

INSTALLATION GUIDE

INSTALLATION VALVES



SV XXX NC/NO – 2/2, LS-liitäntä

rev 1.2



INSTALLATION VALVES/ SV

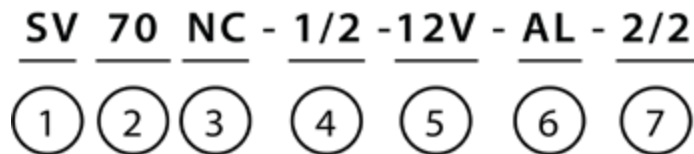
INSTALLATION GUIDE

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1. GENERAL

SV solenoid valves are design to enable easy and reliable start/stop control to DYNASET devices at any base machine. Operator can control base machine normally from cabin and switch hydraulic flow and pressure to DYNASET units (HG, HMG, HWG, HKL etc.). SV comes in 12 or 24 VDC models.

Following identification key describes the SV-valves in more detail.



1. PRODUCT GROUP

Describes the product group in this case the Solenoid valves, SV.

2. FLOW MAX.

Describes the SV's maximum flow value.

3. OPERATION METHOD

Describes the if the SV has NC (normally closed) or NO (normally open) working method. In NC the valve is closed until opened and the NO is vice versa.

4. SIZE

Describes the SV's connection size, example 1/2".

5. OPERATING VOLTAGE

Describes the SV's operating voltage, 12/24 V.

6. BLOCK MATERIAL

Describes the SV's block material.

7. VALVE TYPE

Informs the valve type of the SV.

2. SAFETY


ATTENTION!

Operator and maintenance personnel must act in compliance with the laws, regulations and recommendations issued by the local work safety authorities.

 **WARNING**

HIGH PRESSURE OIL!

Can cause severe injuries.
Always wear appropriate clothing
and safety equipment.




The pressure in hydraulic circuits is considerably high. Therefore the condition of your equipment are to be kept under constant observation. All couplings, valves and hoses are to be kept tight and clean. Leaks in the hydraulic system must be repaired immediately to avoid injuries caused by high pressure and oil blowouts.

 **WARNING**

RISK OF BURNS!

Parts of the unit, oil, and oil filler cap
can be hotter than 80 °C!

Wear personal safety equipment!



ATTENTION!

Before beginning any maintenance, repair or disassembly to the hydraulic system and DYNASET product, ensure that the system is stopped and depressurized. Make sure that the system can not start accidentally.

NOTE!

When carrying out any maintenance to the hydraulic system keep the components clean. This is to ensure safe, reliable and longlife operation of your equipment.

When working with hydraulic system or accessories, wear appropriate protective clothing, safety goggles, gloves, ear protection.

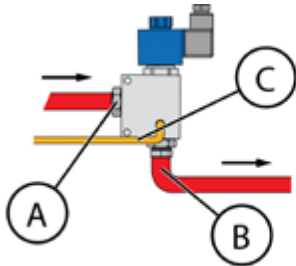
3. TECHNICAL SPECIFICATIONS

MODEL	P max. bar (psi)	Q max. l/min (gpm)	HYDRAULIC PORTS BSP			ORDER CODE
			A	B	LS	
SV70NC-1/2-12V- AL SOLEN.V. 2/2, LS-CONN.	210 (3045)	70 (18.48)	1/2"	1/2"	1/8"	D400103800
SV70NC-1/2-12V- FE SOLEN.V. 2/2, LS-CONN.	350 (5075)	70 (18.48)	1/2"	1/2"	1/8"	D400103820
SV70NC-1/2-24V- AL SOLEN.V. 2/2, LS-CONN.	210 (3045)	70 (18.48)	1/2"	1/2"	1/8"	D400103790
SV70NC-1/2-24V- FE SOLEN.V. 2/2, LS-CONN.	350 (5075)	70 (18.48)	1/2"	1/2"	1/8"	D400103810
SV150NC-1-12V- FE SOLEN.V. 2/2, LS-CONN.	350 (5075)	150 (39.60)	1"	1"	1/8"	D400103860
SV150NC-1-12V- AL SOLEN.V. 2/2, LS-CONN.	210 (3045)	150 (39.60)	1"	1"	1/8"	D400103850
SV150NC-1-24V- AL SOLEN.V. 2/2, LS-CONN.	210 (3045)	150 (39.60)	1"	1"	1/8"	D400103870
SV150NC-1-24V- FE SOLEN.V. 2/2, LS-CONN.	350 (5075)	150 (39.60)	1"	1"	1/8"	D400103880
SV150NC-1-24V- FE SOLEN.V. 2/2, LS-CONN.	350 (5075)	150 (39.60)	1"	1"	1/8"	D400103900
SV150NC-1-24V- AL SOLEN.V. 2/2, LS-CONN.	210 (3045)	150 (39.60)	1"	1"	1/8"	D400103890
SV260NC-1 1/4-24V- FE SOLEN.V. 2/2, LS-CONN.	350 (5075)	260 (68.64)	1 1/4"	1 1/4"	1/8"	D400103910

