

CENTRIFUGAL PUMPS according to DIN 24255 standard

End suction centrifugal pumps in accordance with DIN 24255 made of cast iron, applications in water boosting, heating system, air-conditioning, washing systems and many other industrial applications.



APPLICATION

- **Civil/Domestic Uses:**
Water supply systems
Pressure boosting
Air-conditioning and heating

- **Agriculture:**
Sprinkler or flow irrigation

- **Industrial:**
Water supply systems
Washing plants
Transfer of non-aggressive liquids

TECHNICAL CHARACTERISTICS

Back pull-out construction permits assembly and replacement of the impeller, shaft and bearings without removing the casing.

The sturdy structure ensures maximum resistance to the possible misalignment and distortion of pipes.

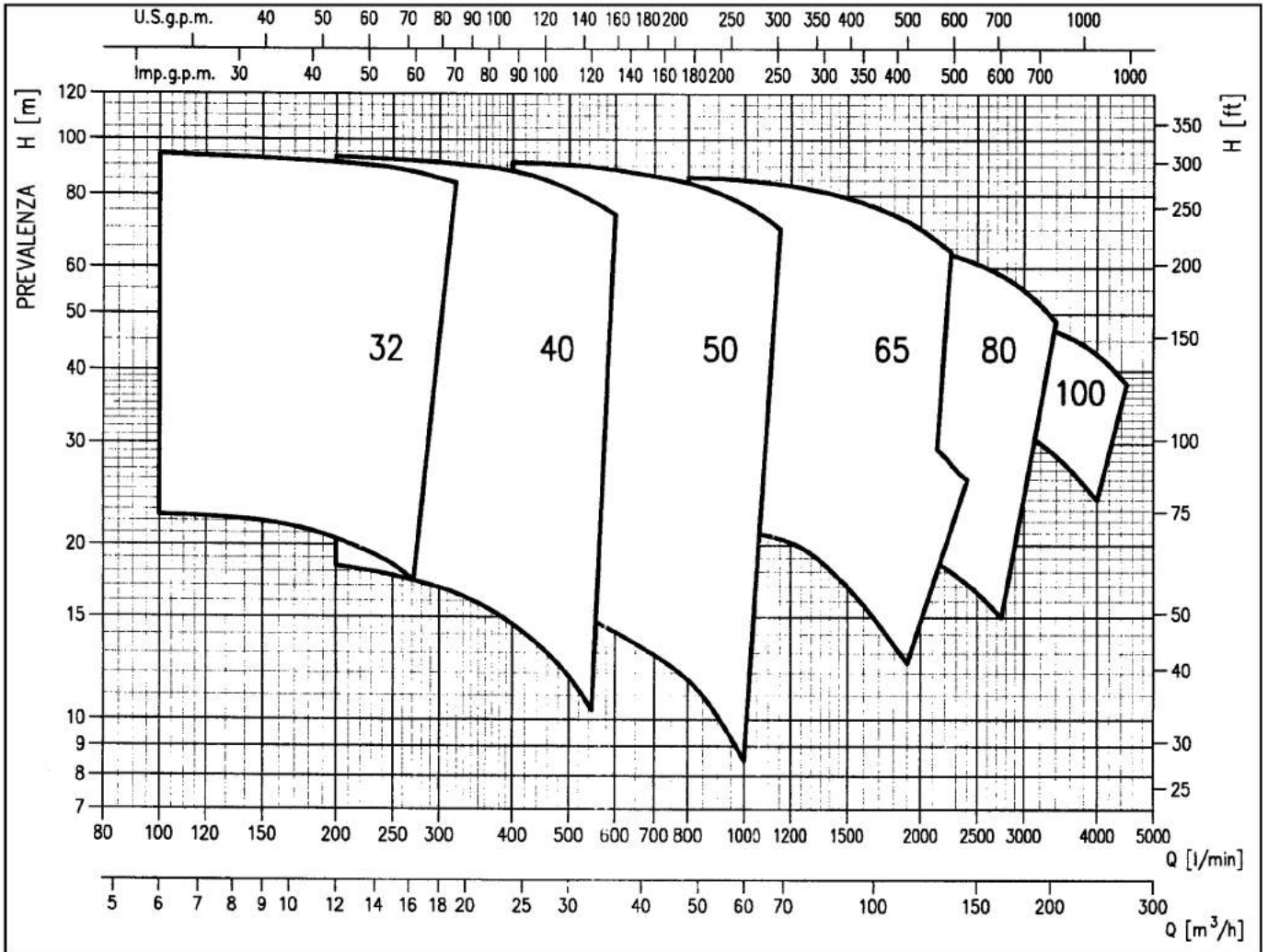
TECHNICAL DATA

- Asynchronous 2 pole motor
- Insulation: Class F
- Protection degree: IP55
- 1~230V ± 10% 50Hz, 3~230/400V ± 10% 50Hz up to 4kW included, 400/690V ± 10% 3.5kW and above
- Permanent split capacitor and automatic thermal overload protection for single-phase version
- Thermal protection to be provided by the user for three-phase version

SPECIFICATIONS

PUMP		
Liquid handle	Type of liquid	Clean water
	Max temperature [°C]	90°C (MD); 130°C (MMD)
Flanges	UNI 2236 - UNI 2223-29 PN 10	
Counter flanges (on request)	UNI 2247	
Construction	Impeller	Closed centrifugal type
	Shaft seal type	Mechanical seal
	Bearing	Sealed ball bearing
Pipe connection	Suction	Flange to DIN 2532 (50mm-65mm-80mm)
	Discharge	Flange to DIN 2532 (32mm-40mm-50mm-65mm)
Material	Casing	Cast iron
	Impeller	Cast iron - Bronze
	Casing cover	Cast iron
	Shaft seal	Ceramic SiC/SiC/EPDM (MMD)
	Shaft	AISI 304 (Part in contact with liquid/AISI 406 per MMD)
	Bracket	Cast iron
Applicable standard of test		ISO 9906 Annex A

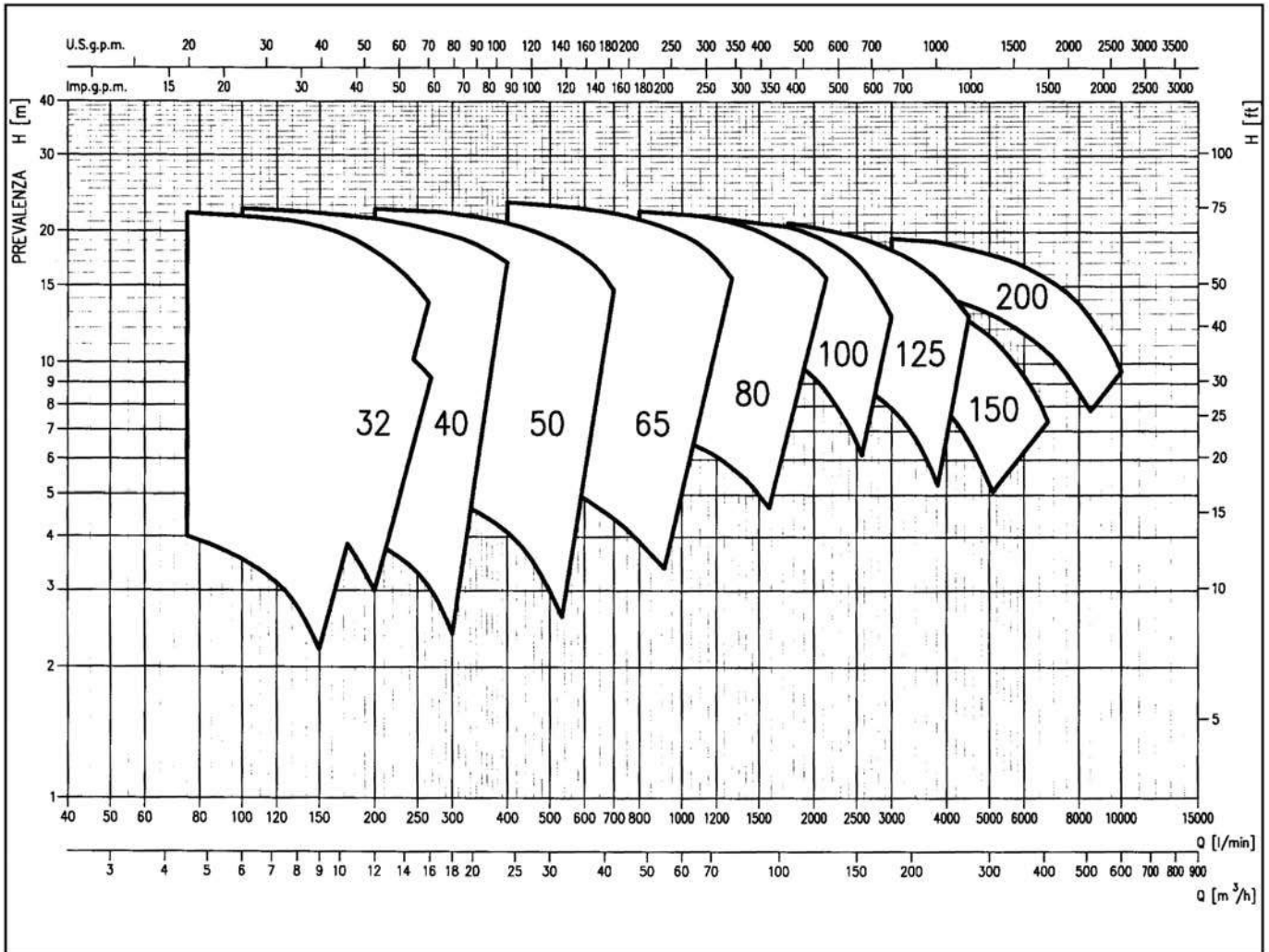
SELECTION CHART
MD/MMD 2 pole

 2900 min⁻¹

 R.P.M. ≈ 2900 min⁻¹

Test fluid : Clean water 20°C

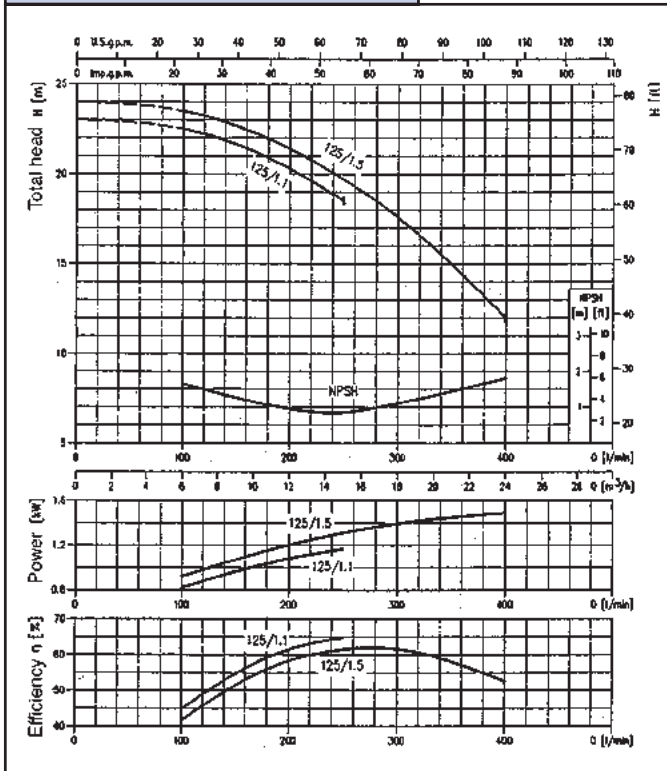
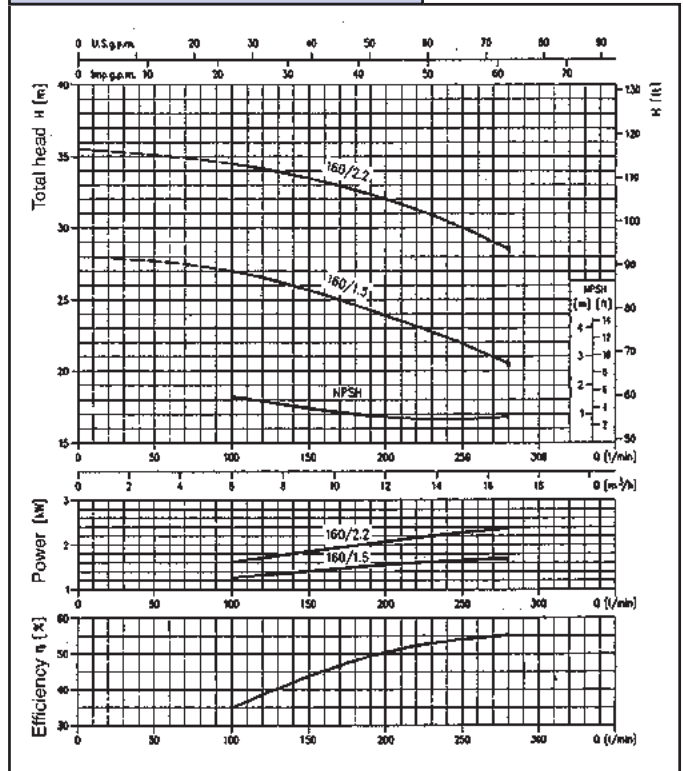
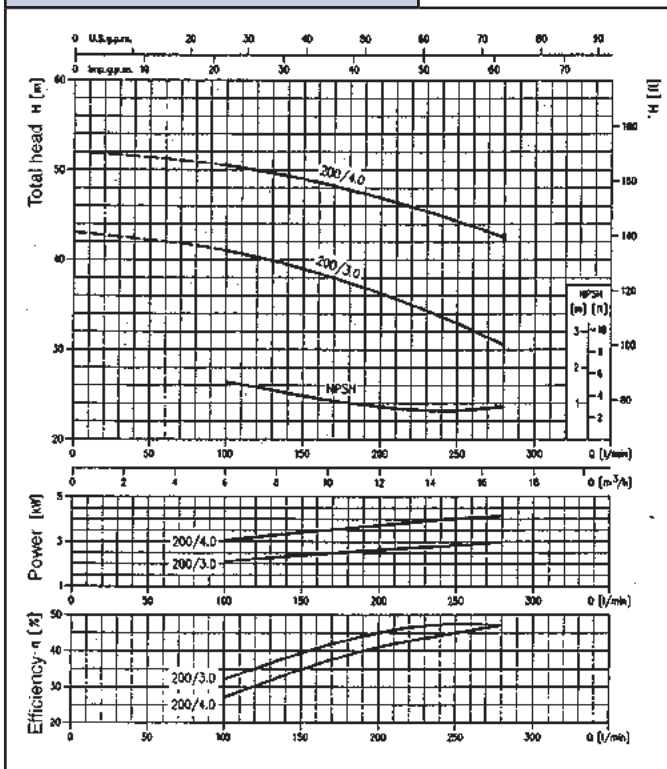
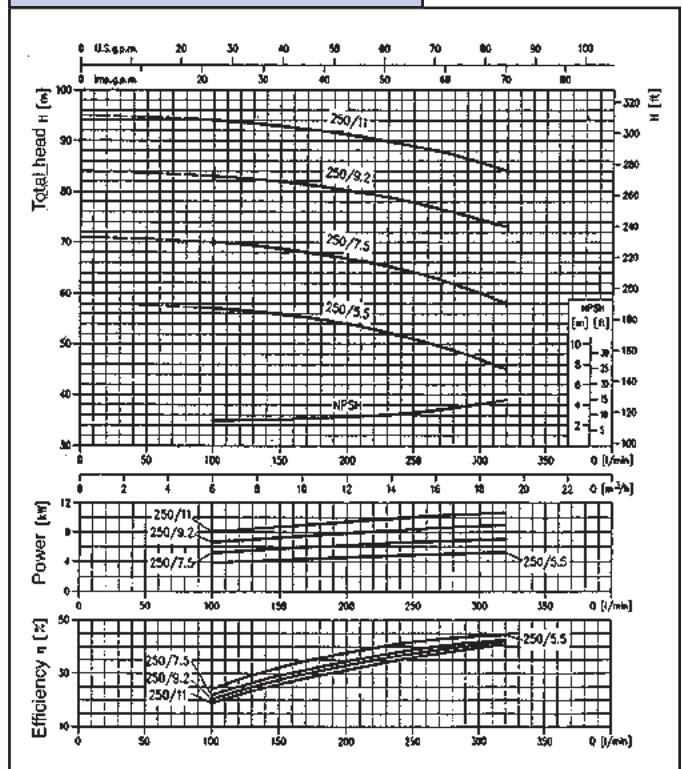
Applicable standard : UNI EN ISO 9906 Appendice A

