

# 6LRH & 6LM lines

Deepwell Borehole



6LRH line



6LM line



Submersible Multistage Centrifugal Pumps for 6" Wells.

The 6LRH line is a radial type execution, while the 6LM one is a semi-axial type. These pumps feature a check valve integrated into the delivery outlet. The pump motor bracket is designed in compliance with NEMA standards. All components are constructed from stainless steel using lost wax microfusion technology. The standard material is AISI 304 stainless steel. Alternatively, the following materials are available upon request: AISI 316 stainless steel and Duplex steel (EN 1.4462). The bushing bearings and wear rings are made from sand abrasion-resistant rubber, while the reverse-thrust ring is crafted from PTFE/Graphite. These pumps are ideal for a variety of applications, including civil and agricultural use.

### General operating data:

- Capacity up to 108 m<sup>3</sup>/h
- Pressure up to 631 m
- Hydraulic efficiency 6", up to 78,5%
- Powers up to 44 kW
- Rotation speed 3.600 rpm
- Maximum depth: 350 m
- Maximum quantity of sand: 100 gr/m<sup>3</sup>
- Drinking water compatibility according to DM174 MEI >= 0,4 (EU directive No.547/2012)
- Performance tolerance: ISO9906-3B

### Construction features

<b>Suction and delivery outlet</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Valve</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Impellers and diffusers</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Upper bushings</b>	NBR rubber
<b>Shaft pump side</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Quantity of sand in the water</b>	max 100 g/m <sup>3</sup>

### Motor

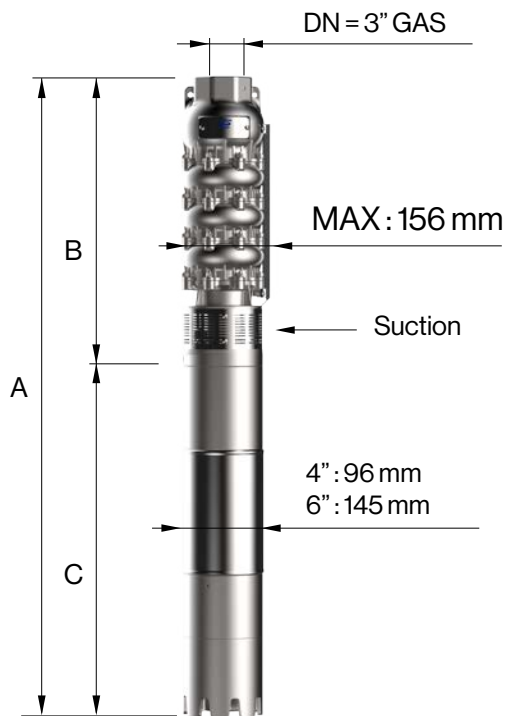
<b>Asynchronous 2 pole</b>	rewindable water cooled
<b>Insulation class</b>	Y (max 30 °C) - PPC winding type F (max 50 °C) - PE2+PA or LPE winding type
<b>Protection degree</b>	IP68
<b>Liquid temperature</b>	max 30 °C (max 50 °C on request)
<b>Depth of immersion</b>	max 350 m



60 Hz - 3500 rpm			Q								
TYPE	P2		l/min	0	120	180	240	300	360	420	480
	HP	kW	l/sec	0,0	2,0	3,0	4,0	5,0	6,0	7,0	8,0
			m³/h	0	7	11	14	18	22	25	29
6LRH 14/01	2	1,5	H (m)	21	20	19	18	17	15	13	10
6LRH 14/02	4	3		42	40	38	36	33	30	25	20
6LRH 14/03	5,5	4		63	60	57	54	50	45	38	29
6LRH 14/04	7,5	5,5		84	79	76	72	67	60	51	39
6LRH 14/05	10	7,5		105	99	95	90	84	76	63	49
6LRH 14/06	10	7,5		126	119	114	108	100	91	76	59
6LRH 14/07	12,5	9,2		147	139	133	126	117	106	89	69
6LRH 14/08	15	11		168	159	152	144	134	121	101	78
6LRH 14/09	15	11		189	179	171	162	150	136	114	88
6LRH 14/10	17,5	13		210	199	190	180	167	151	127	98
6LRH 14/11	17,5	13		161	152	145	138	128	116	97	75
6LRH 14/12	20	15		252	238	228	216	200	181	152	118
6LRH 14/13	25	18,5		273	258	247	234	217	197	165	127
6LRH 14/14	25	18,5		294	278	266	252	234	212	177	137
6LRH 14/15	25	18,5		315	298	285	270	251	227	190	147

