

HRP 3232-65 | 5050-90 | 8050-90

High pressure CO₂ refrigerant pump



HRP

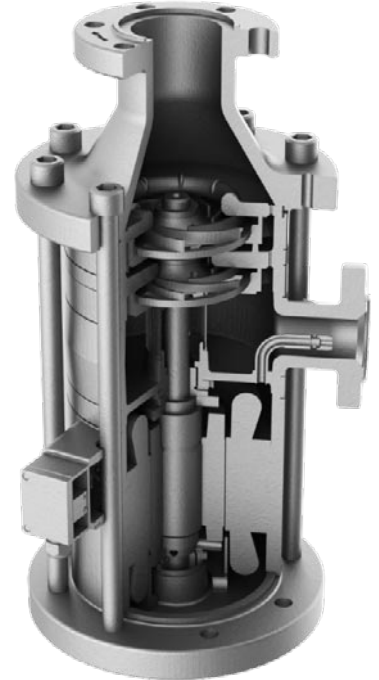
High pressure CO₂ refrigerant pump up to 90 bar

The F-gases phase-out is progressing and applications with the refrigerant R744 carbon dioxide (CO₂) are gaining more and more interest. Especially refrigeration plants up to 500 kW performance require components that can withstand increased standstill pressures.

When the system is at a standstill, the ambient temperature causes the pressure in the system to rise:

Ambient temperature	Standstill pressure	necessary nominal pressure
+ 5° C 41,0° F	40 bar	PN 40
+ 24° C 75,2° F	63 bar	PN 63
+ 26° C 78,8° F	65 bar	PN 65
+ 33° C 91,4° F	80 bar	PN 80
+ 37° C 98,6° F	90 bar	PN 90

Pressure stages and temperature of CO₂



Depending on the achievable standstill temperature in the CO₂ separator, the appropriate pressure stage must be selected. The previous standard pressure stage of PN 40 is often no longer sufficient.

If the pressure rises above the maximum of the components, only two choices remain: the refrigerant charge is blown off via the safety valve or an emergency cooling is switched on until the pressure in the system falls below the maximum pressure again.

Better use our new high-pressure refrigerant pumps HRP-65 or HRP-90

No emergency cooling or charge blow off is required for your CO₂ systems during shutdown.

