

VX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS



The VX are vertical multistage, in-line, centrifugal pumps, directly connected to an electric motor. They are not self-priming.

- HIGH HYDRAULIC EFFICIENCY
- STAINLESS STEEL HYDRAULIC END
- MOTOR DESIGNED TO EN STANDARDS

Applications

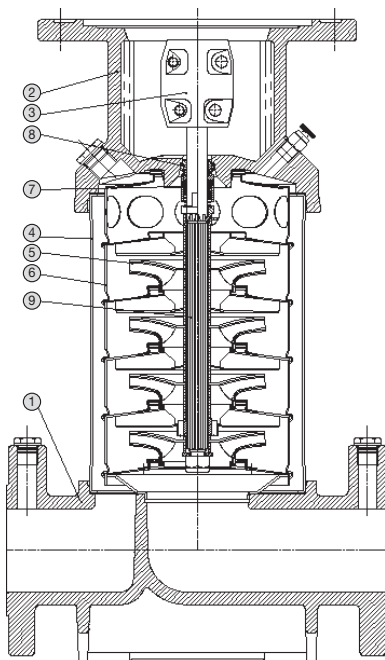
- Water supply
- Pressure Booster Systems
- Irrigation
- High pressure washes
- Firefighting systems
- Boiler supply
- Liquid transfer

Motor

- Asynchronous electric motor with enclosed stator and external ventilation
- Main dimensions are in accordance with DIN and IEC standards
- Design: V18-up to 4,0Kw
V1- to start from 5,5Kw
- Class F insulation
- Level of protection IP 55
- Maximum environmental temperature 40 °C
- Speed of rotation 2900 rpm
- Increased bearings to last longer

Versions Available

- Impeller, diffuser and outside sleeve in stainless steel
- Cast iron base, adapter and motor bracket
- VX-F 32 and VX-F 66 are equipped with cartridge mechanical seal, in order to avoid a motor disassembling in case of replacement
- All the "A" versions are complete with oval gas cast iron counterflanges
- The "F" version is complete with DIN round flanges



DESIGN FEATURES

Component		Material		
		VX 2B - 16	VX-F 32	VX-F 66
1	Pump casing	cast iron EN GJL 200	cast iron EN GJL 500-7U	cast iron EN GJL 250
2	Motor bracket	cast iron EN GJL 200	cast iron EN GJL 200	cast iron EN GJL 200
3	Motor joint	cast iron EN GJS 400	cast iron EN GJL 500-7U	cast iron EN GJL 200
4	Sleeve	Stainless steel X5 CrNi 18-10 (AISI 304)		Stainless steel X2 CrNiMo 17-12-2 (AISI 316L)
5	Impeller	Stainless steel X5 CrNi 18-10 (AISI 304)		Stainless steel X2 CrNiMo 17-12-2 (AISI 316L)
6	Diffuser	Stainless steel X5 CrNi 18-10 (AISI 304)		Stainless steel X2 CrNiMo 17-12-2 (AISI 316L)
7	Rotating seal	silicum carbide	Tungsten carbide	silicum carbide
8	Fixed seal	Graphite		
9	Shaft	Stainless steel X2 CrNiMo 17-12-2 (Aisi 316 L)	Stainless steel X17 CrNi 16-2 (AISI 431)	Stainless steel X2 CrNiMoN 22-5-3 (UNS S 31803)
10	Gaskets	EPDM		

