# **4**J **Submersible Borehole Pumps For 4" Well**



#### Construction

Submersible borehole pumps for 4"(100mm) deep wells comes with various impellers and diffusers made of noryl material. A single piece stainless steel barrel casing prevents the pump from all robust conditions and all types of water corrosions. The life span of the pump set is comparatively higher than its predecessors.

#### **Applications**

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

#### **Water filled Rewindable motor**

- 2-pole Induction motor, 50Hz (n= 2900 rpm)
- For single phase 230V and for Three Phase 440V
- Voltage tolerances : +6% -15%
- Insulation class : B

#### **Operating Conditions**

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

#### **Special features**

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

# **MATERIAL SPECIFICATIONS**

#### PUMP

	PECIFICATIONS
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

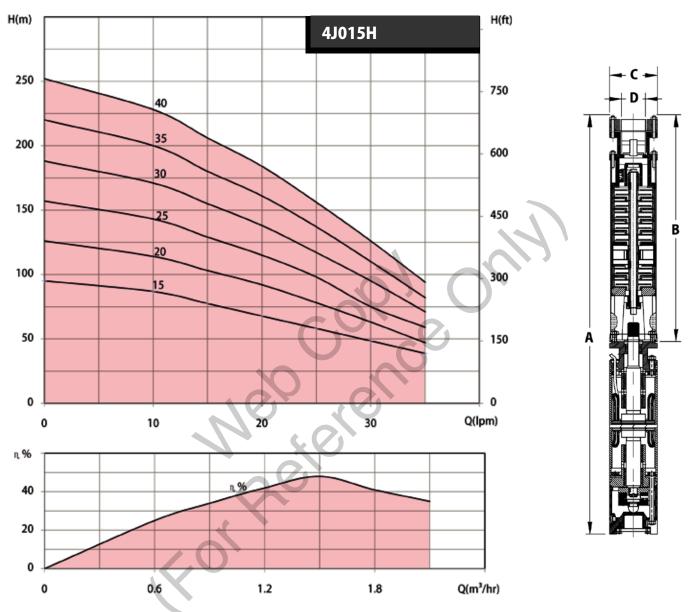
Components	Materials
Body	SS 304
Housings	Cast Iron FG 200
Rotor shaft	SS 420 (Hardened)
Thrust Bearing	Carbon , SS410
Bearing Bush	LTB4
Seal	Oil Seal, Nitrile Rubber



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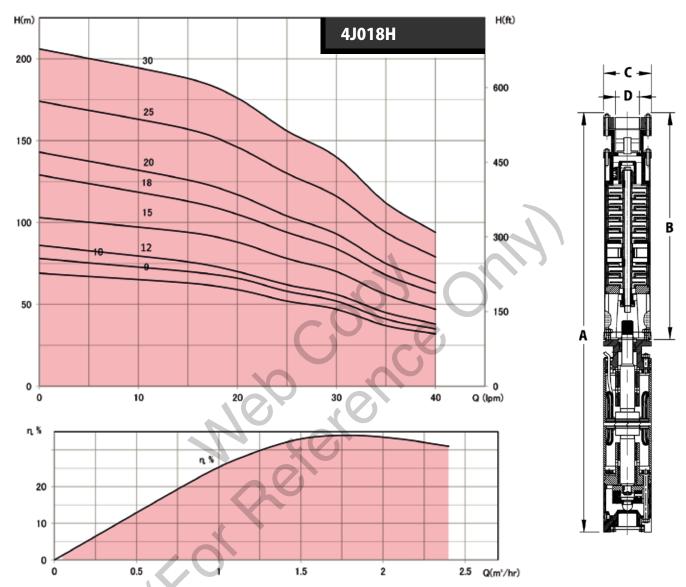
# **Characteristic Curves**



#### **Hydraulic Performance & Dimensions**

Product	НР	kW	Phase	Q - m³/hr	0	0.6	0.9	1.2	1.5	1.8	2.1	Dime	nsions i	in mm	DNM
Code	· · ·	KVV	Fliase	Q - LPM	0	10	15	20	25	30	35	A	В	C	D
4J015H/15	0.75	0.50	м/т		95	89	80	71	60	43	30	960	575	97.5	1.25"
4J015H/20	1.0	0.75	M/T		126	114	103	92	78	63	47	1085	700	97.5	1.25"
4J015H/25	1.5	1.1	M/T	Total Head in	157	143	129	115	98	79	59	1240	825	97.5	1.25"
4J015H/30	1.5	1.1	M/T	Metres	188	171	155	138	117	95	71	1415	1000	97.5	1.25"
4J015H/35	2.0	1.5	м/т		220	200	180	161	137	110	82	1580	1125	97.5	1.25"
4J015H/40	2.0	1.5	M/T		252	228	206	184	156	126	94	1705	1250	97.5	1.25"





