

پمپ عمودی طبقاتی استیل ابارا سری EVM 10



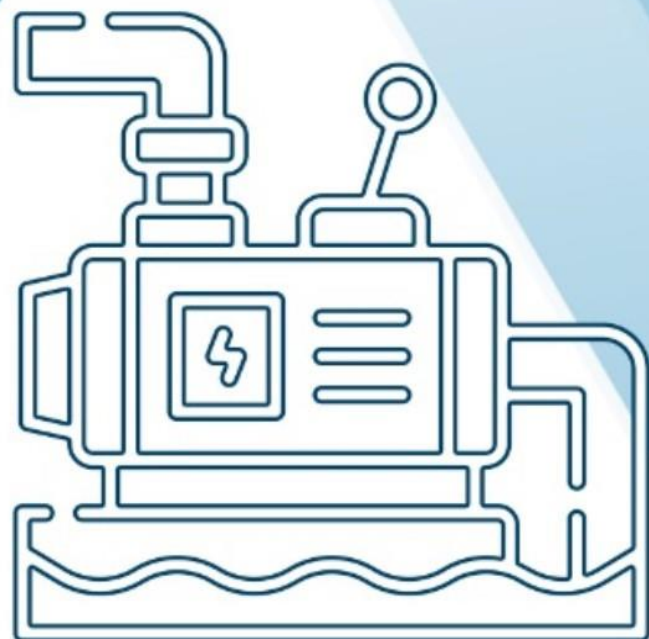
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PUMP

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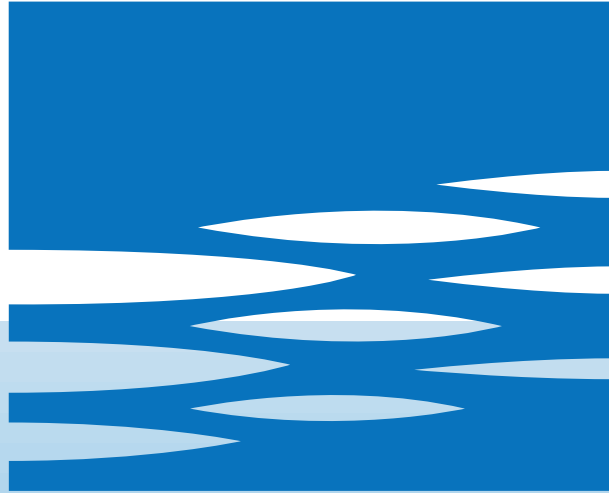


از این که کالا صنعتی را انتخاب کرده اید از شما ممنونیم. گروه کالا صنعتی را میتوان بهترین شرکت برای مشاوره و خرید کالای صنعتی دانست. این شرکت با ترکیب صنعت و تکنولوژی توانسته بهترین خدمات مشاوره ای در زمینه خرید کالای صنعتی و به طور تخصصی پمپ آلات خانگی و صنعتی موجود در بازار را ارائه دهد. انواع پمپ آب 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.

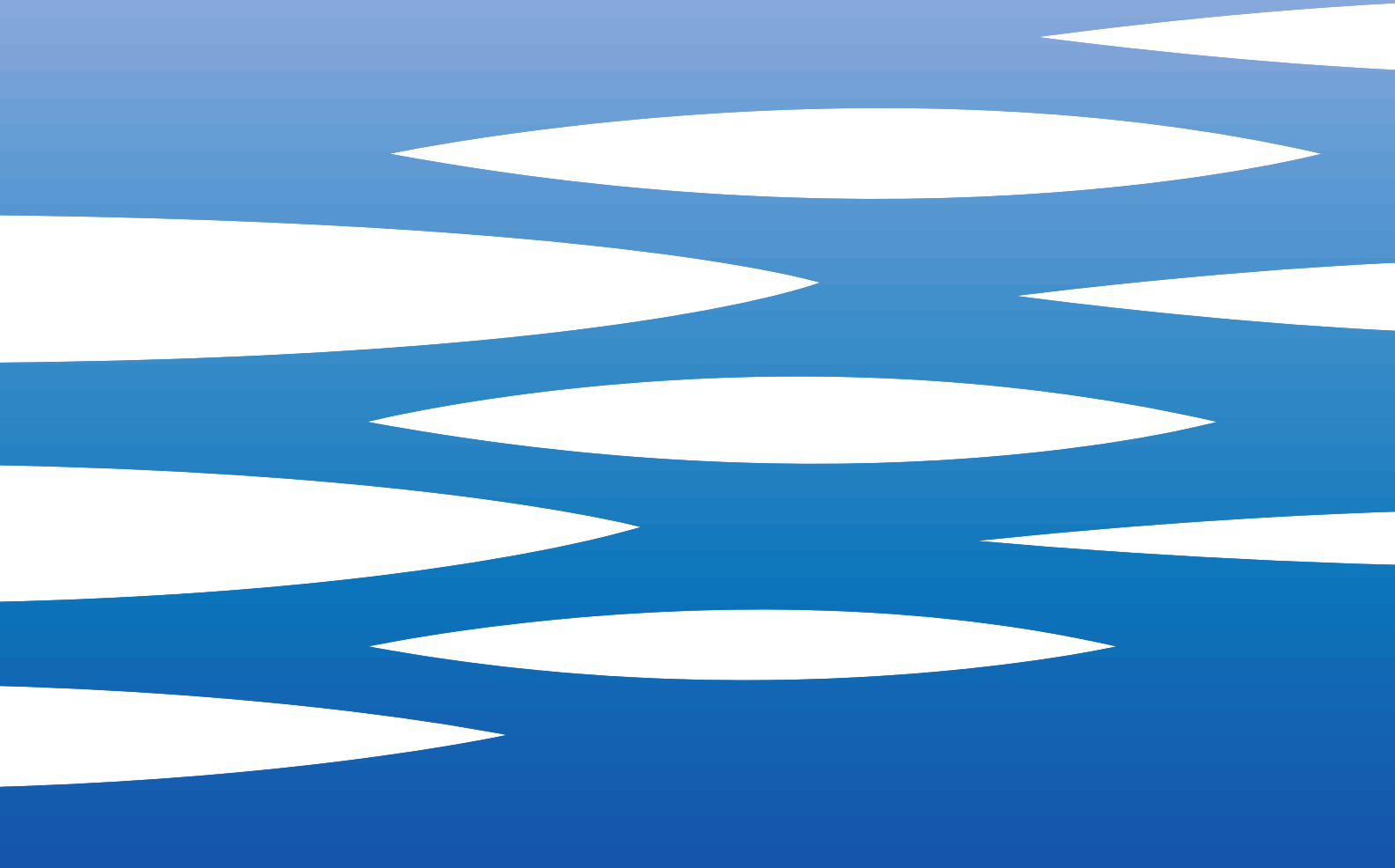
در راستای ارزشمندی مشاوره برای انتخاب پمپ، آماده کردن دیتاشیت و کاتالوگ های با کیفیت در دستور کار این شرکت قرار گرفته است. در ذیل دیتاشیت پمپ طبقاتی ابارا آمده و این مشخصات مربوط به آخرین ویرایش شرکت سازنده می باشد.

