Equipment and solutions

BJ6 Submersible Pump

Product technical datasheet

High-flow BJ6 submersible pumps for deep boreholes.



FT-P021 · Rev. 1

BJ6 multistage centrifugal submersible pumps for clean water in boreholes and reservoirs. Built in AISI 304 stainless steel with radial or semi-axial impellers, providing high mechanical strength for water supply, irrigation and pressurization. Includes 36-month warranty.

Applications

- Domestic and industrial water supply
- Agricultural irrigation and pressure boosting
- Water abstraction from boreholes and tanks

Operating conditions

- Water temperature: up to 35°C
- Max. 20 starts per hour
- Voltage tolerance: +6% / -10%

Engineering note	Confirm the installation conditions, power supply and duty point before commissioning.
Complementary equipment	Contact JOVAL for compatible accessories and equipment.
Resources and support	Pump selection guide · JOVAL technical support
Contact	+351 253 490 740 · joval@joval.pt

Technical specifications

Max. flow

66 m³/h

Max head

505 m

Outlet

2½” (Series 611, 614 and 621) and 3” (Series 627, 636 and 648)

Pump diameter

140 mm (6”)

Power

2.2 kW to 45 kW

Speed

2850 rpm

Tension

Three-phase 400 V

Type

Multistage centrifugal pump (radial or mixed-flow impellers)

Impellers

Noryl with stainless steel components

Difusores

Noryl

Outer casing

AISI 304 stainless steel

Shaft

AISI 316 stainless steel

Coupling

NEMA standard

Applications

- Domestic and industrial water supply
- Agricultural irrigation and pressure boosting
- Water abstraction from boreholes and tanks

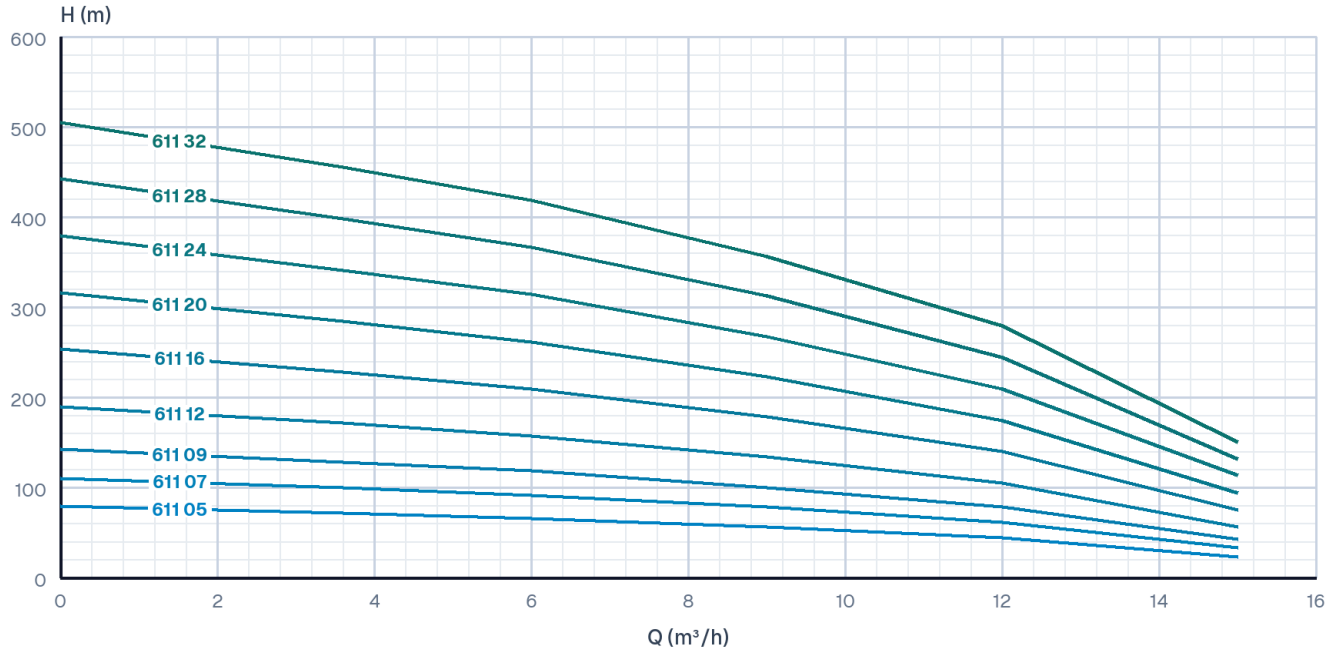
Operating conditions

- Water temperature: up to 35°C
- Max. 20 starts per hour
- Voltage tolerance: +6% / -10%

Engineering note Confirm the installation conditions, power supply and duty point before commissioning.

