

WINNER 4N

4" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304



4" submersed centrifugal electric pumps in AISI 304 with front wear ring impeller.

APPLICATIONS

- Moving clear water in wells
- Pressure boosting of clean water for agricultural, domestic or industrial use
- Irrigation
- Moving water in general

TECHNICAL DETAILS

- Easy to install
- Vertical or horizontal installation

TECHNICAL DATA

- Maximum immersion:
 - 350 m (with motor in water bath)
 - 150 m (with motor in bath of liquid refrigerant)
- Maximum temperature of the liquid:
 - 30°C (with motor in water bath)
 - 35°C (with motor in bath of liquid refrigerant)
- Maximum presence of sand: 50 ppm
- 2 pole motor in bath of liquid refrigerant (OY) or in water bath (WY)
- Max start-ups per hour: 30 (OY) - 20 (WY)
- Class of insulation F (OY) - B (WY)
- Protection rating IP58 (OY) - IP68 (WY)
- 230V (+6-10%) 50Hz (OYM), single phase voltage, three phase 400V (+6-10%) 50Hz (OY)
- 230V (± 6%) 50Hz (WYM) single phase voltage, 400V (± 6%) 50Hz (WY) three phase voltage
- G1 ¼ discharge connection for 4N1 - 4N2 - 4N4 models
- G2 discharge connection for 4N7 - 4N10 - 4N15 models
- For cable dimensioning: see page 41

MATERIALS

- External casing, shaft, discharge outlet and valve in AISI 304
- Technopolymer impeller and nozzle

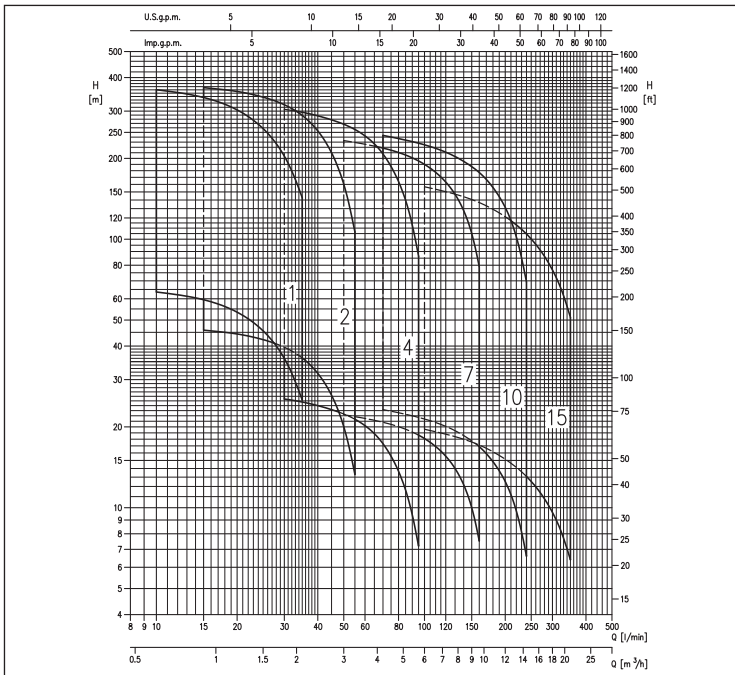
CONTROL PANELS

- Q Series (see page 42)
- 1EPBH (see page 43)

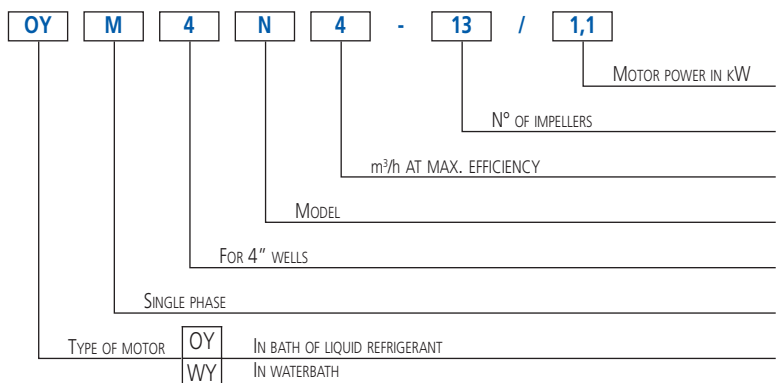
ACCESSORIES (on request)

- Presscomfort - Pressure regulator (see page 45)
- Presso•Matic - Variable speed control system (single phase 230V±10% power supply - 220V three phase output - maximum motor power 2.2 kW-3HP) (see page 46)
- 5 litre 10 bar ¾ EPDM vessel
- Flat cable 4x2.5 for motor 4" OY - from 10 m, 20 m, 30 m or 40 m
- Cable with junction 4x2.5 for motor 4" OY - 40 m
- Cable with junction 4x2.5 for motor 4" OY - 60 m
- Junction for cable GPS-1 (for 4x1.5 and 4x2.5 cables)
- Casting resin cable junction 92A1 (section 1.5÷10 mm²)
- PVC 5m key float with counter-weight
- PVC 10 m key float with counter-weight
- PVC 20 m key float with counter-weight
- Capacitor MF 16,450V L=150
- Capacitor MF 20,450V L=150
- Capacitor MF 25,450V L=150
- Capacitor MF 35,450V L=150
- Capacitor MF 40,450V L=150
- Capacitor MF 50,450V L=150
- Capacitor MF 60,450V L=150
- Capacitor MF 70,450V L=150
- Capacitor MF 80,450V L=150

