



## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1A Yellow

1A YELLOW



### General

Our rubber bellows yellow ring are made from a nitrile rubber compound (ECO) and provide resistance to water upto 70°C and oil upto 90°C, however this is influenced by the working pressure.

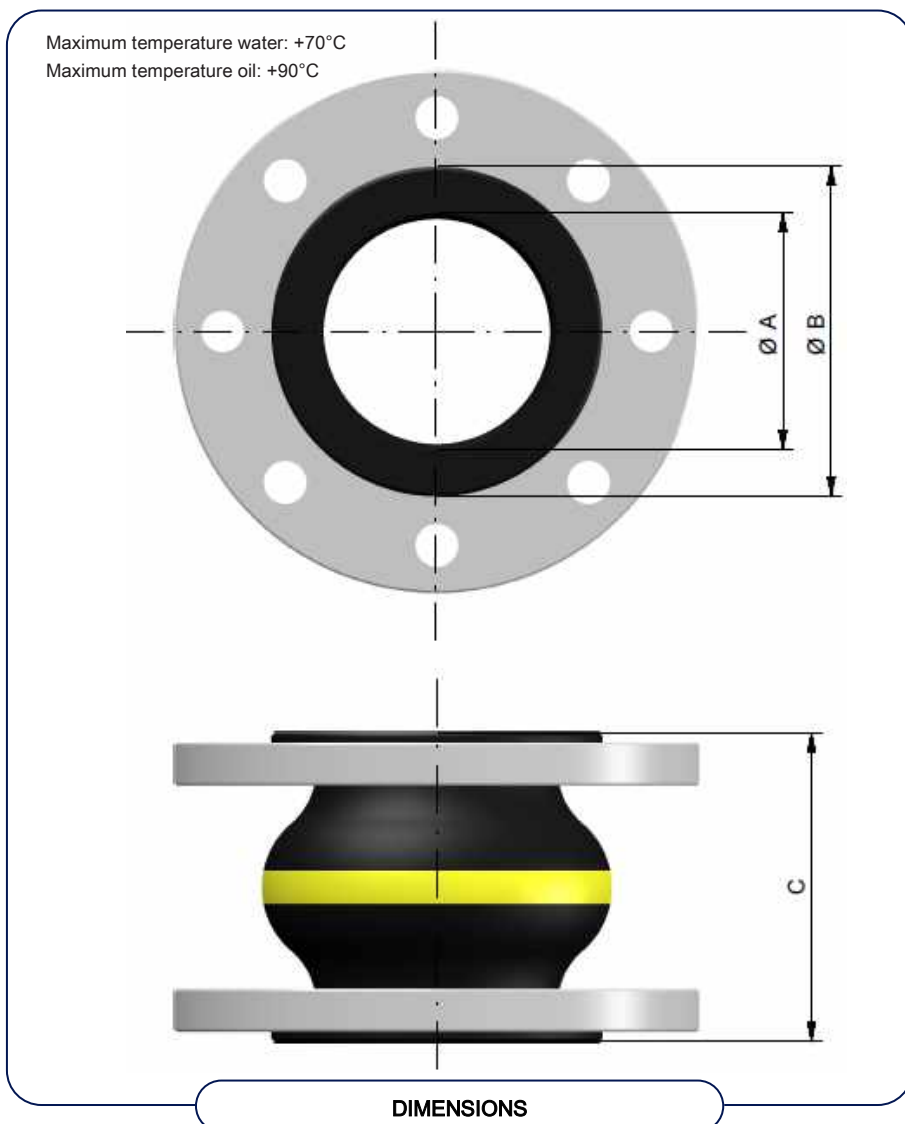
Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss.

High tensile strength texture cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges.

Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.





Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1A YELLOW

1A YELLOW RING	Bellows dimensions			Allowable Displacement			Effective bellows area	Weight	Min. Max. Pressure		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°	cm <sup>2</sup>	kg			mm	mm
KR025G110A000	25	72	130	-30/+20	±20	±35	35	1,9	20	1,6	120	135
KR032G110A000	32	72	130	-30/+20	±20	±35	35	2,0	20	1,6	120	135
KR040G110A000	40	79	130	-30/+20	±20	±35	50	3,5	20	1,6	120	135
KR050G110A000	50	89	130	-30/+20	±20	±35	74	4,3	20	1,6	120	135
KR065G110A000	65	104	130	-30/+20	±20	±30	87	5,5	20	1,6	120	135
KR080G110A000	80	120	130	-30/+20	±20	±30	120	6,2	30	1,6	120	135
KR100G110A000	100	139	130	-30/+20	±20	±25	143	7,7	40	1,6	120	135
KR125G110A000	125	164	130	-30/+20	±20	±25	210	8,7	60	1,6	120	135
KR150G110A000	150	189	130	-30/+20	±20	±15	283	11,3	60	1,6	120	135
KR200G110A000	200	237	130	-30/+20	±20	±15	525	16,2	70	1,0	115	140
KR250G110A000	250	289	130	-30/+20	±20	±10	636	20,5	70	1,0	125	140
KR300G110A000	300	338	130	-30/+20	±20	±10	897	24,0	80	1,0	125	140
KR350G110A000	350	390	200	-30/+20	±20	±10	1290	34,0	80	1,0	190	210
KR400G110A000	400	455	200	-30/+20	±20	±10	1628	37,5	80	1,0	190	210
KR500G110A000	500	555	200	-30/+20	±20	±10	2546	47,0	80	1,0	190	210

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.


TABLE

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )  
 ( \* for bellows larger than NB 150)





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## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1A Hot oil

1A HOT OIL



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

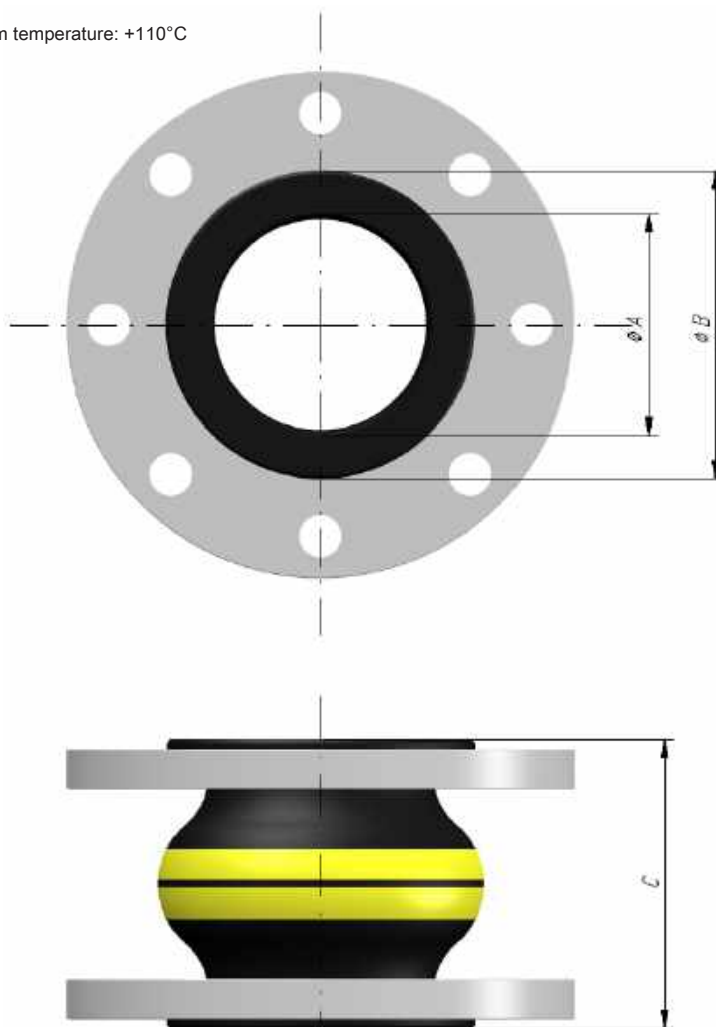
Rubber bellows are used in various fields of industry like shipbuilding, offshore, dredging, power plants, chemical industry, water works etc.

