2GP EVMG

INDUSTRIAL PRESSURE BOOSTING

Units with two vertical multistage pumps with stainless steel hydraulic parts and standardised motor.

PUMP FEATURES

FIELD OF USE
- Maximum working pressure:
  - 16 bar
  - 25 bar
  - 30 bar (for EVMG32 - EVMG45 only)
- Temperature of the liquid: -15°C ÷ +120°C

MATERIALS
- Lower pump body in cast iron
- External casing, seal housing disc, impellers, nozzles, shaft casing, joint cover and small elements in contact with the liquid in AISI 304
- Tie-rods and small elements not in contact with the liquid in galvanised steel
- Shaft in AISI 316
- Bearings in contact with the liquid in tungsten carbide
- Motor support and base in cast iron
- Mechanical sealing in SiC/Carbon/FPM (EVMG10-EVMG18)
- Mechanical sealing with cartridge as per standard (EVMG32-EVMG45-EVMG64)

(F= round flanges; N= oval flanges)

TECHNICAL DATA
- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- IP55 Protection rating
- Single phase voltage 230V ± 10% 50Hz (up to 2.2 kW), three phase voltage 230/400V ±10% 50Hz (up to 4 kW included), three phase voltage 400/690V ±10% (5.5 kW and above)

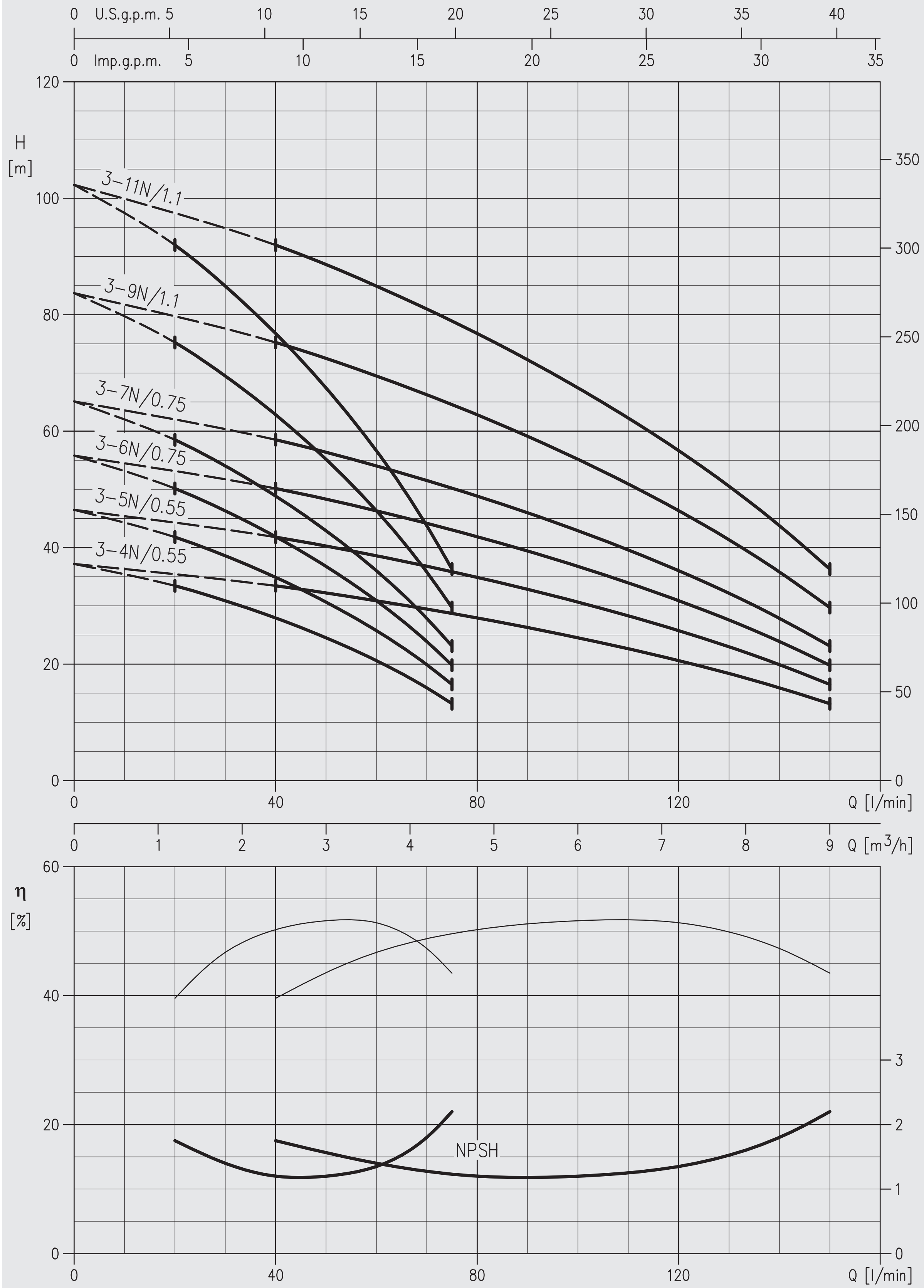
TYPICAL APPLICATIONS
The base of the group is in galvanised steel as are the manifolds. The discharge manifold is set-up to gather any two vertical type membrane reservoirs; two pressure switches, the electric control panel and a pressure gauge are mounted on it. On inlet, each electric pump has an isolating valve and a non-return valve, with the possibility of connection to an air supply unit and has another isolating valve in discharge mode. The electric control panel is sustained by a relative support fixed to the base.

Protection and control panel with CE mark
- IMQ and VDE marked components
- Very low voltage auxiliary circuit
- Motor switch-on and switch-off are controlled by two pressure switches
- The connection to a float of minimum pressure pressure switch is possible in order to prevent functioning in conditions when there is no suction water
- A device is present that inverts the insertion order of the pumps at every start-up
- 230V, 50Hz single phase power supply
  400V, 50Hz three phase
- Start-up:
  - direct for powers up to 7.5 kW
  - delta/triangle for powers exceeding 7.5 kW
- Power circuit protection fuses
- Auxiliary circuit protection fuses
- Protection rating IP 55
- Line main isolating device with door lock
- Aut - 0 - man. switches for each pump
- Reset circuit breaker protection
- Indicator LED:
  - network presence
  - motor running
  - level alarm
  - motor in protection mode (for three phase version only)
- Alarm output set-up
- On request, special version control panels can be used

