

## Counter-pressure tables

Measured in dry metal pipe.

### All counter-pressure specifications in bar (psi).

#### Mini Pipe Sealing Bags 2.5 bar (36.25psi)

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

#### Pipe Sealing Bags

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

### Mini Test Sealing Bags 2.5 bar (36.25psi)

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

### Pipe Sealing Bags

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

# Counter-pressure tables

Measured in dry metal pipe.

## All counter-pressure specifications in bar (psi).

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

High Pressure Pipe Sealing Bags 6 bar (87 psi)					
Diameter mm / inch	RDK 100-200 1430001300	RDK 200-300 1430001500	RDK 300-400 1430001400	RDK 500-600 1430001600	RDK 800 1430000800
100 / 3.9	3.7 / 53.65				
125 / 5.0	3.6 / 52.2				
150 / 5.9	4.6 / 66.7				
200 / 7.8	3.3 / 47.9	4.75 / 68.9			
250 / 9.75		4 / 58.0			
300 / 11.8		3.4 / 49.3	3.8 / 55.1		
400 / 16.0			3.6 / 52.2		
500 / 20.0				4 / 58.0	
600 / 23.4				3.4 / 49.3	
800 / 31.5					3 / 43.5

### Test Sealing Bags

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

# Vetter resistance charts

Transparency for your safety.

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

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

These symbols indicate degrees of resistance:

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

## Please notice:

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

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

## Temperature resistance limits

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

## Material list

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

## Resistance charts

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

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