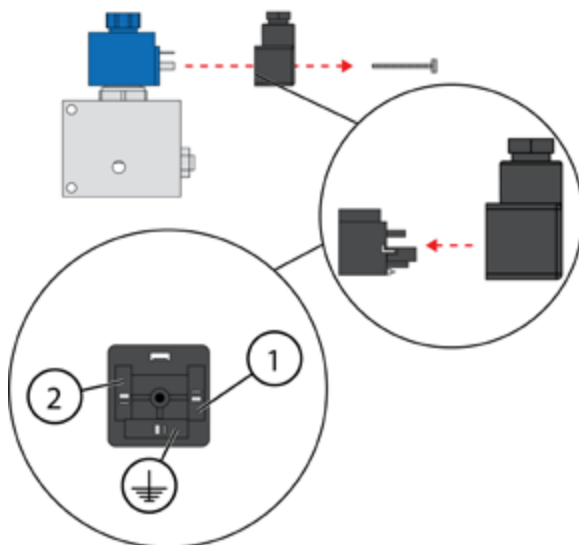
*CF value is adjusted at the factory according to the customers specifications.

4. INSTALLATION

Install SV solenoid valve between the pressure source line (A) and the control line (B), to the target device line with appropriate connectors (see "Technical specifications" table)(C = LS-line).

