Schlumberger

Artificial Lift

REDA Electric Submersible Pump Systems Technology Catalog

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Pump Summary

Pump Summary—338 to 562 Series

Series	OD, in [mm]	Pump Type	Geometry	Capacity Range, Recommended Limits	
				60 Hz, bbl/d	50 Hz, m^3/d
338	3.38 [85.85]	AN550	Radial Flow	400–700	53–93
		AN900	Radial Flow	700–1,060	93–140
		AN1200	Radial Flow	800–1,650	106–219
		AN1500	Radial Flow	1,000–2,000	132–265
		A2700N	Mixed Flow	1,800–3,400	238–450
400[†]	4.00 [101.60]	D460N	Radial Flow	200–650	26–86
		D1050N	Mixed Flow	300–1,650	40–219
		D1150N	Radial Flow	400–1,650	53–219
		D1400N	Radial Flow	960–1,700	127–225
		DN1750	Mixed Flow	1,200–2,050	159–272
		DN1800	Mixed Flow	1,200–2,400	159–318
		D2400N	Mixed Flow	1,500–3,200	199–424
		D3500N	Mixed Flow	1,600–4,500	212–596
		D5800N	Mixed Flow	4,400–7,000	583–927
		RC1000	Mixed Flow	200–1350	27–180
		RC2500	Mixed Flow	1000–3200	133–427
		RC4000	Mixed Flow	3500–7000	467–933
540	5.13 [130.30]	GN1600	Radial Flow	1,000–2,150	132–285
		GN2100	Radial Flow	1,650–2,700	219–358
		GN3200	Radial Flow	2,200–4,100	291–543
		GN4000	Mixed Flow	3,200–4,800	424–636
		GN5200	Mixed Flow	3,900–6,600	517–874
		G6200N	Mixed Flow	4,500–8,000	596–1,060
		GN10000	Mixed Flow	7,000–12,000	927–1,590
538	5.38 [136.65]	SN2600	Radial Flow	1,600–3,200	212–424
		SN3600	Radial Flow	2,400–4,600	318–609
		S4000N	Mixed Flow	1000–6000	133–800
		S6000N	Mixed Flow	3,500–7,800	464–1,033
		S8000N	Mixed Flow	3,500–10,500	464–1,391
562	5.62 [142.75]	HN13500	Mixed Flow	5,000–18,000	662–2,385
		H15500N	Mixed Flow	11,000–20,000	1,457–2,650
		H21500N	Mixed Flow	17,500–24,000	2,319–3,180
		H28000N	Mixed Flow	28,000–36,000	3,710–4,770

[†] All the 400 Series pumps are optionally available with a slimline 3.87-in- [98.3-mm-] OD housing.

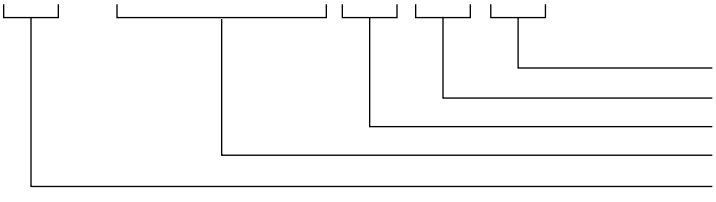
Pump Summary

Pump Summary—675 to 1125 Series

Series	OD, in [mm]	Pump Type	Geometry	Capacity Range, Recommended Limits	
				60 Hz, bbl/d	50 Hz, bbl/d
675	6.75 [171.45]	J7000N	Mixed Flow	4,500–9,000	596–1,192
		J12000N	Mixed Flow	8,000–18,500	1,060–2,451
		JN16000	Mixed Flow	12,800–19,500	1,696–2,584
		JN21000	Mixed Flow	16,000–25,000	2,120–3,312
725	7.25 [184.15]	L16000N	Mixed Flow	11,000–20,000	1,497–2,650
		L43000N	Mixed Flow	36,000–54,000	4,770–7,155
862	8.62 [218.95]	M520A	Mixed Flow	12,000–20,000	1,590–3,180
		M520B	Mixed Flow	12,000–23,000	1,590–3,047
		M520C	Mixed Flow	12,000–22,000	1,590–2,915
		M675A	Mixed Flow	19,000–32,000	2,517–4,306
		M675B	Mixed Flow	19,000–29,000	2,517–3,842
		M675C	Mixed Flow	19,000–28,000	2,517–3,710
950	9.50 [241.30]	N1050A	Mixed Flow	24,000–47,500	3,180–6,294
		N1050B	Mixed Flow	24,000–43,000	3,180–5,697
1000	10.00 [254.00]	N1400A	Mixed Flow	35,000–64,000	4,637–8,480
		N1400B	Mixed Flow	35,000–60,000	4,637–7,950
1125	11.25 [285.75]	P2500A	Mixed Flow	53,486–96,001	7,087–12,720

Pump, Intake, and Gas-Handling Device Nomenclature

XN#### X-X-X or X####N X-X-X



Pump Series	
Designation	**Description**
A	338 Series
D	387/400 Series
S	538 Series
G	540 Series
H	562 Series
J	675 Series
L	725 Series
M	862 Series
N	950/1000 Series
P	1125 Series

Stage Construction	
Designation	**Description**
FL	Floater design
C	Compression, fixed-impeller design†
CR	Compression ring, fixed-impeller design†

† Compression design greatly improves reliability and extends the operating range of the ESP (compared with floater design) by transferring the axial thrust developed by the stages to the high-load protector thrust bearing. The factory-shimmed compression feature provides all the benefits of the classic compression design without the need to precisely set the shafts upon the pump installation at the wellsite.

Pump Configurations	
Designation	**Description**
UT	Upper tandem pump with integral discharge head
CT	Center tandem pump with no intake or discharge head; use as a single-section pump with bolt-on discharge and choice of bolt-on intake or gas separator, or use as a section of a tandem pump
LT	Lower tandem pump with integral intake; use as a single-section pump with bolt-on discharge, or use as lower section of a tandem pump

Pump Shaft Radial Support Options	
Designation	**Description**
ES	Abrasion-resistant zirconium bearings in head and base
ES-ZS	Zirconium silicon carbide bearing pair in head and base
ES-SS	Silicon carbide bearings in head and base
ES1	Abrasion-resistant zirconium carbide bearings in head, base, and middle of pump
ESX	Abrasion-resistant bearings in head and base and X number distributed evenly through pump
ARZ	Abrasion-resistant zirconium bearings distributed through pump
ARZ-SS	Abrasion-resistant silicon carbide bearings distributed through pump
ARZ-ZS	Abrasion-resistant zirconium silicon carbide bearing pairs distributed through pump
ARZ-TT	Tungsten carbide bearings distributed through pump
FBH	Full-bearing housing, ceramic bearings located at every stage

Intake Types	
Designation	**Description**
Intake	Standard intake.
RS	Rotary separator
VGSA	Vortex* gas separator

Bolt-on Pump Discharge Heads

338 Series

Part Number	Description	Length, ft [m]	Weight, lbm [kg]
493015	2 3/8-in [60.33-mm] OD 8rd EUE—carbon steel	0.5 [0.15]	6 [2.7]
492223	2 3/8-in [60.33-mm] OD 8rd EUE—Redalloy* alloy	0.5 [0.15]	4 [1.8]

400 Series

Part Number	Description	Length, ft [m]	Weight, lbm [kg]
243485	2 3/8-in [60.33-mm] OD 8rd EUE—carbon steel	0.6 [0.18]	10 [4.5]
364240	2 3/8-in [60.33-mm] OD 8rd EUE—Redalloy alloy	0.8 [0.24]	10 [4.5]

513/538 Series

Part Number	Description	Length, ft [m]	Weight, lbm [kg]
194381	3 1/2-in [88.90-mm] OD 8rd EUE—carbon steel	0.8 [0.24]	22 [10.0]
492231	3 1/2-in [88.90-mm] OD 8rd EUE—Redalloy alloy	0.8 [0.24]	21 [10.0]

562 Series

Part Number	Description	Length, ft [m]	Weight, lbm [kg]
274795	3 1/2-in [88.90-mm] OD 8rd EUE—carbon steel	0.8 [0.24]	25 [11.3]
1048339	3 1/2-in [88.90-mm] OD 8rd EUE—Redalloy alloy	0.8 [0.24]	25 [11.3]

675 Series

Part Number	Description	Length, ft [m]	Weight, lbm [kg]
1006261	5 1/2-in [139.70-mm] OD 8rd LTC—carbon steel	0.8 [0.24]	30 [13.6]
997353	5 1/2-in [139.70-mm] OD 8rd LTC—Redalloy alloy	0.8 [0.24]	33 [15.0]

725 Series

Part Number	Description	Length, ft [m]	Weight, lbm [kg]
1311125	5 1/2-in [139.70-mm] OD 8rd LTC—carbon steel	0.8 [0.24]	45 [20.4]

Pump Intakes and Gas-Handling Devices

338 Series Bolt-On Intake

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy* High-Nickel Alloy Part Number
Standard intake, 338/375	0.8 [0.2]	20 [9.1]	307157	492249
ARZ abrasion-resistant intake, 338/375	0.8 [0.2]	20 [9.1]	1146372	1129543

338 Series Rotary Gas Separator ARS

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
ARS, 338/375	2.2 [0.7]	42 [19.1]	tba†	1133636
ARS, high-strength shaft, 338/375	2.2 [0.7]	42 [19.1]	tba	1160027

† To be assigned

387 Series Bolt-On Intake

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
Intake: ARZ, standard trim, factory shimmed	1.0 [0.3]	28 [12.7]	100189479	tba†
Intake: ARZ, standard trim, high-strength shaft, factory shimmed	1.0 [0.3]	28 [12.7]	100189481	tba
Intake: ARZ, Monel® trim, high-strength shaft, factory shimmed	1.0 [0.3]	28 [12.7]	tba	100189476

† To be assigned

387 Series Rotary Gas Separator CRS-ES

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
CRS-ES, factory shimmed	2.0 [0.6]	65 [29.5]	tba†	100205677
CRS-ES, high-strength shaft, factory shimmed	2.0 [0.6]	65 [29.5]	tba	100205633

† To be assigned

387 Series Vortex* Gas Separator VGSA D20-60 (2,000- to 6,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
VGSA D20-60, ES-SS, high-strength shaft, factory shimmed	3.3 [1.0]	145 [65.9]	tba†	100202669
VGSA D20-60, ES, high-strength shaft, factory shimmed	3.3 [1.0]	145 [65.9]	tba	100204710

† To be assigned

Pump Intakes and Gas-Handling Devices

400 Series Bolt-On Intake

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
Intake: ARZ, carbon steel, 400/400	1.0 [0.3]	28 [12.7]	1145382	1129527
Intake: ARZ ZS, 400/400	1.0 [0.3]	28 [12.7]	1304567	100050260
Intake: ARZ, high-strength shaft, 400/400	1.0 [0.3]	28 [12.7]	1230838	1140029
Intake: ARZ ZS, high-strength shaft, 400/400	1.0 [0.3]	28 [12.7]	tba†	1275536
Intake: ARZ, 400/540	1.0 [0.3]	28 [12.7]	tba	1259092
Intake: ARZ ZS, 400/540	1.0 [0.3]	28 [12.7]	tba	1313832
Intake: ARZ, high-strength shaft, 400/540	1.0 [0.3]	28 [12.7]	100045111	1296128
Intake: ARZ, 400/400, factory shimmed	1.0 [0.3]	28 [12.7]	100483189	tba
Intake: ARZ ZS, high-strength shaft, 400/400, factory shimmed	1.0 [0.3]	28 [12.7]	tba	100483195

† To be assigned

400 Series Rotary Gas Separator DRS-ES

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
DRS-ES, 400/375	2.6 [0.8]	70 [31.8]	tba†	1129998
DRS-ES, high-strength shaft, 400/400	2.6 [0.8]	70 [31.8]	tba	1241272
DRS-ES type, 400/400	2.6 [0.8]	70 [31.8]	tba	1160043
DRS-ES, 400/400, factory shimmed	2.6 [0.8]	70 [31.8]	tba	100483765

† To be assigned

400 Series Vortex Gas Separator VGSA D20-60 (2,000- to 6,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
VGSA D20-60, ES, high-strength shaft	3.2 [1.0]	145 [65.9]	tba†	2003133
VGSA D20-60, ES-ZS, high-strength shaft	3.2 [1.0]	145 [65.9]	tba	2007915
VGSA D20-60, ES-SS, high-strength shaft	3.2 [1.0]	145 [65.9]	tba	100103337
VGSA D20-60, ES, high-strength shaft, factory shimmed	3.2 [1.0]	145 [65.9]	tba	100204710
VGSA D20-60, ES-ZS, high-strength shaft, factory shimmed	3.2 [1.0]	145 [65.9]	tba	100439733
VGSA D20-60, ES-SS, high-strength shaft, factory shimmed	3.2 [1.0]	145 [65.9]	tba	100202669

† To be assigned

540 and 538 Series Bolt-On Intake

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
Intake: ARZ, abrasion resistant	1.2 [0.4]	50 [22.7]	1145408	1129519
Intake: ARZ, high-strength shaft	1.2 [0.4]	50 [22.7]	1242320	1156942
Intake: ARZ ZS	1.2 [0.4]	50 [22.7]	tba†	1346204
Intake: ARZ ZS, high-strength shaft	1.2 [0.4]	50 [22.7]	1297829	tba
Intake: ARZ SS	1.2 [0.4]	50 [22.7]	tba	1334770
Intake: ARZ SS, high-strength shaft	1.2 [0.4]	50 [22.7]	tba	2003387
Intake: ARZ, factory shimmed	1.2 [0.4]	50 [22.7]	100191069	tba
Intake: ARZ, high-strength shaft, factory shimmed	1.2 [0.4]	50 [22.7]	100191144	100191146

† To be assigned

Pump Intakes and Gas-Handling Devices

538/540 Series Vortex Gas Separator VGSA S70-150 (7,000- to 15,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
VGSA S70-150, ES, high-strength shaft	3.4 [1.0]	160 [72.7]	tba	1293885
VGSA S70-150, ES-SS, high-strength shaft	3.4 [1.0]	160 [72.7]	tba	2003763
VGSA S70-150, ES-ZS, high-strength shaft	3.4 [1.0]	160 [72.7]	tba	2006260
VGSA S70-150, ES, high-strength shaft, factory shimmed	3.4 [1.0]	160 [72.7]	tba	100204881
VGSA S70-150, ES-ZS, high-strength shaft, factor shimmed	3.4 [1.0]	160 [72.7]	tba	100204896
VGSA S70-150, ES-SS, high-strength shaft, factory shimmed	3.4 [1.0]	160 [72.7]	tba	100204898

† To be assigned

562/540 Series Bolt-On Intake

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
Standard intake: ARZ, high-strength shaft	0.7 [0.2]	47 [21.4]	1145424	1108042
Standard intake: ARZ ZS, high-strength shaft	0.7 [0.2]	47 [21.4]	tba†	1290758
Standard intake: ARZ SS, high-strength shaft	0.7 [0.2]	47 [21.4]	tba	2005181

† To be assigned

675 Series Bolt-On Intake

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
Standard intake: ARZ ZS, high-strength shaft , 675/540	1.1 [0.3]	47 [21.4]	tba†	1308832
Standard intake: ARZ, 675/738	1.1 [0.3]	47 [21.4]	1145440	1129501
Standard intake: ARZ ZS, high-strength shaft , 675/738	1.1 [0.3]	47 [21.4]	tba	1265503
Gas separator: GS, 675/738	6.0 [1.8]	250 [113.6]	662213	tba

† To be assigned

400 Series AGH* Advanced Gas-Handling Device D5-21 (500- to 2,100-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
AGH device D5-21, FL-CT ES, high-strength shaft	6.3 [1.9]	135 [61.4]	1236686	1251941
AGH device D5-21, FL-CT ARZ, high-strength shaft	6.3 [1.9]	135 [61.4]	1252279	1251925
AGH device D5-21, CR-CT ES, high-strength shaft	6.3 [1.9]	135 [61.4]	1237890	1251743
AGH device D5-21, CR-CT ARZ, high-strength shaft	6.3 [1.9]	135 [61.4]	1252444	1251453

Pump Intakes and Gas-Handling Devices

400 Series AGH Advanced Gas-Handling Device D20-60 (2,000- to 6,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
AGH device D20-60, C-CT ES, high-strength shaft	6.3 [1.9]	135 [61.4]	1345859	tba†
AGH device D20-60, C-LT ES, high-strength shaft	6.3 [1.9]	135 [61.4]	2000095	tba
AGH device D20-60, C-LT ES-ZS, high-strength shaft	6.3 [1.9]	135 [61.4]	tba	2005146

† To be assigned

540 Series AGH Advanced Gas-Handling Device G20-40 (2,000- to 4,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
AGH device G20-40, FL-CT ES, high-strength shaft	6.3 [1.9]	272 [123.6]	1295682	1295708
AGH device G20-40, FL-CT ARZ, high-strength shaft	6.3 [1.9]	272 [123.6]	1294115	1295120
AGH device G20-40, CR-CT ES, high-strength shaft	6.3 [1.9]	272 [123.6]	1295955	1295997
AGH device G20-40, CR-CT ES-ZS, high-strength shaft	6.3 [1.9]	272 [123.6]	2004363	tba†
AGH device G20-40, CR-CT ARZ, high-strength shaft	6.3 [1.9]	272 [123.6]	1295930	1295971
AGH device G20-40, CR-CT ARZ ZS, high-strength shaft	6.3 [1.9]	272 [123.6]	1335421	1340025
AGH device G20-40, CR-CT ARZ SS, high-strength shaft	6.3 [1.9]	272 [123.6]	tba	2007919

† To be assigned

538 Series AGH Advanced Gas-Handling Device S70-100 (7,000- to 10,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
AGH device S70-100, FL-CT ES, high-strength shaft	6.3 [1.9]	284 [129.1]	1246008	1254614
AGH device S70-100, FL-CT ARZ, high-strength shaft	6.3 [1.9]	284 [129.1]	1254580	1254598
AGH device S70-100, CR-CT ES, high-strength shaft	6.3 [1.9]	284 [129.1]	1254622	1254606
AGH device S70-100, CR-CT ARZ, high-strength shaft	6.3 [1.9]	284 [129.1]	1254564	1254572

Pump Intakes and Gas-Handling Devices

562 Series AGH Advanced Gas-Handling Device H100-250 (10,000- to 25,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
AGH device H100-250, C-LT, 562/540	5.2 [1.6]	263 [119.5]	2010121	tba†
AGH device H100-250, C-LT-ES, modified shaft, 562/540	5.2 [1.6]	263 [119.5]	2010124	2010126
AGH device H100-250, C-LT-ES, 562/540	5.2 [1.6]	263 [119.5]	tba	2010111
AGH device H100-250, C-LT ARZ SS, 562/540	5.2 [1.6]	263 [119.5]	2010100	2010110
AGH device H100-250, C-LT ARZ SS, modified shaft, 562/540	5.2 [1.6]	263 [119.5]	2010128	2010127
AGH device H100-250, C-LT-ES, 675/540	5.2 [1.6]	263 [119.5]	2010120	2010112
AGH device H100-250, C-LT ARZ SS, 675/540	5.2 [1.6]	263 [119.5]	2010101	2010105
AGH device H100-250, C-LT-ES, 725/540	5.2 [1.6]	263 [119.5]	2010119	2010113
AGH device H100-250, C-LT ARZ SS, 725/540	5.2 [1.6]	263 [119.5]	2010102	2010106
AGH device H100-250, C-LT-ES, 862/540	5.2 [1.6]	263 [119.5]	2010118	2010114
AGH device H100-250, C-LT ARZ SS, 862/540	5.2 [1.6]	263 [119.5]	2010103	2010107

† To be assigned

400 Series MGH* Multiphase Gas-Handling System D8-42 (800- to 4,200-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
MGH system D8-42, CR-CT	6.9 [2.1]	160 [72.7]	100065824	tba†
MGH system D8-42, CR-LT	6.9 [2.1]	160 [72.7]	100109719	tba

† To be assigned

538/540 Series MGH Multiphase Gas-Handling System S50-90 (5,000- to 9,000-bbl/d Capacity)

Description	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
MGH system S50-90	6.3 [1.9]	290 [131.8]	2004352	100090034

AN550 Pump

338 Series, Min. Casing Size 4½-in [114.3-mm] OD						
			ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	FL-CT-ES Part Number	Max. Stages	FL-CT-ARZ Part Number
10	2.1 [0.64]	38 [17.3]	16	tba	13	1148261
20	3.5 [1.07]	63 [28.6]	35	tba	29	1148279
30	4.9 [1.49]	88 [40.0]	54	tba	45	1148287
40	6.3 [1.92]	113 [51.3a]	74	tba	62	1148295
50	7.7 [2.35]	138 [62.7]	93	Q883181	80	1148303
60	9.1 [2.78]	163 [74.0]	112	Q883199	96	1148311
70	10.5 [3.20]	188 [85.4]	132	Q883207	112	1148329
80	11.9 [3.63]	213 [96.7]	151	C883215	130	1148337
90	13.3 [4.06]	238 [108.1]	170	Q883223	146	1148345
100	14.7 [4.48]	263 [119.4]	190	Q883231	164	1148352

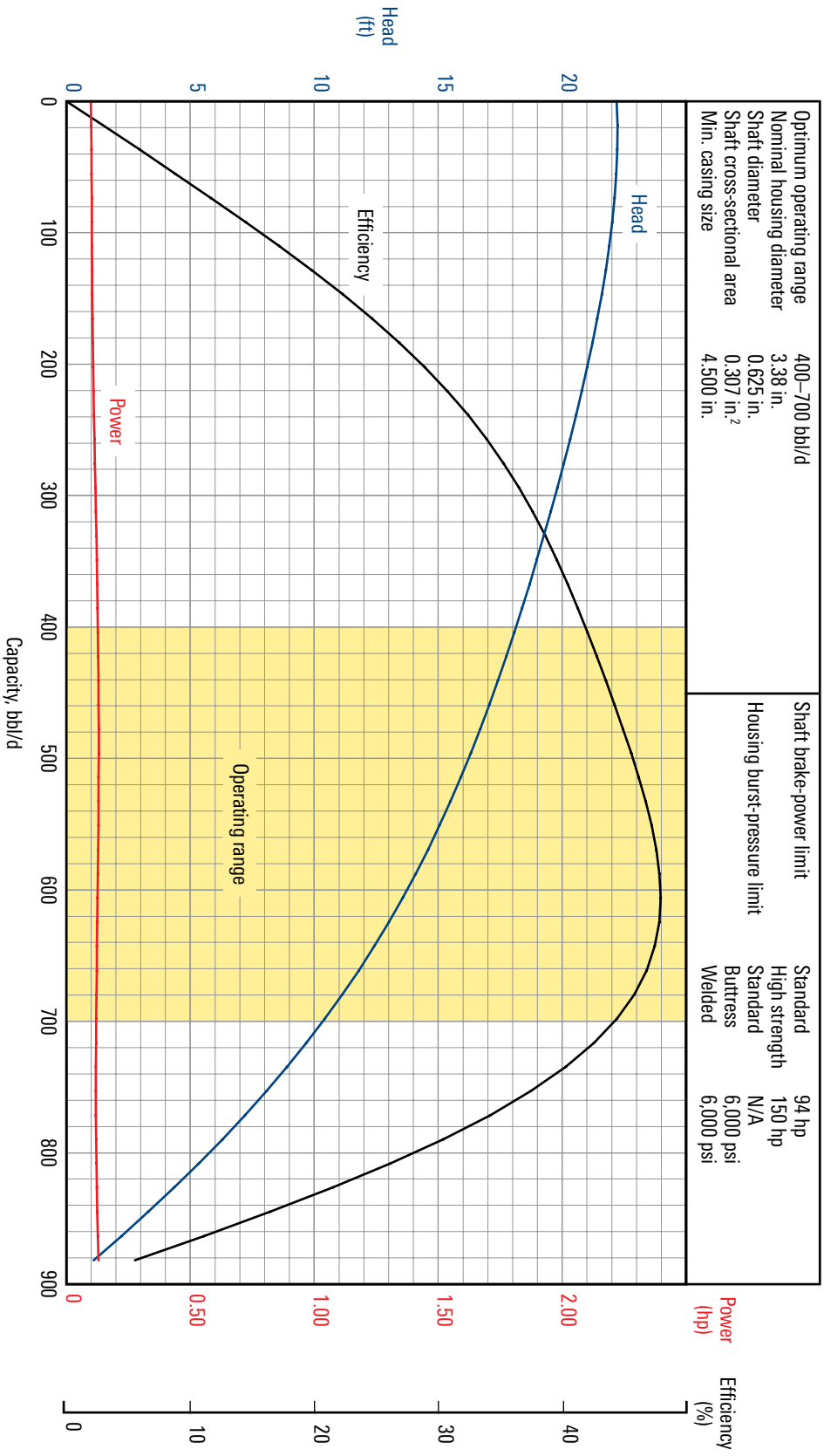
† To be assigned

AN550 Pump, 338 Series, Tandem Combinations							
		Tandem Housing Sections Number					
Pump Housing	Number of Stages	50	60	70	80	90	100
110	205	1					
120	224		2				
130	244		1	1			
140	264			2			
150	283			1	1		
160	302				2		
170	321				1	1	
180	340†					2	
190	360†					1	1
200	380†						2
210	396†			3			
220	415†			2	1		
230	434†			2		1	
240	453†				3		
250	472†				2	1	
260	492†				2		1
270	510†					3	
280	530†					2	1
290	550†					1	2
300	570†						3
310	585†			1	3		
320	604†				4		

Note: Stage counts are for FL-CT-ES pumps

† Requires use of high-load bearing in protector

AN550 Pump



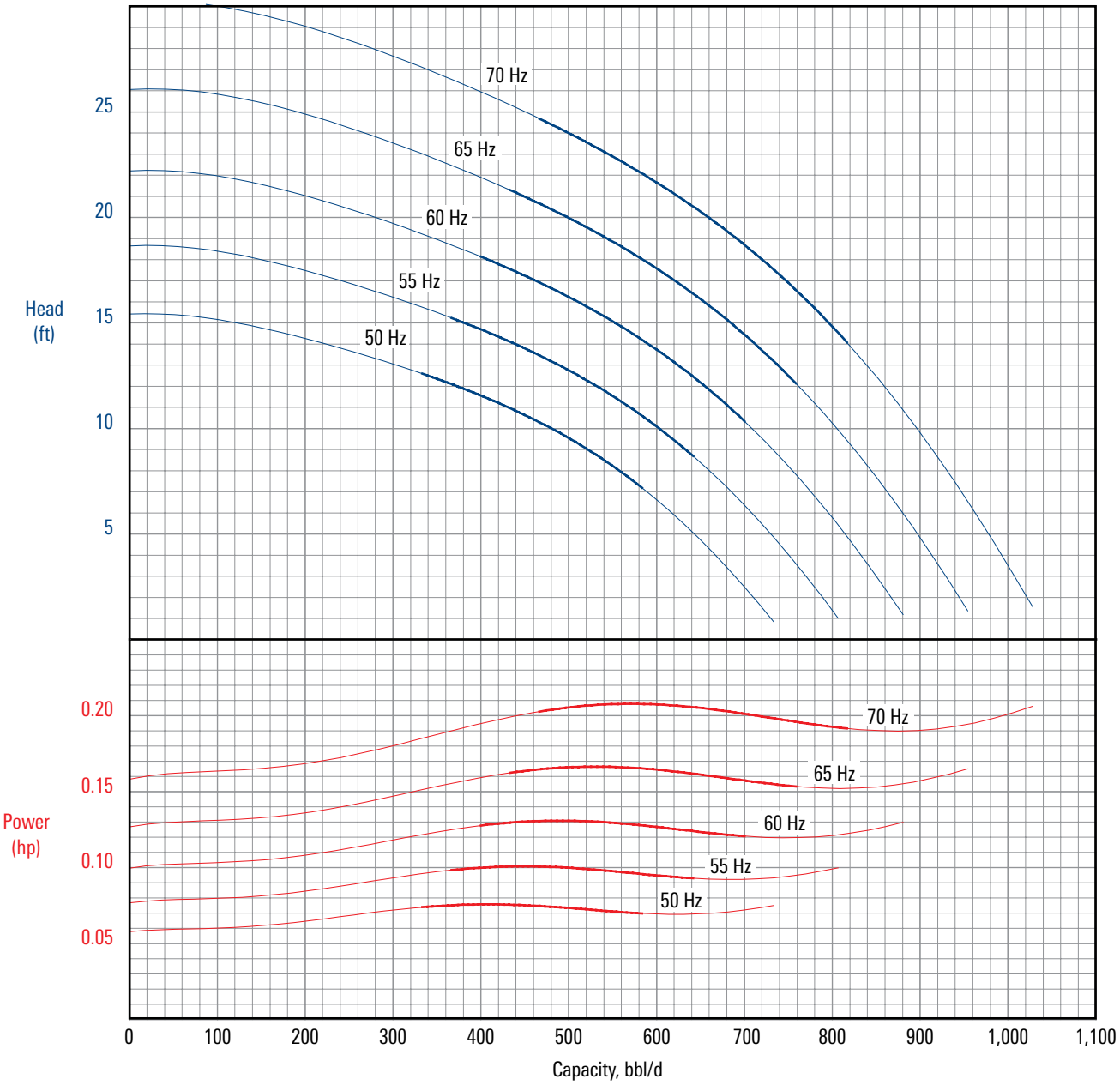
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

AN550 Pump

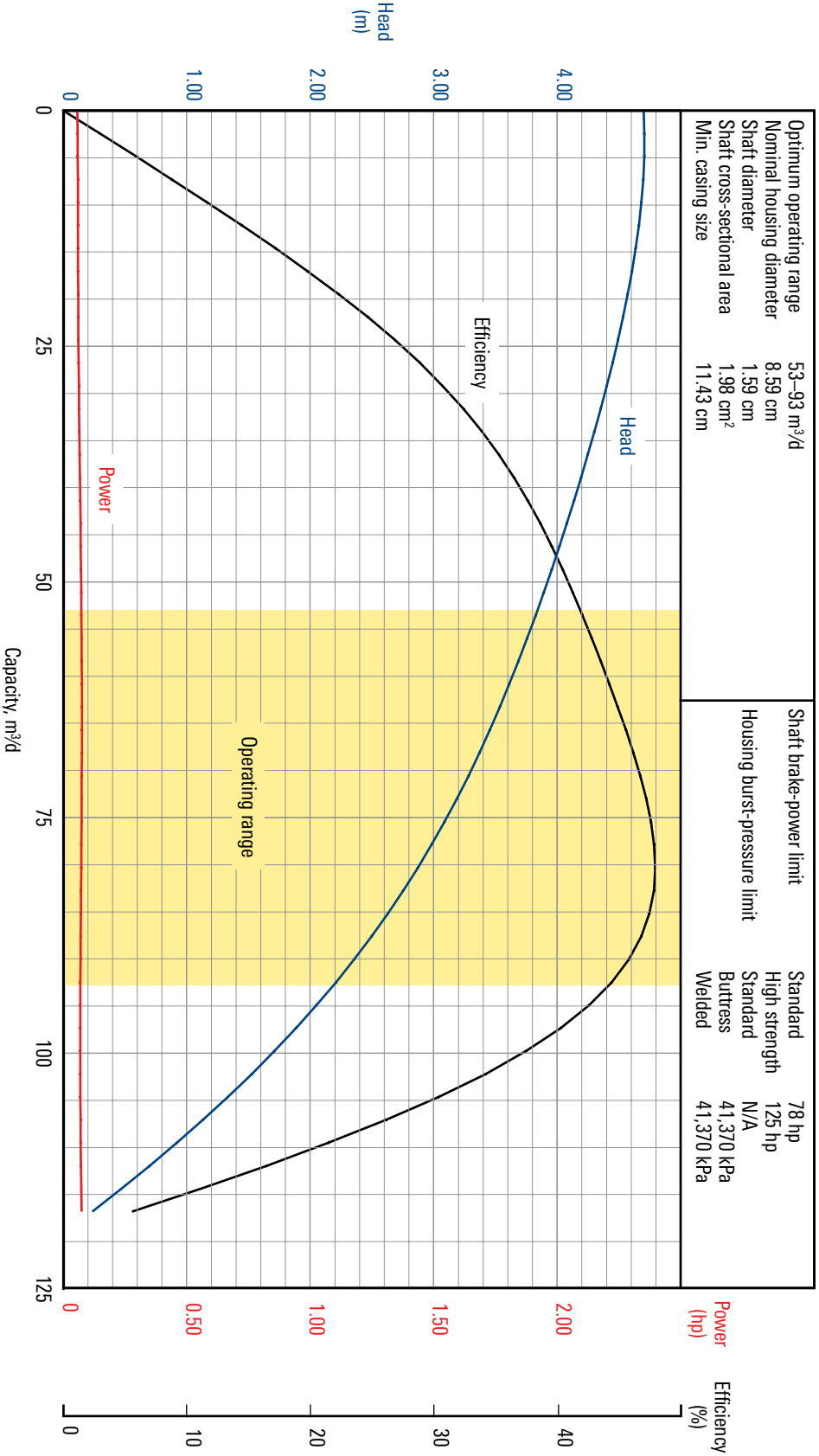
REDA ESP systems

Pump Performance Curve AN550

Curve computed for one stage in fluid of 1.00 sg



AN550 Pump



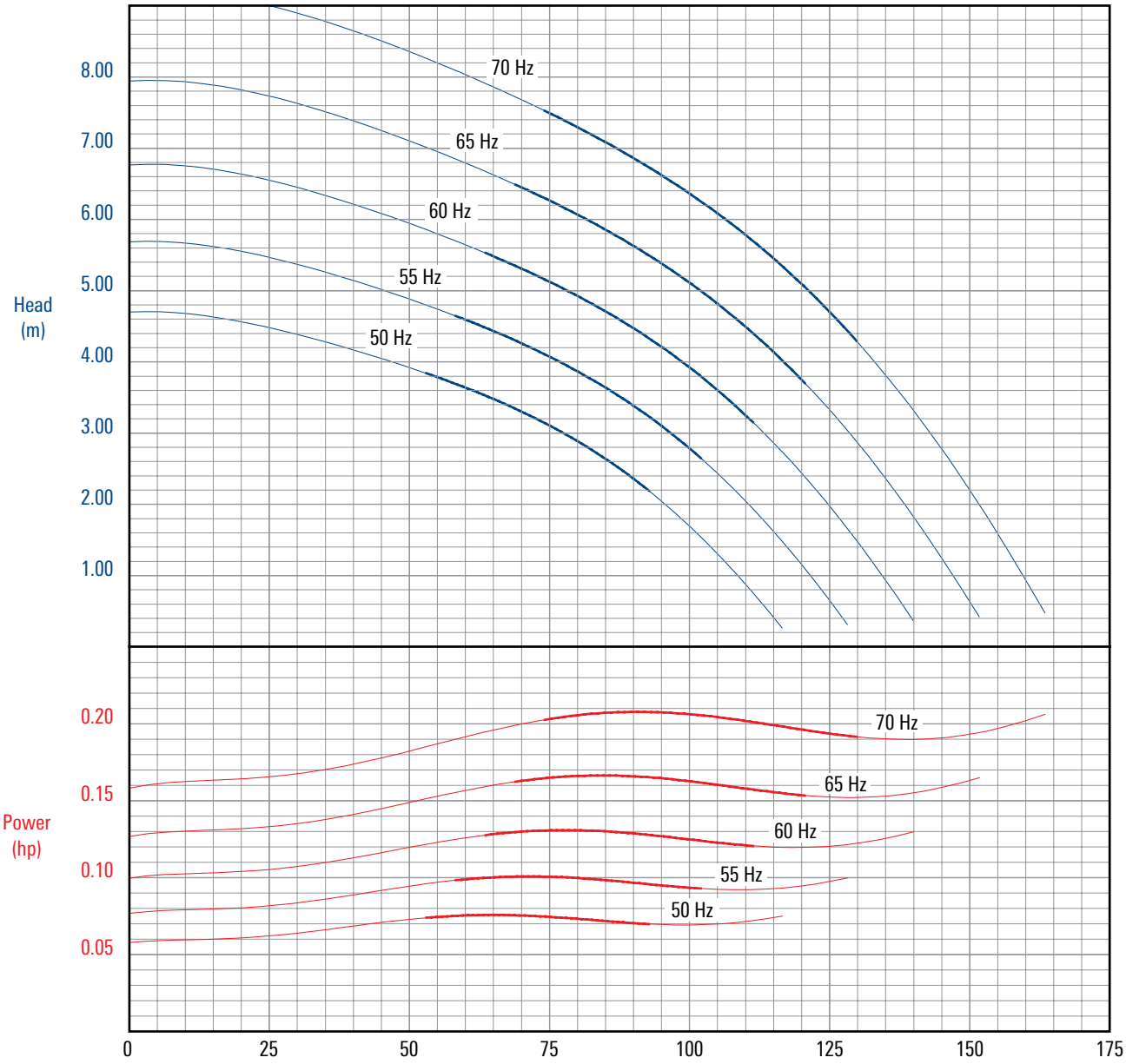
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

AN550 Pump

REDA ESP systems

Pump Performance Curve AN550

Curve computed for one stage in fluid of 1.00 sg



AN900 Pump

338 Series, Min. Casing Size 4½-in [114.3-mm] OD						
			ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	FL-CT-ES	Max. Stages	FL-CT-ARZ Part Number
10	2.1 [0.64]	38 [17.3]	16	tba	13	1148162
20	3.5 [1.07]	63 [28.6]	35	tba	29	1148170
30	4.9 [1.49]	88 [40.0]	54	tba	45	1148188
40	6.3 [1.92]	113 [51.3]	74	tba	62	1148196
50	7.7 [2.35]	138 [62.7]	93	tba	80	1148204
60	9.1 [2.78]	163 [74.0]	112	C883298	96	1148212
70	10.5 [3.20]	188 [85.4]	132	Q883306	112	1148220
80	11.9 [3.63]	213 [96.7]	151	100022487	130	1148238
90	13.3 [4.06]	238 [108.1]	170	tba	146	1148246
100	14.7 [4.48]	263 [119.4]	190	Q883330	164	1148253

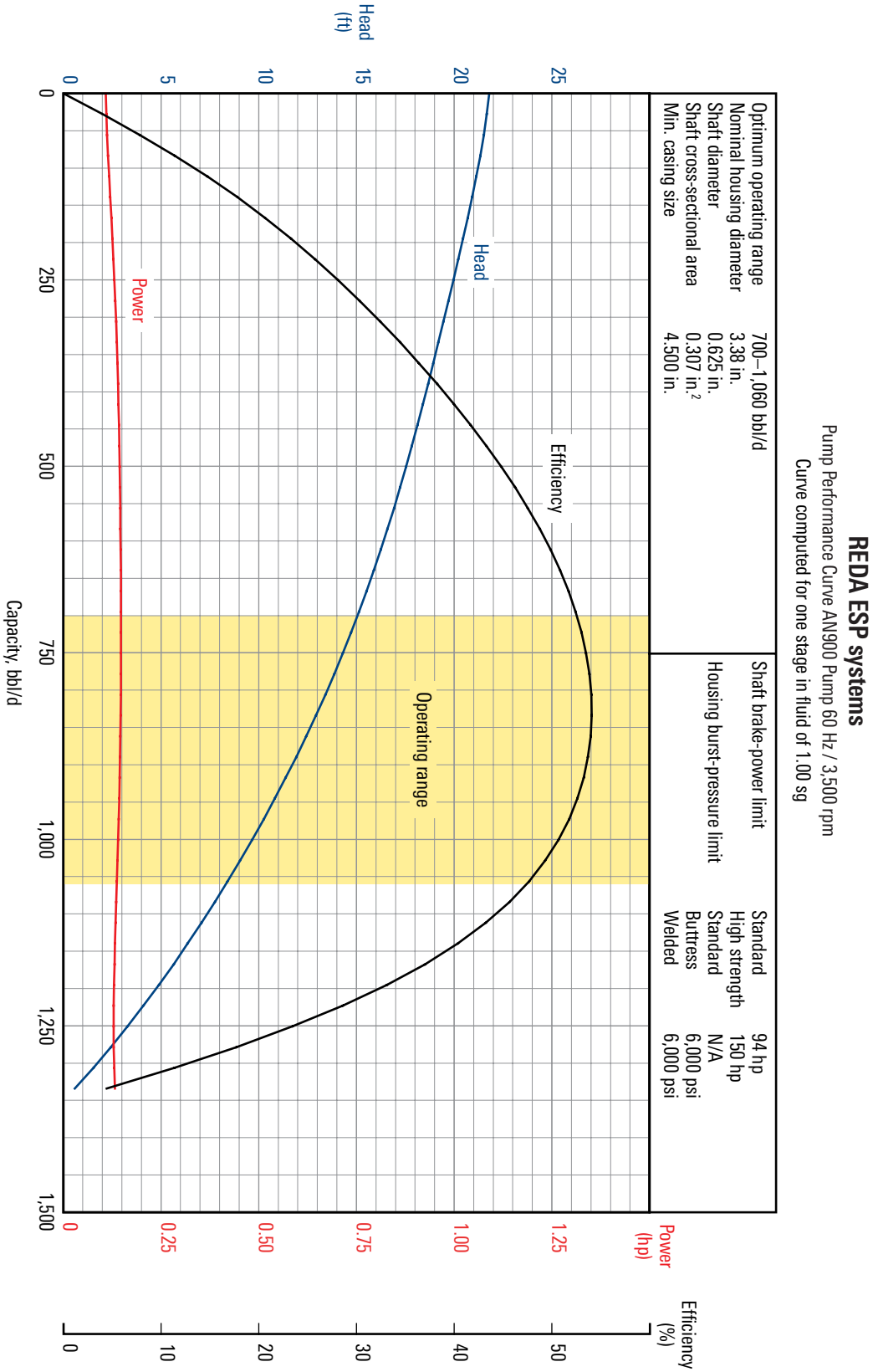
† To be assigned

AN900 Pump, 338 Series, Tandem Combinations							
		Tandem Housing Sections Number					
Pump Housing	Number of Stages	50	60	70	80	90	100
110		205	1	1			
120		224	2				
130		244	1	1			
140		264		2			
150		283		1	1		
160		302			2		
170		321			1	1	
180		340†				2	
190		359†				1	1
200		378†					2
210		396†		3			
220		415†		2	1		
230		434†		2		1	
240		453†			3		
250		472†			2	1	
260		491†			2		1
270		510†				3	
280		529†				2	1
290		548†				1	2
300		567†					3
310		585†		1	3		
320		604†			4		
330		623†			3	1	

Note: Stage counts are for FL-CT-ES pumps

† Requires use of high-load bearing in protector

AN900 Pump

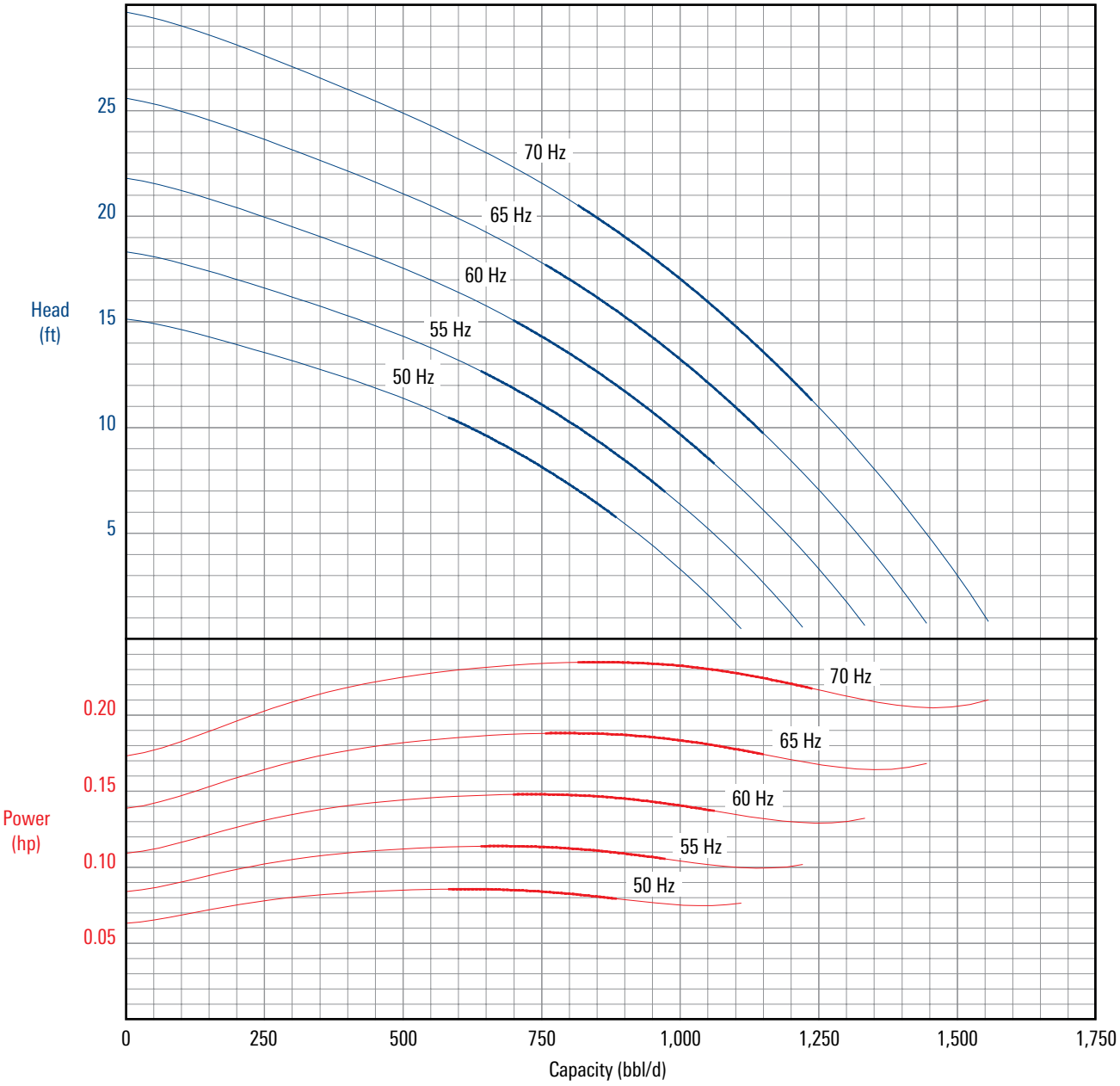


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

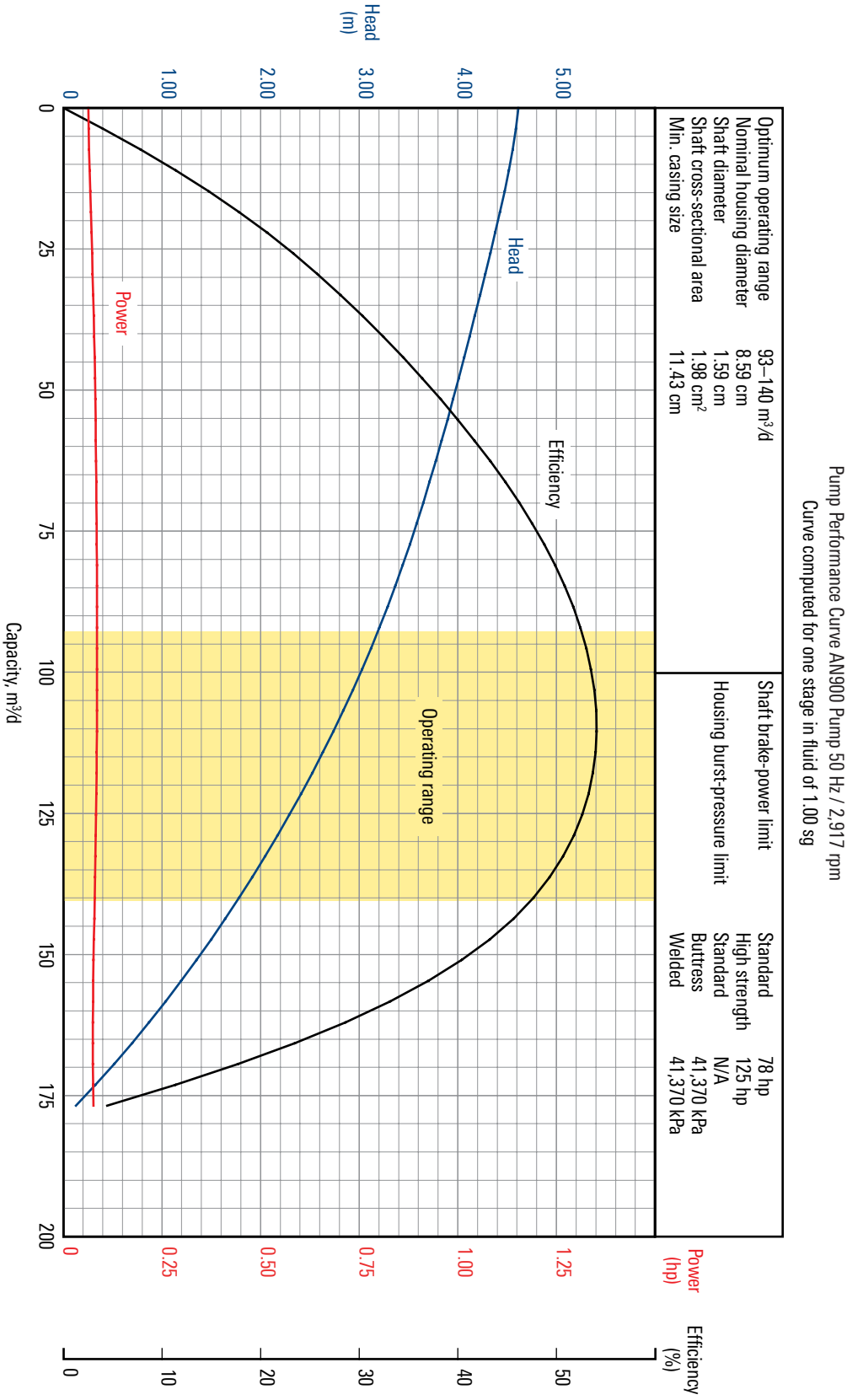
AN900 Pump

REDA* Pump AN900 Performance Curve

Curve computed for one stage in fluid of 1.00 sg.



AN900 Pump

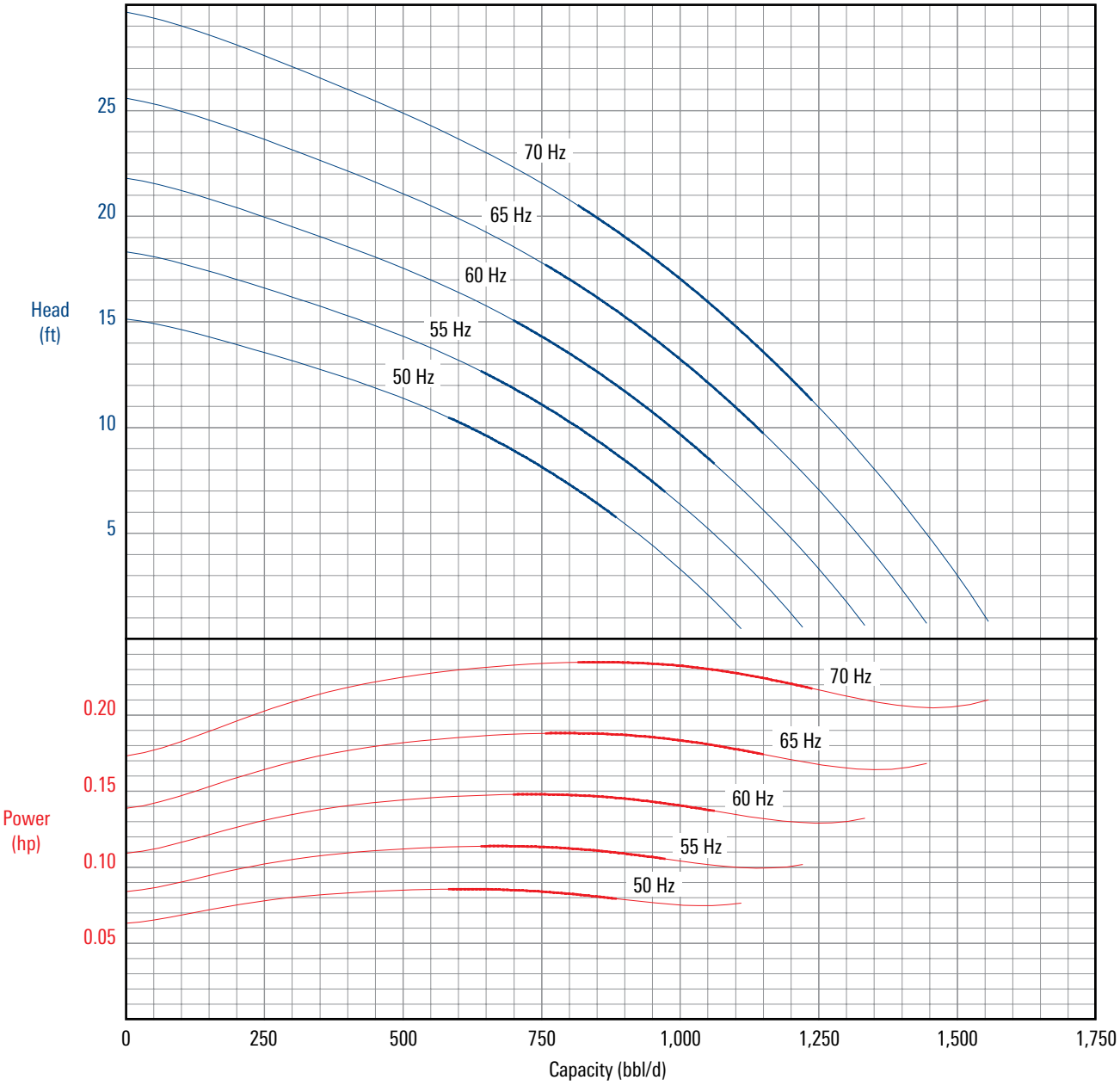


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

AN900 Pump

REDA* Pump AN900 Performance Curve

Curve computed for one stage in fluid of 1.00 sg.



AN1200 Pump

338 Series, Min. Casing Size 4½-in [114.3-mm] OD						
			ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	FL-CT-ES Part Number	Max. Stages	FL-CT-ARZ Part Number
10	2.1 [0.64]	38 [17.3]	13	tba[†]	11	1147388
20	3.5 [1.07]	63 [28.6]	29	tba	23	1147396
30	4.9 [1.49]	88 [40.0]	45	tba	37	1147404
40	6.3 [1.92]	113 [51.3]	61	tba	50	1147412
50	7.7 [2.35]	138 [62.7]	77	tba	66	1147420
60	9.1 [2.78]	163 [74.0]	93	tba	79	1147438
70	10.5 [3.20]	188 [85.4]	108	Q883405	92	1147446
80	11.9 [3.63]	213 [96.7]	124	Q883413	107	1147453
90	13.3 [4.06]	238 [108.1]	140	Q883421	120	1147461
100	14.7 [4.48]	263 [119.4]	156	tba	135	1147479

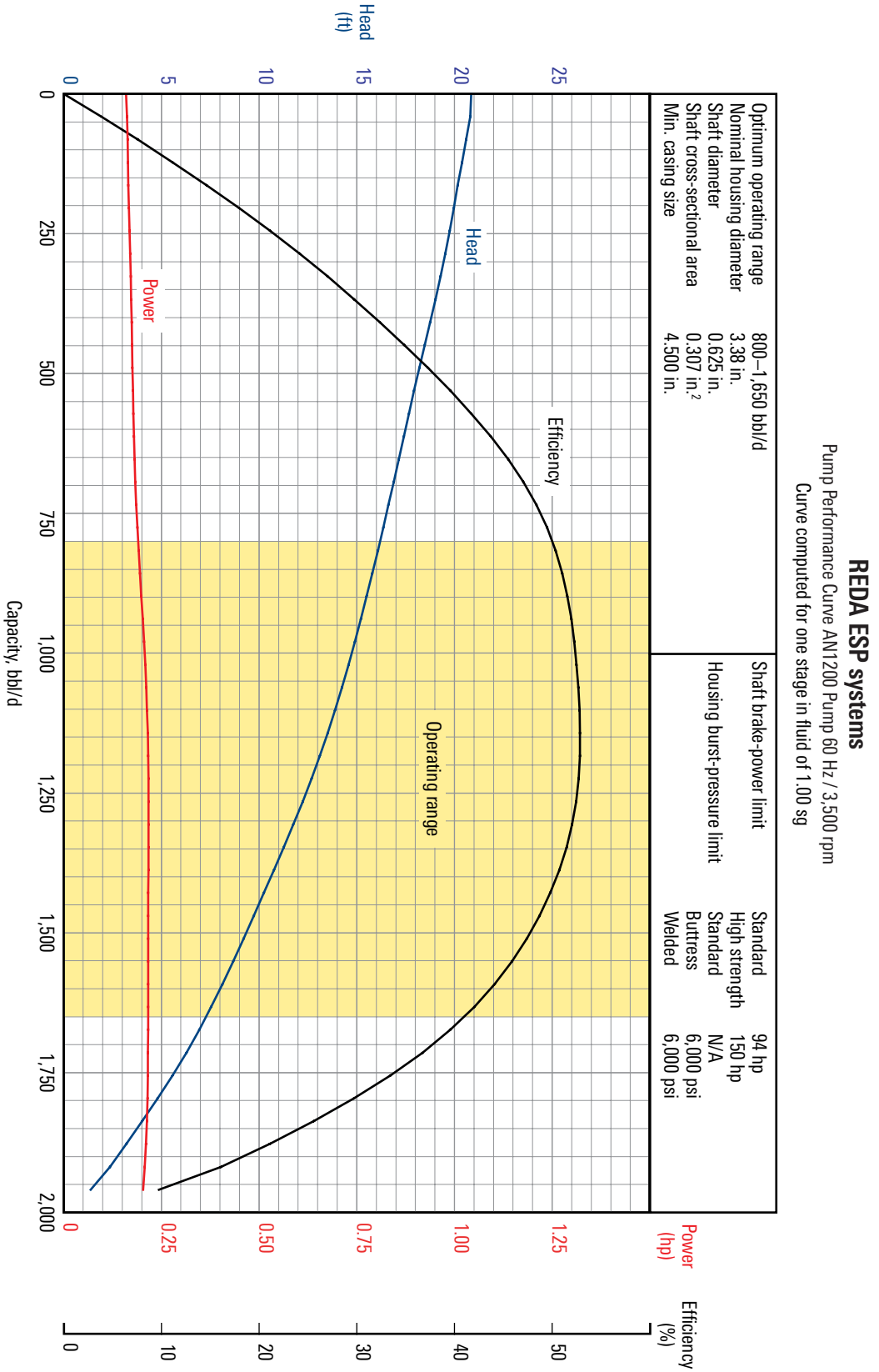
[†] To be assigned

AN1200 Pump

AN1200 Pump, 338 Series, Tandem Combinations							
		Tandem Housing Sections Number					
Pump Housing	**Number of Stages**	**50**	**60**	**70**	**80**	**90**	**100**
110	170	1	1				
120	186		2				
130	201		1	1			
140	216			2			
150	232			1	1		
160	248				2		
170	264				1	1	
180	280					2	
190	296					1	1
200	312						2
210	324			3			
220	340			2	1		
230	356†			2		1	
240	372†				3		
250	388†				2	1	
260	404†				2		1
270	420†					3	
280	436†					2‡	1‡
290	452†					1‡	2‡
300	468†						3‡
310	480†			1‡	3‡		
320	496†				4‡		
330	512†				3‡	1‡	
340	528†				3‡		1‡
350	544†				1‡	3‡	
360	560†					4‡	
370	576†					3‡	1‡
380	592†				1‡		3‡
390	608†					1‡	3‡
400	624†						4‡
410	636†			2‡		3‡	
420	652†			1‡	1‡	3‡	

Note: Stage counts are for FL-CT-ES pumps.
Requires use of high-load bearing in protector
‡ Requires use of high-strength shaft in lowermost pump

AN1200 Pump

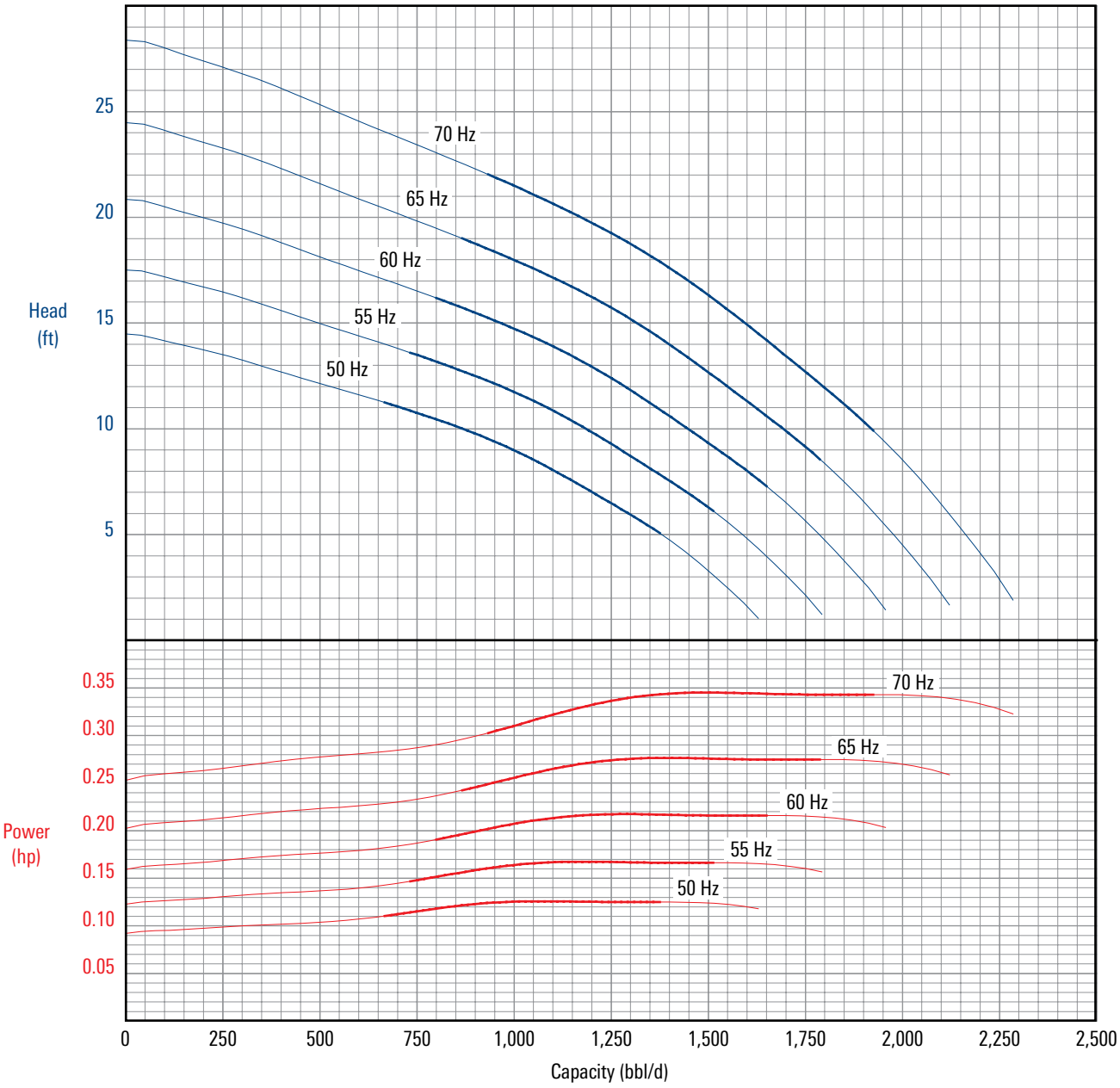


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

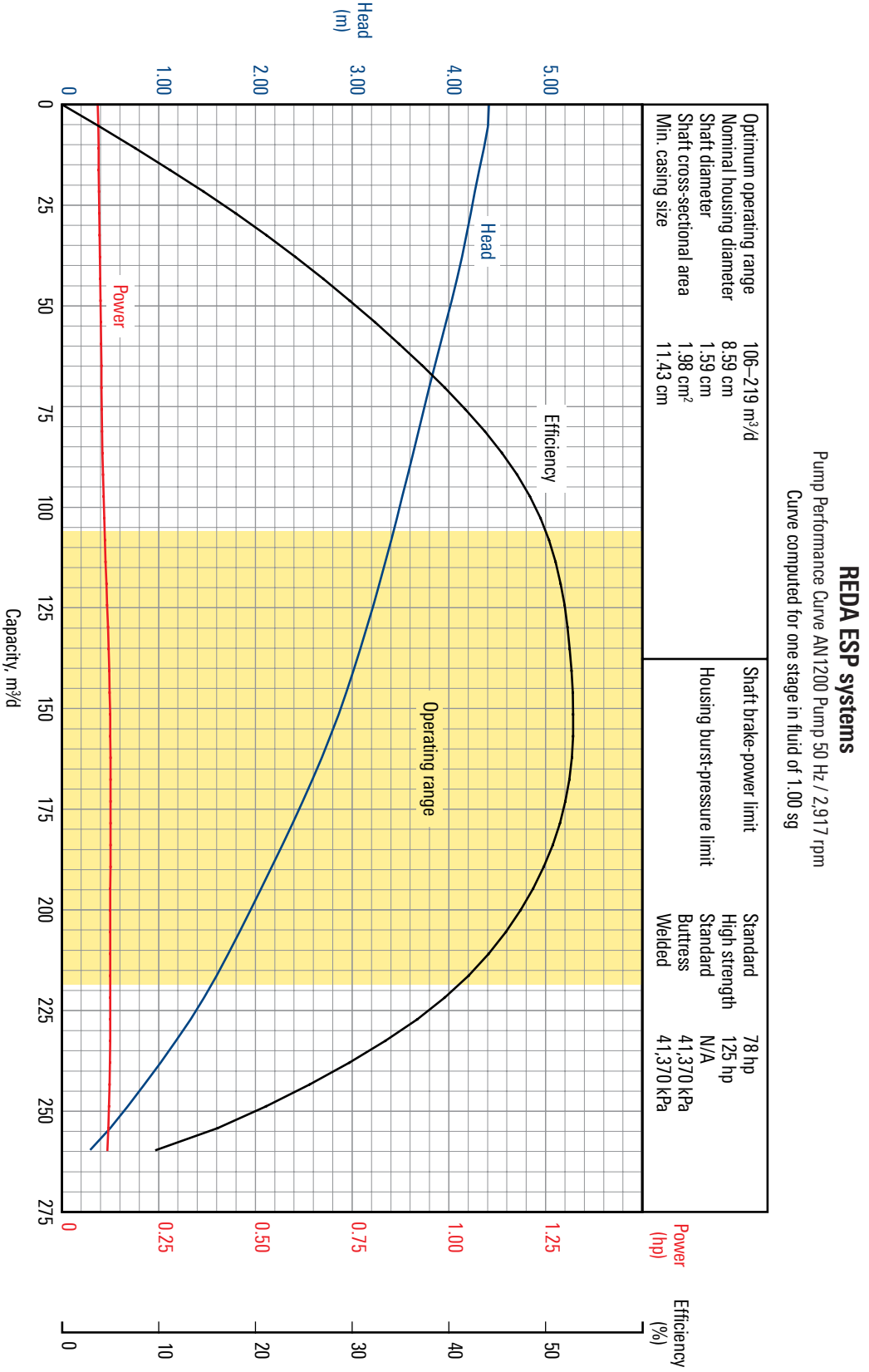
AN1200 Pump

REDA* Pump AN1200 Performance Curve

Curve computed for one stage in fluid of 1.00 sg.



AN1200 Pump



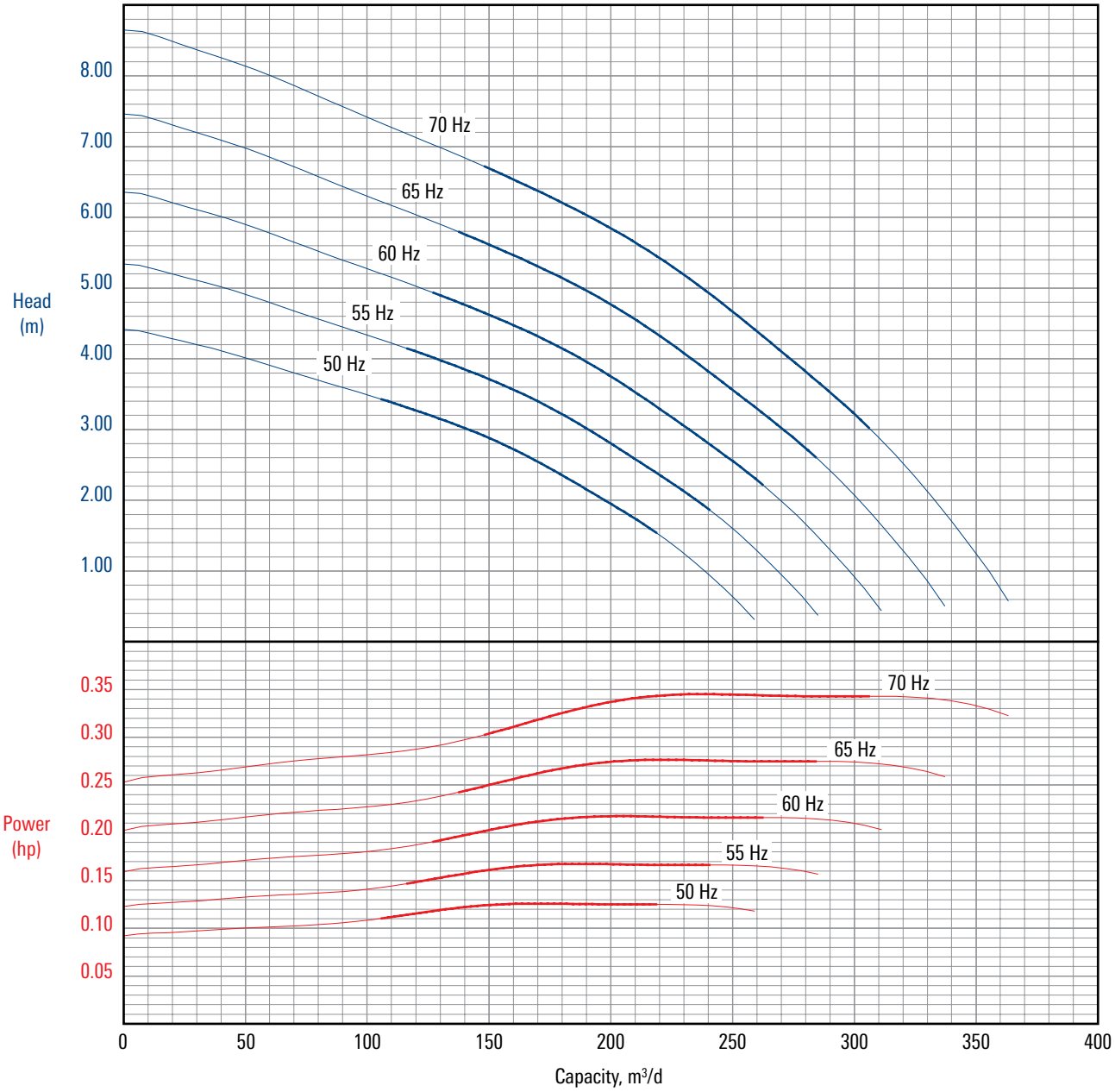
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

AN1200 Pump

REDA ESP systems

Pump Performance Curve AN1200

Curve computed for one stage in fluid of 1.00 sg



AN1500 Pump

338 Series, Min. Casing Size 4½-in [114.3-mm] OD						
			ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	FL-CT-ES Part Number	Max. Stages	FL-CT-ARZ Part Number
10	2.1 [0.64]	38 [17.3]	10	tba	8	1147172
20	3.5 [1.07]	63 [28.6]	23	tba	19	1147180
30	4.9 [1.49]	88 [40.0]	35	tba	29	1147198
40	6.3 [1.92]	113 [51.3]	48	tba	40	1147206
50	7.7 [2.35]	138 [62.7]	60	tba	51	1147214
60	9.1 [2.78]	163 [74.0]	73	Q883603	62	1147222
70	10.5 [3.20]	188 [85.4]	85	Q883611	73	1147230
80	11.9 [3.63]	213 [96.7]	98	Q883629	84	1147248
90	13.3 [4.06]	238 [108.1]	110	Q883637	95	1147255
100	14.7 [4.48]	263 [119.4]	123	Q883645	106	1147263

† To be assigned o be assigned

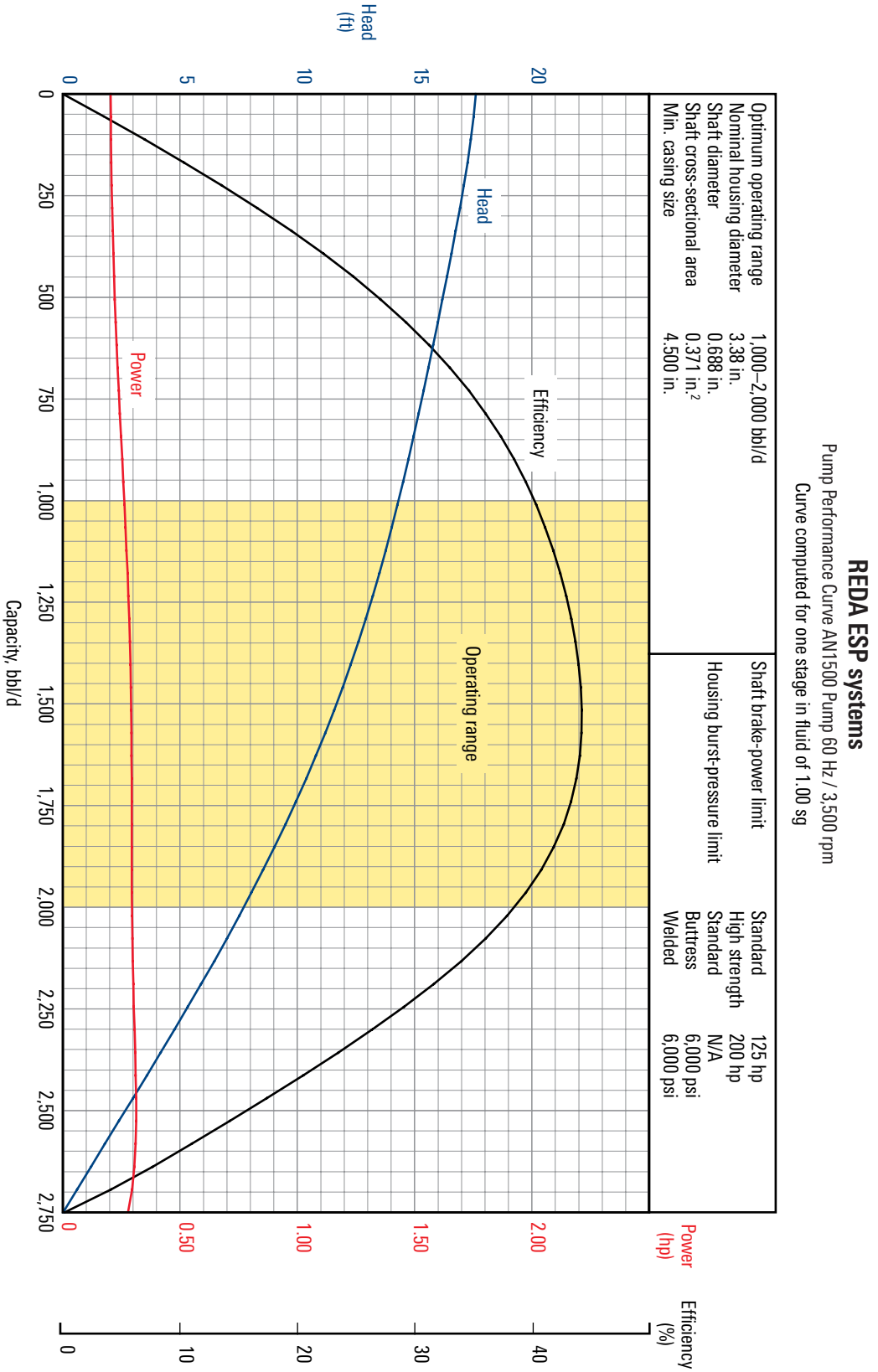
AN1500 Pump

AN1500 Pump, 338 Series, Tandem Combinations

		Tandem Housing Sections Number					
Pump Housing	**Number of Stages**	**50**	**60**	**70**	**80**	**90**	**100**
110	133	1	1				
120	146		2				
130	158		1	1			
140	170			2			
150	183			1	1		
160	196				2		
170	208				1	1	
180	220					2	
190	233					1	1
200	246						2
210	255			3			
220	268			2	1		
230	280			2		1	
240	294				3		
250	306				2	1	
260	319				2		1
270	330					3	
280	343†					2	1
290	356†					1	2
300	369†						3
310	379†			1	3		
320	392†				4‡		
330	404†				3‡	1‡	
340	417†				3‡		1‡
350	428†				1‡	3‡	
360	440†					4‡	
370	453†					3‡	1‡
380	467†				1‡		3‡
390	479†					1‡	3‡
400	492†						4‡
410	502†				4‡	1‡	
420	514†				3‡	2‡	
430	526†				2‡	3‡	
440	538†				1‡	4‡	
450	550†					5‡	
460	563†					4‡	1‡
470	576†					3‡	2‡
480	589†					2‡	3‡
490	602†					1‡	4‡
500	615†						5‡

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector
‡ Requires use of high-strength shaft in lowermost pump

AN1500 Pump



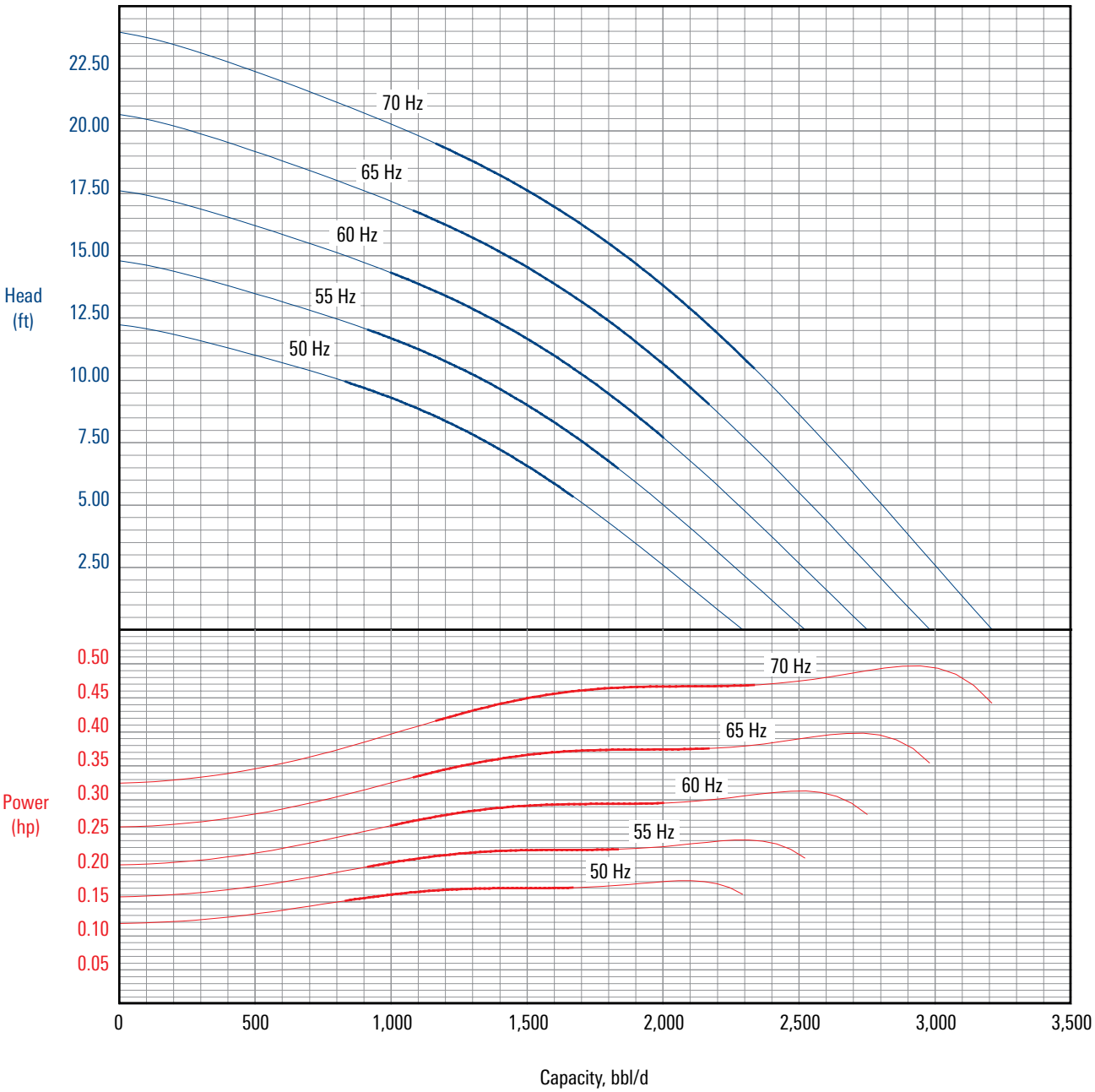
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

AN1500 Pump

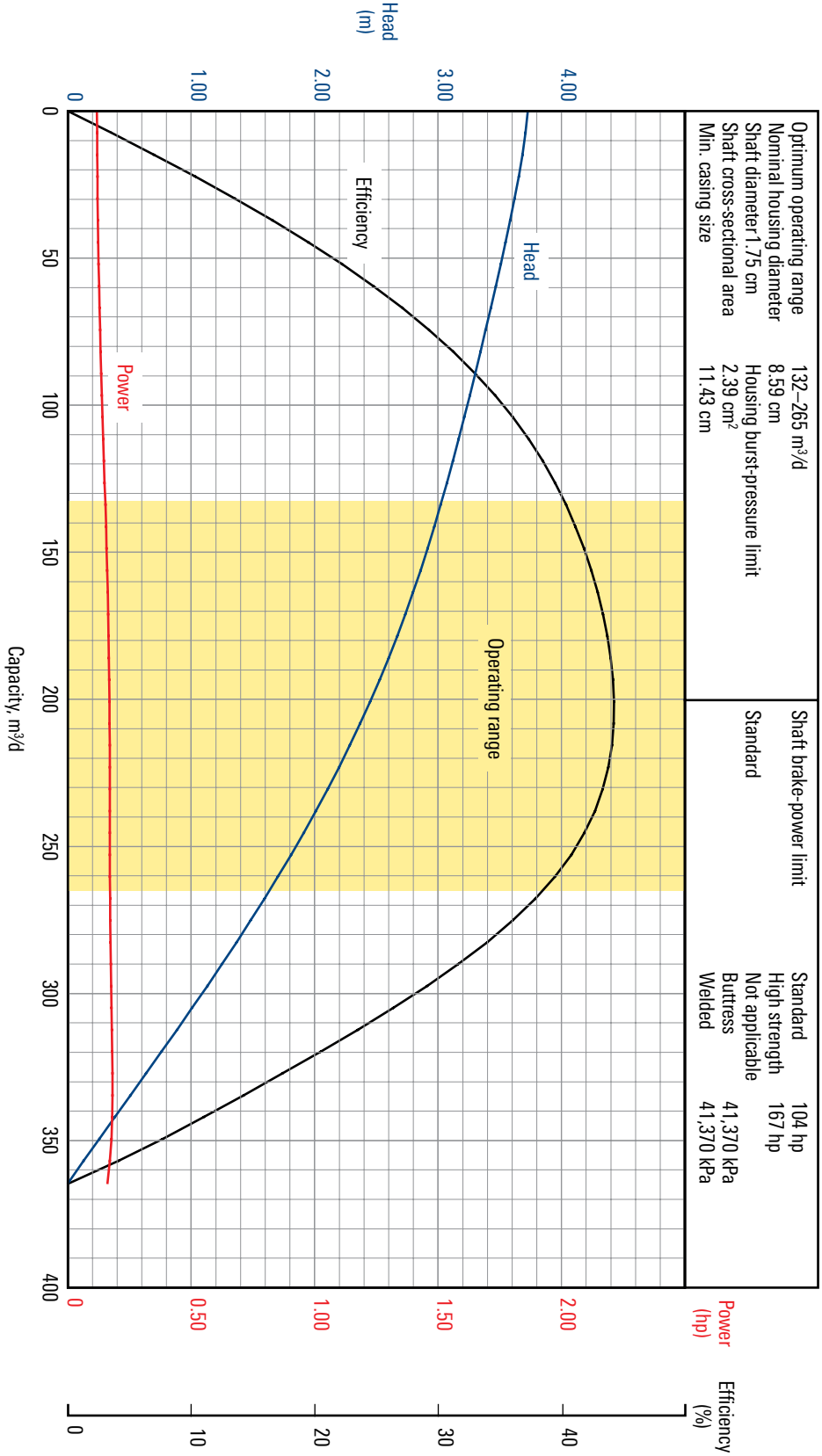
REDA ESP systems

Pump Performance Curve AN1500

Curve computed for one stage in fluid of 1.00 sg



AN1500 Pump



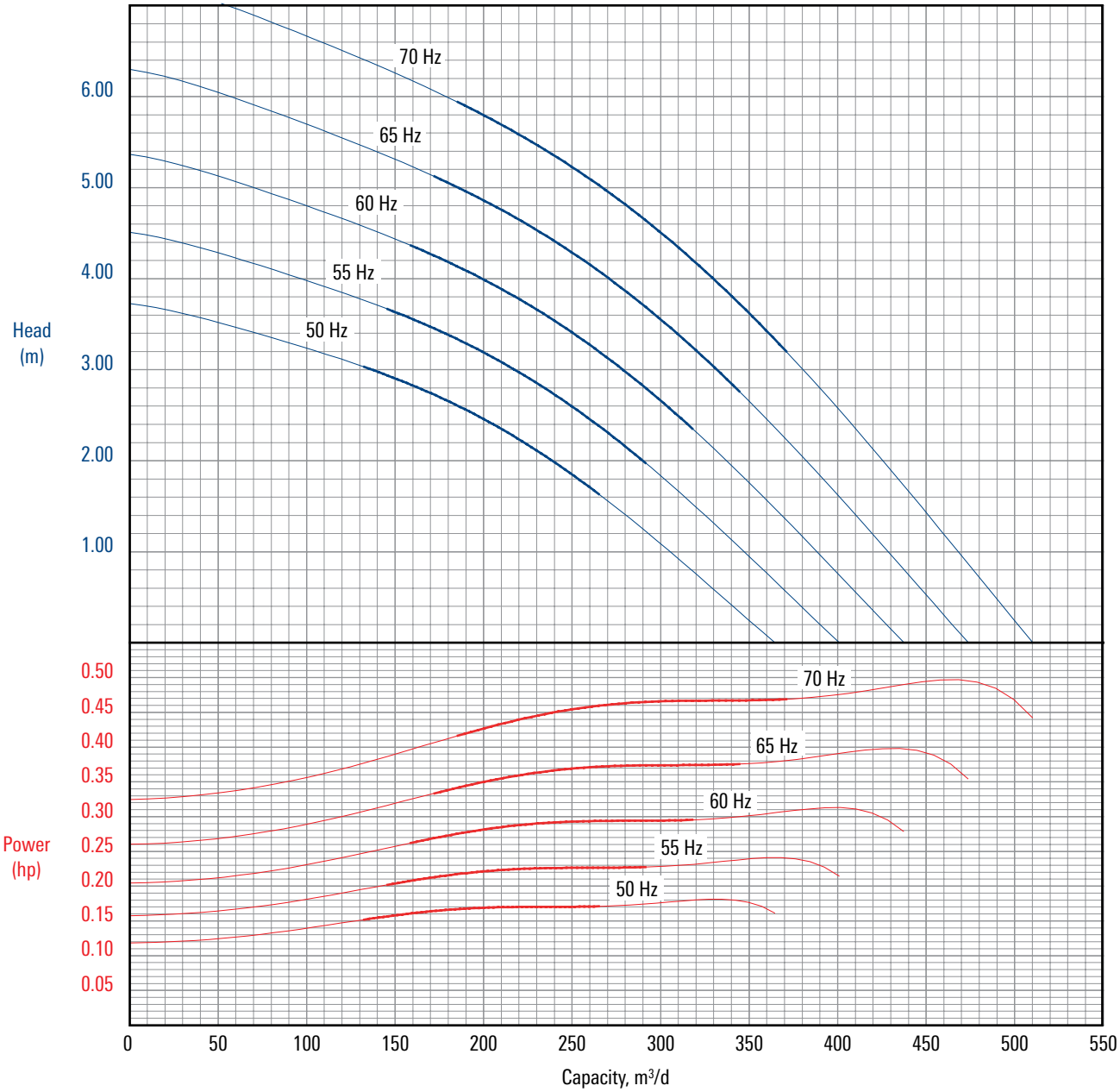
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

AN1500 Pump

REDA ESP systems

Pump Performance Curve AN1500

Curve computed for one stage in fluid of 1.00 sg



A2700N Pump

338 Series, Min. Casing Size 4½-in [114.3-mm] OD

			ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**CR-CT-ARZ Part Number**
10	2.1 [0.64]	38 [17.3]	4	100142518	4	100144727
20	3.5 [1.07]	63 [28.6]	10	100160591	10	100160184
30	4.9 [1.49]	88 [40.0]	15	100160605	15	100160183
40	6.3 [1.92]	113 [51.3]	20	100160606	21	100159837
50	7.7 [2.35]	138 [62.7]	26	100150209	26	100151494
60	9.1 [2.78]	163 [74.0]	31	100160608	31	100159833
70	10.5 [3.20]	188 [85.4]	37	100160609	37	100159826
80	11.9 [3.63]	213 [96.7]	42	100160610	42	100159721
90	13.3 [4.06]	238 [108.1]	48	100150210	48	100151513
100	14.7 [4.48]	263 [119.4]	53	100160611	53	100159718
110	16.1 [4.91]	288 [130.8]	59	100160613	59	100159710
120	17.5 [5.34]	313 [142.1]	64	100150211	64	100151536
130	18.9 [5.76]	338 [153.5]	70	100176477	70	100167674
140	20.3 [6.19]	363 [164.8]	75	100176480	75	100167678
150	21.7 [6.62]	388 [176.2]	81	100176481	81	100167679

338 Series, Min. Casing Size 4½-in [114.3-mm] OD

			ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-LT-ES Part Number**	**Max. Stages**	**CR-LT-ARZ Part Number**
10	2.1 [0.64]	38 [17.3]	4	100146112	4	100145843
20	3.5 [1.07]	63 [28.6]	10	100155822	10	100158103
30	4.9 [1.49]	88 [40.0]	15	100155824	15	100158104
40	6.3 [1.92]	113 [51.3]	20	100155827	21	100158105
50	7.7 [2.35]	138 [62.7]	26	100151727	26	100158106
60	9.1 [2.78]	163 [74.0]	31	tba[†]	31	100158107
70	10.5 [3.20]	188 [85.4]	37	100156087	37	100158109
80	11.9 [3.63]	213 [96.7]	42	100156088	42	100158110
90	13.3 [4.06]	238 [108.1]	48	100151728	48	100158111
100	14.7 [4.48]	263 [119.4]	53	100156090	53	100158112
110	16.1 [4.91]	288 [130.8]	59	100156093	59	100158113
120	17.5 [5.34]	313 [142.1]	64	100151729	64	100158116
130	18.9 [5.76]	338 [153.5]	70	100177056	70	100173493
140	20.3 [6.19]	363 [164.8]	75	100177058	75	100173494
150	21.7 [6.62]	388 [176.2]	81	100177060	81	100173495

[†] To be assigned

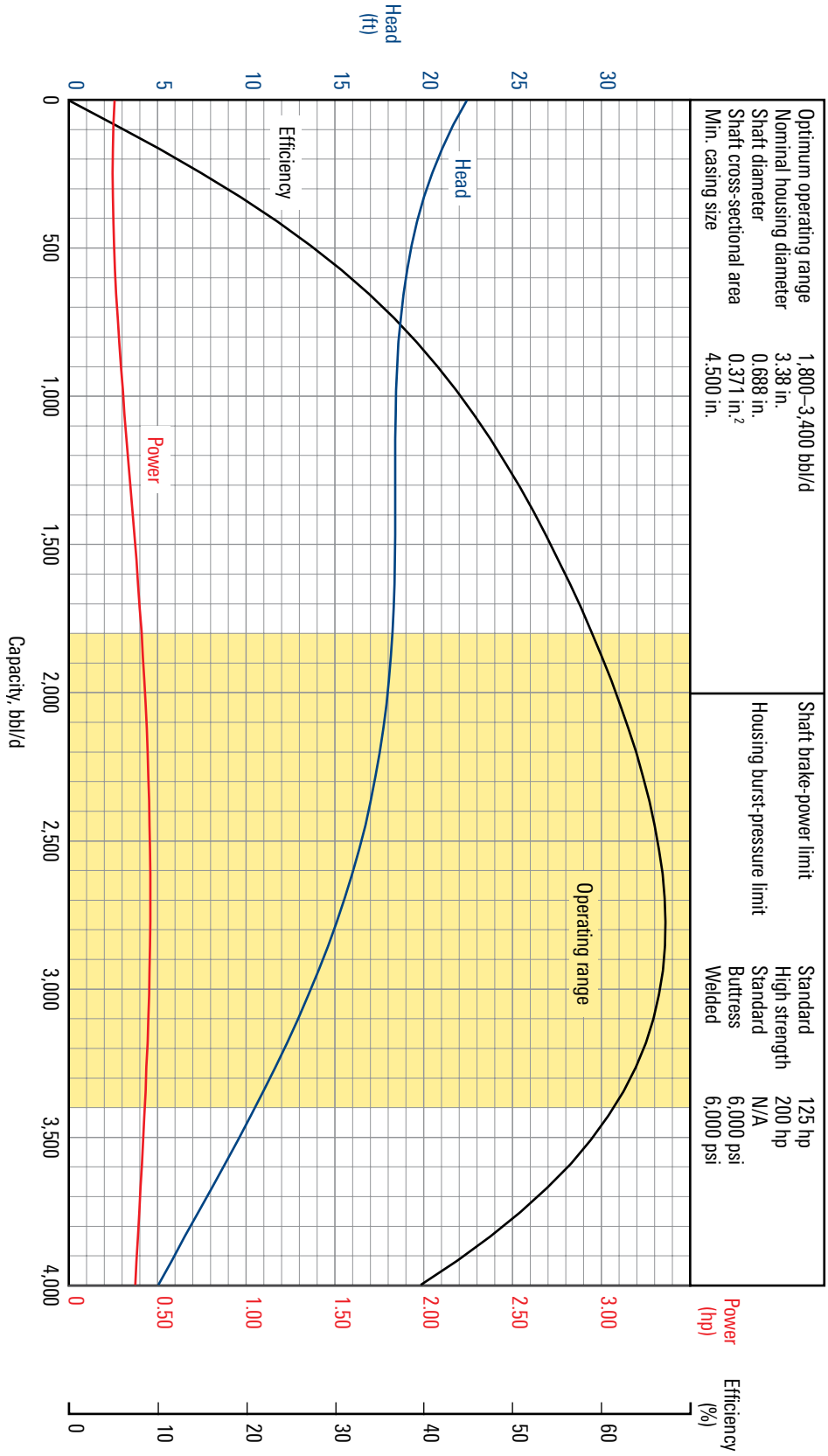
A2700N Pump

A2700N Pump, 338 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	84†	2							
170	90†	1	1						
180	95†	1		1					
190	101†		1	1					
200	106†			2					
210	112†			1	1				
220	118†				2				
230	123†				1	1			
240	128†					2			
250	134†					1	1		
260	140†						2		
270	145†						1	1	
280	150†							2	
290	156†							1	1
300	162†								2
310	165†			2	1				
320	171†			1	2				
330	177†				3				
340	182†				2	1			
350	187†				1	2			
360	192†					3			
370	198†					2	1		
380	204†					1	2		
390	210†						3		
400	215†						2	1	
410	220†						1	2	
420	225†							3	
430	231†							2	1
440	237†							1	2
450	243†								3
460	245†			1		3			
470	251†				1	3			
480	256†					4			
490	262†					3‡	1‡		
500	267†					3‡		1‡	
510	274†					1‡	3‡		
520	280†						4‡		
530	285†						3‡	1‡	
540	291†						3‡	0‡	1‡
550	296†						2‡	1‡	1‡
560	302†, §						2‡	0‡	2‡
570	307†, §						1‡	1‡	2‡
580	312†							2‡	2‡
590	318†, §							1‡	3‡
600	324†, §								4‡

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector for compression pumps
‡ Requires use of high-strength shaft in lowermost pump
§ Requires use of high-load bearing in protector for floater pumps

A2700N Pump



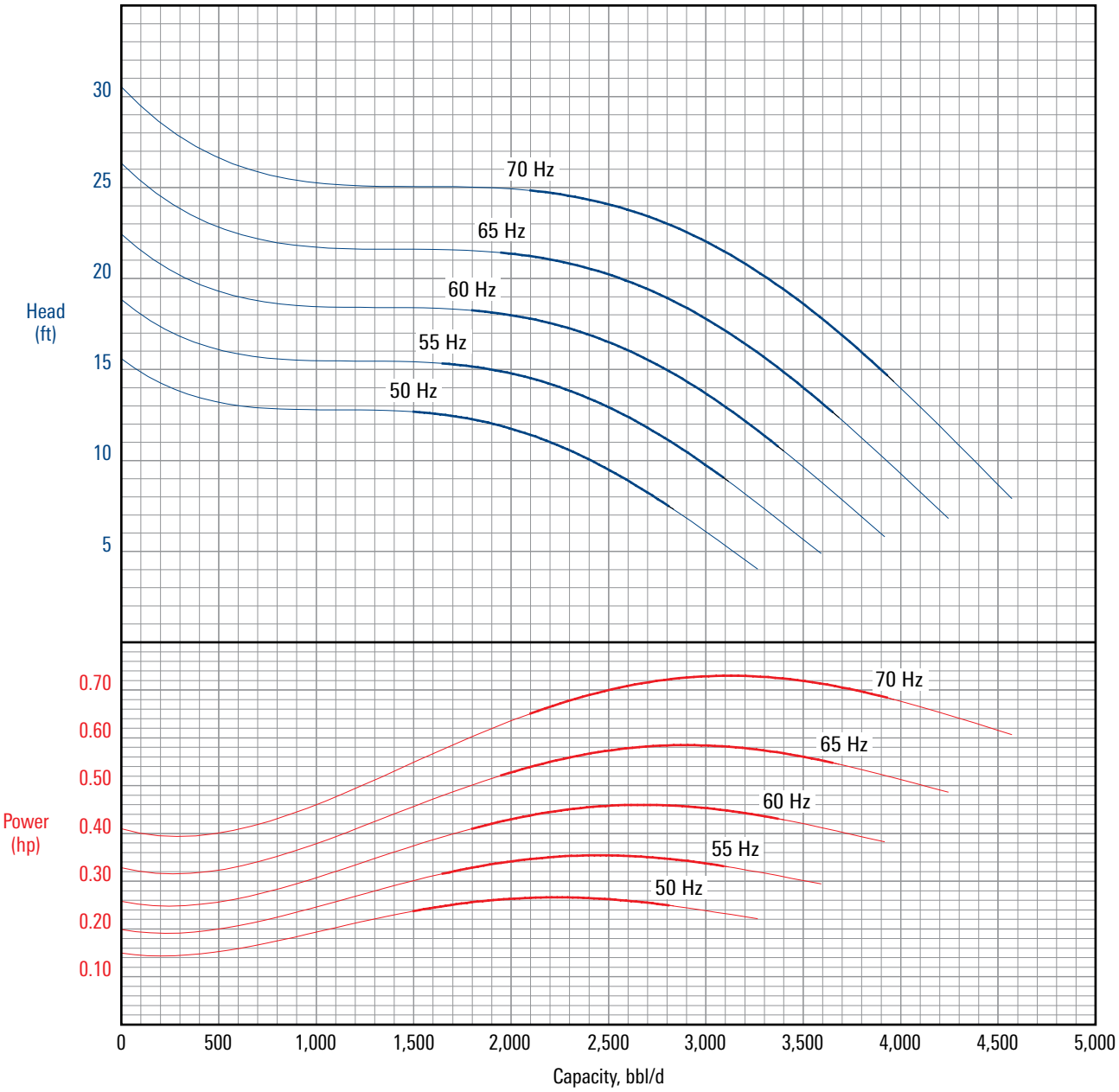
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

A2700N Pump

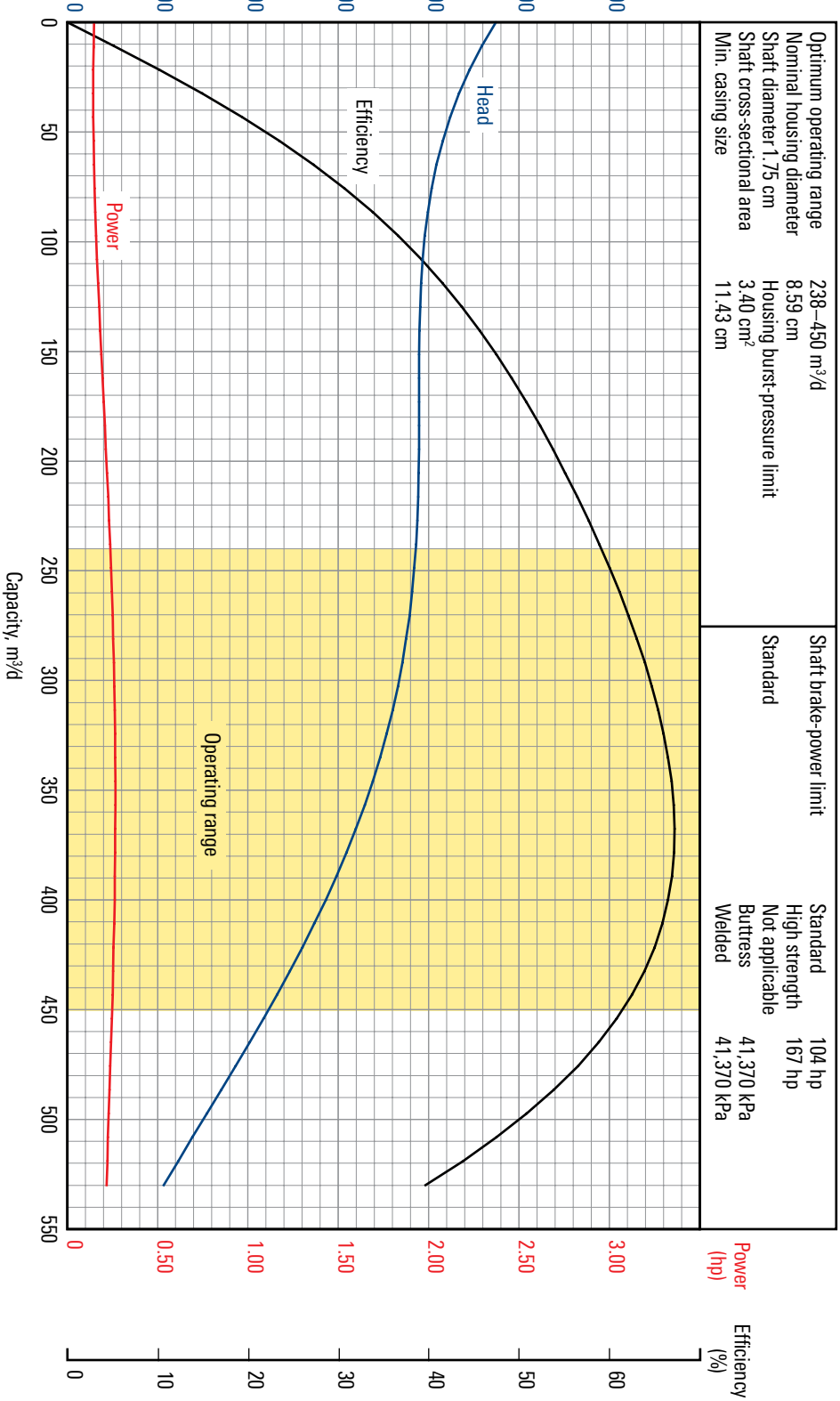
REDA ESP systems

Pump Performance Curve A2700N

Curve computed for one stage in fluid of 1.00 sg



A2700N Pump



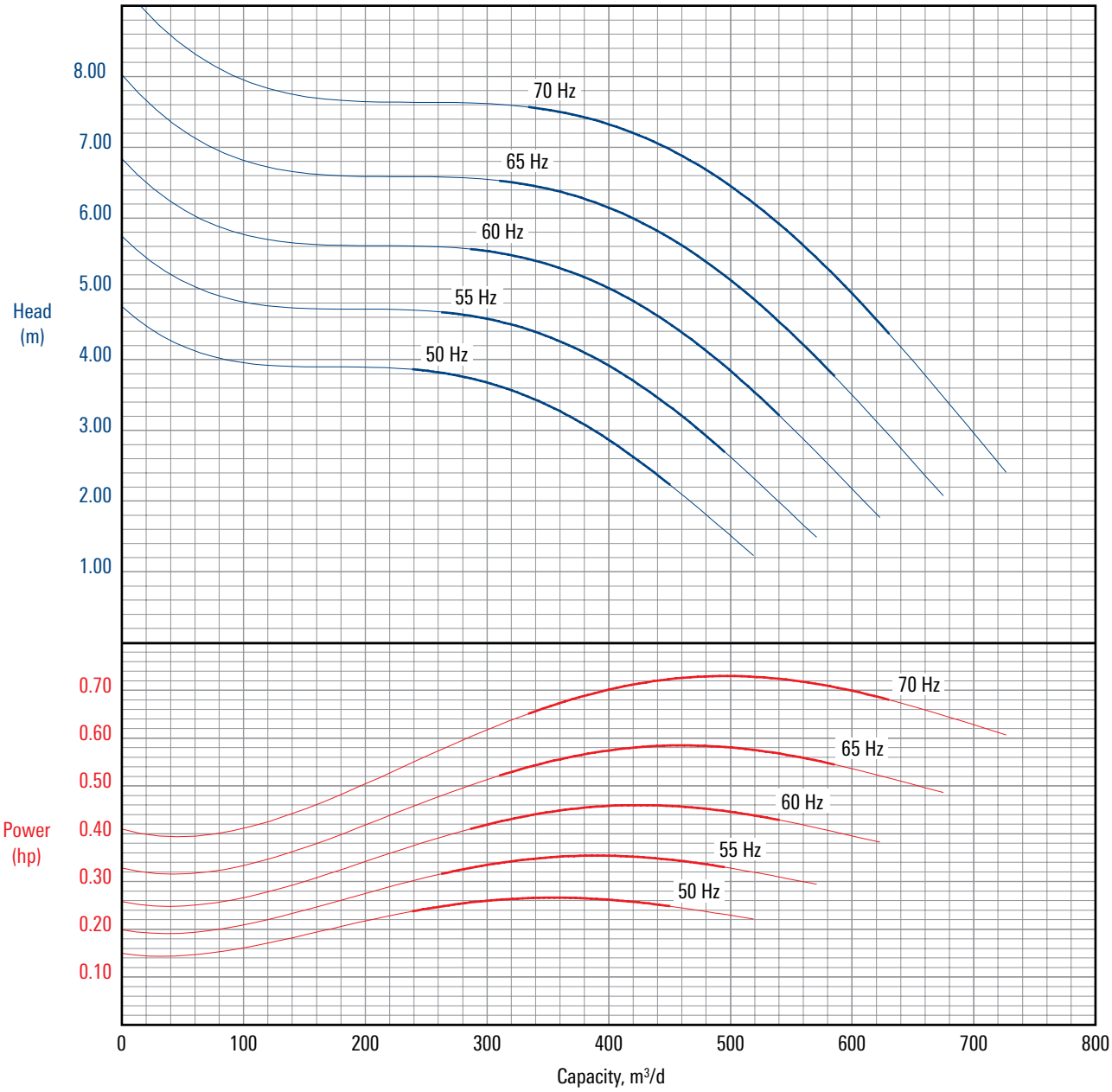
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

A2700N Pump

REDA ESP systems

Pump Performance Curve A2700N

Curve computed for one stage in fluid of 1.00 sg



D460N Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

Housing	Length, ft [m]	Weight, lbm [kg]	ES Carbon Steel		ARZ-ZZ Carbon Steel		ARZ-SS Carbon Steel	
			Max. Stages	CR-CT, FS Part Number	Max. Stages	CR-CT, FS Part Number	Max. Stages	CR-CT, FS Part Number
10	2.1 [0.64]	45 [20.4]	12	tba[†]	10	tba	10	tba
20	3.5 [1.07]	75 [34.1]	27	tba	24	tba	24	tba
30	4.9 [149]	105 [47.7]	43	tba	38	tba	38	tba
40	6.3 [1.92]	135 [61.3]	59	tba	51	tba	51	tba
50	7.7 [2.35]	166 [75.4]	74	tba	66	tba	66	tba
60	9.1 [2.78]	195 [88.5]	90	100739101	80	100739108	80	tba
70	10.5 [3.20]	225 [102.2]	105	100739100	94	100739107	94	tba
80	11.9 [3.63]	255 [115.8]	121	100496742	108	100497268	108	100497480
90	13.3 [4.06]	285 [129.4]	136	100496743	122	100497270	122	100497481
100	14.7 [4.48]	315 [143.0]	152	100496744	137	100497271	137	100497482
110	16.1 [4.91]	345 [156.6]	167	100496745	151	100497272	151	100497483
120	17.5 [5.34]	375 [170.3]	183	100496746	164	100497273	164	100497484

[†] To be assigned.

387 Series, Min. Casing Size 5½-in [139.7-mm] OD

Housing	Length, ft [m]	Weight, lbm [kg]	ES Carbon Steel		ARZ-ZZ Carbon Steel		ARZ-SS Carbon Steel	
			Max. Stages	CR-CT, FS Part Number	Max. Stages	CR-CT, FS Part Number	Max. Stages	CR-CT, FS Part Number
10	2.1 [0.64]	45 [20.4]	12	tba[†]	10	tba	10	tba
20	3.5 [1.07]	75 [34.1]	27	tba	24	tba	24	tba
30	4.9 [149]	105 [47.7]	43	tba	38	tba	38	tba
40	6.3 [1.92]	135 [61.3]	59	tba	51	tba	51	tba
50	7.7 [2.35]	166 [75.4]	74	tba	66	tba	66	tba
60	9.1 [2.78]	195 [88.5]	90	100739103	80	100739105	80	tba
70	10.5 [3.20]	225 [102.2]	105	100739102	94	100739104	94	tba
80	11.9 [3.63]	255 [115.8]	121	100496742	108	100493278	108	100494468
90	13.3 [4.06]	285 [129.4]	136	100485158	122	100493582	122	100494469
100	14.7 [4.48]	315 [143.0]	152	100485162	137	100493585	137	100494470
110	16.1 [4.91]	345 [156.6]	167	100485166	151	100493587	151	100494471
120	17.5 [5.34]	375 [170.3]	183	100485196	164	100493590	164	100494472

Note: This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

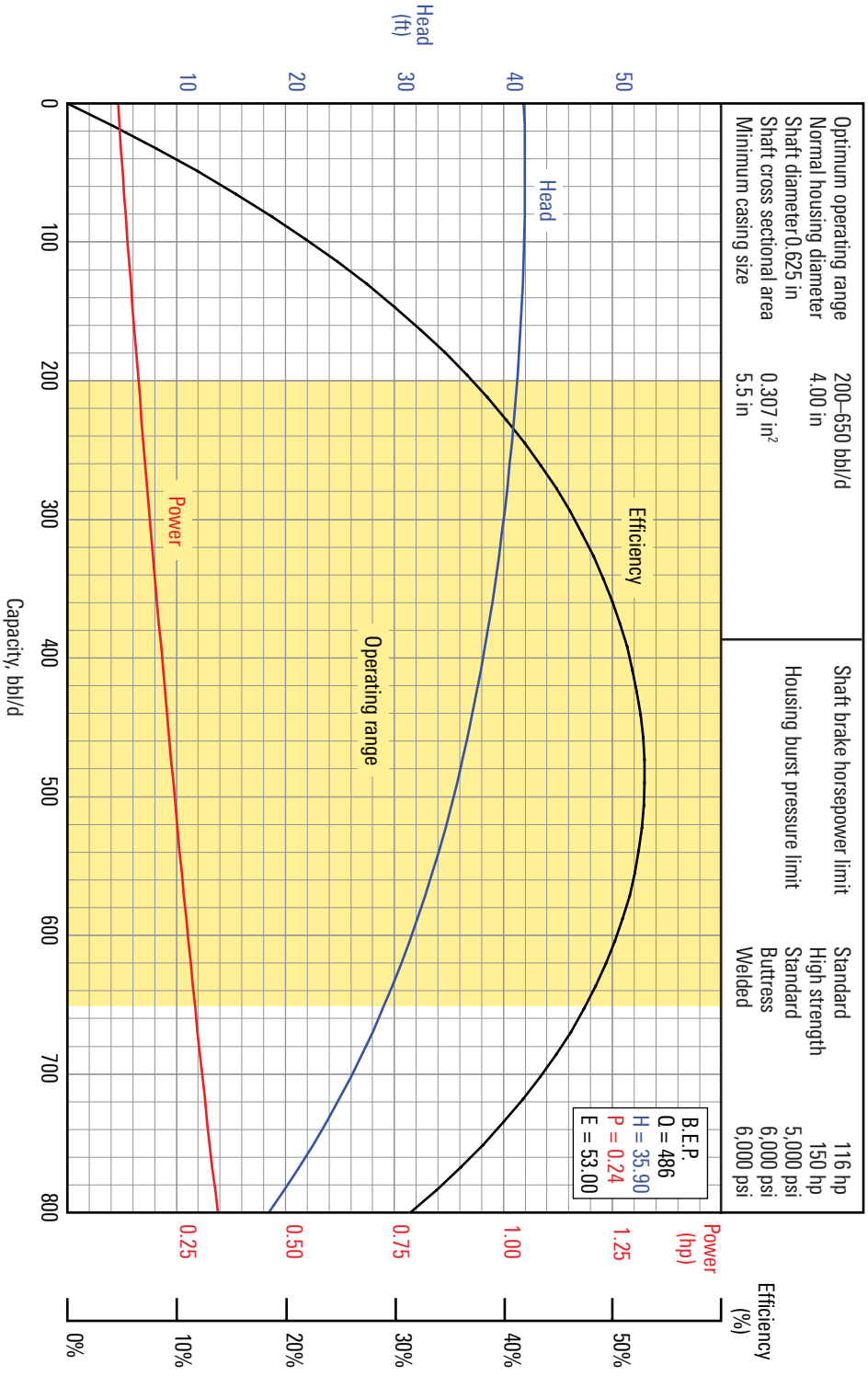
[†] To be assigned.

D460N Pump

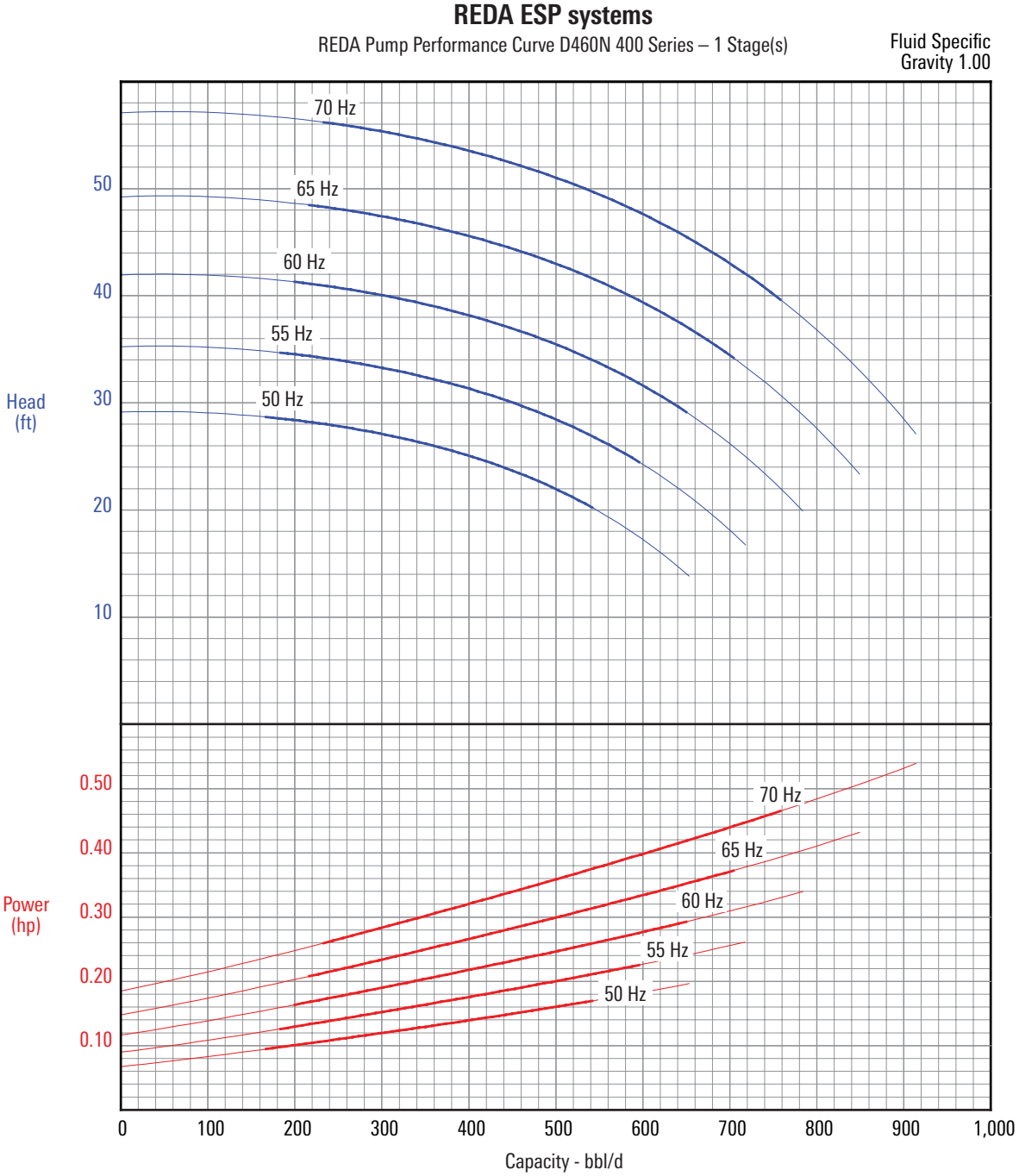
D460N Pump, 400 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	Number of Stages	60	70	80	90	100	110	120
130	195	1	1					
140	210		2					
150	226		1	1				
160	242			2				
170	257			1	1			
180	272				2			
190	288				1	1		
200	304					2		
210	319					1	1	
220	334						2	
230	350						1	1
240	366							2

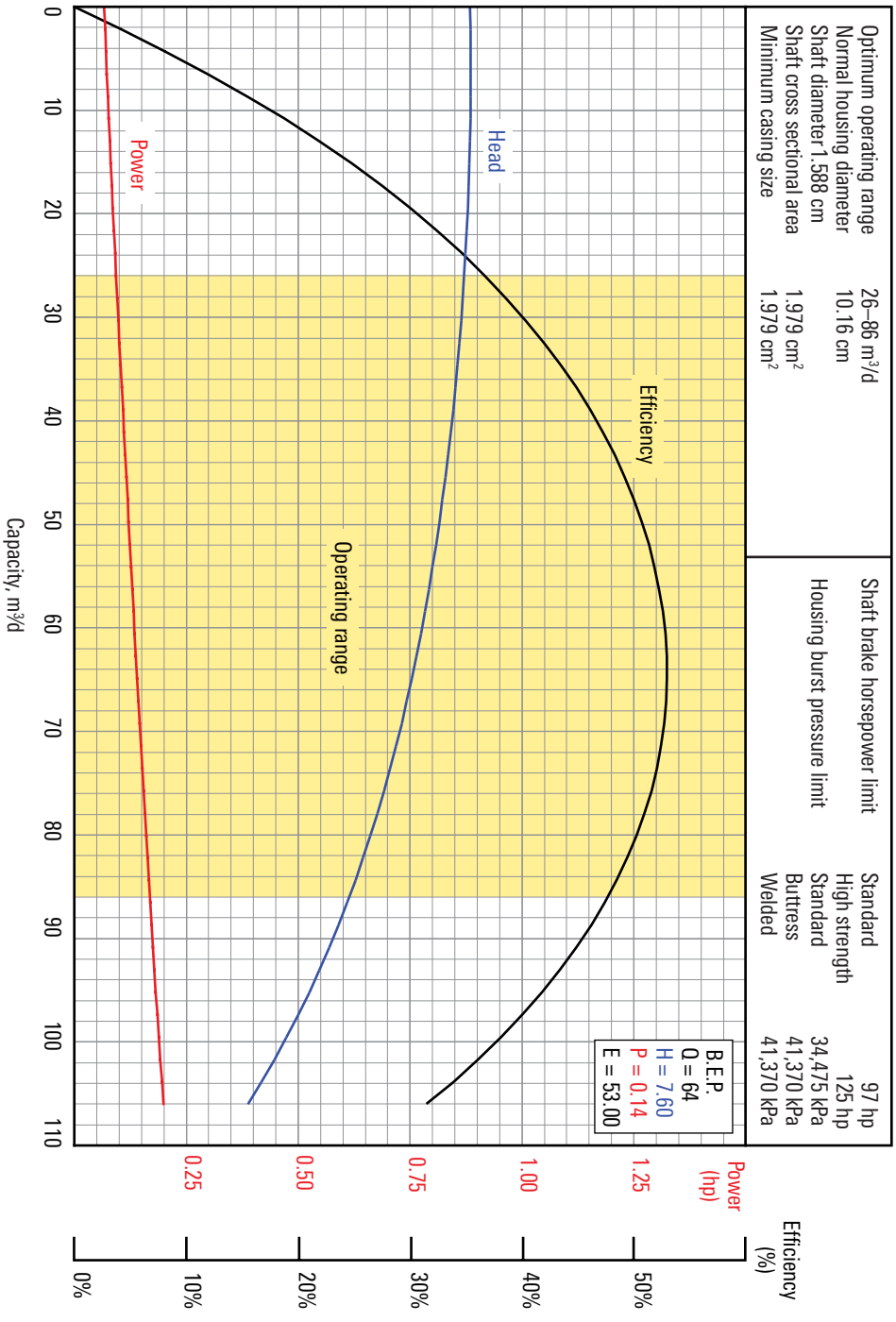
D460N Pump


REDA ESP systems
Pump Performance Curve D460N 60 Hz / 3500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 200–650 bbl/d
Normal housing diameter 4.00 in
Shaft diameter 0.625 in
Shaft cross sectional area 0.307 in²
Minimum casing size 5.5 in
Shaft brake horsepower limit 116 hp
Standard 150 hp
High strength 5,000 psi
Housing burst pressure limit Standard 6,000 psi
Buttress 6,000 psi
Welded 6,000 psi
B.E.P.
Q = 486
H = 35.90
P = 0.24
E = 53.00
Head
Efficiency
Power
Operating range
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d
0
100
200
300
400
500
600
700
800
10
20
30
40
50
0.25
0.50
0.75
1.00
1.25
0%
10%
20%
30%
40%
50%

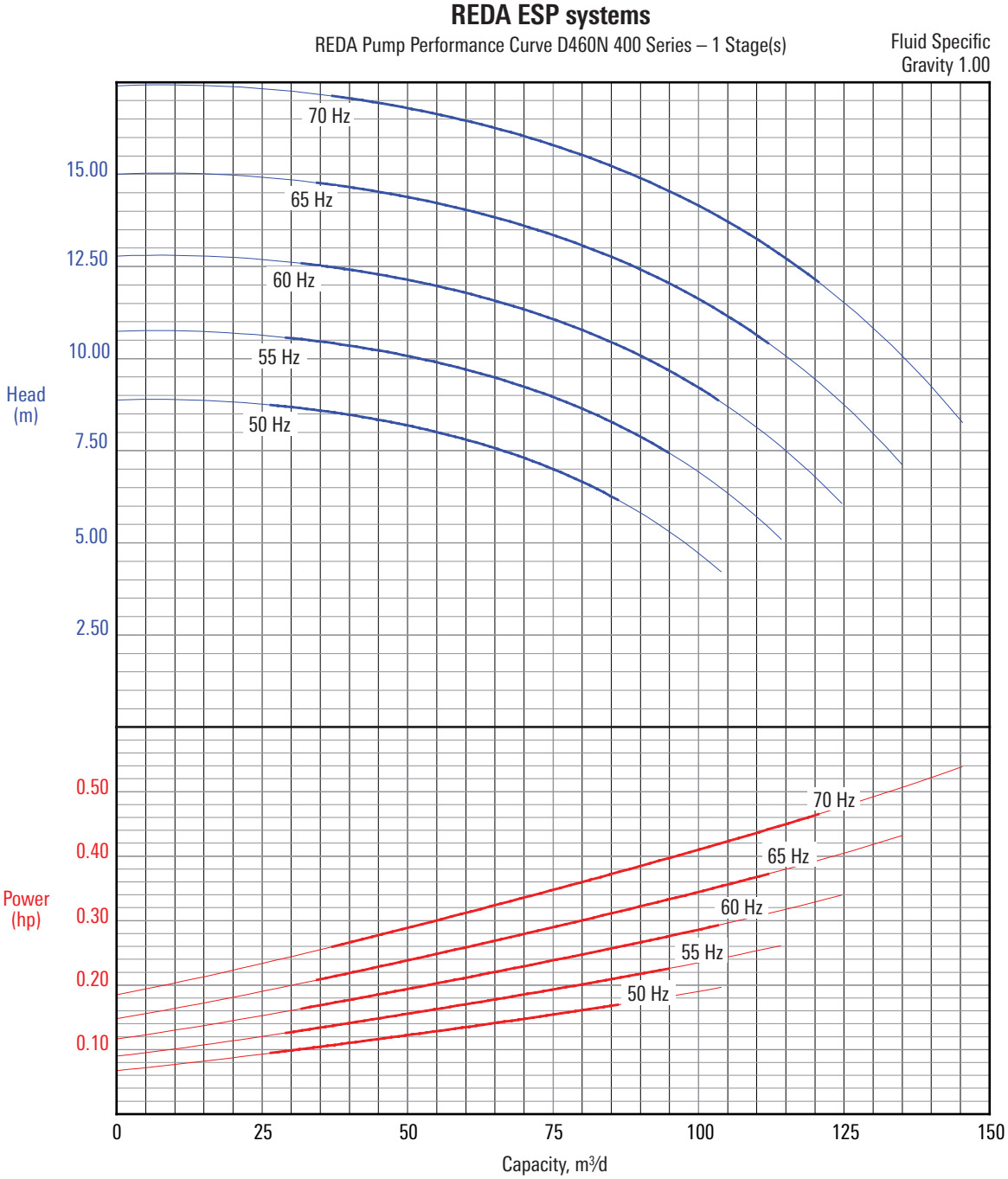
D460N Pump


REDA ESP systems
REDA Pump Performance Curve D460N 400 Series – 1 Stage(s)
Fluid Specific Gravity 1.00
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (ft)
50
40
30
20
10
Power (hp)
0.50
0.40
0.30
0.20
0.10
0
100
200
300
400
500
600
700
800
900
1,000
Capacity - bbl/d

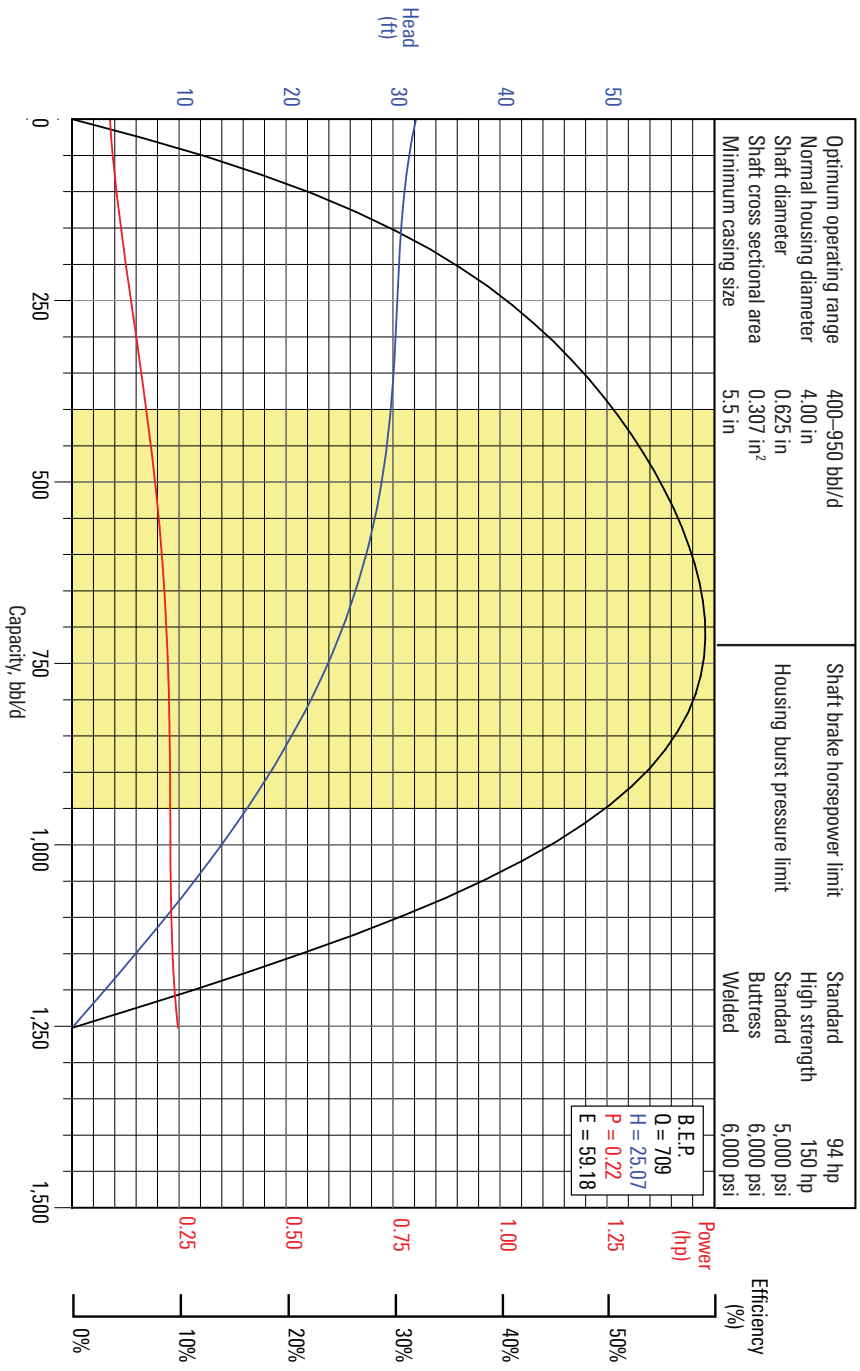
D460N Pump


REDA ESP systems
Pump Performance Curve D460N 50 Hz / 2,917 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 26–86 m³/d
Normal housing diameter 10.16 cm
Shaft diameter 1.588 cm 1.979 cm²
Shaft cross sectional area 1.979 cm²
Minimum casing size
Shaft brake horsepower limit 97 hp
Standard 125 hp
High strength 34,475 kPa
Standard 41,370 kPa
Housing burst pressure limit Buttress 41,370 kPa
Welded
B.E.P.
Q = 64
H = 7.60
P = 0.14
E = 53.00
Efficiency
Operating range
Head
Power
Head (m)
Power (hp)
Efficiency (%)
Capacity, m³/d

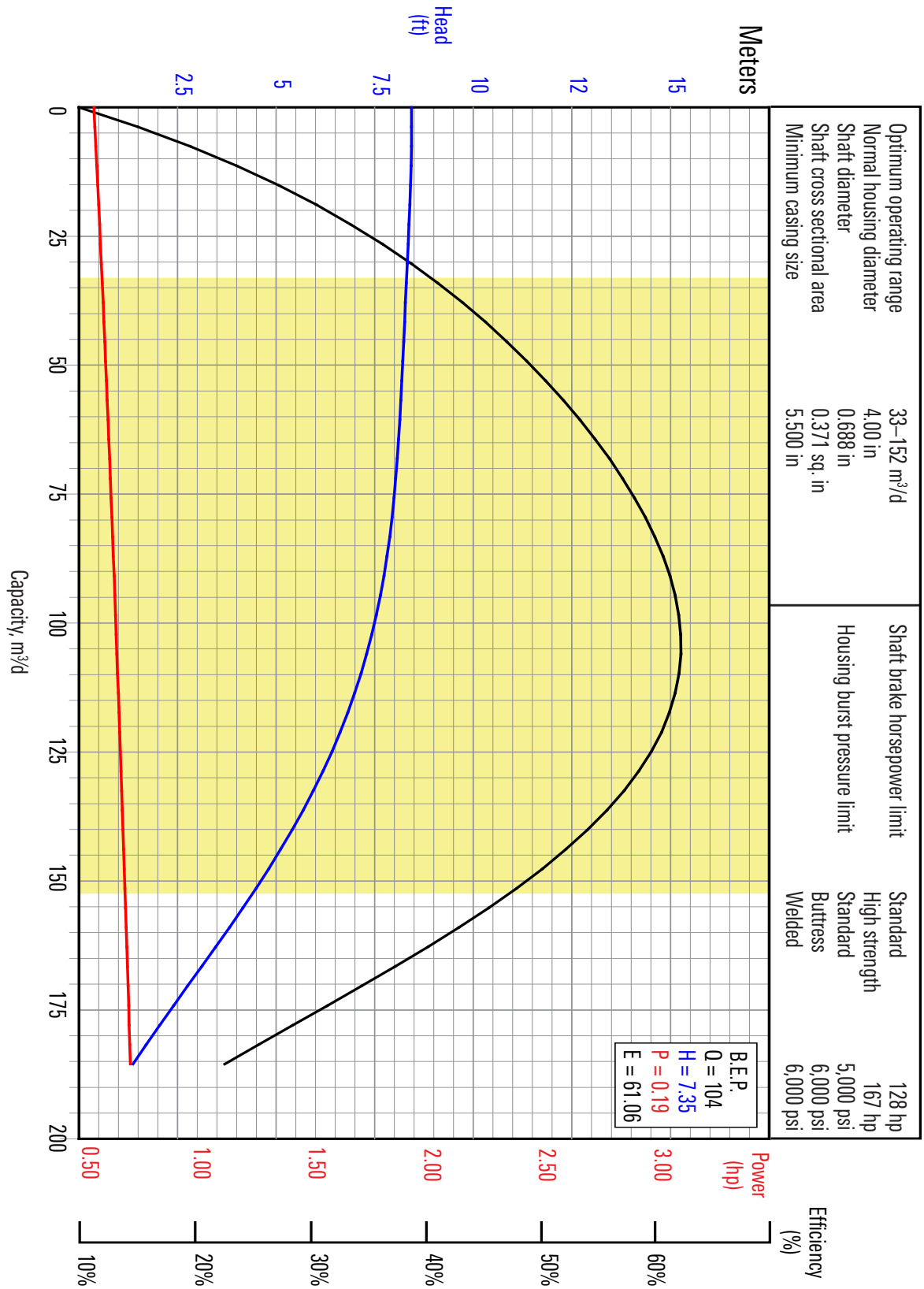
D460N Pump


REDA ESP systems
REDA Pump Performance Curve D460N 400 Series – 1 Stage(s)
Fluid Specific Gravity 1.00
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (m)
15.00
12.50
10.00
7.50
5.00
2.50
Power (hp)
0.50
0.40
0.30
0.20
0.10
0
25
50
75
100
125
150
Capacity, m³/d

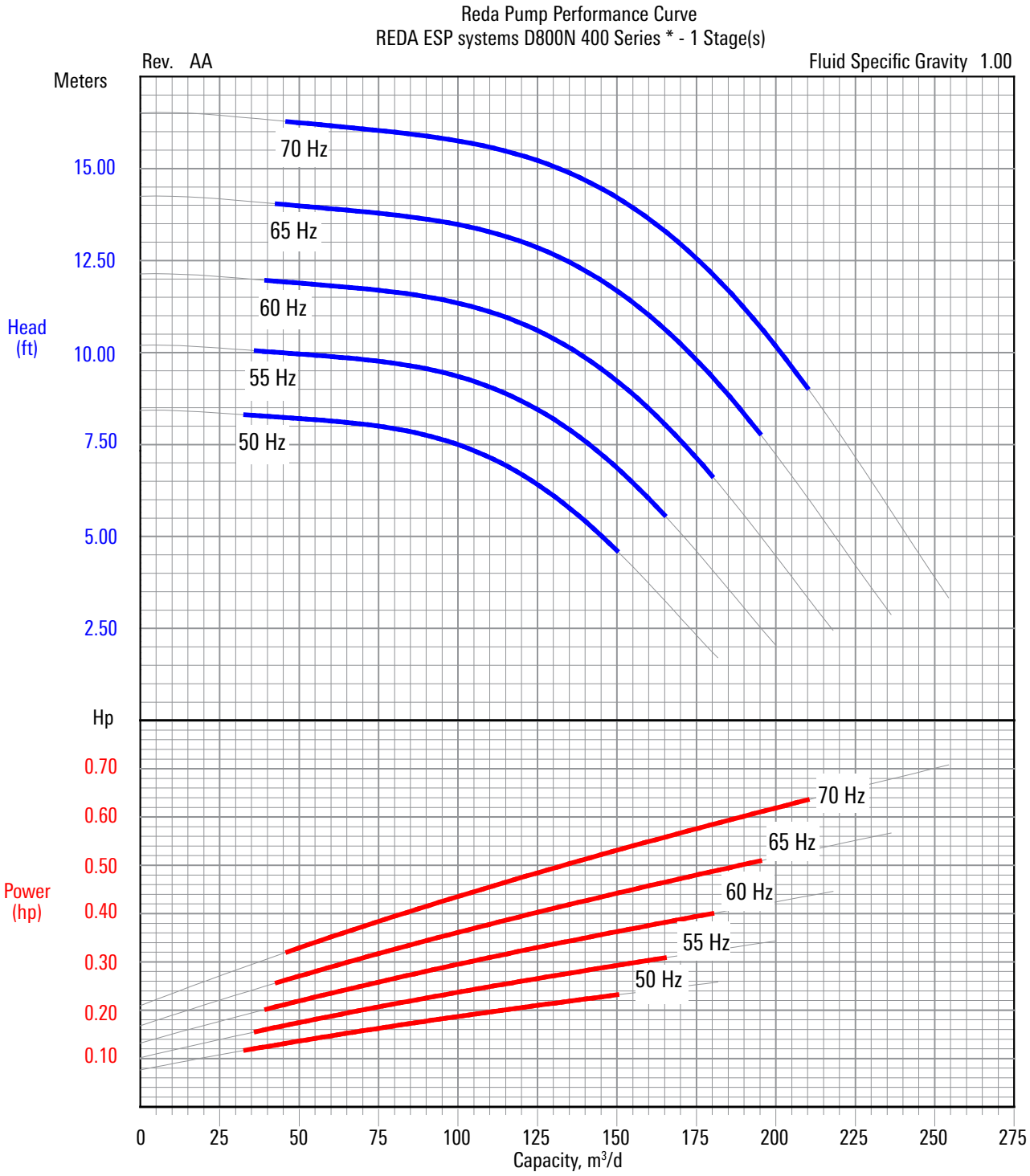
D800N Pump


REDA ESP systems
Pump Performance Curve DN800 60 Hz / 3500 rpm
400 Series* — 1 Stage(s) — Sp. Gr.
Optimum operating range 400–950 bbl/d
Normal housing diameter 4.00 in
Shaft diameter 0.625 in
Shaft cross sectional area 0.307 in²
Minimum casing size 5.5 in
Shaft brake horsepower limit 94 hp
Housing burst pressure limit
Standard 150 hp
High strength 5,000 psi
Standard 6,000 psi
Buttress 6,000 psi
Welded
B.E.P.
Q = 709
H = 25.07
P = 0.22
E = 59.18
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d

D800N Pump


REDA ESP systems
Pump Performance Curve D800N 50 Hz / 2,917 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 33–152 m³/d
Normal housing diameter 4.00 in
Shaft diameter 0.688 in
Shaft cross sectional area 0.371 sq. in
Minimum casing size 5.500 in
Shaft brake horsepower limit Standard 128 hp
High strength 167 hp
Housing burst pressure limit Standard 5,000 psi
Buttress 6,000 psi
Welded 6,000 psi
B.E.P.
Q = 104
H = 7.35
P = 0.19
E = 61.06
Meters
Head (ft)
Power (hp)
Efficiency (%)
Capacity, m³/d
0
25
50
75
100
125
150
175
200
2.5
5
7.5
10
12
15
0.50
1.00
1.50
2.00
2.50
3.00
10%
20%
30%
40%
50%
60%

D800N Pump

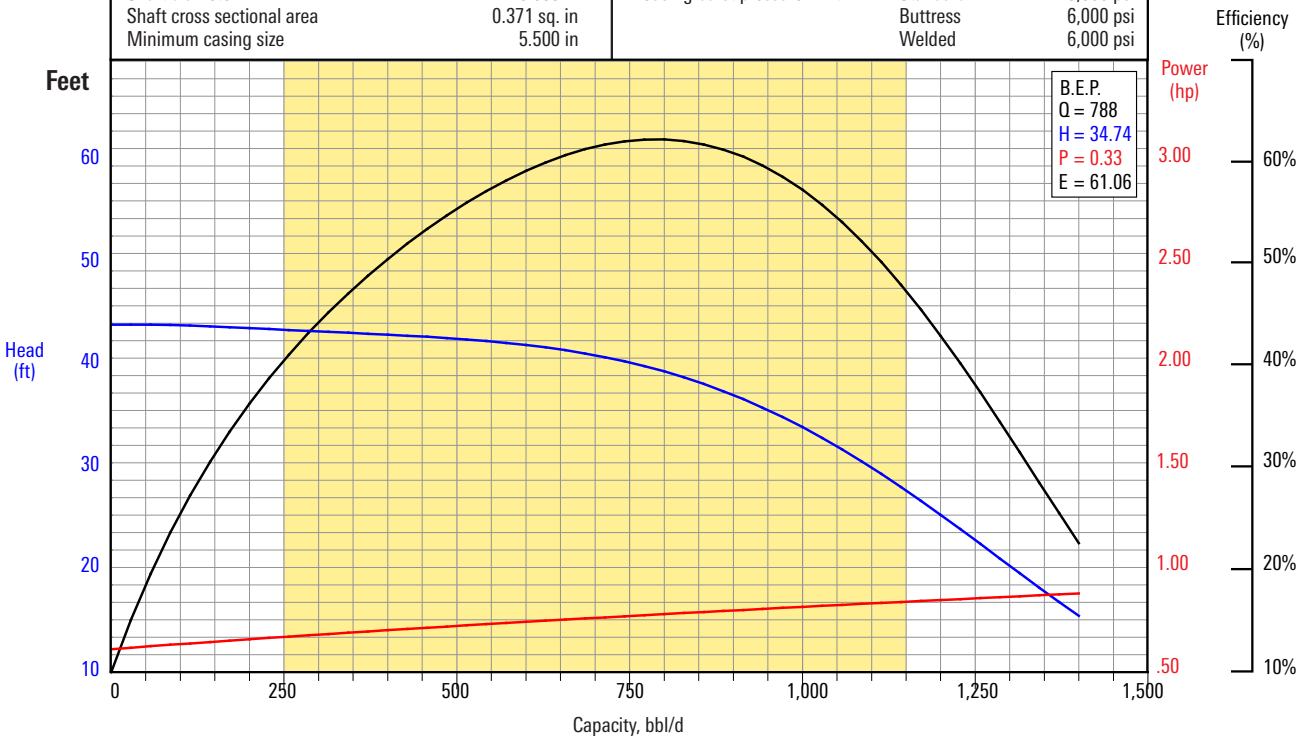

Reda Pump Performance Curve
REDA ESP systems D800N 400 Series * - 1 Stage(s)
Rev. AA
Fluid Specific Gravity 1.00
Meters
15.00
12.50
Head (ft)
10.00
7.50
5.00
2.50
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Hp
0.70
0.60
0.50
Power (hp)
0.40
0.30
0.20
0.10
0
25
50
75
100
125
150
175
200
225
250
275
Capacity, m³/d

D800N Pump

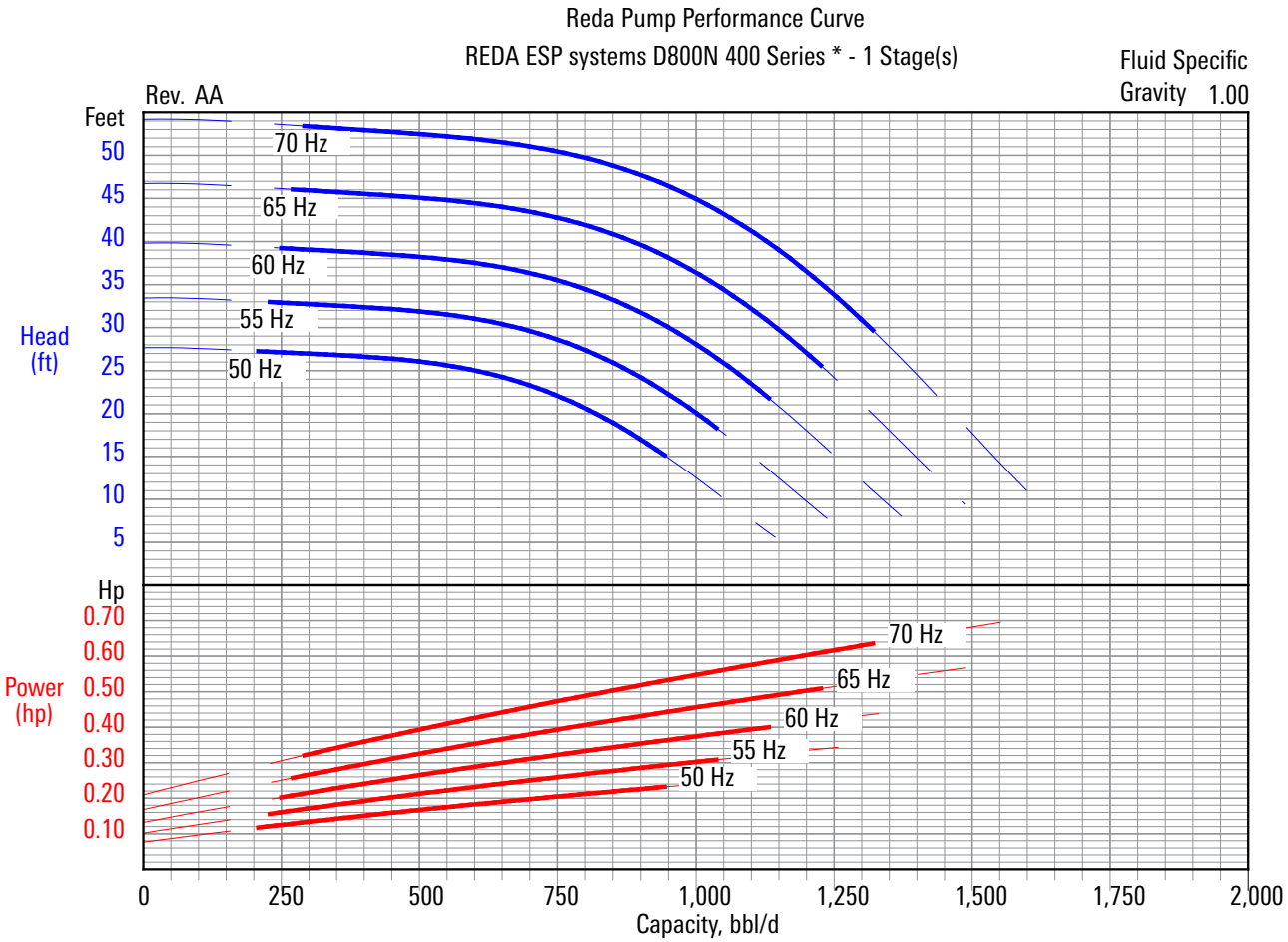
REDA ESP systems

Pump Performance Curve D800N 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00

Optimum operating range	250–1,150 bpd	Shaft brake horsepower limit	Standard	154 hp
Normal housing diameter	4.00 in		High strength	200 hp
Shaft diameter	0.688 in	Housing burst pressure limit	Standard	5,000 psi
Shaft cross sectional area	0.371 sq. in		Buttress	6,000 psi
Minimum casing size	5.500 in		Welded	6,000 psi



D800N Pump


Reda Pump Performance Curve
REDA ESP systems D800N 400 Series * - 1 Stage(s)
Rev. AA
Fluid Specific Gravity 1.00
Feet
Head (ft)
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Hp
Power (hp)
0.70
0.60
0.50
0.40
0.30
0.20
0.10
5
10
15
20
25
30
35
40
45
50
0
250
500
750
1,000
1,250
1,500
1,750
2,000
Capacity, bbl/d

D1050N Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ES Carbon Steel		ARZ-ZZ Carbon Steel		ARZ-SS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**
10	2.1 [0.64]	45 [20.4]	7	tba†	6	tba	6	tba
20	3.5 [1.07]	75 [34.1]	15	tba	14	tba	14	tba
30	4.9 [149]	105 [47.7]	24	tba	22	tba	22	tba
40	6.3 [1.92]	135 [61.3]	32	tba	31	tba	31	tba
50	7.7 [2.35]	166 [75.4]	41	tba	39	tba	39	tba
60	9.1 [2.78]	195 [88.5]	49	tba	47	tba	47	tba
70	10.5 [3.20]	225 [102.2]	58	100850413	55	100850450	55	100850463
80	11.9 [3.63]	255 [115.8]	66	100496395	64	100577818	64	100581278
90	13.3 [4.06]	285 [129.4]	75	100576396	72	100577819	72	100581279
100	14.7 [4.48]	315 [143.0]	83	100576397	80	100577820	80	100581280
110	16.1 [4.91]	345 [156.6]	92	100576398	88	100577821	88	100581282
120	17.5 [5.34]	375 [170.3]	101	100576399	96	100577822	96	100581283
130	18.9 [5.76]	405 [183.9]	109	100576400	105	100577823	105	100581284
140	20.3 [6.19]	435 [197.5]	118	100576401	113	100577824	113	100581321
150	21.7 [6.62]	465 [211.1]	126	100576402	121	100577825	121	100581322

387 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ES Carbon Steel		ARZ-ZZ Carbon Steel		ARZ-SS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**
10	2.1 [0.64]	45 [20.4]	7	tba†	6	tba	6	tba
20	3.5 [1.07]	75 [34.1]	15	tba	14	tba	14	tba
30	4.9 [149]	105 [47.7]	24	tba	22	tba	22	tba
40	6.3 [1.92]	135 [61.3]	32	tba	31	tba	31	tba
50	7.7 [2.35]	166 [75.4]	41	tba	39	tba	39	tba
60	9.1 [2.78]	195 [88.5]	49	tba	47	tba	47	tba
70	10.5 [3.20]	225 [102.2]	58	100852355	55	100852766	55	100852768
80	11.9 [3.63]	255 [115.8]	66	100557873	64	100558444	64	100558890
90	13.3 [4.06]	285 [129.4]	75	100557874	72	100558445	72	100558891
100	14.7 [4.48]	315 [143.0]	83	100557875	80	100558446	80	100558892
110	16.1 [4.91]	345 [156.6]	92	100557877	88	100558447	88	100558893
120	17.5 [5.34]	375 [170.3]	101	100557878	96	100558448	96	100558894
130	18.9 [5.76]	405 [183.9]	109	100557880	105	100558449	105	100558895
140	20.3 [6.19]	435 [197.5]	118	100557882	113	100558450	113	100558896
150	21.7 [6.62]	465 [211.1]	126	100557885	121	100558451	121	100558897

Note: This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

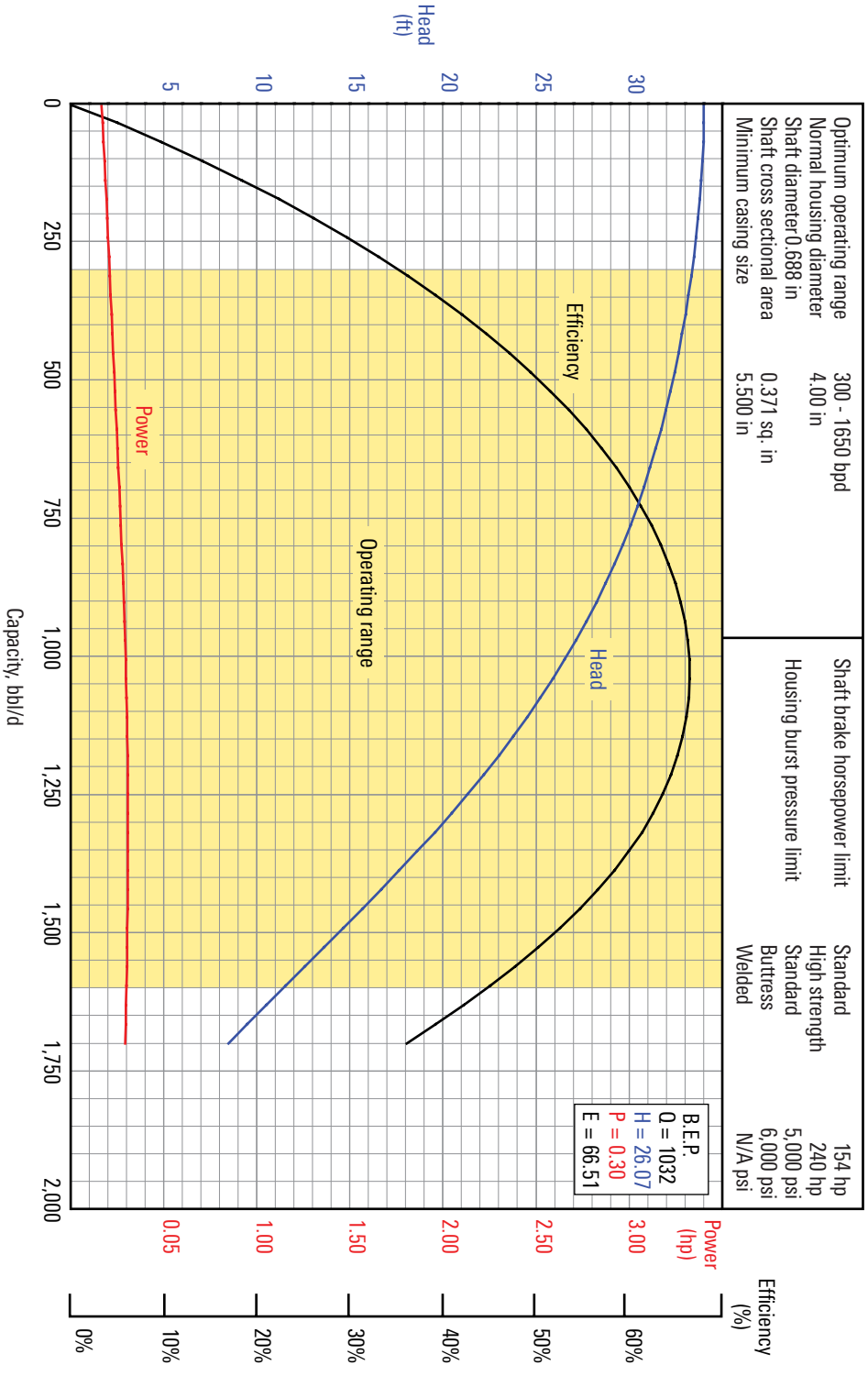
† To be assigned.

