

پمپ عمودی طبقاتی استیل ابارا سری EVM 32



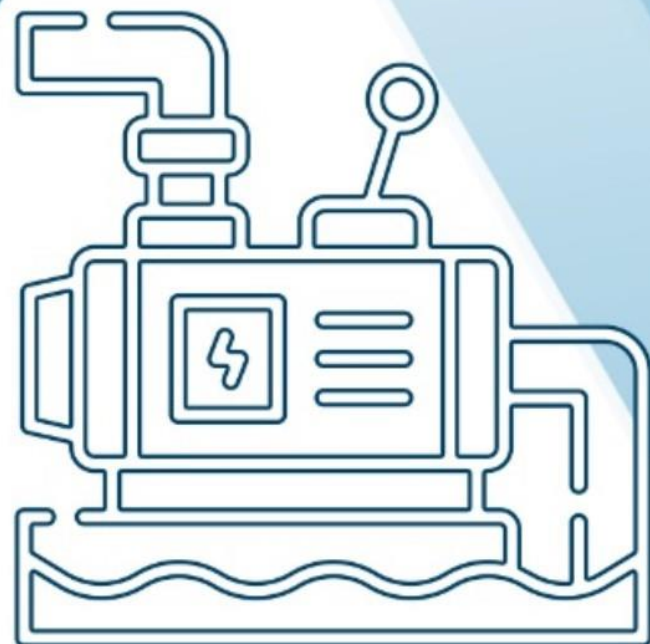
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PUMP

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از این که کالا صنعتی را انتخاب کرده اید از شما ممنونیم. گروه کالا صنعتی را میتوان بهترین شرکت برای مشاوره و خرید کالای صنعتی دانست. این شرکت با ترکیب صنعت و تکنولوژی توانسته بهترین خدمات مشاوره ای در زمینه خرید کالای صنعتی و به طور تخصصی پمپ آلات خانگی و صنعتی موجود در بازار را ارائه دهد. انواع پمپ آب خانگی، کفکش، لجن کش، موتور پمپ، شناور، پمپ وکیوم، بیستونی، دیافراگمی، پمپ دنده ای و بسیاری کالاهای مرتبط با این دسته بندی ها، در سایت کالا صنعتی قابل خرید بوده و سعی بر آن است که قیمت های درج شده کاملاً به روز باشد تا اینکه تصمیم گیری برای مشتریان و کارشناسان فنی شرکت ها آسان شود.

در راستای ارزشمندی مشاوره برای انتخاب پمپ، آماده کردن دیتاشیت و کاتالوگ های با کیفیت در دستور کار این شرکت قرار گرفته است. در ذیل دیتاشیت پمپ طبقاتی ابارا آمده و این مشخصات مربوط به آخرین ویرایش شرکت سازنده می باشد.

- نکته: همواره سعی بر آن بوده که مشخصات و اطلاعات مربوط به کاتالوگ ها به صورت دقیق بازنویسی و نگارش شود. اما به صورت سهوی ممکن است اشکالات نگارشی در کاتالوگ وجود داشته باشد.



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آموزش، انتخاب، خرید



SPECIFICATIONS

50Hz

Rev. G

EVM(.) 32-64

PUMP					
Type		EVMG	EVM	EVML	
Liquid Handled	Type of liquid	Clean water, water contains glycol and moderately aggressive fluids			
	Temperature [°C]	-15 to +120			
	Max solid content	50 ppm (Particle size 0,1-0,25mm or less)			
	Max chlorine ion density	500 ppm			
Maximum working pressure		[MPa]	1.6 / 3.0		
		[bar]	16 / 30		
Construction	Impeller	Closed centrifugal type			
	Shaft seal type	Mechanical seal			
	Bearing	Sealed ball bearing with permanent grease			
Pipe connection	Suction /Discharge	See the dimension table			
Material	Impeller	EN 1.4301(AISI 304)		EN 1.4401 (AISI 316)	
	Intermediate casing	EN 1.4301(AISI 304)		EN 1.4401 (AISI 316)	
	Bottom casing	Cast iron	ASTM CF8	ASTM CF8M	
	Casing cover	Cast iron	Cast iron + EN 1.4301 (AISI 304)	Cast iron + EN 1.4401 (AISI 316)	
	Outer casing	EN 1.4301(AISI 304)		EN 1.4401 (AISI 316)	
	Shaft	EN 1.4401 (AISI 316)			
	Liner ring	EVM32	PTFE / EN 1.4301 (AISI 304)		PTFE / EN 1.4401 (AISI 316)
		EVM45,64	PTFE / EN 1.4401 (AISI 316)		
	Motor bracket	Cast iron			
	Mechanical Seal	Silicon Carbide/Carbon/FPM			
	O-Ring	EPDM	EPDM	FPM	
Applicable standard of test		ISO 9906 annex A			

MOTOR			
Type		Electric -TEFC	
		Single phase	Three phase
Efficiency		/	IE2 from 2.2 kW up to 37 kW
No. of Poles		2	
Rotation speed [min-1]		≈ 2900	
Insulation class		Class F (class B for temperature rise)	
Protection form		IP 55	
Power rating	[kW]	2.2	2.2*37
	[HP]	3	3.0*50
Frequency [Hz]		50	
Voltage	[V]	230 ± 10 %	230/400 ± 10% (up to 4 kW) 400/690 ± 10% (above 5.5 kW)
Over load protection		User to provide	
Casing material		Aluminium	
Flange mount (IEC motor)		IM B14 (up to 4 kW)	
		IM B5 (above 5.5 kW)	

