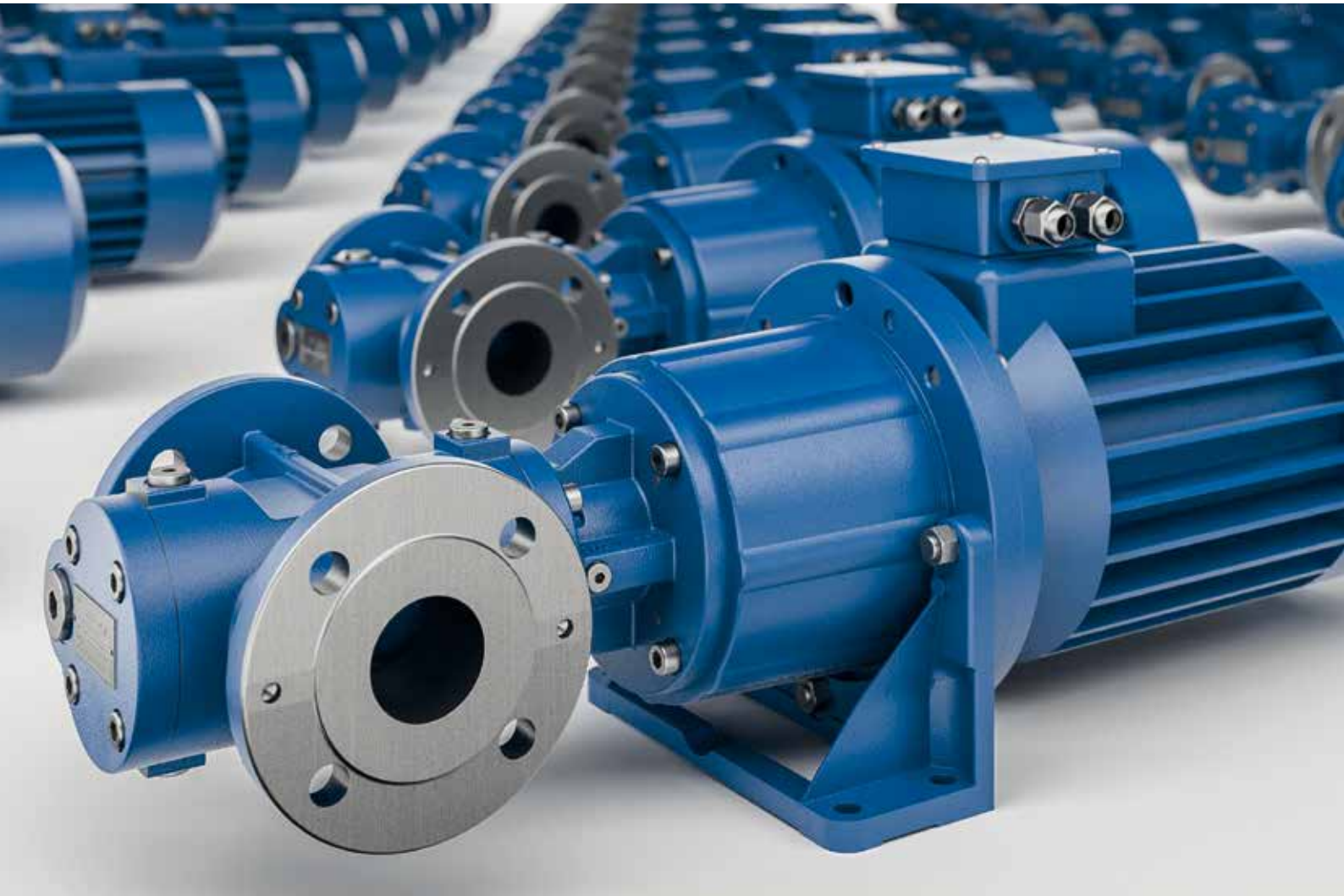


■■■■■■ Pumps.

KRAL



KRAL Serial Production Program.

Extract from our portfolio.

Welcome to KRAL.

About us.

With headquarters in Austria, KRAL GmbH was founded in 1950 and has been an independent family enterprise ever since. We therefore think and invest long-term so that we can remain a stable and reliable business partner for our customers.

KRAL develops and produces screw pumps and flow measurement technology. In addition, we offer customer-specific solutions for systems, from the initial engineering process through to commissioning. And of course our After Sales Service is available to help you after purchase. Our primary business sectors include marine, power generation, oil and gas, mechanical engineering, and chemicals. Our customers include local businesses as well as global industrial concerns.

What you can expect from us.

Since the company was founded, KRAL has established itself as a manufacturer of quality products with a fair price/performance ratio. In order to live up to our standard, we continuously invest in our employees, our manufacturing processes, and our methodological expertise. A commitment to Total Quality Management (TQM) is a key component of our company philosophy. Furthermore, we are increasing the levels of automation and digitization in our company. Our customers claim that we can meet special needs. What's more, KRAL is greatly appreciated for its reliable partnerships and the fact that working together with us is professional and very straightforward. This

makes us quite proud. We will continue to strengthen these values in the future. That's why we continuously invest in innovations, both for products as well as methodology and processes.

A key component in our approach to customer-orientation is that you can rely on excellent care from our Customer Center as well as our After Sales Service. This includes both expertise and reaction speed.

We have summarized what you can expect as a KRAL customer in our company vision:

"KRAL is quality, innovation and quick response, anytime and anywhere around the world."

Check out our services and see for yourself. We will be happy to help you.



DI Otmar Kräutler
CEO



New KRAL Serial Production Program.

Faster delivery with best price guarantee.

To optimize costs and delivery times for our customers, KRAL has expended its portfolio with a serial production program for frequently used pump products. Thanks to targeted standardization in the manufacturing of these products, the reliability and high quality for which KRAL is known can be offered while maintaining shorter delivery times and price advantages.

This catalogue contains a description of these new serial production program with the most important key data as well as article numbers, which you can use in the quick selection tool directly on our website www.kral.at/en for an order. Of course we are available for personal consultation in case of any questions.

Your benefits.

- Proven KRAL reliability and quality.**
- Easy ordering.**
- Short delivery times.**
- Cost savings.**

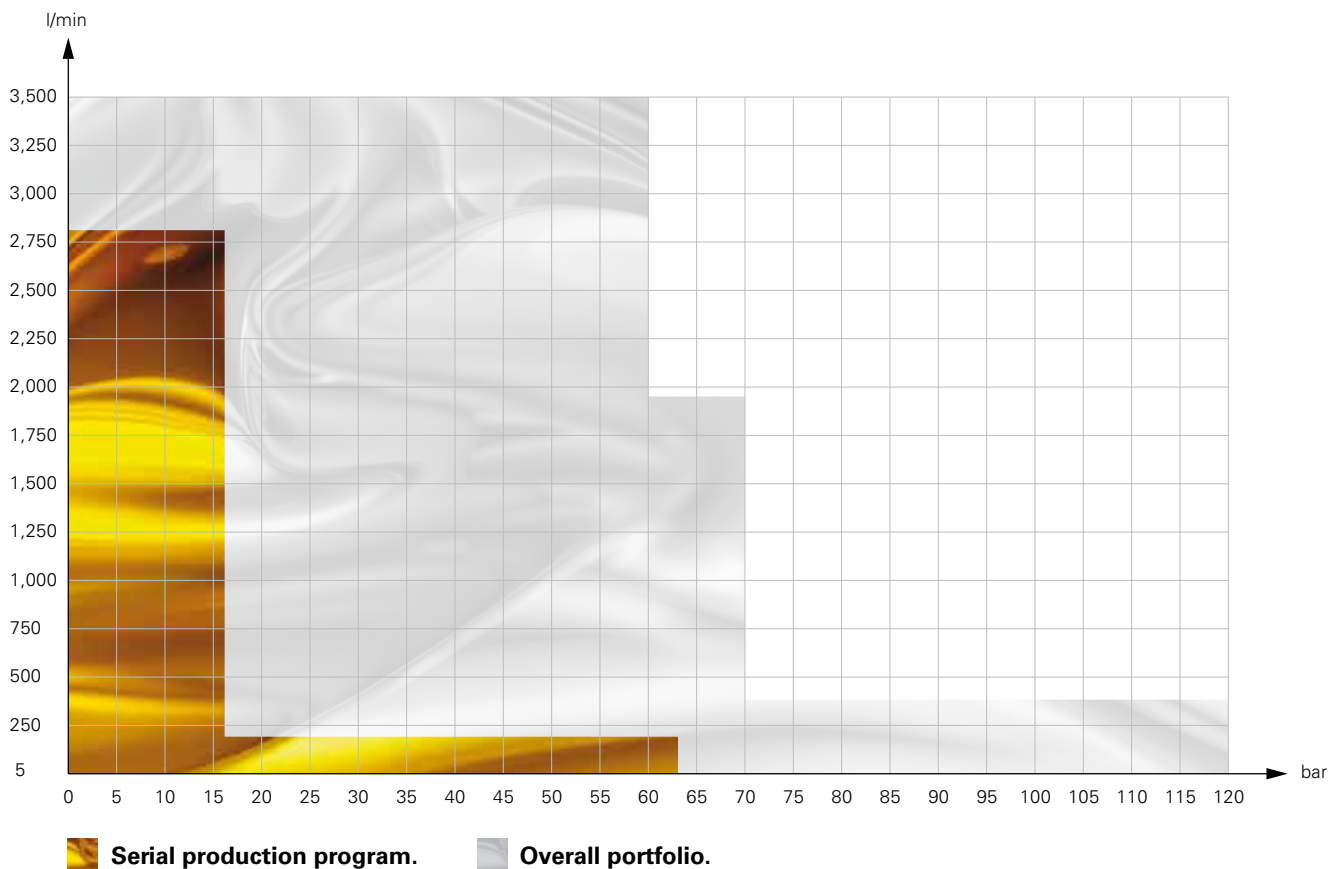
Contact worldwide.