The rubber bellows provide:

- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature: +110°C



### DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1A HOT OIL

1A HOT OIL	Bellows dimensions			Allowable Displacement			Effective bellows area	Weight	Min. Pressure		Max. Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°	cm <sup>2</sup>	kg			mm	mm
KR025D110A000	25	72	130	-30/+20	±20	±35	35	1,9	20	1,6	120	135
KR032D110A000	32	72	130	-30/+20	±20	±35	35	2,0	20	1,6	120	135
KR040D110A000	40	79	130	-30/+20	±20	±35	50	3,5	20	1,6	120	135
KR050D110A000	50	89	130	-30/+20	±20	±35	74	4,3	20	1,6	120	135
KR065D110A000	65	104	130	-30/+20	±20	±30	87	5,5	20	1,6	120	135
KR080D110A000	80	120	130	-30/+20	±20	±30	120	6,2	30	1,6	120	135
KR100D110A000	100	139	130	-30/+20	±20	±25	143	7,7	40	1,6	120	135
KR125D110A000	125	164	130	-30/+20	±20	±25	210	8,7	60	1,6	120	135
KR150D110A000	150	189	130	-30/+20	±20	±15	283	11,3	60	1,6	120	135
KR200D110A000	200	237	130	-30/+20	±20	±15	525	16,2	70	1,0	115	140
KR250D110A000	250	289	130	-30/+20	±20	±10	636	20,5	70	1,0	125	140
KR300D110A000	300	338	130	-30/+20	±20	±10	897	24,0	80	1,0	125	140
KR350D110A000	350	390	200	-30/+20	±20	±10	1290	34,0	80	1,0	190	210
KR400D110A000	400	455	200	-30/+20	±20	±10	1628	37,5	80	1,0	190	210
KR500D110A000	500	555	200	-30/+20	±20	±10	2546	47,0	80	1,0	190	210

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

TABLE

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)

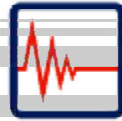


TYPE APPROVAL



### Rubber Design B.V.

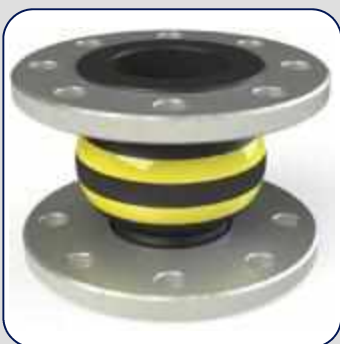
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## DOCUMENTATION SHEET

Rubber Bellows  
Type 1A Double yellow

# 1A DOUBLE YELLOW



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

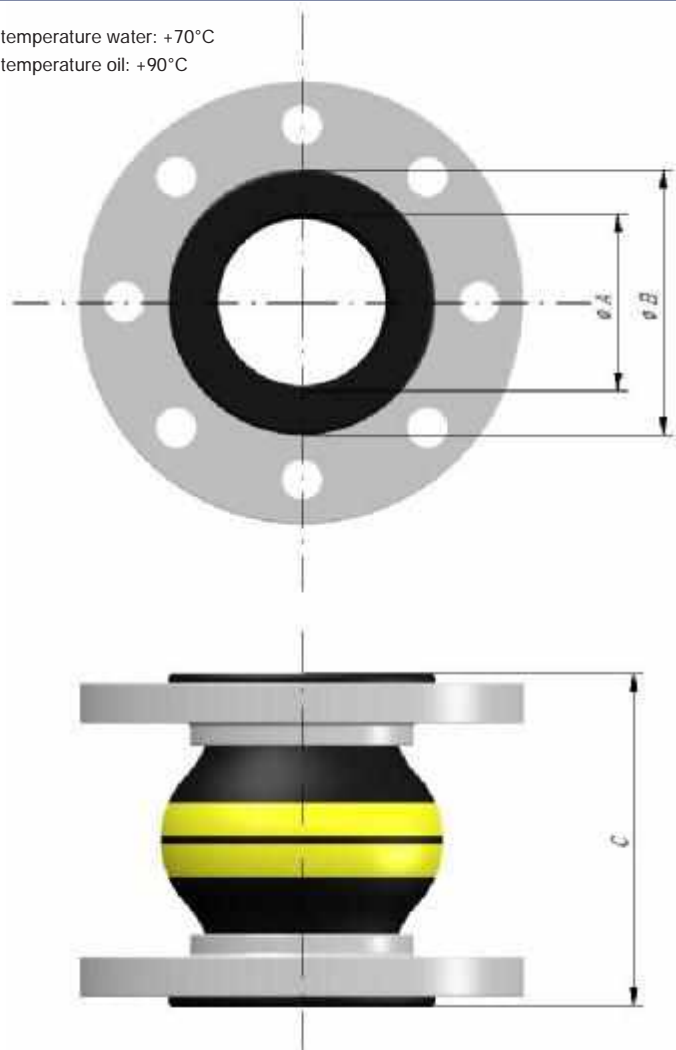
Rubber bellows are used in various fields of industry like shipbuilding, offshore, dredging, power plants, chemical industry, water works etc.

The rubber bellows provide:

- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature water: +70°C  
Maximum temperature oil: +90°C



DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. Steel cord reinforcement combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life, also it provides fire resistance acc. to ISO15540.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1A DOUBLE YELLOW

1A DOUBLE YELLOW RING	Bellows dimensions			Allowable Displacement			Weight kg	Min. Max. Pressure (abs)		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.		kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°			mm	mm	
KR025S110A000	25	64	130	-30/+15	±15	±20,0	1,5	20	1,6	120	135
KR032S110A000	32	64	130	-30/+15	±15	±20,0	2,5	20	1,6	120	135
KR040S110A000	40	72	130	-30/+15	±15	±20,0	3,0	20	1,6	120	135
KR050S110A000	50	84	130	-30/+15	±15	±20,0	4,0	20	1,6	120	135
KR065S110A000	65	104	130	-30/+15	±15	±20,0	4,5	20	1,6	120	135
KR080S110A000	80	114	130	-30/+15	±15	±20,0	5,5	30	1,6	120	135
KR100S110A000	100	138	130	-30/+15	±15	±15,0	7,0	40	1,6	120	135
KR125S110A000	125	164	130	-30/+15	±15	±15,0	8,5	60	1,6	120	135
KR150S110A000	150	190	130	-30/+15	±15	±15,0	11,0	70	1,6	120	135
KR200S110A000	200	250	130	-15/+20	±10	±5,0	17,0	70	1,0	125	140
KR250S110A000	250	301	130	-15/+20	±10	±5,0	23,5	80	1,0	125	140
KR300S110A000	300	351	130	-15/+20	±10	±5,0	27,0	80	1,0	125	140
KR350S110A000	350	409	200	-40/+30	±15	±10,0	39,5	80	1,0	190	210
KR400S110A000	400	409	200	-40/+30	±15	±5,0	42,0	80	1,0	190	210

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

TABLE

**Remark**

Rubber bellows reinforced with steel cord.

**Pressure**

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)








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## DOCUMENTATION SHEET

### Rubber Bellows Type 1A Red

1A RED



#### General

Our rubber bellows red ring are made from EPDM rubber and provide resistance to water upto 90°C, however this is influenced by the working pressure.

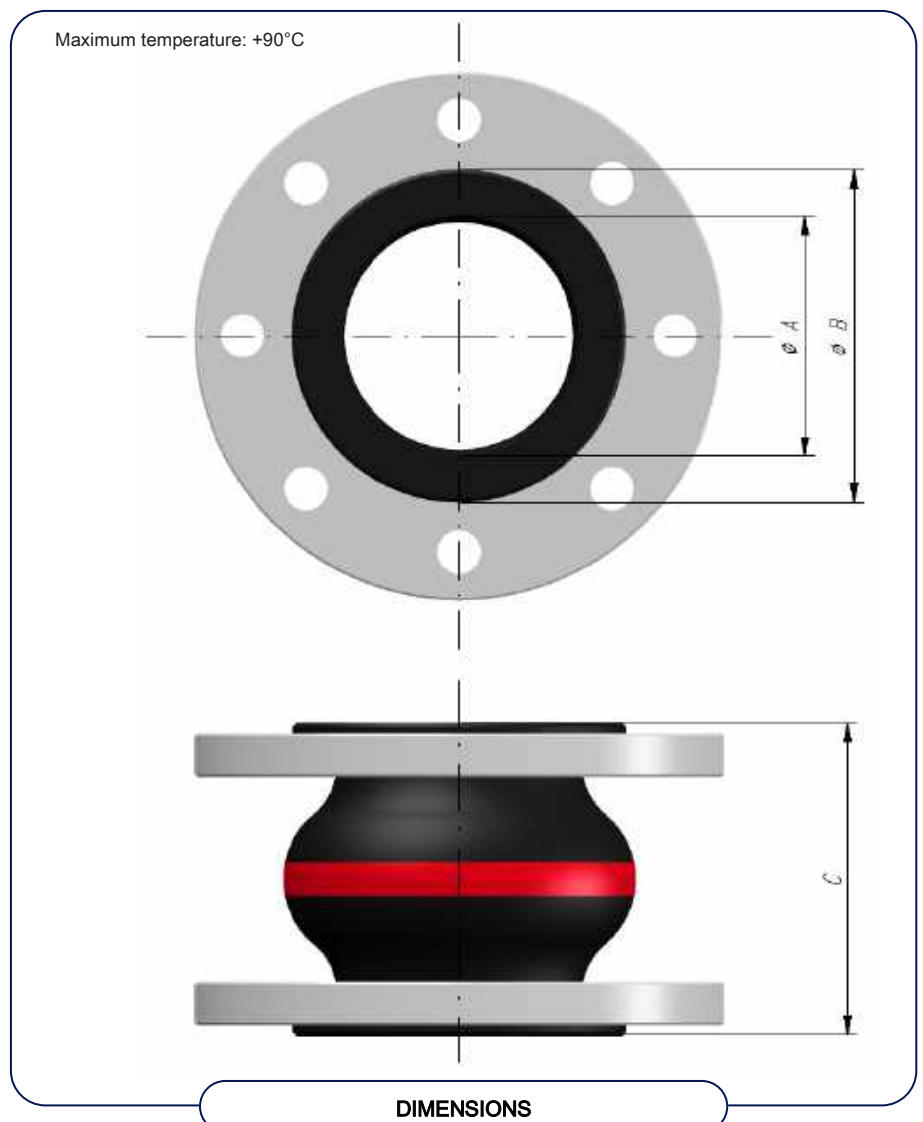
Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss.

