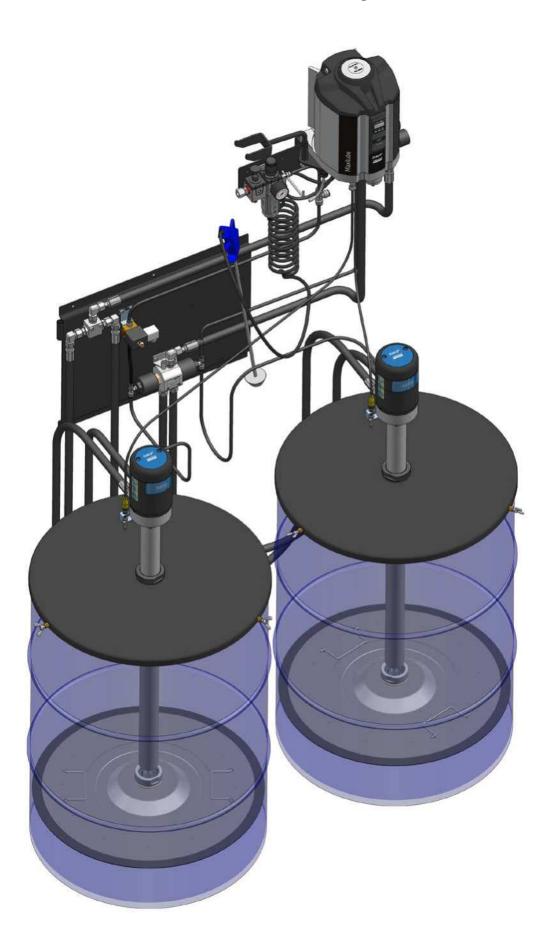
SKF Dualset valve system



DUALSET VALVE SYSTEM

(Original Operating and Service Manual according to EU Directive 2006/42/EC)

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1 DUALSET VALVE SYSTEM GENERAL INFORMATION

The installation, operating and maintenance instructions in this manual conform to the EU Directive 2006/42/EC on machinery. The operating and service manual is an integral part of operating the unit. It must be filed for subsequent use.

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Oy SKF Ab Muurame reserves the right to make changes to the content and technical specifications in this manual.

2 MAINTENANCE

If you have any technical questions, please do not hesitate to contact us:

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3 SKF SAFETY INSTRUCTIONS

This operating and service manual contains basic information which must be observed when installing, operating and maintaining the unit. It is necessary for the installer and operator to read these instructions before installation and commissioning. Ensure that these instructions are always accessible to operating personnel.

In addition to these general safety instructions, the special safety instructions provided in other sections of this document must be followed.

Safety signs

Symbol	Meaning	
	General risk of injury and damage	
4	Voltage	
	Hot surface	
	Risk of slipping	

Warnings and their meanings

Warning	Meaning	
DANGER!	Indicates risk of injury to people	
WARNING!	Indicates danger to buildings, machines or environment	
NOTE!	Indicates additional information	

3.1 Safety instructions for the operator

Electricity-related risks must be prevented by following the current electrical safety regulations.

3.2 Safety instructions for maintenance, inspection and installation

The operator must ensure that all maintenance, inspection and installation work is carried out by authorized and qualified specialists. This operating and service manual must be available to these staff members.



DANGER! Ensure that power to the unit is switched off during maintenance. Smoking and producing open flames and sparks while working on or near hydraulic systems is forbidden.





DANGER! Ensure that the unit is not pressurized during maintenance.



WARNING! Oils and water-polluting fluids must not be allowed to enter the soil, water courses or sewer systems. Ensure that oils are disposed of safely and without harming the environment. The relevant regulations in the country must be observed regarding water pollution and oil disposal.



WARNING! Flammable fuels, such as diesel oil or other fuels, cannot be used to operate the SKF Dualset system.

3.3 Warranty and liability

Oy SKF Ab Muurame will not assume any liability, nor will the warranty provided for the product cover any loss in the following cases:

- The unit has not been used for its intended purpose.
- The unit has not been appropriately installed, de-commissioned or operated.
- The unit has been operated using impure lubricants or materials that have not been approved.
- The unit has been maintained or repaired incorrectly.
- Parts other than Oy SKF Ab's original spare parts have been used in the unit.
- The unit has been altered in ways that Oy SKF AB Muurame has not approved.
- Instructions for transportation and storage have not been followed.

