

Flüssigkeitsring-Vakuumpumpen

Liquid ring vacuum pumps

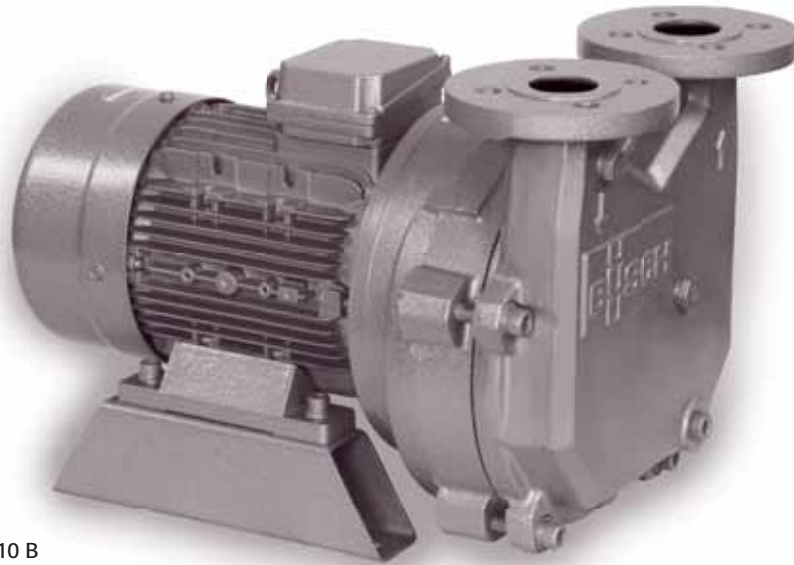
Pompes à vide à anneau liquide



Dolphin LX 0030 - 0260 B

Dolphin LX 0260 - 0430 A

New!



Dolphin LX 0110 B

Dolphin LX ist eine Baureihe hochwertiger Flüssigkeitsring-Vakuumpumpen in Blockbauweise. Durch das bewährte Verdichtungsprinzip lassen sich Dolphin Flüssigkeitsring-Vakuumpumpen in allen Bereichen der Industrie einsetzen. Auch kritische Anwendungen, wie das Absaugen von feuchten Gasen und Dämpfen sind problemlos möglich.

Anwendungsorientiert

Dolphin Vakuumpumpen sind für den Dauereinsatz konzipiert. Durch die optimale Abstufung der verschiedenen Baugrößen und ein umfassendes Zubehörprogramm lassen sie sich optimal auf jeden Prozess abstimmen. Enddrücke bis 33 hPa (mbar), mit Gasstrahlern bis 8 hPa (mbar), sind möglich.

Betriebssicher

durch die robuste Konstruktion und auf den Anwendungsfall abstimmbare Materialien.

Kompakt

durch Blockbauweise mit direkt angeflanschem Elektromotor.

Dolphin LX is a series of sophisticated liquid ring vacuum pumps. The proven compression principle allows Dolphin liquid ring vacuum pumps to be used in all industrial sectors. Critical applications like evacuating humid gases and vapours are possible without problems.

Application orientated

Dolphin vacuum pumps are designed for continuous operation. The various sizes and accessories allow the pumps to be easily adapted to any process. Ultimate pressures of up to 33 hPa (mbar), with air ejectors down to 8 hPa (mbar), can be achieved.

Reliable

due to robust design and application orientated materials.

Compact

due to monobloc and direct flanged electric motor.

Dolphin LX constitue une gamme élaborée de pompes à vide à anneau liquide. Grâce à leur principe de compression éprouvé, les pompes à anneau liquide Dolphin sont adaptées à tous les domaines de l'industrie. Résistantes aux gaz humides et aux vapeurs, elles conviennent parfaitement aux applications exigeantes.

Adaptée à vos applications

Les pompes à vide Dolphin ont été développées pour un service continu. La diversité des modèles et des accessoires permet une adaptation parfaite à chaque application. Pression finale pouvant atteindre 33 hPa (mbar), et 8 hPa (mbar) en combinaison avec des éjecteurs.

Fiable

grâce à une construction robuste et des matériaux adaptés aux différentes applications.

Compacte

Construction monobloc et entraînement direct par moteur normalisé.

Flüssigkeitsring-Vakuumpumpen

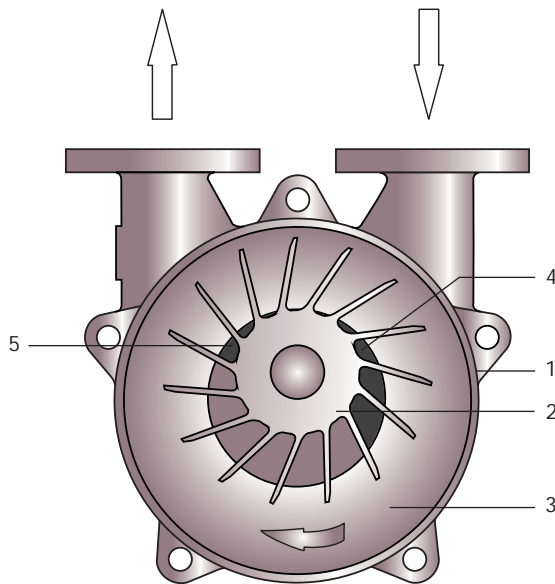
Liquid ring vacuum pumps

Pompes à vide à anneau liquide

Funktionsprinzip

Principle of operation

Principe de fonctionnement



- 1 Gehäuse
- 2 Laufrad
- 3 Flüssigkeitsring
- 4 Saugschlitz
- 5 Druckschlitz

- 1 Casing
- 2 Impeller
- 3 Liquid ring
- 4 Suction slot
- 5 Discharge slot

- 1 Corps de pompe
- 2 Roue à aubes (turbine)
- 3 Anneau liquide
- 4 Lumière d'aspiration
- 5 Lumière de refoulement

Funktionsprinzip und Arbeitsweise

Betriebsmittel von Flüssigkeitsring-Vakuumpumpen ist in der Regel Wasser. Ein exzentrisch angebrachtes Laufrad (2) dreht sich in einem teilweise mit Flüssigkeit gefüllten Gehäuse (1). Durch die Drehbewegung des Flügelrades und der dadurch entstehenden Fliehkraft bildet die Flüssigkeit im Gehäuse den sogenannten Flüssigkeitsring (3). In den Räumen zwischen der laufenden Nabe, den einzelnen Schaufeln und dem Flüssigkeitsring wird das Gas gefördert.

Durch die exzentrische Anordnung des Flügelrades vergrößern sich während einer Umdrehung die Zwischenräume und saugen somit das Medium durch den Saugschlitz (4) an. Im weiteren Verlauf der Drehung verkleinern sich die Zwischenräume, das Medium wird komprimiert und durch den Druckschlitz (5) wieder ausgestoßen.

Der Betrieb der Vakuumpumpe ist mit Wasserdurchlaufkühlung, offenem oder geschlossenem Kühlkreislauf möglich.

Principle of operation

Liquid ring vacuum pumps normally operate with water as the operating medium. An eccentrically installed impeller (2) rotates in the casing (1) partly filled with liquid. By the rotational movement of the impeller and the resulting centrifugal force the liquid within the cylinder forms the so called liquid ring (3). Gas is conveyed in the spaces between the fixed vanes and the liquid ring.

Due to the eccentric installation of the impeller the liquid ring moves out and the process gas is sucked in through the suction slot (4). Further rotation causes the liquid ring to move in so that the gas is compressed and discharged through the discharge slot (5).

The vacuum pump can be operated with water recirculation cooling, open or closed loop cooling circuit.

