ELECTROPOMPE CENTRIFUGE SUBMERSIBILE 4BHS

CUPRINS
50Hz

SPECIFICATII

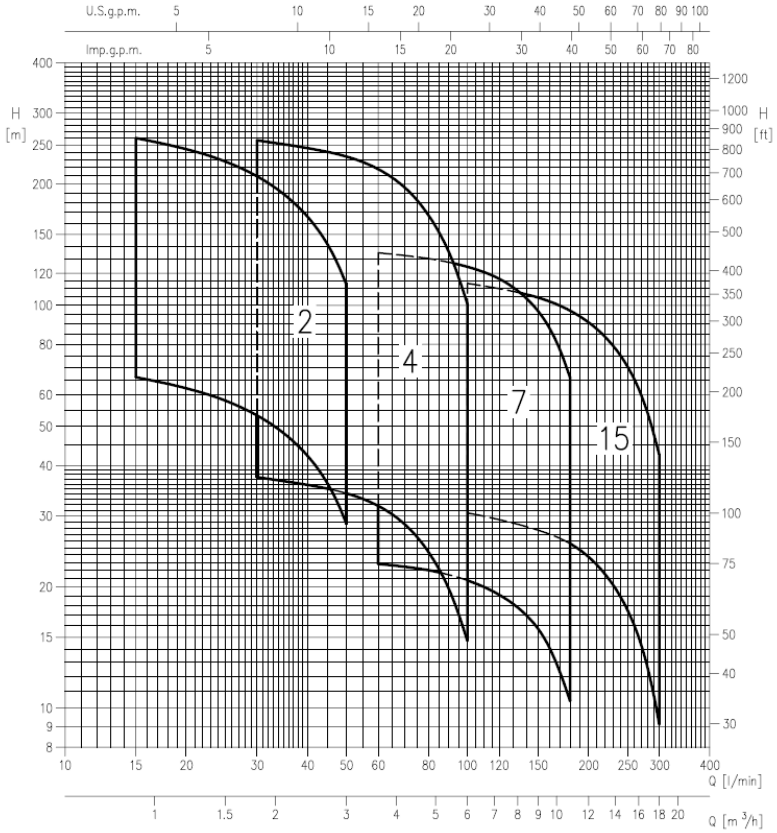
POMPA		
Manipulare lichid	Tip lichid	Apa curata
	Temperatura [ºC]	Maxim: 30
	Continut nisip	Maxim: 50 particule/milion
	Densitate ioni de clor	Maxim: 5000 particule/milion
Constructie	Rotor	Tip inchis centrifugal
	Rulment	Tip manson – carbura de wolfram
Conexiune teava	Aspiratie	N/A
	Refulare	G1¼ (4BHS2) – G1½ (4BHS4) – G2 (4BHS7 – 4BHS15) UNI ISO 228
Material	Rotor	EN 1.4301 (AISI 304)
	Carcasa intermediara	EN 1.4301 (AISI 304)
	Carcasa aspiratie	EN 1.4301 (AISI 304)
	Carcasa refulare	EN 1.4301 (AISI 304)
	Ax	EN 1.4401 (AISI 316)
	Inel cuzinet	EPDM/EN 1.4301 (AISI 304)
	Valva	EN 1.4301 (AISI 304)
	O-ring	NBR
Test standard aplicat	ISO 9906:2012 – Grad 3B	

MOTOR					
Tip		Submersibil in baie de ulei (OY)		Submersibil in baie de apa (WY)	
		Sumoto		Franklin	
		Monofazat	Trifazat	Monofazat	Trfiazat
Putere nominala	[kW]	0.55÷2.2	0.55÷5.5	0.55÷2.2	0.55÷5.5
	[HP]	0.75÷3.0	0.75÷7.5	0.75÷3.0	0.75÷7.5
Nr. Poli		2			
Viteza nominala		Se refera la fiecare caracteristica de performanta a vitezei de rotatie ca viteza nominala			
Clasa de izolatie		F		B	
Grad de protectie		IP58		IP68	
Temperatura maxima ambientala [m]		35		30	
Imersie maxima [m]		150		350	

Porniri/ora		30		20	
Tip pornire		Direct in linie			
Frecventa [Hz]		50 Hz			
Tensiune [V]		230±10%	380-415±10%	230-10%+6%	380-415-10% +6%
Condensator pentru pornire si functionare		Montat in cutia de pornire	-	Montat in cutia de pornire	-
Protectie la suprasarcina		Montat in cutia de pornire	Asigurat de utilizator	Montat in cutia de pornire	Asigurat de utilizator
Lichid de etansare		Tip ulei: Marcol 82 (Esso)		Propilen glicol 50% solutie apa	
Suport motor		Alama		Alama cu placuta de nichel	
Material carcasa		EN 1.4301 (AISI 304)			
Cablu alimentare	material	EPDM/Polietilena incrucisata etansata			
	Dimensiune [mm^2]	4x1.5			
	Lungime [m]	L=1.75 (pana la 2.2 kW)/L=2.5 (pentru 3 si 4 kW)/L=4 (pentru 5.5 kW)			
Flansa de montare		Standard NEMA			

