

### **VSH** XPress

# axial compensators

VSH XPress axial compensators are made of stainless steel, grade 1.4404 and designed to absorb movements in it's longitudinal axial direction. The thermal expansion of a straight pipe line section between two fixed points can be absorbed by

VSH XPress axial compensators with a relatively compact build-in length. This offers a simple and cost efficient solution in terms of movement compensation. The compensators are intended for use in closed and pressurised heating systems and cooling water systems.







#### specifications

- available in dimensions DN12 -50 (15-54 mm)
- M profile press connections
- max. working temperature 135°C (150°C short term)
- max. pressure 16 bar
- with EPDM o-rings
- made of stainless steel 1.4404

dimension	article no.	weight [kg]	11/12	z1/z2	а	movement absorption [Δl)	effective area [cm²]	spring rate [N/mm]			
15 DN12	6198302	0.05	55	35	24	-14	3.1	28			
18 DN15	6198313	0.07	53	33	27	-16	4	28			
22 DN20	6198324	0.13	60	39	37	-20	7.2	40			
28 DN25	6198335	0.16	65	42	44	-22	10.5	42			
35 DN32	6198346	0.24	70	44	50	-24	13.9	54			
42 DN40	6198357	0.31	77	47	60	-24	20.4	47			
54 DN50	6198368	0.46	90	55	72	-30	31	48			

the axial compensators do not carry any potable water approvals



### specifications

- available in dimensions DN65 -100 (76.1-108 mm)
- male tube end connections
- max. working temperature 135°C
- (150°C short term)max. pressure 16 bar
- made of stainless steel 1.4404

dimens	sion	article no.	weight [kg]	11/12	z1/z2	а	movement absorption [Δl)	effective area [cm²]	spring rate [N/mm]
76.1	DN65	6198379	1.41	138	61	92	-30	52.5	60
88.9	DN80	6198381	1.61	145	90	106	-30	73.2	82
108	DN100	6198390	2.10	173	110	130	-30	115	92
the avia	componsators (	do not carry any notable y	vator approvals						



# installation

VSH XPress axial compensators must be carefully selected according to the calculated amount of thermal expansion of the connected pipelines. Only one axial compensator can be installed between two fixed points (fig. 1 & 2).

If the amount of movement of the pipeline segment is too much to be absorbed by one compensator, the pipeline segment should be divided in sections by adding fixed points. Fixed points should be calculated and designed to withstand forces due to pressure thrust and spring force General recommendation is to install axial compensators near fixed points. Pipeline guides insure proper alignment of movement to the axial compensators and prevent buckling of the piping system. The distance between the axial compensator and the first guide (L1) should be a maximum of 4 x diameter. The distance between the following guide (L2) should be maximal 14 x diameter.

For the maximum recommended spacing of other guides (L3) please refer to the VSH XPress technical manual, guidelines for distances of mounting brackets.

For applications in cooling installations, please contact Aalberts integrated piping systems.



#### alignment of piping

do **not** use compensators to correct for misalignment of piping systems



more information about our product range, see www.aalberts-ips.eu or contact: Aalberts integrated piping systems B.V. customer service +31 (0)35 68 84 330 / salessupport.nl@aalberts-ips.com / www.aalberts-ips.eu