Performance · Series 611

Performance curves



Electrical data

Model	kW	HP	Amperage
611 05	2,2	3	5,9
611 07	3	4	7,8
611 09	4	5,5	9,3
611 12	5,5	7,5	12,5
611 16	7,5	10	16,0

Model	kW	HP	Amperage
611 20	9,3	12,5	20,7
611 24	11	15	23,3
611 28	13	17,5	29,5
611 32	15	20	31,3

Performance · Series 611

Hydraulic performance

Total head H in metres

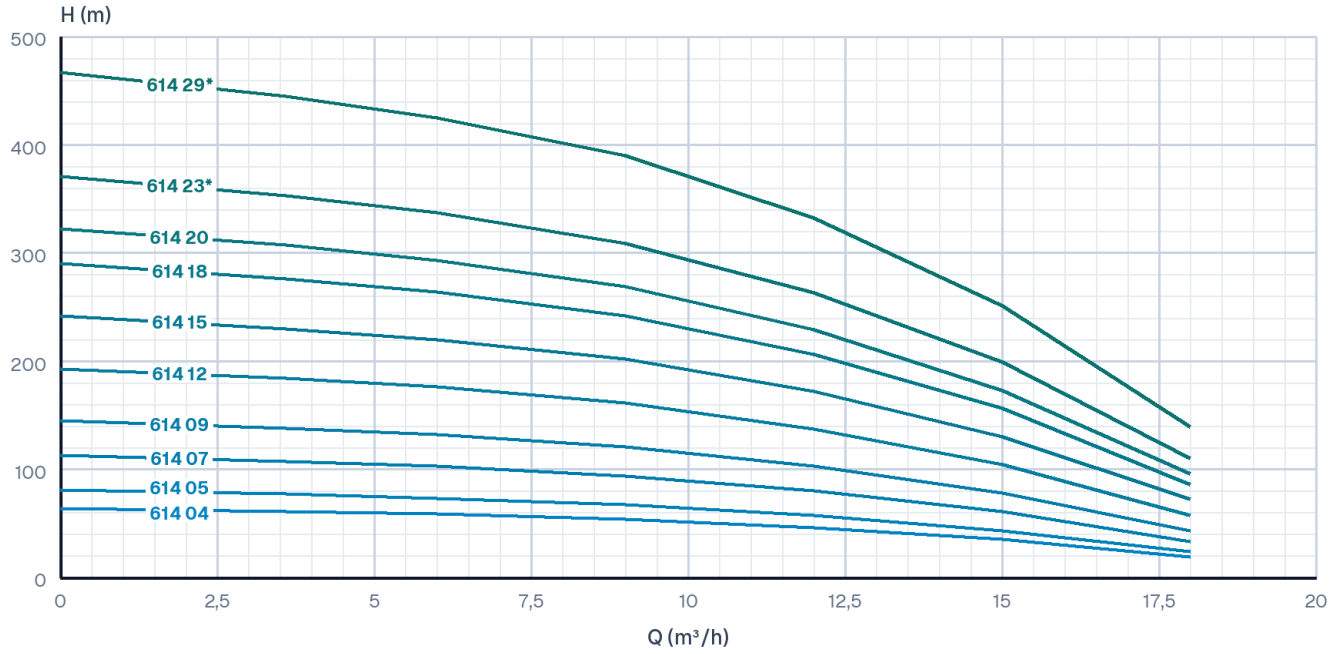
Q · Flow (m³/h)

Model	0	3,6	6	9	12	15
611 05	79	71	65	56	44	23
611 07	110	100	91	78	61	33
611 09	142	128	118	100	78	42
611 12	189	171	157	134	105	56
611 16	253	228	209	178	140	75
611 20	316	284	261	223	174	94
611 24	379	341	314	267	209	113
611 28	442	398	366	312	244	131
611 32	505	455	418	356	279	150

Select the duty point at the intersection of Q and H.

