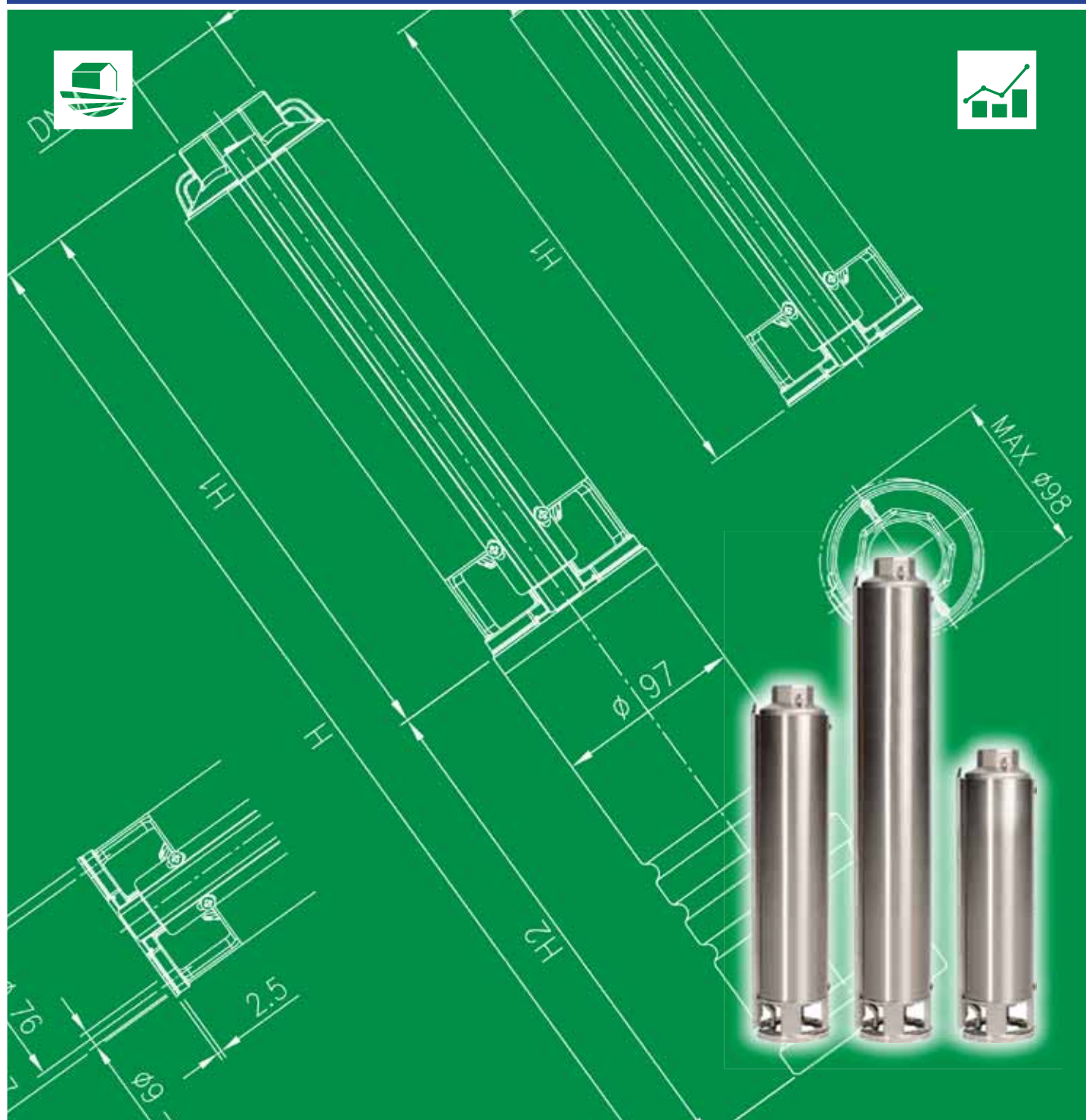




Japanese Technology since 1912

4WN

Data Book 50Hz



SUBMERSIBLE MULTISTAGE PUMPS

4WN

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50Hz

Rev.C

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SUBMERSIBLE MULTISTAGE PUMPS

4WN

SPECIFICATION

50Hz

Rev.C

PUMP		
Liquid Handled	Type of liquid	Clean water
	Temperature [°C]	Maximum 35 (depends on maximum motor temperature)
	Sand content	Maximum : 150 g/mc
	Chlorine ion density	Maximum : 500 parts per million
Construction	Impeller	Closed centrifugal - Floating type
	Bearing	Sleeve type - Sintered (AISI304) / Urethane
Pipe connection	Suction	N/A
	Discharge	RP1 1/4 (models 4WN1 to 4WN4) UNI ISO 7/1
		RP1 1/2 (models 4WN5) UNI ISO 7/1
		RP2 (models 4WN6 to 4WN15) UNI ISO 7/1
Material	Impeller	PPO mod. + Glass Fibre reinforced
	Intermediate casing	EN 1.4301 (AISI 304)
	Diffuser	Polycarbonate Glass Fibre reinforced
	Shaft	EN 1.4301 (AISI 304)
	Coupling	Sintered type (AISI304)
	Discharge Head	EN 1.4301 (AISI 304)
	Valve	EN 1.4301 (AISI 304)
	Bracket	EN 1.4308 (ASTM CF8)
Applicable standard of test		ISO 9906 - Annex A

SUBMERSIBLE MULTISTAGE PUMPS

4WN

SPECIFICATION

50Hz

Rev.C

MOTOR					
Type		Submersible oil filled (type OF)		Submersible water filled (type WF)	
Manufacturer		Sumoto			
		Single phase	Three phase	Single phase	Three phase
Power rating	[kW]	0.55÷3.7	0.55÷7.5	0.55÷3.7	0.55÷7.5
	[HP]	0.75÷5	0.75÷10	0.75÷5	0.75÷10
No. of Poles		2			
Rated speed		Refer to each characteristic performance rotation speed as rated speed			
Insulation class		F			
Protection degree		IP 68			
Maximum temperature		[°C] 35			
Maximum immersion		[m] 150			
Starts / hours		30			
Start type		Direct on line			
Frequency		[Hz] 50 Hz			
Voltage		[V] 230(+6-10%)	400(+6-10%)	230(±6%)	400(±6%)
Capacitor for start and run		Fitted in starter box	-	Fitted in starter box	-
Over load protection		Fitted in starter box	Provided by the user	Fitted in starter box	Provided by the user
Sealing liquid		Oil type: Marcol 82 (Esso)		Propylene Glycol - water solution	
Motor bracket		Cast iron nickel plated		Cast iron G20	
Casing material		EN 1.4301 (AISI 304)			
Power cable	material	EPDM/Cross Seald Polyethylene			
	size [mm²]	4x1.5			
	lenght [m]	L=1.75 (up to 2.2 kW) / L=2.5 (for 3 and 4 kW) / L=4 (for 5.5 and 7.5 kW)			
Flange mount		NEMA standard			