SELECTION CHART

50Hz

Rev. G

EVM(.) 32-64

Pump Type EVM()	Motor			Maximum working pressure [Mpa]	Q=Capacity												
	kW	HP	Size		l/min	0	200	350	500	600	700	900	1000	1200	1400		
					m³/h	0	12	21	30	36	42	54	60	72	84		
					H=Total manometric head in meters												
32 1-0F5/2.2	2.2	3	90L	1.6	24	21.7	19.6	16.4	13.2	9.7	-	-	-	-	-		
32 2-2F5/3.0	3	4	100		39.8	36.9	31.6	23.5	17.4	-	-	-	-	-	-	-	
32 2-0F5/4.0	4	5.5	112		48	43.5	39.2	32.8	26.5	19.4	-	-	-	-	-	-	
32 3-3F5/5.5	5.5	7.5	132S		59.5	55.5	47.5	35.2	26.1	-	-	-	-	-	-	-	
32 3-1F5/5.5	5.5	7.5	132S		68	62	55	44.5	35.2	24.5	-	-	-	-	-	-	
32 4-3F5/7.5	7.5	10	132S		84	77	67.0	51.5	39.4	-	-	-	-	-	-	-	
32 4-1F5/7.5	7.5	10	132S		92	83.5	74.5	61	48.5	34.2	-	-	-	-	-	-	
32 5-3F5/11	11	15	160M		106	100	89	70	54	37.3	-	-	-	-	-	-	
32 5-0F5/11	11	15	160M		118	110	100	84	67	49	-	-	-	-	-	-	
32 6-3F5/11	11	15	160M		130	122	109	87	67.5	47	-	-	-	-	-	-	
32 6-2F5/11	11	15	160M		133	125	113	91.5	71.5	51	-	-	-	-	-	-	
32 7-3F5/15	15	20	160M		153	144	129	104	81	57	-	-	-	-	-	-	
32 7-0F5/15	15	20	160M		165	154	141	118	94	69	-	-	-	-	-	-	
32 8-3F5/15	15	20	160M		177	166	150	121	94.0	67	-	-	-	-	-	-	
32 8-1F5/15	15	20	160M		184	172	157	130	103	75	-	-	-	-	-	-	
32 9-3F5/18.5	18.5	25	160L	2.5	200	188	170	137	108	76.5	-	-	-	-	-		
32 9-0F5/18.5	18.5	25	160L		212	197	181	152	121	88.5	-	-	-	-	-	-	
32 10-3F5/18.5	18.5	25	160L		224	210	190	154	121	86.5	-	-	-	-	-	-	
32 10-2F5/18.5	18.5	25	160L		228	213	193	159	125	90.5	-	-	-	-	-	-	
32 11-3F5/22	22	30	180		247	232	210	171	134	96.5	-	-	-	-	-	-	
32 11-0F5/22	22	30	180		259	241	221	185	147	108	-	-	-	-	-	-	
32 12-3F5/22	22	30	180		271	254	230	188	148	106	-	-	-	-	-	-	
32 13-3F5/30	30	40	200		294	276	250	205	161	116	-	-	-	-	-	-	
32 13-0F5/30	30	40	200	306	285	261	219	174	128	-	-	-	-	-	-		
32 14-3F5/30	30	40	200	318	298	270	222	175	126	-	-	-	-	-	-		
32 14-0F5/30	30	40	200	330	307	281	236	188	138	-	-	-	-	-	-		
45 1-1F5/3.0	3	4	100	1.6	21.0	-	18.9	17.6	16.3	14.3	8.3	-	-	-	-		
45 1-0F5/4.0	4	5.5	112		27.0	-	25.6	24.6	23.5	21.8	16.7	13.3	-	-	-	-	
45 2-2F5/5.5	5.5	7.5	132S		42.0	-	38.1	35.8	33.4	29.8	18.6	-	-	-	-	-	
45 2-0F5/7.5	7.5	10	132S		54.0	-	51.5	50	48	45	35.4	29.1	-	-	-	-	
45 3-2F5/11	11	15	160M		69.0	-	64	61	58	53	37.3	-	-	-	-	-	
45 3-0F5/11	11	15	160M		81.0	-	77.5	75	72.5	68	54	45	-	-	-	-	
45 4-2F5/15	15	20	160M		96.0	-	90	86	82	76	56	43	-	-	-	-	
45 4-0F5/15	15	20	160M		108.0	-	103	100	96.5	91	73	60.5	-	-	-	-	
45 5-2F5/18.5	18.5	25	160L		123.0	-	116	111	107	99.0	74.5	58.5	-	-	-	-	
45 5-0F5/18.5	18.5	25	160L		135.0	-	129	125	121	114	91.5	76.5	-	-	-	-	
45 6-2F5/22	22	30	180		2.5	150.0	-	142	137	131	122	93.5	74.5	-	-	-	
45 6-0F5/22	22	30	180			162.0	-	155	151	146	137	110	92.5	-	-	-	-
45 7-2F5/30	30	40	200			177.0	-	168	162	155	145	112	90.5	-	-	-	-
45 7-0F5/30	30	40	200			189.0	-	181	176	170	160	129	108	-	-	-	-
45 8-2F5/30	30	40	200			204.0	-	194	187	180	168	131	106	-	-	-	-
45 8-0F5/30	30	40	200	216.0		-	207	201	194	183	148	124	-	-	-	-	
45 9-2F5/30	30	40	200	231.0		-	219	212	204	191	150	122	-	-	-	-	
45 9-0F5/37	37	50	200	243.0		-	233	226	219	206	166	140	-	-	-	-	
45 10-2F5/37	37	50	200	3.0	258.0	-	245	237	229	214	168	138	-	-	-		
45 10-0F5/37	37	50	200		270.0	-	259	251	243	229	185	156	-	-	-	-	
64 1-1F5/4.0	4	5.5	100		23.7	-	-	21	20.4	19.7	17.5	15.9	11.4	-	-	-	
64 1-0F5/5.5	5.5	7.5	132S		29.3	-	-	26.6	26.1	25.4	23.7	22.3	18.5	13.5	-	-	
64 2-2F5/7.5	7.5	10	132S		47.5	-	-	42.5	41.5	40.5	36.5	33.5	25.3	-	-	-	
64 2-1F5/11	11	15	160M		53.0	-	-	48	47	46	42.5	40	32.4	23	-	-	
64 2-0F5/11	11	15	160M		58.5	-	-	53.5	53	52	49	46.5	39.5	30.6	-	-	
64 3-3F5/15	15	20	160M		71.0	-	-	64	62.5	61	55.5	51	39.3	-	-	-	
64 3-2F5/15	15	20	160M	76.5	-	-	69.5	68	66.5	61.5	57.5	46.5	32.5	-	-		
64 3-1F5/15	15	20	160M	1.6	82.5	-	-	75	74	72.5	68	64	53.5	40	-		
64 3-0F5/18.5	18.5	25	160L		88.0	-	-	80.5	79.5	78	74	70.5	60.5	47.5	-	-	
64 4-3F5/18.5	18.5	25	160L		100.0	-	-	91	89	87	80.5	75.5	60.5	42	-	-	
64 4-2F5/18.5	18.5	25	160L		106.0	-	-	96.5	95	93	87	81.5	67.5	49.5	-	-	
64 4-1F5/22	22	30	180		112.0	-	-	102	101	98.5	93	88	74.5	57	-	-	
64 4-0F5/22	22	30	180		117.0	-	-	108	106	104	99.0	94.5	81.5	64.5	-	-	
64 5-3F5/30	30	40	200		130.0	-	-	118	116	114	106	99.5	81.5	59.0	-	-	
64 5-2F5/30	30	40	200		135.0	-	-	124	122	119	112	106	88.5	66.5	-	-	
64 5-1F5/30	30	40	200		141.0	-	-	129	127	125	118	112	95.5	74.0	-	-	
64 5-0F5/30	30	40	200		147.0	-	-	135	133	131	124	119	103	81.5	-	-	
64 6-3F5/30	30	40	200		159.0	-	-	145	143	140	131	124	103	76.0	-	-	
64 6-2F5/30	30	40	200		165.0	-	-	151	148	146	137	130	110	83.5	-	-	
64 6-1F5/37	37	50	200		170.0	-	-	156	154	151	143	136	117	91.0	-	-	
64 6-0F5/37	37	50	200		176.0	-	-	162	160	157	149	143	124	99.0	-	-	
64 7-3F5/37	37	50	200		188.0	-	-	172	169	166	156	148	124	93.0	-	-	
64 7-2F5/37	37	50	200	194.0	-	-	178	175	172	162	154	131	101	-	-		
64 7-1F5/37	37	50	200	200.0	-	-	183	181	178	168	161	138	108	-	-		

