



Fabric Expansion Joints

TYPE BELMAN-CH

FEATURES & APPLICATION

The Fabric Expansion Joints within the Belman-CH series are designed especially for use in chemical systems (**CH**).

The Belman-CH Fabric Expansion Joint type is a single-layer design that safely absorbs movements caused by thermal expansions in pipelines and duct systems, with the option to be designed to accommodate misalignments on request. The Belman-CH series is suitable for various levels of aggressive medias.

DESIGN FEATURES

- Single-layer Fabric Expansion Joint
- For dry and wet operation
- Customized to application and project
- Absorbing multiplane movements simultaneously

APPLICATIONS

- Chemical industry
- Oil & gas
- Power plant
- Pulp & Paper
- Steel plants
- Process industry
- Flue gas desulphurization systems
- Boilers and stacks
- ...and many more

ADVANTAGES

- High chemical resistance
- Minimum reaction forces
- Excellent movement absorption and flexibility
- Neckal-tight (completely sealed)
- Higher flow velocity
- Can accommodate misalignments and a large amount of lateral offset (a special design may be required and needs to be specified at inquiry stage)

TYPES & SPECIFICATIONS

OPERATING FEATURES

Temperature range:

Up to +270°C,
minimum temperature: -35°C

Pressure range:

Up to 25.000 Pa (+/- 2500 mmWg).
Higher pressures may be achieved
by customizing for special needs.

Medium

Medias with chemical content such
as alkali, acids, solvents etc.

MOVEMENTS

Absorbs movements in multiple directions
(several planes) simultaneously.

CONNECTION ENDS & HARDWARE

The Belman-CH Fabric Expansion Joint
type is delivered as a customized design
(either closed or as open belt for joining
on-site) with bellows designed to solve the
movement absorption in the application as
well as meet requirements made by the
gap in the pipeline. Belman-CH is as

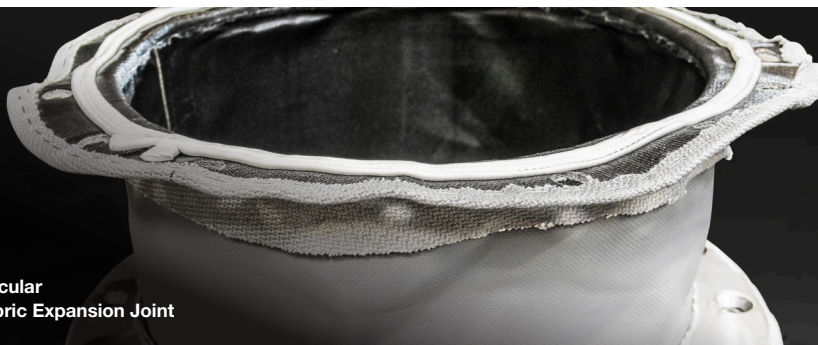
standard supplied as a stand-alone Fabric
Expansion Joint (with parallel or vertical
fixing flange arrangement) that may be
supplied with customized connection ends
and including hardware, but not limited to:

- Complete units (flanged or with welding ends)
- With loose flanges
- With clamping bands
- Special transport fixtures
- Flowliners / inner sleeves
- Pre-setting construction

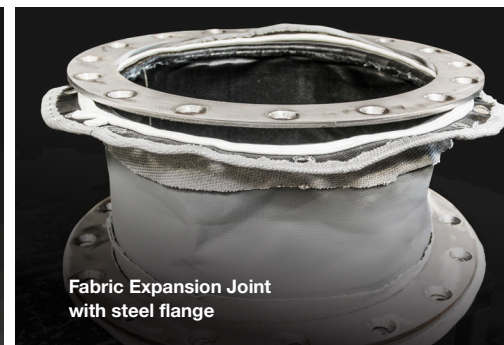
PRODUCT RANGE				
Expansion Joint	Temperature limit	Pressure limit	Media	Comments
CH-PP-750L-N	270°C	+/- 20000 Pa	Chemicals (medium aggressive)	Requires expanded PTFE-sealant between steel parts and bellow
CH-PP-750H-N	270°C	+/- 20000 Pa	Chemicals (high aggressive)	Requires expanded PTFE-sealant between steel parts and bellow
CH-PP-1100-N	270°C	+/- 20000 Pa	Chemicals (high aggressive)	Requires expanded PTFE-sealant between steel parts and bellow

CUSTOMIZED SOLUTION

All Belman Fabric Expansion Joints are customized to the application and operating data of the plant. From a large selection of material types and combinations Belman is able to tailor the type of Belman-CH that meets client specifications. Here are some examples:



**Circular
Fabric Expansion Joint**



**Fabric Expansion Joint
with steel flange**

A WHOLLY OWNED SUBSIDIARY OF BELMAN A/S, DENMARK

Belman Flexibles India Pvt. Ltd, Raipur, India