

# NCL, NCLD

## Inline, Dry Running Circulation Pumps

**ebitt**  
FLUID TECHNOLOGIES



Twin Execution

### FEATURE

- Vertical, single-stage volute casing type, close-coupled in-line centrifugal pumps with closed impeller. Close-coupled by means of an adaptor bracket with an impeller keyed directly to the specific motor shaft extension.
- The NCL-NCLD series have a "Backpull-out" design impeller, adaptor and motor can be extracted without disconnecting the pump body from the piping system.
- NCL-NCLD 40-120 / 320 - 1,5
  - NCL: Single Head
  - NCLD: Twin Head (Double pump in one housing). The two pumps are hydraulically separated by silent-operating valve.
  - 40: Diameter nominal of the pipe connection
  - 120: Nominal diameter of impeller
  - 320: Dimension between inlet and outlet flange
  - 1,5: Nominal motor power P2 in kW
- High-efficiency motors as standard
- High corrosion protection thanks to cathoretic coating
- Standard condensate drainage holes in the motor housing and lanterns
- The pumps are equipped with interchangeable mechanical seals
- Fluid temperature: -20°C / +120°C
- Maximum operating pressure: 10 Bar (PN10)
- IP55 protection, insulation class F
- Mains connection 3 ~ 400V , 50 Hz

### Materials

Pump Housing and Lantern: Cast Iron  
Impeller: Reinforced Glass PPO up to 5,5 kW (not included)  
Cast Iron: 5,5 kW - 7,5 kW  
Mechanical Seal: AQ1EGG  
Shaft: X20Cr (AISI420)

### Applications

NCL-NCLD pumps are designed for clean or slightly contaminated liquids with low viscosity.

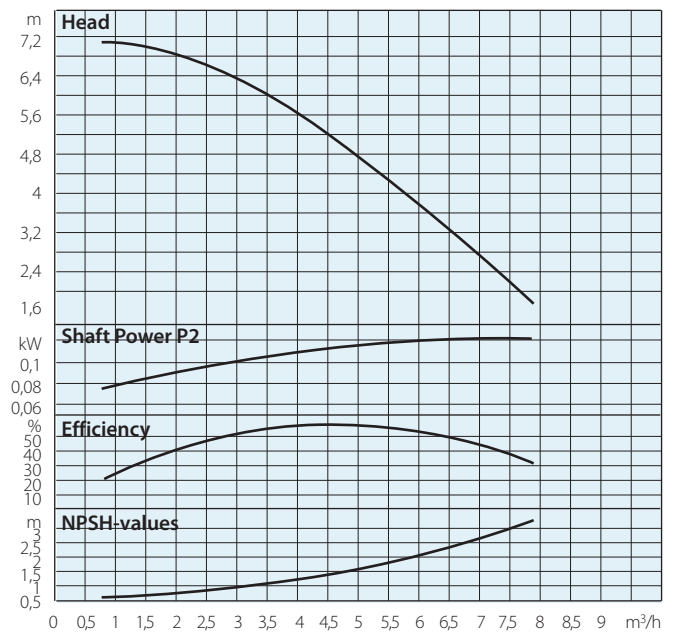
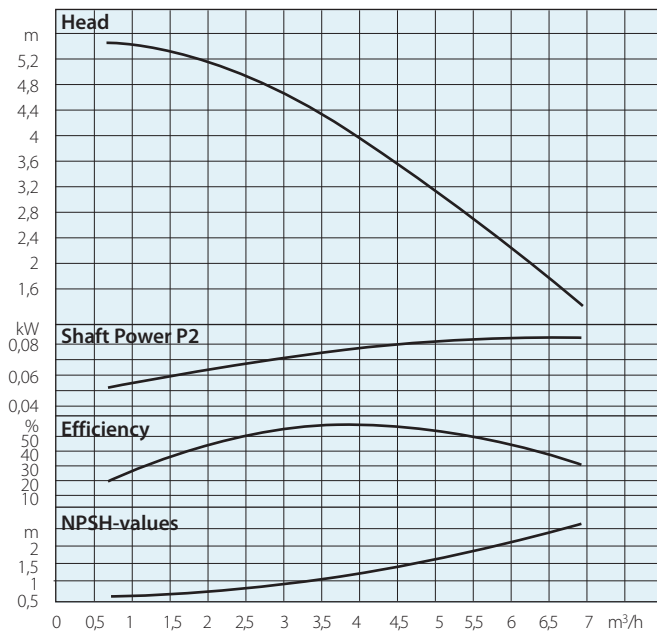
- District heating systems
- Heating systems
- Air-conditioning systems
- District cooling systems
- Water supply
- Industrial processes
- Industrial cooling
- Liquid transfer in ventilation systems
- Pressure boosting in commercial buildings

# NCL

## Inline, Dry Running Circulation Pumps

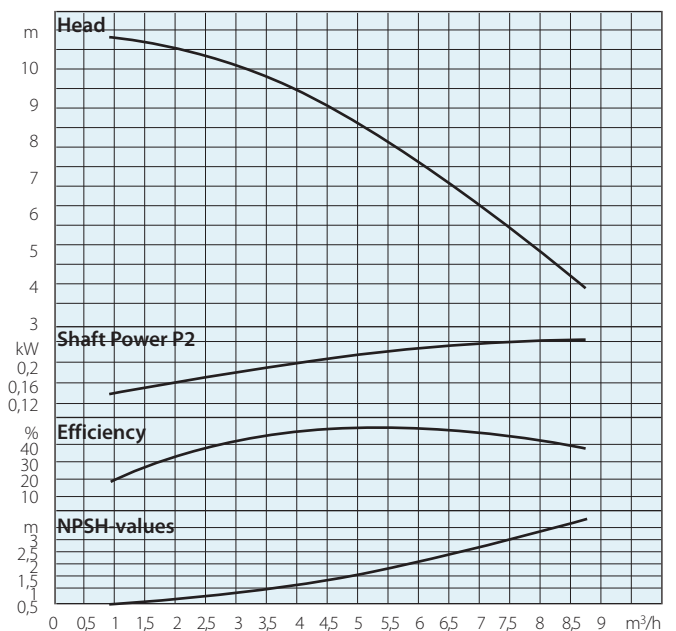
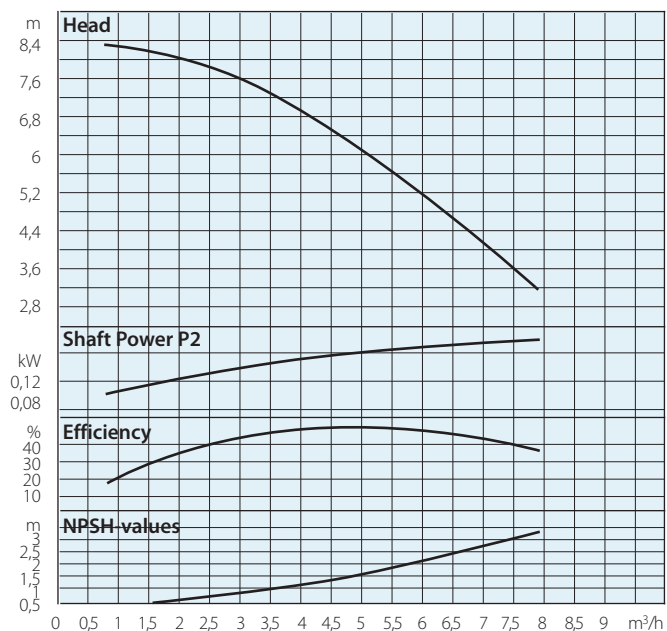
**NCL 25-70/180**

**NCL 25-80/180**



**NCL 25-85/180**

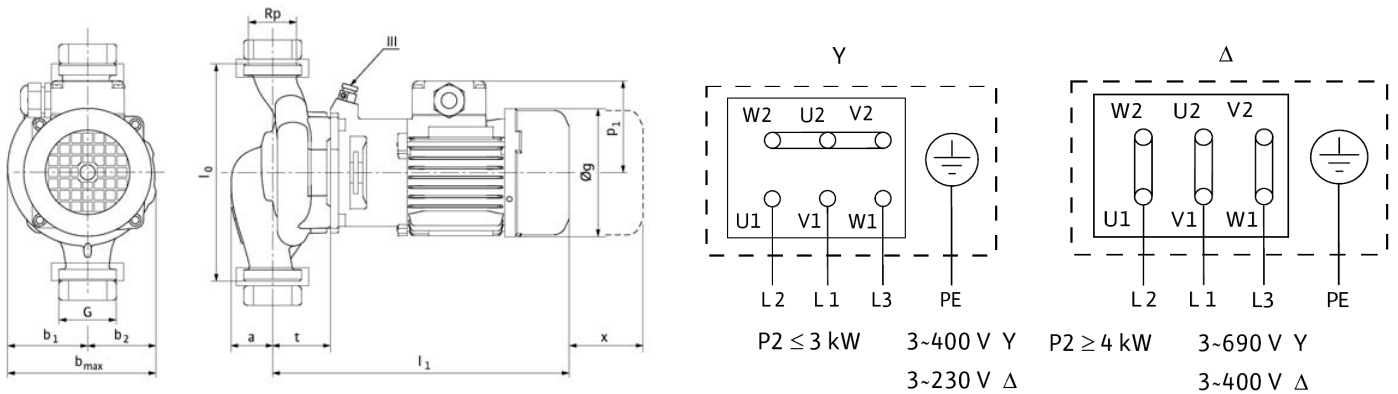
**NCL 25-90/180**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	1	2	3	4	5	6	7
NCL 25-70/180-0,12	H (mWC)	5,4	5,2	4,6	4	2,7	1,8	
NCL 25-80/180-0,12		7,1	6,8	6,4	5,6	4,8	3,8	2,7
NCL 25-85/180-0,18		8,2	8	7,6	6,9	6	5,1	4
NCL 25-90/180-0,25		10,3	10	9,6	9	8	7	6

Model	Rated Power P <sub>2</sub> kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 25-70/180-0,12	0,12	2900	3-400V, 50 Hz	0,36	IP55	+/- 10%
NCL 25-80/180-0,12	0,12	2900	3-400V, 50 Hz	0,36	IP55	+/- 10%
NCL 25-85/180-0,18	0,18	2900	3-400V, 50 Hz	0,5	IP55	+/- 10%
NCL 25-90/180-0,25	0,25	2900	3-400V, 50 Hz	0,6	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	l <sub>0</sub>	l <sub>1</sub>	øg	P <sub>1</sub>	x	DNs/DNd	kg
NCL 25-70/180-0,12	34	66	57	123	180	247	106	76	100	1"/G 1 1/2	7,1
NCL 25-80/180-0,12	52	66	57	123	180	247	106	76	100	1"/G 1 1/2	7,1
NCL 25-85/180-0,18	52	69	68	137	180	251	125	107	100	1"/G 1 1/2	8,7
NCL 25-90/180-0,25	52	69	68	137	180	251	125	107	100	1"/G 1 1/2	9,4

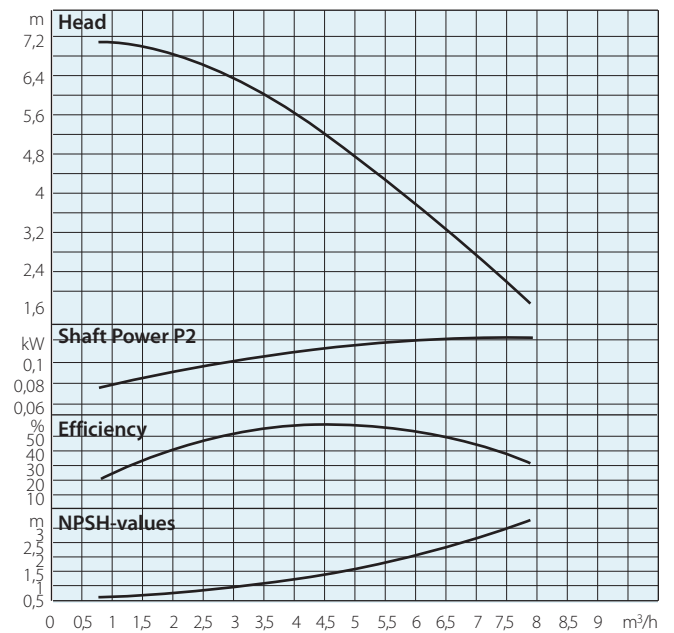
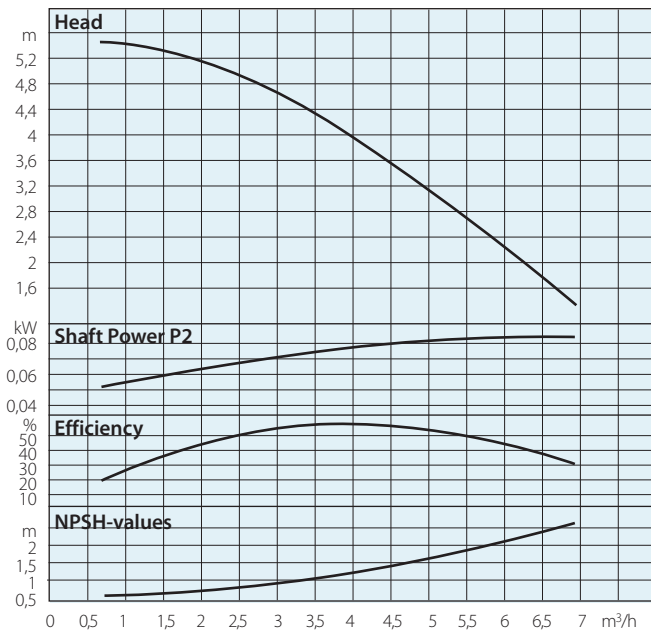
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 25-70/180-0,12	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 25-80/180-0,12	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 25-85/180-0,18	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 25-90/180-0,25	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

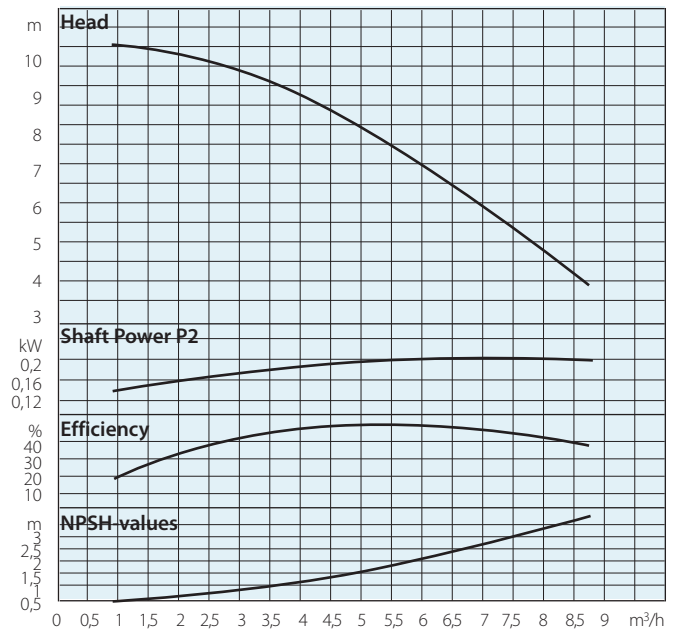
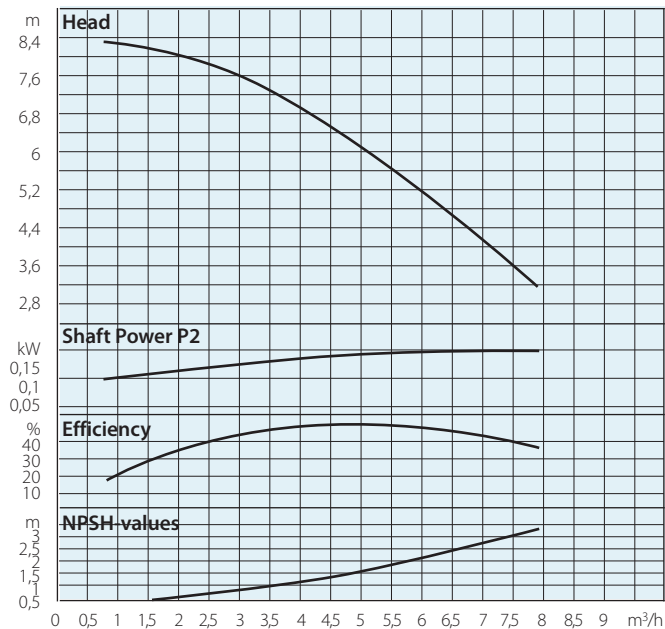
**NCL 30-70/180**

**NCL 30-80/180**



**NCL 30-85/180**

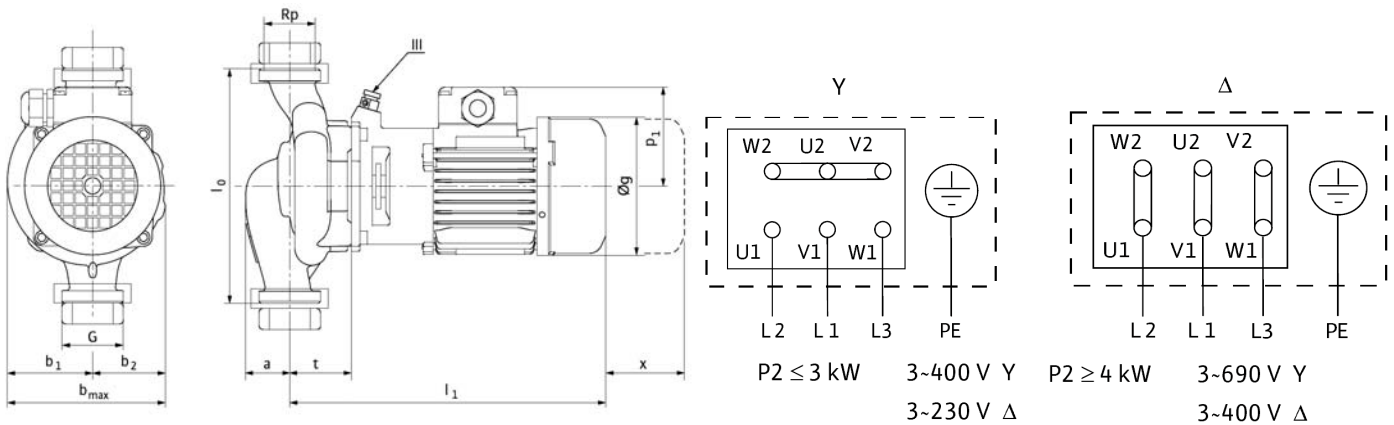
**NCL 30-90/180**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	1	2	3	4	5	6	7	8
NCL 30-70/180-0,12	H (mWC)	5,5	5,2	4,7	4	3,2	2,2		
NCL 30-80/180-0,12		7,1	6,8	6,4	5,6	4,8	3,8	2,8	
NCL 30-85/180-0,18		8,3	8	7,6	6,8	6	5,2	4	
NCL 30-90/180-0,25		10,4	10,1	9,6	9	8,1	7,3	6	4,8

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 30-70/180-0,12	0,12	2900	3-400V, 50 Hz	0,36	IP55	+/- 10%
NCL 30-80/180-0,12	0,12	2900	3-400V, 50 Hz	0,36	IP55	+/- 10%
NCL 30-85/180-0,18	0,18	2900	3-400V, 50 Hz	0,5	IP55	+/- 10%
NCL 30-90/180-0,25	0,25	2900	3-400V, 50 Hz	0,6	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	l <sub>0</sub>	l <sub>1</sub>	øg	P <sub>1</sub>	x	DNs/DNd	kg
NCL 30-70/180-0,12	34	66	57	123	180	254	106	76	100	1 1/4"/G 2	7,1
NCL 30-80/180-0,12	34	66	57	123	180	254	106	76	100	1 1/4"/G 2	7,1
NCL 30-85/180-0,18	52	69	68	137	180	251	125	107	100	1 1/4"/G 2	8,7
NCL 30-90/180-0,25	52	69	68	137	180	251	125	107	100	1 1/4"/G 2	9,4

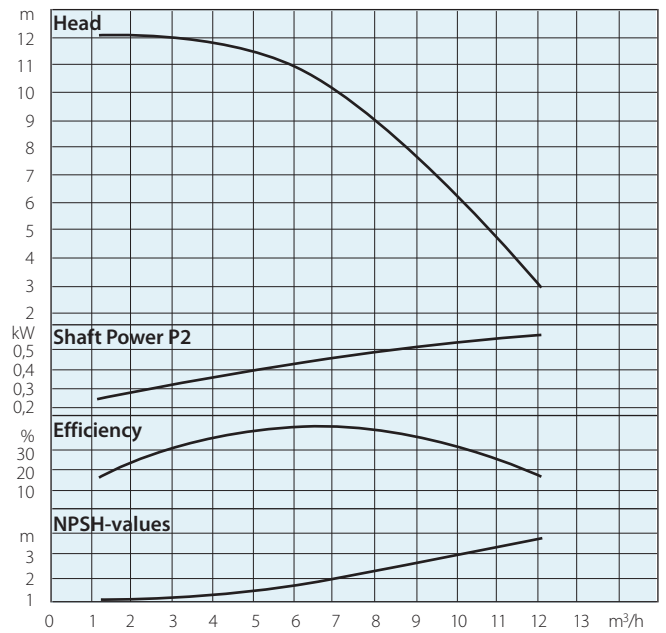
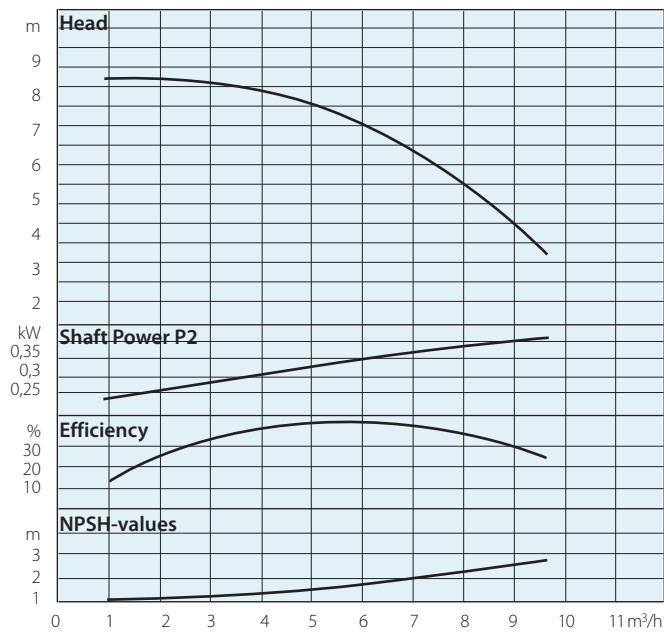
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 30-70/180-0,12	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 30-80/180-0,12	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 30-85/180-0,18	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 30-90/180-0,25	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

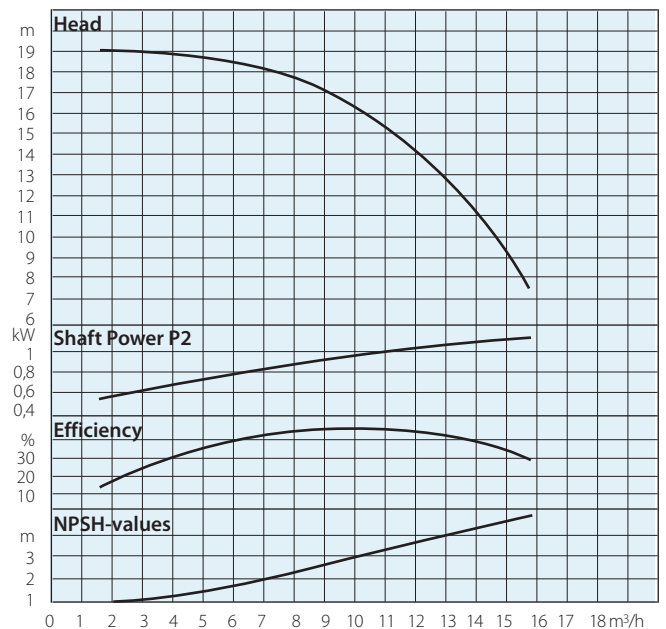
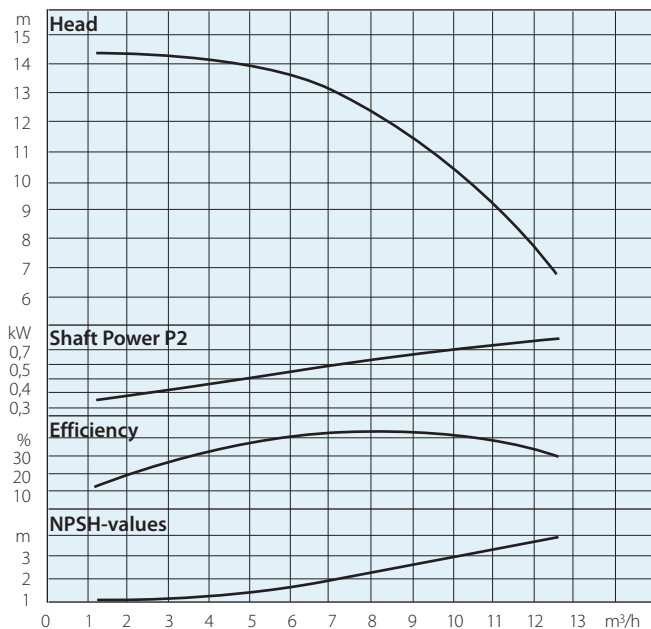
**NCL 32-90/260**

