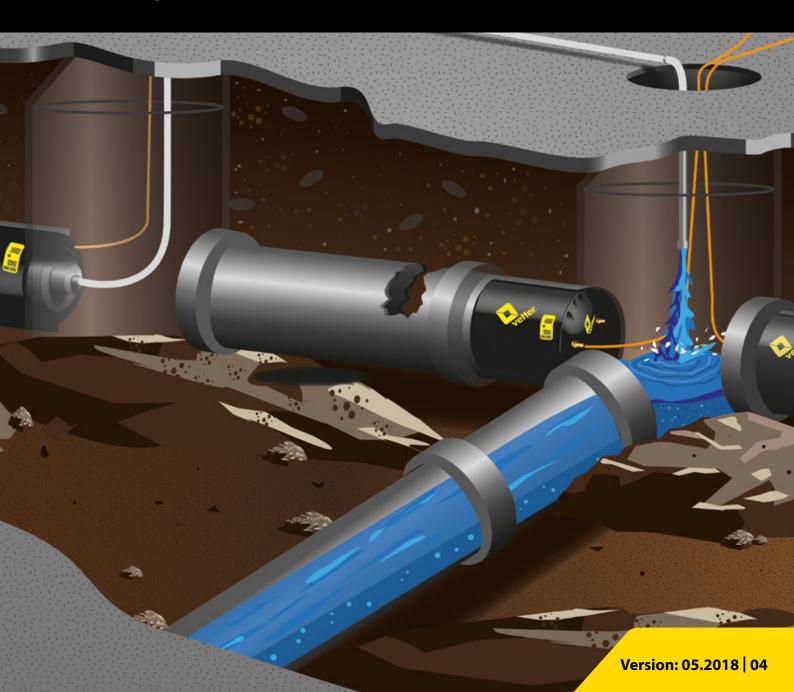
**Industrial Pneumatics.** 



# Inspection, Sealing & Rehabilitation Technology

Product catalogue



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# **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 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.



#### 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 select the equipment that before suits your operational scenarios. 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.

# **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 claw couplings

# **Technical data**

Cone Bags	Pipe diameter  mm/inch	<b>Length</b> <i>mm/inch</i>	Air requirement litre/cu.ft.	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	5 11
<b>KK 400–1.000</b> 1420005700	<b>400–1,000</b> 15.7–39.4	1 <b>,900</b> 74.8	<b>2,071.2</b> 73.14	13 28.7
<b>KK 600–1.600</b> 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

#### **Conical bags:**

Operating pressure: 1 bar (14.5 psi)

Safety factor: 2:1

Counterpressure: max. 0.5 bar (7.25 psi)



# 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.







#### Also available with tire valve



#### 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	Diameter  mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement 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	<b>115</b> 4.5	1 <b>75</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>0.2</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	1 <b>75</b> 7.0	<b>6</b> 0.21	<b>0.4</b> 0.88
<b>RDK 8/15</b> 1440018800	<b>80–150</b> 3.1–6	<b>72</b> 2.8	<b>120</b> 4.7	1 <b>70</b> 7.0	<b>11</b> 0.39	<b>0.4</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
<b>RDK 12,5/20</b> 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	195 7.7	13 0.46	<b>0.6</b> 1.32
<b>RDK 15/30</b> 1440010600	150–300 6–12	<b>145</b> 5.7	<b>200</b> 8.0	<b>245</b> 9.7	<b>54</b> 1.91	1. <b>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 litre/cu. ft.	Weight approx. kg/lbs
<b>PDK 4/7</b> 1441000701	2 x 4 mm 2 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> 2.7–4	<b>68</b> 2.7	190 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	<b>150</b> 5.9	<b>300</b> * 11.8*	2 0.07	<b>1</b> 2.2
PDK 15/20 1441035200	1/2"	150 <b>–</b> 200 5.9–8	<b>145</b> 5.7	195 7.7	<b>345</b> * 13.6*	12 0.42	<b>2.5</b> 5.5
PDK 20/30 1441035300	1"	<b>200–300</b> 8–12	<b>185</b> 7.2	<b>250</b> 9.8	<b>410</b> * 16.0*	<b>18</b> 0.64	<b>4.5</b> 9.9

<sup>\*</sup> 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 Bags		Pipe diameter mm/inch	Diameter  mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement litre/cu. ft.	Weight approx. kg/lbs
<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	1 <b>75</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	155 6.1	215 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>510</b> 20	<b>555</b> 21.9	<b>40.3</b> 1.4	<b>0.9</b> 2.0
<b>RDK 15/30</b> 1440000601	2.5 bar 36.25 psi	<b>150–300</b> 6–12	<b>145</b> 5.7	<b>460</b> 18.1	<b>505</b> 20	<b>87.5</b> 3.1	1. <b>7</b> 3.8
<b>RDK 20/40</b> 1440020100	2.5 bar 36.25 psi	<b>200–400</b> 8–16	195 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	195 7.7	<b>750</b> 29.3	<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
RDK 50/100 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
RDK 60/120 1480001901	1.5 bar 21.75 psi	600–1,200 24–48	<b>580</b> 22.8	1,320 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	<b>800–1,400</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	<b>1,350</b> 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	1,900 74.8	<b>2,300</b> 90.6	<b>9,000</b> 317.7	<b>59</b> 130.1

Note: Vetter's oil resistant CR version of the sealing bags is also available. See page 22.