GAMA SELECTIE

GAMA DE PERFORMANTA



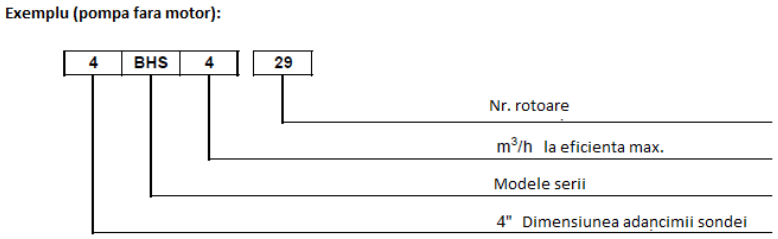
TABEL SELECTIE

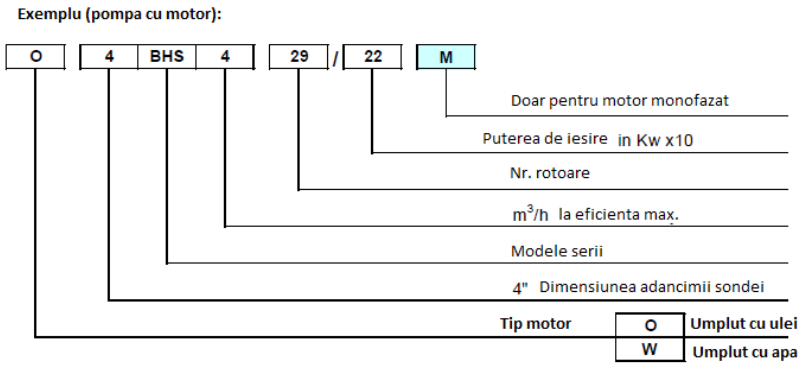
Tip pompa		Putere		Q= Debit														
				l/min. 0	15	20	30	40	50	60	80	100	120	150	180	220	260	300
Monofazat	Trifazat	[kW]	[HP]	m3/h 0	0,9	1,2	1,8	2,4	3,0	3,6	4,8	6	7,2	9	10,8	13,2	15,6	18
				H= Inaltimea totala manometrica in metri														
4BHS2 13/5M	4BHS2 13/5	0,55	0.75	75,5	66,5	62,5	53,5	42,5	28,6	-	-	-	-	-	-	-	-	-
4BHS2 18/7M	4BHS2 18/7	0,75	1.0	104,0	92,0	86,0	74,0	58,5	39,6	-	-	-	-	-	-	-	-	-
4BHS2 27/11M	4BHS2 27/11	1,1	1.5	157,0	138,0	129,0	111,0	88,0	59,5	-	-	-	-	-	-	-	-	-
4BHS2 36/15M	4BHS2 36/15	1,5	2.0	209,0	184,0	172,0	148,0	117,0	79,0	-	-	-	-	-	-	-	-	-
4BHS2 44/22M	4BHS2 44/22	2,2	3.0	255,0	224,0	211,0	180,0	143,0	97,0	-	-	-	-	-	-	-	-	-
4BHS2 51/22M	4BHS2 51/22	2,2	3.0	296,0	260,0	244,0	209,0	166,0	112,0	-	-	-	-	-	-	-	-	-
4BHS4 7/5M	4BHS4 7/5	0,55	0.75	43,0	-	-	37,5	35,8	34,2	31,8	24,4	14,7	-	-	-	-	-	-
4BHS4 10/7M	4BHS4 10/7	0,75	1.0	61,5	-	-	53,5	51,0	49,0	45,5	34,9	21,0	-	-	-	-	-	-
4BHS4 15/11M	4BHS4 15/11	1,1	1.5	92,5	-	-	80,5	77,0	73,0	68,0	52,5	31,5	-	-	-	-	-	-
4BHS4 20/15M	4BHS4 20/15	1,5	2.0	123,0	-	-	107,0	102,0	97,5	91,0	70,0	42,0	-	-	-	-	-	-
4BHS4 24/22M	4BHS4 24/22	2,2	3.0	148,0	-	-	128,0	123,0	117,0	109,0	84,0	50,5	-	-	-	-	-	-
4BHS4 29/22M	4BHS4 29/22	2,2	3.0	178,0	-	-	155,0	148,0	142,0	132,0	101,0	61,0	-	-	-	-	-	-
/	4BHS4 36/30	3.0	4.0	221,0	-	-	193,0	184,0	176,0	163,0	126,0	75,5	-	-	-	-	-	-
/	4BHS4 48/40	4.0	5.5	295,0	-	-	257,0	246,0	234,0	218,0	168,0	101,0	-	-	-	-	-	-
4BHS7 4/7M	4BHS7 4/7	0,75	1.0	24,6	-	-	-	-	-	22,8	22,0	20,8	19,1	15,7	10,4	-	-	-
4BHS7 7/11M	4BHS7 7/11	1,1	1.5	43,0	-	-	-	-	-	39,9	38,5	36,3	33,5	27,5	18,2	-	-	-
4BHS7 10/15M	4BHS7 10/15	1,5	2.0	61,5	-	-	-	-	-	57,0	55,0	52,0	48,0	39,3	26,0	-	-	-
4BHS7 12/22M	4BHS7 12/22	2,2	3.0	74,0	-	-	-	-	-	68,5	66,0	62,5	57,5	47,0	31,3	-	-	-
4BHS7 14/22M	4BHS7 14/22	2,2	3.0	86,0	-	-	-	-	-	80,0	77,0	72,5	67,0	55,0	36,5	-	-	-
/	4BHS7 18/30	3.0	4.0	113,0	-	-	-	-	-	106,0	102,0	97,5	91,0	75,5	52,0	-	-	-
/	4BHS7 23/40	4.0	5.5	144,0	-	-	-	-	-	135,0	131,0	125,0	116,0	96,5	66,0	-	-	-
*4BHS15 7/15M	*4BHS15 7/15	1,5	2.0	38,5	-	-	-	-	-	-	-	30,5	29,3	27,7	25,6	21,5	16,0	9,1
*4BHS15 10/22M	*4BHS15 10/22	2,2	3.0	55,0	-	-	-	-	-	-	-	43,5	42,0	39,5	36,6	30,7	22,9	13,0
/	*4BHS15 13/30	3.0	4.0	71,5	-	-	-	-	-	-	-	59,0	57,5	54,5	50,5	43,5	34,1	22,1
/	*4BHS15 17/40	4.0	5.5	93,5	-	-	-	-	-	-	-	77,0	75,0	71,0	66,0	57,0	44,5	28,9
/	*4BHS15 25/55	5,5	7.5	138,0	-	-	-	-	-	-	-	114,0	110,0	105,0	97,0	83,5	65,5	42,5

* produs indisponibil pentru piata Europeana

TIP COD SI SPECIFICATII CURBA

TIP COD





SPECIFICATII CURBA DE PERFORMANTA

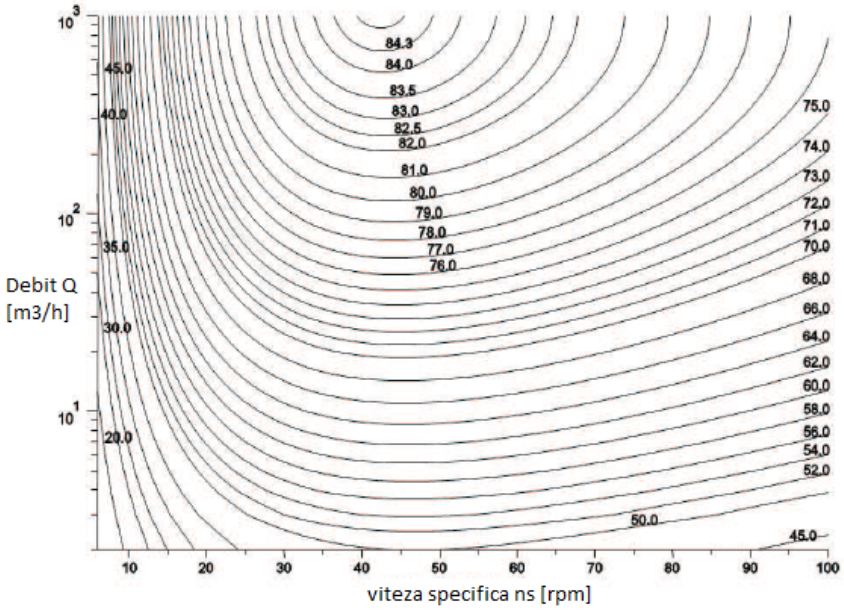
Specificatiile de mai sus reprezinta curbele prevazute in urmatoarele pagini.
Toleranta este in concordanta cu ISO 9906:2012 – Grad 3B.
Curbele se refera la viteza efectiva a motoarelor asincrone la 50 Hz, 2 poli.
Au fost facute masuratori cu apa curata la temperaturi de 20 ºC si cu o vascozitate cinematica de v = 1 mm^2/s (1 cSt).
In timpul selectiei pompei, considerati sa luato o margina de siguranta de cel putin 0.5 m.
Curbele continue indica gama de functionare recomandata. Curba punctata este doar un ghid. Pentru a evita riscul de supra-incalzire, pompele nu trebuie sa fie utilizate la un debit sub 10% din punctul cel mai eficient.

