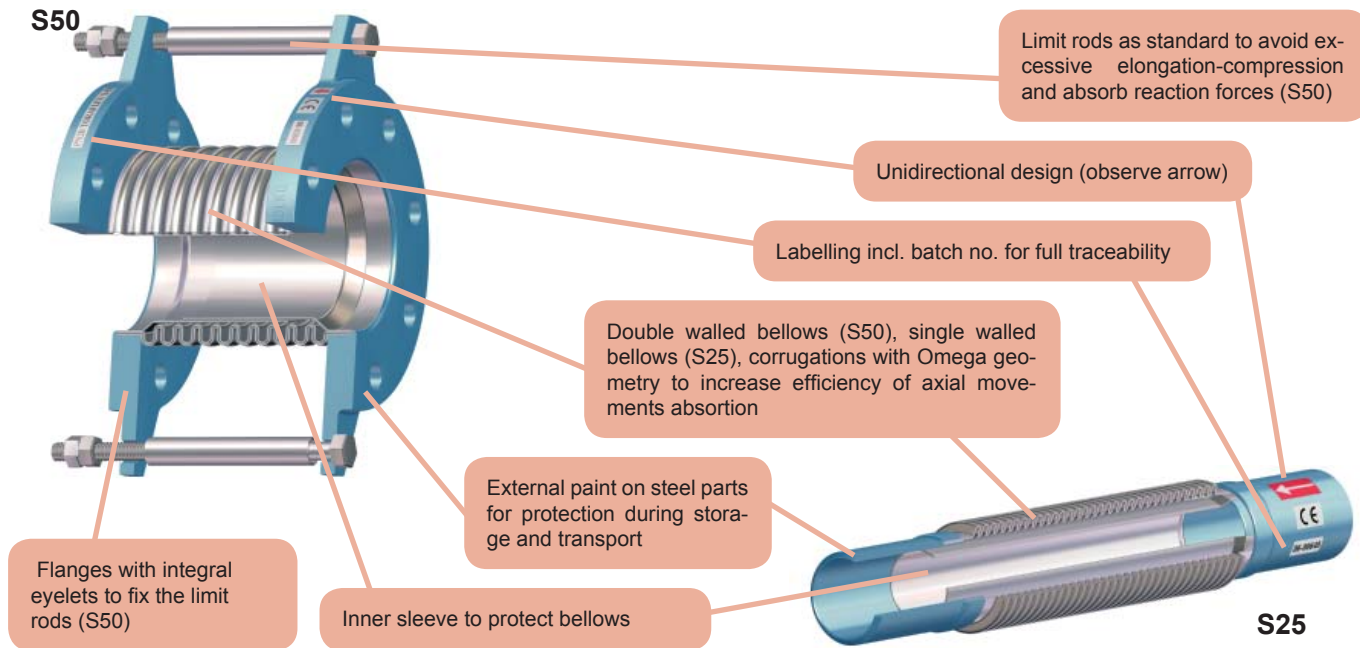


METAL EXPANSION COMPENSATORS

Design Attributes

S25-S50 Metal Compensators are flexible unions used on rigid pipe work systems to absorb axial thermal movements. They consist of a corrugated Omega shaped bellow, with welded ends (S25) or flanged ends (S50), and an internal sleeve, which protects the bellow from wear and turbulences. Additionally S50 type incorporates limit rods as standard. A correct pipe system arrangement and installation according to our Installation Operating and Maintenance Manual is essential to ensure a safe and efficient performance.



Main Features

Design: EJMA 9th Edition
Nominal Pressure: S50 PN16 / S25 PN10
Valve end connections: S50 - Drilled to EN 1092-1 PN16 (valves DN65 with 4 holes as accepted variant in standard)
S25 - Butt weld ends
Marking: EN 19
Pressure Tests: EN 12266-1
Steel parts painted in metal blue color for protection during storage and transport
Product compliant with Directive 2014/68/EU on Pressure Equipment (PED)

Main Duties / Limits of use

Liquids compatible with materials of construction, acc. to Directive 2014/68/EU, Annex II tables 8 (group 1*) & 9 (group 2*) up to category I
Stable gases compatible with materials of construction, acc. to Directive 2014/68/EU, Annex II tables 6 (group 1*) & 7 (group 2*) up to category I

