

316 Stainless Steel Submersible Turbine Pumps

5"-11" Diameter
For 6" and larger wells



SPECIFICATIONS – 3450 RPM

Model	Max. PSI	Max. TDH	Max. Stage	Operating Range GPM	Best Efficiency Range	Horsepower Range	Discharge Connections	Minimum Well Size
5CNLC	460	1063	18	60 – 180	115	5 – 30	4"	6"
5CNHC	450	1040	17	60 – 200	140	5 – 50	4"	6"
5TNLC	475	1097	20	80 – 225	175	5 – 30	4"	6"
5TNHC	460	1063	20	150 – 300	240	5 – 50	4"	6"
6CNLC	455	1051	13	100 – 225	160	5 – 40	4"	8"
6CNHC	450	1040	13	150 – 300	225	10 – 50	4"	8"
7CNLC	425	982	8	275 – 430	350	10 – 75	4", 6"	8"
7CNHC	405	936	8	300 – 600	450	15 – 100	4", 6"	8"
7TNLC	412	952	8	300 – 650	550	10 – 75	4", 6"	8"
7TNHC	395	913	9	375 – 800	600	15 – 100	4", 6"	8"
9CNLC	495	1144	6	400 – 875	600	30 – 150	6"	10"
9CNHC	490	1132	6	550 – 1200	900	50 – 150	6"	10"
9TNLC	530	1224	7	700 – 1400	1050	40 – 150	6"	10"
9TNHC	462	1067	6	900 – 1700	1300	50 – 150	6"	10"
11CNLC	545	1259	4	500 – 1700	1200	75 – 150	6", 8"	12"

FEATURES

- Discharge Adapter:** Several discharge sizes available with NPT or Flanged design in 316 SS.
- Discharge Bearing:** Extra long sealed top bronze bearing insures positive shaft alignment and stabilization for extended life. Standard bronze bearings are of a superior quality Bismuth alloy to ensure tensile strength, yield strength, and percent-age elongation results.

- Intermediate Bowl:** High efficiency design in cast 316 stainless steel.
- Impellers:** Designed for maximum efficiency with wide range hydraulic coverage.
- Thrust Washer:** Designed for extra margin of safety against possible momentary upthrust occurring at start-up.

- Intermediate Bowl Bearings:** Reliable long life Bismuth bronze bearing is standard. Optional rubber or other materials available.
- Taper Locks:** Accurately machined in 316SS to insure positive locking of impeller to pump shaft.
- Suction Inlet:** Contoured for smooth flow entrance. Protected by an oversized 304 stainless steel strainer to prevent entrance of damaging solids.

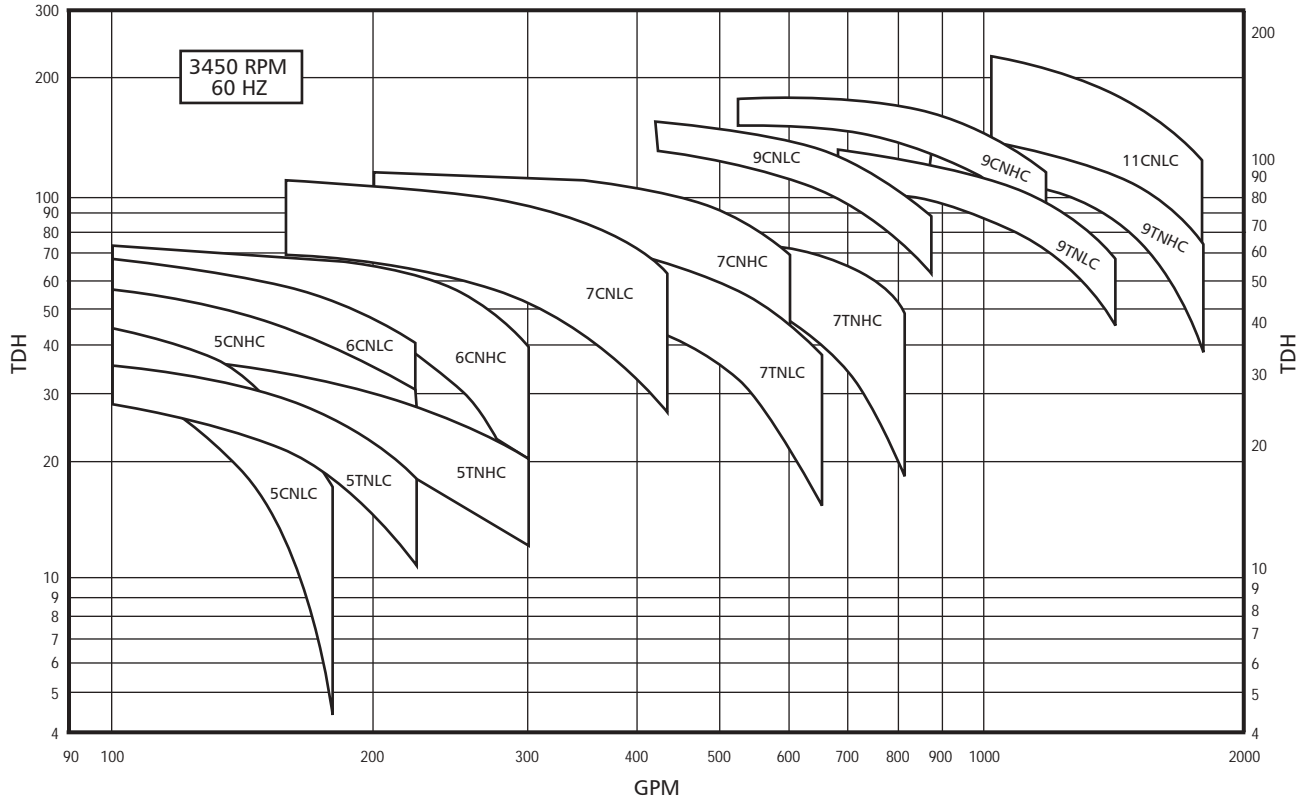
- Motor Adapter:** Cast 316 stainless steel for corrosion resistance, in-creased strength and positive motor alignment. Permits easy access to pump/motor coupling.
- Pump to Motor Coupling:** Large stainless steel coupling accurately matched for perfect alignment, balance and power transmission.
- Pump Shaft:** 316 stainless steel provides strength and excellent corrosion resistance. Ground and polished for smooth bearing surface.
- Powered for Continuous Operation:** All ratings are within the working limits of the motor manufacturer. Pump can be operated continuously without fear of damage to the motor.

- Submersible Motor:**
 - 316 stainless steel corrosion resistant construction
 - 316 stainless steel splined shaft
 - Hermetically sealed windings
 - Anti-track self-healing resin system
 - Water lubrication
 - Kingsbury type thrust bearing
 - Pressure equalizing diaphragm
 - Sand fighter slinger
 - UL 778 recognized.

Goulds Pumps

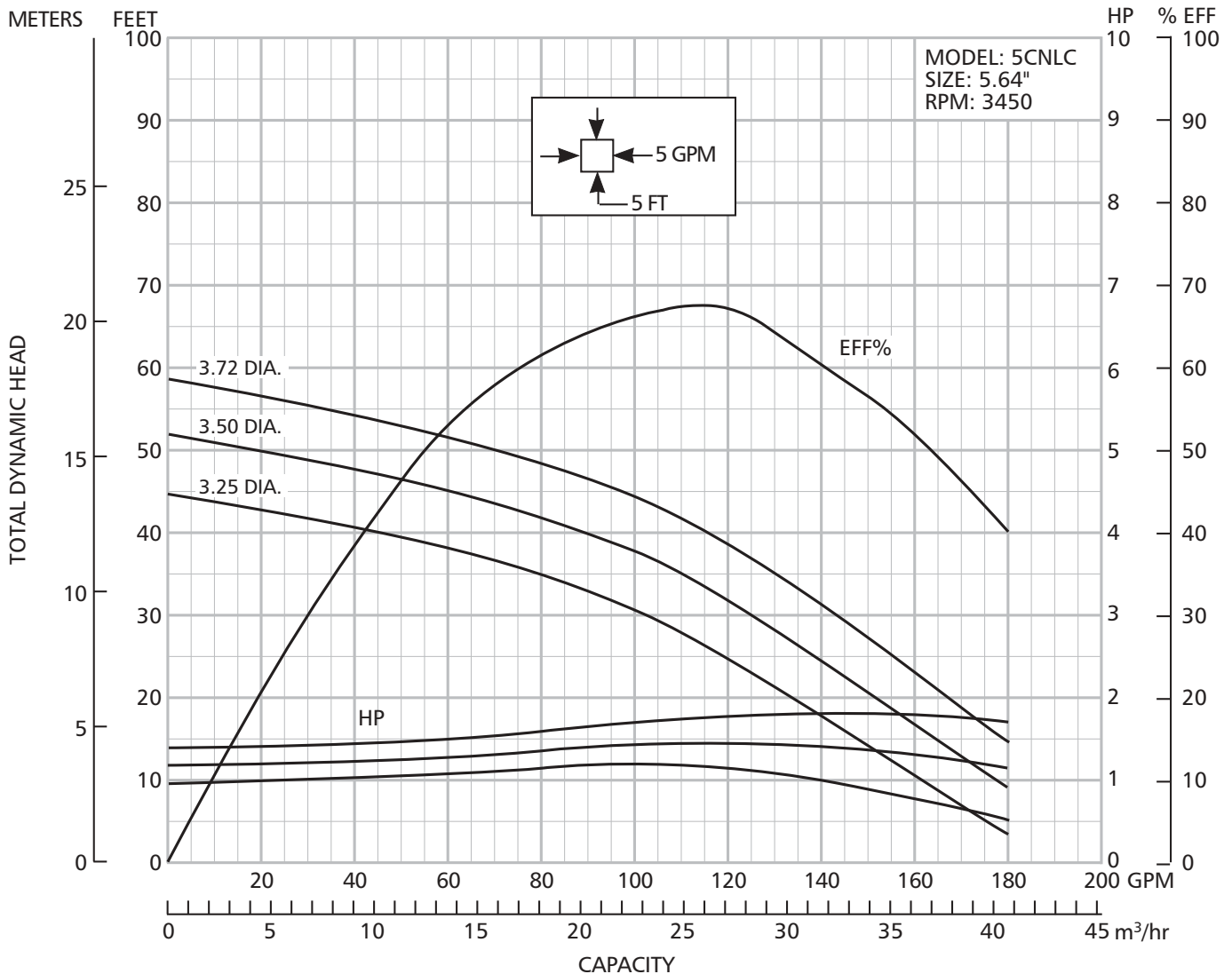


5"-11" 3450 RPM PUMP PERFORMANCE CHART



Model 5CNLC 316 Stainless Steel Pump

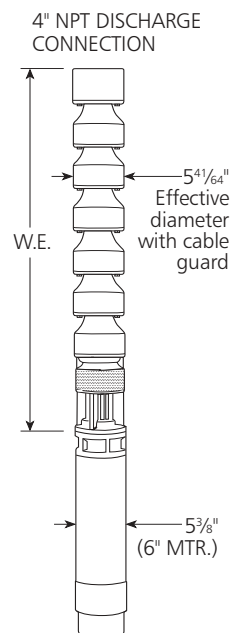
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

