

*Vertical multistage centrifugal pumps completely made of stainless steel AISI 304. Reliable, quiet and easy to maintain. Suitable for municipal, Industrial and agricultural applications e.g. Fire fighting, water boosting (WRAS approved) water treatment plants, irrigation, hot and cold water movement for heating systems, cooling and airconditioners, especially suitable for boiler feed due to the robust construction of the pumps. IEC standard motors are used on all models.*



### **SPECIFICATIONS**

- Maximum working pressure:  
16 bar for models having oval flanges,  
25 bar for models having round flanges
- Liquid temperature: from  $-15^{\circ}\text{C}$  upto  $+120^{\circ}\text{C}$

### **MATERIALS**

- Pump body, external casing, casing cover, impellers, diffusers, bearing sleeve, coupling guard and bolts in contact with liquid AISI 304
- Tie-rods and bolts not in contact with liquid in zinc coated steel

- Shaft in AISI 316
- Bearing in contact with liquid in tungsten-carbide
- Bracket and base in cast iron
- Mechanical seal in SiC/SiC/NBR

### **TECHNICAL DATA**

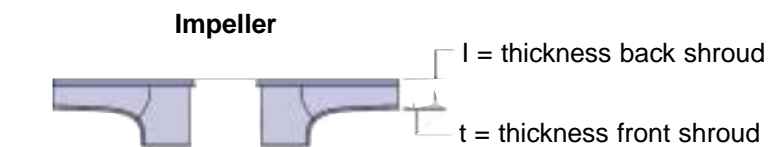
- Asynchronous 2 poles motor
- Insulation class F
- Protection IP55
- 1~220V  $\pm 10\%$  50Hz, 3~230/400V  $\pm 10\%$  50Hz up to 4Kw included, 3 400/690V  $\pm 10\%$  above

The EBARA EVM vertical multistage pumps offer technically advanced designs to meet market demands including hot water applications.

Unique bulge forming process produces rugged construction with increased wall thickness and assures component integrity.

All wetted parts are constructed of high quality stainless steel.

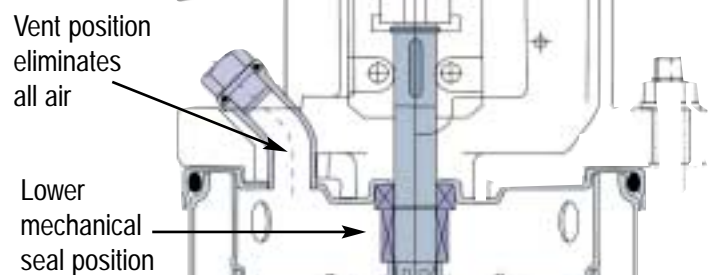
EBARA's robust construction extends to critical internal components such as the impellers. The back shrouds are as much as three times thicker than the front shrouds while front shrouds are 20% to 60% thicker than comparable designs.



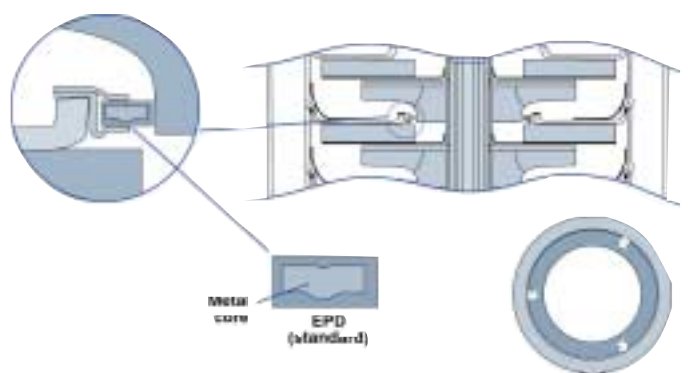
EBARA's intermediate casings are 25% to 55% thicker than comparable designs. All of this yields longer life under varying conditions.



**Air vent**  
 in casing cover allows proper venting preventing air entrapment and dry run



**Liner ring**  
 is a self-aligning, floating design constructed of EPD bonded to stainless steel to prevent swelling at high temperatures



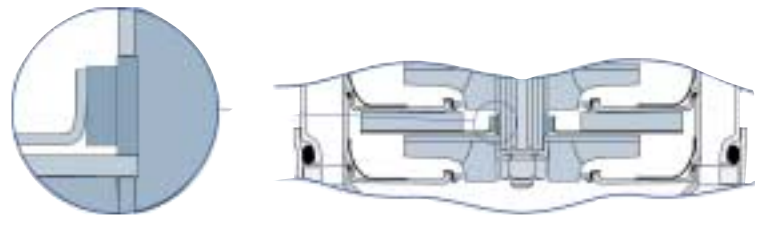
**Mechanical seal**  
 Silicon/Carbon/Viton mechanical shaft seal



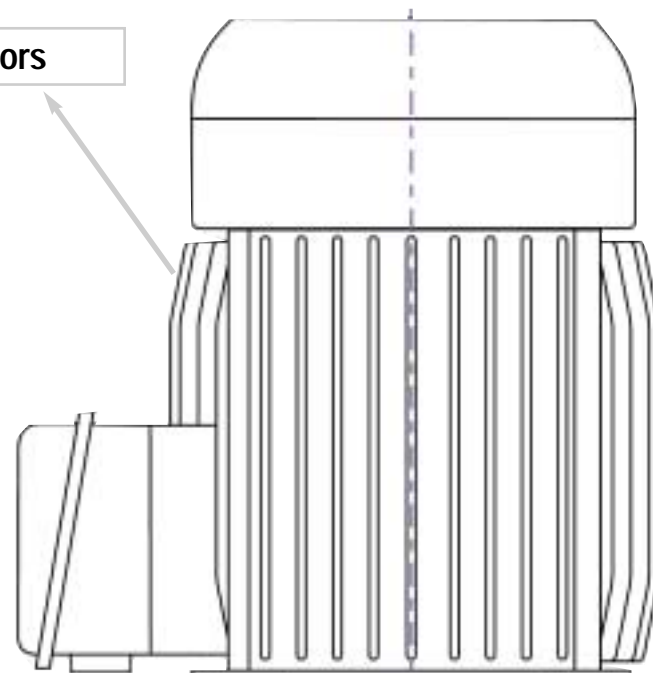
**Positive Sealing**  
 O-rings between intermediate casings provide positive sealing



