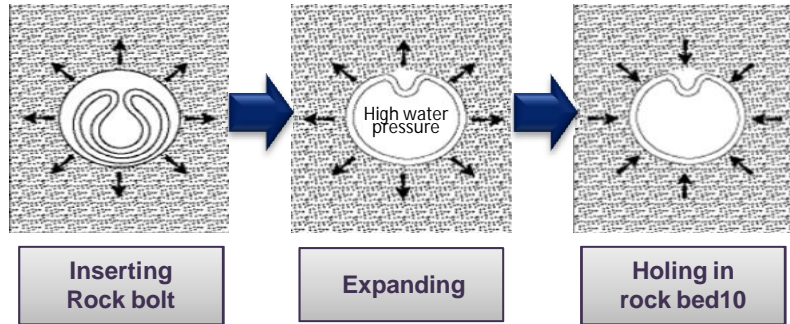


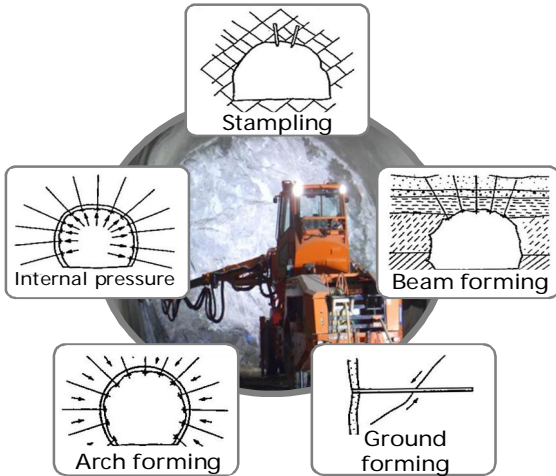
General Description

Expandable Rock Bolting System

- Advanced ground reinforcement technology
- Injecting high pressure fluid (250~300 bar) into the pipe to expand and strongly interlock with surrounding rocks
- Mechanical gearing and frictional force

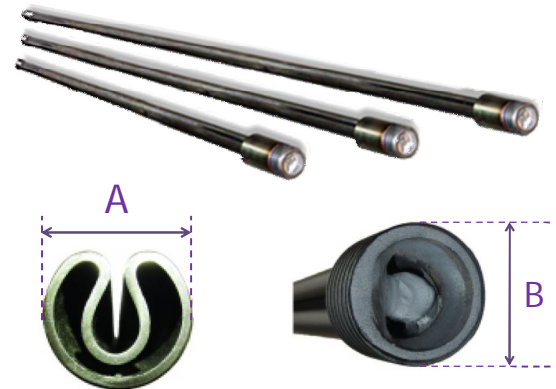


- Quicker and easier to install
- Made of high strength steels
- Minimum 20% elongation
- More competitive than conventional expandable rock bolts
- Provides economical, fast, and safe rock support system



Specification

	FB16	FB18	FB24A	FB24B
Tube Thickness (mm)	2.0	2.3	2.3	3.0
Bolt diameter (mm) – (A)	32.7	32.7	36.0	36.0
Original Tube Diameter (mm)	48.0	48.0	54.0	54.0
Bushing head diameter(mm) – (B)	42.7	42.7	42.7	42.7
Hole diameter (mm)	45-48	45-48	45-54	45-54
Minimum Breaking load (kN)	200	200	220	260
Minimum elongation	18 %	18 %	20 %	20 %



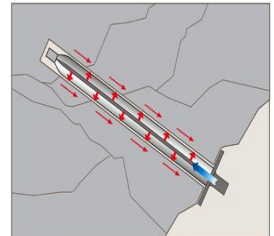
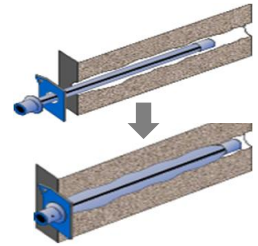
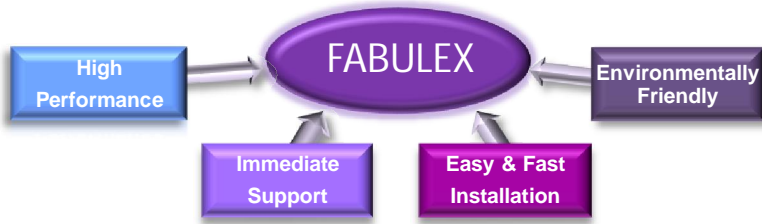
Bolt Weight (lb)

Length	FB 18 (Ø = 48 mm)		FB24 (Ø = 54 mm)	
	Thickness		Thickness	
	2.3 mm	3 mm	2.3 mm	3 mm
10 ft	17.5 lb	22.4 lb	19.7 lb	25.4 lb
12 ft	21.0 lb	26.9 lb	23.7 lb	30.5 lb
14 ft	24.5 lb	31.4 lb	27.6 lb	35.5 lb
16 ft	28.0 lb	35.9 lb	31.6 lb	40.6 lb
18 ft	31.4 lb	40.4 lb	35.5 lb	45.7 lb





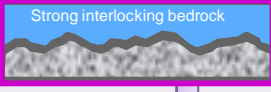


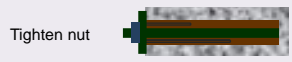
Accessory

Face plate	Diameter (mm)	Weight (lb)	Water Pump
Flat	150 x 150 x 6	2.4	
Dome			
	150 x 150 x 6	2.4	

Advantages




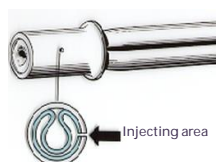


	Fabulex	Conventional Rock Bolt
Installation Time	Within 2 minutes	Over 10 minutes (7~24hr for curing)
Labors	1 or 2	2 or 3
Water Flowing Condition	Available	Depends on the site
Pullout capacity	Immediate	Takes longer

	Fabulex (Expandable Rock Bolt)	Conventional Rock Bolt
Installation Method	Expansion by high water pressure is needed 	Cement mortar Resin or grout is needed 
Effective Time	Immediate support 	Long curing period (7~ 24hours) 
Feature	<ul style="list-style-type: none"> Fast installation Prevention of wedge instability and excessive movement Strong interlocking with bedrock 	<ul style="list-style-type: none"> Insufficient early strength Insufficient support capacity during curing 
	Installation complete 	<ul style="list-style-type: none"> Install the nut and face plate Tighten nut 

Improve Efficiency

- ❑ Inject fluid through the wide top part
- ❑ Faster installation (10~20 seconds per 4M for expanding time)

	Fabulex	Other Expandable Rock Bolt
Shape	 	 
Installation time	Within 2 minutes	4~5 minutes
Feature	<ul style="list-style-type: none"> Expanding by hydraulic pressure Large injecting area 	<ul style="list-style-type: none"> Expanding by hydraulic pressure Small injecting area