



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 three vertical type membrane reservoirs. Three pressure switches and a pressure gauge are mounted on it. On suction, 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

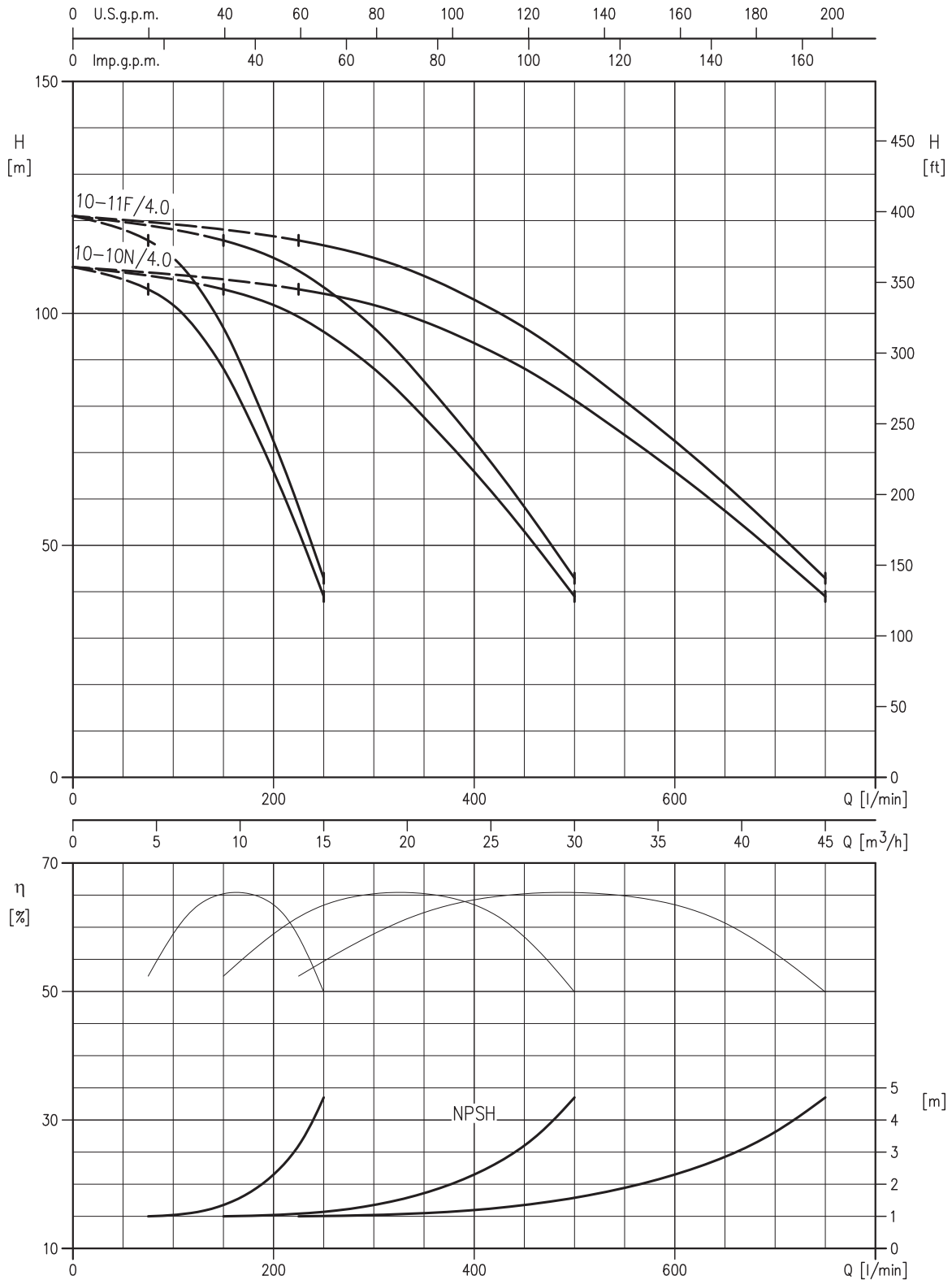
- Functioning with PRESSURE-CONTROLLER: the unit responds to the control of the pressure transducer and the speed control via the pump number one inverter, maintaining the system pressure constant
- Double functioning possibility of every pump in AUTOMATIC, MANUAL OR pump EXCLUDED mode
- Pump motors 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



3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 10 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



