ROCK BOLTS

COMPOSITE ROCK BOLT SPECIFICATIONS

REVISION: March 2020

Rock bolts

		†20 mm	22mm	25mm	†29mm	†32mm
Ultimate tensile load	kN	260	350	460	550	615
	lbs	58 500	78491	103500	123500	138500
Tensile modulus*	GPa	53				
	Msi	7.7				
Reinforcement content	%	82				
Glass transition temperature	°C	110				
	°F	230				
Transverse shear strength (single shear)	kN	50	70	80	110	120
	lbs	11 250	15 700	18 000	24 669	27 000
Unit weight	kg/m	0.58	0.70	0.94	1.26	1.50
	lbs/ft	0.39	0.47	0.63	0.84	1.01

Standard Nuts

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Punch-out torque	m/kg	7.6	8.3	9.0	9.7	—
	ft/lb	55	60	65	70	—
Tensile capacity (Tested with composite rockbolt)	kN	65	70	100	120	130
	lbs	14 577	15 700	22 500	26 911	29 200
Hex size	mm	38	38	44	50	50
	in	1 1/2	1 1/2	1 3/4	1 15/16	1 15/16
Length	mm	51			63.5	
	in	2			2 1/2	
Thread engagement length (prior to punch-out)	mm	41			54	
	in	1 5/8			2 1/8	

Fixed square heads

{molded on rock bolts)

		20 mm	22 mm	25 mm	†29 mm
Head tensile capacity	kN	100	110	—	110
	lbs	22 426	24 669	—	24 750
Square drive size	mm	28.5	28.5	—	28,5
	in	1 1/8	1 1/8	—	1 1/8
Head Length	mm	100			
	in	3.94			

Standard Washer Plate **

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Standard flat washer plate diameter	mm	190				
	in	7 1/2				
Maximum compression load capacity	kN	50	50	65		
	lbs	11 200	11 200	14 500		
Flexural load capacity (Parallel 155mm span)	kN	3 344				
	lbs	750				







* Tensile modulus is based on the working area of the rock bolt and not the nominal size.

** Various types of washers such as swivel or high capacity plates can be made

† according to the customers needs and applications.
Products in prototype development phase, values to be validated.

- The entire length of the Rock bolts are threaded.
- Available in both left hand and right hand threads.
- Rock bolt standard lengths up 10 feet (other lengths available upon request).

infraMOD™ a saskarc company

2 Marconi Road P.O. Box 990 Oxbow, Saskatchewan, Canada SOC 2B0
soesolutions@inframod.com
Phone: +1 (800) 667-5155 | inframod.com

ROCK BOLTS

COMPOSITE ROCK BOLT SPECIFICATIONS

Reliable Support. Safer Excavations.



ROCK BOLTS

		†20 mm	22mm	25mm	†29mm	†32mm
Ultimate tensile load	kN	260	350	460	550	615
	lbs	58 500	78491	103500	123500	138500
Tensile modulus*	GPa	53				
	Msi	7.7				
Reinforcement content	%	82				
Glass transition temperature	°C	110				
	°F	230				
Transverse shear strength (single shear)	kN	50	70	80	110	120
	lbs	11 250	15 700	18 000	24 669	27 000
Unit weight	kg/m	0.58	0.70	0.94	1.26	1.50
	lbs/ft	0.39	0.47	0.63	0.84	1.01

STANDARD NUTS

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Punch-out torque	m/kg	7.6	8.3	9.0	9.7	—
	ft/lb	55	60	65	70	—
Tensile capacity (Tested with composite rockbolt)	kN	65	70	100	120	130
	lbs	14 577	15 700	22 500	26 911	29 200
Hex size	mm	38	38	44	50	50
	in	1 1/2	1 1/2	1 3/4	1 15/16	1 15/16
Length	mm	51			63.5	
	in	2			2 1/2	
Thread engagement length (prior to punch-out)	mm	41			54	
	in	1 5/8			2 1/8	

FIXED SQUARE HEADS (molded on rock bolts)

		20 mm	22 mm	25 mm	†29 mm
Head tensile capacity	kN	100	110	—	110
	lbs	22 426	24 669	—	24 750
Square drive size	mm	28.5	28.5	—	28,5
	in	1 1/8	1 1/8	—	1 1/8
Head Length	mm	100			
	in	3.94			

STANDARD WASHER PLATE

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Standard flat washer plate diameter	mm	190				
	in	7 1/2				
Maximum compression load capacity	kN	50	50	65		
	lbs	11 200	11 200	14 500		
Flexural load capacity (Parallel 155mm span)	kN	3 344				
	lbs	750				







