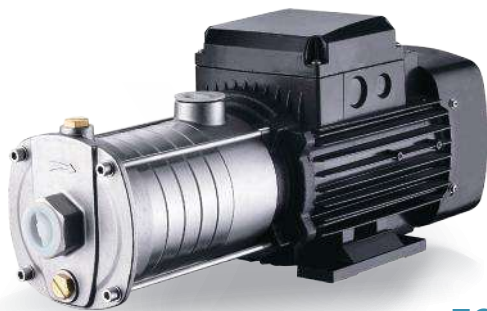


ECH

Stainless Steel Horizontal Multistage Pump



ECH



ECHS

Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc

Pump

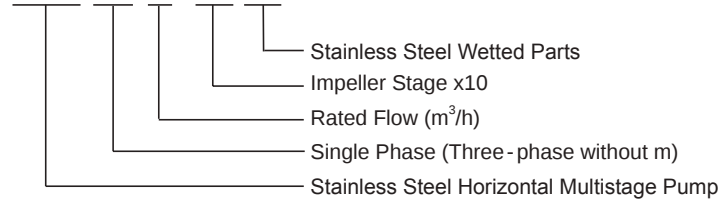
- AISI 304 shaft
- Max. liquid temperature: +85
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max. operation pressure: 10 bar
- Liquid PH Value: 4-10

Motor

- IE2 motor (IE3 motor available on request)
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max ambient temperature: +40

Identification Codes

ECH (m) 2 - 20 (S)



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc

Pump

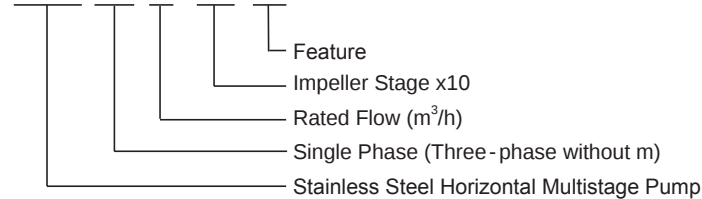
- AISI 304 shaft
- Max. liquid temperature: +60
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max. operation pressure: 10 bar
- Liquid PH Value: 6.5 - 8.5

Motor

- IE2 motor
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. ambient temperature: +40

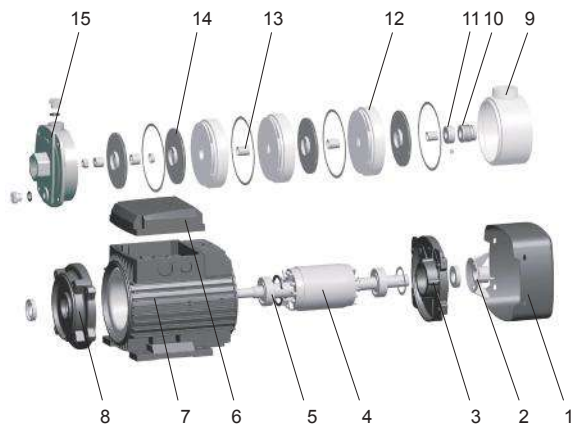
Identification Codes

ECH (m) 2 - 20 - F



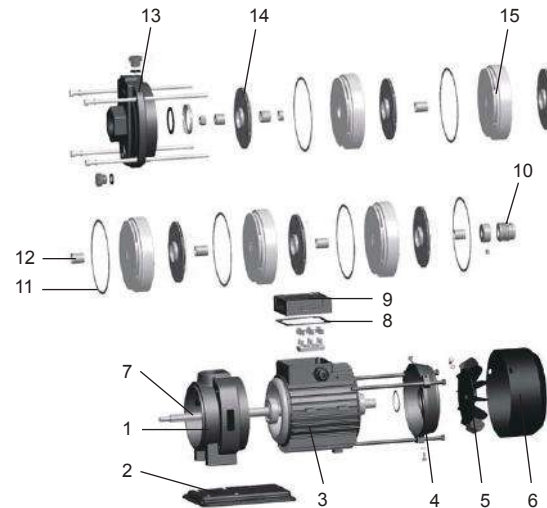
Materials Table

No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	ZL 102
4	Rotor	
5	Bearing	
6	Terminal box	ZL 102
7	Stator	
8	Front cover	Cast iron/AISI 304
9	Outlet body	Cast iron/AISI 304
10	Mechanical seal	Sic/Carbon
11	Positioning sleeve	AISI 304
12	Diffuser	AISI 304
13	Sleeve	AISI 304
14	Impeller	AISI 304
15	Pump body	Cast iron/AISI 304

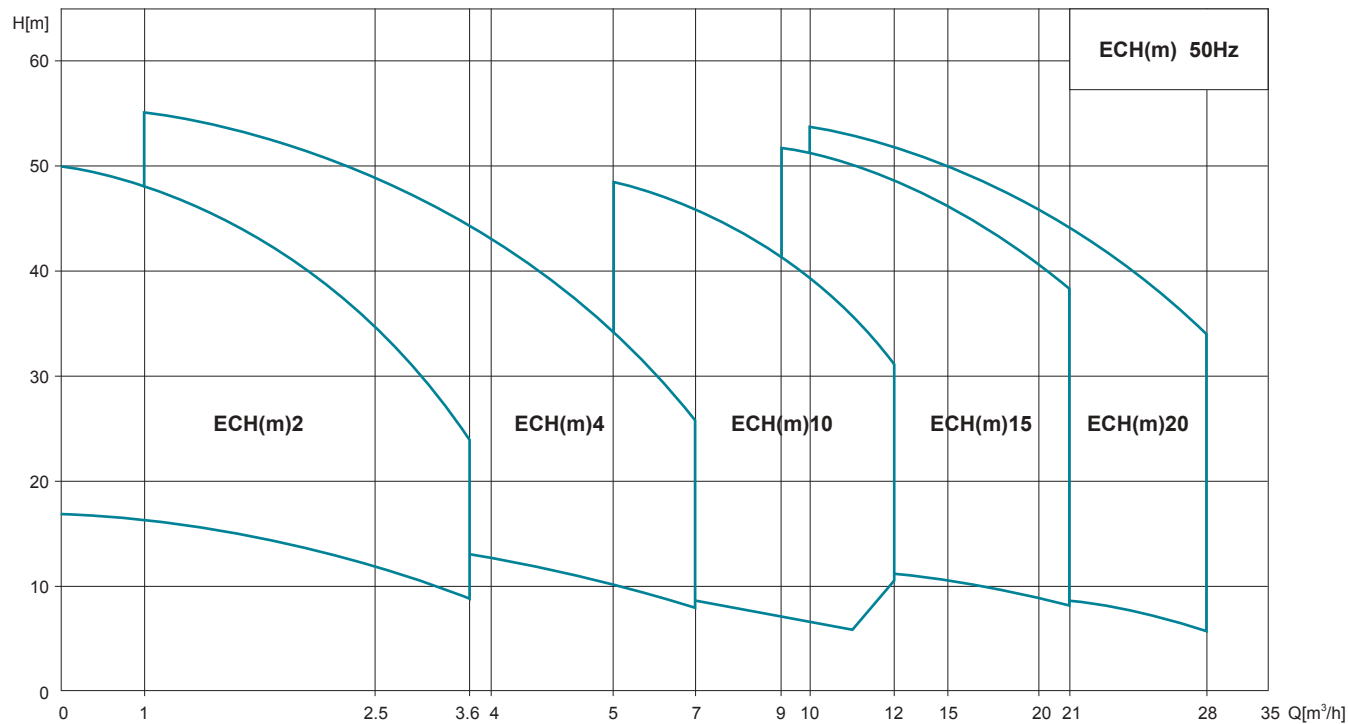


Materials Table

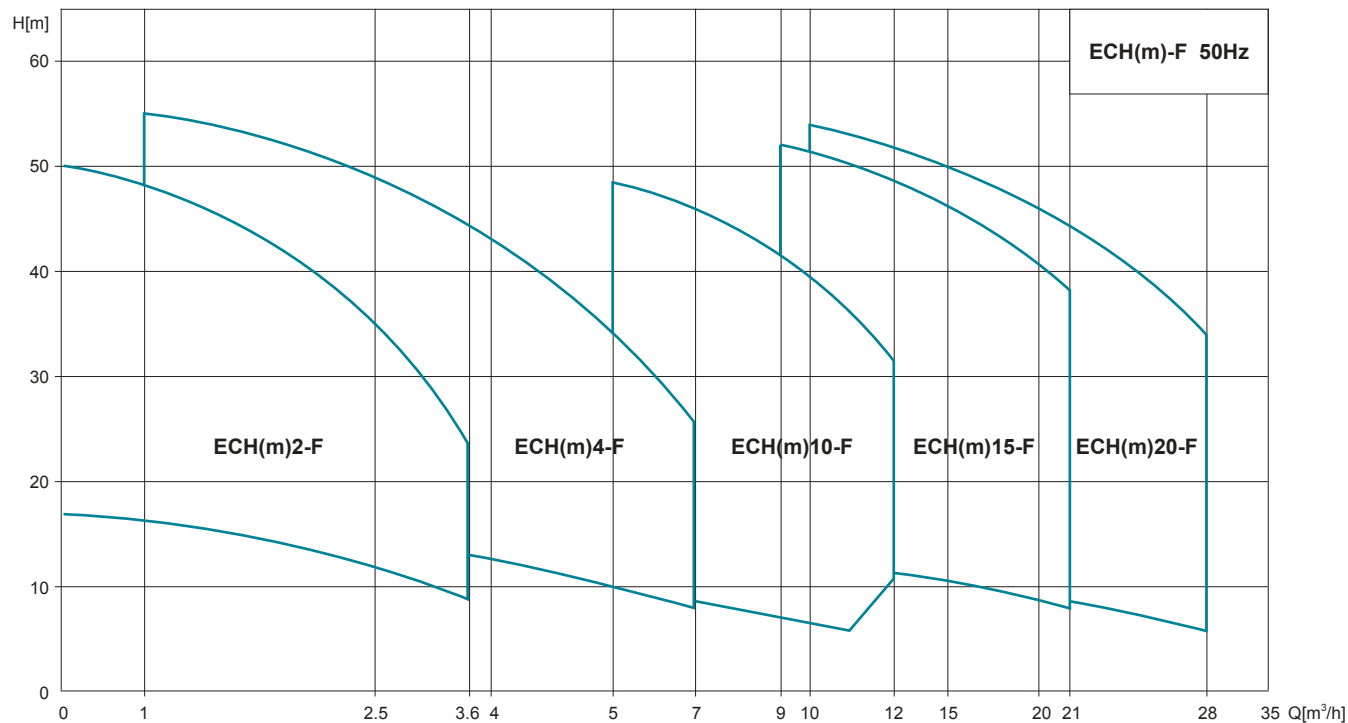
No.	Part	Material
1	Support	Cast iron
2	Base	Q235
3	Stator	ZL 102
4	Rear	ZL 102
5	Fan	PP-GF15
6	Fan cover	08F
7	Rotor	
8	O-ring	NBR
9	Terminal Box	PP-GF20
10	Mechanical seal	Sic/Carbon
11	O-ring	NBR
12	Sleeve	AISI 304
13	Pump body	HT200
14	Impeller	AISI 304
15	Diffuser	AISI 304



