

# CDL 60Hz

Light Vertical Multistage Centrifugal Pump

# CDLF

For NEMA C-FRAME MOTORS



subject to amendments



**W** WISHART  
PUMPS



## General Data

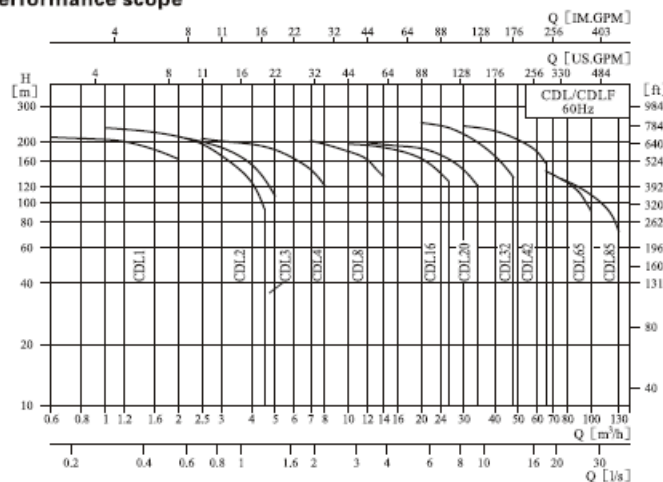
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## General Data

### Performance scope



### Product range

Description	CDL1	CDL2	CDL3	CDL4	CDL8	CDL16	CDL20	CDL32	CDL42	CDL65	CDL85
Rated flow [m³/h]	1	2	3	4	8	16	20	32	42	65	85
Rated flow [l/s]	0.28	0.56	0.83	1.1	2.2	4.4	5.6	8.9	11.7	18	24
Flow range [m³/h]	0.6-2	1.4-5	1.5-5	2.5-8	7-14	10-26	12-34	20-48	30-65	40-100	60-130
Flow range [l/s]	0.17-0.56	0.28-1.25	0.42-1.4	0.7-2.2	1.9-3.9	2.8-7.2	3.3-9.4	5.5-13.3	8.3-18	11.1-27.7	16.7-36.1
Max. pressure [bar]	22	23.5	23	21	20	20	20	25	26	18	15
Motor power [kW]	0.37-2.2	0.55-3.7	0.37-3.7	0.75-5.5	0.75-11	2.2-18.5	2.2-18.5	2.2-30	5.5-45	7.5-45	11-45
Temperature range [°C]	-15~+120										
Max. efficiency [%]	44	46	54	57	62	66	69	73	75	76	77
Type											
CDL	●	●	●	●	●	●	●	●	●	●	●
CDLF	●	●	●	●	●	●	●	●	●	●	●
CDL Pipe connection											
ANSI Flange	1"	1"	1"	1½"	1½"	2"	2"	2½"	3"	4"	4"
CDLF Pipe connection											
ANSI Flange	1"	1"	1"	1½"	1½"	2"	2"	2½"	3"	4"	4"

## General Data

### Pump

CDL / CDLF is a kind of vertical non-self priming multistage centrifugal pump, which is driven by a standard electric motor. The motor output shaft directly connects with the pump shaft through a coupling. The pressure-resistant cylinder and flow passage components are fixed between pump head and inlet & outlet section with tie-bar bolts. The inlet and outlet are located at the pump bottom at the same plane. This kind of pump can be equipped with an intelligent protector to effectively prevent it from dry-running, out-of-phase and overload.

### Operation conditions

- Thin, clean, non-flammable and non-explosive liquid containing no solid granules and fibers.
- Liquid temperature:  
Normal temperature type: -15°C ~ +70°C,  
Hot water type: -15°C ~ +120°C
- Ambient temperature: up to +40°C
- Altitude: up to 1000m

### Application

CDL / CDLF is a kind of multifunctional products. It can be used to convey various medium from tap water to industrial liquid at different temperature and with different flow rate and pressure. CDL type is applicable to conveying non-corrosive liquid, while CDLF is suitable for slightly corrosive liquid.

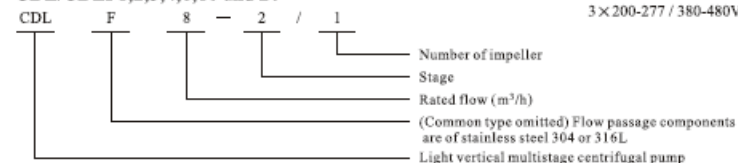
- Water supply: Water filter and transport in Waterworks, boosting of main pipeline, boosting in high-rise buildings.
- Industrial boosting: Process flow water system, cleaning system, high-pressure washing system, fire fighting system.
- Industrial liquid conveying: Cooling and air-conditioning system, boiler water supply and condensing system, machine-associated purpose, acids and alkali.
- Water treatment: Ultrafiltration system, reverse osmosis system, distillation system, separator, swimming pool.
- Irrigation: Farmland irrigation, spray irrigation, dripping irrigation.

### Motor

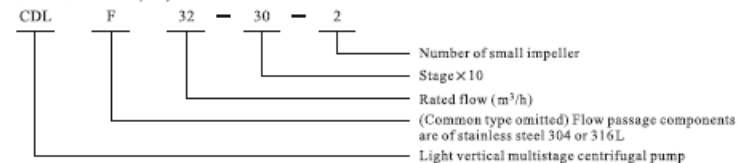
- Full-enclosed air-blast two-pole standard motor
- Protection class: IP55
- Insulation class: F
- Standard voltage: 60Hz: 3×200-230 / 346-400V  
3×200-255 / 380-440V  
3×200-277 / 380-480V

### Definition of Model

CDL/CDLF1,2,3,4,8,16 and 20



CDL/CDLF32,42,65 and 85



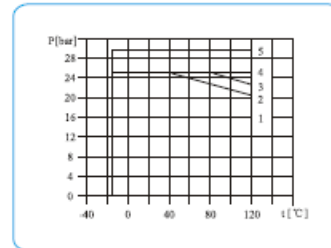
## General Data

### Max working pressure

Model	Curve number
60Hz	
CDL,CDLF1,2,3,4	2
CDL,CDLF8,16,20	3
CDL32	
32-10-1~32-60-2	1 (*)
32-60~32-100-2	5
CDLF32	5
CDL42	
42-10-1~42-40-2	1 (*)
42-40~42-60	4 (*)
42-70-2~42-70	5
CDLF42	
42-10-1~42-60	4 (*)
42-70-2~42-70	5
CDL65	
65-10-1~65-30	1 (**)
65-40-2~65-50-2	4
CDL85	
85-10-1~85-30-2	1 (**)
85-50-1~85-40-2	4
CDLF65,85	4

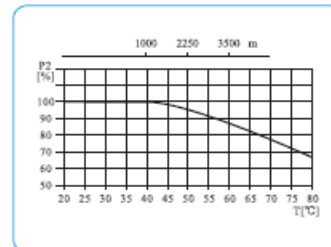
\*: For curve 5, need to specify especially;  
 \*\*: For curve 4, need to specify especially.

The following figure shows the limitation of pressure and temperature, which shall be kept within the region as shown in the figure.