Max Eff. % =	74
Max kW / St. =	1,23

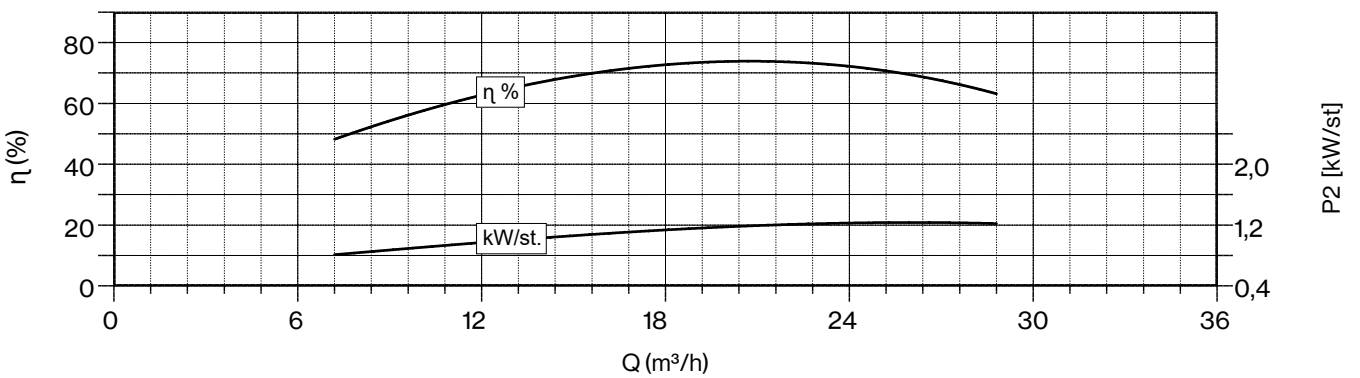
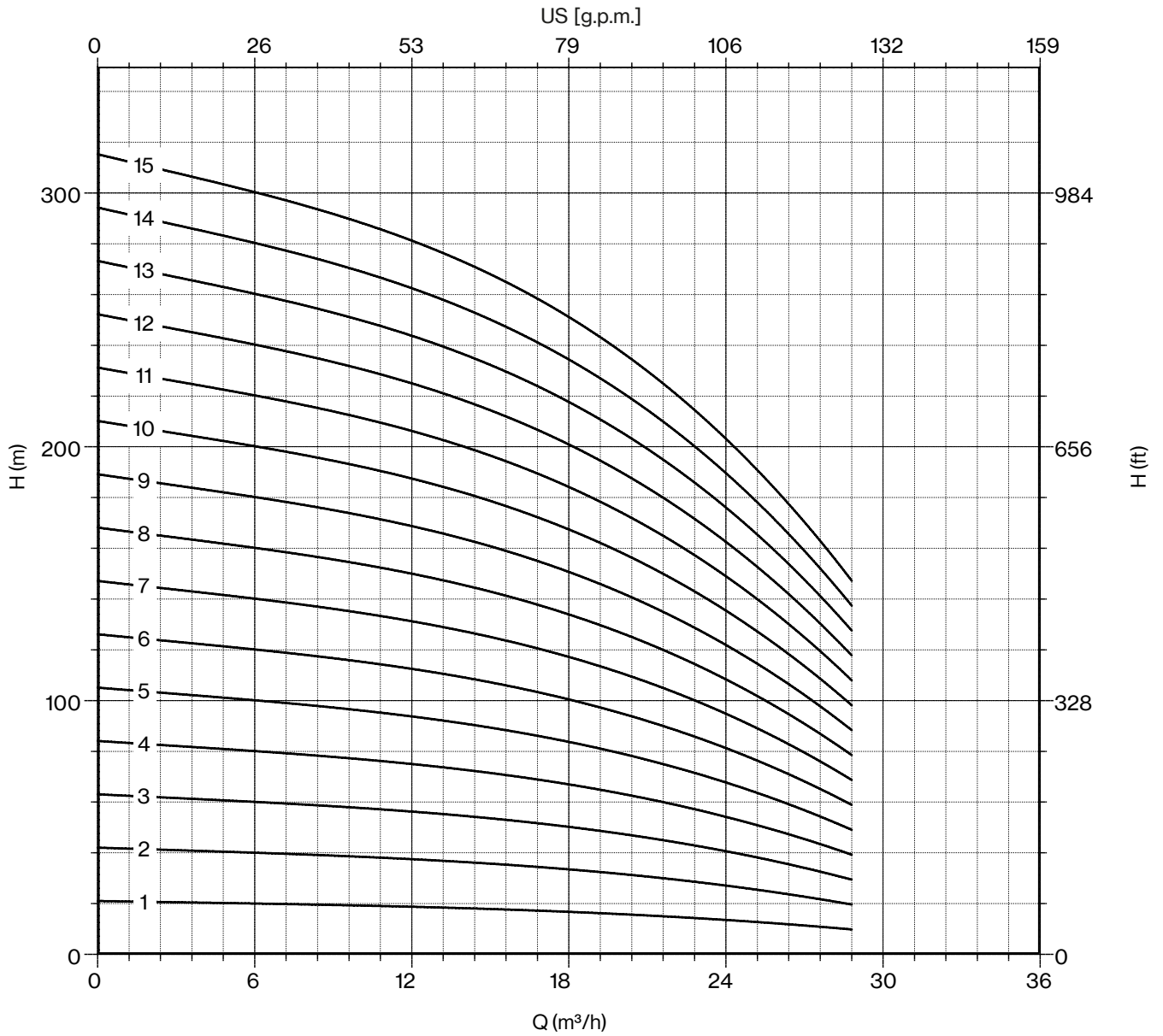
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4	6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 14/01-4	4" NEMA	687	302	385	10,4	11
6LRH 14/02-4		787	369	418	12,8	15
6LRH 14/03-4		904	436	468	15,3	20
6LRH 14/04-4		1041	503	538	18,6	24
6LRH 14/05	6" NEMA	1271	570	701	55	28
6LRH 14/06		1338	637	701	55	32
6LRH 14/07		1455	704	751	60	36
6LRH 14/08		1582	771	811	65	40
6LRH 14/09		1649	838	811	65	44
6LRH 14/10		1746	905	841	70	49
6LRH 14/11		1813	972	841	70	53
6LRH 14/12		1970	1039	931	75	57
6LRH 14/13		2097	1106	991	83	61
6LRH 14/14		2164	1173	991	83	65
6LRH 14/15		2231	1240	991	83	69



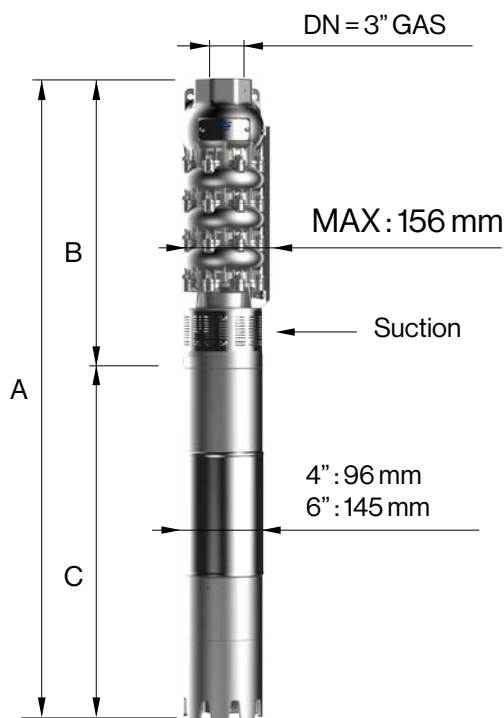
# 6LRH 14



60 Hz - 3500 rpm			Q								
TYPE	P2		l/min	0	120	180	240	300	360	420	480
	HP	kW	l/sec	0,0	2,0	3,0	4,0	5,0	6,0	7,0	8,0
			m³/h	0	7	11	14	18	22	25	29
6LRH 14/16	30	22	H (m)	336	318	304	288	267	242	203	157
6LRH 14/17	30	22		357	338	323	306	284	257	215	166
6LRH 14/18	30	22		378	358	342	324	301	272	228	176
6LRH 14/19	35	26		399	378	361	342	317	287	241	186
6LRH 14/20	35	26		420	397	380	360	334	302	253	196
6LRH 14/21	35	26		442	417	399	378	351	318	266	206
6LRH 14/22	40	30		463	437	418	396	367	333	279	215
6LRH 14/23	40	30		484	457	437	414	384	348	291	225
6LRH 14/24	40	30		505	477	456	432	401	363	304	235
6LRH 14/25	40	30		526	497	475	450	418	378	317	245
6LRH 14/26	50	37		547	517	494	468	434	393	329	255
6LRH 14/27	50	37		568	537	513	486	451	408	342	264
6LRH 14/28	50	37		589	556	532	504	468	423	355	274
6LRH 14/29	50	37		610	576	551	522	484	438	367	284
6LRH 14/30	50	37		631	596	570	540	501	454	380	294

