

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

**Pump data**

Discharge diameter: 30 mm  
 Impeller type: with cutter  
 Impeller diameter: 120 mm  
 Recommended min. flow: 0.5 l/sec (2 m3/h)  
 Weight: 34 kg

**Motor**

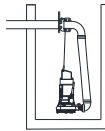
Mains: 50 Hz – 3 phase  
 Rated shaft power: 1.5 kW  
 Rated electrical power: 2.1 kW  
 Nominal speed: 2790 rpm  
 Motor efficiency: 71 %  
 Power factor (cos phi): 0.91  
 Degree of protection: IP 68  
 Isolation class: F (155°C)  
 Max. water temperature: 40°C  
 Standard cable length: 10 m

**Materials**

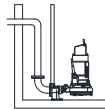
Pump casing: Cast iron GG 25 (EN-GJL-250)  
 Impeller: S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter: Hardened chrome steel  
 Motor unit: Cast iron GG 25 (EN-GJL-250)  
 Shaft: AISI 431  
 Alt: AISI 316  
 Bolts: AISI 316  
 Elastomers: Nitrile (NBR) or neoprene (CR)  
 Alt: Viton (FPM)  
 Electrical 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: BWK050, 065 or 080

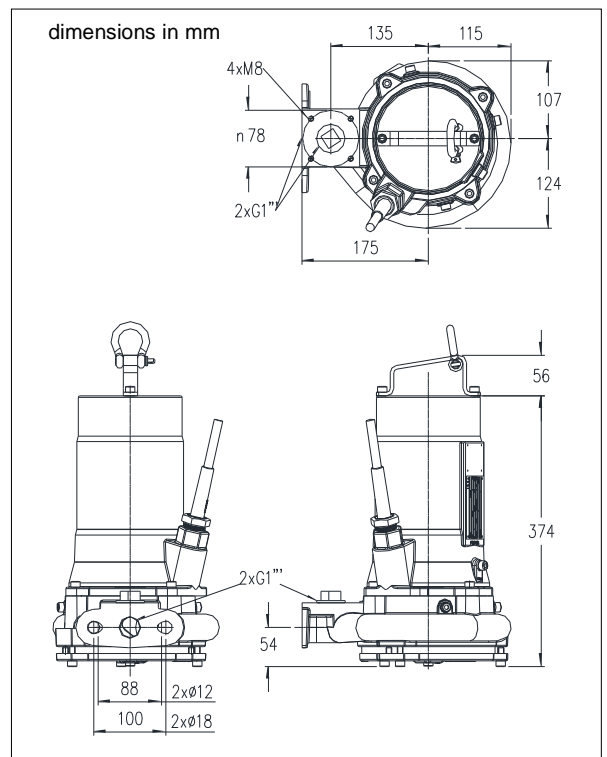
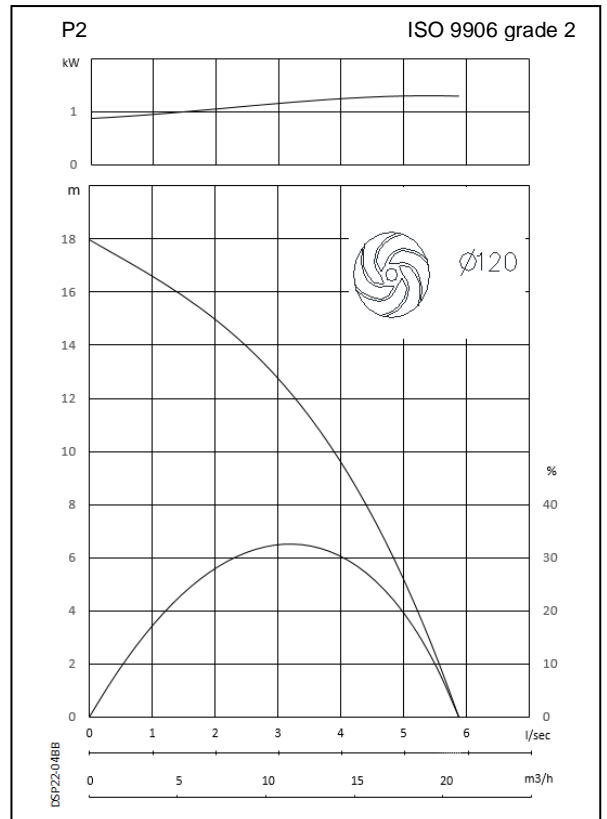


Guide bar coupling: OWK050



**Optional**

- Thermo switches in stator windings
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber



**Connections**

voltage	current	Electrical cable size [mm2]		motor protection and/or water detector	
		direct start		direct start	
230	5.8	4G1.5		7G1.5	
400	3.3	4G1.5		7G1.5	
500	2.7	4G1.5		7G1.5	
starting current DOL start : 4.8 x rated current					
* other voltages on request					

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

**Pump data**

Discharge diameter: 30 mm  
 Impeller type: with cutter  
 Impeller diameter: 136 mm  
 Recommended min. flow: 0.5 l/sec (2 m3/h)  
 Weight: 34 kg

**Motor**

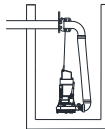
Mains: 50 Hz – 3 phase  
 Rated shaft power: 2.2 kW  
 Rated electrical power: 2.8 kW  
 Nominal speed: 2830 rpm  
 Motor efficiency: 79 %  
 Power factor (cos phi): 0.89  
 Degree of protection: IP 68  
 Isolation class: F (155°C)  
 Max. water temperature: 40°C  
 Standard cable length: 10 m

**Materials**

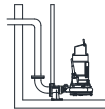
Pump casing: Cast iron GG 25 (EN-GJL-250)  
 Impeller: S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter: Hardened chrome steel  
 Motor unit: Cast iron GG 25 (EN-GJL-250)  
 Shaft: AISI 431  
 Bolts: AISI 316  
 Elastomers: Nitrile (NBR) or Neoprene (CR)  
 Electrical cable: Neoprene (CR)  
 Seal lubrication: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

**Installation options**

Header coupling: BWK050, 065 or 080

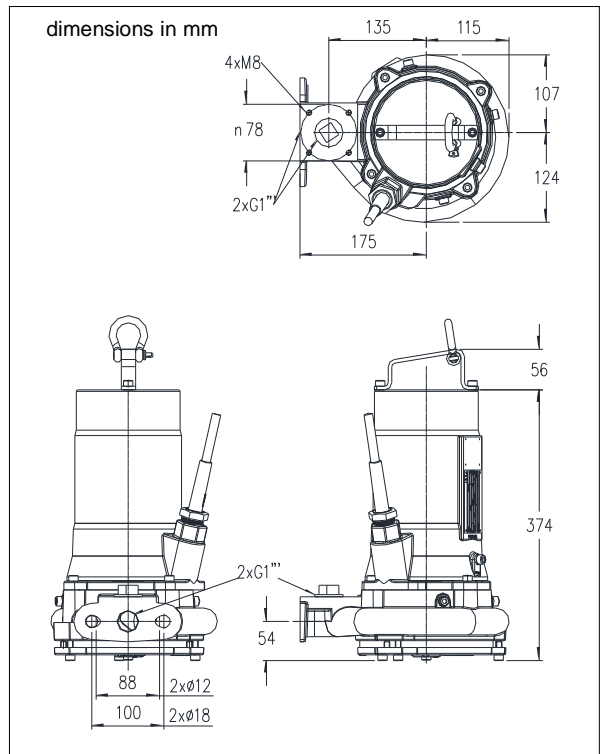
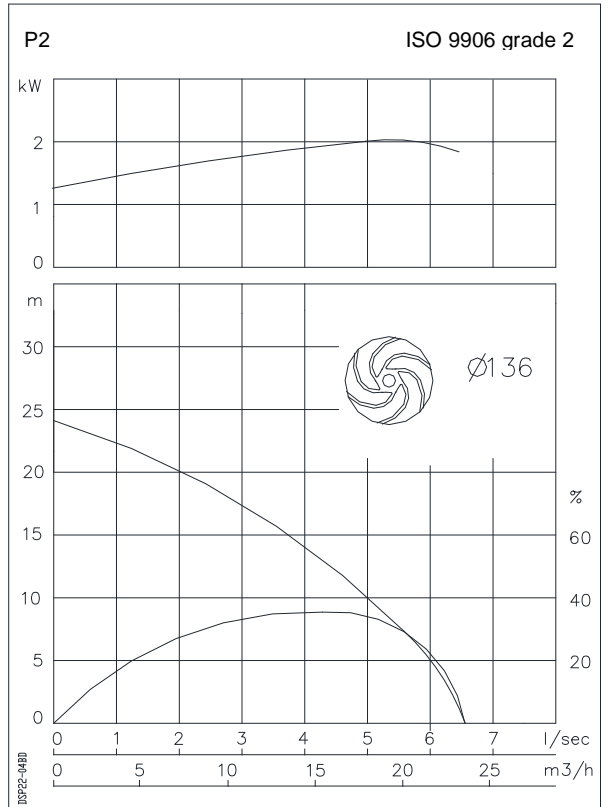


