



Rock reinforcement



Rock reinforcement

	Page
Sandvik RX300 expandable rock bolts.....	66
High pressure water pumps	69
Installation arm for RX300 bolts	70
Cleaning lance & Pull tester	71

Rock reinforcement

Sandvik RX 300 product range

The Sandvik RX300 **E**xpandable **R**ock **B**olts are available in two basic qualities, simply called the **ERB**-line and the **ERB Plus**-line. Each of them including products with three load capacity variants – 120 kN, 160 kN and 240 kN.

The main difference between the two qualities is elongation characteristics. The ERB Plus-line is made of a “softer” steel quality and has gone through an annealing process. Due to this it can be stretched longer and more even before breaking compared to the standard ERB-line quality. This gives the ERB Plus-line better capacity to follow rock deformation and is for that reason better suited for rock conditions with squeezing ground or high strain concentrations areas. The standard ERB-line quality is suitable for most other applications.

Corrosion protection and coating

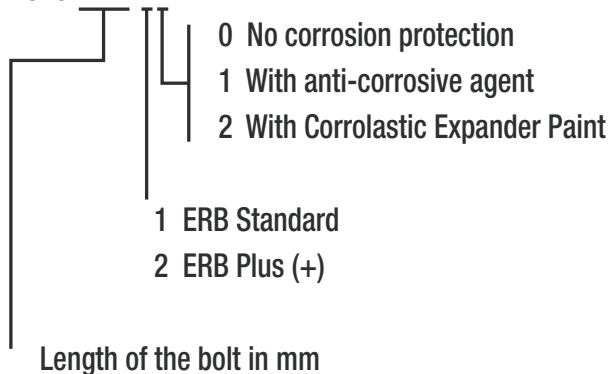
The steel grades used for manufacturing of RX 300 bolts are not corrosion protected, meaning that during overseas transportation and long storage time the bolts may be corroded. Normally this does not affect the product quality.

For overseas transportation and long storage time the bolts can be coated with an anti-corrosive agent. This will prevent corrosion during transport and storage but not after bolt installation.

In very corrosive conditions or for increased service life, the bolts can be covered with Corrolastic Expander Paint. This will prevent corrosion also after bolt installation.


Part No Key

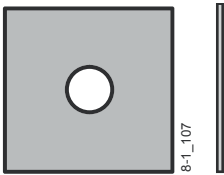
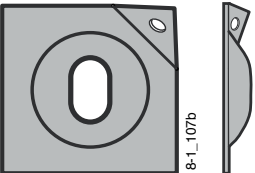
7970-xxxx-xx



Rock reinforcement

Sandvik RX300 expandable rock bolts

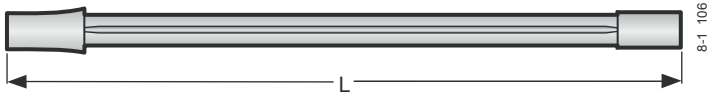
			Length L mm	Weight kg	Part No.
ERB 120 / 120+					
			600	1,20	7970-600-xx
			900	1,80	7970-900-xx
			1.200	2,40	7970-1200-xx
			1.500	3,00	7970-1500-xx
			1.600	3,20	7970-1600-xx
			1.800	3,60	7970-1800-xx
			2.000	4,00	7970-2000-xx
			2.100	4,20	7970-2100-xx
			2.400	4,80	7970-2400-xx
			2.700	5,40	7970-2700-xx
			3.000	6,00	7970-3000-xx
			3.300	6,60	7970-3300-xx
			3.600	7,20	7970-3600-xx
			4.000	8,00	7970-4000-xx
			4.500	9,00	7970-4500-xx
			5.000	10,00	7970-5000-xx
			5.500	11,00	7970-5500-xx
			6.000	12,00	7970-6000-xx
	ERB 120	ERB 120+			
Tube thickness	2 mm	2 mm			
Bolt diameter	28 mm	28 mm			
Original tube diameter	41 mm	41 mm			
Profile diameter	27.5 mm	27.5 mm			
Bushing head diameter	30/36 mm	30/36 mm			
Upper bushing diameter	28 mm	28 mm			
Hole diameter	32 - 39 mm	32 - 39 mm			
Optimal hole diameter	35 - 38 mm	35 - 38 mm			
Breaking load	120 kN	120 kN			
Minimum elongation	10 %	20 %			
Typical elongation	up to 30 %				

