

# Lubrication Systems

## Dyna-Star® Electrically-Powered HP and HF 24 VDC

### Features and Benefits

- High-quality helical hardened steel gears are lubricated for life and sealed to keep contaminants out for longer lasting performance
- Ability to adjust motor controls like power input, motor speed, current control and signal input to perfectly match the pump to your application and environmental changes
- Mechanical auto-fill shutoff and remote-mounted fill port ensures clean and efficient refills
- Vent valve mounts directly to pump with no special brackets or hoses for a compact design and less parts to break or wear out
- IP69K rated
- Built-in pressure relief for safety and compact, efficient installations
- Cavitation-free fill and vent path provides simple and direct venting and filling to the foot of the pump
- Built-in lift ring is rated to 500 lbs (226 kg)
- Strong 12 gauge steel reservoir available in 60 lb (27 kg) or 90 lb (41 kg) size
- AC to DC Converter Box for fixed and in-plant applications

### Typical Applications

- Mining Operations
- Milling and Crushing
- Heavy-duty Construction
- Well Services
- Industrial (see next page for AC to DC Converter)

### Technical Specifications

| Maximum Lubricant Outlet Pressure |   |
|-----------------------------------|---|
| HF models                         | 3500 psi (24.1 MPa, 241 bar)  |
| HP models                         | 5000 psi (34.47 MPa, 344 bar)   |
| Electrical Requirements           |   |
| All models                        | 24 VDC  |
| Input Voltage Range               |   |
| 24 VDC                            | 18 to 32 VDC  |
| Flow Rate Range                   |   |
| HF models                         | 1.5 in <sup>3</sup> - 25 in <sup>3</sup> /minute (24.6 cm <sup>3</sup> - 410 cm <sup>3</sup> /minute) |
| HP models                         | 1.5 in <sup>3</sup> - 18 in <sup>3</sup> /minute (24.6 cm <sup>3</sup> - 295 cm <sup>3</sup> /minute) |
| Inlet/Outlet Sizes                |   |
| Tank/reservoir fill port          | 1/2 in NPT  |
| Overflow port                     | 1/2 in NPT  |
| Fluid outlet size                 | 3/8 in NPT  |
| Operating Temperature             |   |
| HF models                         | 14° to 149° F (-10° to 65° C)   |
| HP models                         | -40° to 149° F (-40° to 65° C)  |
| Audible Sound Pressure            |   |
| 71 dB(A)                          |   |

**Product Manuals:** Pumps 332514, Pump Systems 332540, Auto-Fill Shutoff 332518, Low Level 332515, Electric Vent Valve 332519, Drum Covers and Follower Plates 312738, Remote Fill Port 333393



77X102



77X001

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## Dyna-Star® Electrically-Powered HP and HF AC to DC Converter Box

### Features and Benefits

- Convenience of AC power and maintain the advantages of DC speed and amp control
- In-plant and fixed plant applications without expensive pneumatic and hydraulic power requirements
- Convenient hardware kit to make installation easy
- Two DC 20 amp outputs to power both pump and control
- On/off switch and detachable power cord to meet health and safety requirements

### Typical Applications

- Rock crushers
- Food processing
- Steel milling
- Fixed and in-plant applications

### Technical Specifications

|                                      |                               |
|--------------------------------------|-------------------------------|
| Input Voltage.....                   | 110-240 VAC                   |
| Input Frequency.....                 | 50/60 Hz                      |
| Output Voltage.....                  | 24 VDC                        |
| Output Current.....                  | 20 amps                       |
| IP Rating.....                       | IP24                          |
| Environmental Temperature Range..... | 14° to 122° F (-10° to 50° C) |
| Power Cord Length.....               | 9 ft (2.7 m)                  |
| Manual.....                          | 333391                        |



Installation Hardware Included



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## Dyna-Star® Electrically-Powered HP and HF 24 VDC