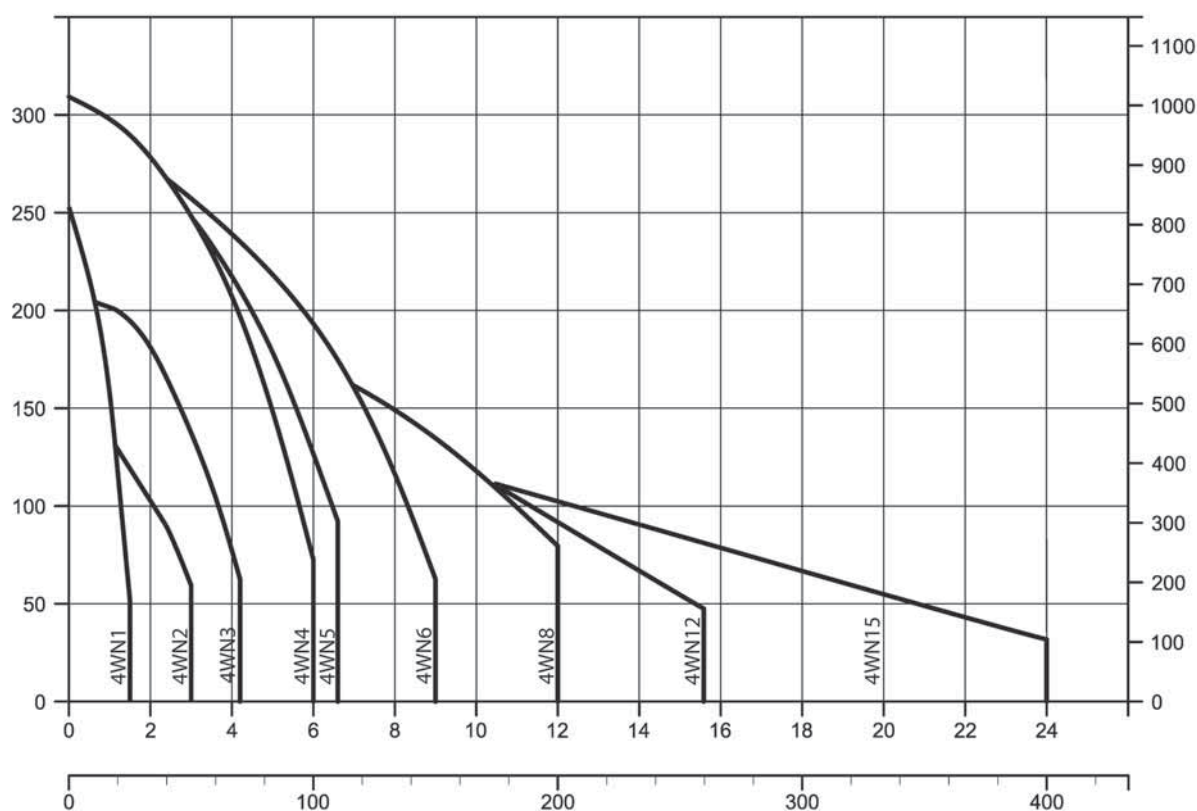
SUBMERSIBLE MULTISTAGE PUMPS

4WN

SELECTION CHART

50Hz

Rev. C



SUBMERSIBLE MULTISTAGE PUMPS

4WN

SELECTION CHART

50Hz

Rev. C

Type pumps	Power		Q=Capacity																
			l/min	0	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100
	[kW]	[HP]	m³/h	0	0,3	0,6	0,9	1,2	1,5	1,8	2,1	2,4	2,7	3,0	3,6	4,2	4,8	5,4	6,0
			H=Total manometric head in meters																
4WN1-19	0,55	0,75	126	118	105	86	60	30	-	-	-	-	-	-	-	-	-	-	
4WN1-26	0,75	1,00	173	160	141	117	81	39	-	-	-	-	-	-	-	-	-	-	
4WN1-38	1,10	1,50	253	234	208	169	117	52	-	-	-	-	-	-	-	-	-	-	
4WN2-10	0,55	0,75	67	-	-	64	61	58	54	49	43	36	28	-	-	-	-	-	
4WN2-14	0,75	0,10	92	-	-	86	83	79	74	67	60	52	42	-	-	-	-	-	
4WN2-20	1,10	1,50	139	-	-	131	127	120	111	101	90	75	60	-	-	-	-	-	
4WN3-8	0,55	0,75	54	-	-	-	51	50	49	46	43	41	38	30	19	-	-	-	
4WN3-11	0,75	1,00	72	-	-	-	68	66	64	61	58	54	49	38	26	-	-	-	
4WN3-16	1,10	1,50	106	-	-	-	101	98	95	89	83	77	70	54	33	-	-	-	
4WN3-21	1,50	2,00	142	-	-	-	135	132	127	122	115	108	100	79	49	-	-	-	
4WN3-32	2,20	3,00	208	-	-	-	200	194	187	177	165	152	138	104	62	-	-	-	
4WN4-7	0,55	0,75	46	-	-	-	-	43	42	41	39	38	36	33	28	22	15	7	
4WN4-9	0,75	1,00	59	-	-	-	-	55	54	52	51	49	47	43	37	28	20	10	
4WN4-14	1,10	1,50	93	-	-	-	-	87	86	83	81	79	76	68	58	47	33	20	
4WN4-18	1,50	2,00	120	-	-	-	-	113	111	108	105	102	98	88	75	60	42	25	
4WN4-27	2,20	3,00	175	-	-	-	-	164	161	157	152	147	141	127	109	87	61	35	
4WN4-35	3,00	4,00	228	-	-	-	-	212	208	203	197	191	184	166	145	119	85	46	
4WN4-48	4,00	5,50	309	-	-	-	-	289	283	276	267	258	248	225	197	162	120	73	
4WN5-6	0,55	0,75	38	-	-	-	-	-	-	36	35	33	32	30	26	22	18	12	
4WN5-8	0,75	1,00	51	-	-	-	-	-	-	47	46	44	43	39	35	30	24	18	
4WN5-12	1,10	1,50	77	-	-	-	-	-	-	72	71	69	68	63	57	49	41	31	
4WN5-16	1,50	2,00	102	-	-	-	-	-	-	98	96	94	92	86	77	68	57	46	
4WN5-24	2,20	3,00	151	-	-	-	-	-	-	142	139	136	132	122	111	97	80	62	
4WN5-32	3,00	4,00	203	-	-	-	-	-	-	188	185	180	175	162	146	127	105	80	
4WN5-44	4,00	5,50	278	-	-	-	-	-	-	265	260	254	247	230	210	187	159	127	

Type pumps	Power		Q=Capacity																							
	[kW]	[HP]	l/min	0	45	50	60	70	80	90	100	120	140	160	180	200	220	240	260	280	300	320	340	360		
			m³/h	0	2,7	3,0	3,6	4,2	4,8	5,4	6,0	7,2	8,4	9,6	10,8	12,0	13,2	14,4	15,6	16,8	18,0	19,2	20,4	21,6		
			H=Total manometric head in meters																							
4WN6-7	1,1	1,5		47	-	-	-	-	39	38	37	33	28	21	14	-	-	-	-	-	-	-	-	-		
4WN6-10	1,5	2		67	-	-	-	-	57	55	53	47	39	31	21	-	-	-	-	-	-	-	-	-		
4WN6-15	2,2	3		100	-	-	-	-	83	81	78	70	59	46	31	-	-	-	-	-	-	-	-	-		
4WN6-21	3	4		140	-	-	-	-	118	115	110	99	83	64	43	-	-	-	-	-	-	-	-	-		
4WN6-29	4	5,5		194	-	-	-	-	163	158	152	137	118	93	66	-	-	-	-	-	-	-	-	-		
4WN6-39	5,5	7,5		262	-	-	-	-	217	210	202	184	161	128	87	-	-	-	-	-	-	-	-	-		
4WN8-6	1,10	1,50		38	-	-	-	-	35	34	33	31	28	24	19	14	-	-	-	-	-	-	-	-		
4WN8-8	1,50	2,00		52	-	-	-	-	47	45	44	41	37	31	25	18	-	-	-	-	-	-	-	-		
4WN8-13	2,20	3,00		82	-	-	-	-	75	73	71	66	59	50	40	30	-	-	-	-	-	-	-	-		
4WN8-17	3,00	4,00		108	-	-	-	-	98	96	94	87	79	70	58	46	-	-	-	-	-	-	-	-		
4WN8-23	4,00	5,50		148	-	-	-	-	134	131	127	118	108	95	79	60	-	-	-	-	-	-	-	-		
4WN8-32	5,50	7,50		202	-	-	-	-	182	178	172	160	143	125	105	80	-	-	-	-	-	-	-	-		
4WN12-7	1,1	1,5		36	-	-	-	-	-	-	31	29	27	24	21	18	15	11	-	-	-	-	-	-		
4WN12-10	1,5	2		55	-	-	-	-	-	-	47	44	41	38	34	29	24	18	-	-	-	-	-	-		
4WN12-14	2,2	3		74	-	-	-	-	-	-	64	60	56	51	46	39	32	24	-	-	-	-	-	-		
4WN12-19	3	4		102	-	-	-	-	-	-	87	83	78	72	65	57	48	37	-	-	-	-	-	-		
4WN12-25	4	5,5		135	-	-	-	-	-	-	116	111	104	96	86	75	62	48	-	-	-	-	-	-		
4WN12-35	5,5	7,5		190	-	-	-	-	-	-	163	155	145	134	122	107	90	71	-	-	-	-	-	-		
4WN12-43	7,5	10		235	-	-	-	-	-	-	204	194	183	169	153	135	114	90	-	-	-	-	-	-		
4WN15-12	2,2	3		54	-	-	-	-	-	-	-	46	44	41	38,5	35,5	32,5	29,5	26	22,5	18	14	10			
4WN15-16	3	4		72,5	-	-	-	-	-	-	-	62	59,5	56	53	49	45	41	36,5	32	27	21	16			
4WN15-21	4	5,5		97	-	-	-	-	-	-	-	84,5	81	76	71	66	61	55,5	50	44	37,5	30	23			
4WN15-30	5,5	7,5		138	-	-	-	-	-	-	-	120	114,5	108	101,5	94	87	79	71,5	63	54	44,5	34,5			

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EBARA PUMPS EUROPE S.p.A.

SUBMERSIBLE MULTISTAGE PUMPS

4WN

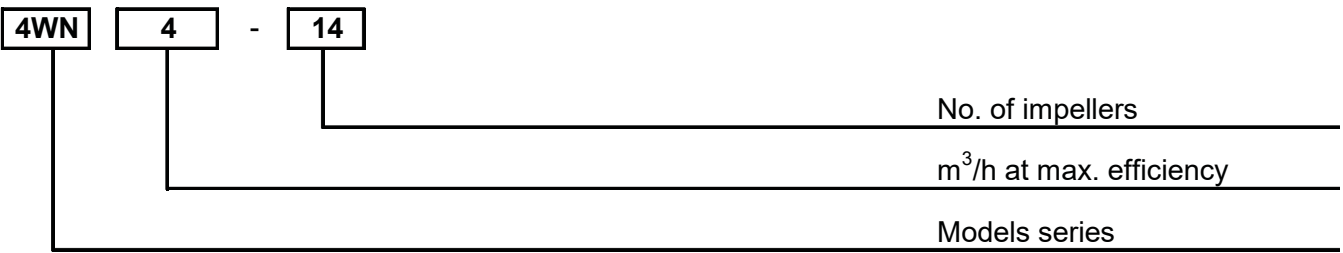
TYPE KEY AND CURVE SPECIFICATIONS

50Hz

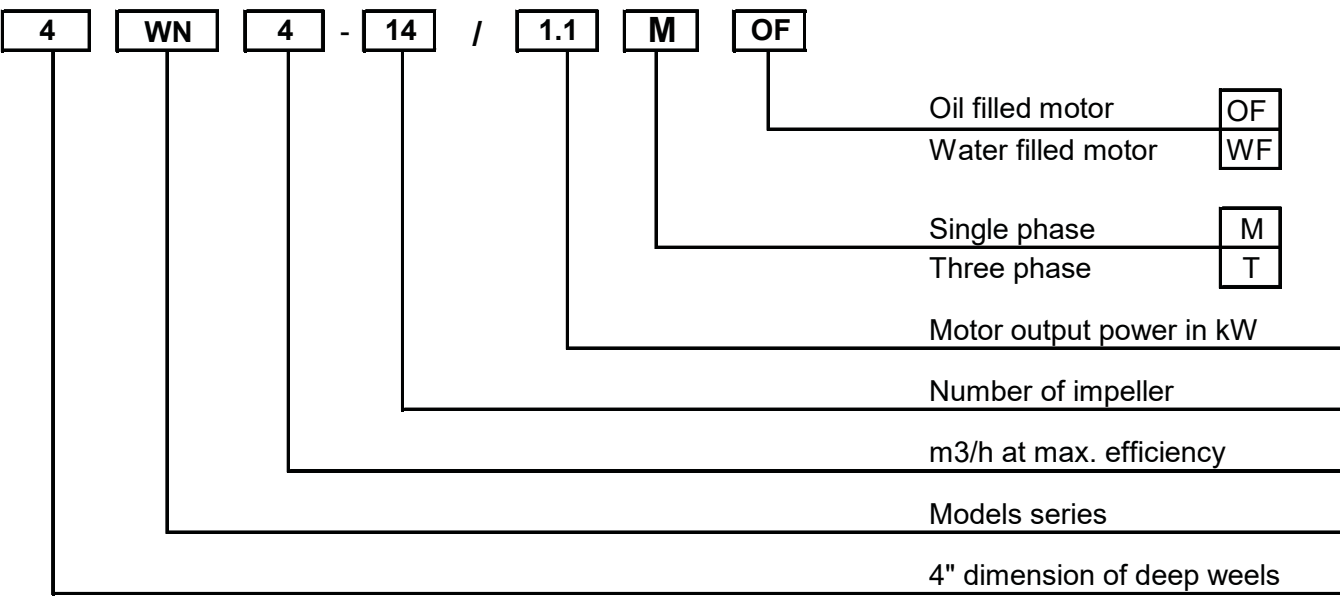
Rev. C

TYPE KEY

EXAMPLE pump without motor



EXAMPLE pump with motor



SUBMERSIBLE MULTISTAGE PUMPS

4WN

TYPE KEY AND CURVE SPECIFICATIONS

50Hz

Rev. C

PERFORMANCE CURVE SPECIFICATIONS

The specifications below qualify the curves shown on the following pages.

