

**FPS**  
VR series

**Vertical Multistage  
Stainless Steel  
Centrifugal Pumps**

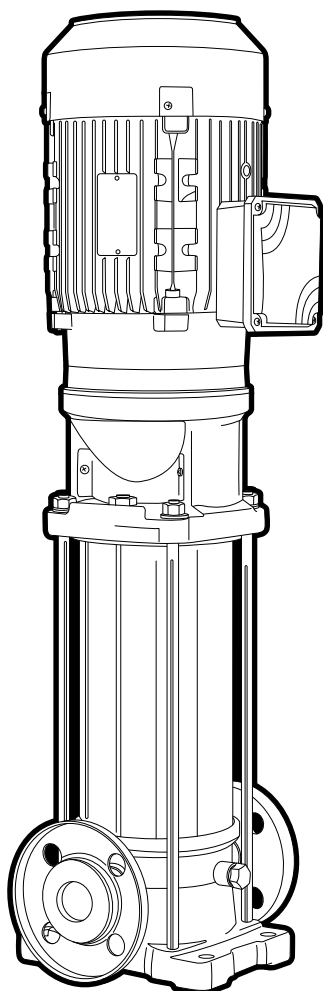
3 to 16 m<sup>3</sup>/h





## VR Series

### Features



# **FPS**

VR series

#### Applications:

- Pressure boosting
- Wash down units
- Boiled feed
- Hot/cold water circulation for HVAC systems
- Water supply and treatment
- Irrigation
- Reverse osmosis

#### Features:

- All stainless steel hydraulics for superior durability, efficiency, and performance over a wide variety of applications.
- Rugged motor mounting with oversized ball bearings ensure long operating life in the toughest jobs. Heavy-duty motor bearing not required.
- Standard equipment mechanical seal provides superior sealing between water end and motor.
- In-line suction and discharge with round flanges fit widest range of applications and provide convenient, compact installation.
- Rugged IEC mount electric motors produced to AU/NZ market standards.

#### Available upon Request\*

- AISI 316 versions
- Special materials for seals, gaskets, and elastomers
- Oval, victaulic, or clamp-flexclamp round flanges

\*May require special order, consult Franklin for details.

# Vertical Multistage Pumps

## VR Series Specifications

### Pump Specifications:

- Standard AISI 304 SS hydraulics
- Capacities up to 26 m<sup>3</sup>/h
- Heads up to 25 Bar
- Maximum working pressure: 25 Bar (except with oval flanges, 16 Bar)
- Liquid temperature range: -15 °C to +120 °C
- Rotation: clockwise looking at pump from above (3-5-9 m<sup>3</sup>/h VR)
- Rotation: counter-clockwise looking at pump from above (16 m<sup>3</sup>/h VR)
- Standard round flanges on body type PN25, with counter flanges and fasteners included
- Materials suitable for handling drinking water (WRAS Certified)
- Hydraulic characteristics are according to ISO Standard 9906, Annex A

### Motor Specifications:

- Squirrel cage, TEFC, Induction Motors
- Single Phase: Aluminium Alloy
- Three Phase: 71 Frame Aluminium Alloy and the larger sizes are cast iron
- Performance in compliance with:
  1. Single Phase: IEC34, IEC 72, AS1359
  2. Three Phase: MEPS AS/NZS1359.5-2004 to Table B2 where applicable
- Ambient temperature: -20 °C to + 40 °C
- Over Load Protection:
  1. Single Phase: Built in thermal overload up to 1.1 kW. Must provide external overload protection for 1.5 kW and above
  2. External thermal overload must be provided for motors up to 7.5 kW. 11 kW and above have thermistors fitted.
- IP55 Protection
- Class F Insulation
- Class B Temperature rise
- Voltage:
  1. Single Phase: Up to 1.1 kW 230-250 V 50 Hz, 1.5 kW and larger 240/480 V
  2. Three Phase: 380-415V 50 Hz / 440-480 V 60 Hz

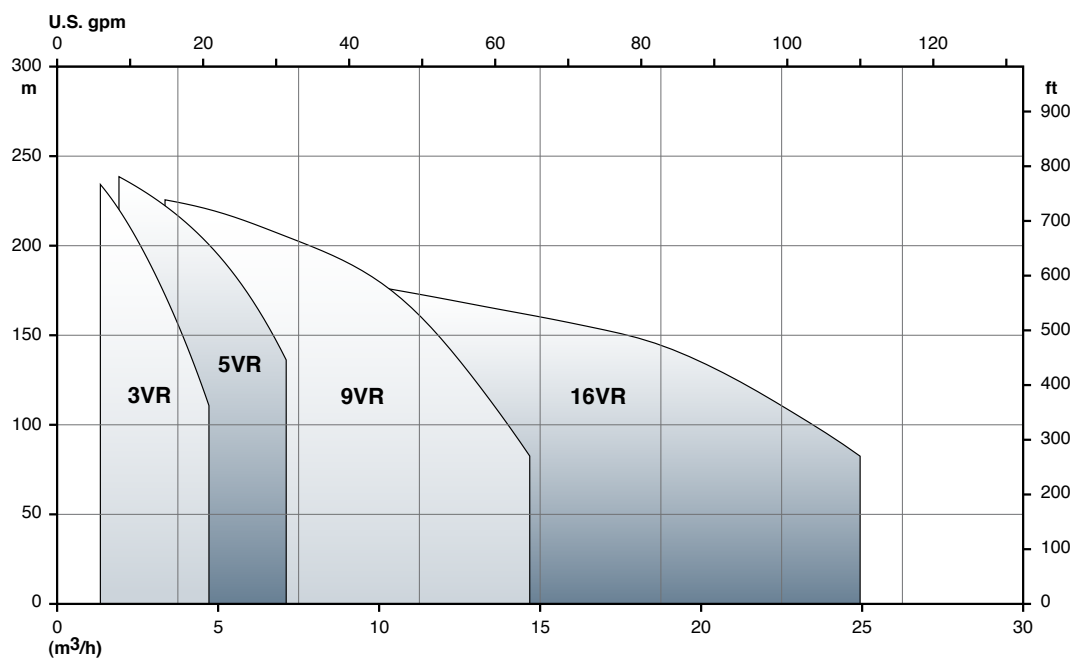
**Note:** Specifications subject to change without prior notice.

# Vertical Multistage Pumps

## VR Series

### 50 Hz Family Curve & Materials of Construction

**50 Hz Family Curves**



### Materials of Construction

Parts Description	Material		
	Type	Standard version	
		AISI	DIN / EN
Pump Casing	Stainless steel	AISI 304	1.4301
Draining and priming cap	Stainless steel	AISI 304	1.4301
Outer case	Stainless steel	AISI 304	1.4301
Mechanical seal housing	Stainless steel	AISI 304	1.4301
Filling plug	Stainless steel	AISI 304	1.4301
Pump shaft	Stainless steel	AISI 304	1.4301
Mechanical seal	Tungsten Carbide/Carbon/EPDM/Stainless steel		
Screws, nuts and washers	Stainless steel	AISI 304	1.4301
O-ring (4 pcs)	EPDM		
Stage housing and diffuser	Stainless steel	AISI 304	1.4301
Stage centering outlet	Stainless steel	AISI 304	1.4301
Floating neck ring assembly	Stainless steel+Teflon (PTFE)	AISI 304	1.4301
Initial stage housing	Stainless steel	AISI 304	1.4301
Last stage with diffuser	Stainless steel	AISI 304	1.4301
Stage centering inlet	Stainless steel	AISI 304	1.4301
Stage housing and diffuser with bearing	Stainless steel	AISI 304	1.4301
Impeller	Stainless steel	AISI 304	1.4301
Impeller spacers (2 pcs)	Stainless steel	AISI 304	1.4301
Intermediary sleeve	Tungsten Carbide		
Intermediary sleeve spacers (2 pcs)	Stainless steel	AISI 304	1.4301

Notes: Optional - All AISI 316 (EN 1.4401).  
Specifications subject to change without prior notice.

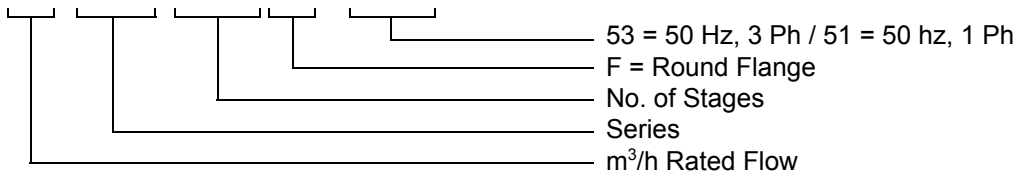
# Vertical Multistage Pumps

## VR Series

### Ordering Information

#### Description Explanation

**X VR XX F - XX**



#### PMA - Single Phase Ordering Information

Order Number	Description	KW/HP	PH	HZ	Motor Volts
91480302-51	3VR2F-51	.37/1.50	1	50	230
91480303-51	3VR3F-51	.55/1.75	1	50	230
91480304-51	3VR4F-51	.75/1.0	1	50	230
91480305-51	3VR5F-51	.75/1.0	1	50	230
91480306-51	3VR6F-51	1.1/1.5	1	50	230
91480307-51	3VR7F-51	1.1/1.5	1	50	230
91480308-51	3VR8F-51	1.5/2.0	1	50	230
91480310-51	3VR10F-51	1.5/2.0	1	50	230
91480312-51	3VR12F-51	2.2/3.0	1	50	230
91480314-51	3VR14F-51	2.2/3.0	1	50	230
91480502-51	5VR2F-51	.55/1.75	1	50	230
91480503-51	5VR3F-51	.75/1.0	1	50	230
91480504-51	5VR4F-51	1.1/1.5	1	50	230
91480505-51	5VR5F-51	1.1/1.5	1	50	230
91480506-51	5VR6F-51	1.5/2.0	1	50	230
91480507-51	5VR7F-51	1.5/2.0	1	50	230
91480508-51	5VR8F-51	2.2/3.0	1	50	230
91480510-51	5VR10F-51	2.2/3.0	1	50	230
91480902-51	9VR2F-51	.75/1.0	1	50	230
91480903-51	9VR3F-51	1.1/1.5	1	50	230
91480904-51	9VR4F-51	1.5/2.0	1	50	230
91480905-51	9VR5F-51	2.2/3.0	1	50	230
91480906-51	9VR6F-51	2.2/3.0	1	50	230