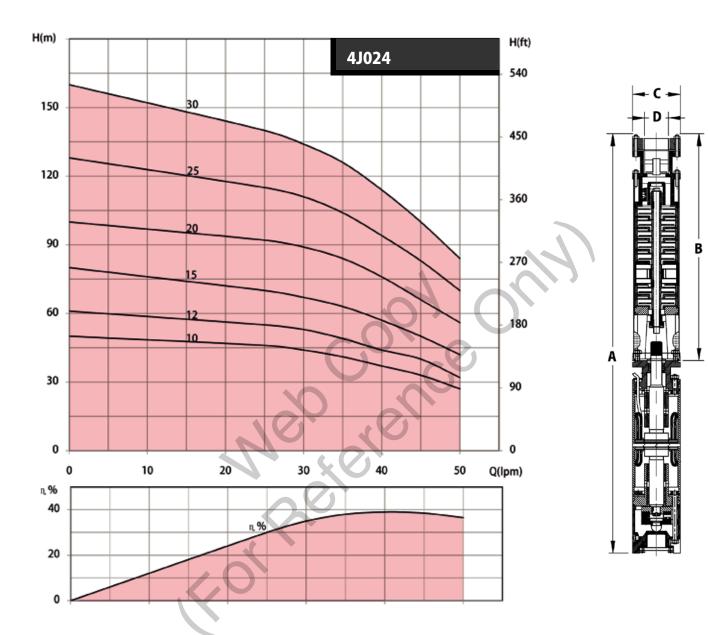
nyuraulic Pe		lance													
Product	ΗΡ	kW	Phase	Q - m³/hr	0	0.9	1.2	1.6	1.8	2.1	2.4	Dime	nsions i	n mm	DNM
Code		KU	Thase	Q - LPM	0	15	20	25	30	35	40	A	В	C	D
4J018H/9	0.5	0.37	M/T		69	63	59	52	47	37	32	780	425	97.5	1.25"
4J018H/10	0.75	0.5	M/T		78	70	66	58	52	41	35	805	450	97.5	1.25"
4J018H/12	0.75	0.5	M/T		86	76	70	62	56	45	38	855	500	97.5	1.25"
4J018H/15	1.0	0.75	M/T	Total Head in	103	94	88	78	70	56	47	960	575	97.5	1.25"
4J018H/18	1.5	1.1	M/T	Metres	129	113	105	94	84	68	57	1065	650	97.5	1.25"
4J018H/20	1.5	1.1	M/T		143	126	117	104	93	75	63	1115	700	97.5	1.25"
4J018H/25	2.0	1.5	M/T		174	157	146	130	116	94	79	1280	825	97.5	1.25"
4J018H/30	2.0	1.5	M/T		206	188	176	156	140	112	94	1455	1000	97.5	1.25"

**Hydraulic Performance & Dimensions** 

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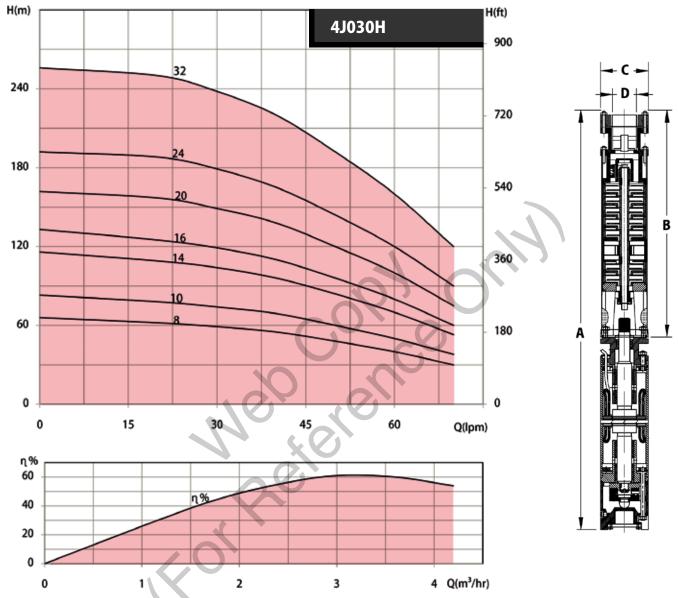
## **Characteristic Curves**