Tolerances according to ISO 9906 Annex A

The curves refer to effective speed of asynchronous motors at 50 Hz

Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt)

The continuous curves indicate the recommended working range. The dotted curve is only a guide.

In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

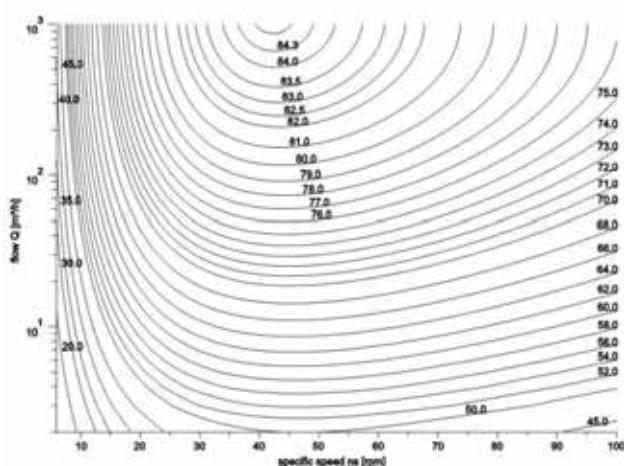
- Q = volume flow rate
- H = total head
- P_2 = pump power input (shaft power)
- η = pump efficiency
- NPSH = net positive suction head required by the pump
- MEI = minimum efficiency index

The minimum efficiency index (MEI) is a measure of the quality of a pump size in respect to its mean efficiency. The minimum efficiency index is based on the hydraulic efficiency and on the head at the best efficiency point.

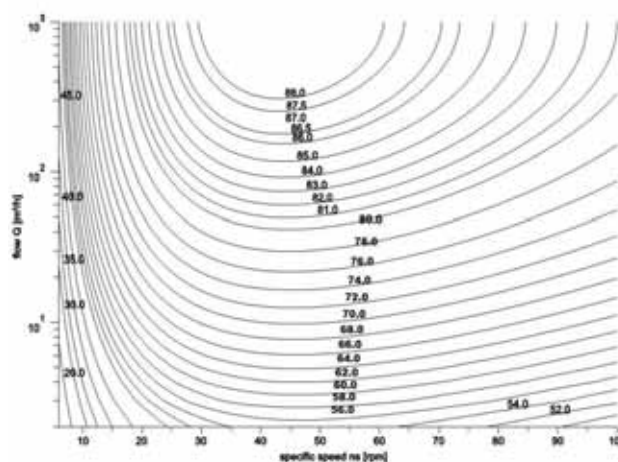
The efficiency of a pump with trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.

The operation of these water pumps with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.

MEI = 0.4 for Multistage Submersible 2900rpm



MEI = 0.7 for Multistage Submersible 2900 rpm



SUBMERSIBLE MULTISTAGE PUMPS

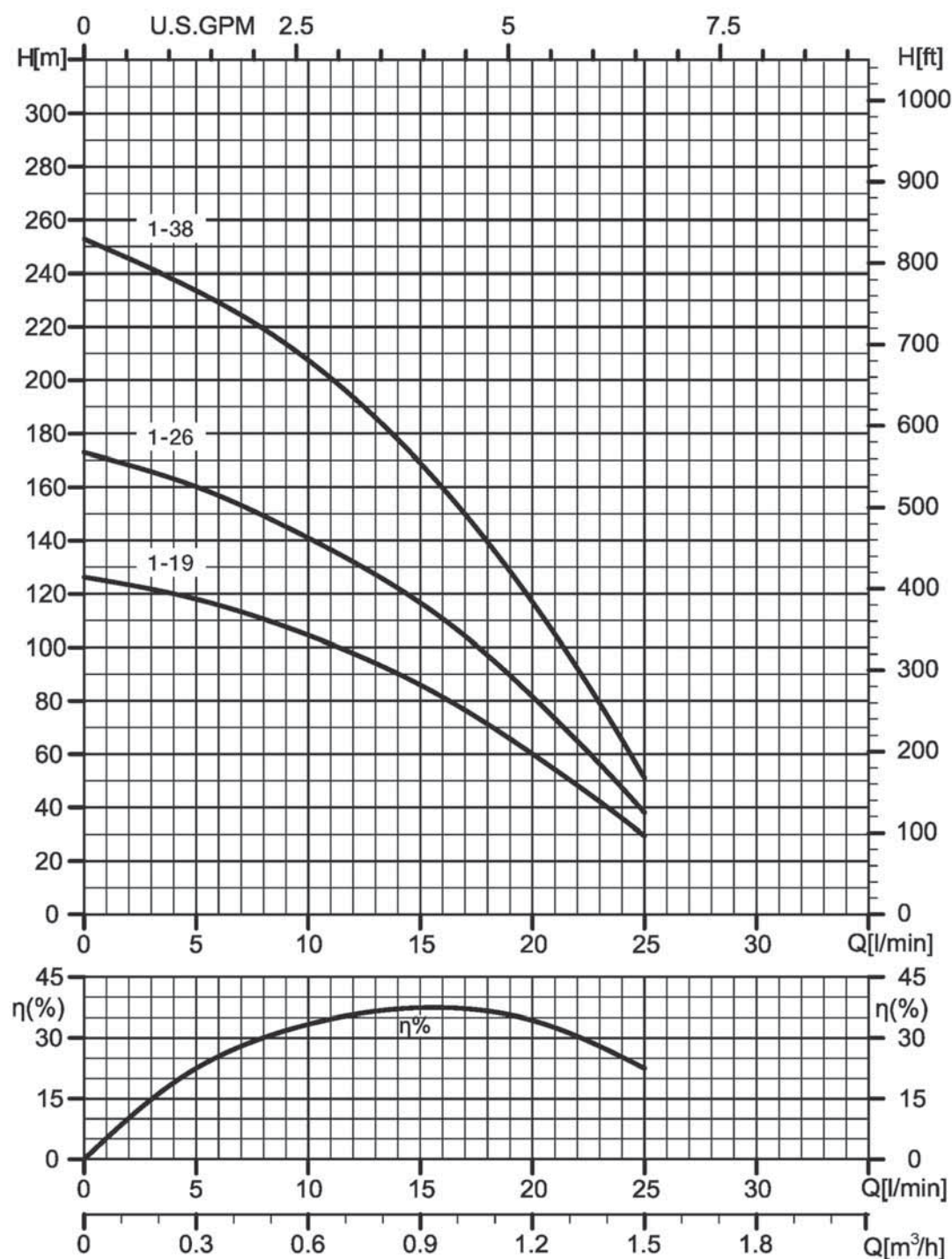
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN1 – MEI > 0.70



Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

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SUBMERSIBLE MULTISTAGE PUMPS

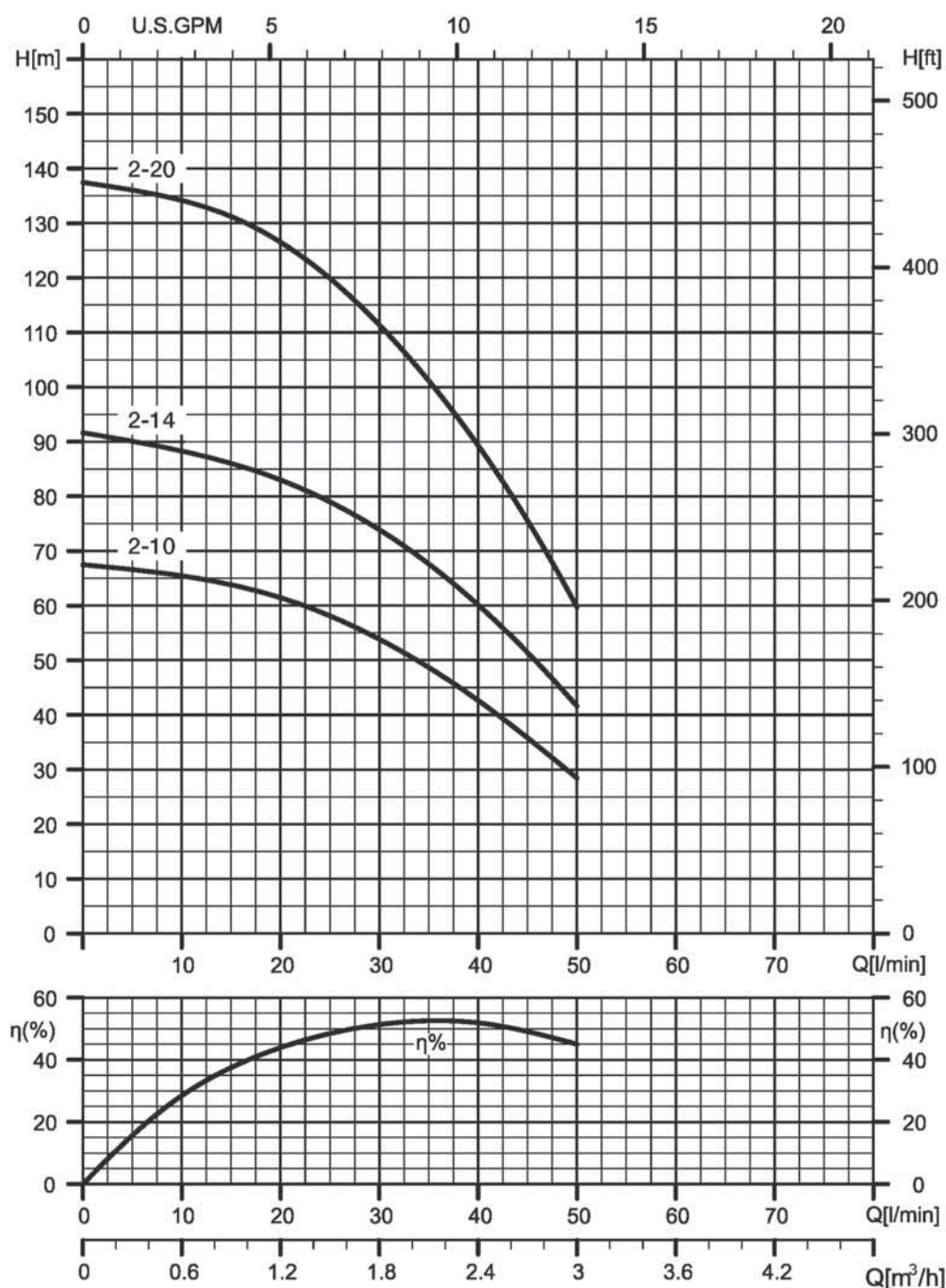
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN2 – MEI > 0.70



Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

SUBMERSIBLE MULTISTAGE PUMPS

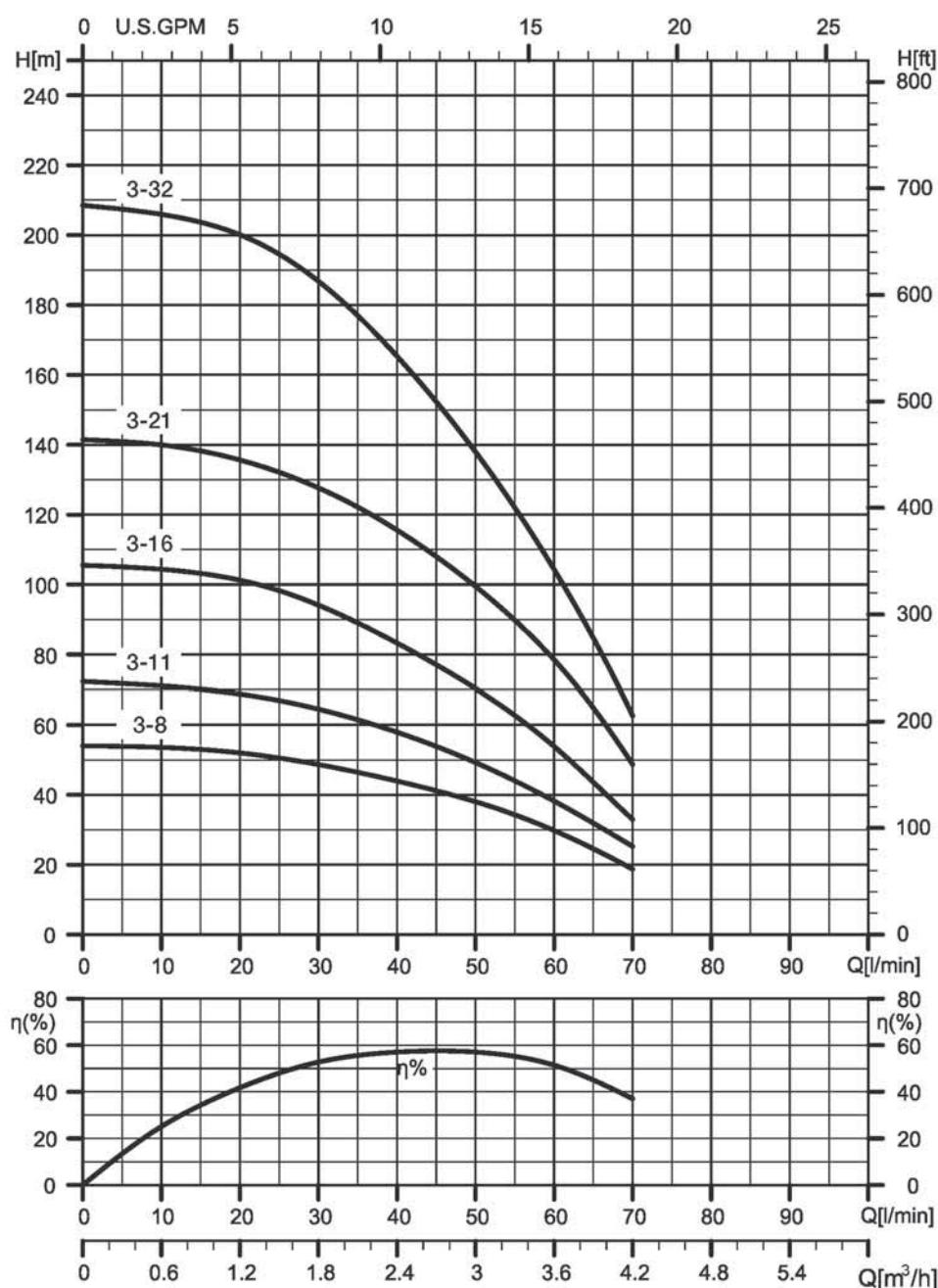
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN3 – MEI > 0.70



Rotation speed ≈ 2850 min⁻¹
Test standard: ISO 9906 – Annex A

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SUBMERSIBLE MULTISTAGE PUMPS

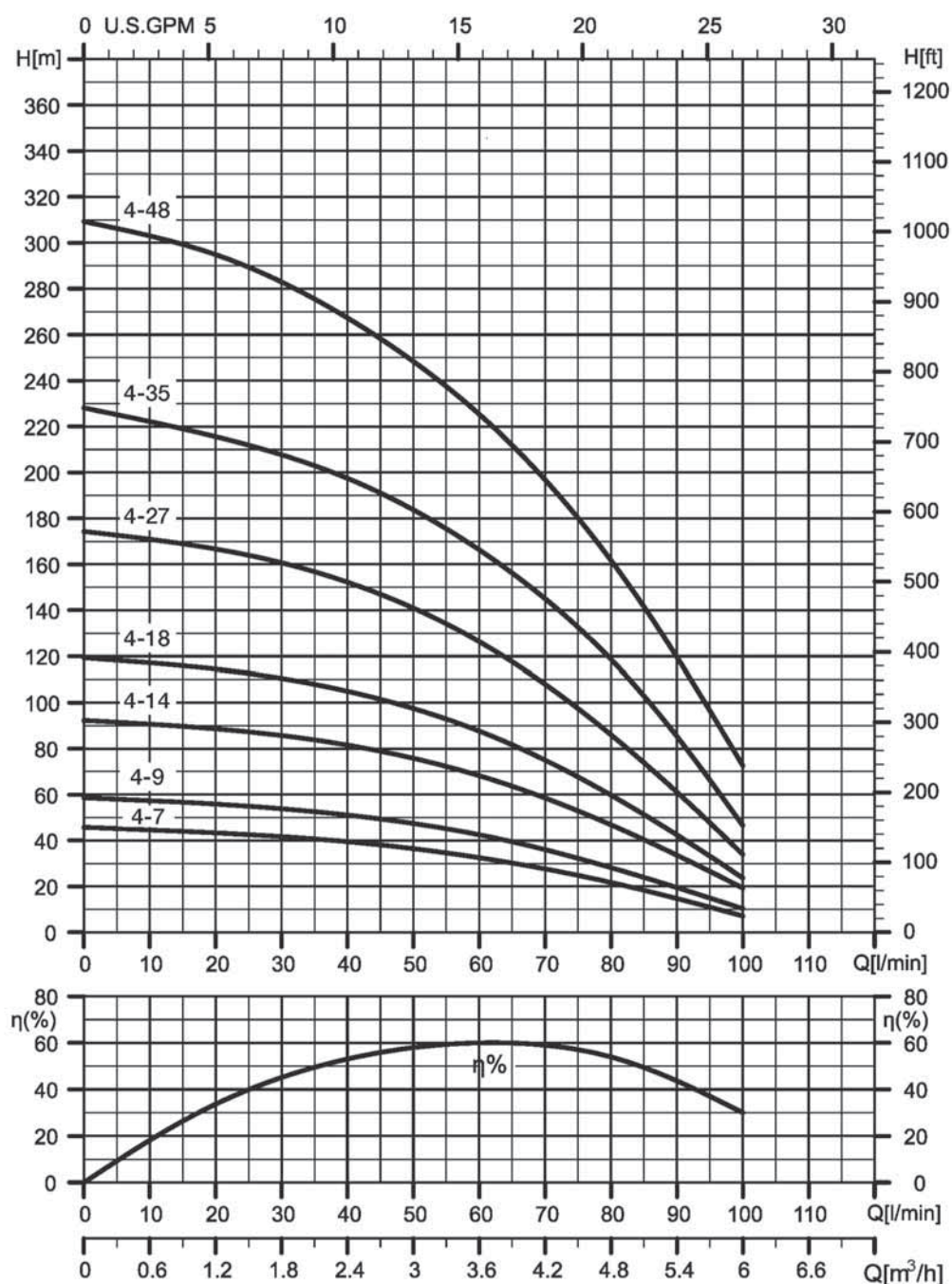
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN4 – MEI > 0.70