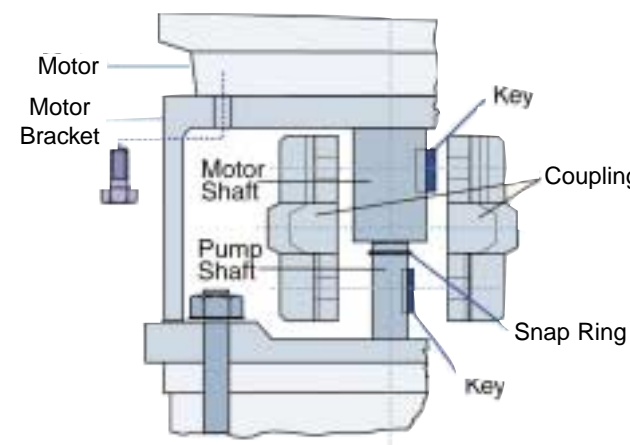
**Tungsten carbide lower pump bearings**  
 and sleeves are standard construction for all services providing maximum operating life



**Standard IEC motors**

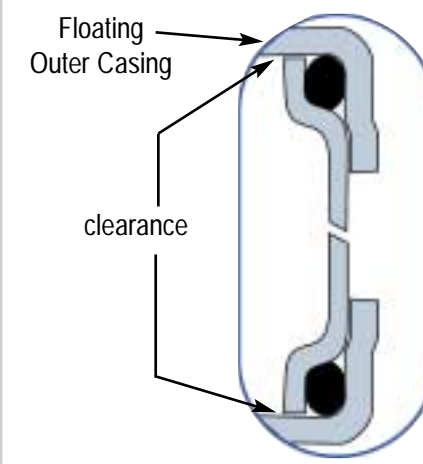


**Direct drive**  
 pump and motor shafts are keyed for positive, reliable power transmission with **no adjustments necessary**



**Floating outer casing**

allows for thermal expansion in hot water applications and is flexible preventing deformation due to pressure fluctuations

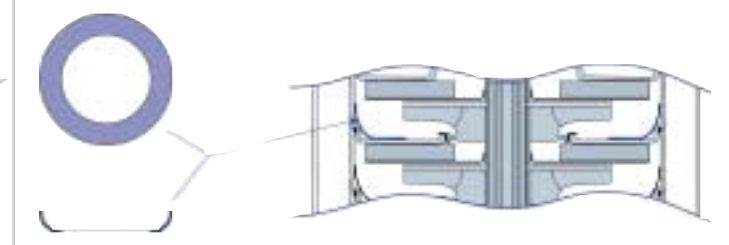


**Thrust Bearing**  
 built-in on 3 HP and larger pumps to handle axial thrust loads

Tie bolts

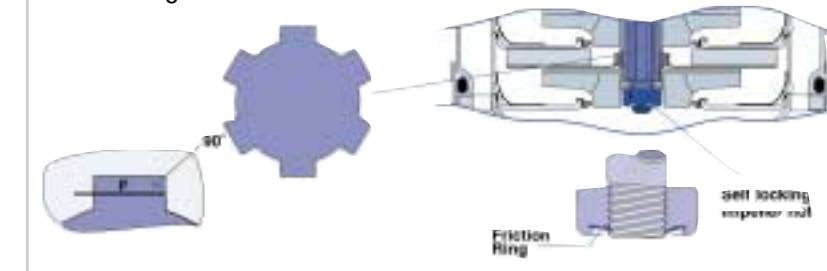
**Anti-erosion measures**

a dish-shaped insert is fitted to the intermediate casing designed to promote smooth flow and prevent high velocity areas that accelerate erosion



**Square-edge spline shaft**

provides positive location and drive of impellers eliminating wear from sliding between faces



**Dimensions & flanges**

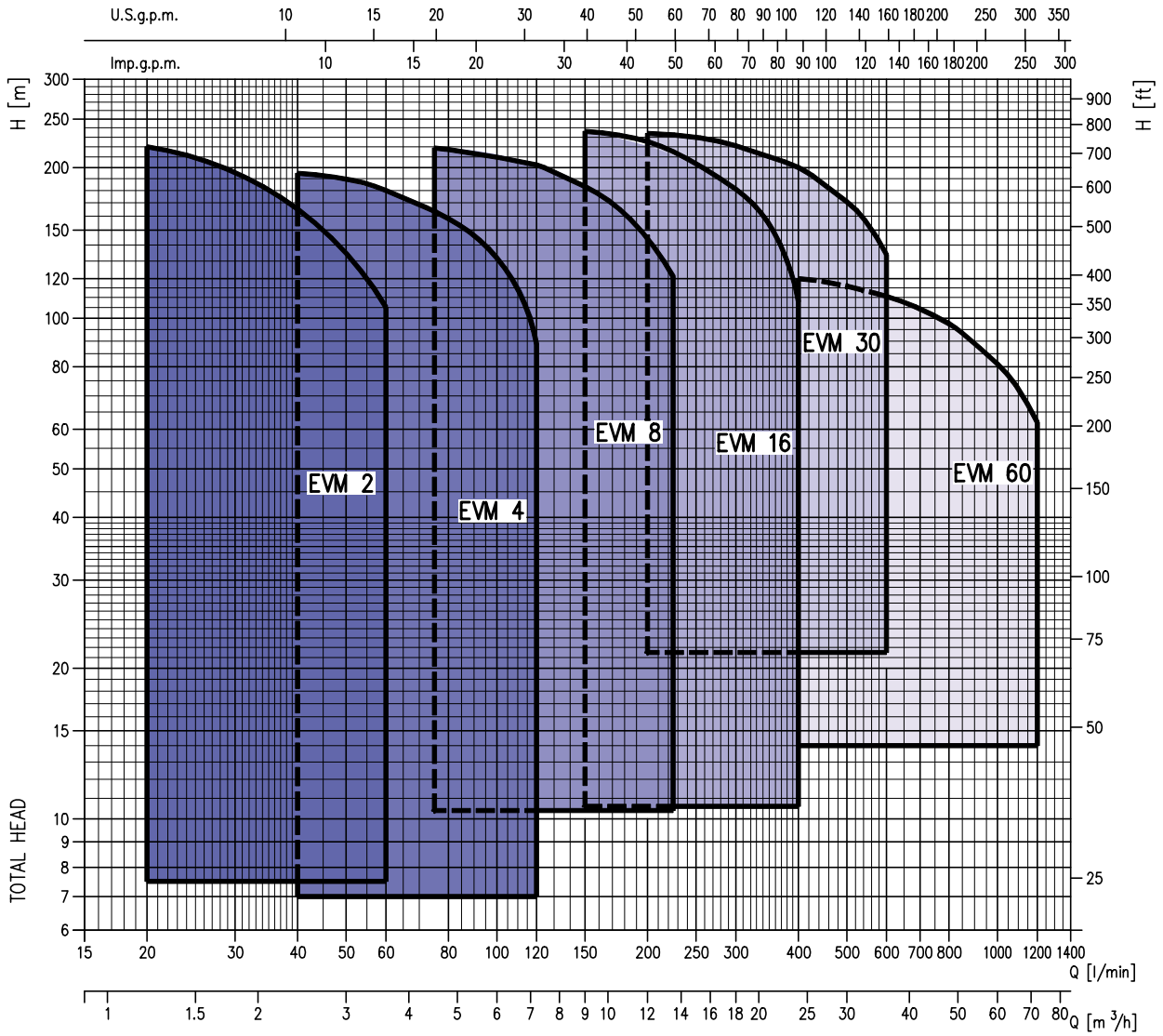
installation is to market accepted dimensions for easy upgrade of existing installations

