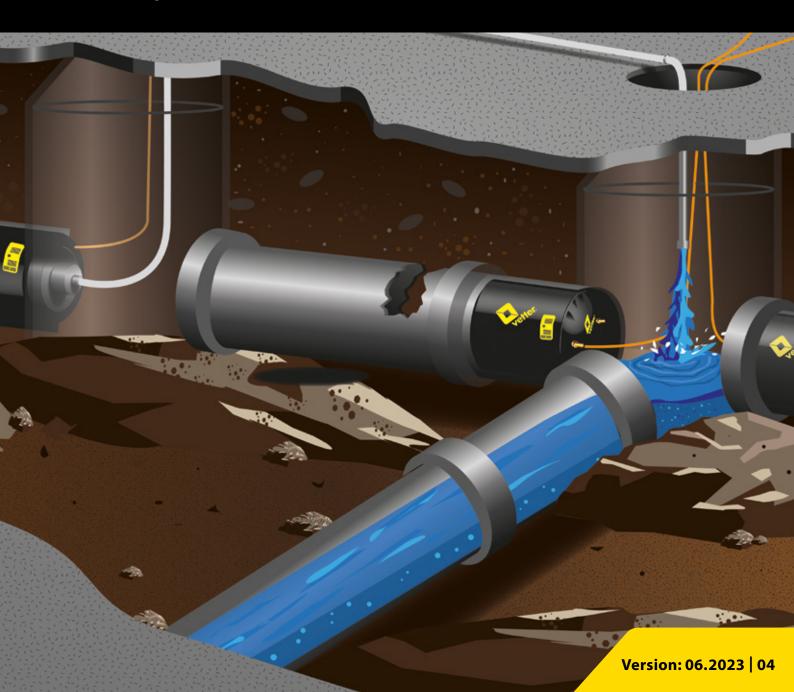
**Industrial Pneumatics.** 



# Inspection, Sealing & Rehabilitation Technology

Product catalogue



# **Special constructions**

**VETTER – Always one idea ahead!** 

- > Different materials
- Many sizes and shapes possible

- > Short delivery time
- > Numerous application areas

It is precisely in the industrial sector that you will often find tool applications especially tailored to individual requirements. In this respect such aspects as flexibility and versatility are in the forefront. Pneumatic constructions are developed and produced in cooperation with the customer. The customer has numerous possibilities available with respect to material, operating pressure, size, shape, inflation connection, resistance etc.



Pipe grip with internal expansion



**Well packer** 



Pipe grip with external expansion



Pipe Sealing Bag with scale



Gel packer with necking

### **Contents**

Round profiles		
Mini pipe sealing bags	Page	6
Mini test sealing bags	Page	7
Pipe sealing bags	Page	8
Test sealing bags	Page	10
Air pressure testing – Round profiles	Page	12
Cone bags	Page	14
Bypass bags	Page	16
Pipe sealing bags CR	Page	18
Accessories	Page	20
Flexible packers		
Lateral packers	Page	24
Flexible packers	Page	26
Counterpressure tables		
Counterpressure tables	Page	28
Vetter resistance list		
Temperature resistance, materials and resistance lists	Page	30

# **Industrial Pneumatics**

Variable, flexible, sealed tight

### We have been the leading supplier of industrial pneumatics for decades.

Our entire portfolio is developed and tested tailor-made for professional users. That is how we guarantee you the maximum functionality and safety of our products – even under extreme conditions. You can count on it.



#### Vetter knows you.

About 40 years of experience at the sewage market makes 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.



#### Vetter supports you.

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.



#### Vetter listens to you.

Together with you, we choose the right equipment for your operational scenario. Our worldwide dealer network is there for you – before, during and after your purchase. Vetter also offers you a test service, with which our products are tested regularly on site. This means you remain operational at all times.



#### You can trust Vetter.

Controlled manual work and high-quality raw materials are the basis for the success of our emergency pneumatics. Each product is tested individually before it is delivered, so that nothing goes wrong during its use. You can see this for yourself thanks to our inspection seal. By the way: almost all Vetter's rescue products are made in Germany.

# Mini pipe sealing bags

The small flexible ones



> Extremely short design

- > Very high expansion
- > Maintains counterpressure up to 1 bar (14.5 psi) > Simple handling

With their short design, mini pipe sealing bags are particularly suitable for sealing building connection lines. In addition, they are always used when flexibility or the ability to negotiate bends is required. This is frequently the case for the HVAC and plumbing sector as well as for oil and gasoline separation tests according to DIN 1999 T 100. Here you are always optimally equipped with Vetter's extensive range of mini pipe sealing bags. Also available with tire valve (as accessory).









With rounded tip: RDK 8/15 (Item number 1440018800) RDK 15/20 (Item number 1440018900)

### **Technical data**

#### Standard test counter-pressure of 10 mWC (14.5 psi)

Mini pipe sealing bags 2.5 bar/36.25 psi	Pipe diameter mm/inch	<b>Diameter</b> mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement approx.  litre/cu. ft.	Weight approx. kg/lbs
<b>RDK 2,5/4</b> 1440000101	<b>25–40</b> 1–1.6	<b>21</b> 0.9	115 4.5	<b>175</b> 7.0	<b>0.7</b> 0.02	<b>0.15</b> 0.33
<b>RDK 4/7</b> 1440000201	<b>40–70</b> 1.6–2.8	<b>37</b> 1.5	<b>155</b> 6.1	<b>215</b> 8.5	<b>2.5</b> 0.09	<b>0.20</b> 0.44
<b>RDK 7/10</b> 1440025900	<b>70–100</b> 2.8–4.0	<b>68</b> 2.7	<b>130</b> 5.1	<b>175</b> 7.0	<b>6</b> 0.21	<b>0.40</b> 0.88
<b>RDK 8/15</b> 1440018800	<b>80–150</b> 3.1–6	<b>72</b> 2.8	120 4.7	1 <b>70</b> 6.7	<b>11</b> 0.39	<b>0.40</b> 0.88
<b>RDK 10/15</b> 1440010500	100–150 4–6	<b>89</b> 3.5	<b>130</b> 5.1	1 <b>75</b> 7.0	<b>7</b> 0.25	<b>0.56</b> 1.23
RDK 12,5/20 1440010700	125–200 5–8	115 4.5	<b>150</b> 5.9	195 7.7	<b>30</b> 1.06	<b>0.76</b> 1.68
<b>RDK 15/20</b> 1440018900	150–200 6–8	<b>90</b> 3.5	<b>150</b> 5.9	<b>195</b> 7.7	13 0.46	<b>0.60</b> 1.32
<b>RDK 15/30</b> 1440010600	<b>150–300</b> 6–12	<b>145</b> 5.7	<b>200</b> 8.0	<b>245</b> 9.7	<b>54</b> 1.91	<b>1.73</b> 3.81

# **Mini test sealing bags**

The small ones with duct



> Extremely short design

- Very high expansion
- > Maintains counterpressure up to 1 bar (14.5 psi) > Valve extension for better handling

Vetter's mini test sealing bags are the right choice for the inspection, maintenance or cleaning of pipes or ducts as well as for leak tests. The bags with 2.5 bar (36.25 psi) are great for testing, sealing, bypassing and diverting profiles up to 300 mm (12 inch).