PERFORMANCE RANGE (according to ISO 9906 Attachment A)



IDENTIFICATION CODE



WINNER 4N

4" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

PERFORMANCE TABLE

Model	P ₂		Q=Flow rate										
	[HP]	[kW]	l/min	10	15	20	25	30	35	45	55	75	95
			m ³ /h	0,6	0,9	1,2	1,5	1,8	2,1	2,7	3,3	4,5	5,7
			H=Head [m]										
WINNER 4N1- 12	0,5	0,37	64	60	54	46	36	25	-	-	-	-	
WINNER 4N1- 18	0,7	0,55	95	89	80	68	54	38	-	-	-	-	
WINNER 4N1- 24	1	0,75	127	119	107	91	72	50	-	-	-	-	
WINNER 4N1- 34	1,5	1,1	180	169	152	129	102	71	-	-	-	-	
WINNER 4N1- 48	2	1,5	254	238	214	182	144	101	-	-	-	-	
WINNER 4N1- 68	3	2,2	360	337	303	258	204	143	-	-	-	-	
WINNER 4N2- 7	0,5	0,37	-	46	44	42	40	36	26	13	-	-	
WINNER 4N2- 10	0,7	0,55	-	66	63	60	57	52	38	19	-	-	
WINNER 4N2- 14	1	0,75	-	92	89	85	79	72	53	27	-	-	
WINNER 4N2- 20	1,5	1,1	-	131	127	121	113	103	75	38	-	-	
WINNER 4N2- 28	2	1,5	-	183	178	169	158	144	105	53	-	-	
WINNER 4N2- 40	3	2,2	-	262	254	242	226	206	150	76	-	-	
WINNER 4N2- 56	4	3	-	367	355	338	317	289	210	106	-	-	
WINNER 4N4- 4	0,5	0,37	-	-	-	-	25	25	23	21	16	7	
WINNER 4N4- 7	0,7	0,55	-	-	-	-	44	43	41	37	27	13	
WINNER 4N4- 9	1	0,75	-	-	-	-	57	56	52	48	35	16	
WINNER 4N4- 13	1,5	1,1	-	-	-	-	83	80	75	69	51	23	
WINNER 4N4- 18	2	1,5	-	-	-	-	114	111	104	96	70	32	
WINNER 4N4- 27	3	2,2	-	-	-	-	171	167	157	144	105	49	
WINNER 4N4- 36	4	3	-	-	-	-	229	223	209	192	140	65	
WINNER 4N4- 48	5,5	4	-	-	-	-	305	297	278	256	187	86	

Model	P ₂		Q=Flow rate										
	[HP]	[kW]	l/min	50	70	100	130	160	200	240	280	320	350
			m ³ /h	3	4,2	6	7,8	9,6	12	14,4	16,8	19,2	21
			H=Head [m]										
WINNER 4N7-4	0,7	0,55	22	21	18	14	8	-	-	-	-	-	
WINNER 4N7-6	1	0,75	33	31	27	21	11	-	-	-	-	-	
WINNER 4N7-8	1,5	1,1	44	42	36	28	15	-	-	-	-	-	
WINNER 4N7-12	2	1,5	67	62	54	42	23	-	-	-	-	-	
WINNER 4N7-17	3	2,2	94	88	77	60	32	-	-	-	-	-	
WINNER 4N7-23	4	3	128	120	104	81	43	-	-	-	-	-	
WINNER 4N7-30	5,5	4	167	156	136	105	56	-	-	-	-	-	
WINNER 4N7-42	7,5	5,5	233	219	190	147	79	-	-	-	-	-	
WINNER 4N10-4	1	0,75	-	23	21	19	17	13	7	-	-	-	
WINNER 4N10-6	1,5	1,1	-	35	32	29	25	19	10	-	-	-	
WINNER 4N10-8	2	1,5	-	46	43	39	34	25	13	-	-	-	
WINNER 4N10-12	3	2,2	-	70	64	58	51	38	20	-	-	-	
WINNER 4N10-17	4	3	-	99	91	82	72	53	28	-	-	-	
WINNER 4N10-23	5,5	4	-	133	123	111	97	72	38	-	-	-	
WINNER 4N10-30	7,5	5,5	-	174	161	145	127	94	50	-	-	-	
WINNER 4N10-42	10	7,5	-	244	225	203	177	131	69	-	-	-	
WINNER 4N15-4	1,5	1,1	-	-	20	18	17	15	13	11	8	6	
WINNER 4N15-6	2	1,5	-	-	29	28	26	23	20	16	13	10	
WINNER 4N15-9	3	2,2	-	-	44	41	39	34	29	24	19	14	
WINNER 4N15-13	4	3	-	-	64	60	56	49	43	35	27	21	
WINNER 4N15-17	5,5	4	-	-	83	78	73	64	56	46	36	27	
WINNER 4N15-24	7,5	5,5	-	-	118	110	103	91	78	65	50	38	
WINNER 4N15-32	10	7,5	-	-	157	147	137	121	105	86	67	51	

