

# Application data

|                             |                         |
|-----------------------------|-------------------------|
| Conveyed product            | sodium cyanide solution |
| Remark                      | 20% w/v NaCN solution   |
| Flowability                 | well flowable           |
| Viscosity                   | 2.16 cP                 |
| Solids content              | without                 |
| Size of solids              | not applicable          |
| Concentration               | 20%                     |
| Density                     | 1,075 kg/dm³            |
| Product temperature         | 5°C - 30°C              |
| Product temperature (norm.) | 30°C                    |
| pH value                    | assumed neutral         |
| Kind of operation           | continuous              |
| Operating hours             | 24 h/day                |
| Location                    | outdoor, dry atmosphere |
| Altitude of installation    | up to 1000 m assumed    |
| Surrounding temperature     | 10-46°C                 |

## Performance data

|                                    | Capacity                       | Pressure | Speed     |      |
|------------------------------------|--------------------------------|----------|-----------|------|
|                                    | 0.54 m³/h                      | 2.08 bar | 53 min⁻¹  | min  |
|                                    | 1.82 m³/h                      | 2.37 bar | 170 min⁻¹ | norm |
|                                    | 4.17 m³/h                      | 3.58 bar | 398 min⁻¹ | max  |
| Starting torque                    | 25 Nm                          |          |           |      |
| Req. operating power at pump shaft | 0.75 kW                        |          |           |      |
| Inlet pressure                     | flooded suction (up to 0,5bar) |          |           |      |
| NPSHr (Standard test)              | 3.74 m                         |          |           |      |

Tolerances according to SEEPEX standards.

## Materials and executions

|                            |                                                    |
|----------------------------|----------------------------------------------------|
| Installation               | horizontal                                         |
| Direction of rotation      | counter clockwise (left)                           |
| Lantern - Design           | with cover plates                                  |
| Lantern - Material         | EN-JL 1040 (gci-25)                                |
| Suction casing - Design    | standard                                           |
| Suction casing - Material  | EN-JL 1040 (gci-25)                                |
| Pressure branch - Design   | standard                                           |
| Pressure branch - Material | EN-JL 1040 (gci-25)                                |
| Position of branch         | position 3                                         |
| Suction connection         | NPS 2½, drilled acc. to ASME B 16.5, Class 150, RF |
| Pressure connection        | NPS 2, drilled acc. to ASME B 16.5, Class 150, RF  |

|                                          |                                    |
|------------------------------------------|------------------------------------|
| Joint - Material                         | standard, holding bands 1.4401     |
| Joint - Universal joint sleeve: material | EPDM                               |
| Coupling rod - Design                    | standard                           |
| Coupling rod - Material                  | 1.4404 / AISI 316L                 |
| Rotor - Design                           | Smart Rotor-design                 |
| Rotor - Material                         | 1.4404 / AISI 316L                 |
| Rotor - Coating                          | ductile chromium coating           |
| Stator - Design                          | smart stator design                |
| Stator - Material                        | EPDM                               |
| Shaft sealing                            | mechanical seal                    |
| Code                                     | GA - single acting mechanical seal |
| Shaft diameter                           | 38 mm                              |
| Make                                     | SEEPEX                             |
| Rotating/stationary seal face            | SiC SiC                            |
| Elastomers                               | EPDM                               |
| Spring                                   | 1.4571 / AISI 316Ti                |
| Metal parts                              | 1.4571 / AISI 316Ti                |
| Type                                     | GA Q1Q1 EGG                        |
| Casing - material                        | PPS 40% glass fiber reinforced     |
| Casing - connection standard             | NPT                                |
| Plug-in Shaft - Design                   | standard                           |
| Plug-in Shaft - Material                 | 1.4404 / AISI 316L                 |
| Bolting - Design                         | completely stainless steel         |

