



## APPLICATIONS

Heavy duty design features for a wide range of commercial and industrial applications such as:

- Sewage systems
- Flood and pollution control
- Industrial dewatering
- Waste water treatment plants
- Municipal and subdivision lift stations

## SPECIFICATIONS

### Pump:

- Solids handling capabilities: 3" maximum.
- Discharge size: 4" 125# ANSI flanged.
- Capacities: up to 1160 GPM.
- Total heads: up to 140 feet.
- Minimum flow: 100 GPM.
- Maximum flow: end of published curve.
- Mechanical seals: 316 stainless steel metal parts, BUNA-N elastomers, with carbon-ceramic/carbon ni-resist faces. (Optional silicon carbide rotary vs. tungsten carbide stationary, lower seal available.)
- Fasteners: 300 series stainless steel.

### Motor:

- Three phase only: 7½–30 HP; 230 or 460 V, 60 Hz, standard. Other voltages (200, 575, 380) 50 Hz available, consult factory for lead times.
- Shaft 400 series stainless steel.
- Oil filled on 7½, 10 and 15 HP, NEMA frame 210 TY.
- Air filled on 20 HP and larger, NEMA frame 250 TYS.
- Class F insulation.
- Two (2) on winding pilot duty thermal sensors – **WARNING!! - Overload protection must be provided in panel.**
- Power cord: 25 ± 1 foot standard. 50 ± 1 foot option. 4 conductor.
- Sensor cord: 25 ± 1 foot standard. 50 ± 1 foot option.

## FEATURES

- **Impeller:** Cast iron, two vane closed design for high efficiency and maximum wear life. Balanced for smooth operation. Optional bronze impeller available.
- **Bronze Wear Ring:** Replaceable to renew the running clearances and efficiencies to original conditions.
- **Casing:** Heavy duty cast iron, volute type for maximum efficiency. 4" ANSI class 125 cast iron flanged. Adaptable to slide rail system mounting.
- **Dual Mechanical Seals:** Function independently for maximum motor protection. The failure of one seal does not affect the operation of the second. The upper seal uses carbon

# Submersible Sewage Pumps

## SERIES 4NS

## 4" Non-Clog Sewage Pump

rotating and ni-resist stationary face materials. The lower seal uses carbon rotating and ceramic stationary face materials as standard. Both seals are oil lubricated by an oil filled seal chamber separated from the motor compartment. Optional silicon carbide/tungsten carbide outer seal recommended for any application containing fine solids or abrasives.

■ **Seal Sensor Probe:** A sensor probe signals the presence of moisture in the seal chamber warning that the pump should be inspected. The seal failure detector and the dual mechanical seals serve to protect the motor and avoid costly repairs.

■ **Designed for Continuous Operation:** Motor is rated continuous duty submerged condition in water that is 40°C or below. Maximum runtime with pump unsubmerged for 7½–15 HP is 1 hour and for 20–30 HP is 15 minutes. Motor is suitable for 10 starts per hour.

■ **Bearings:** Double row angular contact thrust bearing on 250TYS frame and single row deep groove thrust bearing on 210TY frame pumps.

■ **Impeller Mounting Screw:** 300 series stainless steel with anti-rotational locking patch.

■ **Castings:** All iron castings are ASTM A48 class 30 gray cast iron. Optional bronze impeller is ASTM B584 C87500 silicon bronze.

## AGENCY LISTINGS



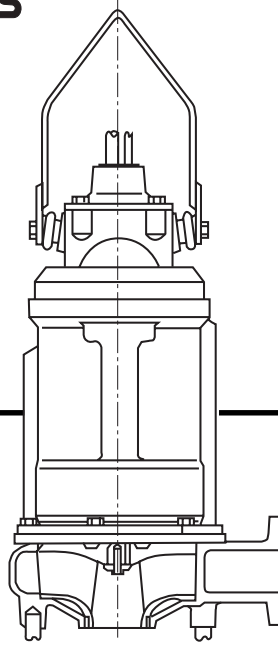
Tested to UL 778 and  
CSA 22.2 108 Standards  
By Canadian Standards Association  
File #LR38549

Goulds Pumps is ISO 9001 Registered.