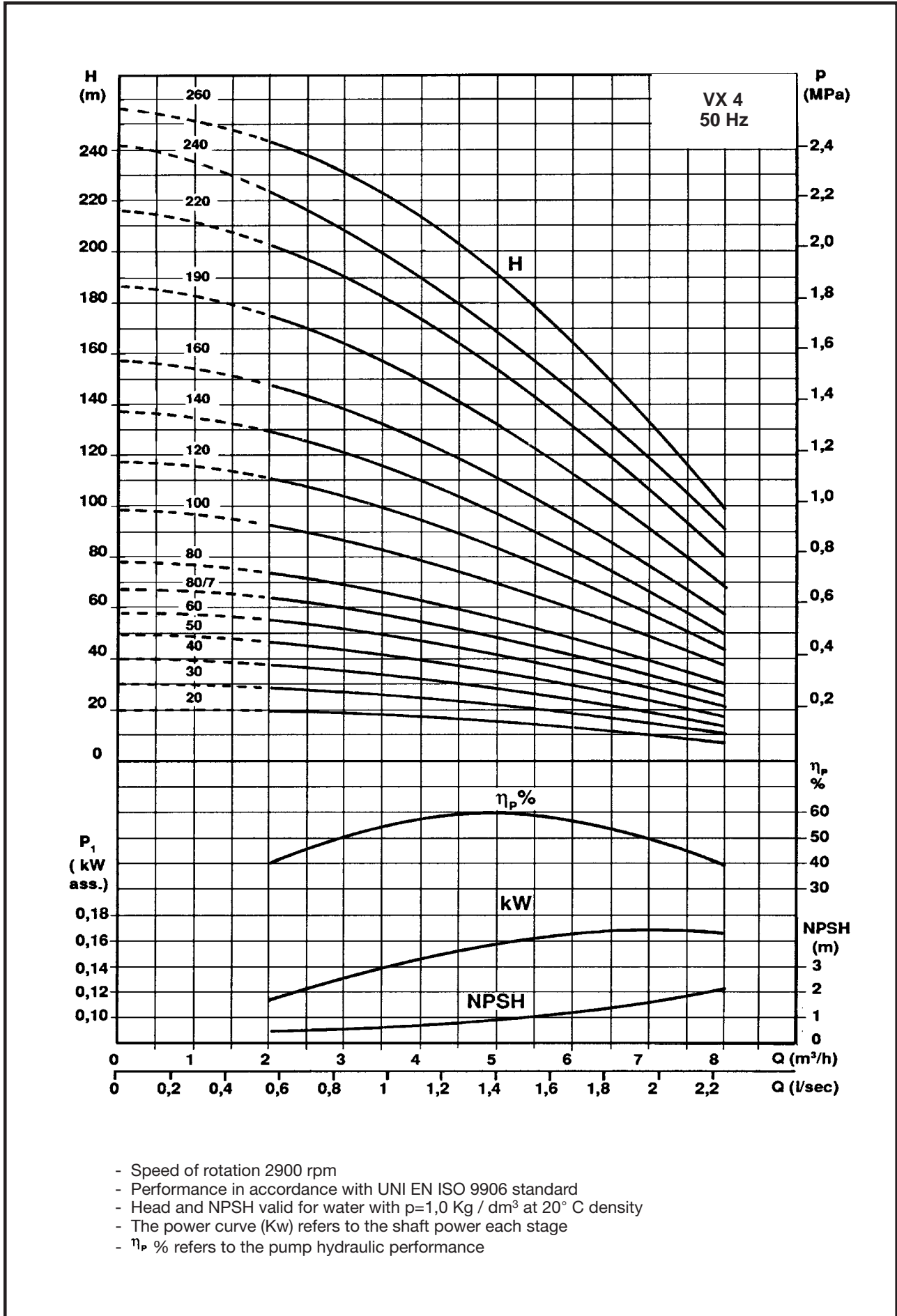
USAGE LIMITATIONS

	VX 2B - VX 4		VX 8	
	Oval flanges	DIN Flanges	Oval flanges	DIN Flanges
Liquid temperature	-15° to +120°		-15° to +120°	
Maximum operating pressure	16 bar	25 bar(max temp 40°) 21 bar(max temp 120°)	16 bar	25 bar(max temp 40°) 23 bar(max temp 120°)
Maximum inlet pressure	VX 2B/30-2 VX 4/20 6bar		16 bar	VX 8/20 - VX 8/30 6 bar
	VX 2B/30 - VX 2B/110 VX 4/30 - VX 4/100 10bar VX 2B/130 - VX 2B/260 VX 4/120 - VX 4/260 15bar			VX 8/40 - VX 8/200 10 bar
Minimum suction head	Please refer to the NPSH values with a safety margin of 0,5 m			

USAGE LIMITATIONS

	VX-F 16	VX-F 32	VX-F 66
	DIN Flanges	DIN Flanges	DIN Flanges
Liquid temperature	-15° to +120°		-20° to +120°
Maximum operating pressure	VX 16/30-2 - VX 16/160 25 bar (max. temp. 85°) VX 16/30-2 - VX 16/160 23 bar (max. temp. 120°)	Max operating pressure (suction included) 25 bar	Max operating pressure (suction included) up to VX 66-50 16 bar from VX 66-60 25 bar
Maximum inlet pressure	VX 16/30-2 - VX 16/30 6 bar VX 16/40 - VX 16/160 10 bar		
Minimum suction head	Please refer to the NPSH values with a safety margin of 0,5 m		

TABLE OF HYDRAULIC PERFORMANCE



PUMP PERFORMANCE

CODE	MODEL	Motor Power		VOLTAGE	Amp.	µF.	Q	Discharge head in meters					
		HP	KW					L/1'	40	60	80	100	120
								m ³ /h	2,4	3,6	4,8	6	7,2
	VX-A 4 - 20 M VX-A 4 - 20 T	0,5	0,37	1 ~ 230 V 3 ~ 230 ÷ 400 V	2,7 1,73-1	14	Discharge head in meters	19	17	15	13	9	
	VX-A 4 - 30 M VX-A 4 - 30 T	0,75	0,55	1 ~ 230 V 3 ~ 230 ÷ 400 V	4 2,5-1,45	16		28	25	22	19	13	
	VX-A 4 - 40 M VX-A 4 - 40 T	1	0,75	1 ~ 230 V 3 ~ 230 ÷ 400 V	5,2 3,3-1,9	25		36	33	29	25	18	
	VX-A 4 - 50 M VX-A 4 - 50 T	1,5	1,1	1 ~ 230 V 3 ~ 230 ÷ 400 V	8 4,3-2,5	35		44	42	37	31	23	
	VX-A 4 - 60 M VX-A 4 - 60 T	1,5	1,1	1 ~ 230 V 3 ~ 230 ÷ 400 V	8 4,3-2,5	35		53	50	44	38	27	
	VX-A 4 - 80/7 M VX-A 4 - 80/7 T	2	1,5	1 ~ 230 V 3 ~ 230 ÷ 400 V	12 5,9-3,4	45		61	58	51	44	32	
	VX-A 4 - 80 M VX-A 4 - 80 T	2	1,5	1 ~ 230 V 3 ~ 230 ÷ 400 V	12 5,9-3,4	45		71	67	59	50	37	
	VX-A 4 - 100 T	3	2,2	3 ~ 230 ÷ 400 V	8,3-4,8			90	82	72	61	46	
	VX-A 4 - 120 T	3	2,2	3 ~ 230 ÷ 400 V	8,3-4,8			107	99	87	73	54	
	VX-A 4 - 140 T	4	3	3 ~ 230 ÷ 400 V	10,9-6,3			124	116	102	85	63	
	VX-A 4 - 160 T	4	3	3 ~ 230 ÷ 400 V	10,9-6,3			142	132	116	97	72	
	VX-F 4 - 190 T VX-F 4 - 190 T	5,5	4	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	13,8-8			170	157	138	114	86	
	VX-F 4 - 220 T VX-F 4 - 220 T	5,5	4	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	13,8-8			196	181	160	131	101	
	VX-F 4 - 240 T VX-F 4 - 240 T	7,5	5,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	12,4-21,5			213	198	175	143	110	
	VX-F 4 - 260 T VX-F 4 - 260 T	7,5	5,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	12,4-21,5			230	213	189	156	120	

- VX 4 version "A": complete with 1" 1/4 gas oval counterflanges
- VX 4 version "F": round counterflanges on request