SELECTION CHART
MMD 4 pole

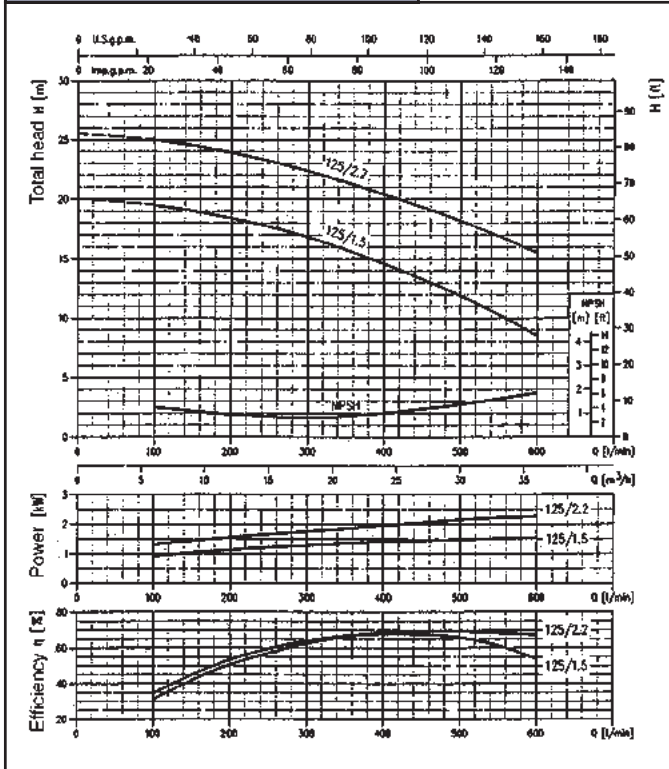
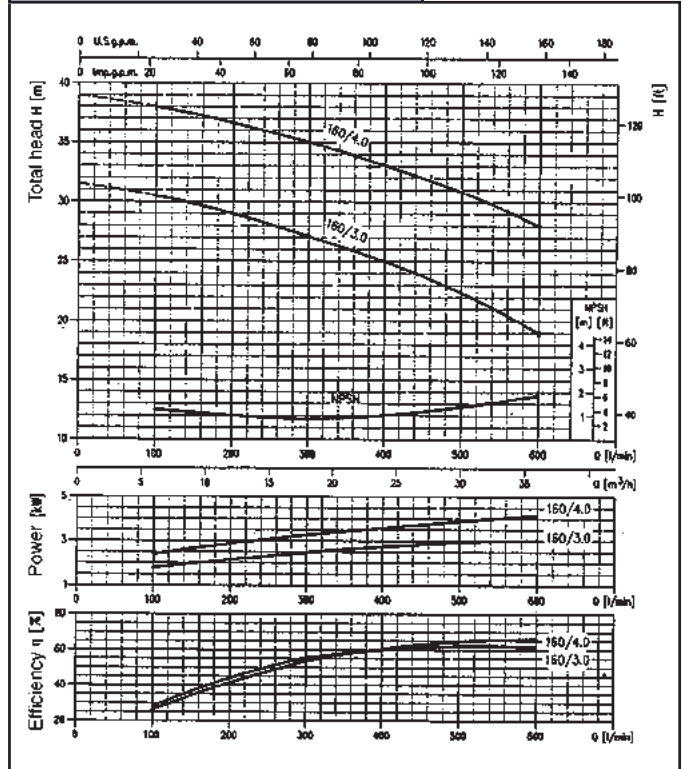
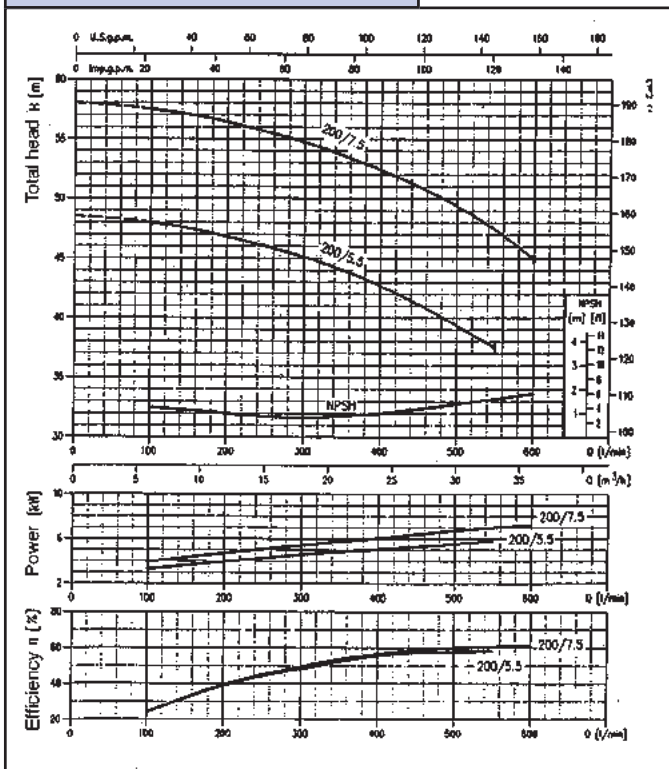
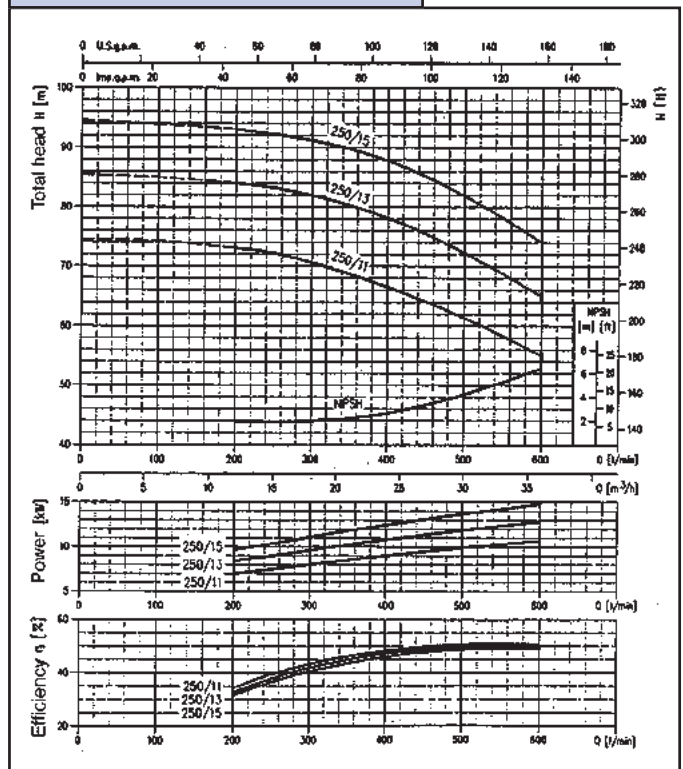
 1450 min⁻¹

 R.P.M. ≈ 1450 min⁻¹

Test fluid : Clean water 20°C

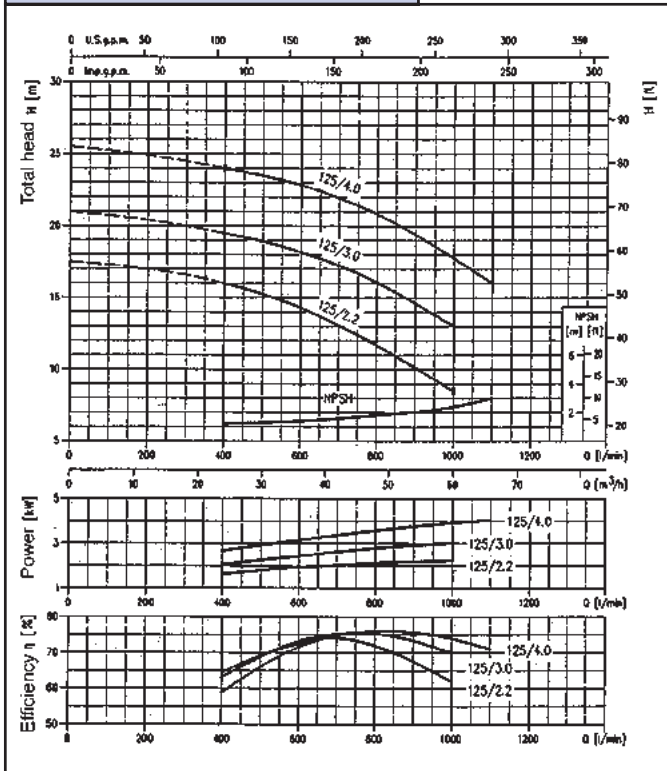
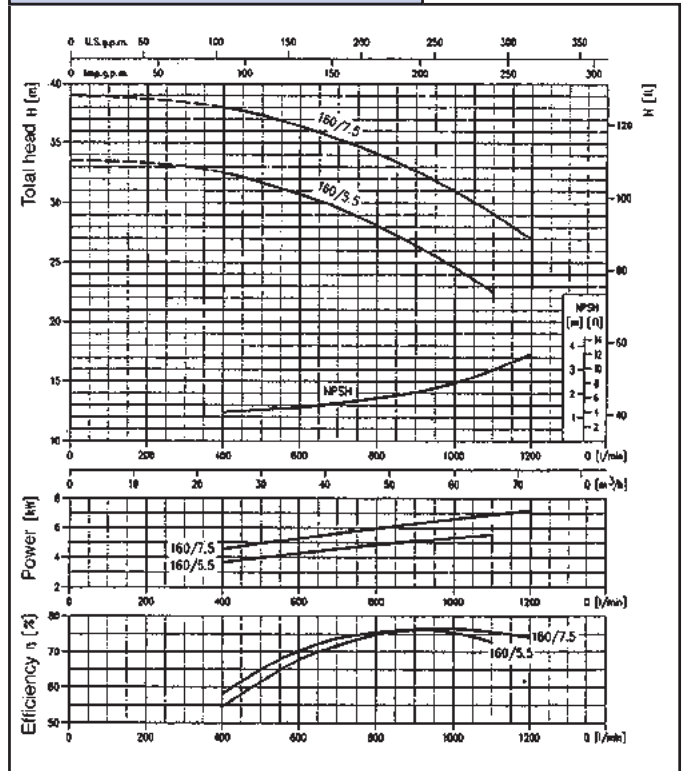
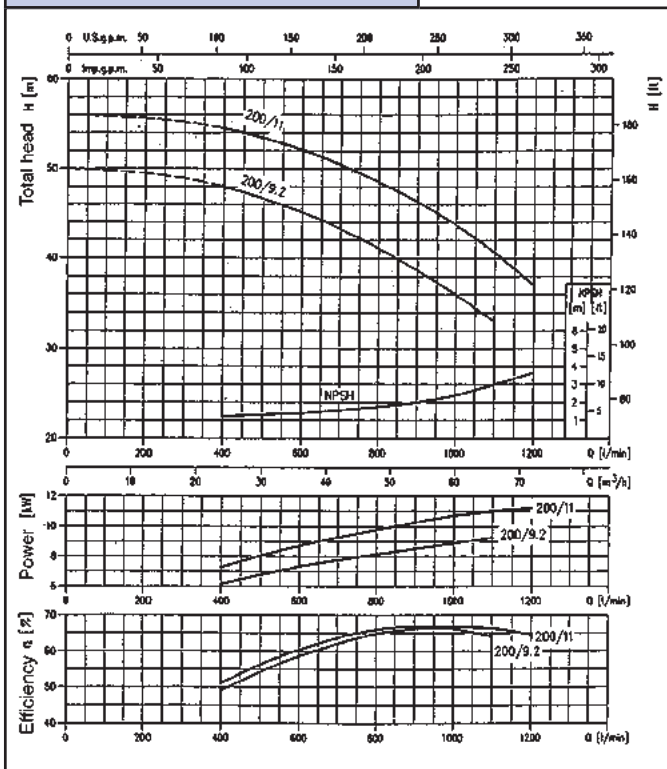
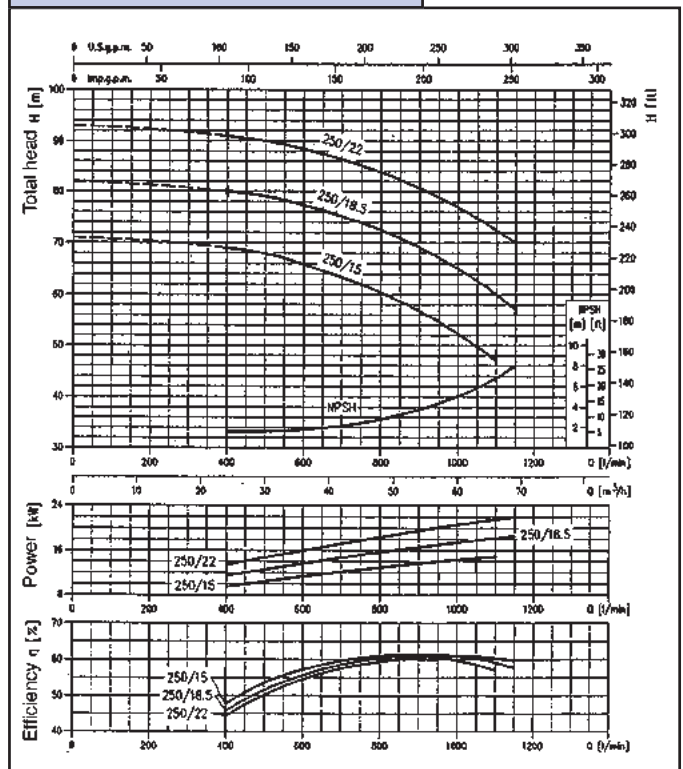
Applicable standard : UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
2 POLE
MD 32-125