## **Hydraulic Performance & Dimensions**

4J4	ΗΡ	kW	Phase	Q - m³/hr	0	1.5	1.8	2.1	2.4	2.7	3.0	Dime	nsions i	in mm	DNM
434	nr	K V V	Fildse	Q - LPM	0	25	30	35	40	45	50	A	В	С	D
4J024/10	0.75	0.5	M/T		50	46	44	41	37	33	27	780	425	97.5	1.25"
4J024/12	0.75	0.5	M/T		61	55	53	49	44	40	32	855	470	97.5	1.25"
4J024/15	1.0	0.75	M/T	Total Head in	80	70	67	63	57	50	42	923	574	97.5	1.25"
4J024/20	1.5	1.1	M/T	Metres	100	92	89	84	76	66	56	1065	650	97.5	1.25"
4J024/25	2.0	1.5	M/T		128	115	111	104	94	83	70	1218	763	97.5	1.25"
4J024/30	2.0	1.5	M/T		160	140	134	126	114	100	84	1331	876	97.5	1.25"

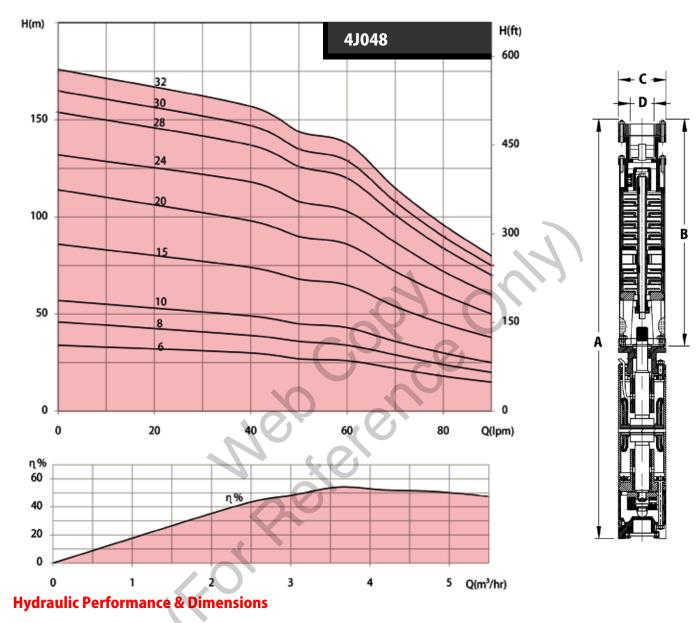




# **Hydraulic Performance & Dimensions**

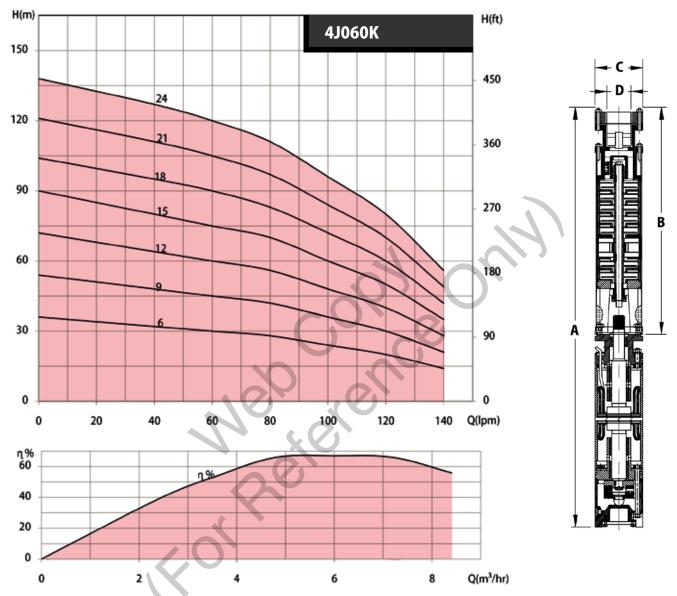
Product	НР	kW	Phase	Q - m³/hr	0	1.2	1.8	2.4	3.0	3.6	4.2	Dime	nsions i	n mm	DNM
Code	nr	KVV	Flidse	Q - LPM	0	20	30	40	50	60	70	A	В	С	D
4J030H/8	1.0	0.75	M/T		66	62	59	55	48	40	30	809	424	97.5	1.5"
4J030H/10	1.0	0.75	M/T		83	78	74	69	60	50	38	865	480	97.5	1.5"
4J030H/14	1.5	1.1	M/T	Total	116	109	104	96	84	70	53	1007	592	97.5	1.5"
4J030H/16	2.0	1.5	M/T	Head in	133	125	119	110	96	80	60	1103	648	97.5	1.5"
4J030H/20	3.0	2.0	M/T	Metres	162	157	149	138	120	100	75	1470	760	97.5	1.5"
4J030H/24	3.0	2.0	M/T		192	188	179	165	144	120	90	1582	872	97.5	1.5"
4J030H/32	4.0	3.0	M/T		256	250	238	220	192	160	120	1806	1096	97.5	1.5"





