Copper Ridge lot 3

Project No. 5-1714S2

LAYOUT FOR 4 BEDROOM HOME

Mar-06

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	Designed LINE LENGTH
TBM		9.0			100.0		
INSTR. 1			109.0				
		Repair					
1	Blue			2.40	106.6	36	
2	Yellow			2.80	106.2	42	
3	Orange			3.40	105.6	56	
4	Red			3.80	105.2	65	
5	Pink			4.70	104.3	70	
		System				**269**	
6	Blue			5.50	103.5	70	70
7	Yelow			5.80	103.2	71	70
8	Orange			6.30	102.7	73	70
9	Red			7.00	102.0	74	70
						288	**280**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	DISTRIBUTION
SYSTEM	269	0.30	PPBPS	LPP
REPAIR	280	0.30	PPBPS	LPP

Notes:

** TBM of system located top of stake flagged in field (see map)
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings

Copper Ridge Lot 3

SYSTEM

DESIGN SPECIFICATIONS

Line #	Color	#Panels	#Holes Panel	Line Length	Hole Size	Line Head	Line Flow
6	Blue	16	1	70	5/32"	2.0	6.56
7	Yellow	16	1	70	5/32"	2.5	7.36
8	Orange	16	1	70	5/32"	3.00	8.00
9	Red	16	1	70	5/32"	3.50	8.64
	Total	**64**	**64.0**	**280**			**30.56**

LAYOUT FOR 4 BEDROOM HOME

REPAIR

DESIGN SPECIFICATIONS

Line #	Color	#Panels	#Holes Panel	Line Length	Hole Size	Line Head	Line Flow
1	Blue	8	1	36	5/32"	2.00	3.28
2	Yellow	10	1	42	5/32"	2.50	4.60
3	Orange	13	1	56	5/32"	3.00	6.50
4	Red	15	1	65	5/32"	3.50	8.10
5	Pink	16	1	70	5/32"	4.00	9.28
	Total	**62**	**84.0**	**269**			**31.76**

CALCULATIONS

Location Lot 3 Copper Ridge

Project Number 5-1714S2

Lot No: 3

No. of Bedrooms	4	
Design Flow	480.00	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\ day}$
EZ-Lay? (YES OR NO)	No	
Supply Line Length	106	ft.
Supply Line Volume	18.444	gal.
Required Feet of Line	267	ft.
Amount of Line from Layout	280	ft.
Gallons per Minute	30.56	$^{gal}/_{min}$
Required Septic Tank Capacity	1500	gal.
Minimum Standard Tank Size	1500	gal
Lateral Line Volume	182.84	gal.
Dosing Volume	230.40	gal.

Note: Dosing Volume based on 75% of the lateral line volume.

Tank Draw Down	11.0	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	7.54	minutes
Elevation Head	11	ft.
Pressure Head	2	ft.
Friction Factor	1.85	ft./100 ft. *(From the interpolater.)*
Friction Head	1.96	ft.
Total Dynamic Head (+15%)	17.21	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
26.24	1.40
30	1.78
30.56	1.85
35	2.37
38.53	2.84
40	3.03
	-2.89
45	3.77
	-3.52
50	4.58
	-4.62
60	6.42

ME SERIES

1/2 through 1-1/2 HP
Effluent Pumps



Double Seal



Single Seal

THE MYERS ME SERIES EFFLUENT PUMPS ARE DESIGNED SPECIFICALLY FOR TODAYS EFFLUENT PRESSURE DISTRIBUTION MOUNDS, TRENCHES AND HIGH FLOW DRAINAGE APPLICATIONS. The ME Series effluent pumps with their efficient two vane, enclosed impellers, provide the ideal performance for optimum dosing. ME Series pumps are constructed of only corrosion resistant materials like cast iron, stainless steel and thermoplastics to assure that they will perform for years to come in the harsh effluent environment and drainage applications. For more information, call your Myers distributor today or the Myers Ashland, Ohio sales office at 419/289-1144.