**NCL 32-100/260**



**NCL 32-110/260**

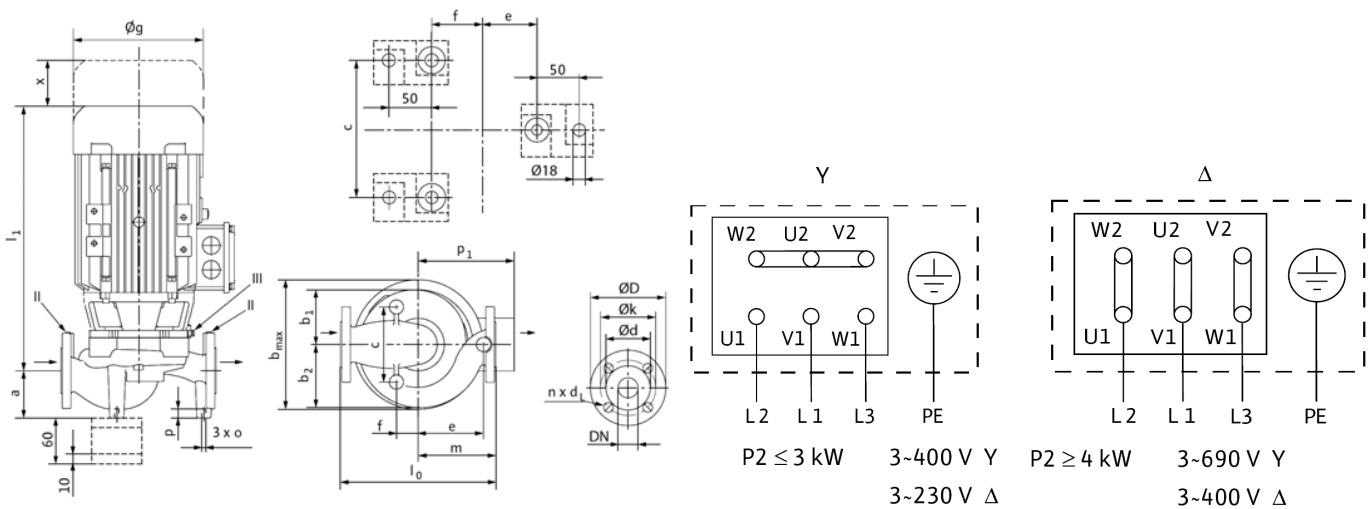
**NCL 32-130/260**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	2	4	6	8	10	12	14
NCL 32-90/260-0,37	H (mWC)	8,1	7,8	6,9	5,3			
NCL 32-100/260-0,55		12	12,7	11	9	6,3	3	
NCL 32-110/260-0,75		14,4	14	13,5	12,5	10,5	7,7	
NCL 32-130/260-1,1		19	18,8	18,5	17,8	16	14	11

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 32-90/260-0,37	0,37	2900	3-400 V, 50 Hz	0,91	IP55	+/- 10%
NCL 32-100/260-0,55	0,55	2900	3-400 V, 50 Hz	1,33	IP55	+/- 10%
NCL 32-110/260-0,75	0,75	2900	3-400 V, 50 Hz	1,7	IP55	+/- 10%
NCL 32-130/260-1,1	1,1	2900	3-400 V, 50 Hz	2,4	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCL 32-90/260-0,37	70	101	106	207	90	40	50	260	321	130	M10	141,2	20	121	150	19	DN32	20,5	DN32	76	140	4	100
NCL 32-100/260-0,55	70	101	106	207	90	40	50	260	321	130	M10	141,2	20	121	150	19	DN32	21,5	DN32	76	140	4	100
NCL 32-110/260-0,75	70	101	106	207	90	40	50	260	341	130	M10	185	20	128	150	19	DN32	25,5	DN32	76	140	4	100
NCL 32-130/260-1,1	70	101	106	207	90	40	50	260	341	130	M10	185	20	128	150	19	DN32	26,1	DN32	76	140	4	100

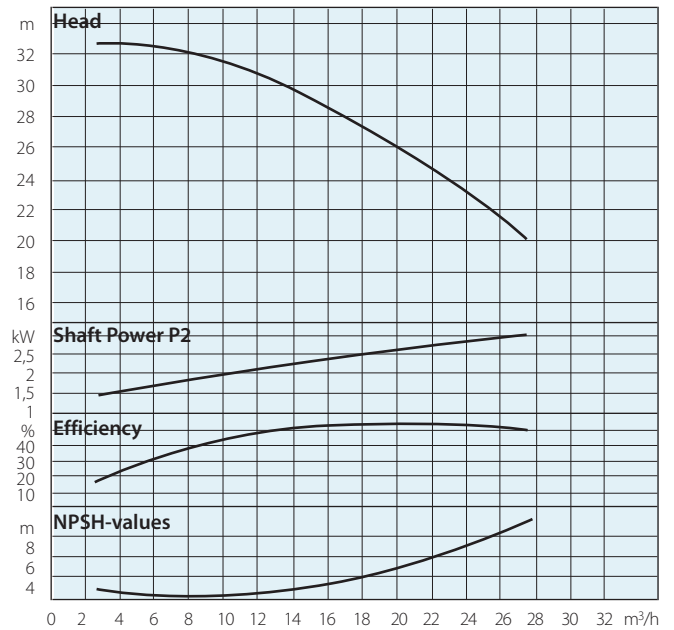
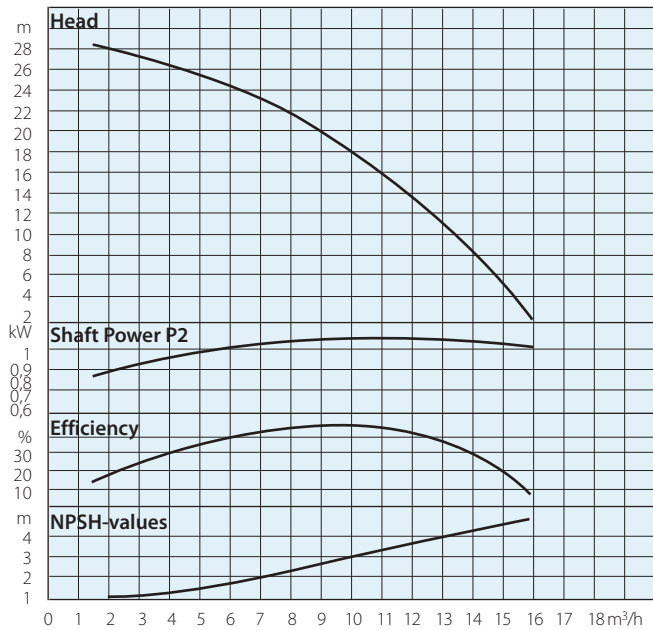
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 32-90/260-0,37	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 32-100/260-0,55	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 32-110/260-0,75	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 32-130/260-1,1	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

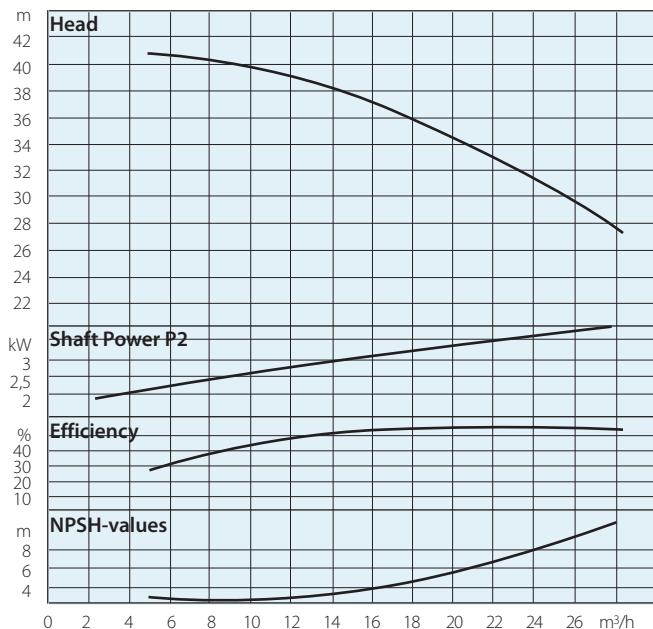
## Inline, Dry Running Circulation Pumps

**NCL 32-160/260**

**NCL 32-165/320**



**NCL 32-175/320**

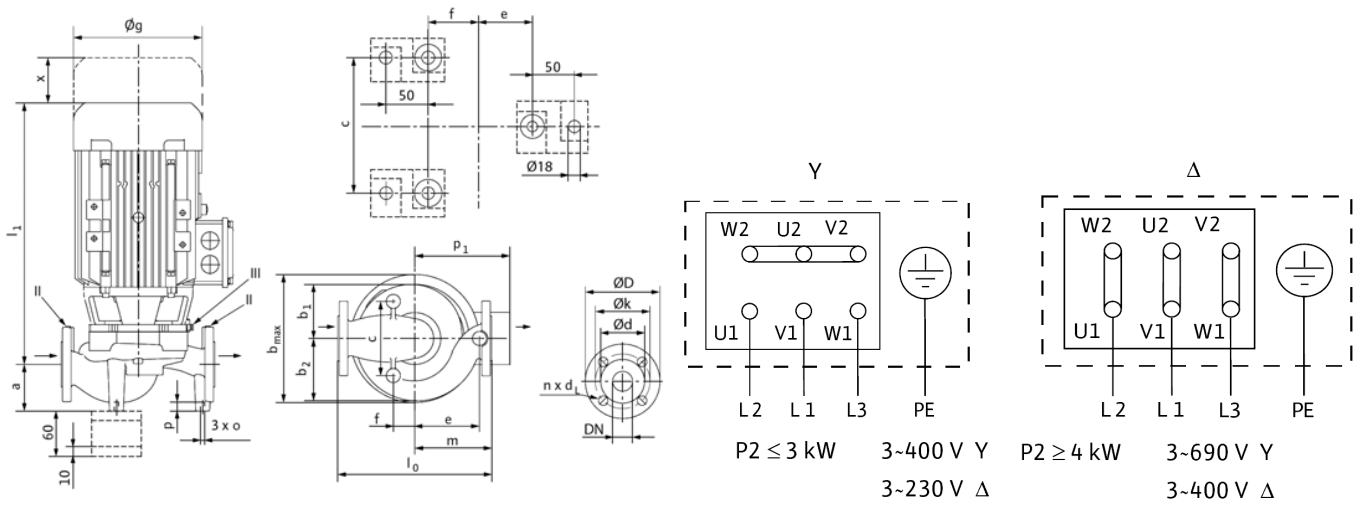




# NCL

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	2	4	6	8	10	12	14	16	18	20	22
NCL 32-160/260-1,1	H (mWC)	28	26,2	24	21,8	18	13,8	8	2			
NCL 32-165/320-3			32,5	32,2	32	31,5	30,8	29,8	28,8	26	23	
NCL 32-175/320-4				40,5	40	39,8	39	38	37	34	31	27,5

Model	Rated Power P <sub>2</sub> kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 32-160/260-1,1	1,1	2900	3-400 V, 50 Hz	2,4	IP55	+/- 10%
NCL 32-165/320-3	3	2900	3-400 V, 50 Hz	5,8	IP55	+/- 10%
NCL 32-175/320-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCL 32-160/260-1,1	70	101	106	207	90	40	50	260	341	130	M10	185	20	128	150	19	DN32	26,1	DN32	76	140	4	100
NCL 32-165/320-3	100	112	124	236	120	132	68	320	396	155	M10	217	20	160	90	19	DN32	46,1	DN32	76	140	4	100
NCL 32-175/320-4	100	112	124	236	120	132	68	320	412	155	M10	232	20	168	90	19	DN32	53,4	DN32	76	140	4	100

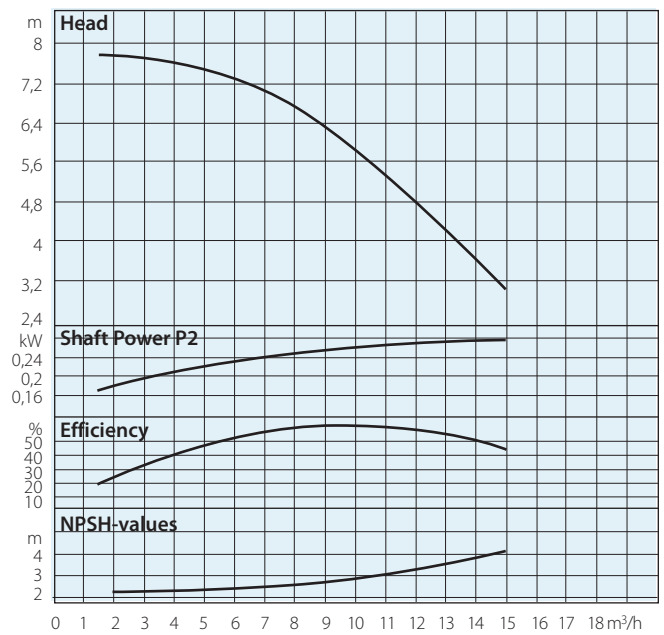
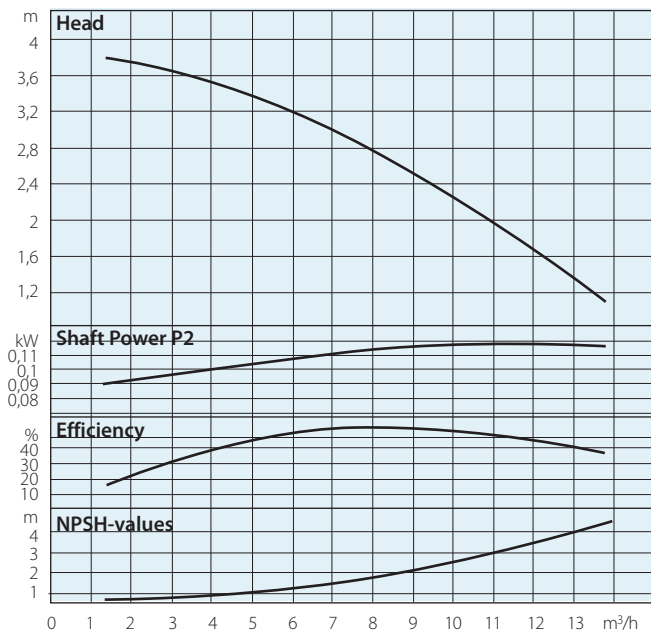
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 32-160/260-1,1	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 32-165/320-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 32-175/320-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

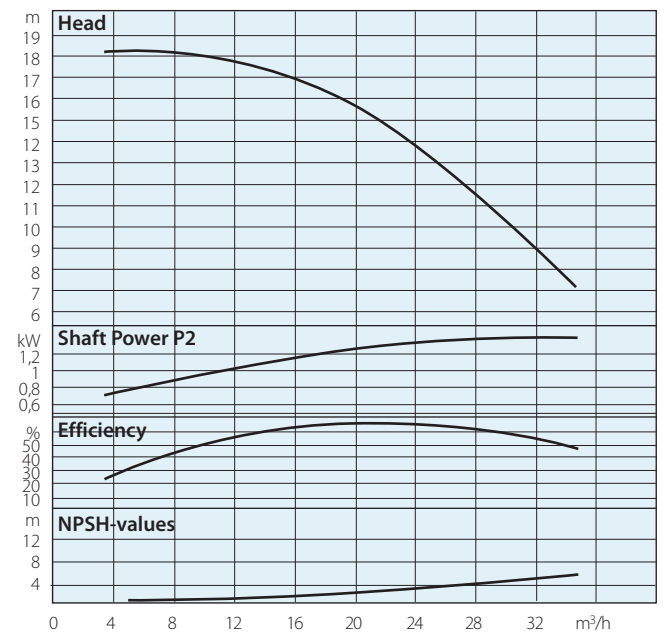
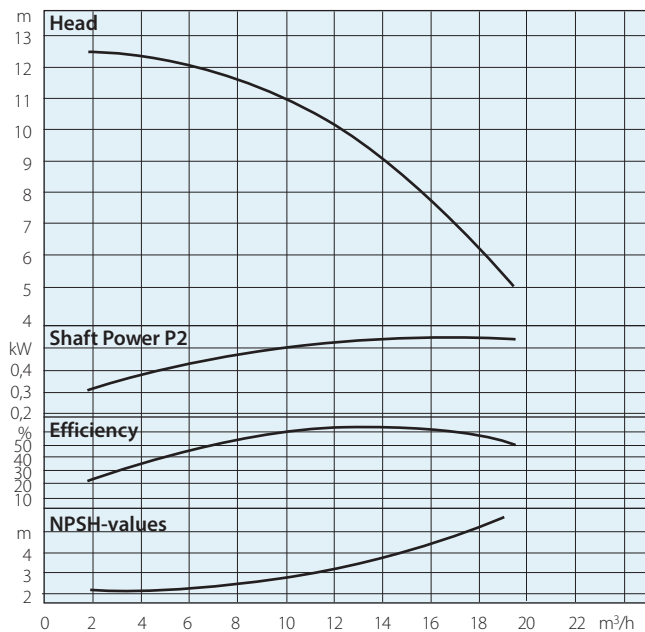
**NCL 40-70/220**

**NCL 40-90/250**



**NCL 40-115/250**

**NCL 40-120/320**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications

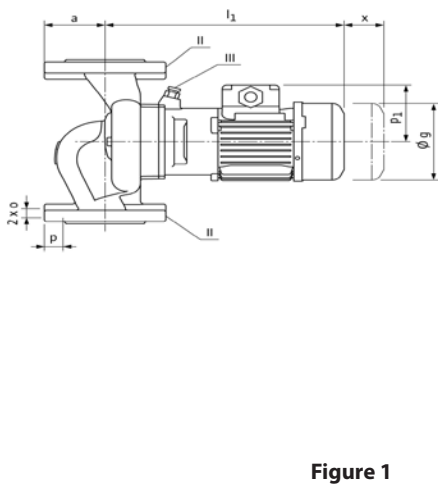


Figure 1

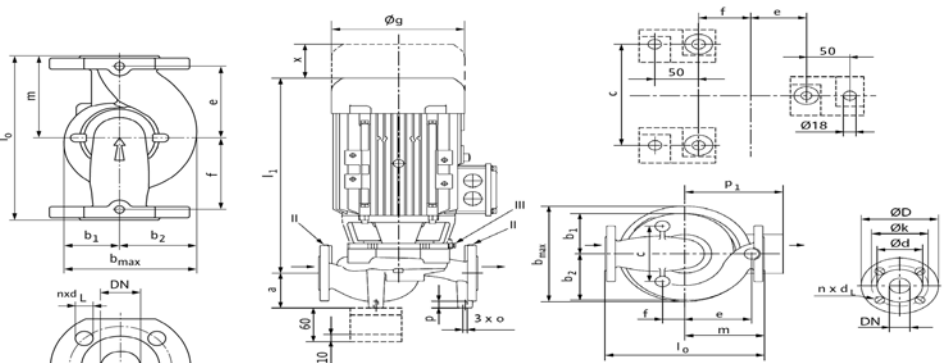
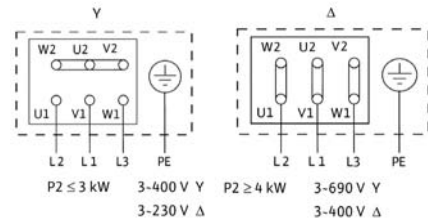


Figure 2



Model	Q (m <sup>3</sup> /h)	4	8	12	16	20	24	28	32
NCL 40-70/220-0,12	H (mWC)	3,5	2,8	1,7					
NCL 40-90/250-0,37		7,6	6,8	4,8					
NCL 40-115/250-0,55		12,3	11,5	10	7,5				
NCL 40-120/320-1,5		18,4	18,2	17,9	17	15,7	13,9	11,5	9

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 40-70/220-0,12	0,12	2900	3-400V, 50 Hz	0,36	IP55	+/- 10%
NCL 40-90/250-0,37	0,37	2900	3-400V, 50 Hz	0,91	IP55	+/- 10%
NCL 40-115/250-0,55	0,55	2900	3-400V, 50 Hz	1,33	IP55	+/- 10%
NCL 40-120/320-1,5	1,5	2900	3-400V, 50 Hz	3,3	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	Fig	DNs/ DNd	d	D	n	k
NCL 40-70/220-0,12	65	75	84	159		95	95	220	259	110	M10	106	20	76	150	19	DN40	12,5	1	DN40	84	150	4	110
NCL 40-90/250-0,37	65	80	90	170		110	110	250	320	125	M10	141,2	20	121	150	19	DN40	19	1	DN40	84	150	4	110
NCL 40-115/250-0,55	65	80	90	170		110	110	250	320	125	M10	141,2	20	121	150	19	DN40	20,1	1	DN40	84	150	4	110
NCL 40-120/320-1,5	75	113	121	234	90	40	50	320	373,5	160	M10	193	20	151	150	19	DN40	29,5	2	DN40	84	150	4	110

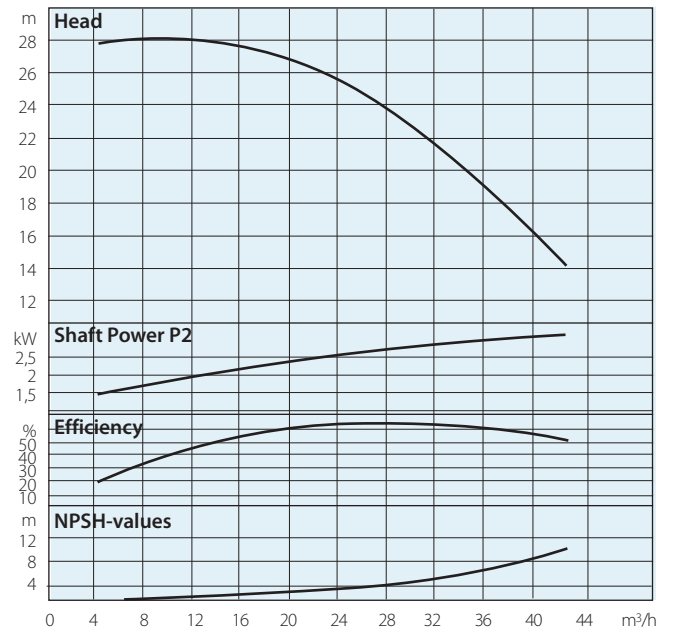
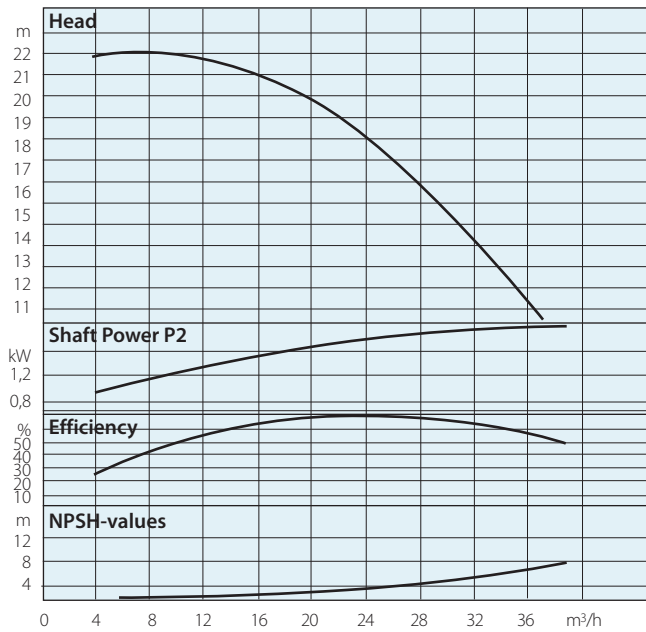
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 40-70/220-0,12	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 40-90/250-0,37	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 40-115/250-0,55	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 40-120/320-1,5	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

