

## RUBBER EXPANSION JOINT TEGUFLEX® PHO DOUBLE YELLOW HNBR FLANGED

Rubber expansion joint Teguflex PHO HNBR with swiveling flanges to absorb vibrations and noises on oils networks, mixed water/oil, mixed compressed air/oil etc...

Body in Hydrogenated nitrile (HNBR) and carbon steel electro galvanized or AISI 316 flanges.

For linear and angular compansion.

130 mm long for all DN.



**Size :** DN25 to DN300

**Connection :** Flanges PN10/16

**Min Temperature :** -25°C

**Max Temperature :** +110°C

**Max Pressure :** 16 Bars (10 bars at 110°C)

**Specifications :** Absorb vibrations and noise

Linear and angular compansion

Hydrogenated nitrile tube (HNBR)

**Materials :** Electro galvanized steel flanges

## RUBBER EXPANSION JOINT TEGUFLEX® PHO DOUBLE YELLOW HNBR FLANGED

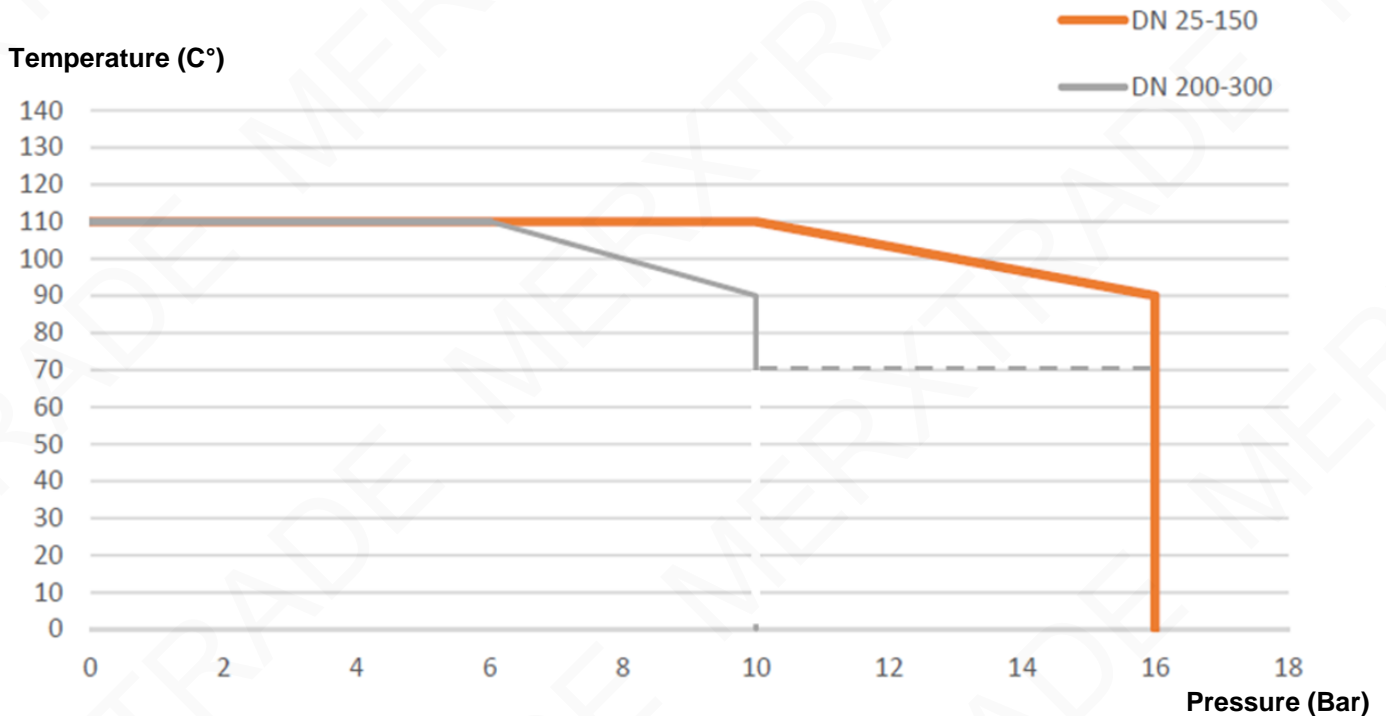
### SPECIFICATIONS :

