

# **GUMMIKOMPENSATOR GKF8000 / GKF8130**





Size: DN 32 to 600 Ends: Flanges PN10/16

**Min Temperature :** - 10°C

**Max Temperature :**  $+100^{\circ}$ C for EPDM and  $+80^{\circ}$ C for NBR

**Max Pressure:** 16 Bars up to DN 300

**Specifications:** Absorb vibrations and noises

Linear and angular compansion

Single sphere

Materials: Galvanized steel flanges



### **SPECIFICATIONS:**

- Absorb vibration, noises and expansion
- Linear and angular compansion
- Tube EPDM ( EPDM marking )
- Galvanized steel flanges PN10/16
- Expansion limiter (option)

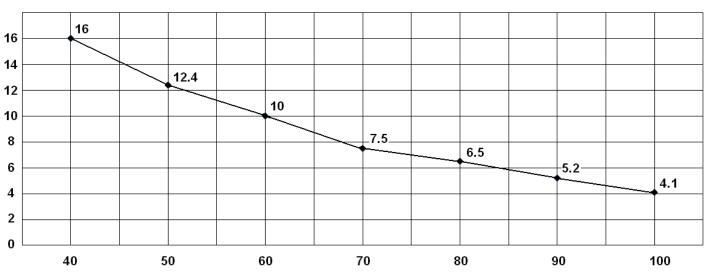
#### USE:

- Water distribution ( for EPDM types )
- Oil, hydrocarbon, air (for NBR types)
- Min and max Temperature Ts: 10°C to + 100°C for EPDM types
- Min and max Temperature Ts: 10°C to + 80°C for NBR type
- Max Pressure Ps: 16 bars up to DN300 ( see graph ), 10 bars over

#### PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED ) GKF8000 / GKF8130 DN 32 - DN 300 :

## 8000 / 8130 DN 32 - DN 300



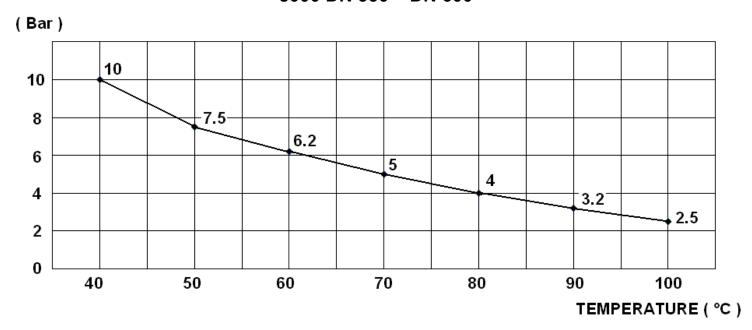


TEMPERATURE (°C)



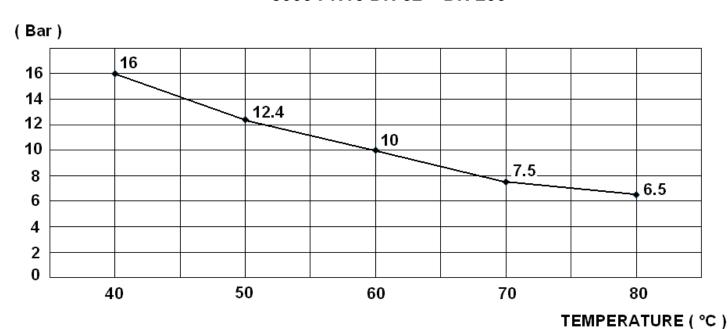
### PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED ) GKF8000 DN 350 - DN 600 :

## 8000 DN 350 - DN 600



PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED ) GKF8000 PN16 DN 32 - 200 :

## 8000 PN16 DN 32 - DN 200

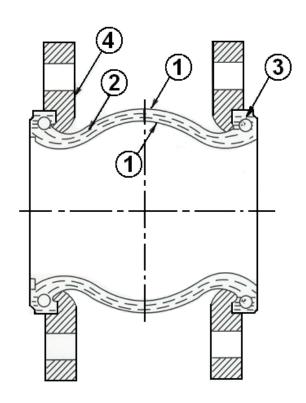




### RANGE:

- EPDM expansion joint with steel flanges PN10 from DN 32 to DN 600
- EPDM expansion joint with steel flanges PN16 from DN 200 to DN 300