PERFORMANCE CURVE

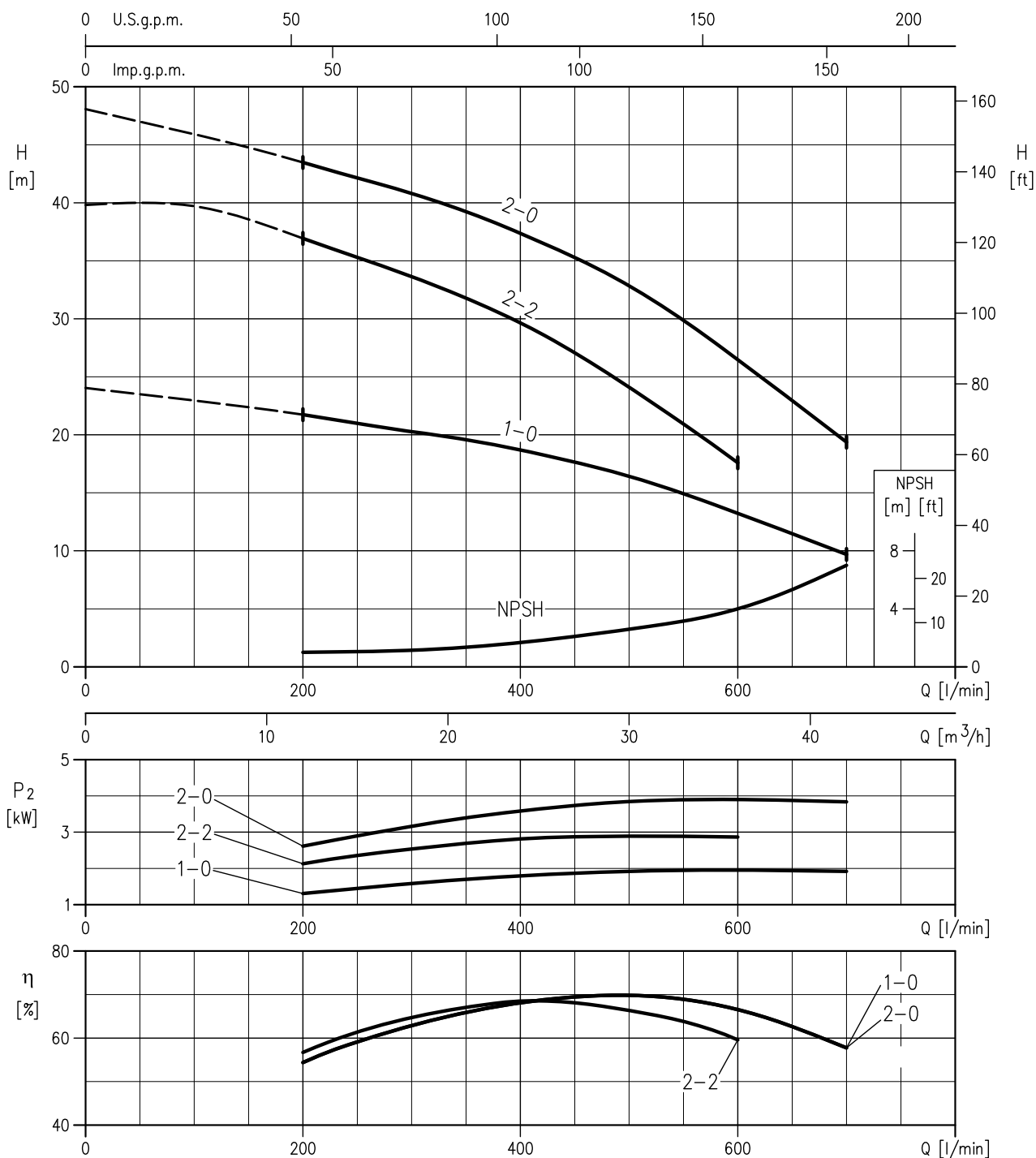
50Hz

Rev. G

EVM32 1-0 F5 2.2 (2.2kW) MEI > 0.60 no.1 impeller diameter = 136 mm

EVM32 2-2F5 3.0 (3.0 kW) MEI > 0.60 no.2 impellers diameter = 125 mm

EVM32 2-0 F5 4.0 (4.0kW) MEI > 0.60 no.2 impellers diameter = 136 mm



Rotation speed $\approx 2900 \text{ min}^{-1}$
Test standard: ISO 9906-Annex A

PERFORMANCE CURVE

50Hz

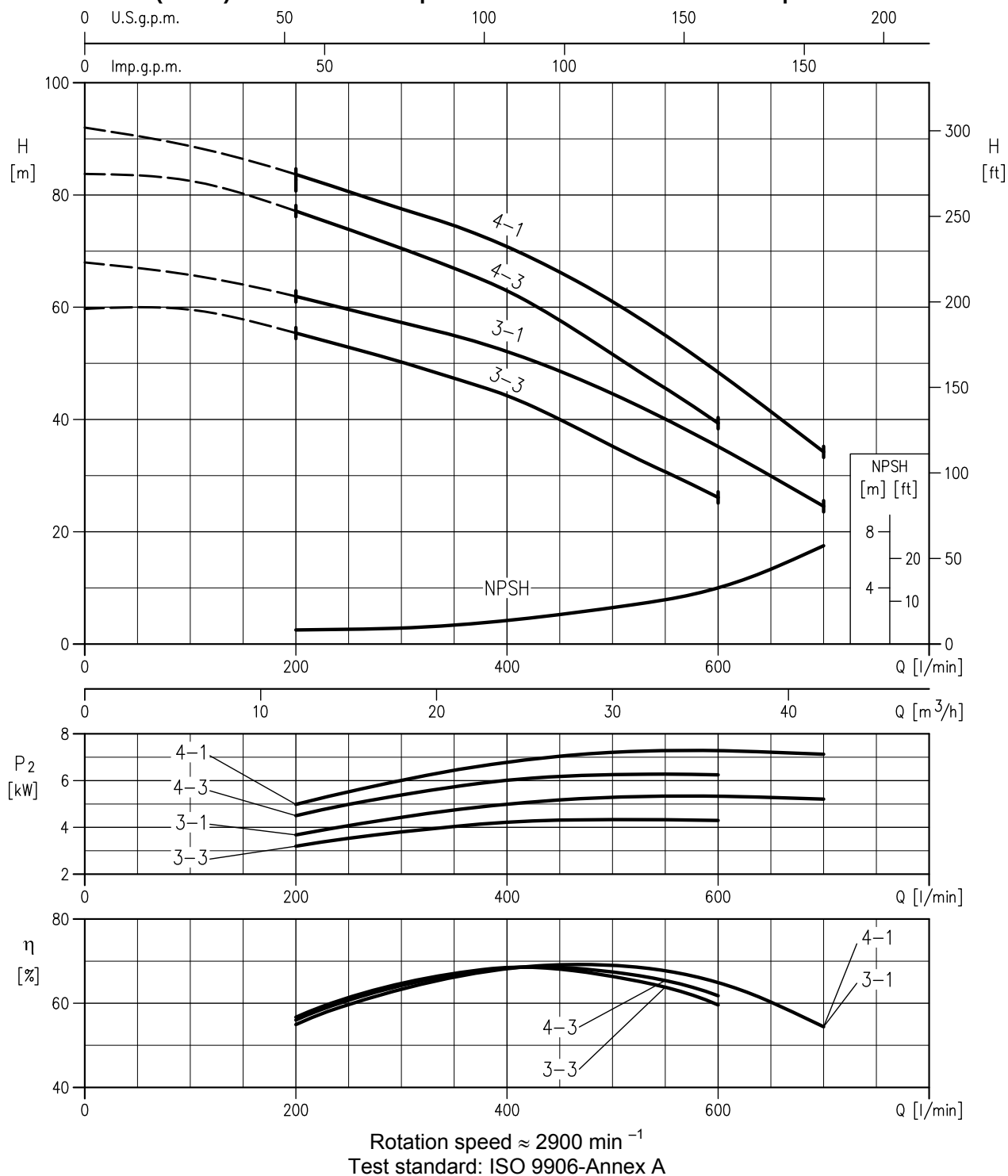
Rev. G

EVM32 3-3 F5 5.5 (5.5kW) MEI > 0.60 no.3 impellers diameter = 125 mm

EVM32 3-1 F5 5.5 (5.5kW) MEI > 0.60 no.2 impellers diameter = 136 mm / no. 1 impeller diameter = 125mm