### **Technical data**

#### Standard test counter-pressure of 10 mWC (14.5 psi)

Mini test sealing bags 2.5 bar/36.25 psi	Opening	Pipe diameter mm/inch	<b>Diameter</b> mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement approx.  litre/cu. ft.	Weight approx. kg/lbs
PDK 4/7 1441000701	1 x 4 mm 1 x 0.16"	<b>40–70</b> 1.6–2.8	<b>37</b> 1.5	<b>155</b> 6.1	<b>250</b> 9.8	<b>3.5</b> 0.12	<b>0.4</b> 0.9
PDK 7/10 1441043900	1/2"	<b>70–100</b> 2.8–4	<b>68</b> 2.7	<b>190</b> 7.5	<b>340</b> 13.4	<b>6.0</b> 0.21	<b>0.4</b> 0.9
PDK 10/15 1441035400	1/2"	100–150 4–6	<b>90</b> 3.5	150 6	<b>300</b> * 11.8*	<b>2</b> 0.07	1 2.2
PDK 15/20 1441035200	1/2"	150–200 6–8	<b>145</b> 5.7	1 <b>95</b> 7.7	<b>345</b> * 13.6*	<b>12</b> 0.42	<b>2.5</b> 5.5
PDK 20/30 1441035300	1"	<b>200–300</b> 8–12	185 7.2	<b>250</b> 9.8	<b>410</b> * 16.1*	<b>18</b> 0.64	<b>4.5</b> 9.9

\*including valve extension

# Pipe sealing bags

#### The classic products



- > Large product range
- > Only 3 sizes from 100-1,000 mm (4-40 inch)
- > Very flexible due to the material
- > Simple handling since light and short

Vetter pipe sealing bags close drainage channels quickly and safely. A special feature: The user can freely adjust the contact pressure on the pipe wall from 0.5 to 2.5 bar (7.25–36.25 psi). Areas of application include repair, inspection, cleaning and maintenance of sewer pipes. But the bags also efficiently and reliably prevent the backflow of wastewater in the event of pipe bursts or floods. With these versatile applications, professionals in many industries trust pipe sealing bags from Vetter. These include, for example, road construction and civil engineering companies, sewer renovation companies, water associations and the manufacturing industry.

By the way: Vetter pipe sealing bags are perfect for leaktightness testing according to DIN EN 1610.





### **Technical data**

RDK 2.5 bar – test counter-pressure of 10 mWC (14.5 psi), RDK 1.5 bar – test counter-pressure of 5 mWC (7.25 psi), RDK 0.5 bar – test counter-pressure 2 mWC (2.9 psi)

Pipe Sealing Bag	s	Pipe diameter mm/inch	Diameter  mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement approx.  litre/cu. ft.	Weight approx.
<b>RDK 2.5/4</b> 1440000101	2.5 bar 36.25 psi	<b>25–40</b> 1–1.6	<b>21</b> 0.9	115 4.5	<b>175</b> 7.0	<b>0.7</b> 0.02	<b>0.15</b> 0.33
<b>RDK 4/7</b> 1440000201	2.5 bar 36.25 psi	<b>40–70</b> 1.6–2.8	<b>37</b> 1.5	<b>155</b> 6.1	<b>215</b> 8.8	<b>2.5</b> 0.09	<b>0.2</b> 0.44
<b>RDK 7/15</b> 1440000301	2.5 bar 36.25 psi	<b>70–150</b> 2.8–6	<b>68</b> 2.7	<b>300</b> 12	<b>345</b> 13.6	13.3 0.47	<b>0.5</b> 1.1
<b>RDK 10/20</b> 1440011700	2.5 bar 36.25 psi	100–200 4–8	<b>90</b> 3.5	<b>250</b> 9.8	<b>295</b> 11.6	<b>25.0</b> 0.9	<b>0.6</b> 1.3
RDK 15/30 1440000601	2.5 bar 36.25 psi	150–300 6–12	<b>145</b> 5.7	<b>350</b> 13.8	<b>395</b> 15.6	<b>70.0</b> 2.5	<b>1.4</b> 3.1
<b>RDK 20/40</b> 1440020100	2.5 bar 36.25 psi	<b>200–400</b> 8–16	<b>195</b> 7.7	<b>650</b> 25.6	<b>700</b> 27.3	<b>224</b> 7.9	<b>2.8</b> 6.2
<b>RDK 20/50</b> 1440016700	2.5 bar 36.25 psi	<b>200–500</b> 8–20	<b>195</b> 7.7	<b>750</b> 29.6	<b>795</b> 31	<b>329</b> 11.6	<b>4.2</b> 9.3
<b>RDK 30/60</b> 1440000801	2.5 bar 36.25 psi	<b>300–600</b> 12–24	<b>295</b> 11.6	<b>735</b> 28.9	<b>780</b> 30.7	<b>507.5</b> 17.9	<b>7.4</b> 16.3
<b>RDK 50/100</b> 1440028200	2.5 bar 36.25 psi	<b>500–1,000</b> 19.7–40	<b>450</b> 17.7	<b>1,110</b> 43.7	<b>1,155</b> 45.6	<b>1,525</b> 53.8	<b>23.7</b> 37.9
<b>RDK 60/120*</b> 1480001901	1.5 bar 21.75 psi	600–1,200 24–48	580 22.8	1 <b>,320</b> 52.0	<b>1,365</b> 53.7	<b>2,475</b> 87.4	<b>27</b> 59.5
RDK 80/140* 1480006000	1.5 bar 21.75 psi	800 <b>–1,400</b> 32–56	<b>785</b> 30.9	<b>1,810</b> 71.3	<b>1,855</b> 73	<b>3,125</b> 110.3	<b>55</b> 121.3
RDK 140/170*** 1400000300	0.5 bar 7.25 psi	1,400–1,700 56–67	1,350 53.2	1,900 74.8	<b>2,150</b> 84.7	<b>8,700</b> 307.1	<b>55</b> 121.3
<b>RDK 170/200***</b> 1400000100	0.5 bar 7.25 psi	1,700–2,000 67–80	1,620 63.8	<b>1,900</b> 74.8	<b>2,300</b> 90.6	<b>9,000</b> 317.7	<b>59</b> 130.1

\*with 2 compressed air supplies | \*\*with claw coupling. Accessories according to air pressure 0.5 bar (7.25 psi)

Note: Vetter's oil resistant CR version of the sealing bags is also available. See page 18.

# **Test sealing bags**

#### The testers

40-2,000 mm 1.6-80 inch

- > Lighter than test bag with inner tube
- > Only 3 sizes from 100-1,000 mm (4-40 inch)
- > Flexible, robust design
- For tests according to DIN EN 1610

The extremely robust Vetter test sealing bags combine three functions in one bag: They seal, facilitate testing with water or air and can used for bypassing or to divert. The inner hoses also make the bags more flexible than comparable bags with inner tubes. These properties enable you to adapt the test bags flexibly to the most varied pipe materials. Small unevenness is also compensated by the bags.

