4N
Submersible Borehole Pumps For 4" Well

EKKI PUMPS | SYSTEMS

Construction

Submersible borehole pumps for 4"(100mm) deep wells with radial flow Impellers coupled with our high precision motors give splendid performance. Improvised diffuser design gives better discharge properties. The noryl and hydraulic materials prevent the impellers from clogging even after long stationary periods.

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)
- For single phase 220V and for Three Phase 440V
- Voltage tolerances : +6% -15%
- Insulation class : B

Special features

- Available with three phase models
- Winding designs for different voltage supplies
- Construction with required metals

MATERIAL SPECIFICATIONS

PUMP

Components	Materials
Suction Housing	Cast Iron FG 200
Diffuser	Noryl, GF30%
Impeller	Noryl, GF30%
Pump Shaft	SS 420
Sleeve	SS 410
NRV Body	Cast Iron
Locking Strip	SS 304
Guide Bushes	LTB4
Delivery Flange	SG Iron
Strainer	SS 202

MOTOR

Components	Materials
Body	SS 304
Housings	Cast Iron FG 200
Rotor shaft	SS 420 (Hardened)
Thrust Bearing	Carbon , SS410
Bearing Bush	LTB4
Seal	Oil Seal, Nitrile Rubber

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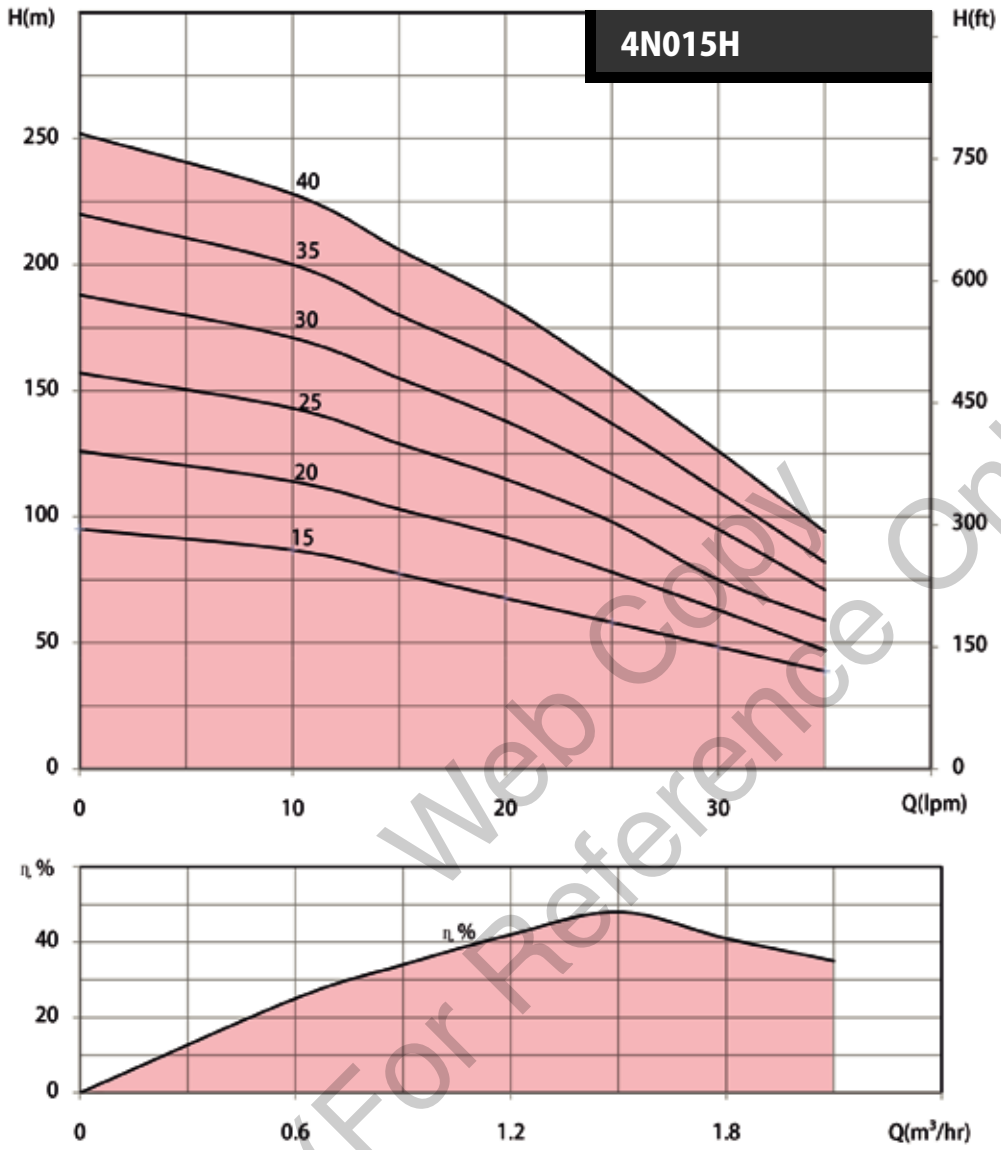
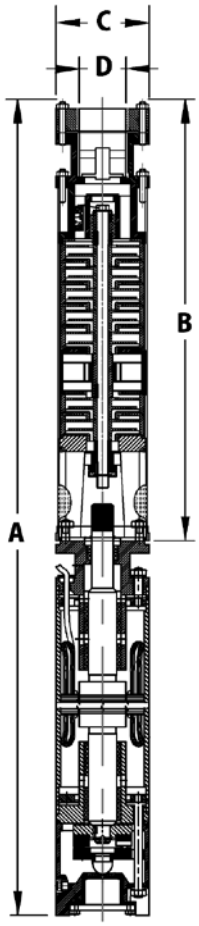
Characteristic Curves





Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	0.6	0.9	1.2	1.5	1.8	2.1	Dimension in mm			DNM
				Q - LPM	0	10	15	20	25	30	35	A	B	C	D
4N015H/15	0.75	0.5	M	Total Head in Metres	95	89	80	71	60	43	30	960	575	97.5	1.25"
4N015H/20	1.0	0.75	M		126	114	103	92	78	63	47	1085	700	97.5	1.25"
4N015H/25	1.5	1.1	M/T		157	143	129	115	98	79	59	1240	825	97.5	1.25"
4N015H/30	1.5	1.1	M/T		188	171	155	138	117	95	71	1415	1000	97.5	1.25"
4N015H/35	2.0	1.5	M/T		220	200	180	161	137	110	82	1580	1125	97.5	1.25"
4N015H/40	2.0	1.5	M/T		252	228	206	184	156	126	94	1705	1250	97.5	1.25"