Pump type EVM		kW	Capacitor		Absorbed Current (A)				l/min m <sup>3</sup> /h	Q=Capacity									
Monofase	Trifase		µF	Vc	1~	3~ 230V	3~ 400V	3~ 690V		20	40	60	75	80	120	150	225	300	400
										H=Total head									
										1,2	2,4	3,6	4,5	4,8	7,2	9,0	13,5	18	24
EVM2 2N/0,37 M	EVM2 2N/0,37	0,37	10	400	3,0	1,65	0,95	-	16,8	12,8	7,5	-	-	-	-	-	-	-	-
EVM2 3N/0,37 M	EVM2 3N/0,37	0,37	10	400	3,0	1,65	0,95	-	25,2	19,2	11,1	-	-	-	-	-	-	-	-
EVM2 4N/0,55 M	EVM2 4N/0,55	0,55	12	400	3,8	2,34	1,35	-	33,9	26	15,2	-	-	-	-	-	-	-	-
EVM2 5N/0,55 M	EVM2 5N/0,55	0,55	12	400	3,8	2,34	1,35	-	42	32,5	18,8	-	-	-	-	-	-	-	-
EVM2 6N/0,75 M	EVM2 6N/0,75	0,75	20	400	5,3	2,8	1,6	-	50,5	38	22,5	-	-	-	-	-	-	-	-
EVM2 7N/0,75 M	EVM2 7N/0,75	0,75	20	400	5,3	2,8	1,6	-	58,8	44,3	26,1	-	-	-	-	-	-	-	-
EVM2 9N/1,1 M	EVM2 9N/1,1	1,1	30	400	6,5	4,0	2,3	-	75,7	58,1	33,8	-	-	-	-	-	-	-	-
EVM2 11N/1,1 M	EVM2 11N/1,1	1,1	30	400	6,5	4,0	2,3	-	91,1	68,7	39,5	-	-	-	-	-	-	-	-
EVM2 13N/1,5 M	EVM2 13N/1,5	1,5	40	400	9,5	5,7	3,3	-	109	84	48,8	-	-	-	-	-	-	-	-
EVM2 15N/1,5 M	EVM2 15N/1,5	1,5	40	400	9,5	5,7	3,3	-	126	95,5	55,9	-	-	-	-	-	-	-	-
EVM2 18F/2,2 M	EVM2 18F/2,2	2,2	60	400	13	7,6	4,4	-	156	120	74	-	-	-	-	-	-	-	-
EVM2 22F/2,2 M	EVM2 22F/2,2	2,2	60	400	13	7,6	4,4	-	186	141,2	81,7	-	-	-	-	-	-	-	-
-	EVM2 26F/3,0	3,0	-	-	-	10,9	6,3	-	220	165,1	105	-	-	-	-	-	-	-	-
EVM4 2N/0,37 M	EVM4 2N/0,37	0,37	10	400	3,0	1,6	0,95	-	-	17,2	15,8	13,9	13,4	6,9	-	-	-	-	-
EVM4 3N/0,55 M	EVM4 3N/0,55	0,55	12	400	3,8	2,3	1,35	-	-	25,7	23,4	21	20,2	10,5	-	-	-	-	-
EVM4 4N/0,75 M	EVM4 4N/0,75	0,75	20	400	5,3	2,8	1,6	-	-	34,9	32	28,4	27,4	15,5	-	-	-	-	-
EVM4 5N/1,1 M	EVM4 5N/1,1	1,1	30	400	6,5	4,0	2,3	-	-	44,1	40,6	36,3	35	19,8	-	-	-	-	-
EVM4 6N/1,1 M	EVM4 6N/1,1	1,1	30	400	6,5	4,0	2,3	-	-	53,2	48,2	43,5	42	24	-	-	-	-	-
EVM4 7N/1,5 M	EVM4 7N/1,5	1,5	40	400	9,5	5,7	3,3	-	-	61,8	56,5	50,9	49	27,7	-	-	-	-	-
EVM4 8N/1,5 M	EVM4 8N/1,5	1,5	40	400	9,5	5,7	3,3	-	-	71,6	65,8	58,2	57,1	33	-	-	-	-	-
EVM4 10N/2,2 M	EVM4 10N/2,2	2,2	60	400	13	7,6	4,4	-	-	88,2	81	72,5	70,6	39,6	-	-	-	-	-
EVM4 11N/2,2 M	EVM4 11N/2,2	2,2	60	400	13	7,6	4,4	-	-	98	90,2	81,8	78,6	45	-	-	-	-	-
EVM4 12N/2,2 M	EVM4 12N/2,2	2,2	60	400	13	7,6	4,4	-	-	106	97,4	87,2	84	47,5	-	-	-	-	-
-	EVM4 14N/3,0	3,0	-	-	-	10,9	6,3	-	-	127	116	105,7	102,2	60,5	-	-	-	-	-
-	EVM4 16N/3,0	3,0	-	-	-	10,9	6,3	-	-	142	130	118	116,7	67,6	-	-	-	-	-
-	EVM4 19F/4,0	4,0	-	-	-	14,2	8,2	-	-	168	154,2	138,2	134,6	75,2	-	-	-	-	-
-	EVM4 22F/4,0	4,0	-	-	-	14,2	8,2	-	-	195	180	163,5	158,1	88,9	-	-	-	-	-
EVM8 2N/0,75 M	EVM8 2N/0,75	0,75	20	400	5,3	2,8	1,6	-	-	-	-	21,1	20,8	19,2	17,1	10,4	-	-	-
EVM8 3N/1,1 M	EVM8 3N/1,1	1,1	30	400	6,5	4,0	2,3	-	-	-	-	32	31,8	29,5	26,8	16,7	-	-	-
EVM8 4N/1,5 M	EVM8 4N/1,5	1,5	40	400	9,5	5,7	3,3	-	-	-	-	42,8	42,2	40	36,1	22,6	-	-	-
EVM8 5N/2,2 M	EVM8 5N/2,2	2,2	60	400	13	7,6	4,4	-	-	-	-	53,6	53	49,1	44,3	28,3	-	-	-
EVM8 6N/2,2 M	EVM8 6N/2,2	2,2	60	400	13	7,6	4,4	-	-	-	-	64,4	64,2	59	53,6	33,8	-	-	-
-	EVM8 8N/3,0	3,0	-	-	-	7,6	6,3	-	-	-	-	85,7	85	80,2	72,5	45,8	-	-	-
-	EVM8 10N/4,0	4,0	-	-	-	10,9	8,2	-	-	-	-	107	106	98,4	87,9	56,5	-	-	-
-	EVM8 11N/4,0	4,0	-	-	-	14,2	8,2	-	-	-	-	117	116,2	108	97,8	61,4	-	-	-
-	EVM8 12N/5,5	5,5	-	-	-	14,2	11,5	6,6	-	-	-	129	127,1	118,4	107,5	67,8	-	-	-
-	EVM8 14N/5,5	5,5	-	-	-	-	11,5	6,6	-	-	-	150	148,3	137,5	124,8	79,1	-	-	-
-	EVM8 15F/5,5	5,5	-	-	-	-	11,5	6,6	-	-	-	162	160,7	148,7	134,2	86,6	-	-	-
-	EVM8 16F/7,5	7,5	-	-	-	-	15,3	8,8	-	-	-	171	170	157,8	140,9	90,4	-	-	-
-	EVM8 18F/7,5	7,5	-	-	-	-	15,3	8,8	-	-	-	193	191,2	176,2	158	102	-	-	-
-	EVM8 20F/7,5	7,5	-	-	-	-	15,3	8,8	-	-	-	219	217,2	202,3	183,2	121	-	-	-
EVM16 2F/2,2 M	EVM16 2F/2,2	2,2	60	400	13	7,6	4,4	-	-	-	-	-	-	29	26,2	21,1	10,6	-	-
-	EVM16 3F/3,0	3,0	-	-	-	10,9	6,3	-	-	-	-	-	-	43,6	38,1	30,7	15,4	-	-
-	EVM16 4F/4,0	4,0	-	-	-	14,2	8,2	-	-	-	-	-	-	58,2	52	42,3	22,3	-	-
-	EVM16 5F/5,5	5,5	-	-	-	-	11,5	6,6	-	-	-	-	-	73,8	67,1	54,9	29,5	-	-
-	EVM16 6F/5,5	5,5	-	-	-	-	11,5	6,6	-	-	-	-	-	88,3	79,8	65	35,8	-	-
-	EVM16 7F/7,5	7,5	-	-	-	-	15,3	8,8	-	-	-	-	-	103	92,5	76,5	41,3	-	-
-	EVM16 8F/7,5	7,5	-	-	-	-	15,3	8,8	-	-	-	-	-	119	108	88,1	49,2	-	-
-	EVM16 10F/11	11	-	-	-	-	20,4	11,8	-	-	-	-	-	148	132,2	108,9	59	-	-
-	EVM16 12F/11	11	-	-	-	-	20,4	11,8	-	-	-	-	-	181	164,5	138	77,6	-	-
-	EVM16 14F/15	15	-	-	-	-	27,6	15,9	-	-	-	-	-	207	186,5	152,3	82,6	-	-
-	EVM16 15F/15	15	-	-	-	-	27,6	15,9	-	-	-	-	-	226	207	171,8	100	-	-
-	EVM16 16F/15	15	-	-	-	-	27,6	15,9	-	-	-	-	-	236	215,2	181	108	-	-

