KRAL Screw Pumps – Series EML/EMS.

Modular Oil burner - supply stations

You are searching for an economical oil burner pump with elements providing additional functions.

Model EML/EMS.

KRAL Oil burner - supply station.

- ☐ Type EML for extra light fuel oil.
- ☐ Type EMS for heavy fuel oil.
- ☐ Pressure stage up to 40 bar.
- ☐ From 5 to 130 l/m.

You neither have the time nor the skilled personnel.

- ☐ to select, layout and synchronise individual components as well as procure them
- ☐ for the assembly and inspection of the components and for initial operation.

Who takes over responsibility.

as general supplier for the functioning and interplay of all components?

Modular system for every application.

Each type of burner has different requirements to fulfil, depending on the system concept. The functions of the KRAL oil burner supply station can be expanded individually, for example with:

- ☐ Pressure regulation.
- ☐ Degassing.
- ☐ Flow metering.
- ☐ Filter.
- ☐ Gas-/Air-separator.

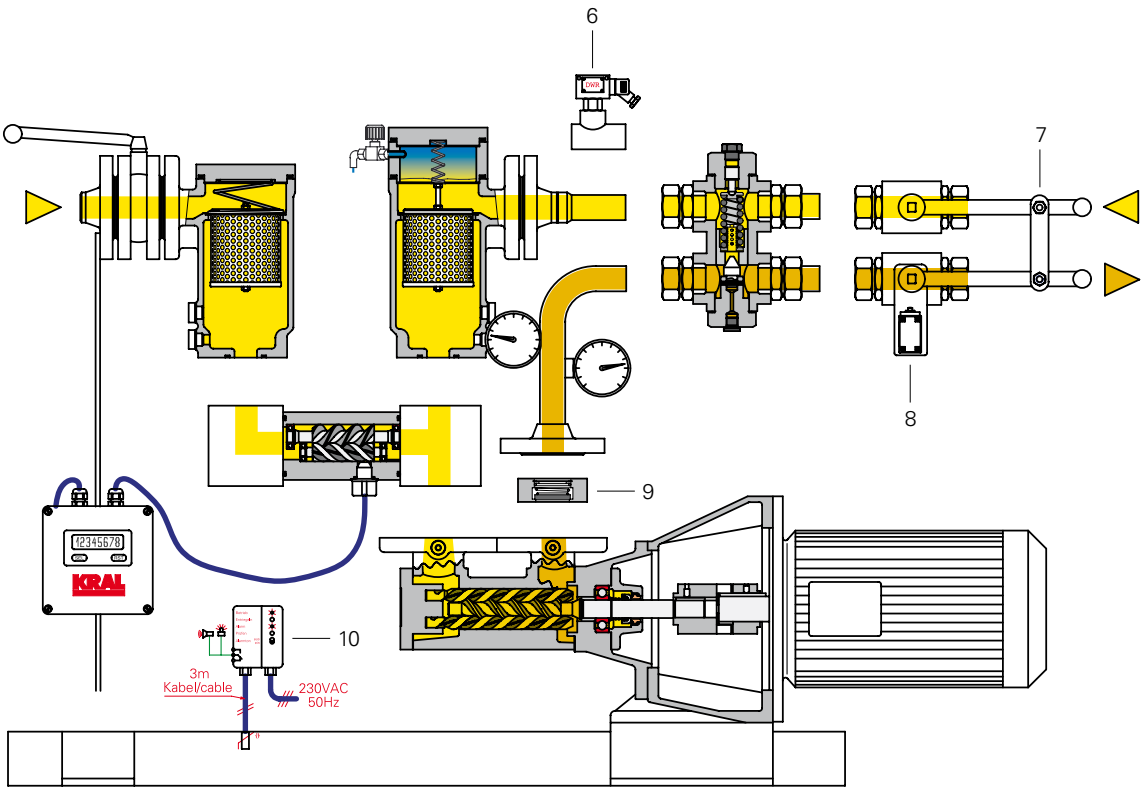
One detail Left-/right-handed installation.

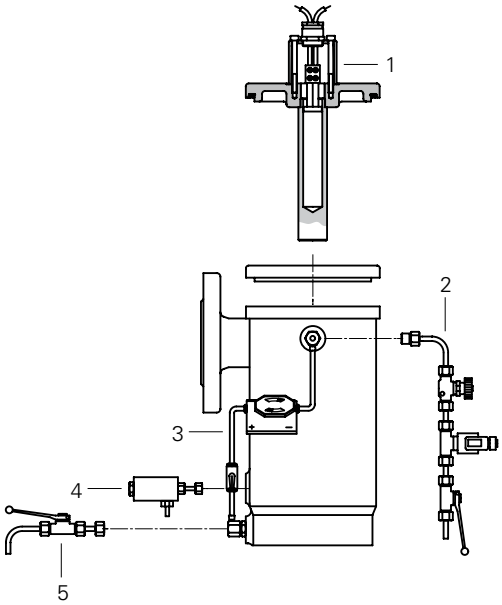
The mounted display instruments are able to swivel. A left- or right-handed installation can ensure individually.