Visit our website to find our partner for your country.

www.kral.at/en/sales-and-service-partner/



Share of Serial Production Program in our Portfolio.



Diesel Oils, Lubricating Oils and Heavy Fuel Oils.

Wide selection of products suitable for liquid.

Focus on customer requirements.

Every operator has special requirements, which have to be considered for the selection and design of a pump. Here our customers can rely on the decades of technical expertise and advisory skills of KRAL. In addition to our extensive knowledge and expertise, the time and cost factors are, however, important to us in order to compile the respective optimum offer.

Serial production program.

KRAL has therefore developed a range as a supplement to the existing portfolio for the most wanted liquids – diesel oils, lubricating oils and heavy fuel oils – that is manufactured serially in tried-and-trusted form as single pumps (K and L series) as well as single stations (EL and EK series) and double stations (DL, DK and DS series). Exact information about the various configurations is available in this catalogue.

Convincing advantages.

Generally KRAL pumps are distinguished by high delivery rates under low space requirements and high differential pressures as well as low-pulsation transporting and outstanding suction behaviour. The stations offer a wide range of functionality in compact spaces and simplest installation. Double stations offer high operational reliability. In addition they provide the possibility of interruption-free switching over as well as doubling of the delivery rate in parallel operation.

The following pages show the various design variants of this new serial production program, clearly structured by the pumped liquid for which they were conceived. The specifications of the delivery rates, viscosities, temperatures, pressures and motor output data aid you in selecting in accordance with your concrete requirements.

Download Pump Data.

Download all the important data sheets conveniently.

We have made the data of the pumps from the serial production program available to you under www.kral.at/en. In the provided quick selection tool simply enter the article number listed in this catalogue. The tool compiles the data for you for downloading to your computer.

Your download package includes.

- Operating data sheet.
- 3D model.
- Dimension sheet.
- Product information sheet.



Colour Code for Different Liquids.



DIESEL OILS.




LUBRICATING OILS.





HEAVY FUEL OILS.

The Serial Production Program at a Glance.

Which design and type for which medium?

Pumped liquid.	Design.	Type.	Delivery rate.	Pressure.	Temperature.	Viscosity.	Page.
			[l/min]	[bar]	[°C]	[mm ² /s]	
 Diesel oils. Fuel oil extra light. Diesel. Marine fuels. ISO 8217:2017 E.	Pump.	KF	5.3 – 724.7	2 – 8	40 – 0	1.5 – 6.0	7
		KV	651.2 – 3180.5	2 – 8	40 – 0	1.5 – 6.0	8
		LFI	4.1 – 180.4	8 – 30	40 – 0	1.5 – 6.0	9
	Single station.	EKL13	0.9 – 127.6	2 – 6	40 – 0	1.5 – 6.0	10
		ELL13	4.1 – 118.8	8 – 30	40 – 0	1.5 – 6.0	11
	Double station.	DKC	0.2 – 265.0	2 – 8	40 – 0	1.5 – 6.0	12
		DLC	0.1 – 180.4	8 – 30	40 – 0	1.5 – 6.0	13
		DL2	1.7 – 29.6	2 – 6	40 – 0	1.5 – 6.0	14
		DL3	25.0 – 56.5	2 – 6	40 – 0	1.5 – 6.0	15
			DL4	55.2 – 127.9	2 – 6	40 – 0	1.5 – 6.0

Pumped liquid.	Design.	Type.	Delivery rate.	Pressure.	Temperature.	Viscosity.	Page.
			[l/min]	[bar]	[°C]	[mm ² /s]	
 Lubricating oils.	Pump.	KF	4.5 – 512.3	2 – 14	150 – 40	2 – 68	19
		KF	202.4 – 775.9	2 – 12	150 – 40	2 – 68	19
		KV	640.0 – 2065.0	2 – 12	150 – 40	2 – 68	20
		KV	1815.5 – 3390.2	2 – 10	150 – 40	2 – 68	20

Pumped liquid.	Design.	Type.	Delivery rate.	Pressure.	Temperature.	Viscosity.	Page.
			[l/min]	[bar]	[°C]	[mm ² /s]	
 Heavy fuel oils.	Pump.	KF	7.7 – 797.4	2 – 10	150 – 50	12 – 380	23
		KV	725.3 – 1350.1	2 – 10	150 – 50	12 – 380	24
		KV	1198.6 – 2274.4	2 – 8	150 – 50	12 – 380	24
		LFI	7.5 – 200.0	8 – 30	150 – 50	12 – 380	25
	Single station.	EKS12	3.1 – 137.3	2 – 6	150 – 80	12 – 180	26
		ELS12	7.5 – 135.0	8 – 30	150 – 80	12 – 180	27
	Double station.	DKC	2.8 – 283.4	2 – 10	150 – 80	12 – 180	28
		DLC	2.2 – 198.5	8 – 30	150 – 80	12 – 180	29
		DS1	1.9 – 33.0	1 – 6	150 – 80	12 – 180	30
		DS3	12.4 – 61.3	1 – 6	150 – 80	12 – 180	31
		DS4	28.0 – 100.9	1 – 6	150 – 80	12 – 180	32
		DS4	107.4 – 135.5	1 – 5	150 – 80	12 – 180	32

Fabrication tolerance acc. VDMA 24284 - tolerance class II.



**DIESEL OILS.
FUEL OIL EXTRA LIGHT.
DIESEL.
MARINE FUELS.
ISO 8217:2017 E.**

Pump | Type KF.

Delivery rate 5.3 – 724.7 l/min.

Product information.

- KRAL screw pump KF.
- Flange design.
- Mechanical seal standard.
- Overflow valve.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.



Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).

On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 8		40 – 0		1.5 – 6.0		9	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KF- 5.ABA.100001	5	5.3 – 7.3	2800	0.37	7.4 – 9.3	3360	0.44
KF- 7.ABA.100001	7	8.8 – 11.4	2800	0.37	11.8 – 14.4	3360	0.44
KF- 10.ABA.100002	10	12.5 – 15.7	2800	0.55	16.5 – 19.7	3360	0.66
KF- 15.ABA.100003	15	21.6 – 25.4	2880	0.75	27.7 – 31.5	3455	0.90
KF- 20.ABA.100004	20	28.4 – 33.4	2880	1.10	36.5 – 41.5	3455	1.30
KF- 32.ABA.100005	32	49.9 – 55.8	2895	1.50	62.7 – 68.5	3470	1.80
KF- 42.ABA.100006	42	66.5 – 74.3	2895	2.20	83.5 – 91.3	3470	2.64
KF- 55.ABA.100007	55	92.5 – 102.5	2895	2.20	115.7 – 125.7	3470	2.64
KF- 74.ABA.100008	74	121.7 – 133.4	2895	3.00	151.5 – 163.2	3470	3.60
KF- 85.ABA.100008	85	137.4 – 149.5	2895	3.00	170.6 – 182.7	3470	3.60
KF- 105.ABA.100009	105	165.8 – 174.5	2905	4.00	195.9 – 214.7	3485	4.80
KF- 118.ABA.100010	118	200.6 – 217.0	2930	5.50	248.6 – 265.0	3515	6.60
KF- 160.ABA.100011	160	281.2 – 303.4	2930	7.50	348.1 – 370.3	3515	9.00
KF- 210.ABA.100011	210	377.4 – 402.8	2930	7.50	465.0 – 490.4	3515	9.00
KF- 235.ABA.100012	235	171.4 – 197.0	1440	4.00	217.5 – 243.1	1725	4.80
KF- 275.ABA.100013	275	209.5 – 240.2	1460	5.50	265.9 – 296.6	1750	6.60
KF- 370.ABA.100014	370	282.6 – 318.8	1460	7.50	356.1 – 392.3	1750	9.00
KF- 450.ABA.100014	450	318.8 – 373.3	1460	7.50	408.3 – 462.8	1750	9.00
KF- 550.ABA.100015	550	441.9 – 485.9	1465	11.00	550.5 – 594.5	1755	13.20
KF- 660.ABA.100015	660	531.8 – 591.0	1465	11.00	665.5 – 724.7	1755	13.20

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Pump | Type KV.

Delivery rate 651.2 – 3180.5 l/min.

Product information.

- KRAL screw pump KV.
- Vertical design.
- Mechanical seal standard.
- Overflow valve.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.

Marine acceptance, optional.

Ship classification:
 ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.