Product	110	LAM	Dhase	Q - m³/hr	0	2.4	3.0	3.6	4.2	4.8	5.4	Dime	nsions i	n mm	DNM
Code	HP	kW	Phase	Q - LPM	0	40	50	60	70	80	90	A	В	С	D
4J048/6	0.50	0.37	M/T		34	30	27	26	22	18	15	705	350	97.5	1.5"
4J048/8	0.75	0.50	M/T		46	39	36	34	29	24	20	755	400	97.5	1.5"
4J048/10	1.0	0.75	M/T	Total	57	49	45	43	36	30	25	835	450	97.5	1.5"
4J048/15	1.5	1.1	M/T		86	74	68	65	54	45	38	990	575	97.5	1.5"
4J048/20	2.0	1.5	M/T	Head in	114	98	90	86	72	60	50	1155	700	97.5	1.5"
4J048/24	3.0	2.0	M/T	Metres	132	118	108	103	87	72	60	1510	800	97.5	1.5"
4J048/28	3.0	2.0	M/T		154	137	126	120	101	84	70	1610	900	97.5	1.5"
4J048/30	3.0	2.0	M/T		165	147	135	129	108	90	75	1660	950	97.5	1.5"
4J048/32	4.0	3.0	M/T		176	157	144	138	115	96	80	1710	1000	97.5	1.5"