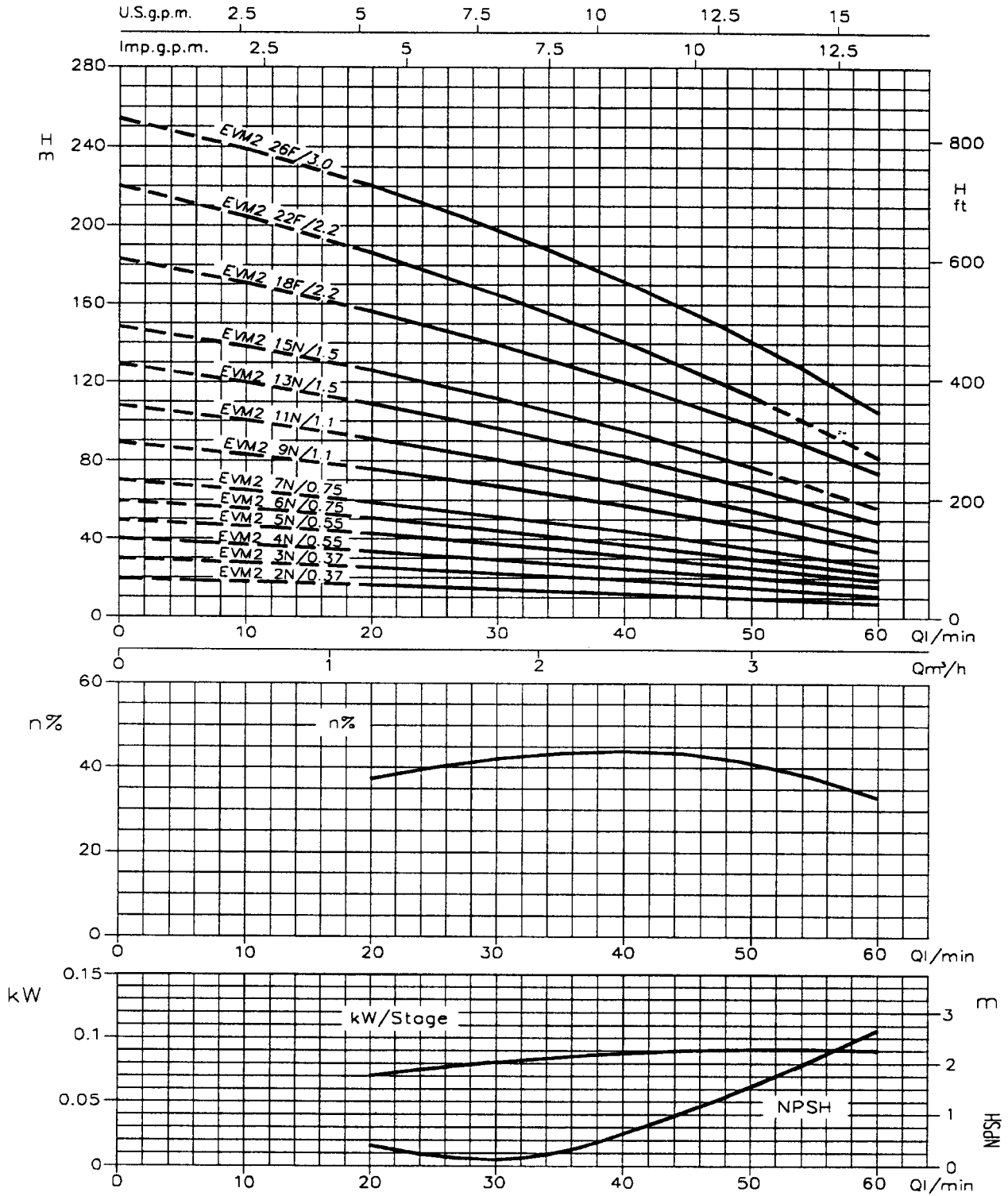
Pump type EVM	kW	Absorbed Current (A)			l/min m <sup>3</sup> /h	Q=Capacity			l/min m <sup>3</sup> /h	Q=Capacity		
		230V	Trifase 400V	690V		210	420	600		400	800	1200
						H=Total head						
EVM30 2F/4	4	12,9	7,4	-	38	32	21,5	-	-	-	-	-
EVM30 3F/5,5	5,5	-	10,5	6,1	56	46	30	-	-	-	-	-
EVM30 4F/7,5	7,5	-	13,9	8,1	77	64	42	-	-	-	-	-
EVM30 6F/11	11	-	20,0	11,6	112	92	62,5	-	-	-	-	-
EVM30 8F/15	15	-	26,5	15,4	155	127	88	-	-	-	-	-
EVM30 10F/18	18,5	-	32,0	18,6	193	162	112	-	-	-	-	-
EVM30 12F/22	22	-	38,5	22,3	232	195	132	-	-	-	-	-
EVM60 2F/5,5	5,5	-	10,5	6,1	-	-	-	30	24	14	-	-
EVM60 3F/7,5	7,5	-	13,9	8,1	-	-	-	43	34,5	19,5	-	-
EVM60 4F/11	11	-	20,0	11,6	-	-	-	59,5	48	28,5	-	-
EVM60 6F/15	15	-	26,5	15,4	-	-	-	83,5	67,5	40	-	-
EVM60 7F/18	18	-	32,0	18,6	-	-	-	103,5	84	52	-	-
EVM60 8F/22	22	-	38,5	22,3	-	-	-	120	97,5	62	-	-