- 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.





EBARA



EVM(.) 3-18

PUMP				
Type		EVMG	EVM	EVML
Liquid Handled	Type of liquid	Clean water, water contains glycol and moderately aggressive fluids	*Drinking water, Clean water, water contains glycol and moderately aggressive fluids	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 / 2.5		
	[bar]	16 / 25		
Construction	Impeller	Closed centrifugal type		
	Shaft seal type	Mechanical seal		
	Bearing	Sealed ball bearing with permanent grease		
Pipe connection	Suction /Discharge	See dimension table		
Material	Impeller	EN 1.4301 (AISI 304)		EN 1.4401 (AISI 316)
	Intermediate casing	EN 1.4301 (AISI 304)		
	Bottom casing	Cast iron	EN 1.4301 (AISI 304)	EN 1.4401 (AISI 316)
	Casing cover	Cast iron	EN 1.4301 (AISI 304)	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	PTFE / EN 1.4301 (AISI 304)		PTFE / EN 1.4401 (AISI 316)
	Motor bracket	Cast iron	Cast iron / EN 1.4301 (AISI 304)	Cast iron / EN 1.4401 (AISI 316)
	Mechanical Seal	Silicon Carbide/Carbon/EPDM		Silicon Carbide/Carbon/FPM
	O-Ring	EPDM	EPDM	FPM
Applicable standard of test		ISO 9906 annex A		

* Approval for drinking water application

WRAS Approved product

DM174/2004



MOTOR			
Type		Electric -TEFC	
		Single phase	Three phase
Efficiency		/	- from 0.37 kW up to 0.55 kW IE2 from 0.75 kW up to 15 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]	0.37+2.2	0.37+15
	[HP]	0.5+3.0	0.5+20
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