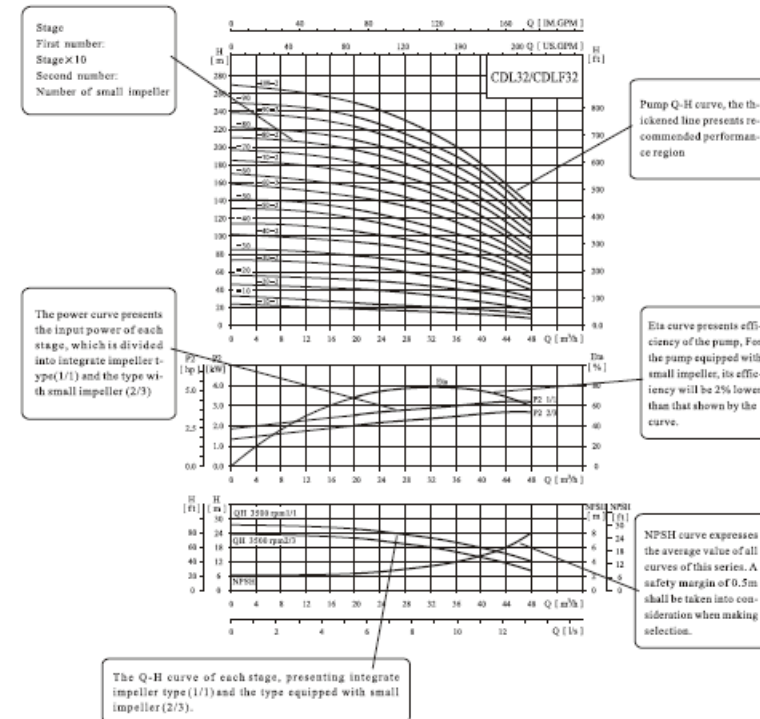
### Max. Ambient temperature

When the pump operates under ambient temperature higher than 40°C or under altitude higher than 1000m, because of low air density and poor cooling effects, the motor output power P2 will be decreased to certain extent. If the pump is operated under the above-said conditions, it should be equipped with motor of higher power.



## General Data

### Curve illustration



### Performance curve

Following conditions are suitable for the performance curves shown below:

1. All curves are based on the measured values of constant motor speed 3500 r/min;
2. Curve tolerance in conformity with ISO9906 Annex A.
3. Measurement is done with 20°C air-free water, kinematic viscosity of 1mm²/sec.

matic viscosity of 1mm²/sec.

4. The operation of pump shall refer to the performance region indicated by the thickened curve to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.

## General Data

### Minimum inlet pressure NPSH

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed. The maximum suction stroke can be calculated with following formula:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

$P_b$  = atmosphere pressure [bar]

(can be set as 1 bar)

In a closed system,  $P_b$  means system pressure [bar]

NPSH = Net positive suction head [m]

(It can be read out from the point of possible max.

flow rate shown on NPSH curve)

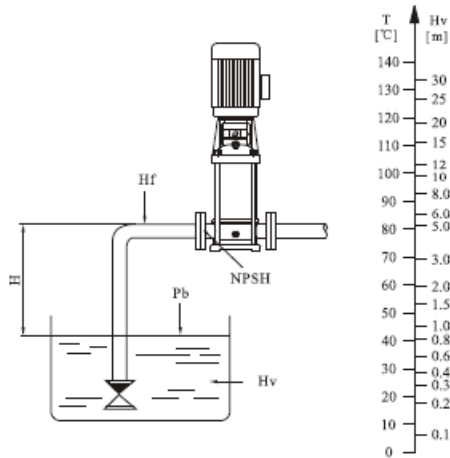
$H_f$  = Pipeline loss at the inlet [m]

$H_v$  = Steam pressure [m]

$H_s$  = Safety margin = Minimum 0.5m delivery head

If the calculated result  $H$  is positive, the pump may run under the max. Suction stroke  $H$ .

In case the calculated result  $H$  is negative, a delivery head of min. Inlet pressure is necessary.



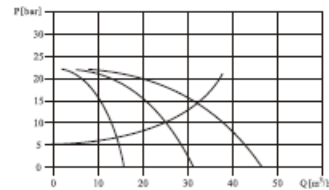
Check and ensure that the pump is not at cavitations state.

### Operation in parallel

Connecting several pumps in parallel running will benefit much more than running a single large pump.

● Applicable to different working states necessary in a variable flow system.

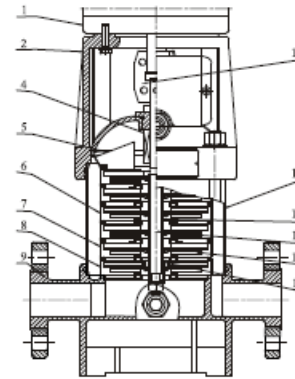
● Increasing the possibility of water supply when the pump is in failure. Because in case of pump failure, only part of the system flow is effected.



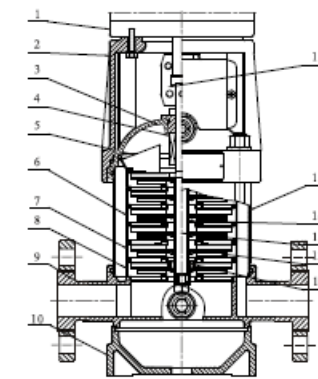
Two pumps or more can be connected in parallel running if necessary.

## General Data

### Section drawing CDL/CDLF1,2,3,4



CDL



CDLF

### Material CDL/CDLF1,2,3,4

NO.	Name	Material	AISI/ASTM
1	Motor		
2	Pump head	Cast iron	ASTM25B
4	Mechanical seal		
5	Top diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inducer	Stainless steel	AISI304
11	Bearing	Tungsten carbide	
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304 AISI316L

NO.	Name	Material	AISI/ASTM
14	Impeller sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Coupling	Carbon steel	

CDLF

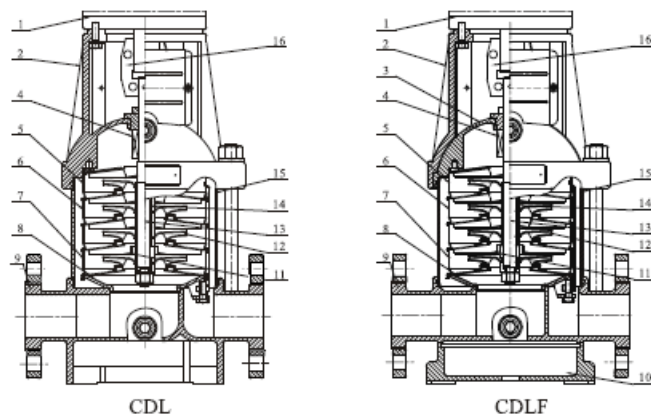
3	Seal base	Stainless steel	AISI304
9	Inlet and outlet chamber	Stainless steel	AISI304
10	Base plate	Cast iron	ASTM25B

CDL

9	Inlet and outlet chamber	Cast iron	ASTM25B
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## General Data

### Section drawing CDL/CDLF8,16,20



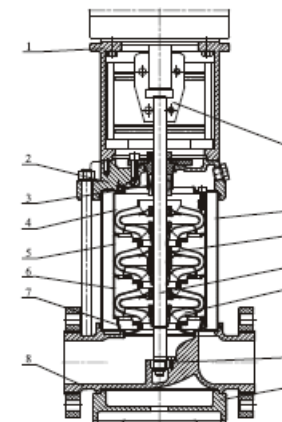
### Material CDL/CDLF8,16,20

NO.	Name	Material	AISI/ASTM
1	Motor		
2	Pump head	Cast iron	ASTM25B
4	Mechanical seal		
5	Top diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inducer	Stainless steel	AISI304
11	Bearing	Tungsten carbide	
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304 AISI316L