EVM32 4-3 F5 7.5 (7.5kW) MEI > 0.60 no.1 impeller diameter = 136 mm / no. 3 impellers diameter= 125 mm

EVM32 4-1 F5 7.5 (7.5kW) MEI > 0.60 no.3 impellers diameter = 136 mm / no. 1 impeller diameter = 125 mm



PERFORMANCE CURVE

50Hz

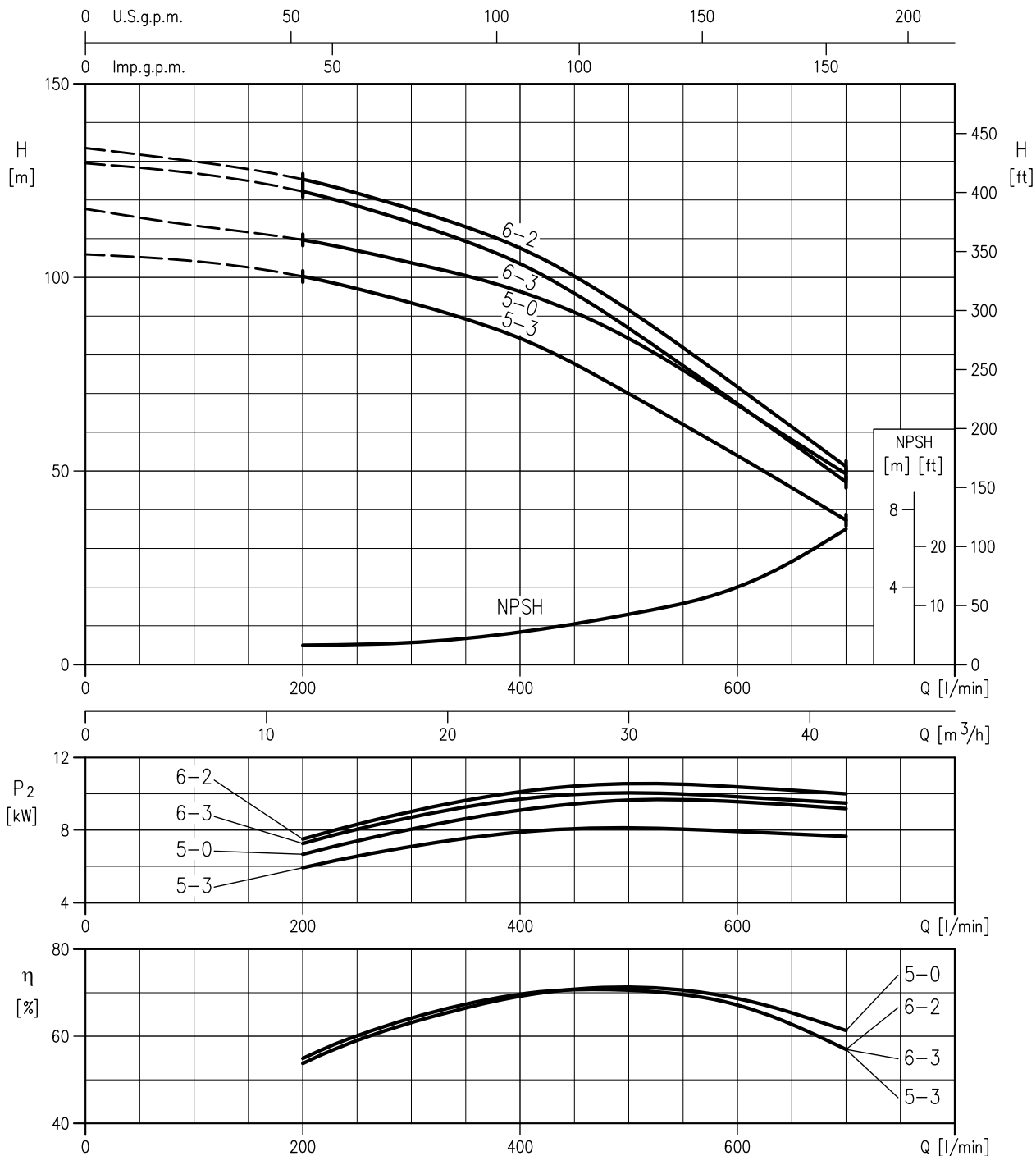
Rev. G

EVM32 5-3 F5 11 (11kW) MEI > 0.60 no.2 impellers diameter = 136 mm / no.3 impellers diameter= 125 mm

EVM32 5-0 F5 11 (11kW) MEI > 0.60 no.5 impellers diameter = 136 mm

EVM32 6-3 F5 11 (11kW) MEI > 0.60 no.3 impellers diameter = 136 mm / no.3 impellers diameter= 125 mm

EVM32 6-2 F5 11 (11kW) MEI > 0.60 no. 6 impellers diameter = 136 mm / no.2 impellers diameter= 125mm



