

ELECTROPOMPE CENTRIFUGE MONOBLOC STANDARDIZATE CONFORM EN 733 din fonta



APLICATII:

- manevrarea apei curate pentru aplicatii civile, industriale, in agricultura si pentru unitati de presurizare, statii de incalzire si statii de aer conditionat;
- irigarea in ferme;
- unitati sportive;
- statii de spalare.

DATE TEHNICE:

- disponibile cu sisteme variate de etansare;

DATE TEHNICE POMPE:

- temperatura lichidului:
 - 5°C ÷ +90°C (MD);
 - 5°C ÷ +110°C (MD versiunile H-HS-HW-HSW);
 - 5°C ÷ +120°C (MD versiunea E);
 - 10°C ÷ 90°C (MMD);
- presiunea maxima de operare: 10 bari;
- MEI > 0.4.

DATE TEHNICE MOTOR:

- motoare IE3 eficienta energetic, cu puteri de la 5.5 kW (MD);
- motoare IE2 eficienta energetic cu puteri de la 0.75 kW si motoare IE3 cu puteri incepand de la 7.5 kW (MMD);
- motoare asincrone cu 2 si 4 poli, cu sistem de auto-ventilare;
- calasa de izolatie F;
- protectie IP55;
- 230/400V ±10% 50Hz trifazat, cu puteri de pana la 4 kW;
- 400/690V ±10% 50Hz (de la 5.5 kW) trifazat;
- condensator incorporat si protectie termo-ampmetrica cu rearmare automata, incorpora, pentru motoarele monfaate;

- pentru motoarele trifazate, protectia este in grija utilizatorului;

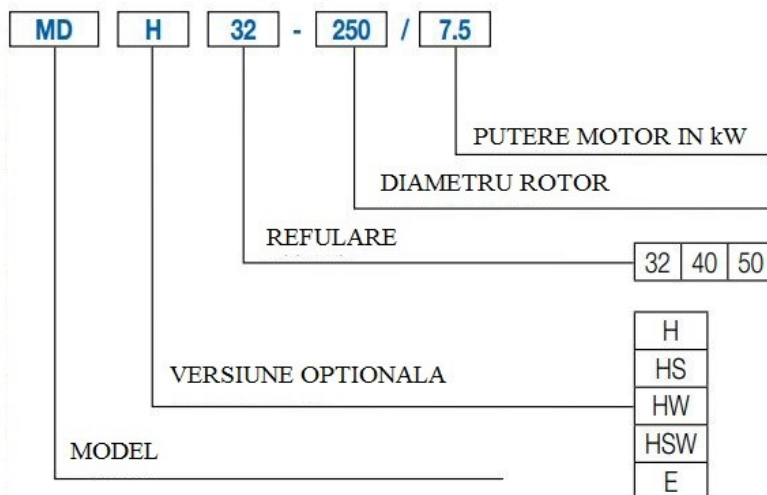
MATERIALE:

- corpul pompei si suportul sunt din fonta cenusie;
- ax din AISI 304 – piesa aflata in contact cu lichidul (MD) si din AISI 420 (MMD);
- etansare mecanica: din Carbon/Ceramica/NBR (MD) si din Carbura de Siliciu/Carbura de siliciu/NBR (MMD);
- rotor: din AISI 304 (MD) si din fonta cenusie (MMD).

ACCESORII (La cerere):

- contra-flanse galvanizate.

COD DE IDENTIFICARE MD



COD DE IDENTIFICARE MMD

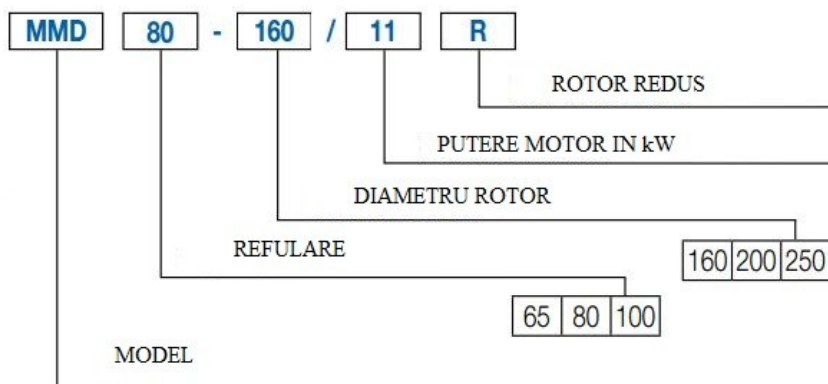


DIAGRAMME DE PERFORMANTA MD 2 POLI
 la 2900 min^{-1} (in concordanta cu ISO 9906 Anexa A)

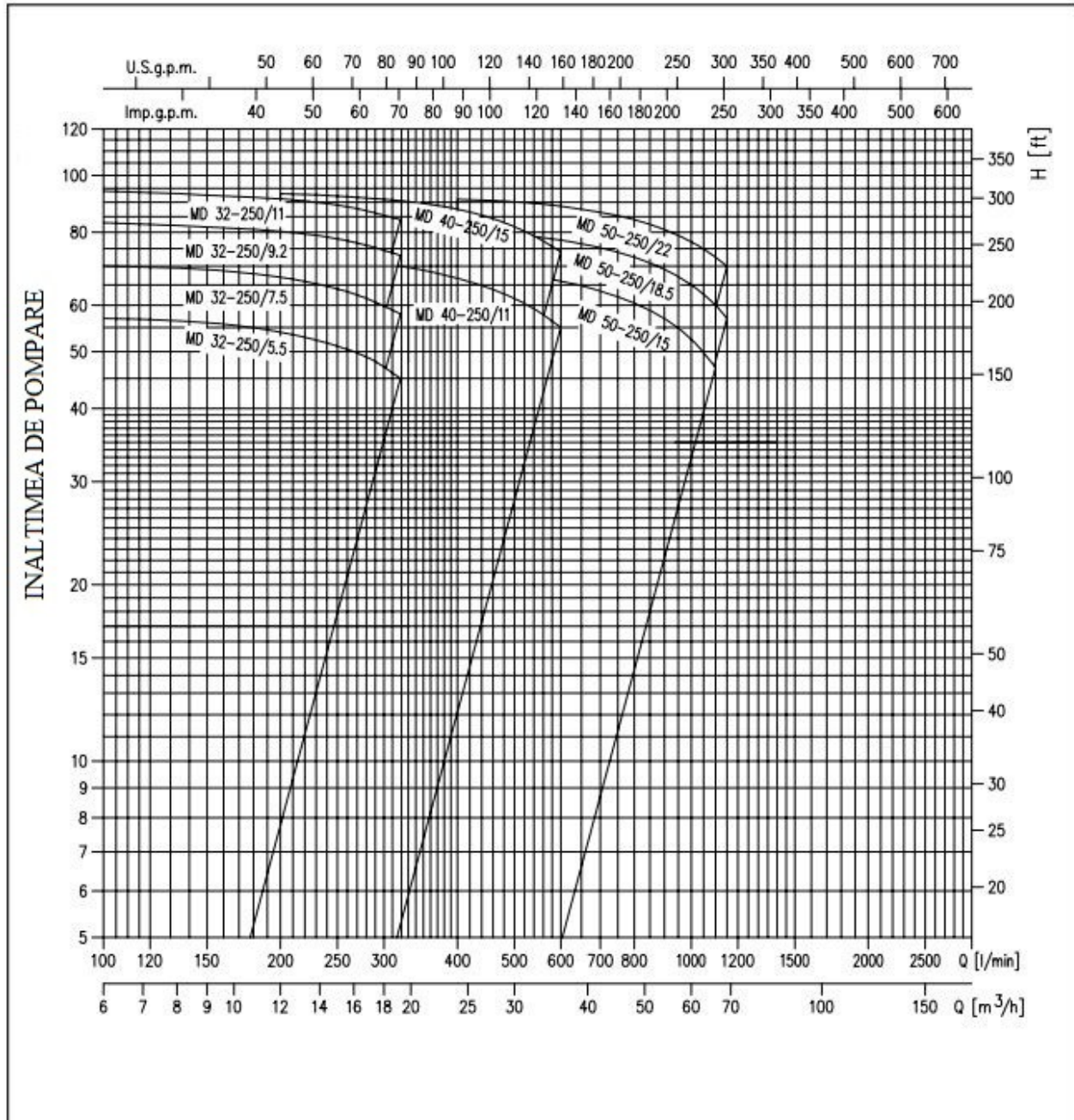


DIAGRAMME DE PERFORMANTA MMD 2 POLI
la 2900 min^{-1} (in concordanta cu ISO 9906 Anexa A)

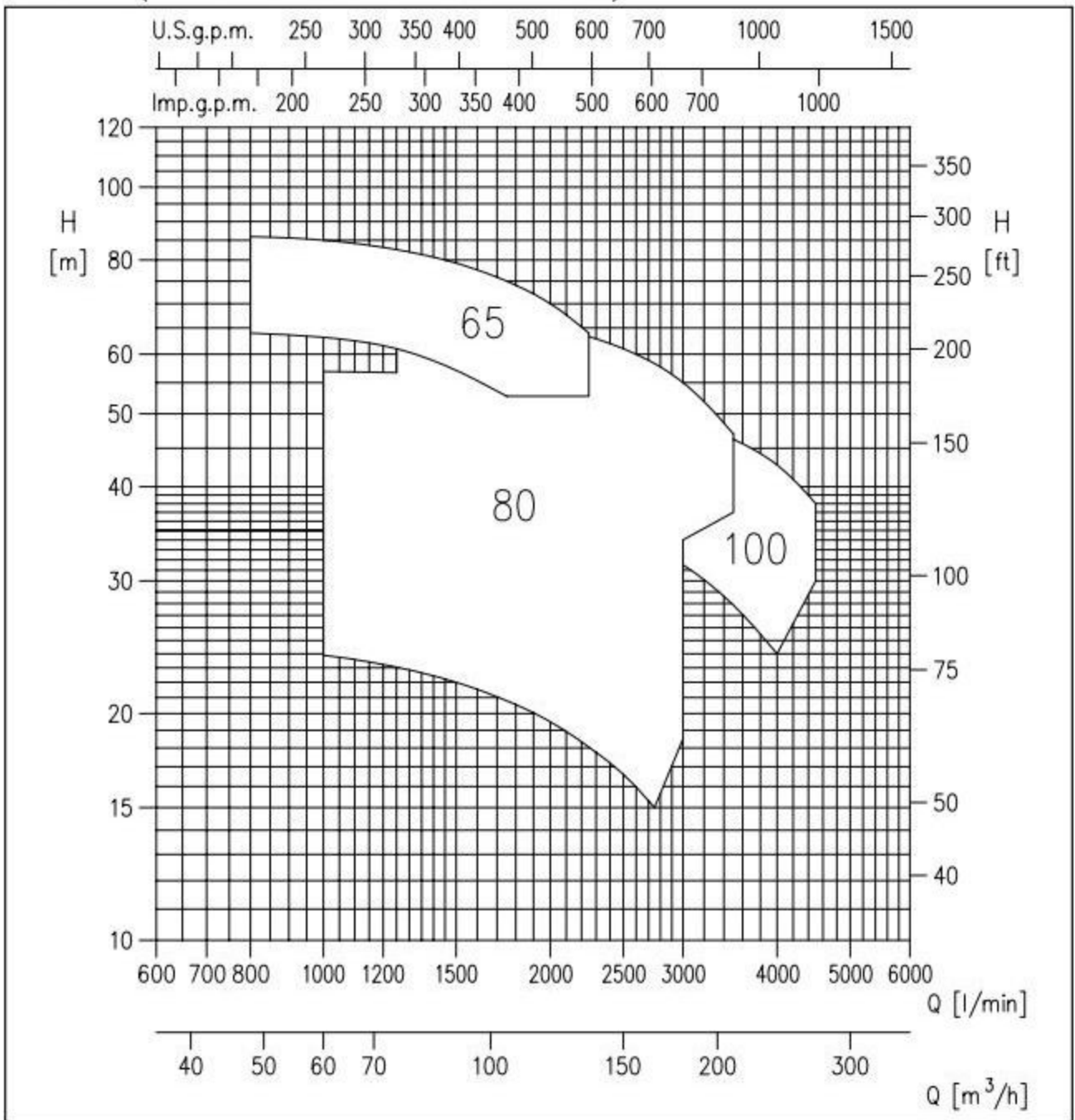
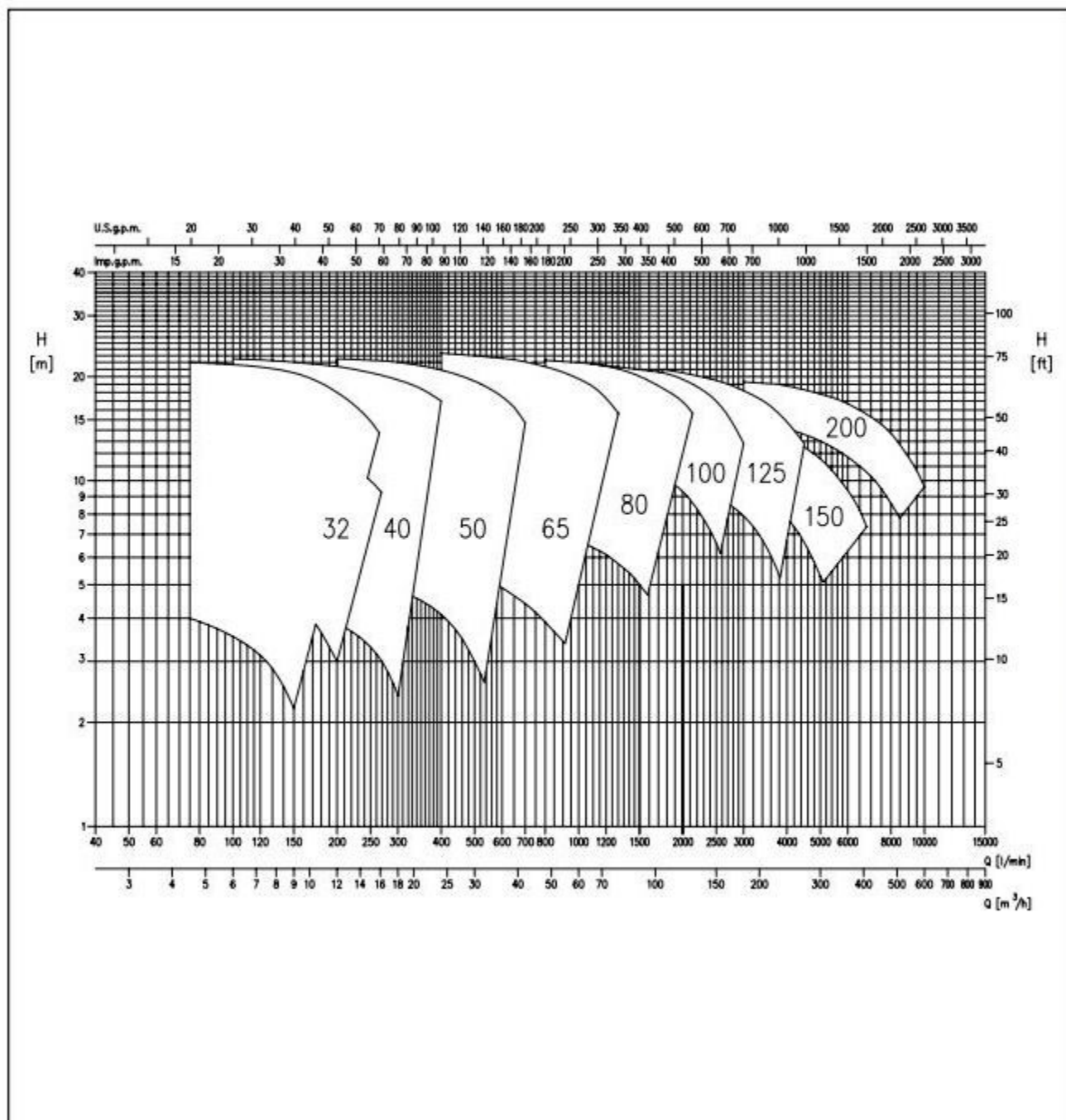