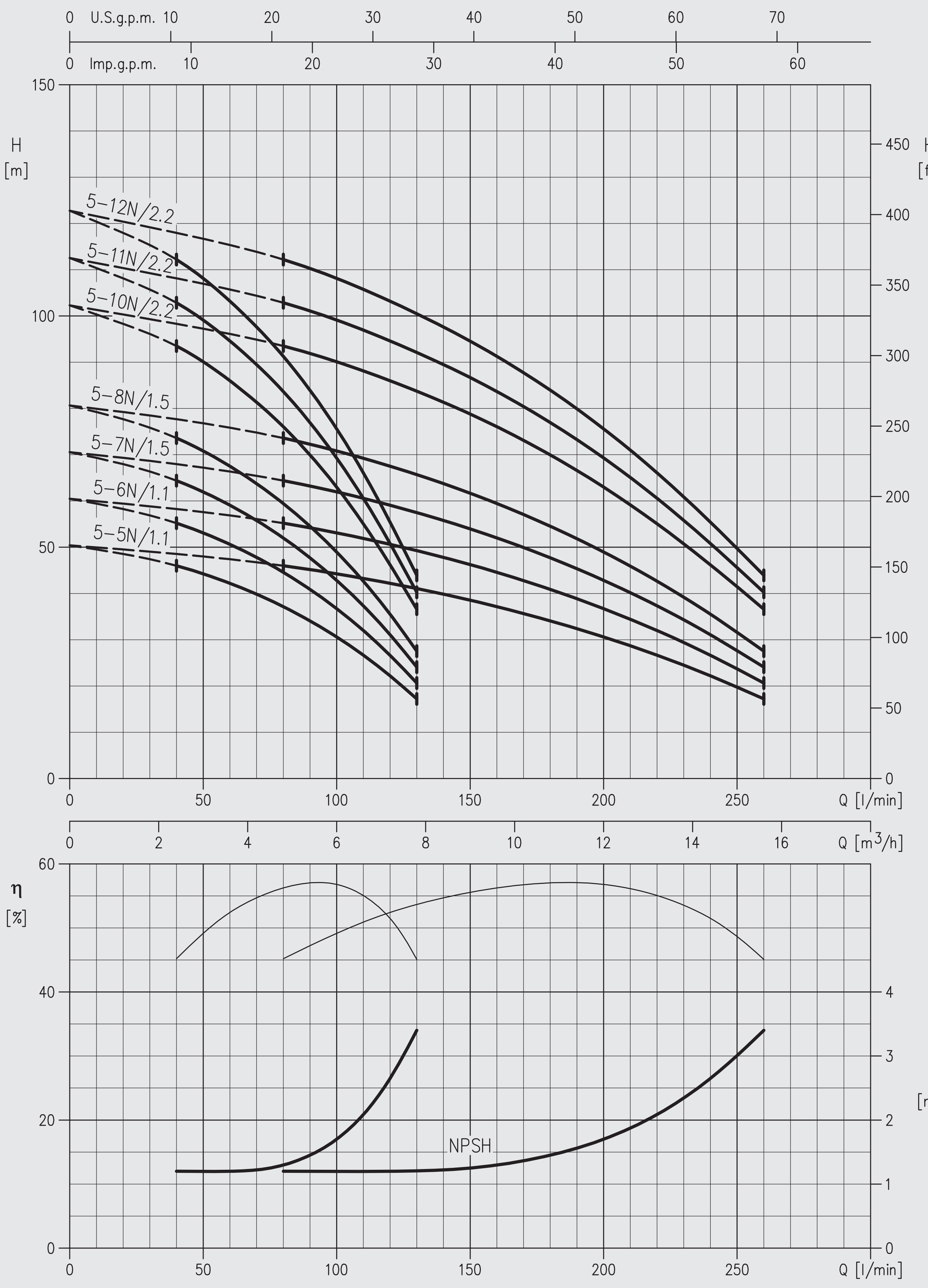
FUNCTIONING PRINCIPLES
The withdrawal or however the escape of water from the system with the pumps at a standstill, causes the pressure to drop and the consequent closure of the pressure switch contact with highest calibration, which determines start-up of the first electric pump. If the outlet discharge exceeds the flow rate of a pump, the pressure continues to drop until it causes the closure of the contact of the second pressure switch and the start-up of the second pump. The end of the distribution of the reduction of the outlet discharge leads to the pressure in the system rising, with opening of the pressure switch contacts and staggered pumps stops. The inversion of the ignition order of the two motors reduces the number of hourly start-ups of the individual pumps and consequently allows use of the same. By connecting a float or minimum pressure pressure switch to the control panel (whether for withdrawal from the primary collection reservoir or from the hydraulic circuit), the most frequent cause of electric pump breakdown is prevented: the lack of water at suction.