Max Eff. % =	74
Max kW / St. =	1,23

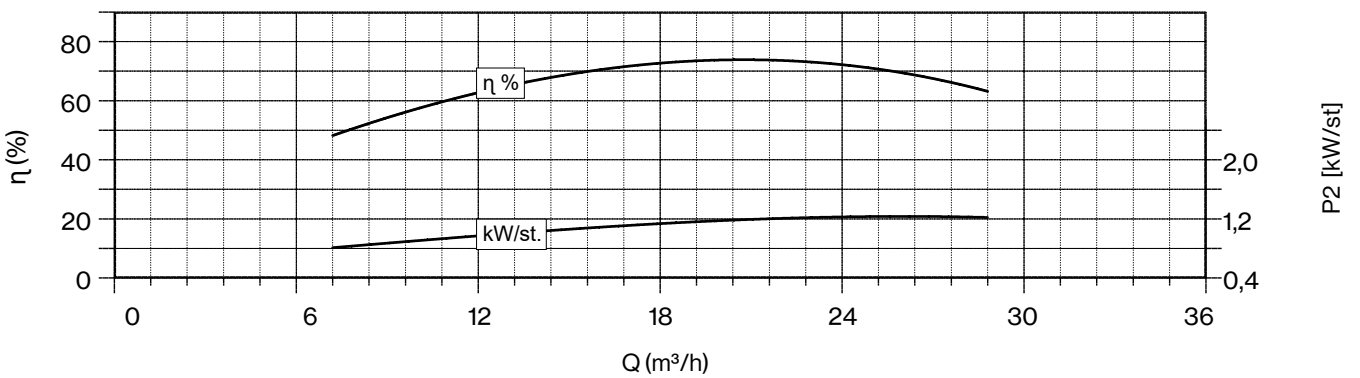
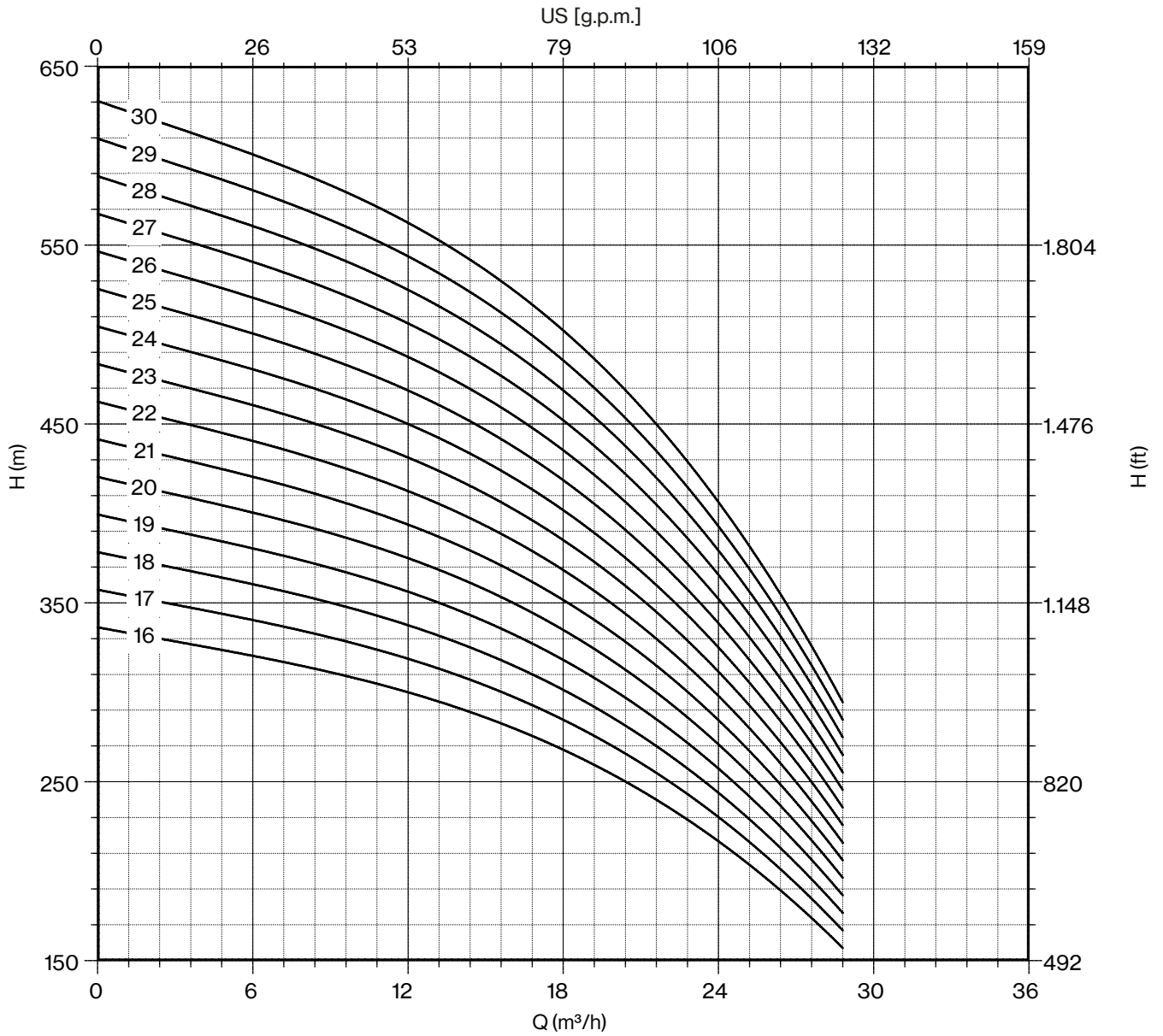
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4	6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 14/16	6" NEMA	2378	1307	1071	92	74
6LRH 14/17		2445	1374	1071	92	78
6LRH 14/18		2512	1441	1071	92	82
6LRH 14/19		2689	1508	1181	100	86
6LRH 14/20		2756	1575	1181	100	90
6LRH 14/21		2823	1642	1181	100	94
6LRH 14/22		2960	1709	1251	108	98
6LRH 14/23		3027	1776	1251	108	103
6LRH 14/24		3094	1843	1251	108	107
6LRH 14/25		3161	1910	1251	108	111
6LRH 14/26		3318	1977	1341	118	115
6LRH 14/27		3385	2044	1341	118	119
6LRH 14/28		3452	2111	1341	118	123
6LRH 14/29		3519	2178	1341	118	127
6LRH 14/30		3586	2245	1341	118	132