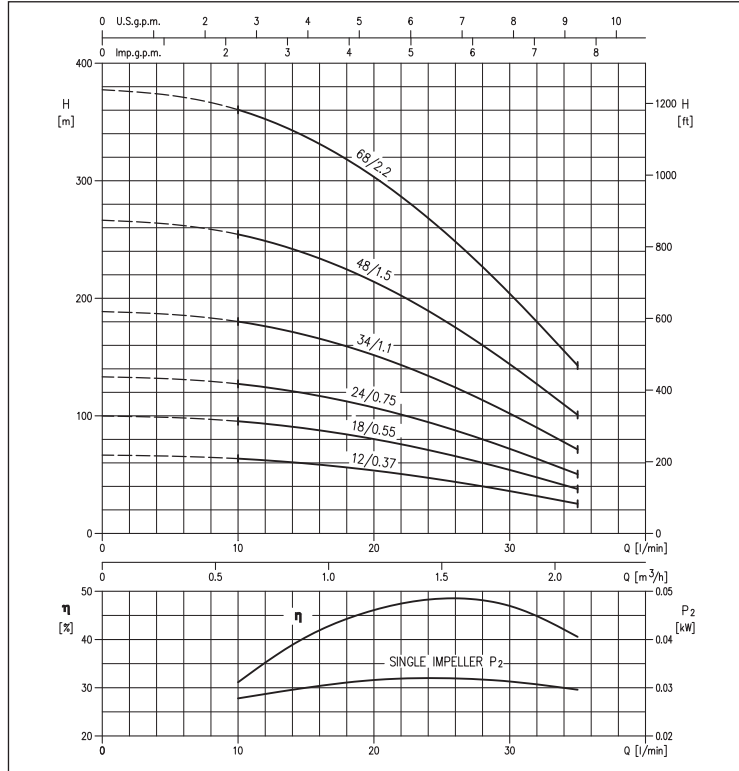


WINNER 4N

4" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS in AISI 304

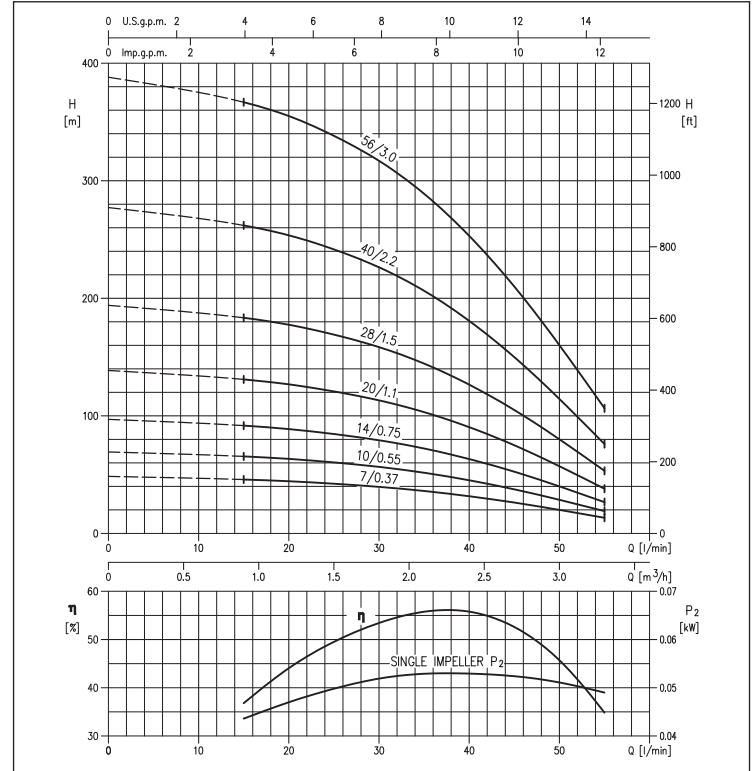
WINNER 4N1 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A) IMPELLER DIAMETER: 67.6 mm