ADVANTAGES BY DESIGN

IDEAL FOR USE IN MOUND AND TRENCH PRESSURE DISTRIBUTION SYSTEMS

- High efficiency, two vane, enclosed impeller provides ideal performance for most efficient dosing
- Impeller passes full ¾ inch solids
- Enclosed impeller design eliminates possibility of jamming or corrosion between impeller and volute.

DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- High torque, permanent split capacitor (PSC), single phase motors. No starting switches or relays to wear out.
- Optional seal leak probe warns of seal leak condition. (Dual seal motors only.) Helps prevent costly motor damage.
- Motors have on winding current and temperature sensitive overload. (Single phase only.)

THE ME SERIES EFFLUENT PUMPS ARE DESIGNED FOR YEARS OF MAINTENANCE FREE OPERATION

- Volute seal ring is replaceable. Restores pump to original performance if wear should occur.
- Motor is held in place by 4 screws. Easily removed if service is ever needed.

PRODUCT CAPAILITIES

Capacities To	120 GPM	454 LPM
Heads To	95 ft.	28.9 m
Max. Spherical Solids	¾ in.	19 mm
Liquids Handling	domestic effluent & drain water	
Intermittent Liquid Temp.	up to 140° F	up to 60° C
Motor Electrical Data	1/2 HP 115 volts, 1 ph 1/2 to 1-1/2 HP 230 volts, 1 ph 208, 230, 460, 575 volts, 3 ph oil-filled, permanent split capacitor type, 1 ph, 3450 rpm, 60 Hz	
Motor Insulation	Class B (130° C)	
Third Party Approvals	UL, CSA	
Acceptable pH Range	6-9	
Specific Gravity	.9-1.1	
Viscosity	28-35 SSU	
Discharge, NPT	2 in.	50.8 mm
Min. Sump Dia. Simplex	24 in.	61 cm
Duplex	36 in.	91.4 cm

Construction Materials	
Motor Housing, Volute	cast iron, Class 30, ASTM A48-76
Enclosed Two Vane Impeller Standard	engineered thermoplastic
Optional	bronze
Impeller Wear Ring	304 SST
Volute Sealing Ring	Buna-N
Shaft	416 SST
Power Cord	
1/2 HP 1 Ph	20 ft. 16/3 SJOW/SJOW-A
3/4 - 1-1/2 HP 1 Ph	20 ft. 14/3 SJOW/SJOW-A
All 3 Ph	20 ft. 14/4 SOW/SOW-A
Shaft Seals Standard	single carbon & ceramic
Optional	tandem carbon & ceramic
Opt. Lower	tungsten carbide
Fasteners	300 Series SST

WHERE INNOVATION MEETS TRADITION

ISO 9001 Certified Company

Myers
PENTAIR PUMP GROUP

ME SERIES

1/2 through 1-1/2 HP
Effluent Pumps

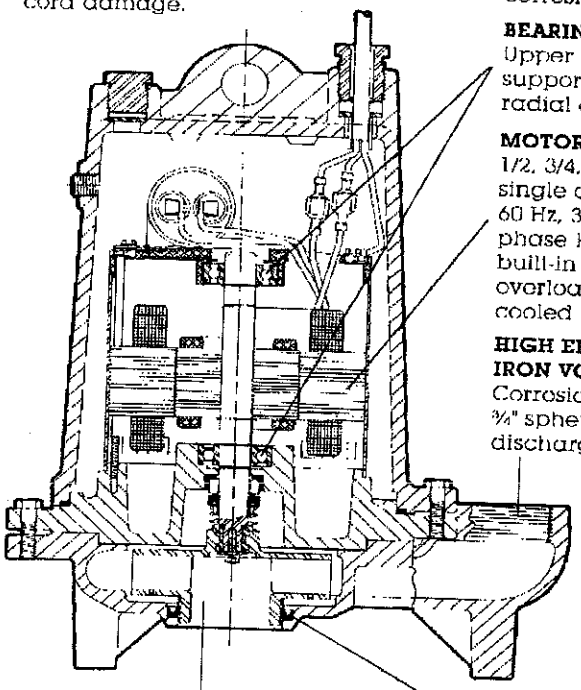
POWER CORD
Jacket sealed with compression fittings. Individual wires potted with epoxy to prevent wicking in case of cord damage.

