

# SCM 4 Plus

## 4" MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMPS COMPLETE WITH MOTOR

The SCM 4 PLUS submersible pumps consist of a multistage pumping unit directly connected to a submersible motor. Especially suitable for pumping from deep 4" (100mm) Ø wells.

- HIGH STIFFNESS AND HIGH RESISTANCE TO WATER HAMMERING
- HIGH SAND ABRASION RESISTANCE
- HIGH HYDRAULIC EFFICIENCY

### Motor

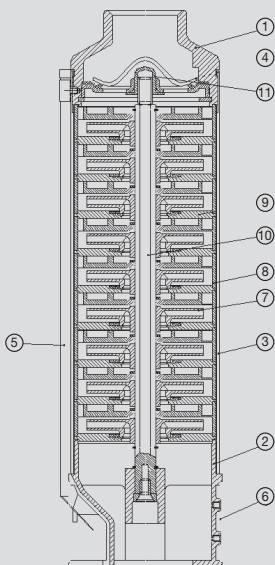
- 4" submersible motor
- Special resin impregnated sealed stator
- Water-cooled thrust bearings and bushes
- Approx. 1.5 m extendible power supply cable
- Non-polluting water cooling
- 4" NEMA flange
- Level of protection IP 58
- Class B insulation
- Speed of rotation 2850 rpm
- Special mechanical seal with sand guard
- Pressure compensation diaphragm
- Supplied without capacitor (single phase version)
- Suitable for continuous use
- Electrical control panel on request

### Applications

- Pumping of water from drilled wells
- Automatic systems for garden irrigation
- Surface irrigation for agricultural use
- Drinking water systems
- Pumping and supply of stored deposits or of booster autoclaves for civil and industrial systems
- Heat pumps

### Usage limitations

- Type of liquid: clean non-aggressive, non-explosive, free of solids
- Maximum liquid temperature 30° C
- Max. start-ups per hour 20
- Motor protection with thermal relay provided by the user



### DESIGN FEATURES

Component	Material
1 Outlet	X 5 CrNi 1810 (AISI 304) Microcast stainless steel
2 Suction flange	X 5 CrNi 1810 (AISI 304) microcast stainless steel
3 Pump casing	X 5 CrNi 1810 (AISI 304) Stainless steel
4 Check valve	X 5 CrNi 1810 (AISI 304) Stainless steel
5 Cable protection trough	X 5 CrNi 1810 (AISI 304) Stainless steel
6 Filter	X 5 CrNi 1810 (AISI 304) Stainless steel
7 Impeller	Acetal resin
8 Diffuser	Polycarbonate with ceramic insert at the point of wear
9 Cap diffuser	Polycarbonate with ceramic insert at the point of wear
10 Motor shaft	Hexagonal in X10 CrNiS 1809 (AISI 303) Stainless steel with ceramic facing on the upper end
11 Self-lubricating delivery bearing	Molybdenum bisulphide polyamide
- Thrust ring inserted in every stage	



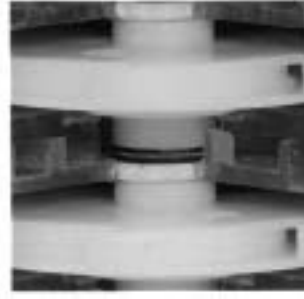
Delivery connection point in microcast AISI 304 stainless steel with an internal tapered double profile with a stainless steel non return valve and a double slot for safety cable.

**BENEFITS:**  
It resets flow resistance offering maximum rigidity and high resistance to protect the pump against water hammering.



Shaft guide bearing made with a self-lubricating closed bush in molybdenum bisulphide polyamide and stainless steel shaft with ceramic insert at the point of wear.

**BENEFITS:**  
Increases the life of the pump - protection against dry operation - high resistance to wear caused by sand.



Floating impeller with suction point shim on stainless steel moulded with a diffuser cover. Thrust bearing inserted between the hub of the impeller and diffuser formed by one ceramic ring moulded with the diffuser and a free ring in graphite. "International Patent"

**BENEFITS:**  
This extraordinary technological innovation leads to a large increase in efficiency as well as high resistance to abrasion by sand and to dry operation.



Motor bracket and suction point in microcast AISI 304 stainless steel rigidly welded to the outer stainless steel liner. Stainless steel suction grid.

**BENEFITS:**  
This system offers high resistance to mechanical stresses caused by operating pressure. Maximum rigidity of the whole structure eliminates vibrations.