4 GENERAL DESCRIPTION

DUALSET is a doubling set for pneumatic pumping centres.

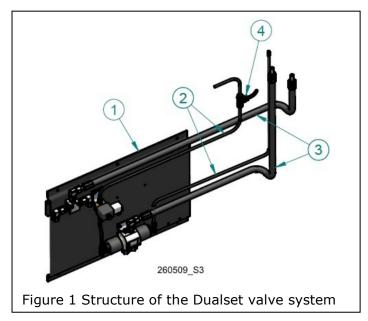
NOTE! The doubling set is an accessory set for the pumping centre. The pumping centre parts must be ordered separately.



5 STRUCTURE

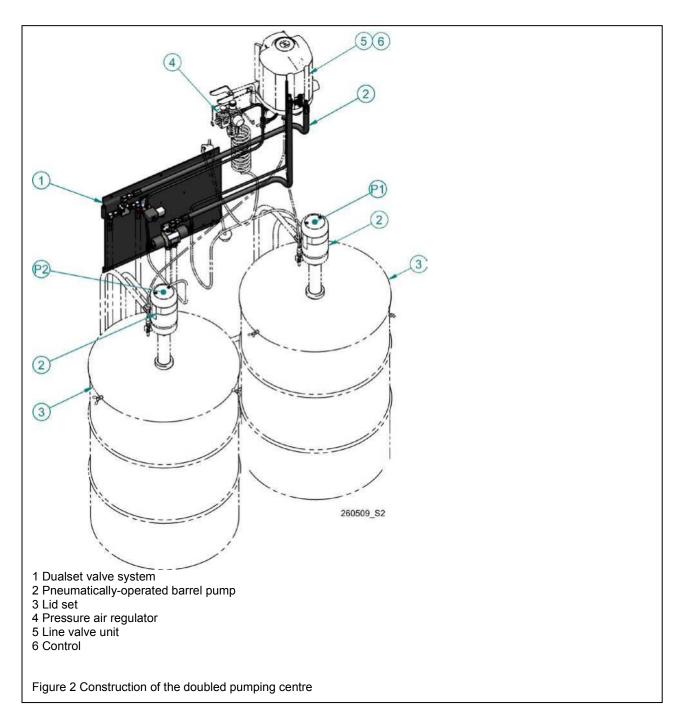
Structure of the Dualset valve system:

- 1 valve system on a base (part 1)
- 1 pneumatic hose ø8/6 mm (part 2, cut to required lengths during installation)
- 2 steel wire reinforced hoses for grease connections (part 3, pressure and return lines)
- 1 ø8 mm T quick connector (part 4)





The doubling of a pneumatic pump requires the Dualset valve system, pneumatic barrel pump (2 pcs, e.g. SKF MPB), lid set (2 pcs), air filter regulator, line valve set (e.g. SKF Maxilube) and control system (e.g. SKF Maxilube IF-105).





6 OPERATION

After the pumping centre has been doubled, the control centre automatically changes from the pump in use to the other pump while the low-level switch of the lubricant barrel operates.

An alarm is triggered by the pump change and lubrication continues normally. The changed pump is the primary pump until its low-level switch operates.

Pressure line P of pumps (P1, P2) is equipped with a shuttle valve V1 which provides lubricant flow to the line valve unit. The tank line T is equipped with a return valve V2, which directs lubricant to the lubricant reservoir in use.

