SBR, extremely smooth, wrapped, UHMWPE film coating
Reinforcement: Double, highly tear-resistant steel braiding
Lining: SBR, black, smooth

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Article no.
25,7	1	5,5	250	660	250	11560-025-120

GrüloPipe

THE PROFESSIONAL

Out of our product line GrüloLine **GrüloPipe** offers all benefits of a premium high pressure rubber hose. **GrüloPipe** is extremely flexible, abrasion-, pressure- and oil resistant. With its working pressure of 250 bar **GrüloPipe** is suited perfectly for the application on jetting lances used for cleaning manholes. **GrüloPipe** can also be used for the provisional sewer cleaning in the area of house connections.

All hoses are assembled with BSP female/male and ferrules. Delivery takes place with test certificate on each assembled hose.



GrüloPipe

The Allrounder

Technical characteristics

Norm: EN 853 1 SN (R1 AT)
 Temperature range: -40 °C to +90 °C
 Standard length: 40 m, 60 m, 80 m, 100 m, 120 m
 Availability: 40 m up to 240 m

Construction

Cover: SBR, smooth, black
 Reinforcement: Highly tear resistant steel wire braid
 Lining: SBR, black, smooth

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
10	3/8	4,00	250	640	130	0,320	10550-009
13	1/2	4,00	250	640	180	0,420	10550-013
16	5/8	4,00	250	640	210	0,520	10550-016
19	3/4	4,00	200	600	240	0,710	10550-019

PRESS COUPLINGS FOR PIPE CLEANING HOSES

Press couplings for pipe cleaning hoses up to max. 250 bar.
 Consisting of BSP female (DKR 60° cone / BSP),
 BSP male (AGR 60° inner cone / BSP) and ferrule (1 SN), steel plated finish.
 Also available in other versions!



GrüloPipe		Press couplings			
DN mm	DN Inch	Part	Thread Inch	Press Ø mm	Article no.
6,4	1/4	Male AGR	1/4	-	20471-02-006
		Female DKR		-	20470-02-006
		Ferrule		16,4	20472-02-006
9,5	3/8	Male AGR	3/8	-	20471-03-010
		Female DKR		-	20470-03-010
		Ferrule		20,1	20472-03-010
12,8	1/2	Male AGR	1/2	-	20471-04-013
		Female DKR		-	20470-04-013
		Ferrule		24,2	20472-04-013
16,0	5/8	Male AGR	3/4	-	20471-06-016
		Female DKR		-	20470-06-016
		Ferrule		26,4	20472-05-016

GrüloPipe Premium 360

1SN cleaning hose

GrüloPipe Premium 360 is ideally suited for the application on jetting lances. Remarkable is the high working pressure of 360 bar which exceeds the requirements of EN 857.

Technical characteristics

Norm: EN 857, ISO 6743-4

Temperature range: -40 °C to +100 °C

Standard length: 40 m, 60 m, 80 m, 100 m, 120 m



Construction

Cover: SBR, extremely smooth, black, UHMWPE-coating,

Reinforcement: Twofold highly tear resistant steel wire braid

Lining: SBR, black, smooth, oil resistant

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
12	1/2	4,60	360	1380	90	0,500	10651-012

GrüloPipe Flex 1SC EN 857

Streak-free

Besides extreme flexibility, high abrasion-, pressure- and oil-resistance, GrüloPipe Flex 1SC EN 857 offers another advantage: it does not leave any streaks.

Technical characteristics

Norm: EN 857

Temperature range: -40 °C to +70 °C

Standard length: 40 m, 60 m, 80 m, 120 m



Construction

Cover: SBR, smooth, grey

Reinforcement: Steel wire braid

Lining: SBR, smooth

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	4,00	200	800	70	0,350	12550-013
16	5/8	3,70	130	650	90	0,430	12550-016
19	3/4	4,00	105	520	100	0,510	12550-019

FlexiPipe 300 Professional

For indoor pipe cleaning

FlexiPipe 300 Professional has been developed for water applications in the medium pressure range. It is perfectly suited for the application on jetting lances and for applications in the field of house connections.

Technical characteristics

Temperature range: -40 °C to +70 °C

Standard length: 10 m, 20 m | further lengths on request



Construction

Cover: PU, magenta, abrasion resistant, UV resistant

Reinforcement: High tensile steel wire braid

Lining: Thermoplastic elastomer

Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
6,4	1/4	2,75	300	1200	40	0,170	12551-006

FlexiPipe PUR bronze

Thermoplastic cleaning hose

FlexiPipe PUR bronze is a light, highly abrasion-resistant pipe cleaning-hose specially developed for house connections. It is extremely flexible and bendable, kink-resistant, UV- and ozone-resistant.

Technical characteristics

Temperature range: -40 °C to +98 °C

Standard length: 10 m, 15 m, 20 m, 25 m, 30 m
other lengths on request

Aufbau

Cover: Special TPU, ultra smooth

Reinforcement: High tensile brass plated carbon steel wire

Lining: Polyester/Elastomer



Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
4,8	3/16	2,2	250	1.000	65		12554-005

VACUMASTER premium FOR ALL VEHICLE MANUFACTURERS

Out of our product line **GrüloLine** we present the cassette hoses **VACUMASTER NR premium** and the oil resistant quality **VACUMASTER OIL premium**. Developed together with the producer and optimised in accordance with prominent vehicle manufacturers a unique cassette hose was developed. The **VACUMASTER premium** convinces due to its outstanding operating characteristics in currently common cassettes and reels of sewer cleaning vehicles of the leading manufacturers. A maximum of flexibility and handling is enabled by the construction of the hose. Due to its high abrasion resistant lining and cover, **VACUMASTER NR premium** guarantees a long operating life.



Fig. courtesy of KROLL Fahrzeugbau - Umwelttechnik GmbH

VACUMASTER NR premium

Abrasion resistant cassette hose

VACUMASTER NR premium is characterised by its excellent flexibility even at low temperatures. Furthermore **VACUMASTER NR premium** is dimensionally stable and has an excellent bending radius.

With extended cuff on one side | other versions available.

Technical characteristics

Temperature range: -35 °C to +80 °C

Standard length: 20 m, 25 m, 30 m

Colour: Black

Construction

Cover: SBR, with fabric impressions

Reinforcement: Textile wrapped, reinforced spring wire spiral

Lining: NR/SBR/BR, smooth, antistatic, abrasion resistant



Inner mm	Inner Inch	Wall mm	Cuff mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
102	4	8,00	110	6	0,90	400	4,700	11513-102
127	5	9,50	133	6	0,90	600	6,400	11513-127
152	6	10,00	160	6	0,90	720	7,500	11513-152

VACUMASTER OIL premium

Oil resistant cassette hose

VACUMASTER OIL premium convinces by its excellent operation properties on all established sewer cleaning vehicles. The construction allows a maximum amount of flexibility even at low temperatures. Furthermore it is dimensionally stable, antistatic, oil resistant and has an excellent bending radius.

With extended cuff on one side | other versions available.

Technical characteristics

Temperature range: -35 °C to +80 °C

Standard length: 20 m, 25 m, 30 m

Electrical resistance: Cover $R \leq 10^6 \Omega/m$

Colour: Black

Construction

Cover: SBR, with fabric impressions

Reinforcement: Textile wrapped, reinforced spring wire spiral

Lining: NBR, black, smooth, antistatic, abrasion resistant



Inner mm	Inner Inch	Wall mm	Cuff mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
102	4	8,00	110	6	0,90	400	4,700	11523-102
127	5	9,50	133	6	0,90	600	6,400	11523-127
152	6	10,00	160	6	0,90	720	7,500	11523-152

OptiVrac ABR

Flexible suction hose

OptiVrac ABR is a highly flexible and corrugated hose which is ideally suited for the use on sewer cleaning vehicles. Its abrasion resistant inner lining is specially developed for suction excavators with mechanical arm conveying high abrasive materials as well as for industrial cleaning purposes.

Technical characteristics

Temperature range: -30 °C to +70 °C

Standard length: 20 m, 25 m, 30 m

Colour: Black



**EXTREMELY
ROBUST
TURRET HOSE**

Construction

Cover: Synthetic rubber, corrugated, with fabric impressions, weather- and abrasion resistant

Reinforcement: High strength synthetic cord, embedded steel wire helix
Lining: Synthetic rubber compound, black, smooth, abrasion resistant, antistatic

Marking: Transfer tape orange, [G+L-Ellipse] - OptiVrac ABR

Inner mm	Inner Inch	WP bar	BP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
80	-	3	9	0,90	245	1,980	12514-080
102	4	3	9	0,90	310	2,630	12514-102
127	5	3	9	0,90	380	3,950	12514-127
152	6	3	9	0,90	460	4,490	12514-152
203	8	3	9	0,90	610	9,980	12514-203
254	10	3	9	0,90	950	18,400	12514-254

OptiVrac OIL

Flexible and oil resistant suction hose

OptiVrac OIL is a highly flexible corrugated hose usable on waste disposal vehicles and as reel hose on sewer cleaning vehicles. Resistant against oil, hydrocarbons, aromats and many types of chemical waste.

Technical characteristics

Temperature range: -20 °C to +70 °C

Standard length: 20 m, 25 m, 30 m

Electrical resistance: Cover $R \leq 10^6 \Omega/m$

Colour: Black



Construction

Cover: Synthetic rubber, corrugated, with fabric impressions, weather- and abrasion resistant

Reinforcement: High strength synthetic cord and helix wire
Lining: Synthetic rubber compound, black, smooth, abrasion resistant, antistatic

Marking: Transfer tape yellow, [G+L-Ellipse] - OptiVrac OIL

Inner mm	Inner Inch	WP bar	BP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
80	-	3	9	0,90	320	2,500	11524-080
102	4	3	9	0,90	410	3,810	11524-102
110	-	3	9	0,90	440	4,390	11524-110
125	-	3	9	0,90	500	4,980	11524-125
152	6	3	9	0,90	610	7,540	11524-152

CASSETTE AND REEL HOSES FOR ALL VEHICLE MANUFACTURERS:

**MÜLLER UMWELT, FFG,
KROLL, ASSMANN,
WIEDEMANN ENVIRO TEC,
KAISER, CAPPELOTTO...**

Fig. courtesy of Müller Umwelttechnik GmbH & Co.KG



SEWER CLEANING HOSE DUCT FOR A LONGER LIFETIME!

Polyethylene disposal hoses **ToiVrac N**

Heavy weight and flexible polyethylene ducting hose. Our recommendation: Use **ToiVrac N** as a protection hose for the sewer cleaning during the insertion into the sewer tunnel to prevent abrasion and premature wear.

The protection set consists of one length of polyethylene disposal hose with black synthetic cuffs on both sides, a 5m or 10m betalone line, fixed with shrinkdown plastic tubing out of polyolefins.



Technical characteristics

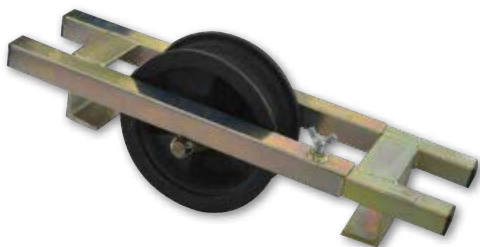
Temperature range: -40 °C to +60 °C

Standard length: 100 cm, 120 cm | further lengths on request

Colour: Black-yellow

Material: Polyethylene

Inner mm	Inner Inch	Material mm	BR mm	Weight kg/m	Article no.
51	2	1,40	85	0,950	12200-051
76	3	1,40	125	1,400	12200-076
102	4	1,40	165	1,800	12200-102



Return pulley, upper edge

Return pulley, upper edge, galvanised steel.