		Dimensions mm	Weight kg	Part No.
Face plate for ERB 120				
	Steel grade ST37	Flat	150 x 150 x 6	1,08
		Flat	150 x 150 x 8	1,44
Flat				7970-P156 7970-P158
	Steel grade ST37	Domed	150 x 150 x 4	0,66
Domed				7970-P154D

Rock reinforcement

Sandvik RX300 expandable rock bolts


			Length L mm	Weight kg	Part No.
ERB 160 / 160+					
			1.800	5,22	7972-1800-xx
			2.100	6,09	7972-2100-xx
			2.400	6,96	7972-2400-xx
			2.700	7,83	7972-2700-xx
			3.000	8,70	7972-3000-xx
			3.300	9,57	7972-3300-xx
			3.600	10,44	7972-3600-xx
			4.000	11,60	7972-4000-xx
			4.500	13,05	7972-4500-xx
			5.000	14,50	7972-5000-xx
			5.500	15,95	7972-5500-xx
			6.000	17,40	7972-6000-xx
	ERB 160	ERB 160+			
Tube thickness	2 mm	2 mm			
Bolt diameter	38 mm	38 mm			
Original tube diameter	54 mm	54 mm			
Profile diameter	36 mm	36 mm			
Bushing head diameter	41/48 mm	41/48 mm			
Upper bushing diameter	38 mm	38 mm			
Hole diameter	43 - 52 mm	43 - 52 mm			
Optimal hole diameter	45 - 51 mm	45 - 51 mm			
Breaking load	160 kN	160 kN			
Minimum elongation	10 %	20 %			
Typical elongation	up to 30 %				

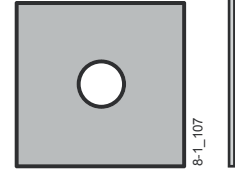
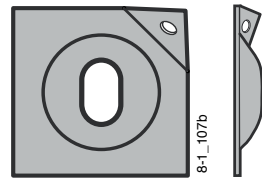


			Dimensions mm	Weight kg	Part No.
Face plate for ERB 160					
 Flat	Steel grade ST37	Flat	150 x 150 x 6	1,08	7971-P156
		Flat	150 x 150 x 8	1,44	7971-P158
 Domed	Steel grade ST37	Domed	150 x 150 x 4	0,66	7971-P154D

Rock reinforcement

Sandvik RX300 expandable rock bolts

			Length L mm	Weight kg	Part No.
ERB 240 / 240+					
			1.800	7,20	7971-1800-xx
			2.100	8,40	7971-2100-xx
			2.400	9,60	7971-2400-xx
			2.700	10,80	7971-2700-xx
			3.000	12,00	7971-3000-xx
			3.300	13,20	7971-3300-xx
			3.600	14,40	7971-3600-xx
			4.000	16,00	7971-4000-xx
			4.500	18,00	7971-4500-xx
			5.000	20,00	7971-5000-xx
			5.500	22,00	7971-5500-xx
6.000	24,00	7971-6000-xx			
	ERB 240	ERB 240+			
Tube thickness	3 mm	3 mm			
Bolt diameter	38 mm	38 mm			
Original tube diameter	54 mm	54 mm			
Profile diameter	36 mm	36 mm			
Bushing head diameter	41/48 mm	41/48 mm			
Upper bushing diameter	38 mm	38 mm			
Hole diameter	43 - 52 mm	43 - 52 mm			
Optimal hole diameter	45 - 51 mm	45 - 51 mm			
Breaking load	240 kN	240 kN			
Minimum elongation	10 %	20 %			
Typical elongation	up to 30 %				

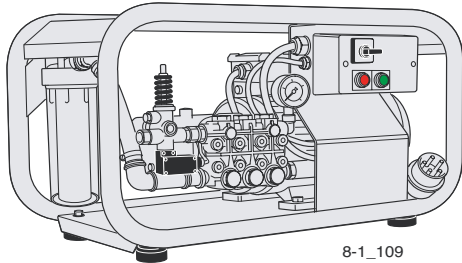
			Dimensions mm	Weight kg	Part No.
Face plate for ERB 240					
	Steel grade ST37	Flat	150 x 150 x 6	1,08	7971-P156
		Flat	150 x 150 x 8	1,44	7971-P158
	Steel grade ST37	Domed	150 x 150 x 4	0,66	7971-P154D
Domed					

Rock reinforcement

High pressure water pumps

Part No.

