

Industrial Pneumatics.



Inspection, sealing & clean-up technology

Product catalogue



NEW

Version: 04.2012

Important advice

Owing to an increase in demand, all pipe and test sealing bags will be fitted with brass couplings as a standard from 01.01.2012 onwards.

If you still wish to have the safety couplings (blue at 1.5 bar, black at 2.5 bar), we kindly ask you to state this explicitly when placing an order.

Coupling system

Overview about the available systems

Brass couplings

**1.5 bar (21.75 psi) and
2.5 bar (36.25 psi):**
Brass coupling and nipple



Safety system

1.5 bar (21.75 psi):
Blue coupling/nipple



2.5 bar (36.25 psi):
Black coupling/nipple



If you have questions, do not hesitate to contact us!

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NEW

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Industrial Pneumatics.

Variable, flexible, sealing.

Vetter has been the leading supplier of industrial pneumatics for decades – and still is. We offer you a product range for demanding professionals, developed especially for you. As a result, Vetter products guarantee you maximum functionality and safety, even in extreme conditions. Count on it!



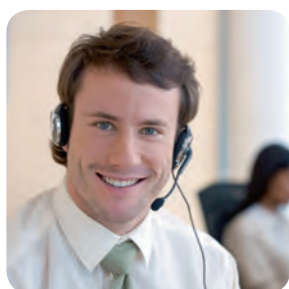
Experience

About 30 years of experience at the sewage market make Vetter a partner you can rely on. We apply our experience and expertise to the constant refinement of our products. Your benefit: Sophisticated industrial pneumatics help you to get everything under control. So, you can fully concentrate on your work.



Technology leader

Highly specialised pneumatics is our core business. Benefit from our complete range of industrial pneumatic products – developed by our engineers in Germany. At Vetter, we are committed to a wide variety of pressure levels, materials and designs.



Expert advice worldwide

Vetter listens to you. Together with you, we will choose equipment exactly tailored to your application scenarios. Our worldwide dealer network is always at your service: before, during and after your purchase. For instance, Vetter also provides a testing service to test your products onsite. That keeps you prepared at all times and guarantees the specified safety.



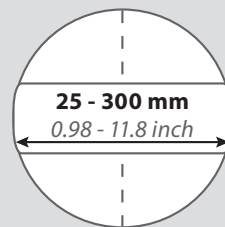
Highest quality – made in Germany

Put your trust in first-class sewage technology handmade by Vetter. Flawless materials and meticulous handwork are the foundation for the safest industrial pneumatics on the market. So nothing can go wrong when it really counts. Our product range is produced entirely in Germany and every product is individually checked before delivery with the 1.3 times test pressure, as you can confirm by checking our test seal.



Mini Pipe Sealing Bags 2.5 bar (36.25 psi)

The small flexible.



- › extremely short design
- › easy handling
- › extremely expandable
- › up to 1 bar (14.5 psi) counter-pressure

Mini pipe sealing bags are especially suited for sealing domestic pipe systems due to their short design. In addition to this they can be used when flexibility and curve mobility is required, e.g. in the heating and sanitary sector as well as with testing oil and petrol strainers according to DIN 1999 T 100.



Technical data

Mini Pipe Sealing Bags 2.5 bar/36.25 psi	Pipe diameter mm / inch	Diameter mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement litres / cu. ft.	Weight, approx. kg / lbs
RDK 2.5/4 1440000101	25 - 40 0.98 - 1.6	21 0.9	115 4.5	175 7	0.7 0.02	0.15 0.33
RDK 4/7 1440000201	40 - 70 1.6 - 2.8	37 1.5	155 6.1	215 8.5	2.5 0.09	0.2 0.44
RDK 8/15 1440018800	80 - 150 3.1 - 5.9	72 2.8	120 4.7	170 7	11 0.39	0.4 0.88
RDK 10/15 1440010500	100 - 150 3.9 - 5.9	89 3.5	130 5.1	175 7	9 0.32	0.56 1.23
RDK 12.5/20 1440010700	125 - 200 5 - 7.8	115 4.5	125 5	175 7	16 0.56	0.76 1.68
RDK 15/20 1440018900	150 - 200 5.9 - 7.8	90 3.5	150 5.9	195 7.6	13 0.46	0.6 1.32
RDK 15/30 1440010600	150 - 300 5.9 - 11.8	145 5.7	200 8	245 9.7	72 2.54	1.42 3.13

Standard test counter-pressure
of 10 m WC (14.5 psi).

Mini Test Sealing Bags 2.5 bar (36.25 psi)

The small ones with duct.

- › extremely short design
- › extremely expandable
- › up to 1 bar (14.5 psi) counter-pressure
- › optimised handling by valve connection



Mini test sealing bags 2.5 bar can be used for testing, sealing and bypassing with repairs and maintenance work, e.g. sealing tests, channel inspection, maintenance, repair and cleaning.



Technical data

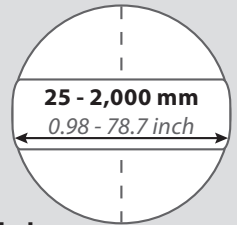
Mini Test Sealing Bags 2.5 bar/36.25 psi	Opening	Pipe diameter <i>mm / inch</i>	Diameter <i>mm / inch</i>	Cylinder length <i>mm / inch</i>	Total length <i>mm / inch</i>	Air requirement <i>litres / cu. ft.</i>	Weight, approx. <i>kg / lbs</i>
PDK 4/7 1441000701	6 mm 0.2 inch	40 - 70 1.6 - 2.8	37 1.5	155 6.1	250 9.8	3.5 0.12	0.4 0.9
PDK 10/15 1441035400	1/2"	100 - 150 3.9 - 5.9	90 3.5	150 5.9	300* 11.8*	2 0.07	1 2.2
PDK 12.5/20 1441035200	1/2"	125 - 200 5 - 7.8	115 4.5	150 5.9	300* 11.8*	4.4 0.16	1.2 2.6
PDK 20/30 1441035300	1"	200 - 300 7.8 - 11.8	185 7.2	250 9.8	410* 16*	18 0.64	4.5 9.9

* including valve connection

**Standard test counter-pressure
of 10 m WC (14.5 psi).**

Pipe Sealing Bags

The classics.



- › wide product range
- › only 3 sizes from 100 - 1,000 mm
- › very flexible due to the material
- › easy handling, because lightweight and short

Vetter Pipe Sealing bags are the optimum solution when quick and reliable sealing of drainage is required. A big advantage of the sealing bags are their freely selectable contact pressure (on the pipe wall): from 0.5 bar to 2.5 bar/7.25 psi to 36.25 psi.

The areas of operation are, among others:

- › sealing off sewer pipelines during repair or maintenance work
- › avoiding sewage backflow at the source location during pipe bursts, flooding, sewer inspection, sewer cleaning, repair and maintenance work

Due to the numerous application possibilities, sealing bags are used in different branches of industry, such as road construction and civil engineering companies, sewer constructors, water authorities and industry.

Vetter Pipe Sealing bags can be used for the sealing test according to DIN EN 1610.



Technical data

Pipe Sealing Bags		Pipe diameter mm / inch	Diameter mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement, approx. litres / cu. ft.	Weight, approx. kg / lbs
RDK 2.5/4 1440000101	2.5 bar (36.25 psi)	25 - 40 0.98 - 1.6	21 0.9	115 4.5	175 7	0.7 0.02	0.15 0.33
RDK 4/7 1440000201	2.5 bar (36.25 psi)	40 - 70 1.6 - 2.8	37 1.5	155 6.1	215 8.5	2.5 0.09	0.2 0.44
RDK 7/15 1440000301	2.5 bar (36.25 psi)	70 - 150 2.8 - 5.9	68 2.7	300 12	345 13.6	13.3 0.47	0.5 1.1
RDK 10/20 1440011700	2.5 bar (36.25 psi)	100 - 200 3.9 - 7.8	90 3.5	510 20	555 21.9	40.3 1.4	1.2 2.7
RDK 15/30 1440000601	2.5 bar (36.25 psi)	150 - 300 5.9 - 11.8	145 5.7	460 18.1	505 20	87.5 3.1	1.9 4.2
RDK 20/40 1440020100	2.5 bar (36.25 psi)	200 - 400 7.8 - 16	195 7.7	650 25.6	700 27.3	224 7.9	2.8 6.2
RDK 20/50 1440016700	2.5 bar (36.25 psi)	200 - 500 7.8 - 20	195 7.7	750 29.3	795 31	329.0 11.6	5 11
RDK 30/60 1440000801	2.5 bar (36.25 psi)	300 - 600 11.8 - 23.4	295 11.6	735 28.9	780 30.7	507.5 17.9	7 15.4
RDK 50/80 1440020000	2.5 bar (36.25 psi)	500 - 800 20 - 31.5	450 17.7	1,110 43.7	1,155 45.6	2,135 75.4	17 37.5
RDK 60/100 1440011900	2.5 bar (36.25 psi)	600 - 1,000 23.4 - 39.4	580 22.8	1,320 52	1,365 53.7	3,465 122.3	25 55
RDK 50/100 1480000801	1.5 bar (21.75 psi)	500 - 1,000 20 - 39.4	450 17.7	1,110 43.7	1,155 45.6	1,525 53.8	17 37.5
RDK 60/120 1480001901	1.5 bar (21.75 psi)	600 - 1,200 23.4 - 47.2	580 22.8	1,320 52	1,365 53.7	2,475 87.4	25 55
RDK 80/140 1480006000	1.5 bar (21.75 psi)	800 - 1,400 31.5 - 55.1	785 30.9	1,810 71.3	1,855 73	3,125 110.3	41 90.4
RDK 140/170 1400000300	0.5 bar (7.25 psi)	1,400 - 1,700 55.1 - 67	1,350 53.2	1,900 74.8	2,150 84.7	8,700 307.1	55 121.3
RDK 170/200 1400000100	0.5 bar (7.25 psi)	1,700 - 2,000 67 - 78.7	1,620 63.8	1,900 74.8	2,300 90.6	9,000 317.7	59 130.1

RDK 2.5 bar - Test counter-pressure 10 m WC (14.5 psi)

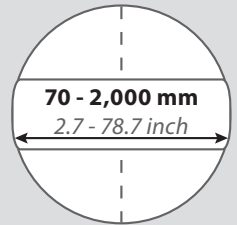
RDK 1.5 bar - Test counter-pressure 5 m WC (7.25 psi)

RDK 0.5 bar - Test counter-pressure 2 m WC (2.9 psi)

Note: As an oil-resistant alternative the Pipe Sealing Bags are also available as a CR-version. You will find the Pipe Sealing Bags CR on page 16.

Test Sealing Bags

The inspectors.