Diameter of roller 225 mm.

Material: Galvanised steel

Article no.: 80002

Return pulley, bottom edge

Essential for fighting abrasion and wear of sewer jetting hoses. The return pulley, bottom edge is suitable for hoses with **ND 19 to 32 mm**. With three rollers (Ø 73 mm), snap hook and 6 m-line with loop.

Material: Galvanised steel

Article no.: 80001-019-032



Return slide, bottom edge with plastic insert

Available for hoses in 3/4", 1" and 1 1/4", with snap hook on one side, Frame in stainless steel, plastic slide in black.

Material: Frame made of VA with plastic sliding insert

Article no.: 80010



Return slide, bottom edge with Polyurea insert

For hoses up to 1", with carabiner on one side and 6 m rope with eyelet. The Polyurea insert is a many times more stable than a conventional PE insert and therefore does not have to be replaced constantly.

Material: Frame made of VA with PUA sliding insert (beige)

Article no.: 80010-025-PUA

High pressure hoses

WATER JETTING HOSES

The efficient and powerful high pressure water jetting hoses out of the **WATERSHOOTER**-series grant a high abrasion resistance and durability at low weight. **WATERSHOOTER** are designed for work under very high pressure with water-based cleaning fluids and for the use on water jet systems. The programme is completed by the polyurethane high pressure hose **GrüloJet POWER**.
Reliable, for sure!

WATERSHOOTER plus

Water jetting hose up to 1100 bar

Technical characteristics

Temperature range: -10 °C to +70 °C
 Standard length: 10 m, 20 m | further lengths on request
 Colour: Black



Construction

Cover: SBR, oil-, abrasion- and weather resistant
 Reinforcement: 4 spiral inlays of high tensile steel wire
 Lining: SBR, black, oil resistant

Inner mm	Inner Inch	Ø Braid mm	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
12,7	1/2	21,6	6,00	1100	2750	230	1,215	11517-013
19	3/4	29,0	6,50	1100	2750	250	1,855	11517-019

WATERSHOOTER 6S

Water jetting hose up to 1450 bar

Technical characteristics

Temperature range: -10 °C to +70 °C
 Standard length: 10 m, 20 m | further lengths on request
 Colour: Black



Construction

Cover: SBR, oil-, abrasion- and weather resistant
 Reinforcement: 6 spiral inlays of high tensile steel wire
 Lining: SBR, black, oil resistant

Inner mm	Inner Inch	Ø Braid mm	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
12,7	1/2	24,6	7,50	1450	3625	250	1,815	11516-012
19	3/4	32,1	8,20	1350	3375	280	2,640	11516-019

GrüloJet POWER

Water jetting hose up to 1120 bar

Technical characteristics

Temperature range: -40 °C to +55 °C
 Standard length: 40 m, 60 m, 80 m, 120 m
 Colour: Orange



Construction

Cover: PU, abrasion resistant
 Reinforcement: Aramidic fibre braids and one high tensile steel braid
 Lining: Thermoplastic polymer

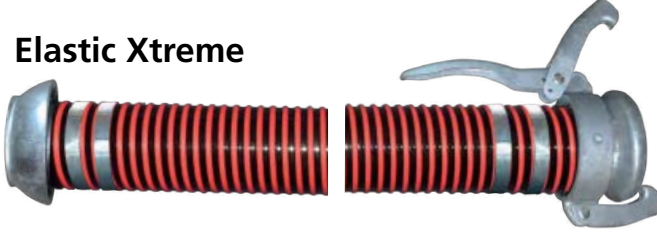
Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
3,5	1/8	3,85	1120	2800	25	0,180	10079-003
4,8	3/16	3,25	800	2000	30	0,167	10079-004
6,4	1/4	4,00	1120	2800	40	0,253	10079-006
8,0	5/16	4,00	1000	2500	50	0,292	10079-008
9,5	3/8	4,65	1120	2800	90	0,389	10079-009
13,0	1/2	6,10	1040	2600	150	0,516	10079-013

Assembled hose lines

Assembly is done under strong compliance with regulations applying to the manufacturing of complete hose lines according to European Pressure Equipment Directive PED 2014/68/EU. Our qualified specialist staff compresses your hose lines up to DN 12"/305 mm with all common coupling systems (Bauer, Perrot, Flange, clamping ring coupling, Victaulic).



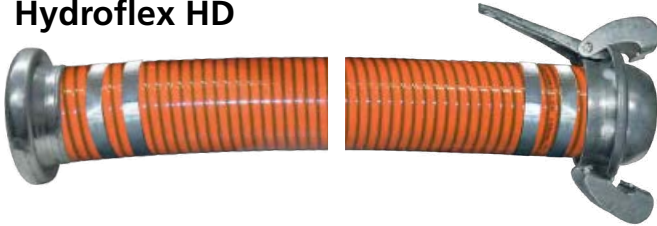
Elastic Xtreme



GrüloElastic SE



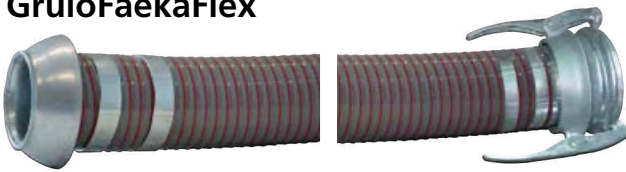
Hydroflex HD



GrüloElastik Oil AS



GrüloFaekaFlex



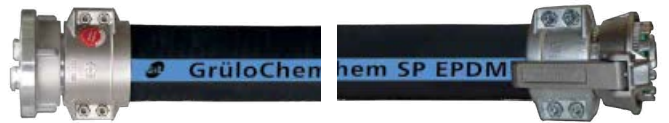
Arizona Superelastic



Water S/D 10



GrüloChem SP EPDM



GrüloTank SP



Individual labelling

HOSE MARKINGS

On request we can produce your hose line with a transfer tape in your corporate colour and logo.



LASER ENGRAVING

We mark your assembled hose lines with our in-house laser. Thus, manufacturer name and order number are visible at a glance. Customer-specific specifications are of course also possible.



HOSE RECYCLING

We dispose your old, disused sewer cleaning hoses - be they of plastic or rubber. Buy a new sewer cleaning hose out of our range or make use of our **GrüloReelTec** services: we take back the disused hose and dispose it properly.

Water S/D 10

Rubber suction and delivery hose

Water hose for suction and discharge purposes in industry, agriculture and construction. The tube is suited for water, sewage, liquid manure, drilling mud and low abrasive materials. The cover is abrasion and weather resistant.

Available in lengths of 3 or 5 m and with spiral free cuffs!

Technical characteristics

Temperature range: -25 °C to +70 °C

Standard length: 40 m | further lengths on request

Colour: Black

Construction

Cover: SBR, smooth, with fabric impression

Reinforcement: Synthetic textile, steel wire spiral

Lining: SBR, black, smooth



Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BP bar	BR mm	Weight kg/m	Article no.
51	2	5,50	10	0,90	30	306	1,738	10056-051
76	3	6,50	10	0,90	30	458	2,845	10056-076
102	4	6,50	10	0,90	30	610	3,930	10056-102
152	6	8,50	10	0,90	30	915	7,850	10056-152
203	8	11,00	10	0,90	30	1219	13,500	10056-203
254	10	12,50	10	0,90	30	1524	18,240	10056-254

Elastic Xtreme

Extremely flexible suction and delivery hose

Elastic Xtreme has a smooth inside wall and an external spiral which reduces hose wear. Very good resistance to atmospheric conditions and to chemicals. Excellent resistance to animal fats, greases and oils. Specially suitable for municipal vehicles, industry and agriculture for the transfer of waste water and manure.

Technical characteristics

Temperature range: -40 °C to +50 °C

Standard length: 50 m | DN 127: 30 m, DN 152: 20 m, DN 203: 10 m

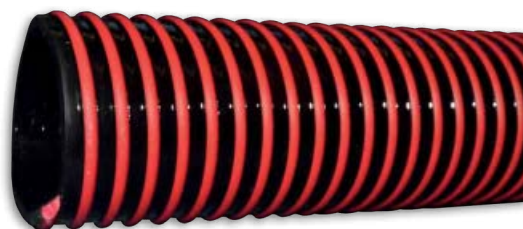
Colour: Black with red spiral

Construction

Cover: PVC, extremely flexible

Reinforcement: Rigid PVC spiral, impact and pressure resistant

Lining: PVC Buna, smooth



Inner mm	Inner Inch	Outer mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
51	2	61,8	3,5	0,70	153	1,070	11700-051
76	3	89	3,0	0,70	266	1,720	11700-076
80	-	93	2,5	0,70	280	1,900	11700-080
102	4	118	2,0	0,70	357	2,700	11700-102
127	5	144	2,0	0,60	508	3,900	11700-127
152	6	170	1,5	0,60	608	5,000	11700-152
203	8	226	1,0	0,60	812	10,000	11700-203

Hydroflex HD

PVC suction and delivery hose

Highly flexible PVC suction and delivery hose with an oval instead of a round reinforcement spiral. This special construction leads to a considerable weight reduction and enables a smooth cover. **Hydroflex HD** is suitable for use on municipal vehicles, in irrigation and agriculture. Very good flexibility under low temperature conditions, excellent abrasion and chemical resistance.

Technical characteristics

Temperature range: -25 °C to +60 °C

Standard length: 50 m | DN 152: 20 m

Colour: Orange

Construction

Cover: PVC

Reinforcement: Oval rigid PVC spiral, grey

Lining: PVC, smooth



Inner mm	Inner Inch	Outer mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
51	2	59,4	6,5	0,90	153	0,850	11011-051
76	3	86,2	5,5	0,90	266	1,500	11011-076
80	-	90,4	5,0	0,90	280	1,700	11011-080
102	4	111,7	4,5	0,90	357	2,200	11011-102
152	6	166,2	3,0	0,90	608	4,300	11011-152

GrüloElastic SE

PVC suction and discharge hose

GrüloElastic SE is a suction and discharge hose for irrigation, sink- and canal cleaning as well as for agricultural purposes as a slurry hose. It is weatherproof, dimensionally stable and smooth inside. Due to its special synthetic formula, **GrüloElastic SE** stays flexible even at temperatures below zero.



GrüloLine

Technical characteristics

Temperature range: -20 °C to +60 °C
 Standard length: 50 m | DN 127: 30 m, DN 152: 20 m
 Colour: Grey

Construction

Cover: PVC BUNA, corrugated
 Reinforcement: Hard-PVC spiral, impact and pressure resistant
 Lining: PVC BUNA, smooth

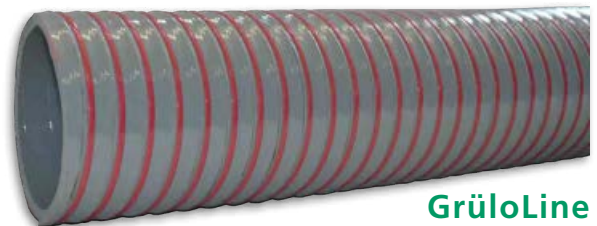
Inner mm	Inner Inch	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
51	2	5,0	0,90	153	1,070	10201-051
76	3	4,0	0,90	266	1,720	10201-076
80	-	4,0	0,90	280	1,900	10201-080
102	4	3,0	0,90	357	2,700	10201-102
127	5	2,5	0,90	508	3,900	10201-127
152	6	2,0	0,90	608	5,000	10201-152



GrüloFaekaFlex

Flexible PVC suction and discharge hose

Highly flexible suction and delivery hose with rigid PVC spiral for municipal use, irrigation and on the agricultural sector. Very good flexibility, even at low temperatures, high resistance against abrasion and many chemicals.



