

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: $-15^{\circ}\text{C} \div +120^{\circ}\text{C}$

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 $230\text{V} \pm 10\%$ 50Hz (up to 2.2 kW),
three phase voltage $230/400\text{V} \pm 10\%$ 50Hz (up to 4 kW included),
three phase voltage $400/690\text{V} \pm 10\%$ (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 relevant support fixed to the base.

TECHNICAL FEATURES

The control panels control pump number one at variable speeds and automatically start any other pumps, allowing to adjust system pressure on constant values. These particulars allow to increase the level of comfort, minimise management costs and reduce all air pre-load accumulation reservoirs to a minimum.

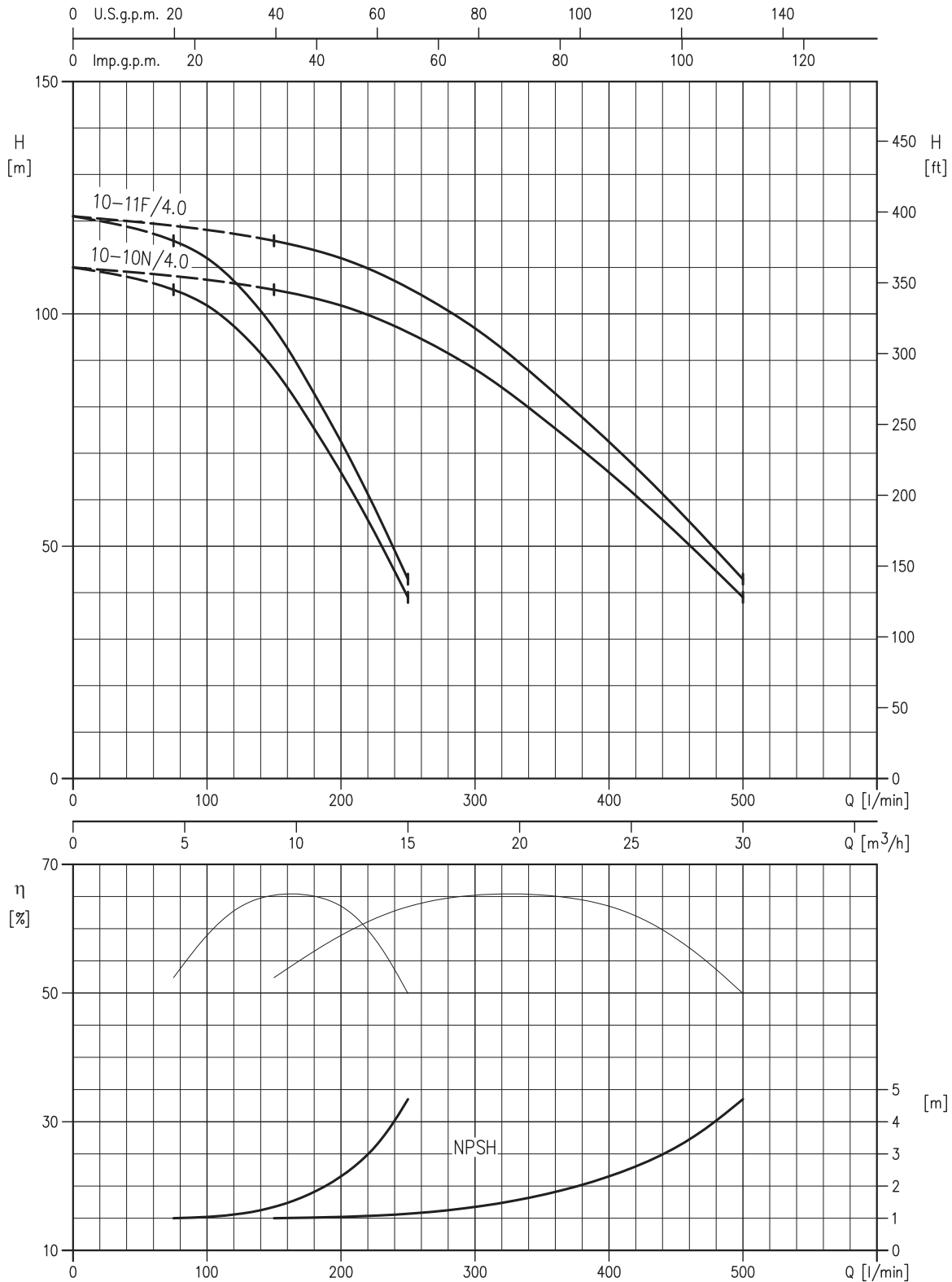
The typical applications of the GPE range pressure boosters with control panels are:

- Water provisioning for condominium, school, hotel hospital distribution networks etc.
- Water provisioning for industry in general
- Irrigation of gardens, parks and sports fields