# Vertical Multistage Pumps

## VR Series

### Ordering Information

#### PMA - Three Phase Ordering Information

Order Number	Description	KW/HP	PHASE	HZ	Motor Volts
91480302-53	3VR2F-53	.37/.50	3	50	230/400
91480303-53	3VR3F-53	.55/.75	3	50	230/400
91480304-53	3VR4F-53	.75/1.0	3	50	230/400
91480305-53	3VR5F-53	.75/1.0	3	50	230/400
91480306-53	3VR6F-53	1.1/1.5	3	50	230/400
91480307-53	3VR7F-53	1.1/1.5	3	50	230/400
91480308-53	3VR8F-53	1.5/2.0	3	50	230/400
91480310-53	3VR10-53	1.5/2.0	3	50	230/400
91480312-53	3VR12F-53	2.2/3.0	3	50	230/400
91480314-53	3VR14F-53	2.2/3.0	3	50	230/400
91480317-53	3VR17F-53	3.0/4.0	3	50	230/400
91480320-53	3VR20F-53	4.0/5.5	3	50	400/690
91480322-53	3VR22F-53	4.0/5.5	3	50	400/690
91480502-53	5VR2F-53	.55/.75	3	50	230/400
91480503-53	5VR3F-53	.75/1.0	3	50	230/400
91480504-53	5VR4F-53	1.1/1.5	3	50	230/400
91480505-53	5VR5F-53	1.1/1.5	3	50	230/400
91480506-53	5VR6F-53	1.5/2.0	3	50	230/400
91480507-53	5VR7F-53	1.5/2.0	3	50	230/400
91480508-53	5VR8F-53	2.2/3.0	3	50	230/400
91480510-53	5VR10F-53	2.2/3.0	3	50	230/400
91480512-53	5VR12F-53	3.0/4.0	3	50	230/400
91480514-53	5VR14F-53	3.0/4.0	3	50	230/400
91480517-53	5VR17F-53	4.0/5.5	3	50	400/690
91480519-53	5VR19F-53	5.5/7.5	3	50	400/690
91480522-53	5VR22F-53	5.5/7.5	3	50	400/690
91480902-53	9VR2F-53	.75/1.0	3	50	230/400
91480903-53	9VR3F-53	1.1/1.5	3	50	230/400
91480904-53	9VR4F-53	1.5/2.0	3	50	230/400
91480905-53	9VR5F-53	2.2/3.0	3	50	230/400
91480906-53	9VR6F-53	2.2/3.0	3	50	230/400
91480907-53	9VR7F-53	3.0/4.0	3	50	230/400
91480908-53	9VR8F-53	3.0/4.0	3	50	230/400
91480910-53	9VR10F-53	4.0/5.5	3	50	400/690
91480911-53	9VR11F-53	4.0/5.5	3	50	400/690
91480912-53	9VR12F-53	5.5/7.5	3	50	400/690
91480914-53	9VR14F-53	5.5/7.5	3	50	400/690
91480917-53	9VR17F-53	7.5/10.0	3	50	400/690
91480919-53	9VR19F-53	7.5/10.0	3	50	400/690
91480920-53	9VR20F-53	7.5/10.0	3	50	400/690
91481602-53	16VR2F-53	1.5/2.0	3	50	230/400
91481603-53	16VR3F-53	2.2/3.0	3	50	230/400
91481604-53	16VR4F-53	3.0/4.0	3	50	230/400
91481605-53	16VR5F-53	4.0/5.5	3	50	400/690
91481606-53	16VR6F-53	5.5/7.5	3	50	400/690
91481607-53	16VR7F-53	5.5/7.5	3	50	400/690
91481608-53	16VR8F-53	5.5/7.5	3	50	400/690
91481609-53	16VR9F-53	7.5/10.0	3	50	400/690
91481610-53	16VR10F-53	7.5/10.0	3	50	400/690
91481611-53	16VR11F-53	7.5/10.0	3	50	400/690
91481612-53	16VR12F-53	9.2/12.5	3	50	400/690
91481613-53	16VR13F-53	9.2/12.5	3	50	400/690
91481614-53	16VR14F-53	11.0/15.0	3	50	400/690
91481615-53	16VR15F-53	11.0/15.0	3	50	400/690
91481616-53	16VR16F-53	11.0/15.0	3	50	400/690

# Vertical Multistage Pumps

## VR Series

### Ordering Information

#### PE Ordering Information

Order Number	Description	KW/HP	HZ
91480302	3VR2F	.37/1.50	50
91480303	3VR3F	.55/1.75	50
91480304	3VR4F	.75/1.0	50
91480305	3VR5F	.75/1.0	50
91480306	3VR6F	1.1/1.5	50
91480307	3VR7F	1.1/1.5	50
91480308	3VR8F	1.5/2.0	50
91480310	3VR10F	1.5/2.0	50
91480312	3VR12F	2.2/3.0	50
91480314	3VR14F	2.2/3.0	50
91480317	3VR17F	3.0/4.0	50
91480320	3VR20F	4.0/5.5	50
91480322	3VR22F	4.0/5.5	50
91480502	5VR2F	.55/1.75	50
91480503	5VR3F	.75/1.0	50
91480504	5VR4F	1.1/1.5	50
91480505	5VR5F	1.1/1.5	50
91480506	5VR6F	1.5/2.0	50
91480507	5VR7F	1.5/2.0	50
91480508	5VR8F	2.2/3.0	50
91480510	5VR10F	2.2/3.0	50
91480512	5VR12F	3.0/4.0	50
91480514	5VR14F	3.0/4.0	50
91480517	5VR17F	4.0/5.5	50
91480519	5VR19F	5.5/7.5	50
91480522	5VR22F	5.5/7.5	50
91480902	9VR2F	.75/1.0	50
91480903	9VR3F	1.1/1.5	50
91480904	9VR4F	1.5/2.0	50
91480905	9VR5F	2.2/3.0	50
91480906	9VR6F	2.2/3.0	50
91480907	9VR7F	3.0/4.0	50
91480908	9VR8F	3.0/4.0	50
91480910	9VR10F	4.0/5.5	50
91480911	9VR11F	4.0/5.5	50
91480912	9VR12F	5.5/7.5	50
91480914	9VR14F	5.5/7.5	50
91480917	9VR17F	7.5/10.0	50
91480919	9VR19F	7.5/10.0	50
91480920	9VR20F	7.5/10.0	50
91481602	16VR2F	1.5/2.0	50
91481603	16VR3F	2.2/3.0	50
91481604	16VR4F	3.0/4.0	50
91481605	16VR5F	4.0/5.5	50
91481606	16VR6F	5.5/7.5	50
91481607	16VR7F	5.5/7.5	50
91481608	16VR8F	5.5/7.5	50
91481609	16VR9F	7.5/10.0	50
91481610	16VR10F	7.5/10.0	50
91481611	16VR11F	7.5/10.0	50
91481612	16VR12F	9.2/12.5	50
91481613	16VR13F	9.2/12.5	50
91481614	16VR14F	11.0/15.0	50
91481615	16VR15F	11.0/15.0	50
91481616	16VR16F	11.0/15.0	50



# Vertical Multistage Pumps

## VR Series

### Ordering Information

#### Single Phase Motor Ordering Information

Order Number	Description	KW	HP	HZ/PH	Volts	Size	Mounting
106618101	VR Motor-0.37/50/1	0.37	0.50	50/1	V240	71	B14
106618102	VR Motor-0.55/50/1	0.55	0.75	50/1	V240	71	B14
106618103	VR Motor-0.75/50/1	0.75	1.00	50/1	V240	80	B14
106618104	VR Motor-1.1/50/1	1.1	1.50	50/1	V240	80	B14
106618105	VR Motor-1.5/50/1	1.5	2.00	50/1	V240	90	B14
106618106	VR Moto-2.2/50/1	2.2	3.00	50/1	V240	90	B14

#### Three Phase Motor Ordering Information

Order Number	Description	KW	HP	PH	50 Hz Volts*	60 Hz Volts*	Wiring Standard 380-415	Wiring Optional 220-240	Size	Mounting
106618301	VR Motor-0.37/50/3	0.37	0.50	3	380/415	440/460	Star	Delta	71	B14
106618302	VR Motor-0.55/50/3	0.55	0.75	3	380/415	440/460	Star	Delta	71	B14
106618303	VR Motor-0.75/50/3	0.75	1.00	3	380/415	440/460	Star	Delta	80	B14
106618304	VR Motor-1.1/50/3	1.1	1.50	3	380/415	440/460	Star	Delta	80	B14
106618305	VR Motor-1.5/50/3	1.5	2.00	3	380/415	440/460	Star	Delta	90	B14
106618306	VR Motor-2.2/50/3	2.2	3.00	3	380/415	440/460	Star	Delta	90	B14
106618307	VR Motor-3.0/50/3	3	4.00	3	380/415	440/460	Star	Delta	100	B14
106618308	VR Motor-4.0/50/3	4	5.50	3	380/415	440/460	Delta		112	B14
106618309	VR Motor-5.5/50/3	5.5	7.50	3	380/415	440/460	Delta		132	B5
106618310	VR Motor-7.5/50/3	7.5	10.00	3	380/415	440/460	Delta		132	B5
106618311	VR Motor-9.2/50/3	9.2	12.50	3	380/415	440/460	Delta		132	B5
106618312	VR Motor-15.0/50/3	11	15.00	3	380/415	440/460	Delta		132	B5

\*Three phase motors are dual voltage/dual frequency, 50/60 Hz.

