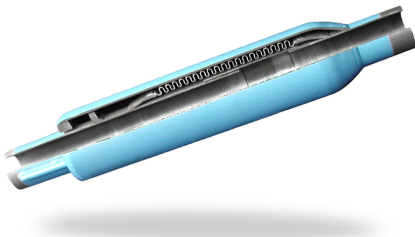


RELY ON EXCELLENCE

DH1S Danmuff metal expansion joints

Expansion joints | Metal expansion joints



Features

- Untied metal expansion joints mainly for district heating applications.
- External shroud with torsion protection, for district heating.
- Can be installed in series.
- Designed for large axial movements.

Advantages

- No significant pressure drop - reduced need for pumps and general power consumption for moving media, compared to pipe loops.
- Less space required around the joint - compared to pipe loops.
- Less supporting structure required - compared to pipe loops.
- Lower erosion rate (for abrasive media lines - compared to pipe loops with elbows).
- Multiply bellows with low spring rate and high cycle life.

Operating range

Diameter: DN 40 ... DN 600 (1.75" ... 24")
Temperature: ... 120 °C (248 °F)
Pressure: 16 barg (232 PSIG), 25 barg (362 PSIG)

Materials

- Bellows: 1.4541 (AISI 321)
- Connections: 1.0345 - (P235GH)

Other materials are available on request.

Standards and approvals

Design code:
EJMA, 1,000 Cycles

NDT and documentation:

Can be provided per customer request e.g., material certificates and NDT test reports.

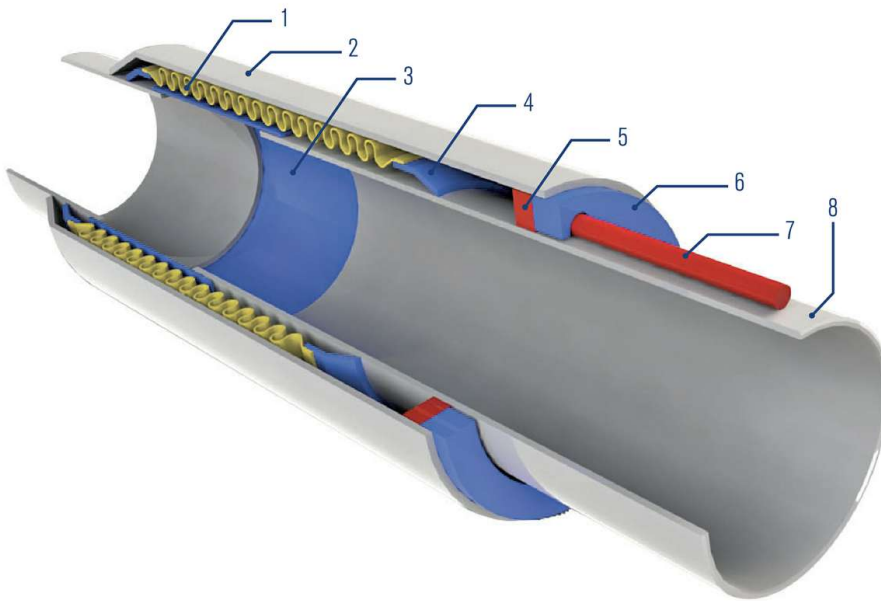
Notes

Custom designs and sizes are available on request. Untied metal expansion joints require guide and support. DH type expansion joints are delivered 100 % preset (extended) using shear bolts, which are activated during startup / first cycle.

Recommended applications

- Power plant technology
- Building services industry
- District heating & cooling
- Water cooling systems
- Air and steam transport lines

RELY ON EXCELLENCE



Item	Description
1	Bellows
2	Outer casing / shroud
3	Internal liner
4	Cone section
5	Stop ring
6	Guide ring
7	Torsion protector
8	Media / line pipe