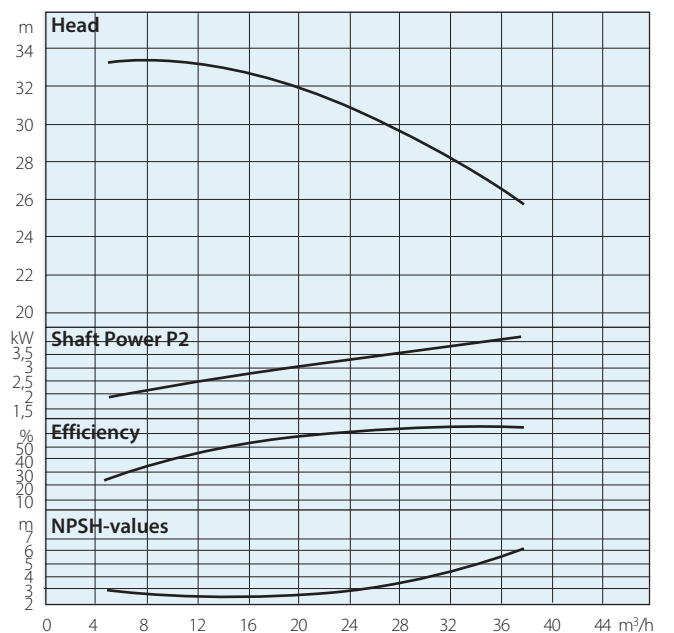
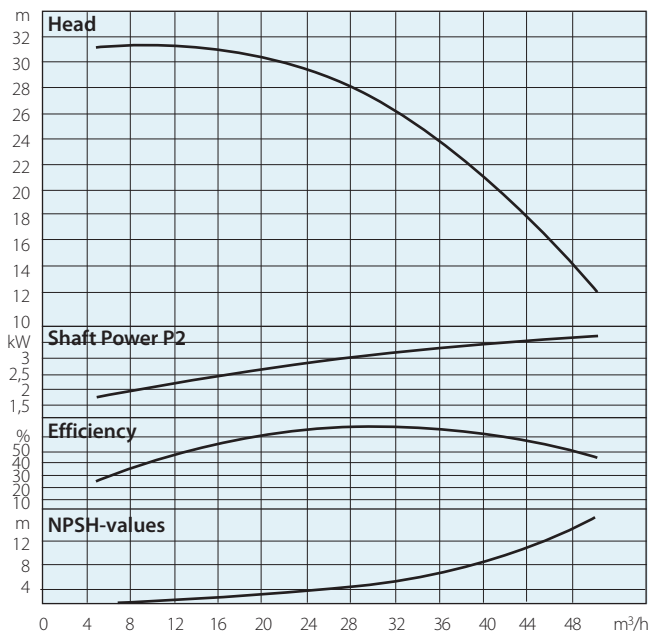
**NCL 40-130/320**

**NCL 40-150/320**



**NCL 40-160/320**

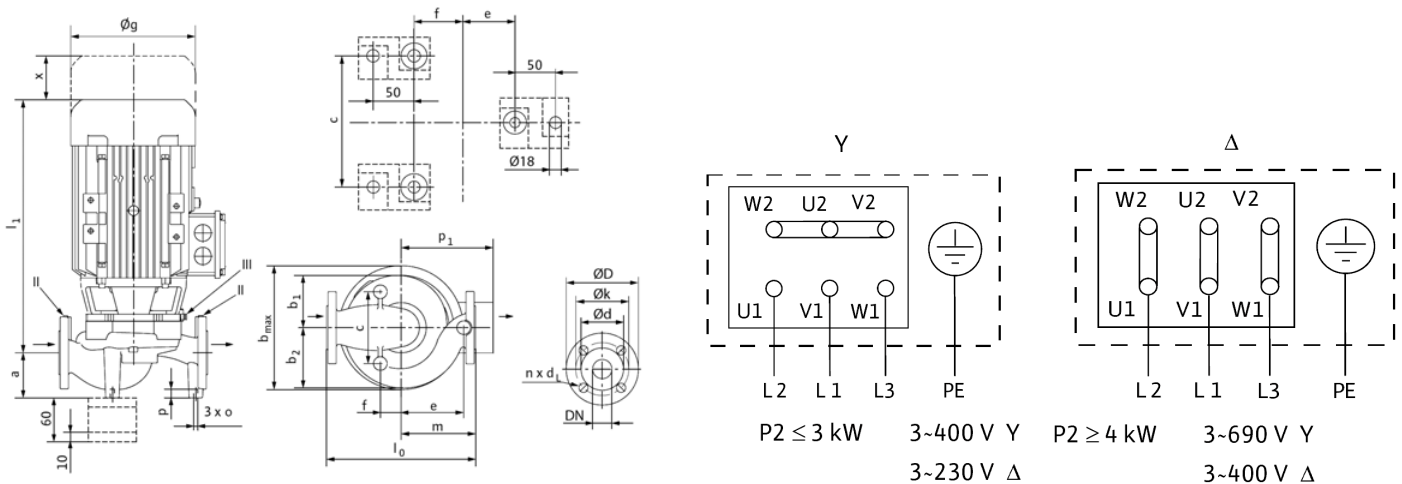
**NCL 40-165/340**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	4	8	12	16	20	24	28	32	36	40	44
NCL 40-130/320-2,2	H (mWC)	21,8	22	22,6	21	19,8	18,1	16,1	13,8	11		
NCL 40-150/320-3			28	28	27,5	26,8	25,5	24	22	19	16,5	
NCL 40-160/320-4			31,3	31,1	30,8	30,5	29,5	28	26	24	21	18
NCL 40-165/340-4			33,3	33,1	32,7	32	31	29,8	28	26,5		

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 40-130/320-2,2	2,2	2900	3-400V, 50 Hz	4,52	IP55	+/- 10%
NCL 40-150/320-3	3	2900	3-400V, 50 Hz	5,8	IP55	+/- 10%
NCL 40-160/320-4	4	2900	3-400V, 50 Hz	7,7	IP55	+/- 10%
NCL 40-165/340-4	4	2900	3-400V, 50 Hz	7,7	IP55	+/- 10%

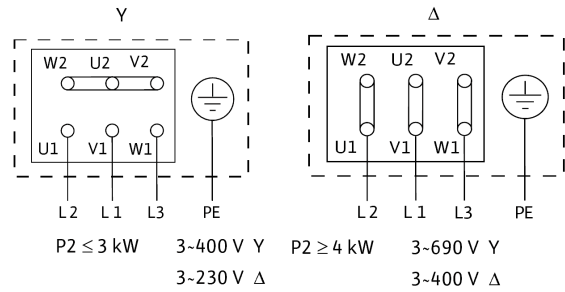
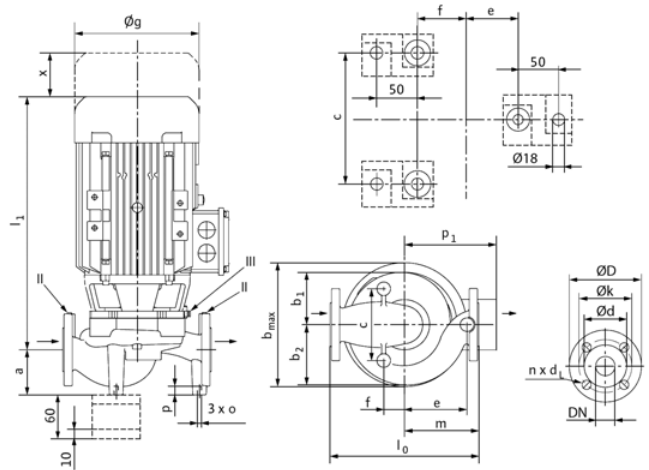
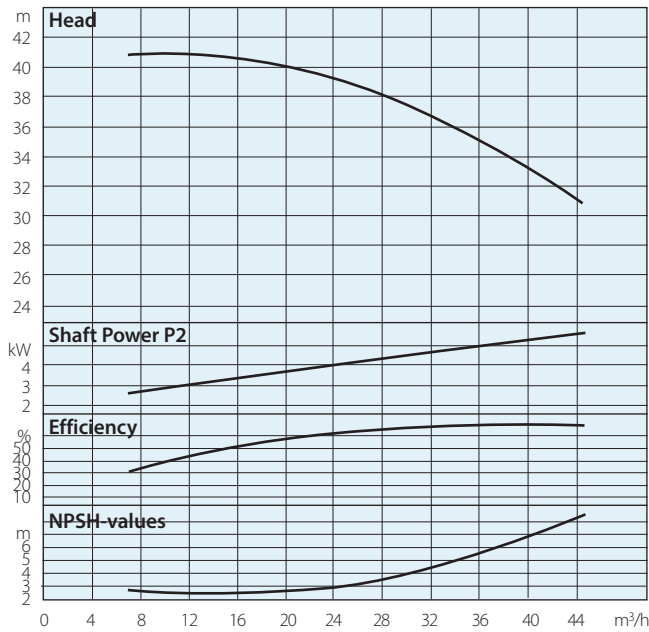
Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCL 40-130/320-2,2	75	113	121	234	90	40	50	320	373,5	160	M10	193	20	151	150	19	DN40	31,5	DN40	84	150	4	110
NCL 40-150/320-3	75	113	121	234	90	40	50	320	386	160	M10	217	20	160	150	19	DN40	37,5	DN40	84	150	4	110
NCL 40-160/320-4	75	113	121	234	90	40	50	320	419,5	160	M10	232	20	168,5	150	19	DN40	43,5	DN40	84	150	4	110
NCL 40-165/340-4	82	113	129	242	130	149	58	340	426	170	M10	232	20	168	150	19	DN40	57,3	DN40	84	150	4	110

Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 40-130/320-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 40-150/320-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 40-160/320-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 40-165/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

**NCL 40-175/340**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications

Model	Q (m <sup>3</sup> /h)	8	12	16	20	24	28	32	36	40	44
NCL 40-175/340-5,5	H (mWC)	41	41	40,5	40	39	38	36,8	35	33	31

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 40-175/340-5,5	5,5	2900	3-400 V, 50 Hz	10,2	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCL 40-175/340-5,5	82	113	129	279	130	149	58	340	511	170	M10	279	20	182	150	19	DN40	68,6	DN40	84	150	4	110

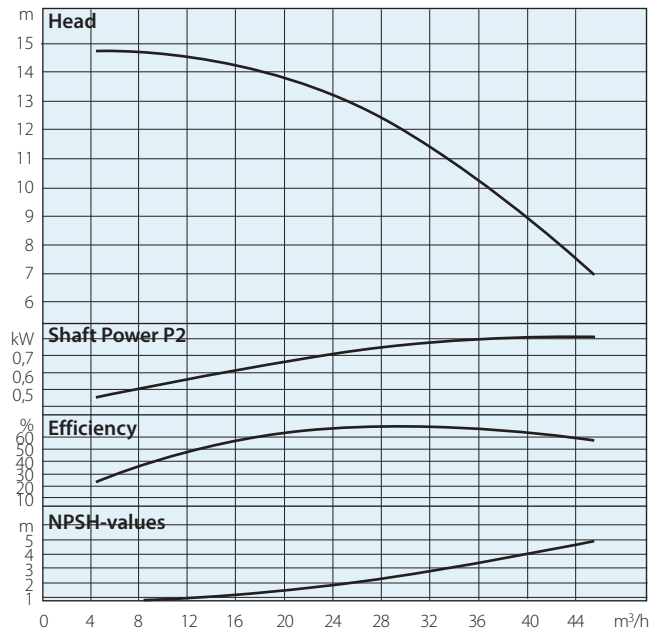
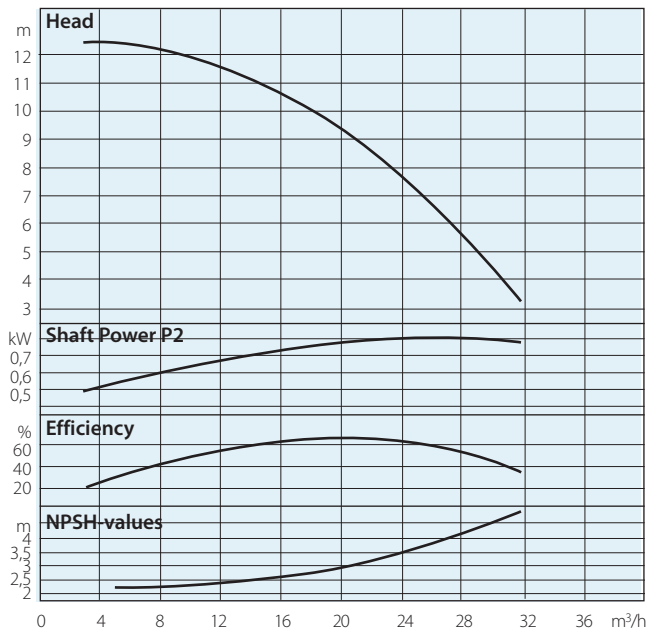
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 40-175/340-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

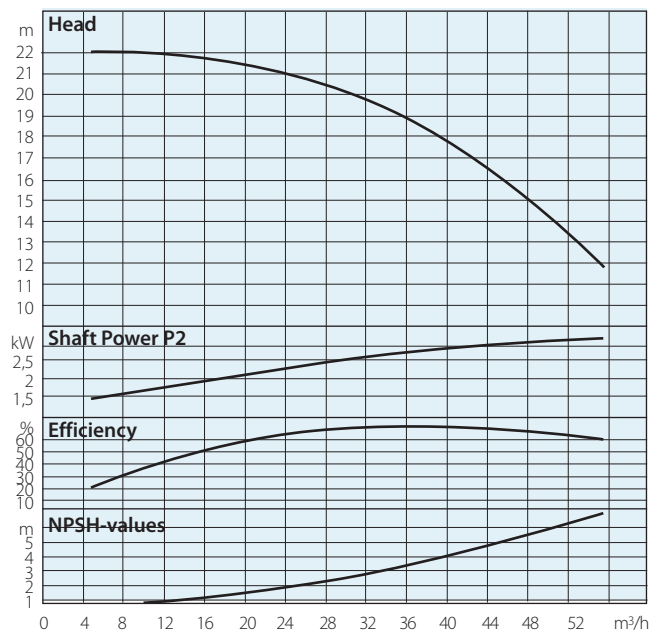
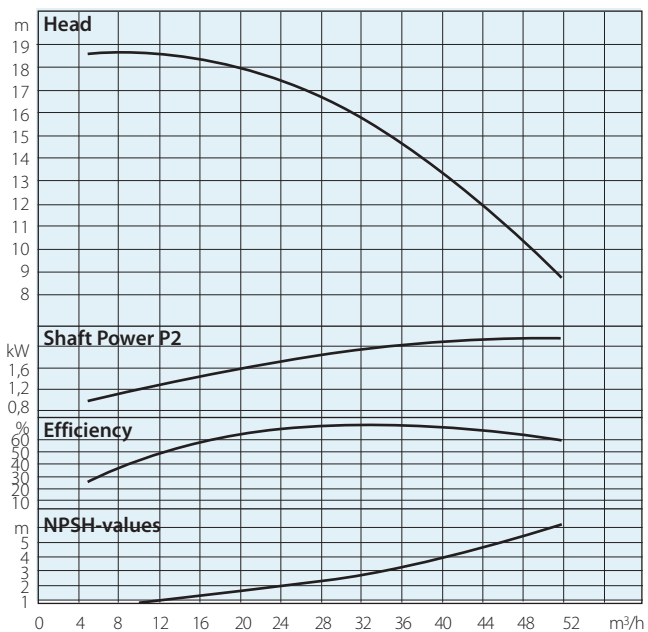
**NCL 50-115/280**

**NCL 50-120/340**



**NCL 50-130/340**

**NCL 50-140/340**





# NCL

## Inline, Dry Running Circulation Pumps

### Specifications

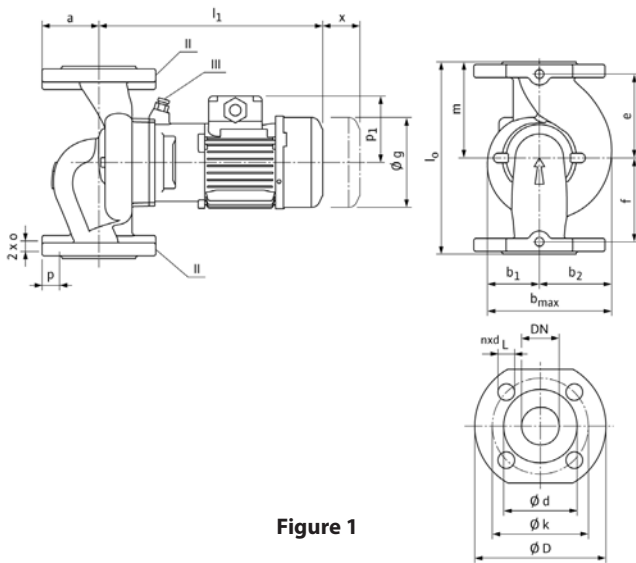


Figure 1

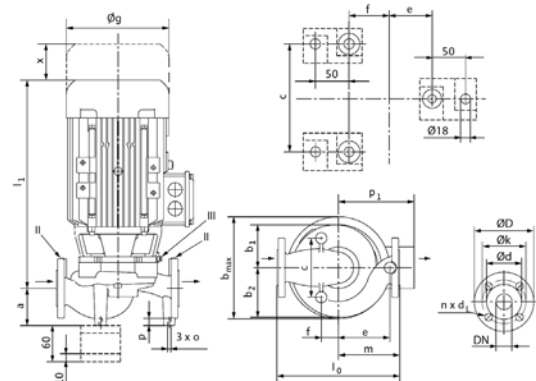
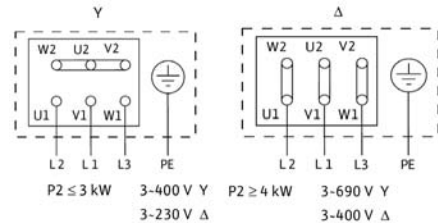


Figure 2



Model	Q (m <sup>3</sup> /h)	8	16	20	24	28	36	44	48	52
NCL 50-115/280-0,75	H (mWC)	12,1	10,5	9,3	7,5	5,5				
NCL 50-120/340-1,5		14,7	14,3	13,7	13,2	12,3	10,3	7,5		
NCL 50-130/340-2,2		18,5	18,3	18	17,5	16,8	14,7	12	10,2	8,8
NCL 50-140/340-3		22	21,8	21,5	21	20,5	19	16,8	15	13,7

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 50-115/280-0,75	0,75	2900	3-400V, 50 Hz	1,7	IP55	+/- 10%
NCL 50-120/340-1,5	1,5	2900	3-400V, 50 Hz	3,3	IP55	+/- 10%
NCL 50-130/340-2,2	2,2	2900	3-400V, 50 Hz	4,52	IP55	+/- 10%
NCL 50-140/340-3	3,8	2900	3-400V, 50 Hz	5,8	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/DN <sub>d</sub>	Fig	DNs/DN <sub>d</sub>	d	D	n	k
NCL 50-115/280-0,75	75	91	101	192		125	125	280	346	140	M10	146	20	128	150	19	DN50	1	DN50	99	165	4	125
NCL 50-120/340-1,5	86	116	131	247	104	40	50	340	375,5	170	M10	193	20	151	150	19	DN50	2	DN50	99	165	4	125
NCL 50-130/340-2,2	86	116	131	247	104	40	50	340	375,5	170	M10	193	20	151	150	19	DN50	2	DN50	99	165	4	125
NCL 50-140/340-3	86	116	131	247	104	40	50	340	388	170	M10	217	20	160	150	19	DN50	2	DN50	99	165	4	125

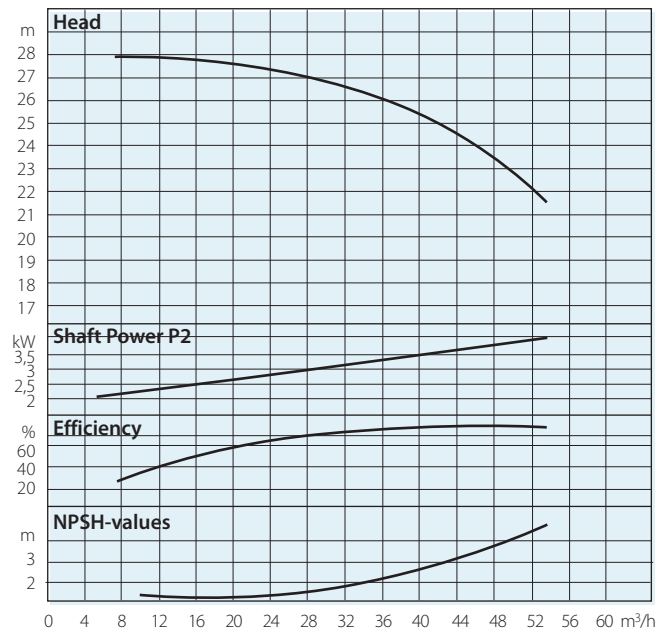
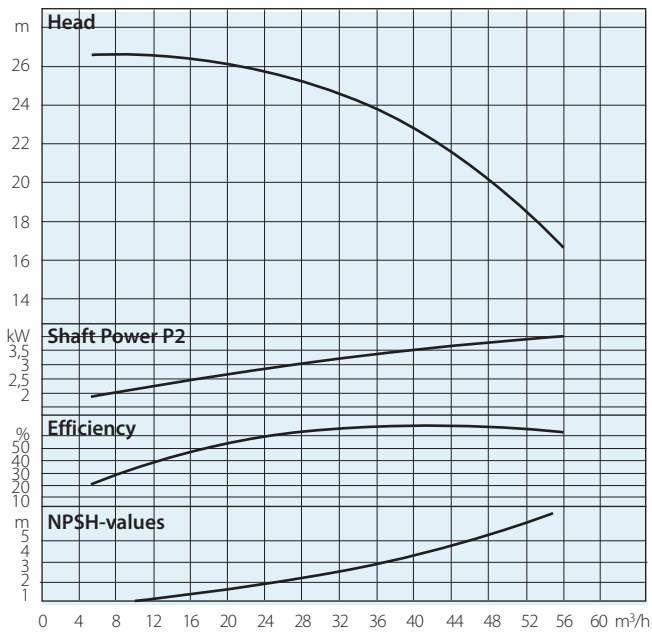
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 50-115/280-0,75	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 50-120/340-1,5	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 50-130/340-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 50-140/340-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

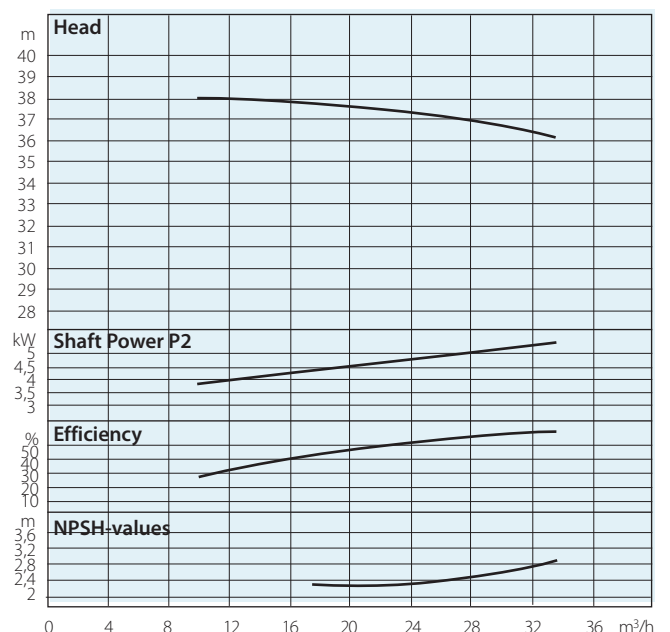
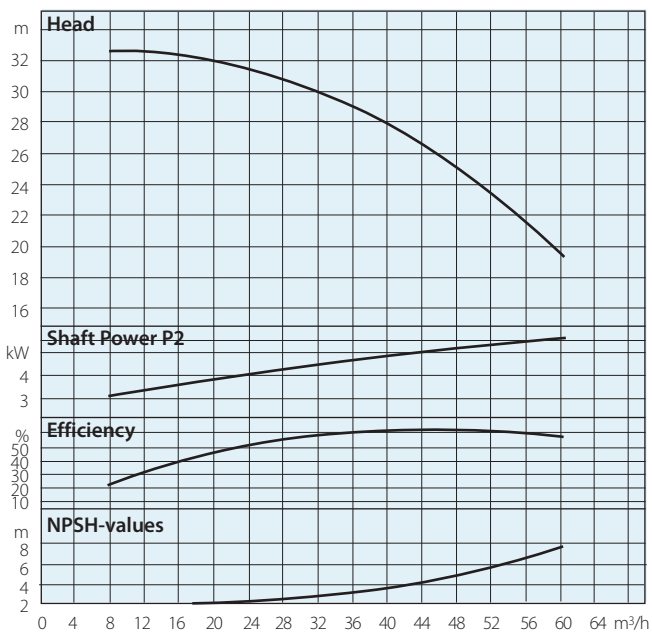
**NCL 50-150/340**