# **Test sealing bags**

#### The testers

40-2,000 mm 2.7-80 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 be bypassed or diverted. 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.

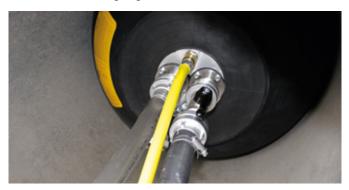




Compressed-air test



Front view test sealing bags



Water pressure testing

# **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	<b>Diameter</b> mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement litre/cu. ft.	Weight approx kg/lbs
PDK 4/7 FLEX 1441000701 2 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> 0.05	<b>1.7</b> 3.8
<b>PDK 10/20 FLEX</b> 1441018501 1 x 1" OT	2.5 bar 36.25 psi	100–200 4–8	<b>90</b> 3.5	<b>510</b> 20.0	<b>555</b> 21.9	<b>40.3</b> 1.4	2 4.4
<b>PDK 15/30 FLEX</b> 1441022701 2 x 1" OT 1441022800 1 x 2" OT	2.5 bar 36.25 psi	<b>150–300</b> 6–12	<b>145</b> 5.7	<b>460</b> 18.1	<b>505</b> 20.0	<b>87.5</b> 3.1	<b>6.2</b> 13.8
<b>PDK 20/40 FLEX</b> 1441040300 2 x 1" OT 1441018600 1 x 2" OT	2.5 bar 36.25 psi	<b>200–400</b> 8–16	195 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> 1441031100 2 x 1" OT 1441031200 1 x 2" OT	2.5 bar 36.25 psi	<b>200–500</b> 8–20	195 7.7	<b>750</b> 29.3	<b>795</b> 31.0	<b>237–333</b> 8.37–11.8	<b>7–9</b> 15.4–19.8
<b>PDK 30/60 FLEX</b> 1441023100 2 x 1" OT 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 50/80 FLEX</b> 1441003900 1 x 2" OT 1441003800 2 x 2" OT	2.5 bar 36.25 psi	<b>500–800</b> 20–32	<b>450</b> 17.7	<b>1,110</b> 43.7	<b>1,155</b> 45.6	<b>2,065–2,135</b> 72.9–75.4	<b>27–36</b> 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 <b>–1,000</b> 24–40	<b>580</b> 22.8	<b>1,320</b> 52	<b>1,365</b> 53.7	<b>2,613–2,648</b> 92.3–93.5	<b>35–42</b> 77.2–92.6
<b>PDK 50/100 FLEX</b> 1481003501 1 x 2" OT 1481023800 2 x 2" OT	1.5 bar 21.75 psi	<b>500–1,000</b> 20–40	<b>450</b> 17.7	1,110 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
PDK 60/120 FLEX 1481009501 1 x 2" OT 1481009301 2 x 2" OT	1.5 bar 21.75 psi	600 <b>–</b> 1,200 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 1481023900 2 x 2" OT	1.5 bar 21.75 psi	<b>800–1,400</b> 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 1401000300 2 x 2" OT	0.5 bar 7.25 psi	1,400–1,700 56–67	<b>1,350</b> 53.2	<b>1,900</b> 74.8	<b>2,150</b> 84.7	8,670–8,685 306.1–306.6	<b>62.5–70</b> 137.8–154.4
PDK 170/200 FLEX 1401000700 1 x 2" OT 1401000600 2 x 2" OT	0.5 bar 7.25 psi	<b>1,700–2,000</b> 67–80	<b>1,620</b> 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

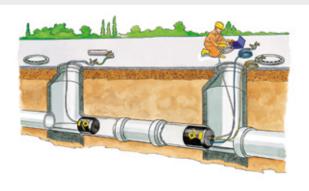
With 1 RDK and 1 PDK with 2 openings, both compressed air tests and water pressure tests can be performed. You do not need another PDK.