#### The areas of application include:

- > Diversion of waste water from leaking sewers
- > Damming and metered drainage of liquids
- > Tightness tests according to DIN EN 1610 with air or water
- > Control of pipeline sections

The test bags are equipped with one or more filling coupling(s) and retaining lugs, depending on the type of bag. The connections with male threads allow a free choice of accessories. The size of the connections depends on the type of bag.



Air pressure test



### **Technical data**

PDK 2.5 bar – test counter-pressure of 10 mWC (14.5 psi), PDK 1.5 bar – test counter-pressure of 5 mWC (7.25 psi), PDK 0.5 bar – test counter-pressure 2 mWC (2.9 psi)

Test sealing bags		Pipe diameter mm/inch	Diameter mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement approx.  litre/cu. ft.	Weight approx. kg/lbs
<b>PDK 4/7 FLEX</b> 1441000701 1 x 4 mm	2.5 bar 36.25 psi	<b>40–70</b> 1.6–2.8	<b>37</b> 1.5	<b>155</b> 6.1	<b>250</b> 9.8	<b>3.5</b> 0.12	<b>0.4</b> 0.88
<b>PDK 7/15 FLEX</b> 1441001201 1 x 1/2" OT	2.5 bar 36.25 psi	<b>70–150</b> 2.8–6	<b>68</b> 2.7	<b>350</b> 13.7	<b>395</b> 15.4	<b>14</b> 0.49	<b>1.7</b> 3.8
<b>PDK 10/20 FLEX</b> 1441018502 1 x 1" OT	2.5 bar 36.25 psi	100–200 4–8	<b>90</b> 3.5	<b>300</b> 11.8	<b>345</b> 13.6	<b>15</b> 0.53	<b>1.3</b> 2.9
<b>PDK 15/30 FLEX</b> 1441022800 1 x 2" OT	2.5 bar 36.25 psi	150–300 6–12	<b>145</b> 5.7	<b>350</b> 13.8	<b>395</b> 15.6	<b>45</b> 1.6	<b>3.4</b> 7.5
<b>PDK 20/40 FLEX</b> 1441018600 1 x 2" OT	2.5 bar 36.25 psi	<b>200–400</b> 8–16	1 <b>95</b> 7.7	<b>640</b> 25.0	<b>685</b> 26.7	<b>225</b> 7.9	<b>8.6</b> 19.0
<b>PDK 20/50 FLEX</b> 1441031200 1 x 2" OT	2.5 bar 36.25 psi	<b>200–500</b> 8–20	1 <b>85</b> 7.3	<b>750</b> 29.5	<b>795</b> 31.3	<b>237–333</b> 8.37–11.8	<b>7–9</b> 15.4–19.8
<b>PDK 30/60 FLEX</b> 1441018701 1 x 2" OT	2.5 bar 36.25 psi	<b>300–600</b> 12–24	<b>295</b> 11.6	<b>735</b> 28.9	<b>815</b> 32.1	<b>454–471</b> 16.03–16.6	11–12 24.3–26.5
<b>PDK 50/100 FLEX</b> 1481003501 1 x 2" OT	1.5 bar 21.75 psi	<b>500–1,000</b> 20–40	<b>450</b> 17.7	<b>1,110</b> 43.7	<b>1,155</b> 45.6	<b>1,475–1,525</b> 52.1–53.8	<b>27–36</b> 59.5–79.4
<b>PDK 60/120 FLEX</b> 1481009501 1 x 2" OT	1.5 bar 21.75 psi	600 <b>–1,200</b> 24–48	<b>580</b> 22.8	<b>1,320</b> 52	<b>1,365</b> 53.7	2,425–2,450 85.6–86.5	<b>35–42</b> 77.2–92.6
<b>PDK 80/140 FLEX</b> 1481024000 1 x 2" OT	1.5 bar 21.75 psi	800–1,400 32–56	<b>785</b> 30.9	<b>1,810</b> 71.3	<b>1,855</b> 73.0	<b>3,075–3,100</b> 108.5–109.4	<b>55–69</b> 121.3–152.2
PDK 140/170 FLEX 1401000400 1 x 2" OT	0.5 bar 7.25 psi	1,400–1,700 56–67	<b>1,350</b> 53.2	1,900 74.8	<b>2,150</b> 84.7	<b>8,670–8,685</b> 306.1–306.6	<b>62.5–70</b> 137.8–154.4
<b>PDK 170/200 FLEX</b> 1401000700 1 x 2" OT	0.5 bar 7.25 psi	1,700-2,000 67-80	1,620 63.8	<b>1,900</b> 74.8	<b>2,300</b> 90.6	<b>8,775–8,888</b> 309.8–313.8	<b>64.5–70</b> 142.2–154.4

With one RDK and one PDK air pressure tests can be performed. For water pressure tests two PDK but no RDK are needed.

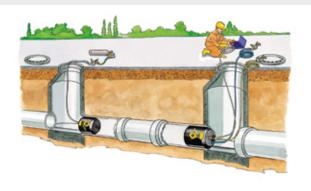
# Air pressure test – Round profiles

# Sets 2.5 bar (36.25 psi) + Sets 1.5 bar (21.75 psi)

For pipes 70–1,000 n	For pipes 70–1,000 mm (2.7–40 inch)			100- 200	150- 300	200- 400	200- 500	300- 600	500- 1,000
RDK 7/15	1440000301	<b>2.5 bar</b> 36.25 psi	1						
PDK 7/15 FLEX with duct 1 x 1/2" OT	1441001201	<b>2.5 bar</b> 36.25 psi	1						
RDK 10/20	1440011700	<b>2.5 bar</b> 36.25 psi		1					
<b>PDK 10/20</b> with duct 1 x 1" OT	1441018502	<b>2.5 bar</b> 36.25 psi		1					
RDK 15/30	1440000601	<b>2.5 bar</b> 36.25 psi			1				
<b>PDK 15/30</b> with duct 1 x 2" OT	1441022801	<b>2.5 bar</b> 36.25 psi			1				
RDK 20/40	1440020100	<b>2.5 bar</b> 36.25 psi				1			
<b>PDK 20/40</b> with duct 1 x 2" OT	1441018600	<b>2.5 bar</b> 36.25 psi				1			
RDK 20/50	1440016700	<b>2.5 bar</b> 36.25 psi					1		
<b>PDK 20/50</b> with duct 1 x 2" OT	1441031200	<b>2.5 bar</b> 36.25 psi					1		
RDK 30/60	1440000801	<b>2.5 bar</b> 36.25 psi						1	
<b>PDK 30/60</b> with duct 1 x 2" OT	1441018701	<b>2.5 bar</b> 36.25 psi						1	
RDK 50/100	1440028200	<b>2.5 bar</b> 36.25 psi							1
<b>PDK 50/100</b> with duct 1 x 2" OT	1481003501	<b>1.5 bar</b> 21.75 psi							1
Air test adapter									
Air test adapter 1/2" IT	1481023600		1						
Air test adapter 1" IT	1481023500			1					
Air test adapter 2" IT	1481023400				1	1	1	1	1
Accessories for inflation									
Inflation hose 10 m (32 ft.), yellow	1600029900	<b>2.5 bar</b> 36.25 psi	2	2	2	2	2	2	2
Single fitting controller	0250005701	<b>2.5 bar</b> 36.25 psi	1	1	1	1	1	1	1
Additional accessories as	an option								
Inflation and safety hose 10 m (32 ft.), yellow	1700009001	<b>0.3 bar</b> 4.35 psi	1	1	1	1	1	1	1
Measurement hose 10 m (32 ft.) (self-monitoring)	1700010301	<b>0.3 bar</b> 4.35 psi	1	1	1	1	1	1	1