MD 32-160

MD 32-200

MD 32-250


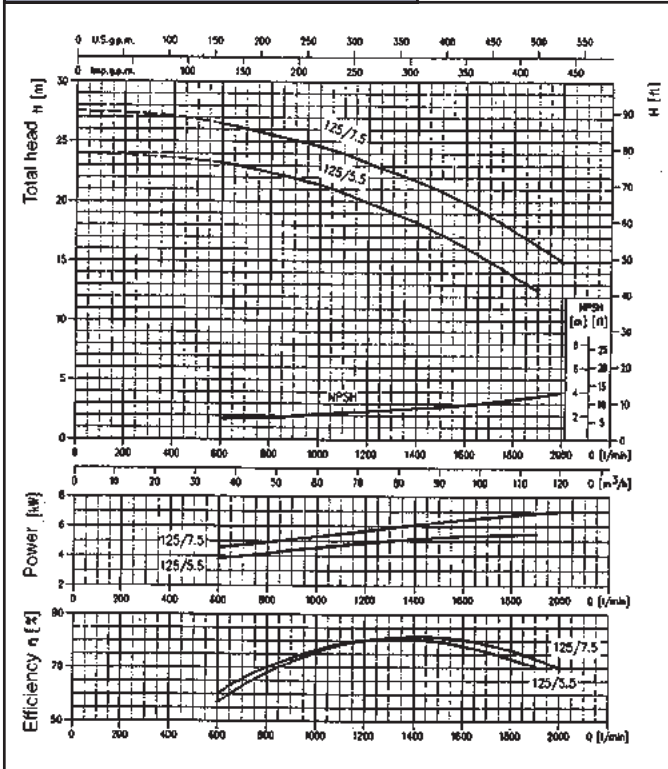
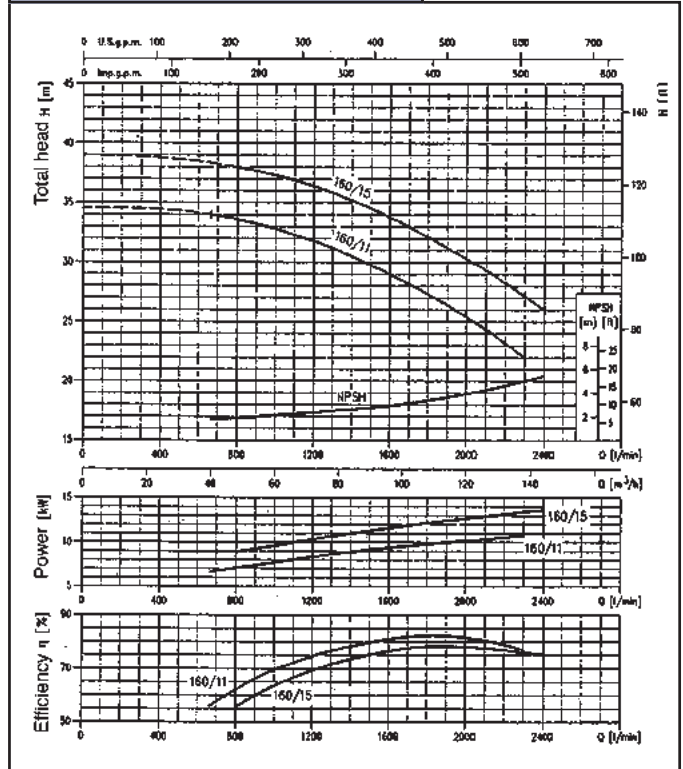
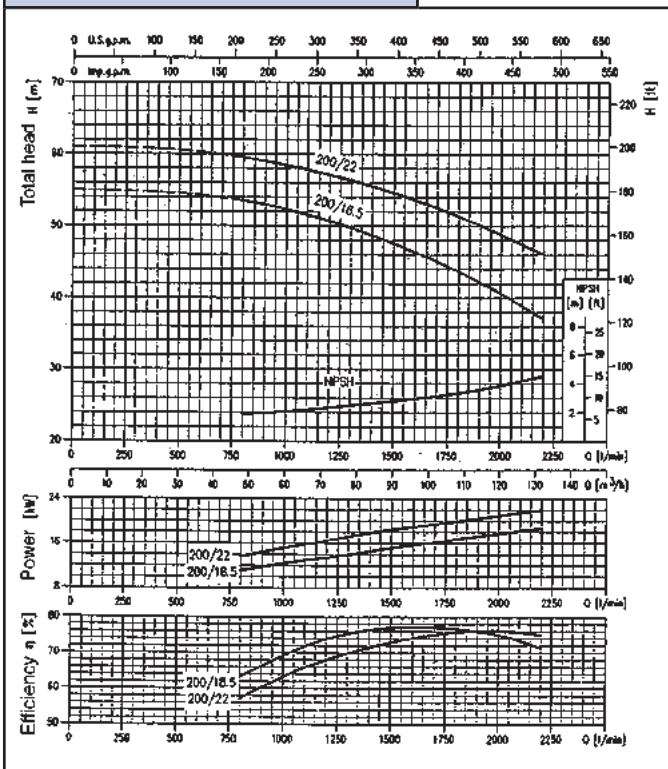
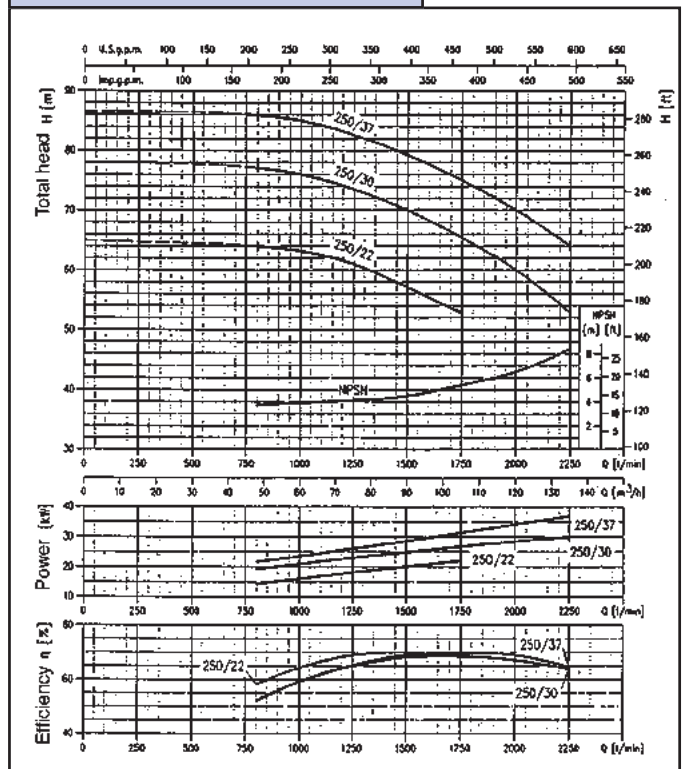
R.P.M. \approx 2900 min⁻¹
 Test fluid: Clean water 20°C
 Applicable standard: UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
2 POLE
MD 40-125

MD 40-160

MD 40-200

MD 40-250


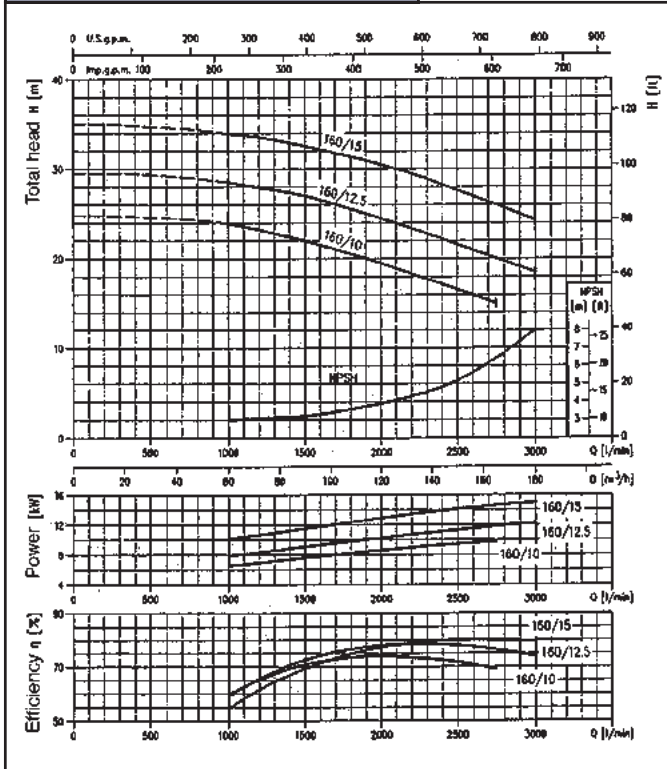
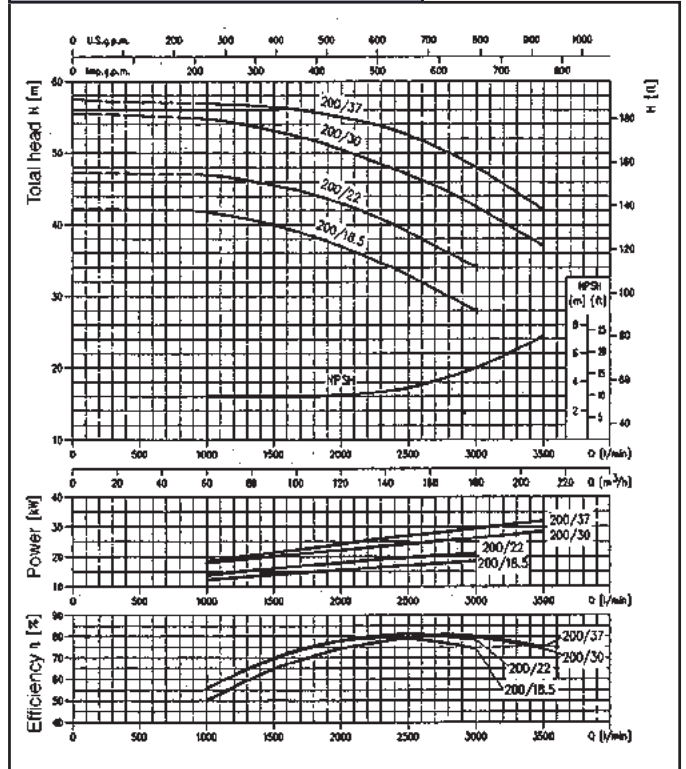
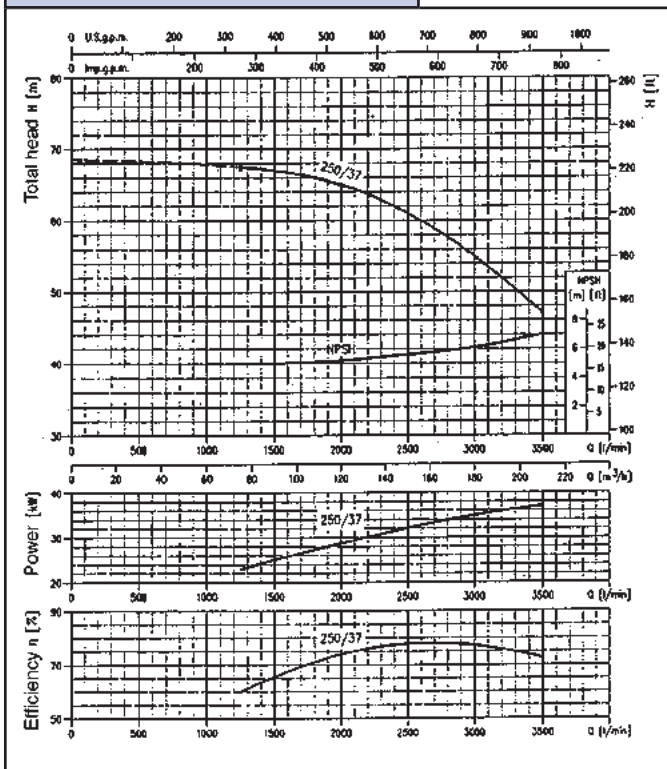
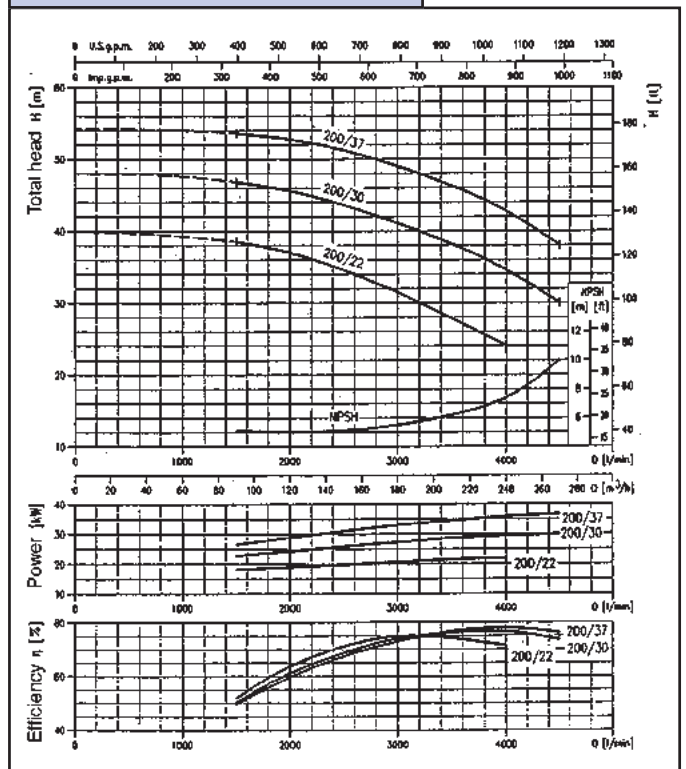
R.P.M. \approx 2900 min⁻¹
 Test fluid : Clean water 20°C
 Applicable standard : UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
2 POLE
MD 50-125

