

Drilling Tools - Data Performance Sheet

Welded HWDP

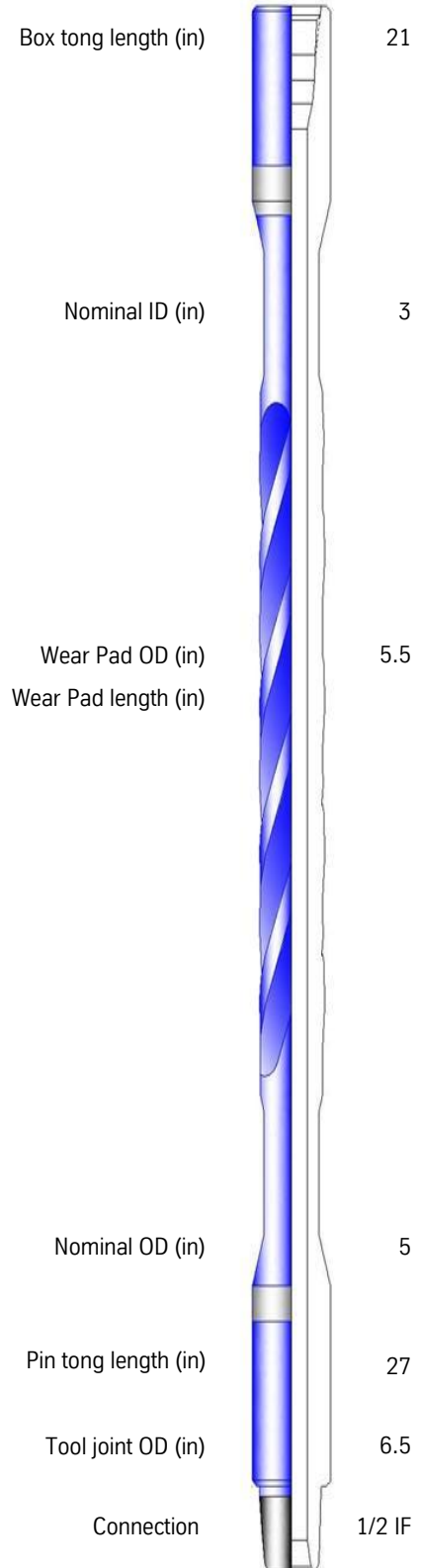
Pipe Size	5" x 3"
Pipe Grade	55 ksi Integral HWDP
Range	2
Tool joint and Connection	4 1/2 IF

Pipe Dimensional Data	5" x 3"
OD (in)	5
Max Upset OD (DTE) (in)	5.125
Wall thickness (in)	1.000
ID (in)	3
Approx. Length (ft)	30.70
Cross sectional area pipe body (in²)	12.566
Cross sectional area OD (in²)	19.635
Cross sectional area ID (in²)	7.069
Section modulus (in³)	10.681
Polar section modulus (in³)	21.363

Pipe Performance Data	
Min Yield strength (Psi)	55 000
Torsional Strength (ft-lbs)	56 496
Tensile Strength (lbs)	691 150
80% Torsional Strength (ft-lbs)	45 197
Pressure Capacity (psi)	19 250
Collapse Capacity (psi)	17 600
Adjusted weight (lbs/ft)	48.62
Fluid displacement (gal/ft)	0.742
Fluid capacity (gal/ft)	0.367
Drift size (in)	2.750

Tool Joint Dimensional Data	4 1/2 IF
OD (in)	6 1/2
ID (in)	3
Pin tong length (in)	27
Box tong length (in)	21

Performance Data	
Torsional Strength (ft-lbs)	52 250
Max Recommended Make up Torque (ft-lbs)	31 350
Min Recommended Make up Torque (ft-lbs)	28 738
Balance OD	6.511
Tensile Strength (lbs)	1 280 600
Tool Joint/Pipe torsional ratio	0.925



Note : Nominal burst calculated at 87.5% RBW per API