# Vertical Multistage Pumps

## VR Series

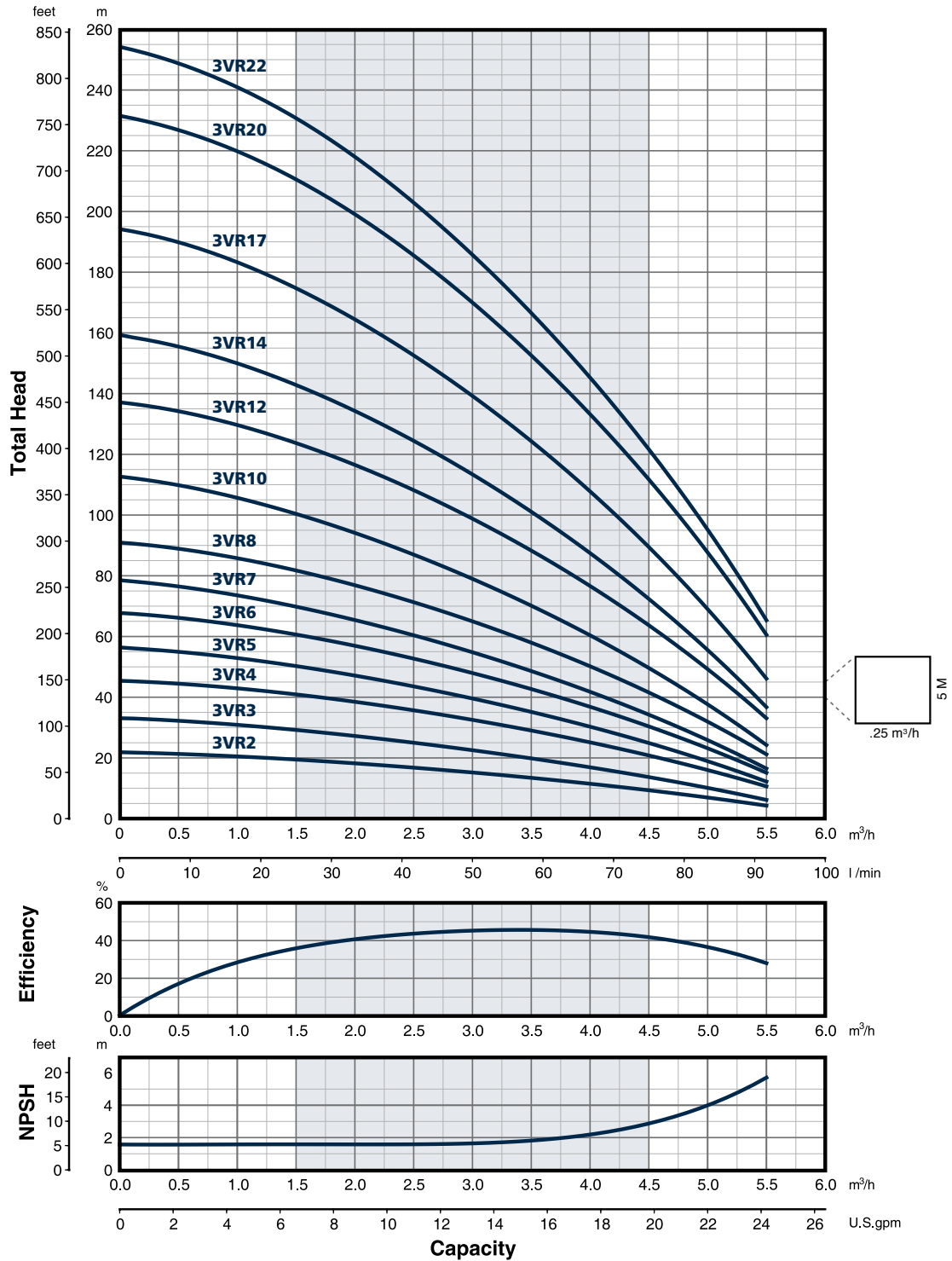
### 50 Hz Performance Data

Model	Rated Power		Delivery																					
	kW	HP	l/min	25	33	42	50	58	67	75	83	90	100	117	133	150	167	183	233	300	333	367	417	
			m³/h	0	1.5	2	2.5	3	3.5	4	4.5	5	5.4	6	7	8	9	10	11	14	18	20	22	25
	H = Total Head Meters Column of Water																							
3VR2	0.3	0.4	22	19,5	18,5	17	15	13,5	11,5	9,5														
3VR3	0.55	0.75	33,5	29	27,5	25	22,5	20	17	13,5														
3VR4	0.75	1	45,5	41	38,5	35,5	32,5	29	25	21														
3VR5	0.75	1	56,5	50	47	43,5	39,5	35	30,5	25														
3VR6	1.1	1.5	68	60,5	57	53	48	42,5	37	30,5														
3VR7	1.1	1.5	78,5	70	65,5	60,5	55	48,5	42	34,5														
3VR8	1.5	2	91	81,5	77	71,5	65	58	50	41,5														
3VR10	1.5	2	112,5	100,5	94,5	87	79	70	60,5	49,5														
3VR12	2.2	3	137	123,5	117	108,5	98,5	88,5	76,5	63,5														
3VR14	2.2	3	159,5	143	134,5	124,5	113,5	101	87,5	72,5														
3VR17	3	4	194,5	174,5	165	152,5	139	124,5	107,5	89,5														
3VR20	4	5.5	231,5	210,5	199,5	185,5	170	152,5	133	111,5														
3VR22	4	5.5	254	230,5	218,5	203	185,5	166,5	145,5	121,5														
5VR2	0.55	0.75	22		21	20	19,5	18,5	18	17	16	15,5	14	11										
5VR3	0.75	1	34		32	31	30	29,5	28	27	26	24,5	22,5	18										
5VR4	1.1	1.5	45,5		42,5	41,5	40	39	37,5	36	34	32,5	30	24										
5VR5	1.1	1.5	56,5		52	50,5	49	47,5	46	44	41,5	39,5	36	29										
5VR6	1.5	2	68,5		63,5	62	60,5	58,5	56,5	54	51,5	49	45	36,5										
5VR7	1.5	2	79,5		73,5	71,5	69,5	67,5	64,5	62	59	56	51	41										
5VR8	2.2	3	92		86	84	82	79,5	77	74	70,5	67	62	50,5										
5VR10	2.2	3	114		106,5	103,5	101	98	94	90,5	86	82	75	61										
5VR12	3	4	137,5		128,5	125,5	122	118,5	114,5	109,5	104,5	99,5	91,5	74,5										
5VR14	3	4	159,5		148,5	144,5	140,5	136,5	131,5	126	120	114	104,5	84,5										
5VR17	4	5.5	196,5		184,5	180,5	176	171	165	159	151,5	145	133,5	109,5										
5VR19	5.5	7.5	220		206,5	202	197	192	185,5	178,5	170	162,5	150	123,5										
5VR22	5.5	7.5	254		237,5	232,5	226,5	220	212,5	204,5	195	186	171,5	140,5										
9VR2	0.75	1	23,5						22	21,5	21,5	21	20,5	20	19	18,5	17	15,5	9					
9VR3	1.1	1.5	35,5						32,5	32	31,5	31	30,5	29,5	28,5	27	25,5	23	13					
9VR4	1.5	2	47,5						43,5	43	42,5	42	41,5	40	38,5	36,5	34,5	31,5	18,5					
9VR5	2.2	3	60						55,5	55	54,5	54	53	51	49,5	47,5	44,5	41	25					
9VR6	2.2	3	71,5						66	65,5	64,5	64	62,5	60,5	58,5	56	52,5	48	28,5					
9VR7	3	4	84						77,5	77	76	75,5	74	71,5	69	66	62,5	57	34,5					
9VR8	3	4	95,5						88	87,5	86,5	85,5	83,5	80,5	77,5	74,5	70	64	38					
9VR10	4	5.5	120,5						112,5	111,5	110,5	109,5	107,5	104	100,5	96,5	91	84	51,5					
9VR11	4	5.5	132						123	122	121	119,5	117,5	113,5	109,5	105,5	99,5	91,5	56					
9VR12	5.5	7.5	144,5						135	134	132,5	131	129	124,5	120,5	116	109,5	100,5	62					
9VR14	5.5	7.5	168						156	155	153,5	151,5	149	144	139	133,5	126	115,5	70					
9VR17	7.5	10	205						191	190	188	186	182,5	177	170,5	164,5	155,5	143	88					
9VR19	7.5	10	228,5						212,5	211	209	206,5	203	196,5	189,5	182	172	158	96,5					
9VR20	7.5	10	240,5						223,5	221,5	219	217	213	206	198,5	191	180	165,5	100,5					
16VR2	1.5	2	24												22	21,5	21	20,5	19,5	17,5	15,5	13	9	
16VR3	2.2	3	36												33	32,5	32	31,5	29,5	26,5	23,5	20	13,5	
16VR4	3	4	48												44,5	43,5	42,5	41,5	39	35	31,5	26,5	18	
16VR5	4	5.5	61												56,5	55,5	54,5	53,5	50,5	45,5	41	35	24,5	
16VR6	5.5	7.5	73												68	66,5	65,5	64	60,5	54,5	49,5	42	29,5	
16VR7	5.5	7.5	85												78,5	77	75,5	74	69,5	63	56,5	48,5	33,5	
16VR8	5.5	7.5	96,5												89	87,5	86	84	79	71	64	54	37	
16VR9	7.5	10	109,5												101,5	99,5	98	96	90,5	81,5	74	63	44	
16VR10	7.5	10	121,5												112,5	110	108	106	99,5	90	81	69	48	
16VR11	7.5	10	133												123	120,5	118,5	116	109	98	88,5	75	51,5	
16VR12	9.2	12.5	145,5												134,5	132	130	127,5	119,5	108	97,5	83	57	
16VR13	9.2	12.5	157,5												145,5	142,5	140	137	128,5	116	104,5	89	61	
16VR14	11	15	171,5												161	158	155,5	152,5	144	131	119	102,5	72,5	
16VR15	11	15	183,5												172	169	166	163	153,5	140	127	109	77	
16VR16	11	15	195,5												183	180	177	173,5	163,5	148,5	135	116	81,5	