Explicatii simboluri:
Q = Debit de volum
H = Inaltimea totala
P_2 = Putere de intrare a pompei (putere ax)
η = eficienta pompei
MEI = Index minim de eficienta

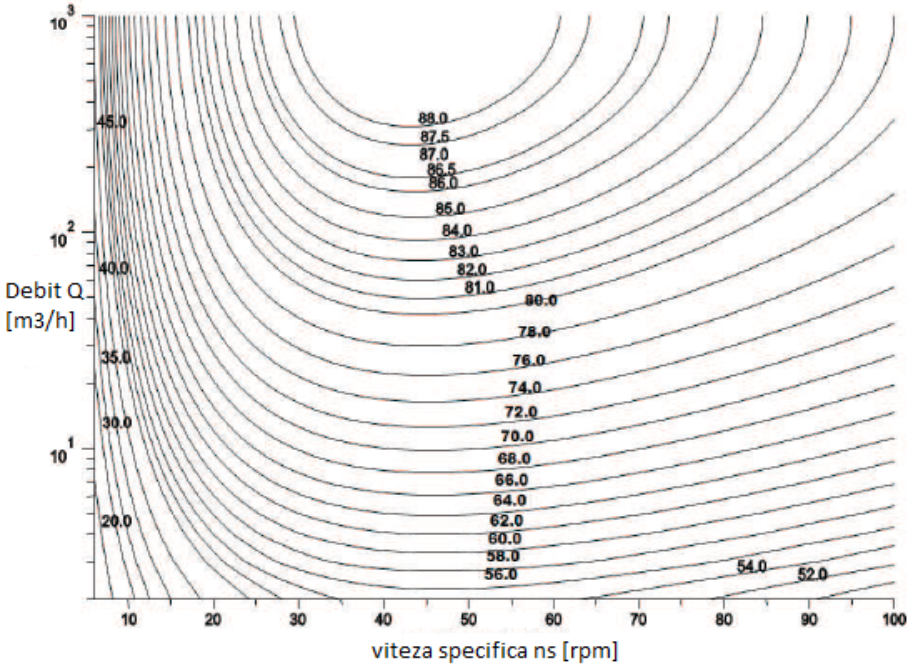
Indexul minim de eficienta (MEI) este o masura a calitatii dimensiunii pompei in raport cu eficienta sa. Indexul minim de eficienta se bazeaza pe eficienta hidraulica si pe eficienta cea mai buna a inaltimii de pompare.
Referinta pompelor de apa celor mai eficiente este MEI ≥ 0.70.
Informatii despre referinta eficientei o regasiti pe: www.ebaraeurope.com

Eficienta unei pompe cu rotor reglabil este, de obicei, mai mica decat a unei pompe cu rotor cu diametru intreg. Reglarea rotorului se va adapta pompei la un punct fix de functionare, ducand la un consum redus de energie. Indexul minim de eficienta (MEI) se bazeaza pe un diametru intreg al rotorului.
Operarea acetor pompe de apa cu puncte variabile de operare pot fi mai eficiente si mai economice atunci cand sunt controlate, de exemplu, de utilizarea unei variabile de viteza ce conincide cu functionarea pompei sistemului.