**NCL 50-155/340**



**NCL 50-165/340**

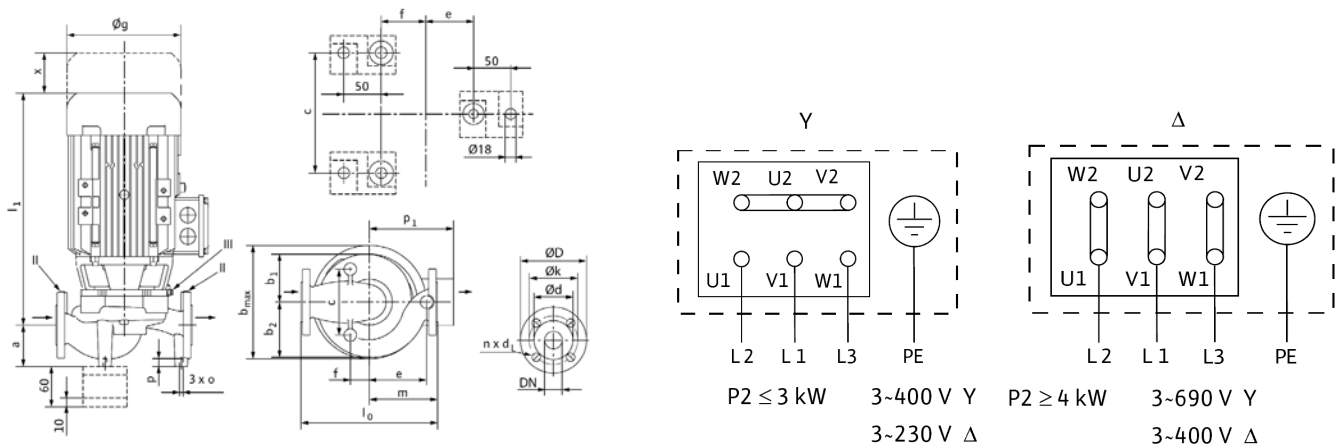
**NCL 50-175/340**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	8	16	20	24	28	36	44	48	52	56
NCL 50-150/340-4	H (mWC)	26,8	26,5	26,1	25,8	25,3	23,9	21,8	20	18,7	16,8
NCL 50-155/340-4		27,9	27,5	27,3	27,2	27	26	24,5	23,6	22	
NCL 50-165/340-5,5		32,5	32,1	32	31,2	30,8	29	26,7	25	23,5	21,4
NCL 50-175/340-5,5			37,9	37,5	37,2	37					

Model	Rated Power P <sub>2</sub> kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 50-150/340-4	4	2900	3-400V, 50 Hz	7,7	IP55	+/- 10%
NCL 50-155/340-4	4	2900	3-400V, 50 Hz	7,7	IP55	+/- 10%
NCL 50-165/340-5,5	5,5	2900	3-400V, 50 Hz	10,2	IP55	+/- 10%
NCL 50-175/340-5,5	5,5	2900	3-400V, 50 Hz	10,2	IP55	+/- 10%

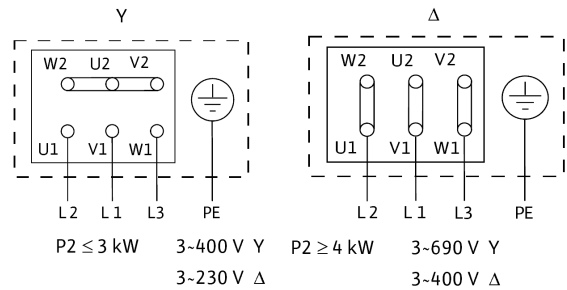
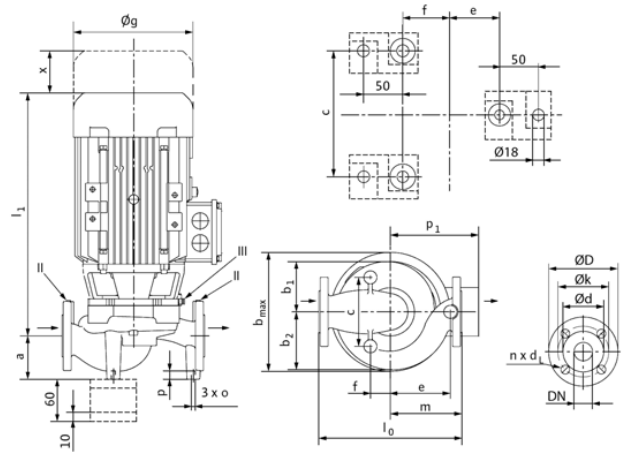
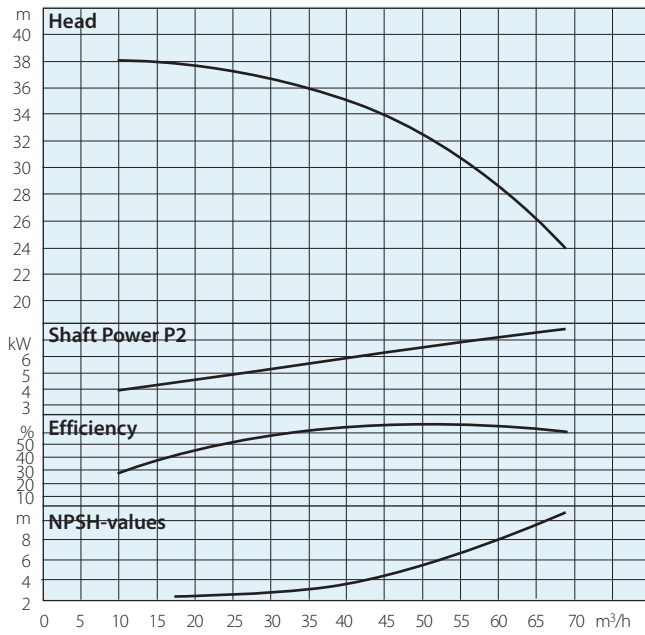
Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	DNs/ DNd	d	D	n	k
NCL 50-150/340-4	86	116	131	247	104	40	50	340	421,5	170	M10	232	20	168,5	150	19	DN50	DN50	99	165	4	125
NCL 50-155/340-4	105	102	119	232	140	130	40	340	463	150	M10	232	20	168	150	19	DN50	DN50	99	165	4	125
NCL 50-165/340-5,5	103	120	138	279	164	143	48	340	526	170	M10	279	20	188	150	19	DN50	DN50	99	165	4	125
NCL 50-175/340-5,5	103	120	138	279	164	143	48	340	526	170	M10	279	20	188	150	19	DN50	DN50	99	165	4	125

Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 50-150/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 50-155/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 50-165/340-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 50-175/340-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

**NCL 50-175/340**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications

Model	Q (m <sup>3</sup> /h)	8	16	20	24	28	36	44	48	52	56
NCL 50-175/340-7,5	H (mWC)	38,1	37,9	37,8	37,1	37	35,7	34	32,3	32	30

Model	Rated Power P <sub>2</sub> kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 50-175/340-7,5	7,5	2900	3-400 V, 50 Hz	13,7	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	DNs/ DNd	d	D	n	k
NCL 50-175/340-7,5	103	120	138	279	164	143	48	340	526	170	M10	279	20	188	150	19	DN50	DN50	99	165	4	125

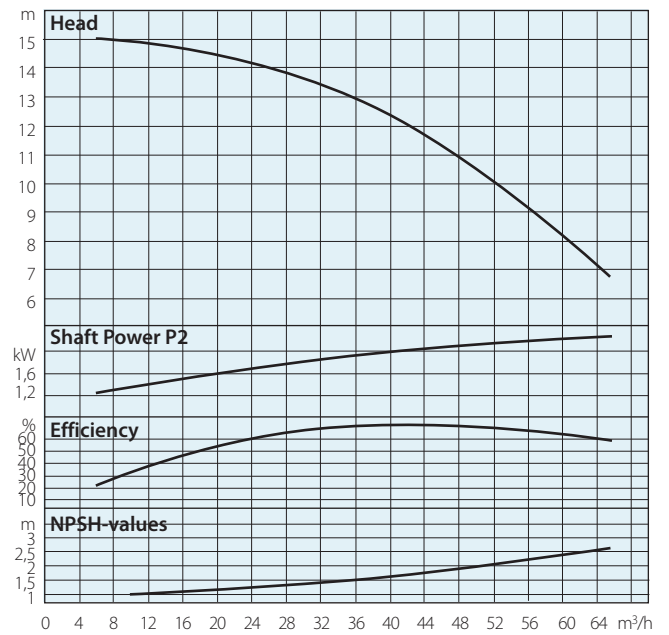
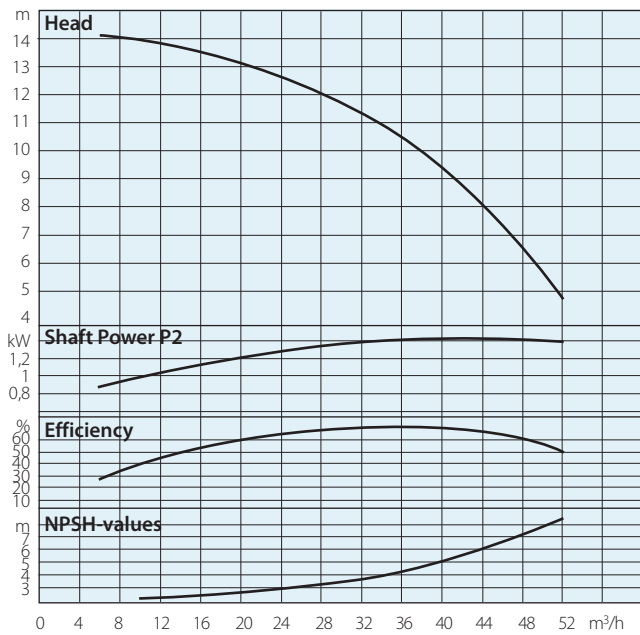
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 50-175/340-7,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

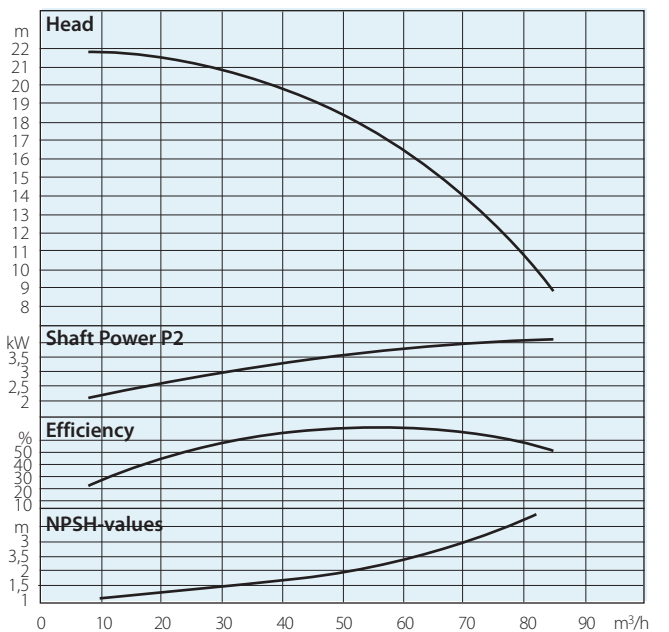
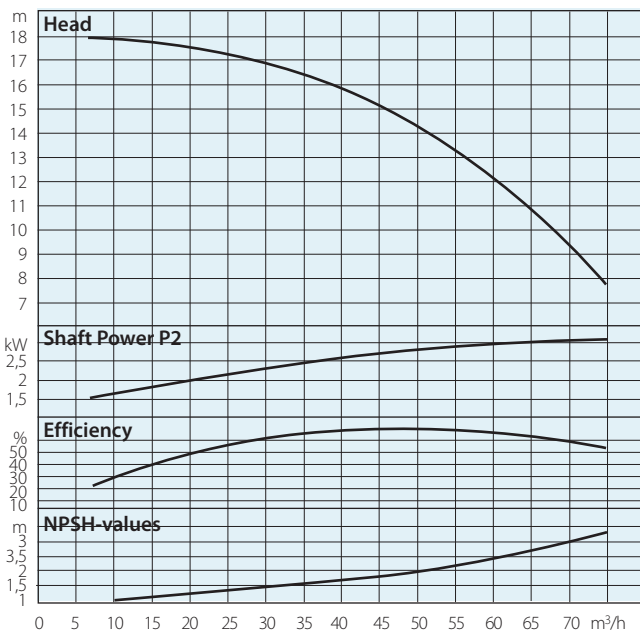
**NCL 65-115/340**

**NCL 65-120/340**



**NCL 65-130/340**

**NCL 65-140/340**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications

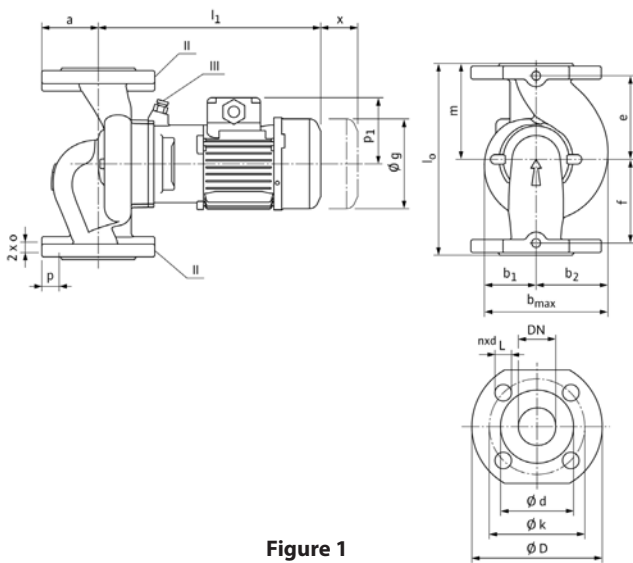


Figure 1

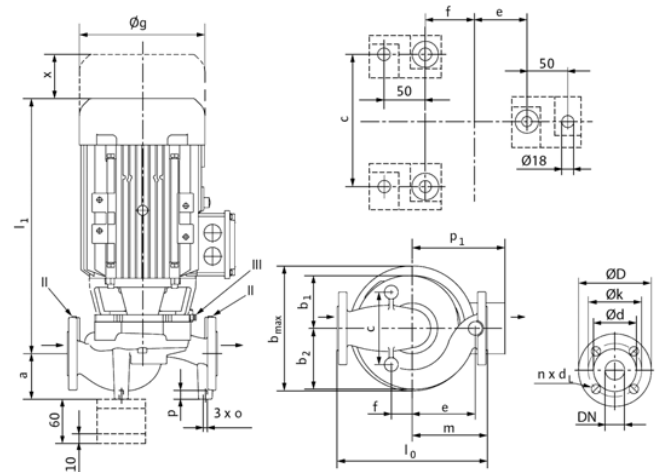
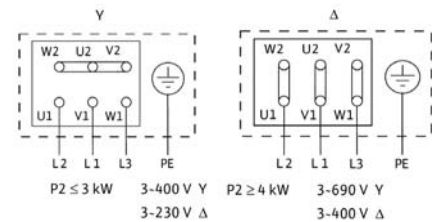


Figure 2



Model	Q (m <sup>3</sup> /h)	8	16	20	24	28	36	44	48	52	56	60	70	80
NCL 65-115/340-1,5	H (mWC)	14	13,5	13	12,6	12	10,5	8	6,5	4,7				
NCL 65-120/340-2,2		15	14,7	14,5	14,2	13,8	13	11,5	11	10,2	9,2	8,2		
NCL 65-130/340-3		17,9	17,6	17,5	17,1	16,9	16,3	15,1	14,3	14	13,3	12		
NCL 65-140/340-4		21,9	21,7	21,4	21	20,9	20,5	19	18,3	18	17	16,5	14	10,5

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 65-115/340-1,5	1,5	2900	3-400 V, 50 Hz	3,3	IP55	+/- 10%
NCL 65-120/340-2,2	2,2	2900	3-400 V, 50 Hz	4,52	IP55	+/- 10%
NCL 65-130/340-3	3	2900	3-400 V, 50 Hz	5,8	IP55	+/- 10%
NCL 65-140/340-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	Fig	kg	DNs/ DNd	d	D	n	k
NCL 65-115/340-1,5	80	100	118	218		155	155	340	386,8	170	M10	193	20	151	150	19	DN65	1	34,6	DN65	118	185	4	145
NCL 65-120/340-2,2	93	119	138	257	135	40	55	340	381,5	170	M10	193	20	151	150	19	DN65	2	37	DN65	118	185	4	145
NCL 65-130/340-3	93	119	138	257	135	40	55	340	394	170	M10	217	20	160	150	19	DN65	2	43	DN65	118	185	4	145
NCL 65-140/340-4	93	119	138	257	135	40	55	340	427,5	140	M10	232	20	168,5	150	19	DN65	2	49	DN65	118	185	4	145

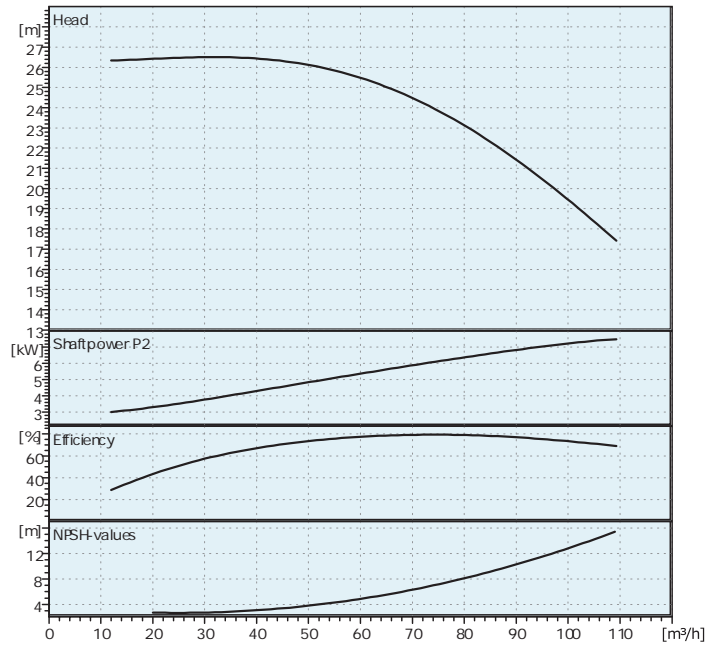
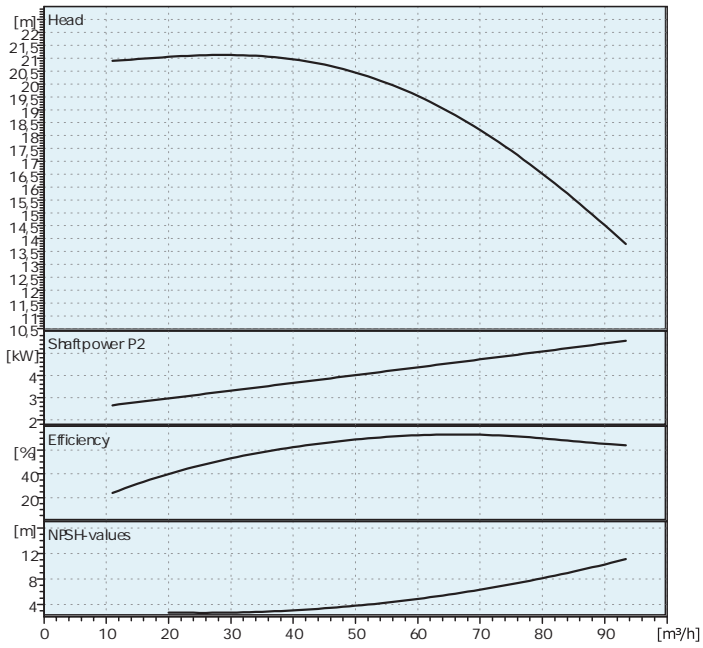
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 65-115/340-1,5	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 65-120/340-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 65-130/340-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 65-140/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

**NCL 65-145/340**

**NCL 65-155/340**

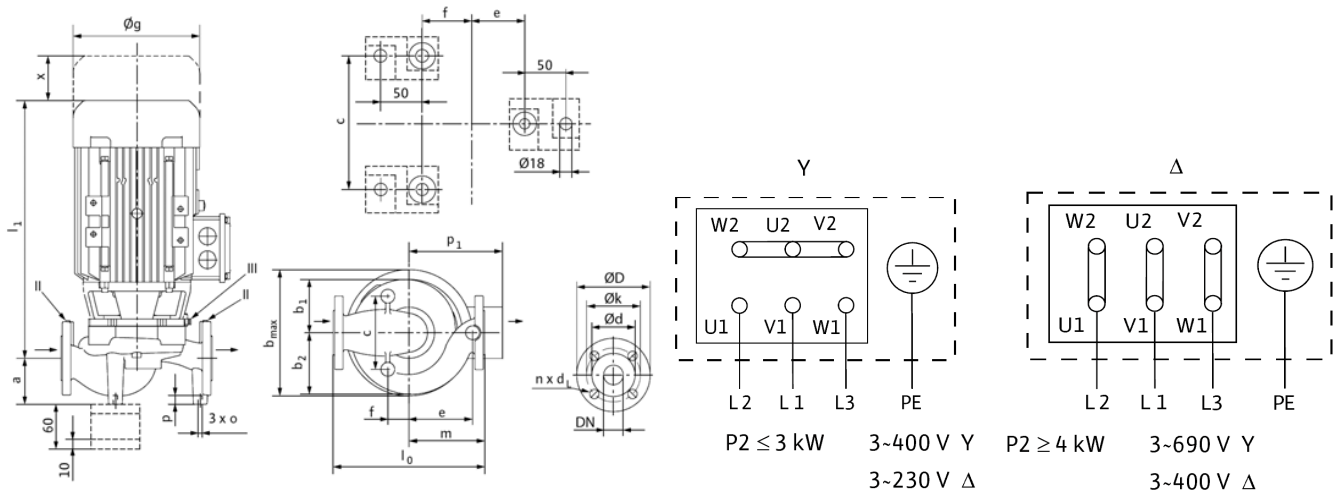




# NCL

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	16	20	24	28	36	44	48	52	56	60	70	80
NCL 65-145/340-5,5	H (mWC)	21	21,3	21,4	21,3	21	20,7	20,5	20,4	20	19,5	18,3	16,5
NCL 65-155/340-7,5		26,3	26,4	26,5	26,6	26,5	26,3	26,2	26	25,9	25,5	24,5	23

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 65-145/340-5,5	5,5	2900	3-400V, 50 Hz	10,2	IP55	+/- 10%
NCL 65-155/340-7,5	7,5	2900	3-400V, 50 Hz	13,7	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCL 65-145/340-5,5	120	112	134	279	140	140	60	340	531	160	M12	279	20	188	150	19	DN65	74,2	DN65	118	185	4	145
NCL 65-155/340-7,5	120	112	134	279	140	140	60	340	531	160	M12	279	20	188	150	19	DN65	82,4	DN65	118	185	4	145

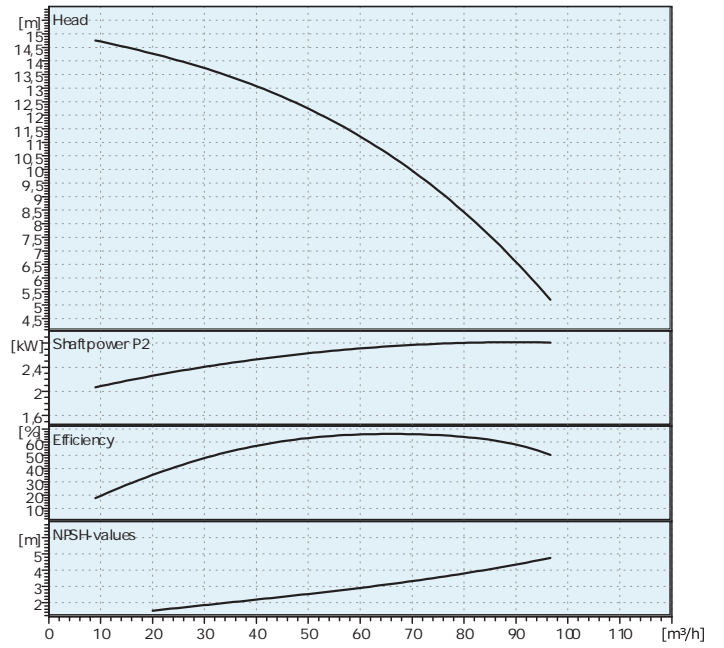
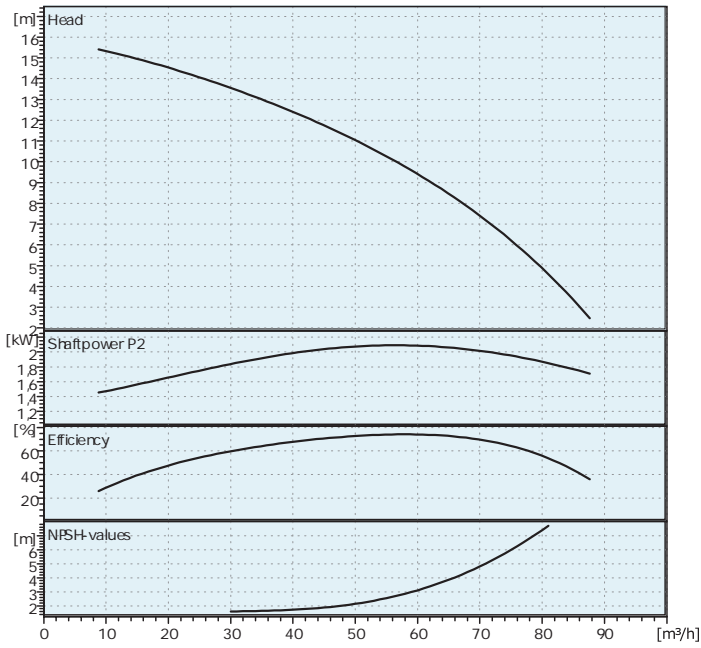
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 65-145/340-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 65-155/340-7,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

