# **MODEL C1 EXPANSION JOINT**

## **PRODUCT 20-011**

The **TechWest Model C1 Expansion Joint** is a splined type expansion joint which allows for movement in the axial direction only. The expainsion joint is locked in the horzontal (rotational) plane by means of a pin travelling in a spline.

The Model C1 Expansion Joint is normally run in conjunction with Permanent or Retrievable Production Packers and is placed in the Tubing String to allow for pipe contraction or expansion, due to the effects of temperature or pressure.

#### **FEATURES**

- Torque is transmitted from all positions.
- Standard 10 foot stroke, and available in different lenghts.
- May be ran pinned fully open (compression release) or closed (tension release).
- Can be manufactured to pin close at 1 foot intervals (tension and compression release)
- Manufactured standard in accordance with NACE specification MR0175 for standard H<sub>2</sub>S Service and with standard A.P.I. tubing connections.
- Avaiallble in a variety steels, V-Seal materials, and preimum threads.

### **SPECIFICATIONS**

20-011 SPECIFICATIONS								
Size		Max OD		Min OD		Product No	Max. # Shear	Standard
in	mm	in	mm	in	mm	Product No	Screws	Connection
2 3/8	60.3	3.09	78.5	2.00	50.7	20-011-2310	12	2 3/8" 4.7# EUE
2 7/8	73.0	3.70	94.0	2.44	62.0	20-011-2710	12	2 <b>7</b> /8" 6.5# EUE
3 1/2	88.9	4.53	115.1	2.99	76.0	20-011-3510	12	3 1/2 9.33# EUE
4 1/2	114.3	5.57	141.5	3.96	100.6	20-011-5510	12	4 1/2 9.33# EUE

## **OPERATION**

Run to depth and space out the top of the tubing string according the anticipated expansion/contraction required to always keep the packer in the neutral position. Set the packer with a full joint. Apply compression or tension to shear the shear pins of the Expansion Joint/ Unscrew the landing joint, attach and land the dog nut.