MEI = 0.4 pentru submersibil multietajat **2900rpm**

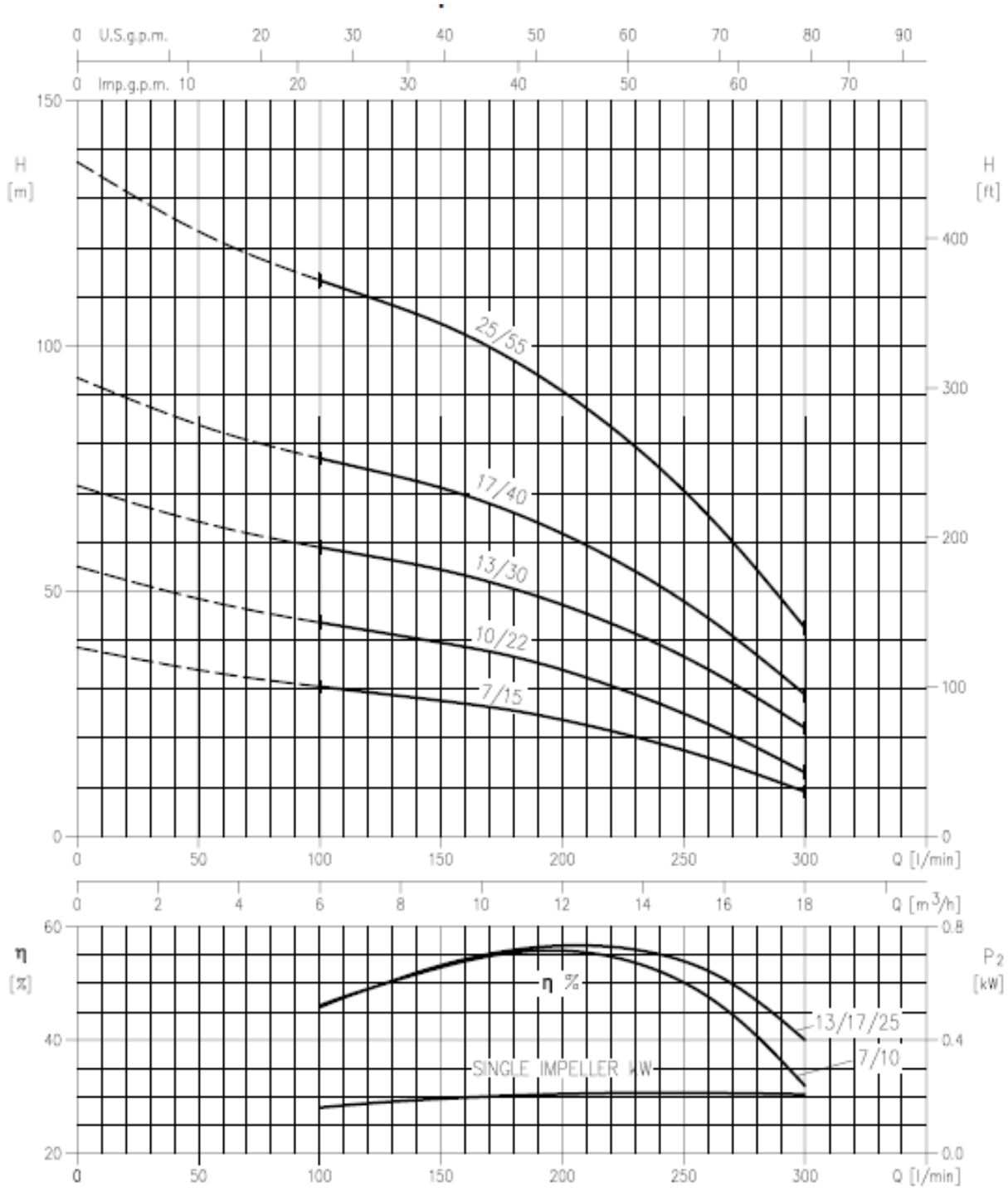


MEI = 0.7 pentru submersibil multietajat **2900 rpm**



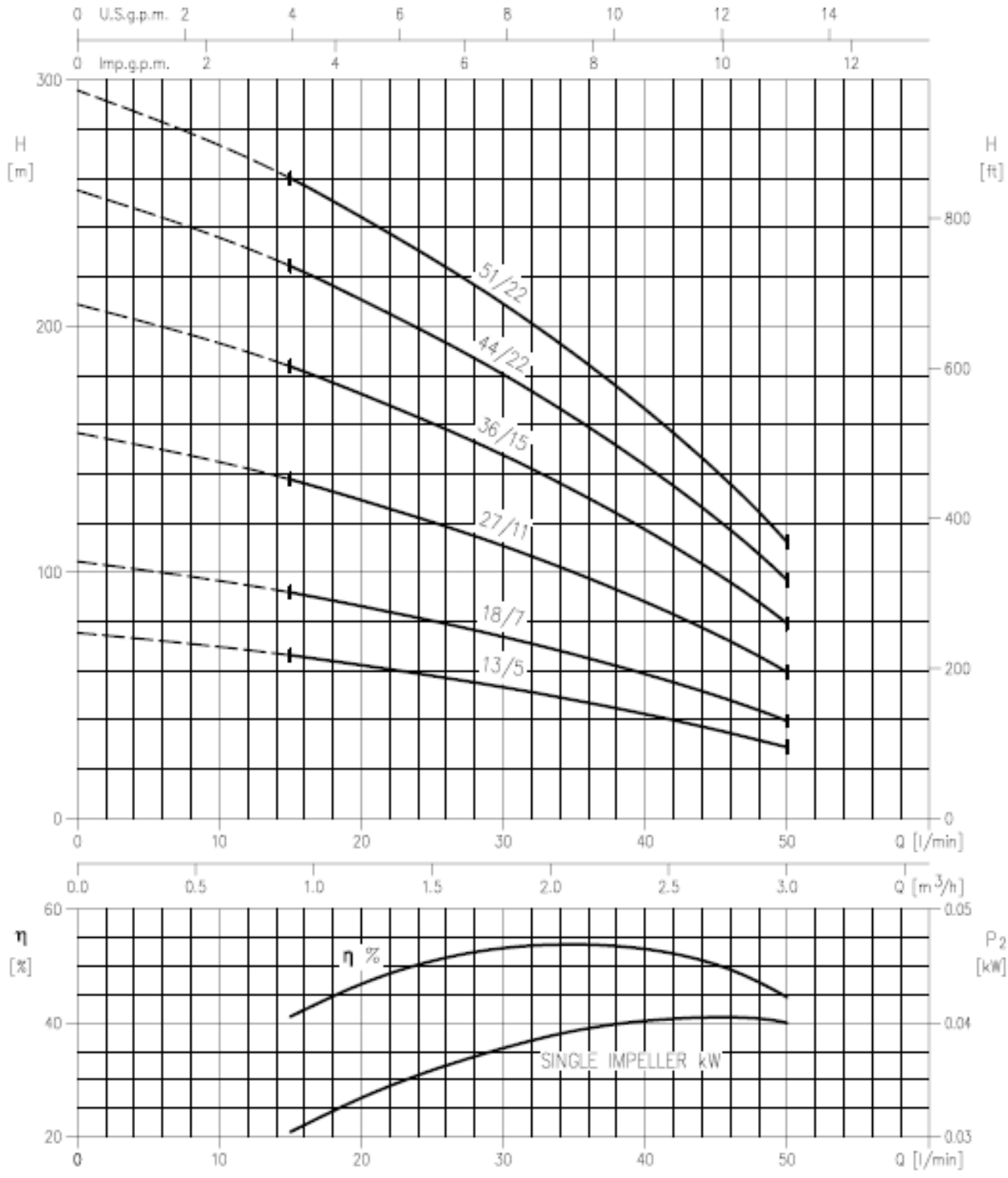
CURBE DE PERFORMANTA

4BHS2 – MEI >0.70 – dia. Rotor = 70.5 mm



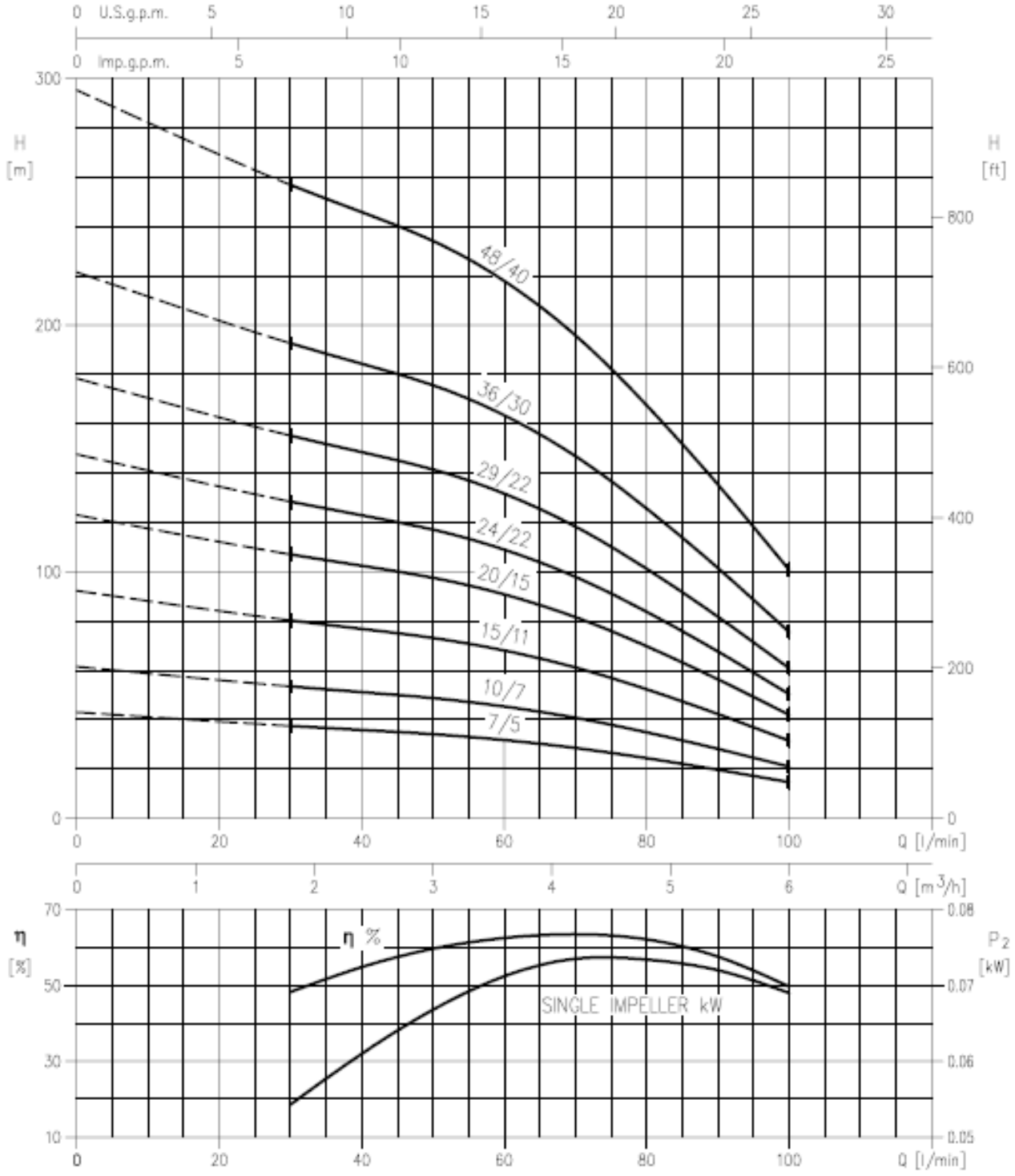
Viteza de rotatie ≈ 2850 min^{-1}
Test standard: ISO 9906:2012 – Grad 3B