MD 50-160

MD 50-200

MD 50-250


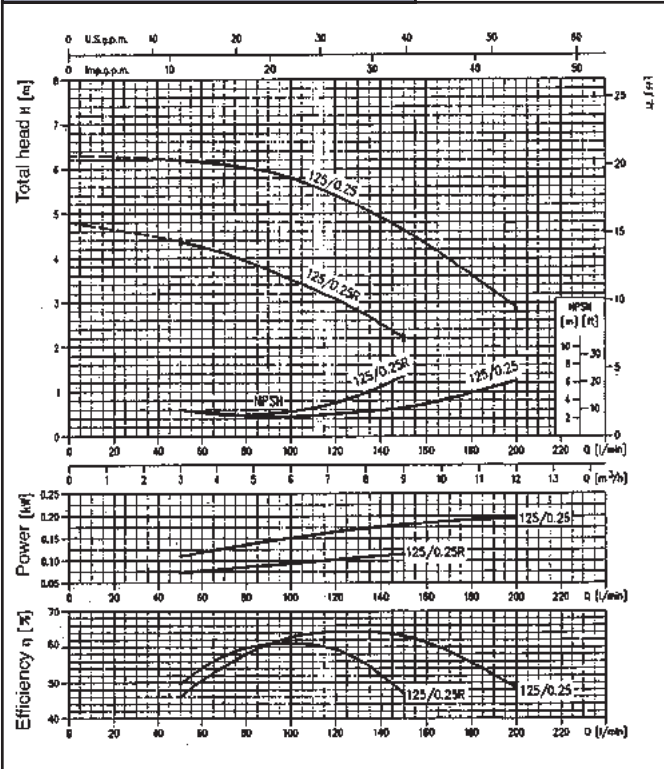
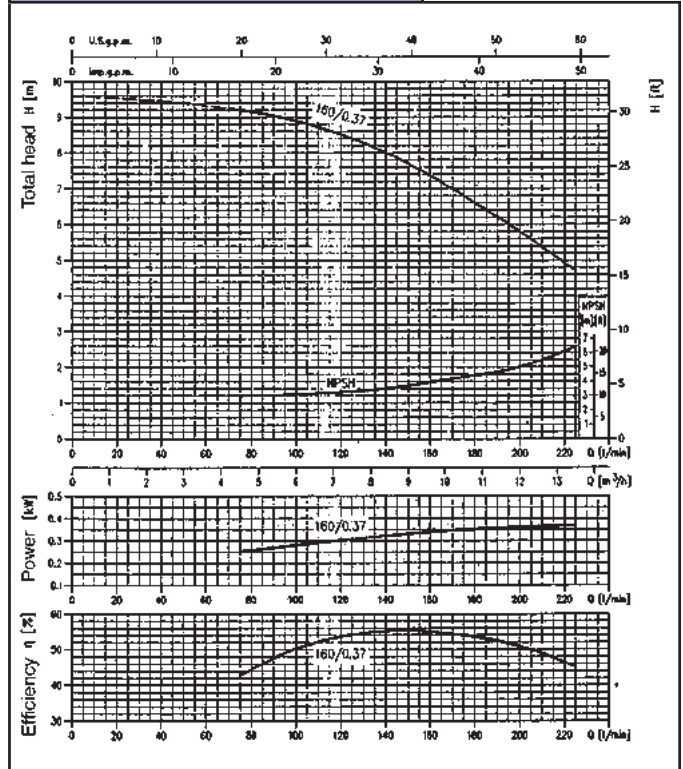
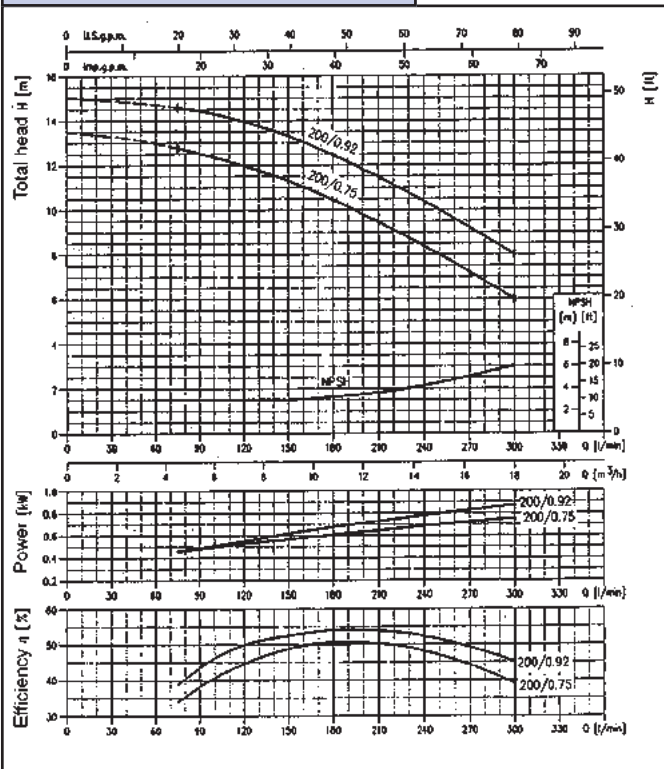
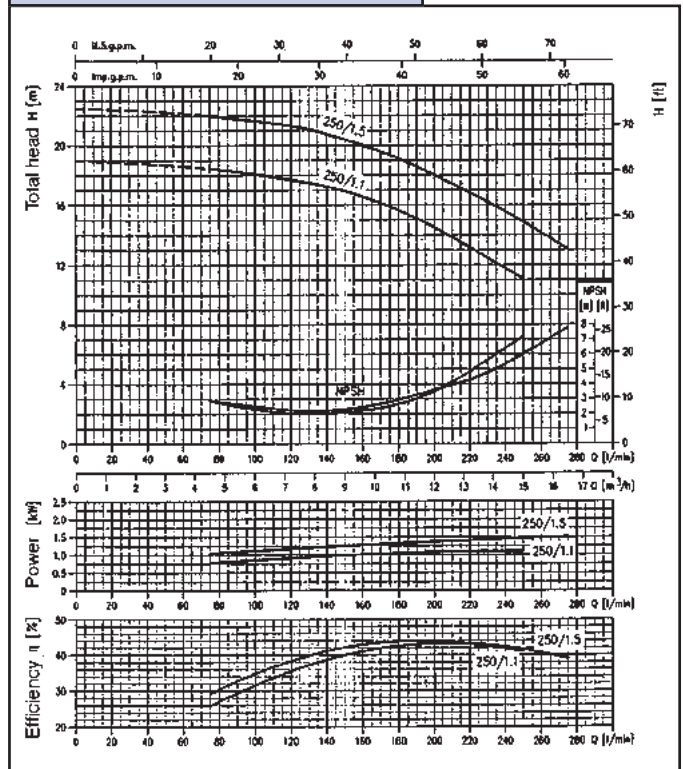
R.P.M. \approx 2900 min⁻¹
 Test fluid : Clean water 20°C
 Applicable standard : UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
2 POLE
MD 65-125

MD 65-160

MD 65-200

MD 65-250


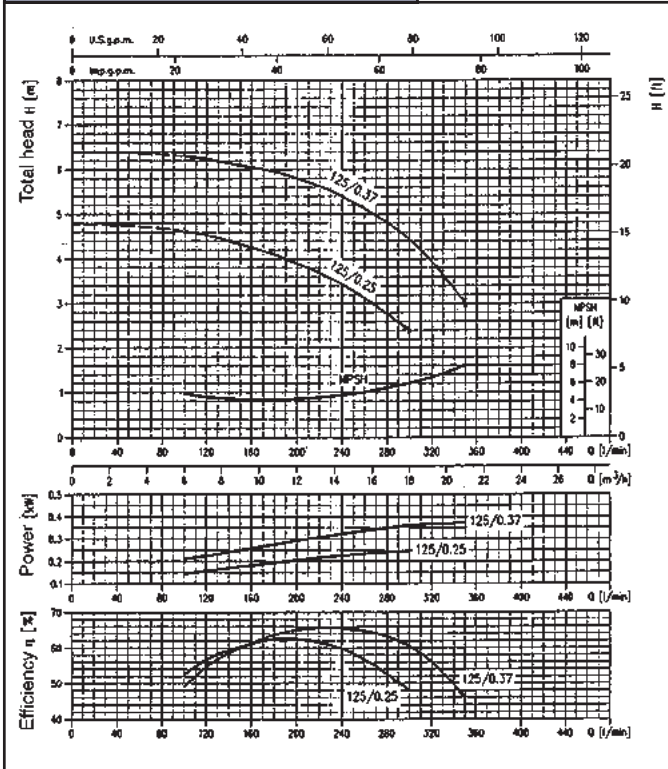
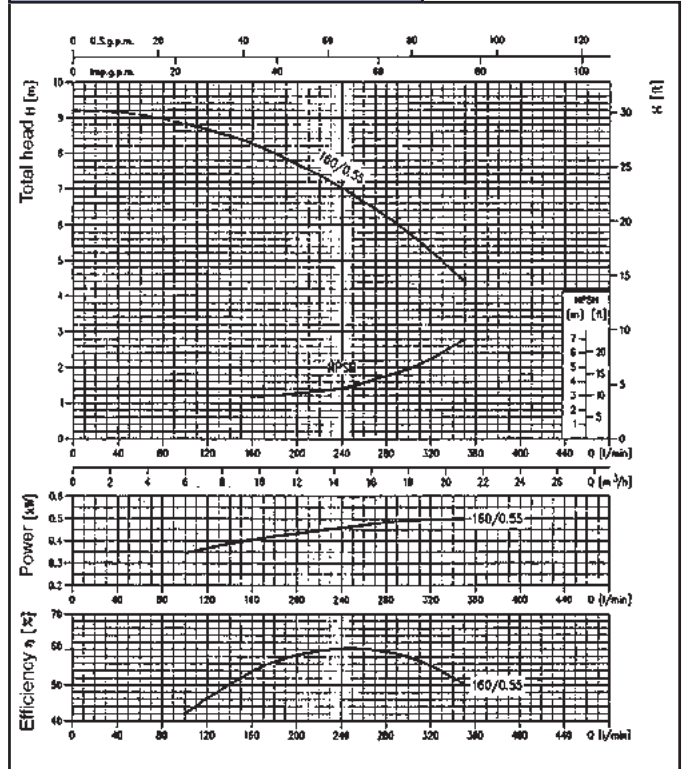
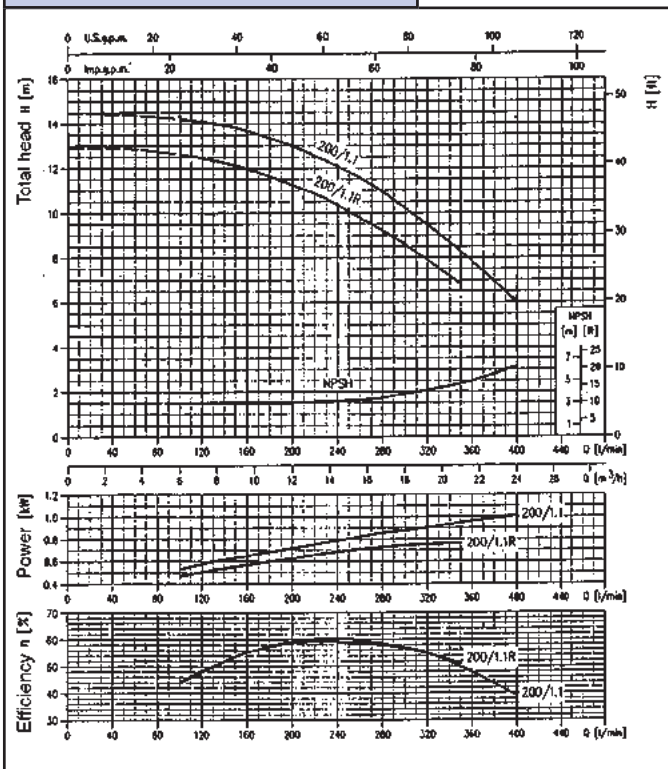
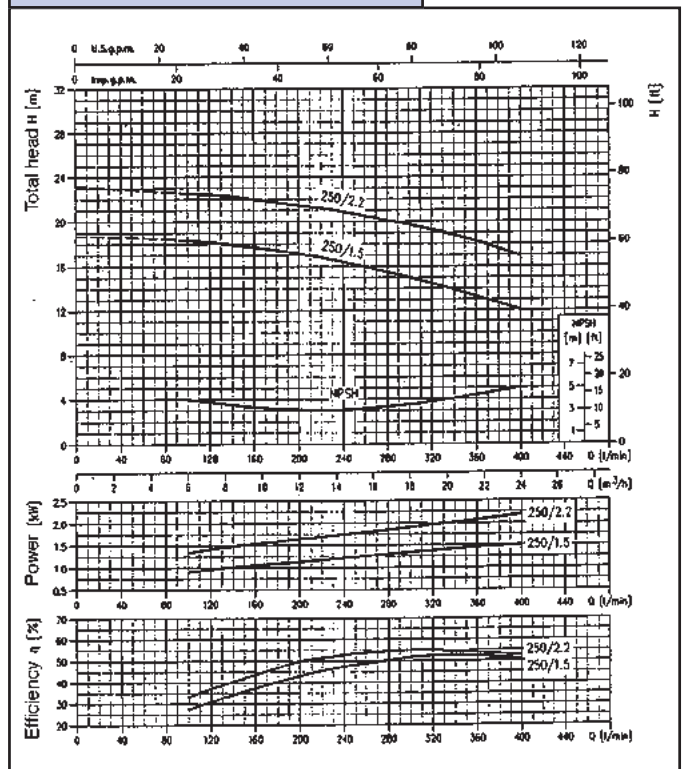
R.P.M. \approx 2900 min⁻¹
 Test fluid: Clean water 20°C
 Applicable standard: UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
2 POLE
MMD 80-160