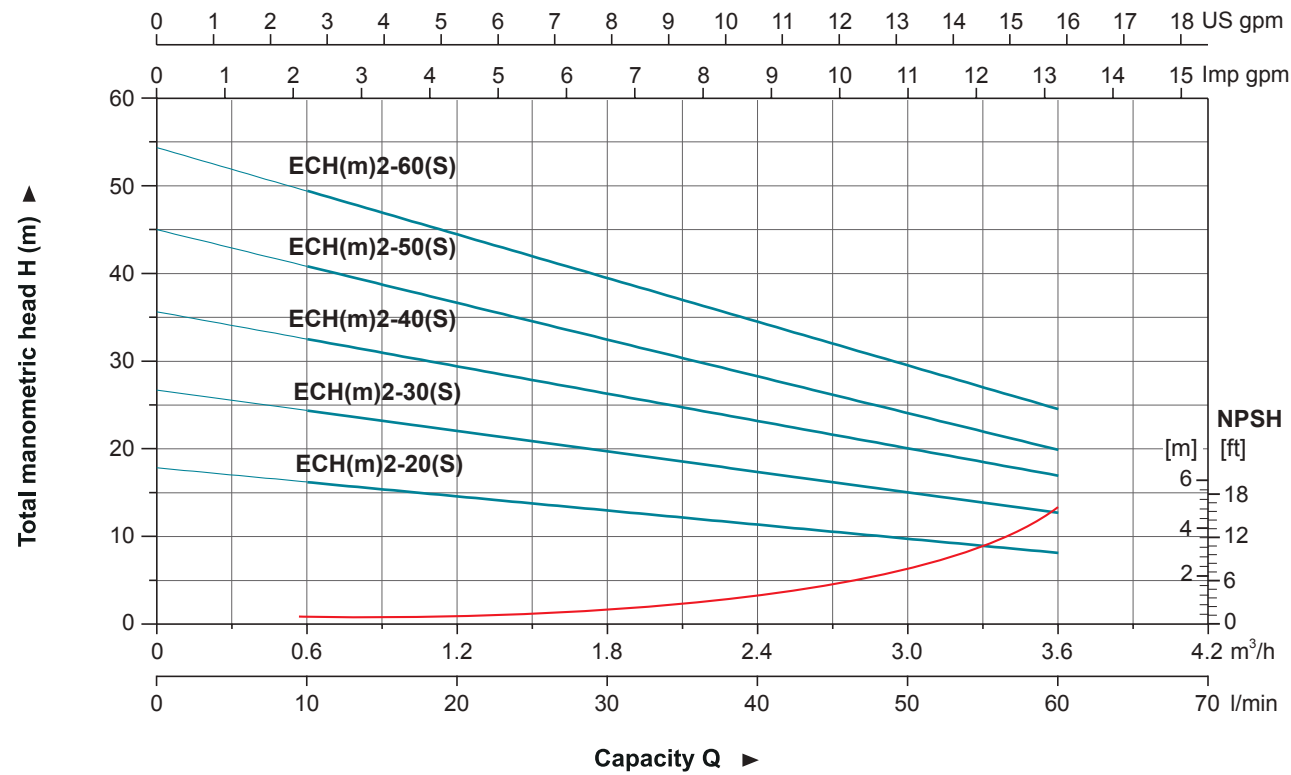
Scope of Performance - ECH



Scope of Performance - ECH-F



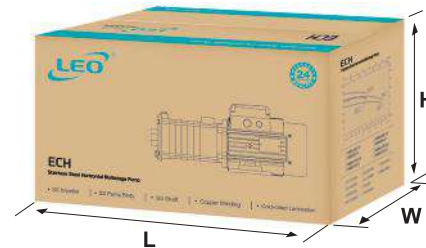
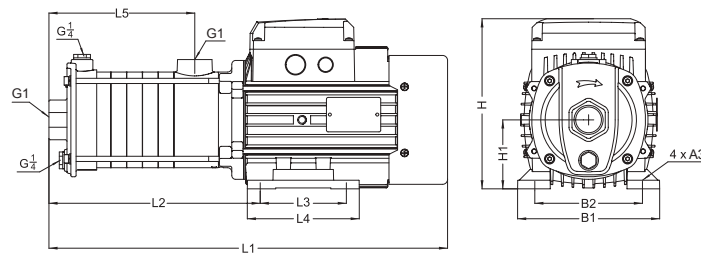
Hydraulic Performance Curves



Technical Data

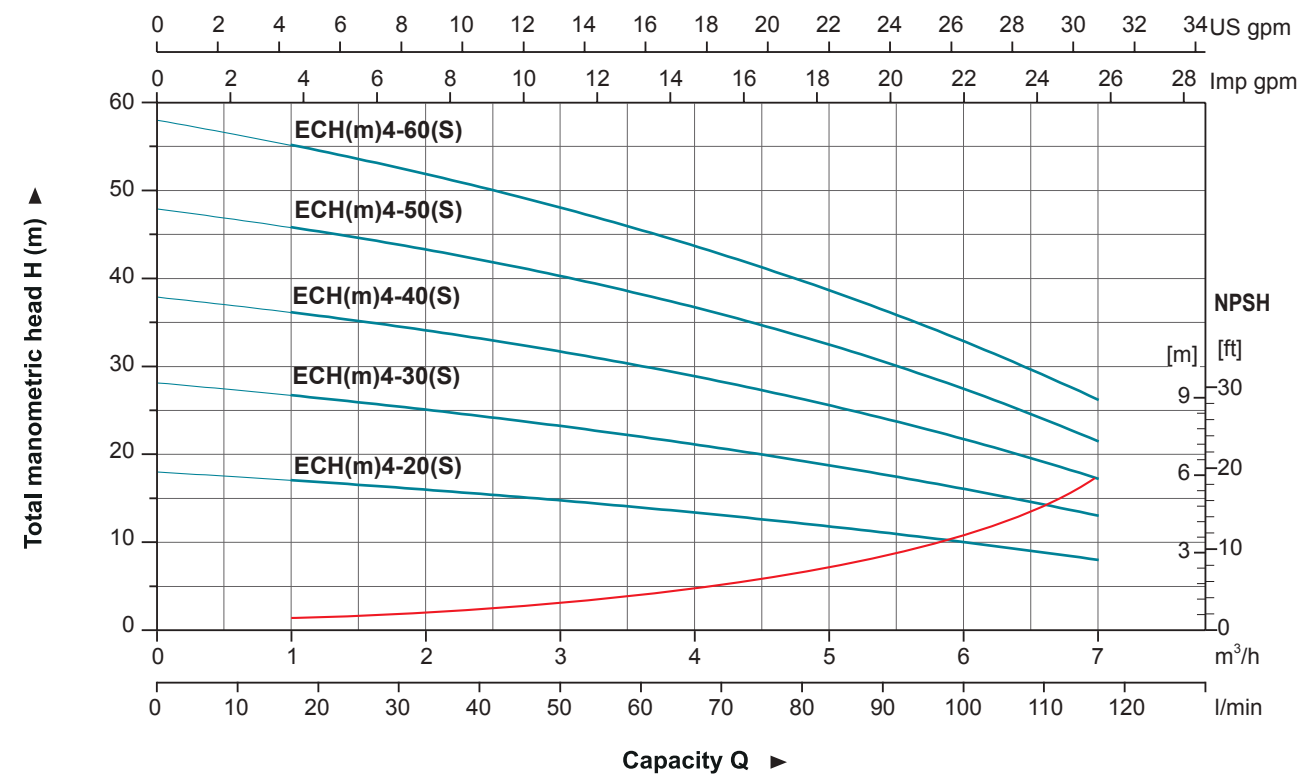
Model	Power		Q (m³/h) Q (l/min)	0.6	1.2	1.8	2.4	3.0	3.6
	kW	HP		10	20	30	40	50	60
ECH(m)2-20(S)	0.37	0.5	H (m)	16	15	13	12	10	8
ECH(m)2-30(S)	0.37	0.5		24	22	20	18	16	12
ECH(m)2-40(S)	0.55	0.75		33	30	26	24	21	16
ECH(m)2-50(S)	0.55	0.75		40	37	33	30	24	19
ECH(m)2-60(S)	0.75	1.0		50	45	40	36	30	23

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
ECH(m)2-20(S)	344.5	165.5	90	110	98.5	137	112	176.5	71	Φ7	11.5	420x215x243	1215
ECH(m)2-30(S)	362.5	183.5	90	110	116.5	137	112	176.5	71	Φ7	11.8	420x215x243	1215
ECH(m)2-40(S)	380.5	201.5	90	100	134.5	137	112	176.5	71	Φ7	13.2	420x215x243	1215
ECH(m)2-50(S)	399.5	220.5	90	110	153.5	137	112	176.5	71	Φ7	13.7	455x215x243	1170
ECH(m)2-60(S)	417.5	238.5	90	110	171.5	137	112	176.5	71	Φ7	14.6	455x215x243	1170

