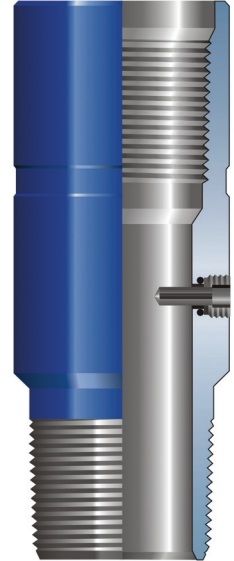


Purpose

The **Brico Kobe Sub** allows the operator to equalize pressure between tubing and the annulus. The sub is normally installed in the tubing string below the production packer. Once the packer has been set and ready for testing, the Kobe pin is sheared off by means of wireline allowing equalization between tubing and the annulus. The Kobe sub is mainly used to test the integrity of the production packer and casing annulus before perforating.

Operation

The Kobe Sub is normally run in the packer tail pipe section below the seating nipple system and above the underbalancing sub. Once the packer / TCP system has been logged on depth and the packer set, the wireline operator will shear off the kobe pin allowing the pressure to be equalized and the packer tested.



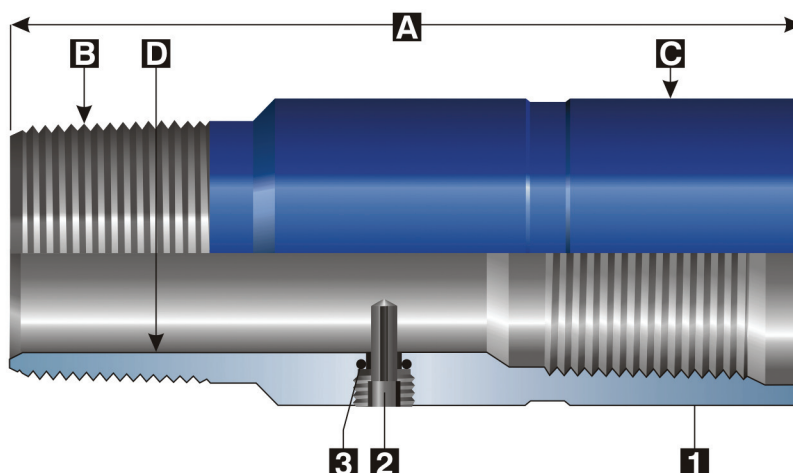
Specifications

Kobe Sub (Product N° 33-10)				
Thread Size and Type	2 3/8" EUE Pin (60.33 mm)	2 7/8" EUE Pin (73.0 mm)	3 1/2" EUE Pin (88.9 mm)	4 1/2" EUE Pin (114.3 mm)
Assembly Number	33-1006041-00	33-1007341-00	33-1008941-00	33-1011441-00
Pressure Rating	10,000 psi (69 mPa)	10,000 psi (69 mPa)	10,000 psi (69 mPa)	10,000 psi (69 mPa)
Tensile Strength	Manufactured from P-110 / L-80 for H2S applications / API Material			
Maximum Temperature	400°F (204°C) with 90 Durometer Viton O-rings			
Minimum ID	1.99" (50.54 mm)	2.44" (61.97 mm)	2.995" (76 mm)	4.00" (101.6 mm)
Maximum OD	3.05" (77.47 mm)	3.67" (93.22 mm)	4.50" (114.30 mm)	5.563" (141.3 mm)
Length	8" (203.20 mm)	9" (228.60 mm)	10" (254.00 mm)	14" (355.60 mm)
Shipping Weight	7 lbs (3.17 kg)	7.3 lbs (3.31 kg)	9 lbs (4.082 kg)	10 lbs (4.53 kg)
Redress Kit Number	31-1006040-99	31-1006040-99	31-1006040-99	31-1006040-99

*NOTE: Standard EUE connections, premium thread connections available on request.

33-10 Kobe Sub, Dimentional Data

Dim	33-1006041-00		33-1007941-00		33-1008941-00		33-1011441-00	
	In	mm	In	mm	In	mm	In	mm
A	8	203.2	9	228.6	10	254.0	14	355.6
B	2 ³ / ₈ " EUE	60.33 EUE	2 ⁷ / ₈ " EUE	73.0 EUE	3 ¹ / ₂ " EUE	89.9 EUE	4 ¹ / ₂ " EUE	114.3 EUE
C	3.050	77.4	3.670	93.2	4.500	114.3	5.563	141.3
D	1.995	50.6	2.441	62.0	2.992	75.9	4.000	101.6



33-10 Kobe Sub, Parts List

Item	Description	33-1006041-00	33-1007341-00	33-1008941-00	33-1011441-00
		Part Number			
1	Body	33-1006001-01	33-1007301-01	33-1008901-01	33-1011401-01
2	Kobe Pin	33-1006001-02	33-1006001-02	33-1006001-02	33-1006001-02
3	O-Ring 90 Durometer Viton	81-0110000-04	81-0110000-04	81-0110000-04	81-0110000-04