### TABLE FOR CALCULATING PUMP LENGTH

MODEL	A Total length mm.	B Motor length mm.	C Pump length mm.	DNM	L Packing length	Total weight Kg.	
SCM 4 PLUS 40/57 M	576	242	334		730	11.8	
SCM 4 PLUS 40/57 T	557	223	334		710	10.8	
SCM 4 PLUS 40/90 M	717	271	446		870	14.0	
SCM 4 PLUS 40/90 T	688	242	446		840	12.7	
SCM 4 PLUS 40/120 M	857	299	558		1010	16.1	
SCM 4 PLUS 40/120 T	829	271	558		980	14.9	
SCM 4 PLUS 40/185 M	1109	327	782		1260	19.2	
SCM 4 PLUS 40/185 T	1081	299	782		1230	17.9	
SCM 4 PLUS 40/240 M	1339	356	983		1490	22.2	
SCM 4 PLUS 40/240 T	1310	327	983		1460	20.8	
SCM 4 PLUS 55/50 M	509	242	267			660	11.3
SCM 4 PLUS 55/50 T	490	223	267			640	10.3
SCM 4 PLUS 55/80 M	628	271	357			780	13.1
SCM 4 PLUS 55/80 T	599	242	357			750	11.8
SCM 4 PLUS 55/105 M	700	299	401			850	14.9
SCM 4 PLUS 55/105 T	672	271	401			830	13.7
SCM 4 PLUS 55/160 M	862	327	535	1012		17.3	
SCM 4 PLUS 55/160 T	834	299	535	990		16.0	
SCM 4 PLUS 55/200 M	1026	356	670	1180		19.8	
SCM 4 PLUS 55/200 T	997	327	670	1150		18.4	
SCM 4 PLUS 55/300 T	1317	356	961	1470		22.3	
SCM 4 PLUS 75/40 M	545	242	303	1" 1/4		700	11.2
SCM 4 PLUS 75/40 T	526	223	303			680	10.2
SCM 4 PLUS 75/56 M	631	271	360			780	12.9
SCM 4 PLUS 75/56 T	602	242	360		750	11.6	
SCM 4 PLUS 75/75 M	744	299	445		900	14.8	
SCM 4 PLUS 75/75 T	716	271	445		870	13.6	
SCM 4 PLUS 75/110 M	915	327	588		1070	17.1	
SCM 4 PLUS 75/110 T	887	299	588		1040	15.8	
SCM 4 PLUS 75/140 M	1058	356	702		1200	19.4	
SCM 4 PLUS 75/140 T	1029	327	702		1180	18.0	
SCM 4 PLUS 75/210 T	1372	356	1016		1520	21.5	
SCM 4 PLUS 115/30 M	488	242	246			640	11.0
SCM 4 PLUS 115/30 T	469	223	246	620		10.0	
SCM 4 PLUS 115/50 M	602	271	331	750		12.8	
SCM 4 PLUS 115/50 T	573	242	331	720		11.5	
SCM 4 PLUS 115/65 M	687	299	388	840		14.4	
SCM 4 PLUS 115/65 T	659	271	388	810		13.2	
SCM 4 PLUS 115/95 M	829	327	502	980		16.6	
SCM 4 PLUS 115/95 T	801	299	502	950		15.3	
SCM 4 PLUS 115/122 M	973	356	617	1120		18.8	
SCM 4 PLUS 115/122 T	944	327	617	1100		17.4	
SCM 4 PLUS 115/185 T	1202	356	846	1350		20.8	
SCM 4 PLUS 115/245 T	1525	423	1102	1680		25.0	
SCM 4 PLUS 150/42 M	652	299	353	2"		800	14.0
SCM 4 PLUS 150/42 T	624	271	353			780	12.8
SCM 4 PLUS 150/64 M	790	327	463		940	16.1	
SCM 4 PLUS 150/64 T	762	299	463		910	14.8	
SCM 4 PLUS 150/84 M	929	356	573		1080	18.3	
SCM 4 PLUS 150/84 T	900	327	573		1050	16.9	
SCM 4 PLUS 150/120 T	1142	356	786		1300	20.1	
SCM 4 PLUS 150/170 T	1466	423	1043		1620	24.2	
SCM 4 PLUS 150/200 T	1816	590	1226		1970	33.1	
SCM 4 PLUS 150/300 T	2407	704	1703		2560	42.3	
SCM 4 PLUS 250/53 M	951	356	595			1100	18.0
SCM 4 PLUS 250/53 T	922	327	595			1070	15.6
SCM 4 PLUS 250/78 T	1186	356	830	1340		18.0	
SCM 4 PLUS 250/100 T	1550	514	1036	1700		23.9	
SCM 4 PLUS 250/127 T	1833	590	1243	1983		29.6	
SCM 4 PLUS 250/185 T	2462	704	1758	2612		42.6	