2GP HIDRO - STANICE

2GP EVM(G) 3

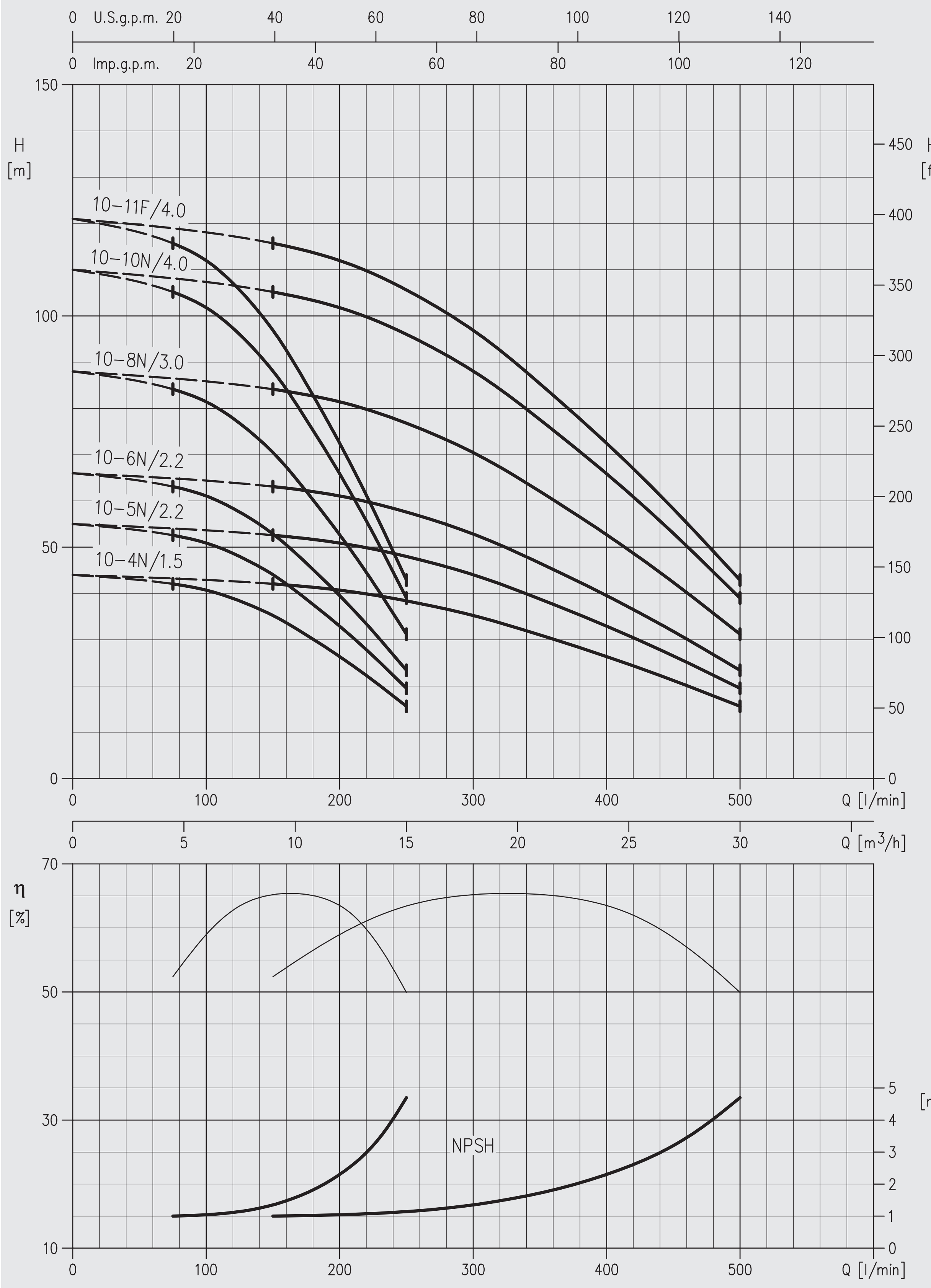


2GP EVM(G) 5



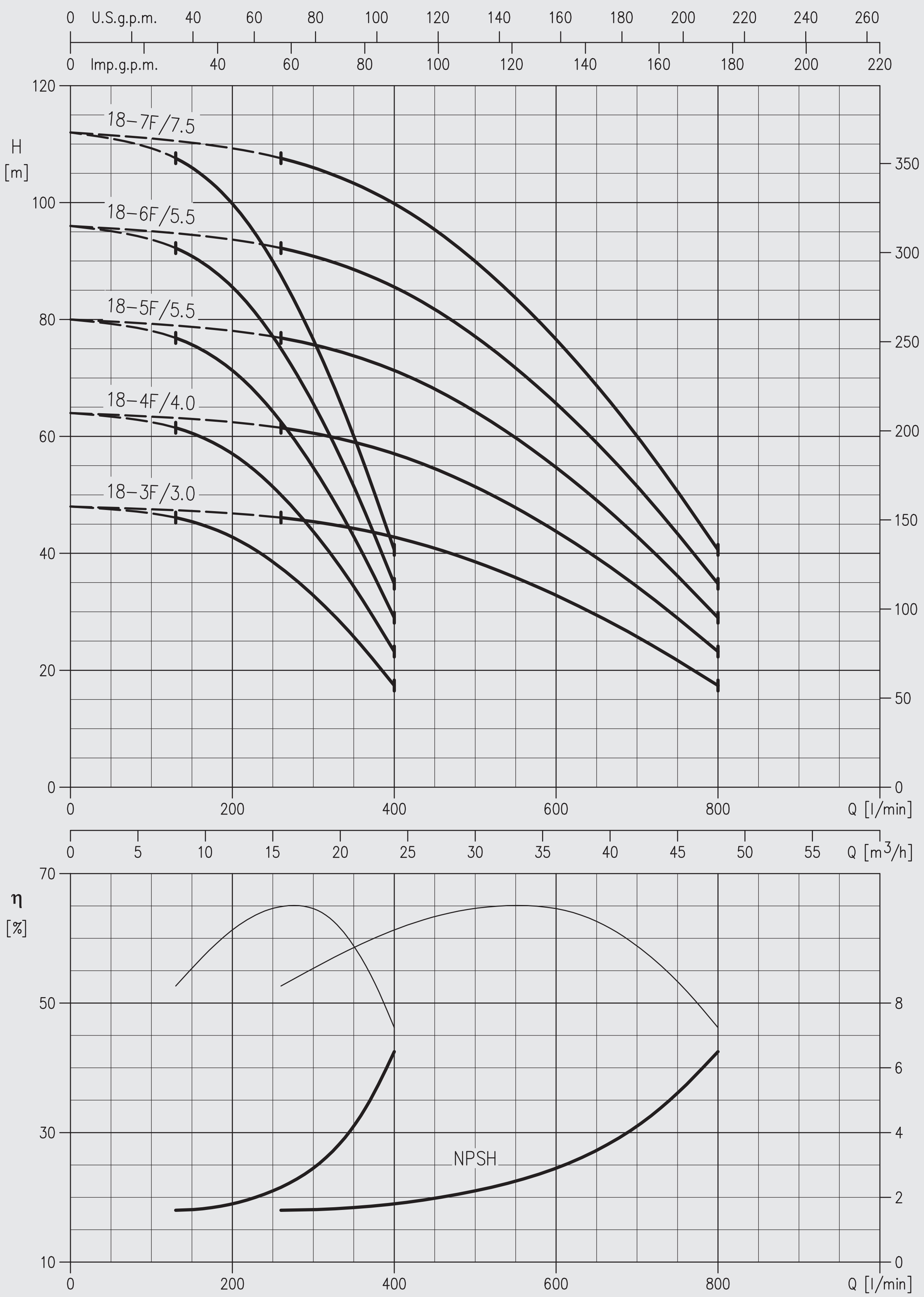
2GP HIDRO - STANICE

2GP EVM(G) 10



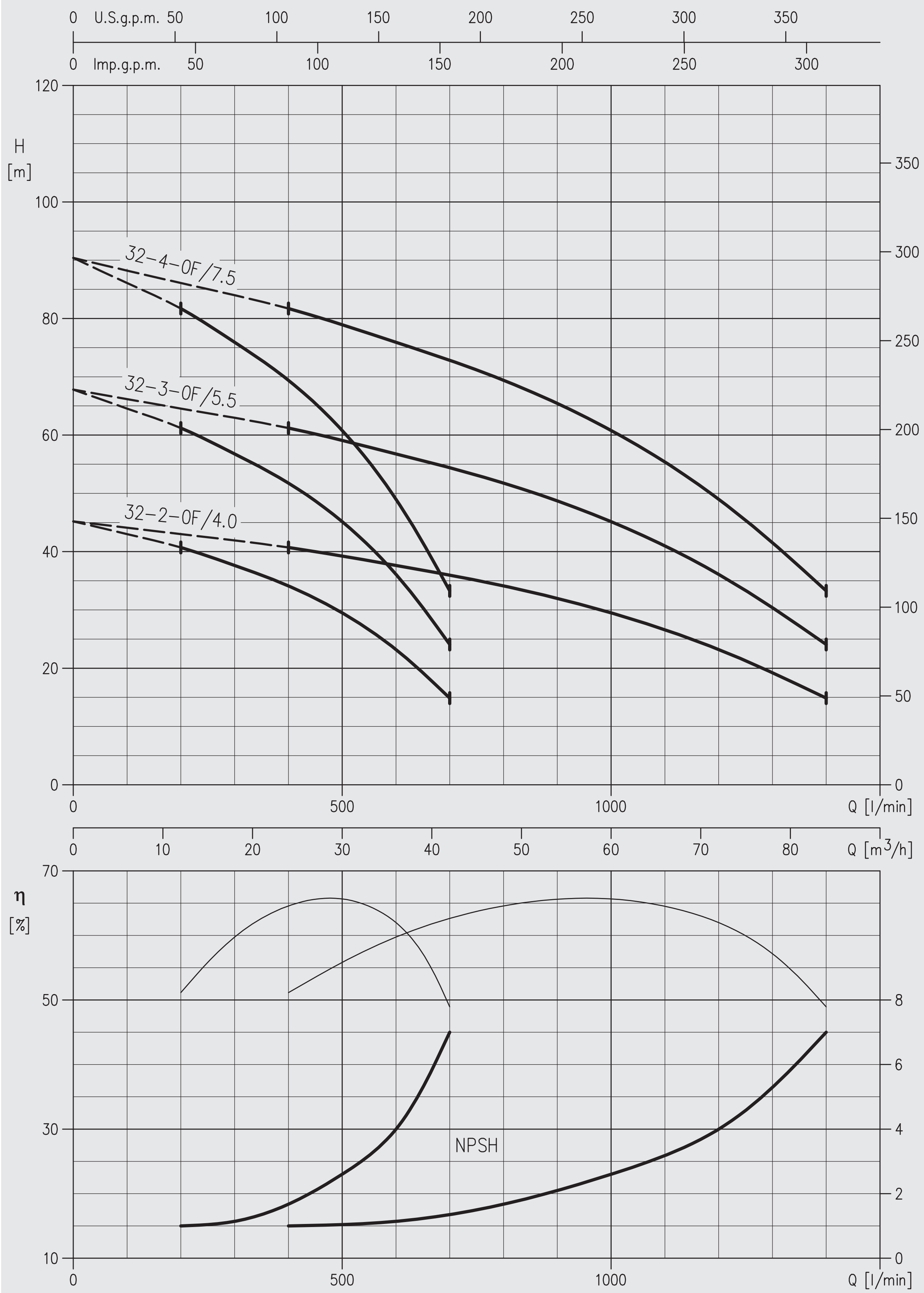
EBARA

2GP EVM(G) 18

