

NOCCHI VLR/VLRI/VLRX VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HIGH HYDRAULIC EFFICIENCY, STANDARDIZED MOTOR



The VLR series offers vertical multi-stage centrifugal pumps with "in line" suction and delivery ports. Directly coupled with an electric motor. Non self-priming.

IDENTIFICATION SYMBOL

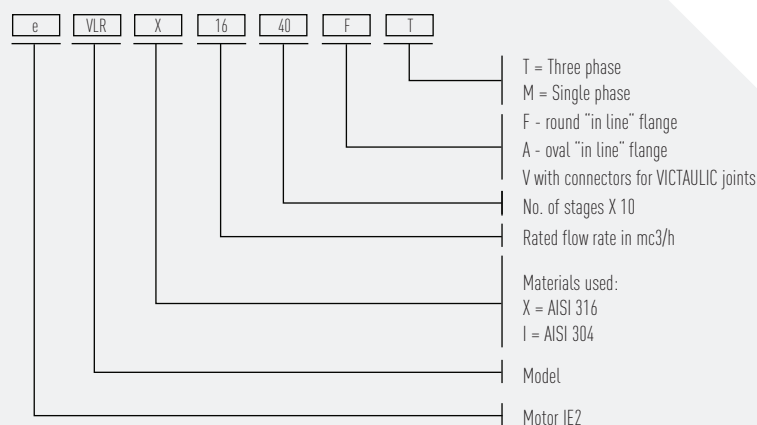


TABLE OF MATERIALS

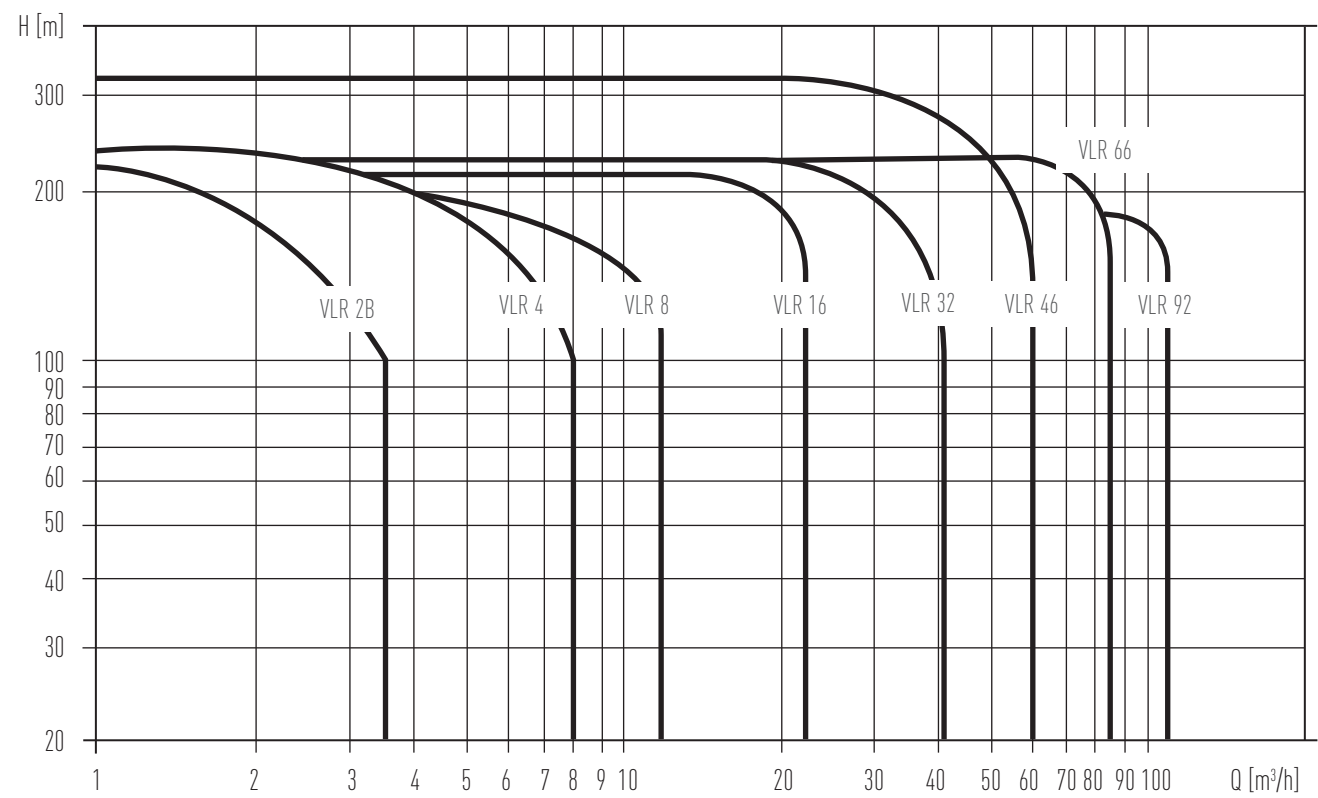
VERSIONS		F - in line ports with ROUND FLANGES (counterflanges optional)	A - in line ports with OVAL FLANGES complete with threaded counter- flange	V - in line ports with connectors for VICTAULIC joints
2B	VLR	X	X	
	VLRI	X	X	
	VLRX	X	X	X
4	VLR	X	X	
	VLRI	X	X	
	VLRX	X	X	X
8	VLR	X	X	
	VLRI	X		
	VLRX	X		X
16	VLR	X		
	VLRI	X		
	VLRX	X		
32	VLR	X		
33	VLRX	X		
46	VLR	X		
	VLRX	X		
66	VLR	X		
	VLRX	X		
92	VLR	X		
	VLRX	X		



NOCCHI VLR

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

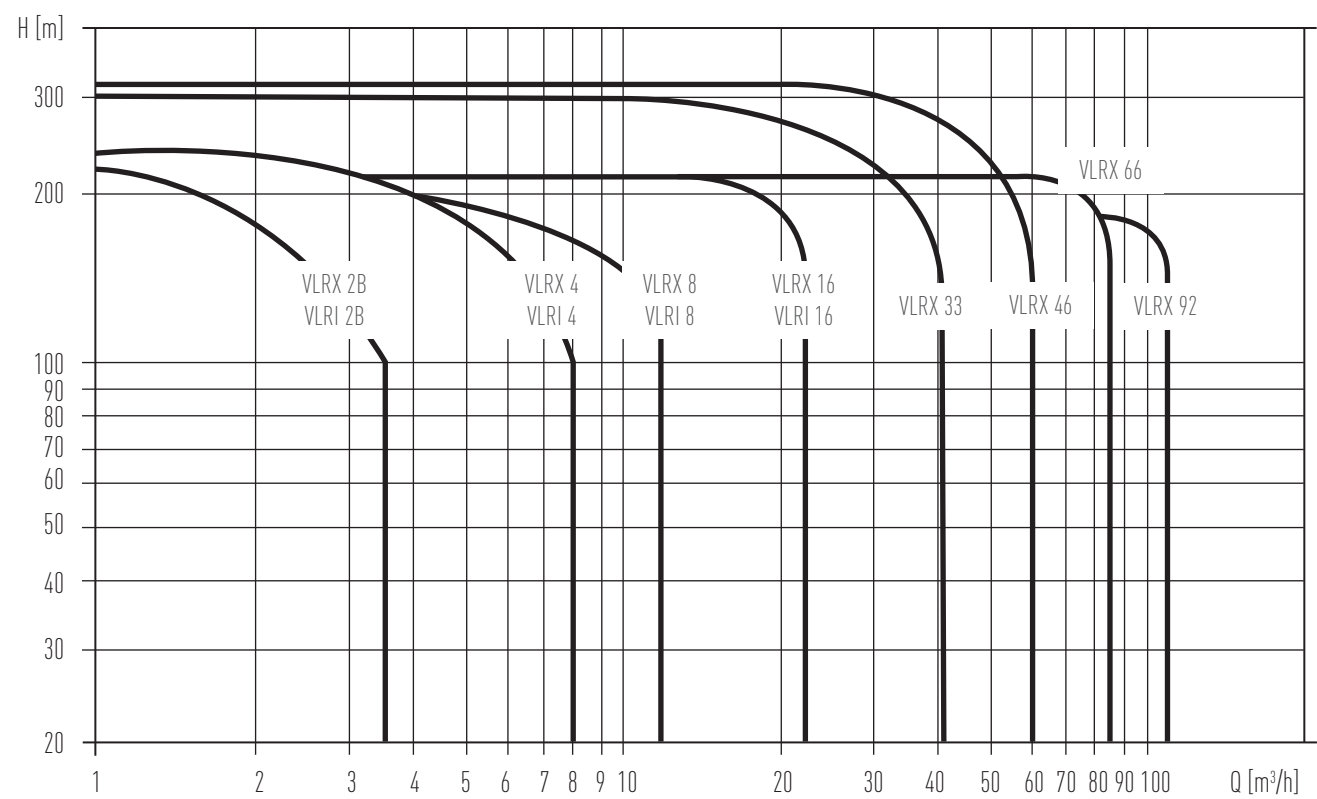
PERFORMANCE RANGE



NOCCHI VLRI/VLRX

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

PERFORMANCE RANGE



NOCCHI VLR

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS



HIGH HYDRAULIC EFFICIENCY, HYDRAULICS IN 100% STAINLESS STEEL, STANDARDIZED MOTOR

The VLR series offers vertical multi-stage centrifugal pumps with "in line" suction and delivery ports. Directly coupled with an electric motor. Non self-priming.

APPLICATIONS

- Water supply
- Pressure increase system
- Irrigation
- High pressure washing
- Fire fighting systems
- Boiler supply
- Liquid transfer

HYDRAULIC

- Impellers, diffusers and external Casing in stainless steel.
- Base, head and lantern housing in cast iron.
- Models VLR 32, VLR 46, VLR 66 and VLR 92 are fitted with a mechanical cartridge seal, thus avoiding the need for motor disassembly in the event of replacement.
- The "A" version models are equipped with threaded oval counterflanges in cast iron.
- The "F" version models are fitted with round DIN flanges.

MOTOR

- Electric asynchronous motor with closed casing and external ventilation.
- The main dimensions are in line with the provisions envisaged by the standards DIN and IEC.
- Construction design: Up to 4.0 Kw V18 From 5.5 Kw V1.
- Insulation class F.
- Protection rating IP 55.
- Maximum ambient temperature: 40° C.
- Rotation speed 2900 rpm.
- Oversized bearings for optimal load support.