D1050N Pump

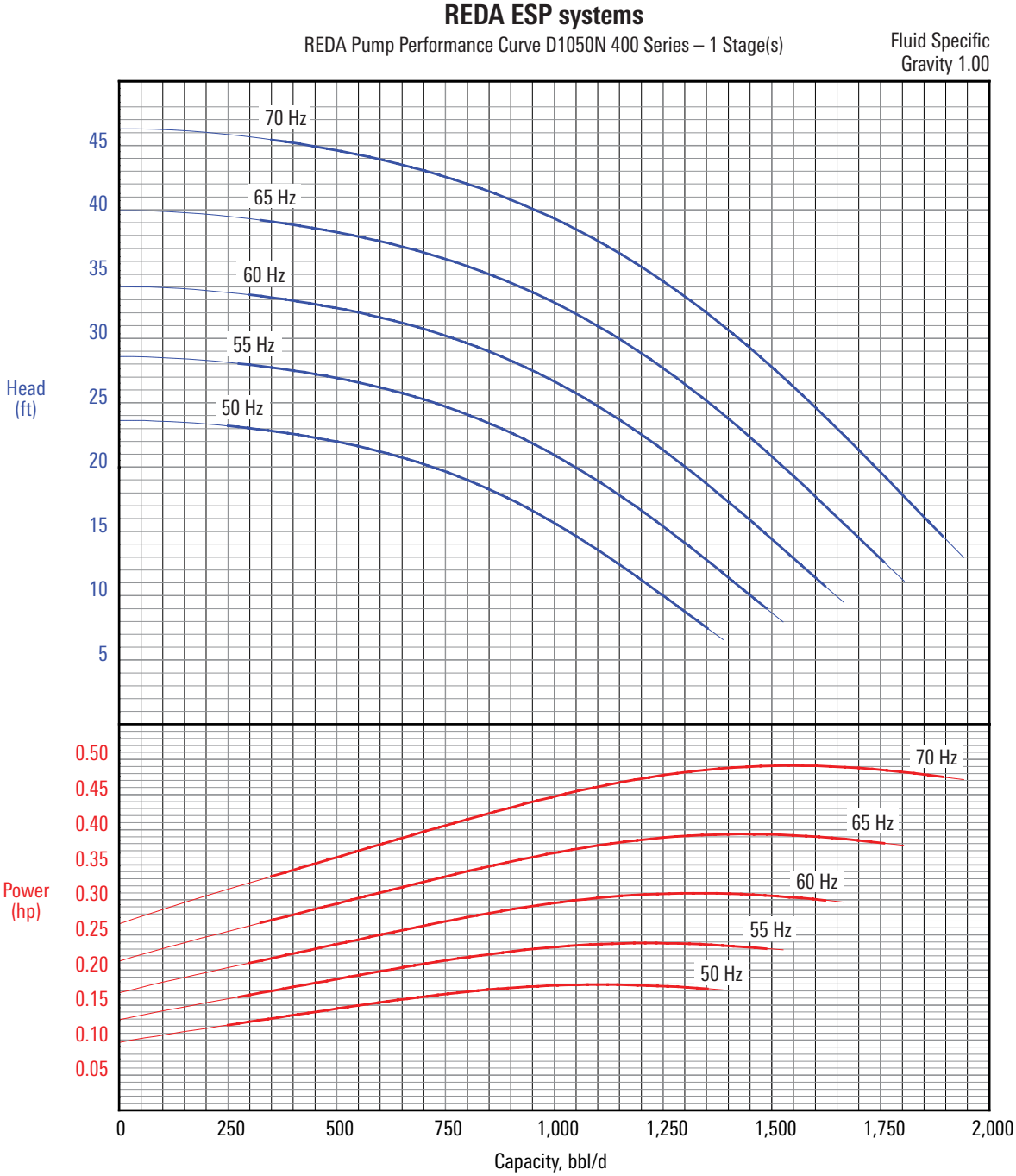
D1050N Pump, 400 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	132	2							
170	141	1	1						
180	150		2						
190	158		1	1					
200	166			2					
210	175†			`	1				
220	184†				2				
230	193†				1	1			
240	202†					2			
250	210†					1	1		
260	218†						2		
270	227†						1	1	
280	236†							2	
290	244†							1	1
300	252†								2
310	258†			2	1				
320	267†			1	2				
330	276†				3				
340	285†				2	1			
350	294†				1	2			
360	303†					3			
370	311†					2	1		
380	319†					1	2		
390	327†						3		
400	336†						2	1	
410	345†						1	2	
420	354†							3	
430	362†							2	1
440	370†							1	2
450	378†								3

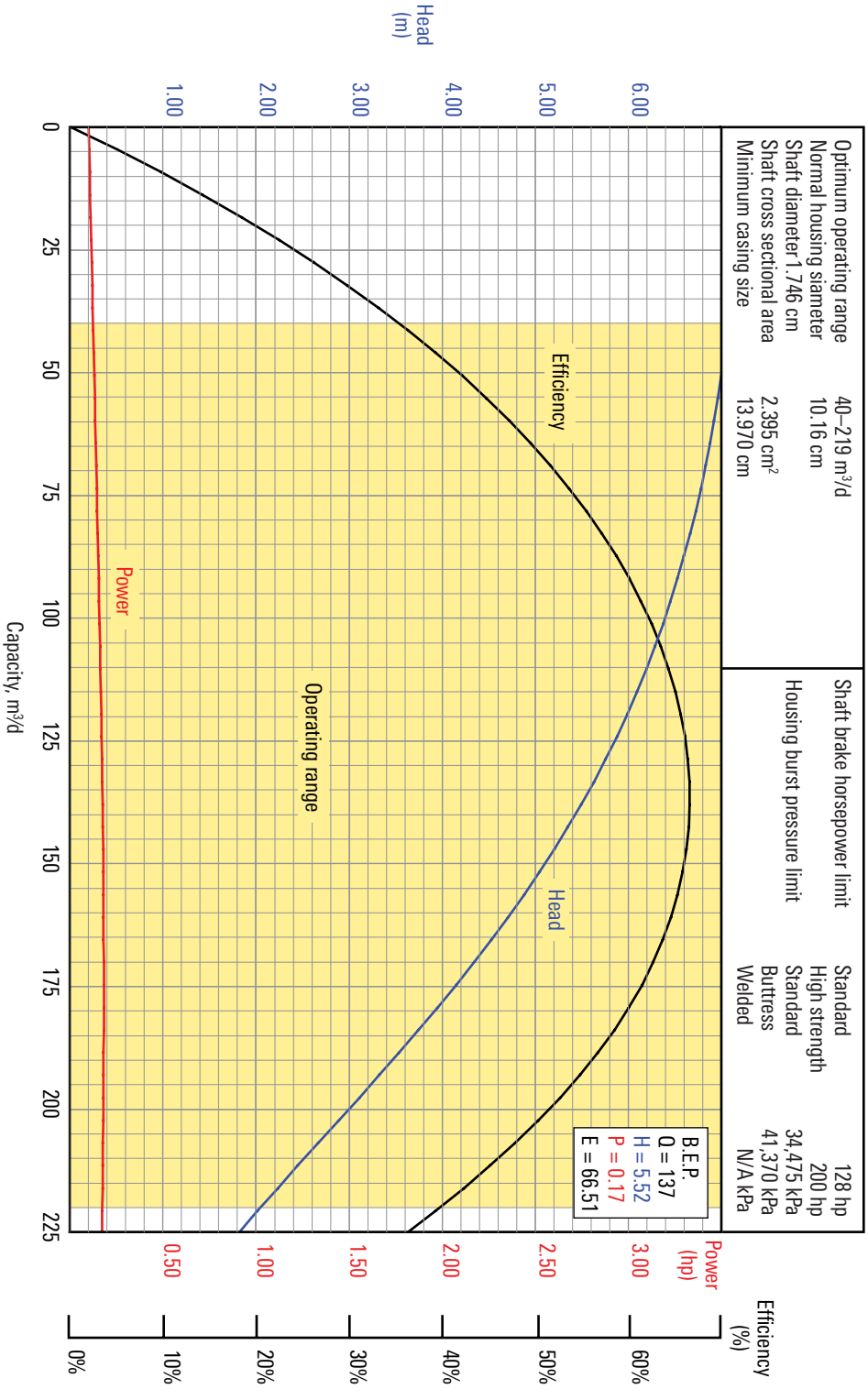
D1050N Pump


REDA ESP systems
Pump Performance Curve D1050N 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 300 - 1650 bpd
Normal housing diameter 4.00 in
Shaft diameter 0.688 in
Shaft cross sectional area 0.371 sq. in
Minimum casing size 5.500 in
Shaft brake horsepower limit 154 hp
Housing burst pressure limit Standard 240 hp
High strength 5,000 psi
Standard 6,000 psi
Buttress N/A psi
Welded
B.E.P.
Q = 1032
H = 26.07
P = 0.30
E = 66.51
Efficiency
Head
Power
Operating range
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d
0
250
500
750
1,000
1,250
1,500
1,750
2,000
5
10
15
20
25
30
0.05
1.00
1.50
2.00
2.50
3.00
0%
10%
20%
30%
40%
50%
60%

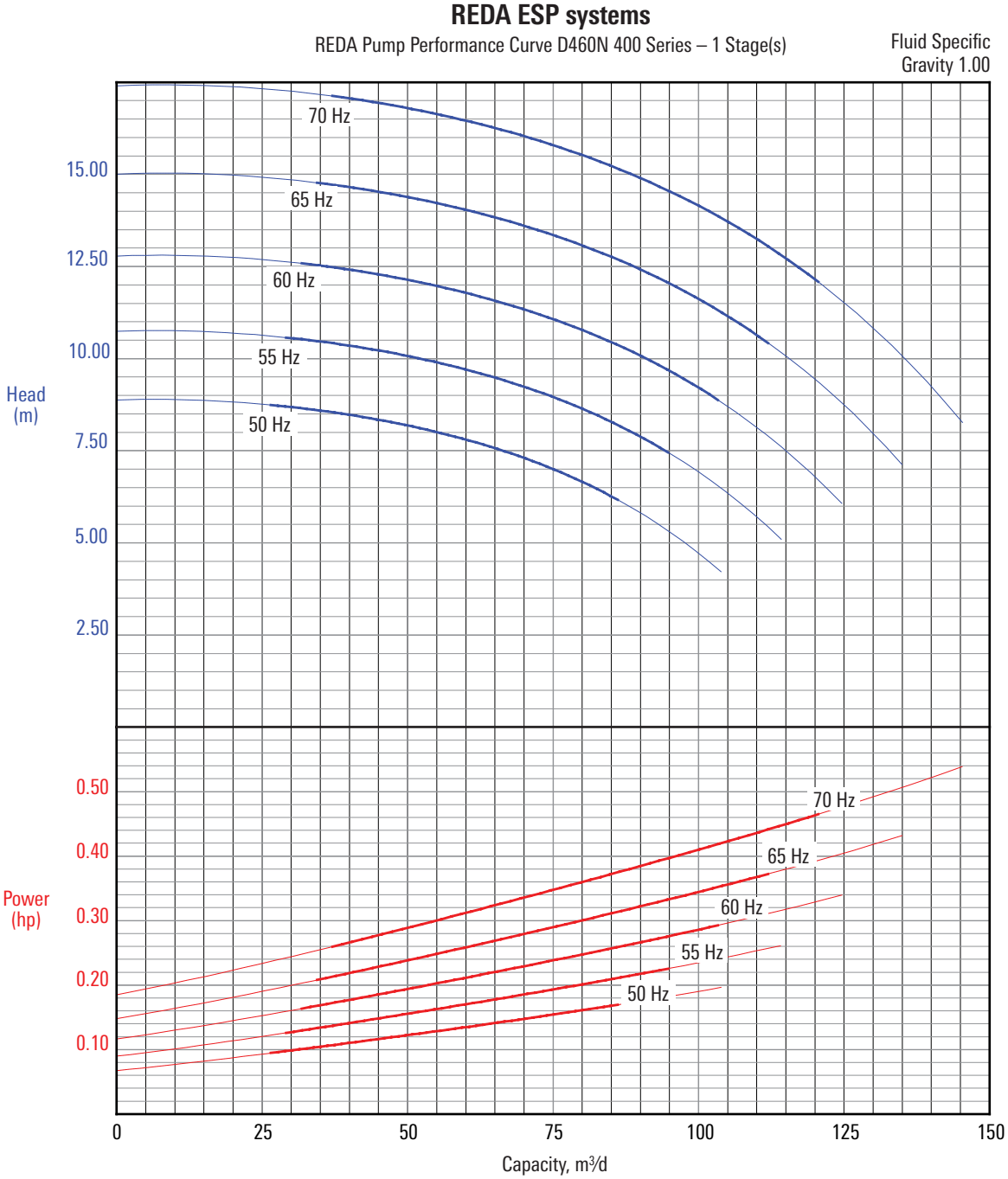
D1050N Pump


REDA ESP systems
REDA Pump Performance Curve D1050N 400 Series – 1 Stage(s)
Fluid Specific Gravity 1.00
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (ft)
45
40
35
30
25
20
15
10
5
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
Power (hp)
0
250
500
750
1,000
1,250
1,500
1,750
2,000
Capacity, bbl/d

D1050N Pump


REDA ESP systems
Pump Performance Curve D1050N 50 Hz / 2,917 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 40–219 m³/d
Normal housing siameter 10.16 cm
Shaft diameter 1.746 cm
Shaft cross sectional area 2.395 cm²
Minimum casing size 13.970 cm
Shaft brake horsepower limit 128 hp
Housing burst pressure limit Standard 200 hp
High strength 34,475 kPa
Standard 41,370 kPa
Buttress N/A kPa
Welded
B.E.P
Q = 137
H = 5.52
P = 0.17
E = 66.51
Efficiency
Head
Power
Operating range
Head (m)
Power (hp)
Efficiency (%)
Capacity, m³/d
0
25
50
75
100
125
150
175
200
225
1.00
2.00
3.00
4.00
5.00
6.00
0.50
1.00
1.50
2.00
2.50
3.00
0%
10%
20%
30%
40%
50%
60%

D1050N Pump


REDA ESP systems
REDA Pump Performance Curve D460N 400 Series – 1 Stage(s)
Fluid Specific Gravity 1.00
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (m)
15.00
12.50
10.00
7.50
5.00
2.50
Power (hp)
0.50
0.40
0.30
0.20
0.10
0
25
50
75
100
125
150
Capacity, m³/d

D1150N Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ES Carbon Steel		ARZ-ZZ Carbon Steel		ARZ-SS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**
10	2.1 [0.64]	45 [20.4]	13	tba†	10	tba	10	tba
20	3.5 [1.07]	75 [34.1]	30	tba	25	tba	25	tba
30	4.9 [149]	105 [47.7]	46	tba	39	tba	39	tba
40	6.3 [1.92]	135 [61.3]	63	tba	53	tba	53	tba
50	7.7 [2.35]	166 [75.4]	80	100779276	69	100779238	69	tba
60	9.1 [2.78]	195 [88.5]	97	100779304	83	100779241	83	tba
70	10.5 [3.20]	225 [102.2]	114	100779310	97	100779308	97	100779330
80	11.9 [3.63]	255 [115.8]	130	100779816	113	100779311	113	100779825
90	13.3 [4.06]	285 [129.4]	147	100779853	127	100779313	127	100779828
100	14.7 [4.48]	315 [143.0]	164	100779854	142	100779314	142	100779830
110	16.1 [4.91]	345 [156.6]	181	100779857	157	100779316	157	100779831
120	17.5 [5.34]	375 [170.3]	197	100779230	171	100779318	171	100779832

† To be assigned.

387 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ES Carbon Steel		ARZ-ZZ Carbon Steel		ARZ-SS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**	**Max. Stages**	**CR-CT, FS Part Number**
10	2.1 [0.64]	45 [20.4]	13	tba†	10	tba	10	tba
20	3.5 [1.07]	75 [34.1]	30	tba	25	tba	25	tba
30	4.9 [149]	105 [47.7]	46	tba	39	tba	39	tba
40	6.3 [1.92]	135 [61.3]	63	tba	53	tba	53	tba
50	7.7 [2.35]	166 [75.4]	80	100778931	69	100778222	69	tba
60	9.1 [2.78]	195 [88.5]	97	100779850	83	100779249	83	tba
70	10.5 [3.20]	225 [102.2]	114	100779860	97	100779258	97	100779936
80	11.9 [3.63]	255 [115.8]	130	100779862	113	100779260	113	100779224
90	13.3 [4.06]	285 [129.4]	147	100779863	127	100779261	127	100779938
100	14.7 [4.48]	315 [143.0]	164	100779864	142	100779263	142	100779939
110	16.1 [4.91]	345 [156.6]	181	100779865	157	100779254	157	100779940
120	17.5 [5.34]	375 [170.3]	197	100779866	171	100779265	171	100779266

Note: This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

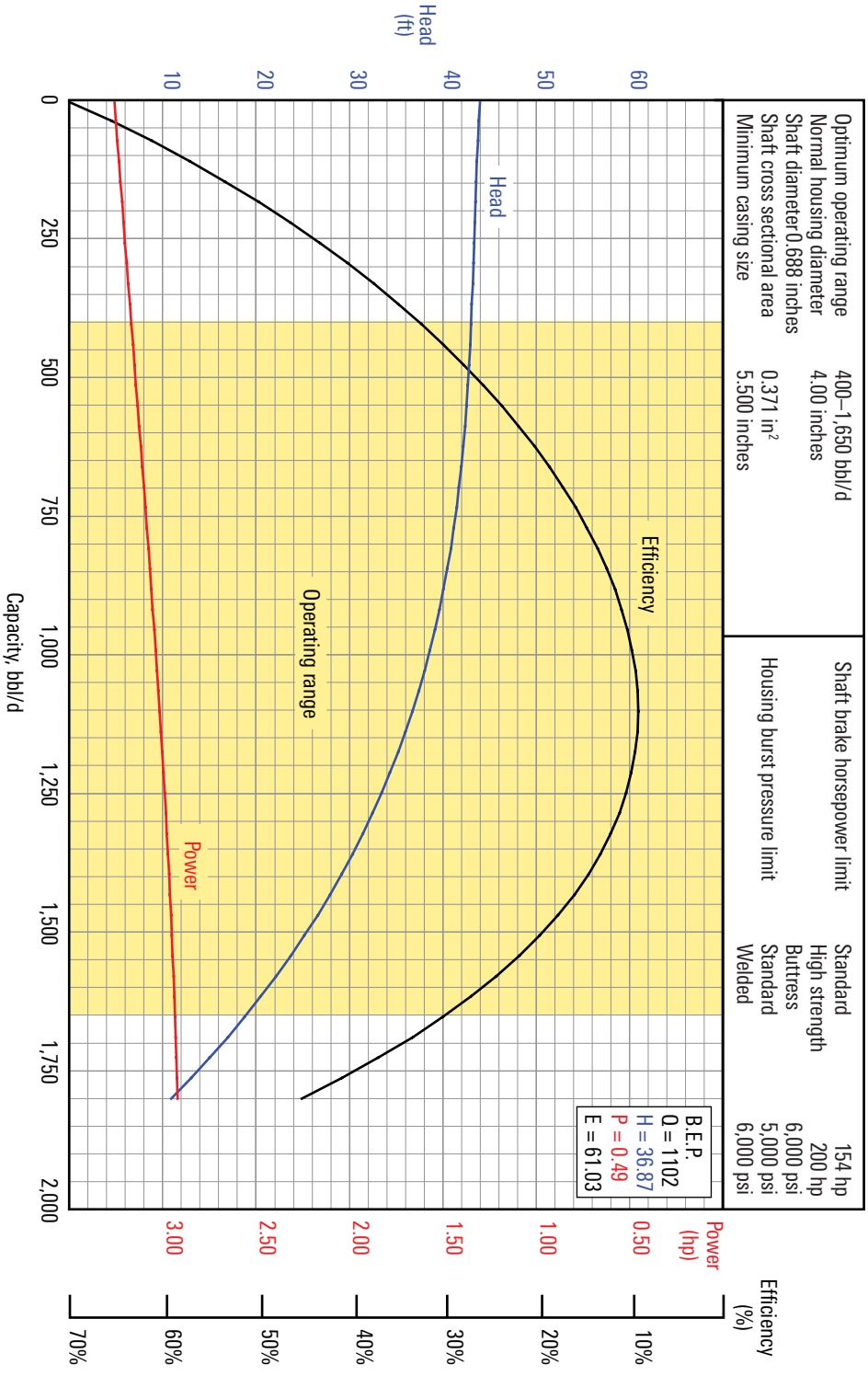
† To be assigned.

D1150N Pump

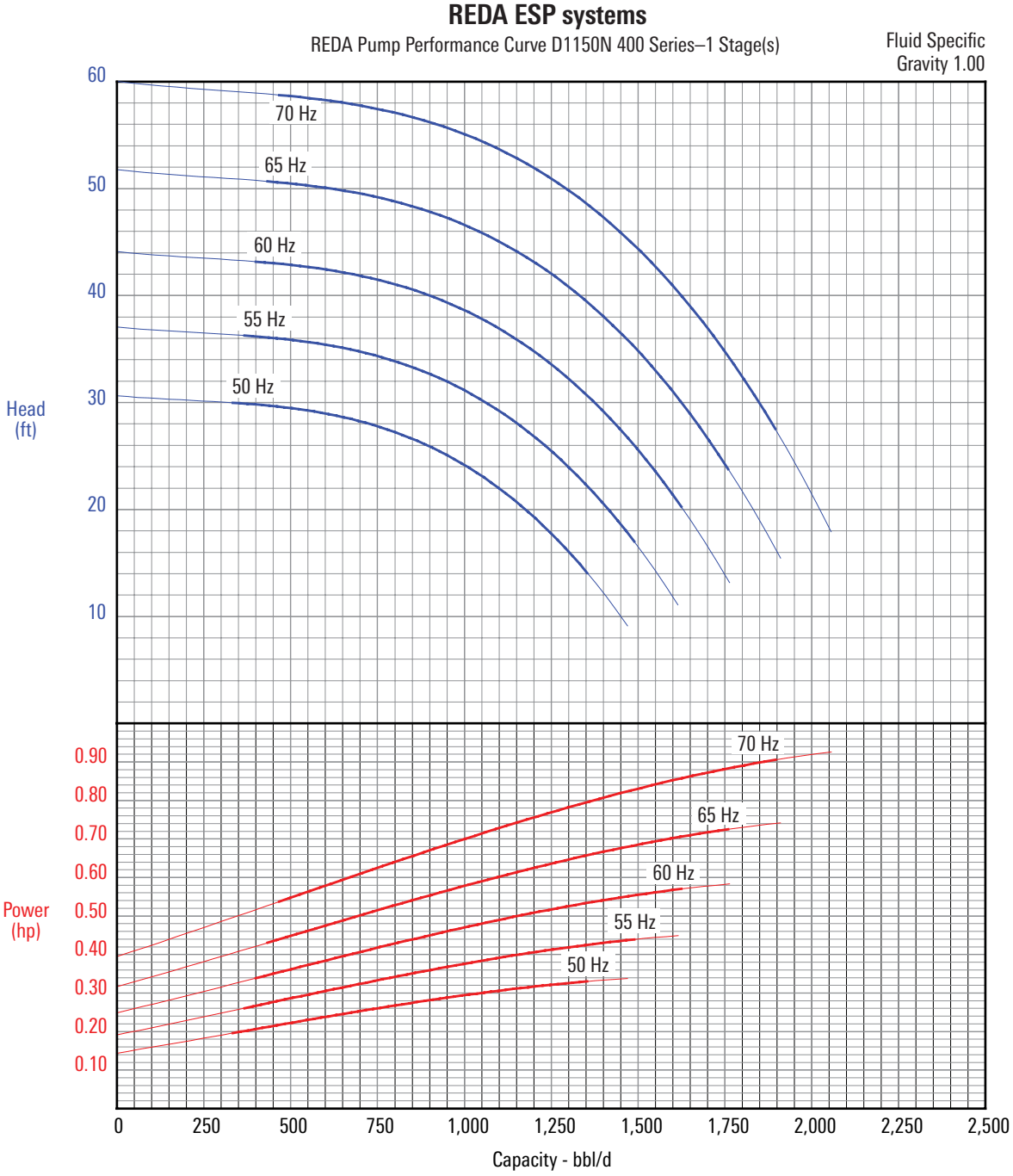
D1150N Pump, 400 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	**Number of Stages**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
130	211	1	1					
140	228		2					
150	244		1	1				
160	260			2				
170	277			1	1			
180	294				2			
190	311				1	1		
200	328†					2		
210	345†					1	1	
220	362†						2	
230	378†						1	1
240	394†							2

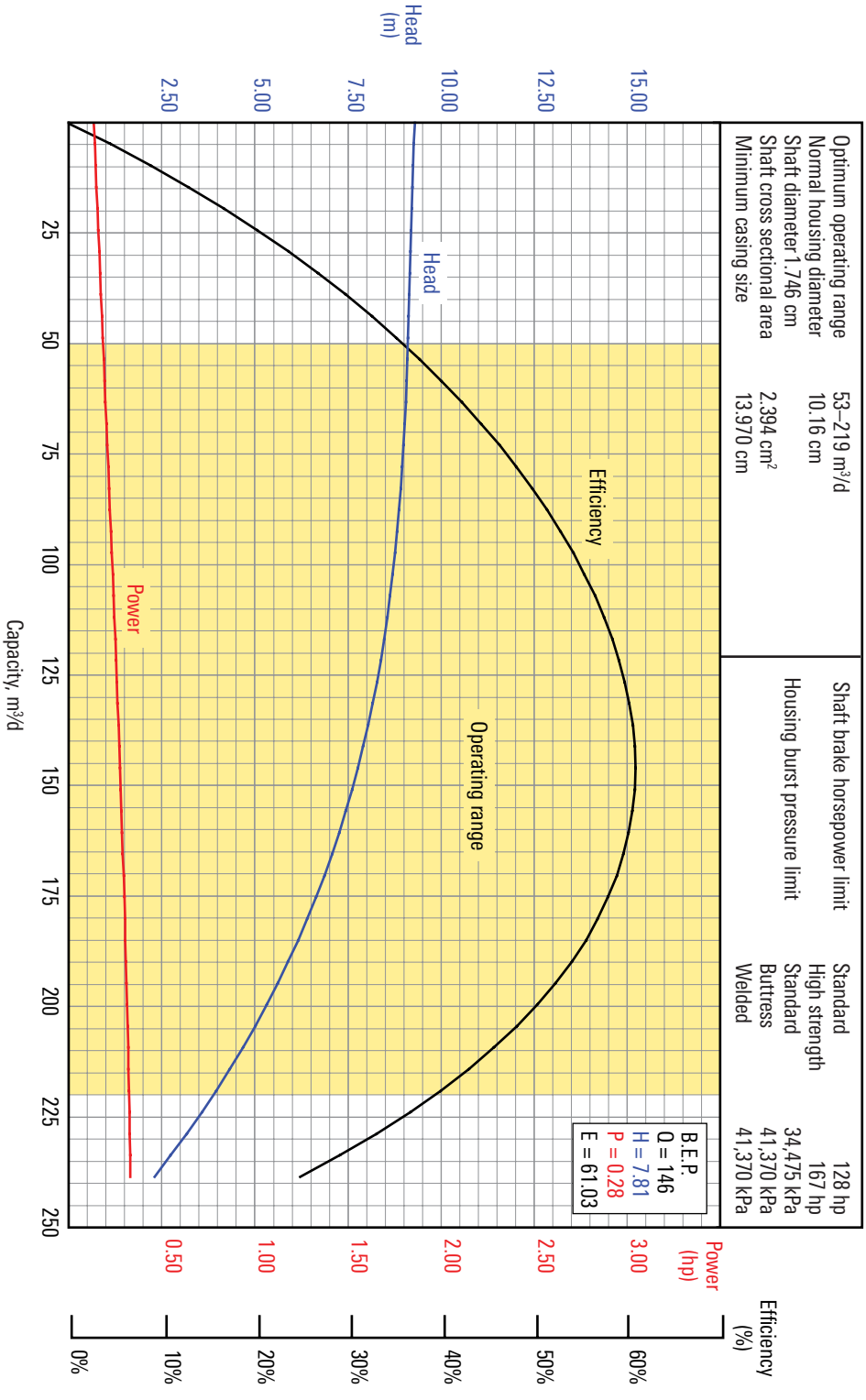
D1150N Pump


REDA ESP systems
Pump Performance Curve D1150N 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 400–1,650 bbl/d
Normal housing diameter 4.00 inches
Shaft diameter 0.688 inches
Shaft cross sectional area 0.371 in²
Minimum casing size 5.500 inches
Shaft brake horsepower limit 154 hp
200 hp
Housing burst pressure limit 6,000 psi
5,000 psi
6,000 psi
Standard
High strength
Buttress
Standard
Welded
B.E.P.
Q = 1102
H = 36.87
P = 0.49
E = 61.03
Head
Efficiency
Operating range
Power
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d
0
250
500
750
1,000
1,250
1,500
1,750
2,000
10
20
30
40
50
60
0.50
1.00
1.50
2.00
2.50
3.00
10%
20%
30%
40%
50%
60%
70%

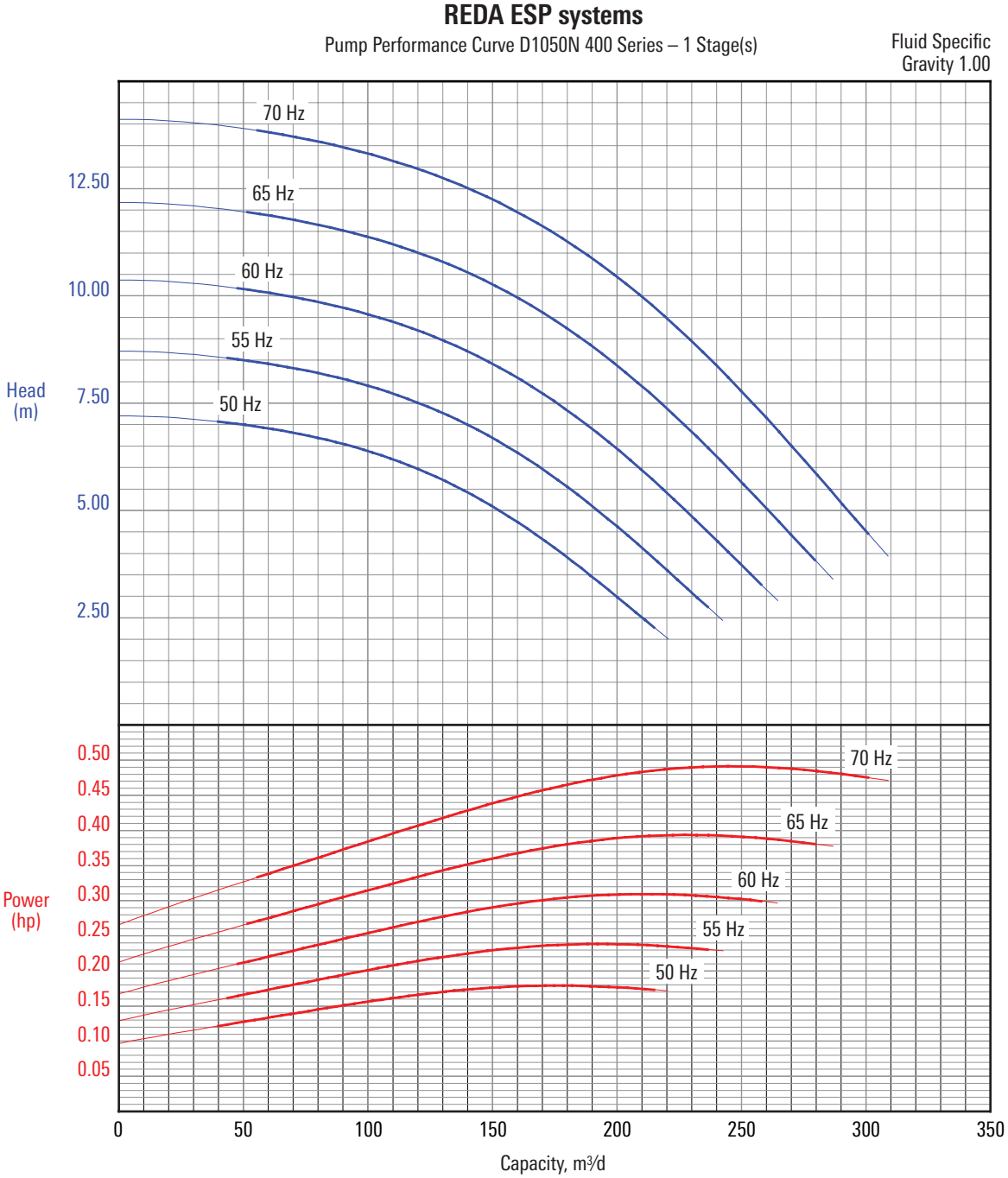
D1150N Pump


REDA ESP systems
REDA Pump Performance Curve D1150N 400 Series–1 Stage(s)
Fluid Specific Gravity 1.00
Head (ft)
60
50
40
30
20
10
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Power (hp)
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0
250
500
750
1,000
1,250
1,500
1,750
2,000
2,250
2,500
Capacity - bbl/d

D1150N Pump


REDA ESP systems
Pump Performance Curve D1150N 50 Hz / 2,917 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 53–219 m³/d
Normal housing diameter 10.16 cm
Shaft diameter 1.746 cm
Shaft cross sectional area 2.394 cm²
Minimum casing size 13.970 cm
Shaft brake horsepower limit 128 hp
Housing burst pressure limit Standard 167 hp
High strength 34,475 kPa
Standard 41,370 kPa
Buttress 41,370 kPa
Welded 41,370 kPa
B.E.P.
Q = 146
H = 7.81
P = 0.28
E = 61.03
Efficiency
Operating range
Head
Power
Head (m)
Power (hp)
Efficiency (%)
Capacity, m³/d
2.50
5.00
7.50
10.00
12.50
15.00
0.50
1.00
1.50
2.00
2.50
3.00
0%
10%
20%
30%
40%
50%
60%
25
50
75
100
125
150
175
200
225
250

D1150N Pump


REDA ESP systems
Pump Performance Curve D1050N 400 Series – 1 Stage(s)
Fluid Specific Gravity 1.00
Head (m)
12.50
10.00
7.50
5.00
2.50
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Power (hp)
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
50
100
150
200
250
300
350
Capacity, m³/d

D1400N Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	45 [20.4]	17	tba†	17	tba	13	tba
20	3.5 [1.07]	75 [34.1]	36	tba	36	tba	29	tba
30	4.9 [1.49]	105 [47.7]	54	tba	54	tba	45	tba
40	6.3 [1.92]	135 [61.3]	73	1346386	73	tba	61	tba
50	7.7 [2.35]	165 [74.9]	92	2005388	92	100030084	78	tba
60	9.1 [2.78]	195 [88.5]	110	tba	110	2004453	94	2006230
70	10.5 [3.20]	225 [102.2]	129	1326156	129	tba	110	2006228
80	11.9 [3.63]	255 [115.8]	147	1326164	147	tba	127	tba
90	13.3 [4.06]	285 [129.4]	166	1328103	166	100023140	143	tba
100	14.7 [4.48]	315 [143.0]	184	1315571	184	100023147	160	tba
110	16.1 [4.91]	345 [156.6]	202	1334176	202	D334176	176	tba
120	17.5 [5.34]	375 [170.3]	221	1328111	221	tba	192	tba

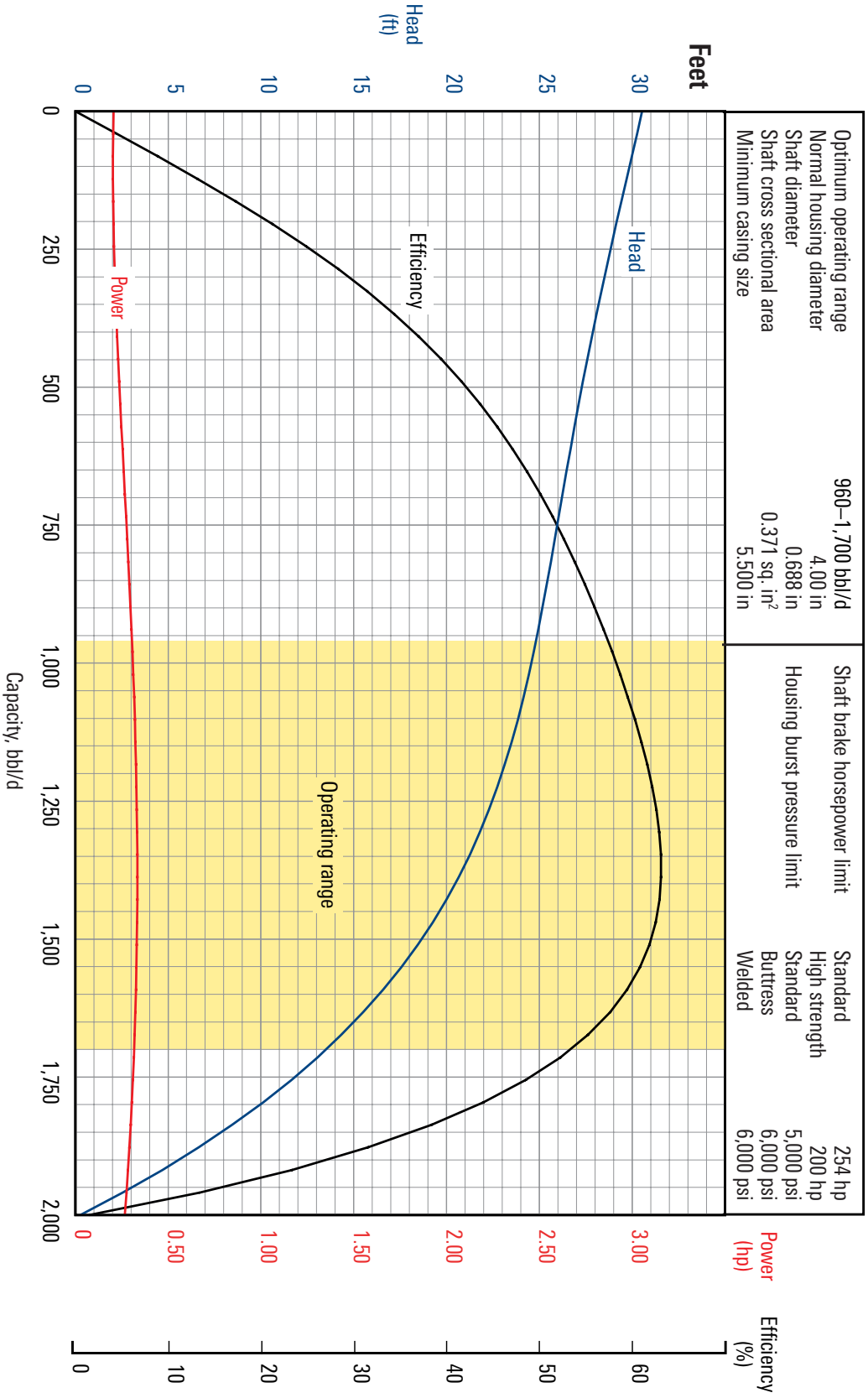
† To be assigned.

D1400N Pump, 400 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	**Number of Stages**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
130	239	1	1					
140	258		2					
150	276		1	1				
160	294			2				
170	313			1	1			
180	332				2			
190	351				1	1		
200	370†					2‡		
210	387†					1‡	1‡	
220	404†						2‡	
230	423†						1‡	1‡

Note: Stage counts are for FL-CT-ES pumps.
† Requires use of buttress threads in uppermost pump.
‡ Requires use of high-strength shaft in lowermost pump.

D1400N Pump

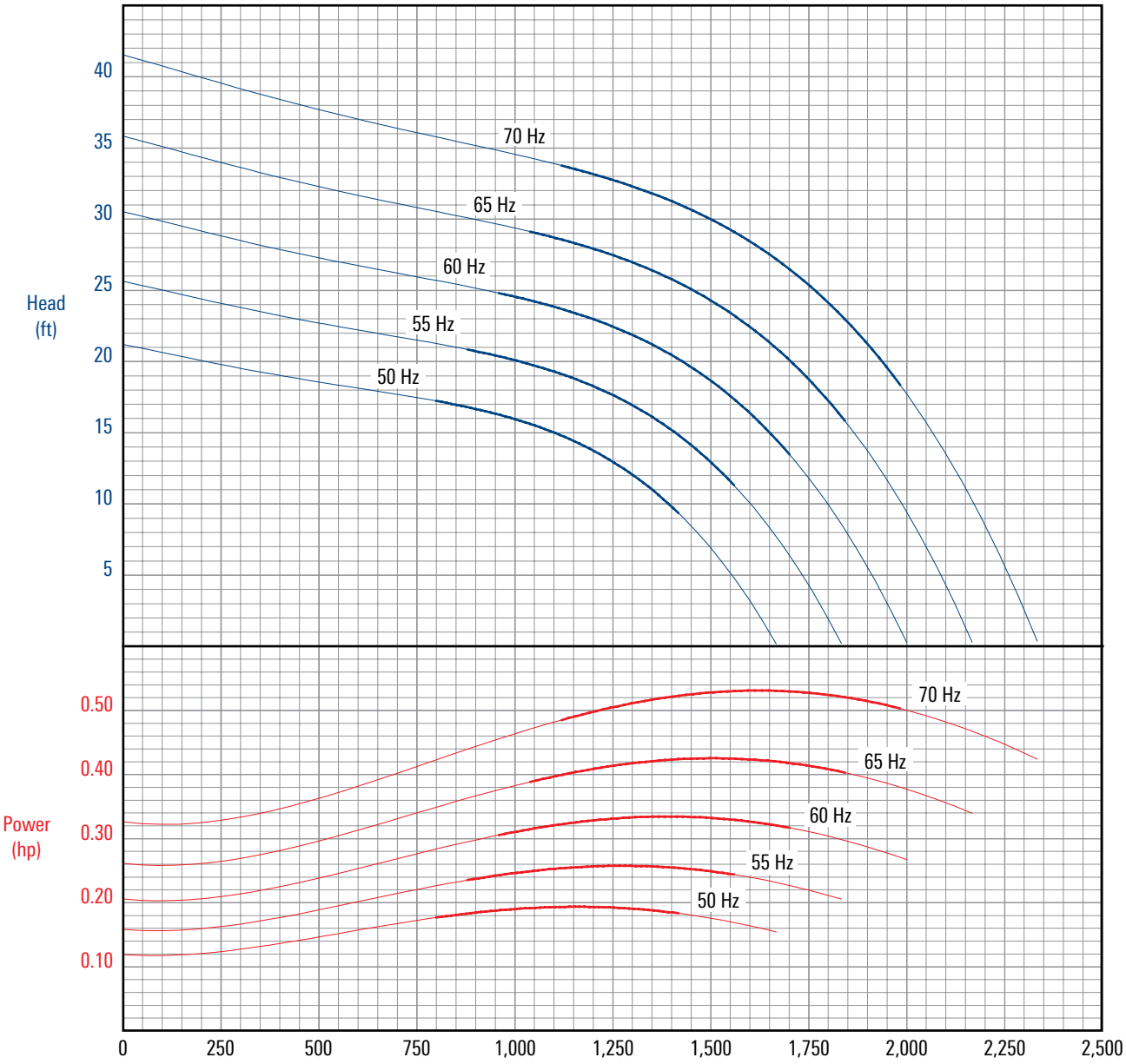


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

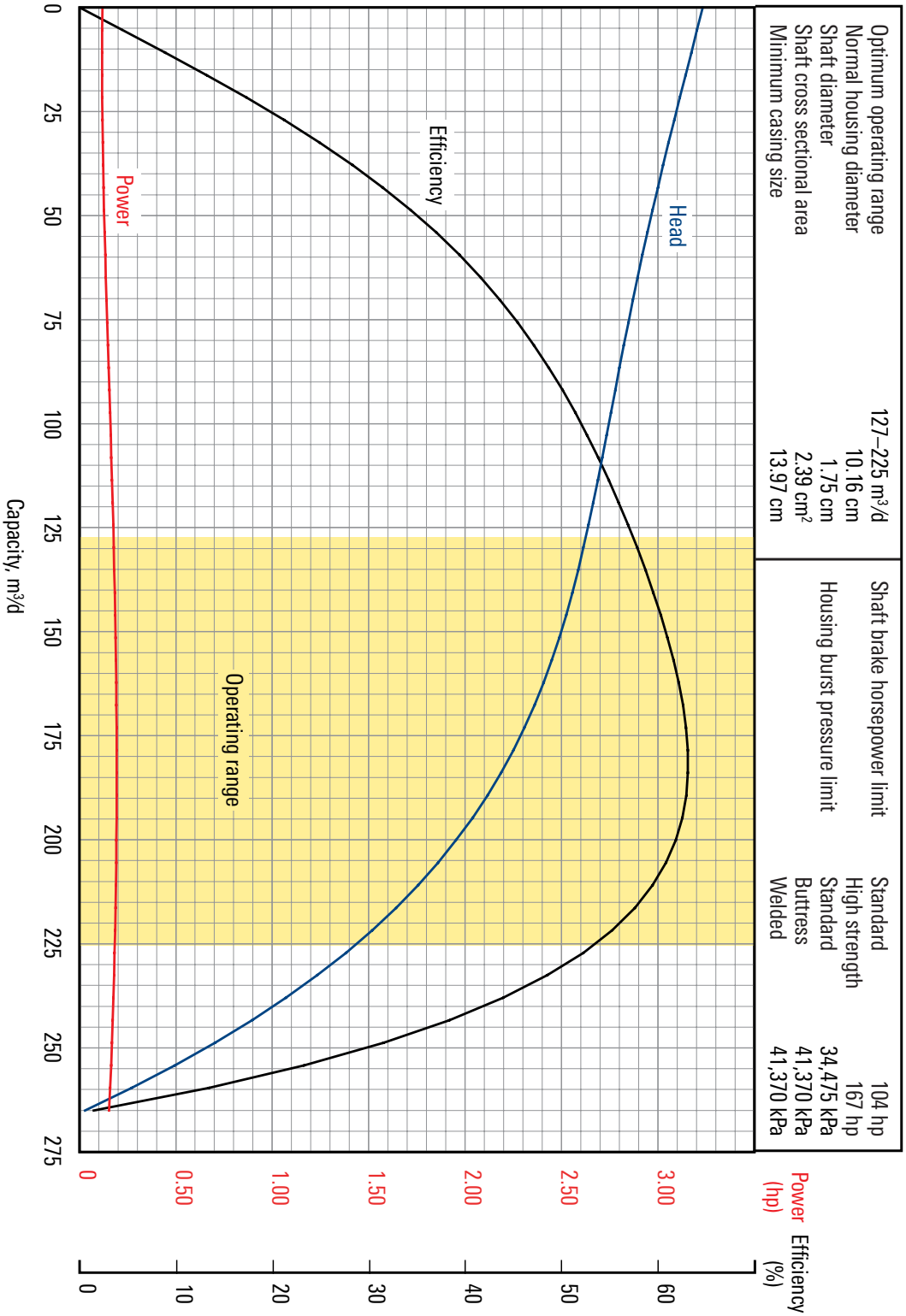
D1400N Pump

REDA ESP systems

Pump Performance Curve D1400N
Curve computed for one stage in fluid of 1.00 sg.



D1400N Pump

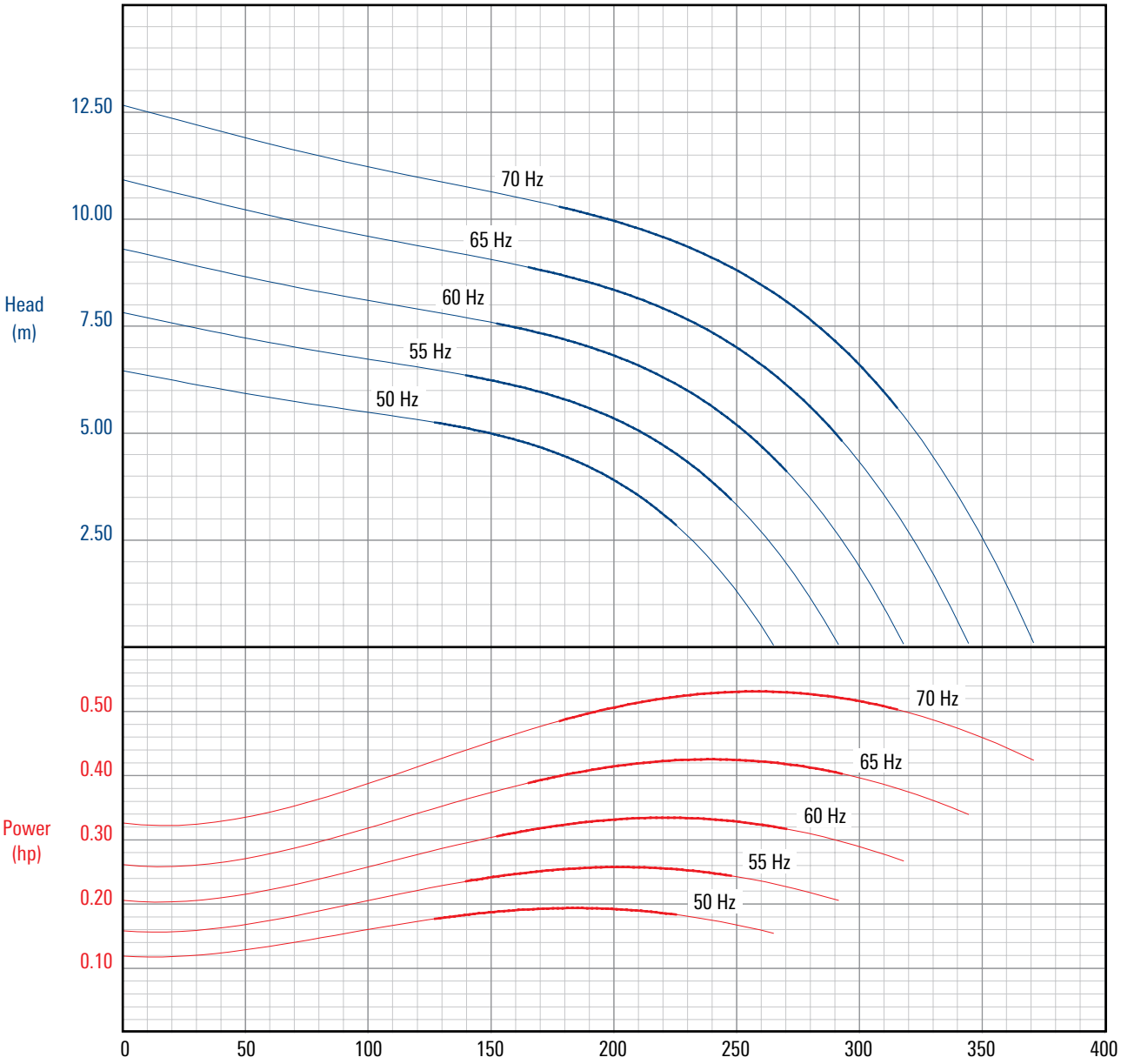


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

D1400N Pump

REDA ESP systems

Pump Performance Curve D1400N
Curve computed for one stage in fluid of 1.00 sg.



DN1750 Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	45 [20.4]	8	717405	8	100023209	7	1131077
20	3.5 [1.07]	75 [34.1]	16	400754	16	tba†	15	1131085
30	4.9 [1.49]	105 [47.7]	24	400762	24	C400762	23	1131093
40	6.3 [1.92]	135 [61.3]	33	400770	33	C400770	31	1131101
50	7.7 [2.35]	165 [74.9]	41	400788	41	C400788	39	1131119
60	9.1 [2.78]	195 [88.5]	50	400796	50	C400796	47	1131127
70	10.5 [3.20]	225 [102.2]	58	806414	58	C806414	55	1131135
80	11.9 [3.63]	255 [115.8]	67	643015	67	C643015	63	1131143
90	13.3 [4.06]	285 [129.4]	75	707554	75	tba	71	1131150
100	14.7 [4.48]	315 [143.0]	83	400804	83	C400804	79	1131168
110	16.1 [4.91]	345 [156.6]	92	810929	92	C810929	87	1131176
120	17.5 [5.34]	375 [170.3]	100	400812	100	C400812	95	1131184
130	18.9 [5.76]	405 [183.9]	108	883868	108	Q883868	103	1131192
140	20.3 [6.19]	435 [197.5]	116	883876	116	C883876	111	1131200
150	21.7 [6.62]	465 [211.1]	125	883884	125	C883884	118	1131218

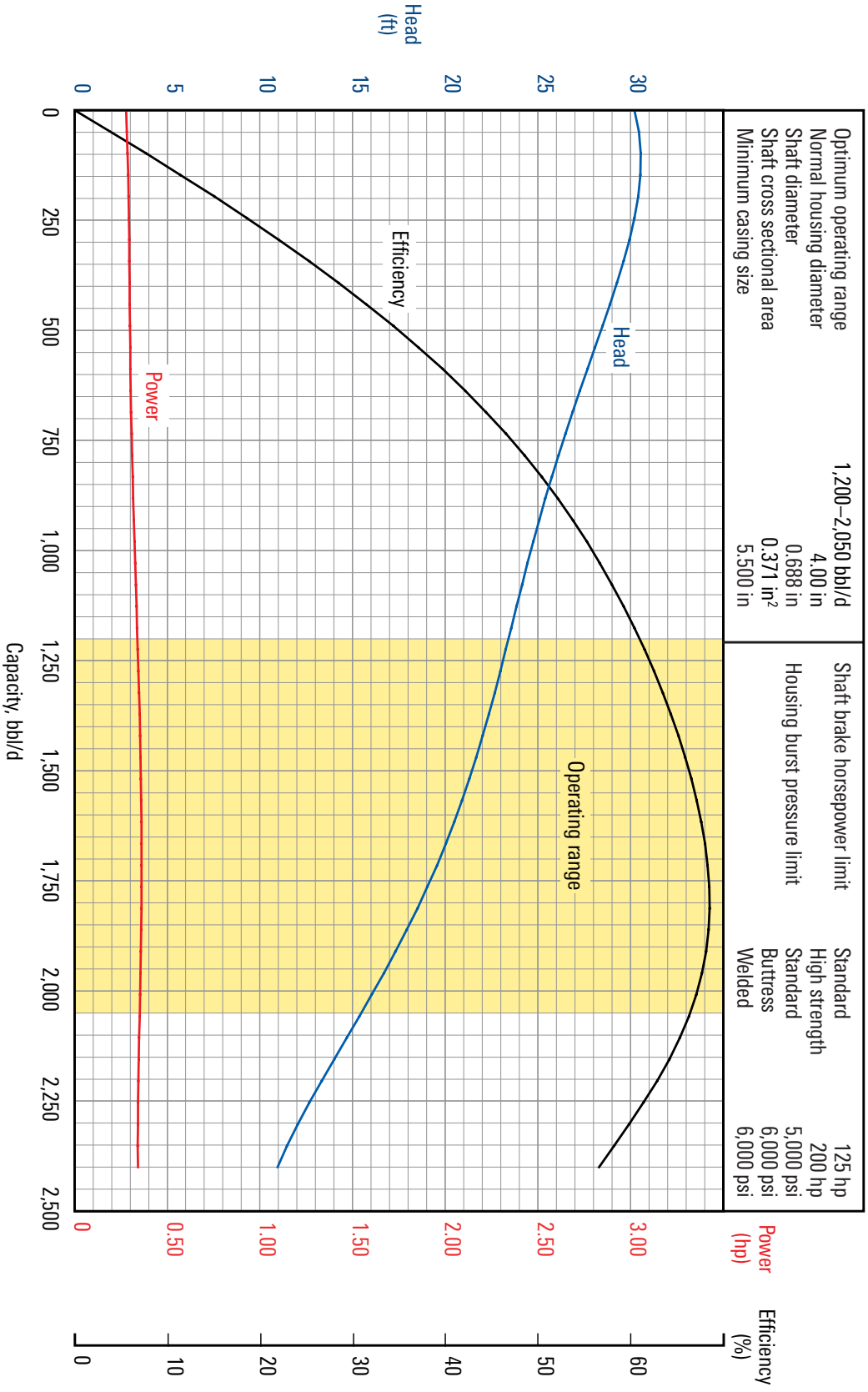
† To be assigned.

DN1750 Pump

DN1750 Pump, 400 Series, Tandem Combinations									
		Tandem Housing Sections Number							
Pump Housing	Number of Stages	80	90	100	110	120	130	140	150
160	134	2							
170	142	1	1						
180	150	1		1					
190	158		1	1					
200	166			2					
210	175			1	1				
220	184				2				
230	192				1	1			
240	200					2			
250	208					1	1		
260	216						2		
270	224						1	1	
280	232							2	
290	241							1	1
300	250								2
310	258			2	1				
320	267			1	2				
330	276				3				
340	284†				2	1			
350	292†				1	2			
360	300†					3			
370	308†					2	1		
380	316†					1	2		
390	324†						3		
400	332†						2	1	
410	340†						1‡	2‡	
420	348†							3‡	
430	357†							2‡	1‡
440	366†							1‡	2‡
450	375†, §								3‡
460	383†, §			1‡		3‡			
470	392†, §				1‡	3‡			
480	400†, §					4‡			
490	408†, §					3‡	1‡		
500	416†, §					3‡		1‡	
510	424†, §					1‡	3‡		
520	432†, §						4‡		
530	440†, §						3‡	1‡	

Note: Stage counts are for FL-CT-ES pumps.
† Requires use of buttress threads in uppermost pump.
‡ Requires use of high-strength shaft in lowermost pump.
§ Requires use of high-load bearing in protector.

DN1750 Pump

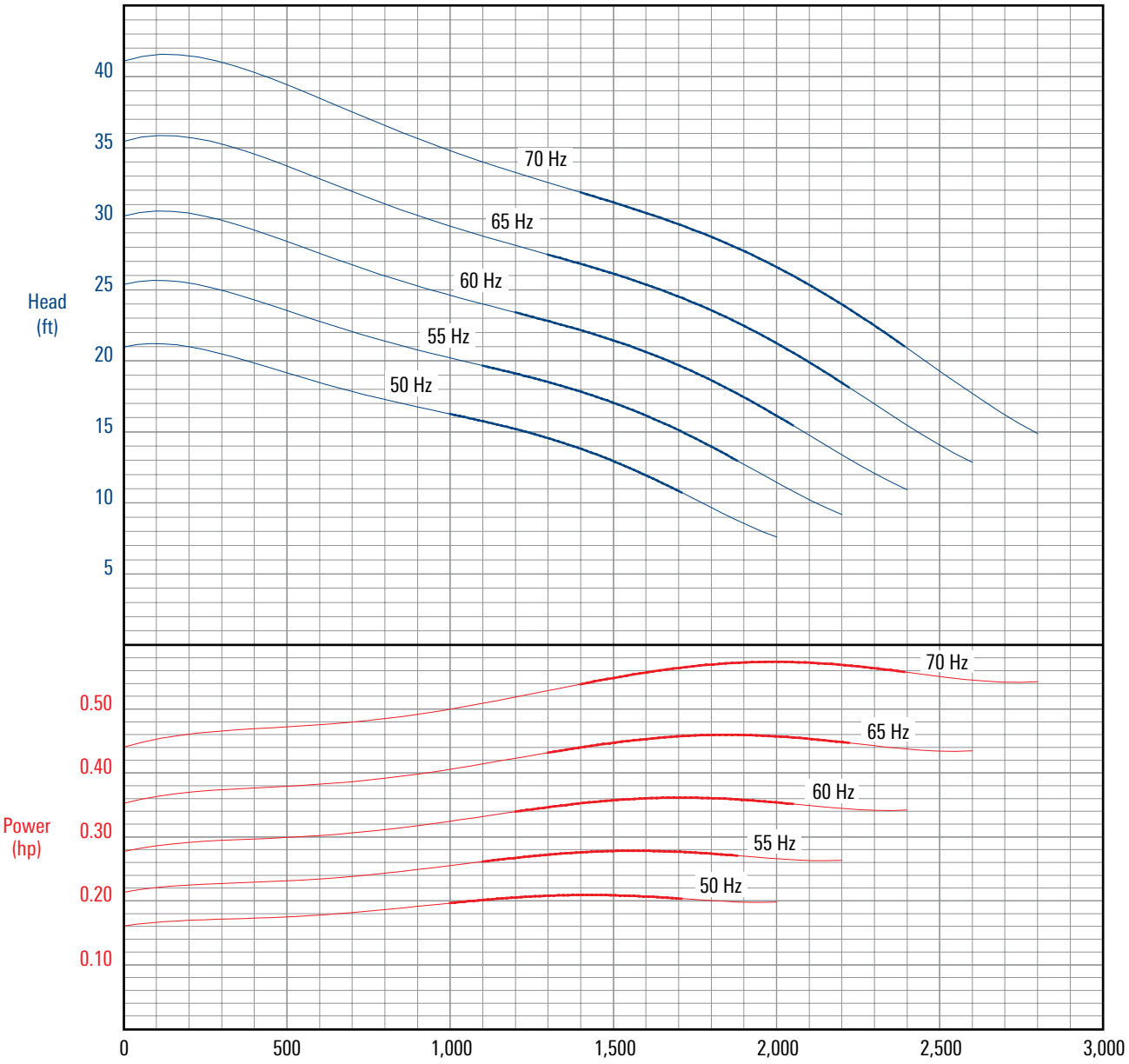


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

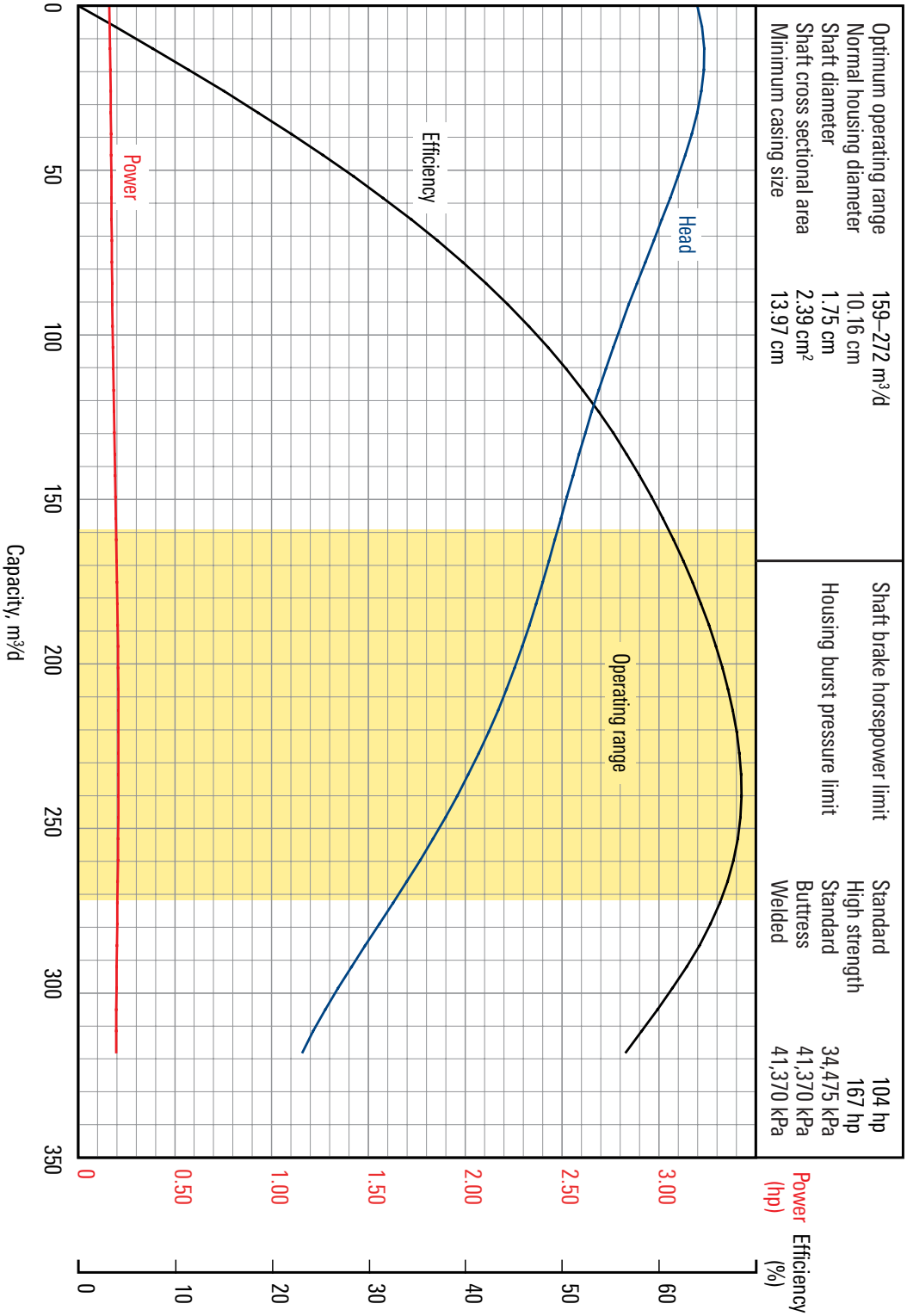
DN1750 Pump

REDA ESP systems

Pump Performance Curve DN1750
Curve computed for one stage in fluid of 1.00 sg.



DN1750 Pump

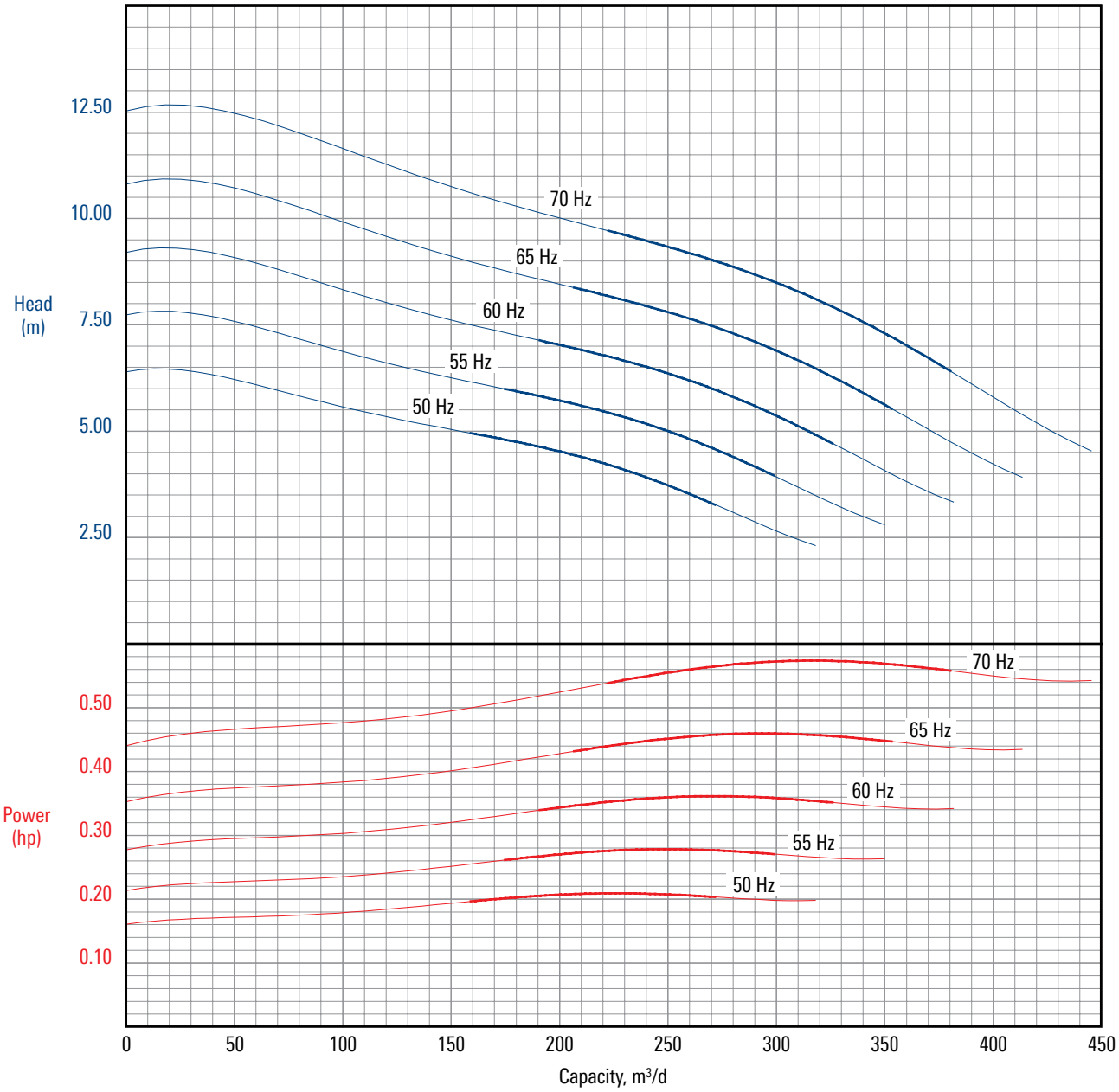


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

DN1750 Pump

REDA ESP systems

Pump Performance Curve DN1750
Curve computed for one stage in fluid of 1.00 sg.



DN1800 Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD								
			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	FL-CT Part Number	Max. Stages	FL-CT-ES Part Number	Max. Stages	FL-CT-ARZ Part Number
10	2.1 [0.64]	45 [20.4]	8	1183441	8	tba†	7	tba
20	3.5 [1.07]	75 [34.1]	16	1183458	16	tba	15	tba
30	4.9 [1.49]	105 [47.7]	24	1183466	24	tba	23	tba
40	6.3 [1.92]	135 [61.3]	33	1183474	33	tba	31	tba
50	7.7 [2.35]	165 [74.9]	41	1183482	41	tba	39	tba
60	9.1 [2.78]	195 [88.5]	50	1183490	50	tba	47	tba
70	10.5 [3.20]	225 [102.2]	58	1183508	58	tba	55	tba
80	11.9 [3.63]	255 [115.8]	67	1183516	67	tba	63	tba
90	13.3 [4.06]	285 [129.4]	75	1183524	75	100030085	71	tba
100	14.7 [4.48]	315 [143.0]	83	1183532	83	tba	77	1296136
110	16.1 [4.91]	345 [156.6]	92	1183540	92	tba	87	tba
120	17.5 [5.34]	375 [170.3]	100	1183557	100	100030086	95	tba
130	18.9 [5.76]	405 [183.9]	108	1183565	108	tba	103	1329473
140	20.3 [6.19]	435 [197.5]	116	1183573	116	100030088	111	tba
150	21.7 [6.62]	465 [211.1]	125	1183581	125	100030089	118	1345727

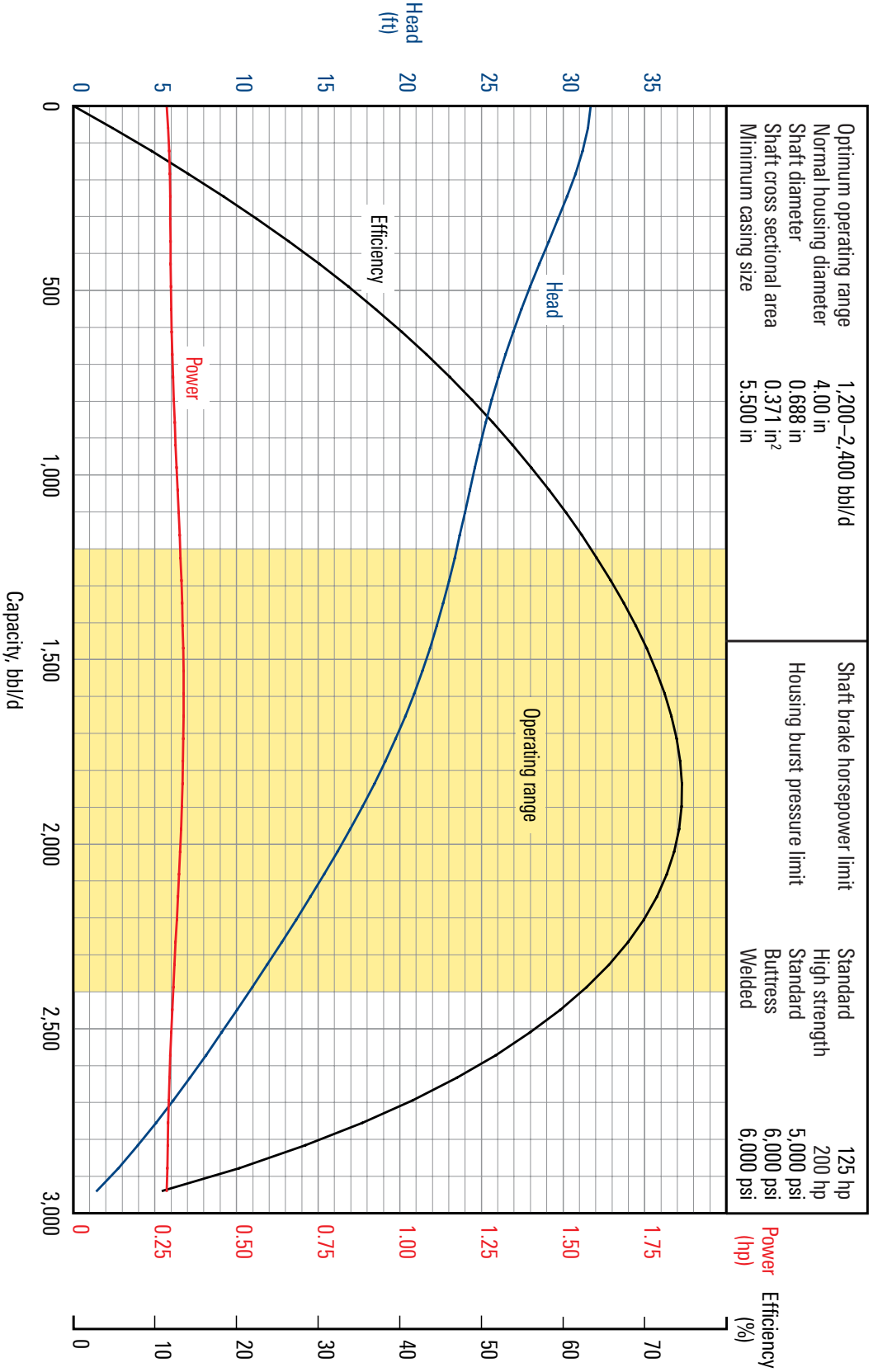
† To be assigned.

DN1800 Pump

DN1800 Pump, 400 Series, Tandem Combinations									
Pump Housing	Number of	Tandem Housing Sections Number							
		80	90	100	110	120	130	140	150
160	134	2							
170	142	1	1						
180	150	1		1					
190	158		1	1					
200	166			2					
210	175			1	1				
220	184				2				
230	192				1	1			
240	200					2			
250	208					1	1		
260	216						2		
270	224						1	1	
280	232							2	
290	241							1	1
300	250								2
310	258			2	1				
320	267			1	2				
330	276				3				
340	284†				2	1			
350	292†				1	2			
360	300†					3			
370	308†					2	1		
380	316†					1	2		
390	324†						3		
400	332†						2	1	
410	340†						1‡	2‡	
420	348†							3‡	
430	357†							2‡	1‡
440	366†							1‡	2‡
450	375†, §								3‡
460	383†, §			1‡		3‡			
470	392†, §				1‡	3‡			
480	400†, §					4‡			
490	408†, §					3‡	1‡		
500	416†, §					3‡		1‡	
510	424†, §					1‡	3‡		
520	432†, §						4‡		
530	440†, §						3‡	1‡	

Note: Stage counts are for FL-CT-ES pumps.
† Requires use of buttress threads in uppermost pump.
‡ Requires use of high-strength shaft in lowermost pump.
§ Requires use of high-load bearing in protector.

DN1800 Pump

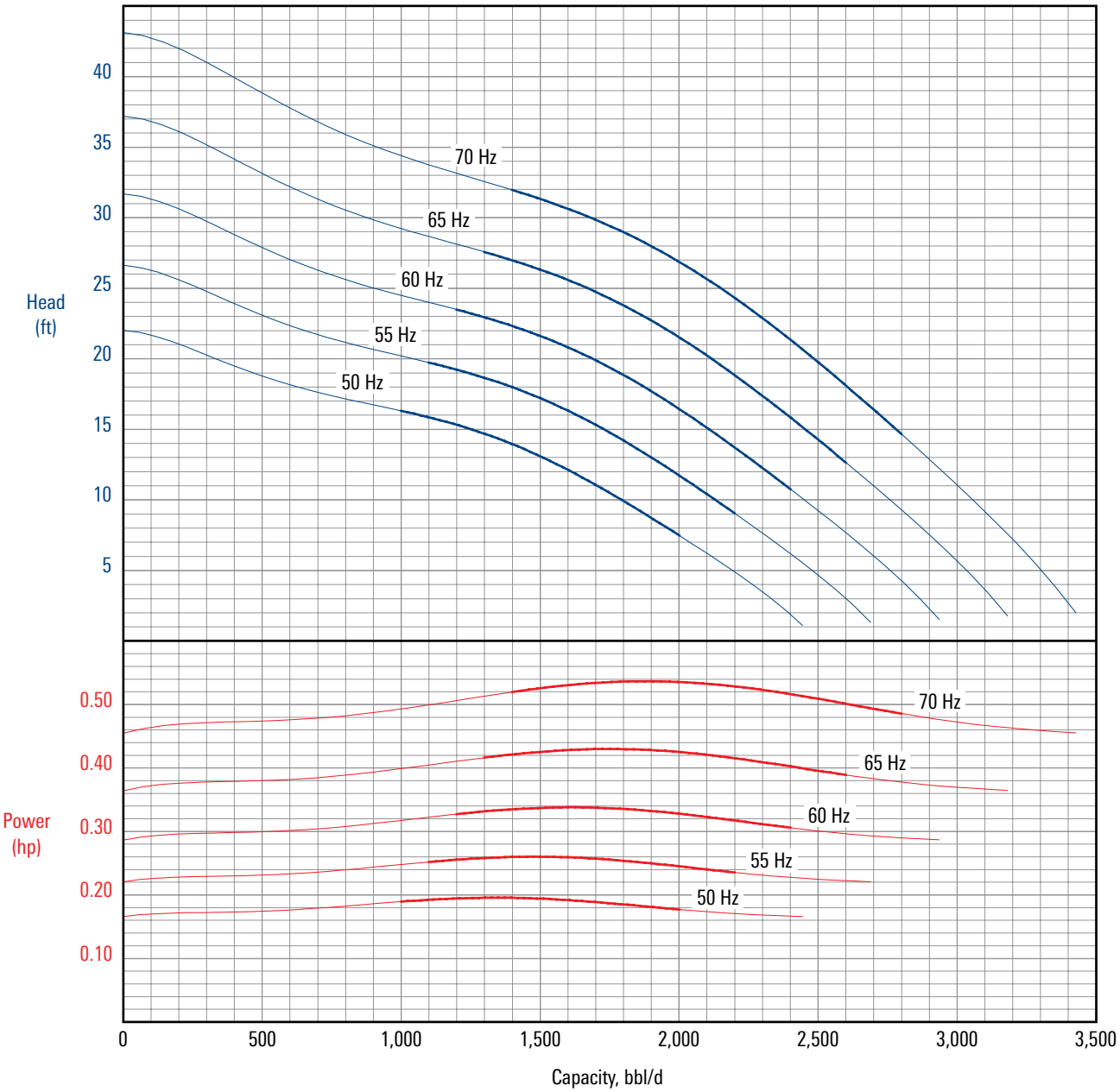


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

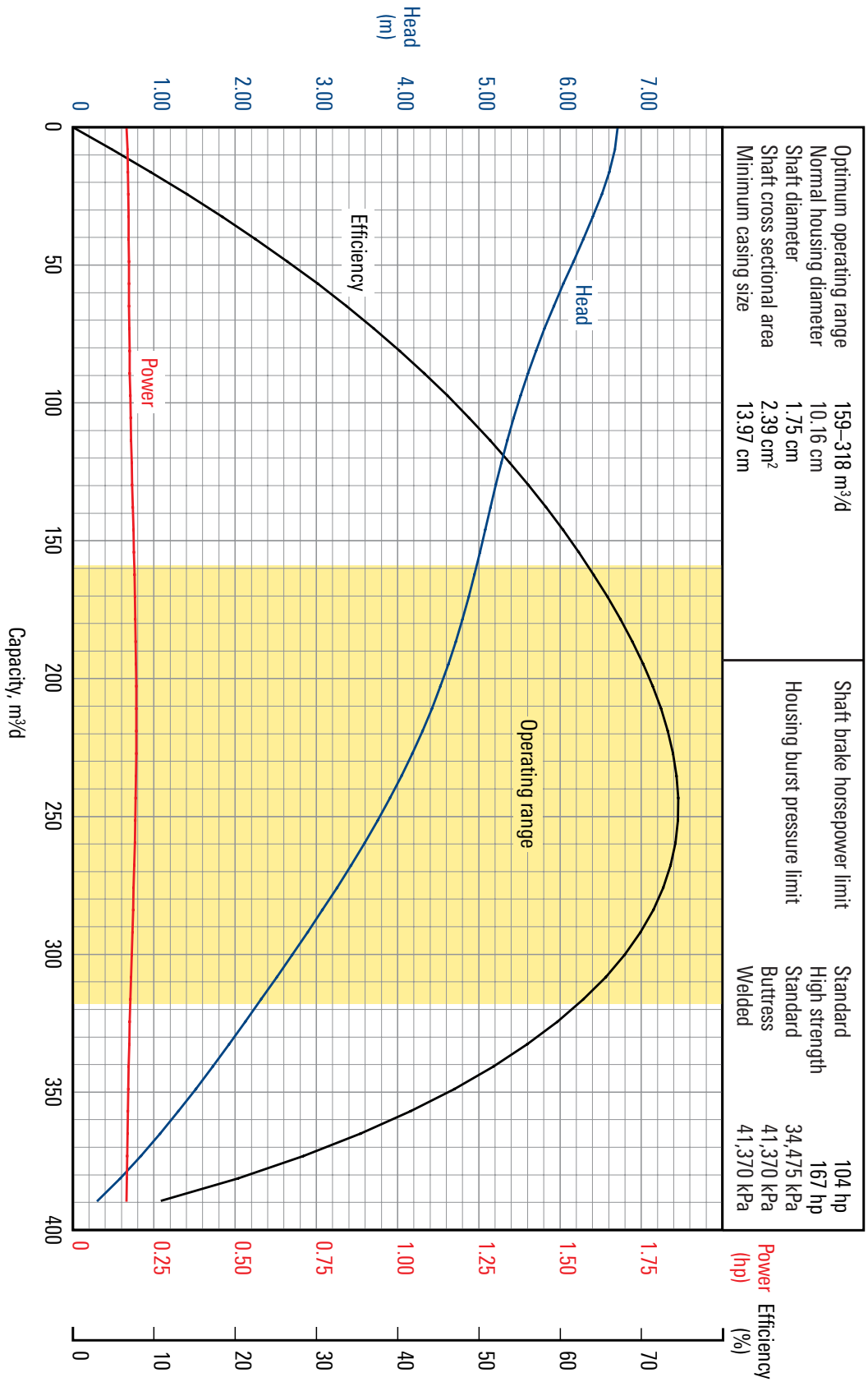
DN1800 Pump

REDA ESP systems

Pump Performance Curve DN1800
Curve computed for one stage in fluid of 1.00 sg.



DN1800 Pump

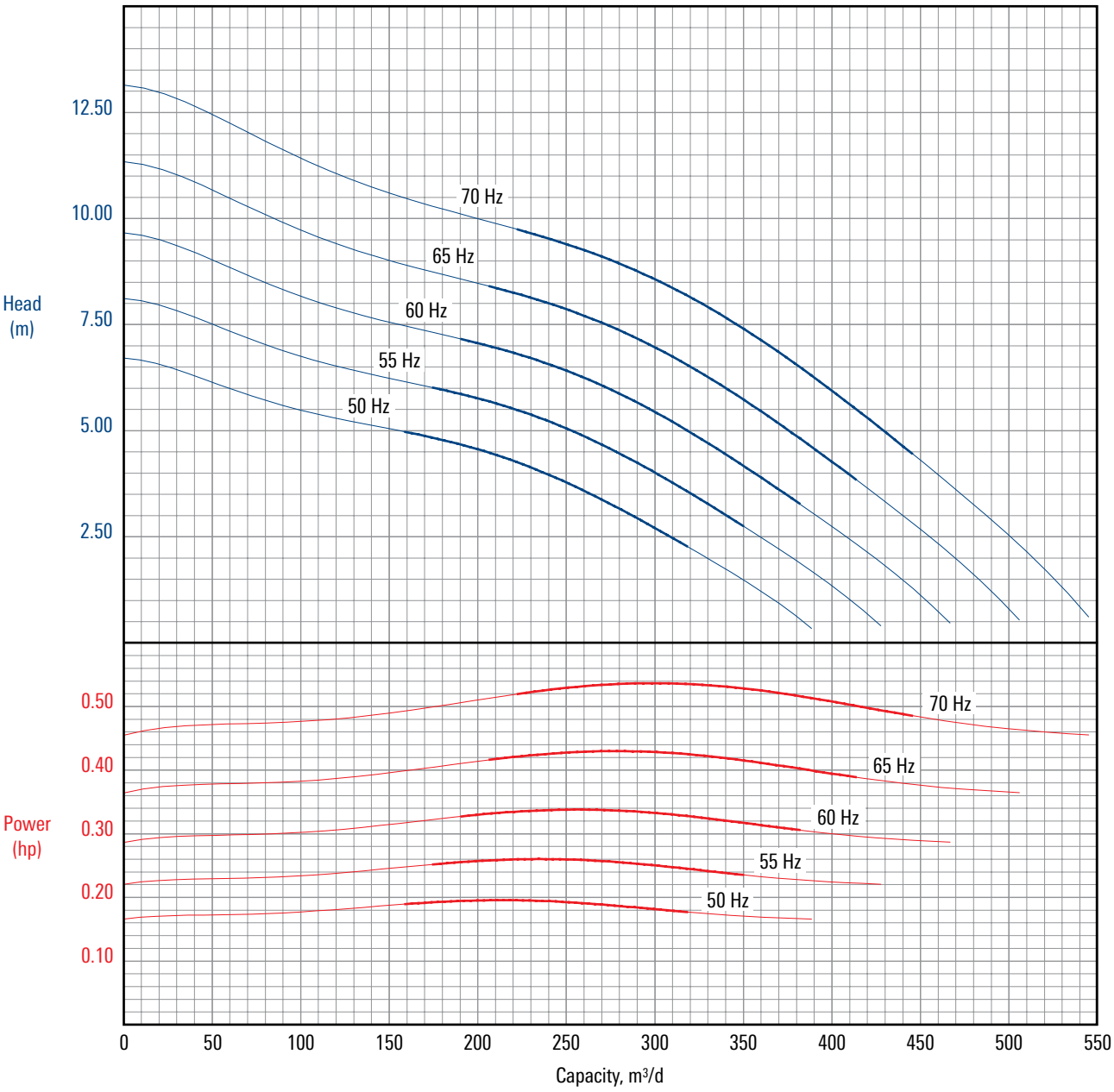


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

DN1800 Pump

REDA ESP systems

Pump Performance Curve DN1800
Curve computed for one stage in fluid of 1.00 sg.



DN2400 Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ES Carbon Steel		ES Redalloy* Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT† Part Number**	**Max. Stages**	**FL-CT† Part Number**
10	2.1 [0.64]	45 [20.4]	8	100254333	8	100254892
20	3.5 [1.07]	75 [34.1]	16	100254342	16	100254893
30	4.9 [1.49]	105 47.7]	24	100254343	24	100254895
40	6.3 [1.92]	135 [61.3]	33	100254345	33	100254896
50	7.7 [2.35]	165 [74.9]	41	100254346	41	100254897
60	9.1 [2.78]	195 [88.5]	50	100254348	50	100254899
70	10.5 [3.20]	225 [102.2]	58	100254349	58	100254900
80	11.9 [3.63]	255 [115.8]	67	100254351	67	100254901
90	13.3 [4.06]	285 [129.4]	75	100254353	75	100254902
100	14.7 [4.48]	315 [143.0]	83	100254354	83	100254903
110	16.1 [4.91]	345 [156.6]	92	100254355	92	100254904
120	17.5 [5.34]	375 [170.3]	100	100253356	100	100254905
130	18.9 [5.76]	405 [183.9]	108	100254357	108	100254906
140	20.3 [6.19]	435 [197.5]	117	100254358	117	100254907
150	21.7 [6.62]	465 [211.1]	125	100254359	125	100254908

† This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ES Carbon Steel		ES Redalloy Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT† Part Number**	**Max. Stages**	**FL-CT† Part Number**
10	2.1 [0.64]	45 [20.4]	7	100257674	7	100257927
20	3.5 [1.07]	75 [34.1]	15	100257675	15	100257948
30	4.9 [1.49]	105 47.7]	23	100257676	23	100257949
40	6.3 [1.92]	135 [61.3]	32	100257677	32	100257950
50	7.7 [2.35]	165 [74.9]	40	100257678	40	100257951
60	9.1 [2.78]	195 [88.5]	49	100257679	49	100257952
70	10.5 [3.20]	225 [102.2]	57	100257680	57	100257953
80	11.9 [3.63]	255 [115.8]	66	100257681	66	100257954
90	13.3 [4.06]	285 [129.4]	74	100257682	74	100257955
100	14.7 [4.48]	315 [143.0]	82	100257684	82	100257956
110	16.1 [4.91]	345 [156.6]	91	100257685	91	100257957
120	17.5 [5.34]	375 [170.3]	99	100257686	99	100257958
130	18.9 [5.76]	405 [183.9]	108	100257688	108	100257960
140	20.3 [6.19]	435 [197.5]	116	100257690	116	100257961
150	21.7 [6.62]	465 [211.1]	125	100257691	125	100257962

†This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

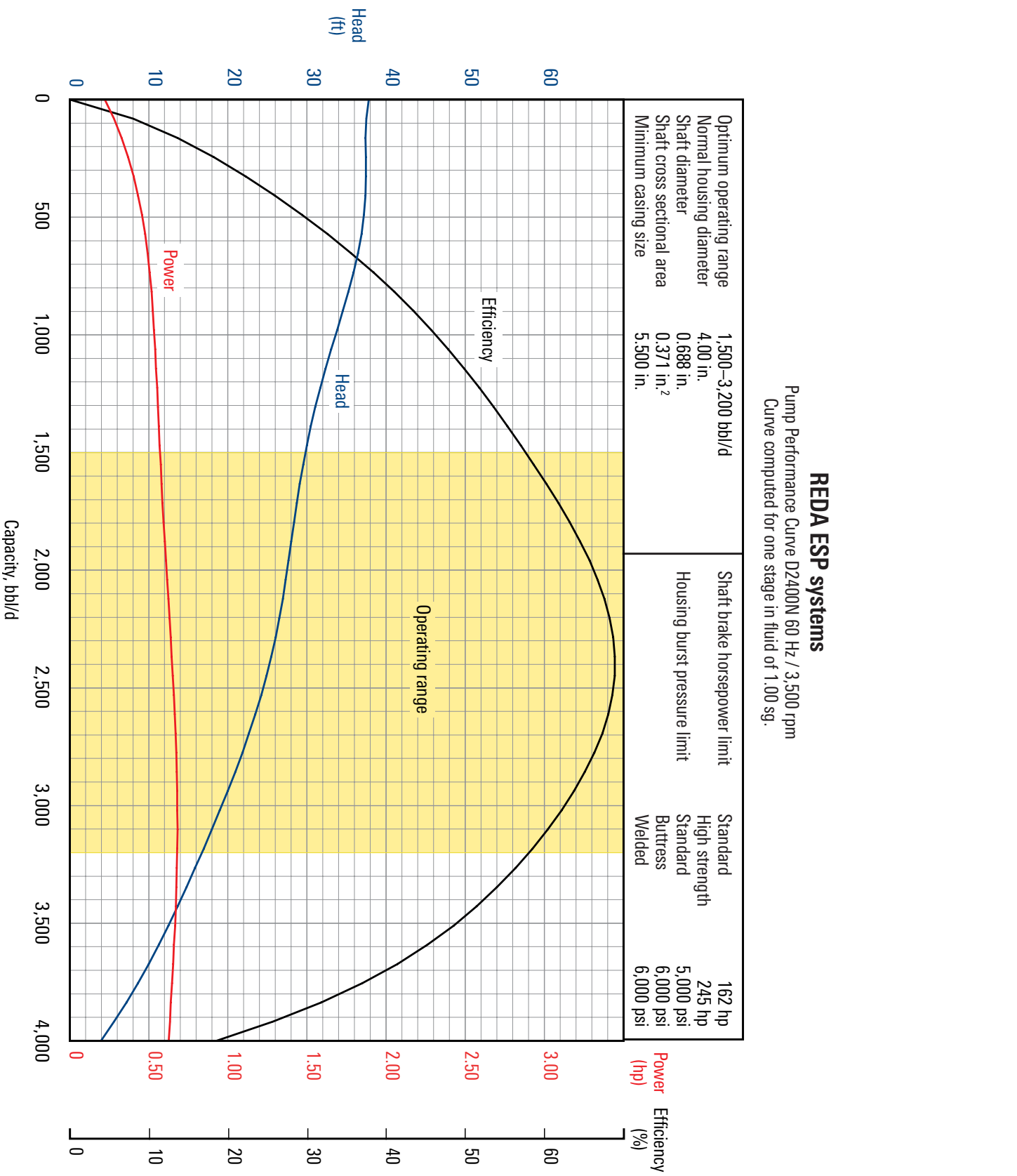
DN2400 Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ARZ Carbon Steel		ARZ Redalloy Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT† Part Number**	**Max. Stages**	**CR-CT† Part Number**
10	2.1 [0.64]	45 [20.4]	6	100258448	6	100258876
20	3.5 [1.07]	75 [34.1]	14	100258449	14	100258877
30	4.9 [1.49]	105 47.7]	22	100258450	22	100258878
40	6.3 [1.92]	135 [61.3]	30	100258451	30	100258879
50	7.7 [2.35]	165 [74.9]	38	100258452	38	100258881
60	9.1 [2.78]	195 [88.5]	46	100258454	46	100258882
70	10.5 [3.20]	225 [102.2]	53	100258455	53	100258883
80	11.9 [3.63]	255 [115.8]	62	100258458	62	100258884
90	13.3 [4.06]	285 [129.4]	70	100258459	70	100258885
100	14.7 [4.48]	315 [143.0]	78	100258460	78	100258886
110	16.1 [4.91]	345 [156.6]	86	100258461	86	100258887
120	17.5 [5.34]	375 [170.3]	93	100258462	93	100258888
130	18.9 [5.76]	405 [183.9]	102	100258463	102	100258889
140	20.3 [6.19]	435 [197.5]	109	100258464	109	100258890
150	21.7 [6.62]	465 [211.1]	117	100258465	117	100258891

† This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

DN2400 Pump

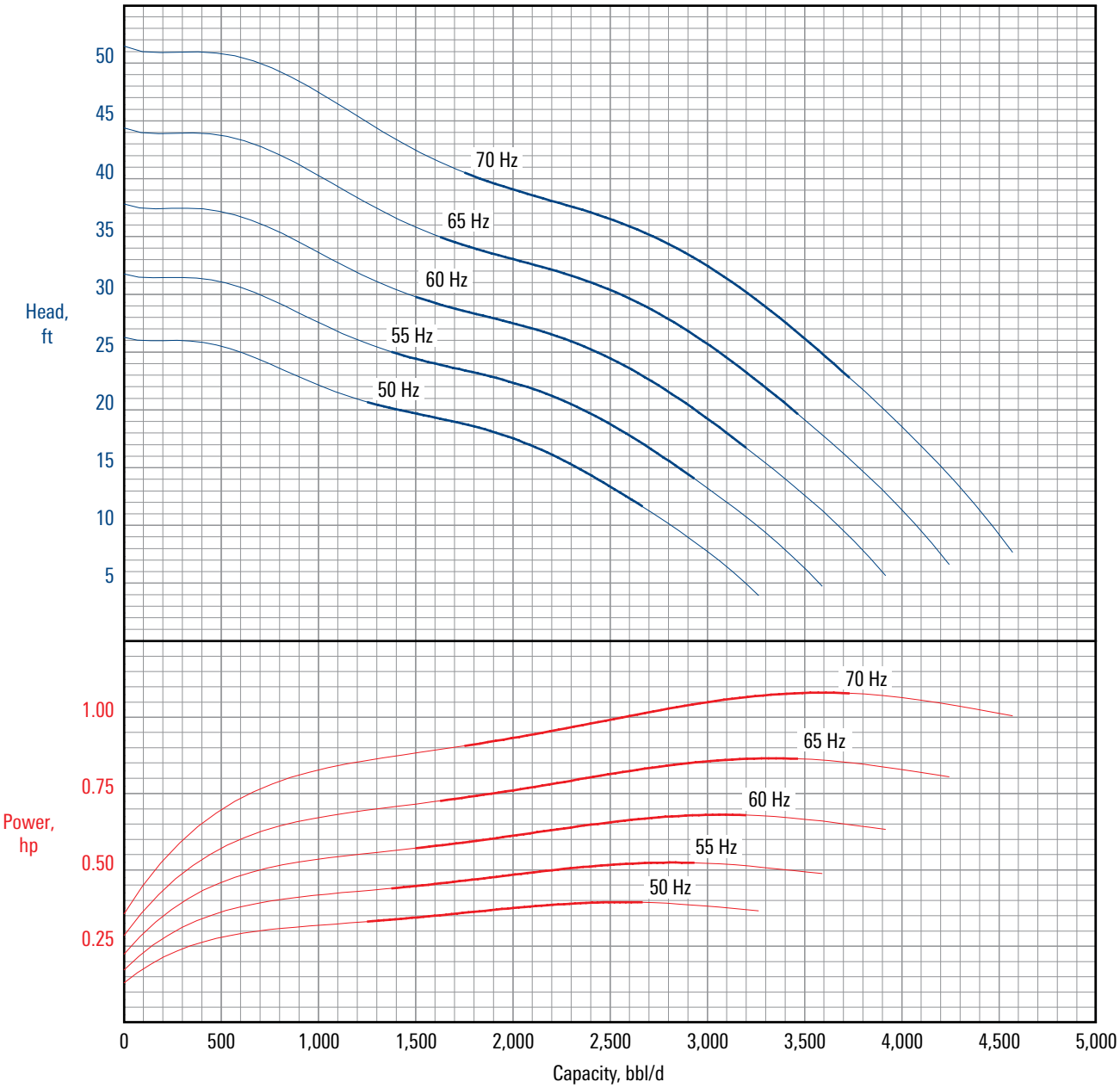


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

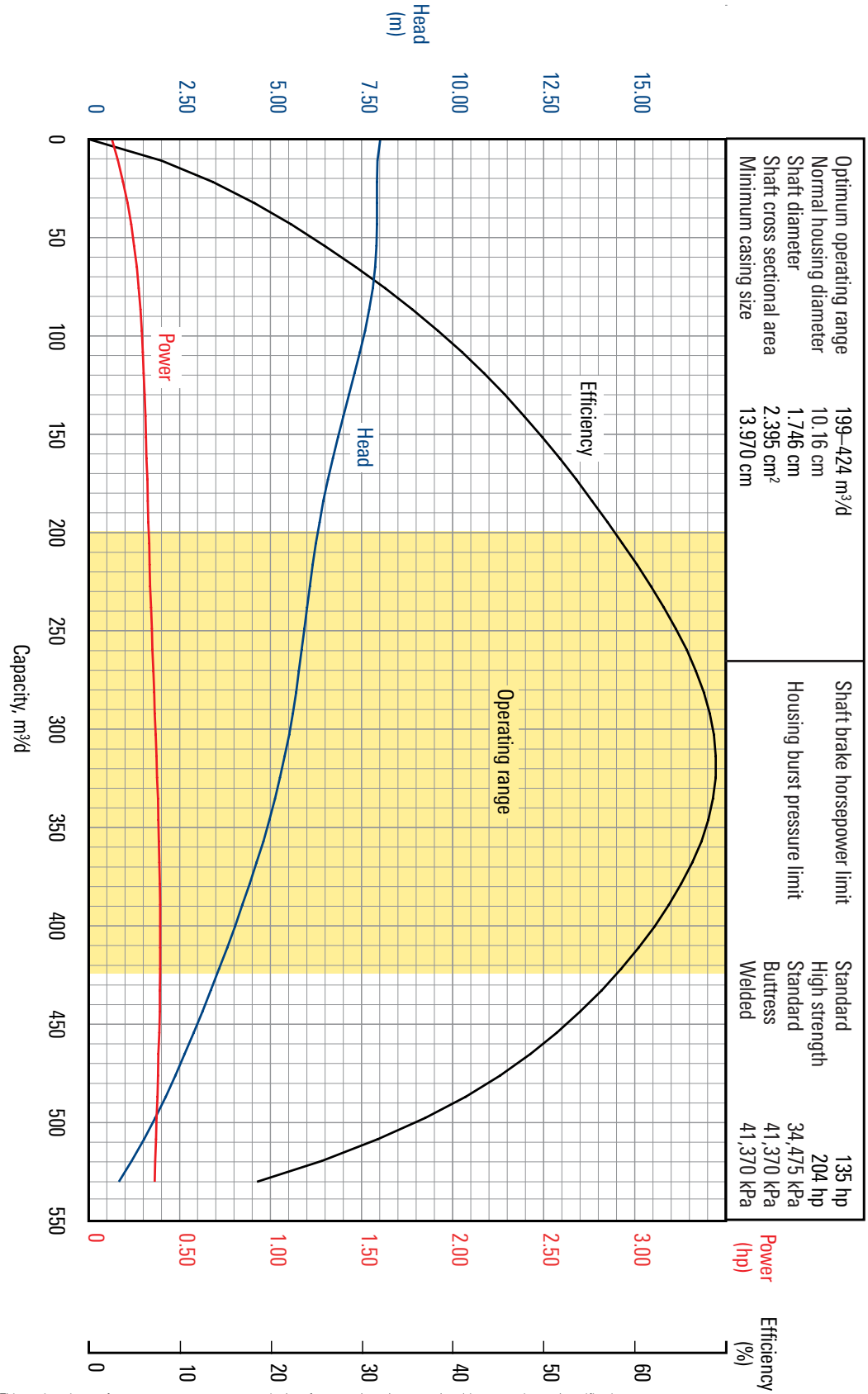
DN2400 Pump

REDA ESP systems

Pump Performance Curve D2400N
Curve computed for one stage in fluid of 1.00 sg.



DN2400 Pump



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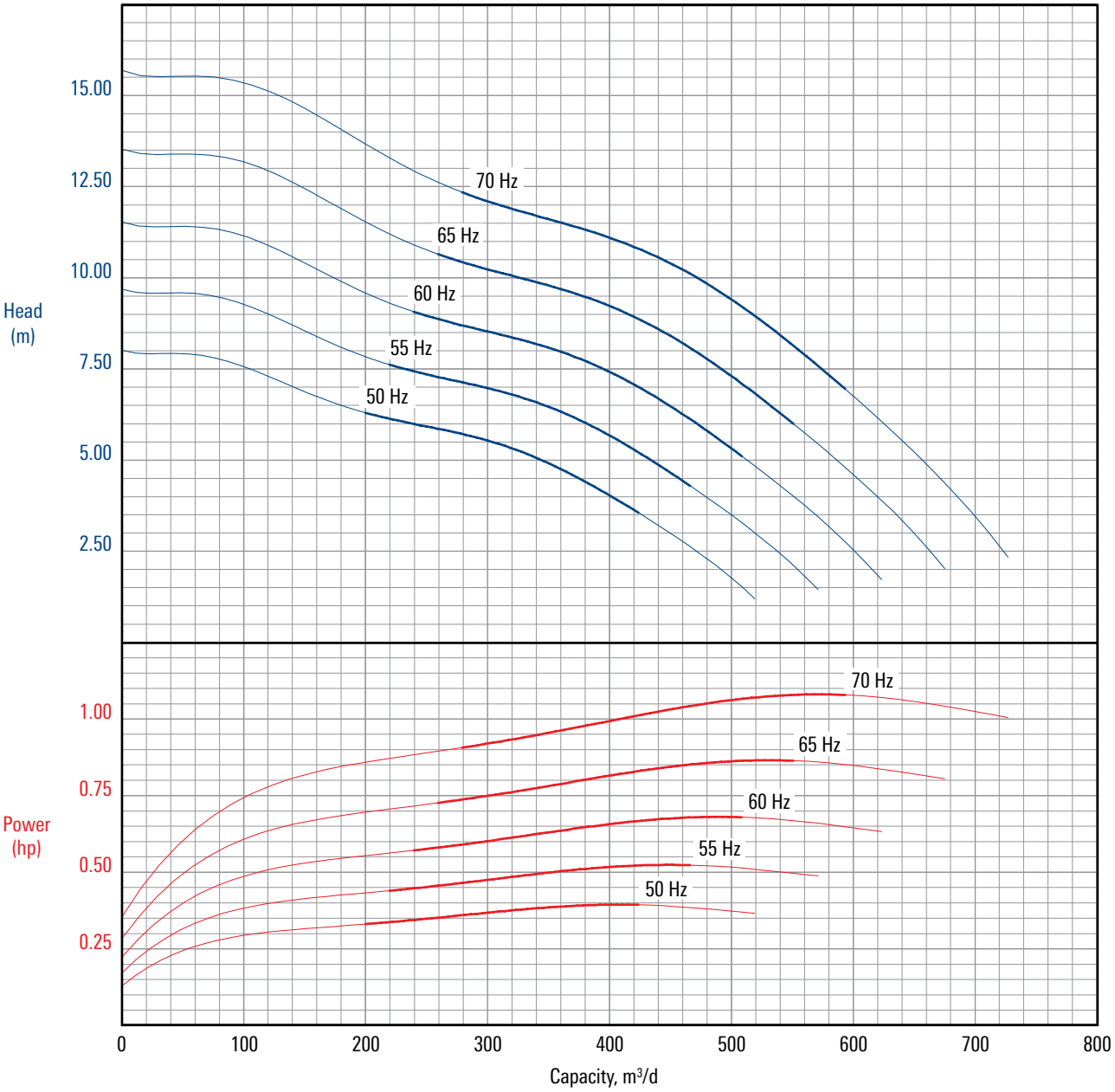
DN2400 Pump

REDA ESP systems

Pump Performance Curve D2400N
Curve computed for one stage in fluid of 1.00 sg.



D3500N Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ARZ Carbon Steel		ARZ Redalloy* High-Nickel Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT† Part Number**	**Max. Stages**	**CR-CT† Part Number**
30	4.9 [1.49]	105 [47.7]	17	100370062	17	100370135
40	6.3 [1.92]	135 [61.3]	23	100370065	23	100370137
50	7.8 [2.38]	166 [75.4]	29	100370066	29	100370138
60	9.2 [2.80]	196 [89.0]	36	100370067	36	100370139
70	10.6 [3.23]	226 [102.6]	42	100370068	42	100370141
80	12.0 [3.66]	257 [116.7]	48	100370069	48	100370142
90	13.4 [4.08]	287 [130.3]	54	100370070	54	100370143
100	15.0 [4.57]	318 [144.4]	60	100370071	60	100370144
110	16.2 [4.94]	348 [158.0]	66	100370073	66	100370145
120	17.6 [5.36]	378 [171.6]	72	100370074	72	100370147
130	19.0 [5.79]	401 [182.1]	79	100370076	79	100370149
140	20.6 [6.28]	438 [198.9]	85	100370077	85	100370150
150	22.0 [6.71]	477 [216.6]	91	100370079	91	100370151

† This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ARZ Carbon Steel		ARZ Redalloy High-Nickel Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT† Part Number**	**Max. Stages**	**CR-CT† Part Number**
30	4.9 [1.49]	105 [47.7]	17	100364147	17	tba‡
40	6.3 [1.92]	135 [61.3]	23	100364148	23	tba
50	7.8 [2.38]	166 [75.4]	29	100364149	29	tba
60	9.2 [2.80]	196 [89.0]	35	100364150	35	tba
70	10.6 [3.23]	226 [102.6]	41	100364151	41	tba
80	12.0 [3.66]	257 [116.7]	48	100364153	48	tba
90	13.4 [4.08]	287 [130.3]	54	100364154	54	tba
100	15.0 [4.57]	318 [144.4]	60	100364155	60	100364297
110	16.2 [4.94]	348 [158.0]	66	100364156	66	100364298
120	17.6 [5.36]	378 [171.6]	72	100364157	72	100364319
130	19.0 [5.79]	401 [182.1]	78	100364158	78	100364320
140	20.6 [6.28]	438 [198.9]	84	100364159	84	100364321
150	22.0 [6.71]	477 [216.6]	91	100364160	91	100364322

† This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

‡ To be assigned.

D3500N Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			ARZ Carbon Steel		ARZ Redalloy High-Nickel Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT[†] Part Number**	**Max. Stages**	**CR-CT[†] Part Number**
30	4.9 [1.49]	105 [47.7]	17	100366184	17	tba[‡]
40	6.3 [1.92]	135 [61.3]	23	100366185	23	tba
50	7.8 [2.38]	166 [75.4]	29	100366186	29	tba
60	9.2 [2.80]	196 [89.0]	35	100366187	35	100541518
70	10.6 [3.23]	226 [102.6]	41	100366188	41	tba
80	12.0 [3.66]	257 [116.7]	47	100366189	47	100541531
90	13.4 [4.08]	287 [130.3]	53	100366190	53	100542404
100	15.0 [4.57]	318 [144.4]	59	100366191	59	100367427
110	16.2 [4.94]	348 [158.0]	65	100366192	65	100367428
120	17.6 [5.36]	378 [171.6]	71	100366193	71	100367429
130	19.0 [5.79]	401 [182.1]	77	100366194	77	100367430
140	20.6 [6.28]	438 [198.9]	83	100366195	83	100367431
150	22.0 [6.71]	477 [216.6]	89	100366196	89	100367432

[†] This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

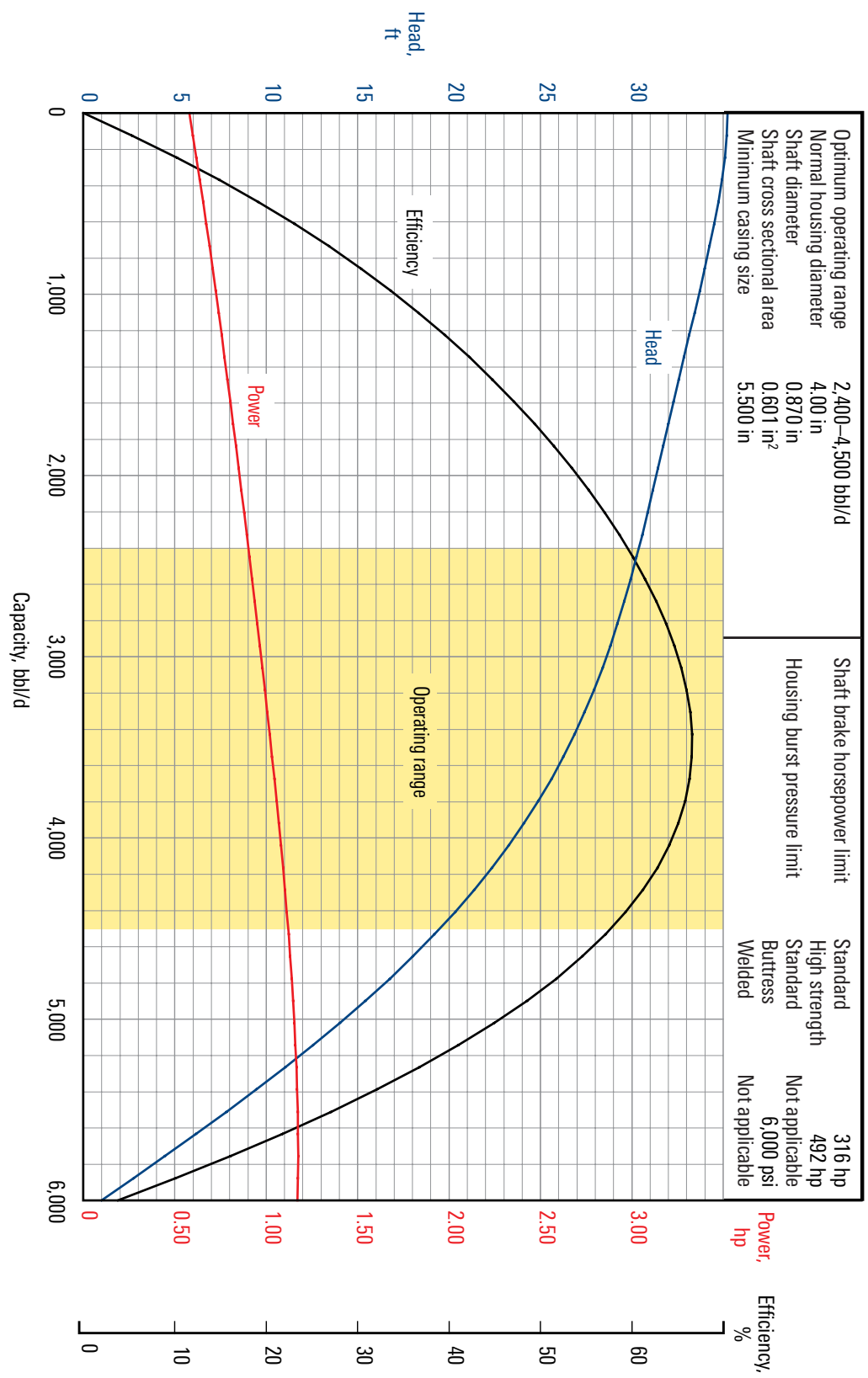
[‡] To be assigned.

D3500N Pump

D3500N Pump, 400 Series, Tandem Configurations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	96	2							
170	102	1	1						
180	108		2						
190	114		1	1					
200	120			2					
210	126			1	1				
220	132				2				
230	138				1	1			
240	144					2			
250	151					1	1		
260	158						2		
270	164						1	1	
280	170							2	
290	176							1	1
300	182								2
310	186			2	1				
320	192			1	2				
330	198				3				
340	204				2	1			
350	210				1	2			
360	216					3			
370	223					2	1		
380	230					1	2		
390	237						3		
400	243						2	1	
410	249						1	2	
420	255							3	
430	261							2	1
440	267							1	2
450	273								3
460	278			2			2		
470	284			1	1		2		
480	290				2		2		
490	296			1	1			2	
500	302			2					2
510	308			1	1				2
520	314				2				2
530	320				1	1			2
540	326					2			2

D3500N Pump

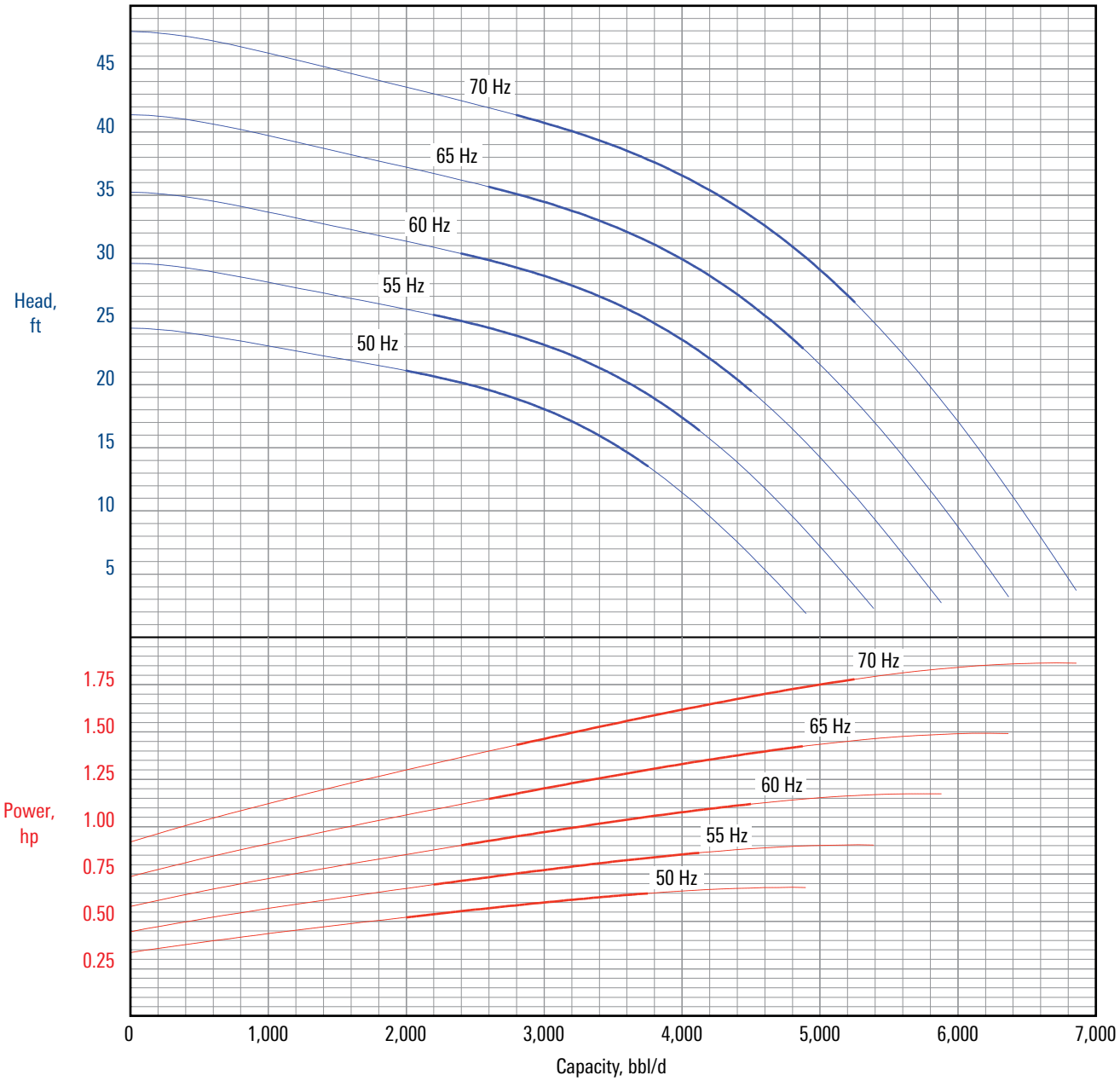


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

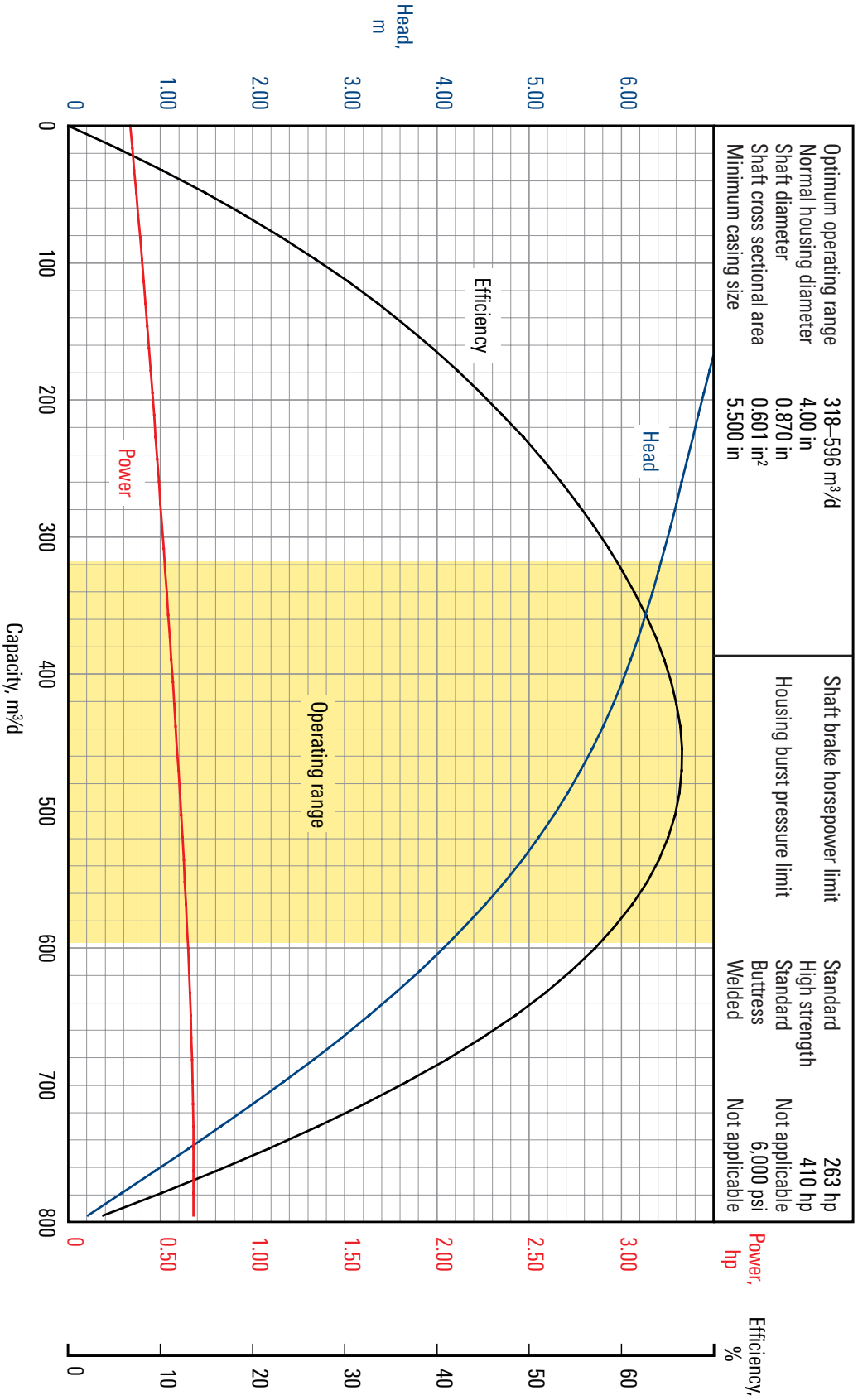
D3500N Pump

REDA ESP systems

Pump Performance Curve D3500N
Curve computed for one stage in fluid of 1.00 sg.



D3500N Pump



This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

D5800N Pump

400 Series, Min. Casing Size 5½-in [139.7-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ-ZT Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT Part Number**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ-ZT Part Number**
10	2.1 [0.64]	45 [20.4]	3	tba[†]	3	tba	3	tba
20	3.5 [1.07]	75 [34.1]	8	tba	8	tba	8	tba
30	4.9 [1.49]	105 [47.7]	12	tba	12	tba	12	tba
40	6.3 [1.92]	135 [61.3]	17	tba	17	tba	17	tba
50	7.7 [2.35]	165 [74.9]	22	tba	22	tba	22	tba
60	9.1 [2.78]	195 [88.5]	26	tba	26	tba	26	tba
70	10.5 [3.20]	225 [102.2]	31	tba	31	tba	31	tba
80	11.9 [3.63]	255 [115.8]	35	tba	35	2003305	35	tba
90	13.3 [4.06]	285 [129.4]	40	tba	40	tba	40	tba
100	14.7 [4.48]	315 [143.0]	44	tba	44	tba	44	tba
110	16.1 [4.91]	345 [156.6]	49	tba	49	tba	49	tba
120	17.5 [5.34]	375 [170.3]	54	tba	54	tba	54	2000234
130	18.9 [5.76]	405 [183.9]	58	1319433	58	D319433	58	1319458
140	20.3 [6.19]	435 [197.5]	63	tba	63	2003310	63	tba
150	21.7 [6.62]	465 [211.1]	67	tba	67	tba	67	tba

[†] To be assigned.

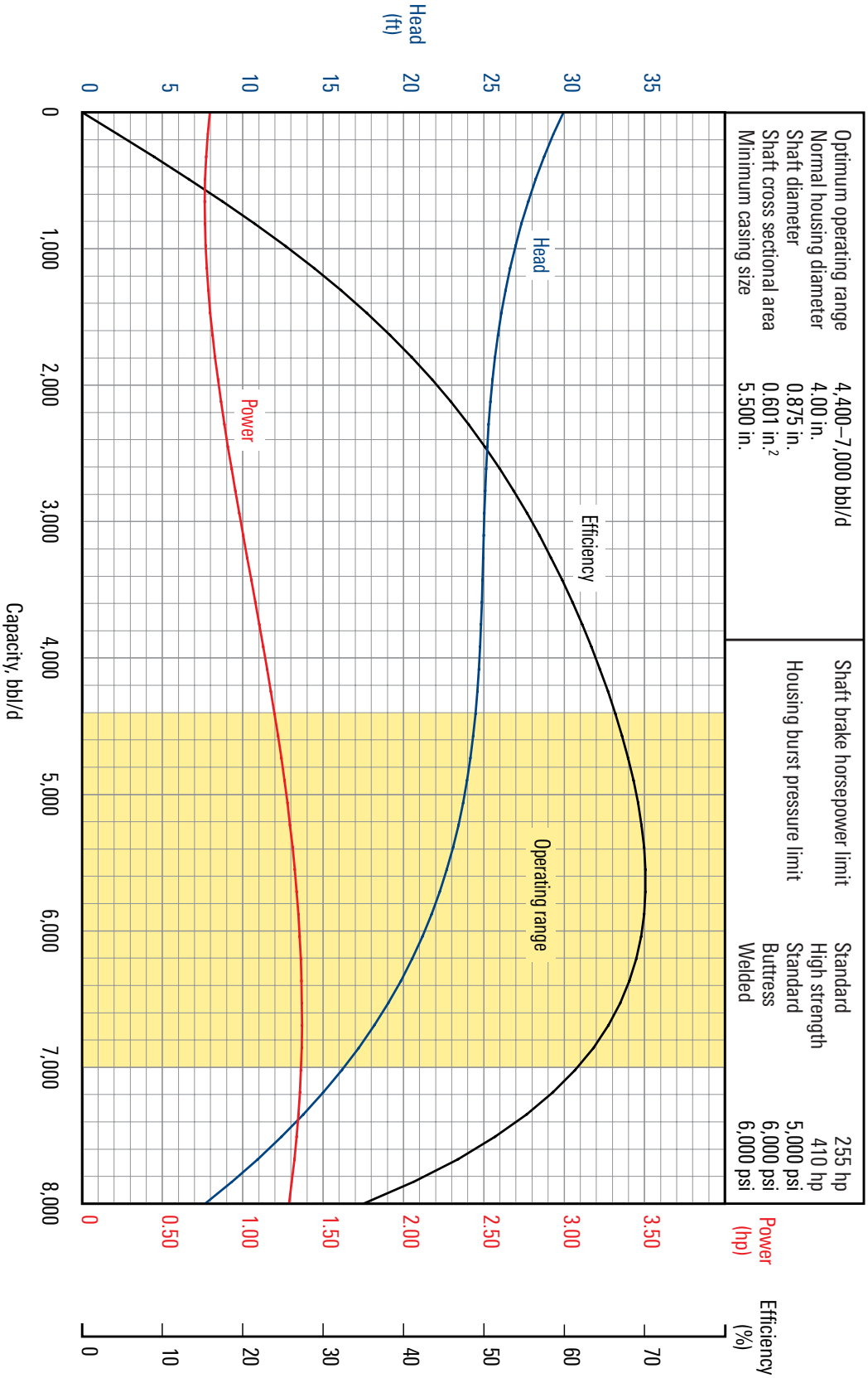
D5800N Pump

D5800N Pump, 400 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	70	2							
170	75	1	1						
180	80		2						
190	84		1	1					
200	88			2					
210	93			1	1				
220	98				2				
230	103				1	1			
240	108					2			
250	112					1	1		
260	116						2		
270	121						1	1	
280	126							2	
290	130							1	1
300	134								2
310	137			2	1				
320	142			1	2				
330	147				3				
340	152				2	1			
350	157				1	2			
360	162					3			
370	166					2	1		
380	170					1	2		
390	174						3		
400	179						2	1	
410	184						1	2	
420	189							3‡	
430	193							2‡	1‡
440	197†							1‡	2‡
450	201†								3‡
460	206†			1‡		3‡			
470	211†				1‡	3‡			
480	216†					4‡			
490	220†					3‡	1‡		
500	223†				1‡		3‡		
510	228†					1‡	3‡		
520	232†						4‡		
530	237†						3‡	1‡	

Note: Stage counts are for C-CT-ES pumps.
† Requires use of high-load bearing in protector.
‡ Requires use of high-strength shaft in lowermost pump.