① Version with oval flanges
VX 4-20 - VX 4-160

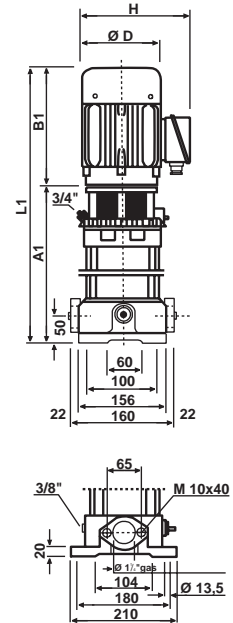


TABLE OF SIZES AND WEIGHTS

Model	Dimensions (mm)							Net Weight (kg)	
	A ₁ ①	B ₁	L ₁ ①	A ₂ ②	L ₂ ②	D	H		
VX 4 - 20	238	213	451	-	-	142	109	20	-
VX 4 - 30	265	213	478	-	-	142	109	21	-
VX 4 - 40	296	237	533	-	-	160	131	23	-
VX 4 - 50	323	237	560	-	-	160	131	25	-
VX 4 - 60	350	237	587	-	-	160	131	26	-
VX 4 - 80/7	423	265	688	-	-	185	130	33	-
VX 4 - 80	423	265	688	-	-	185	130	33	-
VX 4 - 100	477	265	742	-	-	185	130	36	-
VX 4 - 120	531	265	796	-	-	185	130	37	-
VX 4 - 140	589	315	904	-	-	200	140	41	-
VX 4 - 160	643	315	958	-	-	200	140	43	-
VX 4 - 190	-	335	-	749	1084	200	140	-	61
VX 4 - 220	-	335	-	830	1165	200	140	-	63
VX 4 - 240	-	385	-	911	1298	260	185	-	87
VX 4 - 260	-	385	-	965	1350	260	185	-	89

② Version with flanges
PN10 DIN 2534/ISO 7005-2

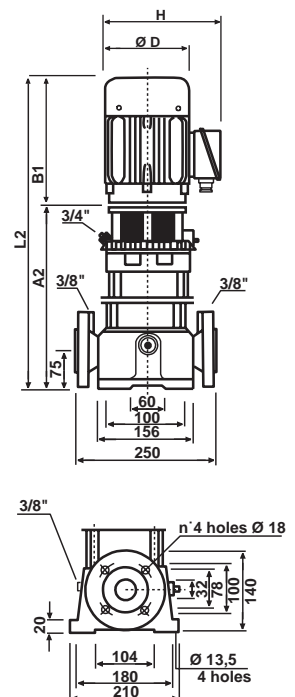
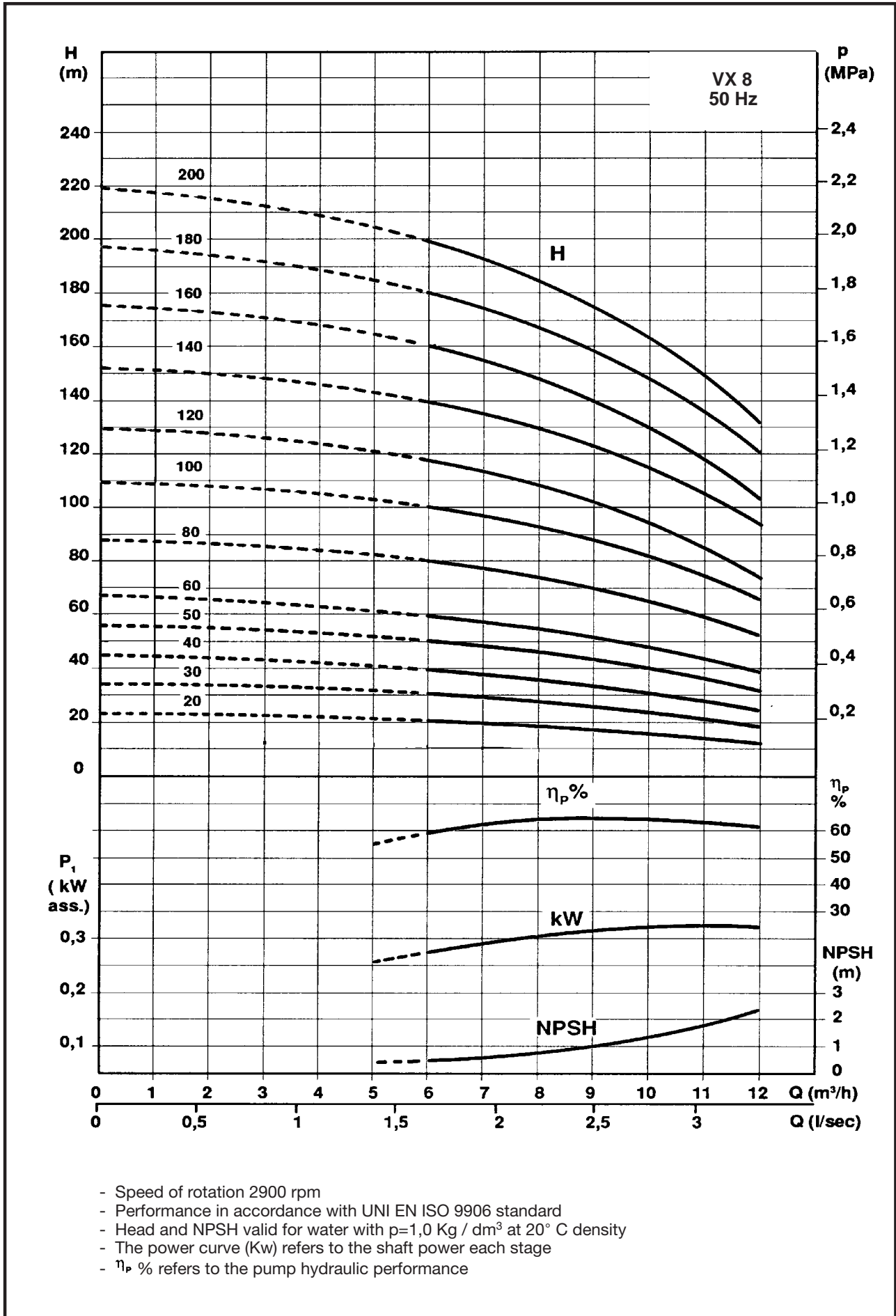


