

RELY ON EXCELLENCE

DX3S DanOne metal expansion joints

Expansion joints | Metal expansion joints



Features

- Untied metal expansion joints mainly for district heating.
- External sealable shroud.
- Can be installed in series.
- One cycle / startup type expansion joint, for ease of installation.
- 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 supporting structure or excavation required – Compared to pipe loops.
- Lower erosion rate (for abrasive media lines – compared to pipe loops with elbows).
- Multiple 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, (4-5) 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. DX3S type expansion joints are used to ease installation by facilitating movement during the first startup. Once in operation, the expansion joint is fix (seal) welded.

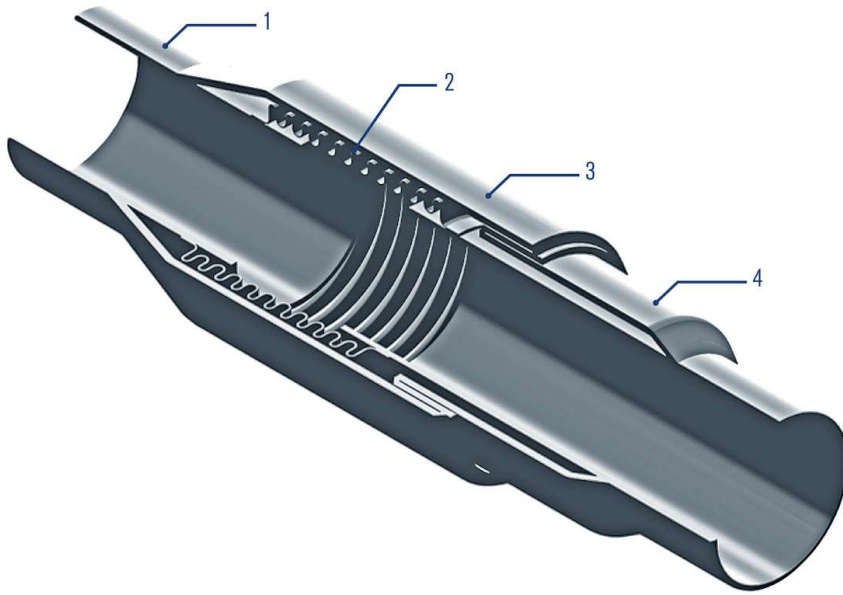
Recommended applications

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

RELY ON EXCELLENCE

Item Description

- | | |
|---|-----------------------|
| 1 | Media/ line pipe |
| 2 | Bellows |
| 3 | Outer casing / shroud |
| 4 | Inner casing / shroud |



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)	Sam. pres raft N	Effective area AB	Weight (kg)
DX3S.40.16.50	50	450	48.3	2.6	100	80	76.1	1600	2910	3
DX3S.50.16.50	50	450	60.3	2.9	100	80	88.9	1700	4180	4
DX3S.65.16.70	70	500	76.1	2.9	105	80	108.0	3000	6160	5
DX3S.80.16.70	70	500	88.9	3.2	105	80	121.0	2300	8110	7
DX3S.100.16.80	80	550	114.3	3.2	100	80	159.0	2800	12690	11
DX3S.125.16.80	80	550	139.7	3.6	100	80	177.8	3600	18030	14
DX3S.150.16.100	100	630	168.3	3.6	90	80	205.0	4800	25510	22
DX3S.175.16.100	100	630	193.7	4.0	90	80	235.0	5700	33200	27
DX3S.200.16.120	120	700	219.1	4.5	105	80	267.0	6700	44460	36
DX3S.250.16.120	120	700	237.0	5.0	100	80	323.9	8900	67020	46
DX3S.300.16.140	140	730	323.9	5.6	110	80	373.0	10800	92410	62
DX3S.350.16.140	140	730	355.6	5.6	110	80	406.4	12000	110450	70
DX3S.400.16.140	140	730	406.4	6.3	110	80	457.2	14000	142400	88
DX3S.450.16.150	150	800	457.2	6.3	110	80	519.0	16100	178410	121
DX3S.500.16.150	150	800	508.0	6.3	110	80	568.0	18200	218460	131
DX3S.600.16.150	150	800	609.6	8.0	110	80	671.0	21800	310740	174

PN 25 technical data

Item no.	Axial movement	LN (mm)	D (mm)	S2 (mm)	L2 (mm)	L3 (mm)	Du (mm)	Spring rate axial C N/mm	Effective area AB	Weight (kg)
DX3S.40.25.50	50	450	48.3	2.6	100	80	76.1	190	2846	3
DX3S.50.25.50	50	450	60.3	2.9	100	80	88.9	199	4038	4
DX3S.65.25.70	70	500	76.1	2.9	105	80	108.0	184	6305	5
DX3S.80.25.70	70	500	88.9	3.2	105	80	121.0	185	8235	7
DX3S.100.25.80	80	550	114.3	3.2	110	80	159.0	375	13253	11
DX3S.125.25.80	80	550	139.7	3.6	115	80	177.8	233	17437	14
DX3S.150.25.100	100	630	168.3	3.6	90	80	205.0	269	27172	22
DX3S.200.25.120	120	700	219.1	4.5	105	80	267.0	762	44339	36
DX3S.250.25.120	120	700	237.0	5.0	80	80	323.9	943	66052	46
DX3S.300.25.140	140	730	323.9	5.6	85	80	373.0	1330	91649	62
DX3S.350.25.140	140	730	355.6	5.6	85	80	406.4	1221	110859	70
DX3S.400.25.140	140	730	406.4	6.3	85	80	457.2	1358	141600	92
DX3S.450.25.150	150	800	457.2	6.3	95	80	519.0	1581	177510	125
DX3S.500.25.150	150	800	508.0	6.3	115	80	568.0	1893	217060	135

RELY ON EXCELLENCE