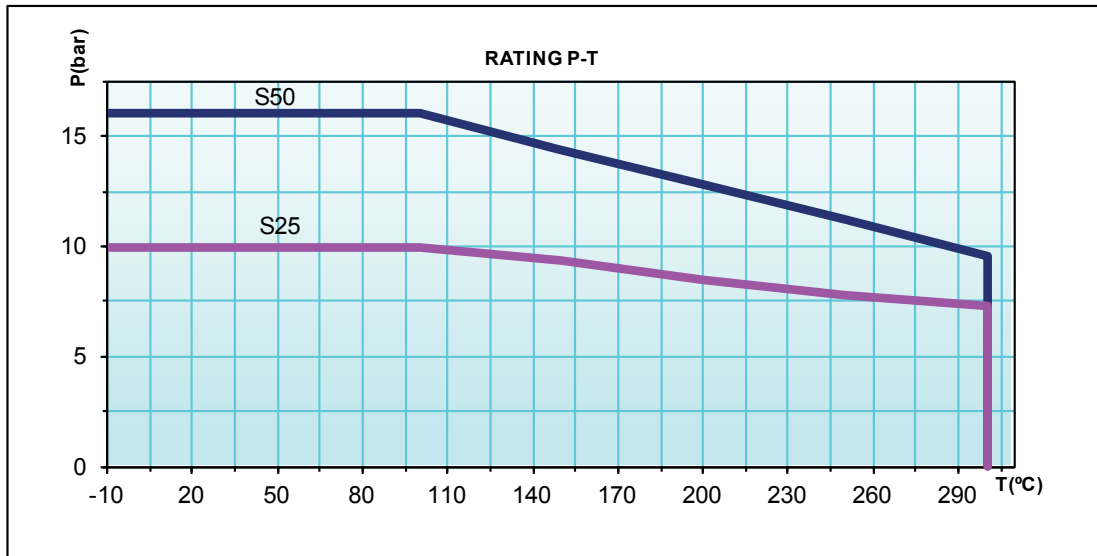
S50	S25
Table 6: PS 16 bar DN32-DN50 PS 15 bar DN65 PS 10 bar DN80-100	Table 6: PS 10 bar DN20-DN100 (Art.4-Parr.3 DN20-25) Table 7: PS 10 bar DN20-DN300 (Art.4-Parr.3 DN20-100) Table 8: PS 10 bar DN20-DN300 (Art.4-Parr.3 DN20-200) Table 9: PS 10 bar DN20-DN300 (Art.4-Parr.3) TS: -10/300°C
Table 7: PS 16 bar DN32-DN200 (Art.4-Parr.3 DN32-50) PS 13 bar DN250 PS 10 bar DN300-350 PS 6 bar DN400-500 PS 5,5 bar DN600	
Table 8: PS 16 bar DN32-DN125 (Art.4-Parr.3) PS 13 bar DN150 (Art.4-Parr.3) PS 10 bar DN200-600 (Art.4-Parr.3 200)	
Table 9: PS 16 bar DN32-DN600 (Art.4-Parr.3 DN32-300) TS: -10/300°C	

Questions referring to chemical resistance, please consult us
Observe also pressure/temperature limits on diagram on next page
*Classification of fluids (group 1 or 2) acc. to Directive 2014/68/EU, Article 13