TABLE OF HYDRAULIC PERFORMANCE



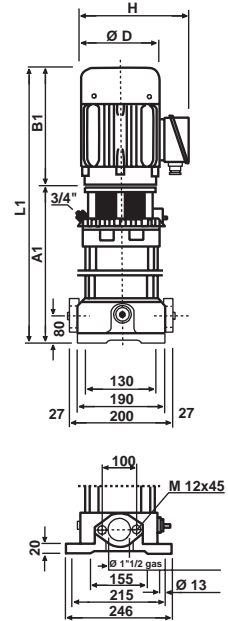
- Speed of rotation 2900 rpm
- Performance in accordance with UNI EN ISO 9906 standard
- Head and NPSH valid for water with $\rho=1,0 \text{ Kg / dm}^3$ at 20° C density
- The power curve (Kw) refers to the shaft power each stage
- $\eta_p \%$ refers to the pump hydraulic performance

PUMP PERFORMANCE

CODE	MODEL	Motor Power		VOLTAGE	Amp.	µF.	Q	Discharge head in meters				
		HP	KW					L1'	50	100	150	175
								3	6	9	10,5	12
	VX-A 8 - 20 M VX-A 8 - 20 T	1	0,75	1 ~ 230 V 3 ~ 230 ÷ 400 V	5,2 3,3-1,9	25	Discharge head in meters	21	20	18	15	13
	VX-A 8 - 30 M VX-A 8 - 30 T	1,5	1,1	1 ~ 230 V 3 ~ 230 ÷ 400 V	8 4,3-2,5	35		32	30	27	23	19
	VX-A 8 - 40 M VX-A 8 - 40 T	2	1,5	1 ~ 230 V 3 ~ 230 ÷ 400 V	12 5,9-3,4	45		42	40	35	30	26
	VX-A 8 - 50 T	3	2,2	3 ~ 230 ÷ 400 V	8,8-5,1			53	50	44	38	32
	VX-A 8 - 60 T	3	2,2	3 ~ 230 ÷ 400 V	8,8-5,1			64	60	52	45	39
	VX-A 8 - 80 T	4	3	3 ~ 230 ÷ 400 V	11,8-6,8			85	80	70	60	52
	VX-A 8 - 100 T VX-A 8 - 100 T	5,5	4	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	16,8-9,7			106	100	88	76	65
	VX-A 8 - 120 T VX-A 8 - 120 T	5,5	4	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	16,8-9,7			127	119	104	90	77
	VX-F 8 - 140 T VX-F 8 - 140 T	7,5	5,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	21,5-12,4			149	130	122	105	92
	VX-F 8 - 160 T VX-F 8 - 160 T	7,5	5,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	21,5-12,4			171	160	138	120	104
	VX-F 8 - 180 T VX-F 8 - 180 T	10	7,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	28-16,4			193	181	160	135	120
	VX-F 8 - 200 T VX-F 8 - 200 T	10	7,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	28-16,4			214	200	175	153	132

- VX 8 version "A" complete with 1" 1/2 GAS oval counterflanges
- VX 8 version "F" round counterflanges on request

① Version with oval flanges
VX 8-20 - VX 8-120



② Version with flanges
PN10 DIN 2534/ISO 7005-2

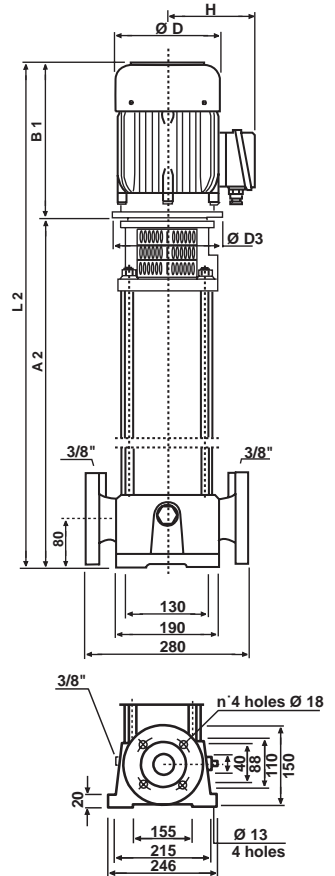
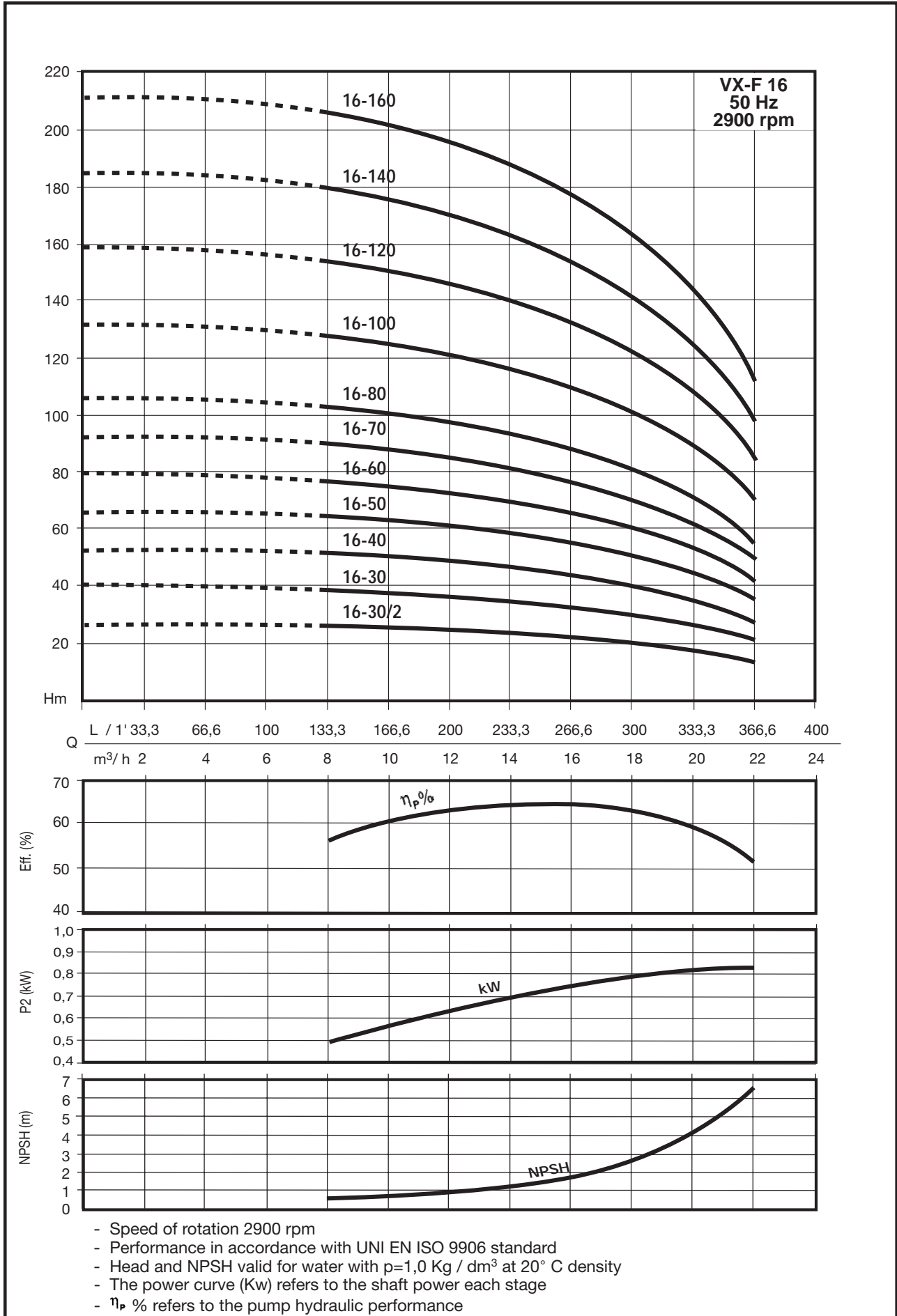


