



Fabric Expansion Joints

TYPE **BELMAN-AI**

FEATURES & APPLICATION

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

Fabric Expansion Joint Type Belman-AI is a multilayer 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.

DESIGN FEATURES

- Multilayer Fabric Expansion Joint
- For dry operation (non-aggressive media)
- Customized to application and project
- Absorbing multiplane movements simultaneously

APPLICATIONS

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

ADVANTAGES

- Reduced heat loss by low surface temperature
- Minimum reaction forces
- Excellent movement absorption and flexibility
- Noise reduction
- Can accommodate misalignments and a large amount of lateral offset (special design may be required and needs to be specified at inquiry stage)

TYPES & SPECIFICATIONS

OPERATING FEATURES

Temperature range:

Up to +400°C,
minimum temperature: -35°C

Pressure range:

Up to +/- 20.000 Pa (+/- 2000 mmWg)

Medium

Air (dry)

MOVEMENTS

Absorbs movements in multiple directions (several planes) simultaneously. Due to the multilayer construction this type is able to absorb large movements within short built-in lengths.

CONNECTION ENDS & HARDWARE

Fabric Expansion Joint type Belman-AI 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 meeting additional requirements

made by the gap in the pipeline.

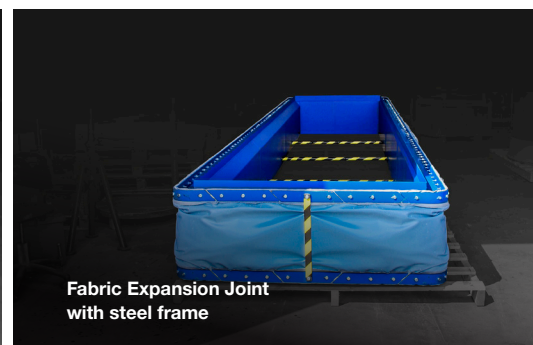
Belman-AI is as standard a stand-alone Fabric Expansion Joint (with parallel or vertical fixing flange arrangement) that may be supplied with customized connection ends and including hardware, but not limited to:

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

PRODUCT RANGE				
Expansion Joint	Temperature limit	Pressure limit	Media	Comments
AI-GS-0250-S	250°C	+/- 20000 Pa	Air (Dry)	-
AI-GS-0300-S	300°C	+/- 20000 Pa	Air (Dry)	-
AI-GS-0400-S	400°C	+/- 20000 Pa	Air (Dry)	-
AI-WS-0250-S	250°C	+/- 20000 Pa	Air (Dry)	-

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-AI that meets client specifications. Here are some examples:



A WHOLLY OWNED SUBSIDIARY OF BELMAN A/S, DENMARK

Belman Flexibles India Pvt. Ltd, Raipur, India