

## SERIES 4600 | HORIZONTAL SPLIT CASE PUMP

### 12 × 8 × 18 | SUBMITTAL

File No: 46.572  
 Date: NOVEMBER 28, 2014  
 Supersedes: 46.572  
 Date: OCTOBER 15, 2013

Job: \_\_\_\_\_ Representative: \_\_\_\_\_  
 \_\_\_\_\_ Ordered by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

#### PUMP DESIGN DATA

No. of pumps: \_\_\_\_\_ Tag: \_\_\_\_\_  
 Capacity: \_\_\_\_\_ USgpm (L/s) Head: \_\_\_\_\_ ft (m)  
 Liquid: \_\_\_\_\_ Viscosity: \_\_\_\_\_  
 Temperature: \_\_\_\_\_ °F (°C) Specific gravity: \_\_\_\_\_  
 Suction: 12" (300 mm) Discharge: 8" (200 mm)

#### MATERIALS OF CONSTRUCTION

ANSI FLANGE RATING	ANSI 125	ANSI 250
Construction	<input type="checkbox"/> BF	<input type="checkbox"/> BF 250

- Casing:** Cast iron
- Impeller:** Bronze
- Casing wear ring:** Bronze
- Gasket:** Confined non-asbestos fiber
- Bearing frame:** Cast iron
- Coupler guard:** Steel OSHA
- Anti-friction bearings:** Permanently lubricated
- Shaft:** Carbon steel
- Shaft sleeve:** Bronze
- Coupler:** Constant speed: Woods sure-flex or equal  
 Variable speed: Woods dura-flex or equal
- Baseplate:** Fabricated steel

#### MECHANICAL SEAL DATA

ANSI FLANGE RATING	ANSI 125	ANSI 250
Seal type	A21	ARO
Stationary seat	Silicon carbide	Carbon
Rotating face	Carbon	Durchrome
Secondary seal	EPDM	Viton

- Spring:** Stainless steel
- Rotating hardware:** Stainless steel
- Gland plate:** Bronze

#### MOTOR DESIGN DATA

HP: \_\_\_\_\_ RPM: \_\_\_\_\_  
 Frame size: \_\_\_\_\_ Enclosure: \_\_\_\_\_  
 Volts: \_\_\_\_\_ Hertz: 60 Hz Phase: 3  
 Efficiency:  NEMA premium 12.12  Other \_\_\_\_\_ %

#### MAXIMUM PUMP OPERATING CONDITIONS

- ANSI 125**  
 175 psig at 150°F (12 bars at 65°C)  
 140 psig at 225°F (10 bars at 107°C)

- ANSI 250**  
 300 psig at 150°F (20 bars at 65°C)  
 250 psig at 250°F (17 bars at 121°C)

- Tolerance of ±0.125" (±3 mm) should be used
- For exact installation, data please write factory for certified dimensions
- See performance curves on page 3

#### OPTIONAL EQUIPMENT

#### SUCTION SIDE REQUIREMENT

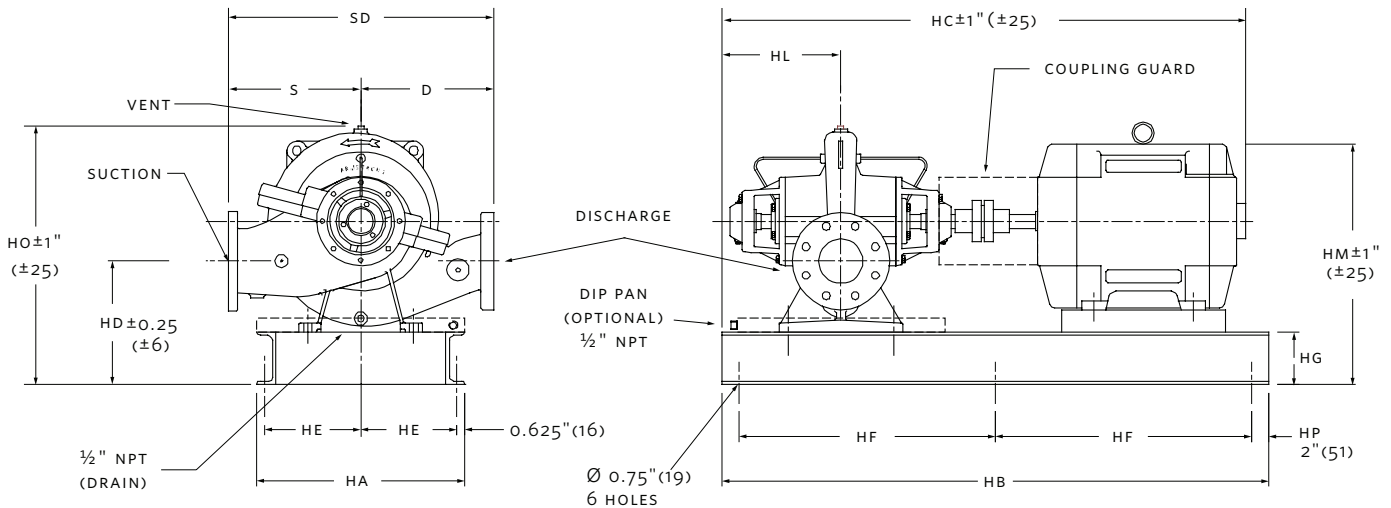
- Important (please select)**  
 Viewed from motor end  
 Right hand (illustrated)  Left hand