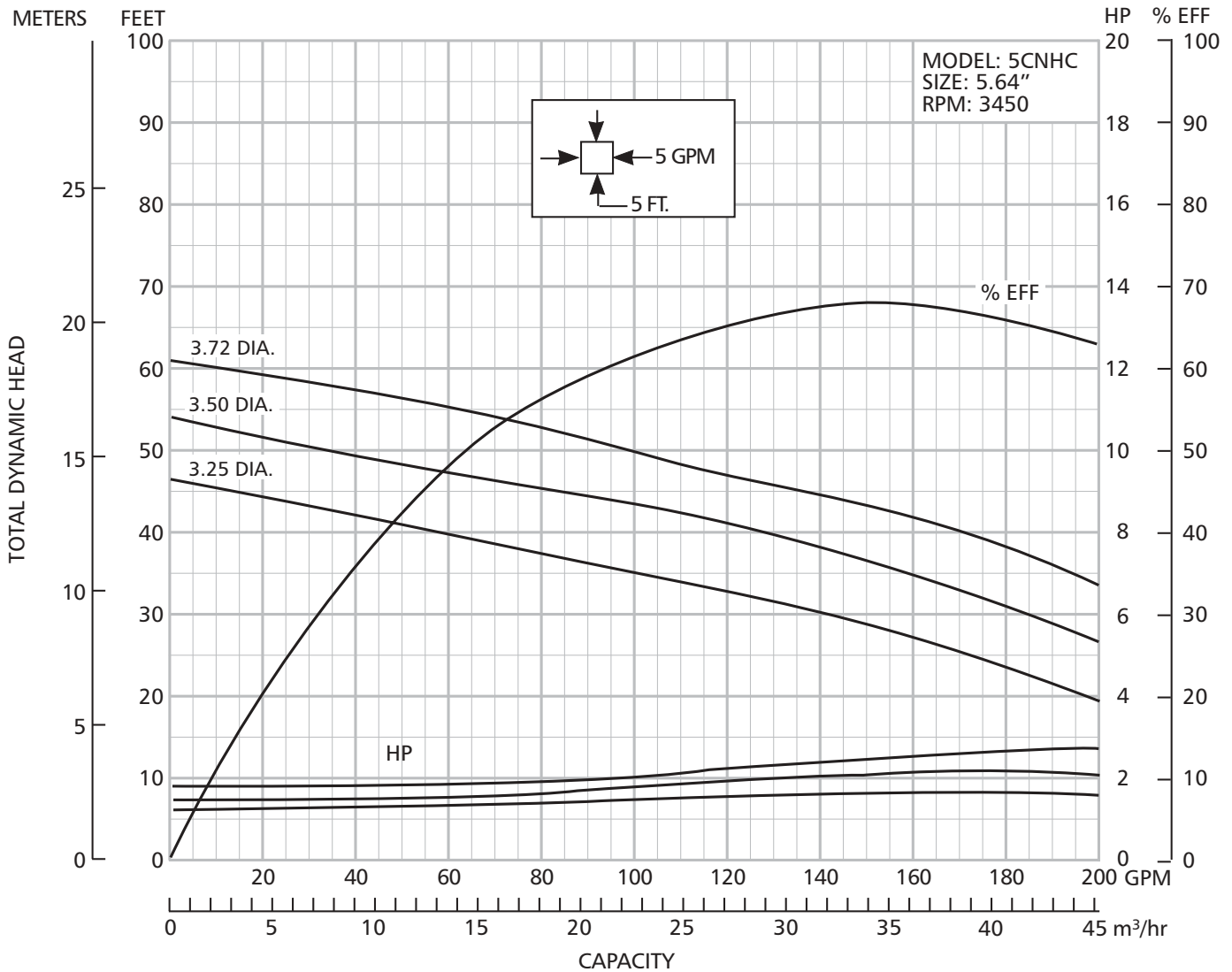
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 5.64"
- **Minimum Well Size:** 6"
- **Available Discharge Size:** 4"
- **Available Motor Size:** 6"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 1.2 lbs./ft.
- **Specific Speed:** 2140
- **Maximum Shutoff Head:** 460 PSI / 1063 Feet
- **Maximum Number of Stages:** 18
- **Efficiency Correction:**
 - 1 Stage deduct 4.0
 - 2 Stages deduct 3.0
 - 3 Stages deduct 1.5



Curves reflect typical performance, refer to factory for certification.

Model 5CNHC 316 Stainless Steel Pump

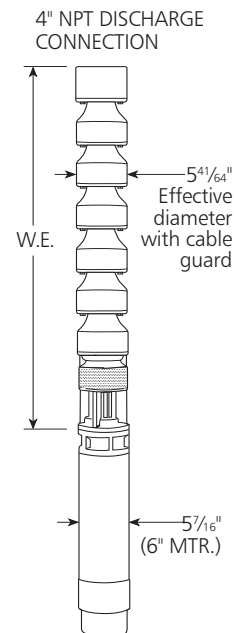
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

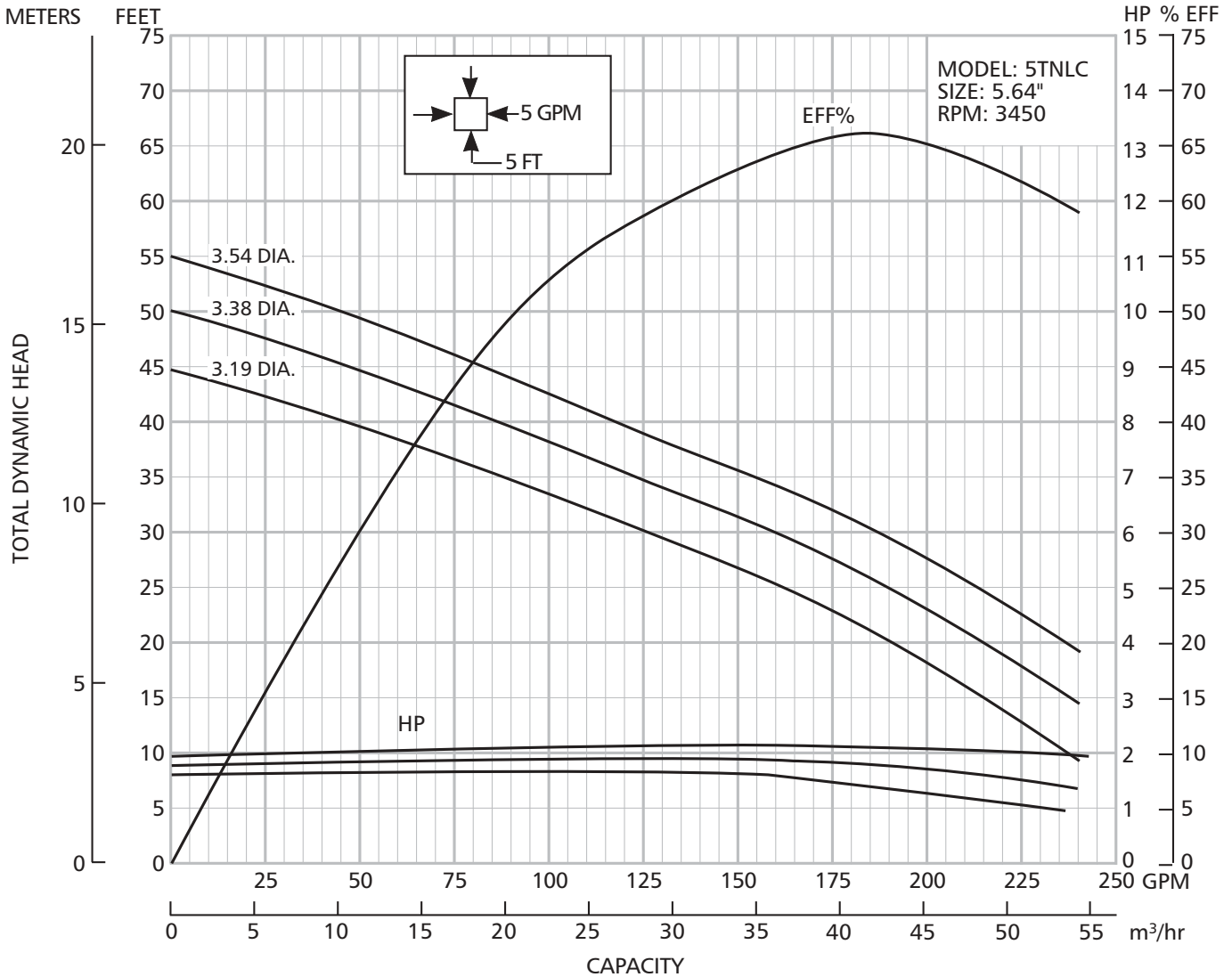
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 5.64"
- **Minimum Well Size:** 6"
- **Available Discharge Size:** 4"
- **Available Motor Size:** 6"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 1.2 lbs./ft.
- **Specific Speed:** 2140
- **Maximum Shutoff Head:** 450 PSI / 1040 Feet
- **Maximum Number of Stages:** 17
- **Efficiency Correction:**
 - 1 Stage deduct 4.0
 - 2 Stages deduct 3.0
 - 3 Stages deduct 1.5



Curves reflect typical performance, refer to factory for certification.