Pressure [bar].		Temperature [°C].		Viscosity [mm²/s].		Overflow valve [bar].	
2 – 8		40 – 0		1.5 – 6.0		9	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KV-851.ABA.100016	851	651.2 – 710.5	1465	15.00	808.5 – 867.8	1755	18.00
KV-951.ABA.100017	951	682.3 – 810.2	1470	18.50	878.0 – 1005.8	1760	22.00
KV-1101.ABA.100017	1101	957.5 – 1033.1	1470	18.50	1182.5 – 1258.2	1760	22.00
KV-1301.ABA.100018	1301	1032.3 – 1153.7	1470	22.00	1293.9 – 1415.3	1760	26.00
KV-1500.ABA.100019	1500	1162.6 – 1317.9	1475	30.00	1470.2 – 1625.5	1770	36.00
KV-1700.ABA.100019	1700	1364.5 – 1544.3	1475	30.00	1724.4 – 1904.6	1770	36.00
KV-2200.ABA.100020	2200	1859.4 – 2047.7	1485	37.00	2319.3 – 2507.6	1780	45.00
KV-2500.ABA.100021	2500	2086.2 – 2297.5	1485	45.00	2319.3 – 2507.6	1780	54.00
KV-2900.ABA.100022	2900	2358.3 – 2597.2	1485	55.00	3076.9 – 3180.5	1780	66.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Pump | Type LFI.

Delivery rate 4.1 – 180.4 l/min.

Product information.

- KRAL screw pump LFI.
- Flange design.
- Mechanical seal standard.
- Overflow valve.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.

Marine acceptance, optional.

Ship classification:
 ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.



Pressure [bar].	Temperature [°C].	Viscosity [mm²/s].	Overflow valve [bar].
8 – 30	40 – 0	1.5 – 6.0	33

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
LFI- 5.ABAF.10001	5	4.1 – 6.7	2880	0.75	6.1 – 8.7	3455	0.90
LFI- 7.ABAF.10002	7	7.1 – 10.6	2880	1.10	10.3 – 13.7	3455	1.32
LFI- 10.ABAF.10003	10	10.6 – 14.8	2895	1.50	14.7 – 19.0	3470	1.80
LFI- 15.ABAF.10004	15	18.7 – 23.7	2895	2.20	24.8 – 29.9	3470	2.62
LFI- 20.ABAF.10005	20	24.6 – 31.2	2895	3.00	32.6 – 39.3	3470	3.60
LFI- 26.ABAF.10006	26	31.6 – 40.2	2905	4.00	42.1 – 50.6	3485	4.80
LFI- 32.ABAF.10007	32	45.4 – 53.2	2905	4.00	58.3 – 66.1	3485	4.80
LFI- 42.ABAF.10008	42	61.3 – 71.7	2930	5.50	78.5 – 88.9	3515	6.60
LFI- 55.ABAF.10009	55	85.8 – 99.2	2930	7.50	109.4 – 122.8	3515	9.00
LFI- 74.ABAF.10010	74	114.8 – 130.5	2945	11.00	145.1 – 160.8	3530	13.20
LFI- 85.ABAF.10010	85	130.6 – 146.7	2945	11.00	164.2 – 180.4	3530	13.20

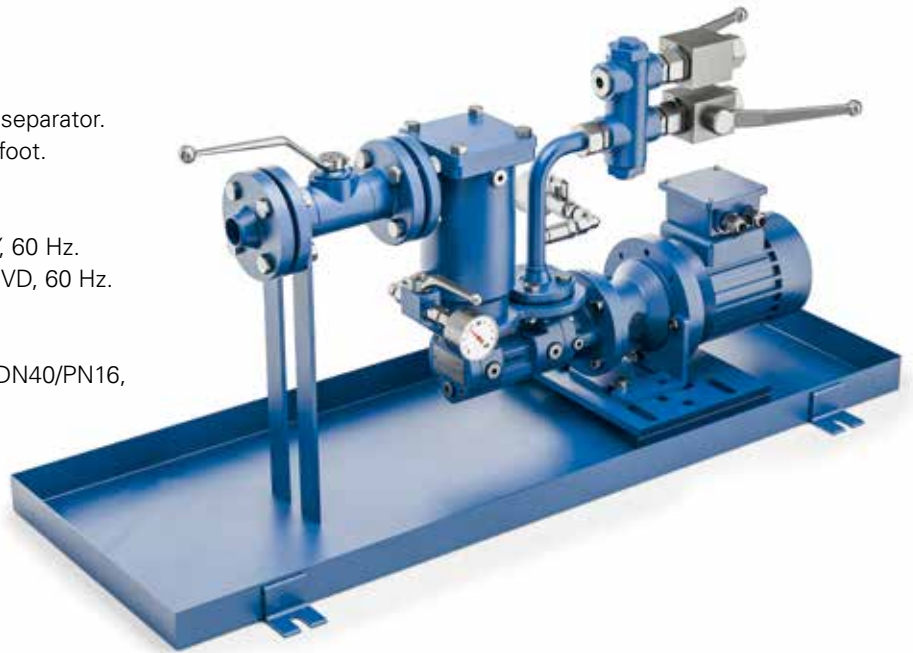
Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Single Station | Type EKL13.

Delivery rate 0.9 – 127.6 l/min.

Product information.

- KRAL single station EKL13.
- KRAL screw pump KFN.
- Overflow valve.
- Mechanical seal standard.
- Strainer (mesh width 0.25 mm) incl. air separator.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Vacuum meter, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- Ball valve, suction-side, DN25/PN16 or DN40/PN16, incl. welding neck counterflange.
- Pressure maintaining valve.
- 2 ball valves, pressure-side, with cutting ring screw connection.
- Base frame with oil pan.



Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).

On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 6		40 – 0		1.5 – 6.0		9	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
EKL13- 240.AA.1001	5	0.9 – 2.6	1380	0.25	1.9 – 3.6	1660	0.30
EKL13- 400.AA.1001	7	2.0 – 4.2	1380	0.25	3.5 – 5.8	1660	0.30
EKL13- 500.AA.1001	10	3.3 – 6.0	1380	0.25	5.3 – 8.0	1660	0.30
EKL13- 750.AA.1002	7	9.7 – 11.9	2800	0.37	12.7 – 14.9	3360	0.44
EKL13-1000.AA.1003	10	13.5 – 16.3	2800	0.55	17.5 – 20.3	3360	0.66
EKL13-1800.AA.1004	15	22.0 – 25.2	2800	0.55	27.9 – 31.2	3360	0.66
EKL13-2300.AA.1005	20	28.9 – 33.2	2880	0.75	38.0 – 42.4	3450	0.90
EKL13-3200.AA.1006	32	51.8 – 56.9	2895	1.50	64.5 – 69.6	3470	1.80
EKL13-4000.AA.1007	42	96.0 – 75.8	2895	2.20	86.0 – 92.8	3470	2.62
EKL13-6000.AA.1008	55	95.7 – 104.4	2895	3.00	118.9 – 127.6	3470	3.60

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Single Station | Type ELL13.

Delivery rate 4.1 – 118.8 l/min.

Product information.

- KRAL single station ELL13.
- KRAL screw pump LFM.
- Overflow valve.
- Mechanical seal standard.
- Strainer (mesh width 0.25 mm) incl. air separator.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Vacuum meter, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- Ball valve, suction-side, DN25/PN16 or DN40/PN16, incl. welding neck counterflange.
- Pressure maintaining valve.
- 2 ball valves, pressure-side, with cutting ring fitting.
- Base frame with oil pan.



ELL13.

Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
8 – 30		40 – 0		1.5 – 6.0		38	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
ELL13- 600.AA.10001	5	4.1 – 6.7	2880	1.10	6.1 – 8.7	3455	1.32
ELL13- 900.AA.10002	7	7.2 – 10.7	2895	1.50	10.3 – 13.8	3470	1.80
ELL13-1200.AA.10002	10	10.4 – 14.8	2895	1.50	14.7 – 19.0	3470	1.80
ELL13-1800.AA.10003	15	18.7 – 23.7	2895	2.20	24.8 – 29.9	3470	2.62
ELL13-2400.AA.10004	20	24.6 – 31.2	2895	3.00	32.6 – 39.3	3470	3.60
ELL13-2600.AA.10005	26	31.4 – 40.0	2905	4.00	42.1 – 50.6	3485	4.80
ELL13-3300.AA.10006	32	45.2 – 43.0	2905	4.00	58.3 – 66.1	3485	4.80
ELL13-5000.AA.10007	42	61.3 – 71.7	2930	5.50	78.5 – 88.9	3515	6.60
ELL13-6500.AA.10008	54	81.2 – 95.6	2930	7.50	104.3 – 118.8	3515	9.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Double Station | Type DKC.

Delivery rate 0.2 – 265.0 l/min.

Product information.

- KRAL double station DKC.
- 2 KRAL screw pumps KFT.
- Overflow valve.
- Mechanical seal standard.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.25 mm) with strainer cover protection.
- 2 vacuum meters, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- SAE counter flanges with welding neck, 3000 psi, suction-side and pressure-side.
- Oil pan incl. drain screw.



Marine acceptance, optional.