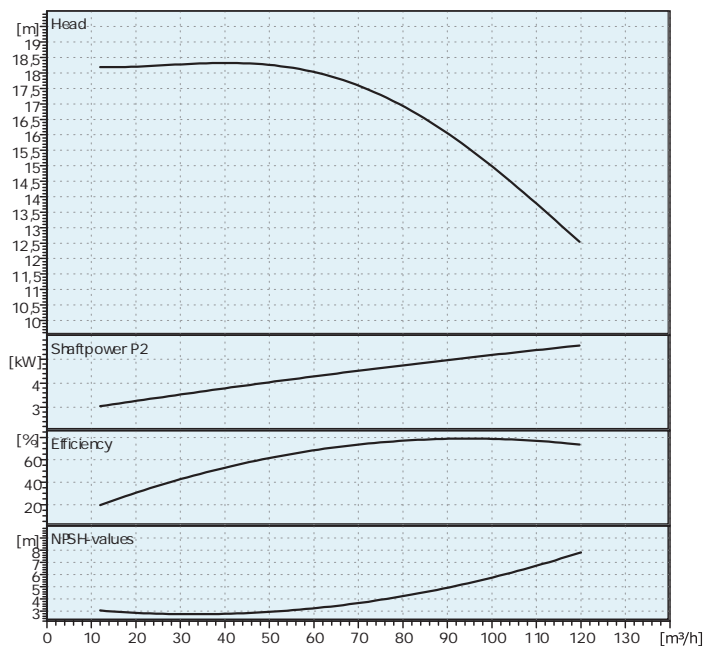
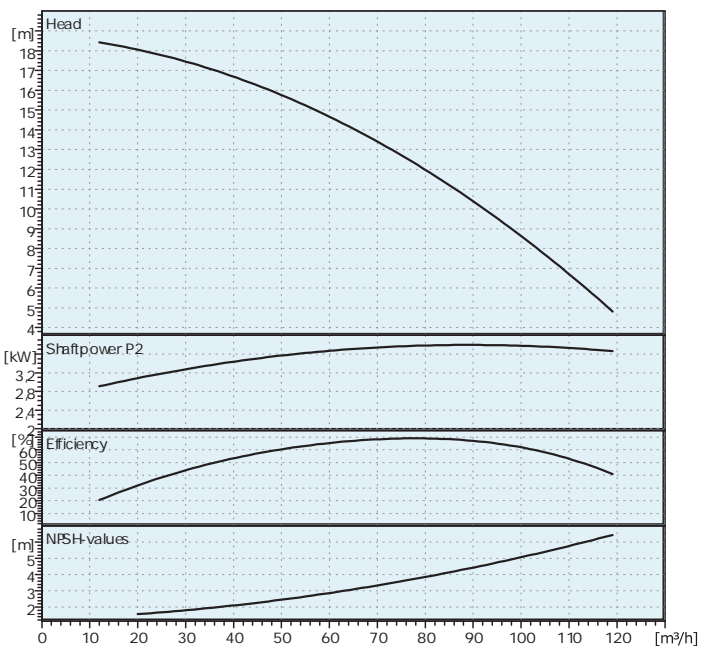
**NCL 80-115/360**

**NCL 80-130/360**



**NCL 80-140/360**

**NCL 80-145/400**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications

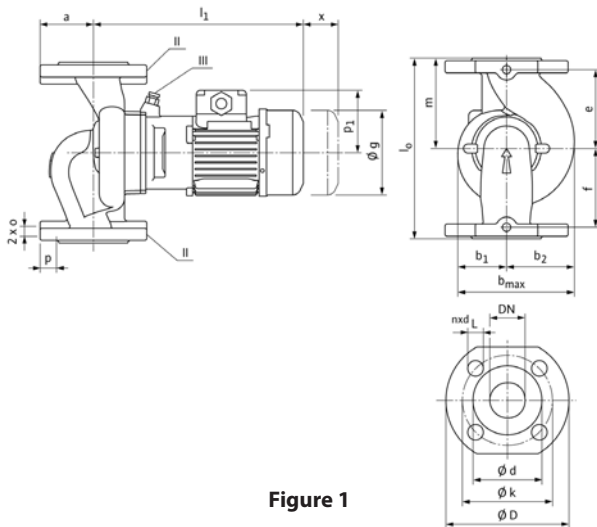


Figure 1

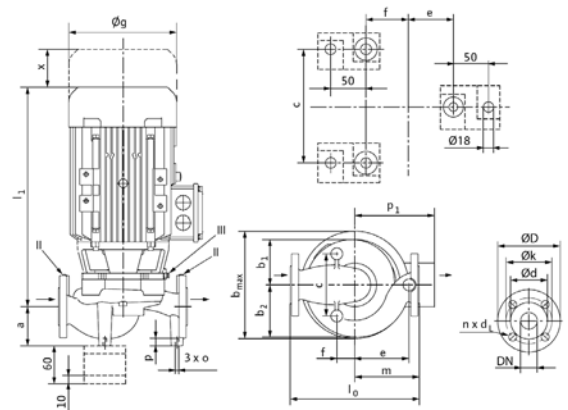
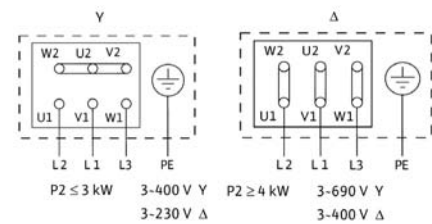


Figure 2



Model	Q (m <sup>3</sup> /h)	10	20	30	40	50	60	70	80	90	100	110	120
NCL 80-115/360-2,2	H (mWC)	15,2	14,7	13,5	12,4	11	9,5	7,5	5				
NCL 80-130/360-3		14,7	14,3	13,7	13	12,3	11,1	10	8,5	6,5			
NCL 80-140/360-4			18	17,5	16,8	15,8	14,8	13,5	12	10,3	8,8	6,7	
NCL 80-145/400-5,5			18,2	18,3	18,4	18,3	18	17,5	17	16	15	13,8	12,5

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 80-115/360-2,2	2,2	2900	3-400 V, 50 Hz	4,52	IP55	+/- 10%
NCL 80-130/360-3	3	2900	3-400 V, 50 Hz	5,8	IP55	+/- 10%
NCL 80-140/360-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%
NCL 80-145/400-5,5	5,5	2900	3-400 V, 50 Hz	10,2	IP55	+/- 10%

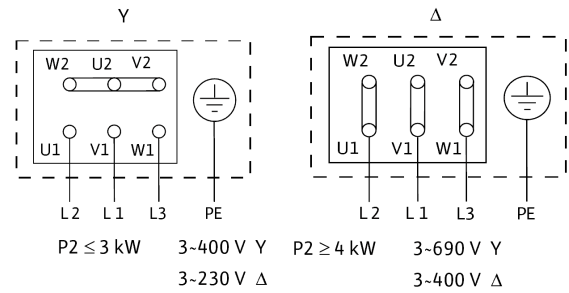
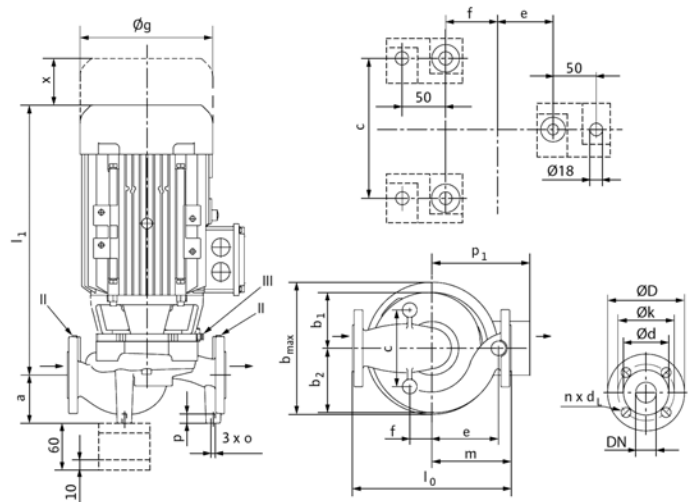
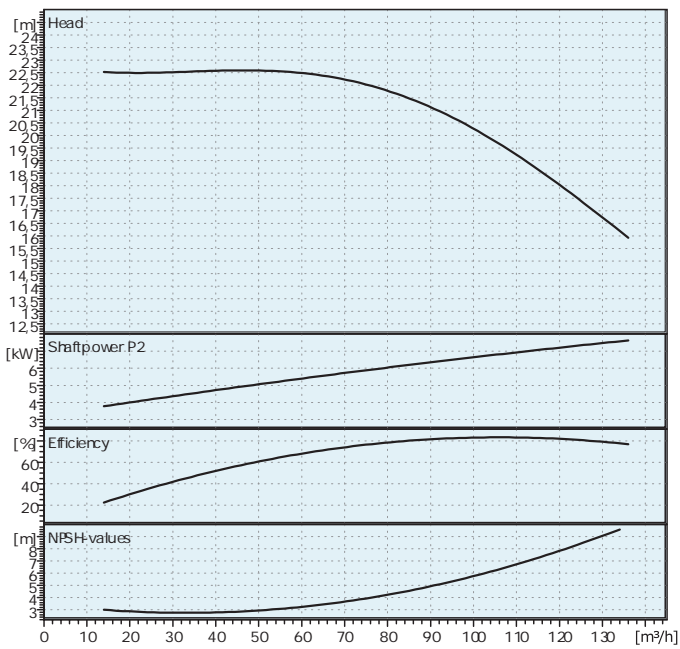
Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	Fig	DNs/ DNd	d	D	n	k
NCL 80-115/360-2,2	98	110	1335	245		165	165	360	388,8	180	M10	193	20	151	150	19	DN80	41,4	1	DN80	132	200	8	160
NCL 80-130/360-3	105	125	153	278	135	40	55	360	400	180	M10	217	20	160	150	19	DN80	46,8	2	DN80	132	200	8	160
NCL 80-140/360-4	105	125	153	278	135	40	55	360	433,5	180	M10	232	20	168,5	150	19	DN80	52,8	2	DN80	132	200	8	160
NCL 80-145/400-5,5	105	123	151	279	180	173	57	400	548	200	M12	279	20	188	150	19	DN80	81,1	2	DN80	132	200	8	160

Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 80-115/360-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 80-130/360-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 80-140/360-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCL 80-145/400-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCL

## Inline, Dry Running Circulation Pumps

**NCL 80-155/400**



# NCL

## Inline, Dry Running Circulation Pumps

### Specifications

Model	Q (m <sup>3</sup> /h)	20	30	40	50	60	70	80	90	100	110	120	130
NCL 80-155/400-7,5	H (mWC)	22,5	22,6	22,7	22,6	22,5	22,3	22	21	20,3	19,4	18	16,8

Model	Rated Power P <sub>2</sub> kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCL 80-155/400-7,5	7,5	2900	3-400 V, 50 Hz	13,7	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCL 80-155/400-7,5	105	123	151	279	180	173	57	400	548	200	M12	279	20	188	150	19	DN80	89,3	DN80	132	200	8	160

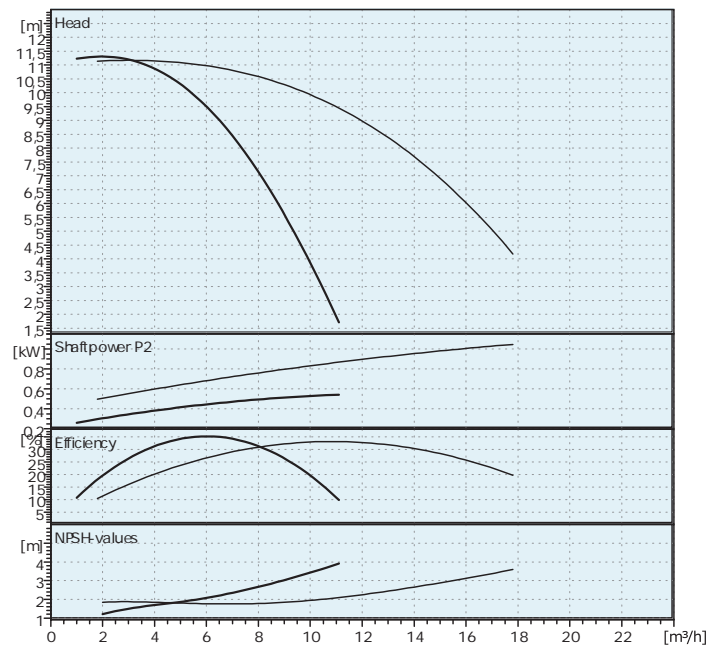
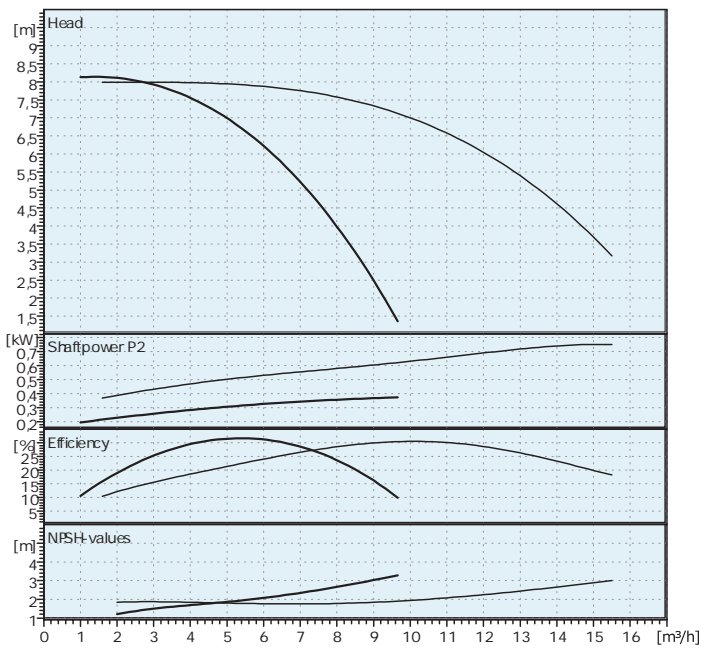
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCL 80-155/400-7,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

## Inline, Dry Running Circulation Pumps

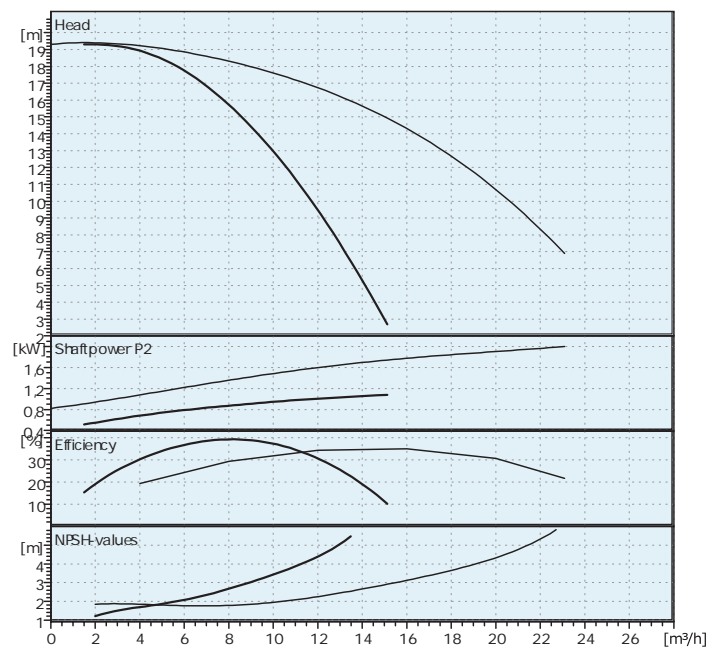
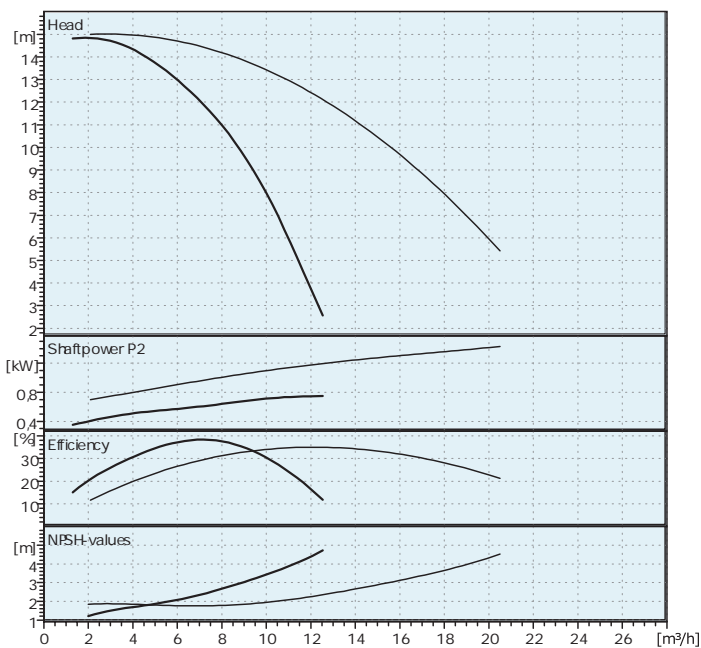
**NCLD 32-90/260**

**NCLD 32-100/260**



**NCLD 32-110/260**

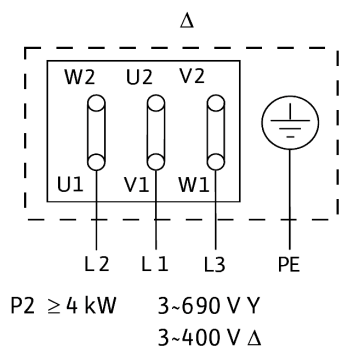
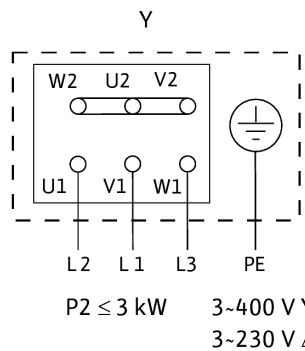
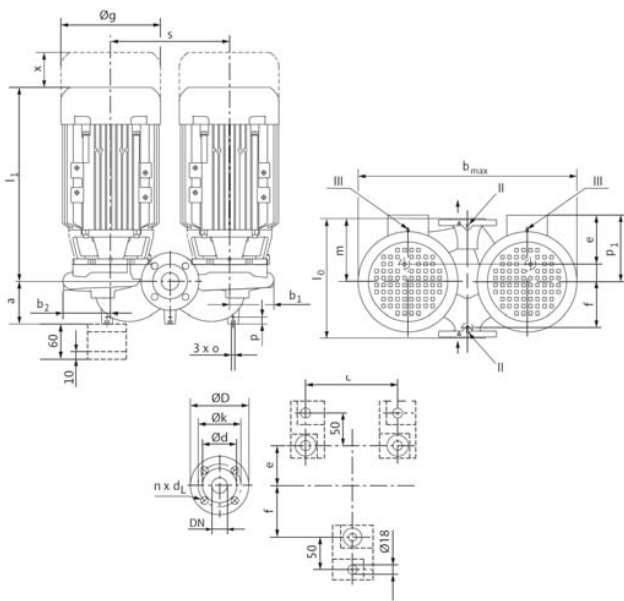
**NCLD 32-130/260**



# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	2	4	6	8	10	12	14
NCLD 32-90/260-0,37	H (Mwc)	8	7,5	6,2	4			
NCLD 32-100/260-0,55		11,1	10,9	9,5	7	4		
NCLD 32-110/260-0,75		15	14,2	13	11	8	3,8	
NCLD 32-130/260-1,1		19,5	18,7	17,8	16	13	9,5	5

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 32-90/260-0,37	0,37	2900	3-400 V, 50 Hz	0,91	IP55	+/- 10%
NCLD 32-100/260-0,55	0,55	2900	3-400 V, 50 Hz	1,33	IP55	+/- 10%
NCLD 32-110/260-0,75	0,75	2900	3-400 V, 50 Hz	1,7	IP55	+/- 10%
NCLD 32-130/260-1,1	1,1	2900	3-400 V, 50 Hz	2,4	IP55	+/- 10%

Model	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 32-90/260-0,37	70	101	105	410	225	56	106	260	321	136	M10	141	20	121	205	150	19	DN32	36	DN32	76	140	4	100
NCLD 32-100/260-0,55	70	101	105	410	225	56	106	260	321	136	M10	141	20	121	205	150	19	DN32	38	DN32	76	140	4	100
NCLD 32-110/260-0,75	70	101	105	410	225	56	106	260	341	136	M10	185	20	128	205	150	19	DN32	46	DN32	76	140	4	100
NCLD 32-130/260-1,1	70	101	105	410	225	56	106	260	341	136	M10	185	20	128	205	150	19	DN32	48	DN32	76	140	4	100

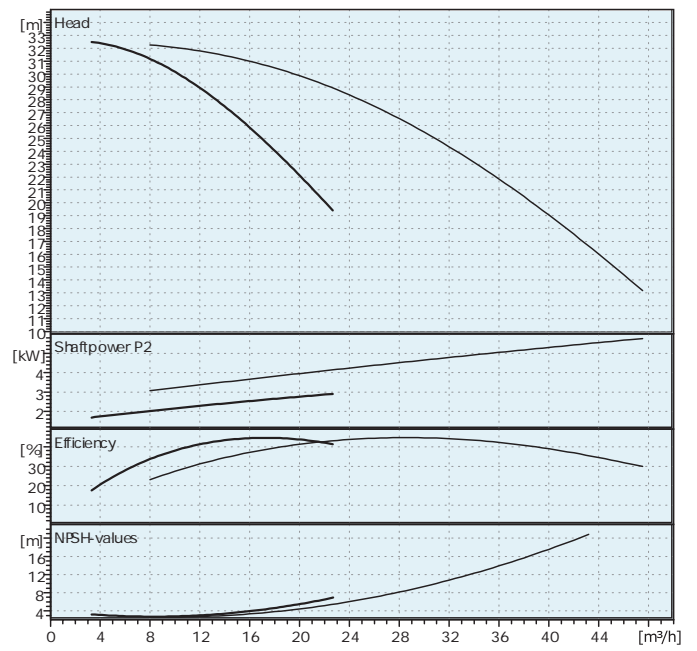
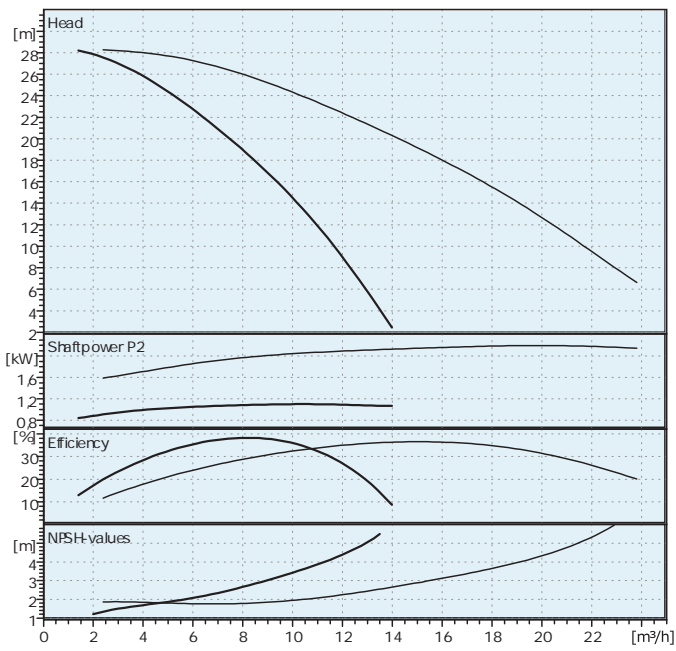
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 32-90/260-0,37	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 32-100/260-0,55	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 32-110/260-0,75	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 32-130/260-1,1	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

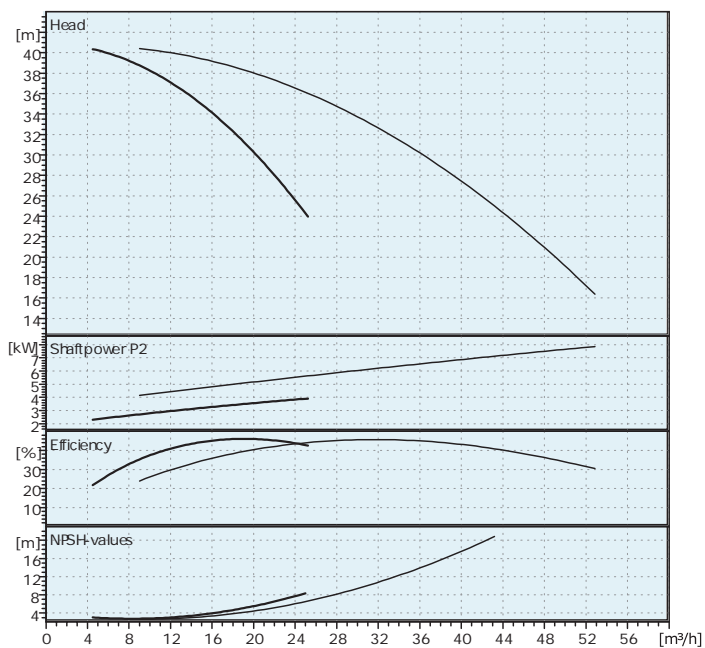
## Inline, Dry Running Circulation Pumps