Guide bar coupling: OWK050



**Optional**

- Thermo switches in stator windings
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber



**Connections**

voltage	current	Electrical cable size [mm2]		motor protection and/or water detector	
		direct start		direct start	
230	7.9	4G1.5		7G1.5	
400	4.5	4G1.5		7G1.5	
500	3.6	4G1.5		7G1.5	
starting current DOL start : 5.3 x rated current					
* other voltages on request					

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

**Pump data**

Discharge diameter: 30 mm  
 Impeller type: with cutter  
 Impeller diameter: 150 mm  
 Recommended min. flow: 0.5 l/sec (2 m3/h)  
 Weight: 36 kg

**Motor**

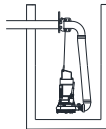
Mains: 50 Hz – 3 phase  
 Rated shaft power: 2.6 kW  
 Rated electrical power: 3.5 kW  
 Nominal speed: 2800 rpm  
 Motor efficiency: 74 %  
 Power factor (cos phi): 0.91  
 Degree of protection: IP 68  
 Isolation class: F (155°C)  
 Max. water temperature: 40°C  
 Standard cable length: 10 m

**Materials**

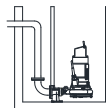
Pump casing: Cast iron GG 25 (EN-GJL-250)  
 Impeller: S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter: Hardened chrome steel  
 Motor unit: Cast iron GG 25 (EN-GJL-250)  
 Shaft: AISI 431  
 Bolts: Alt: AISI 316  
 Elastomers: AISI 316  
 Nitrile (NBR) or Neoprene (CR)  
 Viton (FPM)  
 Neoprene (CR)  
 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: BWK050, 065 or 080

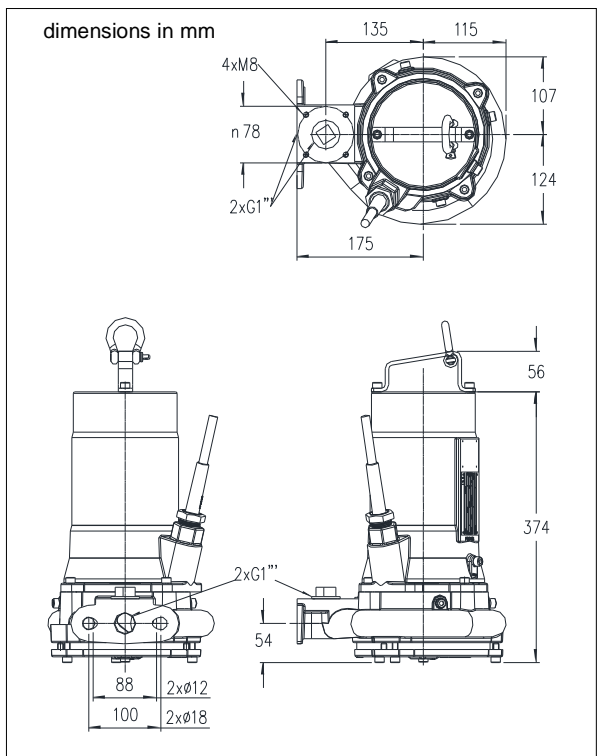
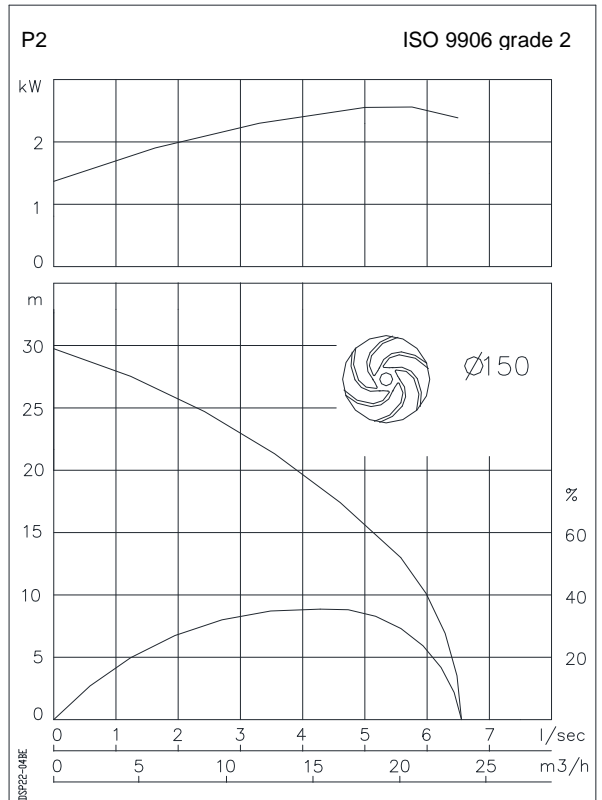


Guide bar coupling: OWK050



**Optional**

- Thermo switches in stator windings
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber



**Connections**

voltage	current	Electrical cable size [mm2]		motor protection and/or water detector	
		direct start		direct start	
230	9.7	4G1.5		7G1.5	
400	5.6	4G1.5		7G1.5	
500	4.5	4G1.5		7G1.5	
starting current DOL start : 4.6 x rated current					
* other voltages on request					

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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 120 mm  
 Recommended min. flow 0.5 l/sec (2 m3/h)  
 Weight 47 kg

**Motor**

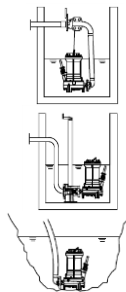
Mains: 50 c/s – 3 phase  
 Rated shaft power 1.5 kW  
 Rated electrical power 2.1 kW  
 Nominal speed 2790 rpm  
 Motor efficiency 71 %  
 Power factor (cos phi) 0.91  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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

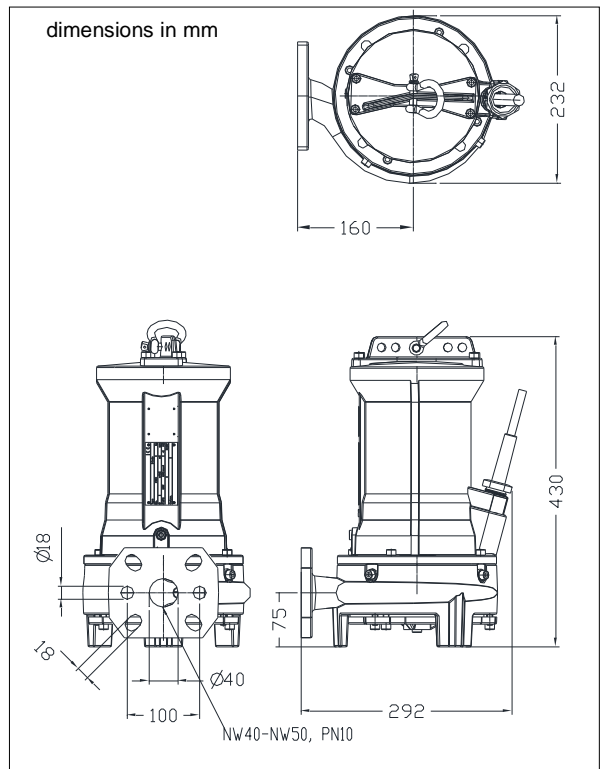
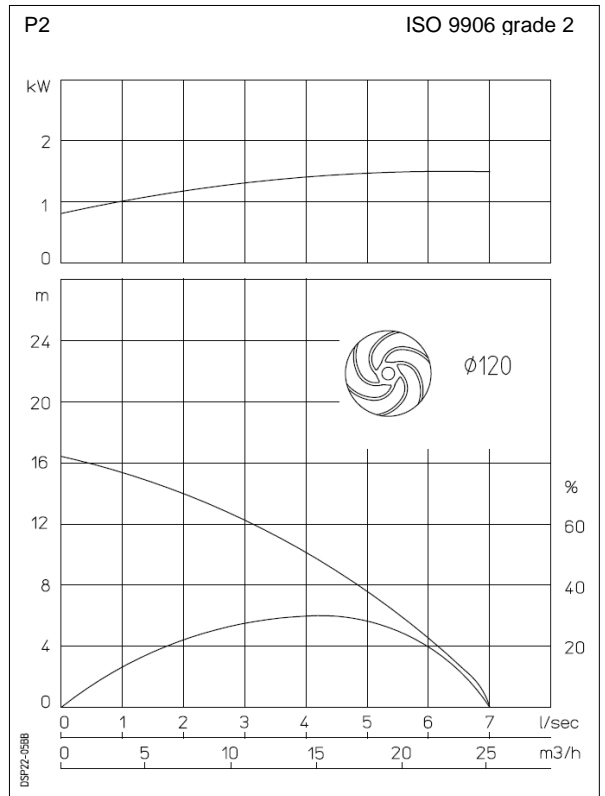
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	current	Electrical cable size [mm2]		motor protection and/or water detector		flameproof version		
		direct start		direct start		direct start		
230	5.8	4G1.5		7G1.5		7G1.5		
400	3.3	4G1.5		7G1.5		7G1.5		
500	2.7	4G1.5		7G1.5		7G1.5		
starting current DOL start : 4.8 x rated current								
							* other voltages on request	