Model 5TNLC 316 Stainless Steel Pump

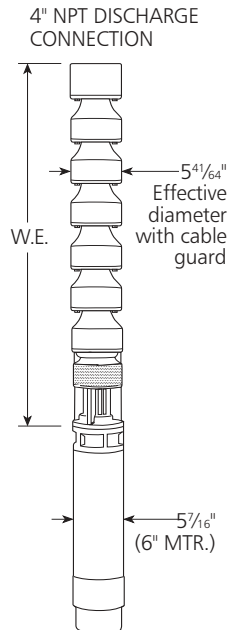
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
 Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

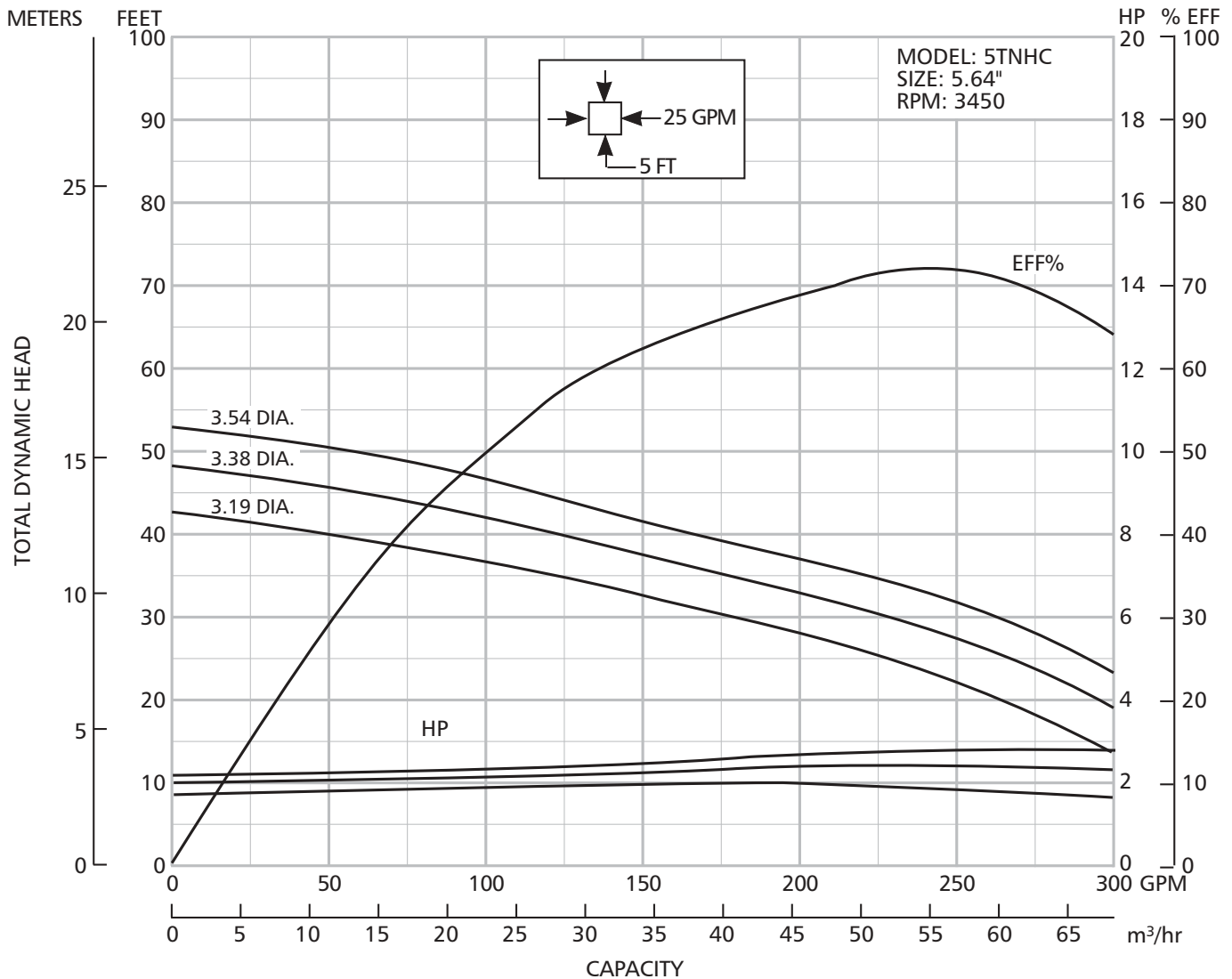
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 5.64"
- **Minimum Well Size:** 6"
- **Available Discharge Size:** 4"
- **Available Motor Size:** 6"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 2.36 lbs./ft.
- **Specific Speed:** 3314
- **Maximum Shutoff Head:** 475 PSI / 1097 Feet
- **Maximum Number of Stages:** 20
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 2.0
 - 3 Stages deduct 0.5



Curves reflect typical performance, refer to factory for certification.

Model 5TNHC 316 Stainless Steel Pump

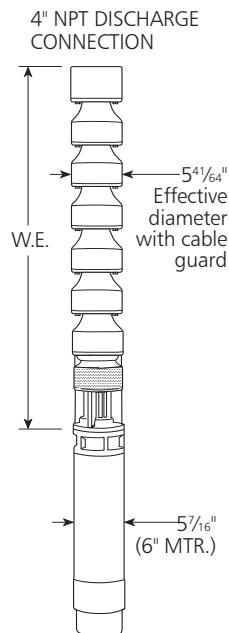
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

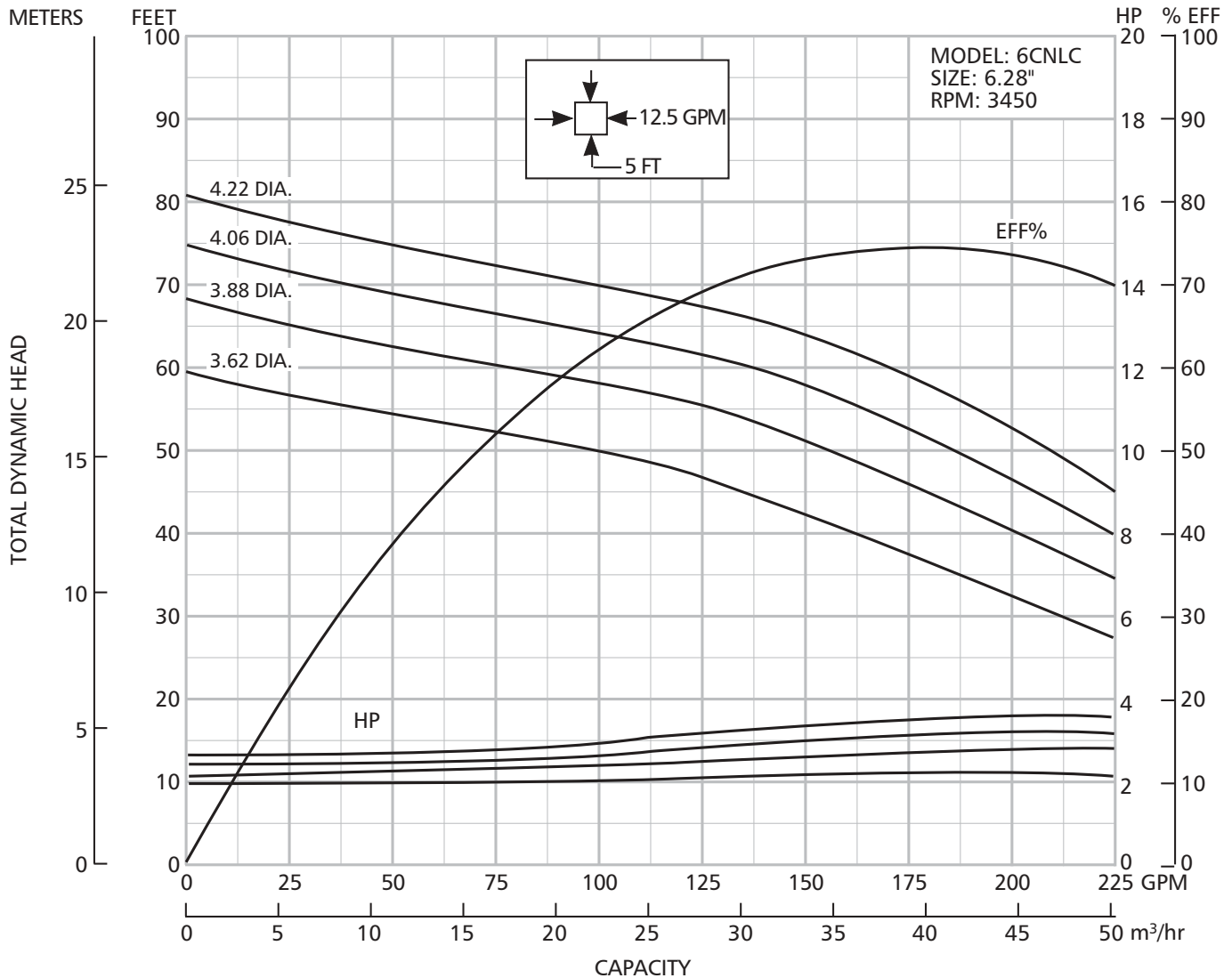
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 5.64"
- **Minimum Well Size:** 6"
- **Available Discharge Size:** 4"
- **Available Motor Size:** 6"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 2.36 lbs./ft.
- **Specific Speed:** 3395
- **Maximum Shutoff Head:** 460 PSI / 1063 Feet
- **Maximum Number of Stages:** 20
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 2.0
 - 3 Stages deduct 1.0



Curves reflect typical performance, refer to factory for certification.

Model 6CNLC 316 Stainless Steel Pump

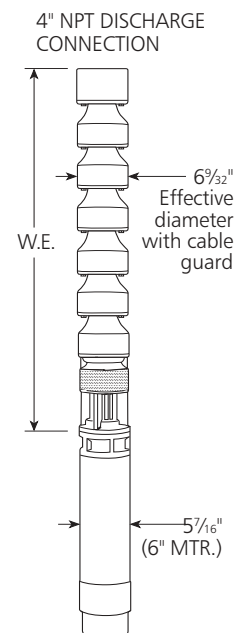
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

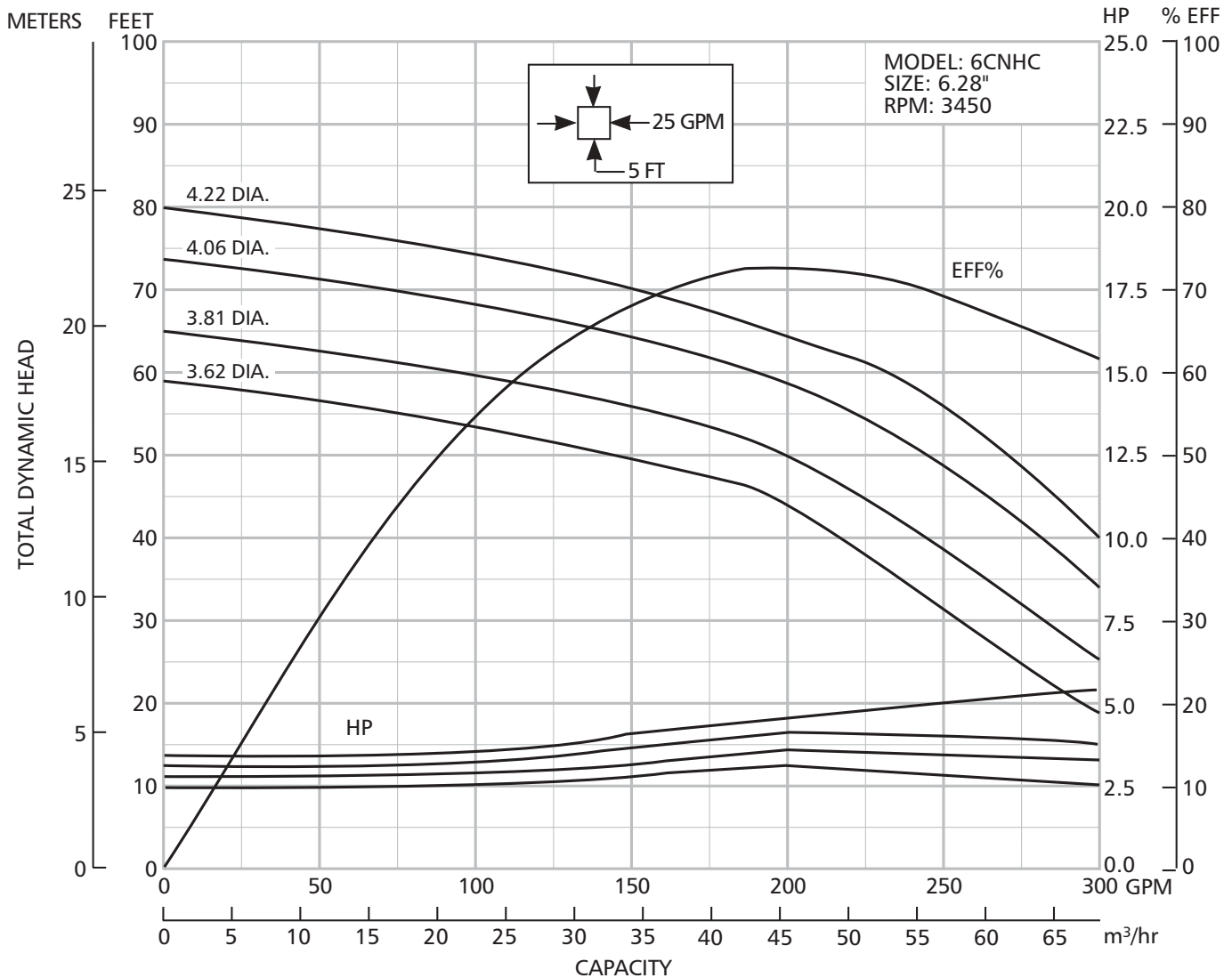
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 6.28"
- **Minimum Well Size:** 8"
- **Available Discharge Size:** 4"
- **Available Motor Size:** 6"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 2.10 lbs./ft.
- **Specific Speed:** 2100
- **Maximum Shutoff Head:** 455 PSI / 1051 Feet
- **Maximum Number of Stages:** 13
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 2.0
 - 3 Stages deduct 0.5