DIAGRAMME DE PERFORMANTA MMD 4 POLI
la 1400 min^{-1} (in concordanta cu ISO 9906 Anexa A)



TABEL PERFORMANTA MD

2 POLI

Model	P ₂		Q= Debit																
	[HP]	[kW]	l/min m ³ /h	100	200	250	280	320	400	550	600	667	700	800	1000	1100	1150	1200	1300
			H= inaltimea de pompare																
MD 32-250/5.5	7.5	5.5	56.5	53.0	50.4	48.6	45.7	38.0	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/7.5	10	7.5	70.0	67.1	64.5	62.7	60.0	53.0	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/9.2	12.5	9.2	81.2	78.2	75.8	74.0	71.4	65.0	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/11	15	11	89.0	86.0	84.0	82.0	79.0	73.0	-	-	-	-	-	-	-	-	-	-	-
MD 40-250/11	15	11	-	74.0	73.0	72.2	71.0	68.2	60.1	56.3	49.8	46.0	-	-	-	-	-	-	-
MD 40-250/15	20	15	-	92.7	92.1	91.7	90.8	88.1	81.2	78.0	72.9	70.0	-	-	-	-	-	-	-
MD 50-250/15	20	15	-	-	-	-	-	71.2	69.2	68.2	66.6	65.7	62.6	54.2	49.0	46.1	43.0	-	-
MD 50-250/18.5	25	18.5	-	-	-	-	-	81.5	79.5	78.5	77.0	76.1	73.2	66.0	61.4	58.9	56.1	50.0	-
MD 50-250/22	30	22	-	-	-	-	-	91.6	89.7	88.9	87.6	86.9	84.3	77.4	73.0	70.4	67.7	61.5	-

TABEL DE PERFORMANTA

2 POLI

Model	P ₂		Q= Debit													
	[HP]	[kW]	l/min m ³ /h	800	1000	1250	1500	1750	2000	2250	2500	2750	3000	3500	4000	4500
			H= inaltimea de pompare													
MMD 65-250/22	30	22	64.0	63.0	61.0	57.0	53.0	-	-	-	-	-	-	-	-	-
MMD 65-250/30	40	30	77.0	76.0	74.0	70.0	66.0	60.0	53.0	-	-	-	-	-	-	-
MMD 65-250/37	55	37	86.0	85.0	83.0	79.0	75.0	70.0	64.0	-	-	-	-	-	-	-
MMD 80-160/11	15	11	-	24.0	23.0	22.0	21.0	19.5	18.0	16.5	15.0	-	-	-	-	-
MMD 80-160/15R	20	15	-	28.5	28.0	27.0	26.0	24.5	23.0	21.5	20.0	18.5	-	-	-	-
MMD 80-160/15	20	15	-	34.0	33.3	32.5	31.8	31.0	29.0	27.5	26.0	24.3	-	-	-	-
MMD 80-200/18.5	25	18.5	-	42.0	41.0	40.0	38.5	37.0	35.0	33.0	30.5	28.0	-	-	-	-
MMD 80-200/22	30	22	-	47.0	46.5	45.5	44.5	43.0	41.0	39.0	37.0	34.0	-	-	-	-
MMD 80-200/30	40	30	-	55.0	54.0	53.0	52.0	51.0	49.0	47.0	45.0	43.0	37.0	-	-	-
MMD 80-200/37	55	37	-	57.0	57.0	56.5	56.0	55.0	54.0	52.5	51.0	48.0	42.0	-	-	-
MMD 80-250/37	55	37	-	-	67.5	67.0	66.2	65.0	63.3	61.0	58.3	55.0	47.0	-	-	-
MMD 100-200/22	30	22	-	-	-	38.5	38.0	37.0	36.0	34.5	33.0	31.5	28.0	24.0	-	-
MMD 100-200/30	40	30	-	-	-	47.0	46.3	45.6	44.8	43.7	42.4	41.0	38.0	34.6	30.0	-
MMD 100-200/37	55	37	-	-	-	53.5	53.5	53.0	52.0	51.0	50.0	49.0	46.0	43.0	38.0	-

TABEL DE PERFORMANTA MMD4

4 POLI

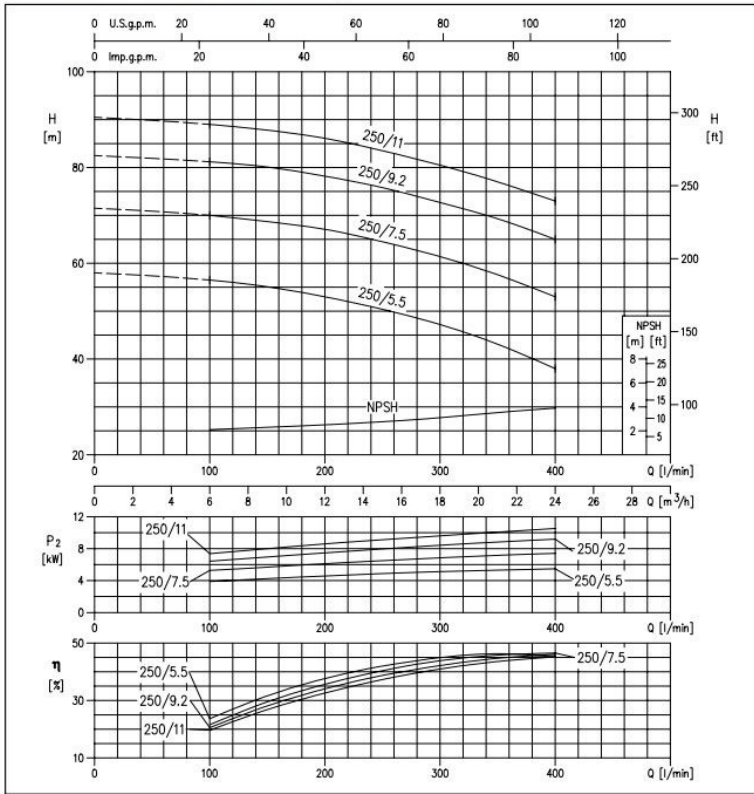
Model	P ₂		Q= Debit																		
	[HP]	[kW]	l/min m ³ /h	75	100	125	150	175	200	225	250	275	300	350	400	450	500	550	600	650	700
			H= inaltimea de pompare																		
MMD4 32-250/1.1	1.5	1.1	18.5	18.0	17.5	17.0	15.9	14.5	12.8	11.0	-	-	-	-	-	-	-	-	-	-	-
MMD4 32-250/1.5	2	1.5	22.0	21.6	21.2	20.5	19.4	18.0	16.5	15.0	13.0	-	-	-	-	-	-	-	-	-	-
MMD4 40-250/1.5	2	1.5	-	18.3	18.0	17.7	17.4	17.0	16.7	16.2	15.6	15.0	13.7	12.0	-	-	-	-	-	-	-
MMD4 40-250/2.2	3	2.2	-	22.5	22.3	22.0	21.7	21.4	21.2	20.5	20.2	19.5	18.5	17.0	-	-	-	-	-	-	-
MMD4 50-250/2.2	3	2.2	-	-	-	-	-	18.5	18.3	18.1	17.8	17.5	17.0	16.2	15.5	14.5	13.5	12.5	11.3	10.0	-
MMD4 50-250/3	4	3	-	-	-	-	-	22.5	22.4	22.3	22.2	22.0	21.5	20.9	20.2	19.4	18.5	17.5	16.3	14.7	-

Model	P ₂		Q= Debit																	
	[HP]	[kW]	l/min m ³ /h	500	550	600	650	700	800	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	
			H= inaltimea de pompare																	
MMD4 65-250/4	5.5	4	19.5	19.3	19.1	18.8	18.5	17.5	16.5	15.5	14.0	12.5	10.4	-	-	-	-	-	-	
MMD4 65-250/5.5	7.5	5.5	23.0	22.8	22.6	22.4	22.2	21.4	20.6	19.7	18.7	17.3	15.7	14.0	-	-	-	-	-	
MMD4 80-160/1.5	2	1.5	-	-	7.7	7.6	7.5	7.3	7.0	6.7	6.4	6.1	5.7	5.4	5.0	-	-	-	-	
MMD4 80-160/2.2	3	2.2	-	-	9.7	9.6	9.5	9.3	9.0	8.8	8.5	8.2	7.9	7.5	7.1	6.0	-	-	-	
MMD4 80-200/3	4	3	-	-	12.0	11.9	11.7	11.5	11.3	11.0	10.5	10.0	9.5	9.0	8.5	7.0	-	-	-	
MMD4 80-200/4	5.5	4	-	-	14.4	14.3	14.2	14.0	13.8	13.5	13.1	12.6	12.2	11.6	11.0	9.0	6.5	-	-	
MMD4 80-250/5.5	7.5	5.5	-	-	-	-	-	19.2	18.9	18.5	18.0	17.6	17.1	16.5	16.0	14.0	12.0	-	-	
MMD4 80-250/7.5	10	7.5	-	-	-	-	-	22.3	22.1	21.9	21.7	21.3	21.0	20.5	20.0	18.5	16.9	14.5	-	

Model	P.		Q= Debit																							
	[HP]	[kW]																								
			l/min	900	1000	1200	1500	1750	2000	2250	2500	2750	3000	3500	3700	4000	4500	5000	5500	6500	7000	8500	9000	9500	10000	
m ³ /h	54	60	72	90	105	120	135	150	165	180	210	222	240	270	300	330	390	420	510	540	570	60	60	60		
			H= Inaltimea de pompare																							
MMD4 100-200/4	5.5	4	12.3	12.2	11.8	11.2	10.3	9.3	8.0	6.6	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-		
MMD4 100-200/5.5	7.5	5.5	14.5	14.4	14.0	13.4	12.8	12.0	11.0	9.8	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-		
MMD4 100-250/7.5	10	7.5	-	19.5	19.1	18.5	17.5	16.5	15.2	14.0	12.0	-	-	-	-	-	-	-	-	-	-	-	-	-		
MMD4 100-250/11	15	11	-	22.0	21.8	21.5	20.5	19.5	18.5	17.0	15.0	12.8	-	-	-	-	-	-	-	-	-	-	-	-		
MMD4 125-200/5.5	7.5	5.5	-	-	-	10.5	10.3	9.9	9.5	9.1	8.5	7.9	6.4	5.7	-	-	-	-	-	-	-	-	-	-		
MMD4 125-200/7.5R	10	7.5	-	-	-	11.8	11.6	11.3	11.0	10.6	10.2	9.6	8.3	7.7	6.7	-	-	-	-	-	-	-	-	-		
MMD4 125-200/7.5	10	7.5	-	-	-	-	12.9	12.7	12.4	12.1	11.7	11.2	10.1	9.6	8.7	7.1	-	-	-	-	-	-	-	-		
MMD4 125-200/11	15	11	-	-	-	-	14.3	14.1	13.8	13.6	13.2	12.8	11.8	11.3	10.6	9.2	7.6	-	-	-	-	-	-	-		
MMD4 125-250/11	15	11	-	-	-	-	17.2	16.7	16.2	15.5	14.8	13.9	12.0	11.3	10.0	-	-	-	-	-	-	-	-	-		
MMD4 125-250/15	20	15	-	-	-	-	21.0	20.5	20.1	19.5	18.9	18.2	16.6	16.0	14.8	12.8	-	-	-	-	-	-	-	-		
MMD4 150-200/7.5	10	7.5	-	-	-	-	-	11.0	10.7	10.4	10.1	9.7	8.8	8.4	7.8	6.6	5.3	-	-	-	-	-	-	-		
MMD4 150-200/11R	15	11	-	-	-	-	-	12.0	11.8	11.6	11.2	10.9	10.2	9.8	9.2	8.0	6.8	5.6	-	-	-	-	-	-		
MMD4 150-200/11	15	11	-	-	-	-	-	-	-	13.7	13.5	13.2	12.5	12.2	11.7	10.8	9.8	8.7	6.1	-	-	-	-	-		
MMD4 150-200/15	20	15	-	-	-	-	-	-	-	15.2	14.9	14.7	14.2	13.8	13.4	12.5	11.6	10.5	8.2	6.8	-	-	-	-		
MMD4 200-250/18.5R	25	18.5	-	-	-	-	-	-	-	-	-	14.9	14.5	14.3	14.1	13.6	13.0	12.3	11.0	10.3	7.8	-	-	-		
MMD4 200-250/18.5	25	18.5	-	-	-	-	-	-	-	-	-	-	15.9	15.5	15.3	15.2	14.7	14.2	13.6	12.3	11.6	9.1	8.2	-		
MMD4 200-250/22R	30	22	-	-	-	-	-	-	-	-	-	-	-	18.0	17.8	17.6	17.1	16.6	16.0	14.7	13.9	11.2	10.1	9.0		
MMD4 200-250/22	30	22	-	-	-	-	-	-	-	-	-	-	-	-	19.1	18.9	18.8	18.3	17.8	17.3	16.0	15.3	12.7	11.7	10.7	9.6

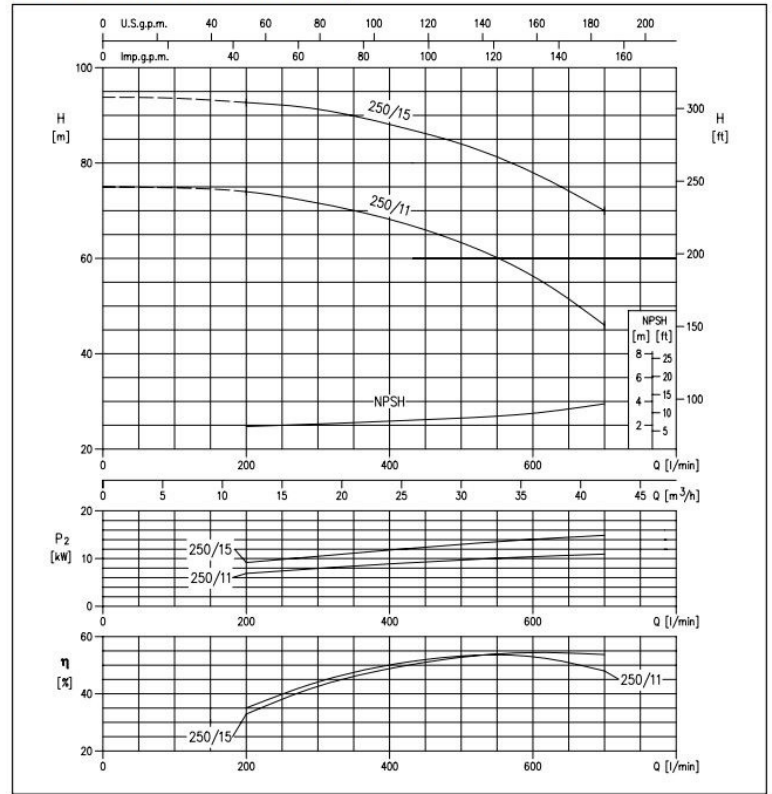
CURBE DE PERFORMANTE MD 32-250
(in concordanta cu ISO 9906 Anexa A)

2 POLI



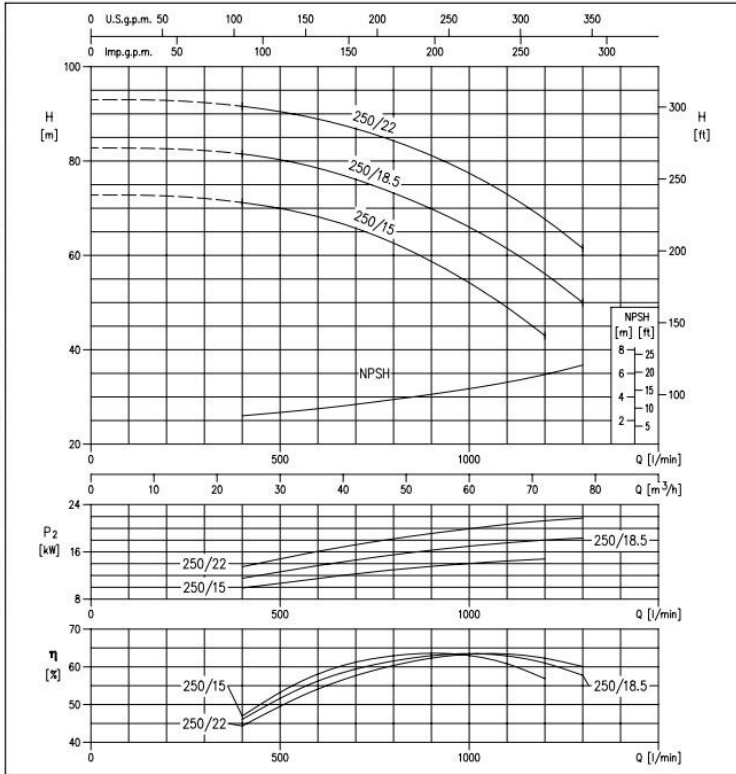
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2 POLI