TABLE OF SIZES AND WEIGHTS

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

TABLE OF HYDRAULIC PERFORMANCE



PUMP PERFORMANCE

CODE	MODEL	Motor Power		VOLTAGE	Amp.	Q	L/1'	100	200	250	300	350
		HP	kW					6	12	15	18	21
	VX-F 16 - 30/2 T	3	2,2	3 ~ 230 ÷ 400 V	8,5-4,9	Discharge head in meters		26	25	23	20	16
	VX-F 16 - 30 T	4	3	3 ~ 230 ÷ 400 V	11,6-6,7		39	37	34	30	24	
	VX-F 16 - 40 T	5,5	4	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	14,3-8,3 8,3-4,8		52	49	46	40	32	
	VX-F 16 - 50 T	7,5	5,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	19,6-11,3 11,3-8,5		65	62	57	51	40	
	VX-F 16 - 60 T	7,5	5,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	19,6-11,3 11,3-8,5		78	74	69	61	47	
	VX-F 16 - 70 T	10	7,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	24,8-14,3 14,3-8,3		91	86	80	71	55	
	VX-F 16 - 80 T	10	7,5	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	24,8-14,3 14,3-8,3		104	98	92	81	63	
	VX-F 16 - 100 T	15	11	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	36,3-21,0 21,0-12,1		130	123	115	101	79	
	VX-F 16 - 120 T	15	11	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	36,3-21,0 21,0-12,1		156	148	137	121	95	
	VX-F 16 - 140 T	20	15	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	48,4-28,0 28,0-12,6		182	172	160	142	111	
	VX-F 16 - 160 T	20	15	3 ~ 230 ÷ 400 V 3 ~ 400 ÷ 690 V	48,4-28,0 28,0-12,6		208	197	183	162	126	

Flanges DN 50 PN 25 DIN 2534 / ISO 7005-2 (with 65mm diameter bore)
 Optional counterflanges
 Approximate motor power.
 The real value depends on type of motor installed and type of applications.