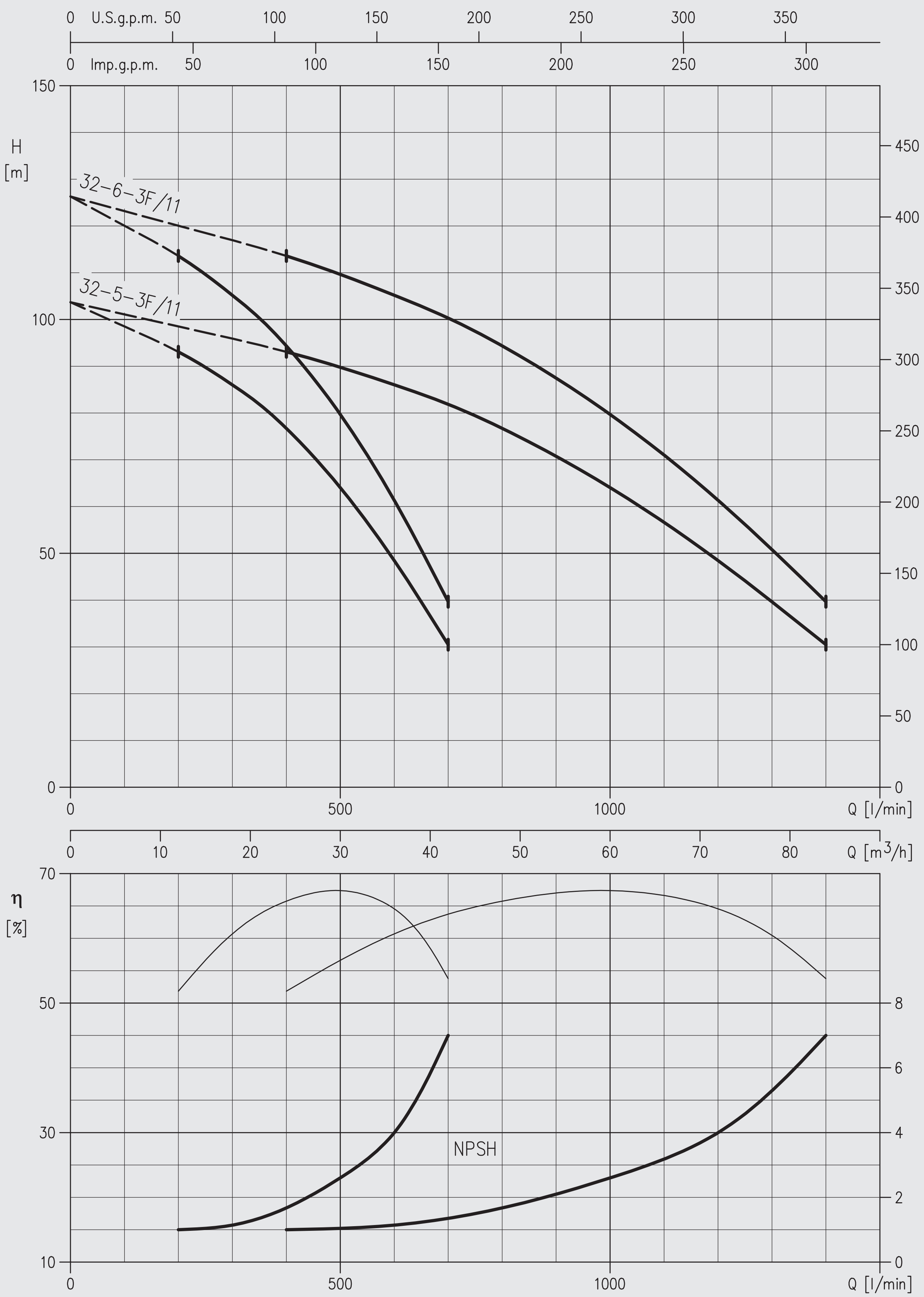


2GP HIDRO - STANICE

2GP EVM(G) 32

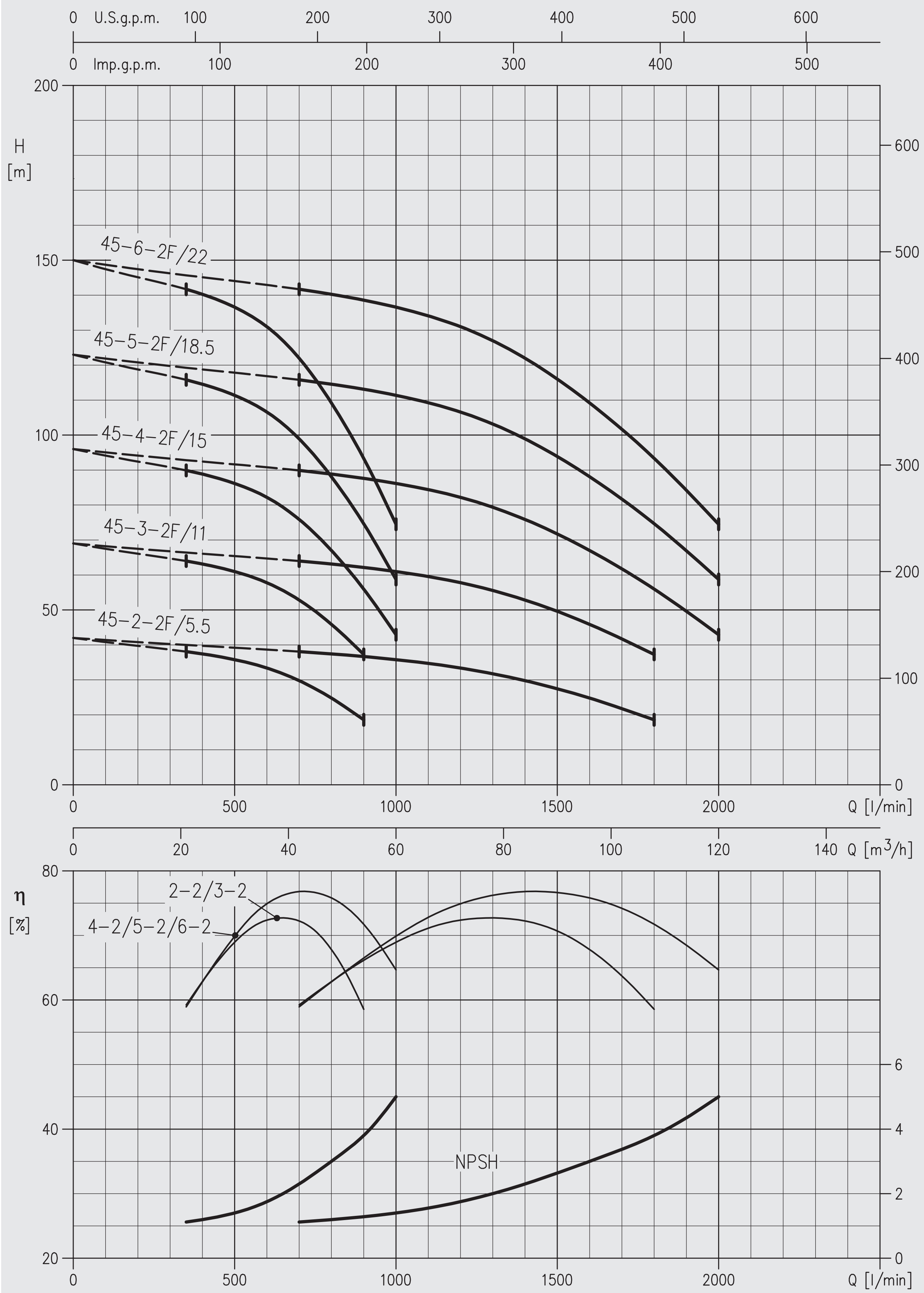


2GP EVM(G) 32



2GP HIDRO - STANICE

2GP EVM(G) 45



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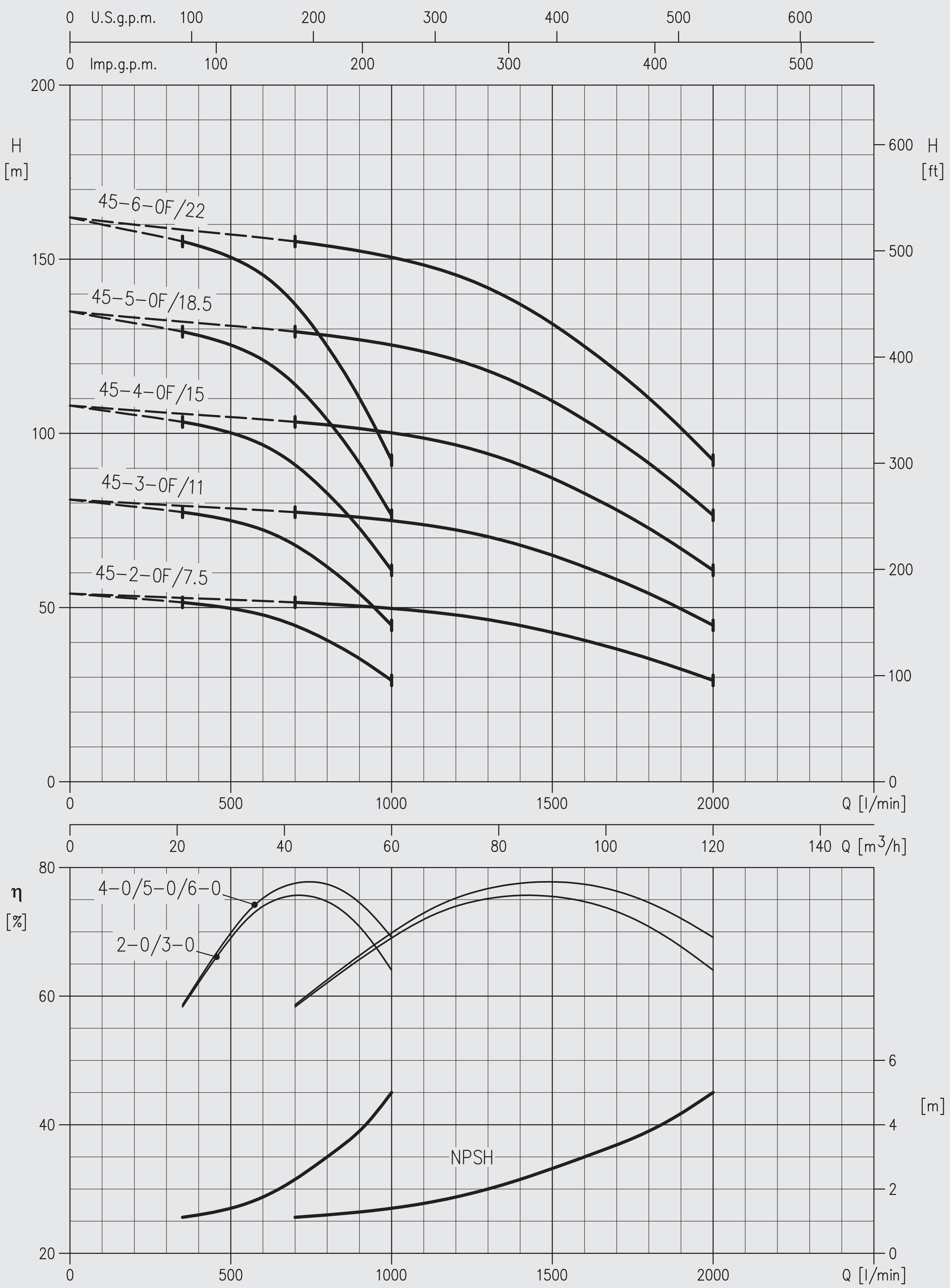

