

# Unigrout Flex S and Flex M

The base model grouting rigs with compact size and excellent performance



# The compact grouting solution

The Unigrout Flex series is a compact grouting solution in injection grouting for civil constructions. The compact grouting platform configuration makes for excellent flexibility and its easy-to-handle manual system will ensure great results above ground or underground. The Flex series is a base model to which standalone products such as Logac and additive system can be added to further expand functionality.

## ⊕ Main benefits

**Mobility** thanks to a compact all-in-one design making the rig easy to relocate at the worksite

**User-friendliness** thanks to clear manual controls which ensure correct pressure and flow rate during grouting

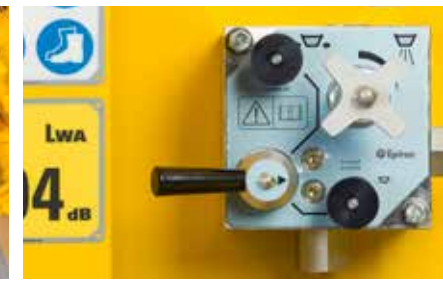
**Excellent performance** with state of the art mixer and pump as used on the more exclusive rigs



Operating platform for easy access to all vital functions



A close clearance between the impeller and housing means a more homogenous mix, free from lumps or aggregates.



An advanced control block enables independent control of both pressure and flow.



All operating controls are within easy reach.

Easy accessible mixer for manual loading

Platform includes fork lift cutouts and lifting lugs



# Compact size - excellent performance

The Unigrout Flex series comes in two different models, S and M. The difference is the mixer and agitator tank sizes. This makes it possible to keep the total size of the rigs to a minimum without affecting the grout performance. Both versions use the same mixing unit and pump.



### + Ergonomic and service minded

The Unigrout Flex S and Flex M units are designed for easy use. The open structure allows for convenient access during cleaning and service of vital parts, which makes the work more productive and cost effective.



### + Well-known mechanics

The Unigrout Flex rigs will keep its well-known mixer design as well as the double acting Pumpac grout pump. These components constitutes the heart in grouting to ensure state of the art functionality and optimal results. Covering low to high pressure ranges, Unigrout Flex S and Flex M can be used with a variety of materials and mix designs.



### + Packers and accessories

Packers are a crucial part of a total grouting solution. They are widely used for grouting works as well as for water tests. We offer a wide range of packers along with the necessary accessories.



## A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

## Unigrout selection guide

Your choice of Unigrout system depends primarily on three main selection criteria: the grouting type/application, the grouting capacity required and the degree of recording that you need for your operation.

### Grouting type/application

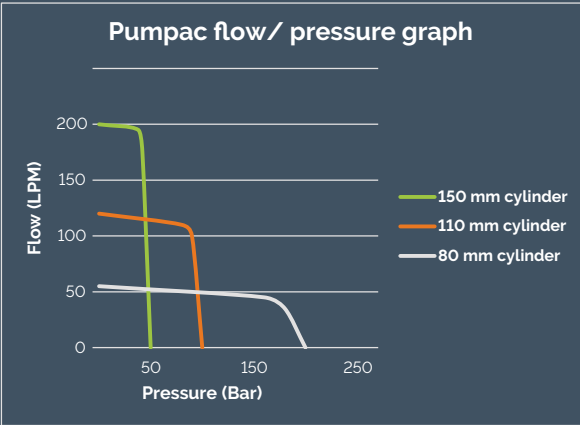
Your selection is influenced mainly by the type of grouting to be performed and by the size of the work place.

### Grouting capacity

Pumping capacity is often understood as grouting capacity, but in reality these can differ substantially. Actual grouting capacity always depends on the availability of grout and this is determined by the mixing capacity. For short-time and non-continuous grouting, there are ways to increase the actual capacity, but for continuous injection, mixing capacity is the key. Continuous mixing capacity is the result of several factors such as type and size of mixer, grout mix design, supply of water and cement, and last but not least, whether manual or automated batching/feeding is used.

### Recording

The Flex series give you the same grouting performance as our bigger units. When recording of the grout result is needed, the Flex M can be equipped with a Logac recorder onboard. Logac standalone unit is compatible with both Unigrout Flex models.