Principe de fonctionnement

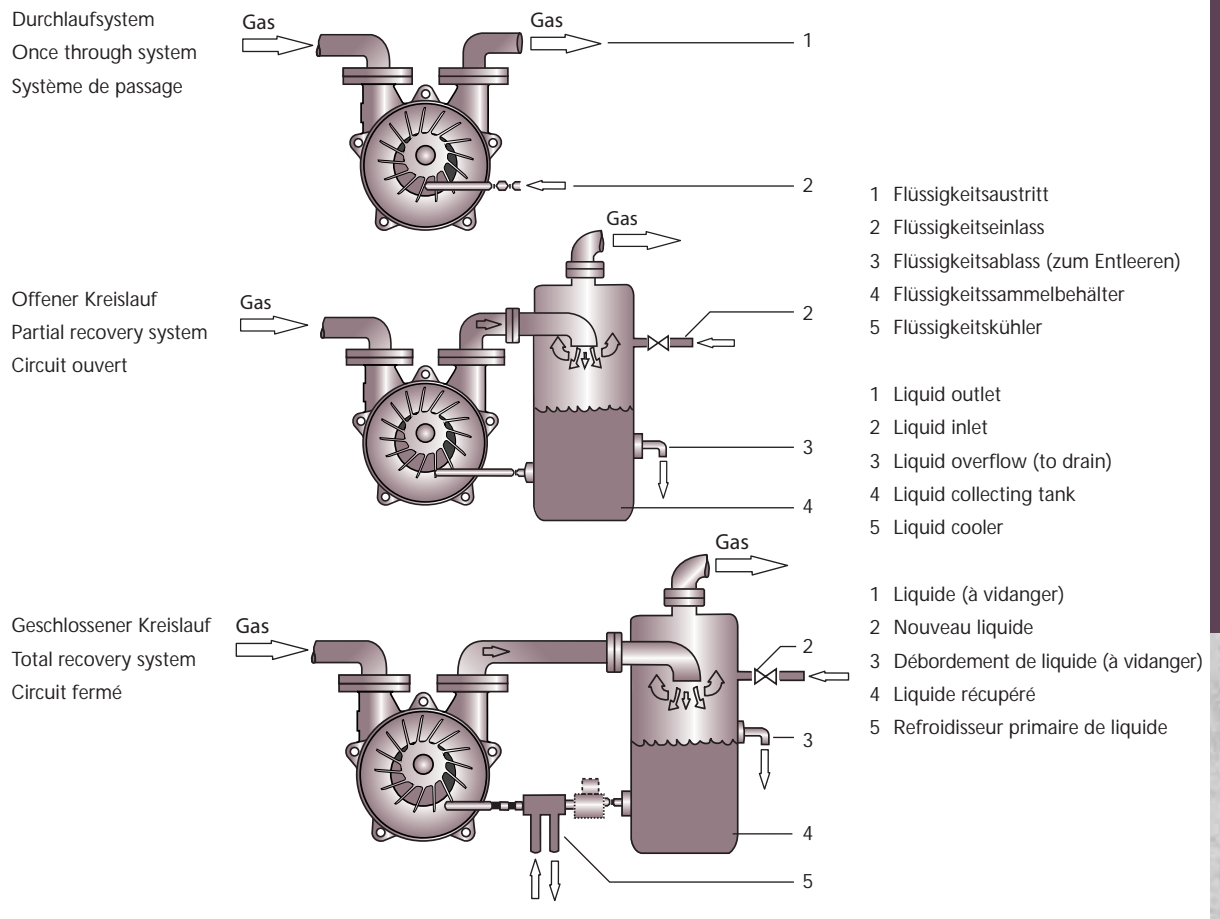
Les pompes à vide à anneau liquide fonctionnent au moyen d'un liquide, généralement de l'eau. Une turbine excentrée (2) tourne dans le corps de la pompe (1) partiellement rempli de liquide. La force centrifuge engendrée par la rotation de la turbine permet la formation de l'anneau liquide (3) à l'intérieur de la pompe. Le gaz est emprisonné dans les espaces libres situés entre les aubes et l'anneau liquide.

L'excentricité de la roue à aubes (turbine) crée un effet volumétrique des espaces libres pendant la rotation et le gaz est aspiré par la lumière d'aspiration (4).

Au cours de la rotation, les espaces libres diminuent, le gaz est comprimé et transporté jusqu'à la lumière de refoulement (5).

La pompe à vide fonctionne avec un refroidissement par circulation d'eau en circuit ouvert, ou en recirculation partielle ou totale.

Betriebsarten Operating mode Mode d'opération



Durchlaufsystem

Die Betriebsflüssigkeit wird permanent zugeführt, durchläuft die Vakuumpumpe und wird zusammen mit dem Gas wieder ausgestoßen.

Offener Kreislauf

Bei diesem System wird die Betriebsflüssigkeit in einem nachgeschalteten Behälter vom Gas getrennt und wieder der Vakuumpumpe zugeführt. Gleichzeitig wird frische Flüssigkeit zugeführt.

Geschlossener Kreislauf

In einem geschlossenen System wird die Betriebsflüssigkeit in einem nachgeschalteten Behälter vom Gas getrennt, durchläuft einen Kühler und wird wieder der Vakuumpumpe zugeführt.

Once through system

The service liquid is constantly fed through the pump and is discharged together with the gas.

Partial recovery system

Within this system the service liquid is discharged to a vessel which allows separation of the gas and liquid. The recirculated liquid is drawn back into the pump as service liquid along with fresh liquid to replace the amount discharged to waste via the vessel overflow.

Total recovery system

In a total recovery system the service liquid and gas are separated in a vessel, a heat exchanger is added to remove the heat of compression prior to re-use of the service liquid, which is fed back to the pump.

Système de passage

Le liquide de service est amené en permanence, traverse la pompe à vide et est évacué en même temps que le gaz.

Circuit ouvert

Dans ce système, le liquide de service est séparé du gaz dans un récipient en aval et ramené à la pompe à vide. Simultanément, du liquide frais est amené.

Circuit fermé

Dans un système fermé, le liquide de service est séparé du gaz dans un récipient en aval, traverse un radiateur et est ramené à la pompe à vide.

Flüssigkeitsring-Vakuumpumpen

Liquid ring vacuum pumps

Pompes à vide à anneau liquide

Technische Daten Dolphin LX 0030 B - LX 0260 B

Technical data Dolphin LX 0030 B - LX 0260 B

Spécifications techniques Dolphin LX 0030 B - LX 0260 B

Technische Daten Technical data Spécifications techniques		Dolphin LX 0030 B	Dolphin LX 0055 B	Dolphin LX 0110 B	Dolphin LX 0140 B	Dolphin LX 0180 B	Dolphin LX 0260 B
Nennsaugvermögen Nominal suction capacity Débit nominal	50 Hz m ³ /h	25	44,5	75	110	130	220
	60 Hz m ³ /h	31	56	90	130	155	260
Enddruck Ultimate pressure Pression finale	hPa (mbar)		33	33	33	33	33
Motornennleistung Nominal motor rating Puissance nominale du moteur	50 Hz kW	0,75	1,5	2,2	3,0	4,0	5,5
	60 Hz kW	1,1	2,2	3,0	4,0	5,5	7,5
Motornendrehzahl Nominal motor speed Vitesse de rotation nominale	50 Hz min ⁻¹	2900	2900	1450	1450	1450	1450
	60 Hz min ⁻¹	3500	3500	1750	1750	1750	1750
Schalldruckpegel (DIN 45635) Sound level (DIN 45635) Niveau sonore (DIN 45635)	dB(A)		70	70	70	70	72
Gewicht ca. Weight approx. Poids approx.	50 Hz kg	25	30	55	65	75	105
	60 Hz kg	25	33	55	70	75	116