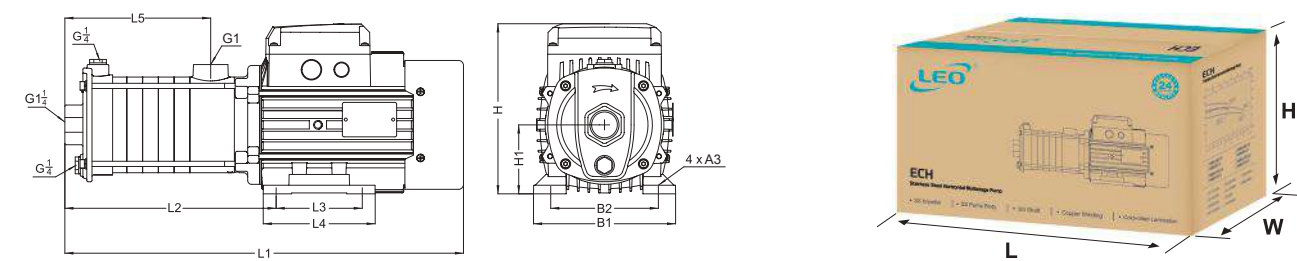
Hydraulic Performance Curves



Technical Data

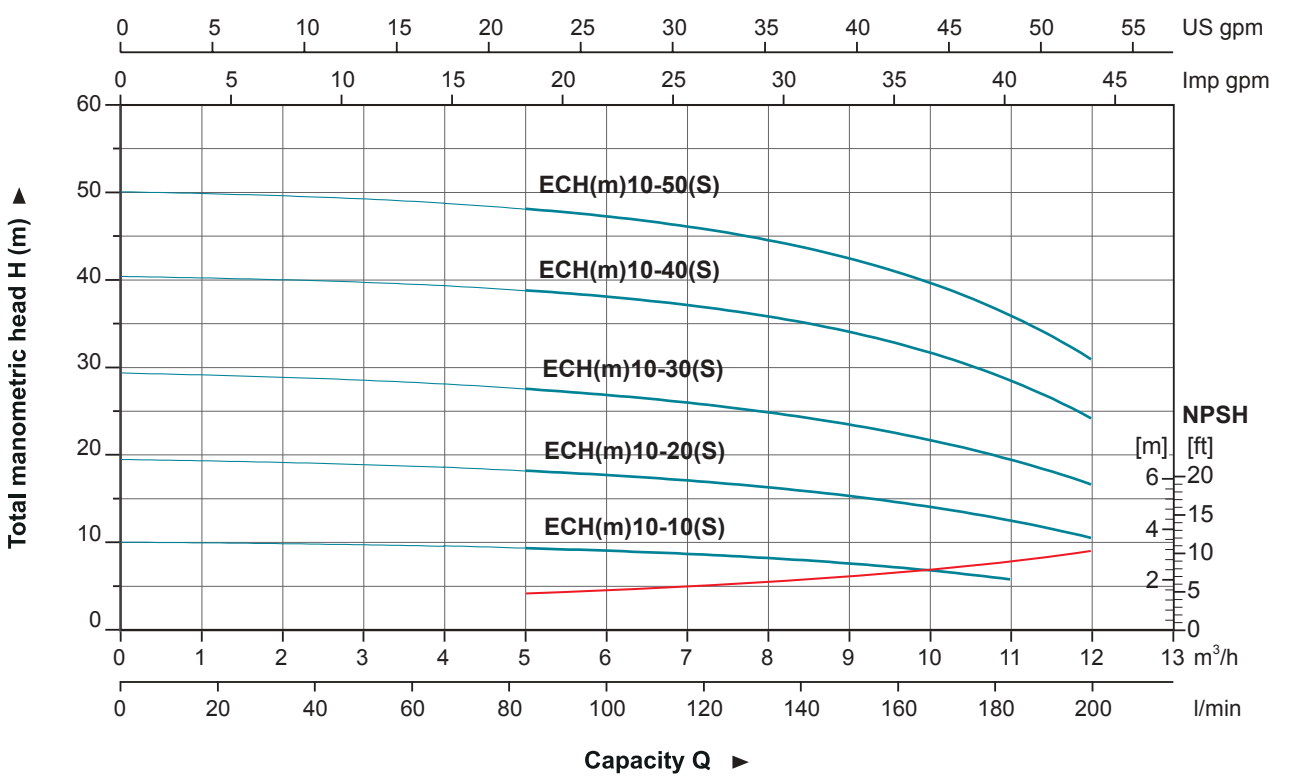
Model	Power		Q(m³/h) Q(l/min)	1	2	3	4	5	6	7
	kW	HP		17	33	50	67	83	100	117
ECH(m)4-20(S)	0.55	0.75	H (m)	17	16	15	13	12	10	8
ECH(m)4-30(S)	0.55	0.75		27	25	23	21	19	16	13
ECH(m)4-40(S)	0.75	1.0		36	34	32	28	26	22	17
ECH(m)4-50(S)	1.1	1.5		46	43	40	36	33	28	21
ECH(m)4-60(S)	1.1	1.5		55	52	48	43	39	33	26

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
ECH(m)4-20(S)	354	175.5	90	110	108.5	137	112	176.5	71	Φ7	13.1	420x215x243	1215
ECH(m)4-30(S)	381.5	203	90	110	136	137	112	176.5	71	Φ7	13.6	420x215x243	1215
ECH(m)4-40(S)	408.5	230	90	110	163	137	112	176.5	71	Φ7	14.7	455x215x243	1170
ECH(m)4-50(S)	484	266	100	130	190	165	125	204.5	80	Φ10	21.5	548x235x268	800
ECH(m)4-60(S)	511.5	293.5	100	130	217.5	165	125	204.5	80	Φ10	22	548x235x268	800

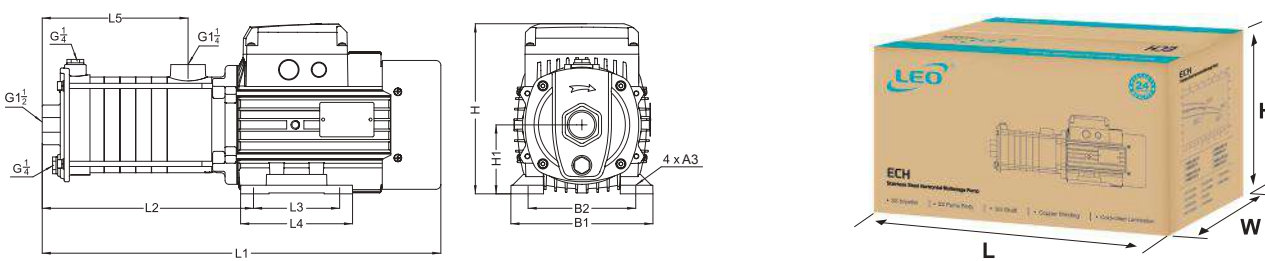
Hydraulic Performance Curves



Technical Data

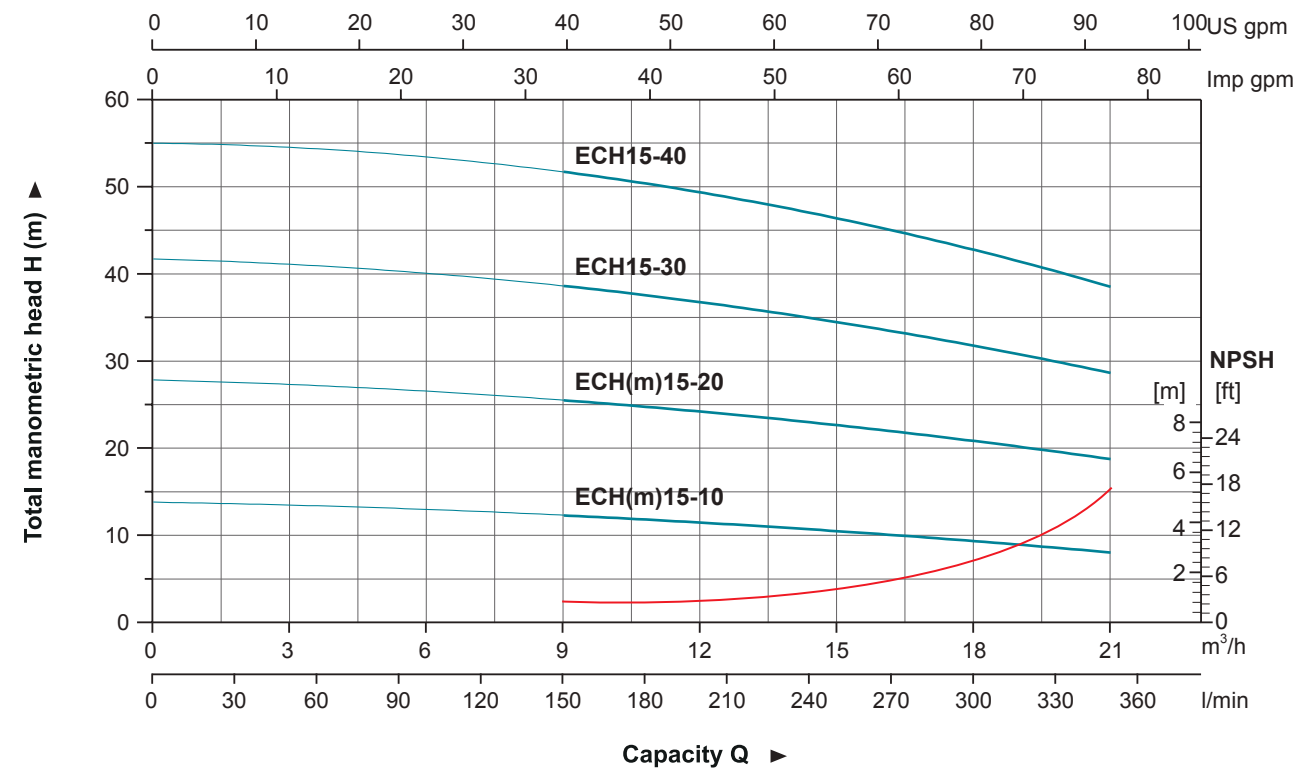
Model	Power		Q(m³/h) Q(l/min)	6	7	8	9	10	11	12
	kW	HP		100	117	133	150	167	183	200
ECH(m)10-10(S)	0.75	1.0	H (m)	9.1	8.7	8.2	7.7	6.8	5.8	-
ECH(m)10-20(S)	0.75	1.0		17.9	17.1	16.3	15.3	14	12.5	10.6
ECH(m)10-30(S)	1.1	1.5		27.1	26.3	24.9	23.4	21.4	19.3	16.9
ECH(m)10-40(S)	1.5	2.0		38.6	37.6	35.9	33.9	31.2	28.2	24.6
ECH(m)10-50(S)	2.2	3.0		47.8	46.4	44.4	42.2	39.5	35.9	31.1

