



Pumps

RSA

Size 28, 40, 60, 95, 125

Description

RSA oil pumps are designed for small/medium sized domestic and commercial oil burners up to 255 l/h. The pumps have a built-in pressure regulator with shut-off function. A special regulation spring is available for feed/transfer applications.

Features & Benefits

- Light oil and Kerosene
- 1 or 2-pipe operation
- 1-stage
- Built-in pressure regulator with shut-off
- Ring filter
- Spec. spring available for feed/transfer applications

Applications

- Small/medium sized domestic and commercial oil burners up to 255 l/h.

Ordering

Product code numbers

Product Type	Nozzle/pressure outlet	ROTATION	1 or 2 stage	Capacity [l/h]	Biofuel blend	Code number
RSA	L	R	1	82.00	100	070-3230
RSA	L	R	1	82.00	100	070-3240
RSA	L	R	1	82.00	100	070-3243
RSA	L	R	1	82.00	100	070-3249
RSA	L	R	1	120.00	100	070-3354
RSA	L	R	1	120.00	100	070-3360
RSA	L	R	1	120.00	100	070-3363
RSA	L	R	1	120.00	100	070-3365
RSA	L	R	1	255.00	100	070-3400
RSA	L	R	1	255.00	100	070-3410
RSA	L	R	1	255.00	100	070-3413
RSA	L	R	1	180.00	100	070-3470
RSA	L	R	1	180.00	100	070-3480
RSA	L	R	1	180.00	100	070-3484
RSA	L	R	1	180.00	100	070-3485
RSA	L	R	1	50.00	100	070-5376
RSA	L	R	1	50.00	100	070-5377
RSA	L	L	1	82.00	100	070L3230
RSA	L	L	1	82.00	100	070L3244
RSA	L	L	1	82.00	100	070L3248
RSA	L	L	1	82.00	100	070L3249
RSA	L	L	1	120.00	100	070L3350
RSA	L	L	1	120.00	100	070L3352
RSA	L	L	1	120.00	100	070L3362
RSA	L	L	1	120.00	100	070L3366
RSA	L	L	1	255.00	100	070L3400
RSA	L	L	1	255.00	100	070L3410
RSA	L	L	1	255.00	100	070L3412
RSA	L	L	1	180.00	100	070L3470
RSA	L	L	1	180.00	100	070L3480
RSA	L	L	1	180.00	100	070L3482
RSA	L	L	1	50.00	100	070L5370

Identification

Example: RSA **60**

RSA

28 = Capacity 46 l/h
40 = Capacity 75 l/h
60 = Capacity 120 l/h
95 = Capacity 184 l/h
125 = Capacity 255 l/h

Nozzle capacity at 4.3 cSt., 10 bar, 2800 min-1.

Accessories code numbers

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.



070-0030

LOW PRESSURE SPRING 1-5 Bar.

LOW PRESSURE SPRING 1-5 Bar.

Related products

070-3410

070-3413

070-3484

070-5377



070-0033

STRAINER SET RSA95/125

STRAINER SET RSA95/125

Related products

070-3410



070-0211

FLANGE

FLANGE

Related products

070-3410

070-3413

070-3484

070-5377



070-0020

2-PIPE SCREW

2-PIPE SCREW

Related products

070-3410

070-3413

070-3484

070-5377

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.

Spare parts code numbers

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.



070-0032

STRAINER SET RSA28/40/60

STRAINER SET RSA28/40/60

Related products

070-3230	070-3240	070-3243	070-3249
070-3354	070-3360	070-3363	070-3365
070-3400	070-3410	070-3413	070-3470
070-3480	070-3484	070-5376	070-5377
070L3230	070L3244	070L3248	070L3249
070L3350	070L3352	070L3362	070L3366
070L3400	070L3410	070L3412	070L3470
070L3480	070L3482		



070-0031

HIGH PRESSURE SPRING 15-30 Bar.

HIGH PRESSURE SPRING 15-30 Bar.