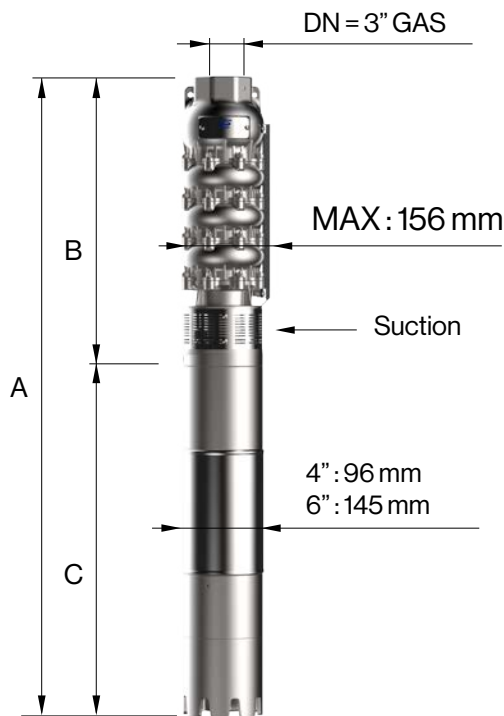
# 6LRH 14



60 Hz - 3500 rpm			Q									
TYPE	P2		l/min	0	180	240	300	360	420	480	540	600
	HP	kW	l/sec	0,0	3,0	4,0	5,0	6,0	7,0	8,0	9,0	10,0
			m <sup>3</sup> /h	0	11	14	18	22	25	29	32	36
6LRH 20/01	3	2,2	H (m)	21	20	20	19	18	16	15	13	10
6LRH 20/02	5,5	4		42	41	39	38	36	33	29	25	20
6LRH 20/03	7,5	5,5		63	61	59	57	54	49	44	38	30
6LRH 20/04	10	7,5		84	81	78	76	71	65	58	50	40
6LRH 20/05	12,5	9,2		104	102	98	95	89	81	73	63	50
6LRH 20/06	12,5	9,2		125	122	118	114	107	98	87	75	60
6LRH 20/07	15	11		146	142	137	133	125	114	102	88	71
6LRH 20/08	17,5	13		167	162	157	152	143	130	116	100	81
6LRH 20/09	20	15		188	183	176	171	161	146	131	113	91
6LRH 20/10	25	18,5		209	203	196	190	179	163	145	125	101
6LRH 20/11	25	18,5		230	223	215	209	196	179	160	138	111
6LRH 20/12	30	22		251	244	235	228	214	195	175	150	121
6LRH 20/13	30	22		271	264	255	247	232	212	189	163	131
6LRH 20/14	30	22		292	284	274	266	250	228	204	175	141
6LRH 20/15	35	26		313	305	294	285	268	244	218	188	151
6LRH 20/16	35	26		334	325	313	304	286	260	233	200	161
6LRH 20/17	40	30		355	345	333	323	304	277	247	213	171
6LRH 20/18	40	30		376	365	353	342	321	293	262	226	181
6LRH 20/19	40	30		397	386	372	361	339	309	276	238	192
6LRH 20/20	50	37		418	406	392	380	357	325	291	251	202
6LRH 20/21	50	37		438	426	411	399	375	342	305	263	212
6LRH 20/22	50	37		459	447	431	418	393	358	320	276	222
6LRH 20/23	50	37		480	467	450	437	411	374	335	288	232

Max Eff. % =	76
Max kW / St. =	1,6

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4	6

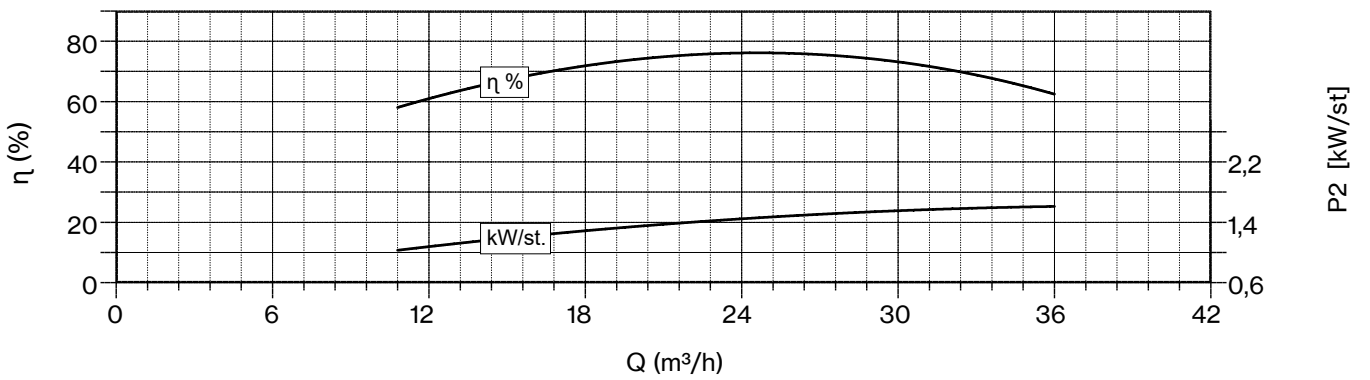
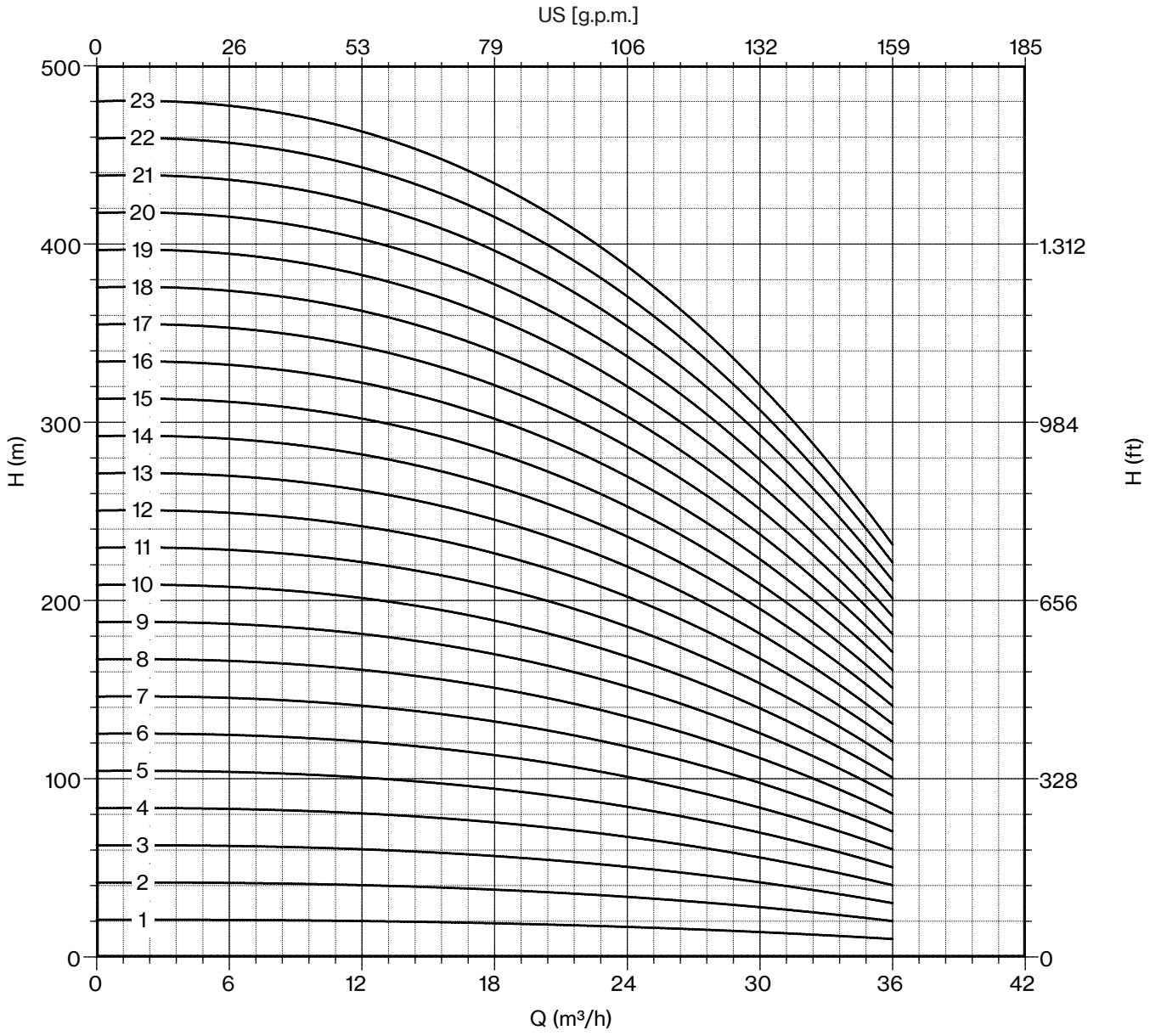