TABLE OF SIZES AND WEIGHTS

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

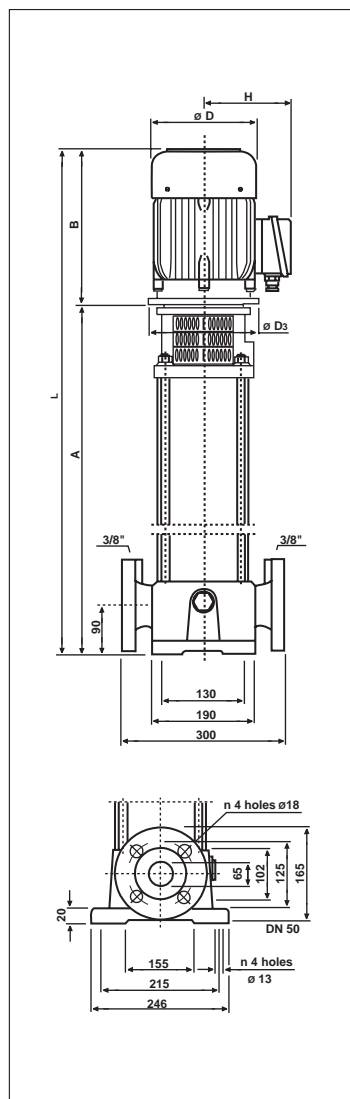
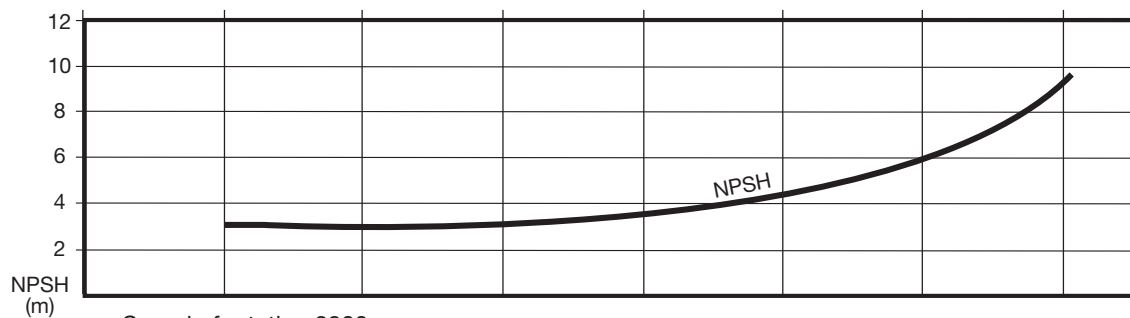
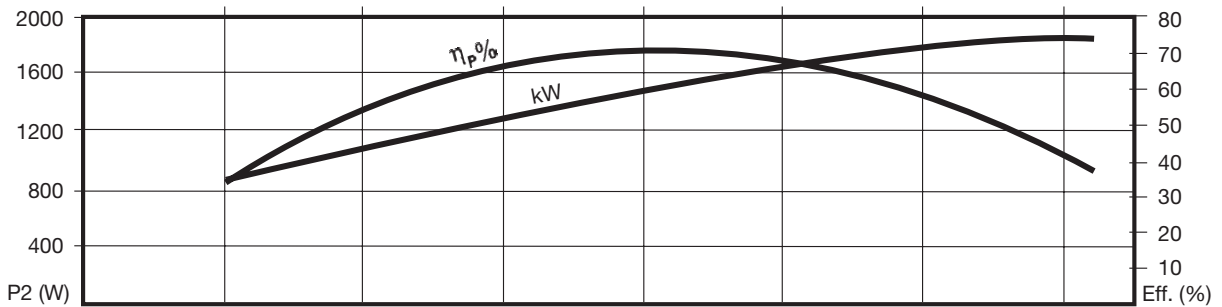
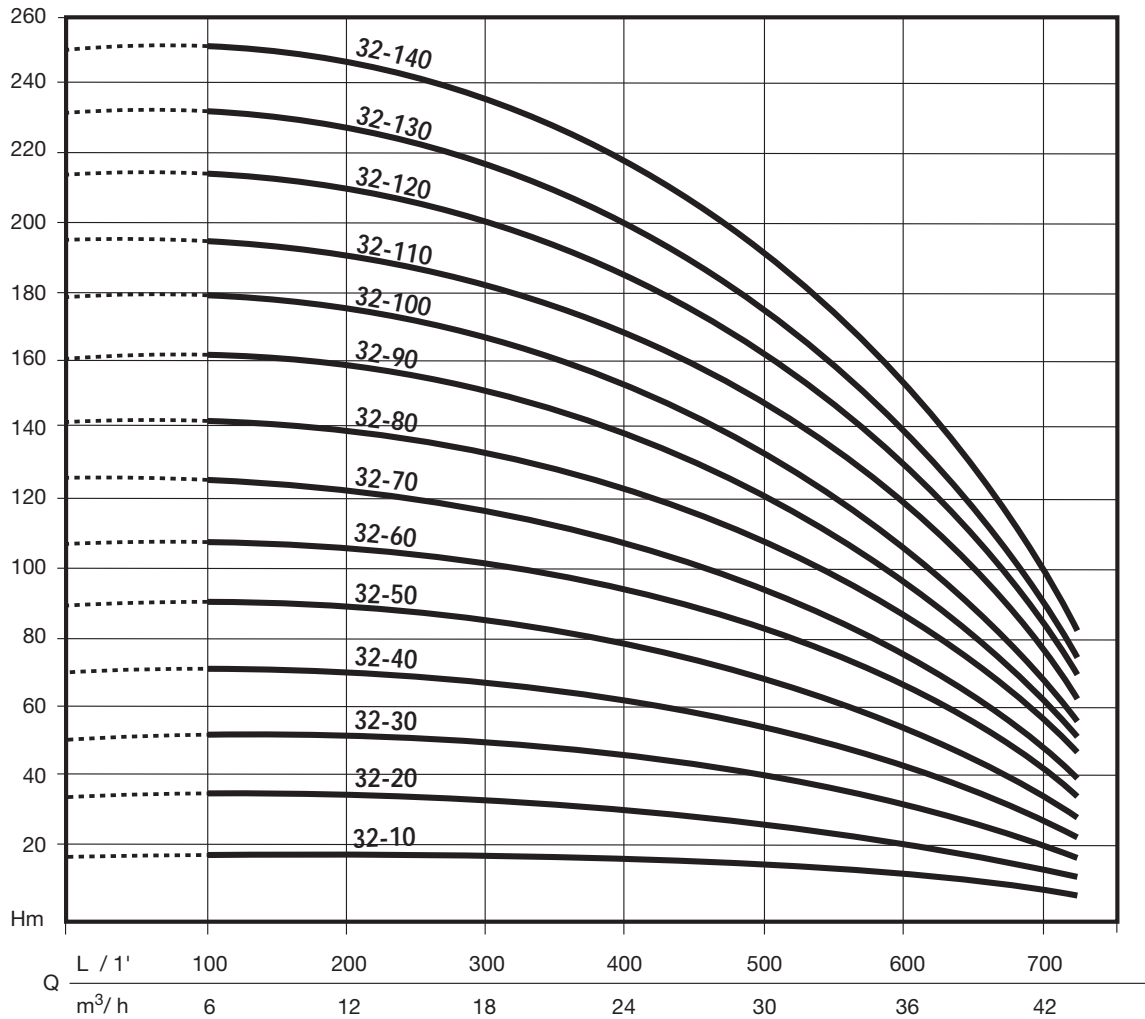


TABLE OF HYDRAULIC PERFORMANCE



- Speed of rotation 2900 rpm
- Performance in accordance with UNI EN ISO 9906 standard
- Head and NPSH valid for water with $\rho=1,0 \text{ Kg / dm}^3$ at 20° C density
- The power curve (Kw) refers to the shaft power each stage
- η_p % refers to the pump hydraulic performance