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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 136 mm  
 Recommended min. flow 0.5 l/sec (2 m3/h)  
 Weight 49 kg

**Motor**

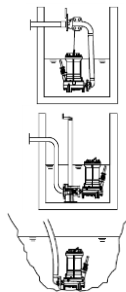
Mains: 50 c/s – 3 phase  
 Rated shaft power 2.2 kW  
 Rated electrical power 2.8 kW  
 Nominal speed 2830 rpm  
 Motor efficiency 79 %  
 Power factor (cos phi) 0.89  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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

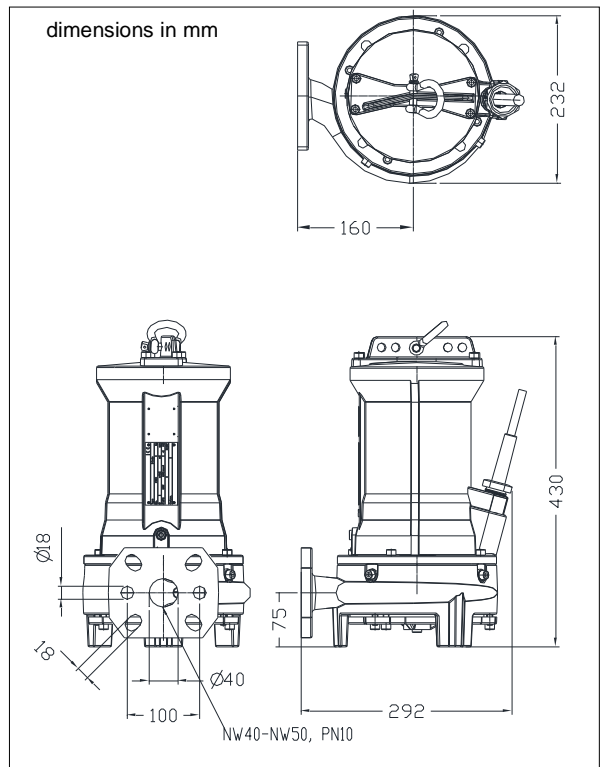
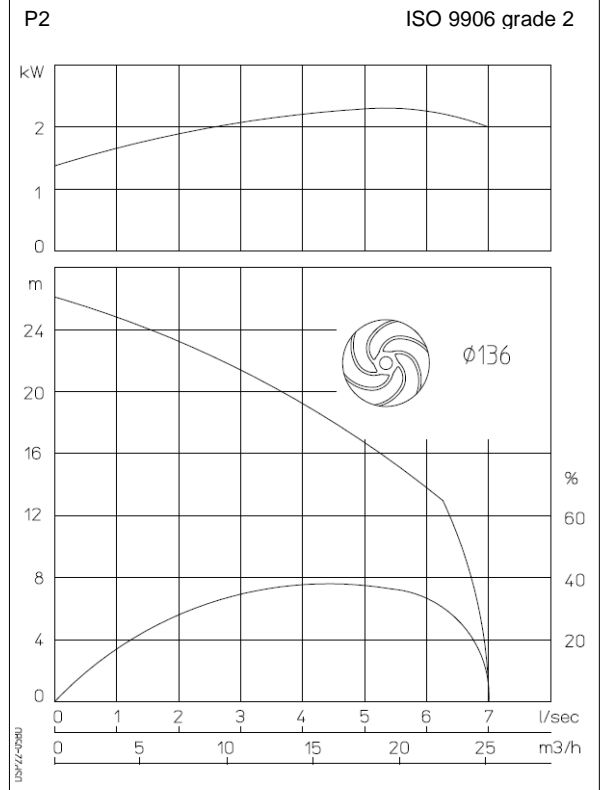
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	current	Electrical cable size [mm2]		motor protection and/or water detector		flameproof version		
		direct start		direct start		direct start		
230	7.9	4G1.5		7G1.5		7G1.5		
400	4.5	4G1.5		7G1.5		7G1.5		
500	3.6	4G1.5		7G1.5		7G1.5		
starting current DOL start : 5.3 x rated current								
							* other voltages on request	

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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 150 mm  
 Recommended min. flow 0.5 l/sec (2 m3/h)  
 Weight 49 kg

**Motor**

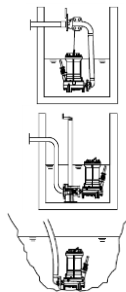
Mains: 50 c/s – 3 phase  
 Rated shaft power 2.6 kW  
 Rated electrical power 3.5 kW  
 Nominal speed 2800 rpm  
 Motor efficiency 74 %  
 Power factor (cos phi) 0.91  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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

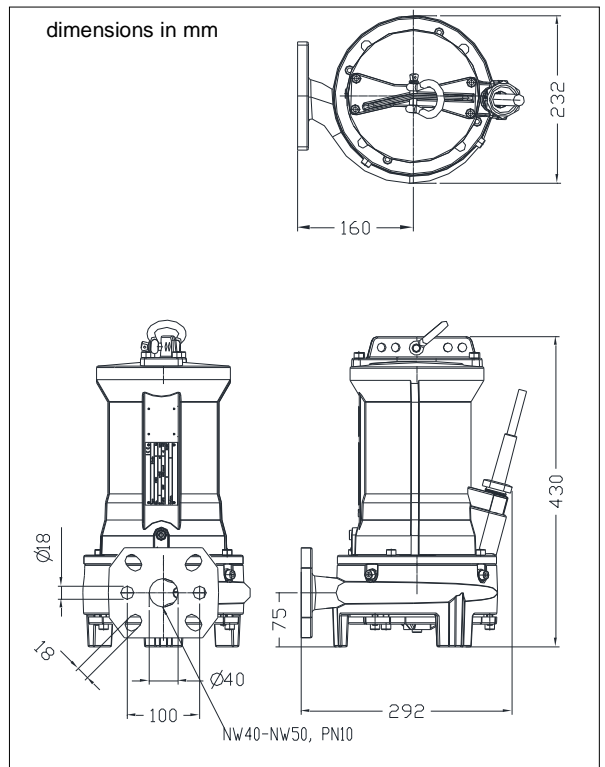
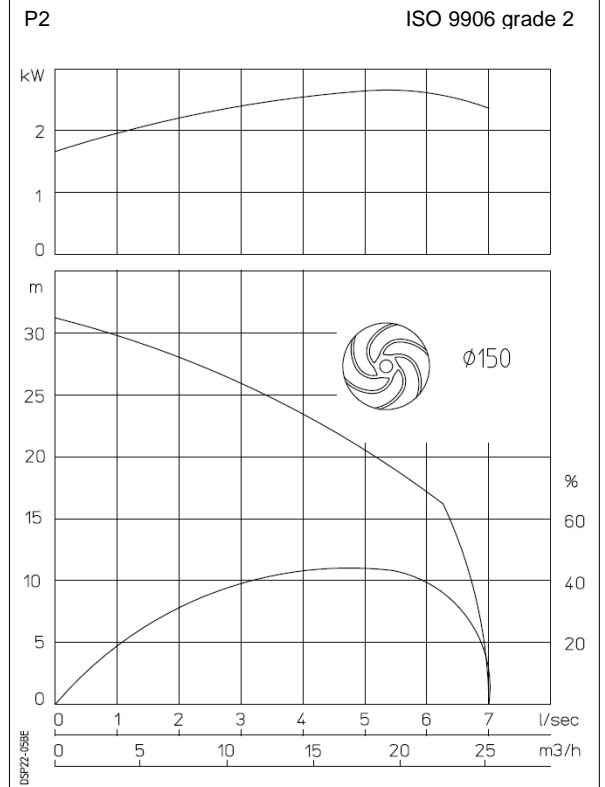
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	9.7	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
400	5.6	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
500	4.5	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
starting current DOL start : 4.6 x rated current								
starting current YD start : 1.5 x rated current								
							* other voltages on request	

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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 160 mm  
 Recommended min. flow 0.5 l/sec (2 m3/h)  
 Weight 55 kg

**Motor**

Mains: 50 c/s – 3 phase  
 Rated shaft power 3.2 kW  
 Rated electrical power 3.9 kW  
 Nominal speed 2910 rpm  
 Motor efficiency 82 %  
 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**