Rotation speed $\approx 2930 \text{ min}^{-1}$
Test standard: ISO 9906-Annex A

PERFORMANCE CURVE

50Hz

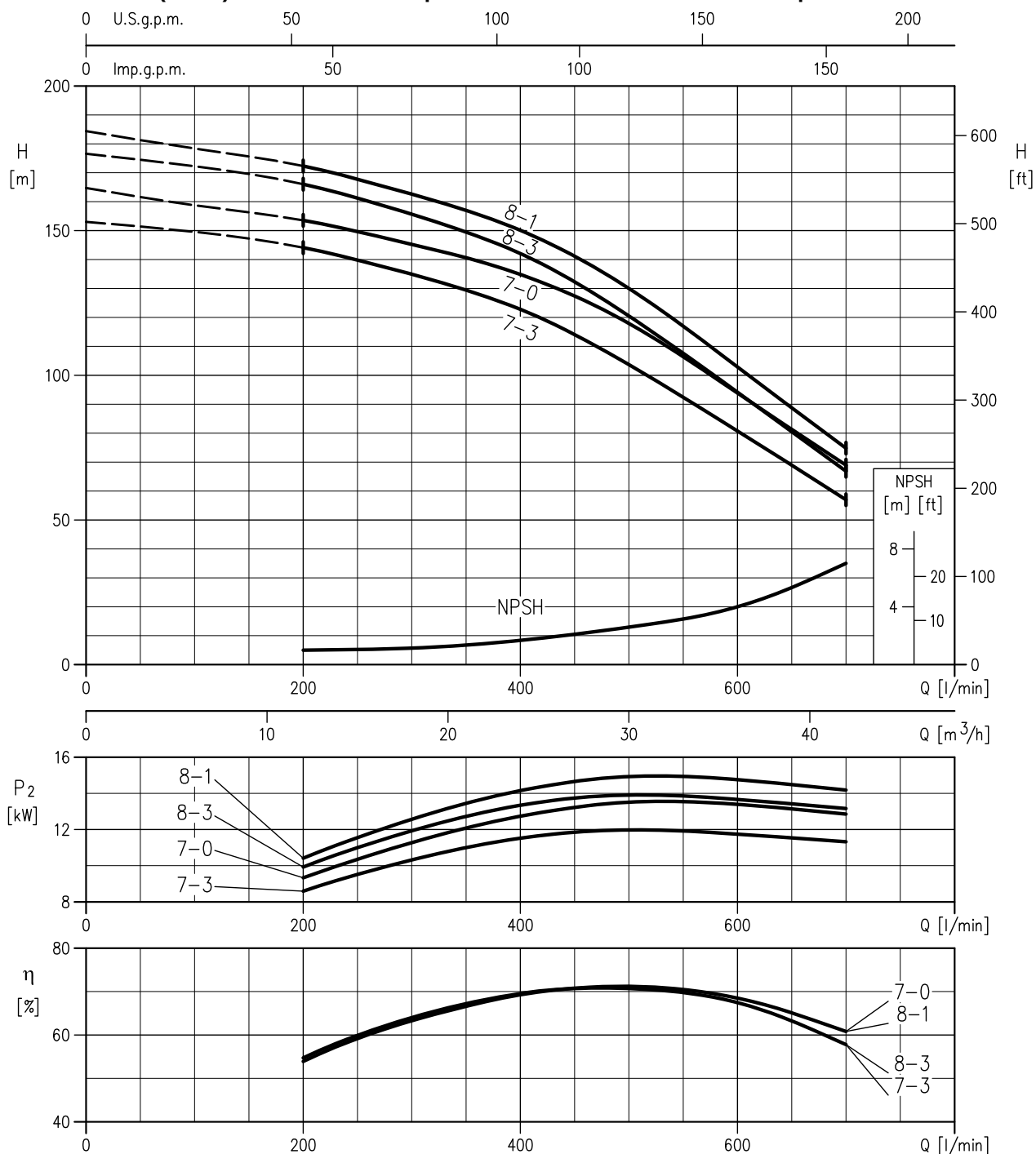
Rev. G

EVM32 7-3 F5 15 (15kW) MEI > 0.60 no.4 impellers diameter = 136 mm / no.3 impellers diameter= 125 mm

EVM32 7-0 F5 15 (15kW) MEI > 0.60 no.7 impellers diameter = 136 mm

EVM32 8-3 F5 15 (15kW) MEI > 0.60 no.5 impellers diameter = 136 mm / no.3 impellers diameter= 125 mm

EVM32 8-1 F5 15 (15kW) MEI > 0.60 no.7 impellers diameter = 136 mm / no. 1 impeller diameter = 125 mm