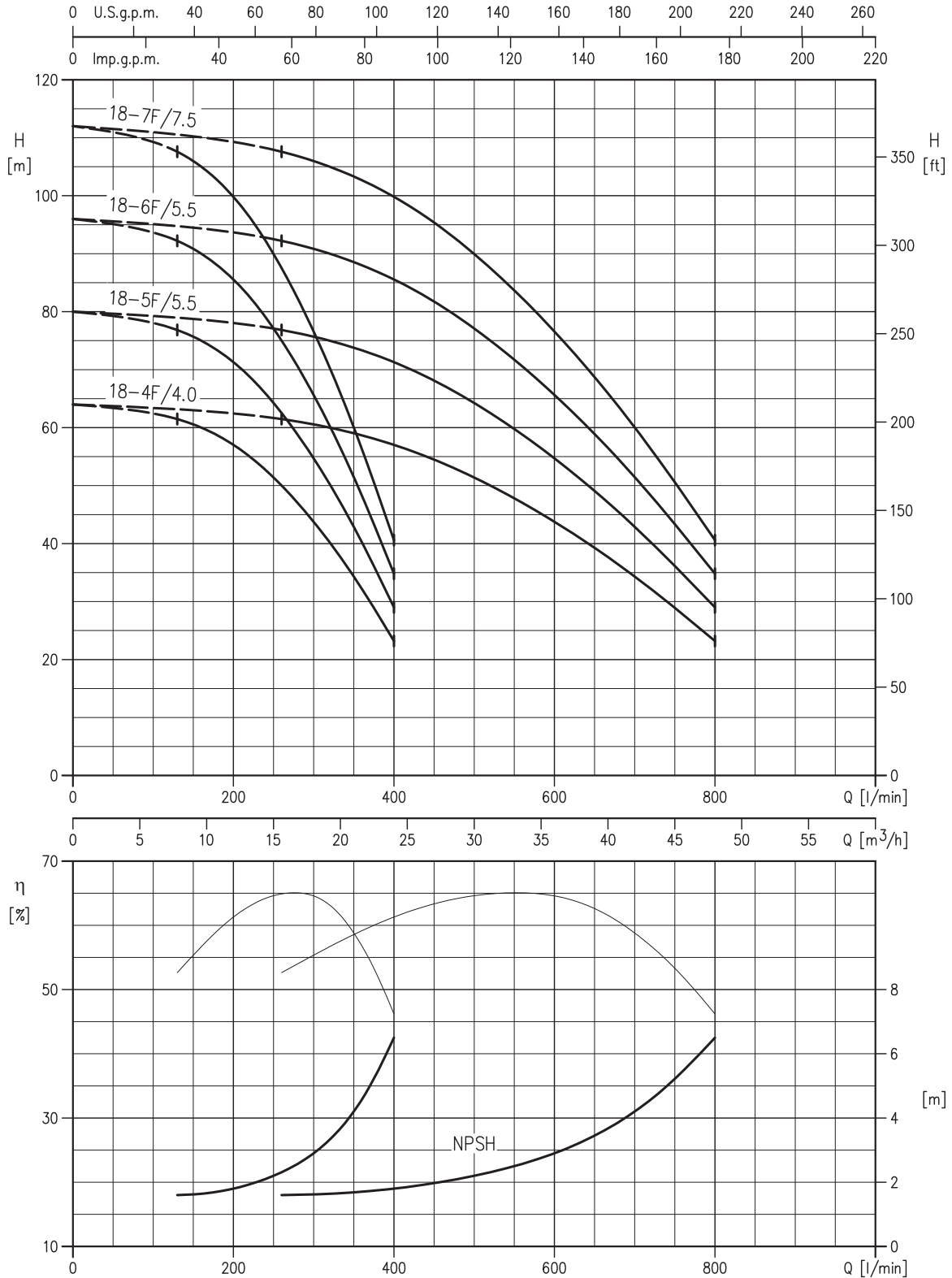
FUNCTIONING PRINCIPLES

- Functioning with PRESSURE-CONTROLLER: the unit responds to the control of the pressure transducer and the speed control via the pump number one inverter, maintaining the system pressure constant
- Double functioning possibility of every pump in AUTOMATIC, MANUAL OR pump EXCLUDED mode
- Pump motors protection against overloads, missing phase over/under voltage
- Pump protection against dry running
- Inverter protection against phase breakdowns, under/over voltage, earth faults, environment overheating
- Functioning of pump number one at variable speed via the inverter; automatic start-up via electro-mechanical contactors of the other pumps
- Automatic switch-over of functioning of pump number one and any other pumps, via electro-mechanical contactors and pressure switches, if the inverter should block
- Automatic switch-over every 24 hours of the powered pumps start-up order via electro-mechanical contactors

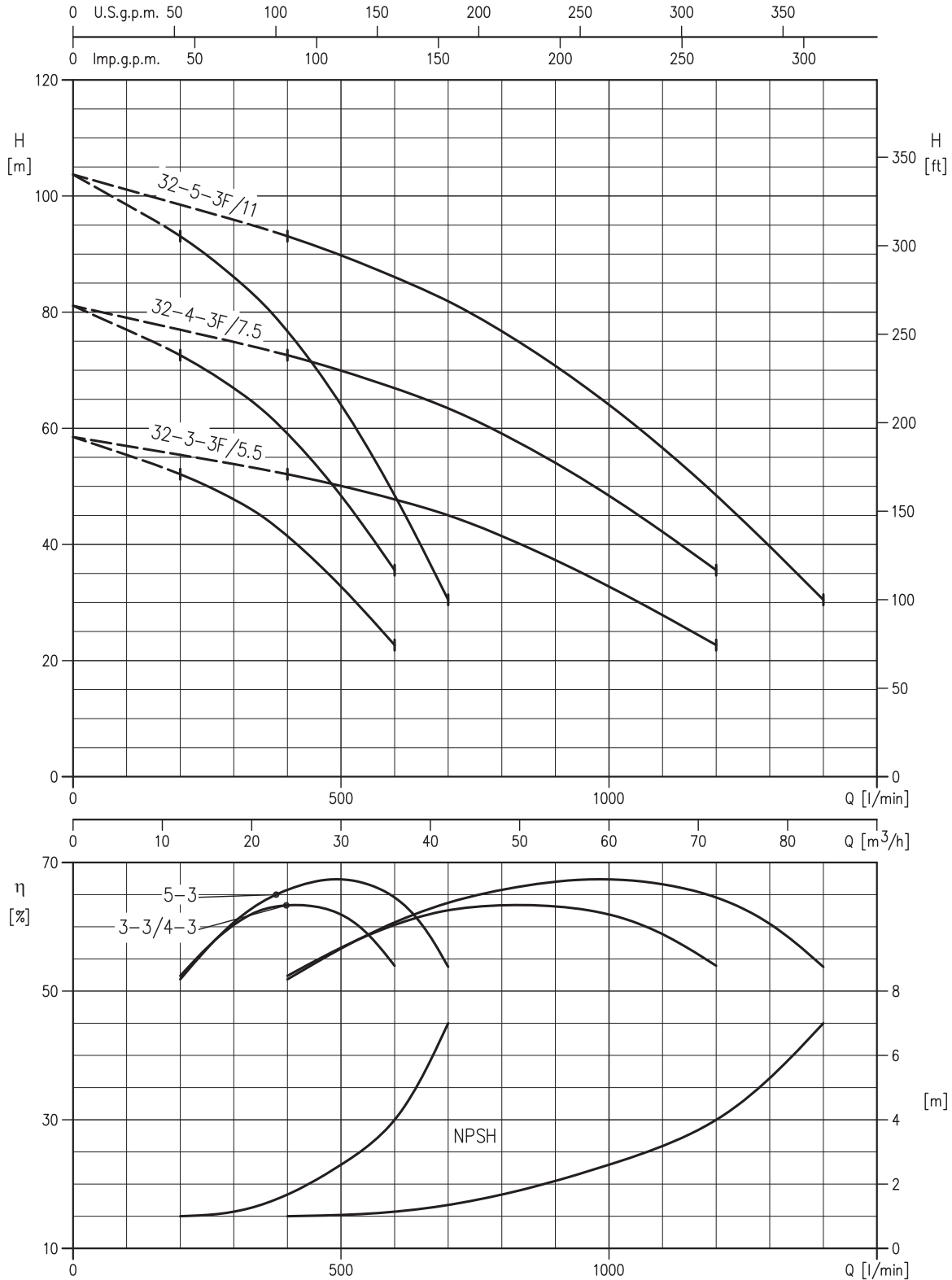
2GPE EVMG 10 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



