

**Purpose:**

- Knuckle joint is a device that provides angular movement between the tool string and the pulling tool.
- To meet operational requirements, one or more knuckle joints are inserted to the tool string.
- The device is available in several of diameters.
- Specializing in deviated wells.

**Operation:**

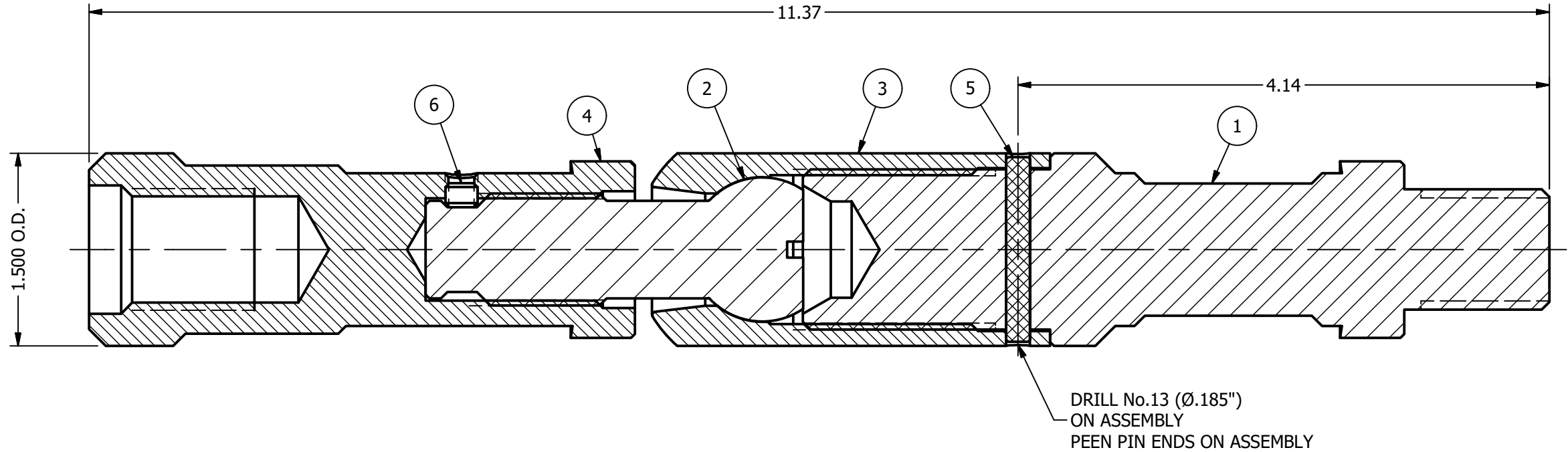
- It provides flexibility within the wireline tool string.

**Precautions:**

- When using Knuckle Joints, well conditions and placement of knuckle joint in tool string should be assessed carefully.
- Knuckle Joints are not recommended for use in wells with high H<sub>2</sub>S content.

APPLICABLE CRITICAL DATA	
DESCRIPTION	DATA
OAL	11.37
MAX O.D.	1.500
UPPER THREAD CONNECTION	.938-10 UN-2A
FISHNECK SIZES	1.375
LOWER THREAD CONNECTION	.938-10 UN-2B
RANGE OF MOTION	± 7°
RECOMMENDED LOAD - L80	32,500 lbs
WEIGHT	4.10 lbs

ITEM	QTY	DESCRIPTION	PART NUMBER	MATERIAL
1	1	FISHNECK	01-01-DFK-150-01	AISI 4140 - L80
2	1	KNUCKLE	01-01-DFK-150-02	AISI 4140 - L80
3	1	SWIVEL CUP	01-01-KJ-150-03	AISI 4140 - L80
4	1	BOTTOM SUB	01-01-DFK-150-04	AISI 4140 - L80
5	1	PIN	3/16" x 1.44 LG.	BRASS/DRILL ROD
6	2	SET SCREW	.250-20 UNC x 3/16" L.G.	AS REQUIRED



WEIGHT = 4.10 lb

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					<b>TOLERANCES</b> .X = +/- 0.030 .XX = +/- 0.015 .XXX = +/- 0.005 < = +/- 0.5 DEG © = .005 TIR				MATERIAL AS REQ SCALE NTS SHEET 1 of 1 DWN L.M.B. DATE 12/03/2018 CHK C.B. DATE 5/24/2018		TITLE 1.50 DOUBLE FISHNECK KNUCKLE JOINT ASSEMBLY DWG # 01-01-DFK-150-A0 REV 2	
2	24 MAY 18	UPDATED BOM, ADDED SET SCREW, REMOVED 1 DRILL HOLE	L.M.B.	00455								
1	01 FEB 17	HOLE WAS 3/16" HOLE	L.M.B.	00309								
REV	DATE	DESCRIPTION	BY	ECR								