Werkstoffausführung Dolphin Material design Matériaux	Dolphin LX 0030 B - 0180 B K	Dolphin LX 0110 B - 0260 B M
Pumpengehäuse Pump casing Corps de pompe	EN 1561 Grauguss Cast iron Fonte grise	1.4401 Edelstahl Stainless steel Acier inoxydable
Laufgrad Impeller Roue à aubes (turbine)	1.4401 Edelstahl Stainless steel Acier inoxydable	
Ventilklappe Valve flap Clapet	PTFE	

Technische Daten Dolphin LX 0260 A - LX 0430 A
 Technical data Dolphin LX 0260 A - LX 0430 A
 Spécifications techniques Dolphin LX 0260 A - LX 0430 A

Technische Daten Technical data Spécifications techniques		Dolphin LX 0260 A	Dolphin LX 0330 A	Dolphin LX 0430 A
Nennsaugvermögen Nominal suction capacity	50 Hz m ³ /h	220	270	372
Débit nominal	60 Hz m ³ /h	260	325	455
Enddruck Ultimate pressure Pression finale	hPa (mbar)	50	33	33
Motornennleistung Nominal motor rating	50 Hz kW	5,5	7,5	11
Puissance nominale du moteur	60 Hz kW	7,5	11	15
Motornendrehzahl Nominal motor speed	50 Hz min ⁻¹	1450	1450	1450
Vitesse de rotation nominale	60 Hz min ⁻¹	1750	1750	1750
Schalldruckpegel (DIN 45635) Sound level (DIN 45635) Niveau sonore (DIN 45635)	dB(A)	72	72	72
Gewicht ca. Weight approx.	50 Hz kg	105	132	190
Poids approx.	60 Hz kg	116	132	198

Werkstoffausführung LX 0260 - 0430 A Material design Matériaux	K
Pumpengehäuse Pump casing Corps de pompe	EN 1561 Grauguss Cast iron Fonte grise
Laufrad Impeller Roue à aubes (turbine)	1.4401 Edelstahl Stainless steel Acier inoxydable
Ventilklappe Valve flap Clapet	PTFE

Zubehör

Wir liefern unter anderem:

- Flüssigkeitsabscheider
- Kavitationsschutz
- Wärmetauscher
- Gasstrahler
- Rückschlagventile
- Ablassventile
- Saugbegrenzungsventile

Accessories

Available are:

- Liquid separator
- Anti cavitation device
- Heat exchanger
- Gas ejector
- Check valve
- Drain valve
- Vacuum relief valve

Accessoires

Egalement disponibles:

- Piège à liquides
- Dispositif anti-cavitation
- Echangeur de chaleur
- Ejecteur à gaz
- Clapets anti retour
- Vannes de vidange
- Soupapes de limitation de vide

Flüssigkeitsring-Vakuumpumpen

Liquid ring vacuum pumps

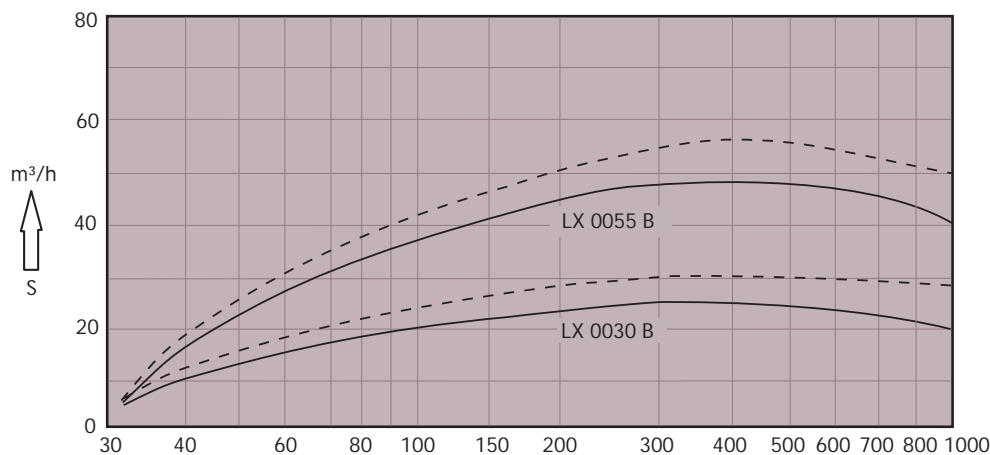
Pompes à vide à anneau liquide

Technische Daten Dolphin LX 0030 B, LX 0055 B

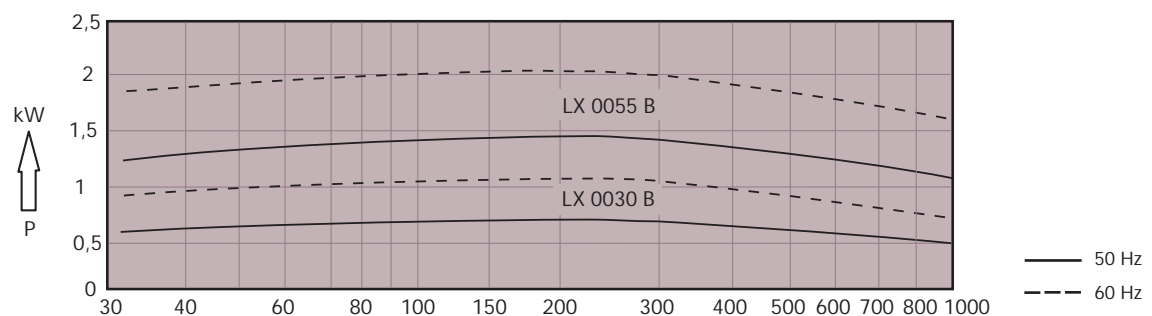
Technical data Dolphin LX 0030 B, LX 0055 B

Spécifications techniques Dolphin LX 0030 B, LX 0055 B

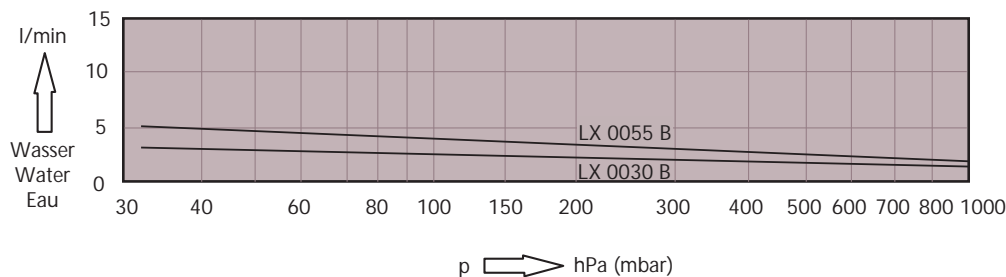
Saugvermögen
Suction capacity
Débit de pompage



Leistung
Power
Puissance



Wasserbedarf
Water requirement
Quantité d'eau
nécessaire



Die Kennlinien gelten bei Verdichtung trockener Luft von 20 °C vom Ansaugdruck auf Atmosphärendruck (1013 hPa (mbar)). Betriebsflüssigkeit ist Wasser mit 15 °C. Die Toleranz des Saugvermögens und des Leistungsbedarfs beträgt ±10%. Die Kurve „Wasserbedarf“ zeigt den Wasserdurchlauf beim Durchlaufsystem (siehe Seite 3) bei 50 und 60 Hz.

Saugvermögen und Leistungsbedarf sind abhängig vom Ansaugdruck. Bei abweichenden Betriebsbedingungen (z. B. abweichende physikalische Daten des zu fördernden Gases oder der Betriebsflüssigkeit, bei Mitfördern von Zusatzflüssigkeit oder bei Förderung von Gas-Dampfgemischen) ändern sich die Kennlinien.