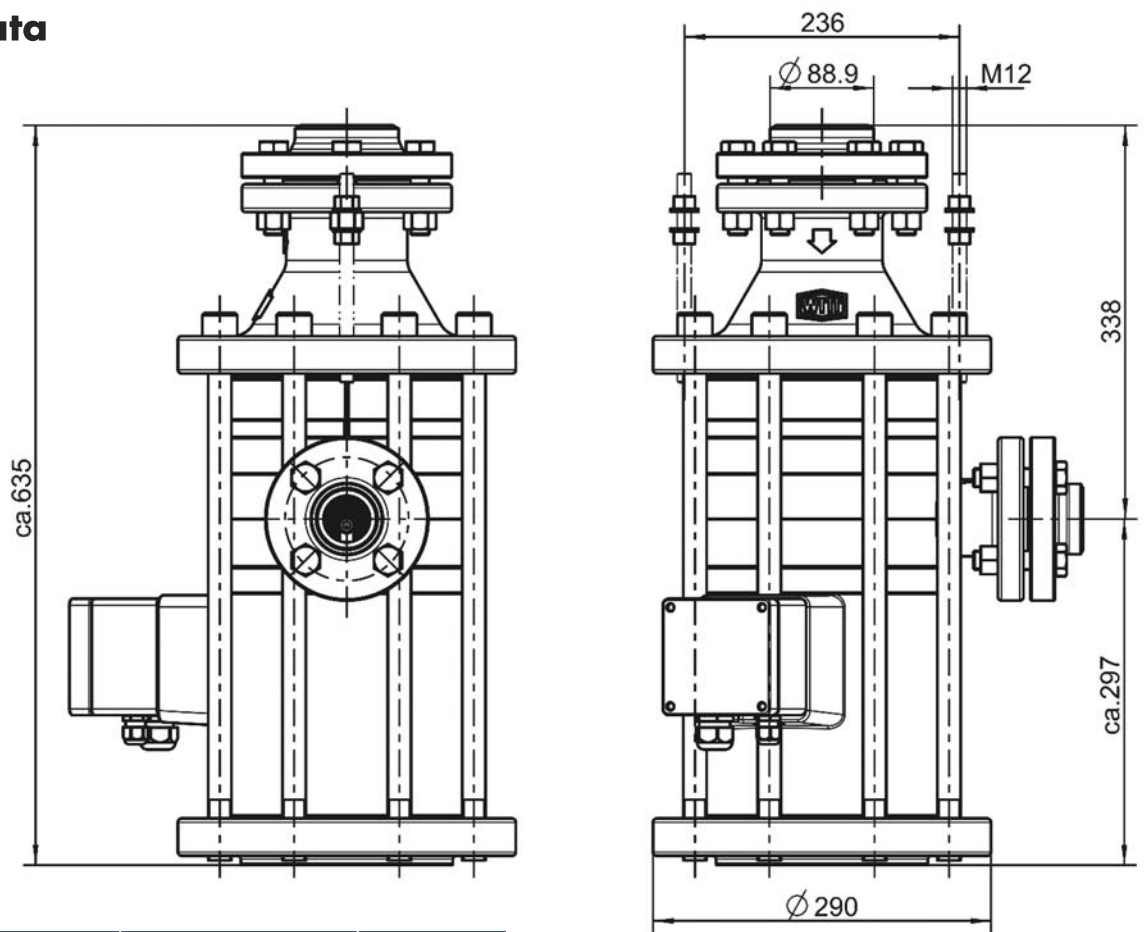
We supply a CO₂ pump series with standstill pressures up to 90 bar, which has been tested many times in the field, as a series product from stock.

Summary

- pressure resistant at standstill up to 90 bar
- refrigerant cooled
- vertical, compact design
- hermetic design
- better venting at standstill due to the vertical design
- better cooling of the bearings

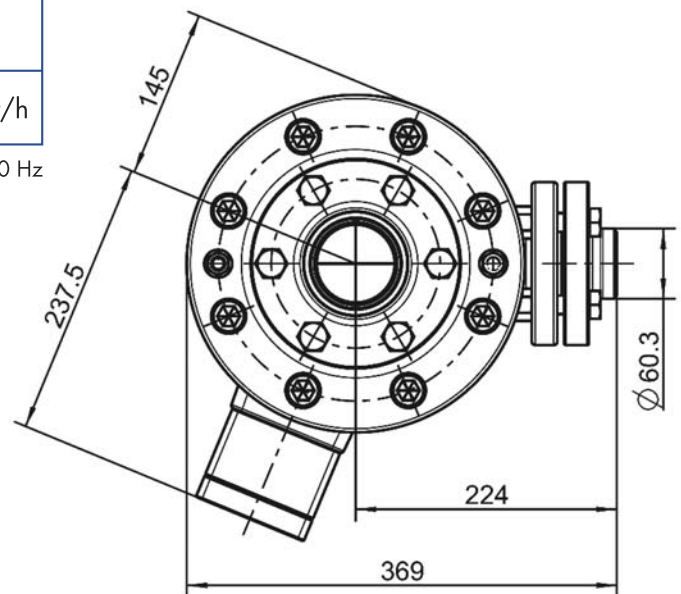


Technical data



	HRP 3232-65*	HRP 5050-90	HRP 8050-90
Nominal pressure	PN 65	PN 90	PN 90
max. capacity**	100 kW at 25 m	500 kW at 25 m 450 kW at 35 m	800 kW at 35 m
max. height H	25 m	45 m	45 m
max. volume \dot{V}	5,6 m ³ /h	15,0 m ³ /h	30,0 m ³ /h

* model is not shown ** $T_0 = -10^\circ\text{C}$, recirculation rate 1,5, 50 Hz



dimensions in mm



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