Rotation speed ≈ 2850 min⁻¹
Test standard: ISO 9906 – Annex A

SUBMERSIBLE MULTISTAGE PUMPS

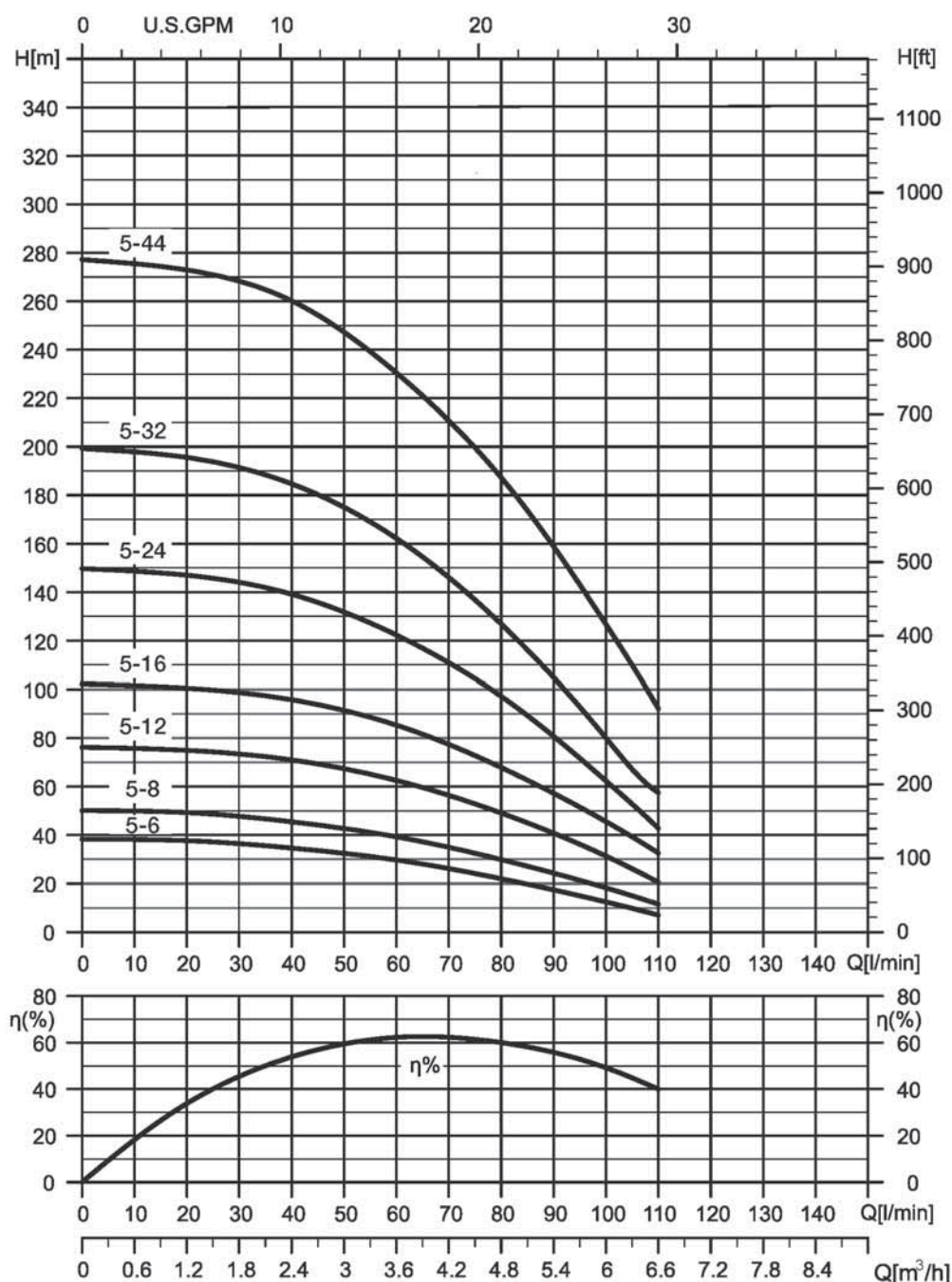
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN5 – MEI > 0.60



Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

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SUBMERSIBLE MULTISTAGE PUMPS

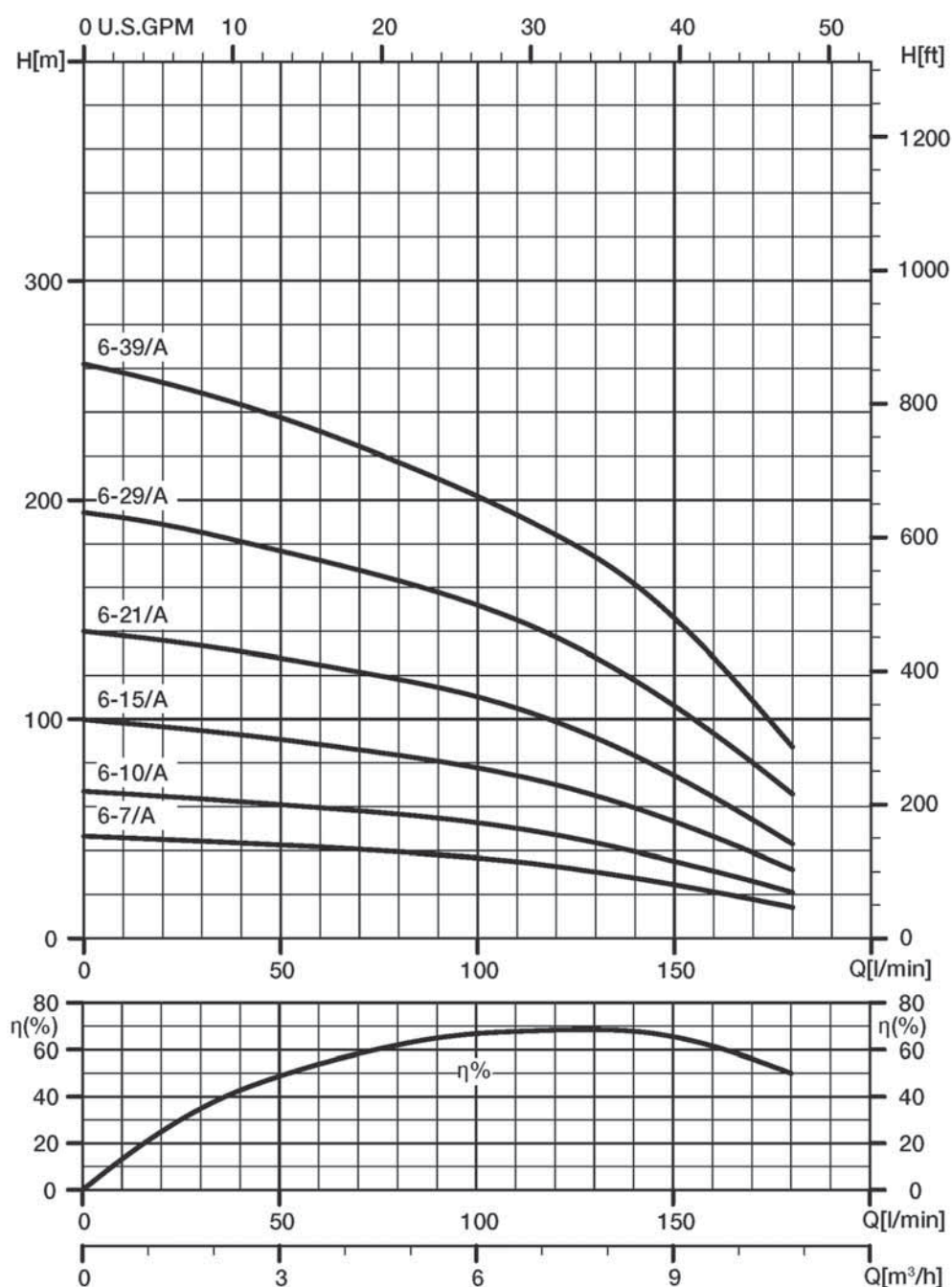
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN6 – MEI > 0.40



Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

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SUBMERSIBLE MULTISTAGE PUMPS

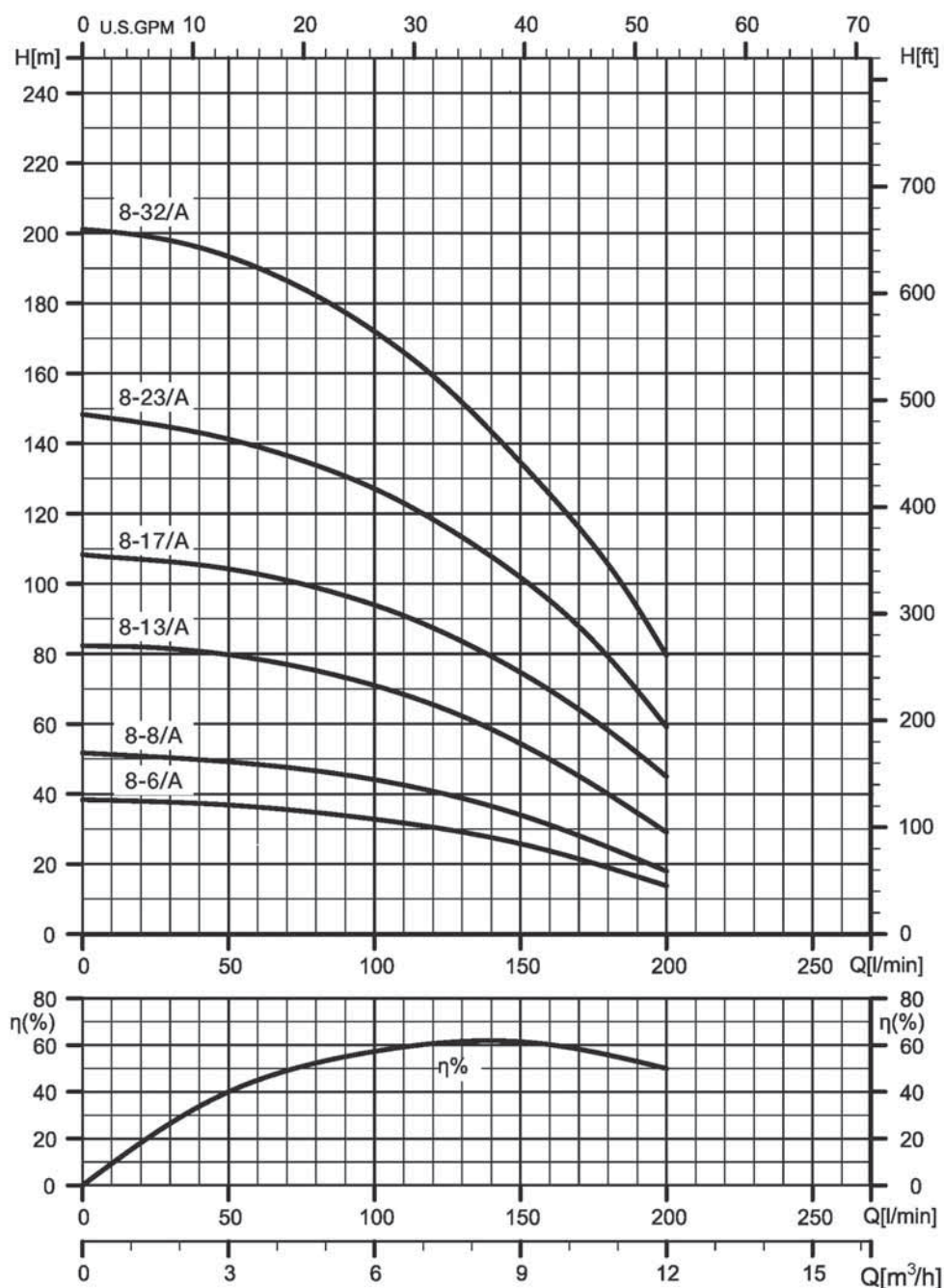
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN8 – MEI > 0.40



Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

SUBMERSIBLE MULTISTAGE PUMPS

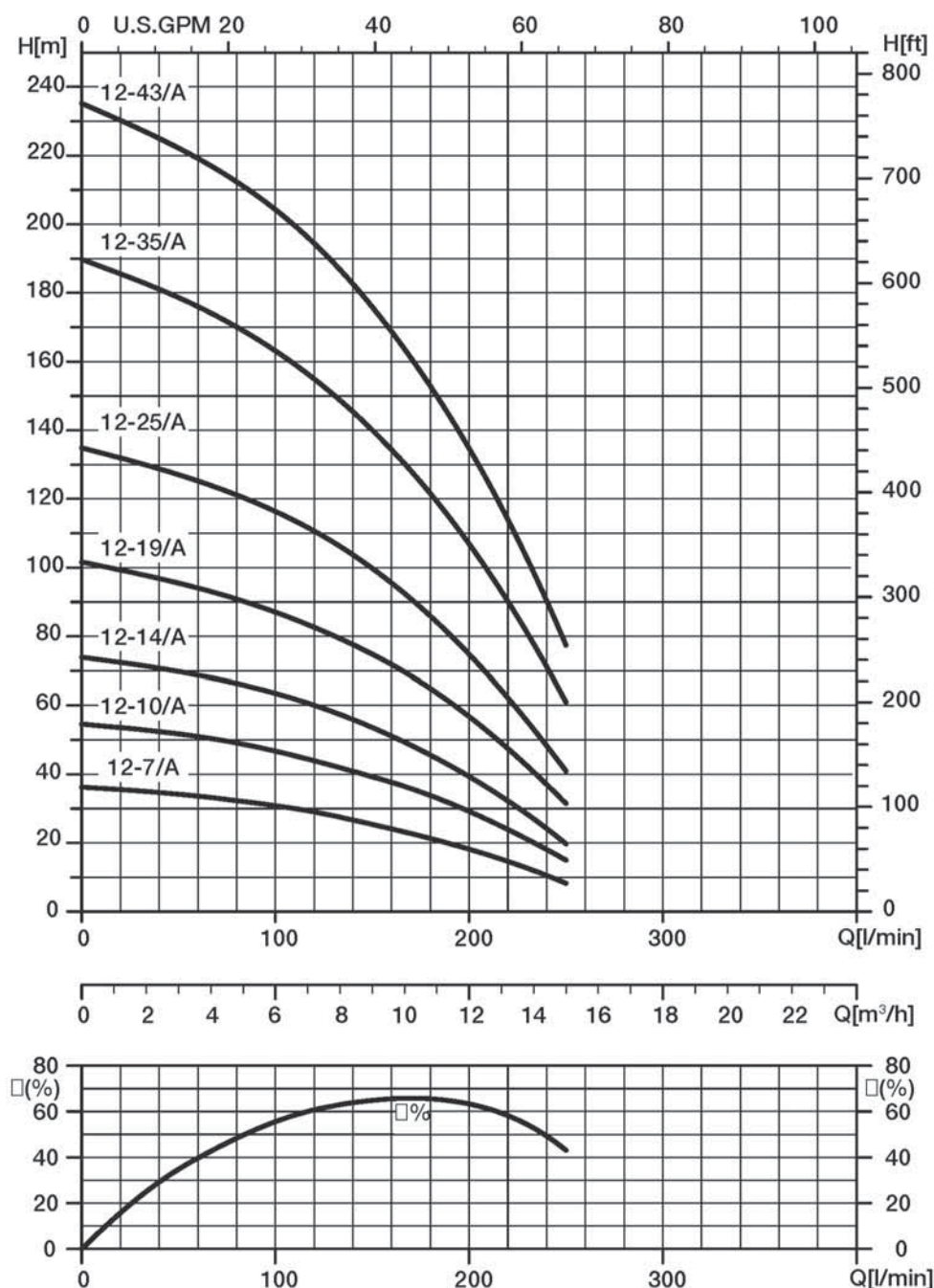
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN12 – MEI > 0.40



Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

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SUBMERSIBLE MULTISTAGE PUMPS