**Painting - Color**  
**Painting - Surface protection**

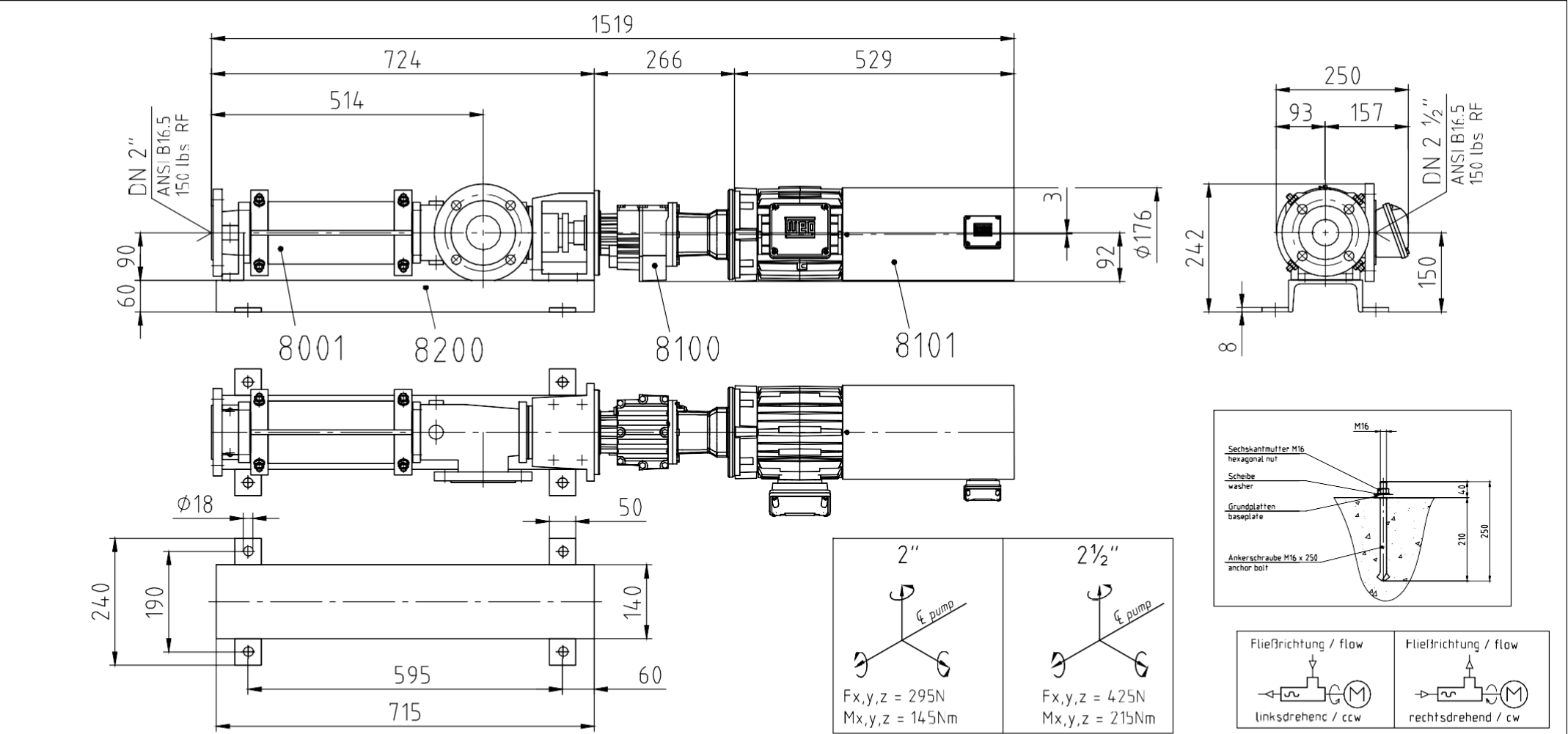
RAL 5013 - Cobalt blue (2K)  
incr. surface protection C3 (NDFT 160 µm)