Curves reflect typical performance, refer to factory for certification.

Model 6CNHC 316 Stainless Steel Pump

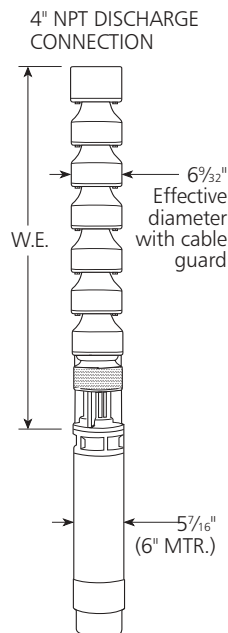
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
 Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

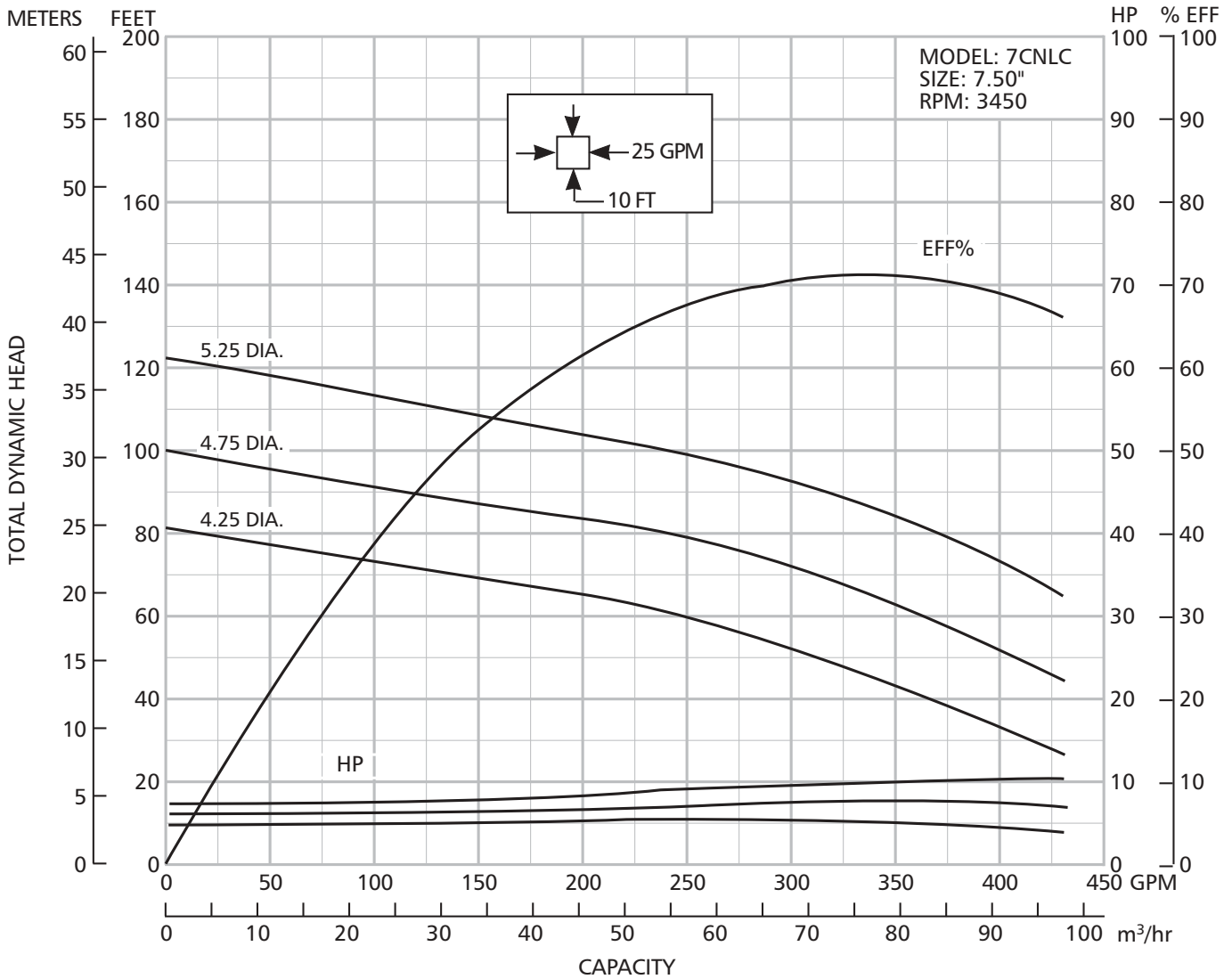
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 6.28"
- **Minimum Well Size:** 8"
- **Available Discharge Size:** 4"
- **Available Motor Size:** 6"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 2.10 lbs./ft.
- **Specific Speed:** 2160
- **Maximum Shutoff Head:** 450 PSI / 1040 Feet
- **Maximum Number of Stages:** 13
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 2.0
 - 3 Stages deduct 0.5



Curves reflect typical performance, refer to factory for certification.

Model 7CNLC 316 Stainless Steel Pump

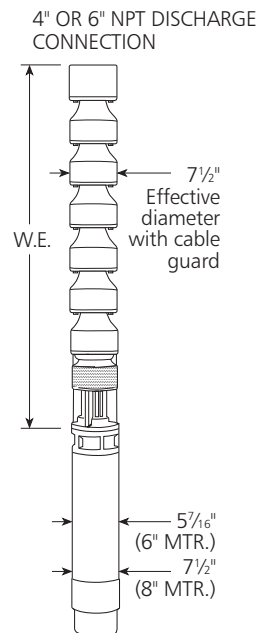
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

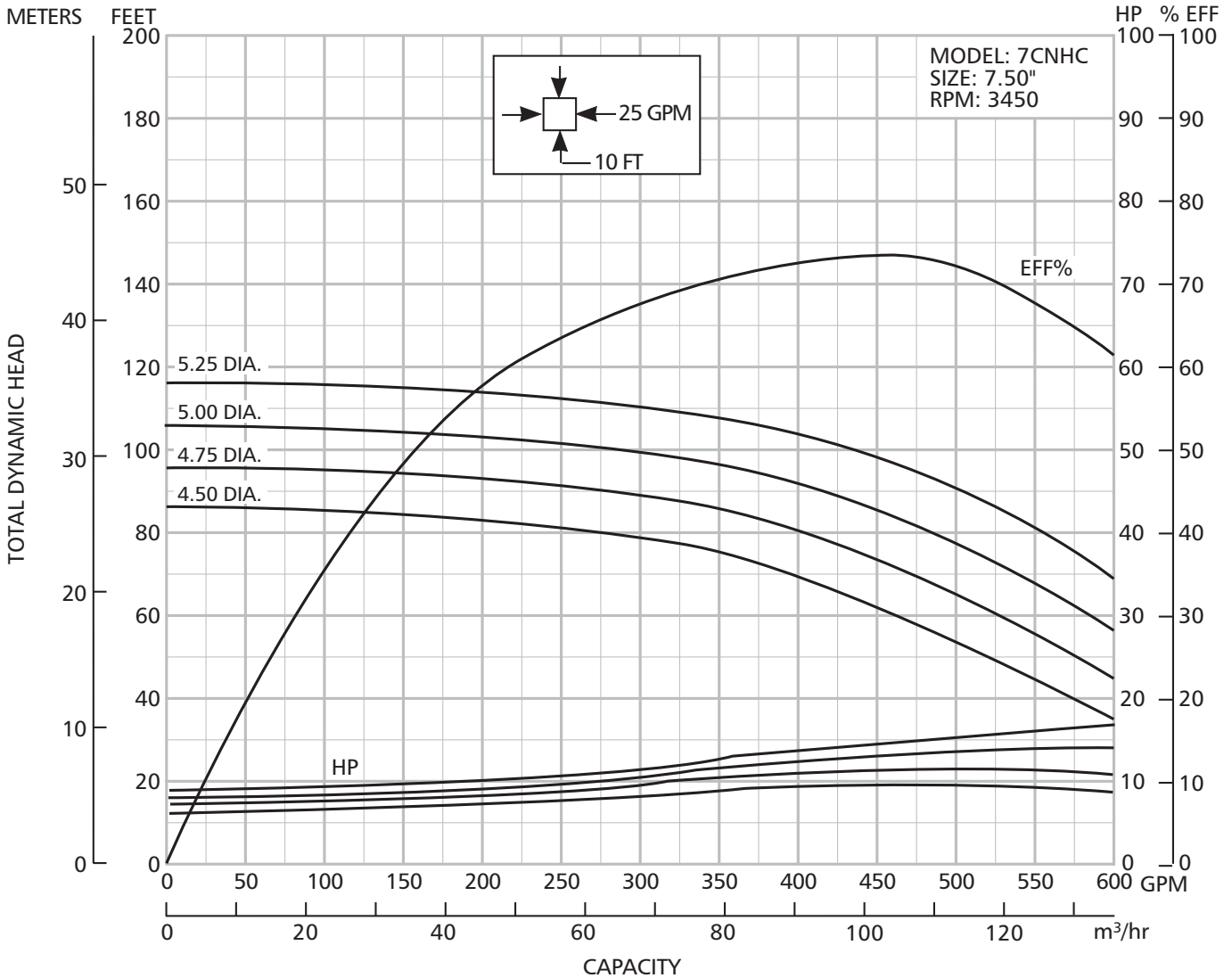
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 7.50"
- **Minimum Well Size:** 8"
- **Available Discharge Size:** 4" & 6"
- **Available Motor Size:** 6", 8"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 3.5 lbs./ft.
- **Specific Speed:** 2183
- **Maximum Shutoff Head:** 425 PSI / 982 Feet
- **Maximum Number of Stages:** 8
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 1.0
 - 3 Stages deduct 0



Curves reflect typical performance, refer to factory for certification.

