Model SSH-C Close-Coupled Unit

TYPICAL ENGINEERING SPECIFICATIONS

BUILT IN THE USA
ENGINEERED, ASSEMBLED & TESTED

I. SCOPE

The contractor shall provide _____ (quantity) horizontal close-coupled, end suction centrifugal pump unit/s, Model SSH-C as manufactured by Goulds Water Technology or equal.

All pump units shall be of one manufacturer and provided complete including electric motor.

II. CONDITIONS OF SERVICE

A. Equipment item number	_____	_____	_____
B. Flange Inside Diameter			
Suction (inches) RF	_____	_____	_____
Discharge (inches) RF	_____	_____	_____
C. Design Service Condition			
Capacity (GPM)	_____	_____	_____
Total Head (feet)	_____	_____	_____
Efficiency (%)	_____	_____	_____
D. Minimum Total Head at Shutoff (feet)	_____	_____	_____
E. Maximum Impeller Diameter (inches)	_____	_____	_____
F. Operating Speed (RPM)	_____	_____	_____
G. Maximum Motor HP	_____	_____	_____

III. PUMP CONSTRUCTION

Each pump shall be designed for clockwise rotation viewed from driven end and include the following design features.

A. PUMP END COMPONENTS

A.1. Casing

The pump casing shall be concentric volute type, back pull-out design with ANSI class 150 flanged suction and discharge connections and shall be constructed of AISI TYPE 316L stainless steel material.

The pump discharge nozzle shall be center line oriented to allow simplified system design and installation.

The complete pump unit shall be supported by the motor.

Pump casing drain shall be provided with stainless steel plugs.

A.2. Wear Ring

A replaceable labyrinth type suction wear ring of AISI TYPE 316L stainless steel shall be provided and held securely by means of an interference fit in the casing suction.

A.3. Impeller

The pump impeller shall be of enclosed design, constructed of AISI TYPE 316L stainless steel material, and key driven. A stainless steel bolt and washer shall provide positive attachment of the impeller to the motor shaft.

A.4. Seal Housing

The seal housing shall be constructed of AISI TYPE 316L stainless steel material and shall hold the stationary seat of the mechanical shaft seal. The seal housing shall be clamped in place over a machined fit on the motor adapter by the pump casing to maintain component alignment and is "O-ring" sealed to insure against leakage.

A.5. Mechanical Seal

The pump shaft seal shall be a John Crane Type 21 mechanical seal, or equal, constructed of the following materials:

Seal Type	Stationary Face	Rotating Face	Elastomers	Metal Components
Standard	Silicon Carbide	Carbon	Viton	18-8 SS
Option				

A.6. Shaft Sleeve

The pump shaft sleeve shall be constructed of AISI TYPE 316L stainless steel and shall be of the hook type design. Locked in place by the impeller without necessity of other mechanical locking devices. The sleeve design must allow the motor shaft to remain dry during pump operation.

A.7. Motor Mounting Adapter

The rigid motor adapter of ASTM A48 CL20 cast iron construction shall support the pump liquid end and maintain pump to motor alignment. A bottom port shall be provided to allow condensation or seal leakage to drain and not be retained within the adapter.

IV. ELECTRIC MOTOR

The motor shall be non-overloading NEMA standard design with JM shaft extension suitable for close-coupled pump mounting. The motor rating shall be:

_____ HP, _____ RPM, _____phase, _____ Hz, _____volts,_____enclosure

1.15 Service Factor, High Efficiency.

V. TESTING

Production performance testing will be conducted by the manufacturer on each pump unit. Head at shut off and a minimum of 2 operating points will be measured at design speed to verify performance.

Xylem Inc.
2881 East Bayard Street Ext., Suite A, Seneca Falls, NY 13148
Phone: (800) 453-6777 Fax: (888) 322-5877
www.gouldswatertechnology.com

GOULDS WATER TECHNOLOGY
a xylem brand