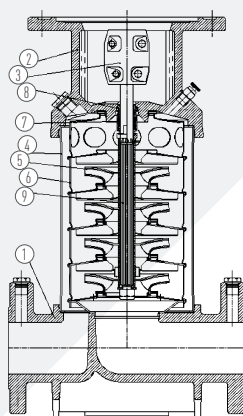


TABLE OF MATERIALS

COMPONENT		VLR 2B - 4 - 8 - 16	VLR 32	VLR 46 - 66 - 92
1	Base	Cast iron EN GJL 200	Cast iron EN GJL 500-7U	Cast iron EN GJL 250
2	Motor housing	Cast iron EN GJL 200	Cast iron EN GJL 200	Cast iron EN GJL 200
3	Motor coupling	Cast iron EN GJS 400	Cast iron EN GJL 500-7U	Cast iron EN GJL 200
4	Casing	Stainless steel X5CrNi18-10 (AISI 304)		Stainless steel X2CrNiMo17-12-2 (AISI 316L)
5	Impeller	Stainless steel X5CrNi18-10 (AISI 304)		Stainless steel X2CrNiMo17-12-2 (AISI 316L)
6	Diffuser	Stainless steel X5CrNi18-10 (AISI 304)		Stainless steel Nimo17-12-2 (AISI 316L)
7	Rotary gasket	Silicon carbide	Tungsten carbide	Silicon carbide
8	Fixed gasket	Graphite	Graphite	Graphite
9	Shaft	Stainless steel X2CrNiMo17-12-2 (AISI 316L)	Stainless steel X17CrNi16-2 (AISI 316L)	Stainless steel X2CrNiMoN22-5-3 (AISI 316L)
10	Seals	EPDM		

NOCCHI VLR

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

APPLICATION DATA

	VLR 2B	VLR 4	VLR 8		VLR 16
	Oval flanges	DIN flanges	Oval flanges	DIN flanges	DIN flanges
Liquid temperature	from -15 to +120° C		from -15 to +120° C		from -15 to +120° C
Max. operating pressure (including suction head)	16 bar	25 bar (max temp 40° C)	16 bar	25 bar (max temp 40° C)	VLR16-30 - 2 - VLR16-100 25 bar (max temp 85° C)
		21 bar (max temp 120° C)		21 bar (max temp 120° C)	VLR16-30 -2 - VLR16-30 23 bar (max temp 120° C)
Minimum suction head	NPSH plus safety margin of 0.5 m				

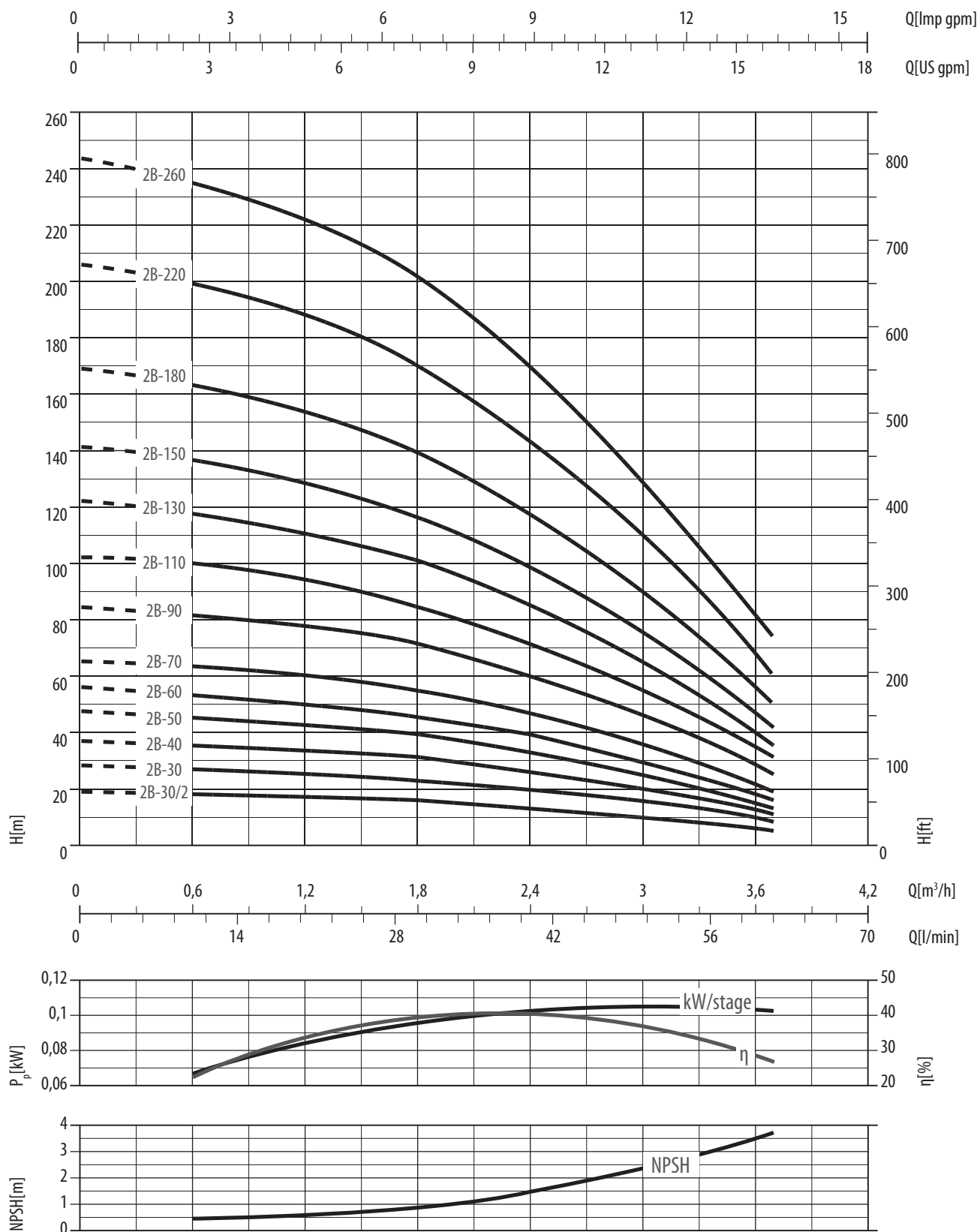
APPLICATION DATA

	VLR 32 DIN flanges	VLR 46 DIN flanges	VLR 66 DIN flanges	VLR 92 DIN flanges
Liquid temperature	from -20 to +120° C	from -30 to +120° C	from -30 to +120° C	from -30 to +120° C
Max. operating pressure (including suction head)	25 bar	16 bar up to VLR 46-50 25 bar up to VLR46-90 40 bar up to VLR 46-130/2	16 bar up to VLR 66-50 25 bar up to VLR 66-80	16 bar up to VLR 92-40 25 bar up to 92-70/2
Minimum suction head	NPSH plus safety margin of 0.5 m			

NOCCHI VLR 2B

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid with water density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

VLR 2B	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

NOCCHI VLR 2B

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

PERFORMANCE TABLE

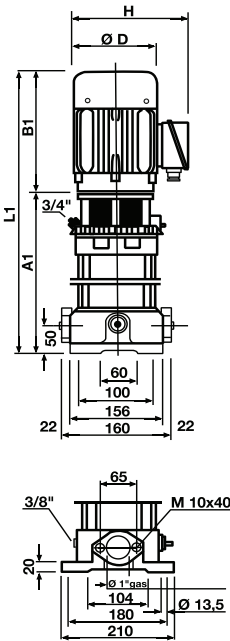
MODEL	Motor output		Volt	In (A)	µF.	Q	L/min	10	20	30	40	50
	HP	kW					m³/h	0.6	1.2	1.8	2.4	3
VLR 2B - 30/2 A M VLR 2B - 30/2 A T	0.5	0.37	1~230 V 3~230 - 400 V	2.8 1.7-1.0	12.5	m.c.a. / m.w.c.	18	17	16	13	10	
VLR 2B - 30 A M VLR 2B - 30 A T	0.5	0.37	1~230 V 3~230 - 400 V	2.8 1.7-1.0	12.5		27	26	23	20	15	
VLR 2B - 40 A M VLR 2B - 40 A T	0.75	0.55	1~230 V 3~230 - 400 V	4.2 2.6-1.5	16		36	34	31	26	20	
VLR 2B - 50 A M VLR 2B - 50 A T	0.75	0.55	1~230 V 3~230 - 400 V	4.2 2.6-1.5	16		45	43	39	33	25	
VLR 2B - 60 A M VLR 2B - 60 A T	1	0.75	1~230 V 3~230 - 400 V	5 3.5-2	25		54	51	46	39	30	
VLR 2B - 70 A M VLR 2B - 70 A T	1	0.75	1~230 V 3~230 - 400 V	5 3.5-2	25		64	60	54	46	35	
VLR 2B - 90 A M VLR 2B - 90 A T	1.5	1.1	1~230 V 3~230 - 400 V	7.9 4.5-2.6	31.5		82	77	70	59	45	
VLR 2B - 110 A M VLR 2B - 110 A T	1.5	1.1	1~230 V 3~230 - 400 V	7.9 4.5-2.6	31.5		100	94	85	72	55	
VLR 2B - 130 A M VLR 2B - 130 A T	2	1.5	1~230 V 3~230 - 400 V	10.5 6.1-3.5	36		118	111	101	85	65	
VLR 2B - 150 A M VLR 2B - 150 A T	2	1.5	1~230 V 3~230 - 400 V	10.5 6.1-3.5	36		136	128	116	99	75	
VLR 2B - 180 F T	3	2.2	3~230 - 400 V	8.5-4.9			163	154	139	118	90	
VLR 2B - 220 F T	3	2.2	3~230 - 400 V	8.5-4.9			199	188	170	144	110	
VLR 2B - 260 F T	4	3	3~230 - 400 V	11.6-6.7			235	222	201	170	130	

- VLR 2B version "A" models are supplied complete with oval 1" GAS flanges
- VLR 2B version "F" models are supplied with optional round counterflanges

