

6I Submersible Borehole Pumps For 6" Well

Construction

Submersible borehole pumps for 6"(150mm) deep wells with various type of impellers made of Stainless Steel (SS). The specially designed robust and light weight SS Diffuser and Impeller can withstand all types of water corrosions. The stainless steel and hydraulic materials prevent the Impeller from clogging even after long stationary periods. The life span of the pump set is comparatively higher than the cast type pump sets.

Applications

- Agriculture
- Domestic Building Services
- Commercial Building Services
- Public Utilities

Operating Conditions

- Liquid temperature : upto 33 °C
- Total Solids : 3000ppm (Max.)
- Durability : 50ppm (Silica Scale Max.)
- Continuous duty

Water filled Rewindable motor

- 2-pole Induction motor, 50Hz (n= 2900 rpm)
- Three phase with DOL, S/D connection 440V
- Voltage tolerances : +6% -15%
- Insulation class : B

Special features on request

- Construction as per NEMA Standard
- Versions for star/delta start (SD)
- Special Winding designs for different voltage supplies
- Construction with required metals

MATERIAL SPECIFICATIONS

PUMP

Components	Materials
Suction Housing	SS 304
Diffuser	SS 304
Impeller	SS 410
Pump Shaft	SS 420
Sleeve	SS 410
NRV Body	SS 304
Locking Strip	SS 304
Guide Bushes	LTB4, Rubber
Strainer	SS 202

