





#### Steel Expansion Joints

We design and manuf acture expansion joint in different materials and for all needs.

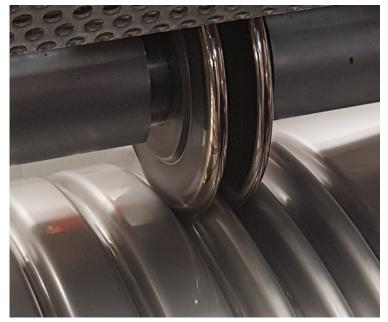
All expansion joints are custom made, its means that every item are designed for you need in according to your data.media, pressure, temperature and movements in an axial, lateral and angular direction etc.

The bellows are used to absorb thermal extensions and assembly shifts in piping systems, without causing stress on the pipe system from major adjusting forces.

The bellows can absorb both high pressures as well as considerable movements.

The products in our range covers DN 25 - DN 5000 from PN 2,5 up to PN 40. If you have other wishes please ask.

Our programme includes welding ends, loose flanges, fixed flanges, internal sleeves (welded or loos), articulated joints, tie bolt rigs in standard and special designs.











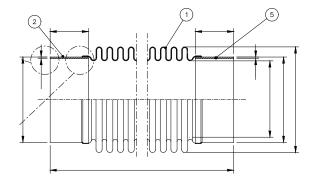




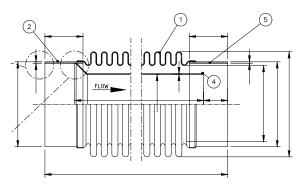
# Exhaust Expansion Joints PN 2,5

#### TYPE 1000:

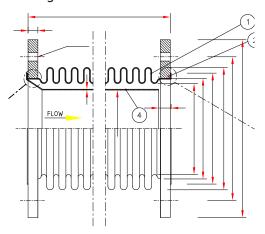
1010. With weld ends.



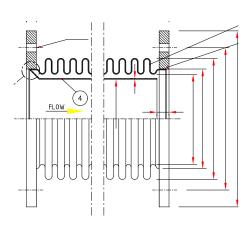
1020. With weld ends and internal sleeve.



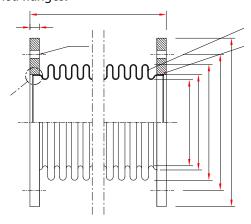
1030. With loose flanges.



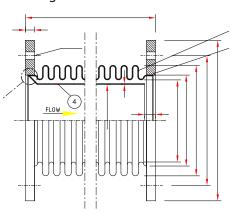
1040. With loose flanges and internal sleeve.



1050. With flxed flanges.



1060. With fixed flanges and internal sleeve.

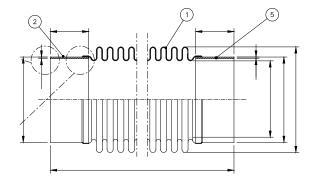




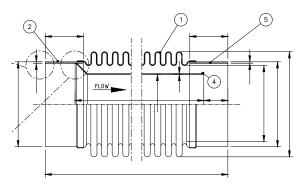
# Axial Expansion Joints PN 10 / PN 16 / PN 25

#### TYPE 2000:

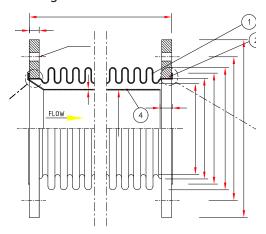
2010. With weld ends.



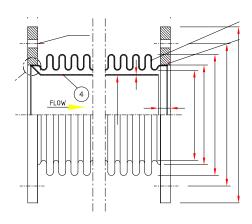
2020. With weld ends and internal sleeve.



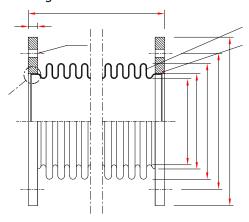
2030. With loose flanges.



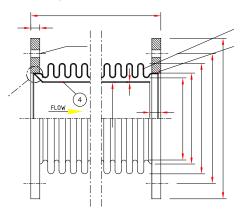
2040. With loose flanges and internal sleeve.



2050. With flxed flanges.



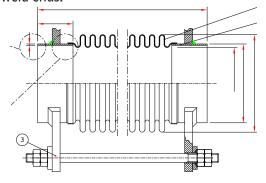
2060. With fixed flanges and internal sleeve.



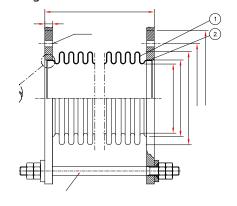
## Lateral Expansion Joints PN 10 / PN 16 / PN 25

#### TYPE 3000:

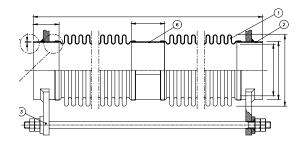
3010. With weld ends.



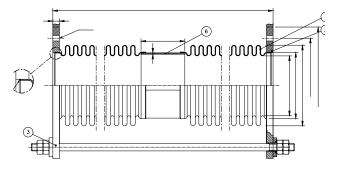
3030. With fixed flanges.