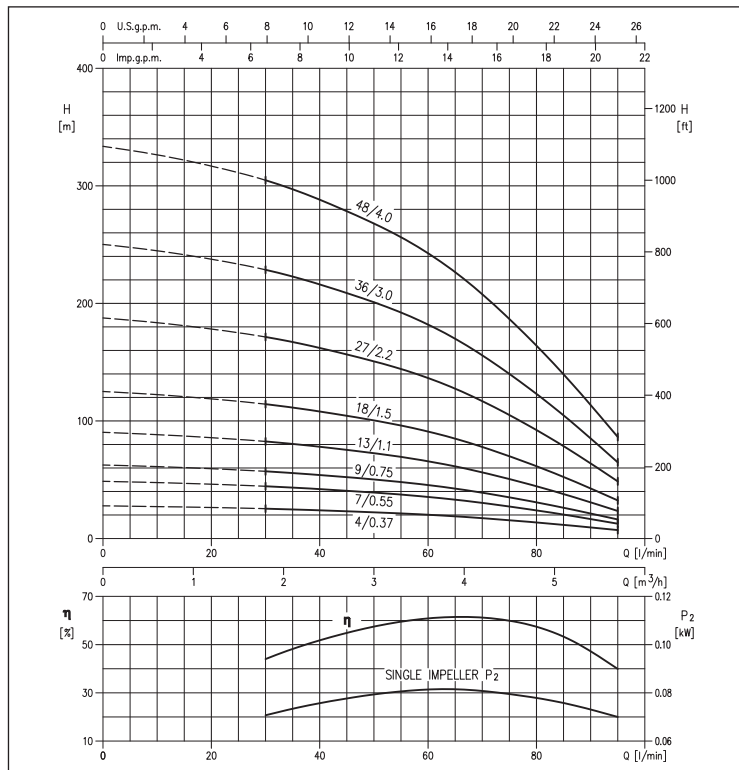
WINNER 4N2 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A) IMPELLER DIAMETER: 76 mm



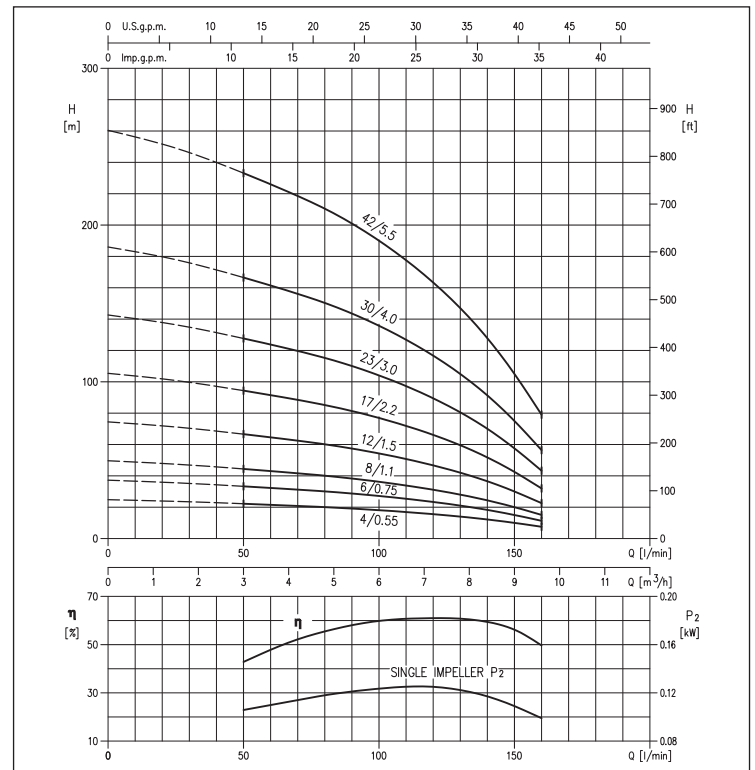
WINNER 4N4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A) IMPELLER DIAMETER: 76 mm



WINNER 4N7 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A) IMPELLER DIAMETER: 74.2 mm