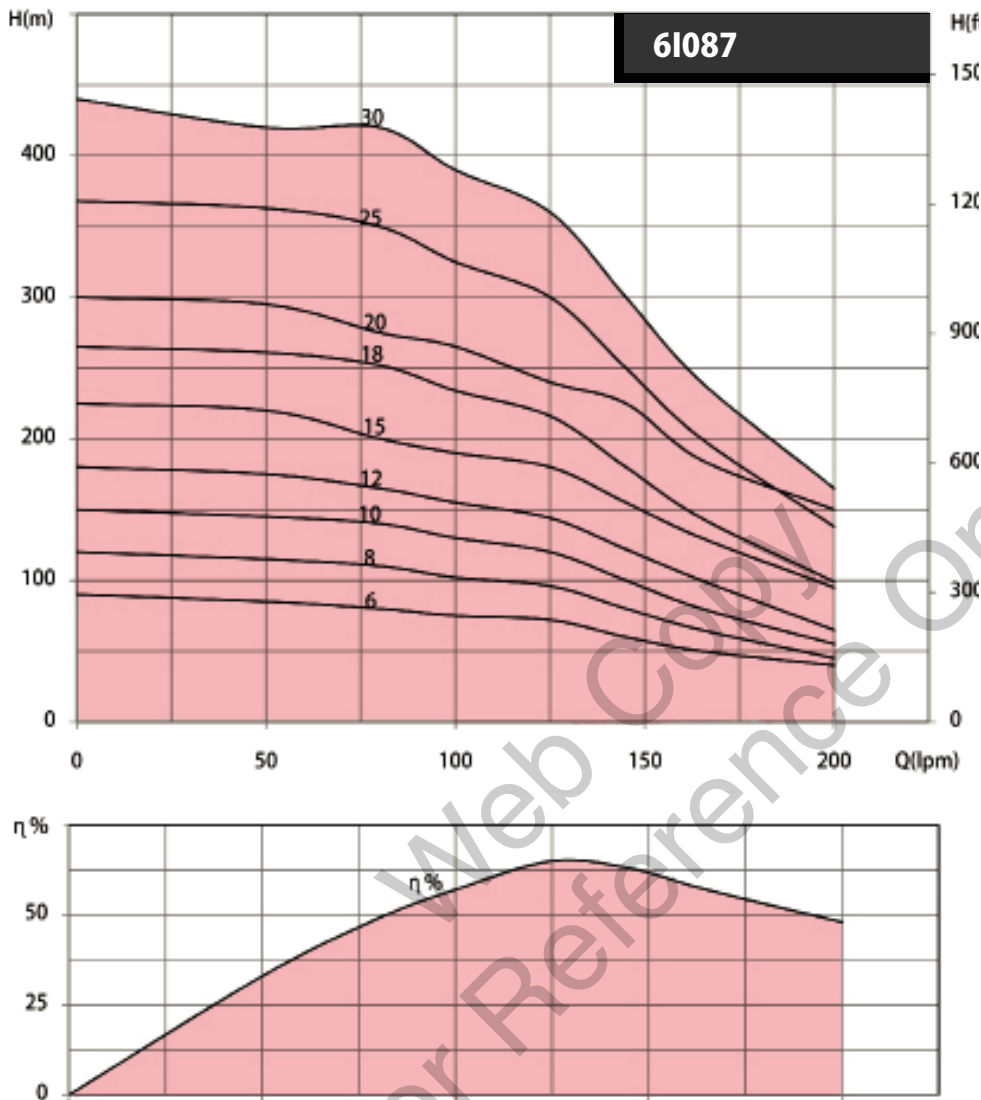
MOTOR

Components	Materials
Body	SS 304
Housings	Cast Iron FG 200
Rotor shaft	SS 420 (Hardened)
Thrust Bearing	Carbon , SS 410
Bearing Bush	LTB4
Seal	Oil Seal, Nitrile Rubber



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Characteristic Curves



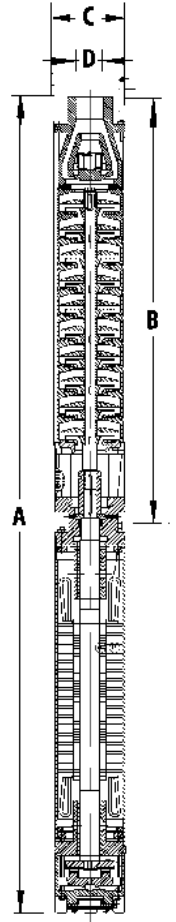
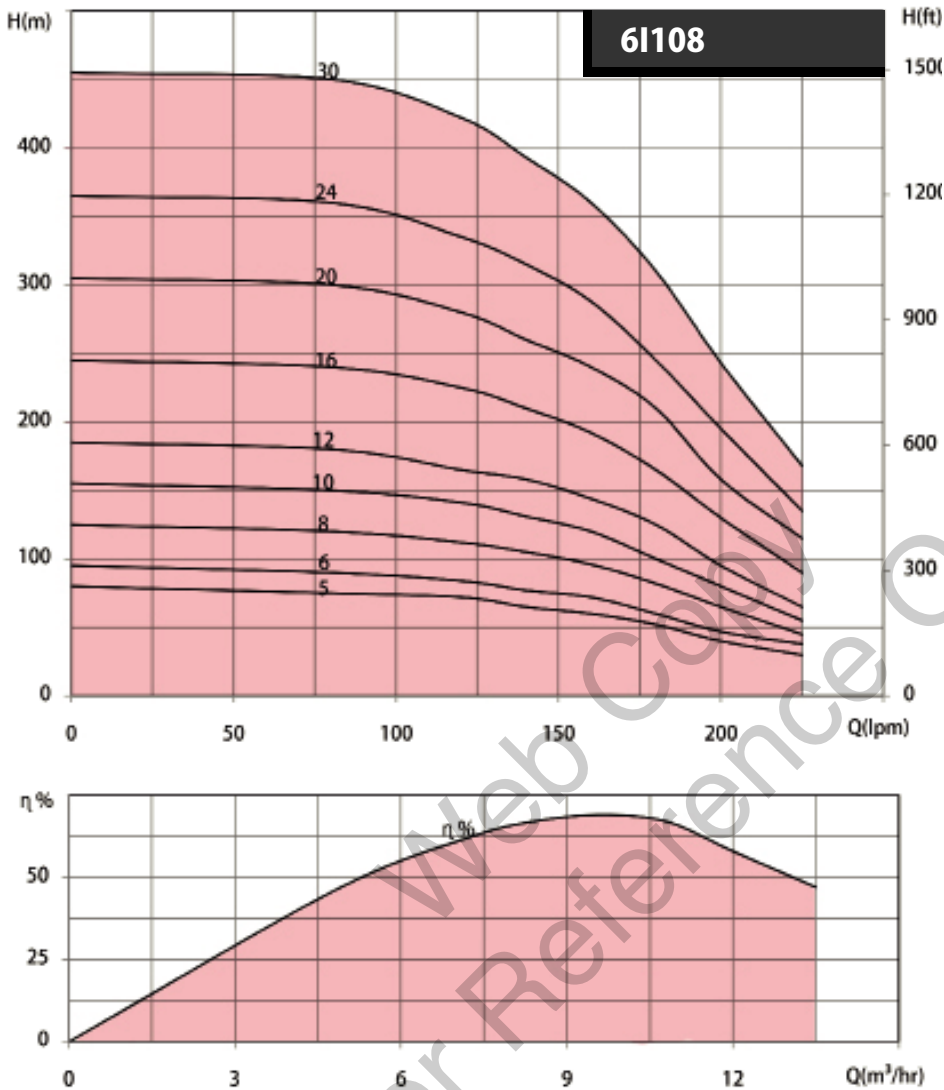
Hydraulic Performance & Dimensions