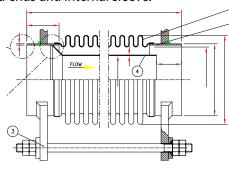
3050. With weld ends (double)



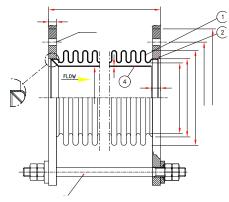
3070. With fixed flanges (double)



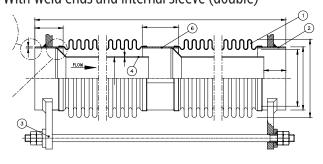
3020. With weld ends and internal sleeve.



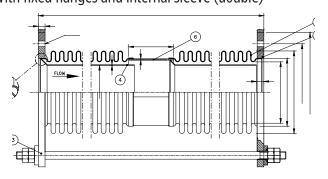
3040. With fixed flanges and internal sleeve.



3060. With weld ends and internal sleeve (double)



3080. With fixed flanges and internal sleeve (double)

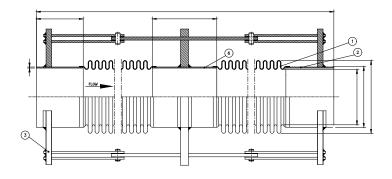




# Lataral Expansion Joints Double Hinge Unit PN 10 / PN 16 / PN 25

#### TYPE 3500:

3510. With weld ends.



3520. With weld ends and internal sleeve.

3530. With fixed flanges.

3540. With fixed flanges and internal sleeve.

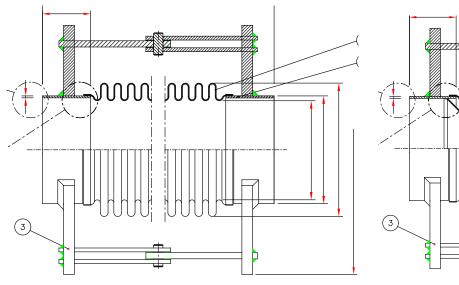


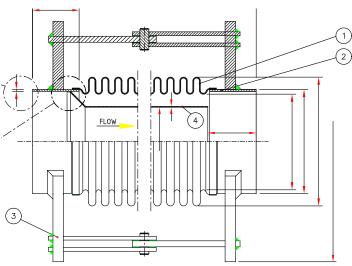
# Angular Expansion Joints PN 10 / PN 16 / PN 25

#### TYPE 4000:

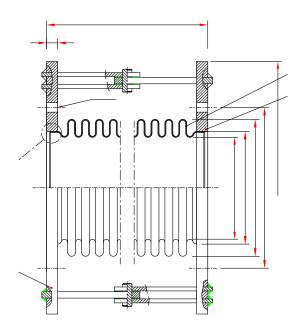
4010. Single hinged, with weld end movable in one plane.

4020. Single hinged, with weld ends and internal sleevs, movable in one plane.

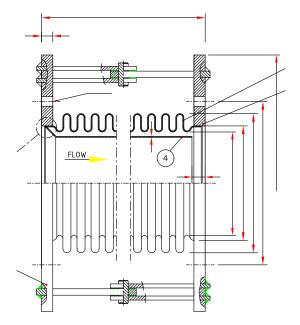




4030. Single hinged, with fixed flanges movable in one plane.



4040. Singled hinged, withfixed flanged and internal sleeve, movable in one plane.

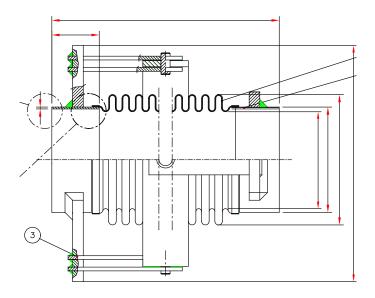




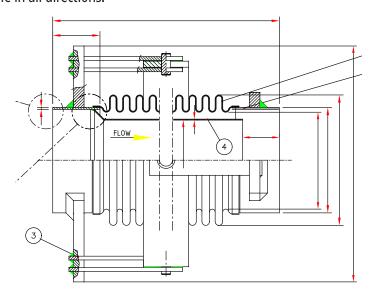
# Angular Expansion Joints PN 10 / PN 16 / PN 25

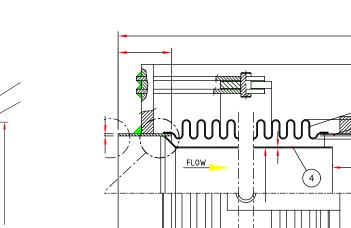
#### TYPE 4500:

4510. Single gimbal, with weld ends, movable in all directions.



4520. Single gimbal, with weld ends and internal sleeve, movable in all directions.





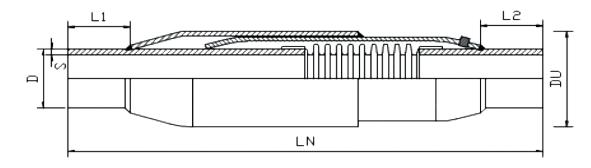
4530. Single gimbal, with fixed flanges movable in all directions. 4540. Single gimbal, with fixed flanges and internal sleeve, movable in all direction.