- › flexible and sturdy design
- › only 3 sizes from 100 - 1,000 mm
- › for tests according to DIN EN 1610
- › lighter than test bags with inside core

Vetter Test Sealing Bags fulfil three functions in one: seal, test with water or air and reroute / divert.

The flexible (internal hoses – no internal tube) and sturdy construction enable easy matching of the test bag to the different pipe materials. Small amounts of unevenness can also be compensated.

The areas of operation are, among others:

- › Rerouting drainage when leaking occurs
- › Banking up and dosed diversion of liquids
- › Sealing tests according to DIN EN 1610 with air or water
- › Control of the pipeline sections

The test bags are fitted with (an) inflation coupling(s) and tension lugs. The outside threaded connections of the inlets enable a free selection of accessories. The size of the connection depends on the type of bag.



Compressed air testing



Water pressure testing

Technical data

Test Sealing Bags		Pipe diameter mm / inch	Diameter mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement, approx. litres / cu. ft.	Weight, approx. kg / lbs
PDK 7/15 FLEX 1441001201 1 x 1/2" OT	2.5 bar (36.25 psi)	70 - 150 2.8 - 5.9	68 2.7	350 13.7	395 15.4	14 0.5	1.7 3.8
PDK 10/20 FLEX 1441018501 1 x 1" OT	2.5 bar (36.25 psi)	100 - 200 3.9 - 7.8	90 3.5	510 20	555 21.9	40.3 1.4	2.8 6.2
PDK 15/30 FLEX 1441022700 2 x 1/2" OT 1441022800 1 x 2" OT	2.5 bar (36.25 psi)	150 - 300 5.9 - 11.8	145 5.7	460 18.1	505 20	87.5 3.1	5.8 12.8
PDK 20/40 FLEX 1441040300 2 x 1" OT 1441018600 1 x 2" OT	2.5 bar (36.25 psi)	200 - 400 7.8 - 16	195 7.7	640 25	685 26.7	225 7.9	8 17.6
PDK 20/50 FLEX 1441031100 2 x 1" OT 1441031200 1 x 2" OT	2.5 bar (36.25 psi)	200 - 500 7.8 - 20	195 7.7	750 29.3	795 31	333 11.8	7 - 9 15.4 - 19.8
PDK 30/60 FLEX 1441023100 2 x 1" OT 1441018701 1 x 2" OT	2.5 bar (36.25 psi)	300 - 600 11.8 - 23.4	295 11.6	735 28.9	815 32.1	471 16.6	11 - 12 24.3 - 26.5
PDK 50/80 FLEX 1441003900 1 x 2" OT 1441003800 2 x 2" OT	2.5 bar (36.25 psi)	500 - 800 20 - 31.5	450 17.7	1,110 43.7	1,155 45.6	2,065 - 2,135 72.9 - 75.4	27 - 36 59.5 - 79.4
PDK 60/100 FLEX 1441023200 1 x 2" OT 1441023300 2 x 2" OT	2.5 bar (36.25 psi)	600 - 1,000 23.4 - 39.4	580 22.8	1,320 52	1,365 53.7	3,395 - 3,430 119.8 - 121.1	33.5 - 42 73.9 - 92.6
PDK 50/100 FLEX 1481003501 1 x 2" OT 1481023800 2 x 2" OT	1.5 bar (21.75 psi)	500 - 1,000 20 - 39.4	450 17.7	1,110 43.7	1,155 45.6	1,475 - 1,525 52.1 - 53.8	27 - 36 59.5 - 79.4
PDK 60/120 FLEX 1481009501 1 x 2" OT 1481009301 2 x 2" OT	1.5 bar (21.75 psi)	600 - 1,200 23.4 - 47.2	580 22.8	1,320 52	1,365 53.7	2,425 - 2,450 85.6 - 86.5	33.5 - 42 73.9 - 92.6
PDK 80/140 FLEX 1481024000 1 x 2" OT 1481023900 2 x 2" OT	1.5 bar (21.75 psi)	800 - 1,400 31.5 - 55.1	785 30.9	1,810 71.3	1,855 73	3,075 - 3,100 108.5 - 109.4	55 - 69 121.3 - 152.2
PDK 140/170 FLEX 1401000400 1 x 2" OT 1401000300 2 x 2" OT	0.5 bar (7.25 psi)	1,400 - 1,700 55.1 - 67	1,350 53.2	1,900 74.8	2,150 84.7	8,670 - 8,685 306.1 - 306.6	62.5 - 70 137.8 - 154.4
PDK 170/200 FLEX 1401000700 1 x 2" OT 1401000600 2 x 2" OT	0.5 bar (7.25 psi)	1,700 - 2,000 67 - 78.7	1,620 63.8	1,900 74.8	2,300 90.6	8,775 - 8,888 309.8 - 313.8	64.5 - 70 142.2 - 154.4

PDK 2.5 bar - Test counter-pressure 10 m WC (14.5 psi)

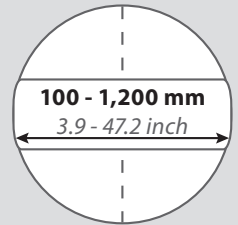
PDK 1.5 bar - Test counter-pressure 5 m WC (7.25 psi)

PDK 0.5 bar - Test counter-pressure 2 m WC (2.9 psi)

With 1 RDK and 1 PDK with 2 openings the compressed air testing as well as the water pressure testing can be carried out. No second PDK is necessary!

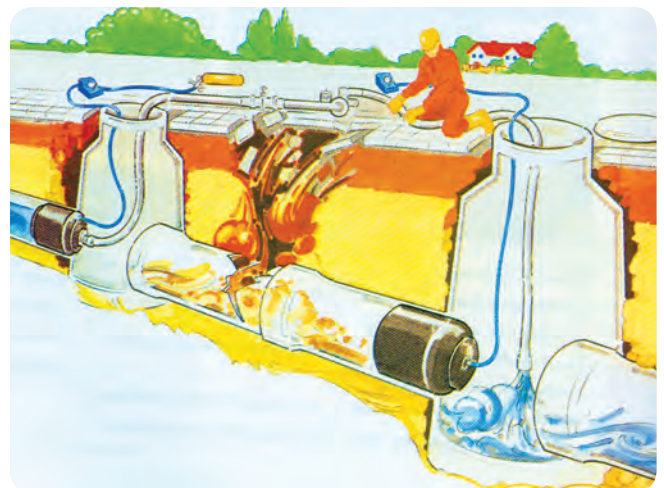
Bypass Bags 1.5 bar (21.75 psi)

With big opening for easy diversion.



- › optimum handling
- › with 3 sizes from 100 - 1,200 mm
- › very lightweight due to PE-core
- › exchangeable sleeve

If there is a requirement to reroute the sewage from defective piping by bypassing the defective location and letting the sewage flow back into the pipeline behind this location, then bypass bags are the suitable solution due to their largest possible through-flow opening. Only three bypass bags are required for pipe diameters from 100 mm to 1,200 mm (4 inch to 47 inch). The outside thread enables the connection coupling to be freely selectable.



Technical data

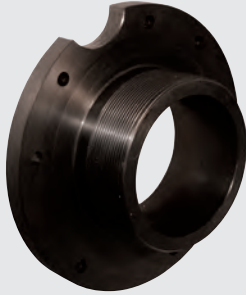
Bypass Bags 1.5 bar/21.75 psi	Pipe diameter mm / inch	Diameter mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement litres / cu. ft.	Weight, approx. kg / lbs
PDK 10/20 PE-core 1481004400 1 x 2 1/2" OT	100 - 200 3.9 - 7.8	97 3.9	485 19.1	545 21.7	27 0.95	2.2 4.9
PDK 20/50 PE-core 1481005000 1 x 4" OT	200 - 500 7.8 - 20	195 7.7	550 21.7	610 24	143 5	7 15.4
PDK 50/80 PE-core* 1481006900 1 x 4" OT	500 - 800 20 - 31.5	450 17.7	565 22.2	580 22.8	310 10.9	32 70.6
PDK 50/120 PE-core* 1481008000 1 x 4" OT	500 - 1,200 20 - 47.2	450 17.7	920 36.2	935 36.8	1,420 50.1	42.5 93.7

* Can be supplied with 6" or 8" duct if required.

**Standard test counter-pressure
of 5 m WC (7.25 psi).**

PDK 10/20 and PDK 20/50

With the sizes PDK 10/20 and PDK 20/50 the bypass adapters are fitted on the PE core with screws.



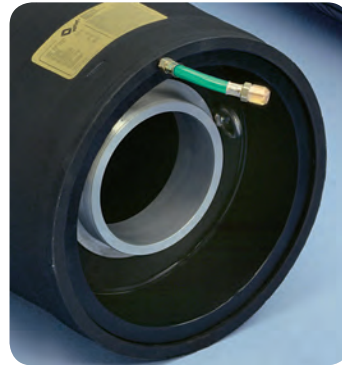
Bypass adapter for PDK 10/20 (Art. no. 1481002900)
for PDK 20/50 (Art. no. 1481001600)



PDK 50/80 and PDK 50/120

With bypass bags PDK 50/80 and PDK 50/120, the ducts (also with outside threads) are directly in the PE core.

If required, a through-flow opening of up to 8" can be supplied for both sizes.