### **MATERIALS:**

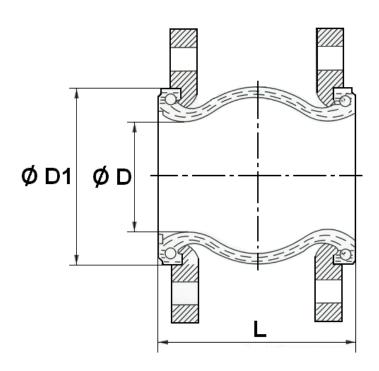


Item	Designation	Materials 8000 ` 8130
1	Inner tube and cover	EPDM
2	Reinforcement	Nylor
3	Brace	Hard
4	Flanges	Galvaniz



# **EXPANSION JOINT EPDM OR NBR PN10/16**

## SIZE ( in mm ):

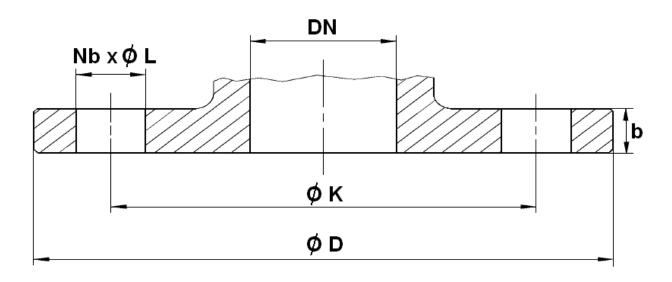


Ref.	DN	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
	L	95	95	105	115	130	135	170	180	205	240	260	265	265	200	200	250
8000	Ø D	29	37	47	57	74	91	119	145	199	241	294	331	372	431	486	591
	Ø D1	69	79	90	108	124	145	179	209	261	320	370	420	473	532	587	685
	Weig. (Kg)	2.79	3.59	4.23	4.74	6.27	6.47	9.4	12.75	17.73	23.27	29.4	41.3	46.85	55.18	65	74.5

Ref.	DN	32	40	50	65	80	100	125	150	200	250	300
	L	130	130	130	130	130	130	130	130	130	130	130
8130	ØD	29	36	48	63	72	92	123	144	199	254	295
8130	Ø D1	69	78	89	108	123	145	180	209	259	322	370
	Weight (Kg )	2.74	2.98	4.24	4.98	5.72	6,94	9.18	10.96	15.3	20.24	23.46



## FLANGES SIZE PN10 GKF8000 / GKF8130 (in mm):

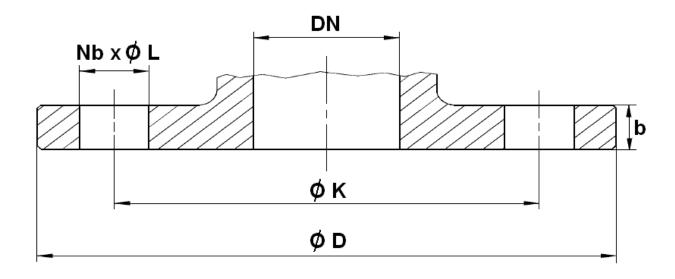


Ref.	DN	40	50	65	80	100	125	150	200	250	300
	ØD	150	165	185	200	220	250	285	340	395	445
8000	øк	110	125	145	160	180	210	240	295	350	400
8130	Nb x Ø L	4 x 19	4 x 19	4 x 19	8 x 19	8 x 19	8 x 19	8 x 23	8 x 23	12 x 23	12 x 23
	b	14	15	15	17	17	19	19	20	22	22

Ref.	DN	350	400	450	500	600
	ØD	505	565	615	670	780
8000	øк	460	515	565	620	725
	Nb x Ø L	16 x 23	16 x 28	20 x 28	20 x 28	20 x 31
	b	26	28	28	30	32