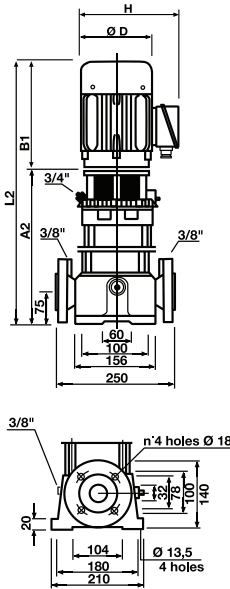
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)							Net weight (kg)	
	A ₁	B ₁	L ₁	A ₂	L ₂	D	H		
VLR 2B - 30/2	238	213	451	-	-	142	109	20	-
VLR 2B - 30	238	213	451	-	-	142	109	21	-
VLR 2B - 40	256	213	469	-	-	142	109	23	-
VLR 2B - 50	274	213	487	-	-	142	109	25	-
VLR 2B - 60	296	237	533	-	-	160	131	26	-
VLR 2B - 70	314	237	551	-	-	160	131	33	-
VLR 2B - 90	350	237	587	-	-	160	131	34	-
VLR 2B - 110	386	237	623	-	-	160	131	36	-
VLR 2B - 130	441	265	706	-	-	185	130	37	-
VLR 2B - 150	447	265	742	-	-	185	130	43	-
VLR 2B - 180	-	265	-	556	821	185	130	-	49
VLR 2B - 220	-	265	-	628	893	185	130	-	61
VLR 2B - 260	-	315	-	704	1019	200	140	-	63

Design with oval flanges
VLR 2B 30/2 VLR 2B 150



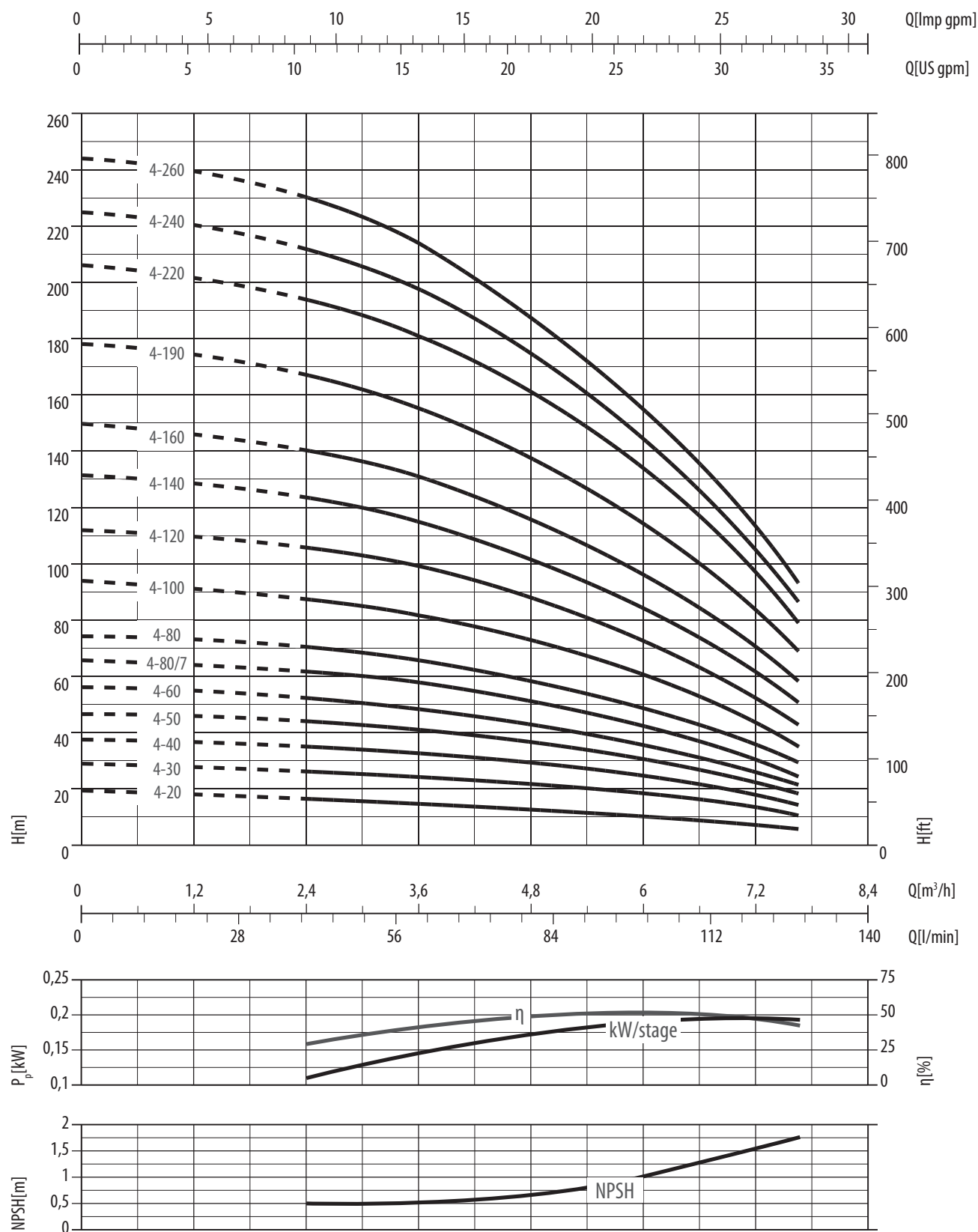
Design with flanges
PIN 10 DIN 2534/ISO 7005-2



NOCCHI VLR 4

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid with water density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

VLR4	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

NOCCHI VLR 4

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

PERFORMANCE TABLE

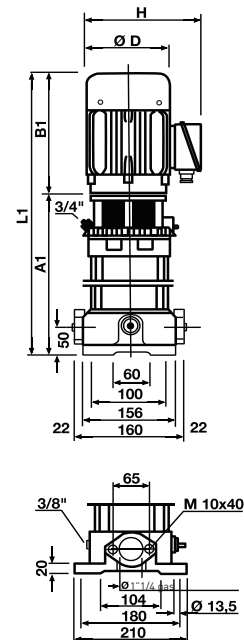
MODEL	Motor output		Volt	In (A)	µF.	Q	L/min m³/h	40	60	80	100	120
	HP	kW						2.4	3.6	4.8	6	7.2
VLR 4 - 20 A M VLR 4 - 20 A T	0.5	0.37	1~230 V 3~230 - 400 V	2.8 1.7-1.0	12.5	m.c.a. / m.w.c.		18	16	15	12	9
VLR 4 - 30 A M VLR 4 - 30 A T	0.75	0.55	1~230 V 3~230 - 400 V	4.2 2.6-1.5	16			27	25	22	18	13
VLR 4 - 40 A M VLR 4 - 40 A T	1	0.75	1~230 V 3~230 - 400 V	5 3.5-2	25			35	33	29	24	18
VLR 4 - 50 A M VLR 4 - 50 A T	1.5	1.1	1~230 V 3~230 - 400 V	7.9 4.5-2.6	31.5			44	41	36	30	22
VLR 4 - 60 A M VLR 4 - 60 A T	1.5	1.1	1~230 V 3~230 - 400 V	7.9 4.5-2.6	36			53	49	44	36	27
VLR 4 - 80/7 A M VLR 4 - 80/7 A T	2	1.5	1~230 V 3~230 - 400 V	10.5 6.1-3.5	36			62	58	51	43	31
VLR 4 - 80 A M VLR 4 - 80 A T	2	1.5	1~230 V 3~230 - 400 V	10.5 6.1-3.5				71	66	58	49	35
VLR 4 - 100 A T	3	2.2	3~230 - 400 V	8.5-4.9				89	82	73	61	44
VLR 4 - 120 A T	3	2.2	3~230 - 400 V	8.5-4.9				106	99	87	73	53
VLR 4 - 140 A T	4	3	3~230 - 400 V	11.6-6.7				124	115	102	85	62
VLR 4 - 160 A T	4	3	3~230 - 400 V	11.6-6.7				142	131	117	97	71
VLR 4 - 190 F T	5.5	4	3~230 - 400 V	14.3-8.3				168	156	138	115	84
VLR 4 - 220 F T	5.5	4	3~230 - 400 V	14.3-8.3				195	181	160	134	97
VLR 4 - 240 F T	7.5	5.5	3~400 - 690 V	11.3-8.5				213	197	175	146	106
VLR 4 - 260 F T	7.5	5.5	3~400 - 690 V	11.3-8.5				230	214	189	158	115

- VLR 4 version "A" models are supplied complete with oval 1" GAS flanges
- VLR 4 version "F" models are supplied with optional round counterflanges

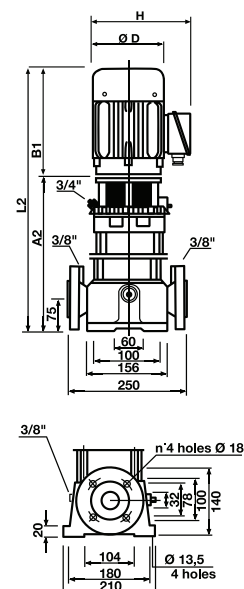
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)							Net weight (kg)	
	A ₁	B ₁	L ₁	A ₂	L ₂	D	H		
VLR 4 - 20	238	213	451	-	-	142	109	20	-
VLR 4 - 30	265	213	478	-	-	142	109	21	-
VLR 4 - 40	269	237	533	-	-	160	131	23	-
VLR 4 - 50	323	237	560	-	-	160	131	25	-
VLR 4 - 60	350	237	587	-	-	160	131	26	-
VLR 4 - 80/7	423	265	688	-	-	185	130	33	-
VLR 4 - 80	423	265	688	-	-	185	130	33	-
VLR 4 - 100	477	265	742	-	-	185	130	36	-
VLR 4 - 120	531	265	796	-	-	185	130	37	-
VLR 4 - 140	589	315	904	-	-	200	140	41	-
VLR 4 - 160	643	315	958	-	-	200	140	43	-
VLR 4 - 190	-	335	-	749	1084	200	140	-	61
VLR 4 - 220	-	335	-	830	1165	200	140	-	63
VLR 4 - 240	-	385	-	911	1298	260	185	-	87
VLR 4 - 260	-	385	-	965	1350	260	185	-	89