# Vertical Multistage Pumps

## VR Series Performance Curves

### 3VR Performance Curves

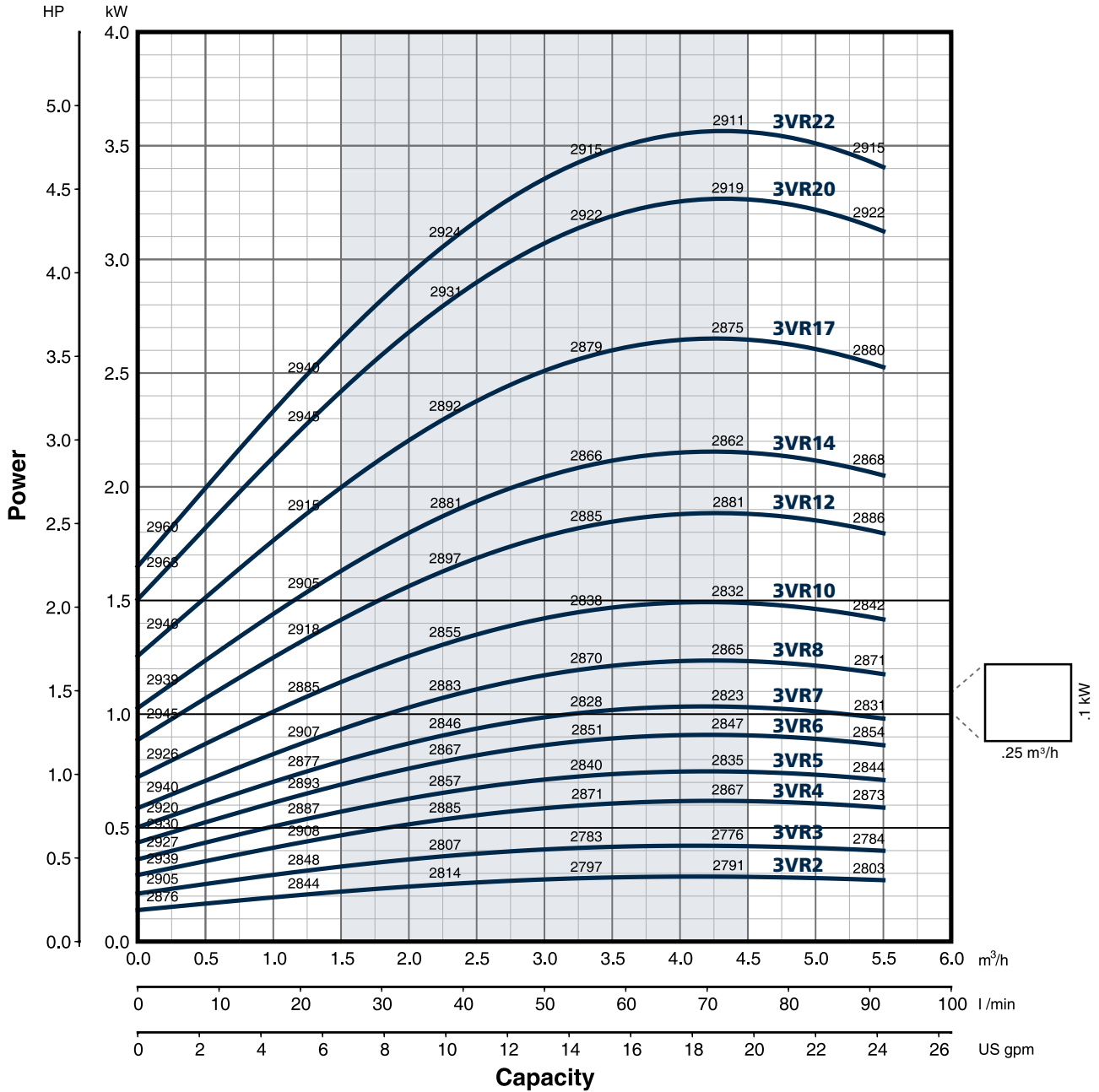


Notes: Specifications subject to change without prior notice.  
Hydraulic characteristics are according to ISO standard 9906, Annex A.

# Vertical Multistage Pumps

## VR Series Power Curves

### 3VR Power Curves



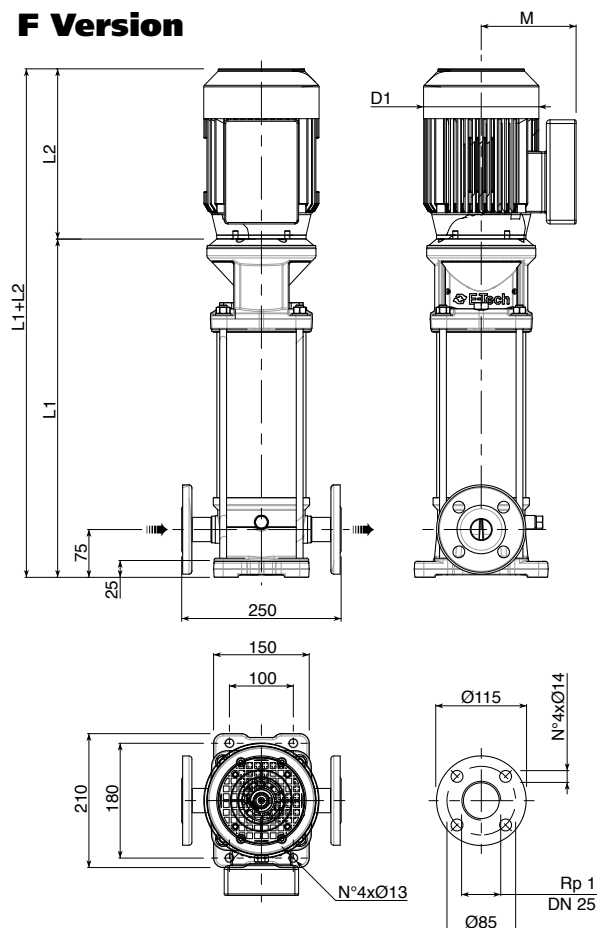
Note: Specifications subject to change without prior notice.

# Vertical Multistage Pumps

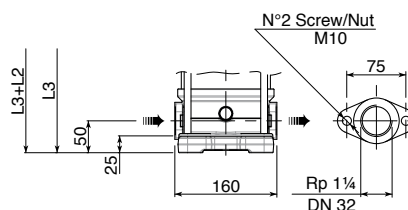
## VR Series

### 3VR Dimensional Data

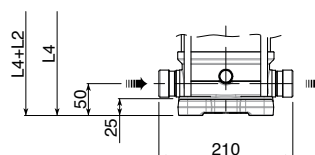
#### F Version



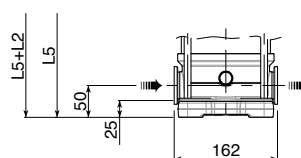
#### T Version



#### V Version



#### C Version



#### F version-

Round flanges on body type PN25: the pump is supplied with joints, bolts and counterflanges.

#### T version-

Oval flanges on body type PN16: the pump is supplied without oval counter flanges for pipe to be screwed, joints and bolts (Optional accessories).

#### V version-

Connections with rapid fittings type "Victaulic": the pump is supplied without the collars (Optional accessories).

#### C version-

Connections with round fittings type Clamp-FlexiClamp: the pump is supplied without collars (Optional accessories).

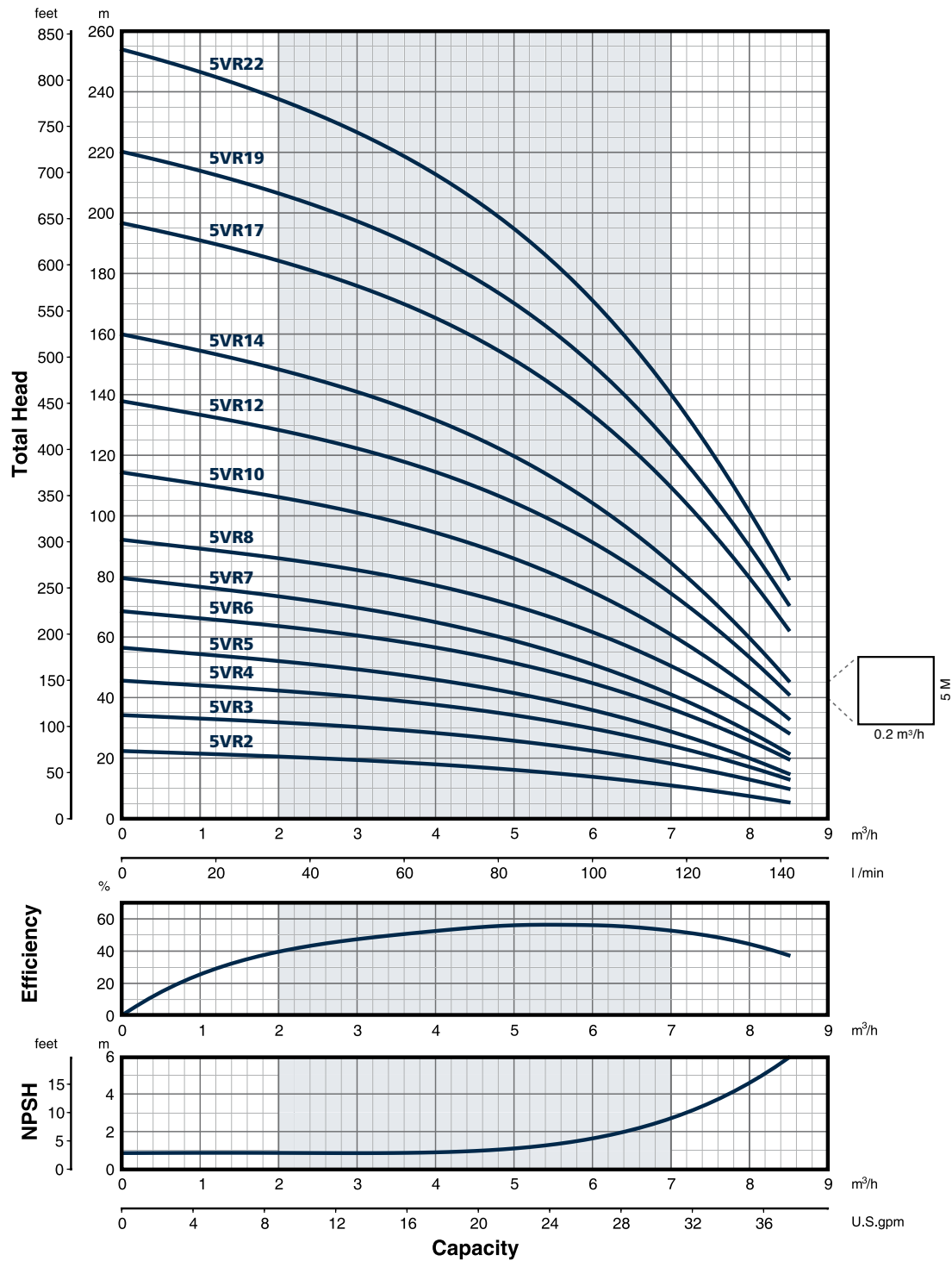
Pump Model	Motor			Dimensions (MM)										Weight (KG)								
	KW/HP	Size	MTG	L1		L2		L3		L4		L5		M		D1		PE	Motor		PMA	
				F	1-ph	3-ph	T-vers	V-vers	C-vers	1-ph	3-ph	1-ph	3-ph	1-ph	3-ph	1-ph	3-ph		1-ph	3-ph		
3VR2	.37/1.55	71	B14	328.5	225.0	232.0	303.5	303.5	303.5	125.0	125.0	145.0	139.0	15.0	7.0	7.3	22.0	22.3				
3VR3	.55/2.0	71	B14	352.5	225.0	232.0	327.5	327.5	327.5	125.0	125.0	145.0	139.0	15.5	8.0	9.5	23.5	25.0				
3VR4	.75/3.0	80	B14	376.5	255.0	300.0	351.5	351.5	351.5	135.0	155.0	165.0	158.0	16.0	8.5	18.0	24.5	34.0				
3VR5	.75/3.0	80	B14	400.5	255.0	300.0	375.5	375.5	375.5	135.0	155.0	165.0	158.0	17.0	8.5	18.0	25.5	35.0				
3VR6	1.1/4.5	80	B14	425.0	255.0	300.0	400.0	400.0	400.0	135.0	155.0	165.0	158.0	17.5	9.5	20.0	27.0	37.5				
3VR7	1.1/4.5	80	B14	449.0	255.0	300.0	424.0	424.0	424.0	135.0	155.0	165.0	158.0	18.0	9.5	20.0	27.5	38.0				
3VR8	1.5/6.0	90S	B14	483.0	285.0	355.0	458.0	458.0	458.0	145.0	160.0	185.0	175.0	19.0	12.5	25.0	31.5	44.0				
3VR10	1.5/6.0	90S	B14	531.0	285.0	355.0	506.0	506.0	506.0	145.0	160.0	185.0	175.0	20.5	12.5	25.0	33.0	45.5				
3VR12	2.2/9.0	90L	B14	579.0	310.0	385.0	554.0	554.0	554.0	145.0	160.0	185.0	175.0	21.5	14.0	29.0	35.5	50.5				
3VR14	2.2/9.0	90L	B14	627.0	310.0	385.0	602.0	602.0	602.0	145.0	160.0	185.0	175.0	23.0	14.0	29.0	37.0	52.0				
3VR17	3.0/12.0	100L	B14	709.0		430.0		684.0	684.0				197.0	25.0		39.0		64.0				
3VR20	4.0/16.5	112	B14	781.0		465.0		756.0	756.0				220.0	27.0		50.0		77.0				
3VR22	4.0/16.5	112	B14	829.0		465.0		804.0	804.0				220.0	28.5		50.0		78.5				

