

DML – DMLF - POMPE SUBMERSIBILE DE CANALIZARE (MONOCANAL) DIN FONTA



APLICATII

- Evacuarea apelor uzate industriale si civile;
- Tratarea gunoilor de grajd lichid;
- Drenarea zonelor de sub-strat;
- Deplasarea, in general, a lichidelor uzate ce contin substante solide si/sau substante aflate in suspensie;
- Pomparea apelor de infiltratii;
- Deplasarea infilttratiilor (sercivii sanitare);
- Pomparea vidanjelor.

CARACTERISTICI TEHNICE

- Echipate cu rotor monocanal;
- Etansare ax superior/inferior (DML);
- Sistem anti-vortex in camera de ulei (DML).

DATE TEHNICE

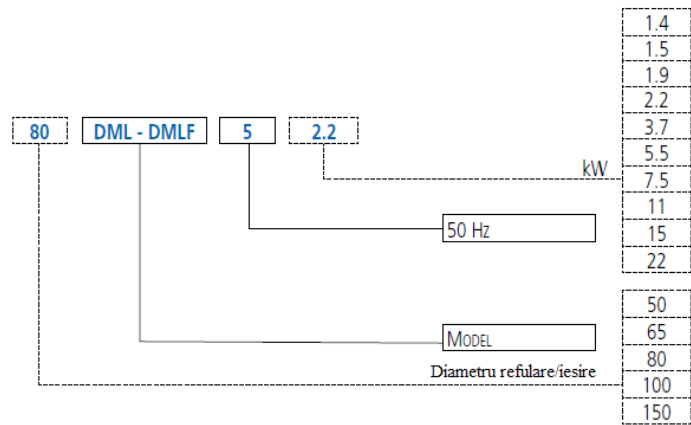
- Temperatura maxima a lichidului: 40 °C;
- Dimensiunea maxima a solidelor vehiculate: 76 mm (DML), 30 mm (DMLF 1.4 kW), 40 mm (DMLF);
- Motor submersibil uscat umplut cu aer, 4 poli (DML);
- Motor submersibil uscat umplut cu aer, 2 poli (DMLF);
- Clasa de izolatie F (DML);
- Clasa de izolatie H (DMLF);
- Grad de protectie IP68;
- curent trifazat:
380-415 V – 10 + 6%, 50 Hz (DML 2.2 kW) – DOL;
380-415 V ± 10%, 50 Hz (DML 3.7 – 22 kW) – Y/Δ;
- curent monofazat: 230 V ± 10%. 50 Hz (DMLF);
- Flanse: DN80, DN100, DN150 (DML), DN50, DN55, DN65 (DMLF).
- Putere pana la 22 kW (DML)/ de la 1.4 pana la 1.9 (DMLF).

MATERIALE

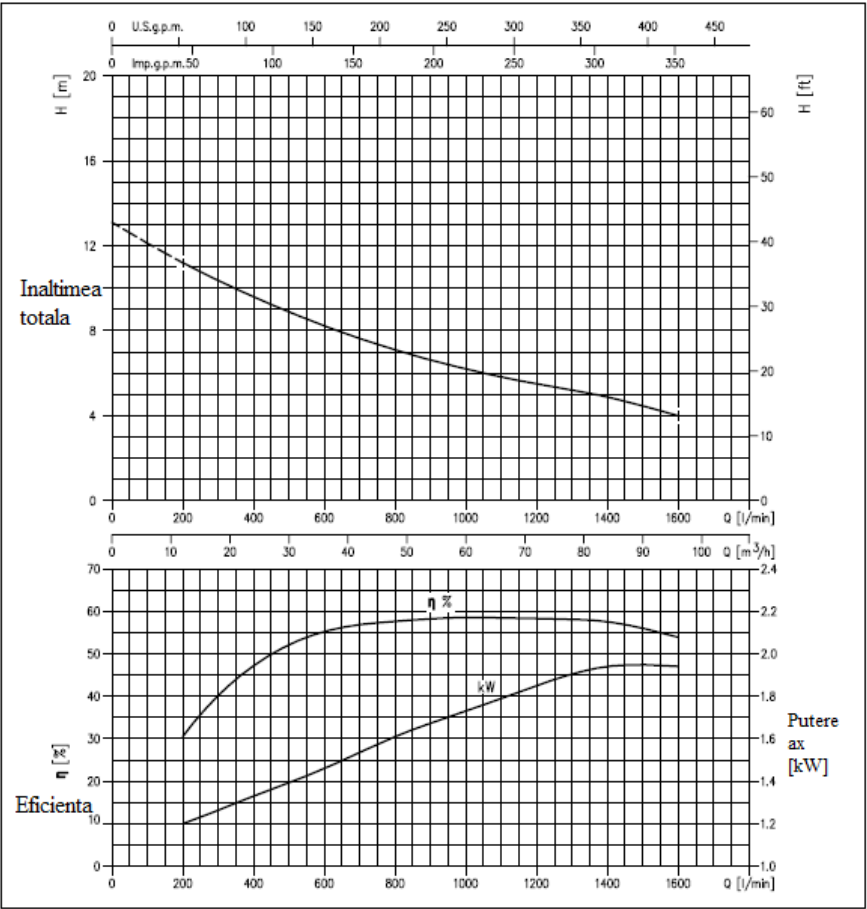
- Carcasa pompei, rotor monocanal, cot din fonta;
- Ax din AISI 403 (DML) si AISI 420B (DMLF);
- Etansare mecanica: SiC/SiC/NBR (partea pompei) (DML si DMLF), Carbon/Ceramica/NBR (partea motorului) (DML).

ACCESORII (la cerere)
Pentru accesorii, vezi pagina 151.

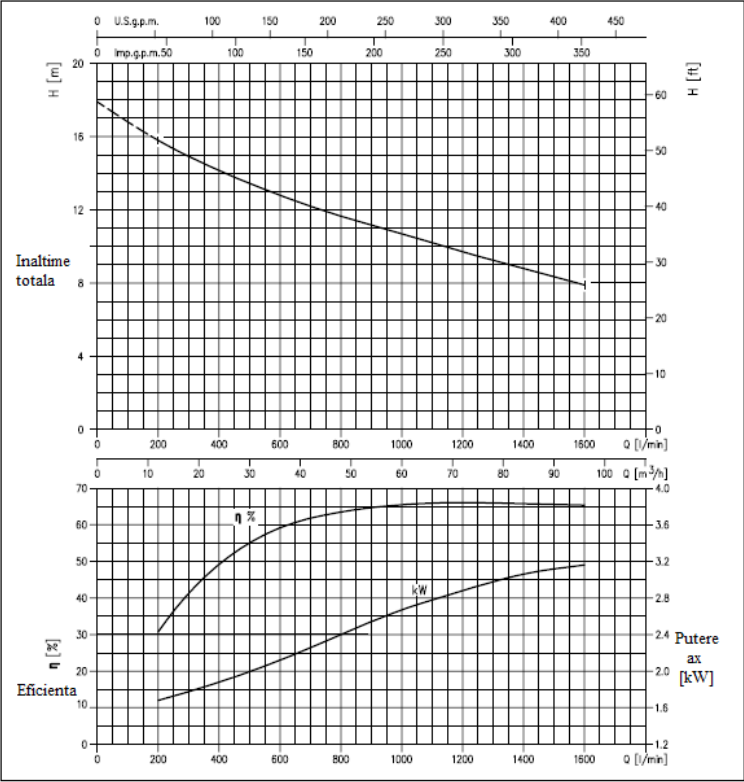
COD DE IDENTIFICARE POMPA



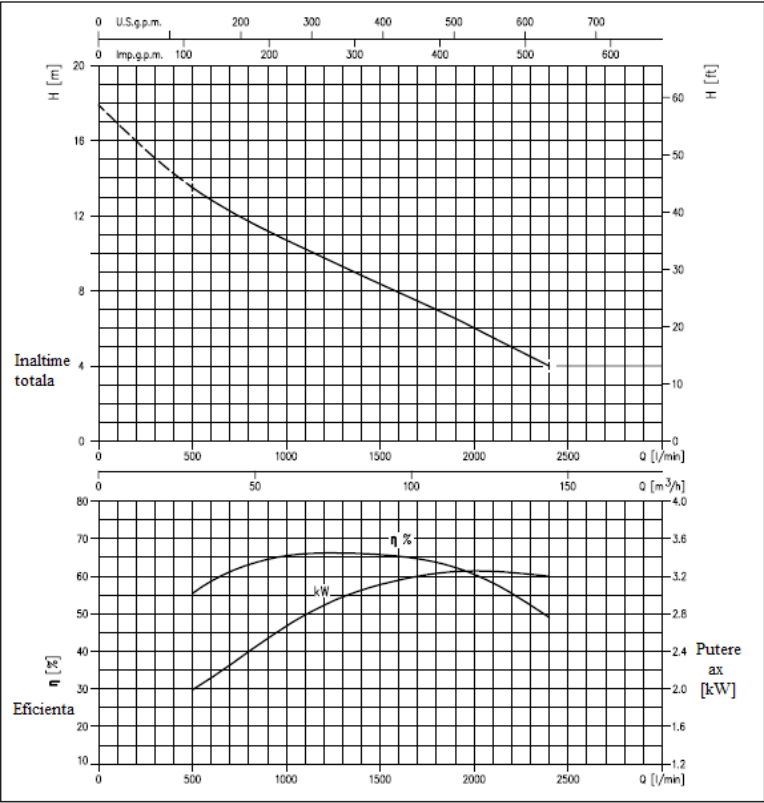
CURBE DE PERFORMANTA SERIA 80DML52.2 (per iso 9906 Anexa A), dia. ROTOR: 179 mm