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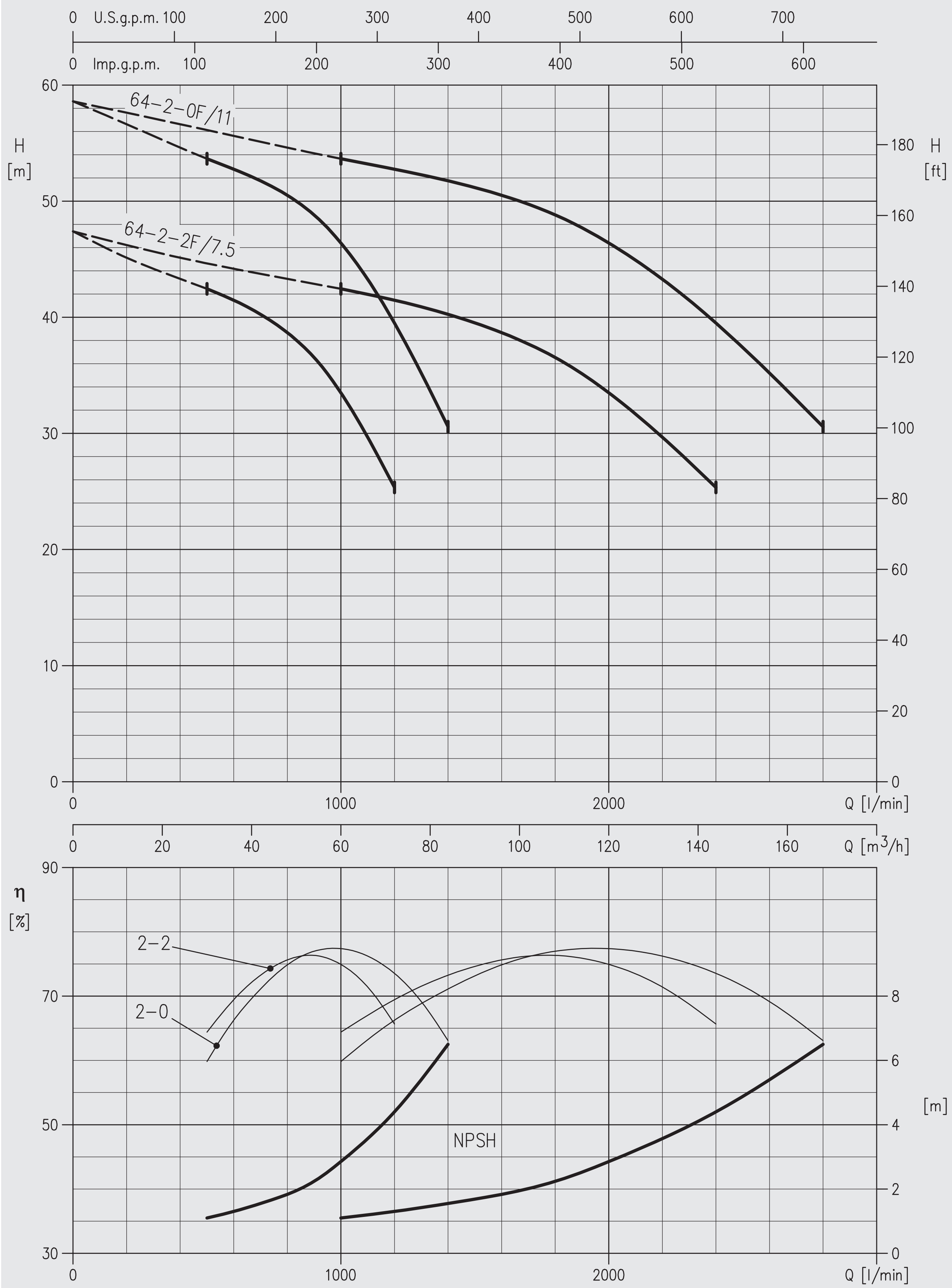

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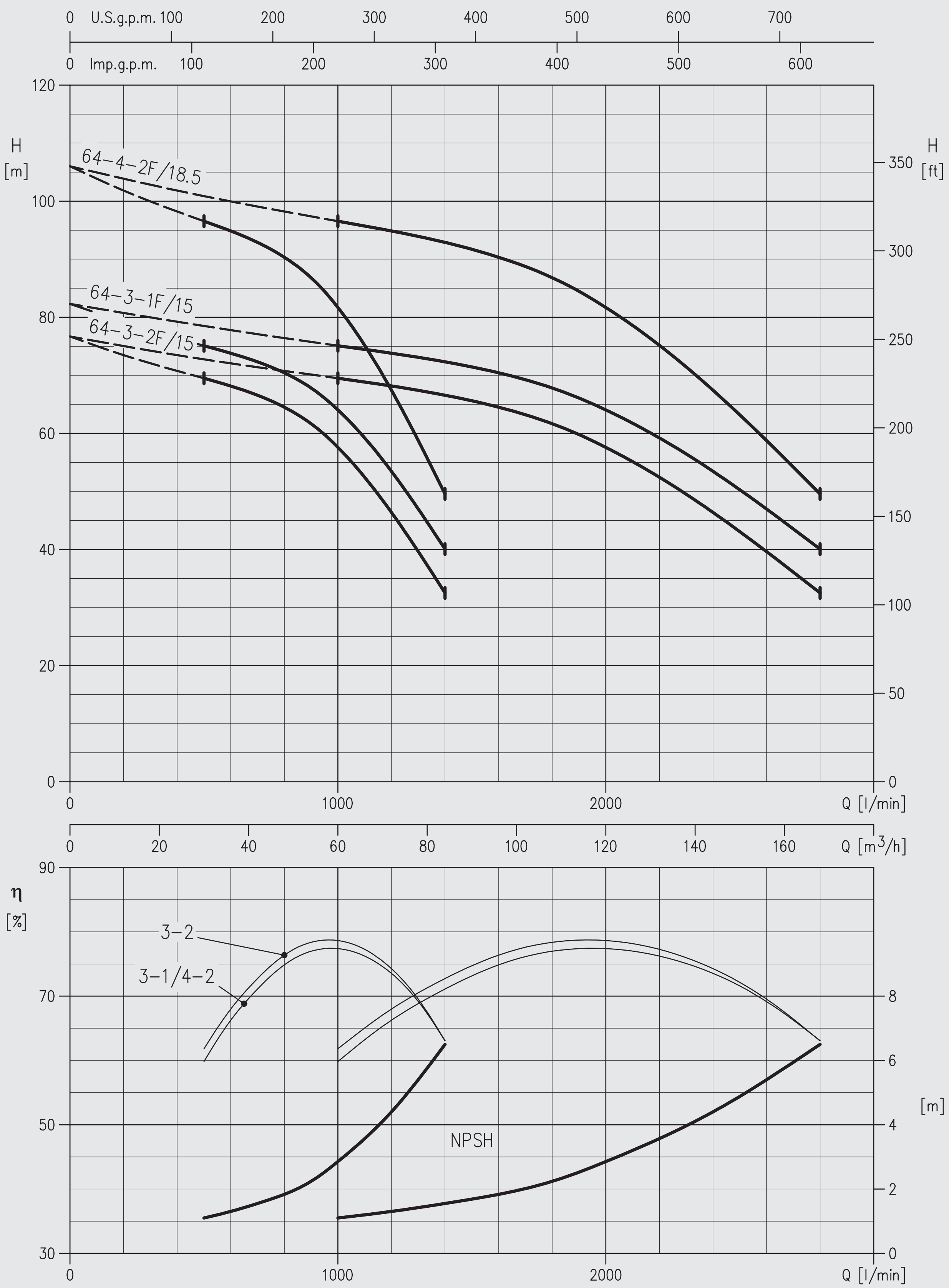


