Grundfos CRN Air-Cooled Top

High temperature operation
In industries where pumping of very hot liquids is crucial for a successful production, it is important that the pumps are able to deal with these high liquid temperatures. Our clients have taught us that no shaft seal can tolerate very hot liquid temperatures. Often, productions are put to unexpected standstills due to the fact that the shaft seal has to be replaced because it has been exposed to very high temperatures.

Therefore, Grundfos has designed the CRN Air-Cooled Top; a pump with a standard mechanical shaft seal that can handle liquid temperatures of up to 180°C and at the same time can deliver a high pressure. As the name implies, the pump has an air-cooled top that separates the pumped liquid from the shaft seal and prevents it from overheating.
Advantages and the CRN Air-Cooled Top

Air-cooled Top
The Grundfos CRN Air-Cooled Top is specially designed to handle hot liquids, i.e., 120°C - 180°C. To make sure that the liquid temperature around the shaft seal does not exceed the level it can withstand, the pump is fitted with a special air-cooled shaft seal chamber generating the same insulation effect as the one of a thermos. To cool the pump, no external cooling is necessary; the ambient temperature is sufficient.

Long lifespan of shaft seal
The lifespan and efficiency of a shaft seal depends on the nature of the pumped liquid and of its temperature. Because of the CRN Air-Cooled Top pump's unique construction, the pump is able to withstand high temperatures over a long period of time. The pump is available with different rubber qualities specially designed to cope with excessive wear and to provide long life under extreme operating conditions.

Reliability above all
The Grundfos CRN Air-Cooled Top pump has been subject to thoroughly testing among others in boiler feed applications dealing with hot liquid temperatures. Therefore, the pump is a highly reliable partner 24 hours a day.

Technical data

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<table>
<thead>
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<tbody>
<tr>
<td>Max. pressure</td>
<td>40 bar</td>
</tr>
<tr>
<td>Max. ambient temp.</td>
<td>40°C</td>
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<tr>
<td>Liquids</td>
<td>Any liquids handled by Grundfos CRN pumps</td>
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<tr>
<td>Min. inlet pressure</td>
<td>No change from standard CRN</td>
</tr>
<tr>
<td>Min. flow</td>
<td>No change from standard CRN</td>
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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 cause – at a short notice – whenever you need it.

Sectional drawing