NO.	Name	Material	AISI/ASTM
14	Impeller sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Coupling	Carbon steel	
CDLF			
3	Seal base	Stainless steel	AISI304
9	Inlet and outlet chamber	Stainless steel	AISI304
10	Base plate	Cast iron	ASTM25B
CDL			
9	Inlet and outlet chamber	Cast iron	ASTM25B

## General Data

### Section drawing CDL/CDLF32,42,65,85



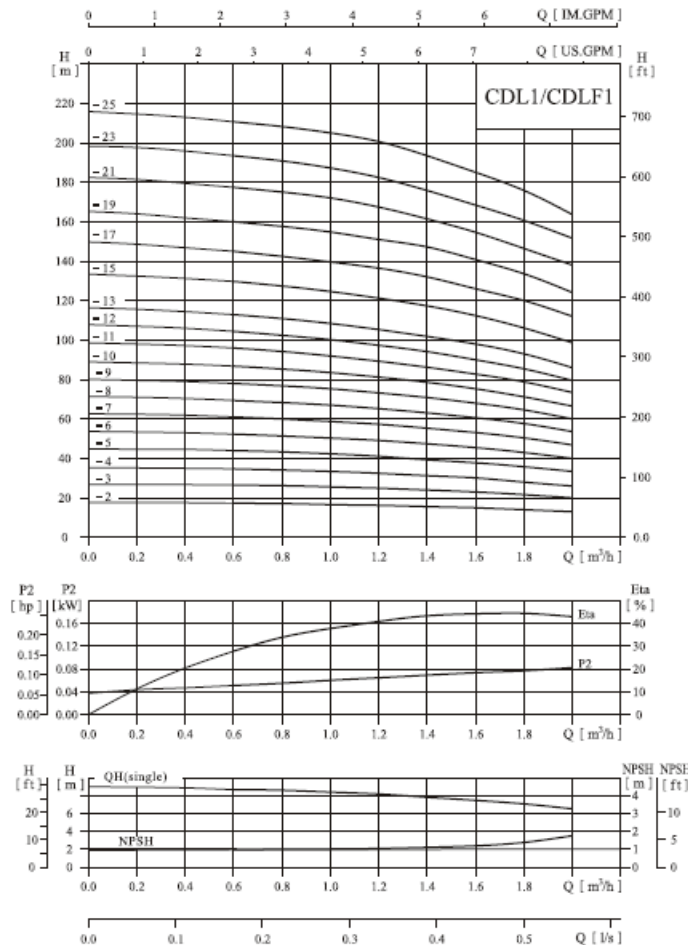
### Material CDL/CDLF32,42,65,85

NO.	Name	Material	AISI/ASTM
1	Bracket	Cast iron	ASTM25B
3	Mechanical seal		
4	Top diffuser	Stainless steel	AISI304
5	Support diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Inducer	Stainless steel	AISI304
9	Base plate	Cast iron	ASTM25B
10	Bottom bearing	Tungsten carbide	
11	Impeller	Stainless steel	AISI304

NO.	Name	Material	AISI/ASTM
12	Shaft	Stainless steel	AISI316L AISI304 AISI431
13	Intermediate bearing	Tungsten carbide	
14	Cylinder	Stainless steel	AISI304
15	Coupling	Carbon steel	
	Rubber parts	NBR	
CDL			
2	Pump head	Cast iron	ASTM25B
8	Inlet and outlet chamber	Cast iron	ASTM25B
CDLF			
2	Pump head	Stainless steel	AISI304
8	Inlet and outlet chamber	Stainless steel	AISI304

● Performance curve

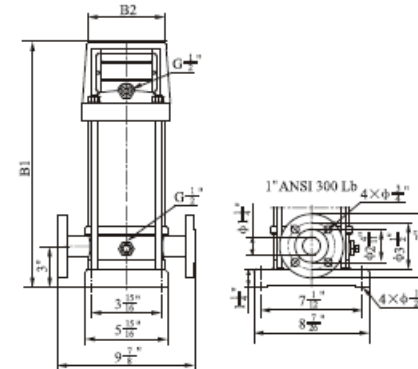
ISO9906 Annex A



● Performance table

Model	Driving motor (kW) (hp)	Frame	Q (m³/h)	0.6	0.8	1	1.2	1.4	1.6	1.8	2
CDL1-2	0.37	0.5	56C	17.5	17	16.5	16	15.5	15	14	13
CDL1-3	0.37	0.5	56C	26.5	26	25	24	23	22	21	20
CDL1-4	0.37	0.5	56C	35	34	33	32	31	30	28	26
CDL1-5	0.55	0.75	56C	43	42	41	40	39	38	35	33
CDL1-6	0.55	0.75	56C	52	51	50	48	47	45	43	39
CDL1-7	0.75	1	56C	60	59	58	56	55	52	50	46
CDL1-8	0.75	1	56C	68	67	65	64	62	59	57	53
CDL1-9	0.75	1	56C	76	75	74	73	71	66	64	60
CDL1-10	1.1	1.5	56C	85	84	83	81	78	74	72	67
CDL1-11	1.1	1.5	56C	95	93	90	87	85	81	78	73
CDL1-12	1.1	1.5	56C	103	102	98	96	92	88	86	79
CDL1-13	1.1	1.5	56C	112	110	107	105	100	95	93	86
CDL1-15	1.5	2	56C	127	125	123	121	117	112	107	99
CDL1-17	1.5	2	56C	144	141	139	137	132	124	120	112
CDL1-19	2.2	3	182TC	160	157	155	153	147	141	134	124
CDL1-21	2.2	3	182TC	177	174	172	168	162	153	147	138
CDL1-23	2.2	3	182TC	193	190	188	184	174	167	161	152
CDL1-25	2.2	3	182TC	210	207	205	202	192	184	176	164