Customised additions.

KRAL offers the optimal solution for every customers need. Just ask us, we have probably solved a similar problem already!

The solution with modular construction.





Options.

1 electrical heating for filter
2 vent with automatic timing
3 diff. pressure indicator optic./electr.
4 expansion valve
5 drain valve on the suction side of the filter
6 pressure control device
7 control circuit for ball valve
8 ball valve with limit switch
9 back-stroke valve
10 oil leakage monitor in oil pan

That is why you should decide for KRAL

Performance test on our own in-house test bench.

Every KRAL oil burner supply station is tested individually on our test bench, performance tested, and if desired, supplied with a test record.

One contact partner.

The KRAL oil burner supply station constitutes a complete unit. The entire system is produced by a single manufacturer. You therefore have only one contact partner for all inquiries. The handling of your orders is significantly more efficient.

Faithful delivery reliability.

KRAL has a well-stocked store of all components. Because of this, fast and punctual delivery is guaranteed every time.

KRAL –
The reliable partner.

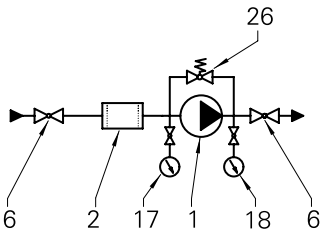
The KRAL AG is a medium-sized family business, which has developed continuously since its founding in 1950. Our KRAL brand is well known for its high standard of quality. KRAL displacement pumps are most successfully used in the delivery and for pressure increase of oils and particle- and non-aggressive lubricating media.

Typical applications include:

- ☐ Marine, as feed and circulation pumps for fuels and lubricants.
- ☐ Mechanical engineering, as lubricant and coolant pumps for gears, engines, turbines and hydraulic systems.
- ☐ Oil burner technology, as ring line and transfer pumps.
- ☐ Plastics processing, especially polyurethane applications.

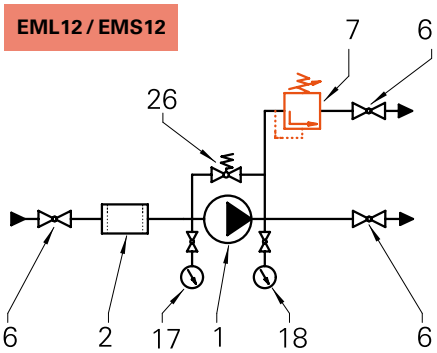
Hydraulic Circuit Diagram.

EML11 / EMS11



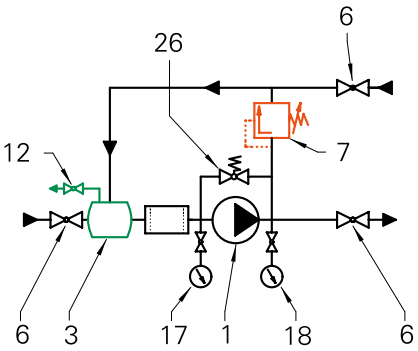
Oil burner pump station as basic module consisting of: Screw pump with built-in safety valve, largely sized suction filter and delivery ball valves as well as pressure and vacuum gauges with shut-off facility.

EML12 / EMS12



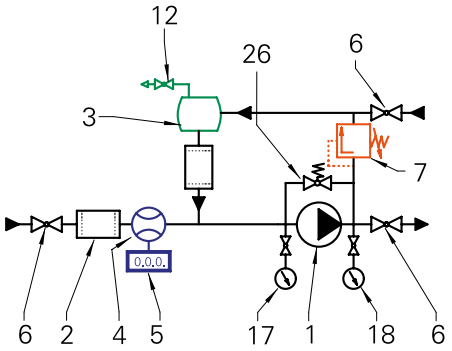
Basic module with an additional **pressure regulator.** The pressure regulating valve ensures a constant pressure even with different consumption rates.