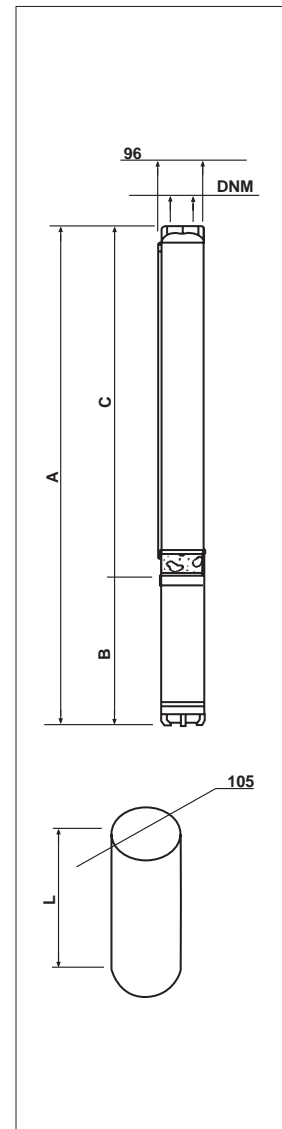
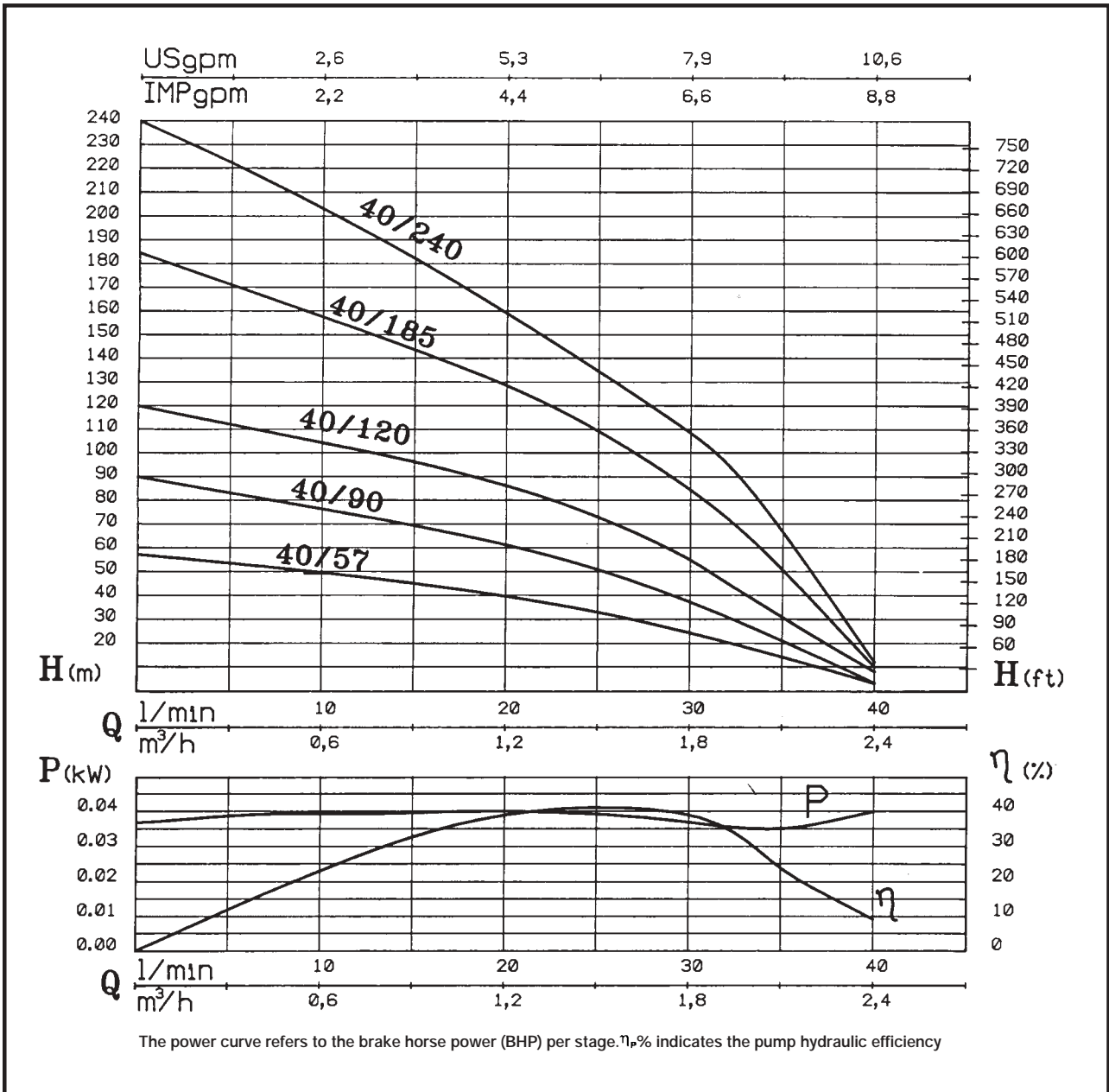