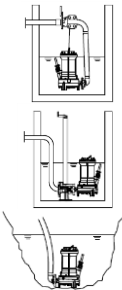
Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 Motor unit Cast iron GG 25 (EN-GJL-250)  
 Shaft AISI 431  
 Alt: AISI 316  
 Bolts AISI 316  
 Elastomers Nitrile (NBR) or neoprene (CR)  
 Alt: viton (FPM)  
 Neoprene (CR)  
 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 050

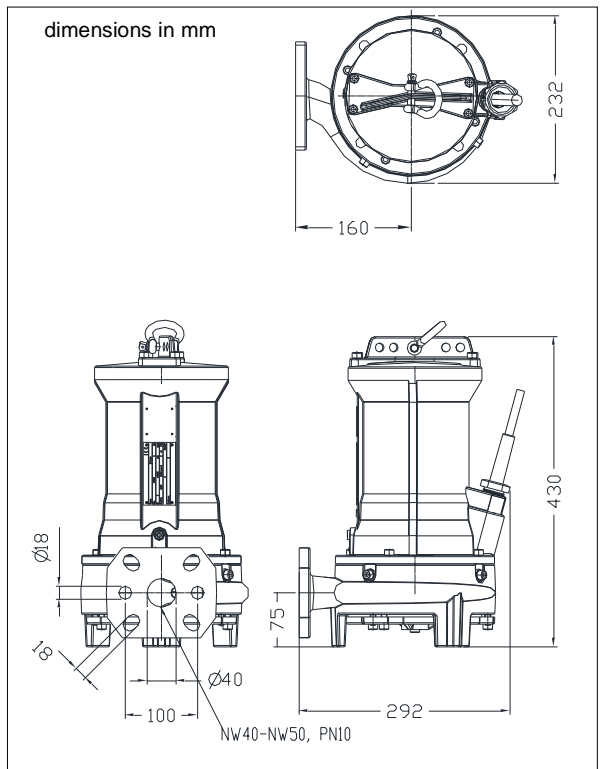
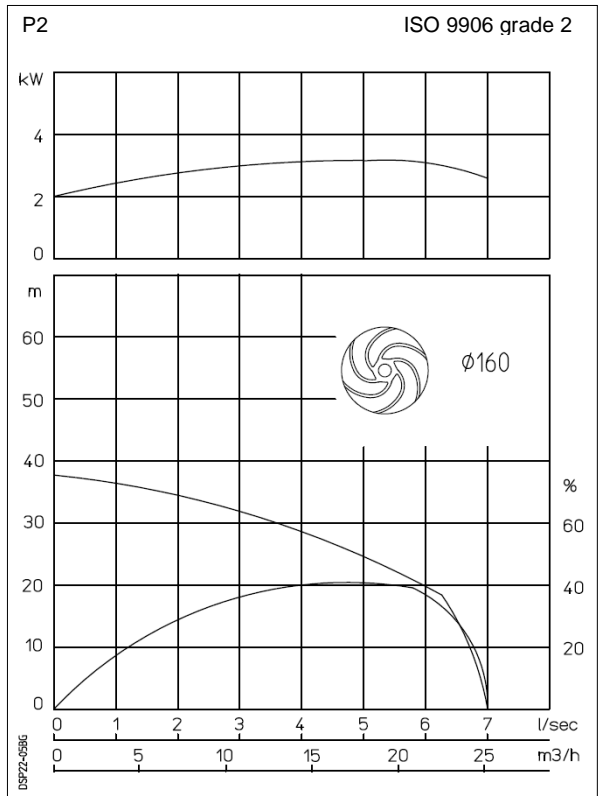
Guide bar coupling OWK 050

Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" threaded connection



**Optional**

- For flameproof version see DSP22-05BH
- Thermo switches in stator windings
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber



**Connections**

voltage	current	Electrical cable size [mm2]		motor protection and/or water detector	
		direct start	stardelta start	direct start	stardelta start
[V]*	[A]				
230	11.7	4G1.5	7G1.5	7G1.5	12G1.5
400	6.7	4G1.5	7G1.5	7G1.5	12G1.5
500	5.4	4G1.5	7G1.5	7G1.5	12G1.5
starting current DOL start : 7.9 x rated current					
starting current YD start : 3.2 x rated current					
* other voltages on request					

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

**Pump data**

Discharge diameter: 40 mm  
 Impeller type: cutter  
 Impeller diameter: 175 mm  
 Recommended min. flow: 0.5 l/sec (2 m3/h)  
 Weight: 55 kg

**Motor**

Mains: 50 c/s – 3 phase  
 Rated shaft power: 4.0 kW  
 Rated electrical power: 5.0 kW  
 Nominal speed: 2840 rpm  
 Motor efficiency: 80 %  
 Power factor (cos phi): 0.85  
 Degree of protection: IP 68  
 Isolation class: F (155°C)  
 Max. water temperature: 40°C  
 Standard cable length: 10 m

**Materials**

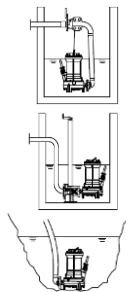
Pump casing: Cast iron GG 25 (EN-GJL-250)  
 Impeller: S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter: Hardened chrome steel  
 Motor unit: Cast iron GG 25 (EN-GJL-250)  
 Shaft: AISI 431  
 Alt: AISI 316  
 Bolts: AISI 316  
 Elastomers: Nitrile (NBR) or neoprene (CR)  
 Alt: viton (FPM)  
 Electrical 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 050

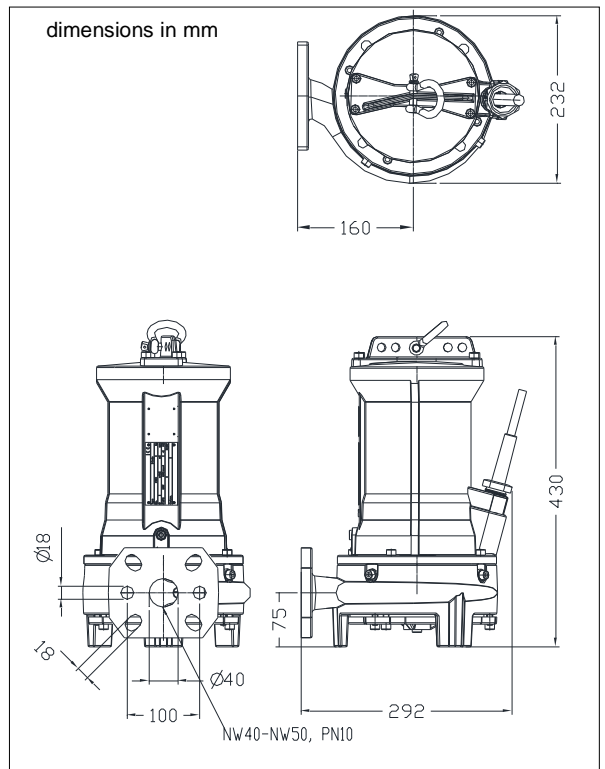
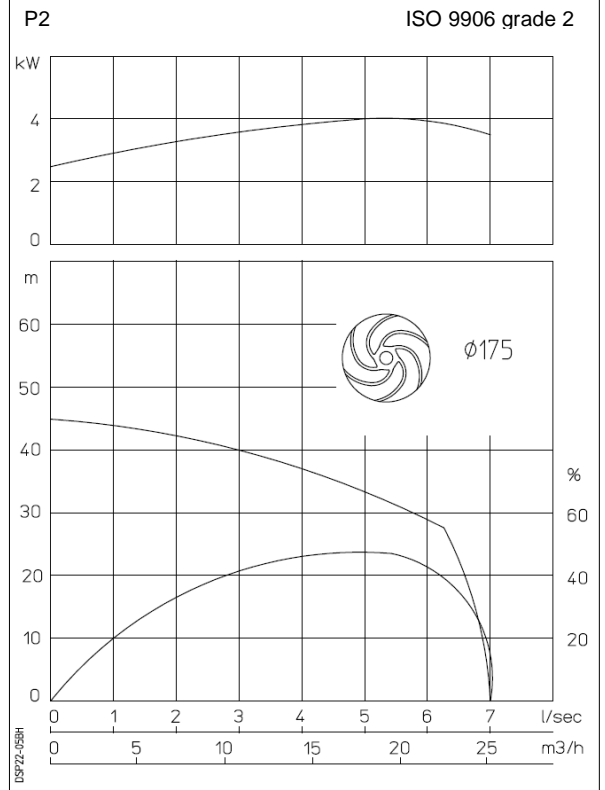
Guide bar coupling: OWK 050

Freestanding (VRS): 50 mm or 75 mm hose connection or G 2" 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	14.8	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
400	8.5	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
500	6.8	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
starting current DOL start : 6.2 x rated current								
starting current YD start : 2.1 x rated current								
							* other voltages on request	