EML13 / EMS13



Basic module with an additional pressure regulator and a **gas / air separator with integrated commissioning filter.**

EML14



Basic module with an additional pressure regulator and a gas / air separator with integrated commissioning filter and **flow meter.**

Item	Parts	Item	Parts	Item	Parts	Item	Parts
1	Pump unit	4	KRAL Volumeter®	7	Constant pressure valve	18	Pressure gauge with shut-off valve
2	Filter	5	Digital display	12	Ventilation	26	Safety valve
3	Air separator with integrated filter	6	Ball valve	17	Vacuum gauge with shut-off valve		

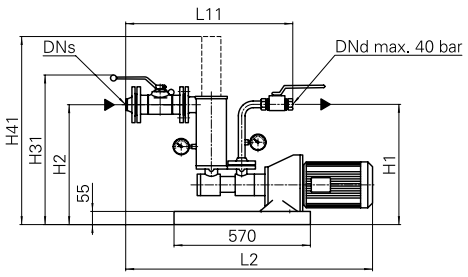
Performance Characteristics

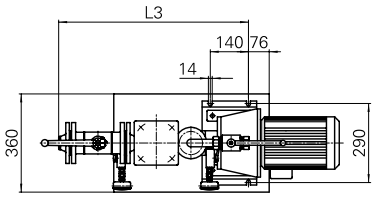
size	pump-type	pump capacity l/h 50Hz 6mm²/s 30 bar	pump capacity l/h 50Hz 152mm²/s 30 bar	pump capacity l/h 60Hz 6mm²/s 30 bar	pump capacity l/h 60Hz 152mm²/s 30 bar	min. inlet pressure only for EML14 bar	RPM 50 Hz min⁻¹	RPM 60 Hz min⁻¹	motor 50/60 Hz Kw	filter-surface cm²
EML11/... - EMS11/...										
EM..11/ 600.1	MF 5	404	575	512	683	-	2900	3400	1,1	320
EM..11/ 900.1	MF 7	644	872	806	1034	-	2900	3400	1,5	320
EM..11/1200.1	MF10	892	1171	1108	1387	-	2900	3400	1,5	320
EM..11/1800.1	MF15	1427	1761	1748	2081	-	2900	3400	2,2	580
EM..11/2400.1	MF20	1877	2317	2300	2739	-	2900	3400	3	580
EM..11/2600.1	MF26	2404	2966	2944	3506	-	2900	3400	4	580
EM..11/3300.1	MF32	3185	3697	3848	4361	-	2900	3400	4	720
EM..11/5000.1	MF42	4249	4930	5131	5841	-	2900	3400	5,5	720
EM..11/6500.1	MF54	5850	6618	7082	7894	-	2900	3400	7,5	720
EML12/... - EMS12/...										
EM..12/ 600.1	MF 5	304	475	412	583	-	2900	3400	1,1	320
EM..12/ 900.1	MF 7	544	772	706	934	-	2900	3400	1,5	320
EM..12/1200.1	MF10	792	1071	1008	1287	-	2900	3400	1,5	320
EM..12/1800.1	MF15	1127	1461	1448	1781	-	2900	3400	2,2	580
EM..12/2400.1	MF20	1577	2017	2000	2439	-	2900	3400	3	580
EM..12/2600.1	MF26	2104	2666	2644	3206	-	2900	3400	4	580
EM..12/3300.1	MF32	2885	3397	3548	4061	-	2900	3400	4	720
EM..12/5000.1	MF42	3949	4630	4831	5514	-	2900	3400	5,5	720
EM..12/6500.1	MF54	5550	6318	6782	7594	-	2900	3400	7,5	720
EML13/... - EMS13/...										
EM..13/ 600.1	MF 5	304	475	412	583	-	2900	3400	1,1	320
EM..13/ 900.1	MF 7	544	772	706	934	-	2900	3400	1,5	320
EM..13/1200.1	MF10	792	1071	1008	1287	-	2900	3400	1,5	320
EM..13/1800.1	MF15	1127	1461	1448	1781	-	2900	3400	2,2	580
EM..13/2400.1	MF20	1577	2017	2000	2439	-	2900	3400	3	580
EM..13/2600.1	MF26	2104	2666	2644	3206	-	2900	3400	4	580
EM..13/3300.1	MF32	2885	3397	3548	4061	-	2900	3400	4	720
EM..13/5000.1	MF42	3949	4630	4831	5514	-	2900	3400	5,5	720
EM..13/6500.1	MF54	5550	6318	6782	7594	-	2900	3400	7,5	720
EML14/...										
EML14/ 600.1	MF 5	304	-	412	-	1,2	2900	3400	1,1	320
EML14/ 900.1	MF 7	544	-	706	-	1,2	2900	3400	1,5	320
EML14/1200.1	MF10	792	-	1008	-	1,2	2900	3400	1,5	320
EML14/1800.1	MF15	1127	-	1448	-	1,6	2900	3400	2,2	580
EML14/2400.1	MF20	1577	-	2000	-	1,7	2900	3400	3	580
EML14/2600.1	MF26	2104	-	2644	-	2	2900	3400	4	580
EML14/3300.1	MF32	2885	-	3548	-	1,4	2900	3400	4	720
EML14/5000.1	MF42	3949	-	4831	-	1,7	2900	3400	5,5	720
EML14/6500.1	MF54	5550	-	6782	-	2	2900	3400	7,5	720