Ship classification:
 ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS)
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 8		40 – 0		1.5 – 6.0		9	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DKC- 240.AAAA.10001	5	0.2 – 2.2	1380	0.25	1.2 – 3.2	1656	0.30
DKC- 450.AAAA.10001	7	1.1 – 3.8	1380	0.25	2.6 – 5.2	1656	0.30
DKC- 500.AAAA.10001	10	2.3 – 5.4	1380	0.25	4.2 – 7.4	1656	0.30
DKC- 600.AAAA.10002	5	5.3–7.3	2800	0.37	7.4 – 9.3	3360	0.44
DKC- 800.AAAA.10003	15	5.8 – 9.6	1400	0.55	8.7 – 12.6	1680	0.66
DKC- 900.AAAA.10004	7	8.8 – 11.4	2800	0.55	11.8 – 14.4	3360	0.66
DKC- 1100.AAAA.10003	20	7.6 – 12.6	1400	0.55	11.5 – 16.5	1680	0.66
DKC- 1200.AAAA.10004	10	12.5 – 15.7	2800	0.55	16.5 – 19.7	3360	0.66
DKC- 1600.AAAA.10005	32	17.8 – 23.7	1445	1.10	24.1 – 30.0	1730	1.32
DKC- 1800.AAAA.10006	15	21.6 – 25.4	2880	1.10	27.7 – 31.5	3455	1.32
DKC- 2400.AAAA.10006	20	28.4 – 33.4	2880	1.10	36.5 – 41.5	3455	1.32
DKC- 2500.AAAA.10005	42	23.8 – 31.6	1445	1.10	32.2 – 40.0	1730	1.32
DKC- 3000.AAAA.10007	55	34.0 – 44.0	1445	1.50	45.5 – 55.5	1730	1.80
DKC- 3300.AAAA.10008	32	49.9 – 55.8	2895	2.20	62.7 – 68.5	3470	2.42
DKC- 4000.AAAA.10009	74	46.0 – 57.7	1435	2.20	60.8 – 72.5	1720	2.42
DKC- 4500.AAAA.10009	85	53.3 – 65.5	1435	2.20	69.8 – 81.9	1720	2.42
DKC- 5000.AAAA.10008	42	66.5 – 74.3	2895	2.20	82.5 – 91.3	3470	2.42
DKC- 5500.AAAA.10010	105	54.0 – 72.7	1435	3.00	73.7 – 92.5	1720	3.60
DKC- 6000.AAAA.10011	55	92.5 – 102.5	2895	3.00	115.7 – 125.7	3470	3.60
DKC- 6500.AAAA.10010	118	78.0 – 94.4	1435	3.00	101.4 – 117.8	1720	3.60
DKC- 8000.AAAA.10012	74	122.2 – 133.9	2905	4.00	152.3 – 164.0	3485	4.80
DKC- 9000.AAAA.10012	85	138.0 – 150.1	2905	4.00	171.4 – 183.5	3485	4.80
DKC-11000.AAAA.10013	105	157.5 – 176.3	2930	5.50	198.0 – 216.8	3515	6.60
DKC-13000.AAAA.10013	118	200.6 – 217.0	2930	5.50	248.6 – 265.0	3515	6.60

Fabrication tolerance acc. VDMA 24284 - tolerance class II.



Double Station | Type DLC.

Delivery rate 0.1 – 180.4 l/min.

Product information.

- KRAL double station DLC.
- 2 KRAL screw pumps LFM.
- Overflow valve.
- Mechanical seal standard.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.25 mm) with strainer cover protection.
- 2 vacuum meters, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- SAE counter flanges with welding neck, 3000 psi, suction-side and pressure-side.
- Oil pan incl. drain screw.



DLC.

Marine acceptance, optional.

Ship classification:
 ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
8 – 30		40 – 0		1.5 – 6.0		33	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DLC- 240.AAAA.10001	5	0.1 – 1.3	1400	0.55	0.1 – 2.3	1680	0.66
DLC- 450.AAAA.10001	7	0.2 – 2.6	1400	0.55	0.7 – 4.1	1680	0.66
DLC- 500.AAAA.10002	10	0.3 – 4.2	1420	0.75	2.0 – 6.2	1700	0.90
DLC- 600.AAAA.10003	5	4.1 – 6.7	2880	1.10	6.1 – 8.7	3455	1.32
DLC- 800.AAAA.10004	15	3.2 – 8.8	1445	1.10	6.2 – 11.3	1730	1.32
DLC- 900.AAAA.10005	7	7.2 – 10.7	2895	1.50	10.3 – 13.7	3470	1.80
DLC- 1100.AAAA.10006	20	4.2 – 10.8	1445	1.50	8.2 – 14.9	1730	1.80
DLC- 1200.AAAA.10005	10	10.6 – 14.8	2895	1.50	14.6 – 18.9	3470	1.80
DLC- 1300.AAAA.10007	26	5.2 – 13.7	1435	2.20	10.3 – 18.8	1720	2.64
DLC- 1600.AAAA.10008	32	12.9 – 20.7	1435	3.00	19.2 – 27.0	1720	3.60
DLC- 1800.AAAA.10009	15	18.7 – 23.7	2895	2.20	24.7 – 29.7	3470	2.64
DLC- 2400.AAAA.10010	20	24.6 – 31.2	2895	3.00	32.4 – 39.1	3470	3.60
DLC- 2500.AAAA.10011	42	17.3 – 27.7	1440	4.00	25.7 – 36.1	1725	4.80
DLC- 2600.AAAA.10012	26	31.6 – 40.2	2905	4.00	42.1 – 50.6	3485	4.80
DLC- 3200.AAAA.10011	54	22.1 – 36.6	1440	4.00	33.4 – 47.8	1725	4.80
DLC- 3300.AAAA.10013	32	46.0 – 53.8	2930	5.50	58.9 – 66.7	3515	6.60
DLC- 5000.AAAA.10013	42	61.3 – 71.7	2930	5.50	78.5 – 88.9	3515	6.60
DLC- 6500.AAAA.10014	54	81.2 – 95.6	2930	7.50	104.3 – 118.8	3515	9.00
DLC- 8000.AAAA.10015	74	114.8 – 130.5	2945	11.00	145.1 – 160.8	3530	13.20
DLC- 9000.AAAA.10016	85	130.6 – 146.7	2945	15.00	164.2 – 180.4	3530	18.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Double Station | Type DL2.

Delivery rate 1.7 – 29.6 l/min.

Product information.

- KRAL double station DL2.
- 2 KRAL screw pumps NE.
- Mechanical seal standard.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Overflow valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.25 mm).
- Manometer, lockable.
- SAE/DIN counter flanges with welding neck, suction-side and pressure-side.
- Oil pan.



Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 6		40 – 0		1.5 – 6.0		6.6	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DL2- 320.BAA.1001	10	1.7 – 3.7	900	0.18	3.0 – 5.0	1080	0.21
DL2- 400.BAA.1002	7	3.5 – 5.1	1380	0.25	5.0 – 6.6	1656	0.30
DL2- 500.BAA.1002	10	5.1 – 7.1	1380	0.25	7.1 – 9.1	1656	0.30
DL2- 750.BAA.1003	7	11.2 – 12.8	2800	0.55	14.2 – 15.8	3360	0.66
DL2-1000.BAA.1003	10	15.4 – 17.3	2800	0.55	19.4 – 21.4	3360	0.66
DL2-1300.BAA.1003	13	20.9 – 23.9	2800	0.55	26.5 – 29.6	3360	0.66

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Double Station | Type DL3.

Delivery rate 25.0 – 56.5 l/min.

Product information.

- KRAL double station DL3.
- 2 KRAL screw pumps NE.
- Mechanical seal standard.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Overflow valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.25 mm) with strainer cover protection.
- 2 vacuum meters, lockable.
- Manometer, lockable.
- SAE/DIN counter flanges with welding neck, suction-side and pressure-side.
- Oil pan.



DL3.

Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 6		40 – 0		1.5 – 6.0		6.6	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DL3-1800.BAA.1004	15	25.0 – 27.4	2880	0.75	31.2 – 33.6	3455	0.90
DL3-2300.BAA.1005	20	32.9 – 36.1	2880	1.10	41.0 – 44.1	3455	1.32
DL3-2900.BAA.1005	26	42.2 – 46.2	2880	1.10	52.5 – 56.5	3455	1.32

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Double Station | Type DL4.

Delivery rate 55.2 – 127.9 l/min.

Product information.

- KRAL double station DL4.
- 2 KRAL screw pumps NE.
- Mechanical seal standard.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Overflow valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.25 mm) with strainer cover protection.
- 2 vacuum meters, lockable.
- Manometer, lockable.
- SAE/DIN counter flanges with welding neck, suction-side and pressure-side.
- Oil pan.