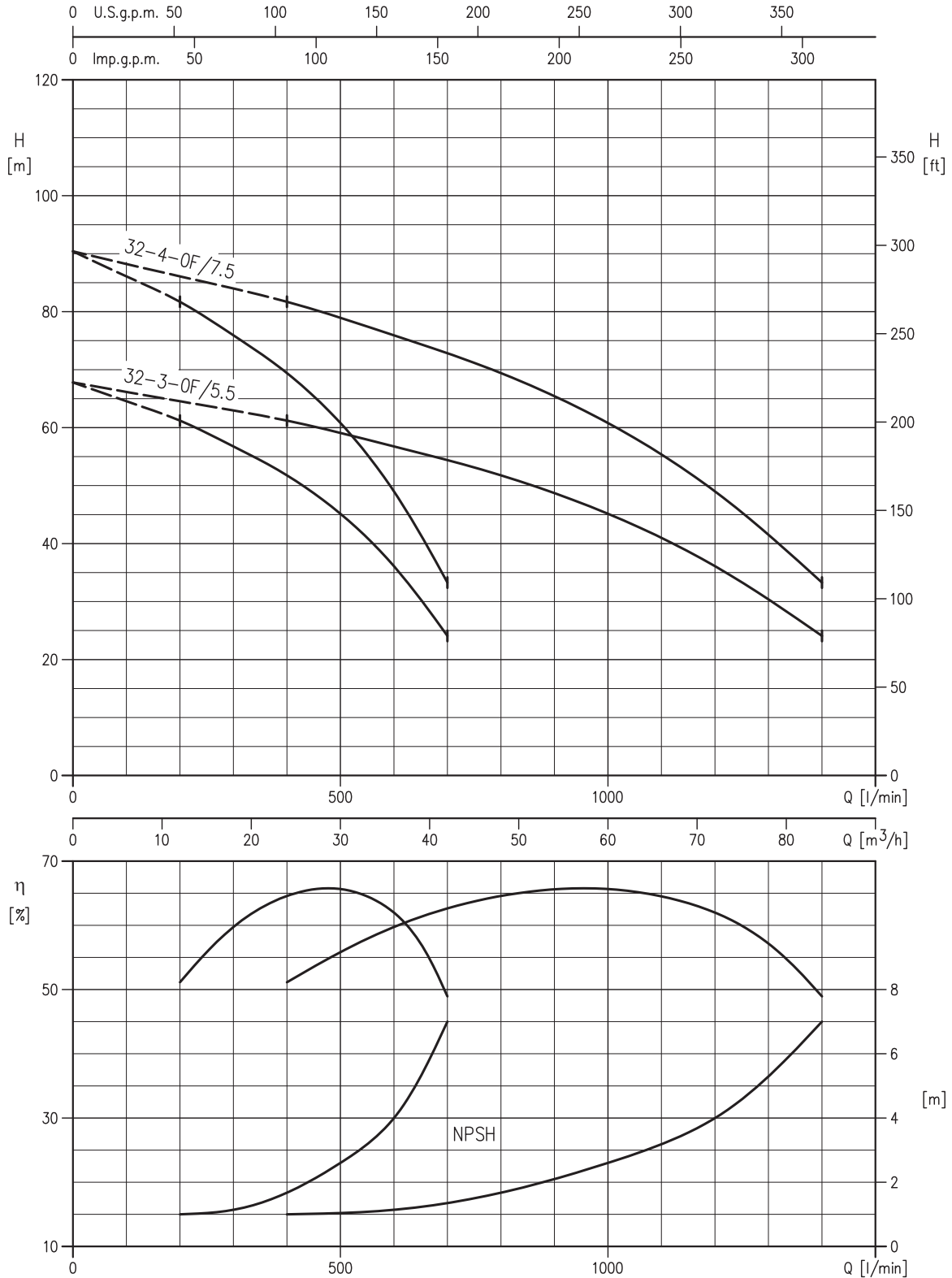
2GPE EVMG 18 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