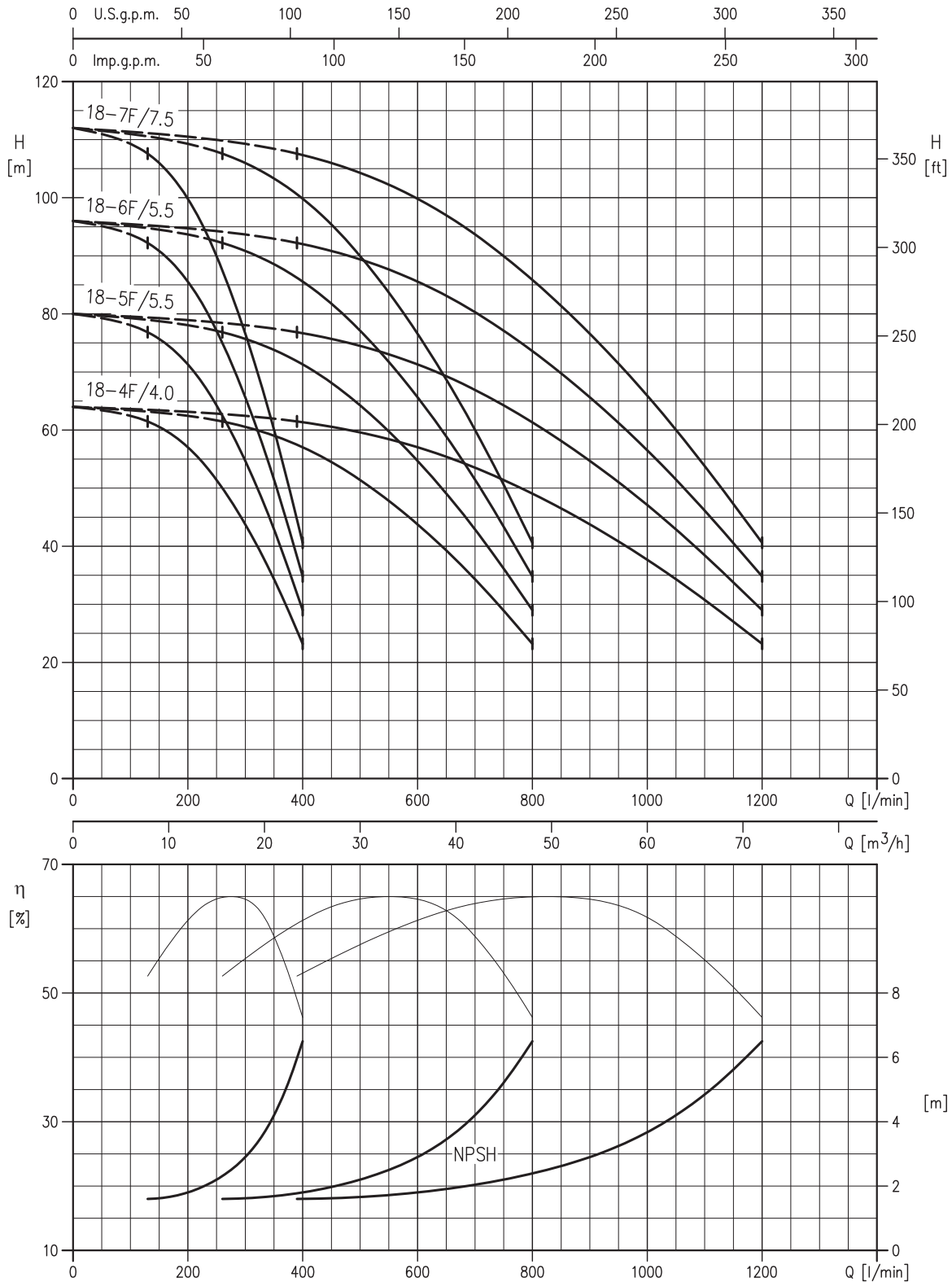
Data under revision. For more information please contact our sales network.



3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 18 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



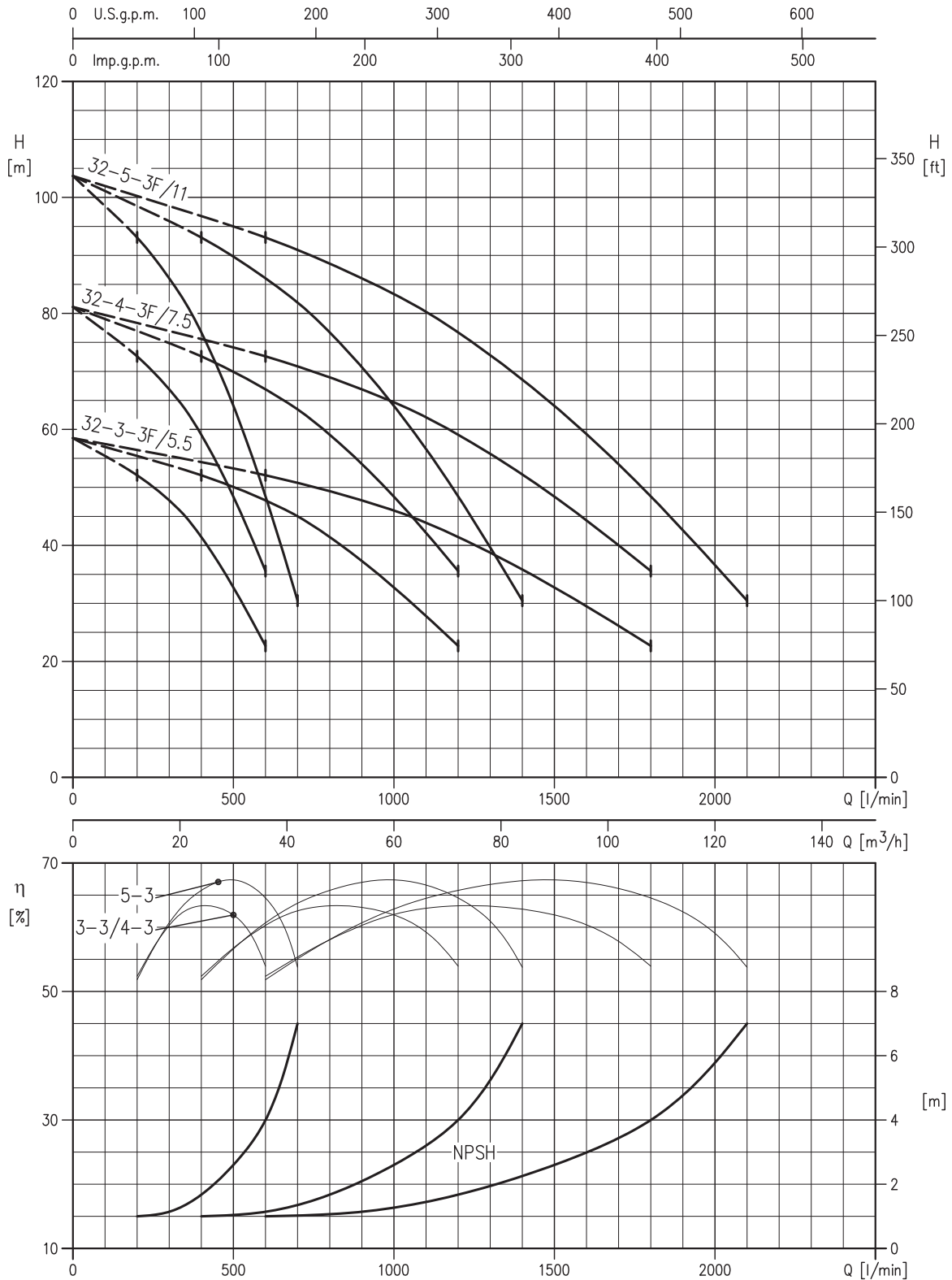
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3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 32 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