Related products

070-3230	070-3240	070-3243
070-3249	070-3354	070-3360
070-3363	070-3365	070-3400
070-3410	070-3413	070-3470
070-3480	070-3484	070-5376
070-5377	070L3230	070L3244
070L3248	070L3249	070L3350
070L3352	070L3362	070L3366
070L3400	070L3410	070L3412
070L3470	070L3480	070L3482



070-0042

G1/4 RSH nozzle port adapter

G1/4 RSH nozzle port adapter

Related products

070-3230	070-3240	070-3243	070-3249
070-3354	070-3360	070-3363	070-3400
070-3410	070-3413	070-3470	070-3480
070-3484	070-5376	070-5377	070L3230
070L3244	070L3248	070L3249	070L3350
070L3352	070L3362	070L3366	070L3400
070L3410	070L3412	070L3470	070L3480
070L3482	070L5370		



070-0033

STRAINER SET RSA95/125

STRAINER SET RSA95/125

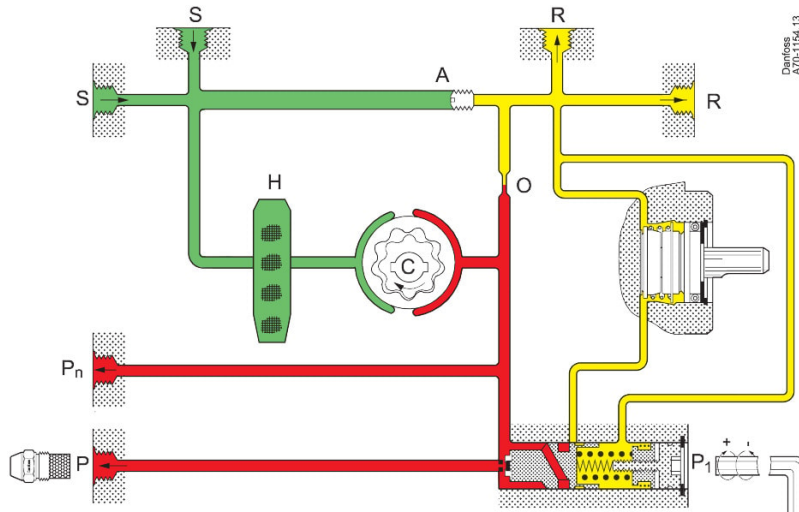
Related products

070-3230	070-3240	070-3243
070-3249	070-3354	070-3360
070-3363	070-3400	070-3410
070-3413	070-3470	070-3480
070-3484	070-5376	070-5377
070L3230	070L3244	070L3248
070L3249	070L3350	070L3352
070L3362	070L3366	070L3400
070L3410	070L3412	070L3470
070L3480	070L3482	070L5370

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.

Functions

Operation



Red = Pressure
Green = Suction
Yellow = Return

From the suction inlet (S) oil is drawn through the gear set, where the pressure is increased. By means of the piston and the spring in the pressure regulator the pressure is kept constant at the value set on adjustment screw (P1).

In 2-pipe systems the excess oil is led back to the return outlet (R). In 1-pipe systems with plugged return outlet (R) and removed by-pass screw (A), the oil is returned internally to the gear set (see figure).

When the pump is stopped the pressure drops and the spring force in the pressure regulator will move the piston until it seats and the oil flow is shut off effectively.

Bleeding

In 2-pipe systems the pumps are self-priming, i.e. bleeding is performed via the constriction (O) to the return outlet (R).

In 1-pipe systems with plugged return outlet (R) and by-pass screw (A) removed, bleeding must be performed through the pressure gauge port (Pn).

In 1-pipe systems with underlying tank, the closing function of the regulating valve must be rendered inoperative. This is made by connecting the nozzle line to the pressure gauge port (Pn) and plug the pressure port (P). In this application a cut-off valve must be installed in the nozzle line.

Warranty

For pumps used outside the stated technical data and used with oil containing abrasive particles Danfoss cannot give any warranty.