Model 7CNHC 316 Stainless Steel Pump

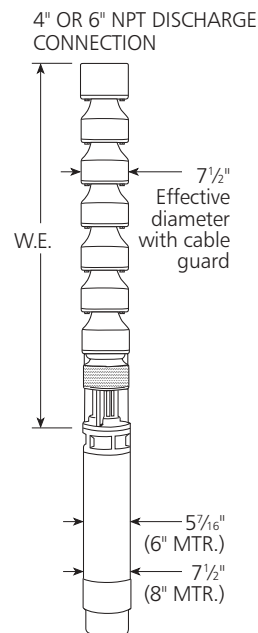
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

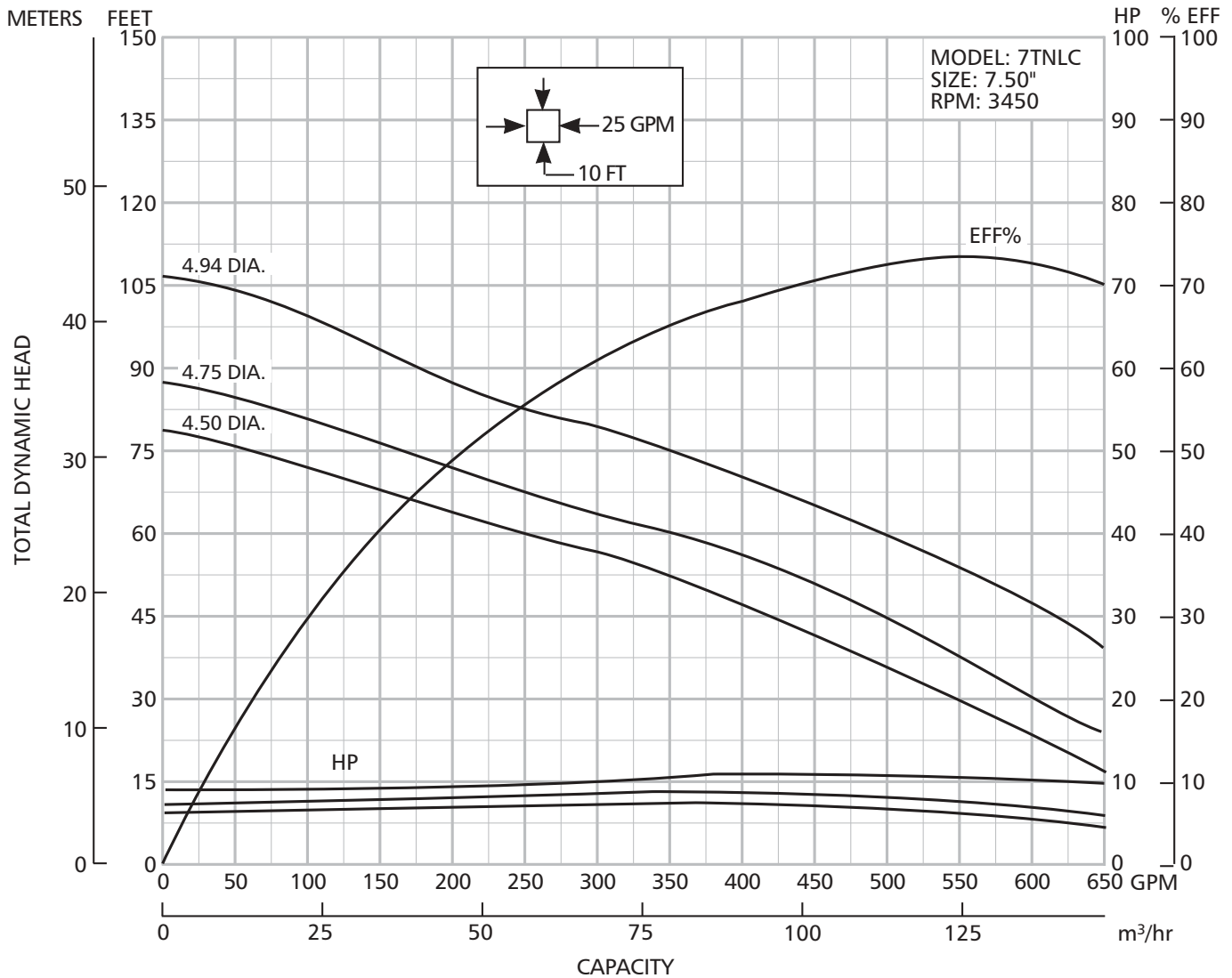
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 7.5"
- **Minimum Well Size:** 8"
- **Available Discharge Size:** 4" & 6"
- **Available Motor Size:** 6", 8"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 3.5 lbs./ft.
- **Specific Speed:** 2300
- **Maximum Shutoff Head:** 405 PSI / 936 Feet
- **Maximum Number of Stages:** 8
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 1.0
 - 3 Stages deduct 0



Curves reflect typical performance, refer to factory for certification.

Model 7TNLC 316 Stainless Steel Pump

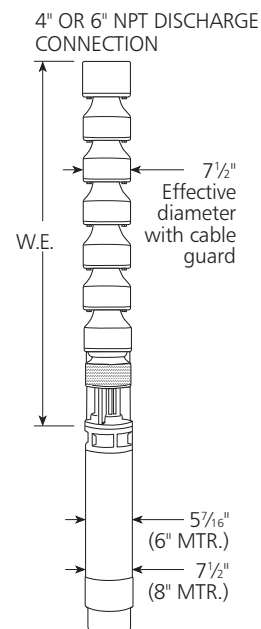
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

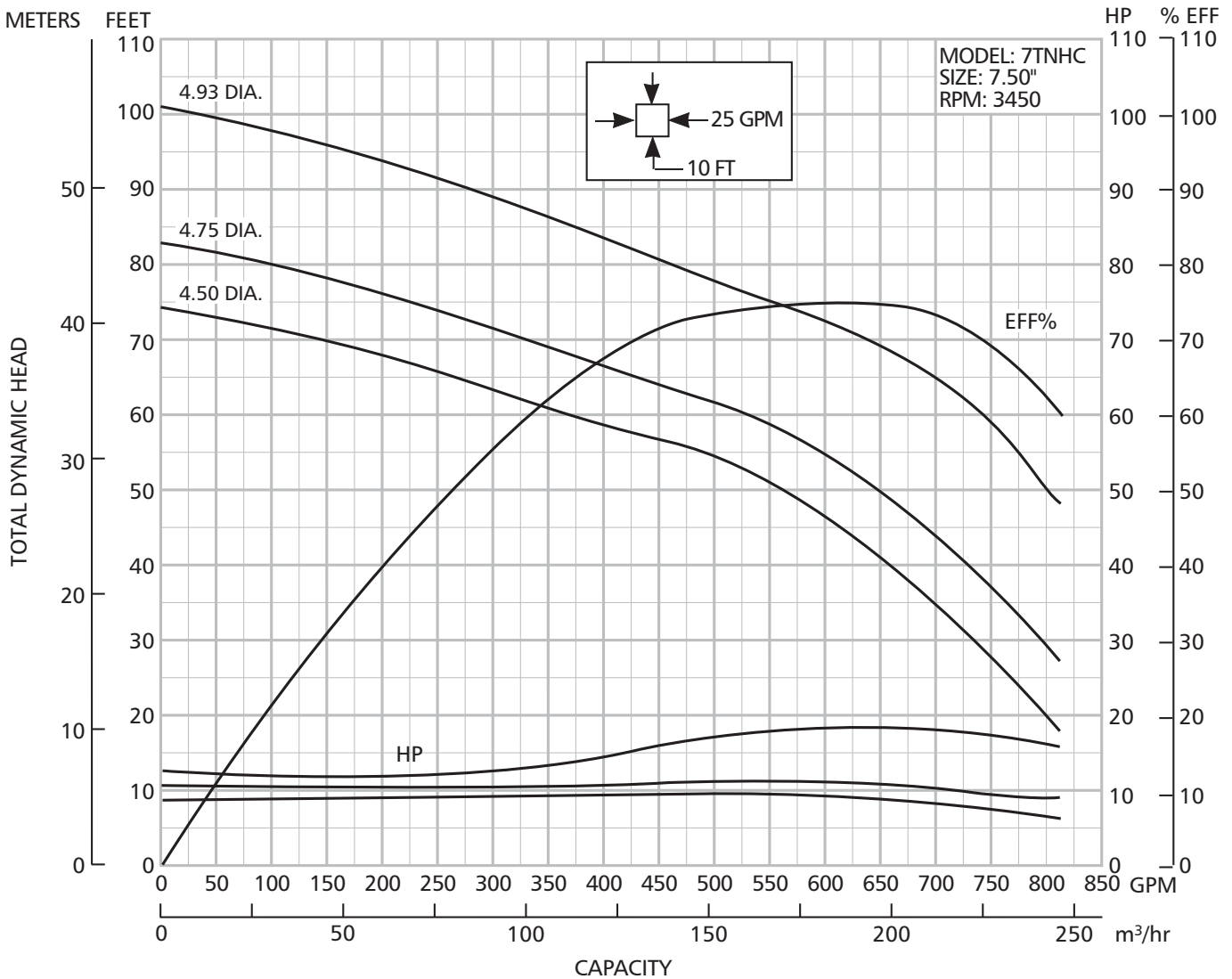
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 7.5"
- **Minimum Well Size:** 8"
- **Available Discharge Size:** 4" & 6"
- **Available Motor Size:** 6", 8"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 4.50 lbs./ft.
- **Specific Speed:** 3684
- **Maximum Shutoff Head:** 412 PSI / 952 Feet
- **Maximum Number of Stages:** 8
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 2.0
 - 3 Stages deduct 1.0



Curves reflect typical performance, refer to factory for certification.