MOTOR	HORSEPOWER @ RPM		DIMENSIONS INCHES (mm)											WEIGHT*		
	1800		1200	HA	HB	HC		HD	HE	HF	HG	HM		HO	lbs (kgs)	
	ODP	TEFC				ODP	TEFC					ODP	TEFC		ODP	TEFC
404TC	—	—	60	32.00 (813)	100.00 (2540)	76.41 (1941)	80.38 (2042)	17.50 (445)	14.50 (368)	48.00 (1219)	6.00 (152)	39.25 (997)	39.75 (1010)	45.00 (1143)	4049 (1836.6)	4167 (1890.1)
405TC	—	—	75	32.00 (813)	100.00 (2540)	76.41 (1941)	80.38 (2042)	17.50 (445)	14.50 (368)	48.00 (1219)	6.00 (152)	39.25 (997)	39.75 (1010)	45.00 (1143)	4075 (1848.4)	4196 (1903.3)
444TC	—	—	100	32.00 (813)	100.00 (2540)	81.97 (2082)	87.74 (2228)	17.50 (445)	14.50 (368)	48.00 (1219)	6.00 (152)	40.75 (1035)	40.75 (1035)	45.00 (1143)	4477 (2030.7)	21864 (9917.3)
445TC	200, 250	—	125	32.00 (813)	100.00 (2540)	81.97 (2082)	87.74 (2228)	17.50 (445)	14.50 (368)	48.00 (1219)	6.00 (152)	40.75 (1035)	40.75 (1035)	45.00 (1143)	4740 (2150.0)	—
447TC	250	200	—	32.00 (813)	100.00 (2540)	90.60 (2301)	97.48 (2476)	17.50 (445)	14.50 (368)	48.00 (1219)	6.00 (152)	40.75 (1035)	40.75 (1035)	45.00 (1143)	—	5013 (2273.9)
449TC	300, 350, 400	250, 300, 350, 400	—	32.00 (813)	100.00 (2540)	90.60 (2301)	97.48 (2476)	17.50 (445)	14.50 (368)	48.00 (1219)	6.00 (152)	40.75 (1035)	40.75 (1035)	45.00 (1143)	—	—

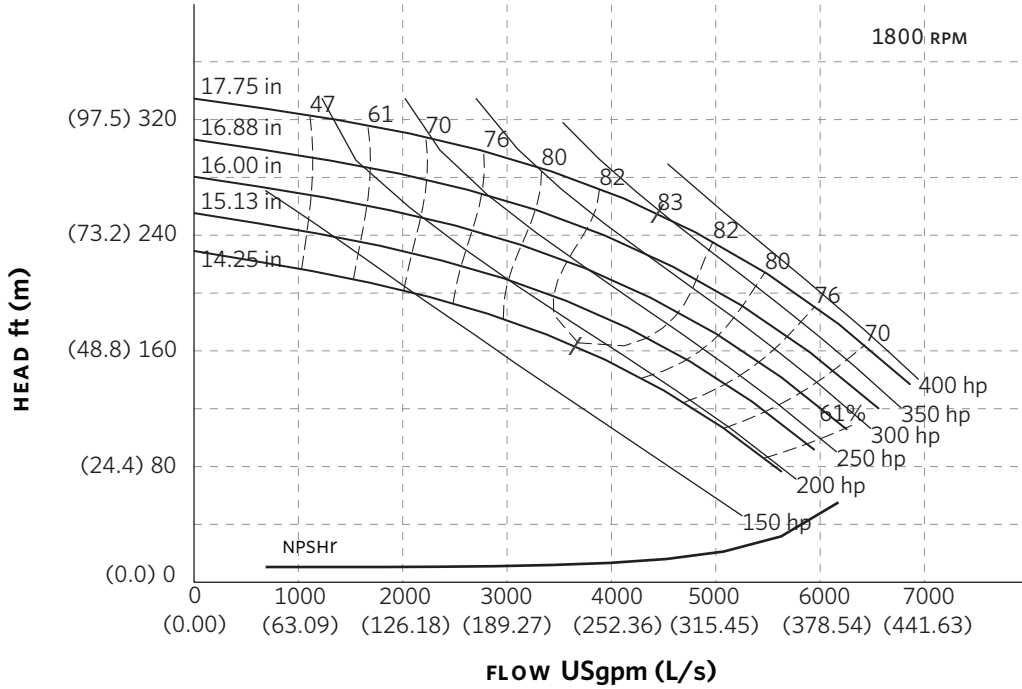
**PUMP DIMENSIONS**  
inches (mm)

HL	S	D
19.35 (491)	21.00 (533)	18.00 (457)

\*Assembly weight combines pump and motor.