Product Code	HP	kW	Q - m ³ /hr	0	3.0	4.8	6.0	7.5	9.9	12	Dimension in mm				DNM
				Q - LPM	0	50	80	100	125	165	200	A	B	C	
6I087/6	3.0	2.0	Total Head in Metres	90	85	80	75	72	50	40	1007	442	142	2"	
6I087/8	4.0	3.0		120	115	110	102	96	65	45	1071	506	142	2"	
6I087/10	5.0	3.7		150	145	140	130	120	80	55	1165	570	142	2"	
6I087/12	6.0	4.5		180	175	165	155	144	100	65	1249	634	142	2"	
6I087/15	7.5	5.5		225	220	200	190	180	130	95	1385	730	142	2"	
6I087/18	10.0	7.5		265	261	252	234	216	144	99	1551	826	142	2"	
6I087/20	10.0	7.5		300	295	275	265	240	185	150	1615	890	142	2"	
6I087/25	12.5	9.3		368	363	350	325	300	200	138	1815	1050	142	2"	
6I087/30	15.0	11.0		440	420	420	390	360	240	165	2005	1210	142	2"	

* M - Single Phase, T - Three Phase, Q - Discharge, DNM - Nominal Diameter

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Characteristic Curves



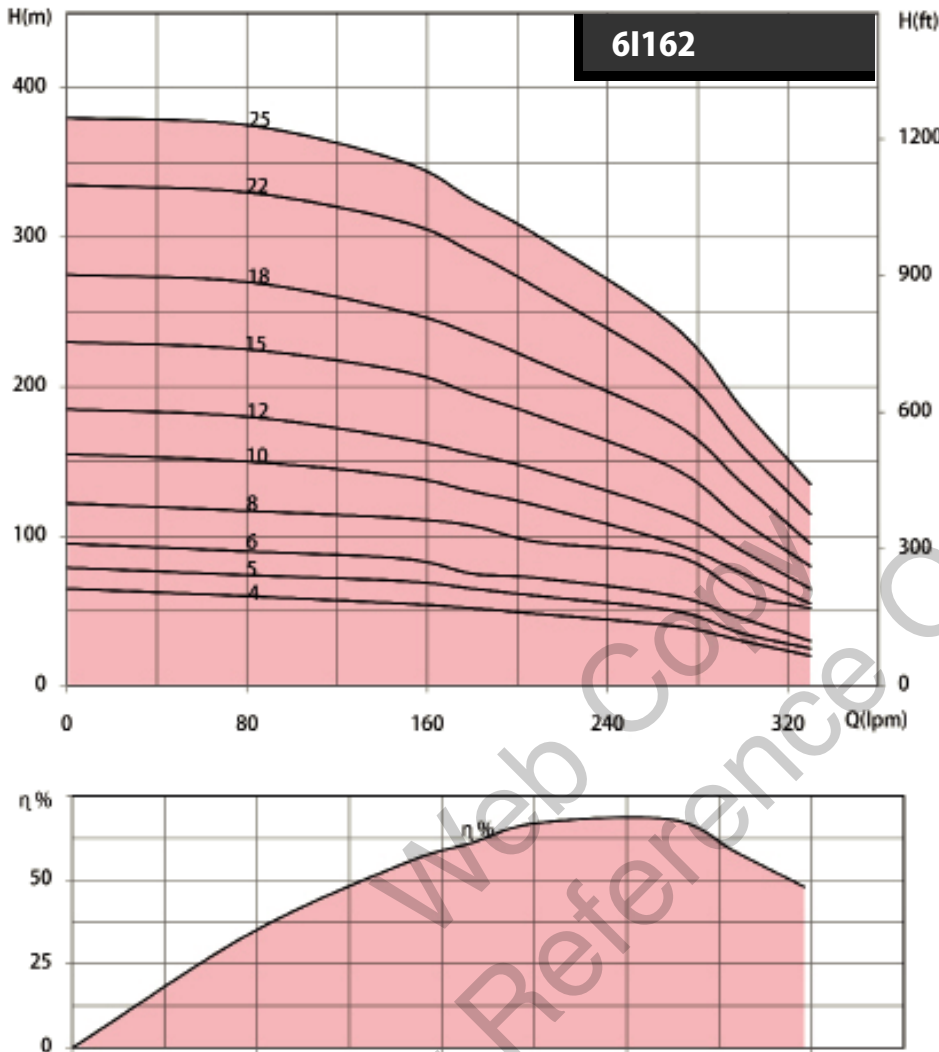