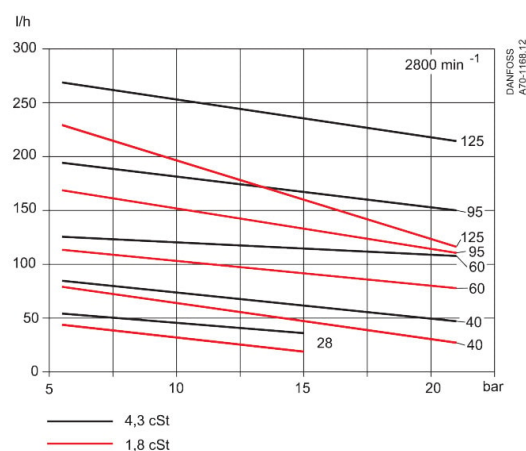
Product details

General data

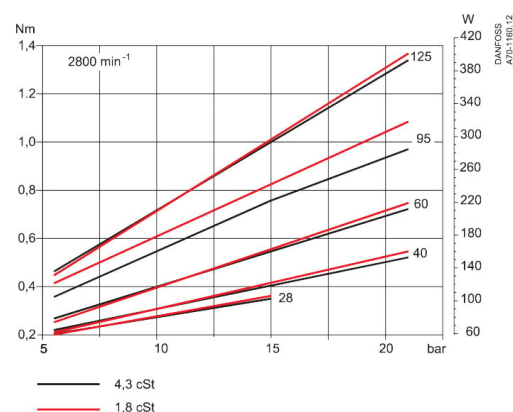
RSA	28	40	60	95	125
Oil types	Kerosene, standard fuel gas oil and bio fuels				
Viscosity range (measured in suction inlet)	1.3 - 75 cSt. (mm²/s)				
Filter area / mesh	75 cm² / 150 µm			170 cm² / 150 µm	
Pressure range, stage	5.5-15 bar	5.5-21 bar			
Factory setting	7 ±1 bar			10 ±1 bar	
Max. pressure in suction inlet/return outlet	4 bar				
Speed	2400-3450 min ⁻¹	1400-3450 min ⁻¹			
Max. starting torque	0.20 Nm	0.22 Nm	0.24 Nm	0.30 Nm	0.35 Nm
Ambient temperature	-20 to +120 °C				
Storage temperature	-25 to +120 °C				
Temperature of medium	-10 to +120 °C				
Neck / Flange	EN 225				

Capacity

Nozzle capacity

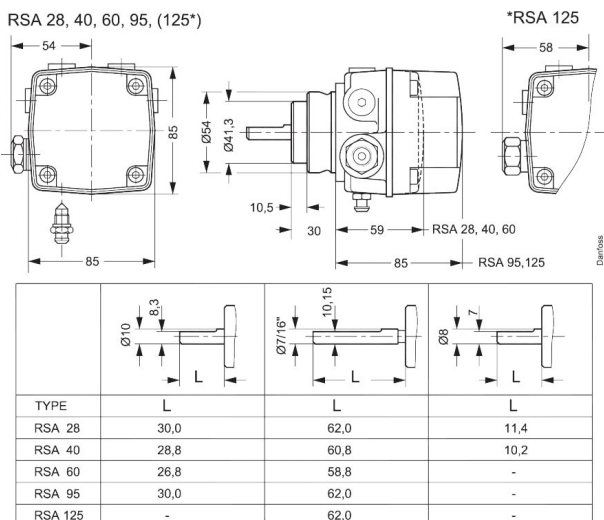


Operating torque
Power consumption



Dimensions & weights

Weight	Oil Pump Type RSA Size 28, 40, 60, 95, 125	
	Gross weight	1.144 kg
	Net weight	1.143 kg
	Volumne	1.203 Liter



Connections

P₁: Pressure adjustment

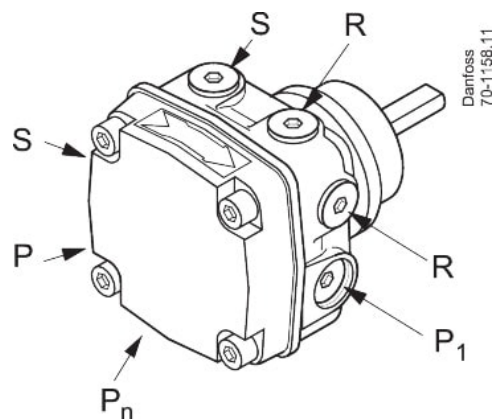
S: Suction inlet G1/4

R: Return outlet G1/4

P: Pressure outlet G1/8 (G1/4 for RSA 125)

P_n: Pressure gauge port G 1/8

H: Filter



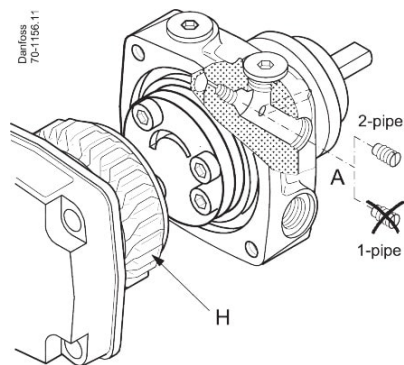
Service

Change-over and filter replacement

H: Filter

A: 2-pipe operation, with screw

B: 1-pipe operation, without screw



Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
Manufacturer's Declaration	Danfoss MA 070 RS.04	Danfoss	EU RoHS
Export Control Declaration	Oil pumps RSA	Danfoss	

Contact details

Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.



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