Performance · Series 614

Performance curves



Electrical data

Model	kW	HP	Amperage
614 04	2,2	3	5,9
614 05	3	4	7,8
614 07	4	5,5	9,3
614 09	5,5	7,5	12,5
614 12	7,5	10	16,0

Model	kW	HP	Amperage
614 15	9,3	12,5	20,7
614 18	11	15	23,3
614 20	13	17,5	29,5
614 23*	15	20	31,3
614 29*	18,5	25	38,5

Performance · Series 614

Hydraulic performance

Total head H in metres

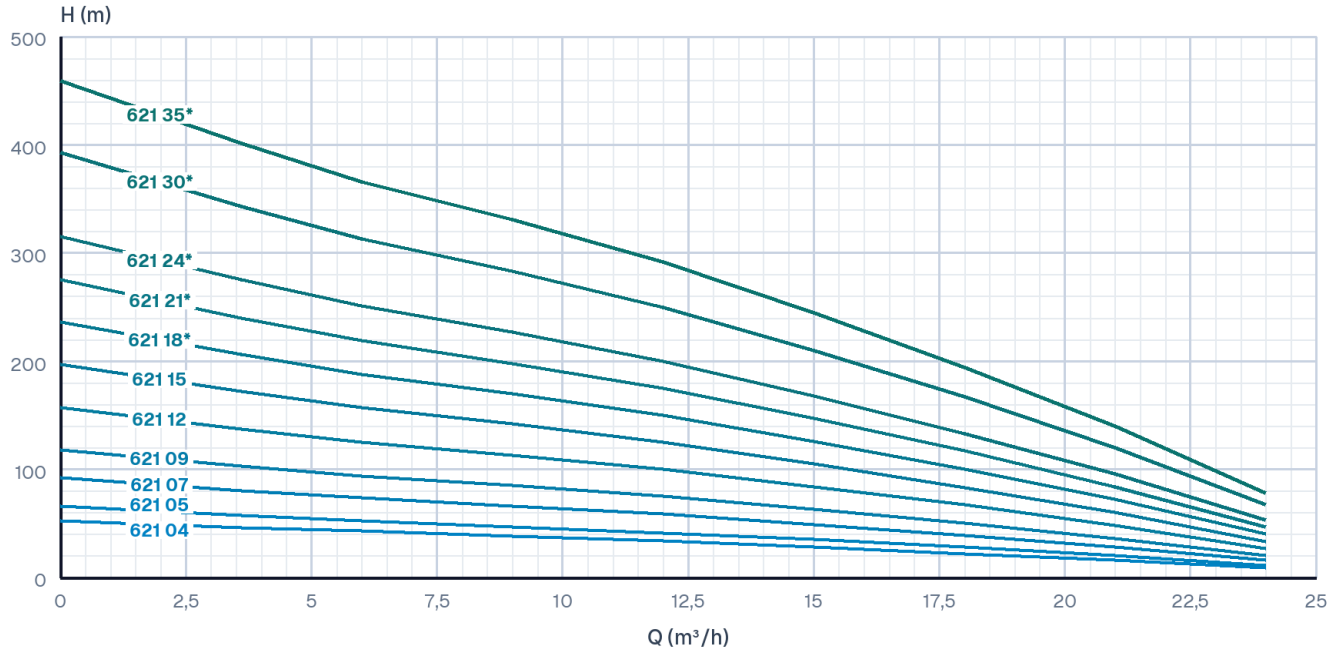
Q · Flow (m³/h)

Model	0	3,6	6	9	12	15	18
614 04	64	61	59	54	46	35	19
614 05	81	77	73	67	57	43	24
614 07	113	107	103	94	80	61	33
614 09	145	138	132	121	103	78	43
614 12	193	184	176	161	137	104	57
614 15	242	230	220	202	172	130	72
614 18	290	276	264	242	206	156	86
614 20	322	307	293	269	229	173	96
614 23*	371	353	337	309	263	199	110
614 29*	467	445	425	390	332	251	139

Select the duty point at the intersection of Q and H.