GrüloLine

Technical characteristics

Temperature range: -25 °C to +60 °C
 Standard length: 50 m | DN 127: 30 m, DN 152: 20 m,
 from DN 203: 10 m
 Colour: Grey, red spiral strip

Construction

Cover: PVC, slightly corrugated
 Reinforcement: Rigid PVC spiral, impact and pressure resistant
 Lining: PVC, smooth

Inner mm	Inner Inch	WP bar	BR mm	Weight kg/m	Article no.
51	2	6,0	250	1,030	12072-051
76	3	5,0	375	1,750	12072-076
80	-	4,5	400	1,845	12072-080
102	4	4,5	500	2,650	12072-102
127	5	3,5	625	3,540	12072-127
152	6	3,0	750	5,000	12072-152
203	8	2,5	1.200	8,400	12072-203

Super Heliflex

PVC-BUNA suction- and discharge hose

This suction and discharge hose can be used for sprinkling, cesspool and canal cleaning purposes as well as for liquid manure in agriculture. **Super Heliflex** is ozon- and UV-resistant, dimensionally stable, interiorly smooth and highly flexible due to its special plastic composition.

Technical characteristics

Temperature range: -40 °C to +60 °C

Standard length: 50 m | DN 127: 25 m, DN 152: 20 m

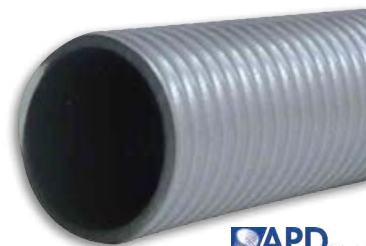
Colour: Silver-grey with white spiral

Construction

Cover: PVC BUNA

Reinforcement: Hard-PVC spiral

Lining: PVC BUNA, smooth



APD
Petzelakis
Schlauchtechnik

Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
51	2	5,20	5	0,90	170	1,000	10072-051
76	3	6,20	4	0,90	240	1,700	10072-076
80	-	6,20	3	0,90	250	2,100	10072-080
102	4	7,20	3	0,90	320	2,700	10072-100
127	5	8,00	2	0,90	620	3,600	10072-127
152	6	9,00	2	0,90	680	5,000	10072-152
203	8	12,00	1	0,90	1100	8,510	10072-203

Arizona Superelastic

Highly flexible suction and delivery hose

The high quality PVC-helix hose **Arizona Superelastic** is abrasion- and cold-resistant. It is highly flexible and suitable for municipal vehicles and irrigation plants. Only recommended as a suction hose.

Technical characteristics

Temperature range: -25 °C to +55 °C

Standard length: 50 m | from DN 75: 30 m, from DN 110: 20 m

Colour: Grey with green PVC spiral

Construction

Cover: PVC

Reinforcement: Shock resistant hard-PVC spiral

Lining: PVC, smooth



MERLETT

Inner mm	Inner Inch	Outer mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
50	2	61,0	5,0	0,90	200	1,050	10073-050
76	3	88,8	4,0	0,90	300	1,700	10073-076
80	-	92,6	3,5	0,90	320	1,850	10073-080
102	4	116,4	3,0	0,90	400	2,700	10073-102
127	5	143,6	2,5	0,90	510	3,900	10073-127
152	6	170,4	2,0	0,90	610	5,000	10073-150
200	-	226,0	1,5	0,90	800	9,500	10073-200

Vacupress® Flex

Highly flexible suction and delivery hose

Highly flexible universal hose with good weather- and abrasion resistance according to DIN 53516 (mm³<160) even at temperatures below zero. **Vacupress® Flex** is ideally suited as suction and discharge hose for sewer cleaning vehicles and silo trucks.

Technical characteristics

Temperature range: -25 °C to +60 °C

Standard length: 60 m | from DN 38: 30 m | from DN 127: 20 m

Colour: Black

Construction

Cover: PVC, smooth

Reinforcement: Embedded steel wire spiral, polyester yarn

Lining: PVC, black, smooth



MERLETT

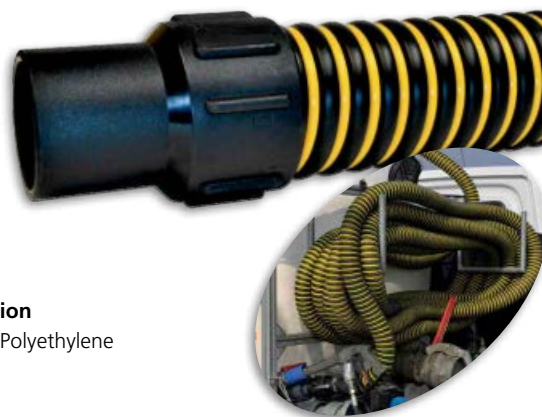
Inner mm	Inner Inch	Outer mm	WP bar	BP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
50	2	64	12	36	0,90	150	1,600	10053-050
76	3	92	12	36	0,90	210	2,970	10053-076
80	-	96	10	30	0,90	220	3,020	10053-080
102	4	119	10	30	0,90	300	4,150	10053-102
127	5	145	7	22	0,90	370	5,950	10053-127
152	6	171	5	15	0,90	480	7,050	10053-152

ToiVrac N

Polyethylene sanitary hose

Heavy weight and flexible PE ducting. For suction and transport of liquids and solid media, especially in sanitary and agricultural pumping systems, sewer cleaning and airport service. Kink resistant, traversable, good resistance to common oils, fats and chemicals. High vacuum resistance and excellent weather- and rot-proof.

Delivery occurs optional with tight welded cuffs on both sides.



Technical characteristics

Temperature range: -40 °C to +60 °C

Standard length: 10 m, 15 m, 20 m | further lengths on request

Colour: Yellow-black | special colors on request

Construction

Material: Polyethylene

Inner mm	Inner Inch	Material mm	Vacuum bar	BR mm	Weight kg/m	Article no.
51	2	1,40	0,95	85	0,950	12200-051
76	3	1,40	0,95	125	1,400	12200-076
102	4	1,40	0,85	165	1,800	12200-102

GrüloFlex EPDM 20

The water hose for professionals

EPDM hose in extruded quality, for dosing, filling and emptying of aqueous lyes and solutions. Especially suitable for heavy duty. Ideal for outdoors, due to ozone resistant cover.

Technical characteristics

Temperature range: -40 °C to +95 °C

Standard length: 40 m

Colour: Black with four yellow stripes

Construction

Cover: EPDM, smooth

Reinforcement: Synthetic woven fabric reinforcement

Lining: EPDM, black, smooth



Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	3,50	20	60	100	0,300	10030-013
19	3/4	4,00	20	60	120	0,420	10030-019
25	1	4,50	20	60	150	0,600	10030-025

GrüloFlex TPE 20

TPE compression air hose 20 bar

GrüloFlex TPE 20 shows similar properties to a rubber hose due to its special Thermorub® composite material. It is very flexible even at low temperatures and oil resistant. Due to the high-strength textile fabric GrüloFlex TPE 20 is especially suitable as compression air or water hose. Ideal for filling stop-off bags!

Technical characteristics

Norm: ISO 1307

Temperature range: -10 °C to +60 °C

Standard length: 40 m

Colour: Black with orange stripes

Construction

Cover: TPE, abrasion-, ozone- and weather resistant

Reinforcement: Two high-strength synthetic textile fabric

Lining: TPE, partly oil resistant, black



Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	4,00	20	60	180	0,335	12228-013
19	3/4	5,00	20	60	240	0,565	12228-019
25	1	5,50	20	60	300	0,790	12228-025

GrüloVin

PVC suction hose, transparent

Robust, flexible and abrasion resistant PVC hose, usable as suction hose for water, foodstuff, beverages to 28 Vol.-% of alcohol, potable water, for vacuum pumps and groundwater drawdown. Very good chemical resistance.

Technical characteristics

Temperature range: -5 °C to +60 °C
 Standard length: 30 m
 Colour: Green transparent

Construction

Cover: Soft PVC, smooth
 Reinforcement: Embedded steel wire spiral
 Lining: Soft PVC, smooth



GrüloLine

Inner mm	Inner Inch	Outer mm	WP bar	BP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
25,4	1	33,3	5	15	0,90	60	0,510	10248-025
30	-	38,4	4	13	0,90	70	0,600	10248-030
32	1 1/4	39,8	4	13	0,90	75	0,650	10248-032
51	2	60,3	3	9	0,80	125	1,200	10248-050
76	3	89,7	2	6	0,70	195	2,500	10248-075
102	4	115,5	2	6	0,60	300	3,400	10248-102
125	-	144,0	2	6	0,90	350	5,400	10248-125
152	6	169,8	2	6	0,60	460	6,350	10248-152

Aquapal®

Potable water hose

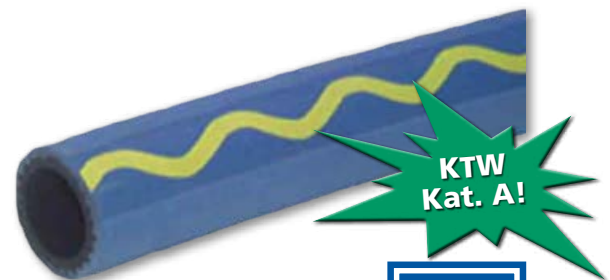
KTW-category A and DVGW-W270 certified. **Aquapal®** does not only fulfill the stringent requirements as set up by the conveyance of potable water, **Aquapal®** is applicable in all areas of food and beverage industry for filling potable water storage tanks and for maintaining domestic emergency supplies. The tube is absolutely neutral in taste and odour. The NBR cover can be overrun, is resistant to abrasion, UV, ozone, fats, oils and commonly used detergents and disinfectants.

Technical characteristics

Approval: KTW A, DVGW-W270
 Temperature range: -20 °C to +90 °C
 Standard length: 40 m
 Colour: Blue, yellow serpentine line, axially running

Construction

Cover: NBR
 Reinforcement: PES Cord reinforcements
 Lining: Transparent, plastomer coating, smooth
 Marking: AQUAPAL Trinkwasserschlauch PN20 KTW "A", DVGW-W270 und VP 549 geprüft DVGW Reg-Nr: DW-0309BT0079



Continental
CONTITECH



Inner mm	Inner Inch	Wall mm	WP bar	BP bar	BR mm	Weight kg/m	Article no.
13	1/2	3,60	20	60	75	0,250	10016-013
19	3/4	4,20	20	60	110	0,420	10016-019
25	1	6,00	20	60	145	0,570	10016-025





Synthetic building hose Standard Layflat hose with couplings

Efficient layflat hose with Storz suction couplings for water pumping.
Hose binding according to your requirements.



Technical characteristics

Temperature range: -30 °C to +100 °C | information valid for water
Standard length: 20 m | further lengths on request
Colour: White

Construction

Material: Polyester yarn, circular woven in twill weave
Lining: EPDM rubber

Inner mm	Inner Inch	WP bar	BP bar	Weight kg/m	Article no.
C/52	2	16	50	8,000	90002-052-020
B/75	3	16	50	11,500	90002-075-020
A/102	4	12	36	14,000	90002-102-020
F/152	6	10	30	27,000	90002-152-020

GrüloDur Multipurpose layflat hose

Flat hose for the delivery of liquid media - as well as hot water and compressed air. Abrasion resistant, robust and long-lasting. Resistance to oil, petrol and chemicals. Lightweight and very flexible compared to mandrel built hoses.