# Submersible Sewage Pumps

## SERIES 4NS

### 4" Non-Clog Sewage Pump



#### DIMENSIONS

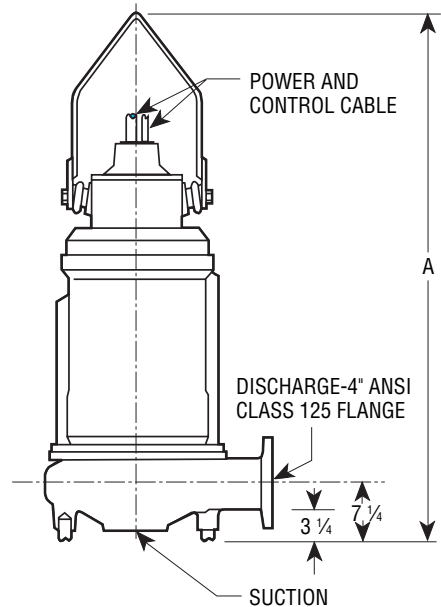
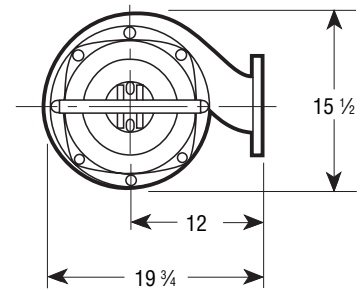
(All dimensions are in inches.  
Do not use for construction purposes.)

