

Pump type: Submersible slurry pump with agitator

Application: Abrasive media

## Pump data

|                             |                   |
|-----------------------------|-------------------|
| Solids passage              | 35 mm             |
| Discharge/ Suction diameter | 100 mm/ 110 mm    |
| Impeller type:              | Vortex            |
| Impeller diameter           | 245 mm            |
| Recommended min. flow       | 6 l/sec (21 m3/h) |
| Weight                      | 185 kg            |

## Motor

|                        |                  |
|------------------------|------------------|
| Mains:                 | 50 c/s – 3 phase |
| Rated shaft power      | 13.0 kW          |
| Rated electrical power | 15.1 kW          |
| Nominal speed          | 1420 rpm         |
| Motor efficiency       | 86 %             |
| 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 + wear plate | Nihard 4 (G-X300CrNiSi 9-5))   |
| Impeller + agitator      | Nihard 4 (G-X300CrNiSi 9-5))   |
| 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       |

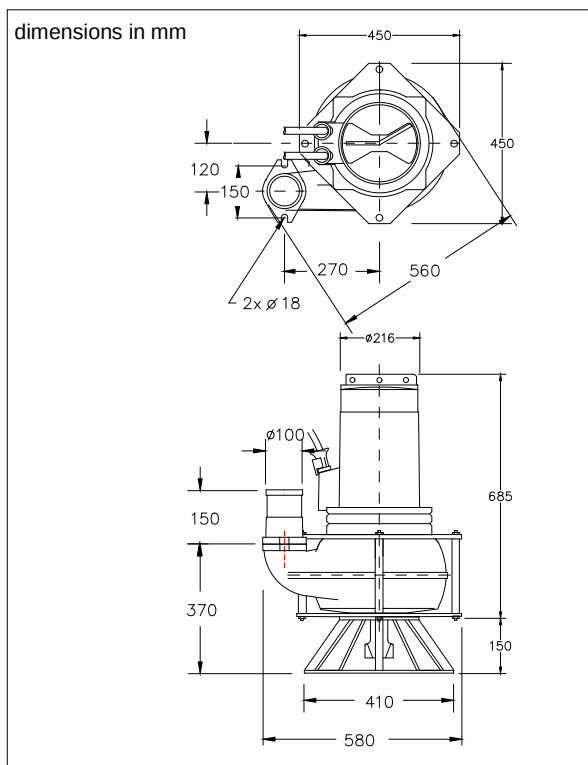
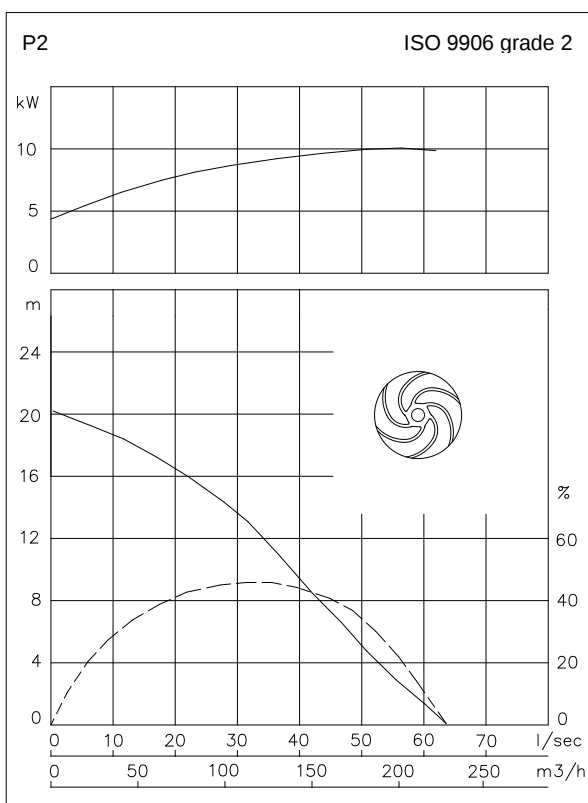
## Installation

| Freestanding            | 100 mm hose connection |
|-------------------------|------------------------|
| Including support (VRS) |                        |



## Optional

- Version without agitator, see DNP42-41DZ  
Version with standard pump casing and agitator, see DNP42-42DZ
- 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

|                                                  |         |                             |                 |                                        |                 |                             |                 |
|--------------------------------------------------|---------|-----------------------------|-----------------|----------------------------------------|-----------------|-----------------------------|-----------------|
|                                                  |         | Electrical cable size [mm2] |                 |                                        |                 |                             |                 |
| voltage                                          | current |                             |                 | motor protection and/or water detector |                 | flameproof version          |                 |
| [V]*                                             | [A]     | direct start                | stardelta start | direct start                           | stardelta start | direct start                | stardelta start |
| 230                                              | 45.4    | 4G10                        | 2x4G6           | 4G10 + 4G1.5                           | -               | 4G10 + 4G2.5                | -               |
| 400                                              | 26.1    | 4G6                         | 7G1.5           | 4G6 + 4G1.5                            | 7G2.5 + 4G1.5   | 4G6 + 4G2.5                 | 7G2.5 + 4G2.5   |
| 500                                              | 20.9    | 4G6                         | 7G1.5           | 4G6 + 4G1.5                            | 10G1.5          | 4G6 + 4G2.5                 | 10G1.5          |
| starting current DOL start : 5.0 x rated current |         |                             |                 |                                        |                 |                             |                 |
| starting current YD start : 1.7 x rated current  |         |                             |                 |                                        |                 | * other voltages on request |                 |