

CASING TECHNICAL DATA SHEET
5.5 x 0.415 EPL80 GBCD

Reviewed by: Sr. Quality Engineer
 Approved by: Corporate Director-QEHS

TDS Date (MM/DD/YY)

1-20-25

PIPE BODY DATA

Nominal Outside Diameter
 Nominal Wall Thickness
 Remaining Body Wall (RBW)
 Type of Thread
 Grade
 Coupling Type

Unit	Imperial	Metric	Unit
in	5.500	139.70	mm
in	0.415	10.54	mm
	95.0%	95.0%	
	GBCD	GBCD	
	EPL80	EPL80	
	11th Edition	11th Edition	

Label Weight
 Plain End Weight
 Pipe Minimum Yield
 Pipe Maximum Yield
 Pipe Minimum Tensile
 Standard Drift Diameter (min)
 Alternate Drift Diameter (min)
 Pipe Body Plain End Yield
 Pipe Body Internal Yield
 Collapse Pressure - Standard
 Collapse Pressure - High

	23.00	23.00	
lb/ft	22.56	33.57	kg/m
ksi	82	565	MPa
ksi	95	655	MPa
ksi	95	655	MPa
in	4.545	115.44	mm
in	N/A	N/A	mm
lb	544,000	246,750	kg
psi	11,760	81,080	kPa
psi	N/A	N/A	kPa
psi	12,110	83,500	kPa

CONNECTION DATA

Coupling Minimum Yield
 Coupling Maximum Yield
 Coupling Minimum Tensile
 Coupling or Joint Outside Diameter (nom)
 Coupling Thread Fracture Strength
 Pipe Thread Fracture Strength
 Pull Out Strength
 Nominal Make-Up Torque or Make-up Torque Range
 Coupling Internal Yield
 Internal Yield of Joint

ksi	See Next Page	See Next Page	MPa
ksi	See Next Page	See Next Page	MPa
ksi	See Next Page	See Next Page	MPa
in	See Next Page	See Next Page	mm
lb	See Next Page	See Next Page	kg
lb	See Next Page	See Next Page	kg
lb	See Next Page	See Next Page	kg
ft-lb	See Next Page	See Next Page	N-m
psi	See Next Page	See Next Page	kPa
psi	See Next Page	See Next Page	kPa

WELDED TUBE GENERAL INPUT CRITERIA

Coupling Color Code
 Coupling Color Code for the Band
 Pipe Color Code Identification
 Additional Color Band (approx.10' from box end)

2" Band(s)	Red
	One Brown
	One Red, One Brown
	White

Note:

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GB Connection Performance Properties Sheet

Rev. 0 (06/28/2024)

ENGINEERING THE RIGHT CONNECTIONS

Casing: 5.5 OD, 23 ppf
Casing Grade:** WTC L80 EP (95% RBW)

Connection: GB CD Butt 6.300
Coupling Grade: API L-80

PIPE BODY GEOMETRY					
Nominal OD (in.)	5 1/2	Wall Thickness (in.)	0.415	Drift Diameter (in.)	4.545
Nominal Weight (ppf)	23.00	Nominal ID (in.)	4.670	API Alternate Drift Dia. (in.)	N/A
Plain End Weight (ppf)	22.56	Plain End Area (in. ²)	6.630		

PIPE BODY PERFORMANCE**					
Material Specification	WTC L80 EP (95% RBW)	Min. Yield Str. (psi)	80,000	Min. Ultimate Str. (psi)	95,000
Collapse		Tension		Pressure	
API (psi)	11,160	Pl. End Yield Str. (kips)	530	Min. Int. Yield Press. **(psi)	11,440
High Collapse** (psi)	11,760	Torque		Bending	
		Yield Torque (ft-lbs)	60,380	Build Rate to Yield (°/100 ft)	66.7

GB CD Butt 6.300 COUPLING GEOMETRY			
Coupling OD (in.)	6.300	Makeup Loss (in.)	4.2500
Coupling Length (in.)	8.500	Critical Cross-Sect. (in. ²)	8.527

GB CD Butt 6.300 CONNECTION PERFORMANCE RATINGS/EFFICIENCIES					
Material Specification	API L-80	Min. Yield Str. (psi)	80,000	Min. Ultimate Str. (psi)	95,000
Tension		Efficiency		Bending	
Thread Str. (kips)	572	Internal Pressure (%)	100%	Build Rate to Yield (°/100 ft)	58.2
Min. Tension Yield (kips)	648	External Pressure (%)	100%	Yield Torque	
Min. Tension Ult. (kips)	770	Tension (%)	100%	Yield Torque (ft-lbs)	27,740
Joint Str. (kips)	572	Compression (%)	100%		
		Ratio of Areas (Cplg/Pipe)	1.29		

MAKEUP TORQUE					
Min. MU Tq. (ft-lbs)	10,000	Max. MU Tq. (ft-lbs)	20,000	Running Tq. (ft-lbs)	See GBC RP
				Max. Operating Tq. (ft-lbs)*	26,360

Units: US Customary (lbm, in., °F, lbf)

1 kip = 1,000 lbs

* See Running Procedure for description and limitations.

See attached: Notes for GB Connection Performance Properties.

GBC Running Procedure (GBC RP): www.gbconnections.com/pdf/RP-GB-DWC-Connections.pdf

Blanking Dimensions: www.gbconnections.com/pdf/GB-DWC-Blanking-Dimensions.pdf

Connection yield torque rating based on physical testing or extrapolation therefrom

** Casing properties applicable to WTC L80 EP (95% RBW) grade with min. yield 80 ksi.

