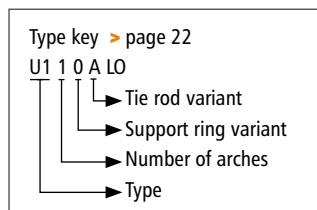


U110A LO \varnothing 80 - 4,000 mm



- > **Type U110A LO**
without vacuum ring
- > **Type U111A LO**
with internal vacuum ring
- > **Type U112A LO**
with embedded vacuum ring



Universal single arch expansion joint with lateral offset

Design: Type U110A LO rubber expansion joints are manufactured with built-in lateral offsets to accommodate non-standard construction site conditions. They provide ease of installation without compromising any performance capabilities. E.g. because of foundation or building settlements the replacement of long-term installed rubber expansion joints may require built-in offsets to accommodate non-standard site conditions. Due to relaxed installation the new expansion joint is capable to compensate further movements in the future.

High elastic, streamlined, single wide arch rubber bellows with full faced rubber flanges or swivel flanges with sealing bulge, designed to compensate all-directional movements, have a cycle life in the tens of millions, constructed with a high-grade leak-proof tube, multiple layers of high-strength cord, a seamless cover, and backing flanges with support collar. Optional with vacuum ring. In compliance with PED 2014/68/EU, FSA Technical Handbook and ASTM F1123 - 87.

Tie rods can be externally or internally attached when the support structure or adjacent equipment have load limitations to take over the thrust forces of the expansion joint bellow under pressure.

Diameters: \varnothing 80 to 4,000 mm, custom diameters possible

Length: Standard $L_e = 150$ to 400 mm (> page 74–79)
Custom length on request

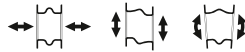
Pressure: Up to 100 bar depending on diameter and length
Vacuum stability on request, with vacuum ring up to 0.05 bar absolute

Application:
Cooling water systems,
desalination plants,
drinking water supply,
plant constructions e.g.
in pipelines, on pumps,
as dismantling joints, on
condensers and vessels



Request assembly instructions at:
www.ditec-adam.de/en/contact

Movement: For large axial, lateral and angular movements
For approx. movement capabilities refer to type U110A (> page 74–79)



Spring rate: Axial and lateral spring rates (> page 296)

Bellows elastomers and reinforcements

Elastomer	Fabric	Marking	°C	Application
EPDM	Polyamid		-40 +100	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDM	Aramid		-40 +100	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDMht	Aramid		-40 +120	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDMwras	Polyamid		-40 +100	Drinking water, foodstuffs
EPDMwras	Aramid		-40 +100	Drinking water, foodstuffs
EPDMbeige	Polyamid		-40 +100	Foodstuffs
EPDMbeige	Aramid		-40 +100	Foodstuffs
IIR	Polyamid		-20 +100	Hot water, acids, bases, gases
IIR	Aramid		-20 +100	Hot water, acids, bases, gases
CSM	Polyamid		-20 +100	Strong acids, bases, chemicals
CSM	Aramid		-20 +100	Strong acids, bases, chemicals
NBR	Polyamid		-30 +100	Oils, petrol, solvents, compressed air
NBR	Aramid		-30 +100	Oils, petrol, solvents, compressed air
NBRbeige	Polyamid		-30 +100	Oil, fatty foods
NBRbeige	Aramid		-30 +100	Oil, fatty foods
CR	Polyamid		-20 +90	Cooling water, slightly oily water, seawater
CR	Aramid		-20 +90	Cooling water, slightly oily water, seawater
FPM	Aramid		-20 +180	Corrosive chemicals, petroleum distillates
FPMbeige	Aramid		-20 +180	Oil, fatty foods
NR	Polyamid		-20 +70	Abrasive materials
Silicon	Aramid Glass		-60 +200	Air, saltwater atmosphere, foodstuffs, medical technology

PTFE-lining: Firmly embedded against chemical attacks on the interior at the rubber bellows, available starting at \varnothing 300 mm. Take the restriction of the listed movement into account (> page 74–79)

Backing flanges

Design: Single-part, round backing flanges with support collar and clearance holes

Flange norms: DIN, ANSI, EN, AWWA, BS, JIS, special measurements (> page 298)


Materials: Carbon steel, stainless steel or aluminium

Coating: Primed, hot-dip galvanised, special paint

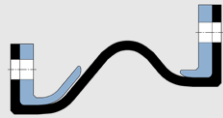
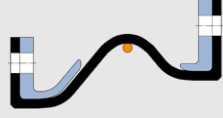
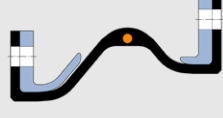
Accessories

Protective covers: Ground protective shield
 Protective shield or cover
 Fire protective cover (> page 58)

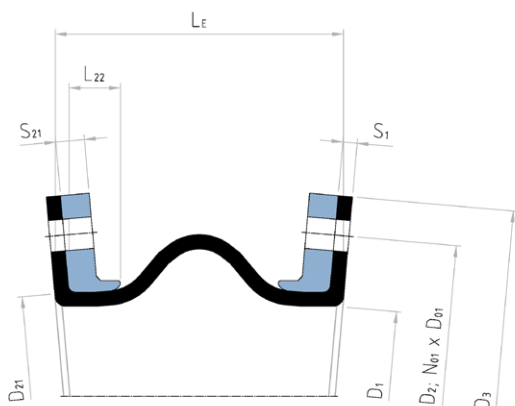
Flow liners: Cylindrical flow liner
 Conical flow liner
 Telescoping flow liner (> page 57)

Filled arch:  (> page 42)

Support rings

TYPE	Support rings	Vacuum ring	Pressure	Movement
U110A LO		None	Depending on the diameter up to 100 bar, vacuum stability on request	> page 74
U111A LO		Medium contact, inside the arch	Depending on the diameter up to 100 bar, for vacuum up to 0.05 bar absolute	> page 76
U112A LO		No medium contact, embedded in the arch	Depending on the diameter up to 40 bar, for vacuum up to 0.05 bar absolute	> page 78
Materials				
Stainless steel		Carbon steel, rubberised	Carbon steel, embedded	

Cross section U110A LO





Rubber expansion joints with built in lateral offset to compensate pipeline misalignment