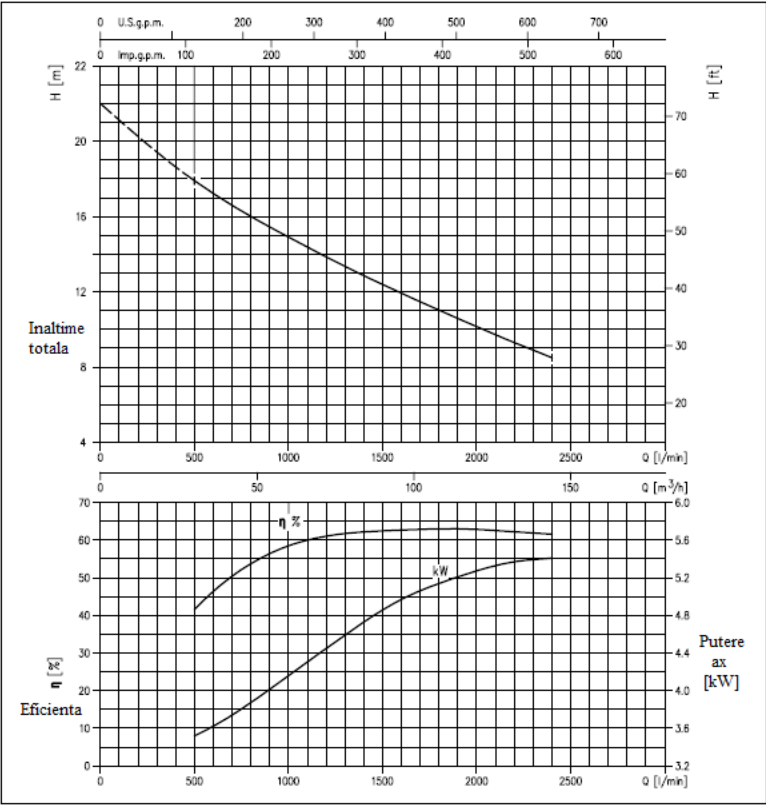
CURBE DE PERFORMANTA SERIA 80DML53.7 (per iso 9906 Anexa A), dia. ROTOR: 210 mm



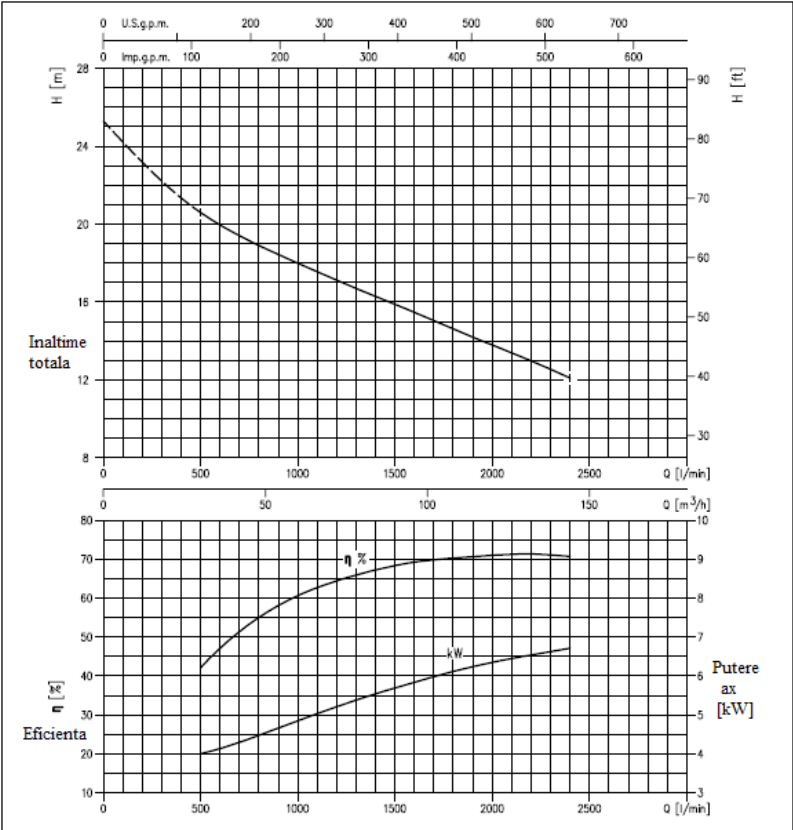
CURBE DE PERFORMANTA 100DML53.7 (per iso 9906 Anexa A), dia. ROTOR: 210 mm



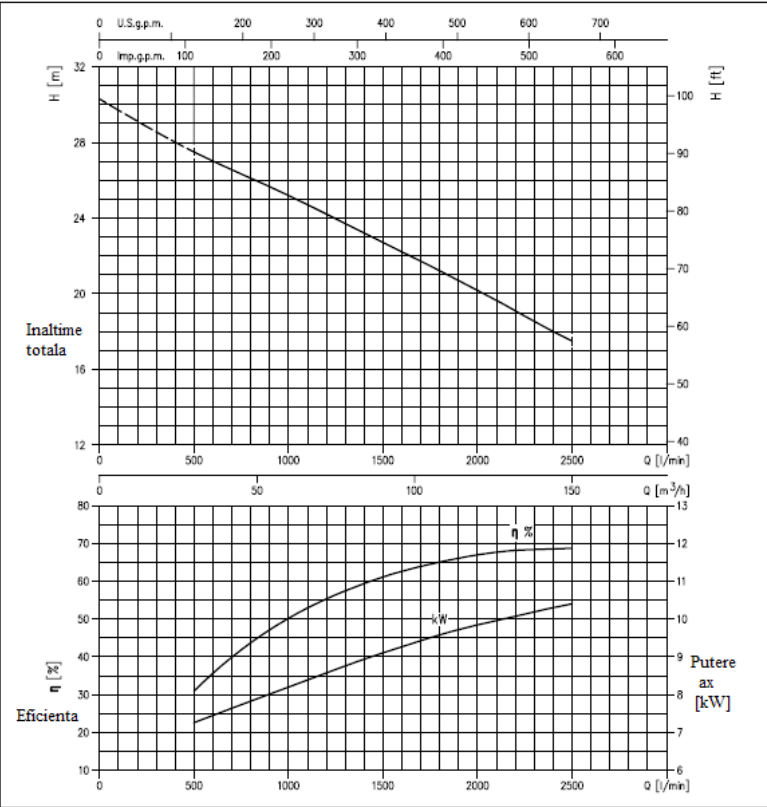
CURBE DE PERFORMANTA 100DML55.5 (per iso 9906 Anexa A), dia. ROTOR: 232 mm



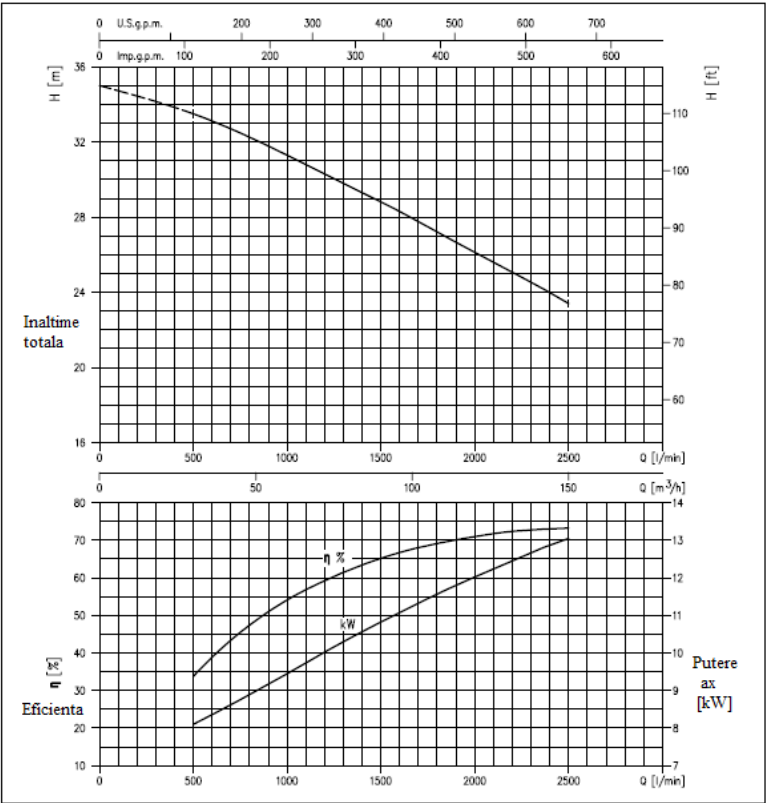
CURBE DE PERFORMANTA 100DML57.5 (per iso 9906 Anexa A), dia. ROTOR: 248 mm



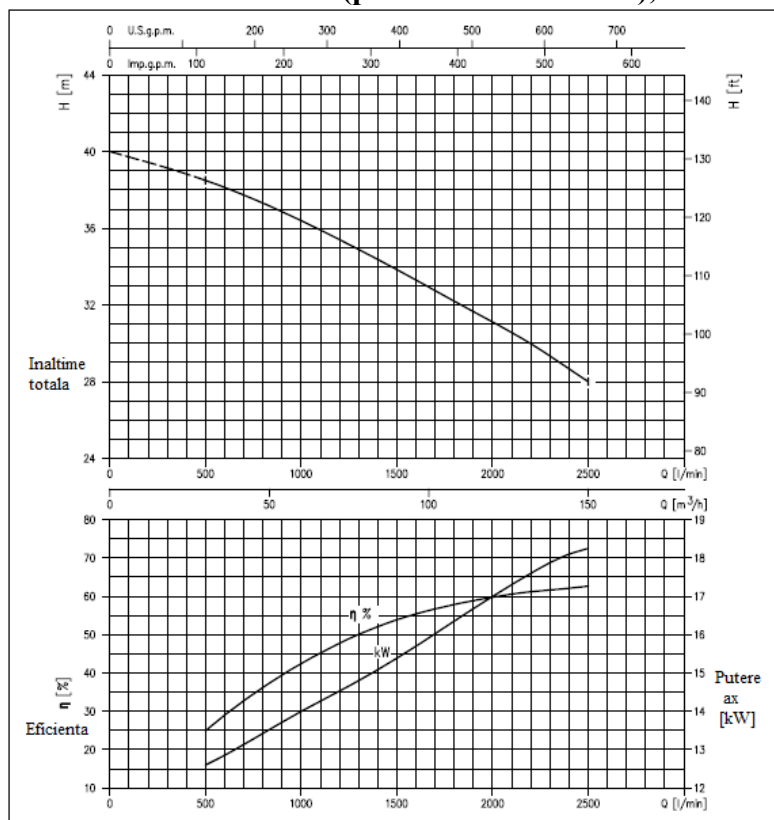
CURBE DE PERFORMANTA 100DML511 (per iso 9906 Anexa A), dia. ROTOR: 286 mm