# **Compressed air test – Round profiles**

For pipes 70–1.000 mm (2.7–40 inch)		0 inch)	70- 150	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	1441018501	<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	1441022800	<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
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
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
Compressed air adapter Comp. air adapter 2" IT	1481023400		1	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



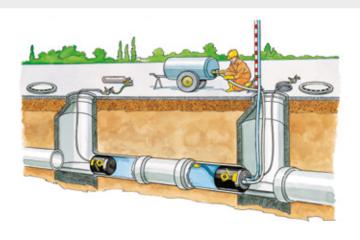
# Water pressure test – Round profiles

# 2.5 bar sets

For pipes 70–1,000 mm (2.7–40 inch)				100- 200	150- 300	200- 400	200- 500	300- 600	500- 1,000
<b>PDK 7/15 FLEX</b> with duct 1 x 1/2" OT	1441001201	<b>2.5 bar</b> 36.25 psi	2						
<b>PDK 10/20</b> with duct 1 x 1" OT	1441018501	<b>2.5 bar</b> 36.25 psi		2					
RDK 15/30	1440000601	<b>2.5 bar</b> 36.25 psi			1				
<b>PDK 15/30</b> with duct 2 x 1" OT	1441022701	<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	1441040300	<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	1441031100	<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	1441023100	<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 2 x 2" OT	1481023800	<b>1.5 bar</b> 21.75 psi							1
Accessories for inflation									
Inflation hose, 10 m (32 ft.), yellow	1600029900	2.5 bar		_	2	_		_	
	1000029900		2	2		2	2	2	2
Single fitting controller	0250005701	36.25 psi <b>2.5 bar</b>	2 1	1	1	1	2 1	1	1
Single fitting controller Single fitting controller		36.25 psi							
	0250005701	36.25 psi 2.5 bar 36.25 psi 1.5 bar							1
Single fitting controller	0250005701	36.25 psi 2.5 bar 36.25 psi 1.5 bar							1
Single fitting controller  Additional accessories as an option	0250005701 0150005401	36.25 psi 2.5 bar 36.25 psi 1.5 bar	1		1				1
Single fitting controller  Additional accessories as an option  D-Fixed coupling 1/2" IT	0250005701 0150005401 1700007600	36.25 psi 2.5 bar 36.25 psi 1.5 bar	1	1	1	1	1	1	1
Single fitting controller  Additional accessories as an option  D-Fixed coupling 1/2" IT  D-Fixed coupling 1" IT	0250005701 0150005401 1700007600 1700016000	36.25 psi 2.5 bar 36.25 psi 1.5 bar	1	1	1	1	1	1	1 1
Single fitting controller  Additional accessories as an option D-Fixed coupling 1/2" IT D-Fixed coupling 1" IT C-Fixed coupling 2" IT	0250005701 0150005401 1700007600 1700016000 1700007700	36.25 psi 2.5 bar 36.25 psi 1.5 bar	2	2	2	2	2	2	1 1
Single fitting controller  Additional accessories as an option  D-Fixed coupling 1/2" IT  D-Fixed coupling 1" IT  C-Fixed coupling 2" IT  D-Blind coupling with chain	0250005701 0150005401 1700007600 1700016000 1700007700 1700016200	36.25 psi 2.5 bar 36.25 psi 1.5 bar	2	2	2	2	2	2	1 1 2
Single fitting controller  Additional accessories as an option  D-Fixed coupling 1/2" IT  D-Fixed coupling 1" IT  C-Fixed coupling 2" IT  D-Blind coupling with chain  C-Blind coupling with chain	0250005701 0150005401 1700007600 1700016000 1700007700 1700016200 1700016600	36.25 psi 2.5 bar 36.25 psi 1.5 bar	2	2	2	2	2	2	1 1 2
Single fitting controller  Additional accessories as an option D-Fixed coupling 1/2" IT D-Fixed coupling 1" IT C-Fixed coupling 2" IT D-Blind coupling with chain C-Blind coupling with chain Ventilation float hose 1/2"	0250005701 0150005401 1700007600 1700016000 1700016200 1700016600 0250004400	36.25 psi 2.5 bar 36.25 psi 1.5 bar	2	2	2	2	2	2	1 1 2
Single fitting controller  Additional accessories as an option  D-Fixed coupling 1/2" IT  D-Fixed coupling 1" IT  C-Fixed coupling 2" IT  D-Blind coupling with chain  C-Blind coupling with chain  Ventilation float hose 1/2"  Ventilation float hose 1"	0250005701 0150005401 1700007600 1700016000 1700016200 1700016600 0250004400 1700038400	36.25 psi 2.5 bar 36.25 psi 1.5 bar	2	2	2	2	2	2	2
Single fitting controller  Additional accessories as an option D-Fixed coupling 1/2" IT D-Fixed coupling 1" IT C-Fixed coupling 2" IT D-Blind coupling with chain C-Blind coupling with chain Ventilation float hose 1/2" Ventilation float hose 2"	0250005701 0150005401 1700007600 1700016000 1700016200 1700016600 0250004400 1700038400 1700011900	36.25 psi 2.5 bar 36.25 psi 1.5 bar	2 2	2 2	2 2	2 2	2 2	2 2	2
Additional accessories as an option D-Fixed coupling 1/2" IT D-Fixed coupling 1" IT C-Fixed coupling 2" IT D-Blind coupling with chain C-Blind coupling with chain Ventilation float hose 1/2" Ventilation float hose 2" Testing & measurement hose Size D	0250005701 0150005401 1700007600 1700016000 1700016200 1700016600 0250004400 1700038400 1700011900	36.25 psi 2.5 bar 36.25 psi 1.5 bar	2 2	2 2	2 2	2 2	2 2	2 2	2 2