Model 7TNHC 316 Stainless Steel Pump

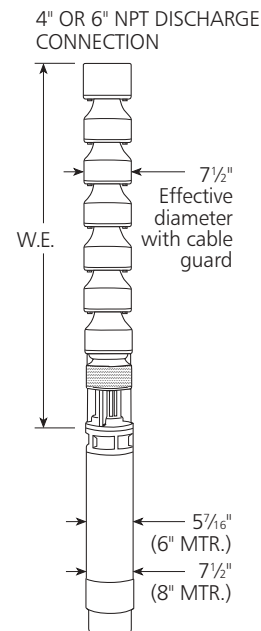
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

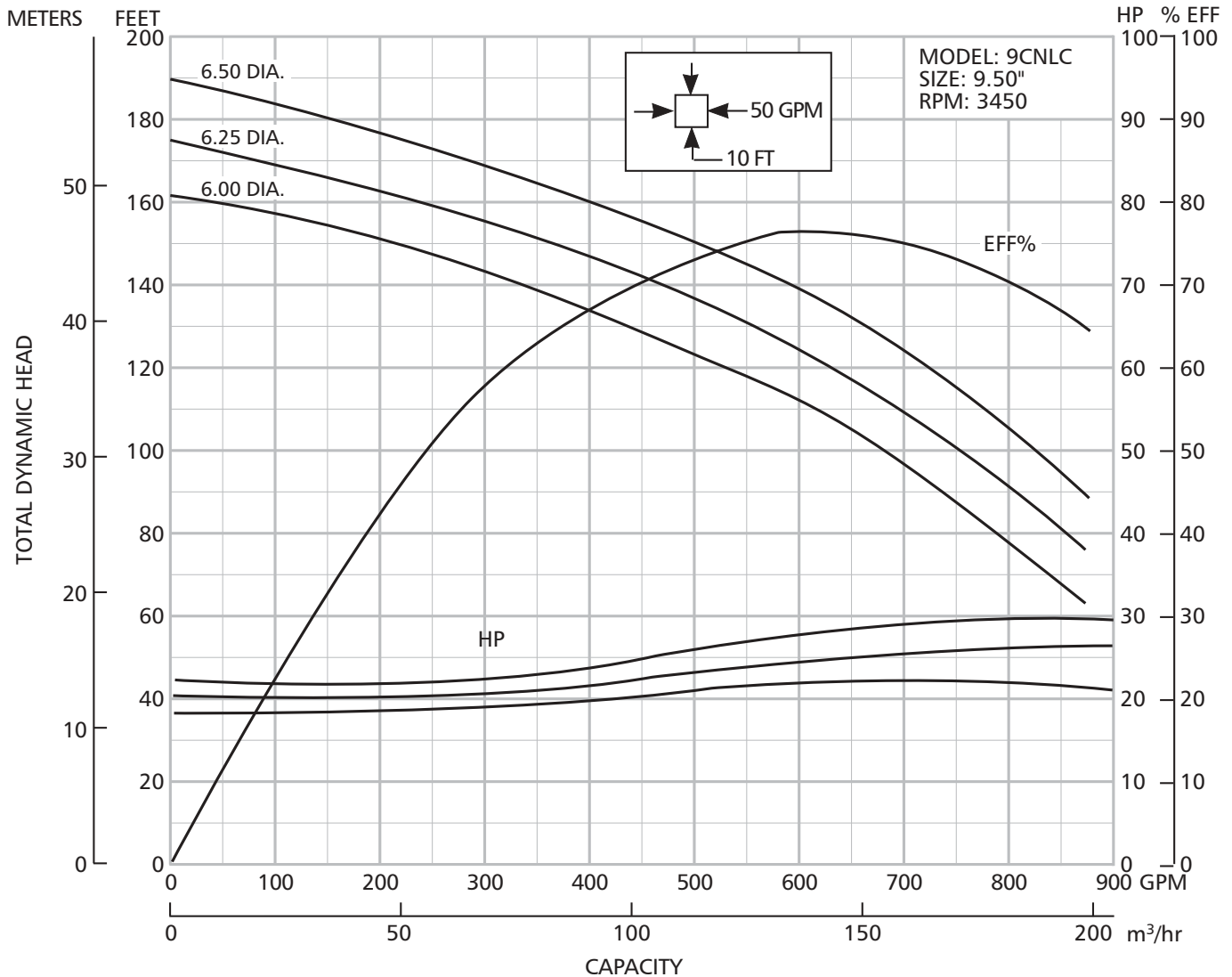
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 7.50"
- **Minimum Well Size:** 8"
- **Available Discharge Size:** 4" & 6"
- **Available Motor Size:** 6", 8"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 4.56 lbs./ft.
- **Specific Speed:** 3619
- **Maximum Shutoff Head:** 395 PSI / 913 Feet
- **Maximum Number of Stages:** 9
- **Efficiency Correction:**
 - 1 Stage deduct 3.0
 - 2 Stages deduct 2.0
 - 3 Stages deduct 1.0



Curves reflect typical performance, refer to factory for certification.

Model 9CNLC 316 Stainless Steel Pump

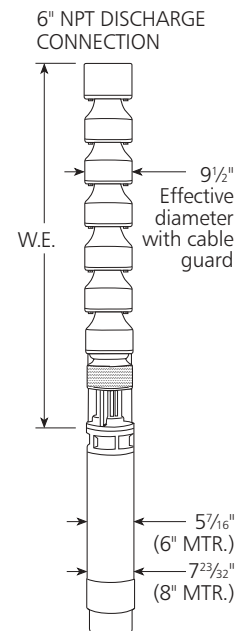
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

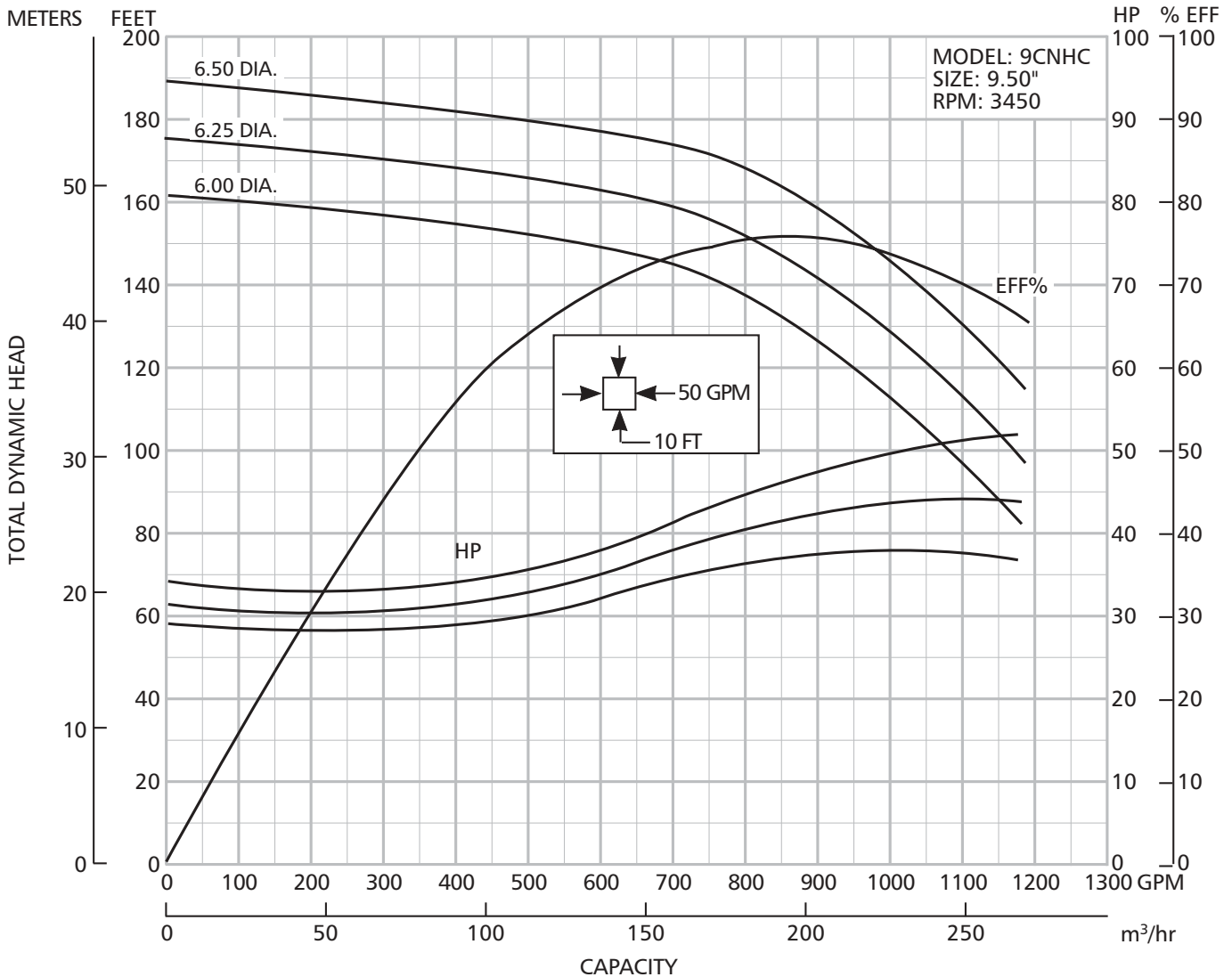
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 9.50"
- **Minimum Well Size:** 10"
- **Available Discharge Size:** 6"
- **Available Motor Size:** 6", 8" & 10"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 4.90 lbs./ft.
- **Specific Speed:** 2290
- **Maximum Shutoff Head:** 495 PSI / 1144 Feet
- **Maximum Number of Stages:** 6
- **Efficiency Correction:**
 - 1 Stage deduct 2.0
 - 2 Stages deduct 1.0
 - 3 Stages deduct 0.5



Curves reflect typical performance, refer to factory for certification.

Model 9CNHC 316 Stainless Steel Pump

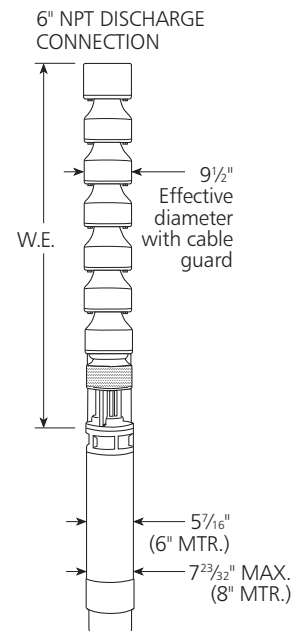
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