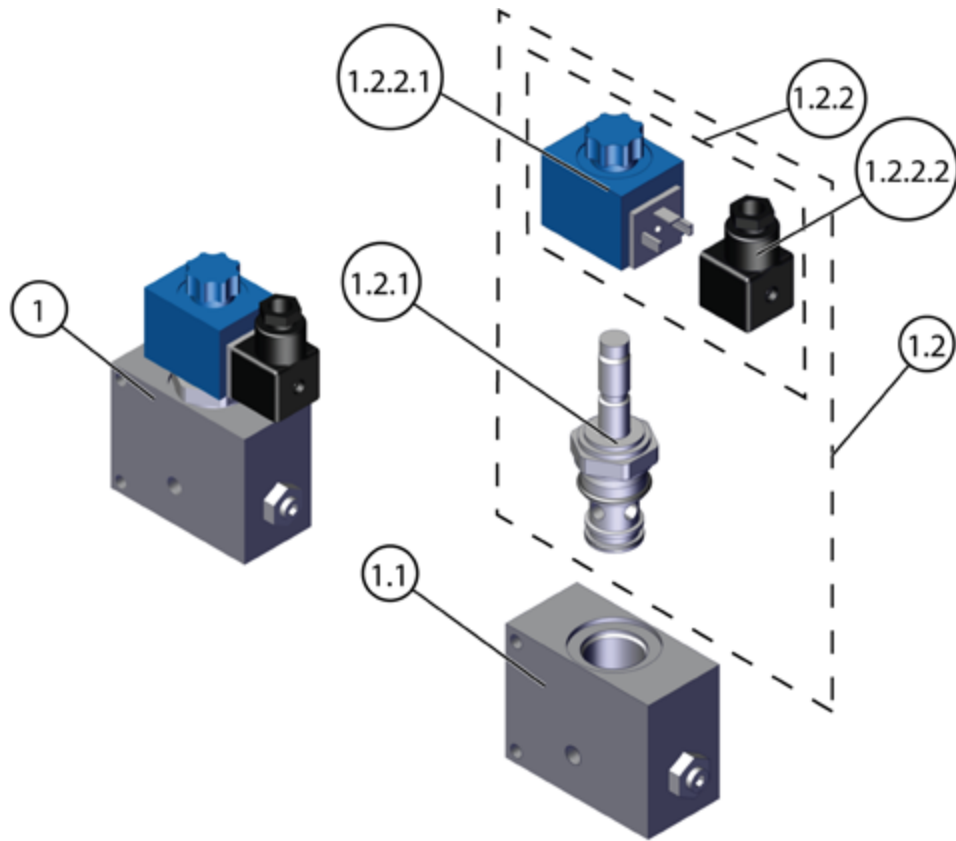


1. Connect coil connector cable to the electric switch SW (12VDC <10A / 24VDC <10A) in the cabin dashboard.
2. Take operating voltage to the SV switch from the cabin's fuse box. Use fuse >15A.
3. Remove valve connector from the cartridge coil.
4. Make shure that the SW is turned off. Open the Coil and connect the cables. Pole 1 is the + VDC and the Pole 2 is the - VDC.



5. When the SW is turned off ensure that there is no voltage between connector pole 1 and 2 by measuring the voltage with voltage meter.
6. Turn SW switch ON and measure connector pole 1 and 2. Reading should be either ~12 VDC /~ 24 VDC depending on the electric system. If not, check the wiring.
7. Attach valve connector to the cartridge coil.
8. Start the working machine and turn SW switch ON to start the Dynaset device.
9. Check all installed hydraulic and electric connection.
10. Turn SW switch OFF to stop the Dynaset device.

5. SPARE PARTS



	POS.	PART NO.	DESIGNATION	DETAILS
SV70NC-1/2-12V-AL	1	D400103800	SV70NC-1/2-12V-AL SOLENOID VALVE 2/2, LS-CONNECTION	Assembly
	1.1		Cartridge body	2/2 1/2
	1.2		Valve cartridge assembly	2/2 NC 70
	1.2.1	V100113100	Valve cartridge	2/2 NC 70
	1.2.2		Cartridge coil assembly	35x45
	1.2.2.1		Coil	12VDC
	1.2.2.2	V100113150	Valve connector 3-pole	12VDC

6. MANUFACTURERS LIMITED WARRANTY

1. Warranty coverage

All hydraulic accessories manufactured by DYNASET OY are subject to the terms and conditions of this limited warranty. Products are warranted to the original purchaser to be free from defects in materials or workmanship. Exclusions from warranty are explained in item Exclusions from warranty.

2. Beginning of warranty period

Warranty period begins from the delivery date of the product. Delivery is considered to be done on the date when installation has been accomplished or purchaser has taken the product in use. Product is considered as taken in use at the date when DYNASET OY has delivered the product to purchaser, unless separately agreed otherwise by written agreement.

3. Warranty period

Warranty period is twenty four (24) months based on maximum of 2000 hours usage during this time period. In cases where the system is provided complete with certain special components (e.g. drive unit), those components are considered as a subject to their manufacturer's warranty.

4. Warranty procedures

Immediately upon identifying a problem which purchaser believes to be a failure subject to the product's limited warranty, purchaser must contact primary to the seller of the product. Contact must be made as soon as possible, latest thirty (30) days after the problem was identified. Seller and/or manufacturer technical staff determines the nature of the problem primarily by phone or e-mail. Purchaser commits to give necessary information and to perform routine diagnostic procedures in order to determine the nature of the problem and necessary procedures.

5. Warranty repairs

If the product is found to be defective during the warranty period, DYNASET OY will, at its option, either repair the product, author it to be repaired at its authorized workshop or exchange the defective product. If the product must be repaired elsewhere than premises of DYNASET OY or authorized workshop, all costs excluded from this warranty (traveling and waiting hours, daily allowance, traveling expenses and uninstallation/reinstallation costs) will be charged from the purchaser.

If the problem is not covered by this limited warranty, DYNASET OY has the right to charge purchaser of troubleshooting and repairing.