● Installation sketch

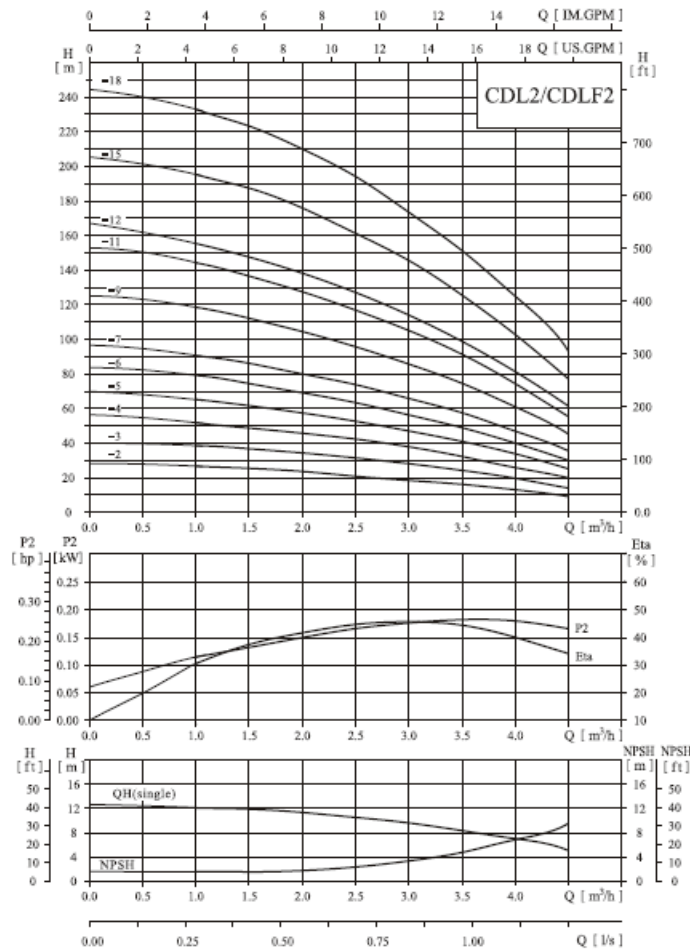


● Size and weight

Model	Size (in)	Weight (lbs)
CDL1-2	11 1/4	34
CDL1-3	12	35
CDL1-4	12 1/8	36
CDL1-5	13 1/8	37
CDL1-6	14 1/8	39
CDL1-7	14 1/8	40
CDL1-8	15 1/8	41
CDL1-9	16 1/8	42
CDL1-10	16 1/8	43
CDL1-11	17 1/8	44
CDL1-12	18 1/8	45
CDL1-13	19 1/8	46
CDL1-15	20 1/8	49
CDL1-17	21 1/8	51
CDL1-19	23 1/8	56
CDL1-21	25 1/8	57
CDL1-23	26 1/8	60
CDL1-25	27 1/8	62

Performance curve

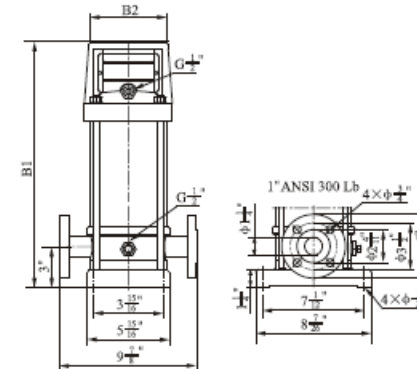
ISO9906 Annex A



Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	1	1.5	2	2.5	3	3.5	4	4.5
CDL2-2	0.55	0.75	56C	H (m)	26	24	22	21	18	16	12	9
CDL2-3	0.75	1	56C		39	36	33	31	27	24	19	15
CDL2-4	1.1	1.5	56C		52	48	45	42	36	32	26	20
CDL2-5	1.1	1.5	56C		65	60	57	52	46	41	32	25
CDL2-6	1.1	1.5	56C		78	74	69	63	56	49	40	30
CDL2-7	1.5	2	56C		91	86	81	74	66	57	47	35
CDL2-9	2.2	3	182TC		117	111	104	95	86	75	61	45
CDL2-11	2.2	3	182TC		143	136	128	116	104	90	75	56
CDL2-12	2.2	3	182TC		157	149	140	126	114	98	82	61
CDL2-15	3.7	5	184TC		195	186	176	160	142	125	103	77
CDL2-18	3.7	5	184TC		234	228	212	195	171	151	126	94

Installation sketch

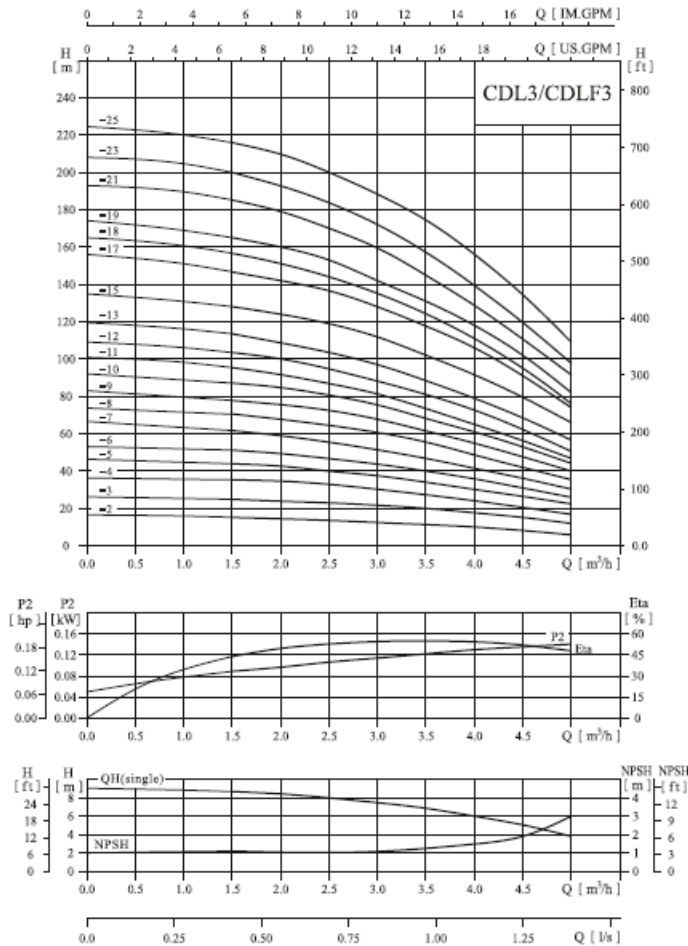


Size and weight

Model	Size (in)	Weight (lbs)
CDL2-2	11 1/4	34
CDL2-3	12	35
CDL2-4	12 1/2	36
CDL2-5	13 3/8	37
CDL2-6	14 1/8	39
CDL2-7	14 1/2	40
CDL2-9	16 3/8	42
CDL2-11	18	44
CDL2-12	18 1/2	50
CDL2-15	20 1/2	53
CDL2-18	22 1/2	55

● Performance curve

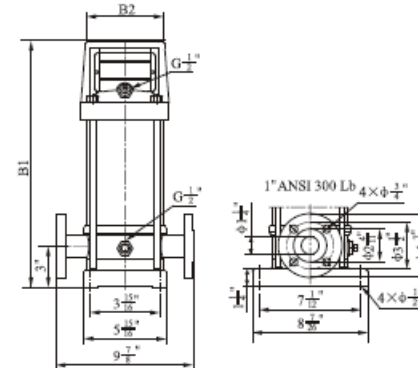
ISO9906 Annex A



● Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	1.5	2	2.5	3	3.5	4	4.5	5
CDL3-2	0.37	0.5	56C	H	17.5	16	15	14	13	11	9	8
CDL3-3	0.55	0.75	56C		26.5	25	24	23	20	18	15	12
CDL3-4	0.55	0.75	56C		35	34	32	30	27	25	20	17
CDL3-5	0.75	1	56C		44	42	40	38	33	31	26	23
CDL3-6	1.1	1.5	56C		51	50	48	45	40	37	32	27
CDL3-7	1.1	1.5	56C		61	59	56	52	46	43	38	31
CDL3-8	1.1	1.5	56C		70	67	64	61	53	49	44	35
CDL3-9	1.5	2	56C		78	77	72	68	60	56	50	40
CDL3-10	1.5	2	56C		87	84	81	76	68	63	55	44
CDL3-11	1.5	2	56C		96	92	87	82	74	69	59	48
CDL3-12	2.2	3	182TC		104	100	96	90	79	73	63	52
CDL3-13	2.2	3	182TC		112	109	104	98	86	80	69	57
CDL3-15	2.2	3	182TC		129	126	120	112	99	93	81	65
CDL3-17	2.2	3	182TC		147	143	137	128	114	106	91	74
CDL3-18	2.2	3	182TC		156	152	145	135	120	112	96	78
CDL3-19	3.7	5	184TC		165	160	153	142	126	118	102	82
CDL3-21	3.7	5	184TC		183	178	170	160	141	129	112	91
CDL3-23	3.7	5	184TC		200	194	185	174	154	142	122	98
CDL3-25	3.7	5	184TC		217	211	202	187	167	154	134	108