PUMP PERFORMANCE

CODE	MODEL	Motor Power		VOLTAGE	Amp.	Q	Discharge head in meters											
		HP	kW				L/1'	0	150	200	250	300	350	400	500	600	700	
							m ³ /h	0	9	12	15	18	21	24	30	36	42	
	VX-F 32-10	3	2,2	3 ~ 230 ÷ 400 V	8,65-5	Discharge head in meters	18	18	18	18	17	17	16	14	11	7		
	VX-F 32-20	5,5	4	3 ~ 400 ÷ 690 V	8,6		36	36	35	35	34	33	31	27	22	14		
	VX-F 32-30	7,5	5,5	3 ~ 400 ÷ 690 V	10,9		54	53	53	53	51	50	47	41	33	20		
	VX-F 32-40	10	7,5	3 ~ 400 ÷ 690 V	14,7		72	71	71	70	68	66	63	55	44	27		
	VX-F 32-50	15	11	3 ~ 400 ÷ 690 V	21		90	89	89	88	85	83	79	69	55	34		
	VX-F 32-60	15	11	3 ~ 400 ÷ 690 V	21		107	107	106	105	102	99	94	82	66	41		
	VX-F 32-70	20	15	3 ~ 400 ÷ 690 V	29		125	125	124	123	119	116	110	96	77	48		
	VX-F 32-80	20	15	3 ~ 400 ÷ 690 V	29		143	142	142	140	136	132	126	110	88	54		
	VX-F 32-90	25	18,5	3 ~ 400 ÷ 690 V	35		161	160	159	158	153	149	141	123	99	61		
	VX-F 32-100	30	22	3 ~ 400 ÷ 690 V	42		179	178	177	175	170	165	157	137	110	68		
	VX-F 32-110	30	22	3 ~ 400 ÷ 690 V	42		196	196	195	193	187	182	173	151	121	75		
	VX-F 32-120	40	30	3 ~ 400 ÷ 690 V	55		214	214	212	210	204	198	188	164	132	82		
	VX-F 32-130	40	30	3 ~ 400 ÷ 690 V	55		232	231	230	228	221	215	204	178	143	88		
	VX-F 32-140	40	30	3 ~ 400 ÷ 690 V	55		250	249	248	245	238	231	220	192	154	95		

TABLE OF SIZES AND WEIGHTS

Model	Dimensions (mm)				Net Weight (Kg)
	A	B	C	D	
VX 32-10	580	850	185	145	78
VX 32-20	650	950	210	155	93,5
VX 32-30	770	1160	260	200	114
VX 32-40	840	1230	260	200	121
VX 32-50	910	1370	260	215	153
VX 32-60	980	1440	260	215	157,5
VX 32-70	1050	1510	260	215	166,5
VX 32-80	1120	1580	260	215	177,5
VX 32-90	1190	1650	320	245	200
VX 32-100	1260	1800	320	245	218
VX 32-110	1330	1870	320	245	222,5
VX 32-120	1400	1980	320	245	236
VX 32-130	1480	2120	360	275	269
VX 32-140	1550	2190	360	275	280

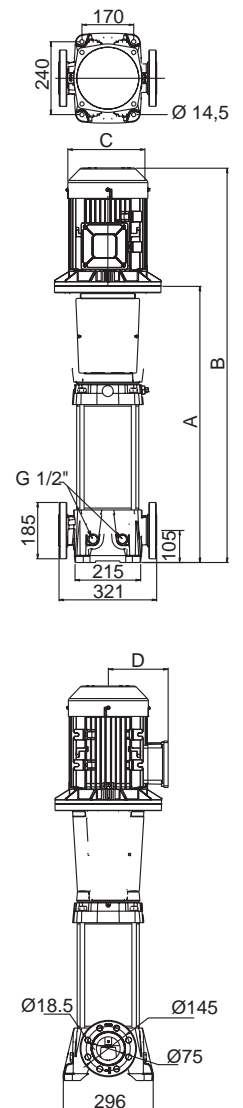
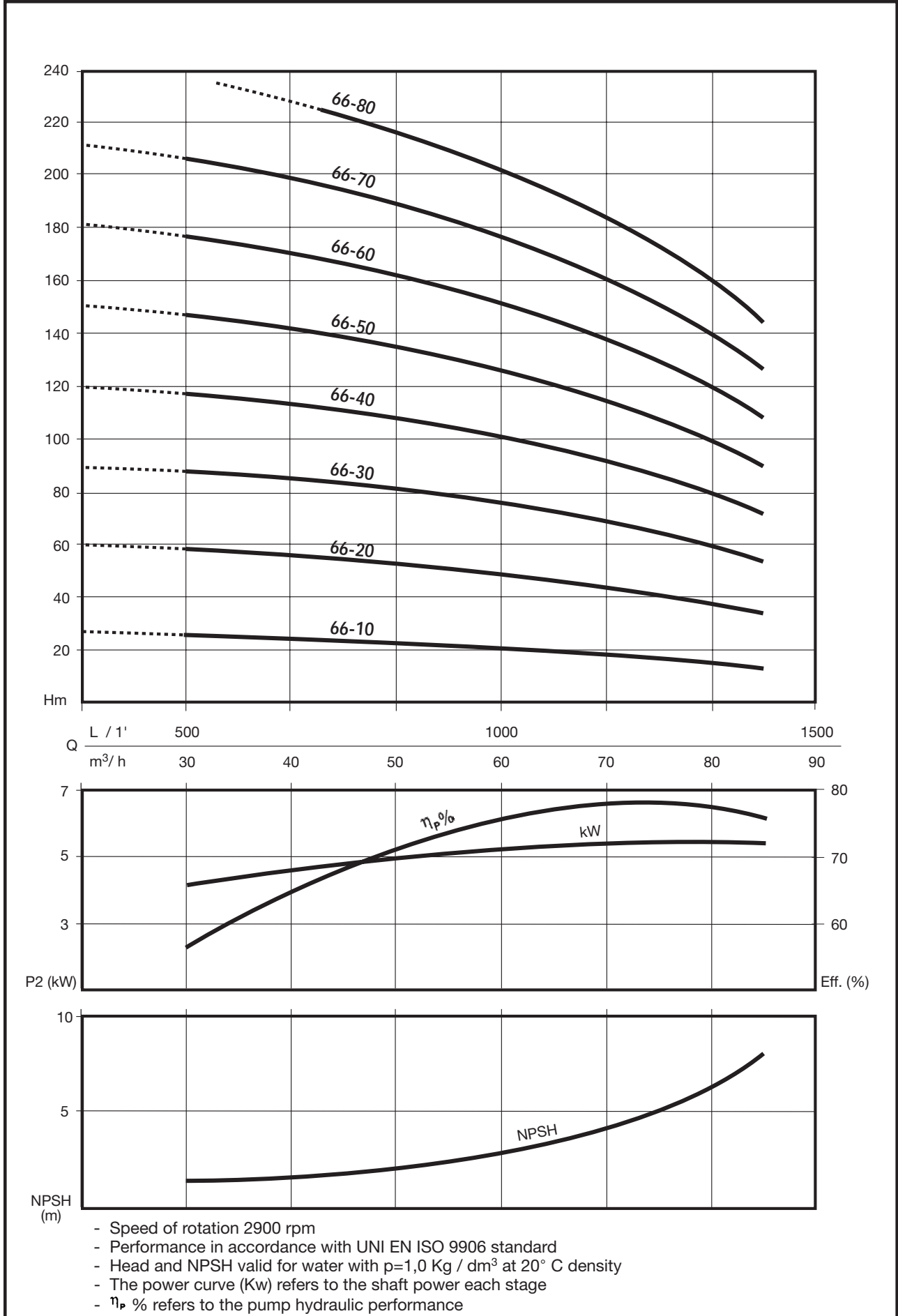