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

For pipes 500-2,000 mm (20-80 inch)				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	1481009301	<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	1481023900	<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	1401000300	<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	1401000600	<b>0.5 bar</b> 7.25 psi				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 opt	ion					
C-Fixed coupling 2" IT	1700007700		2	2	2	2
C-Blind coupling with chain	1700016600		2	2	2	2
Ventilation float hose 2"	1700011900		1	1	1	1
Testing & measurement hose Size C	1700013700		1	1	1	1
Blocking valve Size C	1700007900		1	1	1	1



# **Bypass bags**

Simple diversion with large flow circuit



- > 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.

### Now up to 20% lighter



### **Appropriate fixed- and blind coupling:**



2 1/2" FT (Art. no. 1700010500) Fixed coupling: (Art. no. 1700009900)



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

(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 litre/cu.ft.	Weight approx. kg/lbs
PDK 10/20 PE-core 1481004401 1 x 2 1/2" OT	100 <b>–</b> 200 4–8	<b>97</b> 3.9	<b>485</b> 19.1	<b>635</b> 25.0	<b>27</b> 0.95	2.2 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 50/80 PE-core* 1481006900 1 x 4" OT	<b>500–800</b> 20–32	<b>450</b> 17.7	<b>565</b> 22.2	<b>720</b> ** 28.6**	<b>310</b> 10.9	<b>23.5</b> 50.8
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

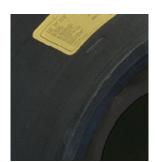
 $<sup>^*</sup>$ On request also available with 6" or 8" feed-through.  $\mid$   $^*$  Including valve extension.

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

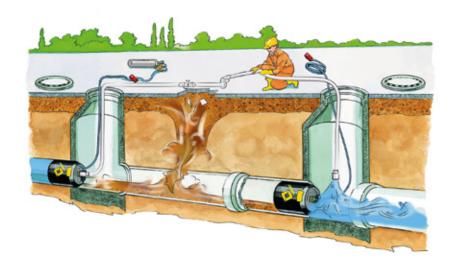


For sizes PDK 10/20 and PDK 20/50, the bypass adapters are fastened to the PE core with screws.

#### PDK 50/80 and PDK 50/120



The bypass bags PDK 50/80 and PDK 50/120 have the feedthroughs (also with external thread) directly in the PE core. On request, a flow opening of up to 8" is possible for both sizes.



# Test system for domestic pipe network

For sealing test according to DIN EN 1610



- > For water and compressed air pressure test
- Ingenious curve mobility

- > Rounded "tip".
- > Taper attachment for easy return

Due to the particularly short construction of the pipe sealing bag as well as the rounded front side, even demanding curved passages are no problem. You simply insert the bag through the inspection shaft with the aid of a filling and pushing hose until it reaches the junction with the main sewer. After the test, just pull the bag back out again – this is usually child's play even in the case of a socket offset. This is made possible by the conical head on the back of the bag, which prevents tilting.



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

### **Technical data**

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

Test system for domestic pipe network 2.5 bar/36.25 ps	Pipe diameter mm/inch	<b>Diameter</b> mm/inch	Cylinder lenght mm/inch	Total lenght mm/inch	Air requirement litre/cu. ft.	Weight approx kg/lbs
<b>RDK 8/15</b> 1440001200	<b>80–150</b> 3.1–6	<b>72</b> 2.8	120 4.7	1 <b>65</b> 6.5	<b>11</b> 0.39	<b>0.3</b> 0.7
<b>RDK 15/20</b> 1440001300	150–200 6–8	<b>90</b> 3.5	<b>150</b> 5.9	190 7.4	13 0.46	<b>0.5</b> 1.1
PDK 10/20 FLEX 1441007703	100–200 4–8	<b>90</b> 3.5	<b>300</b> 11.8	<b>460</b> * 18*	18 0.54	<b>3.1</b> 6.8

<sup>\*</sup> Including valve connection.

