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威乐中国官方微博

V201912
Wilo-IPL/1804/EN/CHN

Pioneering for You



Wilo- Heating, Air-conditioning, Cooling

Wilo-IPL
管道泵



威乐（中国）水泵系统有限公司

地址：
北京市顺义区赵全营兆丰工业区兆丰二街10号
101300

电 话：010-52347888
传 真：010-52347666
网 址：www.wilo.com.cn

威乐（中国）销售网络

上海：021-52981538	广州：020-38817608
天津：010-52347718	青岛：010-52347718
重庆：023-67723781	成都：028-85031202
深圳：0755-23995796	郑州：010-52347718
沈阳：024-31300733	武汉：027-85355869
南京：010-52347718	西安：029-87651288
大连：0411-83700726/0725	

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“威乐(Wilo)
值得信赖的
水泵专家。”



Wilo-IPL

Wilo-IPL系列管道泵，遵循威乐百年制泵理念，产品安全、高效、环保。水泵结构设计紧凑，叶轮与电机之间为同轴直联，同心度高，传动损失少，运行平稳。先进的泵腔及叶轮设计，使水泵具有优越的水力特性，运行时噪音低，效率高，节能环保，可有效降低运行成本。水封采用循环式双向机械密封，具有免维护，工作状态稳定等特点。IPL系列水泵可广泛应用于供暖系统，空调系统，循环系统，供水系统及灌溉系统等。

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“威乐(wilo)的产品
节能降耗，技术领
先，服务更出色！”



Contents

目录

Series description	系列说明	1
Pump curves	特性曲线	3
Terminal diagram, motor data	接线图, 电机参数	8
Dimension, weights	外形尺寸, 重量	9

Series description Wilo-IPL 系列说明



Design

Glanded pump in in-line design with threaded connection or flange connection

Application

For pumping heating water (in accordance with VDI 2035), water-glycol mixtures and cooling and cold water without abrasive substances in heating, cold water and cooling water systems

Scope of delivery

- Pump
- Installation and operating instructions

Type key

Example	IPL 40/160-4/2
IPL	In-line pump
40	Nominal diameter DN of the pipe connection
160	Nominal impeller diameter
4	Nominal motor power P_2 in kW
2	Number of poles

Technical data

- Permissible temperature range -20°C to $+120^{\circ}\text{C}$
- Mains connection 3~400V, 50Hz
- Protection class IP 55
- Nominal diameter Rp 1 to DN 100
- Max. operating pressure 10 bar (special version: 16 bar)

Special features/product benefits

- High-efficiency motors as standard; from 0.75 kW nominal motor power: motors with IE2 technology
- High corrosion protection thanks to cataphoretic coating
- Standard condensate drainage holes in the motor housings and lanterns
- Series version: Motor with one-piece shaft
- Version N: Standard motor B5 or V1 with stainless steel plug shaft
- Bidirectional mechanical seal with forced flushing
- Easy to install due to feet with threaded holes on pump housing

Materials

- Pump housing and lantern: EN-GJL-250
- Impeller: PPO fibreglass-reinforced EN-GJL-200 (depending on pump type)
- Shaft: 1.4021
- Mechanical seal: AQEGG; other mechanical seals on request

Description/design

Single-stage, low-pressure centrifugal pump in in-line design with

- Mechanical seal
- Flange connection with pressure measuring connection $R\frac{1}{8}$
- Motor with one-piece shaft

设计结构

管道安装，带螺纹连接或法兰连接

应用

适用于泵送热水(符合VDI 2035标准)，水-乙二醇混合液及冷却水/冷水，不含腐蚀性物质的热水

供货范围

- 水泵
- 安装及操作维护说明书

型号说明

例如	IPL 40/160-4/2
IPL	管道泵
40	进出口公称直径DN
160	叶轮公称直径
4	额定电机功率 P_2 kW
2	电机极数

技术参数

- 允许温度 -20°C ~ $+120^{\circ}\text{C}$
- 电源 3~400V, 50Hz
- 防护等级 IP 55
- 公称直径 Rp 1 ~ DN 100
- 最大工作压力 10 bar (可根据客户要求: 16bar)

产品特点/优势

- 标准配置高效电机；额定电机功率0.75 kW~: IE2电机
- 电泳涂层，具有较高的防腐蚀性
- 电机壳和灯笼架内带有标准冷凝水出水孔
- 水泵与电机共用一根轴
- 标准电机，不锈钢插拔式轴
- 可冲洗的双向机械密封
- 易于安装，可提供带有支脚和螺纹孔的泵体

材质

- 泵体和灯笼架：铸铁 EN-GJL-250
- 叶轮：PPO 塑料/铸铁 EN-GJL-200 (根据水泵型号)
- 轴：不锈钢 1.4021
- 机械密封：AQEGG; 其它机械密封可根据客户要求提供

