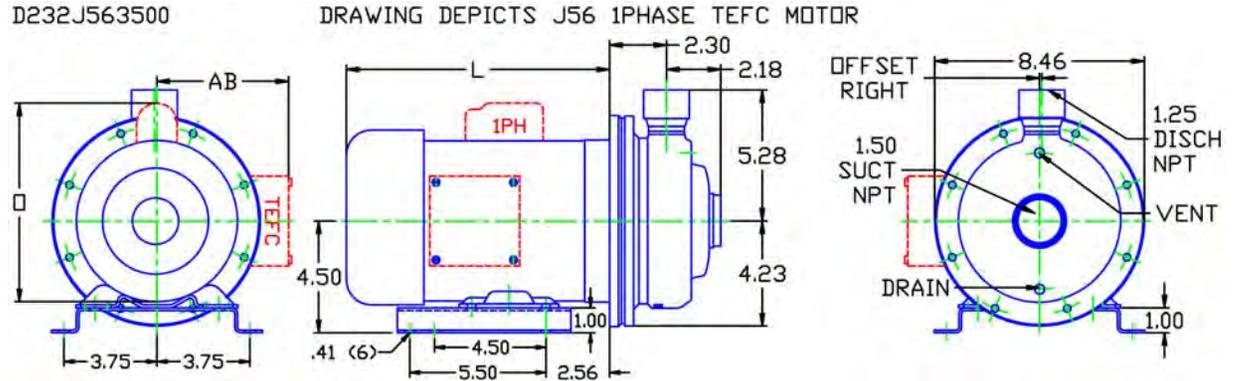


MOTOR DIMENSIONS

NEMA J56 FRAME 2900 RPM

HP	ODP			TEFC		
	3 PHASE			3 PHASE		
	L	O	AB	L	O	AB
1.5	9.44	6.46	3.32	11.05	7.33	5.87
2.0	10.22	6.46	3.32	11.84	7.33	5.87
3.0	11.37	6.50	3.25	12.75	7.08	5.43

Contact Factory for single phase.
Motors are the next larger horsepower and derated to 50HZ.



ALL DIMENSIONS IN INCHES.

DRAWING REPRESENTS APPROXIMATE PUMP DIMENSIONS. ATOCAD DRAWING TO SCALE AVAILABLE FROM FACTORY.