RX520E high pressure water pump for RX300 bolts



8-1_109

Technical data

Maximum output.....	21 l/min.
Maximum output.....	1.260 l/h
Operating pressure, up to.	320 bar
Maximum working pressure	300 bar
Electricity supply.....	32A / 400V
Rpm of the pump.....	400 rpm
Current consumption.....	25 A
Dimensions (LxWxH)	700mm x 550mm x 620mm
Weight	76 kg
Dimension of nozzle	055
Protection of splash proof.	IP 55

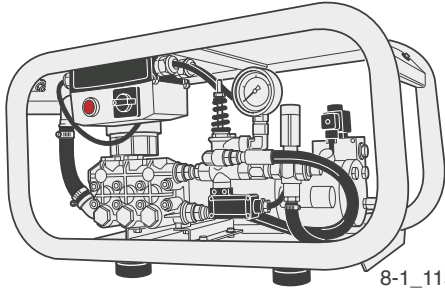
Electric high-pressure water pump for installation of RX300 expandable rock bolts

Complete pump unit 790-4200

Spare Parts and Accessories

Water filter 60µ	791-4101
Repair Kit 3 Sealings	791-4102
Repair Kit 10 Valves	791-4103
High-pressure hose DN 10, 300 bar, 10 meter	791-4105

RX510H - 510E high pressure water pump for RX300 bolts



8-1_115

Technical data

	RX510H	RX510E
Maximum output.....	14 l/min	14 l/min
Maximum output.....	840 l/h bar	840 l/h bar
Operating pressure.....	320 bar	320 bar
Maximum working pressure	300 bar	300 bar
Normal Voltage	2 • 12V (24V)	400V
Driving efficiency	7,5 kW	7,5 kW
Rpm of the pump.....	1400	1400
Oil pressure	170 - 200 bar	
Oil quantity	max 40 l/min	
Amperage.....		16A
Dimensions in mm (L•W•H)	670•350•515	670•350•515
Approx. weight	52 kg	42 kg
Nozzle dimension	040	040
Recoil	66 N	66 N
Protection of splash proof.	IP 55	IP 55

Hydraulic/Electric water pump for installation of RX300 expandable rock bolts

Complete pump unit

RX510H	790-3100
RX510E	790-4100

Spare Parts and Accessories

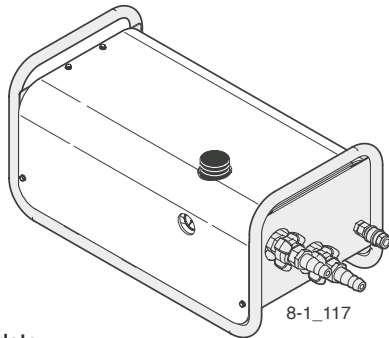
Water filter 60µ	791-4101
Repair Kit 3 Sealings	791-4102
Repair Kit 10 Valves	791-4103
High-pressure hose DN 10, 300 bar, 10 meter	791-4105

Rock reinforcement

High pressure water pumps & Installation arm

Part No.

RX500P high pressure water pump for RX300 bolts



Pneumatic high-pressure water pump for installation of RX300 expandable rock bolts