TABLE OF HYDRAULIC PERFORMANCE



PUMP PERFORMANCE

CODE	MODEL	Motor Power		TENSION	Amp.	Q	L/1'	0	500	600	800	1000	1200	1300	1417
		HP	kW				m³/h	0	30	36	48	60	72	78	85
	VX-F 66-10 T	7,5	5,5	3 ~ 400 ÷ 690 V	11	Discharge head in meters	29,2	25,8	24,8	22,8	20,7	17,9	16,1	13,5	
	VX-F 66-20 T	15	11	3 ~ 400 ÷ 690 V	21		60,4	55,7	54,4	51,1	47,1	42	38,9	34,7	
	VX-F 66-30 T	25	18,5	3 ~ 400 ÷ 690 V	32		91,4	84,7	83	77,7	72	64	60	53,5	
	VX-F 66-40 T	30	22	3 ~ 400 ÷ 690 V	40		121,6	112,5	110	103,3	96	86	79	70,8	
	VX-F 66-50 T	40	30	3 ~ 400 ÷ 690 V	55		152	140,4	137	129	119	107	99	88,5	
	VX-F 66-60 T	50	37	3 ~ 400 ÷ 690 V	65		182,4	168,5	164	155,3	143	128	119	106,2	
	VX-F 66-70 T	60	45	3 ~ 400 ÷ 690 V	80		212,8	196,5	192	180,7	167	150	139	123,9	
	VX-F 66-80 T	60	45	3 ~ 400 ÷ 690 V	80		243,2	224,6	219	206,3	191	171	159	141,6	

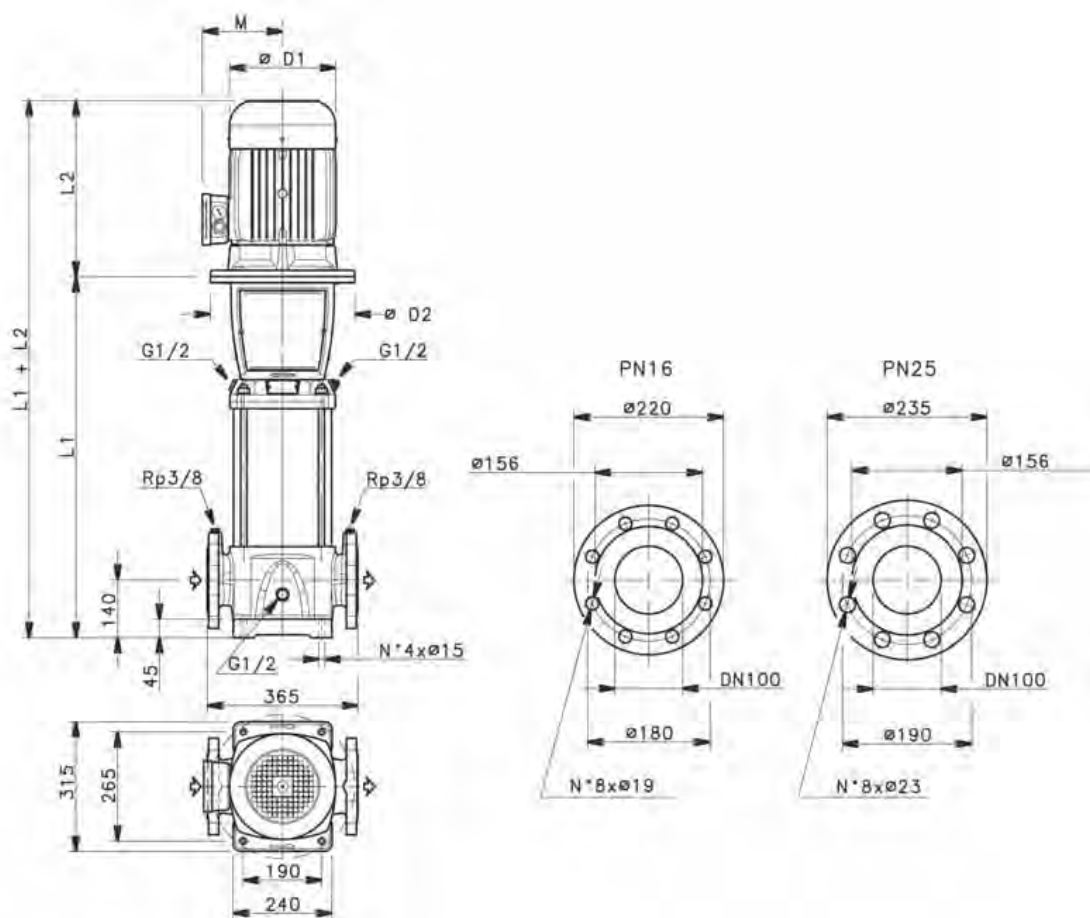


TABLE OF SIZES AND WEIGHTS

Model	Motor		Flanges	Dimensions (mm)					Net Weight (Kg)	
	KW	MEC		PN	L1	L2	D1	D2	M	PUMP
VX 66-10	5,5	132	16	574	374	220	300	151	72	107
VX 66-20	11	160	16	699	427	257	350	194	81	148
VX 66-30	18,5	160	16	789	532	310	350	244	86	202
VX 66-40	22	180	16	879	532	310	350	244	93	213
VX 66-50	30	200	16	969	613	354	400	278	105	237
VX 66-60	37	200	25	1059	613	354	400	278	113	255
VX 66-70	45	225	25	1149	710	411	450	298	122	341
VX 66-80	45	225	25	1239	710	411	450	298	127	346

Counterflanges not included, available on request