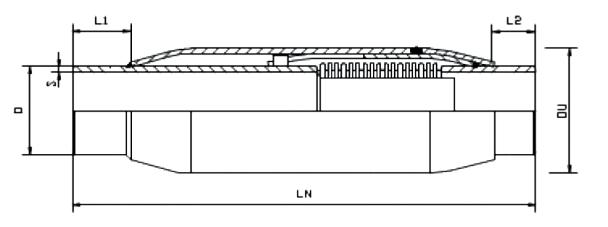
# **District Heating Expansion Joints**

## TYPE 5000:

5100. "Onetime" Expansion joint with weld ends.



5200. Operation Axial Expansion joint with weld ends.





# Internal Sleeve

#### **TYPE 8000**

8010. Loose sleeve with flange.



8020. Loose sleeve.

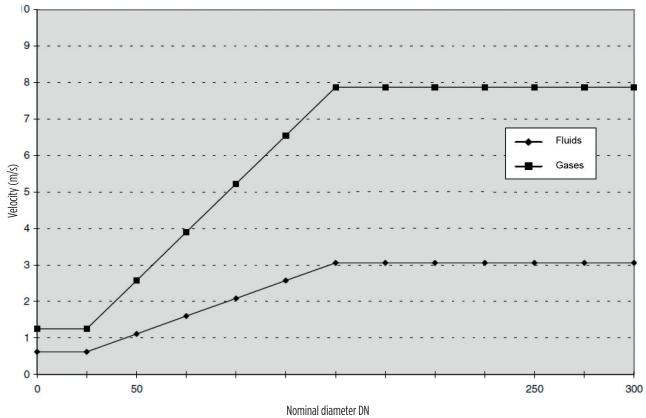


Internal sleeves are used,

- To protect the bellows from wear due to abrasive media.
- To reduce the friction resistance of the medium.
- To prevent turbolence due to high flow velocity.
- In case of using internal sleeves the lateal movement will be decrease.

EJMA recommends the use of a battle where the following figures (see chart below) are exceeded

Threshold for use of internal sleeve





# Steel Expansion Joints Specification Sheet

Quantity:		Pcs.	
Located:			
	Vertical, or:		
	Horizontal		
DN / Size:			
	Flange out dimØD	mm	
	Bolte hole (pitch) diameter - ØPC	mm	
	Bolte hole dimension - Ød	mm	
	Number of holes	pcs.	
Media:			
Working temperture:		Co	
Working pressure:		barg	
Bellow material:			
Face to face: (BL)		mm	
Type of use:			
	Exhauste		
	Axial		
	Lateral		
	Angular		
	District heating		
Movement:			
(AX) axial			
	extension: +	mm	
	compression: -	mm	
(LA) lateral	+/-	mm	
(AG) angular		°degree	
Flange connections:			
	PN:		
	Drilled acc. to.:		
	Material:		
	Surface:		
	With Welded ends:		
	With loose flanges:		
	With fixed flanges:		
With Sleevs:			
	Loose or,		
	Fixed		
Approval:			
Certificate:			
Documention:			
Tests:			

# Partnere

#### **Profile**

We have manufactured flexible solutions for use in most industries. VM Kompensator A/S has been manufacturing flexible solutions for air and flue gas for over 25 years. Our current range of products includes fabric and rubber compensators and steel expansion joints. Our products are used to absorb thermal extensions, vibrations and assembly shifts in channel and piping systems.

Behind each of our products is a team of employees with over twenty years of experience.

We only use raw materials from internationally-recognised suppliers.

Quality, finish and security of supply are keywords in our organisation.

VM's service team, which performs assembly and supervision, has more than 25 years of international experience.

VM Kompensator's general experience is that the best technical and economic solution for the customer is the result of dialogue. In other words, we like to offer our know-how and expertise as early as possible in the project planning phase, in order to ensure that the customer receives an optimal end product.

## Company Profile

VM Kompensator A/S is a strong team with many years of experience in the design and construction of compensators and expansion joints. We aim to provide the best quality compensators and expansion joints, using fabrics, steel and rubber and at prices that match our quality and delivery reliability.

Our range includes all types of compensators, ranging from small simple flex connectors, to expansion joints for incineration plants, conventional installations, desulfurisation, chemical plants, cement works, coal processing plants and gas turbines. You will find further details under "sectors".

We have a broad range of activity in the supply and installation of compensators and expansion joints for all types of plants and installations and we also repair worn and defective channel systems.

Our service team is available for callout 365 days a year, by agreement...

VM Kompensator A/S Industrivej 4, 6622 Bække, Denmark Telefon: +45 38402020 www.vmkomp.dk info@vmkomp.dk