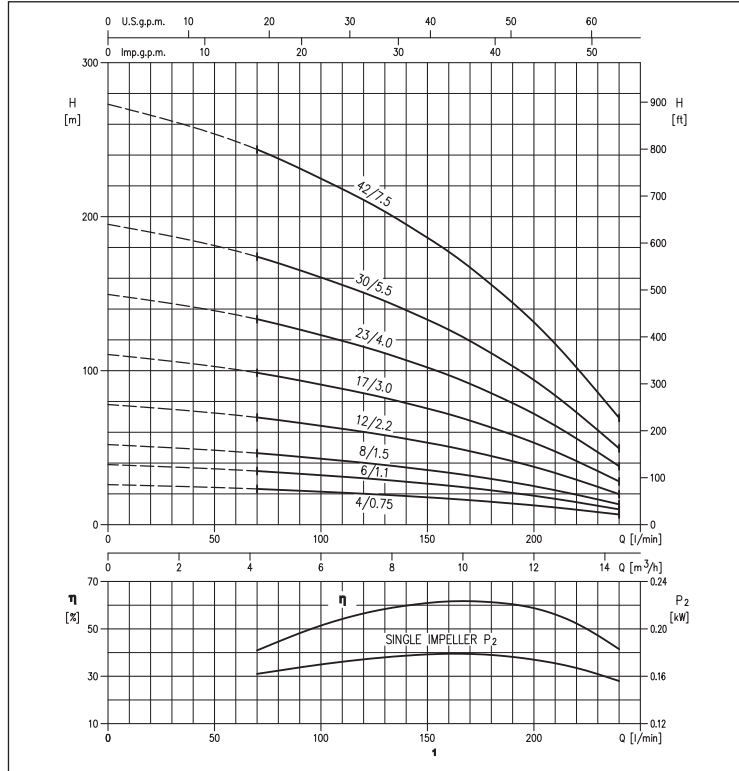


WINNER 4N

4" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS in AISI 304

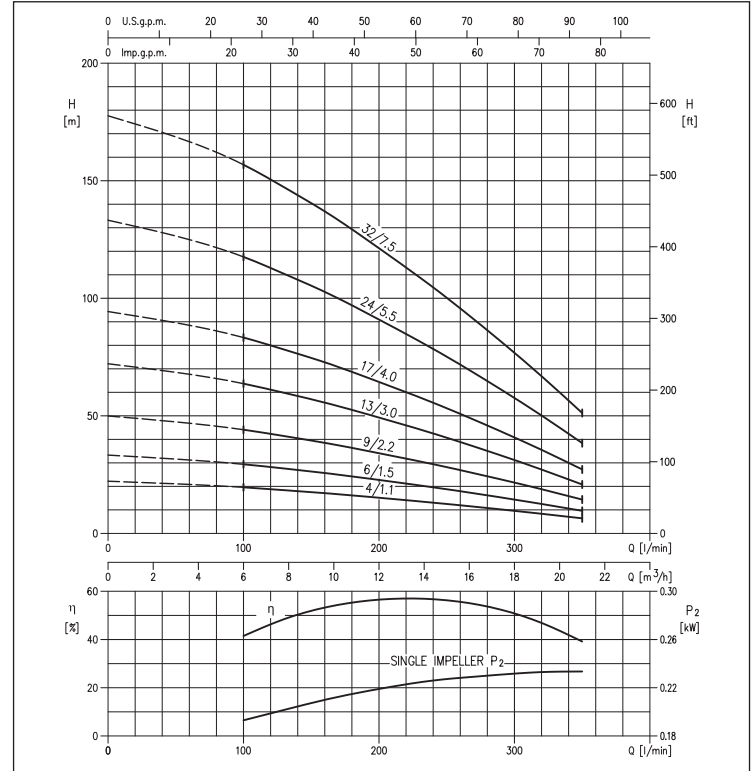
WINNER 4N10 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A) IMPELLER DIAMETER: 72 mm