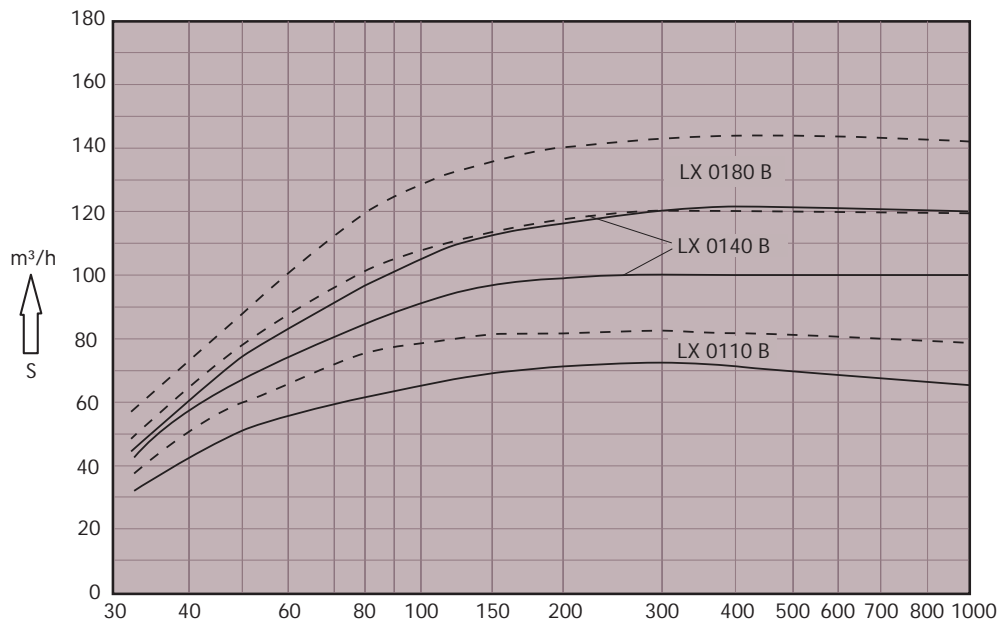
The suction capacity curves are valid for dry air at 20 °C when compressing from inlet pressure to atmospheric pressure (1013 hPa (mbar)). Operating liquid is water at 15 °C. The tolerance of suction capacity and that of power consumption is ±10%. The „Water requirement“ curve shows the water flow by the once through system (see page 3) by 50 and 60 Hz.

Suction capacity and power consumption depend on the inlet pressure. At different operating conditions (like different physical data of the gas or operating liquid being conveyed, conveying of additional liquid or gassteam mixtures) the curves change.

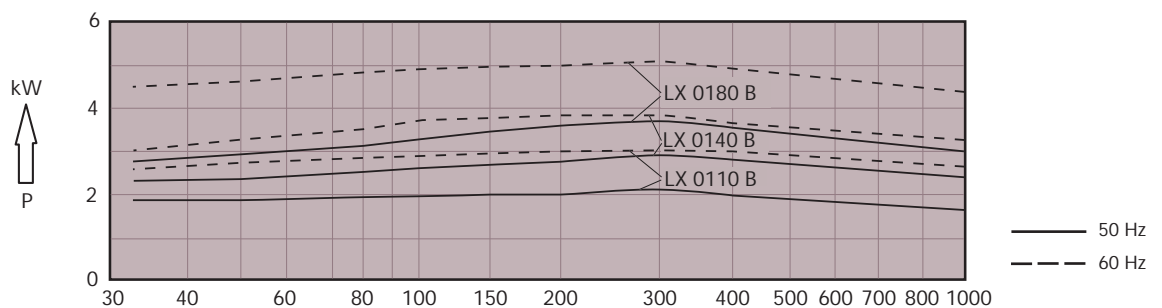
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Technische Daten Dolphin LX 0110 B - LX 0180 B
 Technical data Dolphin LX 0110 B - LX 0180 B
 Spécifications techniques Dolphin LX 0110 B - LX 0180 B

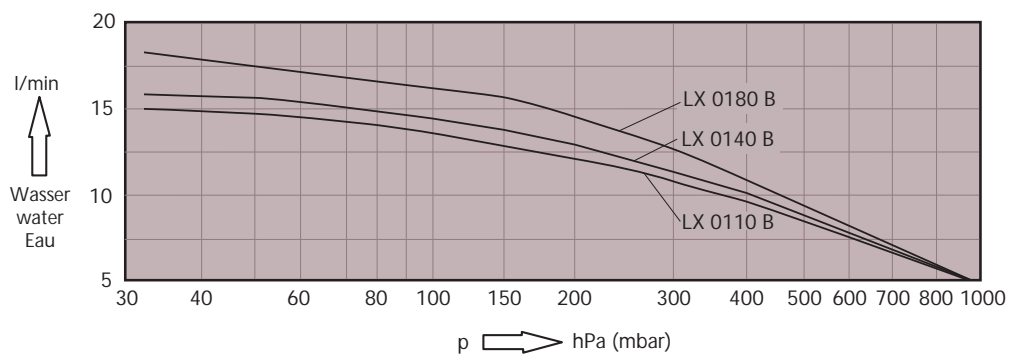
Saugvermögen
 Suction capacity
 Débit de pompage



Leistung
 Power
 Puissance



Wasserbedarf
 Water requirement
 Quantité d'eau
 nécessaire



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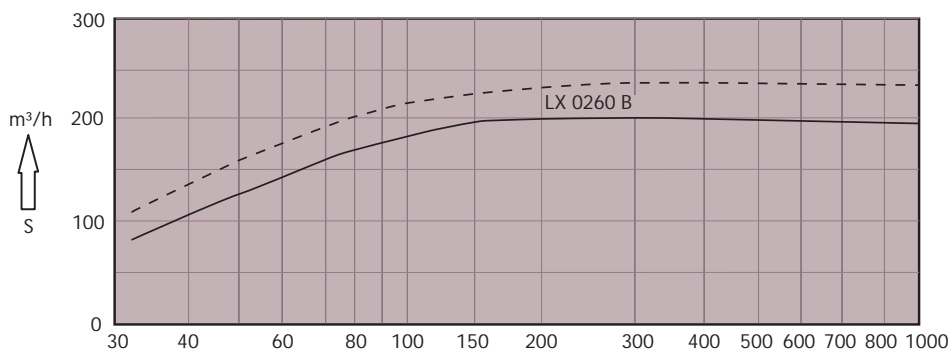
Pompes à vide à anneau liquide