		Pressure max, bar	Flow max, l/min	Cylinder Ø mm
HP High Pressure	HP1	200	50	80
	HP2	100	100	110
LP Low Pressure	LP1	100	100	110
	LP2	50	200	150

## Why grouting? - Minimize risk

Grouting is an engineering method used globally for the treatment of ground and structures in order to achieve the required characteristics. In many cases, it all comes down to risk management and avoiding disastrous accidents or hazards in mining and civil engineering projects, whether in construction or in operation.

### Sealing

Water is a crucial resource that needs protecting. On the other hand, water may cause risk and difficulty in mining and construction operations. Grouting reduces permeability, which minimizes the impact of excavation on the ground water, while reducing risk and de-watering costs during construction and operation. Whether it's about sealing the rock mass around a tunnel or underground structure (e.g. pre-grouting), beneath a dam (e.g. curtain grouting) or in a mine. This type of grouting is generally most extensive and demanding.

### Strengthening/stabilizing

Natural ground conditions do not always meet the full construction specification. Among other methods, grouting is applied to improve ground characteristics. In almost any civil works – tunneling, roads, dam construction, foundations and mining – there is a need to improve the rock or soil using e.g. consolidation grouting.

### Filling

Sometimes grouting is used to fill a hole, gap or similar. In this category, common applications include bolting/anchoring, contact grouting/backfilling, piling or micro-piling, cavity grouting, etc.

Technical specifications

Mixer	A	B
100 l tank volume (Cemix 103H)	●	
200 l tank volume (Cemix 203H)		●
1800 rpm rotation speed	●	●

Agitator	A	B
200 l tank volume (Cemag 203H)	●	
400 l tank volume (Cemag 403H)		●
60 rpm rotation speed	●	●

Grout pump	A	B
50 bar pressure, 200 l/min flow (Pumpac)	○	○
100 bar pressure, 100 l/min flow (Pumpac)	○	○
200 bar pressure, 50 l/min flow (Pumpac)	○	○
10 bar pressure, 60 l/min flow (Progressive cavity pump)	○	

Power unit	A	B
15 kW installed power	●	
22 kW installed power		●
380-690 V voltage	●	●
1 000 V voltage		○
Soft start 400-460 V voltage		○
50/60 Hz frequency	●	●

Electrical control system	A	B
Logac	○	○
Logac on board		○

Water dosing system	A	B
Digital water dosing kit	○	●
Mechanical water flow meter	●	

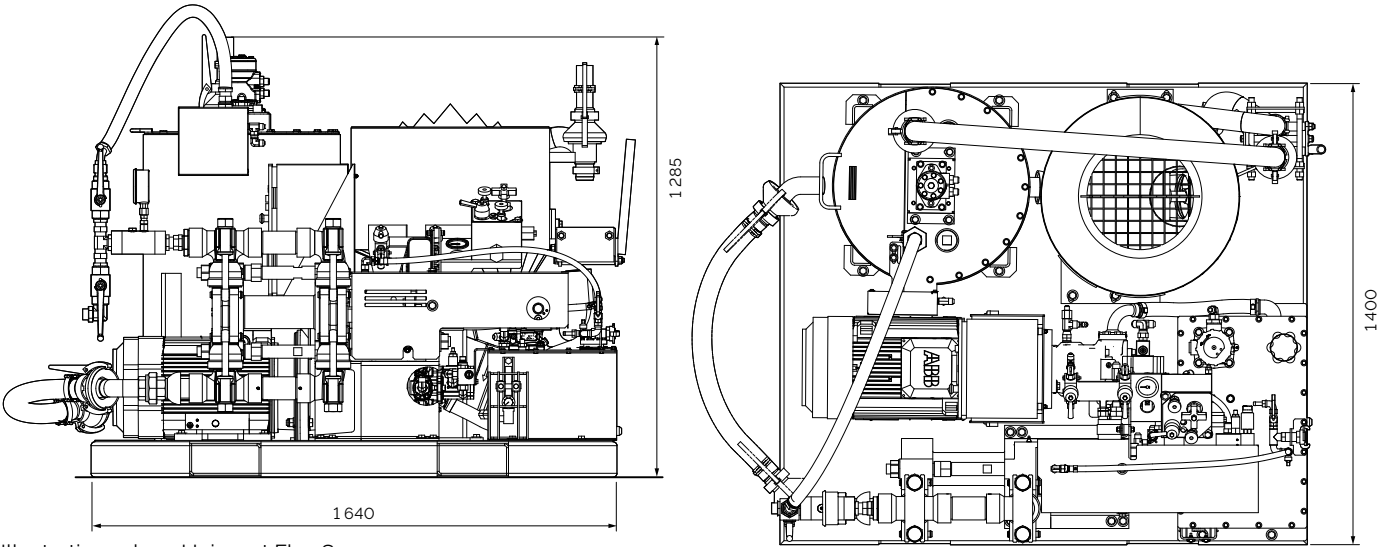
Optional equipment	A	B
Additive dosing pump (Logac required)	○	○
Water dosing tank (160 l)		○

