



VS 4" SERIES 50 HZ

SUBMERSIBLE PUMPS FOR 4" DEEP WELLS OR LARGER



INDEX

Submersible pumps for 4" deep wells or larger.....	2
Family curves.....	3
Pump identification code.....	3
Pump rating plate.....	3
Tables of hydraulic performance at 50 Hz.....	4
VS 1-2-3.....	4
VS 4-6-7.....	4
VS 8-10-15.....	5
Spare parts and material.....	6
VS 1-2-3-4-6-7-8.....	6
VS 10-15.....	7
Technical data and Performance curves at 50 Hz.....	9
VS 1.....	10
VS 2.....	12
VS 3.....	14
VS 4.....	16
VS 6.....	18
VS 7.....	20
VS 8.....	22
VS 10.....	24
VS 15.....	26

NOTE: Franklin Electric S.r.l. reserves the right to amend specification without prior notice

For the most up-to-date product information, visit franklinwater.eu.



SUBMERSIBLE PUMPS FOR 4" DEEP WELLS OR LARGER

APPLICATIONS

- Municipal water works, fountains and waste water
- Water distribution and pressure boosting
- Irrigation and sprinkler systems, water treatment plants, filtration and reverse osmosis
- Industrial cooling and processing
- Mining industry, drainage and dewatering
- Fire-fighting equipment
- Water supply to and from tanks, reservoir and wells
- Lifting and distribution of a wide range of liquids
- Autoclave and cistern charge and discharge
- Turf and landscape
- Greenhouses and nurseries
- Residential and farm wells and drainage
- Food industry
- General industry

FEATURES

- Compact, reliable and suited to operate in horizontal position
- Built-in check valve to protect the pump against water hammer risk
- Floating impellers to grant a better performance and longer life for the pump against abrasion
- The hydraulic design is such to enhance the overall efficiency thus reducing energy consumption and making the pumping systems more cost effective

PUMP SPECIFICATION

- Flow: up to 24 m³/h at 50 Hz
- Head: up to 278 m at 50 Hz
- Pumped liquid: chemically and mechanically non aggressive
- Water temperature range: from 0 °C to 40 °C
- Maximum allowable amount of sand: 100 g/m³ / Solid dimension max: 2 mm
- Maximum pump diameter (including cable guard): 95 mm
- Outlet diameter: 1" ¼ for VS 1-2-3-4, 2" for VS 6-7-8-10-15
- Rotation: counter clockwise when looking into the discharge
- Pump can work continuously in vertical or horizontal position

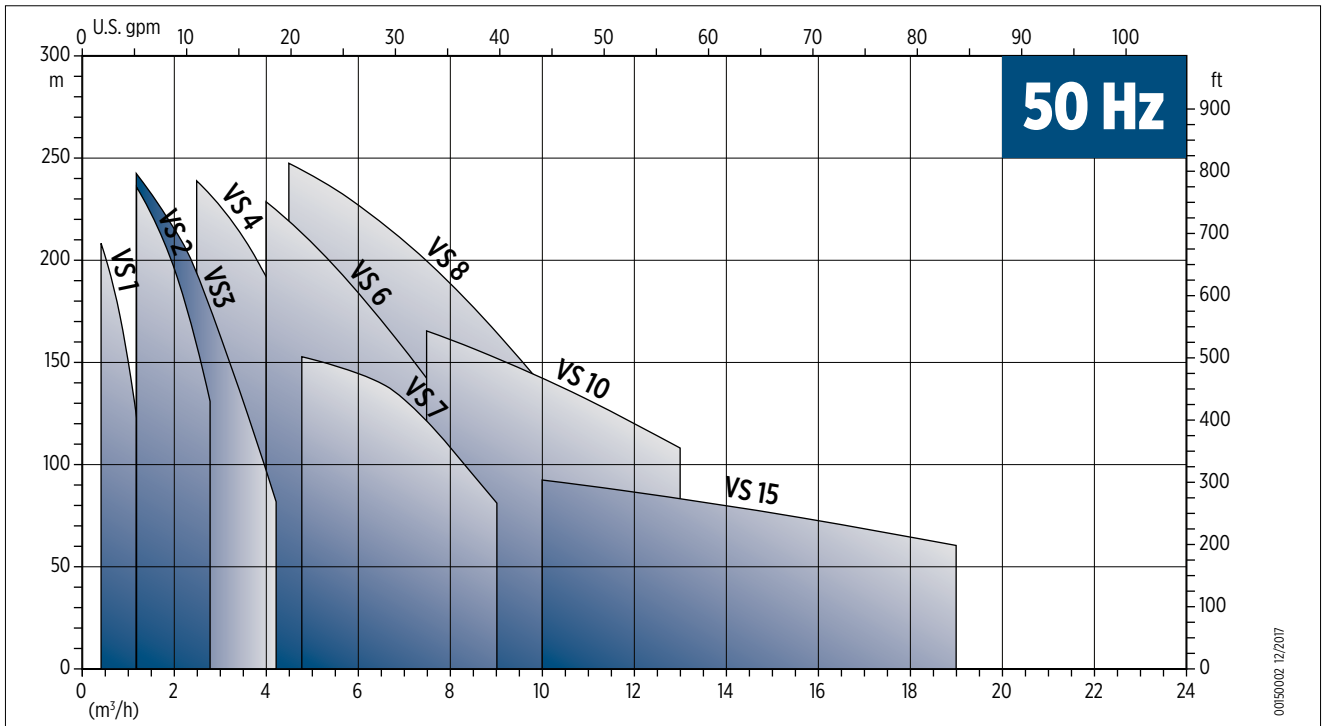
MOTOR SPECIFICATION

- Motor adapter in compliance with NEMA standard
- For more information consult the product catalog of Submersible motors

AVAILABLE ON REQUEST

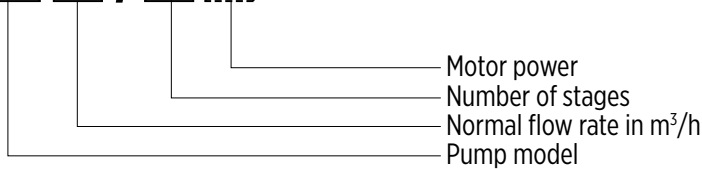
- Cooling shroud

FAMILY CURVES



PUMP IDENTIFICATION CODE

VS 10 / 14



00140002EN 08/2017

PUMP RATING PLATE

Franklin Electric

Imported by
Franklin Electric S.r.l
Via Asolo, 7
36031 Dueville (VI) - ITALY
P-IVA IT00558130241

Type ① Serial No ② Year ③

min ⁻¹	Q(m ³ /h)	H(m)	Hmax(m)	kW	S.F.	MEI ≥	Hyd.Eff
④	⑤	⑥	⑦	⑧	⑨	⑩	⑪

Part No : ⑫

00140064 05/2019

- 1) Model
- 2) Serial number
- 3) Year of production
- 4) Nominal Rpm
- 5) Delivery range
- 6) Head range
- 7) Maximum head
- 8) Motor power
- 9) Service factor
- 10) MEI index
- 11) Hydraulic efficiency
- 12) Code

TABLES OF HYDRAULIC PERFORMANCE AT 50 HZ

VS 1-2-3

Pump model	RATED POWER		Q = DELIVERY													
			m ³ /h 0	0.4	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.8	3	3.3	3.6	4.2
	[kW]	[HP]	l/min 0	6.7	10	15	20	25	30	35	40	47	50	55	60	70
			H = TOTAL M.HEAD OF WATER COLUMN [m]													
VS 1/10	0.37	0.5	68	56	53	45	35	18								
VS 1/13	0.37	0.5	83	68	64	54	39	20								
VS 1/19	0.55	0.75	118	100	94	80	57	30								
VS 1/26	0.75	1	156	136	126	105	75	41								
VS 1/38	1.1	1.5	241	209	193	162	117	63								
VS 2/5	0.37	0.5	34				30	29	27	25	22	17	14	10		
VS 2/7	0.37	0.5	47				43	40	37	35	30	24	20	14		
VS 2/10	0.55	0.75	67				60	57	54	49	43	34	28	20		
VS 2/14	0.75	1	94				85	80	75	68	60	46	39	27		
VS 2/20	1.1	1.5	133				120	114	107	97	86	66	56	40		
VS 2/27	1.5	2	189				164	154	145	132	115	90	75	53		
VS 2/39	2.2	3	259				235	222	209	190	167	130	110	75		
VS 3/4	0.37	0.5	28					25	24	23	22	20	19	17	15	10
VS 3/7	0.55	0.75	48					42	40	39	36	33	30	28	24	16
VS 3/10	0.75	1	70					62	59	56	52	48	44	39	34	23
VS 3/15	1.1	2	104					92	88	83	78	72	65	58	51	34
VS 3/20	1.5	2	140					124	119	112	105	97	87	77	66	43
VS 3/30	2.2	3	205					183	175	164	154	142	128	113	98	65
VS 3/37	3	4	257					232	222	210	194	179	161	143	123	82