# Vertical Multistage Pumps

## VR Series

### Performance Curves

#### 5VR Performance Curves

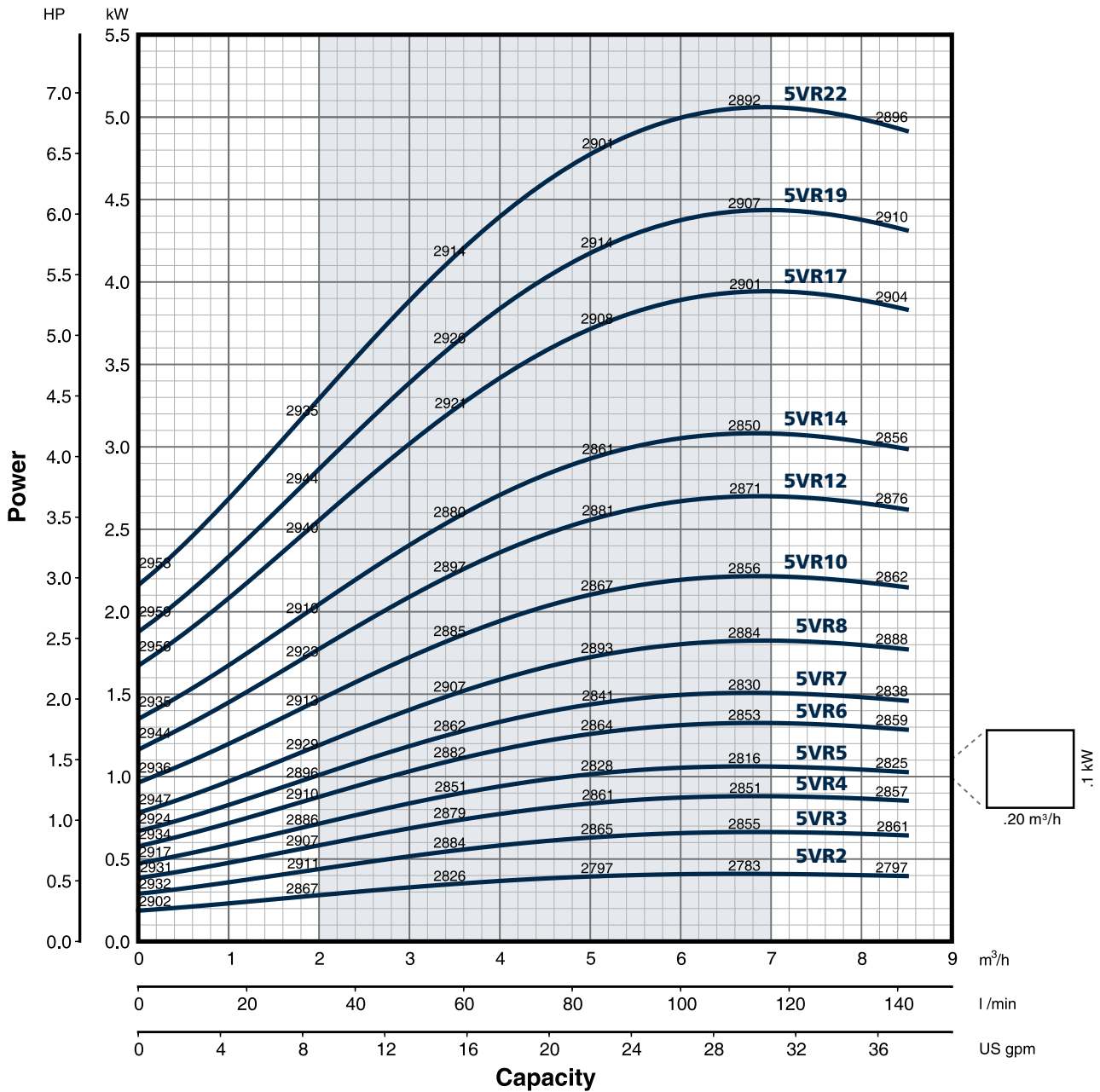


Notes: Specifications subject to change without prior notice.  
Hydraulic characteristics are according to ISO standard 9906, Annex A.

# Vertical Multistage Pumps

## VR Series Power Curves

### 5VR Power Curves



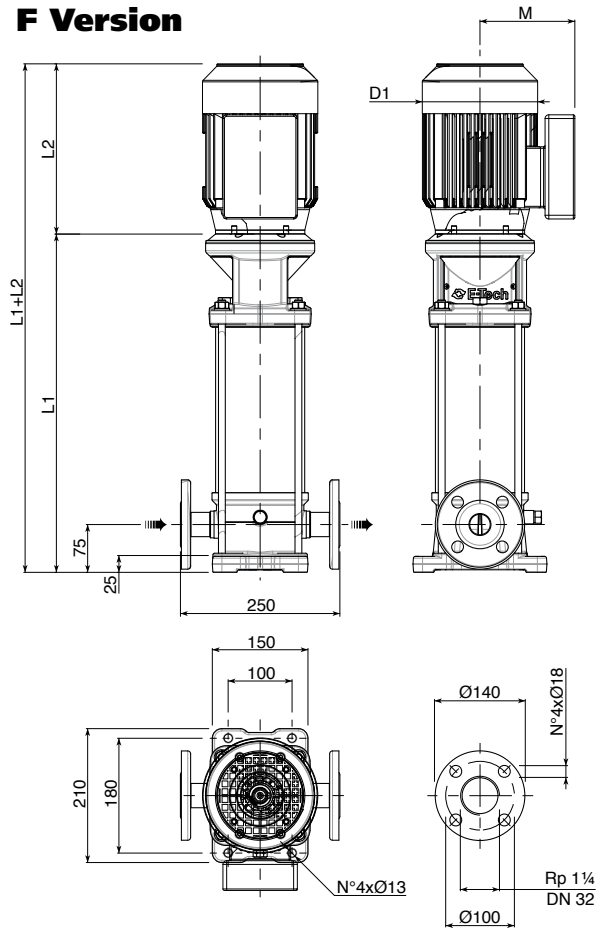
Note: Specifications subject to change without prior notice.

# Vertical Multistage Pumps

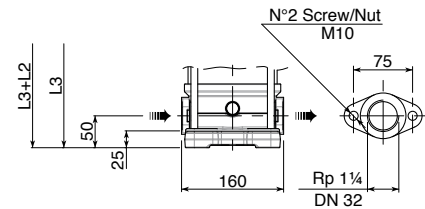
## VR Series

### 5VR Dimensional Data

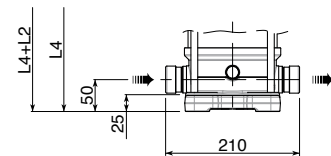
#### F Version



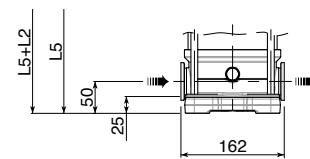
#### T Version



#### V Version



#### C Version



#### F version-

Round flanges on body type PN25: the pump is supplied with joints, bolts and counterflanges.

#### T version-

Oval flanges on body type PN16: the pump is supplied without oval counter flanges for pipe to be screwed, joints and bolts (Optional accessories).

#### V version-

Connections with rapid fittings type "Victaulic": the pump is supplied without the collars (Optional accessories).

#### C version-

Connections with round fittings type Clamp-FlexiClamp: the pump is supplied without collars (Optional accessories).

Pump Model	Motor			Dimensions (MM)										Weight (KG)					
	KW/HP	Size	MTG	L1		L2		L3	L4	L5	M		D1		PE	Motor		PMA	
				F	1-ph	3-ph	T-vers	V-vers	C-vers	1-ph	3-ph	1-ph	3-ph	1-ph		3-ph			
5VR2	.55/0.75	71	B14	328.5	225.0	232.0	303.5	303.5	303.5	125.0	125.0	145.0	139.0	15.5	8.0	9.5	23.5	25.0	
5VR3	.75/1.0	80	B14	352.5	255.0	300.0	327.5	327.5	327.5	135.0	155.0	165.0	158.0	16.0	8.5	18.0	24.5	34.0	
5VR4	1.1/1.5	80	B14	376.5	255.0	300.0	351.5	351.5	351.5	135.0	155.0	165.0	158.0	16.5	9.5	20.0	26.0	36.5	
5VR5	1.1/1.5	80	B14	400.5	255.0	300.0	375.5	375.5	375.5	135.0	155.0	165.0	158.0	17.0	9.5	20.0	26.5	37.0	
5VR6	1.5/2.0	90S	B14	435.0	285.0	355.0	410.0	410.0	410.0	145.0	160.0	185.0	175.0	18.0	12.5	25.0	30.5	43.0	
5VR7	1.5/2.0	90S	B14	459.0	285.0	355.0	434.0	434.0	434.0	145.0	160.0	185.0	175.0	19.0	12.5	25.0	31.5	44.0	
5VR8	2.2/3.0	90L	B14	483.0	310.0	385.0	458.0	458.0	458.0	145.0	160.0	185.0	175.0	19.5	14.0	29.0	33.5	48.5	
5VR10	2.2/3.0	90L	B14	531.0	310.0	385.0	506.0	506.0	506.0	145.0	160.0	185.0	175.0	20.5	14.0	29.0	34.5	49.5	
5VR12	3.0/4.0	100L	B14	589.0		430.0	564.0	564.0	564.0		180.0		197.0	22.5		39.0		61.5	
5VR14	3.0/4.0	100L	B14	637.0		430.0	612.0	612.0	612.0		180.0		197.0	24.0		39.0		63.0	
5VR17	4.0/5.5	112	B14	709.0		465.0		684.0	684.0		190.0		220.0	25.5		50.0		75.5	
5VR19	5.5/7.5	132S	B5	779.5		510.0		754.5	754.5		210.0		262.0	32.0		69.0		101.0	
5VR22	5.5/7.5	132S	B5	851.5		510.0		826.5	826.5		210.0		262.0	33.5		69.0		102.5	