Rotation speed $\approx 2930 \text{ min}^{-1}$
Test standard: ISO 9906-Annex A

PERFORMANCE CURVE

50Hz

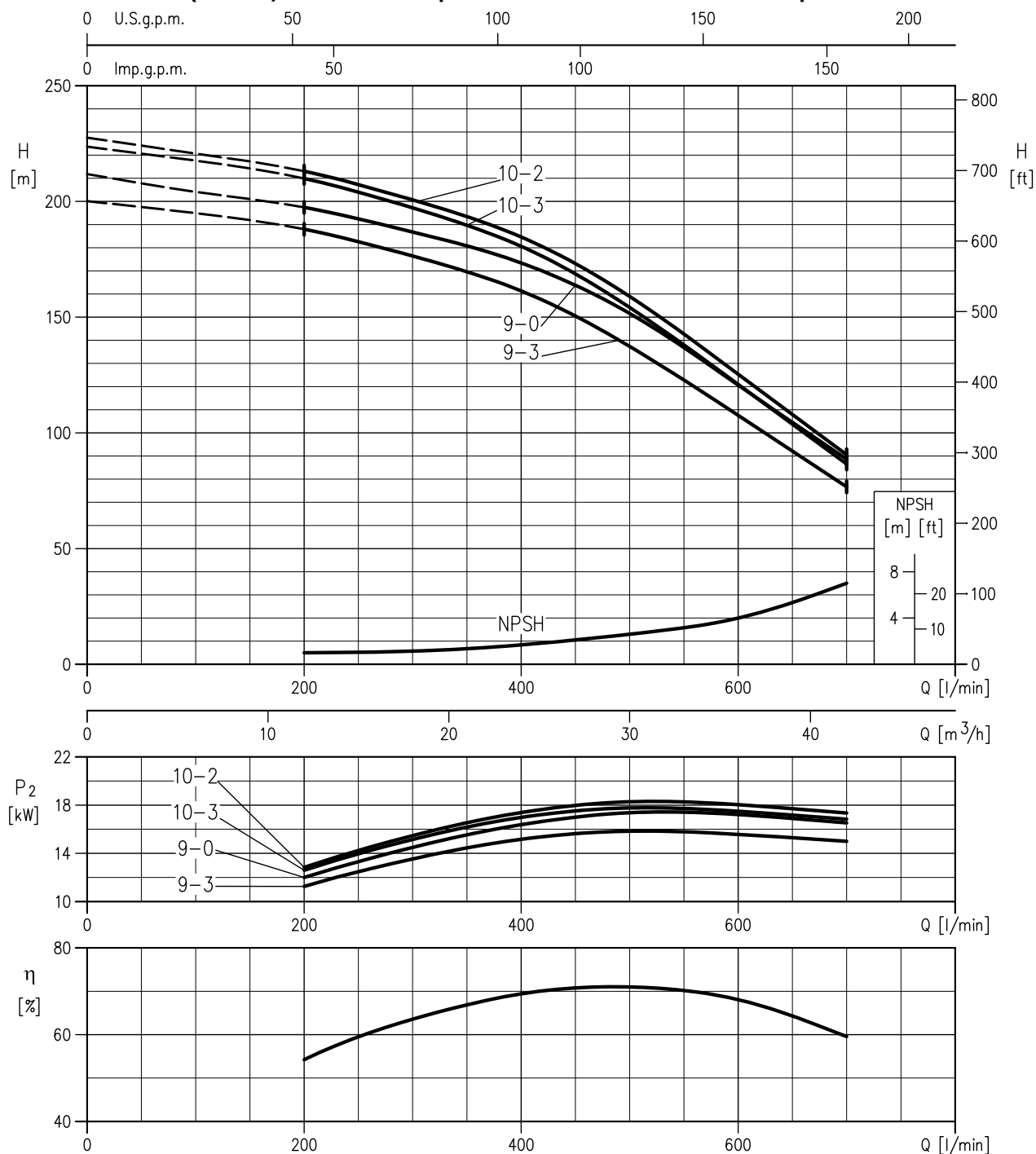
Rev. G

EVM32 9-3 F5 18.5 (18.5kW)MEI>0.60 no.6 impellers diameter= 136 mm / no.3 impellers diameter = 125 mm

EVM32 9-0 F5 18.5 (18.5kW)MEI > 0.60 no.9 impellers diameter= 136 mm

EVM32 10-3 F5 18.5 (18.5kW)MEI>0.60no.7 impellers diameter= 136 mm / no.3 impellers diameter = 125 mm

EVM32 10-2 F5 18.5 (18.5kW)MEI>0.60no.8 impellers diameter= 136 mm / no.2 impeller diameter = 125 mm



Rotation speed $\approx 2930 \text{ min}^{-1}$
Test standard: ISO 9906-Annex A

PERFORMANCE CURVE

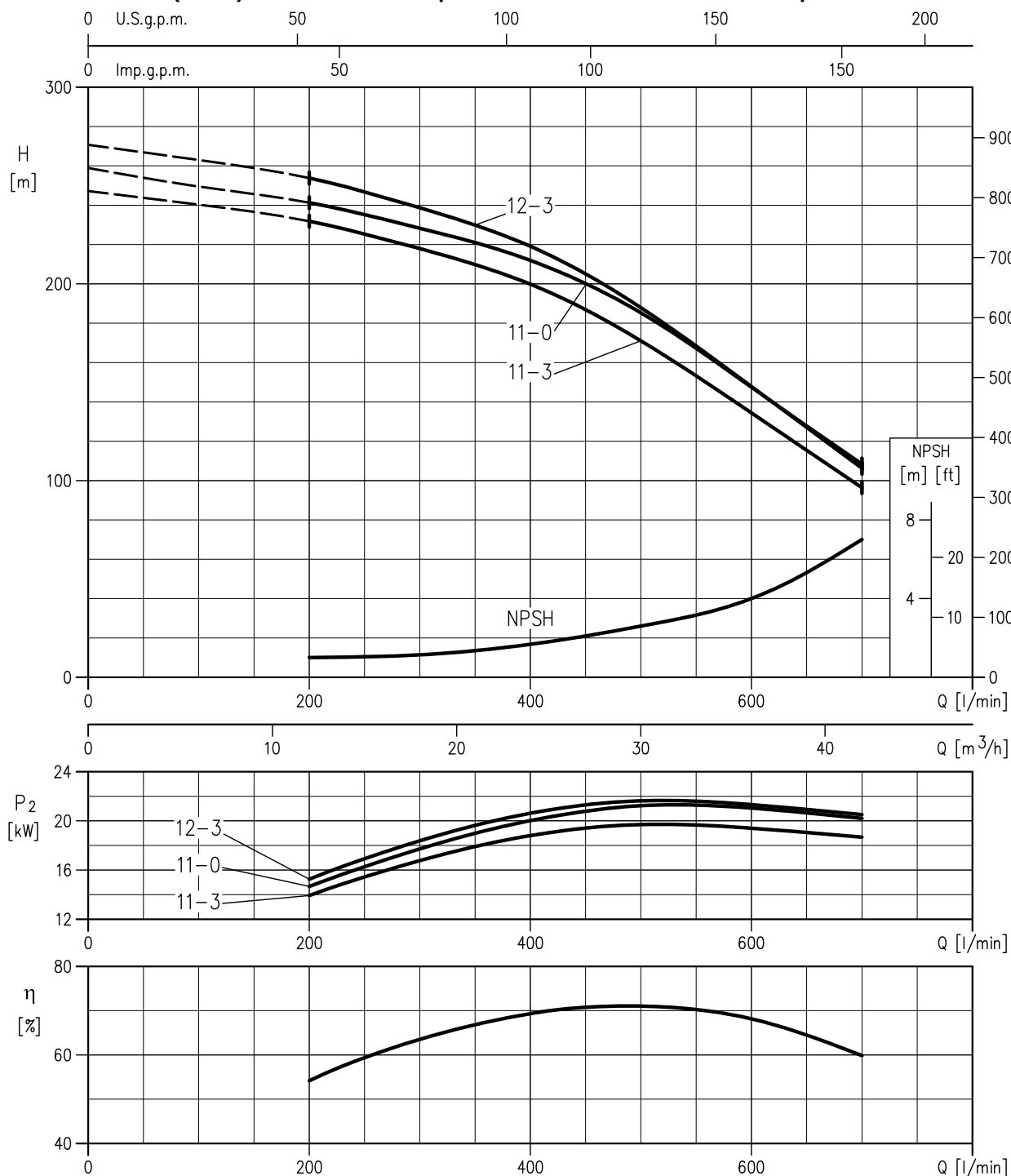
50Hz

Rev. G

EVM32 11-3 F5 22 (22kW) MEI>0.60 no. 8 impellers diameter= 136 mm / no.3 impellers diameter = 125 mm

EVM32 11-0 F5 22 (22kW) MEI>0.60 no.11 impellers diameter= 136 mm

EVM32 12-3 F5 22 (22kW) MEI >0.60 no. 9 impellers diameter= 136 mm / no.3 impellers diameter = 125 mm