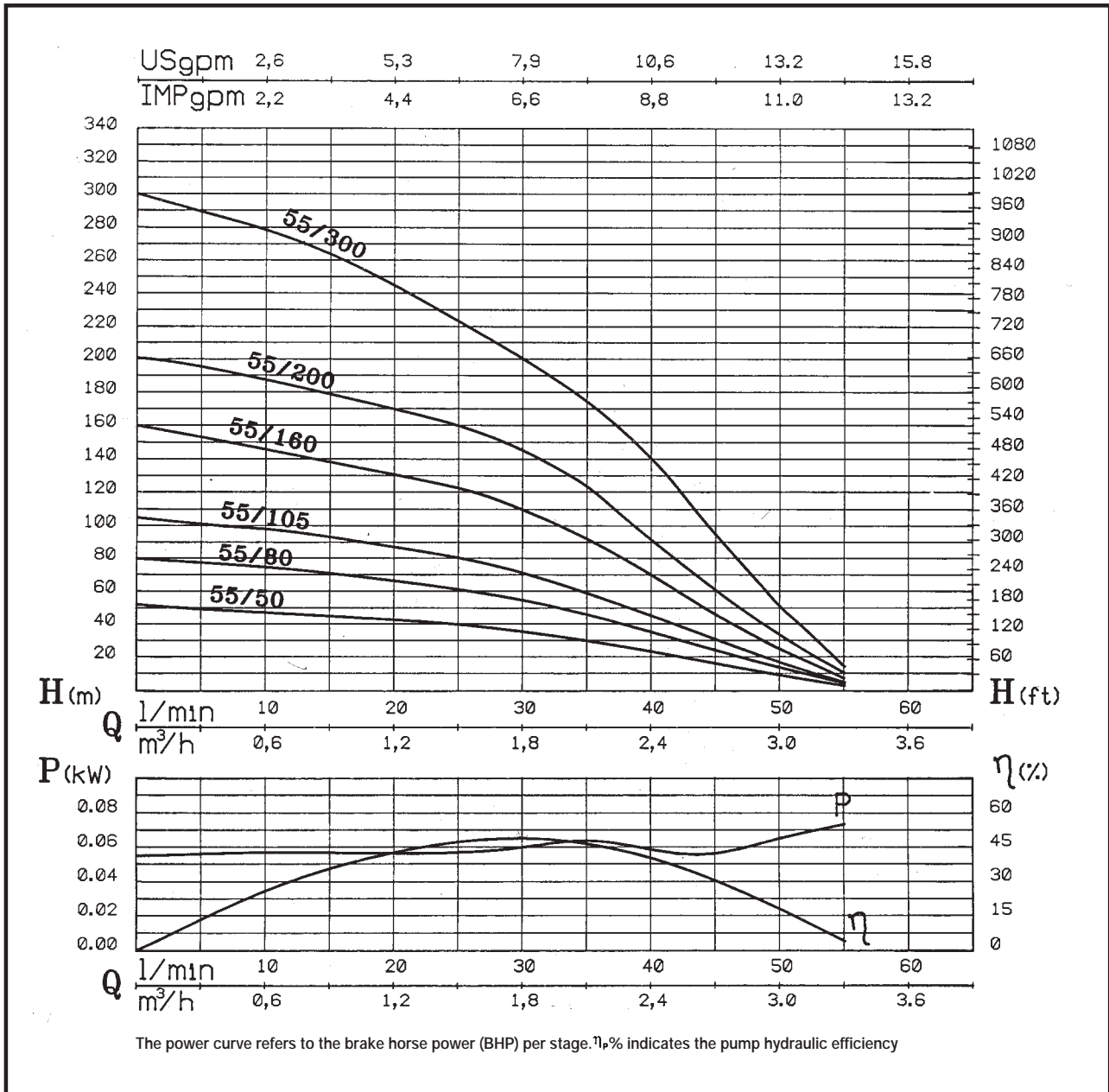
TABLE OF HYDRAULIC PERFORMANCE



## PUMP PERFORMANCE

CODE	MODEL	N' Stages	Motor power		VOLTAGE	Amp.	μF.	Q	Discharge head in meters				Ø DNM
			HP	Kw					10	20	30	40	
N3181000 N3181010	SCM 4 PLUS-40/57 M SCM 4 PLUS-40/57 T	9	0,5	0,37	1 ~ 230 V 3 ~ 400 V	3,4 1,1	16	0,6	0,6	1,2	1,8	2,4	1"¼
N3181020 N3181030	SCM 4 PLUS-40/90 M SCM 4 PLUS-40/90 T	14	0,75	0,55	1 ~ 230 V 3 ~ 400 V	4,3 1,6	20	0,6	0,6	1,2	1,8	2,4	
N3181040 N3181050	SCM 4 PLUS-40/120 M SCM 4 PLUS-40/120 T	19	1	0,75	1 ~ 230 V 3 ~ 400 V	5,7 2,1	30	0,6	0,6	1,2	1,8	2,4	
N3181060 N3181070	SCM 4 PLUS-40/185 M SCM 4 PLUS-40/185 T	29	1,5	1,1	1 ~ 230 V 3 ~ 400 V	8,6 3,2	40	0,6	0,6	1,2	1,8	2,4	
N3181080 N3181090	SCM 4 PLUS-40/240 M SCM 4 PLUS-40/240 T	38	2	1,5	1 ~ 230 V 3 ~ 400 V	10,6 4	50	0,6	0,6	1,2	1,8	2,4	