CURBE DE PERFORMANTA 100DML515 (per iso 9906 Anexa A), dia. ROTOR: 309 mm



CURBE DE PERFORMANTA 100DML522 (per iso 9906 Anexa A), dia. ROTOR: 330 mm



TABEL PERFORMANTA DML 80

Model	P _i		Q= Debit								
	[HP]	[kW]	l/min	200	400	600	800	1000	1200	1400	1600
			m³/h	12	24	36	48	60	72	84	96
			H= Inaltime [m]								
80DML52.2	3	2.2	11.2		9.6	8.2	7.1	6.2	5.5	4.9	4.0
80DML53.7	5	3.7	15.8		14.2	12.8	11.7	10.7	9.7	8.8	7.9

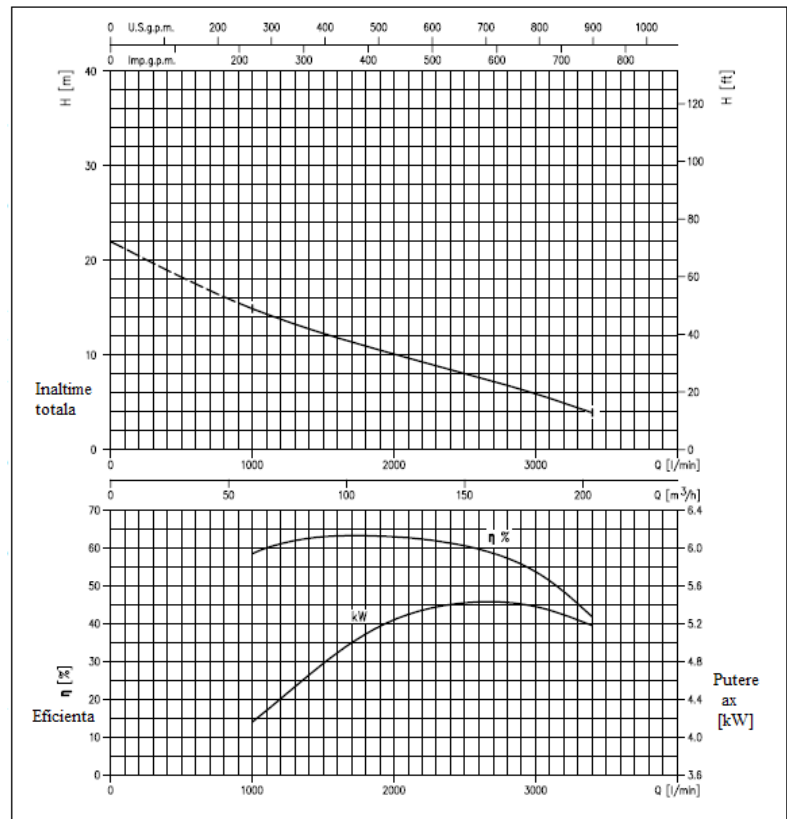
TABEL PERFORMANTA DML 100

Model	P _i		Q= Debit								
	[HP]	[kW]	l/min	500	1000	1300	1600	1900	2200	2400	2500
			m³/h	30	60	78	96	114	132	144	150
			H= Inaltime [m]								
100DML53.7	5	3.7	13.5		10.7	9.3	7.9	6.5	5.0	4.0	-
100DML55.5	7.5	5.5	17.9		14.9	13.4	11.9	10.6	9.3	8.5	-
100DML57.5	10	7.5	20.6		18.0	16.7	15.5	14.2	13.0	12.1	-
100DML511	15	11	27.5		25.2	23.7	22.2	20.7	19.1	18.0	17.5
100DML515	20	15	33.5		31.3	29.8	28.3	26.7	25.1	24.0	23.4
100DML522	30	22	38.5		36.4	34.9	33.3	31.7	30.0	28.7	28.0

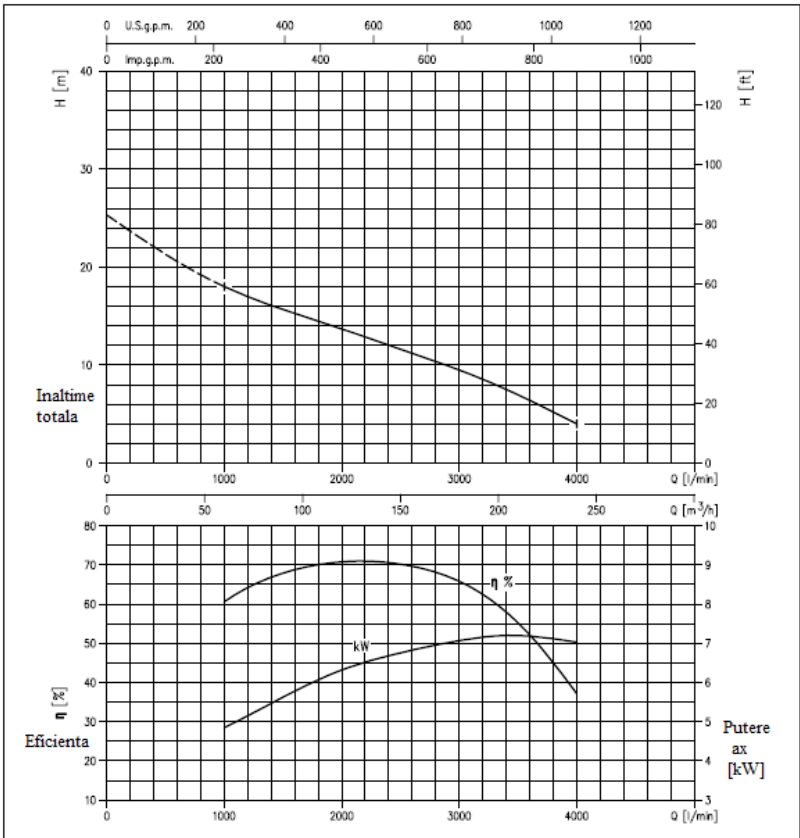
TABEL PERFORMANTA DML 150

Model	P:		Q= Debit									
	[HP]	[kW]	l/min	1000	2000	2500	3000	3400	4000	4500	5000	5500
			m³/h	60	120	150	180	204	240	270	300	330
			H= Inaltime [m]									
150DML55.5	7.5	5.5	14.9		10.1	8.0	5.9	3.9	-	-	-	-
150DML57.5	10	7.5	18.0		13.7	11.6	9.5	7.5	4.0	-	-	-
150DML511	15	11	25.2		20.2	17.5	14.7	12.2	8.6	5.4	-	-
150DML515	20	15	31.3		26.1	23.4	20.6	18.2	14.8	11.9	8.6	-
150DML522	30	22	36.4		31.1	28.0	25.2	22.9	19.5	16.8	13.8	10.5

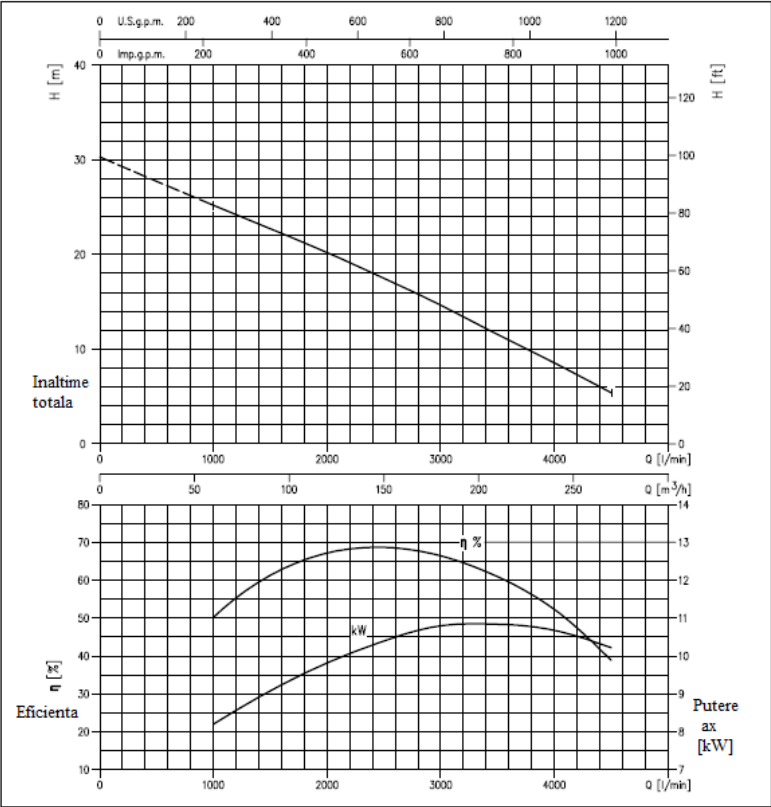
CURBE DE PERFORMANTA 150DML55.5 (per iso 9906 Anexa A), dia. ROTOR: 232 mm



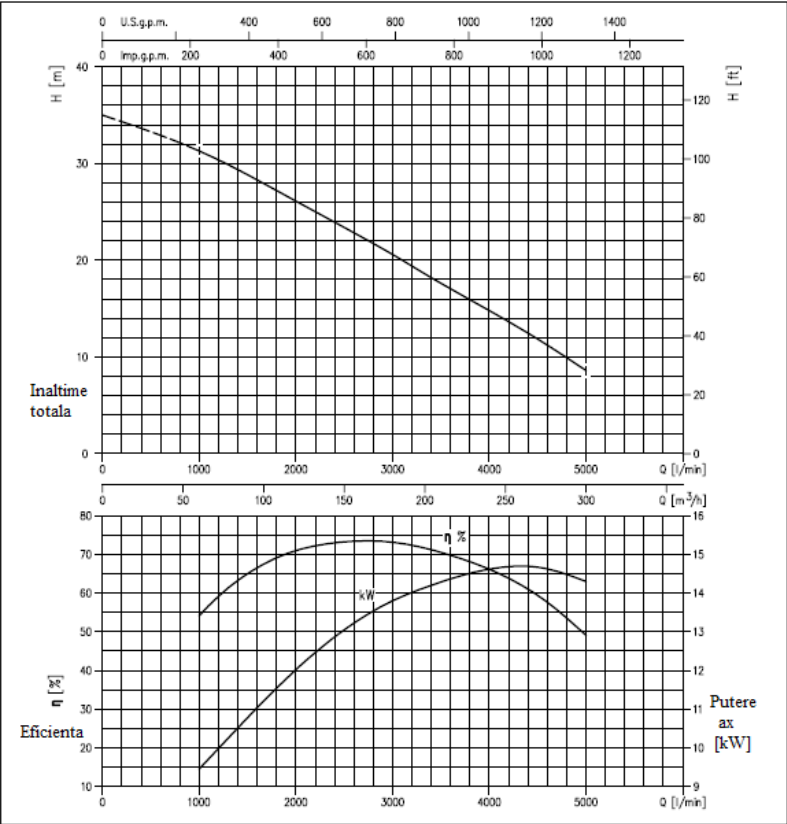
CURBE DE PERFORMANTA 150DML57.5 (per iso 9906 Anexa A), dia. ROTOR: 248 mm



