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Light Duty Range Cooler-LDRA

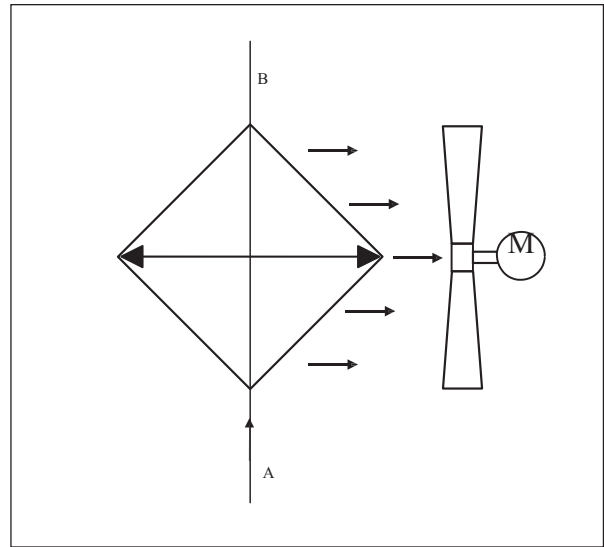


Effective March 1st, 2015
Light Duty Range Cooler—LDRA
ENGINEERING YOUR SUCCESS.

Light Duty Range Cooler—LDRA

IN THIS SECTION

- Overview.....2
- Models, Cooling Performance, Noise & Weight....3
- Dimensions.....3
- Cooler Performance.....4
- Pressure Drop.....4
- Specification.....5
- Ordering Information.....6



Features

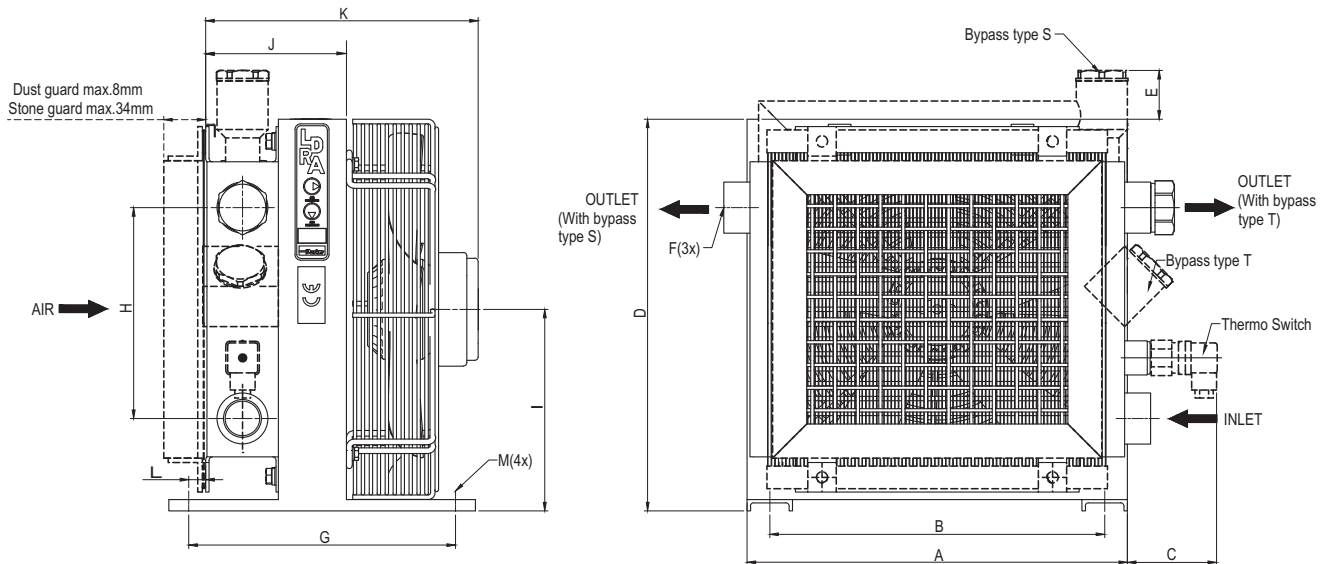
- The Light Duty Range (LDRA) is designed to be the ideal “fit for purpose” solution for small system and low demand machines.
- 100% “Made in Asia” LDRA is a competitive solution for cooling up to 10 kW* heat.
- LDRA002 to 007 coolers are designed with powerful fan which allows an optimised heat transfer.