VS 4-6

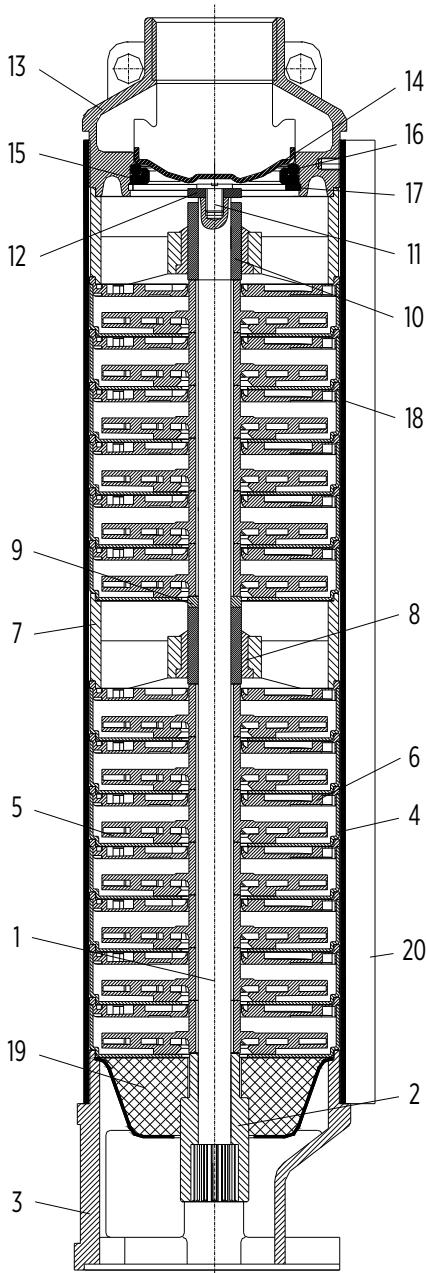
Pump model	RATED POWER		Q = DELIVERY													
			m ³ /h 0	2.5	2.7	3	3.3	3.6	4.2	4.8	5.5	6	7	7.2	8	9
	[kW]	[HP]	l/min 0	42	45	50	55	60	70	80	92	100	117	120	133	150
			H = TOTAL M.HEAD OF WATER COLUMN [m]													
VS 4/4	0.37	0.5	25	22	21	20	20	19	17	14	11	8				
VS 4/7	0.55	0.75	45	39	27	36	35	34	29	25	19	14				
VS 4/10	0.75	1	64	55	54	52	49	47	42	35	26	19				
VS 4/14	1.1	1.5	89	77	75	72	68	65	59	50	37	26				
VS 4/18	1.5	2	114	98	95	93	88	85	80	64	49	34				
VS 4/27	2.2	3	170	146	145	139	133	127	114	95	73	50				
VS 4/32	3	4	222	174	170	165	157	150	135	113	86	60				
VS 4/40	3.7	5	252	216	223	212	196	189	166	141	107	75				
VS 4/44	4	5.5	278	240	235	226	217	207	185	155	116	83				
VS 6/6	0.75	1	36						32	30	28	26	23	22	18	14
VS 6/9	1.1	1.5	53						47	44	41	39	33	32	25	17
VS 6/13	1.5	2	77						70	66	63	60	52	50	43	32
VS 6/19	2.2	3	110						100	95	90	85	74	72	60	41
VS 6/26	3	4	150						134	126	120	110	94	90	73	49
VS 6/31	3.7	5	185						165	155	146	136	115	110	90	59
VS 6/34	4	5.5	200						178	165	155	145	123	118	95	64
VS 6/45	5.5	7.5	269						239	223	208	191	160	155	128	94

VS 7-8-10-15

Pump model	RATED POWER		Q = DELIVERY																					
			m ³ /h 0	4.5	5.4	6	7	7.5	8	8.4	9	9.6	10	11	12	13	14.5	15	16	17	18	19	24	
	[kW]	[HP]	l/min 0	75	90	100	117	125	133	140	150	160	167	183	200	217	242	250	267	283	300	317	400	
		H = TOTAL M.HEAD OF WATER COLUMN [m]																						
VS 7/8	0.75	1	36	29	28	26	25	24	21	17	16													
VS 7/11	1.1	1.5	50	40	39	38	35	32	29	25	21													
VS 7/16	1.5	2	72	60	55	53	49	45	41	36	30													
VS 7/24	2.2	3	105	87	83	79	72	68	59	53	43													
VS 7/32	3	4	140	114	110	105	97	90	80	72	58													
VS 7/40	3.7	5	176	145	137	135	124	107	103	88	77													
VS 7/44	4	5.5	189	159	151	144	132	124	109	96	82													
VS 8/4	0.75	1	25	29	23	22	20	19	18	17	15	14	12	10										
VS 8/6	1.1	1.5	38	36	35	33	31	30	27	26	24	21	19	15										
VS 8/9	1.5	2	57	54	50	49	46	45	40	39	35	32	28	23										
VS 8/14	2.2	3	88	84	78	75	70	68	62	60	54	48	43	34										
VS 8/18	3	4	113	107	101	92	90	87	80	75	70	61	55	45										
VS 8/23	4	5.5	153	140	131	126	117	114	105	100	91	82	75	60										
VS 8/32	5.5	7.5	250	190	179	173	160	155	145	140	127	117	106	88										
VS 8/42	7.5	10	277	251	237	227	210	203	189	181	165	150	135	114										
VS 10/5	1.1	1.5	30					24	24	23	22	21	20	18	16	14	10							
VS 10/7	1.5	2	42					34	33	33	31	30	28	27	23	20	16							
VS 10/11	2.2	3	64					52	51	50	47	45	43	39	35	30	23							
VS 10/14	3	4	82					67	66	65	61	58	56	52	45	40	30							
VS 10/18	4	5.5	107					92	89	87	83	80	77	70	63	55	45							
VS 10/25	5.5	7.5	150					126	124	121	117	112	108	100	91	82	66							
VS 10/32	7.5	10	194					165	160	157	152	145	140	139	120	108	89							
VS 15/8	2.2	3	46											35	33	32	30	27	26	26	25	23	21	10
VS 15/10	3	4	58											43	41	40	38	30	34	33	30	29	27	13
VS 15/12	4	5.5	69											52	50	48	45	42	41	39	37	35	32	15
VS 15/16	5.5	7.5	92											69	66	63	60	56	55	52	49	46	43	20
VS 15/21	7.5	10	121											91	87	84	80	74	72	68	64	60	56	27

SPARE PARTS AND MATERIAL

VS 1-2-3-4-6-7-8



00130014 06/2017

Ref. No.	Part description	Material	Standard	
			ASTM/AISI	DIN/EN
1	Shaft	Stainless Steel	AISI 304	1.4301
2	Coupling	Stainless Steel	AISI 304	1.4301
3	Motor support	Stainless Steel	AISI 304	1.4301
4	Body	Stainless Steel (VS 1-2-3-4-6-8)	AISI 304	1.4301
		Noryl®* (VS 7)	-	-
5	Impeller	Polycarbonate	-	-
6	Diffuser	Noryl®*	-	-
7	Bearing housing	Resin	-	-
8	Bearing bushing	Resin	-	-
9	Upper spacer	Polycarbonate	-	-
10	Upper journal sleeve	Stainless Steel	AISI 316	1.4401
11	Screw	Stainless Steel	AISI 304	1.4301
12	Washer	Stainless Steel	AISI 316	1.4401
13	Discharge	Stainless Steel	AISI 304	1.4301
14	Check valve disc	Stainless Steel	AISI 304	1.4301
15	Check valve ring	Stainless Steel	AISI 420	1.4021
16	Check valve O-ring	Rubber	-	-
17	Check valve snap ring	Stainless Steel	AISI 304	1.4301
18	Outer case	Stainless Steel	AISI 304	1.4301
19	Strainer	Stainless Steel	AISI 304	1.4301
20	Cable guard	Stainless Steel	AISI 304	1.4301

* Noryl® is a Registered Trademark of G.E.

Technical Data and Performance Curves

50 Hz

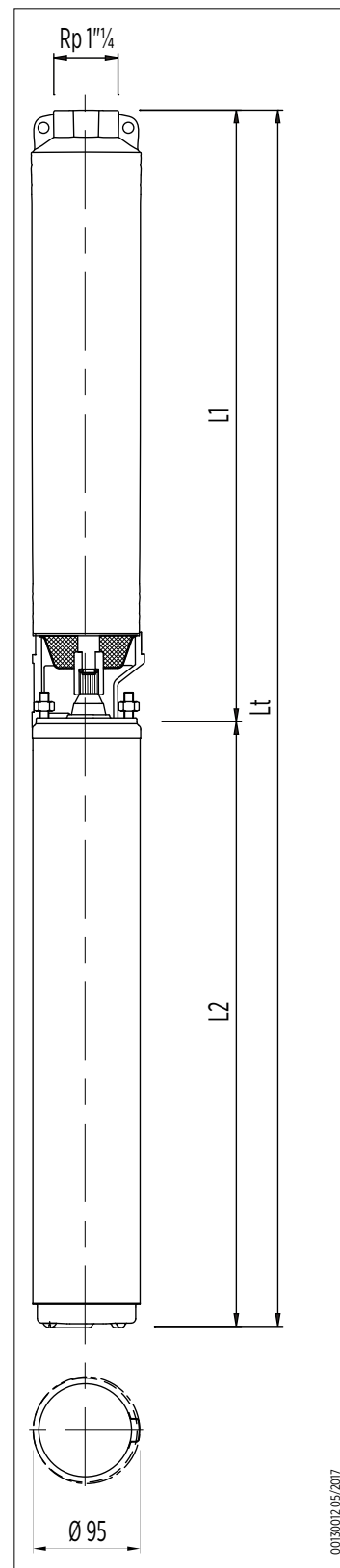
The pumps are according to EU regulation No 547/2012