Design with oval flanges
VLR 4-20 VLR 4-160



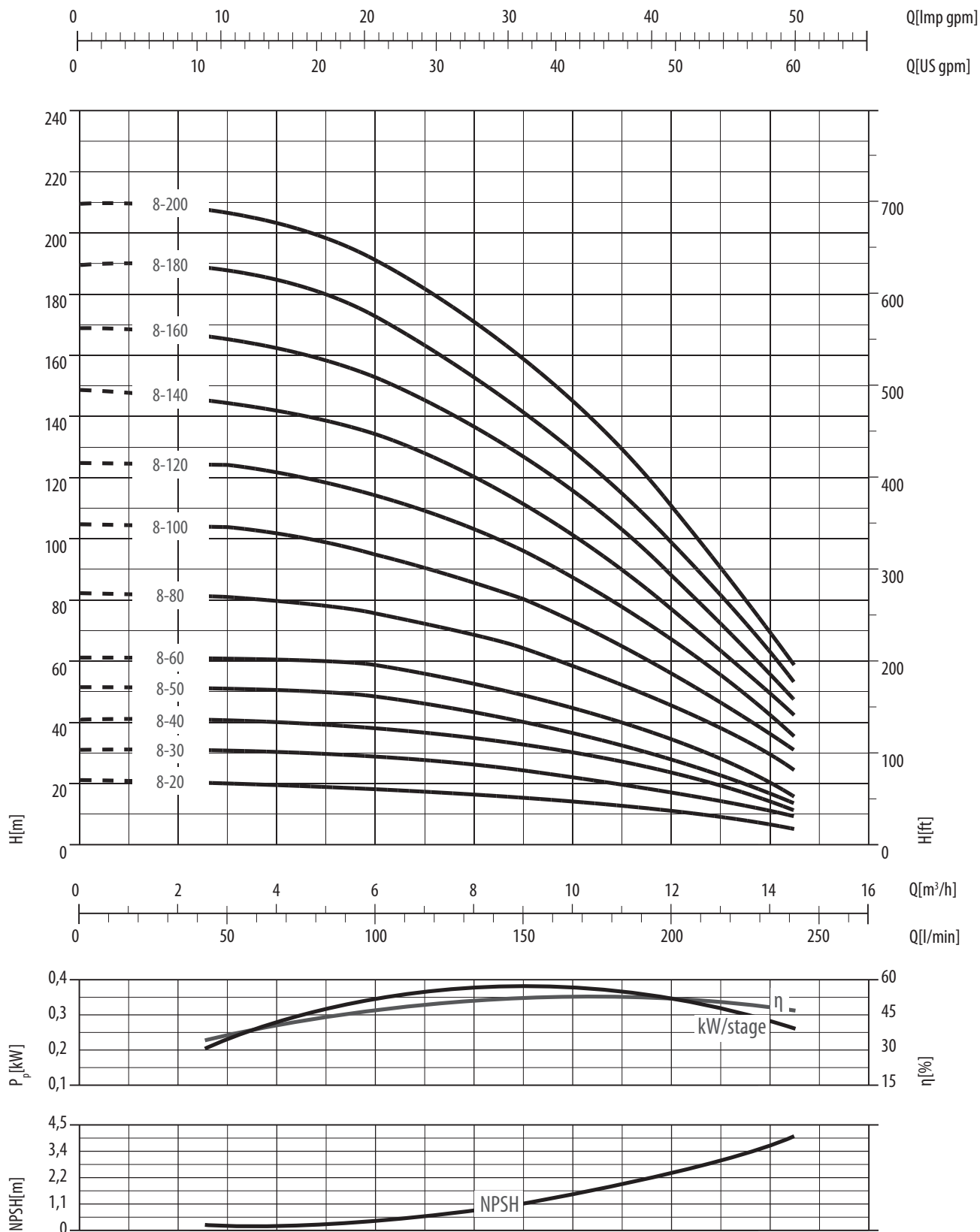
Design with flanges
PIN 10 DIN 2534/ISO 7005-2



NOCCHI VLR 8

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



VLR8	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

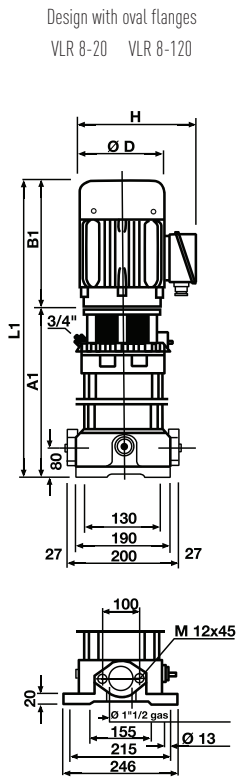
NOCCHI VLR 8

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

PERFORMANCE TABLE

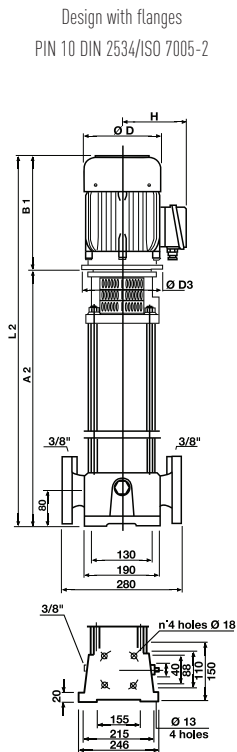
MODEL	Motor output		Volt	In (A)	μF.	Q	L/min	50	100	150	175	200
	HP	kW					m³/h	3	6	9	10.5	12
VLR 8 - 20 A M VLR 8 - 20 A T	1	0.75	1~230 V 3~230 - 400 V	5 3.5-1.9	25	m.c.a. / m.w.c.		21	19	16	14	11
VLR 8 - 30 A M VLR 8 - 30 A T	1.5	1.1	1~230 V 3~230 - 400 V	7.9 4.5-2.6	31.5			31	29	24	21	16
VLR 8 - 40 A M VLR 8 - 40 A T	2	1.5	1~230 V 3~230 - 400 V	10.5 6.1-3.5	36			41	38	32	27	22
VLR 8 - 50 A T	3	2.2	3~230 - 400 V	8.5-4.9				52	48	40	34	27
VLR 8 - 60 A T	3	2.2	3~230 - 400 V	8.5-4.9				62	58	48	41	33
VLR 8 - 80 A T	4	3	3~230 - 400 V	11.6-6.7				82	77	64	55	44
VLR 8 - 100 A T	5.5	4	3~230 - 400 V	14.3-8.3				103	96	80	69	55
VLR 8 - 120 A T	5.5	4	3~230 - 400 V	14.3-8.3				124	115	96	82	65
VLR 8 - 140 F T	7.5	5.5	3~400 - 690 V	11.3-8.5				144	134	112	96	76
VLR 8 - 160 F T	7.5	5.5	3~400 - 690 V	11.3-8.5				165	154	128	110	87
VLR 8 - 180 F T	10	7.5	3~400 - 690 V	14.3-8.3				185	173	144	123	98
VLR 8 - 200 F T	10	7.5	3~400 - 690 V	14.3-8.3				206	192	160	137	109

- VLR 8 version "A" models are supplied complete with oval 1" GAS counterflanges
- VLR 8 version "F" models are supplied with optional round counterflanges



OVERALL DIMENSIONS AND WEIGHTS

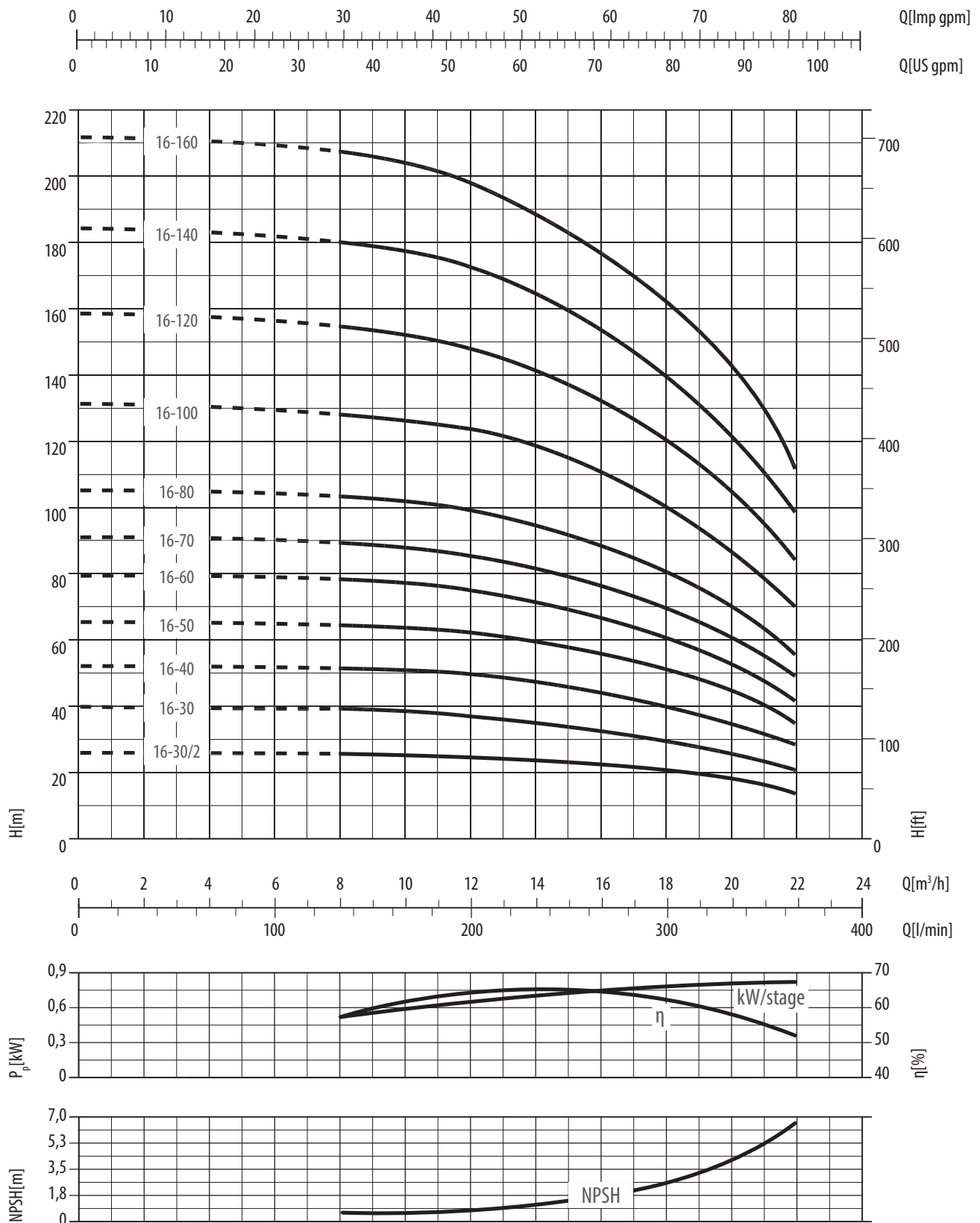
MODEL	Dimensions (mm)								Net weight (kg)	
	A ₁	B ₁	L ₁	A ₂	L ₂	D	H	D ₃		
VLR 8 - 20	245	237	482	-	-	160	131	-	30	-
VLR 8 - 30	375	237	612	-	-	160	131	-	32	-
VLR 8 - 40	420	265	685	-	-	185	130	-	40	-
VLR 8 - 50	450	265	715	-	-	185	130	-	42	-
VLR 8 - 60	480	265	745	-	-	185	130	-	43	-
VLR 8 - 80	545	315	860	-	-	200	140	-	51	-
VLR 8 - 100	605	335	940	-	-	200	140	-	52	-
VLR 8 - 120	665	335	1000	-	-	200	140	-	56	-
VLR 8 - 140	-	385	-	745	1130	260	185	300	-	85
VLR 8 - 160	-	385	-	805	1190	260	185	300	-	86
VLR 8 - 180	-	385	-	865	1250	260	185	300	-	90
VLR 8 - 200	-	385	-	925	1310	260	185	300	-	91