Performance · Series 621

Performance curves



Electrical data

Model	kW	HP	Amperage
621 04	2,2	3	5,9
621 05	3	4	7,8
621 07	4	5,5	9,3
621 09	5,5	7,5	12,5
621 12	7,5	10	16,0
621 15	9,3	12,5	20,7

Model	kW	HP	Amperage
621 18*	11	15	23,3
621 21*	13	17,5	29,5
621 24*	15	20	31,3
621 30*	18,5	25	38,5
621 35*	22	30	45,3

Performance · Series 621

Hydraulic performance

Total head H in metres

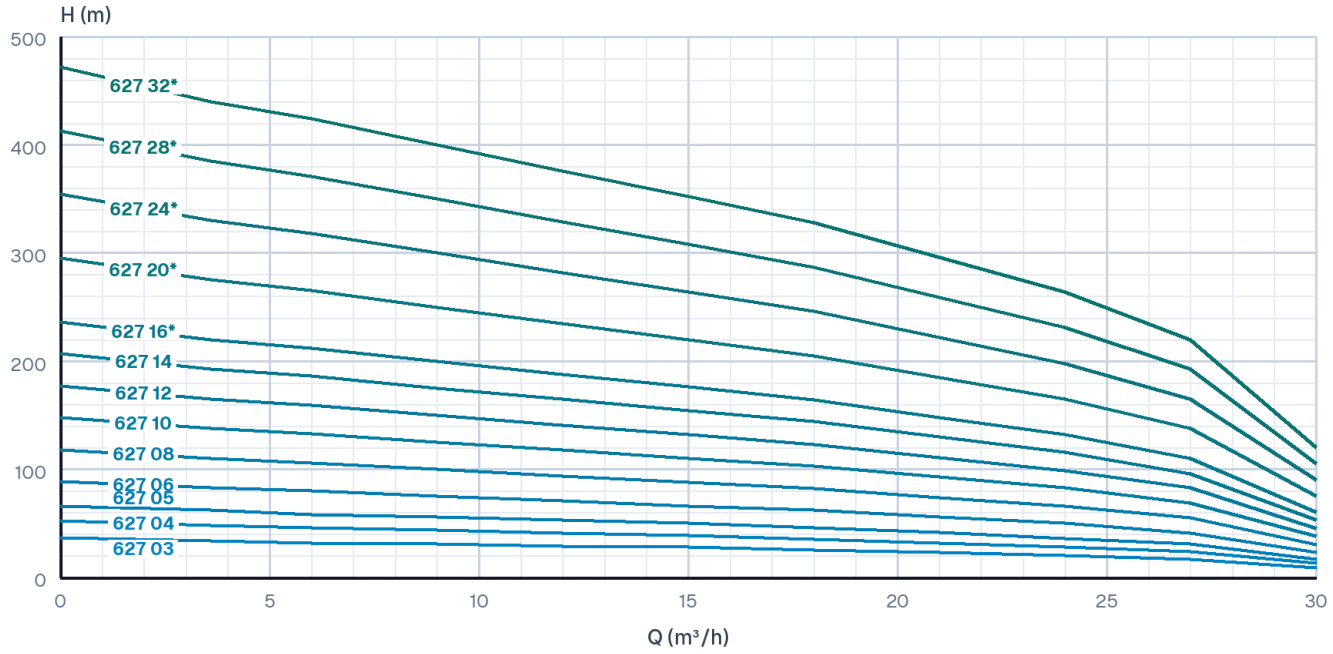
Q · Flow (m³/h)

Model	0	3,6	6	9	12	15	18	21	24
621 04	52	46	43	38	34	28	22	16	9
621 05	66	57	52	47	41	35	28	20	11
621 07	92	80	74	66	59	49	39	28	16
621 09	118	103	94	85	75	63	50	36	20
621 12	157	137	125	113	100	84	67	48	27
621 15	197	172	157	142	125	105	83	60	33
621 18*	236	206	188	170	150	126	100	72	40
621 21*	275	240	219	198	175	147	117	84	47
621 24*	315	275	251	227	200	168	133	96	53
621 30*	393	343	313	283	250	210	167	120	67
621 35*	459	401	366	331	292	245	194	140	78

Select the duty point at the intersection of Q and H.