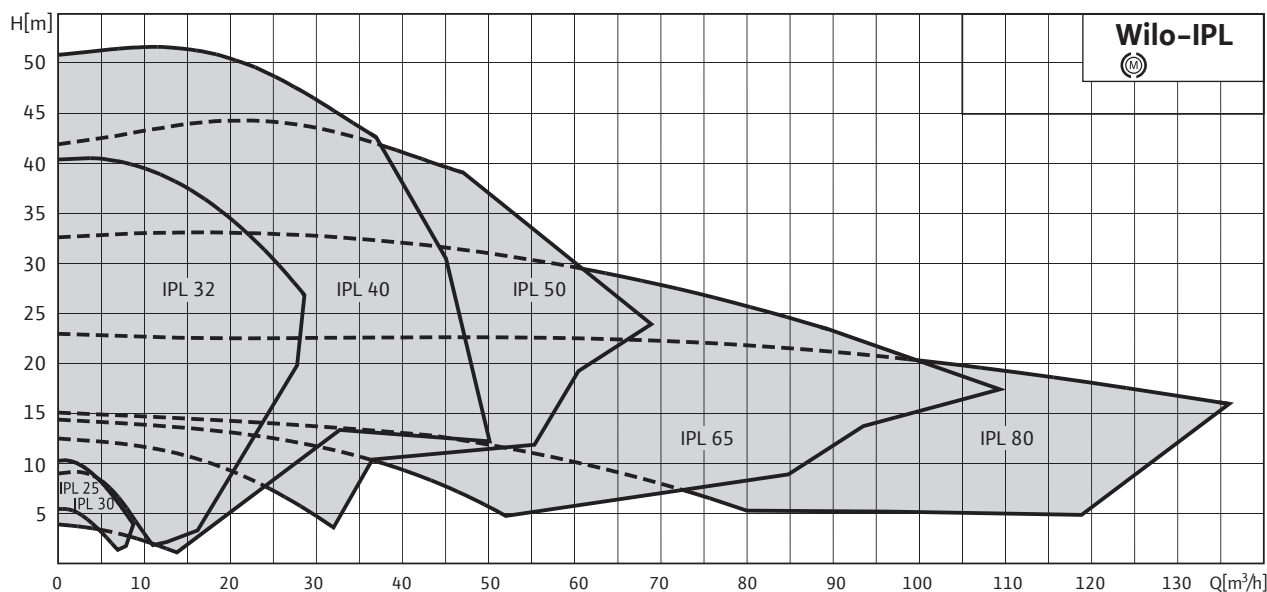
描述/设计

单级，低扬程管道泵

- 机械密封
- 法兰连接带测压接口 $R\frac{1}{8}$
- 一根轴

Series description Wilo-IPL 系列说明

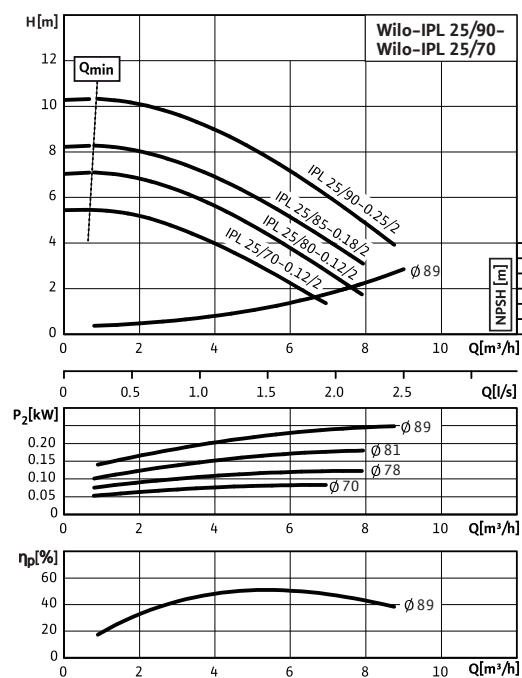
Wilo-IPL (2-pole) 2极电机



Pump curves Wilo-IPL 特性曲线

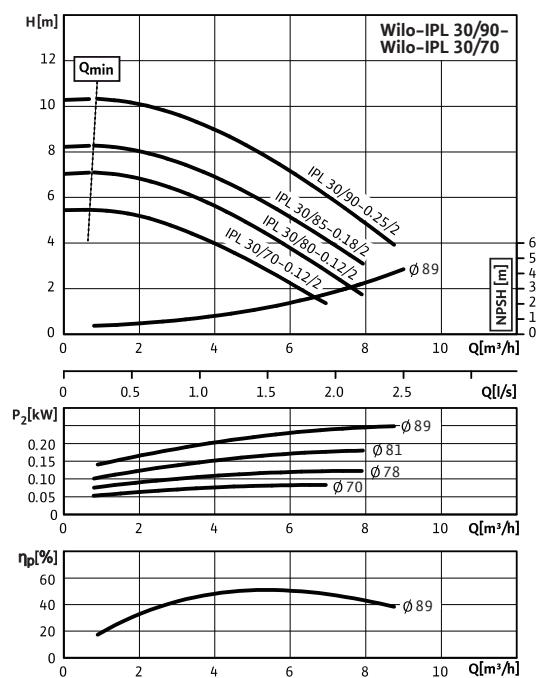
Wilo-IPL 25/70-0.12/2 - 25/90-0.25/2

2-pole, 50 Hz



Wilo-IPL 30/70-0.12/2 - 30/90-0.25/2

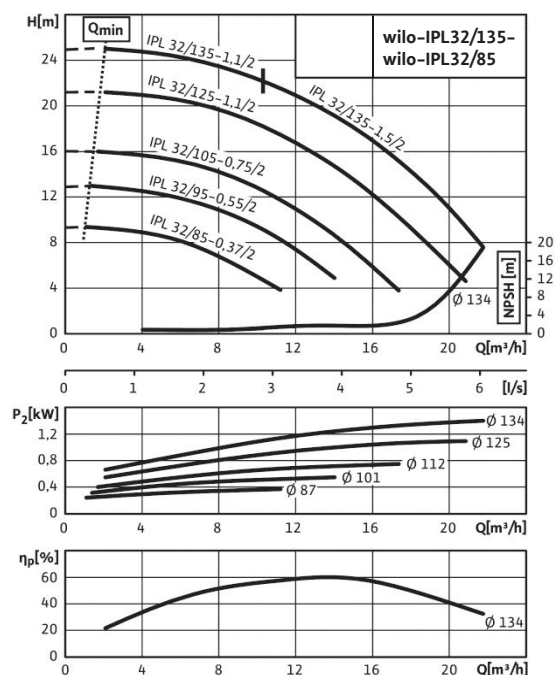
2-pole, 50 Hz



Pump curves Wilo-IPL 特性曲线

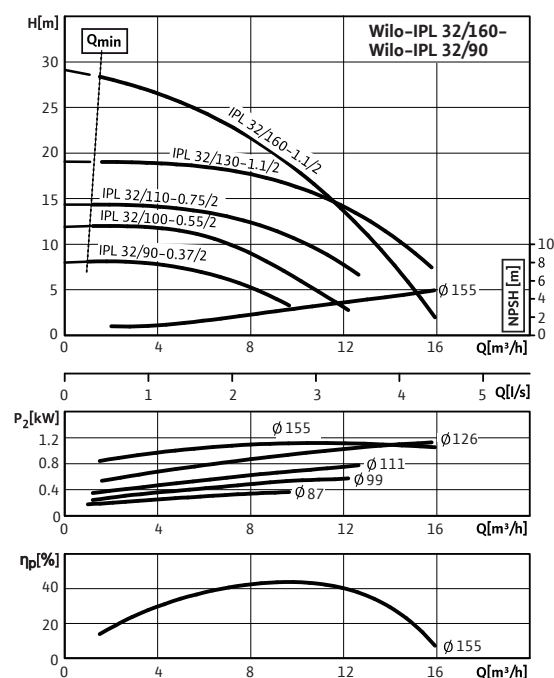
Wilo-IPL 32/85-0.37/2 - 32/135-1.5/2

2-pole, 50 Hz



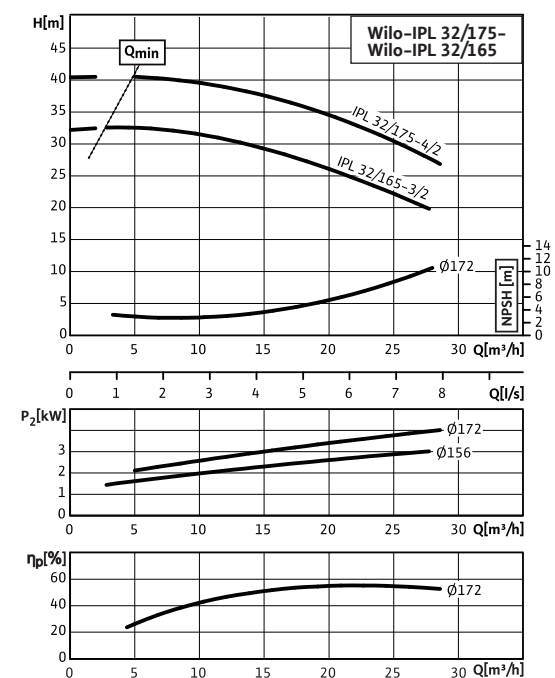
Wilo-IPL 32/90-0.37/2 - 32/160-1.1/2

2-pole, 50 Hz



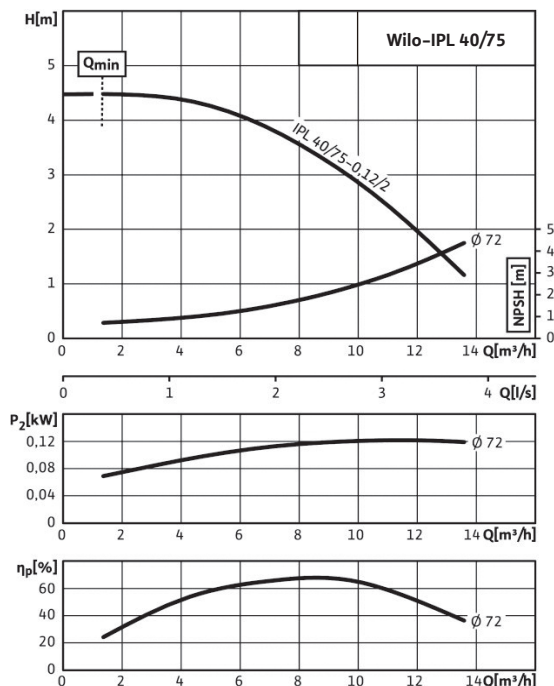
Wilo-IPL 32/165-3/2 - 32/175-4/2