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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 170 mm  
 Recommended min. flow 0.5 l/sec (2 m3/h)  
 Weight 46 kg

**Motor**

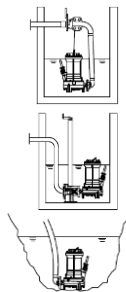
Mains: 50 c/s – 3 phase  
 Rated shaft power 0.65 kW  
 Rated electrical power 0.94 kW  
 Nominal speed 1340 rpm  
 Motor efficiency 69 %  
 Power factor (cos phi) 0.79  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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

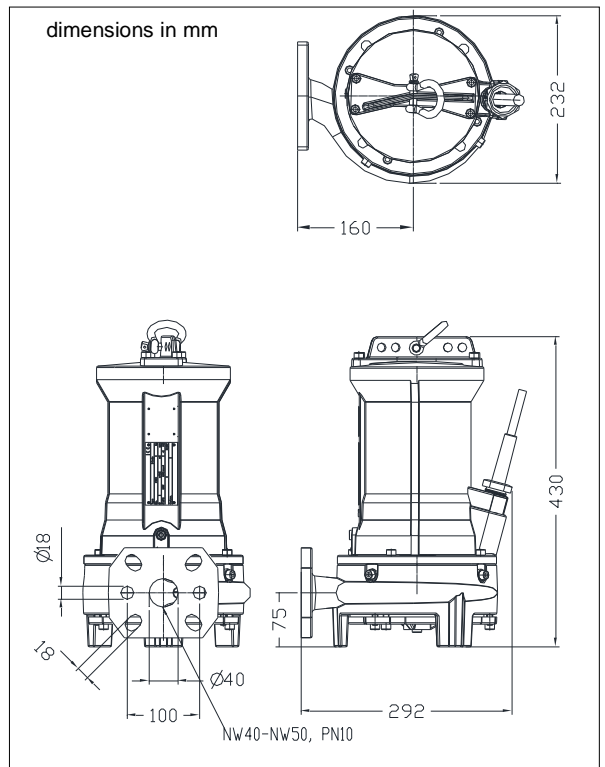
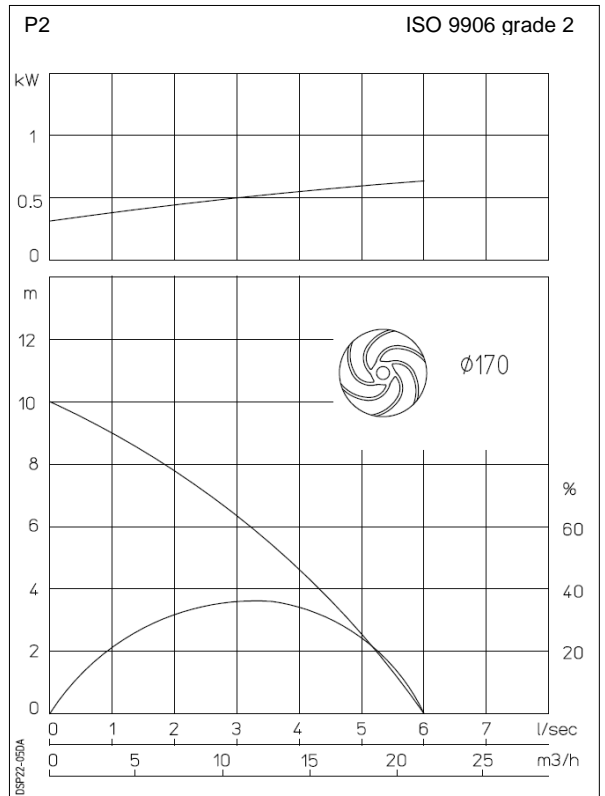
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	current	Electrical cable size [mm2]		motor protection and/or water detector		flameproof version		
		direct start		direct start		direct start		
230	3.0	4G1.5		7G1.5		7G1.5		
400	1.7	4G1.5		7G1.5		7G1.5		
500	1.4	4G1.5		7G1.5		7G1.5		
starting current DOL start : 3.7 x rated current								
							* other voltages on request	

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

**Pump data**

Discharge diameter: 30 mm  
 Impeller type: with cutter  
 Impeller diameter: 126 mm  
 Recommended min. flow: 0.5 l/sec (2 m3/h)  
 Weight: 36 kg

**Motor**

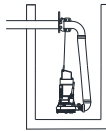
Mains: 50 Hz – 3 phase  
 Rated shaft power: 2.2 kW  
 Rated electrical power: 2.8 kW  
 Nominal speed: 2830 rpm  
 Motor efficiency: 79 %  
 Power factor (cos phi): 0.89  
 Degree of protection: IP 68  
 Isolation class: F (155°C)  
 Max. water temperature: 40°C  
 Standard cable length: 10 m

**Materials**

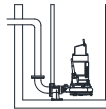
Pump casing: Cast iron GG 25 (EN-GJL-250)  
 Impeller: S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter: Hardened chrome steel  
 Motor unit: Cast iron GG 25 (EN-GJL-250)  
 Shaft: AISI 431  
 Alt: AISI 316  
 Bolts: AISI 316  
 Elastomers: Nitrile (NBR) or Neoprene (CR)  
 Alt: Viton (FPM)  
 Electrical 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: BWK050, 065 or 080

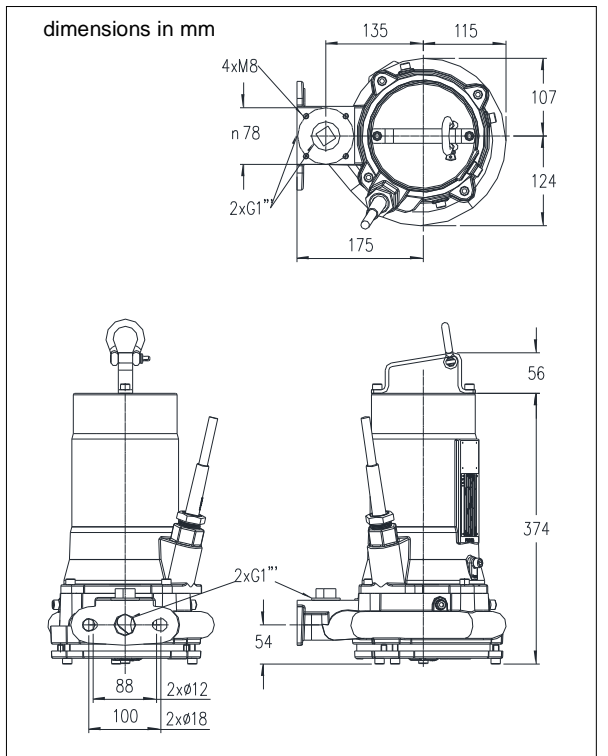
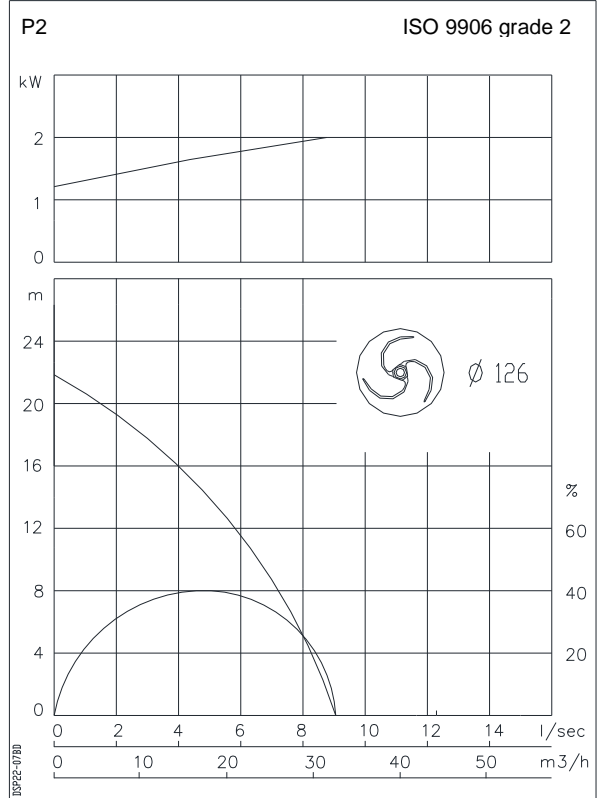


Guide bar coupling: OWK050



**Optional**

- Thermo switches in stator windings
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber



**Connections**

voltage	current	Electrical cable size [mm2]		motor protection and/or water detector	
		direct start		direct start	
230	7.9	4G1.5		7G1.5	
400	4.5	4G1.5		7G1.5	
500	3.6	4G1.5		7G1.5	
starting current DOL start : 5.3 x rated current					
* other voltages on request					