## SERIES 4600 PERFORMANCE CURVES



**Curve number**  
PT594-0-0-1800

**Series**  
4600

**Size**  
12 x 8 x 18

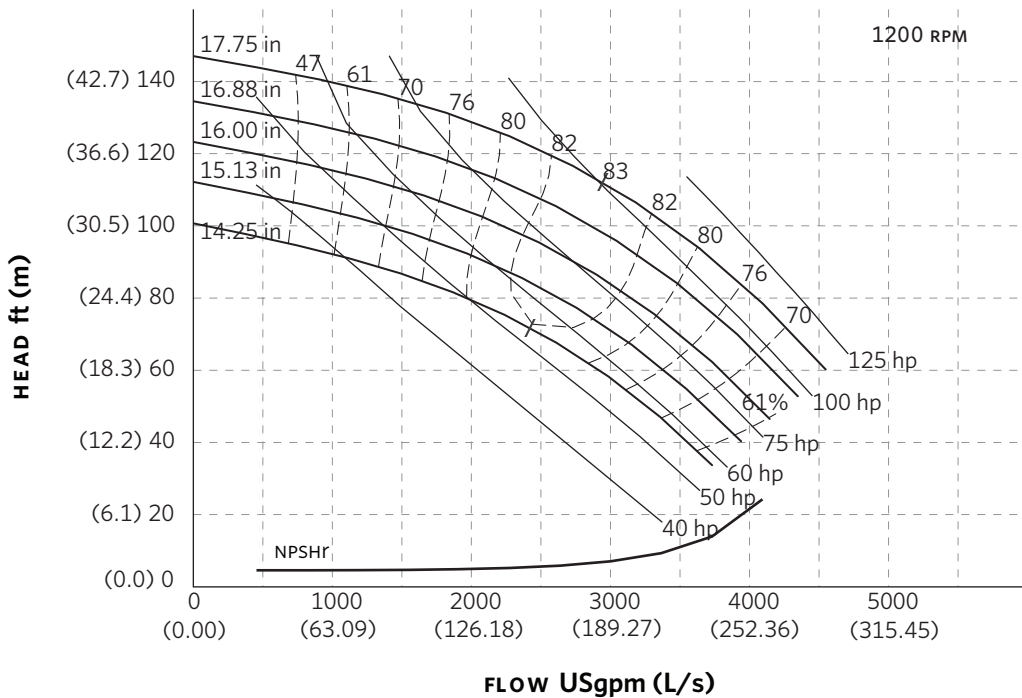
**RPM**  
1800

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4600 all ratings

Performance  
guaranteed only  
at operating point  
indicated

Curve shown for  
clear, cold water  
- SP. GR. 1.000



**Curve number**  
PT594-0-0-1200

**Series**  
4600

**Size**  
12 x 8 x 18

**RPM**  
1200

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4600 all ratings

Performance  
guaranteed only  
at operating point  
indicated

Curve shown for  
clear, cold water  
- SP. GR. 1.000

Performance curves are for reference only.  
Confirm current performance data with Armstrong ACE Online selection software.

**TORONTO**

23 BERTRAND AVENUE  
TORONTO, ONTARIO  
CANADA  
M1L 2P3  
+1 416 755 2291

**BUFFALO**

93 EAST AVENUE  
NORTH TONAWANDA, NEW YORK  
U.S.A.  
14120-6594  
+1 716 693 8813

**BIRMINGHAM**

HEYWOOD WHARF, MUCKLOW HILL  
HALESOWEN, WEST MIDLANDS  
UNITED KINGDOM  
B62 8DJ  
+44 (0) 8444 145 145

**MANCHESTER**

WENLOCK WAY  
MANCHESTER  
UNITED KINGDOM  
M12 5JL  
+44 (0) 8444 145 145

**BANGALORE**

#59, FIRST FLOOR, 3RD MAIN  
MARGOSA ROAD, MALLESWARAM  
BANGALORE, INDIA  
560 003  
+91 (0) 80 4906 3555

**SHANGHAI**

NO. 1619 HU HANG ROAD, XI DU TOWNSHIP  
FENG XIAN DISTRICT, SHANGHAI  
P.R.C.  
201401  
+86 21 3756 6696

ARMSTRONG FLUID TECHNOLOGY  
ESTABLISHED 1934

ARMSTRONGFLUIDTECHNOLOGY.COM

**MAKING  
ENERGY  
MAKE  
SENSE™**