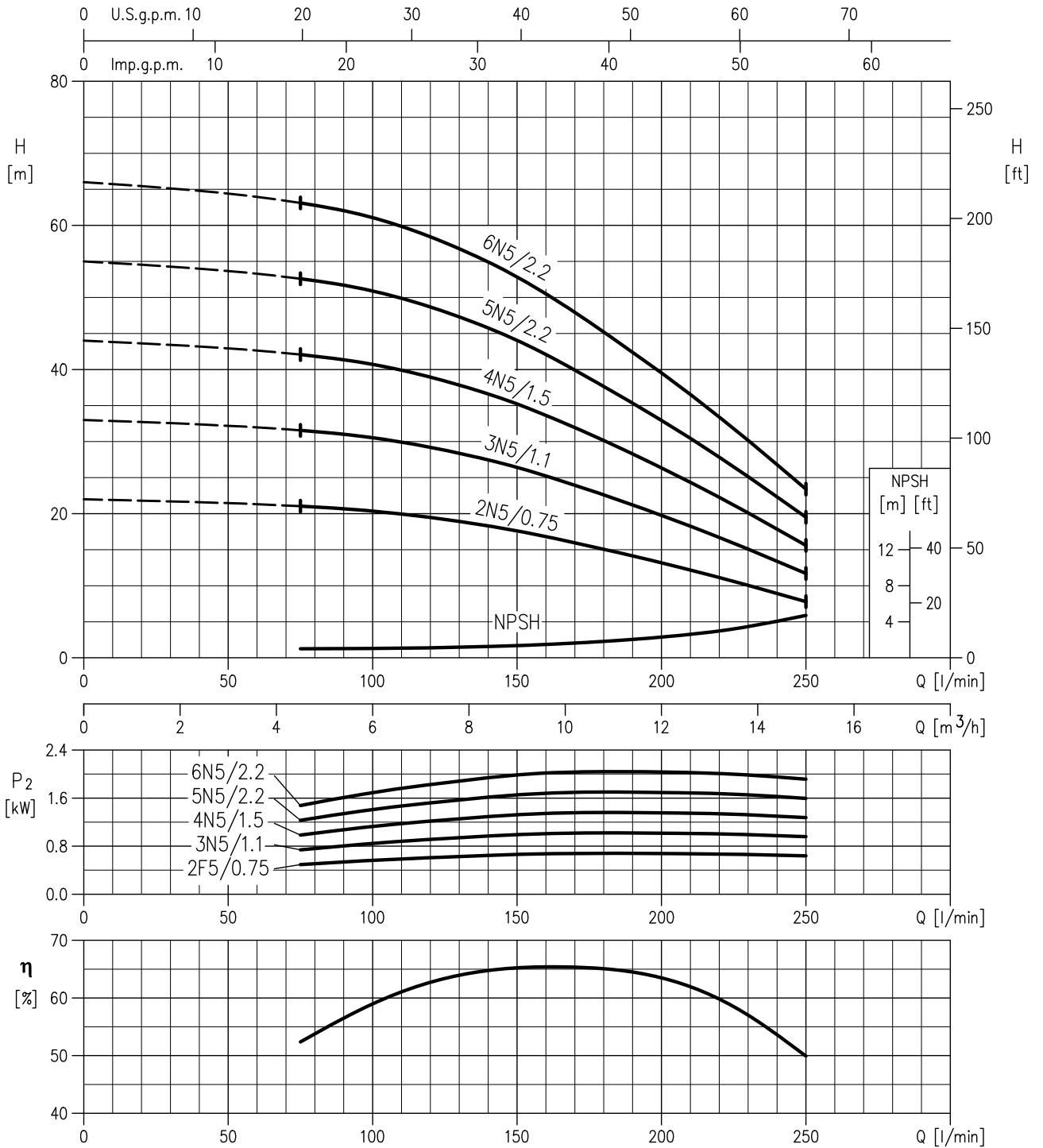
Rev. G

EVM(.) 3-18

Pump Type EVM(.)		Motor			Maximum working pressure (MPa)	Q=Capacity													
Single phase	Three phase	kW	HP	Size		l/min	0	20	40	60	75	100	130	150	200	250	300	350	400
						m³/h	0	1.2	2.4	3.6	4.5	6.0	7.8	9	12	15	18	21	24
H=Total manometric head in meters																			
3 2N5/0.37 M	3 2N5/0.37	0.37	0.5	71	1.6	18.6	16.7	14.0	10.3	6.6	-	-	-	-	-	-	-	-	
3 3N5/0.37 M	3 3N5/0.37	0.37	0.5	71		27.9	25.1	20.9	15.5	9.9	-	-	-	-	-	-	-	-	-
3 4N5/0.55 M	3 4N5/0.55	0.55	0.75	71		37.2	33.4	27.9	20.6	13.2	-	-	-	-	-	-	-	-	-
3 5N5/0.55 M	3 5N5/0.55	0.55	0.75	71		46.5	42.0	34.9	25.8	16.5	-	-	-	-	-	-	-	-	-
3 6N5/0.75 M	3 6N5/0.75	0.75	1	80		56.0	50.0	42.0	30.9	19.8	-	-	-	-	-	-	-	-	-
3 7N5/0.75 M	3 7N5/0.75	0.75	1	80		65.0	58.5	49.0	36.1	23.1	-	-	-	-	-	-	-	-	-
3 9N5/1.1 M	3 9N5/1.1	1.1	1.5	80		84.0	75.0	63.0	46.5	29.7	-	-	-	-	-	-	-	-	-
3 11N5/1.1 M	3 11N5/1.1	1.1	1.5	80		102.0	92.0	77.0	56.5	36.3	-	-	-	-	-	-	-	-	-
3 13N5/1.5 M	3 13N5/1.5	1.5	2	90S		121.0	109.0	90.5	67.0	43.0	-	-	-	-	-	-	-	-	-
3 15N5/1.5 M	3 15N5/1.5	1.5	2	90S		140.0	125.0	105.0	77.5	49.5	-	-	-	-	-	-	-	-	-
3 18F5/2.2 M	3 18F5/2.2	2.2	3	90L	167.0	151.0	126.0	92.5	59.5	-	-	-	-	-	-	-	-	-	
3 22F5/2.2 M	3 22F5/2.2	2.2	3	90L	205.0	184.0	154.0	113.0	72.5	-	-	-	-	-	-	-	-	-	
-	3 26F5/3.0	3	4	100	242.0	217.0	182.0	134.0	86.0	-	-	-	-	-	-	-	-	-	
5 2N5/0.37 M	5 2N5/0.37	0.37	0.5	71	1.6	20.2	-	18.4	16.9	15.4	12.2	6.9	-	-	-	-	-	-	
5 3N5/0.55 M	5 3N5/0.55	0.55	0.75	71		30.2	-	27.6	25.3	23.1	18.4	10.3	-	-	-	-	-	-	-
5 4N5/0.75 M	5 4N5/0.75	0.75	1	80		40.5	-	36.8	33.8	30.8	24.5	13.8	-	-	-	-	-	-	-
5 5N5/1.1 M	5 5N5/1.1	1.1	1.5	80		50.5	-	46.0	42.0	38.6	30.6	17.2	-	-	-	-	-	-	-
5 6N5/1.1 M	5 6N5/1.1	1.1	1.5	80		60.5	-	55.0	50.5	46.5	36.7	20.6	-	-	-	-	-	-	-
5 7N5/1.5 M	5 7N5/1.5	1.5	2	90S		70.5	-	64.5	59.0	54.0	43.0	24.1	-	-	-	-	-	-	-
5 8N5/1.5 M	5 8N5/1.5	1.5	2	90S		80.5	-	73.5	67.5	61.5	49.0	27.5	-	-	-	-	-	-	-
5 10N5/2.2 M	5 10N5/2.2	2.2	3	90L		102.0	-	93.5	86.0	79.0	63.0	36.6	-	-	-	-	-	-	-
5 11N5/2.2 M	5 11N5/2.2	2.2	3	90L		113.0	-	103.0	94.5	86.5	69.5	40.5	-	-	-	-	-	-	-
5 12N5/2.2 M	5 12N5/2.2	2.2	3	90L		123.0	-	112.0	103.0	94.5	75.5	44.0	-	-	-	-	-	-	-
-	5 14N5/3.0	3	4	100	143.0	-	131.0	120.0	110.0	88.0	51.0	-	-	-	-	-	-	-	
-	5 16N5/3.0	3	4	100	164.0	-	150.0	138.0	126.0	101.0	58.5	-	-	-	-	-	-	-	
-	5 18F5/4.0	4	5.5	112	184.0	-	168.0	155.0	142.0	113.0	66.0	-	-	-	-	-	-	-	