- Absorb vibration, noises and expansion
- Linear and angular compansion
- Inner tube Hydrogenated nitrile (HNBR)
- 130 mm length
- Electro galvanized steel swiveling flanges PN10/16 up to DN150, PN10 over
- On request, PN6, PN16 and Class 150 PN20 flanges
- AISI 316 flanges on request
- AISI 316 Ti vacuum ring on request (Ref.9815050 to 9815300)
- Inner liner PTFE on request (movements allowed by the expansion joints are then reduced by 50 % and pressure max is 6 bars)
- Bursting pressure >50 bar at 20°C
- Test pressure 25 bar at 20°C

### USE :

- Oils, mixed Water/oil, mixed compressed air/oil etc...
- Min and max temperature Ts : - 25°C to + 110°C
- Max Pressure Ps : 16 bars at 90°C up to DN150 ( 6 bars with PTFE coating )  
 16 bars at 70°C from DN200 to DN300  
 10 bars at 110°C up to DN150  
 6 bars at 110°C from DN200 to DN300

### PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :



### MAXIMUM VACUUM :

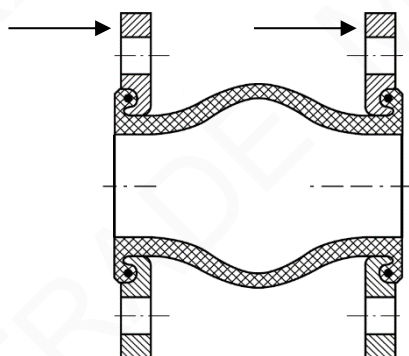
| DN           | 25/32 | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250  | 300  |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|
| Vacuum (bar) | -0.8  | -0.8 | -0.7 | -0.6 | -0.5 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 | -0.2 |

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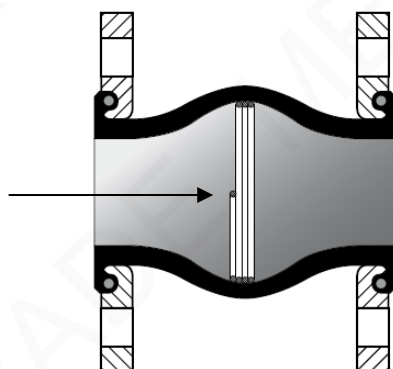
**RANGE :**

- Hydrogenated nitrile (HNBR) expansion joint with electro galvanized steel flanges PN10/16 from DN 25 to DN 150, PN10 over Ref. 1568