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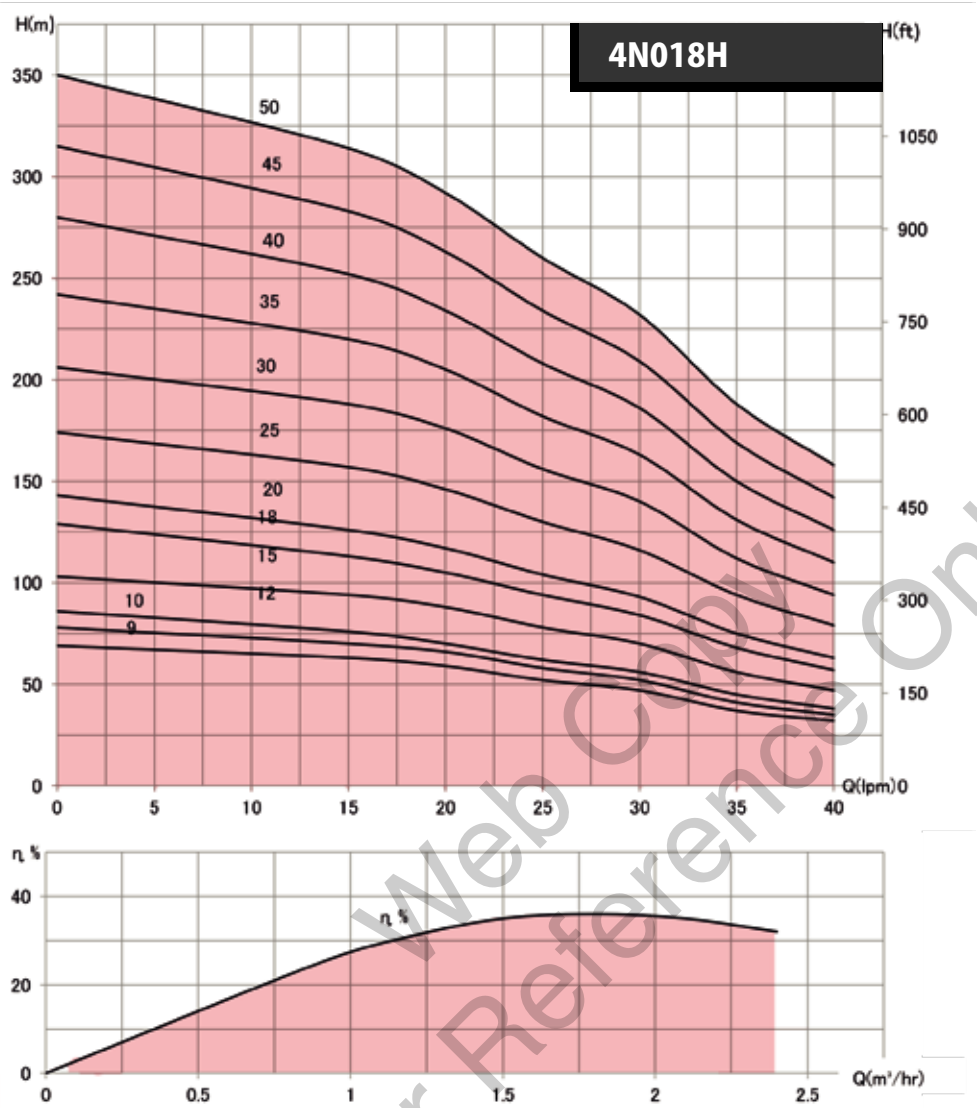

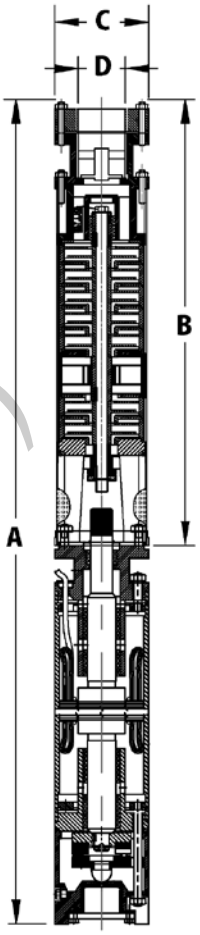

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	0.9	1.2	1.6	1.8	2.1	2.4	Dimension in mm			DNM
				Q - LPM	0	15	20	25	30	35	40	A	B	C	D
4N018H/9	0.5	0.37	M	Total Head in Metres	69	63	59	52	47	37	32	1015	485	97.5	1.25"
4N018H/10	0.75	0.5	M		78	70	66	58	52	41	35	1040	510	97.5	1.25"
4N018H/12	0.75	0.5	M		86	76	70	62	56	45	38	1090	560	97.5	1.25"
4N018H/15	1.0	0.75	M/T		103	94	88	78	70	56	47	1165	635	97.5	1.25"
4N018H/18	1.5	1.1	M/T		129	113	105	94	84	68	57	1280	710	97.5	1.25"
4N018H/20	1.5	1.1	M/T		143	126	117	104	93	75	63	1330	760	97.5	1.25"
4N018H/25	2.0	1.5	M/T		174	157	146	130	116	94	79	1535	885	97.5	1.25"
4N018H/30	2.0	1.5	M/T		206	188	176	156	140	112	94	1710	1060	97.5	1.25"
4N018H/35	3.0	2.0	M/T		242	220	205	182	163	131	110	1895	1185	97.5	1.25"
4N018H/40	3.0	2.0	M/T		280	252	234	208	186	150	126	2020	1310	97.5	1.25"
4N018H/45	4.0	3.0	T		315	283	263	234	209	169	142	2195	1485	97.5	1.25"
4N018H/50	5.0	3.7	T		350	314	292	260	232	188	158	2360	1610	97.5	1.25"

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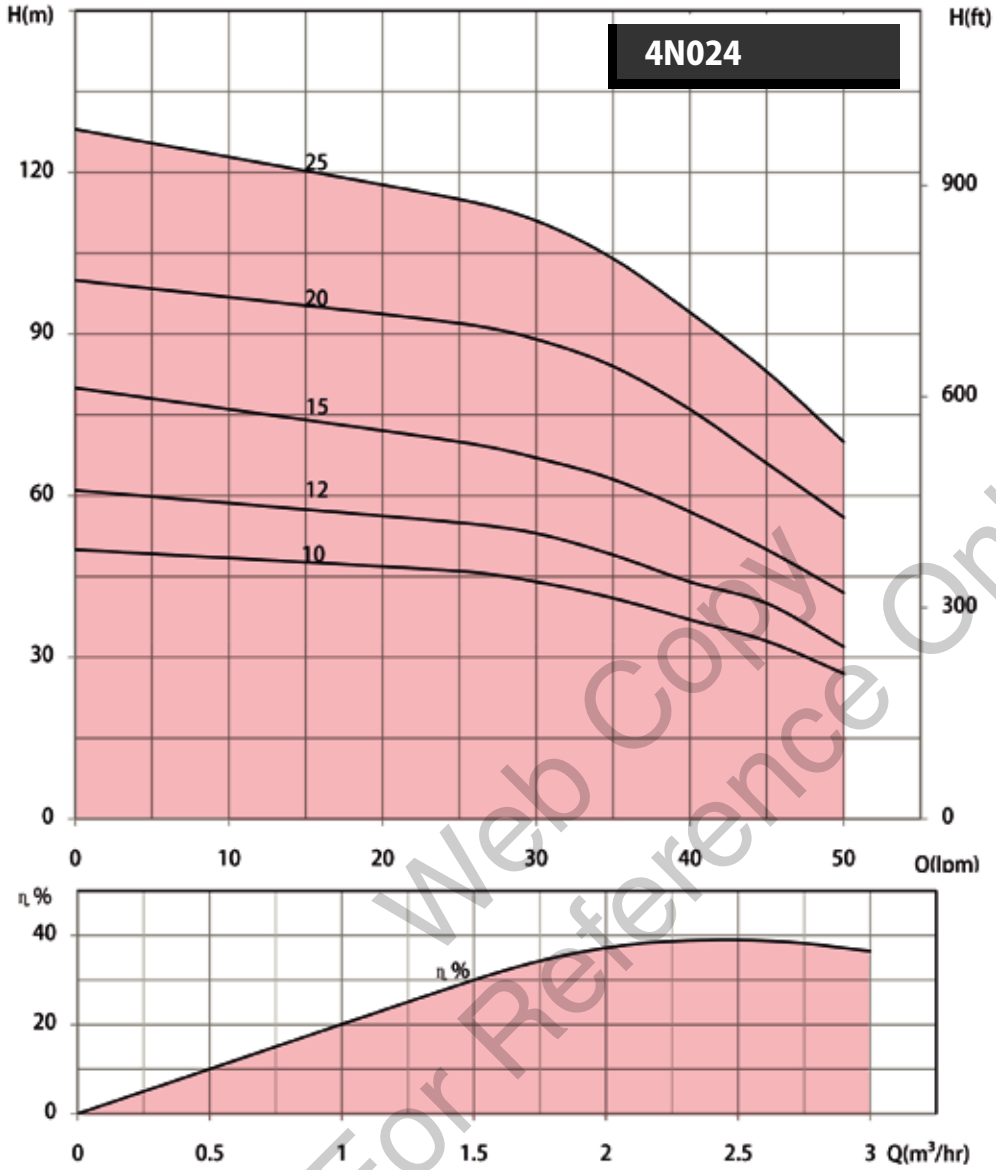