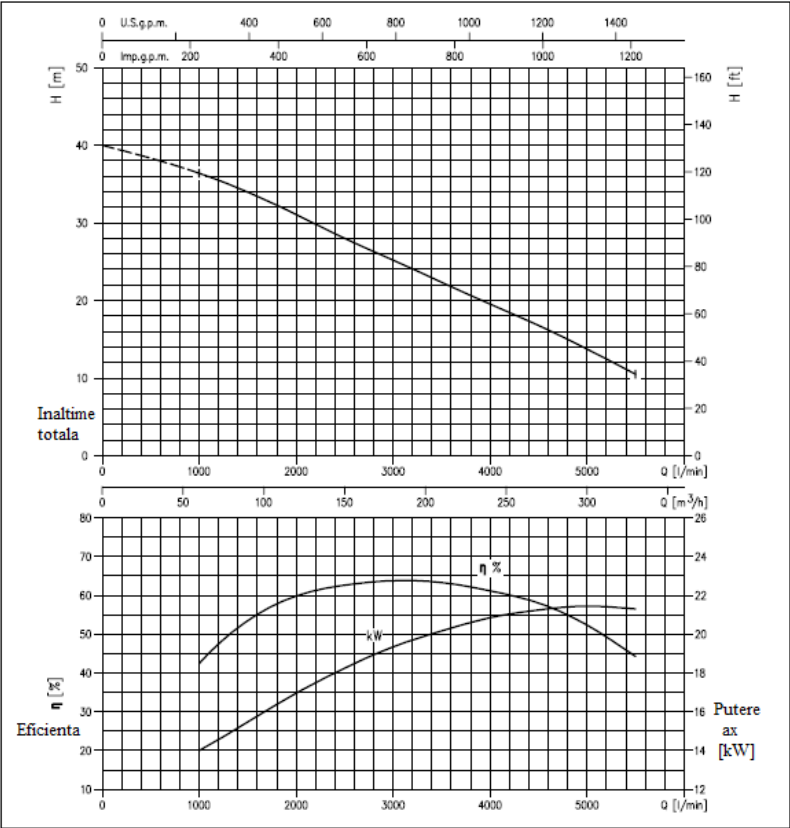
CURBE DE PERFORMANTA 150DML511 (per iso 9906 Anexa A), dia. ROTOR: 286 mm



CURBE DE PERFORMANTA 150DML515 (per iso 9906 Anexa A), dia. ROTOR: 309 mm



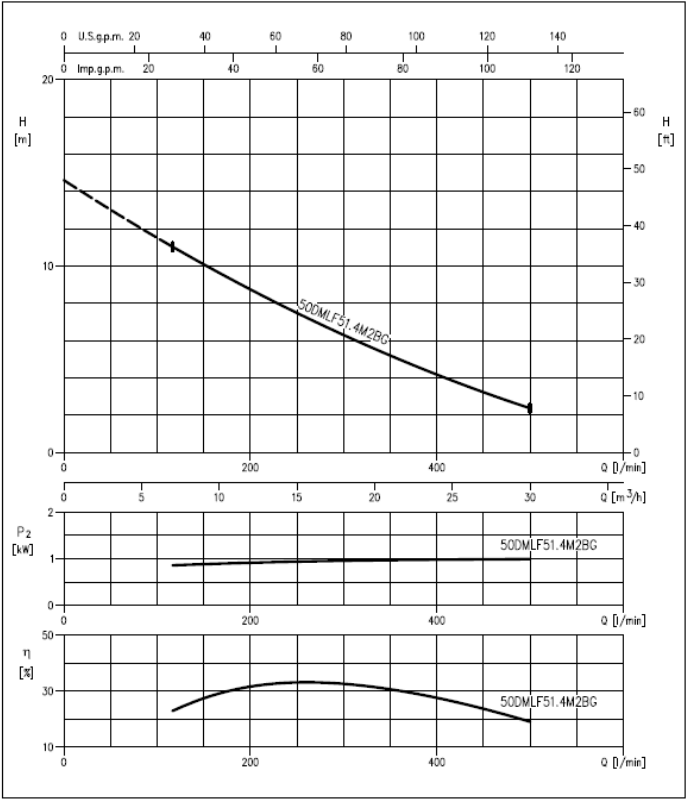
CURBE DE PERFORMANTA 150DML522 (per iso 9906 Anexa A), dia. ROTOR: 330 mm



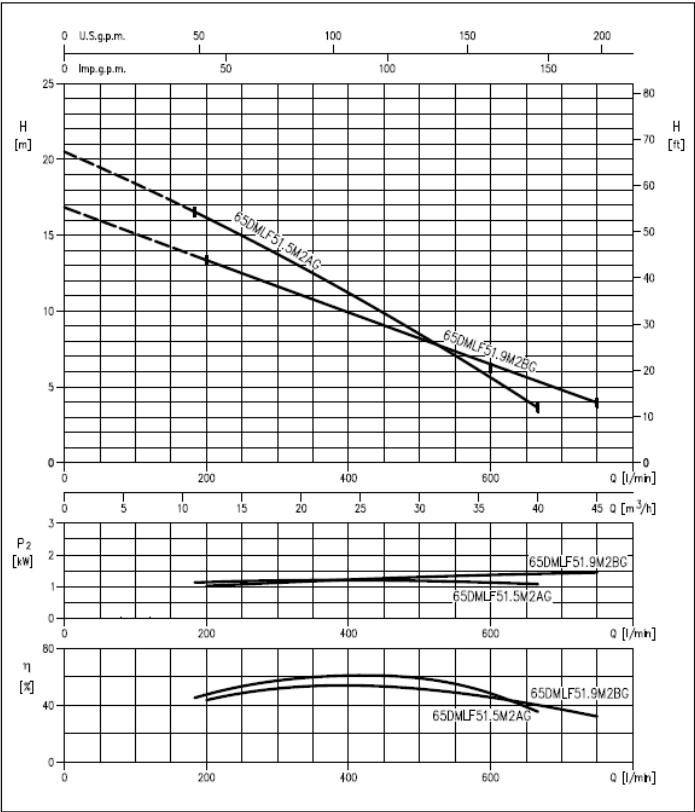
TABEL PERFORMANTA 50-65DMLF

Model	P _i		Q= Debit									
	[HP]	[kW]	l/min 117	183	200	300	350	400	500	600	667	750
			m³/h 7	11	12	18	21	24	30	36	40	45
			H= Inaltime [m]									
50DMLF51.4M2BG	1.5	1.4	11.0	9.2	8.7	6.3	5.2	4.2	2.4	-	-	-
65DMLF51.5M2AG	1.5	1.5	-	16.5	16.2	13.7	12.5	11.2	8.5	5.6	3.6	-
65DMLF51.9M2BG	2.5	1.9	-	-	13.4	11.6	10.8	9.9	8.2	6.5	5.4	4

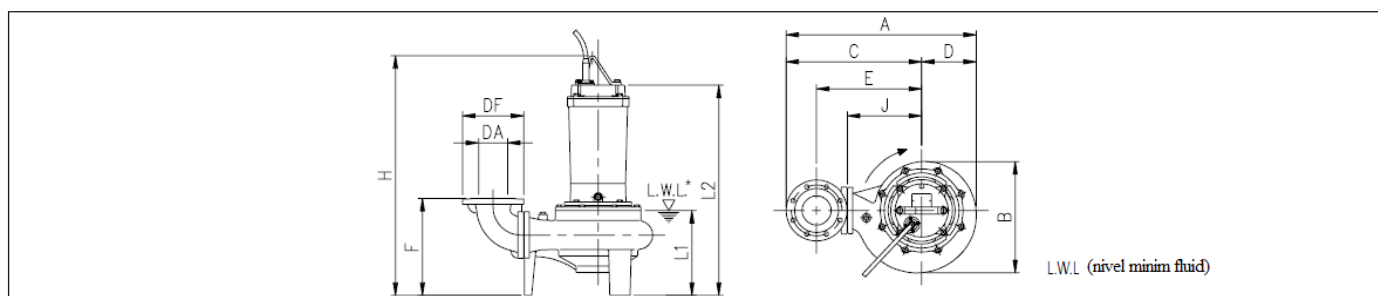
CURBE DE PERFORMANTA SERIA 50DMLF51.4M2BG (1.4 kW) (per iso 9906 Anexa A)



