

Submittal

Ref. #: AD-US-17-661135

Horizontal close coupled end suction pump

Model: Series 4280-3x1.5x8-3 hp Pump (Motor supplier: Armstrong choice)

Project name:

Location:

Date submitted:

Engineer:

Contractor:

Representative:

Phone number:

e-mail:

Submitted by: Anonymous User

Application design data

| | | | |
|-------------------------|----------|------------------------|------------------|
| Tag number: | | Pipe orientation: | Single |
| Service: | | Suction pressure: | 0 ft |
| Location: | | Fluid: | PropyleneGlycol: |
| Quantity: | 1 | Operating temperature: | 55 F |
| Duty flow per pump: | 80 USgpm | Viscosity: | 38.131535 SSU |
| Duty head: | 60 ft | Specific gravity: | 1.0261 |
| Total dissolved solids: | 0 ppm | | |

Materials of construction

| | | | |
|------------------|-----------------------------|----------------|-----------------------------|
| Construction: | BF | Impeller: | Bronze (B584-844) |
| Rating: | ANSI-125 | Shaft sleeve: | 316 SS |
| Connections: | Inlet: 3 in, Outlet: 1.5 in | Casing gasket: | Confined Non-Asbestos Fiber |
| Casing (volute): | Cast Iron (A48-30) | | |

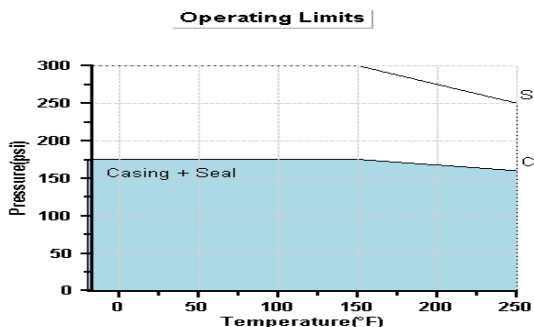
Mechanical seal data

| | | | |
|--------------------|----------------------|------------------|--------------------------|
| Seal type: | Inside Single Spring | Rotating face: | Resin Bonded Carbon |
| Manufacturer code: | C-ssc L EPSS 2A | Stationary seat: | Sintered Silicon Carbide |
| Springs: | Stainless Steel | Secondary seal: | EPDM |
| Rotating hardware: | Stainless Steel | | |

Motor electrical data

| | | | |
|------------------|----------------|----------------------|--------------------|
| Supplier: | Factory Choice | Insulation class: | Class F Insulation |
| Size: | 3 hp | Inverter motor type: | Not applicable |
| Frame number: | 182JM | Efficiency: | Energy Eff (12.11) |
| Enclosure: | ODP | Speed: | 1765 rpm |
| Motor Electrics: | 460/3/60 | | |

Operating limits (temperature - pressure)



Maximum pressure: 175 psi

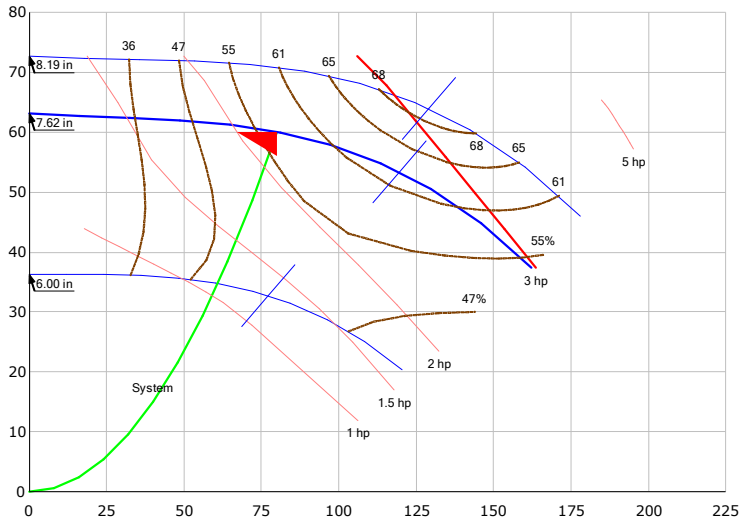
Maximum temperature: 250 F

Pump casings are hydrostatically tested to 150% of maximum pump working pressure rating.

