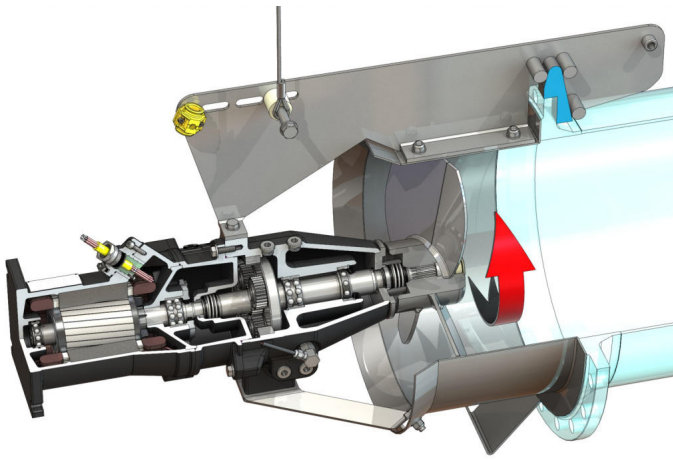


## Recirculation pump

### EMU RZP 50-3.48-4/8 S10



#### Unit

|                                |          |
|--------------------------------|----------|
| Max. weight* <i>m</i>          | 297.6 lb |
| Explosion protection ATEX ATEX | optional |
| Explosion protection FM 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> | 18.9 in (*)  |
| Propeller speed <i>n</i>                          | 480 RPM  |
| Transmission ratio                                | 3.600  |

#### Filling quantities and types

|                                      |                 |
|--------------------------------------|-----------------|
| Filling prechamber                   | Gear oil CLP220 |
| Filling volume prechamber <i>V</i>   | 0.3 US gal      |
| Filling gear chamber                 | Gear oil CLP220 |
| Fill volume gear chamber <i>V</i>    | 0.1 US gal      |
| Filling sealing chamber              | White oil       |
| Fill volume sealing chamber <i>V</i> | 0.3 US gal      |

#### Motor/electronics

|  |   |
|--|---|
| Motor type   | T 17-4/8R (Ex)  |
| Motor design                                       | Submersible motor – surface-cooled                      |
| Mains connection                                   | 3~460 V, 60 Hz  |
| Rated current <i>I<sub>N</sub></i>                 | 8.00 A  |
| Starting current - direct <i>I<sub>A</sub></i>     | 33.00 A   |
| Starting current - star-delta <i>I<sub>A</sub></i> | 11.00 A   |
| Power consumption <i>P<sub>1 max</sub></i>         | 7.2 hp  |
| Rated power <i>P<sub>2</sub></i>                   | 5.6 hp  |
| Speed original <i>n</i>                            | 1690 RPM  |
| Motor efficiency class                             | -   |
| Efficiency $\eta_M$                                | 79.0 %  |
| Power factor $\cos \varphi$                        | 0.84  |
| Min. fluid temperature <i>T<sub>min</sub></i>      | 37 °F   |
| Max. fluid temperature <i>T<sub>max</sub></i>      | 104 °F  |
| Max. immersion depth                               | 66 ft   |
| Insulation class                                   | H   |
| Max. switching frequency <i>t</i>                  | 15 rph  |
| min. switching break <i>t</i>                      | 3 min   |
| Starting torque <i>M</i>                           | 31.0 lbf ft   |
| Moment of inertia                                  | 0.17 lb ft <sup>2</sup>                                 |
| Motor bearings                                     | 1 grooved ball bearing, 1 two-row inclined ball bearing |

#### Materials

|                               |                        |
|-------------------------------|------------------------|
| Motor housing                 | ASTM A48, Class No. 35 |
| Static gaskets                | FKM Fluoro rubber      |
| Motor shaft                   | AISI 420               |
| Seal, gear/sealing chamber    | SiC/SiC, Q1Q1VGG       |
| Gear housing                  | ASTM A48, Class No. 35 |
| Planetary gear                | AISI 5115              |
| Hollow gear                   | Grade 60               |
| Sun gear                      | AISI 5115              |
| Output shaft                  | AISI 329               |
| Seal, gear chamber/prechamber | FKM Fluoro rubber      |
| Sealing chamber               | ASTM A48, Class No. 35 |
| Seal bushing                  | AISI 316Ti             |
| Propeller hub                 | AISI 316Ti             |
| Propeller                     | AISI 316Ti             |
| Flow housing                  | AISI 316Ti             |

#### 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>h10</sub></i> | 100,000 operating hours, ISO 281:2007-02  |

\*maximum weight including accessories