Please observe specified supply pressure and a maximum burner capacity of 2400 l/h applicable to series EML 14.

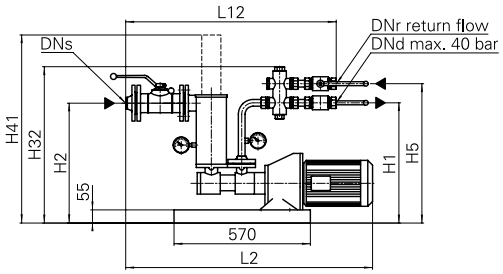
Dimension Drawing

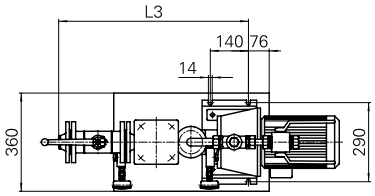
EML11 / EMS11



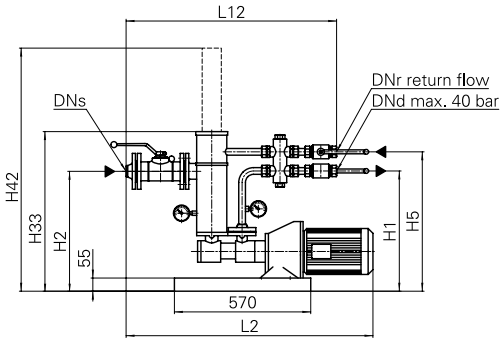


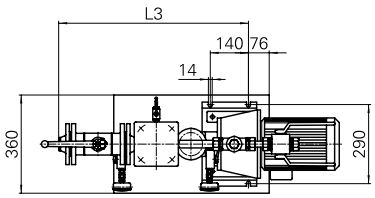
EML12 / EMS12





EML13 / EMS13

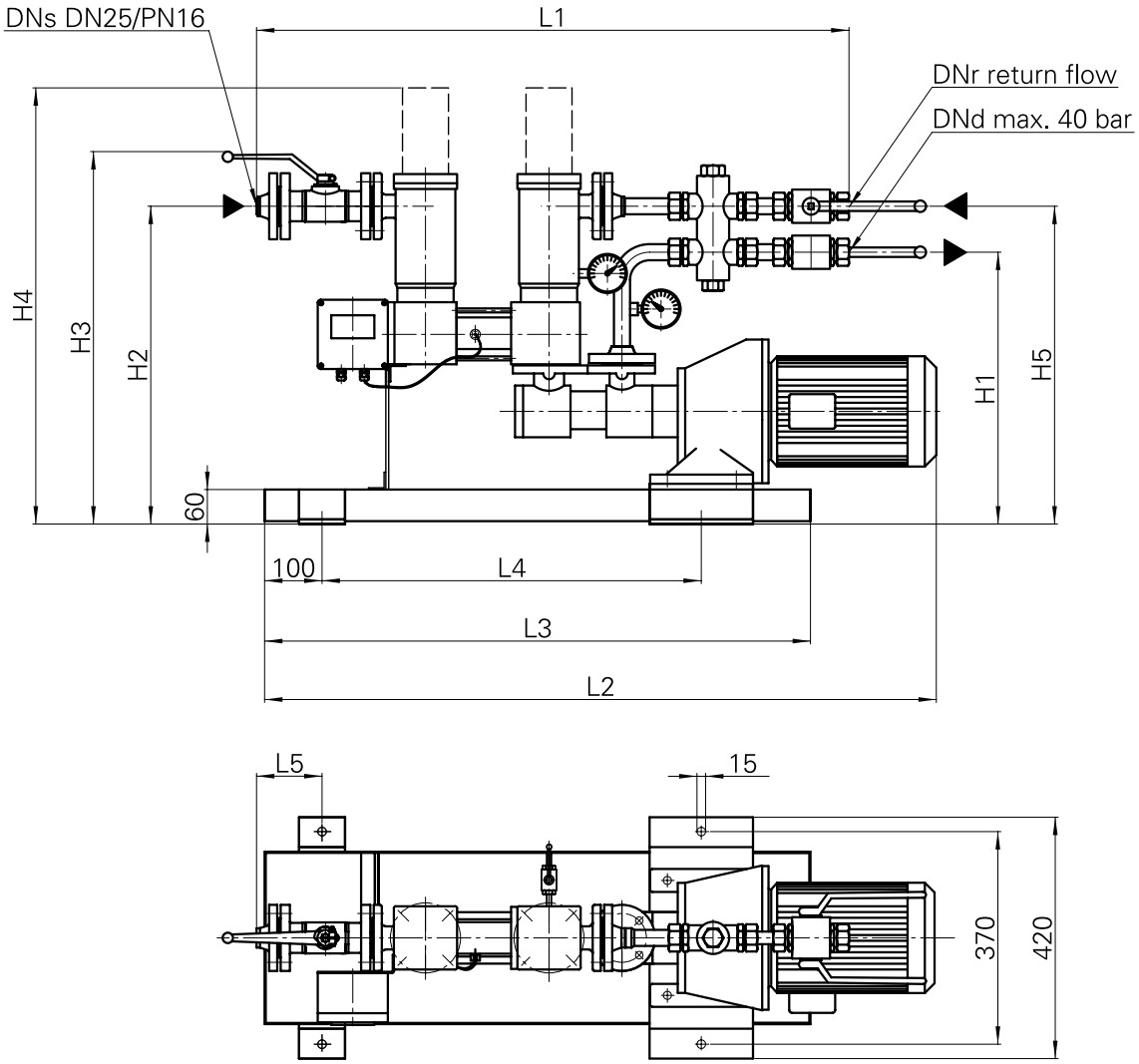




size	dimensions in mm														
	DNs/PN16	DNr	DNd	L11	L12	L2	L3	H1	H2	H31	H32	H33	H41*	H42*	H5
EM.../ 600	DN25	⌀22	⌀22	581	736	782	509	363	365	480	483	495	545	745	389
EM.../ 900	DN25	⌀22	⌀22	581	736	794	509	363	365	480	483	495	545	745	389
EM.../1200	DN25	⌀22	⌀22	581	736	794	509	363	365	480	483	495	545	745	389
EM.../1800	DN40	⌀28	⌀28	698	880	996	694	477	477	600	629	642	761	1012	557
EM.../2400	DN40	⌀28	⌀28	698	880	1032	696	502	502	625	654	667	786	1037	582
EM.../2600	DN40	⌀28	⌀28	698	880	1049	696	502	502	625	654	667	786	1037	582
EM.../3300	DN40	⌀28	⌀28	698	880	1049	696	502	502	625	654	667	786	1037	582
EM.../5000	DN40	⌀28	⌀28	698	880	1160	722	527	527	650	679	692	811	1066	607
EM.../6500	DN40	⌀28	⌀28	698	880	1160	722	527	527	650	679	692	811	1066	607

* dismounting height for filter element