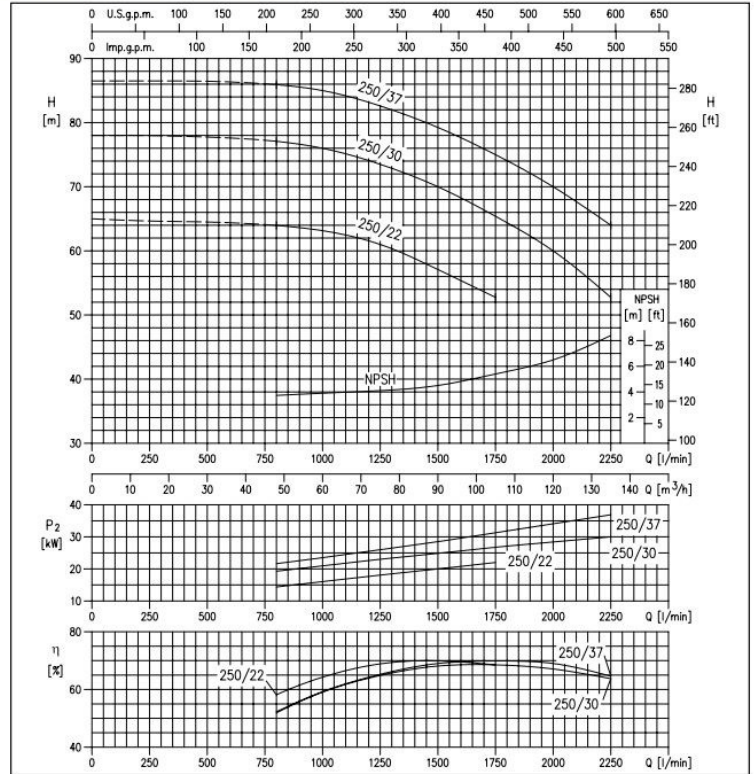
CURBE DE PERFORMANTA MD 50-250
(in concordanta cu ISO 9906 Anexa A)

2 POLI



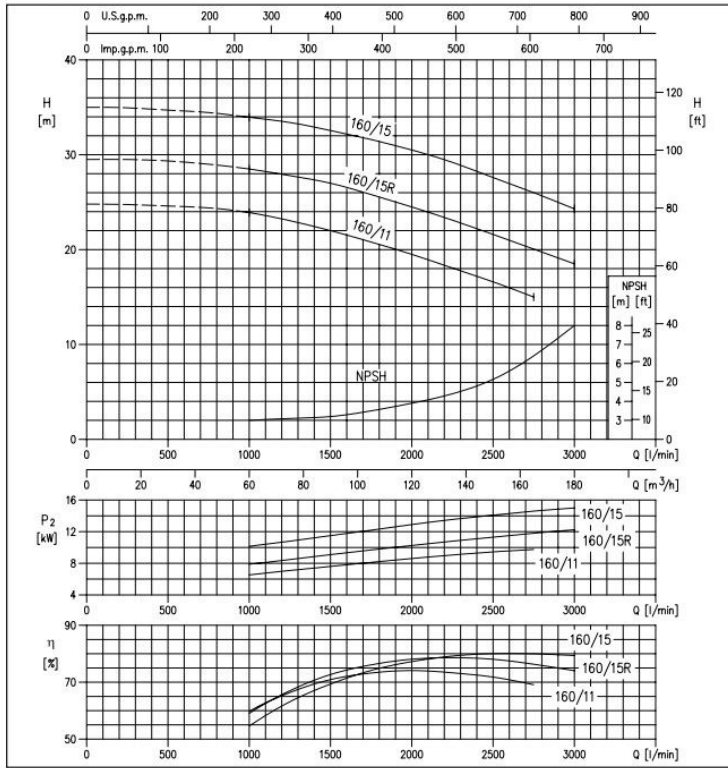
CURBE DE PERFORMANTA MD 65-250
(in concordanta cu ISO 9906 Anexa A)

2 POLI



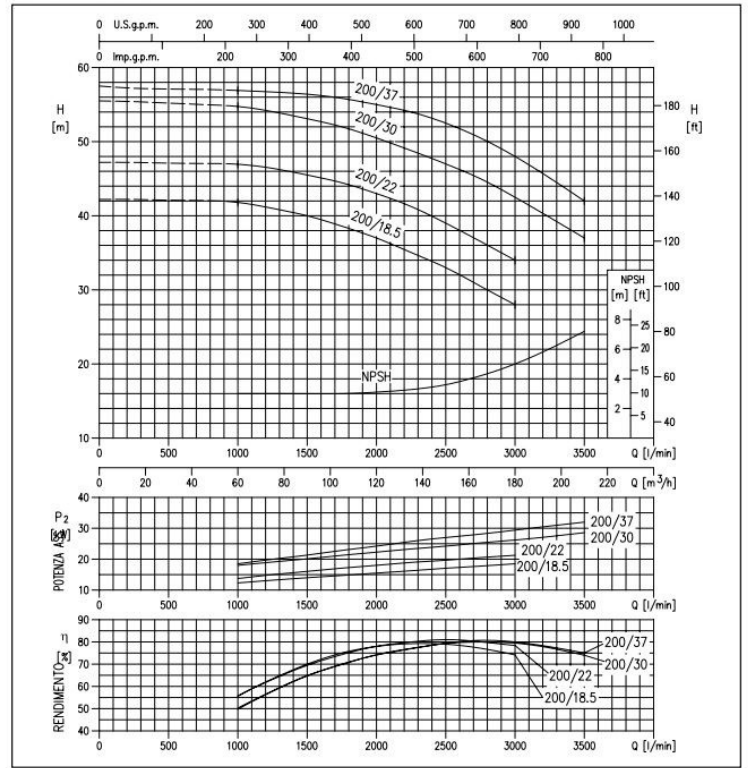
CURBE DE PERFORMANTA MMD 80-160
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2 POLI



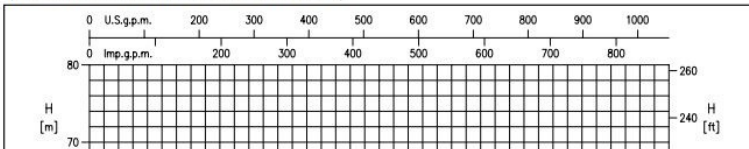
CURBE DE PERFORMANTA MMD 80-200
(in concordanta cu ISO 9906 Anexa A)

2 POLI



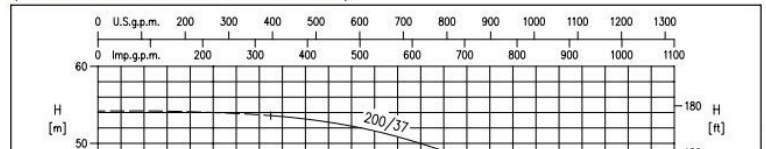
CURBE DE PERFORMANTA 80-250
(in concordanta cu ISO 9906 Anexa A)

2 POLI



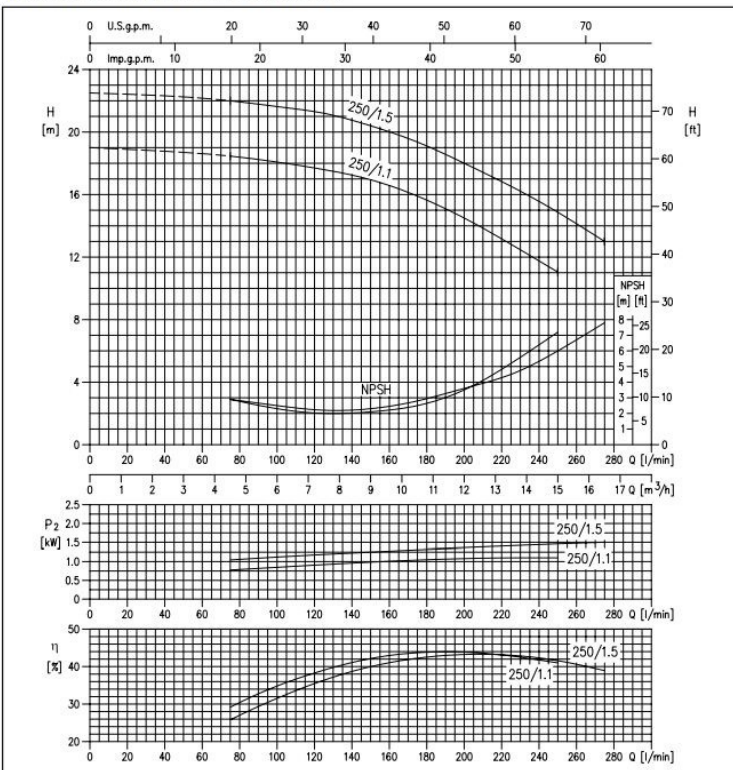
CURBE DE PERFORMANTA 100-200
(in concordanta cu ISO 9906 Anexa A)

2 POLI



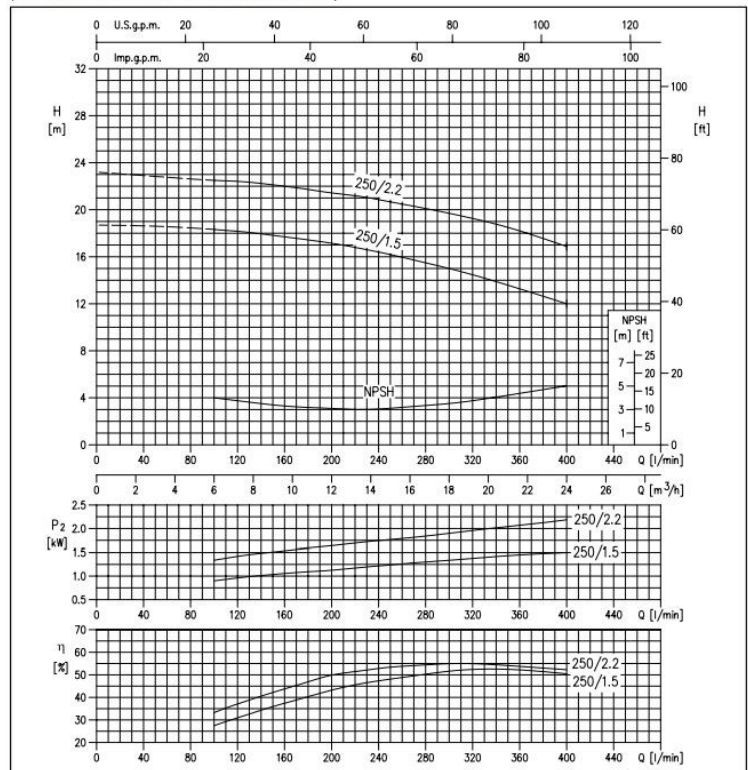
CURBE DE PERFORMANTA MMD4 32-250
(in concordanta cu ISO 9906 Anexa A)

4 POLI



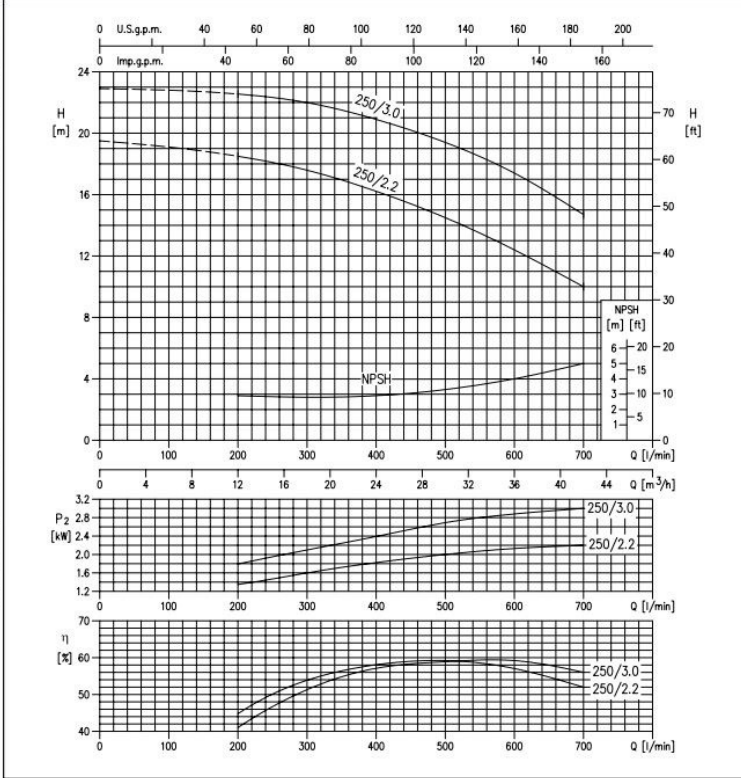
CURBE DE PERFORMANTA MMD4 40-250
(in concordanta cu ISO 9906 Anexa A)

4 POLI



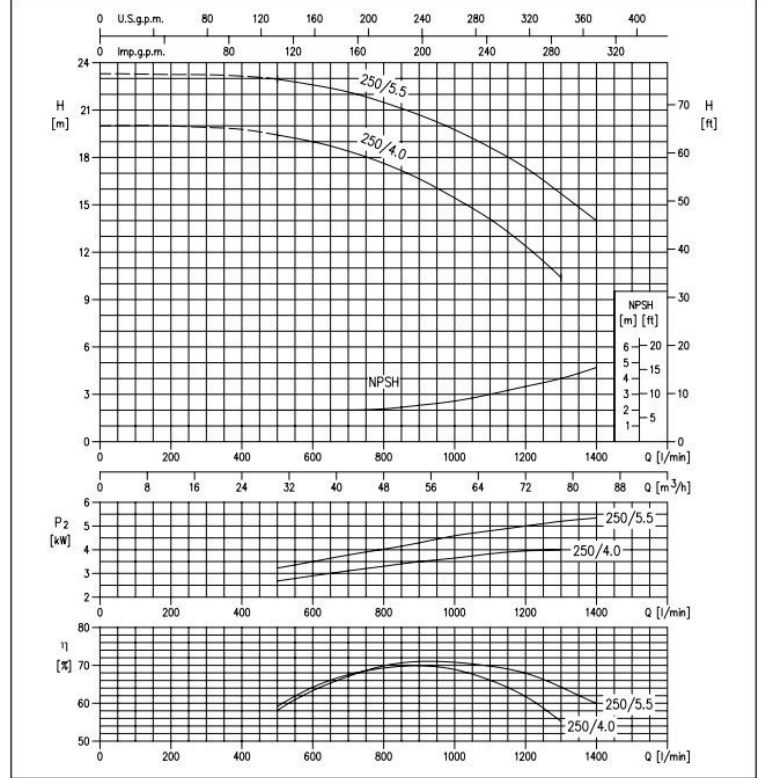
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(in concordanta cu ISO 9906 Anexa A)