Technische Daten Dolphin LX 0260 B

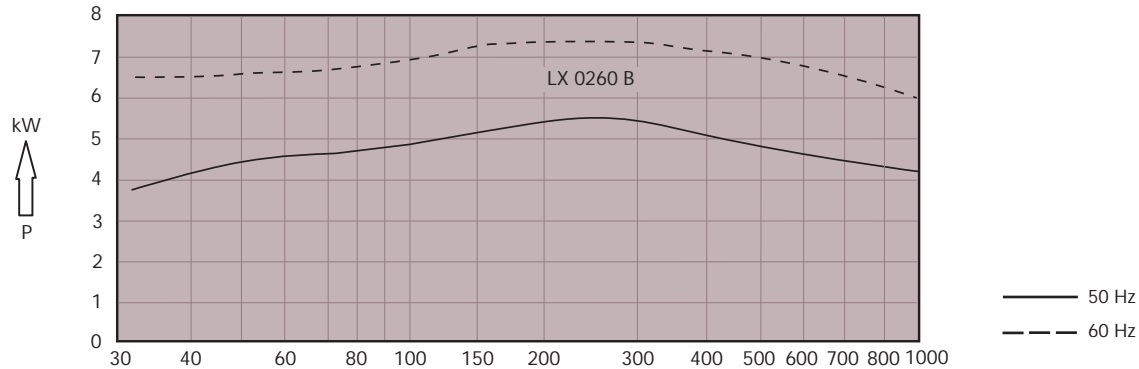
Technical data Dolphin LX 0260 B

Spécifications techniques Dolphin LX 0260 B

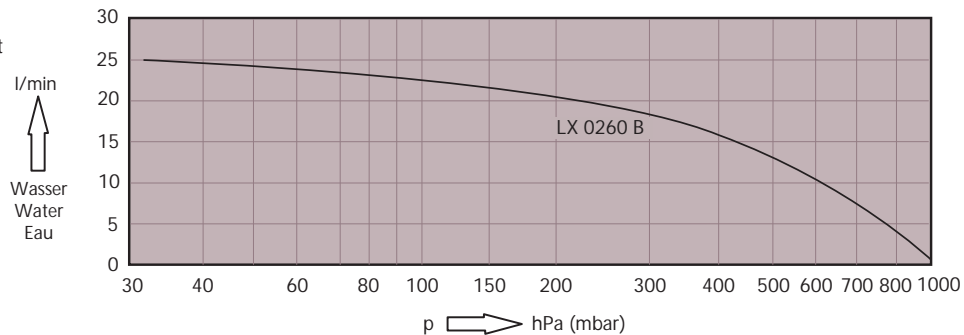
Saugvermögen
Suction capacity
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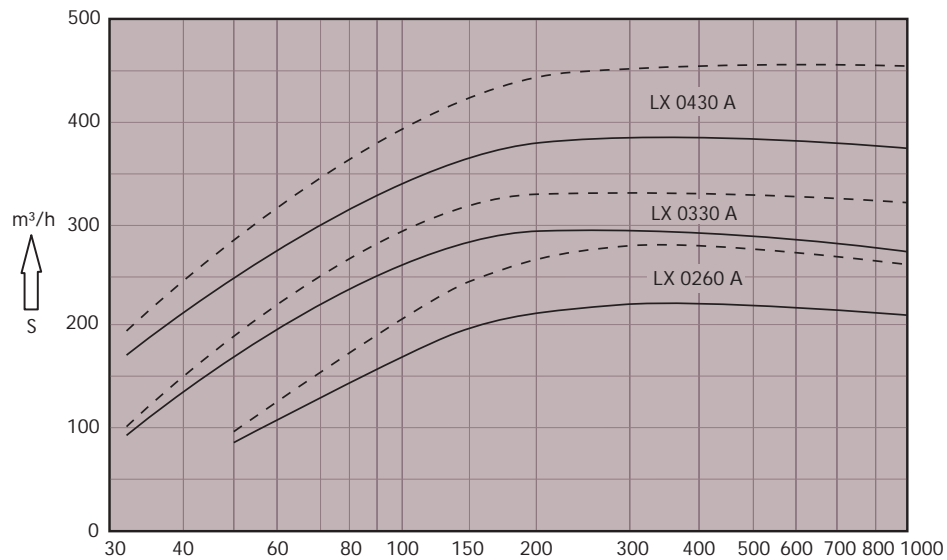
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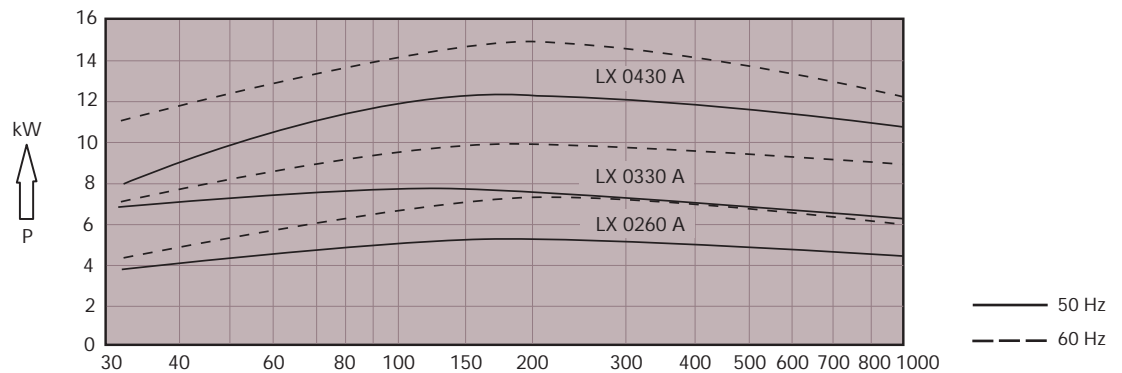
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Technische Daten LX 0260 A - LX 0430 A
 Technical data LX 0260 A - LX 0430 A
 Spécifications techniques LX 0260 A - LX 0430 A

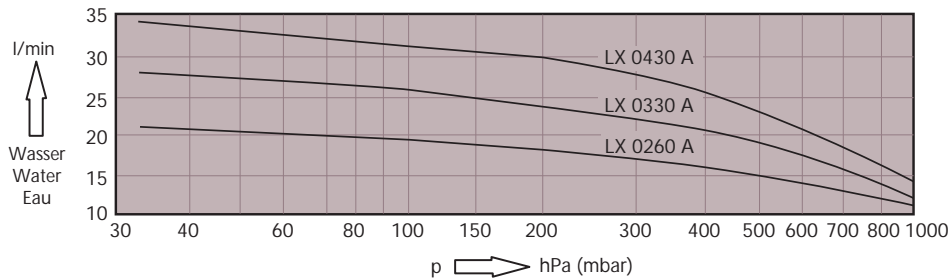
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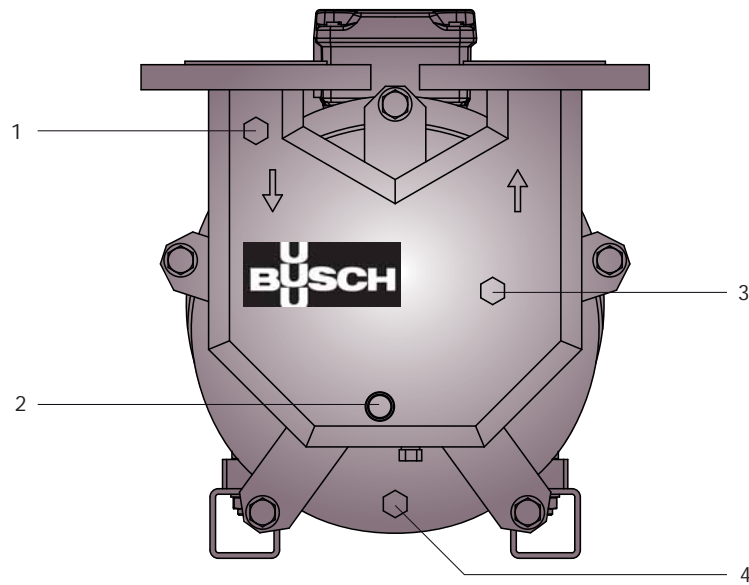
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Flüssigkeitsring-Vakuumpumpen

