

API Drill Pipe Connections

Connection Size and Style RSC Type	Box OD (in)	Pin ID (in)	Make-Up Torque (ft-lbs)	Torsional Yield (ft-lbs)	Pin Tensile Yield (lbs)
5 1/2 FH	7	3 1/4	37,742	62,903 b	1,778,200
		3 1/2	37,742	62,903 b	1,619,200
		3 3/4	37,742	62,903 b	1,448,400
		4	33,412	55,687	1,265,800
	7 1/8	3 1/4	42,425	70,708 b	1,778,200
		3 1/2	42,425	70,708 b	1,619,200
		3 3/4	38,514	64,189	1,448,400
		4	33,412	55,687	1,265,800
	7 1/4	3 1/4	47,230	78,716 b	1,778,200
		3 1/2	43,328	72,213	1,619,200
		3 3/4	38,514	64,189	1,448,400
		4	33,412	55,687	1,265,800
	7 1/2	3 1/4	47,846	79,743	1,778,200
		3 1/2	43,328	72,213	1,619,200
		3 3/4	38,514	64,189	1,448,400
		4	33,412	55,687	1,265,800

b - Torsional yield values shown in yellow indicate the connection is box weak in torsion.

The torsional yield strength is based on a shear strength of 57.7% of the minimum yield strength

The tensile strength of the tool joint pin is based on 120,000 psi yield and the cross sectional area at the root of the thread 5/8" from the shoulder.