For more information please consult our website franklinwater.eu

VS 1 - TECHNICAL DATA

PUMPS WITH ENCAPSULATED MOTOR

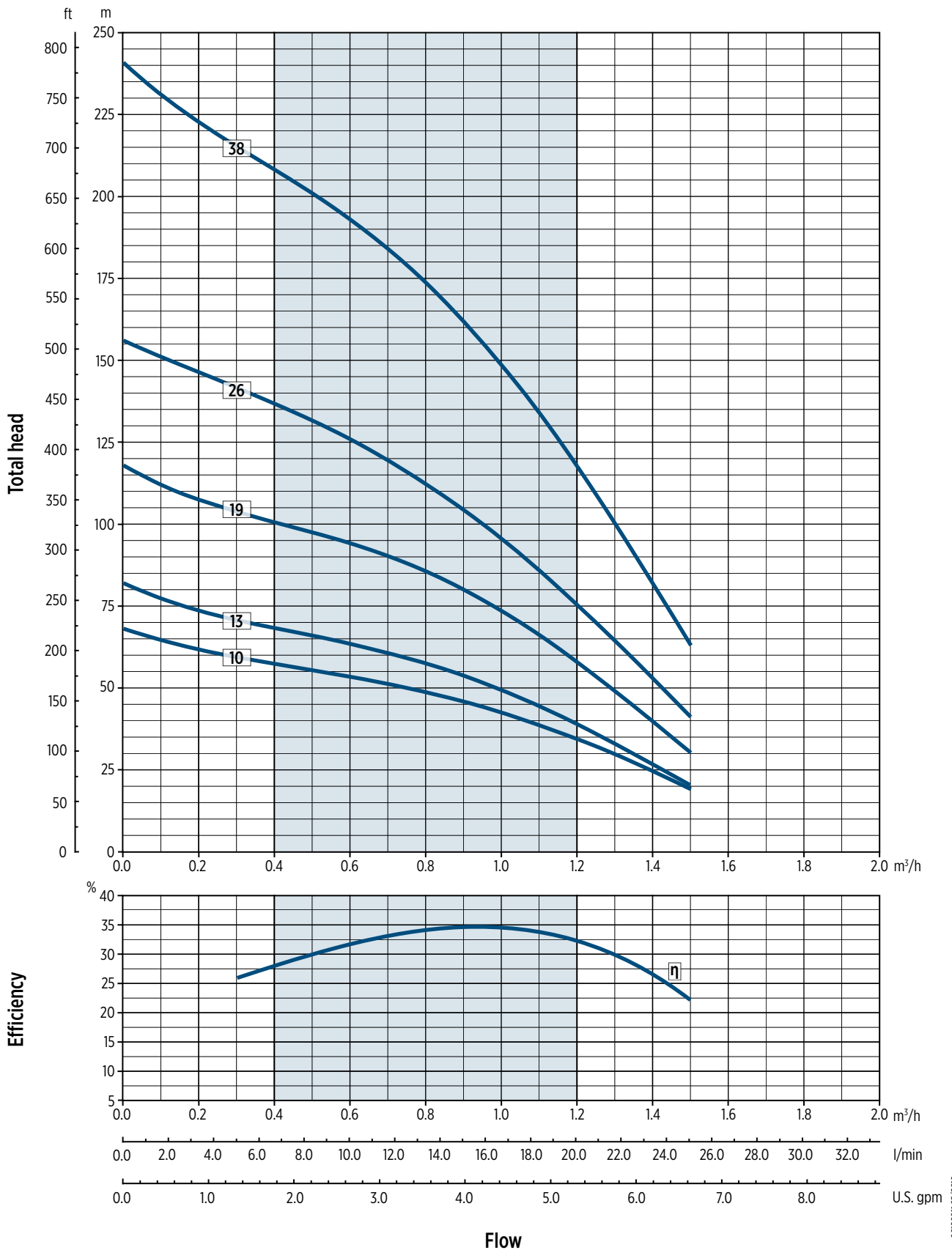
Pump model	Motor			Dimensions [mm]					Weight [Kg]				
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total	
					1-	3-	1-	3-		1-	3-	1-	3-
VS 1/10	E4	0.37	0.5	368	228	214	596	582	4.0	7.8	7.2	11.8	11.2
VS 1/13	E4	0.37	0.5	420	228	214	648	634	4.5	7.8	7.2	12.3	11.7
VS 1/19	E4	0.55	0.75	528	248	228	776	756	5.6	8.7	7.7	16.4	13.3
VS 1/26	E4	0.75	1.0	680	282	248	962	928	7.4	10.0	8.7	17.4	16.1
VS 1/38	E4	1.1	1.5	921	338.5	282.5	1259.5	1203.5	10.0	12.6	10.2	22.6	20.2



00130012.05/2017

VS 1 - PERFORMANCE CURVES AT 50 Hz

MEI ≥ 0,40

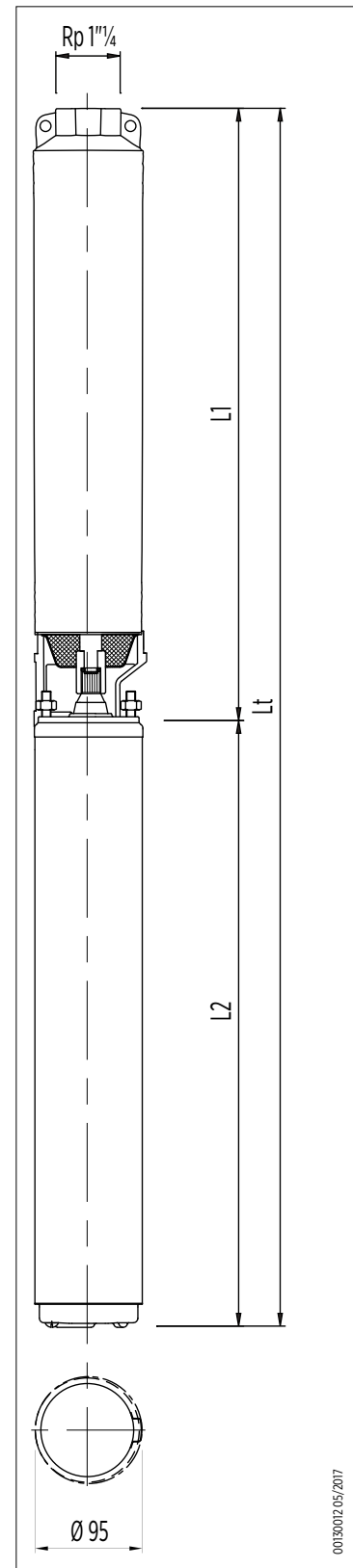


00120011/05/2019

VS 2 - TECHNICAL DATA

PUMPS WITH ENCAPSULATED MOTOR

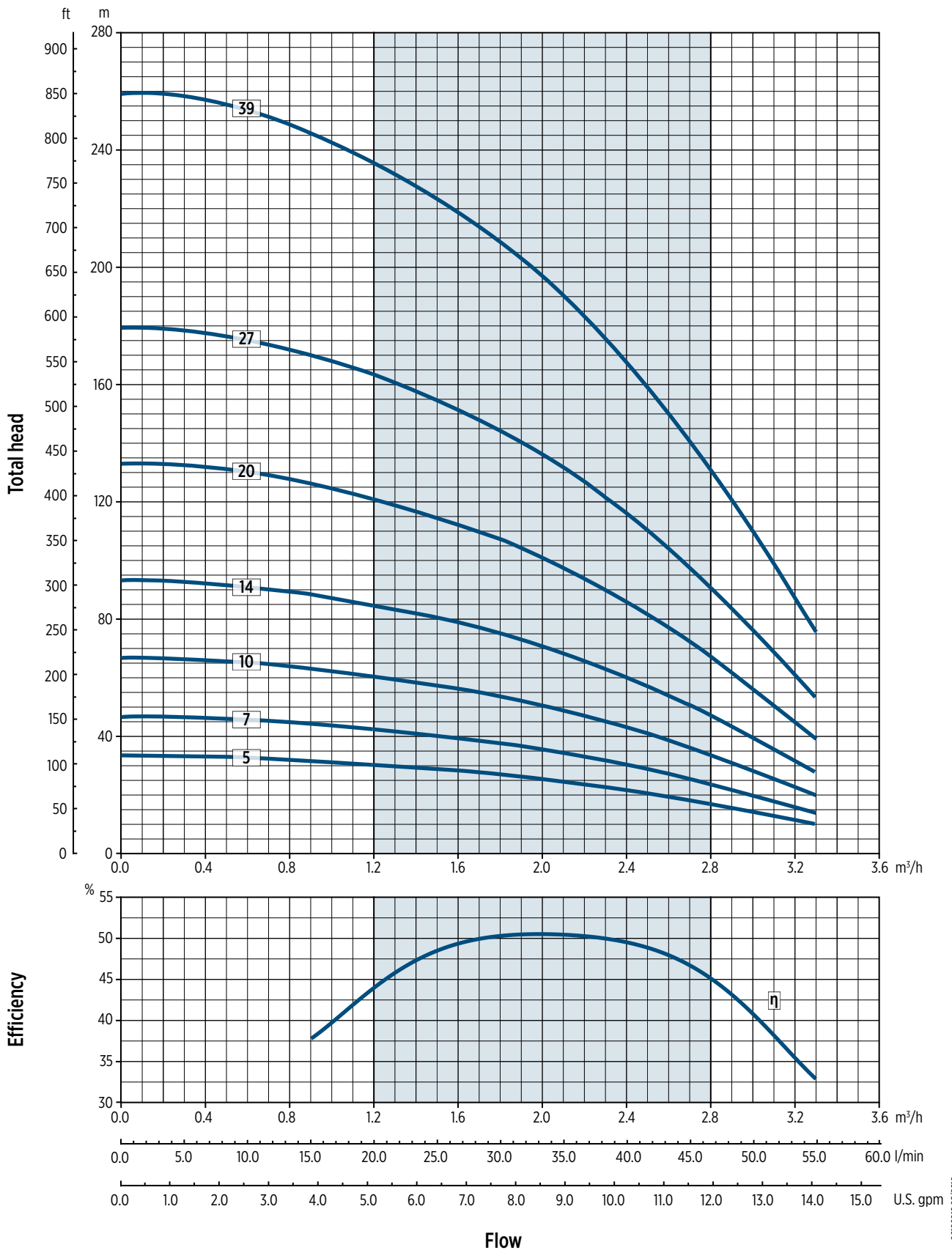
Pump model	Motor Type	Motor		Dimensions [mm]						Weight [Kg]			
		[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total	
					1-	3-	1-	3-		1-	3-	1-	3-
VS 2/5	E4	0.37	0.5	278	228	214	506	492	3.0	7.8	7.2	10.8	10.2
VS 2/7	E4	0.37	0.5	314	228	214	542	528	3.4	7.8	7.2	11.2	10.6
VS 2/10	E4	0.55	0.75	367	248	228	615	595	4.0	8.7	7.7	12.7	11.7
VS 2/14	E4	0.75	1	438	282.5	248	720.5	686	4.6	10.0	8.7	14.6	13.3
VS 2/20	E4	1.1	1.5	542	338.5	282.5	880.5	824.5	5.6	12.6	10.2	18.2	15.8
VS 2/27	E4	1.5	2	695	349.5	306.5	1044.5	1001.5	7.1	13.0	11.2	20.1	18.3
VS 2/39	E4	2.2	3	934	436.5	338.5	1370.5	1272.5	9.4	16.9	12.6	26.3	22.0