Liquid ring vacuum pumps

Pompes à vide à anneau liquide

Anschlüsse
Connections
Connexions



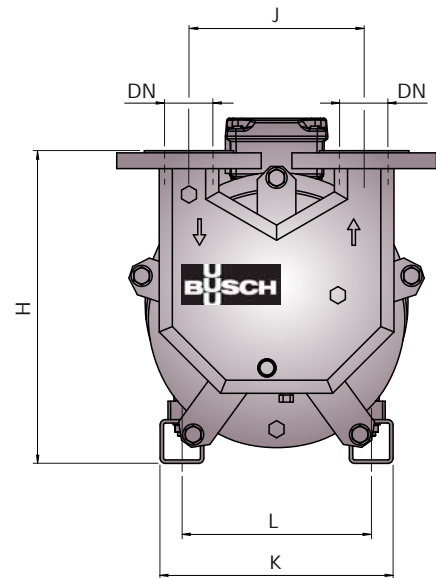
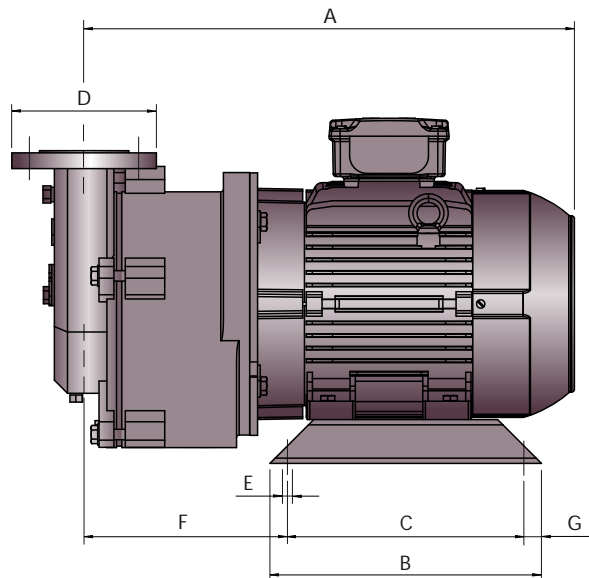
	LX 0030 B - LX 0055 B	LX 0110 B - LX 0260 B	LX 0260 A - LX 0430 A
1 Anschluss für Kavitationsschutz Connection for anti cavitation Connexion de la vanne anticavitation	G 1/4"	G 3/8"	G 3/8"
2 Anschluss für Betriebsflüssigkeit Connection for operating liquid Connexion du liquide de fonctionnement	G 3/8"	G 1/2"	G 1/2"
3 Anschluss für Ablassventil (Wellenmitte) Connection for drain valve (centreline) Connexion de la vanne de vidange (centre roue à aube)	-	G 3/8"	-
4 Anschluss für Ablassventil Connection for drain valve Connexion de la vanne de vidange	G 1/4"	G 3/8"	G 3/8"

Dolphin LX Vakuumpumpen sind mit zusätzlichen Anschlüssen lieferbar:
- geschraubte Anschlüsse NPT
- geflanschte Anschlüsse gemäß ANSI B 16.5 150 lb

Dolphin LX vacuum pumps are also available with imperial connections:
- screwed connections NPT
- flanged connections drilled to ANSI B 16.5 150 lb dimensions

Gamme aussi disponible avec:
- connexions vissées NPT
- brides percées ANSI B 16.5 150 lb

Abmessungen
Dimensions
Dimensions



Abmessungen Dimensions Dimensions	A	B	C	D	E	F	G	H	J	K	L	DN
LX 0030 B 50 Hz LX 0030 B 60 Hz	333	180	150	56	10	121	15	210	100	155	125	G1"
LX 0055 B 50 Hz LX 0055 B 60 Hz	401	200	175	56	10	153	12,5	205	100	170	140	G1"
LX 0110 B 50 Hz LX 0110 B 60 Hz	442	274	232	150	12	143	21	345	180	210	160	40
LX 0140 B 50 Hz LX 0140 B 60 Hz	450 469	274	232	150	12	151 159	21	345 358	180	210 240	160 190	40
LX 0180 B 50 Hz LX 0180 B 60 Hz	489	274	232	150	12	179	21	358	180	240	190	40
LX 0260 B 50 Hz LX 0260 B 60 Hz	553 591	310	270	165	14	226	20	359	200	266	216	50
LX 0260 A 50 Hz LX 0260 A 60 Hz	561 591	310	270	165	14	258	21	357	200	266	216	50
LX 0330 A 50 Hz LX 0330 A 60 Hz	616	310	270	165	14	283	20	357	200	266	216	50
LX 0430 A 50 Hz LX 0430 A 60 Hz	722	465	405	185	14	305	30	440	240	334	254	65

Flüssigkeitsring-Vakuumpumpen
Liquid ring vacuum pumps
Pompes à vide rotatives à anneau liquide



Anwendungen
Applications
Applications



Anwendungen

Dolphin LX 0030 - 0260 B
Dolphin LX 0260 - 0430 A

Applications

Dolphin LX 0030 - 0260 B
Dolphin LX 0260 - 0430 A

Applications

Dolphin LX 0030 - 0260 B
Dolphin LX 0260 - 0430 A

- Erdölindustrie
- Pharmaindustrie
- Chemische Verfahren
- Papierindustrie
- Kunststoffindustrie
- Lebensmittelindustrie
- Textilindustrie

- Mineral oil industry
- Pharmaceutical industry
- Chemical industry
- Paper industry
- Plastic industry
- Food industry
- Textile industry

- Industrie pétrolière
- Industrie pharmaceutique
- Procédés chimiques
- Industrie papetière
- Industrie des plastiques
- Industrie agro-alimentaire
- Industrie textile



Busch – weltweit im Kreislauf der Industrie
Busch – all over the world in industry
Busch – au coeur de l'industrie dans le monde entier



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Dolphin

Liquid Ring Vacuum Pumps LX 0030/0055 B



Dolphin LX pumps are robust and proven liquid ring vacuum pumps from Busch in a compact block design. Their proven operating principle enables them to be used in all sectors of industry. This series encompasses the decades of experience in construction and use of liquid ring vacuum pumps. This means the Dolphin LX series offers extremely efficient and modern vacuum generation for the rough vacuum range up to 33 hPa (mbar) of ultimate pressure.

Application-oriented

Dolphin LX liquid ring vacuum pumps can be operated in simple circulating systems, in open or closed liquid cycles. Thanks to the precise grading between the sizes, the wide range of accessories and the versions of different materials, Dolphin LX pumps are perfectly suited to many industrial processes.

Even critical applications, such as the discharge of humid gases or vapours, can easily be carried out. Dolphin LX liquid ring vacuum pumps are also available in different ATEX versions.

Compact

A directly flange-mounted motor ensures an exceptionally compact construction, enabling Dolphin LX liquid ring vacuum pumps to be very well suited for integration into existing systems or machines.



Dolphin LX – Robust and compact. Ideal for difficult applications.



Dolphin

Liquid Ring Vacuum Pumps LX 0030/0055 B



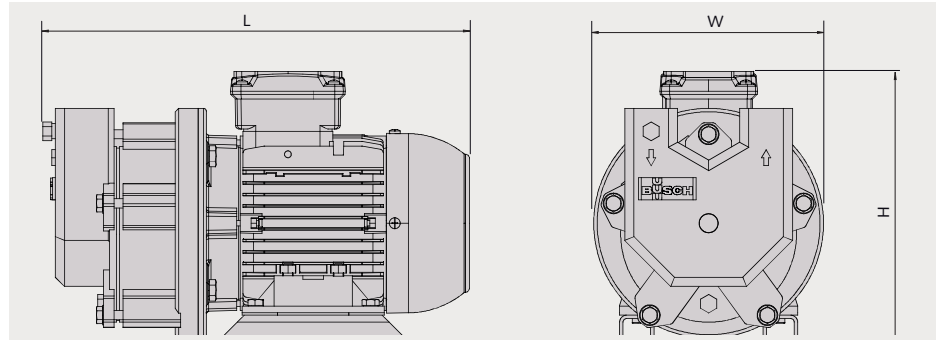
Technical specifications

Dolphin LX pumps are single-stage liquid ring vacuum pumps. Normally water is being used as the operating fluid. An operation with other fluids is also possible, if required by the process conditions. An eccentrically mounted impeller wheel rotates within a housing. This housing is filled with water to the extent that the vanes of the impeller are immersed in the water. The rotary motion of the impeller wheel and the consequent centrifugal force cause the liquid in the housing to form the so-called liquid ring. The gas is conveyed in the spaces between the individual vanes and the liquid ring. Thanks to the eccentric arrangement of the impeller wheel, the volumes of these spaces change with the result that gas is sucked in, compressed and discharged again.