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

**Pump data**

Discharge diameter: 30 mm  
 Impeller type: with cutter  
 Impeller diameter: 136 mm  
 Recommended min. flow: 0.5 l/sec (2 m3/h)  
 Weight: 36 kg

**Motor**

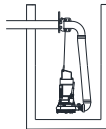
Mains: 50 Hz – 3 phase  
 Rated shaft power: 2.6 kW  
 Rated electrical power: 3.5 kW  
 Nominal speed: 2800 rpm  
 Motor efficiency: 74 %  
 Power factor (cos phi): 0.91  
 Degree of protection: IP 68  
 Isolation class: F (155°C)  
 Max. water temperature: 40°C  
 Standard cable length: 10 m

**Materials**

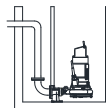
Pump casing: Cast iron GG 25 (EN-GJL-250)  
 Impeller: S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter: Hardened chrome steel  
 Motor unit: Cast iron GG 25 (EN-GJL-250)  
 Shaft: AISI 431  
 Alt: AISI 316  
 Bolts: AISI 316  
 Elastomers: Nitrile (NBR) or Neoprene (CR)  
 Alt: Viton (FPM)  
 Electrical 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: BWK050, 065 or 080

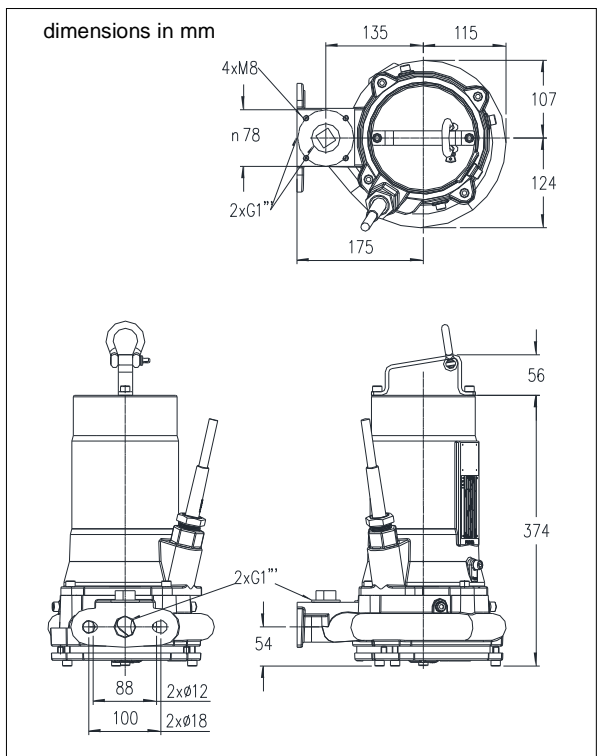
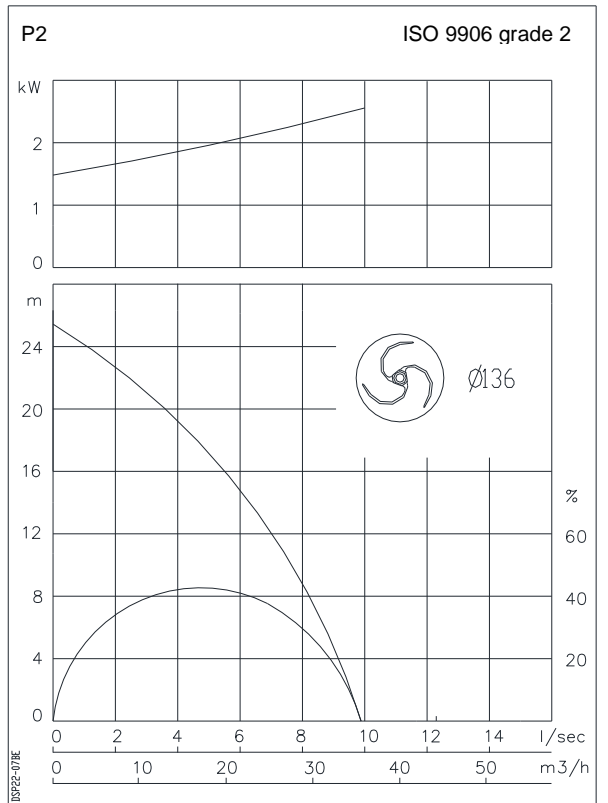


Guide bar coupling: OWK050



**Optional**

- Thermo switches in stator windings
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber



**Connections**

voltage	current	Electrical cable size [mm2]		motor protection and/or water detector	
		direct start		direct start	
230	9.7	4G1.5		7G1.5	
400	5.6	4G1.5		7G1.5	
500	4.5	4G1.5		7G1.5	
starting current DOL start : 4.6 x rated current					
* other voltages on request					

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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 110 mm  
 Recommended min. flow 1 l/sec (3.6 m3/h)  
 Weight 47 kg

**Motor**

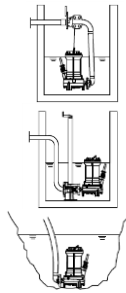
Mains: 50 c/s – 3 phase  
 Rated shaft power 1.5 kW  
 Rated electrical power 2.1 kW  
 Nominal speed 2790 rpm  
 Motor efficiency 71 %  
 Power factor (cos phi) 0.91  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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

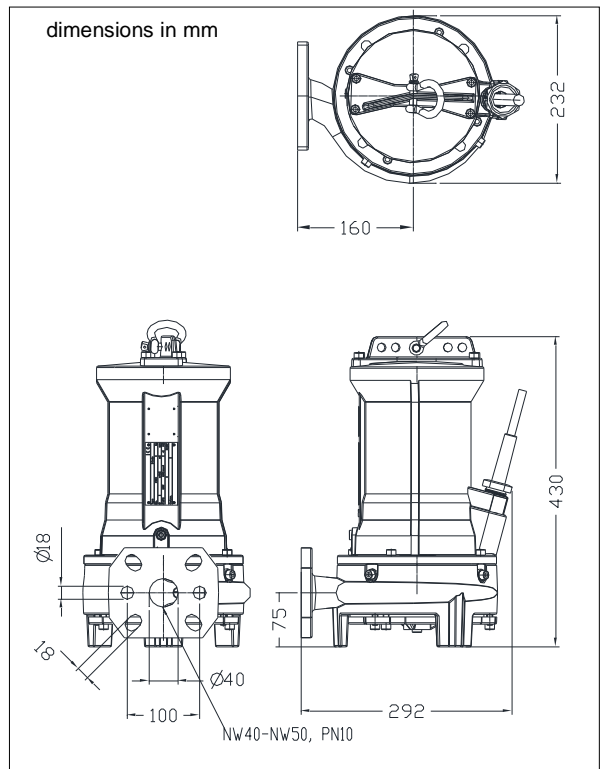
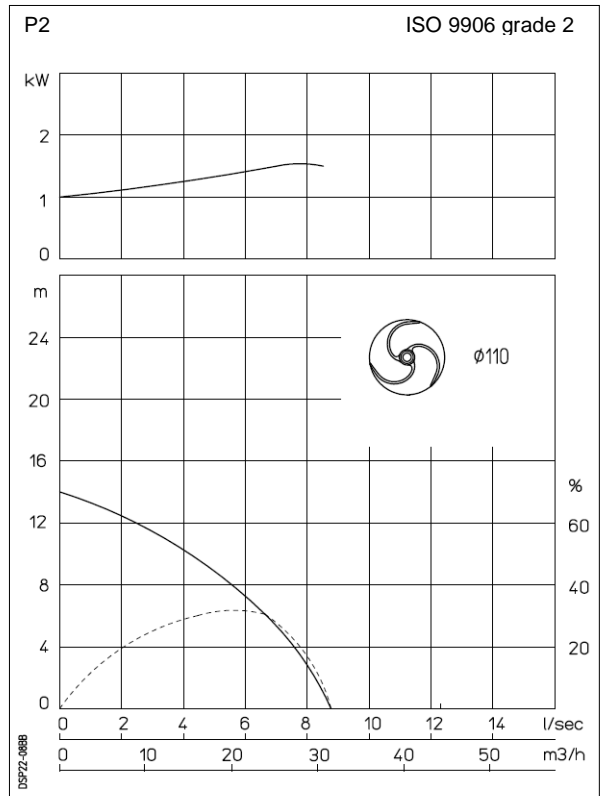
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	current	Electrical cable size [mm2]		motor protection and/or water detector		flameproof version		
		direct start		direct start		direct start		
230	5.8	4G1.5		7G1.5		7G1.5		
400	3.3	4G1.5		7G1.5		7G1.5		
500	2.7	4G1.5		7G1.5		7G1.5		
starting current DOL start : 4.8 x rated current								
							* other voltages on request	

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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 122 mm  
 Recommended min. flow 1 l/sec (3.6 m3/h)  
 Weight 49 kg