4 POLI



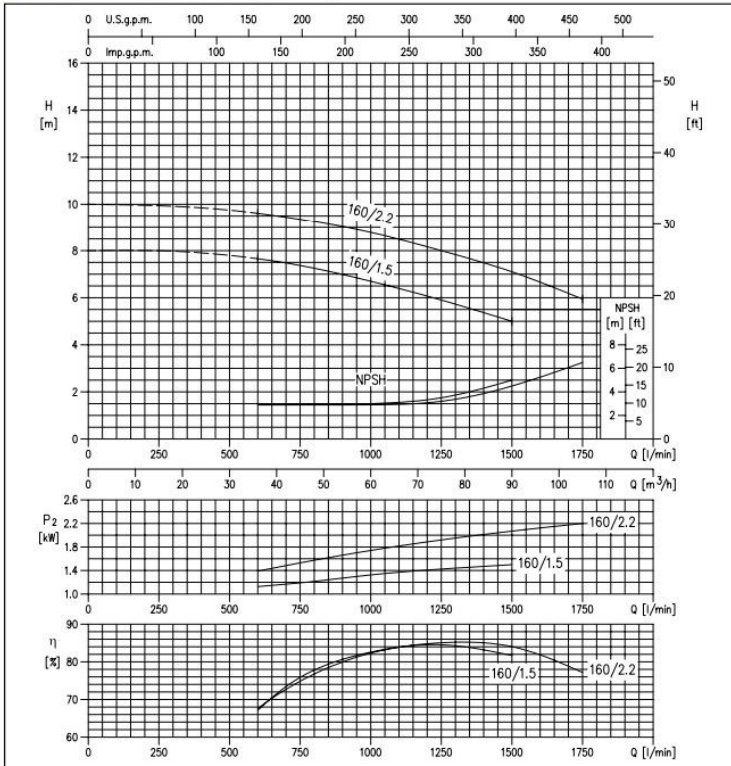
CURBE DE PERFORMANTA MMD4 65-250
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4 POLI



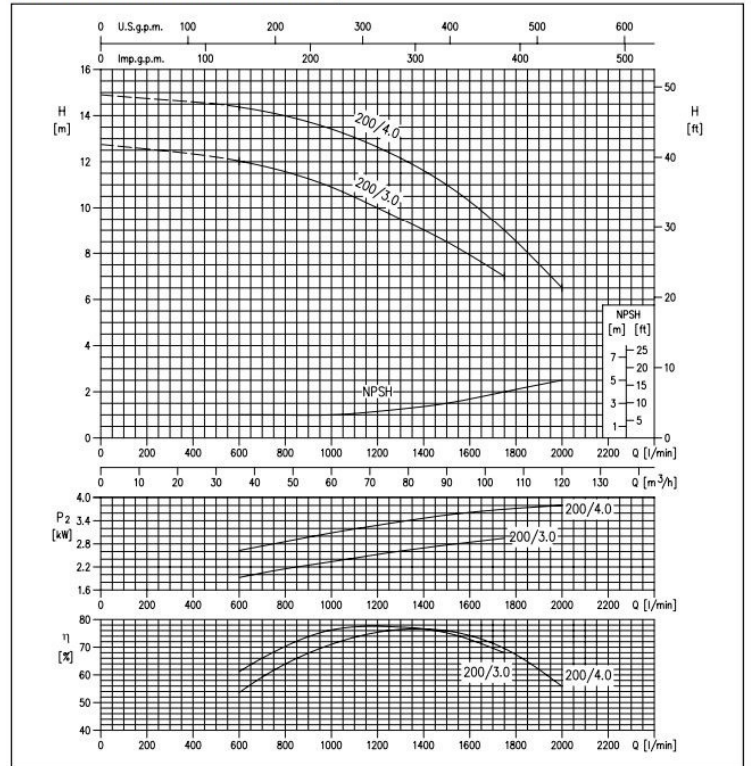
CURBE DE PERFORMANTA MMD4 80-160
(in concordanta cu ISO 9906 Anexa A)

4 POLI



CURBE DE PERFORMANTA MMD4 80-200
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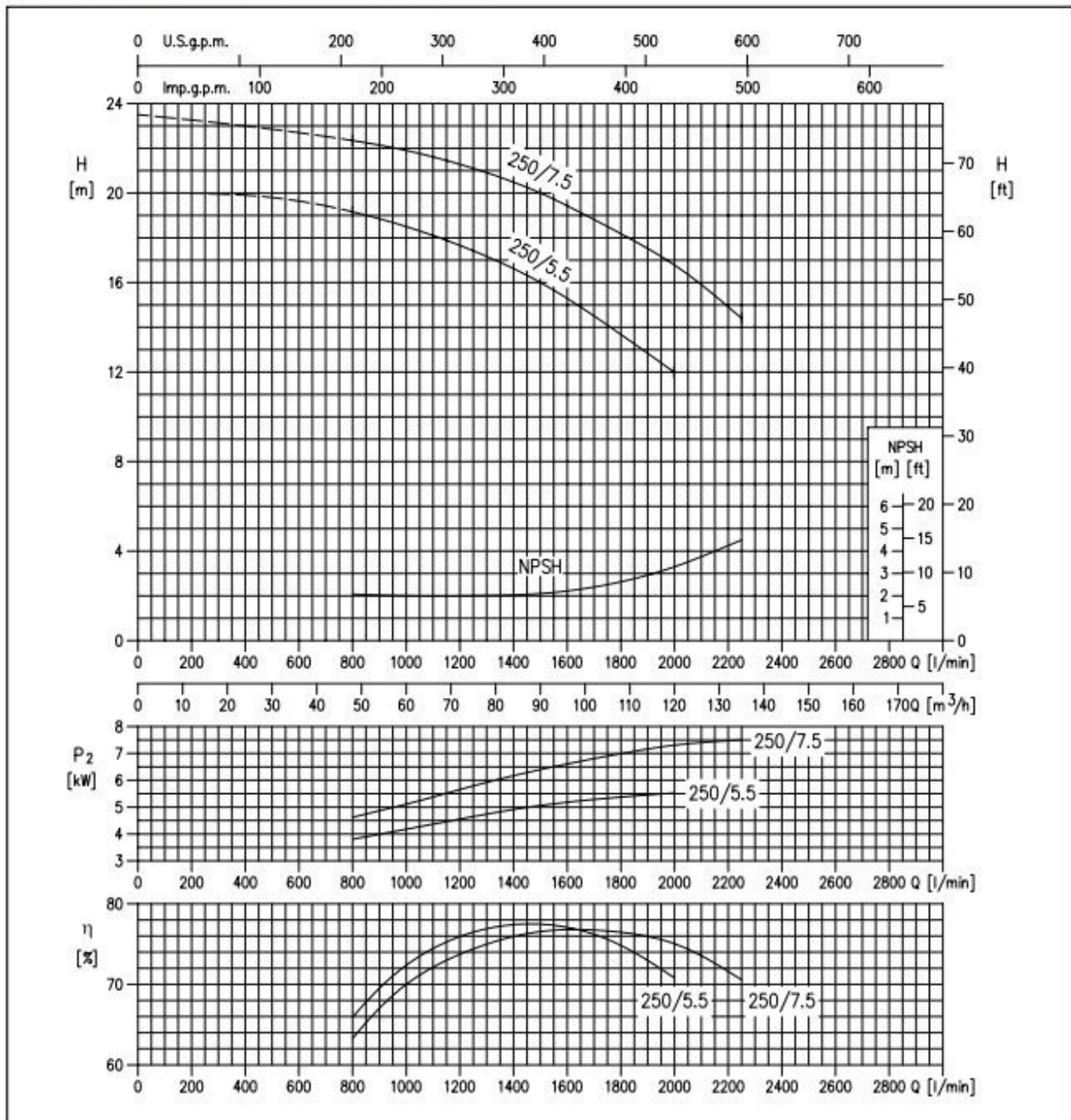
4 POLI



CURBE DE PERFORMANTA MMD4 80-250

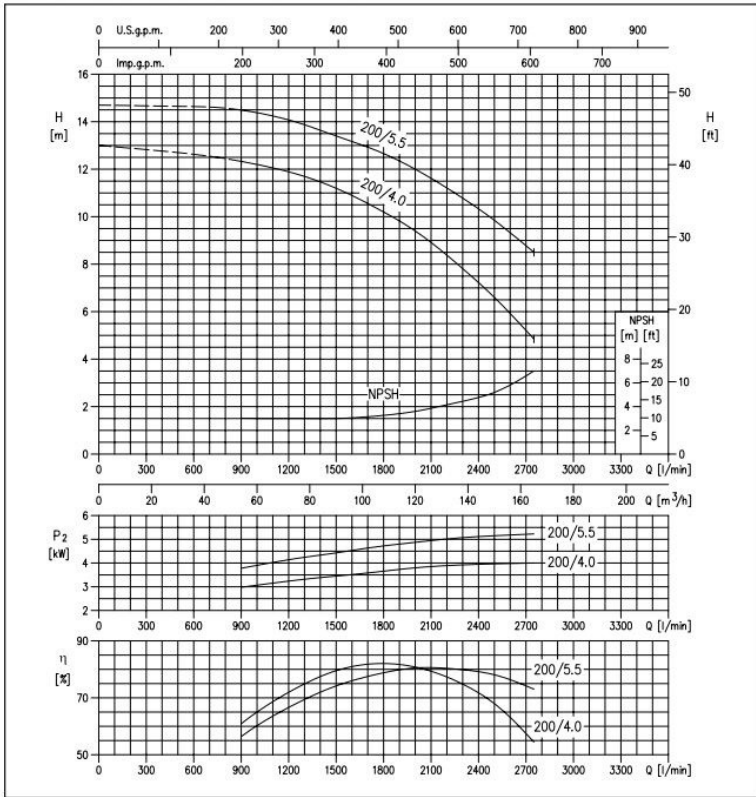
4 POLI

(in concordanta cu ISO 9906 Anexa A)



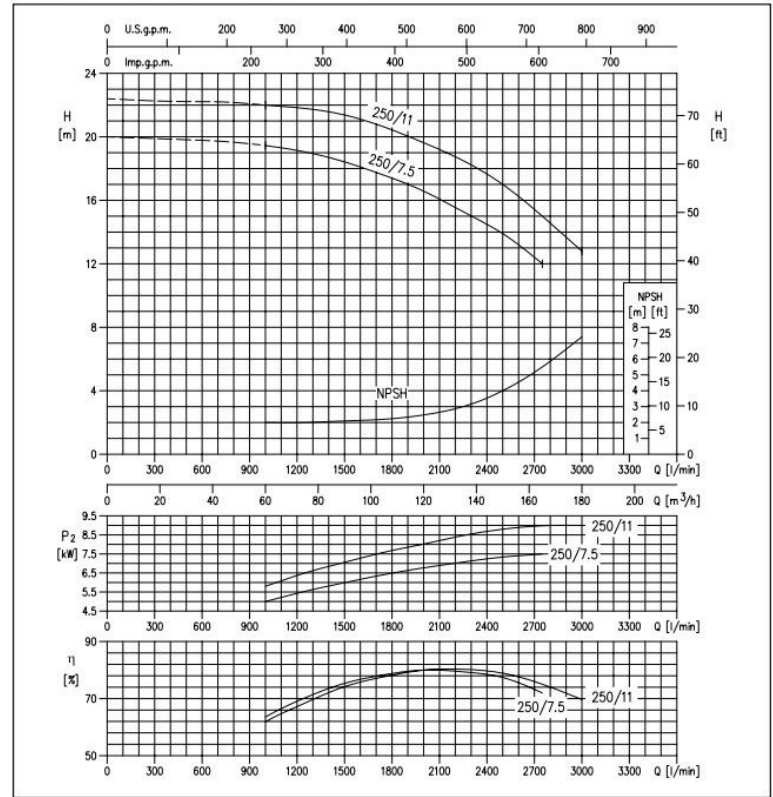
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4 POLI



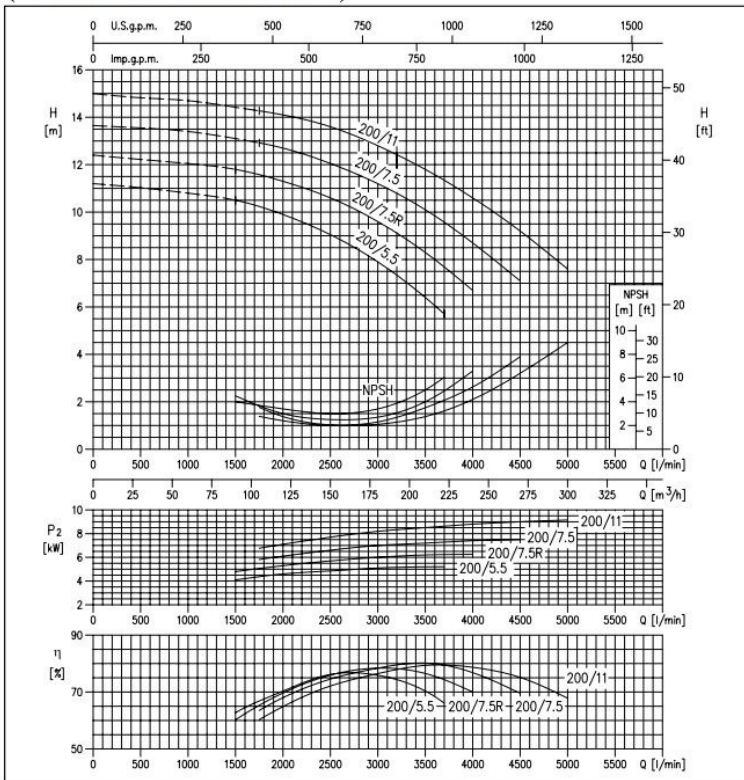
CURBE DE PERFORMANTA MMD4 100-250
(in concordanta cu ISO 9906 Anexa A)

4 POLI



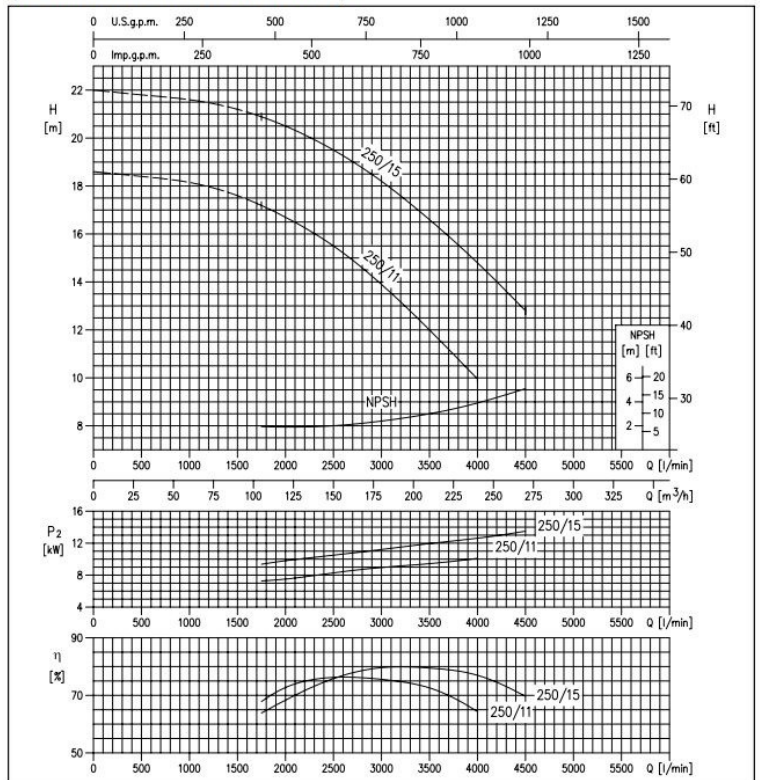
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(in concordanta cu ISO 9906 Anexa A)