### Ordering Information

| Stand Alone Pumps           |  |
|-----------------------------|--|
| 77X000                      | 24 VDC HP stand-alone pump for 35 or 60 pound reservoir  |
| 77X001                      | 24 VDC HP stand-alone pump with tube-in-tube for 35 or 60 pound reservoir  |
| 77X002                      | 24 VDC HP stand-alone pump with tube-in-tube for 90 or 120 pound reservoir   |
| 77X003                      | 24 VDC HP stand-alone pump with tube-in-tube for 400 pound reservoir   |
| 77X014                      | 24 VDC HF stand-alone pump for 35 or 60 pound reservoir  |
| 77X015                      | 24 VDC HF stand-alone pump for 120 pound reservoir   |
| 77X016                      | 24 VDC HF stand-alone pump for 400 pound reservoir   |
| Custom Tank Injector Kits   |  |
| 77X011                      | 24 VDC HP pump and vent valve with tube-in-tube for 35 or 60 pound reservoir   |
| 77X012                      | 24 VDC HP pump and vent valve with tube-in-tube for 90 or 120 pound reservoir  |
| 77X013                      | 24 VDC HP pump and vent valve with tube-in-tube for 400 pound reservoir  |
| Injector Pump Modules       |  |
| 77X100                      | 24 VDC HP injector module with pump, tube-in-tube, vent valve, cover, tank, and dip stick for 60 pound reservoir                     |
| 77X101                      | 24 VDC HP injector module with pump, tube-in-tube, vent valve, cover, tank and dip stick for 90 pound reservoir                      |
| 77X102                      | 24 VDC HP injector module with pump, tube-in-tube, vent valve, cover, tank and auto-fill shutoff for 60 pound reservoir              |
| 77X103                      | 24 VDC HP injector module with pump, tube-in-tube, vent valve, cover, tank and auto-fill shutoff for 90 pound reservoir              |
| 77X104                      | 24 VDC HP injector module with pump, tube-in-tube, vent valve, follower plate, low level kit, cover, and tank for 60 pound reservoir |
| 77X105                      | 24 VDC HP injector module with pump, tube-in-tube, vent valve, follower plate, low level kit, cover, and tank for 90 pound reservoir |
| Standard Drum Injector Kits |  |
| 77X111                      | 24 VDC HP pump, vent valve, and cover with tube-in-tube for 120 pound reservoir  |
| 77X112                      | 24 VDC HP pump, vent valve, and cover with tube-in-tube for 400 pound reservoir  |
| Standard Drum Kits          |  |
| 77X121                      | 24 VDC HF pump and cover for 120 pound reservoir   |
| 77X122                      | 24 VDC HF pump and cover for 400 pound reservoir   |
| Accessories                 |  |
| 77X500                      | Follower plate for Graco 60 pound and 90 pound Graco tank for tube-in-tube   |
| 77X510                      | Follower plate for 35 pound bucket with and without tube-in-tube   |
| 247701                      | Follower plate for 120 pound drum without tube-in-tube   |
| 77X511                      | Follower plate for 120 pound drum with tube-in-tube  |
| 247702                      | Follower plate for 400 pound drum without tube-in-tube   |
| 77X512                      | Follower plate for 400 pound drum with for tube-in-tube  |
| 77X513                      | Cover, cylinder, tie-rods and base to convert 60 pound length to 35 pound bucket   |
| 77X514                      | Cover for 120 pound drum   |
| 77X515                      | Cover for 400 pound drum   |
| 77X521                      | Auto-fill shutoff (AFSO) – diaphragm, plate, valve, coupler, and pipes   |
| 77X522                      | Low level kit sight glass, electric low level switch, and cable (requires follower plate 77X500)                                     |
| 77X523                      | 400 micron inline filter, maximum 5,000 psi (344 bar) inlet pressure   |
| 77X524                      | 110-230 VAC to 24 VDC converter box  |
| 77X540                      | 24 VDC electric vent valve with pressure relief  |
| 77X541                      | Filter replacement kit – use with 77X523   |
| 77X542                      | Remote-fill port manifold with vent  |
| 77X543                      | HF manifold with 4,000 psi pressure relief   |
| 77X544                      | HP manifold with 5,000 psi pressure relief   |
| 77X545                      | Power cable for series progressive systems, M23 connector, 15 ft (4.6 m)   |
| 77X546                      | Power cable for injector systems, M23 connector, 15 ft (4.6 m)   |
| 115124                      | Pressure switch – pressure adjustment visible in window  |
| 24N180                      | Pressure switch, 1/4" BSPP inlet, DIN 43650 connector (1 NO/1 NC), 7,250 psi (500 bar)   |
| 24N181                      | Pressure switch, 1/4" NPT(f) inlet, DIN 43650 connector (1 NO/1 NC), 7,250 psi (500 bar)   |



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