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
ECH(m)10-10(S)	430	212	100	130	121	165	125	204.5	80	Φ10	20.7	503x235x268	856
ECH(m)10-20(S)	430	212	100	130	121	165	125	204.5	80	Φ10	20.8	503x235x268	856
ECH(m)10-30(S)	460.5	242.5	100	130	151.5	165	125	204.5	80	Φ10	21.9	503x235x268	856
ECH(m)10-40(S)	549.5	261.5	125	150	182	180	140	217.5	90	Φ10	28.2	618x245x283	653
ECH(m)10-50(S)	579.5	291.5	125	150	212	180	140	217.5	90	Φ10	30.6	618x245x283	653

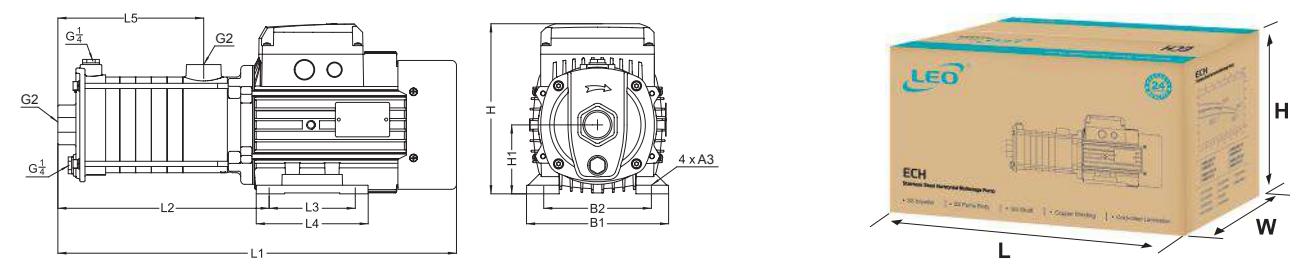
Hydraulic Performance Curves



Technical Data

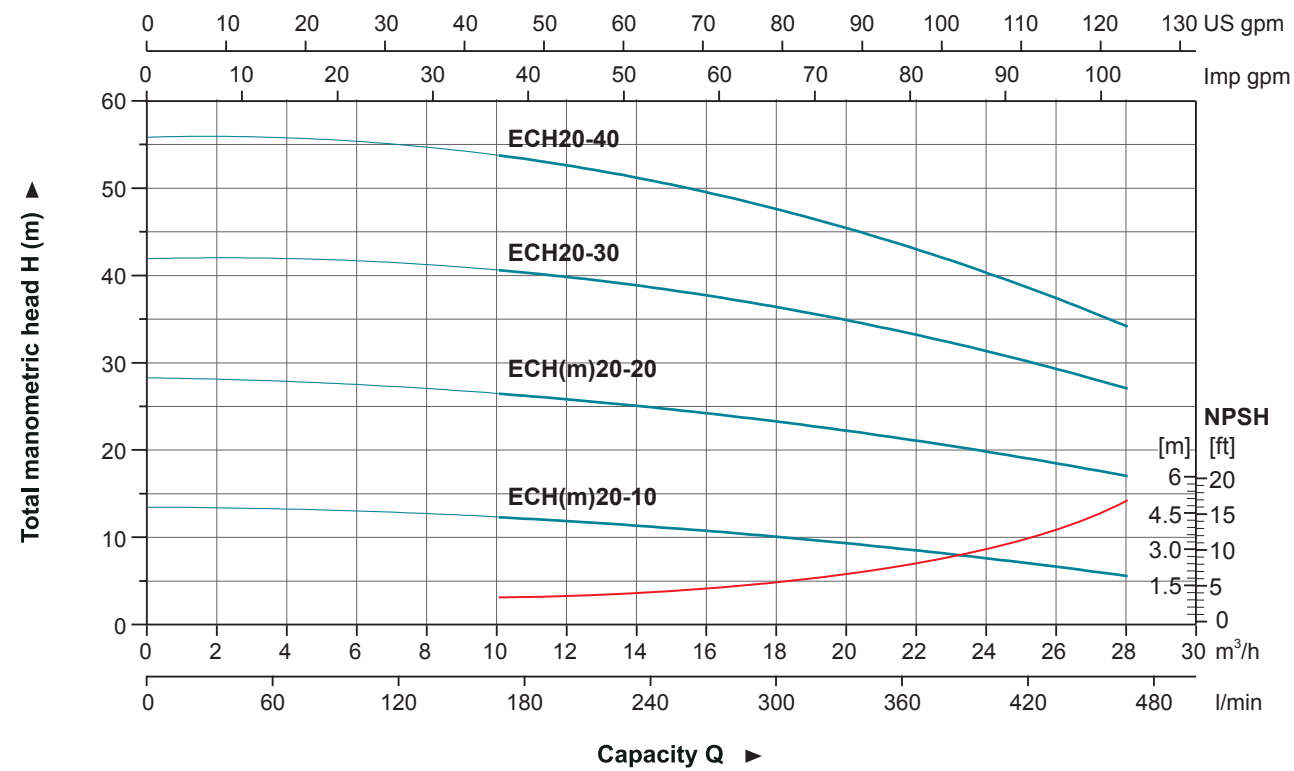
Model	Power		Q(m³/h) Q(l/min)	9	12	15	18	21
	kW	HP		150	200	250	300	350
ECH(m)15-10	1.1	1.5	H (m)	12.4	11.6	10.6	9.4	8.2
ECH(m)15-20	2.2	3		25.6	24.1	22.7	21.1	18.8
ECH15-30	3.0	4		38.7	36.9	34.9	31.9	28.5
ECH15-40	4.0	5.5		51.8	49.7	46.8	42.9	38.3

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
ECH(m)15-10	451	233.5	100	130	139.5	165	125	204.5	80	Φ10	22.7	503x235x268	856
ECH(m)15-20	510	222	125	150	139.5	180	140	217.5	90	Φ10	30.3	557x245x283	659
ECH15-30	560	272	125	150	189.5	180	140	217.5	90	Φ10	32.2	618x245x283	620
ECH15-40	616	336.5	140	180	230	205	160	224.5	100	Φ12	39.6	687x245x290	504