4 POLI



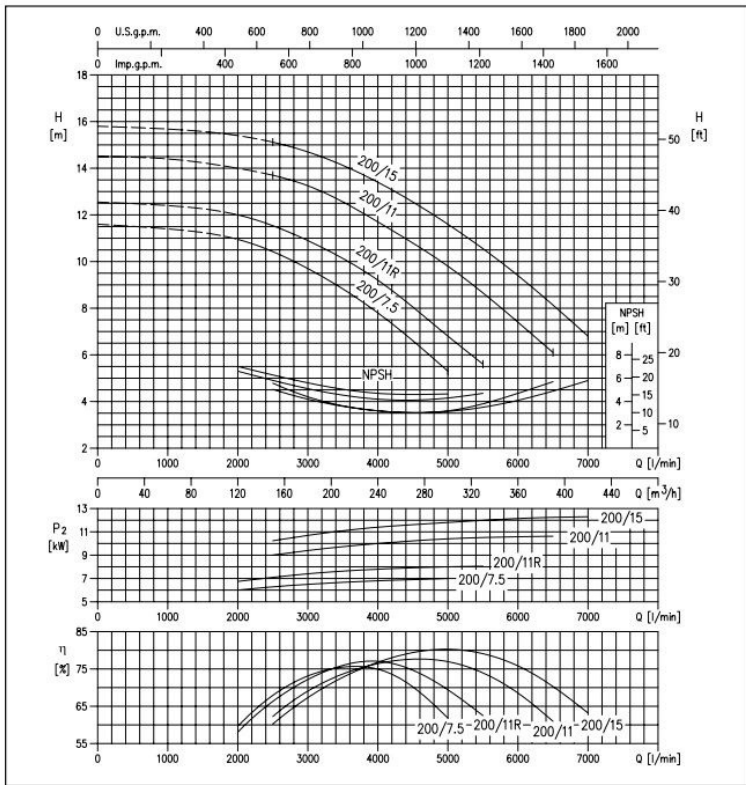
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4 POLI



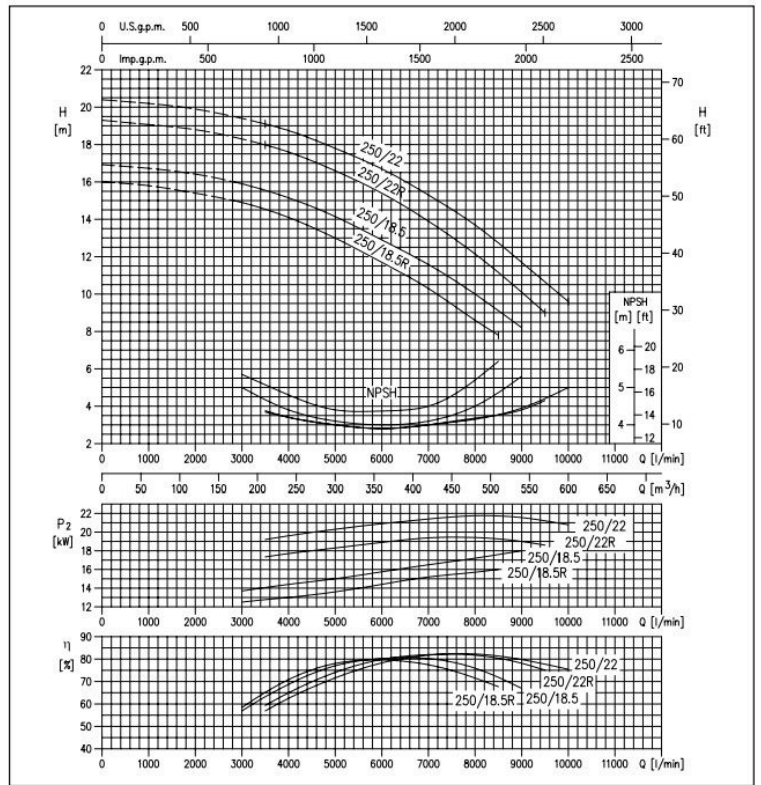
CURBE DE PERFORMANTA 150-200
(in concordanta cu ISO 9906 Anexa A)

4 POLI



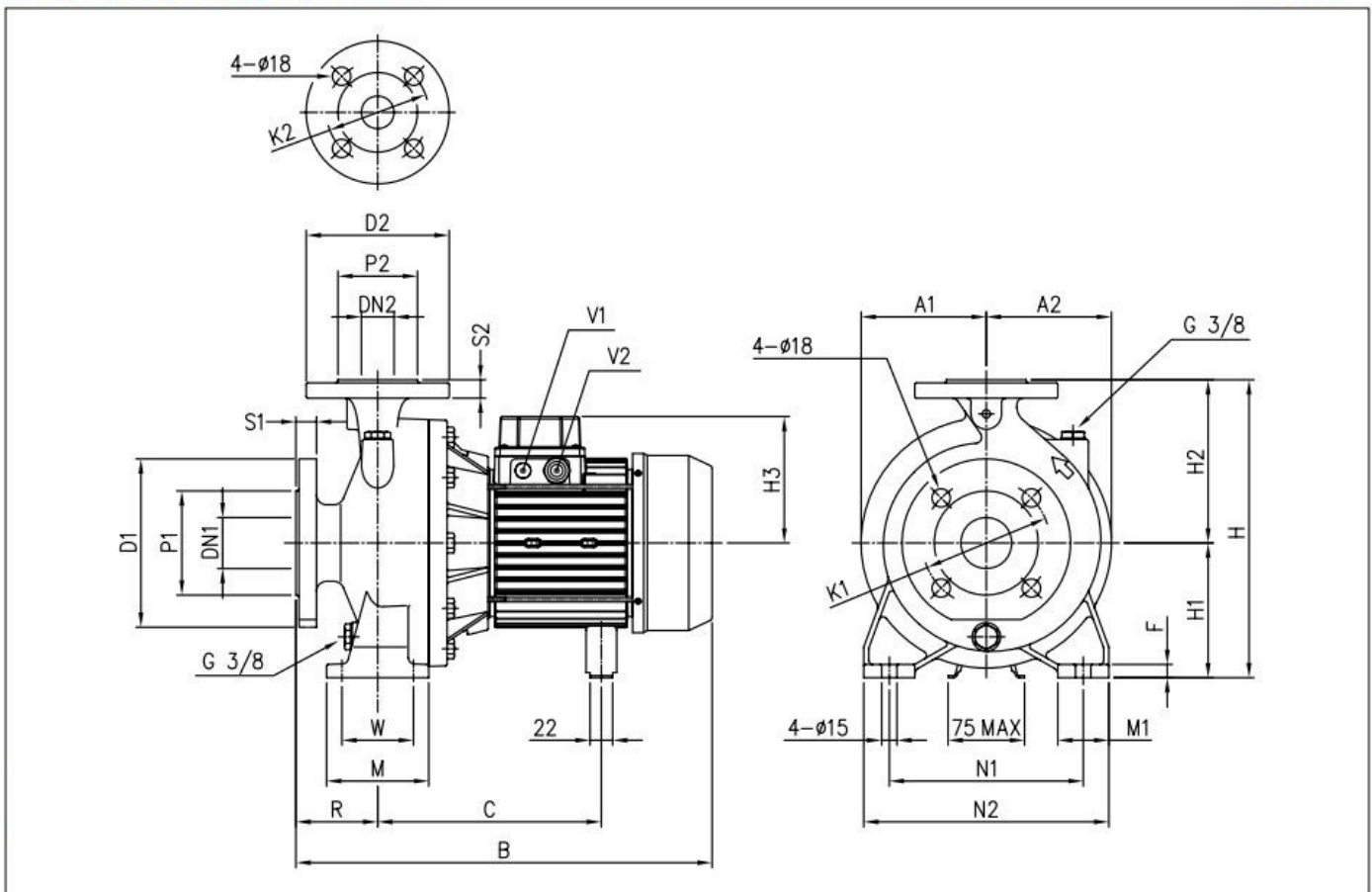
CURBE DE PERFORMANTA 200-250
(in concordanta cu ISO 9906 Anexa A)

4 POLI



DIMENSIUNI MD - pana la 11 kW

2 POLI



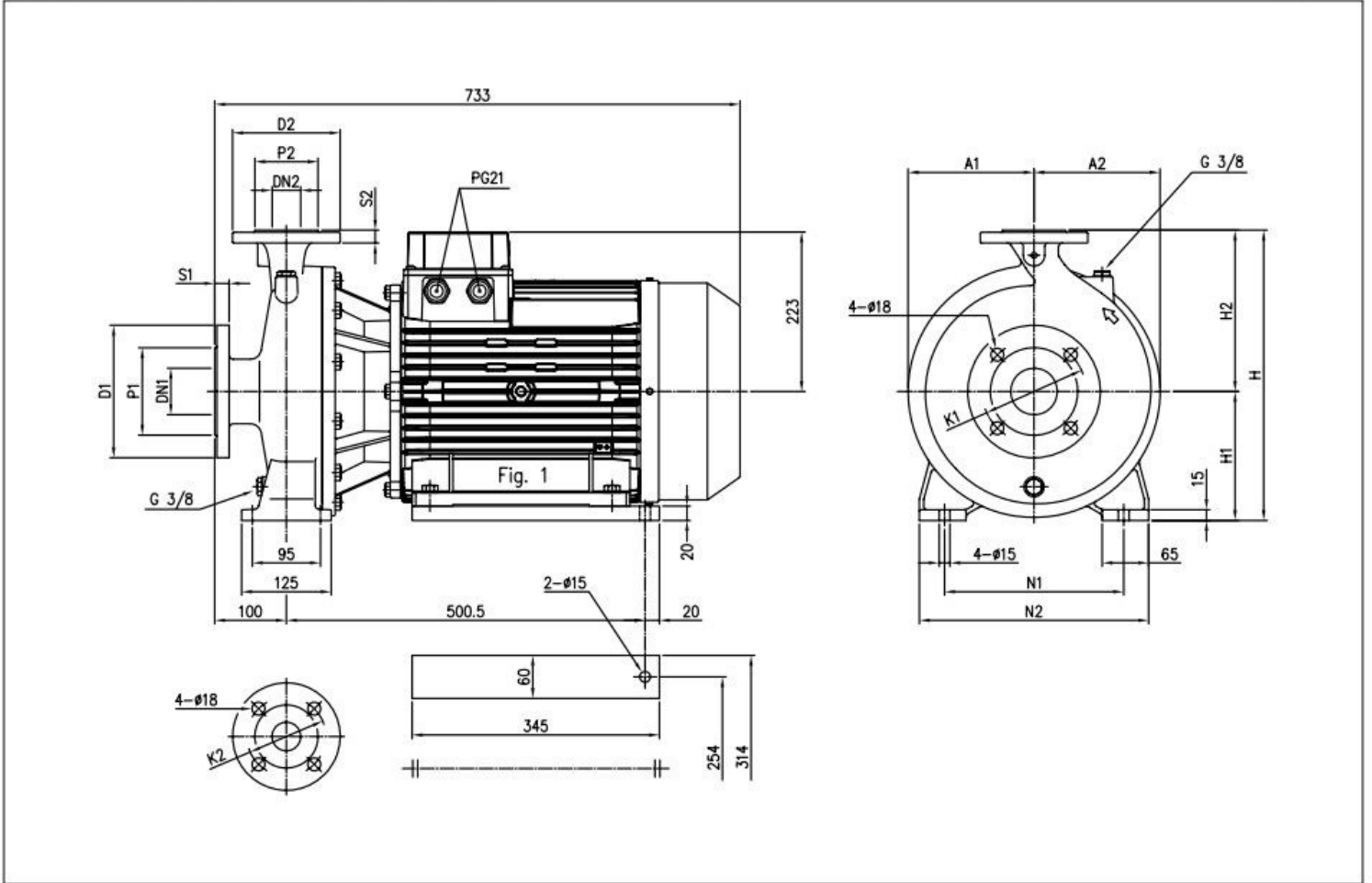
TABEL DE DIMENSIUNI

Model	Dimensiuni [mm]																				Greutate [kg]									
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	H	H1	H2	H3	R	W	M̄	M̄1	N1	N2	A1	A2	B	C	F	V1	V2		*	
MD 32-250/5.5	50	102	125	165	20	32	78	100	140	18	405	180	225	150	100	95	125	65	250	320	176	176	539	539	275	15	PG 13.5	PG 16	74.2	74.2
MD 32-250/7.5	50	102	125	165	20	32	78	100	140	18	405	180	225	150	100	95	125	65	250	320	176	176	537	557	275	15	PG 13.5	PG 16	-	77.7
MD 32-250/9.2	50	102	125	165	20	32	78	100	140	18	405	180	225	178	100	95	125	65	250	320	176	176	589	589	354	15	PG 13.5	PG 21	-	94.5
MD 32-250/11	50	102	125	165	20	32	78	100	140	18	405	180	225	178	100	95	125	65	250	320	176	176	589	589	354	15	PG 13.5	PG 21	-	97.4
MD 40-250/11	65	122	145	185	20	40	88	110	150	18	405	180	225	178	100	95	125	65	250	320	176	176	589	589	354	15	PG 13.5	PG 21	-	100.4

* Doar modele cu motoare IE3

DIMENSIUNI MD - de la 15 kW

2 POLI

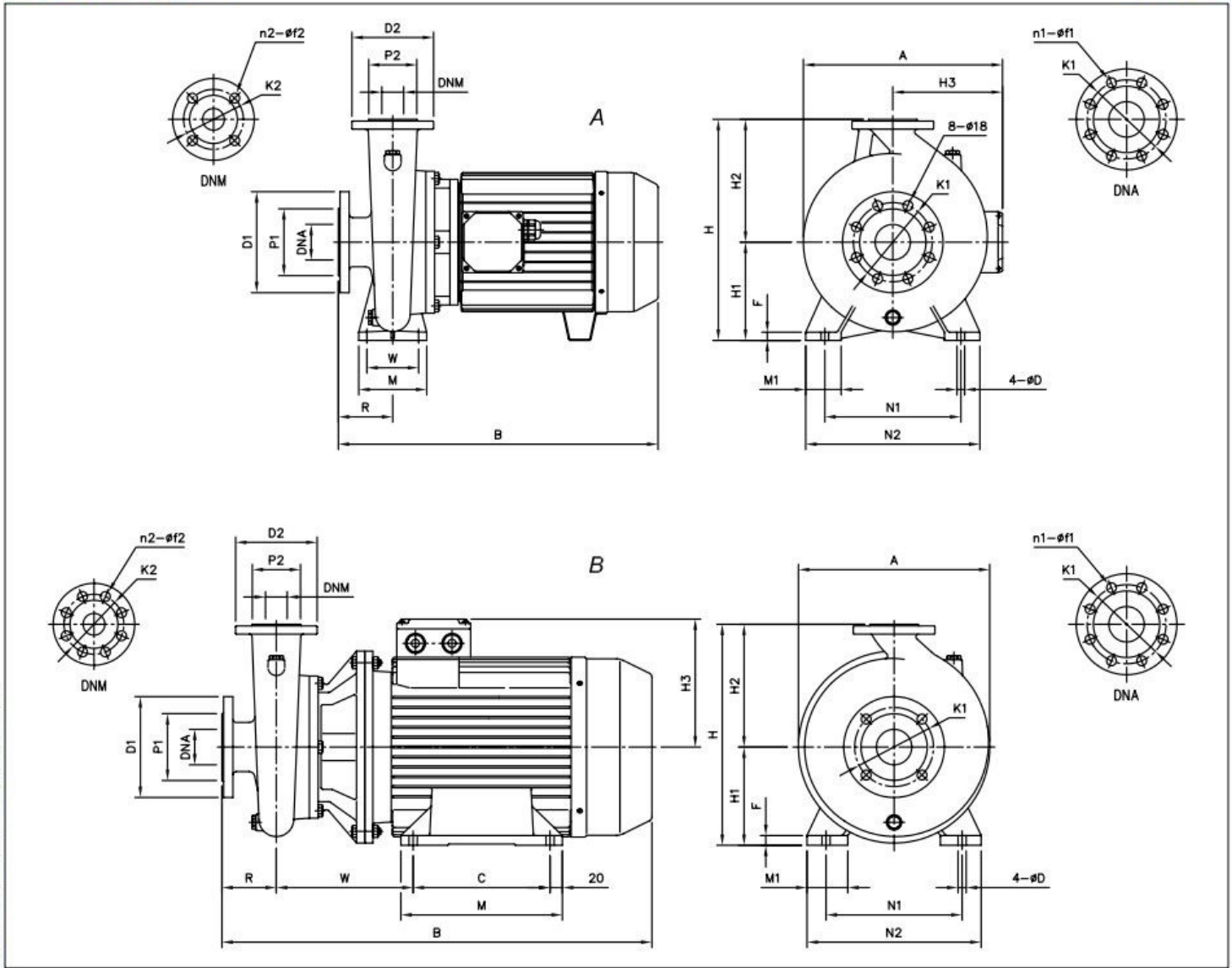


TABEL DIMENSIUNI

Model	Dimensiuni [mm]																Greutate [kg]	
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	H	H1	H2	N1	N2	A1		A2
MD 40-250/15	65	122	145	185	20	40	88	110	150	18	405	180	225	250	320	176	176	105.1
MD 50-250/15	65	122	145	185	20	50	102	125	165	20	405	180	225	250	320	176	176	106.1
MD 50-250/18.5	65	122	145	185	20	50	102	125	165	20	405	180	225	250	320	176	176	136.3
MD 50-250/22	65	122	145	185	20	50	102	125	165	20	405	180	225	250	320	176	176	161.1