2-pole, 50 Hz



Wilo-IPL 40/75-0.12/2

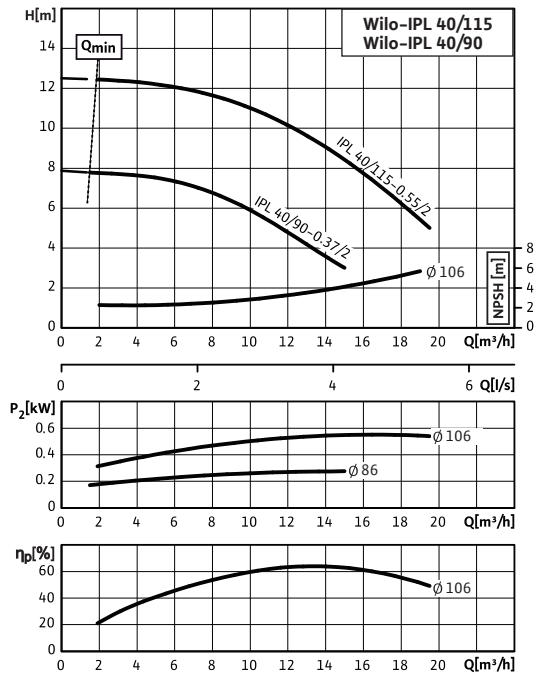
2-pole, 50 Hz



Pump curves Wilo-IPL 特性曲线

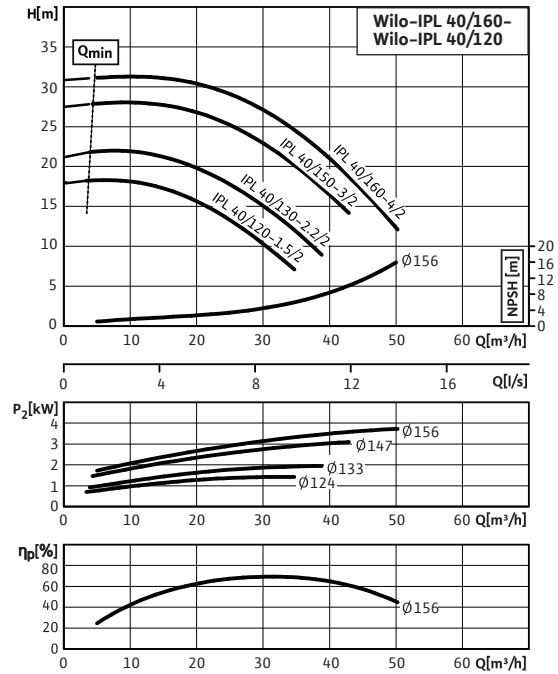
Wilo-IPL 40/90-0.37/2 - 40/115-0.55/2

2-pole, 50 Hz



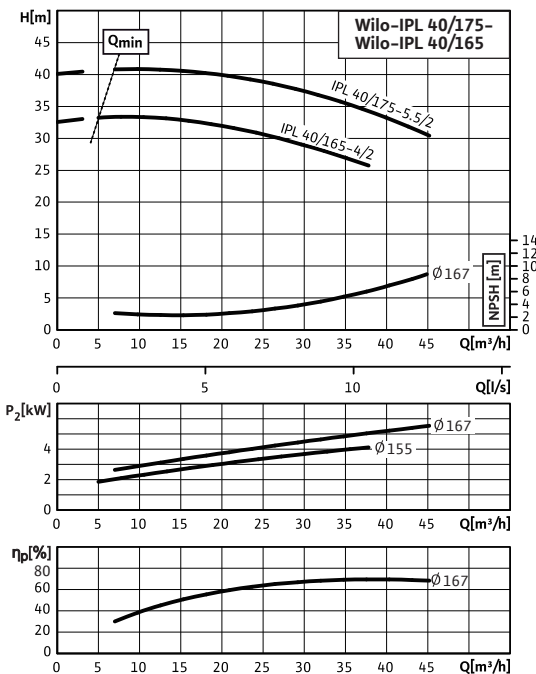
Wilo-IPL 40/120-1.5/2 - 40/160-4/2

2-pole, 50 Hz



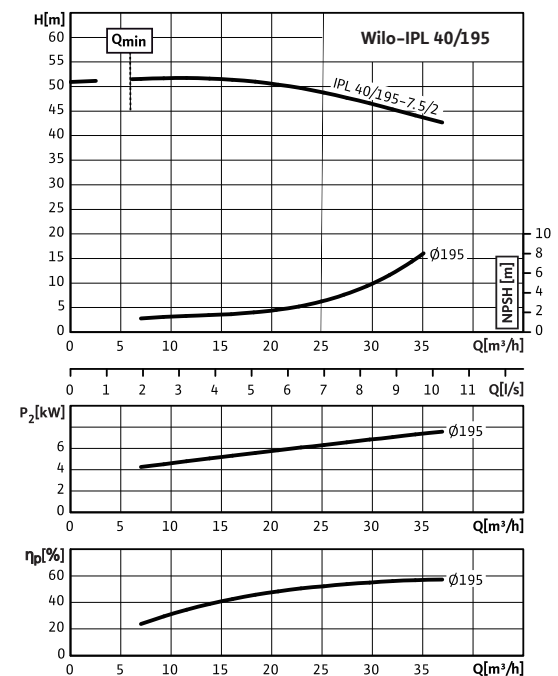
Wilo-IPL 40/165-4/2 - 40/175-5.5/2

2-pole, 50 Hz



Wilo-IPL 40/195-7.5/2

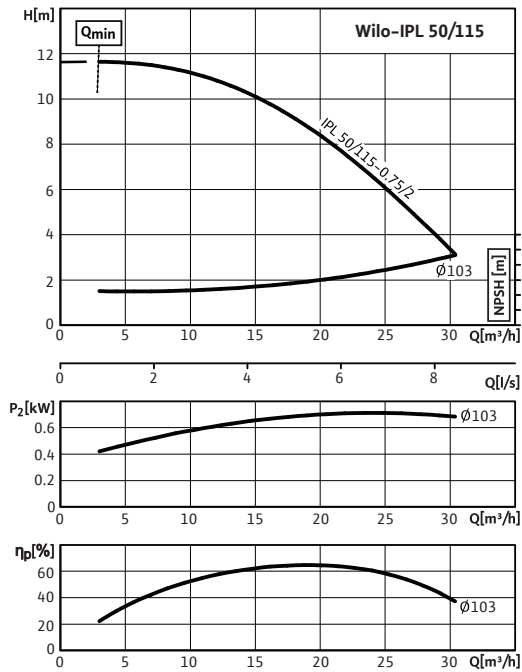
2-pole, 50 Hz



Pump curves Wilo-IPL 特性曲线

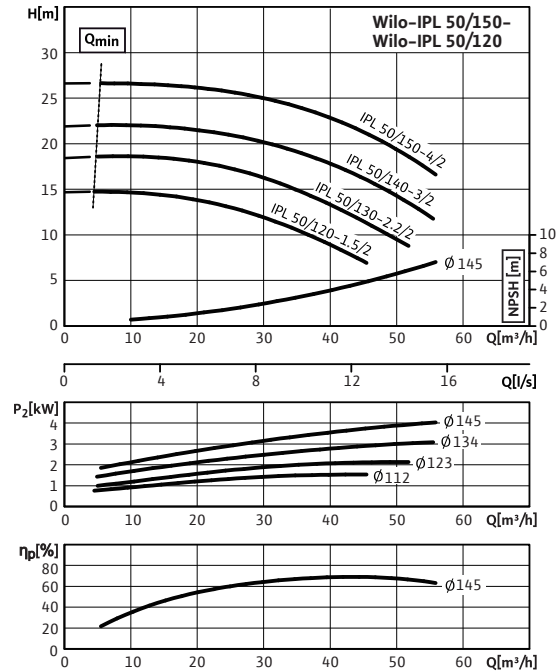
Wilo-IPL 50/115-0.75/2

2-pole, 50 Hz



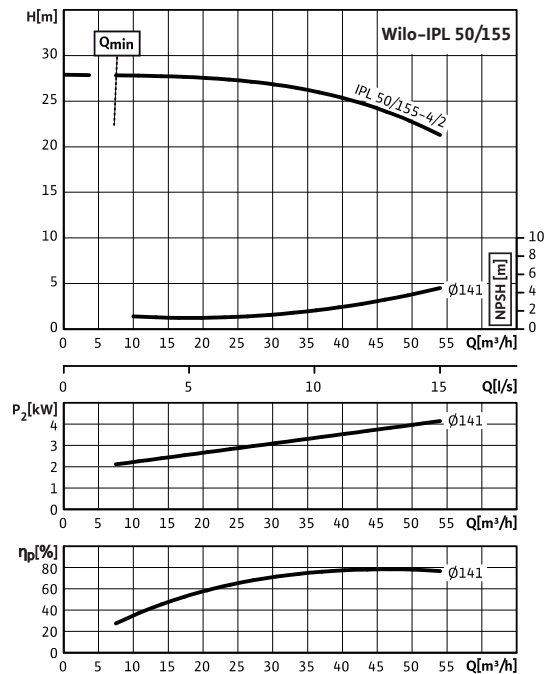
Wilo-IPL 50/120-1.5/2 - 50/150-4/2

