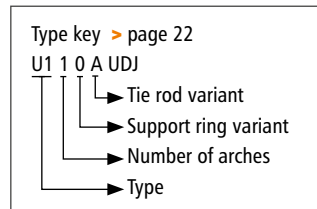


U110A UDJ \varnothing 80 - 4,000 mm



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



Universal dismantling joint

Design:

Rubber expansion joints as dismantling joints play a decisive role in the design and layout of pipelines and valves. They are an essential aid during the installation and removal of pipe sections and piping equipment. Without a dismantling joint offering axial, lateral and angular adjustments, it is almost impossible to insert a valve exactly into a pipe section. Thanks to this all-directional adjustability, the valve can be fitted next to the dismantling joint, and the rubber expansion joint can compensate for installation tolerances prior to being securely connected to the mating flanges.

ditec`s dismantling rubber expansion joints are specifically designed for self-retraction to facilitate access to piping and equipment as well as for unmatched ease of installation and subsequent removal. Only the rubber bellows with its close to unlimited medium compatibility is in contact with the fluid so that the use of costly stainless steel materials or special coatings are unnecessary.

Application:

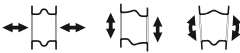
Cooling water systems, desalination plants, drinking water supply, plant constructions, flue gas cleaning plants e.g. in pipelines, on pumps, as dismantling joints, on condensers and vessels





















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

Dismantling rubber expansion joints are high elastic, streamlined, have depending from expected installation tolerances or movements single or multiple wide archs with full faced rubber flanges or swivel flanges with sealing bulge, are designed to compensate all-directional movements, have a cycle life in the tens of millions, are 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.

Universal dismantling joints have light-weight restraints only capable to retract the expansion joints but not designed to take thrust forces of the bellow. Restraints must be loosened for operation and hydraulic testing.

- 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
- Movement:** For large axial, lateral and angular movements
For 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)

88 Universal expansion joints with full faced rubber flange


Backing flanges

- Design:** Single-part, round backing flanges with several tie rod holder, 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)

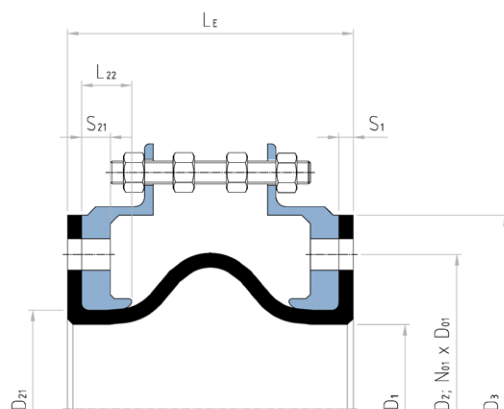
Support rings

TYPE	Support rings	Vacuum ring	Pressure	Movement
U110A UDJ		None	Depending on the diameter up to 100 bar, vacuum stability on request	> page 74
U111A UDJ		Medium contact, inside the arch	Depending on the diameter up to 100 bar, for vacuum up to 0.05 bar absolute	> page 76
U112A UDJ		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

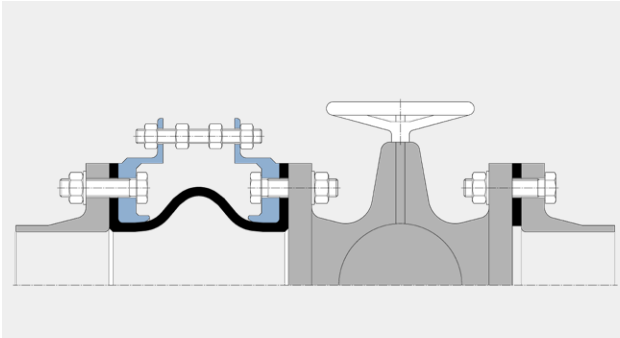
Materials

Stainless steel	Carbon steel, rubberised	Carbon steel, embedded
-----------------	--------------------------	------------------------

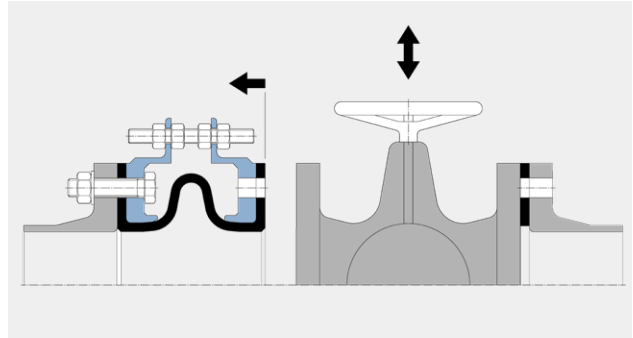
Cross section U110A UDJ



Working principle of a dismantling joint



in operation



for maintenance



Double arch EPDM rubber expansion joints with PTFE lining for GRP gas ducts of a sulphuric acid plant as dismantling joint