**NCLD 32-160/260**

**NCLD 32-165/320**



**NCLD 32-175/320**





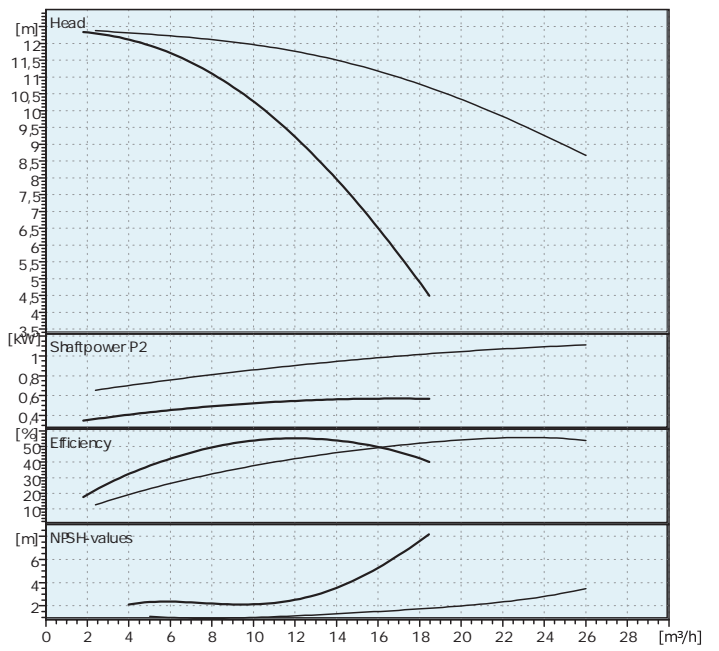
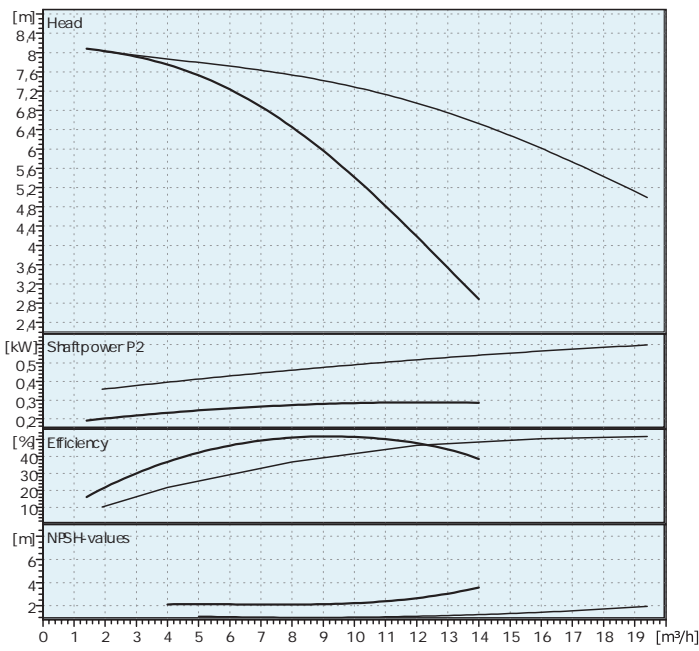


# NCLD

## Inline, Dry Running Circulation Pumps

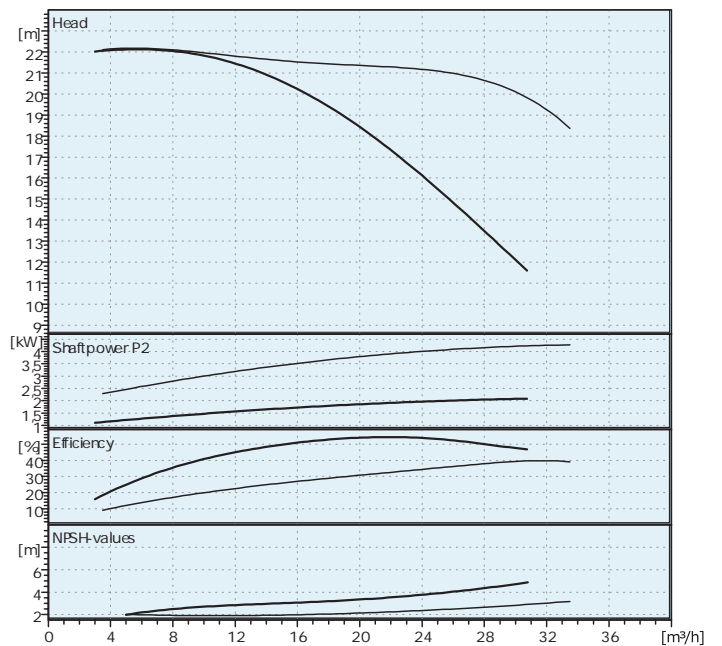
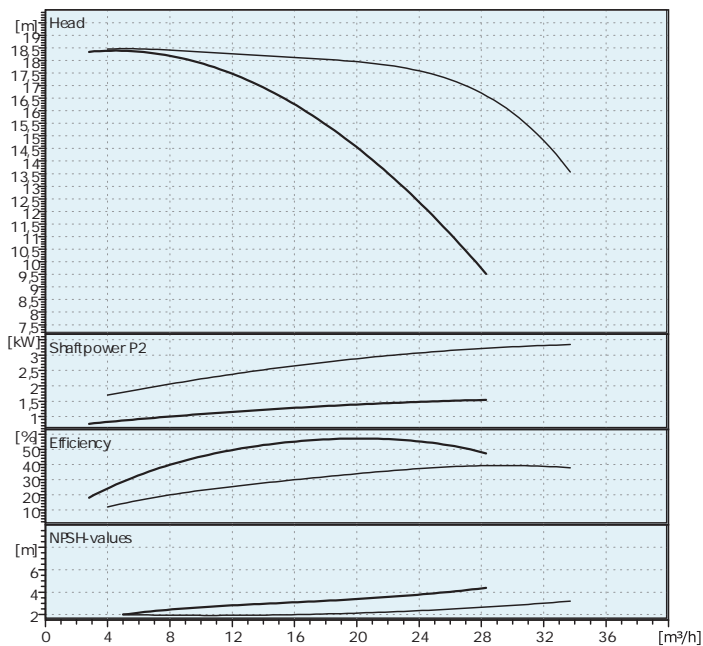
**NCLD 40-90/250**

**NCLD 40-115/250**



**NCLD 40-120/320**

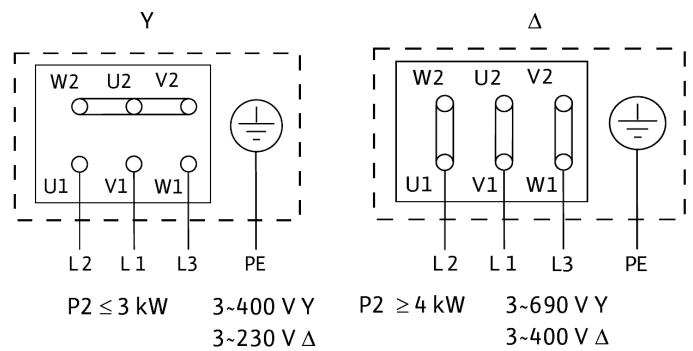
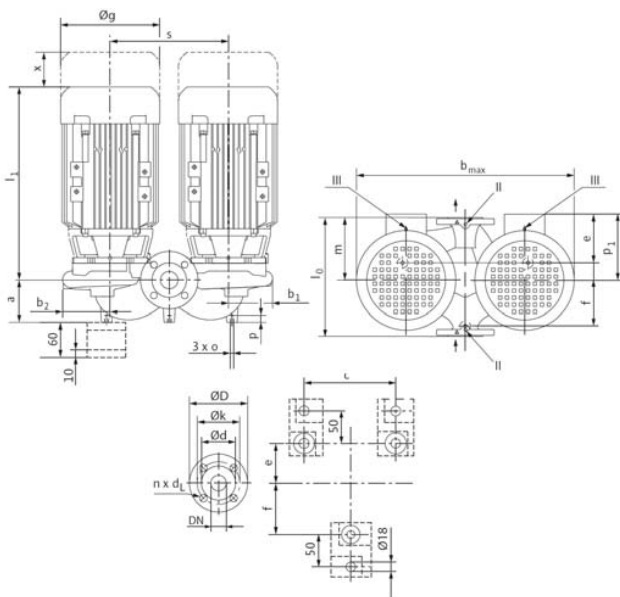
**NCLD 40-130/320**



# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	2	4	6	8	10	12	14	16	18	20	24	28	30
NCLD 40-90/250-0,37	H (Mwc)	8	7,8	7,2	6,4	5,4	4,2	2,9						
NCLD 40-115/250-0,55		12,3	12,1	11,7	11	10,3	9,7	8	6,5	5				
NCLD 40-120/320-1,5			18,4	18,5	18,3	18	17,5	17	16,3	15,5	14,5	12,5	9,7	
NCLD 40-130/320-2,2			22,1	22,2	22	21,8	21,5	21	20,2	19,5	18,5	16	13,5	12

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 40-90/250-0,37	0,37	2900	3-400 V, 50 Hz	0,91	IP55	+/- 10%
NCLD 40-115/250-0,55	0,55	2900	3-400 V, 50 Hz	1,33	IP55	+/- 10%
NCLD 40-120/320-1,5	1,5	2900	3-400 V, 50 Hz	3,3	IP55	+/- 10%
NCLD 40-130/320-2,2	2,2	2900	3-400 V, 50 Hz	4,52	IP55	+/- 10%

Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/DNd	kg	DNs/DNd	d	D	n	k
NCLD 40-90/250-0,37	75	85	91	350	225	35	97	250	320	135	M10	141	20	121	174	150	19	DN40	39	DN40	84	150	4	110
NCLD 40-115/250-0,55	75	85	91	350	225	35	97	250	320	135	M10	141	20	121	174	150	19	DN40	41	DN40	84	150	4	110
NCLD 40-120/320-1,5	75	113	119	456	240	45	135	320	374	167	M10	193	20	151	224	150	19	DN40	63	DN40	84	150	4	110
NCLD 40-130/320-2,2	75	113	119	456	240	45	135	320	374	167	M10	193	20	151	224	150	19	DN40	63	DN40	84	150	4	110

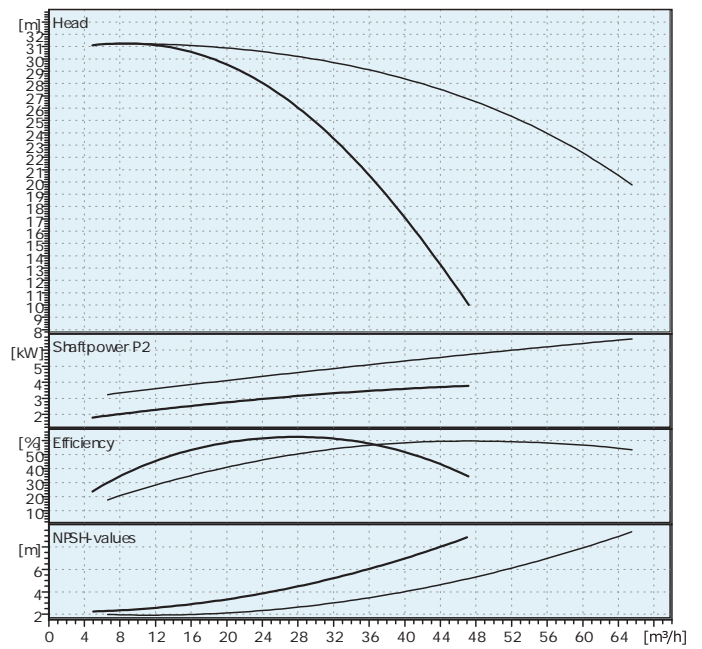
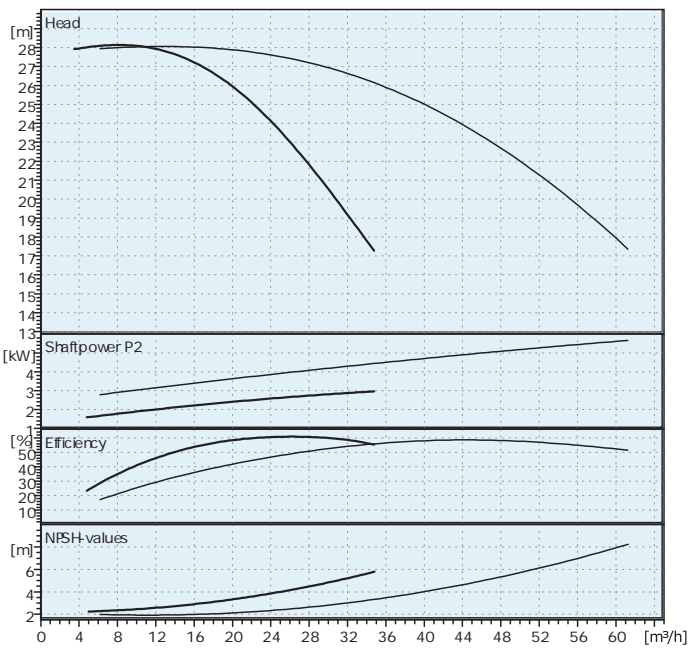
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 40-90/250-0,37	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 40-115/250-0,55	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 40-120/320-1,5	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 40-130/320-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

## Inline, Dry Running Circulation Pumps

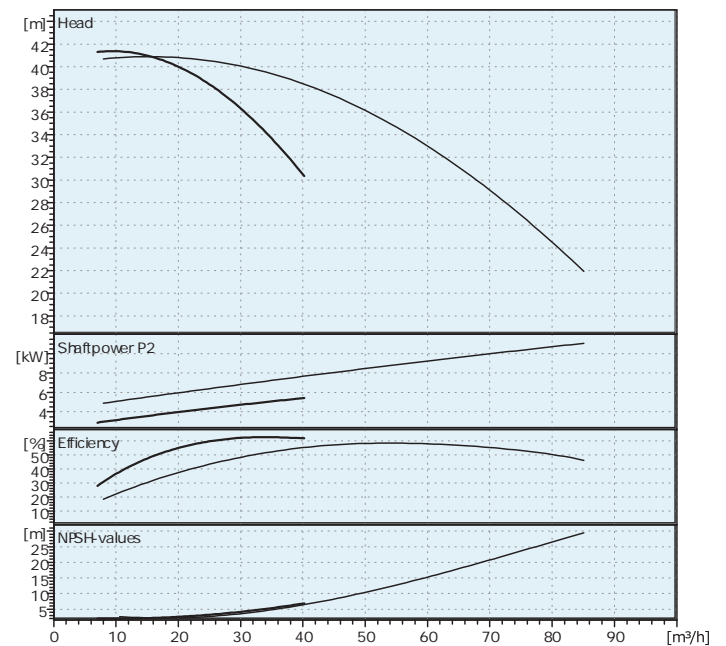
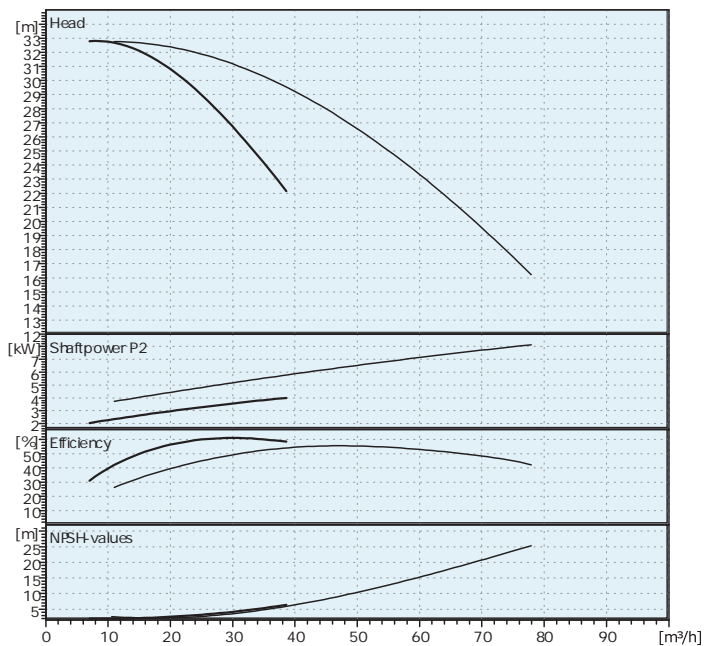
**NCLD 40-150/320**

**NCLD 40-160/320**



**NCLD 40-165/340**

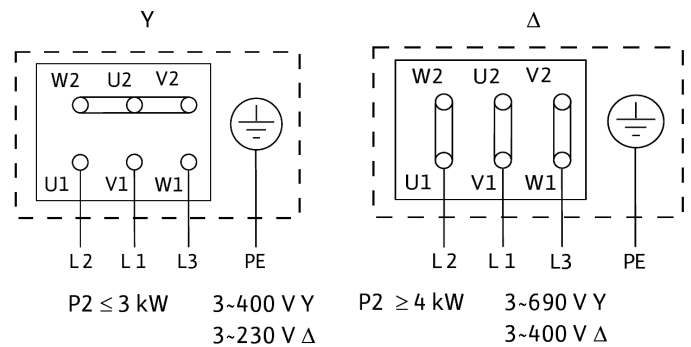
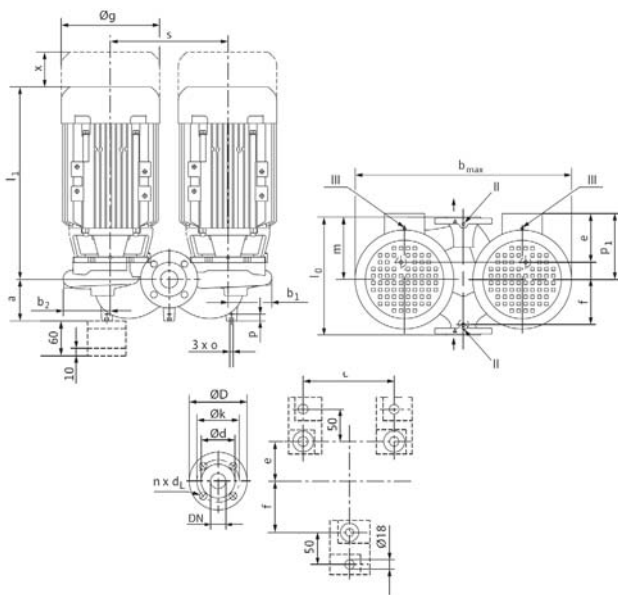
**NCLD 40-175/340**



# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	4	8	12	16	20	24	28	32	36	40	44	
NCLD 40-150/320-3	H (Mwc)	28	28,1	28	27,2	26	24	22	19				
NCLD 40-160/320-4			31,2	31	30,5	29,5	28	26	23,5	20,5	17	13	
NCLD 40-165/340-4			32,9	32,8	32	31,8	30	28	26	24			
NCLD 40-175/340-5,5			40,8	41	40,8	40,1	38,8	37	35,7	33	30,8		

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 40-150/320-3	3	2900	3-400 V, 50 Hz	5,8	IP55	+/- 10%
NCLD 40-160/320-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%
NCLD 40-165/340-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%
NCLD 40-175/340-5,5	5,5	2900	3-400 V, 50 Hz	10,2	IP55	+/- 10%

Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 40-150/320-3	75	113	119	456	240	45	135	320	386	167	M10	217	20	160	224	150	19	DN40	75	DN40	84	150	4	110
NCLD 40-160/320-4	75	113	119	456	240	45	135	320	420	167	M10	232	20	169	224	150	19	DN40	87	DN40	84	150	4	110
NCLD 40-165/340-4	100	120	127	587	400	52	145	340	413	170	M10	232	20	168	340	150	19	DN40	110	DN40	84	150	4	110
NCLD 40-175/340-5,5	100	120	127	619	400	52	145	340	433	170	M10	279	20	182	340	150	19	DN40	132	DN40	84	150	4	110

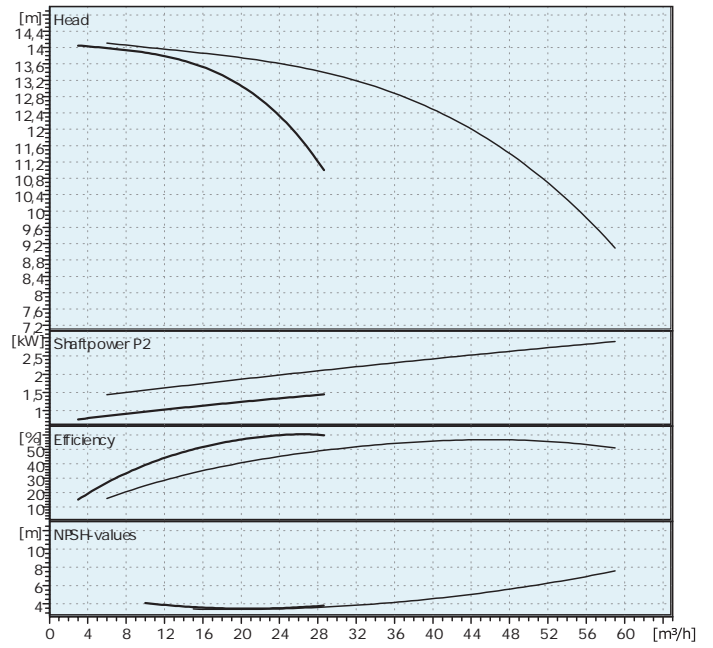
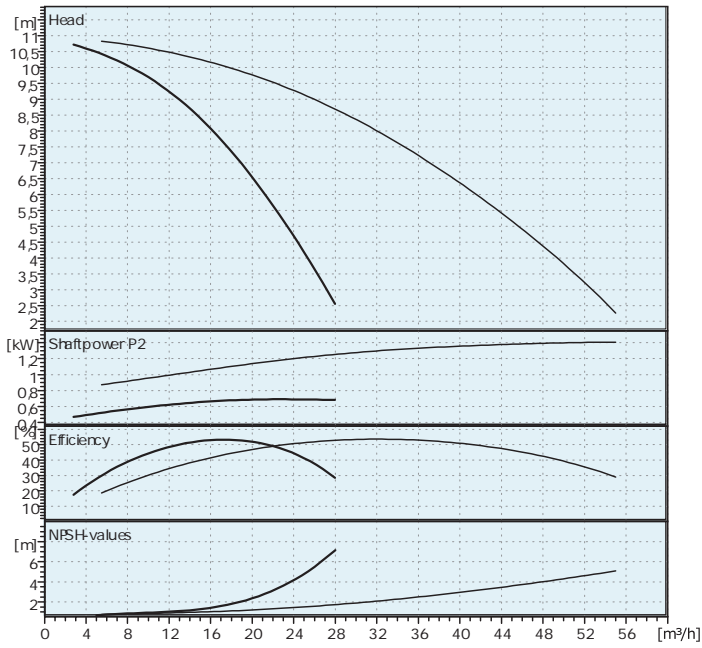
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 40-150/320-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 40-160/320-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 40-165/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 40-175/340-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

## Inline, Dry Running Circulation Pumps

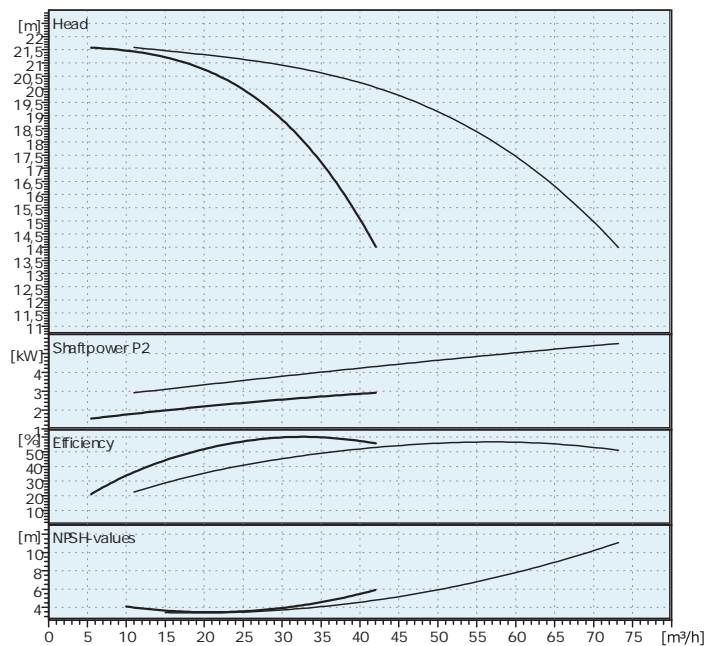
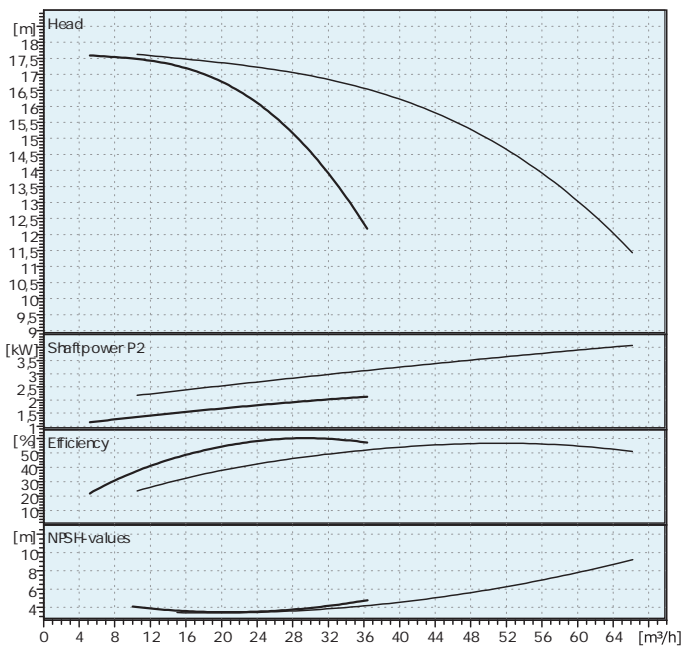
**NCLD 50-115/280**