RELY ON EXCELLENCE

Installation, details, options

PN 16 Technical data

Item no.	Axial movement	LN (mm)	D (mm)	S2 (mm)	L2 (mm)	L3 (mm)	Du (mm)	Spring rate axial CA	Effective area AB	Weight (kg)
DH1S.040.16.100	100	610	48.3	2.6	122	80	88.9	15	4100	7
DH1S.050.16.100	100	610	60.3	2.9	122	80	101.6	43	5500	9
DH1S.065.16.100	100	610	76.1	2.9	122	80	114.3	51	7600	11
DH1S.080.16.100	100	610	88.9	3.2	122	80	133.0	45	10800	13
DH1S.080.16.150	150	790	88.9	3.2	172	80	133.0	41	10800	17
DH1S.100.16.125	125	700	114.3	3.6	147	80	168.3	27	17300	21
DH1S.100.16.155	155	810	114.3	3.6	177	80	168.3	25	17300	23
DH1S.125.16.125	125	700	139.7	4.0	147	80	193.7	58	23700	26
DH1S.125.16.160	165	815	139.7	4.0	182	80	193.7	48	23700	30
DH1S.150.16.125	125	700	168.3	4.5	147	80	230.0	63	33200	35
DH1S.150.16.165	170	820	168.3	4.5	187	80	230.0	53	33200	40
DH1S.175.16.125	125	725	193.7	4.5	147	80	273.0	51	46100	46
DH1S.175.16.170	170	880	193.7	4.5	192	80	273.0	53	46100	55
DH1S.200.16.125	125	725	219.1	4.5	147	80	297.0	53	56000	51
DH1S.200.16.170	170	880	219.1	4.5	192	80	297.0	56	56000	62
DH1S.250.16.125	125	725	273.0	5.0	147	80	355.6	81	81000	72
DH1S.250.16.170	170	880	273.0	5.0	212	80	355.6	42	81000	93
DH1S.300.16.125	125	760	323.9	5.6	147	80	423.0	91	110700	97
DH1S.300.16.190	190	975	323.9	5.6	212	80	423.0	66	110700	120
DH1S.350.16.125	125	785	355.6	5.6	147	80	457.0	101	130500	118
DH1S.350.16.190	190	975	355.6	5.6	222	80	457.0	62	130500	144
DH1S.400.16.125	125	785	406.4	6.3	147	80	508.0	108	173800	140
DH1S.400.16.200	200	985	406.4	6.3	222	80	508.0	67	173800	173
DH1S.450.16.125	125	785	457.0	6.3	147	80	559.0	144	213500	156
DH1S.450.16.200	200	985	457.0	6.3	222	80	559.0	94	213500	194
DH1S.500.16.125	125	785	508.0	6.3	147	80	610.0	150	255500	170
DH1S.500.16.200	200	985	508.0	6.3	222	80	610.0	98	255500	214
DH1S.600.16.125	125	785	610.0	8.0	147	80	718.0	175	358400	240
DH1S.600.16.200	200	985	610.0	8.0	222	80	718.0	104	358400	297

RELY ON EXCELLENCE

PN 25 Technical data

Item no.	Axial movement	LN (mm)	D (mm)	S2 (mm)	L2 (mm)	L3 (mm)	Du (mm)	Spring rate axial CA	Effective area AB	Weight (kg)
DH1S.080.25.90	90	610	88.9	3.2	122	80	133.0	37	10920	14
DH1S.100.25.90	90	700	114.3	3.6	147	80	168.3	31	16700	22
DH1S.125.25.90	90	700	139.7	3.6	164	80	203.0	58	24860	29
DH1S.150.25.90	90	700	168.3	4.0	140	80	235.0	45	35100	40
DH1S.175.25.90	90	760	193.7	4.5	163	80	273.0	61	48040	52
DH1S.200.25.90	90	760	219.1	4.5	132	80	307.0	66	57600	60
DH1S.250.25.90	90	760	273.0	5.0	135	80	364.0	106	85690	85
DH1S.300.25.90	90	760	323.9	5.6	150	80	423.0	153	121620	110
DH1S.350.25.90	90	850	355.6	5.6	134	80	457.0	105	136450	137
DH1S.400.25.90	90	850	406.4	6.3	179	80	515.0	119	179300	155
DH1S.450.25.90	90	875	457.0	6.3	133	80	559.0	146	217640	177
DH1S.500.25.90	90	875	508.0	6.3	192	80	609.6	163	257240	205
DH1S.600.25.90	90	875	609.6	8.0	129	80	718.0	228	363710	287