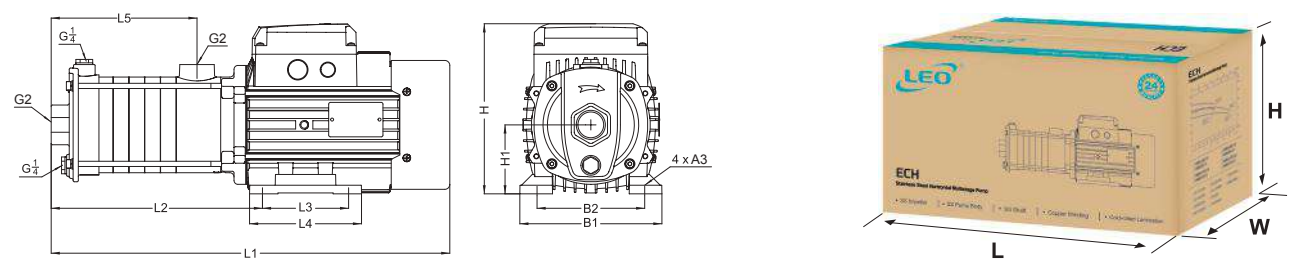
Hydraulic Performance Curves



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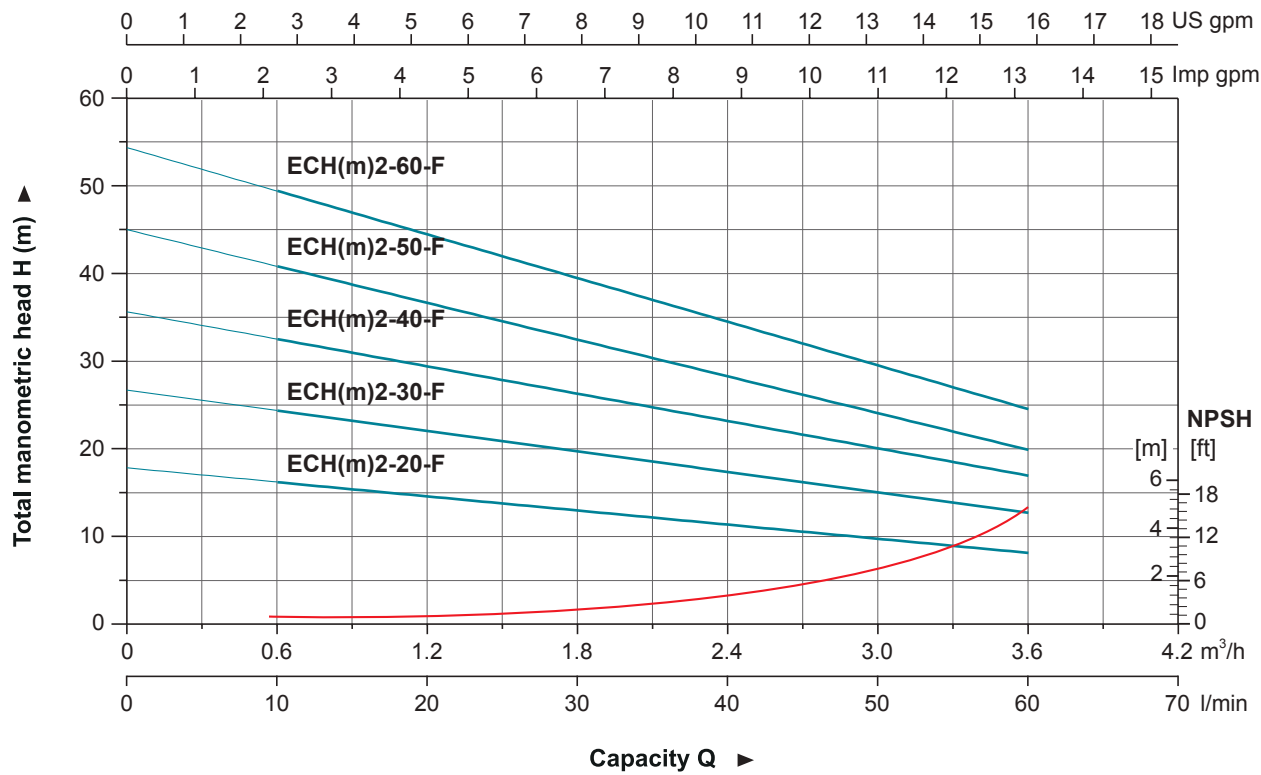
Model	Power		Q(m³/h) Q(l/min)	12	16	20	24	28
	kW	HP		200	267	333	400	467
ECH(m)20-10	1.1	1.5	H (m)	12.1	10.8	9.5	7.8	5.7
ECH(m)20-20	2.2	3		26.1	24.4	22.4	19.8	17.2
ECH20-30	4.0	5.5		39.9	38.0	35.5	31.4	26.9
ECH20-40	4.0	5.5		52.7	50.1	45.9	40.3	34.0

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
ECH(m)20-10	451	233.5	100	130	139.5	165	125	204.5	80	Φ10	22.7	503x235x268	856
ECH(m)20-20	510	222	125	150	139.5	180	140	217.5	90	Φ10	30.3	557x245x283	659
ECH20-30	570.5	291	140	180	184.5	205	160	224.5	100	Φ12	38.9	687x245x290	513
ECH20-40	616	336.5	140	180	230	205	160	224.5	100	Φ12	39.4	687x245x290	504

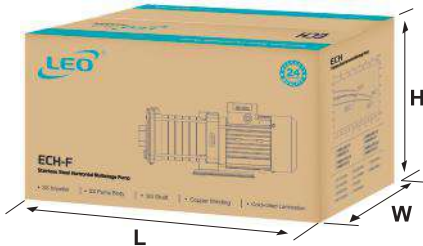
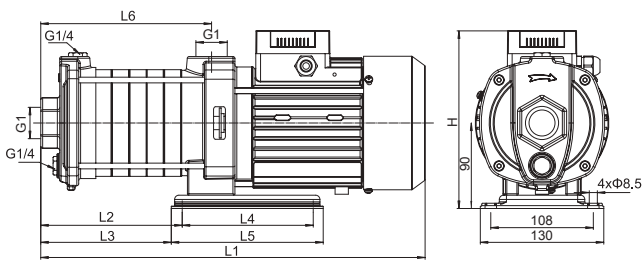
Hydraulic Performance Curves



Technical Data

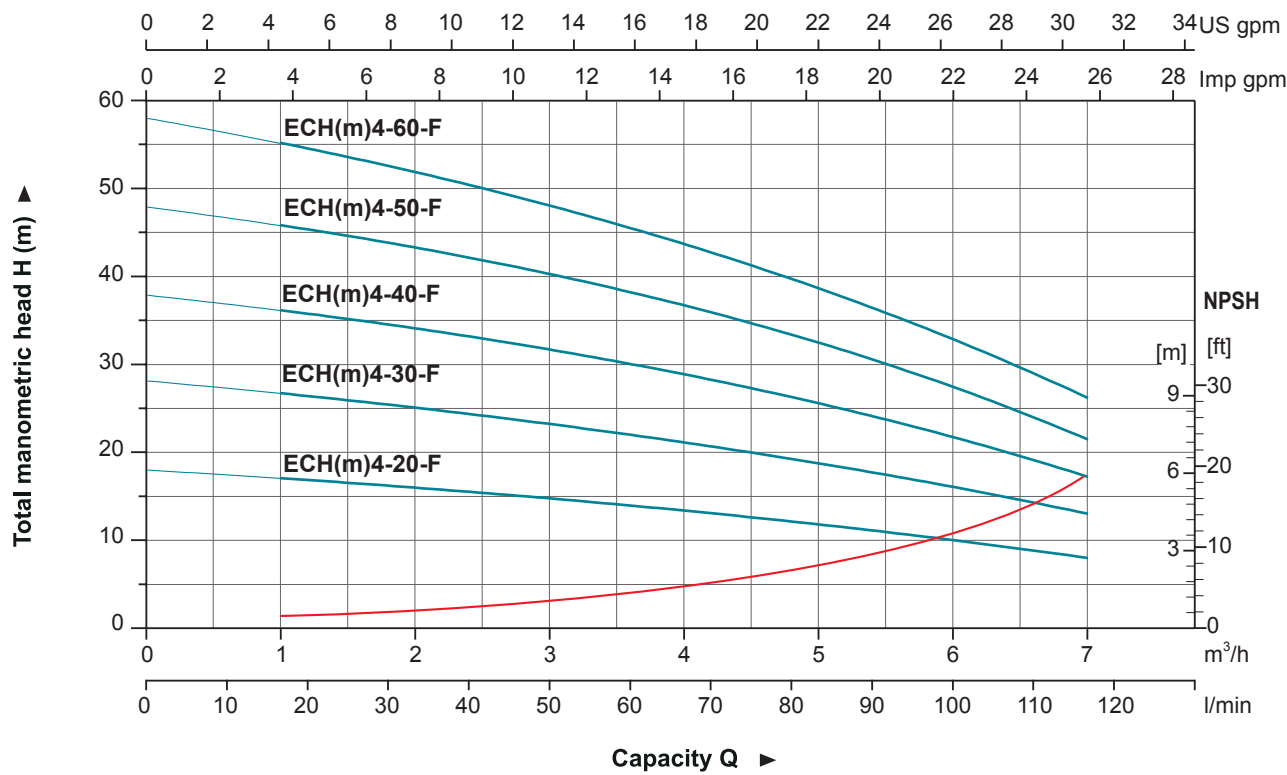
Model	Power		Q (m³/h) Q (l/min)	0	0.6	1.2	1.8	2.4	3.0	3.6
	kW	HP		0	10	20	30	40	50	60
ECH(m)2-20-F	0.37	0.5	H (m)	18	16	15	13	12	10	8
ECH(m)2-30-F	0.37	0.5		27	24	22	20	18	16	12
ECH(m)2-40-F	0.55	0.75		35	33	30	26	24	21	16
ECH(m)2-50-F	0.55	0.75		45	40	37	33	30	24	19
ECH(m)2-60-F	0.75	1.0		53	50	45	40	36	30	23

Dimension



Model	L1	L2	L3	L4	L5	L6	H		GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
							1~	3~			
ECH(m)2-20-F	333	75	64	138	160	103.5	197.5	187	12.3	400x205x240	1386
ECH(m)2-30-F	352	93.5	82.5	138	160	122	197.5	187	12.6	400x205x240	1260
ECH(m)2-40-F	370	112	101	138	160	140.5	197.5	187	13.3	400x205x240	1386
ECH(m)2-50-F	389	130.5	119.5	138	160	159	197.5	187	13.8	400x205x240	1260
ECH(m)2-60-F	407	149	138	138	160	177.5	197.5	187	14.7	400x205x240	1161

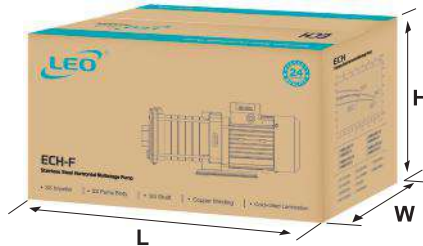
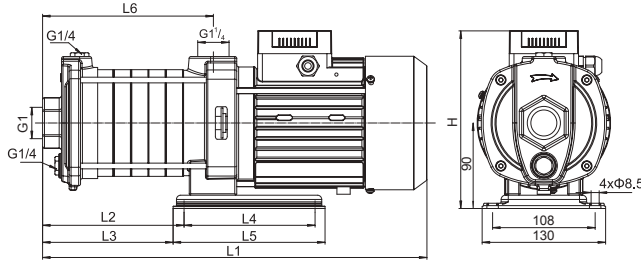
Hydraulic Performance Curves