Appropriate fixed- and blind coupling:



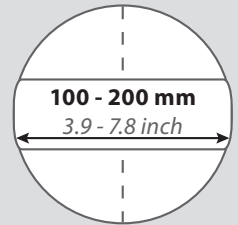
Fixed coupling 2 1/2" IT (Art. no. 1700010500)
4" IT (Art. no. 1700009900)



Blind coupling with chain 2 1/2" (Art. no. 1700022400)
4" (Art. no. 1700012600)

Test system for domestic pipe network

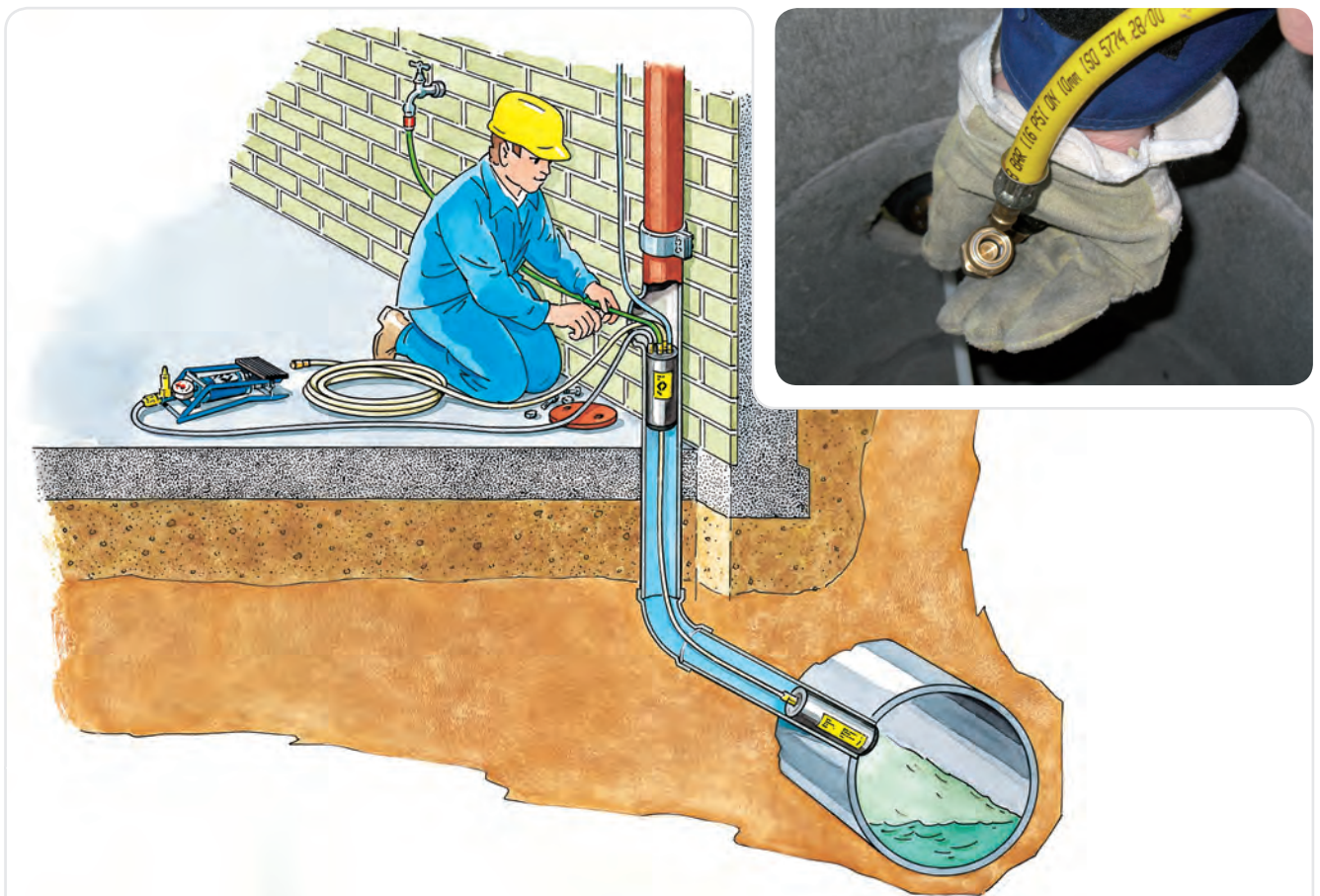
For sealing tests according to DIN EN 1610.



- › ideal bending characteristics
- › rounded „tips“
- › spherical head for easy bag-return
- › for water pressure & compressed air testing

Blocking as well as the test procedure are carried out exclusively from the inspection shaft. Using an inflation hose and a feed hose, the sealing bag is pushed in until it reaches the mouth of the main sewage channel. The test sealing bag is positioned so that it is just in front of the inspection shaft.

The special short design of the pipe sealing bag as well as the rounded „tip“ increase the bending characteristics. In addition to this, the other end of the sealing bag is fitted with a spherical head which enables an effortless return of the bag via a sleeve offset.



Water pressure testing according to DIN EN 1610 with the Vetter Test system for domestic pipe network

Set Test system for domestic pipe network 2.5 bar

For sealing tests according to DIN EN 1610

1441005903



Test sealing bag, Type PDK 10/20 HA FLEX
incl. inflation and feed hose, 15 m

Pipe sealing bag, Type RDK 15/20 HA
incl. Quick-snap couplings 1/4" IT and spherical head

Pipe sealing bag, Type RDK 8/15 HA
incl. Quick-snap couplings 1/4" IT and spherical head

Y-distributor for simultaneous attachment of test and measurement hose as well as the measurement hose for a digital measurement device

Bayonet blind coupling
for connection to the inflation and safety hose

Shut-off unit bayonet coupling
for the water pressure testing

Transport case

Technical data

Test system for domestic pipe network 2.5 bar/36.25 psi	Pipe diameter mm / inch	Diameter mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement, approx. litres / cu. ft.	Weight, approx. kg / lbs
RDK 8/15 1440001200	80 - 150 3.1 - 5.9	72 2.8	120 4.7	165 6.5	11 0.39	0.3 0.7
RDK 15/20 1440001300	150 - 200 5.9 - 7.8	90 3.5	150 5.9	190 7.4	13 0.46	0.5 1.1
PDK 10/20 FLEX 1441007703	100 - 200 3.9 - 7.8	90 3.5	300 11.8	460* 18*	18 0.54	3.1 6.8

* including valve connection

**Standard test counter-pressure
of 10 m WC (14.5 psi).**

Optional accessories

For compressed air testing



Inflation and safety hose
0.3 bar/4.35 psi, 10 m (32 ft.)

1700009001

Measurement hose
0.3 bar/4.35 psi, 10 m (32 ft.)

1700010301

For water pressure testing



Testing and measurement hose
9 mm/0.35 inch, 6 m (16 ft.)

0250002700

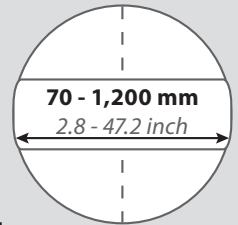
Ventilation float hose

1441039300

Pipe Sealing Bags CR

The oil-resistant alternative to the classics.

- › good handling (length/weight)
- › very flexible applicable
- › with integrated hose as an option
- › good resistance to oil and chemicals



The Pipe Sealing Bags of chloroprene rubber (CR) are characterised by an increased resistance to chemicals (e.g. against mineral oils, heating oil etc.) compared to conventional Pipe Sealing Bags of natural rubber (NR).

These Pipe Sealing Bags CR are available with an integrated inflation hose as an option.

Further sizes can be delivered on request.



Technical data

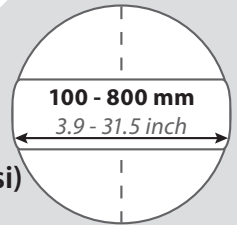
Pipe Sealing Bags CR	Pipe diameter mm / inch	Diameter mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement litres / cu. ft.	Weight, approx. kg / lbs
RDK 7/15 1440008100	2.5 bar (36.25 psi)	70 - 150 2.8 - 5.9	68 2.7	300 11.8	345 13.4	14 0.5
RDK 15/30 1440008000	2.5 bar (36.25 psi)	150 - 300 5.9 - 11.8	145 5.7	465 18.1	510 20	80 2.8
RDK 30/60 1440007900	2.5 bar (36.25 psi)	300 - 600 11.8 - 23.4	295 11.6	735 28.9	780 30.4	508 18
RDK 60/120 1480004800	1.5 bar (21.75 psi)	600 - 1,200 23.4 - 47.2	580 22.8	1,320 52	1,365 53.7	2,475 87.4

RDK 2.5 bar - Test counter-pressure 10 m WC (14.5 psi)

RDK 1.5 bar - Test counter-pressure 5 m WC (7.25 psi)

High Pressure Pipe Sealing Bags 6 bar (87 psi)

Withstand even high pipe internal pressures.



- › multi-layer and stable bag design
- › high operating pressure of 6 bar (87 psi)
- › up to 3 bar (43.5 psi) counter-pressure
- › extreme expansion despite high pressure

The 6.0 bar (87 psi) High Pressure Sealing Bags round off the product range for the pipe sealing bags and the test sealing bags belonging to the 1.5 bar and 2.5 bar (21.75 and 36.25 psi) series which have been successful for many years. These bags, which can withstand a maximum counter-pressure of 30 m (96 ft.) water column and used everywhere where there is a high pipe internal pressure (e.g. in the area of sanitation or for the inspection of pipelines). The multi-layer bag design with textile ply enables the application of a high operating over-pressure of 6.0 bar (87 psi) on the one hand and on the other hand helps to avoid longitudinal expansion due to its structure.



Technical data

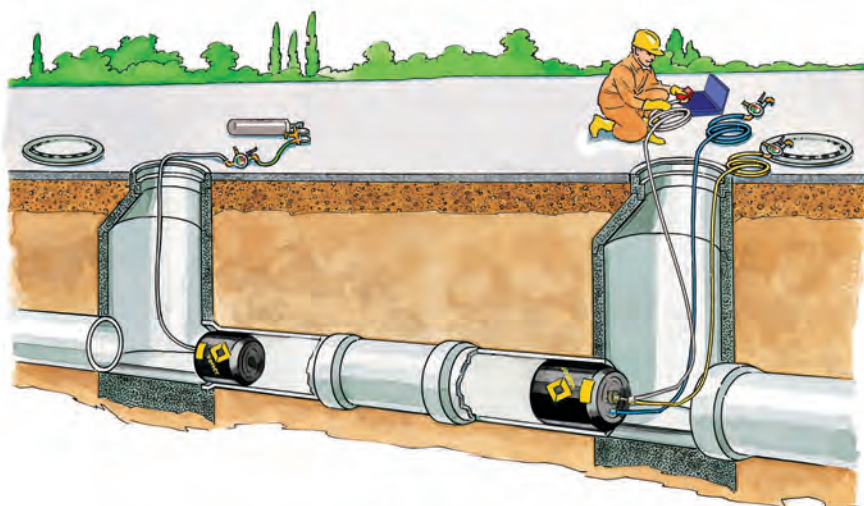
High Pressure Pipe Sealing Bags 6 bar (87 psi)	Pipe diameter mm / inch	Diameter mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement litres / cu. ft.	Weight, approx. kg / lbs
RDK 100-200 1430001300	100 - 200 3.9 - 7.8	90 3.5	510 20	555 21.9	105 3.7	1.5 3.3
RDK 200-300 1430001500	200 - 300 7.8 - 11.8	195 7.7	650 25.6	695 27.4	338 11.9	3.1 6.8
RDK 300-400 1430001400	300 - 400 11.8 - 16	295 11.6	735 29	780 30.7	527 18.6	7 15.4
RDK 500-600 1430000600	500 - 600 20 - 23.4	450 17.7	1,110 43.7	1,155 45.5	1,550 54.7	20 44.1
RDK 800 1430000800	800 31.5	785 30.9	1,810 71.3	1,855 73	6,160 217.5	44 97

**Standard test counter-pressure
of 30 m WC (43.5 psi).**

Compressed air testing - Round profile

Sets 2.5 bar (36.25 psi)