NOCCHI VLR 16

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid with water density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

VLR 16	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

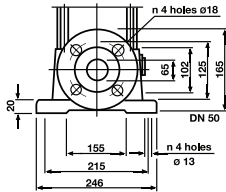
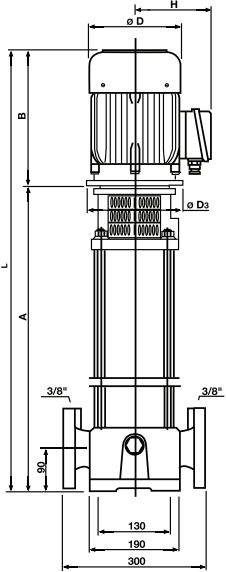
NOCCHI VLR 16

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Motor output		Volt	In (A)	Q	L/min	100	200	250	300	350
	HP	kW				m³/h	6	12	15	18	21
VLR 16 - 30/2 F T	3	2.2	3-230 - 400 V	8.5-4.9	m.c.a. / m.w.c.	26	25	23	20	16	
VLR 16 - 30 F T	4	3	3-230 - 400 V	11.6-6.7		39	37	34	30	24	
VLR 16 - 40 F T	5.5	4	3-230 - 400 V	14.3-8.3		52	49	46	40	32	
VLR 16 - 50 F T	7.5	5.5	3-400 - 690 V	11.3-8.5		65	62	57	51	40	
VLR 16 - 60 F T	7.5	5.5	3-400 - 690 V	11.3-8.5		78	74	69	61	47	
VLR 16 - 70 F T	10	7.5	3-400 - 690 V	14.3-8.3		91	86	80	71	55	
VLR 16 - 80 F T	10	7.5	3-400 - 690 V	14.3-8.3		104	98	92	81	63	
VLR 16 - 100 F T	15	11	3-400 - 690 V	21-12.1		130	123	115	101	79	
VLR 16 - 120 F T	15	11	3-400 - 690 V	21-12.1		156	148	137	121	95	
VLR 16 - 140 F T	20	15	3-400 - 690 V	28-12.6		182	172	160	142	111	
VLR 16 - 160 F T	20	15	3-400 - 690 V	28-12.6		208	197	183	162	126	

Flanges DN50 PN25 DIN 2534/ISO 7005-2 (with thru-diameter of 65 m/m). Counterflanges optional



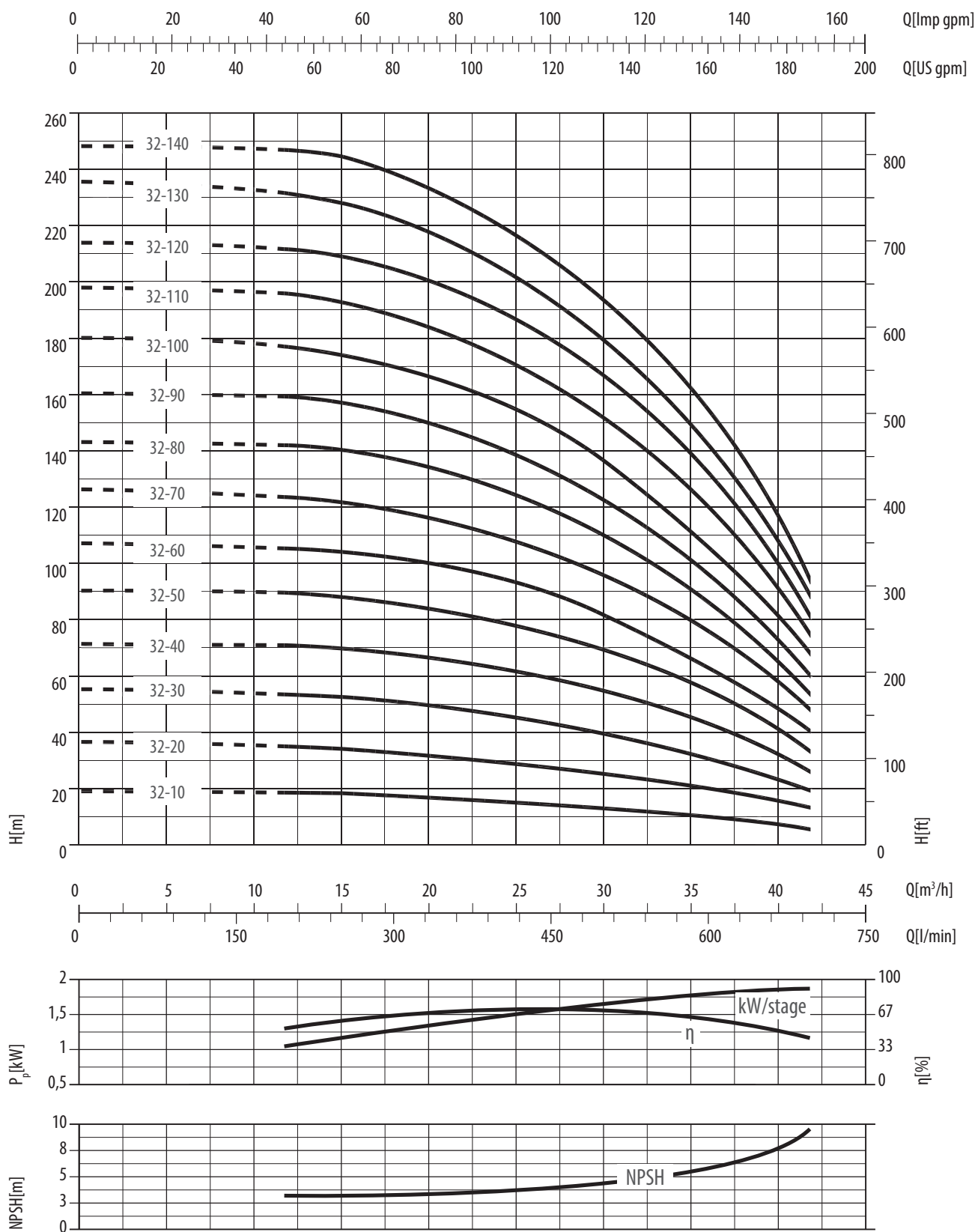
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)						Net weight (kg)
	A	B	L	D	H	D ₃	
VLR 16 - 30/2 F T	460	265	725	185	130	140	52
VLR 16 - 30 F T	464	315	779	200	140	250	56
VLR 16 - 40 F T	509	335	844	200	140	250	59
VLR 16 - 50 F T	575	385	960	260	185	300	82
VLR 16 - 60 F T	620	385	1005	260	185	300	84
VLR 16 - 70 F T	665	385	1050	260	185	300	90
VLR 16 - 80 F T	710	385	1095	260	185	300	92
VLR 16 - 100 F T	830	495	1325	260	185	350	136
VLR 16 - 120 F T	920	495	1425	260	185	350	140
VLR 16 - 140 F T	1010	495	1505	310	230	350	181
VLR 16 - 160 F T	1100	495	1595	310	230	350	185

NOCCHI VLR 32

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid with water density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

VLR 32	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

NOCCHI VLR 32

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

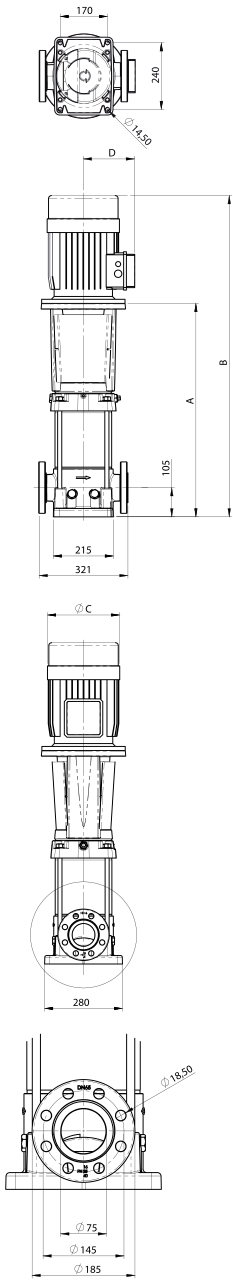
PERFORMANCE TABLE

MODEL	Motor output		Volt	In (A)	Q	L/min	200	400	500	600	700
	HP	kW				m³/h	12	24	30	36	42
VLR 32-1	3	2.2	3 ~ 230 - 400 V	8.65-5	m.c.a. / m.w.c.	18	16	14	11	7	
VLR 32-2	5.5	4	3 ~ 400 - 690 V	8.6		35	31	27	22	14	
VLR 32-3	7.5	5.5	3 ~ 400 - 690 V	10.9		53	47	41	33	20	
VLR 32-4	10	7.5	3 ~ 400 - 690 V	14.7		71	63	55	44	27	
VLR 32-5	15	11	3 ~ 400 - 690 V	21		89	79	69	55	34	
VLR 32-6	15	11	3 ~ 400 - 690 V	21		106	94	82	66	41	
VLR 32-7	20	15	3 ~ 400 - 690 V	29		124	110	96	77	48	
VLR 32-8	20	15	3 ~ 400 - 690 V	29		142	126	110	88	54	
VLR 32-9	25	18.5	3 ~ 400 - 690 V	35		159	141	123	99	61	
VLR 32-10	30	22	3 ~ 400 - 690 V	42		177	157	137	110	68	
VLR 32-11	30	22	3 ~ 400 - 690 V	42		195	173	151	121	75	
VLR 32-12	40	30	3 ~ 400 - 690 V	55		212	188	164	132	82	
VLR 32-13	40	30	3 ~ 400 - 690 V	55		230	204	178	143	88	
VLR 32-14	40	30	3 ~ 400 - 690 V	55		248	220	192	154	95	