4BHS4 – MEI > 0.70 – dia. Rotor = 72 mm



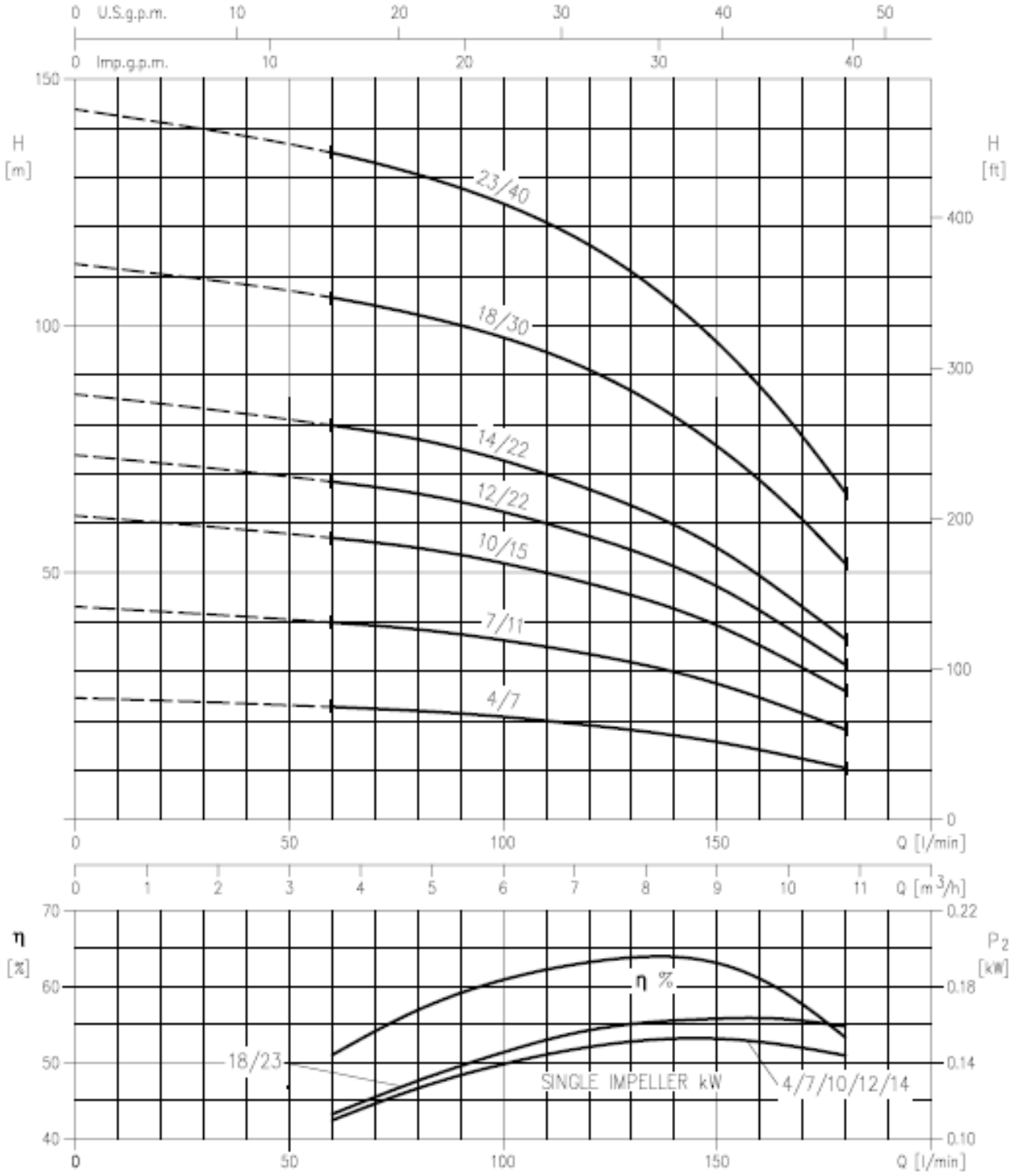
Viteza de rotatie ≈ 2850 min^{-1}
Test standard: ISO 9906:2012 – Grad 3B

4BHS7 – MEI > 0.50 – dia. Rotor = 74 mm



Viteza de rotatie ≈ 2850 min^{-1}
Test standard: ISO 9906:2012 – Grad 3B

4BHS15 – dia. Rotor = 72 mm

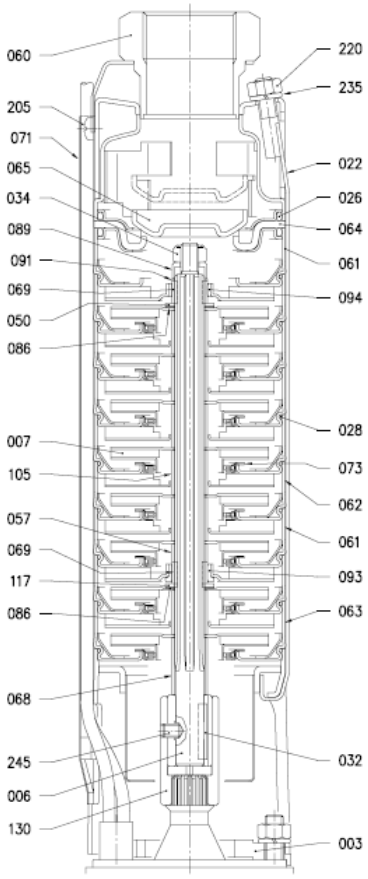


PRODUSUL NU ESTE DISPONIBIL PE PIATA EUROPEANA

Viteza de rotatie ≈ 2850 min^{-1}
Test standard: ISO 9906:2012 – Grad 3B

CONSTRUCTIE

VEDERE IN SECTIUNE



TABEL VEDERE IN SECTIUNE

Ref.	Nume	Material	Dimensiuni	Cantitate
003	Suport	EN 1.4301 (AISI 304)		1
006	Ax pompa	EN 1.4401 (AISI 316)		1
007	Rotor	EN 1.4301 (AISI 304)		[*]
022	Legaturi	EN 1.4301 (AISI 304)		4
026	O-ring	NBR	3x74.5	2
028	O-ring	NBR	1.85x78.4	[*]
032	Piulita	EN 1.4401 (AISI 316)	A4x4x25 UNI 6604	1
034	Piulita rotor auto-inchidere	EN 1.4301 (AISI 304)	M8	1
050	Saiba	EN 1.4301 (AISI 304)		[*]
057	Distantier lagar	EN 1.4301 (AISI 304)		[*]
060	Carcasa refulare	EN 1.4301 (AISI 304)		1

061	Carcasa intermediara lagar	EN 1.4301 (AISI 304)		[*]
062	Carcasa intermediara	EN 1.4301 (AISI 304)		[*]
063	Carcara intermediara aspirare	EN 1.4301 (AISI 304)		1
064	Suport Valva	EN 1.4301 (AISI 304) + NBR		1
065	Valva	EN 1.4301 (AISI 304)		1
068	Distantier	EN 1.4301 (AISI 304)		1
069	Carcasa ax	Carbuna de wolfram		[*]
071	Capac cablu	EN 1.4301 (AISI 304)		1
073	Inel de degajare	EN 1.4301 (AISI 304) + EPDM		[*]
086	Distantier	EN 1.4301 (AISI 304)		[*]
089	Saiba	EN 1.4301 (AISI 304)		1
091	Distantier	EN 1.4301 (AISI 304)		[*]
093	Rulment axial	Carbuna de wolfram		1
094	Rulment radial	Carbuna de wolfram		[*]
105	Distantier	EN 1.4301 (AISI 304)		[*]
117	Saiba anti-frictiune	Carbuna de wolfram		1
130	Cuplaj	EN 1.4301 (AISI 304)		1
205	Surub	EN 1.4301 (AISI 304)	M5x6 UNI 7687	2
220	Piulita	EN 1.4301 (AISI 304)	M8 UNI5588	4
235	Saiba Grower	EN 1.4301 (AISI 304)	8.4 UNI 1751	4
245	Set suruburi	EN 1.4301 (AISI 304)	M6x8 UNI 5923	1