TEMPORARY

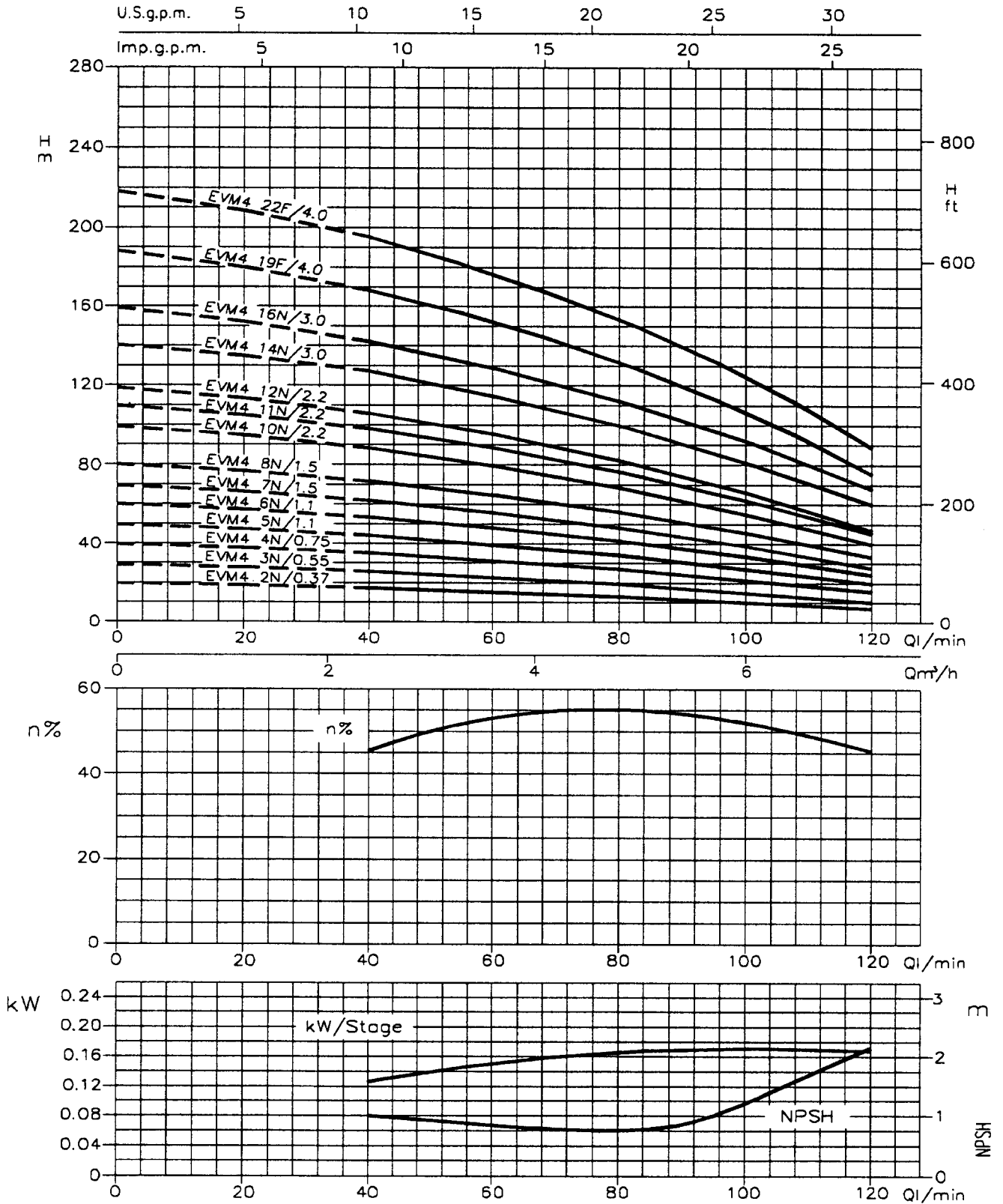
**PERFORMANCE CHART** (according to ISO 9906 grade 2)