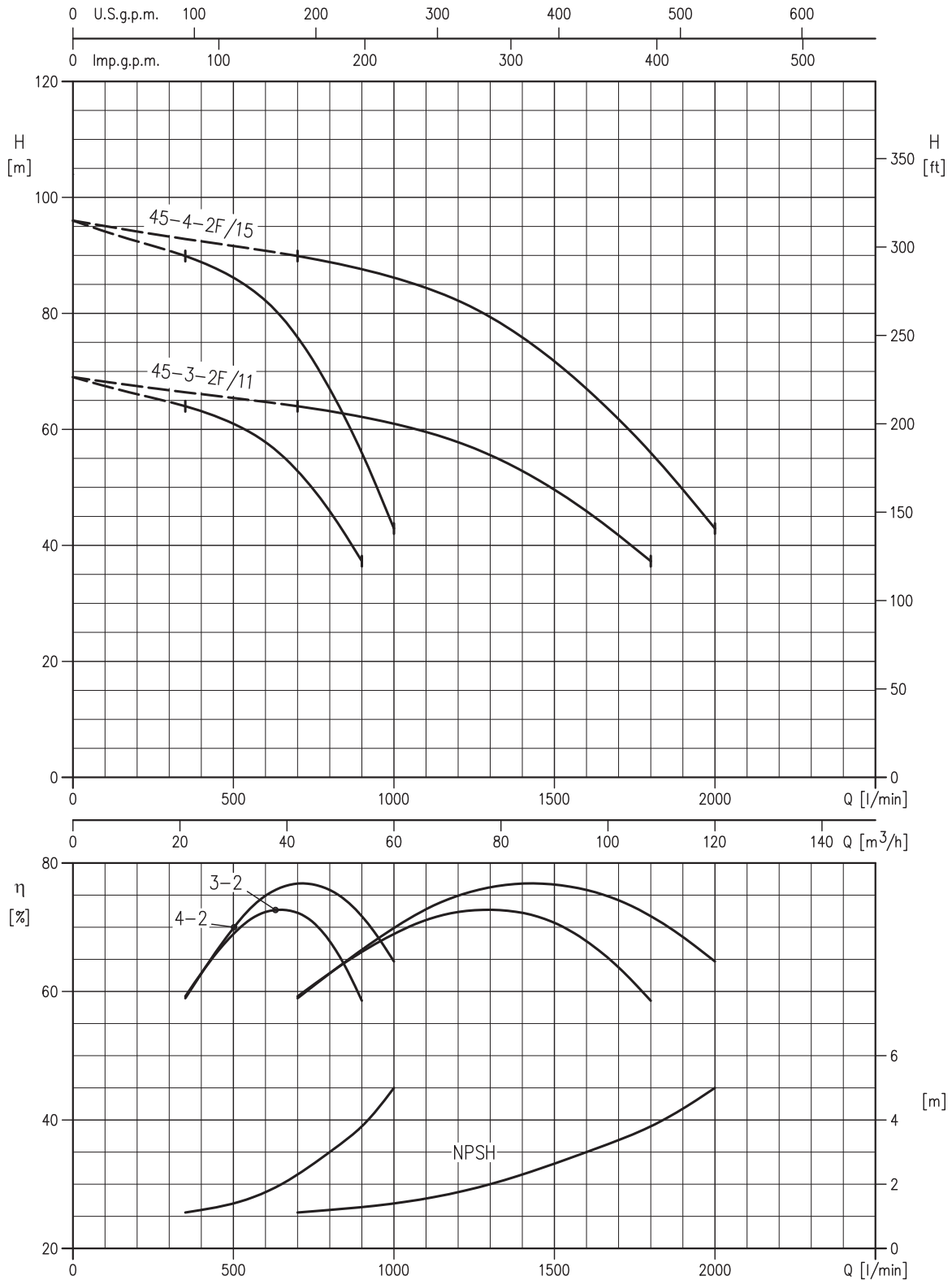
2GPE EVMG 32 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



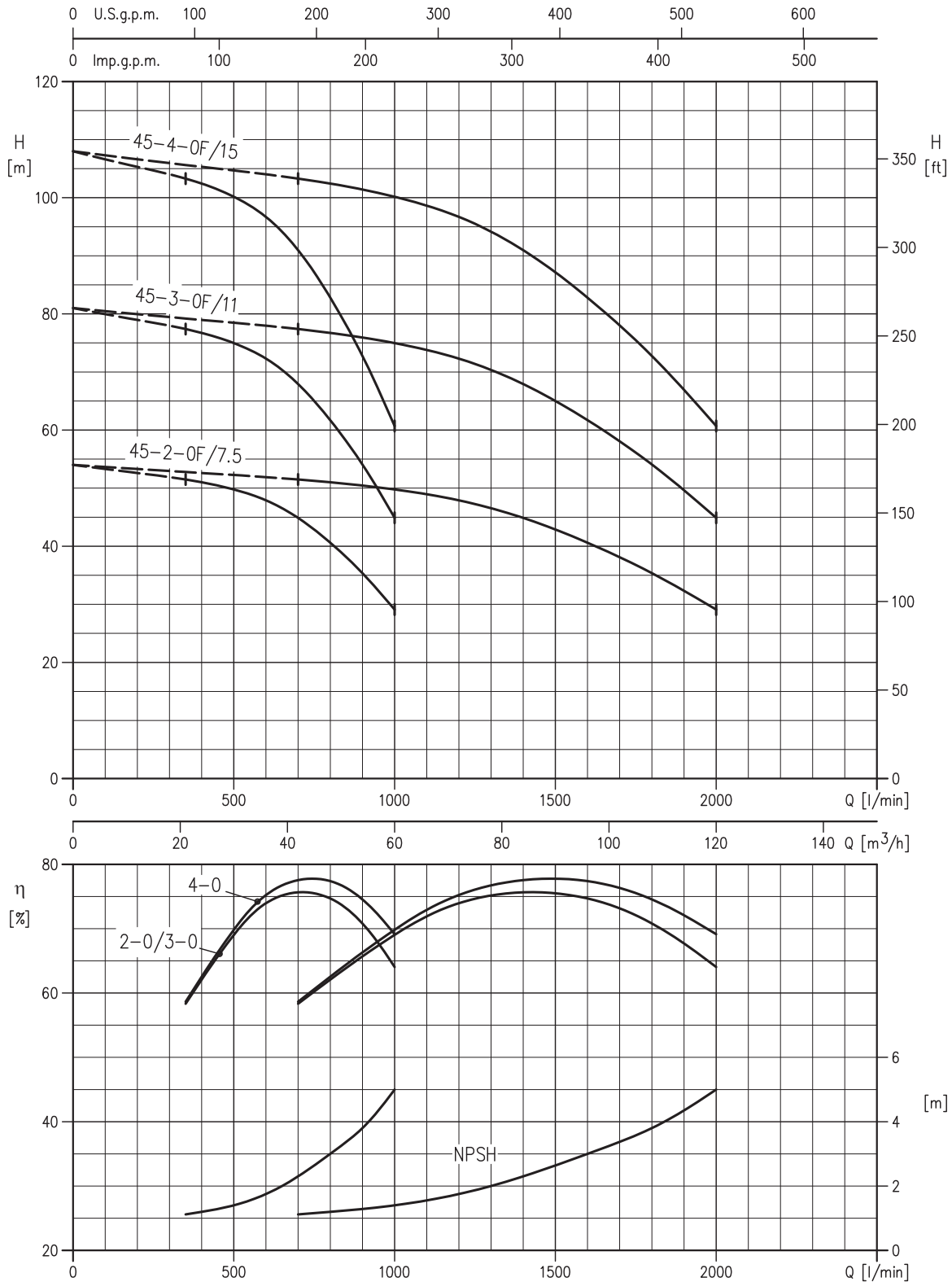
2GPE EVMG 32 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