**Motor**

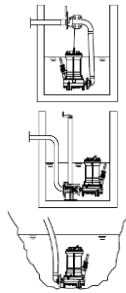
Mains: 50 c/s – 3 phase  
 Rated shaft power 2.2 kW  
 Rated electrical power 2.8 kW  
 Nominal speed 2830 rpm  
 Motor efficiency 79 %  
 Power factor (cos phi) 0.89  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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

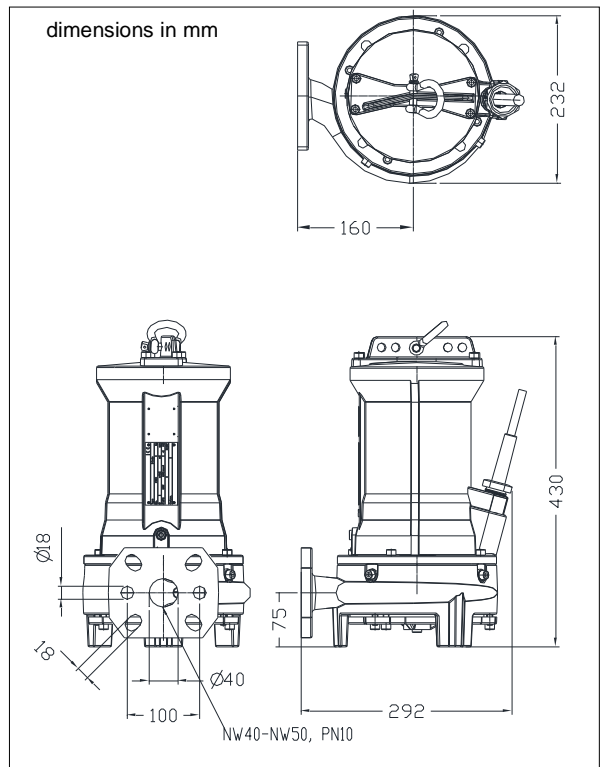
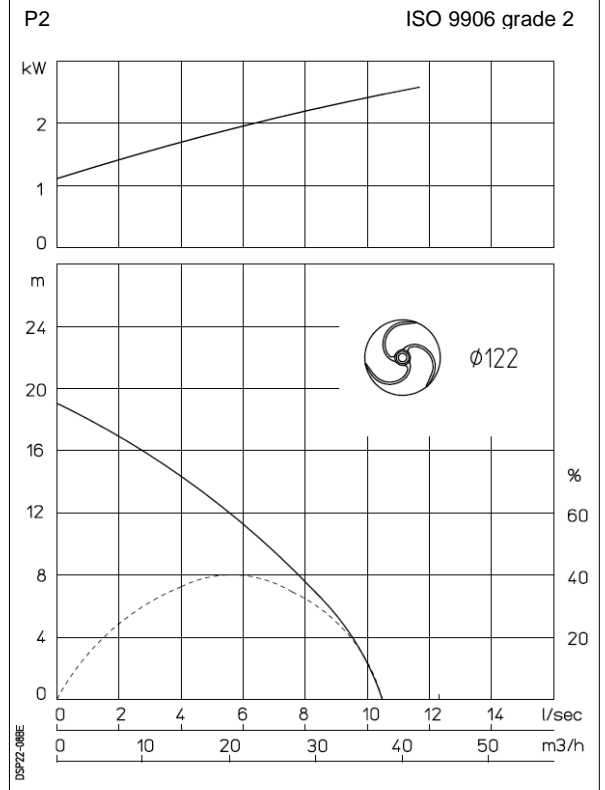
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	current	Electrical cable size [mm2]		motor protection and/or water detector		flameproof version		
		direct start		direct start		direct start		
230	7.9	4G1.5		7G1.5		7G1.5		
400	4.5	4G1.5		7G1.5		7G1.5		
500	3.6	4G1.5		7G1.5		7G1.5		
starting current DOL start : 5.3 x rated current								
							* other voltages on request	

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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 132 mm  
 Recommended min. flow 1 l/sec (3.6 m3/h)  
 Weight 49 kg

**Motor**

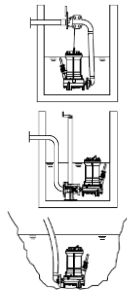
Mains: 50 c/s – 3 phase  
 Rated shaft power 2.6 kW  
 Rated electrical power 3.5 kW  
 Nominal speed 2800 rpm  
 Motor efficiency 74 %  
 Power factor (cos phi) 0.91  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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

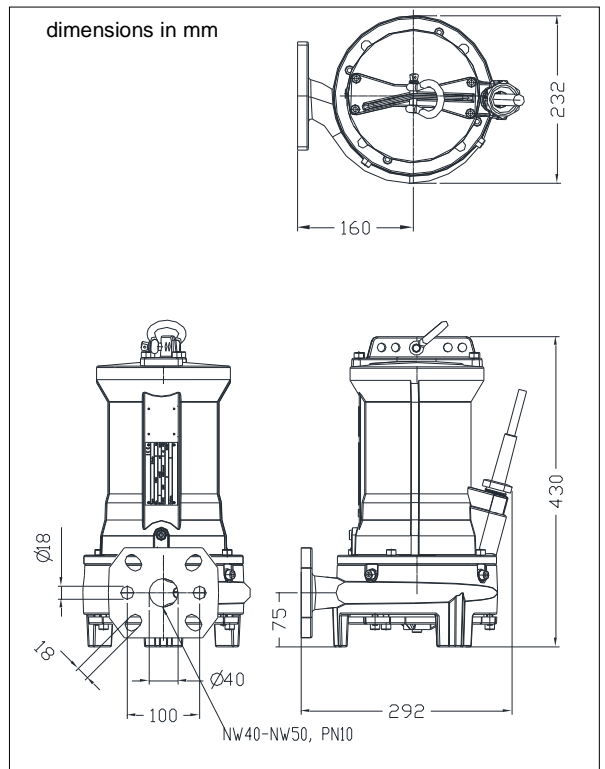
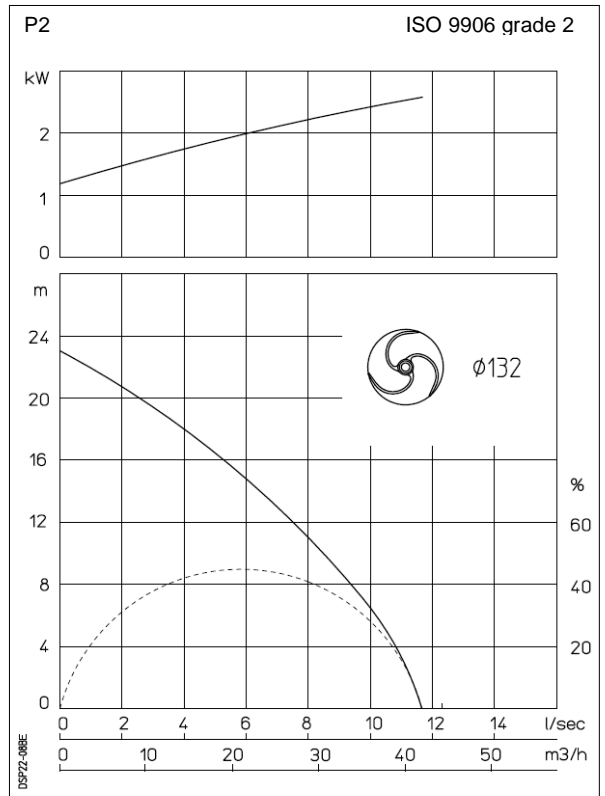
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	9.7	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
400	5.6	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
500	4.5	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
starting current DOL start : 4.6 x rated current								
starting current YD start : 1.5 x rated current								
							* other voltages on request	

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

**Pump data**

Discharge diameter: 40 mm  
 Impeller type: cutter  
 Impeller diameter: 142 mm  
 Recommended min. flow: 1 l/sec (3.6 m3/h)  
 Weight: 55 kg

**Motor**

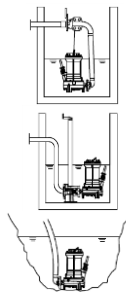
Mains: 50 c/s – 3 phase  
 Rated shaft power: 3.2 kW  
 Rated electrical power: 3.9 kW  
 Nominal speed: 2910 rpm  
 Motor efficiency: 82 %  
 Power factor (cos phi): 0.84  
 Degree of protection: IP 68  
 Isolation class: F (155°C)  
 Max. water temperature: 40°C  
 Standard cable length: 10 m

**Materials**

Pump casing: Cast iron GG 25 (EN-GJL-250)  
 Impeller: S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter: Hardened chrome steel  
 Motor unit: Cast iron GG 25 (EN-GJL-250)  
 Shaft: AISI 431  
 Bolts: Alt: AISI 316  
 Elastomers: AISI 316  
 Nitrile (NBR) or neoprene (CR)  
 Alt: viton (FPM)  
 Neoprene (CR)  
 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 050  
 Guide bar coupling: OWK 050  
 Freestanding (VRS): 50 mm or 75 mm hose connection or G 2" threaded connection