2-pole, 50 Hz



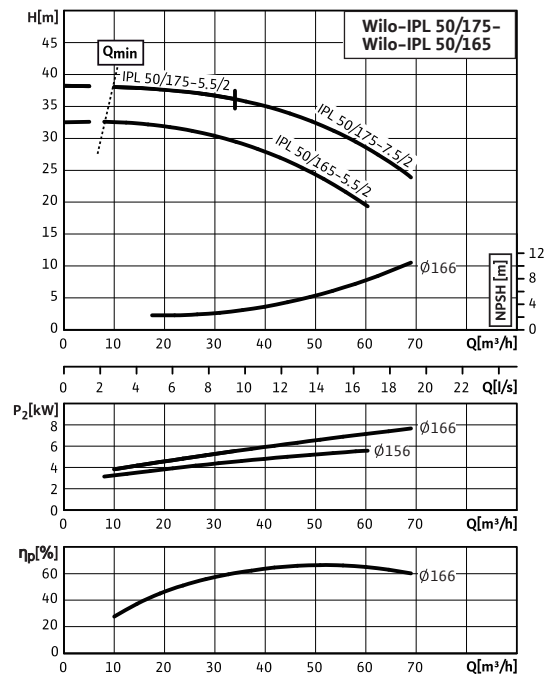
Wilo-IPL 50/155-4/2

2-pole, 50 Hz



Wilo-IPL 50/165-5.5/2 - 50/175-7.5/2

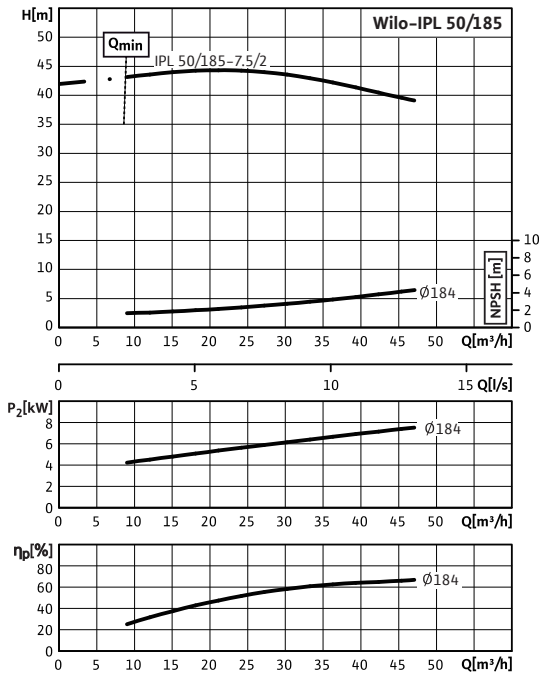
2-pole, 50 Hz



Pump curves Wilo-IPL 特性曲线

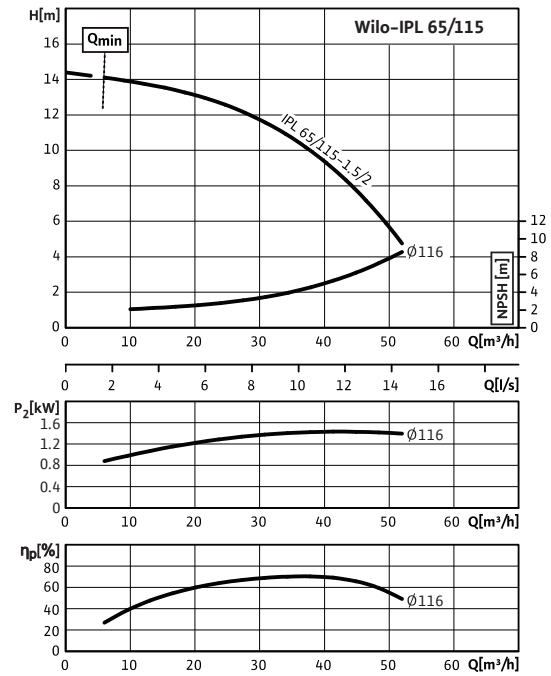
Wilo-IPL 50/185-7.5/2

2-pole, 50 Hz



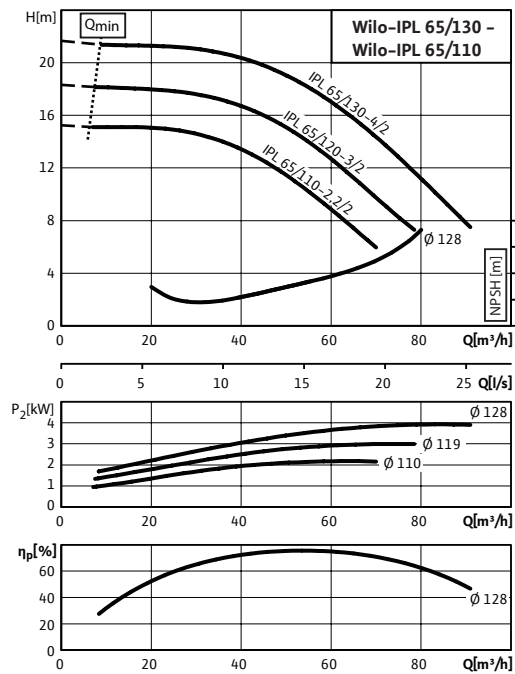
Wilo-IPL 65/115-1.5/2

2-pole, 50 Hz



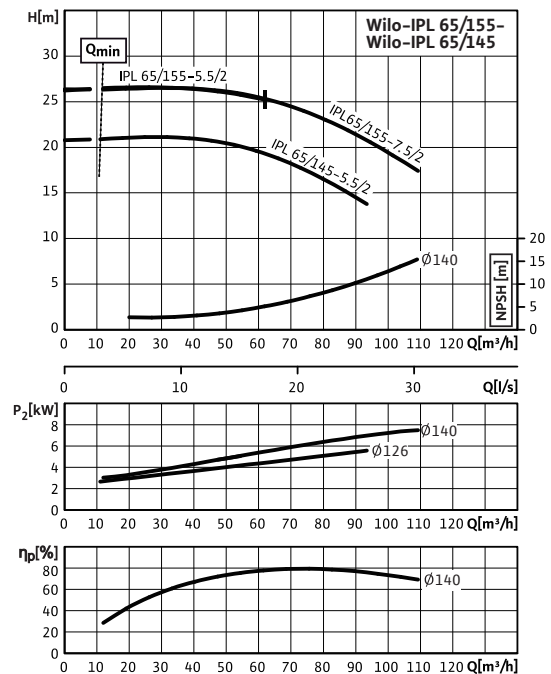
Wilo-IPL 65/110-2.2/2 - 65/130-4/2

2-pole, 50 Hz



Wilo-IPL 65/145-5.5/2 - 65/155-7.5/2

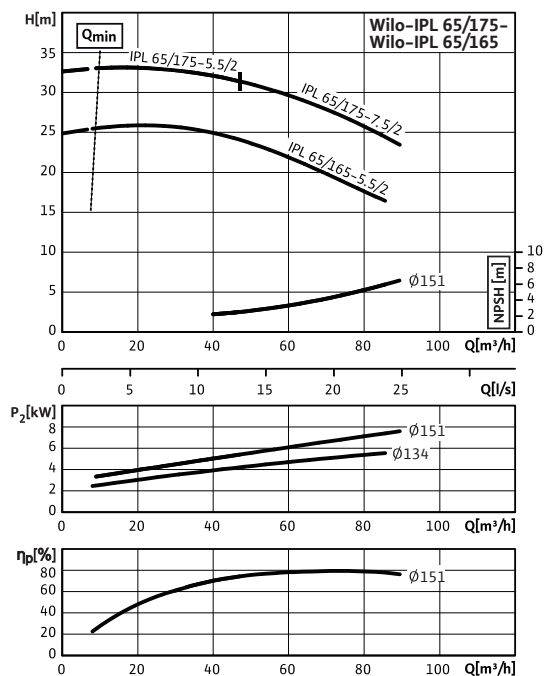
2-pole, 50 Hz



Pump curves Wilo-IPL 特性曲线

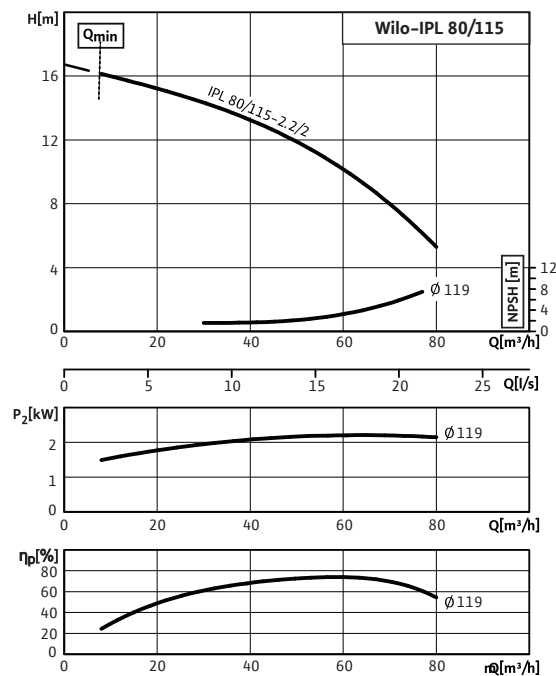
Wilo-IPL 65/165-5.5/2 - 65/175-7.5/2

2-pole, 50 Hz