Hydraulic Performance & Dimensions

Product Code	HP	kW	Q - m³/hr	0	4.8	7.2	8.4	9.6	12.0	13.5	Dimension in mm				DNM
				Q - LPM	0	80	120	140	160	200	225	A	B	C	
6I108/5	3.0	2.2	Total Head in Metres	80	75	72	65	60	40	30	971	406	142	2"	
6I108/6	4.0	3.0		95	90	84	77	72	47	46	1007	442	142	2"	
6I108/8	5.0	3.7		125	120	112	105	96	65	45	1101	506	142	2"	
6I108/10	6.0	4.5		155	150	141	131	120	80	55	1185	570	142	2"	
6I108/12	7.5	5.5		185	180	165	158	144	95	65	1289	634	142	2"	
6I108/16	10.0	7.5		245	240	225	210	192	130	90	1487	762	142	2"	
6I108/20	12.5	9.3		305	300	280	260	240	158	115	1655	890	142	2"	
6I108/24	15.0	11.0		365	360	335	315	288	195	135	1813	1018	142	2"	
6I108/30	17.5	13.2		455	450	422	393	360	243	168	2055	1210	142	2"	

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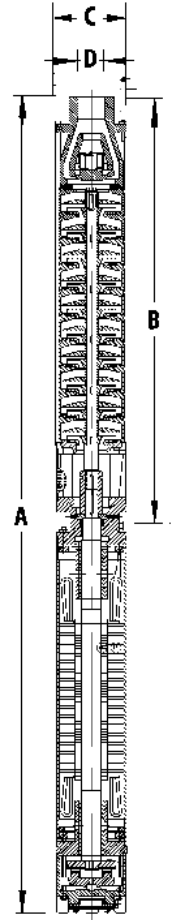
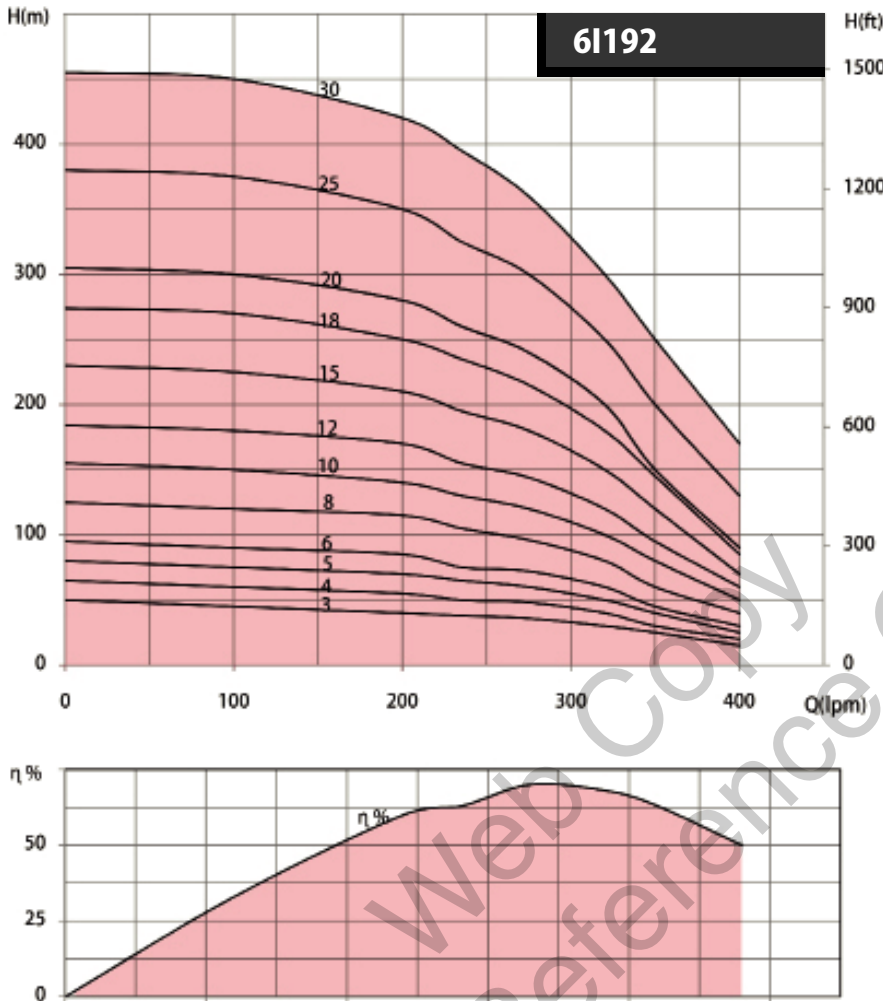
Hydraulic Performance & Dimensions