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 20/01-4	4" NEMA	722	302	420	12	11
6LRH 20/02-4		837	369	468	15,3	15
6LRH 20/03-4		974	436	538	18,6	20
6LRH 20/04		1204	503	701	55	24
6LRH 20/05	6" NEMA	1321	570	751	60	28
6LRH 20/06		1388	637	751	60	32
6LRH 20/07		1515	704	811	65	36
6LRH 20/08		1612	771	841	70	40
6LRH 20/09		1769	838	931	75	44
6LRH 20/10		1896	905	991	83	49
6LRH 20/11		1963	972	991	83	53
6LRH 20/12		2110	1039	1071	92	57
6LRH 20/13		2177	1106	1071	92	61
6LRH 20/14		2244	1173	1071	92	65
6LRH 20/15		2421	1240	1181	100	69
6LRH 20/16		2488	1307	1181	100	74
6LRH 20/17		2625	1374	1251	108	78
6LRH 20/18		2692	1441	1251	108	82
6LRH 20/19		2759	1508	1251	108	86
6LRH 20/20		2916	1575	1341	118	90
6LRH 20/21		2983	1642	1341	118	94
6LRH 20/22		3050	1709	1341	118	98
6LRH 20/23		3117	1776	1341	118	103

\* Coupled pump shaft



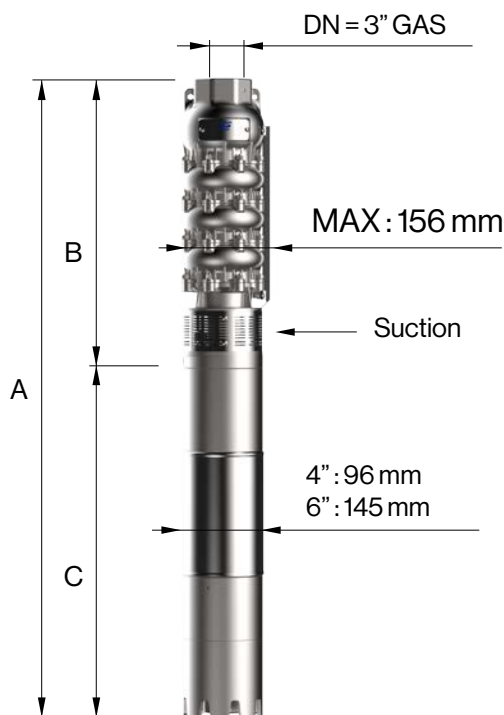
# 6LRH 20



60 Hz - 3500 rpm			Q										
TYPE	P2		l/min	0	240	300	360	420	480	540	600	660	720
	HP	kW	l/sec	0,0	4,0	5,0	6,0	7,0	8,0	9,0	10,0	11,0	12,0
			m³/h	0	14	18	22	25	29	32	36	40	43
6LRH 25/01	3	2,2	H (m)	21	21	20	20	19	18	16	15	13	12
6LRH 25/02	5,5	4		43	42	41	39	37	35	33	30	26	23
6LRH 25/03	10	7,5		64	63	61	59	56	53	49	44	40	35
6LRH 25/04	12,5	9,2		85	84	81	78	75	70	65	59	53	47
6LRH 25/05	15	11		107	104	102	98	94	88	81	74	66	58
6LRH 25/06	17,5	13		128	125	122	118	112	105	98	89	79	70
6LRH 25/07	20	15		149	146	142	137	131	123	114	104	93	82
6LRH 25/08	25	18,5		170	167	162	157	150	141	130	119	106	93
6LRH 25/09	25	18,5		192	188	183	176	168	158	146	133	119	105
6LRH 25/10	30	22		213	209	203	196	187	176	163	148	132	117
6LRH 25/11	30	22		234	230	223	215	206	193	179	163	146	128
6LRH 25/12	35	26		256	251	244	235	225	211	195	178	159	140
6LRH 25/13	35	26		277	271	264	255	243	228	212	193	172	152
6LRH 25/14	40	30		298	292	284	274	262	246	228	208	185	163
6LRH 25/15	40	30		320	313	305	294	281	264	244	222	199	175
6LRH 25/16	50	37		341	334	325	313	300	281	260	237	212	187
6LRH 25/17	50	37		362	355	345	333	318	299	277	252	225	198
6LRH 25/18	50	37		384	376	365	353	337	316	293	267	238	210
6LRH 25/19	50	37		405	397	386	372	356	334	309	282	252	222