Technical Data

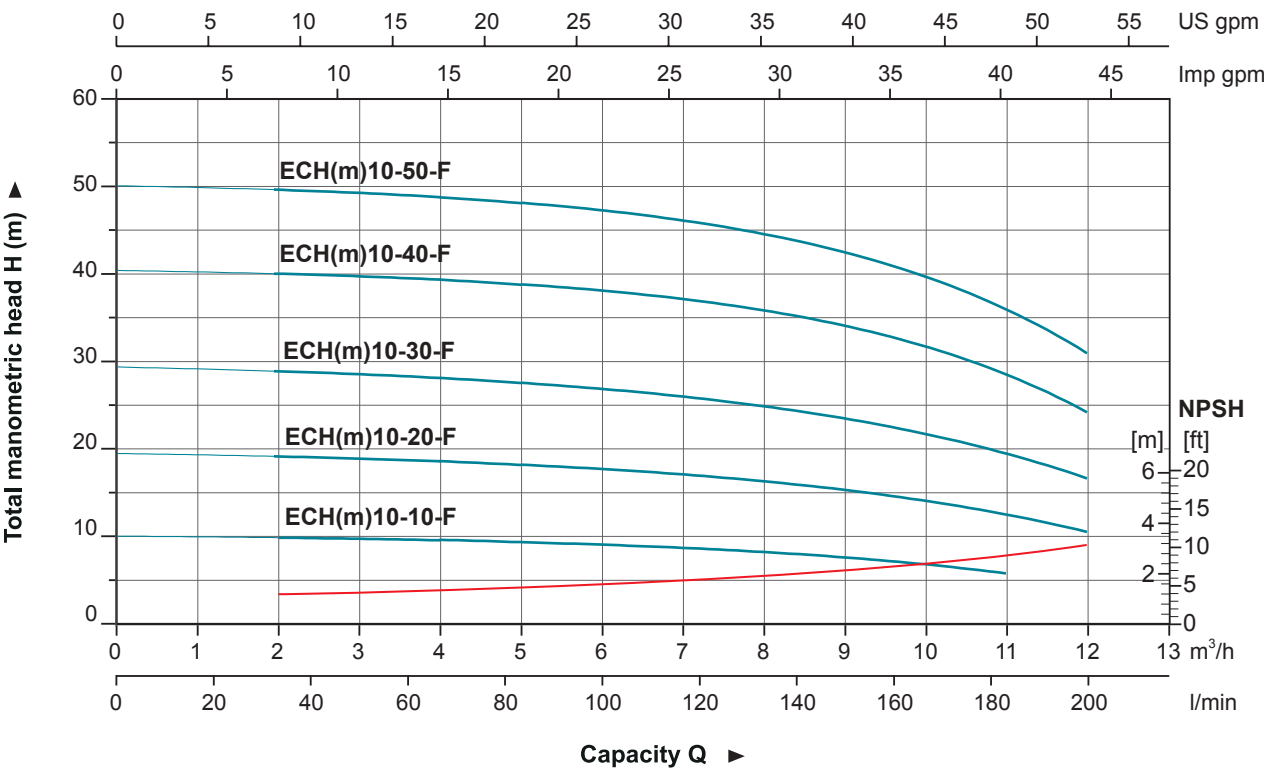
Model	Power		Q(m³/h) Q(l/min)	0	1	2	3	4	5	6	7
	kW	HP		0	17	33	50	67	83	100	117
ECH(m)4-20-F	0.55	0.75	H (m)	18	17	16	15	13	12	10	8
ECH(m)4-30-F	0.55	0.75		28	27	25	23	21	19	16	13
ECH(m)4-40-F	0.75	1.0		38	36	34	32	28	26	22	17
ECH(m)4-50-F	1.1	1.5		48	46	43	40	36	33	28	21
ECH(m)4-60-F	1.1	1.5		58	55	52	48	43	39	33	26

Dimension



Model	L1	L2	L3	L4	L5	L6	H		GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
							1~	3~			
ECH(m)4-20-F	342	85.5	74.5	138	160	114	197.5	187	12.8	400x205x240	1386
ECH(m)4-30-F	370	113	102	138	160	141.5	197.5	187	13	400x205x240	1386
ECH(m)4-40-F	398	140.5	129.5	138	160	169	197.5	187	14.9	455x205x240	1260
ECH(m)4-50-F	426	168	157	138	160	196.5	197.5	187	15.7	455x205x240	1260
ECH(m)4-60-F	453	195.5	184.5	138	160	224	197.5	187	15.9	485x205x240	1161

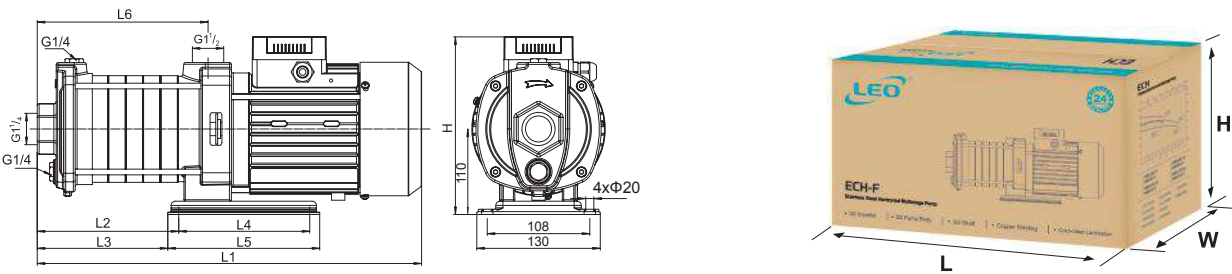
Hydraulic Performance Curves



Technical Data

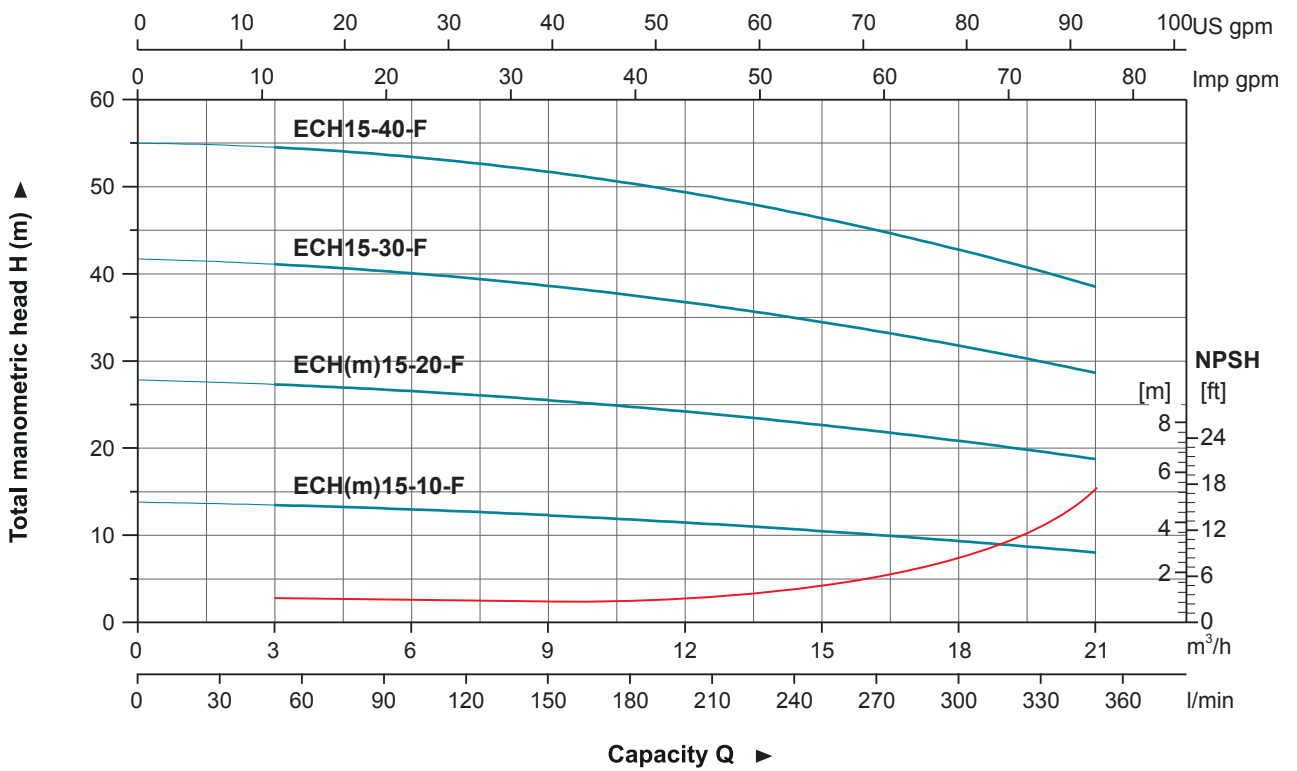
Model	Power		Q(m³/h)	0	2	4	6	7	8	9	10	11	12
	kW	HP	Q(l/min)	0	33	67	100	117	133	150	167	183	200
ECH(m)10-10-F	0.75	1.0	H (m)	10.1	9.8	9.6	9.1	8.7	8.2	7.7	6.8	5.8	-
ECH(m)10-20-F	0.75	1.0		19.5	19	18.7	17.9	17.1	16.3	15.3	14	12.5	10.6
ECH(m)10-30-F	1.1	1.5		29.3	28.6	28.3	27.1	26.3	24.9	23.4	21.4	19.3	16.9
ECH(m)10-40-F	1.5	2.0		38.1	39.6	39.8	38.6	37.6	35.9	33.9	31.2	28.2	24.6
ECH(m)10-50-F	2.2	3.0		49.9	49.2	49.1	47.8	46.4	44.4	42.2	39.5	35.9	31.1

Dimension



Model	L1	L2	L3	L4	L5	L6	H		GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
							1~	3~			
ECH(m)10-10-F	398	122	111	138	170	120	232.5	226	21.5	435x275x310	896
ECH(m)10-20-F	398	122	111	138	170	120	232.5	226	21.9	435x275x310	896
ECH(m)10-30-F	428	152	141	138	170	150	232.5	226	24.3	465x275x310	756
ECH(m)10-40-F	530	194	183	138	170	187	236	230	26.1	575x275x310	686
ECH(m)10-50-F	560	224	213	138	170	217	242	230	30.4	605x275x310	637