D5800N Pump

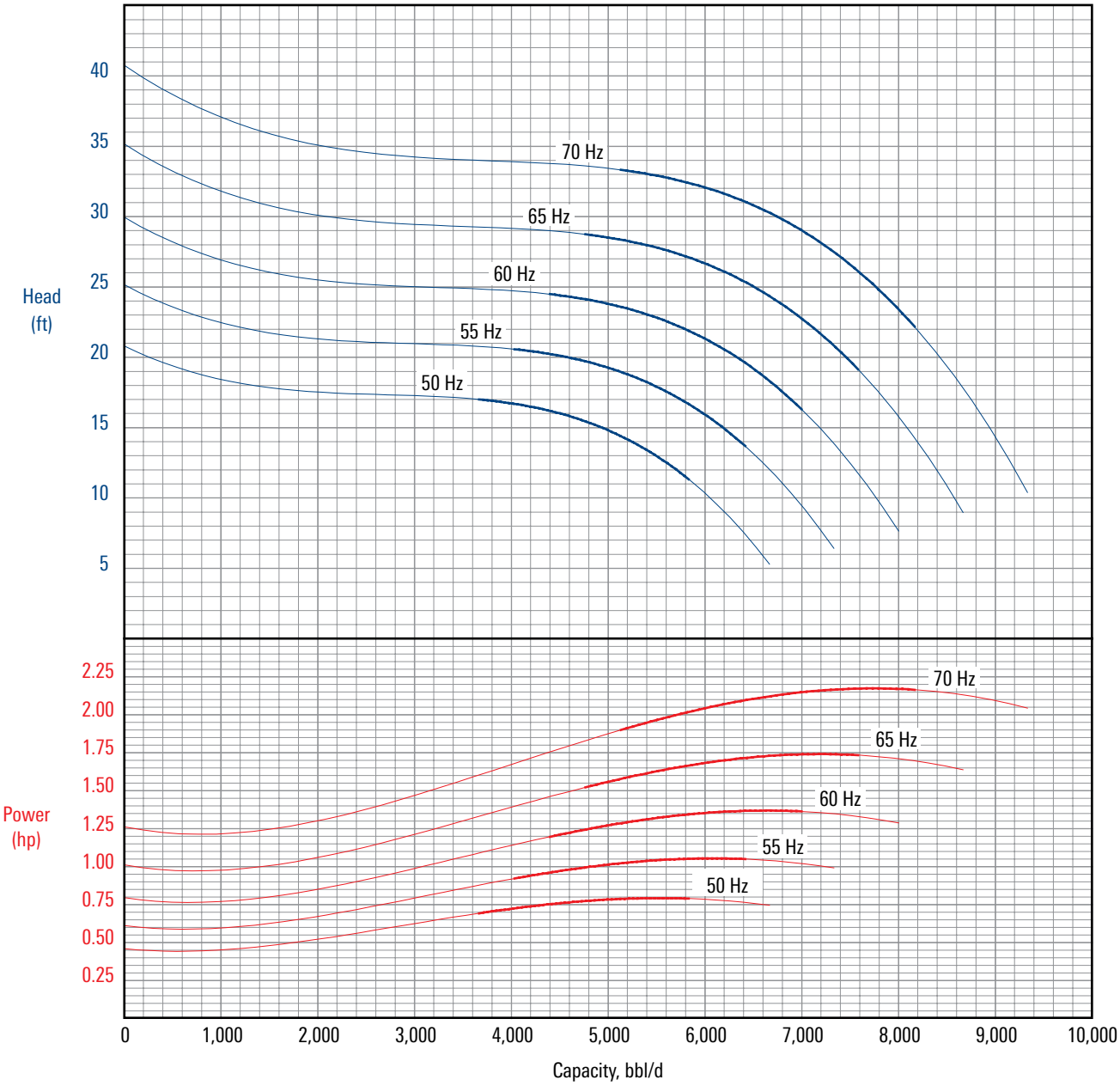


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

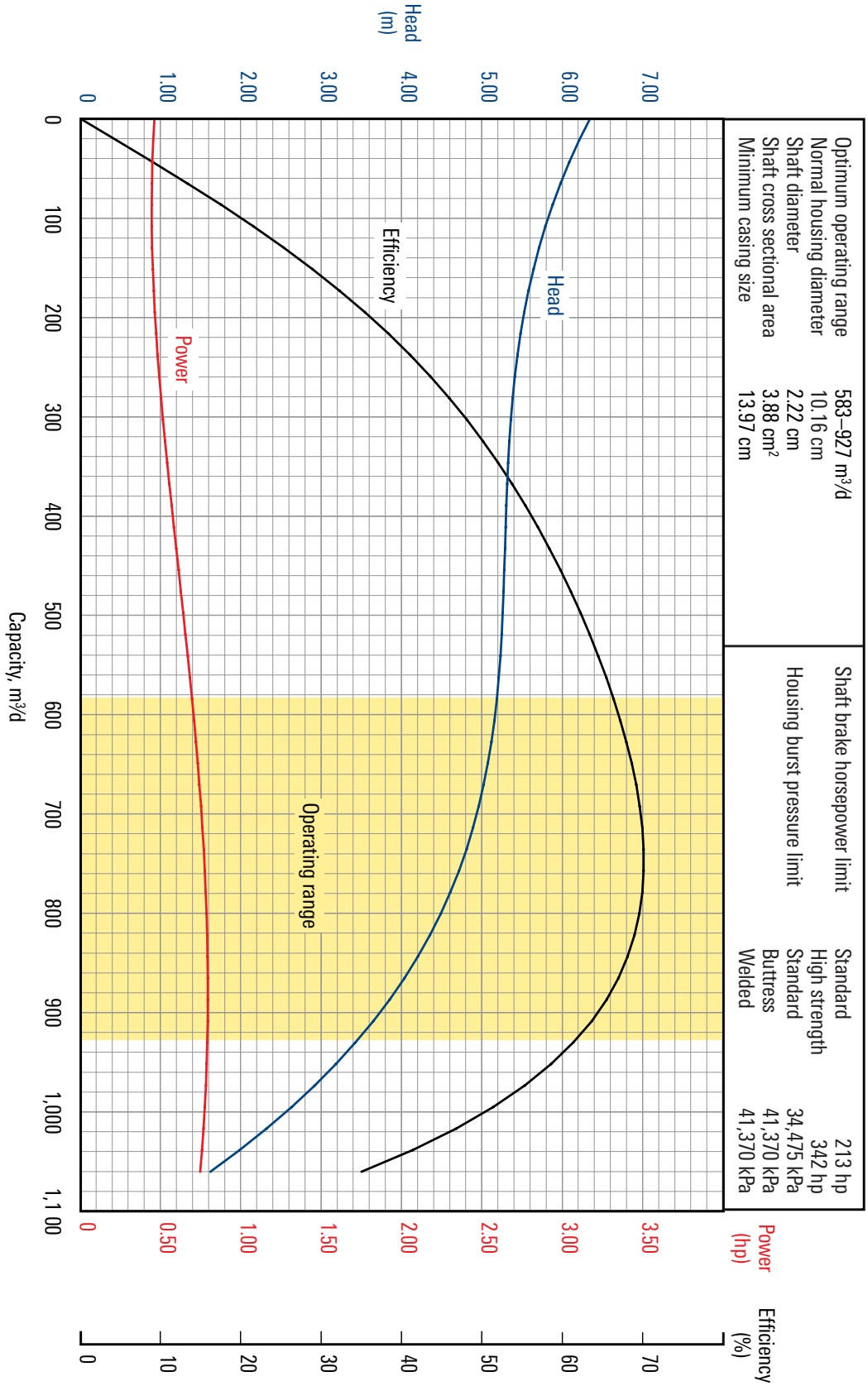
D5800N Pump

REDA ESP systems

Pump Performance Curve D5800N
Curve computed for one stage in fluid of 1.00 sg.



D5800N Pump

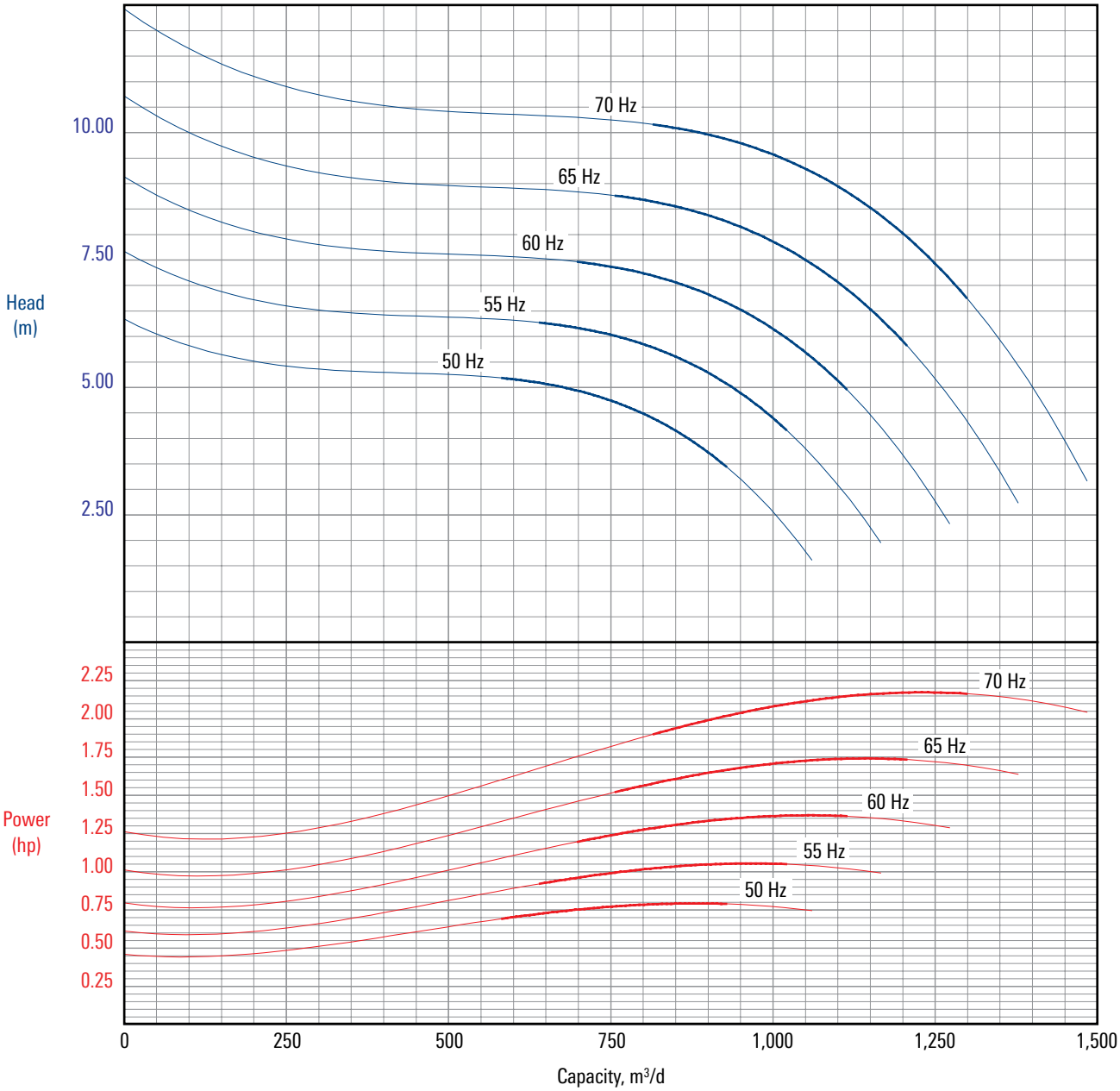


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

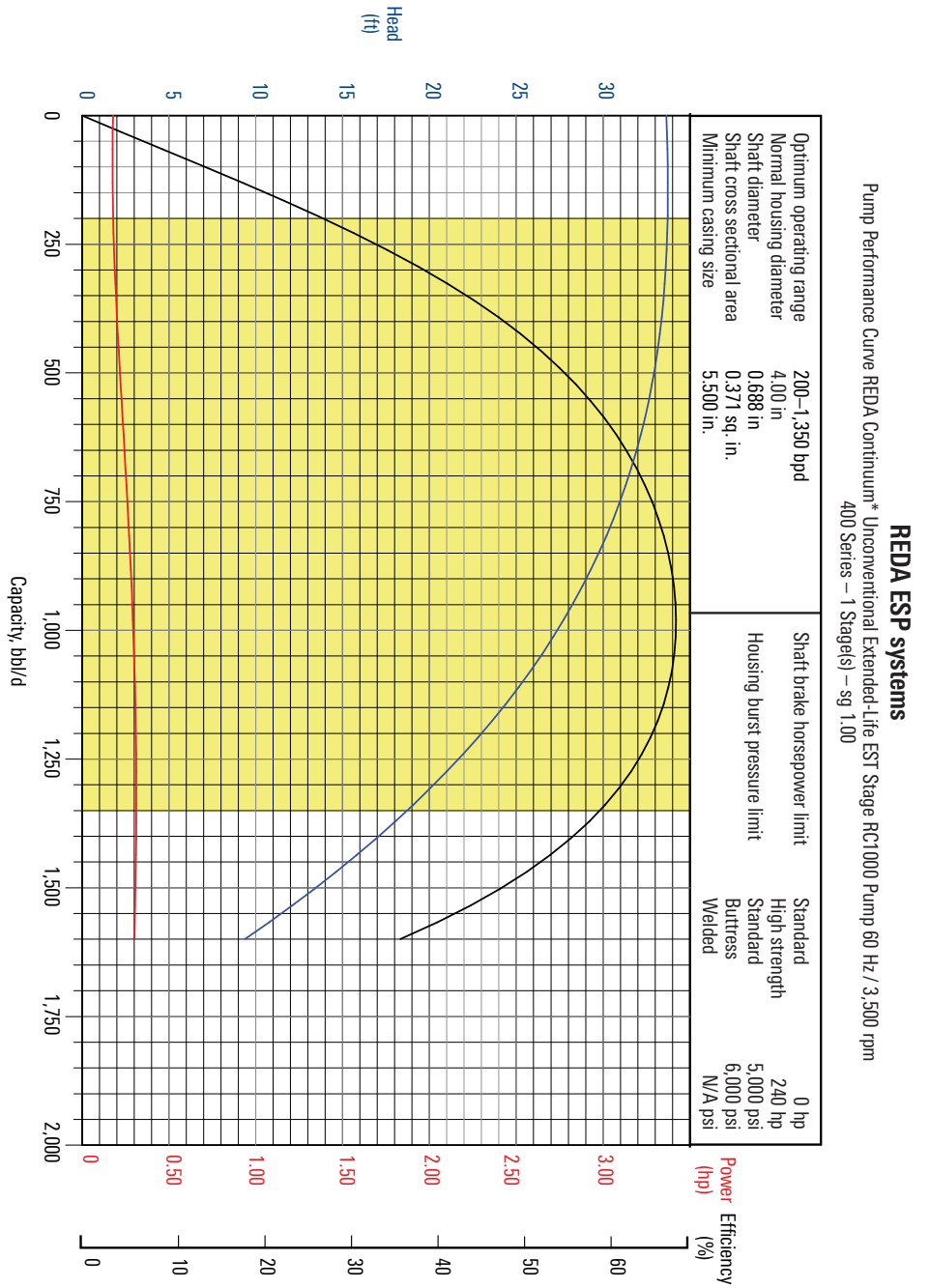
D5800N Pump

REDA ESP systems

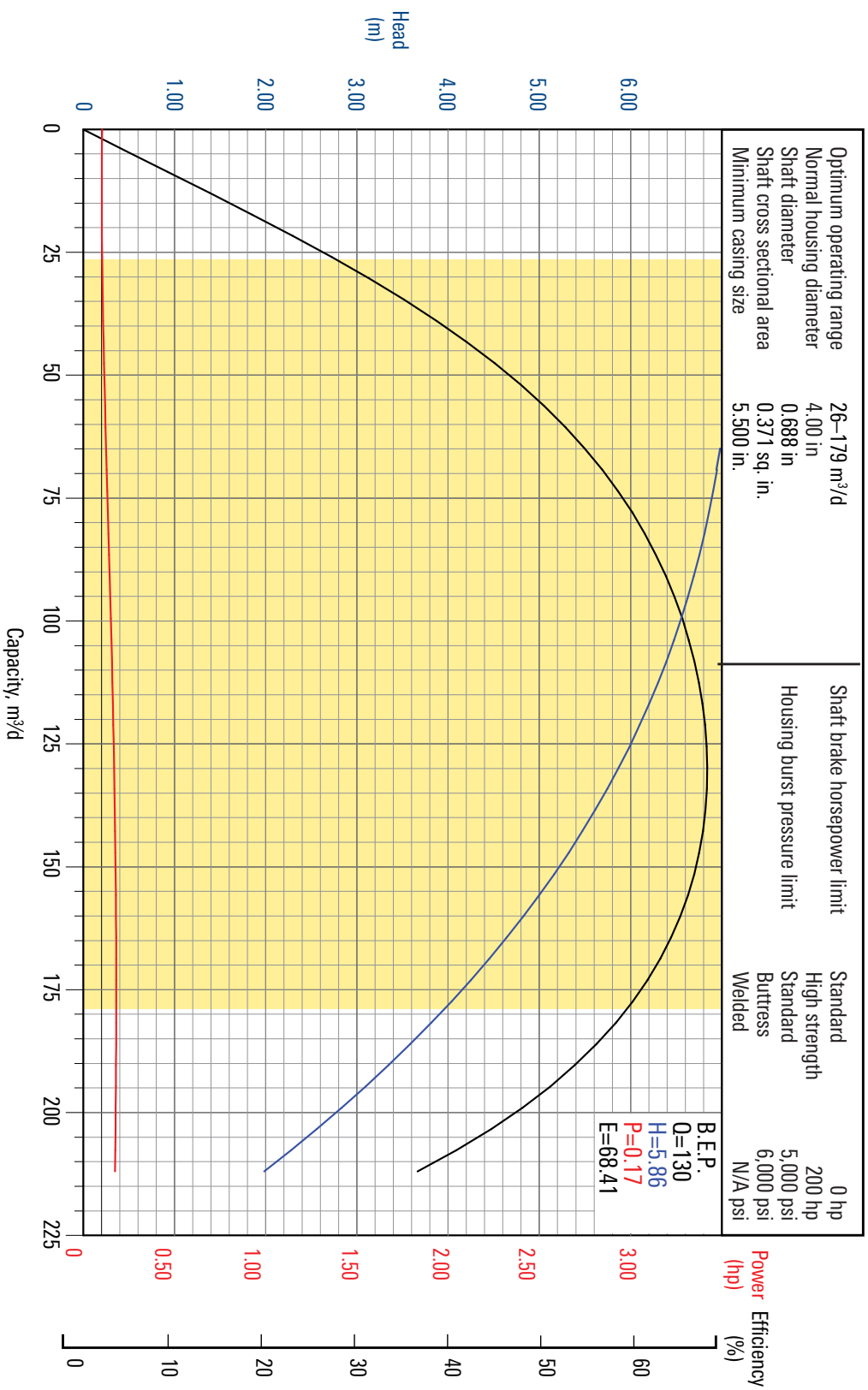
Pump Performance Curve D5800N
Curve computed for one stage in fluid of 1.00 sg.



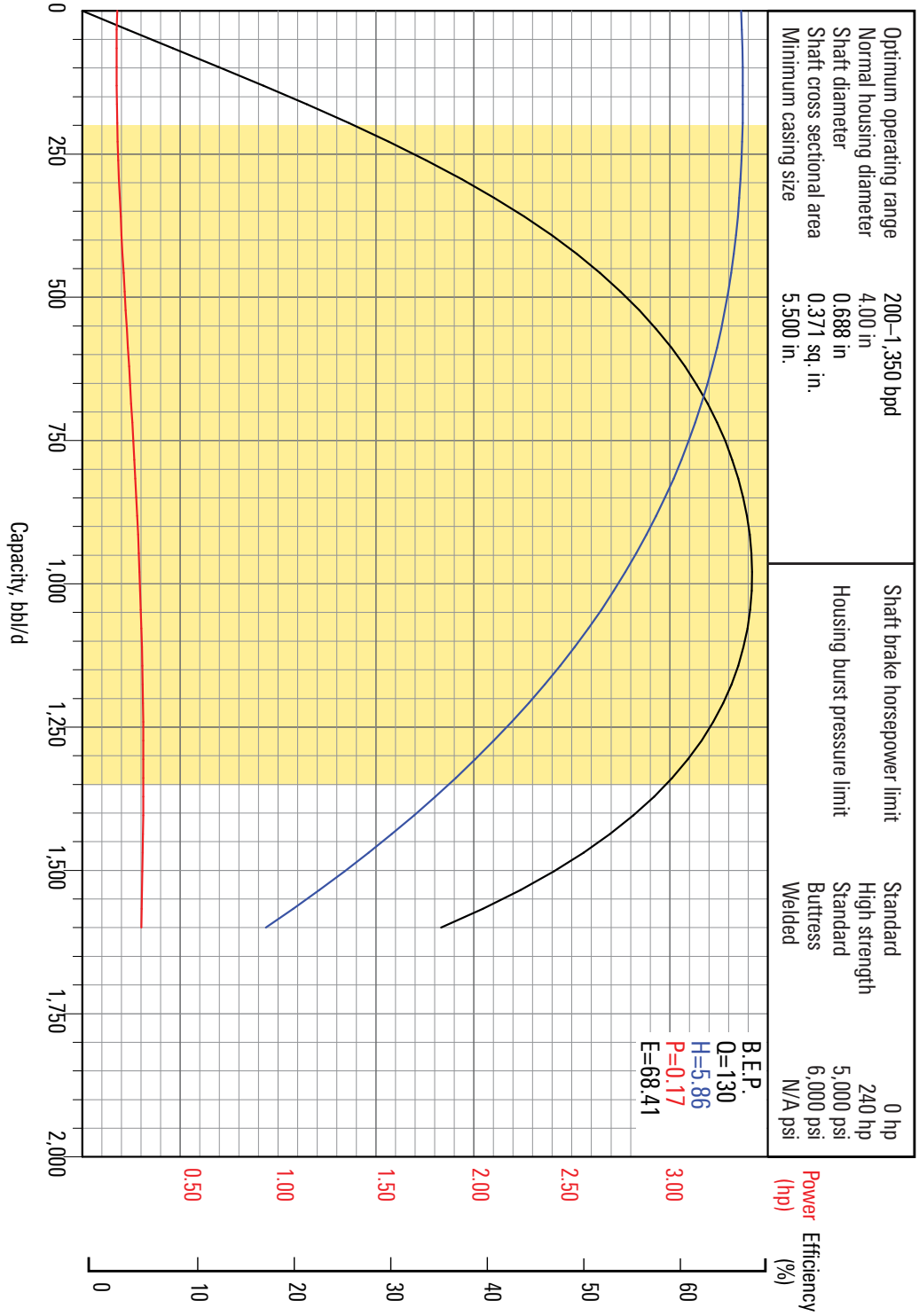
RC1000 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC1000 Pump 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 200–1,350 bpd
Normal housing diameter 4.00 in
Shaft diameter 0.688 in
Shaft cross sectional area 0.371 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit
Housing burst pressure limit
Standard 0 hp
High strength 240 hp
Standard 5,000 psi
Buttress 6,000 psi
Welded N/A psi
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d
0
250
500
750
1,000
1,250
1,500
1,750
2,000
5
10
15
20
25
30
0.50
1.00
1.50
2.00
2.50
3.00
40
50
60

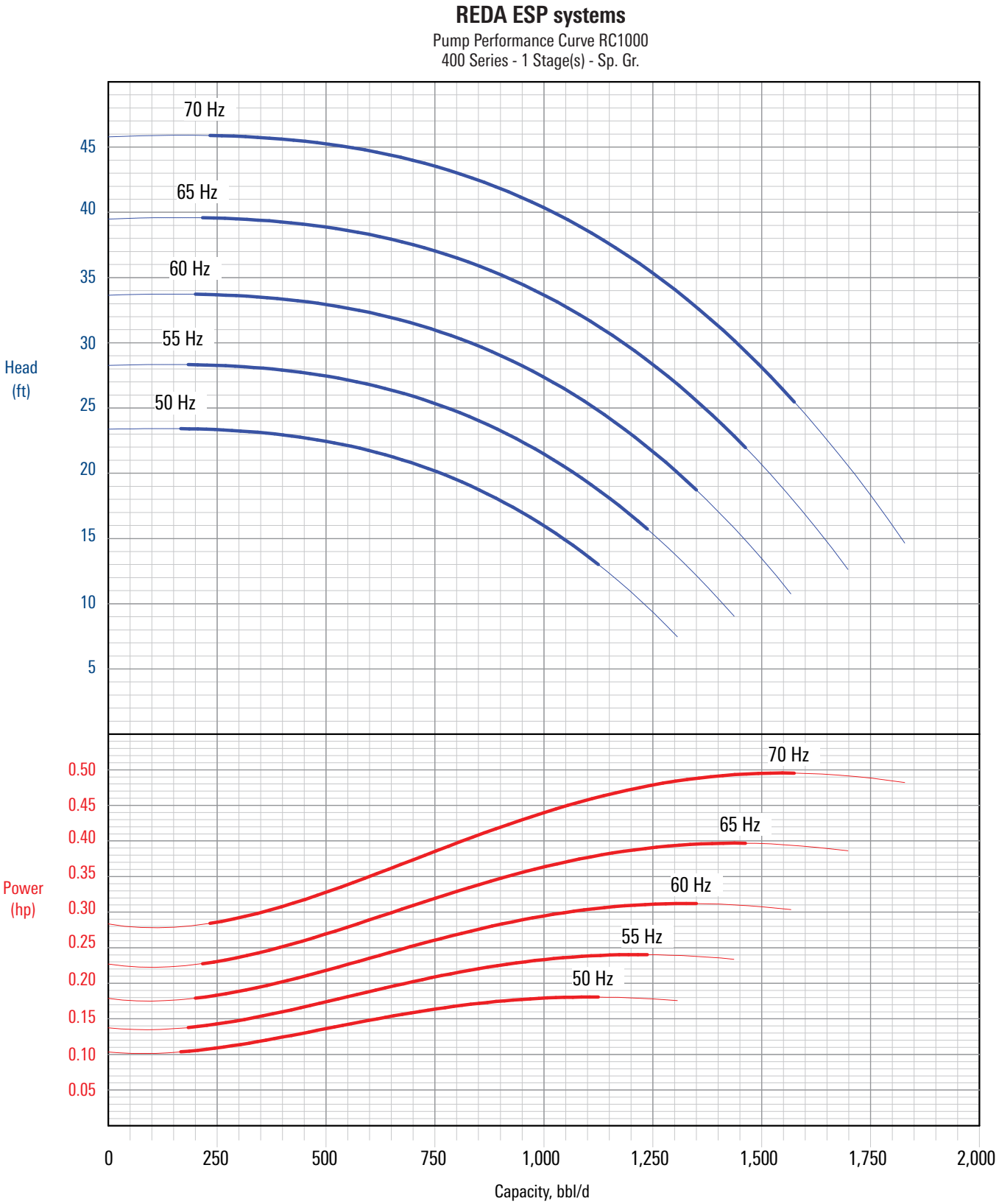
RC1000 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC1000 Pump 50 Hz / 2,917 rpm
400 Series – 1 Stage(s) – Sp. Gr. 1.00
Optimum operating range 26–179 m³/d
Normal housing diameter 4.00 in
Shaft diameter 0.688 in
Shaft cross sectional area 0.371 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit Standard 0 hp
High strength 200 hp
Housing burst pressure limit Standard 5,000 psi
Buttress 6,000 psi
Welded N/A psi
B.E.P.
Q=130
H=5.86
P=0.17
E=68.41
Head (m)
Power (hp)
Efficiency (%)
Capacity, m³/d

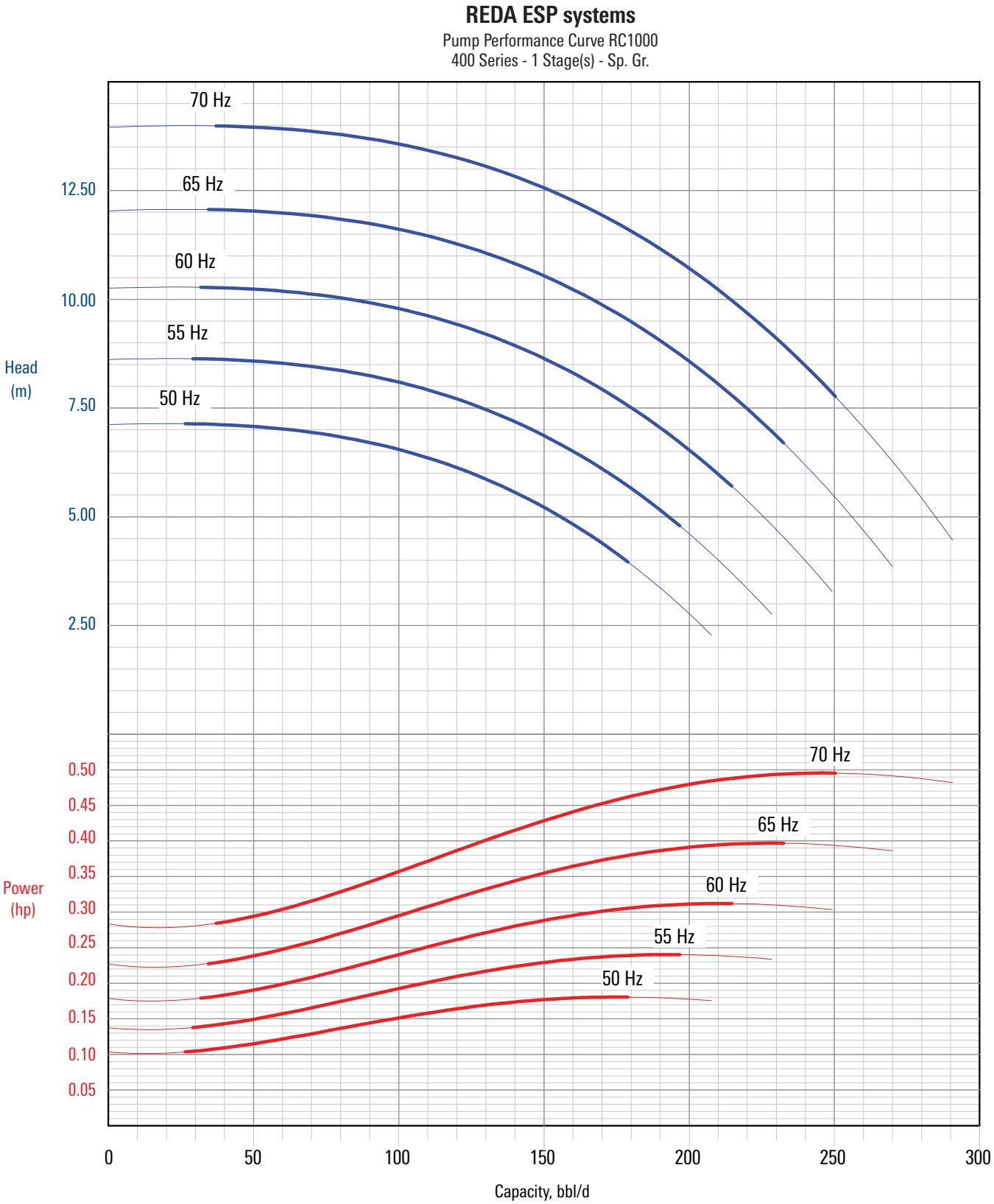
RC1000 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC1000 Pump 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 200–1,350 bpd
Normal housing diameter 4.00 in
Shaft diameter 0.688 in
Shaft cross sectional area 0.371 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit Standard 0 hp
High strength 240 hp
Housing burst pressure limit Standard 5,000 psi
Buttress 6,000 psi
Welded N/A psi
B.E.P.
Q=130
H=5.86
P=0.17
E=68.41
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d

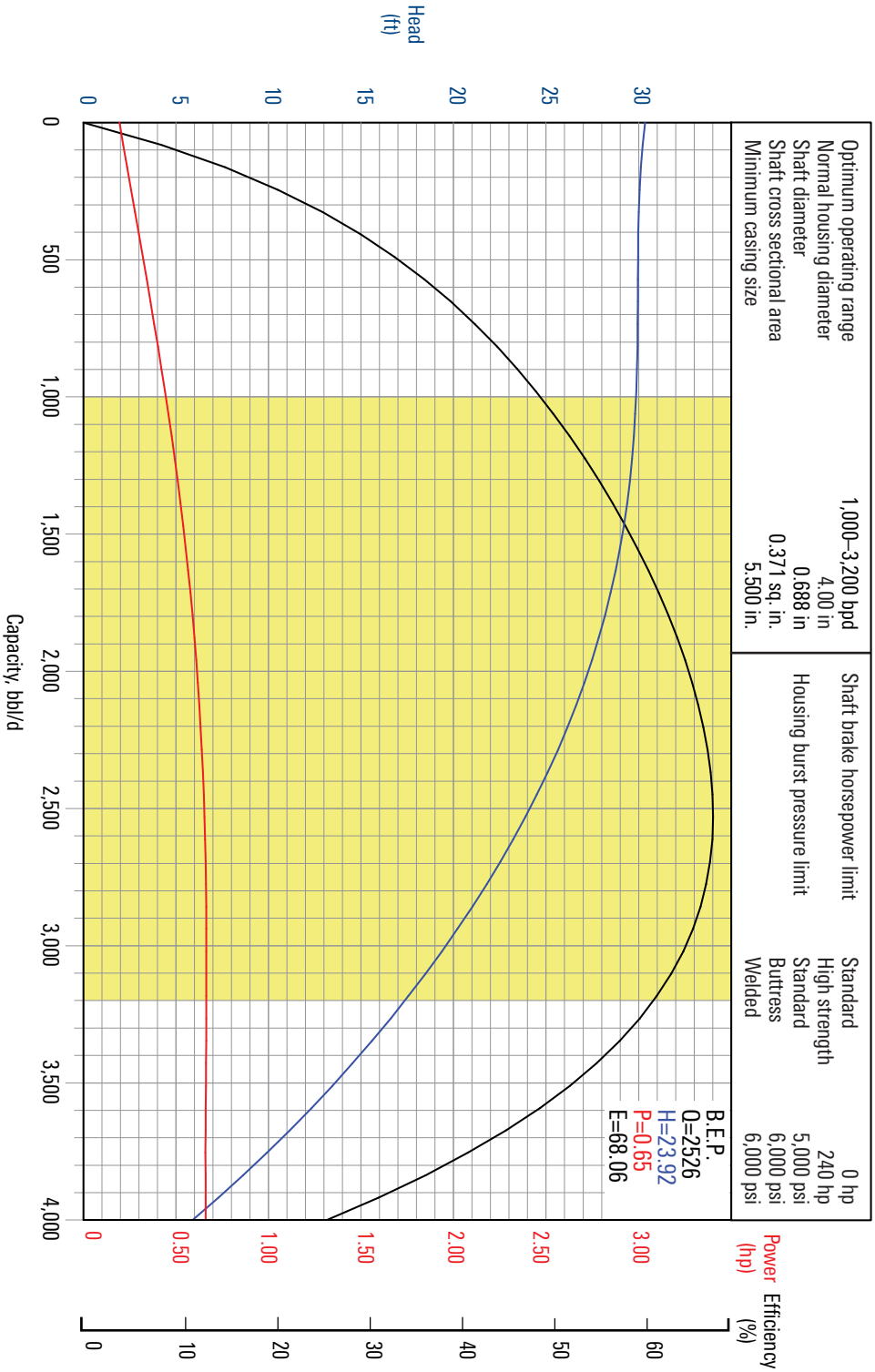
RC1000 Pump


REDA ESP systems
Pump Performance Curve RC1000
400 Series - 1 Stage(s) - Sp. Gr.
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (ft)
45
40
35
30
25
20
15
10
5
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
Power (hp)
0
250
500
750
1,000
1,250
1,500
1,750
2,000
Capacity, bbl/d

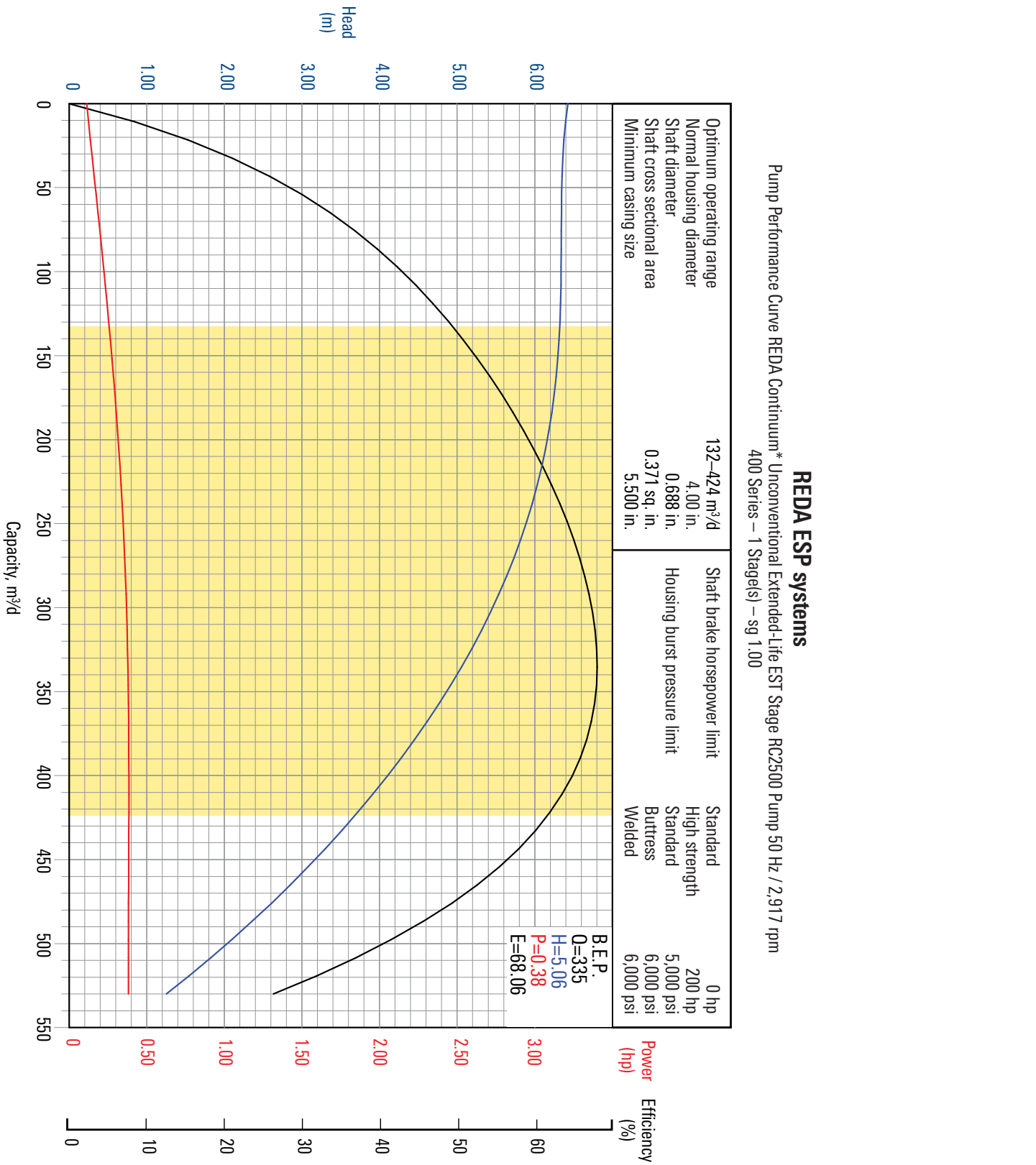
RC1000 Pump


REDA ESP systems
Pump Performance Curve RC1000
400 Series - 1 Stage(s) - Sp. Gr.
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (m)
12.50
10.00
7.50
5.00
2.50
Power (hp)
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
50
100
150
200
250
300
Capacity, bbl/d

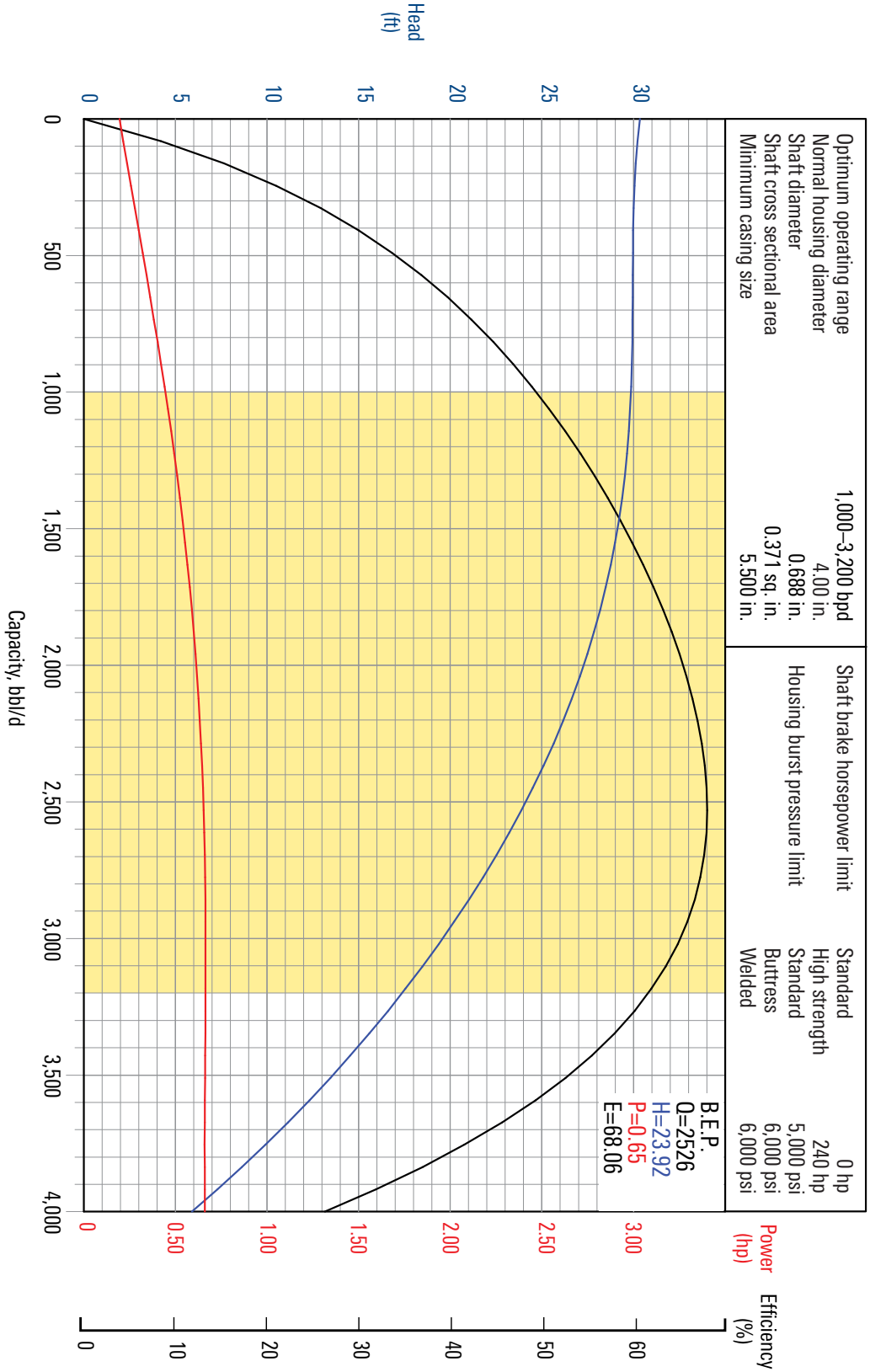
RC2500 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC2500 Pump 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 1,000–3,200 bpd
Normal housing diameter 4.00 in
Shaft diameter 0.688 in
Shaft cross sectional area 0.371 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit 0 hp
Housing burst pressure limit Standard 5,000 psi
High strength 6,000 psi
Standard 6,000 psi
Buttress 6,000 psi
Welded
B.E.P.
Q=2526
H=23.92
P=0.65
E=68.06
Head (ft)
Capacity, bbl/d
Power (hp)
Efficiency (%)

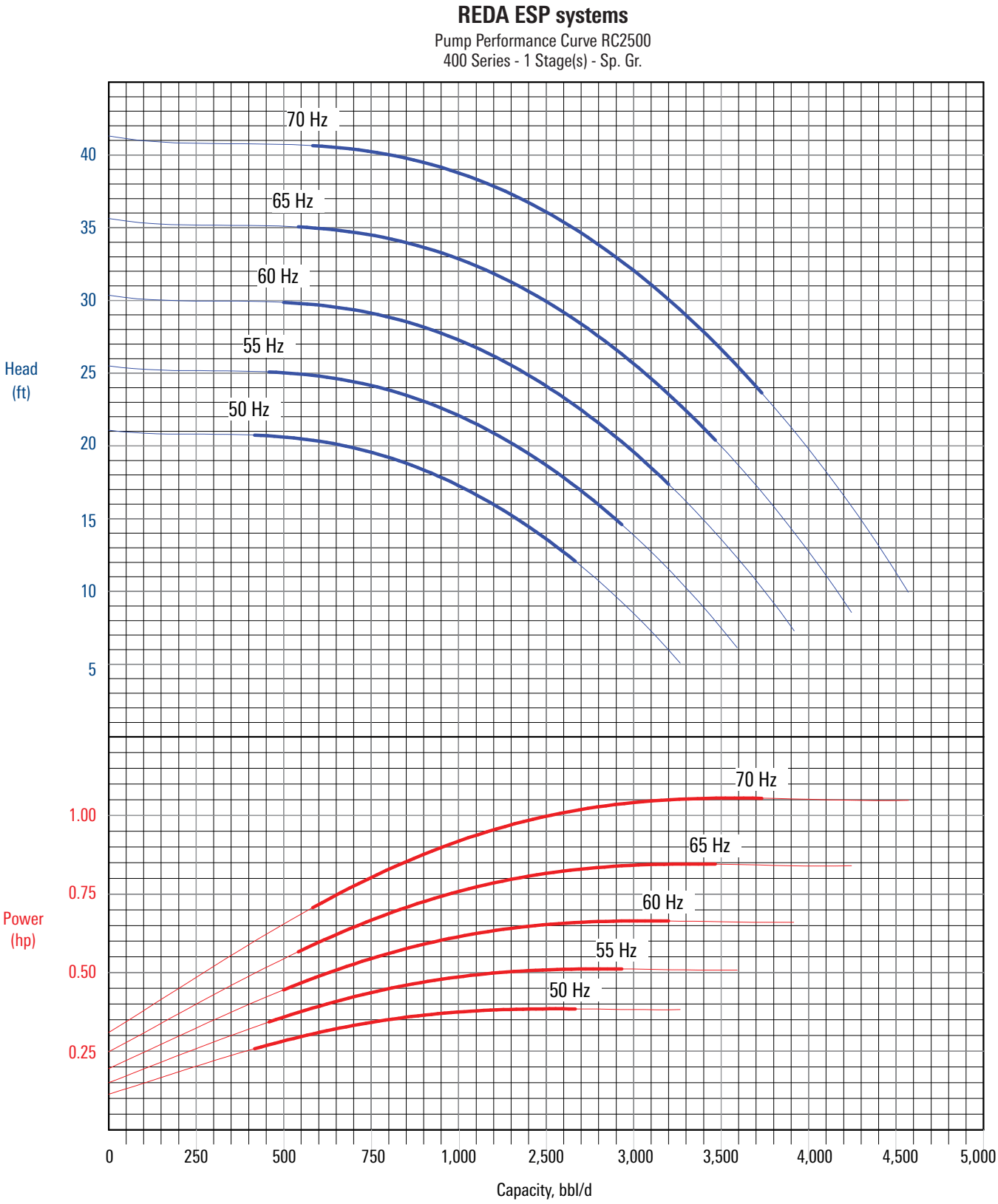
RC2500 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC2500 Pump 50 Hz / 2,917 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 132–424 m³/d
Normal housing diameter 4.00 in.
Shaft diameter 0.688 in.
Shaft cross sectional area 0.371 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit 0 hp
Housing burst pressure limit Standard 200 hp
High strength 5,000 psi
Standard 6,000 psi
Buttress 6,000 psi
Welded
B.E.P.
Q=335
H=5.06
P=0.38
E=68.06
Head (m)
Power (hp)
Efficiency (%)
Capacity, m³/d

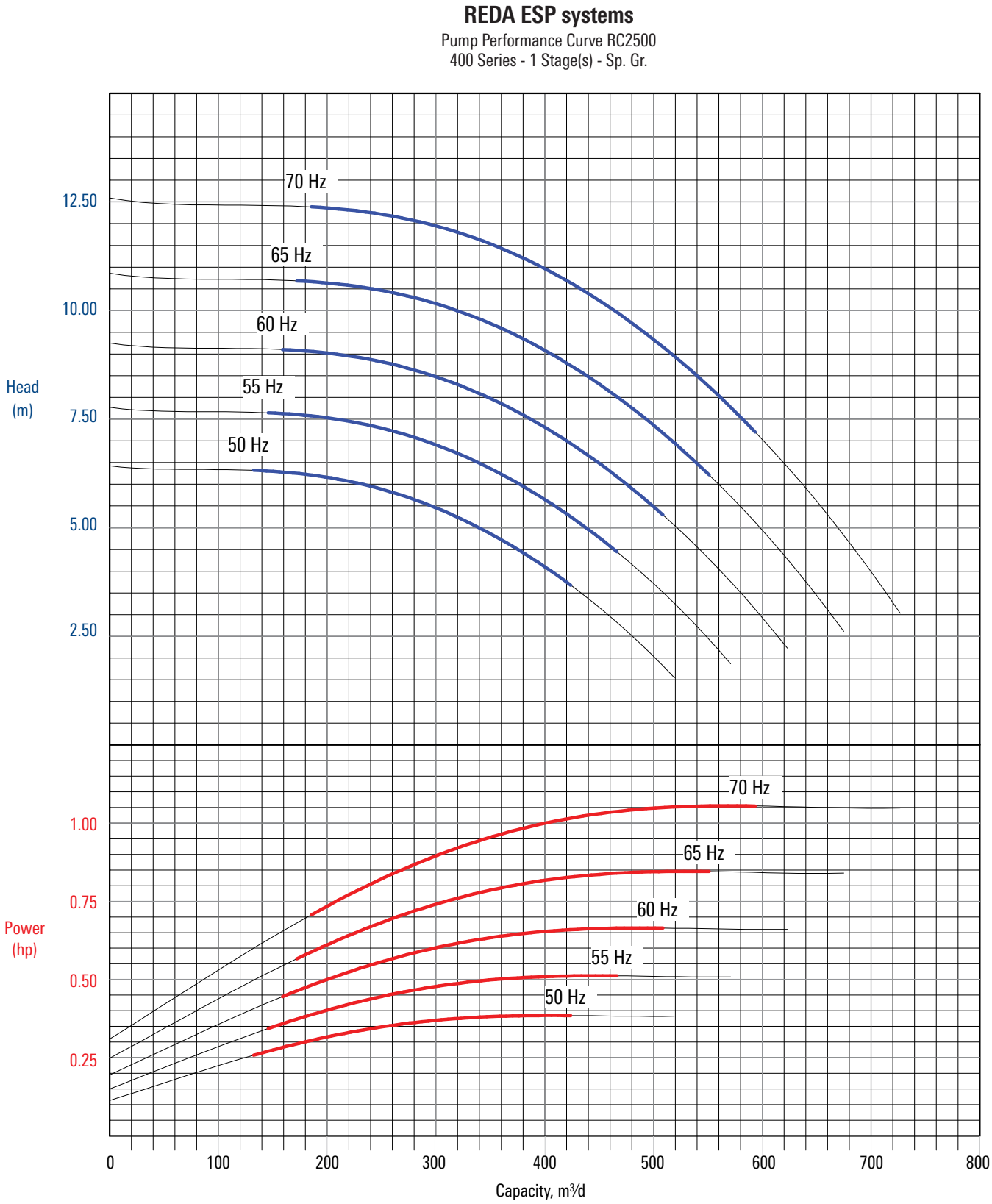
RC2500 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC2500 Pump 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 1,000–3,200 bpd
Normal housing diameter 4.00 in.
Shaft diameter 0.688 in.
Shaft cross sectional area 0.371 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit Standard 0 hp
High strength 240 hp
Housing burst pressure limit Standard 5,000 psi
Buttress 6,000 psi
Welded 6,000 psi
B.E.P.
Q=2526
H=23.92
P=0.65
E=68.06
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d

RC2500 Pump


REDA ESP systems
Pump Performance Curve RC2500
400 Series - 1 Stage(s) - Sp. Gr.
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (ft)
40
35
30
25
20
15
10
5
Power (hp)
1.00
0.75
0.50
0.25
0
250
500
750
1,000
2,500
3,000
3,500
4,000
4,500
5,000
Capacity, bbl/d

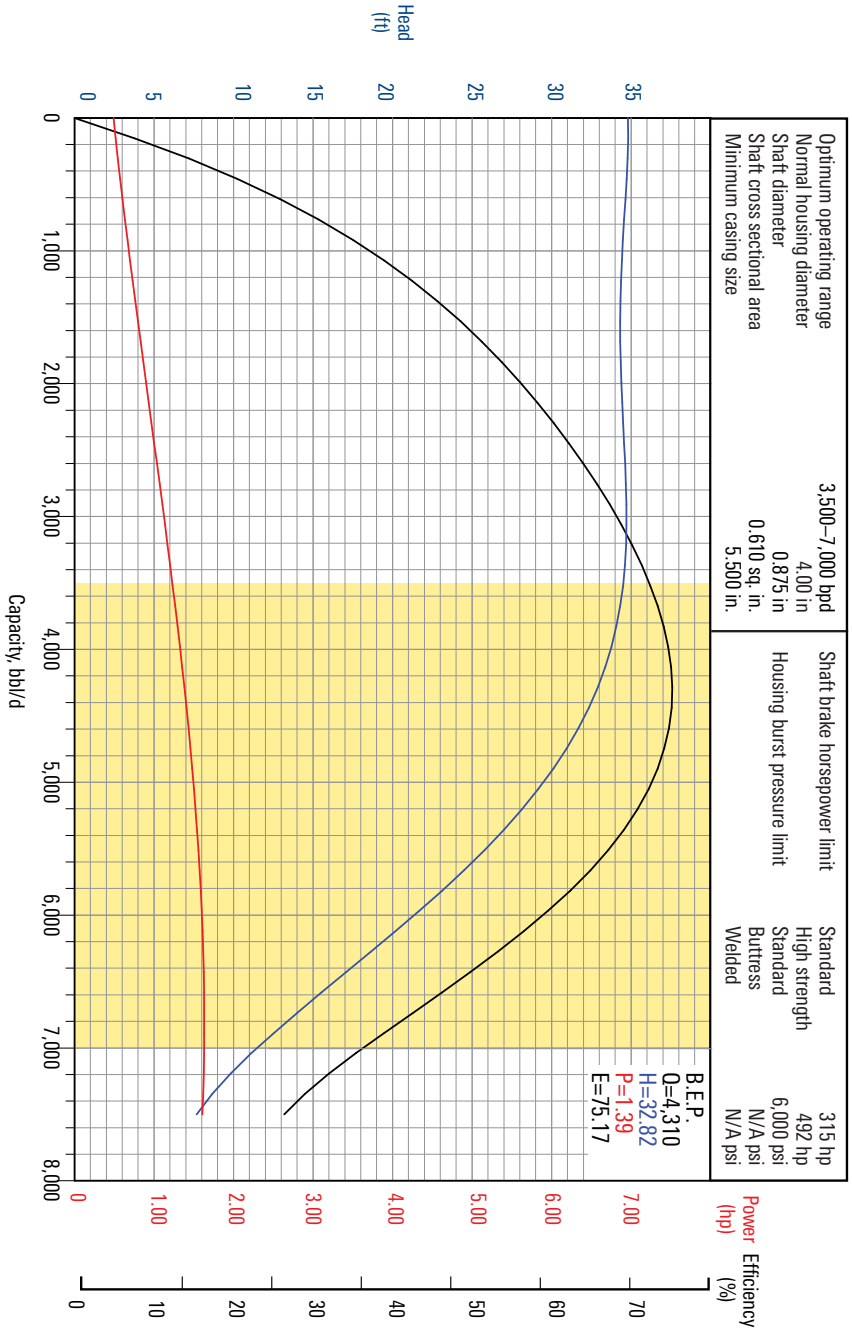
RC2500 Pump


REDA ESP systems
Pump Performance Curve RC2500
400 Series - 1 Stage(s) - Sp. Gr.
Head (m)
12.50
10.00
7.50
5.00
2.50
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Power (hp)
1.00
0.75
0.50
0.25
0
100
200
300
400
500
600
700
800
Capacity, m³/d

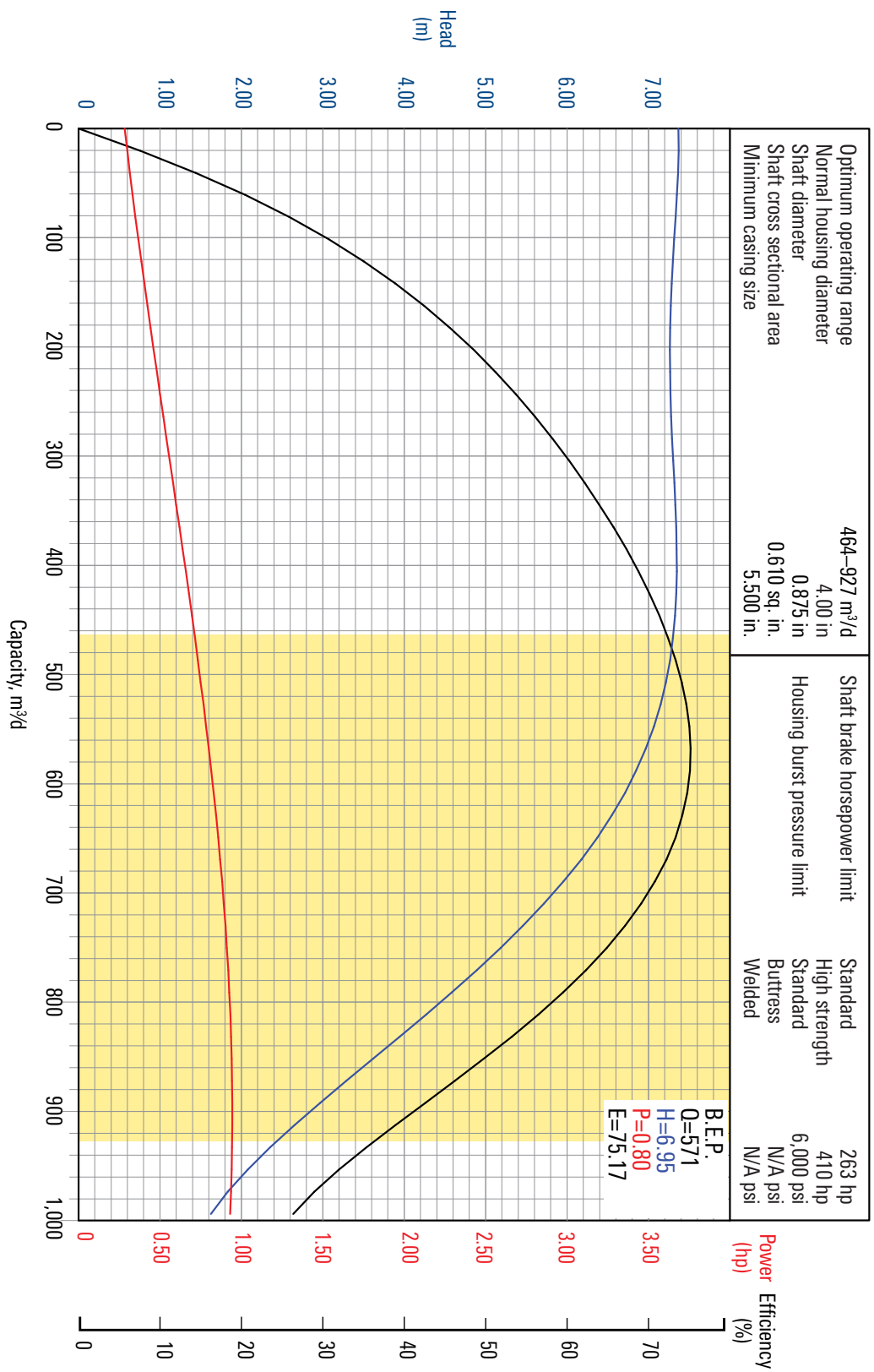
RC4000 Pump

REDA ESP systems

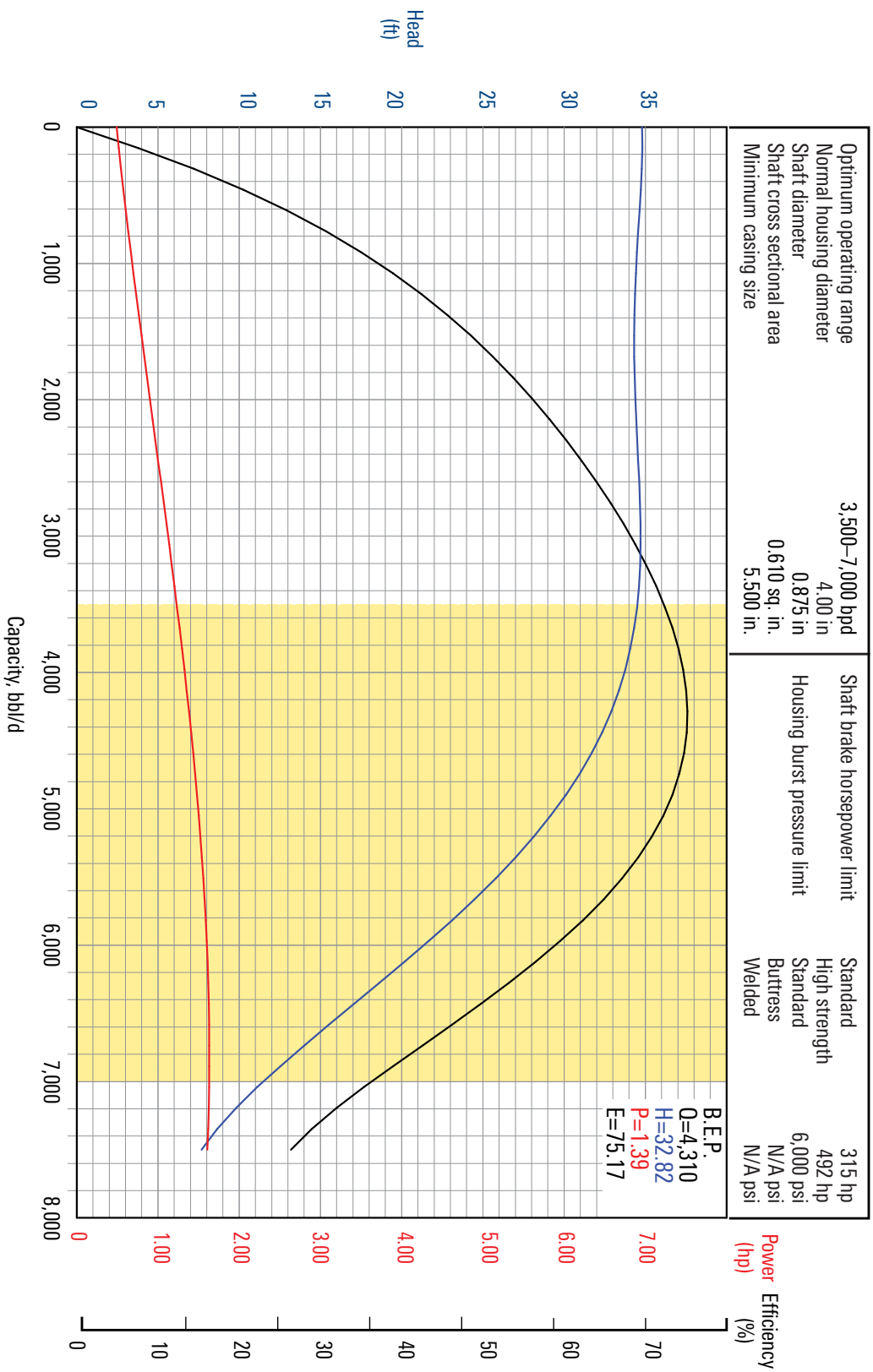
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC4000 Pump 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00



RC4000 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC4000 Pump 50 Hz / 2,917 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 464–927 m³/d
Normal housing diameter 4.00 in
Shaft diameter 0.875 in
Shaft cross sectional area 0.610 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit Standard 263 hp
Housing burst pressure limit High strength 410 hp
Standard 6,000 psi
Buttress N/A psi
Welded N/A psi
B.E.P.
Q=571
H=6.95
P=0.80
E=75.17
Head (m)
Power (hp)
Efficiency (%)
Capacity, m³/d

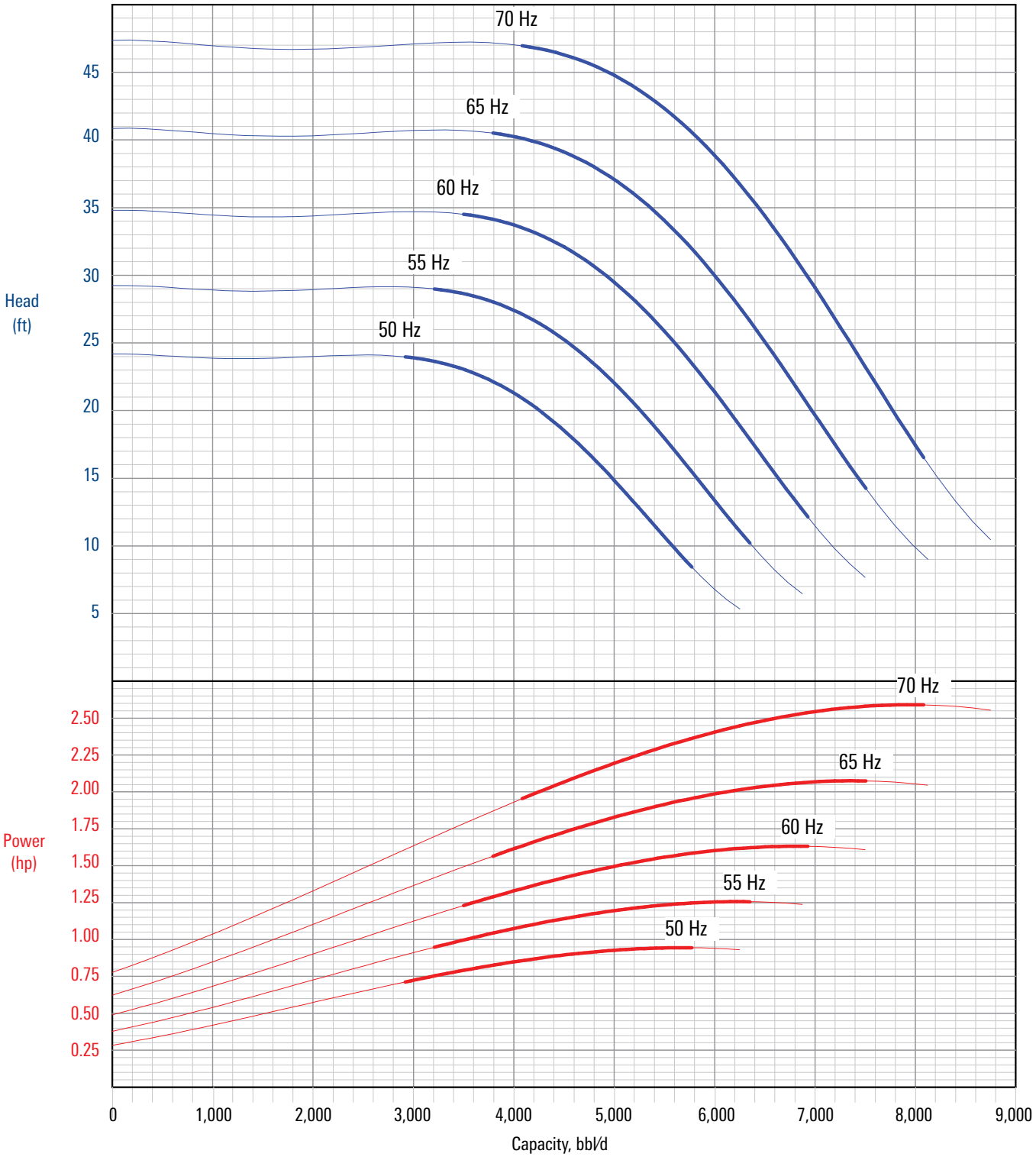
RC4000 Pump


REDA ESP systems
Pump Performance Curve REDA Continuum* Unconventional Extended-Life EST Stage RC4000 Pump 60 Hz / 3,500 rpm
400 Series – 1 Stage(s) – sg 1.00
Optimum operating range 3,500–7,000 bpd
Normal housing diameter 4.00 in
Shaft diameter 0.875 in
Shaft cross sectional area 0.610 sq. in.
Minimum casing size 5.500 in.
Shaft brake horsepower limit Standard 315 hp
High strength 492 hp
Housing burst pressure limit Standard 6,000 psi
Buttress N/A psi
Welded N/A psi
B.E.P.
Q=4,310
H=32.82
P=1.39
E=75.17
Head (ft)
Power (hp)
Efficiency (%)
Capacity, bbl/d
0
5
10
15
20
25
30
35
1.00
2.00
3.00
4.00
5.00
6.00
7.00
0
10
20
30
40
50
60
70
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000

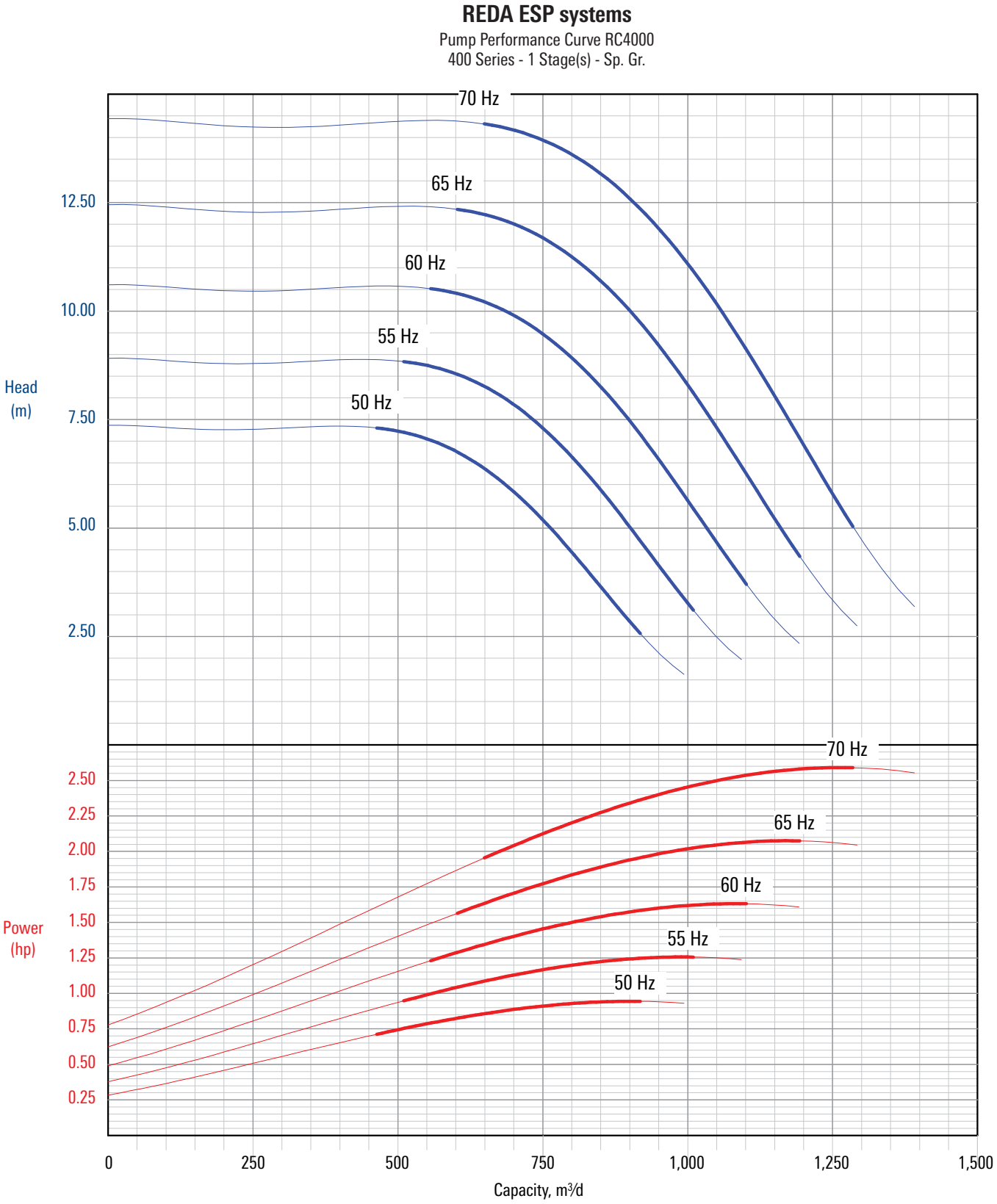
RC4000 Pump

REDA ESP systems

Pump Performance Curve RC4000
400 Series - 1 Stage(s) - Sp. Gr.



RC4000 Pump


REDA ESP systems
Pump Performance Curve RC4000
400 Series - 1 Stage(s) - Sp. Gr.
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Head (m)
12.50
10.00
7.50
5.00
2.50
Power (hp)
2.50
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0
250
500
750
1,000
1,250
1,500
Capacity, m³/d

GN1600 Pump

540 Series, Min. Casing Size 65/8-in [168.3-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	77 [35.0]	12	1019033	12	tba[†]	9	1132927
20	3.5 [1.07]	145 [65.8]	28	1019710	28	D019710	22	1132935
30	4.9 [1.49]	213 [96.7]	43	1019728	43	tba	35	1132943
40	6.3 [1.92]	281 [127.6]	59	1019736	59	D019736	47	1132950
50	7.7 [2.35]	349 [158.4]	75	1019744	75	D019744	62	1132968
60	9.1 [2.78]	417 [189.3]	90	1019041	90	D019041	74	1132976
70	10.5 [3.20]	485 [220.2]	106	1019751	106	D019751	87	1132984
80	11.9 [3.63]	553 [251.1]	122	1019769	122	1246685	101	1132992
90	13.3 [4.06]	621 [281.9]	137	1019777	137	tba	114	1133008

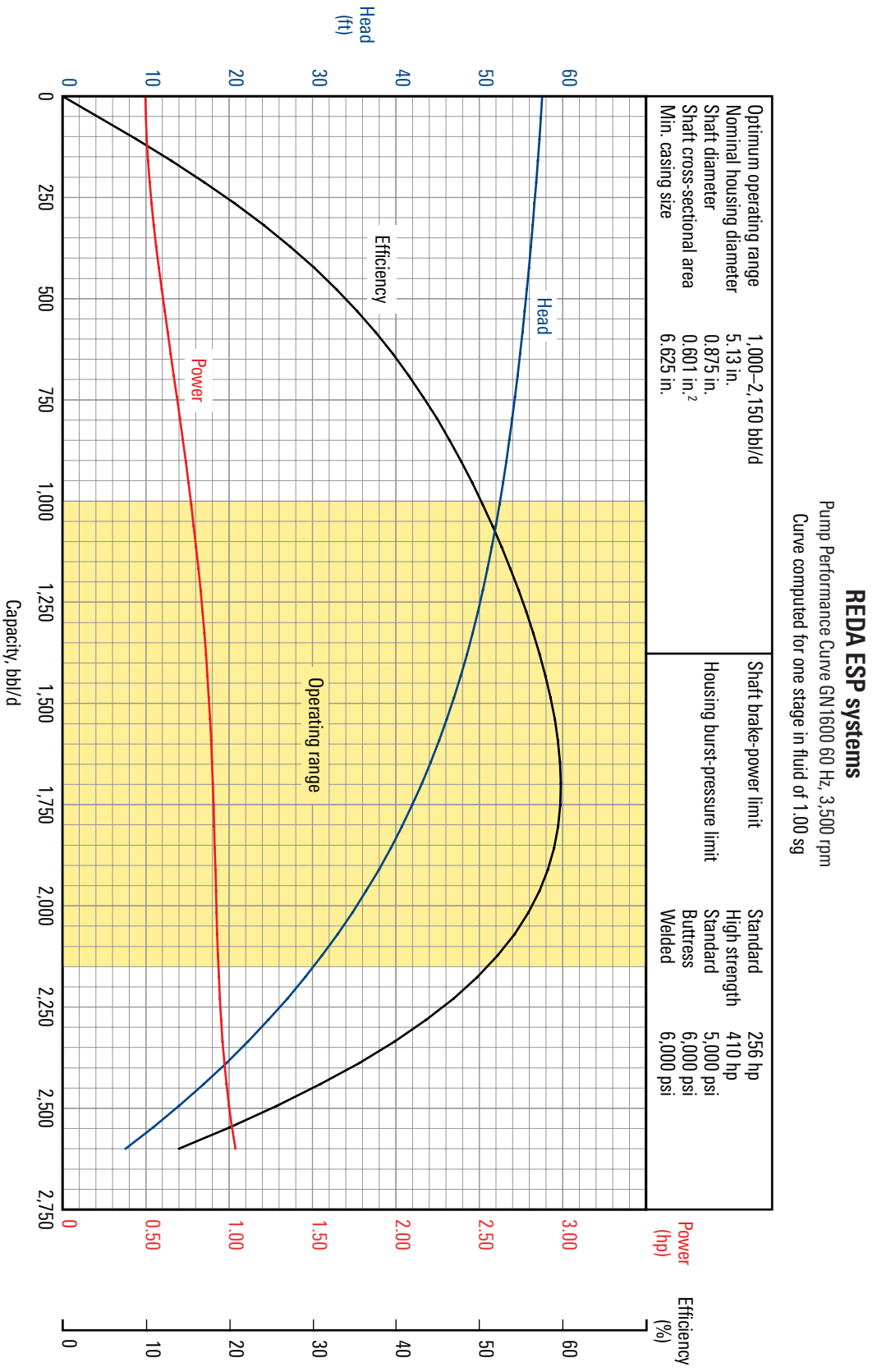
[†] To be assigned

GN1600 Pump, 540 Series, Tandem Combinations

		Tandem Housing Sections Number				
Pump Housing	**Number of Stages**	**50**	**60**	**70**	**80**	**90**
100	150	2				
110	165	1	1			
120	180		2			
130	196[†]		1	1		
140	212[†, ‡]			2		
150	228[†, ‡]			1	1	

[†] Note: Stage counts are for FL-CT-ES pumps
Requires use of high-load bearing in protector
[‡] Requires use of buttress threads in uppermost pump

GN1600 Pump



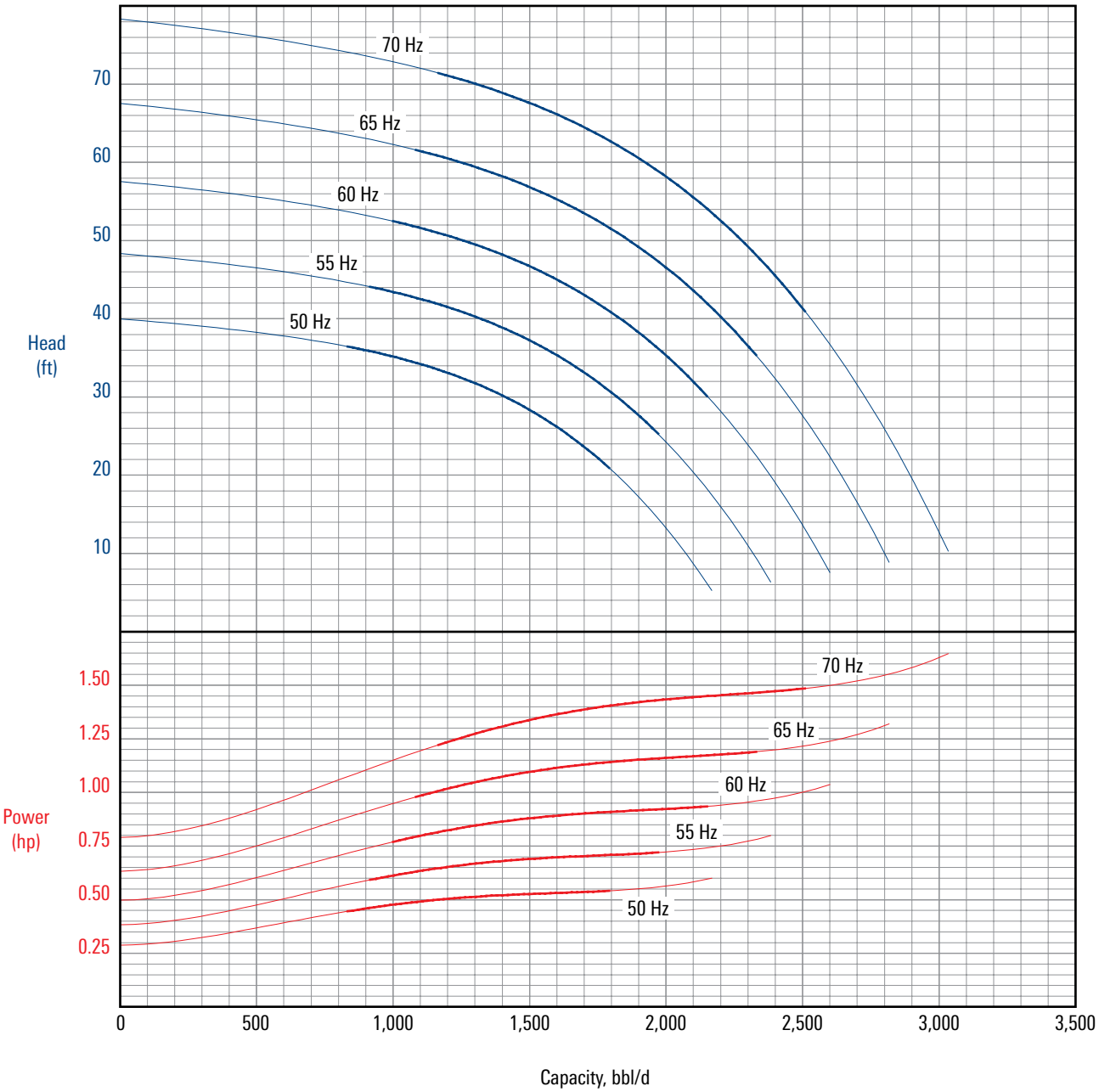
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN1600 Pump

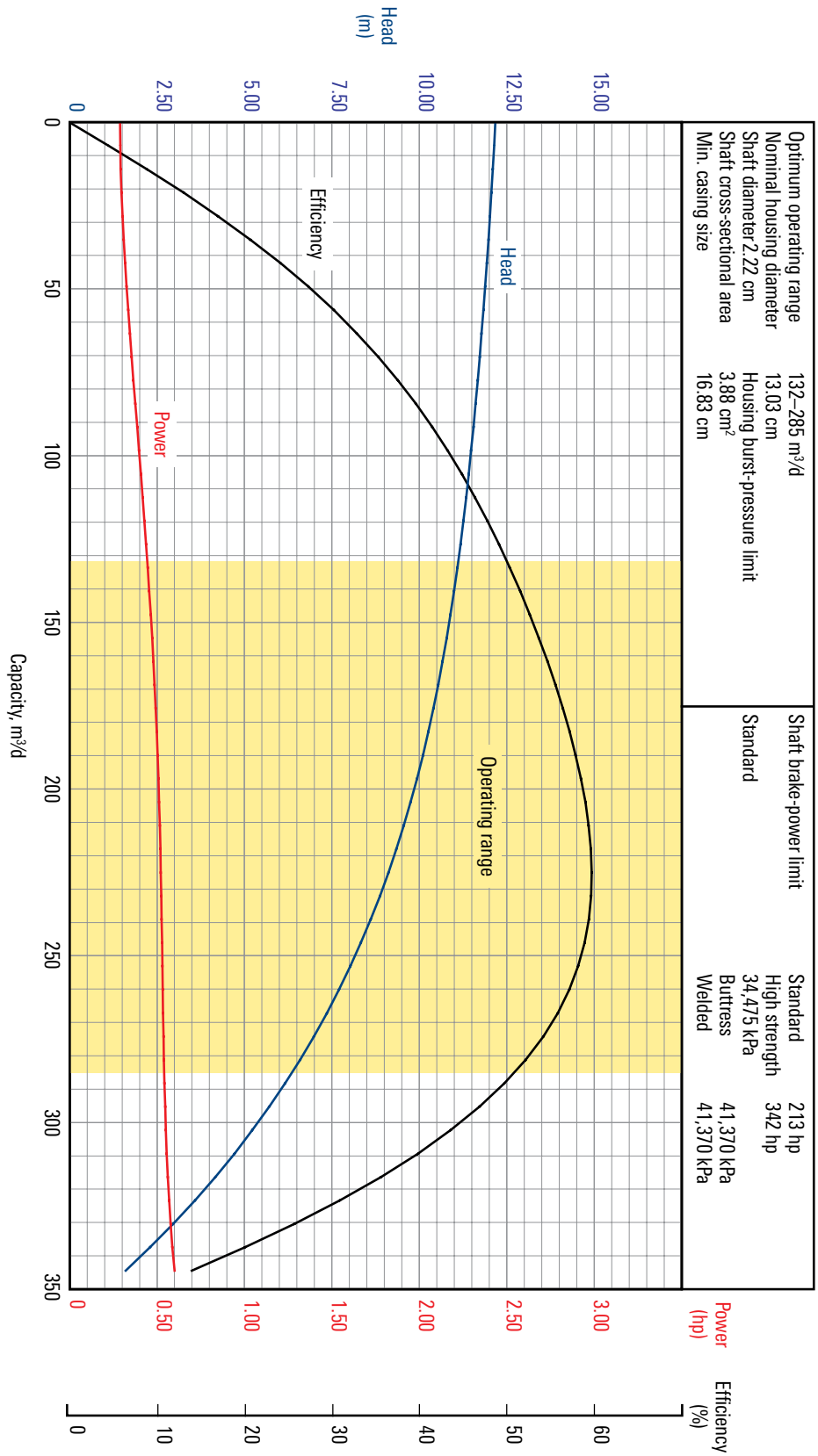
REDA ESP systems

Pump Performance Curve GN1600

Curve computed for one stage in fluid of 1.00 sg



GN1600 Pump



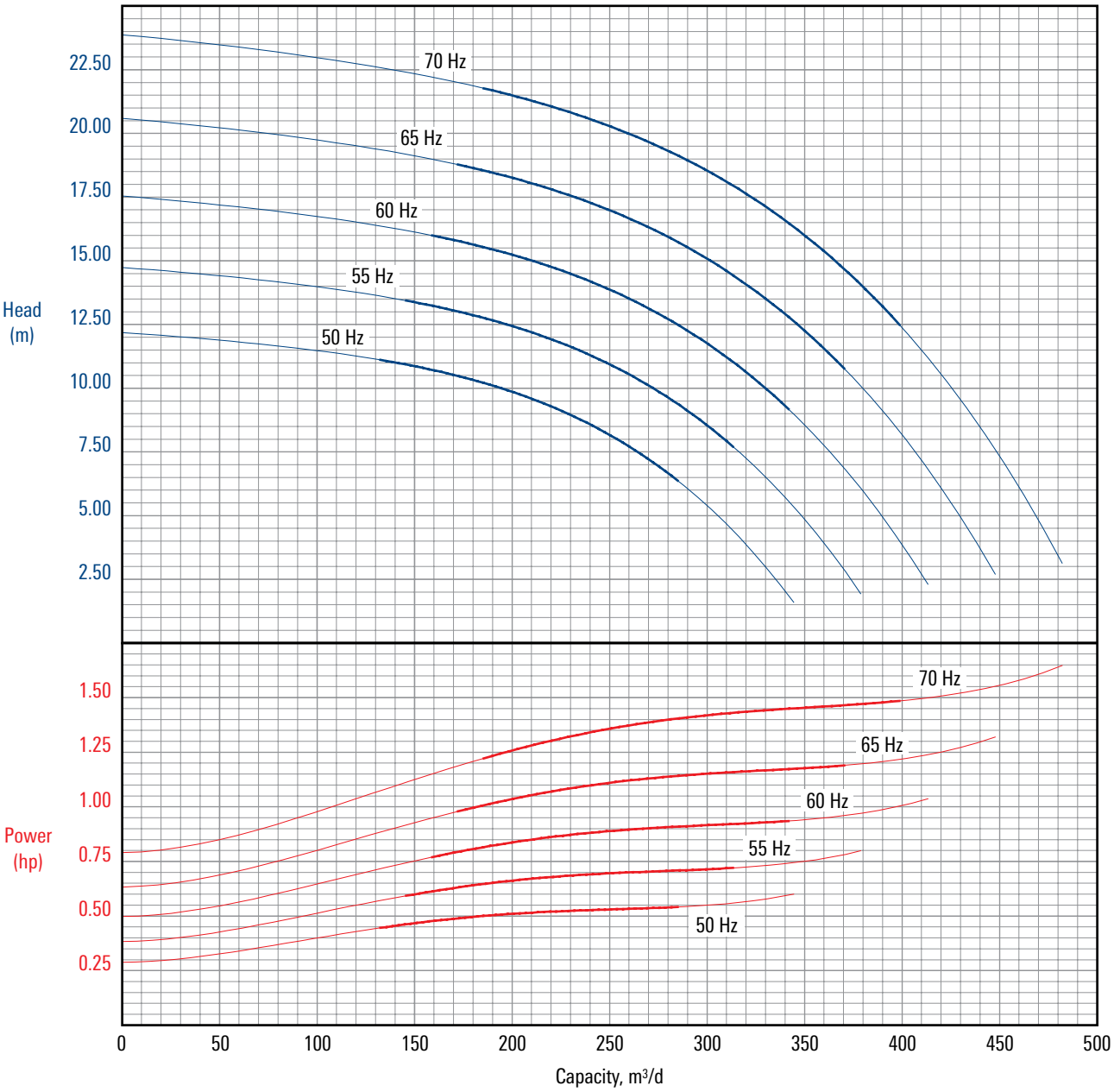
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN1600 Pump

REDA ESP systems

Pump Performance Curve GN1600

Curve computed for one stage in fluid of 1.00 sg



GN2100 Pump

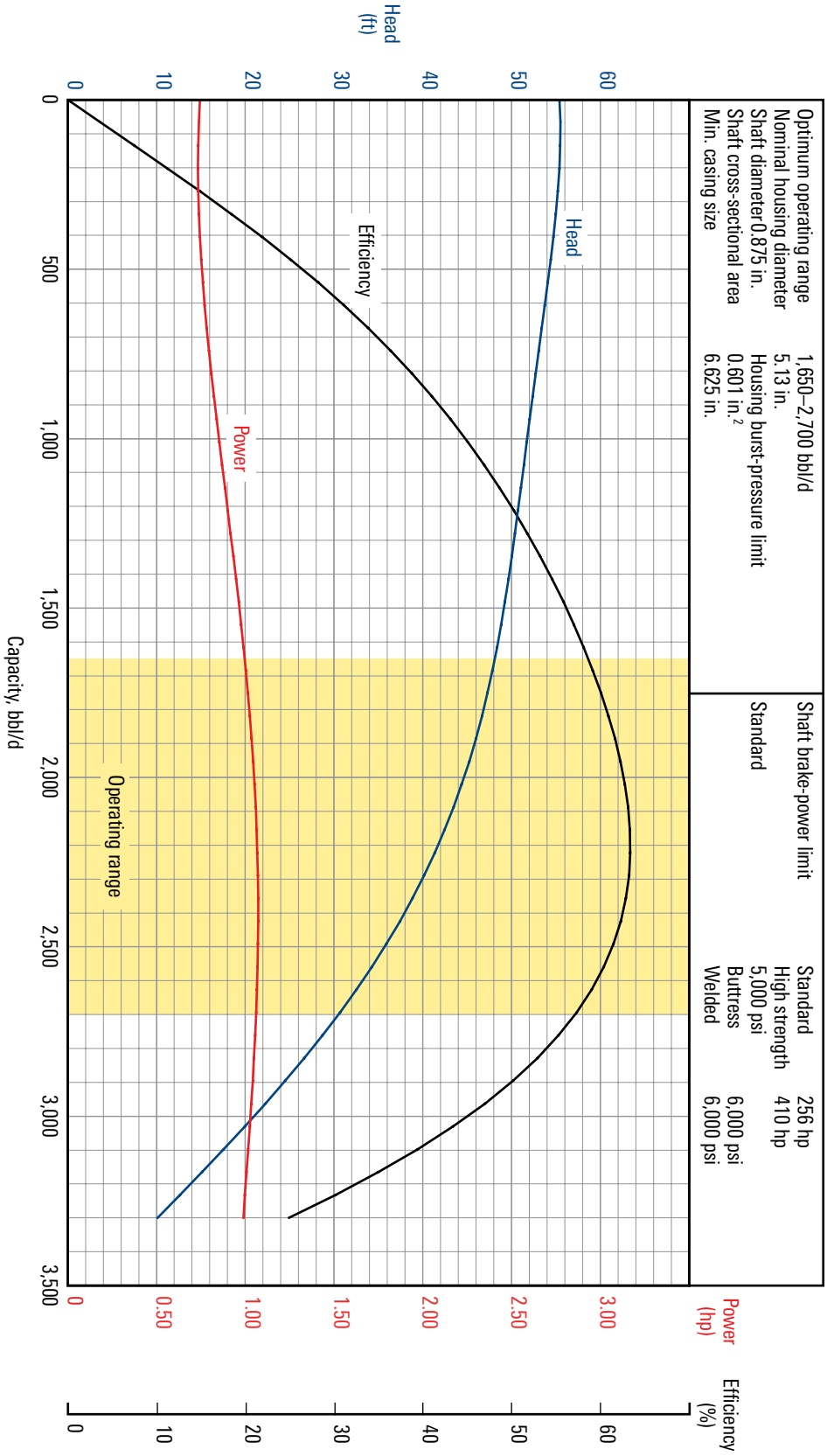
540 Series, Min. Casing Size 65/8-in [168.3-mm] OD								
			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	FL-CT Part Number	Max. Stages	FL-CT-ES Part Number	Max. Stages	FL-CT-ARZ Part Number
10	2.1 [0.64]	77 [35.0]	10	1072198	10	tba†	7	1130855
20	3.5 [1.07]	145 [65.8]	22	1146489	22	tba	18	1130863
30	4.9 [1.49]	213 [96.7]	35	1157262	35	R157262	28	1130871
40	6.3 [1.92]	281 [127.6]	48	1045269	48	tba	39	1070713
50	7.7 [2.35]	349 [158.4]	61	1045277	61	1179464	50	1070721
60	9.1 [2.78]	417 [189.3]	74	1045285	74	tba	61	1070739
70	10.5 [3.20]	485 [220.2]	86	1045293	86	tba	72	1070747
80	11.9 [3.63]	553 [251.1]	99	1045301	99	1235563	83	1070754
90	13.3 [4.06]	621 [281.9]	111	1045319	111	100030884	94	1070762
100	14.7 [4.48]	689 [312.8]	124	1045327	124	tba	105	1070770
110	16.1 [4.91]	757 [343.7]	137	1045335	137	D045335	116	1070788

† To be assigned

GN2100 Pump, 540 Series, Tandem Combinations							
		Tandem Housing Sections Number					
Pump Housing	Number of Stages	60	70	80	90	100	110
120	146	2					
130	158	1	1				
140	170		2				
150	183†		1	1			
160	196†			2			
170	209†, ‡			1	1		
180	222†, ‡				2		
190	235†, ‡				1§	1§	
200	248†, ‡					2§	

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector
‡ Requires use of buttress threads in uppermost pump
§ Requires use of high-strength shaft in lowermost pump

GN2100 Pump



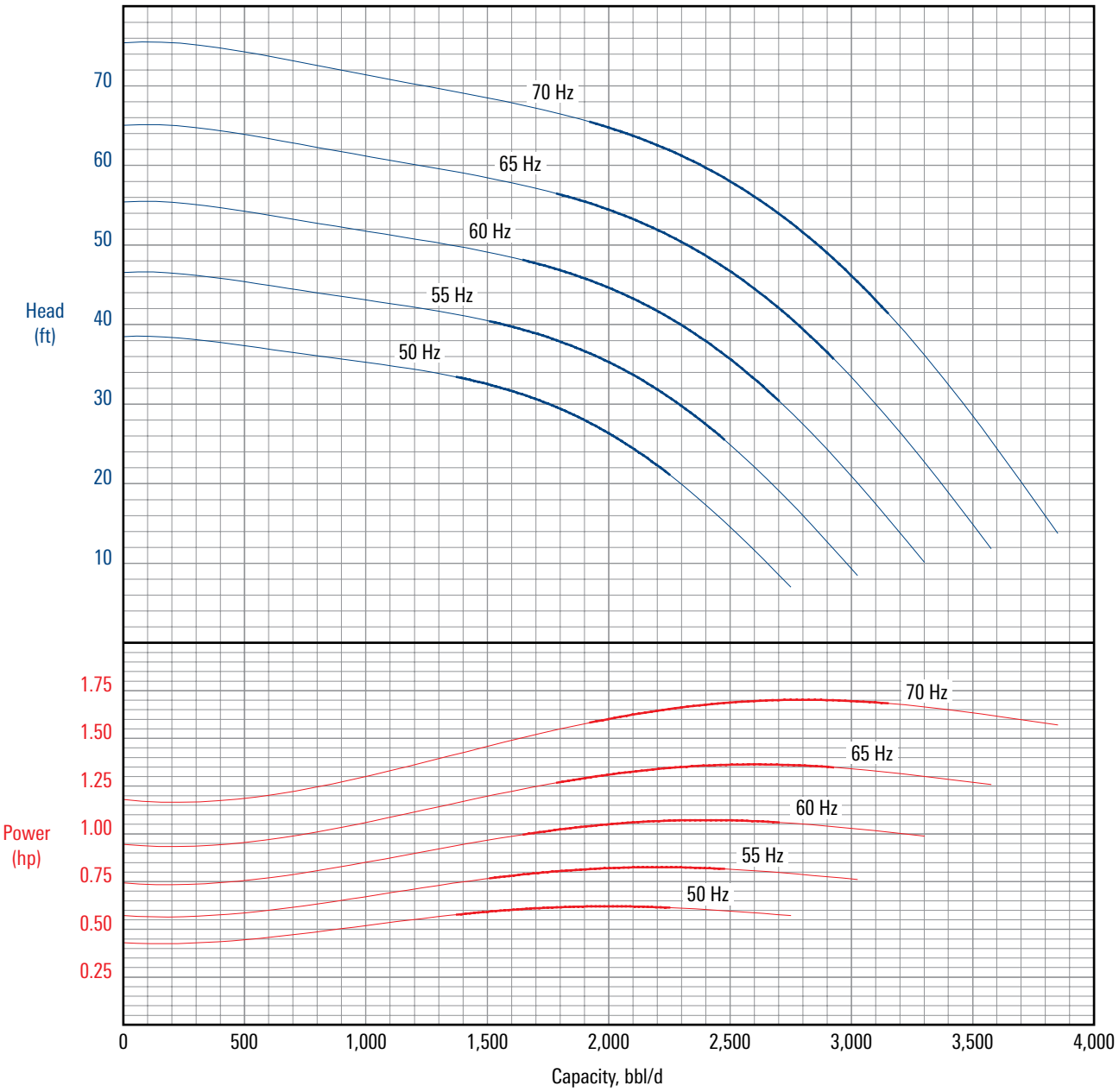
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN2100 Pump

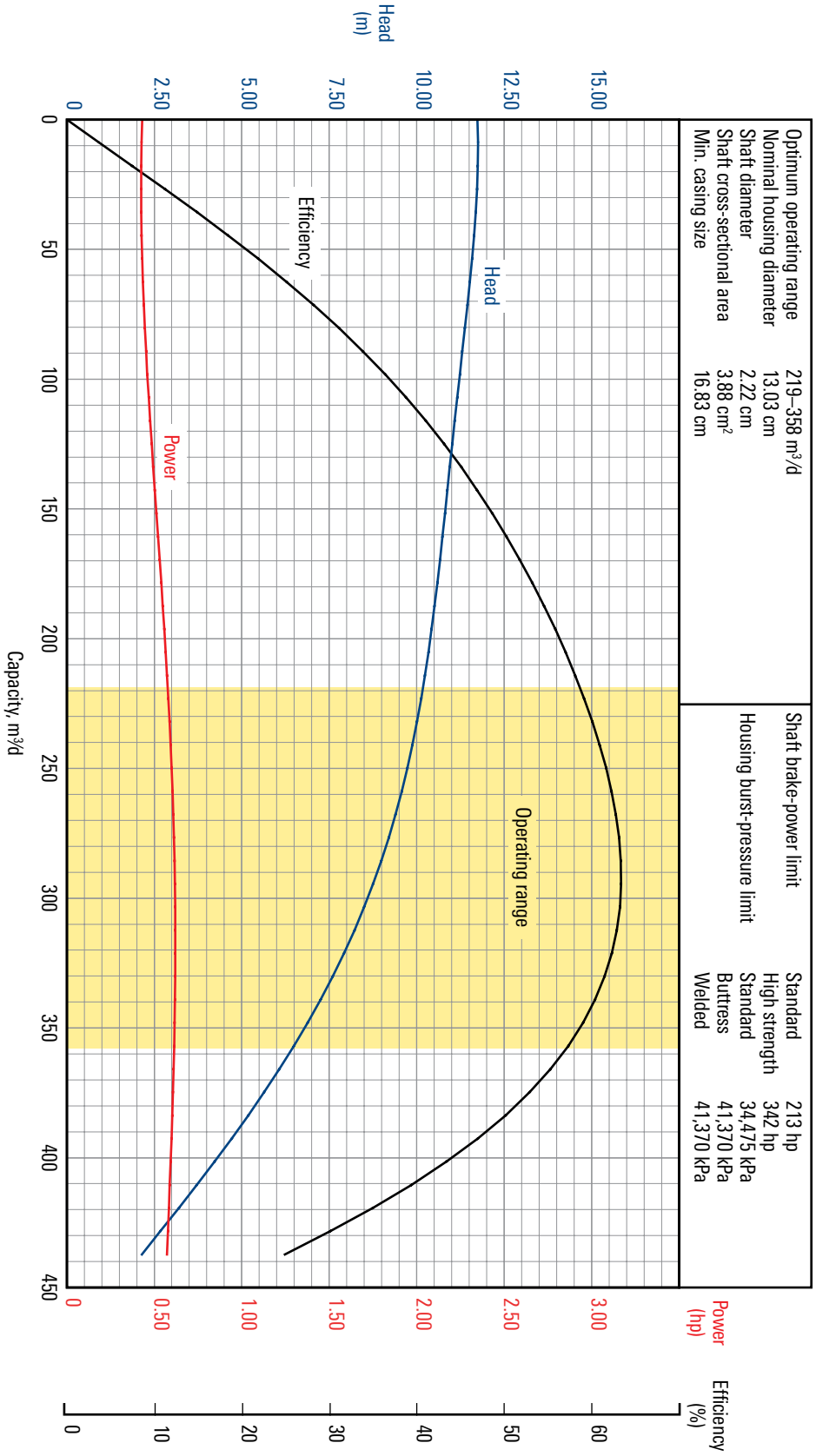
REDA ESP systems

Pump Performance Curve GN2100

Curve computed for one stage in fluid of 1.00 sg



GN2100 Pump



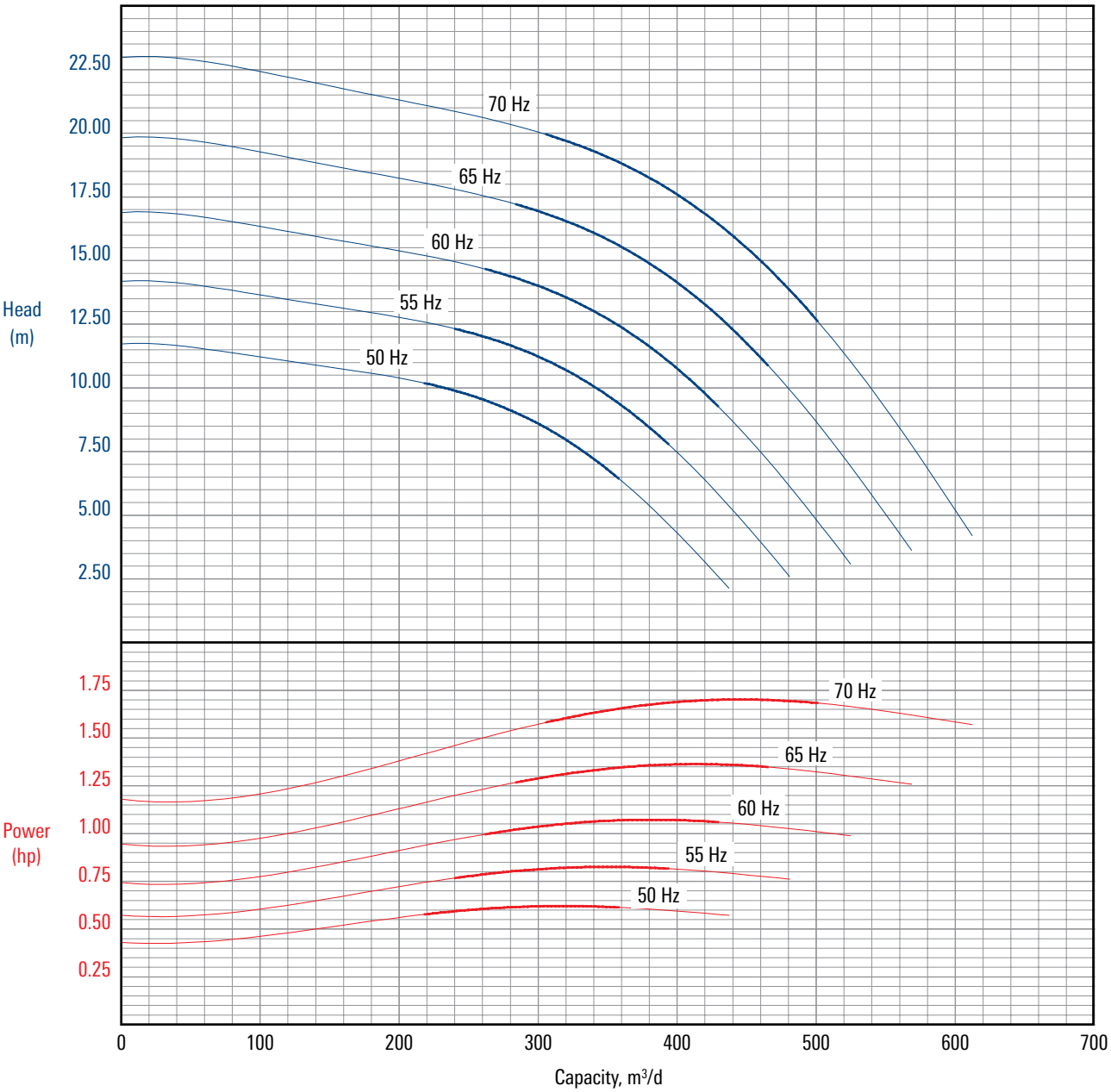
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN2100 Pump

REDA ESP systems

Pump Performance Curve GN2100

Curve computed for one stage in fluid of 1.00 sg



GN3200 Pump

540 Series, Min. Casing Size 65/8-in [168.3-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	77 [35.0]	9	1250125	9	tba†	7	1130822
20	3.5 [1.07]	145 [65.8]	20	1316066	20	tba	17	1130830
30	4.9 [1.49]	213 [96.7]	32	1156975	32	D156975	26	1130848
40	6.3 [1.92]	281 [127.6]	44	1041391	44	tba	36	1070804
50	7.7 [2.35]	349 [158.4]	55	1041409	55	1243633	47	1070812
60	9.1 [2.78]	417 [189.3]	67	1041417	67	D041417	56	1070820
70	10.5 [3.20]	485 [220.2]	79	1041425	79	D041425	66	1070838
80	11.9 [3.63]	553 [251.1]	90	1041433	90	tba	76	1070846
90	13.3 [4.06]	621 [281.9]	102	1041441	102	D041441	86	1070853
100	14.7 [4.48]	689 [312.8]	114	1041458	114	D041458	97	1070861
110	16.1 [4.91]	757 [343.7]	125	1041466	125	tba	106	1070879
120	17.5 [5.34]	825 [374.6]	137	1041474	137	tba	116	1070887

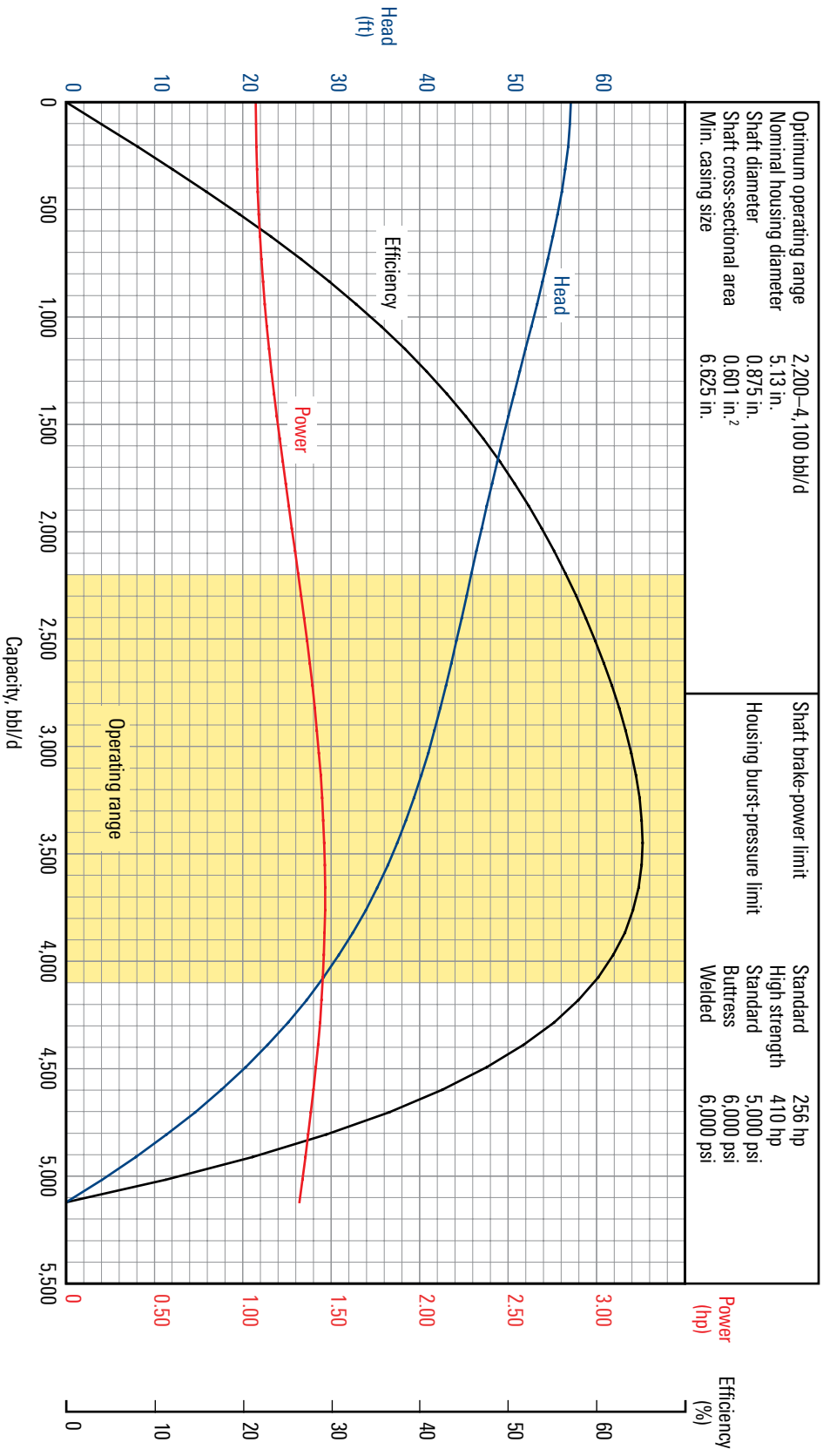
† To be assigned

GN3200 Pump, 540 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	**Number of Stages**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
130	144	1	1					
140	156		2					
150	168†		1	1				
160	180†			2‡				
170	191†			1‡	1‡			
180	202†, §				2‡			
190	214†, §				1‡	1‡		
200	226†, §					2‡		
210	237†, §					1‡	1‡	

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector
‡ Requires use of high-strength shaft in lowermost pump
§ Requires use of buttress threads in uppermost pump

GN3200 Pump



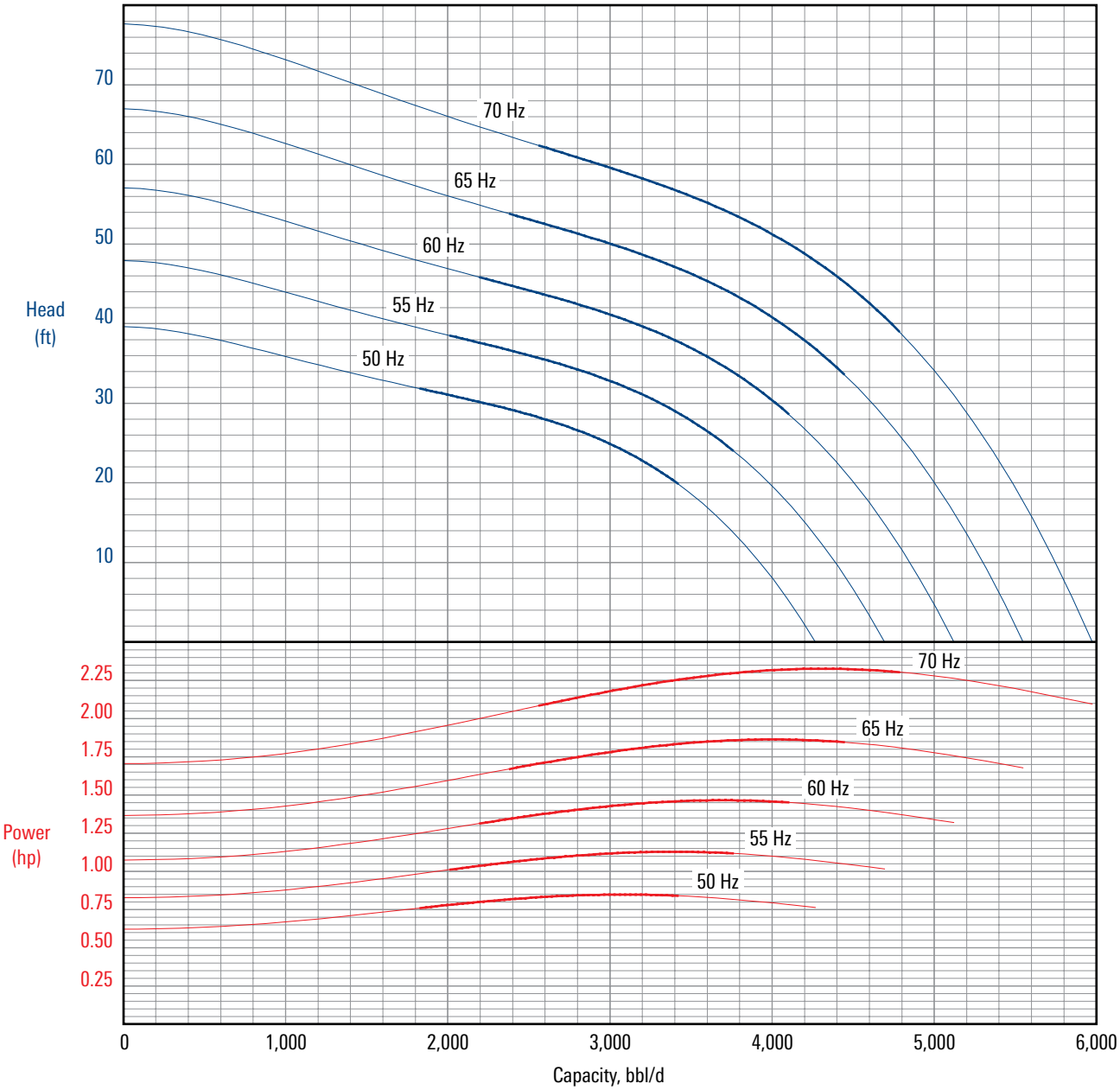
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN3200 Pump

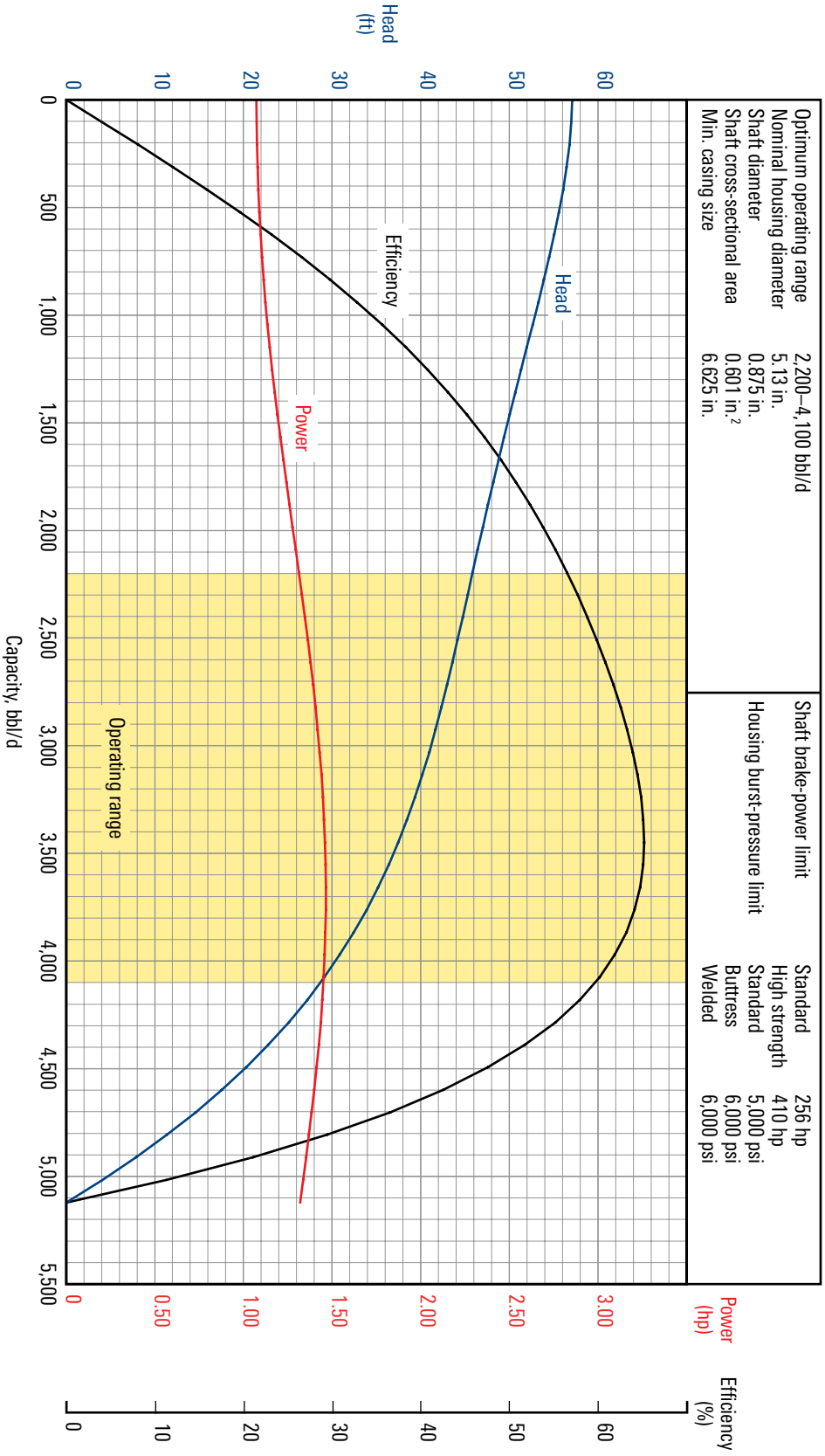
REDA ESP systems

Pump Performance Curve GN3200

Curve computed for one stage in fluid of 1.00 sg



GN3200 Pump



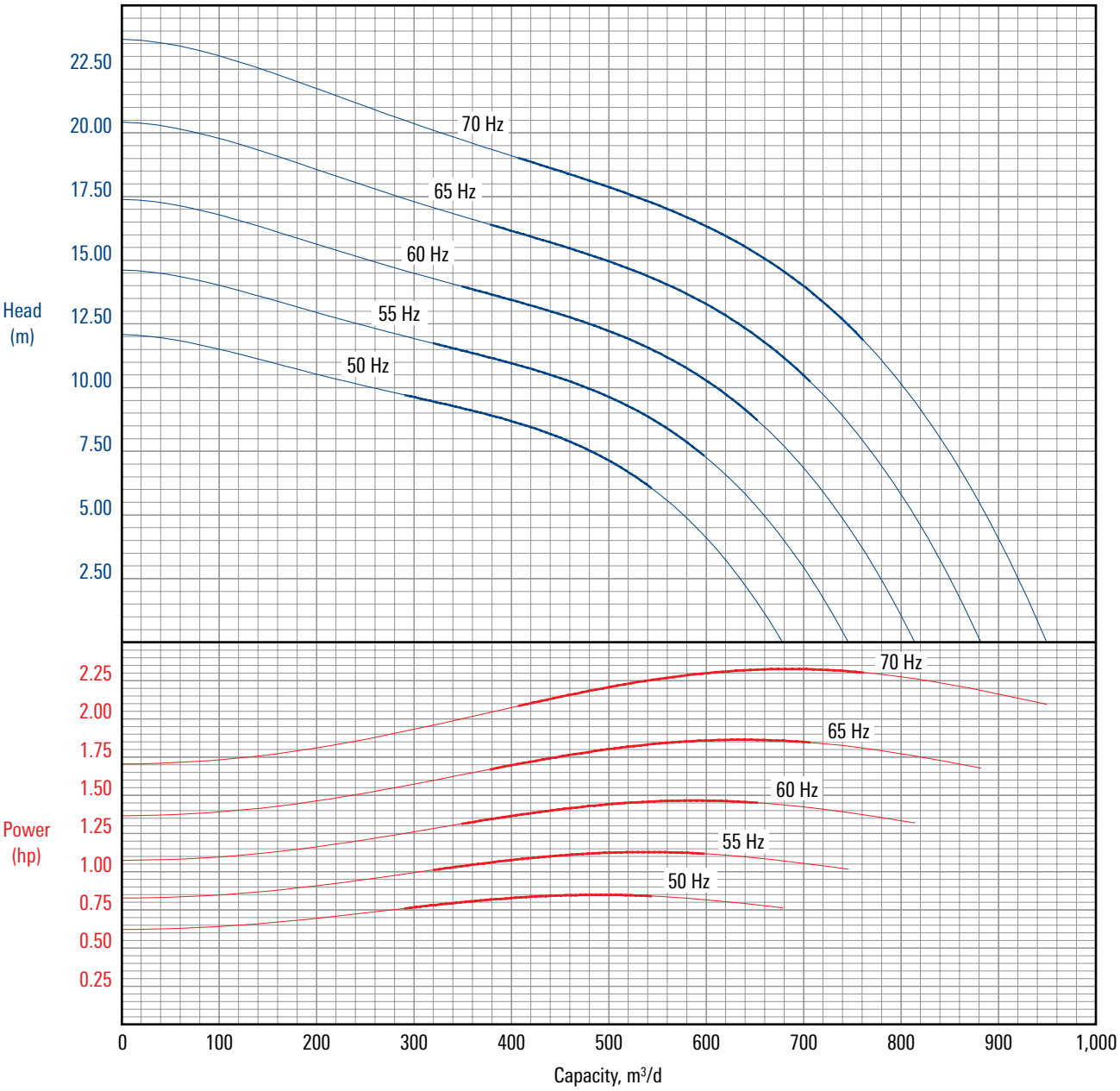
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN3200 Pump

REDA ESP systems

Pump Performance Curve GN3200

Curve computed for one stage in fluid of 1.00 sg



GN4000 Pump

540 Series, Min. Casing Size 65/8-in [168.3-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	77 [35.0]	5	884486	5	C884486	4	1136977
20	3.5 [1.07]	145 [65.8]	12	884494	12	C884494	11	1136985
30	4.9 [1.49]	213 [96.7]	18	884502	18	Q884502	17	1136993
40	6.3 [1.92]	281 [127.6]	25	884510	25	C884510	24	1137009
50	7.7 [2.35]	349 [158.4]	32	884528	32	tba[†]	30	1137017
60	9.1 [2.78]	417 [189.3]	39	884536	39	tba	37	1137025
70	10.5 [3.20]	485 [220.2]	46	884544	46	C884544	43	1137033
80	11.9 [3.63]	553 [251.1]	52	884551	52	C884551	50	1137041
90	13.3 [4.06]	621 [281.9]	59	884569	59	tba	56	1137470
100	14.7 [4.48]	689 [312.8]	66	884577	66	tba	63	1137488
110	16.1 [4.91]	757 [343.7]	73	656140	73	C656140	70	1137496
120	17.5 [5.34]	825 [374.6]	79	884585	79	C884585	76	1137504
130	18.9 [5.76]	893 [405.4]	86	884593	86	tba	83	1137512
140	20.3 [6.19]	961 [463.3]	93	884601	93	Q884601	89	1137520
150	21.7 [6.62]	1,029 [467.2]	100	884619	100	C884619	95	1137538

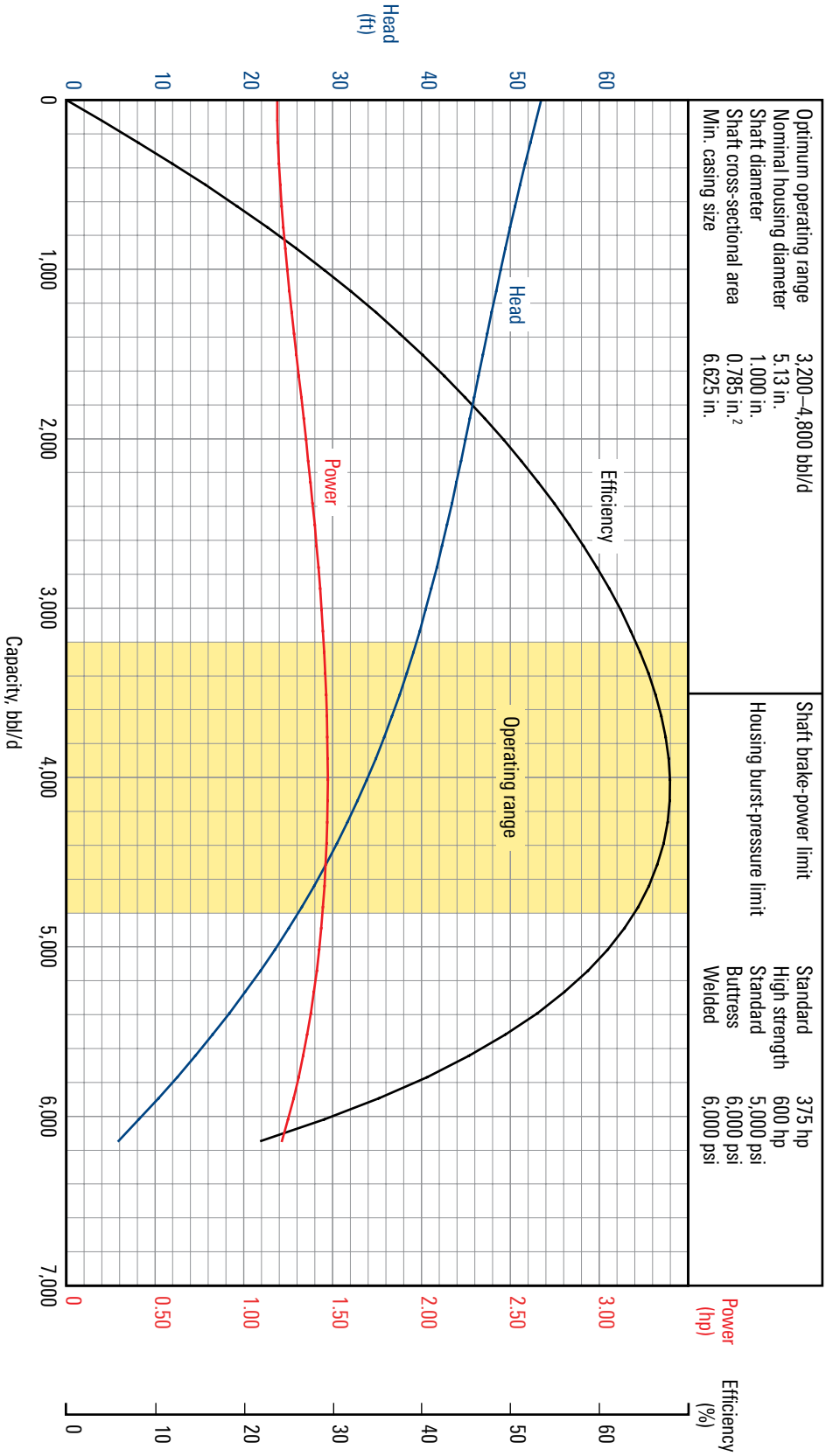
[†] To be assigned

GN4000 Pump

GN4000 Pump, 540 Series, Tandem Combinations								
		Tandem Housing Sections Number						
Pump Housing	**Number of Stages**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
160	104	2						
170	111	1	1					
180	118		2					
190	125		1	1				
200	132			2				
210	139†			1	1			
220	146†				2			
230	152†				1	1		
240	158†					2		
250	165†					1	1	
260	172†						2	
270	179†						1‡	1‡
280	186†							2‡
290	193†							1‡
300	200†							
310	205†			2‡	1‡			
320	212†			1‡	2‡			
330	219†, §				3‡			
340	225†, §				2‡	1‡		
350	231†, §				1‡	2‡		
360	237†, §					3‡		
370	244†, §					2‡	1‡	
380	251†, §					1‡	2‡	
390	258†, §						3‡	

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector
‡ Requires use of high-strength shaft in lowermost pump
§ Requires use of buttress threads in uppermost pump

GN4000 Pump



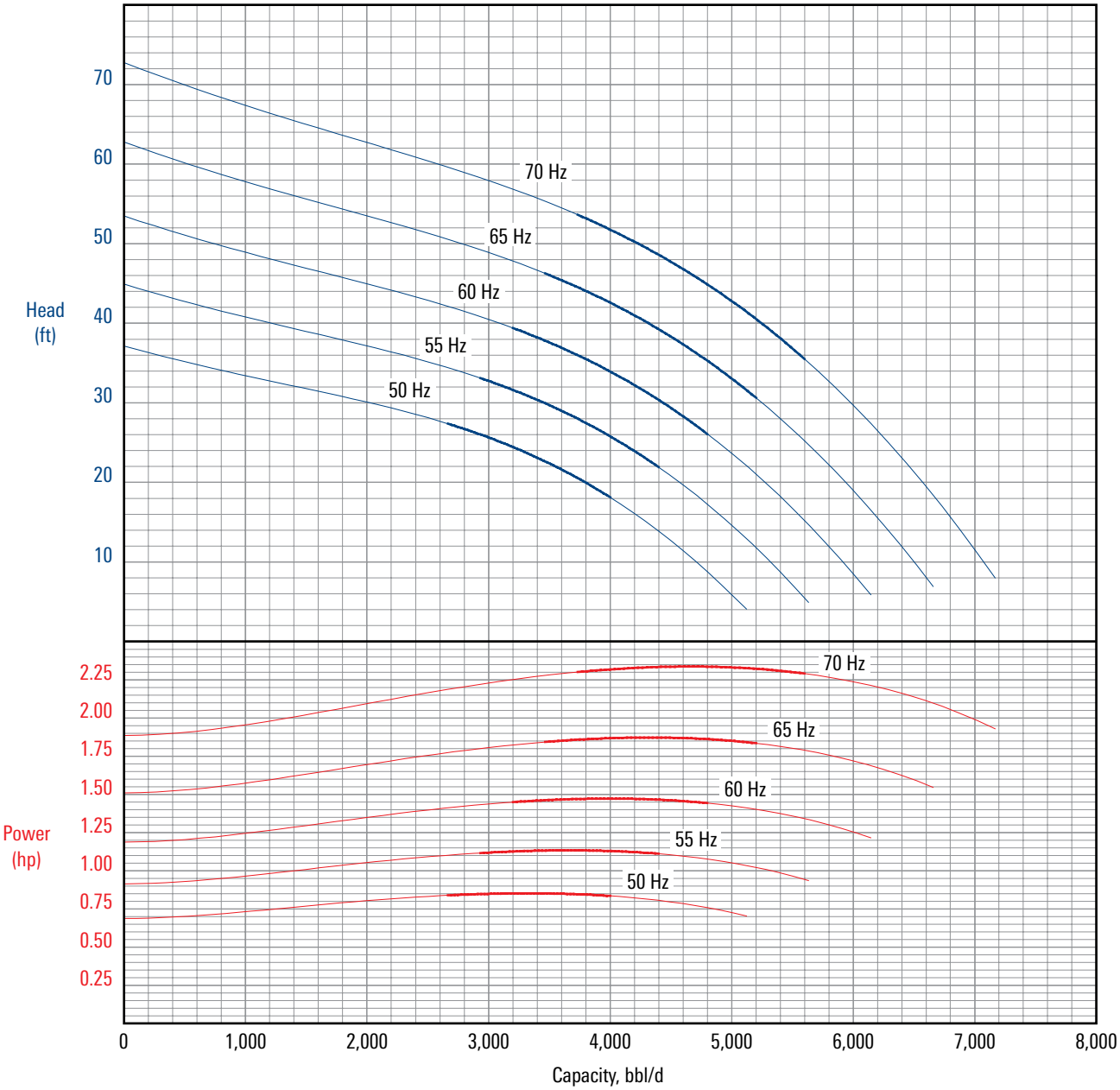
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN4000 Pump

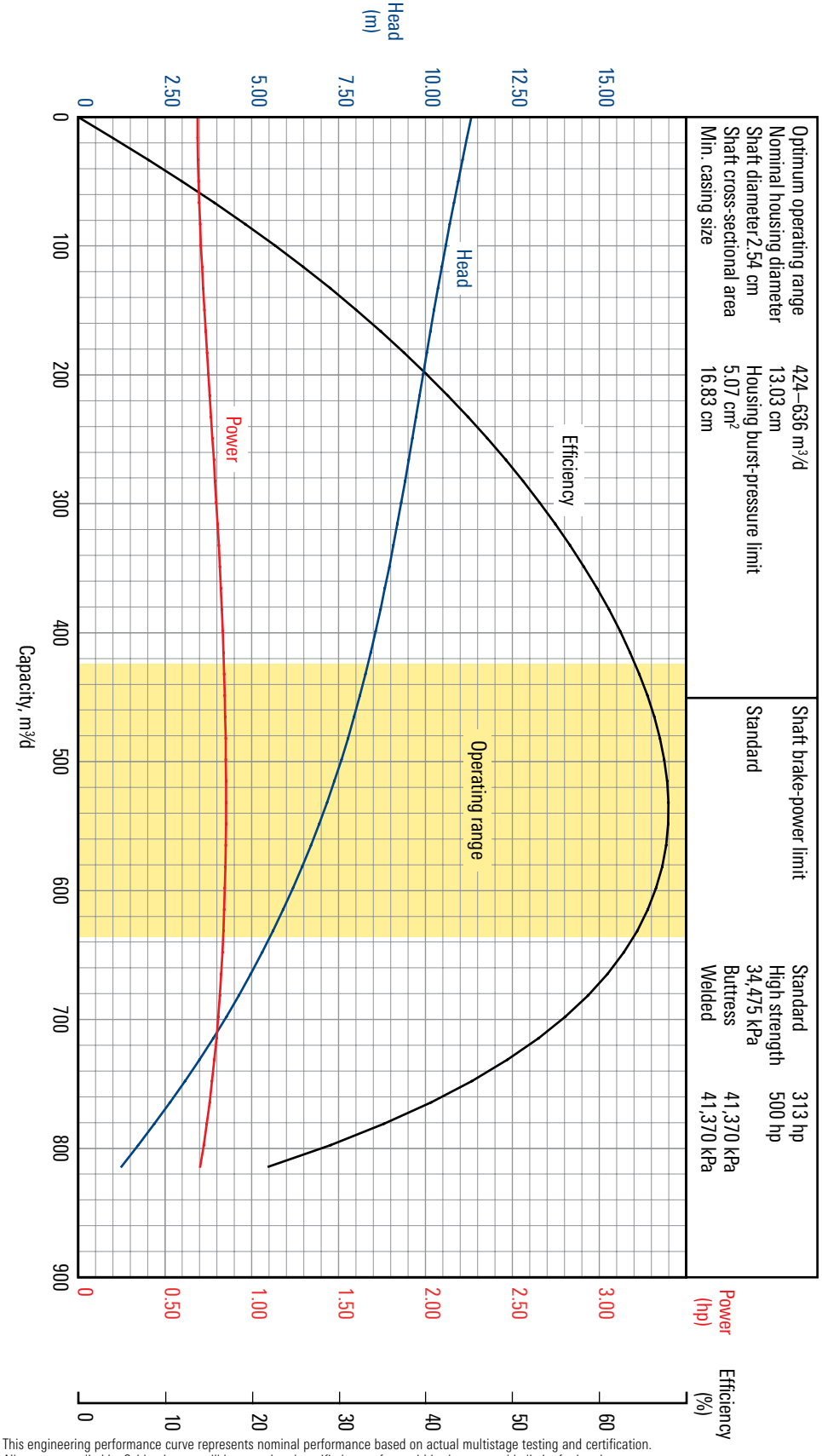
REDA ESP systems

Pump Performance Curve GN4000

Curve computed for one stage in fluid of 1.00 sg



GN4000 Pump



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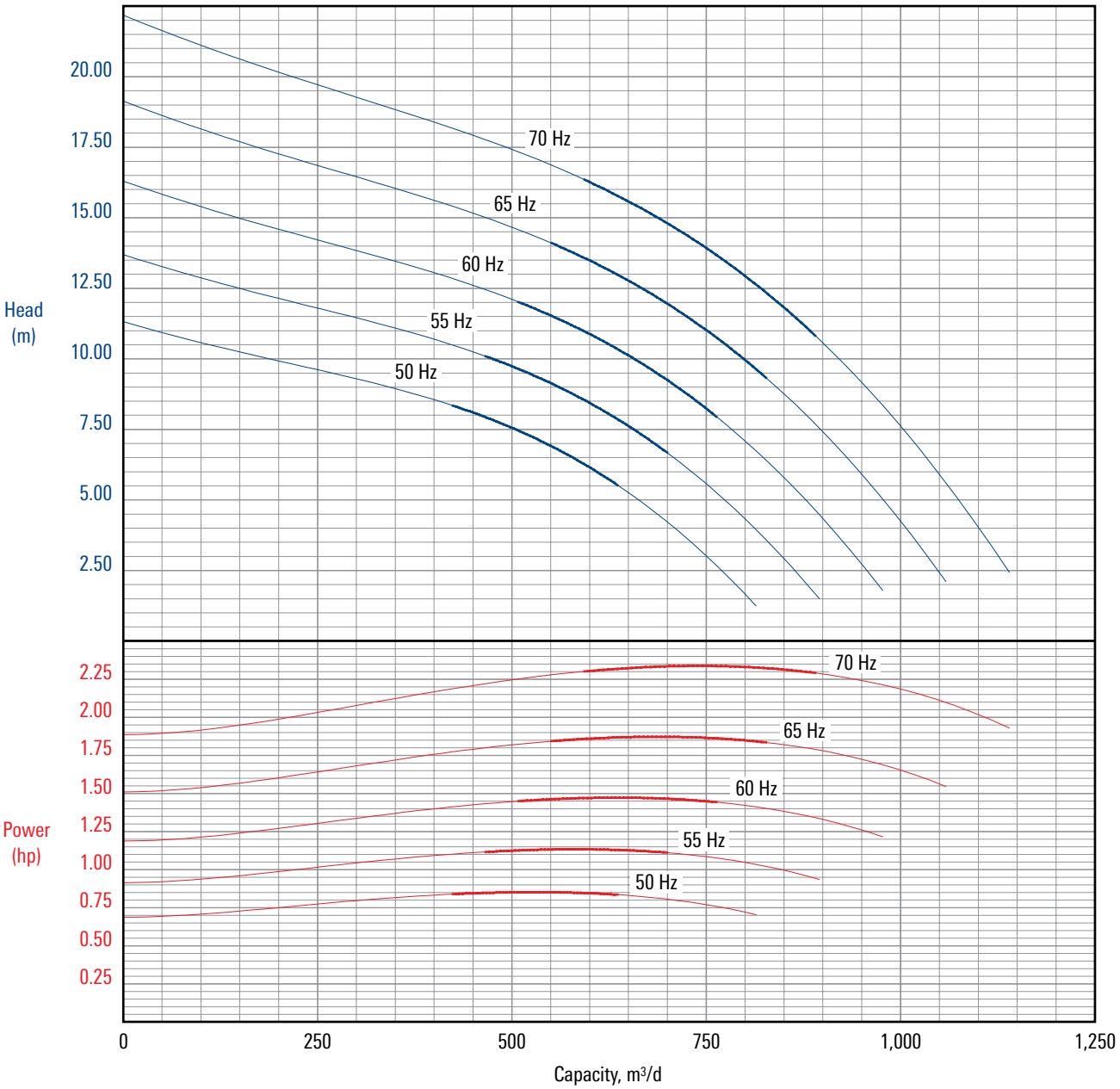
GN4000 Pump