* Depending on working parameters

Models, Cooling Performance, Noise & Weight

TYPE	No. of poles/Capacity (kW)	Noise LpA dB(A)1m*	Weight kg (approx)
LDRA 002-2 single-phase	2-0.05	51	5
LDRA 003-2 single-phase	2-0.10	53	6.5
LDRA 004-2 Three-Phase	2-0.10	53	7
LDRA 004-4 Three-Phase	4-0.10	51	7
LDRA 007-2 Three-Phase	2-0.21	58	11
LDRA 007-4 Three-phase	4-0.10	52	11

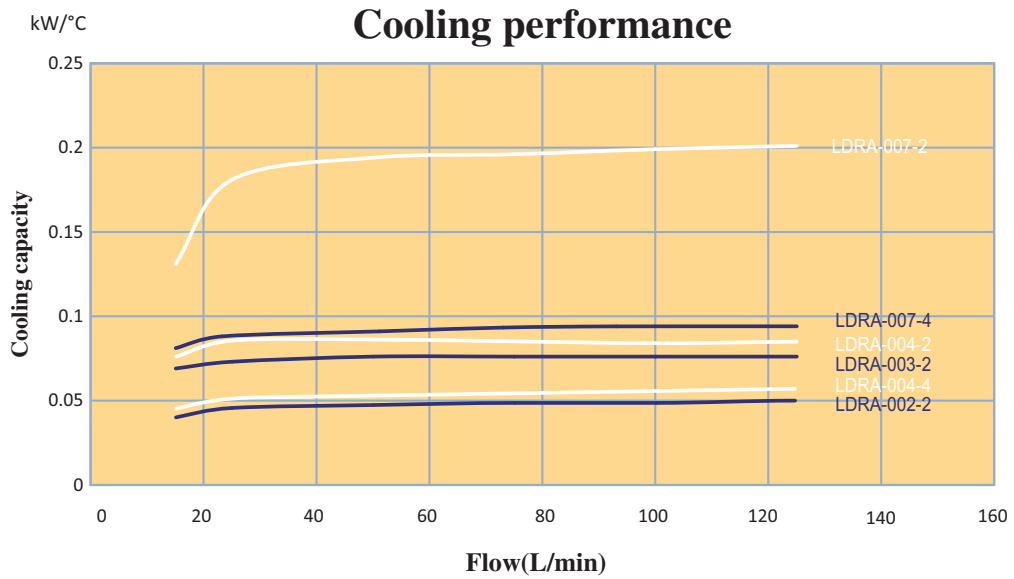
* Noise Level Tolerance $\pm 3\text{dB(A)}$
 LpA dB(A) 1m* = Acoustic pressure Level
 kW = No. of Poles-Capacity
 kg(approx) = weight