Product Code	HP	kW	Q - m ³ /hr	0	4.8	9	10.8	12.6	18.0	19.8	Dimension in mm			DNM
			Q - LPM	0	80	150	180	210	300	330	A	B	C	D
6I162/4	3.0	2.0	Total Head in Metres	65	60	55	52	48	30	20	963	398	142	2"
6I162/5	4.0	3.0		79	74	70	65	60	35	25	1000	435	142	2"
6I162/6	5.0	3.7		95	90	85	75	72	45	30	1067	472	142	2"
6I162/8	6.0	4.5		122	117	112	107	96	62	52	1161	546	142	2"
6I162/10	7.5	5.5		155	150	140	130	120	75	55	1275	620	142	2"
6I162/12	10.0	7.5		185	180	165	155	144	90	65	1419	694	142	2"
6I162/15	12.5	9.3		230	225	210	195	180	110	80	1570	805	142	2"
6I162/18	15.0	11.0		275	270	250	235	216	135	95	1711	916	142	2"
6I162/22	17.5	13.2		335	330	310	290	265	160	115	1909	1064	142	2"
6I162/25	20.0	15.0		380	375	350	325	300	185	135	2060	1175	142	2"

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6l Submersible Borehole Pumps For 6" Well

Characteristic Curves



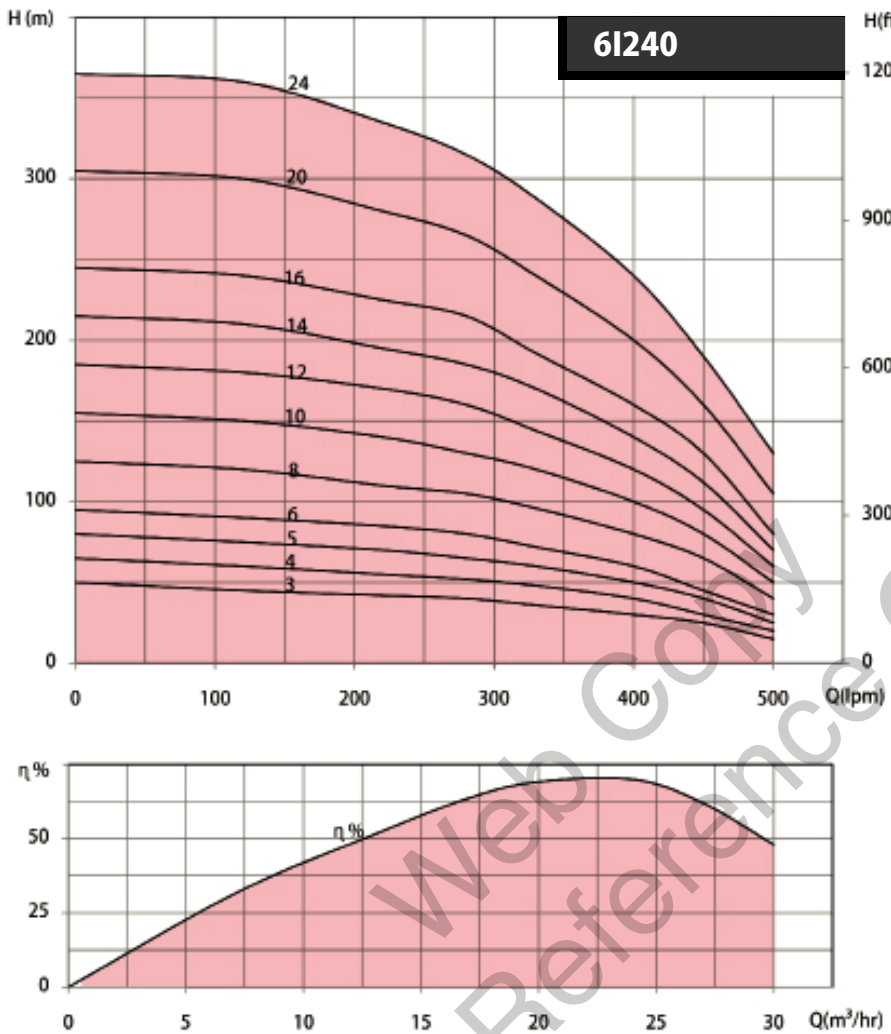
Hydraulic Performance & Dimensions

Product Code	HP	kW	Q - m ³ /hr								Dimension in mm				DNM
