

WILLBRANDT Expansion Joints

If a medium flows through a pipe, it is often exposed to thermal expansion, vibrations, axial pressure forces, yielding suspensions and building settlements. These factors trigger movements in the pipeline that make the installation of flexible elements necessary. These flexible elements can absorb the resulting movements and prevent damage to the pipeline and the connected units:

- thermal expansion
- mechanical vibrations
- acoustic oscillations
- tensions

They are also used:

- for sound insulation
- as dismantling joints on pipeline armatures
- to assimilate assembly tolerances
- to seal pipeline wall penetrations

If it is not possible to design a pipeline that can compensate movements, an expansion joint is an optimal solution and as such acts as a flexible connection in a pipeline.

Typical applications are heating systems, water pipes, pipes in power stations and the chemical industry. Available are various qualities that are suitable for specific media (e.g. drinking water, oil, food).



Our qualified engineers design a suitable expansion joint according to your technical data. A wide range of different types are carried in stock.

Special types can be manufactured at short notice.

We offer expansion joints for various applications. Nominal sizes from DN 20 to DN 5000 are available.

In addition to a comprehensive standard range of products, additional expansion joints can be manufactured according to customers' specifications - with and without tie rods.

It is also possible to provide expansion joints with special accessories in order to fully exploit the advantages of the expansion joints for almost all applications.

WILLBRANDT Quality assurance

WILLBRANDT KG produces and sells technical elastomer products as well as complementary products and sees itself as a reliable partner to its customers in the area of both procurement and sales. Long term and, in some cases, decades of close business relationships with customers and suppliers are the basis for our continued success. When it comes to quality, customers, employees, profit, costs and innovation, it is no coincidence that quality comes first.

Our commitment to quality, in the widest sense of the word, as we understand it, is the basis for everything we do and it is only successful as an integral part of our responsibilities and activities.

All our activities are focused around a zero-defect strategy with preventative measures to minimise the probability of defects occurring. WILLBRANDT KG has been certified to DIN EN ISO 9001 since 27 September 1997.



WILLBRANDT Approvals

Many of the WILLBRANDT expansion joints are subjected to a series of tests and inspections for quality assurance and to obtain the following approvals (see extract opposite).

- Burst pressure test
- Flame resistance test according to DIN EN ISO 15540
- Endurance test (endurance vibration test)
- Impulse test according to DIN EN ISO 6803

Overview Approvals

Type	Shipbuilding									Plant construction			Drinking water / Food			
	DNV	LR	BV	RINA	CCS	KR	ABS	RMRS	MED/MER	TÜV-SÜD			FDA EG 1935/2004	KTW- BWGL	ACS	WRAS
										DIN 4809	CE Kat. A2	CE Kat. B+C2				
39	-	-	-	-	-	-	-	-	-	-	-	on request		-	-	on request
40	-	-	-	-	-	-	-	-	-	-	-	✓		-	-	
42	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
46	     	    	✓	✓	    	✓	✓	✓	     		-	✓	-	-	-	-
48	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
49	  	-	-	  	-	-	-	-	  		-	✓	-	-	-	 
49 S	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
50	     	    	✓	✓	    	✓	✓	✓	     			✓	-		-	 
51	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
52	-	-	-	-	-	-	-	-	-	-	✓	-		-	-	-
55	    	    	✓	✓	    	✓	✓	✓	    		-	✓	-		-	 
55 SO	    	    	✓	✓	    	✓	✓	✓	    		-	✓	-		-	 
56	-	-	-	-	-	-	-	-	-	-	-	on request		-	-	on request
57	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
58	-	-	-	-	-	-	-	-	-	-	-	✓		-	-	
59	-	-	-	-	-	-	-	-	-	-	-	✓		-	-	
60	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-
61	-	-	-	-	-	-	-	-	-	-	-	on request		-	-	on request
63	-	-	-	-	-	-	-	-	-	-	-	✓		-	-	
64	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
81	-	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
81 HD	-	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
FSH	✓	-	-	✓	-	-	-	-	✓	-	-	-	-	-	-	-

✓ Approvals are available for all types.