Dimensions

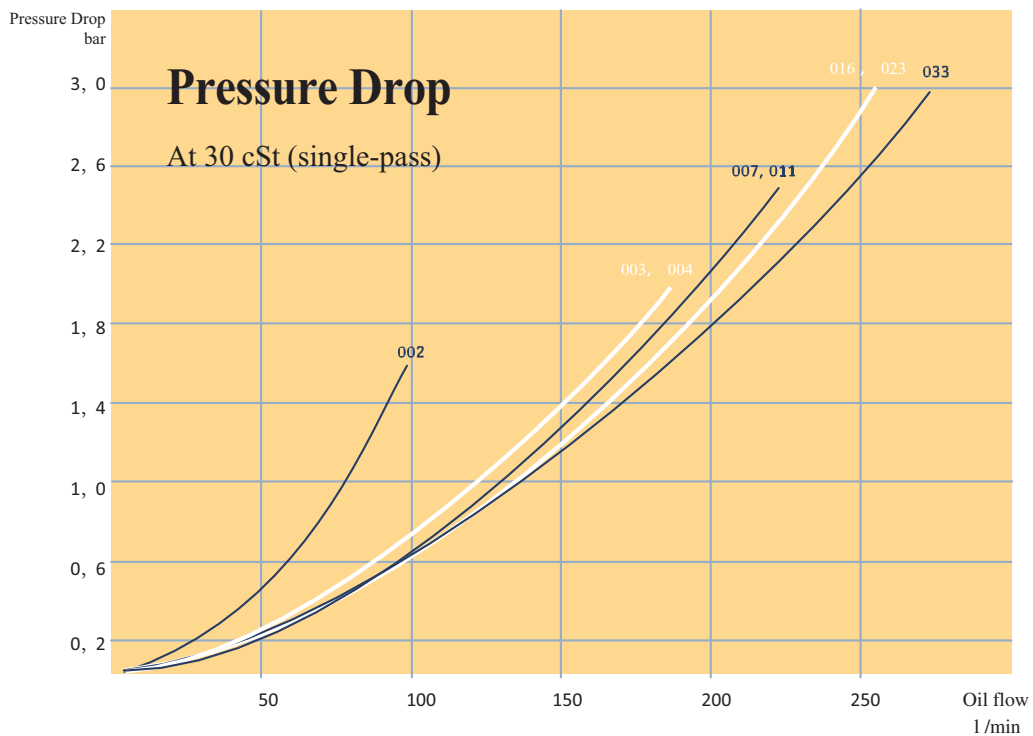
TYPE	A	B	C	D	E	F	G	H	I	J	K	L	ΦM
LDRA-002	175	159	-	181	-	G1/2	87	90	105	-	122	-	7x20
LDRA-003	250	220	78.5	260	32	G1	170	90	132	105	182	15	9x20
LDRA-004	250	220	90	260	46	G1	170	90	135	105	182	13.5	9x20
LDRA-007	335	295	82	345	33	G1	235	160	178	125	204	15	9x20

Cooler Performance



The cooling capacity curves are based on the inlet oil temperature and the ambient air temperature. An oil temperature of 60 °C and an air temperature of 20 °C produce a temperature difference of 40 °C. Multiply by kW/ °C for total cooling performance in kW.

Pressure Drop



LDRA cooler for Industrial Application

LDRA air oil cooler with single-phase or three-phase AC motor is optimized for use in the industrial sector. LDRA cooler is suitable for installation in most applications and environments. With precise calculations and our engineers support, LDRA is the correct cooler solution for more cooling per \$ invested.



Specification

FLUID COMBINATIONS	
Mineral oil	HL/HLP in accordance with DIN 51524
Oil/water emulsion	HFA, HFB in accordance with CETOP RP 77H
Water glycol	HFC in accordance with CETOP RP 77H
Phosphate ester	HFD-R in accordance with CETOP RP 77H

COOLING CAPACITY CURVES
The cooling capacity curves in this technical data sheet are based on tests in accordance with EN 1048 and have been produced using oil type ISO VG 46 at 60 °C.

MATERIAL	
Cooler matrix	Aluminum
Fan blades	Steel
Fan Motor	Aluminum
Fan housing	Steel
Fan guard	Steel
Other parts	Steel
Surface treatment	Electrostatically powder-coated

TECHNICAL DATA, COOLER MATRIX	
Maximum static operating pressure	21bar
Dynamic operating pressure	14bar
Heat transfer limit	±6%
Maximum oil inlet temperature	120 °C
* Tested in accordance with ISO/DIS 10771-1	

TECHNICAL DATA FOR MOTOR	
Insulation class	B
Rise of temperature	B
Protection class	IP44

CONTACT OLAER FOR ADVICE ON
Oil temperatures > 120 °C
Oil viscosity > 100 cSt
Aggressive environments
Ambient air rich in particles
High-altitude locations

Ordering Information

Example: $\frac{\text{LDRA}}{1} - \frac{007}{2} - \frac{2}{3} - \frac{\text{S01}}{4} - \frac{50}{5} - \frac{000}{6} - \frac{0}{7} - \frac{0}{8}$