Max Eff. % =	78,5
Max kW / St. =	2

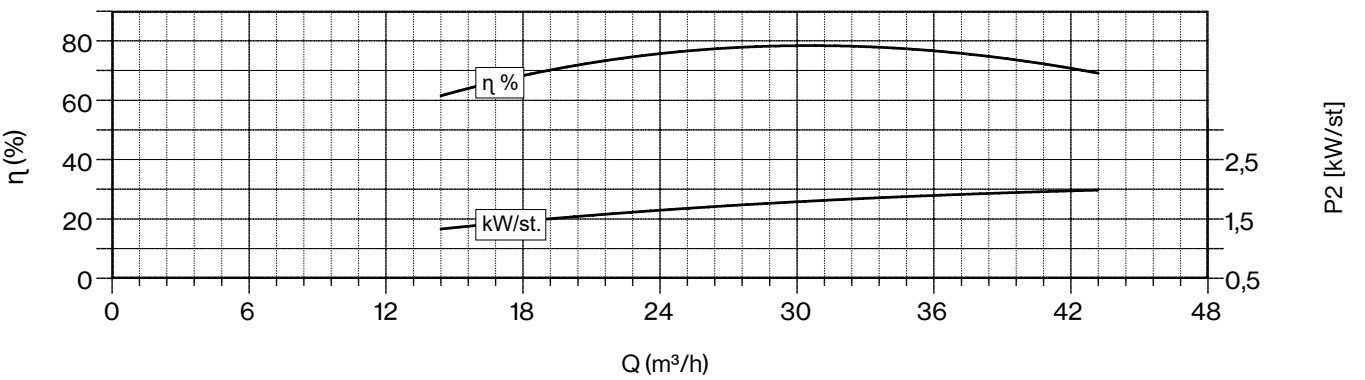
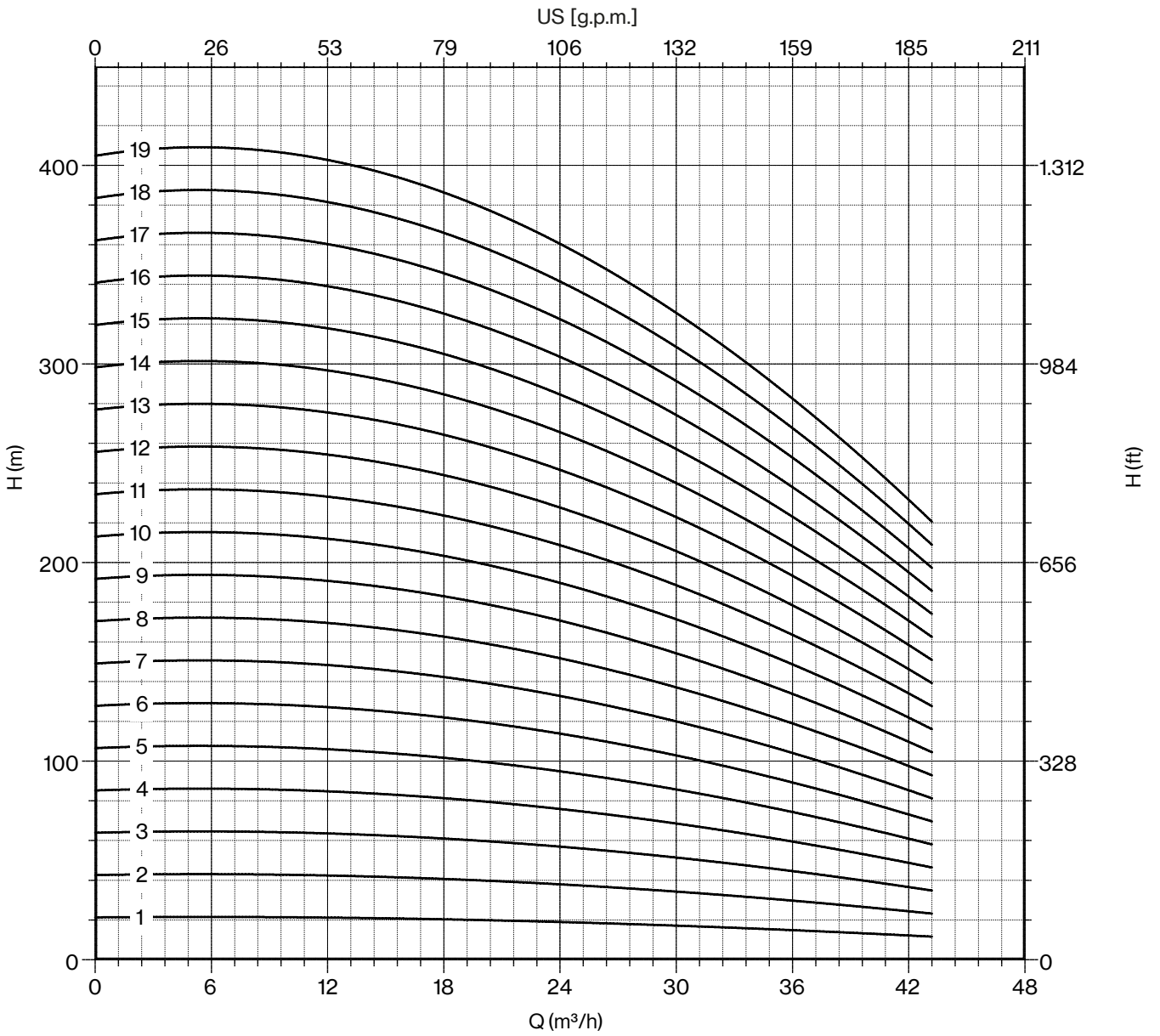
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4,5	6,6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 25/01-4	4" NEMA	722	302	420	12	11
6LRH 25/02-4		837	369	468	15,3	15
6LRH 25/03	6" NEMA	1137	436	701	55	20
6LRH 25/04		1254	503	751	60	24
6LRH 25/05		1381	570	811	65	28
6LRH 25/06		1478	637	841	70	32
6LRH 25/07		1635	704	931	75	36
6LRH 25/08		1762	771	991	83	40
6LRH 25/09		1829	838	991	83	44
6LRH 25/10		1976	905	1071	92	49
6LRH 25/11	2043	972	1071	92	53	
6LRH 25/12	2220	1039	1181	100	57	
6LRH 25/13	2287	1106	1181	100	61	
6LRH 25/14	2424	1173	1251	108	65	
6LRH 25/15	2491	1240	1251	108	69	
6LRH 25/16	2648	1307	1341	118	74	
6LRH 25/17	2715	1374	1341	118	78	
6LRH 25/18	2782	1441	1341	118	82	
6LRH 25/19	2849	1508	1341	118	86	