REDA ESP systems

Pump Performance Curve GN4000

Curve computed for one stage in fluid of 1.00 sg



GN5200 Pump

GN5200 Pump, 540 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	**Number of Stages**	**60**	**70**	**80**	**90**	**100**	**110**	**120**
160	72	2						
170	76	1	1					
180	80		2					
190	85		1	1				
200	90			2				
210	95			1	1			
220	100				2			
230	104				1	1		
240	108					2		
250	113					1	1	
260	118						2	
270	123						1	1
280	128							2
290	132							1
300	136							
310	140			2	1			
320	145			1	2			
330	150				3			
340	154				2	1		
350	158				1	2		
360	162†					3		
370	167†					2	1	
380	172†					1	2	
390	177†						3	
400	182†						2	1
410	187†						1	2
420	192†							3
430	196†							2
440	200†							1
450	204†							
460	207†			1		3		
470	212†				1	3		
480	216†					4‡		
490	221†					3‡	1‡	
500	227†				1‡		3‡	
510	231†					1‡	3‡	
520	236†						4‡	
530	241†						3‡	1‡

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector
‡ Requires use of high-strength shaft in lowermost pump

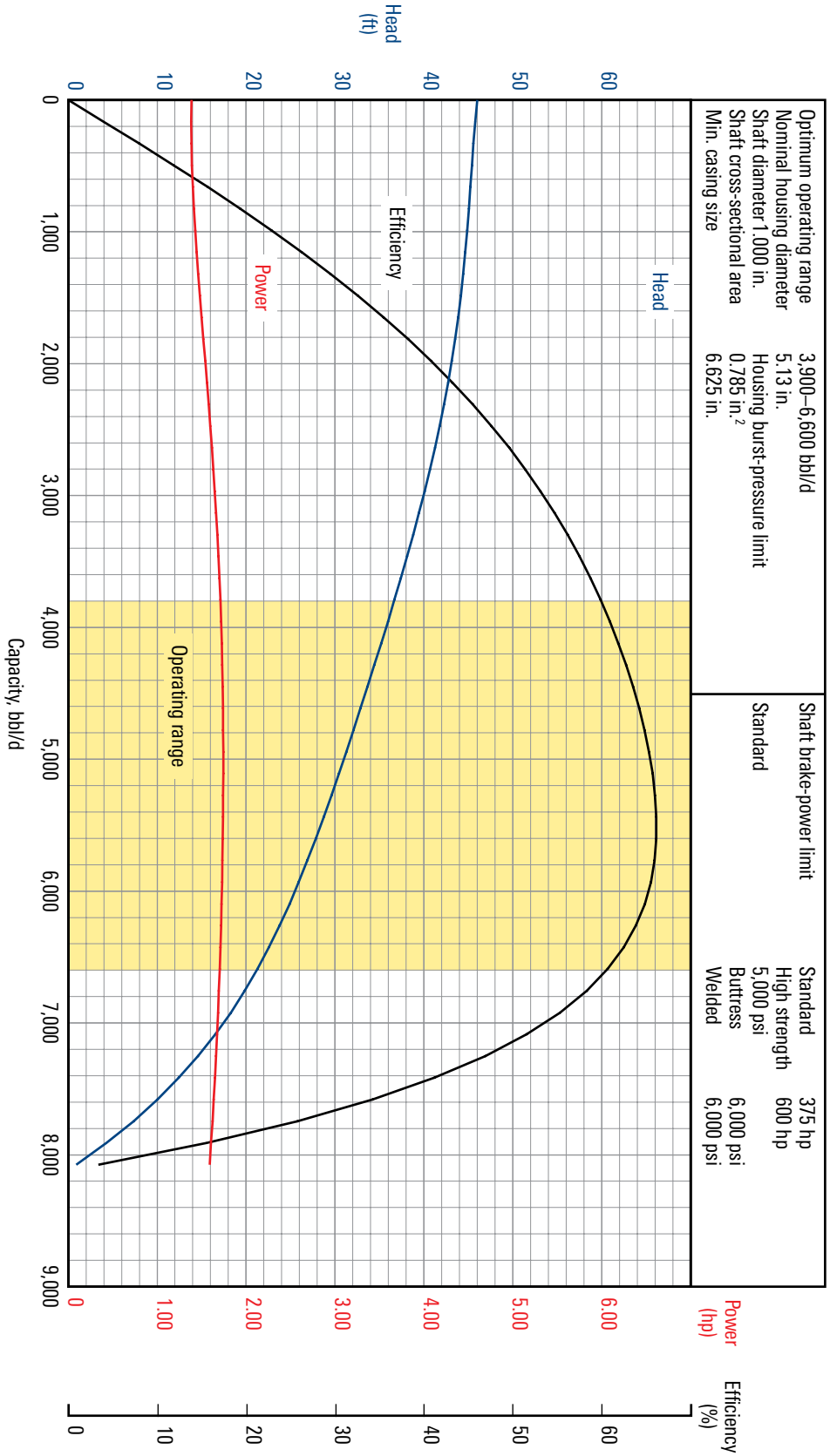
GN5200 Pump

540 Series, Min. Casing Size 65/8-in [168.3-mm] OD

			ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	77 [35.0]	3	tba[†]	3	tba
20	3.5 [1.07]	145 [65.8]	8	tba	8	tba
30	4.9 [1.49]	213 [96.7]	13	tba	12	tba
40	6.3 [1.92]	281 [127.6]	17	100071150	17	100071582
50	7.7 [2.35]	349 [158.4]	22	100071153	22	100071585
60	9.1 [2.78]	417 [189.3]	27	100071168	26	100071586
70	10.5 [3.20]	485 [220.2]	31	100071170	31	100071587
80	11.9 [3.63]	553 [251.1]	36	100071171	36	100071588
90	13.3 [4.06]	621 [281.9]	41	100071172	40	100071603
100	14.7 [4.48]	689 [312.8]	45	100071173	45	100071619
110	16.1 [4.91]	757 [343.7]	50	100071176	50	100071620
120	17.5 [5.34]	825 [374.6]	54	100071177	54	100071622
130	18.9 [5.76]	893 [405.4]	59	100071178	59	100071623
140	20.3 [6.19]	961 [463.3]	64	100071180	64	100071624
150	21.7 [6.62]	1,029 [467.2]	68	100071183	68	100071625

[†] To be assigned

GN5200 Pump



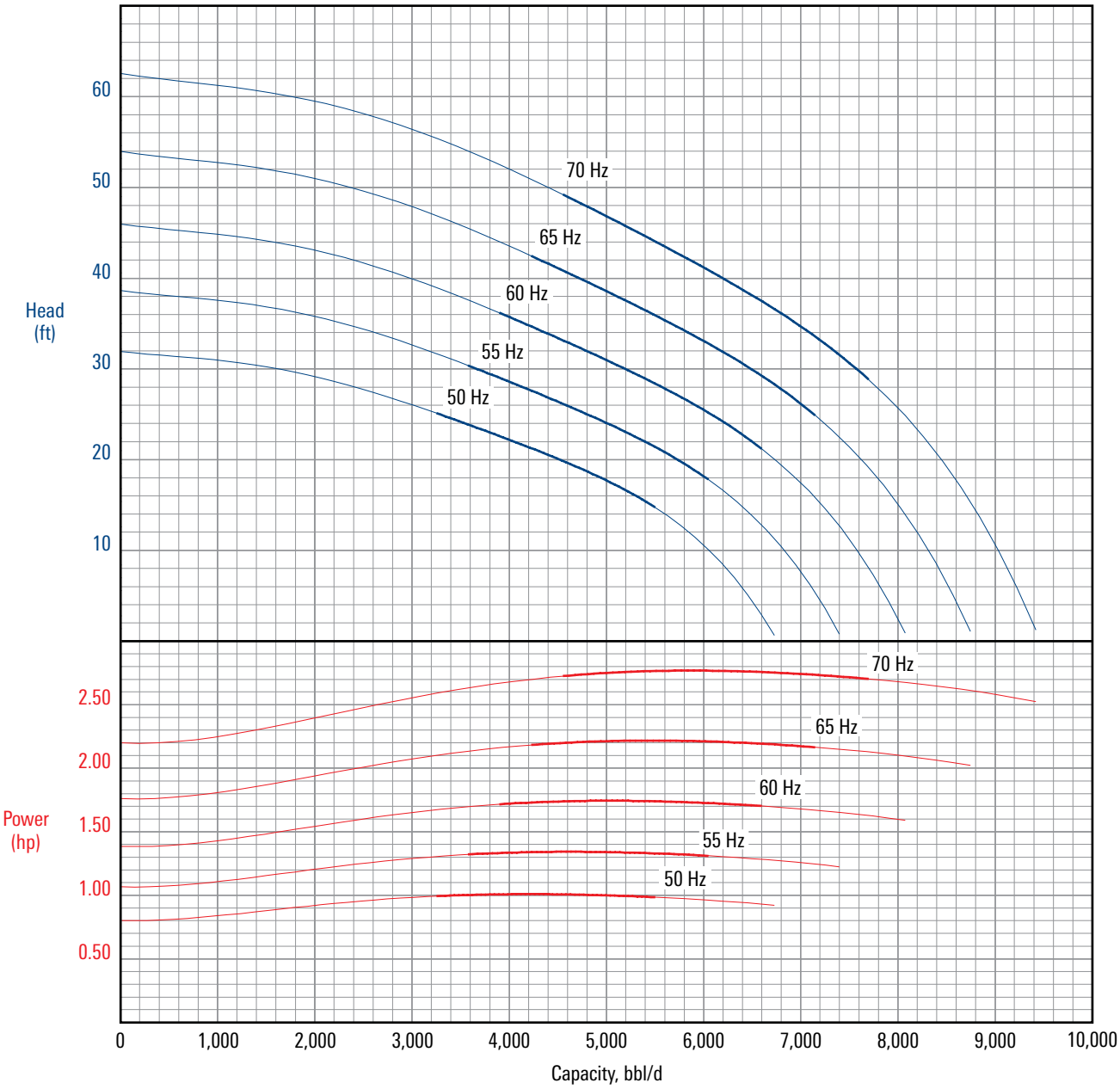
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN5200 Pump

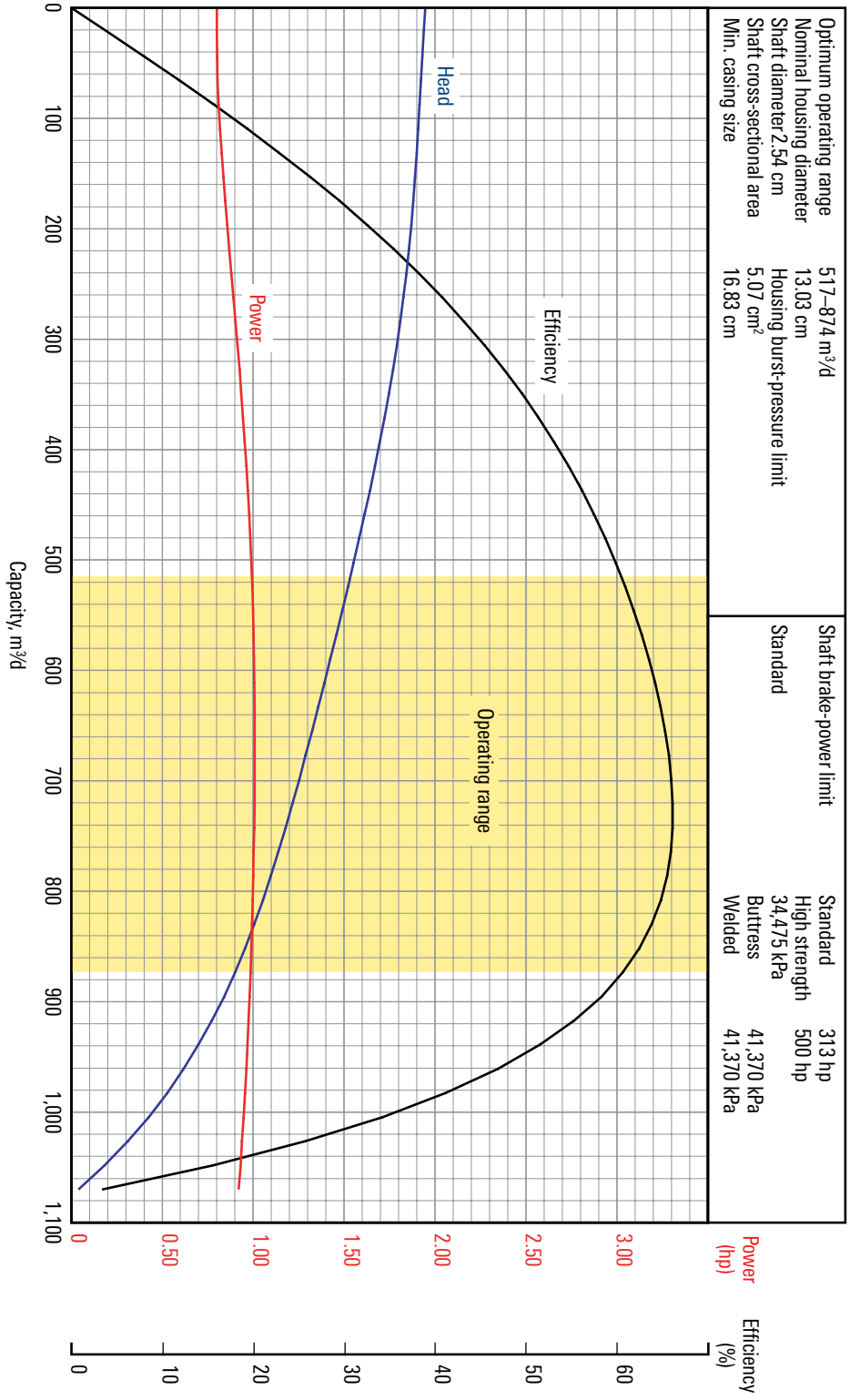
REDA ESP systems

Pump Performance Curve GN5200

Curve computed for one stage in fluid of 1.00 sg



GN5200 Pump



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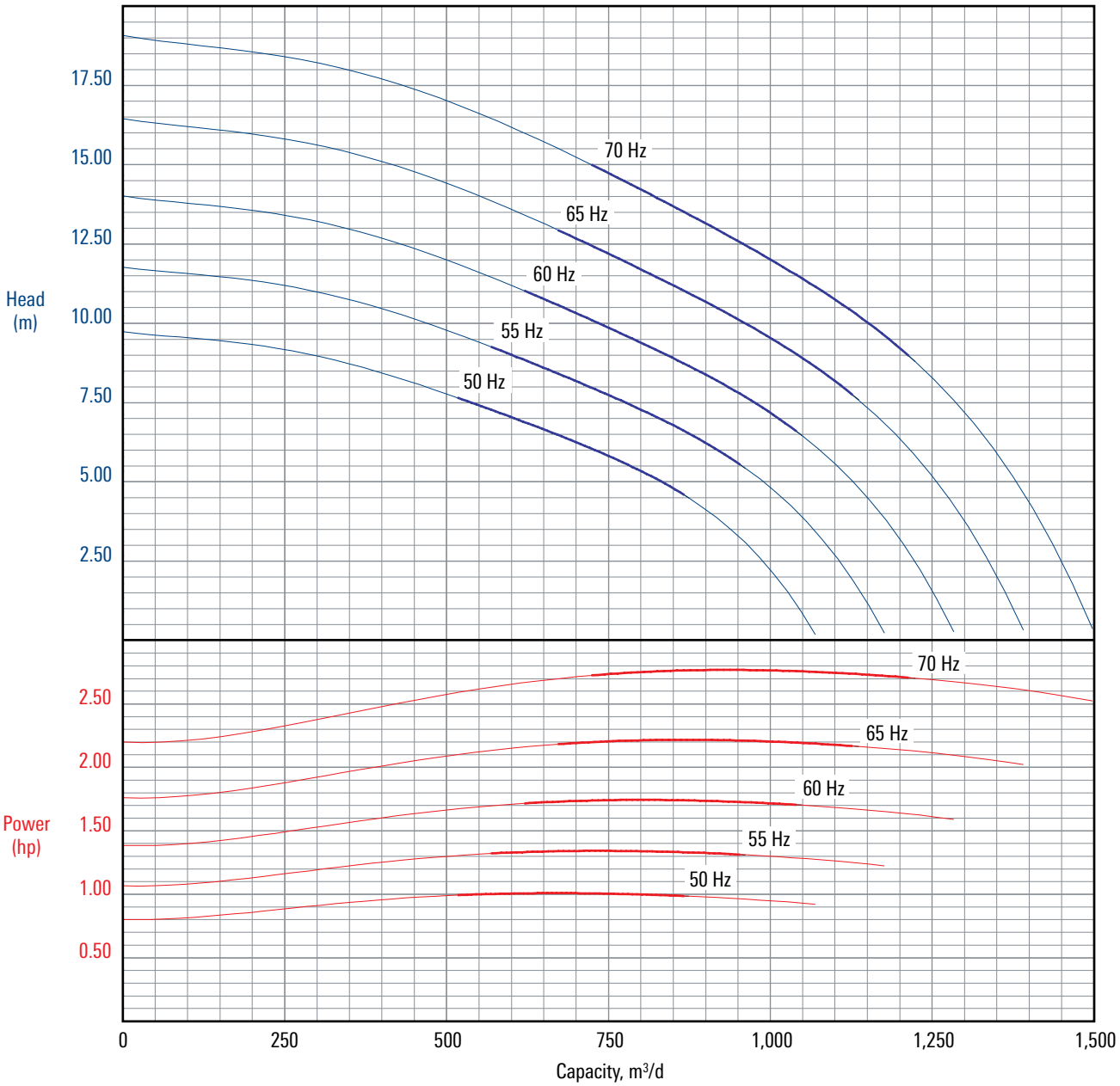
GN5200 Pump

REDA ESP systems

Pump Performance Curve GN5200

Curve computed for one stage in fluid of 1.00 sg



G6200N Pump

538 Series, Min. Casing Size 7-in [177.8-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	93 [42.2]	10	1238443	10	tba[†]	8	1245513
20	3.5 [1.07]	157 [71.3]	23	1238450	23	tba	18	1245521
30	4.9 [1.49]	221 [100.3]	36	1238468	36	tba	29	1245539
40	6.3 [1.92]	285 [129.4]	49	1238476	49	D238476	40	1245547
50	7.7 [2.35]	349 [158.4]	62	1238484	62	D238484	52	1245554
60	9.1 [2.78]	413 [187.5]	75	1238492	75	D238492	63	1245562
70	10.5 [3.20]	477 [216.6]	88	1238500	88	D23850P	74	1245570
80	11.9 [3.63]	541 [245.6]	101	1238518	101	D238518	86	1245588
90	13.3 [4.06]	605 [274.7]	114	1238526	114	D238526	97	1245596
100	14.7 [4.48]	669 [303.7]	127	1238534	127	D238534	109	1245604
110	16.1 [4.91]	733 [332.8]	140	1238542	140	D238542	120	1245612
120	17.5 [5.34]	797 [361.8]	154	1238559	154	100030144	131	1245620

[†] To be assigned

SN2600 Pump, 538 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	Number of Stages	60	70	80	90	100	110	120
130	163[†]	1	1					
140	176[†]		2					
150	189[†, ‡]		1[§]	1[§]				
160	202[†, ‡]			2[§]				
170	215[†, ‡]			1[§]	1[§]			

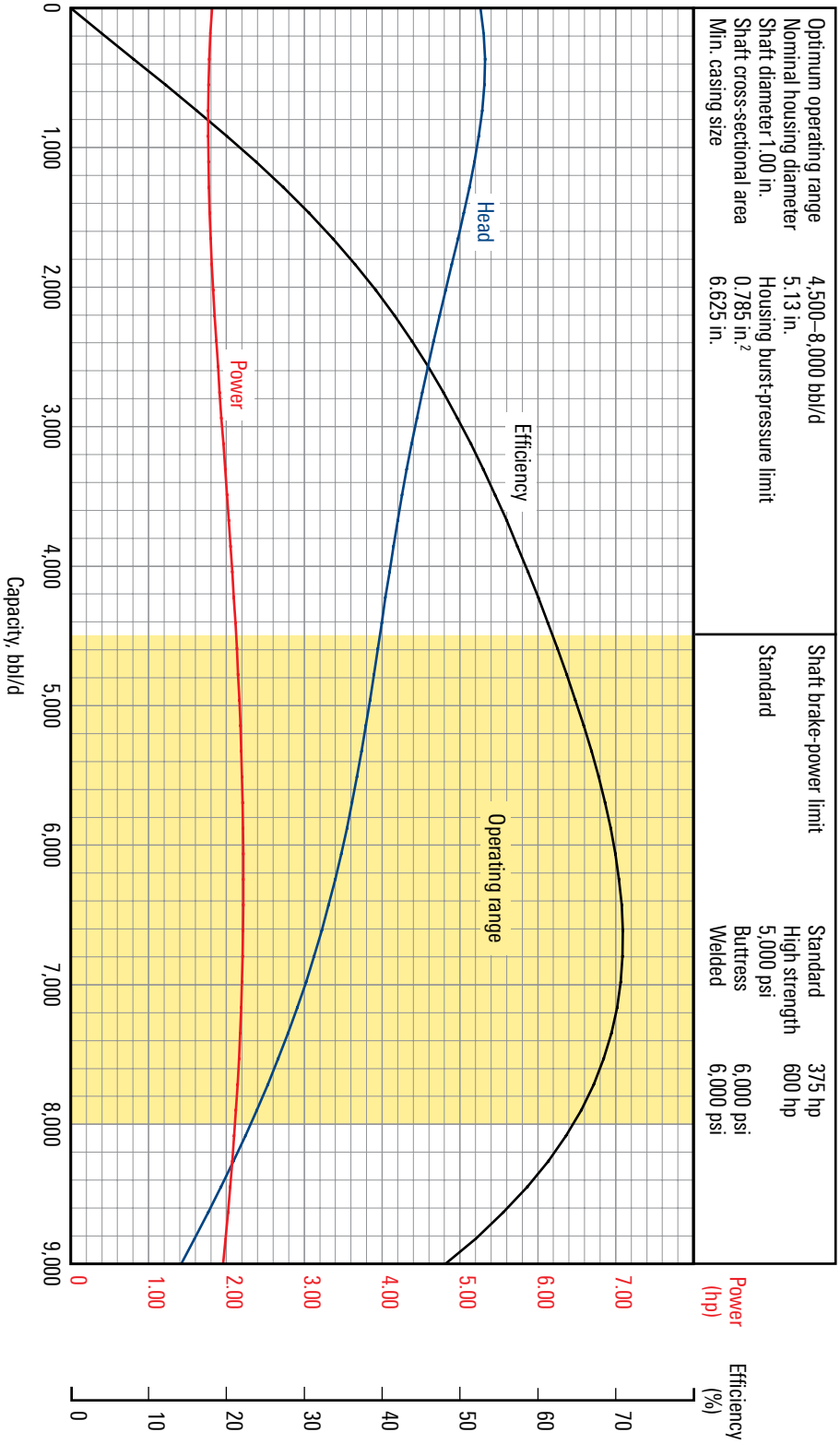
Note: Stage counts are for FL-CT-ES pumps
[†] Requires use of high-load bearing in protector
[‡] Requires use of buttress threads in uppermost pump
[§] Requires use of high-strength shaft in lowermost pump

G6200N Pump

G6200N Pump, 540 Series, Tandem Combinations									
		Tandem Housing Sections Number							
Pump Housing	Number of Stages	80	90	100	110	120	130	140	150
160	72	2							
170	77	1	1						
180	81	1		1					
190	86		1	1					
200	90†			2					
210	95†			1	1				
220	100†				2				
230	104†				1	1			
240	108†					2			
250	113†					1	1		
260	118†						2		
270	123†						1	1	
280	128†							2	
290	132†							1	1
300	136†								2
310	140†			2	1				
320	145†			1	2				
330	150†				3				
340	154†				2	1			
350	158†				1	2			
360	162†					3			
370	167†					2‡	1‡		
380	172†					1‡	2‡		
390	177†, §						3‡		
400	182†, §						2‡	1‡	
410	187†, §						1‡	2‡	
420	192†, §							3‡	
430	196†, §							2‡	1‡
440	200†, §							1‡	2‡
450	204†, §								3‡
460	207†, §			1‡		3‡			
470	212†, §				1‡	3‡			
480	216†, §					4‡			
490	221†, §					3‡, ††	1‡, ††		
500	226†, §					3‡, ††		1‡, ††	
510	231†, §					1‡, ††	3‡, ††		
520	236†, §						4‡, ††		
530	241†, §						3‡, ††	1‡, ††	
540	245†, §						3‡, ††	0‡, ††	1‡, ††
550	250†, §						2‡, ††	1‡, ††	1‡, ††
560	254†, §						2‡, ††	0‡, ††	2‡, ††
570	259†, §						1‡, ††	1‡, ††	2‡, ††
580	264†, §							2‡, ††	2‡, ††
590	268†, §							1‡, ††	3‡, ††
600	272†, §								4‡, ††

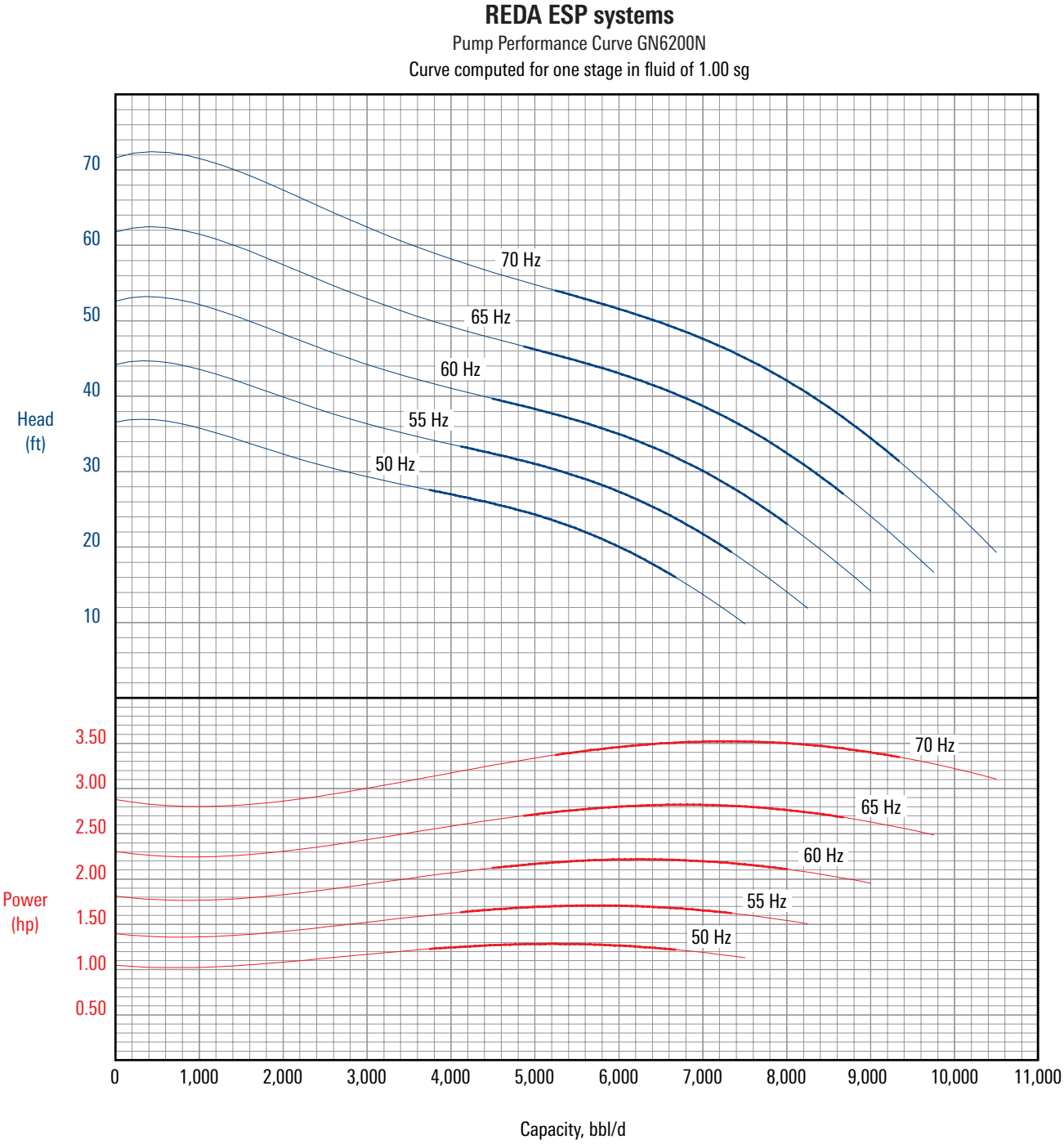
Note Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector for compression pumps
‡ Requires use of high-strength shaft in lowermost pump
§ Requires use of high-load bearing in protector for floater pumps
†† Requires use of buttress head

G6200N Pump

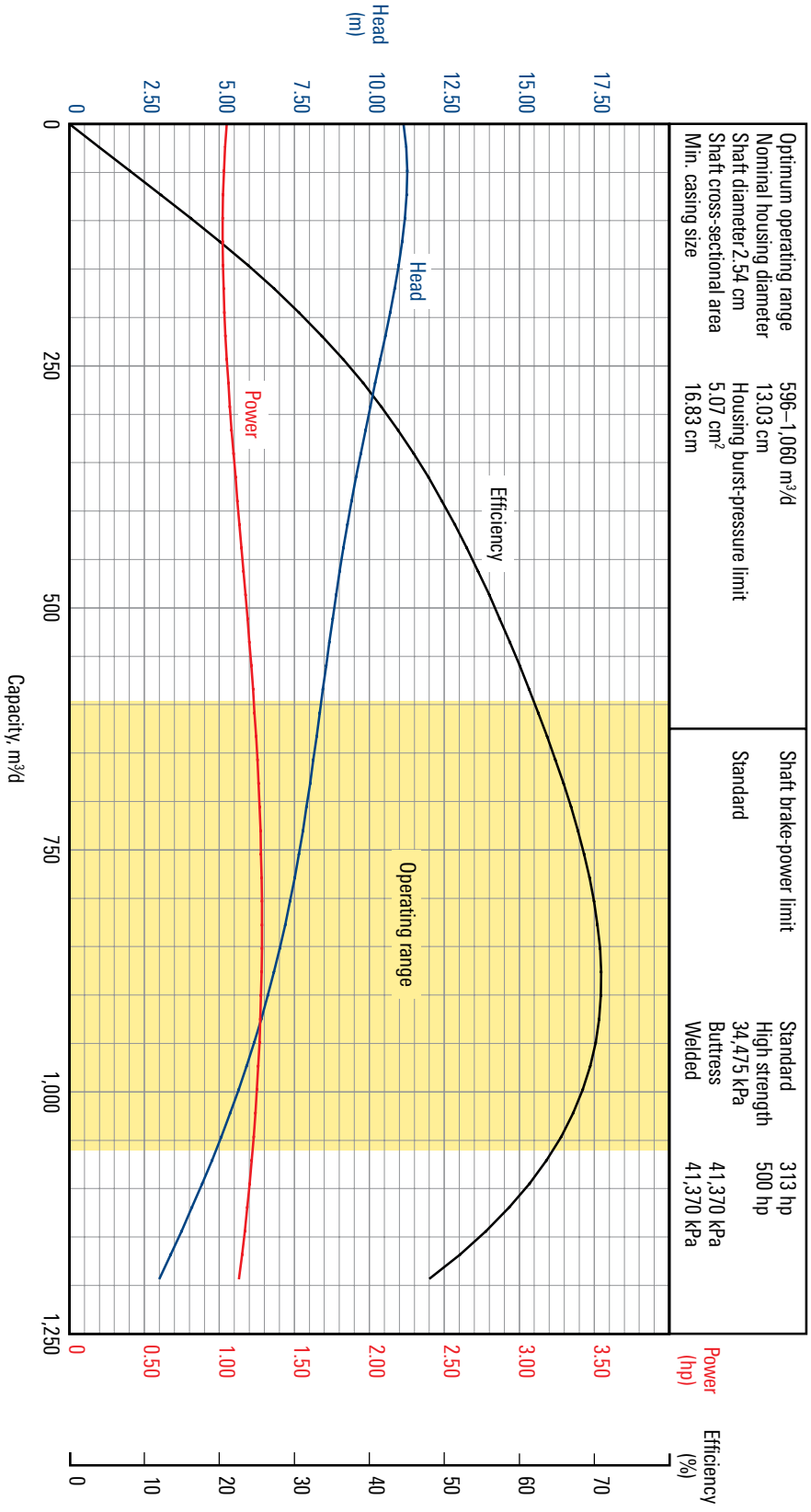


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

G6200N Pump


REDA ESP systems
Pump Performance Curve GN6200N
Curve computed for one stage in fluid of 1.00 sg
Head (ft)
70
60
50
40
30
20
10
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
Power (hp)
3.50
3.00
2.50
2.00
1.50
1.00
0.50
70 Hz
65 Hz
60 Hz
55 Hz
50 Hz
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
10,000
11,000
Capacity, bbl/d

G6200N Pump



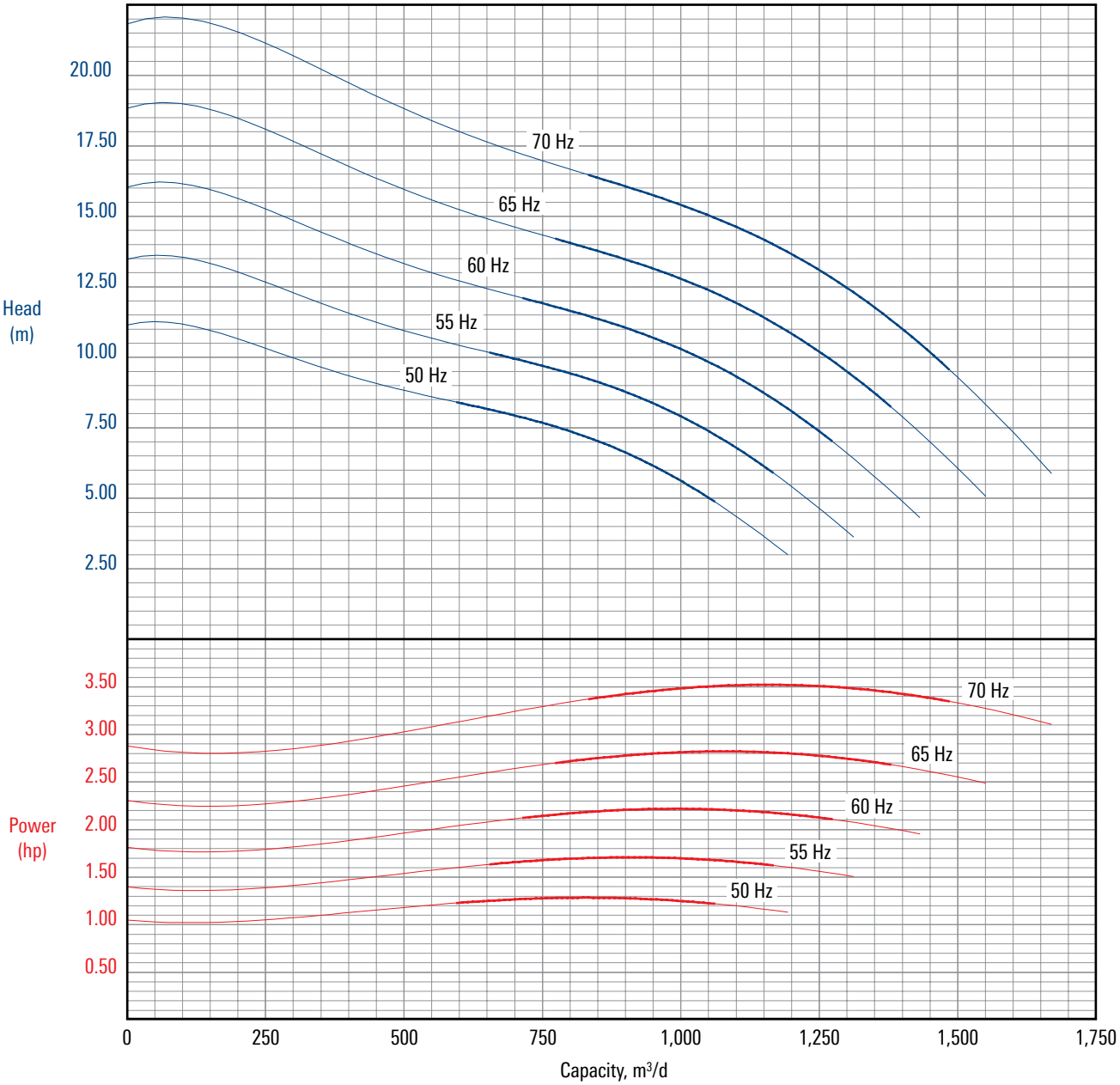
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

G6200N Pump

REDA ESP systems

Pump Performance Curve G6200N

Curve computed for one stage in fluid of 1.00 sg



GN10000 Pump

540 Series, Min. Casing Size 65/8-in [168.3-mm] OD								
			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	FL-CT Part Number	Max. Stages	FL-CT-ES Part Number	Max. Stages	FL-CT-ARZ Part Number
10	2.1 [0.64]	77 [35.0]	2	0885194	2	tba†	2	tba
20	3.5 [1.07]	145 [65.8]	6	0885202	6	tba	6	tba
30	4.9 [1.49]	213 [96.7]	10	0885210	10	tba	10	tba
40	6.3 [1.92]	281 [127.6]	14	0885228	14	tba	14	tba
50	7.7 [2.35]	349 [158.4]	18	0885236	18	tba	18	tba
60	9.1 [2.78]	417 [189.3]	22	0885244	22	tba	22	tba
70	10.5 [3.20]	485 [220.2]	26	0885251	26	tba	26	tba
80	11.9 [3.63]	553 [251.1]	30	0885269	30	tba	30	tba
90	13.3 [4.06]	621 [281.9]	34	0885277	34	tba	34	tba
100	14.7 [4.48]	689 [312.8]	38	0885285	38	tba	38	tba
110	16.1 [4.91]	757 [343.7]	42	0885293	42	tba	42	tba
120	17.5 [5.34]	825 [374.6]	46	0885301	46	tba	46	tba
130	18.9 [5.76]	893 [405.4]	50	0885319	50	tba	50	tba
140	20.3 [6.19]	961 [463.3]	54	0885327	54	tba	54	tba
150	21.7 [6.62]	1,029 [467.2]	58	0885335	58	100012580	58	tba

† To be assigned

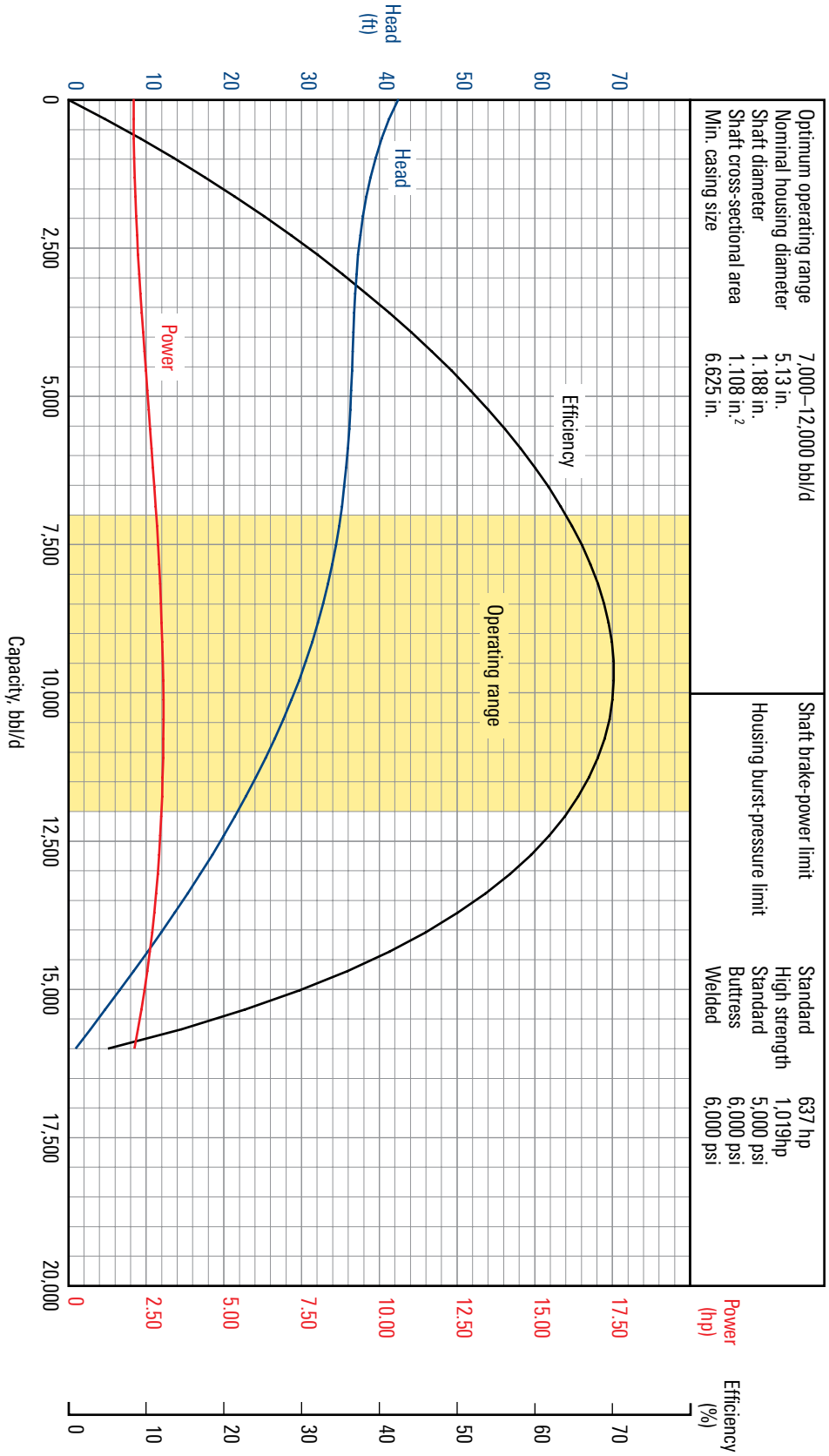
GN10000 Pump

GN10000 Pump, 540 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**
160	60	2						
170	64	1	1					
180	68		2					
190	72		1	1				
200	76			2				
210	80			1	1			
220	84				2			
230	88				1	1		
240	92					2		
250	96					1	1	
260	100						2	
270	104						1	1
280	108							2
290	112							1
300	116							
310	118†			2	1			
320	122†			1	2			
330	126†				3			
340	130†				2	1		
350	134†				1	2		
360	138†					3		
370	142†					2	1	
380	146†					1	2	
390	150†						3	
400	154†						2	1
410	158†						1	2
420	162†							3
430	166†							2
440	170†							1
450	174†							
460	178†			1		3		
470	182†				1	3		
480	186†					4		
490	190†					3	1	
500	194†						3	
510	200†					1	3	
520	204†						4	
530	208†						3	1

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector

GN10000 Pump



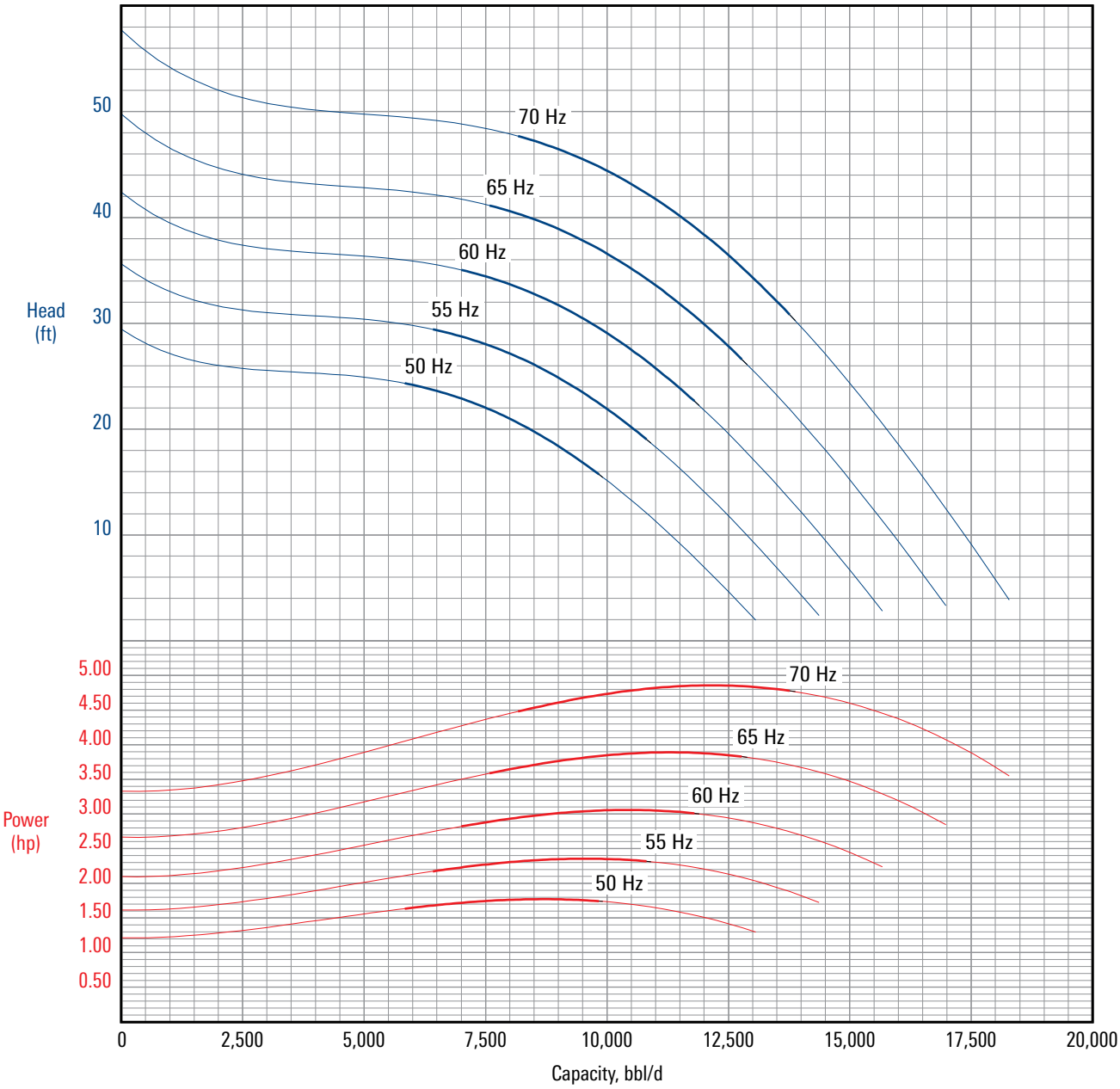
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN10000 Pump

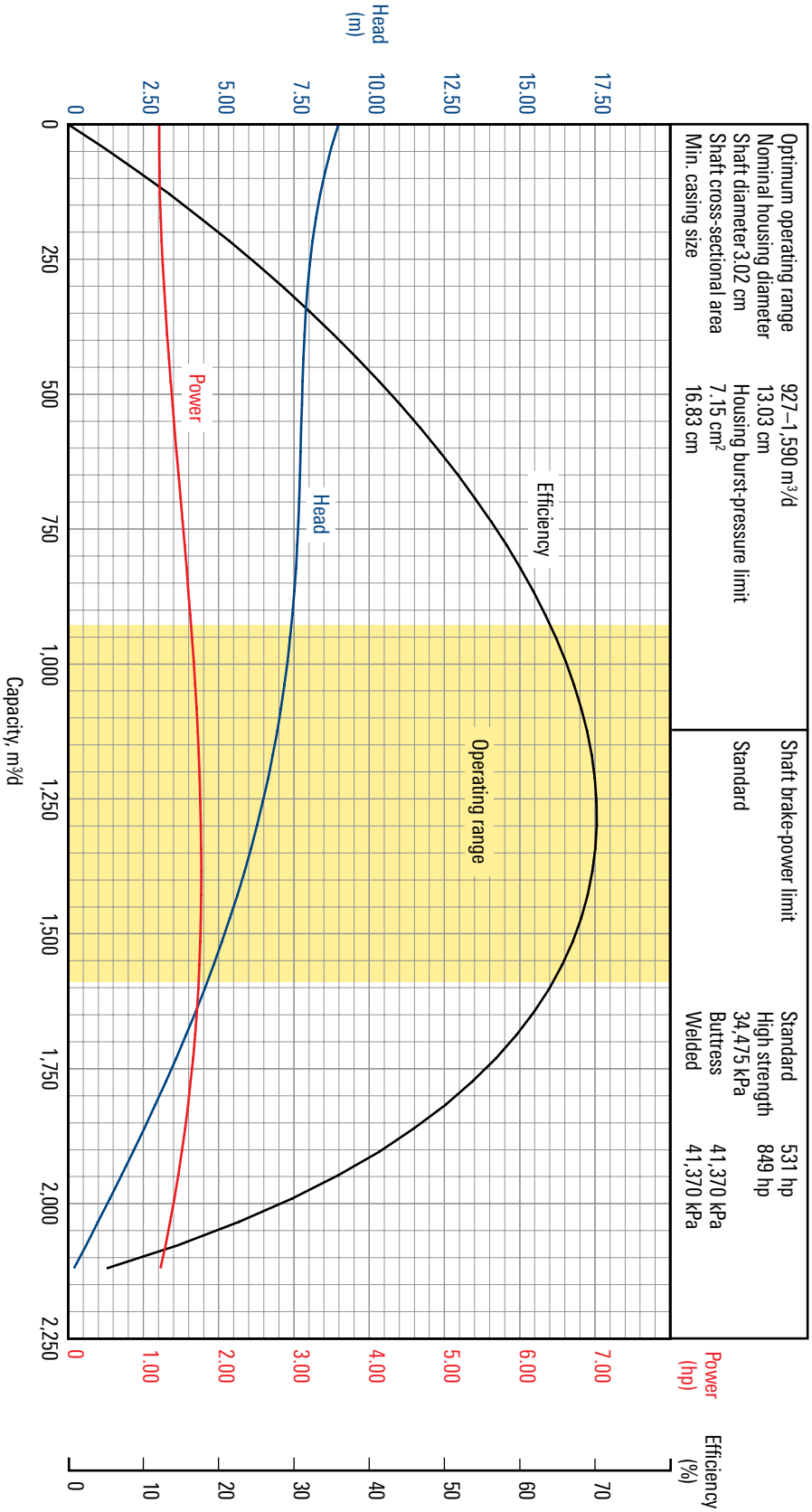
REDA ESP systems

Pump Performance Curve GN10000

Curve computed for one stage in fluid of 1.00 sg



GN10000 Pump



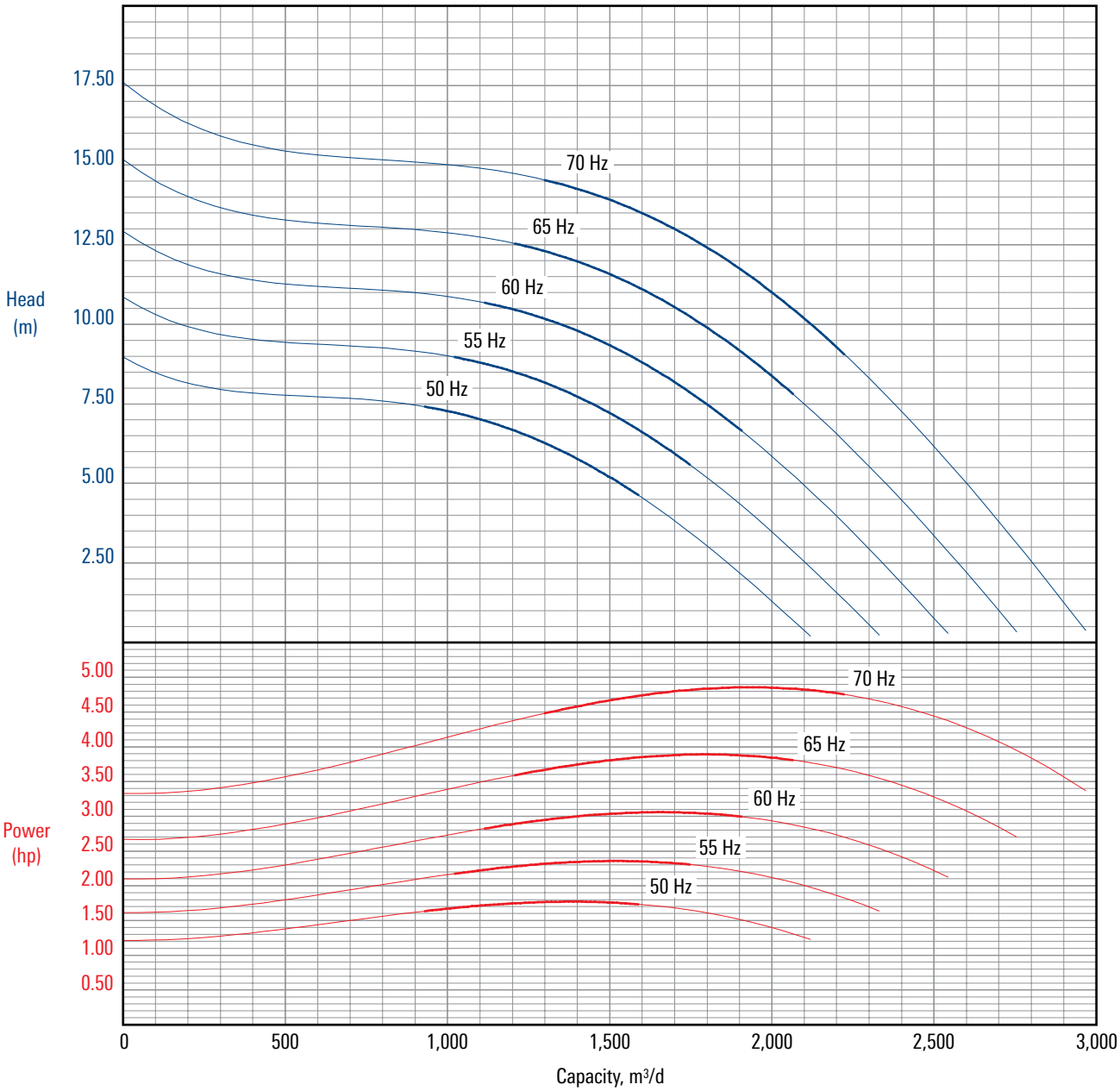
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

GN10000 Pump

REDA ESP systems

Pump Performance Curve GN10000

Curve computed for one stage in fluid of 1.00 sg



HN13500 Pump

562 Series, Min. Casing Size 7-in [177.8-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT Part Number**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ Part Number**
10	2.1 [0.64]	98 [44.5]	3	tba†	3	tba	3	1141514
20	3.5 [1.07]	163 [74.0]	7	tba	7	tba	7	1141522
30	4.9 [1.49]	228 [103.5]	11	tba	11	tba	11	1141530
40	6.3 [1.92]	293 [133.0]	15	tba	15	tba	15	1141548
50	7.7 [2.35]	356 [161.6]	20	1299734	20	1241157	20	1141555
60	9.1 [2.78]	410 [186.1]	24	1229327	24	tba	24	1141563
70	10.5 [3.20]	473 [214.7]	28	1229244	28	tba	28	1141571
80	11.9 [3.63]	532 [241.5]	32	1294651	32	1246644	32	1141589
90	13.3 [4.06]	599 [271.9]	37	tba	37	tba	37	1141597
100	14.7 [4.48]	658 [298.7]	41	1229269	41	1246651	41	1141605
110	16.1 [4.91]	716 [325.1]	45	tba	45	tba	45	1141613
120	17.5 [5.34]	774 [351.4]	49	tba	49	tba	49	1141621
130	18.9 [5.76]	833 [378.2]	54	tba	54	tba	54	1141639
140	20.3 [6.19]	891 [404.5]	58	1253988	58	tba	58	1141647

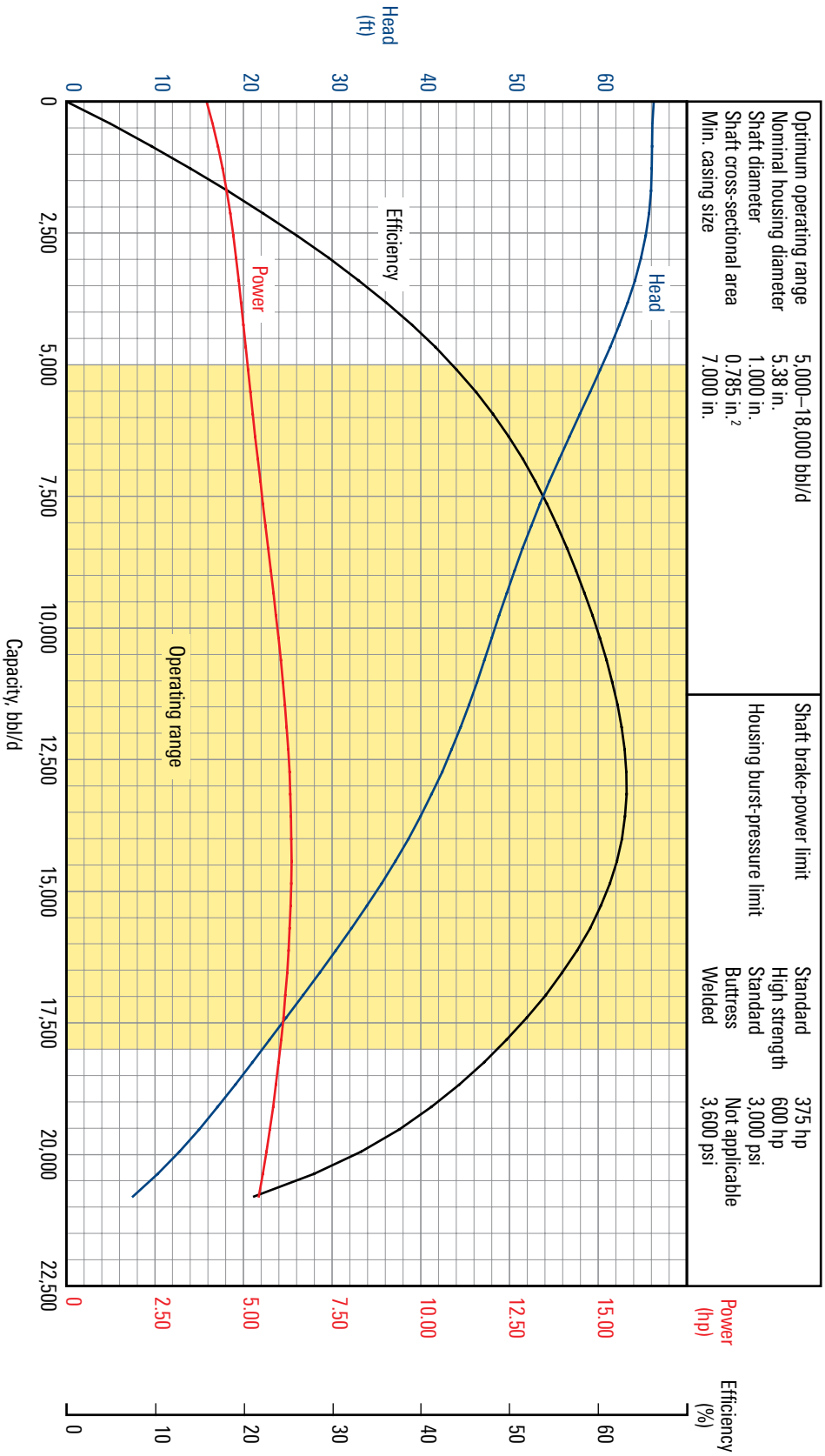
† To be assigned

562 Series, Min. Casing Size 7-in [177.8-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-LT Part Number**	**Max. Stages**	**C-LT-ES Part Number**	**Max. Stages**	**C-LT-ARZ Part Number**
10	2.1 [0.64]	98 [44.5]	3	tba†	3	tba	3	1136142
20	3.5 [1.07]	163 [74.0]	7	tba	7	tba	7	1136159
30	4.9 [1.49]	228 [103.5]	11	tba	11	tba	11	1136167
40	6.3 [1.92]	293 [133.0]	15	tba	15	tba	15	1136175
50	7.7 [2.35]	356 [161.6]	20	tba	20	tba	20	1136183
60	9.1 [2.78]	410 [186.1]	24	tba	24	tba	24	1136191
70	10.5 [3.20]	473 [214.7]	28	tba	28	tba	28	1136209
80	11.9 [3.63]	532 [241.5]	32	tba	32	tba	32	1136217
90	13.3 [4.06]	599 [271.9]	37	tba	37	tba	37	1136225
100	14.7 [4.48]	658 [298.7]	41	tba	41	tba	41	1136233
110	16.1 [4.91]	716 [325.1]	45	tba	45	tba	45	1136241
120	17.5 [5.34]	774 [351.4]	49	tba	49	tba	49	1136258
130	18.9 [5.76]	833 [378.2]	54	tba	54	tba	54	1136266
140	20.3 [6.19]	891 [404.5]	58	tba	58	tba	58	1136274

† To be assigned

HN13500 Pump



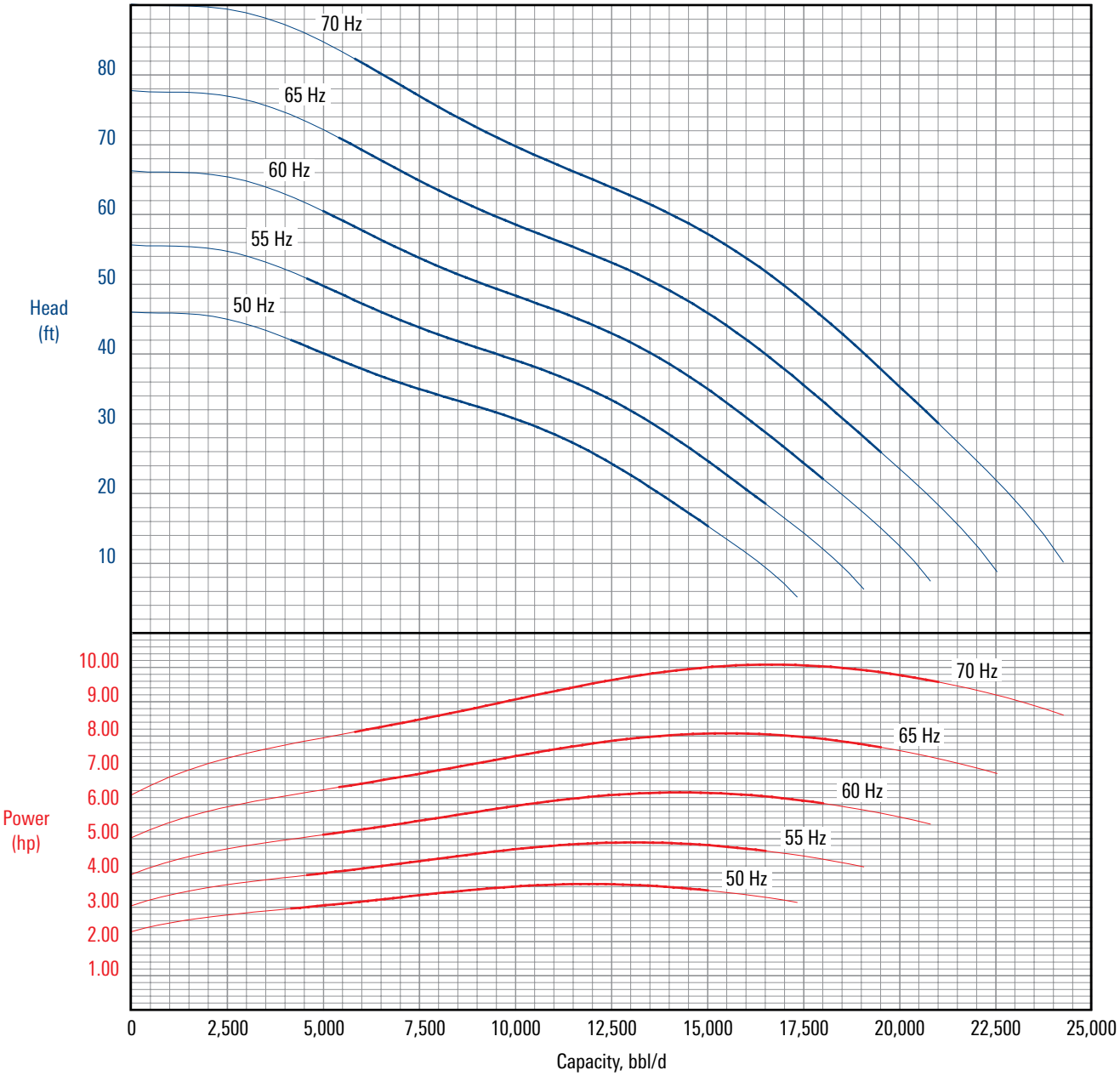
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

HN13500 Pump

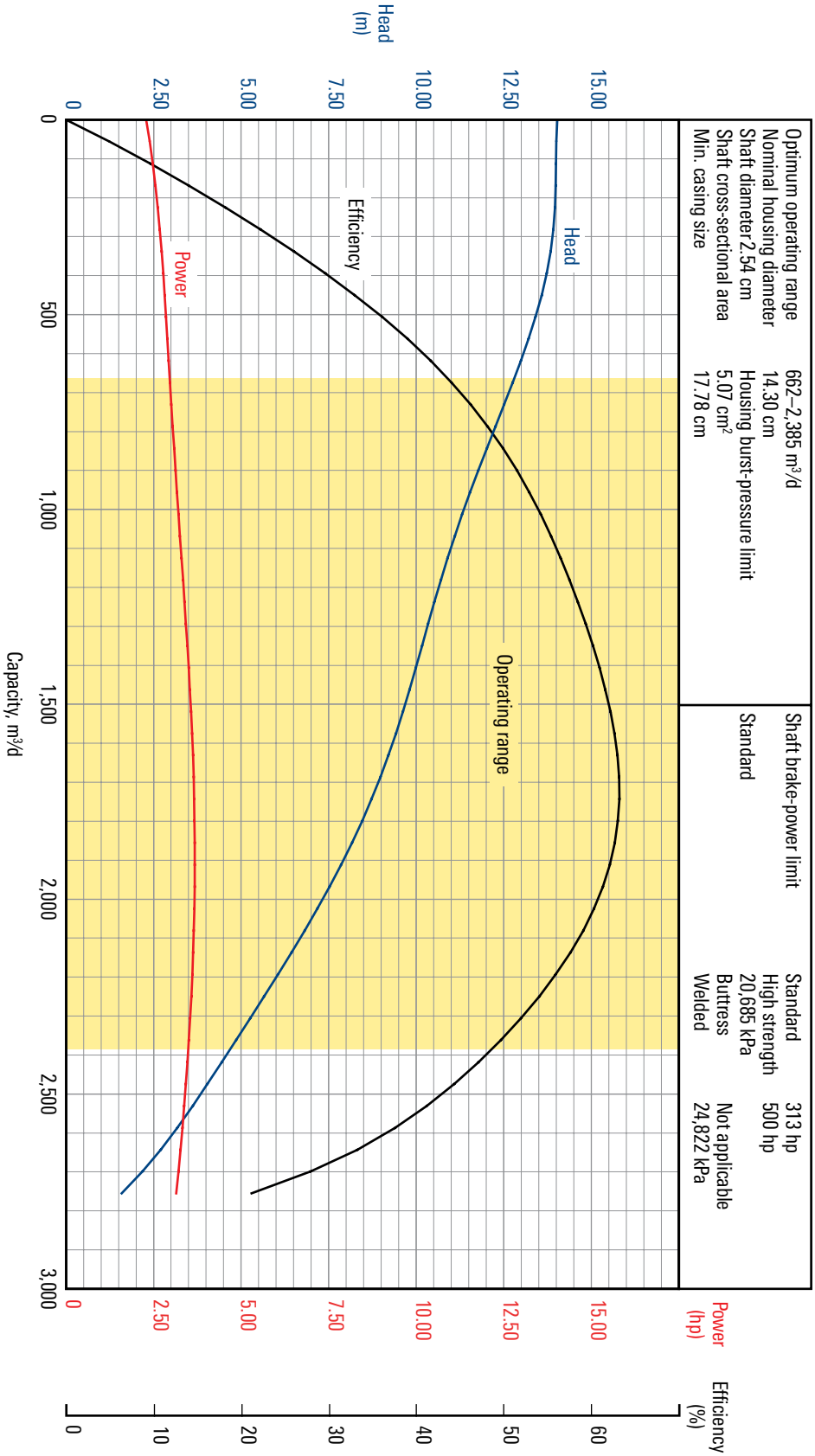
REDA ESP systems

Pump Performance Curve HN13500

Curve computed for one stage in fluid of 1.00 sg



HN13500 Pump



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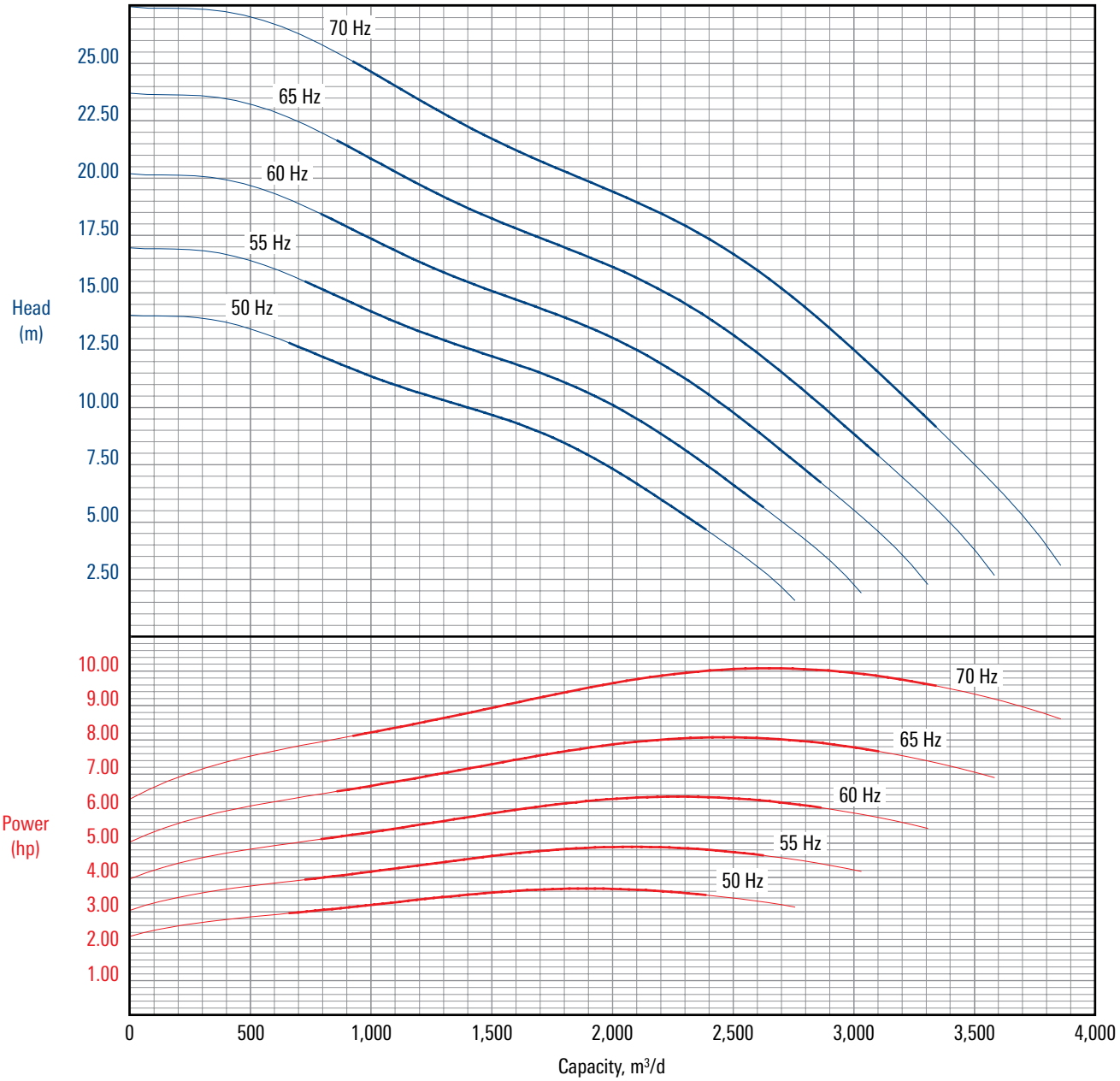
HN13500 Pump

REDA ESP systems

Pump Performance Curve HN13500

Curve computed for one stage in fluid of 1.00 sg



H15500N Pump

562 Series, Min. Casing Size 7-in [177.8-mm] OD

			ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ Part Number**
50	7.7 [2.35]	356 [161.6]	15	2010435	15	2010433
60	9.1 [2.78]	410 [186.1]	18	tba†	18	tba
70	10.5 [3.20]	473 [214.7]	21	tba	21	tba
80	11.9 [3.63]	532 [241.5]	24	2010436	24	2010434
90	13.3 [4.06]	599 [271.9]	27	tba	27	tba
100	14.7 [4.48]	658 [298.7]	30	tba	30	2010446
110	16.1 [4.91]	716 [325.1]	33	tba	33	tba
120	17.5 [5.34]	774 [351.4]	37	tba	37	tba
130	18.9 [5.76]	833 [378.2]	40	tba	40	tba
140	20.3 [6.19]	891 [404.5]	43	tba	43	tba
150	21.7 [6.62]	949 [430.8]	46	tba	46	tba

†To be assigned

562 Series, Min. Casing Size 7-in [177.8-mm] OD

			ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-LT-ES Part Number**	**Max. Stages**	**C-LT-ARZ Part Number**
50	7.7 [2.35]	356 [161.6]	15	2010431	15	2010429
60	9.1 [2.78]	410 [186.1]	18	tba†	18	tba
70	10.5 [3.20]	473 [214.7]	21	tba	21	2010461
80	11.9 [3.63]	532 [241.5]	24	2010432	24	2010430
90	13.3 [4.06]	599 [271.9]	27	tba	27	tba
100	14.7 [4.48]	658 [298.7]	30	tba	30	2010447
110	16.1 [4.91]	716 [325.1]	33	tba	33	tba
120	17.5 [5.34]	774 [351.4]	37	tba	37	tba
130	18.9 [5.76]	833 [378.2]	40	tba	40	2010437
140	20.3 [6.19]	891 [404.5]	43	tba	43	tba
150	21.7 [6.62]	949 [430.8]	46	tba	46	tba

†To be assigned

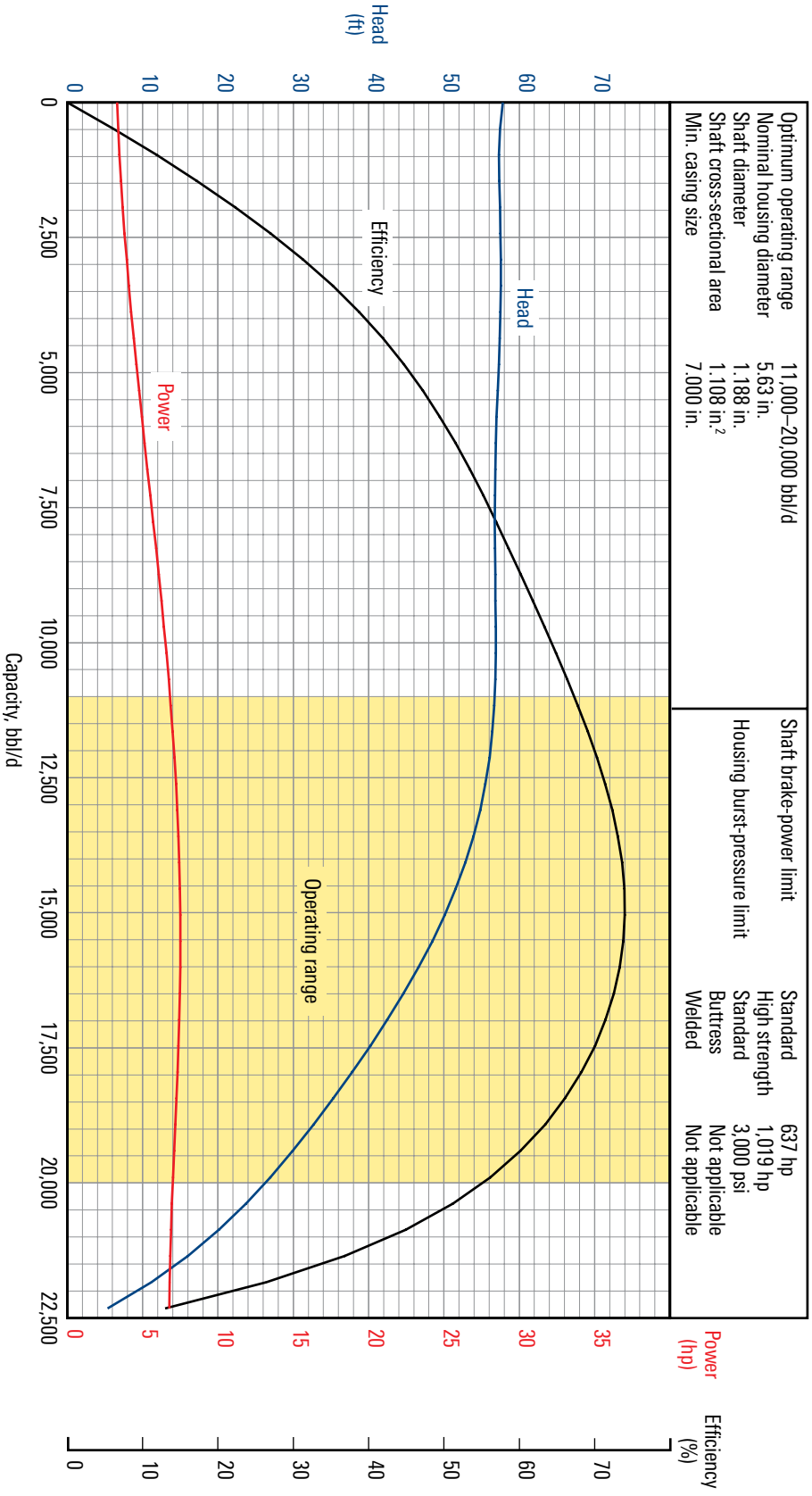
H15500N Pump

H15500N Pump, 562 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	48†	2							
170	51†	1	1						
180	54†	1		1					
190	57†		1	1					
200	60†			2					
210	63†			1	1				
220	66†				2				
230	70†				1	1			
240	74†					2			
250	77†					1	1		
260	80†						2		
270	83†						1	1	
280	86†							2‡	
290	89†							1‡	1‡
300	92†							2‡	
310	93†			2‡	1‡				
320	96†, §			1‡	2‡				

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector for compression pumps.
‡ Requires use of high-strength shaft in lowermost pump.
§ Requires use of high-load bearing in protector for floater pumps.

H15500N Pump



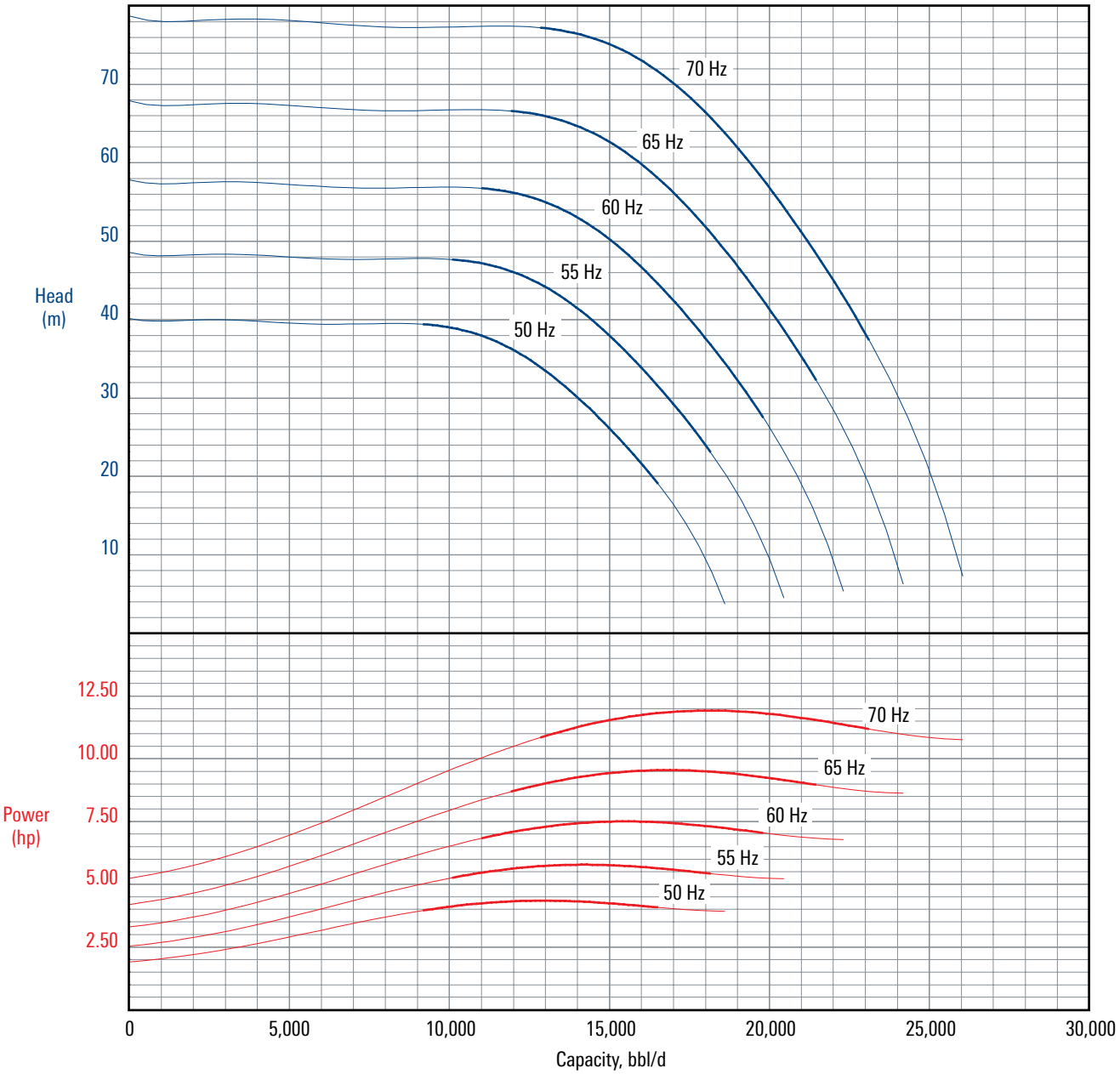
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

H15500N Pump

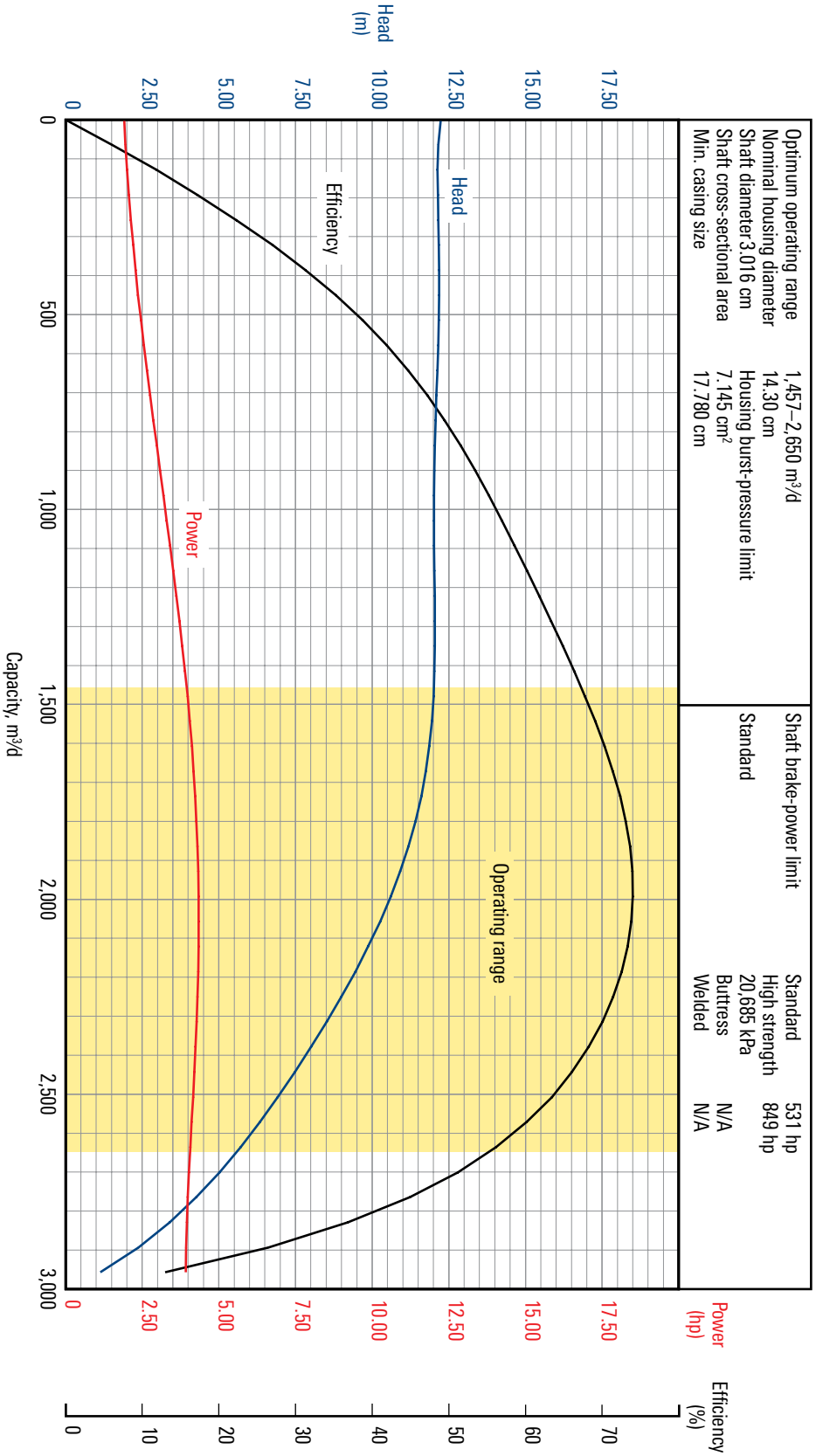
REDA ESP systems

Pump Performance Curve H15500N

Curve computed for one stage in fluid of 1.00 sg



H15500N Pump



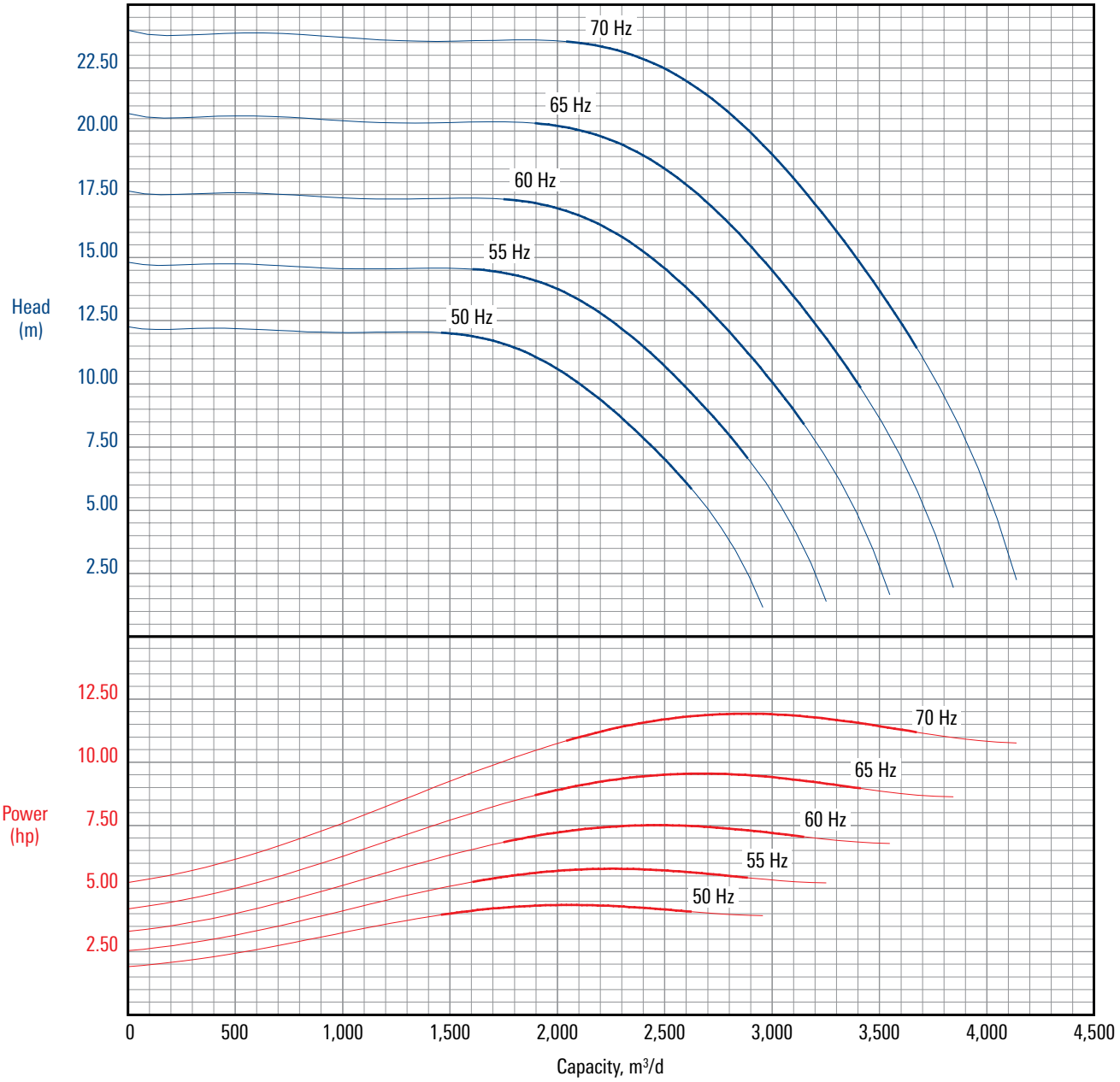
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

H15500N Pump

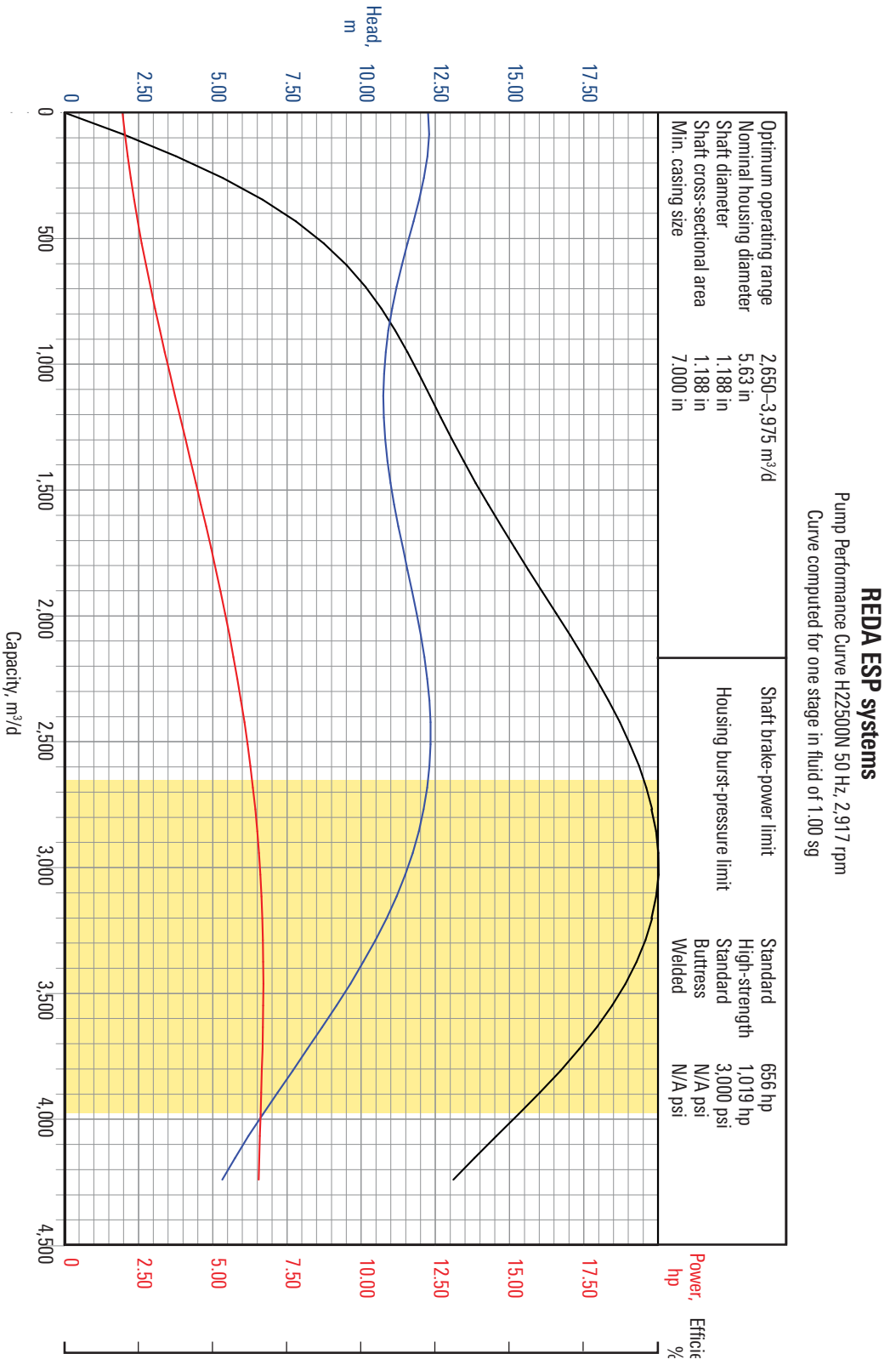
REDA ESP systems

Pump Performance Curve H15500N

Curve computed for one stage in fluid of 1.00 sg

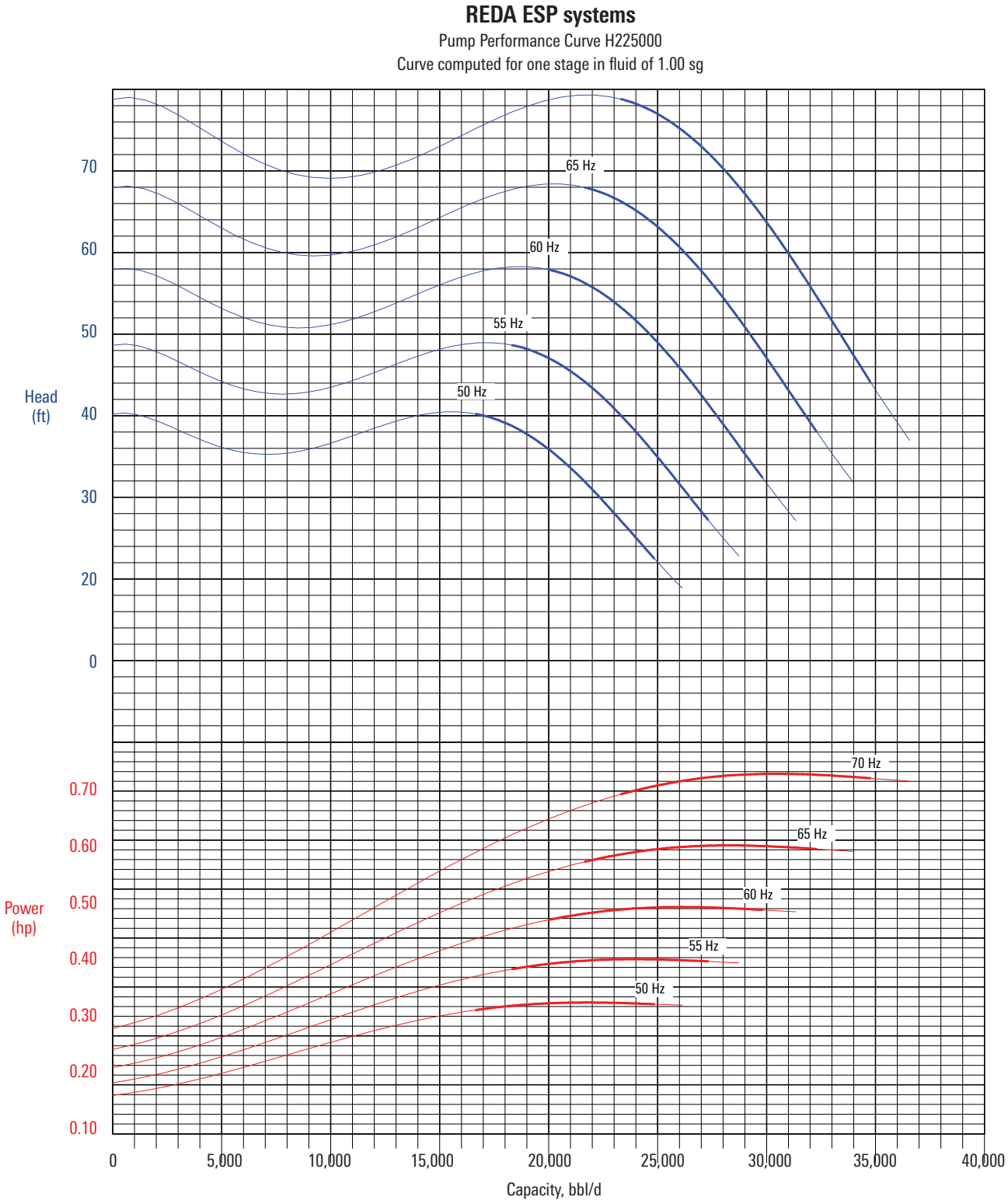


H22500N Pump

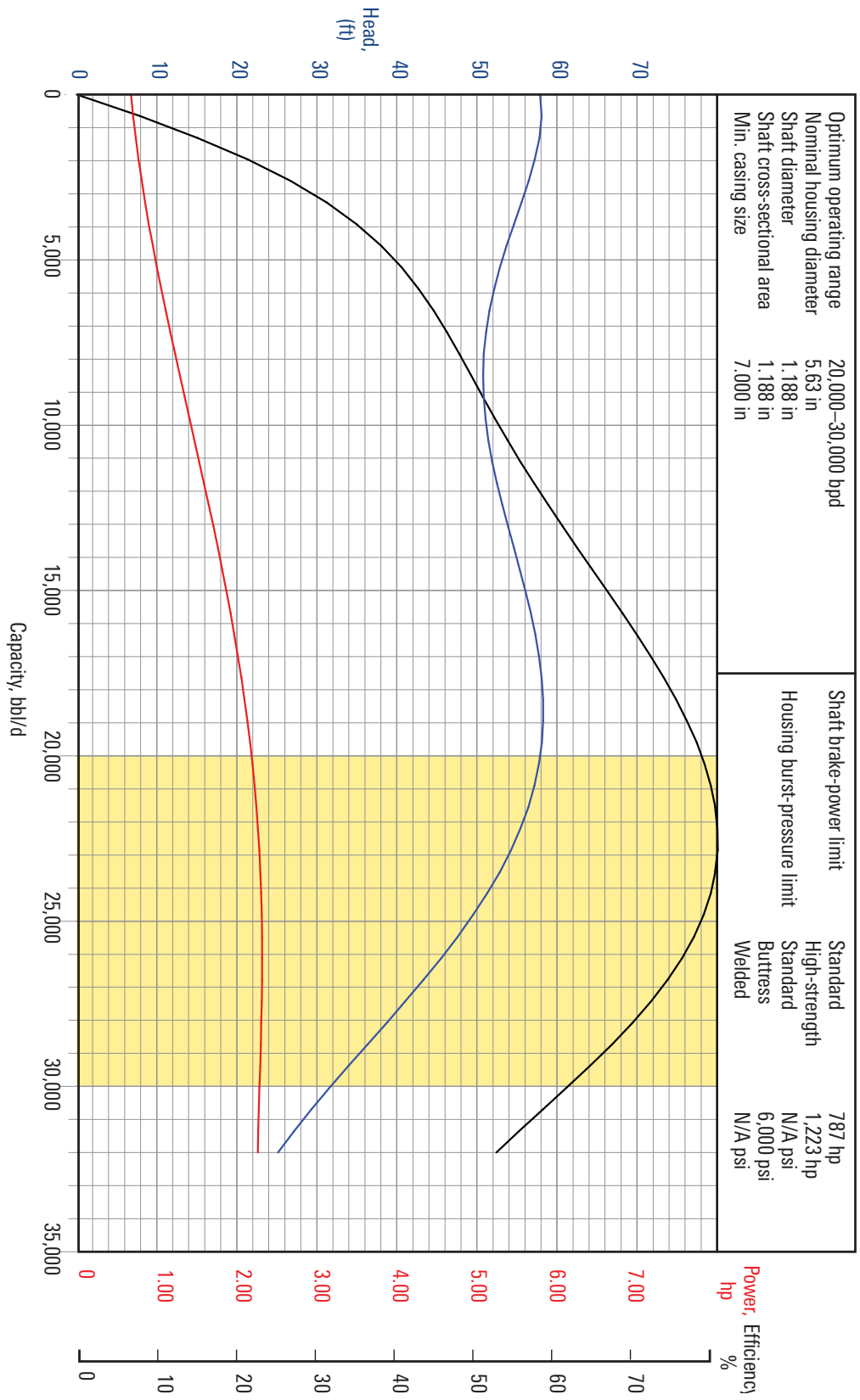


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

H22500N Pump



H22500N Pump



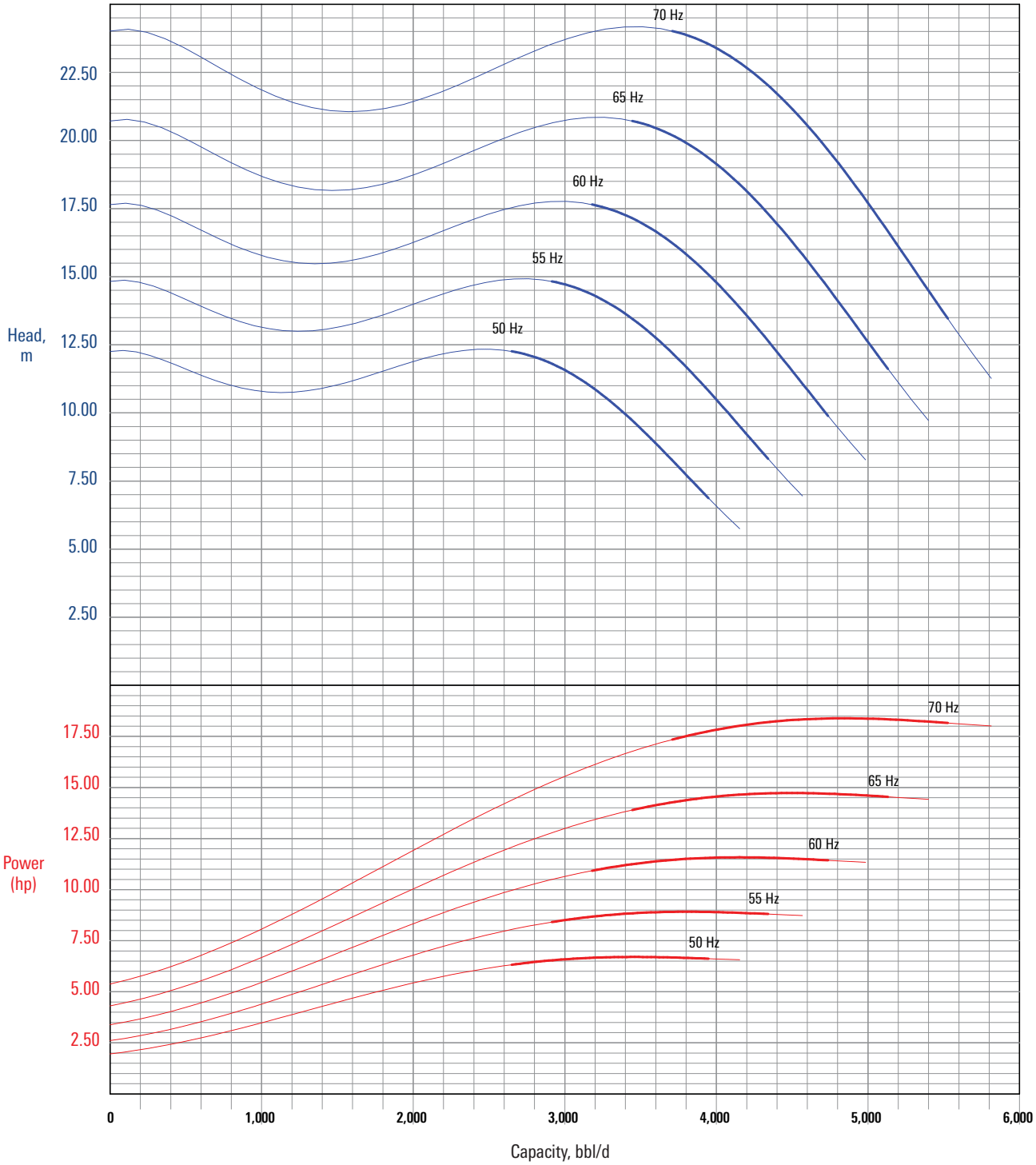
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

H22500N Pump

REDA ESP systems

Pump Performance Curve H22500N

Curve computed for one stage in fluid of 1.00 sg



H28000N Pump

675 Series, Min. Casing Size 85/8-in [219.1-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	C-CT Part Number	Max. Stages	C-CT-ES Part Number	Max. Stages	C-CT-ARZ Part Number
10	2.7 [0.82]	195 [88.5]	2	tba†	2	tba	2	tba
20	4.1 [1.25]	276 [125.3]	6	tba	6	tba	6	tba
30	5.4 [1.65]	357 [162.1]	9	tba	9	tba	9	100051081
40	6.8 [2.07]	438 [198.9]	13	tba	13	tba	13	tba
50	8.2 [2.50]	519 [235.6]	16	tba	16	tba	16	tba
60	9.6 [2.93]	600 [272.4]	19	tba	19	tba	19	tba
70	10.9 [3.32]	681 [309.2]	23	1307461	23	1307479	23	1307487
80	12.3 [3.75]	762 [345.9]	26	tba	26	tba	26	tba
90	13.7 [4.18]	843 [382.7]	29	tba	29	tba	29	tba
100	15.1 [4.61]	924 [419.5]	33	tba	33	D32468V	33	tba
110	16.4 [5.00]	1,005 [456.3]	36	tba	36	tba	36	tba
120	17.8 [5.43]	1,086 [493.0]	40	tba	40	tba	40	tba
130	19.2 [5.86]	1,167 [529.8]	43	tba	43	tba	43	tba
140	20.6 [6.28]	1,248 [566.6]	47	tba	47	tba	47	tba
150	21.9 [6.68]	1,329 [603.4]	50	tba	50	tba	50	tba

† To be assigned

675 Series, Min. Casing Size 85/8-in [219.1-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	C-LT Part Number	Max. Stages	C-LT-ES Part Number	Max. Stages	C-LT-ARZ Part Number
10	2.9 [0.88]	207 [63.1]	2	tba†	2	tba	2	tba
20	4.3 [1.31]	288 [87.8]	6	tba	6	tba	6	tba
30	5.6 [1.71]	369 [112.6]	9	tba	9	tba	6	tba
40	7.0 [2.14]	450 [137.3]	13	tba	13	tba	13	tba
50	8.4 [2.56]	531 [162.0]	16	tba	16	tba	16	tba
60	9.8 [2.99]	612 [186.7]	19	2006213	19	tba	19	tba
70	11.1 [3.39]	693 [211.4]	23	1307495	23	1307503	23	1307511
80	12.5 [3.81]	774 [236.1]	26	tba	26	tba	26	tba
90	13.9 [4.24]	855 [260.8]	29	tba	29	D32463V	29	tba
100	15.3 [4.67]	936 [285.5]	33	tba	33	tba	33	tba
110	16.6 [5.06]	1,017 [310.2]	36	tba	36	tba	36	tba
120	18.0 [5.49]	1,098 [334.9]	40	tba	40	tba	40	tba
130	19.4 [5.92]	1,179 [359.6]	43	1339050	43	tba	43	tba
140	20.8 [6.34]	1,260 [384.3]	47	tba	47	tba	47	tba
150	22.1 [6.74]	1,341 [409.0]	50	tba	50	tba	50	tba

† To be assigned

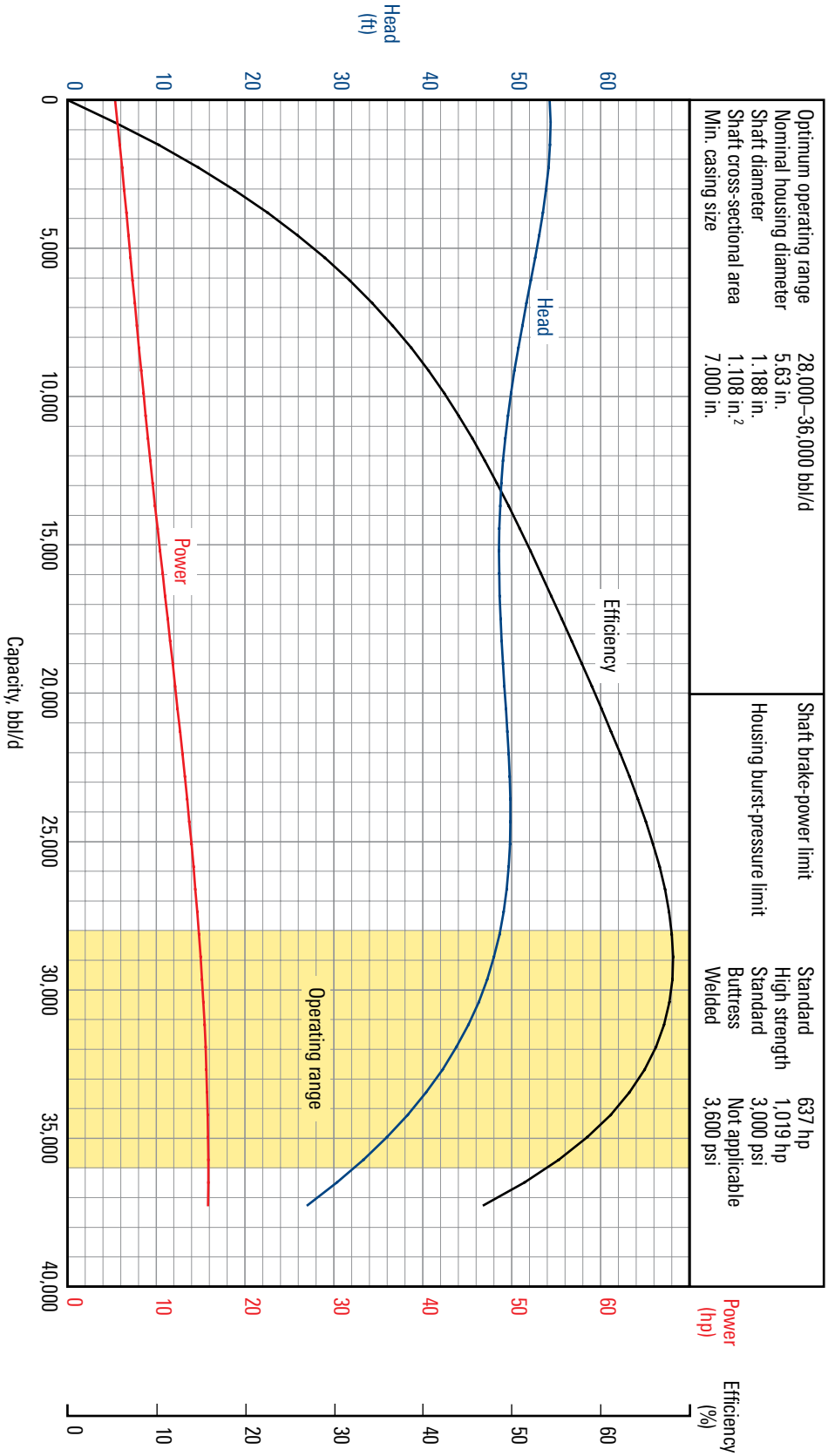
H28000N Pump

H28000N Pump, 562 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	50	2†							
170	53	1†	1†						
180	56		2†						
190	59		1†	1†					
200	62			2†					

† Note: Stage counts are for C-CT-ES pumps
Requires use of high-strength shaft in lowermost pump

H28000N Pump

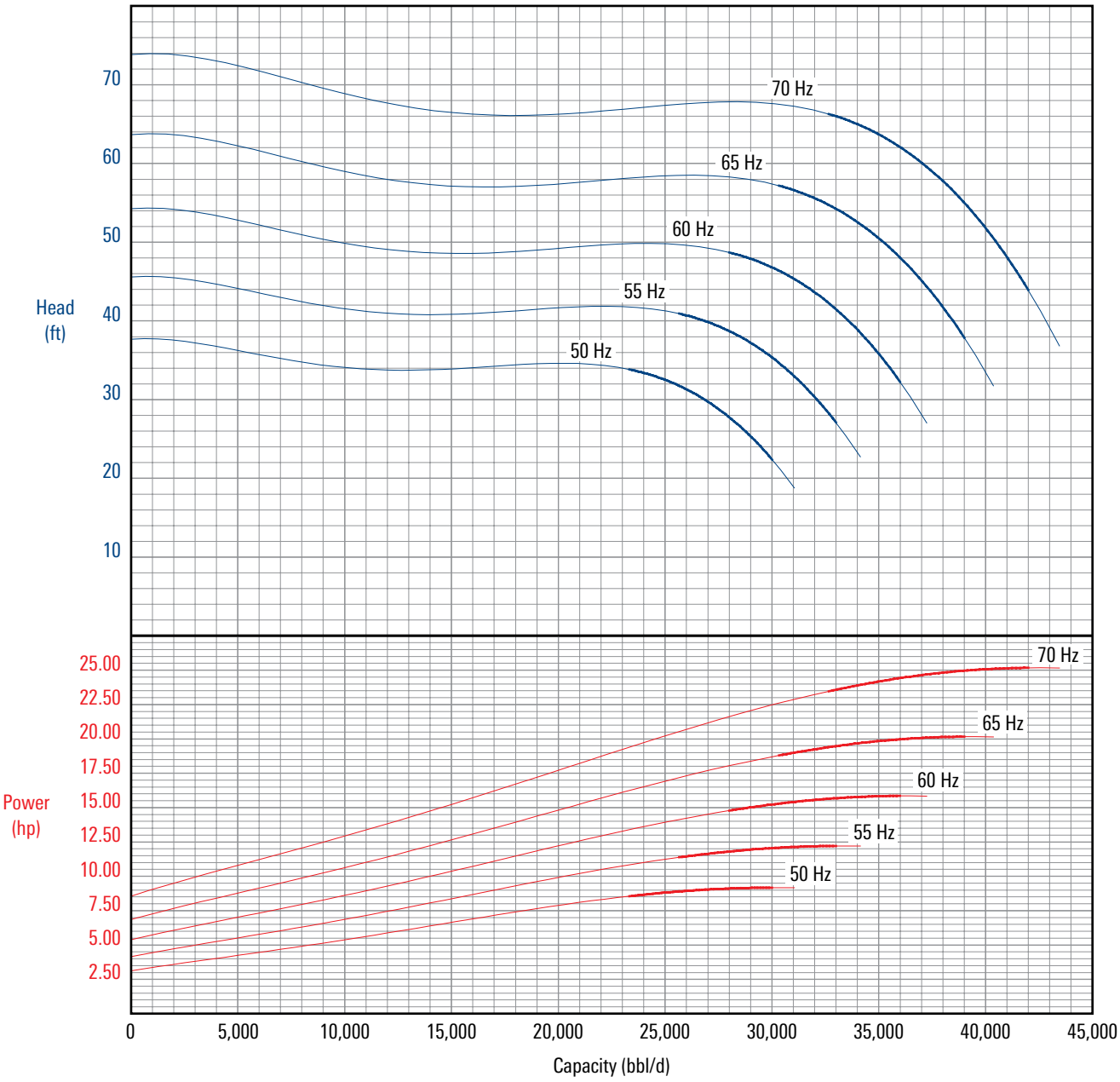


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

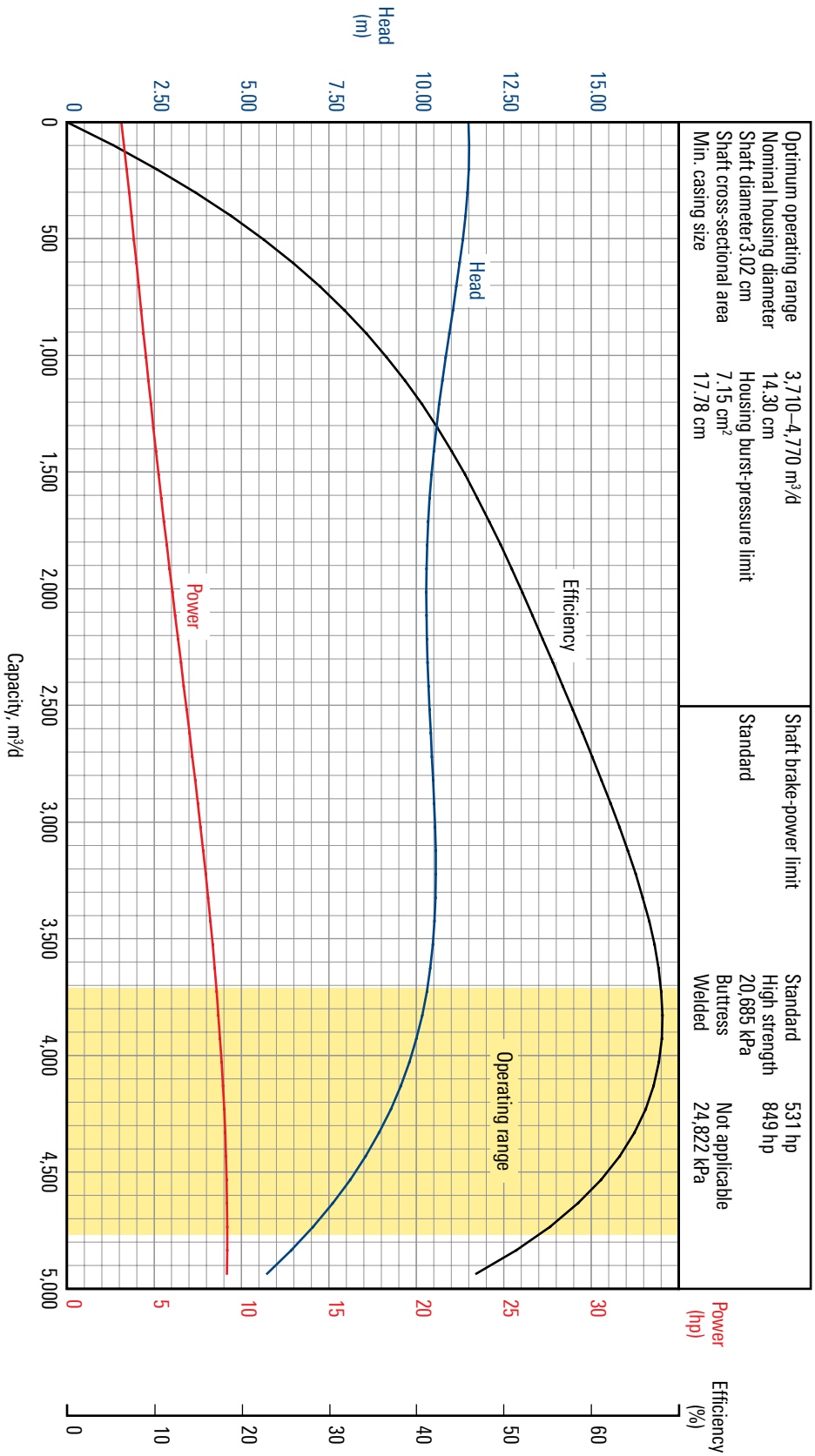
H28000N Pump

REDA* Pump H28000N Performance Curve

Curve computed for one stage in fluid of 1.00 sg.