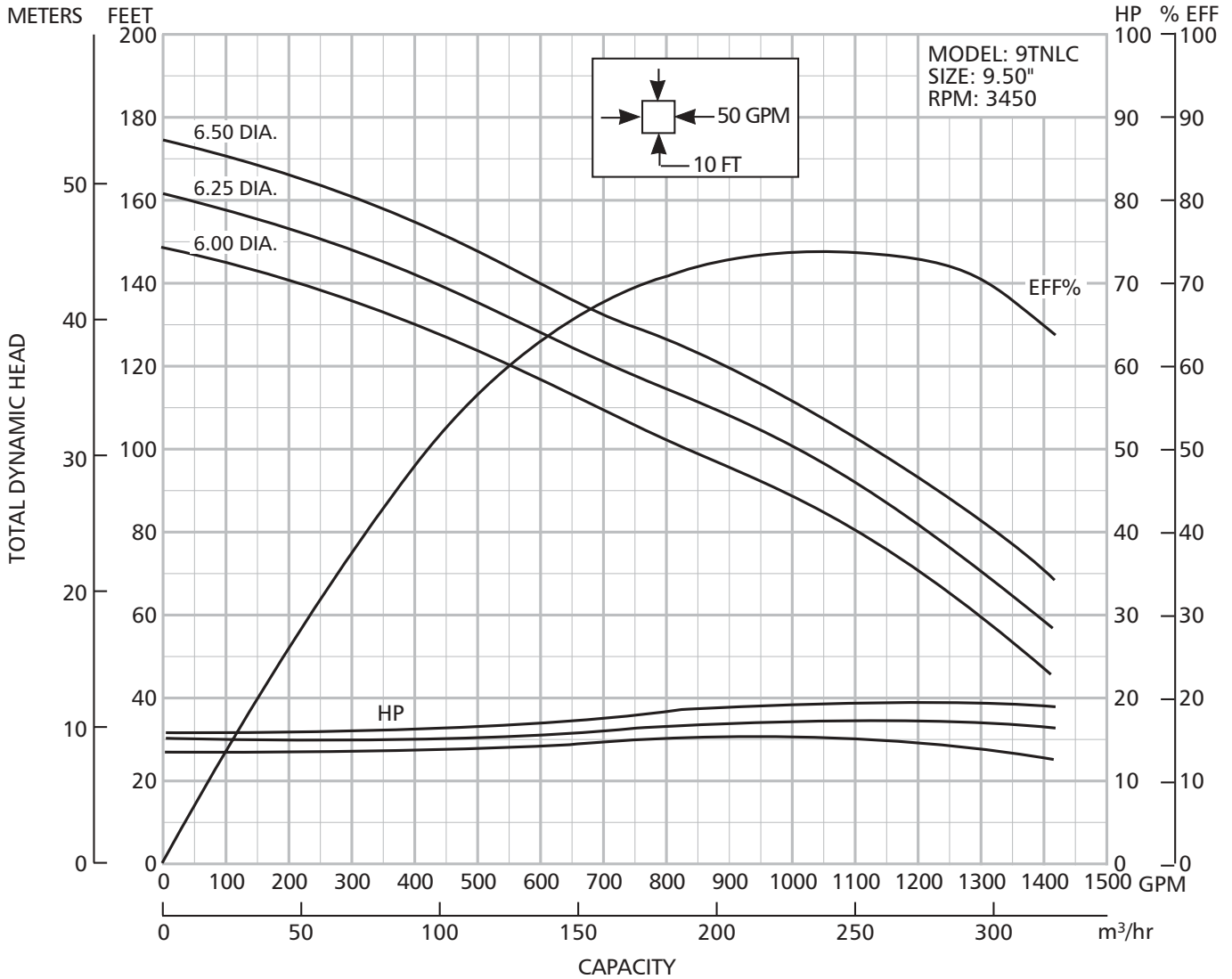
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 9.50"
- **Minimum Well Size:** 10"
- **Available Discharge Size:** 6"
- **Available Motor Size:** 6", 8" & 10"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 3.10 lbs./ft.
- **Specific Speed:** 2300
- **Maximum Shutoff Head:** 490 PSI / 1132 Feet
- **Maximum Number of Stages:** 6
- **Efficiency Correction:**
 - 1 Stage deduct 2.0
 - 2 Stages deduct 1.0
 - 3 Stages deduct 0.5



Curves reflect typical performance, refer to factory for certification.

Model 9TNLC 316 Stainless Steel Pump

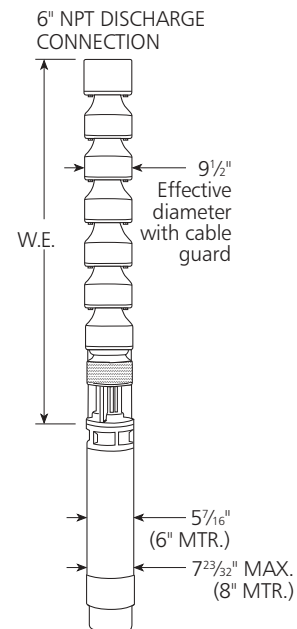
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

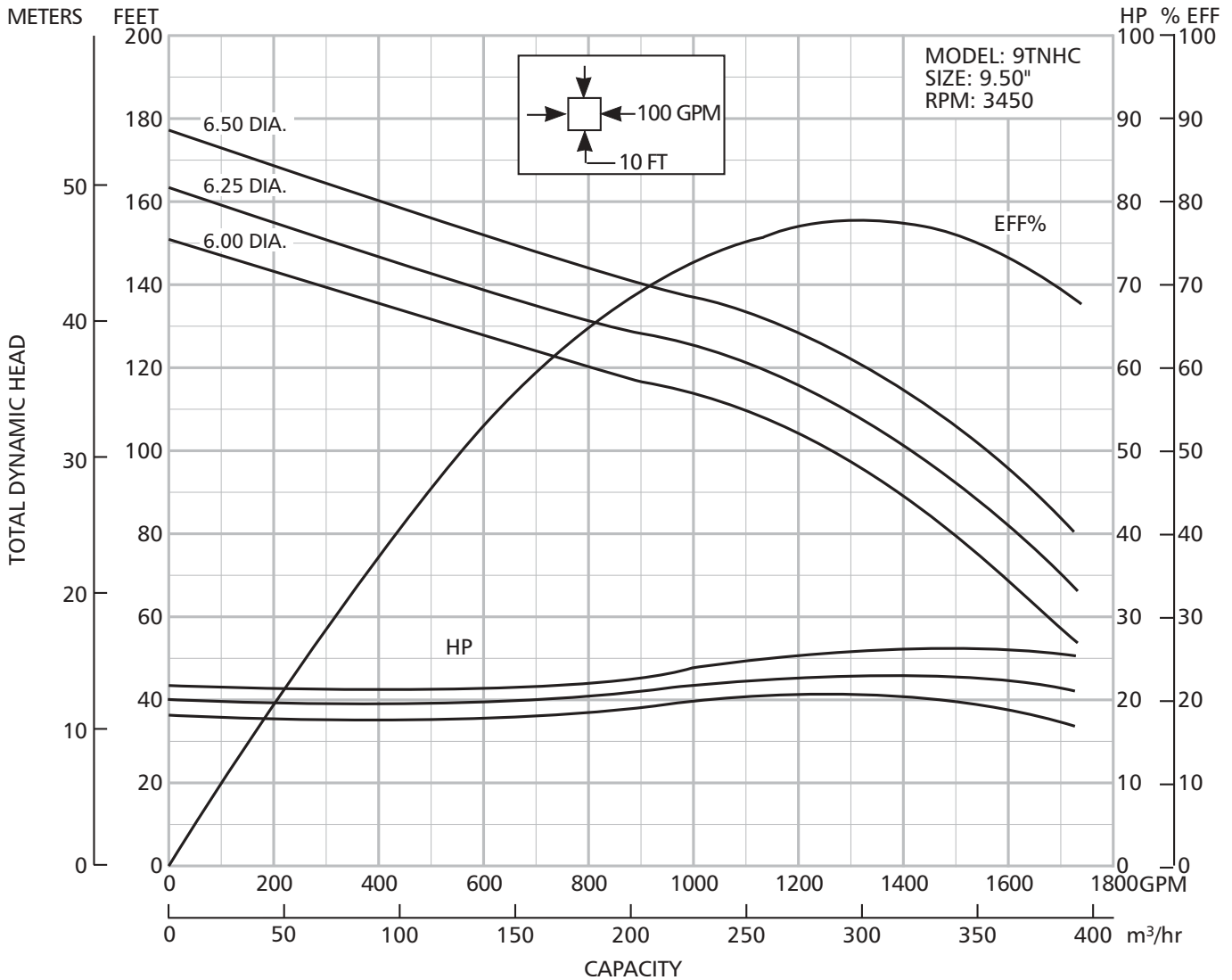
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 9.50"
- **Minimum Well Size:** 10"
- **Available Discharge Size:** 6"
- **Available Motor Size:** 6", 8" & 10"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 9.00 lbs./ft.
- **Specific Speed:** 3740
- **Maximum Shutoff Head:** 530 PSI / 1224 Feet
- **Maximum Number of Stages:** 7
- **Efficiency Correction:**
 - 1 Stage deduct 0
 - 2 Stages deduct 0
 - 3 Stages deduct 0



Curves reflect typical performance, refer to factory for certification.

Model 9TNHC 316 Stainless Steel Pump

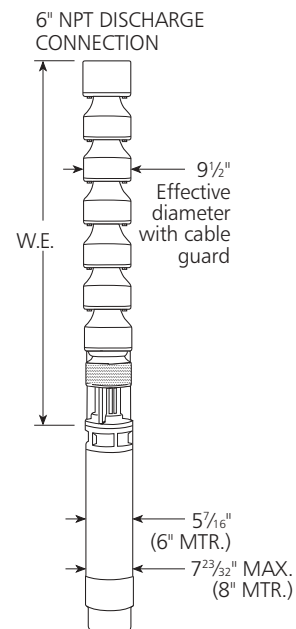
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

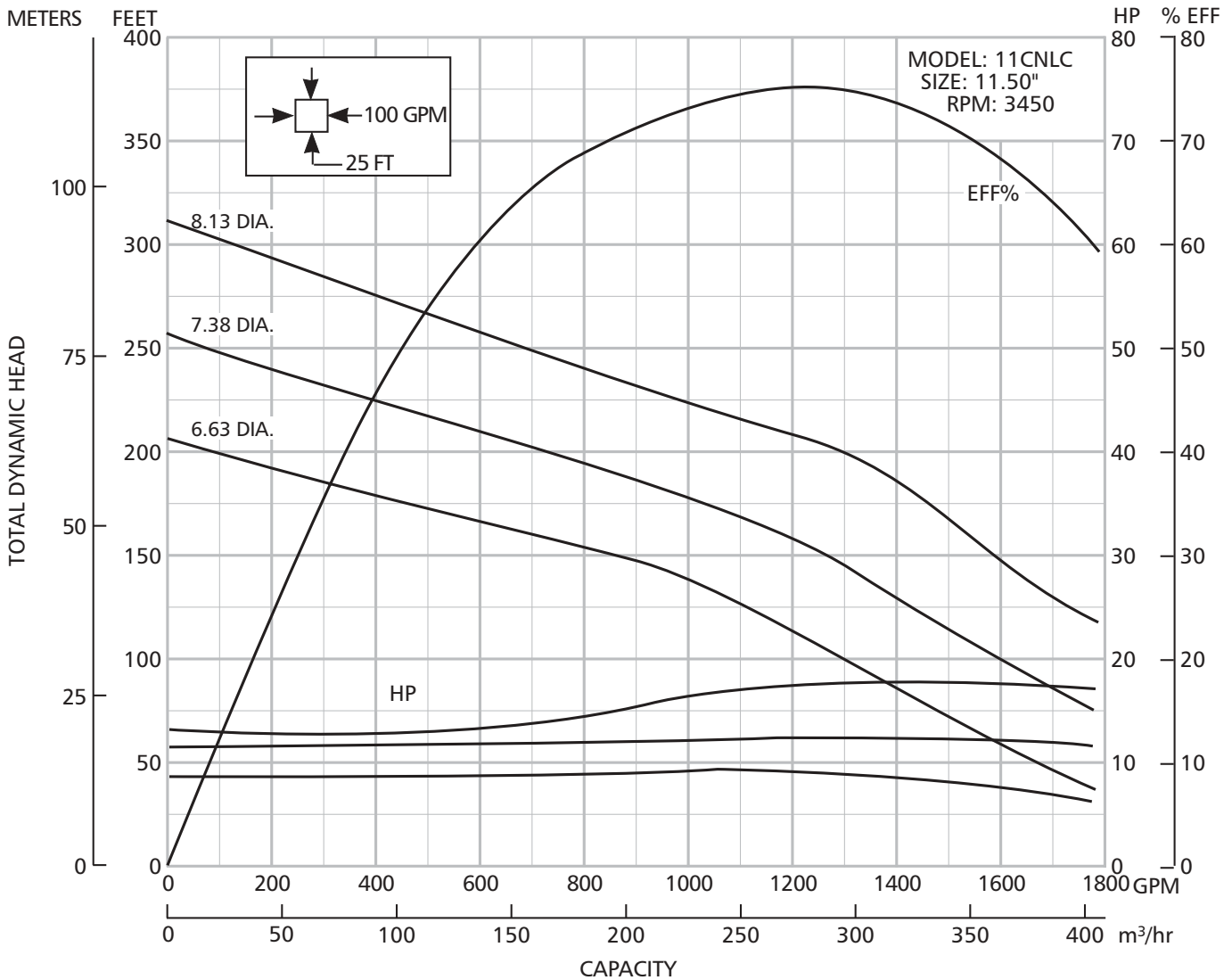
- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 9.50"
- **Minimum Well Size:** 10"
- **Available Discharge Size:** 6"
- **Available Motor Size:** 6", 8" & 10"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 9.00 lbs./ft.
- **Specific Speed:** 3580
- **Maximum Shutoff Head:** 462 PSI / 1067 Feet
- **Maximum Number of Stages:** 6
- **Efficiency Correction:**
 - 1 Stage deduct 0
 - 2 Stages deduct 0
 - 3 Stages deduct 0