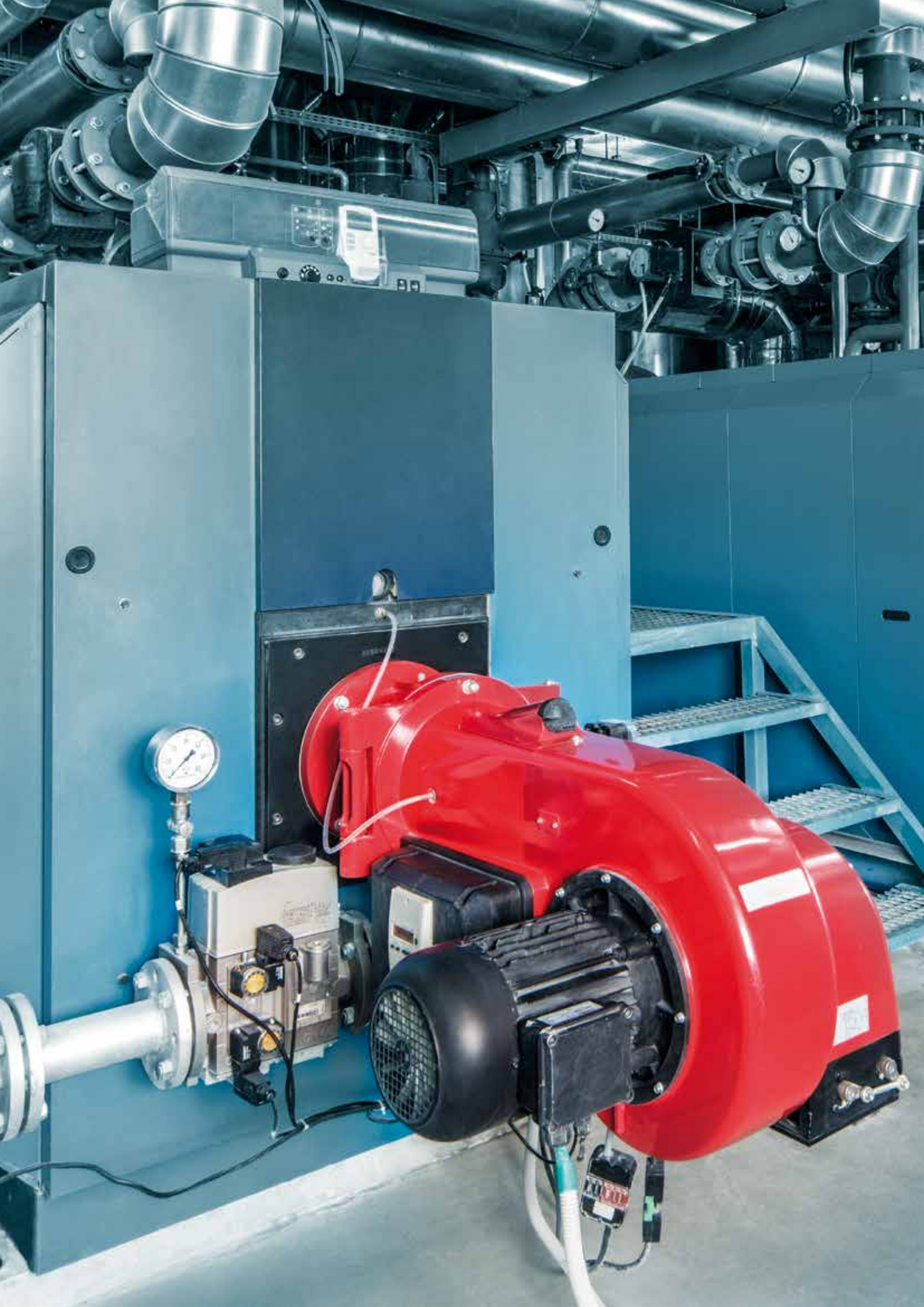
Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 6		40 – 0		1.5 – 6.0		6.6	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DL4-3200.BAA.1006	32	55.2 – 58.9	2895	1.50	68.0 – 71.6	3470	1.80
DL4-4000.BAA.1006	42	73.6 – 78.5	2895	1.50	90.6 – 95.4	3470	1.80
DL4-6000.BAA.1007	54	98.3 – 105.1	2895	2.20	121.1 – 127.9	3470	2.64

Fabrication tolerance acc. VDMA 24284 - tolerance class II.







LUBRICATING OILS.

Pump | Type KF.

Delivery rate 4.5 – 775.9 l/min.

Product information.

- KRAL screw pump KF.
- Flange design.
- Mechanical seal standard.
- Overflow valve.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.



KF



Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS)

On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].	Temperature [°C].	Viscosity [mm ² /s].	Overflow valve [bar].
2 – 14	150 – 40	2 – 68	16

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KF- 5.ACA.100023	5	4.5 – 8.8	2800	0.55	6.5 – 10.4	3360	0.66
KF- 7.ACA.100024	7	8.7 – 13.9	2880	0.75	11.2 – 16.4	3455	0.90
KF- 10.ACA.100024	10	11.6 – 18.7	2880	0.75	15.8 – 22.2	3455	0.90
KF- 15.ACA.100025	15	19.9 – 28.3	2880	1.10	26.0 – 33.7	3455	1.30
KF- 20.ACA.100026	20	26.4 – 37.5	2895	1.50	34.4 – 44.5	3470	1.80
KF- 32.ACA.100027	32	47.3 – 60.3	2895	2.20	60.0 – 73.0	3470	2.60
KF- 42.ACA.100028	42	63.0 – 80.4	2895	3.00	80.0 – 97.3	3470	3.60
KF- 55.ACA.100029	55	88.4 – 110.7	2905	4.00	111.8 – 134.1	3485	4.80
KF- 74.ACA.100030	74	118.2 – 144.4	2930	5.50	148.3 – 174.7	3515	6.60
KF- 85.ACA.100030	85	134.6 – 161.0	2930	5.50	167.7 – 194.7	3515	6.60
KF- 105.ACA.100031	105	150.2 – 191.9	2945	7.50	190.7 – 232.4	3530	9.00
KF- 118.ACA.100031	118	194.5 – 231.0	2945	7.50	242.5 – 279.0	3530	9.00
KF- 160.ACA.100032	160	273.0 – 322.5	2945	11.00	339.9 – 389.4	3530	13.00
KF- 210.ACA.100033	210	368.4 – 424.7	2945	15.00	456.0 – 512.3	3530	18.00

Pressure [bar].	Temperature [°C].	Viscosity [mm ² /s].	Overflow valve [bar].
2 – 12	150 – 40	2 – 68	16

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KF- 275.ACA.100034	275	202.4 – 265.6	1460	7.50	258.7 – 322.0	1750	9.00
KF- 370.ACA.100035	370	275.4 – 350.0	1465	11.00	348.9 – 423.5	1755	13.20
KF- 450.ACA.100036	450	307.6 – 419.9	1465	15.00	397.1 – 509.4	1755	18.00
KF- 550.ACA.100037	550	431.6 – 522.3	1465	15.00	540.2 – 630.9	1755	18.00
KF- 660.ACA.100038	660	520.3 – 642.2	1470	18.50	654.0 – 775.9	1760	22.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Pump | Type KV.

Delivery rate 640.0 – 3390.2 l/min.

Product information.

- KRAL screw pump KV.
- Vertical design.
- Mechanical seal standard.
- Overflow valve.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.

Marine acceptance, optional.

Ship classification:
 ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.



Pressure [bar].	Temperature [°C].	Viscosity [mm²/s].	Overflow valve [bar].
2 – 12	150 – 40	2 – 68	16

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KV-851.ACA.100039	851	640.0 – 762.3	1470	18.50	797.4 – 919.6	1760	26.00
KV-951.ACA.100040	951	655.9 – 919.2	1475	30.00	854.9 – 1118.2	1770	36.00
KV-1101.ACA.100040	1101	943.7 – 1099.5	1475	30.00	1172.6 – 1328.4	1770	36.00
KV-1301.ACA.100041	1301	1017.4 – 1267.6	1485	37.00	1283.6 – 1533.7	1780	44.00
KV-1500.ACA.100042	1500	1136.8 – 1456.6	1485	37.00	1444.4 – 1764.3	1780	54.00
KV-1700.ACA.100043	1700	1334.7 – 1705.1	1485	45.00	1694.6 – 2065.0	1780	54.00

Pressure [bar]	Temperature [°C].	Viscosity [mm²/s].	Overflow valve [bar].
2 – 10	150 – 40	2 – 68	16

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KV-2200.ACA.100044	2200	1815.5 – 2213.1	1485	55.00	2275.4 – 2673.4	1780	66.00
KV-2500.ACA.100044	2500	2036.9 – 2483.0	1485	55.00	2552.9 – 2999.0	1780	66.00
KV-2900.ACA.100045	2900	2302.6 – 2806.9	1485	75.00	2885.9 – 3390.2	1780	90.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.







HEAVY FUEL OILS.

Pump | Type KF.

Delivery rate 7.7 – 797.4 l/min.

Product information.

- KRAL screw pump KF.
- Flange design.
- Mechanical seal hard face.
- Overflow valve.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 H.z



Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).

On request: NK, RRR, IRS, Dual Class etc.