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

For pipes 600–2,000 mm (2		600- 1,200	800- 1,400	1,400– 1,700	1,700- 2,000	
RDK 60/120	1480001901	<b>1.5 bar</b> 21.75 psi	1			
<b>PDK 60/120</b> with duct 1 x 2" OT	1481009501	<b>1.5 bar</b> 21.75 psi	1			
RDK 80/140	1480006000	<b>1.5 bar</b> 21.75 psi		1		
<b>PDK 80/140</b> with duct 1 x 2" OT	1481024000	<b>1.5 bar</b> 21.75 psi		1		
RDK 140/170	1400000300	<b>0.5 bar</b> 7.25 psi			1	
<b>PDK 140/170</b> with duct 1 x 2" OT	1401000400	<b>0.5 bar</b> 7.25 psi			1	
RDK 170/200	1400000100	<b>0.5 bar</b> 7.25 psi				1
<b>PDK 170/200</b> with duct 1 x 2" OT	1401000700	<b>0.5 bar</b> 7.25 psi				1
Air test adapter						
Air test adapter 2" IT	1481023400		1	1	1	
Accessories for inflation						
Inflation hose 10 m (32 ft.), yellow	1600029900	<b>1.5 bar</b> 21.75 psi	2	2		
Single fitting controller	0150005401	<b>1.5 bar</b> 21.75 psi	1	1		
Inflation hose 10 m (32 ft.), yellow	0050001801	<b>0.5 bar</b> 7.25 psi			4	4
Dual fitting controller	0050000801	<b>0.5 bar</b> 7.25 psi			2	2
Additional accessories as an op	tion					
Inflation and safety hose 10 m (32 ft.), yellow	1700009001	<b>0.3 bar</b> 4.35 psi	1	1	1	1
<b>Measurement hose</b> 10 m (32 ft.) (self monitoring)	1700010301	<b>0.3 bar</b> 4.35 psi	1	1	1	1



# **Cone bags**

Pipe sealing without compromises



- > Flexible use in almost all pipe profiles
- > Easy handling due to low weight
- > Secure closure of all pipelines
- → Available in three sizes from 250–1,600 mm

With the Vetter Cone bags you have a strong helper with you that reliably seals and, thanks to its conical shape, adapts to almost all profile types of round, egg, mouth, corner and kite profiles. This allows you to seal all types of pipelines even in difficult installation situations, allowing you to concentrate on your work on site.

Due to its low weight and compact transport format, the foldable barrier bag can be quickly positioned in the manhole by means of a drawbar eye. That is where it convinces with its extremely durable CR material in familiar Vetter quality.

Once positioned, it can be emptied quickly and easily without moving the bag in the pipe using a vacuum adapter and suction cup. You do not need a separate compressed air bottle and benefit from uncompromising quality "Made in Germany".



Additional with an adapter for working with quick-action coupling

# **Technical data**

Cone Bags	Pipe diameter  mm/inch	•		Weight approx. kg/lbs
<b>KK 250–600</b> 1420005600	<b>250–600</b> 9.8–23.6	<b>1,050</b> 41.3	<b>433.5</b> 15.31	<b>5</b> 11
<b>KK 400–1.000</b> 1420005700	<b>400–1,000</b> 15.7–39.4	<b>1,900</b> 74.8	<b>2,071.2</b> 73.14	13 28.7
KK 600-1.600 1420005000	600–1,600 23.6–63	<b>3,180</b> 125.2	<b>8,429.5</b> 297.69	<b>31.8</b> 70.1

#### Cone Bags:

Operating pressure: 1 bar (14.5 psi) Counterpressure: max. 0.5 bar (7.25 psi)



# **Bypass bags**

#### Simple diversion with large flow circuit

1 100-1,200 mm 4-48 inch

- > Perfect handling
- > Only 3 sizes from 100-1,200 mm (4-48 inch)
- Very light due to PE core
- > Exchangeable sleeve

With bypass bags from Vetter, you can selectively drain off wastewater in front of a damaged area and return it to the intact pipeline behind it. The largest possible flow opening makes this possible and the external thread allows free selection of the connection coupling.



#### **Correponding 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)

(Art. no. 1700012600)

### **Technical data**

#### Standard test counter-pressure of 5 mWC (7.25 psi)

Bypass bags 1.5 bar (21.75 psi)	Pipe diameter mm/inch	<b>Diameter</b> mm/inch	Cylinder length mm/inch	Total lenght mm/inch	Air requirement approx.  litre/cu. ft.	Weight approx. kg/lbs
PDK 10/20 PE-core 1481004401 1 x 2 1/2" OT	100–200 4–8	<b>97</b> 3.9	<b>485</b> 19.1	<b>635</b> 25.0	<b>27</b> 0.95	<b>2.2</b> 4.9
PDK 20/50 PE-core 1481005001 1 x 4" OT	<b>200–500</b> 8–20	195 7.7	<b>550</b> 21.7	<b>700</b> * 27.6*	<b>143</b> 5.0	<b>7</b> 15.4
PDK 50/120 PE-core 1481008000 1 x 4" OT	<b>500–1,200</b> 20–48	<b>450</b> 17.7	<b>940</b> 37	1,070* 42.1*	<b>1,420</b> 50.1	<b>36.8</b> 81.1

\*including valve extension.

#### PDK 10/20 and PDK 20/50

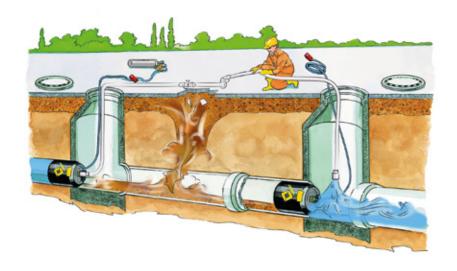


For sizes PDK 10/20 and PDK 20/50, the bypass adapters are fastened to the PE core with screws.

#### **PDK 50/120**



The bypass bag PDK 50/120 have the feedthroughs (also with external thread) directly in the PE core.



## Pipe sealing bags CR

The oil resistant alternative to the classics



- Great handling (length/weight)
- Very flexible application

- > Optionally with integrated hose
- > Excellent oil and chemical resistance

CR pipe sealing bags from Vetter are made of chloroprene rubber. This makes them significantly more resistant to mineral or heating oil than our classic pipe sealing bags made of natural rubber.

The CR pipe sealing bags are also available with an integrated filling hose as an option.