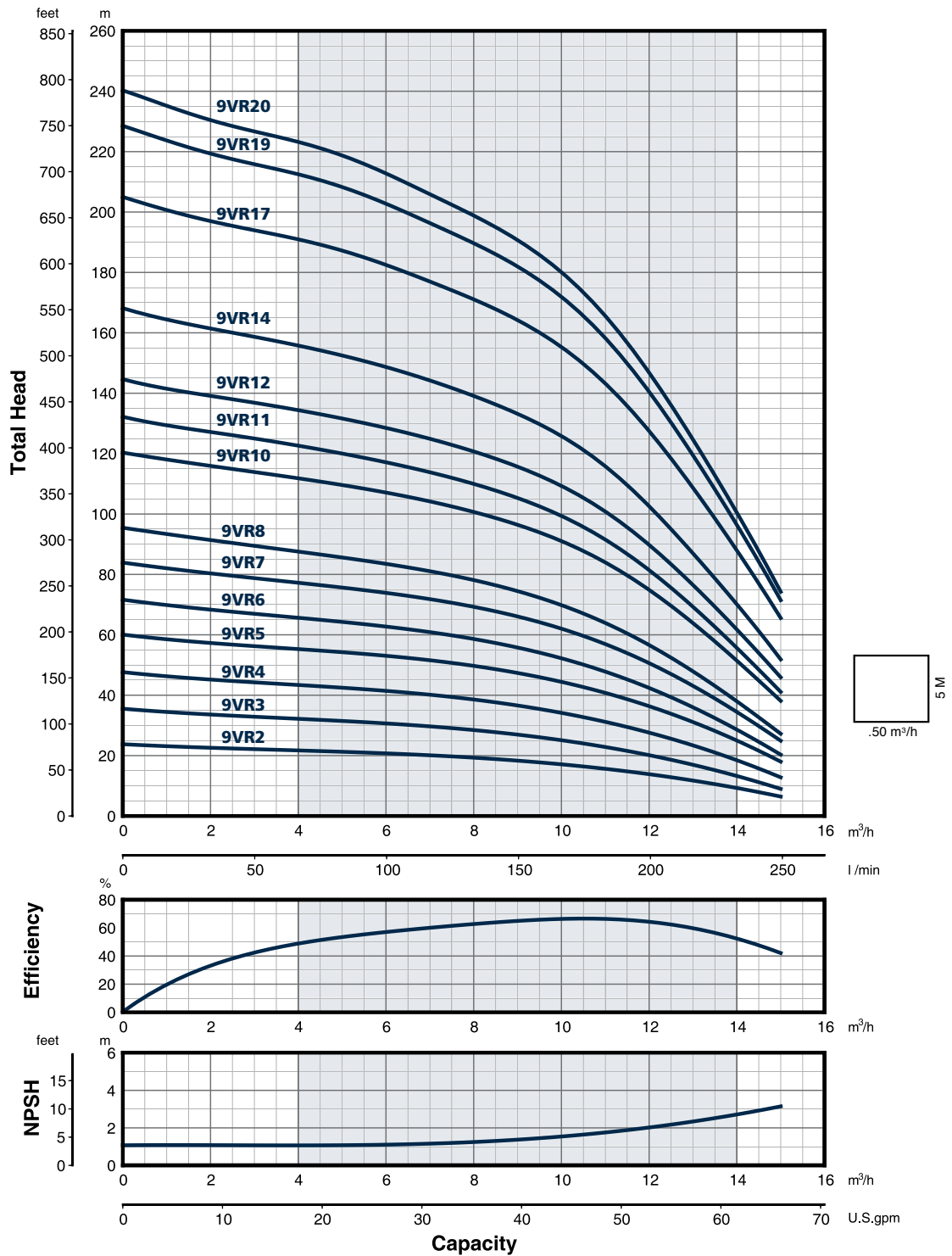


# Vertical Multistage Pumps

## VR Series

### Performance Curves

#### 9VR Performance Curves

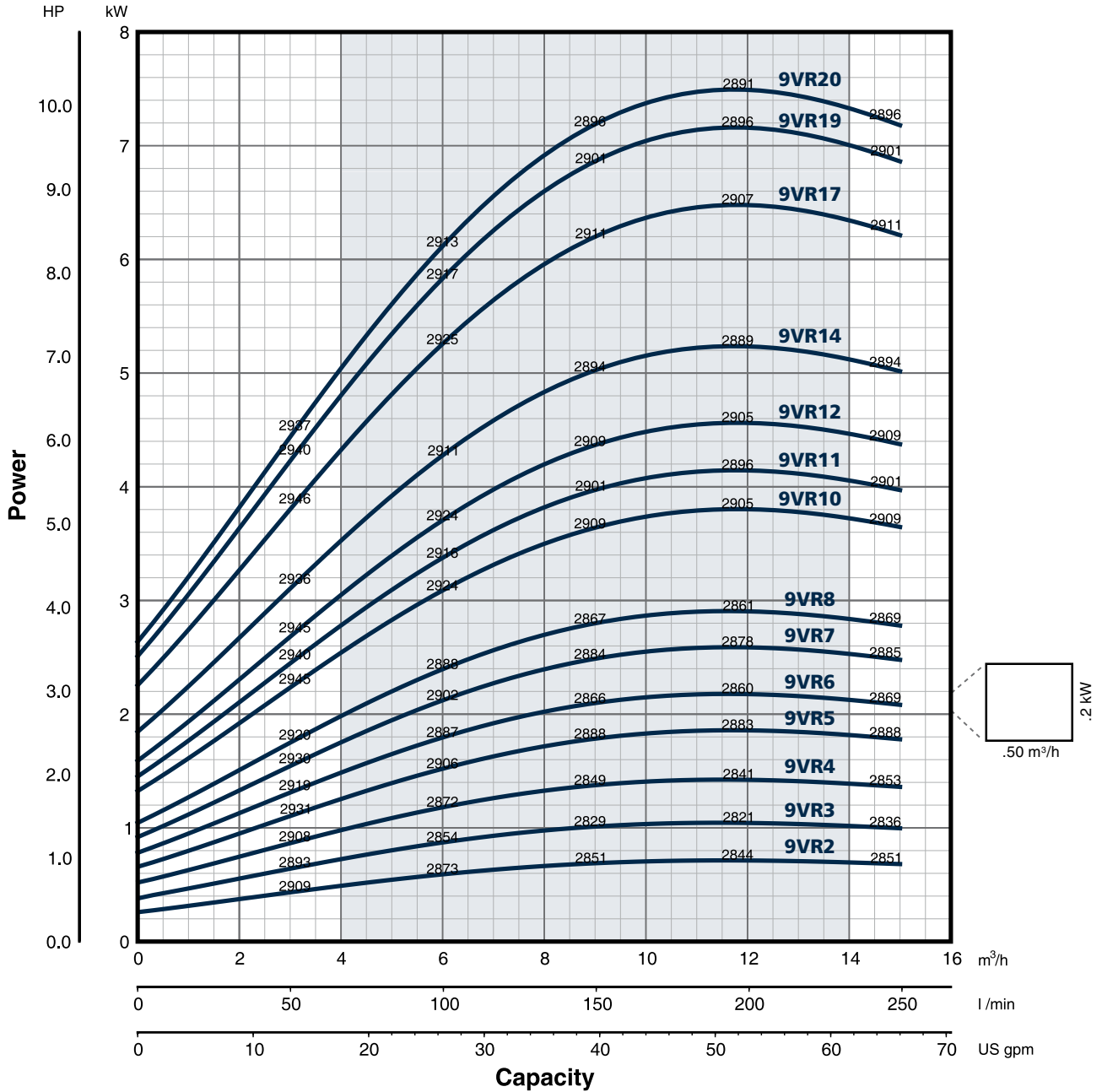


**Notes:** Specifications subject to change without prior notice.  
Hydraulic characteristics are according to ISO standard 9906, Annex A.

# Vertical Multistage Pumps

## VR Series Power Curves

### 9VR Power Curves



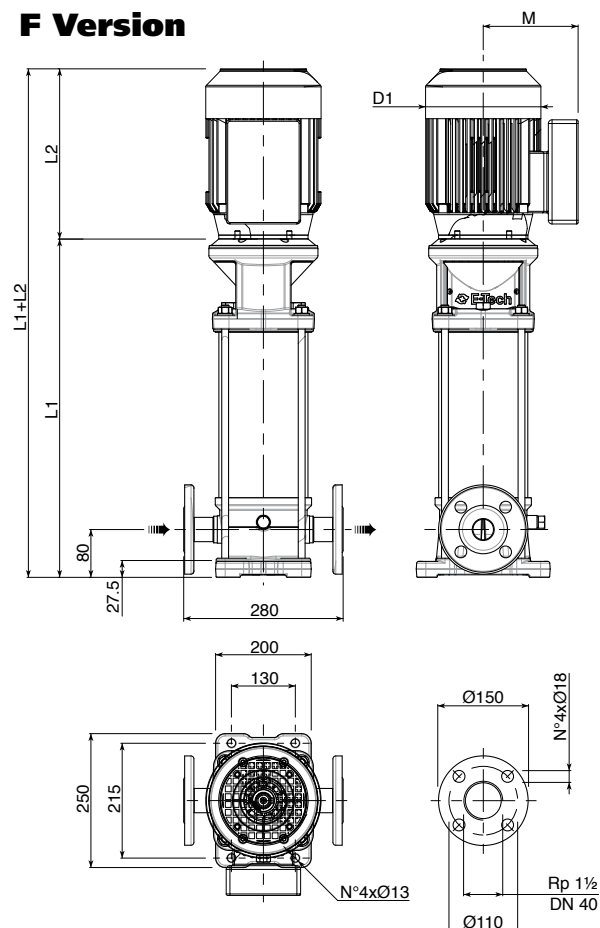
Note: Specifications subject to change without prior notice.

# Vertical Multistage Pumps

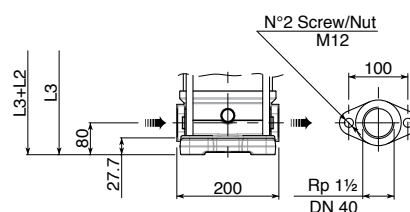
## VR Series

### 9VR Dimensional Data

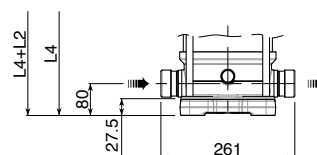
#### F Version



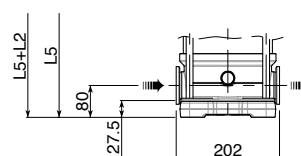
#### T Version



#### V Version



#### C Version



#### F version-

Round flanges on body type PN25: the pump is supplied with joints, bolts and counterflanges.