Series 4280

3x1.5x8 @ 1765 rpm

Head (ft)



Admin Data

Tag Num
Service
Location

Motor Data

Motor Size 3 hp
Motor Speed 1800 rpm

Design Duty Point

Flow 80.00 usgpm
Head 60.00 ft
Impeller 7.616399 in

Performance Data

NPSHR 4.0093 ft
Eff. @ Design 56.47 %
BHP @ Design 2.20 hp
Mtr Capability @ Rated Spd 3.00 hp
%Mtr Safety 36.21 %
BEP @ Design Imp. 61.91 % @ 119.6 usgpm
Impeller Max BHP @ Flow 2.97 hp @ 162.2 usgpm
%max imp. range 73.88 %
Outlet Velocity 12.61 ft/s

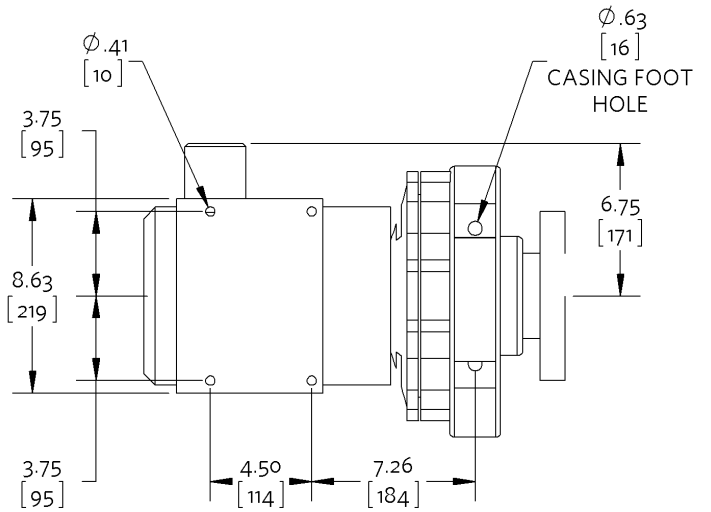
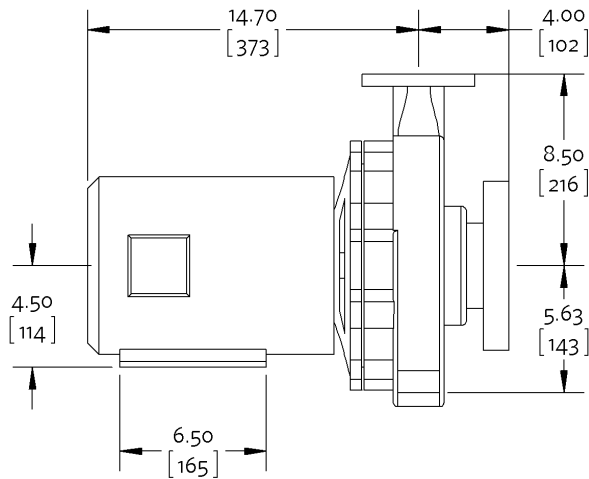
PropyleneGlycol:, spgr= 1.0261

Flow (usgpm)

Dimensional data (not for construction)

Side view

Top view



Weight: 184 lb

- Not to scale
- Units of measure : inches [millimeters]
- Tolerance of ± 0.125 inch (± 3 mm) should be used
- For certified dimensions, please contact your Armstrong representative
- Pump equipped with casing drain plug and $\frac{1}{4}$ inch NPT suction and discharge gauge ports

Connection details

| Connection | Size | Rating | OD | Bolt quantity* | BCD | Bolt size |
|------------|------|----------|-----|----------------|------|-----------|
| Inlet | 3 | ANSI-125 | 7.5 | 4 | 6 | 0.625 |
| Outlet | 1.5 | ANSI-125 | 5 | 4 | 3.88 | 0.5 |

*Equally spaced straddling centreline

Special instructions