**PUMP TO BE
INSTALLED ONLY IN
THE HORIZONTAL
POSITION AS
SHOWN.**



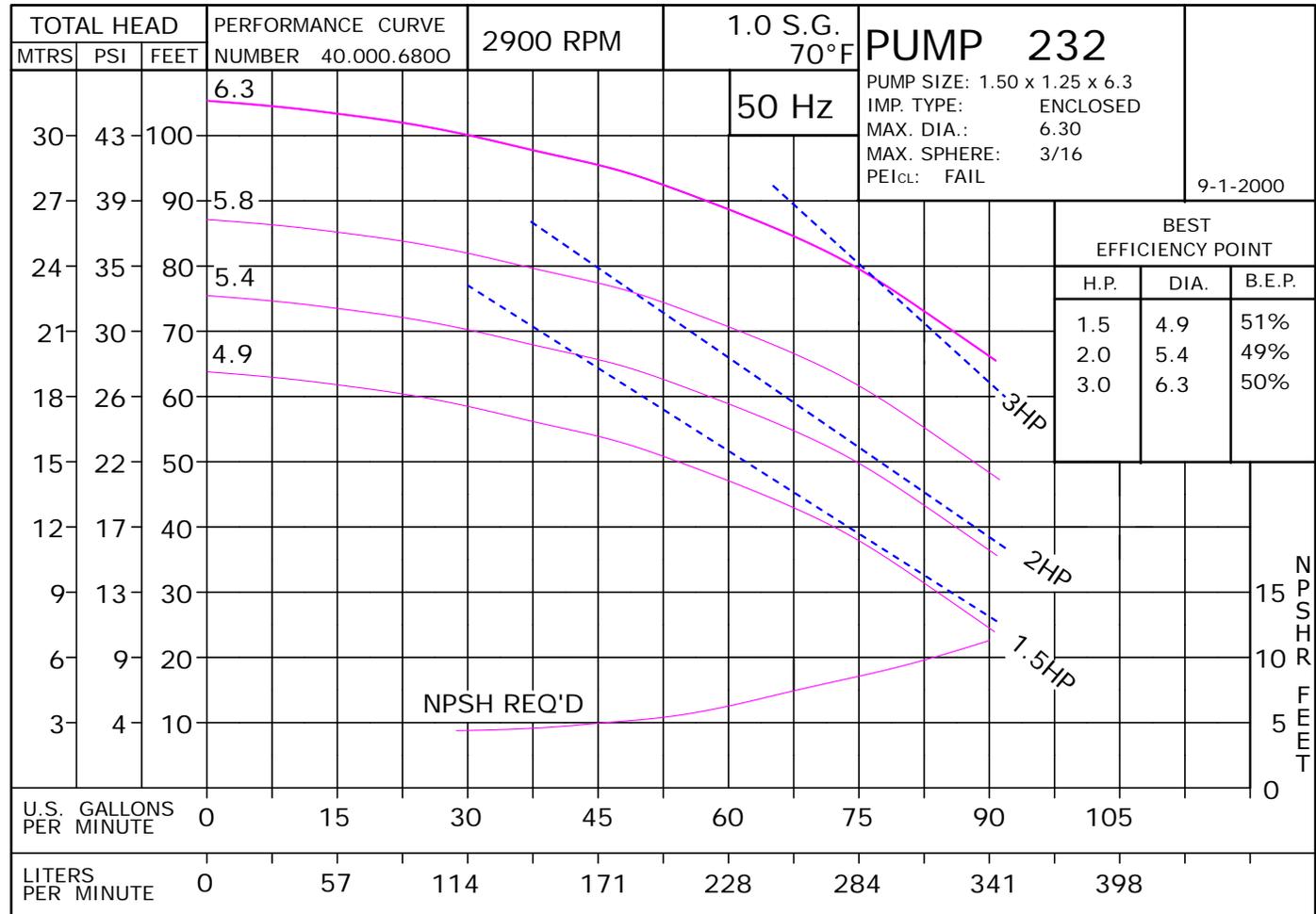
2325DP

D232J563500
2322900

232

J56

2322900J56
81.001.803 M19



BEST EFFICIENCY POINT		
H.P.	DIA.	B.E.P.
1.5	4.9	51%
2.0	5.4	49%
3.0	6.3	50%

50 Hertz Pump & Motor Data

A 3-phase 50 Hertz Motorpump™ can be obtained in several ways. The most common options are listed below:

1. Most 60 Hz pumps available from Scot Pump can be operated on a 3-phase 50 Hz 190/380V power. However, when operated on 50 Hz power, the speed is reduced by approximately 20%, and a significant reduction in performance is realized. The charts below indicate these reductions in performance.
2. Pumps will produce the performance indicated in the performance curves when operated on 50 Hz power. The motors for these selections can be obtained through *derated 60 Hz motors* and *wound 50 Hz motors*.

Contact factory for 1 Phase applications.

Derated 60 Hz Motors

The most common practice and readily available method of obtaining a 50 Hz motor is by using the next larger 60 Hz motor and derating it to the desired horsepower on 50 Hz. Many High Efficient motors can be operated on 50 HZ power without a reduction in horsepower. The motor manufacturers 60 HZ nameplate will remain intact. An "Alternate Motor Rating" nameplate indicating the reduced horsepower, RPM, volts, amps, and service factor will be affixed to the pump. In utilizing this practice, service factors may be derated to 1.0. The standard voltage is 190/380V and has a ±10% voltage variation. In addition, 200/400V and 208/416V may be available. Please contact the factory for approval of the rating for your specific application.

Wound 50 Hz Motors

Specially wound 50 Hz 220/380V six-lead Delta Wye motors are available. Most ratings offer a ±15% voltage variation. These motors are not normally a stock item and require an extended lead time.