MMD 80-200

MMD 80-250

MMD 100-200


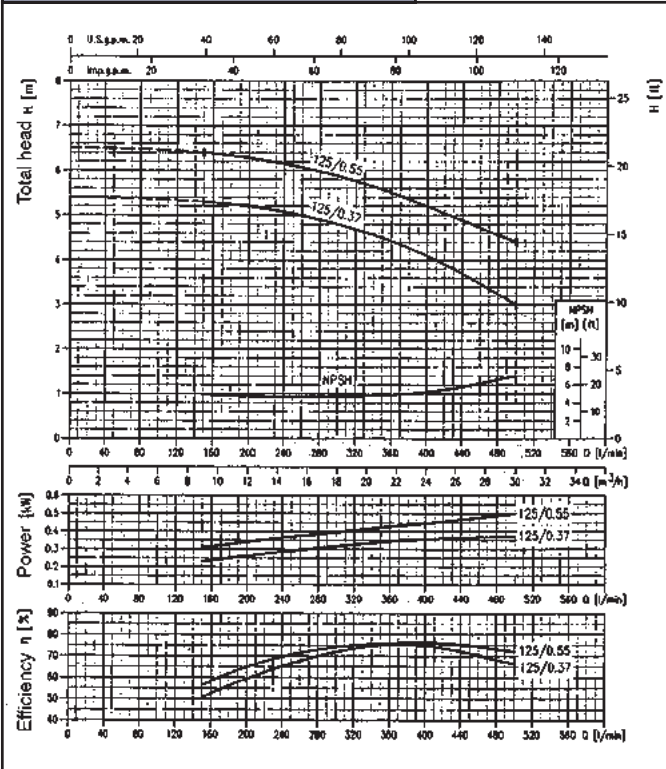
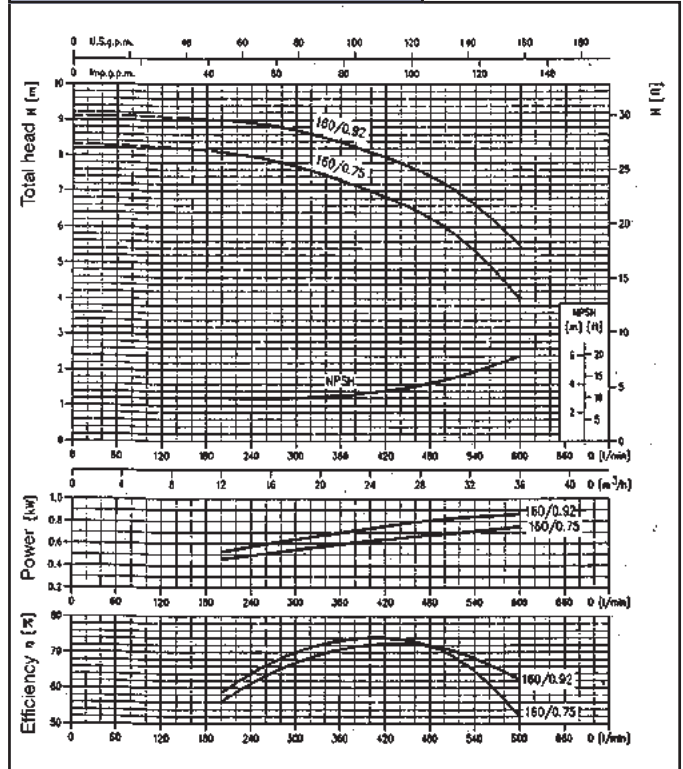
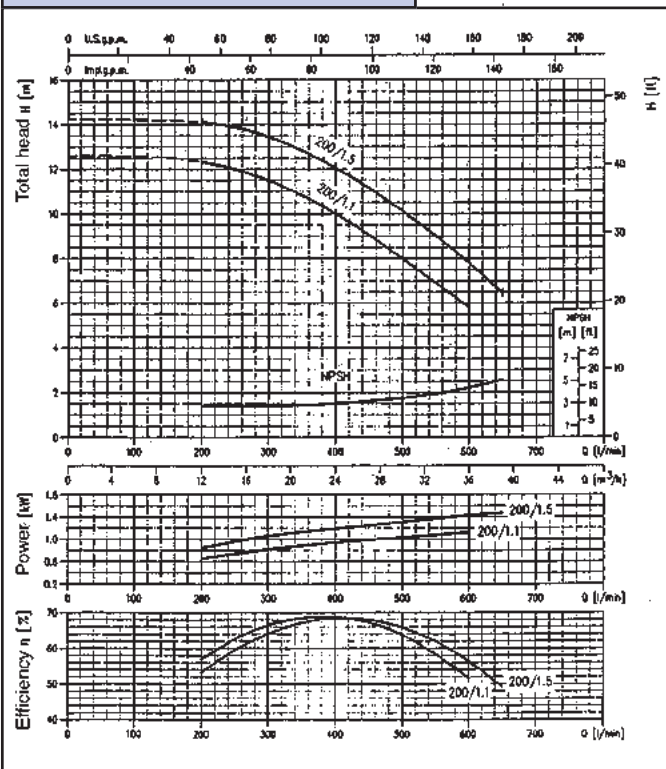
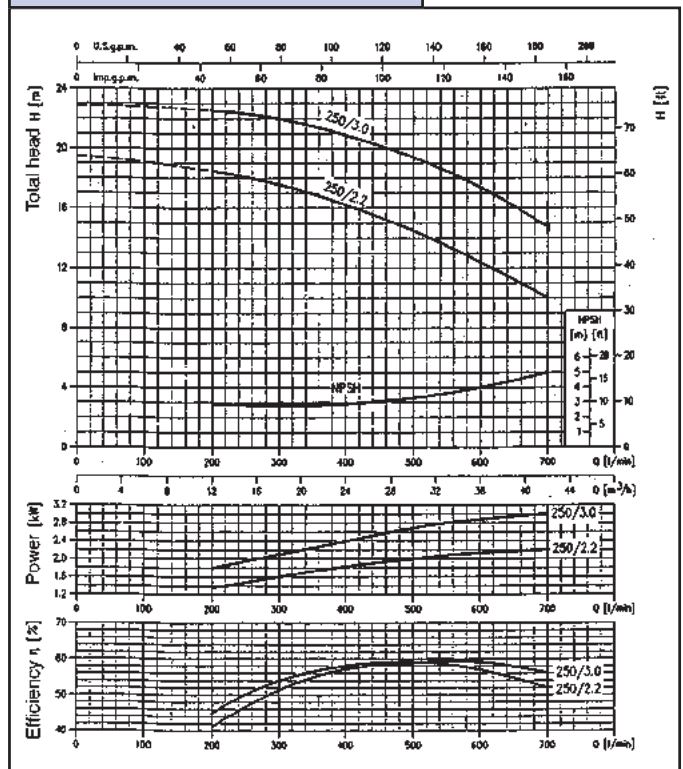
R.P.M. \approx 2900 min⁻¹
 Test fluid : Clean water 20°C
 Applicable standard : UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
4 POLE
MMD 32-125

MMD 32-160

MMD 32-200

MMD 32-250


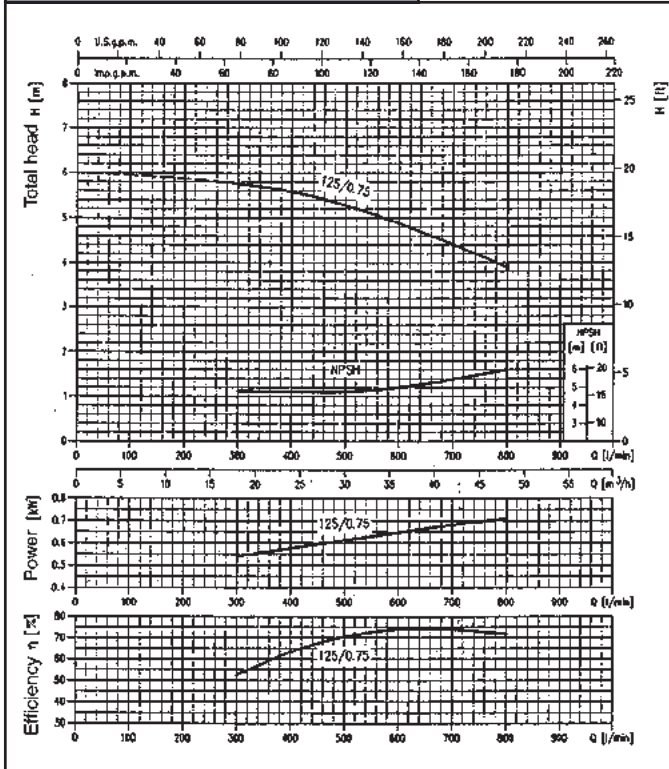
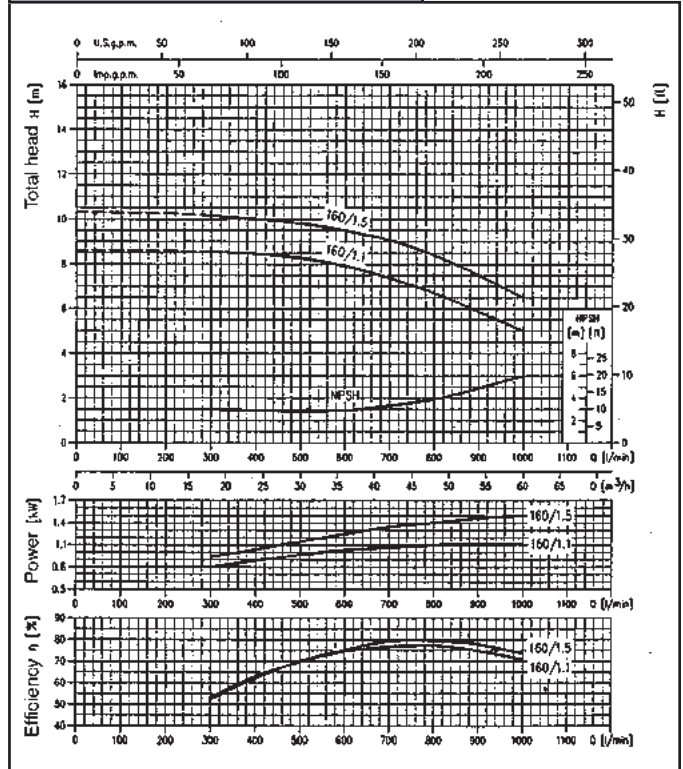
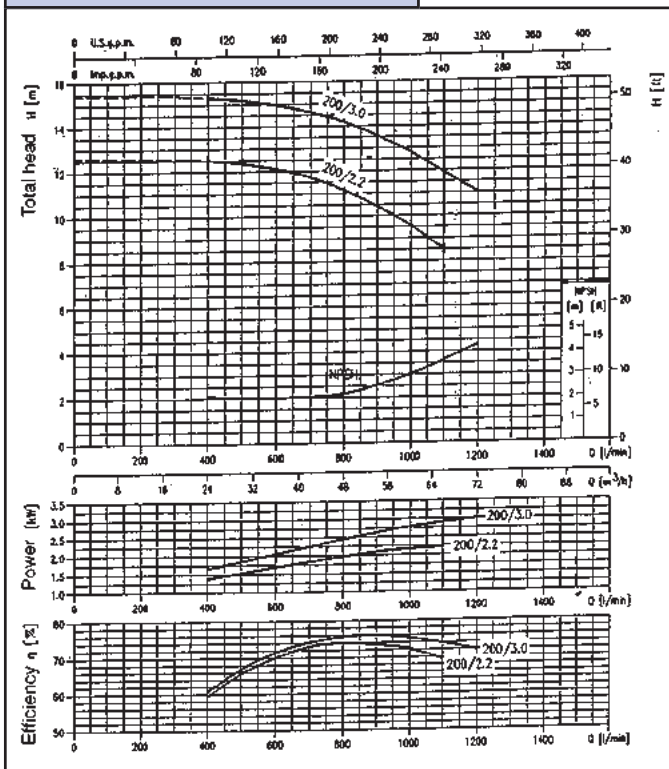
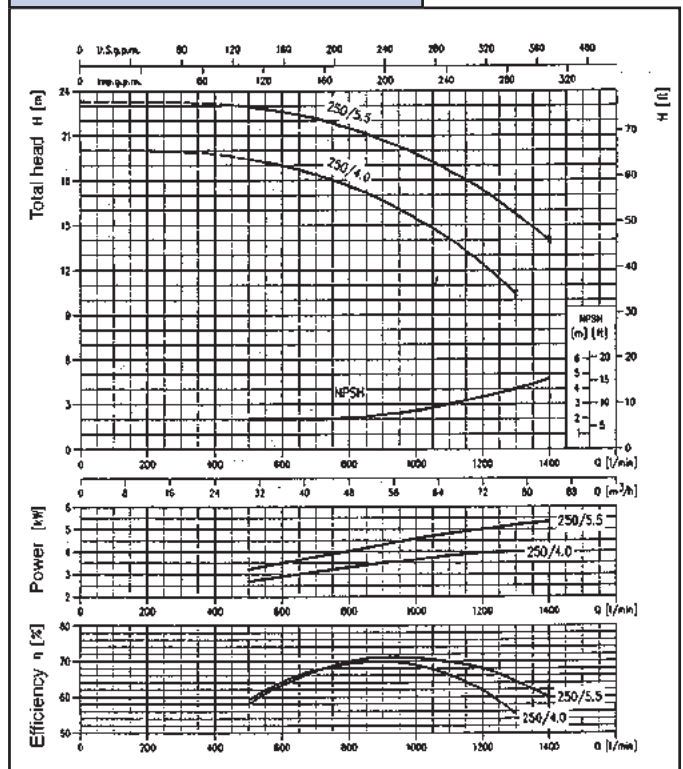
R.P.M. \approx 1400 min⁻¹
 Test fluid : Clean water 20°C
 Applicable standard : UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
4 POLE
MMD 40-125

