



CombiDirt

Heavy duty centrifugal pump for liquids containing solids

Pump characteristics

The CombiDirt is executed with vortex technology. The impeller is located on the shaft in such a way that a large free passage area is created between the impeller blades and the pump housing to prevent clogging. The basic hydraulic principle of this technology is based on energy transfer (vortex generation) of a small secondary flow by the impeller on the main flow. Vanes on the back side of the impeller keep solids away from the shaft sealing areas to avoid heavy wear and damage to the mechanical seal.

The CombiDirt is part of the modular Combi system and the hydraulic components can therefore be used for horizontal, vertical and sump type of pump executions (e.g. CombiSump) as well.

Applications

The CombiDirt is particularly suitable for transporting liquids containing solids of all sorts.

The CombiDirt is also capable of handling gaseous liquids and media requiring self priming conditions.

Pump specifics

- Executed according to the Back Pull Out execution for easy maintenance
- Suitable to handle solids, the impeller is specifically designed to prevent clogging
- Handle liquids with varying amounts of gas
- Optional: oil quench seal execution
- Different types of inlet bend executions
- Rigid bearing bracket construction
- Free hydraulic passage ranges up to 100 mm

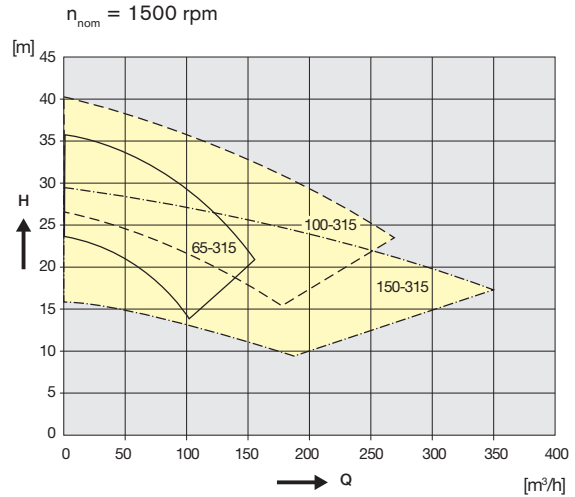
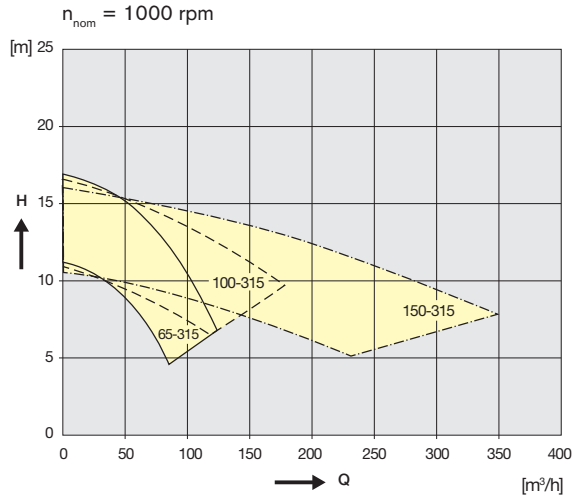
Technical data

Maximum capacity:	420 m ³ /h
Maximum delivery head:	40 m
Maximum liquid temperature:	80 °C
Maximum speed:	1800 rpm
Design pressure:	10 bar

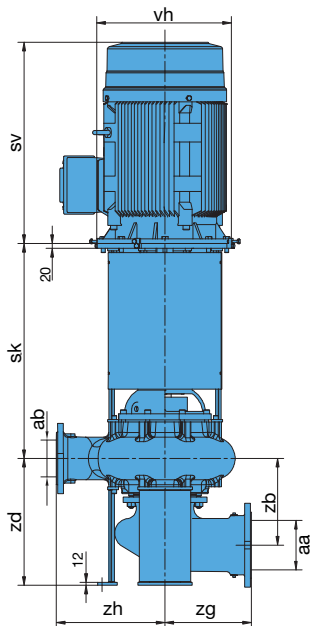
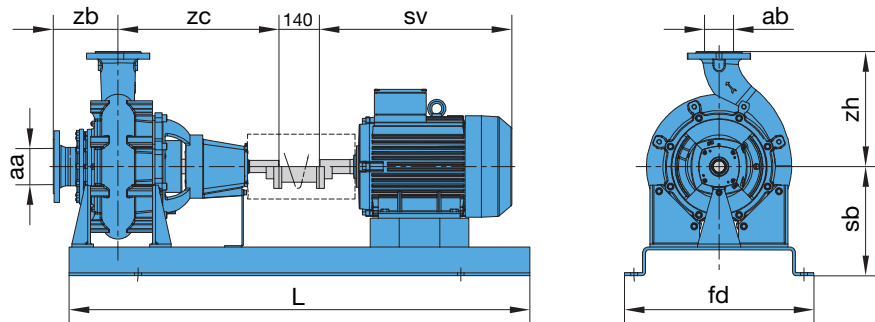
Material

Pump casing	cast iron, nodular cast iron, stainless steel, stainless steel wear resistant
Wear plate	cast iron, stainless steel, stainless steel wear resistant
Impeller	cast iron, stainless steel, stainless steel wear resistant
Impeller shaft	steel alloy, stainless steel
<i>Other materials upon request</i>	

Performance data



Dimensions



IEC Motor IP55							
132M	160M	160L	180M	180L	200L	225S	

CombiDirt – Horizontal

Pump type	aa	ab	zb	zc	zh	sv max.									
						sb	L	fd	520	630	670	700	735	805	835
CD-H 65-315	80	65	190	552	315	sb	370	380		380	380	380			
						L	1250	1600		1600	1600	1600			
						fd	678	658		658	658	658			
CD-H 100-315	125	100	225	565	400	sb		380	380			380	380		
						L		1600	1600			1600	1600		
						fd		658	658			658	658		
CD-H 150-315	200	150	256	600	440	sb					455	455	455		
						L					1600	1600	1600		
						fd					658	658	658		

CombiDirt – Vertical

Pump type	aa	ab	zb	zd	zg	zh	IEC Motor IP55									
							sk	sv	vh	132M	160M	160L	180M	180L	200L	225S
CD-V 65-315	100	65	218	475	250	315	sk	772	815	815	815	815	815	815		
							sv	426	535	535	627	665	737			
							vh	550	550	550	550	550	550			
CD-V 100-315	150	100	271	495	350	400	sk		815	815	815	815	815	845	845	
							sv		535	535	627	665	737	790	790	
							vh		550	550	550	550	550	550	550	
CD-V 150-315	200	150	352	515	350	440	sk		843	843	843	843	843	873	873	
							sv		535	535	627	665	737	790	790	
							vh		550	550	550	550	550	550	550	

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For more information about our worldwide locations, approvals, certifications, and local representatives, please visit www.johnson-pump.com and www.spxpe.com. SPX Corporation reserves the right to incorporate our latest design and material changes without notice or obligation.

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