### **Technical data**

RDK 2.5 bar (36.25 psi) – test counter-pressure 10 mWC (14.5 psi), RDK 1.5 bar (21.75 psi) – test counter-pressure 5 mWC (7.25 psi)

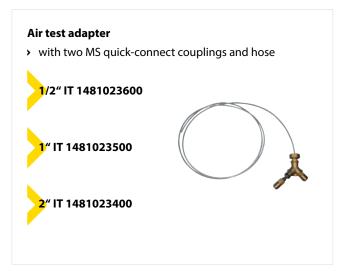
Pipe Sealing Bags CR		Pipe diameter mm/inch	<b>Diameter</b> mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement approx.  litre/cu. ft.	Weight approx. kg/lbs
<b>RDK 4/7</b> 1440027300	2.5 bar 36.25 psi	<b>40–70</b> 1.6–2.8	<b>37</b> 1.5	<b>155</b> 6.1	215 8.8	<b>2.5</b> 0.09	<b>0.2</b> 0.44
<b>RDK 7/15</b> 1440008100	2.5 bar 36.25 psi	<b>70–150</b> 3–6	<b>68</b> 2.7	<b>300</b> 11.8	<b>345</b> 13.4	<b>14</b> 0.5	<b>0.6</b> 1.3
RDK 10/20 1440024300	2.5 bar 36.25 psi	100–200 3.9–7.9	<b>90</b> 3.5	<b>250</b> 9.84	<b>295</b> 11.61	<b>25</b> 0.9	1.1 2.4
RDK 15/30 1440008000	2.5 bar 36.25 psi	<b>150–300</b> 6–12	<b>145</b> 5.7	<b>350</b> 13.78	<b>395</b> 15.55	<b>80</b> 2.8	<b>2.5</b> 5.5
<b>RDK 20/40</b> 1440027100	2.5 bar 36.25 psi	<b>200–400</b> 7.9–15.7	195 7.7	<b>650</b> 25.6	<b>700</b> 27.6	<b>224</b> 8.8	<b>3.4</b> 7.5
RDK 30/60 1440007900	2.5 bar 36.25 psi	<b>300–600</b> 12–24	<b>295</b> 11.6	<b>735</b> 29	<b>780</b> 30.4	<b>508</b> 18	<b>7.3</b> 16.1
RDK 60/120 1480004800	1.5 bar 21.75 psi	600–1,200 24–48	<b>580</b> 22.8	1,320 52	1,365 53.7	<b>2,475</b> 87.4	<b>27</b> 59.6

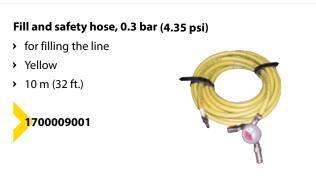
Additional sizes can be supplied on request.

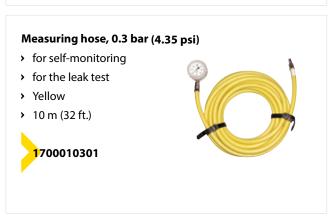


# Accessories – Air pressure test and water pressure testing

### Air pressure test







### **Water pressure testing**







# **Accessories – inflating the bag**

### 0.5 bar (7.25 psi)

#### Inflation hose, 0.5 bar (7.25 psi)

> Yellow



5 m (16.4 ft.) 0050000701 | 10 m (32 ft.) 0050001801

#### Dual controller, 0.5 bar (7.25 psi)

- > Fitting controller
- claw coupling





## 1 bar (14.5 psi)

#### Inflation hose, 1 bar (14.5 psi)

> Yellow



m (16.4 ft.) 1600030000 | 10 m (32 ft.) 1600029900

#### Simple controller, 1 bar (14.5 psi)

> Fitting controller





### 1.5 bar (21.75 psi)

#### Inflation hose, 1.5 bar (21.75 psi)

> Yellow



5 m (16.4 ft.) 1600030000 | 10 m (32 ft.) 1600029900

#### Inflation and safety hose, 1.5 bar (21.75 psi)

- > Yellow
- > 10 m (32 ft.)





#### Simple controller, 1.5 bar (21.75 psi)

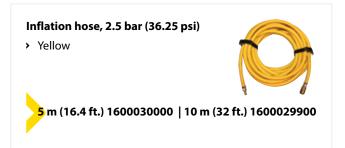
> Fitting controller





# **Accessories – inflating the bag**

### 2.5 bar (36.25 psi)

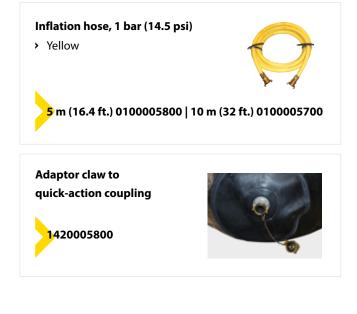


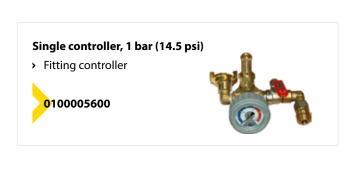






### **Cone bag accessories**





# **Accessories – inflating the bag**

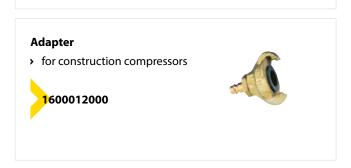
### **Accessories for inflating**











# **Lateral packers**

The intelligent solution that saves money



- > High flexibility
- > Robust cone heads

Vetter lateral packers are the optimal solution for the rehabilitation of pipes with smaller diameters, as they are often used for building connections. The flexible construction facilitates good sliding qualities, bend flexibility and practical handling which reduces your working hours. The open safety coupling with a lock pin prevents unwanted decoupling. In addition, the entire packer has a very robust design.

The lateral packers are available in three sizes from 70 to 200 mm (2.8–8 inch) and lengths up 3 m (118.1 inch).