MOTOR HOUSING
Cast iron for efficient heat transfer and corrosion resistance.

BEARINGS
Upper and lower ball support rotor. Take radial and thrust loads.

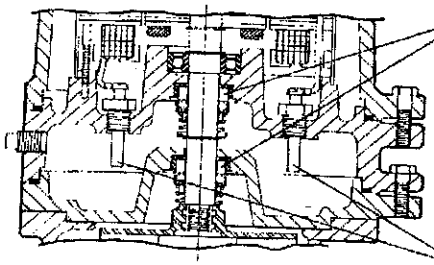
MOTOR
1/2, 3/4, 1 and 1-1/2 HP single or three phase. 60 Hz, 3450 RPM. Single phase PSC motors have built-in on winding overload protection, oil-cooled and lubricated.

HIGH EFFICIENCY CAST IRON VOLUTE
Corrosion resistant. Passes ¾" spherical solids. 2" NPT discharge.



ENCLOSED TWO VANE IMPELLER
high efficiency. Passes ⅜" spherical solids with stainless steel wear ring. Optional bronze construction available.

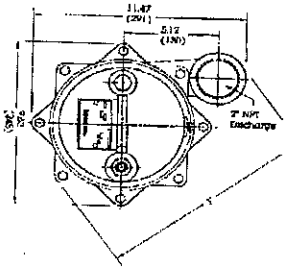
VOLUTE/IMPELLER SEAL RING
Maintains high efficiency and reduces recirculation. Replaceable.

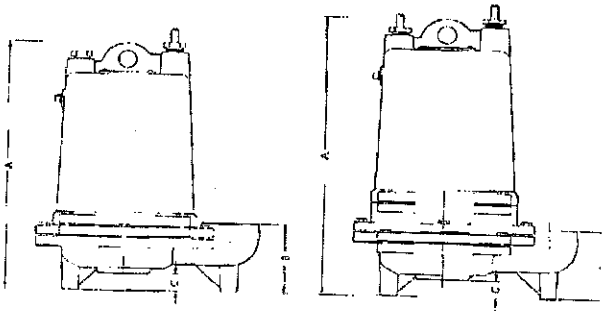


SHAFT SEAL(S)
Carbon and ceramic faces. Optional dual tandem seals. Extends motor life.

SEAL LEAK PROBES
Optional probes (dual seal only) detect water leakage in seal housing. Activates warning light.

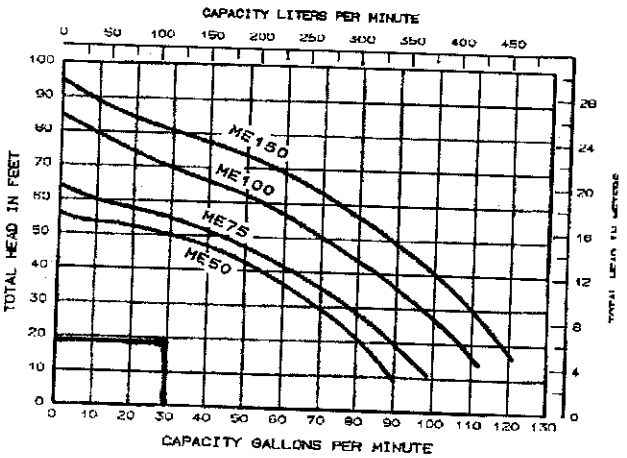
DIMENSIONS





Model Series	Inches (millimeters)			
	A	B	C	F
ME50S	16.8 (427)	4.09 (104)	1.03 (26)	12.13 (308)
ME50D	18.6 (472)	4.09 (104)	1.03 (26)	12.13 (308)
ME75S, ME100S, ME150S	16.8 (427)	4.0 (102)	1.06 (27)	12.5 (318)
ME75D, ME100D, ME150D	18.6 (472)	4.0 (102)	1.06 (27)	12.5 (318)

PERFORMANCE CURVE



K3320 9/98
Printed in U.S.A.

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PENTAIR PUMP GROUP

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