

Grundfos CRN Double Shaft Seal

Aggressive or dangerous liquids

In industrial applications that involve toxic, aggressive or even explosive liquids, leak-free pumping is top priority. Pumps that leak these kinds of liquids make up a considerable risk for the environment in which they operate, and for the people working close to them, and are therefore not safe for that kind of applications. Years of close cooperation with our customers, have taught us that the traditional CR shaft seal solution is unsuitable for dealing with media like that.

Therefore, Grundfos has developed the CRN Double Shaft Seal; a 100% leak-free pump. With the CRN Double Shaft Seal, Grundfos has designed a pump with two shaft seals mounted in a back-to-back arrangement in a pressurised seal chamber, that prevents the pump from leaking.



Advantages and the CRN Double Shaft Seal

No Leakage

Because of the double shaft seal construction, liquids are prevented from penetrating into the shaft seal's working environment and damage it. Evidently, the most important advantage of this construction is that whether it is a toxic, aggressive or explosive liquid that the pump is handling, the liquid stays where it is supposed to - inside the pump.

Safety

The fact that the CRN Double Shaft Seal does not leak, lead to another advantage that comes with this pump. The working environment is safe when the risk of leak of toxic or explosive media is eliminated. Because of the CRN Double Shaft Seal, people working close to the pumps do not need to fear for their own safety. No leak, no risk of pollution.

Technical data	
Max. pressure	25 bar
Max. ambient temp.	40°C
Max. liquid temp.	120°C
Min. inlet pressure	No change from standard CRN
Min. flow	No change from standard CRN

Custom-built solutions

The comprehensive standard Grundfos CR programme covers a wide range of pumps, for a wide range of different industrial applications. Besides, Grundfos designs custom-built pump solutions; acknowledging that sometimes it does not take more, than a little extra effort, to come up with the right solution. With a custom-built pump solution from Grundfos, your pump is capable of handling even higher pressures, more aggressive liquids, excessive liquid temperatures etc.

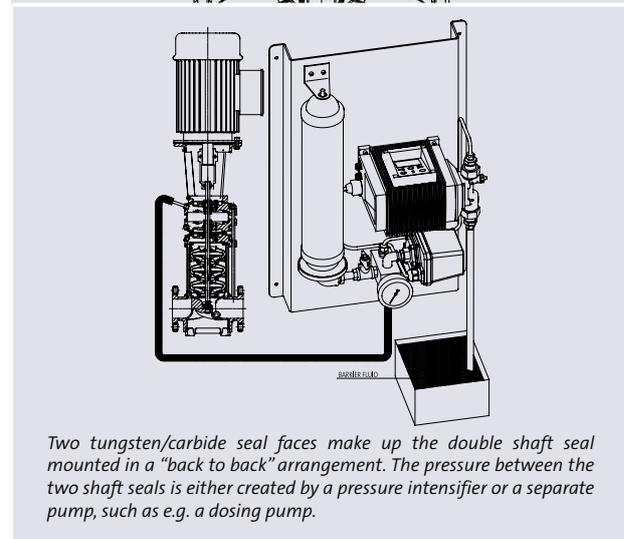
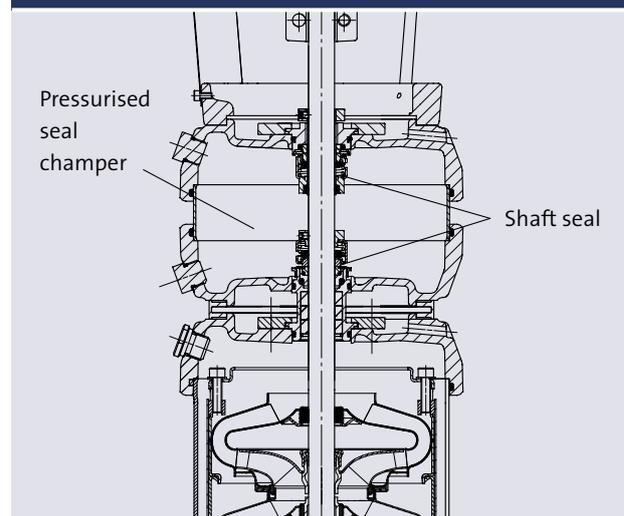
Worldwide pump supplier

Being a worldwide pump supplier, Grundfos has committed itself to provide its clients with a global, reliable and efficient service network. Our experienced team of service technicians are always ready to serve you wherever in the world you are and – of course – at a short notice – whenever you need it.

Longer lifespan of shaft seal

With the CRN Double Shaft Seal, the pumped liquid is not in direct contact with the shaft seal. Especially, in applications dealing with particles or sticky liquids such as paint, the double shaft seal is not exposed to excessive wear, and has a longer lifespan than a traditional shaft seal has.

Sectional drawing



Two tungsten/carbide seal faces make up the double shaft seal mounted in a "back to back" arrangement. The pressure between the two shaft seals is either created by a pressure intensifier or a separate pump, such as e.g. a dosing pump.