

# 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

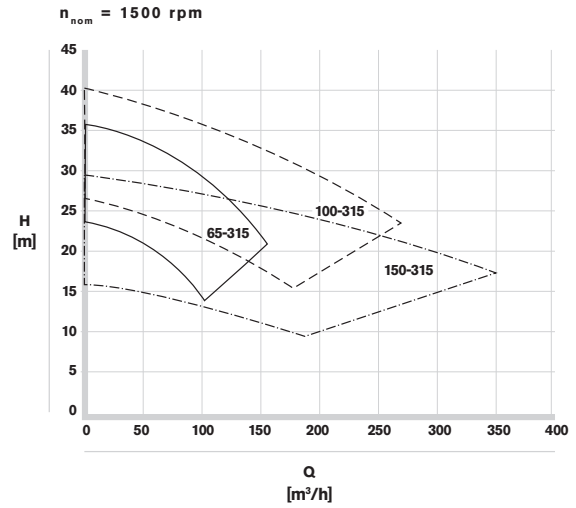
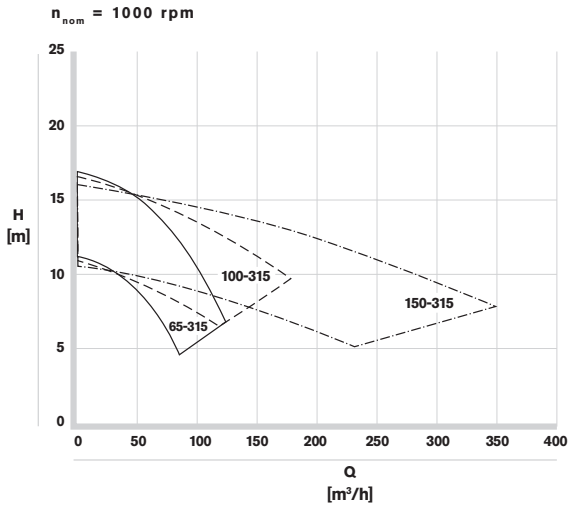


TECHNICAL DATA	
MAXIMUM CAPACITY	420 M <sup>3</sup> /H
MAXIMUM DELIVERY HEAD	40 M
MAXIMUM LIQUID TEMPERATURE	80°C
MAXIMUM SPEED	1800 RPM
DESIGN PRESSURE	10 BAR

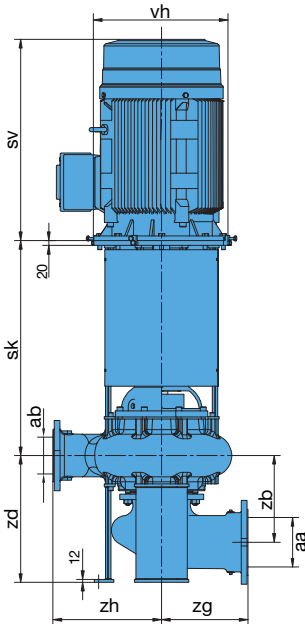
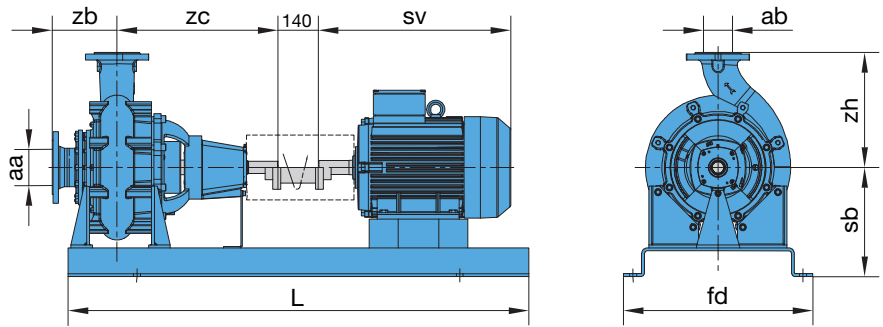
MATERIAL	
PUMP CASING	CAST IRON, NODULAR CAST IRON, STAINLESS STEEL, STAINLESS STEEL WEAR RESISTANT
WEAR PLATE	CAST IRON, STAINLESS STEEL, STAINLESS STEEL WEAR RESISTANT
IMPELLER	CAST IRON, STAINLESS STEEL, STAINLESS STEEL WEAR RESISTANT
IMPELLER SHAFT	STEEL ALLOY, STAINLESS STEEL

Other materials upon request

# Performance data



# Dimensions



## COMBIDIRT – HORIZONTAL

PUMP TYPE	aa	ab	zb	zc	zh	IEC MOTOR IP55								
						132M	160M	160L	180M	180L	200L	225S		
						SV MAX.								
						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								
							132M	160M	160L	180M	180L	200L	225S	225M	
CD-V 65-315	100	65	218	475	250	315	SK	772	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



SPX FLOW TECHNOLOGY ASSEN B.V.

Dr. A.F. Philipsweg 51, 9403 AD Assen P.O. Box 9, 9400 AA Assen, THE NETHERLANDSx

P: +31 (0)592 37 67 67 F: +31 (0)592 37 67 60 E: johnson-pump.nl@spx.com

SPX reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit [www.spx.com](http://www.spx.com) and [www.johnson-pump.com](http://www.johnson-pump.com).

ISSUED 12/2012 JP-DS-CD-EN

COPYRIGHT © 2008, 2011, 2012 SPX Corporation