6. Delivery terms of warranty repair

If the product is found possible to be defective under this limited warranty and it needs to be repaired, DYNASET OY gives Warranty Return Number (WRN). Items being returned must be shipped, at the purchaser's cost, adequately packed for shipment, to the DYNASET OY or to other location authored by DYNASET OY.

Shipment documents must contain:

Purchaser's name and contact information

Receipt of original purchase

WRN code

Problem description

7. Warranty of repaired product

Warranty period of the product repaired under this limited warranty continues to the end of original warranty period.

8.Exclusions from warranty

This warranty shall not apply to:

- Failures due to normal wear and tear, improper installation, misuse, abuse, negligence, purchaser selection of improper product to intended use, accident, improper filtration of hydraulic oil or intake water or lack of maintenance.
- Cost of maintenance, adjustments, installation or startup.
- Coating, hydraulic oil, quick couplings and interconnection hoses (internal or external to system assemblies).
- Products altered or modified in a manner not authorized by DYNASET OY in writing.
- Products which have been repaired during warranty period by others than DYNASET OY or its authorized workshop.
- Costs of any other damage or loss, whether direct, indirect, incidental, special or consequential, arising out of the use of, or the inability to use, the product.
- Telephone or other communications expense.
- Product that is used in exceptional conditions, considered to cause excessive wear and tear.
- Faults caused by nature phenomenon's like flood, thunder, etc.

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7. PRODUCT DISPOSAL

Dispose and recycle all the DYNASET products and their packaging environmentally responsible way.

Do not dispose used oils, electrical components, batteries or any other hazardous waste with normal waste. They are harmful for the environment and can be recycled for re-use.

Contact your local waste recycling facility for more information about recycling hazardous waste.

 **NOTE!**

Always act according to the waste legislation, regulations and recommendations in waste disposal and waste recycling issued by your local authorities.

8. DECLARATION OF CONFORMITY

We hereby declare that the design and manufacture of the product stated below are in conformity with the provisions of the European Parliament and Councils on the harmonization of the laws of Member States on the safety of machine's.

Machine directive 2006/42/EC

LVD directive 2014/35/EU

EMC directive 2014/30/EU

RoHS directive 2011/65/EU

Applied conformity standards:

CEN EN ISO 4413: EN ISO 4413:2010 Hydraulic fluid power - General rules and safety requirements for systems and their components.

EN60204-1 Safety of machinery – Electrical equipment of machines.

Manufacturer: **DYNASET Oy**
Menotie 3, FI-33470 Ylöjärvi, Finland

Product group: INSTALLATION VALVES

Product: SV Solenoid valves

If the device has been modified by someone other than the manufacturer or without the manufacturer's permission, this declaration is not valid.



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ELECTRICITY

HG Hydraulic Generator
HGV POWER BOX Variable Hydraulic Generator System
HGV Variable Hydraulic Generator System
HWG Hydraulic Welding Generator
HGG Hydraulic Ground Power Generator



HIGH PRESSURE WATER

HPW Hydraulic High Pressure Water Pump
HPW Hydraulic Power Washer
KPL High Pressure Street Washing Unit
HPW-DUST High Pressure Dust Suppression System
PPL High Pressure Pipe Cleaning Unit
HPW-FIRE High Pressure Firefighting System
FP Fire Fighting Piercing Kit
HDF Hydraulic Drilling Fluid Pump
JPL High Pressure Bin Washing System
HSP Hydraulic Submersible Pump



COMPRESSED AIR

HK Hydraulic Piston Compressor
HKL Hydraulic Rotary Vane Compressor
HKR Hydraulic Screw Compressor



MAGNET POWER

HMG PRO Hydraulic Magnet Generator
MAG Lift Magnet
HMAG PRO Hydraulic Magnet



VIBRATION

HVB Hydraulic Vibra
HVD Hydraulic Directional Vibra
HRC Hydraulic Reversal Cylinder



POWER BOOSTING

HPI Hydraulic Pressure Intensifier
HPI-C Hydraulic Pressure Intensifier for Cylinder



KNOW-HOW

Hydraulic Power Take-off (PTO)
Hydraulic Power Unit Technology
De-Icing Technology
Installation Valves
HHK Hydraulic Grinder
HV/HVY Hydraulic Winch / Winch Unit

www.DYNASET.com