DIMENSIUNI MMD

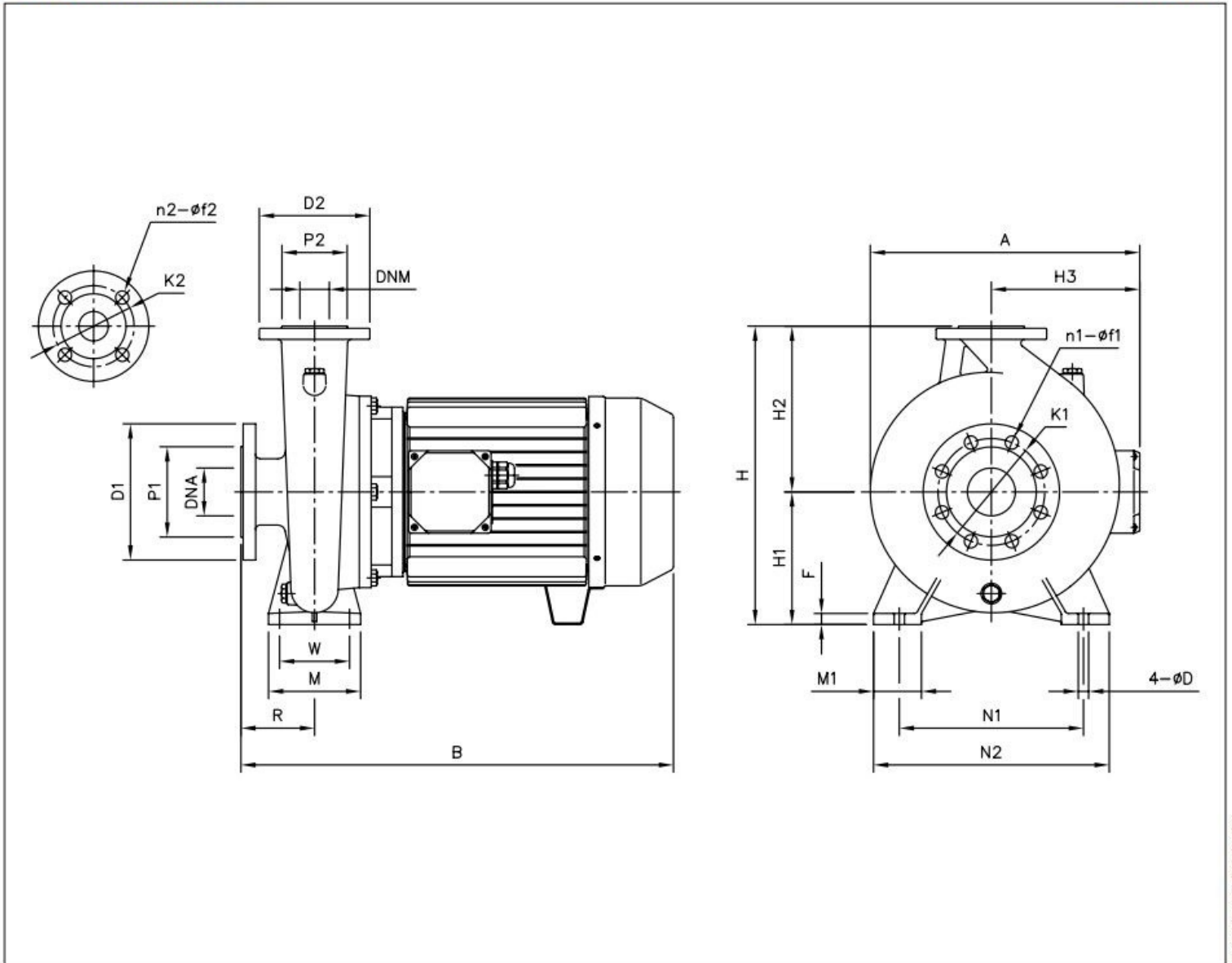
2 POLI



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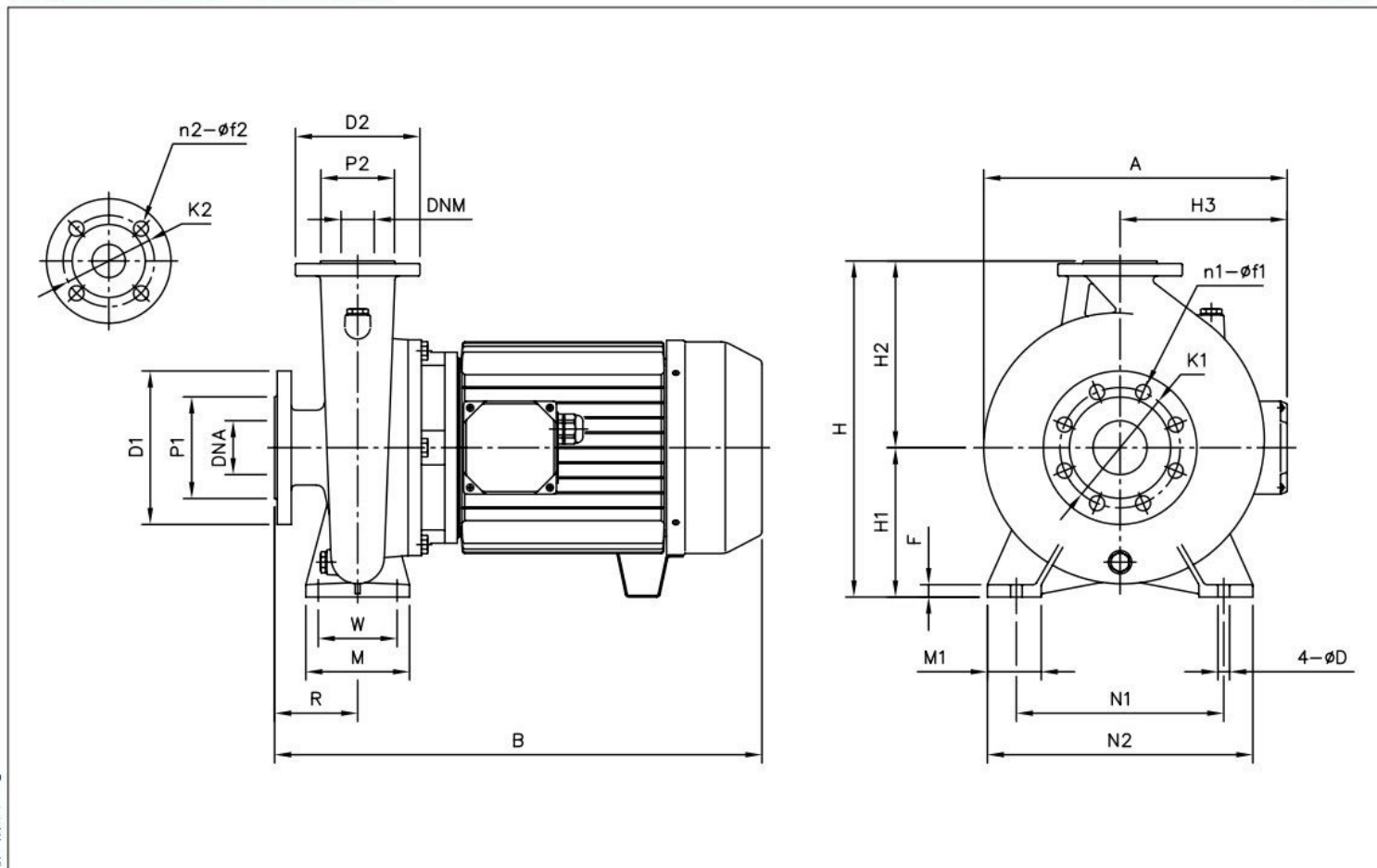
TABEL DIMENSIUNI

Model	Fig.	Dimensiuni [mm]																				Greutate [kg]							
		DNA	n1	f1	P1	K1	D1	DNM	n2	f2	P2	K2	D2	H	H1	H2	H3	R	W	N1	M		N2	M1	F	A	B	C	D
MMD 65-250/22	B	80	8	18	138	160	200	65	4	18	122	145	185	430	180	250	238	100	280	254	420	320	60	20	365	814	370	14	141.0
MMD 65-250/30	B	80	8	18	138	160	200	65	4	18	122	145	185	450	200	250	330	100	325	318	345	380	60	24	365	952	305	18	264.0
MMD 65-250/37	B	80	8	18	138	160	200	65	4	18	122	145	185	450	200	250	330	100	325	318	345	380	60	24	365	952	305	18	297.0
MMD 80-160/11	A	100	8	18	158	180	220	80	8	18	138	160	200	405	180	225	194	125	95	250	125	320	65	14	315	679	-	14	87.0
MMD 80-160/15R	A	100	8	18	158	180	220	80	8	18	138	160	200	405	180	225	194	125	95	250	125	320	65	14	315	730	-	14	90.0
MMD 80-160/15	A	100	8	18	158	180	220	80	8	18	138	160	200	405	180	225	194	125	95	250	125	320	65	14	315	730	-	14	90.0
MMD 80-200/18.5	B	100	8	18	158	180	220	80	8	18	138	160	200	430	180	250	238	125	280	254	420	320	60	20	360	839	370	14	137.0
MMD 80-200/22	B	100	8	18	158	180	220	80	8	18	138	160	200	430	180	250	238	125	280	254	420	320	60	20	360	839	370	14	147.0
MMD 80-200/30	B	100	8	18	158	180	220	80	8	18	138	160	200	450	200	250	330	125	325	318	345	380	60	24	400	977	305	18	284.0
MMD 80-200/37	B	100	8	18	158	180	220	80	8	18	138	160	200	450	200	250	330	125	325	318	345	380	60	24	400	977	305	18	317.0
MMD 80-250/37	B	100	8	18	158	180	220	80	8	18	138	160	200	480	200	280	330	125	325	318	345	380	60	24	400	977	305	18	320.0
MMD 100-200/22	B	125	8	18	188	210	250	100	8	18	158	180	220	460	180	280	238	125	280	254	420	320	60	20	380	839	370	14	157.0
MMD 100-200/30	B	125	8	18	188	210	250	100	8	18	158	180	220	480	200	280	330	125	325	318	345	380	60	24	400	977	305	18	294.0
MMD 100-200/37	B	125	8	18	188	210	250	100	8	18	158	180	220	480	200	280	330	125	325	318	345	380	60	24	400	977	305	18	327.0



TABEL DIMENSIUNI

Model	Dimensiuni [mm]																										Greutate [kg]
	DNA	n1	f1	P1	K1	D1	DNM	n2	f2	P2	K2	D2	H	H1	H2	H3	R	W	N1	M	N2	M1	F	A	B	D	
MMD4 32-250/1.1	50	4	18	102	125	165	32	4	14	78	100	140	405	180	225	138	100	95	250	125	320	65	12	320	476	14	50.0
MMD4 32-250/1.5	50	4	18	102	125	165	32	4	14	78	100	140	405	180	225	138	100	95	250	125	320	65	12	320	476	14	51.0
MMD4 40-250/1.5	65	4	18	122	145	185	40	4	18	88	110	150	405	180	225	138	100	95	250	125	320	65	12	325	476	14	49.0
MMD4 40-250/2.2	65	4	18	122	145	185	40	4	18	88	110	150	405	180	225	145	100	95	250	125	320	65	12	325	515	14	55.0
MMD4 50-250/2.2	65	4	18	122	145	185	50	4	18	102	125	165	405	180	225	145	100	95	250	125	320	65	14	333	515	14	58.0
MMD4 50-250/3	65	4	18	122	145	185	50	4	18	102	125	165	405	180	225	145	100	95	250	125	320	65	14	333	549	14	65.0
MMD4 65-250/4	80	8	18	138	160	200	65	4	18	122	145	185	450	200	250	160	100	120	280	160	360	80	14	365	549	14	79.0
MMD4 65-250/5.5	80	8	18	138	160	200	65	4	18	122	145	185	450	200	250	194	100	120	280	160	360	80	14	365	606	14	103.0