1. The Light Duty Range Cooler= LDRA

2. COOLER SIZE

002、003、004、007

011-033 contact Parker for help

3. NUMBER OF POLES, MOTOR

2 – POLE	= 2
4 – POLE	= 4
6 – POLE	= 6
8 – POLE	= 8

4/6/8 contact Parker for help

*For 002-007 standard is 2-pole

4. VOLTAGE AND FREQUENCY

S01 - Single Phase	110-120V 50/60Hz
S02 - Single Phase	220-230V 50/60Hz
S03 - Single Phase	100V 50/60Hz
S00 - Motor for special voltage or frequency ¹⁾	
T01 - Three Phase	220/380V 50/60Hz
T02 - Three Phase	230/400V 50/60Hz
T03 - Three Phase	415-420V 50/60Hz
T04 - Three Phase	440-460V 50/60Hz
T05 - Three Phase	200V 50/60Hz
T00 - Motor for special voltage or frequency ¹⁾	

1) Stated in plan language at end of description

5. THERMO CONTACT

No thermo contact	= 00
40 °C	= 40
50 °C	= 50
60 °C	= 60
70 °C	= 70
80 °C	= 80
90 °C	= 90

6. COOLER MATRIX

Standard	= 000
Two-pass *	= T00
Built-in, pressure-controlled bypass, single-pass	
2 bar	= S20
5 bar	= S50
8 bar	= S80
Built-in, pressure-controlled bypass, two-pass *	
2 bar	= T20
5 bar	= T50
8 bar	= T80

Built-in, Temperature and pressure-controlled bypass, single-pass

50 °C, 2.2 bar	= S25
60 °C, 2.2 bar	= S26
70 °C, 2.2 bar	= S27
90 °C, 2.2 bar	= S29

Built-in, Temperature and pressure-controlled bypass, two-pass *

50 °C, 2.2 bar	= T25
60 °C, 2.2 bar	= T26
70 °C, 2.2 bar	= T27
90 °C, 2.2 bar	= T29

* = not for LDRA-002 ~ LDRA-004

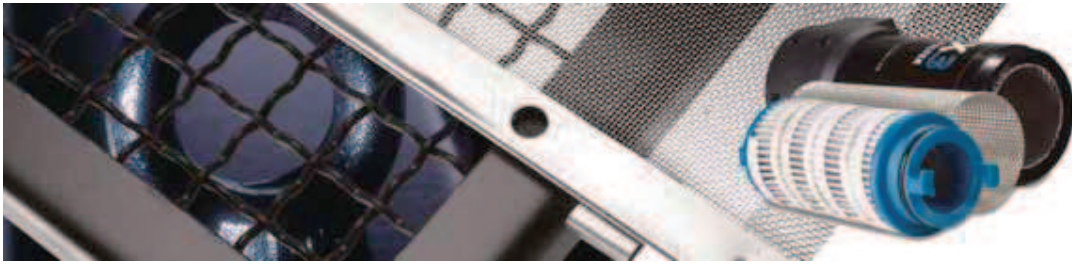
7. MATRIX GUARD

No guard	= 0
Stone guard	= S
Dust guard	= D
Dust and stone guard	= P

8. STANDARD/SPECIAL

Standard	= 0
Special ¹⁾	= Z

1) Stated in plan language at end of description



With our specialist expertise, industry knowledge and advanced technology, we can offer a range of different solutions for coolers and accessories to meet your requirements.

Take the next step

- choose the right accessories

Supplementing a hydraulic system with a cooler, cooler accessories and an accumulator gives you increased availability and a longer useful life, as well as lower service and repair costs. All applications and operating environments are unique. A well-planned choice of the following accessories can thus further improve your hydraulic system. Please contact Olaer for guidance and information.



Pressure-controlled bypass valve *Integrated*

Allows the oil to bypass the cooler matrix if the pressure drop is too high. Reduces the risk of the cooler bursting, e.g. in connection with cold starts and temporary peaks in pressure or flow.



Stone guard/Dust guard

Protects components and systems from tough conditions.



Temperature-controlled bypass valve *Integrated*

Same function as the pressure-controlled bypass valve, but with a temperature-controlled opening pressure - the hotter the oil, the higher the opening pressure.



Lifting eyes

For simple installation and relocation.



Thermo contact

Temperature switch with fixed set point. For temperature warnings, and for more cost-efficient operation and better environmental consideration through the automatic switching on and off of the fan motor.



Temperature-controlled 3-way valve *External*

Same function as the temperature-controlled bypass valve, but positioned externally.
Note: must be ordered separately.

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RevD

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