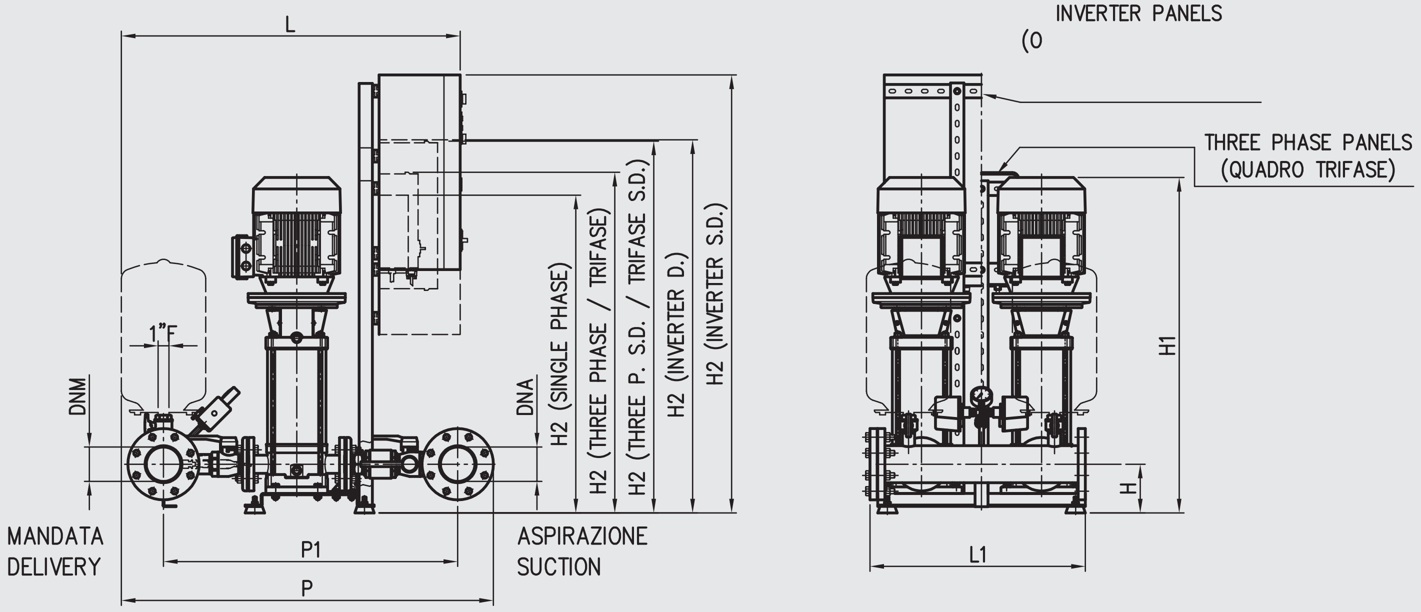
KARAKTERISTIKE HIDRO - STANICA SA DVIJE PARALELNO SPOJENE PUMPE

Tipo pompa		kW	Assorbimento max (A)		Q=Portata												
Monofase 230 V	Trifase 400 V		Monofase 230 V	Trifase 400 V	l/min 0	40	80	120	150	200	260	300	400	500	600	700	800
					m³/h 0	2,4	4,8	7,2	9,0	12	15,6	18	24	30	36	42	48
					H = Prevalenza manometrica in m.c.a.												
3 4N/0.55 M	3 4N/0.55	0.55+0.55	7.6	3.2	37,2	33,4	27,9	20,6	13,2	-	-	-	-	-	-	-	-
3 5N/0.55 M	3 5N/0.55	0.55+0.55	7.6	3.2	46,5	42,0	34,9	25,8	16,5	-	-	-	-	-	-	-	-
3 6N/0.75 M	3 6N/0.75	0.75+0.75	10.6	3.8	56,0	50,0	42,0	30,9	19,8	-	-	-	-	-	-	-	-
3 7N/0.75 M	3 7N/0.75	0.75+0.75	10.6	3.8	65,0	58,5	49,0	36,1	23,1	-	-	-	-	-	-	-	-
3 9N/1.1 M	3 9N/1.1	1.1+1.1	13.4	5	84,0	75,0	63,0	46,5	29,7	-	-	-	-	-	-	-	-
3 11N/1.1 M	3 11N/1.1	1.1+1.1	13.4	5	102,0	92,0	77,0	56,5	36,3	-	-	-	-	-	-	-	-
5 5N/1.1 M	5 5N/1.1	1.1+1.1	13.4	5	50,5	-	46,0	42,0	38,6	30,6	17,2	-	-	-	-	-	-
5 6N/1.1 M	5 6N/1.1	1.1+1.1	13.4	5	60,5	-	55,0	50,5	46,5	36,7	20,6	-	-	-	-	-	-
5 7N/1.5 M	5 7N/1.5	1.5+1.5	17.6	6.8	70,5	-	64,5	59,0	54,0	43,0	24,1	-	-	-	-	-	-
5 8N/1.5 M	5 8N/1.5	1.5+1.5	17.6	6.8	80,5	-	73,5	67,5	61,5	49,0	27,5	-	-	-	-	-	-
5 10N/2.2		2.2+2.2		9.8	102,0	-	93,5	86,0	79,0	63,0	36,6	-	-	-	-	-	-
5 11N/2.2		2.2+2.2		9.8	113,0	-	103,0	94,5	86,5	69,5	40,5	-	-	-	-	-	-
5 12N/2.2		2.2+2.2		9.8	123,0	-	112,0	103,0	94,5	75,5	44,0	-	-	-	-	-	-
10 4N/1.5 M	10 4N/1.5	1.5+1.5	17,6	6.8	44,0	-	-	-	42,0	40,5	37,8	35,2	26,4	15,6	-	-	-
10 5N/2.2		2.2+2.2		9.8	55,0	-	-	-	52,5	51,0	47,5	44,0	33,0	19,5	-	-	-
10 6N/2.2		2.2+2.2		9.8	66,0	-	-	-	63,0	61,0	57,0	53,0	39,5	23,4	-	-	-
10 8N/3.0		3+3		13	88,0	-	-	-	84,0	81,5	75,5	70,5	52,5	31,2	-	-	-
10 10N/4.0		4+4		17	110,0	-	-	-	105,0	102,0	94,5	88,0	66,0	39,0	-	-	-
10 11N/4.0		4+4		17	121,0	-	-	-	116,0	112,0	104,0	97,0	72,5	43,0	-	-	-
18 3F/3.0		3+3		13	48,0	-	-	-	-	-	46,0	45,5	43,0	38,6	32,8	25,7	17,4
18 4F/4.0		4+4		17	64,0	-	-	-	-	-	61,5	60,5	57,0	51,5	44,0	34,3	23,2
18 5F/5.5		5.5+5.5		21.6	80,0	-	-	-	-	-	77,0	75,5	71,5	64,5	54,5	43,0	29,0
18 6F/5.5		5.5+5.5		21.6	96,0	-	-	-	-	-	92,0	91,0	85,5	77,0	65,5	51,5	34,8
18 7F/7.5		7.5+7.5		28.2	112,0	-	-	-	-	-	108,0	106,0	100,0	90,0	76,5	60,0	40,5