For pipes 70 - 1,000 mm (2.7 - 39 inch)			70 - 150	100 - 200	150 - 300	200 - 400	200 - 500	300 - 600	500 - 800	600 - 1,000
RDK 7/15	1440000301	2.5 bar (36.25 psi)	1							
PDK 7/15 FLEX with duct 1 x 1/2" OT	1441001201	2.5 bar (36.25 psi)	1							
RDK 10/20	1440011700	2.5 bar (36.25 psi)		1						
PDK 10/20 with duct 1 x 1" OT	1441018501	2.5 bar (36.25 psi)		1						
RDK 15/30	1440000601	2.5 bar (36.25 psi)			1					
PDK 15/30 with duct 1 x 2" OT	1441022800	2.5 bar (36.25 psi)			1					
RDK 20/40	1440020100	2.5 bar (36.25 psi)				1				
PDK 20/40 with duct 1 x 2" OT	1441018600	2.5 bar (36.25 psi)				1				
RDK 20/50	1440016700	2.5 bar (36.25 psi)					1			
PDK 20/50 with duct 1 x 2" OT	1441031200	2.5 bar (36.25 psi)					1			
RDK 30/60	1440000801	2.5 bar (36.25 psi)						1		
PDK 30/60 with duct 1 x 2" OT	1441018701	2.5 bar (36.25 psi)						1		
RDK 50/80	1440020000	2.5 bar (36.25 psi)							1	
PDK 50/80 with duct 1 x 2" OT	1441003900	2.5 bar (36.25 psi)							1	
RDK 60/100	1440011900	2.5 bar (36.25 psi)								1
PDK 60/100 with duct 1 x 2" OT	1441023200	2.5 bar (36.25 psi)								1
Compressed air adapter										
Comp. air adapter 1/2" IT	1481023600		1							
Comp. air adapter 1" IT	1481023500			1						
Comp. air adapter 2" IT	1481023400				1	1	1	1	1	1
Accessories for inflation										
Inflation hose, 10 m (32 ft.), yellow	1600029900	2.5 bar (36.25 psi)	2	2	2	2	2	2	2	2
Single fitting controller	0250005700	2.5 bar (36.25 psi)	1	1	1	1	1	1	1	1
Additional accessories as an option										
Inflation and safety hose 10 m (32 ft.), yellow	1700009001	0.3 bar (4.35 psi)	1	1	1	1	1	1	1	1
Measurement hose 10 m (32 ft.) (self-monitoring)	1700010301	0.3 bar (4.35 psi)	1	1	1	1	1	1	1	1



Sets 1.5 bar (21.75 psi) + Sets 0.5 bar (7.25 psi)

For pipes 500 - 2,000 mm (19.5 - 78 inch)			500 - 1,000	600 - 1,200	800 - 1,400	1,400 - 1,700	1,700 - 2,000
RDK 50/100	1480000801	1.5 bar (21.75 psi)	1				
PDK 50/100 with duct 1 x 2" OT	1481003501	1.5 bar (21.75 psi)	1				
RDK 60/120	1480001901	1.5 bar (21.75 psi)		1			
PDK 60/120 with duct 1 x 2" OT	1481009501	1.5 bar (21.75 psi)		1			
RDK 80/140	1480006000	1.5 bar (21.75 psi)			1		
PDK 80/140 with duct 1 x 2" OT	1481024000	1.5 bar (21.75 psi)			1		
RDK 140/170	1400000300	0.5 bar (7.25 psi)				1	
PDK 140/170 with duct 1 x 2" OT	1401000400	0.5 bar (7.25 psi)				1	
RDK 170/200	1400000100	0.5 bar (7.25 psi)					1
PDK 170/200 with duct 1 x 2" OT	1401000700	0.5 bar (7.25 psi)					1
Compressed air adapter							
Comp. air adapter 2" IT	1481023400		1	1	1	1	1
Accessories for inflation							
Inflation hose, 10 m (32 ft.), yellow	1600029900	1.5 bar (21.75 psi)	2	2	2		
Single fitting controller	0150005400	1.5 bar (21.75 psi)	1	1	1		
Inflation hose, 10 m (32 ft.), yellow	0050001801	0.5 bar (7.25 psi)				4	4
Dual fitting controller	0050000801	0.5 bar (7.25 psi)				2	2
Additional accessories as an option							
Inflation and safety hose 10 m (32 ft.), yellow	1700009001	0.3 bar (4.35 psi)	1	1	1	1	1
Measurement hose 10 m (32 ft.) (self-monitoring)	1700010301	0.3 bar (4.35 psi)	1	1	1	1	1

Water pressure testing - Round profile

Sets 2.5 bar (36.25 psi)

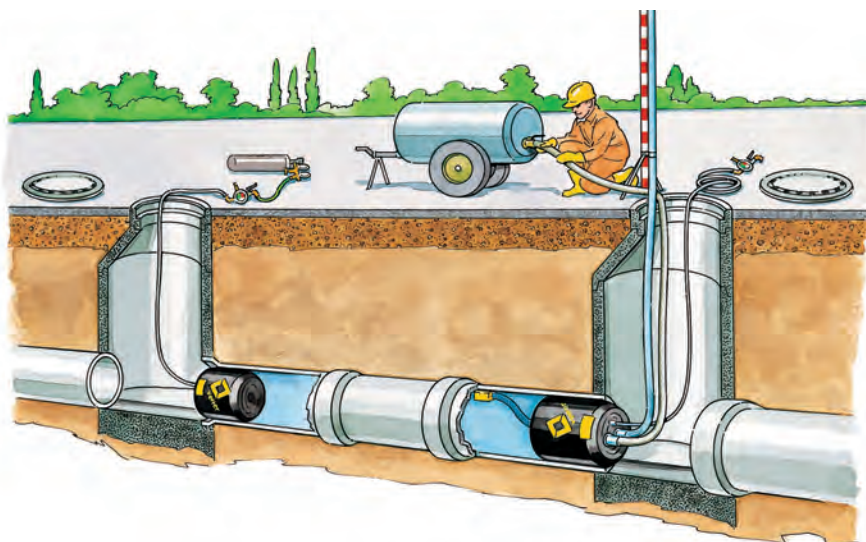
For pipes 70 - 1,000 mm (2.7 - 39 inch)			70 - 150	100 - 200	150 - 300	200 - 400	200 - 500	300 - 600	500 - 800	600 - 1,000
PDK 7/15 with duct 1 x 1/2" OT	1441001201	2.5 bar (36.25 psi)	2							
PDK 10/20 with duct 1 x 1" OT	1441018501	2.5 bar (36.25 psi)		2						
RDK 15/30	1440000601	2.5 bar (36.25 psi)			1					
PDK 15/30 with duct 2 x 1/2" OT	1441022700	2.5 bar (36.25 psi)			1					
RDK 20/40	1440020100	2.5 bar (36.25 psi)				1				
PDK 20/40 with duct 2 x 1" OT	1441040300	2.5 bar (36.25 psi)				1				
RDK 20/50	1440016700	2.5 bar (36.25 psi)					1			
PDK 20/50 with duct 2 x 1" OT	1441031100	2.5 bar (36.25 psi)					1			
RDK 30/60	1440000801	2.5 bar (36.25 psi)						1		
PDK 30/60 with duct 2 x 1" OT	1441023100	2.5 bar (36.25 psi)						1		
RDK 50/80	1440020000	2.5 bar (36.25 psi)							1	
PDK 50/80 with duct 2 x 2" OT	1441003800	2.5 bar (36.25 psi)							1	
RDK 60/100	1440011900	2.5 bar (36.25 psi)								1
PDK 60/100 with duct 2 x 2" OT	1441023300	2.5 bar (36.25 psi)								1

Accessories for inflation

Inflation hose, 10 m (32 ft.), yellow	1600029900	2.5 bar (36.25 psi)	2	2	2	2	2	2	2	2
Single fitting controller	0250005700	2.5 bar (36.25 psi)	1	1	1	1	1	1	1	1

Additional accessories as an option

D-Fixed coupling 1/2" IT	1700007600		2		2					
D-Fixed coupling 1" IT	1700016000			2		2	2	2		
C-Fixed coupling 2" IT	1700007700								2	2
D-Blind coupling with chain	1700016200		2	2	2	2	2	2		
C-Blind coupling with chain	1700016600								2	2
Ventilation float hose 1/2"	0250004400		1		1					
Ventilation float hose 1"	1700038400			1		1	1	1		
Ventilation float hose 2"	1700011900								1	1
Testing & measurement hose	1700008400	Size D	1	1	1	1	1	1		
Testing & measurement hose	1700013700	Size C							1	1
Blocking valve	1700013200	Size D	1	1	1	1	1	1		
Blocking valve	1700007900	Size C							1	1



Sets 1.5 bar (21.75 psi) + Sets 0.5 bar (7.25 psi)

For pipes 500 - 2,000 mm (19.5 - 78 inch)			500 - 1,000	600 - 1,200	800 - 1,400	1,400 - 1,700	1,700 - 2,000
RDK 50/100	1480000801	1.5 bar (21.75 psi)	1				
PDK 50/100 with duct 2 x 2" OT	1481023800	1.5 bar (21.75 psi)	1				
RDK 60/120	1480001901	1.5 bar (21.75 psi)		1			
PDK 60/120 with duct 2 x 2" OT	1481009301	1.5 bar (21.75 psi)		1			
RDK 80/140	1480006000	1.5 bar (21.75 psi)			1		
PDK 80/140 with duct 2 x 2" OT	1481023900	1.5 bar (21.75 psi)			1		
RDK 140/170	1400000300	0.5 bar (7.25 psi)				1	
PDK 140/170 with duct 2 x 2" OT	1401000300	0.5 bar (7.25 psi)				1	
RDK 170/200	1400000100	0.5 bar (7.25 psi)					1
PDK 170/200 with duct 2 x 2" OT	1401000600	0.5 bar (7.25 psi)					1

Accessories for inflation

Inflation hose, 10 m (32 ft.), yellow	1600029900	1.5 bar (21.75 psi)	2	2	2		
Single fitting controller	0150005400	1.5 bar (21.75 psi)	1	1	1		
Inflation hose, 10 m (32 ft.), yellow	0050001801	0.5 bar (7.25 psi)				4	4
Dual fitting controller	0050000801	0.5 bar (7.25 psi)				2	2

Additional accessories as an option

C-Fixed coupling 2" IT	1700007700		2	2	2	2	2
C-Blind coupling with chain	1700016600		2	2	2	2	2
Ventilation float hose 2"	1700011900		1	1	1	1	1
Testing & measurement hose	1700013700	Size C	1	1	1	1	1
Blocking valve	1700007900	Size C	1	1	1	1	1

Egg Profile Sealing Bags

The specialists for egg profiles.