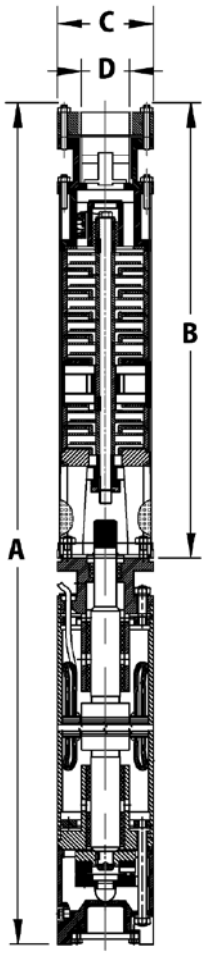

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	1.5	1.8	2.1	2.4	2.7	3.0	Dimension in mm			DNM
				Q - LPM	0	25	30	35	40	45	50	A	B	C	D
4N024/10	0.75	0.5	M/T	Total Head in Metres	50	46	44	41	37	33	27	1015	485	97.5	1.25"
4N024/12	1.0	0.75	M/T		64	56	54	50	46	42	34	1060	530	97.5	1.25"
4N024/15	1.0	0.75	M/T		80	70	67	63	57	50	42	1128	598	97.5	1.25"
4N024/20	1.5	1.1	M/T		100	92	89	84	76	66	56	1280	710	97.5	1.25"
4N024/25	2.0	1.5	M/T		128	115	111	104	94	83	70	1473	823	97.5	1.25"

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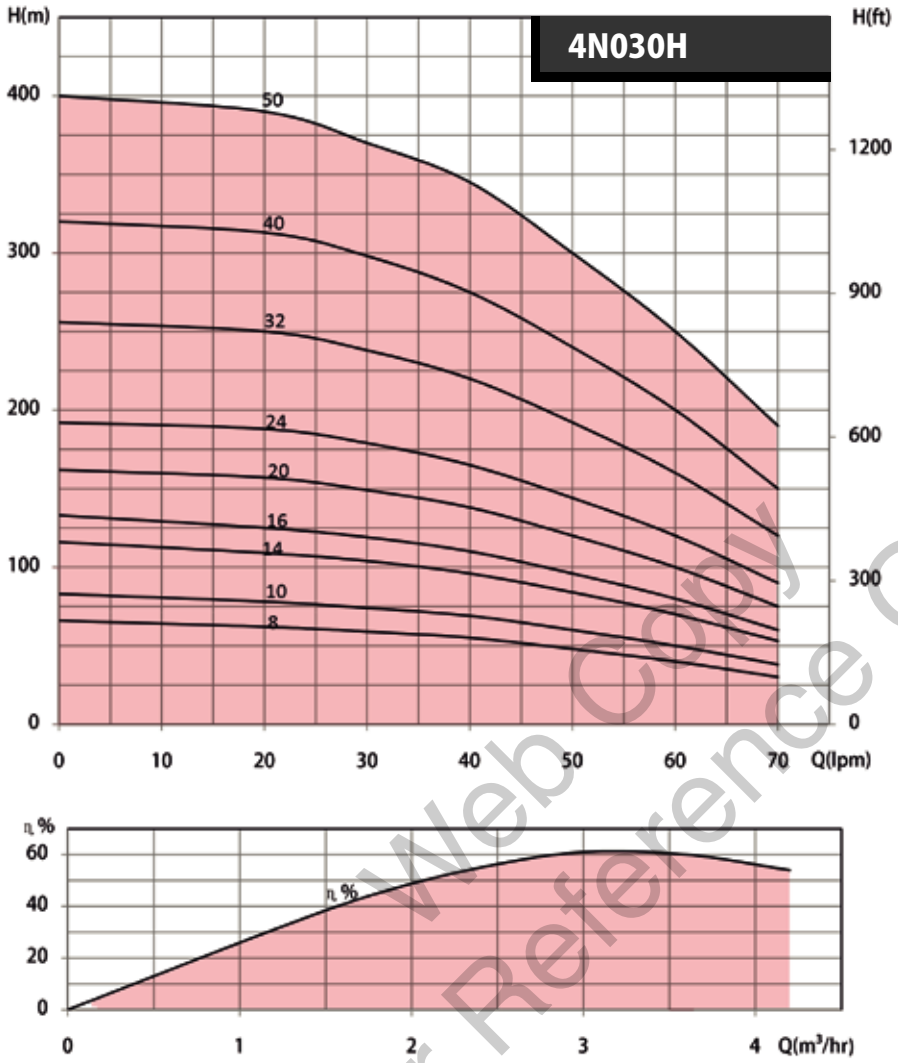

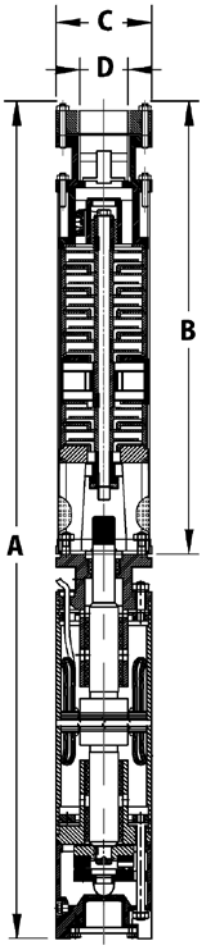

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	1.2	1.8	2.4	3.0	3.6	4.2	Dimension in mm			DNM
				Q - LPM	0	20	30	40	50	60	70	A	B	C	D
4N030H/8	1.0	0.75	M/T	Total Head in Metres	66	62	59	55	48	40	30	1014	484	97.5	1.5"
4N030H/10	1.0	0.75	M/T		83	78	74	69	60	50	38	1070	540	97.5	1.5"
4N030H/14	1.5	1.1	M/T		116	109	104	96	84	70	53	1222	652	97.5	1.5"
4N030H/16	2.0	1.5	M/T		133	125	119	110	96	80	60	1358	708	97.5	1.5"
4N030H/20	3.0	2.0	M/T		162	157	149	138	120	100	75	1530	820	97.5	1.5"
4N030H/24	3.0	2.0	M/T		192	188	179	165	144	120	90	1642	932	97.5	1.5"
4N030H/32	4.0	3.0	T		256	250	238	220	192	160	120	1916	1206	97.5	1.5"
4N030H/40	5.0	3.7	T		320	313	298	275	240	200	150	2180	1430	97.5	1.5"
4N030H/50	6.0	4.5	T		400	390	370	345	300	250	190	2510	1760	97.5	1.5"