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## Drive

|                                               |                                                          |                       |                        |
|-----------------------------------------------|----------------------------------------------------------|-----------------------|------------------------|
| <b>Type</b>                                   | Gear & Motor at freq. inv.<br>(Inverter is not included) |                       |                        |
| <b>Make</b>                                   | SEW                                                      |                       |                        |
| <b>Model</b>                                  | RF27 AMS90                                               |                       |                        |
| <b>Mounting type</b>                          | Flange design                                            |                       |                        |
| <b>Mounting orientation</b>                   | M1                                                       |                       |                        |
| <b>Ratio (i)</b>                              | 5                                                        |                       |                        |
|                                               | <b>Norm</b>                                              | <b>Min</b>            | <b>Max</b>             |
| <b>Speed</b>                                  | 348 min <sup>-1</sup>                                    | 53 min <sup>-1</sup>  | 398 min <sup>-1</sup>  |
| <b>Motor speed</b>                            | 1740 min <sup>-1</sup>                                   | 263 min <sup>-1</sup> | 1989 min <sup>-1</sup> |
| <b>Frequency</b>                              | 60 Hz                                                    | 9 Hz                  | 69 Hz                  |
| <b>Make</b>                                   | WEG                                                      |                       |                        |
| <b>Model</b>                                  | W22-90L                                                  |                       |                        |
| <b>Rated output</b>                           | 1.5 kW                                                   |                       |                        |
| <b>Rated speed</b>                            | 1740 min <sup>-1</sup>                                   |                       |                        |
| <b>Mounting position</b>                      | B5                                                       |                       |                        |
| <b>Starting</b>                               | direct on frequency inverter                             |                       |                        |
| <b>Efficiency class</b>                       | IE3                                                      |                       |                        |
| <b>Terminal box position acc. to supplier</b> | right                                                    |                       |                        |
| <b>Cable entry position acc. to supplier</b>  | not specified                                            |                       |                        |
| <b>Voltage</b>                                | 3 x 460 V                                                |                       |                        |
| <b>Frequency</b>                              | 60Hz                                                     |                       |                        |
| <b>Enclosure</b>                              | IP56                                                     |                       |                        |
| <b>Thermal class</b>                          | F                                                        |                       |                        |
| <b>Winding protection</b>                     | 3 PTC - thermistors                                      |                       |                        |
| <b>Motor accessories: forced ventilation</b>  | 220/380 V, 415/660 V, 50 Hz, IP20                        |                       |                        |
| <b>Other</b>                                  | CSA design (w/o certificate)                             |                       |                        |
| <b>Other</b>                                  | Tropicalized, moisture-proof                             |                       |                        |

The frequency inverter has to follow a linear U/f characteristic curve (constant torque).