- › foldable bag
- › very lightweight and practical
- › up to 0.5 bar (7.25 psi) counter-pressure
- › extremely flexible

The sealing bags for egg profiled pipelines offer the opportunity to also seal sewer pipelines which are egg-shaped as well as the more frequent round shape. Reliable sealing of this Type of pipeline is not possible with round bags due to the fact that at the lower end (sole) has a smaller radius and therefore does not seal one hundred percent (see upper picture on the right).

The egg-profile sealing bag is made of a sturdy rubber material which is seamless and has high expansion characteristics.



Egg Profile Sealing Bags 1 bar (14.5 psi)



Egg profile pipe with round profile sealing bag - adaption problems, no sealing.



Egg profile pipe with egg profile sealing bag - optimum adaption and sealing.

A feature of the **1.5 bar (21.75 psi) egg-profiled sealing bag** is its compact design and therefore has a decisive advantage over the 1.0 bar (14.5 psi) version. This lies in the fact that due to the material expansion of the bag coating, two pipe cross sections can be covered with one egg profiled sealing bag.

The smooth surface ensures constant quality in the field of sewer reconstruction. These sealing bags are also made as test bags and bypass bags with internal hose (refer to Page 25).



**Further sizes and length
can be produced
on request.**

Egg Profile Sealing Bags 1.5 bar (21.75 psi) (Art. no. 1420000101)

Technical data

Egg Profile Sealing Bags		Pipe cross section mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement, approx. litres / cu. ft.	Weight, approx. kg / lbs
EDK 35/52.5 - 50/75 1420000101	1.5 bar (21.75 psi)	350/525 - 500/750 14/21 - 20/30	600 23.4	645 25.4	250 8.8	8 17.6
EDK 60/90 1420000300	1 bar (14.5 psi)	600/900 23.4/35	1,200 47.2	1,400 55.1	840 29.7	17 37.5
EDK 70/105 1420000400	1 bar (14.5 psi)	700/1.050 28/41	1,200 47.2	1,450 57.1	1,400 49.4	20 44.1
EDK 90/135 1420000500	1 bar (14.5 psi)	900/1.350 35/53	1,800 70.2	2,200 86.6	2,640 93.2	26 57.3

**Standard test counter-pressure
of 5 m WC (7.25 psi).**

Egg Profile Test and Bypass Bags

For the reliable testing of egg profiles.

- › foldable bag
- › very lightweight and practical
- › up to 0.5 bar (7.25 psi) counter-pressure
- › extremely flexible

The egg profiles are not only used as sealing bags but also as test bags and bypass bags. In addition to the inflation connection, the bags are equipped with either one or two C-connectors (2").

Additionally, the sealing function is, among other things, suitable for:

- › damming or banking
- › producing a pump well
- › for sealing inspection of newly laid pipelines or reconstructed sewer pipelines according to EN 1610
- › for rerouting sewerage when there are leaky pipelines

Owing to their flexibility, the egg profile bag can be positioned through the shaft in the sewerage pipeline.



Egg Profile Bypass Bags 1 bar (14.5 psi)

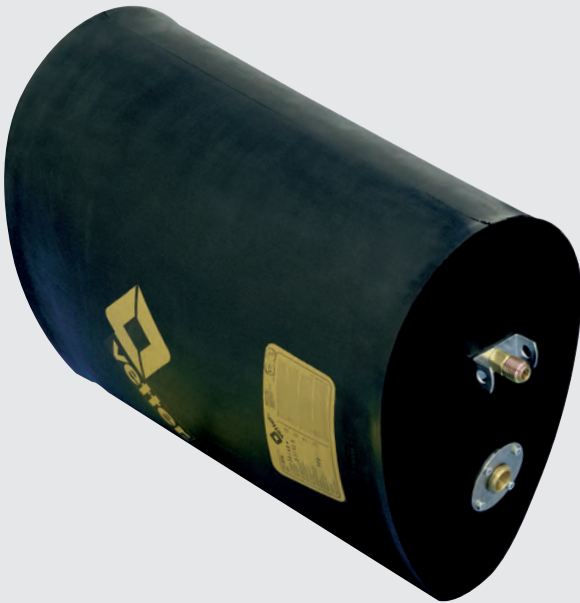


Easy positioning into the pipeline shaft

As opposed to the 1.0 bar (14.5 psi) version, **the 1.5 bar (21.75 psi) egg profiled test sealing bag** covers two pipe dimensions. The compact design and user-friendly application are just two of its features. Test sealing bags can also be used as bypass bags.

Another advantage is the work saving characteristic due to the fact that assembly in the shaft is not necessary as opposed to other customary blocking devices.

The smooth surface ensures constant quality in the field of sewer reconstruction.



You will find the compatible testing equipment at page 27.

Egg profiled test sealing bags 1.5 bar (21.75 psi) (Art. no. 1421000101)

Technical data

Egg Profile Test and Bypass Bags		Pipe cross section mm / inch	Cylinder length mm / inch	Total length mm / inch	Air requirement litres / cu. ft.	Weight, approx. kg / lbs
EPK 35/52.5 - 50/75 1421000101 1 x 1" OT	1.5 bar (21.75 psi)	350/525 - 500/750 14/21 - 20/30	600 23.4	645 25.4	225 7.9	12 26.5
EPK 60/90 1421001300 1 x 2" OT 1421001200 2 x 2" OT	1 bar (14.5 psi)	600/900 23.4/35	1,200 47.2	1,400 55.1	820 29	26 - 35 57.3 - 77.2
EPK 70/105 1421001700 1 x 2" OT 1421001600 2 x 2" OT	1 bar (14.5 psi)	700/1.050 28/41	1,200 47.2	1,450 57.1	1,380 48.7	29 - 38 63.9 - 83.8
EPK 90/135 1421002000 1 x 2" OT 1421001900 2 x 2" OT	1 bar (14.5 psi)	900/1.350 35/53	1,800 70.2	2,200 86.6	2,620 92.5	36 - 46 79.4 - 101.4

**Standard test counter-pressure
of 5 m WC (7.25 psi).**

Compressed air & water pressure testing - Egg profile

Sets 1.5 bar (21.75 psi) + Sets 1 bar (14.5 psi)

For pipes 350-1,350 mm (13.7-52.7 inch)			Compressed air testing				Water pressure testing			
			35/52.5 50/70	60/90	70/105	90/135	35/52.5 50/70	60/90	70/105	90/135
EDK 35/52.5 - 50/75	1420000101	1.5 bar (21.75 psi)	1							
EPK 35/52.5 - 50/75 with duct 1 x 1" OT	1421000101	1.5 bar (21.75 psi)	1				2			
EDK 60/90	1420000300			1				1		
EPK 60/90 with 1 x 2" OT	1421001300	1 bar (14.5 psi)		1						
EPK 60/90 with 2 x 2" OT	1421001200							1		
EDK 70/105	1420000400				1				1	
EPK 70/105 with 1 x 2" OT	1421001700	1 bar (14.5 psi)			1					
EPK 70/105 with 2 x 2" OT	1421001600								1	
EDK 90/135	1420000500					1				1
EPK 90/135 with 1 x 2" OT	1421002000	1 bar (14.5 psi)				1				
EPK 90/135 with 2 x 2" OT	1421001900									1
Compressed air adapter										
Compressed air adapter 1" IT	1481023500		1							
Compressed air adapter 2" IT	1481023400			1	1	1				
Accessories for inflation										
Inflation hose, 10 m (32 ft.), yellow	1600029900	1.5 bar (21.75 psi)	2				2			
Single fitting controller	0150005400	1.5 bar (21.75 psi)	1				1			
Inflation hose, 10 m (32 ft.), yellow	0100000701	1 bar (14.5 psi)		2	2	2		2	2	2
Single fitting controller	0100001501	1 bar (14.5 psi)		2	2	2		2	2	2
Additional accessories as an option										
Inflation and safety hose 10 m (32 ft.), yellow	1700009001	0.3 bar (4.35 psi)	1	1	1	1				
Measurement hose 10 m (32 ft.) (self-monitoring)	1700010301	0.3 bar (4.35 psi)	1	1	1	1				
D-Fixed coupling 1" IT	1700016000						2			
C-Fixed coupling 2" IT	1700007700							2	2	2
D-Blind coupling with chain	1700016200						2			
C-Blind coupling with chain	1700016600							2	2	2
Ventilation float hose 1"	1700038400						1			
Ventilation float hose 2"	1700011900							1	1	1
Testing & measurement hose	1700008400	Size D					1			
Testing & measurement hose	1700013700	Size C						1	1	1
Blocking valve	1700013200	Size D					1			
Blocking valve	1700007900	Size C						1	1	1

Accessories - Compressed air & water pressure testing

Compressed air testing

Compressed air adapter,
with two brass quick-snap couplings and hose



1/2" IT
1481023600
1" IT
1481023500
2" IT
1481023400

Inflation and safety hose 0.3 bar (4.35 psi),
10 m (32 ft.), yellow for inflation of the line



1700009001

Measurement hose 0.3 bar (4.35 psi), 10 m (32 ft.)
for self-monitoring for the sealing tests



1700010301

Water pressure testing

Fixed coupling



D-Fixed coupling 1/2" IT
1700007600
D-Fixed coupling 1" IT
1700016000
C-Fixed coupling 2" IT
1700007700

Ventilation float hose



1/2" IT
0250004400
1" IT
1700038400
2" IT
1700011900

Blind coupling



D-Blind coupling with chain
1700016200
C-Blind coupling with chain
1700016600

Testing and measurement hose 6 m (19 ft.)



Storz D
1700008400
Storz C
1700013700

Blocking valve Size D



1700013200



Blocking valve Size C





1700007900

Accessories - Inflation of the bags



0.5 bar (7.25 psi)

Inflation hose 0.5 bar (7.25 psi)	5 m (16.4 ft.)	10 m (32 ft.)	Dual fitting controller 0.5 bar (7.25 psi)
	0050000701	0050001800	 0050000801

1 bar (14.5 psi)

Inflation hose 1 bar (14.5 psi)	5 m (16.4 ft.)	10 m (32 ft.)	Single fitting controller 1 bar (14.5 psi)
	0100000501	0100000701	 0100001501

1.5 bar (21.75 psi)



Inflation hose	5 m (16.4 ft.)	10 m (32 ft.)	Single fitting controller 1.5 bar (21.75 psi)
	1600030000	1600029900	 0150005401

Inflation and safety hose 1.5 bar (21.75 psi), 10 m (32 ft.), yellow

	0150005500
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All pipe and test sealing bags will be fitted with brass couplings* as a standard from 01.01.2012 onwards.