Technical characteristics

Temperature range: -15 °C to +100 °C
Standard length: 100 m | further lengths on request
Colour: Black

Construction

Cover: NBR/PVC compound, ribbed
Material: Polyester, circular woven
Inside/outside layer: NBR/PVC compound



Inner mm	Inner Inch	Wall mm	WP bar	BP bar	Weight kg/m	Article no.
52	2	2,00	20	60	0,460	10009-052
75	3	2,50	17	50	0,790	10009-075
90	3 1/2	2,35	15	45	0,930	10009-090
102	4	2,50	17	52	1,030	10009-102
125	5	2,70	15	45	1,400	10009-125
152	6	2,60	14	42	1,650	10009-152

GrüloDur PU

Multipurpose layflat hose in PU

Layflat hose for the delivery of liquids under pressure and for transport of abrasive materials, superior abrasion resistance, extremely hardwearing and durable for long service life, resistance to oil, fuel and a wide range of chemicals, excellent flexibility at low temperature.

Technical characteristics

Temperature range: -50 °C to +75 °C | information valid for water
Standard length: 100 m | further lengths on request
Colour: Black

Construction

Cover: Polyether polyurethane, smooth
Reinforcement: High-strength polyester yarn, round woven
Lining: Polyether polyurethane, smooth



Inner mm	Inner Inch	Wall mm	WP bar	BP bar	Weight kg/m	Article no.
52	2	2,40	16	50	0,430	10023-052
76	3	2,80	16	50	0,700	10023-076
90	3 1/2	2,90	14	42	0,950	10023-090
102	4	3,30	14	42	1,150	10023-102
127	5	3,40	14	42	1,500	10023-127
152	6	3,70	14	42	1,900	10023-152

GrüloFlat M

PVC layflat hose, medium duty

Medium duty layflat hose for conveying liquid media. Flat rollable. For the use in irrigation systems, construction industry, agriculture and mining.

Technical characteristics

Temperature range: -10 °C to +60 °C | information valid for water
Standard length: 100 m | further lengths on request
Colour: Blue

Construction

Cover: PVC
Reinforcement: Polyester yarn
Lining: PVC, blue



Inner mm	Inner Inch	WP bar	BP bar	Weight kg/m	Article no.
51	2	6	18	0,300	10005-050
76	3	6	18	0,550	10005-076
102	4	6	18	0,900	10005-102
153	6	6	18	1,800	10005-150
203	8	6	18	2,800	10005-203

GrüloFlat PUR Pro

Robust TPU multi-purpose hose

Suitable for conveying abrasive media, e.g. as suction dredging hose for long distances or for roof graveling. Outstanding abrasion resistance, very robust, wear-resistant and durable, extremely high tensile strength, resistant to oil, petrol and chemicals. Furthermore it is much easier to handle compared to rubber hoses.

Technical characteristics

Temperature range: -50 °C to +75°C | information valid for water
Standard length: 100 m, 200 m
Colour: Orange

Construction

Cover: TPU, smooth
Reinforcement: High-strength polyester yarn, round woven
Lining: PVC, smooth



Inner mm	Inner Inch	Wall mm	WP bar	BP bar	Weight kg/m	Article no.
75	3	3,10	20	50	0,870	11042-076
90	3 1/2	3,50	14	42	1,200	11042-090
102	4	3,30	14	42	1,200	11042-102
127	5	3,30	14	42	1,500	11042-127
152	6	3,50	12	36	2,000	11042-152

GrüloElastic Oil AS

Tank truck hose

Highly flexible, antistatic and cold resistant tank truck hose, with shock and pressure resistant PVC-spiral. **GrüloElastic Oil AS** is especially suitable as suction and discharge hose for tank trucks.

All technical data refer to a temperature of 20 °C.

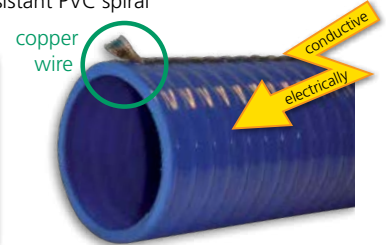
Inner mm	Inner Inch	BP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
51	2	20	0,90	200	1,150	10571-051
76	3	17	0,90	250	1,910	10571-076
80	-	15	0,90	280	2,100	10571-080
102	4	13	0,90	350	3,250	10571-102

Technical characteristics

Norm: ISO 1307
 Temperature range: -25 °C to +60 °C
 Standard length: 50 m | from DN 80: 30 m

Construction

Cover: PVC/NBR, corrugated, outer copper wire
 Reinforcement: Shock and pressure resistant PVC spiral
 Lining: PVC/NBR, smooth



Ölflex

Antistatic tank truck hose

Tank truck hose suitable for hydrocarbons with max. 50% aromatic contents. Lining and cover are electrically conductive ($R \leq 10^6 \Omega/m$).

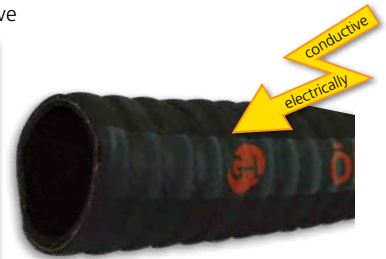
Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
32	1 1/4	4,00	9	0,90	60	0,650	10419-032
38	1 1/2	4,00	9	0,90	80	0,850	10419-038
52	2	5,00	9	0,90	100	1,375	10419-052
76	3	7,50	9	0,90	150	1,900	10419-076
102	4	6,00	9	0,90	200	2,300	10419-102

Technical characteristics

Temperature range: -20 °C to +80 °C
 Standard length: 40 m | further lengths on request

Construction

Cover: SBR, corrugated, electrically conductive
 Reinforcement: Highly tear resistant textile fibres, steel wire helix, copper litz wire
 Lining: NBR, black, electrically conductive



GrüloTank SP

Tank truck hose with helix

Tank truck hose with spiral according EN 12115. Suitable for hydrocarbons up to max. 55% aromatic contents. Oil, weather and ozone resistant cover. Electrically conductive ($R \leq 10^6 \Omega/m$).

Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
51	2	8,00	16	0,9	120	2,100	10191-051
76	3	8,00	16	0,9	175	3,000	10191-076
102	4	8,00	16	0,9	250	4,400	10191-102

Technical characteristics

Temperature range: -30 °C to +80 °C
 Standard length: 40 m

Construction

Cover: CR
 Reinforcement: Synthetic fibres with steel wire helix and two copper litz wires
 Lining: NBR, black, smooth



GrüloTank L

Light weight tank truck hose

Light weight tank truck hose according to EN 12115 for heavy applications. The cover of **GrüloTank L** is resistant to weather, oil and abrasion. For filling and discharging petrol tank trucks and rail tank wagons. Lining and cover are electrically conductive ($R \leq 10^6 \Omega/m$).

Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
32	1 1/4	6,00	10	0,90	55	0,800	10108-032
38	1 1/2	6,50	10	0,90	70	1,200	10108-038
50	2	7,50	10	0,90	80	1,850	10108-050
75	3	7,50	10	0,90	100	3,000	10108-075
100	-	8,00	10	0,90	150	3,500	10108-100

Technical characteristics

Temperature range: -30 °C to +90 °C
 Standard length: 40 m | further lengths on request

Construction

Cover: CR, corrugated, fabric impressions
 Reinforcement: Textile wrapped, copper wire, zinc plated double steel wire helix
 Lining: NBR, black, smooth



GrüloChem SP EPDM

EPDM Chemical hose

Suitable as suction and discharge hose in the chemical industry as well as for sea water and industrial waste water.
Cover and lining are electrically conductive ($R \leq 10^6 \Omega/m$).

Technical characteristics

Norm: EN 12115
Temperature range: -20 °C to +100 °C
Standard length: 40 m
Colour: Black

Construction

Cover: CR, black, fabric impressions
Reinforcement: Textile cord with two steel spirals and two copper wires
Lining: EPDM, black



Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BP bar	BR mm	Weight kg/m	Article no.
51	2	8,00	16	0,90	64	300	2,203	10164-051
76	3	8,00	16	0,80	64	450	3,159	10164-076
102	4	8,00	16	0,80	64	650	4,360	10164-102

GrüloChem SP UPE

UPE Chemical hose

GrüloChem SP UPE is a highly flexible chemical hose with a conductive UPE liner. Suitable for the transport of acids, alkalis, salts, organic compounds incl. aromatic substances, chlorinated hydrocarbons and oxidising acids. Cover and lining are electrically conductive ($R \leq 10^6 \Omega/m$).

Technical characteristics

Norm: EN 12115:2011
Temperature range: -20 °C to +65 °C depending on medium
Standard length: 40 m, 60 m
Colour: Black

Construction

Cover: EPDM, fabric impressions, electrically conductive
Reinforcement: Textile wrapped, rubber foil, two crossed copper wires, steel wire helix
Lining: UPE, black, smooth



Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BP bar	BR mm	Weight kg/m	Article no.
50	2	7,00	16	0,90	64	350	2,100	10163-050
75	-	7,50	16	0,90	64	525	3,350	10163-075
100	-	8,00	16	0,90	64	700	4,450	10163-100

Resist P FEP

FEP Chemical hose

Premium chemical hose with teflon lining, suitable for transporting nearly all chemicals used in the chemical industry.
Cover and lining are electrically conductive ($R \leq 10^6 \Omega/m$).

Technical characteristics

Norm: EN 12115:2011, TRbF 131/2:1992
Temperature range: -20 °C to +150 °C depending on medium
Standard length: 40 m | from DN 75: 20 m
Colour: Black

Construction

Cover: CR, fabric impressions
Reinforcement: Textile wrapped, two copper wires, zinc plated steel wire helix
Lining: FEP, smooth, isolating



SEMPERIT

Inner mm	Inner Inch	Wall mm	WP bar	Vacuum bar	BR mm	Weight kg/m	Article no.
25	1	6,00	16	0,90	225	0,900	11162-025
38	1 1/2	6,50	16	0,90	340	1,350	11162-038
50	2	8,00	16	0,90	415	1,900	11162-050
75	-	8,00	16	0,90	525	3,250	11162-075



We provide you with fully assembled and pressed hose lines with test certificate.

CHECKED



Multi-layer foil hoses

COMPOSITE HOSES

Grüning & Loske offers you a comprehensive range of multi-layer foil hoses or composite hoses for the flexible transport of oil and chemical products in accordance with EN 13765:2010. Apart from an assortment of standards, individual solutions on demand are available. Production and assembly are made according to ISO 9001 and PED. Convince yourself once more of our know-how and 5-star service.



CompoOIL 10 GGE

Oil resistant composite hose

CompoOil 10 GGE is suitable for use and delivery and/or suction of fuels, oils and lubricants in tank trucks, wagons or deposits.

Also available with 14 bar working pressure.