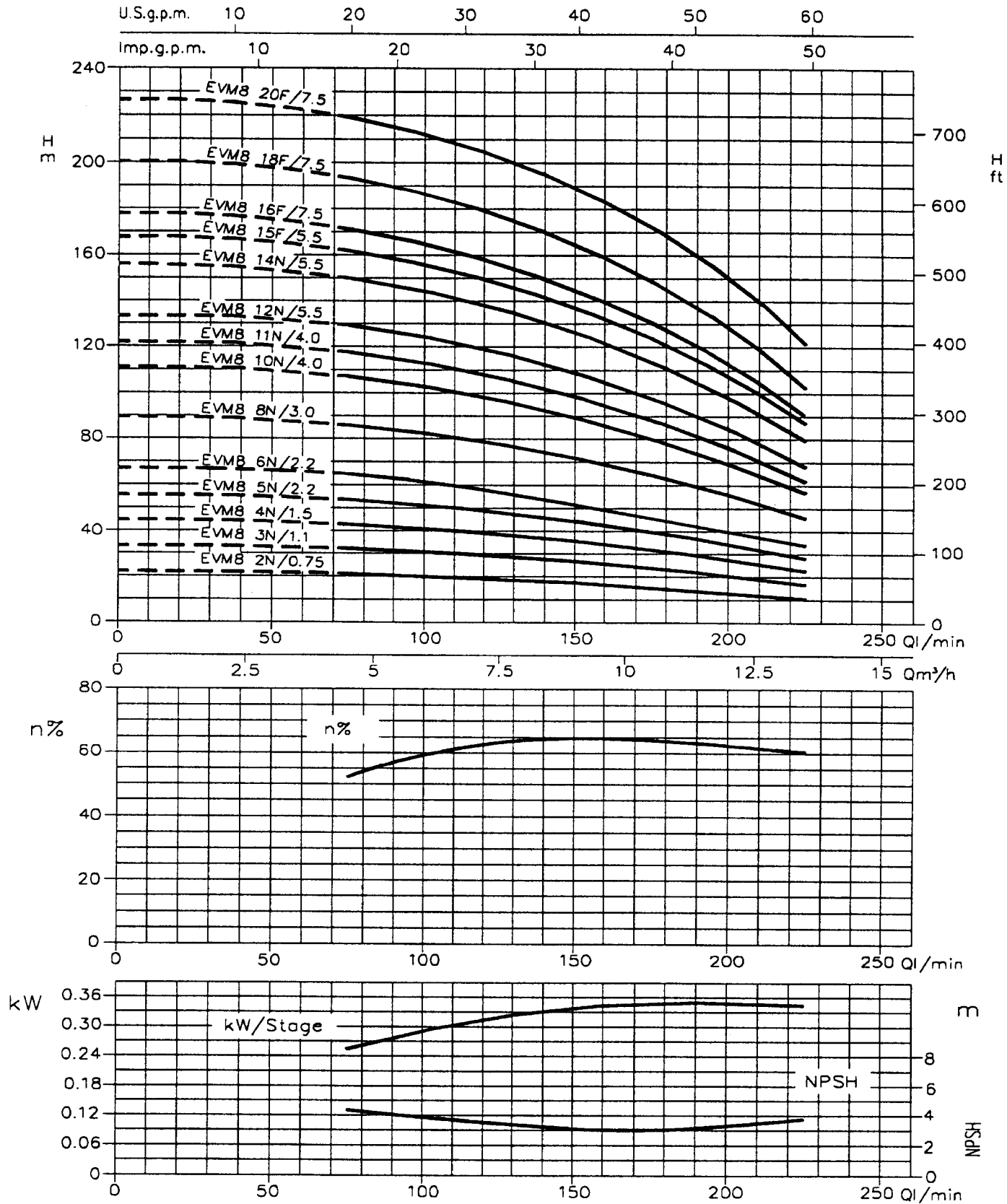
### PERFORMANCE CURVES EVM2 series (according to ISO 9906 grade 2)



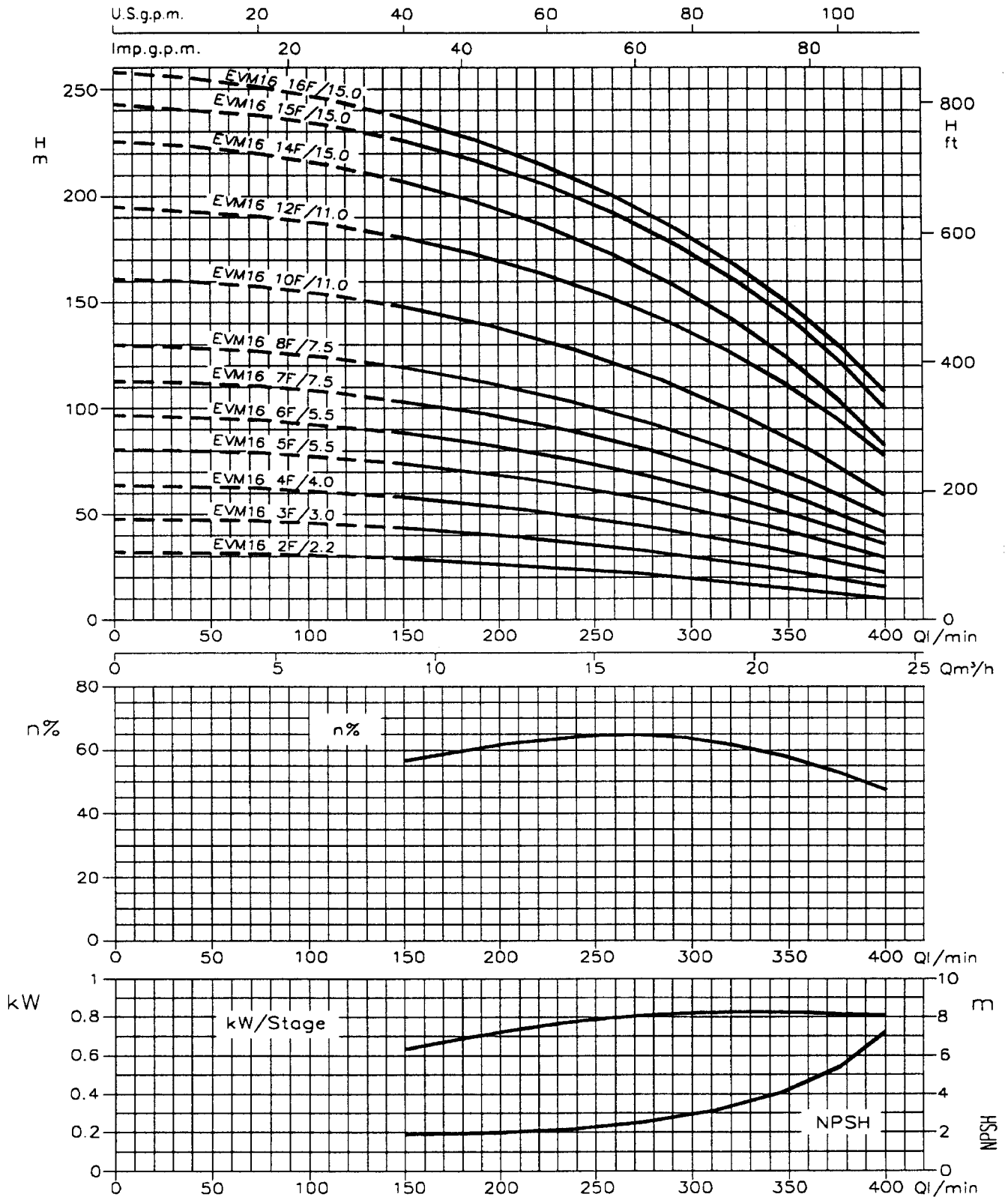
**PERFORMANCE CURVES EVM4 series** (according to ISO 9906 grade 2)