2.5 bar (36.25 psi)

Inflation hose	5 m (16.4 ft.)	10 m (32 ft.)	Single fitting controller 2.5 bar (36.25 psi)
	1600030000	1600029900	 0250005701

Inflation and safety hose 2.5 bar (36.25 psi), 10 m (32 ft.), yellow

	0250005800
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Foot air pump 2.5 bar (36.25 psi) with safety valve

	0250005300
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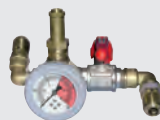
6 bar (87 psi)

Inflation hose 6 bar (87 psi), 10 m (32 ft.), green



1000000401

Single fitting controller 6 bar (87 psi)



0600000401

Accessories for inflation

Air supply hose, green



10 m (32 ft.)

1600013401

10 m (32 ft.), with blocking valve

1600013601

Hand and foot air pump

you need no further adapters or hoses



Hand air pump,
520 ccm / Hub (25.6 cu.in.)

1600008700

Foot air pump,
420 ccm / Hub (31.7 cu.in.)

16000009400

Adapter

for portable compressor/local compressed air network



1600008200

Adapter

for construction site compressor



1600012000

Vetter Flexible packers

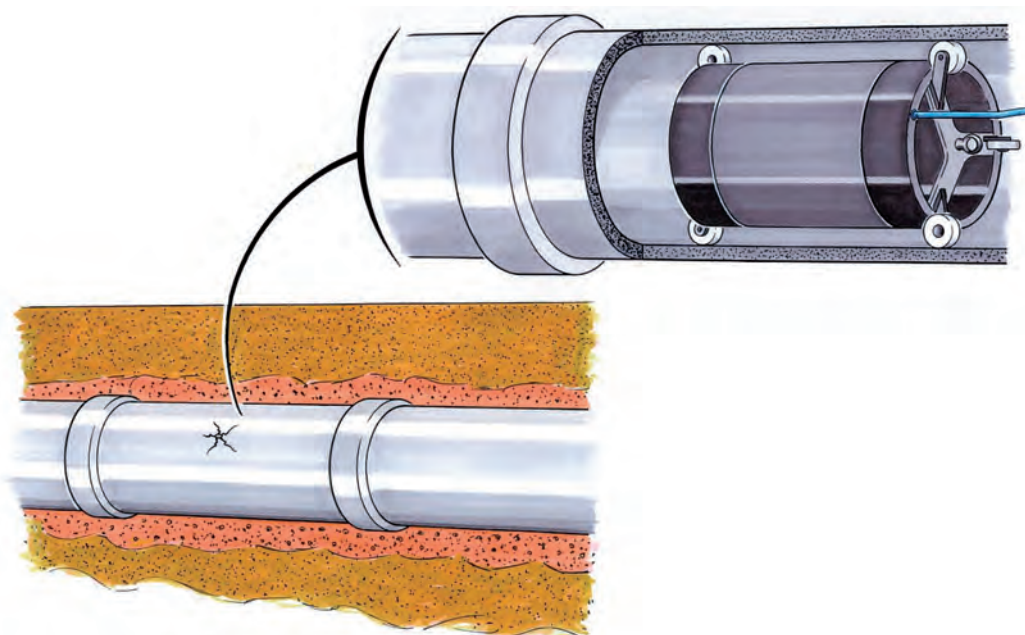
For fast partial reconstruction work.

- › deliverable in different constructions and sizes:
- › Short packers
- › Lateral packers
- › Flexible packers

The partial repair of a defective pipeline (e.g. damages caused by roots, leaky connections, corrosion damages etc.) is carried out using a mat made of synthetic resin and fibre glass. The packer is equipped with this mat and is then attached to the damaged position on the pipeline. Here pressure is applied and in doing so presses the mat onto the pipe wall. This pressure causes the resin to enter the cracks as well as other damaged positions in the pipeline where it solidifies.

Pressure is then finally released from the packer which is then removed out of the repaired pipeline.

NEW

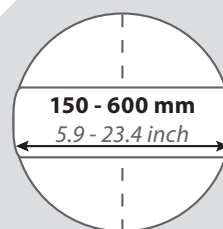


Partial reconstruction work with Vetter flexible packers.

Short packers 2.5 bar (36.25 psi)

The fast and clever solution.

- › adjustable carriage with spring action
- › low weight due to PE tube
- › skid-shaped carriage allows sliding even over offsets



Vetter short packers are designed for reconstructing drains of up to 600 mm (23.4 inch) diameter. They comprise a replaceable rubber sleeve and a PE core with a duct which ensures the water flows off during the reconstruction. The open safety coupling with a lock pin prevents unwanted decoupling.

The carriage can be flexibly adjusted depending on the pipe diameter and has a slight spring action. On top of that, the runner shape facilitates smooth sliding, even over offsets. The wheels are mounted at a 120° angle, which ensures reliable stability and prevents tipping over during the repair work.

The Vetter short packers are available in 5 sizes for pipe diameters of 150 mm - 600 mm (5.9 - 23.4 inch).



Reliable stability due to 3 wheels in an angle of 120°

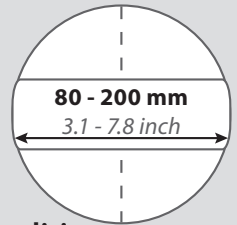


Technical data

Short packers 2.5 bar/36.25 psi	Application range (from-to) mm / inch	Packer length mm / inch	Application length in largest diam. mm / inch	Application length in smallest diam. mm / inch	Packer diameter, approx. mm / inch	Packer length, with carriage mm / inch.	Sleeve length, approx. mm / inch	Weight, approx. kg / lbs
Type 150-200 1491000100	150 - 200 5.9 - 7.8	820 32	650 25.6	695 27.1	105 4.1	950 37.1	800 31.2	5 11
Type 250-300 1491044400	250 - 300 9.8 - 11.8	820 32	640 25	690 26.9	190 7.4	1,080 42.1	800 31.2	11.8 26
Type 300-350 1491044700	300 - 350 11.8 - 14	820 32	630 24.6	670 26.1	230 9	1,080 42.1	800 31.2	17.8 39.2
Type 400-450 1491013100	400 - 450 16 - 18	820 32	660 25.7	680 26.5	310 12.1	1,080 42.1	800 31.2	24.7 54.5
Type 500-600 1491013700	500 - 600 20 - 23.4	920 36	680 26.5	690 26.9	385 15	1,180 46	900 35.1	41 90.4

Lateral packers 2.5 bar (36.25 psi)

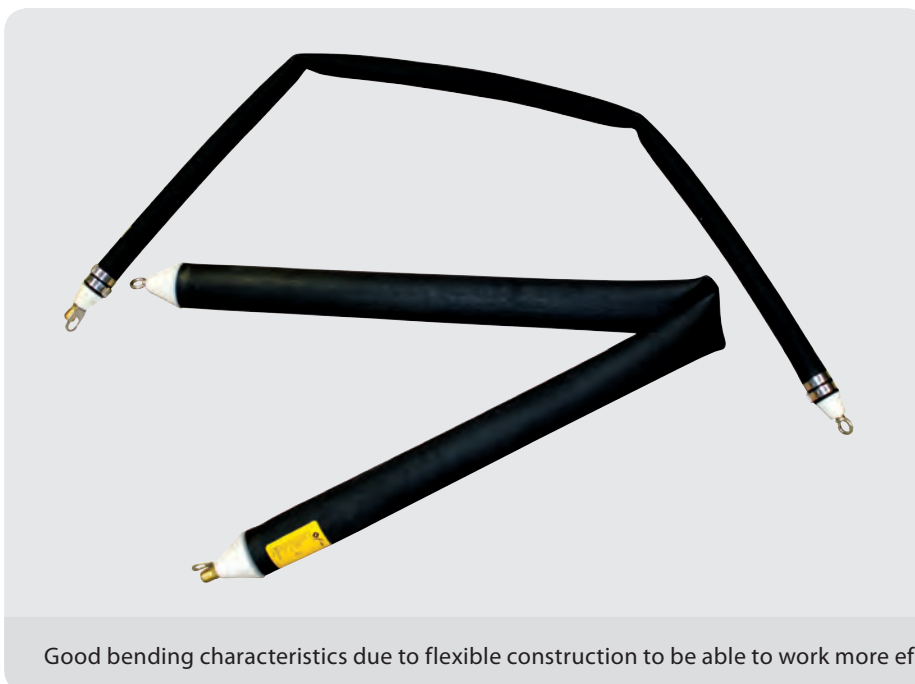
The intelligent solution that saves money.



- › high flexibility
- › Replaceable spherical heads
- › Construction allows very good bending characteristics & increased slipping qualities

Vetter lateral packers are the ideal solution for pipes with small diameters, especially pipelines in the building lateral area. The flexible construction ensures good slipping qualities, bending characteristics and handling. That facilitates quick application, reducing your working hours. The open safety coupling with a lock pin prevents unwanted decoupling. The spherical heads are mounted on the packers and are not vulcanised in. That makes them replaceable and reusable. That in turn provides you with benefits in handling, saves resources and on top of that saves you money.

The lateral packers are available in 3 sizes from 80 - 200 mm (3.1 - 7.8 inch) and lengths up to 4 m (13.2 ft.).



Replaceable spherical heads

Good bending characteristics due to flexible construction to be able to work more effective.

Technical data

Lateral packers 2.5 bar/36.25 psi	Design	Application range (from-to) mm / inch	Packer length, approx. mm / inch	Application length in largest diam. mm / inch	Application length in smallest diam. mm / inch	Packer diameter mm / inch	Packer length with spherical head mm / inch.	Weight, approx.* kg / lbs
Type 80-110 1491019600	wound	80 - 110 3.1 - 4.3	1,000 39	800 31.2	820 32	51 2	1,175 45.8	1.1 2.4
Type 80-110 1491019800	wound	80 - 110 3.1 - 4.3	2,000 78	1,800 70.2	1,820 71	51 2	2,175 84.8	2 4.4
Type 80-110 1491020000	wound	80 - 110 3.1 - 4.3	2,500 97.5	2,300 89.7	2,320 90.5	51 2	2,675 104.3	2.8 6.2
Type 100-150 1491031500	smooth	100 - 150 3.9 - 5.9	1,000 39	840 32.8	920 35.9	66 2.6	1,170 45.6	1.1 2.4
Type 100-150 1491018200	smooth	100 - 150 3.9 - 5.9	2,000 78	1,840 71.8	1,920 74.9	66 2.6	2,170 84.6	2.2 4.9
Type 100-150 1491018300	smooth	100 - 150 3.9 - 5.9	3,000 118	2,840 110.8	2,920 113.9	66 2.6	3,170 123.6	3.3 7.3
Type 100-150 1491018000	smooth	100 - 150 3.9 - 5.9	4,000 156	3,840 149.8	3,920 152.9	66 2.6	4,170 162.6	4.4 9.7
Type 150-200 1491019100	smooth	150 - 200 5.9 - 7.8	1,000 39	940 36.7	920 35.9	92 3.6	1,225 47.8	1.6 3.5
Type 150-200 1491018700	smooth	150 - 200 5.9 - 7.8	2,000 78	1,840 71.8	1,920 74.9	92 3.6	2,225 86.8	3.0 6.6
Type 150-200 1441013600	smooth	150 - 200 5.9 - 7.8	3,000 118	2,840 110.8	2,920 113.9	92 3.6	3,225 125.8	4.5 9.9
Type 150-200 1441013700	smooth	150 - 200 5.9 - 7.8	4,000 156	3,840 149.8	3,920 152.9	92 3.6	4,225 164.8	6.6 14.6

* without spherical heads



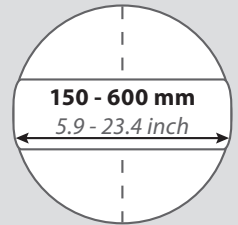
Set spherical heads

DN 80-110 (Art. no. 1491011001)
DN 100-150 (Art. no. 1491047400)
DN 150-200 (Art. no. 1491011101)

Flexible packers

The adaptable solution.