HP	RPM	A	HP	RPM	A
30	1750	53	10	1750	50
25	1750	53	7½	1750	50
20	1750	53	10	1150	50
15	1750	50	7½	1150	50

**SERIES 4NSZ** (All ratings at 3 phase, 60 Hz. Consult factory for 3 phase, 50 Hz applications.)

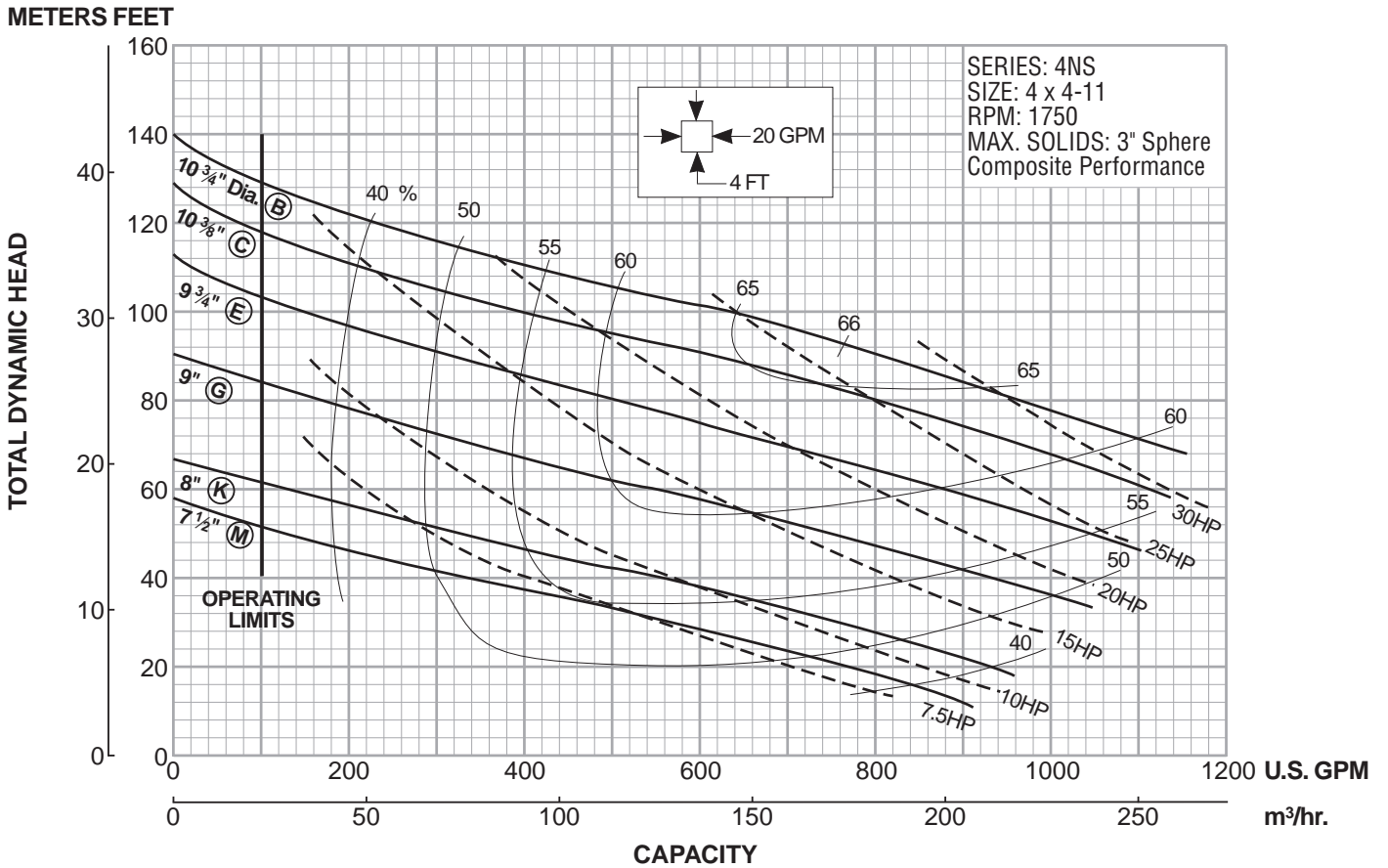
Model No.	HP	Volts	Impeller Diameter	Max. Amps	RPM	Solids	Wt. (lbs.)
4NS12K2MC	7.5	200*	7½"	31.6	1750	3"	450
4NS12K3MC		230		27.5			
4NS12K4MC		460		13.8			
4NS12K5MC		575*		11.0			
4NS12L2KC		10		200*			
4NS12L3KC	230		34.0				
4NS12L4KC	460		17.0				
4NS12L5KC	575*		13.6				
4NS12M2GC	15	200*	9"	61.5			
4NS12M3GC		230		53.5			
4NS12M4GC		460		26.8			
4NS12M5GC		575*		21.4			
4NS12N2EC	20	200*	9¾"	73.6			
4NS12N3EC		230		64.0			
4NS12N4EC		460		32.0			
4NS12N5EC		575*		25.6			
4NS12P2CC	25	200*	10⅝"	94.3			
4NS12P3CC		230		82.0			
4NS12P4CC		460		41.0			
4NS12P5CC		575*		32.8			
4NS12Q2BC	30	200*	10¾"	99.5			
4NS12Q3BC		230		86.0			
4NS12Q4BC		460		43.0			
4NS12Q5BC		575*		34.4			
4NS13K2DC	7.5	200*	10⅝"	32.2	1150	3"	450
4NS13K3DC		230		28.0			
4NS13K4DC		460		14.0			
4NS13K5DC		575*		11.2			
4NS13L2AC		10		200*			
4NS13L3AC	230		39.5				
4NS13L4AC	460		19.8				
4NS13L5AC	575*		15.8				

\* Consult factory for availability.