High tensile strength texture cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges.

Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.





# Rubber Design

vibration and noise control

Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1A RED

1A RED RING	Bellows dimensions			Allowable Displacement			Effective bellows area	Weight	Min. Max. Pressure		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°	cm <sup>2</sup>	kg			mm	mm
KR025R110A000	25	72	130	-30/+20	±20	±35	35	1,9	20	1,6	120	135
KR032R110A000	32	72	130	-30/+20	±20	±35	35	2,0	20	1,6	120	135
KR040R110A000	40	79	130	-30/+20	±20	±35	50	3,5	20	1,6	120	135
KR050R110A000	50	89	130	-30/+20	±20	±35	74	4,3	20	1,6	120	135
KR065R110A000	65	104	130	-30/+20	±20	±30	87	5,5	20	1,6	120	135
KR080R110A000	80	120	130	-30/+20	±20	±30	120	6,2	30	1,6	120	135
KR100R110A000	100	139	130	-30/+20	±20	±25	143	7,7	40	1,6	120	135
KR125R110A000	125	164	130	-30/+20	±20	±25	210	8,7	60	1,6	120	135
KR150R110A000	150	189	130	-30/+20	±20	±15	283	11,3	60	1,6	120	135
KR200R110A000	200	237	130	-30/+20	±20	±15	525	16,2	70	1,0	115	140
KR250R110A000	250	289	130	-30/+20	±20	±10	636	20,5	70	1,0	125	140
KR300R110A000	300	338	130	-30/+20	±20	±10	897	24,0	80	1,0	125	140
KR350R110A000	350	390	200	-30/+20	±20	±10	1290	34,0	80	1,0	190	210
KR400R110A000	400	455	200	-30/+20	±20	±10	1628	37,5	80	1,0	190	210
KR500R110A000	500	555	200	-30/+20	±20	±10	2546	47,0	80	1,0	190	210

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

TABLE

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)



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## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1A Double red

# 1A DOUBLE RED



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

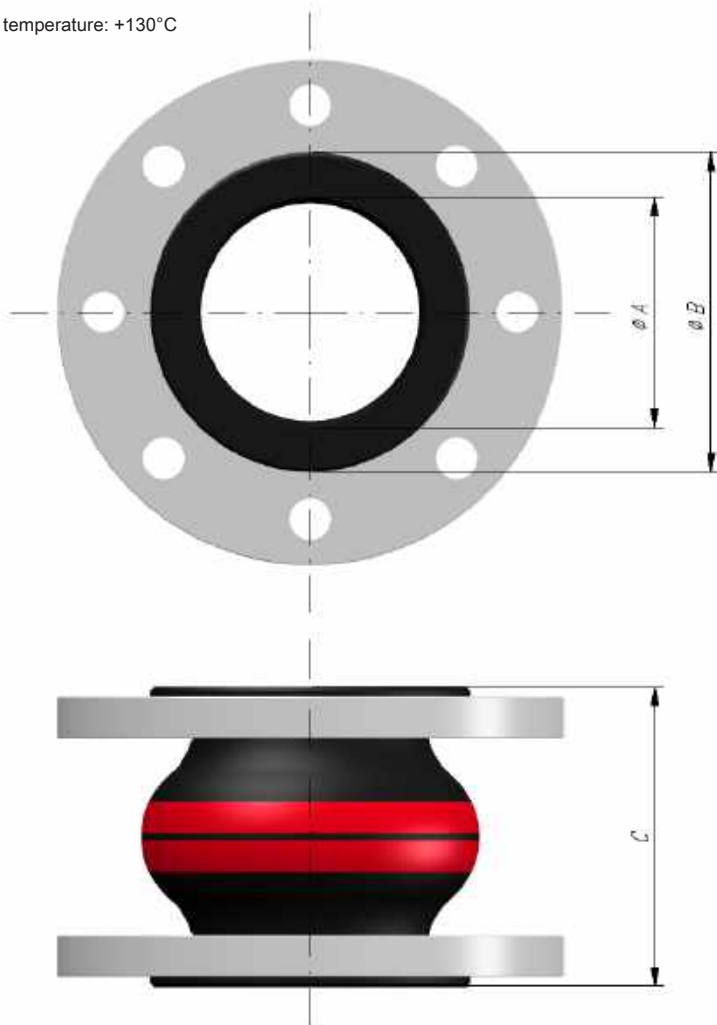
Rubber bellows are used in various fields of industry like shipbuilding, offshore, dredging, power plants, chemical industry, water works etc.

The rubber bellows provide:

- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature: +130°C



DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1A DOUBLE RED

1A DOUBLE RED RING	Bellows			Allowable			Effective	Weight	Min.	Max.	Installation	
	dimensions			displacement			bellows		Pressure		length	
	ØA	ØB	C	Ax.	Lat.	Ang.	area		( abs )		min.	max.
	mm	mm	mm	mm	mm	°	cm <sup>2</sup>	kg	kPa	MPa	mm	mm
KR025K110A000	25	72	130	-30/+20	±20	±35	35	1,9	20	1,6	120	135
KR032K110A000	32	72	130	-30/+20	±20	±35	35	2,0	20	1,6	120	135
KR040K110A000	40	79	130	-30/+20	±20	±35	50	3,5	20	1,6	120	135
KR050K110A000	50	89	130	-30/+20	±20	±35	74	4,3	20	1,6	120	135
KR065K110A000	65	104	130	-30/+20	±20	±30	87	5,5	20	1,6	120	135
KR080K110A000	80	120	130	-30/+20	±20	±30	120	6,2	30	1,6	120	135
KR100K110A000	100	139	130	-30/+20	±20	±25	143	7,7	40	1,6	120	135
KR125K110A000	125	164	130	-30/+20	±20	±25	210	8,7	60	1,6	120	135
KR150K110A000	150	189	130	-30/+20	±20	±15	283	11,3	60	1,6	120	135
KR200K110A000	200	237	130	-30/+20	±20	±15	525	16,2	70	1,0	115	140
KR250K110A000	250	289	130	-30/+20	±20	±10	636	20,5	70	1,0	125	140
KR300K110A000	300	338	130	-30/+20	±20	±10	897	24,0	80	1,0	125	140
KR350K110A000	350	390	200	-30/+20	±20	±10	1290	34,0	80	1,0	190	210
KR400K110A000	400	455	200	-30/+20	±20	±10	1628	37,5	80	1,0	190	210
KR500K110A000	500	555	200	-30/+20	±20	±10	2546	47,0	80	1,0	190	210

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

TABLE

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)



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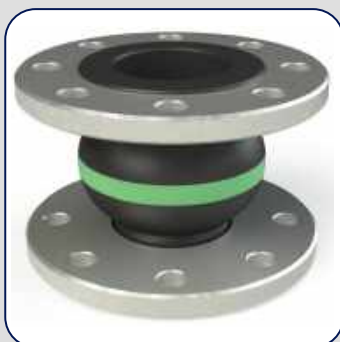


## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1A Green

1A GREEN



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

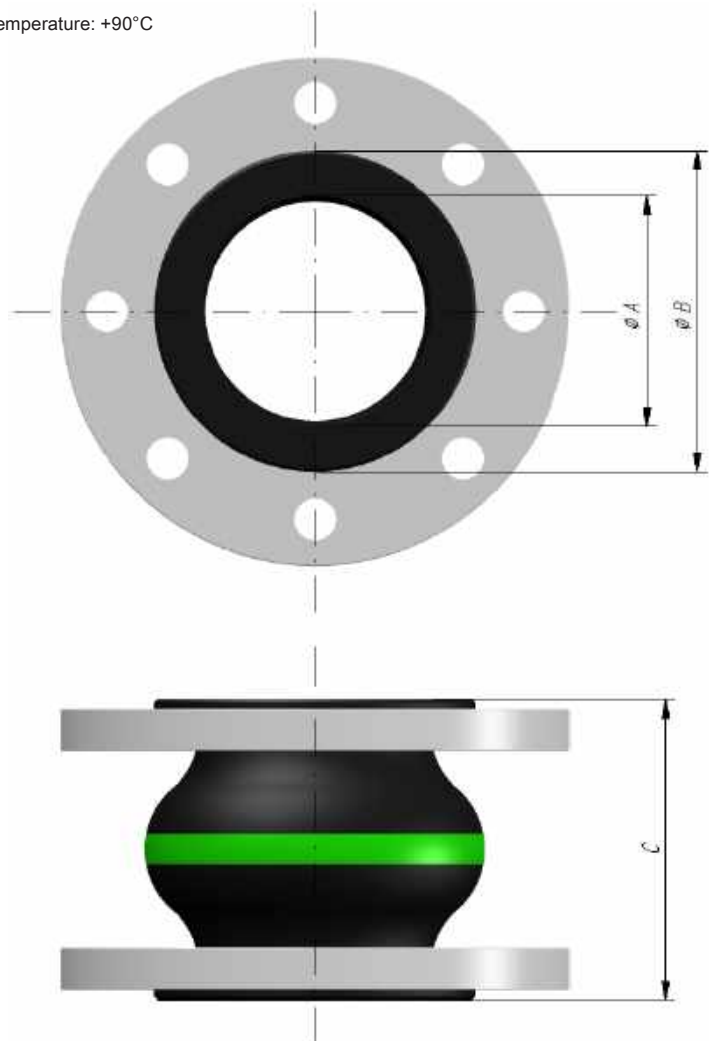
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The rubber bellows provide:

- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature: +90°C



### DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1A GREEN

1A GREEN RING	Bellows dimensions			Allowable Displacement			Effective bellows area cm <sup>2</sup>	Weight kg	Min. Max. Press.ure ( abs )		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°					mm	mm
KR025H110A000	25	72	130	-30/+20	±20	±35	35	1,9	20	1,6	120	135
KR032H110A000	32	72	130	-30/+20	±20	±35	35	2,0	20	1,6	120	135
KR040H110A000	40	79	130	-30/+20	±20	±35	50	3,5	20	1,6	120	135
KR050H110A000	50	89	130	-30/+20	±20	±35	74	4,3	20	1,6	120	135
KR065H110A000	65	104	130	-30/+20	±20	±30	87	5,5	20	1,6	120	135
KR080H110A000	80	120	130	-30/+20	±20	±30	120	6,2	30	1,6	120	135
KR100H110A000	100	139	130	-30/+20	±20	±25	143	7,7	40	1,6	120	135
KR125H110A000	125	164	130	-30/+20	±20	±25	210	8,7	60	1,6	120	135
KR150H110A000	150	189	130	-30/+20	±20	±15	283	11,3	60	1,6	120	135
KR200H110A000	200	237	130	-30/+20	±20	±15	525	16,2	70	1,0	115	140
KR250H110A000	250	289	130	-30/+20	±20	±10	636	20,5	70	1,0	125	140
KR300H110A000	300	338	130	-30/+20	±20	±10	897	24,0	80	1,0	125	140
KR350H110A000	350	390	200	-30/+20	±20	±10	1290	34,0	80	1,0	190	210
KR400H110A000	400	455	200	-30/+20	±20	±10	1628	37,5	80	1,0	190	210
KR500H110A000	500	555	200	-30/+20	±20	±10	2546	47,0	80	1,0	190	210

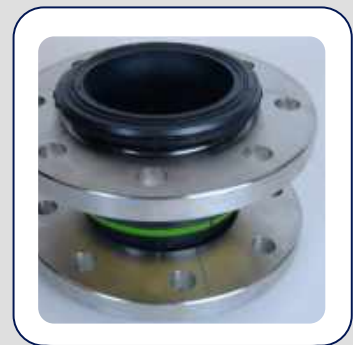
Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

TABLE

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)








TYPE APPROVALS

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## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1A White

1A WHITE



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

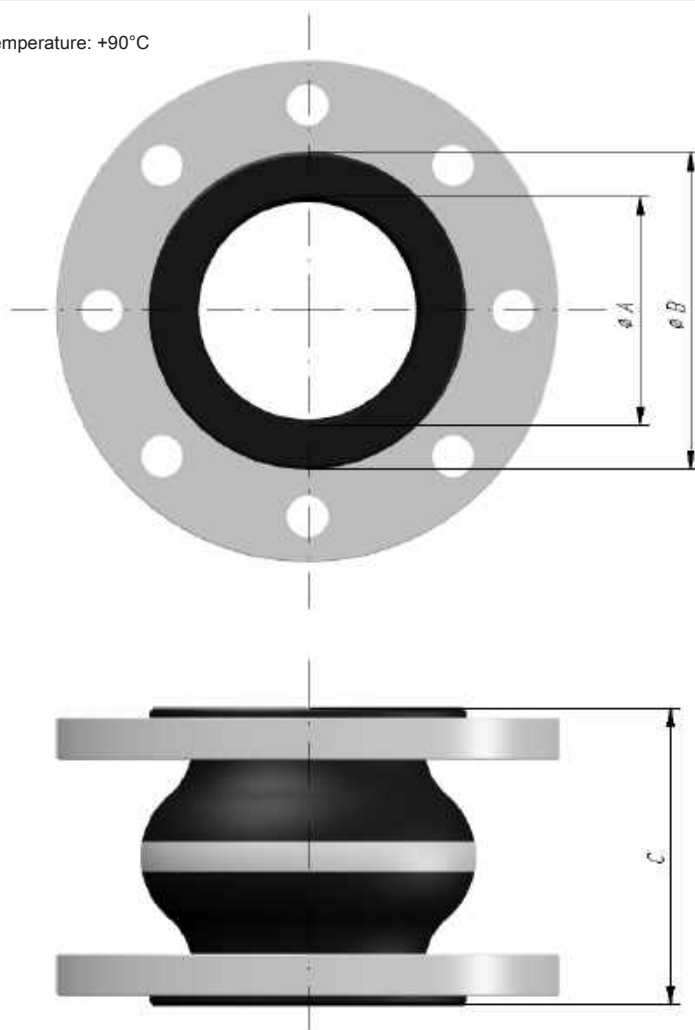
Rubber bellows are used in various fields of industry like shipbuilding, offshore, dredging, power plants, chemical industry, water works etc.

The rubber bellows provide:

- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature: +90°C



### DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1A WHITE

1A WHITE RING	Bellows dimensions			Allowable Displacement			Effective bellows area	Weight	Min. Max. Pressure		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°	cm <sup>2</sup>	kg			mm	mm
KR025W110A000	25	72	130	-30/+20	±20	±35	35	1,9	20	1,6	120	135
KR032W110A000	32	72	130	-30/+20	±20	±35	35	2,0	20	1,6	120	135
KR040W110A000	40	79	130	-30/+20	±20	±35	50	3,5	20	1,6	120	135
KR050W110A000	50	89	130	-30/+20	±20	±35	74	4,3	20	1,6	120	135
KR065W110A000	65	104	130	-30/+20	±20	±30	87	5,5	20	1,6	120	135
KR080W110A000	80	120	130	-30/+20	±20	±30	120	6,2	30	1,6	120	135
KR100W110A000	100	139	130	-30/+20	±20	±25	143	7,7	40	1,6	120	135
KR125W110A000	125	164	130	-30/+20	±20	±25	210	8,7	60	1,6	120	135
KR150W110A000	150	189	130	-30/+20	±20	±15	283	11,3	60	1,6	120	135
KR200W110A000	200	237	130	-30/+20	±20	±15	525	16,2	70	1,0	115	140
KR250W110A000	250	289	130	-30/+20	±20	±10	636	20,5	70	1,0	125	140
KR300W110A000	300	338	130	-30/+20	±20	±10	897	24,0	80	1,0	125	140
KR350W110A000	350	390	200	-30/+20	±20	±10	1290	34,0	80	1,0	190	210
KR400W110A000	400	455	200	-30/+20	±20	±10	1628	37,5	80	1,0	190	210
KR500W110A000	500	555	200	-30/+20	±20	±10	2546	47,0	80	1,0	190	210

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

TABLE

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)



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TYPE APPROVALS



## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1B Yellow

1B YELLOW



### General

Our rubber bellows yellow ring are made from a nitrile rubber compound (ECO) and provide resistance to water upto 70°C and oil upto 90°C, however this is influenced by the working pressure.

Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss.

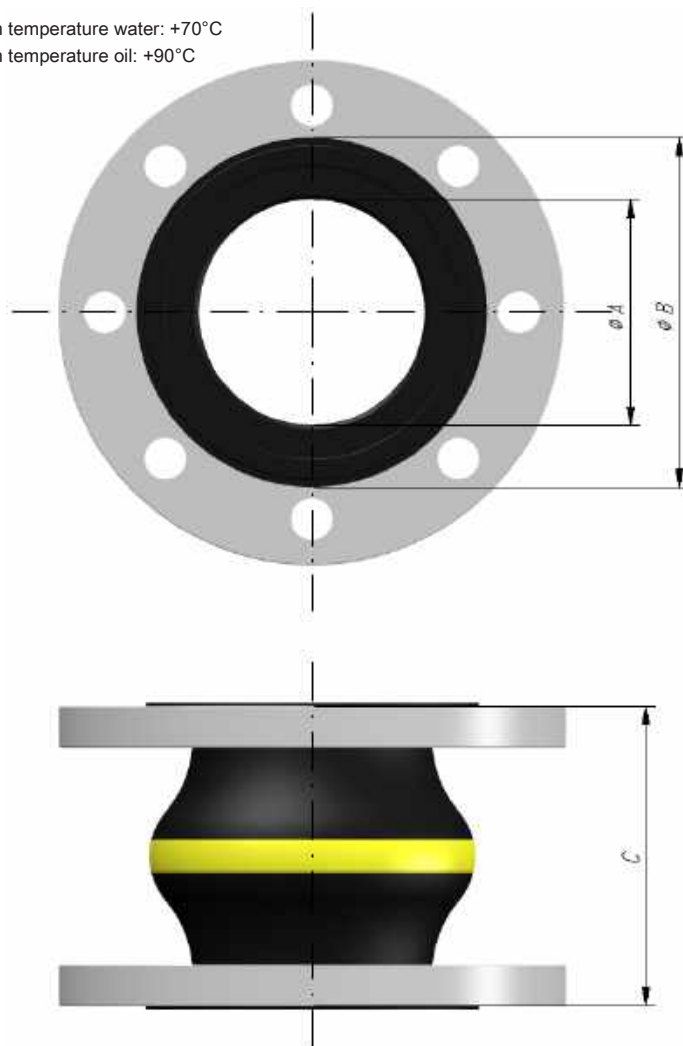
High tensile strength texture cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges.

Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

Maximum temperature water: +70°C  
Maximum temperature oil: +90°C



### DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1B YELLOW RING	Bellows dimensions			Allowable Displacement			Effective Weight bellows area		Min. Max. Pressure ( abs )		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.	cm <sup>2</sup>	kg	kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°					mm	mm
KR050G110B000	50	84	150	-15/+20	±15	±15	35	4,7	20	1,6	140	160
KR065G110B000	65	104	150	-15/+20	±15	±15	56	5,4	30	1,6	140	160
KR080G110B000	80	114	150	-15/+20	±15	±15	87	7,0	40	1,6	140	160
KR100G110B000	100	136	150	-15/+20	±15	±15	130	8,1	60	1,6	140	160
KR125G110B000	125	154	150	-15/+20	±15	±15	190	10,1	70	1,6	140	160
KR150G110B000	150	190	150	-15/+20	±15	±15	263	12,4	70	1,6	140	160
KR200G110B000	200	250	150	-15/+20	±15	±15	398	16,6	70	1,6	140	160

TABLE

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)








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1B YELLOW





## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1B Red

1B RED



#### General

Our rubber bellows red ring are made from EPDM rubber and provide resistance to water upto 90°C, however this is influenced by the working pressure.

Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss.

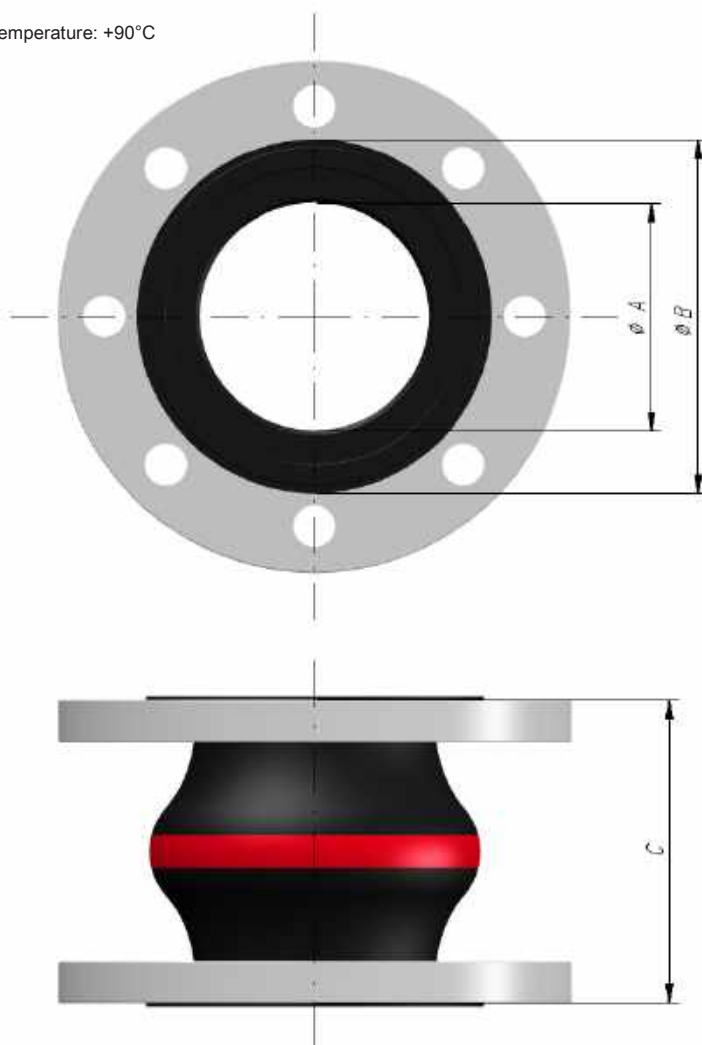
High tensile strength texture cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges.

Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

Maximum temperature: +90°C



#### DIMENSIONS



# Rubber Design

vibration and noise control

Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1B RED

1B RED RING	Bellows dimensions			Allowable Displacement			Effective bellows area	Weight	Min. Max. Pressure ( abs )		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°	cm <sup>2</sup>	kg			mm	mm
KR050R110B000	50	84	150	-15/+20	±15	±15	35	4,7	20	1,6	140	160
KR065R110B000	65	104	150	-15/+20	±15	±15	56	5,4	30	1,6	140	160
KR080R110B000	80	114	150	-15/+20	±15	±15	87	7,0	40	1,6	140	160
KR100R110B000	100	136	150	-15/+20	±15	±15	130	8,1	60	1,6	140	160
KR125R110B000	125	154	150	-15/+20	±15	±15	190	10,1	70	1,6	140	160
KR150R110B000	150	190	150	-15/+20	±15	±15	263	12,4	70	1,6	140	160
KR200R110B000	200	250	150	-15/+20	±15	±15	398	16,6	70	1,6	140	160

TABLE

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.



## Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)



TYPE APPROVAL

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## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1C Yellow

1C YELLOW



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

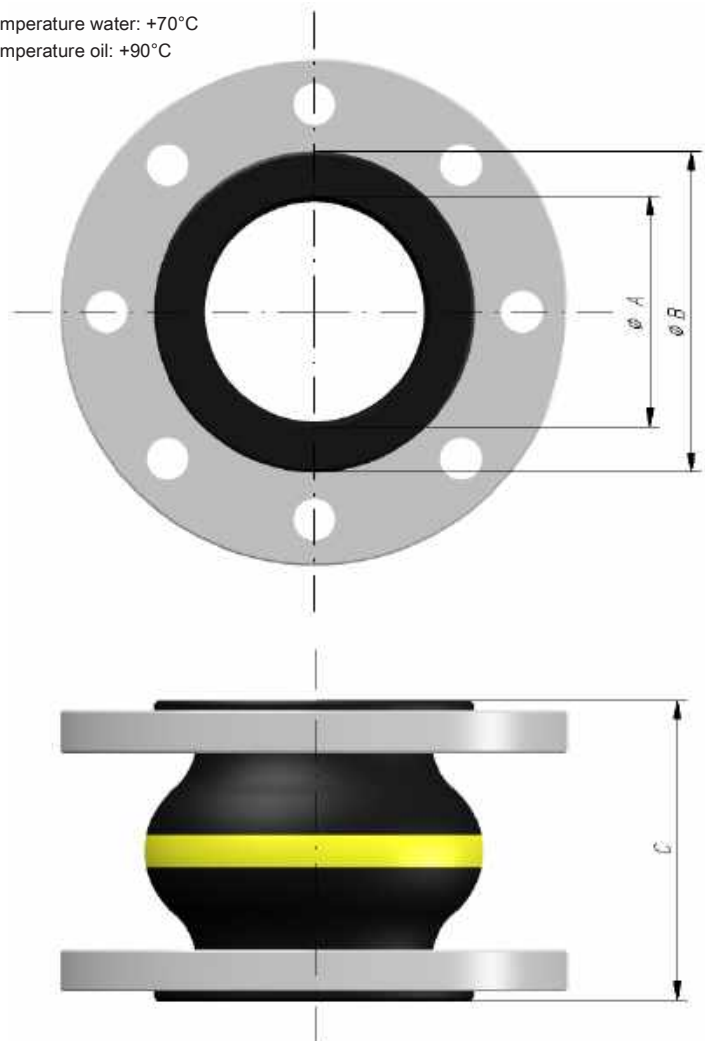
Rubber bellows are used in various fields of industry like shipbuilding, offshore, dredging, power plants, chemical industry, water works etc.

The rubber bellows provide:

- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature water: +70°C  
Maximum temperature oil: +90°C



### DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1C YELLOW RING	Bellows dimensions			Allowable Displacement			Effective bellows area cm <sup>2</sup>	Weight kg	Min. Max. Pressure ( abs )		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°					mm	mm
KR025G110C000	25	65	100	-30/+20	±30	7	18	2,8	30	1,6	90	105
KR032G110C000	32	65	100	-30/+20	±30	7	18	2,8	30	1,6	90	105
KR040G110C000	40	78	100	-30/+20	±30	7	18	3,3	40	1,6	90	105
KR050G110C000	50	90	100	-30/+20	±30	7	35	3,7	50	1,6	90	105
KR065G110C000	65	108	100	-30/+20	±30	7	56	4,8	50	1,6	90	105
KR080G110C000	80	124	100	-30/+20	±30	7	87	5,3	60	1,6	90	105
KR100G110C000	100	152	100	-30/+20	±30	7	130	6,2	70	1,6	90	105
KR125G110C000	125	183	100	-30/+20	±30	7	195	8,2	80	1,6	90	105
KR150G110C000	150	214	100	-30/+20	±30	7	260	11,2	80	1,6	90	105
KR200G110C000	200	252	100	-30/+20	±30	7	416	17,0	80	1,6	90	105

TABLE

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)

1C YELLOW



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## DOCUMENTATION SHEET

### Rubber Bellows Type 1S Yellow

1S YELLOW



#### General

Our rubber bellows yellow ring are made from a nitrile rubber compound (ECO) and provide resistance to water upto 70°C and oil upto 90°C, however this is influenced by the working pressure.

Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss.

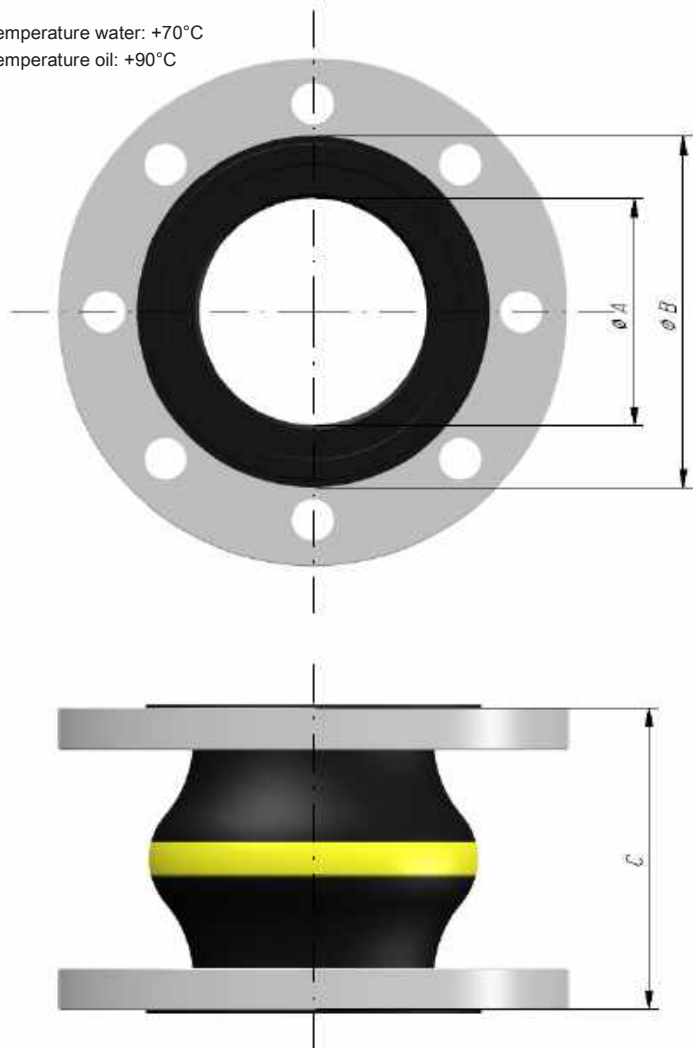
High tensile strength texture cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges.

Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

Maximum temperature water: +70°C  
Maximum temperature oil: +90°C



#### DIMENSIONS



Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1S YELLOW RING	Bellows dimensions			Allowable Displacement			Effective bellows area cm <sup>2</sup>	Weight kg	Min. Pressure		Max. Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°					mm	mm
KR032G110S000	32	64	160	-30/+30	±30	10	15	3,6	20	1,6	150	170
KR040G110S000	40	72	160	-30/+30	±30	10	20	4,2	20	1,6	150	170
KR050G110S000	50	84	160	-30/+30	±30	10	30	4,8	20	1,6	150	170
KR065G110S000	65	104	160	-30/+30	±30	10	50	5,5	30	1,6	150	170
KR080G110S000	80	114	160	-30/+30	±30	10	85	7,1	40	1,6	150	170
KR100G110S000	100	136	160	-30/+30	±30	10	125	8,2	60	1,6	150	170
KR125G110S000	125	154	160	-30/+30	±30	10	185	10,2	70	1,6	150	170
KR150G110S000	150	190	160	-30/+30	±30	10	250	12,5	70	1,6	150	170
KR200G110S000	200	250	160	-30/+30	±30	10	400	16,7	70	1,6	150	170

TABLE

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.

### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150)



TYPE APPROVALS

1S YELLOW



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## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 1S Red

1S RED



### General

Our rubber bellows red ring are made from EPDM rubber and provide resistance to water upto 90°C, however this is influenced by the working pressure.