Options

Higher service temperatures, other designs and approvals; please consult us

Pressure/Temperature limits diagram



S50

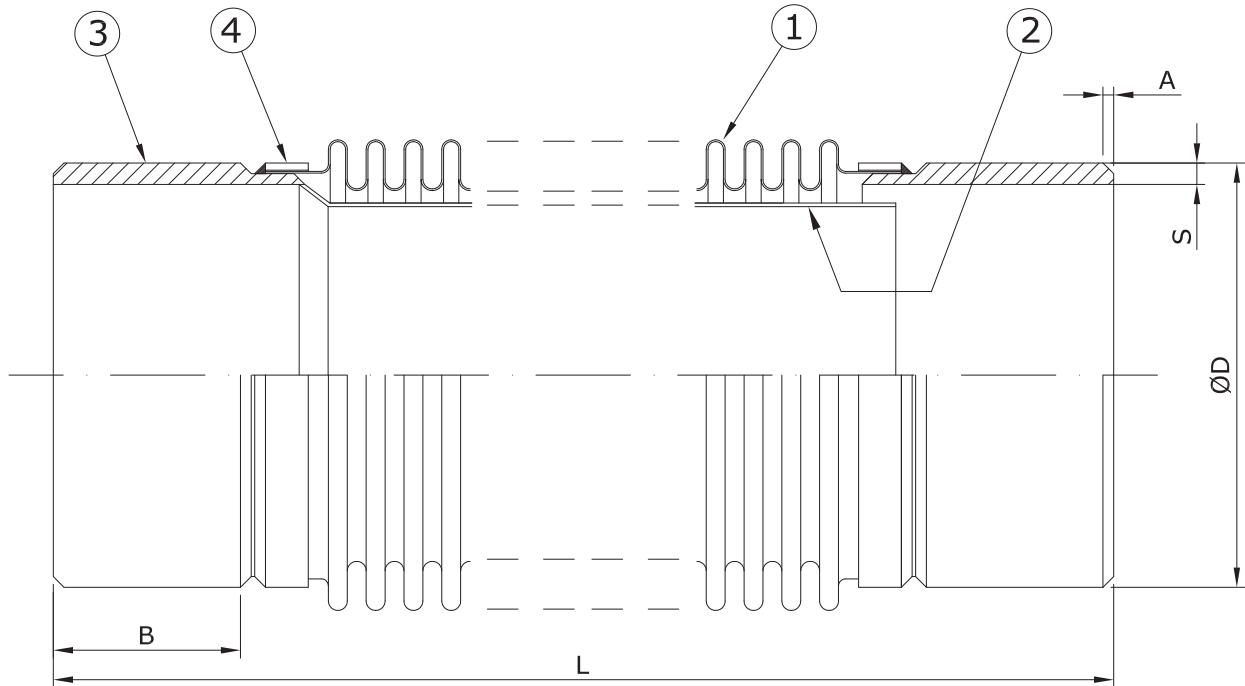
P (bar)	16	16	14,4	12,8	11,2	9,6
T (°C)	-10	100	150	200	250	300

S25

P (bar)	10	10	9,4	8,5	7,8	7,3
T (°C)	-10	100	150	200	250	300

Main Parts and Materials

TYPE S25



N°	PART	MATERIAL
1	BELLOWS	St. steel SS304
2	INTERNAL SLEEVE	St. steel SS304
3	TUBE ENDS	S250_ Steel DIN St 44-2
		S25_ St. steel SS304
4	SEAL RING	St. steel SS304

Main Valve Parameters

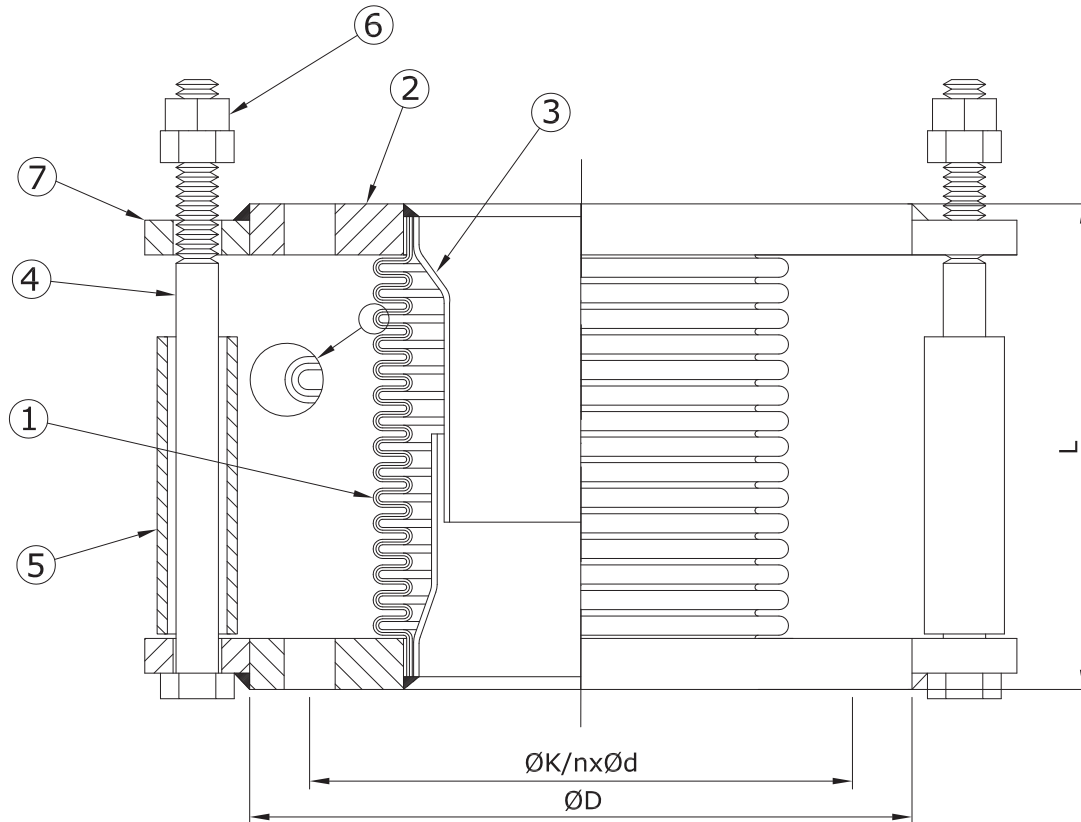
DN	20	25	32	40	50	65
L	250	250	350	350	350	350
Axial Movement	+5, -25	+5, -25	+10, -40	+10, -40	+10, -40	+10, -40
No. of Corrugations	30	28	36	32	24	20
A	1,17	1,70	1,79	1,80	1,90	1,75
B	47,30	45,20	66,60	66,90	59,00	60,00
S	2,8	3,4	3,6	3,7	3,9	4,2
ØD	27,2	34	42,3	48,3	60,3	76,3
S	3	3	3	3	3,5	4
ØD	27,2	34	42,3	48,3	60,3	76,3
Effective Area	6	9	13	21	32	50
Approx. Weight	1	1	1	1,5	2	2,5