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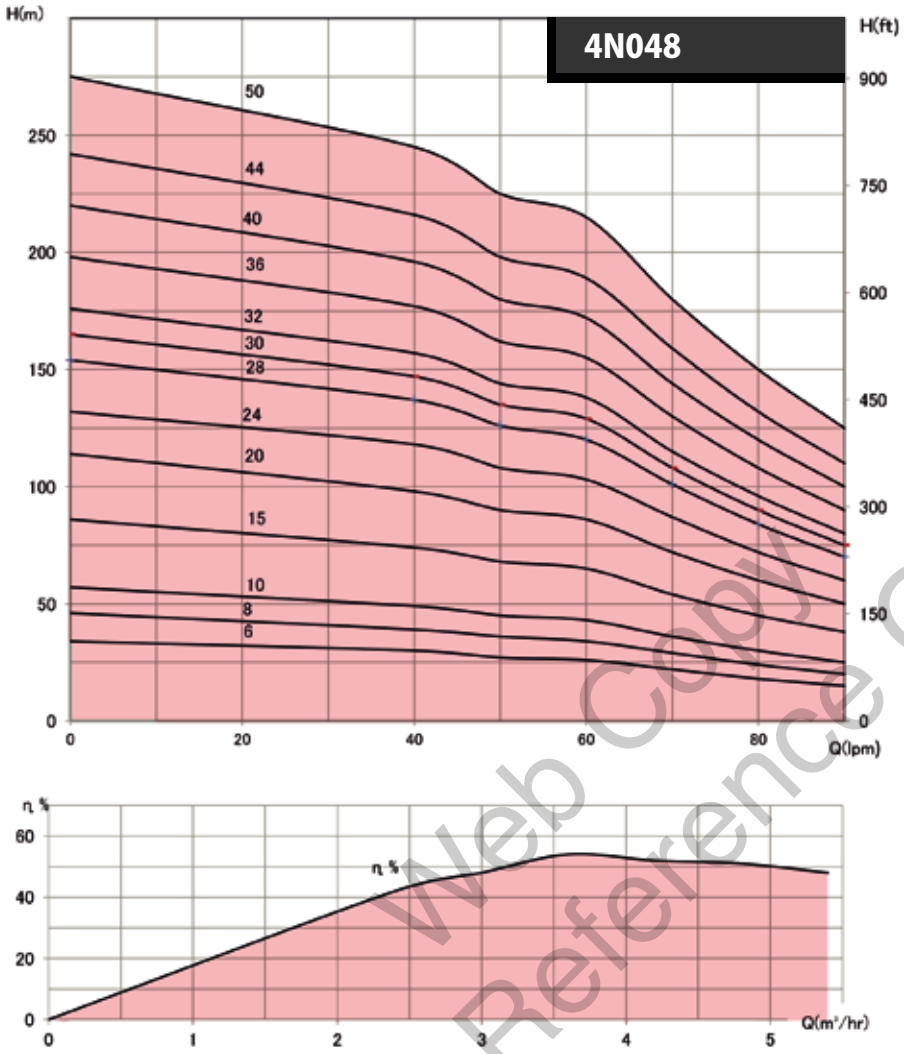

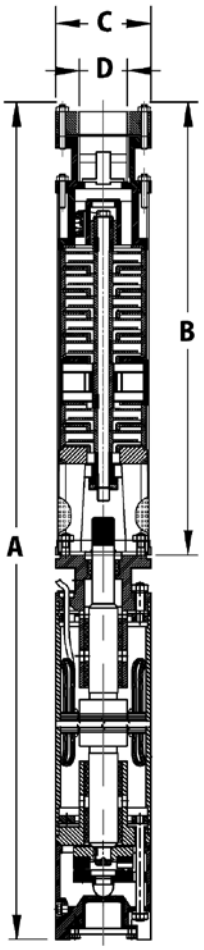

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	2.4	3.0	3.6	4.2	4.8	5.4	Dimension in mm			DNM
				Q - LPM	0	40	50	60	70	80	90	A	B	C	D
4N048/6	0.5	0.37	M	Total Head in Metres	34	30	27	26	22	18	15	940	410	97.5	1.5"
4N048/8	0.75	0.50	M		46	39	36	34	29	24	20	990	460	97.5	1.5"
4N048/10	1.0	0.75	M/T		57	49	45	43	36	30	25	1040	510	97.5	1.5"
4N048/15	1.5	1.1	M/T		86	74	68	65	54	45	38	1205	635	97.5	1.5"
4N048/20	2.0	1.5	M/T		114	98	90	86	72	60	50	1410	760	97.5	1.5"
4N048/24	3.0	2.0	M/T		132	118	108	103	87	72	60	1570	860	97.5	1.5"
4N048/28	3.0	2.0	M/T		154	137	126	120	101	84	70	1720	1010	97.5	1.5"
4N048/30	3.0	2.0	M/T		165	147	135	129	108	90	75	1770	1060	97.5	1.5"
4N048/32	4.0	3.0	T		176	157	144	138	115	96	80	1820	1110	97.5	1.5"
4N048/36	4.0	3.0	T		198	177	162	155	130	108	90	1920	1210	97.5	1.5"
4N048/40	5.0	3.7	T		220	196	180	172	144	150	100	2060	1310	97.5	1.5"
4N048/44	5.0	3.7	T		242	216	198	189	159	132	110	2210	1460	97.5	1.5"
4N048/50	6.0	4.5	T		275	245	225	215	180	150	125	2360	1610	97.5	1.5"

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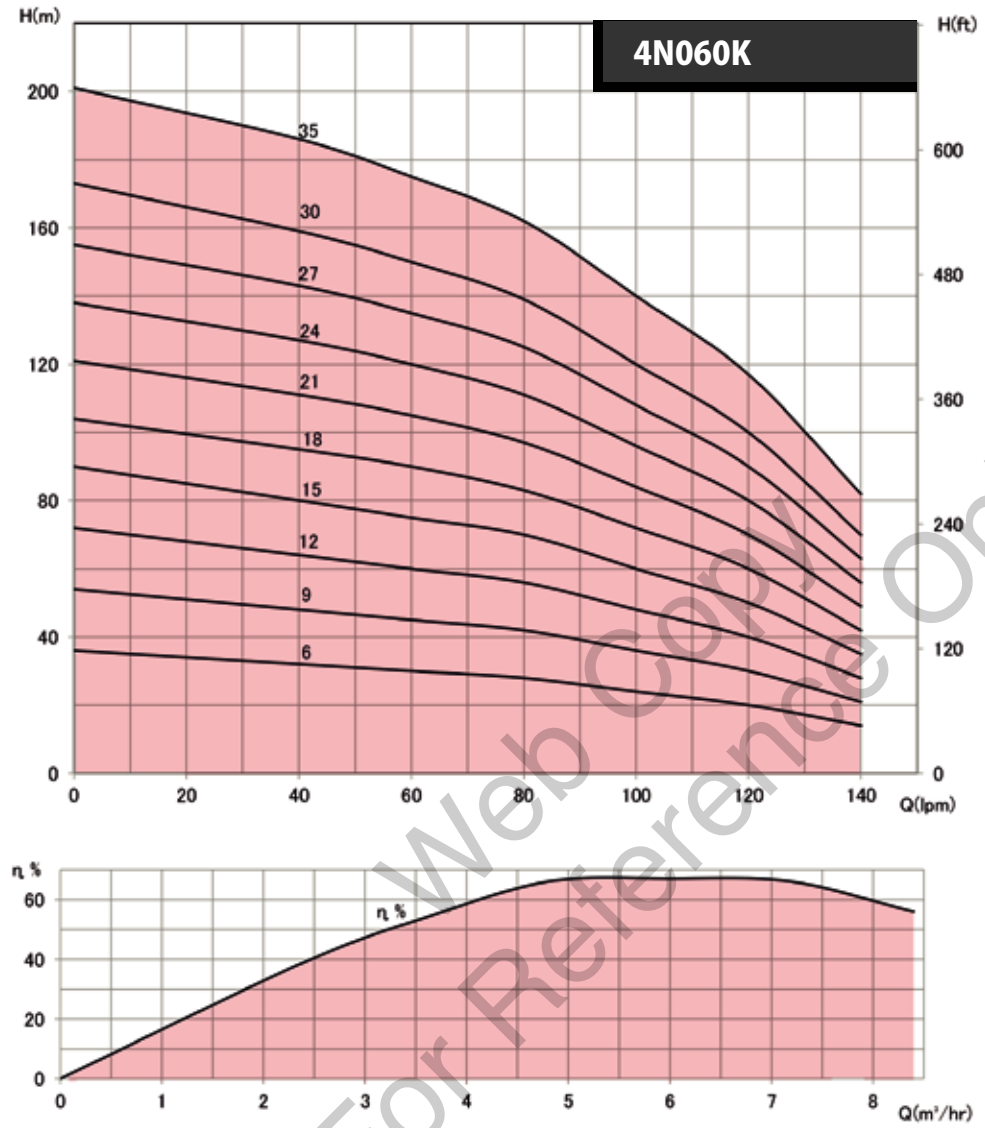