● Installation sketch

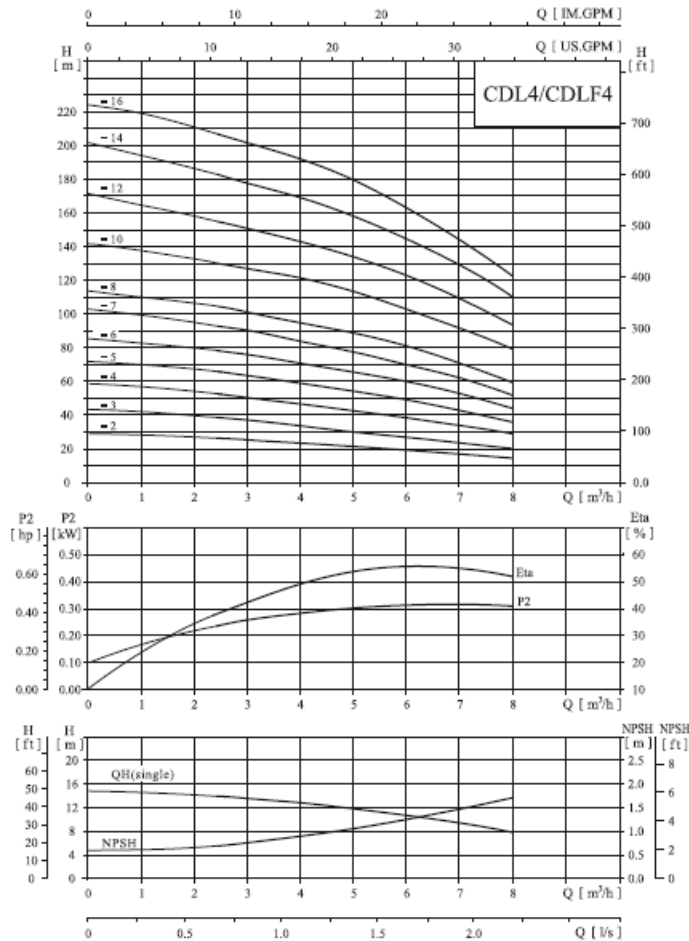


● Size and weight

Model	Size (in)	Weight (lbs)
CDL3-2	11 $\frac{1}{8}$	34
CDL3-3	12	35
CDL3-4	12 $\frac{1}{8}$	36
CDL3-5	13 $\frac{1}{8}$	37
CDL3-6	14 $\frac{1}{8}$	39
CDL3-7	14 $\frac{1}{8}$	40
CDL3-8	15 $\frac{1}{8}$	41
CDL3-9	16 $\frac{1}{8}$	42
CDL3-10	16 $\frac{1}{8}$	43
CDL3-11	17 $\frac{1}{8}$	44
CDL3-12	18 $\frac{1}{8}$	50
CDL3-13	19 $\frac{1}{8}$	51
CDL3-15	20 $\frac{1}{8}$	53
CDL3-17	22 $\frac{1}{8}$	54
CDL3-18	22 $\frac{1}{8}$	55
CDL3-19	23 $\frac{1}{8}$	56
CDL3-21	25 $\frac{1}{8}$	57
CDL3-23	26 $\frac{1}{8}$	60
CDL3-25	27 $\frac{1}{8}$	62

## Performance curve

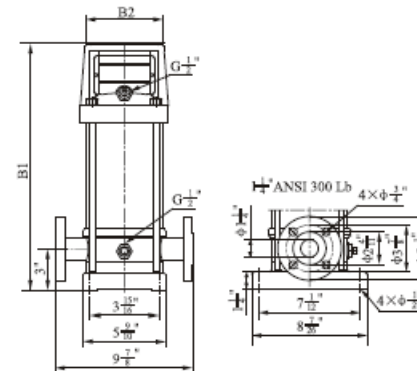
## ISO9906 Annex A



## Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	2.5	3	4	5	6	7	8
CDL4-2	0.75	1	56C	H (m)	26	25	23	21	19	16	14
CDL4-3	1.1	1.5	56C		39	38	36	32	28	24	21
CDL4-4	1.5	2	56C		52	50	48	44	38	35	31
CDL4-5	2.2	3	182TC		65	62	60	55	49	44	39
CDL4-6	2.2	3	182TC		78	75	72	67	59	54	47
CDL4-7	3.7	5	184TC		92	88	84	78	69	62	55
CDL4-8	3.7	5	184TC		104	100	95	90	79	72	63
CDL4-10	3.7	5	184TC		130	125	120	113	102	90	80
CDL4-12	5.5	7.5	213TC		156	150	145	136	122	109	96
CDL4-14	5.5	7.5	213TC		182	176	170	159	145	129	112
CDL4-16	5.5	7.5	213TC		207	201	196	183	165	146	128

## Installation sketch

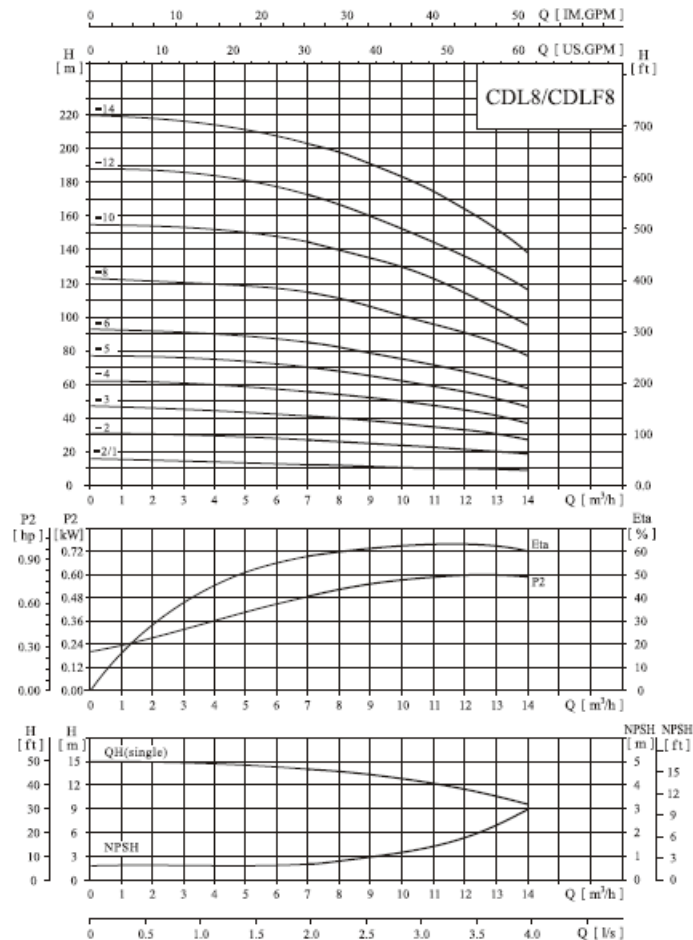


## Size and weight

Model	Size (in)	Weight (lbs)
CDL4-2	12	37
CDL4-3	13 1/8	39
CDL4-4	14 1/8	40
CDL4-5	15 7/16	46
CDL4-6	16 3/16	47
CDL4-7	17 3/8	49
CDL4-8	18 1/4	50
CDL4-10	20 11/16	51
CDL4-12	23 1/16	55
CDL4-14	25 3/16	57
CDL4-16	27 11/16	60