			0	6.0	12	16.5	19.2	21.0	24	A	B	C	D		
6l192/3	3.0	2.2	0	100	200	275	320	350	400	935	370	142	2.5"		
6l192/4	4.0	3.0	0	100	200	275	320	350	400	975	410	142	2.5"		
6l192/5	5.0	3.7	0	100	200	275	320	350	400	1045	450	142	2.5"		
6l192/6	6.0	4.5	0	100	200	275	320	350	400	1105	490	142	2.5"		
6l192/8	7.5	5.5	0	100	200	275	320	350	400	1225	570	142	2.5"		
6l192/10	10.0	7.5	0	100	200	275	320	350	400	1375	650	142	2.5"		
6l192/12	12.5	9.3	0	100	200	275	320	350	400	1495	730	142	2.5"		
6l192/15	15.0	11.0	0	100	200	275	320	350	400	1645	850	142	2.5"		
6l192/18	17.5	13.2	0	100	200	275	320	350	400	1815	970	142	2.5"		
6l192/20	20.0	15.0	0	100	200	275	320	350	400	1935	1050	142	2.5"		
6l192/25	25.0	19.0	0	100	200	275	320	350	400	2175	1250	142	2.5"		
6l192/30	30.0	22.0	0	100	200	275	320	350	400	2415	1450	142	2.5"		

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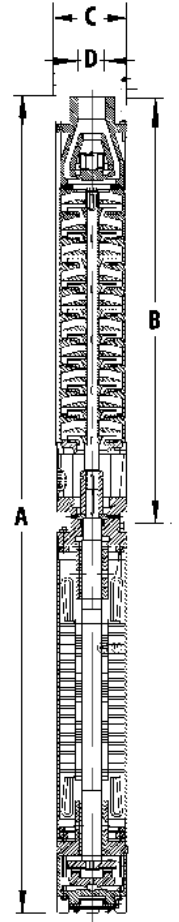
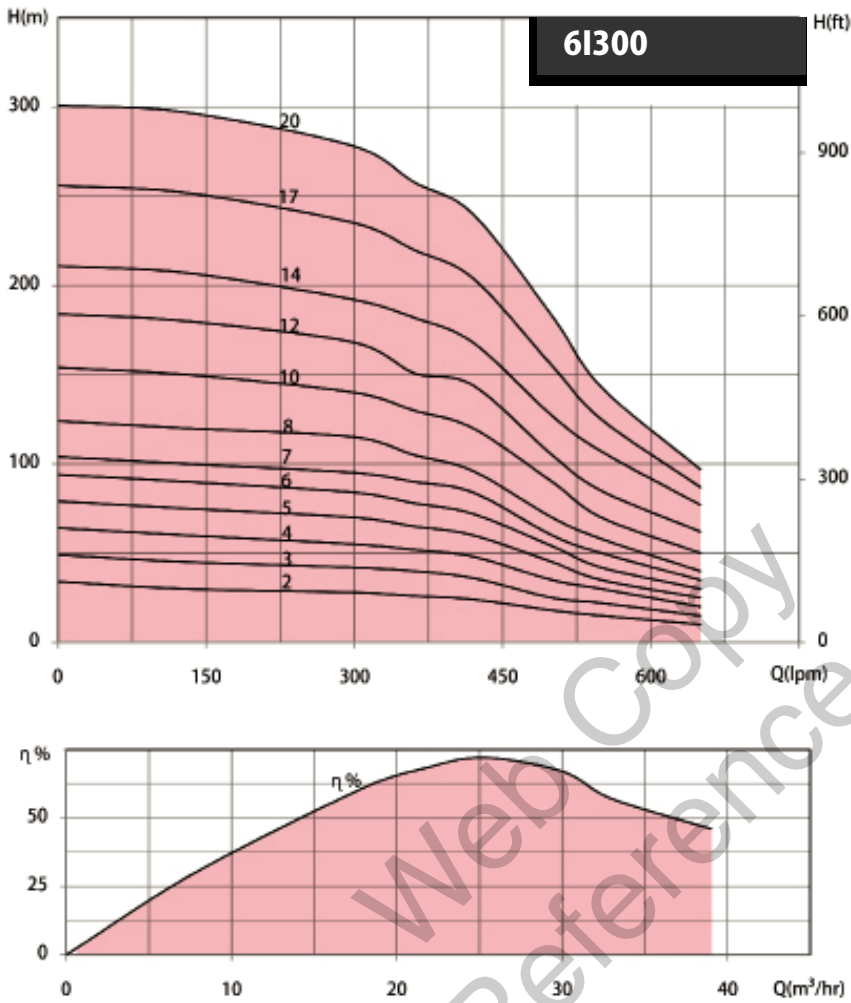
Hydraulic Performance & Dimensions