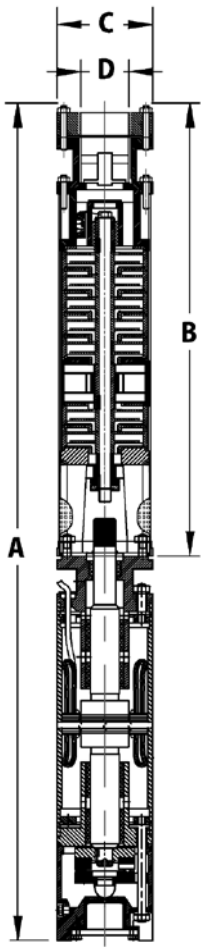

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	2.4	3.6	4.8	6.0	7.2	8.4	Dimension in mm			DNM
				Q - LPM	0	40	60	80	100	120	140	A	B	C	D
4N060K/6	0.8	0.5	M	Total Head in Metres	36	32	30	28	24	20	14	1006	476	97.5	1.5"
4N060K/9	1.0	0.75	M/T		54	48	45	42	36	30	21	1114	584	97.5	1.5"
4N060K/12	1.5	1.1	M/T		72	64	60	56	48	40	28	1262	692	97.5	1.5"
4N060K/15	2.0	1.5	M/T		90	80	75	70	60	50	35	1450	800	97.5	1.5"
4N060K/18	3.0	2.0	M/T		104	95	90	83	72	60	42	1726	1016	97.5	1.5"
4N060K/21	4.0	3.0	T		121	111	105	97	84	70	49	1834	1124	97.5	1.5"
4N060K/24	4.0	3.0	T		138	127	120	111	96	80	56	1942	1232	97.5	1.5"
4N060K/27	4.0	3.0	T		155	143	135	125	108	90	63	2050	1340	97.5	1.5"
4N060K/30	5.0	3.7	T		173	159	150	139	120	100	70	2234	1484	97.5	1.5"
4N060K/35	5.0	3.7	T		201	186	175	162	140	117	82	2414	1664	97.5	1.5"

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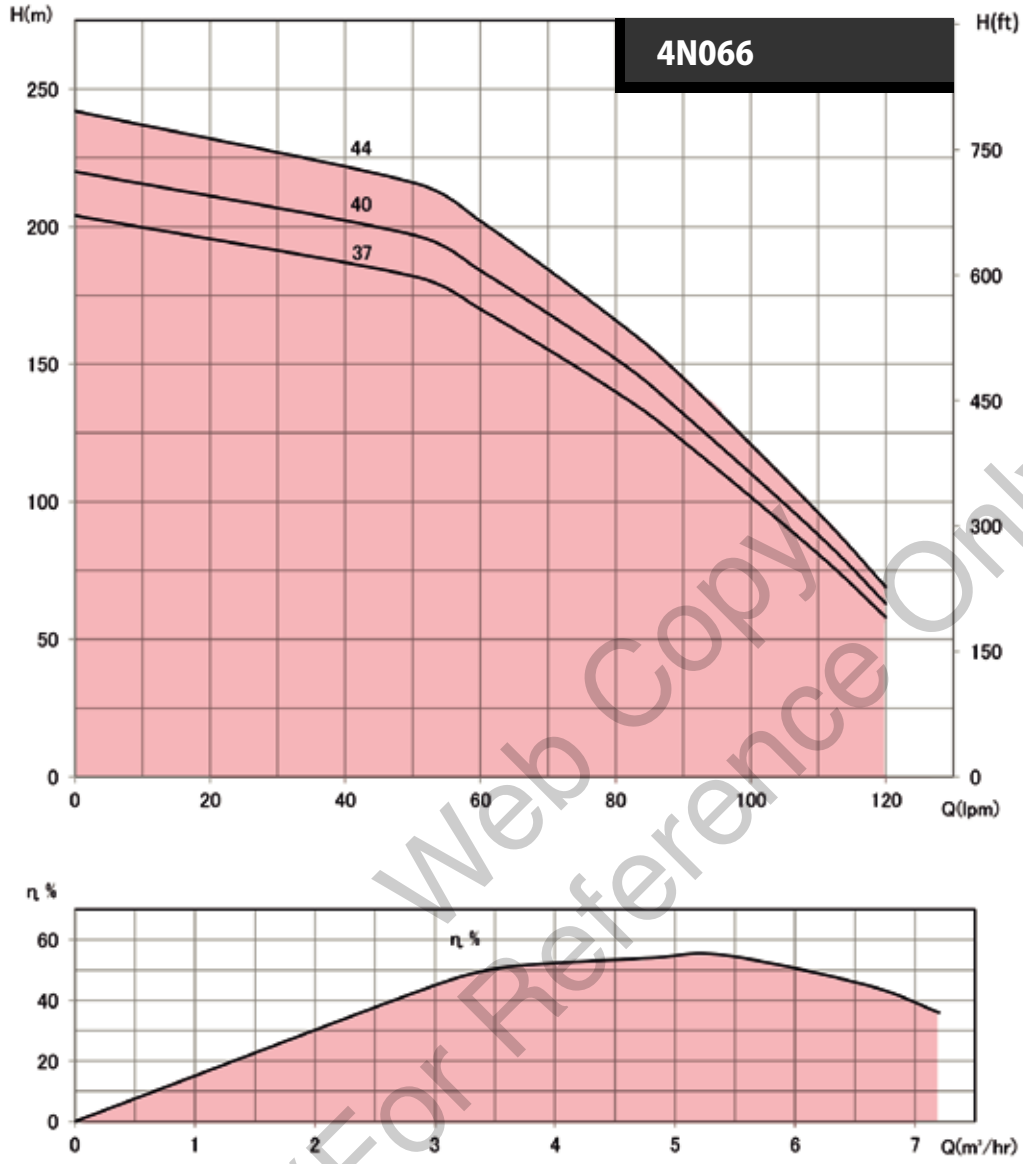