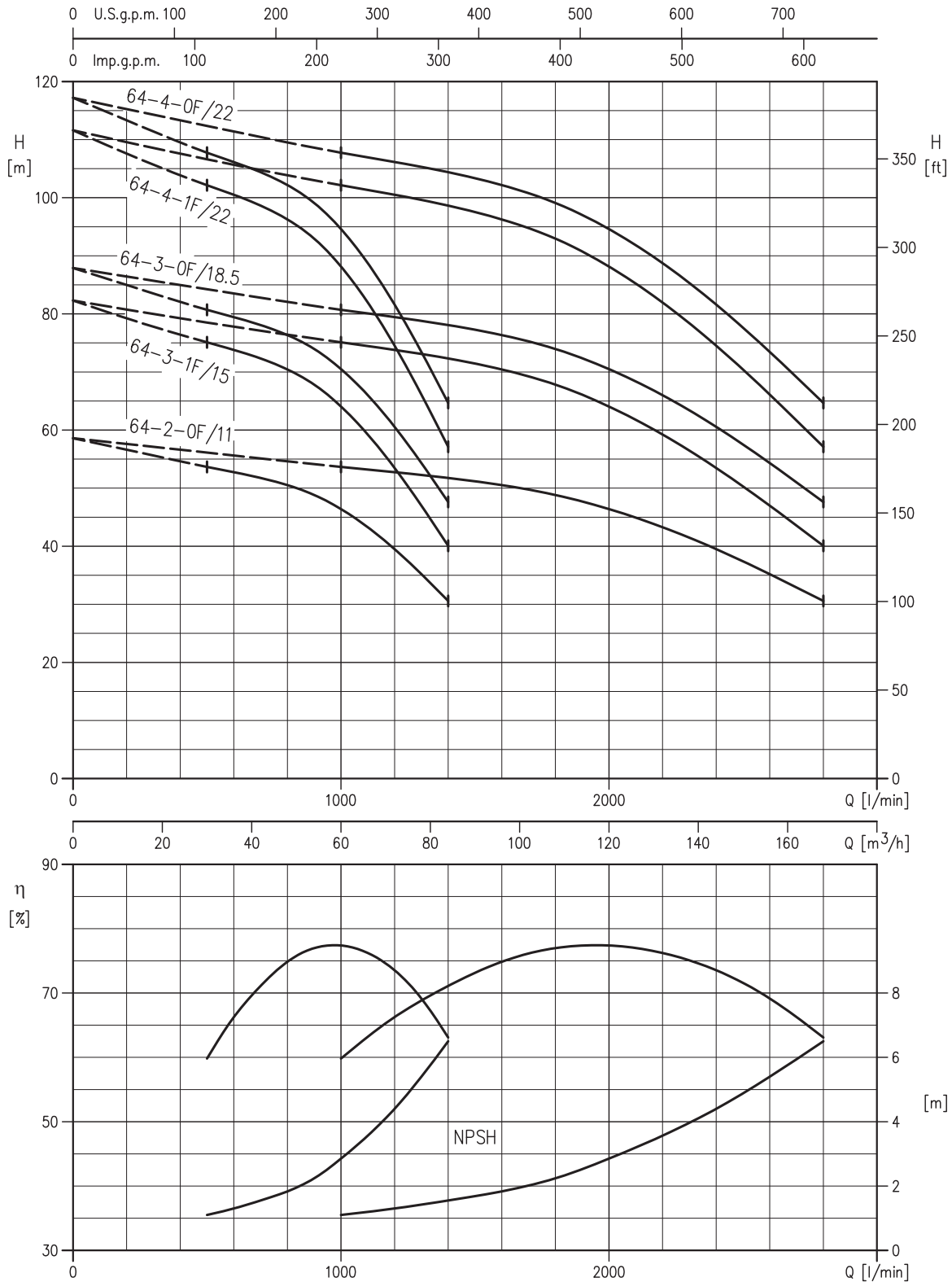
2GPE EVMG 45 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



