# **THERMIC-WELDED TIGHT BELLOWS**

They are used when watertight protection of the components (i.e. screws, shafts, etc.) is necessary against the contamination made by coolants.

- · Economic bellows
- · Good resistance to chemicals
- Resistance to heat compatible with the used materials (see characteristics on pages 60-61)
- They can be supplied in a variety of geometrical shapes, with low cost production of moulds (if not already present in our stock).



Code TEMAT 018 Code TEMAT 019

Code TEMAT 153

See the characteristics shown in the tables on pages 60-61.



## **SEWN ROUND BELLOWS**

These are used when strong rotation resistance is required (for instance, to cover ball screws) and where a very compact closed pack is required.

- Highly **reliable** bellows
- High resistance to mechanical and dynamic stress
- Resistance to coolants and oils
- Suitable for high temperatures
- · Available with guide bushings and reinforcement rings
- No tooling costs
- With selected **edging** (in safety colors upon request)
- Minimum internal diameter starting at 20 mm
- Any size external diameter
- Good price/quality ratio

#### Materials available:

- Polyester coated with Neoprene\* and Hypalon\*
- Polyester coated with Nitril rubber
- Polyester coated with Polyurethane
- Polyester coated with PVC
- Kevlar\* coated with Neoprene\* and Hypalon\*
- Kevlar\* coated with Polyurethane
- Fiberglass coated with Silicone and Neoprene\*
- Fiberglass coated with PVC
- Aluminum-coated fabrics
  - \*) Neoprene, Hypalon and Kevlar are registered Dupont trademarks

(see materials list on pages 60-61)





#### Formula for calculating the CLOSED LENGTH

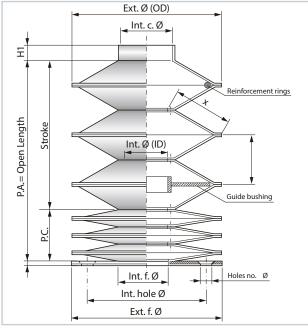
**P.C.**= Closed Length = 
$$NP \cdot SP^*$$

**NP**= Number of folds = 
$$\frac{P.A.}{AP}$$
 +1

\* **SP**= Thickness of 1 fold; see materials list on pages 60-61

**AP**= Opening of 1 fold = 
$$\left(\frac{\emptyset \text{ e. soff.-} \emptyset \text{ i. soff.}}{2} - 6\right) \cdot 1,2$$

**Note:** When steel rings are required inside the folds, the **P.C.** is calculated by our engineering department.

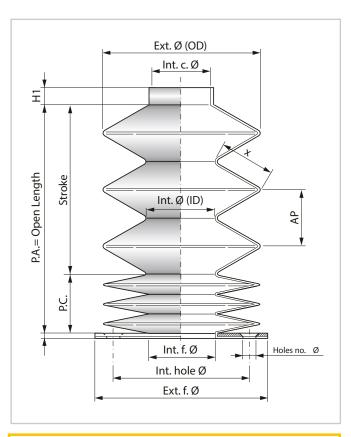


Dimensions in mm.

## **HEAT-FORMED BELLOWS**

These are used when high mechanical strength and heat resistance are required.

- Excellent resistance to mechanical stress
- · Also available cone-shaped
- Resistance to coolants and oils
- No tooling costs
- Available with guide bushings and reinforcement rings upon request
- Suitable for high temperatures



#### Formula for calculating the CLOSED LENGTH

**P.C.**= Closed Length = 
$$NP \cdot SP^*$$

$$\mathbf{NP} = \text{Number of folds} = \begin{array}{c}
\text{P.A.} \\
 \hline
\text{AP}
\end{array}$$

\* **SP**= Thickness of 1 fold; see materials list on pages 60-61

**AP**= Opening of 1 fold = 
$$\left(\frac{\emptyset \text{ e. soff.-} \emptyset \text{ i. soff.}}{2}\right) \cdot 1,41$$

**Note:** When steel rings are required inside the folds, the **P.C.** is calculated by our engineering department.

# **OPEN HEAT-FORMED BELLOWS**

#### **Materials available:**

- Polyester coated with Neoprene\* and Hypalon\*
- · Polyester coated with Nitril rubber
- · Polyester coated with Polyurethane
- Polyester coated with PVC
- Fiberglass coated with Silicone and Neoprene\*
- Neoprene and Hypalon are registered Dupont trademarks

(see materials list on pages 60-61)