● Performance curve

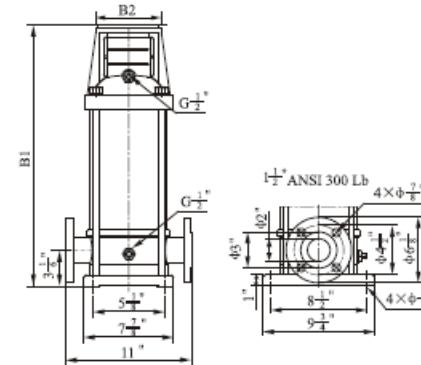
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● Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	7	8	9	10	11	12	13	14
CDL8-2/1	0.75	1	56C	H (m)	13	12	11.5	11	10.5	10	9.5	9
CDL8-2	1.5	2	56C		27	26	25	24	23	22	20	18
CDL8-3	2.2	3	182TC		41	40	38	37	35	33	30	28
CDL8-4	3.7	5	184TC		55	54	52	50	47	45	41	38
CDL8-5	3.7	5	184TC		70	68	65	63	59	56	52	47
CDL8-6	3.7	5	184TC		85	82	78	76	72	68	62	57
CDL8-8	5.5	7.5	213TC		115	110	105	101	97	91	84	75
CDL8-10	7.5	10	215TC		145	140	132	126	122	115	105	95
CDL8-12	7.5	10	215TC		173	167	160	152	147	132	125	115
CDL8-14	11	15	254TC		202	195	188	179	174	163	147	135

● Installation sketch

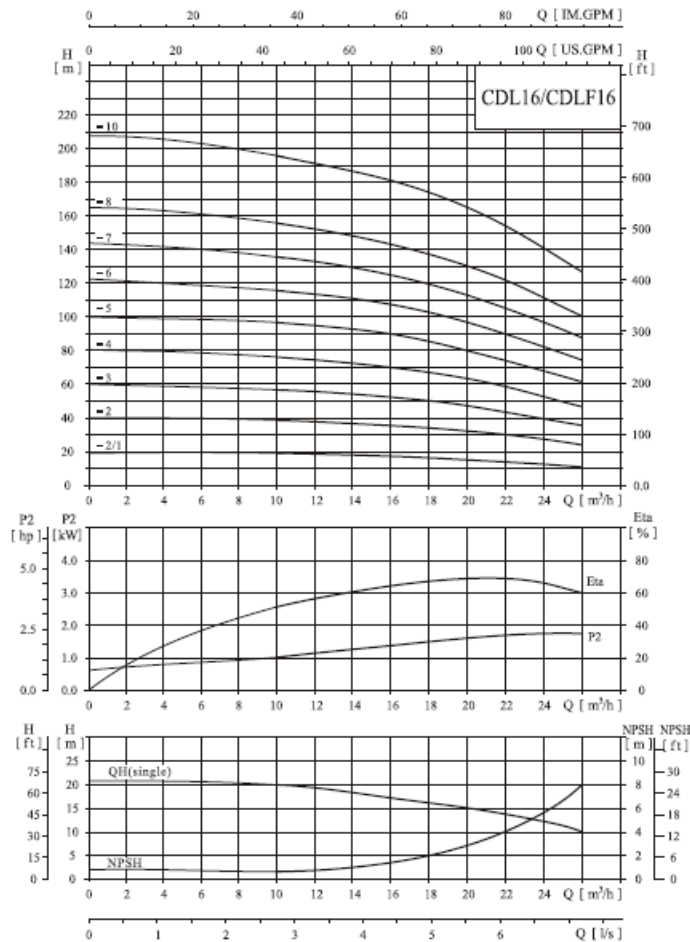


● Size and weight

Model	Size (in)		Weight (lbs)
CDL8-2/1	14 1/8	6 1/2	57
CDL8-2	14 1/8	6 1/2	57
CDL8-3	16 1/8	8 1/2	65
CDL8-4	17 1/8	8 7/8	66
CDL8-5	18 1/8	8 7/8	67
CDL8-6	19 1/8	8 7/8	68
CDL8-8	22 11/16	8 7/8	82
CDL8-10	24 1/8	8 7/8	84
CDL8-12	27 1/8	8 7/8	86
CDL8-14	32 1/8	8 7/8	95

● Performance curve

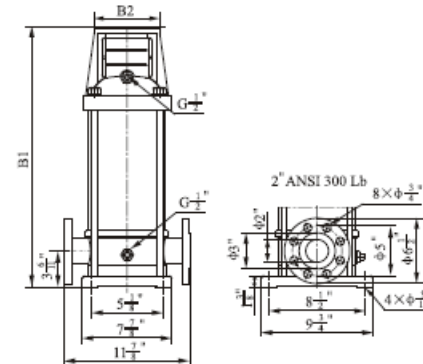
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● Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	10	12	14	16	18	20	22	24	26
CDL16-2/1	2.2	3	182TC	H (m)	19	18.5	18	17	16	15	14	13	11
CDL16-2	3.7	5	184TC		38	37	36	35	34	32	30	27	24
CDL16-3	5.5	7.5	213TC		57	56	55	54	51	48	45	40	36
CDL16-4	7.5	10	215TC		76	75	73	72	68	64	60	54	49
CDL16-5	11	15	254TC		96	94	92	90	85	80	75	68	62
CDL16-6	11	15	254TC		115	113	111	108	102	96	91	82	75
CDL16-7	15	20	256TC		135	132	129	126	119	113	106	96	88
CDL16-8	15	20	256TC		155	152	148	144	137	130	122	111	101
CDL16-10	18.5	25	284TSC		197	192	187	181	174	165	153	139	127