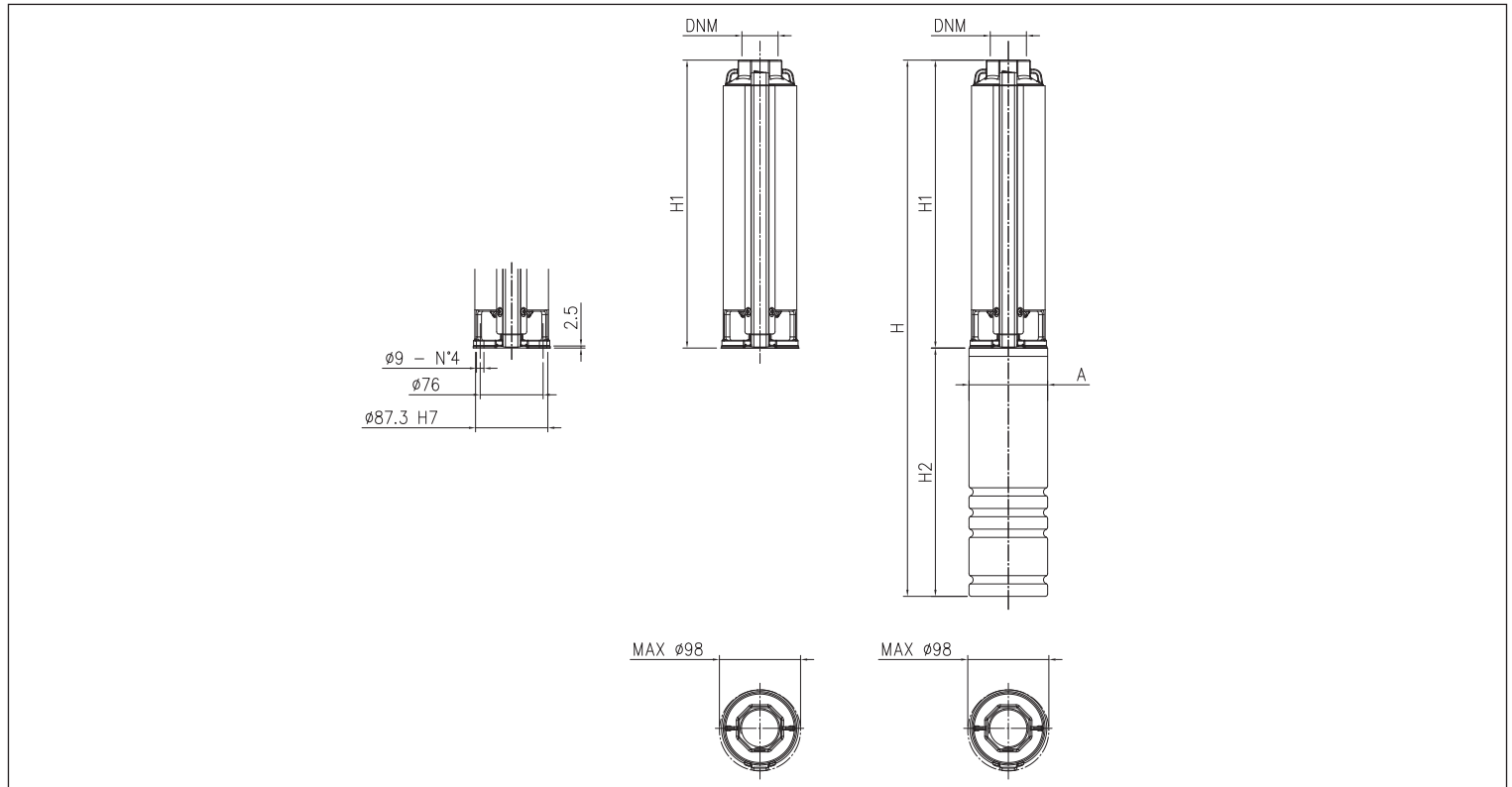


WINNER 4N15 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A) IMPELLER DIAMETER: 75.5 mm



DIMENSIONS



WINNER 4N

4" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

DIMENSIONS TABLE

Model	P ₂		Pump without motor		Pump with motor in bath of liquid refrigerant						Pump with motor in water bath					
	[HP]	[kW]	H1 [mm]	DNM	Single phase			Three phase			Single phase			Three phase		
					A [mm]	H2 [mm]	H [mm]	A [mm]	H2 [mm]	H [mm]	A [mm]	H2 [mm]	H [mm]	A [mm]	H2 [mm]	H [mm]
WINNER 4N1- 12	0,5	0,37	332	G1 ¼	97	325	657	97	304	636	97	242	574	97	223	555
WINNER 4N1- 18	0,75	0,55	437	G1 ¼	97	325	762	97	325	762	97	271	708	97	242	679
WINNER 4N1- 24	1	0,75	542	G1 ¼	97	350	892	97	325	867	97	299	841	97	271	813
WINNER 4N1- 34	1,5	1,1	717	G1 ¼	97	385	1102	97	350	1067	97	356	1073	97	299	1016
WINNER 4N1- 48	2	1,5	1028	G1 ¼	97	420	1448	97	385	1413	97	384	1412	97	327	1355
WINNER 4N1- 68	3	2,2	1378	G1 ¼	97	470	1848	97	420	1798	97	460	1838	97	356	1734
WINNER 4N2- 7	0,5	0,37	245	G1 ¼	97	325	570	97	304	549	97	242	487	97	223	468
WINNER 4N2- 10	0,75	0,55	297	G1 ¼	97	325	622	97	325	622	97	271	568	97	242	539
WINNER 4N2- 14	1	0,75	367	G1 ¼	97	350	717	97	325	692	97	299	666	97	271	638
WINNER 4N2- 20	1,5	1,1	472	G1 ¼	97	385	857	97	350	822	97	356	828	97	299	771
WINNER 4N2- 28	2	1,5	612	G1 ¼	97	420	1032	97	385	997	97	384	996	97	327	939
WINNER 4N2- 40	3	2,2	888	G1 ¼	97	470	1358	97	420	1308	97	460	1348	97	356	1244
WINNER 4N2- 56	4	3	1168	G1 ¼	97	-	-	97	544	1712	97	-	-	97	423	1591
WINNER 4N4- 4	0,5	0,37	208	G1 ¼	97	325	533	97	304	512	97	242	450	97	223	431
WINNER 4N4- 7	0,75	0,55	273	G1 ¼	97	325	598	97	325	598	97	271	543	97	242	515
WINNER 4N4- 9	1	0,75	316	G1 ¼	97	350	666	97	325	641	97	299	614	97	271	586
WINNER 4N4- 13	1,5	1,1	402	G1 ¼	97	385	787	97	350	752	97	356	757	97	299	700
WINNER 4N4- 18	2	1,5	509	G1 ¼	97	420	929	97	385	894	97	384	893	97	327	836
WINNER 4N4- 27	3	2,2	703	G1 ¼	97	470	1173	97	420	1123	97	460	1163	97	356	1058
WINNER 4N4- 36	4	3	962	G1 ¼	97	-	-	97	544	1506	97	-	-	97	423	1385
WINNER 4N4- 48	5,5	4	1220	G1 ¼	97	-	-	97	574	1794	97	-	-	97	583	1803
WINNER 4N7-4	0,75	0,55	262	G2	97	325	587	97	325	587	97	271	533	97	242	504
WINNER 4N7-6	1	0,75	333	G2	97	350	683	97	325	658	97	299	632	97	271	604
WINNER 4N7-8	1,5	1,1	404	G2	97	385	789	97	350	754	97	356	760	97	299	703
WINNER 4N7-12	2	1,5	546	G2	97	420	966	97	385	931	97	384	930	97	327	873
WINNER 4N7-17	3	2,2	724	G2	97	470	1194	97	420	1144	97	460	1184	97	356	1079
WINNER 4N7-23	4	3	937	G2	97	-	-	97	544	1481	97	-	-	97	423	1359
WINNER 4N7-30	5,5	4	1251	G2	97	-	-	97	574	1825	97	-	-	97	583	1834
WINNER 4N7-42	7,5	5,5	1677	G2	97	-	-	97	644	2321	97	-	-	97	698	2375
WINNER 4N10-4	1	0,75	262	G2	97	350	612	97	325	587	97	299	561	97	271	533
WINNER 4N10-6	1,5	1,1	333	G2	97	385	718	97	350	683	97	356	689	97	299	632
WINNER 4N10-8	2	1,5	404	G2	97	420	824	97	385	789	97	384	788	97	327	731
WINNER 4N10-12	3	2,2	546	G2	97	470	1016	97	420	966	97	460	1006	97	356	902
WINNER 4N10-17	4	3	724	G2	97	-	-	97	544	1268	97	-	-	97	423	1146
WINNER 4N10-23	5,5	4	937	G2	97	-	-	97	574	1511	97	-	-	97	583	1520
WINNER 4N10-30	7,5	5,5	1251	G2	97	-	-	97	644	1895	97	-	-	97	698	1949
WINNER 4N10-42	10	7,5	1677	G2	97	-	-	97	805	2482	97	-	-	97	774	2451
WINNER 4N15-4	1,5	1,1	440	G2	97	385	825	97	350	790	97	356	796	97	299	739
WINNER 4N15-6	2	1,5	600	G2	97	420	1020	97	385	985	97	384	984	97	327	927
WINNER 4N15-9	3	2,2	840	G2	97	470	1310	97	420	1260	97	460	1300	97	356	1196
WINNER 4N15-13	4	3	1160	G2	97	-	-	97	544	1704	97	-	-	97	423	1583
WINNER 4N15-17	5,5	4	1480	G2	97	-	-	97	574	2054	97	-	-	97	583	2063
WINNER 4N15-24	7,5	5,5	2106	G2	97	-	-	97	644	2750	97	-	-	97	698	2804
WINNER 4N15-32	10	7,5	2746	G2	97	-	-	97	805	3551	97	-	-	97	774	3520