00130012.05/2017

VS 2 - PERFORMANCE CURVES AT 50 Hz

MEI ≥ 0,40

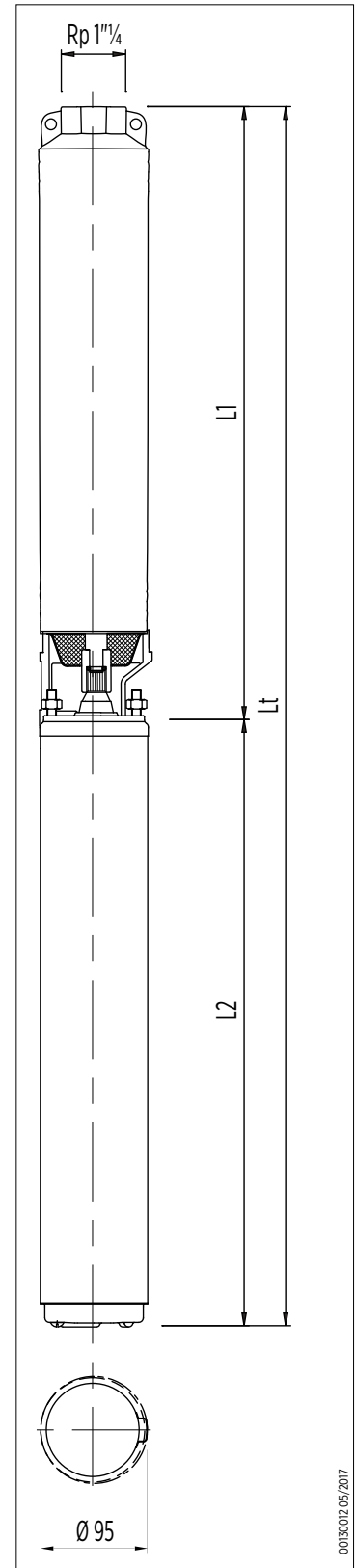


00720012/05/2019

VS 3 - TECHNICAL DATA

PUMPS WITH ENCAPSULATED MOTOR

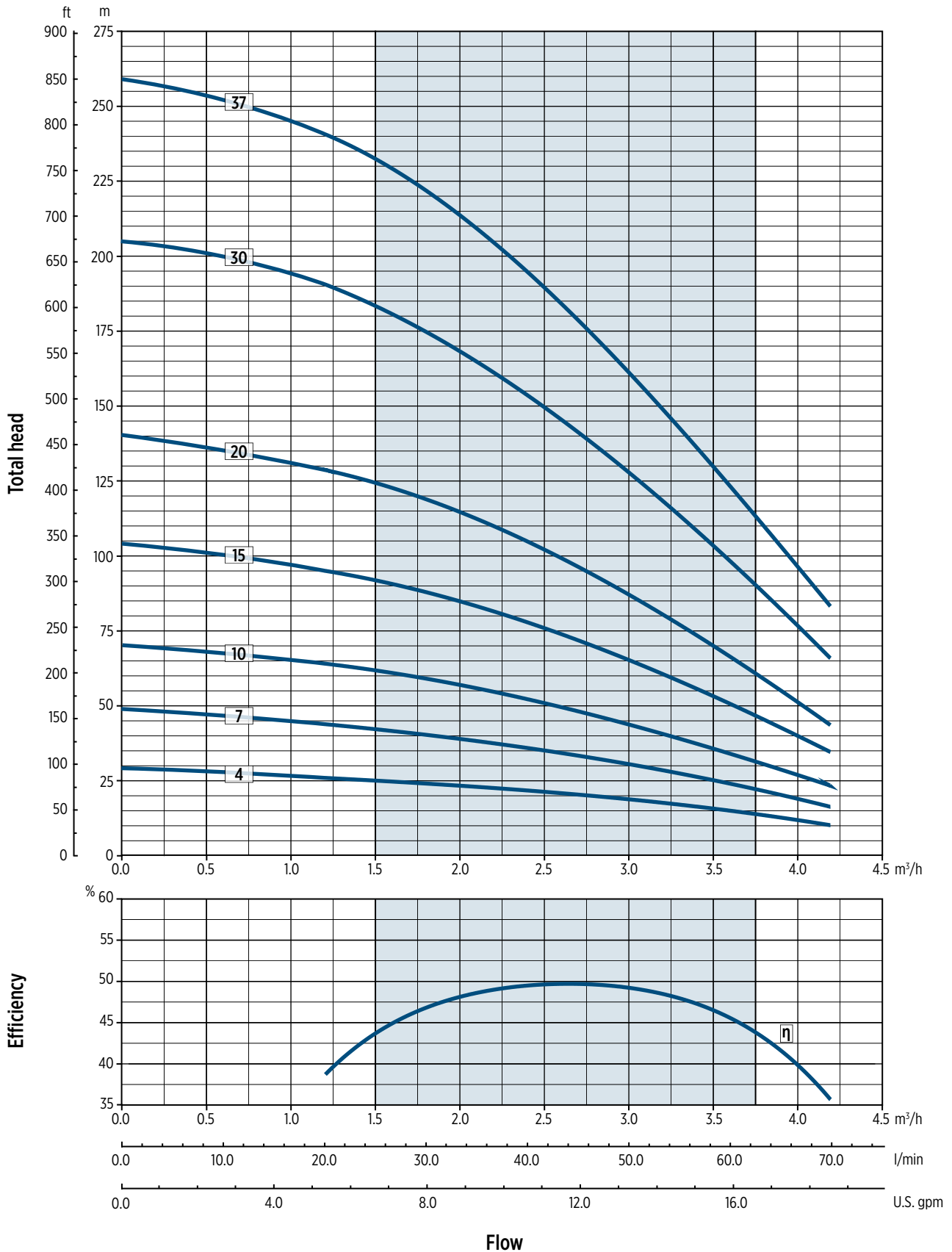
Pump model	Motor			Dimensions [mm]					Weight [Kg]				
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total	
					1-	3-	1-	3-		1-	3-	1-	3-
VS 3/4	E4	0.37	0.5	275	228	214	503	489	2.6	7.8	7.2	10.4	9.8
VS 3/7	E4	0.55	0.75	345	248	228	593	573	3.2	8.7	7.7	11.9	10.9
VS 3/10	E4	0.75	1	410	282.5	248	692.5	658	3.8	10.0	8.7	13.8	12.5
VS 3/15	E4	1.1	2	525	338.5	282.5	863.5	807.5	4.5	12.6	10.2	17.1	14.7
VS 3/20	E4	1.5	2	630	349.5	306.5	979.5	936.5	5.5	13.0	11.2	18.5	16.7
VS 3/30	E4	2.2	3	875	436.5	338.5	1311.5	1213.5	7.8	16.9	12.6	24.7	20.4
VS 3/37	E4	3	4	1065	-	393.5	-	1458.5	9.3	-	15.0	-	24.3