-	5 19F5/4.0	4	5.5	112	194.0	-	178.0	163.0	150.0	120.0	69.5	-	-	-	-	-	-	-	
-	5 22F5/4.0	4	5.5	112	225.0	-	206.0	189.0	173.0	139.0	80.5	-	-	-	-	-	-	-	
-	5 24F5/5.5	5.5	7.5	132S	246.0	-	224.0	206.0	189.0	151.0	88.0	-	-	-	-	-	-	-	
10 2N5/0.75 M	10 2N5/0.75	0.75	1	80	1.6	22.0	-	-	-	21.0	20.4	18.9	17.6	13.2	7.8	-	-	-	
10 3N5/1.1 M	10 3N5/1.1	1.1	1.5	80		33.0	-	-	-	31.6	30.5	28.4	26.4	19.8	11.7	-	-	-	-
10 4N5/1.5 M	10 4N5/1.5	1.5	2	90S		44.0	-	-	-	42.0	40.5	37.8	35.2	26.4	15.6	-	-	-	-
10 5N5/2.2 M	10 5N5/2.2	2.2	3	90L		55.0	-	-	-	52.5	51.0	47.5	44.0	33.0	19.5	-	-	-	-
10 6N5/2.2 M	10 6N5/2.2	2.2	3	90L		66.0	-	-	-	63.0	61.0	57.0	53.0	39.5	23.4	-	-	-	-
-	10 8N5/3.0	3	4	100		88.0	-	-	-	84.0	81.5	75.5	70.5	52.5	31.2	-	-	-	-
-	10 10N5/4.0	4	5.5	112		110.0	-	-	-	105.0	102.0	94.5	88.0	66.0	39.0	-	-	-	-
-	10 11N5/4.0	4	5.5	112		121.0	-	-	-	116.0	112.0	104.0	97.0	72.5	43.0	-	-	-	-
-	10 12N5/5.5	5.5	7.5	132S		134.0	-	-	-	130.0	126.0	118.0	111.0	86.5	55.0	-	-	-	-
-	10 14N5/5.5	5.5	7.5	132S		157.0	-	-	-	151.0	147.0	138.0	130.0	101.0	64.5	-	-	-	-
-	10 15F5/5.5	5.5	7.5	132S	168.0	-	-	-	162.0	158.0	148.0	139.0	108.0	69.0	-	-	-	-	
-	10 16F5/7.5	7.5	10	132S	179.0	-	-	-	173.0	168.0	158.0	148.0	115.0	73.5	-	-	-	-	
-	10 18F5/7.5	7.5	10	132S	202.0	-	-	-	194.0	189.0	177.0	167.0	129.0	83.0	-	-	-	-	
-	10 20F5/7.5	7.5	10	132S	224.0	-	-	-	216.0	210.0	197.0	185.0	144.0	92.0	-	-	-	-	
-	10 22F5/11	11	15	160M	246.0	-	-	-	238.0	231.0	217.0	204.0	158.0	101.0	-	-	-	-	
18 2F5/2.2 M	18 2F5/2.2	2.2	3	90L	1.6	32.0	-	-	-	-	31.0	30.3	28.5	25.7	21.9	17.2	11.6	-	
-	18 3F5/3.0	3	4	100		48.0	-	-	-	-	-	46.0	45.5	43.0	38.6	32.8	25.7	17.4	-
-	18 4F5/4.0	4	5.5	112		64.0	-	-	-	-	-	61.5	60.5	57.0	51.5	44.0	34.3	23.2	-
-	18 5F5/5.5	5.5	7.5	132S		80.0	-	-	-	-	-	77.0	75.5	71.5	64.5	54.5	43.0	29.0	-
-	18 6F5/5.5	5.5	7.5	132S		96.0	-	-	-	-	-	92.0	91.0	85.5	77.0	65.5	51.5	34.8	-
-	18 7F5/7.5	7.5	10	132S		112.0	-	-	-	-	-	108.0	106.0	100.0	90.0	76.5	60.0	40.5	-
-	18 8F5/7.5	7.5	10	132S		128.0	-	-	-	-	-	123.0	121.0	114.0	103.0	87.5	68.5	46.5	-
-	18 10F5/11	11	15	160M		162.0	-	-	-	-	-	157.0	155.0	147.0	134.0	116.0	93.5	69.0	-
-	18 12F5/11	11	15	160M		194.0	-	-	-	-	-	189.0	186.0	177.0	160.0	139.0	112.0	83.0	-
-	18 14F5/15	15	20	160M		227.0	-	-	-	-	-	220.0	217.0	206.0	187.0	162.0	131.0	96.5	-
-	18 15F5/15	15	20	160M	243.0	-	-	-	-	-	236.0	233.0	221.0	201.0	174.0	141.0	104.0	-	
-	18 16F5/15	15	20	160M	259.0	-	-	-	-	-	252.0	249.0	236.0	214.0	186.0	150.0	110.0	-	