H28000N Pump



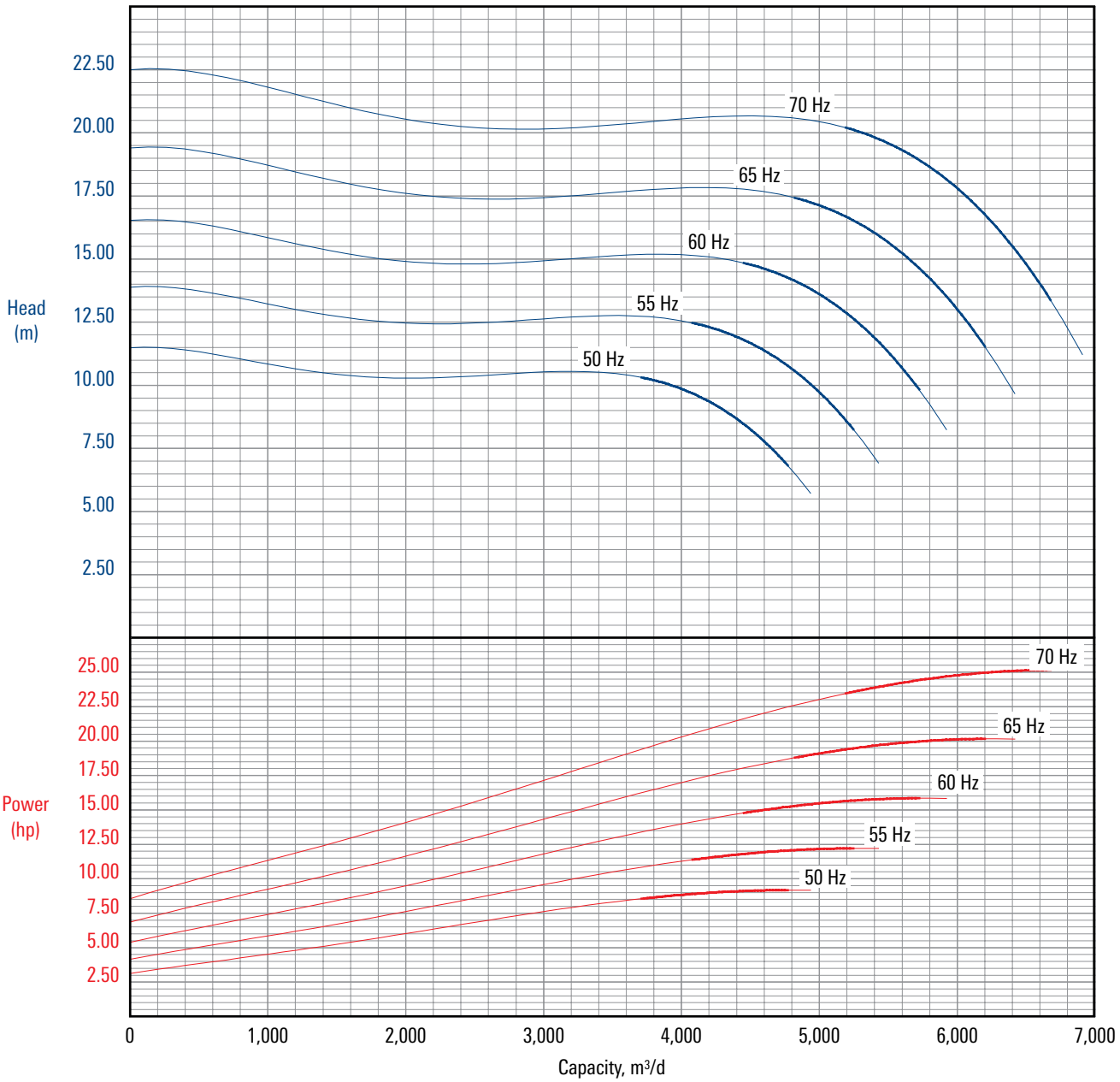
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

H28000N Pump

REDA ESP systems

Pump Performance Curve H28000N

Curve computed for one stage in fluid of 1.00 sg



J7000N Pump

675 Series, Min. Casing Size 8⅝-in [219.1-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT Part Number**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	2.7 [0.82]	195 [88.5]	2	tba†	2	tba	2	tba
20	4.1 [1.25]	276 [125.3]	5	tba	5	tba	5	tba
30	5.4 [1.65]	357 [162.1]	8	2005191	8	tba	8	tba
40	6.8 [2.07]	438 [198.9]	11	1324698	11	tba	11	tba
50	8.2 [2.50]	519 [235.6]	14	tba	14	tba	14	tba
60	9.6 [2.93]	600 [272.4]	17	1315464	17	D315464	17	tba
70	10.9 [3.32]	681 [309.2]	20	tba	20	2000331	20	tba
80	12.3 [3.75]	762 [345.9]	23	1315589	23	tba	23	tba
90	13.7 [4.18]	843 [382.7]	26	tba	26	tba	26	tba
100	15.1 [4.61]	924 [419.5]	29	tba	29	tba	29	tba
110	16.4 [5.00]	1,005 [456.3]	32	2005311	32	tba	32	tba
120	17.8 [5.43]	1,086 [493.0]	35	1306901	35	1306927	35	1306935
130	19.2 [5.86]	1,167 [529.8]	38	100034562	38	tba	38	tba
140	20.6 [6.28]	1,248 [566.6]	41	tba	41	2003500	41	tba
150	21.9 [6.68]	1,329 [603.4]	44	tba	44	tba	44	tba

†To be assigned

675 Series, Min. Casing Size 8⅝-in [219.1-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT Part Number**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	2.9 [0.88]	207 [63.1]	2	tba†	2	tba	2	tba
20	4.3 [1.31]	288 [87.8]	5	tba	5	tba	5	tba
30	5.6 [1.71]	369 [112.6]	8	tba	8	tba	8	tba
40	7.0 [2.14]	450 [137.3]	11	tba	11	tba	11	tba
50	8.4 [2.56]	531 [162.0]	14	tba	14	2003596	14	tba
60	9.8 [2.99]	612 [186.7]	17	1344654	17	D344654	17	tba
70	11.1 [3.39]	693 [211.4]	20	tba	20	tba	20	tba
80	12.5 [3.81]	774 [236.1]	23	1324664	23	tba	23	tba
90	13.9 [4.24]	855 [260.8]	26	tba	26	tba	26	tba
100	15.3 [4.67]	936 [285.5]	29	tba	29	tba	29	tba
110	16.6 [5.06]	1,017 [310.2]	32	1324656	32	tba	32	tba
120	18.0 [5.49]	1,098 [334.9]	35	1306943	35	1306950	35	1306968
130	19.4 [5.92]	1,179 [359.6]	38	1309111	38	tba	38	tba
140	20.8 [6.34]	1,260 [384.3]	41	tba	41	tba	41	tba
150	22.1 [6.74]	1,341 [409.0]	44	tba	44	tba	44	tba

†To be assigned

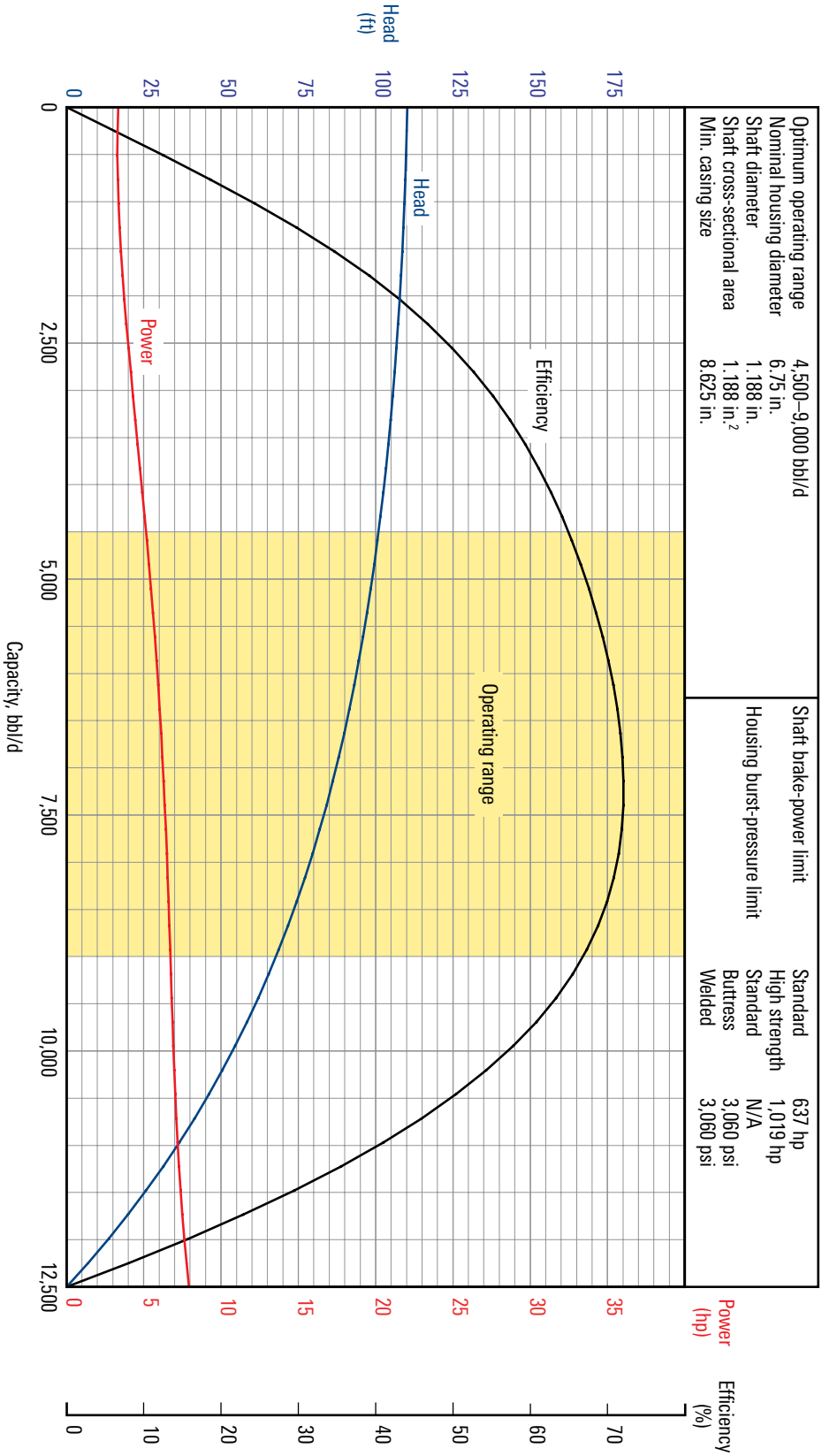
J7000N Pump

J7000N Pump, 675 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160		52	2						
170		55	1	1					
180		58		2					
190		62		1	1				

Note: Stage counts are for C-CT-ES pumps

J7000N Pump



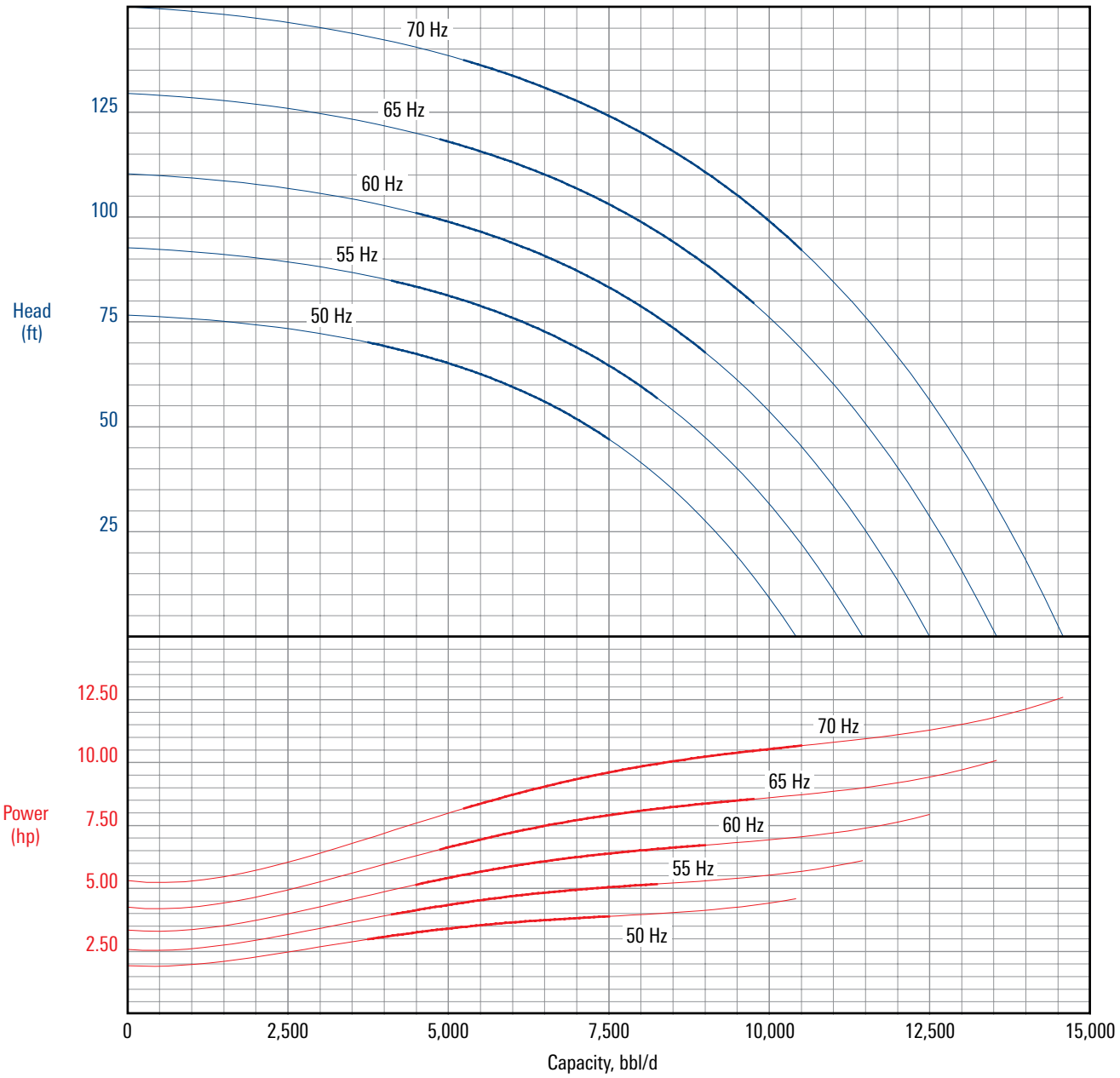
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

J7000N Pump

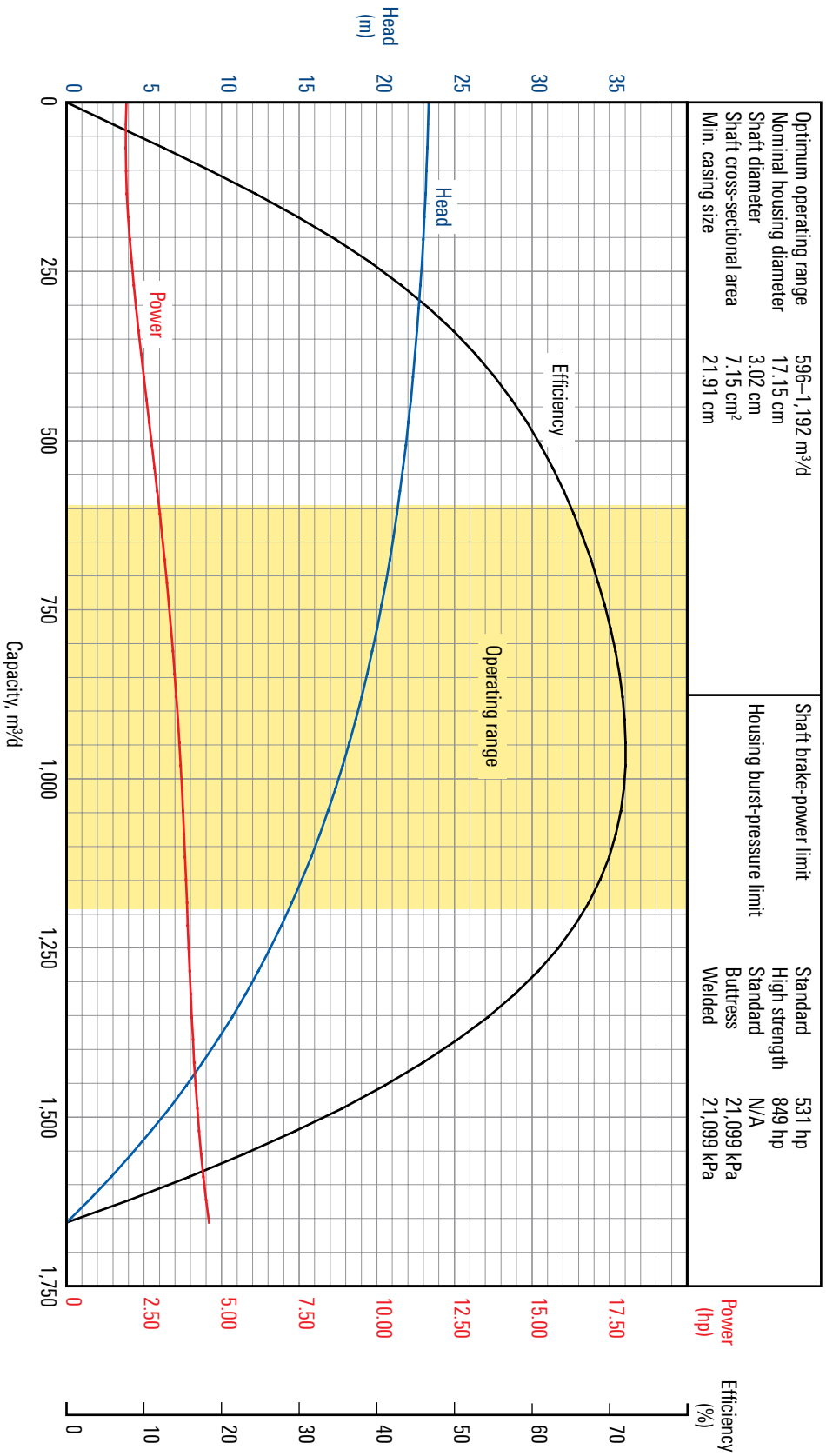
REDA ESP systems

Pump Performance Curve J7000N

Curve computed for one stage in fluid of 1.00 sg



J7000N Pump



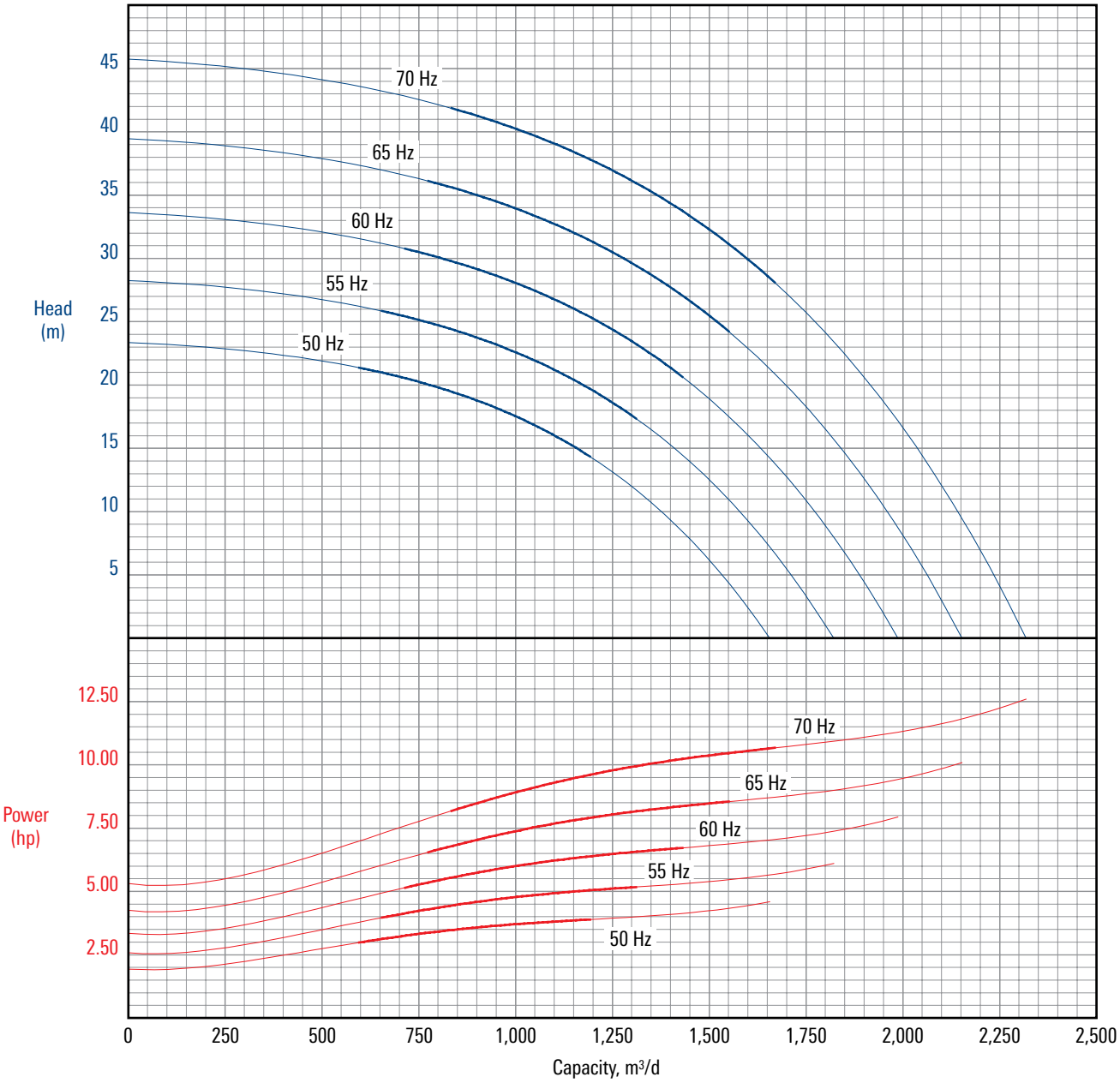
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

J7000N Pump

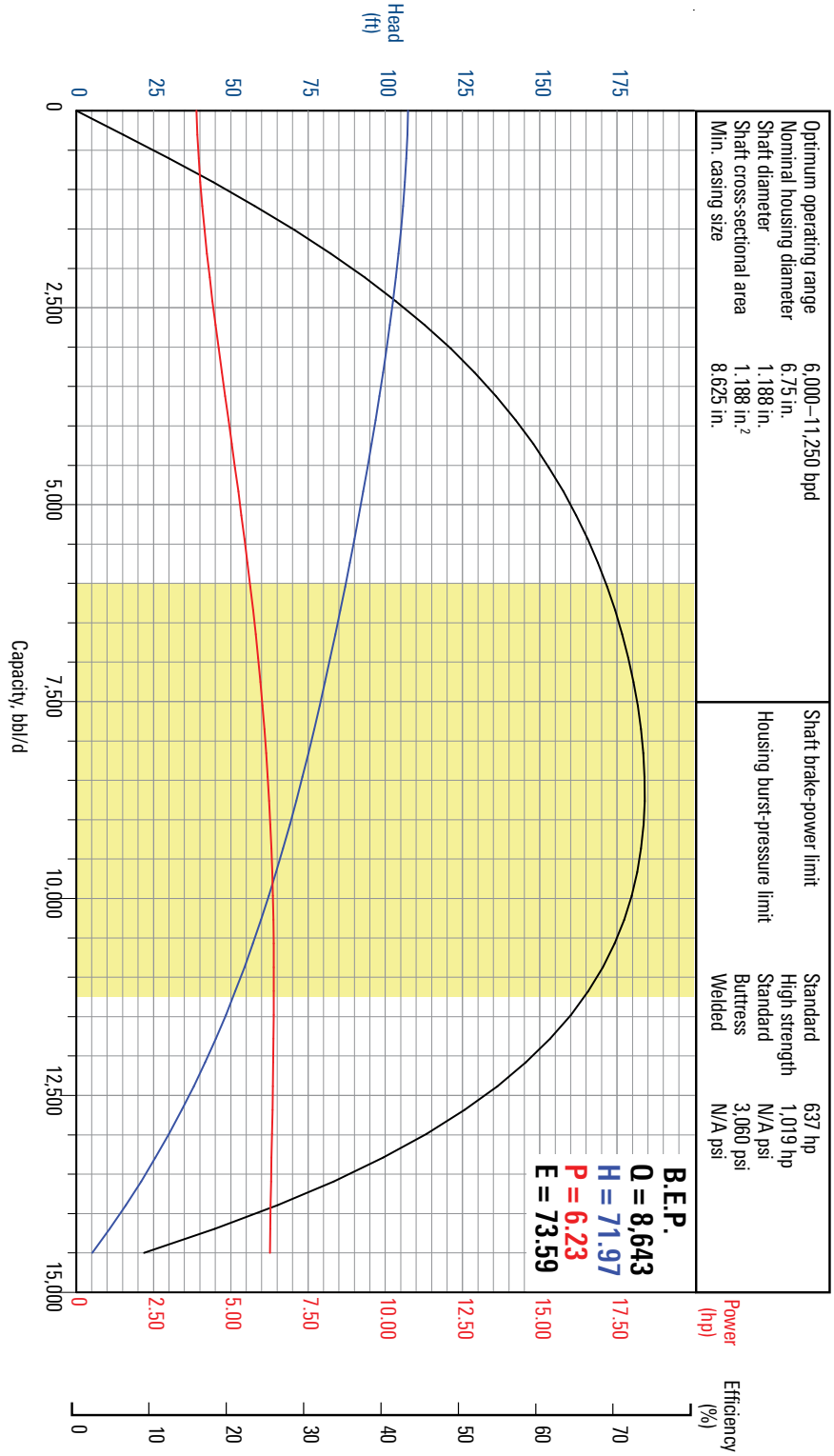
REDA ESP systems

Pump Performance Curve J7000N

Curve computed for one stage in fluid of 1.00 sg



J8500N Pump


REDA ESP systems
Pump Performance Curve JN8500 60 Hz, 3,500 rpm
675 Series for one stage in fluid of 1.00 sg
Optimum operating range 6,000–11,250 bpd
Nominal housing diameter 6.75 in.
Shaft diameter 1.188 in.
Shaft cross-sectional area 1.188 in.2
Min. casing size 8.625 in.
Shaft brake-power limit 637 hp
Housing burst-pressure limit
High strength 1,019 hp
Standard N/A psi
Buttress 3,060 psi
Welded N/A psi
B.E.P.
Q = 8,643
H = 71.97
P = 6.23
E = 73.59
Head (ft)
Capacity, bbl/d
Power (hp)
Efficiency (%)

J12000N Pump

675 Series, Min. Casing Size 8⅝-in [219.1-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT Part Number**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	2.7 [0.82]	195 [88.5]	2	tba†	2	tba	2	tba
20	4.1 [1.25]	276 [125.3]	5	tba	5	tba	5	tba
30	5.4 [1.65]	357 [162.1]	8	tba	8	tba	8	2011896
40	6.8 [2.07]	438 [198.9]	11	tba	11	tba	11	tba
50	8.2 [2.50]	519 [235.6]	14	tba	14	tba	14	tba
60	9.6 [2.93]	600 [272.4]	17	1006857	17	tba	17	2004017
70	0.9 [3.32]	681 [309.2]	20	tba	20	tba	20	tba
80	12.3 [3.75]	762 [345.9]	23	tba	23	tba	23	tba
90	13.7 [4.18]	843 [382.7]	26	2006265	26	tba	26	tba
100	15.1 [4.61]	924 [419.5]	29	1006899	29	tba	29	tba
110	16.4 [5.00]	1,005 [456.3]	32	tba	32	tba	32	tba
120	17.8 [5.43]	1,086 [493.0]	35	tba	35	tba	35	tba
130	19.2 [5.86]	1,167 [529.8]	38	tba	38	100026820	38	tba
140	20.6 [6.28]	1,248 [566.6]	41	tba	41	tba	41	tba
150	21.9 [6.68]	1,329 [603.4]	44	tba	44	tba	44	2003230

† To be assigned

675 Series, Min. Casing Size 8⅝-in [219.1-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT Part Number**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	2.9 [0.88]	207 [63.1]	2	tba†	2	tba	2	tba
20	4.3 [1.31]	288 [87.8]	5	tba	5	tba	5	tba
30	5.6 [1.71]	369 [112.6]	8	1007970	8	tba	8	tba
40	7.0 [2.14]	450 [137.3]	11	1007988	11	tba	11	tba
50	8.4 [2.56]	531 [162.0]	14	1007996	14	tba	14	tba
60	9.8 [2.99]	612 [186.7]	17	1008002	17	tba	17	tba
70	11.1 [3.39]	693 [211.4]	20	1008010	20	tba	20	tba
80	12.5 [3.81]	774 [236.1]	23	tba	23	tba	23	tba
90	13.9 [4.24]	855 [260.8]	26	1008036	26	tba	26	tba
100	15.3 [4.67]	936 [285.5]	29	1008044	29	tba	29	tba
110	16.6 [5.06]	1,017 [310.2]	32	1008184	32	tba	32	tba
120	18.0 [5.49]	1,098 [334.9]	35	2005357	35	tba	35	tba
130	19.4 [5.92]	1,179 [359.6]	38	1008200	38	tba	38	tba
140	20.8 [6.34]	1,260 [384.3]	41	1008218	41	100026819	41	tba
150	22.1 [6.74]	1,341 [409.0]	44	1008226	44	tba	44	tba

† To be assigned

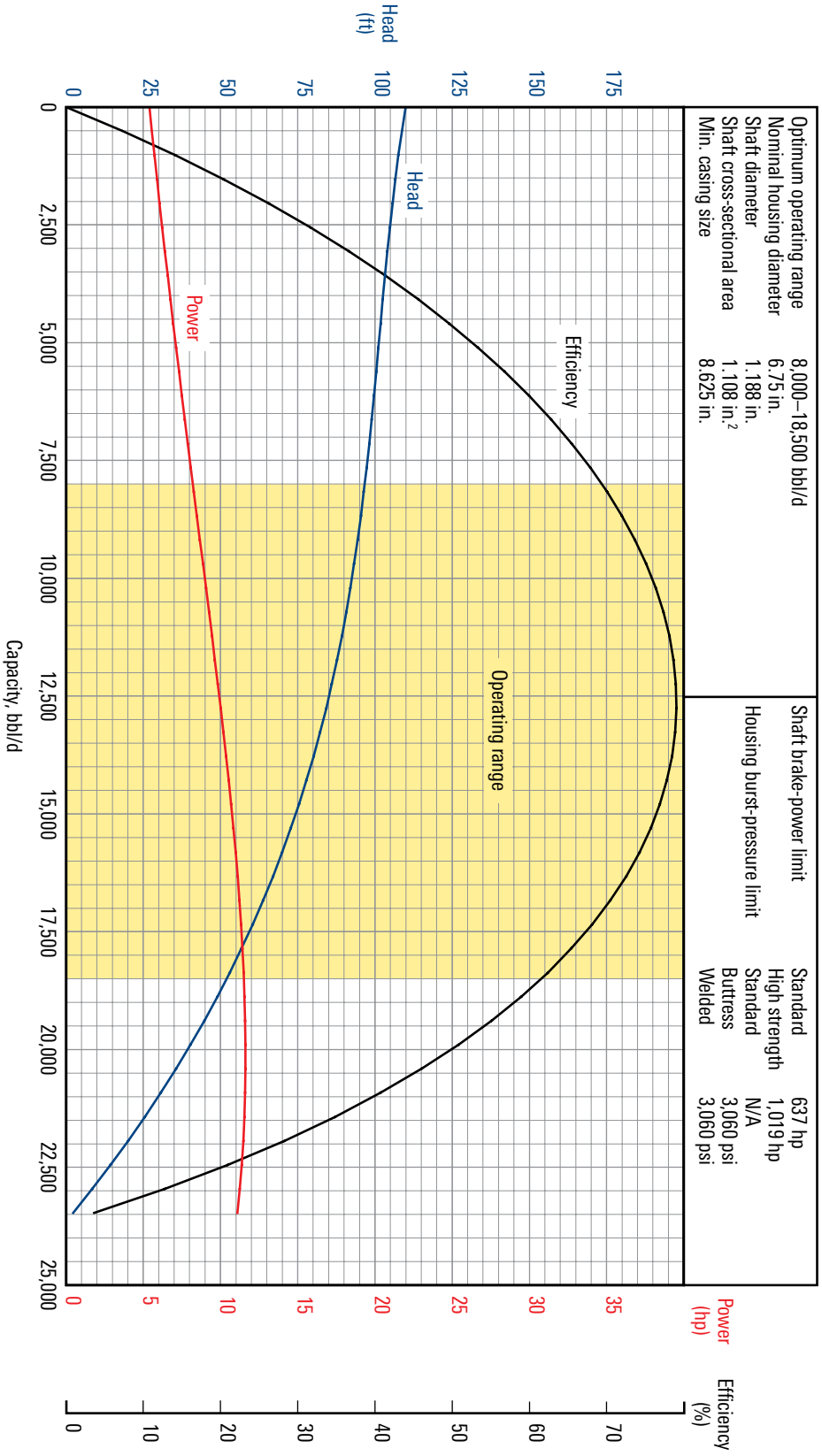
J12000N Pump

J12000N Pump, 675 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	46	2							
170	49	1	1						
180	52		2						
190	55		1†	1†					
200	58			2†					
210	61			1†	1†				
220	64				2†				

Note: Stage counts are for C-CT-ES pumps
† Requires use of high-strength shaft in lowermost pump

J12000N Pump

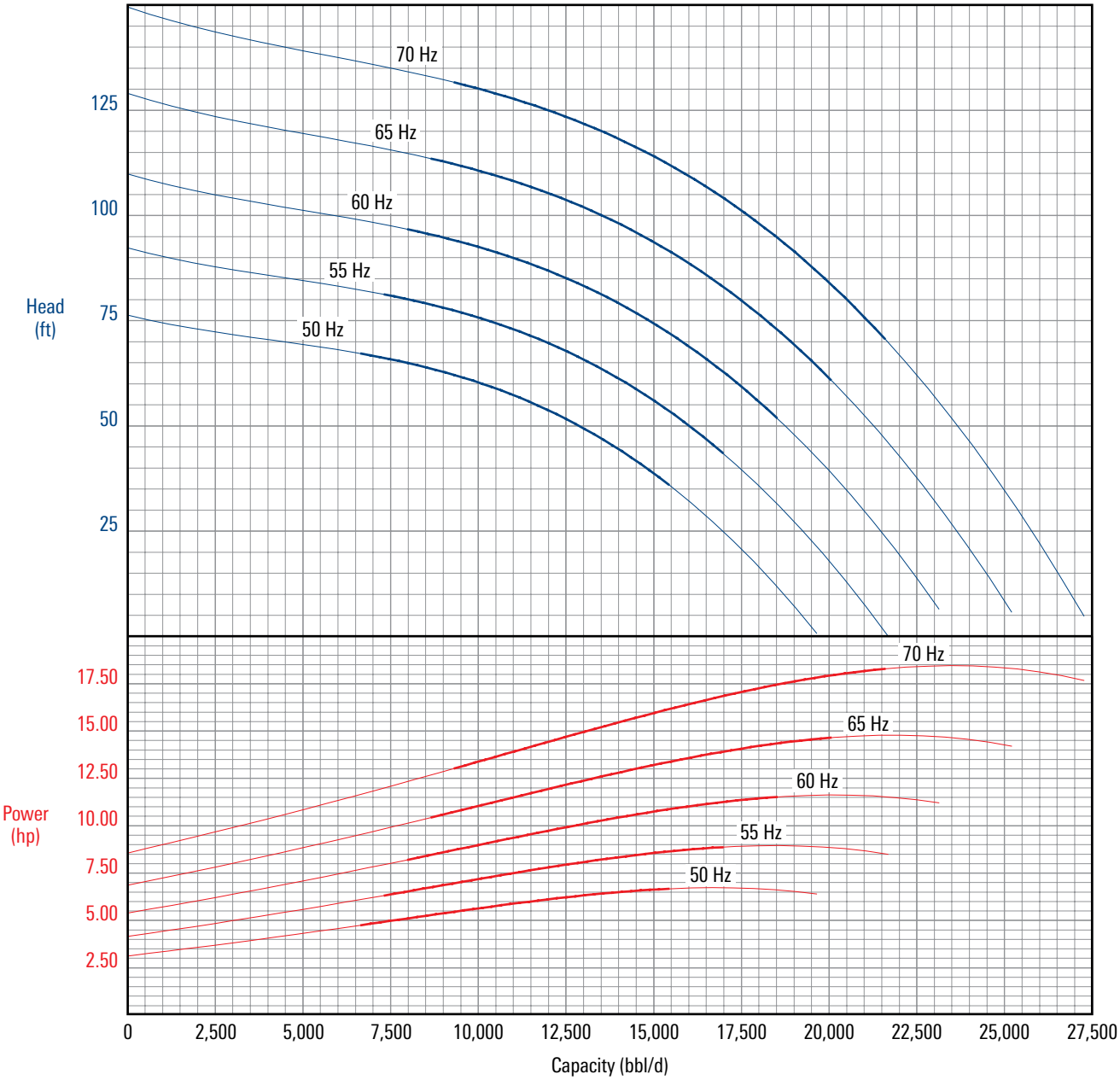


This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

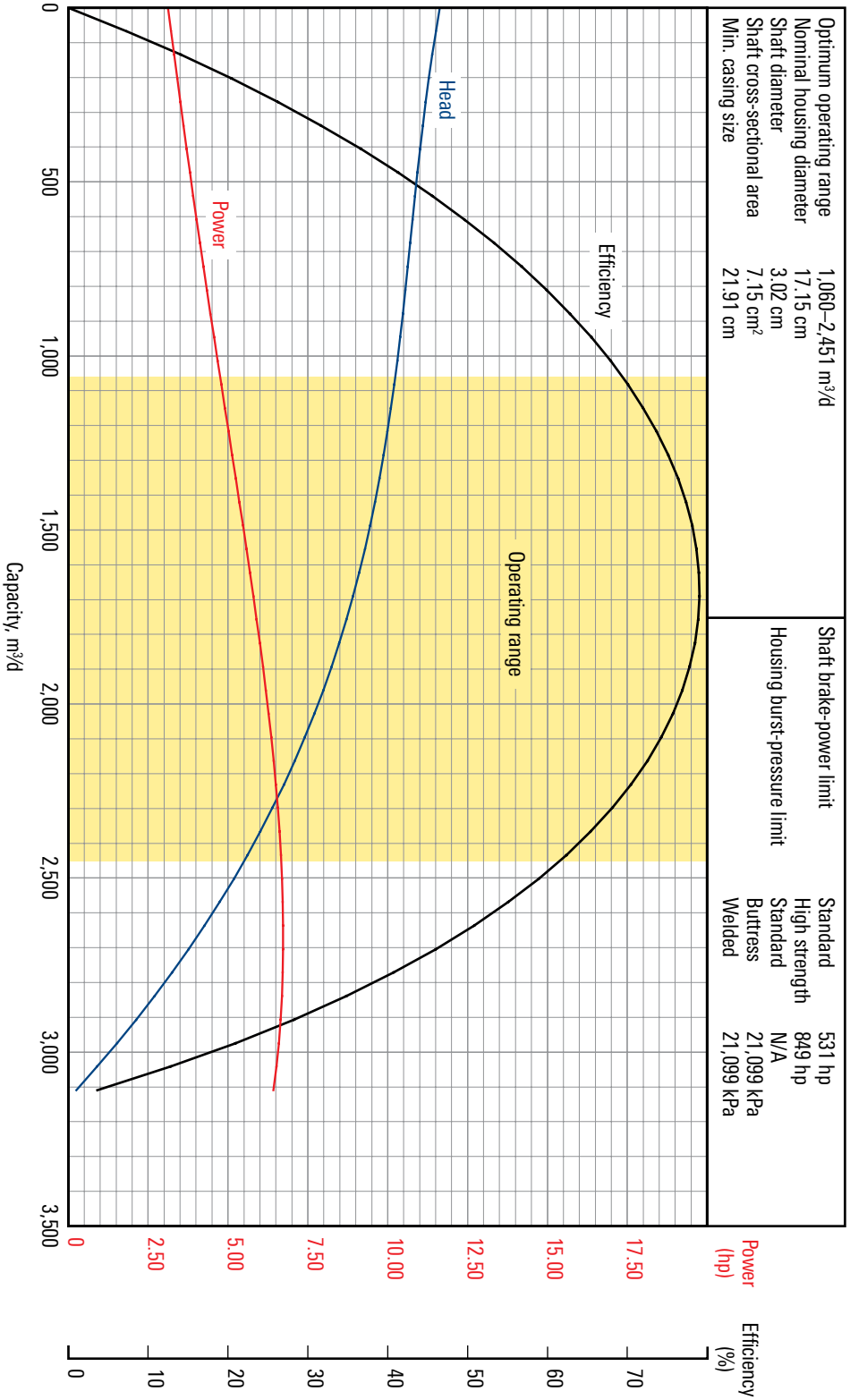
J12000N Pump

REDA* Pump J12000N Performance Curve

Curve computed for one stage in fluid of 1.00 sg.



J12000N Pump



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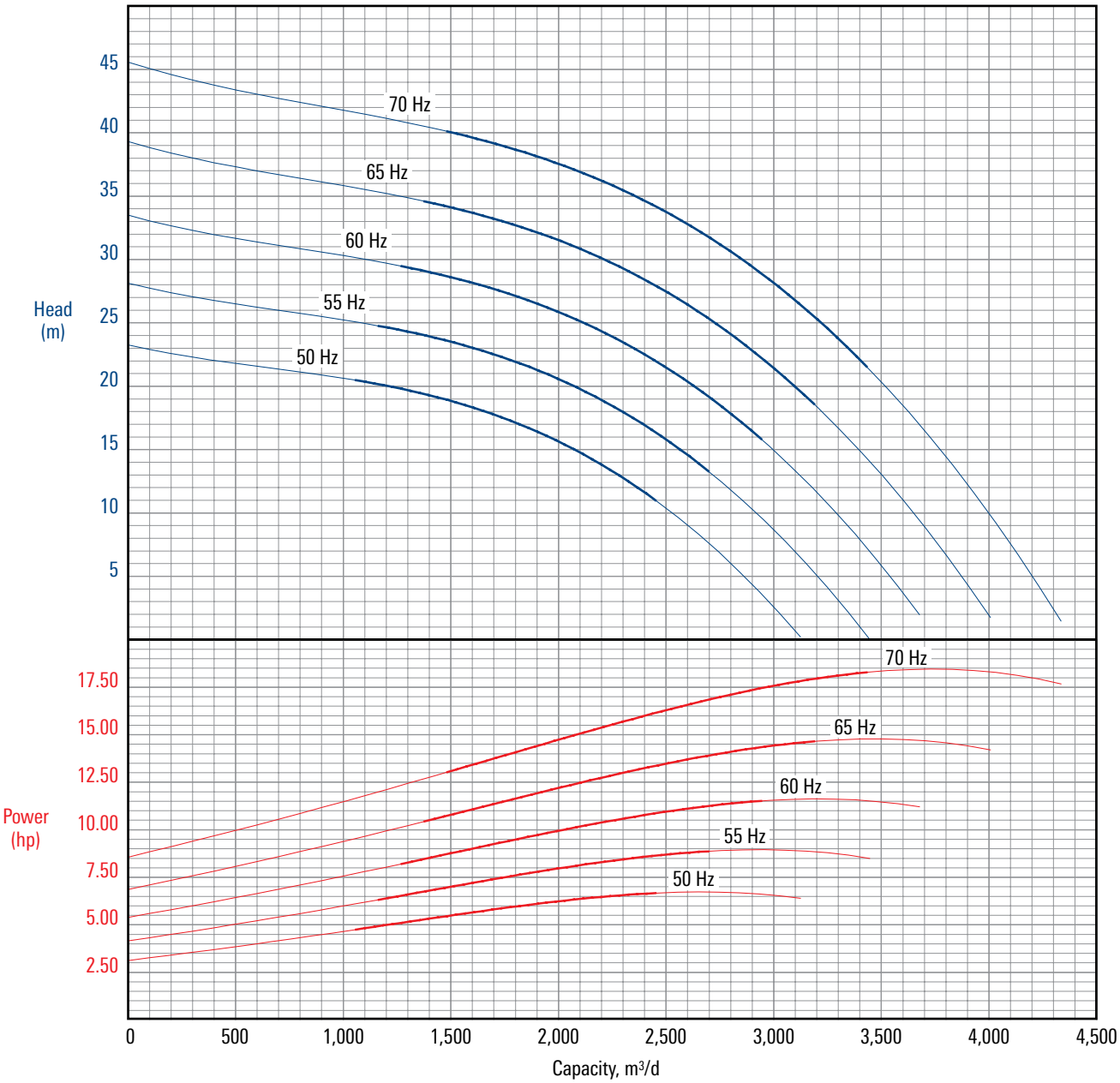
J12000N Pump

REDA ESP systems

Pump Performance Curve J12000N

Curve computed for one stage in fluid of 1.00 sg



JN16000 Pump

675 Series, Min. Casing Size 8⅝-in [219.1-mm] OD

			ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ Part Number**
10	2.7 [0.82]	195 [88.5]	2	tba†	2	1139765
20	4.1 [1.25]	276 [125.3]	5	tba	5	1139773
30	5.4 [1.65]	357 [162.1]	8	tba	8	1139781
40	6.8 [2.07]	438 [198.9]	11	tba	11	1135185
50	8.2 [2.50]	519 [235.6]	14	tba	14	1135193
60	9.6 [2.93]	600 [272.4]	17	tba	17	1135201
70	10.9 [3.32]	681 [309.2]	20	1006964	20	1135219
80	12.3 [3.75]	762 [345.9]	23	tba	23	1135227
90	13.7 [4.18]	843 [382.7]	26	1006980	26	1135235
100	15.1 [4.61]	924 [419.5]	29	1006998	29	1135243
110	16.4 [5.00]	1,005 [456.3]	32	tba	32	1135250
120	17.8 [5.43]	1,086 [493.0]	35	1007012	35	1135268
130	19.2 [5.86]	1,167 [529.8]	38	tba	38	1135276
140	20.6 [6.28]	1,248 [566.6]	41	tba	41	1135284
150	21.9 [6.68]	1,329 [603.4]	44	tba	44	1135292

† To be assigned

675 Series, Min. Casing Size 8⅝-in [219.1-mm] OD

			ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT-ES Part Number**	**Max. Stages**	**C-CT-ARZ Part Number**
10	2.9 [0.88]	207 [63.1]	2	tba†	2	1139823
20	4.3 [1.31]	288 [87.8]	5	tba	5	1139831
30	5.6 [1.71]	369 [112.6]	8	1008259	8	1139849
40	7.0 [2.14]	450 [137.3]	11	1008267	11	1135599
50	8.4 [2.56]	531 [162.0]	14	1008275	14	1135607
60	9.8 [2.99]	612 [186.7]	17	1008283	17	1135615
70	11.1 [3.39]	693 [211.4]	20	1008291	20	1135623
80	12.5 [3.81]	774 [236.1]	23	tba	23	1135631
90	13.9 [4.24]	855 [260.8]	26	1008317	26	1135649
100	15.3 [4.67]	936 [285.5]	29	1008325	29	1135656
110	16.6 [5.06]	1,017 [310.2]	32	1008333	32	1135664
120	18.0 [5.49]	1,098 [334.9]	35	1008341	35	1135672
130	19.4 [5.92]	1,179 [359.6]	38	tba	38	1135680
140	20.8 [6.34]	1,260 [384.3]	41	tba	41	1135698
150	22.1 [6.74]	1,341 [409.0]	44	1008374	44	1135706

† To be assigned

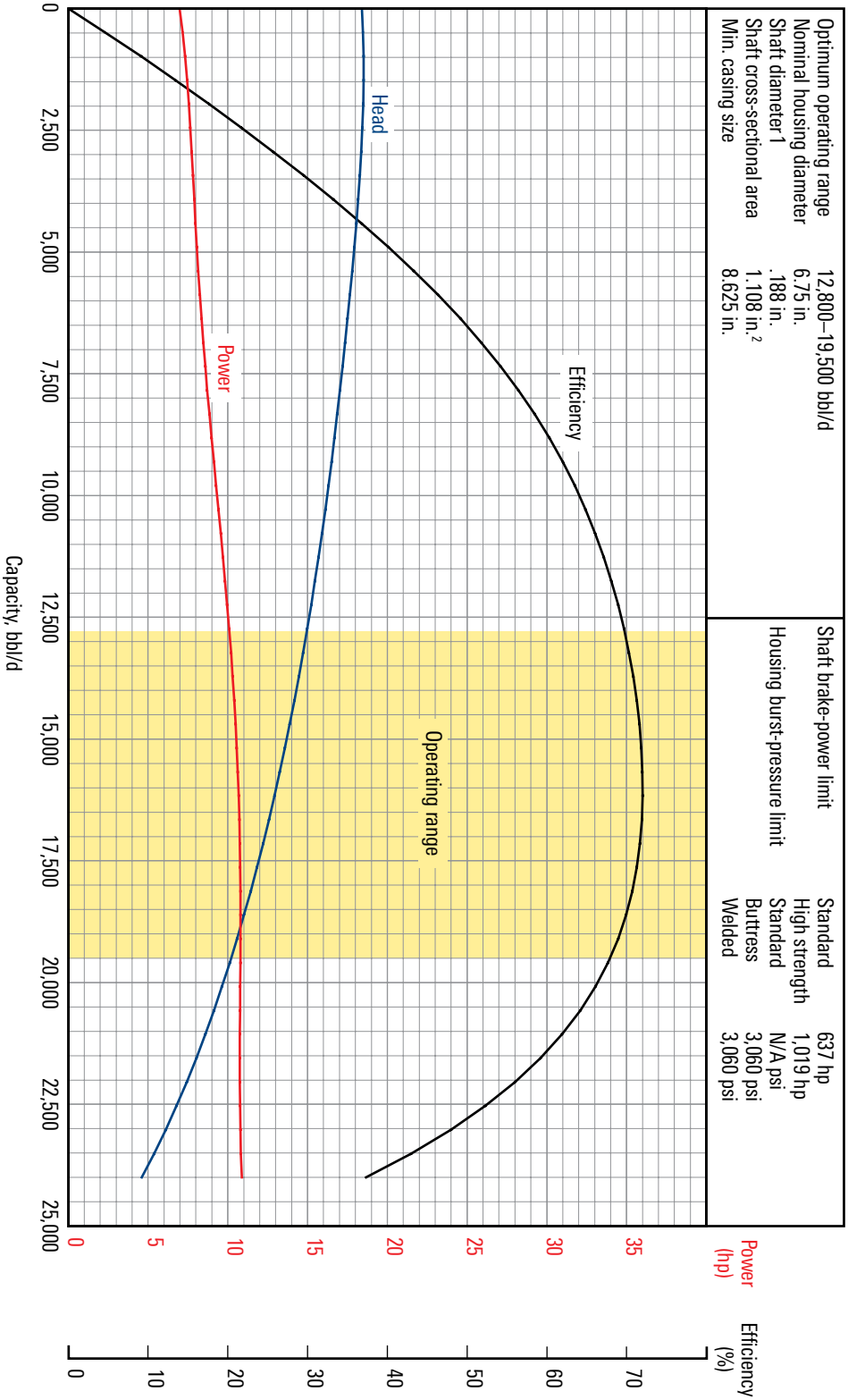
JN16000 Pump

JN16000 Pump, 675 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160		46	2						
170	49	1	1						
180	52		2						
190	55		1	1					
200	58			2†					
210	61			1†	1†				
220	64				2†				
230	67				1†	1†			
240	70					2†			
250	73					1†	1†		
260	76						2†		
270	79						1†	1†	

Note: Stage counts are for C-CT-ES pumps
† Requires use of high-strength shaft in lowermost pump

JN16000 Pump



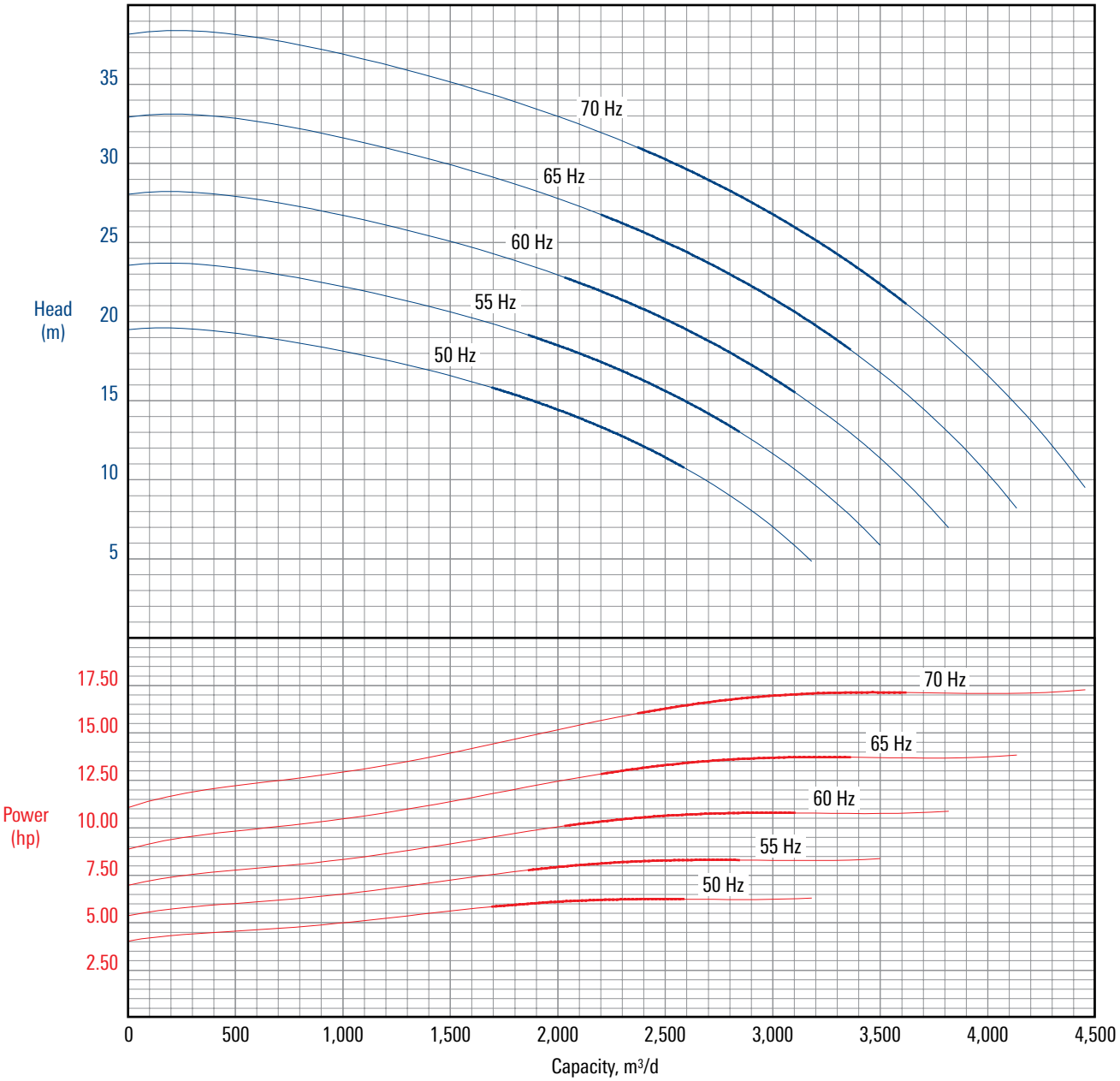
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

JN16000 Pump

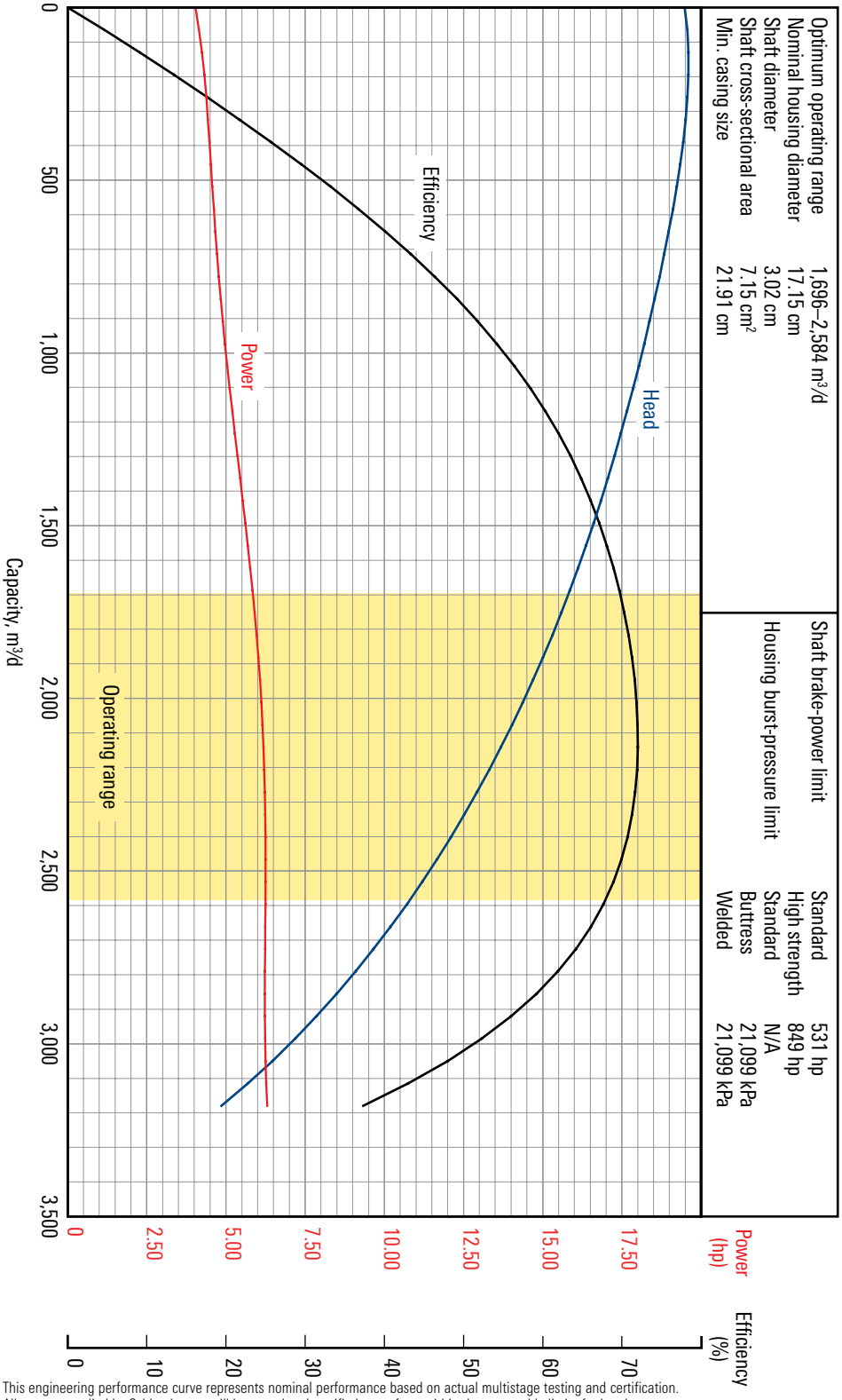
REDA ESP systems

Pump Performance Curve JN16000

Curve computed for one stage in fluid of 1.00 sg



JN16000 Pump



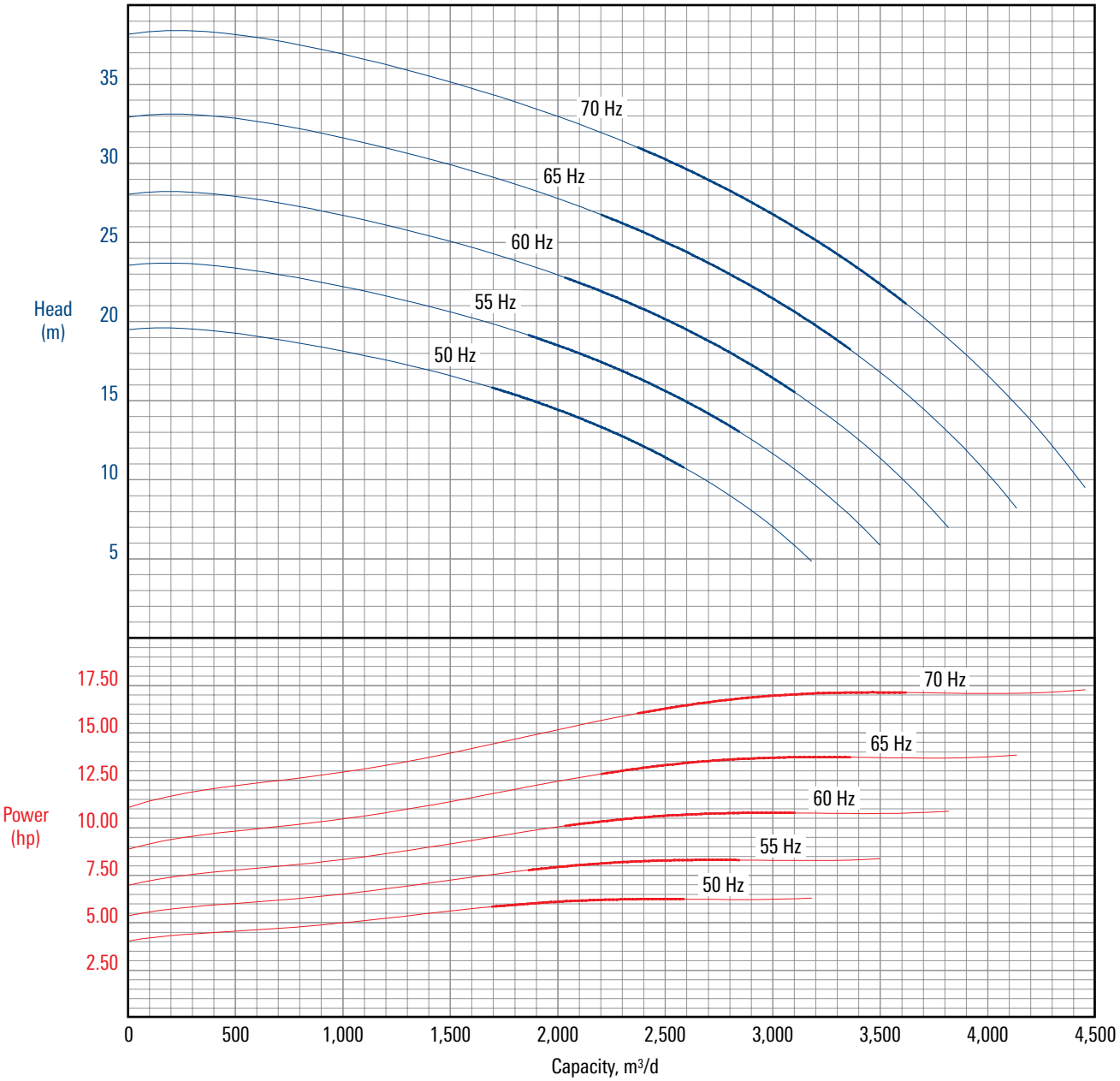
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

JN16000 Pump

REDA ESP systems

Pump Performance Curve JN16000

Curve computed for one stage in fluid of 1.00 sg



JN21000 Pump

725 Series, Min. Casing Size 9⅝-in [244.5-mm] OD

			ES-ZS Carbon Steel		ARZ-ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT-ES-ZS Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	3.1 [0.95]	224 [68.3]	2	tba†	2	tba
20	4.4 [1.34]	320 [97.6]	4	tba	4	tba
30	5.6 [1.71]	416 [126.9]	7	tba	7	tba
40	6.9 [2.10]	512 [156.2]	9	tba	9	tba
50	8.1 [2.47]	608 [185.4]	12	tba	12	tba
60	9.4 [2.87]	704 [214.7]	14	2004858	14	2004867
70	10.6 [3.23]	800 [244.0]	17	2004859	17	2004868
80	11.9 [3.63]	896 [273.3]	19	2004860	19	2004869
90	13.1 [4.00]	992 [302.6]	22	2004861	22	2004870
100	14.4 [4.39]	1,088 [331.8]	24	2004896	24	2000220
110	15.6 [4.76]	1,184 [361.1]	27	2004862	27	2004871
120	16.9 [5.15]	1,280 [390.4]	29	2004863	29	2004872
130	18.1 [5.52]	1,376 [419.7]	32	2004864	32	2004873
140	19.4 [5.92]	1,472 [449.0]	34	2004865	34	2004874
150	20.6 [6.28]	1,568 [478.2]	37	2004866	37	2004875

† To be assigned

725 Series, Min. Casing Size 9⅝-in [244.5-mm] OD

			ES-ZS Carbon Steel		ARZ-ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT-ES-ZS Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	3.3 [1.01]	240 [73.2]	2	tba†	2	tba
20	4.6 [1.40]	336 [102.5]	4	tba	4	tba
30	5.8 [1.77]	432 [131.8]	7	tba	7	tba
40	7.1 [2.17]	528 [161.0]	9	tba	9	tba
50	8.3 [2.53]	624 [190.3]	12	tba	12	tba
60	9.6 [2.93]	720 [219.6]	14	2004840	14	2004849
70	10.8 [3.29]	816 [248.9]	17	2004841	17	2004850
80	12.1 [3.69]	912 [278.2]	19	2004842	19	2004851
90	13.3 [4.06]	1,008 [307.4]	22	2004843	22	2004852
100	14.6 [4.45]	1,104 [336.7]	24	tba	24	2004895
110	15.8 [4.82]	1,200 [366.0]	27	2004844	27	2004853
120	17.1 [5.22]	1,296 [395.3]	29	2004845	29	2004854
130	18.3 [5.58]	1,392 [424.6]	32	2004846	32	2004855
140	19.6 [5.98]	1,488 [453.8]	34	2004847	34	2004856
150	20.8 [6.34]	1,584 [483.1]	37	2004848	37	2004857

† To be assigned

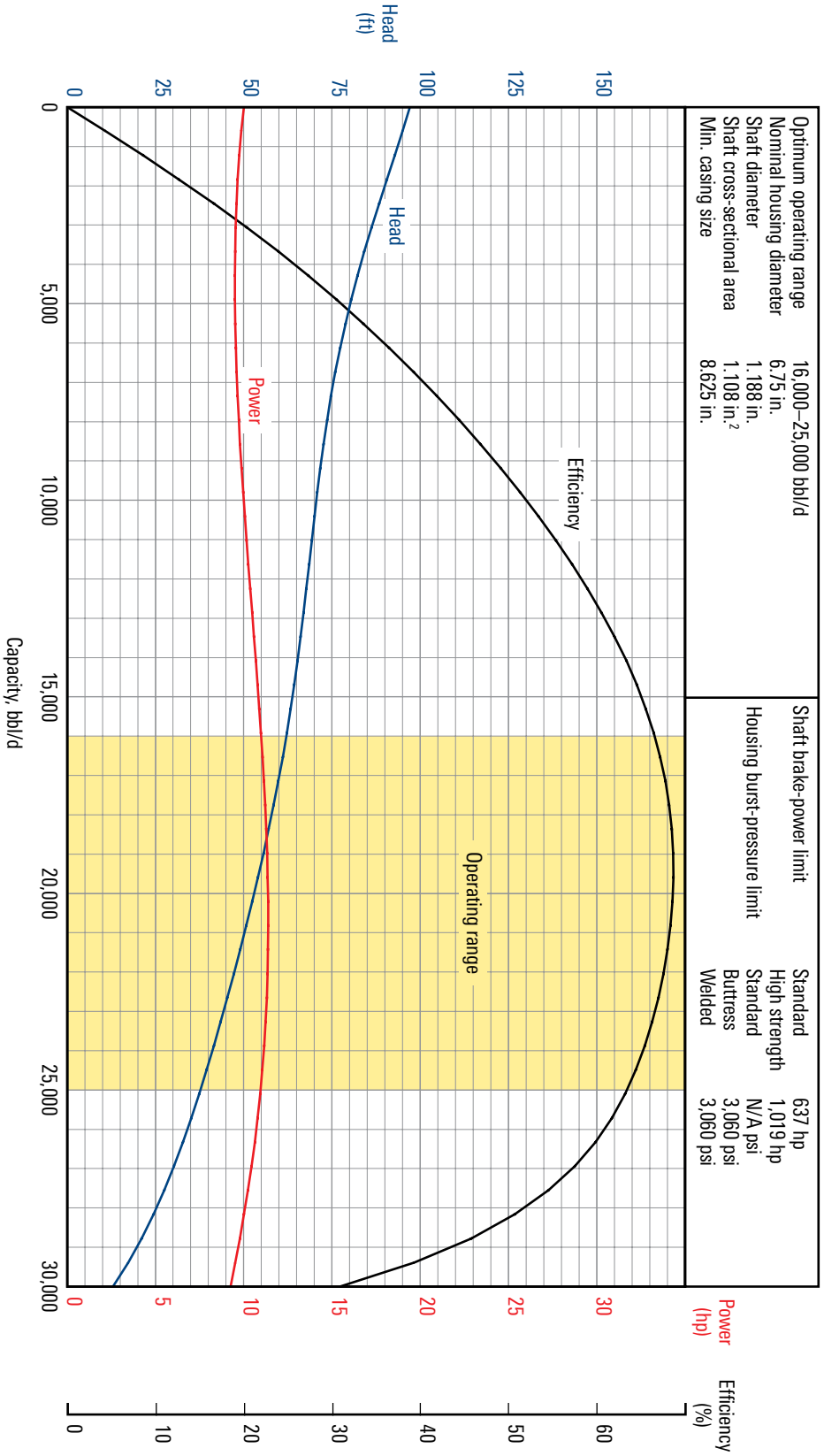
JN21000 Pump

JN21000 Pump, 675 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160		46	2						
170	49	1	1						
180	52		2						
190	55		1	1					
200	58			2†					
210	61			1†	1†				
220	64				2†				
230	67				1†	1†			
240	70					2†			

Note: Stage counts are for C-CT-ES pumps
† Requires use of high-strength shaft in lowermost pump

JN21000 Pump



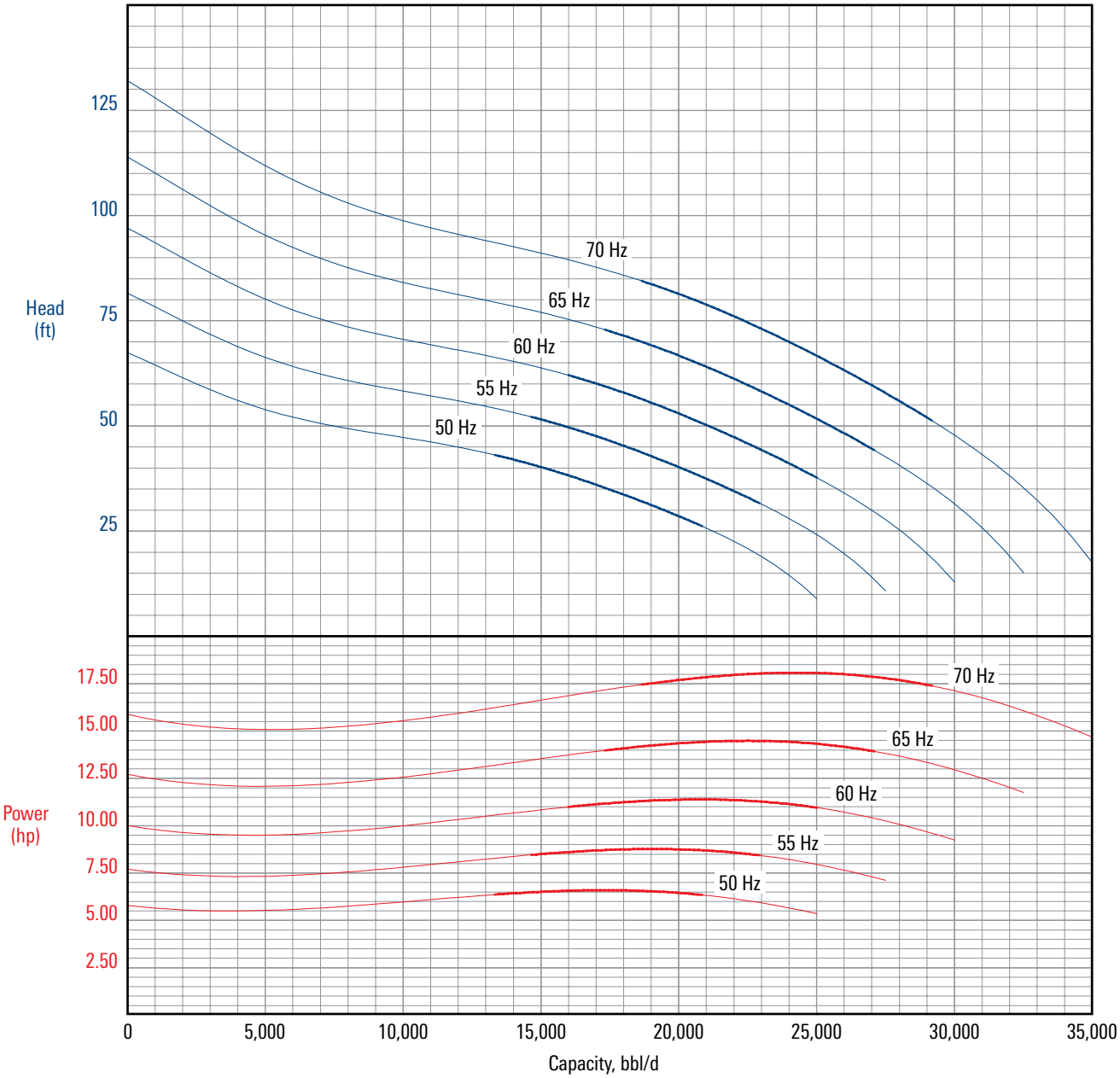
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

JN21000 Pump

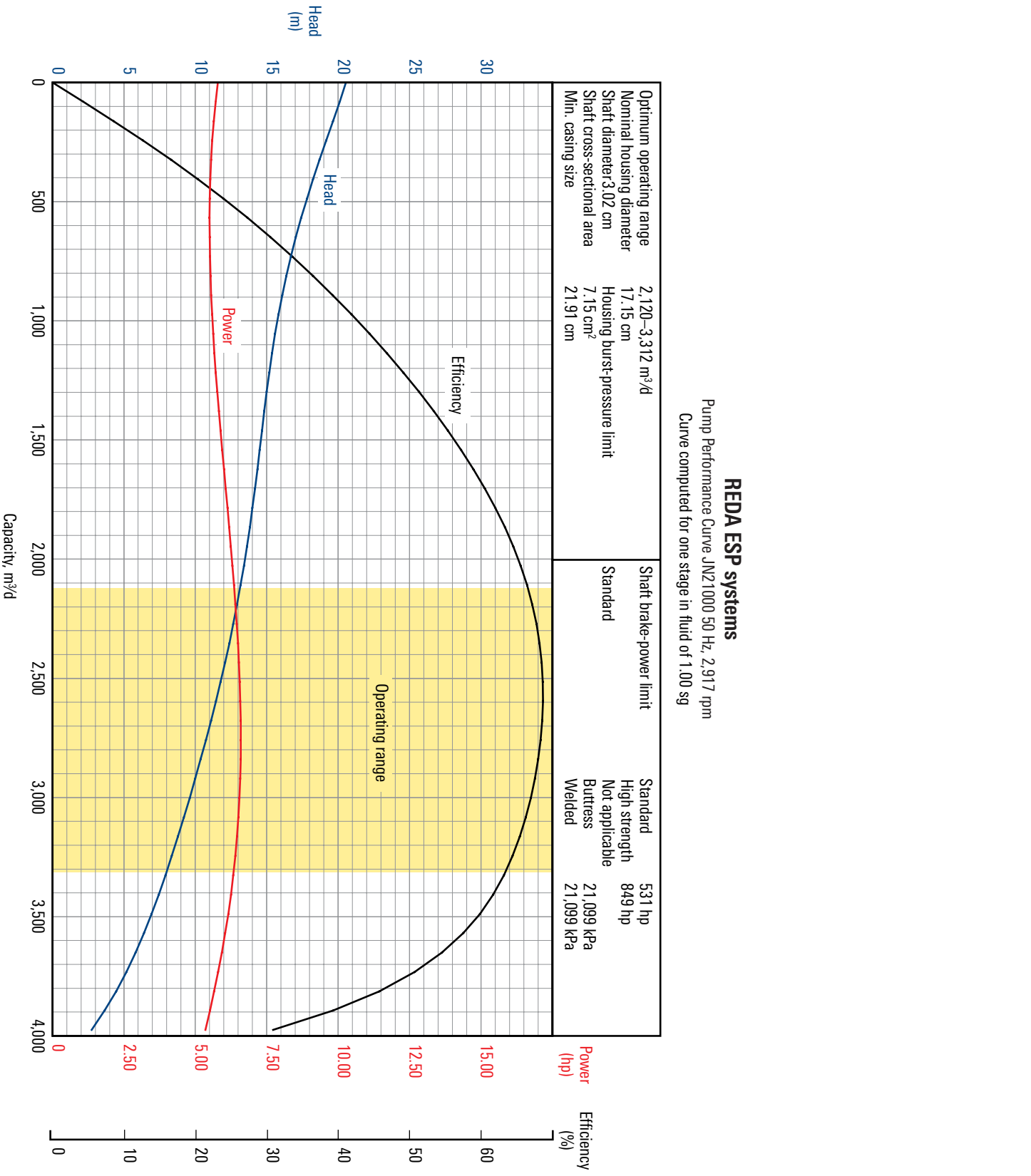
REDA ESP systems

Pump Performance Curve JN21000

Curve computed for one stage in fluid of 1.00 sg



JN21000 Pump



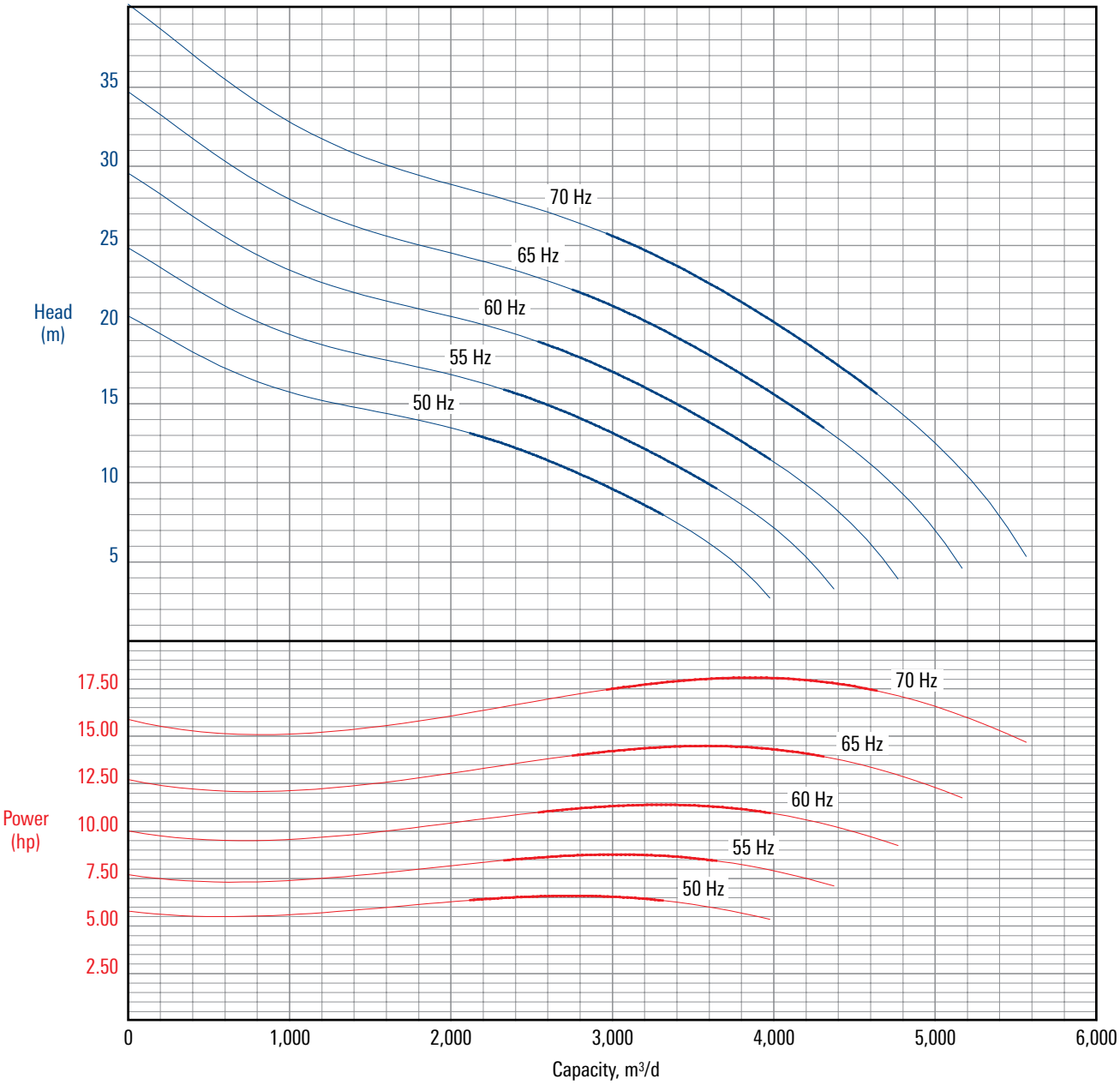
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

JN21000 Pump

REDA ESP systems

Pump Performance Curve JN21000

Curve computed for one stage in fluid of 1.00 sg



L16000N Pump

725 Series, Min. Casing Size 9⅝-in [244.5-mm] OD

			ES-ZS Carbon Steel		ARZ ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT-ES-ZS Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	3.1 [0.95]	224 [68.3]	2	tba†	2	tba
20	4.4 [1.34]	320 [97.6]	4	tba	4	tba
30	5.6 [1.71]	416 [126.9]	7	tba	7	tba
40	6.9 [2.10]	512 [156.2]	9	tba	9	tba
50	8.1 [2.47]	608 [185.4]	12	tba	12	tba
60	9.4 [2.87]	704 [214.7]	14	2004858	14	2004867
70	10.6 [3.23]	800 [244.0]	17	2004859	17	2004868
80	11.9 [3.63]	896 [273.3]	19	2004860	19	2004869
90	13.1 [4.00]	992 [302.6]	22	2004861	22	2004870
100	14.4 [4.39]	1,088 [331.8]	24	2004896	24	2000220
110	15.6 [4.76]	1,184 [361.1]	27	2004862	27	2004871
120	16.9 [5.15]	1,280 [390.4]	29	2004863	29	2004872
130	18.1 [5.52]	1,376 [419.7]	32	2004864	32	2004873
140	19.4 [5.92]	1,472 [449.0]	34	2004865	34	2004874
150	20.6 [6.28]	1,568 [478.2]	37	2004866	37	2004875

† To be assigned

725 Series, Min. Casing Size 9⅝-in [244.5-mm] OD

			ES-ZS Carbon Steel		ARZ ZS Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**C-CT-ES-ZS Part Number**	**Max. Stages**	**C-CT-ARZ-ZS Part Number**
10	3.3 [1.01]	240 [73.2]	2	tba†	2	tba
20	4.6 [1.40]	336 [102.5]	4	tba	4	tba
30	5.8 [1.77]	432 [131.8]	7	tba	7	tba
40	7.1 [2.17]	528 [161.0]	9	tba	9	tba
50	8.3 [2.53]	624 [190.3]	12	tba	12	tba
60	9.6 [2.93]	720 [219.6]	14	2004840	14	2004849
70	10.8 [3.29]	816 [248.9]	17	2004841	17	2004850
80	12.1 [3.69]	912 [278.2]	19	2004842	19	2004851
90	13.3 [4.06]	1,008 [307.4]	22	2004843	22	2004852
100	14.6 [4.45]	1,104 [336.7]	24	tba	24	2004895
110	15.8 [4.82]	1,200 [366.0]	27	2004844	27	2004853
120	17.1 [5.22]	1,296 [395.3]	29	2004845	29	2004854
130	18.3 [5.58]	1,392 [424.6]	32	2004846	32	2004855
140	19.6 [5.98]	1,488 [453.8]	34	2004847	34	2004856
150	20.8 [6.34]	1,584 [483.1]	37	2004848	37	2004857

† To be assigned

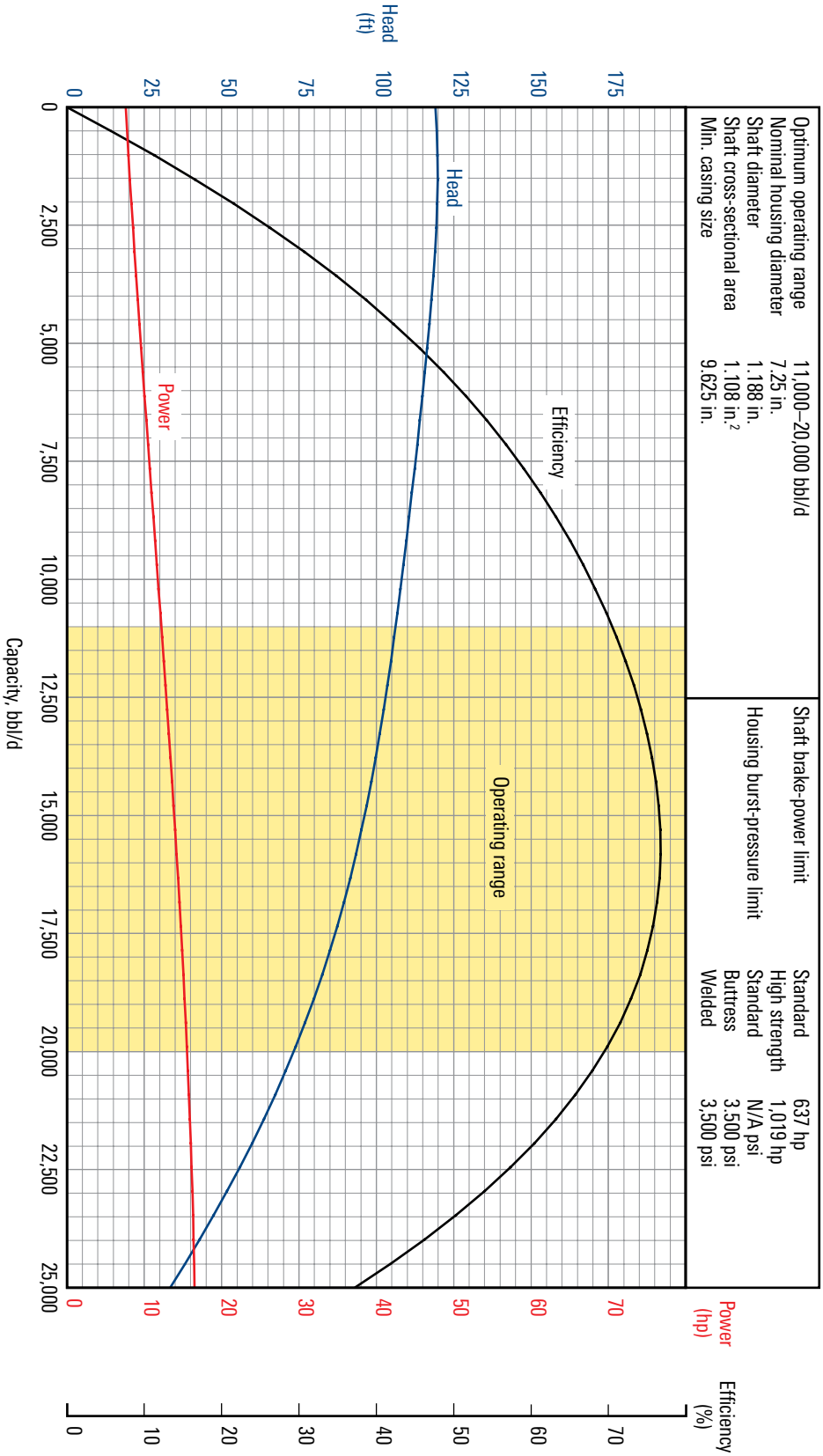
L16000N Pump

L16000N Pump, 725 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160		38	2†						
170	41	1†	1†						
180	44		2†						
190	46		1†	1†					
200	48			2†					
210	51			1†	1†				
220	54				2†				
230	56				1†	1†			
240	58					2†			
250	61					1†	1†		

Note: Stage counts are for C-CT-ES pumps
† Requires use of high-strength shaft in lowermost pump

L16000N Pump



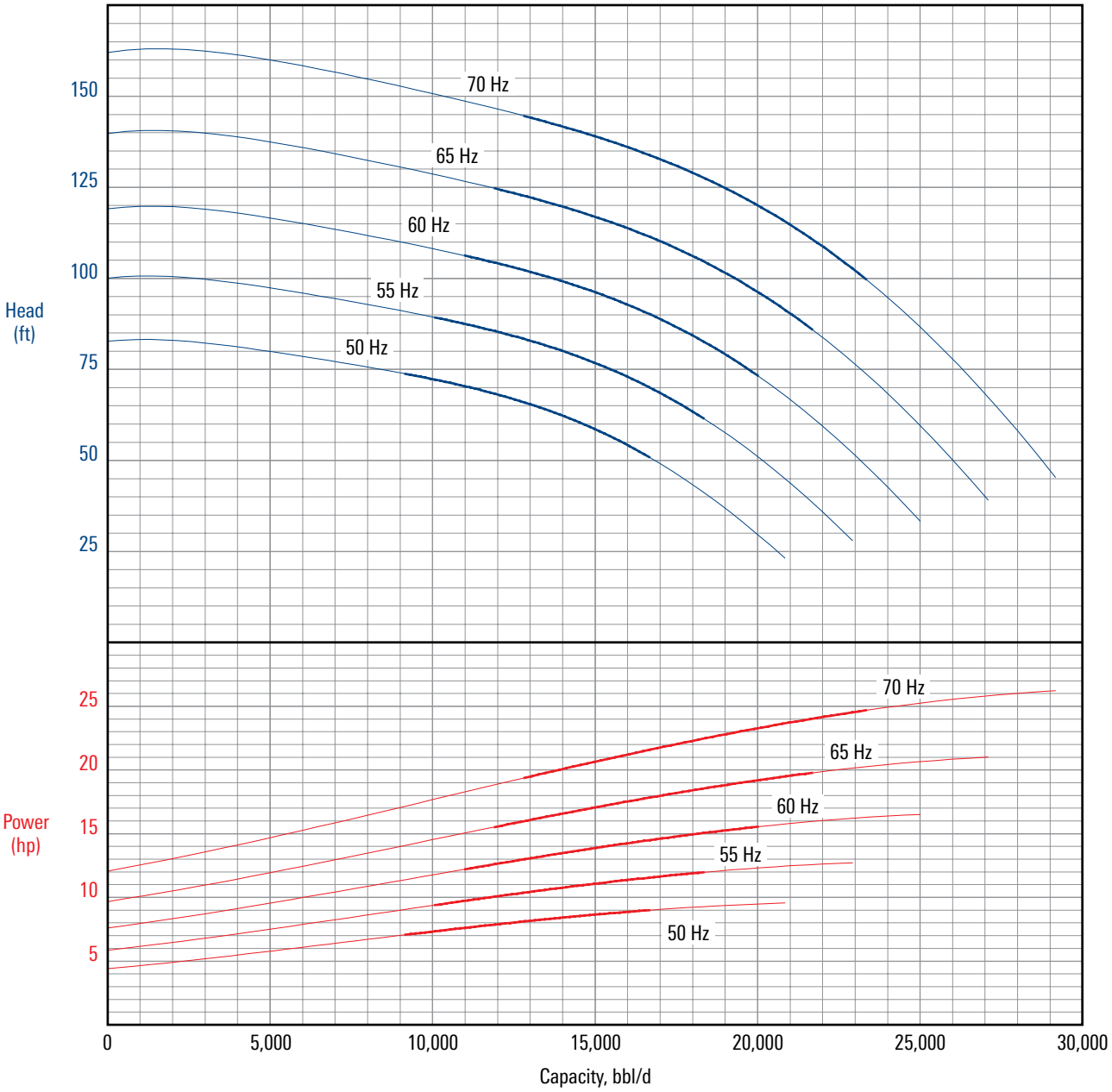
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

L16000N Pump

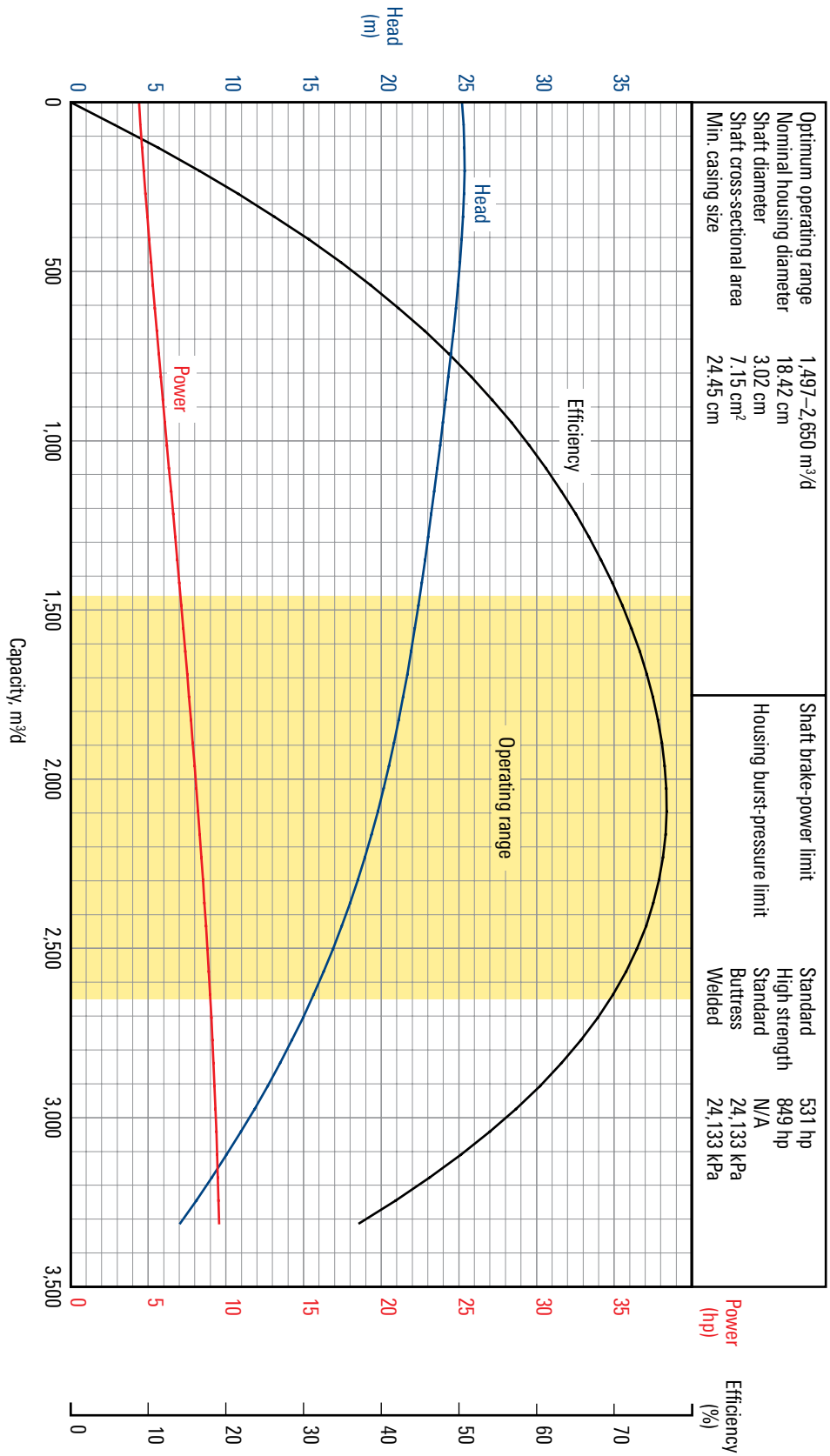
REDA ESP systems

Pump Performance Curve L16000N

Curve computed for one stage in fluid of 1.00 sg



L16000N Pump



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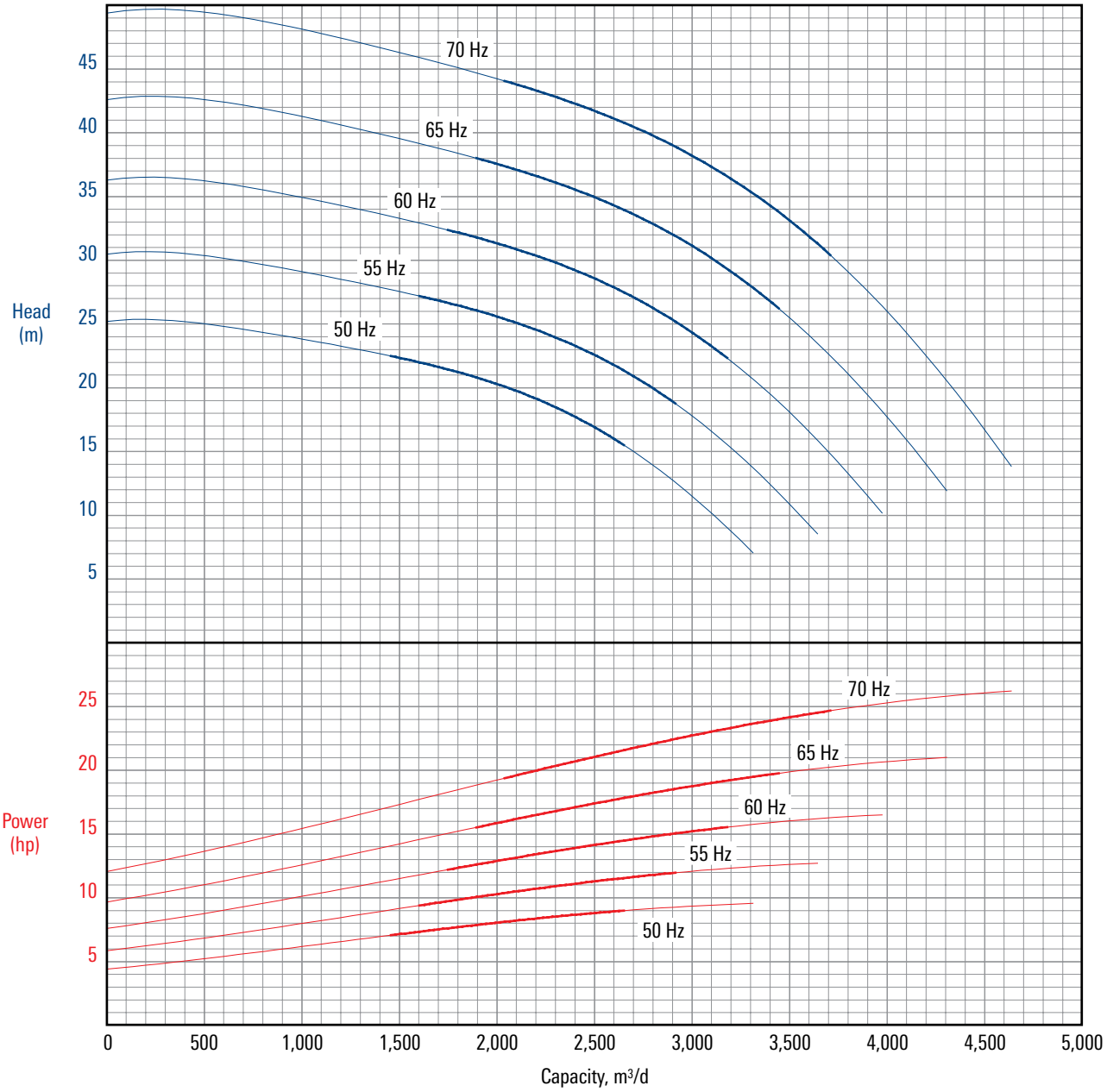
L16000N Pump

REDA ESP systems

Pump Performance Curve L16000N

Curve computed for one stage in fluid of 1.00 sg



L43000N Pump

862 Series, Min. Casing Size 10¾-in [273.1-mm] OD

				Carbon Steel C-LT		ES Carbon Steel C-LT-ES	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"A" Cut Part Number**	**"B" Cut Part Number**
2M	3.9 [1.2]	340 [154]	2	1111277	tba†	tba	tba
3M	4.5 [1.4]	411 [187]	3	1111285	1111186	tba	tba
4M	5.1 [1.6]	471 [214]	4	1111293	1111194	tba	tba
5M	5.7 [1.7]	524 [238]	5	1111301	tba	tba	tba
6M	6.3 [1.9]	613 [278]	6	1111319	1111202	tba	tba
7M	6.9 [2.1]	673 [306]	7	1111327	1111210	tba	tba
8M	7.5 [2.3]	747 [339]	8	1111335	tba	tba	tba
9M	8.1 [2.5]	814 [370]	9	1111343	tba	tba	tba
10M	8.7 [2.7]	874 [397]	10	1111350	1111228	tba	tba
11M	9.3 [2.8]	942 [428]	11	1111368	tba	tba	tba
12M	9.9 [3.0]	1,009 [458]	12	1111376	tba	tba	tba
13M	10.5 [3.2]	1,076 [489]	13	1111384	tba	tba	tba
14M	11.1 [3.4]	1,143 [519]	14	1111392	1111236	tba	tba
15M	11.7 [3.6]	1,211 [550]	15	1111400	1111533	tba	tba
16M	12.3 [3.8]	1,278 [580]	16	1111418	tba	tba	tba
17M	12.9 [3.9]	1,349 [612]	17	1111426	tba	1299361	tba
18M	13.5 [4.1]	1,416 [643]	18	1111434	1111244	tba	tba
19M	14.1 [4.3]	1,480 [672]	19	1111442	tba	tba	tba
20M	14.8 [4.5]	1,547 [702]	20	1111459	1111251	tba	tba
21M	15.4 [4.7]	1,618 [735]	21	1111467	tba	tba	tba
22M	16.0 [4.9]	1,685 [765]	22	1111475	1111269	tba	tba
23M	16.5 [5.0]	1,749 [794]	23	1111483	tba	tba	tba
24M	17.2 [5.3]	1,816 [824]	24	1111491	tba	tba	tba
25M	17.8 [5.4]	1,887 [857]	25	1111509	tba	tba	tba
26M	18.4 [5.6]	1,954 [887]	26	1111517	tba	tba	tba
27M	19.0 [5.8]	2,021 [918]	27	1111525	tba	tba	tba

† To be assigned

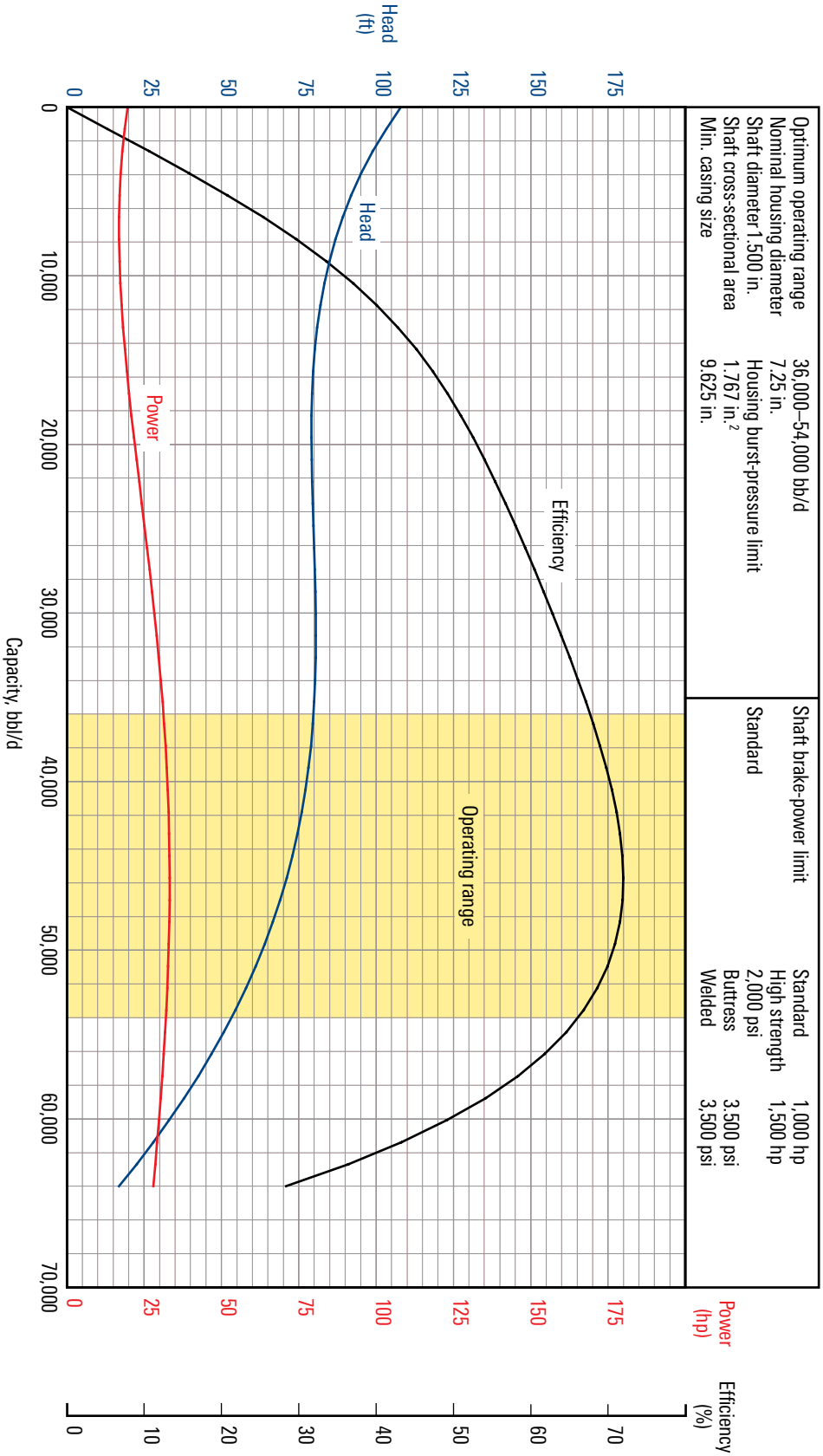
L43000N Pump

L43000N Pump, 725 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	32	2†							
170	34	1†	1†						
180	36		2†						
190	38		1†	1†					
200	40‡			2†					
210	42‡			1†	1†				
220	44‡				2†				
230	46‡				1†	1†			
240	48‡					2†			

Note: Stage counts are for C-CT-ES pumps
† Requires use of high-strength shaft in lowermost pump
‡ Requires use of buttress threads in uppermost pump

L43000N Pump



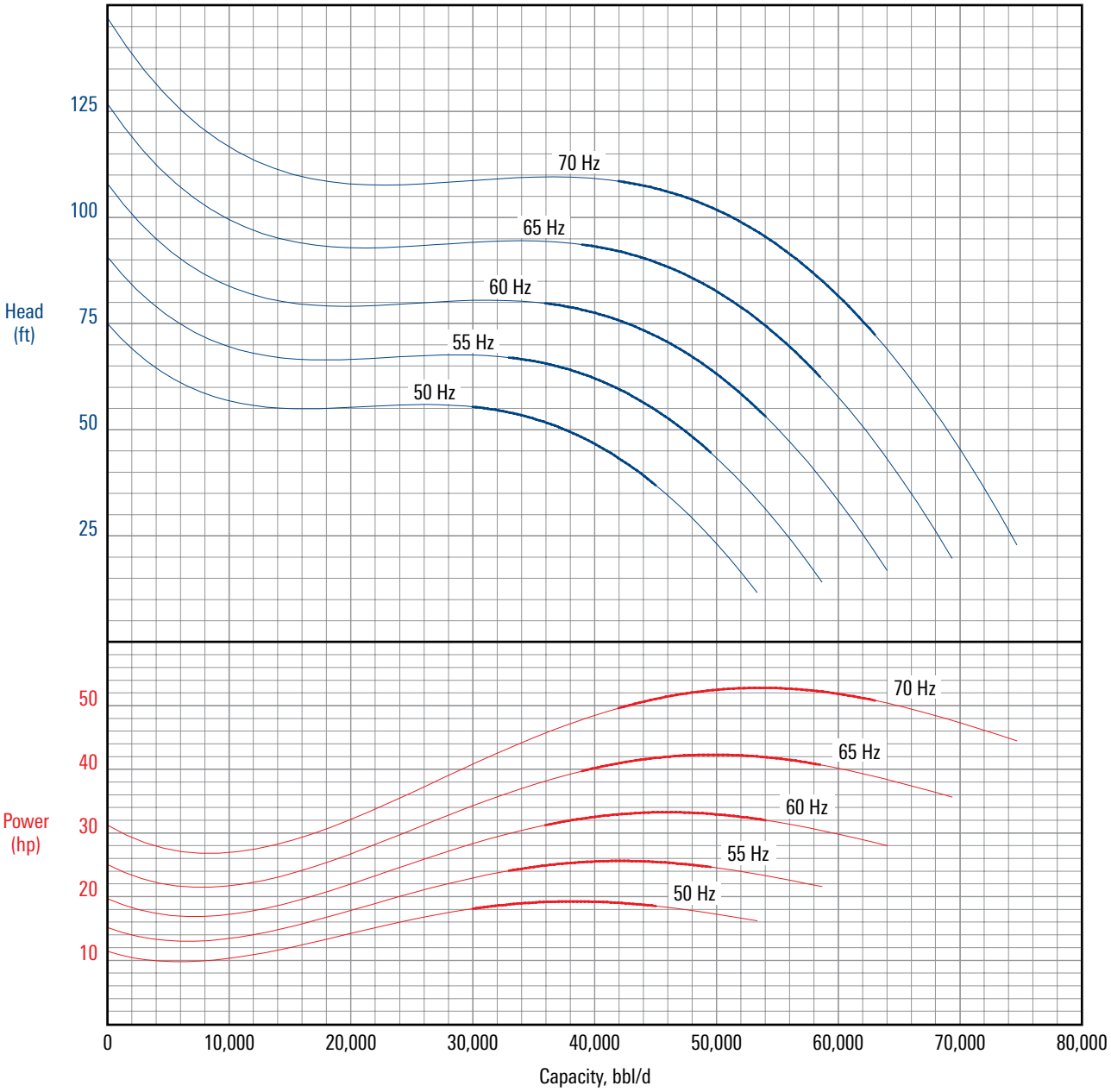
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

L43000N Pump

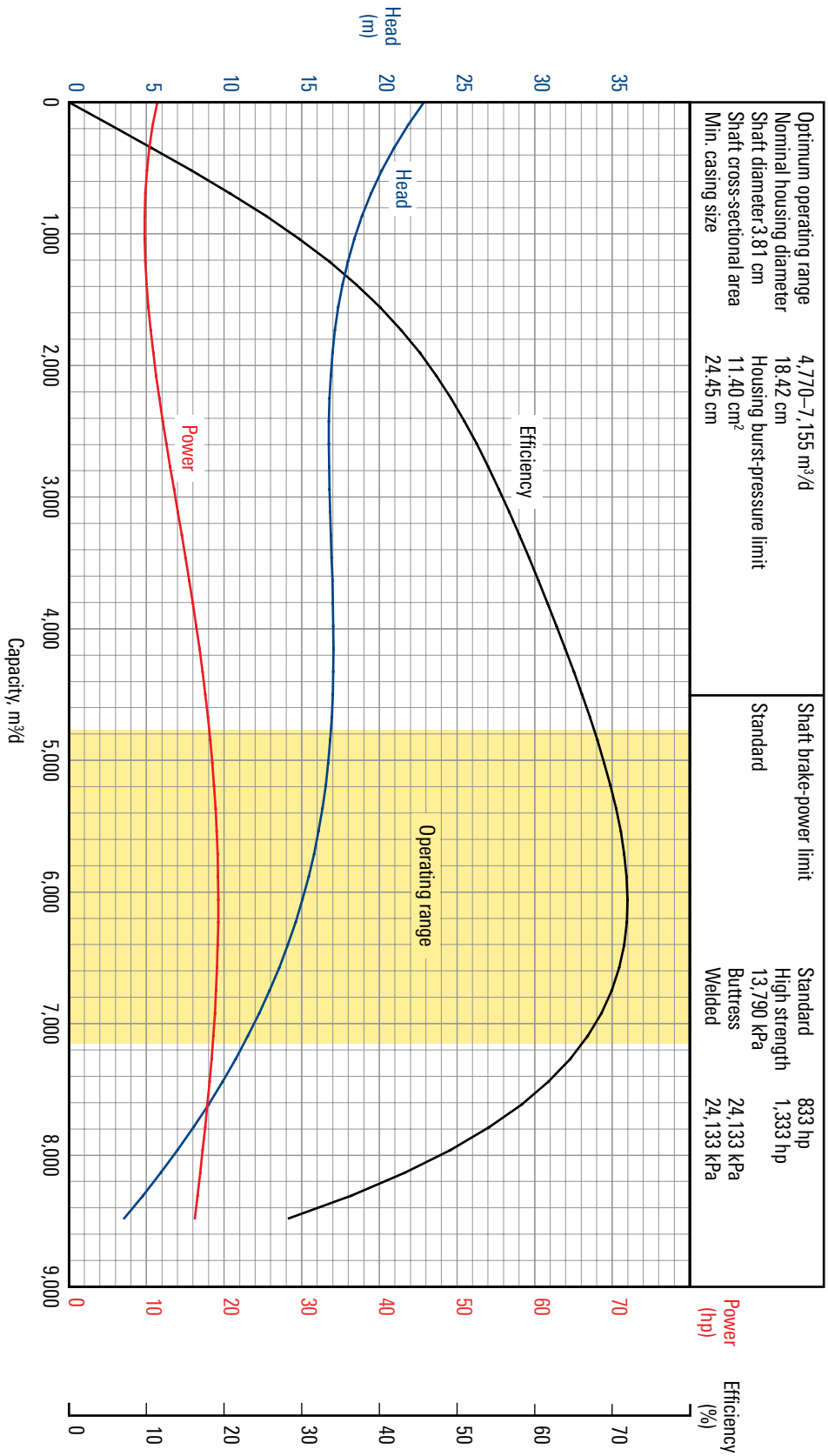
REDA ESP systems

Pump Performance Curve L43000N

Curve computed for one stage in fluid of 1.00 sg



L43000N Pump



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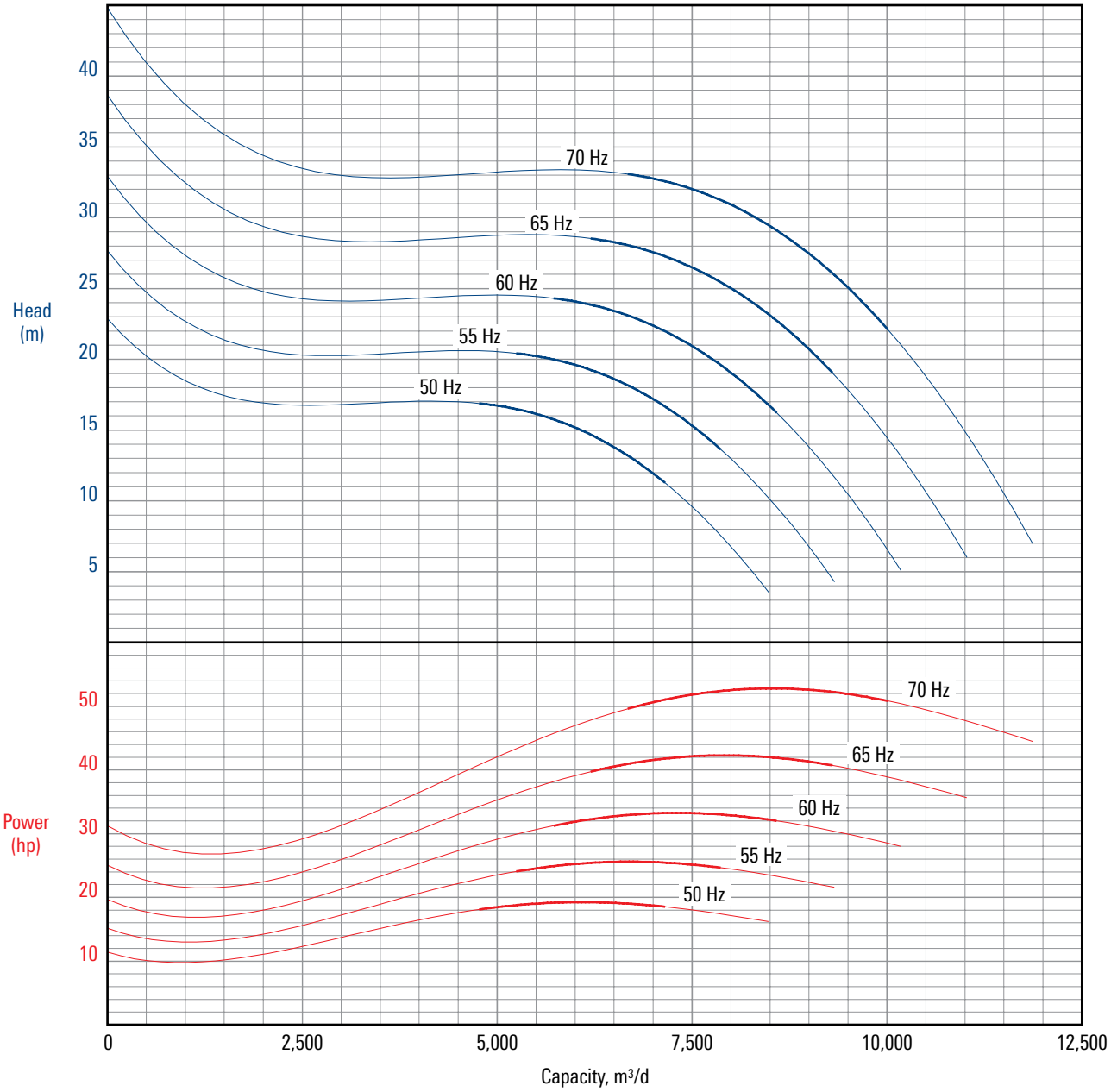
L43000N Pump

REDA ESP systems

Pump Performance Curve L43000N

Curve computed for one stage in fluid of 1.00 sg



M520 Pump

862 Series, Min. Casing Size 10¾-in [273.1-mm] OD

				Carbon Steel C-LT		ES Carbon Steel C-LT-ES	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"A" Cut Part Number**	**"B" Cut Part Number**
2M	3.9 [1.2]	340 [154]	2	1111277	tba†	tba	tba
3M	4.5 [1.4]	411 [187]	3	1111285	1111186	tba	tba
4M	5.1 [1.6]	471 [214]	4	1111293	1111194	tba	tba
5M	5.7 [1.7]	524 [238]	5	1111301	tba	tba	tba
6M	6.3 [1.9]	613 [278]	6	1111319	1111202	tba	tba
7M	6.9 [2.1]	673 [306]	7	1111327	1111210	tba	tba
8M	7.5 [2.3]	747 [339]	8	1111335	tba	tba	tba
9M	8.1 [2.5]	814 [370]	9	1111343	tba	tba	tba
10M	8.7 [2.7]	874 [397]	10	1111350	1111228	tba	tba
11M	9.3 [2.8]	942 [428]	11	1111368	tba	tba	tba
12M	9.9 [3.0]	1,009 [458]	12	1111376	tba	tba	tba
13M	10.5 [3.2]	1,076 [489]	13	1111384	tba	tba	tba
14M	11.1 [3.4]	1,143 [519]	14	1111392	1111236	tba	tba
15M	11.7 [3.6]	1,211 [550]	15	1111400	1111533	tba	tba
16M	12.3 [3.8]	1,278 [580]	16	1111418	tba	tba	tba
17M	12.9 [3.9]	1,349 [612]	17	1111426	tba	1299361	tba
18M	13.5 [4.1]	1,416 [643]	18	1111434	1111244	tba	tba
19M	14.1 [4.3]	1,480 [672]	19	1111442	tba	tba	tba
20M	14.8 [4.5]	1,547 [702]	20	1111459	1111251	tba	tba
21M	15.4 [4.7]	1,618 [735]	21	1111467	tba	tba	tba
22M	16.0 [4.9]	1,685 [765]	22	1111475	1111269	tba	tba
23M	16.5 [5.0]	1,749 [794]	23	1111483	tba	tba	tba
24M	17.2 [5.3]	1,816 [824]	24	1111491	tba	tba	tba
25M	17.8 [5.4]	1,887 [857]	25	1111509	tba	tba	tba
26M	18.4 [5.6]	1,954 [887]	26	1111517	tba	tba	tba
27M	19.0 [5.8]	2,021 [918]	27	1111525	tba	tba	tba

† To be assigned

M520 Pump

862 Series, Min. Casing Size 10¾-in [273.1-mm] OD

				Carbon Steel C-CT		ES Carbon Steel C-CT-ES	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"A" Cut Part Number**	**"B" Cut Part Number**
2M	2.5 [0.8]	271 [123]	2	1139047	1139302	tba†	tba
3M	3.1 [1.0]	342 [155]	3	1139054	1139310	tba	tba
4M	3.8 [1.2]	402 [183]	4	1139062	1139328	tba	tba
5M	4.4 [1.3]	455 [207]	5	1139070	1139336	tba	tba
6M	5.0 [1.5]	544 [247]	6	1139088	1139344	tba	tba
7M	5.6 [1.7]	604 [274]	7	1139096	1139351	R139096	tba
8M	6.2 [1.9]	678 [308]	8	1139104	1139369	1237114	tba
9M	6.8 [2.1]	745 [338]	9	1139112	1139377	tba	tba
10M	7.4 [2.3]	805 [365]	10	1139120	1139385	tba	tba
11M	8.0 [2.4]	873 [396]	11	1139138	1139393	tba	tba
12M	8.6 [2.6]	940 [427]	12	1139146	1139401	1200880	tba
13M	9.2 [2.8]	1,007 [457]	13	1139153	1139419	D13915Z	tba
14M	9.8 [3.0]	1,074 [488]	14	1139161	1139427	tba	tba
15M	10.4 [3.2]	1,142 [518]	15	1139179	1139435	tba	tba
16M	11.0 [3.4]	1,209 [549]	16	1139187	1139443	tba	tba
17M	11.6 [3.5]	1,280 [581]	17	1139195	1139450	tba	tba
18M	12.2 [3.7]	1,347 [612]	18	1139203	1139468	1319946	tba
19M	12.8 [3.9]	1,411 [641]	19	1139211	1139476	tba	tba
20M	13.4 [4.1]	1,478 [671]	20	1139229	1139484	tba	tba
21M	14.0 [4.3]	1,549 [703]	21	1139237	1139492	tba	tba
22M	14.6 [4.5]	1,616 [734]	22	1139245	1139500	2005623	tba
23M	15.2 [4.6]	1,680 [763]	23	1139252	1139518	1200898	tba
24M	15.8 [4.8]	1,747 [793]	24	1139260	1139526	tba	tba
25M	16.4 [5.0]	1,818 [825]	25	1139278	1139534	tba	tba
26M	17.0 [5.2]	1,885 [856]	26	1139286	1139542	tba	tba
27M	17.6 [5.4]	1,952 [886]	27	1139294	1139559	tba	tba
28M	18.3 [5.6]	2,019 [917]	28	tba	tba	tba	tba
29M	20.1 [6.1]	2,155 [978]	29	tba	tba	tba	tba
30M	20.7 [6.3]	2,222 [1,009]	30	tba	tba	tba	tba
31M	21.3 [6.5]	2,289 [1,039]	31	tba	tba	tba	tba

† To be assigned

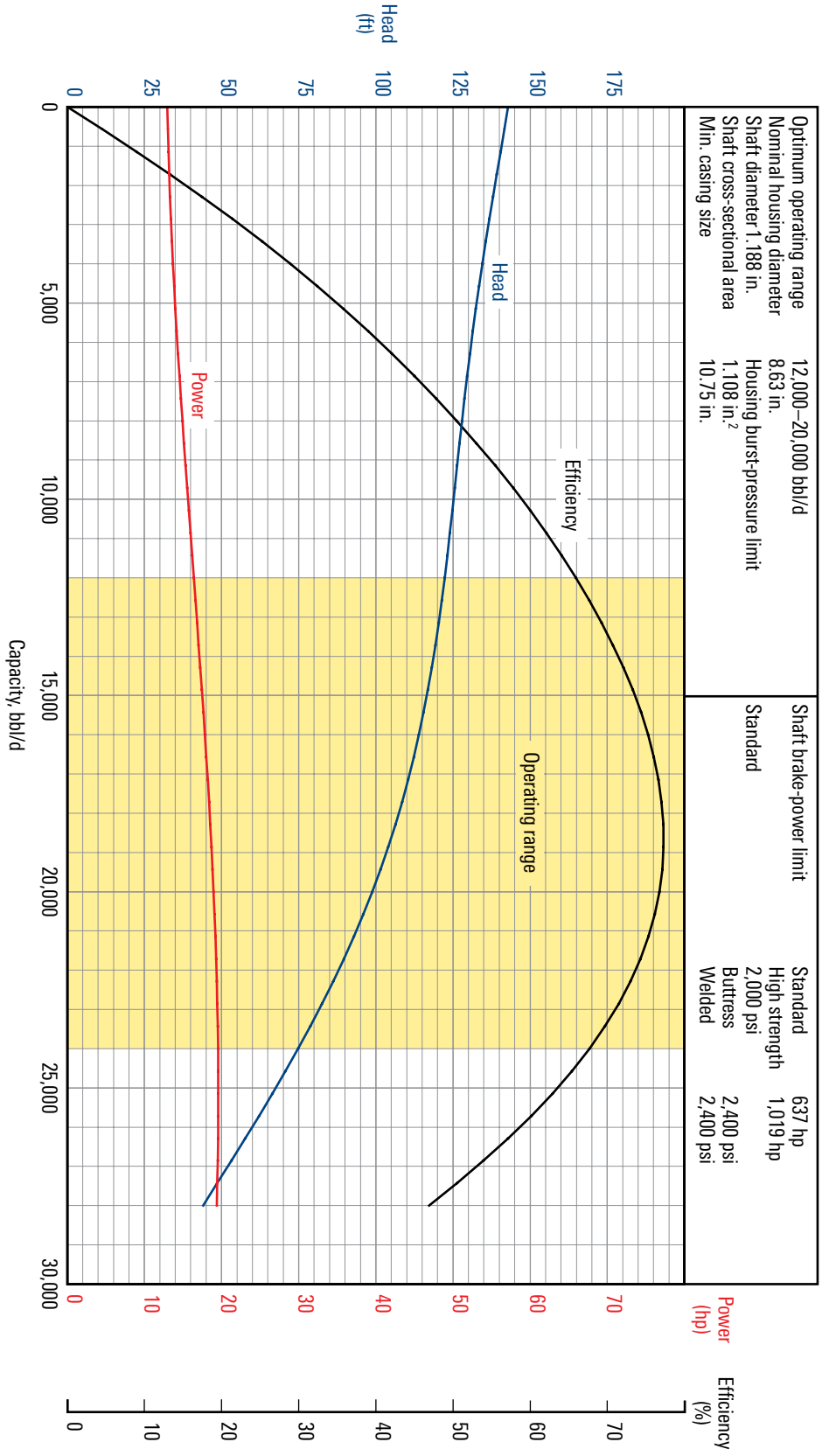
M520 Pump

862 Series, Min. Casing Size 10¾-in [273.1-mm] OD

				ARZ Carbon Steel C-CT-ARZ	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"B" Cut Part Number**
2M	2.5 [0.8]	271 [123]	2	1149467	1136445
3M	3.1 [1.0]	342 [155]	3	1149475	1149723
4M	3.8 [1.2]	402 [183]	4	1149483	1149731
5M	4.4 [1.3]	455 [207]	5	1149491	1336452
6M	5.0 [1.5]	544 [247]	6	1149509	1149749
7M	5.6 [1.7]	604 [274]	7	1149517	1149756
8M	6.2 [1.9]	678 [308]	8	1149525	1336460
9M	6.8 [2.1]	745 [338]	9	1149533	1336478
10M	7.4 [2.3]	805 [365]	10	1149541	1149764
11M	8.0 [2.4]	873 [396]	11	1149558	1336486
12M	8.6 [2.6]	940 [427]	12	1149566	1336494
13M	9.2 [2.8]	1,007 [457]	13	1149574	1336502
14M	9.8 [3.0]	1,074 [488]	14	1149582	1149772
15M	10.4 [3.2]	1,142 [518]	15	1149590	1149780
16M	11.0 [3.4]	1,209 [549]	16	1149608	1336510
17M	11.6 [3.5]	1,280 [581]	17	1149616	1336528
18M	12.2 [3.7]	1,347 [612]	18	1149624	1149798
19M	12.8 [3.9]	1,411 [641]	19	1149632	1336536
20M	13.4 [4.1]	1,478 [671]	20	1149640	1149806
21M	14.0 [4.3]	1,549 [703]	21	1149657	1336544
22M	14.6 [4.5]	1,616 [734]	22	1149665	1149814
23M	15.2 [4.6]	1,680 [763]	23	1149673	1336551
24M	15.8 [4.8]	1,747 [793]	24	1149681	1336569
25M	16.4 [5.0]	1,818 [825]	25	1149699	1336577
26M	17.0 [5.2]	1,885 [856]	26	1149707	1336585
27M	17.6 [5.4]	1,952 [886]	27	1149715	1336593
28M	18.3 [5.6]	2,019 [917]	28	1249606	1336601
29M	20.1 [6.1]	2,155 [978]	29	1336411	1336619
30M	20.7 [6.3]	2,222 [1,009]	30	1277003	tba†
31M	21.3 [6.5]	2,289 [1,039]	31	2006500	tba

† To be assigned

M520 Pump



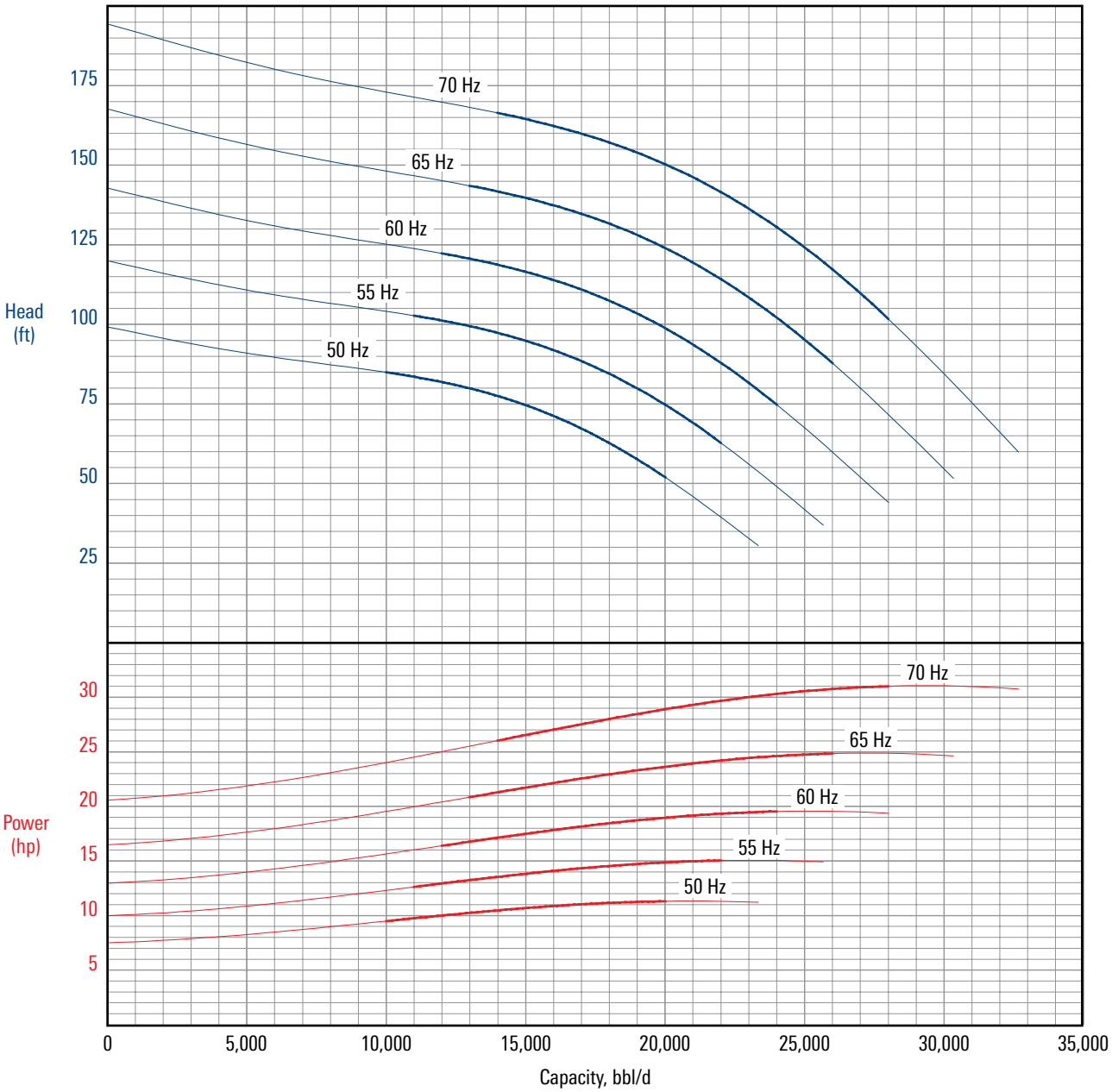
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M520 Pump

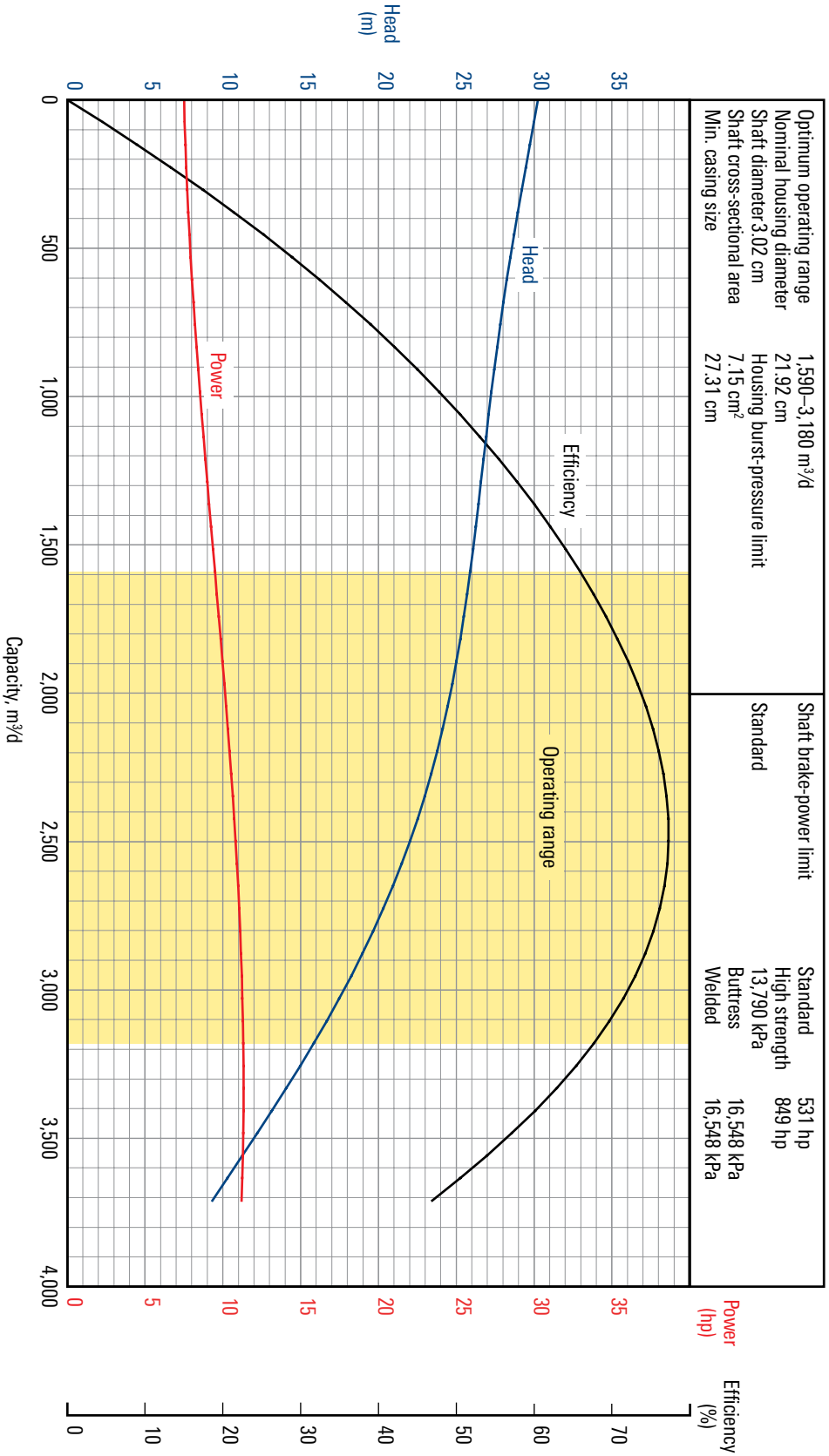
REDA ESP systems

Pump Performance Curve M520A

Curve computed for one stage in fluid of 1.00 sg



M520 Pump



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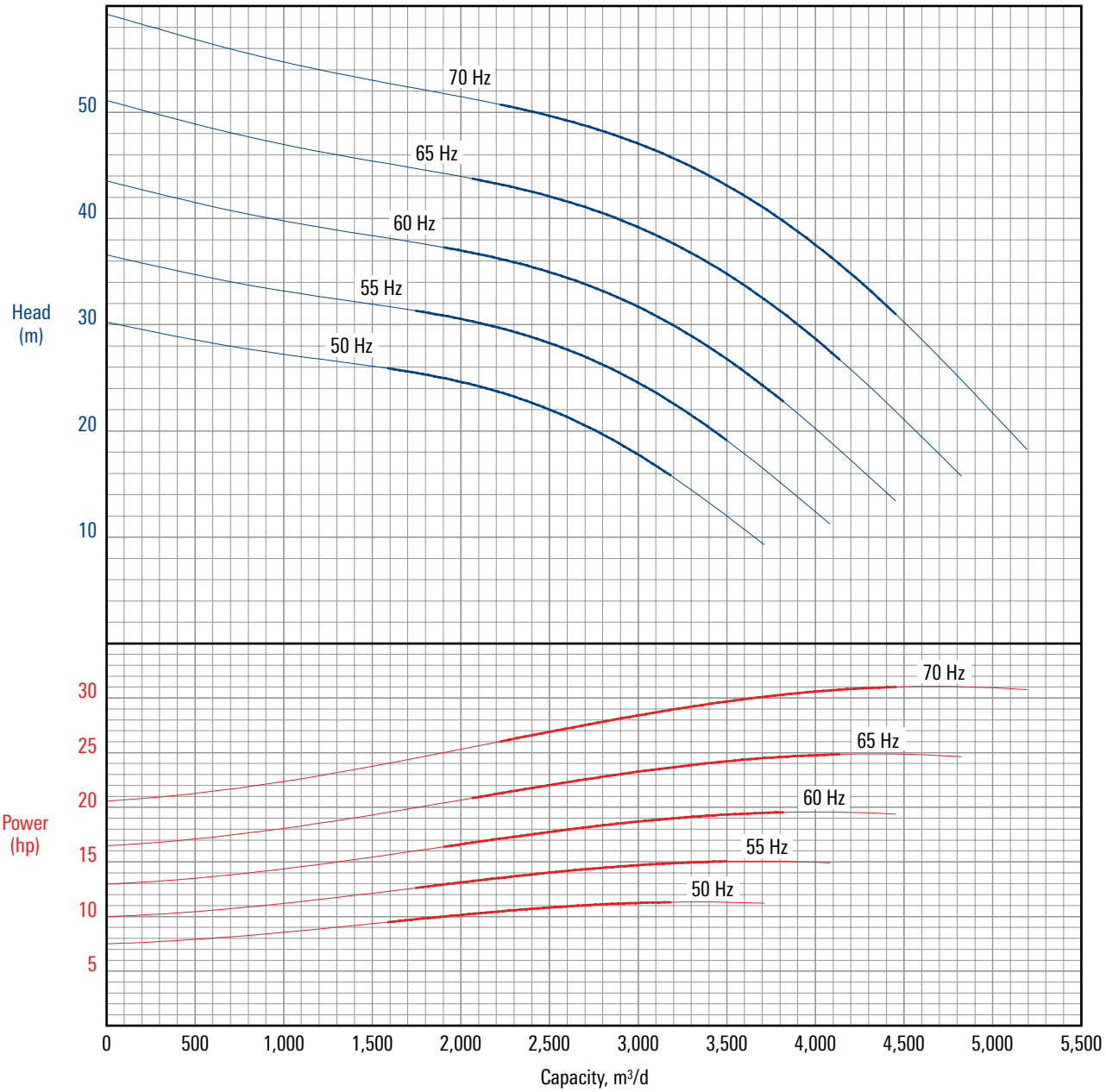
M520 Pump

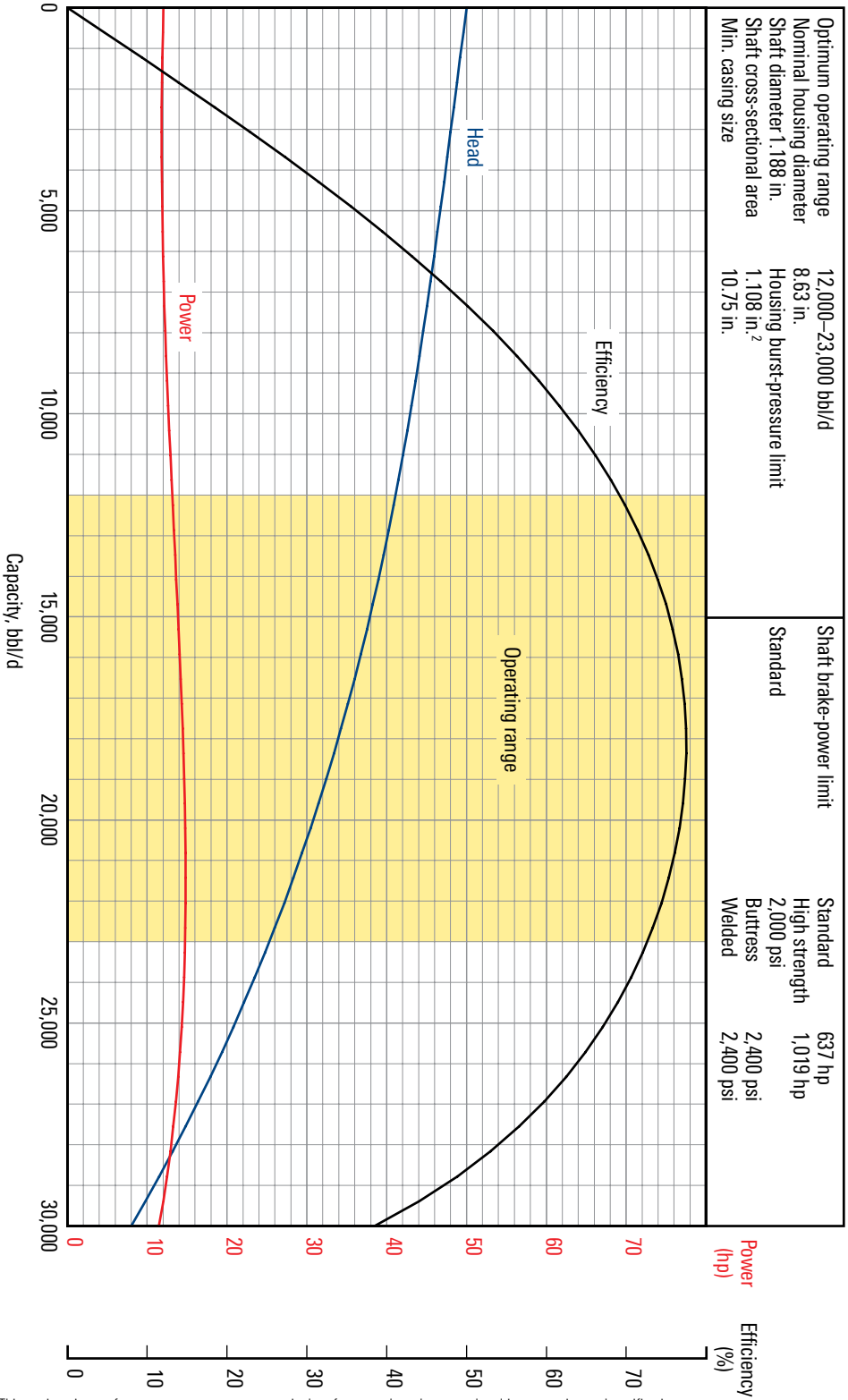
REDA ESP systems

Pump Performance Curve M520A

Curve computed for one stage in fluid of 1.00 sg



M520 Pump



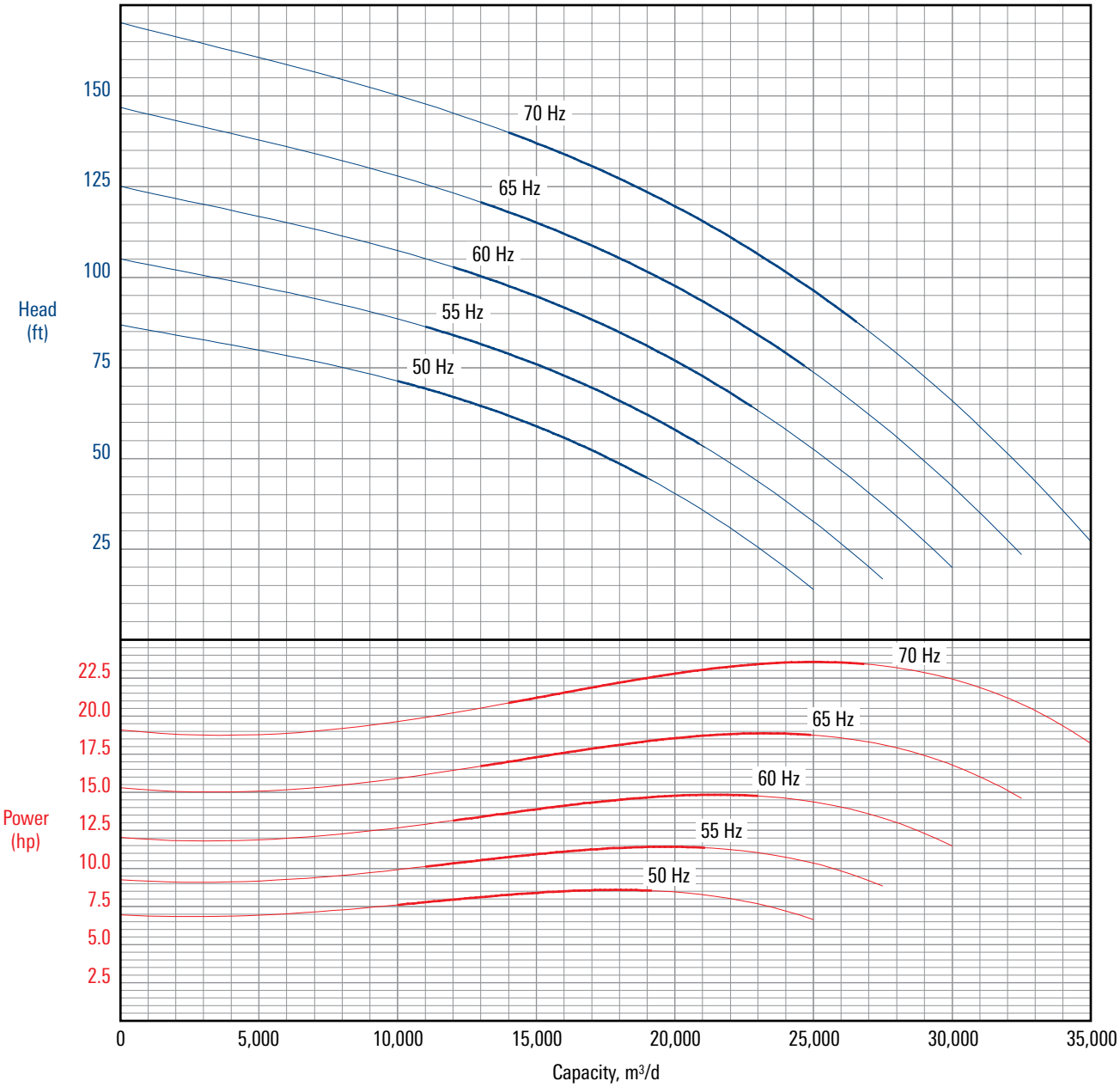
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M520 Pump

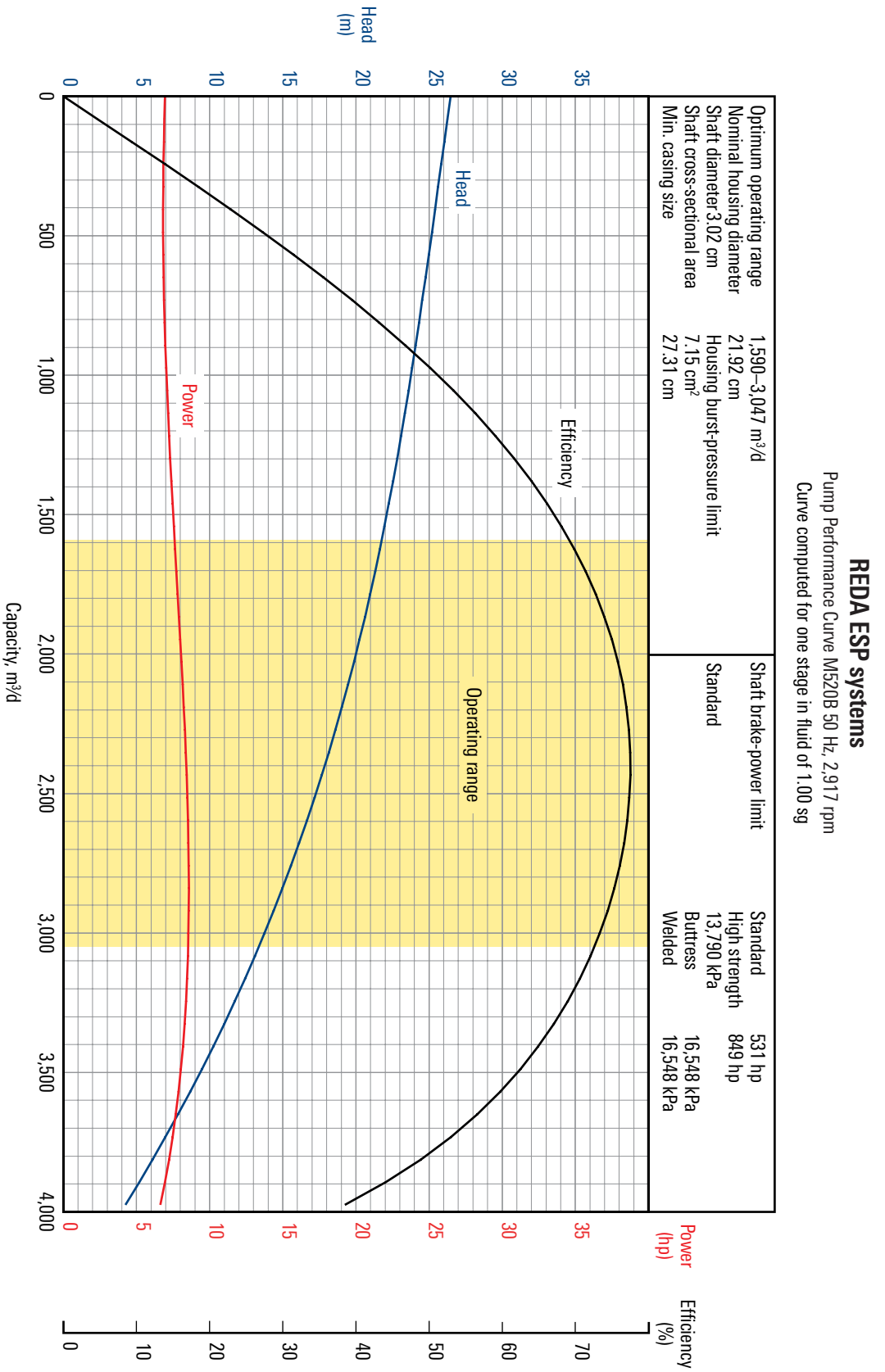
REDA ESP systems

Pump Performance Curve M520B

Curve computed for one stage in fluid of 1.00 sg



M520 Pump



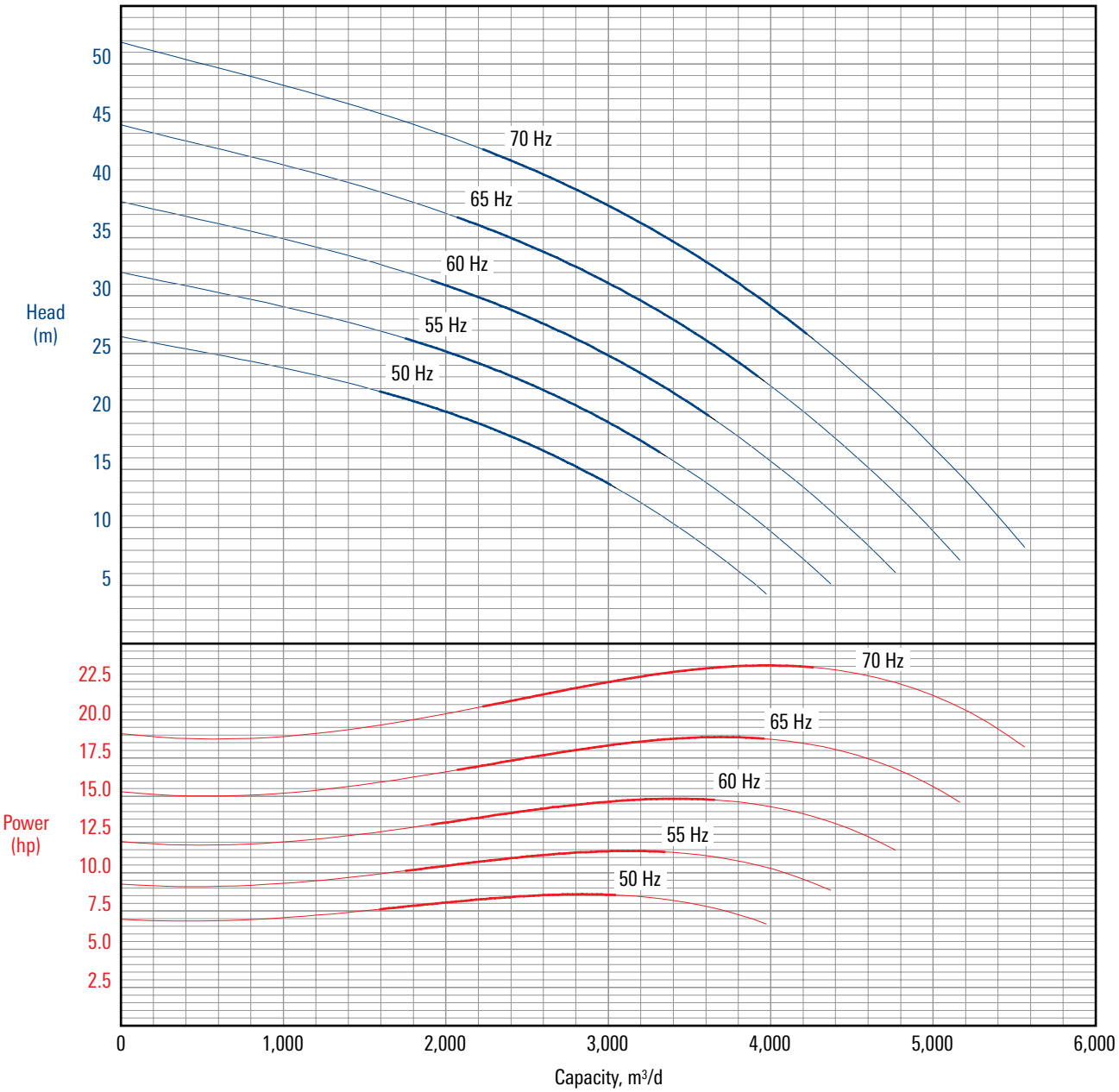
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M520 Pump

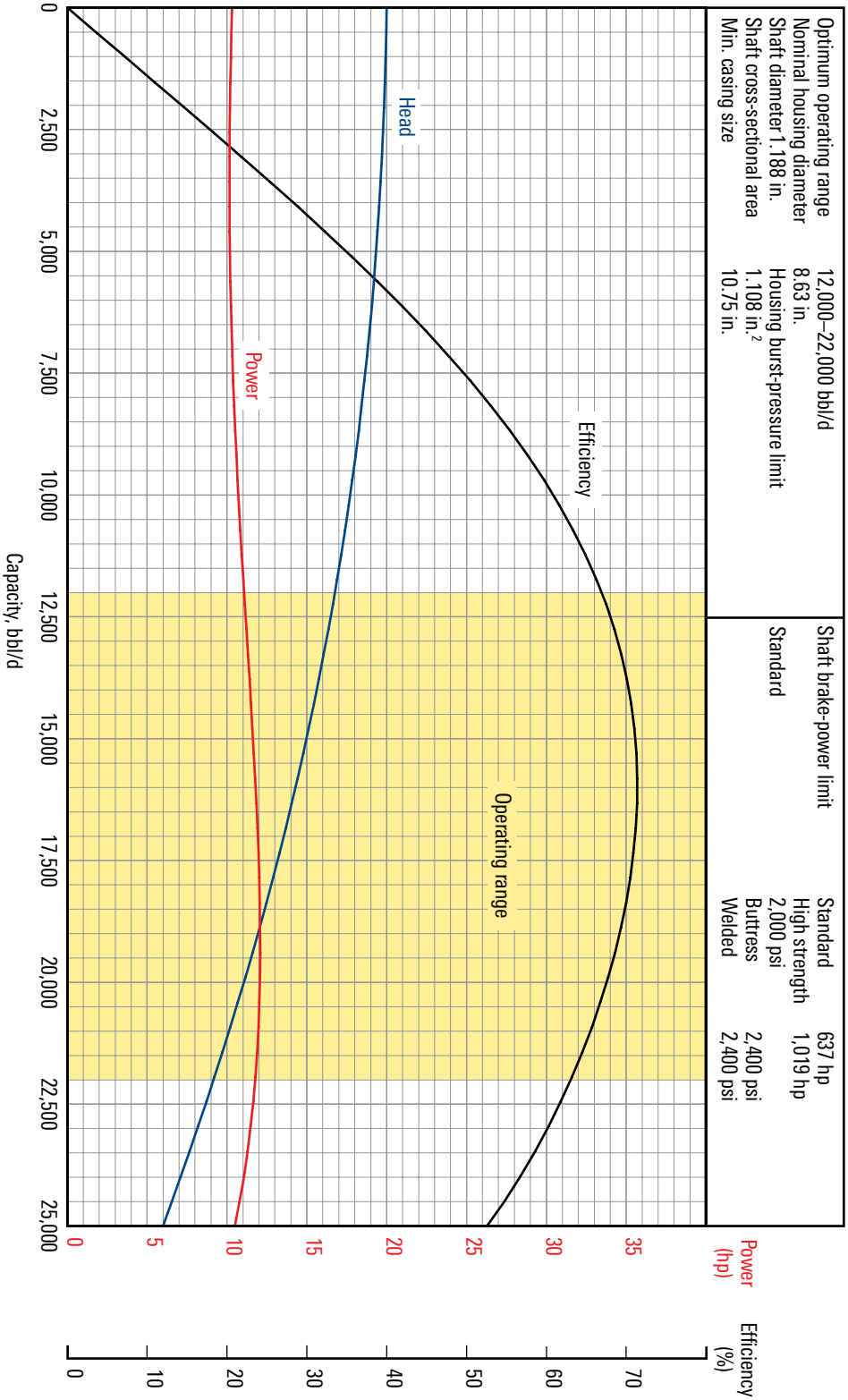
REDA ESP systems

Pump Performance Curve M520B

Curve computed for one stage in fluid of 1.00 sg



M520 Pump



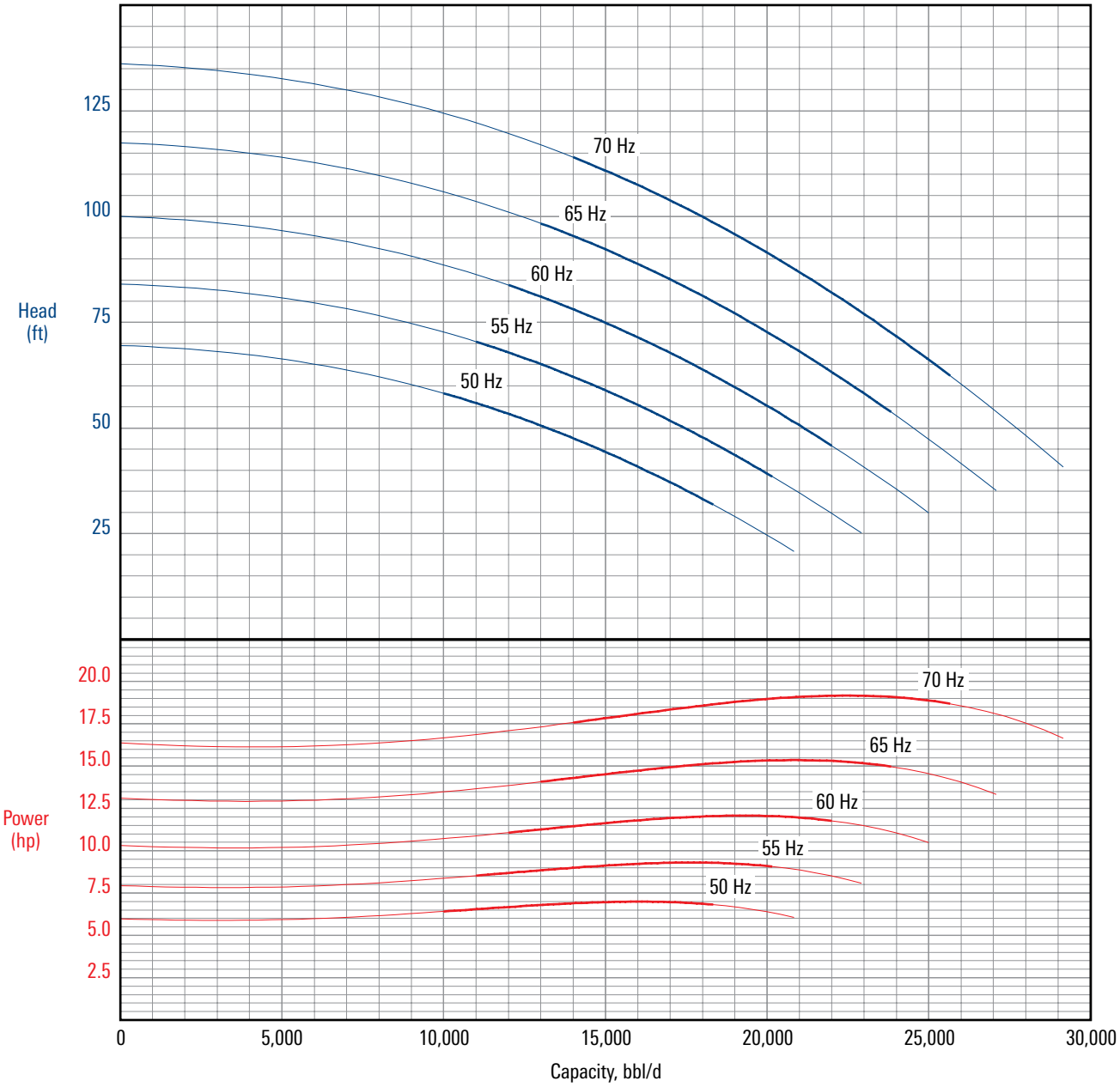
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M520 Pump