**CURBE DE PERFORMANTA SERIA 65DMLF51.4M2AG (1.5 kW)
65DMLF51.9M2BG (1.9 kW) (per iso 9906 Anexa A)**



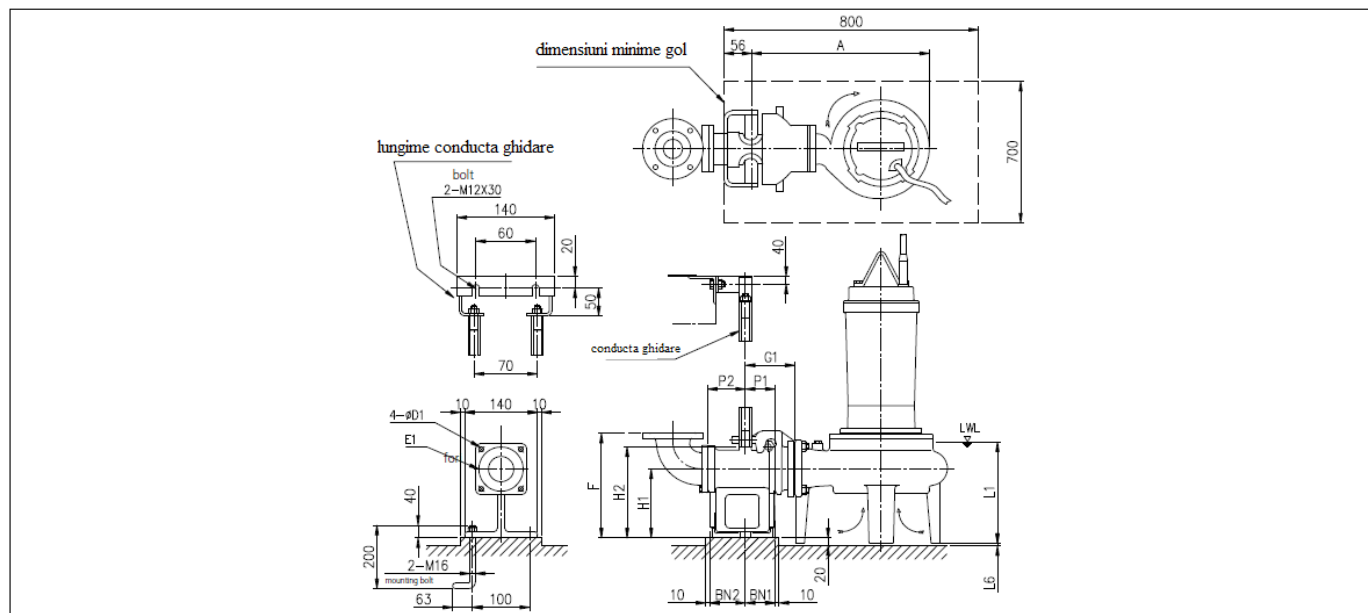
DIMENSIONI DML



TABEL DIMENSIUNI DML

Model	DIMENSIONI [mm]												Greutate [kg]
	DA	kW	A	B	C	D	E	F	H	J	L1	L2	
80DML52.5	80	2.2	542	320	385	157	285	308	668	210	279	547	80.0
80DML53.7	80	3.7	542	320	385	157	285	308	727	210	279	627	87.0
100DML53.7	100	3.7	582	320	425	157	315	313	727	210	279	627	89.0
100DML55.5	100	5.5	658	381	470	188	360	339	824	255	310	724	121.0
100DML57.5	100	7.5	658	381	470	188	360	339	824	255	310	724	125.0
100DML511	100	11	751	455	530	221	420	355	938	315	329	778	160.0
100DML515	100	15	751	455	530	221	420	355	938	315	329	778	166.0
100DML522	100	22	795	497	550	245	440	358	1021	335	342	841	226.0
150DML55.5	150	5.5	715.5	381	527.5	188	385	369	824	255	310	724	127.0
150DML57.5	150	7.5	715.5	381	527.5	188	385	369	824	255	310	724	132.0
150DML511	150	11	808.5	455	587.5	221	445	385	938	315	329	778	166.0
150DML515	150	15	808.5	455	587.5	221	445	385	938	315	329	778	172.0
150DML522	150	22	852.5	497	607.5	245	465	388	1021	335	342	841	232.0

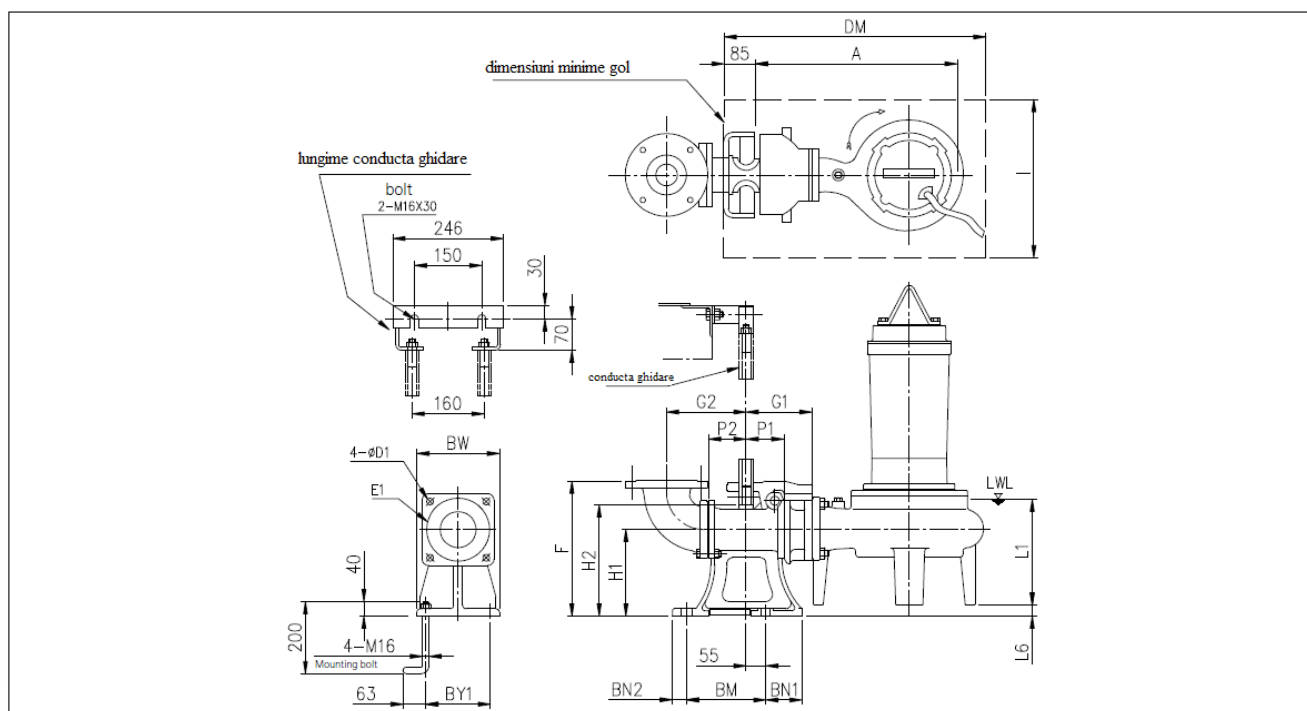
DIMENSIUNI QDC (kit dispozitiv coborare) LM 80 (pentru modelele 80 (100) DML 52.2, 53.7)



TABEL DIMENSIUNI QDC (kit dispozitiv coborare) LM 80

Model	DIMENSIUNI [mm]															QDC (kit dispozitiv coborare)	Greutate [kg]
	A	P1	P2	G1	G2	F	H1	H2	L1	L6	BN1	BN2	D1	E1			
80 DML 52.2	492	75	90	125	165	295	175	230	279	7	75	90	15	155	LM80	17.0	
80 DML 53.7	492	75	90	125	165	295	175	230	279	7	75	90	15	155	LM80	17.0	
100DML53.7	492	75	90	125	195	300	175	230	279	7	75	90	15	155	LM80	17.0	

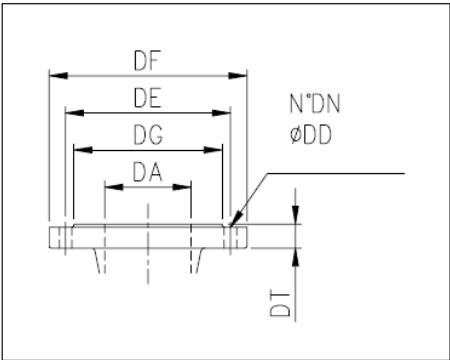
DIMENSIUNI QDC (kit dispozitiv coborare) LL 100 (pentru modelele 100 (150) DML)



TABEL DIMENSIUNI QDC (kit dispozitiv coborare)

Model	DIMENSIUNI [mm]																			Picior cuplare	Greutate [kg]
	A	P1	P2	G1	G2	F	H1	H2	L1	L6	BN1	BN2	BM	BY1	BW	DM	I	D1	E1		
100DML55.5	628	105	105	185	210	370	240	265	310	31	100	40	220	180	230	800	700	19	175	LL100	46.0
100DML57.5	628	105	105	185	210	370	240	265	310	31	100	40	220	180	230	800	700	19	175	LL100	46.0
100DML511	721	105	105	185	210	370	240	265	329	15	100	40	220	180	230	1000	700	19	175	LL100	46.0
100DML515	721	105	105	185	210	370	240	265	329	15	100	40	220	180	230	1000	700	19	175	LL100	46.0
100DML522	765	105	105	185	210	370	240	265	342	12	100	40	220	180	230	1000	700	19	175	LL100	46.0
150DML55.5	628	105	105	185	235	400	240	265	310	31	100	40	220	180	230	800	700	19	175	LL100	46.0
150DML57.5	628	105	105	185	235	400	240	265	310	31	100	40	220	180	230	800	700	19	175	LL100	46.0
150DML511	721	105	105	185	235	400	240	265	329	15	100	40	220	180	230	1000	700	19	175	LL100	46.0
150DML515	721	105	105	185	235	400	240	265	329	15	100	40	220	180	230	1000	700	19	175	LL100	46.0
150DML522	765	105	105	185	235	400	240	265	342	12	100	40	220	180	230	1000	700	19	175	LL100	46.0