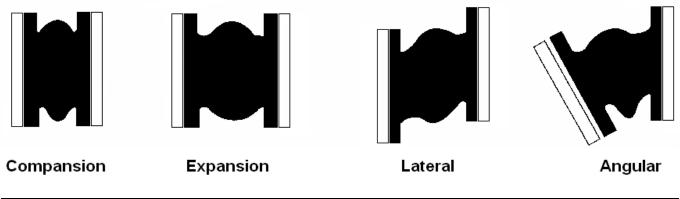
## FLANGES SIZE PN16 GKF8000 PN16 (in mm):



Ref.	DN	200	250	300
	ØD	340	405	460
8000 / PN16	øк	295	355	410
8000 / PN16	Nb x Ø L	12 x 23	12 x 28	12 x 28
	b	22	24	24



### MOVEMENTS (in mm):



DN	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Compansion	8	8	8	12	12	18	18	18	20	22	24	25	25	20	20	20
Expansion	4	4	4	6	6	10	10	10	14	14	14	16	16	12	12	12
Lateral	8	8	8	10	10	12	12	12	18	18	18	18	18	18	18	18
Angular	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°	15°

### **STANDARDS:**

Fabrication according to ISO 9001 : 2008

• DIRECTIVE 97/23/CE: Products excluded from directive (article 1, § 3.2)

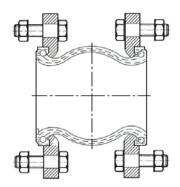
• Flanges according to EN 1092-1 PN10/16



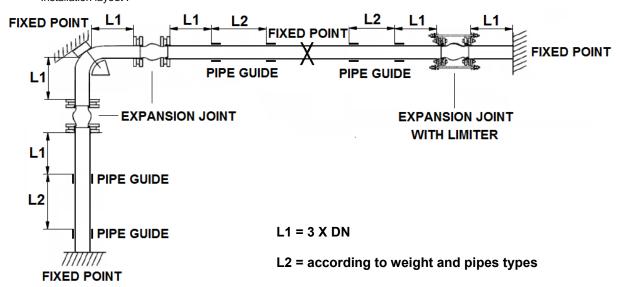
### **INSTALLATION INSTRUCTION:**

Expansion joint are designed for the absorption of previously specified movements under specific pressure and temperature conditions. So that the maximum service life is achieved, the following items must be observed during installation.

- Prior to fitment of the compensator it must be ensured that :
  - The route of the pipeline is straight The expansion tallies with that of the chosen compensator
  - The expansion tallies with that of The chosen compensator
  - The fixes points are dimensionned so that they can absorb the reaction forces and stiffness rate that arise during use.
  - The pipeline is limited by fixed points
  - The distance between compensator and bearing may be a maximum of 3 times the pipe diameter. Place only one compensator between 2 bearings.
- Each pipe elbow must be fixed by support, specially if compensator is mounted with limiters. Fixed bearings are necessary because compensator is submitted to expansion when it is under pressure.
- Expansion joint must not be painted and heat-insulated. It must be protected from bad weather and solar radiation.
- During assembly operation, make sure screws are oriented according to the graph out below :



- Please apply the following stages order :
  - a) Fixed points for above pipeline
  - b) Fixed points for down pipelinec) Compensator mounting
- Installation layout :



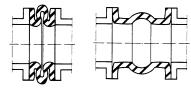


# <u>INSTALLATION INSTRUCTION ( SUITE ) :</u>

- Check that the compensator is not subjected to the weight of the pipeline. The installation lenght must agree with the installation gap. The compensator must never be twisted. It is recommended that specific characteristics be observed during maintenance:
  - o The compensator must never be painted or recovered by heat insulation
  - o The tightness of the bolts must be checked often.
  - o The flanges must be perfectly cleared
- Use limiters: When the working pressure can exceed the following values:
  - o Up to DN100 : 10 bars
  - o From DN125 to DN250 : 9 bars
  - o From DN300 to DN350 : 6 bars
  - o From DN400 to DN600 : 3 bars
  - o When there is some risk of high pressure (pump starting) or high temperature.

**NOTA**: The life of compensator can vary because of working conditions (fluids, pressure, temperature), that is why it is necessary to check it regullary.

### **WRONG INSTALLATION:**

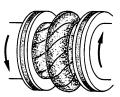


Excessive compansion

Excessive expansion



Cutting too important



Torsion



Important compansion and angular deviation



Angular deviation too important