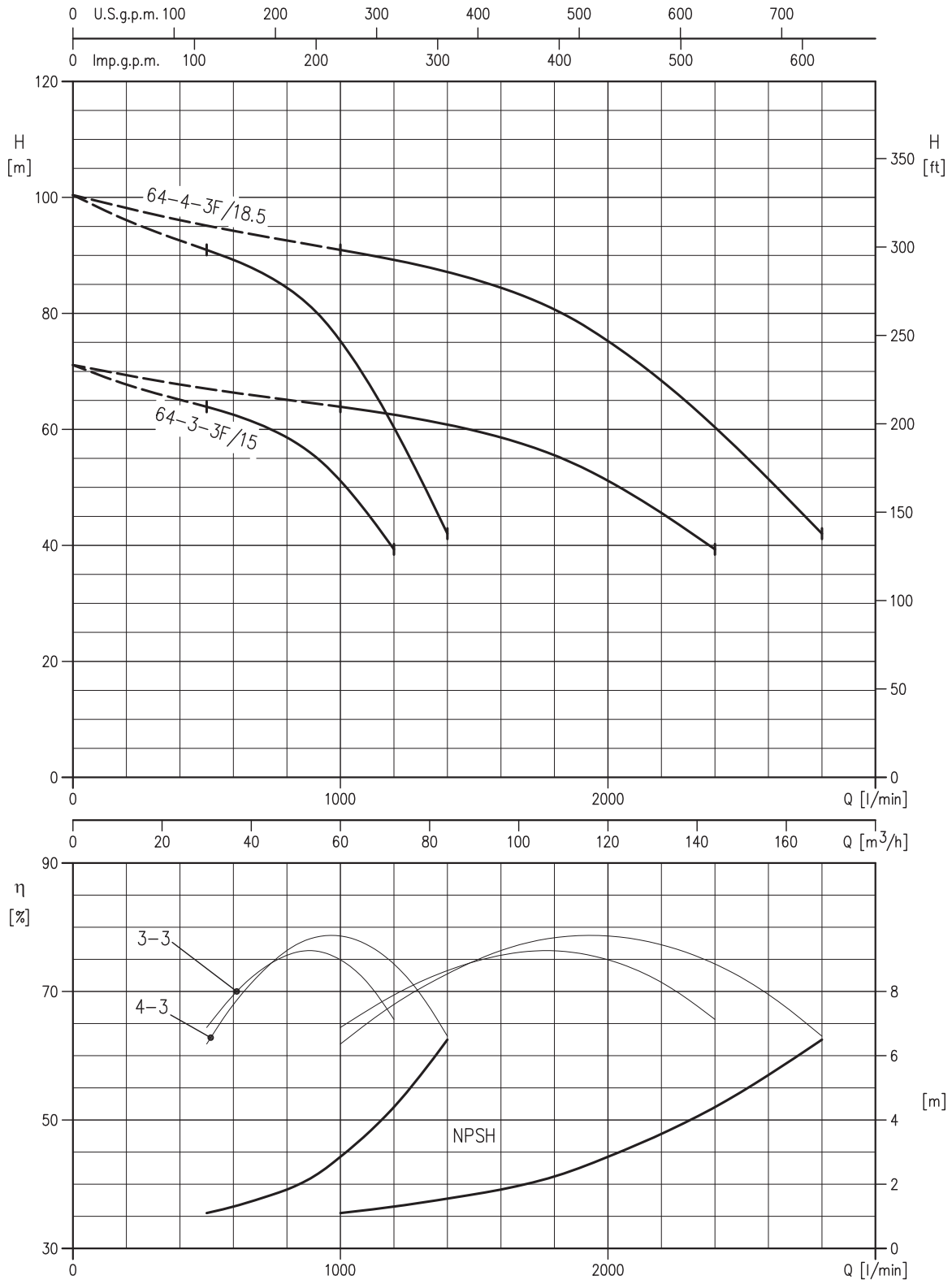
2GPE EVMG 45 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



2GPE EVMG 64 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



2GPE EVMG 64 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)