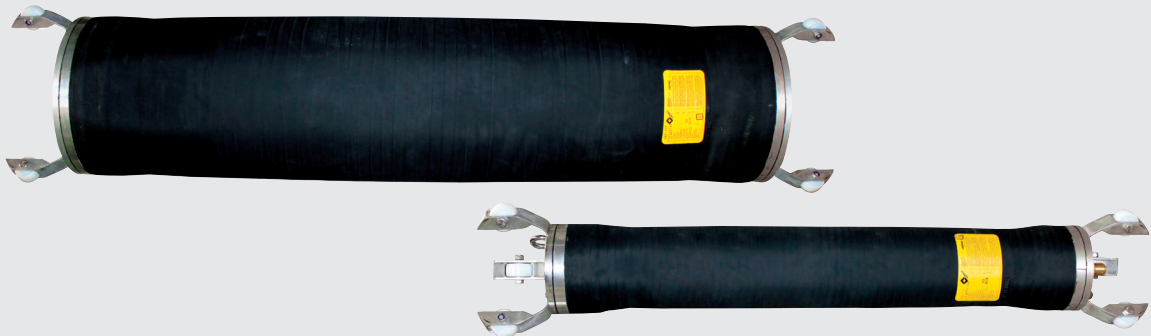
- › high flexibility
- › adjustable carriage with resilience
- › skid-shaped carriage allows sliding even over offsets



Vetter flexible packers are the flexible solution for drain reconstruction. They are made of a rubber sleeve that is vulcanised onto metal heads. The interior tube lets the water flow off during the repair work. The open safety coupling with a lock pin prevents unwanted decoupling. The flexible construction means it is easy to conduct the packer through a manhole and install it in the damaged line.

The carriage has a slight spring action and can be flexibly adjusted to match the pipe diameter. On top of that, the runner-shaped carriage facilitates smooth sliding, even over offsets. The wheels are set at a 120° angle, which ensures easy packer penetration.

The Vetter flexible packers are available in 4 sizes for pipe diameters from 150 - 600 mm (5.9 - 23.4 inch) and lengths up to 4 m (13.1 ft.).

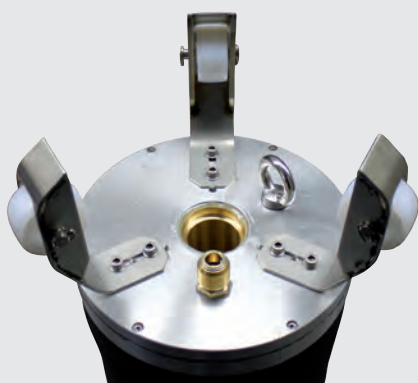


Best flexibility and guaranteed stability.

Technical data

Flexible packers		Application range (from-to) mm / inch	Packer length, approx. mm / inch	Application length in largest diam. mm / inch	Application length in smallest diam. mm / inch	Packer diameter, approx. mm / inch	Packer length, with carriage, approx. mm / inch.	Weight, approx. kg / lbs
Type 150-250 1491045900	2.5 bar (36.25 psi)	150 - 250 5.9 - 9.8	1,000 39	680 26.5	780 30.4	105 4.1	1,130 44.1	6.4 14.1
Type 150-250 1491046000	2.5 bar (36.25 psi)	150 - 250 5.9 - 9.8	2,000 78	1,680 65.5	1,780 69.4	105 4.1	2,130 83.1	10 22.1
Type 150-250 1491046100	2.5 bar (36.25 psi)	150 - 250 5.9 - 9.8	3,000 118	2,680 104.5	2,780 108.4	105 4.1	3,130 122.1	14 20.9
Type 150-250 1491046200	2.5 bar (36.25 psi)	150 - 250 5.9 - 9.8	4,000 156	3,680 143.5	3,780 147.4	105 4.1	4,130 161.1	18 39.7
Type 200-300 1491044800	1.5 bar (21.75 psi)	200 - 300 7.8 - 11.8	1,000 39	590 23	690 26.9	170 6.6	1,260 49.1	10 22.1
Type 200-300 1491046300	1.5 bar (21.75 psi)	200 - 300 7.8 - 11.8	2,000 78	1,590 62	1,690 65.9	170 6.6	2,260 88.1	15 33.1
Type 200-300 1491046400	1.5 bar (21.75 psi)	200 - 300 7.8 - 11.8	3,000 118	2,590 101	2,690 104.9	170 6.6	3,260 127.1	20 44.1
Type 200-300 1491046500	1.5 bar (21.75 psi)	200 - 300 7.8 - 11.8	4,000 156	3,590 140	3,690 143.9	170 6.6	4,260 166.1	25 55.1
Type 300-400 1491044900	1.5 bar (21.75 psi)	300 - 400 11.8 - 16	1,000 39	560 21.8	660 25.7	230 9	1,260 49.1	13.2 29.1
Type 300-400 1491046600	1.5 bar (21.75 psi)	300 - 400 11.8 - 16	2,000 78	1,560 60.8	1,660 64.7	230 9	2,260 88.1	19.4 42.8
Type 300-400 1491046700	1.5 bar (21.75 psi)	300 - 400 11.8 - 16	3,000 118	2,560 99.8	2,660 103.7	230 9	3,260 127.1	26 57.3
Type 300-400 1491046800	1.5 bar (21.75 psi)	300 - 400 11.8 - 16	4,000 156	3,560 138.8	3,660 142.7	230 9	4,260 166.1	32 70.6
Type 400-600 1491045700	1.5 bar (21.75 psi)	400 - 600 16 - 23.4	1,500 58.5	900 35.1	950 37.1	350 13.7	1,770 69	26.1 57.6

Standard through-flow openings of 2".



Through-flow openings of the flexible packers.

Counter-pressure tables

Measured in dry metal pipe.

All counter-pressure specifications in bar (psi).

Mini Pipe Sealing Bags 2.5 bar (36.25psi)

Diameter mm / inch	RDK 2.5/4 1440000101	RDK 4/7 1440000201	RDK 8/15 1440018800	RDK 10/15 1440010500	RDK 12.5/20 1440010700	RDK 15/20 1440018900	RDK 15/30 1440010600
25 / 0.98	1.6 / 23.98						
40 / 1.6	1.4 / 20.3	1.65 / 23.9					
50 / 1.9		1.5 / 21.75					
70 / 2.8		1.25 / 18.1					
80 / 3.1			1.35 / 19.6				
90 / 3.5			1.25 / 18.1				
100 / 3.9			1.25 / 18.1	1.4 / 20.3			
125 / 5.0			1.25 / 18.1	1.35 / 19.6		1.4 / 20.3	
150 / 5.9			1.05 / 15.2	1.3 / 18.9	1.15 / 16.7	1.3 / 18.9	1.35 / 19.6
200 / 7.8					1.1 / 15.9	1.25 / 18.1	1.3 / 18.9
250 / 9.75							1.25 / 18.1
300 / 11.8							1.25 / 18.1

Pipe Sealing Bags

Diameter mm / inch	RDK 7/15 1440000301 1440008100 (CR)	RDK 10/20 1440011700	RDK 15/30 1440000601 1440008000 (CR)	RDK 20/40 1440020100	RDK 20/50 1440016700	RDK 30/60 1440000801 1440007900 (CR)	RDK 50/80 1440020000	RDK 60/100 1440011900
2.5 bar (36.25psi)								
70 / 2.8	1.6 / 23.2							
80 / 3.1	1.8 / 26.1							
90 / 3.5	1.8 / 26.1							
100 / 3.9	1.8 / 26.1	1.5 / 21.75						
125 / 5.0	1.55 / 22.5	1.75 / 25.4						
150 / 5.9	1.4 / 20.3	1.6 / 23.2	1.7 / 24.7					
200 / 7.8		1.4 / 20.3	1.65 / 23.9	1.5 / 21.75	2.1 / 30.5			
250 / 9.75			1.6 / 23.2	1.3 / 18.9	1.8 / 26.1			
300 / 11.8			1.35 / 19.6	1.4 / 20.3	1.7 / 24.7	1.65 / 23.9		
400 / 16.0				1.3 / 18.9	1.5 / 21.75	1.7 / 24.7		
500 / 20.0					1.4 / 20.3	1.45 / 21.0	1.45 / 21.0	
600 / 23.4						1.3 / 18.9	1.55 / 22.5	1.8 / 26.1
800 / 31.5							1.35 / 19.6	1.6 / 23.2
1000 / 39.4								1.3 / 18.9
1200 / 47.2								
1400 / 55.1								
1700 / 67.0								
2000 / 78.7								

Mini Test Sealing Bags 2.5 bar (36.25psi)

Diameter mm / inch	PDK 4/7 1441000701	PDK 10/15 1441035400	PDK 12.5/20 1441035200	PDK 20/30 1441035300
25 / 0.98				
40 / 1.6	1.8 / 26.1			
50 / 1.9	1.6 / 23.2			
70 / 2.8	1.3 / 18.9			
80 / 3.1				
90 / 3.5				
100 / 3.9		1.5 / 21.75		
125 / 5.0		1.25 / 18.1	1.25 / 18.1	
150 / 5.9		1.2 / 17.4	1.2 / 17.4	
200 / 7.8			1.1 / 15.9	1.25 / 18.1
250 / 9.75				1.2 / 17.4
300 / 11.8				1.15 / 16.7

Pipe Sealing Bags

Diameter mm / inch	RDK 50/100 1480000801	RDK 60/120 1480001901 1480004800 (CR)	RDK 80/140 1480006000	RDK 140/170 1400000300	RDK 170/200 1400000100
	1.5 bar (21.75 psi)			0.5 bar (7.25 psi)	
70 / 2.8					
80 / 3.1					
90 / 3.5					
100 / 3.9					
125 / 5.0					
150 / 5.9					
200 / 7.8					
250 / 9.75					
300 / 11.8					
400 / 16.0					
500 / 20.0	1.25 / 18.1				
600 / 23.4	1.25 / 18.1	1.1 / 15.9			
800 / 31.5	1.1 / 15.9	0.95 / 13.8	0.5 / 7.25		
1000 / 39.4	0.57 / 10.9	0.85 / 12.3	0.5 / 7.25		
1200 / 47.2		0.75 / 10.9	0.5 / 7.25		
1400 / 55.1			0.5 / 7.25	0.2 / 2.9	
1700 / 67.0				0.2 / 2.9	0.2 / 2.9
2000 / 78.7				0.2 / 2.9	0.2 / 2.9

Counter-pressure tables

Measured in dry metal pipe.