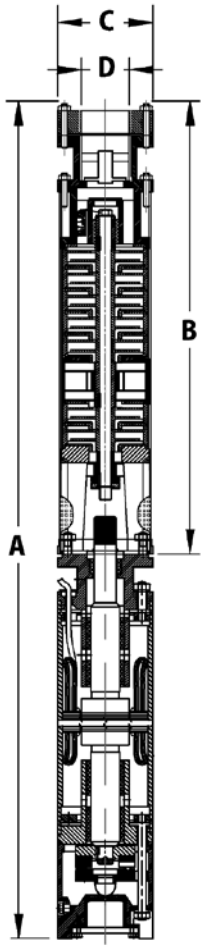

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	3.0	3.6	4.2	5.4	6.6	7.2	Dimension in mm			DNM
				Q - LPM	0	50	60	70	90	110	120	A	B	C	D
4N066/37	5.0	3.7	T	Total Head in Metres	204	182	170	157	122	81	58	1985	1235	97.5	1.5"
4N066/40	6.0	4.5	T		220	197	184	170	132	88	63	2060	1310	97.5	1.5"
4N066/44	6.0	4.5	T		242	216	202	187	145	96	69	2210	1460	97.5	1.5"

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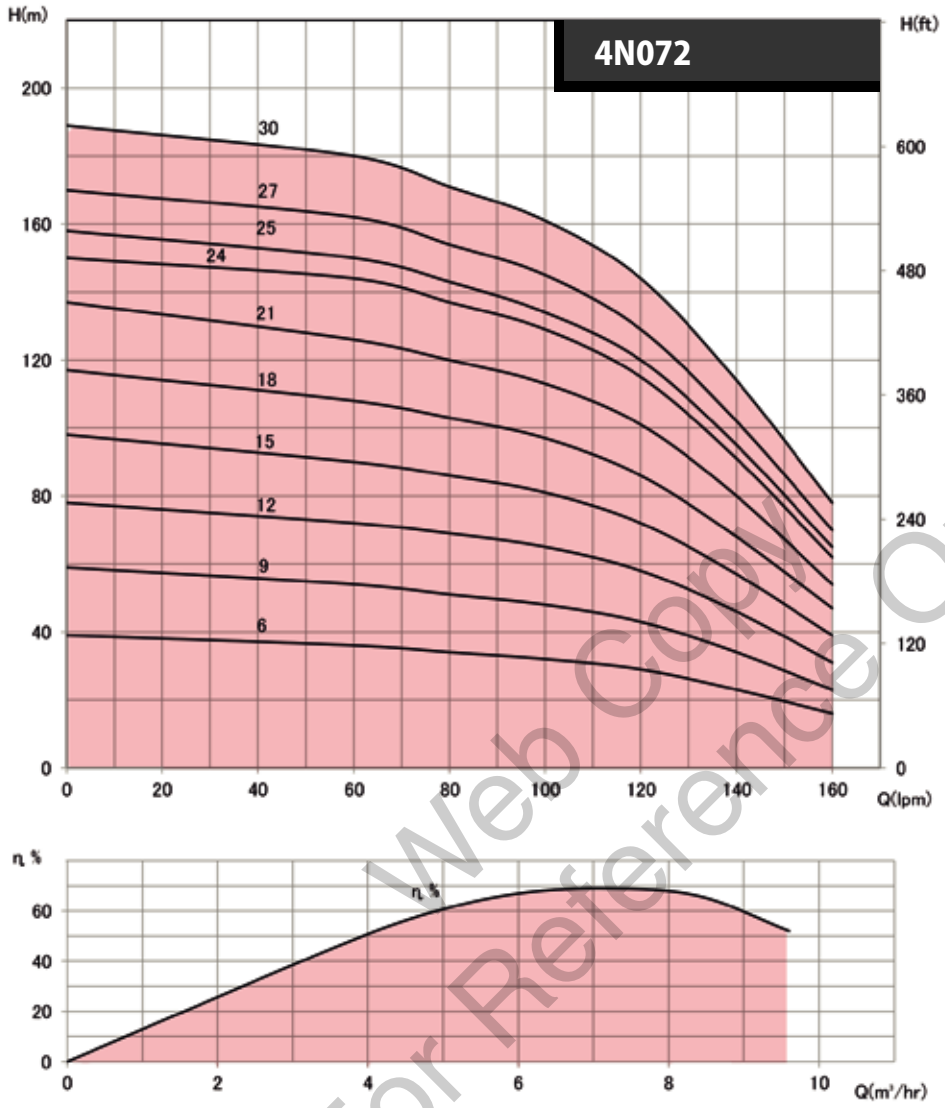

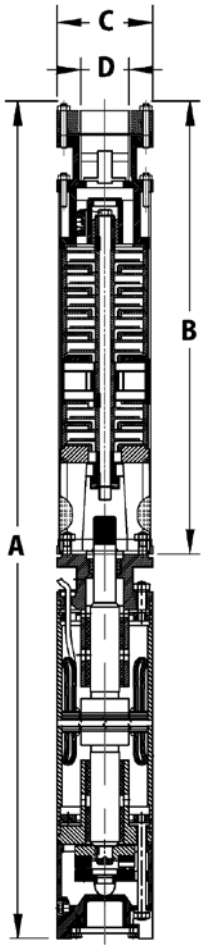

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	3.6	4.8	6.0	7.2	8.4	9.6	Dimension in mm			DNM
				Q - LPM	0	60	80	100	120	140	160	A	B	C	D
4N072/6	1.0	0.75	M/T	Total Head in Metres	39	36	34	32	29	23	16	1006	476	97.5	1.5"
4N072/9	1.5	1.1	M/T		59	54	51	48	43	34	23	1154	584	97.5	1.5"
4N072/12	2.0	1.5	M/T		78	72	69	65	58	46	31	1342	692	97.5	1.5"
4N072/15	3.0	2.0	M/T		98	90	86	81	72	57	39	1510	800	97.5	1.5"
4N072/18	4.0	3.0	T		117	108	103	97	86	68	47	1726	1016	97.5	1.5"
4N072/21	5.0	3.7	T		137	126	120	113	101	80	54	1874	1124	97.5	1.5"
4N072/24	5.0	3.7	T		150	144	137	129	115	91	62	1982	1232	97.5	1.5"
4N072/25	5.0	3.7	T		158	150	143	134	120	95	65	2018	1268	97.5	1.5"
4N072/27	6.0	4.5	T		170	162	154	145	129	102	70	2090	1340	97.5	1.5"
4N072/30	6.0	4.5	T		189	180	171	161	144	114	78	2234	1484	97.5	1.5"