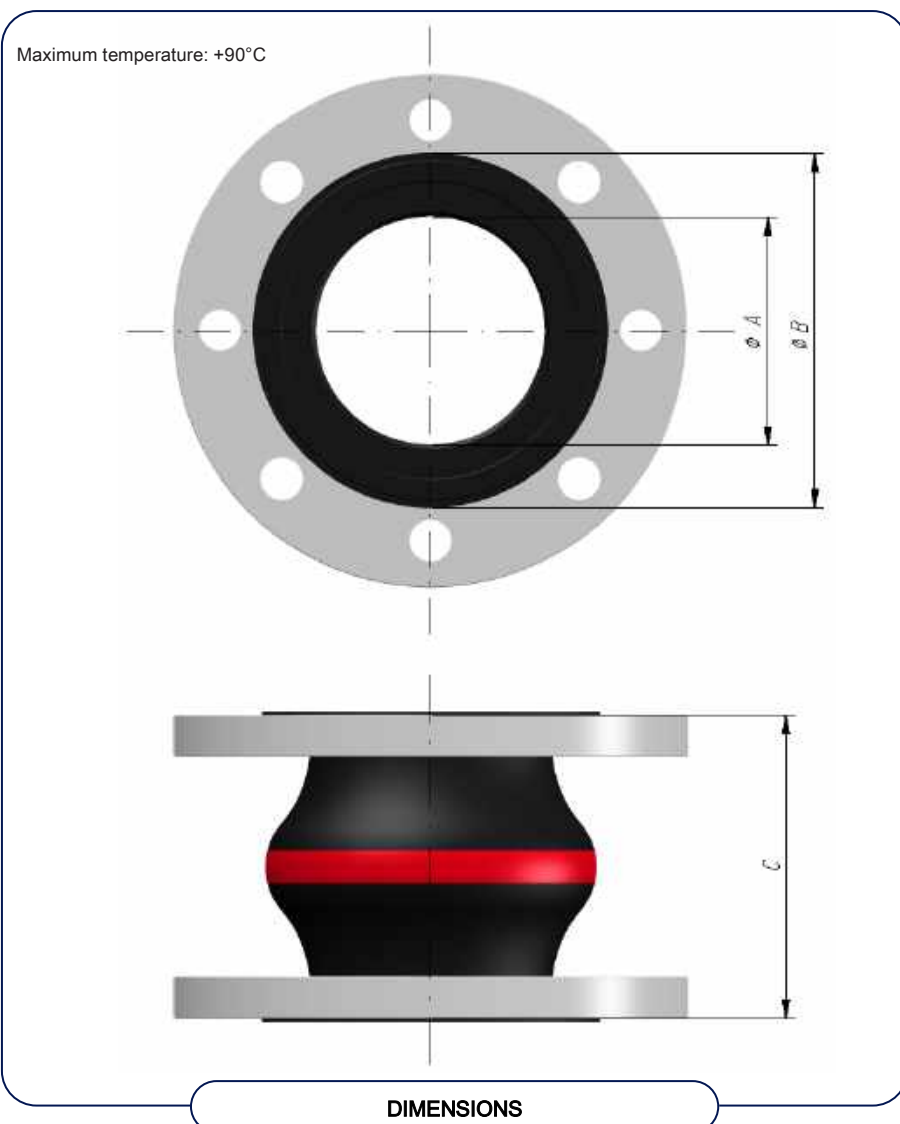
Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss.

High tensile strength texture cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges.

Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.





# Rubber Design

vibration and noise control

Rubber bellows with flanges have a special flow-assisting convoluted shape of the bellows which minimize detrimental turbulence of the medium and pressure loss. High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The rubber bellows are produced with a vulcanized steel ring to guarantee a perfect sealing of the profiled sealing rings in the special chamber of the swivel flanges. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

The standard flange range is made of carbon steel S235JR, drilled according to DIN PN10/16 and electrolytic galvanized.

1S RED

1S RED RING	Bellows dimensions			Allowable Displacement			Effective bellows area cm <sup>2</sup>	Weight kg	Min. Max. Pressure ( abs )		Installation length	
	ØA	ØB	C	Ax.	Lat.	Ang.			kPa	MPa	min.	max.
	mm	mm	mm	mm	mm	°					mm	mm
KR032R110S000	32	64	160	-30/+30	±30	10	15	3,6	20	1,6	150	170
KR040R110S000	40	72	160	-30/+30	±30	10	20	4,2	20	1,6	150	170
KR050R110S000	50	84	160	-30/+30	±30	10	30	4,8	20	1,6	150	170
KR065R110S000	65	104	160	-30/+30	±30	10	50	5,5	30	1,6	150	170
KR080R110S000	80	114	160	-30/+30	±30	10	85	7,1	40	1,6	150	170
KR100R110S000	100	136	160	-30/+30	±30	10	125	8,2	60	1,6	150	170
KR125R110S000	125	154	160	-30/+30	±30	10	185	10,2	70	1,6	150	170
KR150R110S000	150	190	160	-30/+30	±30	10	250	12,5	70	1,6	150	170
KR200R110S000	200	250	160	-30/+30	±30	10	400	16,7	70	1,6	150	170

TABLE

Standard flange S235JR, drilled according to DIN PN10/16, electrolytic galvanized.



### Pressure

The maximum working pressure is 16 Bar ( 10 Bar\* ) with a test pressure of 25 Bar and even a burst pressure of over 60 Bar ( 30 Bar\* )

( \* for bellows larger than NB 150 )



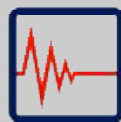



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## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 3K Red

3K RED



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

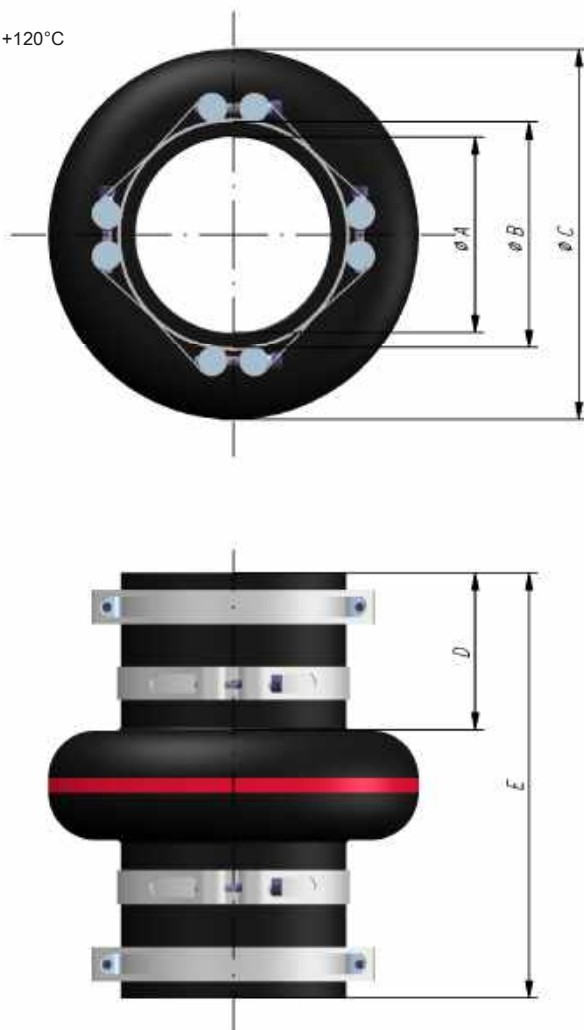
Rubber bellows are used in various fields of industry like shipbuilding, offshore, dredging, power plants, chemical industry, water works etc.

The rubber bellows provide:

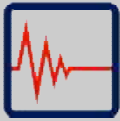
- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature: +120°C



DIMENSIONS



As an addition to the flanged bellow range our 3K and 3K2 rubber bellows have been designed especially to provide small, low weight bellows which are both very flexible and simple to install.

The 3K ranges accommodate misalignment, axial and lateral pipe work movements and dramatically reduce the transmission of noise, vibration and shock.

High tensile strength aramide cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The burst pressure safety factor is 5 times the working pressure of 4 Bar. The minimum work pressure is 70 kPa ( abs ) and can be lowered by fitting a vacuum support ring. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

3K RED RING	Bellows dimensions					Allowable Displacement			Weight Min. Max.	Advised Hose clamp		
	ØA	ØB	C	D	E	Ax.	Lat.	Ang.				
	mm	mm	mm	mm	mm	mm	mm	°	kg	kPa MPa		
Art.nr without clamps												
KV025.0K1000	25,0	44	82	44	140	-15/+7	+/-10	7	0,8	70	0,4	30-40
KV026.9K1000	26,9	45	84	44	140	-15/+7	+/-10	7	0,8	70	0,4	36-45
KV030.0K1000	30,0	48	87	44	140	-15/+7	+/-11	7	0,8	70	0,4	40-50
KV032.0K1000	32,0	50	95	44	140	-15/+7	+/-11	7	0,8	70	0,4	40-50
KV033.7K1000	33,7	52	97	44	140	-15/+7	+/-12	7	0,9	70	0,4	45-55
KV038.0K1000	38,0	57	108	44	140	-15/+7	+/-12	7	0,9	70	0,4	50-60
KV040.0K1000	40,0	59	111	52	160	-19/+9	+/-14	7	0,9	70	0,4	50-60
KV042.4K1000	42,4	61	115	52	160	-19/+9	+/-14	7	0,9	70	0,4	55-65
KV044.5K1000	44,5	63	117	52	160	-19/+9	+/-14	7	0,9	70	0,4	55-65
KV048.3K1000	48,3	67	121	52	160	-19/+9	+/-14	7	0,9	70	0,4	60-70
KV050.8K1000	50,8	69	124	52	160	-19/+9	+/-14	7	1,0	70	0,4	60-70
KV054.0K1000	54,0	73	137	52	160	-19/+9	+/-14	7	1,0	70	0,4	65-75
KV057.0K1000	57,0	76	140	52	160	-19/+9	+/-14	7	1,2	70	0,4	70-80
KV060.3K1000	60,3	78	142	62	180	-19/+9	+/-14	7	1,3	70	0,4	70-80
KV063.5K1000	63,5	81	145	62	180	-19/+9	+/-14	7	1,3	70	0,4	75-85
KV076.1K1000	76,1	94	158	62	180	-19/+9	+/-14	7	1,4	70	0,4	85-95
KV088.9K1000	88,9	107	171	85	225	-20/+10	+/-15	7	1,7	70	0,4	100-110
KV101.6K1000	101,6	121	195	90	250	-25/+12	+/-16	7	2,1	70	0,4	115-125
KV108.0K1000	108,0	128	212	90	250	-25/+12	+/-16	7	2,5	70	0,4	120-130
KV114.3K1000	114,3	134	219	90	250	-25/+12	+/-16	7	2,5	70	0,4	125-135
KV115.8K1000	115,8	135	218	90	250	-25/+12	+/-16	7	2,5	70	0,4	130-140
KV127.0K1000	127,0	146	229	90	250	-25/+12	+/-16	7	2,6	70	0,4	130-140
KV133.0K1000	133,0	154	236	90	250	-25/+12	+/-16	7	2,7	70	0,4	145-155
KV139.7K1000	139,7	160	243	90	250	-25/+12	+/-16	7	2,9	70	0,4	155-165
KV168.3K1000	168,3	187	272	90	250	-30/+14	+/-21	7	3,3	70	0,4	180-190