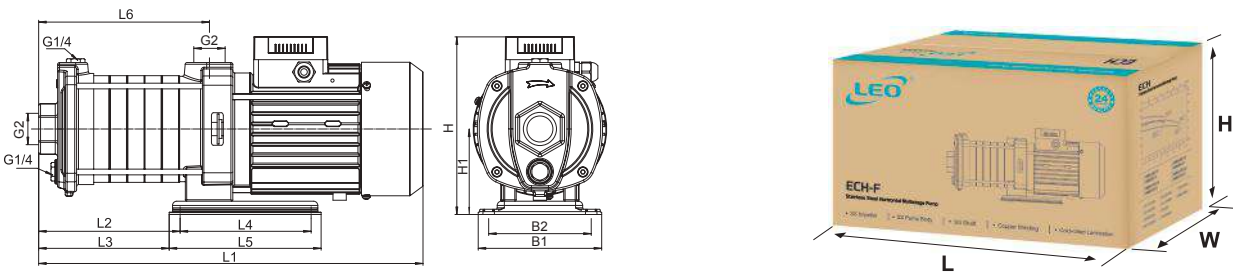
Hydraulic Performance Curves



Technical Data

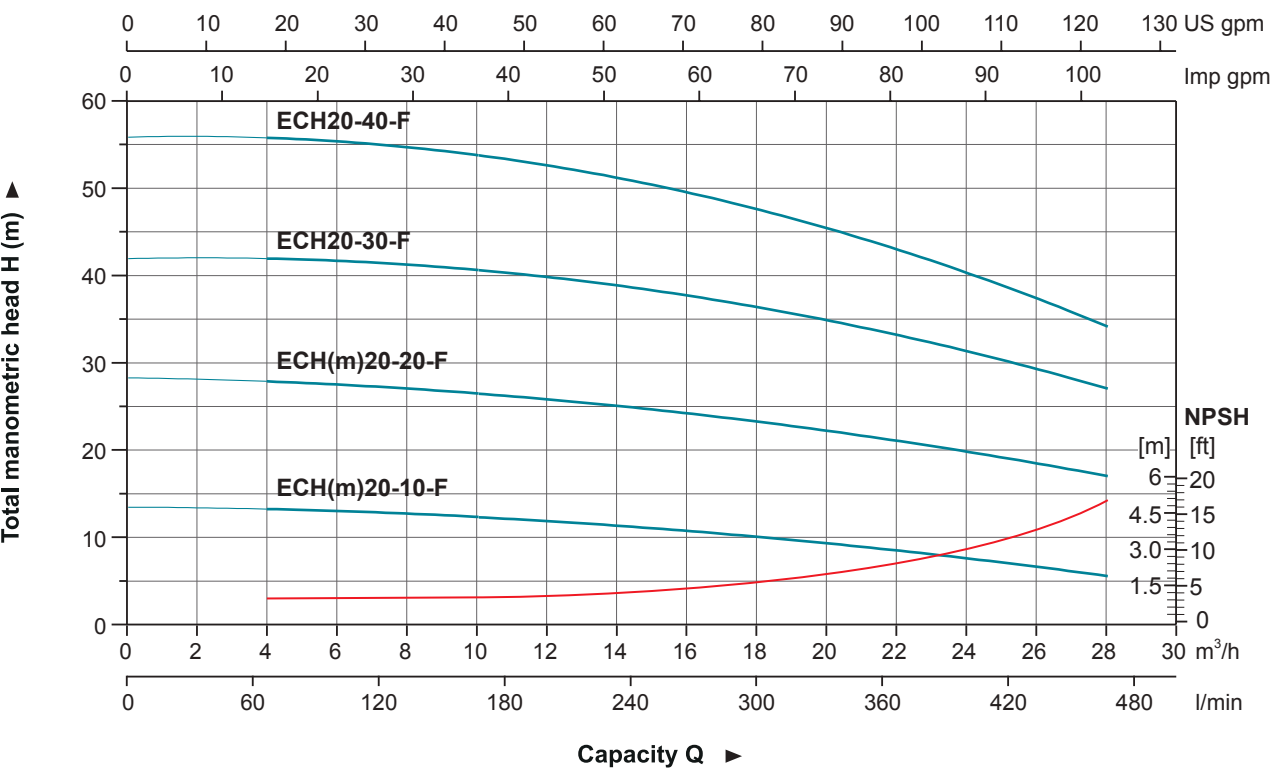
Model	Power		Q(m³/h)	0	3	6	9	12	15	18	21
	kW	HP	Q(l/min)	0	50	100	150	200	250	300	350
ECH(m)15-10-F	1.1	1.5	H (m)	13.9	13.5	13.1	12.4	11.6	10.6	9.4	8.2
ECH(m)15-20-F	2.2	3		27.8	27.5	26.7	25.6	24.1	22.7	21.1	18.8
ECH15-30-F	3.0	4		42.1	40.9	39.8	38.7	36.9	34.9	31.9	28.5
ECH15-40-F	4.0	5.0		55.5	54.3	52.8	51.8	49.7	46.8	42.9	38.3

Dimension



Model	L1	L2	L3	L4	L5	L6	B1	B2	H		H1	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
									1~	3~				
ECH(m)15-10-F	419	142	131	138	170	142	130	108	232.5	226	110	23	465x275x310	756
ECH(m)15-20-F	485	149	138	138	170	142	130	108	242	230	110	29.2	530x275x310	696
ECH15-30-F	546	192	190	190	230	185	180	140	-	250	120	34.5	590x275x310	539
ECH15-40-F	591	237	217	190	230	230	180	140	-	250	120	46.5	635x275x310	430

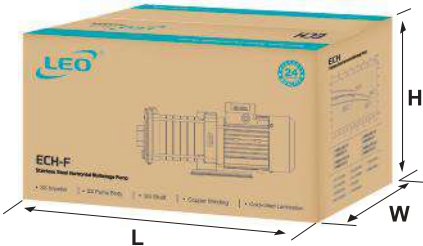
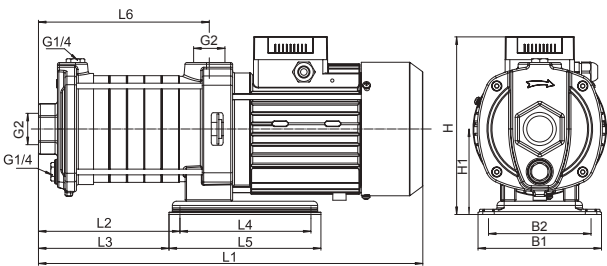
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	0	4	8	12	16	20	24	28
	kW	HP									
ECH(m)20-10-F	1.1	1.5	H (m)	13.6	13.3	12.8	12.1	10.8	9.5	7.8	5.7
ECH(m)20-20-F	2.2	3		28.5	27.8	27.0	26.1	24.4	22.4	19.8	17.2
ECH20-30-F	4.0	5.0		42.5	41.6	40.9	39.9	38.0	35.5	31.4	26.9
ECH20-40-F	4.0	5.0		56.6	55.2	54.2	52.7	50.1	45.9	40.3	34.0

Dimension



Model	L1	L2	L3	L4	L5	L6	B1	B2	H		H1	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20' TEU)
									1~	3~				
ECH(m)20-10-F	419	142	131	138	170	142	130	108	232.5	226	110	23	465x275x310	756
ECH(m)20-20-F	485	149	138	138	170	142	130	108	242	230	110	29.2	530x275x310	696
ECH20-30-F	546	192	190	190	230	185	180	140	-	250	120	37.3	590x275x310	536
ECH20-40-F	591	237	217	190	230	230	180	140	-	250	120	46.5	635x275x310	430

Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc

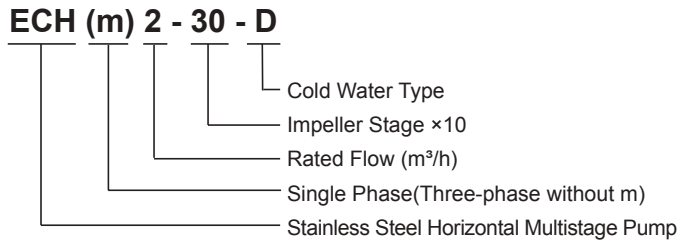
Pump

- AISI 304 shaft
- Max. liquid temperature: +60
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max. operation pressure: 8 bar
- Liquid PH Value: 6.5 - 8.5

Motor

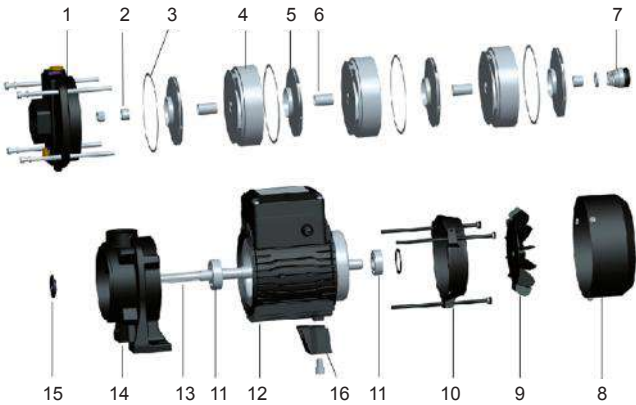
- IE2 Motor (IE3 motor available on request)
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. ambient temperature: +40