Flanges DN50 PN25 DIN 2534/ISO 7005-2. Counterflanges optional

OVERALL DIMENSIONS AND WEIGHTS

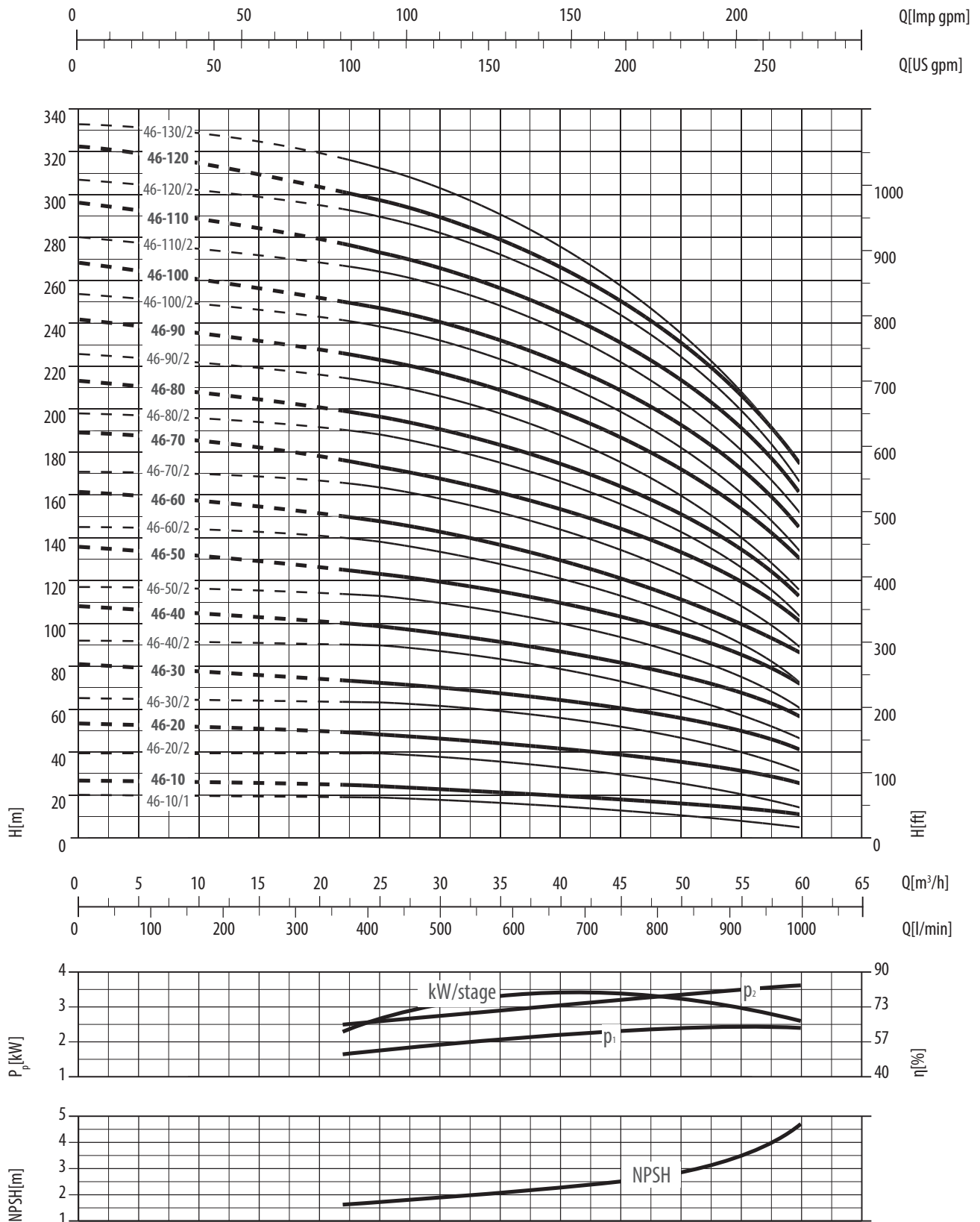
MODEL	Dimensions (mm)				Net weight (kg)
	A	B	L	D	
VLR 32-1	580	850	185	145	78
VLR 32-2	650	950	210	155	93.5
VLR 32-3	770	1160	260	200	114
VLR 32-4	840	1230	260	200	121
VLR 32-5	910	1370	260	215	153
VLR 32-6	980	1440	260	215	157.5
VLR 32-7	1050	1510	260	215	166.5
VLR 32-8	1120	1580	260	215	177.5
VLR 32-9	1190	1650	320	245	200
VLR 32-10	1260	1800	320	245	218
VLR 32-11	1330	1870	320	245	222.5
VLR 32-12	1400	1980	320	245	236
VLR 32-13	1480	2120	360	275	269
VLR 32-14	1550	2190	360	275	280



NOCCHI VLR 46

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid with water density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

VLR 46	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

NOCCHI VLR 46

ELECTRIC VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Motor output		Volt	In (A)	Q	L/min	367	417	500	583	667	750	900	1000
	HP	kW				m³/h	22	25	30	35	40	45	54	60
VLR 46-10/1	4	3	3~230 - 400 V	5	m.c.a. / m.w.c.	19	19	18	17	15	13	9	5	
VLR 46-10	5.5	4	3~230 - 400 V	8.6		24	24	23	21	20	18	14	11	
VLR 46-20/2	7.5	5.5	3~400 - 690 V	10.9		40	39	38	36	33	29	21	14	
VLR 46-20	10	7.5	3~400 - 690 V	14.7		49	48	46	44	42	39	31	25	
VLR 46-30/2	15	11	3~400 - 690 V	21		65	64	62	60	56	52	40	31	
VLR 46-30	15	11	3~400 - 690 V	21		74	73	71	68	65	60	50	41	
VLR 46-40/2	20	15	3~400 - 690 V	29		91	90	87	83	79	73	58	46	
VLR 46-40	20	15	3~400 - 690 V	29		100	98	96	92	87	82	68	56	
VLR 46-50/2	25	18.5	3~400 - 690 V	35		115	113	110	106	100	93	75	60	
VLR 46-50	25	18.5	3~400 - 690 V	35		125	123	120	116	110	103	86	72	
VLR 46-60/2	30	22	3~400 - 690 V	42		139	138	134	129	122	113	92	73	
VLR 46-60	30	22	3~400 - 690 V	42		150	148	144	139	132	124	104	86	
VLR 46-70/2	40	30	3~400 - 690 V	55		165	163	158	152	144	134	110	89	
VLR 46-70	40	30	3~400 - 690 V	55		176	173	168	162	155	145	122	101	
VLR 46-80/2	40	30	3~400 - 690 V	55		190	188	182	176	166	155	127	103	
VLR 46-80	40	30	3~400 - 690 V	55		199	196	191	184	175	164	137	113	
VLR 46-90/2	40	30	3~400 - 690 V	55		215	212	206	198	187	174	143	116	
VLR 46-90	50	37	3~400 - 690 V	65		225	222	217	209	199	187	157	130	
VLR 46-100/2	50	37	3~400 - 690 V	65		241	238	232	223	212	198	164	134	
VLR 46-100	50	37	3~400 - 690 V	65		250	247	241	232	221	208	174	145	
VLR 46-110/2	60	45	3~400 - 690 V	80		267	264	258	249	237	222	184	151	
VLR 46-110	60	45	3~400 - 690 V	80		276	273	266	257	245	230	194	161	
VLR 46-120/2	60	45	3~400 - 690 V	80		293	289	282	272	259	243	202	166	
VLR 46-120	60	45	3~400 - 690 V	80		301	297	290	280	267	250	210	175	
VLR 46-130/2	60	45	3~400 - 690 V	80		316	312	304	292	277	259	214	175	

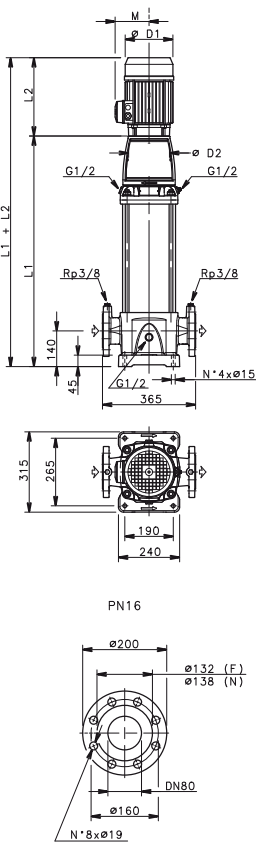
Flanges DN80 PN16 (VLR46-10/1, VLR 46-50); PN25 from VLR 46-60/2 to 46-90; PN 40 from VLR 46-100 TO 46-130/2. Counterflanges optional.