Accessories/technical options

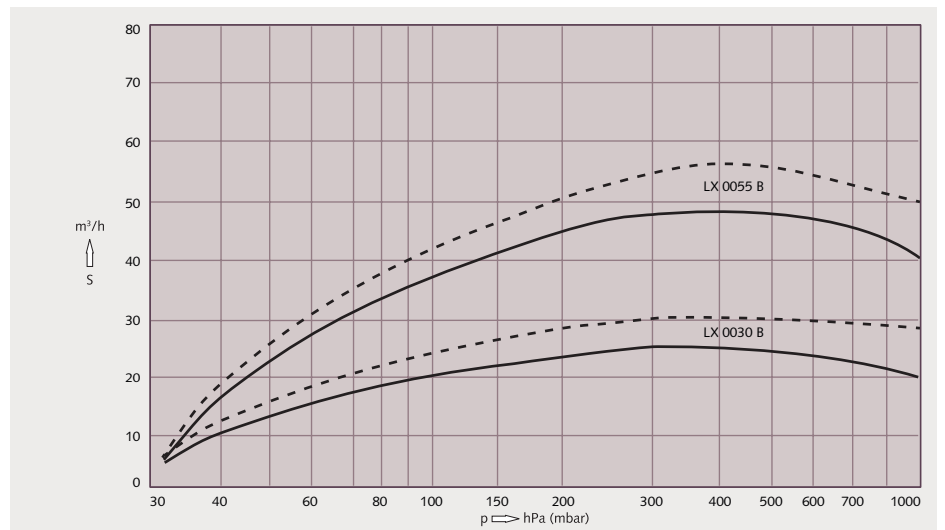
- Liquid separator
- Cavitation protection
- Heat exchanger
- Gas ejector
- Non-return valves
- Drain valves
- Vacuum relief valves

Dolphin LX 0030/0055 B



Pumping speed

Air at 20 °C. Tolerance: ± 10% — 50 Hz - - - - 60 Hz



Technical Data			LX 0030 B	LX 0055 B
Nominal pumping speed	50 Hz / 60 Hz	m ³ /h	25 / 31	45 / 56
Ultimate pressure	50 Hz / 60 Hz	hPa (mbar)	33	33
Nominal motor rating	50 Hz / 60 Hz	kW	0.75 / 1.1	1.5 / 2.2
Nominal motor speed	50 Hz / 60 Hz	min ⁻¹	2900 / 3500	2900 / 3500
Noise level (ISO 2151)	50 Hz / 60 Hz	dB(A)	70	70
Weight approx.		kg	25	30 / 33
Dimensions	L x W x H	mm	361 x 200 x 242	430 x 200 x 255
Gas inlet / outlet		G	1" / 1"	1" / 1"

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Technical data is subject to change. Created in Germany 02/N

Dolphin

Liquid Ring Vacuum Pumps LX 0110 - 0180 B



Dolphin LX pumps are robust and proven liquid ring vacuum pumps from Busch in a compact block design. Their proven operating principle enables them to be used in all sectors of industry. This series encompasses the decades of experience in construction and use of liquid ring vacuum pumps. This means the Dolphin LX series offers extremely efficient and modern vacuum generation for the rough vacuum range up to 33 hPa (mbar) of ultimate pressure.

Application-oriented

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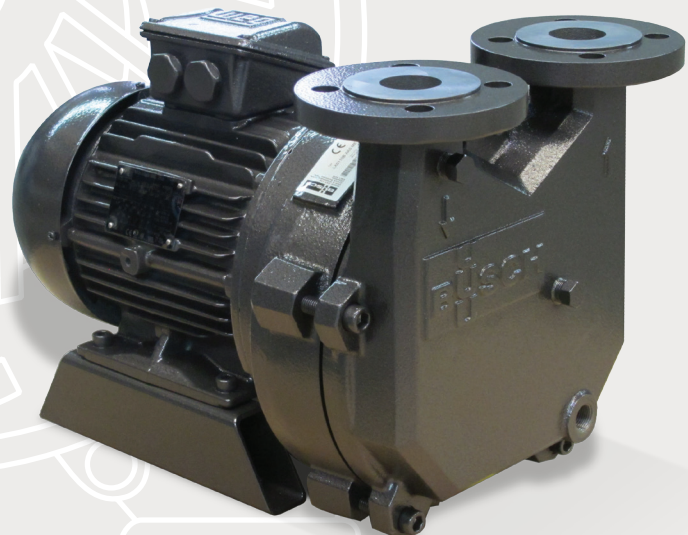
Even critical applications, such as the discharge of humid gases or vapours, can easily be carried out. Dolphin LX liquid ring vacuum pumps are also available in different ATEX versions.

Compact

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Dolphin LX – Robust and compact. Ideal for difficult applications.



Dolphin

Liquid Ring Vacuum Pumps LX 0110 - 0180 B



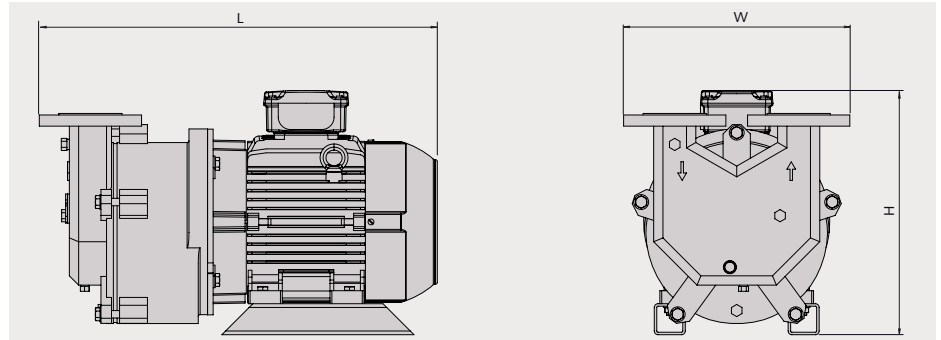
Technical specifications

Dolphin LX pumps are single-stage liquid ring vacuum pumps. Normally water is being used as the operating fluid. An operation with other fluids is also possible, if required by the process conditions. An eccentrically mounted impeller wheel rotates within a housing. This housing is filled with water to the extent that the vanes of the impeller are immersed in the water. The rotary motion of the impeller wheel and the consequent centrifugal force cause the liquid in the housing to form the so-called liquid ring. The gas is conveyed in the spaces between the individual vanes and the liquid ring. Thanks to the eccentric arrangement of the impeller wheel, the volumes of these spaces change with the result that gas is sucked in, compressed and discharged again.