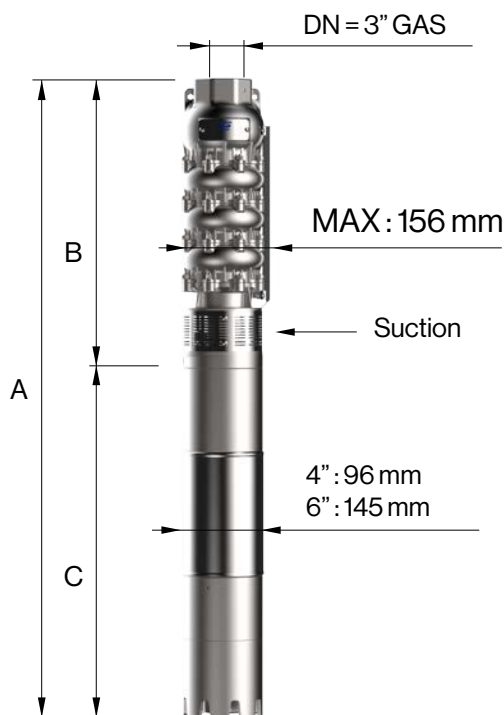
# 6LRH 25



60 Hz - 3500 rpm			Q											
TYPE	P2		l/min	0	300	360	420	480	540	600	660	720	780	840
	HP	kW	l/sec	0,0	5,0	6,0	7,0	8,0	9,0	10,0	11,0	12,0	13,0	14,0
			m³/h	0	18	22	25	29	32	36	40	43	47	50
6LRH 32/01	4	3	H (m)	22	22	21	20	19	18	17	16	14	13	11
6LRH 32/02	7,5	5,5		44	43	42	41	39	37	35	32	29	25	22
6LRH 32/03	10	7,5		66	65	64	61	58	55	52	48	43	38	32
6LRH 32/04	12,5	9,2		88	87	85	81	78	74	69	64	58	51	43
6LRH 32/05	17,5	13		110	109	106	102	97	92	86	80	72	63	54
6LRH 32/06	20	15		132	130	127	122	117	111	104	96	86	76	65
6LRH 32/07	25	18,5		154	152	148	142	136	129	121	112	101	89	76
6LRH 32/08	25	18,5		176	174	169	162	156	147	138	128	115	101	86
6LRH 32/09	30	22		198	196	191	183	175	166	156	144	130	114	97
6LRH 32/10	35	26		220	217	212	203	194	184	173	160	144	127	108
6LRH 32/11	35	26		242	239	233	223	214	203	190	176	158	139	119
6LRH 32/12	40	30		264	261	254	244	233	221	207	192	173	152	130
6LRH 32/13	40	30		286	283	275	264	253	240	225	208	187	165	140
6LRH 32/14	50	37		308	304	296	284	272	258	242	224	202	177	151
6LRH 32/15	50	37		330	326	318	305	292	276	259	240	216	190	162
6LRH 32/16	50	37		353	348	339	325	311	295	276	256	230	203	173

Max Eff. % =	77,5
Max kW / St. =	2,35

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	3,9	7,5

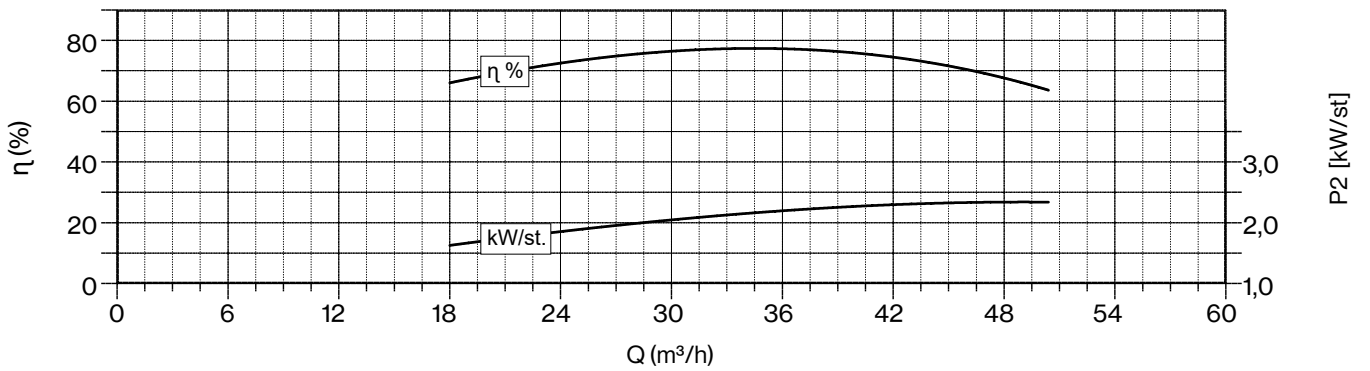
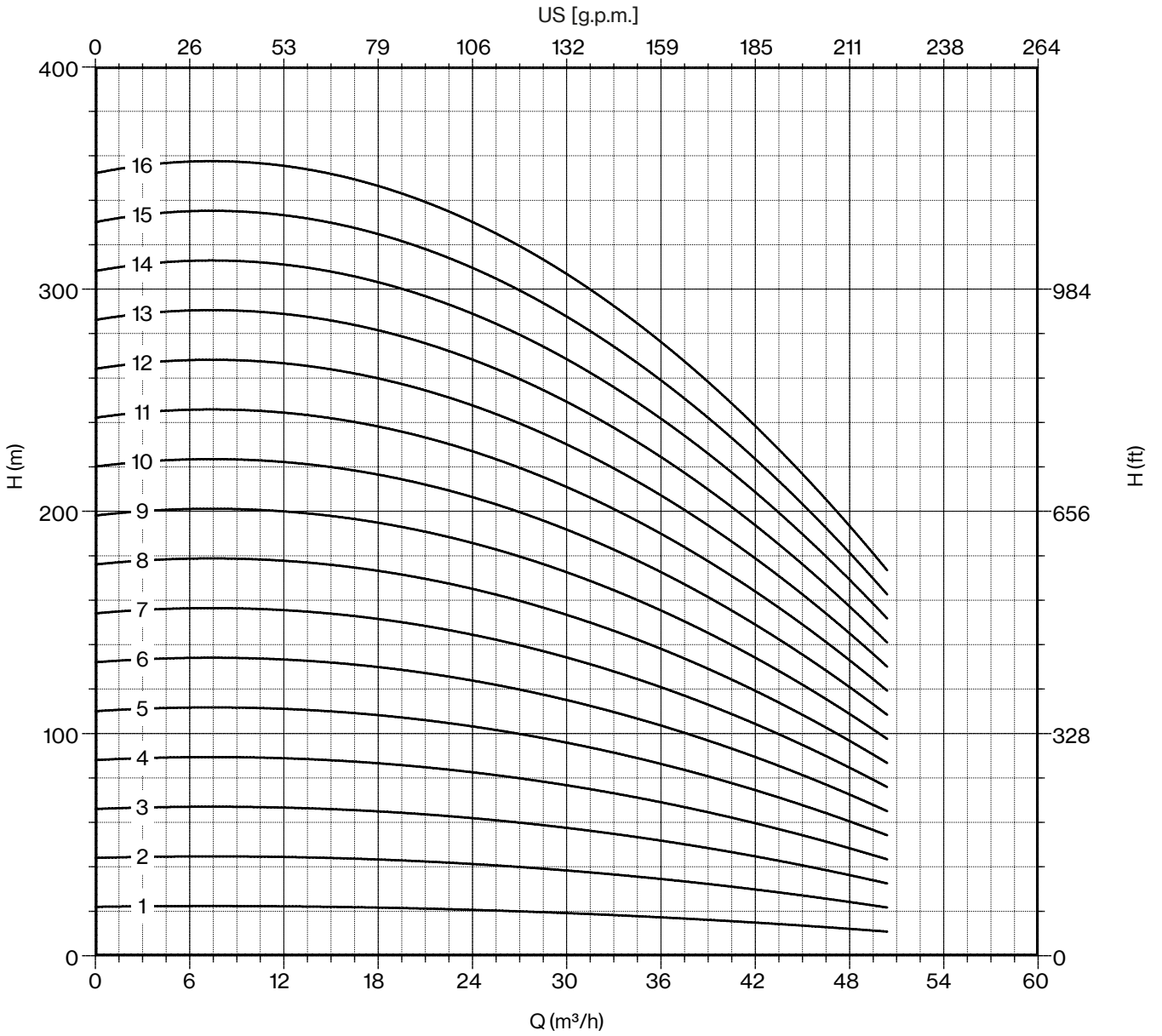