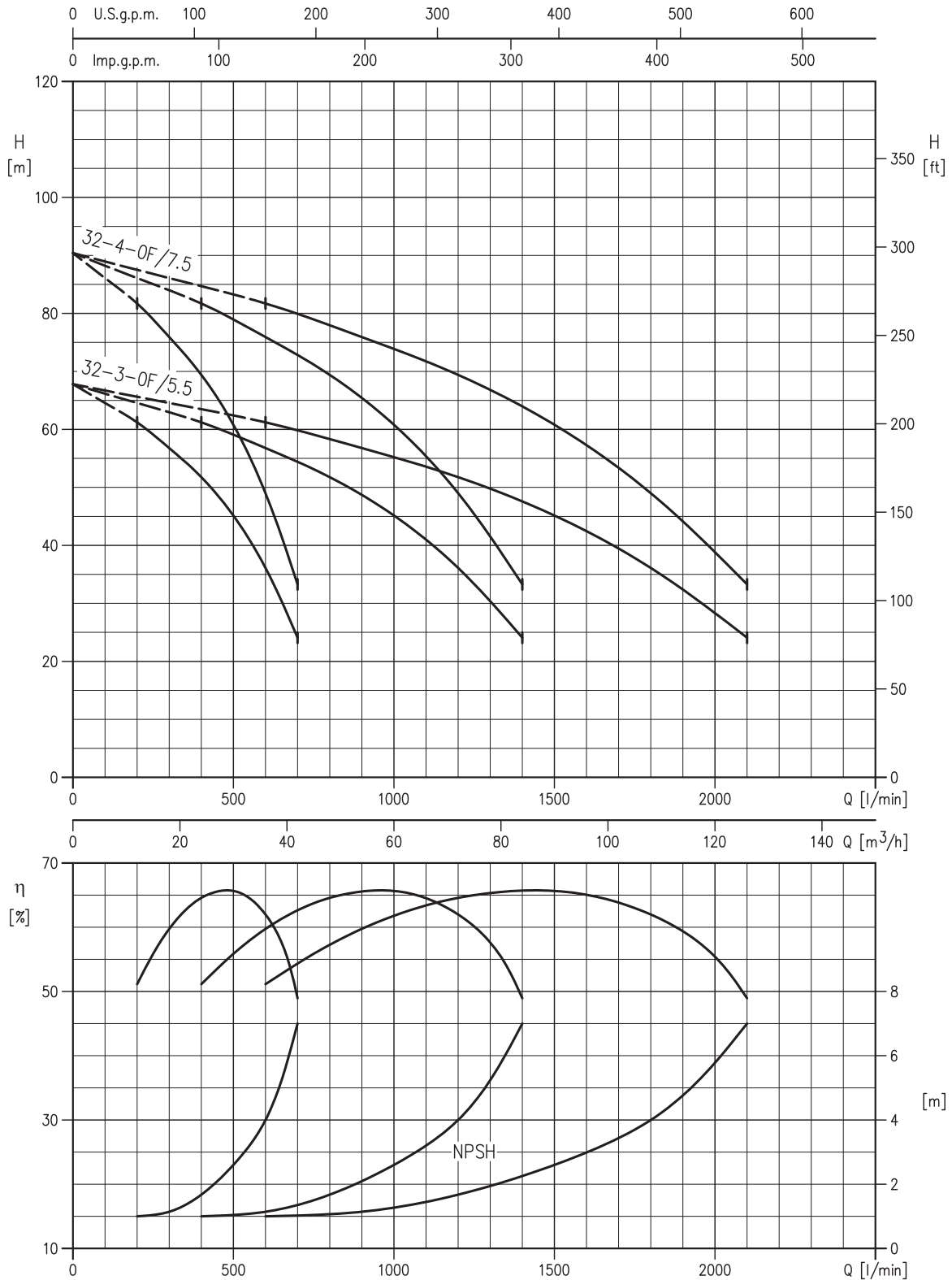
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3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 32 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