TABLE

**Remark**

Rubber bellows reinforced with aramide cord.

**Pressure**

The maximum working pressures are guaranteed by using the recommended power clamps in steel ( galvanized ) or stainless steel according to the table.



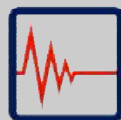
TYPE APPROVAL

3K RED



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## DOCUMENTATION SHEET

### Rubber Bellows

#### Type 3K Yellow

3K YELLOW



### General

Our rubber bellows are made from various elastomers and provide the flexible element in pipe work that is indispensable in today's technically advanced plant and machinery spaces.

By using the best quality proven rubber compounds and a construction based on many years of experience, our rubber bellows are produced to a high quality standard to guarantee maximum safety and performance.

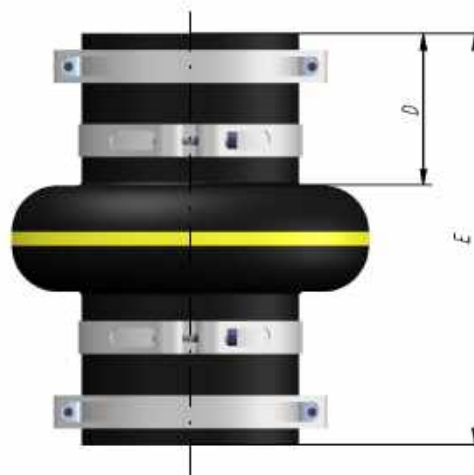
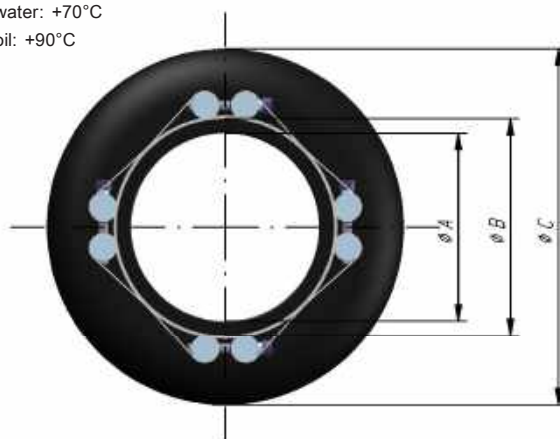
Rubber bellows are used in various fields of industry like shipbuilding, offshore, dredging, power plants, chemical industry, water works etc.

The rubber bellows provide:

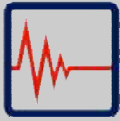
- Compensation of thermal or mechanical movement of pipe work in axial, lateral and/or angular directions.
- Absorption and isolation of vibration combined with damping of pipe work borne sound transmission.
- Reduction of pressure pulses in pipe work.
- Compensation for pipe work misalignment on flexibly mounted installations.

Our program consists of rubber bellows with flanges, according all known standards as well as special connections, and rubber and silicone bellows for installation with hose clamps.

Maximum temperature water: +70°C  
Maximum temperature oil: +90°C



### DIMENSIONS



As an addition to the flanged bellow range our 3K and 3K2 rubber bellows have been designed especially to provide small, low weight bellows which are both very flexible and simple to install. The 3K ranges accommodate misalignment, axial and lateral pipe work movements and dramatically reduce the transmission of noise, vibration and shock.

High tensile strength texture cord plies combined with proven synthetic rubber mixes guarantee maximum reliability and an extended working life.

The burst pressure safety factor is 5 times the working pressure of 4 Bar. The minimum work pressure is 70 kPa ( abs ) and can be lowered by fitting a vacuum support ring. Average installed insulation is about 25 dB, a figure which is further improved by compressed installation.

3K YELLOW RING	Bellows dimensions					Allowable Displacement			Weight kg	Min. Pressure kPa	Max. Pressure MPa	Advised Hose clamp
	ØA	ØB	C	D	E	Ax.	Lat.	Ang.				
	mm	mm	mm	mm	mm	mm	mm	°				
Art.nr without clamps	mm	mm	mm	mm	mm	mm	mm	°	kg	kPa	MPa	
KV025.0G1000	25,0	41	81	44	140	-15/+7	+/-10	7	0,8	70	0,4	30-40
KV026.9G1000	26,9	42	83	44	140	-15/+7	+/-10	7	0,8	70	0,4	36-45
KV030.0G1000	30,0	45	86	44	140	-15/+7	+/-11	7	0,8	70	0,4	40-50
KV032.0G1000	32,0	47	94	44	140	-15/+7	+/-11	7	0,8	70	0,4	40-50
KV033.7G1000	33,7	49	96	44	140	-15/+7	+/-12	7	0,9	70	0,4	45-55
KV038.0G1000	38,0	54	107	44	140	-15/+7	+/-12	7	0,9	70	0,4	50-60
KV040.0G1000	40,0	56	110	52	160	-19/+9	+/-14	7	0,9	70	0,4	50-60
KV042.4G1000	42,4	58	114	52	160	-19/+9	+/-14	7	0,9	70	0,4	55-65
KV044.5G1000	44,5	60	116	52	160	-19/+9	+/-14	7	0,9	70	0,4	55-65
KV048.3G1000	48,3	64	120	52	160	-19/+9	+/-14	7	0,9	70	0,4	60-70
KV050.8G1000	50,8	66	123	52	160	-19/+9	+/-14	7	1,0	70	0,4	60-70
KV054.0G1000	54,0	70	136	52	160	-19/+9	+/-14	7	1,0	70	0,4	65-75
KV057.0G1000	57,0	73	139	52	160	-19/+9	+/-14	7	1,2	70	0,4	70-80
KV060.3G1000	60,3	76	141	62	180	-19/+9	+/-14	7	1,3	70	0,4	70-80
KV063.5G1000	63,5	79	144	62	180	-19/+9	+/-14	7	1,3	70	0,4	75-85
KV076.1G1000	76,1	92	157	62	180	-19/+9	+/-14	7	1,4	70	0,4	85-95
KV088.9G1000	88,9	105	170	85	225	-20/+10	+/-15	7	1,7	70	0,4	100-110
KV101.6G1000	101,6	119	194	90	250	-25/+12	+/-16	7	2,1	70	0,4	115-125
KV108.0G1000	108,0	125	211	90	250	-25/+12	+/-16	7	2,5	70	0,4	120-130
KV114.3G1000	114,3	132	217	90	250	-25/+12	+/-16	7	2,5	70	0,4	125-135
KV115.8G1000	115,8	133	218	90	250	-25/+12	+/-16	7	2,5	70	0,4	130-140
KV127.0G1000	127,0	146	229	90	250	-25/+12	+/-16	7	2,6	70	0,4	130-140
KV133.0G1000	133,0	152	235	90	250	-25/+12	+/-16	7	2,7	70	0,4	145-155
KV139.7G1000	139,7	158	242	90	250	-25/+12	+/-16	7	2,9	70	0,4	155-165
KV168.3G1000	168,3	185	271	90	250	-30/+14	+/-21	7	3,3	70	0,4	180-190

TABLE

### Pressure

The maximum working pressures are guaranteed by using the recommended power clamps in steel (galvanized) or stainless steel according to the table.



TYPE APPROVAL



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3K YELLOW