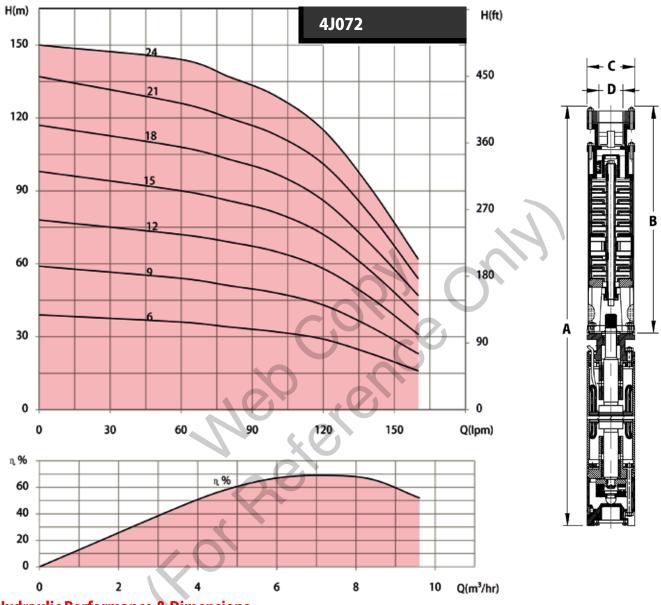




#### **Hydraulic Performance & Dimensions**

Product	НР	kW	Phase	Q - m³/hr	0	2.4	3.6	4.8	6.0	7.2	8.4	Dime	nsions i	n mm	DNM
Code	nr	KVV	Flidse	Q - LPM	0	40	60	80	100	120	140	A	В	С	D
4J060K/6	0.75	0.50	M/T		36	32	30	28	24	20	14	772	416	97.5	1.5"
4J060K/9	1.0	0.75	M/T		54	48	45	42	36	30	21	909	524	97.5	1.5"
4J060K/12	1.5	1.1	M/T	Total	72	64	60	56	48	40	28	1047	632	97.5	1.5"
4J060K/15	2.0	1.5	M/T	Head in	90	80	75	70	60	50	35	1195	740	97.5	1.5"
4J060K/18	3.0	2.0	M/T	Metres	104	95	90	83	72	60	42	1558	848	97.5	1.5"
4J060K/21	4.0	3.0	M/T		121	111	105	97	84	70	49	1666	956	97.5	1.5"
4J060K/24	4.0	3.0	M/T		138	127	120	111	96	80	56	1774	1064	97.5	1.5"

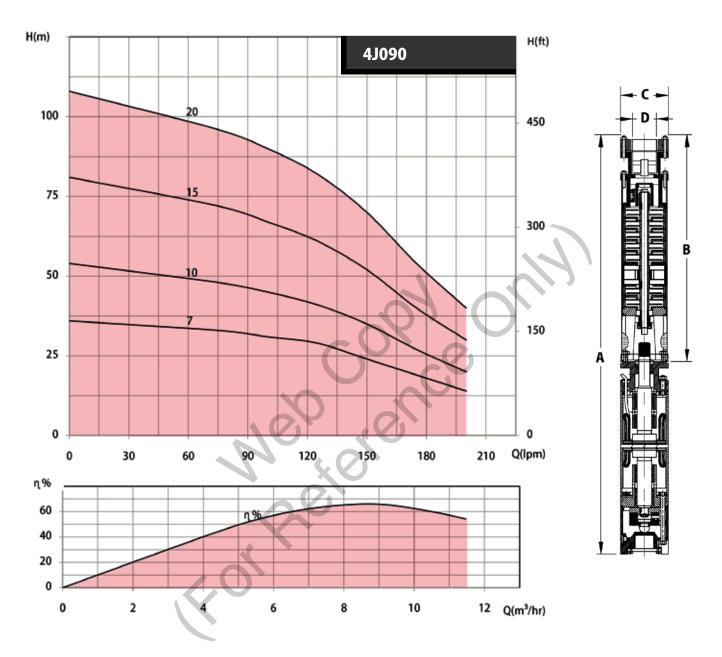




<b>Hydraulic</b>	Performance	& Dimensions
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Product	НР	kW	Phase	Q - m³/hr	0	2.4	3.6	4.8	6.0	7.2	8.4	Dime	nsions i	n mm	DNM
Code	nr	KVV	Flidse	Q - LPM	0	40	60	80	100	120	140	A	В	C	D
4J072/6	1.0	0.75	M/T		39	36	34	32	29	23	16	801	416	97.5	1.5"
4J072/9	1.5	1.1	M/T		59	54	51	48	43	34	23	939	524	97.5	1.5"
4J072/12	2.0	1.5	M/T	Total	78	72	69	65	58	46	31	1087	632	97.5	1.5"
4J072/15	3.0	2.0	M/T	Head in	98	90	86	81	72	57	39	1450	740	97.5	1.5"
4J072/18	4.0	3.0	M/T	Metres	117	108	103	97	86	68	47	1558	848	97.5	1.5"
4J072/21	5.0	3.7	Т		137	126	120	113	101	80	54	1706	956	97.5	1.5"
4J072/24	5.0	3.7	т		150	144	137	129	115	91	62	1814	1064	97.5	1.5"