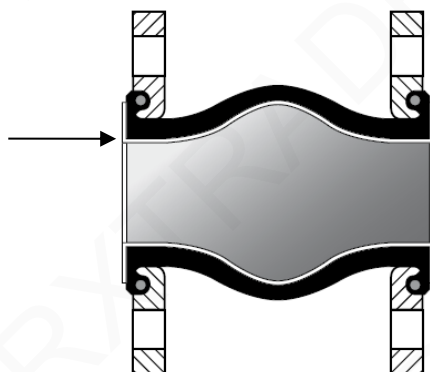
- **On Request :**



- AISI 316 flanges



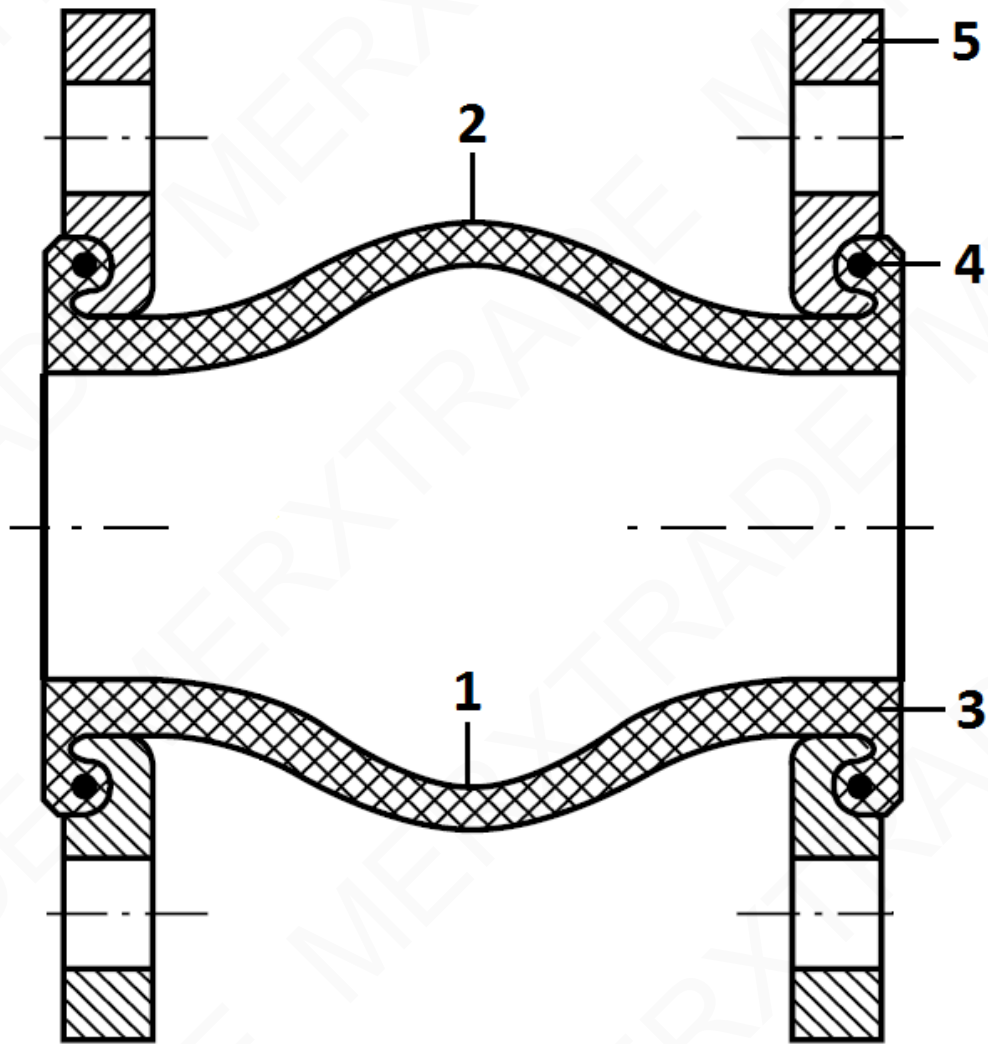
- AISI 316 Ti vacuum ring (vacuum up to -1 bar) Ref.9815050 to 9815300



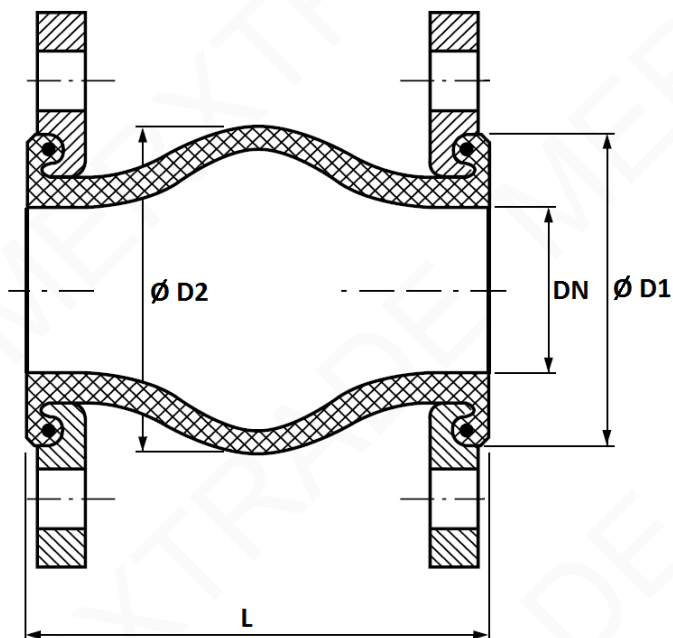
- Inner liner PTFE (movements allowed by the expansion joints are then reduced by 50 % and pressure max is 6 bars)