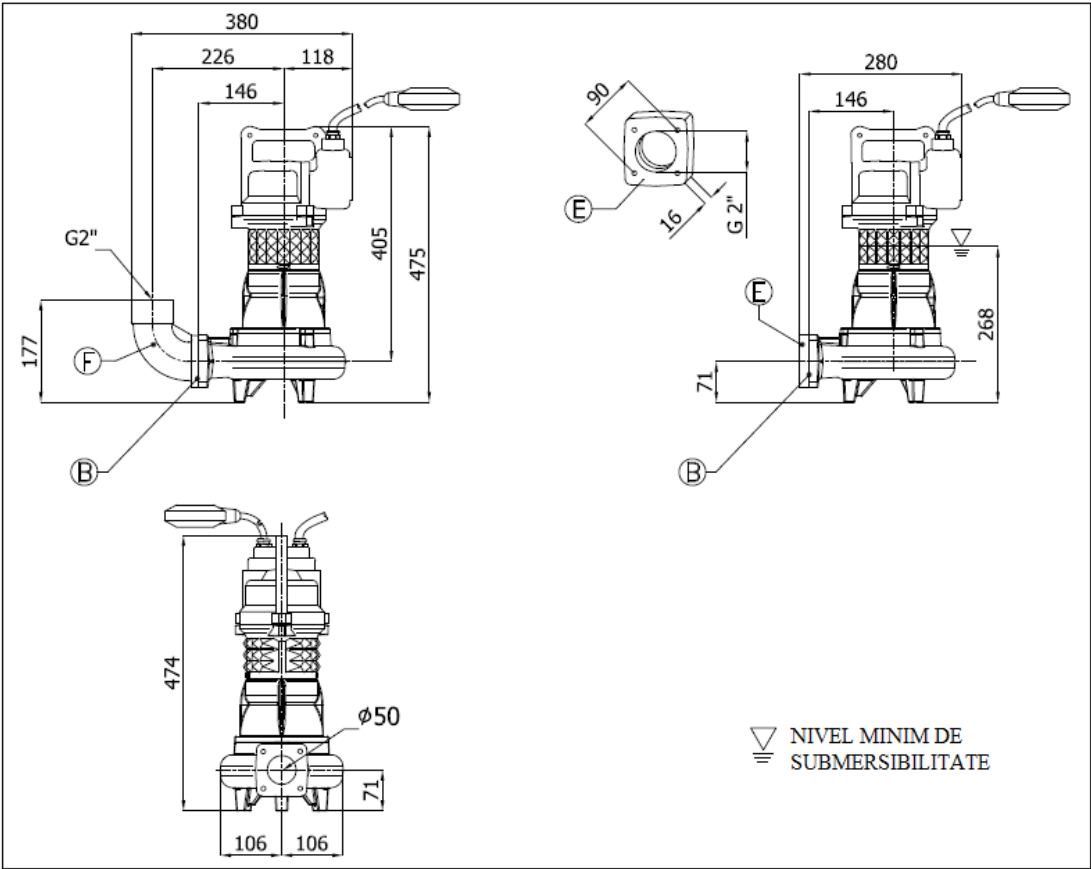
DIMENSIUNI FLANSE

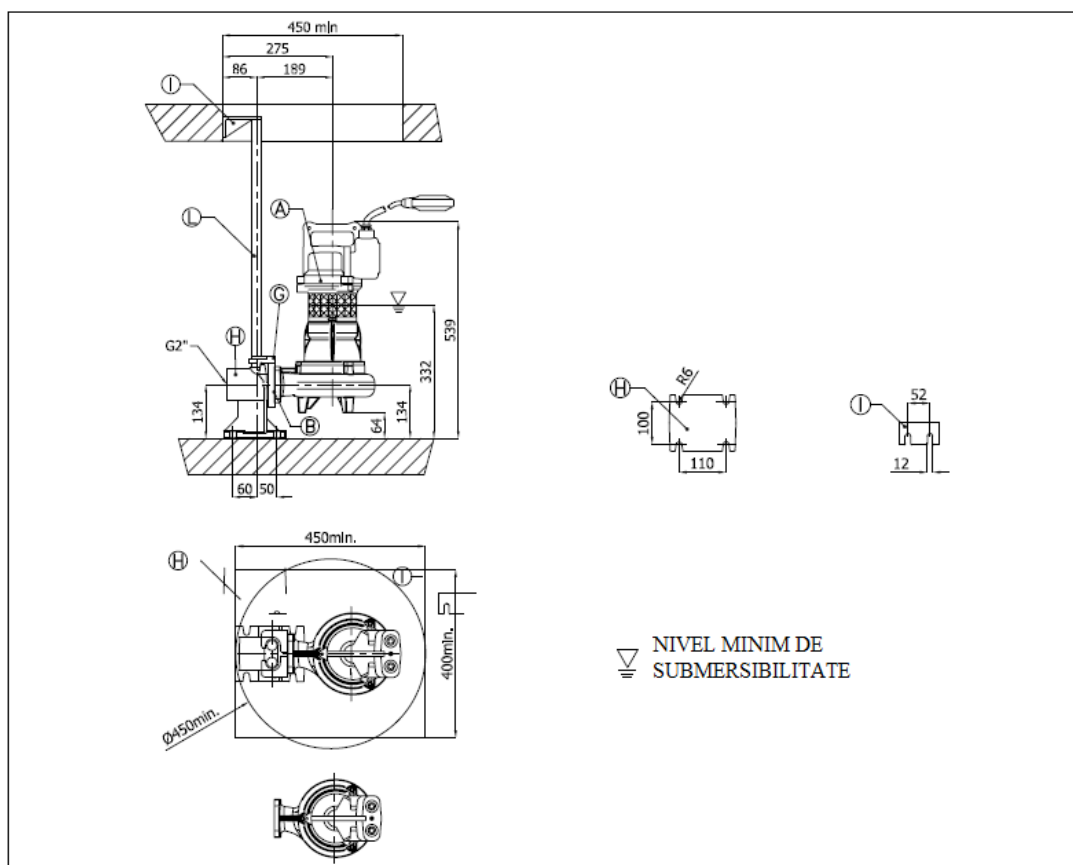


TABEL DIMENSIUNI FLANSE

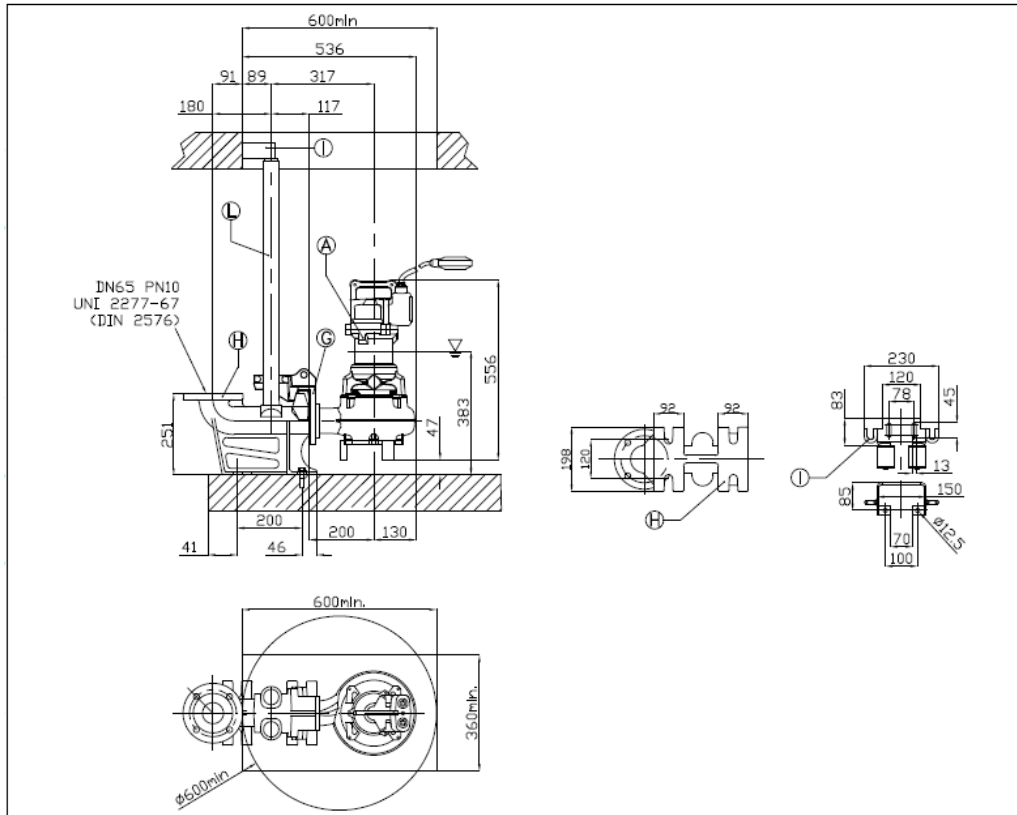
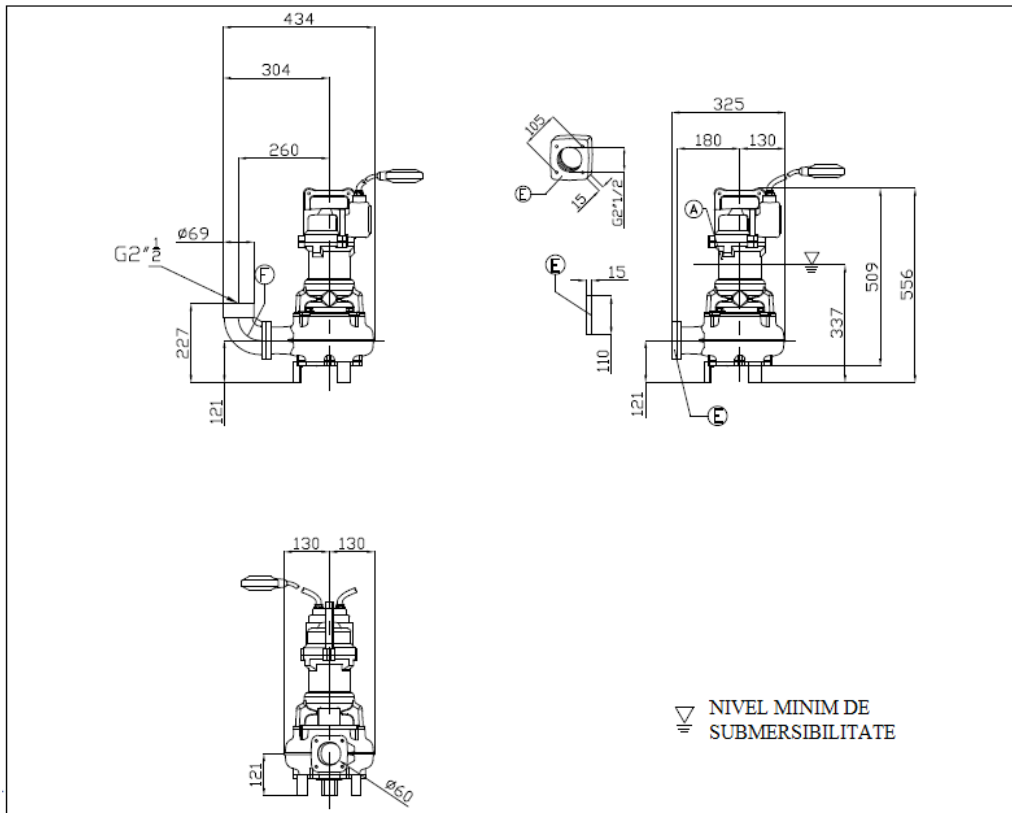
DIMENSIUNI						
DA	DG	DE	DF	DT	N. DN	DD
80	138	160	200	22	8	18
100	158	180	220	24	8	18
150	212	240	285	26	8	22