#### T version-

Oval flanges on body type PN16: the pump is supplied without oval counter flanges for pipe to be screwed, joints and bolts (Optional accessories).

#### V version-

Connections with rapid fittings type "Victaulic": the pump is supplied without the collars (Optional accessories).

#### C version-

Connections with round fittings type Clamp-FlexiClamp: the pump is supplied without collars (Optional accessories).

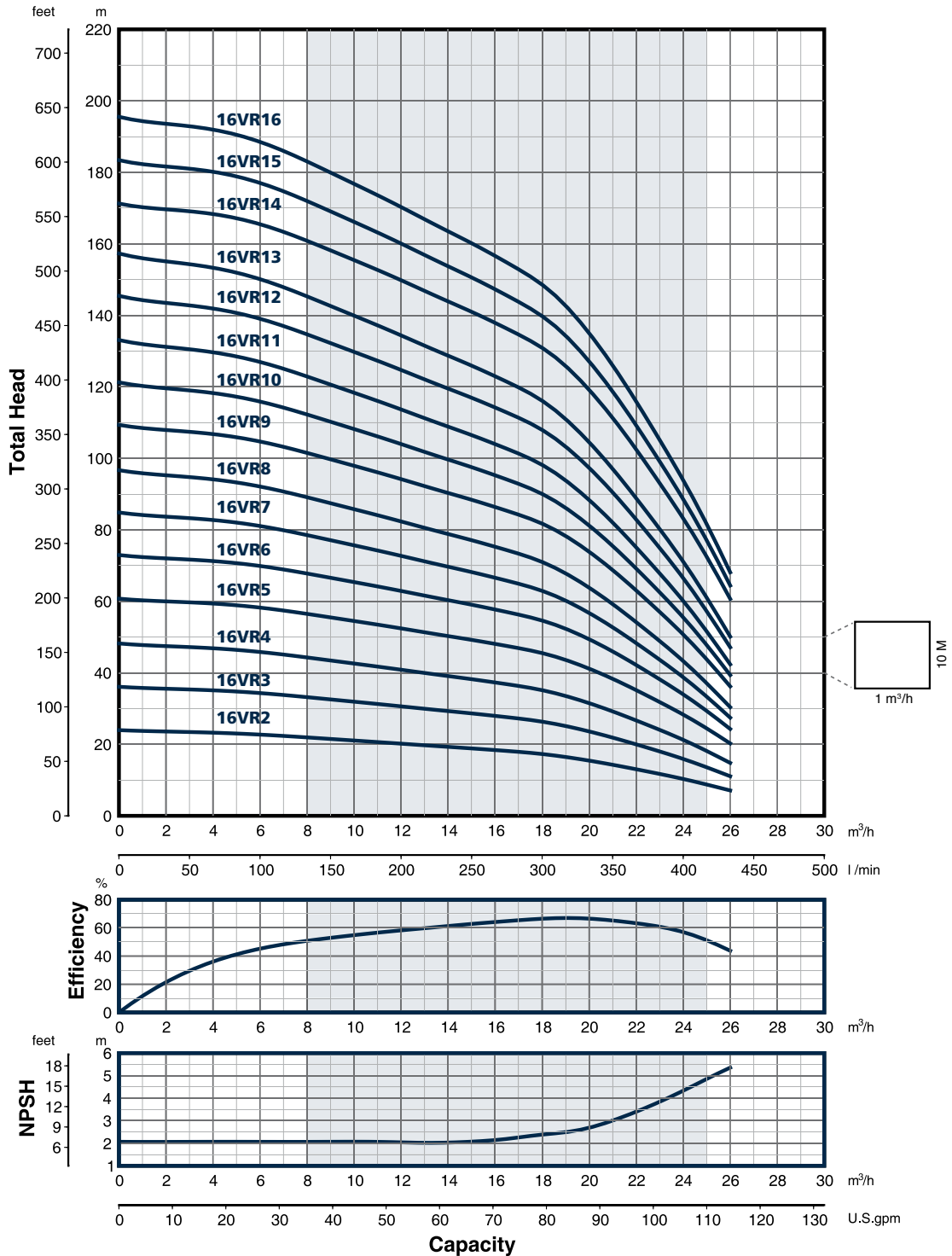
Pump Model	Motor			Dimensions (MM)										Weight (KG)				
	KW/HP	Size	MTG	L1	L2		L3	L4	L5	M		D1		PE	Motor		PMA	
				F	1-ph	3-ph	T-vers	V-vers	C-vers	1-ph	3-ph	1-ph	3-ph		1-ph	3-ph		
9VR2	.75/1.0	80	B14	347.5	255.0	300.0	347.5	347.5	347.5	135.0	155.0	165.0	158.0	17.5	8.5	18.0	26.0	35.5
9VR3	1.1/1.5	80	B14	377.5	255.0	300.0	377.5	377.5	377.5	135.0	155.0	165.0	158.0	18.0	9.5	20.0	27.5	38.0
9VR4	1.5/2.0	90S	B14	417.5	285.0	355.0	417.5	417.5	417.5	145.0	160.0	185.0	175.0	19.0	12.5	25.0	31.5	44.0
9VR5	2.2/3.0	90L	B14	448.0	310.0	385.0	448.0	448.0	448.0	145.0	160.0	185.0	175.0	20.0	14.0	29.0	34.0	49.0
9VR6	2.2/3.0	90L	B14	478.0	310.0	385.0	478.0	478.0	478.0	145.0	160.0	185.0	175.0	21.0	14.0	29.0	35.0	50.0
9VR7	3.0/4.0	100L	B14	518.0		430.0	518.0	518.0	518.0		180.0		197.0	22.0		39.0		61.0
9VR8	3.0/4.0	100L	B14	548.0		430.0	548.0	548.0	548.0		180.0		197.0	23.0		39.0		62.0
9VR10	4.0/5.5	112	B14	608.0		465.0	608.0	608.0	608.0		190.0		220.0	24.5		50.0		74.5
9VR11	4.0/5.5	112	B14	638.0		465.0	638.0	638.0	638.0		190.0		220.0	25.0		50.0		75.0
9VR12	5.5/7.5	132S	B5	690.5		510.0	690.5	690.5	690.5		210.0		262.0	30.5		69.0		99.5
9VR14	5.5/7.5	132S	B5	750.5		510.0		750.5	750.5		210.0		262.0	32.0		69.0		101.0
9VR17	7.5/10.0	132S	B5	840.5		510.0		840.5	840.5		210.0		262.0	34.5		75.0		109.5
9VR19	7.5/10.0	132S	B5	900.5		510.0		900.5	900.5		210.0		262.0	36.0		75.0		111.0
9VR20	7.5/10.0	132S	B5	930.5		510.0		930.5	930.5		210.0		262.0	36.5		75.0		111.5

# Vertical Multistage Pumps

## VR Series

### Performance Curves

#### 16VR Performance Curves

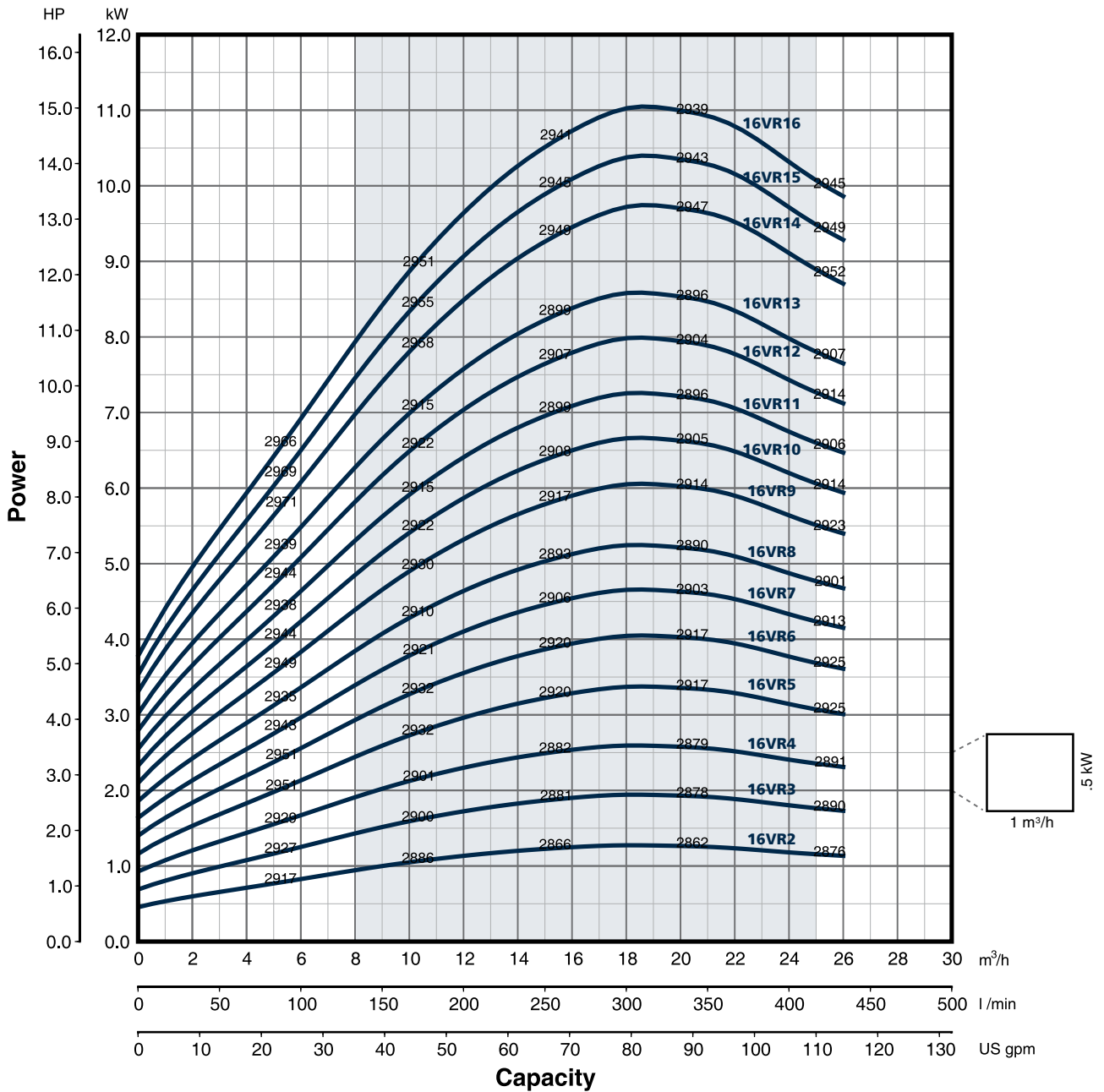


**Notes:** Specifications subject to change without prior notice.  
Hydraulic characteristics are according to ISO standard 9906, Annex A.