Technical characteristics

Norm: EN 13765:2010

Temperature range: -30 °C to +100 °C

Standard length: max. 30 m

Safety factor: 5:1



Construction

Cover: PVC, PP on request

Inner wire spiral: Galvanized steel

Outer wire spiral: Galvanized steel

Lining: Polypropylene

Inner mm	Inner Inch	WP bar	BP bar	BR mm	Weight kg/m	Article no.
51	2	10	50	190	2,060	10324-051
76	3	10	50	290	3,500	10324-076
102	4	10	50	320	5,440	10324-102



Chemical-resistant multi-layer foil hoses

These chemical-resistant composite hoses are suitable for loading and unloading tank trucks in industry plants and marine applications. Suitable for chemical products such as acids, fatty acids, alkalis and solvents, even in corrosive environments.

Also available in other versions and with a working pressure of 14 bar.

CompoCHEM 10 EGE



Technical characteristics

Norm: EN 13765:2010
 Temperature range: -30 °C to +100 °C
 Standard length: max. 30 m
 Safety factor: 5:1

Construction

Cover: PVC coated polyester fabric
 Inner wire spiral: PP coated steel
 Outer wire spiral: Galvanized Steel
 Lining: Polypropylene

Inner mm	Inner Inch	WP bar	BP bar	BR mm	Weight kg/m	Article no.
51	2	10	50	190	2,060	10326-051
76	3	10	50	290	3,500	10326-076
102	4	10	50	320	5,440	10326-102

CompoCHEM 10 SSE



Technical characteristics

Norm: EN 13765:2010
 Temperature range: -30 °C to +100 °C
 Standard length: max. 30 m
 Safety factor: 5:1

Construction

Cover: PVC coated polyester fabric
 Inner wire spiral: Stainless steel
 Outer wire spiral: Stainless steel
 Lining: Polypropylene

Inner mm	Inner Inch	WP bar	BP bar	BR mm	Weight kg/m	Article no.
51	2	10	50	190	2,160	10325-051
76	3	10	50	290	3,670	10325-076
102	4	10	50	320	5,710	10325-102

CompoCHEM 10 ESE



Technical characteristics

Norm: EN 13765:2010
 Temperature range: -30 °C to +100 °C
 Standard length: max. 30 m
 Safety factor: 5:1

Construction

Cover: PVC coated polyester fabric
 Inner wire spiral: PP coated steel
 Outer wire spiral: Stainless steel
 Lining: Polypropylene

Inner mm	Inner Inch	WP bar	BP bar	BR mm	Weight kg/m	Article no.
51	2	10	50	190	2,010	10327-051
76	3	10	50	290	3,400	10327-076
102	4	10	50	320	5,420	10327-102

CARDAN COUPLINGS SYSTEM PERROT

Technical characteristics

Material: Steel, galvanised | also available in stainless steel

Seal: Material according to requirements

Male part with beaded hose shank

Also available with smooth, turned or serrated hose shank.

DN mm	Hose shank mm	Weight/unit kg	Article no.
50	50	0,420	23300-050-050-04
89	75	1,040	23300-089-075-04
108	100	1,620	23300-108-100-04
133	125	2,040	23300-133-125-04
159	150	2,700	23300-159-150-04
216	200	8,550	23300-216-200-04



Female part with beaded hose shank

Also available with smooth, turned or serrated hose shank.

DN mm	Hose shank mm	Weight/unit kg	Article no.
50	50	0,980	23301-050-050-04
89	75	1,600	23301-089-075-04
108	100	2,820	23301-108-100-04
133	125	4,020	23301-133-125-04
159	150	8,080	23301-159-150-04
216	200	20,750	23301-216-200-04



Bow

Also available as 30° or 60° bow.

Bow	DN mm	Weight/unit kg	Article no.
45°	50	1,340	23335-45-050-04
	89	3,900	23335-45-089-04
	108	5,800	23335-45-108-04
	133	8,480	23335-45-133-04
	159	13,130	23335-45-159-04
	200	21,000	23335-45-200-04
	216	23,000	23335-45-216-04
90°	50	1,610	23335-90-050-04
	89	4,560	23335-90-089-04
	108	6,640	23335-90-108-04
	133	9,480	23335-90-133-04
	159	16,620	23335-90-159-04
	216	24,600	23335-90-216-04



We assemble your hose lines with all common coupling systems!



Male part with male thread

DN mm	Thread Inch	Article no.
50	2	23310-050-20-04
89	3	23310-089-30-04
108	4	23310-108-40-04
133	5	23310-133-50-04
159	6	23310-159-60-04



Female part with female thread

DN mm	Thread Inch	Article no.
50	2	23311-050-20-04
89	3	23311-089-30-04
108	4	23311-108-40-04
133	5	23311-133-50-04
159	6	23311-159-60-04



Male part with female thread

DN mm	Thread Inch	Article no.
50	2	23355-050-20-04
89	3	23355-089-30-04
108	4	23355-108-40-04
159	6	23355-159-60-04



Female part with female thread

DN mm	Thread Inch	Article no.
50	2	23357-050-20-04
89	3	23357-089-30-04
108	4	23357-108-40-04
159	6	23357-159-60-04



Reducer male to female part

DN female part mm	DN male part mm	Article no.
89	50	23336-050-089-04
108	89	23336-089-108-04
159	108	23336-108-159-04



Expansion male to female part

DN female part mm	DN male part mm	Article no.
50	89	23337-089-050-04
89	108	23337-108-089-04
108	159	23337-159-108-04



Male part with round flange

Also available with square flange, drilled.

DN mm	Hose shank mm	Weight/unit kg	Article no.
50	50	3,080	23340-050-050-04
89	80	4,350	23340-089-080-04
108	100	5,290	23340-108-100-04
133	125	7,580	23340-133-125-04
159	150	10,360	23340-159-152-04
216	200	15,700	23340-216-200-04



Female part with round flange

Also available with square flange, drilled.

DN mm	Hose shank mm	Weight/unit kg	Article no.
50	50	3,620	23341-050-050-04
89	80	6,340	23341-089-080-04
108	100	8,500	23341-108-100-04
133	125	12,330	23341-133-125-04
159	150	15,700	23341-159-152-04
216	200	26,100	23341-216-200-04



We stock the complete cardan coupling program!

– also system Bauer and Anfor!

Please contact us!



STORZ COUPLINGS

Aluminium

Technical characteristics

Material: Aluminium | also available in brass

Seal: Nitrile rubber, black / white

Thread: DIN ISO 228

WP: 16 bar / 10 bar

Stainless steel

Technical characteristics

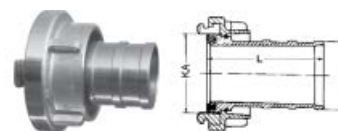
Material: Stainless steel

Seal: Fluoro rupper

Thread: DIN ISO 228

WP: 16 bar

Suction hose coupling



Storz	Lug mm	D mm	Aluminium				Stainless steel		
			L mm	Remark	Weight/piece kg	Article no.	L mm	Weight/piece kg	Article no.
25-D	31	25	53	DIN 14301	0,090	21015-025-025-01	53	0,260	21015-025-025-13
52-C	66	52	90	DIN 14321	0,370	21015-052-052-01	90	0,950	21015-052-052-13
75-B	89	75	125	DIN 14322	0,710	21015-075-075-01	105	1,790	21015-075-075-13
100	115	100	150	-	1,150	21015-100-100-01	100	3,760	21015-100-100-13
110-A	133	110	170	DIN 14323	1,660	21015-110-110-01	170	4,250	21015-110-110-13
125	148	125	200	-	2,270	21015-125-125-01	180	5,550	21015-125-125-13
150	160	150	180	-	2,900	21015-150-150-01	180	9,460	21015-150-150-13
205	220	205	375	max. PN 10	7,200	21015-205-205-01	-	-	-
250	278	258	400	max. PN 10	11,700	21015-254-254-01	-	-	-

Adapter with female thread



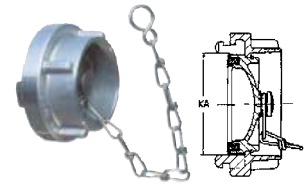
Storz	Lug mm	Female thread Inch	Aluminium			Stainless steel	
			Remark	Weight/piece kg	Article no.	Weight/piece kg	Article no.
25-D	31	1	DIN 14306	0,080	21020-025-10-01	0,210	21020-025-10-13
52-C	66	2	DIN 14307	0,280	21020-052-20-01	0,770	21020-052-20-13
75-B	89	2 1/2	DIN 14308	0,420	21020-075-24-01	1,510	21020-075-24-13
		3	-	0,420	21020-075-30-01	1,260	21020-075-30-13
100	115	4	-	0,850	21020-100-40-01	2,220	21020-100-40-13
110-A	133	4 1/2	DIN 14309	1,120	21020-110-44-01	3,200	21020-110-44-13
125	148	5	-	1,380	21020-125-50-01	3,550	21020-125-50-13
150	160	6	-	1,820	21020-150-60-01	5,300	21020-150-60-13
205	220	8	max. PN 10	3,480	21020-205-80-01	-	-

Adapter with male thread



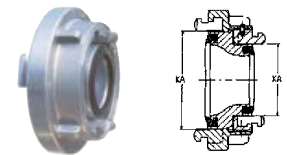
Storz	Lug mm	Male thread Inch	Aluminium			Stainless steel	
			Remark	Weight/piece kg	Article no.	Weight/piece kg	Article no.
52-C	66	1 1/2	-	0,250	21021-052-14-01	0,720	21021-052-14-13
		2	-	0,210	21021-052-20-01	0,710	21021-052-20-13
75-B	89	2 1/2	-	0,360	21021-075-24-01	1,110	21021-075-24-13
		3	-	0,390	21021-075-30-01	1,320	21021-075-30-13
100	115	4	-	0,710	21021-100-40-01	2,760	21021-100-40-13
110-A	133	4	-	1,010	21021-110-40-01	2,920	21021-110-40-13
125	148	5	with nipple	1,810	21021-125-50-01	-	-
150	160	6	with nipple	2,340	21021-150-60-01	-	-

Blank cap with chain



Storz	Lug mm	Aluminium			Stainless steel	
		Remark	Weight/piece kg	Article no.	Weight/piece kg	Article no.
52-C	66	DIN 14311	0,380	21030-052-01DIN	0,880	21030-052-13V
75-B	89	DIN 14312	0,560	21030-075-01DIN	1,340	21030-075-13
110-A	133	DIN 14313	1,340	21030-110-01DIN	3,650	21030-110-13
125	148	-	1,700	21030-125-01	4,610	21030-125-13
150	160	-	2,140	21030-150-01	7,130	21030-150-13

Reducer Storz to Storz



Storz to Storz	Lug mm	Aluminium			Stainless steel	
		Remark	Weight/piece kg	Article no.	Weight/piece kg	Article no.
75-B / 52-C	89 / 66	DIN 14342	0,600	21040-075-052-01DIN	2,170	21040-075-052-03
110-A / 75-B	133 / 89	DIN 14343	1,570	21040-110-075-01DIN	4,460	21040-110-075-03
125 / 100	148 / 115	-	2,630	21040-125-100-01	-	-
150 / 125	160 / 148	-	3,960	21040-150-125-01	-	-

Suction hose coupling with security collar



Storz	Lug mm	D mm	L mm	Aluminium			Stainless steel	
				Remark	Weight/piece kg	Article no.	Weight/piece kg	Article no.
25-D	31	25	75	NW 25	0,110	21018-025-025-01	0,310	21018-025-025-03
52-C	66	50	95	NW 50	0,410	21018-052-050-01	1,030	21018-052-050-03
75-B	89	75	105	NW 80	0,700	21018-075-080-01	2,270	21018-075-075-13
100	115	100	195	NW 100	1,390	21018-100-100-01	-	-
110-A	133	100	145	NW 100	1,670	21018-110-100-01	4,490	21018-110-100-03
125	148	125	190	NW 125	2,340	21018-125-125-01	-	-
150	160	150	250	NW 150	3,610	21018-150-150-01	-	-