**NCLD 50-120/340**



**NCLD 50-130/340**

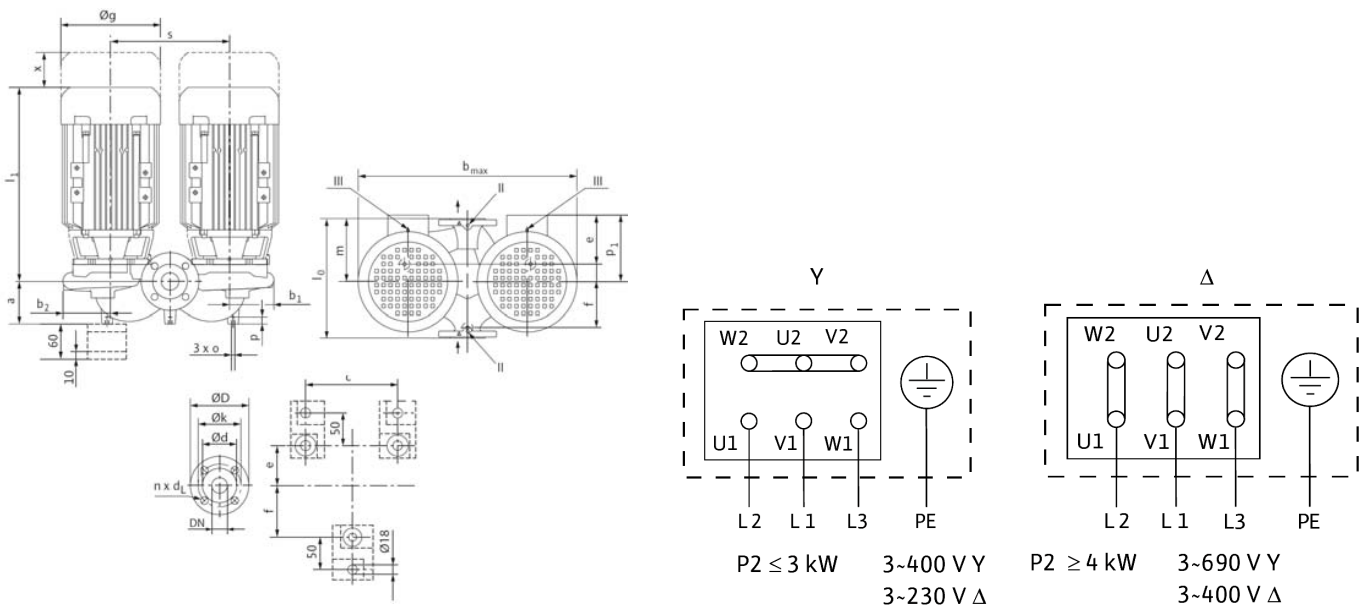
**NCLD 50-140/340**



# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	4	8	12	16	20	24	28	32	36	40
NCLD 50-115/280-0,75	H (MwC)	10,7	10	9,4	8	6,5	4,7				
NCLD 50-120/340-1,5		14	13,9	13,7	13,5	12,9	12,3	11,2			
NCLD 50-130/340-2,2			17,5	17,4	17,2	16,7	16,1	15	13,9	12,3	
NCLD 50-140/340-3			21,5	21,4	21,2	20,8	20	19	18,7	17	15

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 50-115/280-0,75	0,75	2900	3-400 V, 50 Hz	1,7	IP55	+/- 10%
NCLD 50-120/340-1,5	1,5	2900	3-400 V, 50 Hz	3,3	IP55	+/- 10%
NCLD 50-130/340-2,2	2,2	2900	3-400 V, 50 Hz	4,52	IP55	+/- 10%
NCLD 50-140/340-3	3	2900	3-400 V, 50 Hz	5,8	IP55	+/- 10%

Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 50-115/280-0,75	83	95	101	390	228	50	107	280	346	155	M10	146	20	128	194	150	19	DN50	50	DN50	99	165	4	125
NCLD 50-120/340-1,5	86	120	130	500	240	48	132	340	376	190	M10	193	20	151	250	150	19	DN50	60	DN50	99	165	4	125
NCLD 50-130/340-2,2	86	120	130	500	240	48	132	340	376	190	M10	193	20	151	250	150	19	DN50	64	DN50	99	165	4	125
NCLD 50-140/340-3	86	120	130	500	240	48	132	340	388	190	M10	217	20	160	250	150	19	DN50	76	DN50	99	165	4	125

Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 50-115/280-0,75	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 50-120/340-1,5	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 50-130/340-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 50-140/340-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

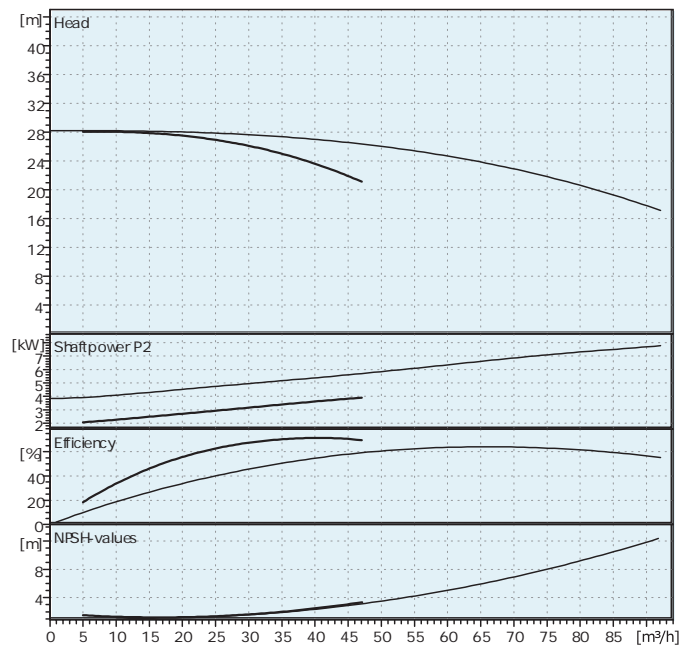
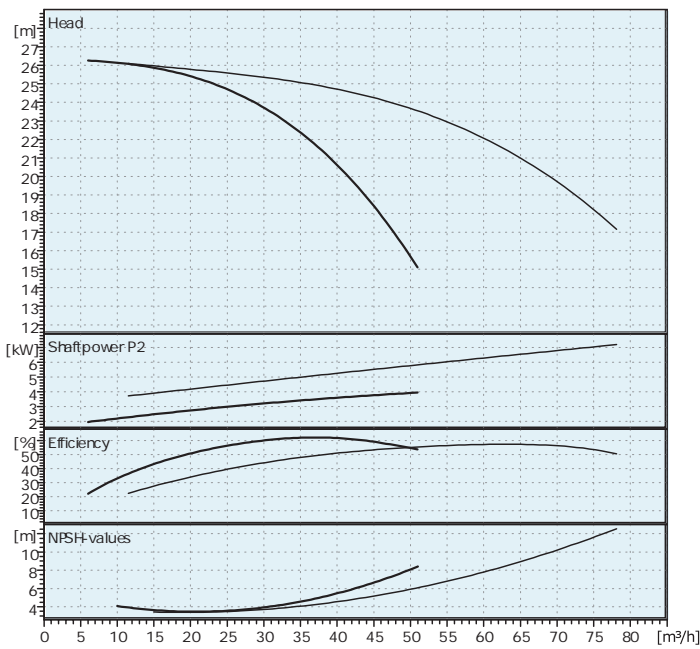


# NCLD

## Inline, Dry Running Circulation Pumps

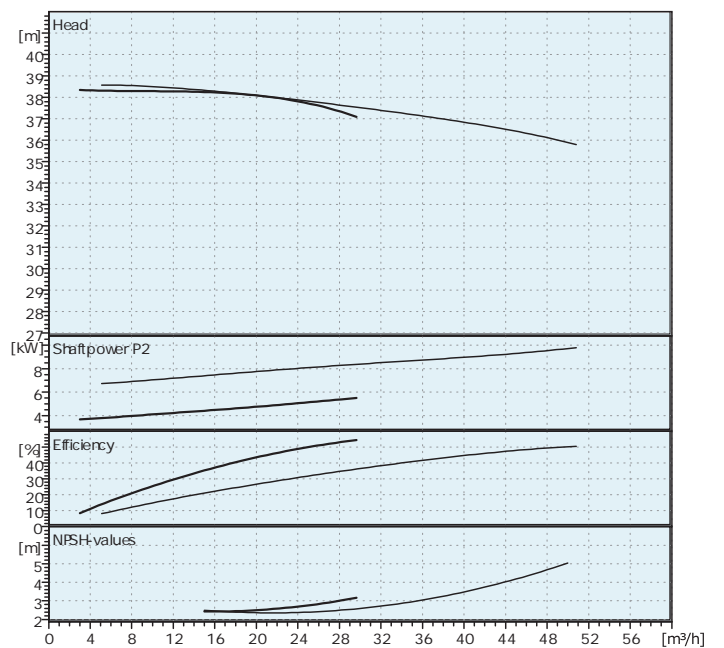
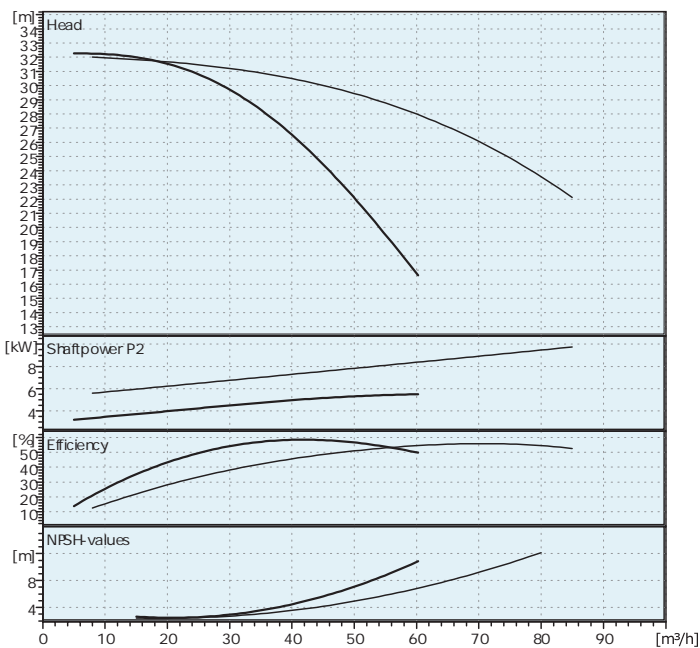
**NCLD 50-150/340**

**NCLD 50-155/340**



**NCLD 50-165/340**

**NCLD 50-175/340**

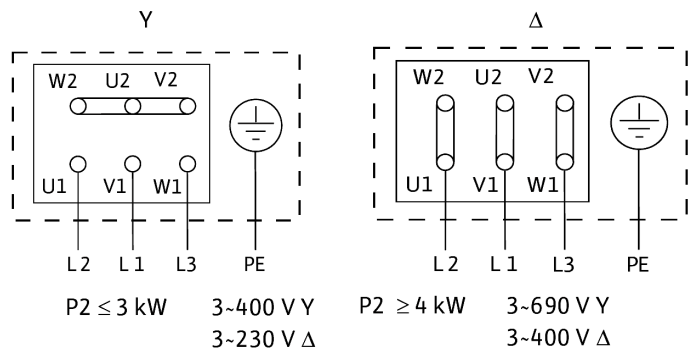
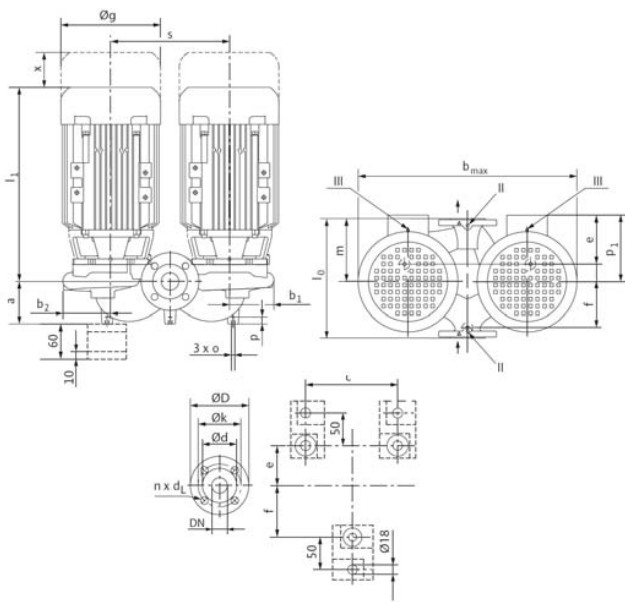




# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	10	15	20	25	30	35	40	45	50	55	60
NCLD 50-150/340-4	H (Mwc)	26,1	26	25,5	24,7	23,8	22,2	20,5	18,4	15,5		
NCLD 50-155/340-4		28	27,9	27,8	27,5	26	25	24	22			
NCLD 50-165/340-5,5		32,1	32	31,9	31	29,8	28	26,5	24	22	20	16,8
NCLD 50-175/340-5,5		38,2	38,1	38	37,9							

Model	Rated Power P <sub>2</sub> kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 50-150/340-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%
NCLD 50-155/340-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%
NCLD 50-165/340-5,5	5,5	2900	3-400 V, 50 Hz	10,2	IP55	+/- 10%
NCLD 50-175/340-5,5	5,5	2900	3-400 V, 50 Hz	10,2	IP55	+/- 10%

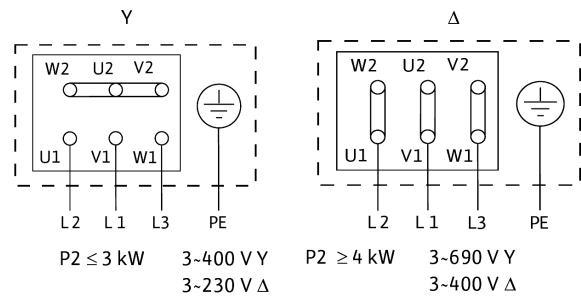
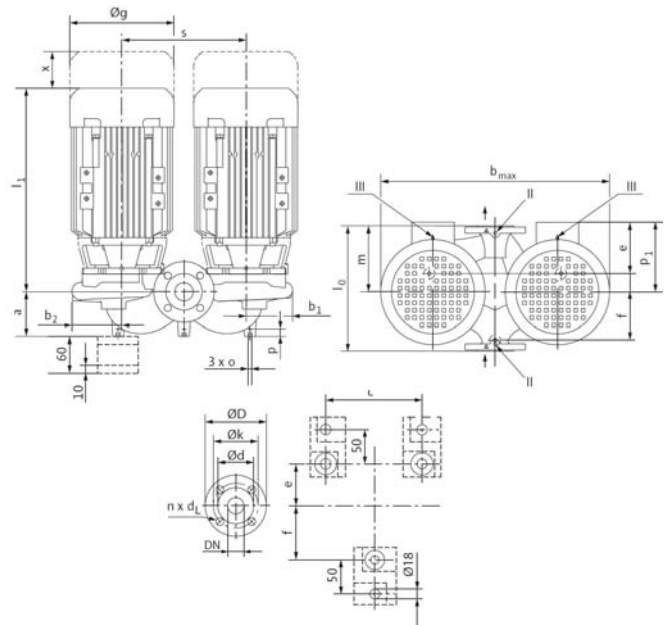
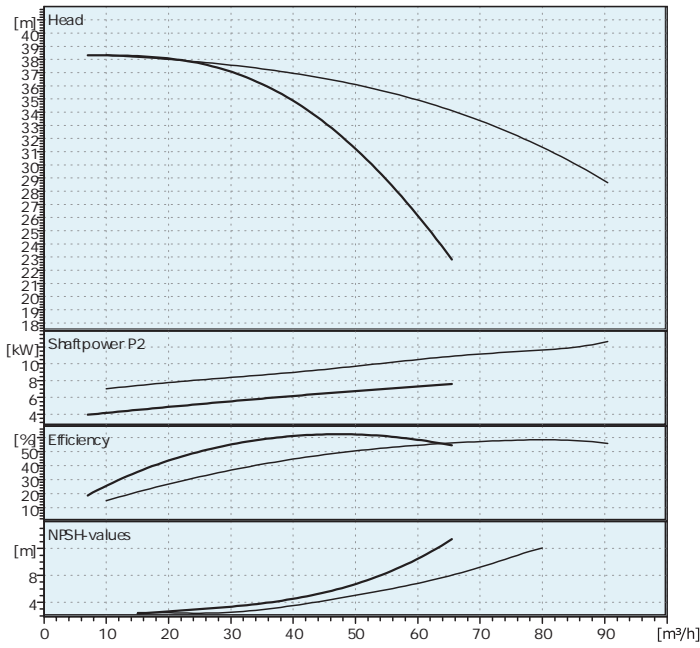
Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 50-150/340-4	86	120	130	500	240	48	132	340	422	190	M10	232	20	169	250	150	19	DN50	88	DN50	99	165	4	125
NCLD 50-155/340-4	105	108	116	532	360	52	148	340	463	170	M10	232	20	168	300	150	19	DN50	107	DN50	99	165	4	125
NCLD 50-165/340-5,5	120	126	136	619	360	50	130	340	503	180	M10	279	20	188	340	150	19	DN50	144	DN50	99	165	4	125
NCLD 50-175/340-5,5	120	126	136	619	360	50	130	340	503	180	M10	279	20	188	340	150	19	DN50	144	DN50	99	165	4	125

Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 50-150/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 50-155/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 50-165/340-5,5	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 50-175/340-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

## Inline, Dry Running Circulation Pumps

**NCLD 50-175/340**



# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications

Model	Q (m <sup>3</sup> /h)	10	20	30	40	50	60
NCLD 50-175/340-7,5	H (Mwc)	38,3	38	37	35	31	26

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 50-175/340-7,5	7,5	2900	3-400 V, 50 Hz	13,7	IP55	+/- 10%

Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 50-175/340-7,5	120	126	136	619	360	50	130	340	503	180	M10	279	20	188	340	150	19	DN50	148	DN50	99	165	4	125

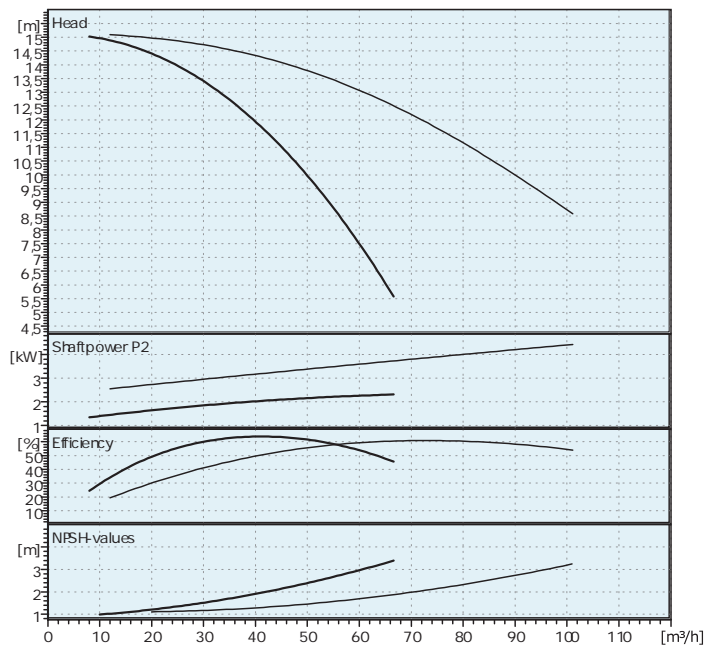
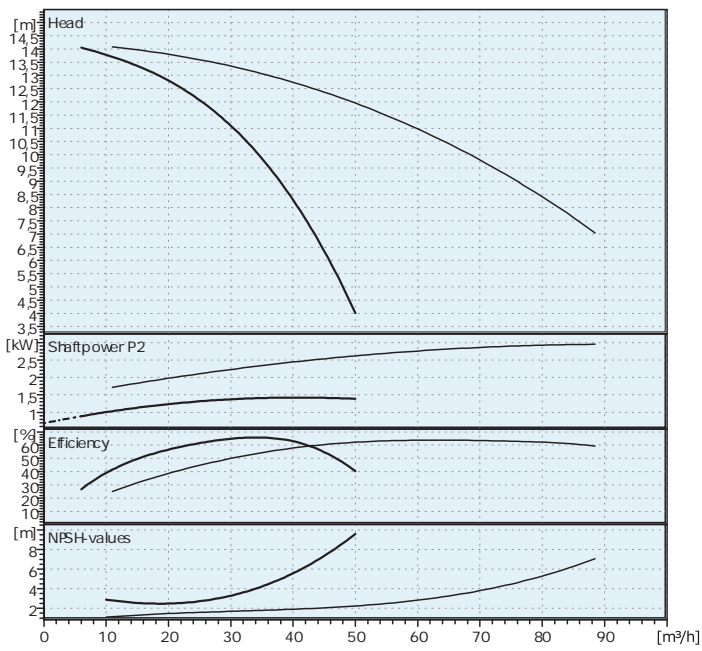
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 50-175/340-7,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

## Inline, Dry Running Circulation Pumps

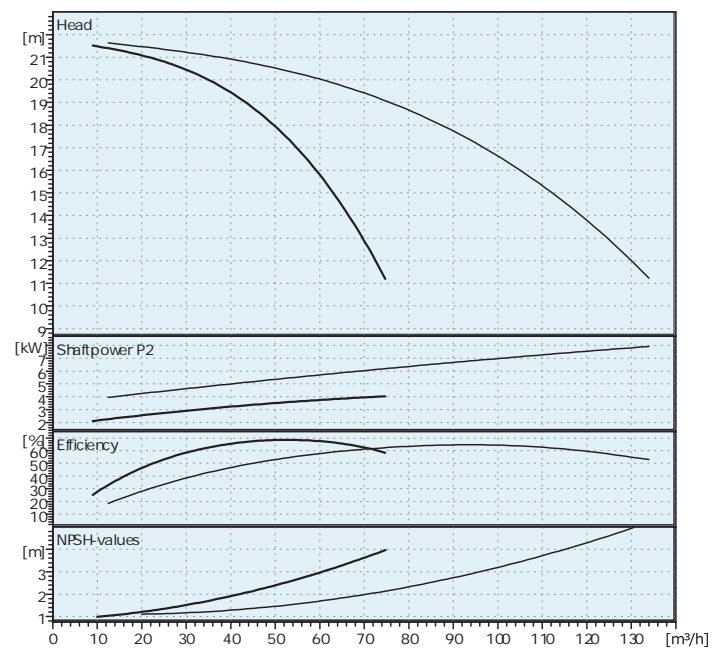
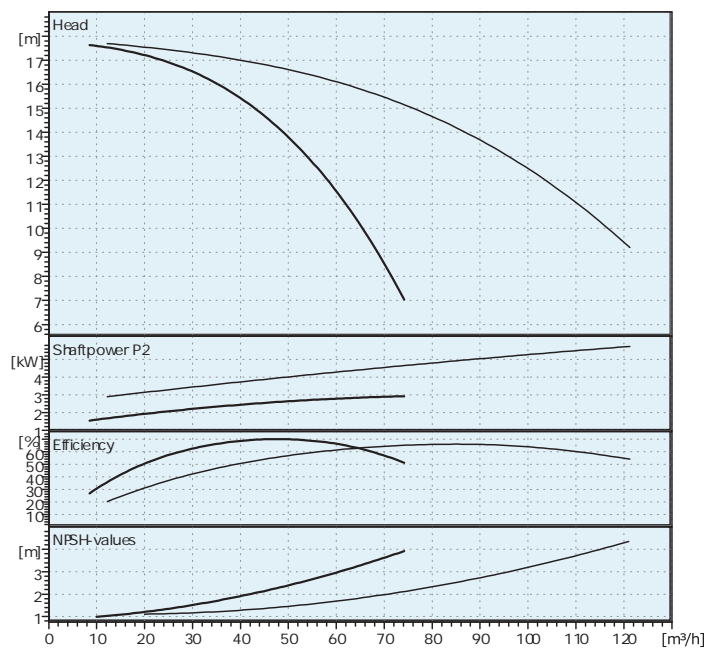
**NCLD 65-115/340**