# Vertical Multistage Pumps

## VR Series Power Curves

### 16VR Power Curves



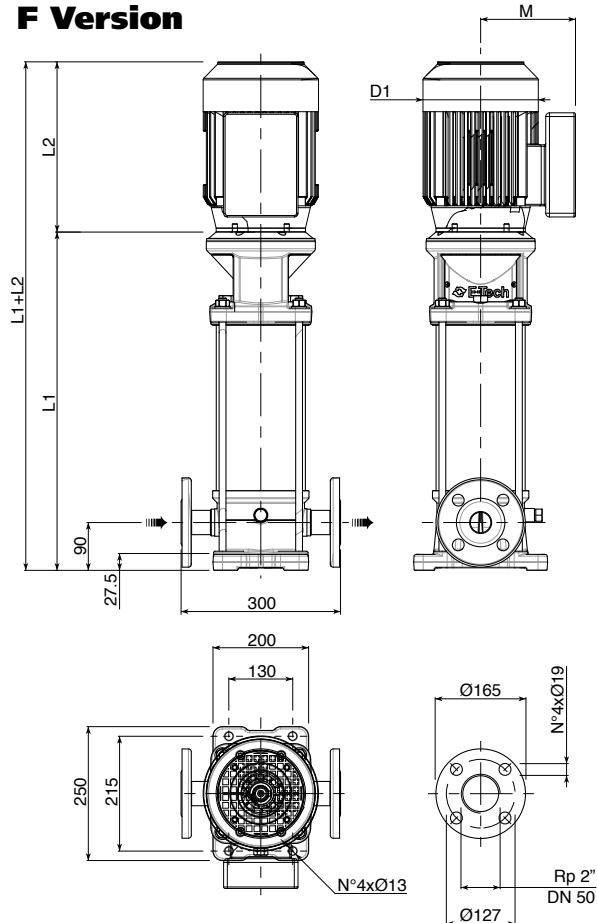
Notes: Specifications subject to change without prior notice.

# Vertical Multistage Pumps

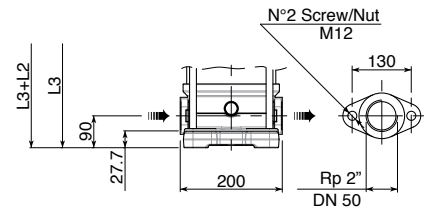
## VR Series

### 16VR Dimensional Data

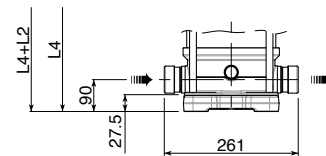
#### F Version



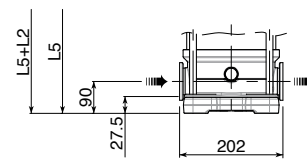
#### T Version



#### V Version



#### C Version



#### F version-

Round flanges on body type PN25: the pump is supplied with joints, bolts and counterflanges.

#### T version-

Oval flanges on body type PN16: the pump is supplied without oval counter flanges for pipe to be screwed, joints and bolts (Optional accessories).

#### V version-

Connections with rapid fittings type "Victaulic": the pump is supplied without the collars (Optional accessories).

#### C version-

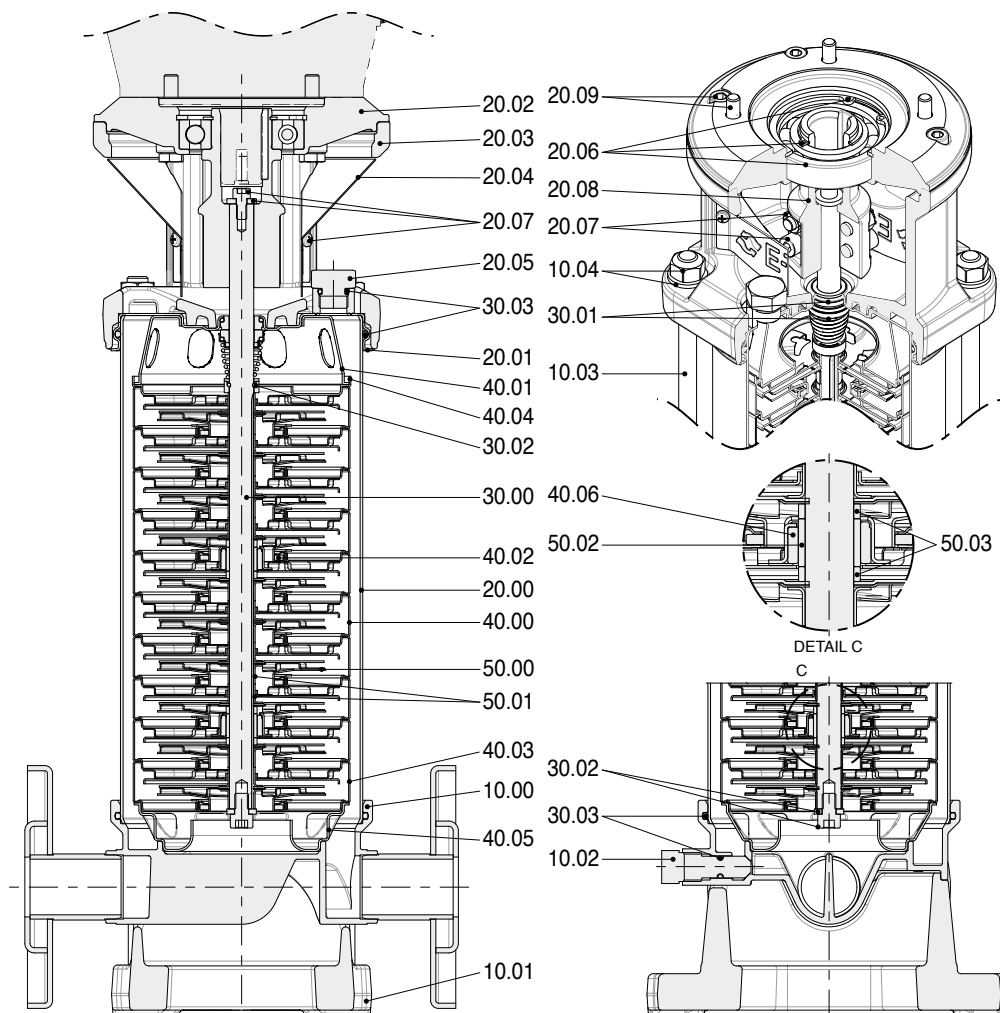
Connections with round fittings type Clamp-FlexiClamp: the pump is supplied without collars (Optional accessories).

Pump Model	Motor			Dimensions (MM)										Weight (KG)				
	KW/HP	Size	MTG	L1	L2		L3	L4	L5	M		D1		PE	Motor		PMA	
				F	1-ph	3-ph	T-vers	V-vers	C-vers	1-ph	3-ph	1-ph	3-ph		1-ph	3-ph		
16VR2	1.5/2.0	90S	B14	382.5		355.0	382.5	382.5	382.5		160.0		175.0	19.0		25.0		44.0
16VR3	2.2/3.0	90L	B14	420.0		385.0	420.0	420.0	420.0		160.0		175.0	20.0		29.0		49.0
16VR4	3.0/4.0	100L	B14	467.5		430.0	467.5	467.5	467.5		180.0		197.0	21.5		39.0		60.5
16VR5	4.0/5.5	112	B14	505.0		465.0	505.0	505.0	505.0		190.0		220.0	22.5		50.0		72.5
16VR6	5.5/7.5	132S	B5	565.0		510.0	565.0	565.0	565.0		210.0		262.0	28.5		69.0		97.5
16VR7	5.5/7.5	132S	B5	602.5		510.0	602.5	602.5	602.5		210.0		262.0	29.5		69.0		98.5
16VR8	5.5/7.5	132S	B5	640.0		510.0	640.0	640.0	640.0		210.0		262.0	30.5		69.0		99.5
16VR9	7.5/10.0	132S	B5	677.5		510.0	677.5	677.5	677.5		210.0		262.0	31.5		75.0		106.5
16VR10	7.5/10.0	132S	B5	715.5		510.0	715.5	715.5	715.5		210.0		262.0	32.5		75.0		107.5
16VR11	7.5/10.0	132S	B5	753.0		510.0	753.0	753.0	753.0		210.0		262.0	33.5		75.0		108.5
16VR12	9.2/12.5	160M	B5	790.5		615.0	790.5	790.5	790.5		255.0		314.0	34.5		120.0		154.5
16VR13	9.2/12.5	160M	B5	828.0		615.0	828.0	828.0	828.0		255.0		314.0	35.0		120.0		155.0
16VR14	11.0/15.0	160M	B5	865.5		615.0	865.5	865.5	865.5		255.0		314.0	36.0		120.0		156.0
16VR15	11.0/15.0	160M	B5	903.0		615.0	903.0	903.0	903.0		255.0		314.0	37.0		120.0		157.0
16VR16	11.0/15.0	160M	B5	940.5		615.0	940.5	940.5	940.5		255.0		314.0	38.0		120.0		158.0

# Vertical Multistage Pumps

## VR Series

### Parts List



Ref. N.	Description
10 00	Pump Casing
10 01	Pump fixing plate
10 02	Draining and priming cap
10 03	Tie bolt
10 04	Kit nuts and washers
20 00	Outer case
20 01	Mechanical seal housing
20 02	Motor flange
20 03	Motor bracket
20 04	Coupling guard
20 05	Filling plug
20 06	Kit circlip and bearing
20 07	Kit coupling washers and screws
20 08	Coupling
20 09	Kit motor screws

Ref. N.	Description
30 00	Pump shaft
30 01	Kit mechanical seal
30 02	Kit screws, nuts and washers
30 03	Kit o-ring (4 pcs)
40 00	Stage housing and diffuser
40 01	Stage centering outlet
40 02	Floating neck ring assembly
40 03	Initial stage housing
40 04	Last stage with diffuser
40 05	Stage centering inlet
40 06	Stage housing and diffuser with bearing
50 00	Impeller
50 01	Impeller spacers (2 pcs)
50 02	Intermediary sleeve
50 03	Intermediary sleeve spacers (2 pcs)

**Note:** Please specify pump model number when ordering.



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