Suction hose couplings with serrated profile



Material: Aluminium

Storz	Lug mm	D mm	L mm	Weight/piece kg	Article no.
52-C	66	51	90	0,370	21017-052-051-01
75-B	89	76	125	0,800	21017-075-076-01
110-A	133	102	170	1,800	21017-110-102-01
150	160	152	180	3,700	21017-150-152-01

Coupling spanners

Storz	Remark	Fig.	Weight/unit kg	Article no.
D	Steel	①	0,160	21060-025-04
65 / 38	Malleable cast iron	②	0,300	21060-065-038-04
B C	Malleable cast iron	③	0,430	21060-075-052-05
B C	Steel (plastic handle)	④	0,300	21060-075-052-04
A B C	Malleable cast iron	⑤	0,780	21060-110-052-05
A B C	Steel (plastic handle)	⑥	0,730	21060-110-052-04
150 / 125	Steel (plastic handle)	⑦	0,720	21060-150-125-04



Actuating Keys

Remark	Material	Fig	Weight/unit kg	Article no.
For pillar hydrants DIN 3223 A	Malleable cast iron	①	1,350	21061-05
For pillar hydrants DIN 3223 B	Modular iron	②	2,100	21061-06
For underground hydrants DIN 3223 C	Steel	③	5,510	21063-04
Hydrant bar with chain	Malleable cast iron	④	0,500	21064



Manhole cover hooks

Remark	Material	Length overall cm	Article no.
Slitted hook	Galvanised steel	80	80003-080-S
T-hook	Galvanised steel	80	80003-080-T
U-hook	Galvanised steel	80	80003-080-U
U-hook (short)	Galvanised steel	80	80003-080-U-K
U-hook	Stainless steel	80	80003-080-U-VA



Standpipes for underground hydrants

Size	Outlet	Description	Article no.
DN 50	2x Storz B	Two outlets with shut-offs head swive	21090-075-050-01
	2x Storz C		21090-052-050-01
DN 80	2x Storz B (DIN 14375)		21090-075-080-01
	2x Storz C		21090-052-080-01
DN 100	2x Storz B		21090-075-100-01
DN 50	1x Storz C		One outlet with shut-off head swive
DN 80	1x Storz C	21091-052-080-01	
DN 50	1x Storz B	One outlet without shut-off head swive	21092-075-050-01
	1x Storz C		21092-052-050-01
DN 80	1x Storz B		21092-075-080-01
	1x Storz C		21092-052-080-01



CAM & GROOVE COUPLINGS

Female Coupler with hose shank

Type C

Standard seal:

NBR | also in FEP, Hypalon and PTFE

For PP: EPDM



DN	Size Inch	For hose mm	Aluminium		Stainless steel		Brass		PP	
			WP bar	Article no.	WP bar	Article no.	WP bar	Article no.	WP bar	Article no.
40	1 1/2	38	18	22004-040-01	18	22004-040-13*	18	22004-040-02	7	22004-040-07
50	2	50	18	22004-050-01	18	22004-050-13*	18	22004-050-02	7	22004-050-07
65	2 1/2	63	11	22004-065-01	11	22004-065-13*	11	22004-065-02	-	22004-065-07
80	3	75	9	22004-080-01	9	22004-080-13*	9	22004-080-02	4	22004-080-07
100	4	100	7	22004-100-01	7	22004-100-13*	7	22004-100-02	4	22004-100-07
125	5	125	5	22004-125-01	5	22004-125-13*	5	22004-125-02	-	-
150	6	150	5	22004-150-01	5	22004-150-13*	5	22004-150-02	-	-

*also available with safety collar

Male Coupler with hose shank

Type E



DN	Size Inch	For hose mm	Aluminium		Stainless steel		Brass		PP	
			WP bar	Article no.	WP bar	Article no.	WP bar	Article no.	WP bar	Article no.
40	1 1/2	38	18	22104-040-01*	18	22104-040-13*	18	22104-040-02	7	22104-040-07*
50	2	50	18	22104-050-01*	18	22104-050-13*	18	22104-050-02	7	22104-050-07*
65	2 1/2	63	11	22104-065-01*	11	22104-065-13*	11	22104-065-02	-	22104-065-07*
80	3	75	9	22104-080-01*	9	22104-080-13*	9	22104-080-02	4	22104-080-07*
100	4	100	7	22104-100-01*	7	22104-100-13*	7	22104-100-02	4	22104-100-07*
125	5	125	5	22104-125-01*	5	22104-125-13*	5	22104-125-02	-	-
150	6	150	5	22104-150-01*	5	22104-150-13*	5	22104-150-02	-	-

*also available with safety collar

Coupler female threaded

Type D

Standard seal:

NBR | also in FEP, Hypalon and PTFE

For PP: EPDM



DN	Size Inch	Thread EN ISO 228-1	Aluminium		Stainless steel		Brass		PP	
			WP bar	Article no.	WP bar	Article no.	WP bar	Article no.	WP bar	Article no.
40	1 1/2	G 1 1/2	18	22000-040-01	18	22000-040-13	18	22000-040-02	7	22000-040-07
50	2	G 2	18	22000-050-01	18	22000-050-13	18	22000-050-02	7	22000-050-07
65	2 1/2	G 2 1/2	11	22000-065-01	11	22000-065-13	11	22000-065-02	-	22000-065-07
80	3	G 3	9	22000-080-01	9	22000-080-13	9	22000-080-02	4	22000-080-07
100	4	G 4	7	22000-100-01	7	22000-100-13	7	22000-100-02	4	22000-100-07
125	5	G 5	5	22000-125-01	5	22000-125-13	5	22000-125-02	-	-
150	6	G 6	5	22000-150-01	5	22000-150-13	5	22000-150-02	-	-

Adaptor female threaded Type A



DN	Size Inch	Thread EN ISO 228-1	Aluminium		Stainless steel		Brass		PP	
			WP bar	Article no.	WP bar	Article no.	WP bar	Article no.	WP bar	Article no.
40	1 1/2	G 1 1/2	18	22100-040-01	18	22100-040-13	18	22100-040-02	7	22100-040-07
50	2	G 2	18	22100-050-01	18	22100-050-13	18	22100-050-02	7	22100-050-07
65	2 1/2	G 2 1/2	11	22100-065-01	11	22100-065-13	11	22100-065-02	-	22100-065-07
80	3	G 3	9	22100-080-01	9	22100-080-13	9	22100-080-02	4	22100-080-07
100	4	G 4	7	22100-100-01	7	22100-100-13	7	22100-100-02	4	22100-100-07
125	5	G 5	5	22100-125-01	5	22100-125-13	5	22100-125-02	-	-
150	6	G 6	5	22100-150-01	5	22100-150-13	5	22100-150-02	-	-

Coupler male threaded Type B

Standard seal:

NBR | also in FEP, Hypalon and PTFE
For PP: EPDM



DN	Size Inch	Thread EN 10226-1	Aluminium		Stainless steel		Brass		PP	
			WP bar	Article no.	WP bar	Article no.	WP bar	Article no.	WP bar	Article no.
40	1 1/2	R 1 1/2	18	22001-040-01	18	22001-040-13	18	22001-040-02	7	22001-040-07
50	2	R 2	18	22001-050-01	18	22001-050-13	18	22001-050-02	7	22001-050-07
65	2 1/2	R 2 1/2	11	22001-065-01	11	22001-065-13	11	22001-065-02	-	22001-065-07
80	3	R 3	9	22001-080-01	9	22001-080-13	9	22001-080-02	4	22001-080-07
100	4	R 4	7	22001-100-01	7	22001-100-13	7	22001-100-02	4	22001-100-07
125	5	R 5	5	22001-125-01	5	22001-125-13	5	22001-125-02	-	-
150	6	R 6	5	22001-150-01	5	22001-150-13	5	22001-150-02	-	-

Adaptor male threaded Type F



DN	Size Inch	Thread EN 10226-1	Aluminium		Stainless steel		Brass		PP	
			WP bar	Article no.	WP bar	Article no.	WP bar	Article no.	WP bar	Article no.
40	1 1/2	R 1 1/2	18	22101-040-01	18	22101-040-13	18	22101-040-02	7	22101-040-07
50	2	R 2	18	22101-050-01	18	22101-050-13	18	22101-050-02	7	22101-050-07
65	2 1/2	R 2 1/2	11	22101-065-01	11	22101-065-13	11	22101-065-02	-	22101-065-07
80	3	R 3	9	22101-080-01	9	22101-080-13	9	22101-080-02	4	22101-080-07
100	4	R 4	7	22101-100-01	7	22101-100-13	7	22101-100-02	4	22101-100-07
125	5	R 5	5	22101-125-01	5	22101-125-13	5	22101-125-02	-	-
150	6	R 6	5	22101-150-01	5	22101-150-13	5	22101-150-02	-	-

TANK TRUCK COUPLINGS

Male part with female thread



Technical characteristics

Material: Brass
Seal Thread: PU
WP: 25 bar



Technical characteristics

Material: Stainless steel
Seal Thread: PTFE
WP: 25 bar

DN Inch	DN mm	Thread Inch	Brass		Stainless steel	
			Weight/unit kg	Article no.	Weight/unit kg	Article no.
2	50	G 2	0,300	24454-050-20-02	0,320	24454-050-20-03
3	80	G 3	0,780	24454-080-30-02	0,740	24454-080-30-03
4	100	G 4	1,220	24454-100-40-02	1,250	24454-100-40-03

Crown part with female thread, locking ring and lever



Technical characteristics

Material: Brass
Seal coupling: NBR
Seal thread: PU
WP: 25 bar



Technical characteristics

Material: Stainless steel
Seal coupling: CSM
Seal thread: PTFE
WP: 25 bar

DN Inch	DN mm	Thread Inch	Brass		Stainless steel	
			Weight/unit kg	Article no.	Weight/unit kg	Article no.
2	50	G 2	0,740	24455-050-20-02	0,630	24455-050-20-03
3	80	G 3	1,460	24455-080-30-02	1,300	24455-080-30-03
4	100	G 4	2,710	24455-100-40-02	2,160	24455-100-40-03

Crown part with female thread



Technical characteristics

Material: Brass
Seal coupling: NBR
Seal thread: PU
WP: 25 bar



Technical characteristics

Material: Stainless steel
Seal coupling: CSM
Seal thread: PTFE
WP: 25 bar

DN Inch	DN mm	Thread Inch	Brass		Stainless steel	
			Weight/unit kg	Article no.	Weight/unit kg	Article no.
2	50	G 2	0,230	24456-20-02	0,200	24456-20-03
3	80	G 3	0,550	24456-30-02	0,490	24456-30-03

TW-Kupplungen - Spannring mit Hebel, lose für Kronenring



Technical characteristics

Material: Brass
WP: 25 bar



Technical characteristics

Material: Stainless steel
WP: 25 bar

DN Inch	DN mm	Thread Inch	Brass		Stainless steel	
			Weight/unit kg	Article no.	Weight/unit kg	Article no.
2	50	G 2	0,510	24457-20-02	0,430	24457-20-03
3	80	G 3	0,930	24457-30-02	0,910	24457-30-03