2 Marconi Road P.O. Box 990 Oxbow, Saskatchewan, Canada SOC 2B0
soesolutions@inframod.com
Phone: +1 (800) 667-5155 | **inframod.com**

infraMOD™
a saskarc company

ROCK BOLTS

COMPOSITE ROCK BOLT SPECIFICATIONS



Rock bolts

		†20 mm	22mm	25mm	†29mm	†32mm
Ultimate tensile load	kN	260	350	460	550	615
	lbs	58 500	78491	103500	123500	138500
Tensile modulus*	GPa	53				
	Msi	7.7				
Reinforcement content	%	82				
Glass transition temperature	°C	110				
	°F	230				
Transverse shear strength (single shear)	kN	50	70	80	110	120
	lbs	11 250	15 700	18 000	24 669	27 000
Unit weight	kg/m	0.58	0.70	0.94	1.26	1.50
	lbs/ft	0.39	0.47	0.63	0.84	1.01

Standard Nuts

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Punch-out torque	m/kg	7.6	8.3	9.0	9.7	—
	ft/lb	55	60	65	70	—
Tensile capacity (Tested with composite rockbolt)	kN	65	70	100	120	130
	lbs	14 577	15 700	22 500	26 911	29 200
Hex size	mm	38	38	44	50	50
	in	1 1/2	1 1/2	1 3/4	1 15/16	1 15/16
Length	mm	51			63.5	
	in	2			2 1/2	
Thread engagement length (prior to punch-out)	mm	41			54	
	in	1 5/8			2 1/8	

* Tensile modulus is based on the working area of the rock bolt and not the nominal size.

** Various types of washers such as swivel or high capacity plates can be made

† according to the customers needs and applications.
Products in prototype development phase, values to be validated.

Fixed square heads
(molded on rock bolts)

		20 mm	22 mm	25 mm	†29 mm
Head tensile capacity	kN	100	110	—	110
	lbs	22 426	24 669	—	24 750
Square drive size	mm	28.5	28.5	—	28,5
	in	1 1/8	1 1/8	—	1 1/8
Head Length	mm	100			
	in	3.94			

Standard Washer Plate

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Standard flat washer plate diameter	mm	190				
	in	7 1/2				
Maximum compression load capacity	kN	50	50	65		
	lbs	11 200	11 200	14 500		
Flexural load capacity (Parallel 155mm span)	kN	3 344				
	lbs	750				







- The entire length of the Rock bolts are threaded.
- Available in both left hand and right hand threads.
- Rock bolt standard lengths up 10 feet (other lengths available upon request).

ROCK BOLTS

COMPOSITE ROCK BOLT SPECIFICATIONS

REVISION: March 2020

Rock bolts

		†20 mm	22mm	25mm	†29mm	†32mm
Ultimate tensile load	kN	260	350	460	550	615
	lbs	58 500	78491	103500	123500	138500
Tensile modulus*	GPa	53				
	Msi	7.7				
Reinforcement content	%	82				
Glass transition temperature	°C	110				
	°F	230				
Transverse shear strength (single shear)	kN	50	70	80	110	120
	lbs	11 250	15 700	18 000	24 669	27 000
Unit weight	kg/m	0.58	0.70	0.94	1.26	1.50
	lbs/ft	0.39	0.47	0.63	0.84	1.01

Standard Nuts

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Punch-out torque	m/kg	7.6	8.3	9.0	9.7	—
	ft/lb	55	60	65	70	—
Tensile capacity (Tested with composite rockbolt)	kN	65	70	100	120	130
	lbs	14 577	15 700	22 500	26 911	29 200
Hex size	mm	38	38	44	50	50
	in	1 1/2	1 1/2	1 3/4	1 15/16	1 15/16
Length	mm	51			63.5	
	in	2			2 1/2	
Thread engagement length (prior to punch-out)	mm	41			54	
	in	1 5/8			2 1/8	

Fixed square heads

(molded on rock bolts)

		20 mm	22 mm	25 mm	†29 mm
Head tensile capacity	kN	100	110	—	110
	lbs	22 426	24 669	—	24 750
Square drive size	mm	28.5	28.5	—	28,5
	in	1 1/8	1 1/8	—	1 1/8
Head Length	mm	100			
	in	3.94			

Standard Washer Plate **

		†20 mm	22 mm	25 mm	†29 mm	†32 mm
Standard flat washer plate diameter	mm	190				
	in	7 1/2				
Maximum compression load capacity	kN	50	50	65		
	lbs	11 200	11 200	14 500		
Flexural load capacity (Parallel 155mm span)	kN	3 344				
	lbs	750				







* Tensile modulus is based on the working area of the rock bolt and not the nominal size.

** Various types of washers such as swivel or high capacity plates can be made

† according to the customers needs and applications.
Products in prototype development phase, values to be validated.

- The entire length of the Rock bolts are threaded.
- Available in both left hand and right hand threads.
- Rock bolt standard lengths up 10 feet (other lengths available upon request).

PULTRALL

700, 9e Rue Nord, Thetford Mines (Quebec) CANADA G6G 6Z5
Phone: **418 335-3202** | Fax: **418 335-5117** | **www.vrod.ca**