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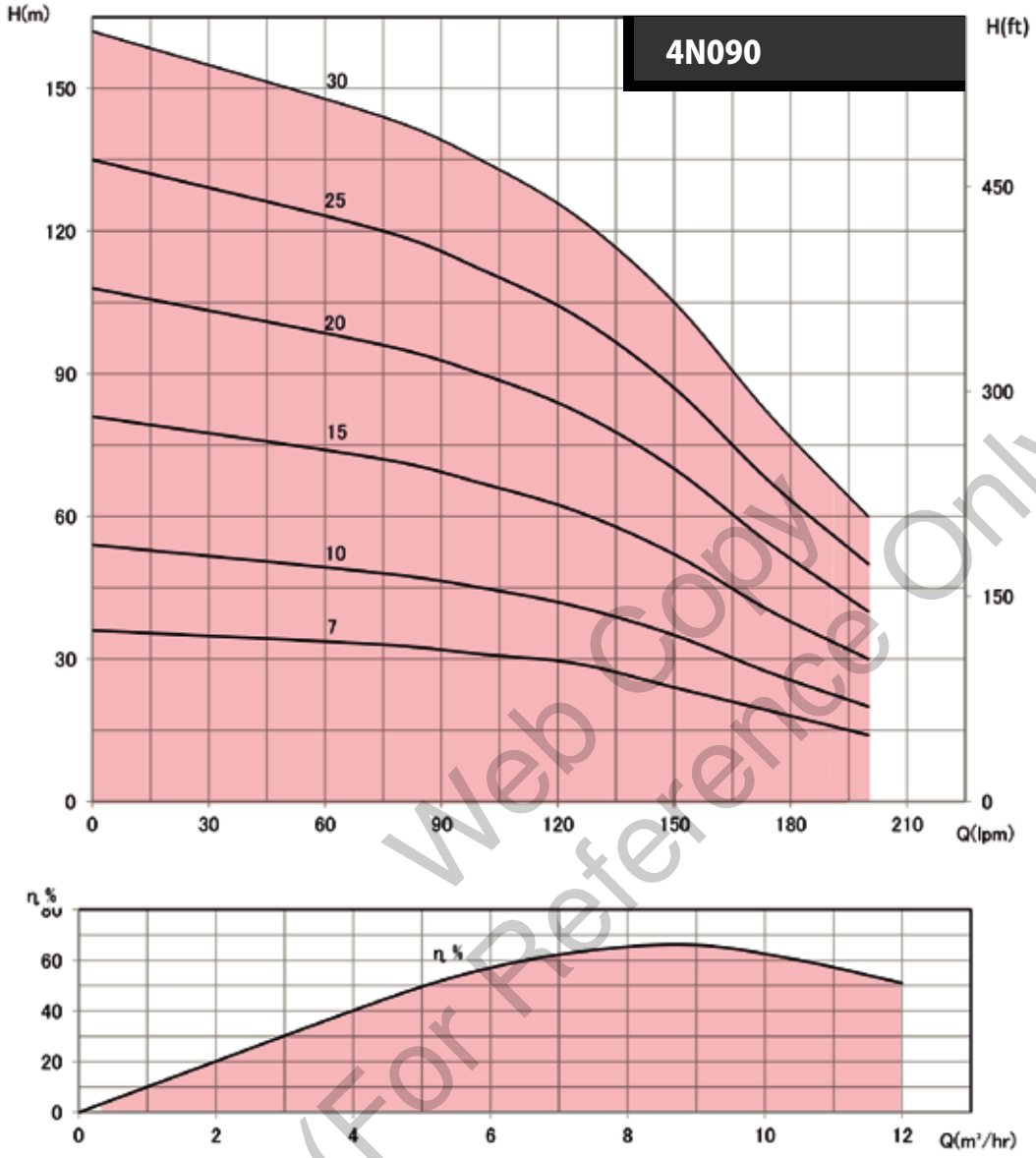

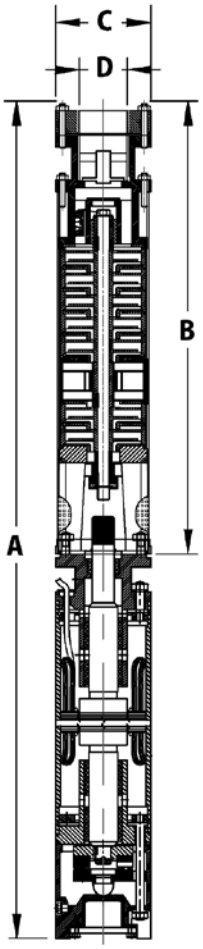

Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	4.5	6.0	7.5	9.0	10.5	12.0	Dimension in mm			DNM
				Q - LPM	0	75	100	125	150	175	200	A	B	C	D
4N090/7	1.5	1.1	M/T	Total Head in Metres	36	33	31	29	24	19	14	1124	554	97.5	2"
4N090/10	2.0	1.5	M/T		54	48	45	41	35	27	20	1330	680	97.5	2"
4N090/15	3.0	2.0	M/T		81	72	67	61	52	40	30	1600	890	97.5	2"
4N090/20	4.0	3.0	T		108	96	90	82	70	54	40	1918	1208	97.5	2"
4NO90/25	5.0	3.7	T		135	120	112	102	87	67	50	2168	1418	97.5	2"
4N090/30	6.0	4.5	T		162	144	135	123	105	81	60	2414	1664	97.5	2"

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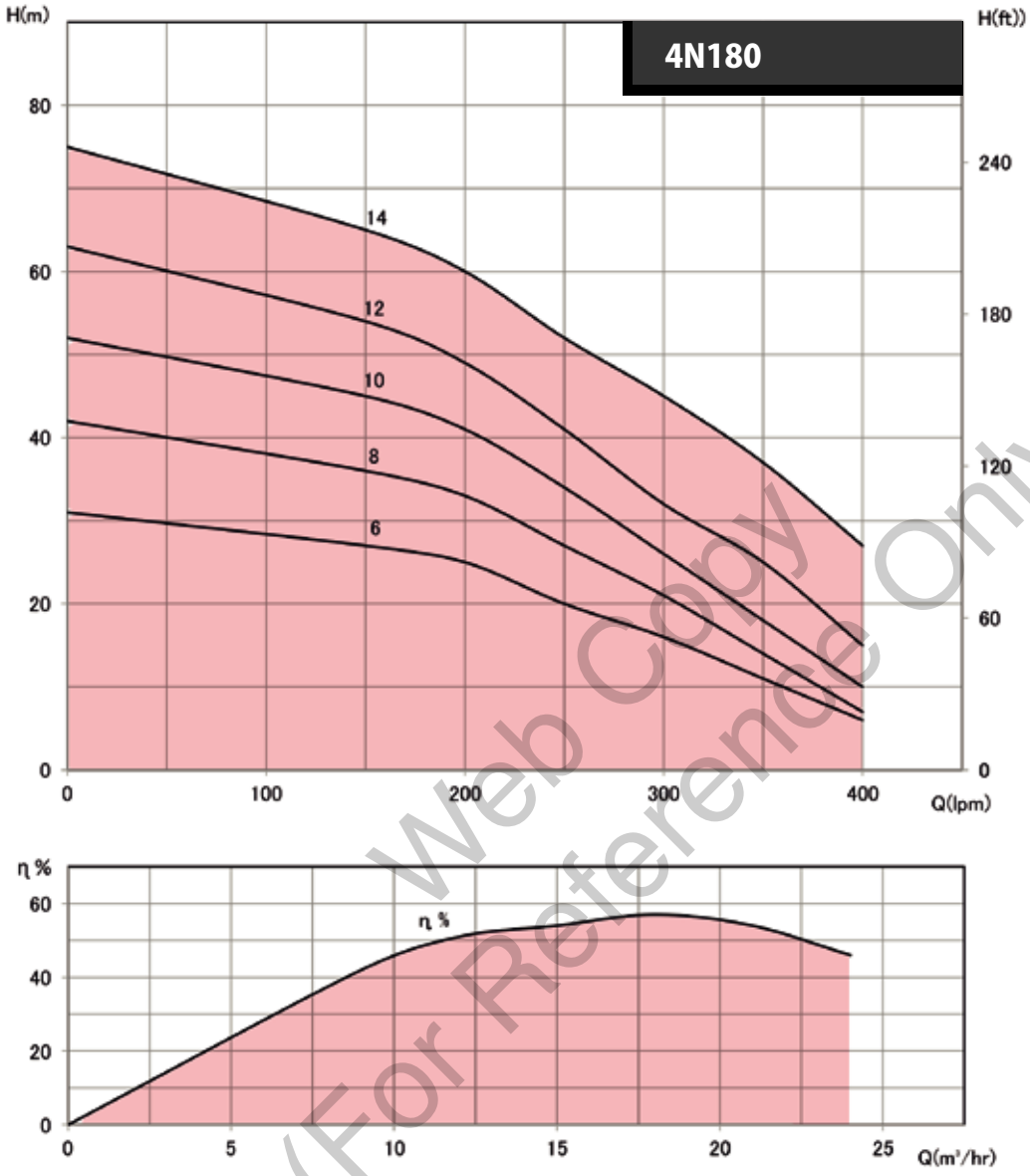
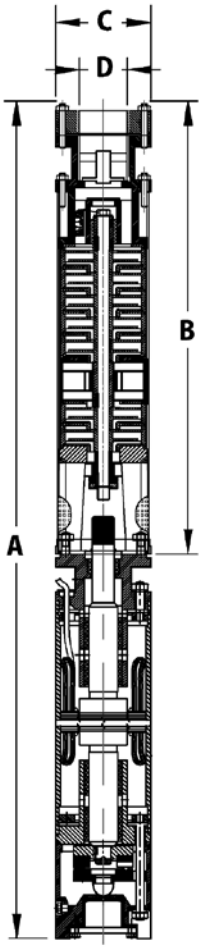