Dust cap for male part



Technical characteristics

Material: Brass | also available in Aluminium
Seal: NBR



Technical characteristics

Material: Stainless steel
Seal: CSM

DN Inch	DN mm	Brass		Stainless steel	
		Weight/unit kg	Article no.	Weight/unit kg	Article no.
2	50	0,370	24458-050-02	0,350	24458-050-03
3	80	0,880	24458-080-02	0,810	24458-080-03

Dust plug for crown part



Technical characteristics

Material: Brass | also available in Aluminium



Technical characteristics

Material: Stainless steel

DN Inch	DN mm	Brass		Stainless steel	
		Weight/unit kg	Article no.	Weight/unit kg	Article no.
2	50	0,360	24459-050-02	0,300	24459-050-03
3	80	0,890	24459-080-02	0,710	24459-080-03

Male threaded with serrated hose shank



Technical characteristics

Norm: EN 14420-5 / DIN 2817
Thread: EN ISO 228-1, BSP
Material: Brass
WP: 16 bar



Technical characteristics

Norm: EN 14420-5 / DIN 2817
Thread: EN ISO 228-1, BSP
Material: Stainless steel
WP: 16 bar

DN Inch	DN mm	For hose mm	SW mm	Brass		Stainless steel	
				Weight/unit kg	Article no.	Weight/unit kg	Article no.
2	50	50	65	0,500	24424-20-050-02	0,540	24424-20-050-03
3	80	75	100	1,000	24424-30-075-02	0,960	24424-30-075-03
4	100	100	125	1,890	24424-40-100-02	1,840	24424-40-100-03

Male threaded with smooth hose shank



For safety clamp assembly

Technical characteristics

Norm: EN 14420-5 / DIN 2817
Thread: EN ISO 228-1, BSP
Material: Brass
WP: 16 bar



Technical characteristics

Norm: EN 14420-5 / DIN 2817
Thread: EN ISO 228-1, BSP
Material: Stainless steel
WP: 16 bar

DN Inch	DN mm	For hose mm	SW mm	Brass		Stainless steel	
				Weight/unit kg	Article no.	Weight/unit kg	Article no.
G 2	50	50	65	0,460	24421-050-20-02	0,430	24421-050-20-13
G 3	80	75	100	0,910	24421-075-30-02	0,910	24421-075-30-13
G 4	100	100	125	1,930	24421-100-40-02	1,176	24421-100-40-13

Safety clamps



Technical characteristics

Material: Aluminium



Technical characteristics

Material: Stainless steel

For hose mm	Clamping range mm	Aluminium	Stainless steel
		Article no.	Article no.
50 x 8	63 - 67	24430-050-008-01	24432-050-008-03
75 x 8	89 - 93	24430-075-008-01	24432-075-008-03
100 x 8	114 - 119	24430-100-008-01	24432-100-008-03

HINGE BOLT CLAMPS

GrüloClamp SUPRA W2

Technical characteristics

Material: Bolt 8.8
 band stainless steel X8Cr17 zinc-coated (DIN 1.4016/AISI 430)
 other parts steel, zinc-coated

Clamping range mm	Band width mm	Article no.
64 – 67	22	30050-W2-22-067-71436
68 – 73	25	30050-W2-25-073-71436
74 – 79	25	30050-W2-25-079-71436
80 – 85	25	30050-W2-25-085-71436
86 – 91	25	30050-W2-25-091-71436
92 – 97	25	30050-W2-25-097-71436
98 – 103	25	30050-W2-25-103-71436
104 – 112	25	30050-W2-25-112-71436
122 – 130	25	30050-W2-25-130-71436
131 – 139	26	30050-W2-26-139-71436
140 – 148	26	30050-W2-26-148-71436
149 – 161	26	30050-W2-26-161-71436
162 – 174	26	30050-W2-26-174-71436
175 – 187	26	30050-W2-26-187-71436



PARI HOSE CLAMPS

Technical characteristics

Material: Steel band galvanised
 Material thickness: 1 mm

Type of screw: Allen screw
 Screw material: Steel 8.8, galvanised

Type 1, 1-part | 20 / 1 mm

Nominal size	Clamping range mm	Band width mm	Screw size	Article no.
SK 65	61 - 67	20	M6	31000-20-065
SK 66	62 - 68	20	M6	31000-20-066
SK 70	66 - 72	20	M6	31000-20-070
SK 72	68 - 74	20	M6	31000-20-072
SK 76	72 - 78	20	M6	31000-20-076
SK 78	74 - 80	20	M6	31000-20-078
SK 80	76 - 82	20	M6	31000-20-080
SK 85	81 - 87	20	M6	31000-20-085
SK 88	84 - 90	20	M6	31000-20-088
SK 90	86 - 92	20	M6	31000-20-090
SK 92	88 - 94	20	M6	31000-20-092
SK 95	91 - 97	20	M6	31000-20-095
SK 100	96 - 102	20	M6	31000-20-100
SK 102	98 - 104	20	M6	31000-20-102
SK 105	101 - 110	20	M6	31000-20-105
SK 106	102 - 108	20	M6	31000-20-106
SK 108	104 - 110	20	M6	31000-20-108
SK 110	106 - 112	20	M6	31000-20-110
SK 115	111 - 117	20	M6	31000-20-115
SK 125	121 - 127	20	M6	31000-20-125



Type 1a, 2-part | 20 / 1 mm

Nominal size	Clamping range mm	Band width mm	Screw size	Article no.
SK 75	67 - 79	20	M6	31001-20-075
SK 85	77 - 89	20	M6	31001-20-085
SK 90	82 - 94	20	M6	31001-20-090
SK 95	87 - 99	20	M6	31001-20-095
SK 100	92 - 104	20	M6	31001-20-100
SK 105	97 - 109	20	M6	31001-20-105
SK 110	102 - 114	20	M6	31001-20-110
SK 116	108 - 120	20	M6	31001-20-116
SK 120	112 - 124	20	M6	31001-20-120
SK 130	122 - 134	20	M6	31001-20-130
SK 135	127 - 139	20	M6	31001-20-135
SK 165	157 - 169	20	M6	31001-20-165
SK 174	166 - 178	20	M6	31001-20-174



Type 2, 2-part | 25 / 1 mm

Nominal size	Clamping range mm	Band width mm	Screw size	Article no.
SK 90	86 - 92	25	M8	31002-25-090
SK 110	106 - 112	25	M8	31002-25-110
SK 114	110 - 116	25	M8	31002-25-114
SK 115	111 - 117	25	M8	31002-25-115
SK 117	113 - 119	25	M8	31002-25-117
SK 120	116 - 122	25	M8	31002-25-120
SK 122	118 - 124	25	M8	31002-25-122
SK 125	123 - 127	25	M8	31002-25-125
SK 130	126 - 132	25	M8	31002-25-130
SK 138	132 - 140	25	M8	31002-25-138
SK 144	140 - 146	25	M8	31002-25-144
SK 150	146 - 152	25	M8	31002-25-150
SK 154	150 - 156	25	M8	31002-25-154
SK 160	156 - 162	25	M8	31002-25-160
SK 170	166 - 172	25	M8	31002-25-170



Type 2a, 2-part | 25 / 1 mm

Nominal size	Clamping range mm	Band width mm	Screw size	Article no.
SK 80	76 - 82	25	M8	31003-25-080
SK 84	80 - 86	25	M8	31003-25-084
SK 92	88 - 94	25	M8	31003-25-092
SK 95	91 - 97	25	M8	31003-25-095
SK 120	116 - 122	25	M8	31003-25-120
SK 160	156 - 162	25	M8	31003-25-160
SK 165	161 - 167	25	M8	31003-25-165
SK 170	166 - 172	25	M8	31003-25-170
SK 210	206 - 212	25	M8	31003-25-210
SK 216	212 - 220	25	M8	31003-25-216
SK 218	214 - 220	25	M8	31003-25-218
SK 220	216 - 222	25	M8	31003-25-220
SK 227	223 - 229	25	M8	31003-25-227
SK 230	226 - 232	25	M8	31003-25-230



BALL VALVES

Technical characteristics

Norm Thread: ISO 228

Material: Pressed brass 58, nickelplated

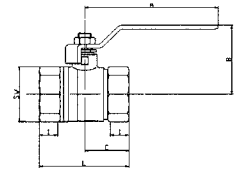
Material seal: PTFE / Teflon

Temperature: -20 °C - +150 °C | according to working pressure

Also available in stainless steel and with cast iron lever

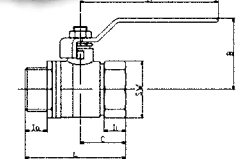
female / female

DN Inch	DN mm	WP bar	L mm	I mm	A mm	B mm	C mm	SW mm	Weight/unit kg	Article no.
3/8	10	40	42	10	73	40	21	20	0,290	25001-03-02
1/2	15	40	52	12	84	48	25	25	0,174	25001-04-02-40
3/4	20	40	55	12	98 ⁴	52	28	31	0,251	25001-06-02
1	24	32	68	15	102	59	34	40	0,433	25001-10-02
1 1/4	32	25	76	15	122	71	38	48	0,628	25001-12-02
2	50	20	106	19	173	92	53	67	1,556	25001-20-02
2 1/2	63	16	130	22	226	115	65	80	2,443	25001-24-02
3	75	16	146	26	226	125	73	98	3,876	25001-30-02
4	100	16	212	43	335	143	105	124	8,640	25001-40-02



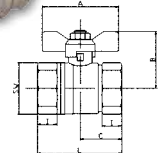
female / male

DN Inch	DN mm	WP bar	L mm	li mm	la mm	A mm	B mm	C mm	SW mm	Weight/unit kg	Article no.
3/8	10	40	50	10	10	73	40	25	20	0,131	25002-03-02
1/2	15	40	59	12	12	84	48	30	26	0,193	25002-04-02
3/4	20	40	62	12	12	84	52	32	31	0,277	25002-06-02
1 1/4	32	25	91	15	19	122	71	46	48	0,672	25002-12-02
1 1/2	40	20	103	15	19	153	87	51	55	0,999	25002-14-02
2	50	16	123	19	24	173	92	64	67	1,732	25002-20-02



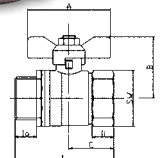
Wing handle, female / female

DN Inch	DN mm	WP bar	L mm	I mm	A mm	B mm	C mm	SW mm	Weight/unit kg	Article no.
1/4	10	40	42	10	52	37	21	20	0,116	25004-02-02
3/8	10	40	42	10	52	37	21	20	0,105	25004-03-02
1/2	15	40	50	12	52	39	25	26	0,159	25004-04-02
3/4	20	40	55	12	52	45	28	32	0,236	25004-06-02
1	25	32	68	15	62	50	34	39	0,405	25004-10-02



Wing handle, female / male

DN Inch	DN mm	WP bar	L mm	li mm	la mm	A mm	B mm	C mm	SW mm	Weight/unit kg	Article no.
3/8	10	40	47	10	10	52	36	25	20	0,109	25005-03-02
1/2	15	40	59	12	12	52	41	30	26	0,160	25005-04-02
3/4	20	40	64	12	12	52	45	32	32	0,256	25005-06-02
1	25	32	79	15	15	62	51	40	40	0,417	25005-10-02



Key shot-off valves

DN = Nominal diameter
SW = Width across flats

L = Length
I = Length/thread

li = Length/thread female
la = Length/thread male

A = Length lever
C = 1/2 L

B = lever upper edge to
midth of passage

WORKSHOP HOSE CRIMPERS

Mobile and lubrication-free

Usable for all types of hose pipes and fittings. Slide bearing metal sheets at the pressing tool: higher efficiency due to less friction, no wear and no soiling by lubricants (lubrication-free), 20% less friction-loss.