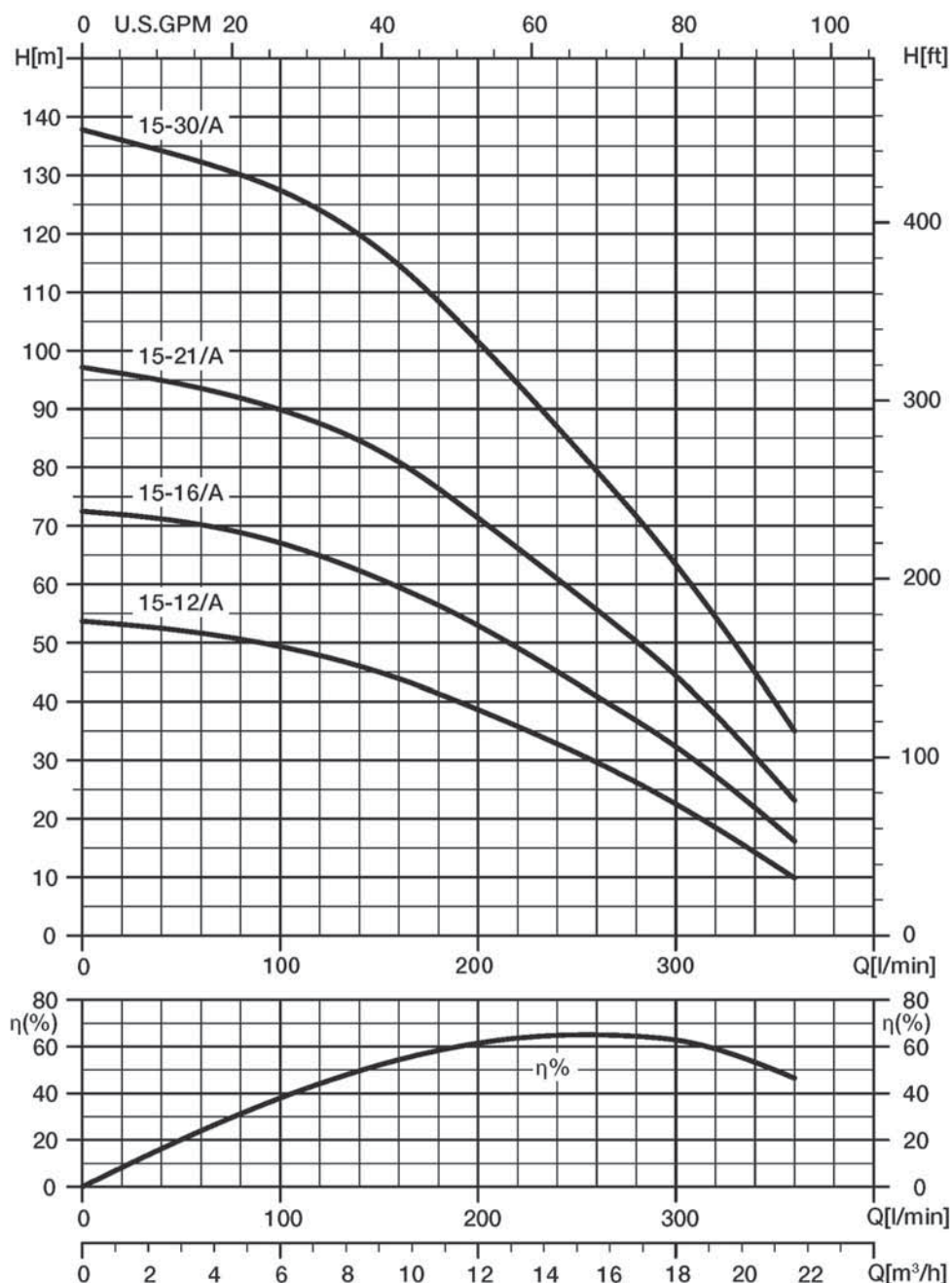
4WN

PERFORMANCE CURVE

50Hz

Rev. C

4WN15 – MEI > 0.40



Rotation speed $\approx 2850 \text{ min}^{-1}$
Test standard: ISO 9906 – Annex A

SUBMERSIBLE MULTISTAGE PUMPS

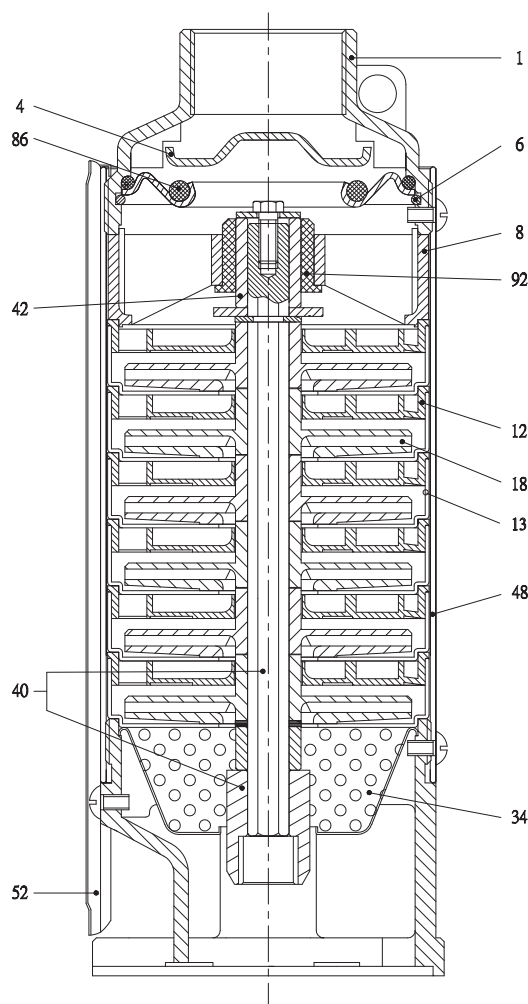
4WN

CONSTRUCTION

50Hz

Rev. C

SECTIONAL VIEW



N°	PART NAME	MATERIAL
1	Discharge Head	AISI 304 SS
4	Check Valve Cone	AISI 304 SS
6	Check Valve retaining ring	AISI 304 SS
8	Bearing Spider	Glass Filled Polycarbonate
12	Diffuser	Glass Filled Polycarbonate
13	Bowl	AISI 304 SS
18	Impeller	Noryl34
34	Strainer	AISI 304 SS
40	Pump Shaft/Coupling	AISI 304 SS
42	Shaft Sleeve	AISI 304 SS or Noryl
48	Pump casing	AISI 304 SS
52	Cable Guard	AISI 304 SS
86	O-Ring	NBR
92	Bearing	Polyacetal

300

SUBMERSIBLE MULTISTAGE PUMPS

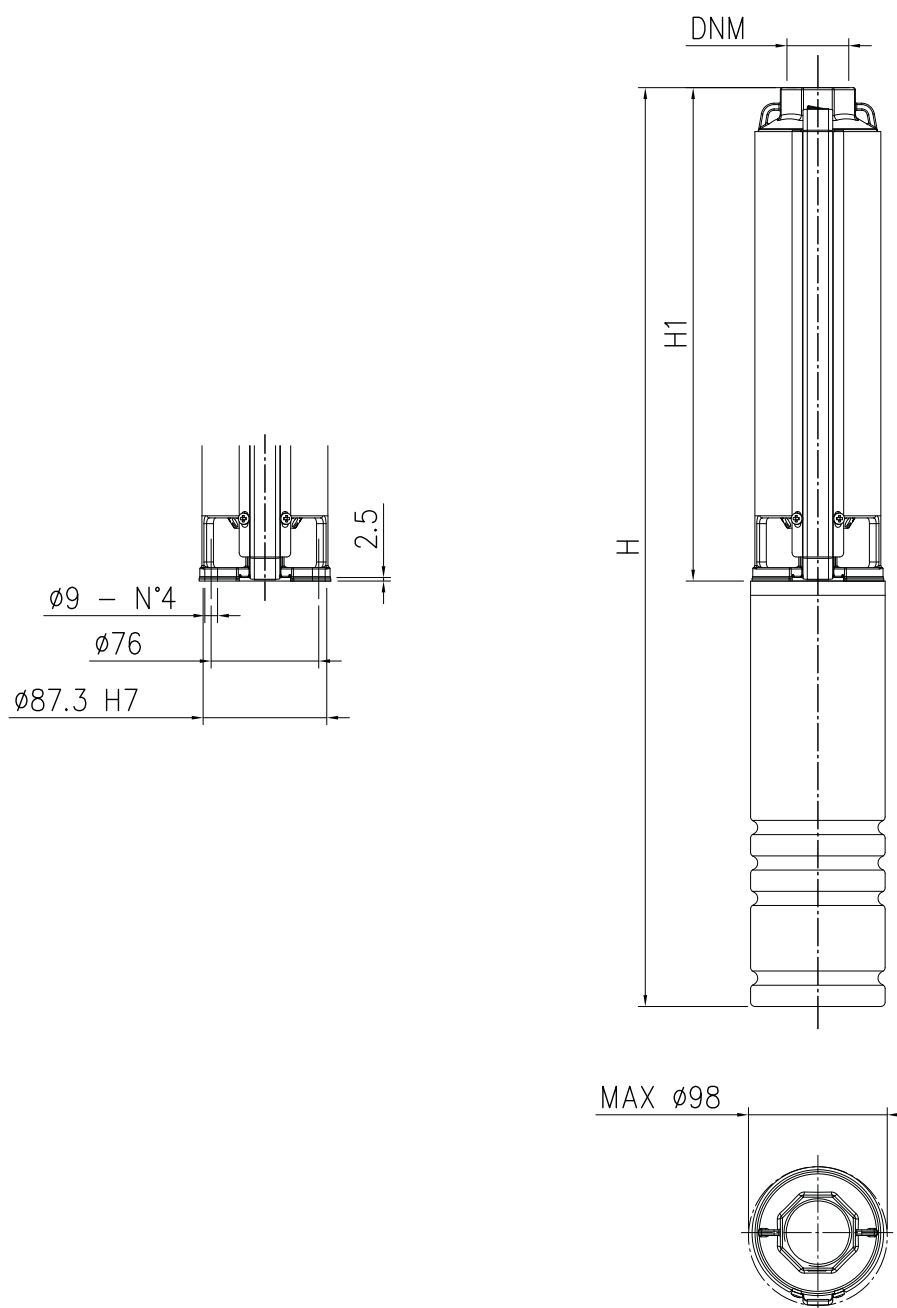
4WN

DIMENSIONS AND WEIGHT

50Hz

Rev.C

PUMP



Pump can be coupled with NEMA standard 4" motor

400

SUBMERSIBLE MULTISTAGE PUMPS

4WN

DIMENSIONS AND WEIGHT

50Hz

Rev.C

Type	Power		H1	DNM	H (OF-OIL motor version)		H (WF-Water motor version)	
	kW	HP			single-phase	three-phase	single-phase	three-phase
4WN1-19	0.55	0.75	481	1 1/4	806	806	734	709
4WN1-26	0.75	1.00	642	1 1/4	992	967	925	890
4WN1-38	1.10	1.50	864	1 1/4	1249	1214	1171	1147
4WN2-10	0.55	0.75	324	1 1/4	649	649	577	552
4WN2-14	0.75	1.00	394	1 1/4	744	719	677	642
4WN2-20	1.10	1.50	499	1 1/4	884	849	806	782
4WN3-8	0.55	0.75	289	1 1/4	614	614	542	517
4WN3-11	0.75	1.00	342	1 1/4	692	667	625	590
4WN3-16	1.10	1.50	430	1 1/4	815	780	737	713
4WN3-21	1.50	2.00	519	1 1/4	939	904	858	826
4WN3-32	2.20	3.00	749	1 1/4	1219	1169	1186	1088
4WN4-7	0.55	0.75	301	1 1/4	626	626	554	529
4WN4-9	0.75	1.00	344	1 1/4	694	669	627	592
4WN4-14	1.10	1.50	452	1 1/4	837	802	759	735
4WN4-18	1.50	2.00	538	1 1/4	958	923	877	845
4WN4-27	2.20	3.00	767	1 1/4	1237	1187	1204	1106
4WN4-35	3.00	4.00	934	1 1/4	....	1478	....	1328
4WN4-48	4.00	5.50	1253	1 1/4	....	1827	....	1796
4WN5-6	0.55	0.75	296	1 1/2	621	621	549	524
4WN5-8	0.75	1.00	345	1 1/2	695	670	628	593
4WN5-12	1.10	1.50	433	1 1/2	818	783	740	716
4WN5-16	1.50	2.00	542	1 1/2	962	927	881	849
4WN5-24	2.20	3.00	777	1 1/2	1247	1197	1214	1116
4WN5-32	3.00	4.00	965	1 1/2	....	1509	....	1359
4WN5-44	4.00	5.50	1296	1 1/2	....	1870	....	1839

SUBMERSIBLE MULTISTAGE PUMPS

4WN

DIMENSIONS AND WEIGHT

50Hz

Rev.C

Type	Power		H1	DNM	H (OF-OIL motor version)		H (WF-Water motor version)	
	kW	HP			single-phase	three-phase	single-phase	three-phase
4WN6-7	1.10	1.50	395	2	780	745	702	678
4WN6-10	1.50	2.00	485	2	905	870	824	792
4WN6-15	2.20	3.00	640	2	1110	1060	1077	979
4WN6-21	3.00	4.00	865	2	....	1409	....	1259
4WN6-29	4.00	5.50	1150	2	....	1724	....	1693
4WN6-39	5.50	7.50	1480	2	....	2124	....	2133
4WN8-6	1.10	1.50	356	2	741	706	663	639
4WN8-8	1.50	2.00	418	2	838	803	757	725
4WN8-13	2.20	3.00	573	2	1043	993	1010	912
4WN8-17	3.00	4.00	697	2	....	1241	....	1091
4WN8-23	4.00	5.50	921	2	....	1495	....	1464
4WN8-32	5.50	7.50	1238	2	....	1882	....	1891
4WN12-7	1.10	1.50	540	2	925	925	847	823
4WN12-10	1.50	2.00	695	2	1115	1115	1034	1002
4WN12-14	2.20	3.00	905	2	1375	1449	1342	1244
4WN12-19	3.00	4.00	1240	2	....	1784	....	1634
4WN12-25	4.00	5.50	1570	2	....	2144	....	2113
4WN12-35	5.50	7.50	2165	2	....	2809	....	2818
4WN12-43	7.50	10.00	2585	2	....	3390	....	3316
4WN15-12	2.20	3.00	680	2	1150	1100	1117	1019
4WN15-16	3.00	4.00	1220	2	....	1764	....	1614
4WN15-21	4.00	5.50	1610	2	....	2184	....	2153
4WN15-30	5.50	7.50	2225	2	....	2869	....	2878