00130102.05/2017

VS 3 - PERFORMANCE CURVES AT 50 Hz

MEI ≥ 0,40

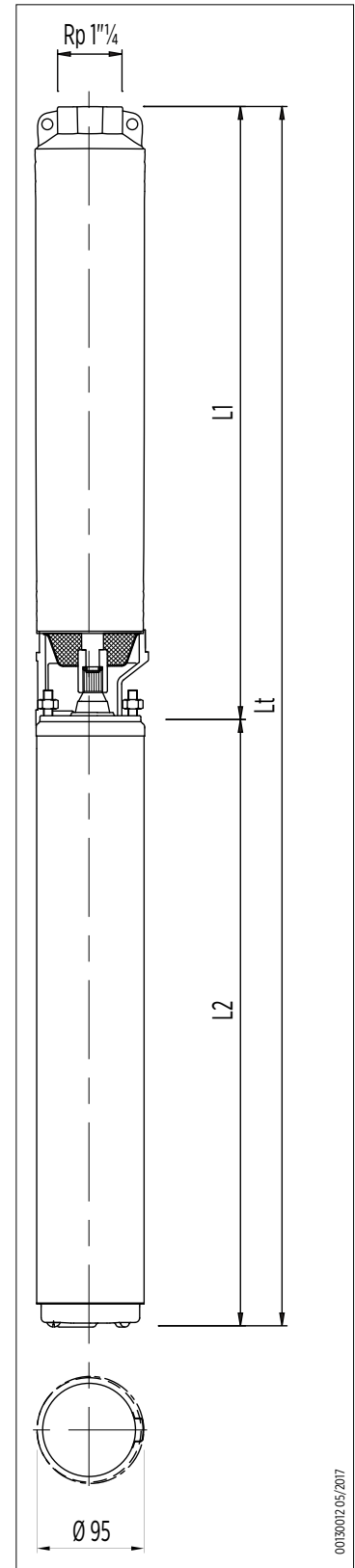


0012107_05/2019

VS 4 - TECHNICAL DATA

PUMPS WITH ENCAPSULATED MOTOR

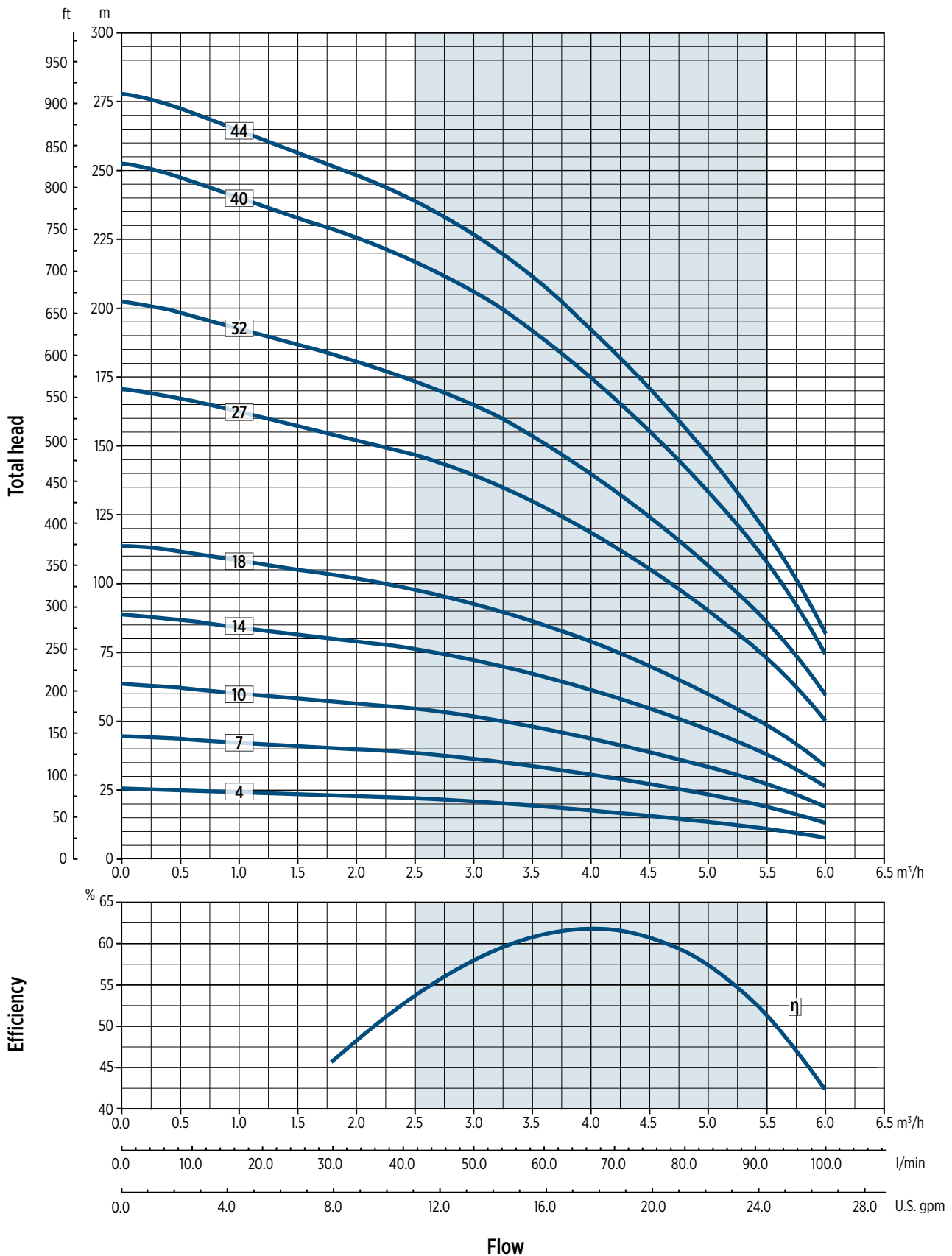
Pump model	Motor			Dimensions [mm]					Weight [Kg]				
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total	
					1-	3-	1-	3-		1-	3-	1-	3-
VS 4/4	E4	0.37	0.5	278	228	214	506	492	2.9	7.8	7.2	10.7	10.1
VS 4/7	E4	0.55	0.75	343	248	228	591	571	3.5	8.7	7.7	12.2	11.2
VS 4/10	E4	0.75	1	411	282.5	248	693.5	659	4.2	10.0	8.7	14.2	12.9
VS 4/14	E4	1.1	1.5	498	338.5	282.5	836.5	780.5	5.1	12.6	10.2	17.7	15.3
VS 4/18	E4	1.5	2	588	349.5	306.5	937.5	894.5	5.9	13.0	11.2	18.9	17.1
VS 4/27	E4	2.2	3	784	436.5	338.5	1220.5	1122.5	7.2	16.9	12.6	24.1	19.8
VS 4/32	E4	3	4	953	-	393.5	-	1346.5	9.2	-	15.0	-	24.2
VS 4/40	E4	3.7	5	1128	-	520	-	1648	10.5	-	19.1	-	29.6
VS 4/44	E4	4	5.5	1219	-	543	-	1762	11.8	-	20.0	-	31.8



00130102.05/2017

VS 4 - PERFORMANCE CURVES AT 50 Hz

MEI ≥ 0,40

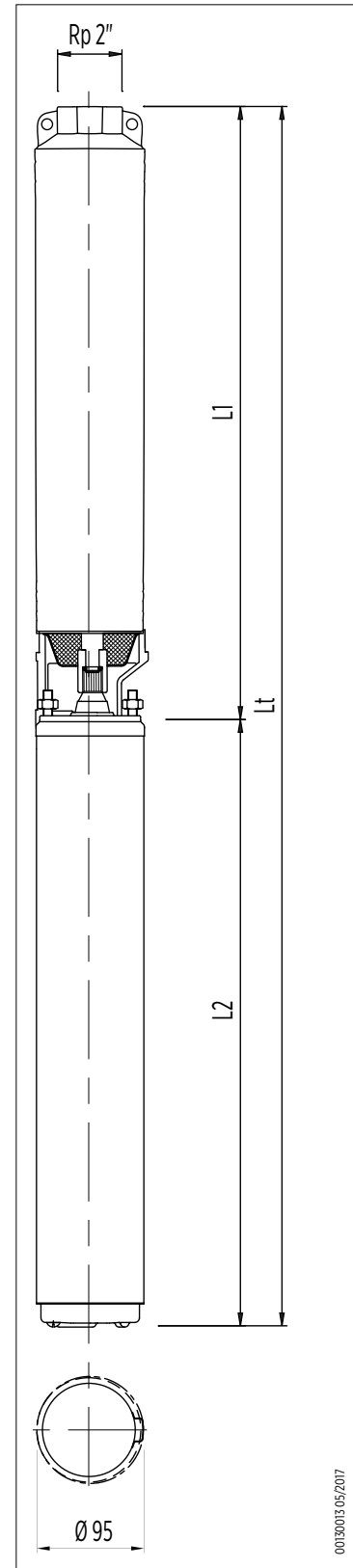


0072013.05/2019

VS 6 - TECHNICAL DATA

PUMPS WITH ENCAPSULATED MOTOR

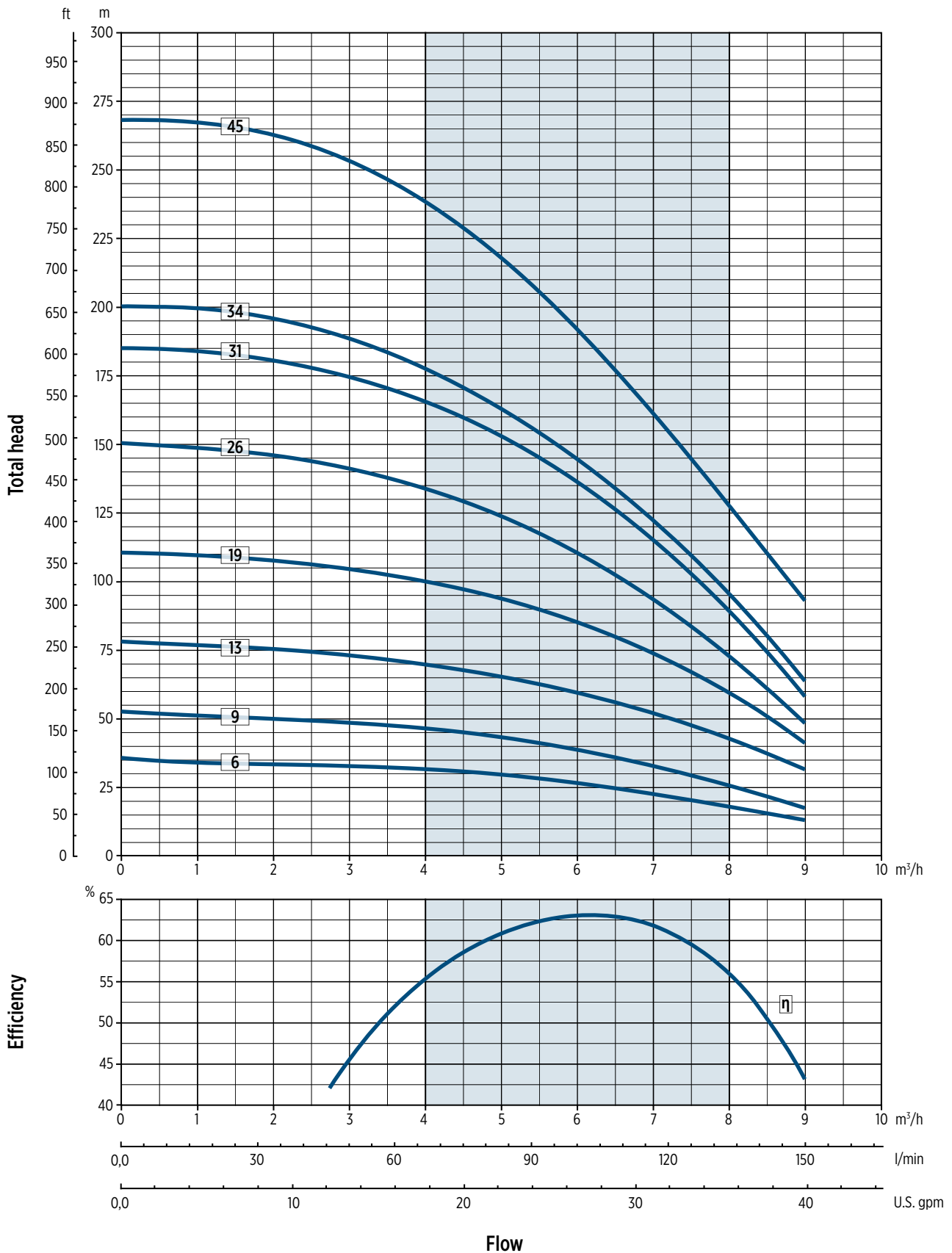
Pump model	Motor			Dimensions [mm]					Weight [Kg]					
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total		
					1-	3-	1-	3-		1-	3-	1-	3-	
VS 6/6	E4	0.75	1	371	282.5	248	653.5	619	3.2	10.0	8.7	13.2	11.9	
VS 6/9	E4	1.1	1.5	461	338.5	282.5	799.5	743.5	4.0	12.6	10.2	16.6	14.2	
VS 6/13	E4	1.5	2	612	349.5	306.5	961.5	918.5	5.3	13.0	11.2	18.3	16.5	
VS 6/19	E4	2.2	3	821	436.5	338.5	1257.5	1159.5	7.3	16.9	12.6	24.2	19.9	
VS 6/26	E4	3	4	1031	-	393.5	-	1424.5	8.7	-	15.0	-	23.7	
VS 6/31	E4	3.7	5	1212	-	520	-	1732	10.2	-	19.1	-	29.3	
VS 6/34	E4	4	5.5	1303	-	543	-	1846	10.9	-	20.0	-	30.9	
VS 6/45	E4	5.5	7.5	1631	-	652.5	-	2283.5	14.1	-	26.6	-	40.7	