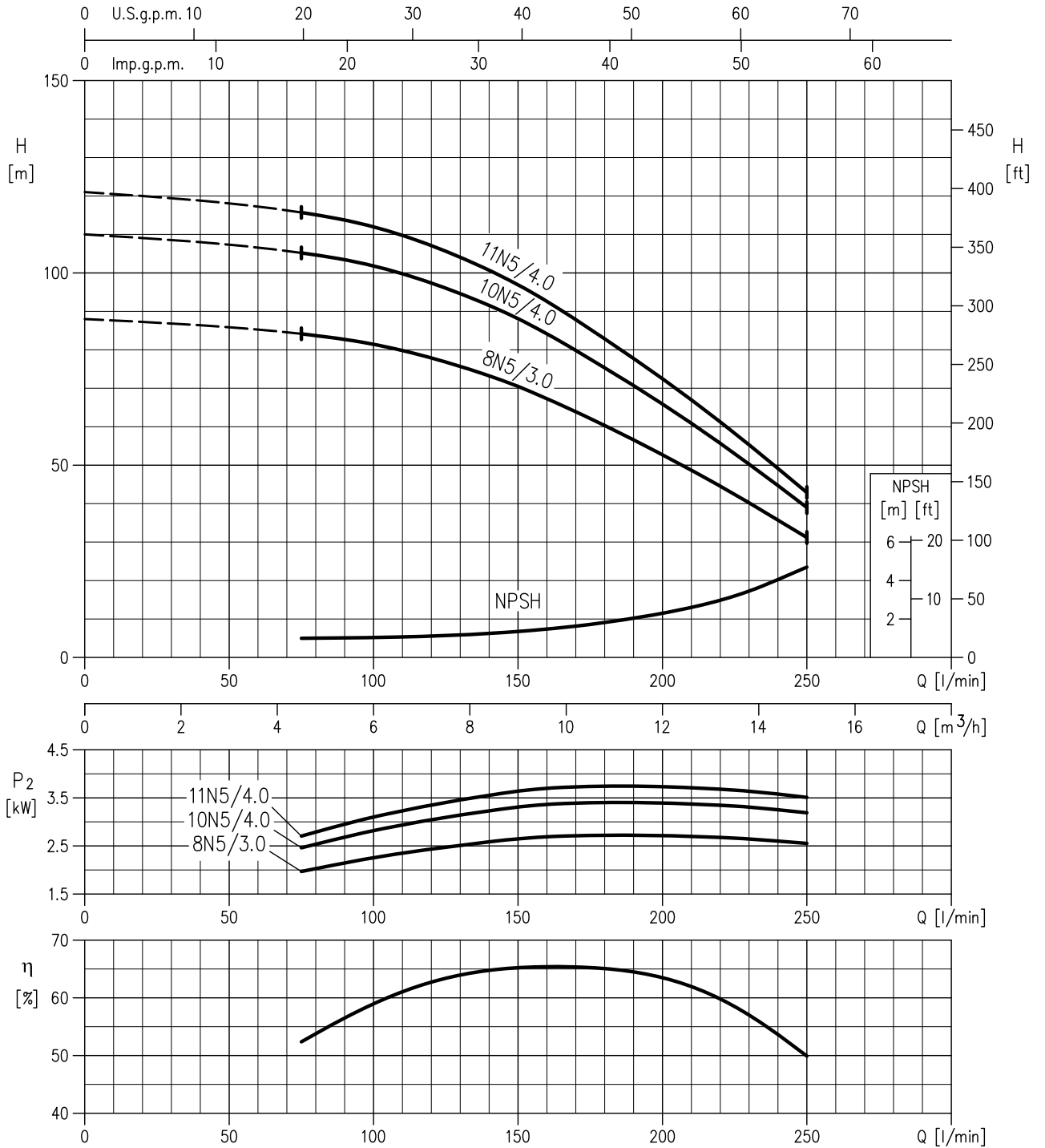
1.6 MPa=16 bar ; 2.5 MPa=25 bar

EVM(.)10 MEI > 0.70 - Impeller diameter =96 mm



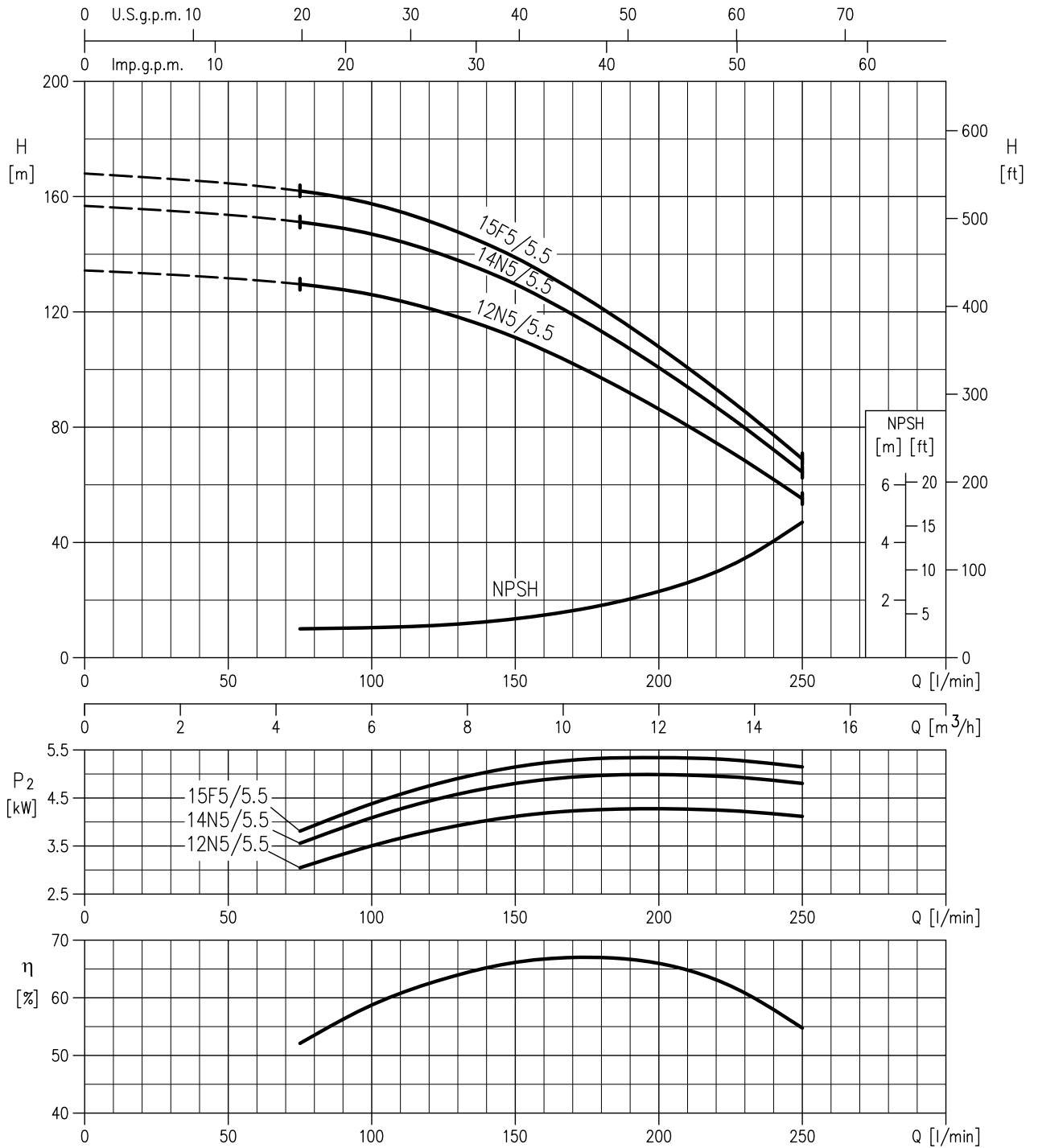
Rotation speed ≈ 2850 min⁻¹
 Test standard: ISO 9906-Annex A