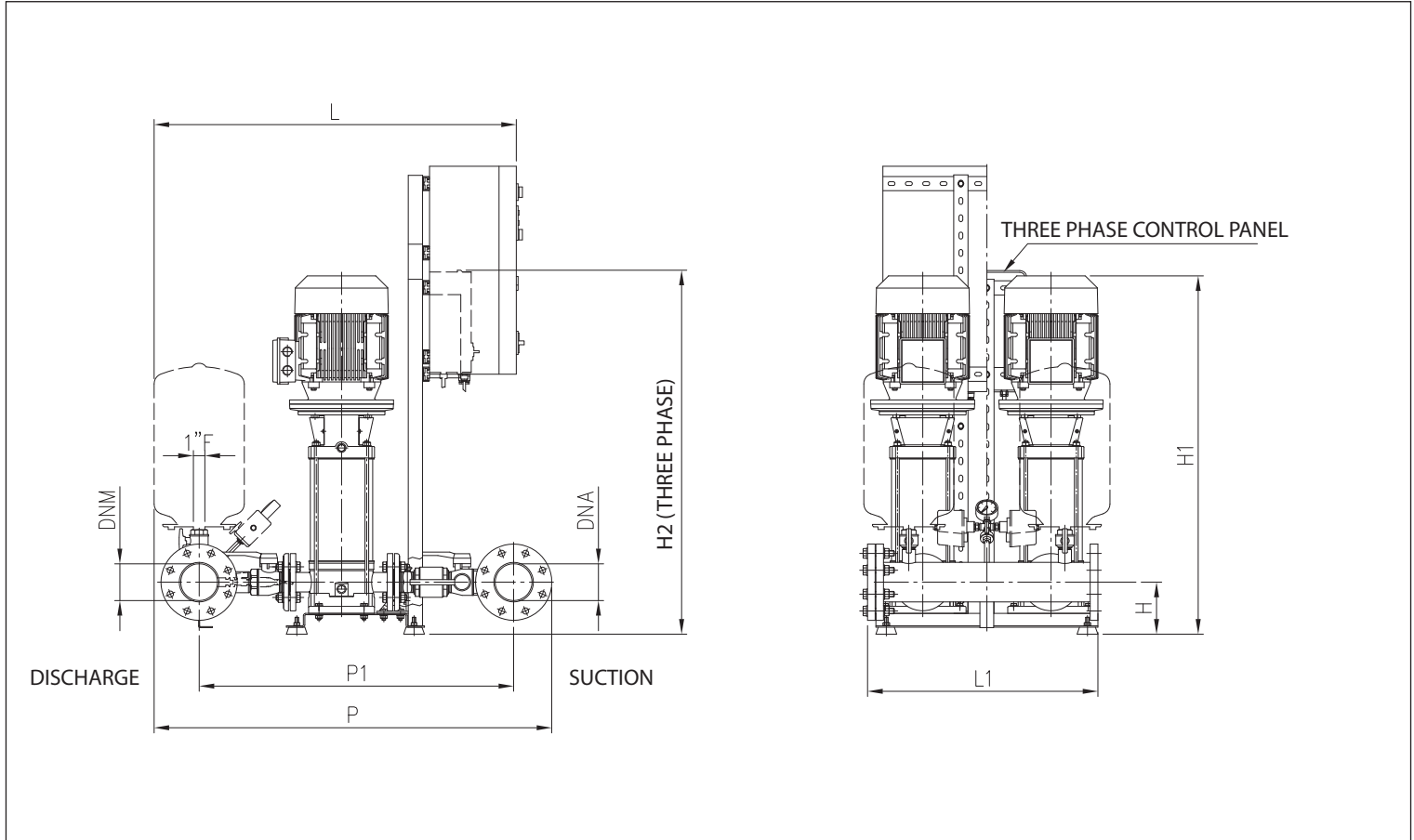


PERFORMANCE TABLE AND ELECTRIC DATA OF THE TWO PUMPS FUNCTIONING SIMULTANEOUSLY

Model Three phase 400V	[kW]	Max abs. [A] 400V Three phase	Q=Flow rate									
			l/min m ³ /h	150	200	260	300	400	500	600	700	800
			H=Head [m]									
EVMG 10 10N/4,0	4+4	17	105,0	102,0	94,5	88,0	66,0	39,0	-	-	-	-
EVMG 10 11N/4,0	4+4	17	116,0	112,0	104,0	97,0	72,5	43,0	-	-	-	-
EVMG 18 4F/4,0	4+4	17	-	-	61,5	60,5	57,0	51,5	44,0	34,3	23,2	-
EVMG 18 5F/5,5	5,5+5,5	21,6	-	-	77,0	75,5	71,5	64,5	54,5	43,0	29,0	-
EVMG 18 6F/5,5	5,5+5,5	21,6	-	-	92,0	91,0	85,5	77,0	65,5	51,5	34,8	-
EVMG 18 7F/7,5	7,5+7,5	28,2	-	-	108,0	106,0	100,0	90,0	76,5	60,0	40,5	-

Model Three phase 400V	[kW]	Max abs. [A] 400V Three phase	Q=Flow rate									
			l/min m ³ /h	400	700	1000	1200	1400	1800	2000	2400	2800
			H=Head [m]									
EVMG 32 3-3F/5,5	5,5+5,5	21,6	52,0	45,0	32,8	22,7	-	-	-	-	-	-
EVMG 32 3-0F/5,5	5,5+5,5	21,6	61,0	54,5	45,0	36,1	24,1	-	-	-	-	-
EVMG 32 4-3F/7,5	7,5+7,5	28,2	72,5	63,5	48,5	35,6	-	-	-	-	-	-
EVMG 32 4-0F/7,5	7,5+7,5	28,2	81,5	73,0	61,0	49,0	33,3	-	-	-	-	-
EVMG 32 5-3F/11	11+11	43	93,0	82,0	64,0	48,5	30,5	-	-	-	-	-
EVMG 45 2-0F/7,5	7,5+7,5	28,2	-	51,5	50,0	48,0	45,0	35,4	29,1	-	-	-
EVMG 45 3-2F/11	11+11	43	-	64,0	61,0	58,0	53,0	37,3	-	-	-	-
EVMG 45 3-0F/11	11+11	43	-	77,5	75,0	72,5	68,0	54,0	45,0	-	-	-
EVMG 45 4-2F/15	15+15	57	-	90,0	86,0	82,0	76,0	56,0	43,0	-	-	-
EVMG 45 4-0F/15	15+15	57	-	103,0	100,0	96,5	91,0	73,0	60,5	-	-	-
EVMG 64 2-0F/11	11+11	43	-	-	53,5	53,0	52,0	49,0	46,5	39,5	30,6	-
EVMG 64 3-3F/15	15+15	57	-	-	64,0	62,5	61,0	55,5	51,0	39,3	-	-
EVMG 64 3-2F/15	15+15	57	-	-	69,5	68,0	66,5	61,5	57,5	46,5	32,5	-
EVMG 64 3-1F/15	15+15	57	-	-	75,0	74,0	72,5	68,0	64,0	53,5	40,0	-
EVMG 64 3-0F/18,5	18,5+18,5	57	-	-	80,5	79,5	78,0	74,0	70,5	60,5	47,5	-
EVMG 64 4-3F/18,5	18,5+18,5	69	-	-	91,0	89,0	87,0	80,5	75,5	60,5	42,0	-
EVMG 64 4-1F/22	22+22	82	-	-	102,0	101,0	98,5	93,0	88,0	74,5	57,0	-
EVMG 64 4-0F/22	22+22	82	-	-	108,0	106,0	104,0	99,0	94,5	81,5	64,5	-