Performance · Series 627

Performance curves



Electrical data

Model	kW	HP	Amperage
627 03	2,2	3	5,9
627 04	3	4	7,8
627 05	4	5,5	9,3
627 06	5,5	7,5	12,5
627 08	7,5	10	16,0
627 10	9,3	12,5	20,7
627 12	11	15	23,3

Model	kW	HP	Amperage
627 14	13	17,5	29,5
627 16*	15	20	31,3
627 20*	18,5	25	38,5
627 24*	22	30	43,5
627 28*	26,5	35	56,7
627 32*	30	40	63,5

Performance · Series 627

Hydraulic performance

Total head H in metres

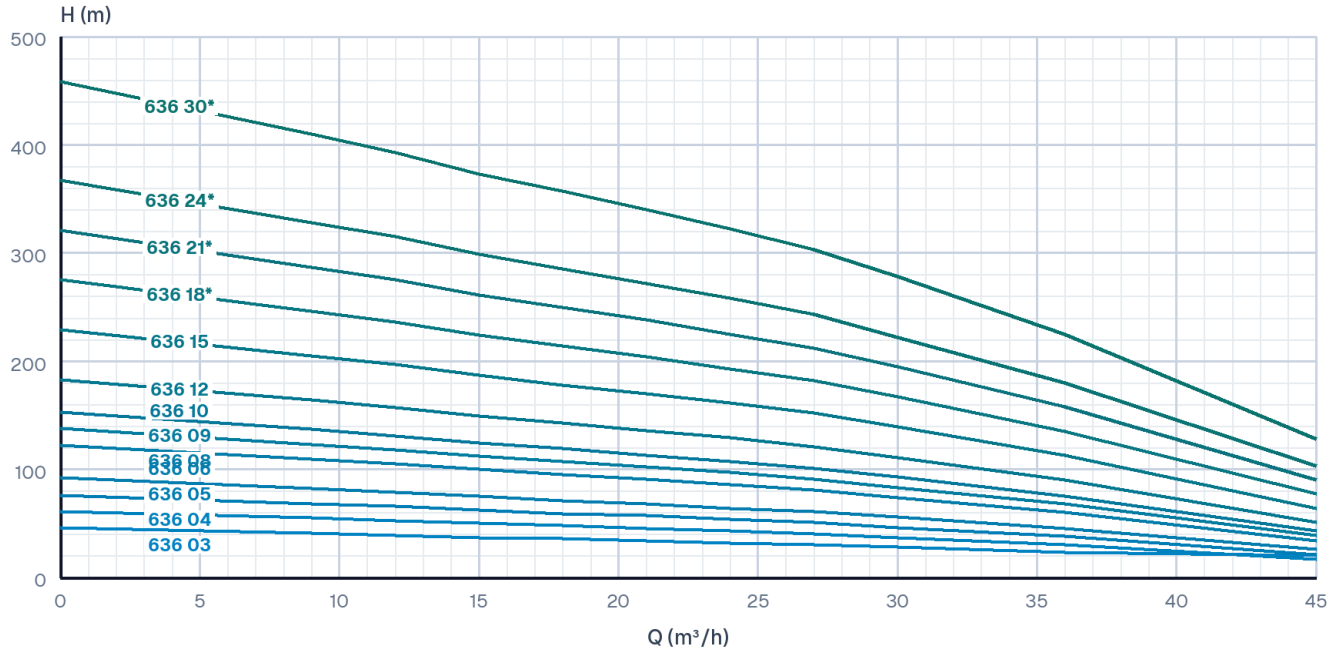
Q · Flow (m³/h)

Model	0	3,6	6	9	12	15	18	21	24	27	30
627 03	37	34	32	31	29	28	25	23	20	17	9
627 04	52	48	46	44	41	39	35	32	28	24	13
627 05	66	62	58	56	53	50	46	42	36	31	17
627 06	89	83	80	75	71	66	62	56	50	41	23
627 08	118	110	106	100	94	88	82	74	66	55	30
627 10	148	138	133	125	118	110	103	93	83	69	38
627 12	177	165	159	150	141	132	123	111	99	83	45
627 14	207	193	186	175	165	154	144	130	116	96	53
627 16*	236	220	212	200	188	176	164	148	132	110	60
627 20*	295	275	265	250	235	220	205	185	165	138	75
627 24*	354	330	318	300	282	264	246	222	198	165	90
627 28*	413	385	371	350	329	308	287	259	231	193	105
627 32*	472	440	424	400	376	352	328	296	264	220	120

Select the duty point at the intersection of Q and H.