KARAKTERISTIKE HIDRO - STANICA SA DVIJE PARALELNO SPOJENE PUMPE

Tipo pompa	kW	Assorbimento max (A)	Q=Portata									
Trifase 400 V		Trifase 400 V	l/min 0	400	700	1000	1200	1400	1800	2000	2400	2800
			m³/h 0	24	42	60	72	84	108	120	144	168
			H = Prevalenza manometrica in m.c.a.									
32 2-0F/4.0	4+4	17	45,0	40,5	36,0	29,5	23,2	14,9	-	-	-	-
32 3-0F/5.5	5.5+5.5	21,6	68,0	61,0	54,5	45,0	36,1	24,1	-	-	-	-
32 4-0F/7.5	7.5+7.5	28,2	90,5	81,5	73,0	61,0	49,0	33,3	-	-	-	-
32 5-3F/11	11+11	43	104,0	93,0	82,0	64,0	48,5	30,5	-	-	-	-
32 6-3F/11	11+11	43	126,0	114,0	100,0	79,5	61,5	39,7	-	-	-	-
45 2-2F/5.5	5.5+5.5	21,6	42,0	-	38,1	35,8	33,4	29,8	18,6	-	-	-
45 2-0F/7.5	7.5+7.5	28,2	54,0	-	51,5	50,0	48,0	45,0	35,4	29,1	-	-
45 3-2F/11	11+11	43	69,0	-	64,0	61,0	58,0	53,0	37,3	-	-	-
45 3-0F/11	11+11	43	81,0	-	77,5	75,0	72,5	68,0	54,0	45,0	-	-
45 4-2F/15	15+15	57	96,0	-	90,0	86,0	82,0	76,0	56,0	43,0	-	-
45 4-0F/15	15+15	57	108,0	-	103,0	100,0	96,5	91,0	73,0	60,5	-	-
45 5-2F/18.5	18.5+18.5	69	123,0	-	116,0	111,0	107,0	99,0	74,5	58,5	-	-
45 5-0F/18.5	18.5+18.5	69	135,0	-	129,0	125,0	121,0	114,0	91,5	76,5	-	-
45 6-2F/22	22+22	82	150,0	-	142,0	137,0	131,0	122,0	93,5	74,5	-	-
45 6-0F/22	22+22	82	162,0	-	155,0	151,0	146,0	137,0	110,0	92,5	-	-
64 2-2F/7.5	7.5+7.5	28,2	47,5	-	-	42,5	41,5	40,5	36,5	33,5	25,3	-
64 2-0F/11	11+11	43	58,5	-	-	53,5	53,0	52,0	49,0	46,5	39,5	30,6
64 3-2F/15	15+15	57	76,5	-	-	69,5	68,0	66,5	61,5	57,5	46,5	32,5
64 3-1F/15	15+15	57	82,5	-	-	75,0	74,0	72,5	68,0	64,0	53,5	40,0
64 4-2F/18.5	18.5+18.5	69	106,0	-	-	96,5	95,0	93,0	87,0	81,5	67,5	49,5