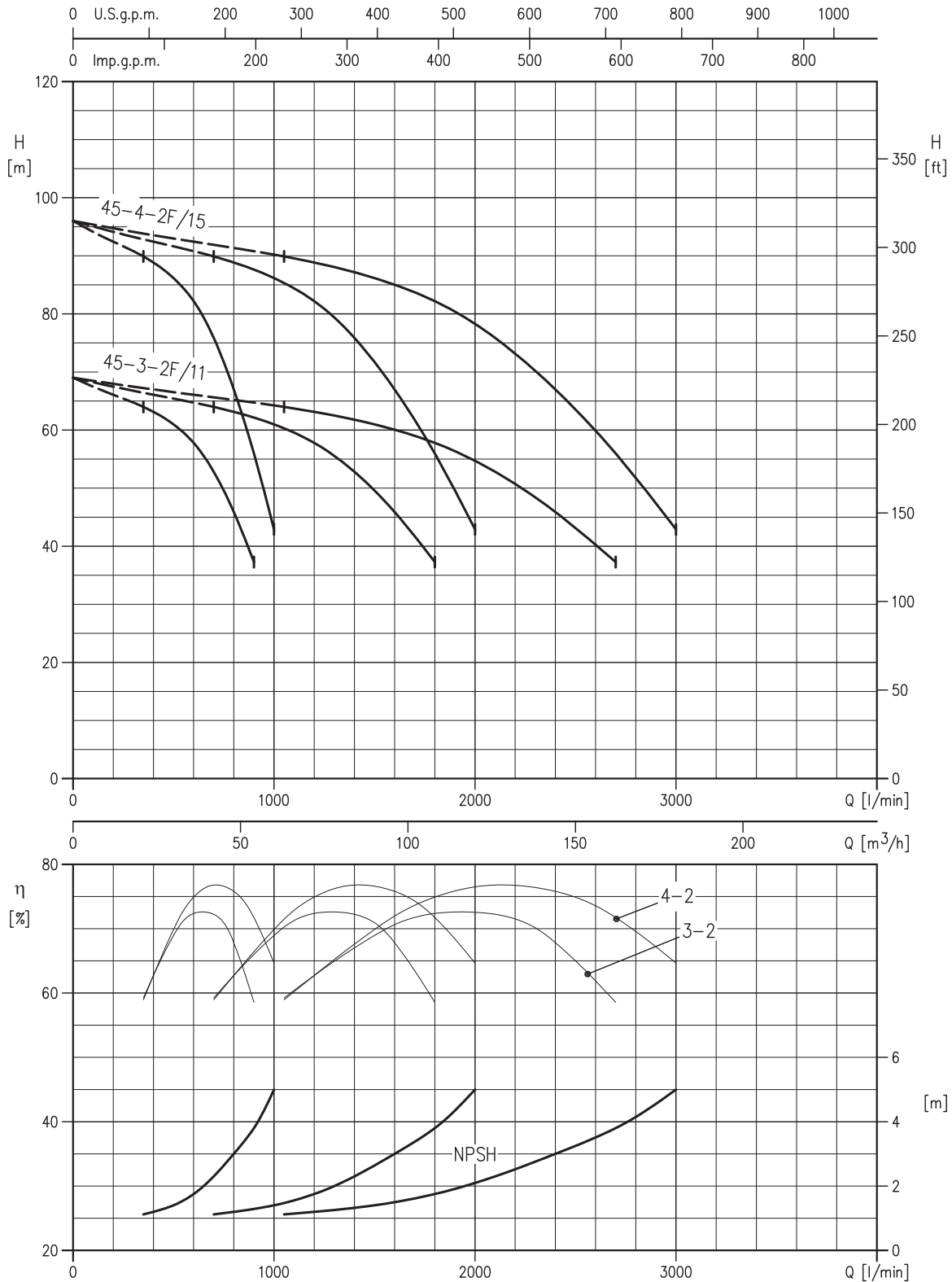
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3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 45 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



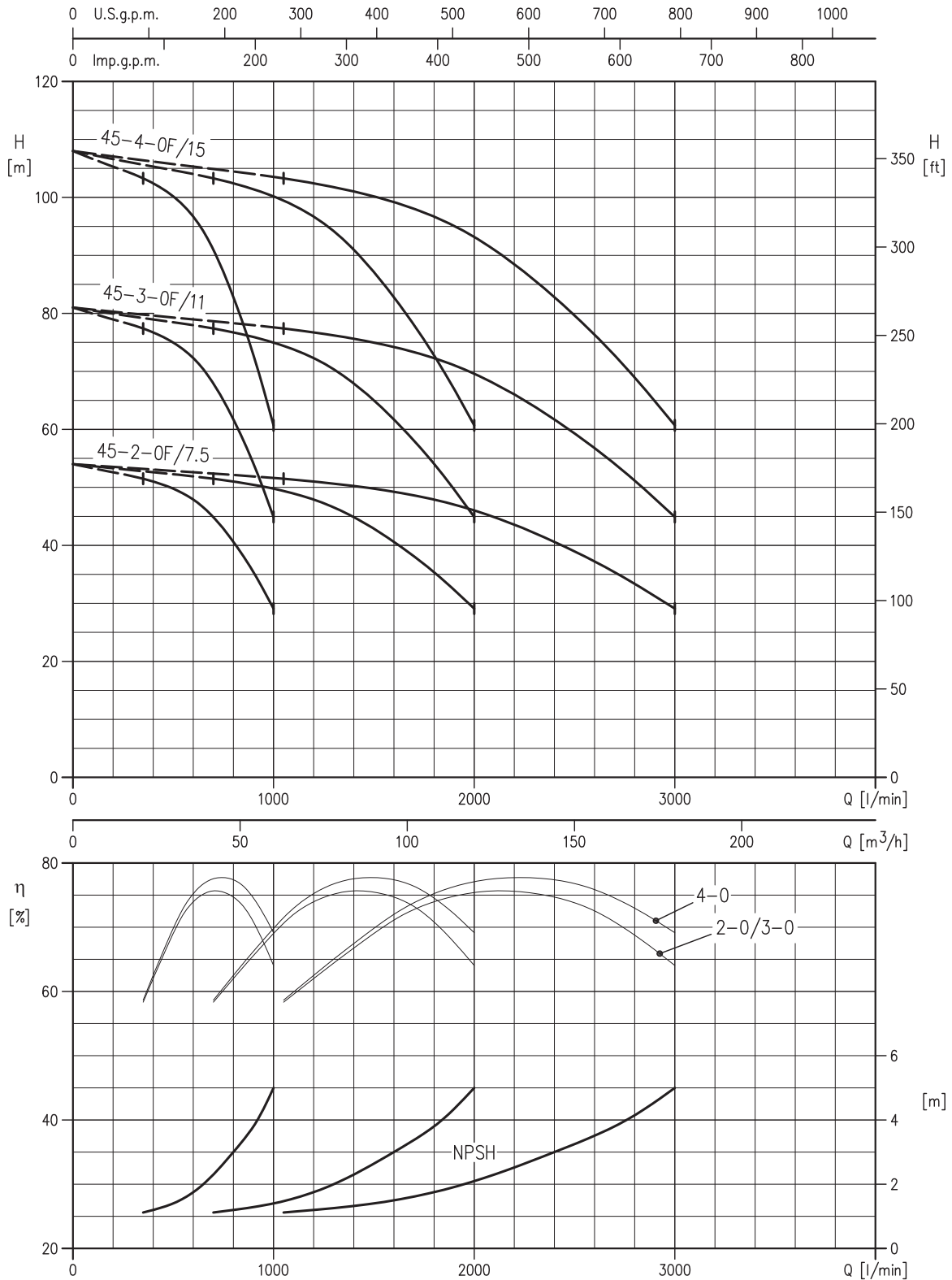
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3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 45 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