Rotation speed $\approx 2930 \text{ min}^{-1}$
Test standard: ISO 9906-Annex A

PERFORMANCE CURVE

50Hz

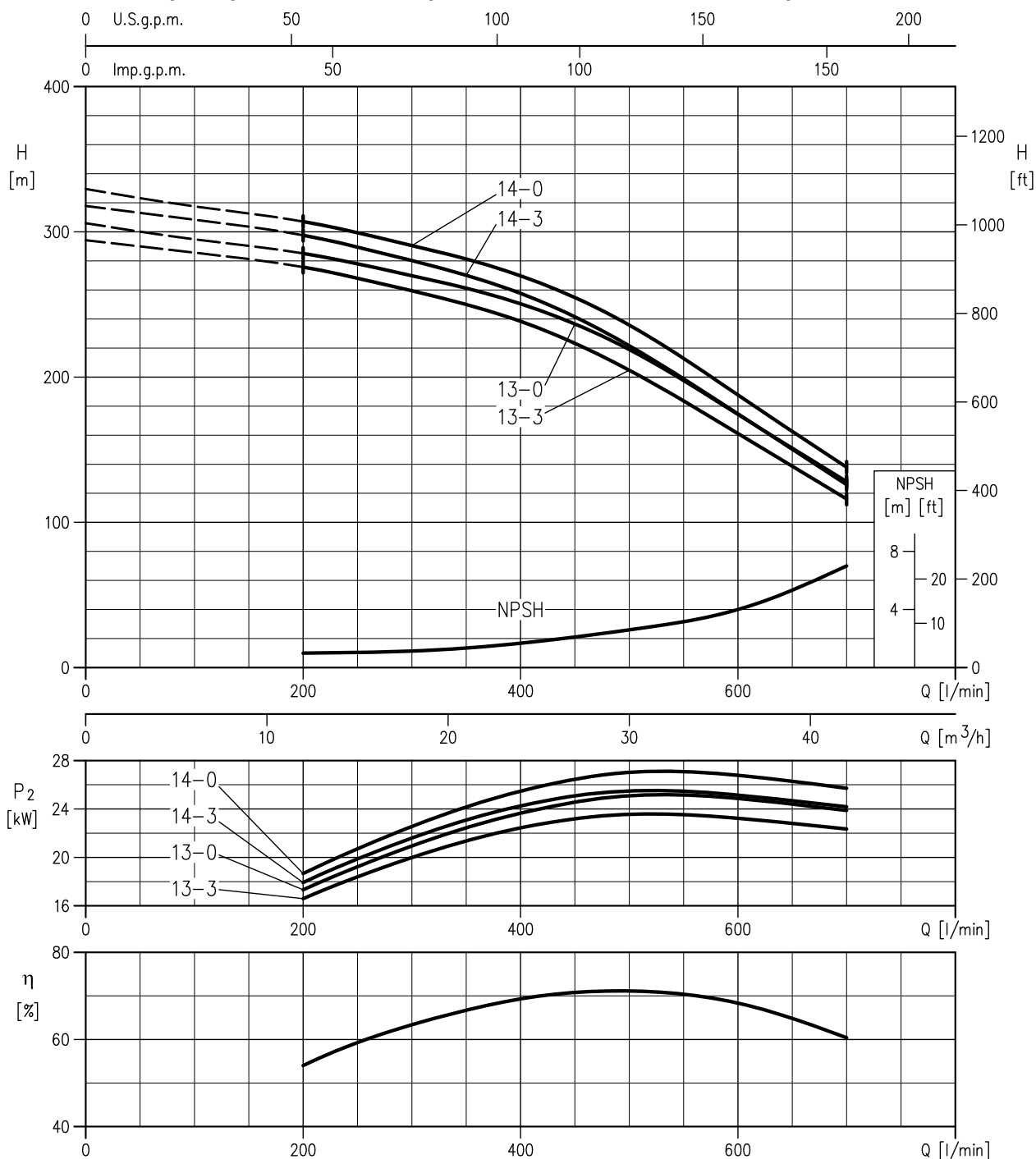
Rev. G

EVM32 13-3 F5 30 (30kW)MEI>0.60 no.10 impellers diameter= 136 mm / no.3 impellers diameter = 125 mm

EVM32 13-0 F5 30 (30kW)MEI>0.60 no.13 impellers diameter= 136 mm

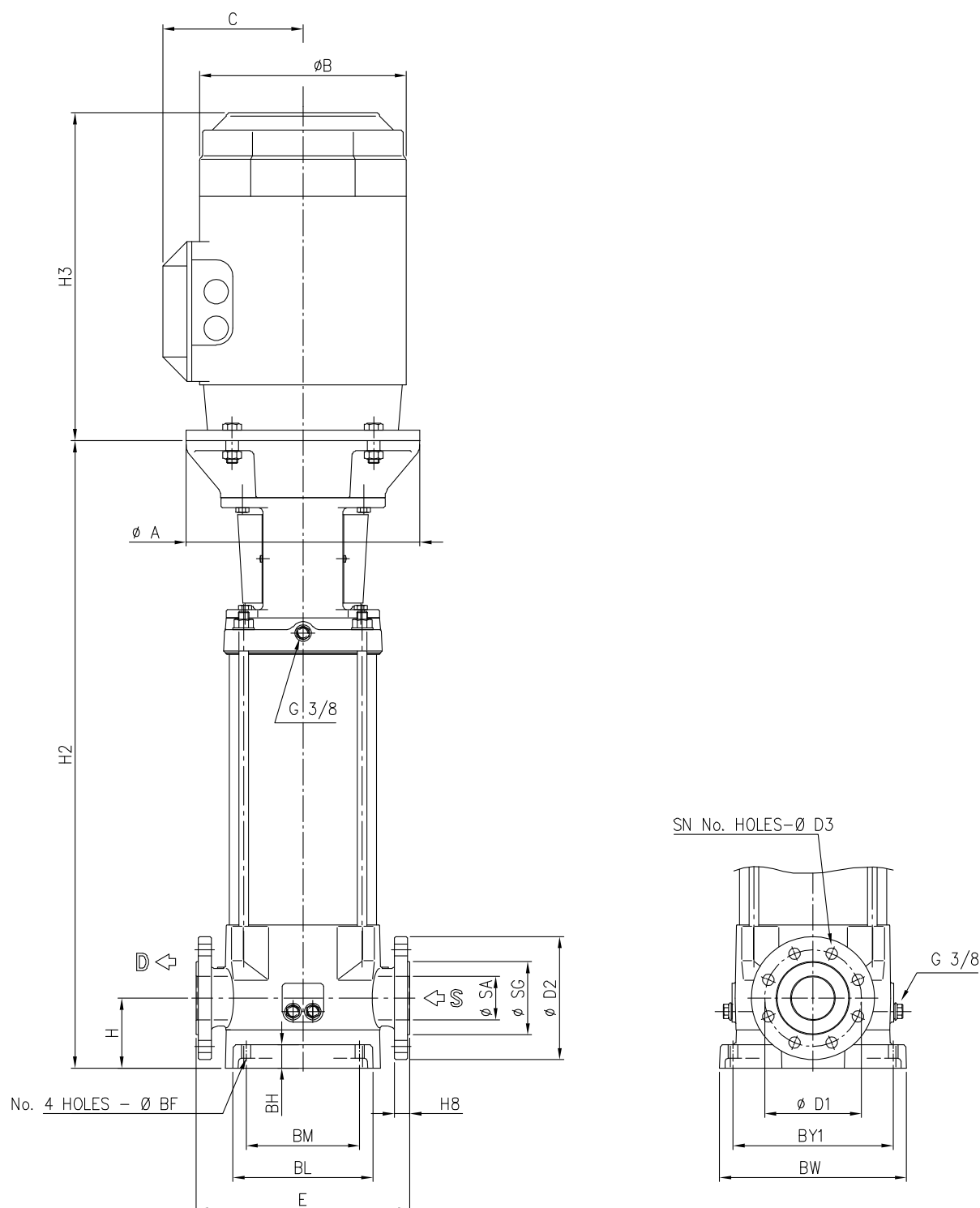
EVM32 14-3 F5 30 (30kW)MEI>0.60 no.11 impellers diameter= 136 mm / no.3 impellers diameter = 125 mm