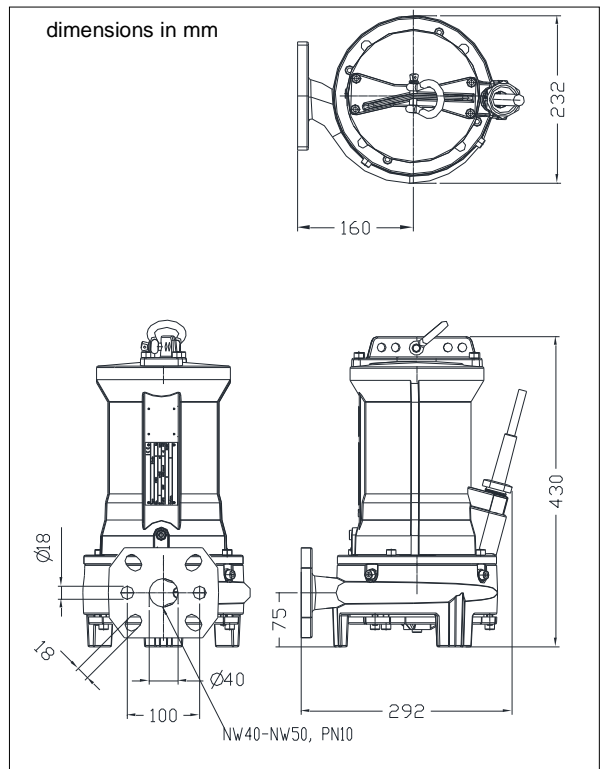
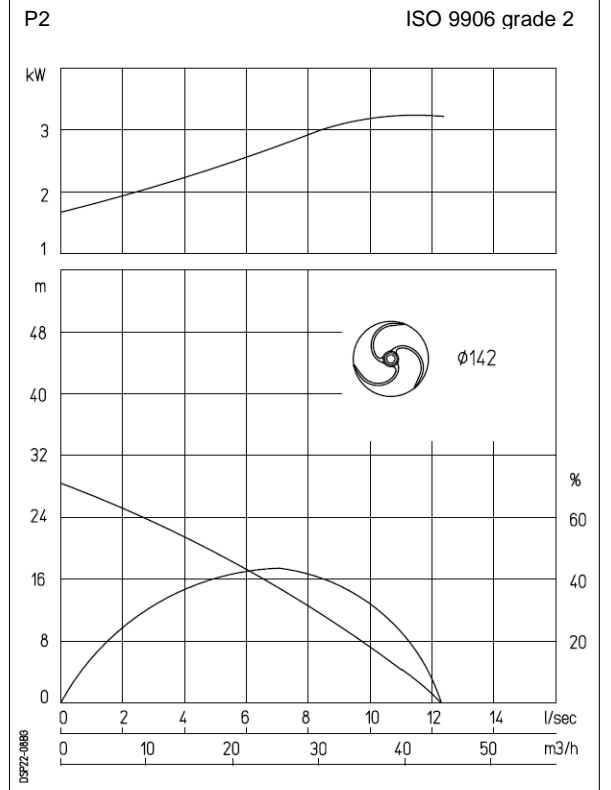


**Optional**

- For flameproof version see DSP22-08BH
- Thermo switches in stator windings
- Cable protective sheathing (AISI 316)
- Water detector in motor and oil chamber

**Connections**

voltage	current	Electrical cable size [mm2]		motor protection and/or water detector	
		direct start	stardelta start	direct start	stardelta start
[V]*	[A]				
230	11.7	4G1.5	7G1.5	7G1.5	12G1.5
400	6.7	4G1.5	7G1.5	7G1.5	12G1.5
500	5.4	4G1.5	7G1.5	7G1.5	12G1.5
starting current DOL start : 7.9 x rated current					
starting current YD start : 3.2 x rated current					
* other voltages on request					



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

**Pump data**

Discharge diameter 40 mm  
 Impeller type: cutter  
 Impeller diameter 160, 152 mm  
 Recommended min. flow 1 l/sec (3.6 m3/h)  
 Weight 55 kg

**Motor**

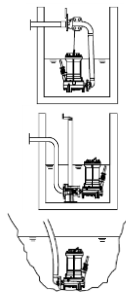
Mains: 50 c/s – 3 phase  
 Rated shaft power 4.0 kW  
 Rated electrical power 5.0 kW  
 Nominal speed 2840 rpm  
 Motor efficiency 80 %  
 Power factor (cos phi) 0.85  
 Degree of protection IP 68  
 Isolation class F (155°C)  
 Max. water temperature 40°C  
 Standard cable length 10 m

**Materials**

Pump casing Cast iron GG 25 (EN-GJL-250)  
 Impeller S.g cast iron GGG 40 (EN-GJS-400-15)  
 Cutter Hardened chrome steel  
 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)  
 Neoprene (CR)  
 Electrical cable Neoprene (CR)  
 Seal lubrication Oil  
 Seal pump side Silicon carbide – silicon carbide  
 Seal motor side Carbon - Ceramic  
 Coating Two components polyurethane

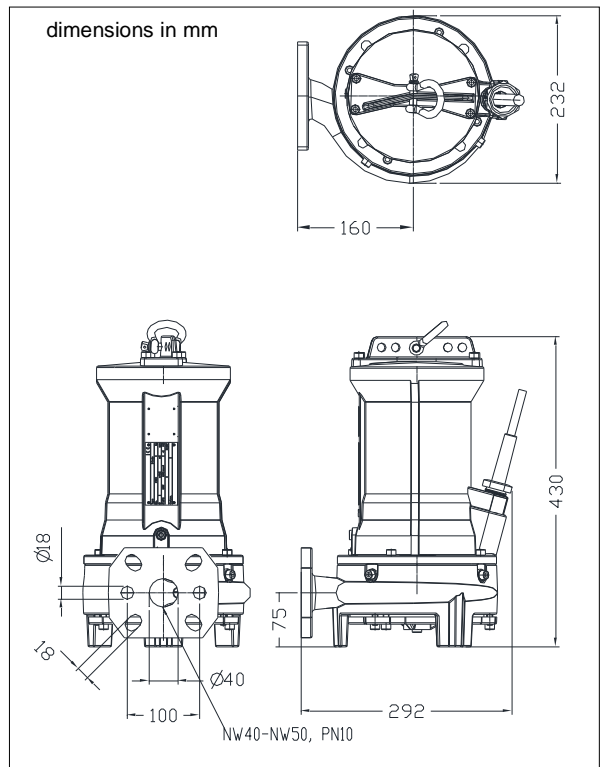
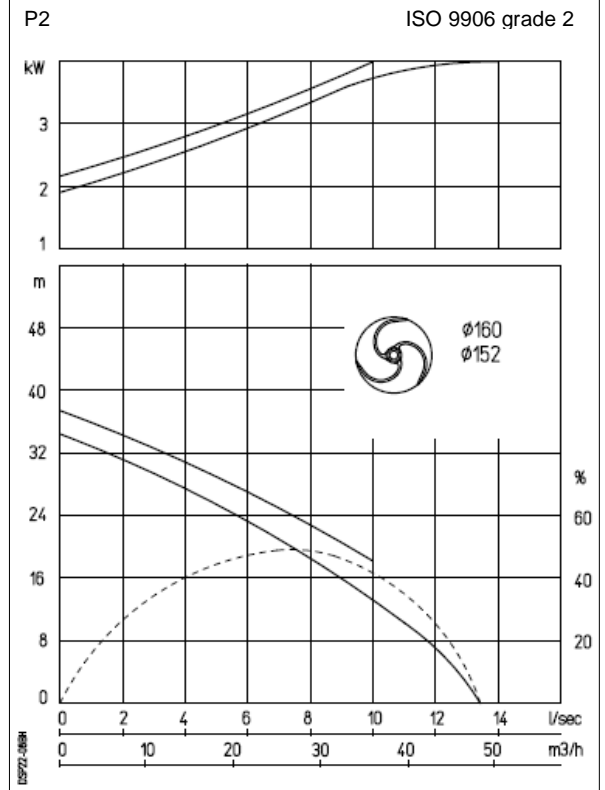
**Installation options**

Header coupling BWK 050  
 Guide bar coupling OWK 050  
 Freestanding (VRS) 50 mm or 75 mm hose connection or G 2" 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	14.8	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
400	8.5	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
500	6.8	4G1.5	7G1.5	7G1.5	12G1.5	7G1.5	12G1.5	
starting current DOL start : 6.2 x rated current								
starting current YD start : 2.1 x rated current								
							* other voltages on request	