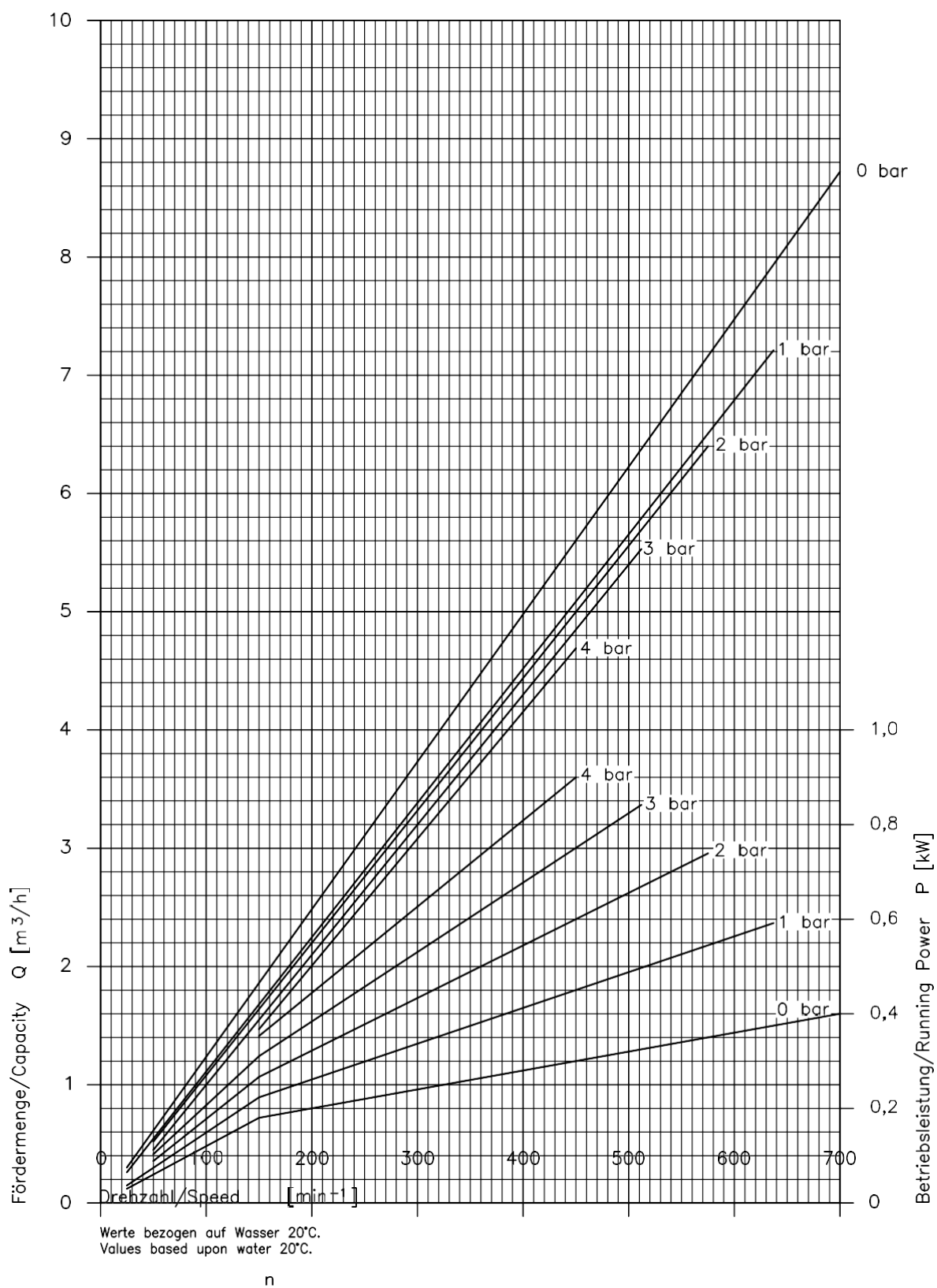


|                 |                                 |              |                       |                                     |                             |
|-----------------|---------------------------------|--------------|-----------------------|-------------------------------------|-----------------------------|
| 1               | Grundplatte / baseplate:        | 8200         |                       | Var.: 801-200/0020-C-002            | 12                          |
| 1               | Motor / motor: WEG W22-145TC    | 8101         |                       | mit Fremdlüfter / with separate fan | 30                          |
| 1               | Getriebe / gear: SEW RF27-AM145 | 8100         |                       |                                     | 10                          |
| 1               | Pumpe / pump: BN 5-6LS          | 8001         |                       |                                     | 37                          |
| Stück<br>Quant. | Bezeichnung<br>Denomination     | Pos.<br>Item | Werkstoff<br>Material | Bemerkung<br>Note                   | Gewicht / kg<br>Weight / kg |

SEEPEX.  
ALL THINGS FLOW

|                             |                  |                   |                               |                         |                                                                 |
|-----------------------------|------------------|-------------------|-------------------------------|-------------------------|-----------------------------------------------------------------|
| 20'9<br>Bearbeitet<br>Drawn | Name/Name<br>pni | Tag/Day<br>27.06. | Maßstab/Scale<br>1:10         | Gewicht/Weight<br>89 kg | Bezeichnung/Denomination<br>Maßzeichnung<br>dimensional drawing |
| Geprüft<br>Checked          | goe              | 27.06.            | EDV-Nr./EDP-No.<br>181814.dwg |                         | Zeichnungs-Nr./Drawing-no.<br>262-C14/0050-S-002A4              |

5-6LS



Werte bezogen auf Wasser 20°C.  
Values based upon water 20°C.

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CHA.5-6LS\_4, F 10.20d/e