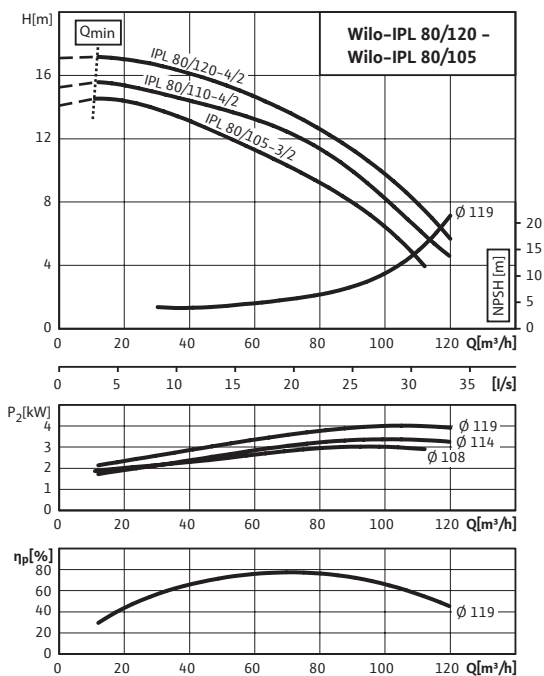
Wilo-IPL 80/115-2.2/2

2-pole, 50 Hz



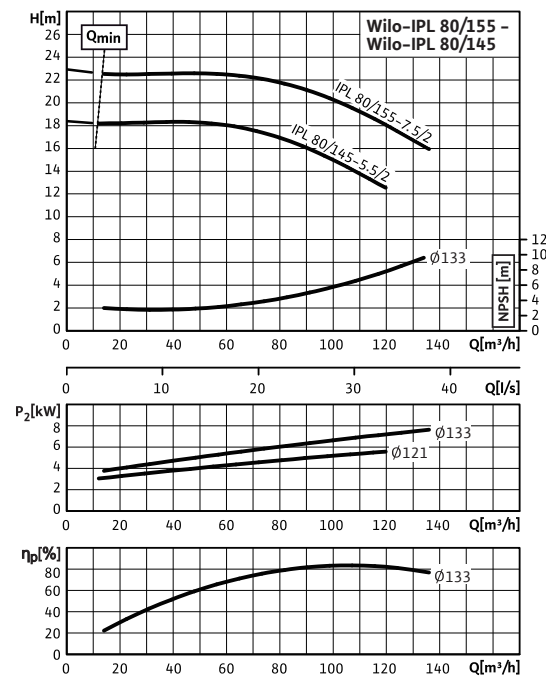
Wilo-IPL 80/105-3/2 - 80/120-4/2

2-pole, 50 Hz



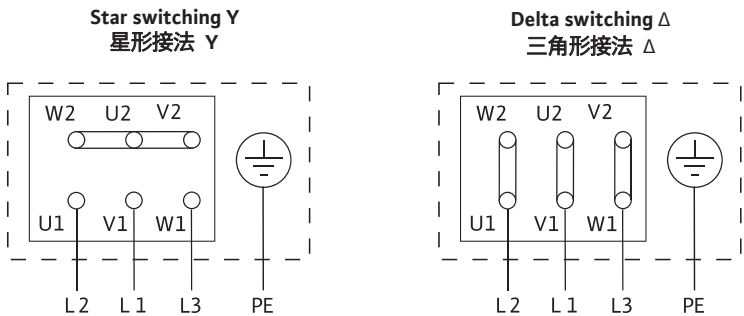
Wilo-IPL 80/145-5.5/2 - 80/155-7.5/2

2-pole, 50 Hz



Terminal diagram, motor data Wilo-IPL 接线图, 电机参数

Terminal diagrams 接线图



Motor protection switch required onsite.
Check the direction of rotation! To change
the direction of rotation, swap any two
phases.

电机保护开关需在现场安装。检查电机
旋转方向! 改变电机的旋转方向, 需调
换任意两相接线。

$P_2 \leq 3 \text{ kW}$	3~400 V Y
	3~230 V Δ
$P_2 \geq 4 \text{ kW}$	3~690 V Y
	3~400 V Δ

After removing the bridges, a Y-Δ start is
possible.

去掉搭桥可实现 Y-Δ 启动。

Motor data (2-pole) 电机参数(2极)