The impeller and horsepower combination sized (taking the reduction in speed into consideration) may not be suitable for operation on 60 Hz power. The increase in speed, performance and load may overload the system and the electric motors. **Pumps sized for 50 Hz operation SHOULD NOT be tested on 60 Hz.**

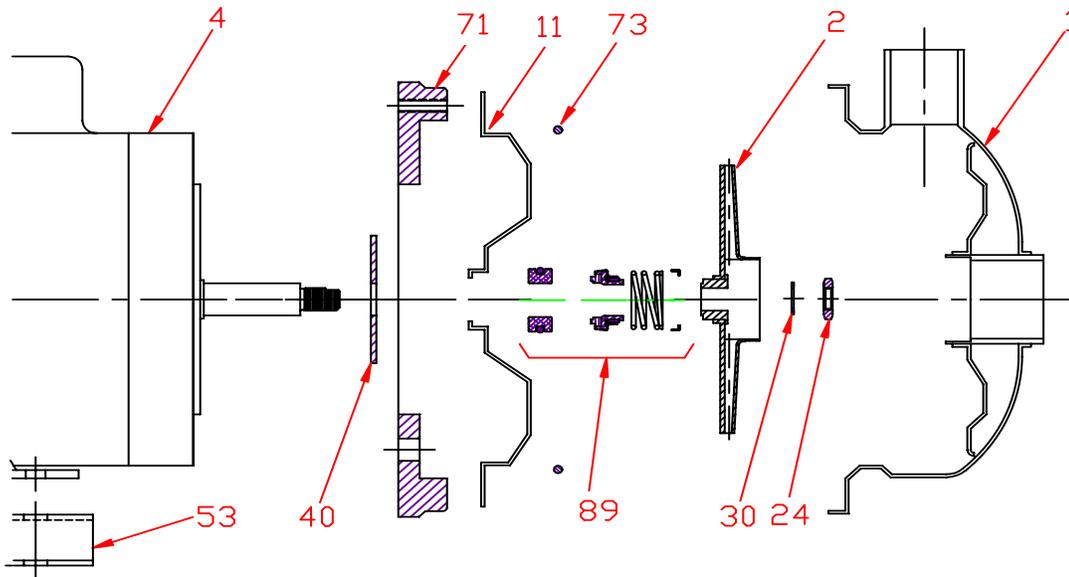
60 Hz Pump on 50 Hz Power		
No Impeller Change		
50 Hz	60 Hz	Factor
GPM =	GPM x	0.829
Head =	Head x	0.687
BHP =	HP x	0.569

To Size 60 Hz Pump Using 50 Hz Data,		
Obtain 60 Hz Data As Follows:		
60 Hz	50 Hz	Factor
GPM =	GPM x	1.2
Head =	Head x	1.45
BHP =	HP =	$\frac{\text{GPM} \times \text{Head} \times \text{SG of}}{3960 \times \text{Eff}}$

Change of Speed (RPM)		
	How Varies:	Examples
GPM	Directly	Double RPM = (2)(RPM) = (2)(GPM) Triple RPM = (3)(RPM) = (3)(GPM)
Head	Square	Double RPM = (2)(RPM) = (2) ² = (2)(2) = (4)(Head) Triple RPM = (3)(RPM) = (3) ² = (3)(3) = (9)(Head)
BHP	Cube	Double RPM = (2)(RPM) = (2) ³ = (2)(2)(2) = (8)(BHP) Triple RPM = (3)(RPM) = (3) ³ = (3)(3)(3) = (27)(BHP)

Change of Impeller Diameter (Dia.)		
	How Varies:	Examples
GPM	Directly	Double Dia. = (2)(Dia.) = (2)(GPM) Triple Dia. = (3)(Dia.) = (3)(RPM)
Head	Square	Double Dia. = (2)(Dia.) = (2) ² = (2)(2) = (4)(Head) Triple Dia. = (3)(Dia.) = (3) ² = (3)(3) = (9)(Head)
BHP	Cube	Double Dia. = (2)(Dia.) = (2) ³ = (2)(2)(2) = (8)(BHP) Triple Dia. = (3)(Dia.) = (3) ³ = (3)(3)(3) = (27)(BHP)