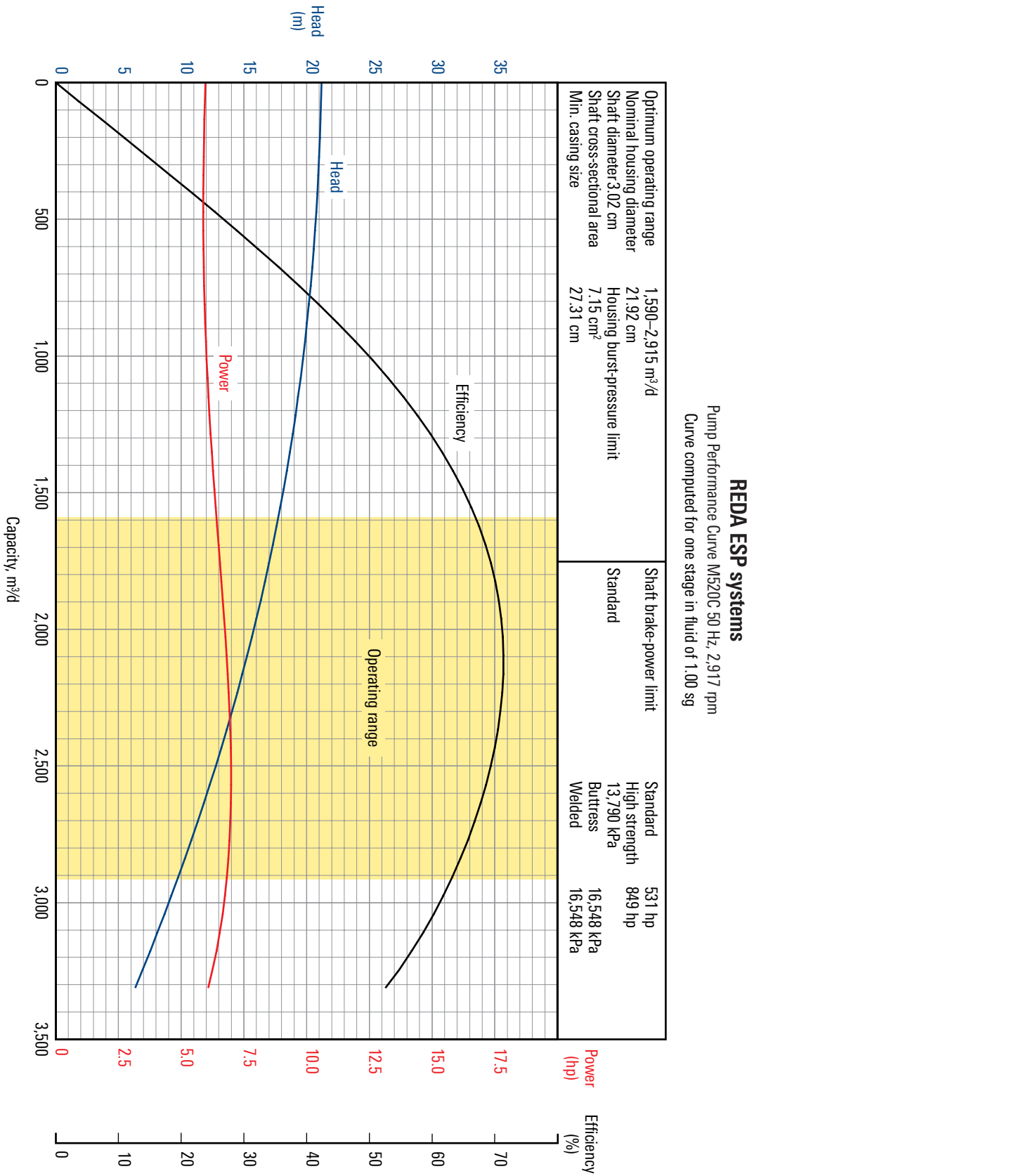
REDA ESP systems

Pump Performance Curve M520C

Curve computed for one stage in fluid of 1.00 sg



M520 Pump



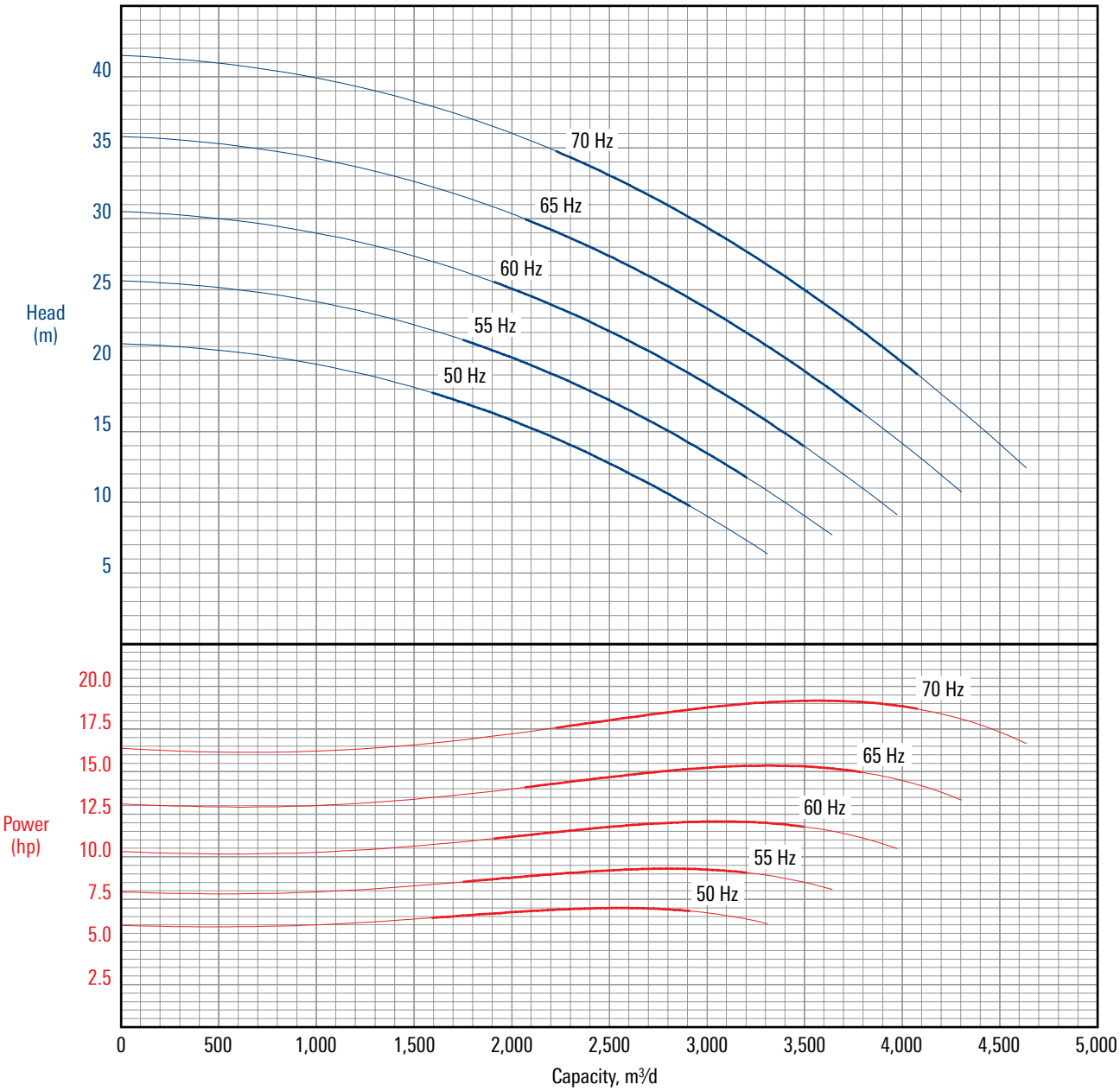
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M520 Pump

REDA ESP systems

Pump Performance Curve M520C

Curve computed for one stage in fluid of 1.00 sg



M675 Pump

862 Series, Min. Casing Size 10¾-in [273.1-mm] OD

				Carbon Steel C-LT			ES Carbon Steel C-LT-ES		
Housing Number	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"C" Cut Part Number**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"C" Cut Part Number**
2M	3.9 [1.2]	340 [154]	2	1111020	1119775	tba†	tba	tba	tba
3M	4.5 [1.4]	411 [187]	3	1111038	1119783	tba	tba	tba	tba
4M	5.1 [1.6]	471 [214]	4	1111046	tba	tba	tba	tba	tba
5M	5.7 [1.7]	524 [238]	5	1111053	tba	tba	tba	tba	tba
6M	6.3 [1.9]	613 [278]	6	1111061	tba	tba	tba	tba	tba
7M	6.9 [2.1]	673 [306]	7	1111079	tba	tba	tba	tba	tba
8M	7.5 [2.3]	747 [339]	8	1111087	tba	tba	tba	tba	tba
9M	8.1 [2.5]	814 [370]	9	1111095	1111004	tba	tba	tba	tba
10M	8.7 [2.7]	874 [397]	10	1111103	tba	tba	tba	tba	tba
11M	9.3 [2.8]	942 [428]	11	1111111	tba	tba	tba	tba	tba
12M	9.9 [3.0]	1,009 [458]	12	1111129	tba	tba	tba	tba	tba
13M	10.5 [3.2]	1,076 [489]	13	1111137	1111012	tba	tba	tba	tba
14M	11.1 [3.4]	1,143 [519]	14	1111145	tba	tba	tba	tba	tba
15M	11.7 [3.6]	1,211 [550]	15	1111152	tba	1110998	tba	tba	tba
16M	12.3 [3.8]	1,278 [580]	16	1111160	tba	tba	tba	tba	tba
17M	12.9 [3.9]	1,349 [612]	17	1111178	tba	tba	tba	tba	tba
18M	13.5 [4.1]	1,416 [643]	18	tba	tba	tba	tba	tba	tba
19M	14.1 [4.3]	1,480 [672]	19	tba	tba	tba	tba	tba	tba
20M	14.8 [4.5]	1,547 [702]	20	tba	tba	tba	tba	tba	tba
21M	15.4 [4.7]	1,618 [735]	21	tba	tba	tba	tba	tba	tba
22M	16.0 [4.9]	1,685 [765]	22	tba	tba	tba	tba	tba	tba
23M	16.5 [5.0]	1,749 [794]	23	tba	tba	tba	tba	tba	tba
24M	17.2 [5.3]	1,816 [824]	24	tba	tba	tba	tba	tba	tba
25M	17.8 [5.4]	1,887 [857]	25	tba	tba	tba	tba	tba	tba
26M	18.4 [5.6]	1,954 [887]	26	tba	tba	tba	tba	tba	tba
27M	19.0 [5.8]	2,021 [918]	27	tba	tba	tba	tba	tba	tba
28M	19.6 [3.0]	2,088 [948]	28	1119791	tba	tba	1119791	tba	tba

†To be assigned

M675 Pump

862 Series, Min. Casing Size 10¾-in [273.1-mm] OD

				ARZ Carbon Steel C-CT-ARZ		
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"C" Cut Part Number**
2M	2.5 [0.76]	271 [123.03]	2	1149822	1149996	tba†
3M	3.1 [0.95]	342 [155.27]	3	1149830	1150002	tba
4M	3.8 [1.16]	402 [182.51]	4	1149848	1336742	tba
5M	4.4 [1.34]	455 [206.57]	5	1149855	1336759	tba
6M	5.0 [1.53]	544 [246.98]	6	1149863	1336767	tba
7M	5.6 [1.71]	604 [274.22]	7	1149871	1336775	tba
8M	6.2 [1.89]	678 [307.81]	8	1149889	1336783	tba
9M	6.8 [2.07]	745 [338.23]	9	1149897	1150010	tba
10M	7.4 [2.26]	805 [365.47]	10	1149905	1336791	tba
11M	8.0 [2.44]	873 [396.34]	11	1149913	1336809	tba
12M	8.6 [2.62]	940 [426.76]	12	1149921	1336817	tba
13M	9.2 [2.81]	1,007 [457.18]	13	1149939	1150028	tba
14M	9.8 [2.99]	1,074 [487.60]	14	1149947	1336825	tba
15M	10.4 [3.17]	1,142 [518.47]	15	1149954	1336833	1150036
16M	11.0 [3.36]	1,209 [548.89]	16	1149962	1336841	tba
17M	11.6 [3.54]	1,280 [581.12]	17	1149970	1336858	tba
18M	12.2 [3.72]	1,347 [611.54]	18	1336635	1336866	tba
19M	12.8 [3.90]	1,411 [640.59]	19	1336643	1336874	tba
20M	13.4 [4.09]	1,478 [671.01]	20	1252535	1336882	tba
21M	14.0 [4.27]	1,549 [703.25]	21	1336650	1336890	tba
22M	14.6 [4.45]	1,616 [733.66]	22	1336668	1336908	tba
23M	15.2 [4.64]	1,680 [762.72]	23	1336676	1336916	tba
24M	15.8 [4.82]	1,747 [793.14]	24	1336684	1336924	tba
25M	16.4 [5.00]	1,818 [825.37]	25	1336692	1336932	tba
26M	17.0 [5.19]	1,885 [855.79]	26	1336700	1336940	tba
27M	17.6 [5.37]	1,952 [886.21]	27	1336718	1336957	tba
28M	18.3 [5.58]	2,019 [916.63]	28	1149988	1336965	tba

†To be assigned

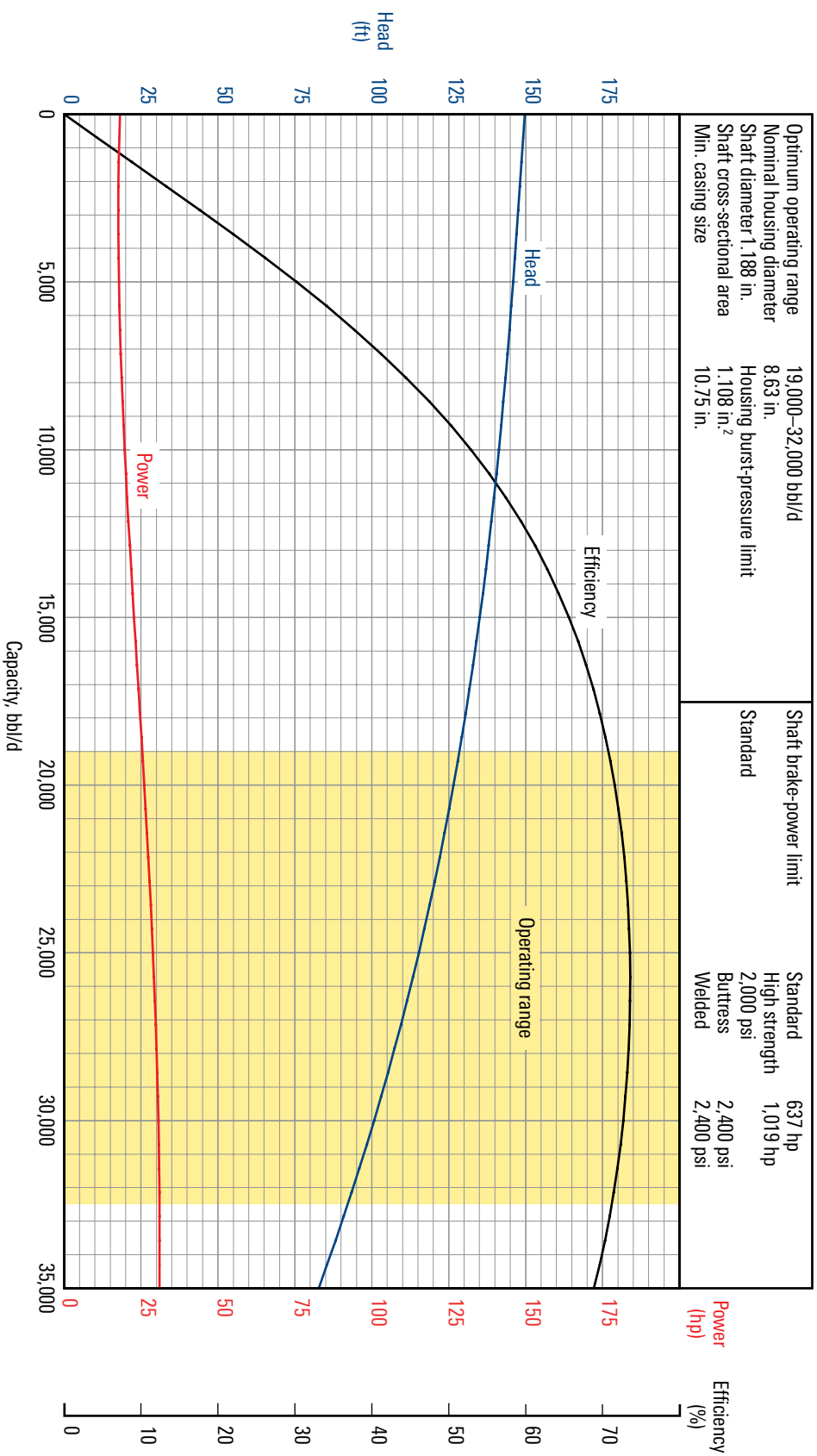
M675 Pump

862 Series, Min. Casing Size 10¾-in [273.1-mm] OD

				Carbon Steel C-CT			ES Carbon Steel C-CT-ES		
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"C" Cut Part Number**	**"A" Cut Part Number**	**"B" Cut Part Number**	**"C" Cut Part Number**
2M	2.5 [0.8]	271 [123]	2	1138239	1138502	1138775	tba†	tba	tba
3M	3.1 [1.0]	342 [155]	3	1138247	1138510	1138783	tba	tba	tba
4M	3.8 [1.2]	402 [183]	4	1138254	1138528	1138791	tba	tba	tba
5M	4.4 [1.3]	455 [207]	5	1138262	1138536	1138809	1185024	tba	tba
6M	5.0 [1.5]	544 [247]	6	1138270	1138544	1138817	tba	tba	tba
7M	5.6 [1.7]	604 [274]	7	1138288	1138551	1138825	D13828Z	tba	tba
8M	6.2 [1.9]	678 [308]	8	1138296	1138569	1138833	tba	M13856U	tba
9M	6.8 [2.1]	745 [338]	9	1138304	1138577	1138841	tba	tba	tba
10M	7.4 [2.3]	805 [365]	10	1138312	1138585	1138858	tba	tba	tba
11M	8.0 [2.4]	873 [396]	11	1138320	1138593	1138866	tba	tba	tba
12M	8.6 [2.6]	940 [427]	12	1138338	1138601	1138874	tba	tba	tba
13M	9.2 [2.8]	1,007 [457]	13	1138346	1138619	1138882	tba	tba	tba
14M	9.8 [3.0]	1,074 [488]	14	1138353	1138627	1138890	tba	tba	tba
15M	10.4 [3.2]	1,142 [518]	15	1138361	1138635	1138908	D13836Z	tba	tba
16M	11.0 [3.4]	1,209 [549]	16	1138379	1138643	1138916	D13837Z	tba	tba
17M	11.6 [3.5]	1,280 [581]	17	1138387	1138650	1138924	tba	tba	tba
18M	12.2 [3.7]	1,347 [612]	18	1138395	1138668	1138932	tba	tba	tba
19M	12.8 [3.9]	1,411 [641]	19	1138403	1138676	1138940	tba	tba	tba
20M	13.4 [4.1]	1,478 [671]	20	1138411	1138684	1138957	tba	tba	tba
21M	14.0 [4.3]	1,549 [703]	21	1138429	1138692	1138965	tba	tba	tba
22M	14.6 [4.5]	1,616 [734]	22	1138437	1138700	1138973	tba	tba	tba
23M	15.2 [4.6]	1,680 [763]	23	1138445	1138718	1138981	tba	tba	tba
24M	15.8 [4.8]	1,747 [793]	24	1138452	1138726	1138999	tba	tba	tba
25M	16.4 [5.0]	1,818 [825]	25	1138460	1138734	1139005	tba	tba	tba
26M	17.0 [5.2]	1,885 [856]	26	1138478	1138742	1139013	tba	tba	tba
27M	17.6 [5.4]	1,952 [886]	27	1138486	1138759	1139021	tba	tba	tba
28M	18.3 [5.6]	2,019 [917]	28	1138494	1138767	1139039	tba	tba	tba

† To be assigned

M675 Pump



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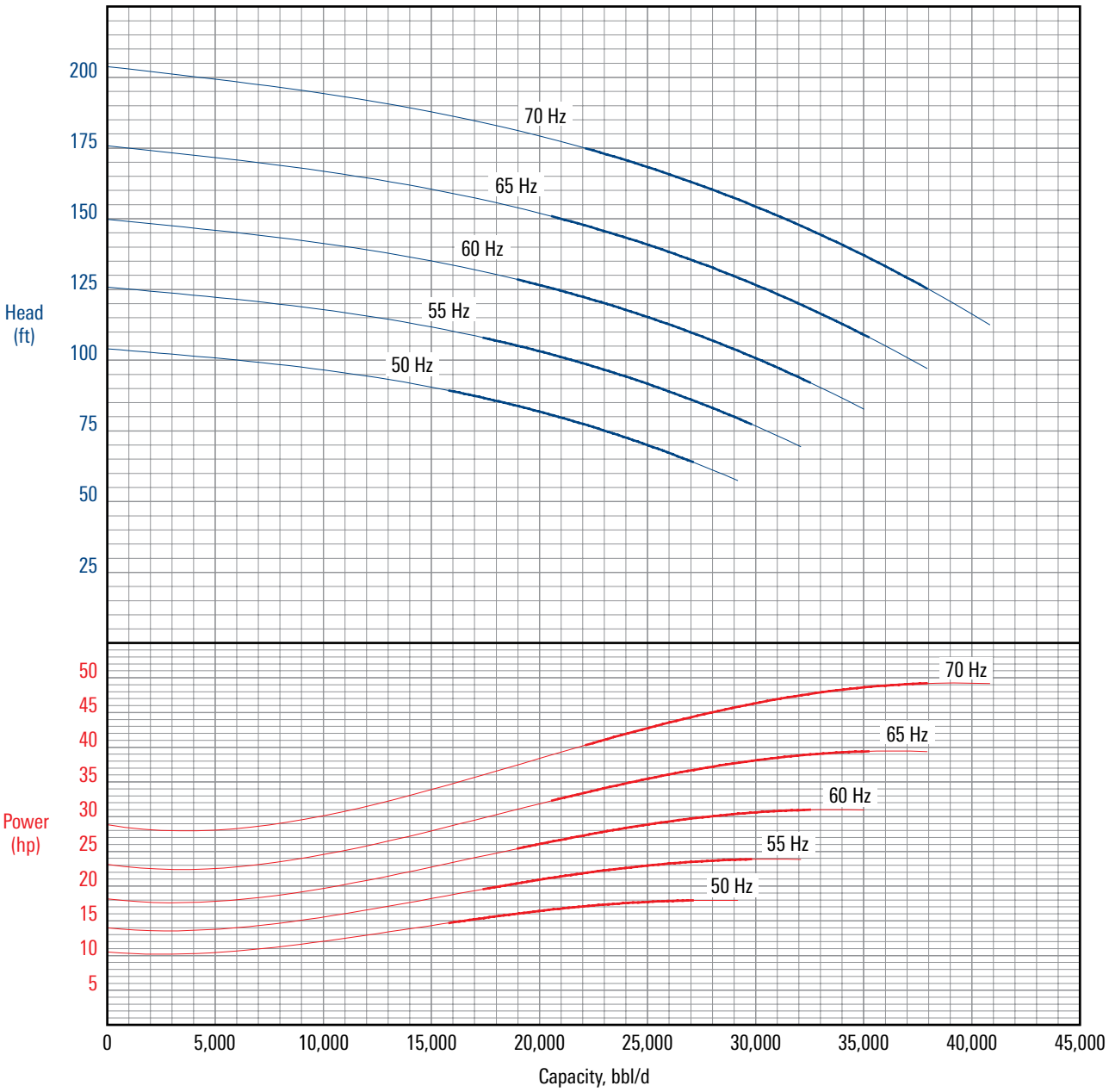
M675 Pump

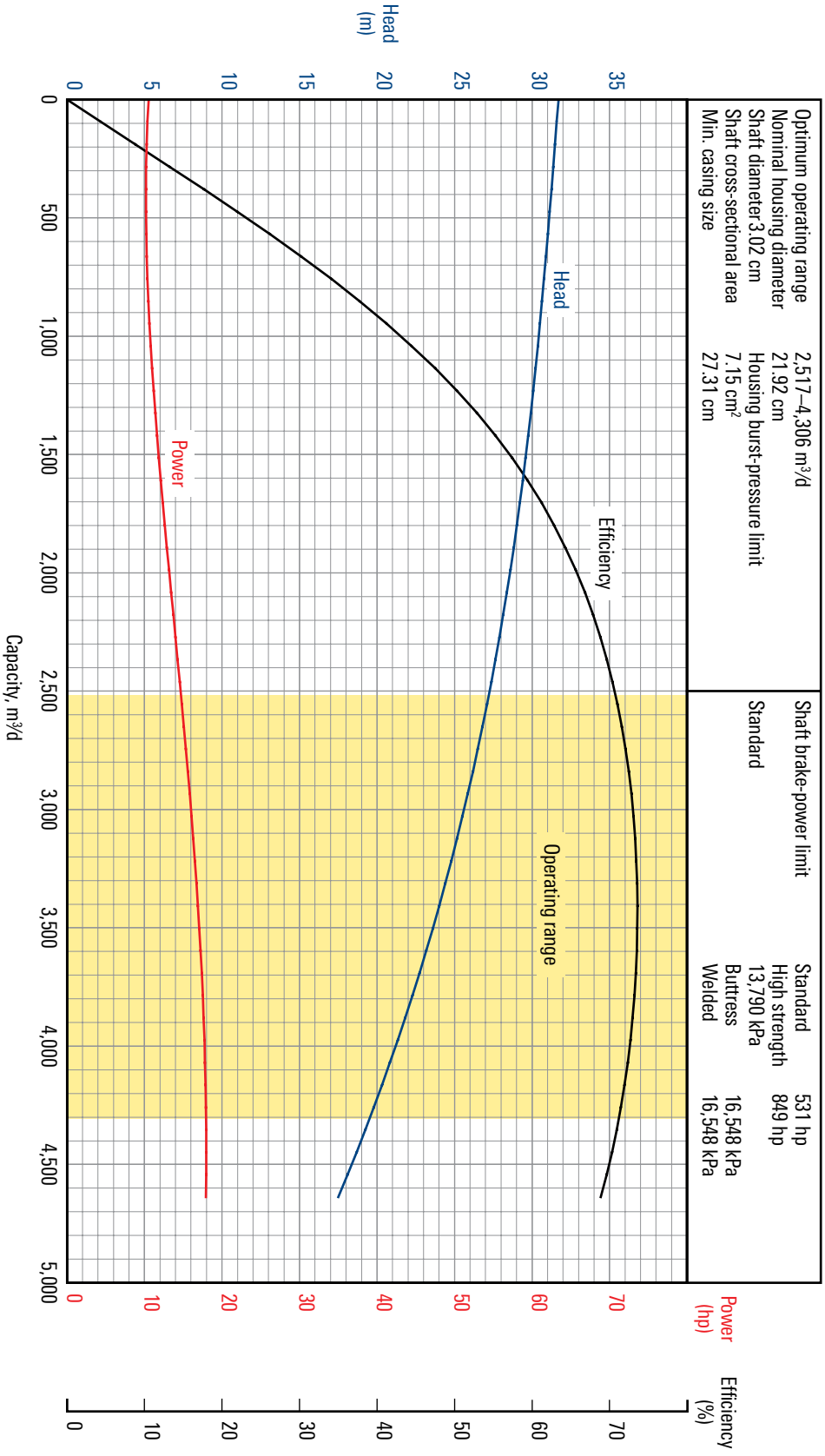
REDA ESP systems

Pump Performance Curve M675A

Curve computed for one stage in fluid of 1.00 sg



M675 Pump



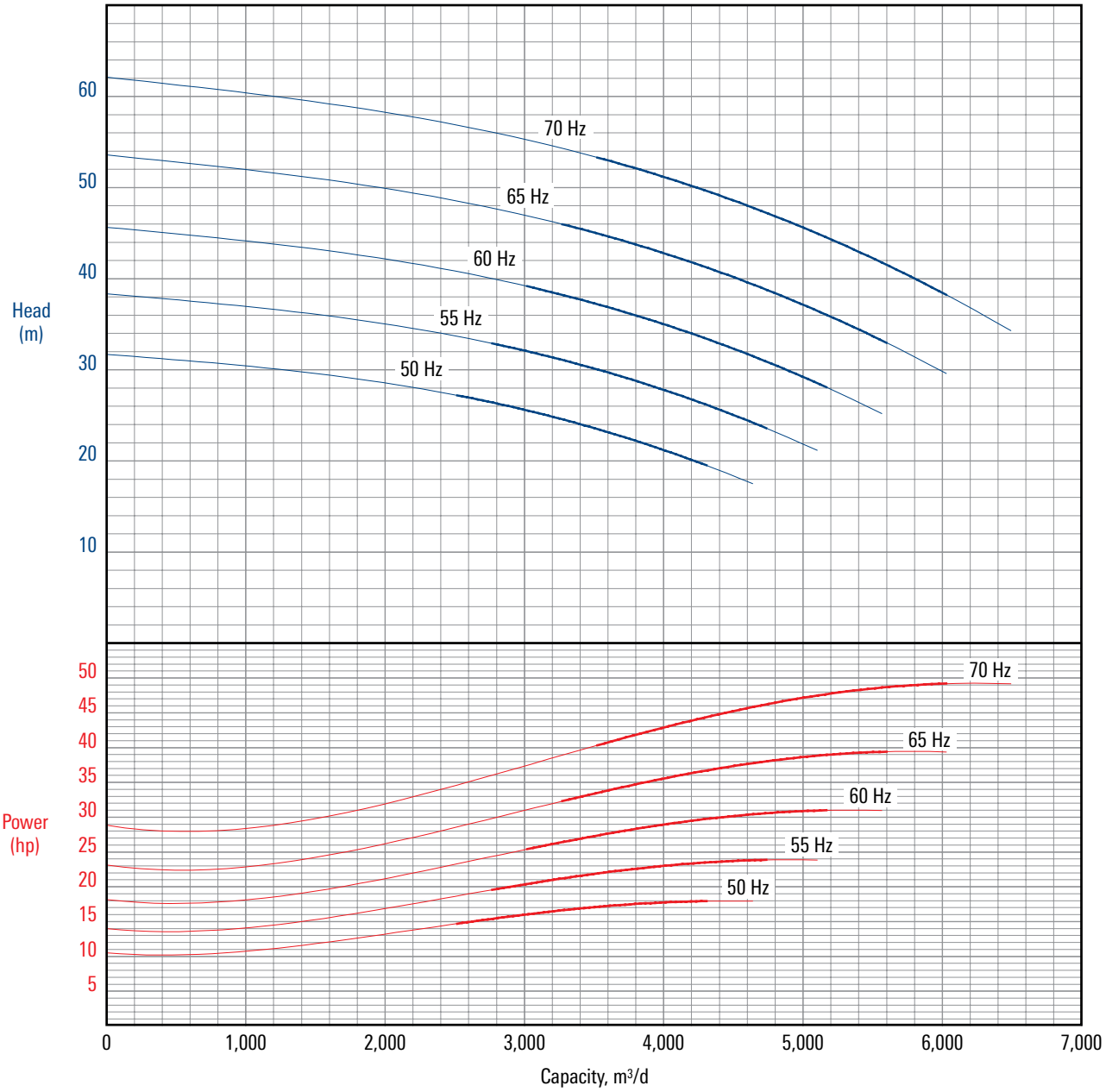
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M675 Pump

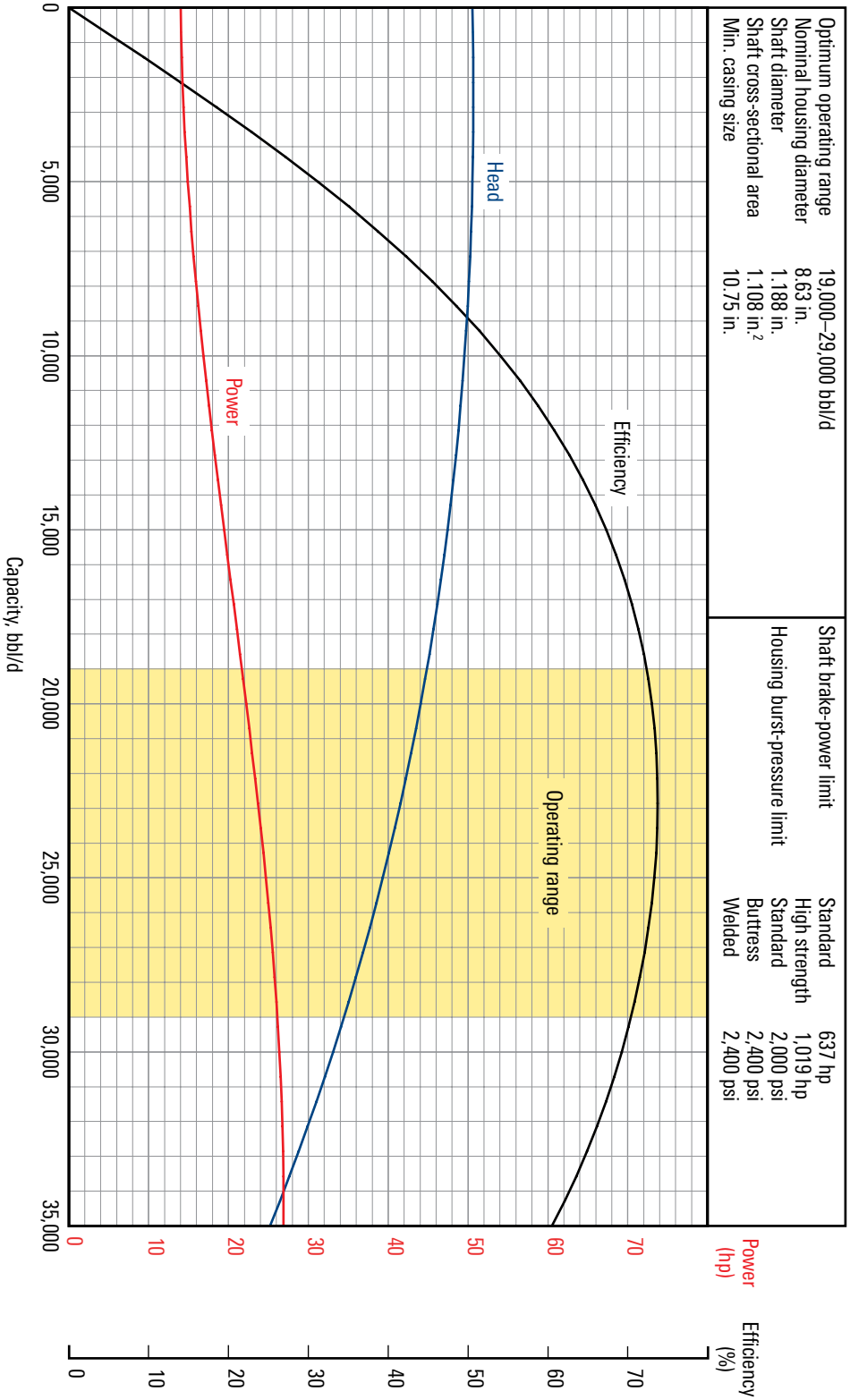
REDA ESP systems

Pump Performance Curve M675A

Curve computed for one stage in fluid of 1.00 sg



M675 Pump



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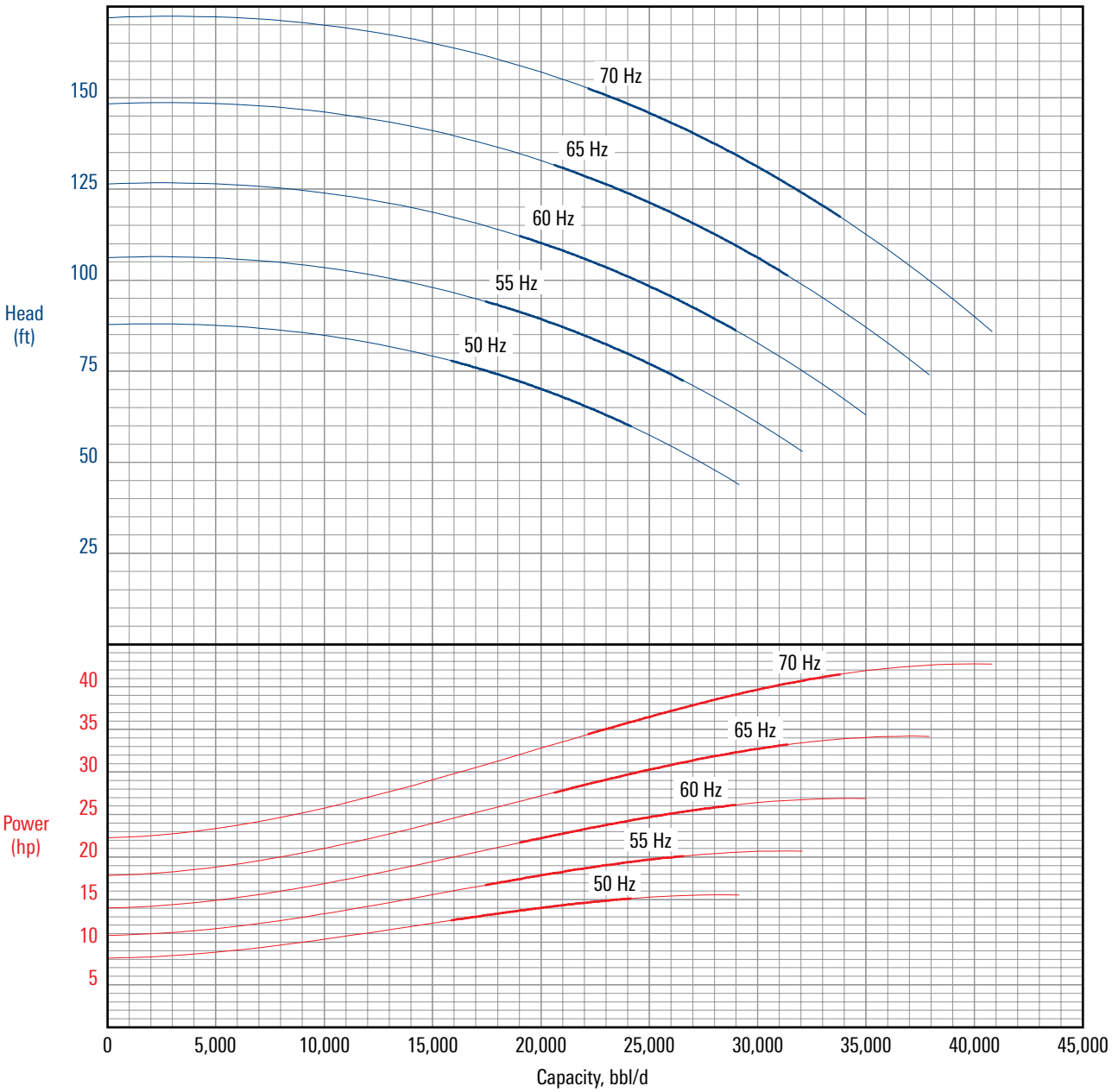
M675 Pump

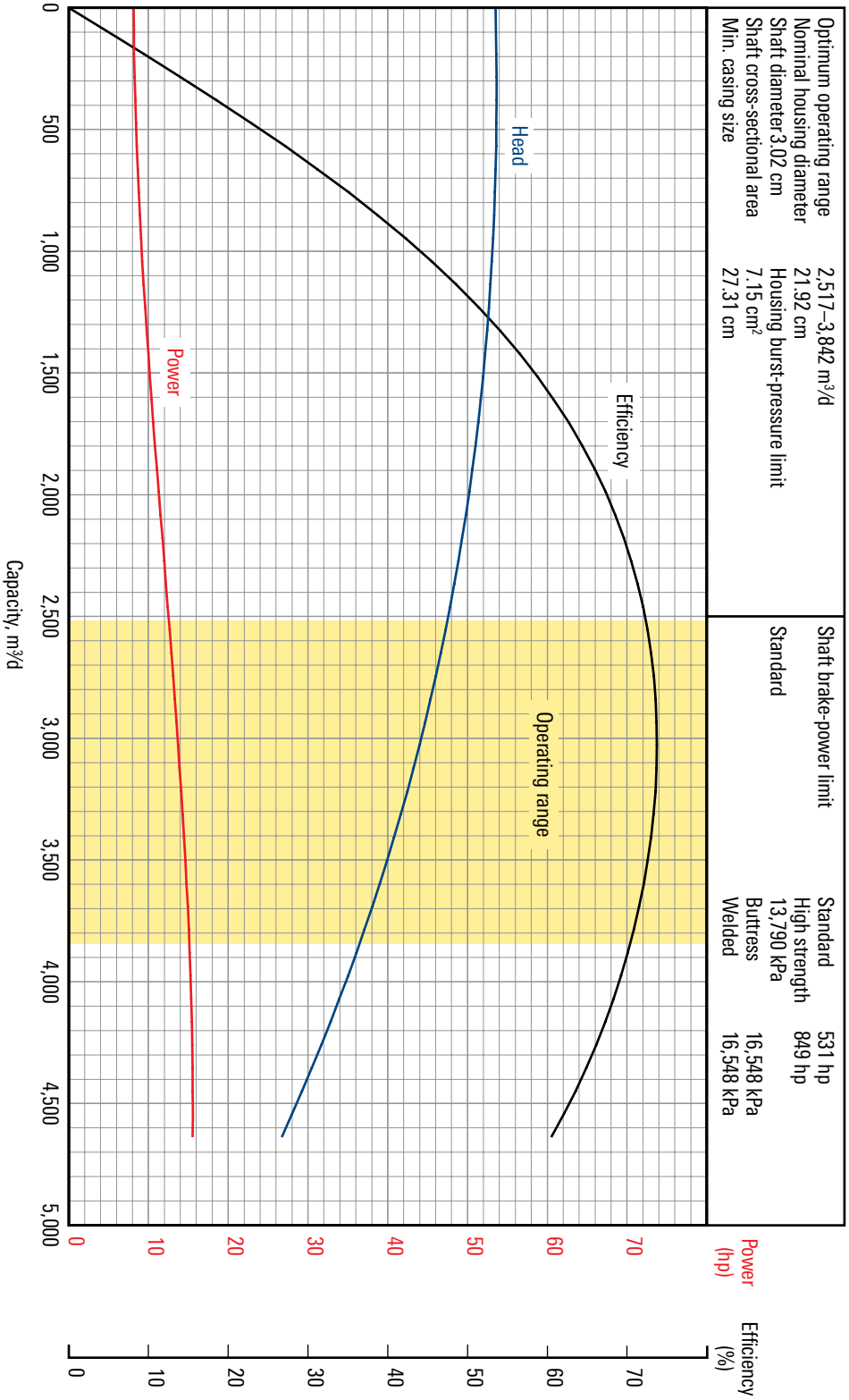
REDA ESP systems

Pump Performance Curve M675B

Curve computed for one stage in fluid of 1.00 sg



M675 Pump



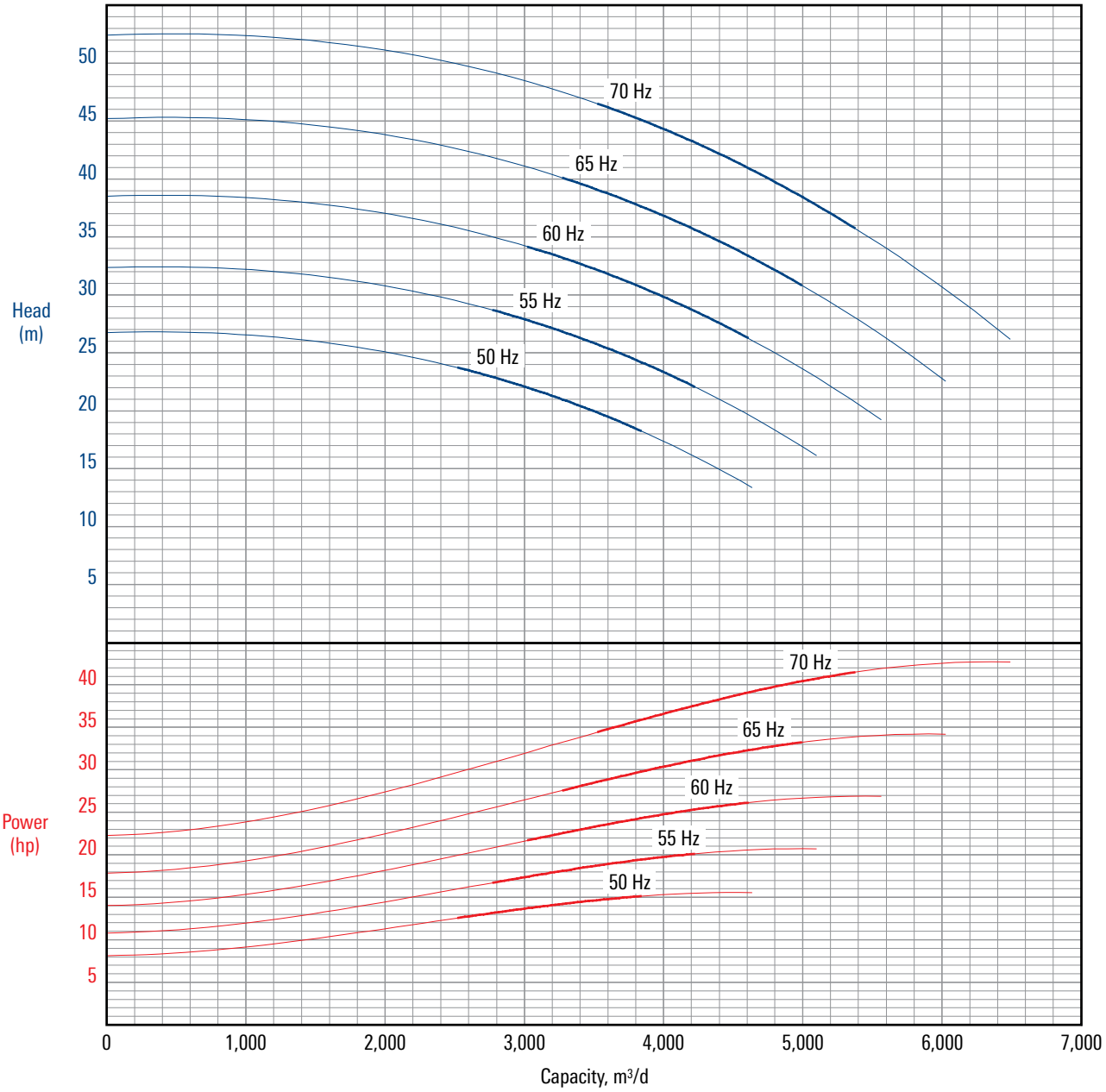
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M675 Pump

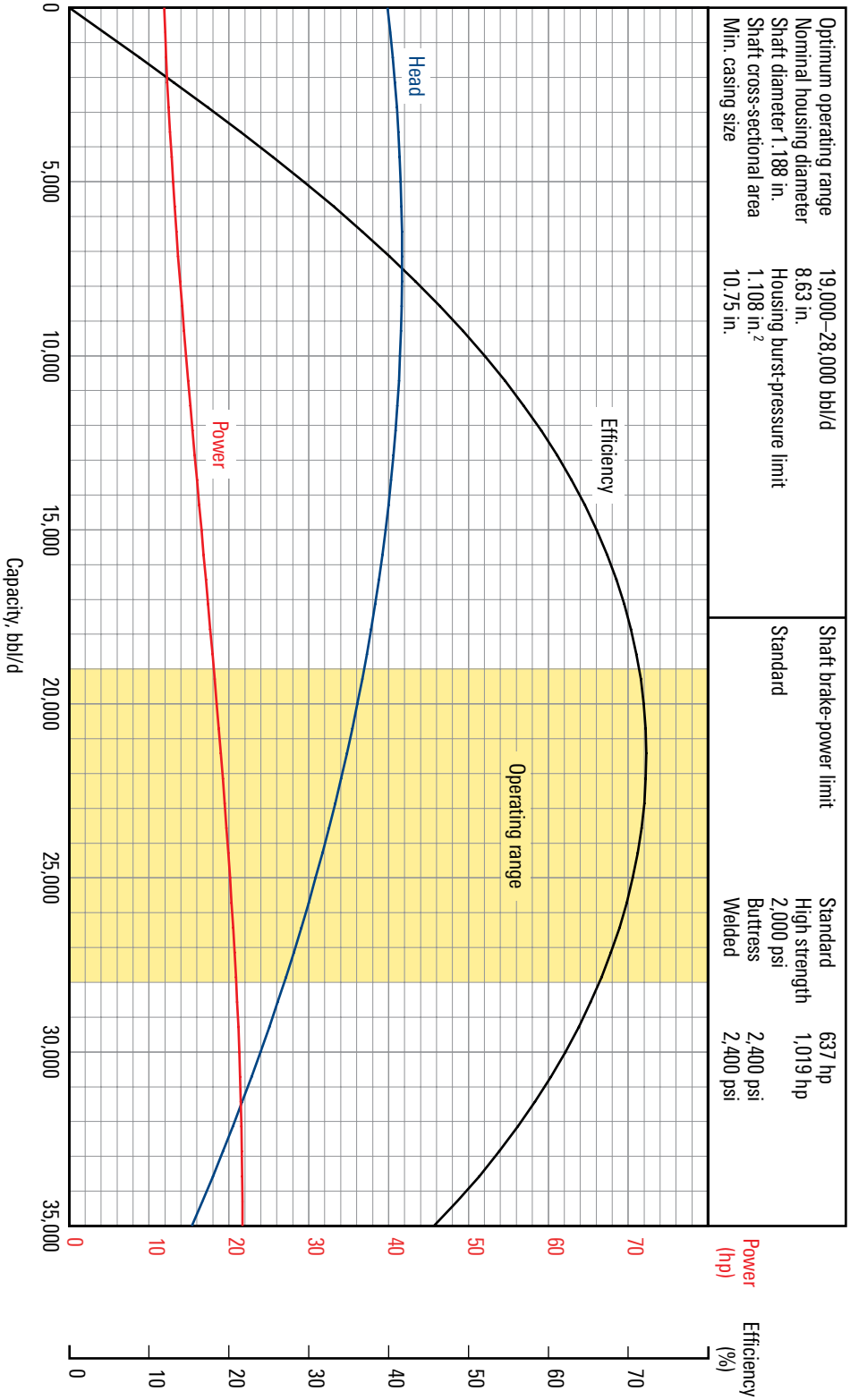
REDA ESP systems

Pump Performance Curve M675B

Curve computed for one stage in fluid of 1.00 sg



M675 Pump



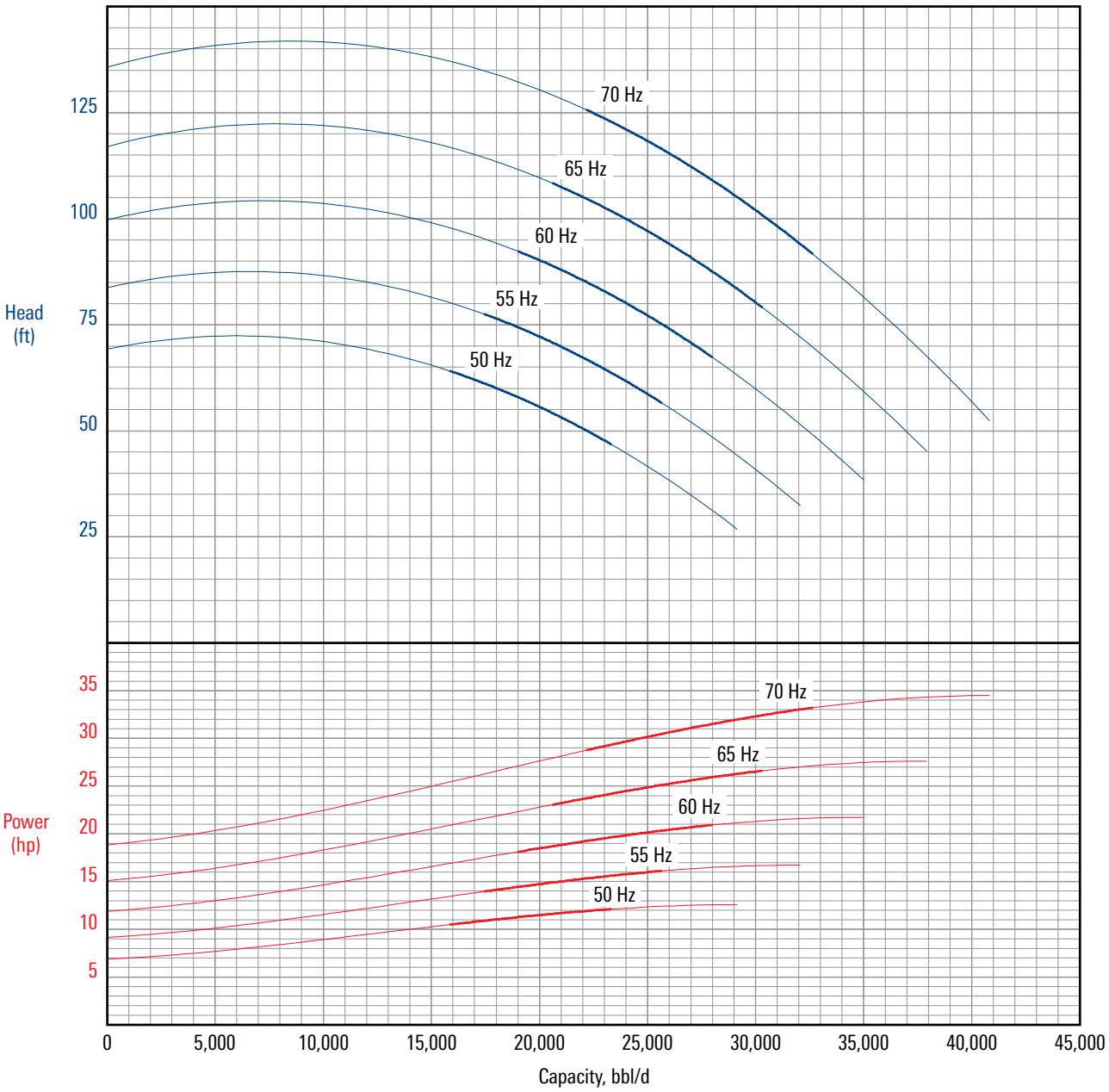
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M675 Pump

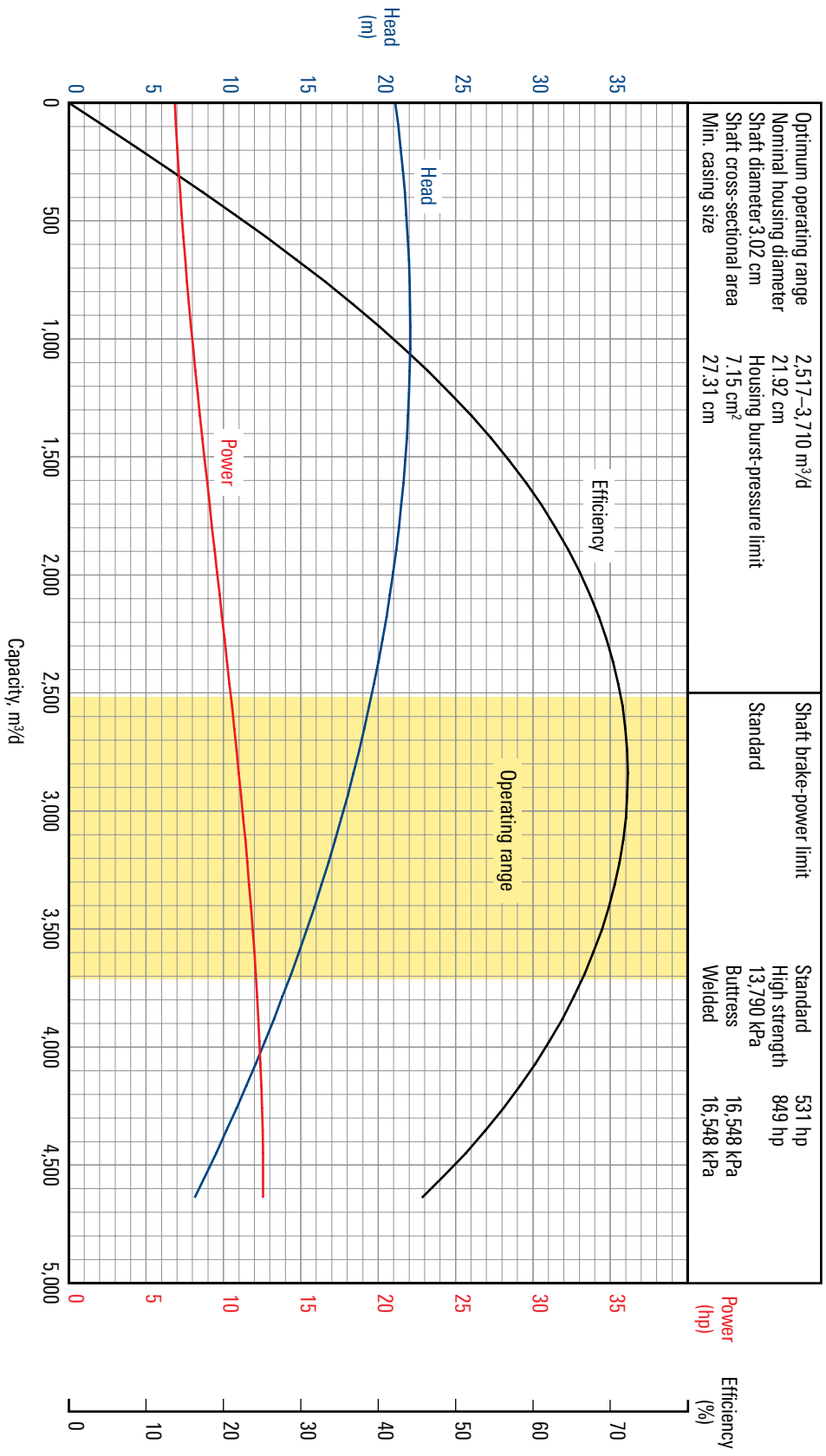
REDA ESP systems

Pump Performance Curve M675C

Curve computed for one stage in fluid of 1.00 sg



M675 Pump



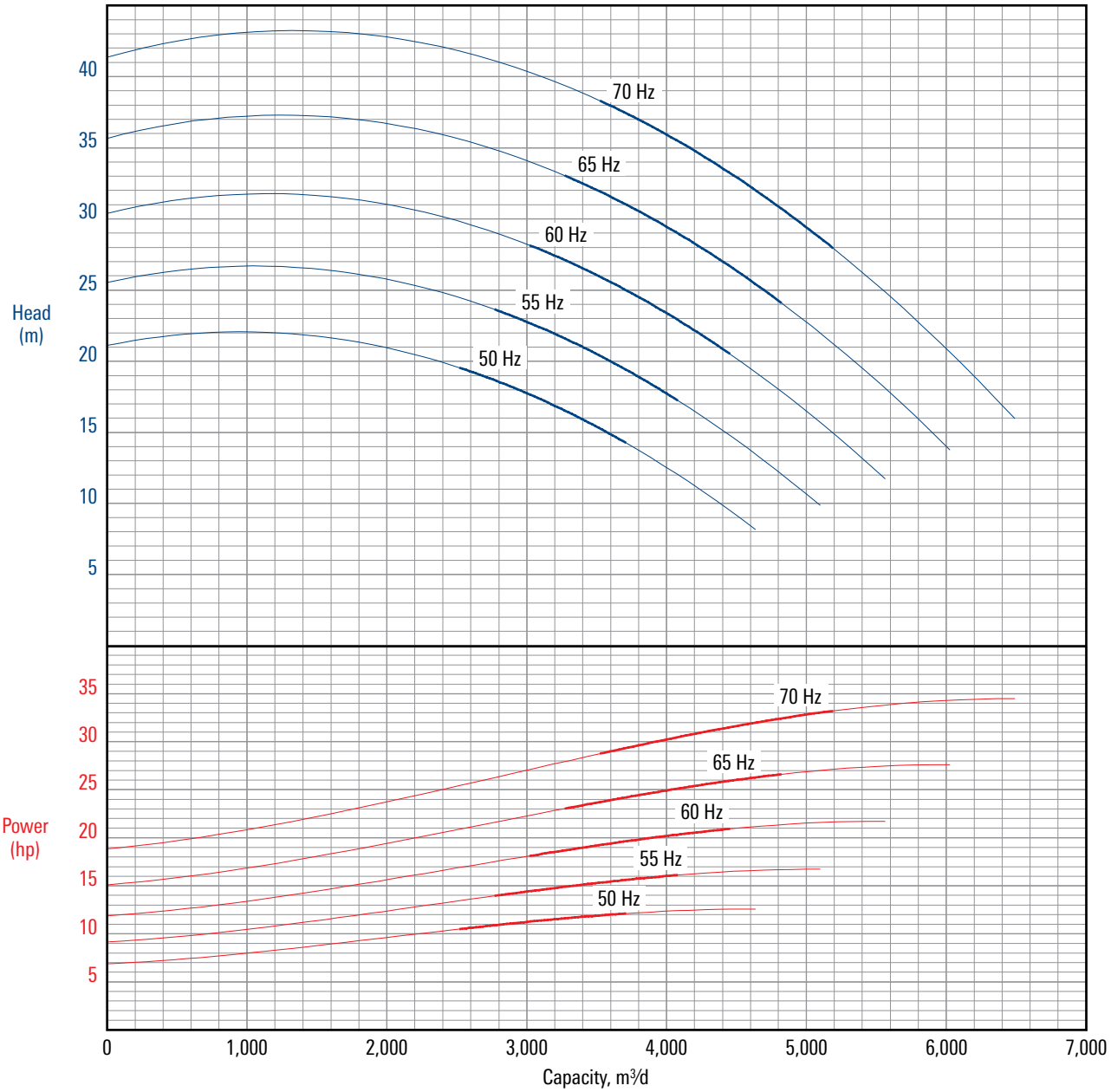
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

M675 Pump

REDA ESP systems

Pump Performance Curve M675C

Curve computed for one stage in fluid of 1.00 sg



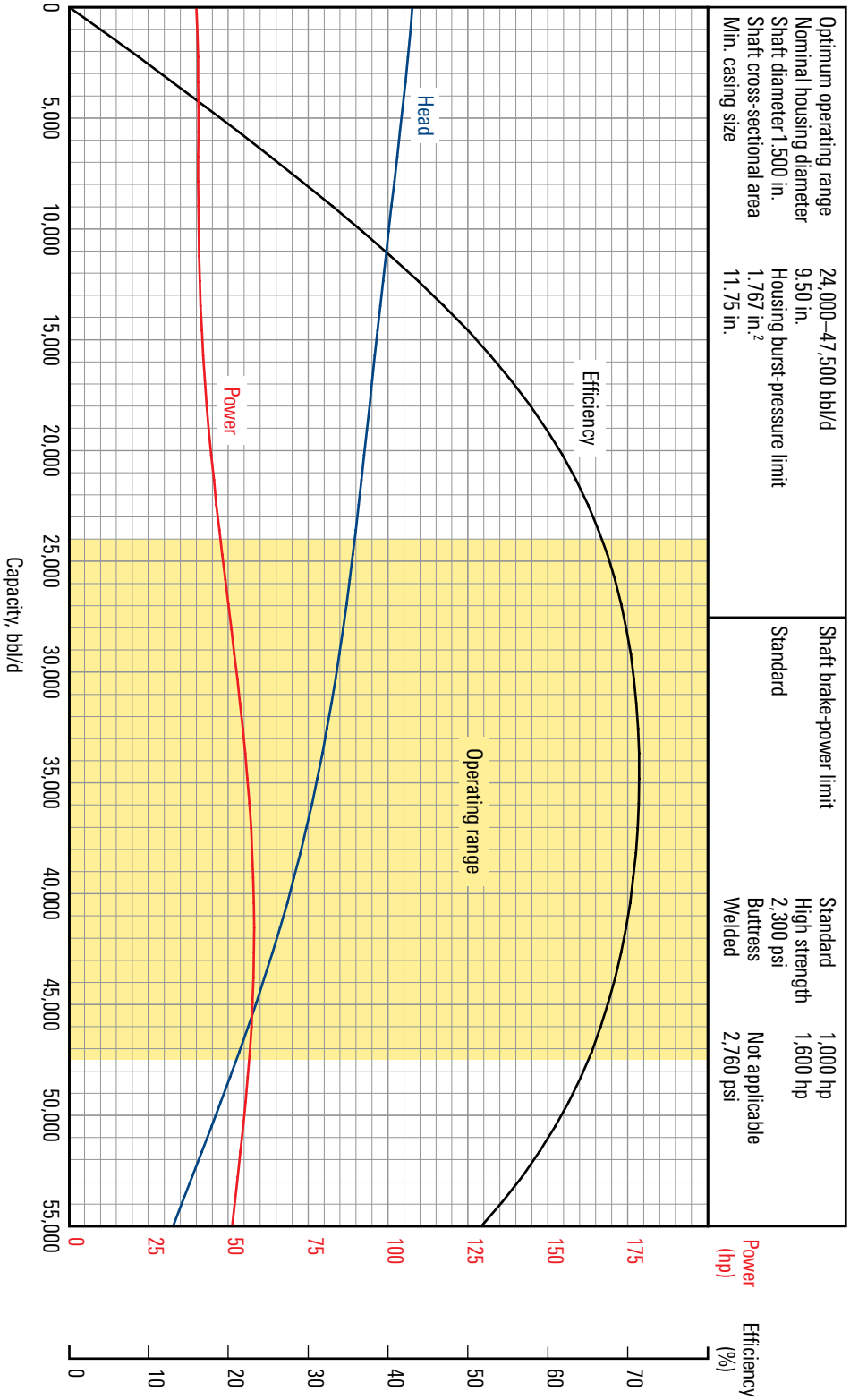
N1050 Pump

950 Series, Min. Casing Size 113/4-in [298.5-mm] OD

				ARZ Carbon Steel C-CT-ARZ		ARZ Carbon Steel C-CT-ARZ	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut† Part Number**	**"A" Cut‡ Part Number**	**"B" Cut† Part Number**	**"B" Cut‡ Part Number**
1N	3.1 [1.0]	326 [148]	1	tba§	tba	tba	tba
2N	3.7 [1.1]	402 [183]	2	tba	tba	tba	tba
3N	4.3 [1.3]	477 [217]	3	tba	1199470	tba	tba
4N	4.9 [1.5]	554 [252]	4	tba	1199488	tba	tba
5N	5.4 [1.7]	627 [285]	5	tba	1199496	tba	2003595
6N	6.0 [1.8]	703 [319]	6	tba	1199504	tba	tba
7N	6.6 [2.0]	779 [354]	7	tba	1199512	tba	tba
8N	7.2 [2.2]	854 [388]	8	tba	1199520	tba	tba
9N	7.8 [2.4]	930 [422]	9	tba	tba	tba	tba
10N	8.4 [2.6]	1,003 [455]	10	tba	tba	tba	tba
11N	8.9 [2.7]	1,079 [490]	11	tba	tba	tba	tba
12N	9.5 [2.9]	1,155 [524]	12	tba	tba	tba	tba
13N	10.1 [3.1]	1,231 [559]	13	tba	tba	tba	tba
14N	10.7 [3.3]	1,307 [593]	14	tba	tba	tba	tba
15N	11.3 [3.5]	1,382 [627]	15	tba	tba	tba	tba
16N	11.9 [3.6]	1,458 [662]	16	tba	tba	tba	tba
17N	12.4 [3.8]	1,534 [696]	17	tba	tba	tba	tba
18N	13.0 [4.0]	1,611 [731]	18	tba	tba	tba	tba
19N	13.6 [4.2]	1,687 [766]	19	tba	tba	tba	tba
20N	14.2 [4.3]	1,763 [800]	20	tba	tba	tba	tba

† Single compression pump with integral intake, 738 Series bolt pattern, discharge head with 7-in [177.8-mm] threads.
‡ Single compression pump with integral intake, 950 Series bolt pattern, discharge head with 7-in [177.8-mm] threads.
§ To be assigned.

N1050 Pump



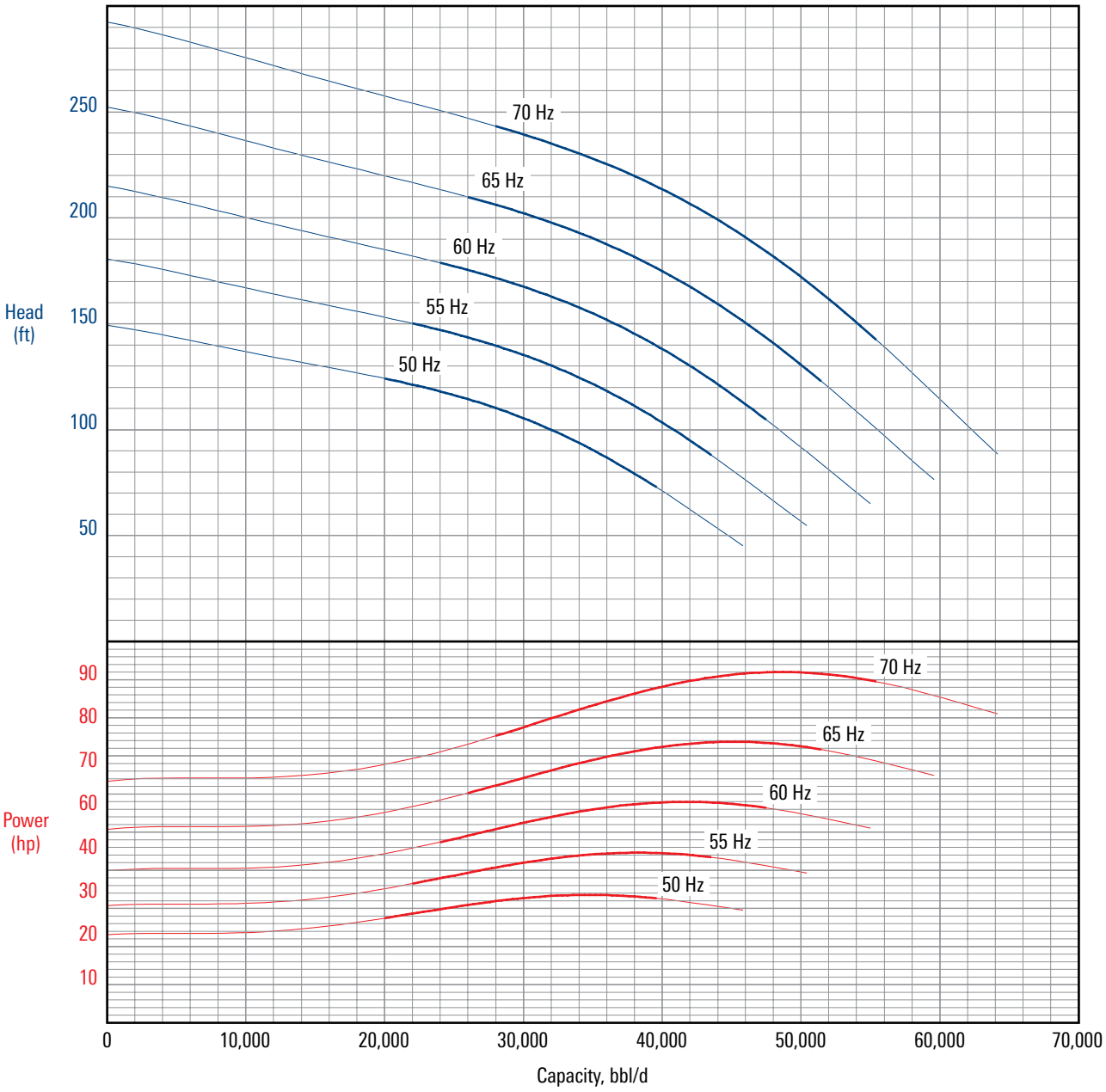
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

N1050 Pump

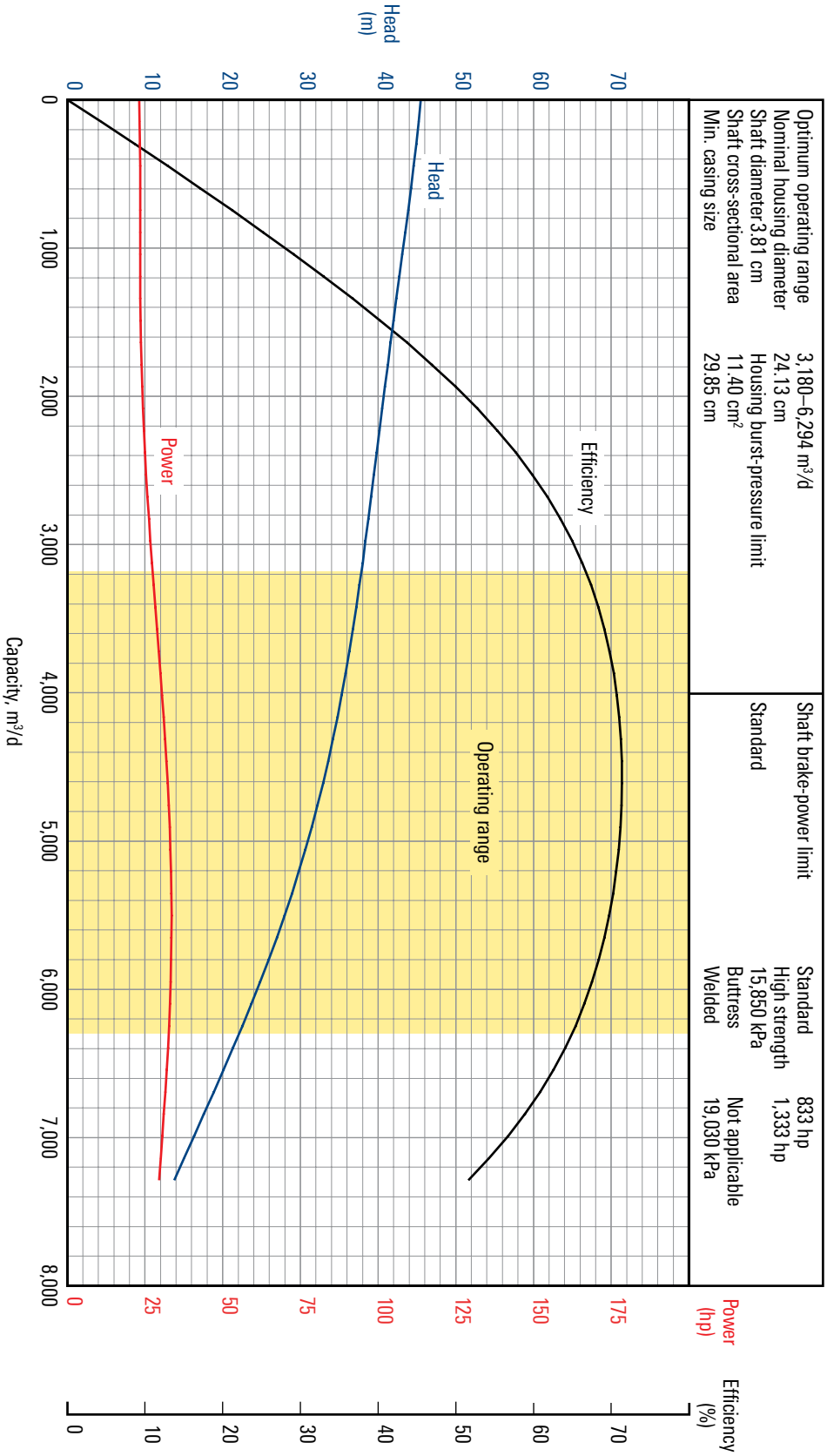
REDA ESP systems

Pump Performance Curve N1050A

Curve computed for one stage in fluid of 1.00 sg



N1050 Pump



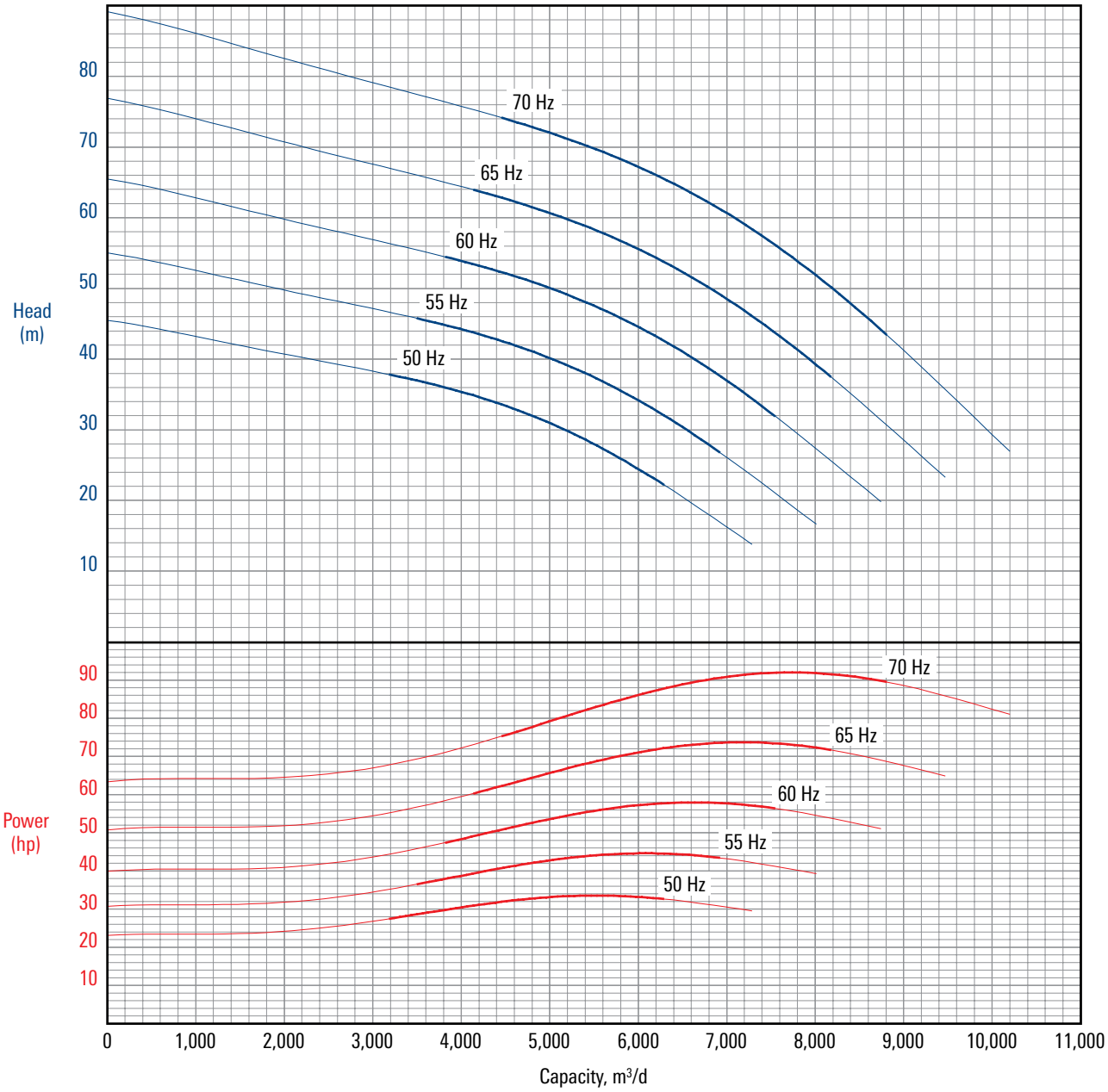
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

N1050 Pump

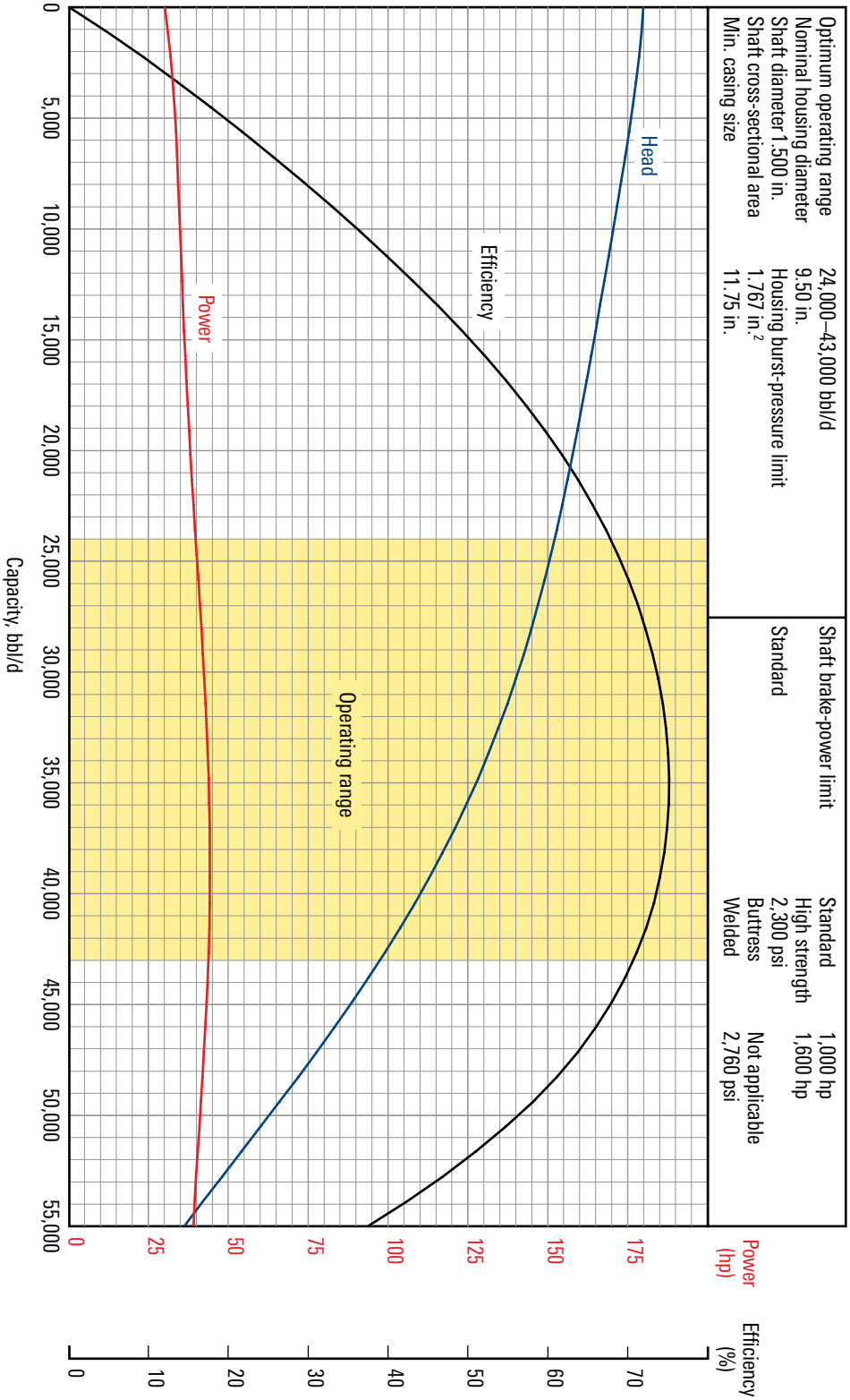
REDA ESP systems

Pump Performance Curve N1050A

Curve computed for one stage in fluid of 1.00 sg



N1050 Pump



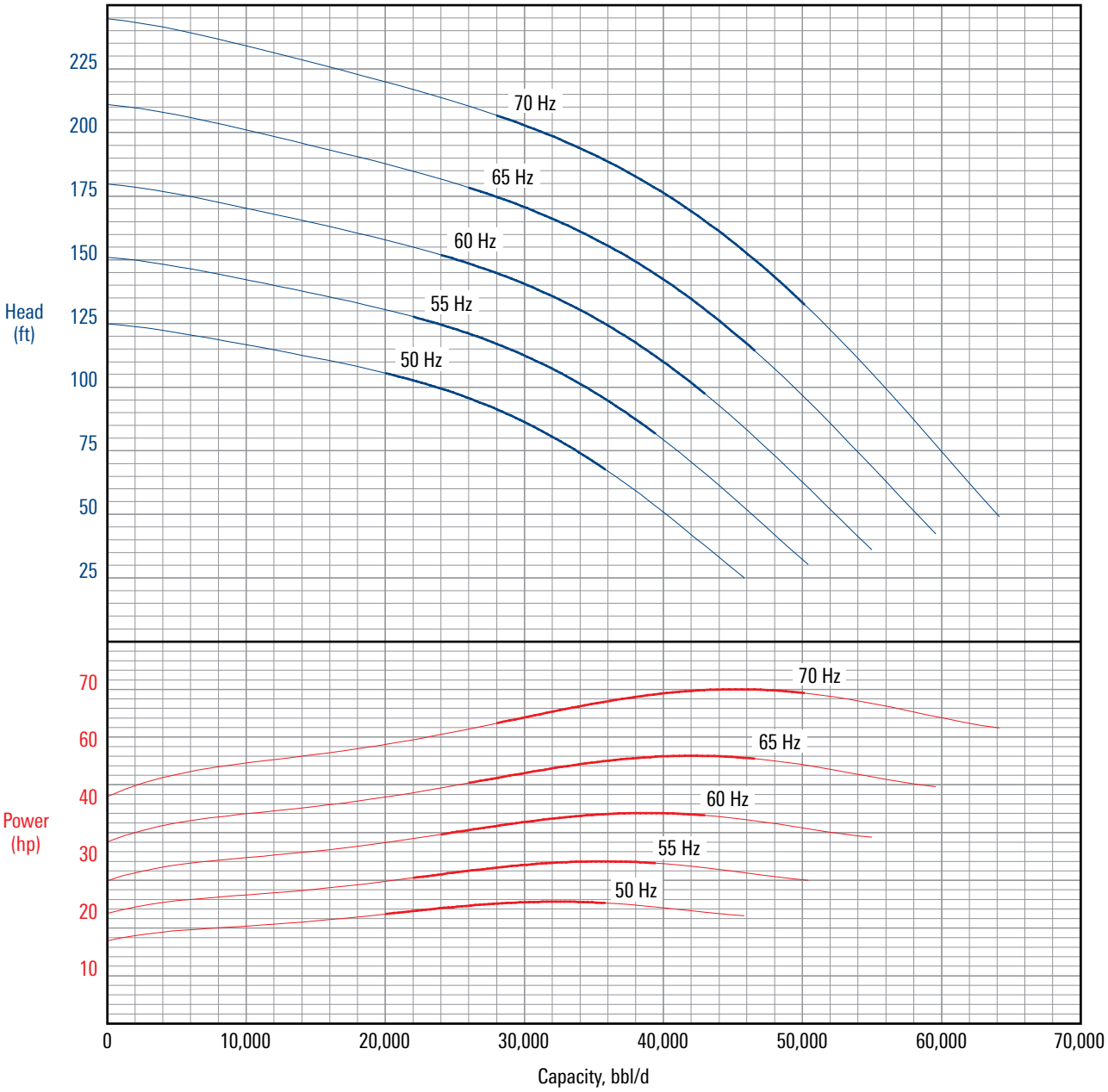
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

N1050 Pump

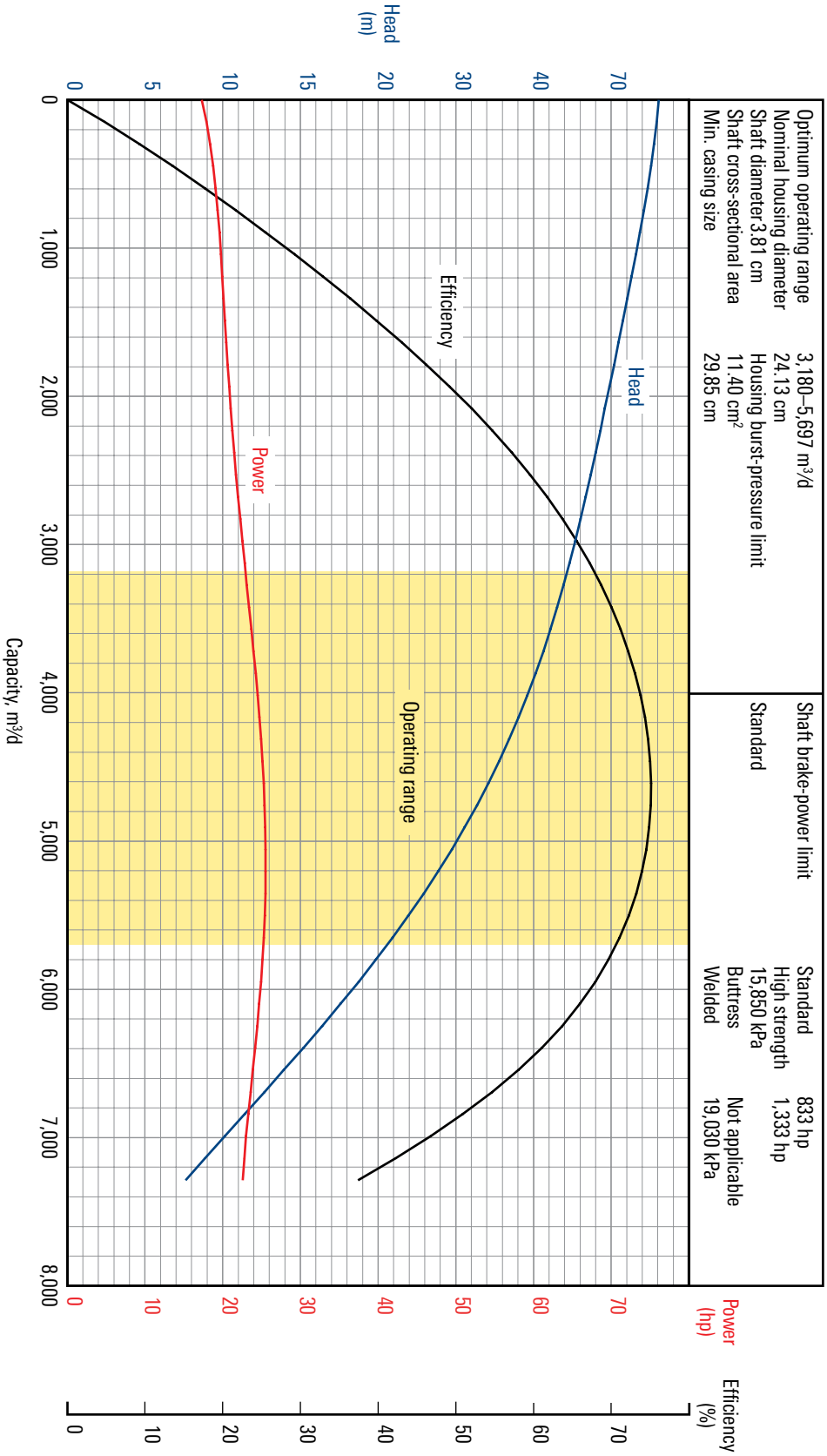
REDA ESP systems

Pump Performance Curve N1050B

Curve computed for one stage in fluid of 1.00 sg



N1050 Pump



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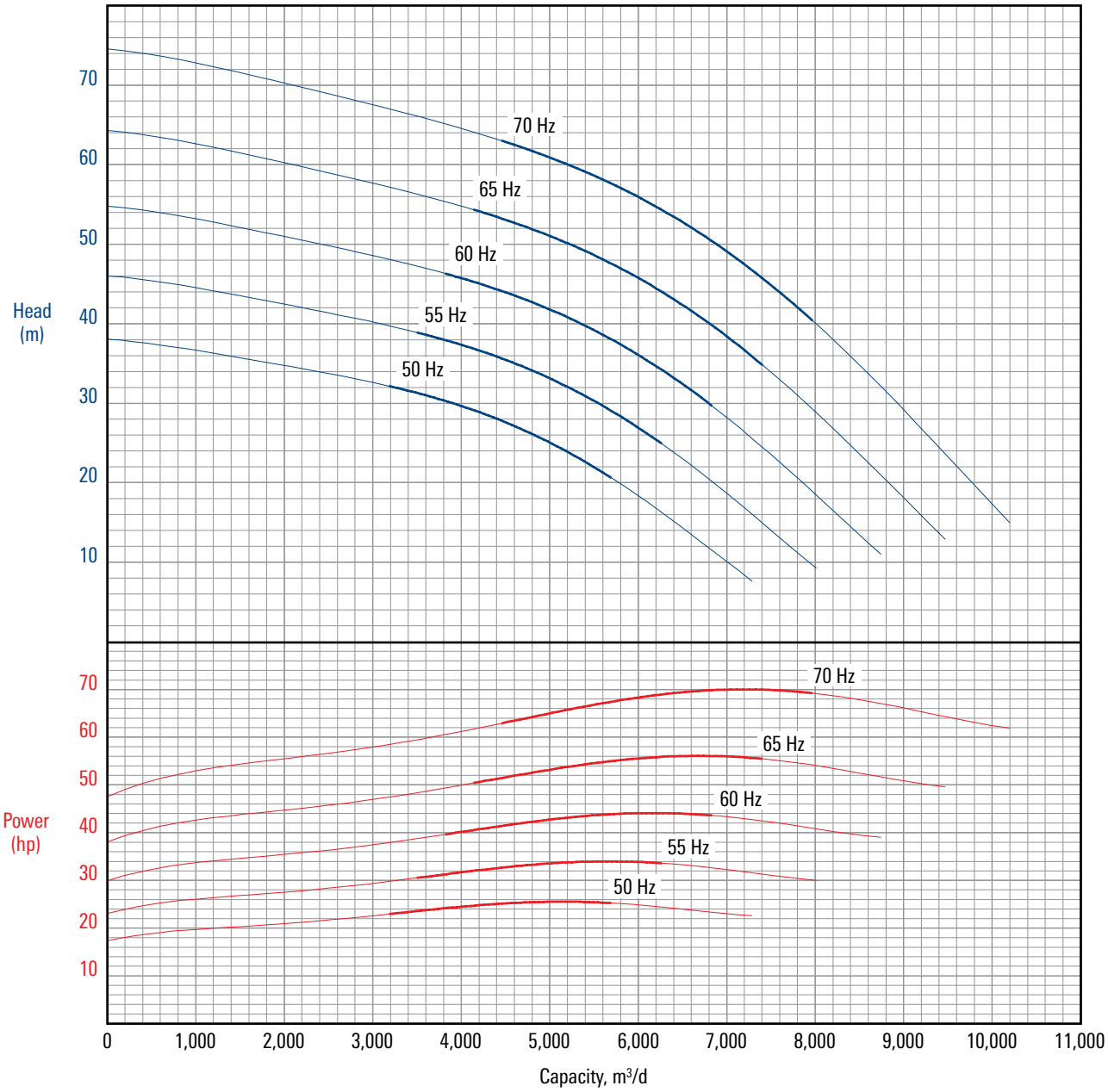
N1050 Pump

REDA ESP systems

Pump Performance Curve N1050B

Curve computed for one stage in fluid of 1.00 sg



N1400 Pump

1000 Series, Min. Casing Size 113/4-in [298.5-mm] OD

				ES Carbon Steel C-CT-ES-ZS		ARZ Carbon Steel C-CT-ARZ-ZS	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	"A" Cut Part Number	"B" Cut Part Number	"A" Cut Part Number	"B" Cut Part Number
1N	2.56 [0.78]	528 [240]	1	tba†	tba	tba	tba
2N	3.30 [1.01]	618 [281]	2	tba	tba	tba	tba
3N	4.04 [1.23]	708 [321]	3	2004030	tba	2004033	tba
4N	4.78 [1.46]	798 [362]	4	2004031	tba	2004034	tba
5N	5.52 [1.68]	888 [403]	5	2000653	tba	2000651	tba
6N	6.26 [1.91]	978 [444]	6	tba	tba	tba	tba
7N	7.00 [2.14]	1,068 [485]	7	2004032	tba	2004035	tba
8N	7.74 [2.36]	1,158 [526]	8	tba	tba	tba	tba
9N	8.48 [2.59]	1,248 [567]	9	tba	tba	tba	tba
10N	9.22 [2.81]	1,338 [607]	10	tba	tba	tba	tba
11N	9.96 [3.04]	1,398 [635]	11	tba	tba	tba	tba
12N	9.70 [2.96]	1,488 [676]	12	tba	tba	tba	tba
13N	11.44 [3.49]	1,578 [716]	13	tba	tba	tba	tba
14N	12.18 [3.71]	1,668 [757]	14	tba	tba	tba	tba

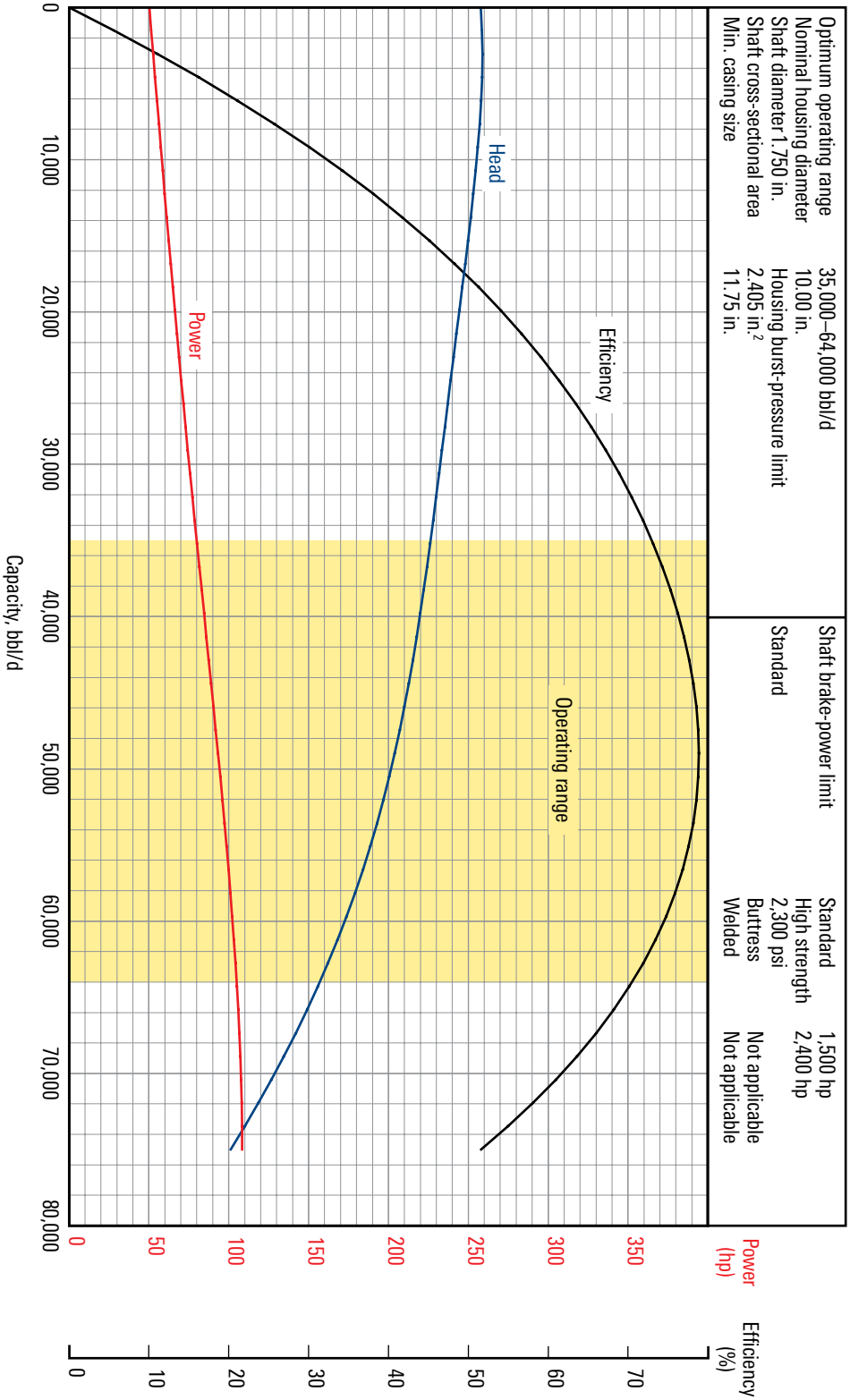
† To be assigned

1000 Series, Min. Casing Size 113/4-in [298.5-mm] OD

				ES Carbon Steel C-LT-ES-ZS		ARZ Carbon Steel C-LT-ARZ-ZS	
Housing	Length, ft [m]	Weight, lbm [kg]	Max. Stages	"A" Cut Part Number	"B" Cut Part Number	"A" Cut Part Number	"B" Cut Part Number
1N	2.56 [0.78]	528 [240]	1	tba†	tba	tba	tba
2N	3.30 [1.01]	618 [281]	2	tba	tba	tba	tba
3N	4.04 [1.23]	708 [321]	3	tba	tba	tba	tba
4N	4.78 [1.46]	798 [362]	4	tba	tba	tba	tba
5N	5.52 [1.68]	888 [403]	5	2000657	tba	2000656	tba
6N	6.26 [1.91]	978 [444]	6	tba	tba	tba	tba
7N	7.00 [2.14]	1,068 [485]	7	tba	tba	tba	tba
8N	7.74 [2.36]	1,158 [526]	8	tba	tba	tba	tba
9N	8.48 [2.59]	1,248 [567]	9	tba	tba	tba	tba
10N	9.22 [2.81]	1,338 [607]	10	tba	tba	tba	tba
11N	9.96 [3.04]	1,398 [635]	11	tba	tba	tba	tba
12N	9.70 [2.96]	1,488 [676]	12	tba	tba	tba	tba
13N	11.44 [3.49]	1,578 [716]	13	tba	tba	tba	tba
14N	12.18 [3.71]	1,668 [757]	14	tba	tba	tba	tba

† To be assigned

N1400 Pump



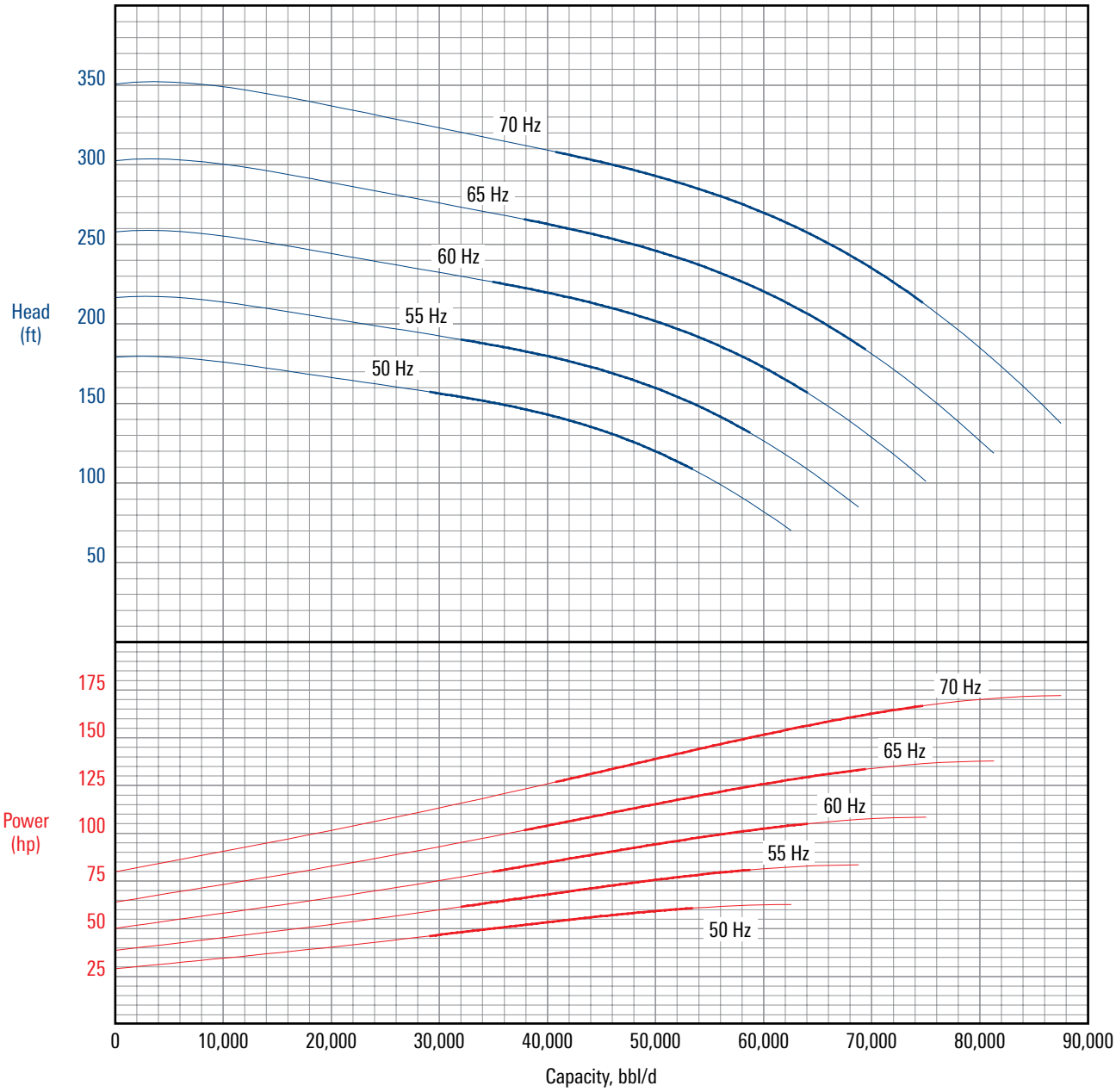
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

N1400 Pump

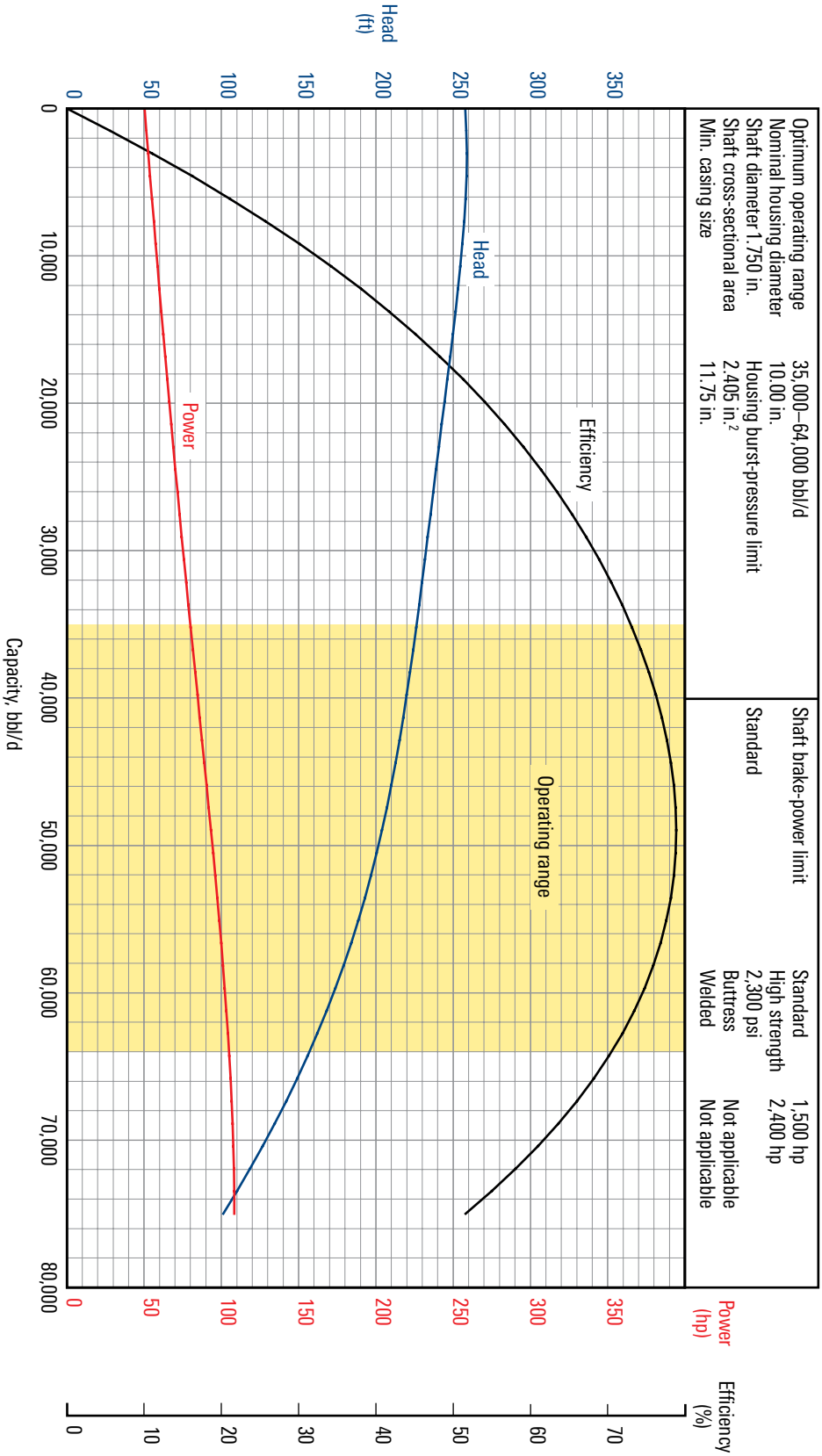
REDA ESP systems

Pump Performance Curve N1400A

Curve computed for one stage in fluid of 1.00 sg



N1400 Pump



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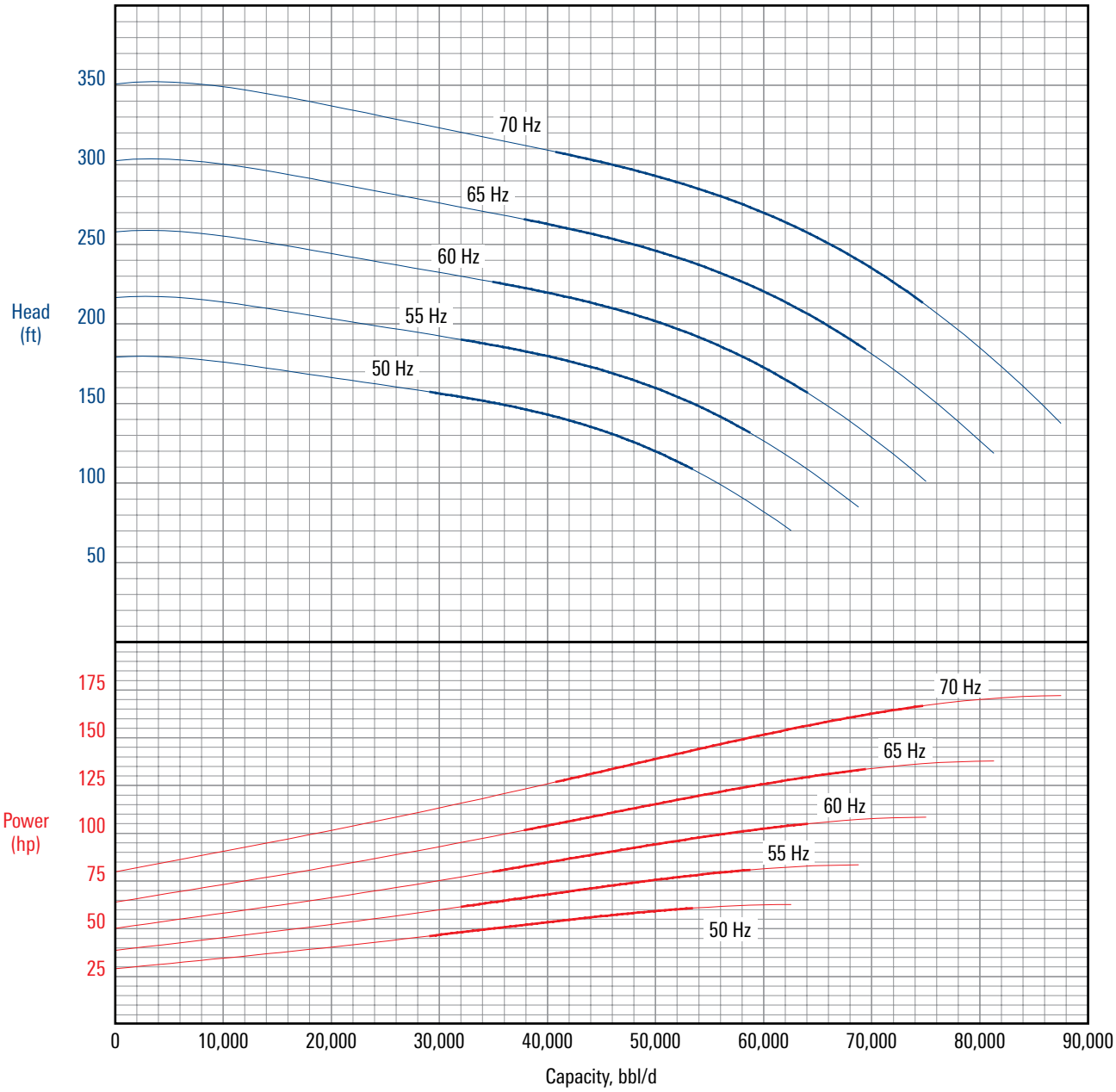
N1400 Pump

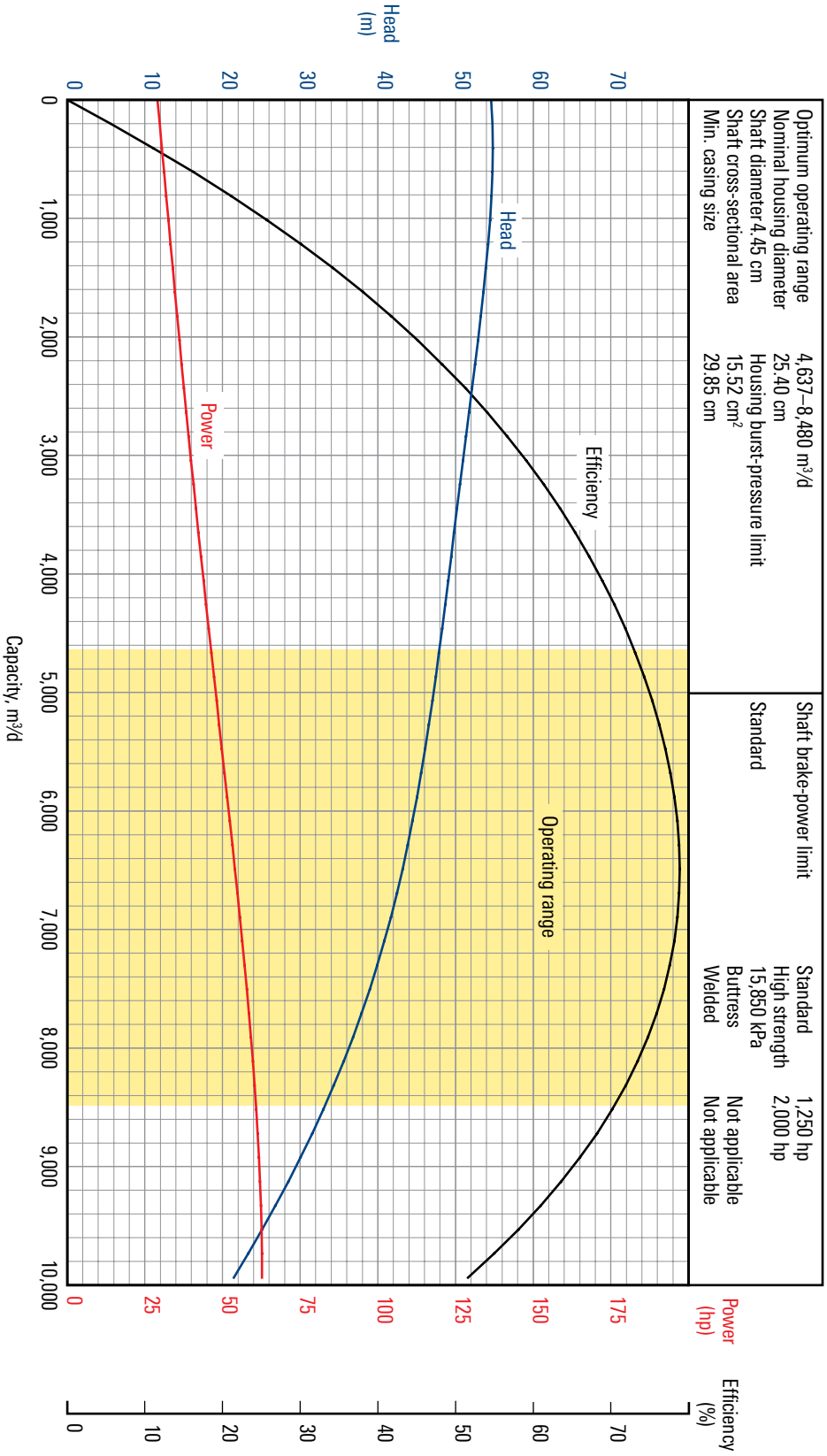
REDA ESP systems

Pump Performance Curve N1400A

Curve computed for one stage in fluid of 1.00 sg



N1400 Pump



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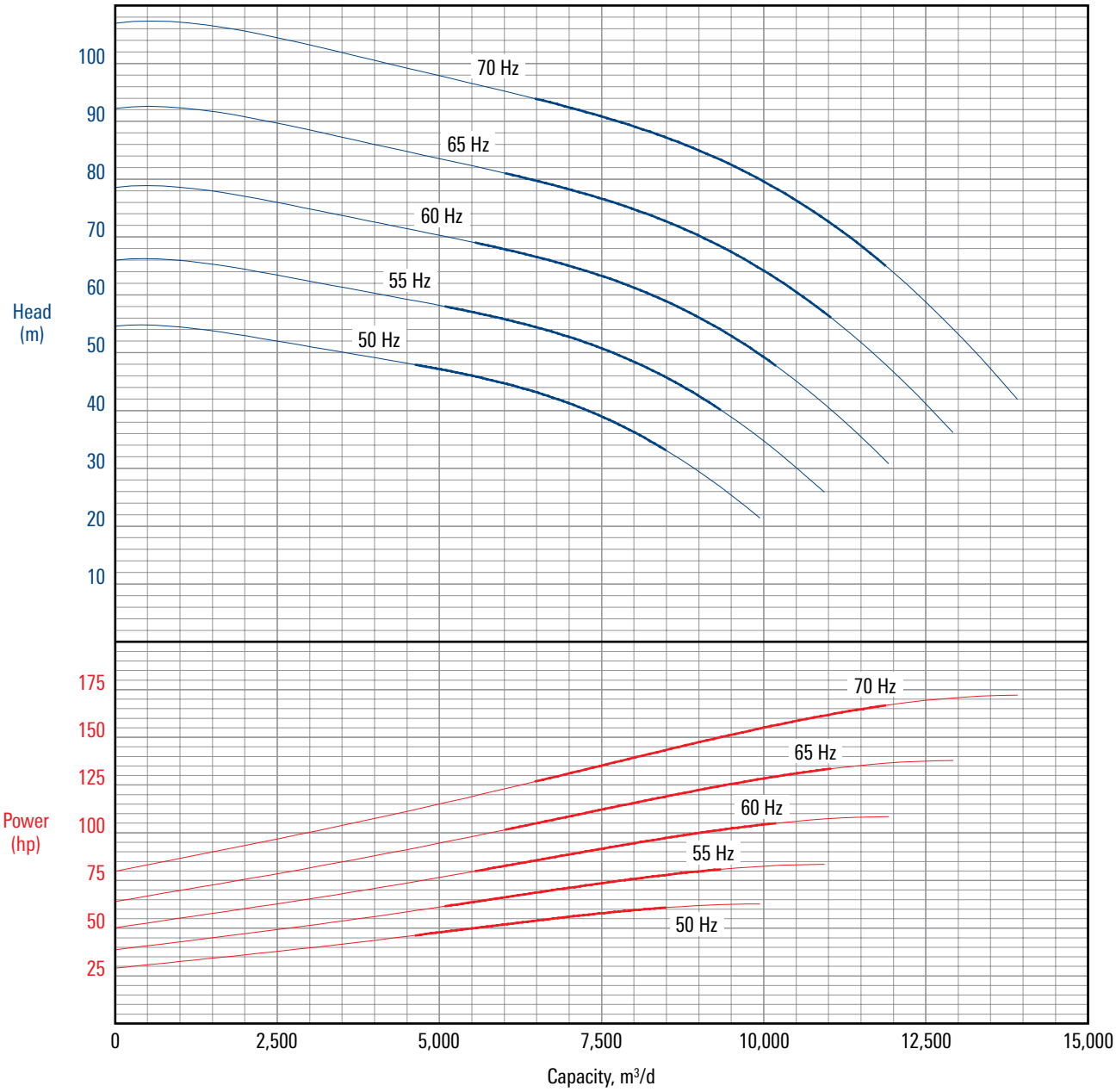
N1400 Pump

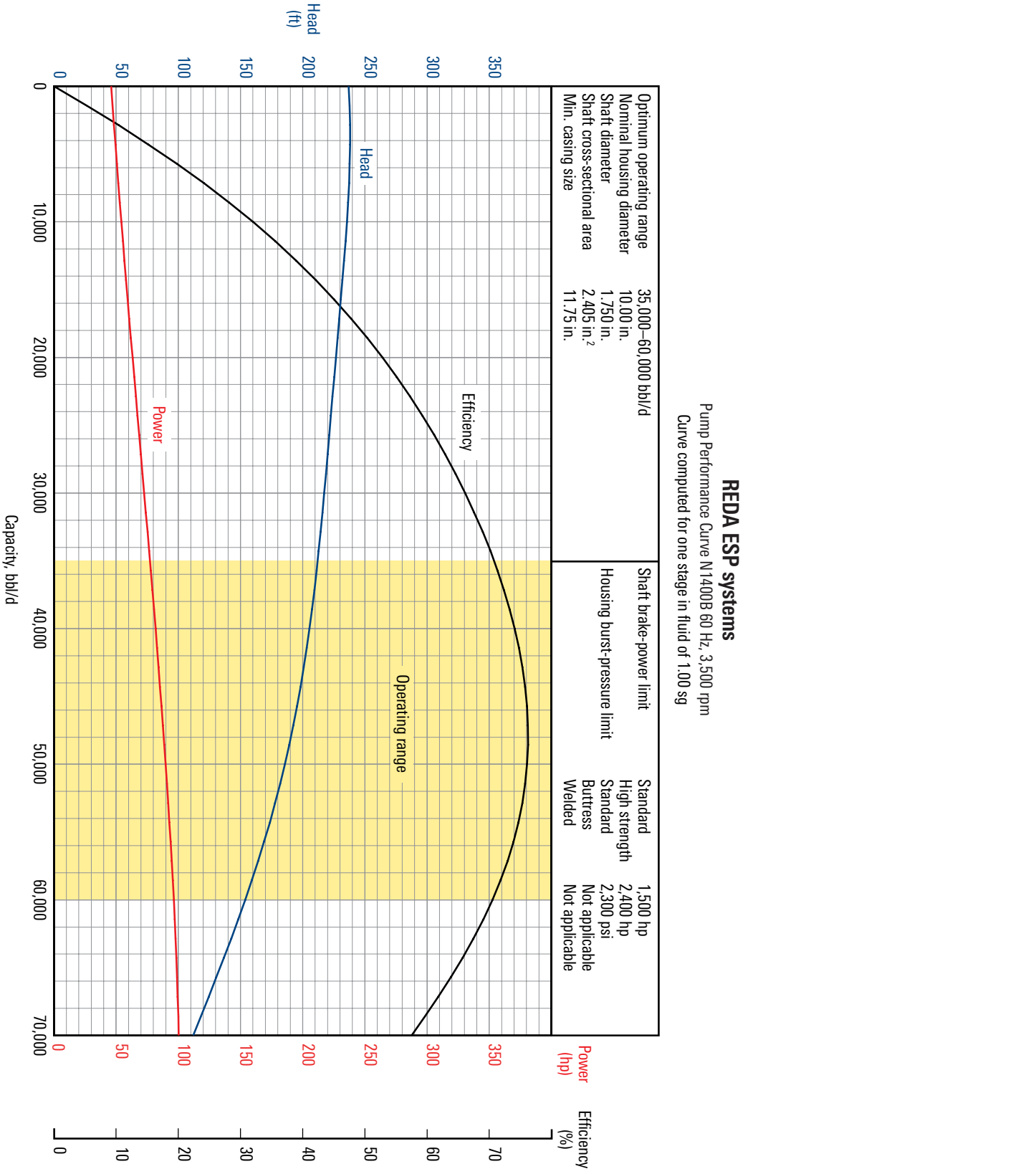
REDA ESP systems

Pump Performance Curve N1040A

Curve computed for one stage in fluid of 1.00 sg



N1400 Pump



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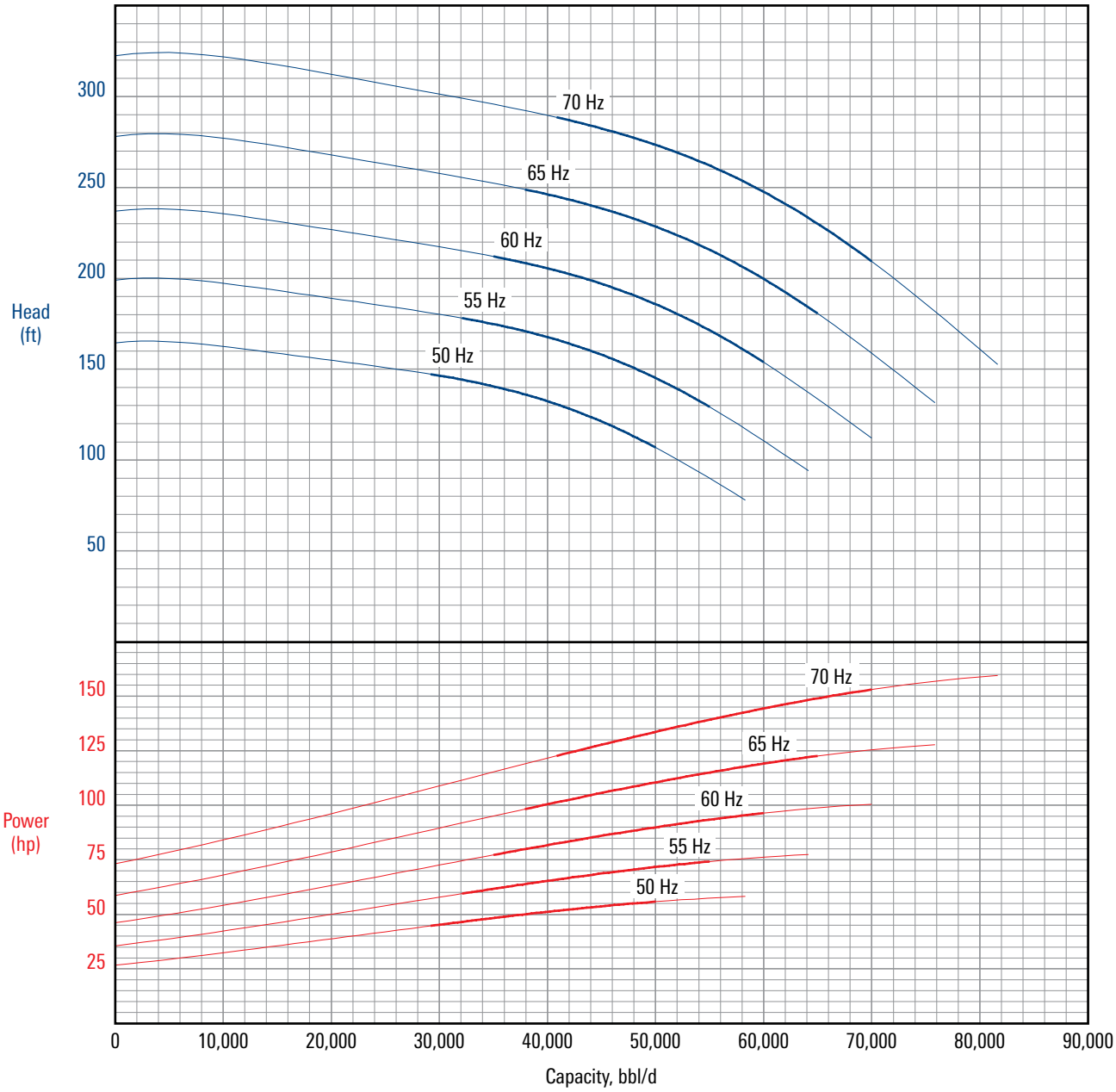
N1400 Pump

REDA ESP systems

Pump Performance Curve N1040B

Curve computed for one stage in fluid of 1.00 sg



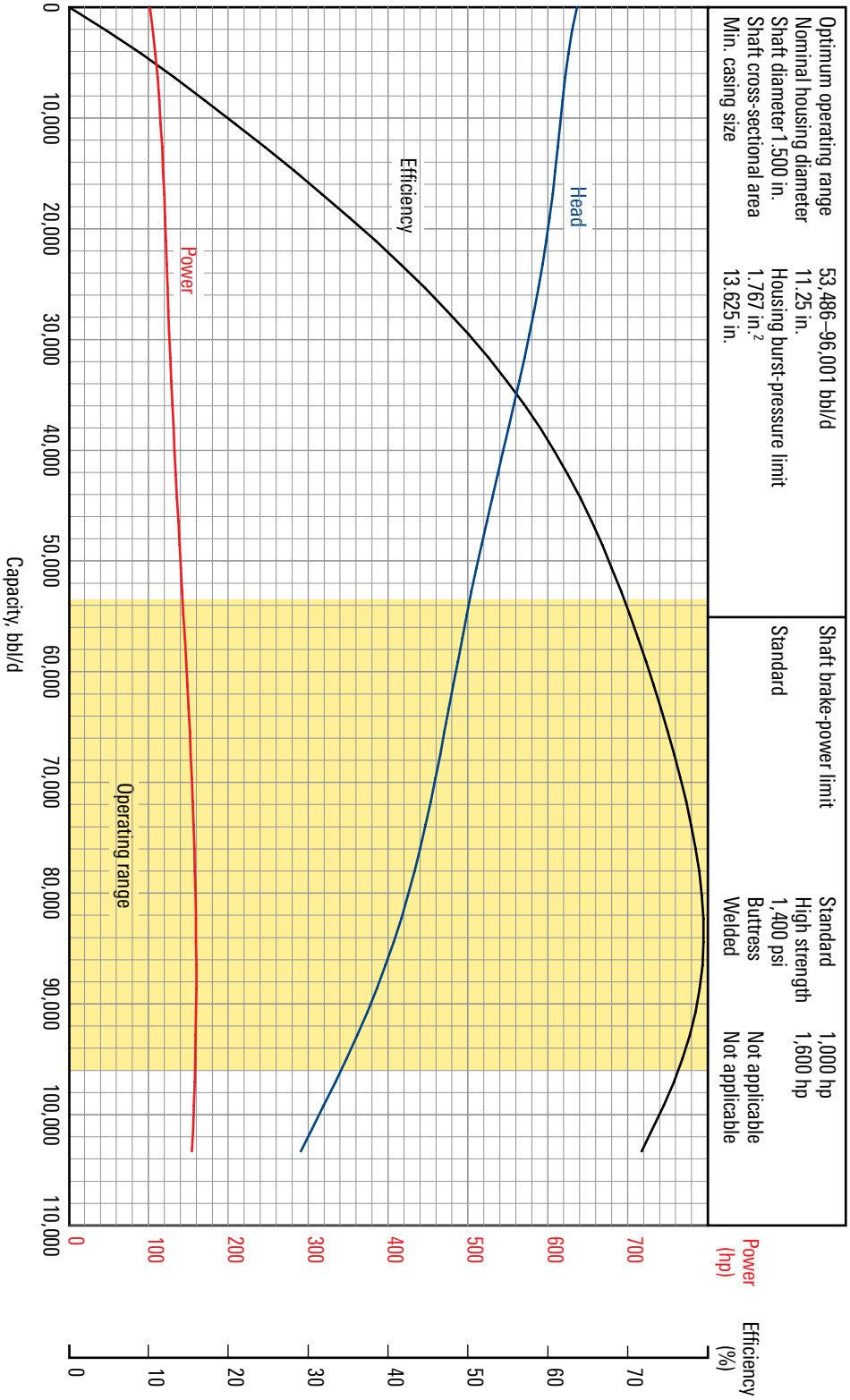
P2500A Pump

1125 Series, Min. Casing Size 13⅝-in [346.1-mm] OD

				Carbon Steel C-LT	ES Carbon Steel C-LT-ES
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**"A" Cut Part Number**	**"A" Cut Part Number**
1	3.6 [1.10]	403 [183]	1	2010904	tba†
2	4.4 [1.34]	513 [233]	2	tba	tba
3	5.1 [1.56]	623 [283]	3	1267616	tba
4	5.9 [1.80]	733 [333]	4	tba	tba
5	6.7 [2.04]	843 [383]	5	1236116	1333574
6	7.4 [2.26]	953 [433]	6	1236124	tba
7	8.2 [2.50]	1,063 [483]	7	1236132	tba
8	9.0 [2.75]	1,173 [533]	8	1345081	tba

† To be assigned

P2500A Pump



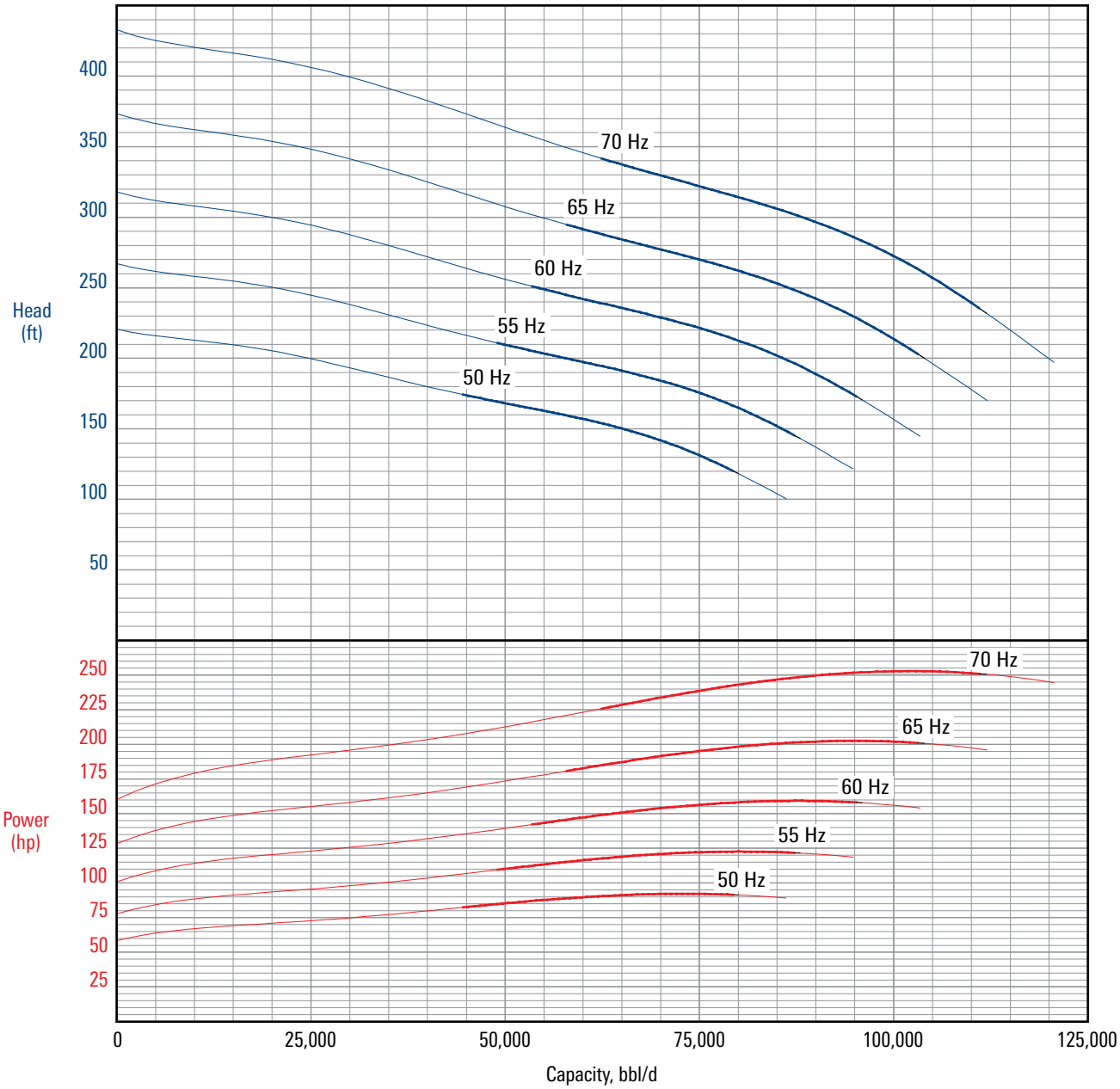
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