SUBMERSIBLE MULTISTAGE PUMPS

4WN

DIMENSIONS AND WEIGHT

50Hz

Rev.C

Type	Power		Weight (kg) OF-Oil motor version			Weight (kg) WF-Water motor version		
			Pump	Pump + Motor		Pump	Pump + Motor	
	Kw	HP		single-phase	three-phase		single-phase	three-phase
4WN1-19	0.55	0.75	4,7	12,3	11,7	4,7	12,8	12,8
4WN1-26	0.75	1.00	5,8	14,5	13,4	5,8	16,4	16,4
4WN1-38	1.10	1.50	8,2	18,5	16,9	8,2	19,4	19,4
4WN2-10	0.55	0.75	3,3	10,9	10,3	3,3	11,4	11,4
4WN2-14	0.75	1.00	3,9	12,6	11,5	3,9	14,5	14,5
4WN2-20	1.10	1.50	4,9	15,2	13,6	4,9	16,1	16,1
4WN3-8	0.55	0.75	2,9	10,5	9,9	2,9	11	11
4WN3-11	0.75	1.00	3,4	12,1	11	3,4	14	14
4WN3-16	1.10	1.50	4,2	14,5	12,9	4,2	15,4	15,4
4WN3-21	1.50	2.00	5	17	15,4	5	19	19
4WN3-32	2.20	3.00	7,1	21,3	19,1	7,1	23,5	23,5
4WN4-7	0.55	0.75	3	10,3	10	3	11,1	11,1
4WN4-9	0.75	1.00	3,3	12	10,9	3,3	13,9	13,9
4WN4-14	1.10	1.50	4,1	14,4	12,8	4,1	15,3	15,3
4WN4-18	1.50	2.00	4,7	16,7	15,1	4,7	18,7	18,7
4WN4-27	2.20	3.00	6,2	20,4	18,2	6,2	22,6	22,6
4WN4-35	3.00	4.00	7,9	....	21	7,9	....	26,2
4WN4-48	4.00	5.50	9,9	....	25,5	9,9	....	26,2
4WN5-6	0.55	0.75	2,9	9,9	12	2,9	11	11
4WN5-8	0.75	1.00	3,3	12	10,9	3,3	13,9	13,9
4WN5-12	1.10	1.50	4,1	14,4	12,8	4,1	15,3	15,3
4WN5-16	1.50	2.00	5	17	15,4	5	19	19
4WN5-24	2.20	3.00	6,6	20,8	18,6	6,6	23	23
4WN5-32	3.00	4.00	8,7	....	21,8	8,7	....	27
4WN5-44	4.00	5.50	11,2	....	26,8	11,2	....	34,6

SUBMERSIBLE MULTISTAGE PUMPS

4WN

DIMENSIONS AND WEIGHT

50Hz

Rev.C

Type	Power		Weight (kG) OF-Oil motor version			Weight (kG) WF-Water motor version		
			Pump	Pump + Motor		Pump	Pump + Motor	
	Kw	HP		single-phase	three-phase		single-phase	three-phase
4WN6-7	1.10	1.50	3,8	14,1	12,7	3,8	15	15
4WN6-10	1.50	2.00	4,6	16,6	15	4,6	18,6	18,6
4WN6-15	2.20	3.00	6,4	20,6	18,4	6,4	22,8	22,8
4WN6-21	3.00	4.00	8,2	....	21,3	8,2	....	26,5
4WN6-29	4.00	5.50	10,7	....	26,3	10,7	....	34,1
4WN6-39	5.50	7.50	14,5	....	33,4	14,5	....	43,9
4WN8-6	1.10	1.50	3,4	13,7	12,1	3,4	14,6	14,6
4WN8-8	1.50	2.00	4	16	14,4	4	18	18
4WN8-13	2.20	3.00	5,5	19,7	17,5	5,5	21,9	21,9
4WN8-17	3.00	4.00	6,6	....	19,7	6,6	....	24,9
4WN8-23	4.00	5.50	8,4	....	24	8,4	....	31,8
4WN8-32	5.50	7.50	11	....	29,9	11	....	40,4
4WN12-7	1.10	1.50	4,9	15,2	13,6	4,9	16,1	16,1
4WN12-10	1.50	2.00	6,3	18,3	16,7	6,3	20,3	20,3
4WN12-14	2.20	3.00	8,1	22,3	20,1	8,1	24,5	24,5
4WN12-19	3.00	4.00	11	....	24,1	11	....	29,3
4WN12-25	4.00	5.50	14,3	....	29,9	14,3	....	37,7
4WN12-35	5.50	7.50	19,8	....	38,7	19,8	....	49,2
4WN12-43	7.50	10.00	24	....	51	24	....	57,8
4WN15-12	2.20	3.00	8,4	22,6	20,4	8,4		24,8
4WN15-16	3.00	4.00	10,8	....	23,9	10,8	....	29,1
4WN15-21	4.00	5.50	14,7	....	30,3	14,7	....	38,1
4WN15-30	5.50	7.50	20,1	....	39	20,1	....	49,5

SUBMERSIBLE MULTISTAGE PUMPS

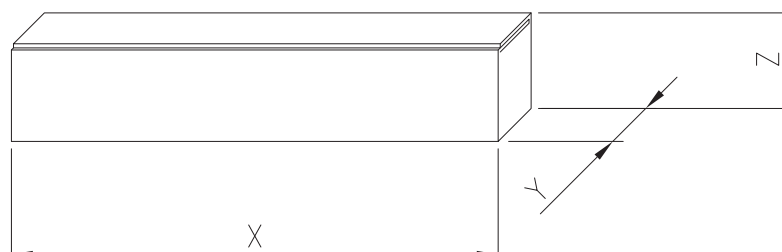
4WN

DIMENSIONS AND WEIGHT

50Hz

Rev.C

PACKING



Type	Power		Packing (mm)			OF Pump + Motor+Packing		WF Pump + Motor+Packing	
	Kw	HP	X	Y	Z	single-phase	three-phase	single-phase	three-phase
4WN1-19	0.55	0.75	950	100	100	12,7	12,1	13,2	13,2
4WN1-26	0.75	1.00	1035	100	100	14,9	13,8	16,8	16,8
4WN1-38	1.10	1.50	1300	100	100	19,0	17,4	19,9	19,9
4WN2-10	0.55	0.75	820	100	100	11,2	10,6	11,7	11,7
4WN2-14	0.75	1.00	820	100	100	12,9	11,8	14,8	14,8
4WN2-20	1.10	1.50	950	100	100	15,6	14,0	16,5	16,5
4WN3-8	0.55	0.75	640	100	100	10,8	10,2	11,3	11,3
4WN3-11	0.75	1.00	820	100	100	12,4	11,3	14,3	14,3
4WN3-16	1.10	1.50	800	100	100	14,8	13,2	15,7	15,7
4WN3-21	1.50	2.00	1035	100	100	17,4	15,8	19,4	19,4
4WN3-32	2.20	3.00	1300	100	100	21,8	19,6	24,0	24,0
4WN4-7	0.55	0.75	640	100	100	10,6	10,3	11,4	11,4
4WN4-9	0.75	1.00	820	100	100	12,3	11,2	14,2	14,2
4WN4-14	1.10	1.50	950	100	100	14,8	13,2	15,7	15,7
4WN4-18	1.50	2.00	1035	100	100	17,1	15,5	19,1	19,1
4WN4-27	2.20	3.00	1300	100	100	20,9	18,7	23,1	23,1
4WN4-35	3.00	4.00	1530	100	100	....	21,6	....	26,8
4WN4-48	4.00	5.50	2110	100	100	....	26,4	....	27,1
4WN5-6	0.55	0.75	640	100	100	10,2	12,3	11,3	11,3
4WN5-8	0.75	1.00	820	100	100	12,3	11,2	14,2	14,2
4WN5-12	1.10	1.50	800	100	100	14,7	13,1	15,6	15,6
4WN5-16	1.50	2.00	1035	100	100	17,4	15,8	19,4	19,4
4WN5-24	2.20	3.00	1300	100	100	21,3	19,1	23,5	23,5
4WN5-32	3.00	4.00	1530	100	100	....	22,4	....	27,6
4WN5-44	4.00	5.50	2110	100	100	....	27,7	....	35,5

SUBMERSIBLE MULTISTAGE PUMPS

4WN

DIMENSIONS AND WEIGHT

50Hz

Rev.C

Type	Power		Packing (mm)			OF Pump + Motor+Packing		WF Pump + Motor+Packing	
	Kw	HP	X	Y	Z	single-phase	three-phase	single-phase	three-phase
4WN6-7	1.10	1.50	800	100	100	14,4	13,0	15,3	15,3
4WN6-10	1.50	2.00	1035	100	100	17,0	15,4	19,0	19,0
4WN6-15	2.20	3.00	1300	100	100	21,1	18,9	23,3	23,3
4WN6-21	3.00	4.00	1530	100	100	....	21,9	....	27,1
4WN6-29	4.00	5.50	1810	100	100	....	27,1	....	34,9
4WN6-39	5.50	7.50	2430	100	100	....	34,4	....	44,9
4WN8-6	1.10	1.50	820	100	100	14,0	12,4	14,9	14,9
4WN8-8	1.50	2.00	950	100	100	16,4	14,8	18,4	18,4
4WN8-13	2.20	3.00	1035	100	100	20,1	17,9	22,3	22,3
4WN8-17	3.00	4.00	1300	100	100	....	20,2	....	25,4
4WN8-23	4.00	5.50	1530	100	100	....	24,6	....	32,4
4WN8-32	5.50	7.50	2110	100	100	....	30,8	....	41,3
4WN12-7	1.10	1.50	1035	100	100	15,6	14,0	16,5	16,5
4WN12-10	1.50	2.00	1300	100	100	18,8	17,2	20,8	20,8
4WN12-14	2.20	3.00	1530	100	100	22,9	20,7	25,1	25,1
4WN12-19	3.00	4.00	1950	100	100	....	24,9	....	30,1
4WN12-25	4.00	5.50	2430	100	100	....	30,9	....	38,7
4WN12-35	5.50	7.50	3000	100	100	....	40,0	....	50,5
4WN12-43	7.50	10.00	3600	100	100	....	52,5	....	59,3
4WN15-12	2.20	3.00	1300	100	100	23,1	20,9	26,5	25,3
4WN15-16	3.00	4.00	1950	100	100	....	24,7	....	29,9
4WN15-21	4.00	5.50	2430	100	100	....	31,3	....	39,1
4WN15-30	5.50	7.50	3000	100	100	....	40,3	....	50,8