00130103 05/2017

VS 6 - PERFORMANCE CURVES AT 50 Hz

MEI ≥ 0,40

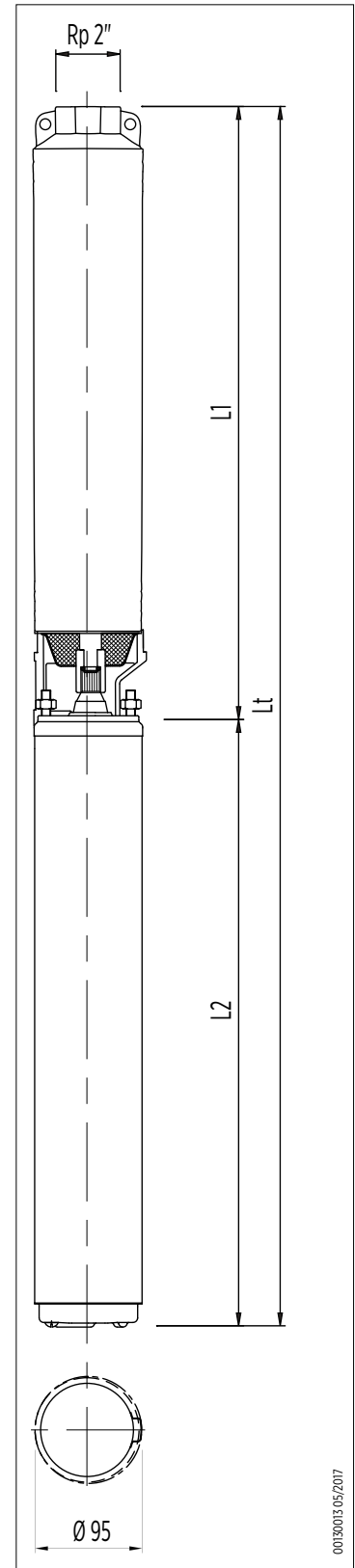


002004_05/2019

VS 7 - TECHNICAL DATA

PUMPS WITH ENCAPSULATED MOTOR

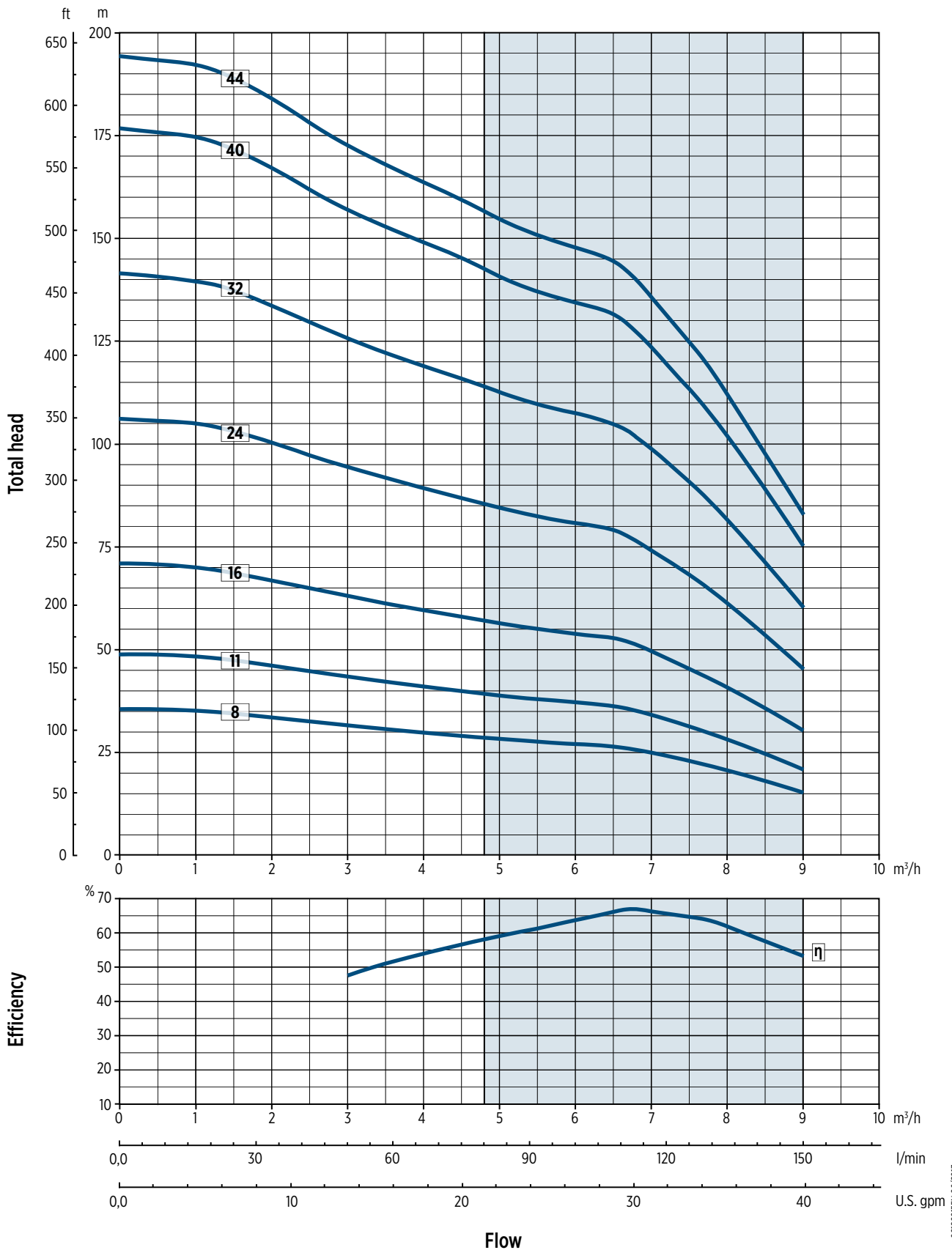
Pump model	Motor			Dimensions [mm]					Weight [Kg]					
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total		
					1-	3-	1-	3-		1-	3-	1-	3-	
VS 7/8	E4	0.75	1	440	298	272	738	712	3.5	9.3	7.25	12.8	10.75	
VS 7/11	E4	1.1	1.5	542	322	298	864	840	4.5	10.45	8.55	14.95	13.05	
VS 7/16	E4	1.5	2	713	354	322	1067	1035	68	11.9	9.55	79.9	77.55	
VS 7/24	E4	2.2	3	1014	452	354	1466	1368	8	16.65	11.05	24.65	19.05	
VS 7/32	E4	3	4	1318	-	409	-	1727	10	-	13.55	-	23.55	
VS 7/40	E4	3.7	5	1618	-	520	-	2138	12	-	26.6	-	38.6	
VS 7/44	E4	4	5.5	1755	-	543	-	2298	13.5	-	30.6	-	44.1	