Pump 232 • 304SS • J56 Frame • 2900 RPM

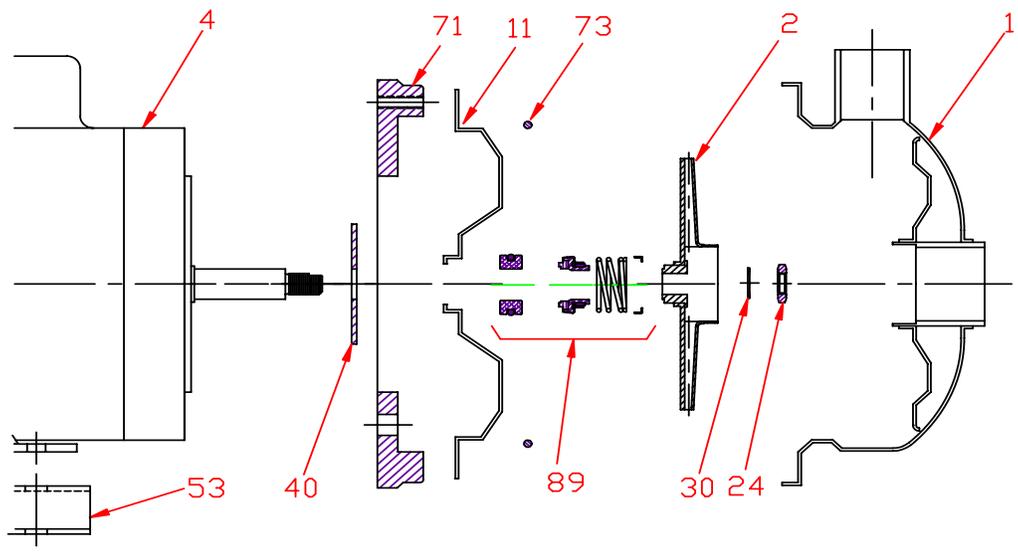


KEY NO.	PART NAME	PUMP 232	
1	CASE, 304SS, 1.5 x 1.25, NPT	137.001.314	
2	IMPELLER, STAINLESS, ENCLOSED, 7/16" THREADED:		
	4.90" DIA	137.001.318	
	5.40" DIA	137.001.317	
	5.80" DIA	137.001.316	
	6.30" DIA	137.001.315	
4	MOTOR:		
	J56/180, 4.5" RIGID BASE J56/56, 3.5" RIGID BASE	See 60HZ Chart See 60HZ Chart	
11	COVER, STAINLESS	137.001.059	
24*	NUT, 304SS	137.001.349	
30*	D WASHER, 316SS	104.000.168	
40*	FLINGER, NEOPRENE	104.000.171	
53	BASE, STEEL	137.001.130	
71	DISC, IRON	137.001.046	
73*	GASKET, CASE, BUNA	137.001.121	
89*	5/8" SEALS WITH RETAINER:		
	TYPE 21, BN-CARB/SIL	137.002.401	
	TYPE 21, VN-CARB/SIL	137.002.390	
	TYPE 21, VN-SIL/SIL	137.002.406	
	TYPE 21, EPDM-CARB/SIL	137.002.258	
--	REPAIR KITS:	3 PHASE:	† 1 PHASE:
	BN-CARB/CM SEAL	118.000.581	118.000.581.1
	VN-CARB/SIL SEAL	118.000.581E	118.000.581E.1
	VN-SIL/SIL SEAL	118.000.581F	118.000.581F.1
	EPDM-CARB/SIL SEAL	118.000.581C	118.000.581C.1

* DENOTES COMPONENTS INCLUDED IN REPAIR KIT.

† USE 3 PHASE KIT ON 2-3 HP 1 PHASE MOTORS.

Pump 232 • 304SS • J56 Frame • 2900 RPM



CONSTRUCTION OPTIONS		
KEY	PART NAME	STANDARD FITTED
1	Case	304SS
2	Impeller	304SS
11	Cover	304SS
24	Nut	304SS
30	D-Washer	316SS
53	Base	Steel
40	Flinger	Neoprene
71	Motor Disc	Cast Iron
73	Gasket, Case	Buna
89	Seal Assembly	BN-CARB/SIL
89A	Seal Retainer	304SS

E231J56-B

J15

C2322900J56