● Installation sketch



● Size and weight

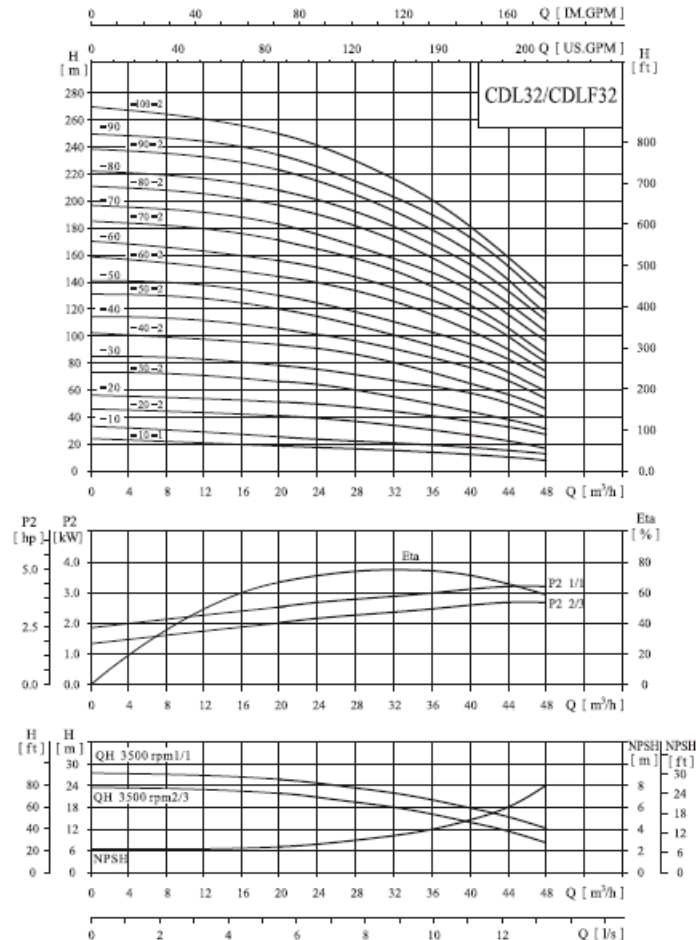
Model	Size (in)		Weight (lb)
	B1	B2	
CDL16-2/1	16 <sup>11</sup> / <sub>16</sub>	8 <sup>7</sup> / <sub>8</sub>	71
CDL16-2	16 <sup>11</sup> / <sub>16</sub>	8 <sup>7</sup> / <sub>8</sub>	71
CDL16-3	18 <sup>2</sup> / <sub>16</sub>	8 <sup>7</sup> / <sub>8</sub>	73
CDL16-4	20 <sup>3</sup> / <sub>16</sub>	8 <sup>7</sup> / <sub>8</sub>	75
CDL16-5	25 <sup>4</sup> / <sub>16</sub>	8 <sup>7</sup> / <sub>8</sub>	84
CDL16-6	27	8 <sup>7</sup> / <sub>8</sub>	86
CDL16-7	28 <sup>11</sup> / <sub>16</sub>	8 <sup>7</sup> / <sub>8</sub>	88
CDL16-8	30 <sup>7</sup> / <sub>8</sub>	8 <sup>7</sup> / <sub>8</sub>	93
CDL16-10	33 <sup>11</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>16</sub>	101

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## Performance curve

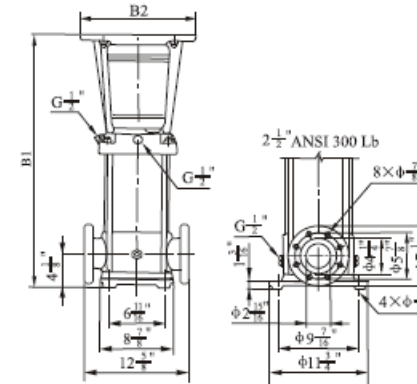
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## Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	20	24	28	32	36	40	44	48
CDL32-10-1	2.2	3	182TC	H (m)	20	19	18	17	15	13	10	7
CDL32-10	3.7	5	184TC		26	25	24	23	21	19	17	14
CDL32-20-2	5.5	7.5	213TC		41	40	38	35	31	27	22	17
CDL32-30	7.5	10	215TC		52	50	48	45	41	37	33	27
CDL32-30-2	7.5	10	215TC		67	64	61	57	52	46	39	31
CDL32-30	11	15	254TC		78	75	71	67	62	56	50	40
CDL32-40-2	11	15	254TC		94	91	87	81	73	65	56	45
CDL32-40	15	20	256TC		104	101	96	91	83	75	66	55
CDL32-50-2	15	20	256TC		119	115	109	102	94	84	73	59
CDL32-50	15	20	256TC		130	125	119	112	104	94	83	69
CDL32-60-2	18.5	25	284TC		145	140	134	126	116	104	90	74
CDL32-60	18.5	25	284TC		155	150	144	136	126	114	100	81
CDL32-70-2	22	30	286TC		172	166	158	149	137	123	106	86
CDL32-70	22	30	286TC		182	176	168	159	148	133	118	97
CDL32-80-2	22	30	286TC		196	190	182	172	159	143	124	102
CDL32-80	30	40	324TC		208	201	192	181	167	152	132	111
CDL32-90-2	30	40	324TC		223	216	206	194	179	162	142	117
CDL32-90	30	40	324TC		234	226	216	204	189	172	152	127
CDL32-100-2	30	40	324TC		248	241	231	217	201	181	159	133

## Installation sketch

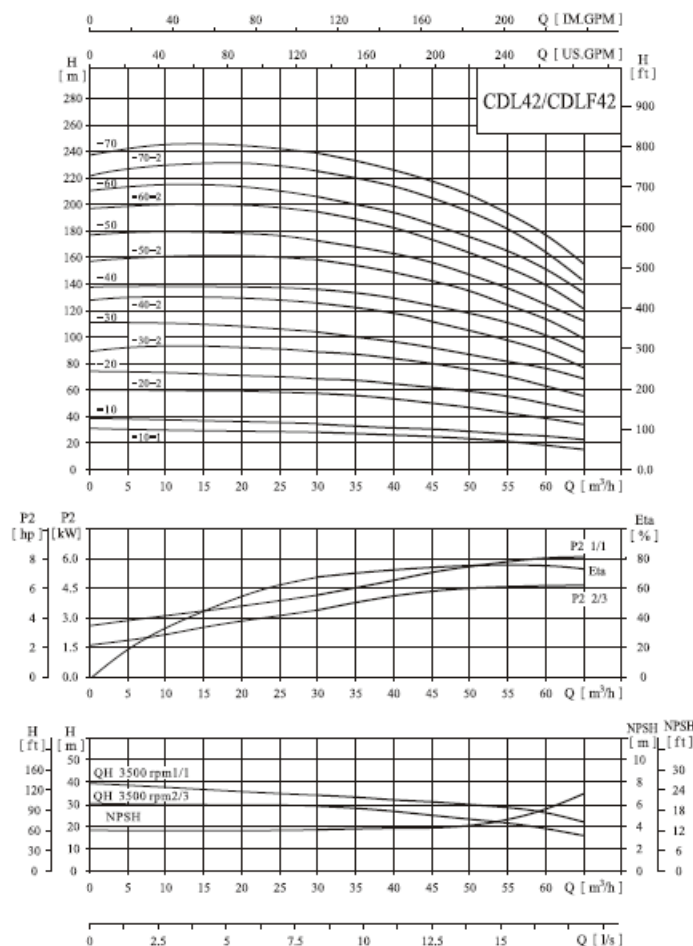


## Size and weight

Model	Size (in)	Weight (lbs)
CDL32-10-1	20 3/8	93
CDL32-10	20 3/8	93
CDL32-20-2	22 3/8	101
CDL32-20	22 3/8	101
CDL32-30-2	25 1/8	110
CDL32-30	25 1/8	128
CDL32-40-2	31 3/8	137
CDL32-40	31 3/8	137
CDL32-50-2	34 3/8	146
CDL32-50	34 3/8	139
CDL32-60-2	33 3/8	148
CDL32-60	33 3/8	148
CDL32-70-2	37 3/8	157
CDL32-70	37 3/8	157
CDL32-80-2	42 1/8	165
CDL32-80	42 1/8	179
CDL32-90-2	42 1/8	187
CDL32-90	42 1/8	187
CDL32-100-2	48 3/8	196