### Test system for domestic pipe network

#### for leaktightness tests according to DIN EN 1610

- > Test sealing bags, Type PDK 10/20 HA FLEX including fill and push hose, 15 m (49.2 ft.)
- Pipe sealing bags, Type RDK 15/20 HA
   plus quick-release coupling 1/4" FT and conical attachment
- Pipe sealing bags, Type RDK 8/15 HA plus quick-release coupling 1/4" FT and conical attachment
- Y-distributor
   for simultaneously connecting test and measuring hose
   plus the measuring hose for a digital measuring device
- Bayonet dummy coupling
   For connecting to the filling and safety hose
- Shut-off device bayonet coupling for the water pressure test
- > Transport case







### **Optional accessory**

#### For compressed air test

- > Fill and safety hose 0.3 bar (4.35 psi)
- Yellow
- > 10 m (32 ft.)



- > Measuring hose 0.3 bar
- Yellow
- > 10 m (32 ft.)





#### For the water pressure test

- > Test and measuring hose
- > 9 mm (0.35 inch)
- > 6 m (16 ft.)



Venting + floating hose







# 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, for example.

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) – testing counter-pressure 10 mWC (14.5 psi), RDK 1.5 bar (21.75 psi) – testing 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 litre/cu. ft.	Weight approx. kg/lbs
<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	<b>100–200</b> 3.9–7.9	<b>90</b> 3.5	<b>510</b> 20.1	<b>555</b> 21.9	<b>40,3</b> 1.6	<b>1.1</b> 2.4
RDK 15/30 1440008000	2.5 bar 36.25 psi	150–300 6-12	<b>145</b> 5.7	<b>465</b> 18.1	<b>510</b> 20	<b>80</b> 2.8	<b>2.5</b> 5.5
RDK 20/40 1440027100	2.5 bar 36.25 psi	200–400 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
<b>RDK 30/60</b> 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
<b>RDK 60/120</b> 1480004800	1.5 bar 21.75 psi	600 <b>–1,200</b> 24–48	<b>580</b> 22.8	1,320 52	<b>1,365</b> 53.7	<b>2,475</b> 87.4	<b>27</b> 29.5

Additional sizes can be supplied on request.

# High pressure pipe sealing bags

Resist even high internal pipe pressures



- > Extreme expansion despite high pressure
- > High operating pressure of 6 bar (87 psi)
- > Withstands counterpressures up to 3 bar (43.5 psi)
- > Multi-layer dimensionally stable bag structure

Our high pressure 6 bar (87 psi) pipe sealing bags can withstand a maximum back pressure of 30 mWC. This is why they are used, for example, in the renovation or inspection of pipelines and pipelines. The multi-layer bag construction with fabric reinforcement enables the high operating pressure of 6.0 bar (87 psi) on the one hand and, on the other hand, helps to avoid expansion due to the structure. With these high pressure pipe sealing bags we round off our pipe and test sealing bags product range with 1.5 (21.75 psi) and 2.5 bar (36.25 psi), which have been tried and tested for many years.



# **Technical data**

#### Standard test counter-pressure of 30 mWC (43.5 psi)

High Pressure Pipe Sealing Bags	Pipe diameter	Diameter	Cylinder lenght	Total lenght	Air requirement	Weight approx
6 bar/87 psi	mm/inch	mm/inch	mm/inch	mm/inch	litre/cu. ft.	kg/lbs
<b>RDK 100–200</b> 1430001300	100–200 4–8	<b>90</b> 3.5	<b>510</b> 20	<b>555</b> 21.9	<b>105</b> 3.7	1. <b>5</b> 3.3
<b>RDK 200–300</b> 1430001500	<b>200–300</b> 8–12	195 7.7	<b>650</b> 25.6	<b>695</b> 27.4	<b>338</b> 11.9	3.1 6.8
RDK 300-400 1430001400	<b>300–400</b> 12–16	<b>295</b> 11.6	<b>735</b> 29	<b>780</b> 30.7	<b>527</b> 18.6	<b>7</b> 15.4
<b>RDK 500–600</b> 1430001600	<b>500–600</b> 20–24	<b>450</b> 17.7	<b>1,110</b> 43.7	<b>1,155</b> 45.5	<b>1,550</b> 54.7	<b>20</b> 44.1
RDK 800 1430000800	<b>800</b> 32	<b>785</b> 30.9	<b>1,810</b> 71.3	<b>1,855</b> 73	<b>6,160</b> 217.5	<b>44</b> 97

# **Test sealing bags for gullies**

**Test sealing bags for gullies** 



- Very low weight
- > Short, light design

- > Especially resistant CR material
- > According with DIN EN 1610

Vetter test sealing bags for gullies are designed for flexible use in manholes with 600 (23.6 inch) to 650 mm (25.6 inch). Three mounting brackets facilitate positioning during use. The operating pressure of 1 bar (14.5 psi) allows testing with both air and vacuum. The bags can withstand a counterpressure of up to 0.2 bar (2.9 psi). For all water and compressed air tests you can fall back on standard accessories – no additional special accessories are required. Like all Vetter products, the test sealing bags for gullies are also subjected to an individual function test before delivery, which is confirmed by a test seal. So you can always rely 100 percent on our products.