Weight		
Unigrout Flex S	930 kg	
Unigrout Flex M	1 135 kg	

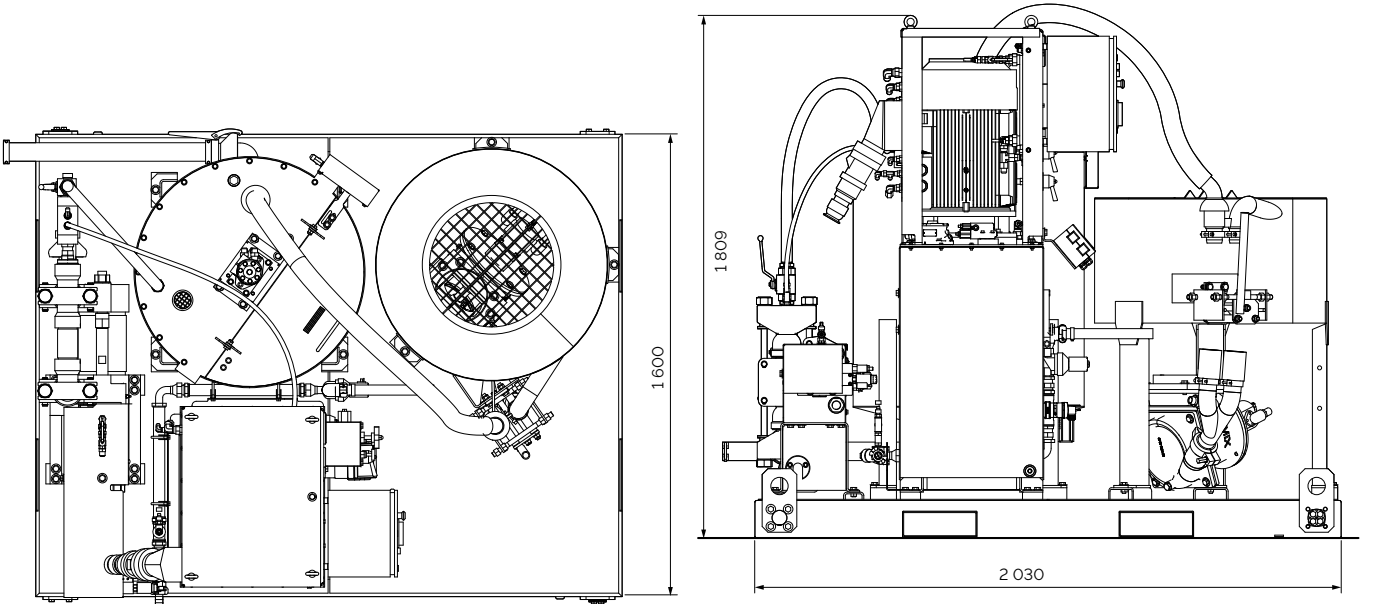
Sound and vibrations		
Unigrout Flex S	83 dB(A)	N/A
Unigrout Flex M	83 dB(A)	0.11 mm/s²

Technical specifications

Measurements in millimeters



Illustrations show Unigrout Flex S.



Illustrations show Unigrout Flex M.

# United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward.  
Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.  
**[epiroc.com](https://epiroc.com)**