MMD 40-160

MMD 40-200

MMD 40-250


R.P.M. \approx 1400 min⁻¹
 Test fluid : Clean water 20°C
 Applicable standard : UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
4 POLE
MMD4 50-125

MMD4 50-160

MMD4 50-200

MMD4 50-250


R.P.M. \approx 1400 min⁻¹
 Test fluid : Clean water 20°C
 Applicable standard : UNI EN ISO 9906 Appendice A

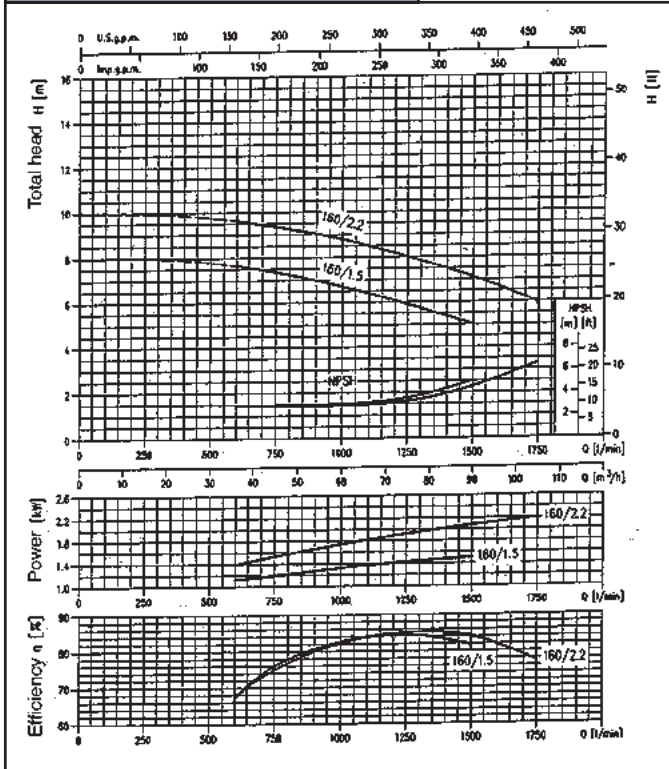
PERFORMANCE CURVE
4 POLE
MMD4 65-125

MMD4 65-160

MMD4 65-200

MMD4 65-250


R.P.M. \approx 1400 min⁻¹
 Test fluid : Clean water 20°C
 Applicable standard : UNI EN ISO 9906 Appendice A

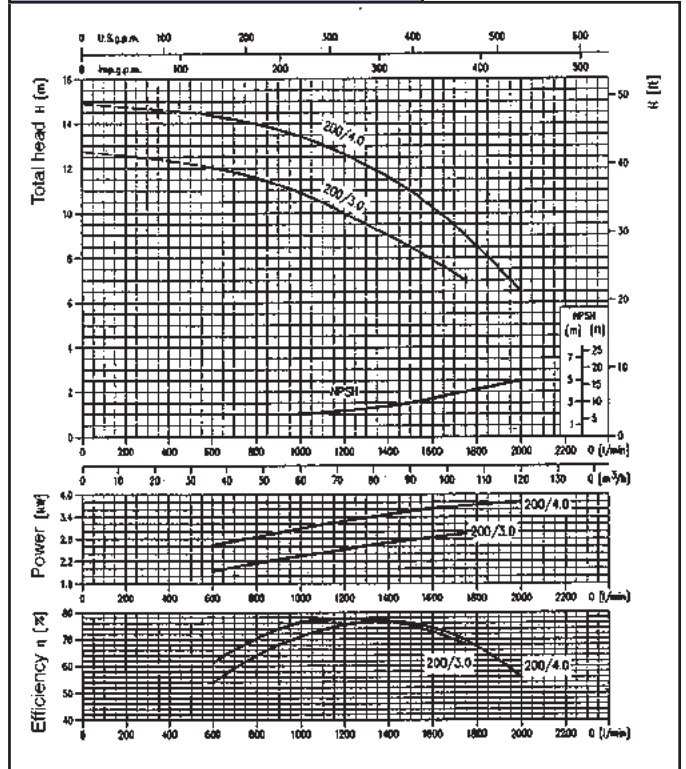
PERFORMANCE CURVE

4 POLE

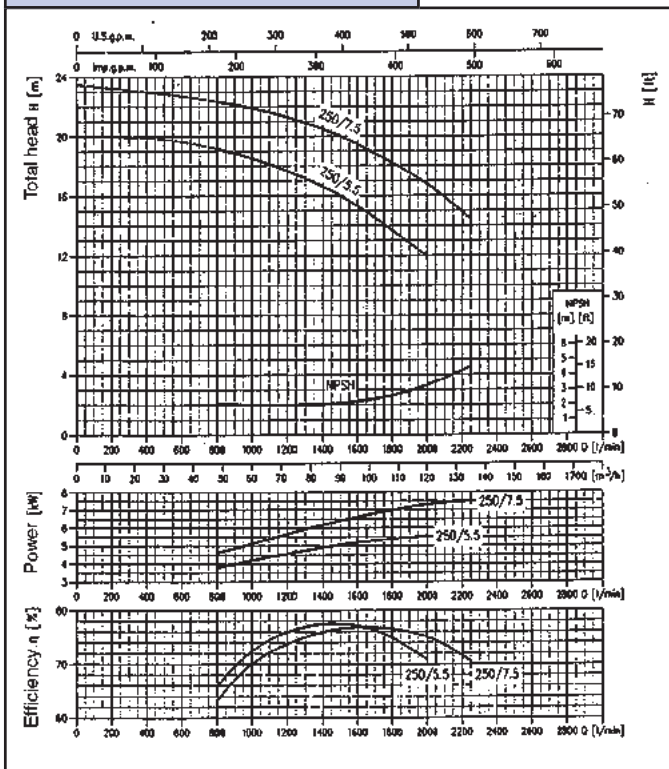
MMD4 80-160



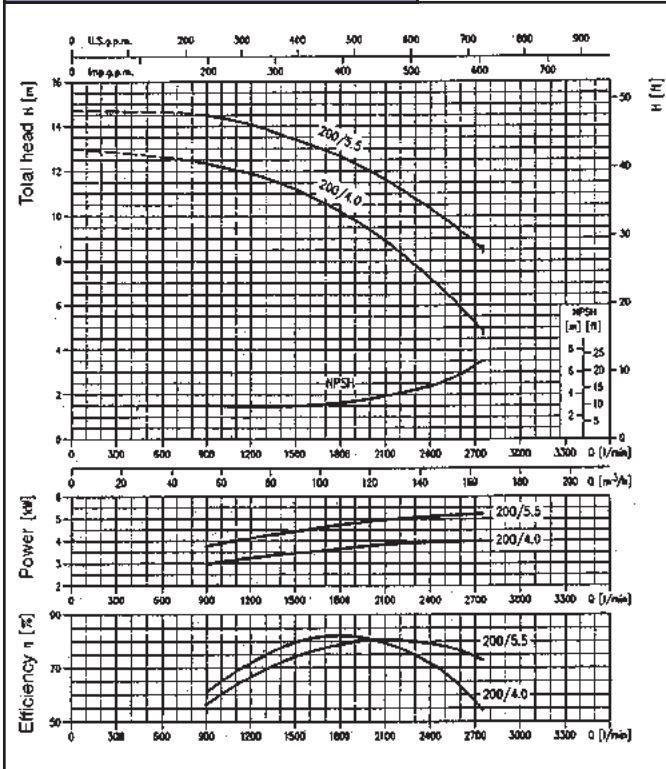
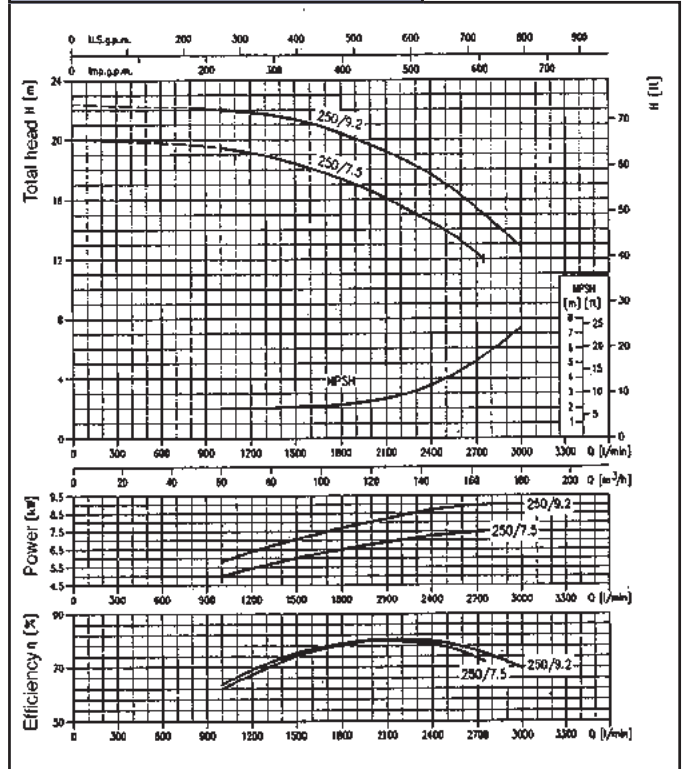
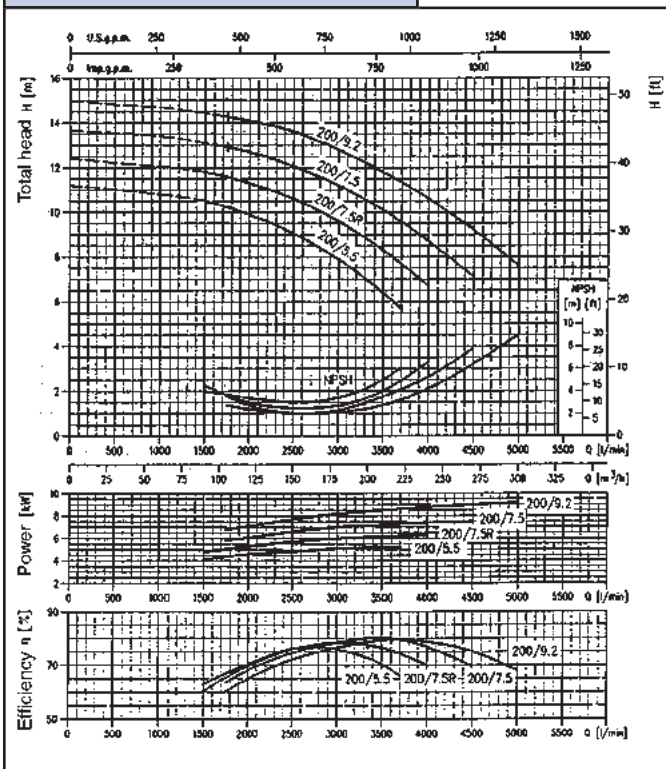
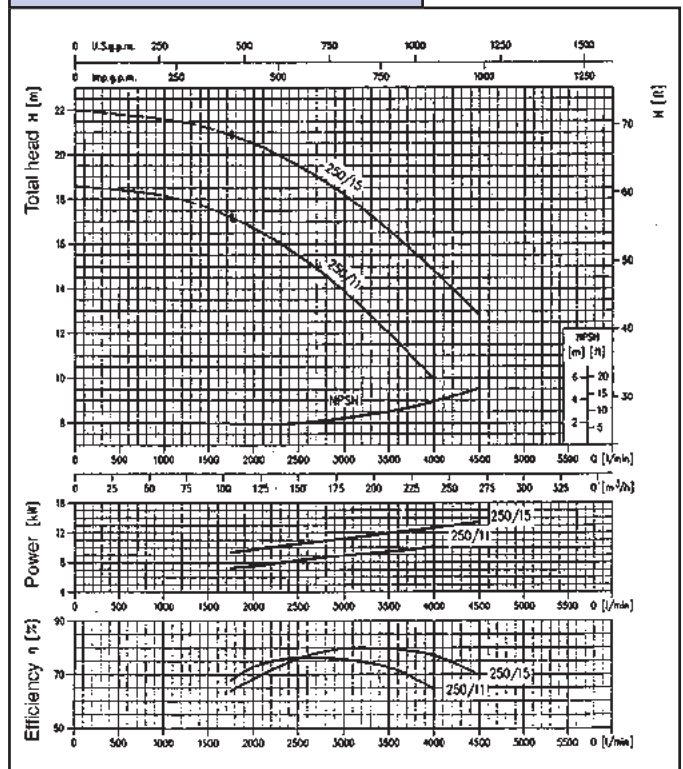
MMD4 80-200