Wilo-IPL...	Nominal current (approx.) 额定电流	Power factor 功率因数	Efficiency 效率
	I_N 3~400V	$\cos \varphi$	η_M
	A		%
0.12kW	0.36	0.75	64.0
0.18kW	0.50	0.72	67.4
0.25kW	0.60	0.81	69.9
0.37kW	0.91	0.78	72.8
0.55kW	1.33	0.76	75.5
0.75kW	1.70	0.80	77.4
1.1kW	2.40	0.82	79.6
1.5kW	3.30	0.77	81.3
2.2kW	4.52	0.82	83.2
3kW	5.80	0.88	84.6
4kW	7.70	0.87	85.8
5.5kW	10.20	0.87	87.0
7.5kW	13.70	0.89	88.1

Observe motor name plate data
参见电机铭牌参数

Dimensions, weights Wilo-IPL 外形尺寸, 重量

Dimensions, weights (2-pole with screwed connection) 外形尺寸, 重量(2极电机, 螺纹连接)

Wilo-IPL...	Thread 螺纹	Screwed connection 螺纹连接	Overall length 总长度	Dimensions 外形尺寸									Impeller* 叶轮*	Weight approx 重量	Dimensions drawing 外形尺寸图
	G	R _p	l ₀	a	b ₁	b ₂	b _{max}	øg	l ₁	P ₁	t	x		m	
				mm										kg	
25/70-0.12/2	1½	1	180	34	66	57	123	106	247	76	48	100	P	7.1	C
25/80-0.12/2	1½	1	180	34	66	57	123	106	247	76	48	100	P	7.1	C
25/85-0.18/2	1½	1	180	52	69	68	137	125	251	107	44	100	P	8.7	C
25/90-0.25/2	1½	1	180	52	69	68	137	125	251	107	44	100	p	9.4	C
30/70-0.12/2	2	1¼	180	34	66	57	123	106	254	76	55	100	p	7.1	C
30/80-0.12/2	2	1¼	180	34	66	57	123	106	254	76	55	100	p	7.1	C
30/85-0.18/2	2	1¼	180	52	69	68	137	125	251	107	44	100	p	8.7	C
30/90-0.25/2	2	1¼	180	52	69	68	137	125	251	107	44	100	p	9.4	C

*impeller material: CI grey cast iron; P plastic

*叶轮材质: CI 灰铸铁; P 塑料

Dimensions, weights (2-pole with flange connection) 外形尺寸, 重量(2极电机, 法兰连接)