[*] Vezi pagina 302

CANTITATI PENTRU MODEL

Tip pompa	Cantitati pentru model											
	N°007	N°028	N°050	N°057	N°061	N°062	N°069	N°073	N°086	N°091	N°094	N°105
4BHS2 13	13	14	/	0	1	12	1	13	1	1	0	12
4BHS2 18	18	19	1	1	2	16	2	18	2	1	1	16
4BHS2 27	27	28	1	1	2	25	2	27	2	1	1	25
4BHS2 36	36	37	2	2	3	33	3	36	3	1	2	33
4BHS2 44	44	45	3	3	4	40	4	44	4	1	3	40
4BHS2 51	51	52	3	3	4	47	4	51	4	1	3	47
4BHS4 7	7	8	/	0	1	6	1	7	1	1	0	6
4BHS4 10	10	11	/	0	1	9	1	10	1	1	0	9
4BHS4 15	15	16	/	0	1	14	1	15	1	1	0	14
4BHS4 20	20	21	1	1	2	18	2	20	2	1	1	18
4BHS4 24	24	25	1	1	2	22	2	24	2	1	1	22
4BHS4 29	29	30	2	2	3	26	3	29	3	1	2	26
4BHS4 36	36	37	2	2	3	33	3	36	3	1	2	33
4BHS4 48	48	49	3	3	4	44	4	48	4	1	3	44
4BHS7 4	4	5	/	0	1	4	1	4	/	/	0	3
4BHS7 7	7	8	/	0	1	6	1	7	/	/	0	6
4BHS7 10	10	11	/	0	1	9	1	10	/	/	0	9
4BHS7 12	12	13	1	1	2	10	2	12	/	/	1	10
4BHS7 14	14	15	1	1	2	12	2	14	/	/	1	12
4BHS7 18	18	19	1	1	2	16	2	18	/	/	1	16
4BHS7 23	23	24	2	2	3	20	3	23	/	/	2	20
4BHS15 7	7	8	/	0	1	6	1	7	/	/	0	6
4BHS15 10	10	11	1	1	2	8	2	10	/	/	1	8
4BHS15 13	13	14	1	1	2	11	2	13	/	/	1	11
4BHS15 17	17	18	2	2	3	14	3	17	/	/	2	14
4BHS15 25	25	26	3	3	4	21	4	25	/	/	3	21

CARCASA INTERMEDIARA CU POZITIA LAGARULUI

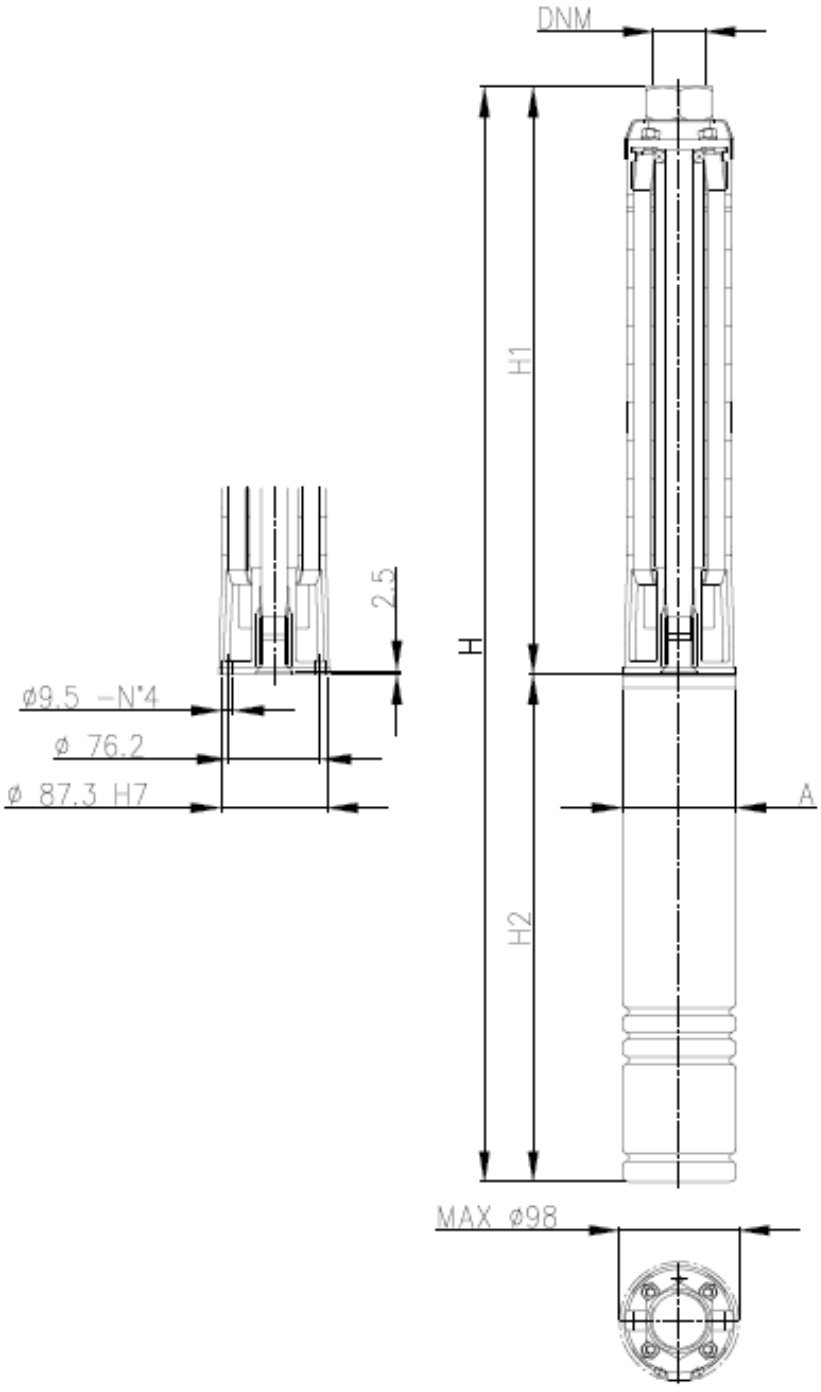
Tip pompa	Nr. rotoare	Carcasa intermediara cu lagar					
		Cantitate pentru model		Pozitie*			
		axial	radial				
4BHS2 13	13	1	/				14th
4BHS2 18	18	1	1	5th			19th
4BHS2 27	27	1	1	5th			28th
4BHS2 36	36	1	2	5th	20th		37th
4BHS2 44	44	1	3	5th	20th	35th	45th
4BHS2 51	51	1	3	5th	20th	35th	52th
4BHS4 7	7	1	/				8th
4BHS4 10	10	1	/				11th
4BHS4 15	15	1	/				16th
4BHS4 20	20	1	1	5th			21th
4BHS4 24	24	1	1	5th			25th
4BHS4 29	29	1	2	5th	20th		30th
4BHS4 36	36	1	2	5th	20th		37th
4BHS4 48	48	1	3	5th	20th	35th	49th
4BHS7 4	4	1	/				5th
4BHS7 7	7	1	/				8th
4BHS7 10	10	1	/				11th
4BHS7 12	12	1	1	4th			13th
4BHS7 14	14	1	1	4th			15th
4BHS7 18	18	1	1	4th			19th
4BHS7 23	23	1	2	4th	16th		24th
4BHS15 7	7	1	/				8th
4BHS15 10	10	1	1	3th			11th
4BHS15 13	13	1	1	3th			14th
4BHS15 17	17	1	2	3th	12th		18th
4BHS15 25	25	1	3	3th	12th	21th	26th