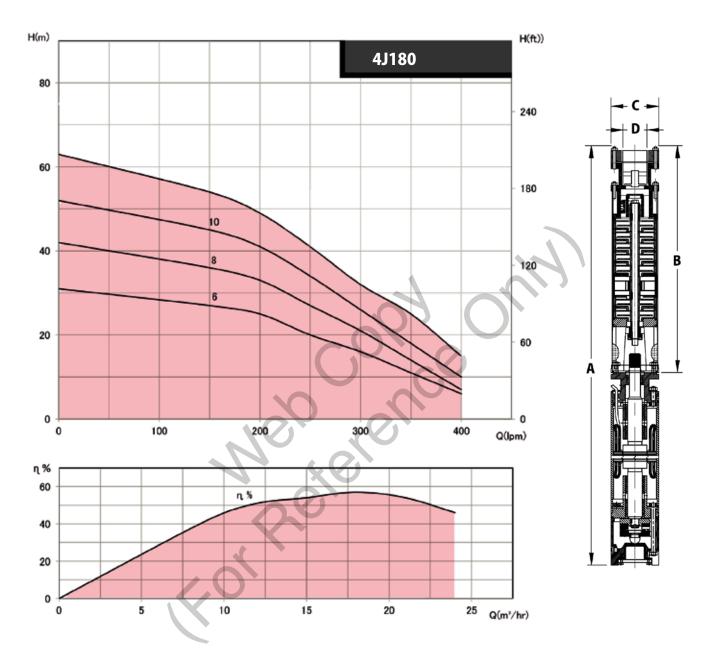




**Hydraulic Performance & Dimensions** 

Product	НР	kW	Phase	Q - m³/hr	0	4.5	6.0	7.5	9.0	10.5	12.0	Dime	nsions i	n mm	DNM
Code	nr	KVV	Flidse	Q - LPM	0	75	100	125	150	175	200	A	В	C	D
4J090/7	1.5	1.1	M/T		36	33	31	29	24	19	14	909	494	97.5	2"
4J090/10	2.0	1.5	M/T	Total Head in	54	48	45	41	35	27	20	1083	620	97.5	2"
4J090/15	3.0	2.0	M/T	Metres	81	72	67	61	52	40	30	1456	746	97.5	2"
4J090/20	4.0	3.0	M/T		108	96	90	82	70	54	40	1666	956	97.5	2"

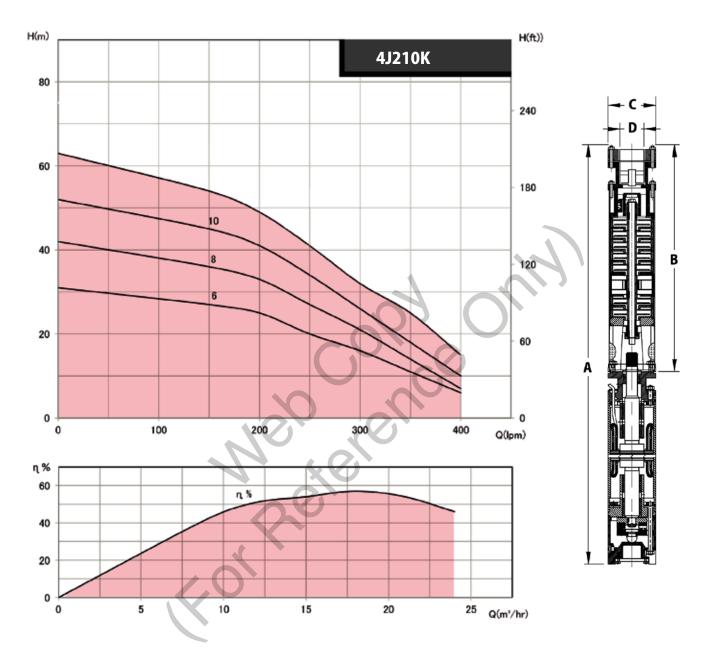




#### **Hydraulic Performance & Dimensions**

Product	НР	kW	Phase	Q - m³/hr	0	9.0	12.0	15.0	18.0	21.0	24.0	Dime	nsion in	mm	DNM
Code	nr	KVV	Flidse	Q - LPM	0	150	200	250	300	350	400	A	В	С	D
4J180/6	2.0	1.5	M/T		31	27	25	20	16	11	6	1360	710	97.5	2"
4J180/8	3.0	2.0	M/T	Total Head in	42	36	33	27	21	14	7	1570	860	97.5	2"
4J180/10	3.0	2.0	M/T	Metres	52	45	41	34	26	18	10	1720	1010	97.5	2"
4J180/12	5.0	3.7	Т		63	54	49	41	32	25	15	1910	1160	97.5	2"





#### **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	В	C	D
4J210K/8	3.0	2.0	M/T	Total Head in Metres	43	36	33	30	26	21	15	1615	905	97.5	2.5"
4J210K/10	3.0	2.0	M/T		54	45	41	37	32	26	19	1765	1055	97.5	2.5"
4J210K/12	5.0	3.7	Т		64	54	49	44	39	31	23	1955	1205	97.5	2.5"
4J210K/14	6.0	4.5	Т		75	65	60	52	45	37	27	2105	1355	97.5	2.5"