EVM32 14-0 F5 30 (30kW)MEI>0.60 no.14 impellers diameter= 136 mm /no.1 impellers diameter = 125 mm



Rotation speed $\approx 2960 \text{ min}^{-1}$
Test standard: ISO 9906-Annex A

EVM(.) 32-64



See dimensions pages 404,405,406

DIMENSIONS TABLE EVM(.) 32

Pump Type EVM	Pmax. [MPa] 2)	Motor Size	Dimensions [mm]																			Weight [kgf]		
			H	H2	H3 1) 3~	E	B 1) 3~	C 1) 3~	BM	BL	BY1	BW	SA	SG	D1	D2	H8	SN	D3	BF	BH	A	Pump	Pump + motor
32 1-0F5/2.2	1.6	90L	105	493	267	320	180	148	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	140	56.0	72.0
32 2-2F5/3.0	1.6	100	105	503	306	320	196	155	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	160	58.0	80.8
32 2-0F5/4.0	1.6	112	105	503	306	320	196	155	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	160	58.0	80.8
32 3-3F5/5.5	1.6	132	105	572	328	320	220	161	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	300	74.0	112.6
32 3-1F5/5.5	1.6	132	105	572	328	320	220	161	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	300	74.0	112.6
32 4-3F5/7.5	1.6	132	105	620	328	320	220	161	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	300	77.0	117.4
32 4-1F5/7.5	1.6	132	105	620	328	320	220	161	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	300	77.0	117.4
32 5-3F5/11	1.6	160M	105	799	403	320	248	195	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	350	96.0	158.5
32 5-0F5/11	1.6	160M	105	799	403	320	248	195	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	350	96.0	158.5
32 6-3F5/11	1.6	160M	105	847	403	320	248	195	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	350	99.0	161.5
32 6-2F5/11	1.6	160M	105	847	403	320	248	195	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	350	99.0	161.5
32 7-3F5/15	1.6	160M	105	895	498	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	350	102.0	189.1
32 7-0F5/15	1.6	160M	105	895	498	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	4	Ø18	Ø14	35	350	102.0	189.1
32 8-3F5/15	2.5	160M	105	943	498	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	105.0	192.1
32 8-1F5/15	2.5	160M	105	943	498	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	105.0	192.1
32 9-3F5/18.5	2.5	160L	105	991	542	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	108.0	205.5
32 9-0F5/18.5	2.5	160L	105	991	542	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	108.0	205.5
32 10-3F5/18.5	2.5	160L	105	1039	542	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	112.0	209.5
32 10-2F5/18.5	2.5	160L	105	1039	542	320	317	238	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	112.0	209.5
32 11-3F5/22	2.5	180	105	1087	577	320	360	268	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	116.0	279.0
32 11-0F5/22	2.5	180	105	1087	577	320	360	268	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	116.0	279.0
32 12-3F5/22	2.5	180	105	1135	577	320	360	268	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	350	119.0	282.0
32 13-3F5/30	3.0	200	105	1198	658	320	399	300	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	400	129.0	357.0
32 13-0F5/30	3.0	200	105	1198	658	320	399	300	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	400	129.0	357.0
32 14-3F5/30	3.0	200	105	1246	658	320	399	300	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	400	133.0	361.0
32 14-0F5/30	3.0	200	105	1246	658	320	399	300	170	210	240	280	Ø65	Ø110	Ø145	Ø185	23	8	Ø18	Ø14	35	400	133.0	361.0

1) AEG motor dimensions

2) 1,6 MPa=16 bar

2,5 MPa=25 bar

3,0 MPa=30 bar

PACKING TABLE EVM(.) 32

PUMP TYPE EVM(.)	PUMPS						PUMPS WITH MOTOR ~3					
	Packing [mm]			Weight [kgf] EVM(G)	Weight [kgf] EVM(L)	Pack Type	PACKING [mm]			Weight [kgf] EVM(G)	Weight [kgf] EVM(L)	Pack Type
	X	Y	Z				X	Y	Z			
32 1-0F5/2.2	400	400	780	56	61	2	400	400	1047	74.0	79	2
32 2-2F5/3.0	400	400	780	58	63	2	400	400	1047	82.5	87.5	2
32 2-0F5/4.0	400	400	780	58	63	2	400	400	1047	90.1	95.1	2
32 3-3F5/5.5	400	400	780	72	79	2	400	400	1047	123.6	130.6	2
32 3-1F5/5.5	400	400	780	72	79	2	400	400	1047	123.6	130.6	2
32 4-3F5/7.5	400	400	780	75	82	2	400	400	1047	127.4	134.4	2
32 4-1F5/7.5	400	400	780	75	82	2	400	400	1047	127.4	134.4	2
32 5-3F5/11	400	400	1047	94	103	2	500	1540	540	187.5	196.5	3
32 5-0F5/11	400	400	1047	94	103	2	500	1540	540	187.5	196.5	3
32 6-3F5/11	400	400	1047	97	106	2	500	1540	540	190.5	199.5	3
32 6-2F5/11	400	400	1047	97	106	2	500	1540	540	190.5	199.5	3
32 7-3F5/15	400	400	1047	100	109	2	500	1540	540	193.1	202.1	3
32 7-0F5/15	400	400	1047	100	109	2	500	1540	540	193.1	202.1	3
32 8-3F5/15	400	400	1240	105	115	2	500	1540	540	195.1	205.1	3
32 8-1F5/15	400	400	1240	105	115	2	500	1540	540	195.1	205.1	3
32 9-3F5/18.5	400	400	1240	108	118	2	610	1750	593	209.5	219.5	3
32 9-0F5/18.5	400	400	1240	108	118	2	610	1750	593	209.5	219.5	3
32 10-3F5/18.5	400	400	1240	111	122	2	610	1750	593	212.5	223.5	3
32 10-2F5/18.5	400	400	1240	111	122	2	610	1750	593	212.5	223.5	3
32 11-3F5/22	400	400	1240	115	126	2	610	1750	593	264.0	275.0	3
32 11-0F5/22	400	400	1240	115	126	2	610	1750	593	264.0	275.0	3
32 12-3F5/22	400	1350	540	122	133	3	635	2130	587	328.0	339.0	3
32 13-3F5/30	500	1350	545	131	143	3	635	2130	587	387.0	399.0	3
32 13-0F5/30	500	1350	545	131	143	3	635	2130	587	387.0	399.0	3
32 14-3F5/30	500	1350	545	134	147	3	635	2130	587	390.0	403.0	3
32 14-0F5/30	500	1350	545	134	147	3	635	2130	587	390.0	403.0	3