# Performance Curves

## Waste Water Pumps

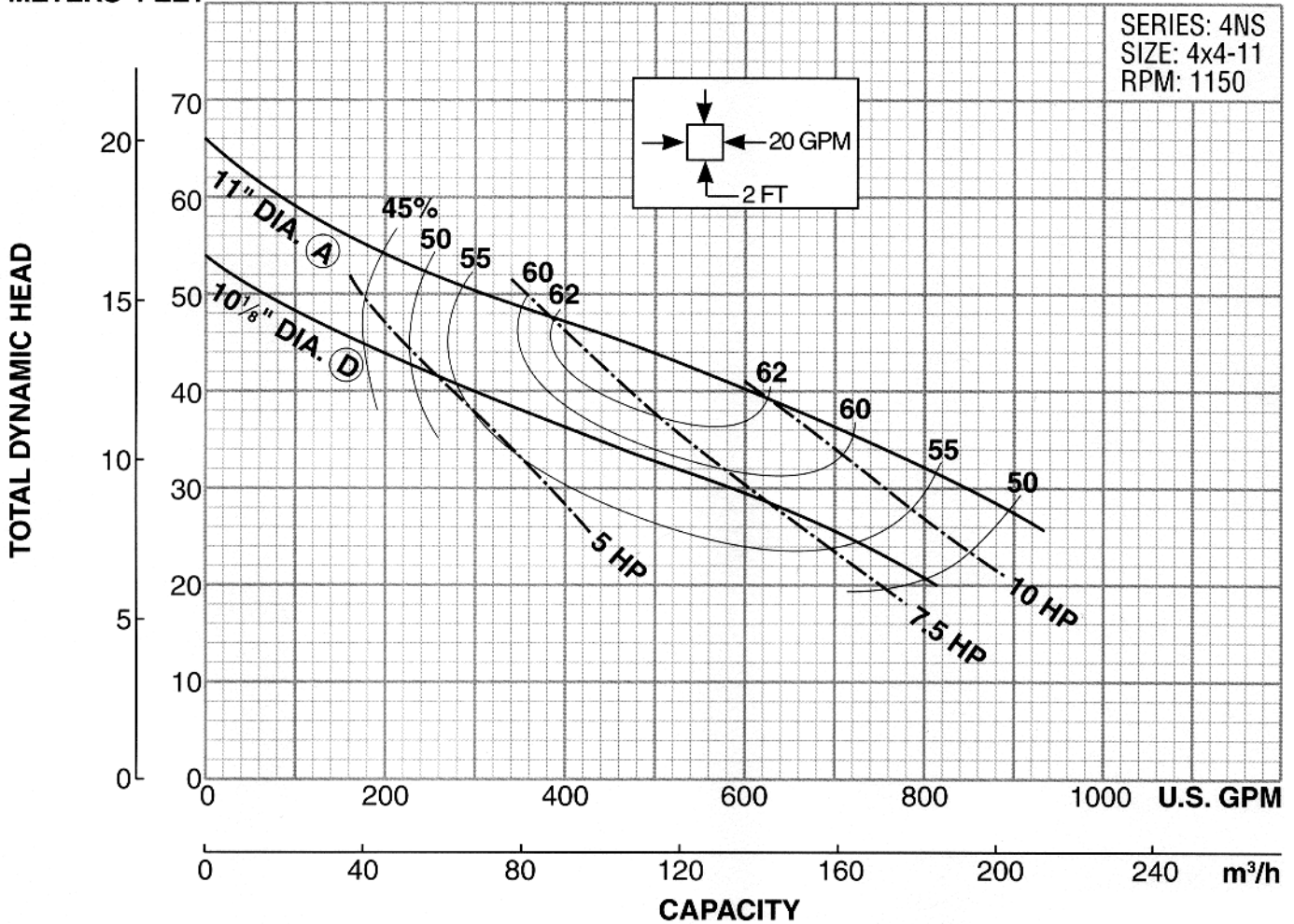


Customer _____ Pump Item _____	Condition of Service _____ GPM _____ TDH _____ EFF% _____	Imp. Dia. _____	Certified for: _____ By _____ Date _____	Approval <input type="checkbox"/> Record <input type="checkbox"/>
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Goulds Pumps



METERS FEET



Customer _____ Pump Item _____	Condition of Service _____ GPM _____	Imp. Dia. _____ TDH _____	EFF% _____	Certified for: _____ By _____ Date _____	Approval <input type="checkbox"/> Record <input type="checkbox"/>
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Goulds Pumps