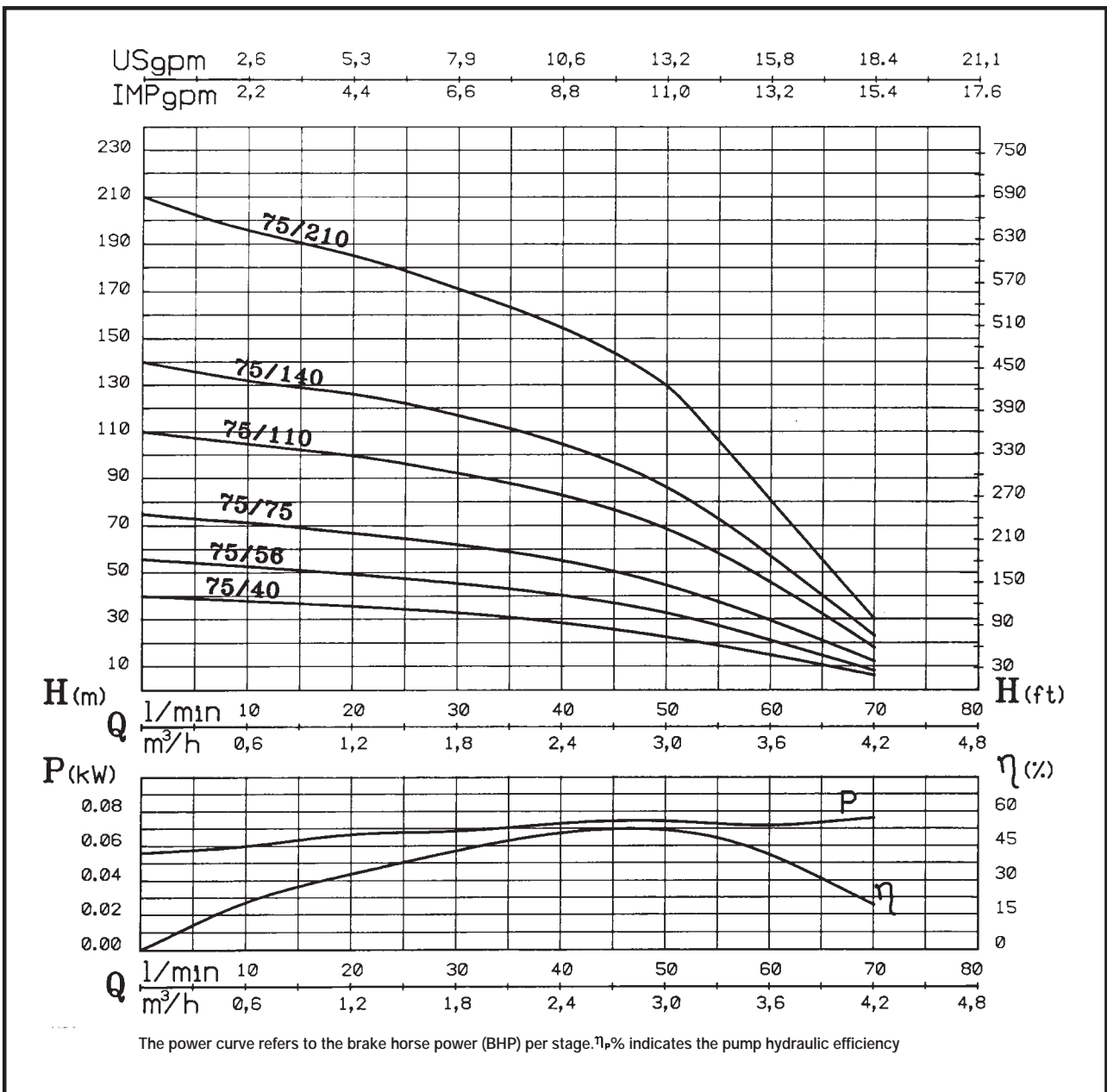
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CODE	MODEL	N' Stages	Motor power		VOLTAGE	Amp.	μF.	Q	10	20	30	40	50	Ø DNM
			HP	Kw					0,6	1,2	1,8	2,4	3	
N3182000 N3182010	SCM 4 PLUS-55/50 M SCM 4 PLUS-55/50 T	6	0,5	0,37	1 ~ 230 V 3 ~ 400 V	3,2 1,1	16	Discharge head in meters	47	42	36	23	8	1"1/4
N3182020 N3182030	SCM 4 PLUS-55/80 M SCM 4 PLUS-55/80 T	10	0,75	0,55	1 ~ 230 V 3 ~ 400 V	4,3 1,6	20		75	66	55	35	12	
N3182040 N3182050	SCM 4 PLUS-55/105 M SCM 4 PLUS-55/105 T	12	1	0,75	1 ~ 230 V 3 ~ 400 V	5,3 2,1	30		98	87	72	46	12	
N3182060 N3182070	SCM 4 PLUS-55/160 M SCM 4 PLUS-55/160 T	18	1,5	1,1	1 ~ 230 V 3 ~ 400 V	7,8 3,2	40		145	132	110	70	24	
N3182080 N3182090	SCM 4 PLUS-55/200 M SCM 4 PLUS-55/200 T	24	2	1,5	1 ~ 230 V 3 ~ 400 V	9,9 4	50		187	169	145	90	30	
N3182100	SCM 4 PLUS-55/300 T	37	3	2,2	3 ~ 400 V	5,9			278	244	200	140	50	

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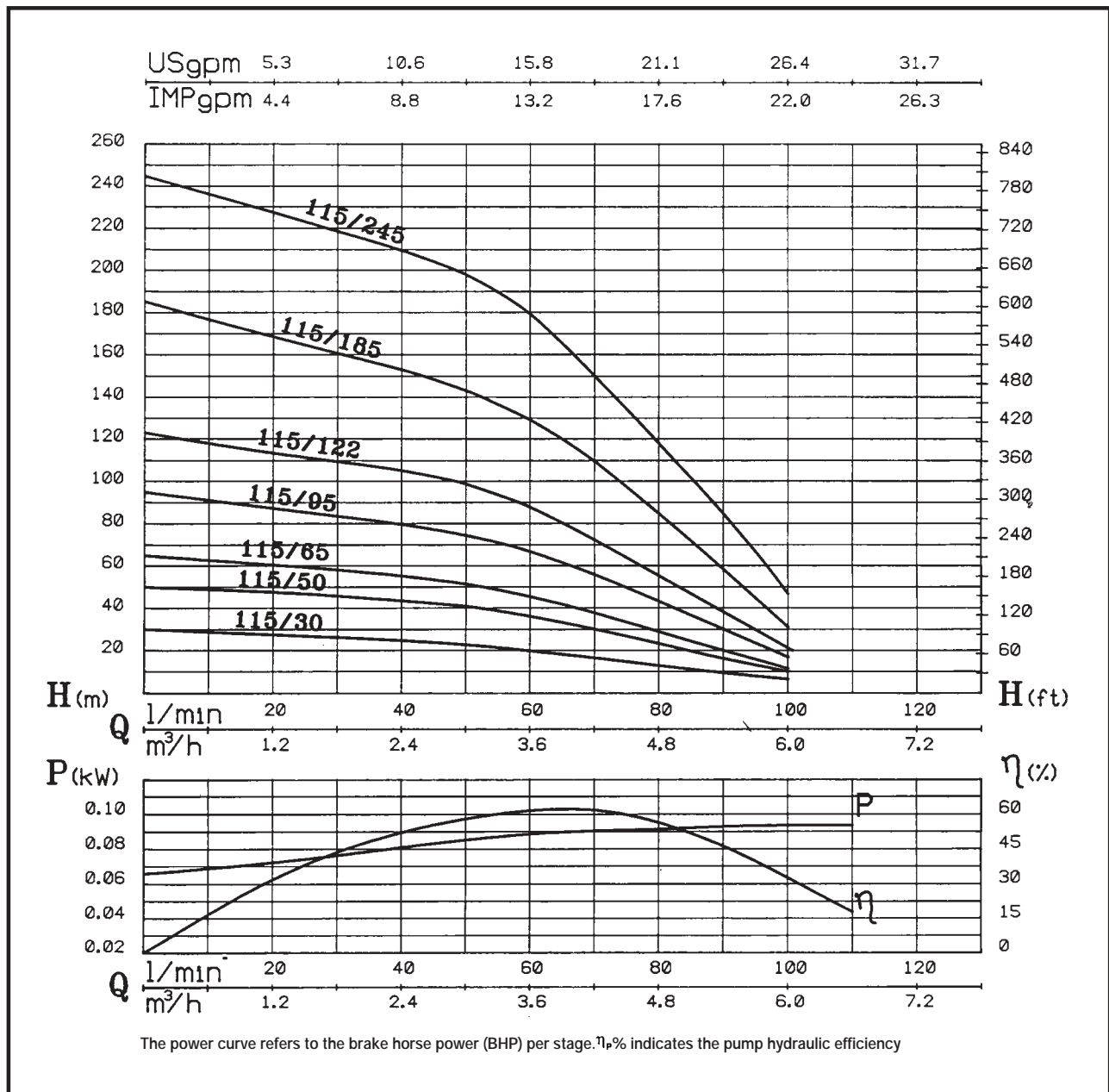