NOCCHI VLR 46

ELECTRIC VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

OVERALL DIMENSIONS AND WEIGHTS

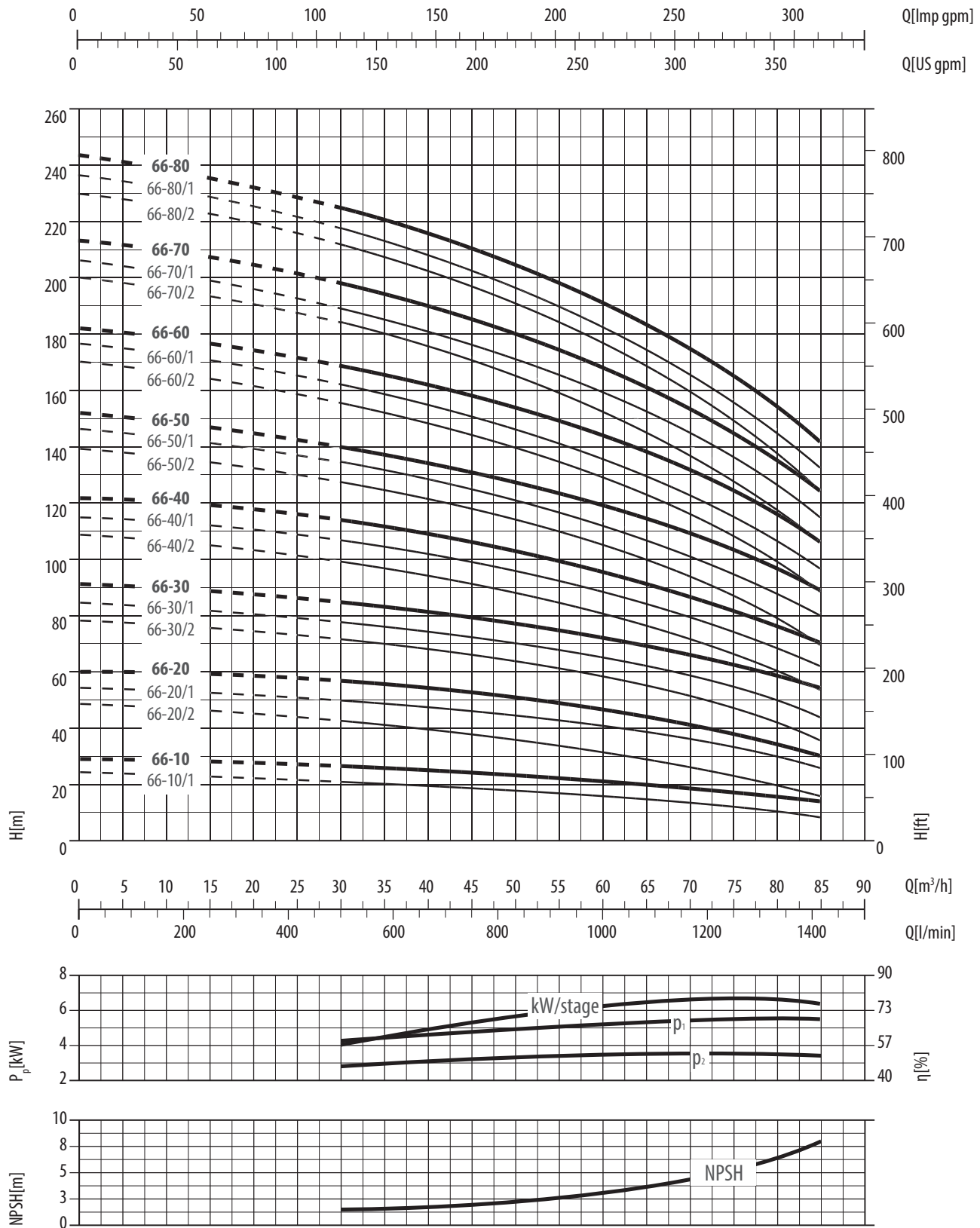
MODEL	Dimensions (mm)					Net weight (kg)
	L ₁	L ₂	D ₁	D ₂	M	
VLR 46-10/1	529	298	174	164	134	79
VLR 46-10	529	319	197	164	154	84.5
VLR 46-20/2	624	375	214	300	168	104
VLR 46-20	624	367	356	300	191	122
VLR 46-30/2	734	428	256	350	191	144
VLR 46-30	734	428	256	350	191	144
VLR 46-40/2	809	494	313	350	240	180
VLR 46-40	809	494	313	350	240	180
VLR 46-50/2	884	494	313	350	240	193
VLR 46-50	884	494	313	350	240	193
VLR 46-60/2	959	494	313	350	240	208
VLR 46-60	959	494	313	350	240	208
VLR 46-70/2	1034	613	354	400	278	230
VLR 46-70	1034	613	354	400	278	230
VLR 46-80/2	1109	613	354	400	278	234
VLR 46-80	1109	613	354	400	278	234
VLR 46-90/2	1184	613	354	400	278	238
VLR 46-90	1184	613	354	400	278	238
VLR 46-100/2	1259	613	354	400	278	248
VLR 46-100	1259	613	354	400	278	257
VLR 46-110/2	1334	710	411	450	298	257
VLR 46-110	1334	710	411	450	298	345
VLR 46-120/2	1409	710	411	450	298	345
VLR 46-120	1409	710	411	450	298	350
VLR 46-130/2	1484	710	411	450	298	354



NOCCHI VLR 66

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



VLR 66	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

NOCCHI VLR 66

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Motor output		Volt	In (A)	Q	L/min	500	600	700	750	900	1000	1200	1300	1417
	HP	kW				m³/h	30	36	42	45	54	60	72	78	85
VLR 66-10/1	5.5	4	3~230 - 400 V	8.6	m.c.a. / m.w.c.		21	21	20	19	18	17	13	11	8
VLR 66-10	7.5	5.5	3~400 - 690 V	10.9			26	25	24	23	22	21	18	16	14
VLR 66-20/2	10	7.5	3~400 - 690 V	14.7			43	41	40	39	36	33	26	22	16
VLR 66-20/1	15	11	3~400 - 690 V	21			50	48	47	46	43	41	35	31	26
VLR 66-20	15	11	3~400 - 690 V	21			56	54	53	52	49	47	42	39	35
VLR 66-30/2	20	15	3~400 - 690 V	29			72	70	67	66	62	58	49	43	35
VLR 66-30/1	20	15	3~400 - 690 V	29			78	76	74	72	68	65	56	51	44
VLR 66-30	25	18.5	3~400 - 690 V	35			85	83	81	79	75	72	64	60	54
VLR 66-40/2	25	18.5	3~400 - 690 V	35			100	97	94	92	86	82	70	63	53
VLR 66-40/1	30	22	3~400 - 690 V	42			106	103	100	99	93	89	78	71	62
VLR 66-40	30	22	3~400 - 690 V	42			113	110	107	105	100	96	86	79	71
VLR 66-50/2	40	30	3~400 - 690 V	55			128	124	120	118	111	106	92	83	70
VLR 66-50/1	40	30	3~400 - 690 V	55			134	131	127	125	118	112	99	91	80
VLR 66-50	40	30	3~400 - 690 V	55			140	137	133	131	125	119	107	99	89
VLR 66-60/2	40	30	3~400 - 690 V	55			156	152	147	144	136	129	113	103	88
VLR 66-60/1	40	30	3~400 - 690 V	55			162	158	153	151	143	136	121	111	97
VLR 66-60	50	37	3~400 - 690 V	65			169	164	160	158	150	143	128	119	106
VLR 66-70/2	50	37	3~400 - 690 V	65			184	179	174	171	161	153	134	122	106
VLR 66-70/1	50	37	3~400 - 690 V	65			190	185	180	177	168	160	142	131	115
VLR 66-70	60	45	3~400 - 690 V	80			197	192	187	184	174	167	150	139	124
VLR 66-80/2	60	45	3~400 - 690 V	80			212	206	200	197	186	177	156	142	124
VLR 66-80/1	60	45	3~400 - 690 V	80			218	213	207	204	193	184	163	150	133
VLR 66-80	60	45	3~400 - 690 V	80			225	219	213	210	199	191	171	159	142

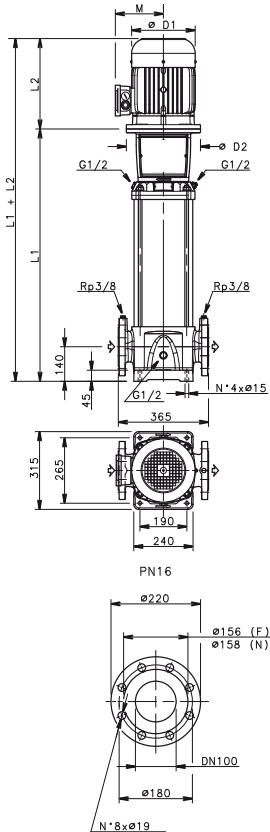
Flanges DN 100 PN 16 from VLR 66-10/1 to 66-80. PN 25 from VLR 66-60 to 66-80. Counterflanges optional.

