

Pump type: Submersible vortex pump  
 Application: Waste water, sewage

**Pump data**

Solids passage 80 mm  
 Discharge/ Suction diameter 100 mm/ 80 mm  
 Impeller type: Vortex  
 Impeller diameter 170 - 140 mm  
 Recommended min. flow 3.5 l/sec (13 m3/h)  
 Weight 56 kg

**Motor**

Mains: 50 c/s – 3 phase  
 Rated shaft power 3.5 kW  
 Rated electrical power 4.5 kW  
 Nominal speed 1385 rpm  
 Motor efficiency 78 %  
 Power factor (cos phi) 0.84  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Motor unit Cast iron GG 25 (EN-GJL-250)  
 Shaft AISI 431  
 Alt: AISI 316  
 Bolts AISI 316  
 Elastomers Nitrile (NBR) or neoprene (CR)  
 Alt: viton (FPM)  
 Electrical cable Neoprene (CR)  
 Seal lubrication Oil  
 Seal pump side Silicon carbide – silicon carbide  
 Seal motor side Carbon - Ceramic  
 Coating Two components polyurethane

**Installation options**

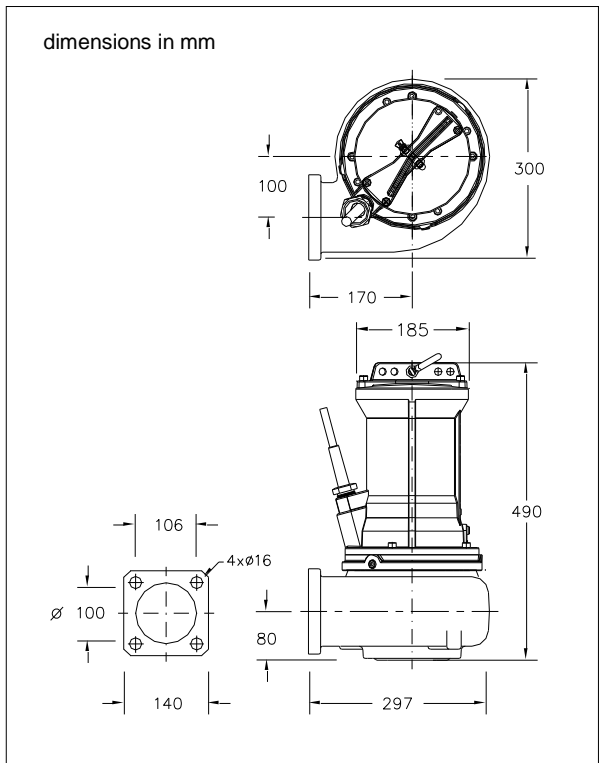
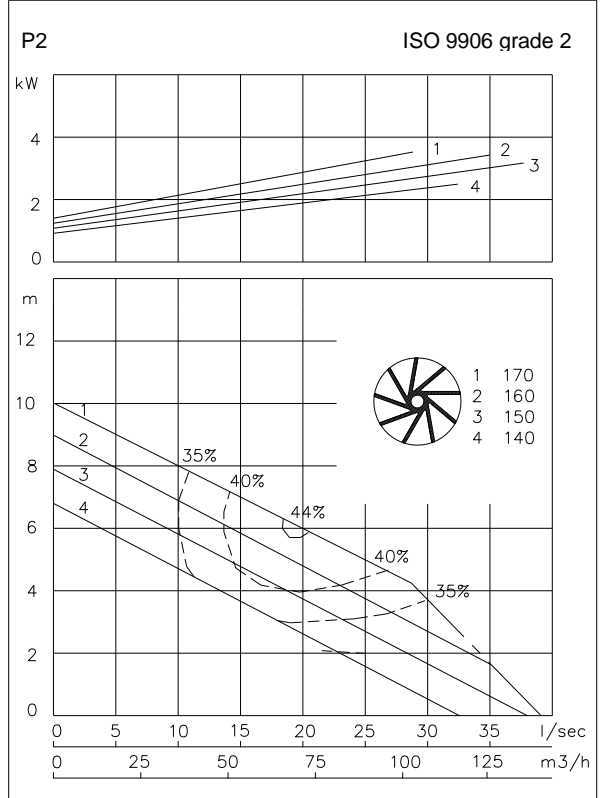
Header coupling BWK 080 or BWK100

Guide bar coupling OWK 100

Freestanding Including support (VRS) 100 mm hose connection or G 4" threaded connection

**Optional**

- Flameproof version, to class: II 2 G Ex d IIB c T4  
 Standard: II 2 G Ex b c d IIB T4 Gb  
 With Frequency control: II 2 G Ex b c d IIB T3 Gb
- Thermo switches in stator windings (standard for flame proof version)
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber  
 Flameproof version with external cable



**Connections**

voltage [V]*	current [A]	Electrical cable size [mm2]		motor protection and/or water detector		flameproof version		
		direct start	stardelta start	direct start	stardelta start	direct start	stardelta start	
230	13.4	4G1.5	7G1.5	7G1.5	10G1.5	7G1.5	10G1.5	
400	7.7	4G1.5	7G1.5	7G1.5	10G1.5	7G1.5	10G1.5	
500	6.2	4G1.5	7G1.5	7G1.5	10G1.5	7G1.5	10G1.5	
starting current DOL start : 4.3 x rated current								
starting current YD start : 1.4 x rated current								
							* other voltages on request	