PUMP PERFORMANCE

CODE	MODEL	N° Stages	Motor power		VOLTAGE	Amp.	μF.	Q	20	30	40	50	60	Ø DNM
			HP	Kw					L/1'	m³/h	1,2	1,8	2,4	
N3183000	SCM 4 PLUS-75/40 M	6	0,5	0,37	1 ~ 230 V	3,2	16	Discharge head in meters	20	30	40	50	60	1 1/4
N3183010	SCM 4 PLUS-75/40 T				3 ~ 400 V	1,1			1,2	1,8	2,4	3	3,6	
N3183020	SCM 4 PLUS-75/56 M	8	0,75	0,55	1 ~ 230 V	4,3	20		50	45	40	32	21	
N3183030	SCM 4 PLUS-75/56 T				3 ~ 400 V	1,6	1,2		1,8	2,4	3	3,6		
N3183040	SCM 4 PLUS-75/75 M	11	1	0,75	1 ~ 230 V	5,3	30		67	62	55	45	30	
N3183050	SCM 4 PLUS-75/75 T				3 ~ 400 V	2,1			1,2	1,8	2,4	3	3,6	
N3186140	SCM 4 PLUS-75/75 T				3 ~ 230 V	3,7			1,2	1,8	2,4	3	3,6	
N3183060	SCM 4 PLUS-75/110 M	16	1,5	1,1	1 ~ 230 V	7,8	40		100	92	82	68	44	
N3183070	SCM 4 PLUS-75/110 T				3 ~ 400 V	3,2			1,2	1,8	2,4	3	3,6	
N3183080	SCM 4 PLUS-75/140 M	20	2	1,5	1 ~ 230 V	9,9	50		127	116	105	86	57	
N3183090	SCM 4 PLUS-75/140 T				3 ~ 400 V	4		1,2	1,8	2,4	3	3,6		
N3183100	SCM 4 PLUS-75/210 T	30	3	2,2	3 ~ 400 V	5,9		186	170	155	130	80		