### PERFORMANCE CURVES EVM8 series (according to ISO 9906 grade 2)



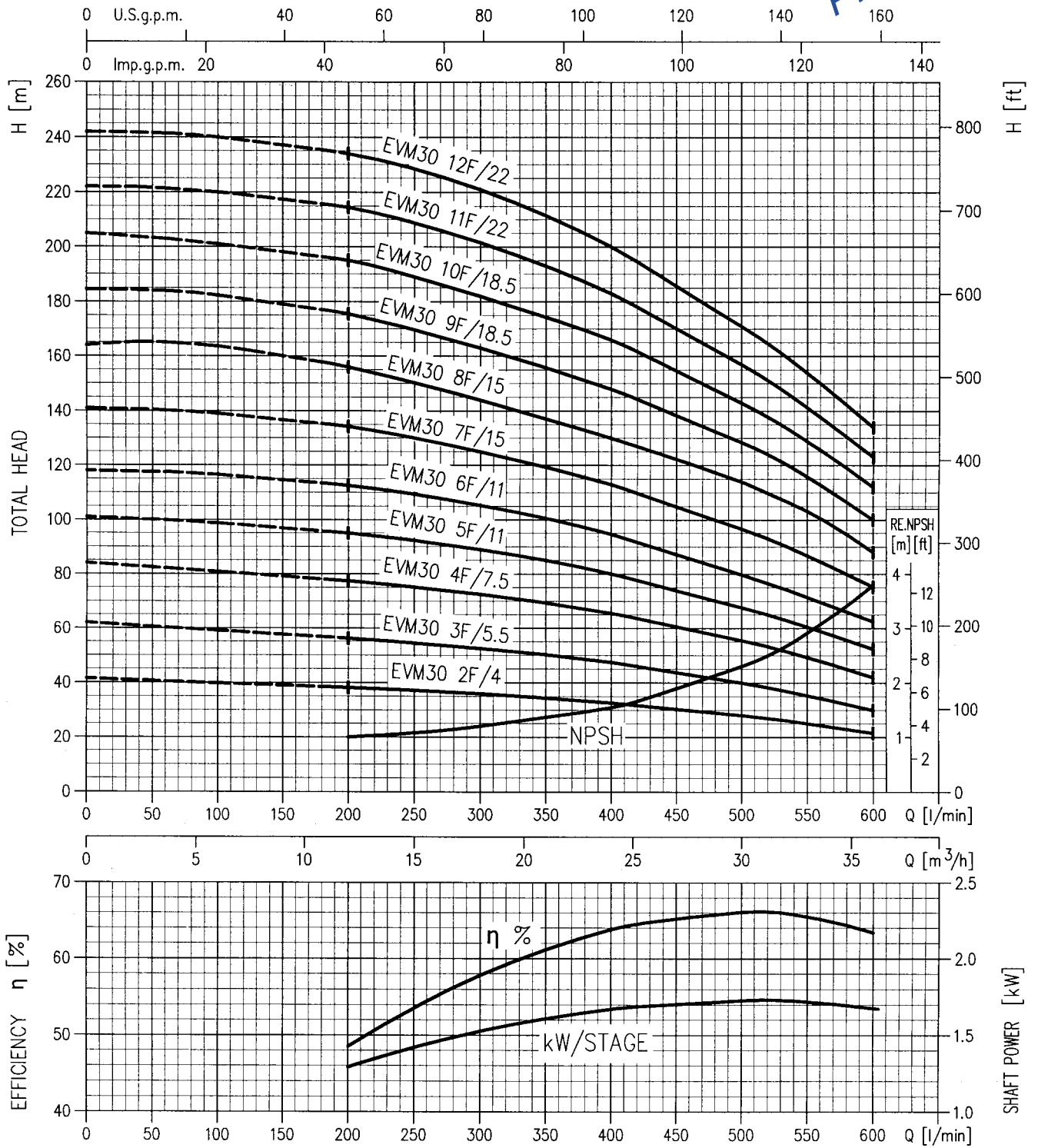
**PERFORMANCE CURVES EVM16 series** (according to ISO 9906 grade 2)





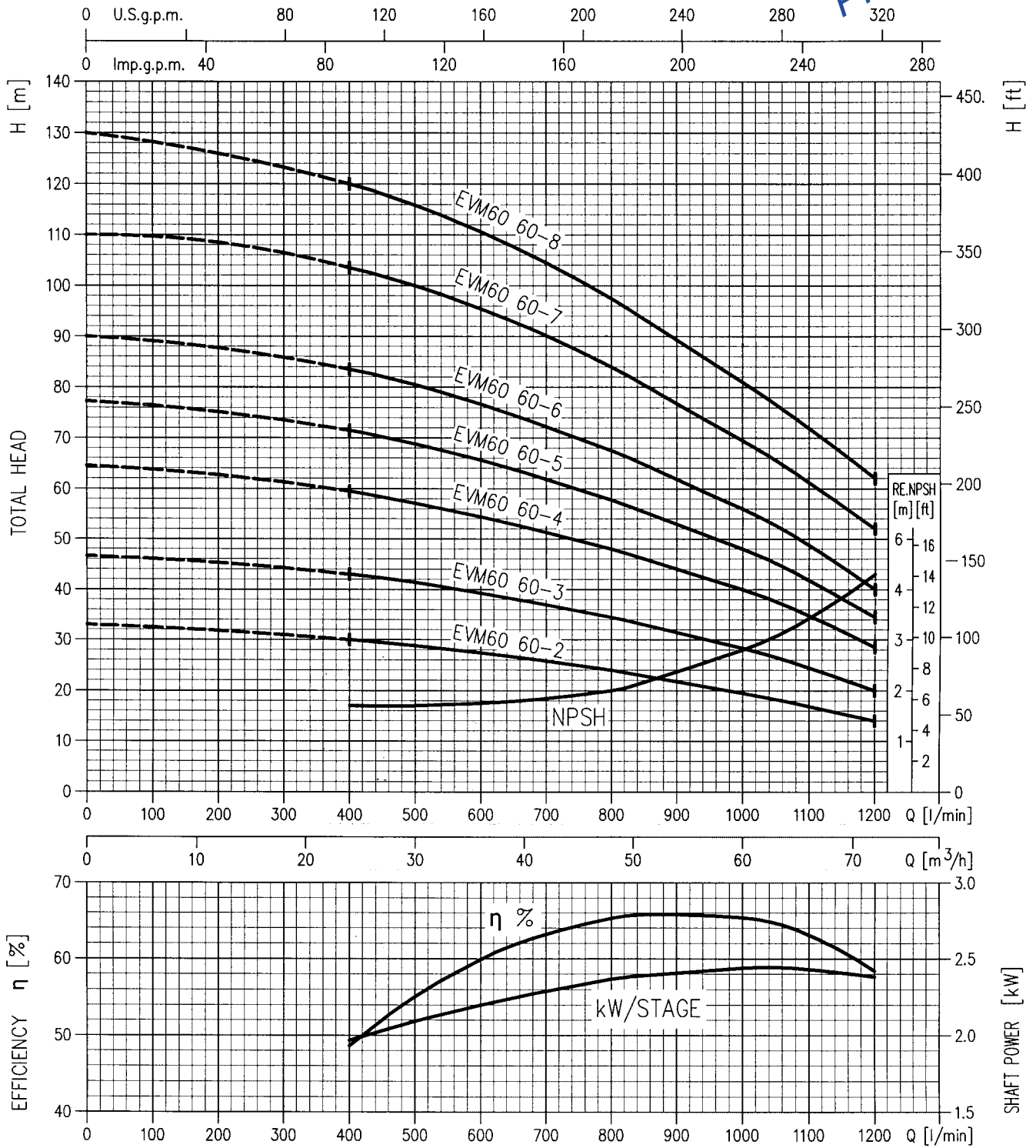
PERFORMANCE CURVES EVM 30 series (according to ISO 9906 grade 2)