MIJERNA SKICA - DIMENZIJE

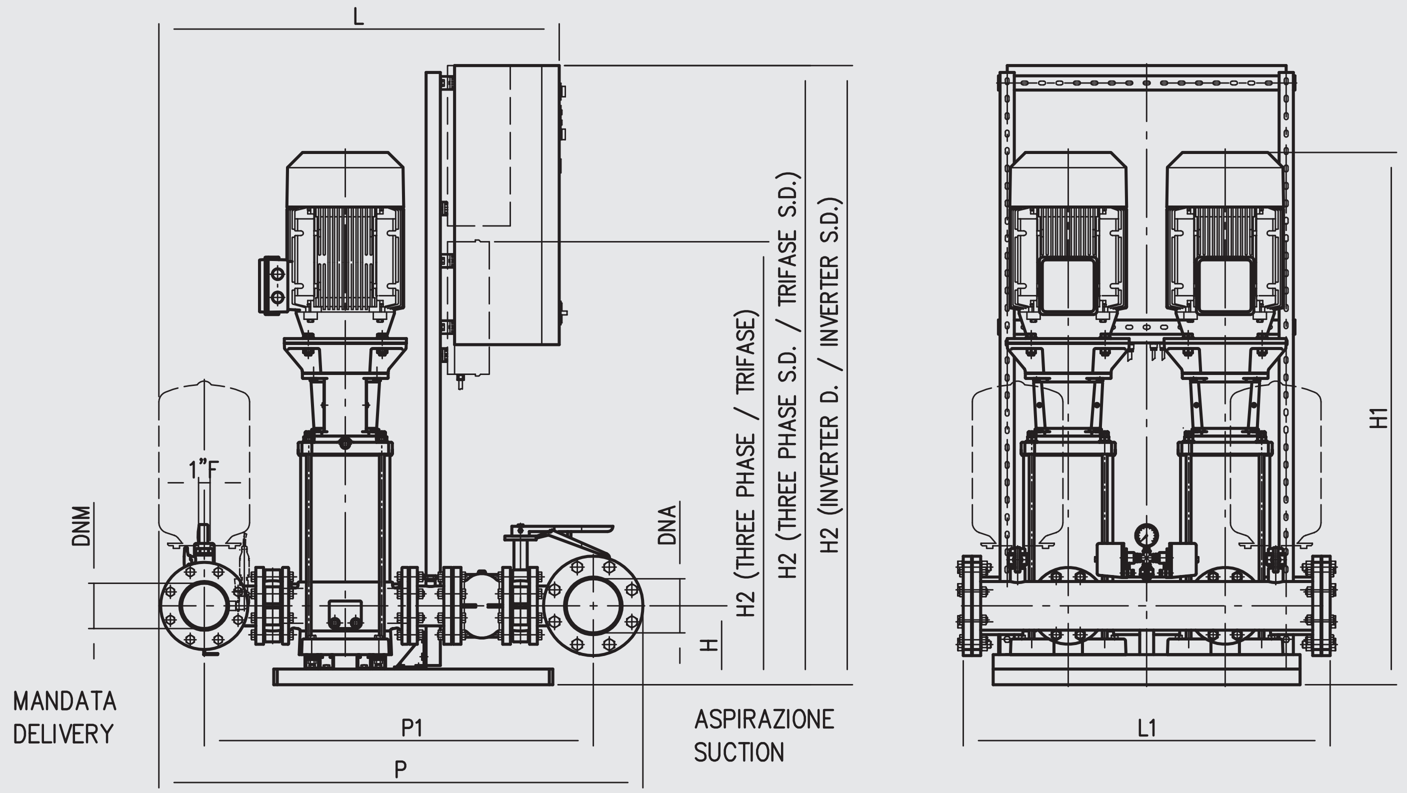


MODELLO	L – VERSIONE STANDARD SIN. PH.	L – VERSIONE STANDARD D.O.L.	L – VERSIONE STANDARD T.S.D.	L – VERSIONE STANDARD I.D.O.L.	L – VERSIONE STANDARD I.S.D.	L – VERSIONE AISI 304 SIN. PH.	L – VERSIONE AISI 304 D.O.L.	L – VERSIONE AISI 304 T.S.D.	L – VERSIONE AISI 304 I.D.O.L.	L – VERSIONE AISI 304 I.S.D.	H	H 1 SIN. PH.	H 1 D.O.L. - T.S.D. / I.D.O.L. - I.S.D.	H2 – VERSIONE STANDARD SIN. PH.	H2 – VERSIONE STANDARD D.O.L.	H2 – VERSIONE STANDARD T.S.D.	H2 – VERSIONE STANDARD I.D.O.L.	H2 – VERSIONE STANDARD I.S.D.	H2 – VERSIONE AISI 304 SIN. PH.	H2 – VERSIONE AISI 304 D.O.L.	H2 – VERSIONE AISI 304 T.S.D.	H2 – VERSIONE AISI 304 I.D.O.L.	H2 – VERSIONE AISI 304 I.S.D.	P VERSIONE STANDARD	P VERSIONE AISI 304	P 1 VERSIONE STANDARD	P 1 VERSIONE AISI 304	L1	DNA / DNM	kg SIN. PH.	kg D.O.L.	kg T.S.D.	kg I.D.O.L.	kg I.S.D.
2GP(E) EVM3 4N/0,55	790	820	–	–	–	880	910	–	–	–	110	560	560	895	900	–	–	–	895	900	–	–	–	780	1005	690	925	660	G 2	88	91	–	–	–
2GP(E) EVM3 5N/0,55	790	820	–	–	–	880	910	–	–	–	110	580	580	895	900	–	–	–	895	900	–	–	–	780	1005	690	925	660	G 2	96	98	–	–	–
2GP(E) EVM3 6N/0,75	790	820	–	950	–	880	910	–	1040	–	110	625	625	895	900	–	1050	–	895	900	–	1100	–	780	1005	690	925	660	G 2	106	104	–	124	–
2GP(E) EVM3 7N/0,75	790	820	–	950	–	880	910	–	1040	–	110	650	650	895	900	–	1050	–	895	900	–	1100	–	780	1005	690	925	660	G 2	104	102	–	127	–
2GP(E) EVM3 9N/1,1	790	820	–	950	–	880	910	–	1040	–	110	690	690	895	900	–	1050	–	895	900	–	1100	–	780	1005	690	925	660	G 2	112	110	–	130	–
2GP(E) EVM3 11N/1,1	790	820	–	950	–	880	910	–	1040	–	110	730	730	895	900	–	1050	–	895	900	–	1100	–	780	1005	690	925	660	G 2	121	116	–	141	–
2GP(E) EVM5 5N/1,1	755	785	–	915	–	815	845	–	975	–	110	640	640	895	900	–	1050	–	895	900	–	1100	–	720	885	630	805	660	G 2	113	110	–	135	–
2GP(E) EVM5 6N/1,1	755	785	–	915	–	815	845	–	975	–	110	670	670	895	900	–	1050	–	895	900	–	1100	–	720	885	630	805	660	G 2	114	110	–	130	–
2GP(E) EVM5 7N/1,5	755	785	–	915	–	815	845	–	975	–	110	755	740	895	900	–	1050	–	895	900	–	1100	–	720	885	630	805	660	G 2	131	124	–	144	–
2GP(E) EVM5 8N/1,5	755	785	–	915	–	815	845	–	975	–	110	780	770	895	900	–	1050	–	895	900	–	1100	–	720	885	630	805	660	G 2	134	127	–	147	–
2GP(E) EVM5 10N/2,2	–	785	–	915	–	–	845	–	975	–	110	–	835	–	900	–	1050	–	–	900	–	1100	–	720	885	630	805	660	G 2	–	143	–	168	–
2GP(E) EVM5 11N/2,2	–	785	–	915	–	–	845	–	975	–	110	–	865	–	900	–	1050	–	–	900	–	1100	–	720	885	630	805	660	G 2	–	153	–	173	–
2GP(E) EVM5 12N/2,2	–	785	–	915	–	–	845	–	975	–	110	–	890	–	900	–	1050	–	–	900	–	1100	–	720	885	630	805	660	G 2	–	157	–	177	–
2GP(E) EVM10 4N/1,5	815	845	–	975	–	885	915	–	1045	–	140	740	730	995	1000	–	1100	–	995	1000	–	1050	–	850	1050	735	935	670	G 3	172	155	–	175	_
2GP(E) EVM10 5N/2,2	–	845	–	975	–	–	915	–	1045	–	140	–	770	–	1000	–	1100	–	–	1000	–	1050	–	850	1050	735	935	670	G 3	–	168	–	193	–
2GP(E) EVM10 6N/2,2	–	845	–	975	–	–	915	–	1045	–	140	–	800	–	1000	–	1100	–	–	1000	–	1050	–	850	1050	735	935	670	G 3	–	178	–	198	–
2GP(E) EVM10 8N/3	–	845	–	975	–	–	915	–	1045	–	140	–	910	–	1000	–	1100	–	–	1000	–	1050	–	850	1050	735	935	670	G 3	–	192	–	212	–
2GP(E) EVM10 10N/4	–	845	–	975	–	–	915	–	1045	–	140	–	970	–	1000	–	1100	–	–	1000	–	1050	–	850	1050	735	935	670	G 3	–	212	–	237	–
2GP(E) EVM10 11N/4	–	845	–	975	–	–	915	–	1045	–	140	–	1000	–	1000	–	1100	–	–	1000	–	1050	–	850	1050	735	935	670	G 3	–	219	–	239	–
2GP(E) EVM18 3F/3	–	915	–	1045	–	–	1045	–	1175	–	150	–	790	–	1050	–	1150	–	–	1050	–	1150	–	1125	1370	905	1150	690	DN 100	–	263	–	283	–
2GP(E) EVM18 4F/4	–	915	–	1045	–	–	1045	–	1175	–	150	–	840	–	1050	–	1150	–	–	1050	–	1150	–	1125	1370	905	1150	390	DN 100	–	289	–	314	–
2GP(E) EVM18 5F/5,5	–	915	–	1045	–	–	1045	–	1175	–	150	–	955	–	1050	–	1150	–	–	1050	–	1150	–	1125	1370	905	1150	390	DN 100	–	348	–	383	–
2GP(E) EVM18 6F/5,5	–	915	–	1045	–	–	1045	–	1175	–	150	–	995	–	1050	–	1150	–	–	1050	–	1150	–	1125	1370	905	1150	390	DN 100	–	357	–	392	–
2GP(E) EVM18 7F/7,5	–	915	975	1045	1045	–	1045	1105	1175	1175	150	–	1035	–	1050	1145	1150	1350	–	1050	1195	1150	1350	1125	1370	905	1150	690	DN 100	–	378	388	413	413

SIN. PH. = Monofase
D.O.L. = Trifase Avviamento diretto
T.S.D. = Trifase Avviamento stella - triangolo
I = Comando ad inverter

2GP HIDRO - STANICE

MIJERNA SKICA - DIMENZIJE



MODELLO	L D.O.L.	L T.S.D.	L I.D.O.L.	L I.S.D.	H	H1 D.O.L./T.S.D. I.D.O.L./I.S.D.	H2 D.O.L.	H2 T.S.D.	H2 I.D.O.L.	H2 I.S.D.	P	P 1	L 1	DNA	DNM	PESO kg D.O.L.	PESO kg T.S.D.	PESO kg I.D.O.L.	PESO kg I.S.D.
2GP(E) EVM32 2-0F/4	1015	-	1165	-	190	895	1025	-	1275	-	1340	1105	1050	DN 125	DN 100	403	-	433	-
2GP(E) EVM32 3-0F/5,5	1015	-	1165	-	190	1030	1025	-	1275	-	1340	1105	1050	DN 125	DN 100	462	-	502	-
2GP(E) EVM32 4-0F/7,5	1015	1095	1165	1165	190	1075	1025	1325	1275	1475	1340	1105	1050	DN 125	DN 100	482	492	522	522
2GP(E) EVM32 5-3F/11	1015	1095	1215	1215	190	1390	1275	1325	1475	1475	1340	1105	1050	DN 125	DN 100	602	612	662	662
2GP(E) EVM32 6-3F/11	1015	1095	1215	1215	190	1435	1275	1325	1475	1475	1340	1105	1050	DN 125	DN 100	602	612	662	672
2GP(E) EVM45 2-2F/5,5	1085	-	1215	-	225	1075	1175	-	1375	-	1470	1195	1050	DN 150	DN 125	494	-	526	-
2GP(E) EVM45 2-0F/7,5	1085	1145	1215	1215	225	1075	1175	1375	1375	1575	1470	1195	1050	DN 150	DN 125	504	513	536	536
2GP(E) EVM45 3-2F/11	1085	1145	1215	1265	225	1410	1225	1375	1575	1575	1470	1195	1050	DN 150	DN 125	524	621	669	672
2GP(E) EVM45 3-0F/11	1085	1145	1265	1265	225	1410	1225	1375	1575	1575	1470	1195	1050	DN 150	DN 125	524	621	669	672
2GP(E) EVM45 4-2F/15	-	1145	-	1265	225	1480	-	1475	-	1575	1470	1195	1050	DN 150	DN 125	-	639	-	690
2GP(E) EVM45 4-0F/15	-	1145	-	1265	225	1480	-	1475	-	1575	1470	1195	1050	DN 150	DN 125	-	639	-	690
2GP(E) EVM45 5-2F/18,5	-	1145	-	1265	225	1600	-	1625	-	1775	1470	1195	1050	DN 150	DN 125	-	719	-	777
2GP(E) EVM45 5-0F/18,5	-	1145	-	1265	225	1600	-	1625	-	1775	1470	1195	1050	DN 150	DN 125	-	719	-	777
2GP(E) EVM45 6-2F/22	-	1165	-	1365	225	1725	-	1625	-	1975	1470	1195	1050	DN 150	DN 125	-	799	-	1022
2GP(E) EVM45 6-0F/22	-	1165	-	1365	225	1725	-	1625	-	1975	1470	1195	1050	DN 150	DN 125	-	799	-	1022
2GP(E) EVM64 2-2F/7,5	-	1005	1100	1100	225	1075	1175	1375	1375	1575	1385	1115	1050	DN 150	DN 125	510	520	550	550
2GP(E) EVM64 2-0F/11	-	1005	1130	1150	225	1340	1225	1375	1575	1575	1385	1115	1050	DN 150	DN 125	616	626	676	676
2GP(E) EVM64 3-2F/15	-	1005	-	1150	225	1410	-	1475	-	1575	1385	1115	1050	DN 150	DN 125	-	680	-	710
2GP(E) EVM64 3-1F/15	-	1005	-	1150	225	1410	-	1475	-	1575	1385	1115	1050	DN 150	DN 125	-	652	-	712
2GP(E) EVM64 4-2F/18,5	-	1005	-	1150	225	1525	-	1625	-	1775	1385	1115	1050	DN 150	DN 125	-	728	-	758

SIN. PH. = Monofase
D.O.L. = Trifase Avviamento diretto
T.S.D. = Trifase Avviamento stella - triangolo
I = Comando ad inverter