



SECTION I: TOOL STRING	2021
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Product Code: 101

Rebco STEMS (Weight Bar): provide added weight to the Wireline Tool String, to counteract the wellbore pressure and effectiveness of the impact delivered by Jars (**Product Code 102**).

Rebco offers variety of Stem Types (Table - Availability), for specific applications.

Alloy Material is used to manufacture **Rebco STEMS**. Materials suitable for specific Well conditions are available.

Type of STEMS: Availability Table

Thread	TYPE		ASSEMBLY PART NUMBER	DESCRIPTION
	QLS *			
	Single	Double		
'A'		'AD'	1010003-	Solid Bar
	'AS'		1010014-	
			10100-	
'BO'		'BD'	1010103-	Lead Filled
	'BS'		1010114-	
			1010120-	
'EO'		'ED'	1010203-	Roller Stem
	'ES'		1010214-	
			1010220-	
'TO'		'TD'	1011503-	Tungsten Filled
	'TS'		1011514-	
			1011520-	

- QLS** - Quick Lock System
- **'RQLS'** Single Shoulder
 - **'RQLD'** Double Shoulder, Heavy Duty

Rebco - Helpful Hint: How to determine the amount of Stem Weight needed?

EXAMPLE: 1 1/2" Diameter Stem

As a general **"Rule of thumb"** a minimum of five (5 ft.) of Stem (29.2 lbs) is used for pressure of 1,000 psi and less. Use an additional two (2 ft.) of Stem (11.0 lbs) for each additional 1,000 psi of well pressure.

FORMULA: Reasonably accurate for determining the weight per FOOT of given

- a) Stem size is: $\frac{D^2 \times 8}{3} = \text{lbs/ft.}$
- b) Weight in lbs/ft. = $10.68r^2$
 - r^2 is the radius of the bar in inches
 - the density of steel is taken as 490.06 lbs/cu. ft.
 - To convert from lbs/ft. to kg/m multiply by 1.487

Density/Weight Comparison of Metals used to manufacture Stem

METAL	Density Lbs/ft ³	WEIGHT		Example 1 1/2" X 5 ft.
		Kgs/m ³	Lbs/ft ³	
Steel	490.06	7,850	489.84	29.2 lbs
Lead Fill	708	11,340	707.62	35.8 lbs
Tungsten Fill	976	19,600	1,223.04	58.15 lbs



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Type 'EO' Roller Stem (Weight Bar): 1 1/4" – 2 1/2"

Rebco Type 'EO' Roller Stems are with Threaded Connections – (Sucker Rod Type)



ASSEMBLY PART NUMBER	NOMINAL SIZE (OD)	ENGINEERING DATA							
		LENGTH	THREAD CONNECTIONS	FISHING NECK	NO * ROLLERS	ROLLER OD *			
10104201252	1 1/4"	24"	15/16" - 10	1.187"	2	1.50"			
10104201253		36"			3				
10104201255		60"			4				
10104201502	1 1/2"	24"		1 1/16" - 10	1.375"	2	1.75"		
10104201503		36"				3			
10104201505		60"				4			
10104201752	1 3/4"	24"	1 1/16" - 10		1.750"	2	2.20"		
10104201753		36"				3			
10104201755		60"				4			
10104201872	1 7/8"	24"		1 1/16" - 10		1.750"		2	2.20"
10104201873		36"						3	
10104201875		60"						4	
10104202122	2 1/8"	24"	1 1/16" - 10		1.750"		2	2.75"	
10104202123		36"					3		
10104202125		60"					4		
10104202502	2 1/2"	24"		1 1/16" - 10		2.313"	2		3.25"
10104202503		36"					3		
10104202505		60"					4		

Type 'ED' Roller Stem (Weight Bar): 1 1/2" – 2 1/2"

Rebco Type 'ED' Roller Stems are with integral QLS (Quick Lock System)

- *Rebco* Type '**RQLD**'

ASSEMBLY PART NUMBER	NOMINAL SIZE (OD)	ENGINEERING DATA							
		LENGTH	'QLS' CONNECTIONS	FISHING NECK	NO * ROLLERS	ROLLER OD *			
10104031502	1 1/2"	24"	'RQLD'	1.375"	2	1.75"			
10104031503		36"			3				
10104031505		60"			4				
10104031752	1 3/4"	24"		'RQLD'	1.750"	2	2.20"		
10104031753		36"				3			
10104031755		60"				4			
10104031872	1 7/8"	24"	'RQLD'			1.750"		2	2.20"
10104031873		36"						3	
10104031875		60"						4	
10104032122	2 1/8"	24"		'RQLD'	1.750"		2	2.75"	
10104032123		36"					3		
10104032125		60"					4		
10104032502	2 1/2"	24"	'RQLD'			2.313"	2		3.25"
10104032503		36"					3		
10104032505		60"					4		

* Material, OD of Rollers, No. of Rollers and Configuration can be changed to suit. Please specify