KF.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 10		150 – 50		12 – 380		11	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output .
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KF- 5.BCA.100046	5	7.7 – 9.6	2800	0.55	9.7 – 11.6	3360	0.66
KF- 7.BCA.100047	7	12.4 – 15.0	2880	0.75	15.5 – 18.1	3455	0.90
KF- 10.BCA.100047	10	16.9 – 20.0	2880	0.75	21.0 – 24.1	3455	1.30
KF- 15.BCA.100048	15	26.2 – 29.9	2880	1.10	32.3 – 36.1	3455	1.30
KF- 20.BCA.100049	20	34.6 – 39.6	2895	1.50	42.7 – 47.6	3470	1.80
KF- 32.BCA.100050	32	57.0 – 62.7	2895	2.20	69.7 – 75.5	3470	2.60
KF- 42.BCA.100051	42	75.9 – 83.6	2895	3.00	92.9 – 100.5	3470	3.60
KF- 55.BCA.100052	55	105.0 – 114.8	2905	4.00	128.3 – 138.2	3485	4.80
KF- 74.BCA.100053	74	137.6 – 149.2	2930	5.50	167.9 – 179.6	3515	6.60
KF- 85.BCA.100053	85	154.0 – 166.0	2930	5.50	187.7 – 199.7	3515	6.60
KF- 105.BCA.100054	105	180.1 – 198.6	2930	7.50	220.6 – 239.1	3515	9.00
KF- 118.BCA.100054	118	220.4 – 236.5	2930	7.50	251.5 – 284.5	3515	9.00
KF- 160.BCA.100055	160	309.7 – 331.6	2945	11.00	376.6 – 398.5	3530	13.20
KF- 210.BCA.100056	210	410.20 – 435.2	2945	15.00	497.8 – 522.8	3530	18.00
KF- 235.BCA.100057	235	205.4 – 230.0	1460	7.50	252.4 – 277.6	1750	9.00
KF- 275.BCA.100057	275	246.5 – 276.8	1460	7.50	302.9 – 333.2	1750	9.00
KF- 370.BCA.100058	370	327.5 – 363.2	1465	11.00	401.0 – 436.7	1755	13.20
KF- 450.BCA.100058	450	386.0 – 439.7	1465	11.00	475.5 – 529.3	1755	13.20
KF- 550.BCA.100059	550	494.9 – 538.4	1465	15.00	603.5 – 647.0	1755	18.00
KF- 660.BCA.100060	660	605.4 – 663.8	1470	18.50	739.0 – 797.4	1760	22.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Pump | Type KV.

Delivery rate 725.3 – 2274.4 l/min.

Product information.

- KRAL screw pump KV.
- Vertical design.
- Mechanical seal hard face.
- Overflow valve.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.



Marine acceptance, optional.

Ship classification:
 ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.



Pressure [bar].	Temperature [°C].	Viscosity [mm²/s].	Overflow valve [bar].
2 – 10	150 – 50	12 – 380	11

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KV-851.BCA.100061	851	725.3 – 783.9	1470	18.50	882.7 – 941.2	1760	22.00
KV-951.BCA.100062	951	836.2 – 962.4	1470	22.00	1031.9 – 1158.0	1760	26.40
KV-1101.BCA.100062	1101	1058.3 – 1125.1	1470	22.00	1283.3 – 1350.1	1760	26.40

Pressure [bar].	Temperature [°C].	Viscosity [mm²/s].	Overflow valve [bar].
2 – 8	150 – 50	12 – 380	11

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
KV-1301.BCA.100063	1301	1198.6 – 1305.8	1475	30.00	1464.7 – 1562.9	1770	36.00
KV-1500.BCA.100064	1500	1379.9 – 1516.9	1485	37.00	1687.5 – 1824.6	1780	44.40
KV-1700.BCA.100064	1700	1616.2 – 1774.9	1485	37.00	1976.2 – 2134.8	1780	44.40
KV-2200.BCA.100065	2200	1323.0 – 1489.2	980	30.00	1627.0 – 1793.2	1175	36.00
KV-2500.BCA.100066	2500	1484.4 – 1670.9	985	37.00	1825.5 – 2011.9	1180	44.40
KV-2900.BCA.100067	2900	1678.0 – 1888.8	985	45.00	2063.6 – 2274.4	1180	54.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Pump | Type LFI.

Delivery rate 7.5 – 200.0 l/min.

Product information.

- KRAL screw pump LFI.
- Flange design.
- Mechanical seal hard face.
- Overflow valve.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.

Marine acceptance, optional.

Ship classification:

ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS)

On request: NK, RRR, IRS, Dual Class etc.



LFI.



Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
8 – 30		150 – 80		12 – 380		33	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
LFI- 5.BBAF.10011	5	7.5 – 9.5	2880	1.10	9.6 – 11.9	3455	1.32
LFI- 7.BBAF.10012	7	11.9 – 14.9	2895	1.50	15.0 – 18.0	3470	1.80
LFI- 10.BBAF.10013	10	16.2 – 20.0	2895	2.20	20.4 – 24.1	3470	2.62
LFI- 15.BBAF.10014	15	25.4 – 29.9	2895	3.00	31.6 – 36.0	3470	3.60
LFI- 20.BBAF.10015	20	33.6 – 39.5	2905	4.00	41.7 – 47.6	3485	4.80
LFI- 26.BBAF.10015	26	43.0 – 50.5	2905	4.00	53.4 – 61.0	3485	4.80
LFI- 32.BBAF.10016	32	56.4 – 63.2	2930	5.50	69.3 – 76.2	3515	6.60
LFI- 42.BBAF.10017	42	75.1 – 84.3	2930	7.50	92.4 – 101.5	3515	9.00
LFI- 55.BBAF.10018	55	104.2 – 116.0	2945	11.00	127.8 – 139.6	3530	13.20
LFI- 74.BBAF.10018	74	135.7 – 149.5	2945	11.00	166.0 – 179.8	3530	13.20
LFI- 85.BBAF.10019	85	152.1 – 166.3	2945	15.00	185.8 – 200.0	3530	18.00

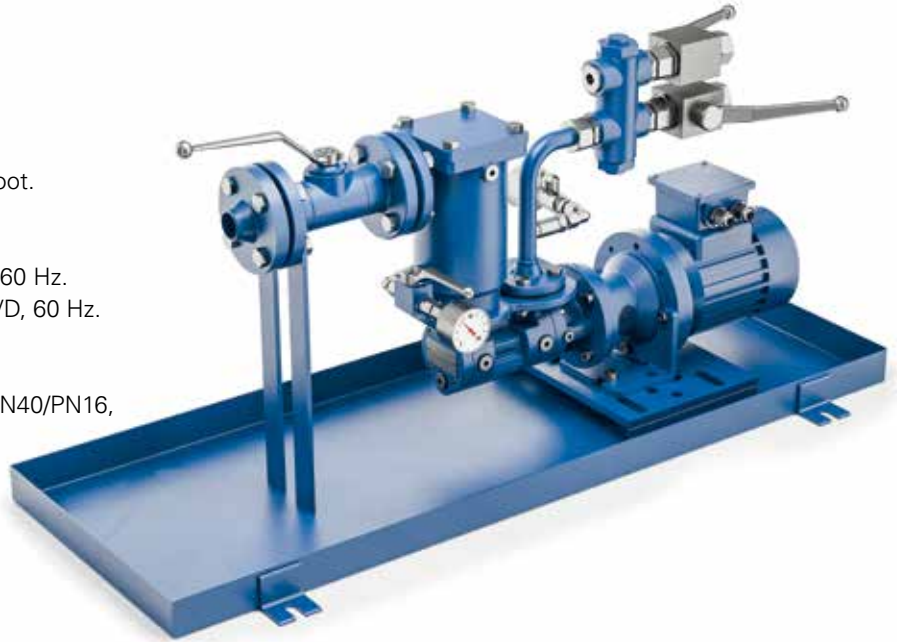
Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Single Station | Type EKS12.

Delivery rate 3.1 – 137.3 l/min.

Product information.

- KRAL single station EKS12.
- KRAL screw pump KFN.
- Overflow valve.
- Mechanical seal hard face.
- Strainer (mesh width 0.5 mm) with strainer cover protection.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Vacuum meter, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- Ball valve, suction-side, DN25/PN16 or DN40/PN16, incl. welding neck counterflange.
- Pressure maintaining valve.
- 2 ball valves, pressure-side, with cutting ring fitting.
- Base frame with oil pan.



Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 6		150 – 80		12 – 180		9	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
EKS12- 240.BA.1009	5	3.1 – 4.5	1380	0.25	4.1 – 5.5	1660	0.30
EKS12- 400.BA.1009	7	5.0 – 6.8	1380	0.25	6.5 – 8.3	1660	0.30
EKS12- 500.BA.1009	10	6.9 – 9.1	1380	0.25	9.0 – 11.1	1660	0.30
EKS12- 750.BA.1010	7	12.7 – 14.4	2800	0.37	15.7 – 17.5	3360	0.44
EKS12-1000.BA.1011	10	17.2 – 19.3	2800	0.55	21.2 – 23.4	3360	0.66
EKS12-1800.BA.1012	15	26.3 – 28.9	2800	0.55	32.3 – 34.9	3360	0.66
EKS12-2300.BA.1013	20	34.7 – 38.1	2880	0.75	43.8 – 47.2	3450	0.90
EKS12-3200.BA.1014	32	58.6 – 62.6	2895	1.50	71.3 – 75.3	3470	1.80
EKS12-4000.BA.1015	42	78.0 – 83.4	2895	2.20	95.0 – 100.3	3470	2.62
EKS12-6000.BA.1016	55	107.3 – 114.1	2895	3.00	130.5 – 137.3	3470	3.60

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

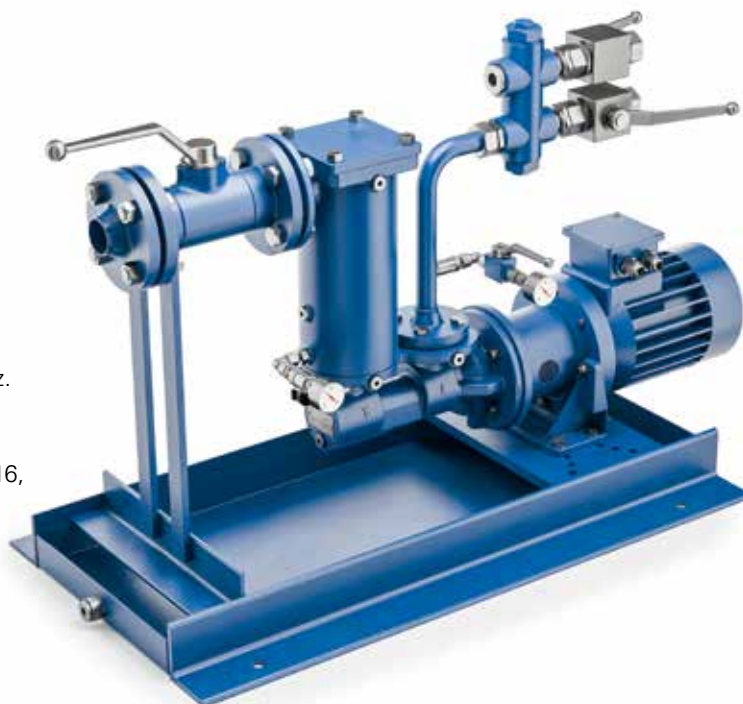


Single Station | Type ELS12.

Delivery rate 7.5 – 135.0 l/min.

Product information.

- KRAL single station ELS12.
- KRAL screw pump LFM.
- Overflow valve.
- Mechanical seal hard face.
- Strainer (mesh width 0.5 mm) with strainer cover protection.
- Coupling, pump bracket, pump bracket foot.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Vacuum meter, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- Ball valve, suction-side, DN25/PN16 or DN40/PN16, incl. welding neck counterflange.
- Pressure maintaining valve.
- 2 ball valves, pressure-side, with cutting ring fitting.
- Base frame with oil pan.



ELS12.

Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).

On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
8 – 30		150 – 80		12 – 180		39.9	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
ELS12- 600.BA.10009	5	7.5 – 9.6	2880	1.10	9.6 – 11.7	3455	1.32
ELS12- 900.BA.10010	7	11.9 – 14.6	2895	1.50	15.0 – 17.7	3470	1.80
ELS12-1200.BA.10010	10	16.2 – 19.6	2895	1.50	20.4 – 23.7	3470	1.80
ELS12-1800.BA.10011	15	25.4 – 29.4	2895	2.20	31.6 – 35.6	3470	2.62
ELS12-2400.BA.10012	20	33.5 – 38.7	2895	3.00	41.5 – 46.8	3470	3.60
ELS12-2600.BA.10013	26	43.0 – 49.7	2905	4.00	53.4 – 60.2	3485	4.80
ELS12-3300.BA.10014	32	55.8 – 62.0	2905	4.00	68.7 – 74.8	3485	4.80
ELS12-5000.BA.10015	42	75.1 – 83.3	2930	5.50	92.4 – 100.6	3515	6.60
ELS12-6500.BA.10016	54	100.4 – 111.8	2930	7.50	123.6 – 135.0	3515	9.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Double Station | Type DKC.

Delivery rate 2.8 – 283.4 l/min.

Product information.

- KRAL double station DKC.
- 2 KRAL screw pumps KFT.
- Overflow valve.
- Mechanical seal hard face.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Without pressure maintaining valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.5 mm) with strainer cover protection.
- 2 vacuum meters, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- SAE counter flanges with welding neck, 3000 psi, suction-side and pressure-side.
- Oil pan incl. drain screw.



Marine acceptance, optional.

Ship classification:
 ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
2 – 8		150 – 80		12 – 180		9	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DKC- 240.BAAA.10014	5	2.8 – 4.4	1380	0.25	3.8 – 5.4	1656	0.30
DKC- 450.BAAA.10014	7	4.6 – 6.7	1380	0.25	6.1 – 8.2	1656	0.30
DKC- 500.BAAA.10014	10	6.5 – 9.0	1380	0.25	8.5 – 11.0	1656	0.30
DKC- 600.BAAA.10015	5	8.0 – 9.5	2800	0.37	10.0 – 11.5	3360	0.44
DKC- 800.BAAA.10016	15	10.8 – 13.8	1400	0.55	13.8 – 16.8	1680	0.66
DKC- 900.BAAA.10017	7	12.3 – 14.3	2800	0.55	15.3 – 17.4	3360	0.66
DKC- 1100.BAAA.10016	20	14.2 – 18.2	1400	0.55	18.2 – 22.1	1680	0.66
DKC- 1200.BAAA.10017	10	16.7 – 19.2	2800	0.55	20.7 – 23.2	3360	0.66
DKC- 1600.BAAA.10018	32	25.6 – 30.2	1445	1.10	31.9 – 36.5	1730	1.32
DKC- 1800.BAAA.10019	15	26.6 – 29.6	2880	1.10	32.8 – 35.8	3455	1.32
DKC- 2400.BAAA.10019	20	35.1 – 39.0	2880	1.10	43.1 – 47.1	3455	1.32
DKC- 2500.BAAA.10018	42	34.1 – 40.3	1445	1.10	42.5 – 48.7	1730	1.32
DKC- 3000.BAAA.10020	55	47.4 – 55.3	1445	1.50	58.9 – 66.8	1730	1.80
DKC- 3300.BAAA.10021	32	57.7 – 62.3	2895	2.20	70.4 – 75.1	3470	2.42
DKC- 4000.BAAA.10022	74	61.6 – 70.9	1435	2.20	76.4 – 85.7	1720	2.42
DKC- 4500.BAAA.10022	85	69.5 – 79.0	1435	2.20	85.9 – 95.5	1720	2.42
DKC- 5000.BAAA.10021	42	76.9 – 83.1	2895	2.20	93.9 – 100.0	3470	2.42
DKC- 5500.BAAA.10023	105	79.0 – 93.8	1435	3.00	98.7 – 113.5	1720	3.60
DKC- 6000.BAAA.10024	55	105.8 – 113.7	2895	3.00	129.0 – 136.9	3470	3.60
DKC- 6500.BAAA.10023	118	99.9 – 112.8	1435	3.00	123.2 – 136.2	1720	3.60
DKC- 8000.BAAA.10025	74	137.8 – 147.1	2905	4.00	167.9 – 177.2	3485	4.80
DKC- 9000.BAAA.10025	85	154.2 – 163.7	2905	4.00	187.6 – 197.1	3485	4.80
DKC-11000.BAAA.10026	105	182.5 – 197.3	2930	5.50	223.0 – 237.8	3515	6.60
DKC-13000.BAAA.10026	118	222.5 – 235.4	2930	5.50	270.4 – 283.4	3515	6.60

Fabrication tolerance acc. VDMA 24284 - tolerance class II.



Double Station | Type DLC.

Delivery rate 2.2 – 198.5 l/min.

Product information.

- KRAL double station DLC.
- 2 KRAL screw pumps LFM.
- Overflow valve.
- Mechanical seal hard face.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.5 mm) with strainer cover protection.
- 2 vacuum meters, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- SAE counter flanges with welding neck, 3000 psi, suction-side and pressure-side.
- Oil pan incl. drain screw.



Marine acceptance, optional.

Ship classification:

ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).

On request: NK, RRR, IRS, Dual Class etc.