Product Code	HP	Kw	Q - m³/hr	0	7.2	13.2	16.8	24	27.0	30	Dimension in mm				DNM
				Q - LPM	0	120	220	280	400	450	500	A	B	C	
6I240/3	4.0	3.0	Total Head in Metres	50	45	42	40	30	25	15	947	382	142	2.5"	
6I240/4	5.0	3.7		65	60	55	52	40	30	20	1021	426	142	2.5"	
6I240/5	6.0	4.5		80	75	70	65	50	40	25	1085	470	142	2.5"	
6I240/6	7.5	5.5		95	90	85	80	60	45	30	1169	514	142	2.5"	
6I240/8	10.0	7.5		125	120	110	105	80	65	40	1327	602	142	2.5"	
6I240/10	12.5	9.3		155	150	140	130	100	80	50	1455	690	142	2.5"	
6I240/12	15.0	11.0		185	180	170	160	120	95	60	1573	778	142	2.5"	
6I240/14	17.5	13.2		215	210	195	185	140	112	70	1711	866	142	2.5"	
6I240/16	20.0	15.0		245	240	225	215	160	130	80	1839	954	142	2.5"	
6I240/20	25.0	19.0		305	300	280	265	200	160	105	2055	1130	142	2.5"	
6I240/24	30.0	20.0		365	360	335	315	240	190	130	2271	1306	142	2.5"	