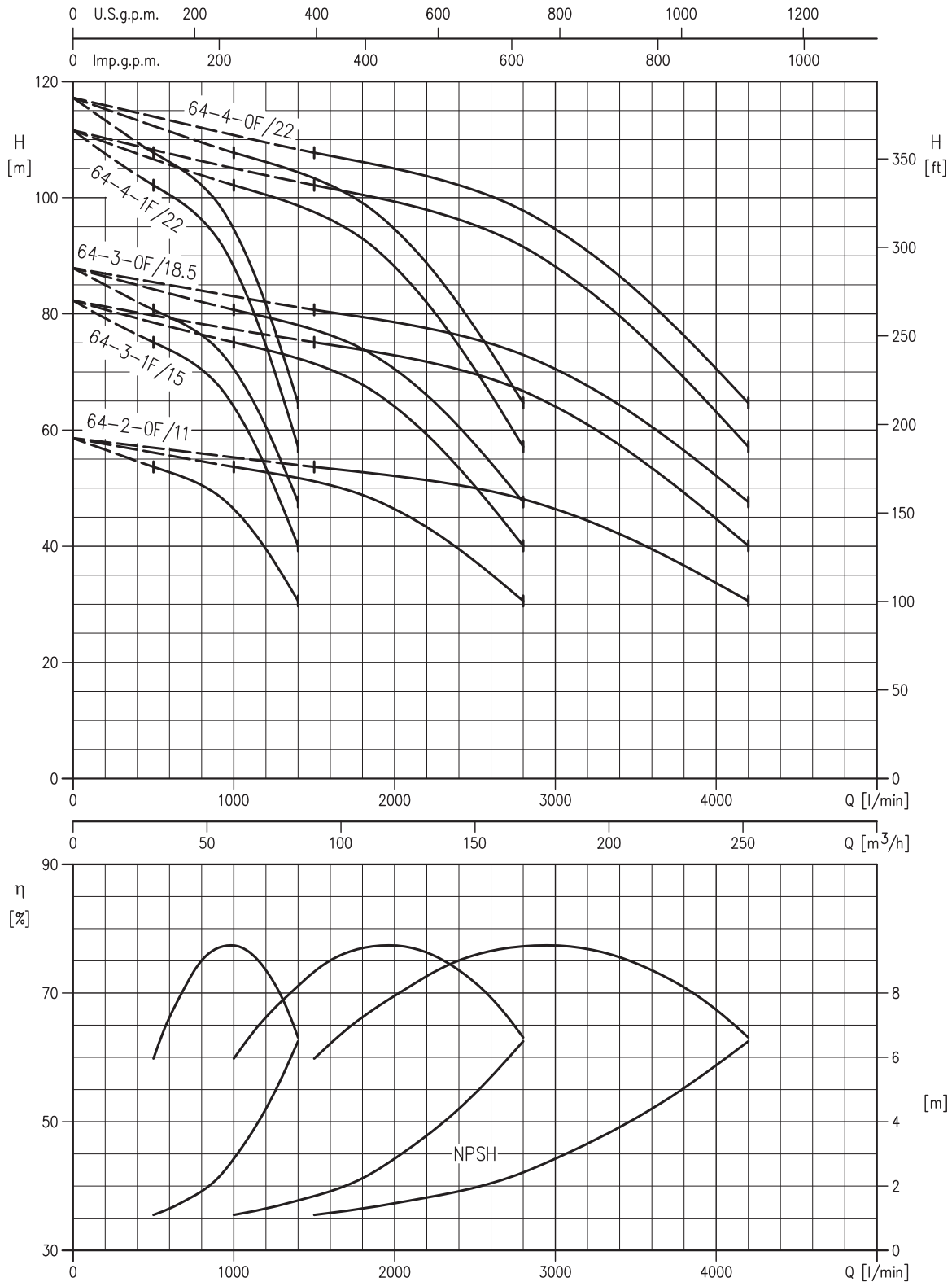
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3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 64 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