Test Sealing Bags for Gullies 1 bar (14.5 psi) (Art. no.1411002300)

Storz C fixed coupling is not included in the scope of delivery

### **Technical data**

Schachtprüf- kissen		Pipe diameter mm/inch	<b>Diameter</b> mm/inch	<b>High</b> mm/inch	Bypass mm/inch	Weight approx. kg/lbs
TSG 600–650	1.5 bar	600–650	<b>450</b> 17.7	<b>300</b>	<b>2"</b>	11.6
1411002300	21.75 psi	23.6–25.6		11.8	2"	25.6

# **Protection sleeves**

The reliable protective layer for your pipe sealing bag



- Ideal for Vetter pipe sealing bags
- With four carrying loops

- > 2 mm (0.08 inch) thin
- > Also available in CR material

With our protection sleeves you extend the durability of your sealing bags even further. The robust material protects against debris, cuts and sharp edges. All sleeves are suitable for our Vetter pipe sealing bags and offer real added value.



Protection sleeves

### **Technical data**

Protection Sleeve	Pipe Diameter mm/inch	Internal diameter mm/inch	Outer diameter mm/inch	Total lenght mm/inch
<b>RDK 10/20</b> 1491054900	100 <b>–200</b> 3.9–7.9	<b>95</b> 3.7	<b>97</b> 3.8	<b>420</b> 16.5
<b>RDK 15/30</b> 1491055000	<b>150–300</b> 5.9–11.8	<b>150</b> 5.9	<b>152</b> 6	<b>420</b> 16.5
<b>RDK 30/60</b> 1491055100	<b>300–600</b> 11.8–23.6	<b>300</b> 11.8	<b>302</b> 11.9	<b>710</b> 28

Other sizes on request!

# Accessories – Compressed air and water pressure testing

### **Compressed-air test**

#### Compressed air adapter

> with two MS quick-connect couplings and hose

1/2" IT 1481023600

1" IT 1481023500

2" IT 1481023400



#### Fill and safety hose, 0.3 bar (4.35 psi)

- > for filling the line
- > Yellow
- > 10 m (32 ft.)

1700009001

#### Measuring hose, 0.3 bar (4.35 psi)

- > for self-monitoring
- > for the leak test
- > Yellow
- > 10 m (32 ft.)

1700010301





### **Water pressure testing**

#### **Fixed coupling**

D-fixed coupling

1/2" IT 1700007600

> D-fixed coupling



> C-fixed coupling



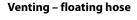
#### **Blind coupling**

> D-dummy coupling with chain



> C-dummy coupling with chain





1/2" IG 0250004400

1" IG 1700038400

2" IG 1700011900

#### Test and measuring hose

> 6 m (19 ft.)

Storz D 1700008400 | Storz C 1700013700

#### **Blocking valve**

> Size D

1700013200

Size C

1700007900









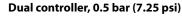
# **Accessories – filling the bag**

### 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



- > Fitting controller
- > claw coupling

0050000801



# 1 bar (14.5 psi)

Inflation hose, 1 bar (14.5 psi)

> Yellow

5 m 0100000501 | 10 m 0100000701



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

- > Fitting controller
- > claw coupling

**0**100001501



### **Cone bag accessories**

Inflation hose, 1 bar (14.5 psi)

Yellow



Single controller, 1 bar (14.5 psi)

> Fitting controller

0100001503



Vacuum adapter

1420005300



Adaptor claw to quick-action coupling

1420005800



# Test sealing bag for gullies accessories

Inflation hose, 1 bar (14.5 psi)

Yellow



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

> Fitting controller

0100005201

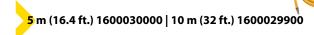


# **Accessories – filling the bag**

### 1.5 bar (21.75 psi)

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

Yellow



Fill and safety hose, 1.5 bar (21.75 psi)

- Yellow
- > 10 m (32 ft.)





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

> Fitting controller





# 2.5 bar (36.25 psi)

#### Filling hose, 2.5 bar (36.25 psi)

Yellow

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

#### Simple controller, 2.5 bar (36.25 psi)

> Fitting controller

0250005701



#### Fill and safety hose, 2.5 bar (36.25 psi)

- Yellow
- > 10 m (32 ft.)

**0**250005800



#### Food air pump 2.5 bar (36.25 psi)

> with safety valve

**0**250005300



### 6 bar (87 psi)

#### Filling hose, 6 bar (87 psi)

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

1000000401



#### Single controller, 6 bar (87 psi)

> Fitting controller

0600000401



# **Accessories for filling**

#### Air supply hose, 1 bar (14.5 psi)

- > Green
- > 10 m (32 ft.)
- > with cut-off valve



#### Adapter

> for portable compressor/permanent compressed air network







#### Hand air pump

> 520 ccm/lift



#### Food air pump

> 420 ccm/lift



#### Adapter

> for construction compressors







#### Tyre valve





# Lateral packers 2.5 bar (36.25 psi)

The intelligent solution that saves money

80-200 mm 3.1-8 inch

- Construction ensures very good curve mobility & increased gliding properties
- > 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 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 80 to 200 mm (3.1–8 inch) and lengths up 3 m (118.1 inch).