Sturdy spherical heads

# **Technical data**

Lateral packers 2.5 bar/36.25 psi	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	Weight approx.
<b>Typ 70–110</b> 1491019600	<b>70–110</b> 2.8–4.3	<b>1,000</b> 39	<b>800</b> 31.5	<b>890</b> 35	<b>51</b> 2	1.1 2.4
<b>Typ 70–110</b> 1491067000	<b>70–110</b> 2.8–4.3	<b>1,500</b> 59.1	1,300 51.2	<b>1,390</b> 54.7	<b>51</b> 2	<b>1.6</b> 3.5
<b>Typ 70–110</b> 1491019800	<b>70–110</b> 2.8–4.3	<b>2,000</b> 79	<b>1,800</b> 70.9	<b>1,890</b> 74.5	<b>51</b> 2	2 4.4
<b>Typ 70–110</b> 1491067100	<b>70–110</b> 2.8–4.3	<b>2,500</b> 98.4	<b>2,300</b> 90.6	<b>2,390</b> 94.1	<b>51</b> 2	<b>2.4</b> 5.3
<b>Typ 70–110</b> 1491020000	<b>70–110</b> 2.8–4.3	<b>3,000</b> 118	<b>2,800</b> 110.2	<b>2,890</b> 114	<b>51</b> 2	<b>2.8</b> 6.2
<b>Typ 100–150</b> 1491031500	100–150 4–6	1,000 39	<b>750</b> 30	<b>840</b> 33	<b>66</b> 2.6	1.1 2.4
<b>Typ 100–150</b> 1491067200	<b>100–150</b> 4–6	<b>1,500</b> 59.1	<b>1,250</b> 49.2	<b>1,340</b> 52.8	<b>66</b> 2.6	<b>1.7</b> 3.7
<b>Typ 100–150</b> 1491018200	<b>100–150</b> 4–6	<b>2,000</b> 79	<b>1,750</b> 69	<b>1,840</b> 72	<b>66</b> 2.6	<b>2.2</b> 4.9
<b>Typ 100–150</b> 1491067300	100–150 4–6	<b>2,500</b> 98.4	<b>2,250</b> 88.6	<b>2,340</b> 92.1	<b>66</b> 2.6	<b>2.7</b> 6
<b>Typ 100–150</b> 1491018300	<b>100–150</b> 4–6	<b>3,000</b> 118	<b>2,750</b> 108	<b>2,840</b> 112	<b>66</b> 2.6	<b>3.3</b> 7.3
<b>Typ 150–200</b> 1491019100	150–200 6–8	<b>1,000</b> 39	<b>720</b> 28	<b>800</b> 32	<b>92</b> 3.6	<b>1.6</b> 3.5
<b>Typ 150–200</b> 1491067400	<b>150–200</b> 6–8	<b>1,500</b> 59.1	1,220 48	<b>1,300</b> 51.2	<b>92</b> 3.6	<b>2.3</b> 5.1
<b>Typ 150–200</b> 1491018700	150–200 6–8	<b>2,000</b> 79	1, <b>720</b> 68	<b>1,800</b> 71	<b>92</b> 3.6	<b>3</b> 6.6
<b>Typ 150–200</b> 1491067500	150–200 6–8	<b>2,500</b> 98.4	<b>2,220</b> 87.4	<b>2,300</b> 90.6	<b>92</b> 3.6	<b>3.8</b> 8.4
<b>Typ 150–200</b> 1441013600	<b>150–200</b> 6–8	<b>3,000</b> 118	<b>2,720</b> 107	<b>2,800</b> 110	<b>92</b> 3.6	<b>4.5</b> 9.9

# Flexible packers

#### The adaptable solution



- > Stable running gear
- High flexibility

#### > Adjustable chassis

Vetter flexible packers are the really flexible solution for drain reconstruction. Its design allows you to easily guide the packer through a manhole and install it in the damaged pipe. This is ensured, for example, by the spherical chassis with a light spring effect. So problem-free gliding even over offsets is no problem. The wheels are set at a 120° angle. This makes it easy to control the packer. In addition, you can adjust the chassis individually to any pipe diameter.

Flexible packers from Vetter are made of a rubber jacket that is vulcanised onto metal heads. The interior tube lets the water flow off during the renovation work and the open safety coupling with safety pin prevents unintentional disconnection.

Vetter flexible packers are available in four sizes for pipe diameters from 150 to 1,200 mm (6–47 inch) and in lengths of up to 3 m (118.1 inch).





Full flexibility and guaranteed stability



flow-through openings of the flex packers

### **Technical data**

- > Type 150 250 through-flow openings of 1"
- > Type 200 300 and Type 300 400 through-flow openings of 2"
- > From Type 400 600 through-flow openings of 3"

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	
<b>Typ 150–250</b> 1491045901	2.5 bar 36.25 psi	150–250 6–10	1,000 39.4	<b>680</b> 26.8	<b>780</b> 30.8	105 4.1	1,130 44.5	<b>6.4</b> 14.1
<b>Typ 150–250</b> 1491066300	2.5 bar 36.25 psi	<b>150–250</b> 6–10	1,500 59.1	<b>1,180</b> 46.5	<b>1,280</b> 50.4	105 4.1	1,630 64.2	8 17.6
<b>Typ 150–250</b> 1491046001	2.5 bar 36.25 psi	<b>150–250</b> 6–10	2,000 78.7	<b>1,680</b> 66.1	<b>1,780</b> 70	105 4.1	<b>2,130</b> 83.9	10.0 22
<b>Typ 150–250</b> 1491066400	2.5 bar 36.25 ps	150–250 6–10	<b>2,500</b> 98.4	<b>2,180</b> 85.8	<b>2,280</b> 89.8	105 4.1	<b>2,630</b> 103.5	12 26.5
<b>Typ 150–250</b> 1491046101	2.5 bar 36.25 psi	150–250 6–10	3,000 118.1	<b>2,680</b> 105.5	<b>2,780</b> 109.4	105 4.1	<b>3,130</b> 123.2	14.0 30.9
<b>Typ 200–300</b> 1491044801	1.5 bar 21.75 psi	<b>200–300</b> 8–12	1,000 39.4	<b>590</b> 23.2	690 27.2	1 <b>70</b> 6.7	1,130 44.5	10 22.1
<b>Typ 200–300</b> 1491066500	1.5 bar 21.75 psi	<b>200–300</b> 8–12	<b>1,500</b> 59.1	<b>1,090</b> 42.91	1,190 46.9	1 <b>70</b> 6.7	1,630 64.2	12.5 27.6
<b>Typ 200–300</b> 1491046301	1.5 bar 21.75 psi	<b>200–300</b> 8–12	<b>2,000</b> 78.7	1,590 62.5	1,690 66.6	1 <b>70</b> 6.7	<b>2,130</b> 83.9	15 33.1
<b>Typ 200–300</b> 1491066600	1.5 bar 21.75 psi	<b>200–300</b> 8–12	<b>2,500</b> 98.4	<b>2,090</b> 82.3	<b>2,190</b> 86.2	1 <b>70</b> 6.7	<b>2,630</b> 103.5	1 <b>7.5</b> 38.6
<b>Typ 200–300</b> 1491046401	1.5 bar 21.75 psi	<b>200–300</b> 8–12	<b>3,000</b> 118	<b>2,590</b> 102	<b>2,690</b> 106	1 <b>70</b> 6.7	<b>3,130</b> 123.3	<b>20</b> 44.1
<b>Typ 300–400</b> 1491044901	1.5 bar 21.75 psi	<b>300–400</b> 12–16	1,000 39.4	560 22	<b>660</b> 26	<b>230</b> 9	1,170 46.1	13.2 29.1
<b>Typ 300–400</b> 1491066700	1.5 bar 21.75 psi	<b>300–400</b> 12–16	<b>1,500</b> 59.1	<b>1,060</b> 41.7	<b>1,160</b> 45.7	<b>230</b> 9	<b>1,670</b> 65.7	16.5 36.4
<b>Typ 300–400</b> 1491046601	1.5 bar 21.75 psi	<b>300–400</b> 12–16	<b>2,000</b> 78.7	<b>1,560</b> 61.5	1,660 65.5	<b>230</b> 9	<b>2,170</b> 85.5	1 <b>9.4</b> 42.8
<b>Typ 300–400</b> 1491066800	1.5 bar 21.75 psi	<b>300–400</b> 12–16	<b>2,500</b> 98.4	<b>2,060</b> 81.1	<b>2,160</b> 85.0	<b>230</b> 9	<b>2,670</b> 105.1	<b>23</b> 50.7
<b>Typ 300–400</b> 1491046701	1.5 bar 21.75 psi	<b>300–400</b> 12–16	<b>3,000</b> 118	<b>2,560</b> 100.8	<b>2,660</b> 104.7	<b>230</b> 9	<b>3,170</b> 124.8	<b>26</b> 57.3
<b>Typ 400–600</b> 1491045701	1.5 bar 21.75 psi	<b>400–600</b> 16–24	<b>1,500</b> 59.1	<b>980</b> 38.6	1,240 48.8	<b>350</b> 13.8	1,670 65.7	<b>26.1</b> 57.6
<b>Typ 400–600</b> 1491059500	1.5 bar 21.75 psi	<b>400–600</b> 16–24	2,000 78.7	1,400 55.1	1,450 57	350 13.8	2,170 85.4	29 63.9
<b>Typ 600–800</b> 1491059001	1 bar 14.50 psi	600–800 24–31.5	<b>1,500</b> 59.1	<b>700</b> 27.6	<b>900</b> 35.4	<b>400</b> 15.7	<b>1,670</b> 65.7	<b>29</b> 63.9
<b>Typ 800–1.000</b> 1491058601	1 bar 14.50 psi	<b>800–1,000</b> 31.5–39.4	1,500 59.1	<b>520</b> 20.5	<b>760</b> 29.9	<b>550</b> 21.7	<b>1,670</b> 65.7	<b>50</b> 110.2
<b>Typ 1.000–1.200</b> 1491059600	1 bar 14.50 psi	1,000–1,200 39.4–47.2	<b>2,200</b> 86.6	1,000 39.4	<b>1,200</b> 47.2	<b>550</b> 21.7	<b>2,370</b> 93.3	<b>73</b> 160.9