**RUBBER EXPANSION JOINT TEGUFLEX® PHO DOUBLE YELLOW HNBR FLANGED**

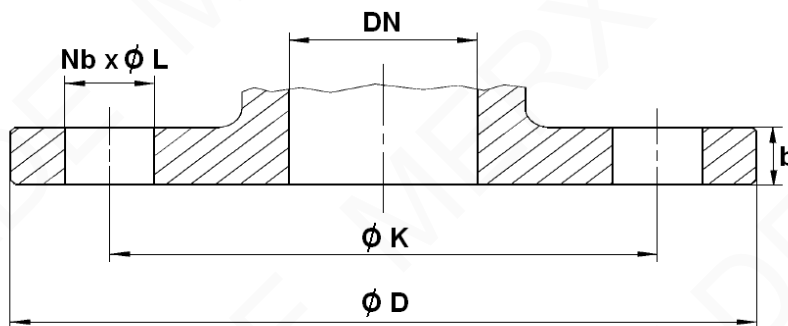
**MATERIALS :**



| Item | Designation       | Materials                   |
|------|-------------------|-----------------------------|
| 1    | Inner tube        | Hydrogenated nitrile (HNBR) |
| 2    | Outer cover       |                             |
| 3    | Reinforcement     | Aramid                      |
| 4    | Brace             | Carbon steel                |
| 5    | Swiveling flanges | Electro galvanized steel    |

**RUBBER EXPANSION JOINT TEGUFLEX® PHO DOUBLE YELLOW HNBR FLANGED**
**SIZE ( in mm ) :**


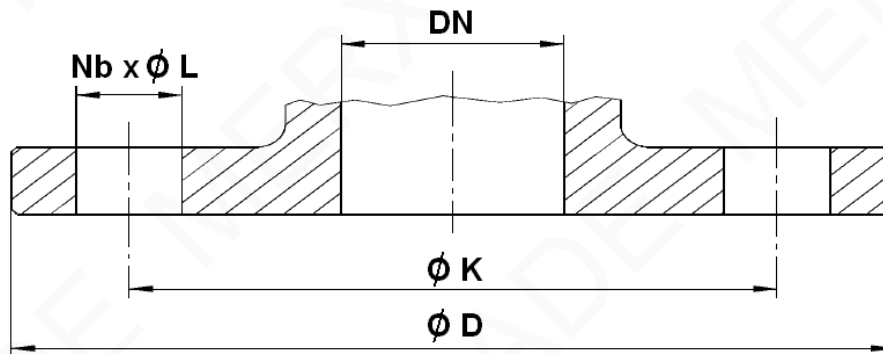
| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| L           | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     |
| Ø D1        | 72      | 80      | 90      | 105     | 120     | 140     | 165     | 190     | 240     | 290     | 340     |
| Ø D2        | 77      | 85      | 95      | 110     | 125     | 145     | 170     | 195     | 245     | 295     | 345     |
| Weight (Kg) | 2.8     | 3.3     | 3.7     | 4.8     | 5.3     | 6.2     | 8.2     | 11.2    | 16.8    | 21.6    | 30.1    |
| Ref.        | 1568032 | 1568040 | 1568050 | 1568065 | 1568080 | 1568100 | 1568125 | 1568150 | 1568200 | 1568250 | 1568300 |