* prima carcasa de refulare intermediara este folosita ca referinta pentru pozitia

rulment axial

DIMENSIUNI

DESEN POMPA



TABEL DIMENSIUNI POMPA

Tip pompa	Putere		Pompa fara		Pompa cu motor in baie de ulei						Pompa cu motor in baie de apa					
					monofazat			trifazat			monofazat			trifazat		
	[kW]	[HP]	DNM	H1 [mm]	A [mm]	H2 [mm]	H [mm]	A [mm]	H2 [mm]	H [mm]	A [mm]	H2 [mm]	H [mm]	A [mm]	H2 [mm]	H [mm]
4BHS2 13/5	0.55	0.75	G 1 1/4	489	97	325	814	97	325	814	91	248	737.2	91	228	717.2
4BHS2 18/7	0.75	1.0	G 1 1/4	594	97	350	944	97	325	919	91	283	876.6	91	248	842.2
4BHS2 27/11	1.1	1.5	G 1 1/4	783	97	385	1168	97	350	1133	91	339	1121.6	91	283	1065.6
4BHS2 36/15	1.5	2.0	G 1 1/4	972	97	420	1392	97	385	1357	91	350	1321.6	91	307	1278.6
4BHS2 44/22	2.2	3.0	G 1 1/4	1140	97	470	1610	97	420	1560	91	437	1576.6	91	339	1478.6
4BHS2 51/22	2.2	3.0	G 1 1/4	1287	97	470	1757	97	420	1707	91	437	1723.6	91	339	1625.6
4BHS4 7/5	0.55	0.75	G 1 1/2	368	97	325	693	97	325	693	91	248	616.2	91	228	596.2
4BHS4 10/7	0.75	1.0	G 1 1/2	431	97	350	781	97	325	756	91	283	713.6	91	248	679.2
4BHS4 15/11	1.1	1.5	G 1 1/2	536	97	385	921	97	350	886	91	339	874.6	91	283	818.6
4BHS4 20/15	1.5	2.0	G 1 1/2	641	97	420	1061	97	385	1026	91	350	990.6	91	307	947.6
4BHS4 24/22	2.2	3.0	G 1 1/2	725	97	470	1195	97	420	1145	91	437	1161.6	91	339	1063.6
4BHS4 29/22	2.2	3.0	G 1 1/2	830	97	470	1300	97	420	1250	91	437	1266.6	91	339	1168.6
4BHS4 36/30	3.0	4.0	G 1 1/2	977	/	/	/	97	544	1521	/	/	/	91	394	1370.6
4BHS4 48/40	4.0	5.5	G 1 1/2	1229	/	/	/	97	574	1803	/	/	/	91	543	1772.2
4BHS7 4/7	0.75	1.0	G 2	373	97	350	723	97	325	698	91	283	655.6	91	248	621.2
4BHS7 7/11	1.1	1.5	G 2	468	97	385	853	97	350	818	91	339	806.6	91	283	750.6
4BHS7 10/15	1.5	2.0	G 2	562	97	420	982	97	385	947	91	350	911.6	91	307	868.6
4BHS7 12/22	2.2	3.0	G 2	625	97	470	1095	97	420	1045	91	437	1061.6	91	339	963.6
4BHS7 14/22	2.2	3.0	G 2	688	97	470	1158	97	420	1108	91	437	1124.6	91	339	1026.6
4BHS7 18/30	3.0	4.0	G 2	814	/	/	/	97	544	1358	/	/	/	91	394	1207.6
4BHS7 23/40	4.0	5.5	G 2	972	/	/	/	97	574	1546	/	/	/	91	543	1515.2
4BHS15 7/15	1.5	2.0	G 2	552	97	420	972	97	385	937	91	350	901.6	91	307	858.6
4BHS15 10/22	2.2	3.0	G 2	678	97	470	1148	97	420	1098	91	437	1114.6	91	339	1016.6
4BHS15 13/30	3.0	4.0	G 2	804	/	/	/	97	544	1348	/	/	/	91	394	1197.6
4BHS15 17/40	4.0	5.5	G 2	972	/	/	/	97	574	1546	/	/	/	91	543	1515.2
4BHS15 25/55	5.5	7.5	G 2	1308	/	/	/	97	644	1952	/	/	/	91	653	1960.5

IMPACHETARE SI GREUTATE

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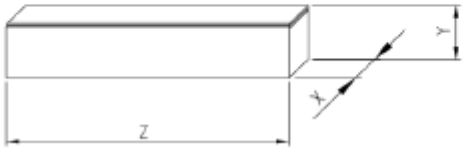
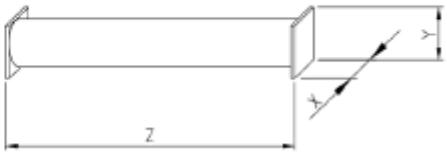
TIP 1