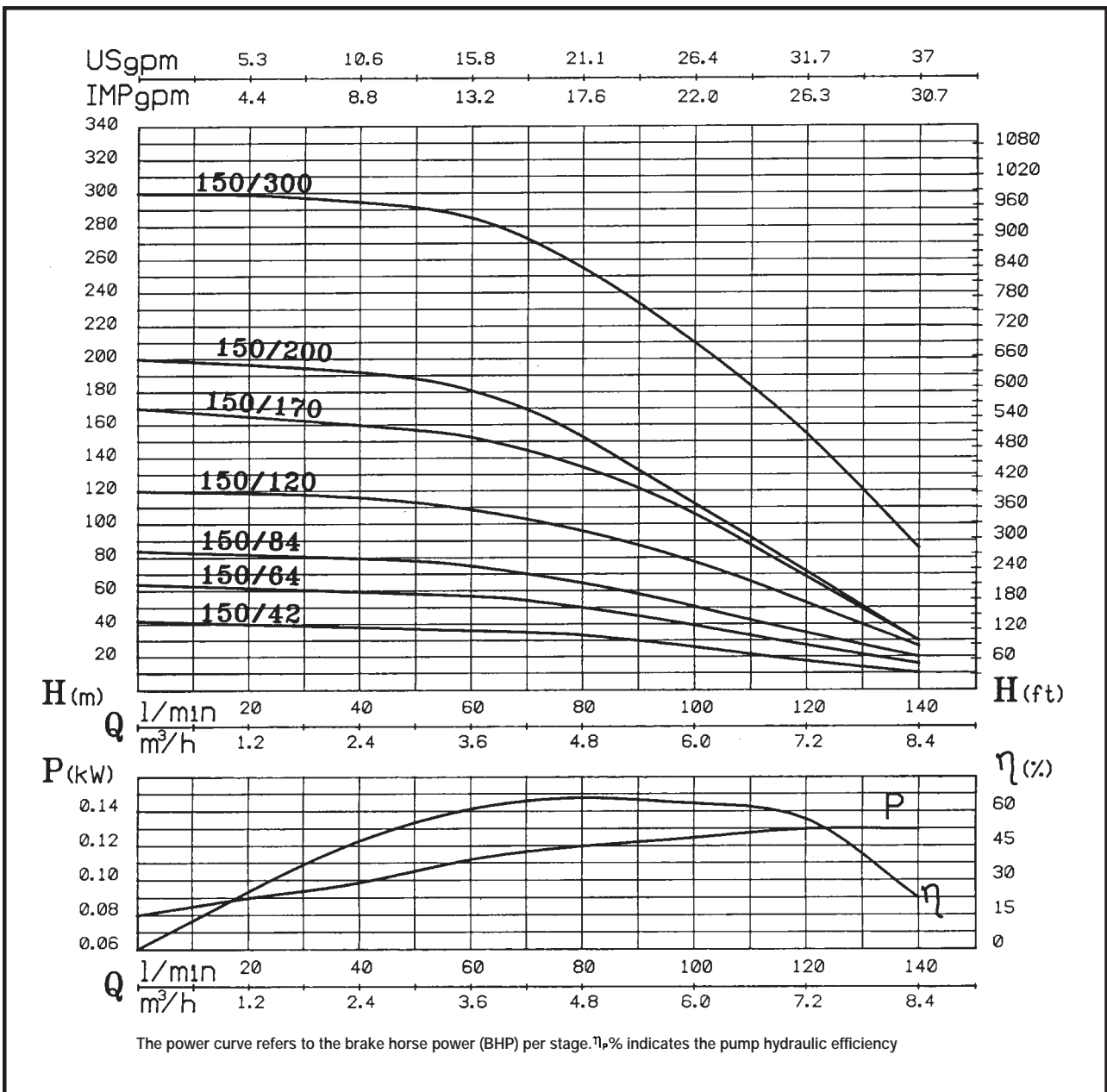
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CODE	MODEL	N' Stages	Motor power		VOLTAGE	Amp.	$\mu$ F.	Q	Discharge head in meters								$\emptyset$ DNM
			HP	Kw					30	40	50	60	80	90	100		
N3184000	SCM 4 PLUS-115/30 M	4	0,5	0,37	1 ~ 230 V	3,2	16	Discharge head in meters	1,8	2,4	3	3,6	4,8	5,4	6	1"1/4	
N3184010	SCM 4 PLUS-115/30 T				3 ~ 400 V	1,1			26	24	22	20	13	9	6,4		
N3184020	SCM 4 PLUS-115/50 M	7	0,75	0,55	1 ~ 230 V	4,3	20		46	43	40	36	23	16	10		
N3184030	SCM 4 PLUS-115/50 T				3 ~ 400 V	1,6											
N3184040	SCM 4 PLUS-115/65 M	9	1	0,75	1 ~ 230 V	5,3	30		58	55	51	46	29	20	11		
N3184050	SCM 4 PLUS-115/65 T				3 ~ 400 V	2,1											
N3186150	SCM 4 PLUS-115/65 T				3 ~ 230 V	3,7											
N3184060	SCM 4 PLUS-115/95 M	13	1,5	1,1	1 ~ 230 V	7,8	40		83	80	74	67	43	30	18		
N3184070	SCM 4 PLUS-115/95 T				3 ~ 400 V	3,2											
N3186160	SCM 4 PLUS-115/95 T				3 ~ 230 V	5,2											
N3184080	SCM 4 PLUS-115/122 M	17	2	1,5	1 ~ 230 V	9,9	50	109	106	98	88	55	38	21			
N3184090	SCM 4 PLUS-115/122 T				3 ~ 400 V	4											
N3184100	SCM 4 PLUS-115/185 T	24	3	2,2	3 ~ 400 V	5,9		160	153	143	130	85	58	31			
N3184110	SCM 4 PLUS-115/245 T	33	4	3	3 ~ 400 V	7,8		218	210	198	179	118	84	47			

