



Series 4302 IVS Design Envelope

Models: 10CN2, 10CO2, 10CP2

10C_2

| | |
|-------------|---------------|
| FILE NO: | 100.592 |
| DATE: | Feb. 09, 2009 |
| SUPERSEDES: | New |
| DATE: | New |

SUBMITTAL

| | |
|-------------------|---------------------------------|
| JOB: _____ | REPRESENTATIVE: _____ |
| ENGINEER: _____ | ORDER NO: _____ DATE: _____ |
| CONTRACTOR: _____ | SUBMITTED BY: _____ DATE: _____ |
| | APPROVED BY: _____ DATE: _____ |

| PUMP DESIGN DATA | | | |
|------------------|-------------|-------------------|---------|
| NO. OF PUMPS: | | | |
| TAG: | | | |
| CAPACITY: | USgpm (L/s) | HEAD: | ft. (m) |
| LIQUID: | VISCOSITY: | | |
| TEMPERATURE: | °F (°C) | SPECIFIC GRAVITY: | |

| MOTOR DESIGN DATA | | |
|--------------------------|--------------------|------------------------|
| HP: | | |
| FRAME SIZE: | ENCLOSURE: | |
| VOLTS: | HERTZ: 60 Hz | Phase: 3 |
| EFFICIENCY: NEMA PREMIUM | | |
| FLANGE SIZE: | SUCTION6" (150 mm) | DISCHARGE: 6" (150 mm) |

| DESIGN ENVELOPE CAPABILITY DATA | | | | | |
|---------------------------------|---------------------|----------------|------|-------------|------|
| MODEL | FLOW USgpm (Lps) | HEAD ft (m) | EFF% | MOTOR HP | RPM |
| <input type="checkbox"/> 10CN2 | 479 (30.2) | 194 (59.3) | 71.0 | 50 | 2705 |
| <input type="checkbox"/> 10CO2 | 541 (34.1) | 247 (75.3) | 71.0 | 60 | 3050 |
| <input type="checkbox"/> 10CP2 | 629 (39.7) | 335 (102.2) | 71.0 | 75 | 3550 |

| DRIVE DATA | |
|--|---|
| SENSORLESS CONTROL: | <input type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED |
| *MINIMUM SYSTEM PRESSURE TO BE MAINTAINED _____ ft (m) | |
| FIELD BUS PROTOCOL: <input type="checkbox"/> ModBUS RTU (standard) <input type="checkbox"/> LonWorks <input type="checkbox"/> BACnet | |
| VFD BRIDGE: <input type="checkbox"/> Automatic Standby - Alternation Control | |
| ENCLOSURE: UL Type 12 | |
| EMI/RFI CONTROL: Integrated Filter designed to meet EN61800-3 | |
| HARMONIC SUPPRESSION: Integrated DC Link Reactors (<5% THD) | |
| COOLING: Fan-cooled through back channel | |
| AMBIENT TEMPERATURE: -10°C to +45°C up to 1000 meters above sea level (-14°F TO +113°F, 3280ft) | |
| ANALOG INPUTS: 2, current or voltage | |
| ANALOG OUTPUTS: 1, current | |
| DIGITAL INPUTS: 4 Programmable | |
| DIGITAL OUTPUTS: 2 Programmable (can be configured as additional digital inputs) | |
| PULSE INPUTS: 2 Programmable | |
| RELAY OUTPUTS: 2 Programmable | |
| COMMUNICATION PORT: RS 485 | |

| MATERIALS OF CONSTRUCTION | | |
|---------------------------|--|---|
| ANSI FLANGE RATING | <input type="checkbox"/> 125 lb. CAST IRON | <input type="checkbox"/> 250 lb. DUCTILE IRON |
| CONSTRUCTION | <input type="checkbox"/> BF | <input type="checkbox"/> DBF |
| CASING | CAST IRON | DUCTILE IRON |
| IMPELLER | BRONZE | BRONZE |
| FLUSH LINE | COPPER | COPPER |
| PUMP SHAFT | 416 STAINLESS STEEL | |
| COUPLING | HIGH TENSILE ALUMINUM | |
| GASKET | CONFINED NON-ASBESTOS | |

| MAXIMUM PUMP OPERATING CONDITIONS | |
|--|---|
| 125 lb. CAST IRON | 250 lb. DUCTILE IRON |
| 175 psig at 140°F (12 bars at 60°C) 100 psig at 300°F (7 bars at 149°C) | 375 psig at 100°F (26 bars at 38°C) 275 psig at 500°F (19 bars at 260°C) |
| SEE FILE NO. 43.50 FOR MAXIMUM SEAL OPERATING CONDITIONS | |

| MECHANICAL SEAL DESIGN DATA |
|---|
| See File No. 43.50 for standard mechanical |
| Armstrong Seal Reference Number |
| <input type="checkbox"/> C1 (a) Other _____ |

| SEAL DATA OPTIONS |
|-------------------|
| |

| OPTIONAL EQUIPMENT |
|--|
| |
| SEE FILE NO. 43.50 FOR ENVIRONMENTAL ACCESSORIES |

| CHASSIS SIZE: | | | | |
|---------------|----|------------------|-----------|------|
| MODEL | hp | VFD Chassis Size | | |
| | | 200V-240V | 380V-480V | 600V |
| 10CN2 | 50 | C2 | C1 | B2 |
| 10CO2 | 60 | C2 | C1 | C1 |
| 10CP2 | 75 | N/A | C1 | C1 |