# **Counterpressure tables**

### Measured in dry metal pipe

	•		•	
Mini	nıne	CAAI	ına	nads
		<b>3</b> Cu		

Diameter mm/inch	<b>RDK 2.5/4</b> 1440000101	<b>RDK 4/7</b> 1440000201	<b>RDK 7/10</b> 1440025900	<b>RDK 8/15</b> 1440018800	<b>RDK 10/15</b> 1440010500	<b>RDK 12.5/20</b> 1440010700	<b>RDK 15/20</b> 1440018900	<b>RDK 15/30</b> 1440010600
				2.5 bar (3	6.25 psi)			
25/1	1.6/23.2							
40/1.6	1.4/20.3	1.65/23.9						
50/2		1.5/21.8						
70/2.8		1.25/18.1	1.5/21.8					
80/3.1			1.3/18.9	1.35/19.6				
90/3.5			1.3/18.9	1.25/18.1				
100/4			1.3/18.9	1.25/18.1	1.4/20.3			
125/5				1.25/18.1	1.35/19.6		1.4/20.3	
150/6				1.05/15.2	1.3/19.6	1.15/16.7	1.3/18.9	1.35/19.6
200/8						1.1/15.9	1.25/18.1	1.3/18.9
250/10								1.25/18.1
300/12								1.25/18.1

### Pipe sealing bags

<b>Diameter</b> mm/inch	<b>RDK 7/15</b> 144000301 1440008100 (CR)	<b>RDK 10/20</b> 1440011700	<b>RDK 15/30</b> 144000601 1440008000 (CR)	<b>RDK 20/40</b> 1440020100	<b>RDK 20/50</b> 1440016700	<b>RDK 30/60</b> 1440000801 1440007900 (CR)	<b>RDK 50/100</b> 1440028200
				2.5 bar (36.25 psi)			
70/2.8	2.1/30.5						
80/3.1	2/29						
90/3.5	1.8/26.1						
100/4	<b>1.7/</b> 24.7	2.4/35					
125/5	1.6/23.2	2.0/29					
150/6	1.1/16	1.85/26.8	2.4/35				
200/8		1.3/18.9	2.1/30.5	2.3/33.4	2.2/31.9		
250/10			1.5/21.8	2.3/33.4	<b>2/</b> 29		
300/12			1.0/14.5	2.1/30.5	<b>2/</b> 29	2.3/33.4	
400/16				1.9/28	1.9/28	2/29	
500/20					<b>1.7</b> /24.7	1.9/28	2.05/29.7
600/24						1.6/23.2	1.95/28.3
800/32							1.6/23.2
1,000/40							1.2/17.4

<b>Diameter</b> mm/inch	<b>RDK 60/120</b> 1480001901 1480004800 (CR)	<b>RDK 80/140</b> 1480006000
	1.5 bar (2	21.75 psi)
600/24	1.1/16	
800/32	0.95/13.8	0.5/7.3
1,000/40	0.85/12.3	0.5/7.3
1,200/48	0.75/10.9	0.5/7.3
1,400/56		<b>0.5/</b> 7.3

<b>Diameter</b> mm/inch	<b>RDK 140/170</b> 1400000300	<b>RDK 170/200</b> 1400000100
	0.5 bar (	7.25 psi)
500/20		
600/24		
800/32		
1,000/40		
1,200/48		
1,400/56	0.2/2.9	
1,700/67	0.2/2.9	0.2/2.9
2,000/80	0.2/2.9	0.2/2.9

### Mini test sealing bags

<b>Diameter</b> mm/inch	<b>PDK 4/7</b> 1441000701	<b>PDK 7/10</b> 1441043900	<b>PDK 10/15</b> 1441035400	<b>PDK 15/20</b> 1441035200	<b>PDK 20/30</b> 1441035300
		2.5 bar (36.25 psi)			
25/1					
40/1.6	1.8/26.1				
50/2	1.6/23.2				
70/2.8	1.3/18.9	1.3/18.9			
80/3.1		1.3/18.9			
90/3.5		1.3/18.9			
100/4		1.3/18.9	1.5/21.8		
125/5			1.25/18.1		
150/6			1.2/17.4	1.3/18.9	
200/8				1.2/17.4	1.25/18.1
250/10					1.25/18.1
300/12					1.25/18.1

All counter-pressure stated in bar and inch

# **Test sealing bags**

<b>Diameter</b> mm/inch	<b>PDK 4/7 FLEX</b> 1441000701	PDK 7/15 FLEX 1441001201	PDK 10/20 FLEX 1441018502	PDK 15/30 FLEX 1441022801	<b>PDK 20/40 FLEX</b> 1441018600	PDK 20/50 FLEX 1441031200	PDK 30/60 FLEX 1441018701
				2.5 bar (36.25 psi)			
40/1.6	1.3/18.9						
70/2.8	1.3/18.9	1.55/22.5					
80/3.1		1.75/25.4					
90/3.5		<b>1.7/</b> 24.7					
100/4		1.65/23.9	1.6/23.2				
125/5		1.5/21.8	1.5/21.8				
150/6		1.4/20.3	1.4/20.3	1.65/23.9			
200/8			1.45/21.0	1.6/23.2	1.45/21.0	2/29.0	
250/10				1.5/21.8	1.3/18.9	<b>1.7</b> /24.7	
300/12				1.3/18.9	1.35/19.6	1.65/23.9	1.6/23.2
400/16					1.3/19.6	1.5/21.8	1.65/23.9
500/20						1.35/19.6	1.4/20.3
600/24							1.3/18.9
800/32							
1,000/40							
1,200/48							
1,400/56							
1,700/67							
2,000/80							