00130013 05/2017

VS 7 - PERFORMANCE CURVES AT 50 Hz

MEI ≥ 0,40

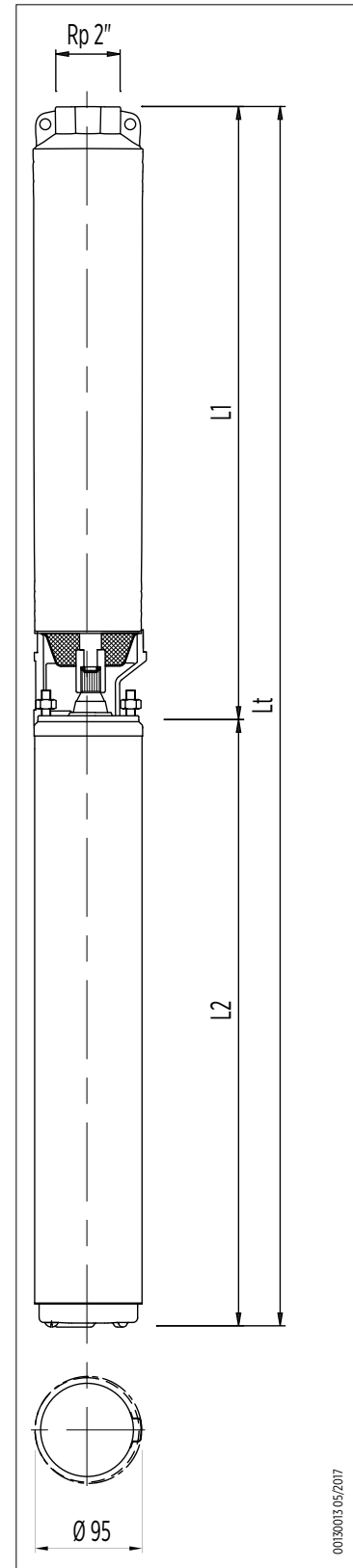


00120015EN 06/2017

VS 8 - TECHNICAL DATA

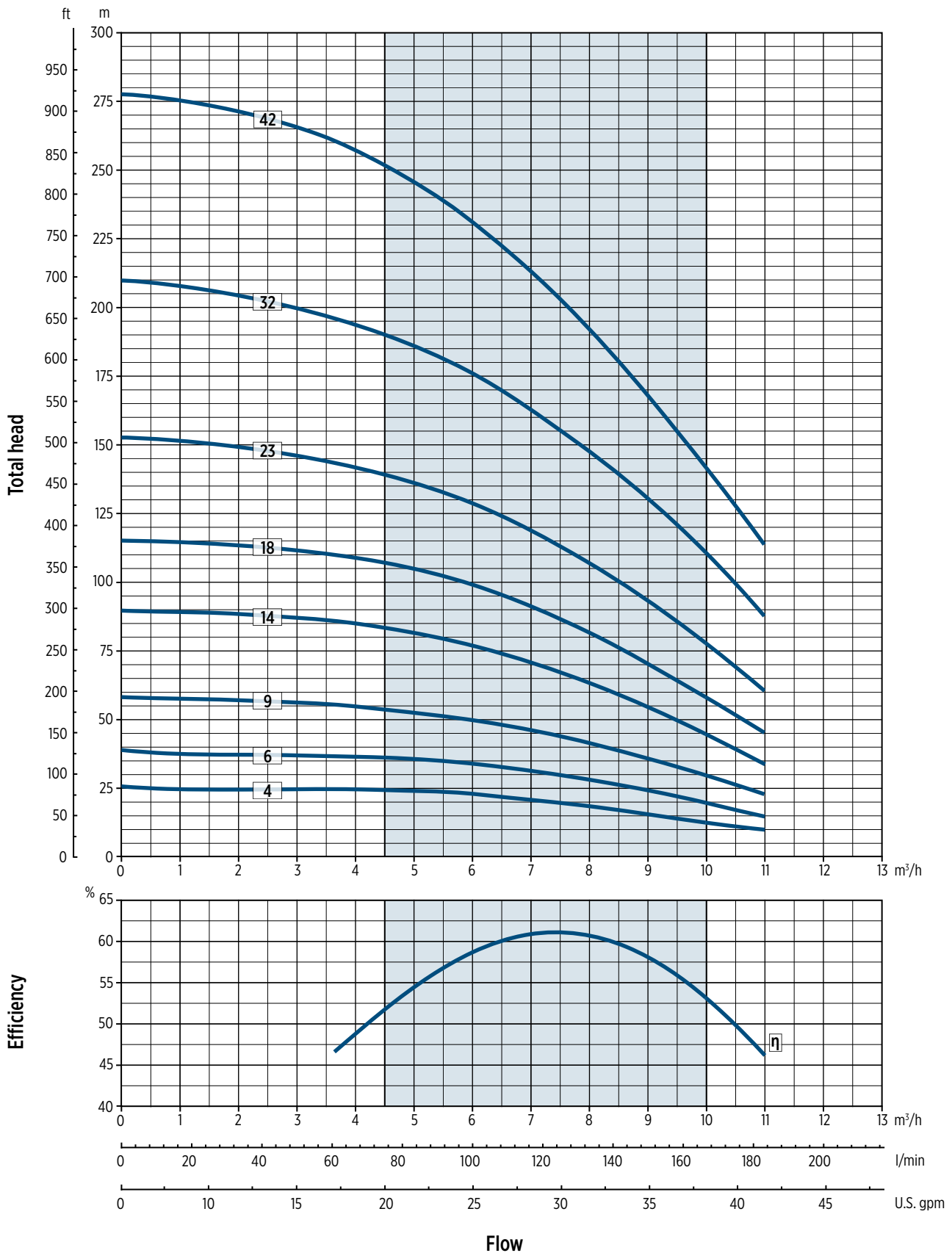
PUMPS WITH ENCAPSULATED MOTOR

Pump model	Motor			Dimensions [mm]					Weight [Kg]				
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total	
					1-	3-	1-	3-		1-	3-	1-	3-
VS 8/4	E4	0.75	1	311	282.5	248	593.5	559	2.9	10.0	8.7	12.9	11.6
VS 8/6	E4	1.1	1.5	371	338.5	282.5	709.5	653.5	3.2	12.6	10.2	15.8	13.4
VS 8/9	E4	1.5	2	461	349.5	306.5	810.5	767.5	4.0	13.0	11.2	17.0	15.2
VS 8/14	E4	2.2	3	643	436.5	338.5	1079.5	981.5	5.4	16.9	12.6	22.3	18.0
VS 8/18	E4	3	4	793	-	393.5	-	1186.5	6.6	-	15.0	-	21.6
VS 8/23	E4	4	5.5	943	-	543	-	1486	7.7	-	20.0	-	27.7
VS 8/32	E4	5.5	7.5	1245	-	652.5	-	1897.5	10.1	-	26.6	-	36.7
VS 8/42	E4	7.5	10	1576	-	730.5	-	2306.5	12.8	-	30.6	-	42.4