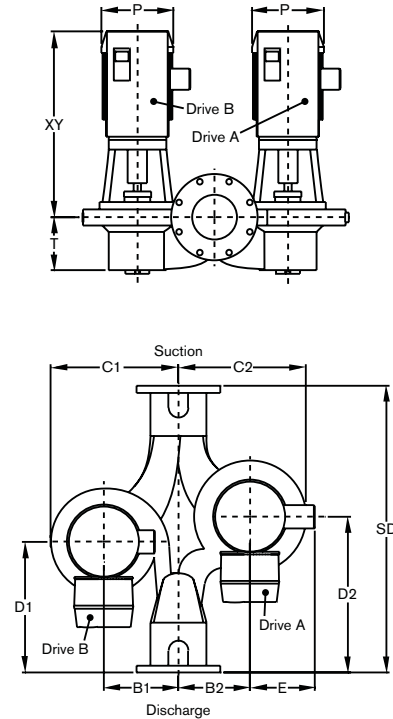
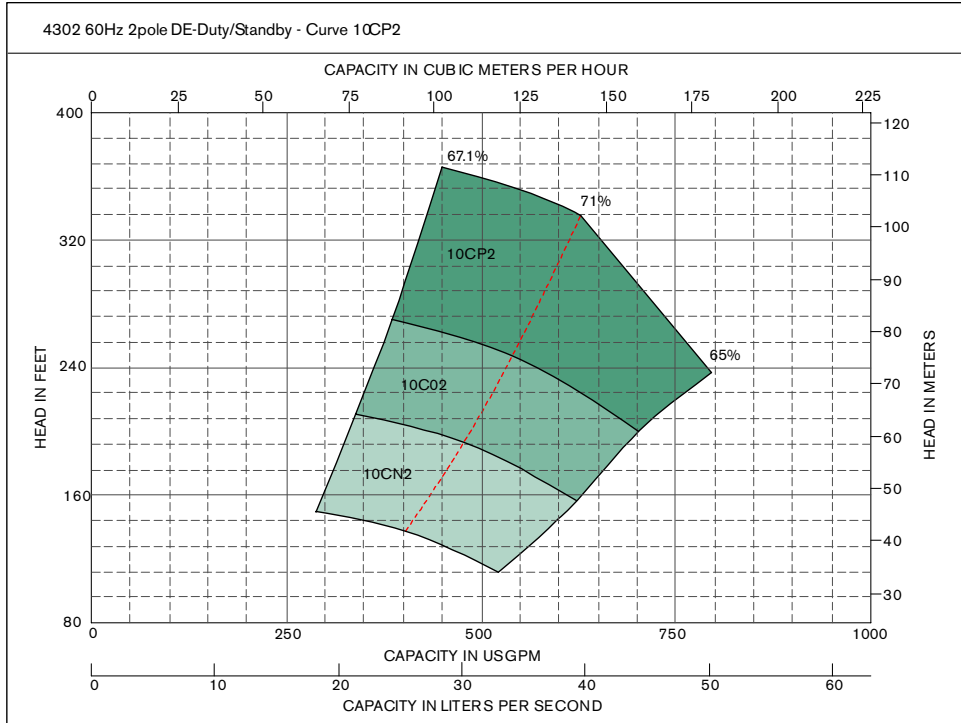
*If minimum maintained system pressure is not known: Default to 40% of design head



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DIMENSION DATA - inches (mm)

| Curve No. | Size | Power (HP) | Motor Frame | | C1 | C2 | D1 | D2 | B1 | B2 | T | SD | ODP motors with UL Type 12 drives | | | TEFC motors with UL Type 12 drives | | | Weight in lbs (Kg) | |
|-----------|--------|------------|-------------|-------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-----------------------------------|-------------|--------------|------------------------------------|-------------|--------------|--------------------|---------------|
| | | | ODP | TEFC | | | | | | | | | P | E | XY | P | E | XY | ODP | TEFC |
| 10CN2 | 6X6X10 | 50 | 324TC | 326TC | 17.63 (448) | 18.63 (473) | 15.50 (394) | 18.75 (476) | 10.00 (254) | 10.00 (254) | 7.66 (195) | 36.00 (914) | 14.13 (359) | 12.69 (322) | 38.48 (977) | 17.00 (432) | 13.91 (353) | 44.29 (1125) | 1600 (725.6) | 2050 (929.7) |
| 10CO2 | 6X6X10 | 60 | 326TC | 364TC | 17.63 (448) | 18.63 (473) | 15.50 (394) | 18.75 (476) | 10.00 (254) | 10.00 (254) | 7.66 (195) | 36.00 (914) | 14.13 (359) | 12.69 (322) | 38.48 (977) | 19.03 (483) | 16.44 (418) | 42.60 (1082) | 1660 (752.8) | 2310 (1047.6) |
| 10CP2 | 6X6X10 | 75 | 364TC | 365TC | 17.63 (448) | 18.63 (473) | 15.50 (394) | 18.75 (476) | 10.00 (254) | 10.00 (254) | 7.66 (195) | 36.00 (914) | 17.68 (449) | 16.19 (411) | 39.91 (1014) | 19.03 (483) | 16.44 (418) | 42.60 (1082) | 2030 (920.6) | 2390 (1083.9) |

- COUPLING GUARD (NOT SHOWN) IS SUPPLIED.
- TOLERANCE OF $\pm 0.125"$ (± 3 mm) SHOULD BE USED.
- FOR EXACT INSTALLATION DATA PLEASE WRITE FACTORY FOR CERTIFIED DIMENSIONS.
- PUMP EQUIPPED WITH CASING DRAIN PLUG AND 1/4" NPT SUCTION AND DISCHARGE GAUGE PORTS

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