Hydraulic Performance & Dimensions

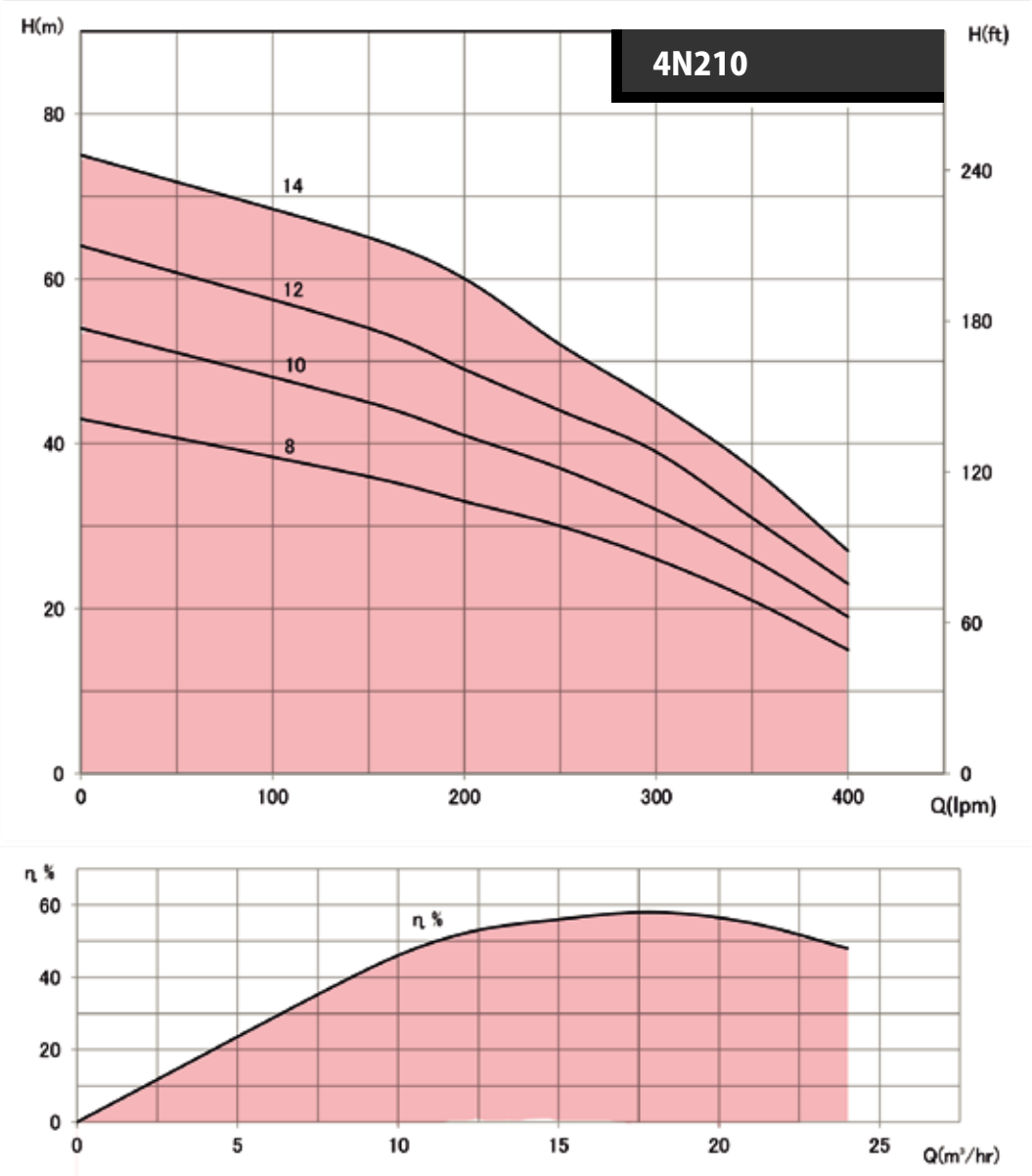
Product Code	HP	kW	Phase	Q - m³/hr	0	9.0	12.0	15.0	18.0	21.0	24.0	Dimension in mm			DNM
				Q - LPM	0	150	200	250	300	350	400	A	B	C	D
4N180/6	2.0	1.5	M/T	Total Head in Metres	31	27	25	20	16	11	6	1360	710	97.5	2"
4N180/8	3.0	2.0	M/T		42	36	33	27	21	14	7	1570	860	97.5	2"
4N180/10	3.0	2.0	M/T		52	45	41	34	26	18	10	1720	1010	97.5	2"
4N180/12	5.0	3.7	T		63	54	49	41	32	25	15	1910	1160	97.5	2"
4N180/14	6	4.5	T		75	65	60	52	45	37	27	2060	1310	97.5	2"

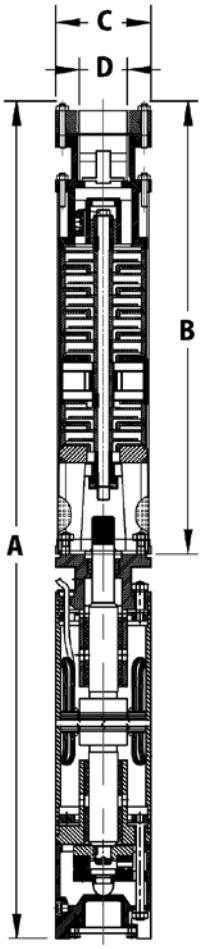
* M - Single Phase, T - Three Phase, Q - Discharge, DNM - Nominal Diameter

4N
Submersible Borehole Pumps For 4" Well

EKKI PUMPS | SYSTEMS

Characteristic Curves





Hydraulic Performance & Dimensions

Product Code	HP	kW	Phase	Q - m³/hr	0	9.0	12.0	15.0	18.0	21.0	24.0	Dimensions			
				Q - LPM	0	150	200	250	300	350	400	A	B	C	D
4N210K/8	3.0	2.0	M/T	Total Head in Metres	43	36	33	30	26	21	15	1615	905	97.5	2.5"
4N210K/10	3.0	2.0	M/T		54	45	41	37	32	26	19	1765	1055	97.5	2.5"
4N210K/12	5.0	3.7	T		64	54	49	44	39	31	23	1955	1205	97.5	2.5"
4N210K/14	6.0	4.5	T		75	65	60	52	45	37	27	2105	1355	97.5	2.5"

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