**NCLD 65-120/340**



**NCLD 65-130/340**

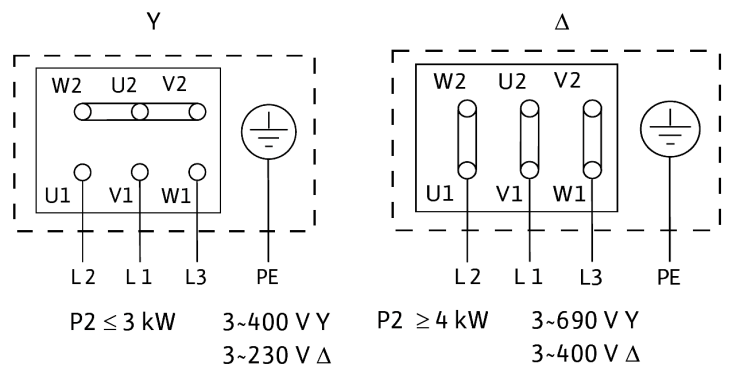
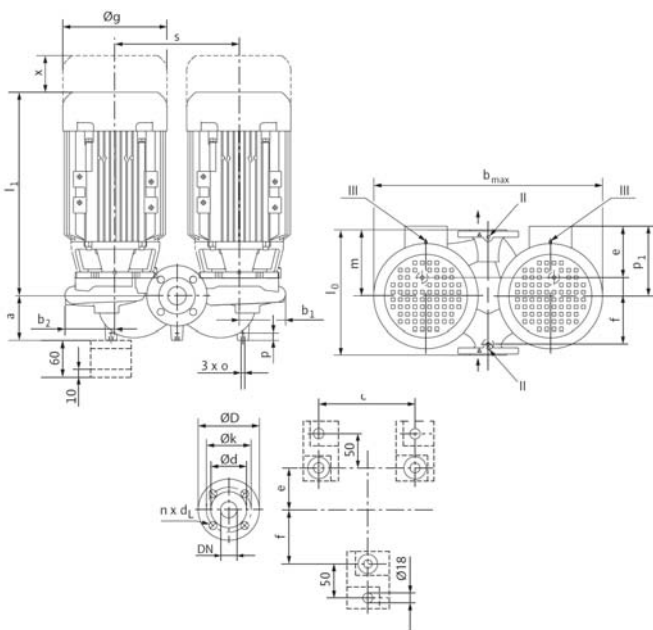
**NCLD 65-140/340**



# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	10	20	30	40	50	60	70
NCLD 65-115/340-1,5	H (Mwc)	13,8	12,8	11	8,5	4		
NCLD 65-120/340-2,2		15	14,5	13,5	12	10	7,5	
NCLD 65-130/340-3		17,8	17,1	16,5	15,3	13,9	11,5	8,5
NCLD 65-140/340-4		21,6	21	20,5	19,5	18	15,8	12,8

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 65-115/340-1,5	1,5	2900	3-400 V, 50 Hz	3,3	IP55	+/- 10%
NCLD 65-120/340-2,2	2,2	2900	3-400 V, 50 Hz	4,52	IP55	+/- 10%
NCLD 65-130/340-3	3	2900	3-400 V, 50 Hz	5,8	IP55	+/- 10%
NCLD 65-140/340-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%

Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 65-115/340-1,5	93	103	117	432	225	25	137	340	387	185	M10	193	20	151	212	150	19	DN65	66	DN65	118	185	4	145
NCLD 65-120/340-2,2	93	125	135	550	240	43	137	340	382	185	M10	193	20	151	290	150	19	DN65	72	DN65	118	185	4	145
NCLD 65-130/340-3	93	125	135	550	240	43	137	340	394	185	M10	217	20	160	290	150	19	DN65	84	DN65	118	185	4	145
NCLD 65-140/340-4	93	125	135	550	240	43	137	340	428	185	M10	232	20	169	290	150	19	DN65	96	DN65	118	185	4	145

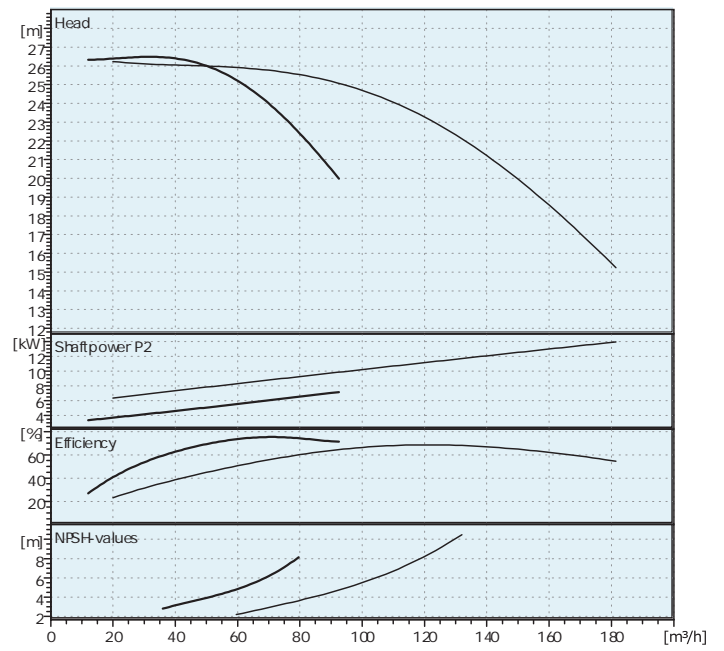
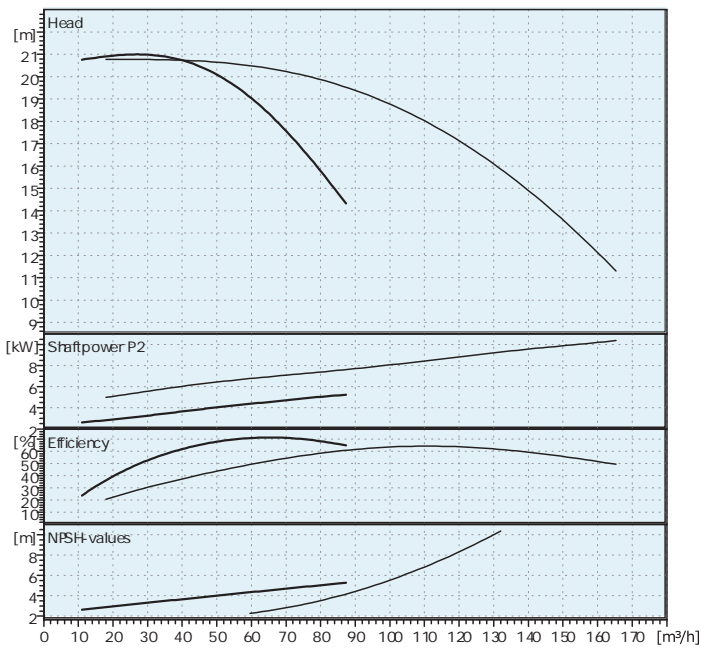
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 65-115/340-1,5	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 65-120/340-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 65-130/340-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 65-140/340-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

## Inline, Dry Running Circulation Pumps

**NCLD 65-145/340**

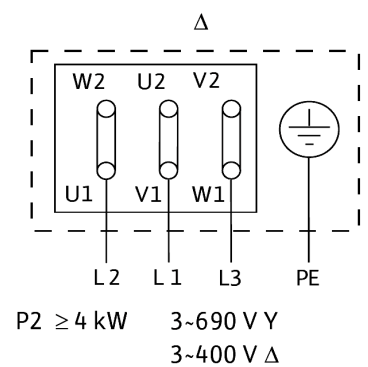
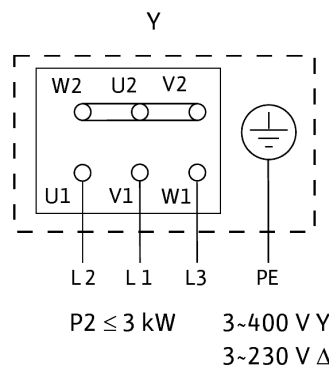
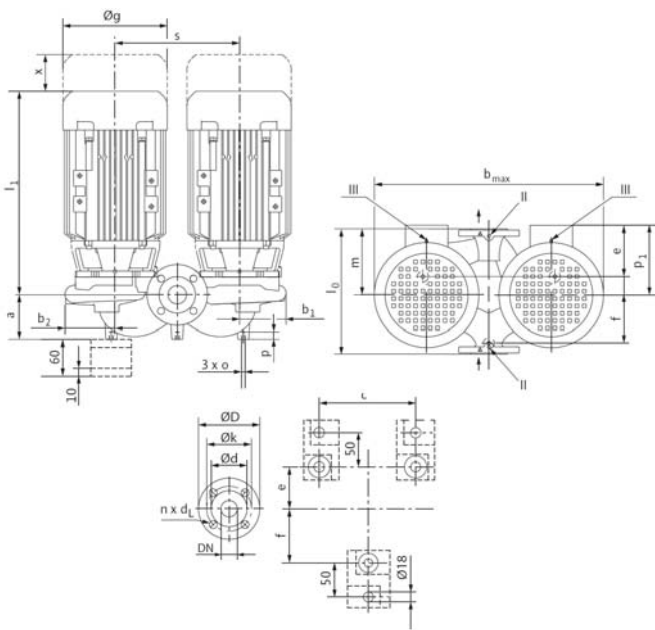
**NCLD 65-155/340**



# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	20	30	40	50	60	70	80	90
NCLD 65-145/340-5,5	H (Mwc)	21	21,1	20,8	20	19	17,5	15,8	
NCLD 65-155/340-7,5		26,2	26,1	26	25,9	25	24	22,5	20

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 65-145/340-5,5	5,5	2900	3-400 V, 50 Hz	10,2	IP55	+/- 10%
NCLD 65-155/340-7,5	7,5	2900	3-400 V, 50 Hz	13,7	IP55	+/- 10%

Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 65-145/340-5,5	120	121	130	619	400	50	150	340	521	170	M12	279	20	188	340	150	19	DN65	145	DN65	118	185	4	145
NCLD 65-155/340-7,5	120	121	130	619	400	50	150	340	521	170	M12	279	20	188	340	150	19	DN65	162	DN65	118	185	4	145

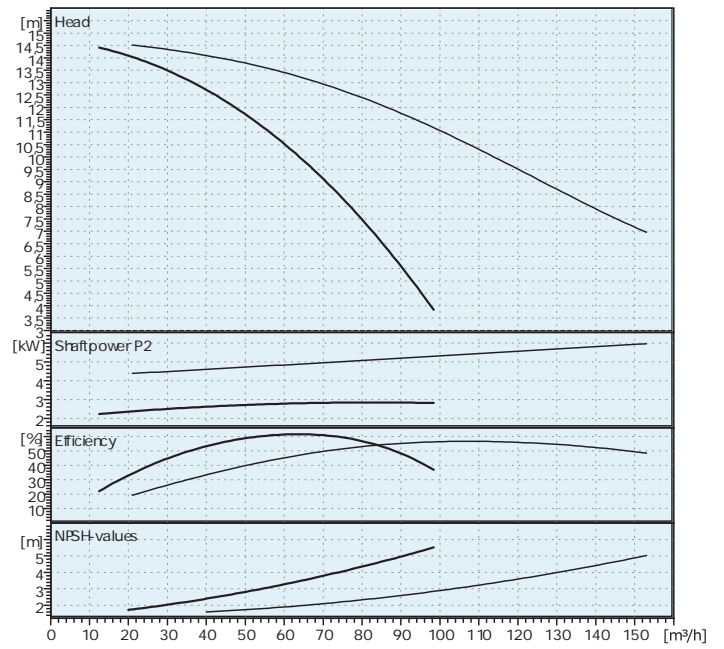
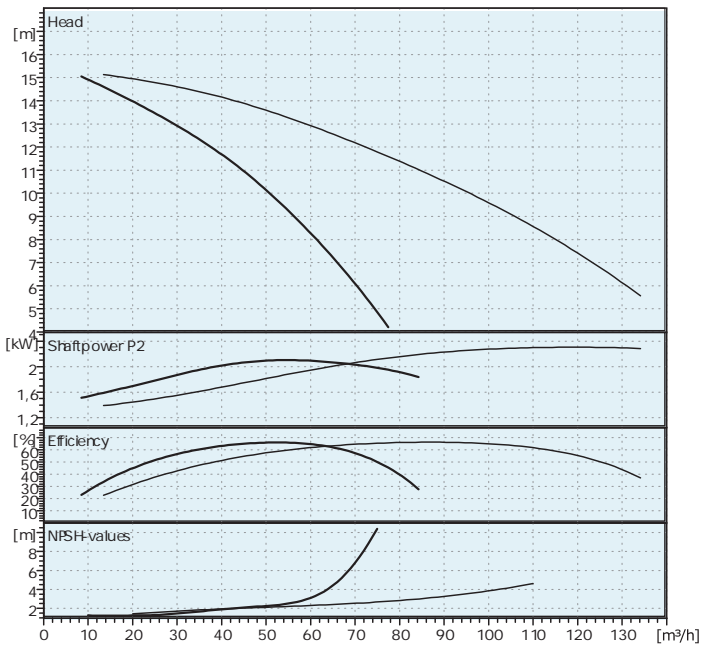
Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 65-145/340-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 65-155/340-7,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

# NCLD

## Inline, Dry Running Circulation Pumps

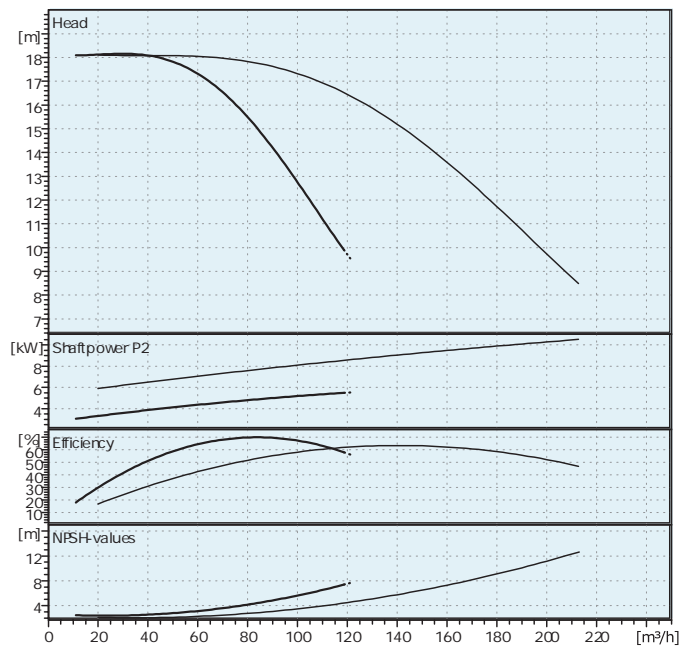
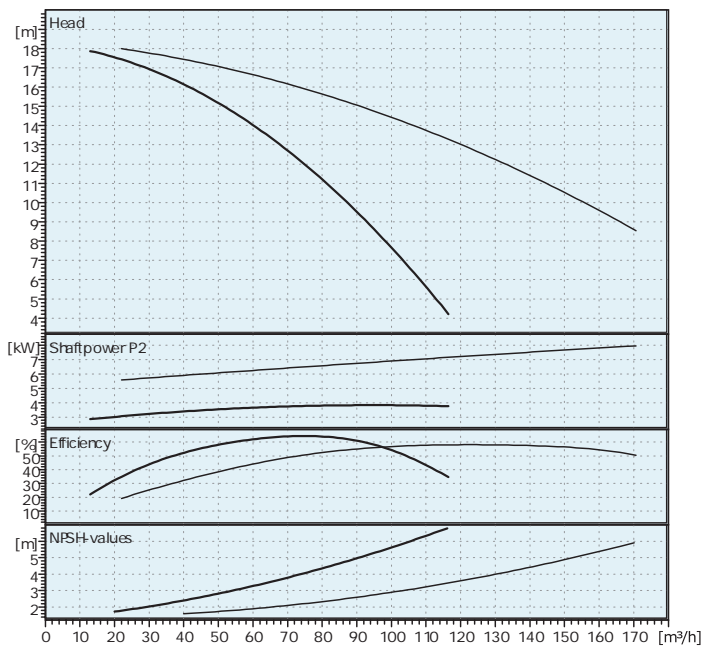
**NCLD 80-115/360**

**NCLD 80-130/360**



**NCLD 80-140/360**

**NCLD 80-145/400**

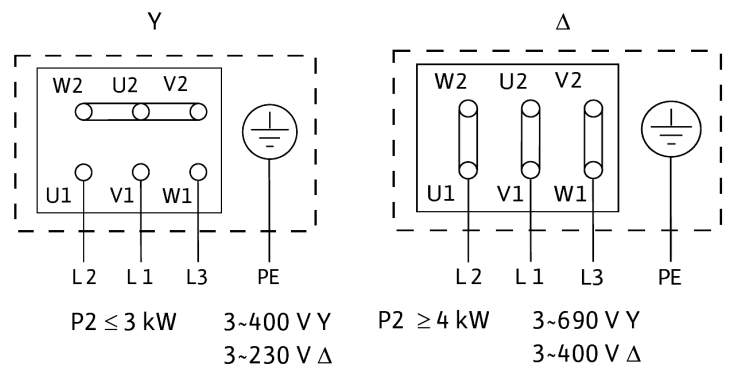
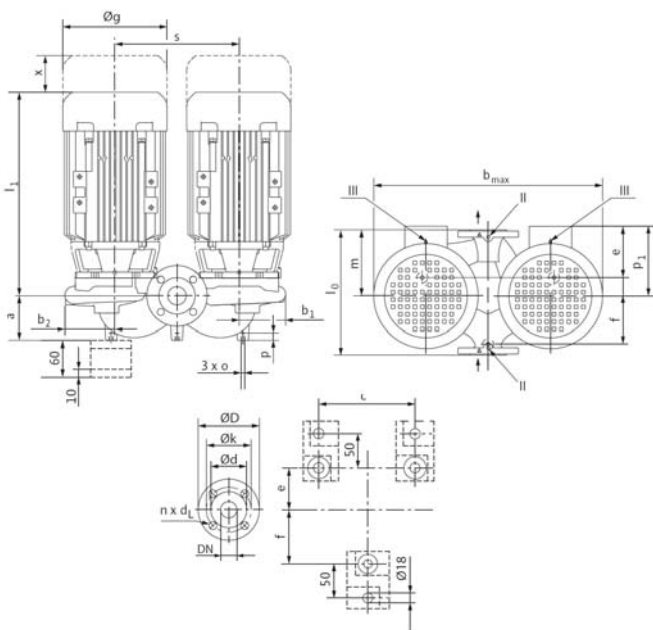




# NCLD

## Inline, Dry Running Circulation Pumps

### Specifications



Model	Q (m <sup>3</sup> /h)	10	20	30	40	50	60	70	80	90	100	110
NCLD 80-115/360-2,2	H (Mwc)	14,9	14	13	11,8	10	8,2	6				
NCLD 80-130/360-3			14	13,5	12,7	11,7	10	9	7,5	5,5		
NCLD 80-140/360-4			17,6	17	16,1	15	14	12,8	11,2	9,5	7,8	5,8
NCLD 80-145/400-5,5			18,2	18,1	18	17,7	17,2	16,5	15,5	14	12,8	11

Model	Rated Power P2 kW	Nominal Speed 1/min	Rated Voltage	Max. Current A	Degree of Protection	Permitted Voltage Tolerance
NCLD 80-115/360-2,2	2,2	2900	3-400 V, 50 Hz	4,52	IP55	+/- 10%
NCLD 80-130/360-3	3	2900	3-400 V, 50 Hz	5,8	IP55	+/- 10%
NCLD 80-140/360-4	4	2900	3-400 V, 50 Hz	7,7	IP55	+/- 10%
NCLD 80-145/400-5,5	5,5	2900	3-400 V, 50 Hz	10,2	IP55	+/- 10%

Models	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>max</sub>	c	e	f	l <sub>0</sub>	l <sub>1</sub>	m	o	Øg	p	p <sub>1</sub>	s	x	d <sub>L</sub>	DNs/ DNd	kg	DNs/ DNd	d	D	n	k
NCLD 80-115/360-2,2	100	113	132	480	240	43	137	360	389	205	M10	193	20	151	235	150	19	DN80	76	DN80	132	200	8	160
NCLD 80-130/360-3	103	134	147	601	240	30	150	360	400	192	M10	217	20	160	320	150	19	DN80	87	DN80	132	200	8	160
NCLD 80-140/360-4	103	134	147	601	240	30	150	360	434	192	M10	232	20	169	320	150	19	DN80	99	DN80	132	200	8	160
NCLD 80-145/400-5,5	155	134	146	630	400	62	178	400	528	200	M12	279	20	188	350	150	19	DN80	160	DN80	132	200	8	160

Model	Housing	Shaft	Impeller	Mech. Seal	Side Opening	Plug Shaft
NCLD 80-115/360-2,2	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 80-130/360-3	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 80-140/360-4	Cast Iron	X 20 Cr 13	Reinforced Glass PPO	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13
NCLD 80-145/400-5,5	Cast Iron	X 20 Cr 13	Cast Iron	AQ1EGG (Standard)	Cast Iron	X 20 Cr 13

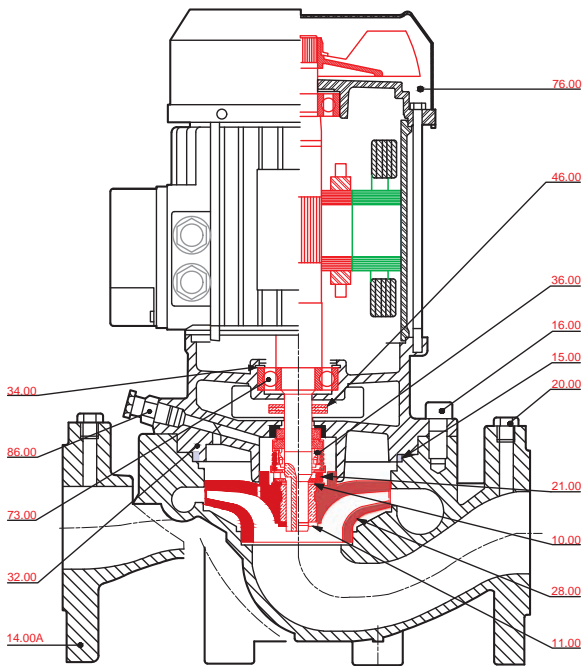


# NCLD

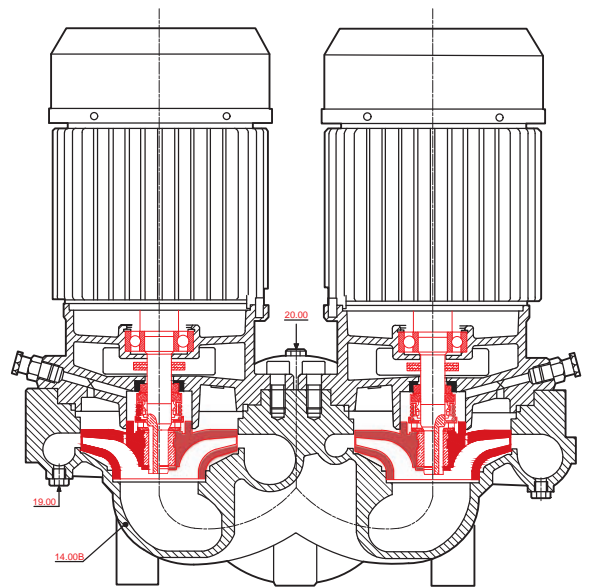
## Inline, Dry Running Circulation Pumps

### Sectional Drawing

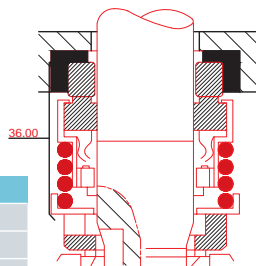
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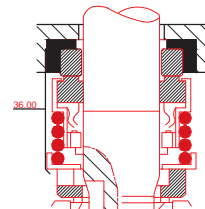
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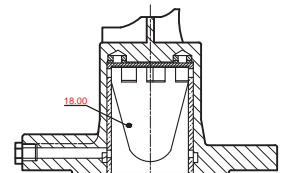
**MECHANICAL SEAL**



**MECHANICAL SEAL**



**DETAILS OF OUTLET**



**List**

14.00A	Single pump housing
14.00B	Double pump housing
28.00	Impeller
46.00	Deflector
73.00	Guide bearing
32.00	Bearing lantern
36.00	Mechanical seal
15.00	O-ring pump housing
11.00	Snap ring on shaft
10.00	Snap ring on shaft
34.00	Circlip of bearing
76.00	Electric motor
20.00	Plug for pressure gauge take-off
19.00	Drain plugs (NCLD)
86.00	Air release plug
18.00	Outlet valve (NCLD)
16.00	Bearing lantern retaining screw
21.00	Axial bearing of mechanical seal
Spare parts recommended	

**List**

14.00A	Single pump housing
14.00B	Double pump housing
28.00	Impeller
46.00	Deflector
73.00	Guide bearing
32.00	Bearing lantern
36.00	Mechanical seal
15.00	O-ring pump housing
11.00	Snap ring on shaft
10.00	Snap ring on shaft
34.00	Circlip of bearing
76.00	Electric motor
20.00	Plug for pressure gauge take-off
19.00	Drain plugs (NCLD)
86.00	Air release plug
18.00	Outlet valve (NCLD)
16.00	Bearing lantern retaining screw
21.00	Axial bearing of mechanical seal
Spare parts recommended	