DIMENSIUNI 50DMLF/50DMLF CU QDC (1.4 kW)





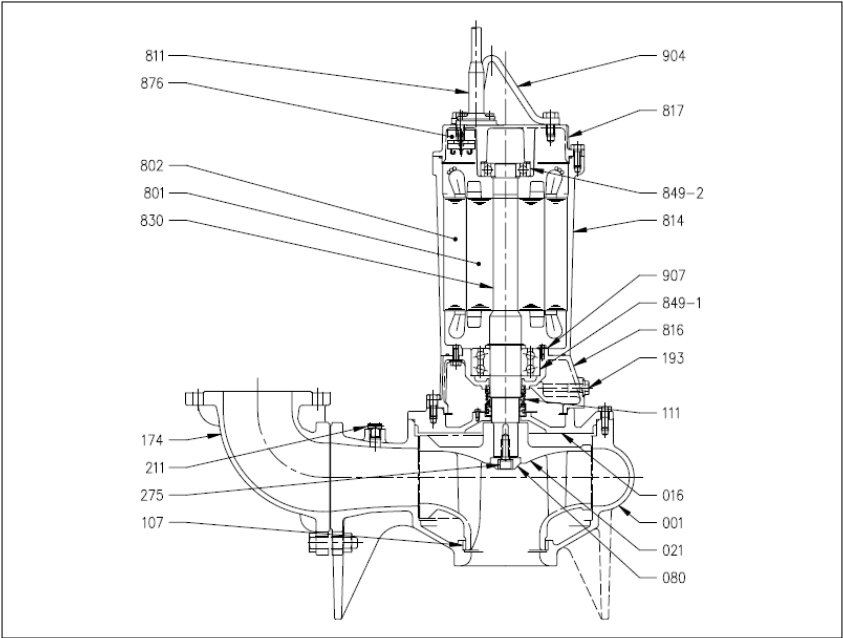
DIMENSIUNI 65DMLF/65DMLF CU QDC (1.5 – 1.9 kW)



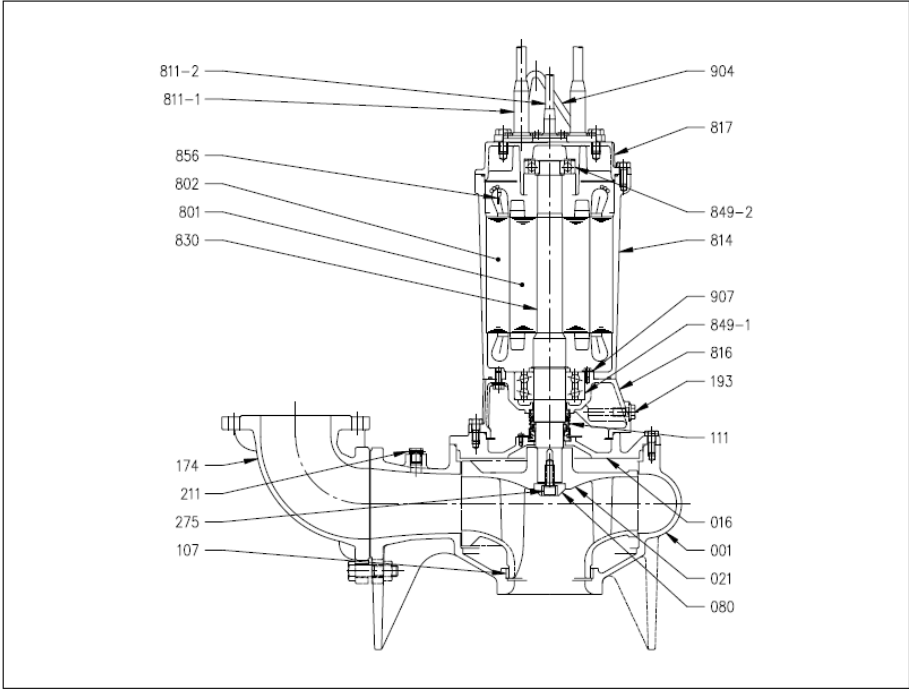
**TABEL DIMENSIUNI 65DMLF/65DMLF
cu QDC (1.5 - 1.9 kW)**

DA	Model	[kW]	Greutate [kg]
65	65DMLF51.5M2AG	1.5	42
	65DMLF51.9M2BG	1.9	45

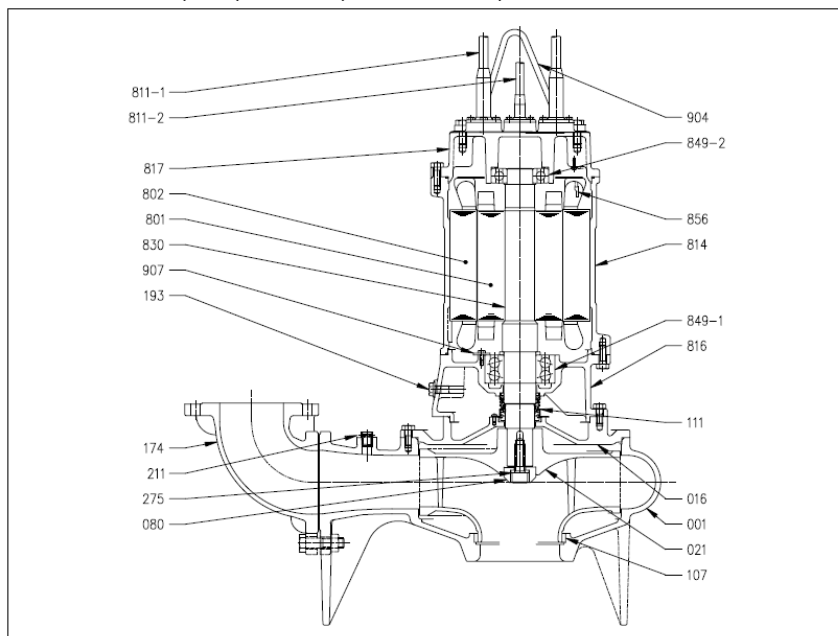
VEDERE IN SECTIUNE 80DML 52.2



VEDERE IN SECTIUNE 80 (100) (150) DML (3.7 – 7.5 kW)



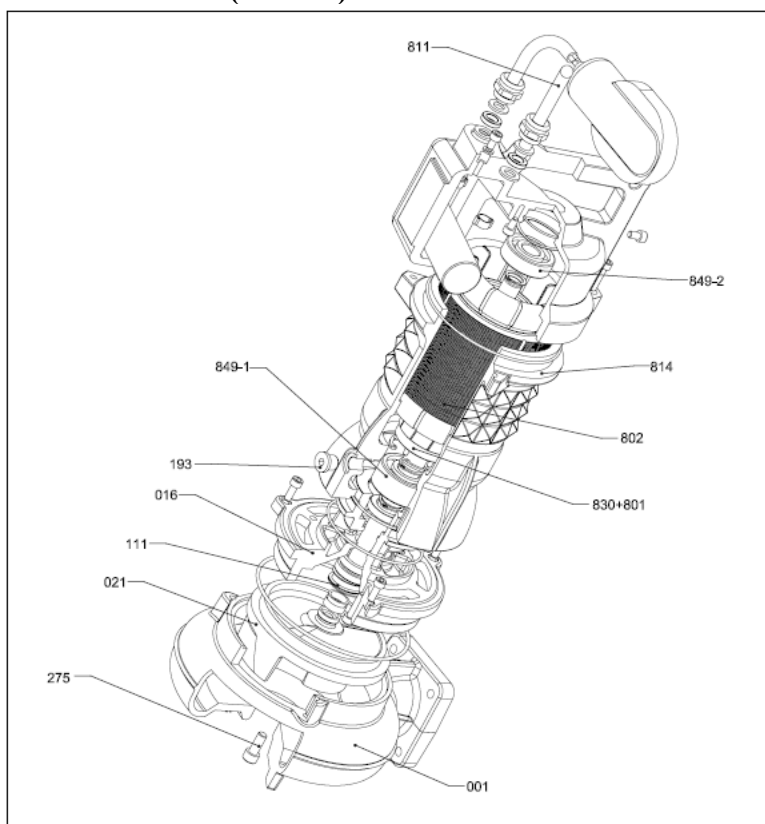
VEDERE IN SECTIUNE 100 (150) DML (11 – 22 kW)



