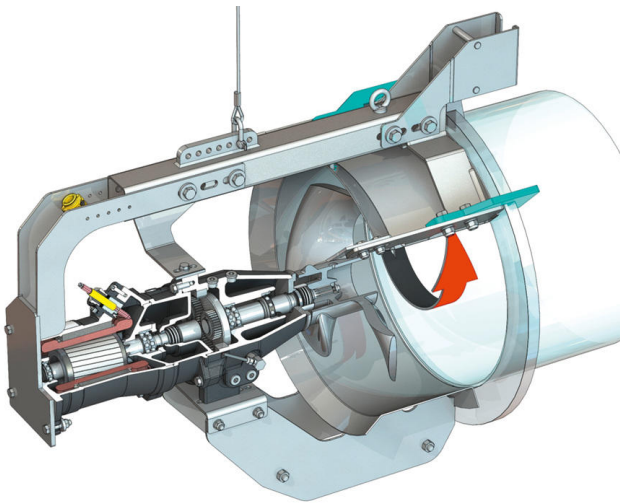


Pioneering for You

wilo

## Recirculation pump

### Flumen OPTI-RZP 60-4.40-4/24



#### Unit

|                           |          |
|---------------------------|----------|
| Max. weight* <i>m</i>     | 230 kg   |
| Explosion protection ATEX | optional |
| Explosion protection FM   | optional |
| Protection class motor    | IP68     |

#### Propeller

|   |  |
|---|--|
| Propeller model                                   | 3-blade propeller with self-cleaning hub; clogging- and entwining-free |
| Nominal propeller diameter <i>D<sub>nom</sub></i> | 600 mm   |
| Propeller speed <i>n</i>                          | 405 1/min  |
| Transmission ratio                                | 3.600  |

#### Filling quantities and types

|                                      |                 |
|--------------------------------------|-----------------|
| Filling prechamber                   | Gear oil CLP220 |
| Filling volume prechamber <i>V</i>   | 1.20 l          |
| Filling gear chamber                 | Gear oil CLP220 |
| Fill volume gear chamber <i>V</i>    | 0.50 l          |
| Filling sealing chamber              | White oil       |
| Fill volume sealing chamber <i>V</i> | 1.10 l          |

#### Motor/electronics

|  |   |
|--|---|
| Motor type   | T 17-4/24R (Ex)   |
| Motor design                                       | Submersible motor – surface-cooled                      |
| Mains connection                                   | 3~400 V, 50 Hz  |
| Rated current <i>I<sub>n</sub></i>                 | 21.00 A   |
| Starting current – direct <i>I<sub>A</sub></i>     | 123.00 A  |
| Starting current – star-delta <i>I<sub>A</sub></i> | 41.00 A   |
| Power consumption <i>P<sub>2max</sub></i>          | 12.20 kW  |
| Rated power <i>P<sub>2</sub></i>                   | 10 kW   |
| Speed original <i>n</i>                            | 1417 1/min  |
| Motor efficiency class                             | –   |
| Efficiency <i>η<sub>M</sub></i>                    | 82.0 %  |
| Power factor <i>cos φ<sub>100</sub></i>            | 0.85  |
| Min. fluid temperature <i>T<sub>min</sub></i>      | 3 °C  |
| Max. fluid temperature <i>T<sub>max</sub></i>      | 40 °C   |
| Max. immersion depth                               | 20 m  |
| Insulation class                                   | H   |
| Max. switching frequency <i>t</i>                  | 15 rph  |
| min. switching break <i>t</i>                      | 3 min   |
| Starting torque <i>M</i>                           | 150 Nm  |
| Moment of inertia                                  | 0.0134 kg/m <sup>2</sup>                                |
| Motor bearings                                     | 1 grooved ball bearing, 1 two-row inclined ball bearing |

#### Materials

|                               |                           |
|-------------------------------|---------------------------|
| Motor housing                 | 5.1301, EN-GJL-250        |
| Static gaskets                | FKM                       |
| Motor shaft                   | 1.4021, X20Cr13           |
| Seal, gear/sealing chamber    | SiC/SiC, Q1Q1VGG          |
| Gear housing                  | 5.1301, EN-GJL-250        |
| Planetary gear                | 1.7131, 16MnCr5           |
| Hollow gear                   | 1.5216, 17MnV6            |
| Sun gear                      | 1.7131, 16MnCr5           |
| Output shaft                  | 1.4462, X2CrNiMoN22-5-3   |
| Seal, gear chamber/prechamber | FKM                       |
| Sealing chamber               | 5.1301, EN-GJL-250        |
| Seal on the fluid side        | SiC/SiC, Q1Q1VGG          |
| Seal bushing                  | 1.4571, X6CrNiMoTi17-12-2 |
| Propeller                     | 1.4408, GX5CrNiMo19-11-2  |
| Flow housing                  | 1.4571, X6CrNiMoTi17-12-2 |

#### Gear

|                                     |   |
|-------------------------------------|---|
| Gear construction type              | m 2.0 as per DIN 780-1:1977-05 /P10 (ISO54:1996-12); sun and planetary gears case hardened and sanded, internal gear butt-jointed |
| Gear bearings                       | Three needle roller bearing (planetary), one two-row inclined ball bearing and one grooved ball bearing (output shaft)            |
| Service life <i>L<sub>h50</sub></i> | 100,000 operating hours, ISO 281:2007-02  |

\*maximum weight including accessories

Subject to change without prior notice.