<b>Diameter</b> mm/inch	<b>PDK 50/100 FLEX</b> 1481003501	<b>PDK 60/120 FLEX</b> 1481009501	<b>PDK 80/140 FLEX</b> 1481024000
		1.5 bar (21.75 psi)	
500/20	1.2/17.4		
600/24	1.2/17.4	1.05/15.2	
800/32	1/14.5	0.9/13.1	0.5/7.3
1,000/40	0.55/8.0	0.8/11.6	0.5/7.3
1,200/48		0.75/10.9	0.5/7.3
1,400/56			0.5/7.3
1,700/67			
2,000/80			

<b>Diameter</b> mm/inch	PDK 140/170 FLEX 1401000400	PDK 170/200 FLEX 1401000700
	0.5 bar (	7.25 psi)
500/20		
600/24		
800/32		
1,000/40		
1,200/48		
1,400/56	0.2/2.9	
1,700/67	0.2/2.9	0.2/2.9
2,000/80	0.2/2.9	0.2/2.9

### **Vetter resistance list**

#### **Convincing with transparency**

Please note: The information in our resistance list is based on laboratory tests and empirical values. A material reacts faster to chemicals under expansion than at rest. That means the greater the expansion, the lower the chemical resistance. In addition, the resistance also depends on the thickness of the material, which influences diffusion. Furthermore, other variable factors, such as temperature, intensity or exposure time, also have an influence on the durability.

The values given may therefore differ in the concrete application scenario and are to be understood here only as an indication. We are glad to provide material samples for your own investigations of the chemical resistance.

#### Key

- + resistant
- not resistant

o conditionally resistant n.d. no data

Temperature resist				
Products	Cold resistance	Cold flexible	Heat resistance, long term	
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 High Pressure Pipe Sealing Bags Test Sealing Bags for Gullies Protection Sleeve Lateral packers Flexible packers	–40°C	–20°C	+90°C	+115℃
Pipe Sealing Bags 0.5 bar (7.25 psi) Test Sealing Bags 0.5 bar (7.25 psi)	-40 °C -30 °C	−20 °C	+50 °C +70 °C	
Cone Bags 1 bar (14.5 psi)	−20 °C		+55 ℃	
Controller: Aluminium- and fitting	−20 °C			+55 °C
Rubber hoses	-40 °C	-30 °C	+90 °C	_

<b>Material list</b>		
Products	Material	Support material
Mini Pipe Sealing Bags High Pressure Pipe Sealing Bags Protection Sleeve Lateral packers Flexible packers	NR	Nylon cord
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) Test Sealing Bags 2.5 bar (36.25 psi) Bypass Bags 1.5 bar (21.75 psi)	NR	Nylon cord/Aramide
Pipe Sealing Bags 0.5 bar (7.25 psi) Test Sealing Bags 0.5 bar (7.25 psi)	CR/NR	Nylon cord/Aramide
Pipe Sealing Bags CR Cone Bags 1 bar (14.5 psi) Test Sealing Bags for Gullies	CR	Nylon cord
Inflation hoses and air supply hoses (outside)	EPDM	Polyester

We are glad to provide material samples for your own investigations of the chemical resistance.

Resistance list*			
Material designation	CR	NR	EPDM
Aceton	0	+	-
Acetylen	+	+	-
Alum, aqueous	+	+	-
Aluminium chloride	+	+	+
Aniline	-	n.d.	n.d.
ASTM oil 1	0	-	-
Petrol	o	-	n.d.
Benzene	-	-	-
Boracic acid	+	+	+
Bromine (moist)	-	-	-
Butytric acid	-	-	n.d.
Chlorine gas (moist)	_	_	n.d.
Chlorine, wet	0	-	0
Diesel fuel	0	-	_
Iron chloride	+	+	+
Petroleum	0	_	
Acetic acid	0	+	0
Fatty acids	+	0	-
Formaldehyde	+	+	+
Glucose	+	+	+
Heating oil	+	-	-
Potassium chloride	+	+	+
Calcium chloride	+	+	+
Calcium nitrate	+	+	+
Carbon dioxide	+	+	+
Carbon monoxide	+	+	+
Copper sulphate	+	+	+
Glue	+	+	+
Methyl chloride	-	-	0
Seawater	+	+	n.d.
Mineral oils	+	-	-
Sodium carbonate	+	+	-
Ozone	+	-	+
Paraffin	+	-	-
Perchloric acid	0	n.d.	+
Phenol (aqueous)	-	-	+
Phosphoric acid (concentrated)	-	-	-
Mercury	+	+	+
Nitric acid (fuming)	-	-	-
Sulphur dioxide (dry)	-	o	n.d.
Sulphuric acid (50%)	+	_	_
Nitrogen	+	+	+
Carbon tetrachloride	-	-	_
Animal fats	+	-	+
Toluene	T		T

<sup>\*</sup>Subject to change without notice |+ resistant | o conditionally resistant |- not resistant | n.d. no data

# **Notes**



### Part of the international IDEX Corporation

Vetter is part of the international IDEX Corporation. This company invests in successful medium-sized companies in highly specialised markets. All members of the group are characterized by their technical orientation and high innovative strength.

In the field of wastewater, Ipek GmbH is one of our sister companies with its innovative camera solutions. In addition to Vetter, the IDEX Rescue division includes some of the strongest fire and rescue brands, including the American manufacturer of rescue shears HURST – JAWS OF LIFE and the long-established German company LUKAS Hydraulik.

Our customers benefit twice: on the one hand from our international application knowledge and on the other from the intensive transfer of expertise within the group of companies. This expertise flows directly into the development of Vetter's well thought-out and powerful products.



idexcorp.com















### The complete provider for industry pneumatics

Aircraft Recovery

Vetter stands for sound technological knowledge and intensive cooperation with fire services throughout the world. Based on this, we develop high-quality pneumatic products that are tested in practice and are indispensable in many rescue areas and operational scenarios.

Rescue Products

Hazardous material program

Industrial pneumatic

Pneumatic tents and showers

Oil and water aspirators

Airshore

You will find al

You will find all our products, detailed information and catalogues to download on the internet at: **vetter.de** 

### Place your trust in industrial pneumatics!

We will be able to help you.

#### **Vetter GmbH**

A Unit of IDEX Corporation

Blatzheimer Str. 10–12 53909 Zülpich Germany

#### Sales

Tel: +49 (0) 22 52 / 30 08-0 Fax: +49 (0) 22 52 / 30 08-690 Email: vetter.info@idexcorp.com

### vetter.de