EVM(.)10 MEI > 0.70 - Impeller diameter =96 mm



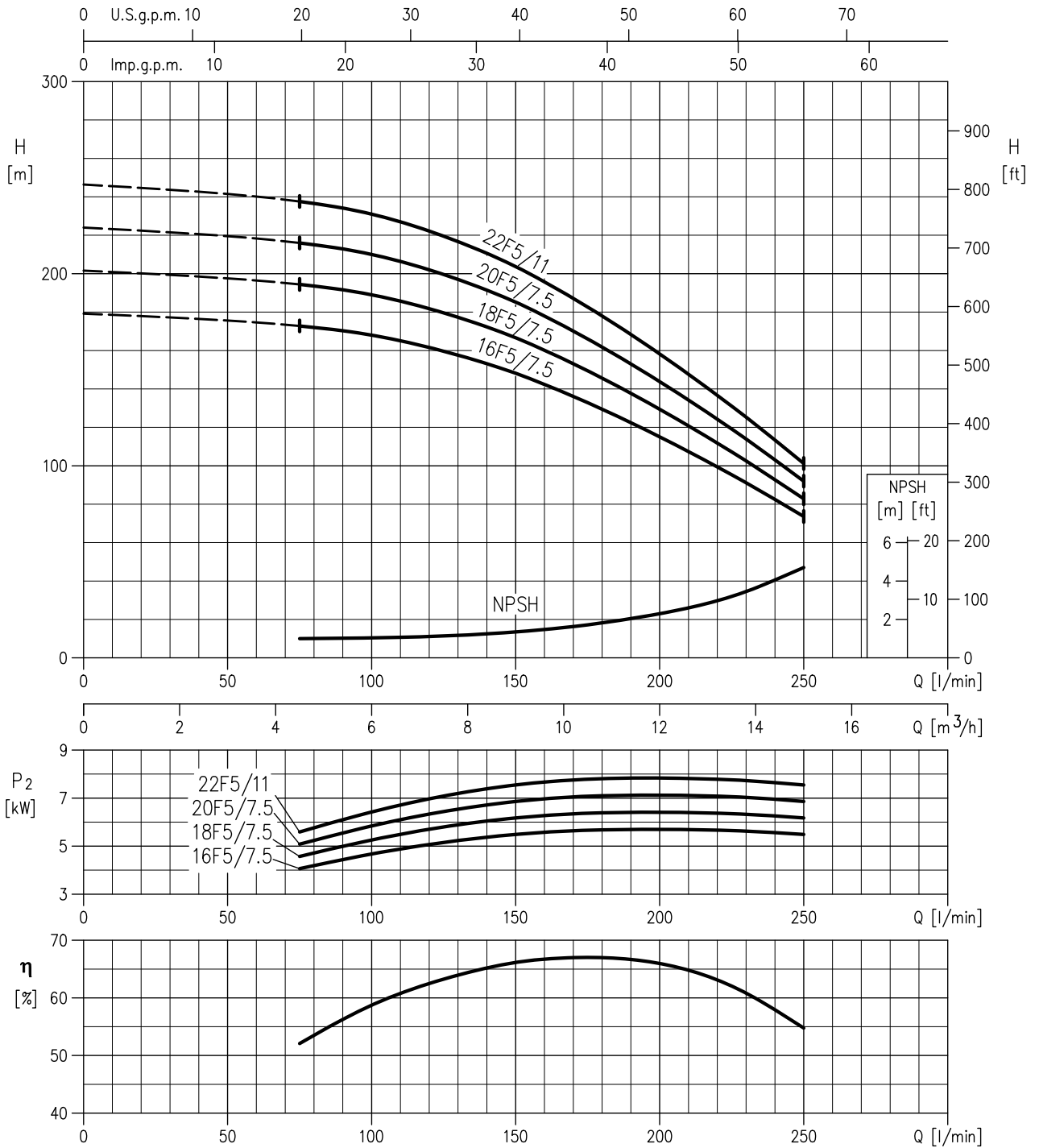
Rotation speed ≈ 2850 min⁻¹
 Test standard: ISO 9906-Annex A