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 32/01-4	4" NEMA	720	302	418	12,8	11
6LRH 32/02-4		907	369	538	18,6	15
6LRH 32/03	6" NEMA	1137	436	701	55	20
6LRH 32/04		1254	503	751	60	24
6LRH 32/05		1411	570	841	70	28
6LRH 32/06		1568	637	931	75	32
6LRH 32/07		1695	704	991	83	36
6LRH 32/08		1762	771	991	83	40
6LRH 32/09		1909	838	1071	92	44
6LRH 32/10		2086	905	1181	100	49
6LRH 32/11		2153	972	1181	100	53
6LRH 32/12		2290	1039	1251	108	57
6LRH 32/13		2357	1106	1251	108	61
6LRH 32/14		2514	1173	1341	118	65
6LRH 32/15		2581	1240	1341	118	69
6LRH 32/16		2648	1307	1341	118	74

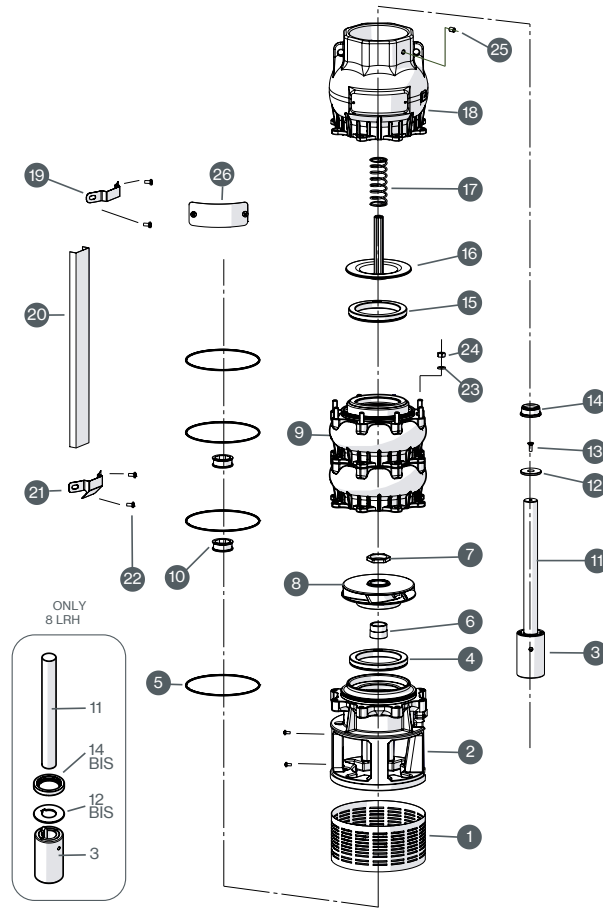
\* Coupled pump shaft



# 6LRH 32



# 6LRH-8LRH



N. CODE	DESCRIPTION	LRHS EXECUTION	LRHX EXECUTION	LRHD EXECUTION	(*) Q.TY
1	SUCTION STRAINER	AISI 304	AISI 316	Duplex EN 1.4462	-
2	MOTOR BRACKET	AISI 304	AISI 316	Duplex EN 1.4462	-
3	COUPLING	AISI 304	AISI 316	Duplex EN 1.4462	1
4	WEAR RING	NBR	NBR	NBR	N° of Stages
5	O-RING	NBR	NBR	NBR	N° of Stages
6	CONE	AISI 304	AISI 316	Duplex EN 1.4462	N° of Stages
7	HEXAGONAL RING	AISI 304	AISI 316	Duplex EN 1.4462	N° of Stages
8	IMPELLER	AISI 304	AISI 316	Duplex EN 1.4462	N° of Stages
9	DIFFUSER	AISI 304	AISI 316	Duplex EN 1.4462	-
10	BEARING BUSH	NBR	NBR	NBR	N° of Stages
11	SHAFT	AISI 304	AISI 316	Duplex EN 1.4462	1
12	DISK	AISI 304	AISI 316	Duplex EN 1.4462	-
13	SCREW	AISI 304	AISI 316	Duplex EN 1.4462	-
14	COUNTERTHRUST	PTFE+25% CARBON	PTFE+25% CARBON	PTFE+25% CARBON	1
15	GASKET VALVE	NBR	NBR	NBR	1
16	VALVE	AISI 304	AISI 316	Duplex EN 1.4462	-
17	SPRING	AISI 301	AISI 316	Duplex EN 1.4462	-
18	BODY VALVE	AISI 304	AISI 316	Duplex EN 1.4462	-
19	UPPER FLANGE	AISI 304	AISI 316	Duplex EN 1.4462	-
20	COVER CABLE	AISI 304	AISI 316	Duplex EN 1.4462	-
21	LOWER FLANGE	AISI 304	AISI 316	Duplex EN 1.4462	-
22	SCREW M4x8	AISI 304	AISI 316	Duplex EN 1.4462	-
23	WASHER	AISI 304	AISI 316	Duplex EN 1.4462	-
24	NUT	AISI 304	AISI 316	Duplex EN 1.4462	-
25	GRAIN	AISI 304	AISI 316	Duplex EN 1.4462	-
26	METALLIC LABEL	AISI 304	AISI 316	Duplex EN 1.4462	-

\* Recommended spare parts quantity