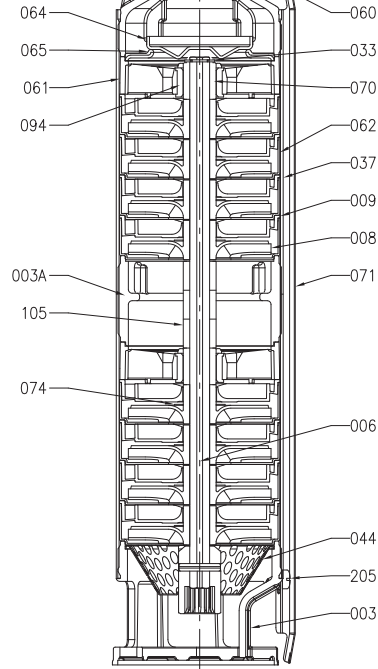
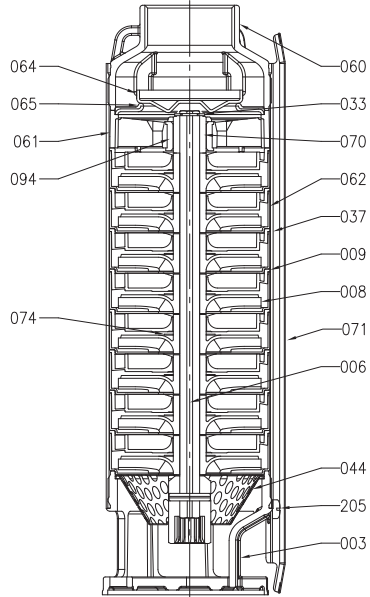
WINNER 4N

4" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS
in AISI 304

WINNER 4N1-4N2-4N4 SECTIONAL VIEW

Single pump body

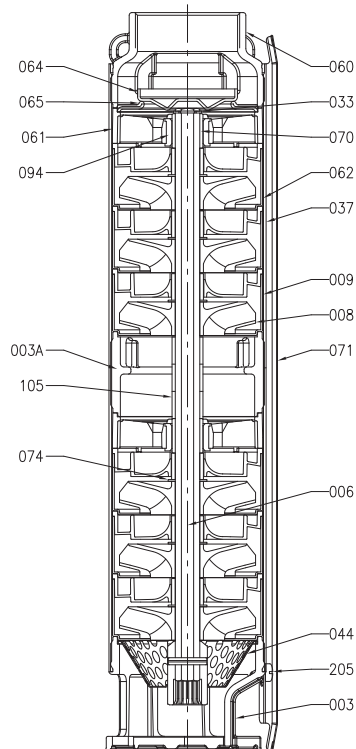
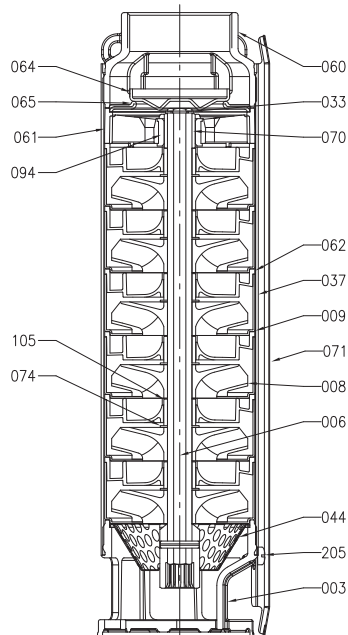
Twin pump body



WINNER 4N7-4N10-4N15 SECTIONAL VIEW

Single pump body

Twin pump body



4" SUBMERSED CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
003	Support	EN 1.4308 (ASTM CF8)	062	Stage box	EN 1.4301 (AISI 304)
003A	Connection ring	EN 1.4308 (ASTM CF8)	064	Valve	EN 1.4301 (AISI 304)
006	Rec. shaft c/joint	EN 1.4301 (AISI 304)	065	Valve seat	EN 1.4301 (AISI 304) + EPDM rubber
008	Impeller	Ixef®	070	Anti-friction bearing	Alumina (Ceramic)
009	Nozzle	PPO reinforced with fibreglass	071	Isolating cover	EN 1.4301 (AISI 304)
033	Seeger Ring	EN 1.4301 (AISI 304)	074	Anti-friction washer	EN 1.4301 (AISI 304)
037	External casing	EN 1.4301 (AISI 304)	094	Bearing	EPDM rubber
044	Filter	EN 1.4301 (AISI 304)	105	Spacer	PPO reinforced with fibreglass
060	Discharge inlet	EN 1.4308 (ASTM CF8)	205	Screw (M4x6 UNI 7687)	EN 1.4301 (AISI 304)
061	Support super-inter.	PPO reinforced with fibreglass			

ELECTRIC DATA TABLE WINNER 4N WITH MOTOR IN BATH OF LIQUID REFRIGERANT

P ₂		P ₁	Voltage	Single phase		Efficiency	Power factor	P ₁	Voltage	Three phase		Yield	Power factor
[HP]	[kW]	[kW]	[V]	IN	IA					[A]	[A]		
0,5	0,37	0,61	230V	4,5	13,6	61	0,94	0,6	400V	2	7	62	0,75
0,75	0,55	0,9	230V	4,5	13,6	61	0,94	0,89	400V	2	7	62	0,75
1	0,75	1,19	230V	6	18,5	63	0,96	1,12	400V	2,6	10	67	0,74
1,5	1,1	1,64	230V	8,2	26	67	0,97	1,64	400V	3,4	14	67	0,74
2	1,5	2,31	230V	11	34	65	0,98	2,21	400V	4,6	17	68	0,72
3	2,2	3,24	230V	14,8	48	68	0,96	2,97	400V	6,2	24	74	0,76
4	3	-	230V	-	-	-	-	4	400V	8	34	75	0,78
5,5	4	-	230V	-	-	-	-	5,33	400V	10,2	47	75	0,78
7,5	5,5	-	230V	-	-	-	-	7,24	400V	14,4	58	76	0,79
10	7,5	-	230V	-	-	-	-	10,42	400V	19,5	72	72	0,78

ELECTRIC DATA TABLE WINNER 4N WITH MOTOR IN WATER BATH

P ₂		P ₁	Voltage	Single phase		Efficiency	Power factor	P ₁	Voltage	Three phase		Yield	Power factor
[HP]	[kW]	[kW]	[V]	IN	IA					[A]	[A]		
0,5	0,37	0,7	230V	3,4	11,2	53	0,93	0,56	400V	1,1	4,7	66	0,70
0,75	0,55	1	230V	4,3	16,1	63	0,94	0,96	400V	1,6	6,4	67	0,75
1	0,75	1,25	230V	5,7	21,1	60	0,98	1,09	400V	2,1	9,3	69	0,75
1,5	1,1	1,77	230V	8,6	31,5	62	0,94	1,51	400V	3	14,5	73	0,76
2	1,5	2,27	230V	10,6	35,4	66	0,95	2,05	400V	4	19,2	73	0,76
3	2,2	3,33	230V	15,5	56,7	66	0,97	2,93	400V	5,9	28,9	75	0,75
4	3	-	230V	-	-	-	-	3,95	400V	7,8	41,6	76	0,75
5,5	4	-	230V	-	-	-	-	5,13	400V	10	58	78	0,78
7,5	5,5	-	230V	-	-	-	-	7,24	400V	13,7	76	76	0,79
10	7,5	-	230V	-	-	-	-	10,14	400V	18,4	102	74	0,79