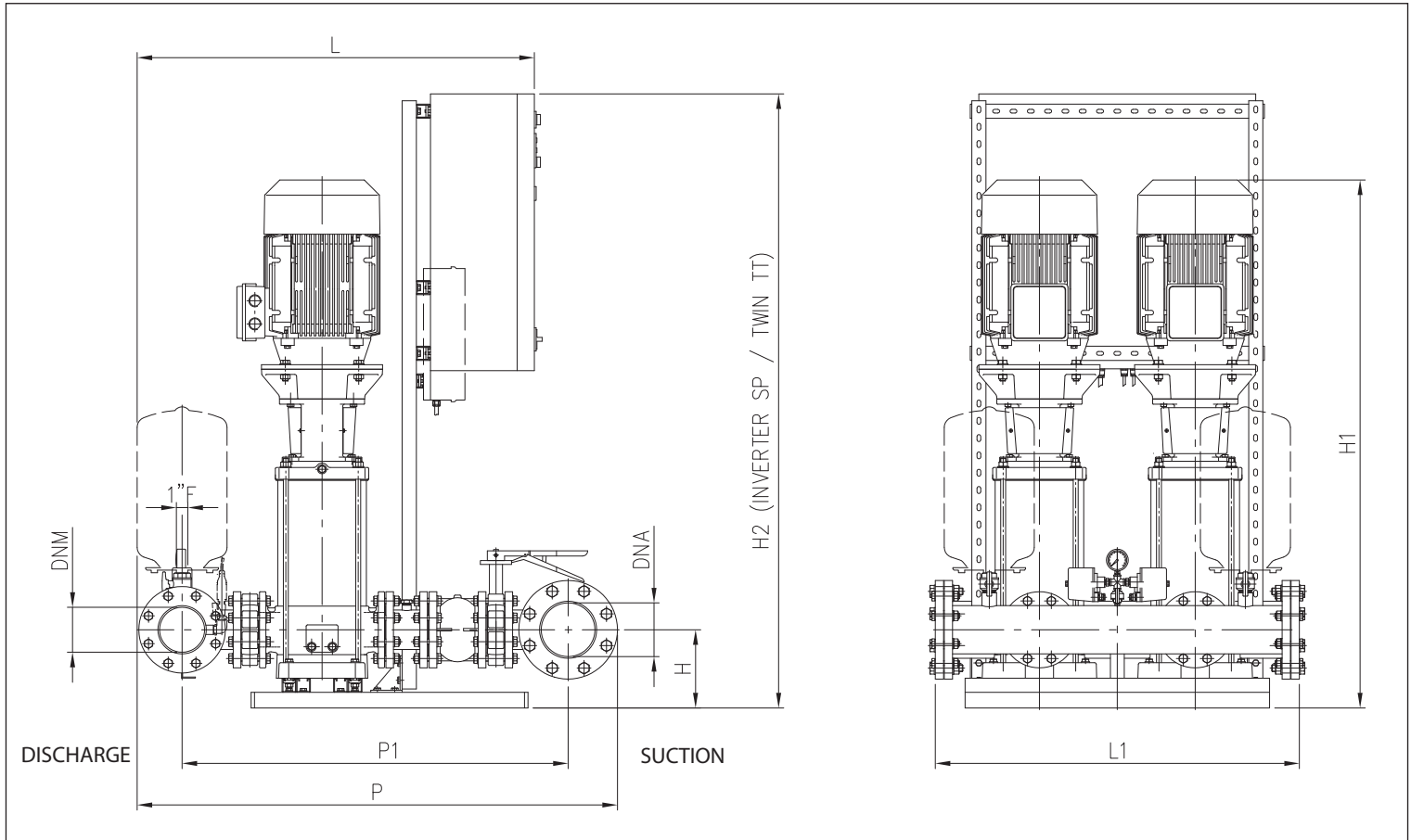
2GPE EVMG 10-18 DIMENSIONS



DIMENSIONS TABLE

Model	Dimensions [mm]								Weight [kg]
	L	H	H1	H2	P	P1	L1	DNA-DNM	
2GPE EVMG 10 10N/4	940	140	970	1000	925	735	670	G3	179,0
2GPE EVMG 10 11N/4	940	140	1000	1000	925	735	670	G3	183,0
2GPE EVMG 18 3F/3	1010	150	790	1050	1145	905	690	DN100	194,0
2GPE EVMG 18 4F/4	1010	150	840	1050	1145	905	690	DN100	216,0
2GPE EVMG 18 5F/5.5	1045	150	955	1150	1145	905	690	DN100	270,0
2GPE EVMG 18 6F/5.5	1045	150	995	1150	1145	905	690	DN100	276,0
2GPE EVMG 18 7F/7.5	1045	150	1035	1150	1145	905	690	DN100	292,0

2GPE EVMG 32-45-64 DIMENSIONS



DIMENSIONS TABLE

Model	Dimensions [mm]										Weight [kg]
	L	H	H1	H2	P	P1	L1	DNA	DNM		
2GPE EVMG 32 3-3F/5.5	1165	190	1030	1275	1360	1105	1050	DN125	DN100	441,0	
2GPE EVMG 32 3-0F/5.5	1165	190	1030	1275	1360	1105	1050	DN125	DN100	441,0	
2GPE EVMG 32 4-3F/7.5	1165	190	1075	1275	1360	1105	1050	DN125	DN100	457,0	
2GPE EVMG 32 4-0F/7.5	1165	190	1075	1275	1360	1105	1050	DN125	DN100	457,0	
2GPE EVMG 32 5-3F/11	1215	190	1390	1475	1360	1105	1050	DN125	DN100	596,0	
2GPE EVMG 45 2-0F/7.5	1215	225	1075	1375	1470	1195	1050	DN150	DN125	501,0	
2GPE EVMG 45 3-2F/11	1265	225	1410	1575	1470	1195	1050	DN150	DN125	638,0	
2GPE EVMG 45 3-0F/11	1265	225	1410	1575	1470	1195	1050	DN150	DN125	638,0	
2GPE EVMG 45 4-2F/15	1265	225	1480	1575	1470	1195	1050	DN150	DN125	656,0	
2GPE EVMG 45 4-0F/15	1265	225	1480	1575	1470	1195	1050	DN150	DN125	656,0	
2GPE EVMG 64 2-0F/11	1150	225	1340	1575	1390	1115	1050	DN150	DN125	628,0	
2GPE EVMG 64 3-3F/15	1150	225	1410	1575	1390	1115	1050	DN150	DN125	662,0	
2GPE EVMG 64 3-2F/15	1150	225	1410	1575	1390	1115	1050	DN150	DN125	662,0	
2GPE EVMG 64 3-1F/15	1150	225	1410	1575	1390	1115	1050	DN150	DN125	662,0	
2GPE EVMG 64 3-0F/18.5	1150	225	1410	1775	1390	1115	1050	DN150	DN125	678,0	
2GPE EVMG 64 4-3F/18.5	1150	225	1525	1775	1390	1115	1050	DN150	DN125	696,0	
2GPE EVMG 64 4-1F/22	1150	225	1580	1900	1390	1115	1050	DN150	DN125	770,0	
2GPE EVMG 64 4-0F/22	1150	225	1580	1900	1390	1115	1050	DN150	DN125	770,0	