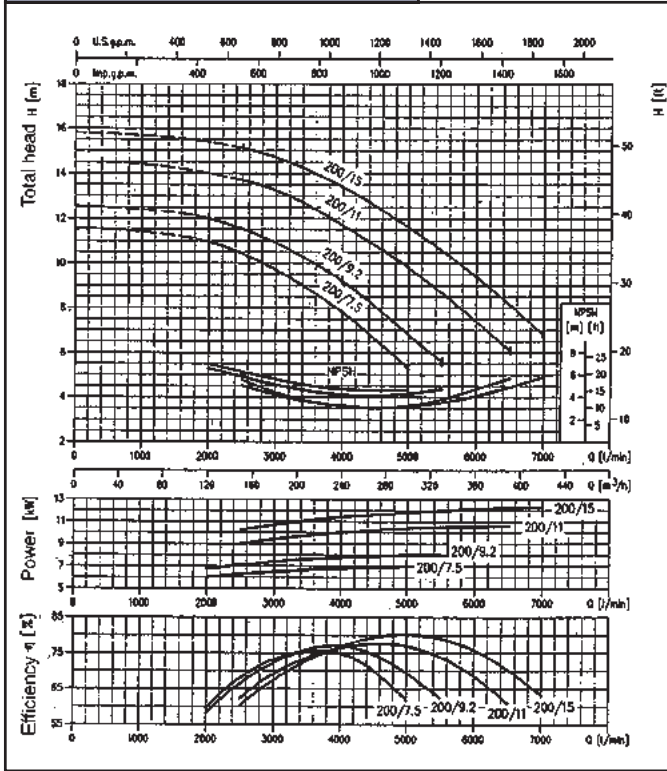
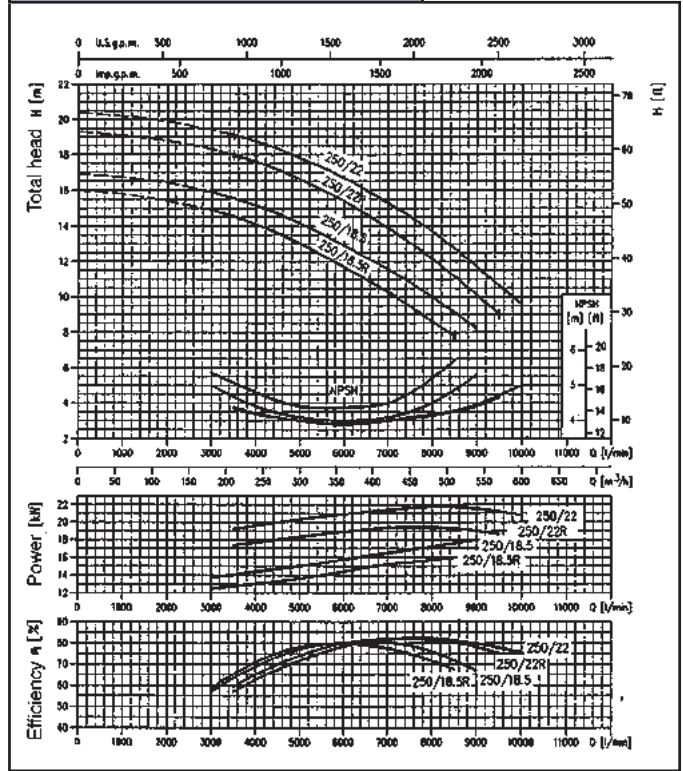
MMD4 80-250



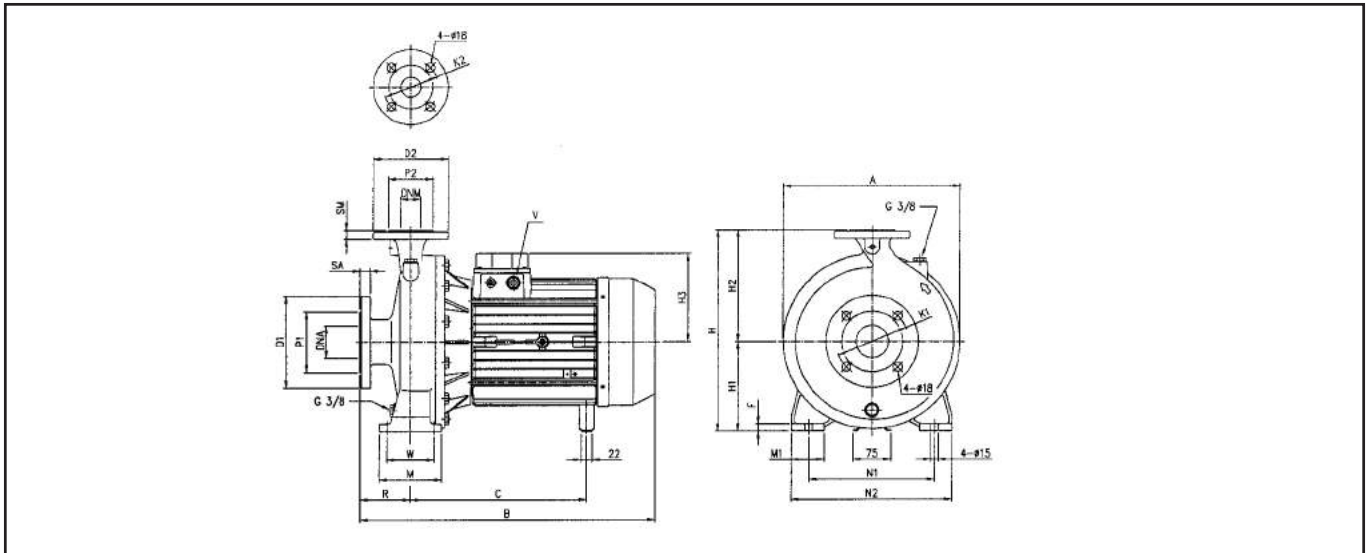
R.P.M. \approx 1450 min⁻¹
 Test fluid: Clean water 20°C
 Applicable standard: UNI EN ISO 9906 Appendice A

PERFORMANCE CURVE
4 POLE
MMD4 100-200

MMD4 100-250

MMD4 125-200

MMD4 125-250


R.P.M. ≈ 1450 min⁻¹
 Test fluid: Clean water 20°C
 Applicable standard: UNI EN ISO 9906 Appendice A

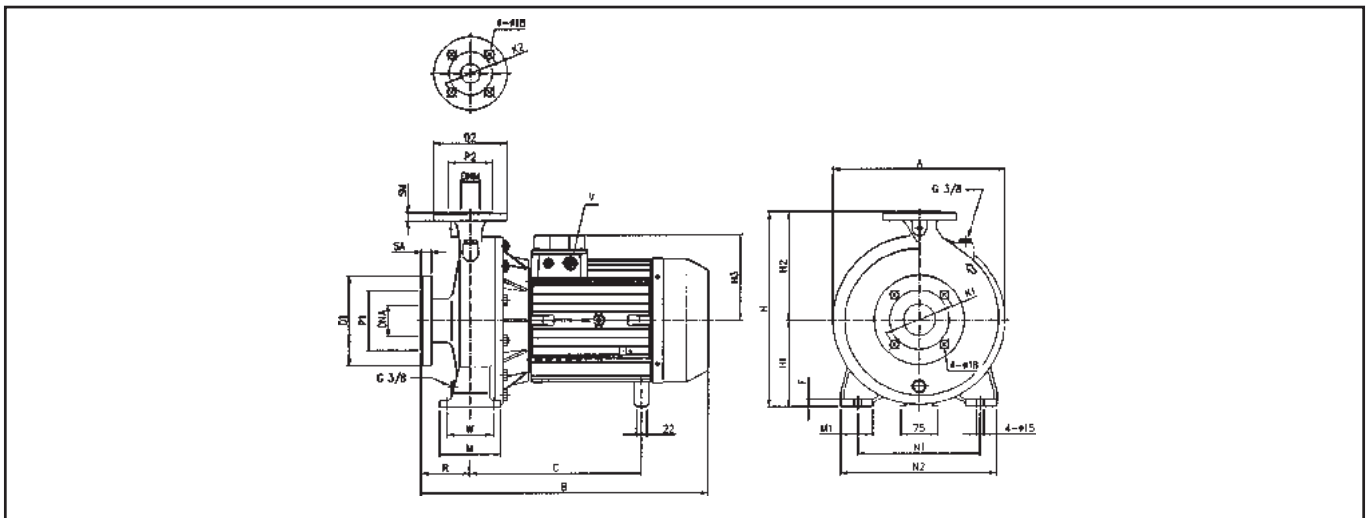
PERFORMANCE CURVE
4 POLE
MMD4 150-200

MMD4 200-250


R.P.M. $\approx 1450 \text{ min}^{-1}$
 Test fluid: Clean water 20°C
 Applicable standard: UNI EN ISO 9906 Appendice A

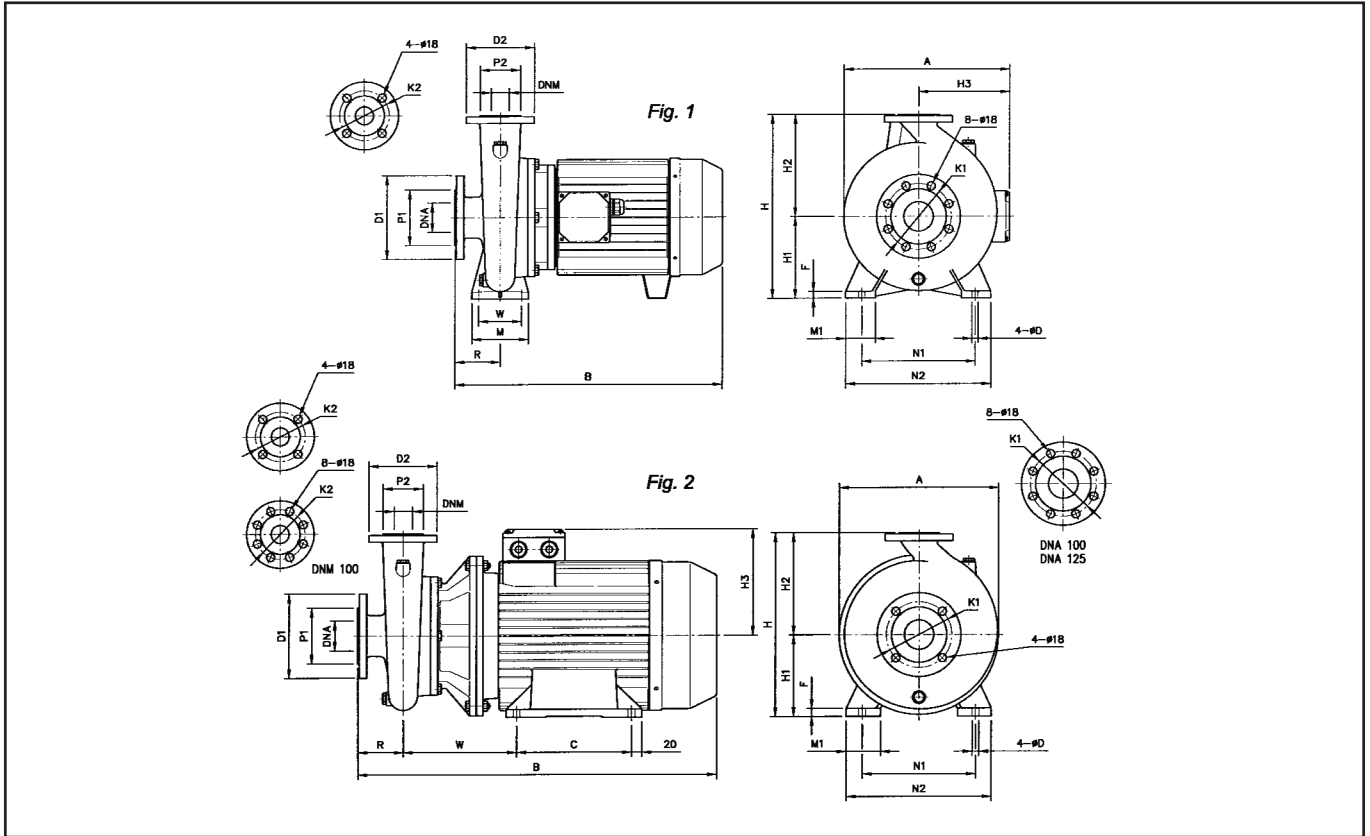
DIMENSION
MD 2 pole


Model	Dimension (mm) H3																			Weight [Kg]																																									
	DNA	P1	K1	D1	SA	DNM	P2	K2	D2	SM	H	H1	H2	[1]	[2]	R	W	N1	M		N2	M1	F	A	B	C	V [1]																																		
MD 32-125/1.1	50	102	125	165		32	78	100	140	18	252	112	140	122	139	80	70	140	190	100	240	50	13	205	431	230	PG 13.5	276																																	
MD 32-125/1.5											28.3																																																		
MD 32-160/1.5											292	132	160	134	139			100	95					250	125	320		65	15	352	588	351	PG 21	31.5																											
MD 32-160/2.2											35.4																																																		
MD 32-200/3											340	160	180	153	139									100	250					250	125	320		65	15	352	588	351	PG 21	44.1																					
MD 32-200/4											50.5																																																		
MD 32-200/5.5											405	180	225	181	139															100	250					250	125	320		65	15	352	588	351	PG 21	70.5															
MD 32-250/7.5											74.6																																																		
MD 32-250/9.2											252	112	140	122	139																					100	160					160	210	320		65	15	352	588	351	PG 21	84.3									
MD 32-250/11											87.3																																																		
MD 40-125/1.5	65	122	145	185	20	40	88	110	150	18	252	112	140	122	139	80	70			190	100	240	50				13															245	459					254	PG 13.5	29.9											
MD 40-125/2.2											31.9																																																		
MD 40-160/3											292	132	160	134	139			100	212	265	265					320		65	15				352									588	351					PG 21		39											
MD 40-160/4											45.7																																																		
MD 40-200/5.5											340	160	180	153	139					100	212			265	265							320	65	15	352				588			351	PG 21							60.1											
MD 40-200/7.5											68.5																																																		
MD 40-250/11											405	180	225	181	139									100	250					250	125				320			65	15	352	588	351			PG 21					90.7											
MD 40-250/13											93																																																		
MD 50-125/2.2											80	138	160	200	22															65	122					145	185			20	292	132		160		122	139			100	70	190	100	240	50	13	230	431	230	PG 13.5	34
MD 50-125/3																																									31.9																				
MD 50-125/4	340	160	180	153	139	100	212	265	265	320						65	15					352	588				351														PG 21	42.3																			
MD 50-160/5.5	42.3																																																												
MD 50-160/7.5	360	180	210	181	139			100	212									265	265			320	65			15	352	588	351													PG 21		57.2																	
MD 50-200/9.2	68.7																																																												
MD 50-200/11	340	160	180	153	139													100	212	265	265						320	65	15			352	588	351									PG 21	74																	
MD 50-250/15	80.9																																																												
MD 65-125/7.5	80	138	160	200	22															65	122			145	185							20	360	180	210			181	139					100	95	125	280	320	65			15	300				585	355	PG 21		67
MD 65-160/11																																	86.4																												
MD 65-160/15											91.9																																																		
MD 65-200/22											300	585	355	PG 21	91.9																																														