**STANDARD FLANGES PN10 (PN10/16 UP TO DN150) SIZE ( in mm ) :**


| DN       | 25   | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250     | 300     |
|----------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| Ø D      | 115  | 140    | 150    | 165    | 185    | 200    | 220    | 250    | 285    | 340    | 395     | 445     |
| Ø K      | 85   | 100    | 110    | 125    | 145    | 160    | 180    | 210    | 240    | 295    | 350     | 400     |
| Nb x Ø L | 4x14 | 4 x 18 | 4 x 18 | 4 x 18 | 4 x 18 | 8 x 18 | 8 x 18 | 8 x 18 | 8 x 22 | 8 x 22 | 12 x 22 | 12 x 22 |
| b        | 13.8 | 13.8   | 14     | 14.1   | 14.4   | 14.8   | 15.2   | 16     | 17.8   | 20.2   | 22.6    | 26.5    |

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**SIZE OF FLANGES ON REQUEST :**



**PN6 FLANGES ( in mm ) :**

| DN       | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250     | 300     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| Ø D      | 100    | 120    | 130    | 140    | 160    | 190    | 210    | 240    | 265    | 320    | 375     | 440     |
| Ø K      | 75     | 90     | 100    | 110    | 130    | 150    | 170    | 200    | 225    | 280    | 335     | 395     |
| Nb x Ø L | 4 x 11 | 4 x 14 | 4 x 14 | 4 x 14 | 4 x 14 | 4 x 18 | 4 x 18 | 8 x 18 | 8 x 18 | 8 x 18 | 12 x 18 | 12 x 22 |

**PN16 FLANGES ( in mm ) :**

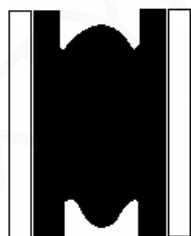
| DN       | 200     | 250     | 300     |
|----------|---------|---------|---------|
| Ø D      | 340     | 405     | 460     |
| Ø K      | 295     | 355     | 410     |
| Nb x Ø L | 12 x 22 | 12 x 26 | 12 x 26 |

**Class 150 PN20 FLANGES ( in mm ) :**

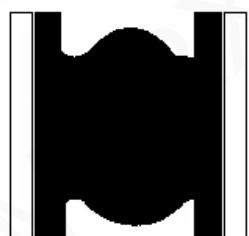
| DN (mm)  | 25       | 32       | 40       | 50     | 65     | 80     | 100    | 125      | 150      | 200      | 250       | 300   |
|----------|----------|----------|----------|--------|--------|--------|--------|----------|----------|----------|-----------|-------|
| NPS (")  | 1"       | 1"1/4    | 1"1/2    | 2"     | 2"1/2  | 3"     | 4"     | 5"       | 6"       | 8"       | 10"       | 12"   |
| Ø D      | 108      | 117      | 127      | 152    | 178    | 190    | 229    | 254      | 279      | 343      | 406       | 483   |
| Ø K      | 79.4     | 88.9     | 98.4     | 120.6  | 139.7  | 152.4  | 190.5  | 215.9    | 241.3    | 298.4    | 361.9     | 431.8 |
| Nb x Ø L | 4 x 15.9 | 4 x 15.9 | 4 x 15.9 | 4 x 19 | 4 x 19 | 4 x 19 | 8 x 19 | 8 x 22.2 | 8 x 22.2 | 8 x 22.2 | 12 x 25.4 |       |

**RUBBER EXPANSION JOINT TEGUFLEX® PHO DOUBLE YELLOW HNBR FLANGED**

MOVEMENTS ( in mm ) :