Performance · Series 636

Performance curves



Electrical data

Model	kW	HP	Amperage
636 03	3	4	7,8
636 04	4	5,5	9,3
636 05	5,5	7,5	12,5
636 06	7,5	10	16,0
636 08	9,3	12,5	20,7
636 09	11	15	23,3
636 10	13	17,5	29,5

Model	kW	HP	Amperage
636 12	15	20	31,3
636 15	18,5	25	38,5
636 18*	22	30	45,3
636 21*	26,5	35	56,7
636 24*	30	40	63,5
636 30*	37	50	73,0

Performance · Series 636

Hydraulic performance

Total head H in metres

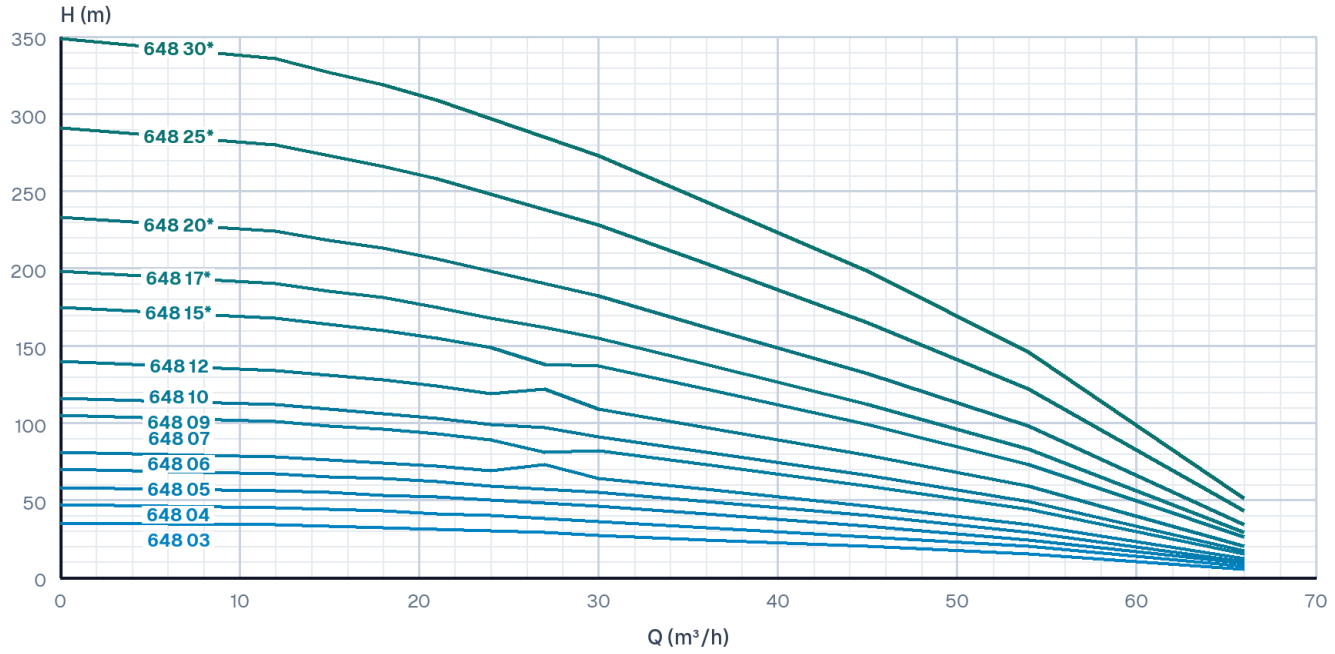
Q · Flow (m³/h)

Model	0	9	12	15	18	21	24	27	30	36	45
636 03	46	41	39	37	36	34	32	30	28	23	20
636 04	61	55	52	50	48	45	43	40	37	30	17
636 05	76	68	66	62	59	57	54	51	46	38	21
636 06	92	82	79	75	71	68	64	61	56	45	26
636 08	122	109	105	100	95	91	86	81	74	60	34
636 09	138	123	118	112	107	102	97	91	83	68	39
636 10	153	137	131	124	119	113	107	101	93	75	43
636 12	183	164	157	149	143	136	129	121	111	90	51
636 15	229	205	197	187	178	170	161	152	139	113	64
636 18*	275	246	236	224	214	204	193	182	167	135	77
636 21*	321	287	275	261	250	238	225	212	195	158	90
636 24*	367	328	315	299	285	272	258	243	222	180	103
636 30*	458	410	393	373	357	340	322	303	278	225	128

Select the duty point at the intersection of Q and H.