NOCCHI VLR 66

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

OVERALL DIMENSIONS AND WEIGHTS

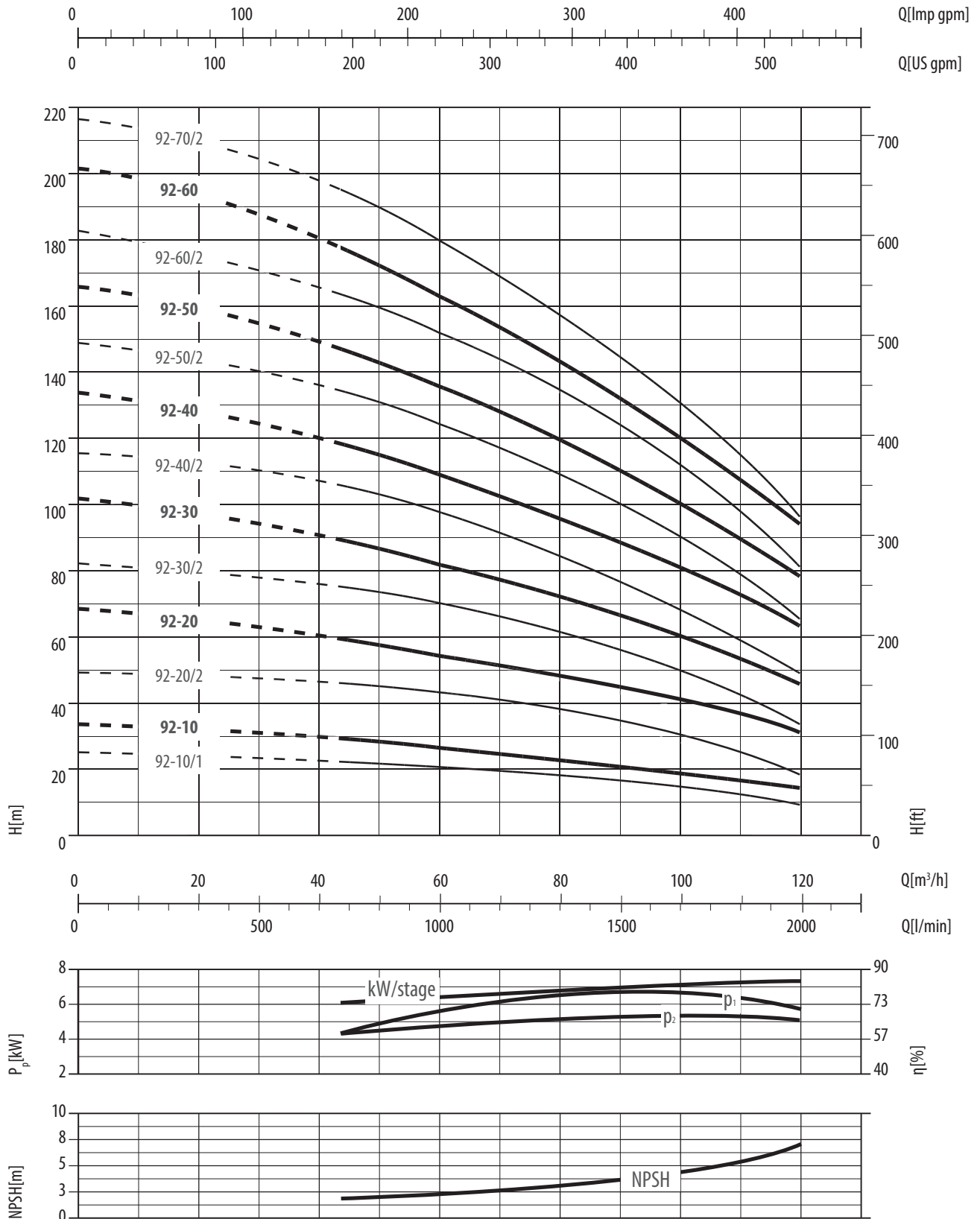
MODEL	Dimensions (mm)					Net weight (kg)
	L ₁	L ₂	D ₁	D ₂	M	
VLR 66-10/1	554	319	197	164	154	92.5
VLR 66-10	574	375	214	300	168	110
VLR 66-20/2	664	367	256	300	191	133
VLR 66-20/1	699	428	256	300	191	151
VLR 66-20	699	428	256	350	191	151
VLR 66-30/2	789	494	313	350	240	188
VLR 66-30/1	789	494	313	350	240	188
VLR 66-30	789	494	313	350	240	197
VLR 66-40/2	879	494	313	350	240	203
VLR 66-40/1	879	494	313	350	240	214
VLR 66-40	879	494	313	350	240	214
VLR 66-50/2	969	613	354	400	278	237
VLR 66-50/1	969	613	354	400	278	237
VLR 66-50	969	613	354	400	278	245
VLR 66-60/2	1059	613	354	400	278	245
VLR 66-60/1	1059	613	354	400	278	255
VLR 66-60	1059	613	354	400	278	255
VLR 66-70/2	1149	613	354	400	278	261
VLR 66-70/1	1149	613	354	400	278	261
VLR 66-70	1149	710	411	450	298	341
VLR 66-80/2	1239	710	411	450	298	346
VLR 66-80/1	1239	710	411	450	298	346
VLR 66-80	1239	710	411	450	298	346



NOCCHI VLR 92

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid with water density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

VLR 92	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts

NOCCHI VLR 92

VERTICAL MULTI-CELL CENTRIFUGAL PUMPS

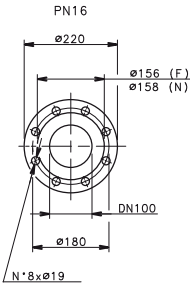
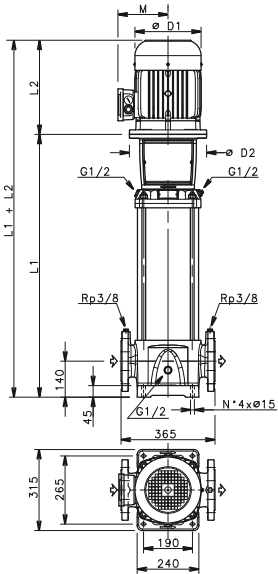
PERFORMANCE TABLE

MODEL	Motor output		Volt	In (A)	Q	L/min	750	900	1000	1200	1300	1417	1600	1800	2000
	HP	kW				m³/h	45	54	60	72	78	85	96	108	120
VLR 92-10/1	7.5	5.5	3-400 - 690 V	10.9	m.c.a. / m.w.c.		22	22	21	19	19	17	15	12	8
VLR 92-10	10	7.5	3-400 - 690 V	14.7			29	27	26	24	23	22	20	18	14
VLR 92-20/2	15	11	3-400 - 690 V	21			45	44	43	40	38	36	31	25	17
VLR 92-20	20	15	3-400 - 690 V	29			58	55	53	50	48	45	41	36	30
VLR 92-30/2	25	18.5	3-400 - 690 V	35			74	72	70	65	62	59	52	44	33
VLR 92-30	30	22	3-400 - 690 V	42			88	84	81	76	73	69	63	56	46
VLR 92-40/2	40	30	3-400 - 690 V	55			104	100	97	90	87	82	74	63	49
VLR 92-40	40	30	3-400 - 690 V	55			117	112	108	101	97	92	85	75	63
VLR 92-50/2	50	37	3-400 - 690 V	65			122	128	124	116	111	105	95	81	65
VLR 92-50	50	37	3-400 - 690 V	65			146	140	135	126	121	115	106	94	78
VLR 92-60/2	60	45	3-400 - 690 V	80			163	156	152	141	135	129	117	101	81
VLR 92-60	60	45	3-400 - 690 V	80			176	168	163	151	146	139	127	113	94
VLR 92-70/2	60	45	3-400 - 690 V	80			192	184	179	167	160	152	138	120	97

Flanges DN 100 PN 16 from VLR 92-10/1 to 92-40. PN25 from VLR 92-50/2 to 92-70/2. Counterflanges optional.

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)					Net weight (kg)
	L ₁	L ₂	D ₁	D ₂	M	
VLR 92-10/1	574	375	214	300	168	109
VLR 92-10	574	367	256	300	191	127
VLR 92-20/2	699	428	256	350	191	150
VLR 92-20	699	494	313	350	240	182
VLR 92-30/2	789	494	313	350	240	197
VLR 92-30	789	494	313	350	240	208
VLR 92-40/2	879	613	354	400	278	232
VLR 92-40	879	613	354	400	278	232
VLR 92-50/2	969	613	354	400	278	250
VLR 92-50	969	613	354	400	278	250
VLR 92-60/2	1059	710	411	450	298	335
VLR 92-60	1059	710	411	450	298	335
VLR 92-70/2	1149	710	411	450	298	340



NOCCHI VLR/VLRI/VLRX

ACCESSORIES

CIRCULAR FLANGES

CODE	DESCRIPTION	Material	Ext D	inter. S	N° Holes	D Holes F	Hole B		PN	STANDARD
							Thread- ed	To weld		
D3086KKK	Pair of circular flanges complete with bolts and gaskets	STEEL	140	100	4	18	1 1/4"	-	16	UNI EN 1092-1
B7098KKK			150	110	4	18	-	DN40	16	UNI EN 1092-1
B7097KKK			150	110	4	18	1 1/2"	-	16	UNI EN 1092-1
ZB901890			165	125	4	18	-	DN50	16	UNI EN 1092-1
B7050KKK			165	125	4	18	2"	-	16	UNI EN 1092-1
B7051KKK			165	125	4	18	2 1/2"	-	16	N/A
ZB901920			220	180	8	18	-	DN100	16	UNI EN 1092-1
B7698KKK			185	145	8	18	-	DN65	25	UNI EN 1092-1
ZB902350			235	190	8	22	-	DN100	25	UNI EN 1092-1
ZA008460		STAINLESS STEEL AISI 316	140	99.2	4	20	1 1/4"	DN32	16	N/A
ZB902120			150	110	4	20	1 1/2"	DN40	16	N/A
ZB902130			165	126	4	20	2"	DN50	16	N/A

OVAL FLANGES

CODE	DESCRIPTION	Material	ext. D	ext. A	inter. S	Ø Holes F	Hole B threaded
ZC001270	Single oval flange	CAST IRON	95	68	65	11	1"
ZC001290		CAST IRON	95	68	65	11	1 1/4"
ZC001280		CAST IRON	128	75	100	14	1 1/2"
ZA008560	Pair of oval flanges complete with bolts 1 1/4" and gaskets	STAINLESS STEEL cast AISI 316	95	68	65	11	1 1/4"

VICTAULIC JOINTS

CODE	DESCRIPTION	Material	Dimensions			CONNECTOR
			X	Y	Z	
ZA009020	VICTAULIC joint	CAST IRON	68	117	45	1" 1/4 42.2
ZA009030			87	133	48	2" 60.3

NOCCHI VLR/VLRI/VLRX

ACCESSORIES

GUIDE TO SELECTION

Port dimensions	1¼"	1½"	DN40	2"	2½"	DN 50	DN 65	DN 100	DN 100	DN 32	DN 40	DN 50	1"	1¼"	1½"	1½"
Notes	PN 16	PN 16	PN 16	PN 16	-	PN 25	PN 25	PN 16	PN 25	PN 16	PN 16	PN 16	CAST IRON	CAST IRON	CAST IRON	CAST IRON
CODE → TYPE ↓	D3086KKK	B7097KKK	B7098KKK	B7050KKK	B7051KKK	ZB901890	B7698KKK	ZB901920	ZB902350	ZA008460	ZB902120	ZB902130	* ZC001270	* ZC001290	* ZC001280	ZA008560
VLR 2B FLANGE A													●			
VLR 2B FLANGE F	○															
VLR 4 FLANGE A														●		
VLR 4 FLANGE F	○															
VLR 8 FLANGE A															●	
VLR 8 FLANGE F		○	○													
VLR 16 FLANGE F				○	○	○										
VLR 32 FLANGE F							○									
VLR 66 FLANGE F → 66-50								○								
VLR 66 FLANGE F 66-60 →									○							
VLR 92 FLANGE F → 92-40										○						
VLR 92 FLANGE F 92-50 →																

* These codes refer to a single flange without screws and without gaskets

● Component assembled as standard ○ Component optional

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