EVM(.)10 MEI > 0.70- Impeller diameter =96 mm



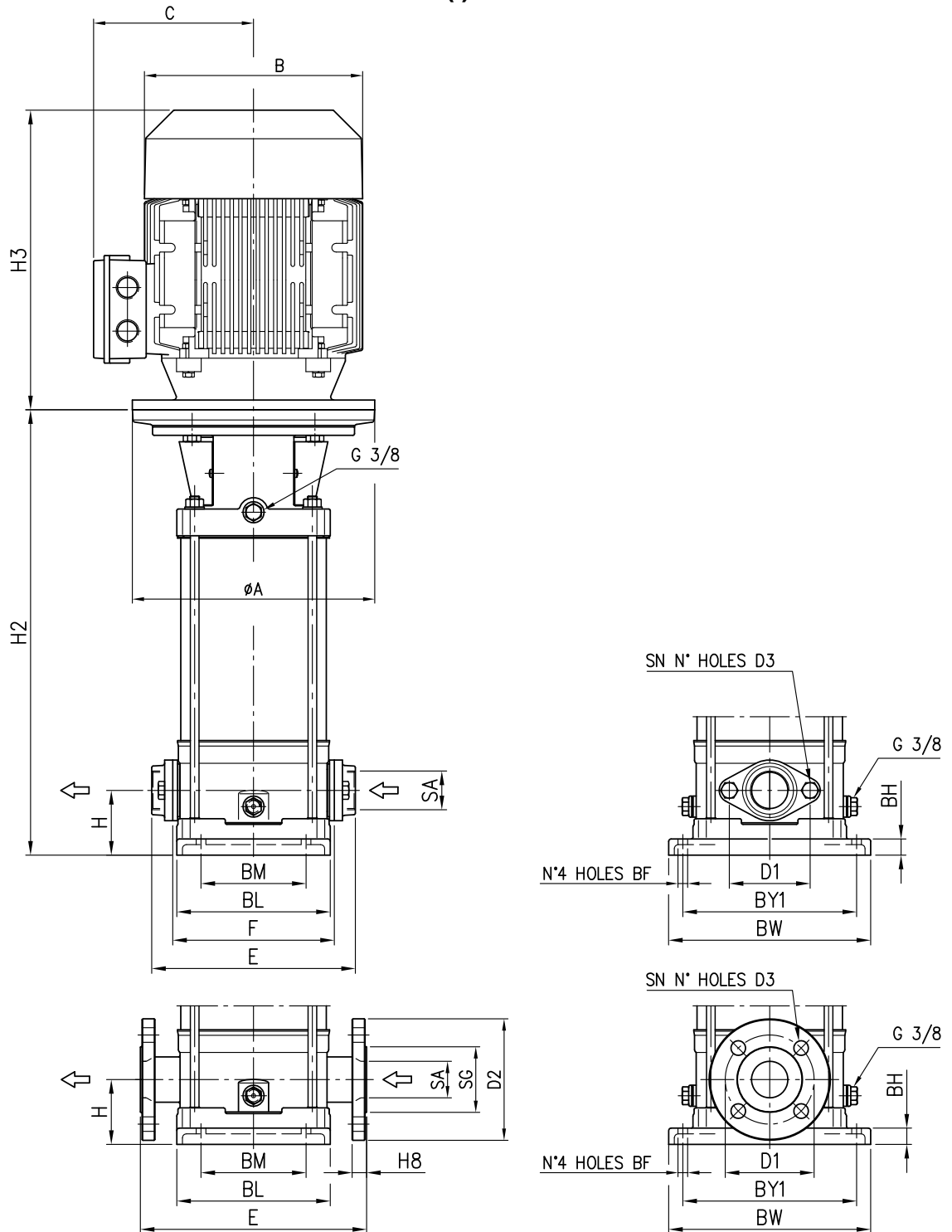
Rotation speed ≈ 2850 min⁻¹
 Test standard: ISO 9906-Annex A

EVM(.)10 MEI > 0.70 - Impeller diameter =96 mm



Rotation speed ≈ 2850 min⁻¹
 Test standard: ISO 9906-Annex A

**PUMP
EVM(.) 3-18**



See dimensions pages 401, 402

DIMENSIONS AND WEIGHT

50Hz

Rev. G

EVM(.) 10-18

Pump Type EVM	Pmax. [MPa] 2)	Motor Size	Dimensions [mm]																				Weight [kgf]						
			H	H2	H3 1)		F	E	B 1)		C 1)		BM	BL	BY1	BW	SA	SG	D1	D2	H8	SN	D3	BF	BH	A	Pump	Pump + motor	
					1~	3~			1~	3~	1~	3~																1~	3~
10 2N5/0.75	1.6	80	80	333	232	232	200	252	160	160	150	139	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø120	18.0	29.4	26.4
10 3N5/1.1	1.6	80	80	363	232	232	200	252	160	160	150	139	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø120	19.5	31.3	30.6
◆ 10 4N5/1.5	1.6	90S	80	403	278	267	200	252	172	180	140	148	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø140	21.9	39.7	35.9
◆ 10 5N5/2.2	1.6	90L	80	443	278	267	200	252	172	180	140	148	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø140	22.5	42.0	38.5
◆ 10 6N5/2.2	1.6	90L	80	473	278	267	200	252	172	180	140	148	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø140	24.0	43.5	40.0
10 8N5/3.0	1.6	100	80	543	-	306	200	252	-	196	-	155	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø160	30.6	-	53.4
10 10N5/4.0	1.6	112	80	603	-	306	200	252	-	196	-	155	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø160	31.5	-	54.3
10 11N5/4.0	1.6	112	80	633	-	306	200	252	-	196	-	155	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø160	34.0	-	56.8
10 12N5/5.5	1.6	132	80	674	-	328	200	252	-	220	-	161	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø300	39.3	-	77.9
10 14N5/5.5	1.6	132	80	734	-	328	200	252	-	220	-	161	130	190	215	250	G 1"1/2	-	100	-	-	2	M12	Ø12	20	Ø300	41.8	-	80.4
10 15F5/5.5	2.5	132	80	764	-	328	-	280	-	220	-	161	130	190	215	250	Ø40	Ø79	Ø110	Ø150	21	4	Ø18	Ø12	20	Ø300	45.8	-	84.4
10 16F5/7.5	2.5	132	80	794	-	328	-	280	-	220	-	161	130	190	215	250	Ø40	Ø79	Ø110	Ø150	21	4	Ø18	Ø12	20	Ø300	47.8	-	88.2
10 18F5/7.5	2.5	132	80	854	-	328	-	280	-	220	-	161	130	190	215	250	Ø40	Ø79	Ø110	Ø150	21	4	Ø18	Ø12	20	Ø300	49.8	-	90.2
10 20F5/7.5	2.5	132	80	914	-	328	-	280	-	220	-	161	130	190	215	250	Ø40	Ø79	Ø110	Ø150	21	4	Ø18	Ø12	20	Ø300	49.8	-	90.2
10 22F5/11	2.5	160M	80	1004	-	403	-	280	-	248	-	195	130	190	215	250	Ø40	Ø79	Ø110	Ø150	21	4	Ø18	Ø12	20	Ø350	55.5	-	118.0
◆ 18 2F5/2.2	1.6	90L	90	373	278	267	-	300	172	180	140	148	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø140	27.4	46.9	43.4
18 3F5/3.0	1.6	100	90	423	-	306	-	300	-	196	-	155	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø160	28.9	28.9	51.7
18 4F5/4.0	1.6	112	90	473	-	306	-	300	-	196	-	155	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø160	31.4	-	54.2
18 5F5/5.5	1.6	132	90	524	-	328	-	300	-	220	-	161	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø300	38.4	-	77.0
18 6F5/5.5	1.6	132	90	564	-	328	-	300	-	220	-	161	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø300	41.4	-	80.0
18 7F5/7.5	2.5	132	90	604	-	328	-	300	-	220	-	161	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø300	43.9	-	84.3
18 8F5/7.5	2.5	132	90	644	-	328	-	300	-	220	-	161	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø300	43.8	-	84.2
18 10F5/11	2.5	160M	90	754	-	403	-	300	-	248	-	195	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø350	54.3	-	116.8
18 12F5/11	2.5	160M	90	834	-	403	-	300	-	248	-	195	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø350	57.3	-	119.8
18 14F5/15	2.5	160M	90	914	-	498	-	300	-	317	-	238	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø350	57.8	-	144.9
18 15F5/15	2.5	160M	90	954	-	498	-	300	-	317	-	238	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø350	58.3	-	145.4
18 16F5/15	2.5	160M	90	994	-	498	-	300	-	317	-	238	130	190	215	250	Ø50	Ø92	Ø125	Ø165	21	4	Ø18	Ø12	20	Ø350	61.3	-	148.4