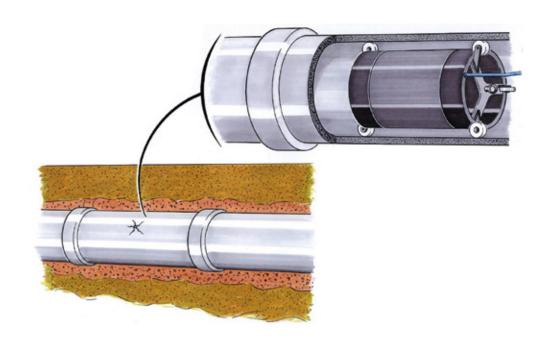




Sturdy spherical heads

# **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 approx. mm/inch	Weight approx.
<b>Typ 80–110</b> 1491019600	wound	<b>80–110</b> 3.1–4.3	<b>1,000</b> 39	<b>800</b> 31.2	<b>820</b> 32	<b>51</b> 2	1.1 2.4
<b>Typ 80–110</b> 1491019800	wound	<b>80–110</b> 3.1–4.3	<b>2,000</b> 78	1,800 70.2	<b>1,820</b> 71	<b>51</b> 2	2 4.4
<b>Typ 80–110</b> 1491020000	wound	<b>80–110</b> 3.1–4.3	<b>3,000</b> 118	<b>2,800</b> 110.2	2,820 111	<b>51</b> 2	<b>2.8</b> 6.2
<b>Typ 100–150</b> 1491031500	wound	100–150 4–6	<b>1,000</b> 39	<b>840</b> 32.8	<b>920</b> 35.9	<b>66</b> 2.6	1.1 2.4
<b>Typ 100–150</b> 1491018200	wound	100–150 4–6	<b>2,000</b> 78	<b>1,840</b> 71.8	<b>1,920</b> 74.9	<b>66</b> 2.6	<b>2.2</b> 4.9
<b>Typ 100–150</b> 1491018300	wound	<b>100–150</b> 4–6	<b>3,000</b> 118	<b>2,840</b> 110.8	<b>2,920</b> 110.8	<b>66</b> 2.6	<b>3.3</b> 7.3
<b>Typ 150–200</b> 1491019100	wound	1 <b>50–200</b> 6–8	<b>1,000</b> 39	<b>940</b> 36.7	<b>920</b> 36.7	<b>92</b> 3.6	1.6 3.5
<b>Typ 150–200</b> 1491018700	wound	150–200 6–8	<b>2,000</b> 78	<b>1,840</b> 71.8	<b>1,920</b> 71.8	<b>92</b> 3.6	3 6.6
<b>Typ 150–200</b> 1441013600	wound	<b>150–200</b> 6–8	<b>3,000</b> 118	<b>2,840</b> 110.8	<b>2,920</b> 110.8	<b>92</b> 3.6	<b>4.5</b> 9.9



# Flexible packers

The adaptable solution



- Skid-shaped running gear ensures
   gliding even over offsets
- > High flexibility
- > Adjustable chassis with spring action

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, among other things, 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 600 mm (6–24 inch) and in lengths of up to 3 m (118.1 inch).