DLC.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
8 – 30		150 – 80		12 – 180		33	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DLC- 240.BAAA.10017	5	2.2 – 4.3	1400	0.55	3.2 – 5.3	1680	0.66
DLC- 450.BAAA.10017	7	3.8 – 6.5	1400	0.55	5.3 – 8.0	1680	0.66
DLC- 500.BAAA.10018	10	5.6 – 9.0	1420	0.75	7.6 – 11.0	1700	0.90
DLC- 600.BAAA.10019	5	7.5 – 9.6	2880	1.10	9.6 – 11.7	3455	1.32
DLC- 800.BAAA.10020	15	10.0 – 14.0	1445	1.10	13.0 – 17.0	1730	1.32
DLC- 900.BAAA.10021	7	11.9 – 14.6	2895	1.50	15.0 – 17.7	3470	1.80
DLC- 1100.BAAA.10022	20	13.2 – 18.5	1445	1.50	17.1 – 22.3	1730	1.80
DLC- 1200.BAAA.10021	10	16.2 – 19.6	2895	1.50	20.4 – 23.7	3470	1.80
DLC- 1300.BAAA.10023	26	16.5 – 23.3	1435	2.20	21.7 – 28.4	1720	2.64
DLC- 1600.BAAA.10024	32	23.3 – 29.4	1435	3.00	29.6 – 35.7	1720	3.60
DLC- 1800.BAAA.10025	15	25.4 – 29.4	2895	2.20	31.6 – 35.6	3470	2.64
DLC- 2400.BAAA.10026	20	33.5 – 38.7	2895	3.00	41.5 – 46.8	3470	3.60
DLC- 2500.BAAA.10027	42	31.2 – 39.4	1440	4.00	39.6 – 47.8	1725	4.80
DLC- 2600.BAAA.10028	26	43.0 – 49.7	2905	4.00	53.4 – 60.2	3485	4.80
DLC- 3200.BAAA.10027	54	41.4 – 52.8	1440	4.00	52.6 – 64.1	1725	4.80
DLC- 3300.BAAA.10029	32	56.4 – 62.5	2930	5.50	69.3 – 75.5	3515	6.60
DLC- 5000.BAAA.10029	42	75.1 – 83.3	2930	5.50	92.4 – 100.6	3515	6.60
DLC- 6500.BAAA.10030	54	100.4 – 111.8	2930	7.50	123.6 – 135.0	3515	9.00
DLC- 8000.BAAA.10031	74	135.7 – 148.0	2945	11.00	166.0 – 178.3	3530	13.20
DLC- 9000.BAAA.10032	85	152.1 – 164.8	2945	15.00	185.8 – 198.5	3530	18.00

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Double Station | Type DS1.

Delivery rate 1.9 – 33.0 l/min.

Product information.

- KRAL double station DS1.
- 2 KRAL screw pumps NE.
- Mechanical seal hard face.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Overflow valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.5 mm) with strainer cover protection.
- 2 vacuum meters, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- SAE/DIN counter flanges with welding neck, suction-side and pressure-side.
- Oil pan.



Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
1 – 6		150 – 80		12 – 180		6.6	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DS1- 150.CAA.1008	5	1.9 – 2.9	900	0.18	2.6 – 3.5	1080	0.21
DS1- 240.CAA.1009	5	3.6 – 4.6	1380	0.25	4.6 – 5.6	1656	0.30
DS1- 320.CAA.1008	10	4.3 – 5.9	900	0.18	5.6 – 7.3	1080	0.21
DS1- 400.CAA.1009	7	5.7 – 7.0	1380	0.25	7.2 – 8.5	1656	0.30
DS1- 500.CAA.1009	10	7.8 – 9.3	1380	0.25	9.8 – 11.3	1656	0.30
DS1- 750.CAA.1010	7	13.4 – 14.6	2800	0.55	16.4 – 17.7	3360	0.66
DS1-1000.CAA.1010	10	18.0 – 19.6	2800	0.55	22.0 – 23.6	3360	0.66
DS1-1300.CAA.1010	13	24.9 – 27.3	2800	0.55	30.6 – 33.0	3360	0.66

Fabrication tolerance acc. VDMA 24284 - tolerance class II.



Double Station | Type DS3.

Delivery rate 12.4 – 61.3 l/min.

Product information.

- KRAL double station DS3.
- 2 KRAL screw pumps NE.
- Mechanical seal hard face.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Overflow valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.5 mm) with strainer cover protection.
- 2 vacuum meters, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- SAE/DIN counter flanges with welding neck, suction-side and pressure-side.
- Oil pan.



DS3.

Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].		Temperature [°C].		Viscosity [mm ² /s].		Overflow valve [bar].	
1 – 6		150 – 80		12 – 180		6.6	
Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DS3-900.CAA.1011	15	12.4 – 14.3	1400	0.55	15.4 – 17.2	1680	0.66
DS3-1100.CAA.1011	20	16.3 – 18.8	1400	0.55	20.2 – 22.7	1680	0.66
DS3-1500.CAA.1011	26	20.8 – 24.0	1400	0.55	25.9 – 29.0	1680	0.66
DS3-1800.CAA.1012	15	28.2 – 30.1	2880	1.10	34.3 – 36.2	3455	1.32
DS3-2300.CAA.1012	20	37.1 – 39.6	2880	1.10	45.2 – 47.4	3455	1.32
DS3-2900.CAA.1013	26	47.8 – 50.9	2895	1.50	58.1 – 61.3	3470	1.80

Fabrication tolerance acc. VDMA 24284 - tolerance class II.

Double Station | Type DS4.

Delivery rate 28.0 – 135.5 l/min.

Product information.

- KRAL double station DS4.
- 2 KRAL screw pumps NE.
- Mechanical seal hard face.
- Coupling, pump bracket.
- AC motor IE3, B5, IP55, ISO F/B.
- Voltage.
 - To 2.2 kW: 230VD/400VY, 50 Hz; 460VY, 60 Hz.
 - From 3.0 kW: 400VD/690VY 50 Hz; 460VD, 60 Hz.
- Compact station block without pressure maintaining valve.
- Overflow valve.
- Three-way valve.
- 2 non-return valves.
- 2 strainers (mesh width 0.5 mm) with strainer cover protection.
- 2 vacuum meters, lockable, glycerin filled.
- Manometer, lockable, glycerin filled.
- SAE/DIN counter flanges with welding neck, suction-side and pressure-side.
- Oil pan.



DS4.

Marine acceptance, optional.

Ship classification: ABS, BV, CCS, DNV/GL, KR, LRS, RINA, RS (MRS).
 On request: NK, RRR, IRS, Dual Class etc.

Pressure [bar].	Temperature [°C].	Viscosity [mm²/s].	Overflow valve [bar].
1 – 6	150 – 80	12 – 180	6.6

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DS4-1600.CAA.1014	32	28.0 – 30.9	1445	1.10	34.3 – 37.2	1730	1.32
DS4-2000.CAA.1014	42	37.3 – 41.2	1445	1.10	45.7 – 49.6	1730	1.32
DS4-3200.CAA.1015	32	60.1 – 63.0	2895	2.20	72.8 – 75.7	3470	2.64
DS4-4000.CAA.1015	42	80.1 – 83.9	2895	2.20	97.0 – 100.9	3470	2.64

Pressure [bar].	Temperature [°C].	Viscosity [mm²/s].	Overflow valve [bar].
1 – 5	150 – 80	12 – 180	6.6

Art. No.	Size.	Delivery rate.	Rotation speed.	Motor output.	Delivery rate.	Rotation speed.	Motor output.
		[l/min at 50 Hz]	[min ⁻¹ at 50 Hz]	[kW at 50 Hz]	[l/min at 60 Hz]	[min ⁻¹ at 60 Hz]	[kW at 60 Hz]
DS4-6000.CAA.1015	54	107.4 – 112.7	2895	2.20	130.2 – 135.5	3470	2.64






Fabrication tolerance acc. VDMA 24284 - tolerance class II.





Overall Portfolio.

Here you'll find an overview of the most important information.

 Delivery rate.	 Pressure.	 Temperature.	 Type.	 Position in the KRAL product line.
5 to 2900 l/min. 0.3 to 174 m ³ /h.	16 bar.	-20 to +180 °C.	K.	This economical, most sold KRAL pump can be used at pressures up to 16 bar.
5 to 200 l/min. 0.3 to 12 m ³ /h.	63 bar.	-20 to +180 °C.	L.	The mid-pressure pump from KRAL. Robust, low wear and easy to maintain.
5 to 3550 l/min. 0.3 to 213 m ³ /h.	100 bar.	-20 to +180 °C.	C.	The all-rounder – when needs exceed the standard K or L series pumps.
15 to 290 l/min. 0.9 to 17.4 m ³ /h.	120 bar.	-20 to +180 °C.	W.	The pump for special applications, for example contaminated, abrasive or low viscosity media.
5 to 3550 l/min. 0.3 to 213 m ³ /h.	100 bar.	-20 to +300 °C.	Magnetic coupling.	KRAL magnetic couplings are maintenance free, hermetically sealed and can be used at temperatures up to 300 °C.
5 to 280 l/min. 0.3 to 16.8 m ³ /h.	40 bar.	-20 to +180 °C.	EK, EL.	This is a commercial/economical oil burner pump with additional functions.
5 to 280 l/min. 0.3 to 16.8 m ³ /h.	40 bar.	-20 to +180 °C.	DKC, DLC, DS/L.	Two pumps are ideal when redundancy and greater safety are needed.
5 to 3550 l/min. 0.3 to 213 m ³ /h.	100 bar.	-20 to +180 °C.	Single station.	Available in a standard design, or can be set up according to specific customer needs.
5 to 3550 l/min. 0.3 to 213 m ³ /h.	100 bar.	-20 to +180 °C.	Double station.	Available in a standard design, or can be set up according to specific customer needs.



Headquarters.

KRAL GmbH

Bildgasse 40, Industrie Nord
6890 Lustenau, Austria
e-mail: kral@kral.at
Tel.: +43/5577/86644-0

Further locations.

KRAL Deutschland GmbH

88131 Lindau
Germany

KRAL Polska Sp. z o.o.

40-668 Katowice
Poland

KRAL SAS

69100 Villeurbanne
France

KRAL-USA, Inc.

28105 Matthews, NC
USA

KRAL (Wuxi) Machinery Technology Co., Ltd.

214100 Wuxi
China