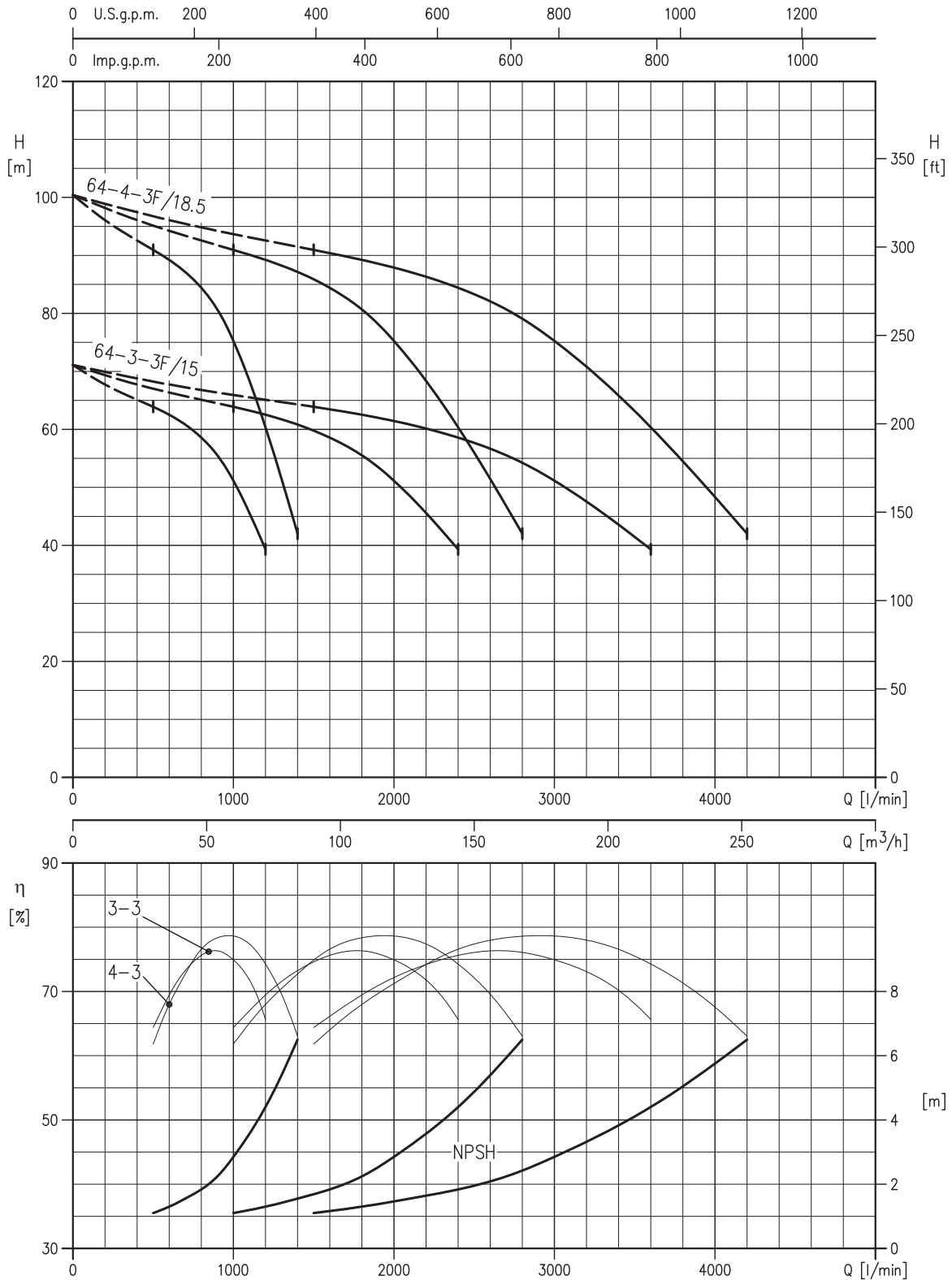
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3GPE EVMG

INDUSTRIAL PRESSURE BOOSTING

3GPE EVMG 64 RANGE PERFORMANCE CURVE (according to ISO 9906 Attachment A)



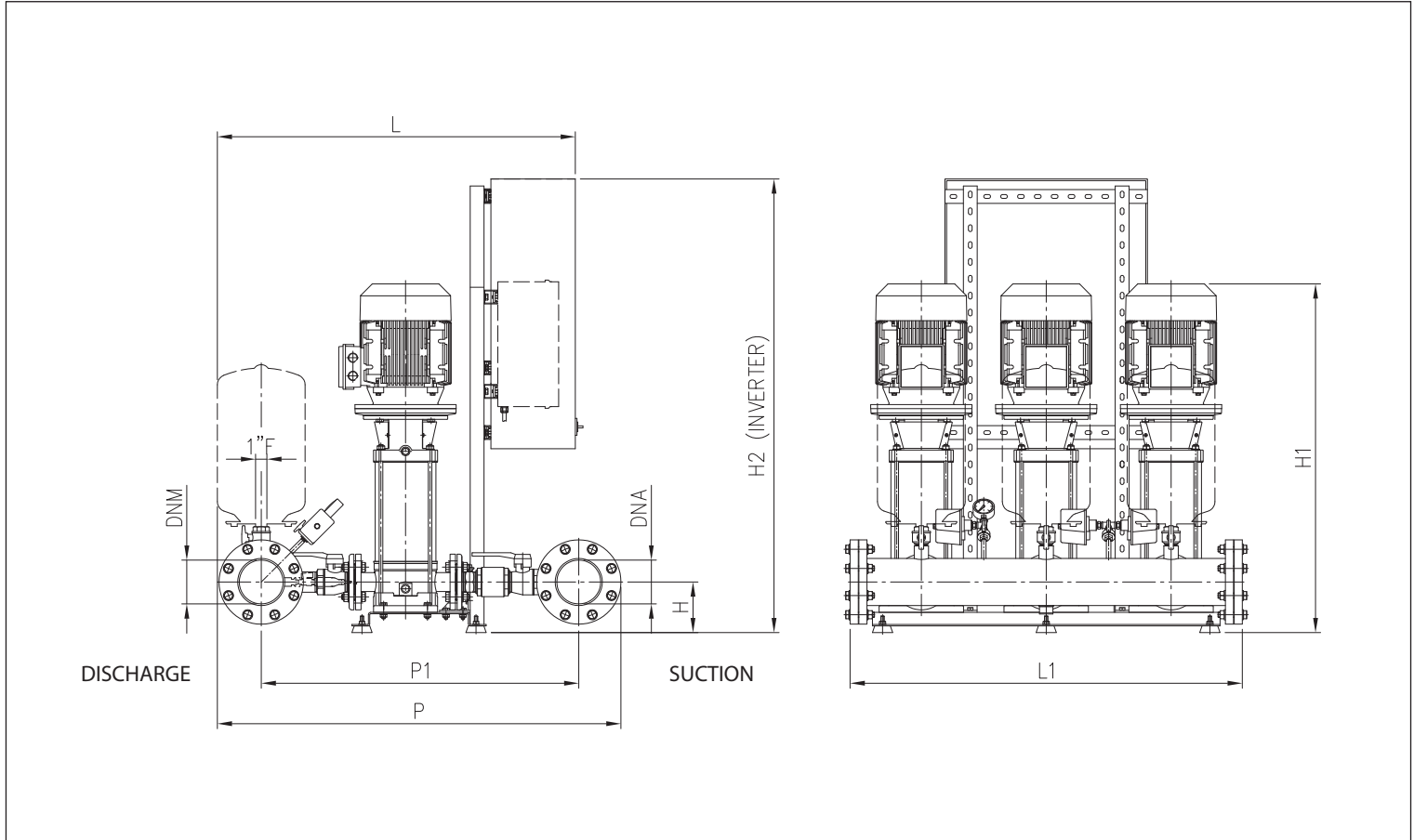
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PERFORMANCE TABLE AND ELECTRIC DATA OF THE THREE PUMPS FUNCTIONING SIMULTANEOUSLY