Wilo-IPL...	Nominal flange diameter 法兰公称 直径	Overall length 总长度	Dimensions 外形尺寸														Impeller* 叶轮*	Weight approx 重量	Dimensions drawing 外形尺寸图
	DN	l ₀	a	b ₁	b ₂	b _{max}	c	e	f	øg	l _{1max}	m	o	p	p ₁	x		m	
			mm															kg	
32/85-0.37/2	32	260	70	94	96	190	90	40	50	141.2	319	130	M10	20	121	150	P	19	B
32/90-0.37/2	32	260	70	101	106	207	90	40	50	141	321	130	M10	20	121	150	P	21	A
32/95-0.55/2	32	260	70	94	96	190	90	40	50	141.2	319	130	M10	20	121	150	P	22	B
32/100-0.55/2	32	260	70	101	106	207	90	40	50	141	321	130	M10	20	121	150	P	22	A
32/105-0.75/2	32	260	70	94	96	190	90	40	50	185	339	130	M10	20	128	150	P	24	B
32/110-0.75/2	32	260	70	101	106	207	90	40	50	185	341	130	M10	20	128	150	P	26	A
32/125-1.1/2	32	260	70	94	96	190	90	40	50	185	339	130	M10	20	128	150	P	25	B
32/130-1.1/2	32	260	70	101	106	207	90	40	50	185	341	130	M10	20	128	150	P	26	A
32/135-1.1/2	32	260	70	94	96	190	90	40	50	185	339	130	M10	20	128	150	P	25	B
32/135-1.5/2	32	260	70	94	96	193	90	40	50	193	377	130	M10	20	149.5	150	P	30	B
32/160-1.1/2	32	260	70	101	106	207	90	40	50	185	341	130	M10	20	128	150	P	26	A
32/165-3/2	32	320	100	112	124	236	120	132	68	217	396	155	M10	20	160	90	CI	46	A
32/175-4/2	32	320	100	112	124	236	120	132	68	232	412	155	M10	20	168	90	CI	53	A
40/75-0.12/2	40	250	65	80	90	170	-	110	110	141.2	292	125	M10	20	118.5	150	P	18	B
40/90-0.37/2	40	250	65	80	90	170	-	110	110	141	320	125	M10	20	121	150	P	19	B
40/115-0.55/2	40	250	65	80	90	170	-	110	110	141	320	125	M10	20	121	150	P	20	B
40/120-1.5/2	40	320	75	113	121	234	90	40	50	193	374	160	M10	20	151	150	P	30	A
40/130-2.2/2	40	320	75	113	121	234	90	40	50	193	374	160	M10	20	151	150	P	32	A
40/150-3/2	40	320	75	113	121	234	90	40	50	217	386	160	M10	20	160	150	P	38	A
40/160-4/2	40	320	75	113	121	234	90	40	50	232	420	160	M10	20	169	150	P	44	A
40/165-4/2	40	340	82	113	129	242	130	149	58	232	426	170	M10	20	168	150	CI	57	A
40/175-5.5/2	40	340	82	113	129	279	130	149	58	279	511	170	M10	20	182	150	CI	69	A
40/195-7.5/2	40	440	110	145	149	294	180	172	78	279	520	190	M10	20	188	150	CI	81	A
50/115-0.75/2	50	280	75	91	101	192	-	125	125	146	346	140	M10	20	128	150	P	27	B
50/120-1.5/2	50	340	86	116	131	247	104	40	50	193	376	170	M10	20	151	150	P	33	A
50/130-2.2/2	50	340	86	116	131	247	104	40	50	193	376	170	M10	20	151	150	P	35	A

Dimensions, weights Wilo-IPL 外形尺寸, 重量

Dimensions, weights (2-pole with flange connection) 外形尺寸, 重量(2极电机, 法兰连接)

Wilo-IPL...	Nominal flange diameter 法兰公称直径	Overall length 总长度	Dimensions 外形尺寸														Impeller* 叶轮*	Weight approx 重量	Dimensions drawing 外形尺寸图
	DN	l ₀	a	b ₁	b ₂	b _{max}	c	e	f	øg	l _{1max}	m	o	p	p ₁	x		m	
			mm											mm				kg	
50/140-3/2	50	340	86	116	131	247	104	40	50	217	388	170	M10	20	160	150	P	41	A
50/150-4/2	50	340	86	116	131	247	104	40	50	232	422	170	M10	20	169	150	P	47	A
50/155-4/2	50	340	105	102	119	232	140	130	40	232	463	150	M10	20	168	150	CI	63	A
50/165-5.5/2	50	340	103	120	138	279	164	143	48	279	526	170	M10	20	188	150	CI	74	A
50/175-5.5/2	50	340	103	120	138	279	164	143	48	279	526	170	M10	20	188	150	CI	74	A
50/175-7.5/2	50	340	103	120	138	279	164	143	48	279	526	170	M10	20	188	150	CI	76	A
50/185-7.5/2	50	440	120	145	150	295	160	170	70	279	521	190	M10	20	188	150	CI	83	A
65/115-1.5/2	65	340	80	100	118	218	-	155	155	193	387	170	M10	20	151	150	P	35	B
65/110-2.2/2	65	340	93	111	132	243	135	32	63	193	379.5	162	M10	20	149.5	150	P	37	A
65/120-3/2	65	340	93	111	132	243	135	32	63	217	414	162	M10	20	169.5	150	P	43	A
65/130-4/2	65	340	93	111	132	243	135	32	63	232	445.5	162	M10	20	174.5	150	P	51	A
65/145-5.5/2	65	340	120	112	134	279	140	140	60	279	531	160	M12	20	188	150	CI	74	A
65/155-5.5/2	65	340	120	112	134	279	140	140	60	279	531	160	M12	20	188	150	CI	74	A
65/155-7.5/2	65	340	120	112	134	279	140	140	60	279	531	160	M12	20	188	150	CI	82	A
65/165-5.5/2	65	430	110	126	146	279	180	195	60	279	531	215	M12	20	188	150	CI	78	A
65/175-5.5/2	65	430	110	126	146	279	180	195	60	279	531	215	M12	20	188	150	CI	79	A
65/175-7.5/2	65	430	110	126	146	279	180	195	60	279	531	215	M12	20	188	150	CI	85	A
80/115-2.2/2	80	360	98	110	135	245	-	165	165	193	389	180	M10	20	151	150	P	41	B
80/105-3/2	80	360	105	125	157	282	135	40	55	217	421.5	180	M10	20	169.5	150	P	48	A
80/110-4/2	80	360	105	125	157	282	135	40	55	232	453	180	M10	20	174.5	150	P	56	A
80/120-4/2	80	360	105	125	157	282	135	40	55	232	453	180	M10	20	174.5	150	P	56	A
80/145-5.5/2	80	400	105	123	151	279	180	173	57	279	548	200	M12	20	188	150	CI	81	A
80/155-7.5/2	80	400	105	123	151	279	180	173	57	279	548	200	M12	20	188	150	CI	89	A

Note concerning I:
For version N (standard motor), the dimensions depend on the motor version
*impeller material: CI grey cast iron; P plastic

注意:
根据电机型号不同, 外形尺寸不同
*叶轮材质: CI 灰铸铁; P 塑料

Flange dimensions 法兰尺寸					
Wilo-IPL...	Nominal flange diameter 法兰公称直径	Pump flange dimensions 水泵法兰尺寸			
	DN	øD	ød	øK	n x ød _L
			mm		pcs.x mm
32...	32	140	76	100	4x19
40...	40	150	84	110	4x19
50...	50	165	99	125	4x19
65...	65	185	118	145	4x19
80...	80	200	132	160	8x19
100...	100	220	156	180	8x19

Pump flange dimensions—according to EN 1092 - 2 PN 16, n = number of drilled holes
水泵法兰尺寸——符合EN 1092—2 PN 16, n = 钻孔数量