Performance · Series 648

Performance curves



Electrical data

Model	kW	HP	Amperage
648 03	4	5,5	9,3
648 04	5,5	7,5	12,5
648 05	7,5	10	16,0
648 06	9,3	12,5	20,7
648 07	11	15	23,3
648 09	13	17,5	29,5
648 10	15	20	31,3

Model	kW	HP	Amperage
648 12	18,5	25	38,5
648 15*	22	30	45,3
648 17*	26,5	35	56,7
648 20*	30	40	63,5
648 25*	37	50	73,0
648 30*	45	60	93,9

Performance · Series 648

Hydraulic performance

Total head H in metres

Q · Flow (m³/h)

Model	0	12	15	18	21	24	27	30	36	45	54	66
648 03	35	34	33	32	31	30	29	27	24	20	15	5
648 04	47	45	44	43	41	40	38	36	32	26	20	7
648 05	58	56	55	53	52	50	48	46	41	33	24	9
648 06	70	67	65	64	62	59	57	55	49	40	29	10
648 07	81	78	76	74	72	69	73	64	57	46	34	12
648 09	105	101	98	96	93	89	81	82	73	59	44	15
648 10	116	112	109	106	103	99	97	91	81	66	49	17
648 12	140	134	131	128	124	119	122	109	97	79	59	20
648 15*	175	168	164	160	155	149	138	137	122	99	73	26
648 17*	198	190	185	181	175	168	162	155	138	112	83	29
648 20*	233	224	218	213	206	198	190	182	162	132	98	34
648 25*	291	280	273	266	258	248	238	228	203	165	122	43
648 30*	349	336	327	319	309	297	285	273	243	198	146	51

Select the duty point at the intersection of Q and H.

Dimensions and models · 1/2

Dimensions and models

Dimensions e Weights · Series 611

Model	Height (mm)	Weight (kg)
611 05	552	9,7
611 07	634	11,2
611 09	725	12,8
611 12	848	15,1
611 16	1172	18,2
611 20	1176	21,3
611 24	1412	24,7
611 28	1576	27,8
611 32	1740	30,9

Dimensions e Weights · Series 614

Model	Height (mm)	Weight (kg)
614 04	511	8,9
614 05	552	9,7
614 07	643	11,2
614 09	725	12,8
614 12	848	15,1
614 15	971	17,4
614 18	1094	19,8
614 20	1176	21,3
614 23*	1371	23,9
614 29*	1617	28,6

Dimensions e Weights · Series 621

Model	Height (mm)	Weight (kg)
621 04	579	9,9
621 05	637	10,9
621 07	762	13,0
621 09	878	15,1
621 12	1052	18,2
621 15	1226	21,3
621 18*	1400	24,4
621 21*	1574	27,5
621 24*	1748	30,6
621 30*	2096	36,8
621 35*	2386	41,9

Dimensions e Weights · Series 627

Model	Height (mm)	Weight (kg)
627 03	536	9,2
627 04	599	10,4
627 05	671	11,6
627 06	734	12,7
627 08	860	15,0
627 10	986	17,3
627 12	1112	19,6
627 14	1238	22,0
627 16*	1364	24,3
627 20*	1616	28,9
627 24*	1868	33,5
627 28*	2120	38,1
627 32*	2372	42,7

Dimensions and models · 2/2

Dimensions and models

Dimensions e Weights · Series 636

Model	Height (mm)	Weight (kg)
636 03	536	9,1
636 04	608	10,3
636 05	671	11,4
636 06	734	12,5
636 08	860	14,7
636 09	923	15,8
636 10	986	16,9
636 12	1112	19,2
636 15	1301	22,5
636 18*	1490	25,8
636 21*	1679	29,2
636 24*	1868	32,5
636 30*	2246	39,2

Dimensions e Weights · Series 648

Model	Height (mm)	Weight (kg)
648 03	560	9,3
648 04	628	10,5
648 05	696	11,7
648 06	764	12,9
648 07	832	14,0
648 09	968	16,4
648 10	1036	17,5
648 12	1172	19,9
648 15*	1376	23,4
648 17*	1512	25,7
648 20*	1716	29,3
648 25*	2056	35,1
648 30*	2396	41,0