## Performance curve

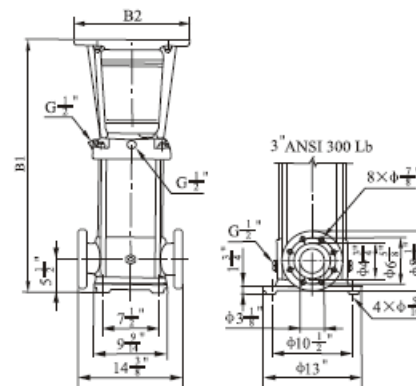
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## Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	30	35	40	42	45	50	55	60	65
CDL42-10-1	5.5	7.5	213TC	H	29	28	27	26	25	23	21	19	16
CDL42-10	7.5	10	215TC		34	33	32	31.5	30	29	27	25	22
CDL42-20-2	11	15	254TC		57	55	53	52	49	46	43	38	33
CDL42-20	15	20	256TC		69	67	65	63	61	59	55	50	44
CDL42-30-2	18.5	25	284TSC		90	88	85	83	80	75	72	63	55
CDL42-30	18.5	25	284TSC		102	100	97	95	92	88	82	76	68
CDL42-40-2	22	30	286TSC		125	121	118	115	112	105	98	89	78
CDL42-40	30	40	324TSC		136	133	129	126	123	117	112	102	89
CDL42-50-2	30	40	324TSC		159	154	149	146	142	134	121	115	99
CDL42-50	30	40	324TSC		171	166	161	158	154	145	138	126	112
CDL42-60-2	37	50	326TSC		194	188	182	178	173	163	155	139	122
CDL42-60	37	50	326TSC		205	200	193	190	186	176	166	152	134
CDL42-70-2	45	60	364TSC		227	220	213	210	205	193	182	165	144
CDL42-70	45	60	364TSC		239	232	226	221	216	204	194	178	157

## Installation sketch



## Size and weight

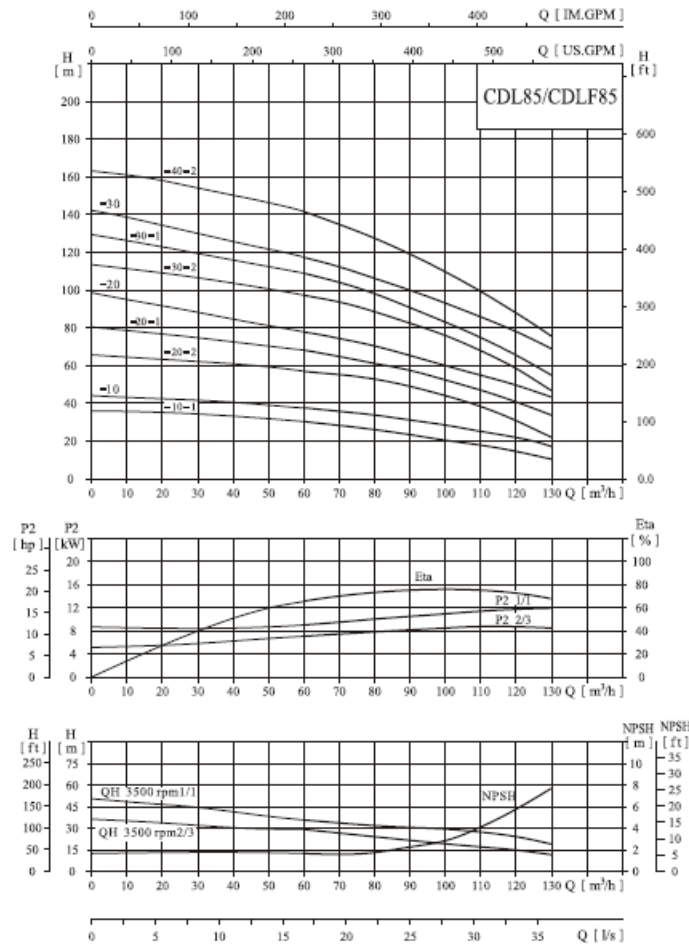
Model	Size (in)		Weight (lbs)
	B1	B2	
CDL42-10-1	22 $\frac{3}{8}$	8 $\frac{7}{8}$	137
CDL42-10	22 $\frac{3}{8}$	8 $\frac{7}{8}$	137
CDL42-20-2	29 $\frac{1}{8}$	8 $\frac{7}{8}$	163
CDL42-20	29 $\frac{1}{8}$	8 $\frac{7}{8}$	163
CDL42-30-2	31 $\frac{1}{2}$	11 $\frac{1}{32}$	165
CDL42-30	31 $\frac{1}{2}$	11 $\frac{1}{32}$	165
CDL42-40-2	34 $\frac{3}{16}$	11 $\frac{1}{32}$	174
CDL42-40	35 $\frac{3}{16}$	13 $\frac{19}{32}$	190
CDL42-50-2	38 $\frac{1}{2}$	13 $\frac{7}{12}$	198
CDL42-50	38 $\frac{1}{2}$	13 $\frac{19}{32}$	198
CDL42-60-2	41 $\frac{1}{2}$	13 $\frac{7}{12}$	207
CDL42-60	41 $\frac{1}{2}$	13 $\frac{19}{32}$	207
CDL42-70-2	44 $\frac{1}{2}$	15 $\frac{11}{16}$	234
CDL42-70	44 $\frac{1}{2}$	15 $\frac{31}{60}$	234

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● Performance curve

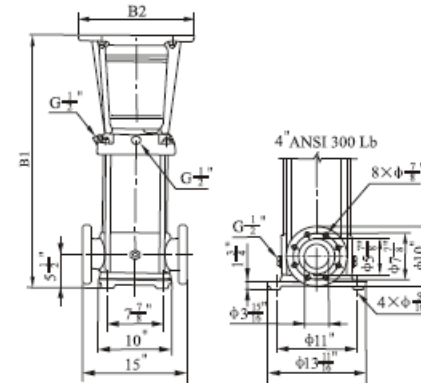
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● Performance table

Model	Driving motor (kW)	(hp)	Frame	Q (m³/h)	60	70	80	85	90	100	110	120	130
CDL85-10-1	11	15	254TC	H (m)	31	27	25	24	23	21	18	14	9
CDL85-10	15	20	256TC		36	35	33	31	30	29	26	23	18
CDL85-20-2	18.5	25	284TSC		59	57	54	51	48	44	39	32	22
CDL85-20-1	22	30	286TSC		67	65	62	59	57	51	47	41	33
CDL85-20	30	40	324TSC		76	73	69	66	64	60	56	52	44
CDL85-30-2	37	50	326TSC		98	94	88	85	82	75	69	59	46
CDL85-30-1	37	50	326TSC		108	104	98	94	90	83	78	69	56
CDL85-30	45	60	364TSC		116	111	105	102	97	93	88	79	69
CDL85-40-2	45	60	364TSC		141	135	128	124	118	109	102	89	72

● Installation sketch



● Size and weight

Model	Size (in)		Weight (lbs)
	B1	B2	
CDL85-10-1	22 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>	163
CDL85-10	22 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>	163
CDL85-20-2	20 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	168
CDL85-20-1	20 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	168
CDL85-20	30 <sup>1</sup> / <sub>2</sub>	13 <sup>7</sup> / <sub>8</sub>	187
CDL85-30-2	33 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	202
CDL85-30-1	33 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	202
CDL85-30	33 <sup>1</sup> / <sub>2</sub>	15 <sup>1</sup> / <sub>2</sub>	220
CDL85-40-2	36 <sup>1</sup> / <sub>2</sub>	15 <sup>1</sup> / <sub>2</sub>	234