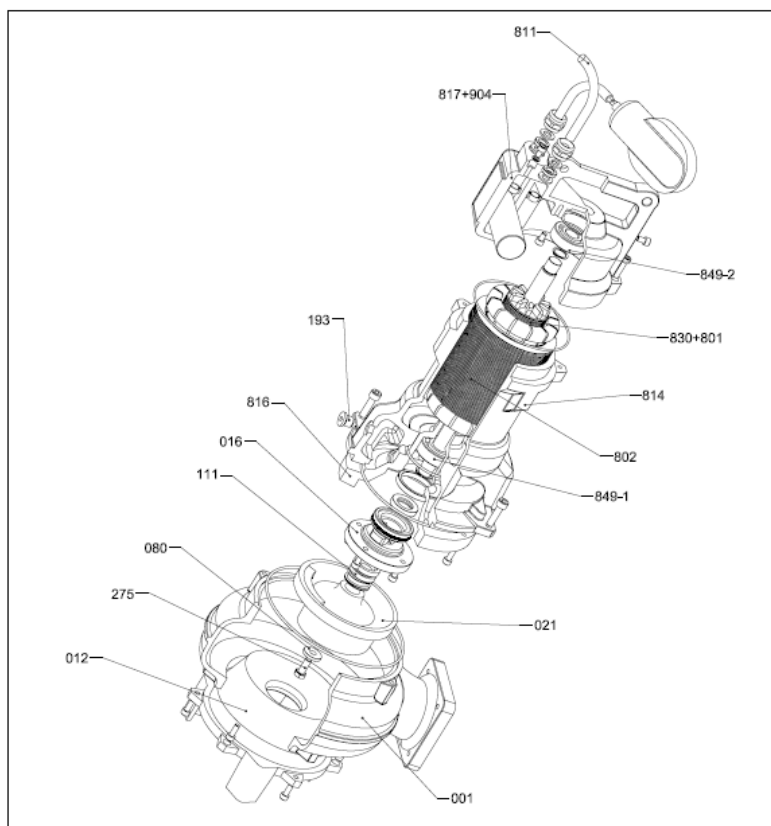
TABEL MATERIALE DML

Ref.	Nume	Material	Ref.	Nume	Material
001	Corp pompa	Fonta EN-GHJL-200-EN 1561	811-1	Cablu de alimentare	-
016	Invelis etansare mecanica	Fonta EN-GHJL-200-EN 1561	811-2	Cablu semnal	-
021	Rotor	Fonta EN-GHJL-200-EN 1561	814	Carcasa motor	Fonta EN-GHJL-200-EN 1561
080	Bucsa	Otel	816	Montura superioara	Fonta EN-GHJL-200-EN 1561
107	Inel de degajare	Bronz	817	Rulment inferior	Fonta EN-GHJL-200-EN 1561
111	Etansare mecanica	-	830	Ax	EN 1.4006 (AISI403)
174	Cot livrare	Fonta EN-GHJL-200-EN 1561	849-1	Rulment cu bile	-
193	Capac ulei	NBR/Otel inoxidabil	849-2	Rulment cu bile	-
211	Supapa de aer	Alama	856	Decuplare termica	-
275	Bolt (rotor)	A2-70 otel inoxidabil clasa ISO 3506/1	876	Decuplare motor	-
801	Rotor	-	904	Carlig ridicare	Otel
802	Stator	-	907	Invelis	Otel
811	Cablu	-			

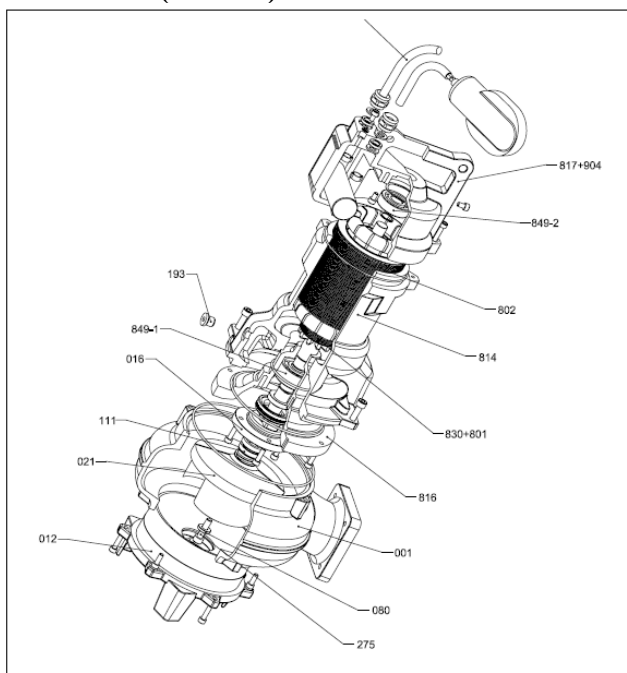
VEDERE IN SECTIUNIE 50DMLF (1.4 kW)



VEDERE IN SECTIUNIE 65DMLF (1.5 kW)



VEDERE IN SECTIUNIE 65DMLF (1.9 kW)



TABEL MATERIALE DMLF

Ref.	Nume	Material
001	Corp pompa	Fonta EN-GJL-250
012	Invelis parte aspiratie	Fonta EN-GJL-250
016	Invelis etansare mecanica	Fonta EN-GJL-250
021	Rotor	Fonta EN-GJL-250 + Ni
080	Bucsa	Otel
111	Etansare mecanica	-
193	Capac ulei	NBR/Otel inoxidabil
275	Piulita rotor	AISI 304 Clasa A2
801	Rotor	-
802	Stator	-
811	Cablu	-
814	Carcasa motor	Fonta EN-GJL-250
816	Montura superioara	Fonta EN-GJL-250
817	Rulment inferior	Fonta EN-GJL-250
830	Ax	AISI 420B
849-1	Rulment cu bile	-
849-2	Rulment cu bile	-
904	Carlig de ridicare	Fonta EN-GJL-250

TABEL DATE ELECTRICE DML(V) (2.2 – 3.7 kW)

[P ₂]			[kW]	2.2			3.7		
Rezistența la 20°C			[Ω]	7.015			3.623		
GD ²			[kg/m ²]	0.02			0.03		
Voltaj			[V]	380	400	415	380	400	415
Full load	0%	Curent	[A]	2.13	2.52	2.81	3.29	3.88	4.45
		Putere	[W]	450	480	580	620	780	840
	75%	Curent	[A]	4.33	4.21	4.32	6.79	6.77	6.95
		Eficienta	[%]	67.11	68.45	67.13	72.12	71.40	69.56
		Factor putere	[%]	86.20	82.63	79.22	86.08	82.84	79.82
		rpm	[min ⁻¹]	1428	1437	1442	1439	1443	1447
	100%	Curent	[A]	5.50	5.20	5.20	8.60	8.40	8.40
		Eficienta	[%]	67.56	69.50	68.98	72.79	72.71	71.61
		Factor putere	[%]	89.53	87.56	85.08	89.58	87.44	85.44
		rpm	[min ⁻¹]	1400	1411	1421	1416	1422	1428
Cuplu cu rotor blocat			[%]	182	204	221	203	226	244
Curent de pornire			[A]	24.30	25.70	26.70	45.50	48.10	50.00
Poli				4					
Faze				3					
Frecvența [Hz]				50					
Porniri pe ora				10					
Toleranța voltaj			[%]	-10 +6%	±10%				
Toleranța frecvența			[%]	±1%					
Clasa izolație				F					
Model				ZDMEU					

TABEL DATE ELECTRICE DML(V) (5.5 – 11 kW)

[P ₂]			[kW]	5.5			7.5			11		
Rezistența la 20°C			[Ω]	1.920			1.326			0.862		
GD ²			[kg/m²]	0.059			0.076			0.120		
Voltaj			[V]	380	400	415	380	400	415	380	400	415
Full load	0%	Curent	[A]	5.56	6.67	7.64	6.93	8.41	9.70	8.49	10.15	11.85
		Putere	[W]	900	1200	1330	1200	1300	1600	1100	1450	1800
	75%	Curent	[A]	10.30	10.51	10.83	13.65	14.06	14.48	18.26	19.27	19.66
		Eficiența	[%]	73.72	72.26	71.38	75.24	76.86	71.60	81.12	75.49	74.70
		Factor putere	[%]	82.50	78.43	74.23	83.20	75.16	75.46	84.63	81.87	78.15
	100%	rpm	[min ⁻¹]	1454	1456	1460	1461	1460	1466	1462	1461	1465
		Curent	[A]	12.70	12.60	12.70	16.90	16.90	17.10	23.50	23.80	23.80
		Eficiența	[%]	75.37	74.50	74.06	76.89	79.01	74.60	81.65	77.41	77.06
		Factor putere	[%]	87.04	84.27	81.03	87.39	80.89	81.76	87.68	85.82	83.31
		rpm	[min ⁻¹]	1437	1440	1445	1445	1447	1455	1447	1446	1451
Cuplu cu rotor blocat			[%]	227	252	272	231	256	278	154	170	184
Curent de pornire			[A]	78.00	82.60	87.80	110.20	116.50	121.70	128.20	136.00	141.90
Poli				4								
Faze				3								
Frecvența [Hz]				50								
Porniri pe ora				10					7			
Toleranța voltaj			[%]	±10%								
Toleranța frecvența			[%]	±1%								
Clasa izolație				F								
Model				ZDMEU								

TABEL DATE ELECTRICE DML(V) (15 – 22 kW)

[P ₂]			[kW]	15			22			
Rezistentă la 20°C				[Ω]	0.563			0.308		
GD ²				[kg/m ²]	0.16			0.34		
Voltaj				[V]	380	400	415	380	400	415
Full load	0%	Curent	[A]	10.8	13.13	15.08	13.37	16.27	18.82	
		Putere	[W]	1220	1650	2000	1500	2000	2100	
	75%	Curent	[A]	24.86	25.03	25.59	33.90	33.38	34.04	
		Eficiență	[%]	79.66	78.43	77.65	84.98	85.54	83.88	
		Factor putere	[%]	86.32	82.71	78.78	87.01	83.40	80.41	
		rpm	[min ⁻¹]	1465	1464	1467	1473	1475	1474	
	100%	Curent	[A]	31.50	31.00	31.00	43.50	42.00	42.00	
		Eficiență	[%]	80.84	80.23	79.78	85.80	86.52	85.34	
		Factor putere	[%]	89.13	86.77	84.16	89.33	87.27	85.16	
		rpm	[min ⁻¹]	1449	1451	1455	1462	1466	1466	
Cuplu cu rotor blocat				[%]	176	195	211	155	172	185
Curent de pornire				[A]	199.80	211.90	220.90	299.80	318.50	332.70
Porniri pe ora					7					
Model					ZDMEU					

TABEL DATE ELECTRICE DMLF (1.4 – 1.9 kW)

[P ₂]			[kW]	1.4	1.5	1.9
Rezistentă la 20°C			[Ω]	-	-	-
GD ²			[kg/m ²]	0.0011	0.0039	0.0078
Voltaj			[V]	230	230	230
Full load	0%	Curent	[A]	-	-	-
		Putere	[W]	-	-	-
	75%	Curent	[A]	-	-	-
		Eficiență	[%]	72	72	73
		Factor putere	[%]	0.97	0.97	0.97
		rpm	[min ⁻¹]	-	-	-
	100%	Curent	[A]	-	-	-
		Eficiență	[%]	73	73	73
		Factor putere	[%]	0.99	0.99	0.99
		rpm	[min ⁻¹]	-	-	-
Cuplu cu rotor blocat			[%]	-	-	-
Curent pornire			[A]	31.1	33.3	62.7
Poli				2		
Faze				1		
Porniri pe ora				15		
Model				M272M-1.4-230/50NY-IE	M272M-1.5-230/50NY-IE	M272M-1.9-230/50NY-IE
Tip pompa				50DMLF51.4M2BG	65DMLF51.5M2AG	65DMLF51.9M2BG