PREVISIONAL

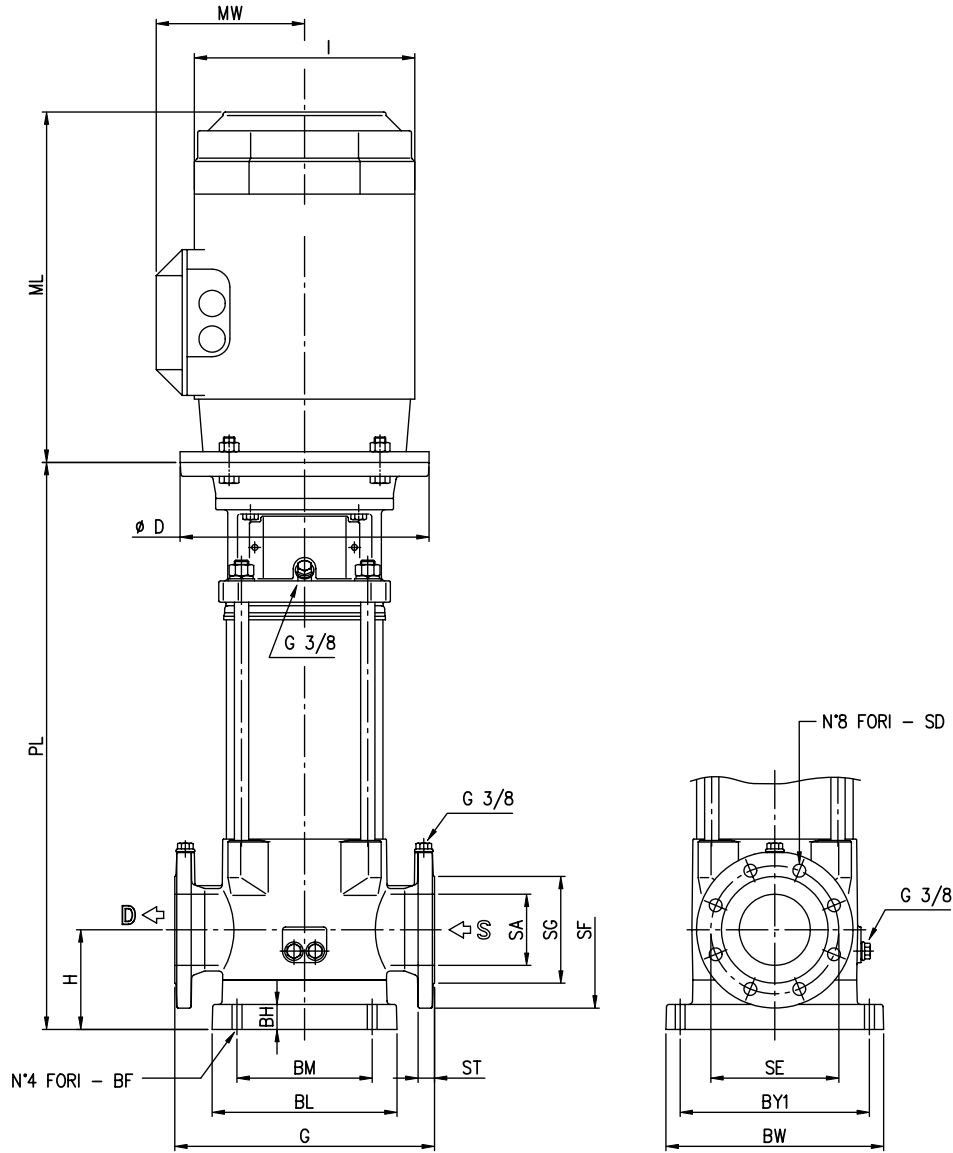


PERFORMANCE CURVES EVM 60 series (according to ISO 9906 grade 2)

PREVISIONAL






**DIMENSIONAL TABLE**

Pump type	Motor type Size	Dimensions (mm)																	Weights			
		H	PL	ML	D	G	I	MW	SA	SG	SE	SF	ST	SD	BL	BW	BM	BY1	BF	BH	Pump ( kgf )	Motor ( kgf )
EVM30 2F/4	112		502	301	250		221	146													60,5	25
EVM30 3F/5,5	132		571	367	300		261	163,5													75,5	37
EVM30 4F/7,5	132		619		300																79	42
EVM30 5F/11	160		697																		93	73
EVM30 6F/11	160		745																		96	73
EVM30 7F/15	160	105	793			320			65	122	145	185	22	18	210	280	170	240	14	35	100	84
EVM30 8F/15	160		841	492,5	350		310	208,5													103	84
EVM30 9F/18,5	160		889																		106,5	94
EVM30 10F/18,5	160		937																		110	94
EVM30 11F/22	180		985					223,5													115,5	119
EVM30 12F/22	180		1033	570			360														119	119
EVM60 2F/5,5	132		623,5																		84,5	37
EVM60 3F/7,5	132		695,5	367	300		261	163,5													88,5	42
EVM60 4F/11	160		797,5																		104	73
EVM60 5F/15	160	140	869,5			365			100	150	180	220	24	18	260	306	190	266	14	35	108	84
EVM60 6F/15	160		941,5	492,5	350		310	208,5													112	84
EVM60 7F/18,5	160		1013,5																		116	94
EVM60 8F/22	180		1085,5	570			360	223,5													123	119