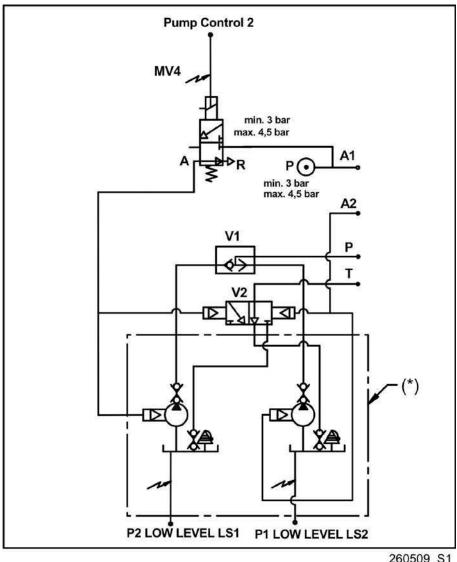


Figure 3 PI diagram

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7 CONNECTIONS

The first pump (P1) is connected via the P connection to the check valve's (V1) P1 connection and via the T connection to the return valve's (V2) T1 connection. The pneumatic connection of the pump P1 is connected to the return valve's (V2) pneumatic connection P1.

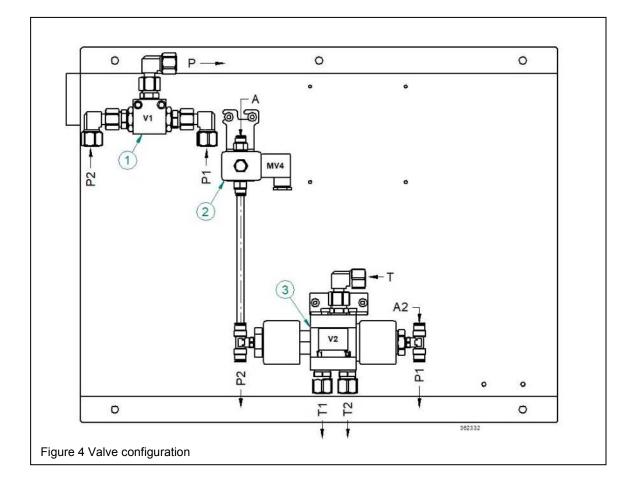
The second pump (P2) is connected via the P connection to the check valve's (V1) P2 connection and via the T connection to the return valve's (V2) T2 connection. The pneumatic connection of the pump P2 is connected to the return valve's (V2) pneumatic connection P2.

Maxilube's T connection is connected to the return valve's (V2) T connection and Maxilube's A2 connection is connected to the return valve's (V2) P1 connection.

The pneumatic connection of the valve system's solenoid valve MV4 is connected with the assistance of the T quick connector delivered with the pressure air regulator's pressure regulating valve.

Lubricant connections ø12 mm stainless union connector DIN2353/ISO8434-1

Pressure air connections ø8 mm quick connectors



8 SPARE PARTS

See figure 4.

3	RETURN VALVE	12386001	1
2	SOLENOID VALVE BURKERT/SOCKET	11601420/12600292	1/1
1	SHUTTLE VALVE R1/4	12600815	1

9 TECHNICAL SPECIFICATION

Description	Value	Unit
Compressed air connection range	3.0 4.5	bar
Valve operating voltage	24	V DC
Valve power requirement	8	W
Ambient operating temperature range	0 +50	°C
Protection class	IP 65	
Max. lubricant pressure	300	bar

Dualset valve system order code 12386002

10 REMOVING FROM SERVICE

10.1 Temporary removing from service

The system can be temporarily shut down by disconnecting it from electrical, pressurised air and hydraulic outlets. For further information, see section "General description" of this manual. For temporary removal from service, see also section "Storage". To restart the system, see the "Operation" and "Technical specification" sections.

10.2 Final removing from service

All relevant country-specific instructions and regulations regarding the decommissioning and disposal of contaminated equipment must be followed when decommissioning the product.



WARNING! Lubricants can contain chemicals that can contaminate the soil and the water system. Lubricants must be disposed of correctly. Follow the national instructions and regulations for disposal and recycling.

Oy SKF AB will receive products it has delivered and take care of their appropriate disposal. Oy SKF AB has the right to charge for expenses that are not related to disposal and recycling.

11 STORAGE

The products must be stored as follows:

- The storage space must be dry, dustless and well ventilated
- The maximum storage time is 24 months
- The storage temperature must be 10-40 °C
- Avoid exposure to direct sunlight and thermal radiation
- Store the products clear of the ground or floor
- · Protect the products from mechanical shocks, corrosion and dust



12 CONTACT INFORMATION

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