Hose Crimper S1M

Package includes: single-stage hand pump, handle B 14
Pressing dies PB261 (Ø 17,020, 24)

Technical characteristics

Crimp force: 75t, up to DN 25 – 4P (1" R12)
depending on tube and fitting

SAE R 12 / 4 SP* 1 piece fitting: 1"

SAE R 12 / 4 SP* 2 piece fitting: 1"

Industrial: 1 1/4"

90° Elbows: 1/2"

Max. Crimping range: 52 mm

Opening: +10 mm

Opening without dies: 52 mm

Type of dies: 261

Drive: Manuell

Oil: 0,32 l

LxWxH: 230x180x160 mm

Weight: 15 kg

Article no.: 13000-S1M



Hose Crimper S2M

Package includes: two-stage hand pump (11,26 cm³ / 2,47 cm³),
Pressing dies PB263 (Ø 17, 20, 24, 28, 32, 40)

Technical characteristics

Crimp force: 90 t, to DN 25 – 4SH (1" R15)

SAE R 12 / 4 SP* 1 piece fitting: 1 1/4"

SAE R 15 / 4 SH* 2 piece fitting: 1"

Industrial: 1 1/4"

90° Elbow: 1"

Max. Crimping range: 63 mm

Opening: +22 mm

Opening without dies: 77 mm

Type of dies: 263

Drive: Manuell

Oil: 0,75 l

LxWxH: 500x420x440 mm

Weight: 32 kg

Article no.: 13000-S2M



Hose Crimper S2A

Package includes: Pressing dies PB263 (Ø 17, 20, 24, 28, 32, 40)

Technical characteristics

Crimp force: 90 t, to DN 25 – 4SH (1" R15)

SAE R 12 / 4 SP* 1 piece fitting: 1 1/4"

SAE R 15 / 4 SH* 2 piece fitting: 1"

Industrial: 1 1/4"

90° Elbow: 1"

Max. Crimping range: 63 mm

Opening: +22 mm

Opening without dies: 77 mm

Type of dies: 263

Drive: electrical 230V-50Hz-1Ph,
alternatively 12 od. 24 Volt DC

Oil: 1,5 l

LxWxH: 450x450x350 mm

Weight: 41 kg

Article no.: 13000-S2A



Hose Crimper S2P

Package includes: Pressing dies PB263 (Ø 17, 20, 24, 28, 32, 40)

Technical characteristics

Crimp force: 90 t, to DN 25 – 4SH (1" R15)

SAE R 12 / 4 SP* 1 piece fitting: 1 1/4"

SAE R 15 / 4 SH* 2 piece fitting: 1"

Industrial: 1 1/4"

90° Elbow: 1"

Max. Crimping range: 63 mm

Opening: +22 mm

Opening without dies: 77 mm

Type of dies: 263

Drive: Compressed air

Oil: 2 l

LxWxH: 380x400x310 mm

Weight: 33 kg

Article no.: 13000-S2P





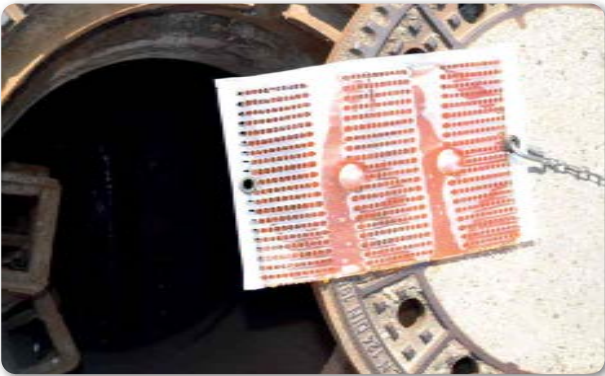
GrüloSmellPad

ODOUR NEUTRALIZATION IN THE SEWER SYSTEM

Grüning & Loske GmbH addresses the problem of unpleasant smells. Wherever disturbing smells occur there are ways to fight them. Following an onsite survey we develop a specific operational planning, support the application permanently and train yourself in the use of the product. The anti-smell plate **GrüloSmellPad** is particularly of use for sewer systems, treatment plants and waste disposal.

Minimum effort – maximum benefit!

- Polymer plate with specific formula for odour reducing ingredients
- Proven product against H₂S, sulfuric components, Ammonia and compounds
- Release of ingredients over 3-4 months, 24h gas-to-gas treatment
- Affixing in manholes above sewage



SmellMasterTruck

ODOUR NEUTRALIZATION BY DRY STEAM-PROCEDURE

SmellMasterTruck is a simple way to neutralise odours. Designed to make work easier for disposers who deal with malodorous substances such as food waste tanks, grease separators or sewer cleaners.

A hydrophobic liquid is atomized into dry microparticles by compressed air through nozzles. This dry steam binds the gas molecules responsible for bad odours. The heavily polluted exhaust air is neutralised directly in the exhaust pipe. **SmellMasterTruck** can be used in continuous operation, but can also be switched off. In the case of new vehicles, installation is carried out directly by the vehicle body manufacturer; retrofitting is also possible.

STOP THE ODOUR!



Pipe plugs, pipe stoppers and rehabilitation packers

Quality and safety – Made in Germany!

Pipe stoppers, pipe plugs or flow-through plugs for all profiles: circle, square, egg-shaped, kite-shaped, mouth-shaped or open U-profiles: We guarantee quality and safety by products manufactured in Germany.

Your advantages in overview:

- All products are highly resistant to ageing and offer good chemical resistance
- The pipe stoppers are repairable, easily and narrowly foldable. Uncomplicated handling makes your work more efficient.
- Operating a device in different diameters saves you further acquisitions.
- We will be pleased to provide the necessary equipment as there are safety valves, filling hoses, pressure reducer...



We repair your packer! Please contact us!

Personal Protection Equipment

Safety first!

Grüning & Loske GmbH cares about your safety at work - we provide personal protection equipment (PPE) from head to toe. A wide delivery range of products ensures the availability of high-quality trade-marked articles from different manufacturers. As system partners of industry (MRO) we offer out-sourcing concepts in occupational safety including scheduling and logistics in cooperation with your management for occupational safety and purchase.

In addition we advise you on the application of our products considering latest knowledge of occupational medicine as well as safety requirements. If required we carry out safety-related analysis followed by a sound consultancy service.

Our range of personal protection equipment covers everything: from gloves to chest wader, safety boots and helmets up to high visibility clothing.

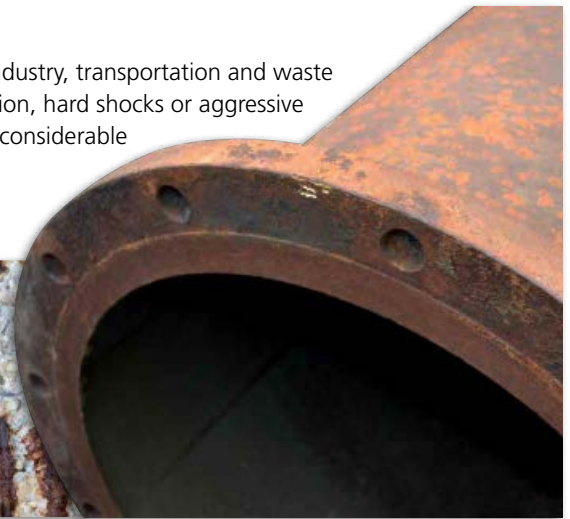
We find the appropriate equipment for your safety!



ABRASION AND CORROSION

The problem: Abrasion!

In numerous industries, such as the raw materials and building materials industry, transportation and waste water disposal, various influences lead to wear and corrosion. Heavy abrasion, hard shocks or aggressive liquids and chemicals lead to major damage and thus to high repair costs, considerable downtimes and enormous economic damage.



The Solution: GrüloCOAT Systeme!

GrüloCoat Systeme is a newly developed technology for the coating, sealing, grouting and repair of almost all surfaces.

Use our lead in knowledge and experience to protect your surfaces long-term against numerous negative influences as mechanical abrasion, chemical destruction and corrosion.

Successful coatings result from an interaction of many factors. Experienced staff out of our application technology as well as research and development ensure constant alignment of critical parameters. So the best solution for your wear problem can be achieved.

As a specialist company in high-quality wear protection for various loads we offer you high resistant and high-quality coating systems in **rubber, ceramics** and **liquid plastic**.



Application areas:

- Inner pipes
- Bends and suction pipes
- Funnels and cyclones
- Deflector plates/metal sheets
- Containers and silos
- Inside of tanks
- Conveyor and transport systems
- Hose couplings, Storz and Perrot
- Pulley lagging
- Working and storage areas
- Boats and bouys
- Sewage plants
- Transport areas
- Ponds and Pools
- Transport boxes
- Loudspeakers
- Flat roofs
- Floors
- etc.



What Polyurea can do?

See for yourself:





Competence in Rubber Coating

Soft Rubber Coating - Wear Protection

Rubber as protection against wear is an optimal cover for machines and plants. It is most suitable for coating of transport- and storage containers, chutes, gutters or funnels due to high tensile strength and elasticity.

We process natural rubber (NR) of 2, 5, 7 and 10 mm thickness in soft rubber coating. On demand we offer to choose between highly wear resistant 40° Shore A in blue or highly abrasion resistant 60° Shore A in black.

ADVANTAGES OF RUBBER COATING

- wear protection
- noise protection
- vibration protection
- higher lifetime
- lower caking

APPLICATION AREAS

- road sweeper parts
- suction dredge wear parts
- engine pumps
- crushing plants
- lining for sandblast cabins
- gutters and chutes
- spiral pump shafts
- truck mixer gutters/-chutes
- gravel excavator pumps
- deflection plates and deflector metal sheets
- pipe coating for sand- and gravel industry
- ventilation cases

Hard Rubber Coating - Protection against corrosion (acc. to EN 14879-1)

The material characteristics of synthetic rubber – high ageing and weather resistance as well as an outstanding chemical resistance – offer optimal protection against aggressive media inside industrial plants.

Mostly a hard rubber coating with the materials Butyl rubber or Hypalon® is used, furthermore IR, BR, SBR, IIR, CR and NBR .

APPLICATION AREAS

- flue gas desulfurisation plants
- pipe coating
- basins/tanks for chemicals
- basins for electroplating and much more

After coating we gladly varnish your parts with a 2-component finish in our in-house paint shop.



From shore A 40 to hard rubberlining



From individual item to large-scale production



Freehanded rubber coating on nearly every surface



OUR PRODUCT RANGE AT A GLANCE

Grünin **G+L**oske

Magdeburger Str. 1
D-30880 Laatzen

Fon +49 (0) 51 02 - 91 99 - 01

Fax +49 (0) 51 02 - 91 99 - 90

info@gruelo.de



HOSE TECHNOLOGY

technical advice, pressure testing,
hose line assembly



HOSE CONNECTION SYSTEMS

couplings, fittings



FASTENING TECHNOLOGY

hose clamps



WEAR PROTECTION AND CONVEYOR BELT ENGINEERING



RUBBER- AND SEALING TECHNOLOGY



PPE - PERSONAL PROTECTIVE EQUIPMENT



MRO GOODS



CHEMICAL PRODUCTS adhesive and sealing material



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