P2500A Pump

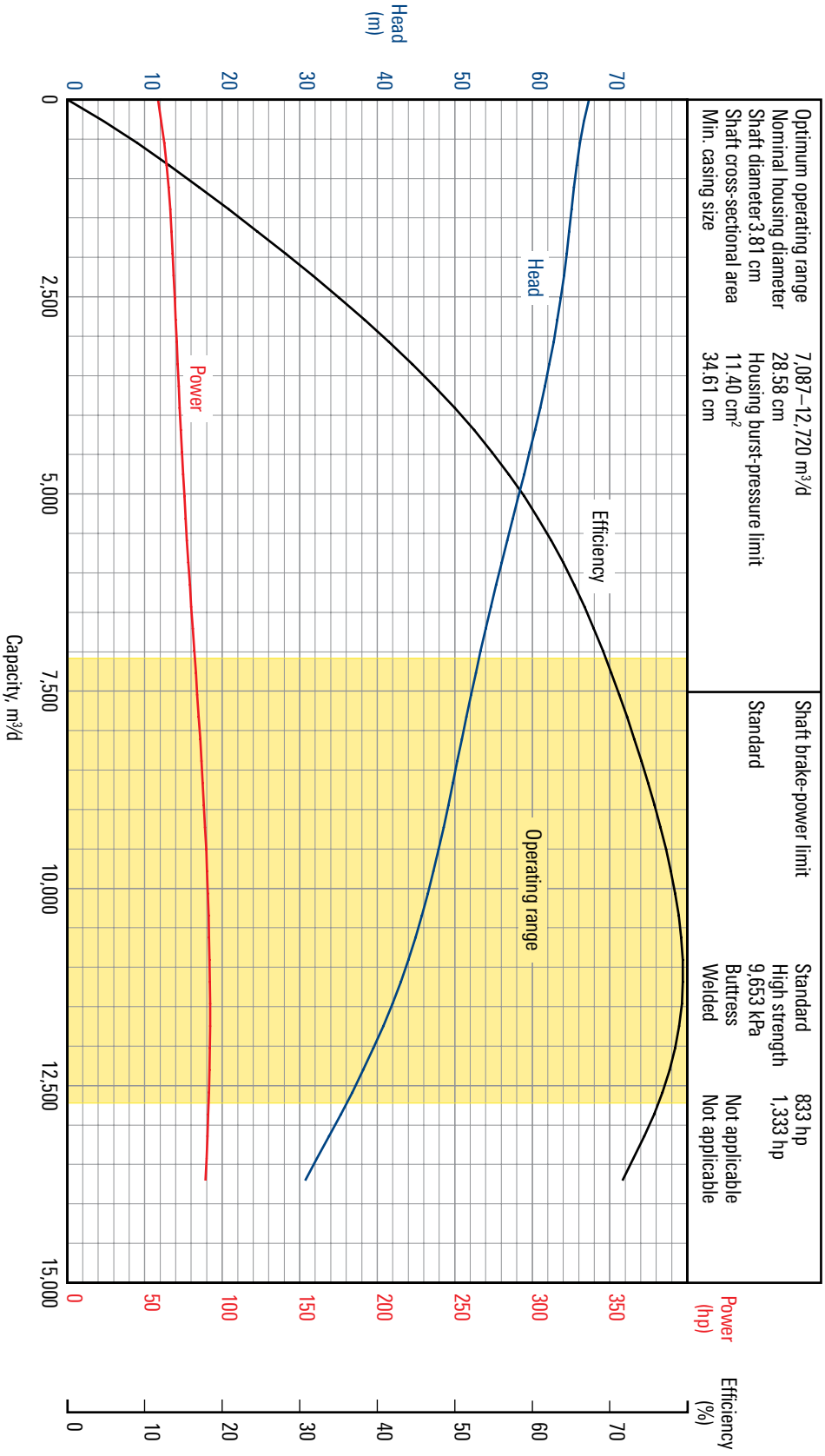
REDA ESP systems

Pump Performance Curve P2500A

Curve computed for one stage in fluid of 1.00 sg



P2500A Pump



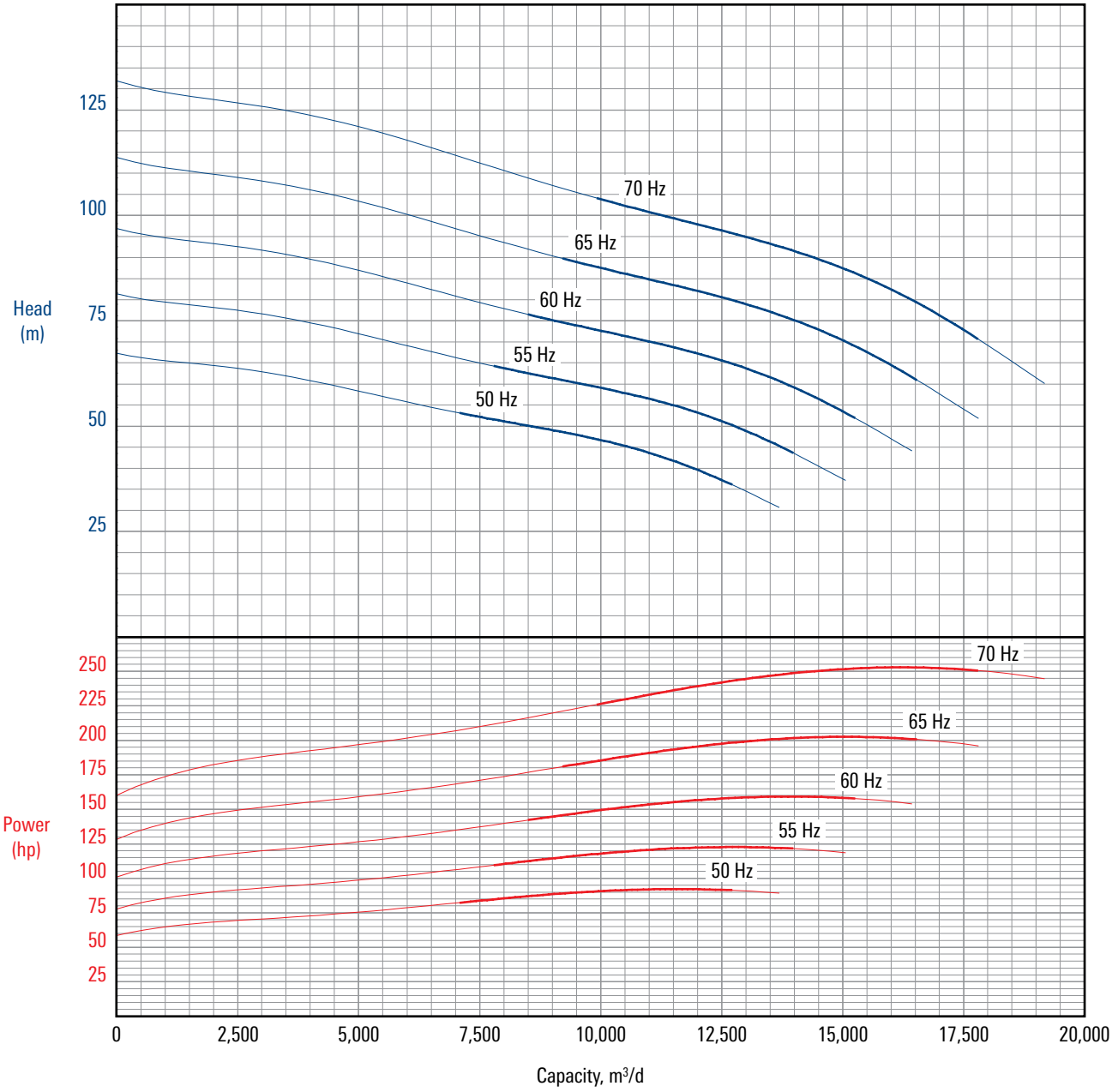
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

P2500A Pump

REDA ESP systems

Pump Performance Curve P2500A

Curve computed for one stage in fluid of 1.00 sg



SN2600 Pump

538 Series, Min. Casing Size 7-in [177.8-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	93 [42.2]	6	tba†	6	tba	5	tba
20	3.5 [1.07]	157 [71.3]	16	1275510	16	tba	13	tba
30	4.9 [1.49]	221 [100.3]	25	tba	25	tba	21	1290352
40	6.3 [1.92]	285 [129.4]	34	1267525	34	tba	28	1290360
50	7.7 [2.35]	349 [158.4]	44	1233667	44	D233667	37	tba
60	9.1 [2.78]	413 [187.5]	53	1233675	53	D233675	45	1261668
70	10.5 [3.20]	477 [216.6]	62	1233683	62	D233683	52	tba
80	11.9 [3.63]	541 [245.6]	71	1233691	71	R233691	61	1240944
90	13.3 [4.06]	605 [274.7]	81	1233709	81	D233709	69	1261684
100	14.7 [4.48]	669 [303.7]	90	1233717	90	D233717	77	1261692
110	16.1 [4.91]	733 [332.8]	99	1233725	99	D233725	85	tba
120	17.5 [5.34]	797 [361.8]	109	1233733	109	D233733	93	tba
130	18.9 [5.76]	861 [390.9]	118	1233741	118	D233741	101	tba
140	20.3 [6.19]	925 [420.0]	127	1233758	127	D233758	109	1261734
150	21.7 [6.62]	989 [449.0]	137	1233766	137	D233766	117	tba

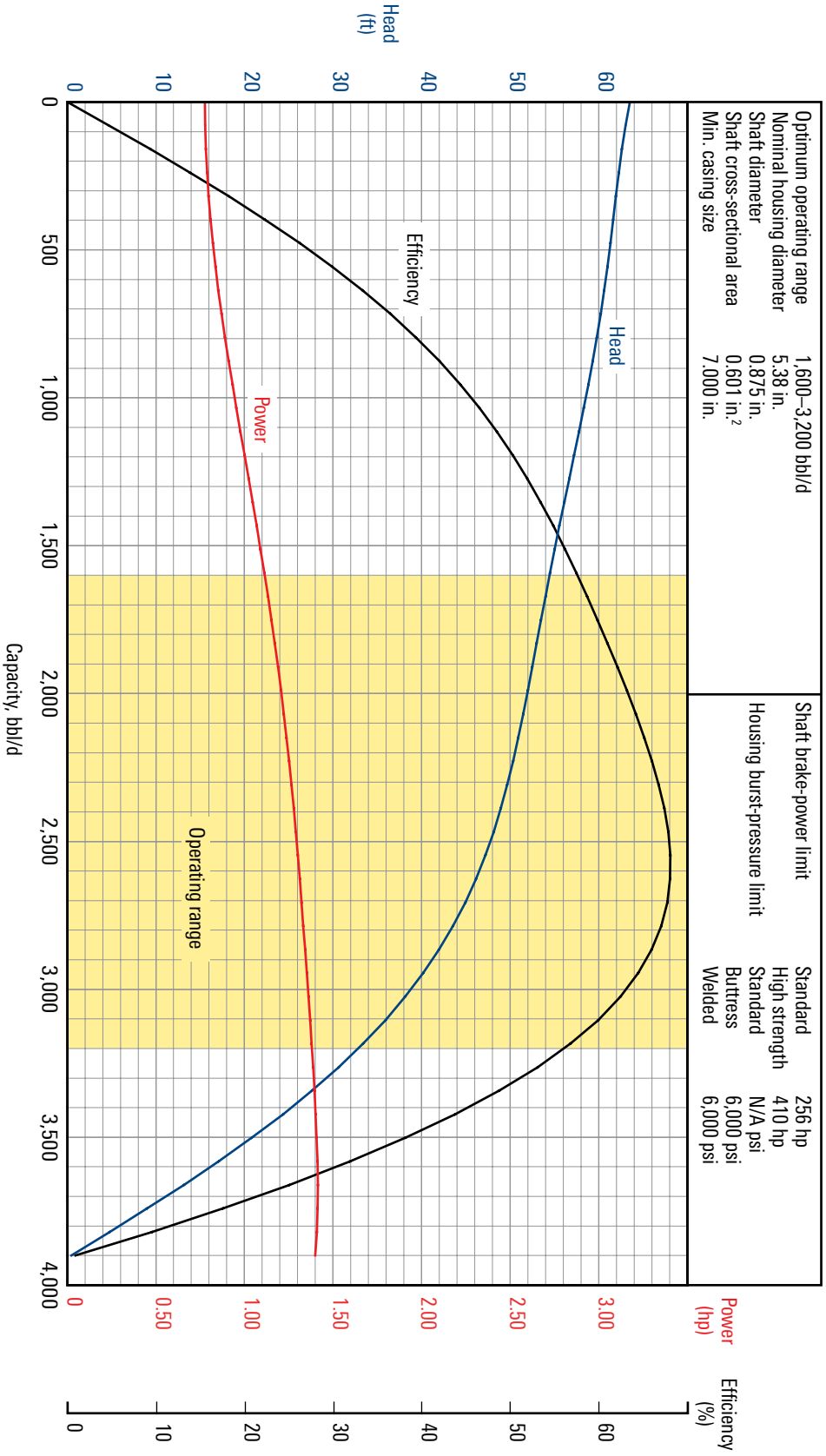
† To be assigned

SN3600 Pump, 538 Series, Tandem Combinations

		Tandem Housing Sections Number						
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**
160	142†	2‡						
170	152†	1‡	1‡					
180	162†		2‡					
190	171†		1‡	1‡				
200	180†			2‡				
210	189†			1‡	1‡			
220	198†				2‡			
230	208†				1‡	1‡		

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector
‡ Requires use of high-strength shaft in lowermost pump

SN2600 Pump



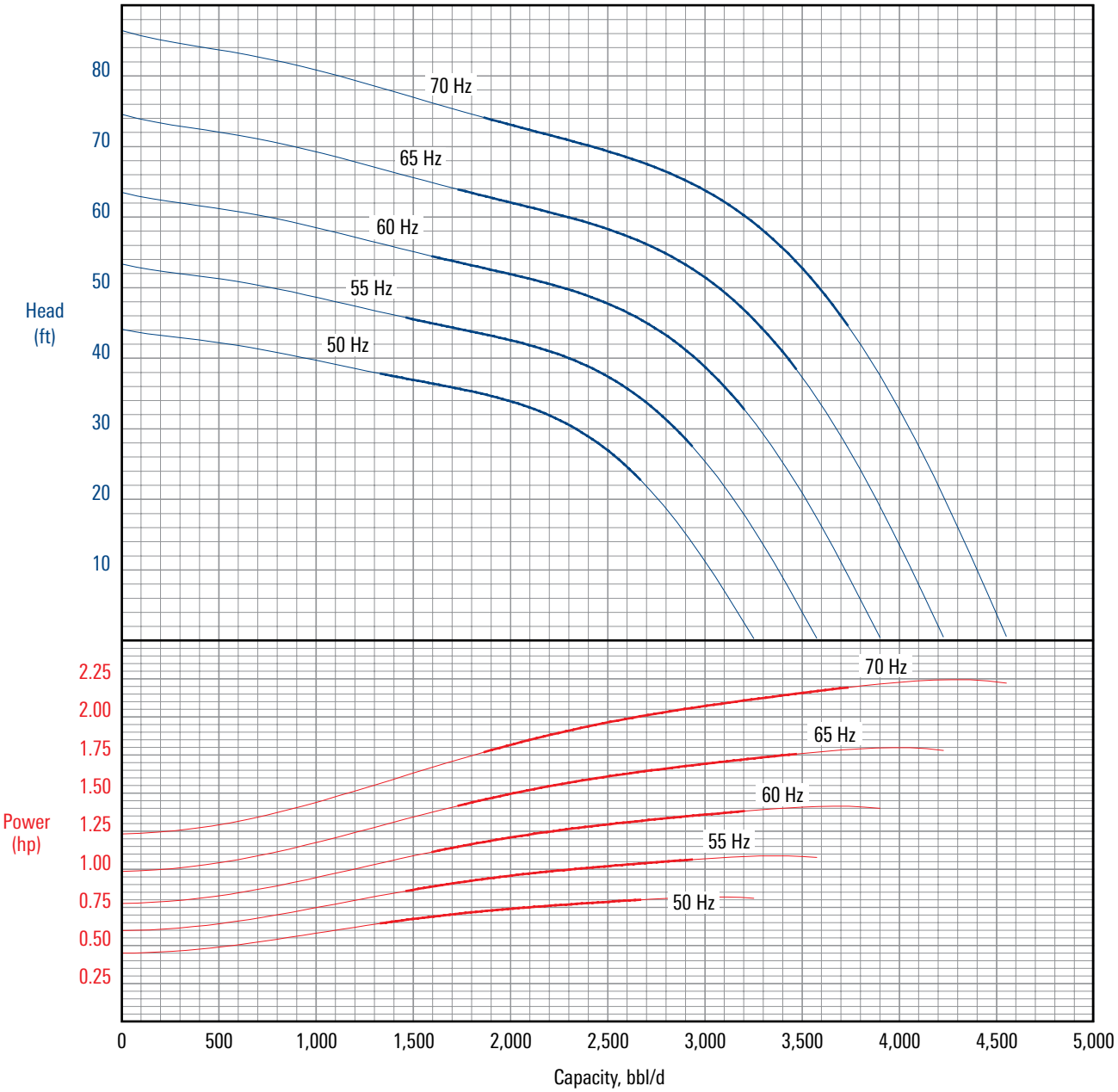
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

SN2600 Pump

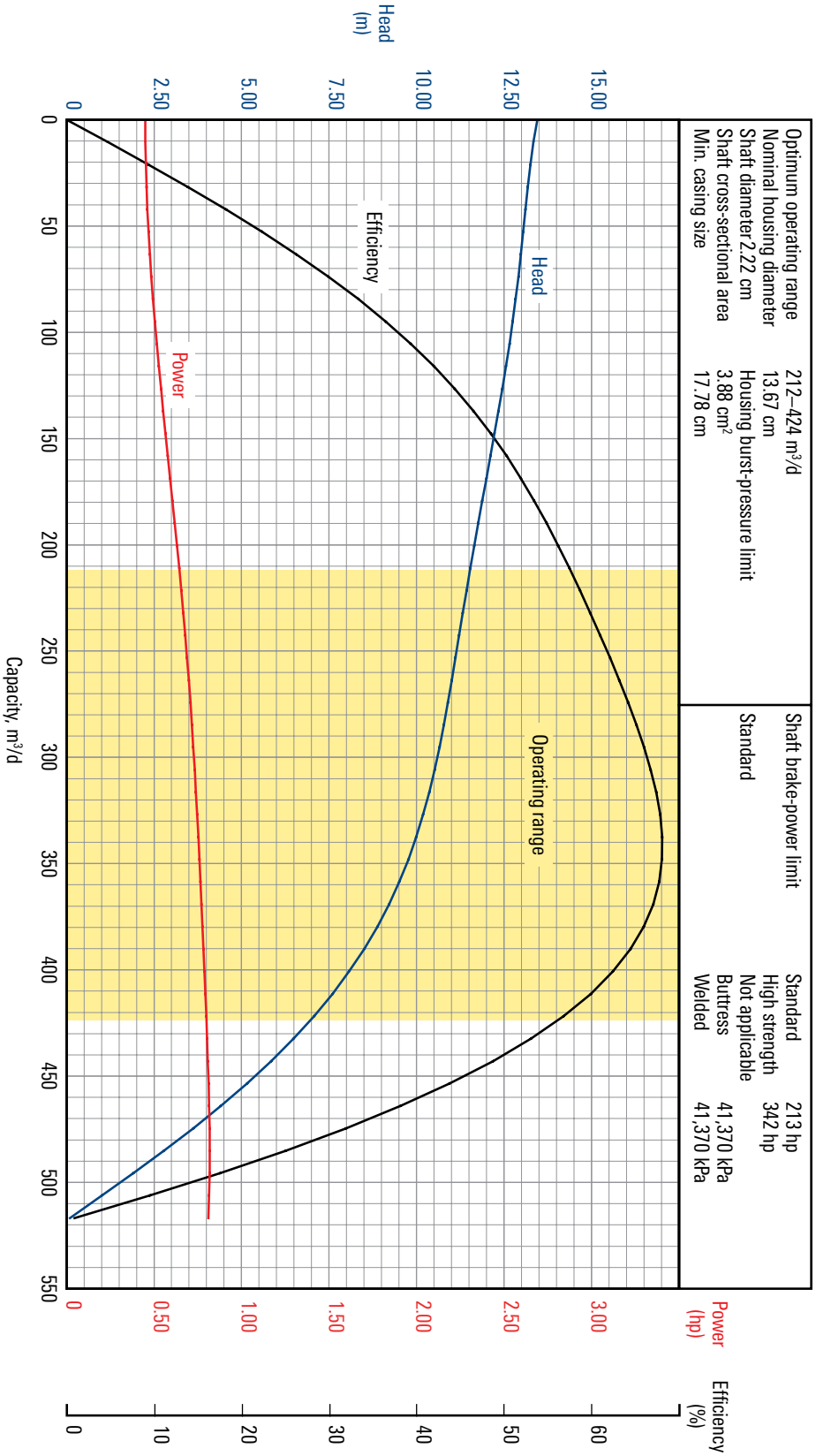
REDA ESP systems

Pump Performance Curve SN2600

Curve computed for one stage in fluid of 1.00 sg



SN2600 Pump



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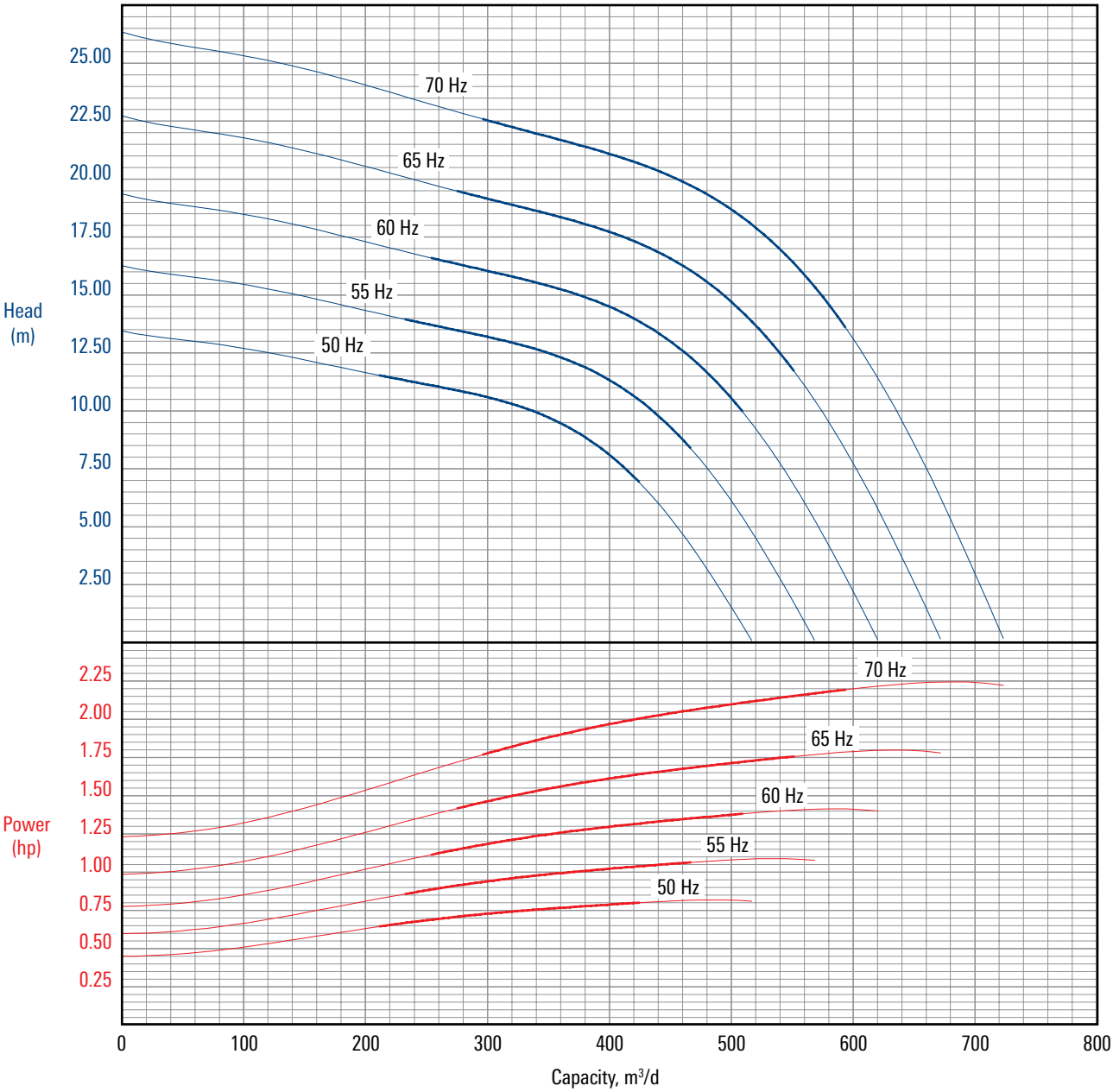
SN2600 Pump

REDA ESP systems

Pump Performance Curve SN2600

Curve computed for one stage in fluid of 1.00 sg



SN3600 Pump

538 Series, Min. Casing Size 7-in [177.8-mm] OD

			Carbon Steel		ES Carbon Steel		ARZ Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT Part Number**	**Max. Stages**	**FL-CT-ES Part Number**	**Max. Stages**	**FL-CT-ARZ Part Number**
10	2.1 [0.64]	93 [42.2]	5	tba†	5	tba	4	tba
20	3.5 [1.07]	157 [71.3]	11	tba	11	tba	10	tba
30	4.9 [1.49]	221 [100.3]	18	tba	18	tba	16	tba
40	6.3 [1.92]	285 [129.4]	25	tba	25	100116107	21	100115942
50	7.7 [2.35]	349 [158.4]	31	tba	31	100116110	28	100115966
60	9.1 [2.78]	413 [187.5]	38	tba	38	100116113	33	100115976
70	10.5 [3.20]	477 [216.6]	44	tba	44	100116205	39	100116005
80	11.9 [3.63]	541 [245.6]	51	tba	51	100116207	45	100116017
90	13.3 [4.06]	605 [274.7]	57	tba	57	100116209	51	100116018
100	14.7 [4.48]	669 [303.7]	64	2010176	64	2010040	57	2010041
110	16.1 [4.91]	733 [332.8]	71	tba	71	100116212	63	100116038
120	17.5 [5.34]	797 [361.8]	77	tba	77	100116220	69	100116043
130	18.9 [5.76]	861 [390.9]	84	tba	84	100116223	75	100116051
140	20.3 [6.19]	925 [420.0]	90	tba	90	100116225	81	100116055
150	21.7 [6.62]	989 [449.0]	97	tba	97	100116226	87	100116065

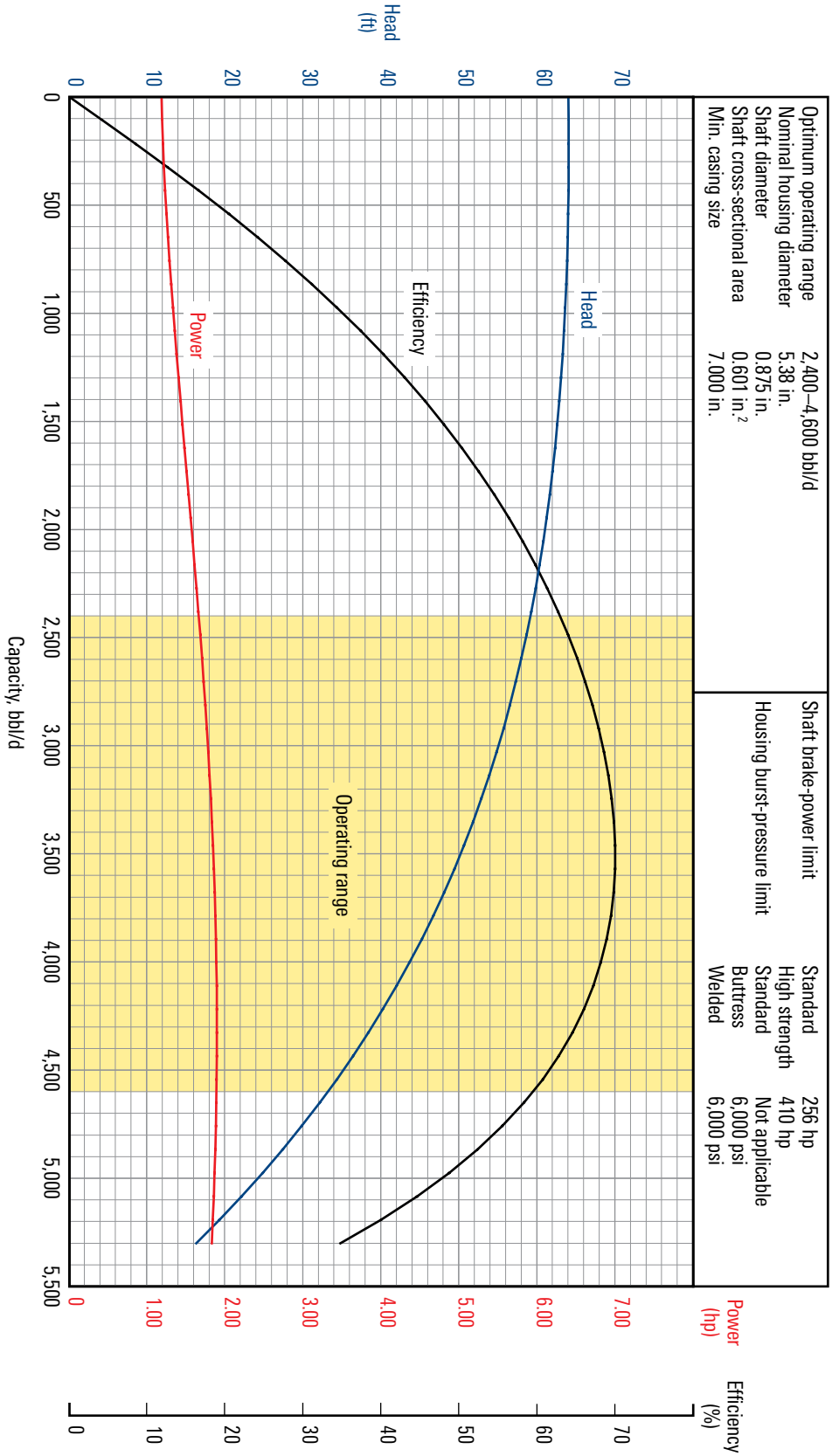
† To be assigned

SN3600 Pump, 538 Series, Tandem Combinations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**60**	**70**	**80**	**90**	**100**	**110**	**120**	**130**
160	142†	2‡							
170	152†	1‡	1‡						
180	162†		2‡						
190	171†		1‡	1‡					
200	180†			2‡					
210	189†			1‡	1‡				
220	198†				2‡				
230	208†				1‡	1‡			

Note: Stage counts are for FL-CT-ES pumps
† Requires use of high-load bearing in protector
‡ Requires use of high-strength shaft in lowermost pump

SN3600 Pump



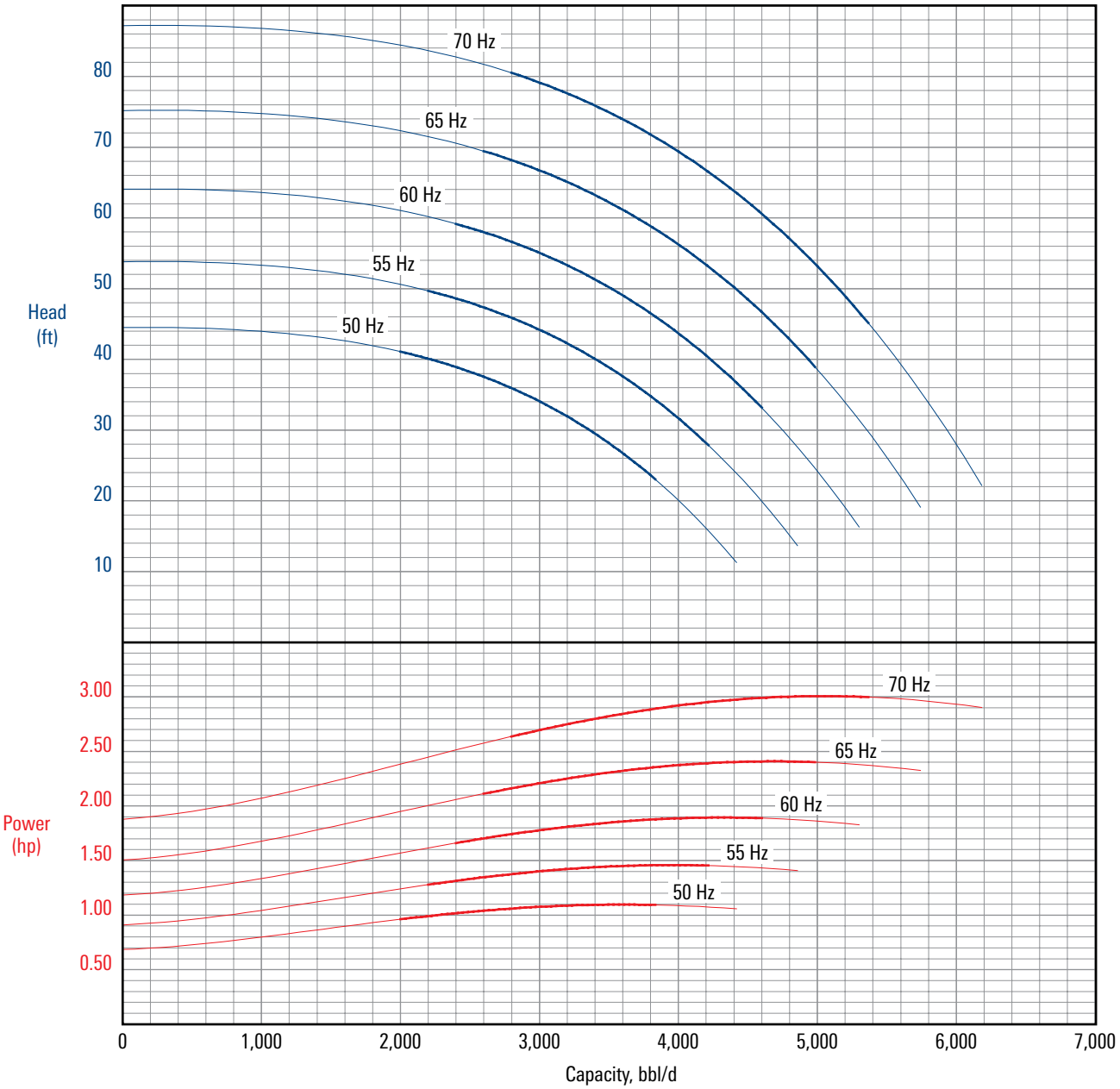
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

SN3600 Pump

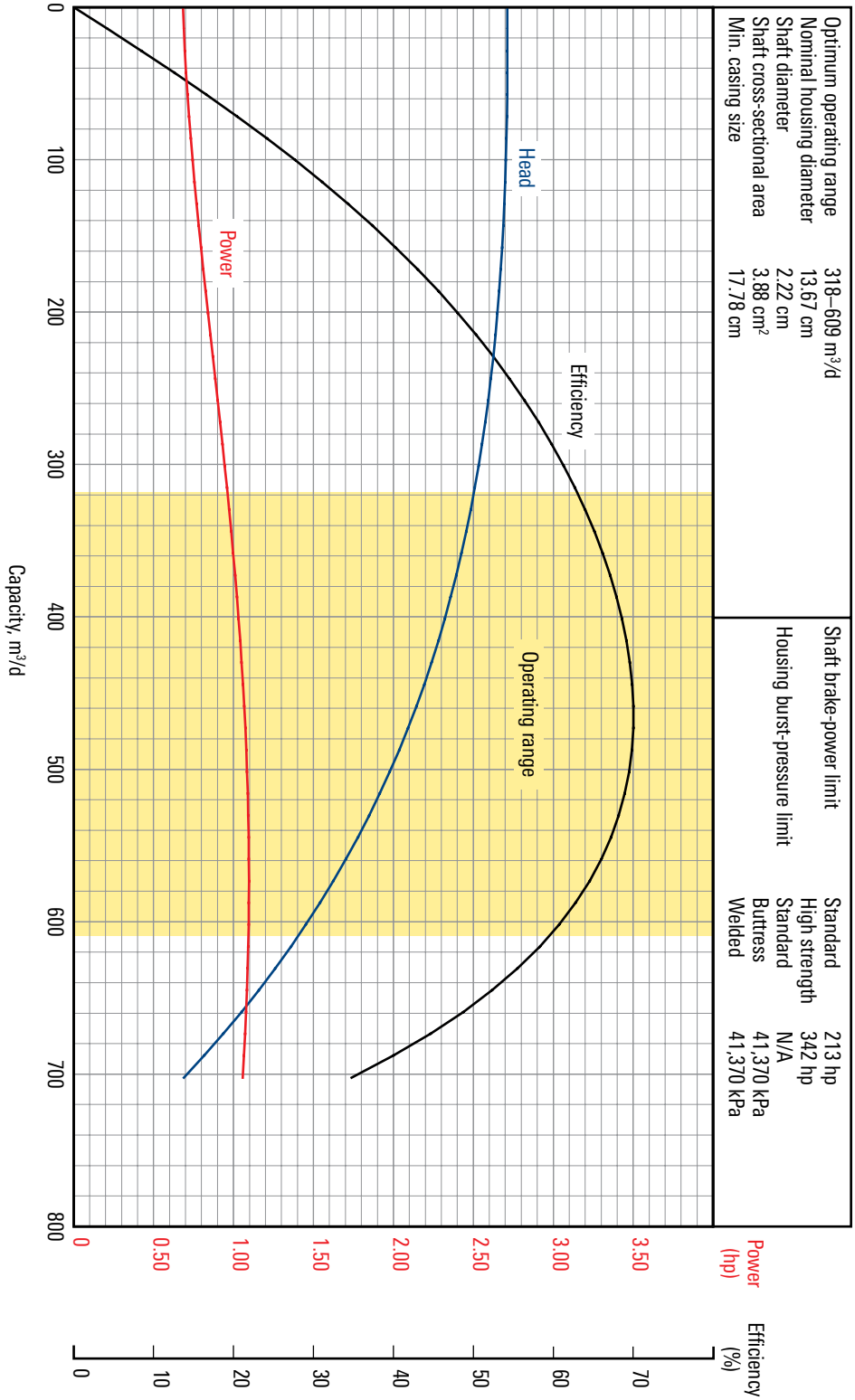
REDA ESP systems

Pump Performance Curve SN3600

Curve computed for one stage in fluid of 1.00 sg



SN3600 Pump



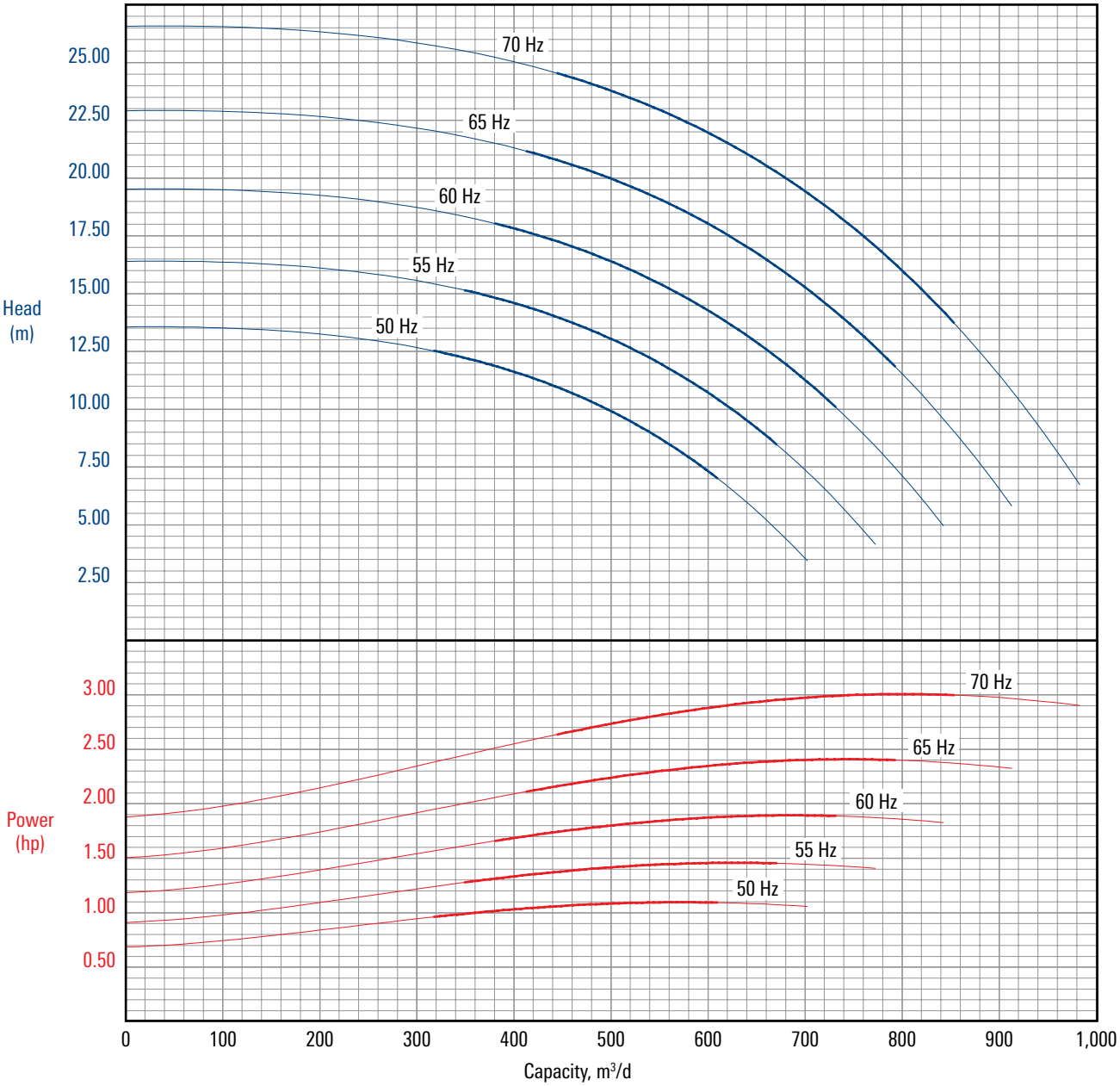
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

SN3600 Pump

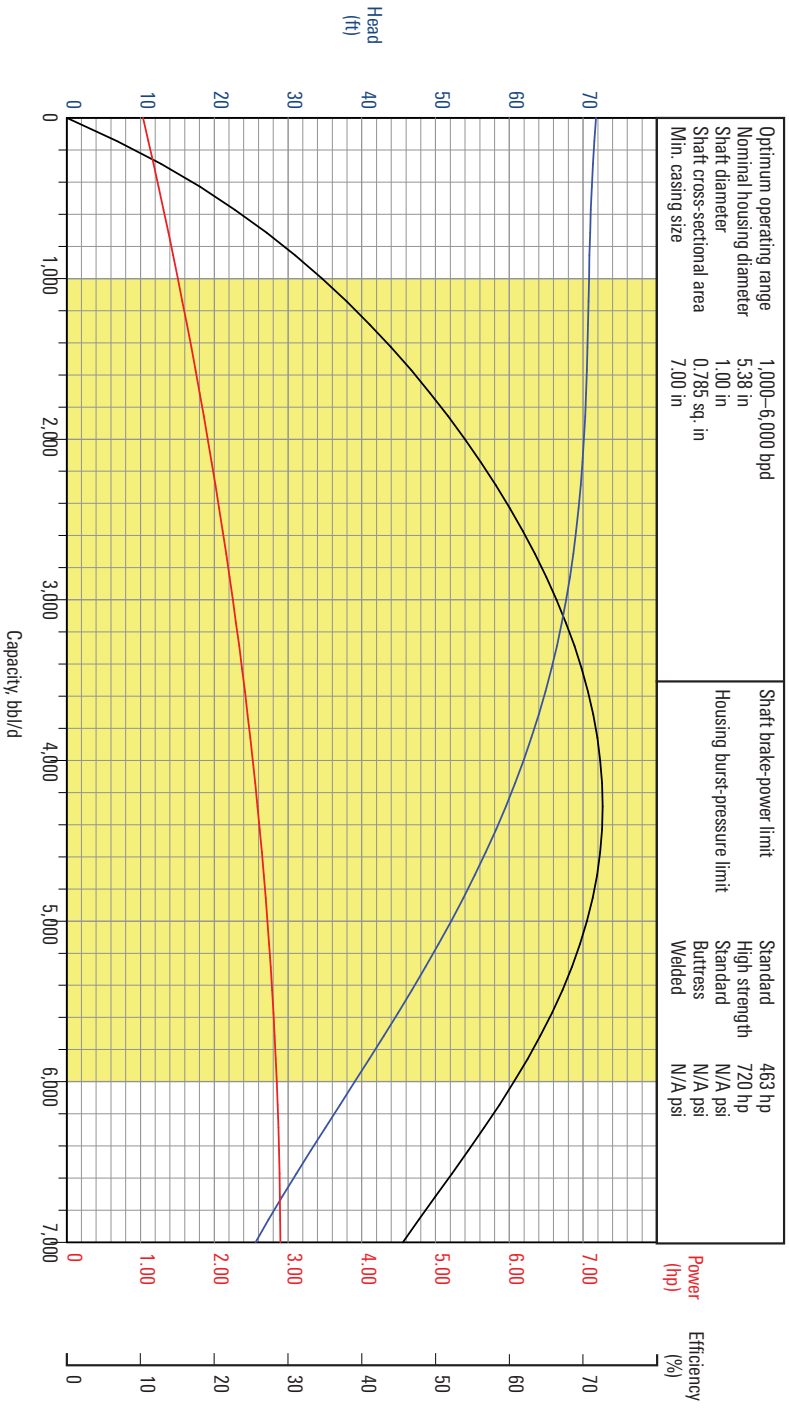
REDA ESP systems

Pump Performance Curve SN3600

Curve computed for one stage in fluid of 1.00 sg



S4000N Pump


REDA ESP systems
Pump Performance Curve S4000N 60 Hz, 3,500 rpm
Curve computed for one stage in fluid of 1.00 sg
Optimum operating range 1,000–6,000 bpd
Nominal housing diameter 5.38 in
Shaft diameter 1.00 in
Shaft cross-sectional area 0.785 sq. in
Min. casing size 7.00 in
Shaft brake-power limit
Housing burst-pressure limit
Standard 463 hp
High strength 720 hp
Standard N/A psi
Buttress N/A psi
Welded N/A psi
Head (ft)
Capacity, bbl/d
Power (hp)
Efficiency (%)

S6000N Pump

538 Series, Min. Casing Size 7-in [177.8-mm] OD

Housing	Length, ft [m]	Weight, lbm [kg]	ES Carbon Steel		ES Redalloy* High-Nickel Alloy	
			Max. Stages	FL-CT Part Number	Max. Stages	FL-CT Part Number
30	4.9 [1.49]	220 [99.9]	15	100308860	15	100309542
40	6.3 [1.92]	284 [128.9]	21	100308872	21	100309544
50	7.7 [2.35]	347 [157.5]	26	100308873	26	100309545
60	9.1 [2.78]	412 [187.0]	32	100308874	32	100309546
70	10.5 [3.20]	473 [214.7]	38	100308876	38	100309547
80	11.9 [3.63]	537 [243.8]	43	100308877	43	100309548
90	13.3 [4.06]	602 [273.3]	49	100308878	49	100309550
100	14.7 [4.48]	665 [301.9]	55	100308879	55	100309551
110	16.1 [4.91]	729 [331.0]	60	100308880	60	100309552
120	17.5 [5.34]	793 [360.0]	66	100308881	66	100309553
130	18.9 [5.76]	857 [389.0]	71	100308882	71	100309554
140	20.4 [6.20]	921 [418.1]	77	100308884	77	100309555
150	21.8 [6.63]	985 [447.2]	83	100308886	83	100309556

538 Series, Min. Casing Size 7-in [177.8-mm] OD

Housing	Length, ft [m]	Weight, lbm [kg]	ES Carbon Steel		ES Redalloy Alloy	
			Max. Stages	CR-CT† Part Number	Max. Stages	CR-CT† Part Number
30	4.9 [1.49]	220 [99.9]	15	100301480	15	tba‡
40	6.3 [1.92]	284 [128.9]	21	100301494	21	tba
50	7.7 [2.35]	347 [157.5]	26	100301495	26	100302192
60	9.1 [2.78]	412 [187.0]	32	100301496	32	100302193
70	10.5 [3.20]	473 [214.7]	37	100301497	37	100302194
80	11.9 [3.63]	537 [243.8]	43	100301498	43	100302196
90	13.3 [4.06]	602 [273.3]	49	100301499	49	100302197
100	14.7 [4.48]	665 [301.9]	54	100301500	54	100302198
110	16.1 [4.91]	729 [331.0]	60	100301501	60	100302200
120	17.5 [5.34]	793 [360.0]	66	100301502	66	100302201
130	18.9 [5.76]	857 [389.0]	71	100301503	71	100302203
140	20.4 [6.20]	921 [418.1]	77	100301504	77	100302204
150	21.8 [6.63]	985 [447.2]	82	100301505	82	100302205

† This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

‡ To be assigned

S6000N Pump

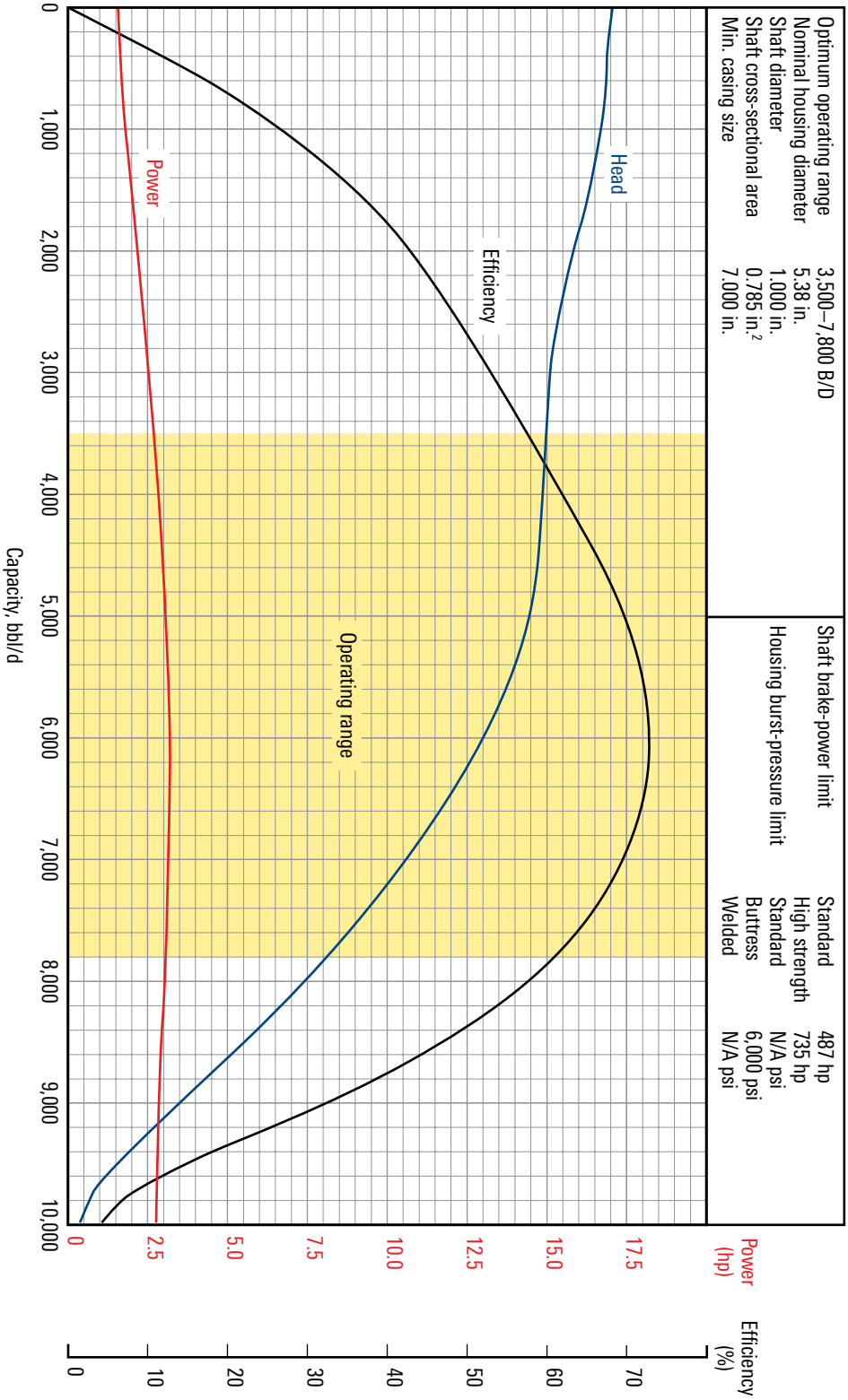
538 Series, Min. Casing Size 7-in [177.8-mm] OD

			ARZ Carbon Steel		ARZ Redalloy Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT† Part Number**	**Max. Stages**	**CR-CT† Part Number**
30	4.9 [1.49]	220 [99.9]	15	100304066	15	tba‡
40	6.3 [1.92]	284 [128.9]	20	100304068	20	tba
50	7.7 [2.35]	347 [157.5]	26	100304069	26	100304978
60	9.1 [2.78]	412 [187.0]	31	100304070	31	100304979
70	10.5 [3.20]	473 [214.7]	37	100304071	37	100304980
80	11.9 [3.63]	537 [243.8]	43	100304072	43	100304981
90	13.3 [4.06]	602 [273.3]	48	100304074	48	100304982
100	14.7 [4.48]	665 [301.9]	54	100304075	54	100304984
110	16.1 [4.91]	729 [331.0]	59	100304076	59	100304985
120	17.5 [5.34]	793 [360.0]	65	100304077	65	100304986
130	18.9 [5.76]	857 [389.0]	71	100304079	71	100304987
140	20.4 [6.20]	921 [418.1]	76	100304080	76	100304988
150	21.8 [6.63]	985 [447.2]	82	100304081	82	100304989

† This factory-shimmed pump type should always be installed with a factory-shimmed coupling. If this pump type is mated with other factory-shimmed equipment, no shimming is required during assembly. Conversely, if this pump type is mated with nonfactory-shimmed equipment, the field-shimming procedures must be followed.

‡ To be assigned

S6000N Pump



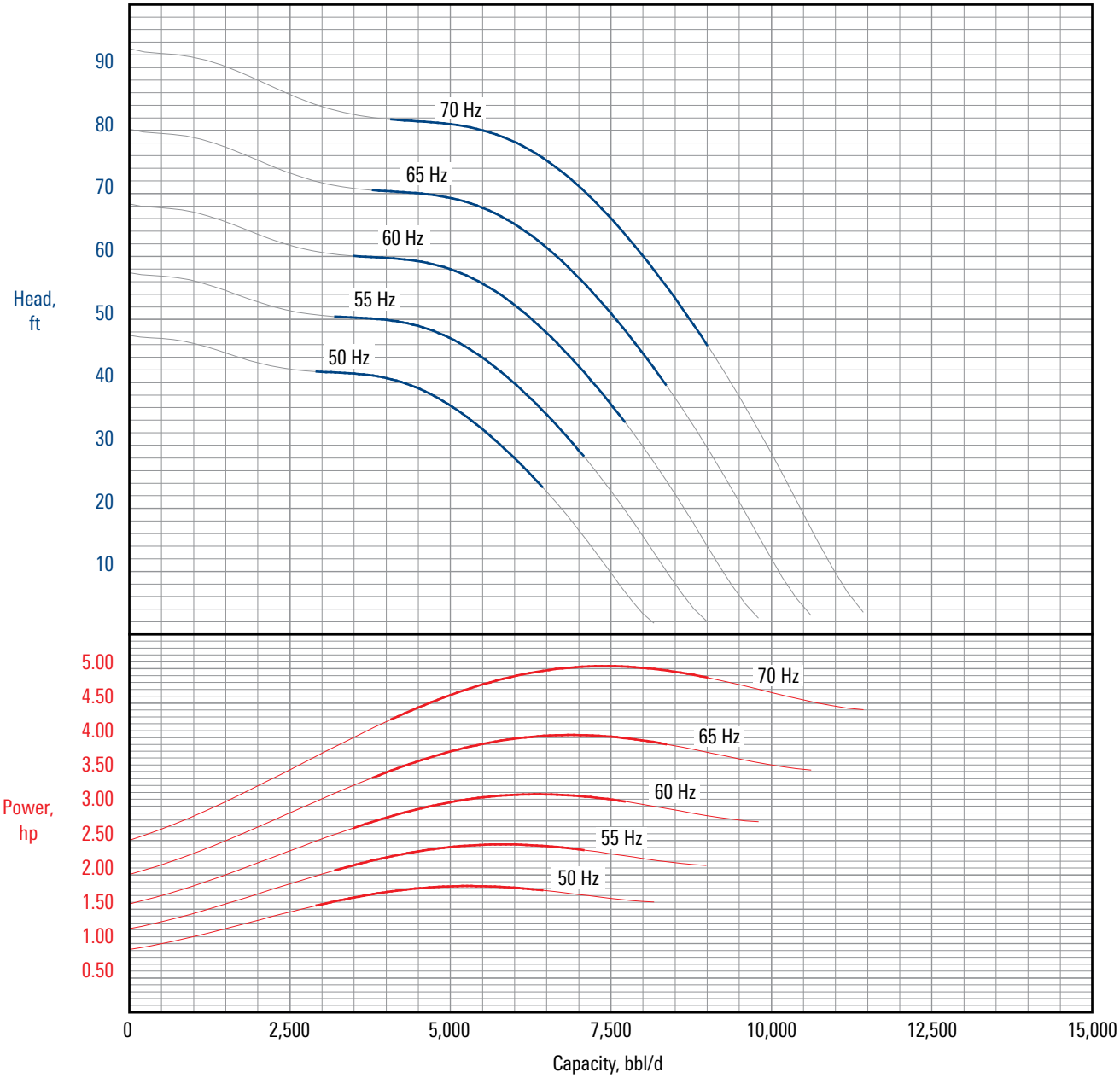
This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

S6000N Pump

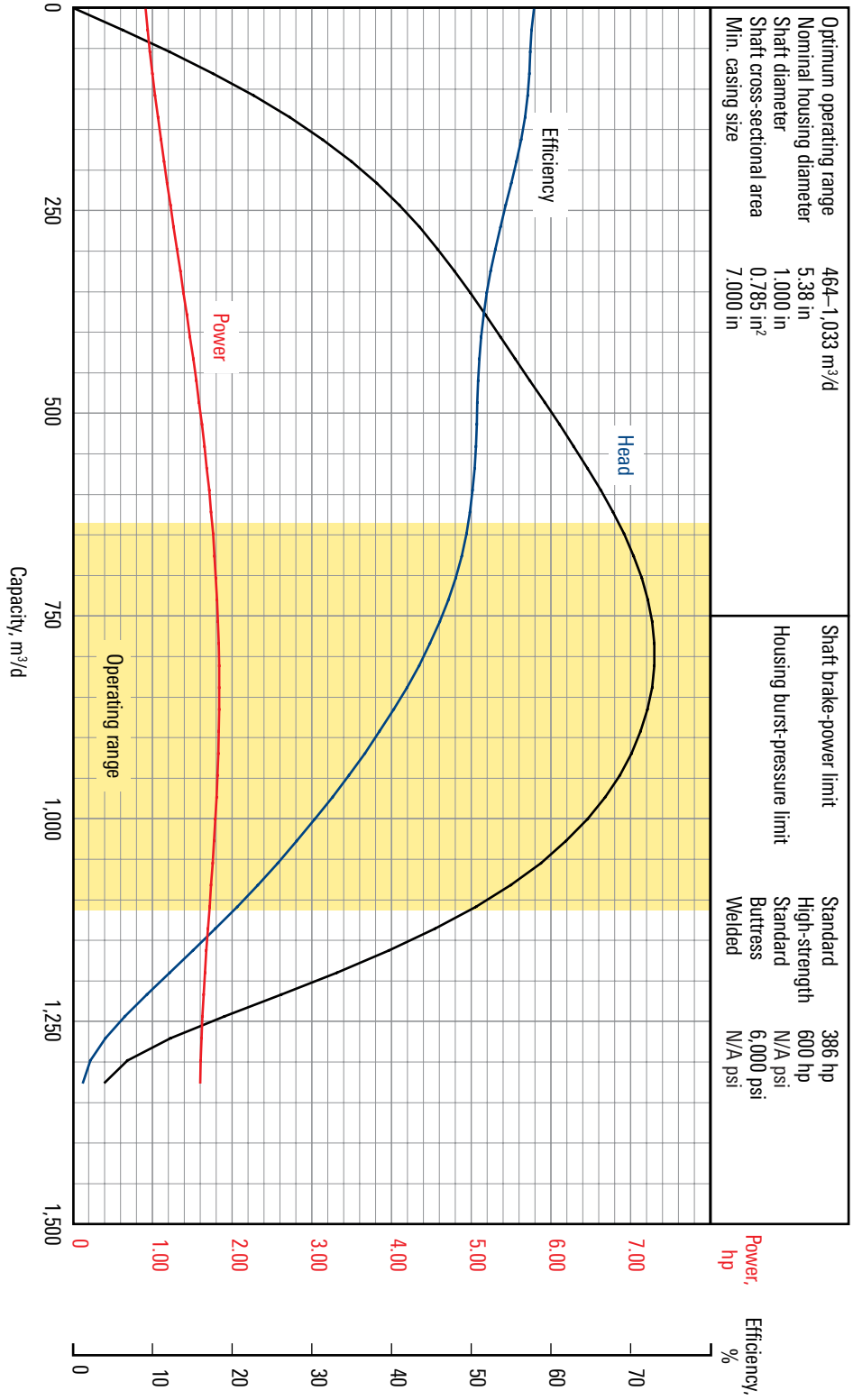
REDA ESP systems

Pump Performance Curve S6000N

Curve computed for one stage in fluid of 1.00 sg



S6000N Pump



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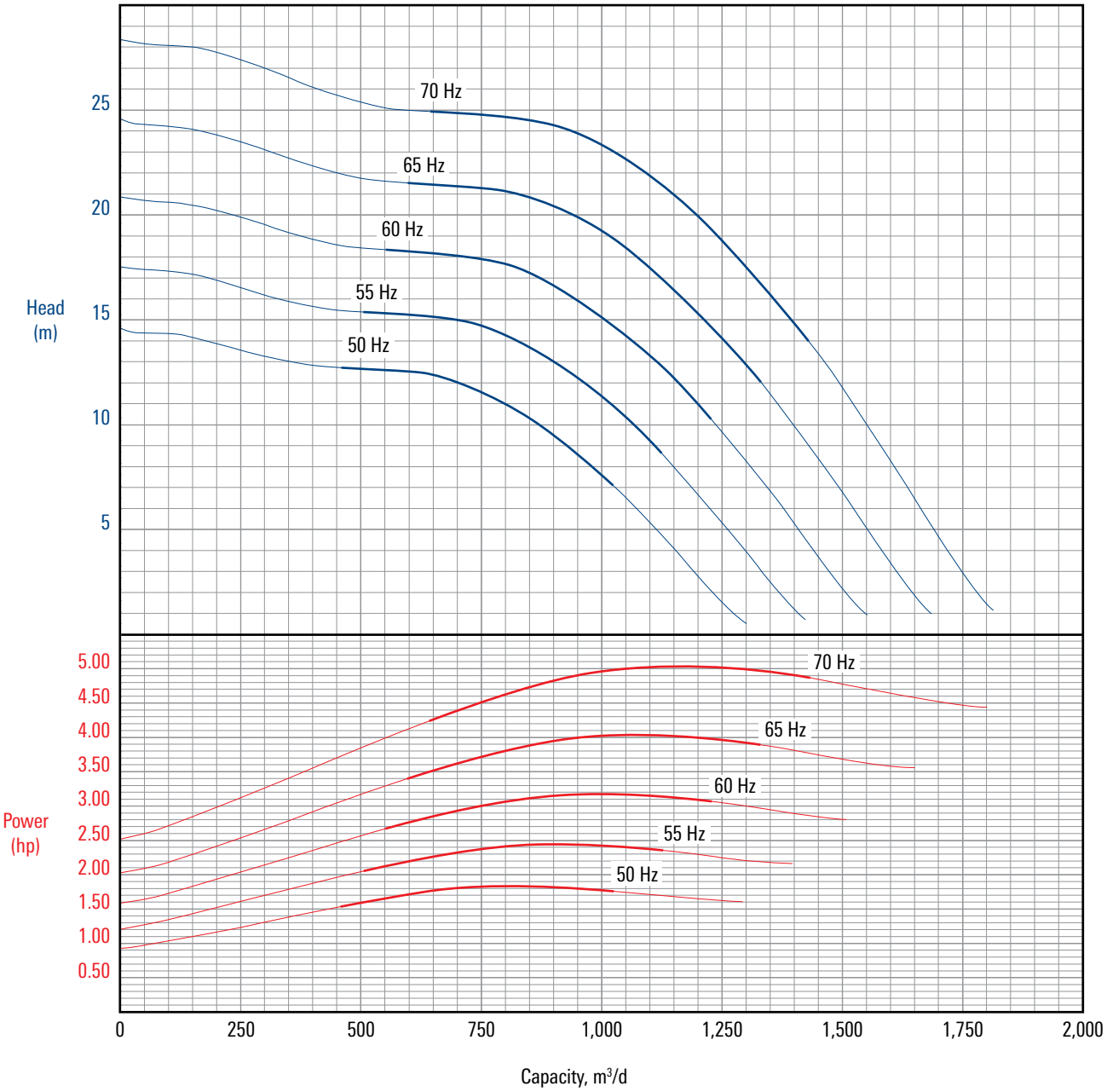
S6000N Pump

REDA ESP systems

Pump Performance Curve S6000N

Curve computed for one stage in fluid of 1.00 sg



S8000N Pump

538 Series, Min. Casing Size 7-in [177.8-mm] OD

			ES Carbon Steel	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**FL-CT ES Part Number**
30	4.9 [1.49]	220 [100]	15	100401456
40	6.3 [1.92]	284 [129]	20	100441076
50	7.7 [2.35]	347 [158]	26	100441077
60	9.1 [2.77]	412 [187]	31	100441080
70	10.5 [3.20]	473 [215]	37	100441081
80	11.9 [3.63]	537 [244]	42	100441082
90	13.3 [4.05]	602 [274]	48	100441083
100	14.7 [4.48]	665 [302]	53	100441084
110	16.1 [4.91]	729 [331]	59	100441085
120	17.5 [5.34]	793 [360]	64	100441086
130	18.9 [5.76]	857 [390]	70	100441087
140	20.4 [6.22]	921 [419]	75	100441088
150	21.8 [6.65]	985 [448]	81	100441089

538 Series, Min. Casing Size 7-in [177.8-mm] OD

			ES Carbon Steel		ES Redalloy* High-Nickel Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT ES Part Number**	**Max. Stages**	**CR-CT ES Part Number**
30	4.9 [1.49]	220 [100]	15	100401489	15	tba†
40	6.3 [1.92]	284 [129]	21	100422706	21	tba
50	7.7 [2.35]	347 [158]	26	100422709	26	tba
60	9.1 [2.77]	412 [187]	32	100422710	32	tba
70	10.5 [3.20]	473 [215]	37	100422711	37	tba
80	11.9 [3.63]	537 [244]	43	100422712	43	tba
90	13.3 [4.05]	602 [274]	49	100422714	49	tba
100	14.7 [4.48]	665 [302]	54	100422716	54	tba
110	16.1 [4.91]	729 [331]	60	100422717	60	tba
120	17.5 [5.34]	793 [360]	66	100422718	66	100401504
130	18.9 [5.76]	857 [390]	71	100422719	71	100422746
140	20.4 [6.22]	921 [419]	77	100422720	77	100422747
150	21.8 [6.65]	985 [448]	82	100422721	82	100422748

† To be assigned

S8000N Pump

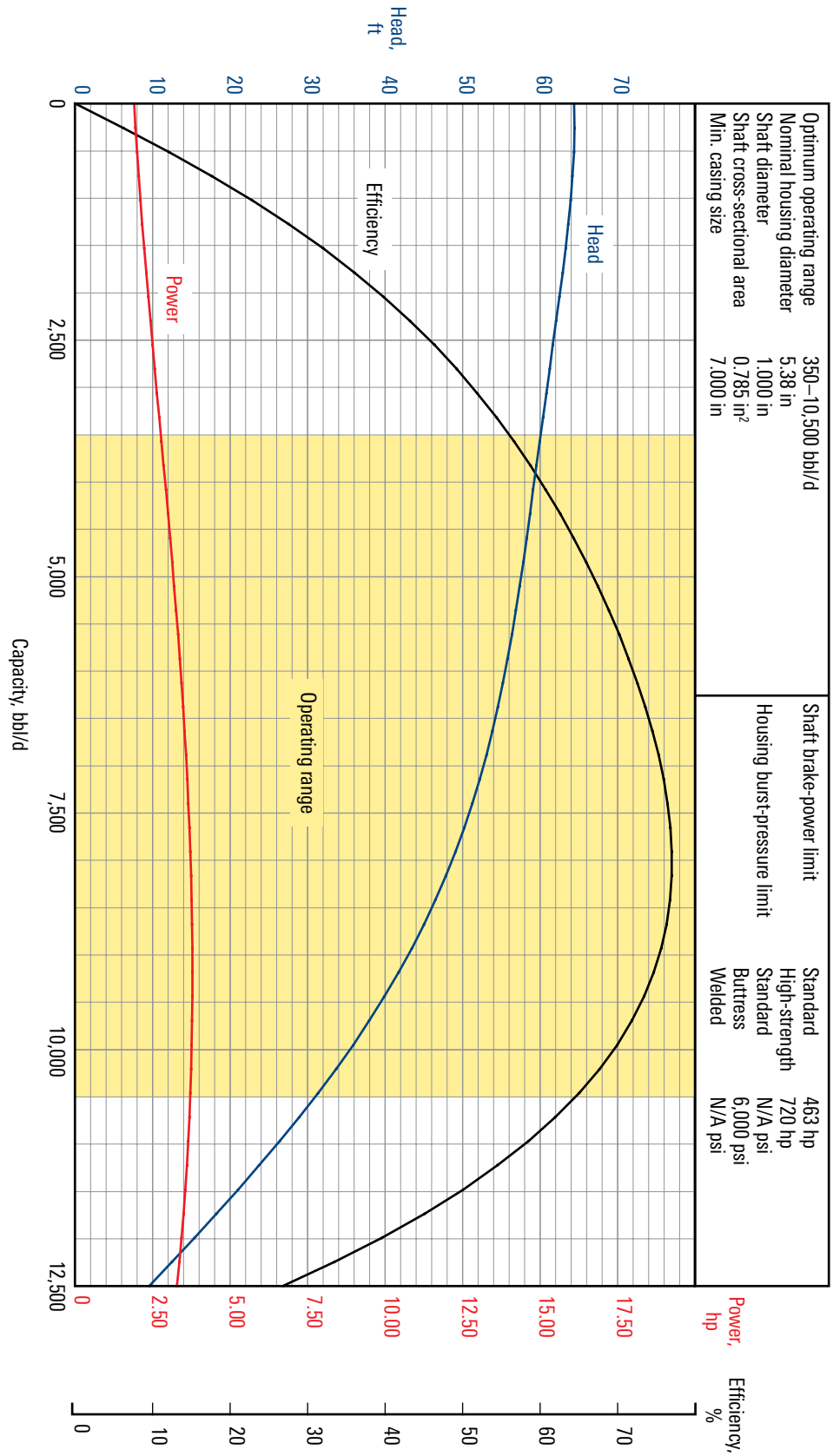
538 Series, Min. Casing Size 7-in [177.8-mm] OD

			ARZ Carbon Steel		ARZ Redalloy High-Nickel Alloy	
Housing	**Length, ft [m]**	**Weight, lbm [kg]**	**Max. Stages**	**CR-CT ARZ Part Number**	**Max. Stages**	**CR-CT ARZ Part Number**
30	4.9 [1.49]	220 [100]	14	100401509	14	100401799
40	6.3 [1.92]	284 [129]	20	100419400	20	100423509
50	7.7 [2.35]	347 [158]	25	100419402	25	100423510
60	9.1 [2.77]	412 [187]	30	100419403	30	100423511
70	10.5 [3.20]	473 [215]	36	100419404	36	100423512
80	11.9 [3.63]	537 [244]	41	100419405	41	100423514
90	13.3 [4.05]	602 [274]	47	100419406	47	100423515
100	14.7 [4.48]	665 [302]	52	100419407	52	100423516
110	16.1 [4.91]	729 [331]	57	100419408	57	100423518
120	17.5 [5.34]	793 [360]	63	100419409	63	100423564
130	18.9 [5.76]	857 [390]	68	100419410	68	100423566
140	20.4 [6.22]	921 [419]	74	100419411	74	100423567
150	21.8 [6.65]	985 [448]	79	100419412	79	100423568

S8000N Pump, 538 Series, Tandem Configurations

		Tandem Housing Sections Number							
Pump Housing	**Number of Stages**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
160	86	2							
170	92	1	1						
180	98		2						
190	104		1	1					
200	110			2					
210	115			1	1				
220	120				2				
230	126				1	1			
240	132					2			
250	137					1	1		
260	142						2		
270	148						1	1	
280	154							2	
290	160							1	1
300	166								2
310	170			2	1				
320	175			1	2				
330	180				3				
340	186				2	1			
350	192				1	2			

S8000N Pump



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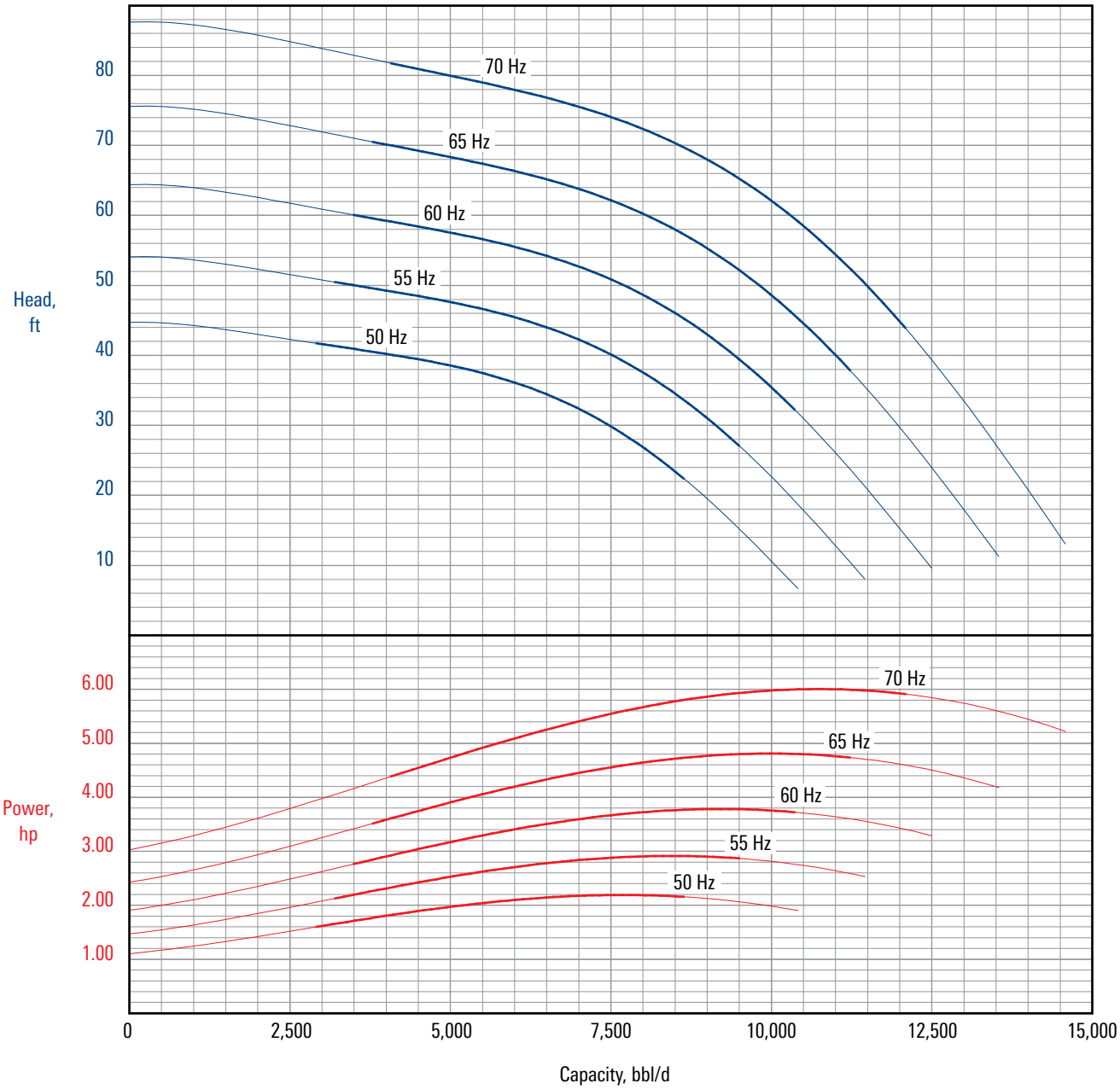
S8000N Pump

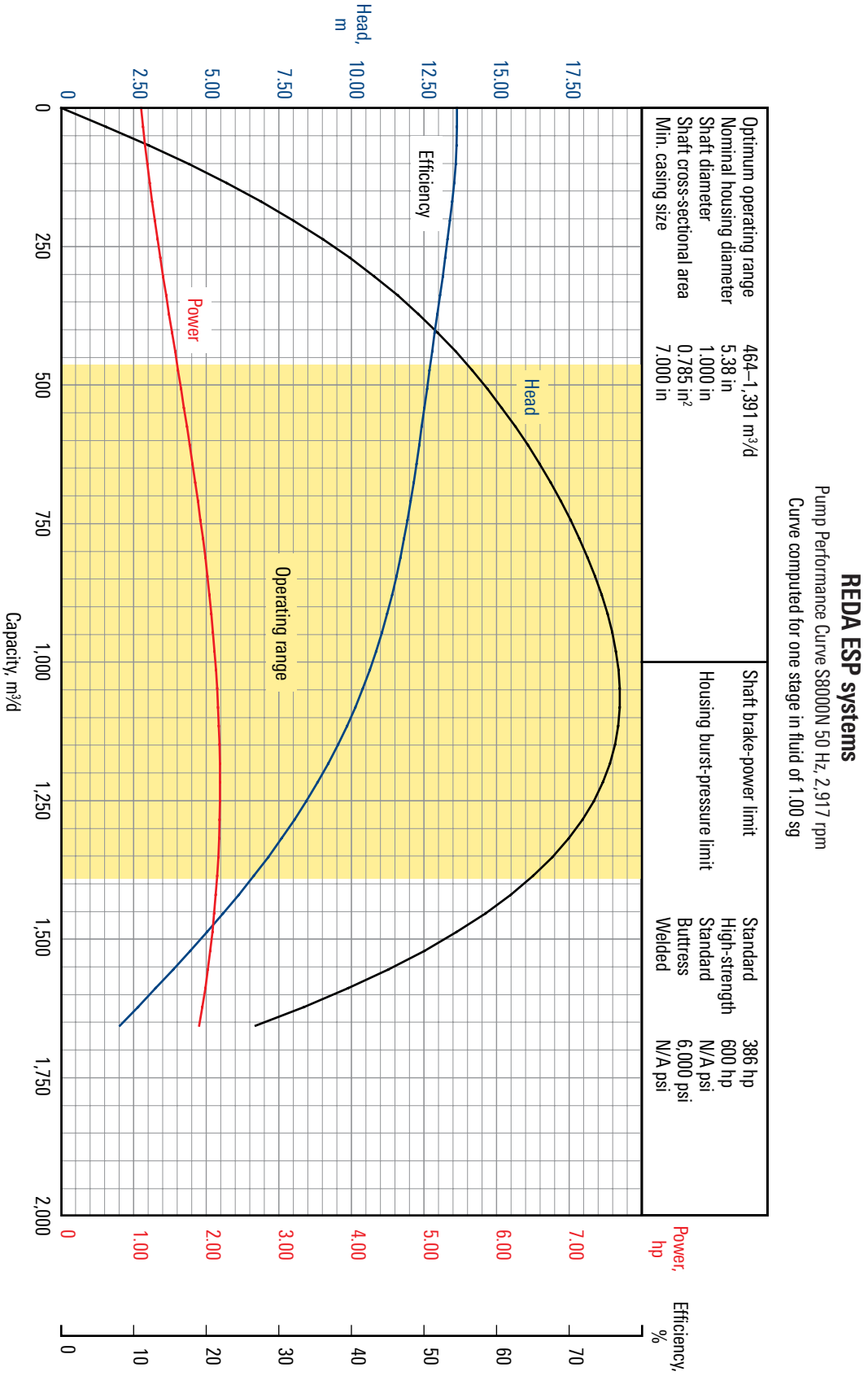
REDA ESP systems

Pump Performance Curve S8000N

Curve computed for one stage in fluid of 1.00 sg

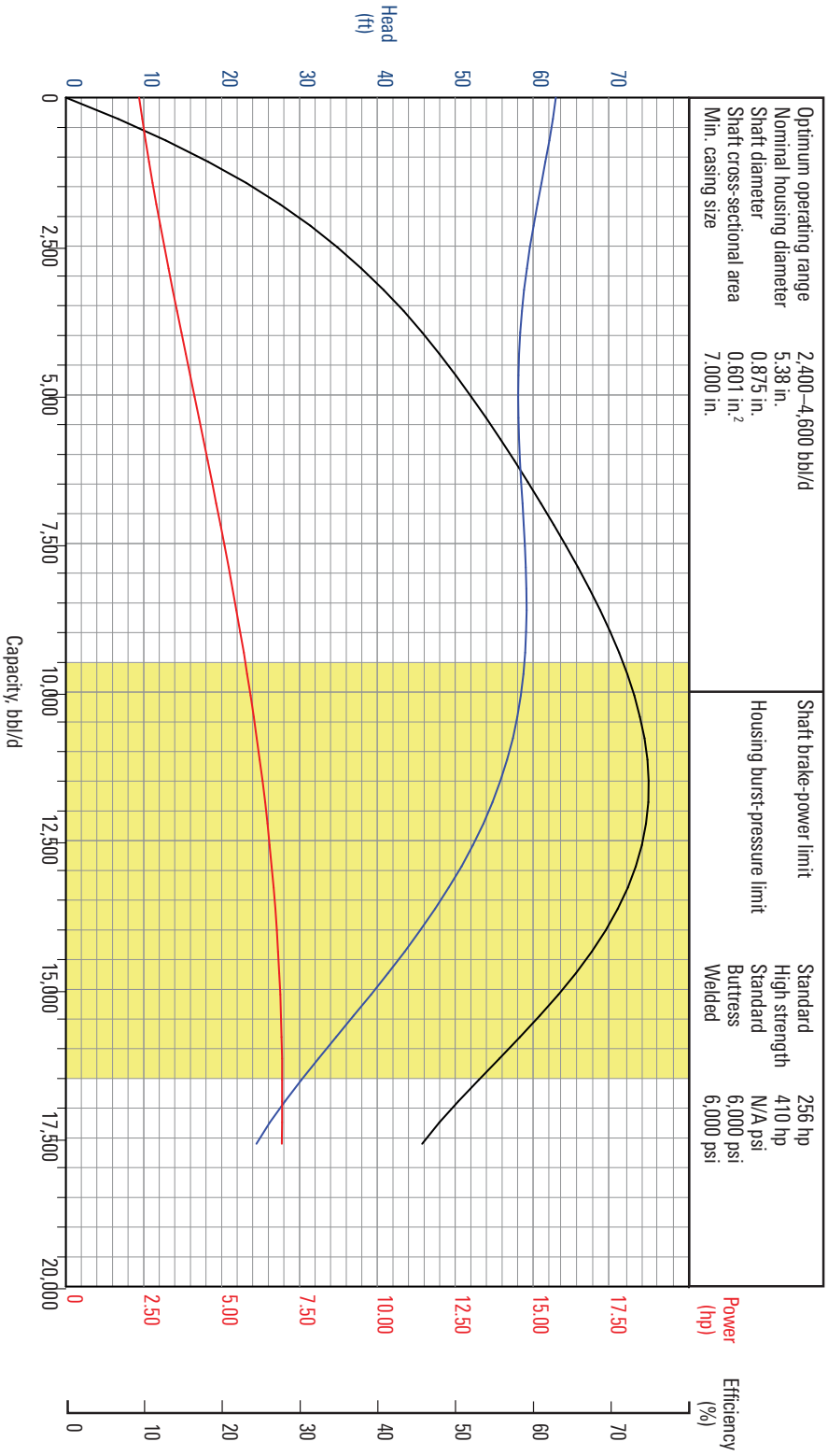


S8000N Pump



This engineering performance curve represents nominal performance based on actual multistage testing and certification. All pumps supplied by Schlumberger will be tested and certified to perform within the acceptable limits for head, power, and efficiency as defined in the API Recommended Practice (11S2) for Electric Submersible Pump Testing.

S110000 Pump



REDA ESP System Cables

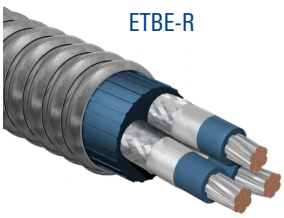
REDA* ESP Cable Specifications							
	Temperature Range, degF [degC]	**Profile**	**Insulation**	**Barrier**	**Jacket**	**Armor**	**Voltage, kV**
REDA MAX* ESP Power Cables							
ETBE-R	–40 to 400 [–40 to 204]	Round	EPDM[†]	Fluoropolymer tape	EPDM	Galvanized steel[§]	5
ETBE-F	–40 to 400 [–40 to 204]	Flat	EPDM	Fluoropolymer tape	EPDM	Galvanized steel[§]	5
EE-R	–40 to 400 [–40 to 204]	Round	EPDM	None	EPDM	Galvanized steel[§]	5
EO-F	0 to 250 [–18 to 121]	Flat	EPDM	None	Nitrile	Galvanized steel[§]	4
REDA Lead* Lead-Barrier ESP Power Cables							
ELC-LPF	–40 to 400 [–40 to 204]	Flat	EPDM	Lead	None	Galvanized steel	5
ELB-F	–40 to 450 [–40 to 232]	Flat	EPDM	Lead	None	Galvanized steel[§]	5
EHLTB-F	–40 to 450 [–40 to 232]	Flat	EPDM	Heavy lead and fluoropolymer tape	None	Galvanized steel[§]	5
ELBE-R	–40 to 450 [–40 to 232]	Round	EPDM	Lead	EPDM	Galvanized steel[§]	5
EHLTB-XF	–40 to 500 [–40 to 260]	Flat	Extreme EPDM	Heavy lead and fluoropolymer tape	None	Galvanized steel[§]	5
REDA Subsea* High-Reliability Corrosion-Resistant ESP Cable							
SESLTBE-R	–40 to 400 [–40 to 204]	Round	High-voltage EPDM	Lead and fluoropolymer tape	EPDM	Double-layer galvanized steel	8

[†]Ethylene propylene diene monomer [§]MONEL® and stainless steel armor available on request.
Other configurations can be manufactured on request.

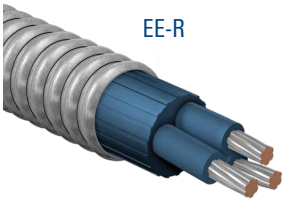
Cables Nomenclature Guide

- E – EPDM
- T – Tape
- B – Braid
- O – Nitrile
- L – Lead
- C – Cushion
- HL – Heavy Lead
- X – Extreme EPDM
- S – Semiconductor
- R – Round
- F – Flat
- LP – Low Profile

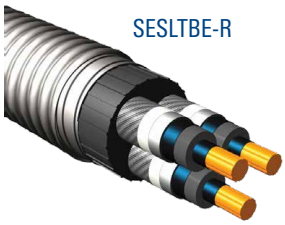
ETBE-R



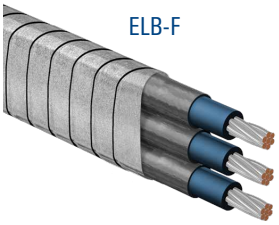
EE-R



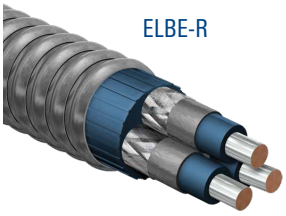
SESLTBE-R



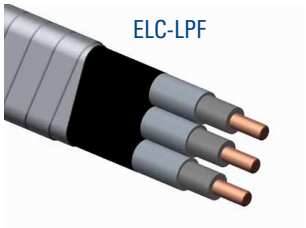
ELB-F



ELBE-R



ELC-LPF



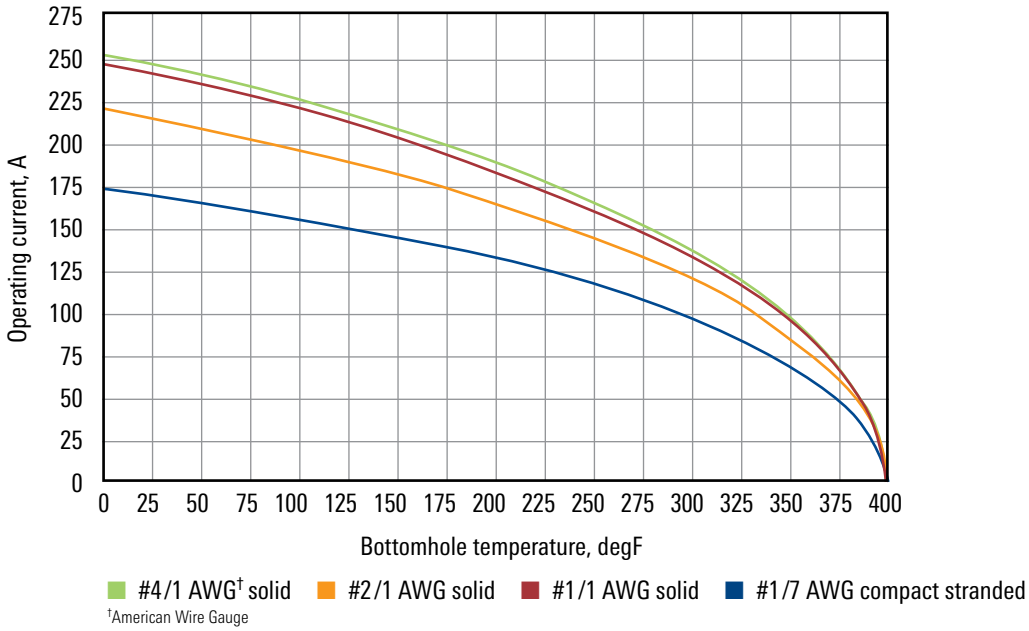
REDA MAX Cable ETBE-R

REDA MAX* ESP Power Cable ETBE-R Specifications

Part number and description	L5921027 #2/1 ETBE G5R	L5921047 #4/1 ETBE G5R	L5923018 #1/7 C/S ETBE M5R	101340945 #4/1 ETBE GG5R	101249685 #1/1 ETBE HG5R	L5852028 #2/7 ETBE M5R
Conductor diameter, in	0.2576	0.2043	0.2970	0.2043	0.2893	0.2920
Conductor configuration	Solid	Solid	Compact stranded	Solid	Solid	Stranded
Insulation material	EPDM†	EPDM	EPDM	EPDM	EPDM	EPDM
Insulation wall thickness, in	0.090	0.090	0.090	0.090	0.090	0.090
Insulation diameter, in	0.438	0.384	0.477	0.384	0.469	0.472
Barrier material	Fluoropolymer tape	Fluoropolymer tape	Fluoropolymer tape	Fluoropolymer tape	Fluoropolymer tape	Fluoropolymer tape
Barrier wall thickness, in	0.004	0.004	0.004	0.004	0.004	0.004
Barrier diameter, in	0.446	0.392	0.485	0.392	0.477	0.480
Jacket material	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM
Jacket wall thickness, in	0.060	0.060	0.060	0.060	0.060	0.060
Jacket diameter, in	1.133	1.018	1.218	1.018	1.202	1.207
Tubing material	NA‡	NA	NA	NA	NA	NA
Tubing size	NA	NA	NA	NA	NA	NA
Ground wire size	NA	NA	NA	NA	NA	NA
Armor material	Galvanized steel	Galvanized steel	MONEL®	Double-layer galvanized steel	Galvanized steel	MONEL
Armor width × thickness, in	½ × 0.025	½ × 0.025	½ × 0.025	½ × 0.020 (layer 1) ½ × 0.025 (layer 2)	½ × 0.034	½ × 0.020
Armored cable diameter, in	1.303	1.188	1.378	1.300	1.392	1.367
Weight, lbm/ft	1.597	1.245	1.761	1.636	2.046	1.633
Max. conductor resistance	IEEE 1018					
Min. insulation resistance	IEEE 1018					

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



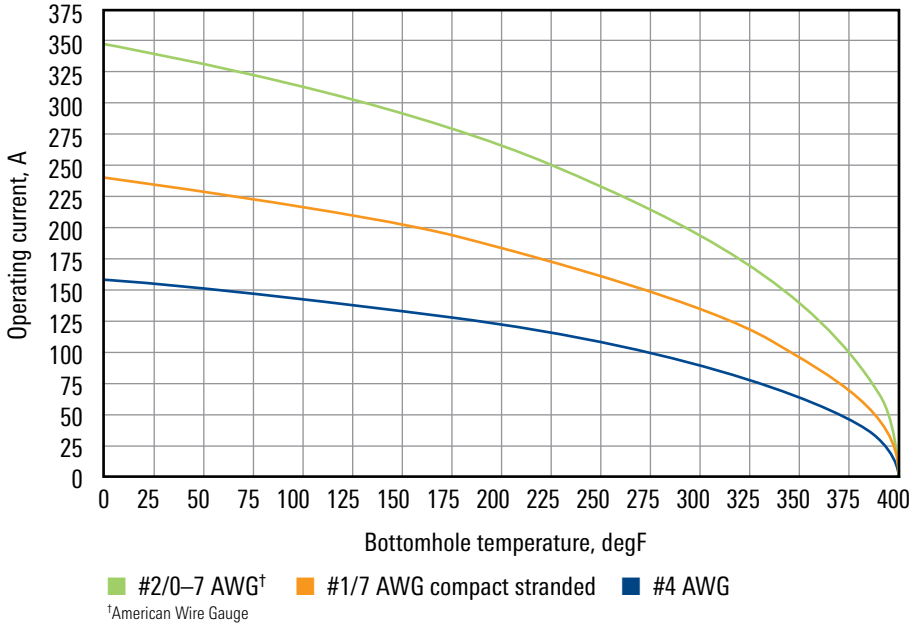
†American Wire Gauge

REDA MAX Cable ETBE-F

REDA MAX* ESP Power Cable ETBE-F Specifications

Part number and description	L5882227 #2/0-7 ETBE G5F W/ 4/1 GND	L5882228 #2/0-7 ETBE M5F W/ 4/1 GND	101726942 #1/7 C/S ETBE M5F W/ 4/1 GND	100726429 #1/7 C/S ETBE G5F W/ 4/1 GND	100388957 #4 ETBE G5F
Conductor diameter, in	0.4140	0.4140	0.297	0.297	0.2043
Conductor configuration	Stranded	Stranded	Compact stranded	Compact stranded	Solid
Insulation material	EPDM†	EPDM	EPDM	EPDM	EPDM
Insulation wall thickness, in	0.090	0.090	0.090	0.090	0.090
Insulation diameter, in	0.594	0.594	0.477	0.477	0.384
Barrier material	Fluoropolymer tape	Fluoropolymer tape	Fluoropolymer tape	Fluoropolymer tape	Fluoropolymer tape
Barrier wall thickness, in	0.004	0.004	0.004	0.004	0.004
Barrier diameter, in	0.602	0.602	0.485	0.485	0.392
Jacket material	EPDM	EPDM	EPDM	EPDM	EPDM
Jacket wall thickness, in	0.055	0.055	0.055	0.055	0.055
Jacket dimensions, in	0.728 × 2.044	0.728 × 2.044	0.601 × 1.693	0.601 × 1.693	0.518 × 1.414
Tubing material	NA‡	NA	NA	NA	NA
Tubing size	NA	NA	NA	NA	NA
Ground wire size, AWG§	#4	#4	#4	#4	NA
Armor material	Galvanized steel	MONEL®	MONEL	Galvanized steel	Galvanized steel
Armor width × thickness, in	¾ × 0.020	½ × 0.020	½ × 0.020	¾ × 0.020	¾ × 0.020
Armored cable dimensions, in	0.858 × 2.648	0.858 × 2.648	0.731 × 2.277	0.731 × 2.277	0.648 × 1.515
Weight, lbm/ft	2.711	2.533	1.817	1.970	1.184
Max. conductor resistance	IEEE 1018				
Min. insulation resistance	IEEE 1018				

†Ethylene propylene diene monomer ‡Not applicable
§American Wire Gauge Dimensions are nominal.
Other configurations can be manufactured on request.



†American Wire Gauge

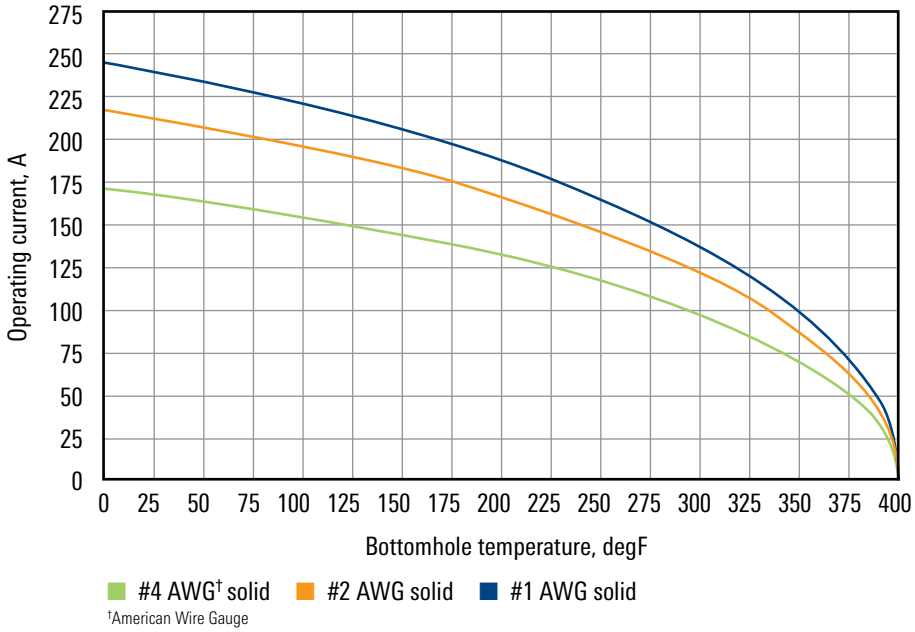
REDA MAX Cable EE-R

REDA MAX* ESP Power Cable EE-R Specifications

Part number and description	L5651047 #4/1 EE G5R	100152716 #2/1 EE G5R	101000655 #2/7 C/S EE SS5R	L5653017 #1/7 C/S EE G5R	L5651043 #4/1 EE SS5R	100598783 #2/1 EE M5R
Conductor diameter, in	0.2043	0.2576	0.268	0.297	0.2043	0.2576
Conductor configuration	Round	Round	Round	Round	Round	Round
Insulation material	EPDM†	EPDM	EPDM	EPDM	EPDM	EPDM
Insulation wall thickness, in	0.090	0.090	0.090	0.090	0.090	0.090
Insulation diameter, in	0.384	0.438	0.448	0.477	0.384	0.438
Barrier material	NA‡	NA	NA	NA	NA	NA
Barrier wall thickness	NA	NA	NA	NA	NA	NA
Barrier diameter	NA	NA	NA	NA	NA	NA
Jacket material	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM
Jacket wall thickness, in	0.060	0.060	0.060	0.060	0.060	0.060
Jacket diameter, in	0.988	1.103	1.125	1.188	0.988	1.104
Tubing material	NA	NA	NA	NA	NA	NA
Tubing size	NA	NA	NA	NA	NA	NA
Armor material	Galvanized steel	Galvanized steel	Stainless steel	Galvanized steel	Stainless steel	MONEL®
Armor width × thickness, in	½ × 0.025	½ × 0.025	½ × 0.020	½ × 0.025	½ × 0.020	½ × 0.020
Armored cable diameter, in	1.158	1.273	1.285	1.358	1.148	1.263
Weight, lbm/ft	1.194	1.542	1.452	1.765	1.108	1.489
Max. conductor resistance	IEEE 1018					
Min. insulation resistance	IEEE 1018					

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



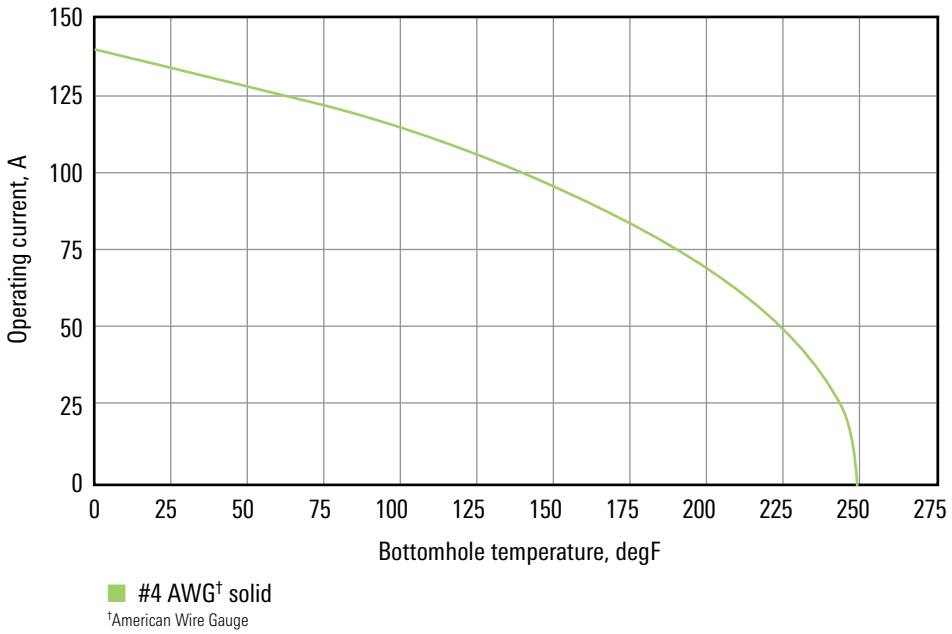
†American Wire Gauge

REDA MAX Cable EO-F

REDA MAX* ESP Power Cable EO-F Specifications	
Part number and description	**102032792 #4/1 EO G4F**
Conductor diameter, in	0.2043
Conductor configuration	Solid
Insulation material	EPDM†
Insulation wall thickness, in	0.058
Insulation diameter, in	0.320
Barrier material	NA‡
Barrier wall thickness	NA
Barrier diameter	NA
Jacket material	Nitrile
Jacket wall thickness, in	0.045
Jacket dimensions, in	0.410 × 1.161
Tubing material	NA
Tubing size	NA
Armor material	Galvanized steel
Armor width × thickness, in	¾ × 0.020
Armored cable dimensions, in	0.540 × 1.271
Weight, lbm/ft	0.921
Max. conductor resistance	IEEE 1018
Min. insulation resistance	IEEE 1018

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



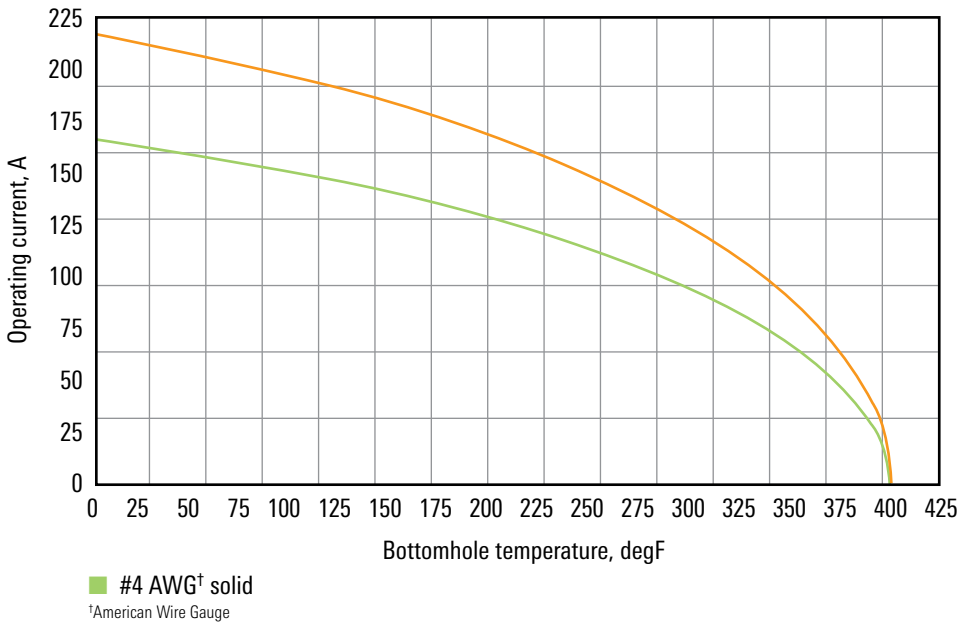
†American Wire Gauge

REDA Lead Cable ELC-LPF

REDA Lead* Lead-Barrier ESP Power Cable ELC-LPF Specifications		
Part number and description	**102771071 #4/1 ELC G5F**	**102896633 #2/1 ELC-LPF G5F**
Conductor diameter, in	0.2043	0.2576
Conductor configuration	Solid	Solid
Insulation material	EPDM†	EPDM
Insulation wall thickness, in	0.065	0.065
Insulation diameter, in	0.334	0.388
Barrier material	Lead	Lead
Barrier wall thickness, in	0.025	0.030
Barrier diameter, in	0.384	0.448
Jacket material	NA‡	NA
Jacket wall thickness	NA	NA
Jacket diameter	NA	NA
Tubing material	NA	NA
Tubing size	NA	NA
Ground wire size	NA	NA
Armor material	Galvanized steel	Galvanized Steel
Armor width × thickness, in	¾ × 0.016	¾ x 0.016
Armored cable dimensions, in	0.520 × 1.360	0.579 x 1.550
Weight, lbm/ft	1.569	1.645
Max. conductor resistance	IEEE 1018	IEEE 1018
Min. insulation resistance	IEEE 1018	IEEE 1018

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



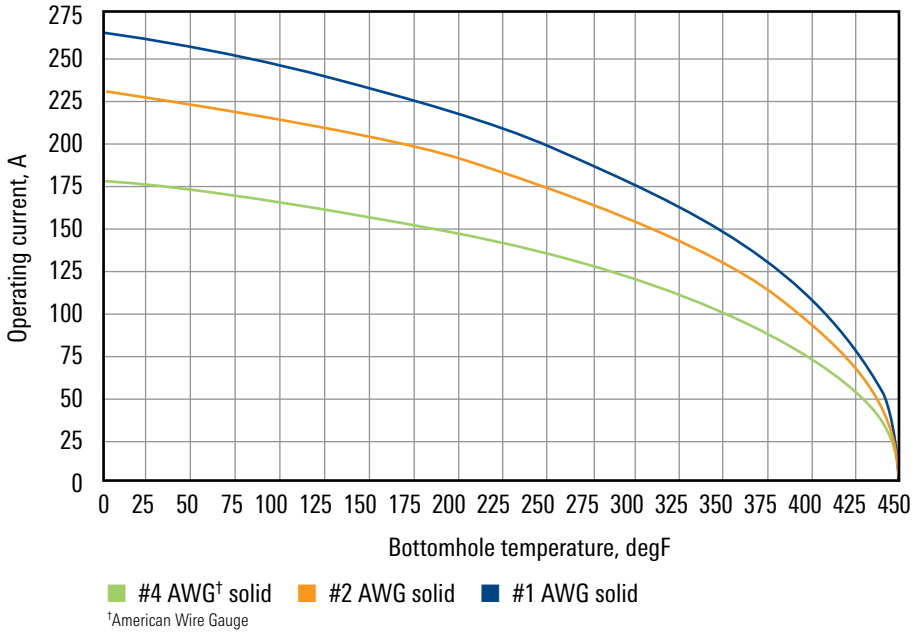
REDA Lead Cable ELB-F

REDA Lead* Lead-Barrier ESP Power Cable ELB-F Specifications

Part number and description	L3201047 #4/1 ELB G5F	L3231047 #4/1 ELB G5F W/ 3/8 TUBE	L3201027 #2/1 ELB G5F	L3201017 #1/1 ELB G5F	101233871 #4/1 ELB G5F W/2 3/8 TUBES	L3251027 #2/1 ELB G5F W/2 3/8 TUBES	100377714 #4/1 ELB SS5F
Conductor diameter, in	0.2043	0.2043	0.2576	0.2893	0.2043	0.2576	0.2043
Conductor configuration	Solid	Solid	Solid	Solid	Solid	Solid	Solid
Insulation material	EPDM†	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM
Insulation wall thickness, in	0.075	0.075	0.075	0.075	0.075	0.075	0.075
Insulation diameter, in	0.354	0.354	0.408	0.439	0.354	0.408	0.354
Barrier material	Lead	Lead	Lead	Lead	Lead	Lead	Lead
Barrier wall thickness, in	0.040	0.040	0.040	0.040	0.040	0.040	0.040
Barrier diameter, in	0.434	0.434	0.488	0.519	0.434	0.488	0.434
Jacket material	NA‡	NA	NA	NA	NA	NA	NA
Jacket wall thickness	NA	NA	NA	NA	NA	NA	NA
Jacket diameter	NA	NA	NA	NA	NA	NA	NA
Tubing material	NA	Stainless steel	NA	NA	Stainless steel	Stainless steel	NA
Tubing size, in	NA	0.375	NA	NA	0.375	0.375	NA
Ground wire size	NA	NA	NA	NA	NA	NA	NA
Armor material	Galvanized steel	Galvanized steel	Galvanized steel	Galvanized steel	Galvanized steel	Galvanized steel	Stainless steel
Armor width × thickness, in	¾ × 0.020	¾ × 0.020	¾ × 0.020	¾ × 0.020	¾ × 0.020	¾ × 0.020	½ × 0.020
Armored cable dimensions, in	0.550 × 1.401	0.550 × 1.836	0.604 × 1.561	0.635 × 1.656	0.550 × 2.271	0.604 × 2.036	0.550 × 1.401
Weight, lbm/ft	1.569	2.109	1.953	2.206	2.580	2.653	1.638
Max. conductor resistance	IEEE 1018						
Min. insulation resistance	IEEE 1018						

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



†American Wire Gauge

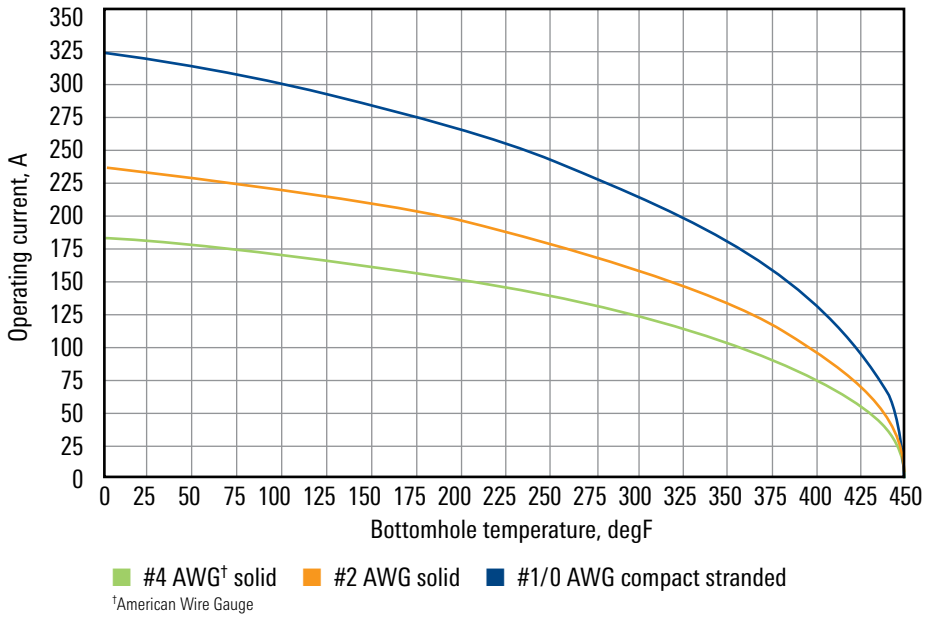
REDA Lead Cable EHLTB-F

REDA Lead* Lead-Barrier ESP Power Cable EHLTB-F Specifications

Part number and description	100927773 #4/1 EHLTB G5F	100357995 #2/1 EHLTB G5F	101189929 #4/1 EHLTB GG5F	L331321B #1/0-7 C/S EHLTB G5F CII	100917303 #1/0-7 C/S EHLTB M5F
Conductor diameter, in	0.2043	0.2576	0.2043	0.3370	0.3370
Conductor configuration	Solid	Solid	Solid	Compact stranded	Compact stranded
Insulation material	EPDM†	EPDM	EPDM	EPDM	EPDM
Insulation wall thickness, in	0.075	0.075	0.075	0.075	0.075
Insulation diameter, in	0.354	0.408	0.354	0.487	0.487
Barrier material	Heavy lead and fluoropolymer tape	Heavy lead and fluoropolymer tape	Heavy lead and fluoropolymer tape	Heavy lead and fluoropolymer tape	Heavy lead and fluoropolymer tape
Barrier wall thickness, in	0.050 and 0.004	0.050 and 0.004	0.050 and 0.004	0.050 and 0.004	0.050 and 0.004
Barrier diameter, in	0.454 and 0.462	0.508 and 0.516	0.454 and 0.462	0.587 and 0.595	0.587 and 0.595
Jacket material	NA‡	NA	NA	NA	NA
Jacket wall thickness	NA	NA	NA	NA	NA
Jacket diameter	NA	NA	NA	NA	NA
Tubing material	NA	NA	Stainless steel	NA	NA
Tubing size, in	NA	NA	0.375	NA	NA
Ground wire size	NA	NA	NA	NA	NA
Armor material	Galvanized steel	Galvanized steel	Double-layer galvanized steel	Galvanized steel	MONEL®
Armor width × thickness, in	¾ × 0.020	¾ × 0.020	¾ × 0.020	¾ × 0.025	½ × 0.020
Armored cable dimensions, in	0.578 × 1.485	0.638 × 1.663	0.694 × 1.958	0.745 × 1.921	0.717 × 1.901
Weight, lbm/ft	1.812	2.238	2.500	3.129	3.035
Max. conductor resistance	IEEE 1018				
Min. insulation resistance	IEEE 1018				

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



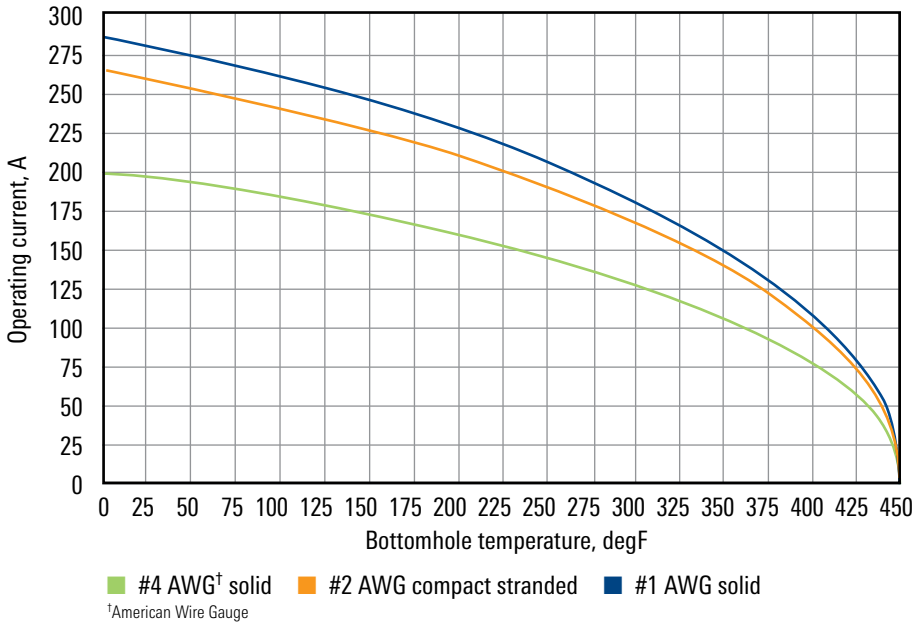
†American Wire Gauge

REDA Lead Cable ELBE-R

REDA Lead* Lead-Barrier ESP Power Cable ELBE-R Specifications			
Part number and description	**L3501047 #4/1 ELBE G5R**	**100040036 #1/1 ELBE HG5R**	**L3503027 #2/7 C/S ELBE G5R**
Conductor diameter, in	0.2043	0.2893	0.2680
Conductor configuration	Solid	Solid	Compact stranded
Insulation material	EPDM†	EPDM	EPDM
Insulation wall thickness, in	0.075	0.075	0.075
Insulation diameter, in	0.354	0.439	0.418
Barrier material	Lead	Lead	Lead
Barrier wall thickness, in	0.040	0.040	0.040
Barrier diameter, in	0.434	0.519	0.498
Jacket material	EPDM	EPDM	EPDM
Jacket wall thickness, in	0.060	0.060	0.060
Jacket diameter, in	1.109	1.292	1.246
Tubing material	NA‡	NA	NA
Tubing size	NA	NA	NA
Ground wire size	NA	NA	NA
Armor material	Galvanized steel	Galvanized steel	Galvanized steel
Armor width × thickness, in	½ × 0.025	½ × 0.034	½ × 0.025
Armored cable diameter, in	1.279	1.482	1.416
Weight, lbm/ft	2.010	2.971	2.484
Max. conductor resistance	IEEE 1018		
Min. insulation resistance	IEEE 1018		

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



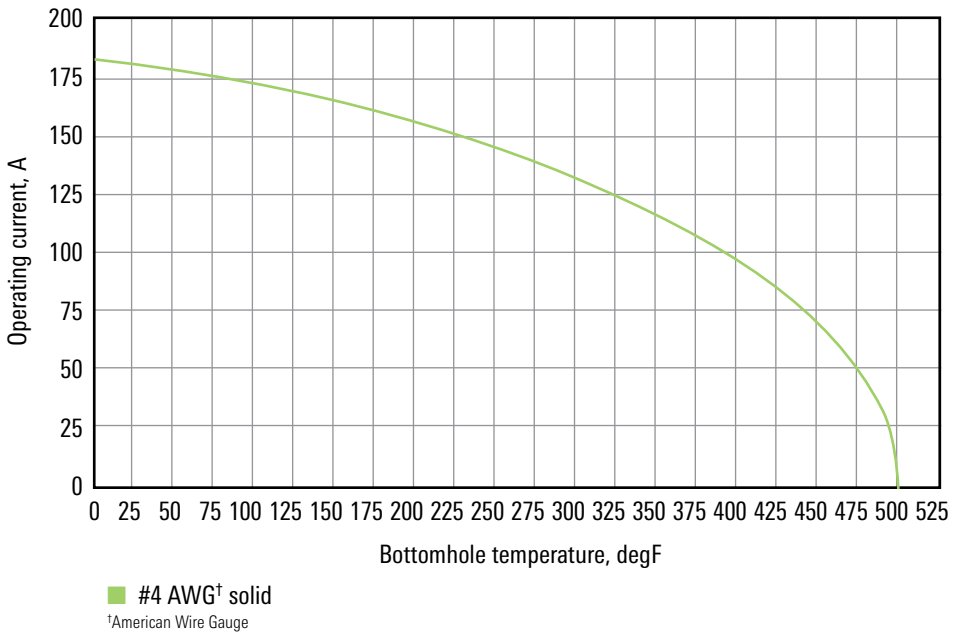
†American Wire Gauge

REDA Lead Cable EHLTB-XF

REDA Lead* Lead-Barrier ESP Power Cable EHLTB-XF Specifications		
Part number and description	**101926370 #4/1 EHLTB-HT G5F**	**102872448 #4/1 EHLTB-HT G5F W/ 3/8 Tube**
Conductor diameter, in	0.2043	0.2043
Conductor configuration	Solid	Solid
Insulation material	Extreme EPDM†	Extreme EPDM
Insulation wall thickness, in	0.075	0.075
Insulation diameter, in	0.354	0.354
Barrier material	Heavy lead and fluoropolymer tape	Heavy lead and fluoropolymer tape
Barrier wall thickness, in	0.050 and 0.004	0.050 and 0.004
Barrier diameter, in	0.454 and 0.462	0.454 and 0.462
Jacket material	NA‡	NA
Jacket wall thickness	NA	NA
Jacket diameter	NA	NA
Tubing material	NA	Stainless steel
Tubing size, in	NA	0.375
Ground wire size	NA	NA
Armor material	Galvanized steel	Galvanized steel
Armor width × thickness, in	¾ × 0.020	¾ × 0.020
Armored cable dimensions, in	0.578 × 1.485	0.578 × 1.920
Weight, lbm/ft	1.815	2.365
Max. conductor resistance		IEEE 1018
Min. insulation resistance		IEEE 1018

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.

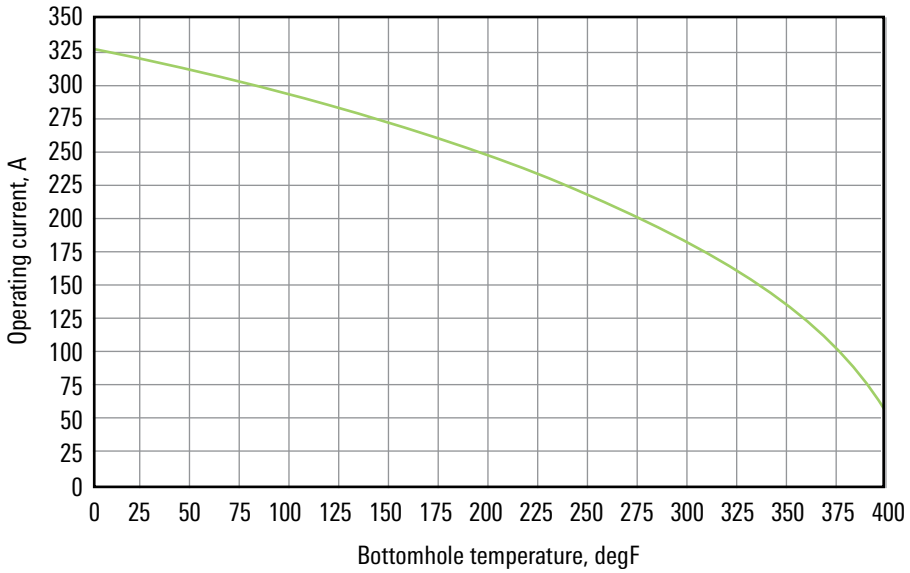


REDA Subsea Cable SESLTBE-R

REDA Subsea* High-Reliability Corrosion-Resistant ESP Cable SESLTBE-R Specifications	
Part number and description	101076089 #1/0-7 C/S SESLTBE GG8R
Conductor diameter, in	0.3370
Conductor configuration	Compact stranded
Insulation material	Semiconductive layer-EPDM†-Semiconductive layer
Insulation wall thickness, in	0.130
Insulation diameter, in	0.617
Barrier material	Lead and fluoropolymer tape
Barrier wall thickness, in	0.040 and 0.004
Barrier diameter, in	0.727 and 0.735
Jacket material	EPDM
Jacket wall thickness, in	0.060
Jacket diameter, in	1.757
Tubing material	NA‡
Tubing size	NA
Ground wire size	NA
Armor material	Double-layer galvanized steel
Armor width × thickness, in	½ × 0.020 (layer 1) ½ × 0.025 (layer 2)
Armored cable diameter, in	2.039
Weight, lbm/ft	4.762
Max. conductor resistance	IEEE 1018
Min. insulation resistance	IEEE 1018

†Ethylene propylene diene monomer ‡Not applicable

Dimensions are nominal. Other configurations can be manufactured on request.



†American Wire Gauge

Protector Type Nomenclature

Chamber Type	
L	Labyrinth
B	Elastomer bag
M	Metal bellows
66L	Two-chambered labyrinth design
SB	Positive seal protector using a single elastomeric bag
DB	Positive seal protector with two elastomeric bags connected in parallel
PF	Prefilled protector

Connection Type	
S	Series
P	Parallel

Thrust Bearing Type	
HL	High load
None	Base configuration (intermediate load)

Shaft Material	
HSS	High-strength shaft
None	Base configuration (intermediate strength)

Note: REDA Maximus system protectors protectors use MaxJoint* ESP flange connection technology and do not require oil servicing at the wellsite. All other designs of protectors must be refilled with oil at the wellsire during the installation process.

Miscellaneous	
Type	Description
HTM	Use of high-temperature materials in the protector

Elastomer Application Guidelines

Performance Ratings					
Elastomer	**Neoprene/Nitrile**	**Carboxy Nitrile**	**HSN**	**Viton®**	**Aflas®**
Temperature limit, degF [degC]	250 [121]	275 [135]	300 [149]	351 [177]	399 [204]
Water or oil	1	1	1	2	1
Hydrogen sulfide	1	3	1	4	1
Amines	3	3	3	4	1
Polar chemicals	4	4	1–2	3	3
Carbon dioxide	2	2	2	4	2

Definition of ratings: 1 = Excellent—long-term resistance (low swell, high retention of physical properties); 2 = Good—long-term resistance (moderate swell, good retention of physical properties); 3 = Fair—depends on exposure time and temperature (good short-term resistance); 4 = Poor—no resistance, even in the short term.

Note: Temperature limit indicates maximum operating temperature for the elastomers. An elastomeric component will operate at a higher temperature than the ambient wellbore temperature, depending on its location in the equipment. Consult your Schlumberger representative for specific application assistance.

REDA Maximus ESP System Protectors

325 Series REDA Maximus ESP System Protector with HSN or Aflas® Elastomers (Bolts Onto the 375 Series Maximus System Motor)

Description	Length, ft [m]	Weight, lbm [kg]
BSB	5.7 [1.7]	110 [50]
LSB	5.7 [1.7]	110 [50]
LSL	5.7 [1.7]	110 [50]
BPBSL	8.0 [2.4]	176 [80]
BSBSL	8.0 [2.4]	176 [80]
LSBPB	8.0 [2.4]	176 [80]
LSBSB	8.0 [2.4]	176 [80]
LSLSB	8.0 [2.4]	176 [80]
LSLSL	8.0 [2.4]	176 [80]

540 Series Maximus ESP System Protector with HSN or Aflas Elastomers (Bolts Onto the 562 Series Maximus System Motor)

Description	Length, ft [m]	Weight, lbm [kg]
BSB	6.5 [2.0]	300 [136]
BSL	6.5 [2.0]	300 [136]
LSB	6.5 [2.0]	300 [136]
LSL	6.5 [2.0]	300 [136]
BPBSL	8.9 [2.7]	382 [174]
BSBSL	8.9 [2.7]	382 [174]
LSBPB	8.9 [2.7]	382 [174]
LSLSB	8.9 [2.7]	382 [174]
LSBSB	8.9 [2.7]	382 [174]
LSLSL	8.9 [2.7]	382 [174]

400 Series Maximus ESP System Protector with HSN or Aflas Elastomers (Bolts Onto the 456 Series Maximus System Motor)

Description	Length, ft [m]	Weight, lbm [kg]
LSL	5.8 [1.8]	156 [71]
LSB	5.8 [1.8]	156 [71]
BSB	5.8 [1.8]	156 [71]
BSL	5.8 [1.8]	156 [71]
BPBSL	8.0 [2.4]	206 [94]
BSBSL	8.0 [2.4]	206 [94]
LSBPB	8.0 [2.4]	206 [94]
LSBSB	8.0 [2.4]	206 [94]
LSLSB	8.0 [2.4]	206 [94]
LSLSL	8.0 [2.4]	206 [94]

738 Series Maximus ESP System Protector (Bolts to 738 Series Maximus System Motor)

Description	Length, ft [m]	Weight, lbm [kg]
66L-HL	6.4 [1.95]	334 [151.6]
66L-HL-HTM-HSS	6.4 [1.95]	334 [151.6]
PF-SB-HL	6.4 [1.95]	334 [151.6]
PF-SB-HL-HTM	6.4 [1.95]	334 [151.6]
BPBSL-HL-HSS	11.9 [3.63]	500 [227.0]

325 Series Protector

325 Series REDA Maximus ESP System Protector—Single Tandem with HSN Elastomers (Bolts Onto the 375 Series Maximus System Motor)					
Description	**Length ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Carbon Steel w/Monel® Trim Part Number**	**Redalloy* Part Number**
BSB	5.7 [1.7]	110 [50]	100492055	100492067	100492076
BSB-HL	5.7 [1.7]	110 [50]	100492052	100492073	100492078
LSB	5.7 [1.7]	110 [50]	100491065	100491067	100491072
LSB-HL	5.7 [1.7]	110 [50]	100491060	100491069	100491074
BPBSL	8.0 [2.4]	176 [80]	100477101	100477120	100477137
BPBSL-HSS	8.0 [2.4]	176 [80]	100477105	100477123	100477139
BPBSL-XHSS	8.0 [2.4]	176 [80]	tba†	100477125	100477140
BPBSL-HL	8.0 [2.4]	176 [80]	100477095	100477126	100477142
BPBSL-HL HSS	8.0 [2.4]	176 [80]	100379784	100477127	100477144
BPBSL-HL XHSS	8.0 [2.4]	176 [80]	tba	100477128	100477145
BSBSL	8.0 [2.4]	176 [80]	100486716	100486914	100486921
BSBSL-HSS	8.0 [2.4]	176 [80]	100486717	100486915	100486922
BSBSL-HL	8.0 [2.4]	176 [80]	100486707	100486917	100486923
BSBSL-HL HSS	8.0 [2.4]	176 [80]	100379785	100486918	100486924
LSBPB	8.0 [2.4]	176 [80]	100376929	100376936	100376954
LSBPB-HSS	8.0 [2.4]	176 [80]	100376930	100376938	100376958
LSBPB-XHSS	8.0 [2.4]	176 [80]	tba	100376941	100376959
LSBPB-HL	8.0 [2.4]	176 [80]	100364179	100364240	100364173
LSBPB-HL HSS	8.0 [2.4]	176 [80]	100324781	100364248	100364163
LSBPB-HL XHSS	8.0 [2.4]	176 [80]	tba	100373985	100373963
LSBSB	8.0 [2.4]	176 [80]	100467018	100467037	100467093
LSBSB-HSS	8.0 [2.4]	176 [80]	100467017	100467040	100467094
LSBSB-XHSS	8.0 [2.4]	176 [80]	tba	100467042	100467095
LSBSB-HL	8.0 [2.4]	176 [80]	100467016	100467044	100467096
LSBSB-HL HSS	8.0 [2.4]	176 [80]	100379783	100467046	100467098
LSBSB-HL XHSS	8.0 [2.4]	176 [80]	tba	100467047	100467099
LSLSB	8.0 [2.4]	176 [80]	100470413	100470425	100470445
LSLSB-HSS	8.0 [2.4]	176 [80]	100470412	100470427	100470448
LSLSB-HL	8.0 [2.4]	176 [80]	100470410	100470436	100470452
LSLSB-HL HSS	8.0 [2.4]	176 [80]	100372594	100470437	100470453
LSLSL	8.0 [2.4]	176 [80]	100472171	100472181	100472199
LSLSL-HSS	8.0 [2.4]	176 [80]	100472178	100472182	100472200
LSLSL-HL	8.0 [2.4]	176 [80]	100472157	100472184	100472201
LSLSL-HL HSS	8.0 [2.4]	176 [80]	100379780	100472186	100472202

† To be assigned

325 Series Protector

325 Series Maximus ESP System Protector—Single Tandem with Aflas® Elastomer (Bolts Onto the 375 Series Maximus System Motor)					
Description	**Length ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Carbon Steel w/Monel Trim Part Number**	**Redalloy Part Number**
BSB	5.7 [1.7]	110 [50]	100492056	100492070	100492077
BSB-HL	5.7 [1.7]	110 [50]	100491165	100492074	100492079
LSB	5.7 [1.7]	110 [50]	100491063	100491068	100491073
LSB-HL	5.7 [1.7]	110 [50]	100490590	100491070	100491075
LSL	5.7 [1.7]	110 [50]	100489745	100489747	100489750
LSL-HL	5.7 [1.7]	110 [50]	100489201	100489748	100489751
BPBSL	8.0 [2.4]	176 [80]	100477109	100477158	100477166
BPBSL-HSS	8.0 [2.4]	176 [80]	100477113	100477160	100477167
BPBSL-XHSS	8.0 [2.4]	176 [80]	tba†	100477161	100477168
BPBSL-HL	8.0 [2.4]	176 [80]	100477116	100477162	100477169
BPBSL-HL HSS	8.0 [2.4]	176 [80]	100477117	100477163	100477170
BPBSL-HL XHSS	8.0 [2.4]	176 [80]	tba	100477165	100477171
BSBSL	8.0 [2.4]	176 [80]	100486733	100486740	100486929
BSBSL-HSS	8.0 [2.4]	176 [80]	100486734	100486741	100486931
BSBSL-HL	8.0 [2.4]	176 [80]	100486735	100486742	100486932
BSBSL-HL HSS	8.0 [2.4]	176 [80]	100486736	100486743	100486933
LSBPB	8.0 [2.4]	176 [80]	100376934	100376944	100376960
LSBPB-HSS	8.0 [2.4]	176 [80]	100376935	100376950	100376962
LSBPB-XHSS	8.0 [2.4]	176 [80]	tba	100376948	100376965
LSBPB-HL	8.0 [2.4]	176 [80]	100365449	100365466	100365338
LSBPB-HL HSS	8.0 [2.4]	176 [80]	100365460	100365468	100365367
LSBPB-HL XHSS	8.0 [2.4]	176 [80]	tba	100374238	100374205
LSBSB	8.0 [2.4]	176 [80]	100467027	100467076	100467103
LSBSB-HSS	8.0 [2.4]	176 [80]	100467028	100467078	100467104
LSBSB-XHSS	8.0 [2.4]	176 [80]	tba	100467080	100467105
LSBSB-HL	8.0 [2.4]	176 [80]	100467029	100467081	100467106
LSBSB-HL HSS	8.0 [2.4]	176 [80]	100467030	100467082	100467107
LSBSB-HL XHSS	8.0 [2.4]	176 [80]	tba	100467083	100467108
LSLSB	8.0 [2.4]	176 [80]	100470467	100470482	100470490
LSLSB-HSS	8.0 [2.4]	176 [80]	100470469	100470483	100470491
LSLSB-HL	8.0 [2.4]	176 [80]	100470470	100470485	100470493
LSLSB-HL HSS	8.0 [2.4]	176 [80]	100470471	100470486	100470494
LSLSL	8.0 [2.4]	176 [80]	100472414	100472619	100472633
LSLSL-HSS	8.0 [2.4]	176 [80]	100472413	100472556	100472634
LSLSL-HL	8.0 [2.4]	176 [80]	100472213	100472557	100472635
LSLSL-HL HSS	8.0 [2.4]	176 [80]	100472212	100472558	100472636

† To be assigned

400 Series Protector

400 Series REDA Maximus ESP System Protector—Single/Lower Tandem with HSN Elastomers (Bolts Onto the 456 Series Maximus System Motor)					
Description	**Length ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Carbon Steel w/Monel® Trim Part Number**	**Redalloy* Part Number**
LSL	5.8 [1.8]	156 [71]	100323805	100323825	100323842
LSL-HL	5.8 [1.8]	156 [71]	100323817	100323833	100323850
LSB	5.8 [1.8]	156 [71]	100323807	100323826	100323843
LSB-HL	5.8 [1.8]	156 [71]	100323818	100323834	100323851
BSB	5.8 [1.8]	156 [71]	100323808	100323827	100323844
BSB-HL	5.8 [1.8]	156 [71]	100323819	100323835	100323852
BSL	5.8 [1.8]	156 [71]	100323809	100323828	100323845
BSL-HL	5.8 [1.8]	156 [71]	100323820	100323837	100323853
BPBSL	8.0 [2.4]	206 [94]	100293040	100293054	100293081
BPBSL-HSS	8.0 [2.4]	206 [94]	100293041	100293067	100293084
BPBSL-HL	8.0 [2.4]	206 [94]	100293046	100293071	100293095
BPBSL-HL-HSS	8.0 [2.4]	206 [94]	100293048	100293075	100293100
BSBSL	8.0 [2.4]	206 [94]	100293441	100293453	100293464
BSBSL-HSS	8.0 [2.4]	206 [94]	100293442	100293454	100293466
BSBSL-HL	8.0 [2.4]	206 [94]	100293445	100293459	100293469
BSBSL-HL-HSS	8.0 [2.4]	206 [94]	100293446	100293460	100293470
LSBPB	8.0 [2.4]	206 [94]	100293215	100293237	100293256
LSBPB-HSS	8.0 [2.4]	206 [94]	100293217	100293238	100293257
LSBPB-HL	8.0 [2.4]	206 [94]	100293230	100293245	100293262
LSBPB-HL-HSS	8.0 [2.4]	206 [94]	100293232	100293250	100293263
LSBSB	8.0 [2.4]	206 [94]	100292371	100292312	100293286
LSBSB-HSS	8.0 [2.4]	206 [94]	100292374	100292314	100293289
LSBSB-HL	8.0 [2.4]	206 [94]	100292365	100292307	100293278
LSBSB-HL-HSS	8.0 [2.4]	206 [94]	100292369	100292310	100293282
LSLSB	8.0 [2.4]	206 [94]	100293541	100293557	100293584
LSLSB-HSS	8.0 [2.4]	206 [94]	100293546	100293561	100293586
LSLSB-HL	8.0 [2.4]	206 [94]	100293549	100293578	100293590
LSLSB-HL-HSS	8.0 [2.4]	206 [94]	100293553	100293579	100293594
LSLSL	8.0 [2.4]	206 [94]	100293874	100293884	100293897
LSLSL-HSS	8.0 [2.4]	206 [94]	100293875	100293885	100293899
LSLSL-HL	8.0 [2.4]	206 [94]	100293879	100293890	100293906
LSLSL-HL-HSS	8.0 [2.4]	206 [94]	100293881	100293892	100293907

400 Series Protector

400 Series Maximus System Protector—Upper Tandem with HSN Elastomers (Bolts Onto the 400/456 Single/Lower Tandem Maximus System Protector)					
Description	**Length ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Carbon Steel w/Monel Trim Part Number**	**Redalloy Part Number**
BPBSL	8.0 [2.4]	206 [94]	100291981	100291991	100292001
BPBSL-HSS	8.0 [2.4]	206 [94]	100291982	100291992	100292002
BPBSL-HL	8.0 [2.4]	206 [94]	100291985	100291996	100292005
BPBSL-HL-HSS	8.0 [2.4]	206 [94]	100291987	100291997	100292006
LSBPB	8.0 [2.4]	206 [94]	100290587	100290383	100290729
LSBPB-HSS	8.0 [2.4]	206 [94]	100290596	100290561	100290727
LSBPB-HL	8.0 [2.4]	206 [94]	100290584	100290345	100290717
LSBPB-HL-HSS	8.0 [2.4]	206 [94]	100290591	100290557	100290715
LSLSB	8.0 [2.4]	206 [94]	100291169	100291180	100291191
LSLSB-HSS	8.0 [2.4]	206 [94]	100291171	100291181	100291192
LSLSB-HL	8.0 [2.4]	206 [94]	100291174	100291187	100291197
LSLSB-HL-HSS	8.0 [2.4]	206 [94]	100291175	100291188	100291199
LSLSL	8.0 [2.4]	206 [94]	100291907	100291916	100291927
LSLSL-HSS	8.0 [2.4]	206 [94]	100291908	100291917	100291928
LSLSL-HL	8.0 [2.4]	206 [94]	100291911	100291921	100291932
LSLSL-HL-HSS	8.0 [2.4]	206 [94]	100291912	100291923	100291933

400 Series Protector

400 Series Maximus System Protector—Single/Lower Tandem with Aflas® Elastomers (Bolts Onto the 456 Series Maximus System Motor)					
Description	**Length ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Carbon Steel w/Monel Trim Part Number**	**Redalloy Part Number**
LSL	5.8 [1.8]	156 [71]	100323812	100323829	100323846
LSL-HL	5.8 [1.8]	156 [71]	100323821	100323838	100323854
LSB	5.8 [1.8]	156 [71]	100323814	100323830	100323847
LSB-HL	5.8 [1.8]	156 [71]	100323822	100323839	100323855
BSB	5.8 [1.8]	156 [71]	100323815	100323831	100323848
BSB-HL	5.8 [1.8]	156 [71]	100323823	100323840	100323856
BSL	5.8 [1.8]	156 [71]	100323816	100323832	100323849
BSL-HL	5.8 [1.8]	156 [71]	100323824	100323841	100323857
BPBSL	8.0 [2.4]	206 [94]	100293043	100293069	100293088
BPBSL-HSS	8.0 [2.4]	206 [94]	100293045	100293070	100293090
BPBSL-HL	8.0 [2.4]	206 [94]	100293049	100293077	100293103
BPBSL-HL-HSS	8.0 [2.4]	206 [94]	100293050	100293079	100293107
BSBSL	8.0 [2.4]	206 [94]	100293443	100293457	100293467
BSBSL-HSS	8.0 [2.4]	206 [94]	100293444	100293458	100293468
BSBSL-HL	8.0 [2.4]	206 [94]	100293447	100293461	100293472
BSBSL-HL-HSS	8.0 [2.4]	206 [94]	100293449	100293462	100293473
LSBPB	8.0 [2.4]	206 [94]	100293225	100293240	100293259
LSBPB-HSS	8.0 [2.4]	206 [94]	100293228	100293243	100293260
LSBPB-HL	8.0 [2.4]	206 [94]	100293233	100293251	100293264
LSBPB-HL-HSS	8.0 [2.4]	206 [94]	100293235	100293253	100293265
LSBSB	8.0 [2.4]	206 [94]	100292370	100292311	100293283
LSBSB-HSS	8.0 [2.4]	206 [94]	100292372	100292313	100293287
LSBSB-HL	8.0 [2.4]	206 [94]	100292364	100288882	100293276
LSBSB-HL-HSS	8.0 [2.4]	206 [94]	100292368	100292309	100293281
LSLSB	8.0 [2.4]	206 [94]	100293547	100293567	100293587
LSLSB-HSS	8.0 [2.4]	206 [94]	100293548	100293575	100293588
LSLSB-HL	8.0 [2.4]	206 [94]	100293554	100293582	100293595
LSLSB-HL-HSS	8.0 [2.4]	206 [94]	100293555	100293583	100293597
LSLSL	8.0 [2.4]	206 [94]	100293876	100293886	100293901
LSLSL-HSS	8.0 [2.4]	206 [94]	100293877	100293888	100293905
LSLSL-HL	8.0 [2.4]	206 [94]	100293882	100293894	100293909
LSLSL-HL-HSS	8.0 [2.4]	206 [94]	100293883	100293895	100293910

400 Series Protector

400 Series Maximus System Protector—Upper Tandem with Aflas Elastomers (Bolts Onto the 400/456 Single/Lower Tandem Maximus System Protector)					
Description	**Length ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Carbon Steel w/Monel Trim Part Number**	**Redalloy Part Number**
BPBSL	8.0 [2.4]	206 [94]	100291983	100291993	100292003
BPBSL-HSS	8.0 [2.4]	206 [94]	100291984	100291995	100292004
BPBSL-HL	8.0 [2.4]	206 [94]	100291988	100291998	100292007
BPBSL-HL-HSS	8.0 [2.4]	206 [94]	100291989	100291999	100292008
LSBPB	8.0 [2.4]	206 [94]	100290589	100290361	100290720
LSBPB-HSS	8.0 [2.4]	206 [94]	100290593	100290567	100290719
LSBPB-HL	8.0 [2.4]	206 [94]	100290413	100288669	100290712
LSBPB-HL-HSS	8.0 [2.4]	206 [94]	100290590	100290551	100290713
LSLSB	8.0 [2.4]	206 [94]	100291172	100291182	100291193
LSLSB-HSS	8.0 [2.4]	206 [94]	100291173	100291184	100291194
LSLSB-HL	8.0 [2.4]	206 [94]	100291178	100291189	100291201
LSLSB-HL-HSS	8.0 [2.4]	206 [94]	100291179	100291190	100291203
LSLSL	8.0 [2.4]	206 [94]	100291909	100291918	100291930
LSLSL-HSS	8.0 [2.4]	206 [94]	100291910	100291920	100291931
LSLSL-HL	8.0 [2.4]	206 [94]	100291913	100291924	100291934
LSLSL-HL-HSS	8.0 [2.4]	206 [94]	100291914	100291925	100291935

540 Series Protector

540 Series REDA Maximus ESP System Protector—Single Tandem with HSN Elastomers (Bolts Onto the 562 Series Maximus System Motor)

Description	Length ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Carbon Steel w/Monel® Trim Part Number	Redalloy* Part Number
BSB	6.5 [2.0]	300 [136]	100397009	100397013	100397017
BSB-NTB/HL	6.5 [2.0]	300 [136]	100397011	100397015	100397019
BSL	6.5 [2.0]	300 [136]	100393964	100396983	100396989
BSL-NTB/HL	6.5 [2.0]	300 [136]	100396991	100396993	100396995
LSB	6.5 [2.0]	300 [136]	100397046	100397052	100397056
LSB-NTB/HL	6.5 [2.0]	300 [136]	100397049	100397054	100397058
LSL	6.5 [2.0]	300 [136]	100397608	100397615	100397619
LSL-NTB/HL	6.5 [2.0]	300 [136]	100397610	100397617	100397621
BPBSL	8.9 [2.7]	382 [174]	100390231	100390223	100390215
BPBSL-HSS	8.9 [2.7]	382 [174]	100390230	100390222	100390214
BPBSL-XHSS	8.9 [2.7]	382 [174]	tba†	100391742	100391747
BPBSL-NTB/HL	8.9 [2.7]	382 [174]	100391767	100391757	100391763
BPBSL-KTB/HL	8.9 [2.7]	382 [174]	tba	100390219	100390207
BPBSL-NTB/HL, HSS	8.9 [2.7]	382 [174]	100391766	100391756	100391762
BPBSL-KTB/HL, HSS	8.9 [2.7]	382 [174]	tba	100390218	100390205
BPBSL-NTB/HL, XHSS	8.9 [2.7]	382 [174]	tba	100391755	100391761
BPBSL-KTB/HL, XHSS	8.9 [2.7]	382 [174]	tba	100391745	100391749
BSBSL	8.9 [2.7]	382 [174]	100390776	100390768	100390760
BSBSL-HSS	8.9 [2.7]	382 [174]	100390775	100390767	100390759
BSBSL-NTB/HL	8.9 [2.7]	382 [174]	100390772	100390764	100390756
BSBSL-NTB/HL, HSS	8.9 [2.7]	382 [174]	100390771	100390763	100390755
LSBPB	8.9 [2.7]	382 [174]	100391237	100391255	100391281
LSBPB-HSS	8.9 [2.7]	382 [174]	100391236	100391254	100391280
LSBPB-XHSS	8.9 [2.7]	382 [174]	tba	100391865	100391884
LSBPB-NTB/HL	8.9 [2.7]	382 [174]	100391232	100391877	100391888
LSBPB-KTB/HL	8.9 [2.7]	382 [174]	tba	100391251	100391277
LSBPB-NTB/HL, HSS	8.9 [2.7]	382 [174]	100391231	100391875	100391889
LSBPB-KTB/HL, HSS	8.9 [2.7]	382 [174]	tba	100391256	100391282
LSBPB-NTB/HL, XHSS	8.9 [2.7]	382 [174]	tba	100391879	100391893
LSBPB-KTB/HL, XHSS	8.9 [2.7]	382 [174]	tba	100391868	100391886
LSLSB	8.9 [2.7]	382 [174]	100392514	100392522	100392530
LSLSB-HSS	8.9 [2.7]	382 [174]	100392513	100392521	100392529
LSLSB-NTB/HL	8.9 [2.7]	382 [174]	100392510	100392518	100392526
LSLSB-NTB/HL, HSS	8.9 [2.7]	382 [174]	100392509	100392517	100392525
LSBSB	8.9 [2.7]	382 [174]	100392209	100392217	100392232
LSBSB-HSS	8.9 [2.7]	382 [174]	100392208	100392216	100392231
LSBSB-NTB/HL	8.9 [2.7]	382 [174]	100392213	100392221	100392236
LSBSB-NTB/HL, HSS	8.9 [2.7]	382 [174]	100392212	100392220	100392235
LSLSL	8.9 [2.7]	382 [174]	100392278	100392289	100392300
LSLSL-HSS	8.9 [2.7]	382 [174]	100392279	100392290	100392301
LSLSL-NTB/HL	8.9 [2.7]	382 [174]	100392282	100392293	100392304
LSLSL-NTB/HL, HSS	8.9 [2.7]	382 [174]	100392283	100392294	100392305

†To be assigned

540 Series Protector

540 Series Maximus System Protector—Single Tandem with Aflas® Elastomers (Bolts Onto the 562 Series Maximus System Motor)					
Description	**Length ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Carbon Steel w/Monel Trim Part Number**	**Redalloy Part Number**
BSB	6.5 [2.0]	300 [136]	100397010	100397014	100397018
BSB-NTB/HL	6.5 [2.0]	300 [136]	100397012	100397016	100397021
BSL	6.5 [2.0]	300 [136]	100396982	100396987	100396990
BSL-NTB/HL	6.5 [2.0]	300 [136]	100396992	100396994	100396996
LSB	6.5 [2.0]	300 [136]	100397047	100397053	100397057
LSB-NTB/HL	6.5 [2.0]	300 [136]	100397051	100397055	100397060
LSL	6.5 [2.0]	300 [136]	100397609	100397616	100397620
LSL-NTB/HL	6.5 [2.0]	300 [136]	100397612	100397618	100397622
BPBSL	8.9 [2.7]	382 [174]	100390229	100390221	100390212
BPBSL-HSS	8.9 [2.7]	382 [174]	100390228	100390220	100390208
BPBSL-XHSS	8.9 [2.7]	382 [174]	tba†	100391741	100391746
BPBSL-NTB/HL	8.9 [2.7]	382 [174]	100391765	100391754	100391760
BPBSL-KTB/HL	8.9 [2.7]	382 [174]	tba	100390217	100297439
BPBSL-NTB/HL, HSS	8.9 [2.7]	382 [174]	tba	100390216	100285486
BPBSL-KTB/HL, HSS	8.9 [2.7]	382 [174]	tba	100391744	100391748
BPBSL-NTB/HL, XHSS	8.9 [2.7]	382 [174]	100391764	100391753	100391759
BPBSL-KTB/HL, XHSS	8.9 [2.7]	382 [174]	tba	100391752	100391758
BSBSL	8.9 [2.7]	382 [174]	100390774	100390766	100390758
BSBSL-HSS	8.9 [2.7]	382 [174]	100390773	100390765	100390757
BSBSL-NTB/HL	8.9 [2.7]	382 [174]	100390770	100390762	100390754
BSBSL-NTB/HL, HSS	8.9 [2.7]	382 [174]	100390769	100390761	100390753
LSBPB	8.9 [2.7]	382 [174]	100391234	100391253	100391279
LSBPB-HSS	8.9 [2.7]	382 [174]	100391233	100391252	100391278
LSBPB-XHSS	8.9 [2.7]	382 [174]	tba	100391867	100391885
LSBPB-NTB/HL	8.9 [2.7]	382 [174]	100391230	100391874	100391890
LSBPB-KTB/HL	8.9 [2.7]	382 [174]	tba	100391249	100391276
LSBPB-NTB/HL, HSS	8.9 [2.7]	382 [174]	100391229	100391873	100391891
LSBPB-KTB/HL, HSS	8.9 [2.7]	382 [174]	tba	100391248	100279228
LSBPB-NTB/HL, XHSS	8.9 [2.7]	382 [174]	tba	100391880	100391894
LSBPB-KTB/HL, XHSS	8.9 [2.7]	382 [174]	tba	100391870	100391887
LSLSB	8.9 [2.7]	382 [174]	100392512	100392520	100392528
LSLSB-HSS	8.9 [2.7]	382 [174]	100392511	100392519	100392527
LSLSB-NTB/HL	8.9 [2.7]	382 [174]	100392508	100392516	100392524
LSLSB-NTB/HL, HSS	8.9 [2.7]	382 [174]	100392507	100392515	100392523
LSBSB	8.9 [2.7]	382 [174]	100392207	100392215	100392230
LSBSB-HSS	8.9 [2.7]	382 [174]	100392206	100392214	100392229
LSBSB-NTB/HL	8.9 [2.7]	382 [174]	100392211	100392219	100392234
LSBSB-NTB/HL, HSS	8.9 [2.7]	382 [174]	100392210	100392218	100392233
LSLSL	8.9 [2.7]	382 [174]	100392280	100392291	100392302
LSLSL-HSS	8.9 [2.7]	382 [174]	100392281	100392292	100392303
LSLSL-NTB/HL	8.9 [2.7]	382 [174]	100392284	100392295	100392306
LSLSL-NTB/HL, HSS	8.9 [2.7]	382 [174]	100392285	100392296	100392307

† To be assigned

738 Series Protector

738 Series REDA Maximus ESP System Protector (Bolts to 738 Series Maximus System Motor)				
Description	**Length, ft [m]**	**Weight, lbm [kg]**	**Carbon Steel Part Number**	**Redalloy* Alloy Part Number**
66L-HL	6.4 [1.95]	334 [151.6]	1196724	1230150
66L-HL-HTM-HSS	6.4 [1.95]	334 [151.6]	R19672J	100064613
PF-SB-HL	6.4 [1.95]	334 [151.6]	0978429	1071612
PF-SB-HL-HTM	6.4 [1.95]	334 [151.6]	J97842C	C97842C
BPBSL-HL-HSS	11.9 [3.63]	500 [227.0]	tba†	2005492

† To be assigned

REDA Maximus ESP System Motors

REDA* Maximus* ESP System Motor Specifications				
Motor Series	**375**	**456**	**562**	**738**
OD, in [mm]	3.75 [95.25]	4.56 [115.8]	5.62 [142.7]	
Power range: single-section hp at 60 Hz [kW at 50 Hz]	14.3 to 71.4 [8.9 to 44.4]	30 to 270 [18.6 to 167.8]	37.5 to 563 [23.3 to 350]	
Power range: max. tandem hp at 60 Hz [kW at 50 Hz]	285.6 [177.5]	540 [335.6]	1,126 [700]	
Rotor bearing type	Self-locking (SLK)	Self-locking and self-lubricating with polymer lining (SLK-PL)	SLK-PL	
Max. winding operating temperature, degF [degC]†	350–400 [177–204]	350–400 [177–204]	350–400 [177–204]	
Shipping and storage temperature, degF [degC]	-40 to 176 [-40 to 80]	-40 to 176 [–40 to 80]	-40 to 176 [-40 to 80]	
Operating frequency, Hz	30 to 90	30 to 90	30 to 90	
Metallurgy	Carbon steel (CS), CS with Monel® trim (CS M-TRM), Redalloy* high-nickel alloy	CS, CS M-TRM, Redalloy high-nickel alloy	CS, CS M-TRM, Redalloy high-nickel alloy	
Protector and tandem motor connection	MaxJoint* ESP flange connection technology	MaxJoint technology	MaxJoint technology	
Motor lead extension connection	Tape-in	MaxLok* ESP quick-plug motor lead extension plug-in	MaxLok extension plug-in	
Sensor connection options	Adapter to sensor	GRB with factory-installed motor winding thermocouple or built-in sensor		
Oil-filling process	Factory vacuum filled with degassed oil specified for the application and sealed with compensating shipping cap (no additional oil filling required on installation)			

†Configurable based on well conditions and application requirements.