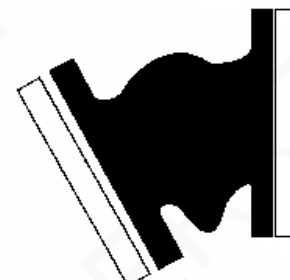
**Compansion**



**Expansion**



**Lateral**

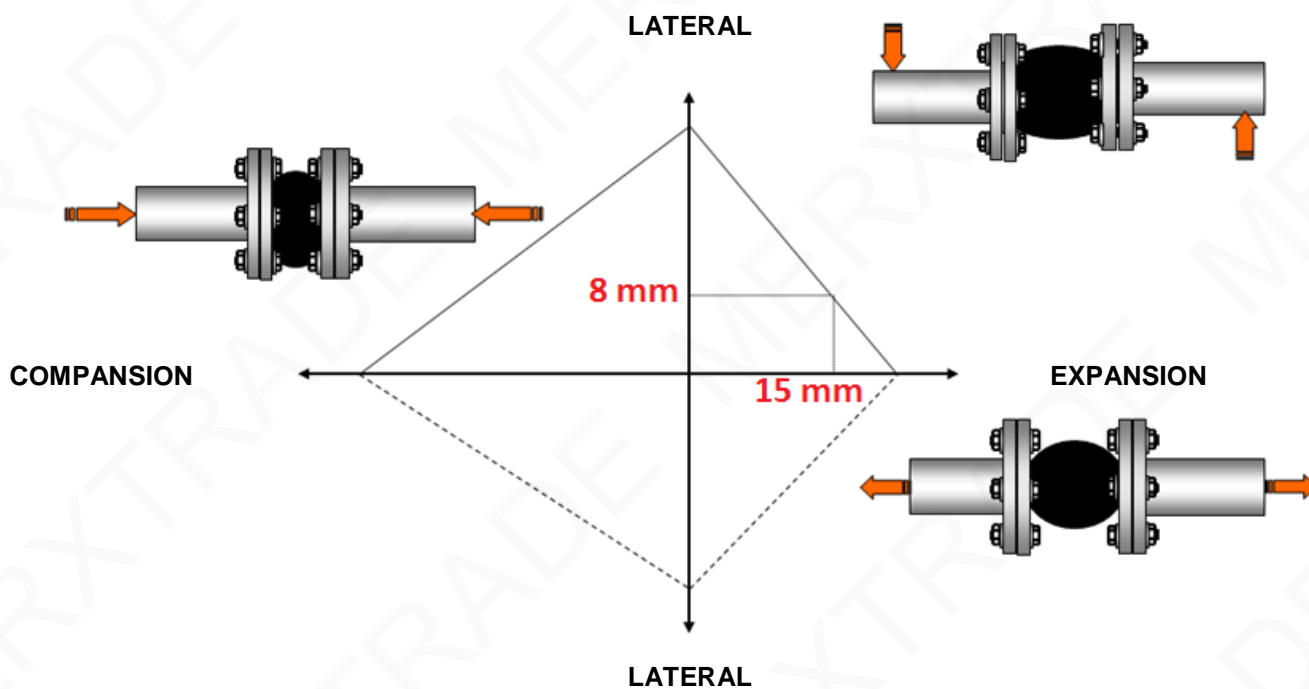


**Angular**

| DN         | 25-50 | 65  | 80  | 100 | 125 | 150 | 200 | 250 | 300 |
|------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| Compansion | 30    | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
| Expansion  | 20    | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |
| Lateral    | 20    | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |
| Angular    | 35°   | 30° | 30° | 25° | 25° | 15° | 15° | 10° | 10° |

Maximum movements can't be applied simultaneously.

For example, with an expansion of 15mm, the maximum lateral movement will be 8 mm :





## RUBBER EXPANSION JOINT TEGUFLEX® PHO DOUBLE YELLOW HNBR FLANGED

### MARKING :



### STANDARDS :

- Manufacturer certified ISO 9001 : 2015 and ISO 14001 : 2015
- DIRECTIVE 2014/68/EU: For liquids and gas of Group 1
  - DN32-50 : Risk category I, CE 0056 marking
  - DN65-200 : Risk category II, CE 0056 marking
  - DN250-300 : Risk category III, CE 0056 marking
- Flanges according to EN 1092-1 PN10/16
- **Marine ABS** Product type approved
- **Marine DNV** type Approval certificate

**ADVICE :** Our opinion and our advice are not guaranteed and merxtrade shall not be liable for the consequences of damages. The customer must check the right choice of the products with the real service conditions.