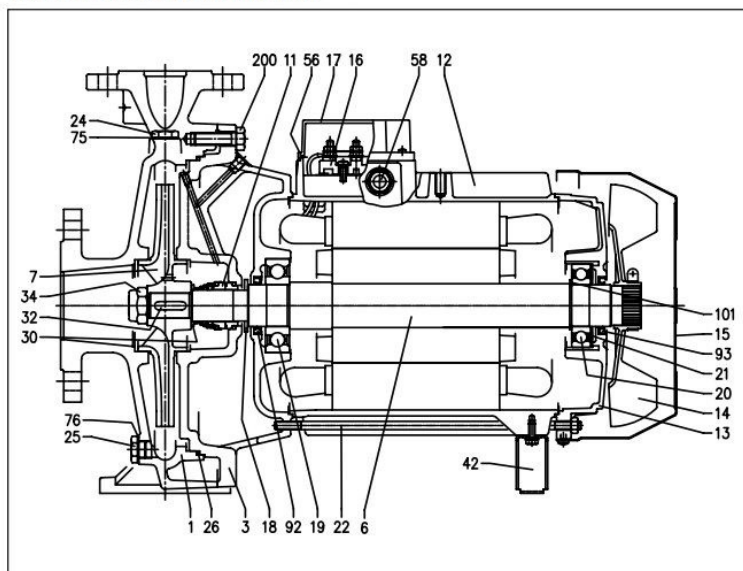


The content of this publication

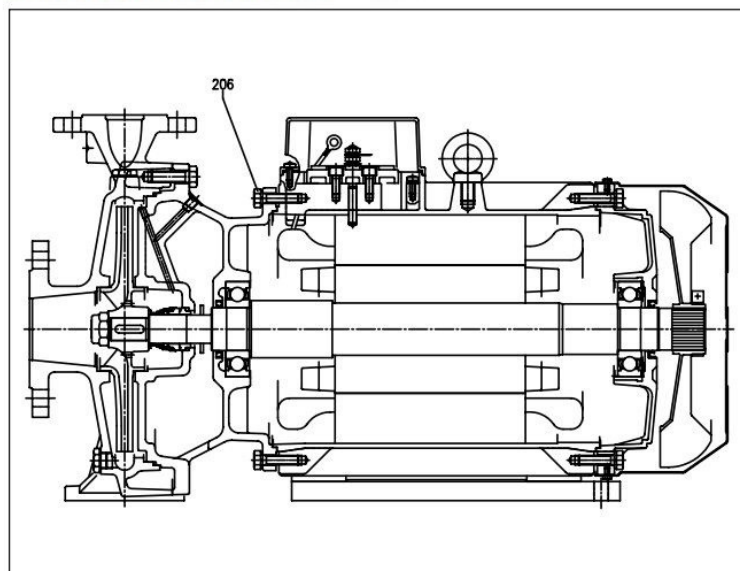
TABEL DIMENSIUNI

Model	Dimensiuni [mm]																											Greutate [kg]
	DNA	n1	f1	P1	K1	D1	DNM	n2	f2	P2	K2	D2	H	H1	H2	H3	R	W	N1	M	N2	M1	F	A	B	D		
MMD4 80-160/1.5	100	8	18	158	180	220	80	8	18	138	160	200	405	180	225	138	125	95	250	125	320	65	14	330	501	14	46.0	
MMD4 80-160/2.2	100	8	18	158	180	220	80	8	18	138	160	200	405	180	225	145	125	95	250	125	320	65	14	330	540	14	52.0	
MMD4 80-200/3	100	8	18	158	180	220	80	8	18	138	160	200	430	180	250	145	125	95	280	125	345	65	12	355	586	14	68.0	
MMD4 80-200/4	100	8	18	158	180	220	80	8	18	138	160	200	430	180	250	160	125	95	280	125	345	65	12	355	574	14	72.0	
MMD4 80-250/5.5	100	8	18	158	180	220	80	8	18	138	160	200	480	200	280	194	125	120	315	160	400	80	14	400	631	18	109.0	
MMD4 80-250/7.5	100	8	18	158	180	220	80	8	18	138	160	200	480	200	280	194	125	120	315	160	400	80	14	400	671	18	119.0	
MMD4 100-200/4	125	8	18	188	210	250	100	8	18	158	180	220	480	200	280	160	125	120	280	160	360	80	14	385	574	18	77.0	
MMD4 100-200/5.5	125	8	18	188	210	250	100	8	18	158	180	220	480	200	280	194	125	120	280	160	360	80	14	385	631	18	103.0	
MMD4 100-250/7.5	125	8	18	188	210	250	100	8	18	158	180	220	505	225	280	194	140	120	315	160	400	80	14	420	686	18	125.0	
MMD4 100-250/11	125	8	18	188	210	250	100	8	18	158	180	220	505	225	280	238	140	120	315	160	400	80	14	420	779	18	168.0	
MMD4 125-200/5.5	150	8	22	212	240	285	125	8	18	188	210	250	565	250	280	194	140	120	315	160	400	80	14	470	657	18	137.0	
MMD4 125-200/7.5R	150	8	22	212	240	285	125	8	18	188	210	250	565	250	315	194	140	120	315	160	400	80	14	470	697	18	147.0	
MMD4 125-200/7.5	150	8	22	212	240	285	125	8	18	188	210	250	565	250	315	194	140	120	315	160	400	80	14	470	697	18	147.0	
MMD4 125-200/11	150	8	22	212	240	285	125	8	18	188	210	250	565	250	315	238	140	120	315	160	400	80	14	470	790	18	190.0	
MMD4 125-250/11	150	8	22	212	240	285	125	8	18	188	210	250	605	250	355	238	140	120	315	160	400	80	16	470	790	18	196.0	
MMD4 125-250/15	150	8	22	212	240	285	125	8	18	188	210	250	605	250	355	238	140	120	315	160	400	80	16	470	854	18	216.0	
MMD4 150-200/7.5	200	12	22	268	295	340	150	8	22	212	240	285	680	280	400	194	160	155	450	200	550	100	22	550	717	24	180.0	
MMD4 150-200/11R	200	12	22	268	295	340	150	8	22	212	240	285	680	280	400	238	160	155	450	200	550	100	22	550	810	24	223.0	
MMD4 150-200/11	200	12	22	268	295	340	150	8	22	212	240	285	680	280	400	238	160	155	450	200	550	100	22	550	810	24	223.0	
MMD4 150-200/15	200	12	22	268	295	340	150	8	22	212	240	285	680	280	400	238	160	155	450	200	550	100	22	550	874	24	229.0	
MMD4 200-250/18.5R	250	12	25	320	355	405	200	12	22	268	295	340	765	315	450	238	200	155	450	200	550	100	22	630	962	24	368.0	
MMD4 200-250/18.5	250	12	25	320	355	405	200	12	22	268	295	340	765	315	450	238	200	155	450	200	550	100	22	630	962	24	368.0	
MMD4 200-250/22R	250	12	25	320	355	405	200	12	22	268	295	340	765	315	450	238	200	155	450	200	550	100	22	630	1002	24	383.0	
MMD4 200-250/22	250	12	25	320	355	405	200	12	22	268	295	340	765	315	450	238	200	155	450	200	550	100	22	630	1002	24	383.0	

VEDERE IN SECTIUNE pana la 11 kW



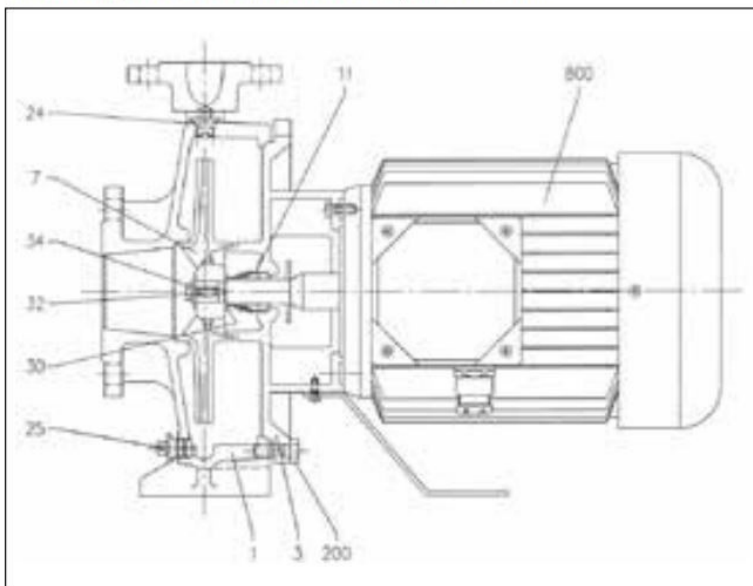
VEDERE IN SECTIUNE MD de la 15 kW



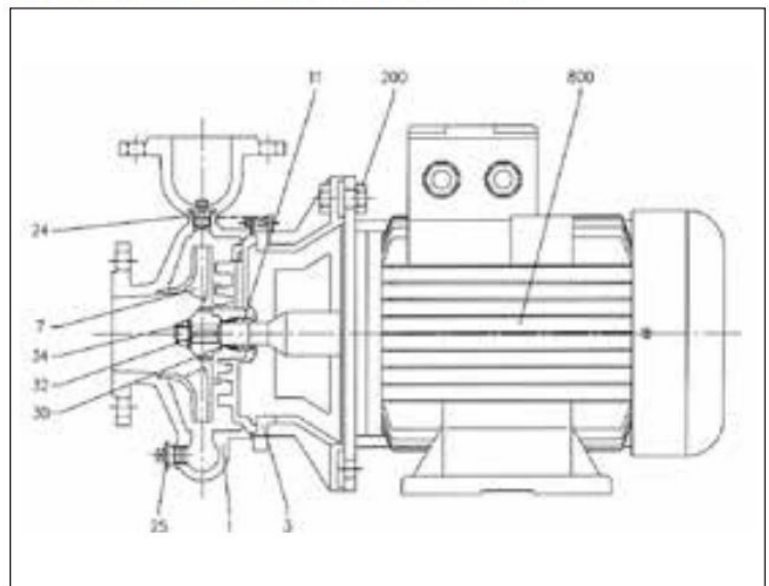
Ref	Nume	Material
1	Carcasa pompei	Fonta cenusie EN-GJL-200-EN-1561
3	Gheara de fixare motor	Fonta cenusie EN-GJL-200-EN-1561
6	Ax	AISI 304 (piesa aflata in contact cu lichidul)
7	Rotor	AISI 304
11	Etansare mecanica	Carbon/Ceramica/NBR
12	Cadru motor	-
13	Invelis motor	Aluminiu
14	Ventilator	PP
15	Invelis ventilator	Fier P04 galvanizat
16	Cutie de borne	-
17	Invelis cutie de borne	Aluminiu
18	Inel deflector	NBR
19	Rulment (la partea pompei)	-
20	Rulment (la partea motorului)	-
21	Inel de ajustare	Otel inoxidabil C70
22	Bulon de ancorare	Fier 42 galvanizat (pana la 11 kW) Otel galvanizat (de la 15 kW)
24	Buson	Alama
25	Buson	Alama
26	O-Ring	NBR [1]
30	Distantier	AISI 304

32	Pana	AISI 316
34	Piulita rotor	AISI 304
42	Suport motor	Fier P04
56	Garnitura invelisului cutiei de borne	NBR
58	Garnitura de etansare a cablului	-
75	Saiba	Aluminiu
76	Saiba	Aluminiu
92	Inel de etansare	-
93	Inel de etansare	-
101	Inel Seeger (doar pentru 9.2 si 11 kW)	Otel-Carbon TC 80
200	Surub	Otel galvanizat
260	Surub	Otel galvanizat (de la 15 kW)

VEDERE IN SECTIUNE MMD-MMD4 pana la MEC 132



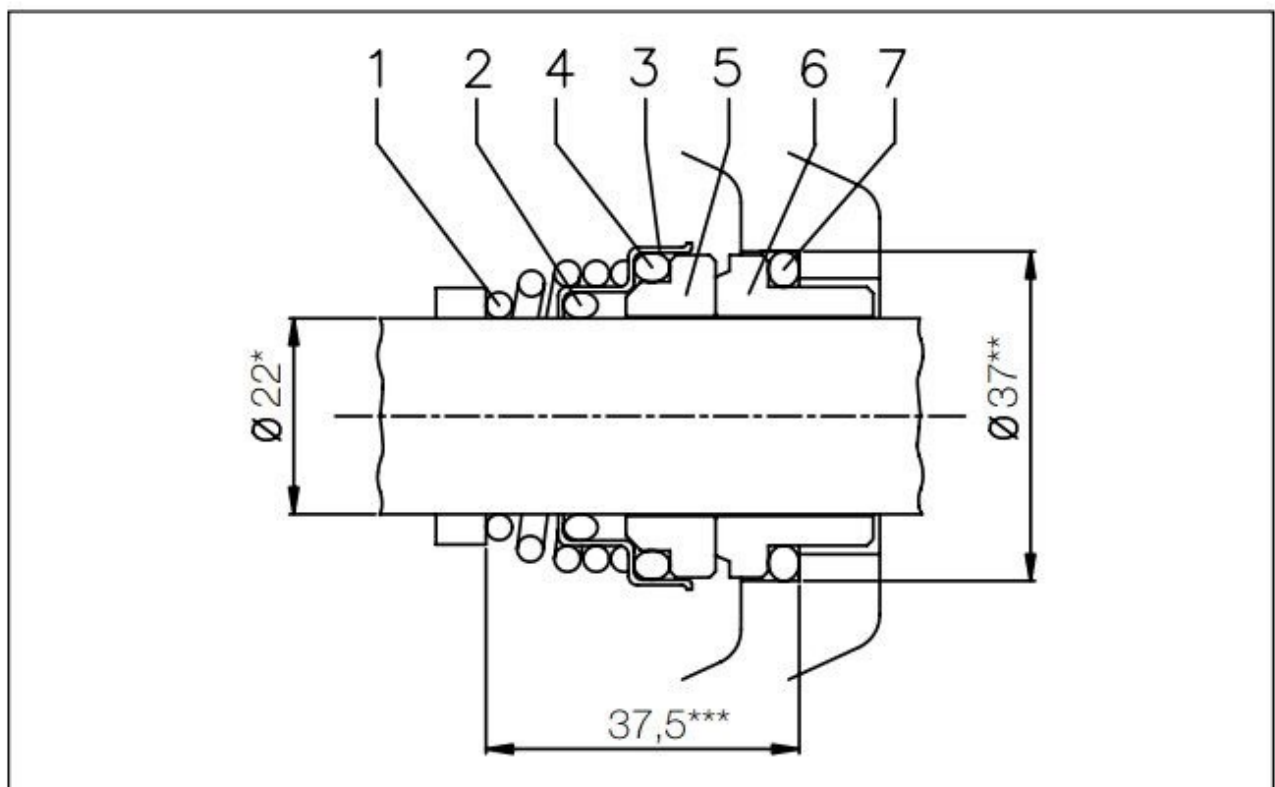
VEDERE IN SECTIUNE MMD-MMD4 peste MEC 160



Ref	Nume	Materiale
1	Carcasa pompa	Fonta cenusie EN-GJL-200-EN-1561
3	Gheara de fixare motor	Fonta cenusie EN-GJL-200-EN-1561
7	Rotor	Fonta cenusie EN-GJL-200-EN-1561
11	Etansare mecanica	Carbura de siliciu/Carbura de siliciu/NBR
24	Buson	Otel inoxidabil
25	Buson	Otel inoxidabil

30	Distantier	Otel inoxidabil
32	Pana	Otel inoxidabil
34	Piulita rotor	Otel inoxidabil
200	Surub (corpul pompei)	Otel inoxidabil
800	Motor	Aluminiu (pana la MEC 160) Fonta cenusie (de la MEC 180)

ETANSARE MECANICA MD standard



TABEL MATERIALE

Ref.	Nume	Materiale
1	Arc	AISI 316
2	O-Ring	NBR
3	Structura/Cadru	AISI 304
4	O-Ring	NBR
5	Piesa rotativa	Ceramica
6	Piesa fixa	Carbon

7	O-ring	NBR
---	--------	-----

* Ø30 de la 9.2 kW

** Ø45 de la 9.2 kW

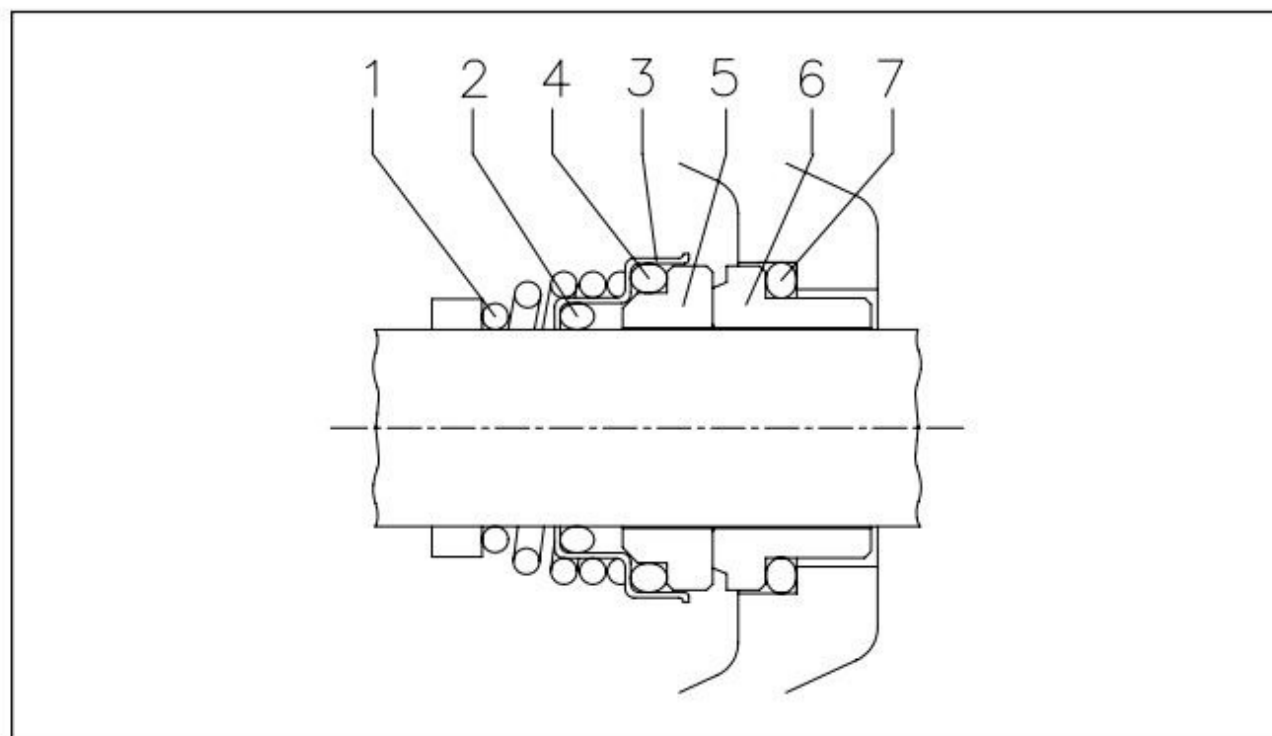
*** 42.5 mm de la 9.2 kW

ETANSARE MECANICA MD SPECIALA (la cerere)

Nume	Materiale				
	Versiune H	Versiune HS	Versiune HW	Versiune HSW	Versiune E
Spring	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
O-Ring	FKM	FKM	FKM	FKM	EPDM
Structure/frame	AISI 304 / AISI 316*	AISI 316	AISI 316	AISI 316	AISI 304
O-Ring	FKM	FKM	FKM	FKM	EDPM
Rotating part	Ceramic	Silicon Carbide	Tungsten Carbide	Silicon Carbide	Ceramic
Fixed part	Carbon	Silicon Carbide	Tungsten Carbide	Tungsten Carbide	Carbon
O-Ring	FKM	FKM	FKM	FKM	EPDM