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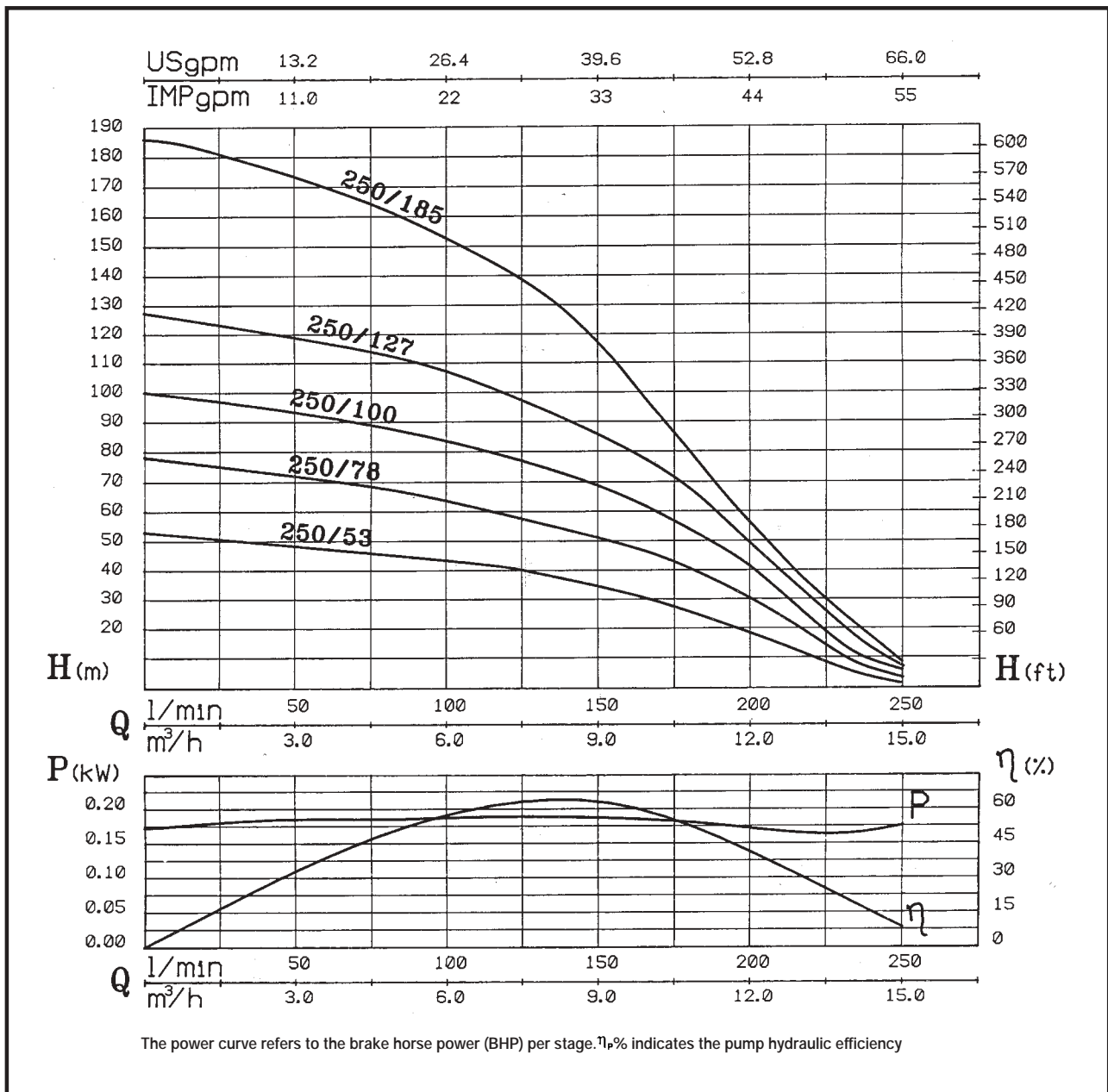


PUMP PERFORMANCE

CODE	MODEL	N' Stages	Motor power		VOLTAGE	Amp.	μF.	Q	Discharge head in meters								Ø DNM
			HP	Kw					40	50	60	80	100	120	140	140	
N3185000	SCM 4 PLUS-150/42 M	6	1	0,75	1 ~ 230 V	5,3	30	Discharge head in meters	2,4	3	3,6	4,8	6	7,2	8,4	2"	
N3185010	SCM 4 PLUS-150/42 T				3 ~ 400 V	2,1			38	37	36	33	26	17	10		
N3186170	SCM 4 PLUS-150/42 T				3 ~ 230 V	3,7											
N3185020	SCM 4 PLUS-150/64 M	9	1,5	1,1	1 ~ 230 V	7,8	40		59	58	57	50	39	27	15		
N3185030	SCM 4 PLUS-150/64 T				3 ~ 400 V	3,2											
N3186180	SCM 4 PLUS-150/64 T				3 ~ 230 V	5,2											
N3185040	SCM 4 PLUS-150/84 M	12	2	1,5	1 ~ 230 V	9,9	50		80	78	75	64	50	34	20		
N3185050	SCM 4 PLUS-150/84 T				3 ~ 400 V	4											
N3186190	SCM 4 PLUS-150/84 T				3 ~ 230 V	6,9											
N3185060	SCM 4 PLUS-150/120 T	17	3	2,2	3 ~ 400 V	5,9			116	113	108	96	77	53	26		
N3185070	SCM 4 PLUS-150/170 T	24	4	3	3 ~ 400 V	7,8		160	157	152	134	106	69	30			
N3185080	SCM 4 PLUS-150/200 T	29	5,5	4	3 ~ 400 V	10		191	188	179	152	112	71	32			
N3185090	SCM 4 PLUS-150/300 T	42	7,5	5,5	3 ~ 400 V	13,7		292	290	285	252	210	155	82			



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CODE	MODEL	N° Stages	Motor power		VOLTAGE	Amp.	μF.	Q	100	120	140	180	200	220	240	ø DNM
			HP	Kw					6	7,2	8,4	10,8	12	13,2	14,4	
N3186000	SCM 4 PLUS-250/53 M	9	2	1,5	1 ~ 230 V	9,9	50	Discharge head in meters	6	7,2	8,4	10,8	12	13,2	14,4	2"
N3186010	SCM 4 PLUS-250/53 T				3 ~ 400 V	4			43	41	37	26	18	11	4	
N3186200	SCM 4 PLUS-250/53 T				3 ~ 230 V	6,9			63	59	54	41	30	18	7	
N3186020	SCM 4 PLUS-250/78 T	13	3	2,2	3 ~ 400 V	5,9	83		78	66	54	41	24	9		
N3186030	SCM 4 PLUS-250/100 T	17	4	3	3 ~ 400 V	7,8	106		100	90	68	49	31	14		
N3186040	SCM 4 PLUS-250/127 T	21	5,5	4	3 ~ 400 V	10	152	141	127	81	57	36	18			
N3186050	SCM 4 PLUS-250/185 T	31	7,5	5,5	3 ~ 400 V	13,7										