Curves reflect typical performance, refer to factory for certification.

Model 11CNLC 316 Stainless Steel Pump

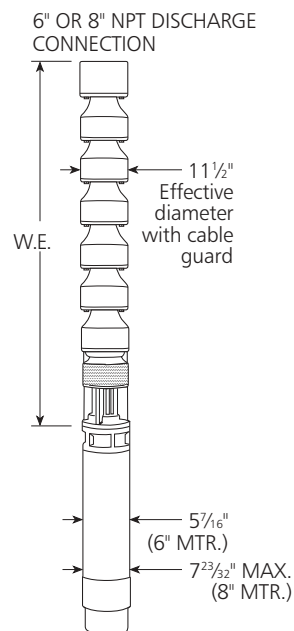
Single Stage Performance Curve



Characteristics based upon pumping clear non-aerated water.
Rating point only is guaranteed. Column and other losses not included.

SPECIFICATIONS

- **RPM:** 3450, 60 Hz
- **Max. O.D. with Cable Guard:** 11.50"
- **Minimum Well Size:** 12"
- **Available Discharge Size:** 6" & 8"
- **Available Motor Size:** 8" & 10"
- **Bowl Connection:** Bolted
- **Impeller:** Enclosed Type
- **Bearing Material:** Bronze, other materials available.
- **Thrust Constant (K):** 7.9 lbs./ft.
- **Specific Speed:** 2320
- **Maximum Shutoff Head:** 545 PSI / 1259 Feet
- **Maximum Number of Stages:** 4
- **Efficiency Correction:**
 - 1 Stage deduct 1.5
 - 2 Stages deduct 1.0
 - 3 Stages deduct 0.5



Curves reflect typical performance, refer to factory for certification.

MATERIALS OF CONSTRUCTION *(Drawing 1)*

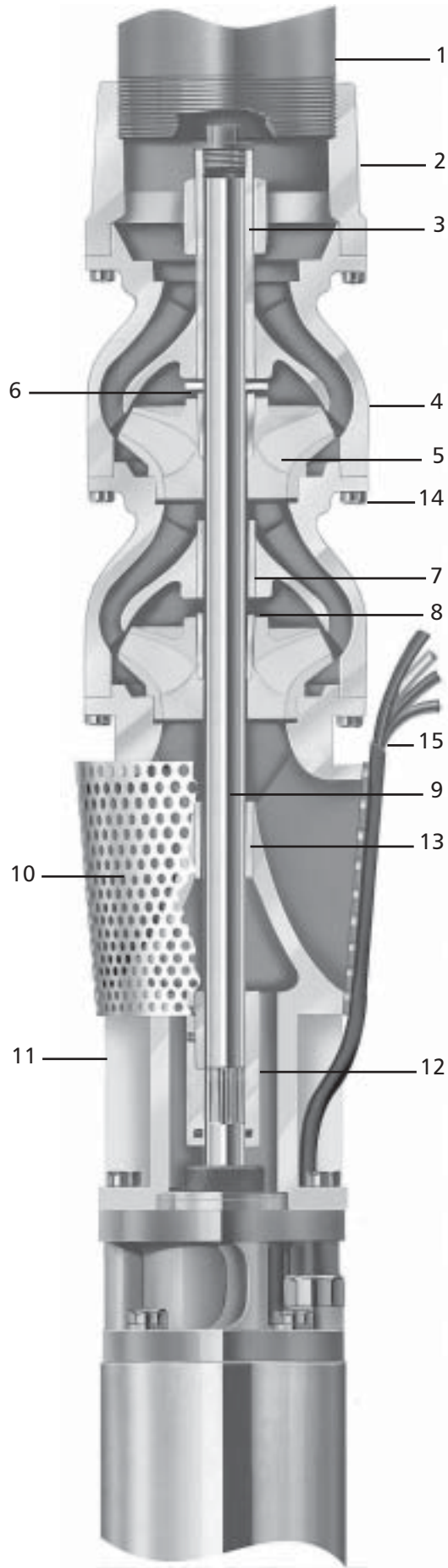
Item	Nomenclature	Material	Specifications
1	Column Pipe		By Others
2	Discharge Adapter	316 SS	A744 CF8M
3	Discharge Bearing	Bronze	B584 C90300
4	Intermediate Bowl	316 SS	A744 CF8M
5	Impeller	316 SS	A744 CF8M
6	Thrust Washer	DPE	Polyethylene
7	Intermediate Bowl Bearing	Bronze	B584 C90300
8	Taper Lock	316 SS	A276 S31600
9	Pump Shaft	316 SS	A276 S31600
10	Suction Inlet Screen	304 SS	A240 S30400
11	Motor Adapter	316 SS	A744 CF8M
12	Coupling	316 SS	A276 S31600
13	Motor Adapter Bearing	Bronze	B584 C90300
14	Bolts	316 SS	A276 S31600
15	Cable Guard	304 SS	A240 S30400

Other bearing materials available upon request. Contact factory.

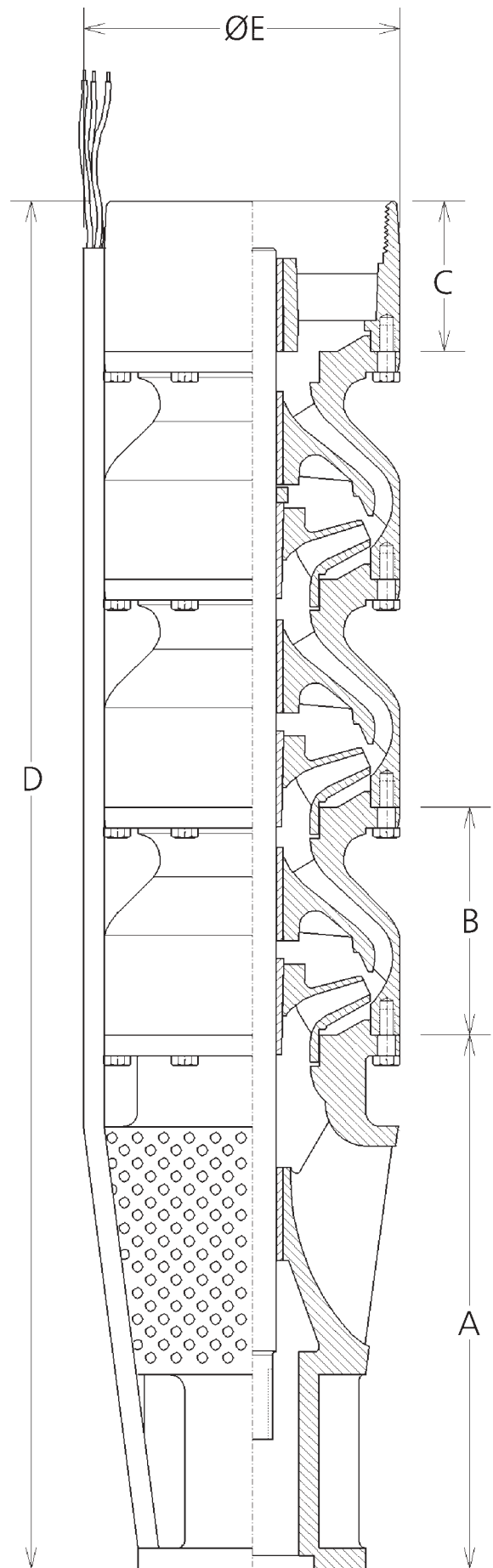
5"-11" COMPONENTS *(Drawing 2)*

Model	NEMA	"A" (in.)	"B" (in.)	"C" (in.)	"D" (in.)	"E" (in.)	Disc Size - NPT (in.)	First STG Wt. - lbs.	Additional STG Wt. - lbs.
5CN	6	10.6	4.6	3.1	18.3	5.6	4"	62	16
5TN	6	10.6	4.8	3.1	18.4	5.6	4"	62	16
6CN	6	10.6	5.1	3.8	19.4	6.3	4"	69	21
7CN	6	12.9	6.4	3.6	22.9	7.5	4", 6"	94	35
	8	14.6	6.4	3.6	24.6	7.5	4", 6"	102	35
7TN	6	12.9	7.1	3.6	23.6	7.5	4", 6"	98	39
	8	14.6	7.1	3.6	25.3	7.5	4", 6"	106	39
9CN	6	14.0	8.0	4.5	26.5	9.5	6"	208	68
	8	16.3	8.0	4.5	28.8	9.5	6"	216	68
	10	16.3	8.0	4.5	28.8	9.5	6"	216	68
9TN	6	14.0	9.0	4.5	27.5	9.5	6"	214	74
	8	16.3	9.0	4.5	29.8	9.5	6"	222	74
	10	16.3	9.0	4.5	29.8	9.5	6"	222	74
11CN	8	13.3	9.8	5.1	28.2	11.5	6", 8"	356	125
	10	13.3	9.8	5.1	28.2	11.5	6", 8"	356	125

DRAWINGS



Drawing 1



Drawing 2

Goulds Pumps and the ITT Engineered Blocks symbol are registered trademarks and tradenames of ITT Industries.