DN	80	100	125	150	200	250	300
L	350	350	350	350	350	350	350
Axial Movement	+10, -40	+10, -40	+10, -40	+10, -40	+10, -40	+10, -40	+10, -40
No. of Corrugations	20	16	15	14	13	12	12
A	2,20	2,30	2,50	3,75	3,75	3,75	3,75
B	58,70	65,50	62,10	60,9	58,8	60,10	59,50
S	4,2	4,5	5	5,5	6,5	6,3	7,9
ØD	89,1	114,3	139,8	168,3	219,1	273,1	323,9
S	4	4	5	5	6,5	6,5	6,5
ØD	89,1	114,3	139,8	168,3	219,1	273,1	323,9
Effective Area	67	110	182	259	417	661	907
Approx. Weight	2,5	4	5,5	6,5	8	11	17

Dimensions in mm subject to manufacturing tolerance / Effective Area in cm² / Weights in kg

Main Parts and Materials

TYPE S50



N°	PART	MATERIAL
1	BELLOWS	St. steel SS304
2	FLANGE	Steel DIN ST-37.2
3	INTERNAL SLEEVE	St. steel SS304
4	LIMIT ROD	Steel DIN ST-44.2
5	LIMIT PIPE	St. steel SS304
6	NUT	Steel DIN ST-44.2
7	LUG	Steel DIN ST-44.2

Main Valve Parameters

DN	32	40	50	65	80	100	125	150
L	150	150	150	150	150	150	150	150
Axial Movement	+10, -25	+10, -25	+10, -25	+10, -25	+10, -25	+10, -25	+10, -25	+10, -25
ØD	140	150	165	185	200	220	250	285
ØK	100	110	125	145	160	180	210	240
n	4	4	4	4	8	8	8	8
Ød	18	18	18	18	18	18	18	22
No. of Limit Rods	2	2	2	2	2	2	2	3
Effective Area	13	20	32	49	67	109	167	229
Weight	5	6	6,5	8	9	10	14	17,5

DN	200	250	300	350	400	450	500	600
L	200	200	200	200	200	200	200	250
Axial Movement	+10, -35	+10, -35	+10, -35	+10, -35	+10, -35	+10, -25	+10, -25	+10, -40
ØD	340	405	460	520	580	640	715	840
ØK	295	355	410	470	525	585	650	770
n	12	12	12	16	16	20	20	20
Ød	22	26	26	26	30	30	33	36
No. of Limit Rods	4	4	4	4	4	4	4	6
Effective Area	384	579	820	1171	1515	1886	2324	3274
Weight	23	33	37	77	92	107	129	185

Dimensions in mm subject to manufacturing tolerance / Effective Area in cm² / Weights in kg