Doar pentru * Ø30

ETANSARE MECANICA MMD-MMD4



Ref	Nume	Materiale
1	Arc	AISI 316
2	O-Ring	NBR
3	Structura/Cadru	AISI 316
4	O-Ring	NBR
5	Piesa rotativa	Carbura de siliciu
6	Piesa fixa	Carbura de siliciu
7	O-ring	NBR

2 Poles

Model Trifazat	P _n		Eficienta Trifazat	Eficienta (%) Trifazat η %			P _n Three phase [kW]	Curent absorbit [A] Trifazat	
	[HP]	[kW]		50%	75%	100%		400V	690V
	MD 32-250/5.5	7.5		5.5	IE2	82.9		86.0	87.4
	7.5	5.5	IE3	89.2	90.6	90.4	6.09	10.6	6.1
MD 32-250/7.5	10	7.5	IE3	89.0	90.7	90.8	8.26	13.6	7.9
MD 32-250/9.2	12.5	9.2	IE3	90.1	90.8	90.9	10.12	17.2	10.0
MD 32-250/11	15	11	IE3	90.4	91.2	91.8	11.98	21.3	12.3
MD 40-250/11	15	11	IE3	90.4	91.2	91.8	11.98	21.3	12.3
MD 40-250/15	20	15	IE3	91.2	92.0	91.9	16.32	27.7	17.3
MD 50-250/15	20	15	IE3	91.2	92.0	91.9	16.32	27.7	17.3
MD 50-250/18.5	25	18.5	IE3	91.6	93.0	92.6	19.98	35.0	20.3
MD 50-225/22	30	22	IE3	92.0	93.1	93.2	23.58	39.7	23.6

2 POLI

Model Trifazat	P _n		Eficienta Trifazat	Eficienta (%) Trifazat η %			P _n Trifazat [kW]	Curent absorbit [A] Trifazat	
	[HP]	[kW]		50%	75%	100%		400V	690V
	MMD 65-250/22	30		22	IE3	92.2		93.7	92.7
MMD 65-250/30	40	30	IE3	91.4	93.3	93.3	32.12	52.1	30.0
MMD 65-250/37	50	37	IE3	91.8	93.7	93.7	39.47	62.6	36.0
MMD 80-160/11	15	11	IE3	90.0	90.8	91.2	12.27	19.9	11.5
MMD 80-160/15R	20	15	IE3	91.0	92.2	91.9	16.33	26.8	15.5
MMD 80-160/15	20	15	IE3	91.0	92.2	91.9	16.33	26.8	15.5
MMD 80-200/18.5	25	18.5	IE3	91.6	92.8	92.4	20.12	33.0	19.0
MMD 80-200/22	30	22	IE3	92.2	93.7	92.7	23.75	39.4	22.5
MMD 80-200/30	40	30	IE3	91.4	93.3	93.3	32.12	52.1	30.0
MMD 80-200/37	50	37	IE3	91.8	93.7	93.7	39.47	62.6	36.0
MMD 80-250/37	50	37	IE3	91.8	93.7	93.7	39.47	62.6	36.0
MMD 100-200/22	30	22	IE3	92.2	93.7	92.7	23.75	39.4	22.5
MMD 100-200/30	40	30	IE3	91.4	93.3	93.3	32.12	52.1	30.0
MMD 100-200/37	50	37	IE3	91.8	93.7	93.7	39.47	62.6	36.0

Model Trifazat	P ₁		Eficienta Trifazat	Eficienta (%) Trifazat			P ₂ Trifazat [kW]	Curent absorbit [A] Trifazat		
	[HP]	[kW]		50%	75%	100%		230V	400V	690V
MMD4 32-250/1.1	1.5	1.1	IE2	81.4	82.7	82.5	1.33	4.3	2.5	-
MMD4 32-250/1.5	2	1.5	IE2	81.0	83.5	83.0	1.81	5.9	3.4	-
MMD4 40-250/1.5	2	1.5	IE2	81.0	83.5	83.0	1.81	5.9	3.4	-
MMD4 40-250/2.2	3	2.2	IE2	84.0	85.3	85.1	2.61	8.9	5.1	-
MMD4 50-250/2.2	3	2.2	IE2	84.0	85.3	85.1	2.61	8.9	5.1	-
MMD4 50-250/3	4	3	IE2	82.6	84.7	86.4	3.47	11.3	6.5	-
MMD4 65-250/4	5.5	4	IE2	86.0	87.3	87.1	4.59	14.8	8.5	-
MMD4 65-250/5.5	7.5	5.5	IE2	87.5	88.3	88.1	6.16	-	11.4	6.6
MMD4 80-160/1.5	2	1.5	IE2	81.0	83.5	83.0	1.81	5.9	3.4	-
MMD4 80-160/2.2	3	2.2	IE2	84.0	85.3	85.1	2.61	8.9	5.1	-
MMD4 80-200/3	4	3	IE2	82.6	84.7	86.4	3.47	11.3	6.5	-
MMD4 80-200/4	5.5	4	IE2	86.0	87.3	87.1	4.59	14.8	8.5	-
MMD4 80-250/5.5	7.5	5.5	IE2	87.5	88.3	88.1	6.16	-	11.4	6.6
MMD4 80-250/7.5	10	7.5	IE3	88.5	89.4	89.2	8.41	-	16.4	9.5
MMD4 100-200/4	5.5	4	IE2	86.0	87.3	87.1	4.59	14.8	8.5	-
MMD4 100-200/5.5	7.5	5.5	IE2	87.5	88.3	88.1	6.16	-	11.4	6.6
MMD4 100-250/7.5	10	7.5	IE3	88.5	89.4	89.2	8.41	-	16.4	9.5
MMD4 100-250/11	15	11	IE3	89.4	90.3	90.1	12.49	-	22.0	12.7
MMD4 125-200/5.5	7.5	5.5	IE2	87.5	88.3	88.1	6.16	-	11.4	6.6
MMD4 125-200/7.5R	10	7.5	IE3	88.5	89.4	89.2	8.41	-	16.4	9.5
MMD4 125-200/7.5	10	7.5	IE3	88.5	89.4	89.2	8.41	-	16.4	9.5
MMD4 125-200/11R	15	11	IE3	89.4	90.3	90.1	12.49	-	22.0	12.7
MMD4 125-250/11	15	11	IE3	89.4	90.3	90.1	12.49	-	22.0	12.7
MMD4 125-250/15	20	15	IE3	90.6	91.2	91.0	16.87	-	29.0	16.7
MMD4 150-200/7.5	10	7.5	IE3	88.5	89.4	89.2	8.41	-	16.4	9.5
MMD4 150-200/11R	15	11	IE3	89.4	90.3	90.1	12.49	-	22.0	12.7
MMD4 150-200/11	15	11	IE3	89.4	90.3	90.1	12.49	-	22.0	12.7
MMD4 150-200/15	20	15	IE3	90.6	91.2	91.0	16.87	-	29.0	16.7
MMD4 200-250/18.5R	22	18.5	IE3	90.7	92.6	92.6	19.96	-	34.3	19.8
MMD4 200-250/18.5	22	18.5	IE3	90.7	92.6	92.6	19.96	-	34.3	19.8
MMD4 200-250/22R	30	22	IE3	91.1	93.0	93.0	23.67	-	40.2	23.2
MMD4 200-250/22	30	22	IE3	91.1	93.0	93.0	23.67	-	40.2	23.2

Model Trifazat	P ₂		L _{pA} - dB(A)*
	[HP]	[kW]	
MD 32-250/5.5	7.5	5.5	75
MD 32-250/7.5	10	7.5	
MD 32-250/9.2	12.5	9.2	80
MD 32-250/11	15	11	
MD 40-250/11	15	11	80
MD 40-250/15	20	15	83-82
MD 50-250/15	20	15	83-82
MD 50-250/18.5	25	18.5	
MD 50-250/22	30	22	

*Valoare medie a catorva masuratori efectuate la 1 m in jurul pompei
Toleranta ± 2.5 dB

2 POLI

Model Trifazat	P ₂		L _{pA} - dB(A)*
	[HP]	[kW]	
MMD 65-250/22	30	22	81
MMD 65-250/30	40	30	83
MMD 65-250/37	50	37	
MMD 80-160/11	15	11	80
MMD 80-160/15R	20	15	
MMD 80-160/15	20	15	
MMD 80-200/18.5	25	18.5	81
MMD 80-200/22	30	22	
MMD 80-200/30	40	30	83
MMD 80-200/37	50	37	
MMD 80-250/37	50	37	
MMD 100-200/22	30	22	81
MMD 100-200/30	40	30	83
MMD 100-200/37	50	37	

*Valoarea medie a catorva masuratori, efectuate la 1 m distanta in jurul pompei

Toleranta ± 2.5 dB

TABEL DE PERFORMANTA MMD4

Model	P _i		Q= Debit																			
	[HP]	[kW]	l/min m³/h	75 5	100 6	125 8	150 9	175 11	200 12	225 14	250 15	275 17	300 18	350 21	400 24	450 27	500 30	550 33	600 36	650 39	700 42	
MMD4 32-250/1.1	1,5	1,1	18,5	18,0	17,5	17,0	15,9	14,5	12,8	11,0	-	-	-	-	-	-	-	-	-	-	-	-
MMD4 32-250/1.5	2	1,5	22,0	21,6	21,2	20,5	19,4	18,0	16,5	15,0	13,0	-	-	-	-	-	-	-	-	-	-	-
MMD4 40-250/1,5	2	1,5	-	18,3	18,0	17,7	17,4	17,0	16,7	16,2	15,6	15,0	13,7	12,0	-	-	-	-	-	-	-	-
MMD4 40-250/2,2	3	2,2	-	22,5	22,3	22,0	21,7	21,4	21,2	20,5	20,2	19,5	18,5	17,0	-	-	-	-	-	-	-	-
MMD4 50-250/2,2	3	2,2	-	-	-	-	-	18,5	18,3	18,1	17,8	17,5	17,0	16,2	15,5	14,5	13,5	12,5	11,3	10,0	-	-
MMD4 50-250/3	4	3	-	-	-	-	-	22,5	22,4	22,3	22,2	22,0	21,5	20,9	20,2	19,4	18,5	17,5	16,3	14,7	-	-

H= inaltimea de pompare

Model	P _i		Q= Debit																		
	[HP]	[kW]	l/min m³/h	500 30	550 33	600 36	650 39	700 42	800 48	900 54	1000 60	1100 66	1200 72	1300 78	1400 84	1500 90	1750 105	2000 120	2250 135		
MMD4 65-250/4	5,5	4	19,5	19,3	19,1	18,8	18,5	17,5	16,5	15,5	14,0	12,5	10,4	-	-	-	-	-	-	-	
MMD4 65-250/5,5	7,5	5,5	23,0	22,8	22,6	22,4	22,2	21,4	20,6	19,7	18,7	17,3	15,7	14,0	-	-	-	-	-	-	
MMD4 80-160/1,5	2	1,5	-	-	7,7	7,6	7,5	7,3	7,0	6,7	6,4	6,1	5,7	5,4	5,0	-	-	-	-	-	
MMD4 80-160/2,2	3	2,2	-	-	9,7	9,6	9,5	9,3	9,0	8,8	8,5	8,2	7,9	7,5	7,1	6,0	-	-	-	-	
MMD4 80-200/3	4	3	-	-	12,0	11,9	11,7	11,5	11,3	11,0	10,5	10,0	9,5	9,0	8,5	7,0	-	-	-	-	
MMD4 80-200/4	5,5	4	-	-	14,4	14,3	14,2	14,0	13,8	13,5	13,1	12,6	12,2	11,6	11,0	9,0	6,5	-	-	-	
MMD4 80-250/5,5	7,5	5,5	-	-	-	-	-	19,2	18,9	18,5	18,0	17,6	17,1	16,5	16,0	14,0	12,0	-	-	-	
MMD4 80-250/7,5	10	7,5	-	-	-	-	-	22,3	22,1	21,9	21,7	21,3	21,0	20,5	20,0	18,5	16,9	14,5	-	-	

H= inaltimea de pompare

Model	P _i		Q= Debit																							
	[HP]	[kW]	l/min m³/h	900 54	1000 60	1200 72	1500 90	1750 105	2000 120	2250 135	2500 150	2750 165	3000 180	3500 210	3700 222	4000 240	4500 270	5000 300	5500 330	6500 390	7000 420	8500 510	9000 540	9500 570	10000 60	
MMD4 100-200/4	5,5	4	12,3	12,2	11,8	11,2	10,3	9,3	8,0	6,6	4,8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MMD4 100-200/5,5	7,5	5,5	14,5	14,4	14,0	13,4	12,8	12,0	11,0	9,8	8,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MMD4 100-250/7,5	10	7,5	-	19,5	19,1	18,5	17,5	16,5	15,2	14,0	12,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MMD4 100-250/11	15	11	-	22,0	21,8	21,5	20,5	19,5	18,5	17,0	15,0	12,8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MMD4 125-200/5,5	7,5	5,5	-	-	-	10,5	10,3	9,9	9,5	9,1	8,5	7,9	6,4	5,7	-	-	-	-	-	-	-	-	-	-	-	-
MMD4 125-200/7,5R	10	7,5	-	-	-	11,8	11,6	11,3	11,0	10,6	10,2	9,6	8,3	7,7	6,7	-	-	-	-	-	-	-	-	-	-	-
MMD4 125-200/7,5	10	7,5	-	-	-	-	12,9	12,7	12,4	12,1	11,7	11,2	10,1	9,6	8,7	7,1	-	-	-	-	-	-	-	-	-	-
MMD4 125-200/11	15	11	-	-	-	-	14,3	14,1	13,8	13,6	13,2	12,8	11,8	11,3	10,6	9,2	7,6	-	-	-	-	-	-	-	-	-
MMD4 125-250/11	15	11	-	-	-	-	17,2	16,7	16,2	15,5	14,8	13,9	12,0	11,3	10,0	-	-	-	-	-	-	-	-	-	-	-
MMD4 125-250/15	20	15	-	-	-	-	21,0	20,5	20,1	19,5	18,9	18,2	16,6	16,0	14,8	12,8	-	-	-	-	-	-	-	-	-	-
MMD4 150-200/7,5	10	7,5	-	-	-	-	-	11,0	10,7	10,4	10,1	9,7	8,8	8,4	7,8	6,6	5,3	-	-	-	-	-	-	-	-	-
MMD4 150-200/11R	15	11	-	-	-	-	-	12,0	11,8	11,6	11,2	10,9	10,2	9,8	9,2	8,0	6,8	5,6	-	-	-	-	-	-	-	-
MMD4 150-200/11	15	11	-	-	-	-	-	-	-	13,7	13,5	13,2	12,5	12,2	11,7	10,8	9,8	8,7	6,1	-	-	-	-	-	-	-
MMD4 150-200/15	20	15	-	-	-	-	-	-	-	15,2	14,9	14,7	14,2	13,8	13,4	12,5	11,6	10,5	8,2	6,8	-	-	-	-	-	-
MMD4 200-250/18,5R	25	18,5	-	-	-	-	-	-	-	-	-	14,9	14,5	14,3	14,1	13,6	13,0	12,3	11,0	10,3	7,8	-	-	-	-	-
MMD4 200-250/18,5	25	18,5	-	-	-	-	-	-	-	-	-	15,9	15,5	15,3	15,2	14,7	14,2	13,6	12,3	11,6	9,1	8,2	-	-	-	-
MMD4 200-250/22R	30	22	-	-	-	-	-	-	-	-	-	-	18,0	17,8	17,6	17,1	16,6	16,0	14,7	13,9	11,2	10,1	9,0	-	-	-
MMD4 200-250/22	30	22	-	-	-	-	-	-	-	-	-	-	19,1	18,9	18,8	18,3	17,8	17,3	16,0	15,3	12,7	11,7	10,7	9,6	-	-

e conștient fără nici o garanție.