All counter-pressure specifications in bar (psi).

Test Sealing Bags

Diameter mm / inch	PDK 7/15 FLEX 1441001201	PDK 10/20 FLEX 1441018501	PDK 15/30 FLEX 1441022700 1441022800	PDK 20/40 FLEX 1441040300 1441018600	PDK 20/50 FLEX 1441031100 1441031200	PDK 30/60 FLEX 1441023100 1441018701	PDK 50/80 FLEX 1441003900 1441003800	PDK 60/100 FLEX 1441023200 1441023300
2.5 bar (36.25psi)								
70 / 2.8	1.55 / 22.5							
80 / 3.1	1.75 / 25.4							
90 / 3.5	1.7 / 24.7							
100 / 3.9	1.65 / 23.9	1.6 / 23.2						
125 / 5.0	1.5 / 21.75	1.5 / 21.75						
150 / 5.9	1.4 / 20.3	1.4 / 20.3	1.65 / 23.9					
200 / 7.8		1.45 / 21.0	1.6 / 23.2	1.45 / 21.0	2 / 29.0			
250 / 9.75			1.5 / 21.75	1.3 / 18.9	1.7 / 24.7			
300 / 11.8			1.3 / 18.9	1.35 / 19.6	1.65 / 23.9	1.6 / 23.2		
400 / 16.0				1.3 / 18.9	1.5 / 21.75	1.65 / 23.9		
500 / 20.0					1.35 / 19.6	1.4 / 20.3	1.4 / 20.3	
600 / 23.4						1.3 / 18.9	1.5 / 21.75	1.75 / 25.4
800 / 31.5							1.35 / 19.6	1.5 / 21.75
1000 / 39.4								1.3 / 18.9
1200 / 47.2								
1400 / 55.1								
1700 / 67.0								
2000 / 78.7								

High Pressure Pipe Sealing Bags 6 bar (87 psi)

Diameter mm / inch	RDK 100-200 1430001300	RDK 200-300 1430001500	RDK 300-400 1430001400	RDK 500-600 1430001600	RDK 800 1430000800
100 / 3.9	3.7 / 53.65				
125 / 5.0	3.6 / 52.2				
150 / 5.9	4.6 / 66.7				
200 / 7.8	3.3 / 47.9	4.75 / 68.9			
250 / 9.75		4 / 58.0			
300 / 11.8		3.4 / 49.3	3.8 / 55.1		
400 / 16.0			3.6 / 52.2		
500 / 20.0				4 / 58.0	
600 / 23.4				3.4 / 49.3	
800 / 31.5					3 / 43.5

Test Sealing Bags

Diameter <i>mm / inch</i>	PDK 50/100 FLEX 1481003501 1481023800	PDK 60/120 FLEX 1481009501 1481009301	PDK 80/140 FLEX 1481024000 1481023900	PDK 140/170 FLEX 1401000400 1401000300	PDK 170/200 FLEX 1401000700 1401000600
	1.5 bar (21.75 psi)			0.5 bar (7.25 psi)	
70 / 2.8					
80 / 3.1					
90 / 3.5					
100 / 3.9					
125 / 5.0					
150 / 5.9					
200 / 7.8					
250 / 9.75					
300 / 11.8					
400 / 16.0					
500 / 20.0	1.2 / 17.4				
600 / 23.4	1.2 / 17.4	1.05 / 15.2			
800 / 31.5	1 / 14.5	0.9 / 13.1	0.5 / 7.25		
1000 / 39.4	0.55 / 8.0	0.8 / 11.6	0.5 / 7.25		
1200 / 47.2		0.75 / 10.9	0.5 / 7.25		
1400 / 55.1			0.5 / 7.25	0.2 / 2.9	
1700 / 67.0				0.2 / 2.9	0.2 / 2.9
2000 / 78.7				0.2 / 2.9	0.2 / 2.9

Vetter resistance charts

Transparency for your safety.

Since your products have to withstand thermal as well as chemical requirements, Vetter gives you detailed resistance information.

The data is based on laboratory tests, experience and are influenced by such factors as temperature, intensity, length of exposure etc.

These symbols indicate degrees of resistance:

- + resistant
- not-resistant
- o conditionally resistant
- k. A. no details

Please notice:

An expanding material reacts to chemicals a lot quicker than when it is in the non-operative condition. This means, the greater the expansion, the lower the chemical resistance. Resistance also depends on material thickness, which is attributable to diffusion. Because of that, our resistance list can only give you points of reference.

We will gladly provide material samples to users wishing to conduct their own chemical resistance tests.

Temperature resistance limits

Products	Cold resistance	Cold flexible	Heat resistance, long term	Heat resistance, short term
Mini Pipe Sealing Bags				
Mini Test Sealing Bags				
Pipe Sealing Bags 1.5 bar (21.75 psi)				
Pipe Sealing Bags 2.5 bar (36.25 psi)				
Test Sealing Bags 1.5 bar (21.75 psi)				
Test Sealing Bags 2.5 bar (36.25 psi)				
Bypass Bags 1.5 bar (21.75 psi)				
Pipe Sealing Bags CR	- 40 °C	- 20 °C	+ 90 °C	+ 115 °C
High Pressure Pipe Sealing Bags				
Egg profile Sealing Bags 1.5 bar (21.75 psi)				
Egg profile Testing Bags 1.5 bar (21.75 psi)				
Short packers				
Lateral packers				
Flexible packers				
Pipe Sealing Bags 0.5 bar (7.25 psi)				
Test Sealing Bags 0.5 bar (7.25 psi)				
Egg profile Sealing Bags 1 bar (14.5 psi)	- 40 °C	- 20 °C	+ 70 °C	+ 85 °C
Egg profile Testing Bags 1 bar (14.5 psi)				
Egg profile Bypass Bags 1 bar (14.5 psi)				
Rubber hoses	- 40 °C	- 30 °C	+ 90 °C	--
Controller: plastic, aluminium- and fitting	- 20 °C	--	+ 50 °C	--

Material list

Products	Material	Support material
Mini Pipe Sealing Bags		
High Pressure Pipe Sealing Bags		
Egg profile Sealing Bags 1.5 bar (21.75 psi)	NR	Nylon cord
Egg profile Sealing Bags 1.5 bar (21.75 psi)		
Short packers		
Lateral packers		
Flexible packers		
Mini Test Sealing Bags	NR	NR
Pipe Sealing Bags 1.5 bar (21.75 psi)		
Pipe Sealing Bags 2.5 bar (36.25 psi)		
Test Sealing Bags 1.5 bar (21.75 psi)	NR	Nylon cord/Aramid
Test Sealing Bags 2.5 bar (36.25 psi)		
Bypass Bags 1.5 bar (21.75 psi)		
Pipe Sealing Bags 0.5 bar (7.25 psi)		
Test Sealing Bags 0.5 bar (7.25 psi)		
Egg profile Sealing Bags 1 bar (14.5 psi)	CR/NR	Nylon cord/Aramid
Egg profile Testing Bags 1 bar (14.5 psi)		
Egg profile Bypass Bags 1 bar (14.5 psi)		
Pipe Sealing Bags CR	CR	Nylon cord
Inflation hoses and air supply hoses (outside)	EPDM	Polyester

Resistance charts

Description of material	CR	NR	EPDM	Description of material	CR	NR	EPDM
Aceton	o	+	–	Carbon dioxide	+	+	+
Acetylene	+	+	–	Carbon monooxide	+	+	+
Alum, watery	+	+	–	Copper sulphate	+	+	+
Aluminium chloride	+	+	+	Adhesive	+	+	+
Anilene	–	n. d.	n. d.	Methyl chloride	–	–	o
ASTM-oil 1	o	–	–	Sea water	+	+	n. d.
Petrol	o	–	n. d.	Mineral oil	+	–	–
Benzene	–	–	–	Sodium carbonate	+	+	–
Boric acid	+	+	+	Ozone	+	–	+
Bromine (moist)	–	–	–	Paraffin	+	–	–
Butyric acid	–	–	n. d.	Perchloric acid	o	n. d.	+
Chlorine gas (moist)	–	–	n. d.	Phenol (watery)	–	–	+
Chlorine (wet)	o	–	o	Phosphoric acid (concentrated)	–	–	–
Diesel fuel	o	–	–	Mercury	+	+	+
Iron chloride	+	+	+	Nitric acid (fuming)	–	–	–
Petroleum	o	–	–	Sulphur dioxide (dry)	–	o	n. d.
Acetic acid	o	+	o	Sulphur acid (50 %)	+	–	–
Fatty acid	+	o	–	Nitrogen	+	+	+
Formaldehyde	+	+	+	Carbon tetrachloride	–	–	–
Glucose	+	+	+	Animal fat	+	–	+
Heating oil	+	–	–	Toluene	–	–	–
Potassium chloride	+	+	+				
Calcium chloride	+	+	+				
Calcium nitrate	+	+	+				

+ resistant o conditionally resistant – not-resistant n. d. no details



A part of the IDEX Corporation.

Vetter GmbH is part of the international IDEX Corporation. This corporation invests in successful medium-sized companies in highly specialised markets. All members of the group have two things in common: strong technical orientation and innovative strength.

As our customer, you will benefit twice: on the one hand from our international practical knowledge and on the other hand from the intensive transfer of skills and know-how within the corporate group. This know-how contributes directly to the development of sophisticated and high-performing products.



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The all-round manufacturer for specialized industrial pneumatics

Owing to the intensive work for customers throughout the world, Vetter was able to create an extensive product range which has become indispensable in many fields. Vetter stands for specialized technical knowledge. Based on this we develop optimally tailored pneumatic solution for different application areas.

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- **Medical Tents**
- **Aircraft Lifting Bags**
- **Industry products**

All products as well as detailed information and the catalogue for downloading can be found on our internet website under

www.vetter.de

Place your trust in industrial pneumatics!

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