EML14



size	dimensions in mm												weight	flow-meter
	DNr	DNd	L1	L2	L3	L4	L5	H1	H2	H3	H4**	H5	in kg	
EML14/ 600	ø22	ø22	920	926	760	540	170	417	510	605	716	510	82	OME20
EML14/ 900	ø22	ø22	920	938	760	540	170	417	510	605	716	510	85	OME20
EML14/1200	ø22	ø22	920	938	760	540	170	417	510	605	716	510	85	OME20
EML14/1800	ø28	ø28	1031	1147	950	660	86	448	528	623	734	528	135	OME20
EML14/2400	ø28	ø28	1031	1169	950	660	114	473	553	648	759	553	140	OME20*
EML14/2600	ø28	ø28	1031	1186	950	660	114	473	553	648	759	553	145	OME20*
EML14/3300	ø28	ø28	1031	1186	950	660	114	473	553	648	759	553	150	OME20*
EML14/5000	ø28	ø28	1031	1273	950	660	148	501	581	676	787	581	170	OME20*
EML14/6500	ø28	ø28	1031	1273	950	660	148	501	581	676	787	581	175	OME20*

* only up to a burner output of 2400 l/h (values with higher level on request)

** dismounting height for filter element

KRAL Oil burner - supply station.

The following parameters are required for the station design:			
☐ Medium	☐ Viscosity	☐ Differential pressure	☐ Regulating range of consumer
☐ Medium temperature	☐ Supply pressure	☐ Feed rate	☐ Maximum permissible pressure fluctuation

KRAL

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