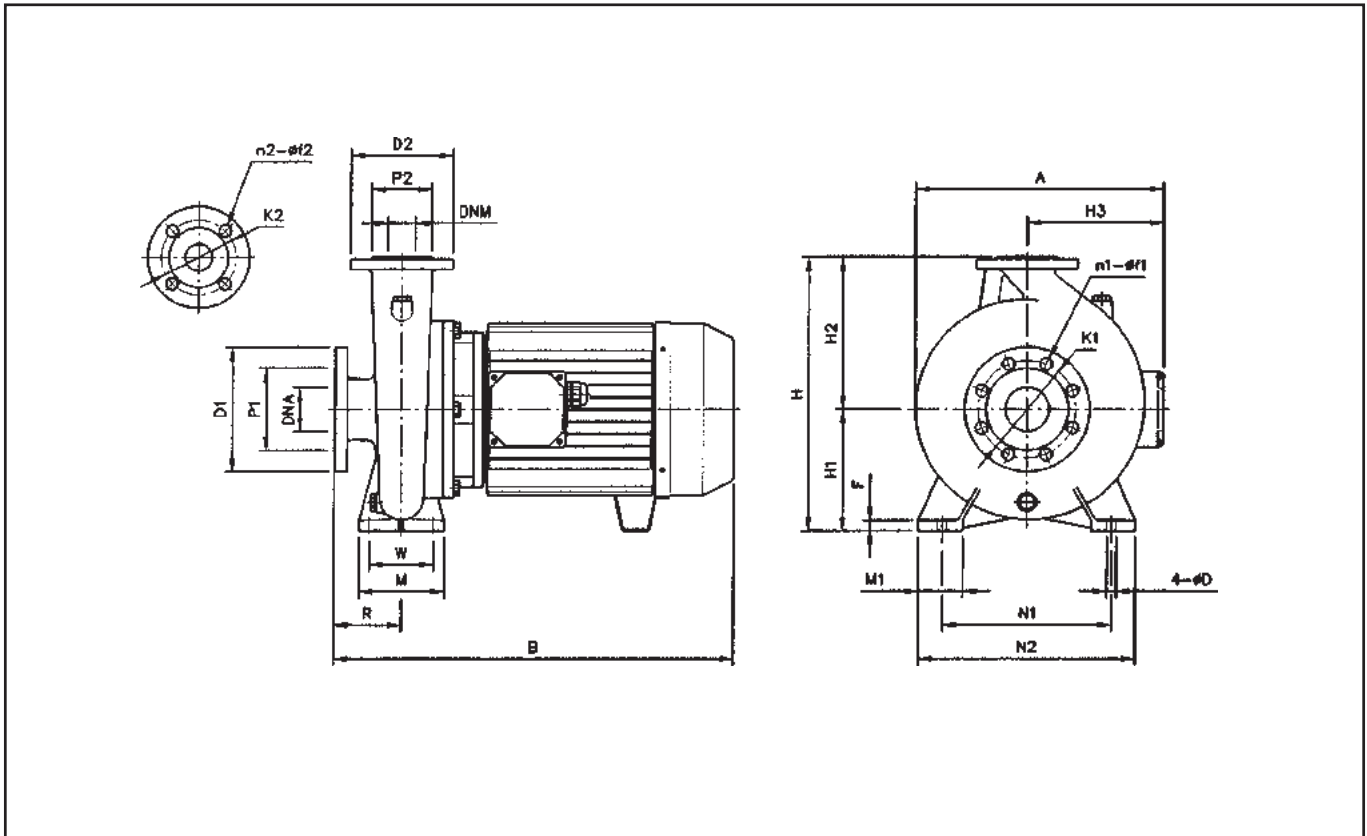
[1] = Three-phase [2] = Single-phase



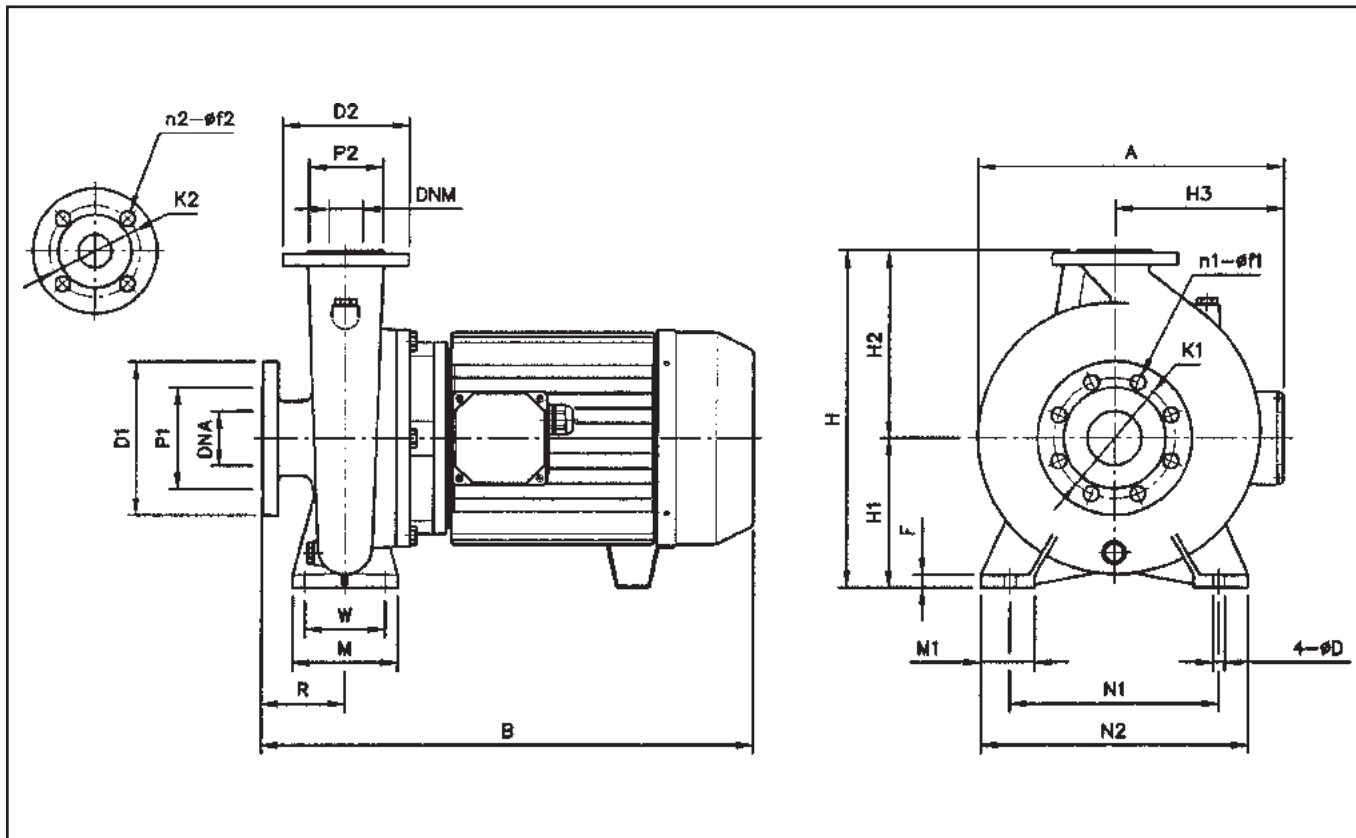
Model	Dimension (mm)																			Weight [Kg]							
	DNA	P1	K1	D1	SA	DNM	P2	K2	D2	SM	H	H1	H2	H3	R	W	N1	M	N2		M1	F	A	B	C	V [1]	
MD 40-250/15	65	122	145	185	20	50	102	125	165	20	405	180	225	230	100	95	250	125	320	65	15	352	734	501	PG 21	96.8	
MD 50-250/15	65																									97.6	
MD 50-250/18.5	65																									126	
MD 50-250/22	65																									148	
MD 65-200/18.5	80	138	160	200	22	65	122	145	185	20	360	180	210	181	139	100	95	125	280	320	65	15	310	736	548	PG 21	126
MD 65-200/22	80																										135

DIMENSION
MMD 2 pole

DIMENSIONAL TABLE

Model	Fig.	Dimension (mm)																				Weight [Kg]										
		DNA	P1	K1	D1	DNW	P2	K2	D2	H	H1	H2	H3	R	W	N1	M	N2	M1	F	A		B	C	D							
MMD 65-250/22	2	80	138	160	200	65	122	145	185	450	180	250	230	100	293	280	-	320	55	22	365	810	241	14	144							
MMD 65-250/30											200		257		325	318		360	60	24	400	905	305	18	172							
MMD 65-250/37											200		257		325	318		360	60	24	400	905	305	18	190							
MMD 80-160/10	1									405	225	184		95	250	125		65	14	345	665	-				74						
MMD 80-160/12.5																										180	320	14	345	665	-	81.5
MMD 80-160/15																										180	320	14	345	665	-	88.5
MMD 80-200/18.5	2	100	158	180	220	80	138	160	200	430	250	230	125	293	280			55	22	360	835	241				132						
MMD 80-200/22																										150						
MMD 80-200/30																										192						
MMD 80-200/37																										210						
MMD 80-250/37																										196						
MMD 100-200/22																										160						
MMD 100-200/30	202																															
MMD 100-200/37	220																															

DIMENSION
MMD 4 pole

DIMENSIONAL TABLE

Model	Dimension (mm)													Weight [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 32-125/0.25R	50			102	125	165	32			78	100	140	252	112	140	107	80	70	140	100	190	240	65	12	205	405	19.5								
MMD4 32-125/0.25													292	132	160				50		240														
MMD4 32-160/0.37													340	160	180				255		425														
MMD4 32-200/0.75													405	1801	225	149			100	95	250	125						320	65	320	485	47			
MMD4 32-200/0.92																																	320	485	49
MMD4 32-250/1.1																																			
MMD4 32-250/1.5	65	4	18	122	145	185	40	4	18	88	110	150	252	112	140	107	80	70	160	100	210	50	12	230	405	20.5									
MMD4 40-125/0.25													292	132	160				240																
MMD4 40-125/0.37													340	160	180				240		50														
MMD4 40-160/0.55													405	180	225	149			100	95	250	125					320	65	320	485	20.5				
MMD4 40-200/1.1																																320	485	25	
MMD4 40-200/1.5																																			320
MMD4 40-250/1.5	65	4	18	122	145	185	40	4	18	102	125	165	292	132	160	107	100	70	190	100	240	50	12	246	425	25									
MMD4 40-200/1.1													340	160	180				242																
MMD4 40-200/1.5													405	180	225				242		485														
MMD4 40-250/1.5													405	180	225	159			100	95	250	125					320	65	325	525	47.5				
MMD4 40-250/2.2																																325	525	54	
MMD4 50-125/0.37																																			325
MMD4 50-125/0.55	65	4	18	122	145	185	50	4	18	102	125	165	292	132	160	107	100	70	190	100	240	50	12	246	425	25									
MMD4 50-160/0.75													340	160	180				240																
MMD4 50-160/0.92													360	160	180				159																
MMD4 50-200/1.1													405	180	225	149			100	95	250	125					320	65	325	525	32				
MMD4 50-200/1.5																																325	525	33	
MMD4 50-250/2.2																																			325
MMD4 50-250/3.0	65	4	18	122	145	185	50	4	18	102	125	165	360	160	180	107	100	70	212	100	265	50	12	269	445	26									
MMD4 50-200/1.1													360	160	180				159																
MMD4 50-200/1.5													360	160	180				149																
MMD4 50-250/2.2													405	180	225	159			100	95	250	125					320	65	325	525	38				
MMD4 50-250/3.0																																325	525	40	
MMD4 65-125/0.75																																			325
MMD4 65-125/0.75	80			138	160	200	65			122	145	185	340	160	180	118	95	212	125	125	280	65	12	286	445	32									
MMD4 65-160/1.1													360	160	200				149																
MMD4 65-160/1.5													360	160	200				149																
MMD4 65-160/1.5													405	180	225	159			100	95	250	125					320	65	325	525	37.5				
MMD4 65-200/2.2																																325	525	51	
MMD4 65-200/3.0																																			325
MMD4 65-250/4.0	450	200	250	159	184	120	280	160	360	80	365	640	80																						
MMD4 65-250/5.5														450	200	250	184	120	280	160	360	80	365	640	90										

DIMENSION
MMD 4 pole

DIMENSIONAL TABLE

Model	Dimension (mm)																				Weight [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
MMD4 80-160/1.5	100	8	18	158	180	220	80	4	138	160	200	405	180	225	149	125	95	250	125	320	65	14	330	510	14	45
MMD4 80-160/2.2																										51
MMD4 80-200/3.0																										66
MMD4 80-250/4.0																										73
MMD4 80-250/5.5	125	8	18	188	210	250	100	18	158	180	220	430	225	184	125	120	120	315	160	400	80	14	355	560	18	96
MMD4 80-250/7.5																										106
MMD4 100-200/4.0																										78
MMD4 100-200/5.5																										90
MMD4 100-250/7.5	150	8	18	188	210	250	100	18	158	180	220	505	225	184	140	120	120	315	160	400	80	14	355	665	18	112
MMD4 100-250/9.2																										118
MMD4 125-200/5.5																										124
MMD4 125-200/7.5R																										134
MMD4 125-200/7.5	200	22	18	212	240	285	125	8	188	210	250	565	250	315	255	140	120	315	160	400	80	14	470	700	18	140
MMD4 125-200/9.2																										162
MMD4 125-200/11																										190
MMD4 125-250/15																										167
MMD4 150-200/7.5	250	12	22	212	240	285	150	22	212	240	285	680	280	400	160	155	450	200	550	100	22	550	855	24	173	
MMD4 150-200/9.2																									175	
MMD4 150-200/11																									203	
MMD4 150-200/15																									278	
MMD4 200-250/18.5R	250	12	22	268	295	340	150	22	268	295	340	765	315	450	200	155	450	200	550	100	22	630	1000	24	278	
MMD4 200-250/18.5																									300	
MMD4 200-250/22																										
MMD4 200-250/22																										