00130013 05/2017

VS 8 - PERFORMANCE CURVES AT 50 Hz

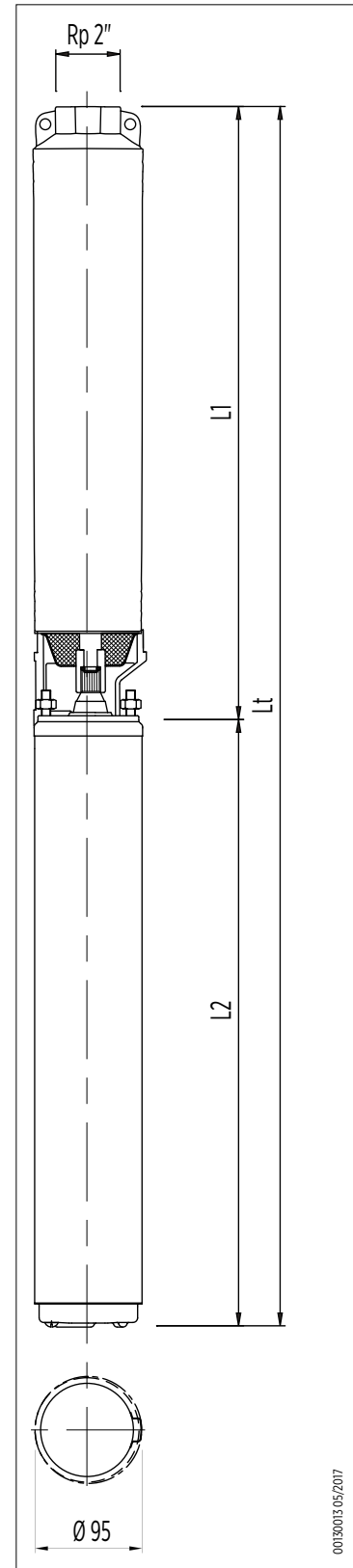


00720016 05/2019

VS 10 - TECHNICAL DATA

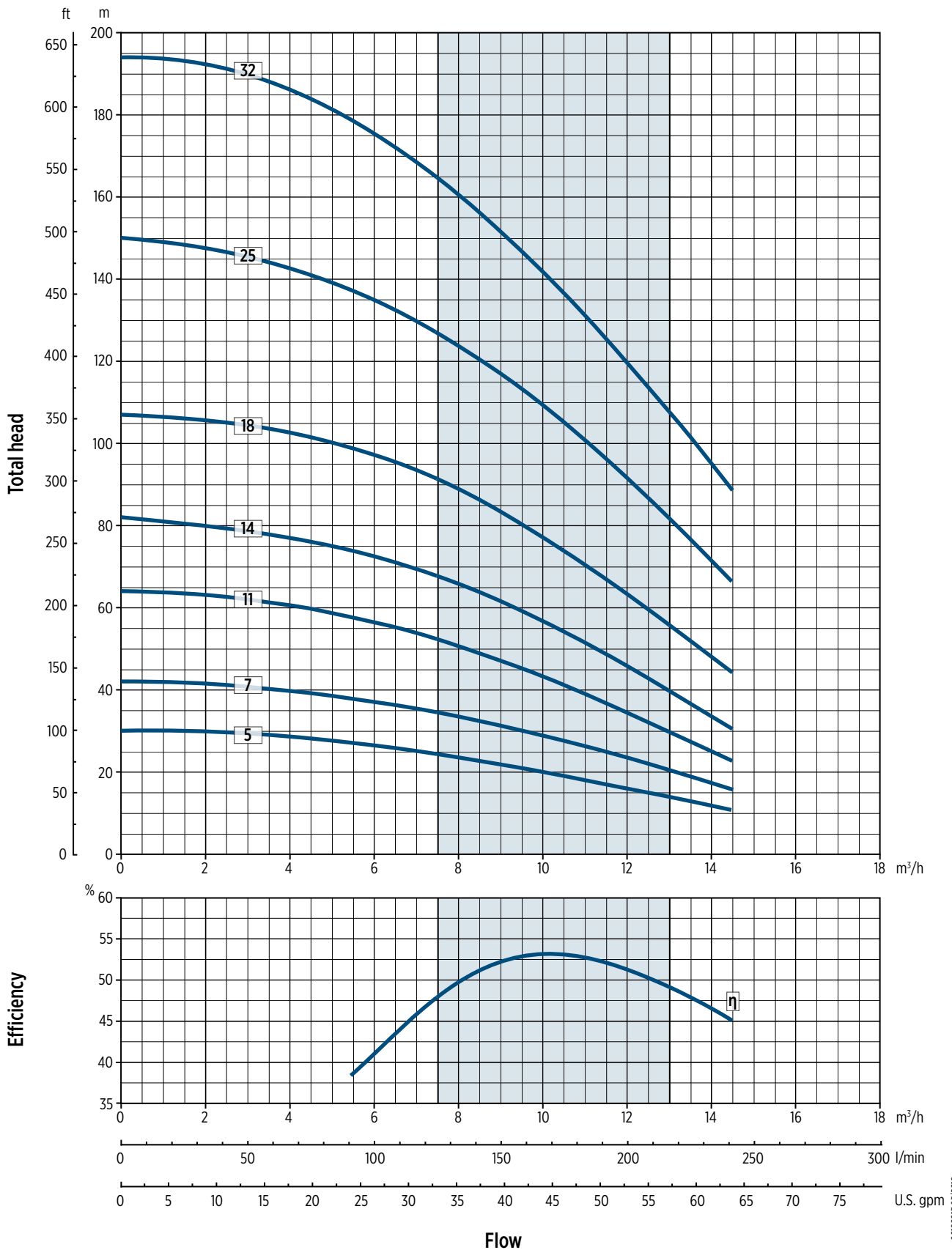
PUMPS WITH ENCAPSULATED MOTOR

Pump model	Motor			Dimensions [mm]				Weight [Kg]					
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total	
					1-	3-	1-	3-		1-	3-	1-	3-
VS 10/5	E4	1.1	1.5	440	338.5	282.5	778.5	722.5	3.7	12.6	10.2	16.3	13.9
VS 10/7	E4	1.5	2	541	349.5	306.5	890.5	847.5	4.4	13.0	11.2	17.4	15.6
VS 10/11	E4	2.2	3	773	436.5	338.5	1209.5	111.5	6.3	16.9	12.6	23.2	18.9
VS 10/14	E4	3	4	923	-	393.5	-	1316.5	7.6	-	15.0	-	22.6
VS 10/18	E4	4	5.5	1153	-	543	-	1696	9.4	-	20.0	-	29.4
VS 10/25	E4	5.5	7.5	1536	-	652.5	-	2188.5	12.4	-	26.6	-	39.0
VS 10/32	E4	7.5	10	1918	-	730.5	-	2648.5	15.8	-	30.6	-	46.4



00130013 05/2017

VS 10 - PERFORMANCE CURVES AT 50 Hz

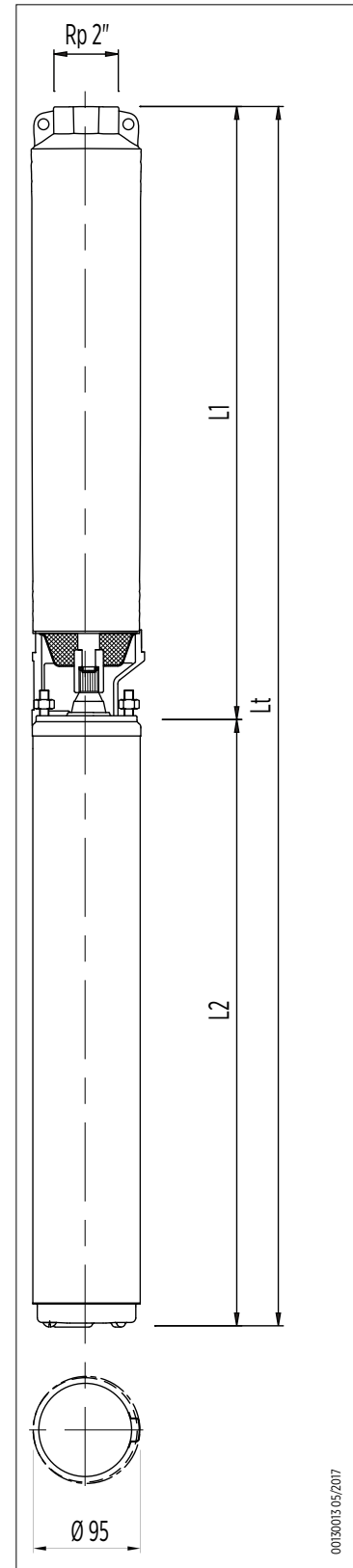


00220017/05/2019

VS 15 - TECHNICAL DATA

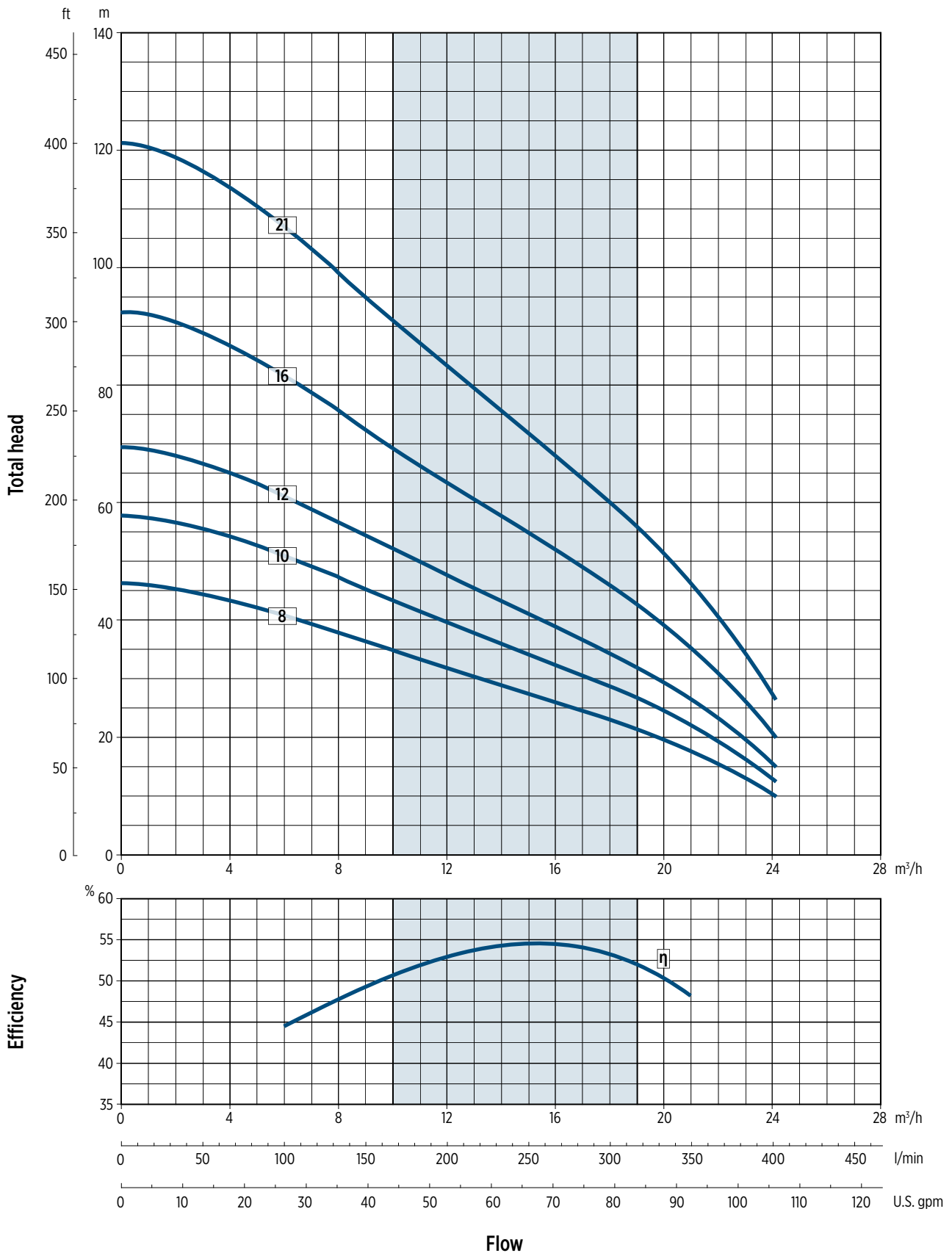
PUMPS WITH ENCAPSULATED MOTOR

Pump model	Motor			Dimensions [mm]					Weight [Kg]				
	Type	[kW]	[HP]	L1	L2		Lt		Pump	Motor		Total	
					1-	3-	1-	3-		1-	3-		
VS 15/8	E4	2.2	3	686	436.5	338.5	1122.5	1024.5	5.4	16.9	12.6	22.3	18.0
VS 15/10	E4	3	4	833	-	393.5	-	1226.5	6.4	-	15.0	-	21.4
VS 15/12	E4	4	5.5	981	-	543	-	1515	7.4	-	20.0	-	27.4
VS 15/16	E4	5.5	7.5	1275	-	652.5	-	1927.5	9.5	-	26.6	-	36.1
VS 15/21	E4	7.5	10	1643	-	730.5	-	2373.5	12.1	-	30.6	-	42.7



00130015 05/2017

VS 15 - PERFORMANCE CURVES AT 50 Hz



0022018 05/2019



Franklin Electric

Franklin Electric S.r.l.
Via Asolo, 7 - 36031 Dueville (Vicenza) - ITALY
Phone: +39 0444 361114 - Fax: +39 0444 365247
Email: sales.it@fele.com

Single member - Company subject to the control and coordination of Franklin Electric Co., Inc.

Franklin Electric S.r.l. reserves the right to amend specification without prior notice

00103800_EN_REV04_05-2019

franklinwater.eu