Accessories/technical options

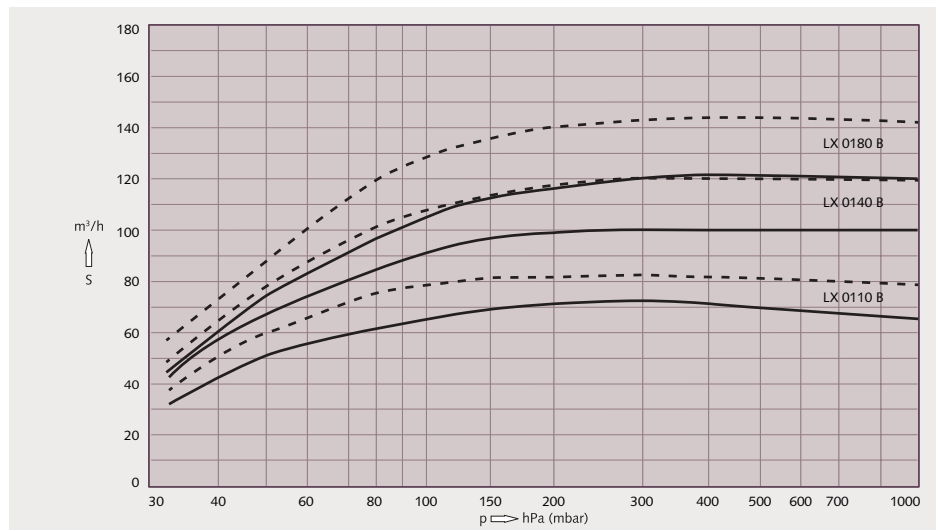
- Liquid separator
- Cavitation protection
- Heat exchanger
- Gas ejector
- Non-return valves
- Drain valves
- Vacuum relief valves

Dolphin LX 0110 - 0180 B



Pumping speed

Air at 20 °C. Tolerance: ± 10% — 50 Hz - - - - 60 Hz



Technical Data			LX 0110 B	LX 0140 B	LX 0180 B
Nominal pumping speed	50 Hz / 60 Hz	m ³ /h	72 / 83	100 / 120	122 / 144
Ultimate pressure	50 Hz / 60 Hz	hPa (mbar)	33	33	33
Nominal motor rating	50 Hz / 60 Hz	kW	2.2 / 3.0	3.0 / 4.0	4.0 / 5.5
Nominal motor speed	50 Hz / 60 Hz	min ⁻¹	1500 / 1800	1500 / 1800	1500 / 1800
Noise level (ISO 2151)	50 Hz / 60 Hz	dB(A)	70	70	70
Weight approx.		kg	55 / 58	65 / 70	75 / 78
Dimensions	L x W x H	mm	517 x 330 x 345	544 x 330 x 364	564 x 330 x 364
Gas inlet/outlet		DN	40 / 40	40 / 40	40 / 40

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Dolphin

Liquid Ring Vacuum Pumps LX 0260 - 0430 B



Dolphin LX pumps are robust and proven liquid ring vacuum pumps from Busch in a compact block design. Their proven operating principle enables them to be used in all sectors of industry. This series encompasses the decades of experience in construction and use of liquid ring vacuum pumps. This means the Dolphin LX series offers extremely efficient and modern vacuum generation for the rough vacuum range up to 33 hPa (mbar) of ultimate pressure.

Application-oriented

Dolphin LX liquid ring vacuum pumps can be operated in simple circulating systems, in open or closed liquid cycles. Thanks to the precise grading between the sizes, the wide range of accessories and the versions of different materials, Dolphin LX pumps are perfectly suited to many industrial processes.

Even critical applications, such as the discharge of humid gases or vapours, can easily be carried out. Dolphin LX liquid ring vacuum pumps are also available in different ATEX versions.

Compact

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Dolphin LX – Robust and compact. Ideal for difficult applications.



Dolphin LX 0330 B

Dolphin

Liquid Ring Vacuum Pumps LX 0260 - 0430 B



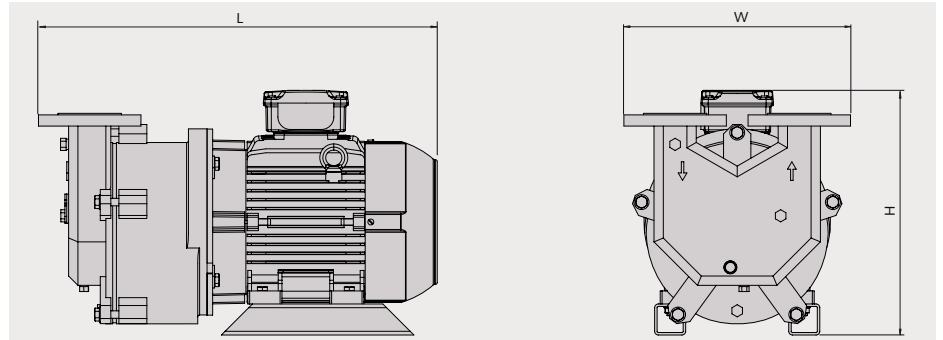
Technical specifications

Dolphin LX pumps are single-stage liquid ring vacuum pumps. Normally water is being used as the operating fluid. An operation with other fluids is also possible, if required by the process conditions. An eccentrically mounted impeller wheel rotates within a housing. This housing is filled with water to the extent that the vanes of the impeller are immersed in the water. The rotary motion of the impeller wheel and the consequent centrifugal force cause the liquid in the housing to form the so-called liquid ring. The gas is conveyed in the spaces between the individual vanes and the liquid ring. Thanks to the eccentric arrangement of the impeller wheel, the volumes of these spaces change with the result that gas is sucked in, compressed and discharged again.

Accessories/technical options

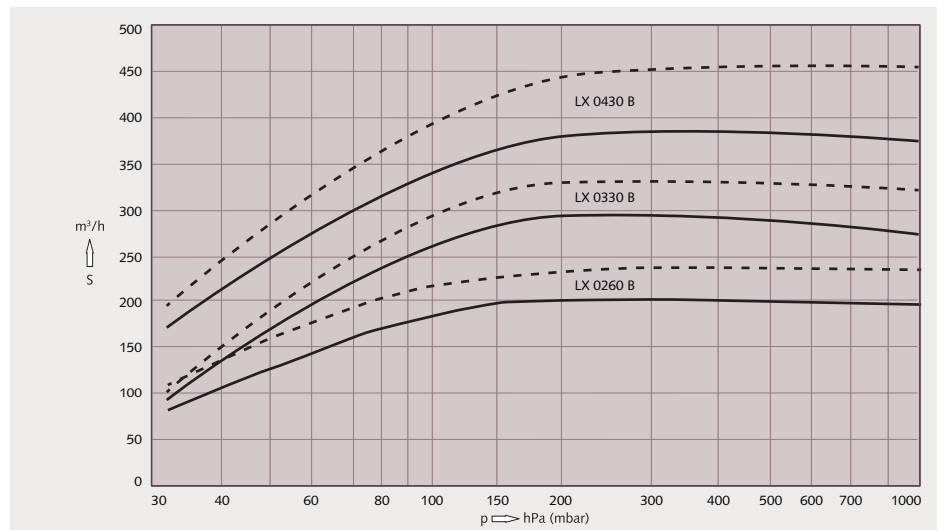
- Liquid separator
- Cavitation protection
- Heat exchanger
- Gas ejector
- Non-return valves
- Drain valves
- Vacuum relief valves

Dolphin LX 0260 - 0430 B



Pumping speed

Air at 20 °C. Tolerance: ± 10% — 50 Hz - - - - 60 Hz



Technical Data			LX 0260 B	LX 0330 B	LX 0430 B
Nominal pumping speed	50 Hz / 60 Hz	m³/h	200 / 240	280 / 330	372 / 455
Ultimate pressure	50 Hz / 60 Hz	hPa (mbar)	33	33	33
Nominal motor rating	50 Hz / 60 Hz	kW	5.5 / 7.5	7.5 / 11.0	11.0 / 15.0
Nominal motor speed	50 Hz / 60 Hz	min ⁻¹	1500 / 1800	1500 / 1800	1500 / 1800
Noise level (ISO 2151)	50 Hz / 60 Hz	dB(A)	72	72	72
Weight approx.		kg	105 / 116	132	190 / 198
Dimensions	L x W x H	mm	680 x 365 x 396	705 x 365 x 396	814 x 425 x 510
Gas inlet/outlet		DN	50 / 50	50 / 50	65 / 65

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