- 1) AEG motor dimensions except ◆ Single phase motors manufactured by Ebara
- 2) 1.6 MPa=16 bar
2.5 MPa=25 bar

**PACKING TABLE
EVM(.) 10-18**

PUMP TYPE EVM (.)	PUMPS					PUMPS WITH MOTOR ~1					PUMPS WITH MOTOR ~3				
	Packing [mm]			Weight [kgf]	Pack Type	Packing [mm]			Weight [kgf]	Pack Type	Packing [mm]			Weight [kgf]	Pack Type
	X	Y	Z			X	Y	Z			X	Y	Z		
10 2N5/0.75	265	265	410	22.0	1	300	300	825	33.4	2	300	300	825	30.4	2
10 3N5/1.1	265	265	410	23.5	1	300	300	825	35.3	2	300	300	825	34.6	2
10 4N5/1.5	265	265	525	25.9	1	300	300	825	43.5	2	300	300	825	39.9	2
10 5N5/2.2	265	265	525	26.5	1	300	300	935	46.0	2	300	300	935	42.5	2
10 6N5/2.2	265	265	525	28.0	1	300	300	935	47.5	2	300	300	935	44.0	2
10 8N5/3.0	300	300	825	34.6	2	-	-	-	-	-	400	400	1047	60.0	2
10 10N5/4.0	300	300	825	35.5	2	-	-	-	-	-	400	400	1047	71.6	2
10 11N5/4.0	300	300	825	38.0	2	-	-	-	-	-	400	400	1047	74.1	2
10 12N5/5.5	400	400	1047	46.0	2	-	-	-	-	-	480	480	1297	96.1	2
10 14N5/5.5	400	400	1047	48.5	2	-	-	-	-	-	480	480	1297	98.6	2
10 15F5/5.5	400	400	1047	52.5	2	-	-	-	-	-	410	1350	542	106.1	3
10 16F5/7.5	400	400	1047	54.5	2	-	-	-	-	-	410	1350	542	109.4	3
10 18F5/7.5	400	400	1047	56.5	2	-	-	-	-	-	410	1350	542	111.4	3
10 20F5/7.5	400	400	1230	59.5	2	-	-	-	-	-	410	1350	542	111.4	3
10 22F5/11	400	400	1230	65.5	2	-	-	-	-	-	610	1750	597	162.5	3
18 2F5/2.2	400	400	780	32.5	2	300	300	825	51.0	2	400	700	780	48.5	2
18 3F5/3.0	400	400	780	34.0	2	-	-	-	-	-	400	400	1047	58.5	2
18 4F5/4.0	400	400	780	36.5	2	-	-	-	-	-	400	400	1047	68.6	2
18 5F5/5.5	400	400	780	43.5	2	-	-	-	-	-	400	400	1047	91.6	2
18 6F5/5.5	400	400	780	46.5	2	-	-	-	-	-	400	400	1047	97.6	2
18 7F5/7.5	400	400	780	49.0	2	-	-	-	-	-	400	400	1047	100.9	2
18 8F5/7.5	400	400	1047	50.5	2	-	-	-	-	-	480	480	1297	101.4	2
18 10F5/11	400	400	1047	61.0	2	-	-	-	-	-	500	1350	552	155.5	3
18 12F5/11	400	400	1047	64.0	2	-	-	-	-	-	520	1540	547	159.5	3
18 14F5/15	400	400	1230	67.5	2	-	-	-	-	-	520	1540	547	159.1	3
18 15F5/15	400	400	1230	68.0	2	-	-	-	-	-	520	1540	547	160.1	3
18 16F5/15	400	400	1230	71.0	2	-	-	-	-	-	610	1750	597	168.1	3