Complete pump unit 790-1100

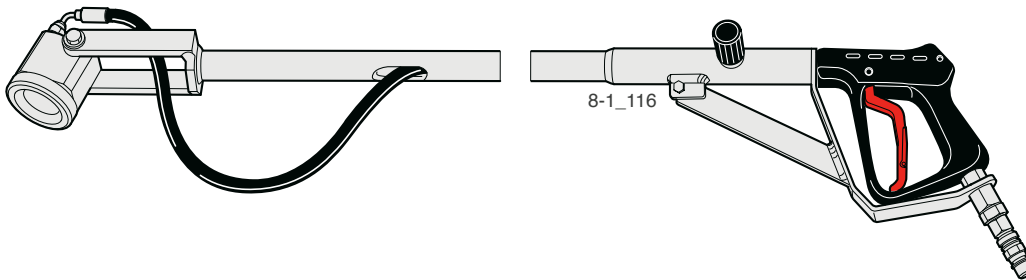
Technical data

Pump type	Pneumatic
Working pressure, water ...	320 bar
Max output flow, water	9 l/min, 540 l/h
Press. amplification (air-water)	64 times
Input air pressure.....	5-8 bar
Air consumption (5 bar).....	50-60 l/s
Input water pressure	3-10 bar
Stroke volume, water	50 cm ³
Dimensions (LxWxH)	720mm x 375mm x 360mm
Weight	34 kg

Spare Parts and Accessories

Water filter 60µ	791-4101
Repair Kit 3 Sealings	791-4102
Repair Kit 10 Valves	791-4103
High-pressure hose DN 10, 300 bar, 10 meter	791-4105

Installation arm for RX300 bolts



High-pressure installation arm for RX300 expandable rock bolts. All vital components are specially selected to withstand peak pressures up to 500 bar.

Installation Arm with nozzle head,
ERB 120/120+ incl. 10 m high pressure hose 790-2100

Installation Arm with nozzle head,
ERB 160/160+ and 240/240+
incl. 10 m high-pressure hose 790-2200

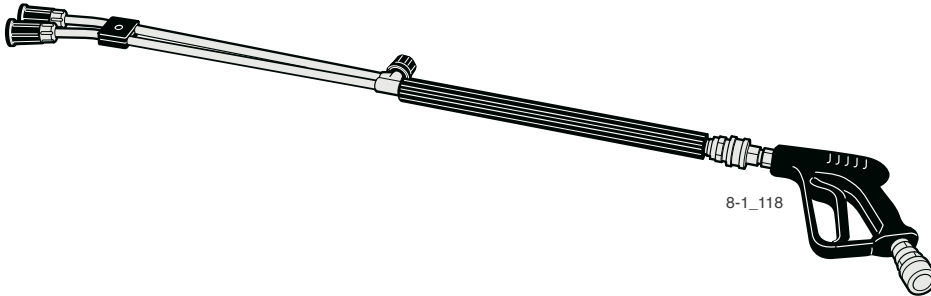
High-pressure hose DN, 300 bar,
10 meters 791-4105

Rock reinforcement

Cleaning lance & Pull tester

Part No.

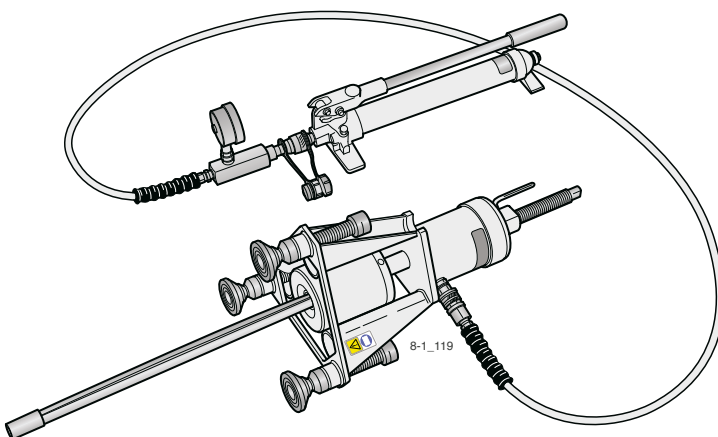
Cleaning lance for Sandvik high pressure water pumps



The high-pressure water pumps RX510E, RX510H and RX520E for installation of Sandvik RX300 expandable rock bolts are also suitable for cleaning of vehicles such as loaders and drilling jumbos, if this cleaning lance is used.

High-pressure cleaning lance	790-2300
High-pressure hose DN, 300 bar, 10 meters	791-4105

Pull tester equipment for RX300 bolts



Hydraulic pull tester for RX300 bolts, with digital pressure gauge.

Complete pull tester	790-6100
----------------------	----------