Identification Codes

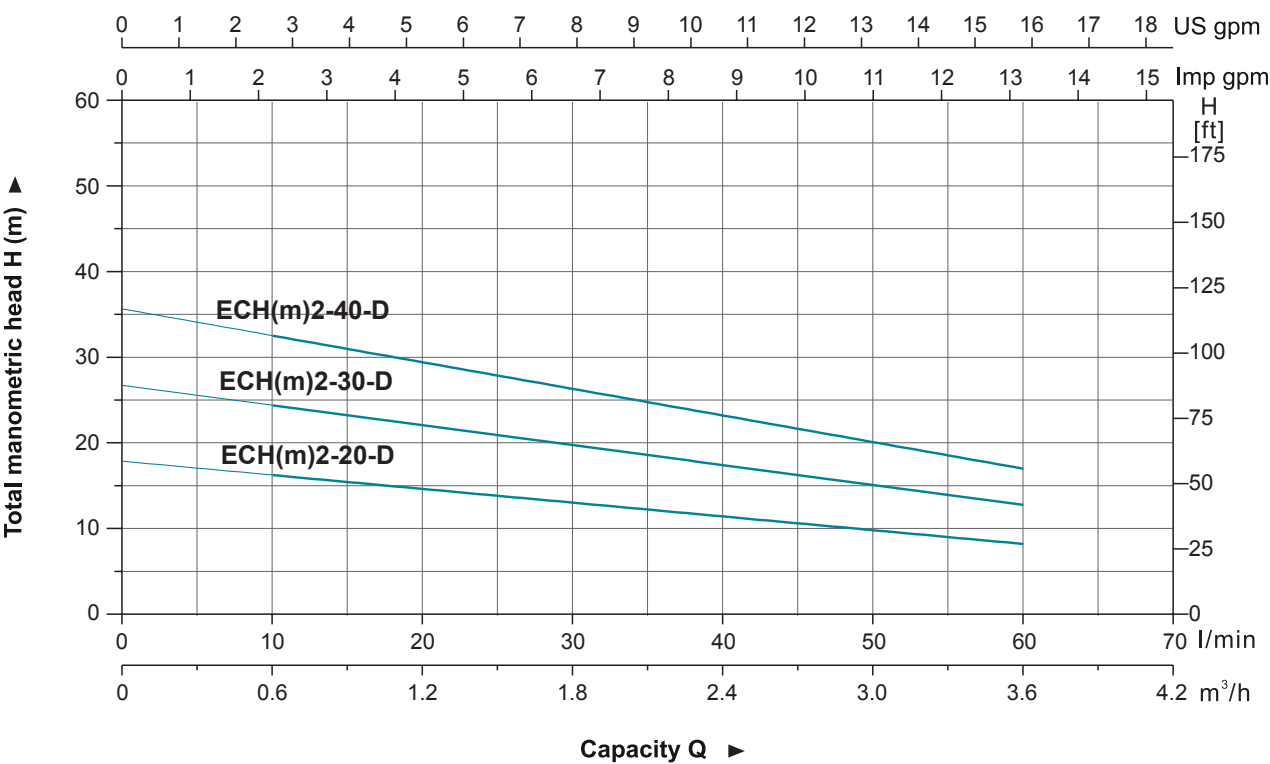


Materials Table

No.	Part	Material
1	Pump body	Cast iron
2	Shaft end sleeve	AISI304
3	Snap ring	PTFE
4	Diffuser	AISI304
5	Impeller	AISI304
6	Sleeve	AISI304
7	Mechanical seal	Sic/Carbon
8	Fan cover	08F
9	Fan	PP
10	Rear cover	ZL102
11	Bearing	
12	Stator	
13	Rotor	
14	Outlet body	Cast iron
15	Collar	PTFE
16	Support	PTFE



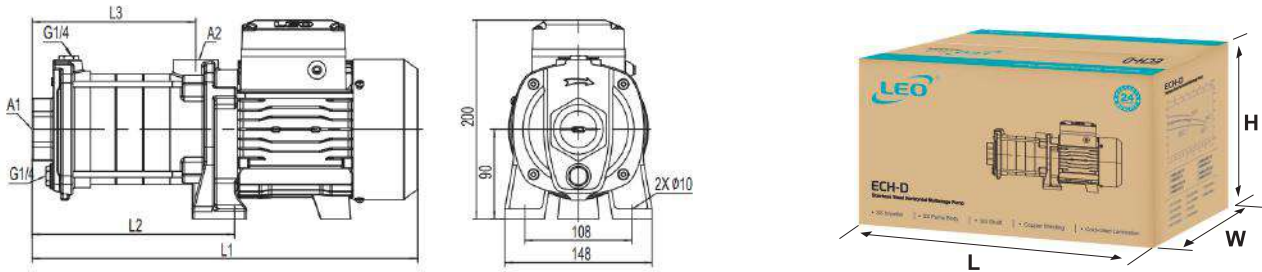
Hydraulic Performance Curves



Technical Data

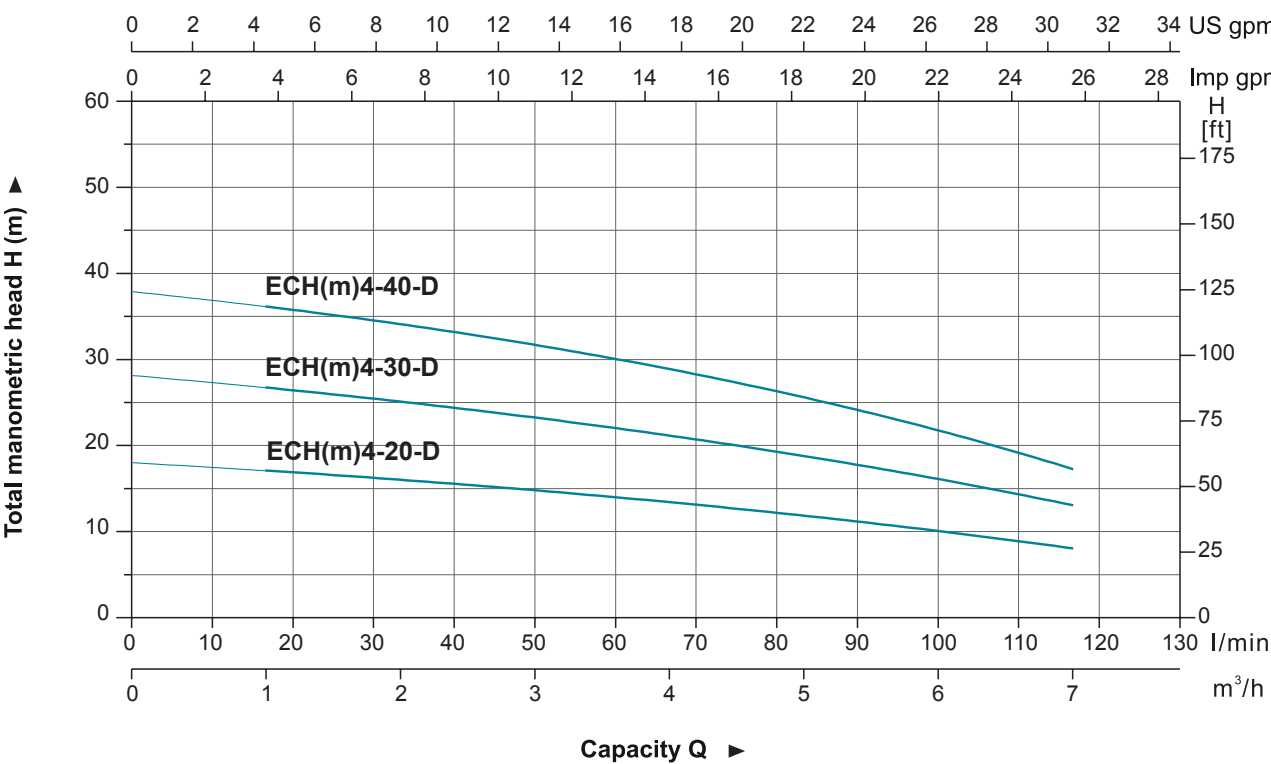
Model	Power		Q(m³/h) Q(l/min)	0.6	1.2	1.8	2.4	3.0	3.6
	kW	HP		10	20	30	40	50	60
ECH(m)2-20-D	0.37	0.5	H (m)	16	15	13	12	10	8
ECH(m)2-30-D	0.37	0.5		24	22	20	18	16	12
ECH(m)2-40-D	0.55	0.75		33	30	26	24	21	16

Dimension



Model	L1	L2	L3	A1	A2	GW(kg)		L x W x H (mm)	Quantity (PCS/20"TEU)
						1~	3~		
ECH(m)2-20-D	324	140	101	G1	G1	10.3	10.7	375x185x237	1674
ECH(m)2-30-D	342	158	119	G1	G1	10.7	11	375x185x237	1674
ECH(m)2-40-D	360	176	137	G1	G1	12.4	12.6	420x185x237	1508

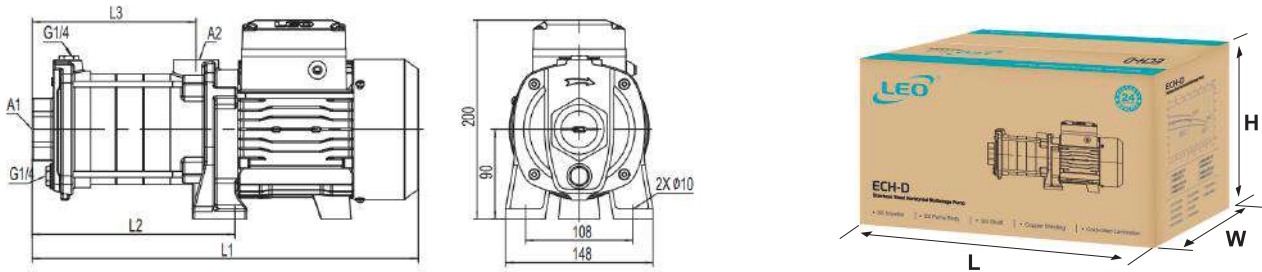
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	1	2	3	4	5	6	7
	kW	HP		17	33	50	67	83	100	117
ECH(m)4-20-D	0.55	0.75	H (m)	17	16	15	13	12	10	8
ECH(m)4-30-D	0.55	0.75		27	25	23	21	19	16	13
ECH(m)4-40-D	0.75	1.0		36	34	32	28	26	22	17

Dimension



Model	L1	L2	L3	A1	A2	GW(kg)		L x W x H (mm)	Quantity (PCS/20"TEU)
						1~	3~		
ECH(m)4-20-D	334	150	111	G1 1/4	G1	11.7	12	375x185x237	1583
ECH(m)4-30-D	361	177	138	G1 1/4	G1	12.4	12.6	420x185x237	1508
ECH(m)4-40-D	388	204	165	G1 1/4	G1	13.8	14	420x185x237	1357