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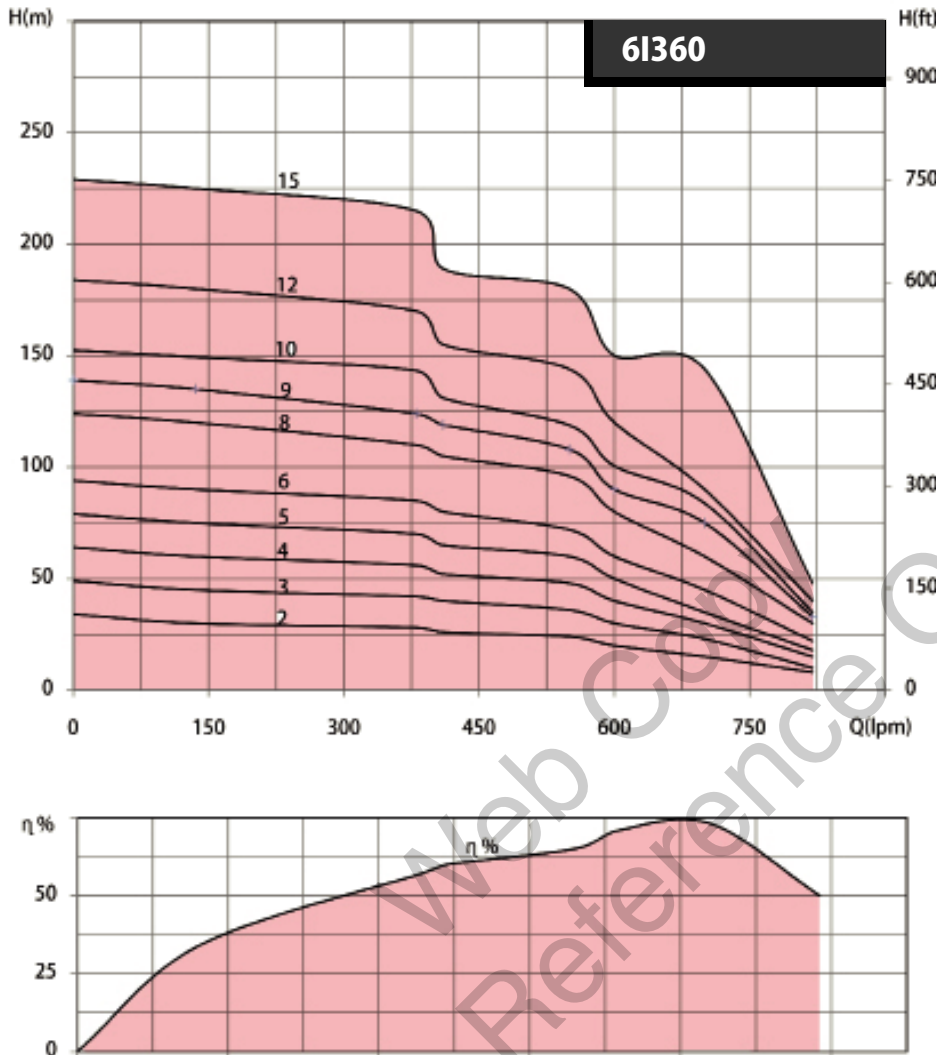
Hydraulic Performance & Dimensions

Product Code	HP	kW	Q - m³/hr	0	7.8	18	21.6	25.2	33.0	39	Dimension in mm			DNM
			Q - LPM	0	130	300	360	420	550	650	A	B	C	D
6I300/2	3.0	2.0	Total Head in Metres	34	30	28	26	24	15	10	911	346	142	2.5"
6I300/3	5.0	3.7		49	45	42	40	36	22	15	989	394	142	2.5"
6I300/4	6.0	4.5		64	60	55	52	48	30	20	1057	442	142	2.5"
6I300/5	7.5	5.5		79	75	70	65	60	35	25	1145	490	142	2.5"
6I300/6	10.0	7.5		94	90	84	78	72	42	30	1263	538	142	2.5"
6I300/7	10.0	7.5		104	100	95	90	84	50	35	1311	586	142	2.5"
6I300/8	12.5	9.3		124	120	115	105	96	58	40	1399	634	142	2.5"
6I300/10	15.0	11.0		154	150	140	130	120	70	50	1525	730	142	2.5"
6I300/12	17.5	13.2		184	180	168	151	144	85	62	1671	826	142	2.5"
6I300/14	20.0	15.0		211	207	192	182	168	107	77	1807	922	142	2.5"
6I300/17	25.0	19.0		256	252	235	220	204	125	87	1991	1066	142	2.5"
6I300/20	30.0	20.0		301	297	278	258	240	143	97	2175	1210	142	2.5"

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Hydraulic Performance & Dimensions

Product Code	HP	kW	Q - m ³ /hr	0	8.1	22.8	24.6	33	42.0	49.2	Dimension in mm			DNM
				Q - LPM	0	135	380	410	550	700	820	A	B	
6I360/2	5.0	3.7	Total Head in Metres	34	30	28	26	24	15	8	955	360	142	2.5"
6I360/3	6.0	4.5		49	45	42	40	36	23	10	1030	415	142	2.5"
6I360/4	7.5	5.5		64	60	56	52	48	30	15	1125	470	142	2.5"
6I360/5	10.0	7.5		79	75	70	65	60	35	18	1250	525	142	2.5"
6I360/6	12.5	9.3		94	90	85	80	72	45	22	1345	580	142	2.5"
6I360/8	15.0	11.0		124	120	110	105	96	60	30	1485	690	142	2.5"
6I360/9	17.5	13.2		139	135	124	119	108	75	33	1590	745	142	2.5"
6I360/10	20.0	15.0		154	150	140	132	120	84	35	1685	800	142	2.5"
6I360/12	25.0	19.0		184	180	170	155	144	90	40	1835	910	142	2.5"
6I360/15	30.0	20.0		229	225	215	189	180	144	48	2040	1075	142	2.5"

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