Model Three phase 400V	[kW]	Max abs. [A] 400V Three phase	Q=Flow rate								
			l/min m ³ /h	225 13,5	300 18	390 23,4	450 27	600 36	750 45	900 54	1050 63
			H=Head [m]								
EVMG 10 10N/4,0	4+4+4	25,5	105,0	102,0	94,5	88,0	66,0	39,0	-	-	-
EVMG 10 11N/4,0	4+4+4	25,5	116,0	112,0	104,0	97,0	72,5	43,0	-	-	-
EVMG 18 4F/4,0	4+4+4	25,5	-	-	61,5	60,5	57,0	51,5	44,0	34,3	23,2
EVMG 18 5F/5,5	5,5+5,5+5,5	32,4	-	-	77,0	75,5	71,5	64,5	54,5	43,0	29,0
EVMG 18 6F/5,5	5,5+5,5+5,5	32,4	-	-	92,0	91,0	85,5	77,0	65,5	51,5	34,8
EVMG 18 7F/7,5	7,5+7,5+7,5	42,3	-	-	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	600 36	1050 63	1500 90	1800 108	2100 126	2700 162	3000 180	3600 216
			H=Head [m]								
EVMG 32 3-3F/5,5	5,5+5,5+5,5	32,4	52,0	45,0	32,8	22,7	-	-	-	-	-
EVMG 32 3-0F/5,5	5,5+5,5+5,5	32,4	61,0	54,5	45,0	36,1	24,1	-	-	-	-
EVMG 32 4-3F/7,5	7,5+7,5+7,5	42,3	72,5	63,5	48,5	35,6	-	-	-	-	-
EVMG 32 4-0F/7,5	7,5+7,5+7,5	42,3	81,5	73,0	61,0	49,0	33,3	-	-	-	-
EVMG 32 5-3F/11	11+11+11	64,5	93,0	82,0	64,0	48,5	30,5	-	-	-	-
EVMG 45 2-0F/7,5	7,5+7,5+7,5	42,3	-	51,5	50,0	48,0	45,0	35,4	29,1	-	-
EVMG 45 3-2F/11	11+11+11	64,5	-	64,0	61,0	58,0	53,0	37,3	-	-	-
EVMG 45 3-0F/11	11+11+11	64,5	-	77,5	75,0	72,5	68,0	54,0	45,0	-	-
EVMG 45 4-2F/15	15+15+15	85,5	-	90,0	86,0	82,0	76,0	56,0	43,0	-	-
EVMG 45 4-0F/15	15+15+15	85,5	-	103,0	100,0	96,5	91,0	73,0	60,5	-	-
EVMG 64 2-0F/11	11+11+11	64,5	-	-	53,5	53,0	52,0	49,0	46,5	39,5	30,6
EVMG 64 3-3F/15	15+15+15	85,5	-	-	64,0	62,5	61,0	55,5	51,0	39,3	-
EVMG 64 3-2F/15	15+15+15	85,5	-	-	69,5	68,0	66,5	61,5	57,5	46,5	32,5
EVMG 64 3-1F/15	15+15+15	85,5	-	-	75,0	74,0	72,5	68,0	64,0	53,5	40,0
EVMG 64 3-0F/18,5	18,5+18,5+18,5	103,5	-	-	80,5	79,5	78,0	74,0	70,5	60,5	47,5
EVMG 64 4-3F/18,5	18,5+18,5+18,5	103,5	-	-	91,0	89,0	87,0	80,5	75,5	60,5	42,0
EVMG 64 4-1F/22	22+22+22	123	-	-	102,0	101,0	98,5	93,0	88,0	74,5	57,0
EVMG 64 4-0F/22	22+22+22	123	-	-	108,0	106,0	104,0	99,0	94,5	81,5	64,5