TIP 2



Tip pompa	Pompa fara motor					Pompa cu motor in baie de ulei										Pompa cu motor in baie de apa									
						monofazat					trifazat					monofazat					trifazat				
	X [mm]	Y [mm]	Z [mm]	weight [kgf]	type	X [mm]	Y [mm]	Z [mm]	weight [kgf]	type	X [mm]	Y [mm]	Z [mm]	weight [kgf]	type	X [mm]	Y [mm]	Z [mm]	weight [kgf]	type	X [mm]	Y [mm]	Z [mm]	weight [kgf]	type
4BHS2 13/5	100	100	495	6.6	1	100	100	1035	14.2	1	100	100	1035	13.6	1	100	100	800	15.1	1	100	100	800	14.4	1
4BHS2 18/7	100	100	640	8.3	1	100	100	1035	17	1	100	100	1035	15.9	1	100	100	1035	18.3	1	100	100	1035	16.9	1
4BHS2 27/11	100	100	800	11	1	100	100	1300	21.3	1	100	100	1300	19.7	1	100	100	1300	22.8	1	100	100	1300	20.5	1
4BHS2 36/15	100	100	1035	13.8	1	100	100	1530	25.8	1	100	100	1530	24.2	1	100	100	1530	27.5	1	100	100	1530	24.9	1
4BHS2 44/22	100	100	1300	16.5	1	110	100	1810	32	2	110	110	1810	30.7	2	110	110	1810	32.9	2	110	110	1810	30.3	1
4BHS2 51/22	100	100	1300	18.7	1	110	100	1950	34.2	2	110	110	1950	32.9	2	110	110	1950	35.1	2	110	110	1810	32.5	2
4BHS4 7/5	100	100	495	4.4	1	100	100	800	12	1	100	100	800	11.4	1	100	100	800	12.9	1	100	100	800	12.2	1
4BHS4 10/7	100	100	495	5.5	1	100	100	800	14.2	1	100	100	800	13.1	1	100	100	800	15.5	1	100	100	800	14.1	1
4BHS4 15/11	100	100	640	7.2	1	100	100	1035	17.5	1	100	100	1035	15.9	1	100	100	1035	19	1	100	100	1035	16.7	1
4BHS4 20/15	100	100	640	8.3	1	100	100	1300	20.3	1	100	100	1300	18.7	1	100	100	1300	22	1	100	100	1035	19.4	1
4BHS4 24/22	100	100	800	9.9	1	100	100	1300	25.4	1	100	100	1300	24.1	1	100	100	1300	26.3	1	100	100	1300	23.7	1
4BHS4 29/22	100	100	1035	11.5	1	100	100	1530	27	1	100	100	1530	25.7	1	100	100	1530	27.9	1	100	100	1300	25.3	1
4BHS4 36/30	100	100	1035	14.3	1	-	-	-	-	-	110	110	1810	33.3	2	-	-	-	-	-	100	100	1530	31.6	1
4BHS4 48/40	100	100	1300	17.6	1	-	-	-	-	-	110	110	1950	37.6	2	-	-	-	-	-	110	110	1950	38.8	2
4BHS7 4/7	100	100	495	4.2	1	100	100	800	12.9	1	100	100	800	11.8	1	100	100	800	14.2	1	100	100	800	12.8	1
4BHS7 7/11	100	100	495	5	1	100	100	1035	15.3	1	100	100	1035	13.7	1	100	100	1035	16.8	1	100	100	800	14.5	1
4BHS7 10/15	100	100	640	6.6	1	100	100	1035	18.6	1	100	100	1035	17	1	100	100	1035	20.3	1	100	100	1035	17.7	1
4BHS7 12/22	100	100	640	7.7	1	100	100	1300	23.2	1	100	100	1300	21.9	1	100	100	1300	24.1	1	100	100	1035	21.5	1
4BHS7 14/22	100	100	800	8.3	1	100	100	1300	23.8	1	100	100	1300	22.5	1	100	100	1300	24.7	1	100	100	1300	22.1	1
4BHS7 18/30	100	100	1035	9.9	1	-	-	-	-	-	100	100	1530	28.9	1	-	-	-	-	-	100	100	1530	27.2	1
4BHS7 23/40	100	100	1035	11.5	1	-	-	-	-	-	110	110	1810	31.5	2	-	-	-	-	-	110	110	1810	32.7	2
4BHS15 7/15	100	100	640	5.8	1	100	100	1035	17.8	1	100	100	1035	16.2	1	100	100	1035	19.5	1	100	100	1035	16.9	1
4BHS15 10/22	100	100	800	7.3	1	100	100	1300	22.8	1	100	100	1300.3	21.5	1	100	100	1300	23.7	1	100	100	1300	21.1	1
4BHS15 13/30	100	100	1035	8.7	1	-	-	-	-	-	100	100	1530	27.7	1	-	-	-	-	-	100	100	1530	26	1
4BHS15 17/40	100	100	1035	10.7	1	-	-	-	-	-	110	110	1810	30.7	2	-	-	-	-	-	110	110	1810	31.9	2

DATE TEHNICE

DATE MOTOR
MOTOR IN BAIE DE ULEI

Putere		Tractiune inalta	Monofazat 230 V				Trifazat 380 V				Trifazat 415 V			
[kW]	[HP]	[N]	Intrare [kW]	IN [A]	IA [A]	Factor putere	Intrare [kW]	IN [A]	IA [A]	Factor putere	Intrare [kW]	IN [A]	IA [A]	Factor putere
0,55	0,75	1500	0,97	4,5	13,6	0,94	0,94	1,9	7,0	0,75	1,08	2,0	7,0	0,75
0,75	1	1500	1,32	6,0	18,5	0,96	1,17	2,4	10,0	0,74	1,38	2,6	10,0	0,74
1,1	1,5	1500	1,83	8,2	26,0	0,97	1,56	3,2	14,0	0,74	1,81	3,4	14,0	0,74
1,5	2	1500	2,48	11,0	34,0	0,98	2,09	4,4	17,0	0,72	2,38	4,6	17,0	0,72
2,2	3	4400	3,27	14,8	48,0	0,96	-	-	-	-	-	-	-	-
2,2	3	1500	-	-	-	-	3,00	6	24,0	0,76	3,39	6,2	24,0	0,76
2,2	3	5000	-	-	-	-	3,02	5,6	23,0	0,82	3,42	5,8	23,0	0,82
3	4	5000	-	-	-	-	4,05	7,7	30,0	0,80	4,49	7,8	30,0	0,80
4	5,5	5000	-	-	-	-	5,24	9,7	45,0	0,82	5,78	9,8	45,0	0,82
5,5	7,5	5000	-	-	-	-	7,37	13,5	55,0	0,83	8,23	13,8	55,0	0,83

MOTOR IN BAIE DE APA

Putere		Tractiune inalta	Monofazat 230 V				Trifazat 380 V				Trifazat 415 V			
[kW]	[HP]	[N]	Intrare [kW]	IN [A]	IA [A]	Factor putere	Intrare [kW]	IN [A]	IA [A]	Factor putere	Intrare [kW]	IN [A]	IA [A]	Factor putere
0,55	0,75	3000	0,93	4,3	17,7	0,94	0,83	1,6	7	0,79	0,86	1,7	7,7	0,7
0,75	1	3000	1,28	5,7	22,7	0,98	1,07	2,0	10,1	0,81	1,10	2,1	10,9	0,73
1,1	1,5	3000	1,78	8,4	33,9	0,92	1,51	2,8	15,3	0,82	1,54	2,9	16,7	0,74
1,5	2	3000	2,34	10,7	41,7	0,95	2,13	3,9	19,7	0.83	2,10	4	21,5	0.73
2,2	3	4000	3,28	14,7	61,8	0,97	2,91	5,4	28,3	0,82	3,00	5,8	30,9	0,72
3	4	4000	-	-	-	-	3,99	7,4	39,9	0,82	4,09	7,9	43,6	0,72
4	5,5	6500	-	-	-	-	5,24	9,7	54,1	0,82	5,38	10,4	59,1	0,72
5,5	7,5	6500	-	-	-	-	7,05	12,6	73,3	0,85	7,08	12,8	80,1	0,77

SELECTIE MOTOARE IN BAIE DE ULEI

EXEMPLU: MOTOR 0.75 kW 230 V LUNGIME CABLU 75 m - 4x2,5 mm^2

MONOFAZAT **230 V**

PUTERE		TIP CABLU SI LUNGIME MAXIMA (*)							
[kW]	[HP]	4x1	4x1,5	4x2	4x2,5	4x4	4x6	4x10	4x16
0.55	0.75	38	57	76	95	152	-	-	-
0.75	1	30	45	60	75	120	174	-	-
1.1	1.5	22	33	43	53	85	127	210	-
1.5	2	-	23	31	38	63	92	154	246
2.2	3	-	-	22	28	45	67	112	180

TRIFAZAT **380-415 V**

PUTERE		TIP CABLU SI LUNGIME MAXIMA (*)							
[kW]	[HP]	4x1	4x1,5	4x2	4x2,5	4x4	4x6	4x10	4x16
0.55	0.75	164	246	328	-	-	-	-	-
0.75	1	133	200	266	333	-	-	-	-
1.1	1.5	97	146	195	244	390	-	-	-
1.5	2	72	109	145	180	290	435	-	-
2.2	3	51	78	103	130	207	310	516	-
3	4	41	62	83	104	167	250	416	-
4	5.5	31	46	62	77	124	186	310	496
5.5	7.5	-	33	45	56	90	135	225	360

(*) Lungimea maxima a cablului cu o cadere de tensiune de 3% la 30 ºC temperatura ambientala.

Daca tensiunea de operare Ui din instalatie este diferita de tensiunea nominala Un, atunci este posibil sa se calculeze lungimea maxima permisa Lmax, cu tabelul de lungimi dat Ltab, cu urmatoarea formula:

$$\mathbf{Lmax = Ltab\ (Ui/Un)^2}$$