Maximus ESP System Motor Capacity Ranges			
Min. Casing OD, in [mm]	**Motor Series**	**Power Rating at 60-Hz Frequency, hp**	**Power Rating at 50-Hz Frequency, hp**
4.500 [114.3]	375	14.3–285	11.9–237
5.500 [139.7]	456	30–540	25–450
7.000 [177.8]	562	37.5–1,126	31.3–938
8.625 [219.1]	738	250–1,500	208–1,250

375 Series Motor

375 Series REDA* Maximus* ESP System Motor—RA Type

Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
14.3	386	11.9	322	27.1	UT	5.7 [1.7]	195 [89]
21.4	447	17.8	372	35.1	UT	7.6 [2.3]	260 [118]
	578		482	49.6	UT	7.6 [2.3]	260 [118]
28.6	422	23.8	352	49.6	UT	9.5 [2.9]	325 [148]
	596		497	35.1	UT	9.5 [2.9]	325 [148]
35.7	418	29.7	348	62.5	UT	11.4 [3.5]	388 [176]
	418		348	62.5	CT	11.6 [3.5]	388 [176]
	745		621	35.1	UT	11.4 [3.5]	388 [176]
	745		621	35.1	CT	11.6 [3.5]	388 [176]
42.8	502	35.7	418	62.5	UT	13.2 [4.0]	456 [207]
	502		418	62.5	CT	13.5 [4.1]	456 [207]
	764		637	41.1	UT	13.2 [4.0]	456 [207]
	764		637	41.1	CT	13.5 [4.1]	456 [207]
50.0	586	41.7	488	62.4	UT	15.1 [4.6]	518 [235]
	586		488	62.4	CT	15.4 [4.7]	518 [235]
	738		615	49.6	UT	15.1 [4.6]	518 [235]
	738		615	49.6	CT	15.4 [4.7]	518 [235]
	1,196		997	30.6	UT	15.1 [4.6]	518 [235]
	1,196		997	30.6	CT	15.4 [4.7]	518 [235]
57.1	669	47.6	557	62.5	UT	17.0 [5.2]	581 [264]
	669		557	62.5	CT	17.4 [5.3]	581 [264]
	844		703	49.6	UT	17.0 [5.2]	581 [264]
	844		703	49.6	CT	17.4 [5.3]	581 [264]
	1,193		994	35.1	UT	17.0 [5.2]	581 [264]
	1,193		994	35.1	CT	17.4 [5.3]	581 [264]
	1,542		1,285	27.1	UT	17.0 [5.2]	581 [264]
	1,542		1,285	27.1	CT	17.4 [5.3]	581 [264]

375 Series Motor

375 Series Maximus ESP System Motor—RA Type							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
64.3	753	53.6	627	62.5	UT	18.9 [5.8]	648 [295]
	753		627	62.5	CT	19.2 [5.9]	648 [295]
	949		791	49.6	UT	18.9 [5.8]	648 [295]
	949		791	49.6	CT	19.2 [5.9]	648 [295]
	1,342		1,118	35.1	UT	18.9 [5.8]	648 [295]
	1,342		1,118	35.1	CT	19.2 [5.9]	648 [295]
	1,538		1,282	30.6	UT	18.9 [5.8]	648 [295]
	1,538		1,282	30.6	CT	19.2 [5.9]	648 [295]
	1,735		1,446	27.1	UT	18.9 [5.8]	648 [295]
	1,735		1,446	27.1	CT	19.2 [5.9]	648 [295]
71.4	837	59.5	697	62.5	UT	20.8 [6.3]	680 [309]
	837		697	62.5	CT	21.0 [6.4]	680 [309]
	1,055		879	49.6	UT	20.8 [6.3]	680 [309]
	1,055		879	49.6	CT	21.0 [6.4]	680 [309]
	1,491		1,242	35.1	UT	20.8 [6.3]	680 [309]
	1,491		1,242	35.1	CT	21.0 [6.4]	680 [309]
	1,710		1,425	30.6	UT	20.8 [6.3]	680 [309]
	1,710		1,425	30.6	CT	21.0 [6.4]	680 [309]

456 Series Motor

456 Series REDA* Maximus* ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
30.0	463	25.0	386	42.3	S-GRB	5.8 [1.8]	266 [121]
	719		599	27.2	S-GRB	5.8 [1.8]	266 [121]
	463		386	42.3	S	5.7 [1.7]	266 [121]
	719		599	27.2	S	5.7 [1.7]	266 [121]
37.5	578	31.3	482	42.5	S-GRB	6.7 [2.0]	303 [138]
	899		749	27.3	S-GRB	6.7 [2.0]	303 [138]
	578		482	42.5	S	6.6 [2.0]	303 [138]
	899		749	27.3	S	6.6 [2.0]	303 [138]
45.0	438	37.5	365	67.1	S-GRB	7.4 [2.3]	339 [154]
	823		686	35.7	S-GRB	7.4 [2.3]	339 [154]
	950		792	30.9	S-GRB	7.4 [2.3]	339 [154]
	438		365	67.1	S	7.3 [2.2]	339 [154]
	823		686	35.7	S	7.3 [2.2]	339 [154]
	950		792	30.9	S	7.3 [2.2]	339 [154]
52.5	660	43.8	550	52.0	S-GRB	8.3 [2.5]	376 [154]
	736		614	46.7	S-GRB	8.3 [2.5]	376 [171]
	959		799	35.8	S-GRB	8.3 [2.5]	376 [171]
	1,109		924	31.0	S-GRB	8.3 [2.5]	376 [171]
	660		550	52.0	S	8.2 [2.5]	376 [171]
	736		614	46.7	S	8.2 [2.5]	376 [171]
	959		799	35.8	S	8.2 [2.5]	376 [171]
	1,109		924	31.0	S	8.2 [2.5]	376 [171]
60.0	754	50.0	628	52.1	S-GRB	9.0 [2.7]	413 [188]
	925		771	42.3	S-GRB	9.0 [2.7]	413 [188]
	1,096		913	35.7	S-GRB	9.0 [2.7]	413 [188]
	1,438		1,198	27.2	S-GRB	9.0 [2.7]	413 [188]
	754		628	52.1	S	8.9 [2.7]	413 [188]
	925		771	42.3	S	8.9 [2.7]	413 [188]
	1,096		913	35.7	S	8.9 [2.7]	413 [188]
	1,438		1,198	27.2	S	8.9 [2.7]	413 [188]
67.5	849	56.3	708	52.0	S-GRB	9.9 [3.0]	450 [205]
	1,233		1,027	35.8	S-GRB	9.9 [3.0]	450 [205]
	849		708	52.0	S	9.8 [3.0]	450 [205]
	1,233		1,027	35.8	S	9.8 [3.0]	450 [205]

456 Series Motor

456 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	943		786	52.0	S-GRB	10.6 [3.2]	486 [221]
	1,157		964	42.3	S-GRB	10.6 [3.2]	486 [221]
	1,477		1,231	33.3	S-GRB	10.6 [3.2]	486 [221]
	1,797		1,498	27.3	S-GRB	10.6 [3.2]	486 [221]
	943		786	52.0	S	10.5 [3.2]	486 [221]
	1,157		964	42.3	S	10.5 [3.2]	486 [221]
	1,477		1,231	33.3	S	10.5 [3.2]	486 [221]
	1,797		1,498	27.3	S	10.5 [3.2]	486 [221]
75.0	943	62.5	786	52.0	UT	10.7 [3.3]	482 [219]
	1,157		964	42.3	UT	10.7 [3.3]	482 [219]
	1,477		1,231	33.3	UT	10.7 [3.3]	482 [219]
	1,797		1,498	27.3	UT	10.7 [3.3]	482 [219]
	943		786	52.0	LT-GRB	10.4 [3.2]	443 [201]
	1,157		964	42.3	LT-GRB	10.4 [3.2]	443 [201]
	1,477		1,231	33.3	LT-GRB	10.4 [3.2]	443 [201]
	1,797		1,498	27.3	LT-GRB	10.4 [3.2]	443 [201]
	803		669	67.3	S-GRB	10.0 [3.0]	523 [238]
	921		767	58.7	S-GRB	10.0 [3.0]	523 [238]
	1,272		1,060	42.5	S-GRB	10.0 [3.0]	523 [238]
	1,978		1,648	27.3	S-GRB	10.0 [3.0]	523 [238]
	803		669	67.3	S	10.1 [3.1]	523 [238]
82.5	921	68.8	767	58.7	S	10.1 [3.1]	523 [238]
	1,272		1,060	42.5	S	10.1 [3.1]	523 [238]
	1,978		1,648	27.3	S	10.1 [3.1]	523 [238]
	921		767	58.7	UT	11.5 [3.5]	519 [236]
	1,272		1,060	42.5	UT	11.5 [3.5]	519 [236]
	1,978		1,648	27.3	UT	11.5 [3.5]	519 [236]
	875		730	67.4	S-GRB	11.8 [3.6]	560 [255]
	1,516		1,263	38.7	S-GRB	11.8 [3.6]	560 [255]
	1,901		1,584	31.0	S-GRB	11.8 [3.6]	560 [255]
	2,156		1,797	27.2	S-GRB	11.8 [3.6]	560 [255]
	875		730	67.4	S	11.9 [3.6]	560 [255]
	1,516		1,263	38.7	S	11.9 [3.6]	560 [255]
	1,901		1,584	31.0	S	11.9 [3.6]	560 [255]
	2,156		1,797	27.2	S	11.9 [3.6]	560 [255]
90.0	875	75.0	730	67.4	UT	12.3 [3.8]	555 [252]
	1,516		1,263	38.7	UT	12.3 [3.8]	555 [252]
	1,901		1,584	31.0	UT	12.3 [3.8]	555 [252]
	2,156		1,797	27.2	UT	12.3 [3.8]	555 [252]
	875		730	67.4	LT-GRB	12.0 [3.7]	532 [242]
	1,516		1,263	38.7	LT-GRB	12.0 [3.7]	532 [242]
	1,901		1,584	31.0	LT-GRB	12.0 [3.7]	532 [242]
	2,156		1,797	27.2	LT-GRB	12.0 [3.7]	532 [242]

456 Series Motor

Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	949		791	67.3	S-GRB	11.8 [3.6]	597 [271]
	1,227		1,022	52.0	S-GRB	11.8 [3.6]	597 [271]
	1,782		1,485	35.8	S-GRB	11.8 [3.6]	597 [271]
	2,060		1,717	31.0	S-GRB	11.8 [3.6]	597 [271]
	949		791	67.3	S	11.9 [3.6]	597 [271]
97.5	1,227	81.3	1,022	52.0	S	11.9 [3.6]	597 [271]
	1,782		1,485	35.8	S	11.9 [3.6]	597 [271]
	2,060		1,717	31.0	S	11.9 [3.6]	597 [271]
	949		791	67.3	UT	13.1 [4.0]	592 [269]
	1,227		1,022	52.0	UT	13.1 [4.0]	592 [269]
	1,782		1,485	35.8	UT	13.1 [4.0]	592 [269]
	2,060		1,717	31.0	UT	13.1 [4.0]	592 [269]
	1,021		851	67.1	S-GRB	13.4 [4.1]	633 [288]
	1,470		1,225	46.6	S-GRB	13.4 [4.1]	633 [288]
	2,067		1,723	33.3	S-GRB	13.4 [4.1]	633 [288]
	2,217		1,848	30.9	S-GRB	13.4 [4.1]	633 [288]
	1,021		851	67.1	UT	13.9 [4.2]	628 [285]
105.0	1,470	87.5	1,225	46.6	UT	13.9 [4.2]	628 [285]
	2,067		1,723	33.3	UT	13.9 [4.2]	628 [285]
	2,217		1,848	30.9	UT	13.9 [4.2]	628 [285]
	1,021		851	67.1	LT-GRB	13.6 [4.1]	621 [282]
	1,470		1,225	46.6	LT-GRB	13.6 [4.1]	621 [282]
	2,067		1,723	33.3	LT-GRB	13.6 [4.1]	621 [282]
	2,217		1,848	30.9	LT-GRB	13.6 [4.1]	621 [282]
	935		779	78.9	S-GRB	14.2 [4.3]	670 [305]
	1,415		1,230	52.0	S-GRB	14.2 [4.3]	670 [305]
	2,057		1,714	35.8	S-GRB	14.2 [4.3]	670 [305]
112.5	935	93.8	779	78.9	UT	14.7 [4.5]	665 [302]
	1,476		1,230	51.3	UT	14.8 [4.5]	665 [302]
	2,057		1,714	35.8	UT	14.7 [4.5]	665 [302]
	997		831	78.6	S-GRB	15.0 [4.6]	706 [321]
	1,508		1,257	52.0	S-GRB	15.0 [4.6]	706 [321]
	2,192		1,826	35.8	S-GRB	15.0 [4.6]	706 [321]
	2,533		2,111	30.9	S-GRB	15.0 [4.6]	706 [321]
	997		831	78.6	UT	15.5 [4.7]	702 [319]
120.0	1,508	100.0	1,257	52.0	UT	15.5 [4.7]	702 [319]
	2,192		1,826	35.8	UT	15.5 [4.7]	702 [319]
	2,533		2,111	30.9	UT	15.5 [4.7]	702 [319]
	1,508		1,257	52.0	LT-GRB	15.2 [4.6]	709 [322]
	2,192		1,826	35.8	LT-GRB	15.2 [4.6]	709 [322]
	2,533		2,111	30.9	LT-GRB	15.2 [4.6]	709 [322]

456 Series Motor

456 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,059		882	78.9	S-GRB	15.8 [4.8]	743 [338]
	1,241		1,035	67.3	S-GRB	15.8 [4.8]	743 [338]
	1,423		1,186	58.7	S-GRB	15.8 [4.8]	743 [338]
	2,150		1,791	38.8	S-GRB	15.8 [4.8]	743 [338]
127.5	1,059	106.3	882	78.9	UT	16.3 [5.0]	741 [337]
	1,241		1,035	67.3	UT	16.3 [5.0]	741 [337]
	1,423		1,186	58.7	UT	16.3 [5.0]	741 [337]
	2,150		1,791	38.8	UT	16.3 [5.0]	741 [337]
	1,121		934	78.9	S-GRB	16.6 [5.1]	784 [356]
	1,313		1,094	67.4	S-GRB	16.6 [5.1]	784 [356]
	1,505		1,254	58.7	S-GRB	16.6 [5.1]	784 [356]
	2,081		1,734	42.5	S-GRB	16.6 [5.1]	784 [356]
	2,658		2,215	33.3	S-GRB	16.6 [5.1]	784 [356]
	1,121		934	78.9	UT	17.1 [5.2]	780 [355]
	1,313		1,094	67.4	UT	17.1 [5.2]	780 [355]
135.0	1,505	112.5	1,254	58.7	UT	17.1 [5.2]	780 [355]
	2,081		1,734	42.5	UT	17.1 [5.2]	780 [355]
	2,658		2,215	33.3	UT	17.1 [5.2]	780 [355]
	1,121		934	78.9	LT-GRB	16.8 [5.1]	798 [363]
	1,313		1,094	67.4	LT-GRB	16.8 [5.1]	798 [363]
	1,505		1,254	58.7	LT-GRB	16.8 [5.1]	798 [363]
	2,081		1,734	42.5	LT-GRB	16.8 [5.1]	798 [363]
	2,658		2,215	33.3	LT-GRB	16.8 [5.1]	798 [363]
	1,184		987	78.8	S-GRB	17.4 [5.3]	821 [373]
	1,793		1,494	52.0	S-GRB	17.4 [5.3]	821 [373]
	2,199		1,833	42.5	S-GRB	17.4 [5.3]	821 [373]
	2,403		2,002	38.8	S-GRB	17.4 [5.3]	821 [373]
	1,184		987	78.8	UT	17.9 [5.5]	817 [371]
	1,793		1,494	52.0	UT	17.9 [5.5]	817 [371]
142.5	2,199	118.8	1,833	42.5	UT	17.9 [5.5]	817 [371]
	2,403		2,002	38.8	UT	17.9 [5.5]	817 [371]
	1,184		987	78.8	LT-GRB	17.6 [5.4]	835 [380]
	1,793		1,494	52.0	LT-GRB	17.6 [5.4]	835 [380]
	2,199		1,833	42.5	LT-GRB	17.6 [5.4]	835 [380]
	2,403		2,002	38.8	LT-GRB	17.6 [5.4]	835 [380]

456 Series Motor

456 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,246		1,038	78.6	S-GRB	18.2 [5.5]	858 [390]
	1,673		1,394	58.7	S-GRB	18.2 [5.5]	858 [390]
	1,886		1,572	52.1	S-GRB	18.2 [5.5]	858 [390]
	2,314		1,928	42.3	S-GRB	18.2 [5.5]	858 [390]
	1,246		1,038	78.6	UT	18.7 [5.7]	853 [388]
150.0	1,673	125.0	1,394	58.7	UT	18.7 [5.7]	853 [388]
	1,886		1,572	52.1	UT	18.7 [5.7]	853 [388]
	2,314		1,928	42.3	UT	18.7 [5.7]	853 [388]
	1,246		1,038	78.6	LT-GRB	18.4 [5.6]	871 [396]
	1,673		1,394	58.7	LT-GRB	18.4 [5.6]	871 [396]
	2,314		1,928	42.3	LT-GRB	18.4 [5.6]	871 [396]
	1,981		1,651	52.0	S-GRB	19.0 [5.8]	895 [407]
	2,205		1,838	46.8	S-GRB	19.0 [5.8]	895 [407]
	1,981		1,651	52.0	UT	19.5 [5.9]	895 [407]
157.5	2,205	131.3	1,838	46.8	UT	19.5 [5.9]	890 [405]
	1,981		1,651	52.0	LT-GRB	19.2 [5.9]	908 [413]
	2,205		1,838	46.8	LT-GRB	19.2 [5.9]	908 [413]
	1,370		1,142	78.6	S-GRB	19.8 [6.0]	931 [423]
	1,839		1,533	58.8	S-GRB	19.8 [6.0]	931 [423]
	2,075		1,729	52.1	S-GRB	19.8 [6.0]	931 [423]
	2,545		2,121	42.3	S-GRB	19.8 [6.0]	931 [423]
	1,370		1,142	78.6	UT	20.3 [6.2]	926 [421]
	1,839		1,533	58.8	UT	20.3 [6.2]	926 [421]
165.0	2,075	137.5	1,729	52.1	UT	20.3 [6.2]	926 [421]
	2,545		2,121	42.3	UT	20.3 [6.2]	926 [421]
	2,779		2,316	38.7	UT	20.3 [6.2]	926 [421]
	1,370		1,142	78.6	LT-GRB	20.0 [6.1]	945 [430]
	1,839		1,533	58.8	LT-GRB	20.0 [6.1]	945 [430]
	2,075		1,729	52.1	LT-GRB	20.0 [6.1]	945 [430]
	2,545		2,121	42.3	LT-GRB	20.0 [6.1]	945 [430]
	1,238		1,032	95.0	S-GRB	21.4 [6.5]	1,004 [456]
	1,495		1,245	78.9	S-GRB	21.4 [6.5]	1,004 [456]
	2,262		1,885	52.0	S-GRB	21.4 [6.5]	1,004 [456]
	2,520		2,100	46.6	S-GRB	21.4 [6.5]	1,004 [456]
	1,238		1,032	95.0	UT	21.9 [6.7]	1,000 [455]
180.0	1,495	150.0	1,245	78.9	UT	21.9 [6.7]	1,000 [455]
	2,262		1,885	52.0	UT	21.9 [6.7]	1,000 [455]
	2,520		2,100	46.6	UT	21.9 [6.7]	1,000 [455]
	1,238		1,032	95.0	LT-GRB	21.6 [6.6]	1,018 [463]
	1,495		1,245	78.9	LT-GRB	21.6 [6.6]	1,018 [463]
	2,262		1,885	52.0	LT-GRB	21.6 [6.6]	1,018 [463]
	2,520		2,100	46.6	LT-GRB	21.6 [6.6]	1,018 [463]

456 Series Motor

456 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,342		1,118	95.0	S-GRB	23.0 [7.0]	1,078 [490]
	1,619		1,349	78.6	S-GRB	23.0 [7.0]	1,078 [490]
	2,730		2,275	46.6	S-GRB	23.0 [7.0]	1,078 [490]
	1,342		1,118	95.0	UT	23.6 [7.2]	1,073 [488]
195.0	1,619	162.5	1,349	78.6	UT	23.6 [7.2]	1,073 [488]
	2,730		2,275	46.6	UT	23.6 [7.2]	1,073 [488]
	1,342		1,118	95.0	LT-GRB	23.2 [7.1]	1,092 [496]
	1,619		1,349	78.6	LT-GRB	23.2 [7.1]	1,092 [496]
	2,730		2,275	46.6	LT-GRB	23.2 [7.1]	1,092 [496]
	2,346		1,955	58.7	S-GRB	24.7 [7.5]	1,151 [523]
	2,640		2,200	52.0	S-GRB	24.7 [7.5]	1,151 [523]
210.0	2,346	175.0	1,955	58.7	UT	25.2 [7.7]	1,147 [521]
	2,640		2,200	52.0	UT	25.2 [7.7]	1,147 [521]
	2,346		1,955	58.8	LT-GRB	24.8 [7.6]	1,165 [530]
	2,640		2,200	52.0	LT-GRB	24.8 [7.6]	1,165 [530]
	1,868		1,557	78.9	S-GRB	26.3 [8.0]	1,225 [557]
	2,829		2,357	52.0	S-GRB	26.3 [8.0]	1,225 [557]
225.0	1,868	187.5	1,557	78.9	UT	26.8 [8.2]	1,220 [555]
	2,829		2,357	52.0	UT	26.8 [8.2]	1,220 [555]
	1,868		1,557	78.9	LT-GRB	26.4 [8.0]	1,248 [567]
	2,829		2,357	52.0	LT-GRB	26.4 [8.0]	1,248 [567]
	1,993		1,661	78.6	S-GRB	27.9 [8.5]	1,298 [590]
	2,676		2,230	58.7	S-GRB	27.9 [8.5]	1,298 [590]
240.0	1,993	200.0	1,661	78.6	UT	28.4 [8.7]	1,293 [588]
	2,676		2,230	58.7	UT	28.4 [8.7]	1,293 [588]
	1,993		1,661	78.6	LT-GRB	28.0 [8.5]	1,293 [588]
	2,676		2,230	58.7	LT-GRB	28.0 [8.5]	1,293 [588]
	2,118		1,765	78.6	S-GRB	29.5 [9.0]	1,371 [623]
	2,842		2,369	58.7	S-GRB	29.5 [9.0]	1,371 [623]
255.0	2,118	212.5	1,765	78.6	UT	30.0 [9.1]	1,367 [621]
	2,842		2,369	58.7	UT	30.0 [9.1]	1,367 [621]
	2,118		1,765	78.6	LT-GRB	29.7 [9.1]	1,390 [632]
	2,842		2,369	58.7	LT-GRB	29.7 [9.1]	1,390 [632]
	1,858		1,549	95.0	S-GRB	31.1 [9.5]	1,449 [659]
	2,241		1,868	78.6	S-GRB	31.1 [9.5]	1,449 [659]
	2,626		2,189	67.1	S-GRB	31.1 [9.5]	1,449 [659]
	1,858		1,549	95.0	UT	31.6 [9.6]	1,440 [655]
270.0	2,241	225.0	1,868	78.6	UT	31.6 [9.6]	1,440 [655]
	2,626		2,189	67.1	UT	31.6 [9.6]	1,440 [655]
	1,858		1,549	95.0	LT-GRB	31.3 [9.5]	1,463 [665]
	2,241		1,868	78.6	LT-GRB	31.3 [9.5]	1,463 [665]
	2,626		2,189	67.1	LT-GRB	31.3 [9.5]	1,463 [665]

562 Series Motor

562 Series REDA* Maximus* ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
37.5	485	31.3	404	47.4	S-GRB	5.1 [1.6]	380 [173]
	787		656	28.8	S-GRB	5.1 [1.6]	380 [173]
	485		404	47.4	S	5.1 [1.6]	380 [173]
	787		656	28.8	S	5.1 [1.6]	380 [173]
	485		404	47.4	S-GRB	6.0 [1.8]	420 [191]
	787		656	28.8	S-GRB	6.0 [1.8]	420 [191]
58.3	453	46.9	378	77.3	S-GRB	6.2 [1.9]	470 [214]
	1,205		1,004	28.2	S-GRB	6.2 [1.9]	470 [214]
	453		378	77.3	S	6.2 [1.9]	470 [214]
	1,205		1,004	28.2	S	6.2 [1.9]	470 [214]
	453		378	77.3	S-Gauge	8.0 [2.4]	510 [232]
	1,205		1,004	28.2	S-Gauge	8.0 [2.4]	510 [232]
75.0	517	62.5	430	88.1	S-GRB	7.1 [2.2]	534 [243]
	895		746	50.9	S-GRB	7.1 [2.2]	534 [243]
	1,272		1,060	36.0	S-GRB	7.1 [2.2]	534 [243]
	517		430	88.1	S	7.1 [2.2]	534 [243]
	895		746	50.9	S	7.1 [2.2]	534 [243]
	1,272		1,060	36.0	S	7.1 [2.2]	534 [243]
	517		430	88.1	S-Gauge	8.0 [2.4]	574 [261]
	895		746	50.9	S-Gauge	8.0 [2.4]	574 [261]
	1,272		1,060	36.0	S-Gauge	8.0 [2.4]	574 [261]
93.8	463	88.1	386	124.0	S-GRB	8.3 [2.5]	622 [283]
	654		545	88.1	S-GRB	8.3 [2.5]	622 [283]
	1,036		863	55.1	S-GRB	8.3 [2.5]	622 [283]
	1,323		1,102	43.2	S-GRB	8.3 [2.5]	622 [283]
	463		386	124.0	S	8.3 [2.5]	622 [283]
	654		545	88.1	S	8.3 [2.5]	622 [283]
	1,036		863	55.1	S	8.3 [2.5]	622 [283]
	1,323		1,102	43.2	S	8.3 [2.5]	622 [283]
	463		386	124.0	S-Gauge	10.0 [3.0]	662 [301]
	654		545	88.1	S-Gauge	10.0 [3.0]	662 [301]
	1,036		863	55.1	S-Gauge	10.0 [3.0]	662 [301]
	1,323		1,102	43.2	S-Gauge	10.0 [3.0]	662 [301]

562 Series Motor

562 Series Maximus ESP System Motor

Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	**Voltage, V**	**Power Rating, hp**	**Voltage, V**	**Current, A**	**Type**	**Length, ft [m]**	**Weight, lbm [kg]**
113.0	888	93.8	740	77.3	S-GRB	9.2 [2.8]	686 [312]
	1,001		834	67.7	S-GRB	9.2 [2.8]	686 [312]
	1,228		1,023	55.1	S-GRB	9.2 [2.8]	686 [312]
	1,455		1,212	47.4	S-GRB	9.2 [2.8]	686 [312]
	1,568		1,307	43.8	S-GRB	9.2 [2.8]	686 [312]
	2,248		1,874	30.6	S-GRB	9.2 [2.8]	686 [312]
	888		740	77.3	S	9.2 [2.8]	686 [312]
	1,001		834	67.7	S	9.2 [2.8]	686 [312]
	1,228		1,023	55.1	S	9.2 [2.8]	686 [312]
	1,455		1,212	47.4	S	9.2 [2.8]	686 [312]
	1,568		1,307	43.8	S	9.2 [2.8]	686 [312]
	2,248		1,874	30.6	S	9.2 [2.8]	686 [312]
	888		740	77.3	S-Gauge†	11.0 [3.4]	726 [330]
	1,001		834	67.7	S-Gauge	11.0 [3.4]	726 [330]
	1,228		1,023	55.1	S-Gauge	11.0 [3.4]	726 [330]
	1,455		1,212	47.4	S-Gauge	11.0 [3.4]	726 [330]
	1,568		1,307	43.8	S-Gauge	11.0 [3.4]	726 [330]
	2,248		1,874	30.6	S-Gauge	11.0 [3.4]	726 [330]
131.0	511	109.0	426	157.0	S-GRB	10.4 [3.2]	773 [351]
	912		760	88.1	S-GRB	10.4 [3.2]	773 [351]
	1,178		982	67.7	S-GRB	10.4 [3.2]	773 [351]
	1,445		1,204	55.1	S-GRB	10.4 [3.2]	773 [351]
	511		426	157.0	S	10.4 [3.2]	773 [351]
	912		760	88.1	S	10.4 [3.2]	773 [351]
	1,178		982	67.7	S	10.4 [3.2]	773 [351]
	1,445		1,204	55.1	S	10.4 [3.2]	773 [351]
	511		426	157.0	S-Gauge	12.0 [3.7]	813 [370]
	912		760	88.1	S-Gauge	12.0 [3.7]	813 [370]
	1,178		982	67.7	S-Gauge	12.0 [3.7]	813 [370]
	1,445		1,204	55.1	S-Gauge	12.0 [3.7]	813 [370]

† Gauge is an integral gauge.

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,033		861	88.1	S-GRB	11.3 [3.4]	837 [380]
	1,335		1,113	67.7	S-GRB	11.3 [3.4]	837 [380]
	1,486		1,238	61.1	S-GRB	11.3 [3.4]	837 [380]
	2,393		1,994	38.4	S-GRB	11.3 [3.4]	837 [380]
	2,696		2,247	33.6	S-GRB	11.3 [3.4]	837 [380]
	1,033		861	88.1	S	11.3 [3.4]	837 [380]
	1,335		1,113	67.7	S	11.3 [3.4]	837 [380]
	1,486		1,238	61.1	S	11.3 [3.4]	837 [380]
	2,393		1,994	38.4	S	11.3 [3.4]	837 [380]
	2,696		2,247	33.6	S	11.3 [3.4]	837 [380]
	1,033		861	88.1	S-Gauge†	13.0 [4.0]	877 [399]
	1,335		1,113	67.7	S-Gauge	13.0 [4.0]	877 [399]
150.0	1,486	125.0	1,238	61.1	S-Gauge	13.0 [4.0]	877 [399]
	2,393		1,994	38.4	S-Gauge	13.0 [4.0]	877 [399]
	2,696		2,247	33.6	S-Gauge	13.0 [4.0]	877 [399]
	1,033		861	88.1	UT	11.5 [3.5]	847 [385]
	1,335		1,113	67.7	UT	11.5 [3.5]	847 [385]
	1,486		1,238	61.1	UT	11.5 [3.5]	847 [385]
	2,393		1,994	38.4	UT	11.5 [3.5]	847 [385]
	2,696		2,247	33.6	UT	11.5 [3.5]	847 [385]
	1,033		861	88.1	UT HSS	11.5 [3.5]	847 [385]
	1,335		1,113	67.7	UT HSS	11.5 [3.5]	847 [385]
	1,486		1,238	61.1	UT HSS	11.5 [3.5]	847 [385]
	2,393		1,994	38.4	UT HSS	11.5 [3.5]	847 [385]
	2,696		2,247	33.6	UT HSS	11.5 [3.5]	847 [385]

† Gauge is an integral gauge.

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	999		833	104.0	S-GRB	12.5 [3.8]	925 [420]
	1,170		975	88.1	S-GRB	12.5 [3.8]	925 [420]
	1,513		1,260	67.7	S-GRB	12.5 [3.8]	925 [420]
	1,855		1,546	55.1	S-GRB	12.5 [3.8]	925 [420]
	999		833	104.0	S	12.5 [3.8]	925 [420]
	1,170		975	88.1	S	12.5 [3.8]	925 [420]
	1,513		1,260	67.7	S	12.5 [3.8]	925 [420]
	1,855		1,546	55.1	S	12.5 [3.8]	925 [420]
	999		833	104.0	S-Gauge†	14.0 [4.3]	965 [439]
	1,170		975	88.1	S-Gauge	14.0 [4.3]	965 [439]
169.0	1,513	141.0	1,260	67.7	S-Gauge	14.0 [4.3]	965 [439]
	1,855		1,546	55.1	S-Gauge	14.0 [4.3]	965 [439]
	999		833	104.0	UT	14.0 [4.3]	965 [439]
	1,170		975	88.1	UT	14.0 [4.3]	965 [439]
	1,513		1,260	67.7	UT	14.0 [4.3]	965 [439]
	1,855		1,546	55.1	UT	14.0 [4.3]	965 [439]
	999		833	104.0	UT HSS	14.0 [4.3]	965 [439]
	1,170		975	88.1	UT HSS	14.0 [4.3]	965 [439]
	1,513		1,260	67.7	UT HSS	14.0 [4.3]	965 [439]
	1,855		1,546	55.1	UT HSS	14.0 [4.3]	965 [439]
	914		762	124.0	S-GRB	13.4 [4.1]	989 [450]
	1,101		918	104.0	S-GRB	13.4 [4.1]	989 [450]
	1,291		1,076	88.1	S-GRB	13.4 [4.1]	989 [450]
	1,480		1,233	77.3	S-GRB	13.4 [4.1]	989 [450]
	2,424		2,020	47.4	S-GRB	13.4 [4.1]	989 [450]
	2,803		2,336	40.8	S-GRB	13.4 [4.1]	989 [450]
	3,370		2,808	33.6	S-GRB	13.4 [4.1]	989 [450]
188.0	914	156.0	762	124.0	S	13.4 [4.1]	989 [450]
	1,101		918	104.0	S	13.4 [4.1]	989 [450]
	1,291		1,076	88.1	S	13.4 [4.1]	989 [450]
	1,480		1,233	77.3	S	13.4 [4.1]	989 [450]
	2,424		2,020	47.4	S	13.4 [4.1]	989 [450]
	2,803		2,336	40.8	S	13.4 [4.1]	989 [450]
	3,370		2,808	33.6	S	13.4 [4.1]	989 [450]

† Gauge is an integral gauge.

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	914		762	124.0	S-Gauge†	15.0 [4.6]	1,029 [468]
	1,101		918	104.0	S-Gauge	15.0 [4.6]	1,029 [468]
	1,291		1,076	88.1	S-Gauge	15.0 [4.6]	1,029 [468]
	1,480		1,233	77.3	S-Gauge	15.0 [4.6]	1,029 [468]
	2,424		2,020	47.4	S-Gauge	15.0 [4.6]	1,029 [468]
	2,803		2,336	40.8	S-Gauge	15.0 [4.6]	1,029 [468]
	3,370		2,808	33.6	S-Gauge	15.0 [4.6]	1,029 [468]
	914		762	124.0	UT	13.6 [4.1]	999 [454]
	1,101		918	104.0	UT	13.6 [4.1]	999 [454]
	1,291		1,076	88.1	UT	13.6 [4.1]	999 [454]
	1,480		1,233	77.3	UT	13.6 [4.1]	999 [454]
	2,424		2,020	47.4	UT	13.6 [4.1]	999 [454]
	2,803		2,336	40.8	UT	13.6 [4.1]	999 [454]
188.0	3,370	156.0	2,808	33.6	UT	13.6 [4.1]	999 [454]
	914		762	124.0	UT HSS	13.6 [4.1]	999 [454]
	1,101		918	104.0	UT HSS	13.6 [4.1]	999 [454]
	1,291		1,076	88.1	UT HSS	13.6 [4.1]	999 [454]
	1,480		1,233	77.3	UT HSS	13.6 [4.1]	999 [454]
	2,424		2,020	47.4	UT HSS	13.6 [4.1]	999 [454]
	2,803		2,336	40.8	UT HSS	13.6 [4.1]	999 [454]
	3,370		2,808	33.6	UT HSS	13.6 [4.1]	999 [454]
	1,101		918	104.0	LT-Gauge†	14.5 [4.4]	1,019 [463]
	1,480		1,233	77.3	LT-Gauge	14.5 [4.4]	1,019 [463]
	2,424		2,020	47.4	LT-Gauge	14.5 [4.4]	1,019 [463]
	2,803		2,336	40.8	LT-Gauge	14.5 [4.4]	1,019 [463]
	3,370		2,808	33.6	LT-Gauge	14.5 [4.4]	1,019 [463]

† Gauge is an integral gauge.

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,428		1,190	88.1	S-GRB	14.6 [4.5]	1,076 [489]
	1,847		1,539	67.7	S-GRB	14.6 [4.5]	1,076 [489]
	2,264		1,887	55.1	S-GRB	14.6 [4.5]	1,076 [489]
	1,428		1,190	88.1	S	14.6 [4.5]	1,076 [489]
	1,847		1,539	67.7	S	14.6 [4.5]	1,076 [489]
	2,264		1,887	55.1	S	14.6 [4.5]	1,076 [489]
	1,428		1,190	88.1	UT	14.7 [4.5]	1,086 [494]
206.0	1,847	172.0	1,539	67.7	UT	14.7 [4.5]	1,086 [494]
	2,264		1,887	55.1	UT	14.7 [4.5]	1,086 [494]
	1,428		1,190	88.1	UT HSS	14.7 [4.5]	1,086 [494]
	1,847		1,539	67.7	UT HSS	14.7 [4.5]	1,086 [494]
	2,264		1,887	55.1	UT HSS	14.7 [4.5]	1,086 [494]
	1,428		1,190	88.1	LT-GRB	14.7 [4.5]	1,086 [494]
	1,847		1,539	67.7	LT-GRB	14.7 [4.5]	1,086 [494]
	2,264		1,887	55.1	LT-GRB	14.7 [4.5]	1,086 [494]
	1,096		914	124.0	S-GRB	15.5 [4.7]	1,141 [519]
	1,323		1,102	104.0	S-GRB	15.5 [4.7]	1,141 [519]
	1,776		1,480	77.3	S-GRB	15.5 [4.7]	1,141 [519]
	2,229		1,858	61.1	S-GRB	15.5 [4.7]	1,141 [519]
	1,096		914	124.0	S	15.5 [4.7]	1,141 [519]
	1,323		1,102	104.0	S	15.5 [4.7]	1,141 [519]
	1,776		1,480	77.3	S	15.5 [4.7]	1,141 [519]
	2,229		1,858	61.1	S	15.5 [4.7]	1,141 [519]
	1,096		914	124.0	UT	15.7 [4.8]	1,150 [523]
	1,323		1,102	104.0	UT	15.7 [4.8]	1,150 [523]
	1,776		1,480	77.3	UT	15.7 [4.8]	1,150 [523]
	2,229		1,858	61.1	UT	15.7 [4.8]	1,150 [523]
	1,096		914	124.0	UT-HSS	15.7 [4.8]	1,150 [523]
225.0	1,323	188.0	1,102	104.0	UT-HSS	15.7 [4.8]	1,150 [523]
	1,776		1,480	77.3	UT-HSS	15.7 [4.8]	1,150 [523]
	2,229		1,858	61.1	UT-HSS	15.7 [4.8]	1,150 [523]
	1,096		914	124.0	LT-GRB	15.3 [4.7]	1,141 [519]
	1,323		1,102	104.0	LT-GRB	15.3 [4.7]	1,141 [519]
	1,776		1,480	77.3	LT-GRB	15.3 [4.7]	1,141 [519]
	2,229		1,858	61.1	LT-GRB	15.3 [4.7]	1,141 [519]
	1,323		1,102	104.0	LT-Gauge†	16.6 [5.1]	1,171 [532]
	1,776		1,480	77.3	LT-Gauge	16.6 [5.1]	1,171 [532]
	2,229		1,858	61.1	LT-Gauge	16.6 [5.1]	1,171 [532]
	1,096		914	124.0	CT	15.4 [4.7]	1,150 [523]
	1,323		1,102	104.0	CT	15.4 [4.7]	1,150 [523]
	1,096		914	124.0	CT-HSS	15.4 [4.7]	1,150 [523]
	1,323		1,102	104.0	CT-HSS	15.4 [4.7]	1,150 [523]

† Gauge is an integral gauge

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,279		1,065	124.0	S-GRB	17.6 [5.4]	1,291 [587]
	1,544		1,287	104.0	S-GRB	17.6 [5.4]	1,291 [587]
	1,808		1,506	88.1	S-GRB	17.6 [5.4]	1,291 [587]
	2,601		2,168	61.1	S-GRB	17.6 [5.4]	1,291 [587]
	1,279		1,065	124.0	UT	17.8 [5.4]	1,302 [592]
	1,544		1,287	104.0	UT	17.8 [5.4]	1,302 [592]
	1,808		1,506	88.1	UT	17.8 [5.4]	1,302 [592]
	1,279		1,065	124.0	UT-HSS	17.8 [5.4]	1,302 [592]
	1,544		1,287	104.0	UT-HSS	17.8 [5.4]	1,302 [592]
263.0	1,808	219.0	1,506	88.1	UT-HSS	17.8 [5.4]	1,302 [592]
	1,279		1,065	124.0	LT-GRB	17.4 [5.3]	1,291 [587]
	1,544		1,287	104.0	LT-GRB	17.4 [5.3]	1,291 [587]
	1,808		1,506	88.1	LT-GRB	17.4 [5.3]	1,291 [587]
	1,279		1,065	124.0	LT-Gauge[†]	18.6 [5.7]	1,321 [600]
	1,544		1,287	104.0	LT-Gauge	18.6 [5.7]	1,321 [600]
	1,808		1,506	88.1	LT-Gauge	18.6 [5.7]	1,321 [600]
	1,279		1,065	124.0	CT	17.5 [5.3]	1,302 [592]
	1,279		1,065	124.0	CT-HSS	17.5 [5.3]	1,302 [592]
	1,461		1,217	124.0	S-GRB	19.7 [6.0]	1,442 [655]
	1,763		1,469	104.0	S-GRB	19.7 [6.0]	1,442 [655]
	2,368		1,974	77.3	S-GRB	19.7 [6.0]	1,442 [655]
	2,671		2,226	67.7	S-GRB	19.7 [6.0]	1,442 [655]
	1,461		1,217	124.0	UT	19.9 [6.1]	1,454 [661]
	1,763		1,469	104.0	UT	19.9 [6.1]	1,454 [661]
	2,368		1,974	77.3	UT	19.9 [6.1]	1,454 [661]
	1,461		1,217	124.0	UT-HSS	19.9 [6.1]	1,454 [661]
300.0	1,763	250.0	1,469	104.0	UT-HSS	19.9 [6.1]	1,454 [661]
	2,368		1,974	77.3	UT-HSS	19.9 [6.1]	1,454 [661]
	1,461		1,217	124.0	LT-GRB	19.5 [5.9]	1,442 [655]
	1,763		1,469	104.0	LT-GRB	19.5 [5.9]	1,442 [655]
	1,461		1,217	124.0	LT-Gauge	20.7 [6.3]	1,472 [669]
	1,763		1,469	104.0	LT-Gauge	20.7 [6.3]	1,472 [669]
	2,368		1,974	77.3	LT-Gauge	20.7 [6.3]	1,472 [669]
	1,763		1,469	104.0	CT	19.6 [6.0]	1,454 [661]
	1,763		1,469	104.0	CT-HSS	19.6 [6.0]	1,454 [661]

[†] Gauge is an integral gauge.

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,644		1,370	124.0	S-GRB	21.8 [6.6]	1,594 [725]
	1,984		1,653	104.0	S-GRB	21.8 [6.6]	1,594 [725]
	2,324		1,937	88.1	S-GRB	21.8 [6.6]	1,594 [725]
	2,665		2,220	77.3	S-GRB	21.8 [6.6]	1,594 [725]
	1,644		1,370	124.0	UT	22.0 [6.7]	1,605 [730]
	1,984		1,653	104.0	UT	22.0 [6.7]	1,605 [730]
	2,324		1,937	88.1	UT	22.0 [6.7]	1,605 [730]
	1,644		1,370	124.0	UT-HSS	22.0 [6.7]	1,605 [730]
338.0	1,984	281.0	1,653	104.0	UT-HSS	22.0 [6.7]	1,605 [730]
	2,324		1,937	88.1	UT-HSS	22.0 [6.7]	1,605 [730]
	1,644		1,370	124.0	LT-GRB	21.6 [6.6]	1,594 [725]
	1,984		1,653	104.0	LT-GRB	21.6 [6.6]	1,594 [725]
	2,324		1,937	88.1	LT-GRB	21.6 [6.6]	1,594 [725]
	1,644		1,370	124.0	LT-Gauge[†]	22.8 [7.0]	1,624 [738]
	1,984		1,653	104.0	LT-Gauge	22.8 [7.0]	1,624 [738]
	1,644		1,370	124.0	CT	21.7 [6.6]	1,605 [730]
	1,644		1,370	124.0	CT-HSS	21.7 [6.6]	1,605 [730]
	1,448		1,207	157.0	S-GRB	23.9 [7.3]	1,745 [793]
	1,827		1,522	124.0	S-GRB	23.9 [7.3]	1,745 [793]
	2,204		1,837	104.0	S-GRB	23.9 [7.3]	1,745 [793]
	2,582		2,152	88.1	S-GRB	23.9 [7.3]	1,745 [793]
	1,448		1,207	157.0	UT	24.1 [7.3]	1,757 [799]
	1,827		1,522	124.0	UT	24.1 [7.3]	1,757 [799]
	2,204		1,837	104.0	UT	24.1 [7.3]	1,757 [799]
	2,582		2,152	88.1	UT	24.1 [7.3]	1,757 [799]
	1,448		1,207	157.0	UT-HSS	24.1 [7.3]	1,757 [799]
375.0	1,827	313.0	1,522	124.0	UT-HSS	24.1 [7.3]	1,757 [799]
	2,204		1,837	104.0	UT-HSS	24.1 [7.3]	1,757 [799]
	2,582		2,152	88.1	UT-HSS	24.1 [7.3]	1,757 [799]
	1,448		1,207	157.0	LT-GRB	23.7 [7.2]	1,745 [793]
	1,827		1,522	124.0	LT-GRB	23.7 [7.2]	1,745 [793]
	2,204		1,837	104.0	LT-GRB	23.7 [7.2]	1,745 [793]
	2,582		2,152	88.1	LT-GRB	23.7 [7.2]	1,745 [793]
	1,448		1,207	157.0	CT	23.8 [7.3]	1,757 [799]
	1,448		1,207	157.0	CT-HSS	23.8 [7.3]	1,757 [799]

[†] Gauge is an integral gauge.

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,594		1,328	157.0	S-GRB	26.0 [7.9]	1,897 [862]
	2,009		1,674	124.0	S-GRB	26.0 [7.9]	1,897 [862]
	2,841		2,367	88.1	S-GRB	26.0 [7.9]	1,897 [862]
	3,672		3,060	67.7	S-GRB	26.0 [7.9]	1,897 [862]
	1,594		1,328	157.0	UT	26.1 [8.0]	1,908 [867]
	2,009		1,674	124.0	UT	26.1 [8.0]	1,908 [867]
	2,841		2,367	88.1	UT	26.1 [8.0]	1,908 [867]
	3,672		3,060	67.7	UT	26.1 [8.0]	1,908 [867]
	1,594		1,328	157.0	UT-HSS	26.1 [8.0]	1,908 [867]
413.0	2,009	344.0	1,674	124.0	UT-HSS	26.1 [8.0]	1,908 [867]
	2,841		2,367	88.1	UT-HSS	26.1 [8.0]	1,908 [867]
	3,672		3,060	67.7	UT-HSS	26.1 [8.0]	1,908 [867]
	1,594		1,328	157.0	LT-GRB	25.8 [7.9]	1,897 [862]
	2,009		1,674	124.0	LT-GRB	25.8 [7.9]	1,897 [862]
	2,841		2,367	88.1	LT-GRB	25.8 [7.9]	1,897 [862]
	3,672		3,060	67.7	LT-GRB	25.8 [7.9]	1,897 [862]
	1,594		1,328	157.0	CT	25.9 [7.9]	1,908 [867]
	1,594		1,328	157.0	CT-HSS	25.9 [7.9]	1,908 [867]
	1,738		1,448	157.0	S-GRB	28.1 [8.6]	2,048 [931]
	2,192		1,827	124.0	S-GRB	28.1 [8.6]	2,048 [931]
	2,646		2,205	104.0	S-GRB	28.1 [8.6]	2,048 [931]
	3,552		2,960	77.3	S-GRB	28.1 [8.6]	2,048 [931]
	4,005		3,338	67.7	S-GRB	28.1 [8.6]	2,048 [931]
	1,738		1,448	157.0	UT	28.2 [8.6]	2,060 [936]
	2,192		1,827	124.0	UT	28.2 [8.6]	2,060 [936]
	2,646		2,205	104.0	UT	28.2 [8.6]	2,060 [936]
	1,738		1,448	157.0	UT-HSS	28.2 [8.6]	2,060 [936]
450.0	2,192	375.0	1,827	124.0	UT-HSS	28.2 [8.6]	2,060 [936]
	2,646		2,205	104.0	UT-HSS	28.2 [8.6]	2,060 [936]
	1,738		1,448	157.0	LT-GRB	27.9 [8.5]	2,048 [931]
	2,192		1,827	124.0	LT-GRB	27.9 [8.5]	2,048 [931]
	2,646		2,205	104.0	LT-GRB	27.9 [8.5]	2,048 [931]
	1,738		1,448	157.0	CT	28.0 [8.5]	2,060 [936]
	2,192		1,827	124.0	CT	28.0 [8.5]	2,060 [936]
	1,738		1,448	157.0	CT-HSS	28.0 [8.5]	2,060 [936]
	2,192		1,827	124.0	CT-HSS	28.0 [8.5]	2,060 [936]

562 Series Motor

562 Series Maximus ESP System Motor							
Frequency 60 Hz		Frequency 50 Hz					
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]
	1,884		1,570	157.0	S-GRB	30.2 [9.2]	2,200 [1,000]
	2,375		1,979	124.0	S-GRB	30.2 [9.2]	2,200 [1,000]
	2,865		2,387	104.0	S-GRB	30.2 [9.2]	2,200 [1,000]
	3,847		3,206	77.3	S-GRB	30.2 [9.2]	2,200 [1,000]
	1,884		1,570	157.0	UT	30.3 [9.2]	2,250 [1,023]
	2,375		1,979	124.0	UT	30.3 [9.2]	2,250 [1,023]
	1,884		1,570	157.0	UT-HSS	30.3 [9.2]	2,250 [1,023]
488.0	2,375	406.0	1,979	124.0	UT-HSS	30.3 [9.2]	2,250 [1,023]
	1,884		1,570	157.0	LT-GRB	30.0 [9.1]	2,200 [1,000]
	2,375		1,979	124.0	LT-GRB	30.0 [9.1]	2,200 [1,000]
	1,884		1,570	157.0	CT	30.1 [9.2]	2,250 [1,023]
	2,375		1,979	124.0	CT	30.1 [9.2]	2,250 [1,023]
	1,884		1,570	157.0	CT-HSS	30.1 [9.2]	2,250 [1,023]
	2,375		1,979	124.0	CT-HSS	30.1 [9.2]	2,250 [1,023]
	2,028		1,690	157.0	S-GRB	32.3 [9.8]	2,351 [1,069]
	2,557		2,131	124.0	S-GRB	32.3 [9.8]	2,351 [1,069]
	3,086		2,572	104.0	S-GRB	32.3 [9.8]	2,351 [1,069]
	3,615		3,013	88.1	S-GRB	32.3 [9.8]	2,351 [1,069]
	4,144		3,454	77.3	S-GRB	32.3 [9.8]	2,351 [1,069]
	2,028		1,690	157.0	UT	32.4 [9.9]	2,363 [1,074]
525.0	2,557	438.0	2,131	124.0	UT	32.4 [9.9]	2,363 [1,074]
	2,028		1,690	157.0	UT-HSS	32.4 [9.9]	2,363 [1,074]
	2,557		2,131	124.0	UT-HSS	32.4 [9.9]	2,363 [1,074]
	2,028		1,690	157.0	LT-GRB	32.1 [9.8]	2,351 [1,069]
	2,557		2,131	124.0	LT-GRB	32.1 [9.8]	2,351 [1,069]
	2,028		1,690	157.0	CT	32.1 [9.8]	2,351 [1,069]
	2,028		1,690	157.0	CT-HSS	32.1 [9.8]	2,351 [1,069]
	2,173		1,811	157.0	S-GRB	34.4 [10.5]	2,503 [1,138]
	2,740		2,284	124.0	S-GRB	34.4 [10.5]	2,503 [1,138]
	3,306		2,755	104.0	S-GRB	34.4 [10.5]	2,503 [1,138]
	3,873		3,228	88.1	S-GRB	34.4 [10.5]	2,503 [1,138]
563.0	2,173	469.0	1,811	157.0	UT	34.5 [10.5]	2,540 [1,155]
	2,740		2,284	124.0	UT	34.5 [10.5]	2,540 [1,155]
	2,173		1,811	157.0	UT-HSS	34.5 [10.5]	2,540 [1,155]
	2,740		2,284	124.0	UT-HSS	34.5 [10.5]	2,540 [1,155]
	2,173		1,811	157.0	LT-GRB	34.2 [10.4]	2,503 [1,138]

738 Series Motor

738 Series REDA* Maximus* ESP System Motor—RK Type

Frequency 60 Hz		Frequency 50 Hz							
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy* Alloy Part Number
	2,277	208	1,897	66.7	S	12.3 [3.8]	1,256 [570.2]	2012369	2012472
250	3,238		2,697	46.9	S	12.3 [3.8]	1,256 [570.2]	2012370	2012473
	4,200		3,499	36.2	S	12.3 [3.8]	1,256 [570.2]	2012371	2012474
300	2,270	250	1,891	80.3	S	13.9 [4.2]	1,490 [676.5]	2012373	2012476
	3,656		3,045	49.8	S	13.9 [4.2]	1,490 [676.5]	2012374	2012477
	4,117		3,429	44.3	S	13.9 [4.2]	1,490 [676.5]	2012372	2012475
350	2,379		1,982	89.4	S	15.6 [4.8]	1,724 [782.7]	2012375	2012478
	3,187	292	2,655	66.7	S	15.6 [4.8]	1,724 [782.7]	2012376	2012479
	4,265		3,553	49.8	S	15.6 [4.8]	1,724 [782.7]	2012377	2012480
	2,411		2,008	100.8	S	17.2 [5.2]	1,958 [888.9]	2012378	2012481
400	3,335	333	2,778	72.9	S	17.2 [5.2]	1,958 [888.9]	2012379	2012482
	4,258		3,547	57.1	S	17.2 [5.2]	1,958 [888.9]	2012380	2012483
	2,020		1,683	135.3	UT	18.8 [5.7]	2,193 [995.6]	2012511	2012519
450	2,366	375	1,971	115.5	S	18.8 [5.7]	2,193 [995.6]	2012381	2012484
	3,405		2,836	80.3	S	18.8 [5.7]	2,193 [995.6]	2012382	2012485
	4,097		3,413	66.7	S	18.8 [5.7]	2,193 [995.6]	2012383	2012486
	1,860		1,549	163.3	UT	20.5 [6.3]	2,427 [1,101.9]	2012512	2012520
	1,860		1,549	163.3	LT	20.0 [6.1]	2,427 [1,101.9]	2013061	2013079
500	2,244	417	1,869	135.4	LT	20.0 [6.1]	2,427 [1,101.9]	2013063	2013080
	2,244		1,869	135.4	S	20.5 [6.3]	2,427 [1,101.9]	2012384	2012487
	3,398		2,831	89.4	S	20.5 [6.3]	2,427 [1,101.9]	2012385	2012488
	4,169		3,473	72.9	S	20.5 [6.3]	2,427 [1,101.9]	2012386	2012489
	2,046		1,704	163.3	UT	22.2 [6.8]	2,661 [1,208.1]	2012513	2012521
	2,046		1,704	163.3	LT	21.7 [6.6]	2,661 [1,208.1]	2013064	2013081
550	2,469	458	2,057	135.3	S	22.2 [6.8]	2,661 [1,208.1]	2012387	2012490
	3,315		2,762	100.8	S	22.2 [6.8]	2,661 [1,208.1]	2012388	2012491
	4,162		3,468	80.3	S	22.2 [6.8]	2,661 [1,208.1]	2012389	2012492
	1,770		1,474	205.9	UT	23.8 [7.3]	2,895 [1,314.3]	2013240	2013247
	2,232		1,859	163.3	UT	23.8 [7.3]	2,895 [1,314.3]	2012514	2012522
	1,770		1,474	205.9	LT	23.4 [7.1]	2,895 [1,314.3]	2013065	2013082
600	2,232	500	1,859	163.3	LT	23.4 [7.1]	2,895 [1,314.3]	2013066	2013083
	2,232		1,859	163.3	S	23.8 [7.3]	2,895 [1,314.3]	2012390	2012493
	3,155		2,628	115.5	S	23.8 [7.3]	2,895 [1,314.3]	2012391	2012494
	3,616		3,012	100.8	S	23.8 [7.3]	2,895 [1,314.3]	2012392	2012495
	1,917		1,597	206.0	UT	25.5 [7.8]	3,129 [1,420.6]	2013241	2013248
	1,917		1,597	206.0	LT	25.0 [7.6]	3,129 [1,420.6]	2013067	2013084
650	2,418	541	2,014	163.3	S	25.5 [7.8]	3,129 [1,420.6]	2012393	2012496
	3,418		2,847	115.5	S	25.5 [7.8]	3,129 [1,420.6]	2012394	2012497
	3,918		3,264	100.8	S	25.5 [7.8]	3,129 [1,420.6]	2012395	2012498

738 Series Motor

738 Series Maximus ESP System Motor—RK Type (Continued)

Frequency 60 Hz		Frequency 50 Hz							
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
	2,065		1,720	205.9	UT	27.1 [8.3]	3,363 [1,526.8]	2013242	2013249
	2,065		1,720	205.9	LT	26.6 [8.1]	3,363 [1,526.8]	2013068	2013085
700	2,604	583	2,169	163.3	S	27.1 [8.3]	3,363 [1,526.8]	2012396	2012499
	3,142		2,617	135.3	S	27.1 [8.3]	3,363 [1,526.8]	2012397	2012500
	4,220		3,515	100.8	S	27.1 [8.3]	3,363 [1,526.8]	2012398	2012501
	2,212		1,843	206.0	UT	28.7 [8.8]	3,598 [1,633.5]	2001634	2013250
	2,212		1,843	206.0	LT	28.3 [8.6]	3,598 [1,633.5]	2013069	2013086
750	2,212	625	1,843	206.0	S	28.8 [8.8]	3,598 [1,633.5]	2013305	2013311
	3,367		2,805	135.3	S	28.8 [8.8]	3,598 [1,633.5]	2012399	2012502
	3,943		3,285	115.5	S	28.8 [8.8]	3,598 [1,633.5]	2012400	2012503
	2,360		1,966	205.9	S	30.4 [9.3]	3,832 [1,739.7]	2013306	2013312
800	2,975	666	2,478	163.3	S	30.4 [9.3]	3,832 [1,739.7]	2012401	2012504
	3,591		2,991	135.3	S	30.4 [9.3]	3,832 [1,739.7]	2012402	2012505
	2,507		2,088	206.0	S	32.0 [9.8]	4,066 [1,846.0]	2013307	2013313
850	3,161	708	2,633	163.3	S	32.0 [9.8]	4,066 [1,846.0]	2012403	2012506
	3,815		3,178	135.3	S	32.0 [9.8]	4,066 [1,846.0]	2012404	2012507
900	3,347	750	2,788	163.3	S	33.7 [10.3]	4,300 [1,955.2]	2012406	2012509
	4,040		3,365	135.3	S	33.7 [10.3]	4,300 [1,955.2]	2012405	2012508

738 Series Motor

738 Series Maximus ESP System Motor — RK Type with Integral Phoenix* Downhole Monitoring Systems Adapter									
Frequency 60 Hz		Frequency 50 Hz							
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
	2,277		1,897	66.7	S	12.5 [3.8]	1,256 [570.2]	2013100	2013174
250	3,238	208	2,697	46.9	S	12.5 [3.8]	1,256 [570.2]	2013101	2013175
	4,200		3,499	36.2	S	12.5 [3.8]	1,256 [570.2]	2013102	2013176
	2,270		1,891	80.3	S	14.1 [4.3]	1,490 [676.5]	2013104	2013178
300	3,656	250	3,045	49.8	S	14.1 [4.3]	1,490 [676.5]	2013105	2013179
	4,117		3,429	44.3	S	14.1 [4.3]	1,490 [676.5]	2013103	2013177
	2,379		1,982	89.4	S	15.7 [4.8]	1,724 [782.7]	2013106	2013180
350	3,187	292	2,655	66.7	S	15.7 [4.8]	1,724 [782.7]	2013107	2013181
	4,265		3,553	49.8	S	15.7 [4.8]	1,724 [782.7]	2013108	2013182
	2,411		2,008	100.8	S	17.4 [5.3]	1,958 [888.9]	2013109	2013183
400	3,335	333	2,778	72.9	S	17.4 [5.3]	1,958 [888.9]	2013110	2013185
	4,258		3,547	57.1	S	17.4 [5.3]	1,958 [888.9]	2013111	2013186
450	2,366	375	1,971	115.5	S	19.0 [5.8]	2,193 [995.6]	2013112	2013187
	3,405		2,836	80.3	S	19.0 [5.8]	2,193 [995.6]	2013113	2013188
	1,860		1,549	163.3	LT	20.2 [6.2]	2,427 [1,101.9]	2013213	2013228
	2,244		1,869	135.4	LT	20.2 [6.2]	2,427 [1,101.9]	2013214	2013229
500	2,244	417	1,869	135.4	S	20.6 [6.3]	2,427 [1,101.9]	2013115	2013190
	3,398		2,831	89.4	S	20.6 [6.3]	2,427 [1,101.9]	2013116	2013191
	4,169		3,473	72.9	S	20.6 [6.3]	2,427 [1,101.9]	2013117	2013192
	2,046		1,704	163.3	LT	21.9 [6.7]	2,661 [1,208.1]	2013215	2013230
550	2,469	458	2,057	135.3	S	22.4 [6.8]	2,661 [1,208.1]	2013118	2013193
	3,315		2,762	100.8	S	22.4 [6.8]	2,661 [1,208.1]	2013119	2013194
	4,162		3,468	80.3	S	22.4 [6.8]	2,661 [1,208.1]	2013120	2013195
	1,770		1,474	205.9	LT	23.5 [7.2]	2,895 [1,314.3]	2013216	2013231
	2,232		1,859	163.3	LT	23.5 [7.2]	2,895 [1,314.3]	2013217	2013232
600	2,232	500	1,859	163.3	S	24.0 [7.3]	2,895 [1,314.3]	2013121	2013196
	3,155		2,628	115.5	S	24.0 [7.3]	2,895 [1,314.3]	2013122	2013197
	3,616		3,012	100.8	S	24.0 [7.3]	2,895 [1,314.3]	2013123	2013198
	1,917		1,597	206.0	LT	25.2 [7.7]	3,129 [1,420.6]	2013218	2013233
650	2,418	541	2,014	163.3	S	25.7 [7.8]	3,129 [1,420.6]	2013124	2013199
	3,418		2,847	115.5	S	25.7 [7.8]	3,129 [1,420.6]	2013125	2013200
	3,918		3,264	100.8	S	25.7 [7.8]	3,129 [1,420.6]	2013126	2013201
	2,065		1,720	205.9	LT	26.8 [8.2]	3,363 [1,526.8]	2013219	2013234
700	2,604	583	2,169	163.3	S	27.3 [8.3]	3,363 [1,526.8]	2013127	2013202
	3,142		2,617	135.3	S	27.3 [8.3]	3,363 [1,526.8]	2013128	2013203
	4,220		3,515	100.8	S	27.3 [8.3]	3,363 [1,526.8]	2013129	2013204
	2,212		1,843	206.0	LT	28.5 [8.7]	3,598 [1,633.5]	2001625	2013235
750	2,212	625	1,843	206.0	S	28.9 [8.8]	3,598 [1,633.5]	2013343	2013349
	3,367		2,805	135.3	S	28.9 [8.8]	3,598 [1,633.5]	2009859	2013205
	3,943		3,285	115.5	S	28.9 [8.8]	3,598 [1,633.5]	2013130	2013206

738 Series Motor

738 Series Maximus ESP System Motor— RK Type with Integral Phoenix Downhole Monitoring Systems Adapter (Continued)

Frequency 60 Hz		Frequency 50 Hz							
Power Rating, hp	Voltage, V	Power Rating, hp	Voltage, V	Current, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Alloy Part Number
	2,360		1,966	205.9	S	30.6 [9.3]	3,832 [1,739.7]	2013344	2013350
800	2,975	666	2,478	163.3	S	30.6 [9.3]	3,832 [1,739.7]	2013131	2013207
	3,591		2,991	135.3	S	30.6 [9.3]	3,832 [1,739.7]	2013132	2013208
	2,507		2,088	206.0	S	32.2 [9.8]	4,066 [1,846.0]	2013345	2013351
850	3,161	708	2,633	163.3	S	32.2 [9.8]	4,066 [1,846.0]	2013133	2013209
	3,815		3,178	135.3	S	32.2 [9.8]	4,066 [1,846.0]	2013134	2013210
900	3,347	750	2,788	163.3	S	33.8 [10.3]	4,300 [1,952.2]	2013135	2013212
	4,040		3,365	135.3	S	33.8 [10.3]	4300, [1,952.2]	2006498	2013211

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 387/456, Integral Pressure Sensor, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
30	483	25	402	41.8		12.1 [3.7]	395 [180]	tba†
	750		625	26.9				tba
38	603	31	502	41.9		13.0 [4.0]	435 [198]	tba
	937		781	26.9				tba
45	457	38	380	66.4		13.7 [4.2]	470 [214]	tba
	858		715	35.3				tba
	991		826	30.6				tba
53	689	44	574	51.3		14.6 [4.5]	500 [227]	tba
	768		640	46.0				tba
	1,000		833	35.3				tba
	1,156		963	30.6				tba
60	787	50	655	51.4		15.3 [4.7]	545 [248]	tba
	965		804	41.9				tba
	1,143		952	35.3				tba
	1,499		1,249	26.9				tba
68	886	56	738	51.3		16.2 [4.9]	575 [261]	tba
	1,286		1,072	35.3	BSL-S			tba
75	983	63	820	51.3		16.9 [5.2]	610 [227]	tba
	1,207		1,006	41.8				tba
	1,540		1,283	32.8				tba
	1,874		1,562	26.9				tba
83	837	69	698	66.3		17.8 [5.4]	650 [295]	tba
	960		800	57.8				tba
	1,327		1,106	41.9				tba
	2,063		1,719	26.9				tba
90	913	75	761	66.4		18.5 [5.6]	690 [314]	tba
	1,581		1,317	38.3				tba
	1,982		1,652	30.6				tba
	2,248		1,874	26.9				tba
98	990	81	825	66.3		19.4 [5.9]	725 [330]	tba
	1,279		1,066	51.3				tba
	1,859		1,549	35.3				tba
	2,148		1,790	30.6				tba
105	1,065	88	887	66.4		20.1 [6.1]	760 [345]	100178621
	1,533		1,278	46.1				100178623
	2,156		1,797	32.8				100176037
	2,312		1,927	30.6				100178624
113	975	94	812	77.7		21.0 [6.4]	790 [359]	100176051
	1,476		1,230	51.3	BSL-S			100176060
	2,145		1,788	35.3				100176064
120	1,040	100	866	77.7		21.7 [6.6]	835 [380]	100176082
	1,573		1,311	51.4				100176087
	2,286		1,905	35.3				100176091
	2,642		2,202	30.6				100178644

† To be assigned.

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 387/456, Integral Pressure Sensor, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
	1,104		920	77.7				tba[†]
128	1,295	106	1,079	66.3		22.6 [875]	875 [398]	tba
	1,484		1,237	57.8				tba
	2,242		1,868	38.3				tba
	1,169		974	77.7				tba
135	1,570	113	1,308	57.9		23.3 [7.1]	920 [418]	tba
	2,170		1,809	41.9				tba
	2,772		2,310	32.8				tba
	1,870		1,558	51.3				tba
143	2,294	119	1,911	41.8		24.2 [7.4]	960 [436]	tba
	2,506		2,088	38.3				tba
	1,299		1,083	77.7				tba
150	1,745	125	1,454	57.9	BSL-S	24.9 [7.6]	995 [452]	tba
	1,967		1,639	51.3				tba
	2,413		2,011	41.8				tba
158	2,066	131	1,722	51.3		25.8 [7.9]	1,030 [468]	tba
	2,300		1,917	46.1				tba
	1,429		1,191	77.7				tba
165	1,918	138	1,599	57.9		26.6 [8.1]	1,070 [486]	tba
	2,164		1,803	51.3				tba
	2,899		2,415	38.3				tba
	1,559		1,299	77.7				tba
180	2,360	150	1,966	51.4		28.2 [8.6]	1,145 [520]	tba
	2,628		2,190	46.1				tba
210	2,446	175	2,039	57.8		31.4 [9.6]	1,310 [595]	tba

[†] To be assigned.

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 387/456, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
53	1,000	44	833	35.3	BSL-S	13.3 [4.1]	500 [227]	100190850
60	1,143	50	952	35.3		14.0 [4.3]	545 [248]	100190856
68	886	56	738	51.3		14.9 [4.5]	575 [261]	100190510
83	837	69	698	66.3		16.5 [5.0]	650 [295]	100190511
90	913	75	761	66.4		17.2 [5.2]	690 [314]	100190512
	1,581		1,317	38.3				100190861
113	1,476	94	1,230	51.3		19.7 [6.0]	790 [359]	100190865
120	1,040	100	866	77.7		20.4 [6.2]	835 [380]	100190513
	1,573		1,311	51.4				100190867
135	1,370	113	1,141	66.3		22.0 [6.7]	920 [418]	100190514
	2,170		1,809	41.9				100201323
158	2,066	131	1,722	51.3		24.6 [7.5]	1,070 [486]	100201332
165	2,899	138	2,415	38.3		25.3 [7.7]		100190868
180	2,360	150	1,966	51.4		26.9 [8.2]	1,145 [520]	100201340
	2,628		2,190	46.1				100190515

REDA Maximus System ProMotor Unit BSL Type, 387/456, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
195	1,689	163	1,407	77.7	BPBSL-S	32.0 [9.8]	1,260 [573]	100178670
	2,847		2,372	46.1				100178675
210	2,446	175	2,039	57.8		33.6 [10.2]	1,335 [607]	100178678
	2,753		2,294	51.3				100178677
225	1,948	188	1,623	77.8		35.2 [10.7]	1,410 [641]	100178695
	2,950		2,459	51.3				100178687

REDA Maximus System ProMotor Unit BPBSL Type, 387/456, RSPD Type

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy* High-Nickel Alloy Part Number
195	1,689	163	1,407	77.7	BPBSL-S	30.7 [9.4]	1,260 [573]	tba†	100203451
	2,847		2,372	46.1				tba	100203452
210	2,446	175	2,039	57.8		32.3 [9.8]	1,335 [607]	tba	100203455
	2,753		2,294	51.3				tba	100203454
225	1,948	188	1,623	77.8		35.2 [10.7]	1,410 [641]	100201348	tba
	2,950		2,459	51.3				100201347	tba

† To be assigned.

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BPBSL Type, 387/456, Upper Tandem, RSPD Type

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Part Number
120	1,040	100	866	77.7	BPBSL-UT	22.8 [7.0]	875 [398]	100179093	100213488
	1,573		1,311	51.4				100210573	100213489
	2,286		1,905	35.3				100210575	100213491
	2,642		2,202	30.6				100210574	100213490
135	1,169	113	974	77.7		24.4 [7.4]	960 [436]	100179080	100213492
	1,370		1,141	66.4				100210578	100213496
	1,570		1,308	57.9				100210576	100213494
	2,170		1,809	41.9				100210581	100213497
150	1,299	125	1,083	77.7		26.0 [7.9]	1,035 [470]	100179076	100213498
	1,745		1,454	57.9				100210539	100213500
	1,967		1,639	51.3				100210544	100213502
	2,413		2,011	41.8				100210543	100213501
165	1,184	138	987	93.7		27.7 [8.4]	1,110 [505]	100136075	100213507
	1,429		1,191	77.7				100131666	100213503
	1,918		1,599	57.9				100210549	100213505
	2,164		1,803	51.3				100210550	100213506
	2,899		2,415	38.3				100210547	100213504
180	1,559	150	1,299	77.7		29.3 [8.9]	1,185 [539]	100179054	100213508
	2,360		1,966	51.4				100210554	100213510
195	1,689	163	1,407	77.7		30.9 [9.4]	1,260 [573]	100125484	100213513
	2,847		2,372	46.1				100210566	100213514
210	2,446	175	2,039	57.8		32.5 [9.9]	1,335 [607]	100210569	100213516
	2,753		2,294	51.3				100210568	100213515
225	1,948	188	1,623	77.8		34.1 [10.4]	1,410 [641]	100099091	100213519
	2,950		2,459	51.3				100210572	100213574

REDA Maximus System ProMotor Unit LSBPB Type, 387/456, Upper Tandem, RSPD Type

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy* High-Nickel Alloy Part Number
120	1,040	100	866	77.7	LSBPB-UT	22.8 [7.0]	875 [398]	100234693	100235365
	1,573		1,311	51.4				100234946	100235366
	2,286		1,905	35.3				100234948	100235369
	2,642		2,202	30.6				100234947	100235367
135	1,169	113	974	77.7		24.4 [7.4]	960 [436]	100234949	100235370
	1,370		1,141	66.4				100234953	100235374
	1,570		1,308	57.9				100234951	100235371
	2,170		1,809	41.9				100234954	100235375
	2,772		2,310	32.8				100234952	100235373
150	1,299	125	1,083	77.7		26.0 [7.9]	1,035 [470]	100234955	100235388
	1,745		1,454	57.9				100234956	100235389
	1,967		1,639	51.3				100234959	100235396
	2,413		2,011	41.8				100234957	100235390

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit LSBPB Type, 387/456, Upper Tandem, RSPD Type (Continued)

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy Part Number
	1,184		987	93.7				100235026	100235406
	1,429		1,191	77.7				100234961	100235397
165	1,918	138	1,599	57.9		27.7 [8.4]	1,110 [505]	100234963	100235404
	2,164		1,803	51.3				100235025	100235405
	2,899		2,415	38.3				100234962	100235398
	1,559		1,299	77.7				100235031	100235414
180	2,360	150	1,966	51.4		29.3 [8.9]	1,185 [539]	100235027	100235415
	2,628		2,190	46.1	LSBPB-UT			100235028	100235416
195	1,689	163	1,407	77.7		30.9 [9.4]	1,260 [573]	100235032	100235434
	2,847		2,372	46.1				100235033	100235435
210	2,446	175	2,039	57.8		32.5 [9.9]	1,335 [607]	100235035	100235439
	2,753		2,294	51.3				100235034	100235436
225	1,948	188	1,623	77.8		34.1 [10.4]	1,410 [641]	100235037	100235442
	2,950		2,459	51.3				100235036	100235441

REDA Maximus System Motor, 387/456, Lower Tandem, Integral Sensor, RSPD Type

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy* High-Nickel Alloy Part Number
	1,040		866	77.7				tba†	tba
	1,573		1,311	51.4				tba	tba
120	2,286	100	1,905	35.3		16.4 [5.0]	715 [325]	tba	tba
	2,642		2,202	30.6				tba	tba
	1,169		974	77.7				tba	tba
	1,370		1,141	66.4				tba	tba
135	1,570	113	1,308	57.9		18.0 [5.5]	800 [364]	tba	tba
	2,170		1,809	41.9				tba	tba
	2,772		2,310	32.8				tba	tba
	1,299		1,083	77.7				tba	tba
150	1,745	125	1,454	57.9		19.6 [6.0]	875 [398]	tba	tba
	1,967		1,639	51.3				tba	tba
	2,413		2,011	41.8	LT			tba	tba
	1,184		987	93.7				tba	tba
	1,429		1,191	77.7				tba	tba
165	1,918	138	1,599	57.9		21.2 [6.5]	950 [432]	tba	tba
	2,164		1,803	51.3				tba	tba
	2,899		2,415	38.3				tba	tba
	1,559		1,299	77.7				tba	tba
180	2,360	150	1,966	51.4		22.8 [7.0]	1,025 [466]	tba	tba
	2,628		2,190	46.1				tba	tba
195	1,689	163	1,407	77.7		24.4 [7.4]	1,100 [500]	tba	tba
	2,847		2,372	46.1				tba	tba
210	2,753	175	2,294	51.3		26.0 [7.9]	1,175 [534]	tba	tba
225	1,948	188	1,623	77.8		27.6 [8.4]	1,250 [568]	tba	tba

† To be assigned.

REDA Maximus ESP System ProMotor Units

REDA Maximus System Motor, 387/456, Lower Tandem, RSPD Type

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number	Redalloy* High-Nickel Alloy Part Number
120	1,040	100	866	77.7	LT	15.0 [4.6]	700 [318]	100196418	100213556
	1,573		1,311	51.4				100212430	100213557
	2,286		1,905	35.3				100212432	100213559
	2,642		2,202	30.6				100212431	100213558
135	1,169	113	974	77.7		16.7 [5.1]	785 [357]	100196420	100213560
	1,370		1,370	66.4				100212435	100213563
	1,570		1,570	57.9				100212433	100213561
	2,170		2,170	41.9				100212436	100213564
	2,772		2,772	32.8				100212434	100213562
150	1,299	125	1,083	77.7		18.3 [5.6]	860 [391]	100196424	100213565
	1,745		1,745	57.9				100212437	100213567
	1,967		1,967	51.3				100212439	100213569
	2,413		2,413	41.8				100212438	100213568
165	1,184	138	987	93.7		19.9 [6.1]	935 [425]	100196428	100213580
	1,429		1,191	77.7				100196426	100213570
	1,918		1,599	57.9				100212443	100213578
	2,164		1,803	51.3				100212444	100213579
	2,899		2,415	38.3				100212441	100213571
180	1,559	150	1,299	77.7		21.5 [6.6]	1,010 [459]	100196432	100213581
	2,360		1,966	51.4				100212445	100213582
	2,628		2,190	46.1				100212446	100213586
195	1,689	163	1,407	77.7		23.1 [7.0]	1,085 [493]	100196435	100213587
	2,847		2,372	46.1				100212447	100213588
210	2,753	175	2,294	51.3		24.7 [7.5]	1,160 [527]	100212451	100213589
225	1,948	188	1,623	77.8		26.3 [8.0]	1,235 [561]	100196438	100213592
	2,950		2,459	51.3				100212452	100213591

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 562 Series, Integral Pressure Sensor, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
38	506	31	422	47.3	BSL-S	12.0 [3.7]	691 [314]	tba†
	822		685	29.1				tba
	1,295		1,079	18.5				tba
56	473	47	394	75.9		13.2 [4.0]	779 [354]	tba
	655		545	54.8				tba
	774		645	46.3				tba
	1,257		1,048	28.5				tba
75	539	63	449	88.8		14.1 [4.3]	843 [383]	tba
	934		778	51.2				tba
	1,328		1,106	36.0				tba
94	682	78	568	87.7		15.3 [4.7]	930 [423]	tba
	882		735	67.8				tba
	1,081		901	55.3				tba
	1,381		1,150	43.3				tba
113	926	94	772	77.5	BSL-S	16.2 [4.9]	994 [452]	100237454
	1,282		1,068	56.0				100223322
	1,637		1,364	43.9				100237458
	2,346		1,955	30.6				100237461
131	534	109	445	157.0		17.4 [5.3]	1,046 [475]	100237462
	952		793	88.0				100237463
	1,230		1,025	68.1				100237464
	1,508		1,257	55.5				100237465
150	1,078	125	898	88.8		18.3 [5.6]	1,110 [505]	100237466
	1,551		1,293	61.7				100237467
	2,497		2,081	38.3				100237468
	2,814		2,345	34.0				100237469
169	1,043	141	869	103.3		19.5 [5.9]	1,125 [511]	100237470
	1,221		1,018	88.2				100237471
	1,579		1,315	68.2				100237472
	1,936		1,613	55.6				100237473

† To be assigned.

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 562 Series, Integral Pressure Sensor, RSPD Type (Continued)

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
113	926	94	772	77.5	BSL-S	16.2 [4.9]	994 [452]	tba†
	1,282		1,068	56.0				tba
	1,637		1,364	43.9				tba
	2,346		1,955	30.6				tba
131	534	109	445	157.0		17.4 [5.3]	1,046 [475]	tba
	952		793	88.0				tba
	1,230		1,025	68.1				tba
	1,508		1,257	55.5				tba
150	1,078	125	898	88.8		18.3 [5.6]	1,110 [505]	tba
	1,551		1,293	61.7				tba
	2,497		2,081	38.3				tba
	2,814		2,345	34.0				tba
169	1,043	141	869	103.3		19.5 [5.9]	1,125 [511]	tba
	1,221		1,018	88.2				tba
	1,579		1,315	68.2				tba
	1,936		1,613	55.6				tba

† To be assigned

REDA Maximus System ProMotor Unit BPBSL Type, 562 Series, Integral Pressure Sensor, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
188	1,150	156	958	104.1	BPBSL-S	22.9 [7.0]	1,217 [553]	tba†
	1,544		1,287	77.5				tba
	2,530		2,108	47.3				tba
	2,925		2,437	40.9				tba
	3,517		2,931	34.0				tba
206	1,491	172	1,242	88.3		24.0 [7.3]	1,427 [649]	tba
	1,927		1,606	68.3				tba
	2,363		1,969	55.7				tba
225	1,381	188	1,150	104.0		24.9 [7.6]	1,491 [678]	tba
	1,854		1,545	77.5				tba
	2,327		1,939	61.7				tba
	2,800		2,333	51.3				tba
263	1,334	219	1,112	125.5		27.0 [8.2]	1,634 [743]	tba
	1,612		1,343	103.9				tba
	1,887		1,572	88.8				tba
	2,715		2,262	61.7				tba
300	1,525	250	1,271	125.5		29.1 [8.9]	1,776 [807]	tba
	1,840		1,534	104.0				tba
	2,472		2,060	77.4				tba
	2,787		2,323	68.7				tba

† To be assigned

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BPBSL Type, 562 Series, Integral Pressure Sensor, RSPD Type (Continued)

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
338	1,716	281	1,430	125.5	BPBSL-S	31.2 [9.5]	1,919 [872]	tba†
	2,070		1,725	104.0				tba
	2,781		2,317	77.4				tba

† To be assigned

REDA Maximus System ProMotor Unit BPBSL Upper Tandem Type, 562 Series, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
188	1,150	156	958	104.1	BPBSL-UT	22.9 [7.0]	1,217 [553]	100236659
	1,544		1,287	77.5				100236655
	2,530		2,108	47.3				100236656
	2,925		2,437	40.9				100236657
	3,517		2,931	34.0				100236658
225	1,381	188	1,150	104.0		24.9 [7.6]	1,491 [678]	100236660
	1,854		1,545	77.5				100236661
	2,327		1,939	61.7				100236662
	2,800		2,333	51.3				100236663
263	1,334	219	1,112	125.5		27.0 [8.2]	1,634 [743]	100236664
	1,612		1,343	103.9				100145975
	1,887		1,572	88.8				100147598
	2,715		2,262	61.7				100236665
300	1,525	250	1,271	125.5		29.1 [8.9]	1,776 [807]	100236666
	1,840		1,534	104.0				100236669
	2,472		2,060	77.4				100236667
	2,787		2,323	68.7				100236668
338	1,716	281	1,430	125.5		31.2 [9.5]	1,919 [872]	100119228
	2,070		1,725	104.0				100236670
	2,781		2,317	77.4				100236671

† To be assigned

REDA Maximus System Motor, 562 Series, LT with Integral Pressure Sensor, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
113	1,045	94	871	68.4	LT	10.4 [3.2]	686 [312]	tba†
188	1,150	156	958	104.1		14.5 [4.4]	989 [450]	tba
	1,544		1,287	77.5				tba
	2,530		2,108	47.3				tba
	2,925		2,437	40.9				tba
	3,517		2,931	34.0				tba

REDA Maximus ESP System ProMotor Units

REDA Maximus System Motor, 562 Series, LT with Integral Pressure Sensor, RSPD Type

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
225	1,381	225	1,150	104.0	LT	16.6 [5.1]	1,133 [515]	tba†
	1,854		1,545	77.5				tba
	2,327		1,939	61.7				tba
	2,800		2,333	51.3				tba
263	1,334	219	1,112	125.5		18.7 [5.7]	1,290 [586]	tba
	1,612		1,343	103.9				tba
	1,887		1,572	88.8				tba
	2,715		2,262	61.7				tba
300	1,525	250	1,271	125.5		20.8 [6.3]	1,419 [645]	tba
	1,840		1,534	104.0				tba
	2,472		2,060	77.4				tba
	2,787		2,323	68.7				tba
338	1,716	281	1,430	125.5		22.9 [7.0]	1,600 [727]	tba
	2,070		1,725	104.0				tba
	2,781		2,317	77.4				tba

† To be assigned

REDA Maximus System ProMotor Unit BSL Type, 456 Series, MaxJoint* ESP Flange Connection Technology

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
30	463	25	386	42.3	BSL-S	11.0 [3.4]	395 [180]	100360547
	719		599	27.2				100361297
38	578	31	482	42.5		11.9 [3.6]	435 [198]	100361303
	899		749	27.3				100361305
45	438	38	365	67.1		12.6 [3.8]	470 [214]	100361307
	823		686	35.7				100361308
	950		792	30.9				100361310
53	660	44	550	52.0		13.5 [4.1]	500 [227]	100361313
	736		614	46.7				100361398
	959		799	35.8				100361319
	1,109		924	31.0				100361322
60	754	50	628	52.1		14.2 [4.3]	545 [248]	100361400
	925		771	42.3				100361408
	1,096		913	35.7				100361403
	1,438		1,198	27.2				100361406
68	849	56	708	52.0		15.1 [4.6]	575 [261]	100361412
	1,233		1,027	35.8				100361414
75	943	63	786	52.0		15.8 [4.8]	610 [227]	100361419
	1,157		964	42.3				100361421
	1,477		1,231	33.3				100361416
	1,797		1,498	27.3				100361425

† To be assigned

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 456 Series, MaxJoint Technology (Continued)

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
83	803	69	669	67.3	BSL-S	16.7 [5.1]	650 [295]	100361428
	921		767	58.7				100361438
	1,272		1,060	42.5				100361434
	1,978		1,648	27.3				100361437
90	875	75	730	67.4		17.4 [5.3]	690 [314]	100361440
	1,516		1,263	38.7				100361442
	1,901		1,584	31.0				100361447
	2,156		1,797	27.2				100361445
98	949	81	791	67.3		18.3 [5.6]	725 [330]	100361449
	1,227		1,022	52.0				100361451
	1,782		1,485	35.8				100361457
	2,060		1,717	31.0				100361455
105	1,021	88	851	67.1		19.0 [5.8]	760 [345]	100361459
	1,470		1,225	46.6				100361461
	2,067		1,723	33.3				100361464
	2,217		1,848	30.9				100361620
113	935	94	779	78.9		19.9 [6.1]	790 [359]	100361485
	1,415		1,180	52.0				100361491
	2,057		1,714	35.8				100361492

REDA Maximus System ProMotor Unit BSL Type, 456 Series, MaxJoint Technology

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
120	997	100	831	78.6	BSL-S	20.6 [6.3]	835 [380]	100361498
	1,508		1,257	52.0				100361500
	2,192		1,826	35.8				100361508
	2,533		2,111	30.9				100361506
128	1,059	106	882	78.9		21.5 [6.6]	875 [398]	100361509
	1,241		1,035	67.3				100361511
	1,423		1,186	58.7				100361513
	2,150		1,791	38.8				100361516
135	1,121	113	934	78.9		22.2 [6.8]	920 [418]	100361519
	1,505		1,254	58.7				100361523
	2,081		1,734	42.5				100361562
	2,658		2,215	33.3				100361527
143	1,184	119	987	78.8		23.1 [7.0]	960 [436]	100361574
	1,793		1,494	52.0				100361569
	2,199		1,833	42.5				100361570
	2,403		2,002	38.8				100361573

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 456 Series, MaxJoint Technology (Continued)

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
150	1,246	125	1,038	78.6	BSL-S	23.8 [7.3]	995 [452]	100361575
	1,673		1,394	58.7				100361577
	1,886		1,572	52.1				100361582
	2,314		1,928	42.3				100361580
158	1,981	131	1,651	52.0		24.7 [7.5]	1,030 [468]	100361585
	2,205		1,838	46.8				100361587
165	1,370	138	1,142	78.6		25.4 [7.7]	1,070 [486]	100361589
180	1,495	150	1,245	78.9		27.0 [8.2]	1,145 [520]	100361601
	2,520		2,100	46.6				100361605

REDA Maximus System ProMotor Unit BSL Type, 456 Series, MaxJoint Technology

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel with Monel® Trim Part Number	Redalloy* High-Nickel Alloy with Monel Trim Part Number
30	463	25	386	42.3	BSL-S	11.0 [3.4]	395	100360577	100360589
	719		599	27.2				100361628	100361859
38	578	31	482	42.5		11.9 [3.6]	435	100361630	100361860
	899		749	27.3				100361632	100361861
45	438	38	365	67.1		12.6 [3.8]	470	100361634	100361862
	823		686	35.7				100361635	100361863
	950		792	30.9				100361636	100361864
53	660	44	550	52.0		13.5 [4.1]	500	100361638	100361865
	736		614	46.7				100361642	100361868
	959		799	35.8				100361639	100361866
	1,109		924	31.0				100361641	100361867
60	754	50	628	52.1		14.2 [4.3]	545	100361644	100361869
	925		771	42.3				100361649	100361872
	1,096		913	35.7				100361645	100361870
	1,438		1,198	27.2				100361647	100361871
68	849	56	708	52.0		15.1 [4.6]	575	100361651	100361873
	1,233		1,027	35.8				100361652	100361874
75	943	63	786	52.0		15.8 [4.8]	610	100361655	100361876
	1,157		964	42.3				100361657	100361877
	1,477		1,231	33.3				100361653	100361875
	1,797		1498	27.3				100361658	100361878
83	803	69	669	67.3		16.7 [5.1]	650	100361659	100361879
	921		767	58.7				100361663	100361882
	1,272		1,060	42.5				100361661	100361880
	1,978		1,648	27.3				100361662	100361881
90	1,516	75	1,263	38.7		17.4 [5.3]	690	100361666	100361885
	1,901		1,584	31.0				100361670	100361887
	2,156		1,797	27.2				100361669	100361886

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 456 Series, MaxJoint Technology (Continued)

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	**Volts, V**	**Horsepower, hp**	**Volts, V**	**Amperage, A**	**Type**	**Length, ft [m]**	**Weight, lbm [kg]**	**Carbon Steel with MONEL® Trim Part Number**	**Redalloy* High-Nickel Alloy with MONEL Trim Part Number**
98	949	81	791	67.3	BSL-S	18.3 [5.6]	725	100361671	100361888
	1,227		1,022	52.0				100361672	100361889
	1,782		1,485	35.8				100361676	100361891
	2,060		1,717	31.0				100361674	100361890
105	1,021	88	851	67.1		19.0 [5.8]	760	100361677	100361893
	1,470		1,225	46.6				100361679	100361894
	2,067		1,723	33.3				100361681	100361896
	2,217		1,848	30.9				100361680	100361895
113	935	94	779	78.9		19.9 [6.1]	790	100361683	100361897
	1,415		1,180	52.0				100361688	100361898
	2,057		1,714	35.8				100361689	100361899

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BSL Type, 456 Series, MaxJoint Technology

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel with Monel® Trim Part Number	Redalloy* High-Nickel Alloy with Monel Trim Part Number
120	997	100	831	78.6	BSL-S	20.6 [6.3]	835 [380]	100361690	100361900
	1,508		1,257	52.0				100361692	100361901
	2,192		1,826	35.8				100361694	100361903
	2,533		2,111	30.9				100361693	100361902
128	1,059	106	882	78.9		21.5 [6.6]	875 [398]	100361695	100361904
	1,241		1,035	67.3				100361696	100361905
	1,423		1,186	58.7				100361698	100361906
	2,150		1,791	38.8				100361699	100361907
135	1,121	113	934	78.9		22.2 [6.8]	920 [418]	100361701	100361908
	1,505		1,254	58.7				100361702	100361909
	2,081		1,734	42.5				100361706	100361910
	2,658		2,215	33.3				100361703	100361912
143	1,184	119	987	78.8		23.1 [7.0]	960 [436]	100361713	100361916
	1,793		1,494	52.0				100361707	100361913
	2,199		1,833	42.5				100361709	100361914
	2,403		2,002	38.8				100361711	100361915
150	1,246	125	1,038	78.6		23.8 [7.3]	995 [452]	100361714	100361917
	1,673		1,394	58.7				100361715	100361918
	1,886		1,572	52.1				100361717	100361920
	2,314		1,928	42.3				100361716	100361919
158	1,981	131	1,651	52.0		24.7 [7.5]	1,030 [468]	100361718	100361921
	2,205		1,838	46.8				100361719	100361922
165	1,370	138	1,142	78.6		25.4 [7.7]	1,070 [486]	100361720	100361923
	1,839		1,533	58.8			1,070 [486]	100361728	100361925
	2,075		1,729	52.1			1,070 [486]	100361729	100361926
	2,779		2,316	38.7				100361725	100361924
180	1,495	150	1,245	78.9		27.0 [8.2]	1,145 [520]	100361731	100361927
	2,262		1,885	52.0				100361732	100361928
	2,520		2,100	46.6				100361733	100361929

REDA Maximus System ProMotor Unit BPBSL Type, 456 Series, MaxJoint Technology

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
195	1,619	162.5	1,349	78.6	BPBSL-S	30.9 [9.4]	1,260 [573]	100361942
	2,730		2,275	46.6				100361943
210	2,346	175	1,955	58.7		32.5 [9.9]	1,335 [607]	100361945
	2,640		2,200	52.0				100361944
225	1,868	188	1,557	78.9		34.1 [10.4]	1,410 [641]	100361947
	2,829		2,357	52.0				100361946

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BPBSL Type, 456 Series, MaxJoint Technology

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel with MONEL® Trim Part Number	Redalloy* High-Nickel Alloy with MONEL Trim Part Number
195	1,619	162.5	1,349	78.6	BPBSL-S	30.9 [9.4]	1,260 [573]	100361948	100361954
	2,730		2,275	46.6				100361949	100361955
210	2,346	175	1,955	58.7		32.5 [9.9]	1,335 [607]	100361951	100361957
	2,640		2,200	52.0				100361950	100361956
225	1,868	188	1,557	78.9		34.1 [10.4]	1,410 [641]	100361953	100361959
	2,829		2,357	52.0				100361952	100361958

REDA Maximus System ProMotor Unit BPBSL Type, 456 Series, Upper Tandem, MaxJoint Technology

Frequency 60 Hz		Frequency 50 Hz						
Horsepower, hp	Volts, V	Horsepower, hp	Volts, V	Amperage, A	Type	Length, ft [m]	Weight, lbm [kg]	Carbon Steel Part Number
120	997	100	831	78.6	BPBSL-UT	23.0 [7.0]	875 [398]	100351312
	1,508		1,257	52.0				100351313
	2,192		1,826	35.8				100351315
	2,533		2,111	30.9				100351314
135	1,121	113	934	78.9		24.6 [7.5]	960 [436]	100351316
	1,313		1,094	67.4				100351319
	1,505		1,254	58.7				100351317
	2,081		1,734	42.5				100351320
	2,658		2,215	33.3				100351318
150	1,246	125	1,038	78.6		26.2 [8.0]	1,035 [470]	100351321
	1,673		1,394	58.7				100351322
	1,886		1,572	52.1				100351324
	2,314		1,928	42.3				100351323
165	1,370	138	1,142	78.6		27.8 [8.5]	1,110 [505]	100351325
	1,839		1,533	58.8				100351327
	2,075		1,729	52.1				100351328
	2,075		1,729	93.7				100351329
	2,779		2,316	38.7				100351326
180	1,495	150	1,245	78.9		29.4 [9.0]	1,185 [539]	100351330
	2,262		1,885	52.0				100351331
	2,520		2,100	46.6				100351332

REDA Maximus ESP System ProMotor Units

REDA Maximus System ProMotor Unit BPBSL Type, 456 Series, Upper Tandem, MaxJoint Technology

Frequency 60 Hz		Frequency 50 Hz							
Horsepower, hp	**Volts, V**	**Horsepower, hp**	**Volts, V**	**Amperage, A**	**Type**	**Length, ft [m]**	**Weight, lbm [kg]**	**Carbon Steel w/ Monel Trim Part Number**	**Redalloy* High-Nickel Alloy w/Monel Trim Part Number**
	997		831	78.6				100362331	100351342
	1,508		1,257	52.0				100362332	100351343
120	2,192	100	1,826	35.8		23.0 [7.0]	875 [398]	100362334	100351345
	2,533		2,111	30.9				100362333	100351344
	1,121		934	78.9				100351339	100351346
	1,313		1,094	67.4				100362337	100351349
135	1,505	113	1,254	58.7		24.6 [7.5]	960 [436]	100362335	100351347
	2,081		1,734	42.5				100362338	100351350
	2,658		2,215	33.3				100362336	100351348
	1,246		1,038	78.6				100362339	100351351
	1,673		1,394	58.7				100362340	100351352
150	1,886	125	1,572	52.1	BPBSL-UT	26.2 [8.0]	1,035 [470]	100362342	100351354
	2,314		1,928	42.3				100362341	100351353
	1,370		1,142	78.6				100362343	100351355
	1,839		1,533	58.8				100362345	100351357
165	2,075	138	1,729	52.1		27.8 [8.5]	1,110 [505]	100362346	100351358
	2,075		1,729	93.7				100362347	100351359
	2,779		2,316	38.7				100362344	100351356
	1,495		1,245	78.9				100362348	100351360
180	2,262	150	1,885	52.0		29.4 [9.0]	1,185 [539]	100362349	100351361
	2,520		2,100	46.6				100362350	100351362

SpeedStar 519 SWD

18-pulse, low-voltage sine wave variable speed drive

SpeedStar 519 SWD* Variable Speed Drive (VSD) Specifications	
Control system	Flux-vector PWM, V/Hz control
Input supply	380–480 V ±10%, 50/60 Hz ±2 Hz
Output voltage regulation	Same as power supply
Frequency setting	0.01 to 90 Hz, 0.01-Hz resolution
Non-SWD (PWM)	0.5 to 3.0 kHz (user adjustable) carrier frequency
Sine wave drive VSD	2.2-kHz carrier frequency fixed
Input configuration	18-pulse integral phase shifting transformer with diode front end
Inverter efficiency	> 97% at full load
Power factor	> 0.98 at full load
Overload rating	120% for 60 s; 100% continuous
Certification and standards	UL-508

SpeedStar 519 SWD VSD Enclosure and Environmental Ratings	
Enclosure rating	NEMA 1 (indoor)† or NEMA 3R (outdoor) or IP-56 (optional)
Electronic section	Sealed from outside air and cooled by heat exchanger
Transformer section	Forced air cooled (automatic internal and external fans)
Maximum altitude, ft [m]	4,921 [1,500] above sea level; output rating derated above maximum altitude
Ambient operating temperature, degF [degC]	–22 to 122 [–30 to 50]; output rating derated above upper temperature
Ambient storage temperature, degF [degC]	–40 to 140 [–40 to 60]
Relative humidity	20 to 95% maximum (noncondensing)
H_2S protection	Uses conformal coated circuit boards and tin-plated bus bars
Material	12-gauge carbon steel enclosure‡

† Dimensions and specifications provided on request
‡ Stainless steel provided on request

SpeedStar 2000 Plus & SpeedStar SWD

Variable speed drives

SpeedStar 2000 Plus* Variable Speed Drive (VSD) and SpeedStar SWD* VSD Specifications	
Control system	Flux-vector PWM, V/Hz control
Input supply	380 to 480 V ±10%, 50 or 60 Hz ±5%
Output voltage regulation	Same as power supply
Frequency setting	0.01 to 120 Hz, 0.1-Hz resolution
PWM carrier frequency (user-adustable)	SpeedStar 2000 Plus VSD: 0.5 to 3.0 kHz SpeedStar SWD VSD: 2.2 kHz
Input configuration	Diode, 6- or 12-pulse
Efficiency	>98% at full load
Power factor	>0.97 at full load
Overload rating	120% for 60 s, 100% continuous
Certification and standards compliance	UL-508, CE (with addition of electromagnetic interference filter at drive input)

SpeedStar 2000 Plus VSD and SpeedStar SWD VSD Environmental Ratings	
Enclosure rating	NEMA 1 (indoor) or NEMA 3R (outdoor)
Cooling method	Electronic section: sealed from outside air (NEMA 4 section) and cooled by heat exchanger Sine wave filter section: air–cooled
Max. altitude, ft [m]	3,280 [1,000] above sea level; output rating derated above upper temperature
Ambient operating temperature, degF [degC]	–22 to 122 [–30 to 50]; output rating derated above upper temperature
Ambient storage temperature, degF [degC]	–40 to 140 [–40 to 60]
Relative humidity	20% to 95% maximum (noncondensing)
H_2S protection	Conformal-coated circuit boards and tin-plated bus bars
Material	12-gauge carbon steel enclosure†

† Stainless steel available on request

SpeedStar 2000 Plus VSD and SpeedStar SWD VSD 6- and 12-Pulse Specifications

Output Rating			Ambient Temperature Rating, degF [degC]	SpeedStar 2000 Plus VSD Dimensions (H × W × D), in [cm]		SpeedStar 2000 Plus VSD Approximate Weight, lbm [kg]	SpeedStar SWD VSD Dimensions (H × W × D), in [cm]		SpeedStar SWD VSD Approximate Weight, lbm [kg]
A	kVA at 480 V	kVA at 380 V		NEMA 3R	NEMA 1		NEMA 3R	NEMA 1	
79	66	52	122 [50]	81.50 × 25.00 × 35.00 [207 × 63.5 × 89]	81.50 × 25.06 × 33.00 [207 × 63.7 × 83.4]	1,000 [453.6]	na†	na	na
100	83	66	122 [50]	81.50 × 25.00 × 35.00 [207 × 63.5 × 89]	81.50 × 25.06 × 33.00 [207 × 63.7 × 83.4]	1,000 [453.6]	na	na	na
132	110	87	122 [50]	81.50 × 25.00 × 35.00 [207 × 63.5 × 89]	81.50 × 25.06 × 33.00 [207 × 63.7 × 83.4]	1,000 [453.6]	99.50 × 25.00 × 35.00 [252.7 × 63.5 × 89]	99.50 × 25.06 × 33.00 [252.7 × 63.7 × 83.4]	1,500 [680]
156	130	103	122 [50]	81.50 × 31.50 × 35.00 [207 × 80 × 89]	81.50 × 25.06 × 33.00 [207 × 63.7 × 83.4]	1,000 [453.6]	99.50 × 31.50 × 35.00 [252.7 × 80 × 89]	99.50 × 25.06 × 33.00 [252.7 × 63.7 × 83.4]	1,500 [680]
196	163	129	122 [50]	81.50 × 31.50 × 35.00 [207 × 80 × 89]	81.50 × 25.06 × 33.00 [207 × 63.7 × 83.4]	1,000 [453.6]	99.50 × 31.50 × 35.00 [252.7 × 80 × 89]	99.50 × 25.06 × 33.00 [252.7 × 63.7 × 83.4]	1,500 [680]
241	200	158	122 [50]	81.50 × 31.50 × 35.00 [207 × 80 × 89]	81.50 × 25.06 × 33.00 [207 × 63.7 × 83.4]	1,000 [453.6]	99.50 × 31.50 × 35.00 [252.7 × 80 × 89]	99.50 × 25.06 × 33.00 [252.7 × 63.7 × 83.4]	1,500 [680]
313	260	206	122 [50]	81.50 × 46.00 × 42.00 [207 × 117 × 107]	81.50 × 37.06 × 40.00 [207 × 94 × 101.6]	1,200 [544]	99.50 × 46.00 × 42.00 [252.7 × 117 × 107]	99.50 × 37.06 × 40.00 [252.7 × 94 × 101.6]	2,000 [907]
469	390	309	122 [50]	81.50 × 46.00 × 42.00 [207 × 117 × 107]	81.50 × 37.06 × 40.00 [207 × 94 × 101.6]	1,200 [544]	99.50 × 46.00 × 42.00 [252.7 × 117 × 107]	99.50 × 37.06 × 40.00 [252.7 × 94 × 101.6]	2,000 [907]
546	454	359	122 [50]	81.50 × 46.00 × 42.00 [207 × 117 × 107]	81.50 × 37.06 × 40.00 [207 × 94 × 101.6]	1,200 [544]	99.50 × 46.00 × 42.00 [252.7 × 117 × 107]	99.50 × 37.06 × 40.00 [252.7 × 94 × 101.6]	2,000 [907]
623	518	410	104 [40]	81.50 × 46.00 × 42.00 [207 × 117 × 107]	81.50 × 37.06 × 40.00 [207 × 94 × 101.6]	1,200 [544]	99.50 × 46.00 × 42.00 [252.7 × 117 × 107]	99.50 × 37.06 × 40.00 [252.7 × 94 × 101.6]	2,000 [907]
623	518	410	122 [50]	81.50 × 90.00 × 48.00 [207 × 229 × 122]	81.50 × 72.00 × 46.00 [207 × 183 × 117]	2,000 [907]	99.50 × 90.00 × 48.00 [252.7 × 229 × 122]	99.50 × 72.00 × 46.00 [252.7 × 183 × 117]	3,100 [1,406]

SpeedStar 2000 Plus & SpeedStar SWD

SpeedStar 2000 Plus VSD and SpeedStar SWD VSD 6- and 12-Pulse Specifications (continued)

Output Rating			Ambient Temperature Rating, degF [degC]	SpeedStar 2000 Plus VSD Dimensions (H × W × D), in [cm]		SpeedStar 2000 Plus VSD Approximate Weight, lbm [kg]	SpeedStar SWD VSD Dimensions (H × W × D), in [cm]		SpeedStar SWD VSD Approximate Weight, lbm [kg]
A	kVA at 480 V	kVA at 380 V		NEMA 3R	NEMA 1		NEMA 3R	NEMA 1	
722	600	475	122 [50]	81.50 × 90.00 × 48.00 [207 × 229 × 122]	81.50 × 72.00 × 46.00 [207 × 183 × 117]	2,000 [907]	99.50 × 90.00 × 48.00 [252.7 × 229 × 122]	99.50 × 72.00 × 46.00 [252.7 × 183 × 117]	3,100 [1,406]
842	700	554	122 [50]	81.50 × 90.00 × 48.00 [207 × 229 × 122]	81.50 × 72.00 × 46.00 [207 × 183 × 117]	2,000 [907]	99.50 × 90.00 × 48.00 [252.7 × 229 × 122]	99.50 × 72.00 × 46.00 [252.7 × 183 × 117]	3,100 [1,406]
980	815	645	122 [50]	81.50 × 90.00 × 48.00 [207 × 229 × 122]	81.50 × 72.00 × 46.00 [207 × 183 × 117]	2,000 [907]	99.50 × 90.00 × 48.00 [252.7 × 229 × 122]	99.50 × 72.00 × 46.00 [252.7 × 183 × 117]	3,100 [1,406]
1,121	932	738	122 [50]	81.50 × 90.00 × 48.00 [207 × 229 × 122]	81.50 × 72.00 × 46.00 [207 × 183 × 117]	2,000 [907]	99.50 × 90.00 × 48.00 [252.7 × 229 × 122]	99.50 × 72.00 × 46.00 [252.7 × 183 × 117]	5,000 [2,268]
1,203	1,000	792	122 [50]	81.50 × 90.00 × 48.00 [207 × 229 × 122]	81.50 × 72.00 × 46.00 [207 × 183 × 117]	2,000 [907]	99.50 × 90.00 × 48.00 [252.7 × 229 × 122]	99.50 × 72.00 × 46.00 [252.7 × 183 × 117]	5,000 [2,268]
1,443	1,200	950	122 [50]	81.50 × 110.00 × 48.00 [207 × 279 × 122]	81.50 × 84.00 × 46.00 [207 × 213 × 117]	3,500 [1,588]	99.50 × 110.00 × 48.00 [252.7 × 279 × 122]	99.50 × 84.00 × 46.00 [252.7 × 213 × 117]	5,000 [2,268]
1,684	1,400	1,108	104 [40]	81.50 × 110.00 × 48.00 [207 × 279 × 122]	81.50 × 84.00 × 46.00 [207 × 213 × 117]	3,500 [1,588]	99.50 × 110.00 × 48.00 [252.7 × 279 × 122]	99.50 × 84.00 × 46.00 [252.7 × 213 × 117]	5,000 [2,268]
1,804	1,500	1,188	104 [40]	81.50 × 110.00 × 48.00 [207 × 279 × 122]	81.50 × 84.00 × 46.00 [207 × 213 × 117]	3,500 [1,588]	99.50 × 110.00 × 48.00 [252.7 × 279 × 122]	99.50 × 84.00 × 46.00 [252.7 × 213 × 117]	5,000 [2,268]

†Not available.

VariStar

Variable speed drive

VariStar* Variable Speed Drive (VSD) Pulse Width Modulation (PWM) Output			
Output rating, kVA at 480/380 V	200/158	390/309	518/410
Output rating, A	241	469	623
Ambient temperature, degF [degC]	14 to 122 [–10 to 50]	14 to 122 [–10 to 50]	14 to 104 [–10 to 40]
Dimensions, H × W × D, in [cm]	81.5 × 35.5 × 35 [207 × 90.2 × 89]	81.5 × 45.5 × 42 [207 × 115.6 × 106.7]	81.5 × 45.5 × 42 [207 × 115.6 × 106.7]
Approximate weight, lbm [kg]	1,000 [454]	1,200 [544]	1,200 [544]

VariStar VSD Sine Wave Output			
Output rating, kVA at 480/380 V	390/309	518/410	
Output rating, A	241	469	623
Ambient temperature, degF [degC]	14 to 122 [–10 to 50]	14 to 122 [–10 to 50]	14 to 104 [–10 to 40]
Dimensions, H × W × D, in [cm]	96 × 35.5 × 35 [243.8 × 90.2 × 89]	96 × 45.5 × 42 [243.8 × 115.6 × 107]	96 × 45.5 × 42 [243.8 × 115.6 × 106.7]
Approximate weight, lbm [kg]	1,500 [680]	2,000 [907]	2,000 [907]

VariStar VSD Principal Control Parameters	
Control system	PWM flux-vector, V/Hz control
Input power	380/480 V (± 10%), 50/60 Hz (± 5%)
Output voltage regulation	Same as input power
Frequency setting	0.01–120 Hz, 0.01-Hz resolution
PWM carrier frequency	User-adjustable: 0.5–3.0 kHz, sine wave fixed at 2.2 kHz
Input configuration	6-pulse diode only
Efficiency	98% at all loads and speeds
Power factor	96% at all loads and speeds
Overload rating	120% overcurrent for 60 s (100% continuous)

VariStar VSD Enclosure and Environmental Ratings	
Type	NEMA 3R-rated enclosure (outdoor); standard compliance with UL-508
Cooling method	Forced air (internal and external fans)
Maximum altitude, ft [m]	3,300 [1,000] above sea level (derated above maximum altitude)
Relative humidity	20%–95% maximum (noncondensing)
H2S protection	Coated circuit boards, heat sink
Material	12-gauge carbon steel enclosure

SpeedStar MVD Indoor

Medium-voltage variable speed drive—NEMA 1 for indoor applications

SpeedStar MVD* Variable Speed Drive (VSD) Models and Dimensions NEMA 1 (3.3- to 6.6-kV input and up to 4.5-kV output[‡])											
Output rating, A		62	74	87	99	112	124	155	186	217	248
Output power at 4,160 V and 60Hz, kVa [hp]		447 [500]	536 [600]	625 [700]	715 [800]	804 [900]	893 [1,000]	1,116 [1,250]	1,340 [1,500]	1,536 [1,750]	1,786 [2,000]
Standard MVD footprint with sine wave filter	Dimensions (H × W × D), in [cm]	103.7 × 74 × 43.4 [263.4 × 188.0 × 110.3]						103.7 × 122 × 43.4 [263.4 × 309.9 × 110.3]			
	Weight, lbm [kg]	7,160 [3,248]	7,380 [3,348]	7,610 [3,452]	7,910 [3,588]	8,210 [3,274]	9,010 [4,087]	11,830 [5,366]	12,630 [5,729]	13,530 [6,137]	14,180 [6,432]
Micro Series MVD footprint without sine wave filter	Dimensions (H × W × D), in [cm]	103.7 × 48 × 48 [263.4 × 121.9 × 121.9]		103.7 × 60 × 48 [263.4 × 152.4 × 121.9]				103.7 × 90 × 48 [263.4 × 228.6 × 121.9]			
	Weight, lbm [kg]	6,000 [2,722]	6,200 [2,813]	7,000 [3,175]	7,200 [3,266]	7,400 [3,357]	7,600 [3,448]	10,400 [4,718]	10,600 [4,808]	10,800 [4,899]	12,000 [5,444]
Micro Series MVD footprint with sine wave filter	Dimensions (H × W × D), in [cm]	103.7 × 48 × 48 [263.4 × 121.9 × 121.9]		103.7 × 60 × 48 [263.4 × 152.4 × 121.9]				103.7 × 112 × 48 [263.4 × 281.9 × 121.9]			
	Weight, lbm [kg]	6,440 [2,921]	6,640 [3,012]	7,580 [3,438]	7,840 [3,556]	8,040 [3,647]	8,240 [3,738]	11,780 [5,343]	12,580 [5,706]	13,480 [6,115]	14,130 [6,409]

Power System Specifications	
Control system	Sinusoidal multilevel PWM control
Control precision	± 0.5% of maximum output frequency
Base control system	V/Hz, sensorless vector control, variable torque, closed-loop vector control, constant torque
Efficiency	96.5% (total system), 98% (inverter)
Input power factor	0.96
Overload capacity	115% for 60 s, 100% continuous (in some models, overload capacity is 110% for 60 s)
Input voltage supply	2,400 to 13,800 V,[†] 50/60 Hz
Input tolerance	Voltage: ±10%; Frequency: ±5%
Output	Voltage: 0 to 4.5 kV; Frequency: 0 to 120 Hz
Main input power	Three-phase input isolation transformer, 24-pulse design with visible input fused disconnect and precharge circuitry
Control power supply	Integral to main transformer: three-phase 480-V, 50/60-Hz, 20-kVA capacity via tertiary winding; 15 kVA available for other uses
Internal protective functions	Current limit, overcurrent, overcharge, overload, undervoltage, overvoltage, ground fault, CPU error, abnormal cooling
PWM carrier frequency	2.048 kHz
Output transistor type	IGBT
Applicable standards	Electrical performance: NEC, ANSI
Components and others	NEC, NEMA, UL, cUL, and CE

[†] Requires addition of high-voltage circuit breaker at front end if higher than 6.6 kV

Construction Specifications	
Panel construction	Free-standing, front-maintenance type with channel base
Cooling	Forced air cooled with optional redundant fan
Air filter	Front-mounted, aluminum, washable, screened
Paint and color	Gavlon 841, 2-mil minimum, UL1332 compliant, ANSI-61 gray

Enclosure and Environmental Ratings	
Type	NEMA 1–rated, IP20, IEC-529, gasketed, and filtered
Ambient temperature operating range, degF [degC]	14 to 104 [–10 to 40]; output rating derated above upper temperature
Ambient temperature storage range, degF [degC]	–7 to 140 [–14 to 60]
Humidity	95% maximum (noncondensing)
Max. altitude, ft [m]	3,300 [1,000] above mean sea level
Vibration	0.5 g_n or less at 10 to 50 Hz

SpeedStar MVD Outdoor

Medium-voltage variable speed drive for outdoor applications

SpeedStar MVD* Variable Speed Drive (VSD) Models and Dimensions (with 3.3- to 6.6-kV input and up to 4.5-kV‡ output)				
Output rating, A	62	124	186	248
Output power at 4.16 kV, kVa [hp]	447 [500]	893 [1,000]	1,340 [1,500]	1,786 [2,000]
Dimensions (H × W × D), in [cm]	107 × 168 × 63 [272 × 427 × 160]	107 × 168 × 63 [272 × 427 × 160]	107 × 168 × 63 [272 × 427 × 160]	107 × 222 × 72 [271.8 × 563.9 × 182.8]
Weight, lbm [kg]	15,000 [6,804]	15,000 [6,804]	15,000 [6,804]	24,500 [11,113]
SpeedStar MVD VSD Models and Dimensions (with 34.5-kV† input and up to 4.5-kV‡ output)				
Output rating, A	62	124	186	
Output rating at 4,160 V, kVa [hp]	500 [447]	1,000 [893]	1,500 [1,340]	
Dimensions (H × W × D),§ in [cm]	96 × 252 × 63 [244 × 640 × 160]	96 × 240 × 63 [244 × 609 × 160]	96 × 240 × 63 [244 × 609 × 160]	
Weight,§ lbm [kg]	34,000 [15,422]	34,000 [15,422]	34,000 [15,422]	
Power System Specifications				
Control system	Sinusoidal multilevel PWM control			
Control precision	±0.5% of maximum output frequency			
Base control system	V/Hz, sensorless vector control, variable torque, closed-loop vector control, constant torque			
Efficiency	96.5% overall			
Input power factor	0.96			
Overload capacity	115% for 60 s, 100% continuous			
Input voltage supply	3.3 kV to 13.8 kV, 50/60 Hz (dry-type transformer) or 0.38 kV to 34.5 kV, 50/60 Hz user specified (liquid-filled transformer)			
Input tolerance	Voltage: ±10%; Frequency: ±5%			
Output	Voltage: 0 to 4,160/4,500 V; Frequency: 0 to 120 Hz			
Main input power	Three-phase input isolation transformer, 36-pulse design with visible input fused isolation switch (optional for liquid-filled transformer >6.6 kV) and precharge circuitry			
Control power supply	2-kVA control power transformer providing 110 V			
Internal protective functions	Current limit, overcurrent, overcharge, overload, undervoltage, overvoltage, ground fault, CPU error, internal RTDs for temperature monitoring			
PWM carrier frequency	2.048 kHz			
Output transistor type	Medium-voltage IGBT			
Applicable standards	Electrical performance: NEC, ANSI			
Components and others	NEC, NEMA, UL,†† cUL††			
Construction Specifications				
Panel construction	Free-standing, front-maintenance type, back or bottom access for motor and input power cables			
	Two sections: input transformer section and inverter section			
Cooling	Dry-type transformer section, convection cooled; heat eliminated through passive vents at top of drive			
	Liquid-filled transformer section type, ONAN cooled			
	Inverter section: power modules mounted on heat sinks, forced air cooled and cooled using plate-type heat exchangers			
Paint color	Bright white			

SpeedStar MVD Outdoor

Environmental Ratings	
Overall enclosure type	NEMA 3R rated, gasketed[††], or filtered outdoor MVD with liquid-filled transformer[‡‡]
Ambient temperature operating range, degF [degC]	–13 to 122 [–25 to 50][‡‡]
Ambient temperature storage range, degF [degC]	–22 to 140 [–30 to 60][‡‡]
Humidity	95% maximum (noncondensing)
Max. altitude, ft [m]	3,300 [1,000] above sea level or less
Vibration	0.5 g or less at 10–50 Hz
Installation	Outdoor, nonhazardous, noncorrosive environment

[†] For other input voltages, dimensions and weights will be advised per project.

[‡] In some models, the MVD must be derated beyond 4.16 kV.

[§]All dimensions and weights are approximate.

[††] Available with up to 6.6-kV input with dry-type transformers.

[‡‡] For MVDs with liquid-filled transformers, temperature is variable, as specified on order.

FixStar

Fixed speed drive

FixStar* Fixed Speed Drive Specifications				
Model	**5000**	**3900**	**3300**	**1500**
Voltage rating, V	5,000	3,900	3,300	1,500
Current rating, A	70; 130; 170; 200	70; 130; 170; 200	70; 130; 170; 200	70; 130; 170; 200
Frequency, Hz	50/60	50/60	50/60	50/60
Dimensions H × W × D, in [mm]	81 × 39 × 30.75 [2,060 × 995 × 785]	81 × 39 × 30.75 [2,060 × 995 × 785]	81 × 39 × 30.75 [2,060 × 995 × 785]	81 × 39 × 30.75 [2,060 × 995 × 785]
Weight, lbm [kg]	1,100 [500]	1,100 [500]	1,100 [500]	1,100 [500]
Operating temperature, degF [degC]	–40 to 122 [–40 to 50]	–40 to 122 [–40 to 50]	–40 to 122 [–40 to 50]	–40 to 122 [–40 to 50]
Storage temperature, degF [degC]	–58 to 158 [–50 to 70]	–58 to 158 [–50 to 70]	–58 to 158 [–50 to 70]	–58 to 158 [–50 to 70]
Certification	CE†	CE	CE	CE
Power rating, kVA	606; 1,126; 1,472; 1,732	473; 878; 1,148; 1,351	400; 743; 972; 1,143	182; 338; 442; 520

†CE-89/336/EC (EMC Directive).

3900-V FixStar drive high-voltage compartment.

3900-V FixStar drive low-voltage compartment.

FixStar Drive Main Components
Main disconnect switch†
Power fuses‡
Vacuum contactor†,‡
Multitap control power transformer 1 kVA
Lightning arrestors
UniConn fixed speed controller†
Three current transformers (CTs) with CT burden module set
A095 backspin shunt
CSA-type 3R enclosure
Instrument potential transformers

† CSA certification.
‡ UL certification.

FixStar Drive Optional Components
Phoenix system interface kit (UniConn controller Phoenix system card, three-phase choke and wiring)
LiftWatcher service interface kit (SCB, UniConn controller SCADA card, Phoenix system interface card (PIC) and wiring)
Bristol chart recorder kit
Pilot light kit

†Available as field-installed kits.

Instruct

All-in-one acquisition and control unit

Instruct* All-in-One Acquisition and Control Unit Specifications†	
Dimensions	
Unit length, H × W × D, in [mm]	7.1 × 8.5 × 7.4 [180 × 216 × 187]
Unit weight, lbm [kg]	9.5 [4.3]
Faceplate length, H × W, in [mm]	7.64 × 10.59 [194 × 270]
Instruct unit option cards‡, mm	172 × 170 × 25
Standard option cards, mm	172 × 130 × 20
Power supply	
Alternating current (AC)	100- to 240-V rms, 75 W, both 50 and 60 Hz
Direct current (DC)	24 V ± 2%, 75 W
Temperature rating	
Operating range, degF [degC]	–40 to 167 [–40 to 75]
Storage range, degF [degC]	–76 to 185 [–60 to 85]
Expansion card rack	
No. of slots	Four
Cards available	Modbus RS-232 or RS-485 communication card, PIC, EIC, and HTIC cards, Modbus TCP/IP card
Feature card rack	
No. of slots	Two
Input/Output	
Digital output	Three channels per card, 100- to 260-V AC rms, 10- to 28-V DC, 3 A maximum
Digital input	Six channels per card, 24-V DC power internally supplied
Analog input	Four insulated per card, double-wire channels; 0- to 10-V DC (0 to 20 mA)
Analog output	Two individually configurable per card, 4- to 20-mA current loops
Maintenance port	
Connection	USB and standard serial port connector, DB9F, Modbus RS-232
Baud rate	300/600/1,200/2,400/4,800/9,600/19,200/38,400/57,600 bps
Serial communication	Data bit: 8; stop bit: 1; parity: none
Remote communication interface	
No. of channels	One to six
Protocol	Modbus RTU and Modbus TC/IP (with optional TCP/IP card)
Baud rate	300/600/1,200/2,400/4,800/9,600/19,200/38,400/57,600 bps
Serial communication	Data bit: 7/8; stop bit: 1/2; parity: none/even/odd
Interface	RS-232, RS-485, Modbus TCP/IP (one per communication card)
Gauge interface	
Types of tools supported	Phoenix xt150 system downhole gauge, Phoenix CTS system (all types), HTIC card
Interface	PIC, EIC, or HTIC card
Data logging/trending	
Logged events	Starts, stops, alarms, trips, set point changes, system resets
Number of logged channels	Up to 32 in parallel
Data storage capacity	32,000,000 data points
Sampling rate	Individual per channel (up to one sample/s)‡

† CSA certified and CE compliant

‡ Options include sampling only when motor is running and exceeding user-set deviation limits.

Phoenix SoloConn

Data acquisition and control unit

Phoenix SoloConn* Data Acquisition and Control Unit Specifications	
Dimensions (H × W × L), in [mm]	2.6 × 4.1 × 10.75 [66 × 104 × 273] NEMA 1
Weight, lbm [kg]	3.3 [1.5] NEMA 1
Power supply	24-V DC ±5% 8W 110-V to 240-V AC, 50/60 Hz (optional)
Temperature, degF [degC]	Operating range: –40 to 140 [–40 to 60] (DC input); –40 to 122 [–40 to 50] (AC input) Storage range: –40 to 185 [–40 to 85]
Digital output	1 relay dry contact; 24-V DC 1 A, 125-V AC 0.3 A; 3-pin quick connect
Communication port	1 Modbus RS-485 port (4 or 2 wires); 2,400–57,600 bits per second; 6-pin quick connect
Configuration port	1 Modbus RS-232 DB9F port, 2,400–57,600 bits per second
Qualifications†‡ §††	CE, (c)UL, CSA, ROHS, and WEEE
Enclosure rating	NEMA 1
Downhole Gauge Interface	
No. of gauges	Max. of 1
Gauges supported	Phoenix CTS system gauges, Phoenix xt150 system gauges, MultiSensor well monitoring unit, Select downhole monitoring gauge, and UltraLite* ESP monitoring systems
Max. output voltage/current	120 V, 34 mA
Software	
Software	StarView wellsite display software
Functionality	Device configuration, including gauge coefficient upload Live data viewing, capture, and trending Internal trend memory data download to PC

† Conformité Européenne.

‡ Canadian Underwriters Laboratory.

§ Canadian Standards Association.

†† Restriction of certain hazardous substances.

Phoenix ArConn

Rack-mountable data acquisition and control unit

Phoenix ArConn* Rack-Mountable Data Acquisition and Control Unit Specifications	
Dimensions (H × W × L), in [mm]	7 × 17.5 × 15.5 [178 × 445 × 394] (19-in [48.26-cm] rack mount)
Approximate shipping weight, lbm [kg]	30.0 [13.6]
Power supply	110-V to 240-V AC, 50/60 Hz (standard device only); 16-W; full load: 16 PIC cards, 145-W (max. consumption); 24-V DC ± 5%, 150 W
Temperature, degF [degC]	Operating range: –40 to 131 [–40 to 50] Storage range: –40 to 167 [–40 to 75]
Configuration port	1 Modbus RS-232 DB9F port, 57,600 bits per second, on CPU card
Qualifications†‡§††	CE, (c)UL, CSA, and ROHS
Enclosure rating	NEMA 1, IP10
Downhole Gauge Interface	
No. of PIC V2 card slots	16
No. of gauges	1 per PIC V2 card (16 gauges)
Gauges supported	Phoenix CTS system gauges, Phoenix xt150 system, and Select downhole monitoring gauges
Max. output current/power	30 mA, 3.6 W
Max. output voltage	120-V
Cable voltage status	Short-circuit and open-line detection
Connection	Through CPU card configuration port, using straight DB-9 serial cable
Software	
PC software	StarView wellsite display software
Functionality	Device configuration, including gauge coefficient upload, live data viewing, capture, and trending; internal trend memory data download to PC
Remote Communication	
No. of channels	1 by default, up to 4
Protocol	Modbus RS-232/485
Baud rate, bits per second	300; 600; 1,200; 2,400; 4,800; 9,600; 19,200; 38,400; 57,600
Port setting	8 data bits; 1 or 2 stop bits; none, even, or odd parity
Internal Data Storage	
Event log	Up to 1,500 events, first-in, first-out basis
Type of events logged	Status change and configuration changes
Trend data	Up to 64MB (4,874,240 data points) of available memory for trending; user-settable option to write over first data in, or stop recording when memory is full
Trend data	Temperature, pressure, vibration, and tool status
Sampling rate	Up to 1 sample per second per PIC V2 card

† Conformité Européenne.

‡ Canadian Underwriters Laboratory.

§ Canadian Standards Association.

†† Restriction of certain hazardous substances. Qualifications are only valid with PIC V2 SLB PN 101095702.

SCB3

Site communication box for use with real-time data transmission

SCB3 Site Communication Box Specifications	
Wall Mount Enclosure	
Height, in [cm]	15.75 [40]
Width, in [cm]	11.8 [30]
Depth, in [cm]	6.3 [16]
Satellite Antenna	
Height, in [cm]	14.9 [38]
Width, in [cm]	14.9 [38]
Depth, in [cm]	1.1 [2.79]
Enclosure Construction	
Material	Blend of polybutylene terephthalate (PBT) and polycarbonate (PC)
Finish	Natural (off-white)
Ingress protection	NEMA 3R
Maximum altitude	2,000 m above sea level
Temperature	
Operating, degF [degC]	–40 to 167 [–40 to 75]
Storage, degF [degC]	–40 to 167 [–40 to 75]
Power	
Input	100 to 240 V AC, 50 to 60 Hz
Output	14.7 V DC, 2.6 A
Ultracapacitor	
Capacity	58 farad
Voltage	16.2 V, DC
Standards	CSA C/US safety certification, CE compliant, RoHS compliant