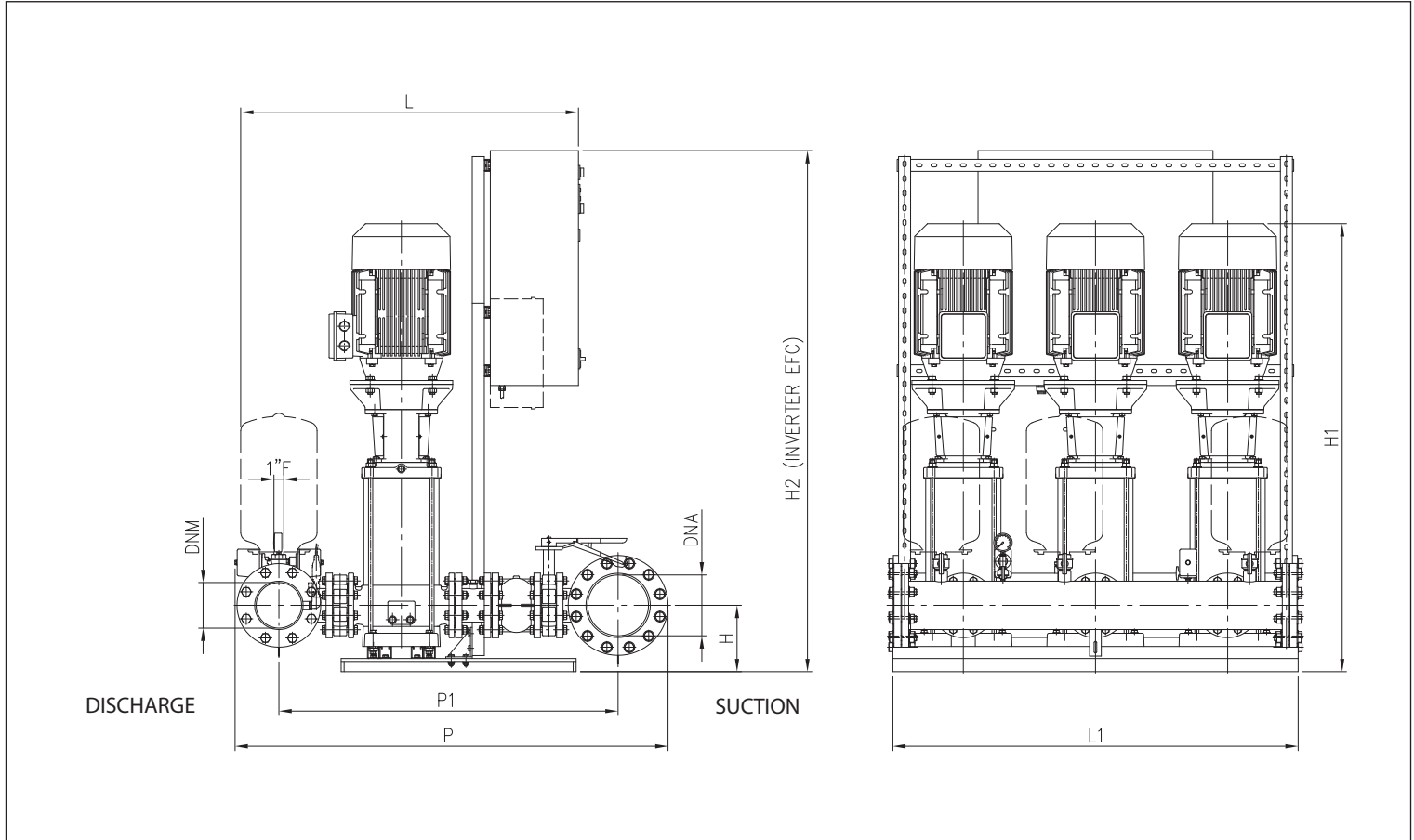
3GPE EVMG 10-18 DIMENSIONS



DIMENSIONS TABLE

Model	Dimensions [mm]								
	L	H	H1	H2	P	P1	L1	DNA-DNM	Weight [kg]
3GP(E) EVM10 10N/4	985	140	970	1095	1005	765	1160	DN100	245,0
3GP(E) EVM10 11N/4	985	140	1000	1095	1005	765	1160	DN100	251,0
3GP(E) EVM18 4F/4	1060	150	840	1145	1195	940	1160	DN125	282,0
3GP(E) EVM18 5F/5.5	1060	150	955	1345	1195	940	1160	DN125	348,0
3GP(E) EVM18 6F/5.5	1060	150	995	1345	1195	940	1160	DN125	357,0
3GP(E) EVM18 7F/7.5	1060	150	1035	1345	1195	940	1160	DN125	381,0

3GPE EVMG 32-45-64 DIMENSIONS



DIMENSIONS TABLE

Model	Dimensions [mm]										Weight [kg]
	L	H	H1	H2	P	P1	L1	DNA	DNM		
3GPE EVMG 32 3-3F/5.5	1175	190	1030	1475	1420	1130	1380	DN150	DN125	555,0	
3GPE EVMG 32 3-0F/5.5	1175	190	1030	1475	1420	1130	1380	DN150	DN125	555,0	
3GPE EVMG 32 4-3F/7.5	1175	190	1075	1475	1420	1130	1380	DN150	DN125	579,0	
3GPE EVMG 32 4-0F/7.5	1175	190	1075	1475	1420	1130	1380	DN150	DN125	579,0	
3GPE EVMG 32 5-3F/11	1225	190	1390	1475	1420	1130	1380	DN150	DN125	774,0	
3GPE EVMG 45 2-0F/7.5	1250	225	1075	1575	1550	1235	1380	DN200	DN150	627,0	
3GPE EVMG 45 3-2F/11	1300	225	1410	1575	1550	1235	1380	DN200	DN150	819,0	
3GPE EVMG 45 3-0F/11	1300	225	1410	1575	1550	1235	1380	DN200	DN150	819,0	
3GPE EVMG 45 4-2F/15	1300	225	1480	1575	1550	1235	1380	DN200	DN150	854,0	
3GPE EVMG 45 4-0F/15	1300	225	1480	1575	1550	1235	1380	DN200	DN150	854,0	
3GPE EVMG 64 2-0F/11	1170	225	1340	1575	1475	1155	1380	DN200	DN150	804,0	
3GPE EVMG 64 3-3F/15	1170	225	1410	1575	1475	1155	1380	DN200	DN150	863,0	
3GPE EVMG 64 3-2F/15	1170	225	1410	1575	1475	1155	1380	DN200	DN150	863,0	
3GPE EVMG 64 3-1F/15	1170	225	1410	1575	1475	1155	1380	DN200	DN150	863,0	
3GPE EVMG 64 3-0F/18.5	1170	225	1410	1775	1475	1155	1380	DN200	DN150	887,0	
3GPE EVMG 64 4-3F/18.5	1170	225	1525	1775	1475	1155	1380	DN200	DN150	914,0	
3GPE EVMG 64 4-1F/22	1170	225	1580	1900	1475	1155	1380	DN200	DN150	1025,0	
3GPE EVMG 64 4-0F/22	1170	225	1580	1900	1475	1155	1380	DN200	DN150	1025,0	