Full flexibility and guaranteed stability

# **Technical data**

### Standard through-flow openings of 2"

Flexible packers		Application range (from-to) mm/inch	Packer length approx.	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.
<b>Typ 150–250</b> 1491045900	2.5 bar 36.25 psi	150–250 6–10	<b>1,000</b> 39	<b>680</b> 26.5	<b>780</b> 30.4	105 4.1	1,130 44.1	<b>6.4</b> 14.1
<b>Typ 150–250</b> 1491046000	2.5 bar 36.25 psi	150–250 6–10	<b>2,000</b> 78	1,680 65.5	1,780 69.4	105 4.1	<b>2,130</b> 83.1	<b>10</b> 22.1
<b>Typ 150–250</b> 1491046100	2.5 bar 36.25 psi	150–250 6–10	<b>3,000</b> 118	<b>2,680</b> 104.5	<b>2,780</b> 108.4	105 4.1	<b>3,130</b> 122.1	<b>14</b> 20.9
<b>Typ 200–300</b> 1491044800	1.5 bar 21.75 psi	<b>200–300</b> 8–12	1,000 39	<b>590</b> 23	<b>690</b> 26.9	170 6.6	<b>1,260</b> 49.1	<b>10</b> 22.1
<b>Typ 200–300</b> 1491046300	1.5 bar 21.75 psi	<b>200–300</b> 8–12	<b>2,000</b> 78	1,590 62	<b>1,690</b> 65.9	170 6.6	<b>2,260</b> 88.1	<b>15</b> 33.1
<b>Typ 200–300</b> 1491046400	1.5 bar 21.75 psi	<b>200–300</b> 8–12	<b>3,000</b> 118	<b>2,590</b> 101	<b>2,690</b> 104.9	170 6.6	<b>3,260</b> 127.1	<b>20</b> 44.1
<b>Typ 300–400</b> 1491044900	1.5 bar 21.75 psi	<b>300–400</b> 12–16	1,000 39	<b>560</b> 21.8	660 25.7	<b>230</b> 9	<b>1,260</b> 49.1	<b>13.2</b> 29.1
<b>Typ 300–400</b> 1491046600	1.5 bar 21.75 psi	<b>300–400</b> 12–16	<b>2,000</b> 78	1,560 60.8	<b>1,660</b> 64.7	<b>230</b> 9	<b>2,260</b> 88.1	<b>19.4</b> 42.8
<b>Typ 300–400</b> 1491046700	1.5 bar 21.75 psi	<b>300–400</b> 12–16	<b>3,000</b> 118	<b>2,560</b> 99.8	<b>2,660</b> 103.7	<b>230</b> 9	<b>3,260</b> 127.1	<b>26</b> 57.3
<b>Typ 400–600</b> 1491045700	1.5 bar 21.75 psi	<b>400–600</b> 16–24	<b>1,500</b> 58.5	<b>900</b> 35.1	<b>950</b> 37.1	<b>350</b> 00	<b>1,770</b> 69	<b>26.1</b> 57.6



# **Counterpressure tables**

### Measured in dry metal pipe

# Mini pipe sealing bags

<b>Diameter</b> 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	<b>2/</b> 29						
90/3.5	1.8/26.1						
100/4	<b>1.7</b> /24.7	2.1/30.5					
125/5	1.6/23.2	1.95/28.2					
150/6	1.1/16	1.85/26.8	2.3/33.4				
200/8		1.8/26.1	2.1/30.5	2.3/33.4	2.2/31.9		
250/10			1.7/28	2.3/33.4	2/29		
300/12			1.7/28	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	1.4/20.3
600/24						1.6/23.2	

<b>Diameter</b> mm/inch	<b>RDK 60/120</b> 1480001901 1480004800 (CR)	RDK 80/140 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		0.5/7.3

<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

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<b>Diameter</b> mm/inch	<b>PDK 4/7 FLEX</b> 1441000701	PDK 7/15 FLEX 1441001201	PDK 10/20 FLEX 1441018501	PDK 15/30 FLEX 1441022701 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 (36.25 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	1.4/20.3	
600/24							1.3/18.9	1.5/21.8	1.75/25.4
800/32								1.35/19.6	1.5/21.8
1,000/40									1.3/18.9
1,200/48									
1,400/56									
1,700/67									
2,000/80									

<b>Diameter</b> mm/inch	PDK 50/100 FLEX 1481003501 1481023800	PDK 60/120 FLEX 1481009501 1481009301	PDK 80/140 FLEX 1481024000 1481023900
		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 1401000300	PDK 170/200 FLEX 1401000700 1401000600
	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	<b>0.2/</b> 2.9

# High pressure pipe sealing bags

					_
<b>Diameter</b> mm/inch	<b>RDK 100–200</b> 1430001300	<b>RDK 200–300</b> 1430001500	<b>RDK 300–400</b> 1430001400	<b>RDK 500–600</b> 1430001600	<b>RDK 800</b> 1430000800
			6 bar (87 psi)		
100/4	3.7/53.6				
125/5	3.6/52.2				
150/6	4.6/66.7				
200/8	3.3/47.9	4.75/68.9			
250/10		4/58.0			
300/12		3.4/49.3	3.8/55.1		
400/16			3.6/52.2		
500/20				4/58.0	
600/24				3.4/49.3	
800/32					<b>3/</b> 43.5

# **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 resistance						
Products	Cold resistance	Cold flexible	Heat resistance, long term	Heat resistance, short time		
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 1.5 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)  Controller: Aluminium- and fitting	−20 °C −30 °C		+55 ℃ 	+80 °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)	FPDM	Polvester

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

Resistance list*			
Material designation	CR	NR	EPDM
Aceton	o	+	-
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	-	_
ron 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)	-	0	n.d.
Sulphuric acid (50%)	+	-	_
Nitrogen	+	+	+
Carbon tetrachloride	-	-	-
Animal fats		_	
Ammanats	+		+

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



#### 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.



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### The complete provider for industry pneumatics

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.

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