## Submersible mixer

EMU TR 226-3.43-4/8V


Unit

| Power consumption at duty point $P_{1.1}$ | 4.56 hp |
| :--- | :--- |
| Max. thrust $F$ | 741.9 lbf |
| Thrust to power ratio | $161 \mathrm{lbf} / \mathrm{hp}$ |
| Max. weight* $m$ | 440.9 lb |
| Explosion protection ATEXATEX | optional |
| Explosion protection FM FM | optional |
| Protection class motor | IP68 |

Propeller

| Propeller model | 2-blade propeller with self-cleaning hub; <br> clogging- and entwining-free |
| :--- | :--- |
| Nominal propeller diameter Dnom | 102.4 in (") |
| Propeller speed $n$ | 43 RPM |
| Transmission ratio | 40.740 |

Filling quantities and types

| Filling prechamber | Gear oil CLP220 |
| :--- | :--- |
| Filling volume prechamber $V$ | 0.3 US gal |
| Filling gear chamber | Gear oil CLP220 |
| Fill volume gear chamber $V$ | 0.2 US gal |
| Filling sealing chamber | White oil |
| Fill volume sealing chamber $V$ | 0.3 US gal |

Motor/electronics

| Motor type | $\mathrm{T} 17-4 / 8 \mathrm{~V}(\mathrm{Ex})$ |
| :--- | :--- |
| Motor design | Submersible motor - surface-cooled |
| Mains connection | $3 \sim 230 \mathrm{~V}, 60 \mathrm{~Hz}$ |
| Rated current $I_{N}$ | 13.40 A |
| Starting current - direct $I_{A}$ | 66.00 A |
| Power consumption $P_{1}$ max | 6.2 hp |
| Rated power $P_{2}$ | 4.4 hp |
| Speed original $n$ | 1680 RPM |
| Motor efficiency class | - |
| Efficiency $\eta_{M}$ | $72.0 \%$ |
| Power factor cos $\varphi$ | 0.86 |
| Min. fluid temperature $T_{\text {min }}$ | $37^{\circ} \mathrm{F}$ |
| Max. fluid temperature $T_{\text {max }}$ | $104^{\circ} \mathrm{F}$ |
| Max. immersion depth | 66 ft |
| Insulation class | H |
| Max. switching frequency $t$ | 15 rph |
| min. switching break $t$ | 3 min |
| Starting torque $M$ | 31.0 lbf ft |
| Moment of inertia | 0.17 lb ft ${ }^{2}$ |
| Motor bearings | 1 grooved ball bearing, 1 two-row inclined ball |


| Materials |  |
| :--- | :--- |
| Motor housing | ASTM A48, Class No. 35 |
| Static gaskets | FKM Fluoro rubber |
| Motor shaft | SiC/SiC, Q1Q1VGG |
| Seal, gear/sealing chamber | ASTM A48, Class No. 35 |
| Gear housing | AISI 5115 |
| Planetary gear | Grade 60 |
| Hollow gear | AISI 5115 |
| Sun gear | AISI 329 |
| Output shaft | FKM Fluoro rubber |
| Seal, gear chamber/prechamber | ASTM A48, Class No. 35 |
| Sealing chamber | AISI 316Ti |
| Seal bushing | $60-40-15$ |
| Propeller hub | VE-GFRP |
| Propeller |  |


| Gear |  |
| :--- | :--- |
| Gear construction type | m 2.0 as per DIN 780-1:1977-05/P10 (ISO54: <br> $1996-12) ; ~ s u n ~ a n d ~ p l a n e t a r y ~ g e a r s ~ c a s e ~ h a r-~$ <br> dened and sanded, internal gear butt-jointed |
| Gear bearings | Six needle roller bearing (planetary), two ta- <br> pered roller bearings (output shaft adjustable <br> type), gearing permanently fixed |
| Service life $L_{h 10}$ | 100,000 operating hours, ISO 281:2007-02 |

