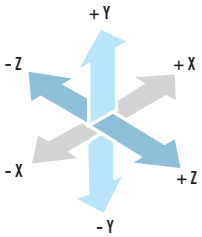
Product Code	Definition
KM100 - YVDB	Seismic Isolation Expansion Joint Grooved ±50mm Expansion
KM200 - YVDB	Seismic Isolation Expansion Joint Grooved ±100mm Expansion
KM300 - YVDB	Seismic Isolation Expansion Joint Grooved ±150mm Expansion
KM400 - YVDB	Seismic Isolation Expansion Joint Grooved ±200mm Expansion

GENERAL

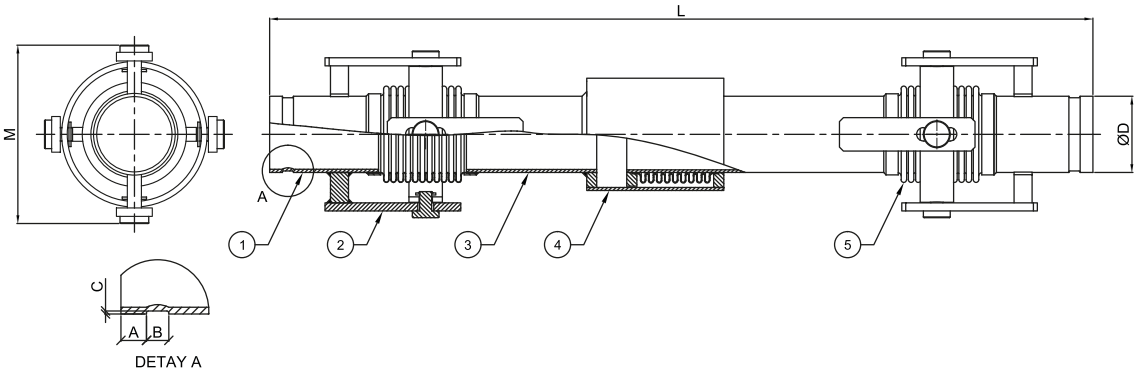
Seismic expansion joints are the flexible connection elements that minimize the risk of breakage that may occur in the system as a result of seismic (earthquake, building collapses, etc.) movements by damping the three dimensional movement as axial, lateral and angular and provide the continuity of the system by removing the stress on the rigid pipe. Seismic Expansion joints which are designed such as to accommodate the movement in three different directions (axial, lateral and angular), are widely used in systems such as heating, cooling, fire and sanitary systems of the structures where seismic isolators are used and the amount of movement is very high. They can also be used in places such as all building passages, Dilatation points etc. In the order phase, the prescribed amount of motion in the system, fluid type in the line, place of use, connection type, the working pressure and temperature of the system should be specified.



Standard Product Materials		Optional Product Materials
Bellows	1.4301 (AISI 304)	1.4541 / 1.4401 / Titanium / Incoloy 800H / Inconel etc.
Joint Arms	1.0038 (St 37-2)	Stainless Steel
Grooved Connections	1.0038 (St 37-2)	Stainless Steel

Design Parameters	
Design Pressure	16 Bar (1 Bar...64 Bar)
Design Temperature	+20°C (-90°C...+550°C)
Diameters	DN25 (1")....DN2500 (100")
Movements	X:100mm (±50); Y,Z:±50mm / Y,Z:±100mm / Y,Z:±150mm / Y,Z:±200mm
Standards	EJMA, EN 14917
Certifications	TSE - CE Module H (Optional) - EAC

**Please contact our sales team for your special requests.



Part Number	Specifications	
	Name	Material
1	Grooved End	1.0038 (S235JR / St37-2)
2	Joint Arm	1.0038 (S235JR / St37-2)
3	Intermediate Pipe	1.0038 (S235JR / St37-2)
4	Outside Pipe	1.0038 (S235JR / St37-2)
5	Bellows	1.4301 (AISI 304)

Diameters		LENGTH (L = mm)				A (mm)	B (mm)	C (mm)	ØD (mm)	M (mm)	Effective Area (cm²)
		KM100-YVDB	KM200-YVDB	KM300-YVDB	KM400-YVDB						
		X: ±50mm Y: ±50mm Z: ±50mm	X: ±50mm Y: ±100mm Z: ±100mm	X: ±50mm Y: ±150mm Z: ±150mm	X: ±50mm Y: ±200mm Z: ±200mm						
DN25	1"	1270	1350	1450	1550	15,8	7,1	1,6	33,7	170	19,0
DN32	1 1/4"	1270	1350	1450	1550	15,8	7,1	1,6	42,4	170	19,0
DN40	1 1/2"	1250	1350	1450	1550	15,8	7,1	1,6	48,3	170	24,7
DN50	2"	1300	1400	1500	1600	15,8	8,7	1,6	60,3	195	38,7
DN65	2 1/2"	1380	1480	1580	1680	15,8	8,7	1,9	76,1	210	58,0
DN80	3"	1450	1550	1650	1750	15,8	8,7	1,9	88,9	220	80,5
DN100	4"	1530	1630	1730	1830	15,8	8,7	2,1	114,3	265	129,0
DN125	5"	1600	1700	1800	1900	15,8	8,7	2,1	139,7	310	191,8
DN150	6"	1625	1725	1825	1925	15,8	8,7	2,1	165,1	335	262,7
DN200	8"	1710	1810	1910	2010	19,0	11,9	2,3	219,1	425	453,5
DN250	10"	1800	1900	2000	2100	19,0	11,9	2,3	273	470	698,4
DN300	12"	1900	2000	2100	2200	19,0	11,9	2,7	323,9	570	967,0

** X,Y,Z value represents axial, lateral, angular movements. Please contact our technical department for different movement requirements.