

ELECTRIC POWERED HYDRAULIC PUMPS

UP-45SV Series

SMALL-SIZE

ENERGY-SAVING

HIGH-POWER



UP-45SV-Electric/Hydraulic Pumps

- These pumps feature special 2-stage plunger pumps, providing high flow of 2.5ℓ at 1st stage upto 7MPa by means of unloading valves, firstly introduced in this class.
- The pumps are designed to easily accept various kind of such stacking valves as solenoid valves, relief valves, check valves, etc. for almost any application. Solenoid valved pumps combine maximum productivity and energy saving with ease of use, and are ideal choice for production, lifting and maintenance applications.
- Lightweight and portable-16 to 20 kgs, with easy carry handles.



COMMON SPECIFICATIONS

Type	Electric Motor (50/60Hz)	Hydraulic Pump				Reservoir	
UP-45SV	0.45KW AC230V 50/60Hz single phase, commutator type, insulation "E", Max. 4.5 A.	Max. Work. Pressure MPa		Flow Rate (ℓ /min)		Capacity ℓ	Usable Oil ℓ
		1st Stage	2st Stage	1st Stage	2st Stage		
UP-45SVL		70	7	0.35	2.5	3.0	2.0
						5.0	4.0

Remarks : 5ℓ reservoir pump (usable oil : 4ℓ) are also available on request.

Features and Function of Each Model

	Model No.	Valve	Pump function	Control	Fitted w/	Weight
For single-acting	UP-45SVG-0	Basic type	With P.T. manifold, without any valve.	Hand pendant	Pressure gauge	14.3Kg
	UP-45SVG-1	Manual 3-way Valve	A single-acting ram is actuated by 3-way manual valve. Advance/Hold/Retract.	Manual valve Hand pendant	Pressure gauge	16.1Kg
	UP-45SVG-4	Solenoid w/ hand pendant	"Advance" with ON switch depressed and the motor running, the motor stops and "Hold" with the switch released. "Retract" with OFF switch depressed. Advance/Hold/Retract.	2-way solenoid valve	Pressure gauge	17.2kg
	UP-45SVG-2	2-way solenoid valve	"Advance" with ON switch depressed and the motor running. "Retract" with the switch released and the motor stops. Advance/auto Retract.	Solenoid w/ hand pendant	Pressure gauge	18.5kg
For double-acting	UP-45SVG-7	4-way 3-pos. manual valve	A double-acting ram is actuated by 4-way manual valve. Advance/Hold/Retract.	Manual valve hand pendant	Pressure gauge	16.1kg
	UP-45SVG-5	4-way 2-pos. solenoid valve	"Advance" with ON switch depressed and the motor running, the motor stops with ON switch released. "Retract" with OFF switch depressed and the motor running. Advance/Retract.	Solenoid w/ hand pendant	Pressure gauge	18.5kg
	UP-45SVG-8SP UP-45SVG-8WP	4-way 3-pos. solenoid valve/check valve (s)	Advance/"A" port Hold/Retract with stacking type pilot-operated check valve fitted on "A" port line. UP-45SVG-8WP allows pressure holding on both "A" and "B" port lines. Advance/Hold/Retract.	Solenoid w/ hand pendant	Pressure gauge	18.5kg
	UP-45SVG-8R	4-way 3-pos. solenoid valve/relief valve (s)	"A" and/or "B" port pressure is adjustable with stacking type double relief valves. Advance/Retract. pressure holding type pumps are available with additional check valves.	Solenoid w/ hand pendant	Pressure gauge	21.0kg
	UP-45SVG-8A UP-45SVG-8H	4-way 3-pos. solenoid valve	UP-45SVG is fitted with "A" port block solenoid valve. Open centre type solenoid valve is mounted on Model UP-45SVG-8H pump. Advance/Hold/Retract.	Solenoid w/ hand pendant	Pressure gauge	19.0kg

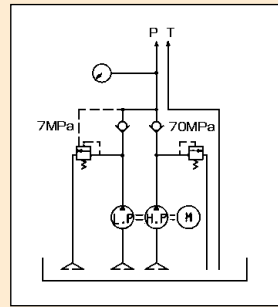
Pressure switches are additionally fitted for applications where system pressure must be maintained over a period of time or fixed force is repeatedly required.

UP-45SVG-0 basic pump

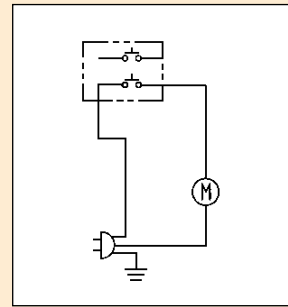
For applications where directional control valves are remotely mounted away from the pump.



■ Hydraulics circuit



■ Electric circuit

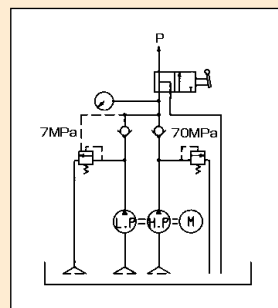


UP-45SVG-1 manual valve pump

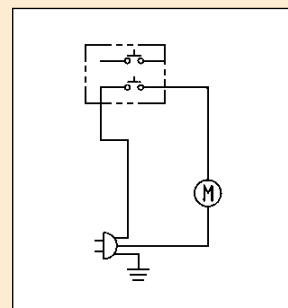
With MVS-3 3-way manual valve for applications such as lifting, maintenance, etc.



■ Hydraulics circuit



■ Electric circuit

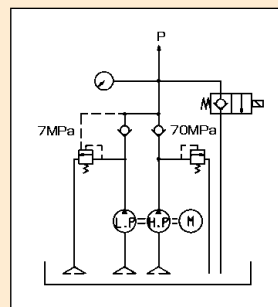


UP-45SVG-4 solenoid valve pump

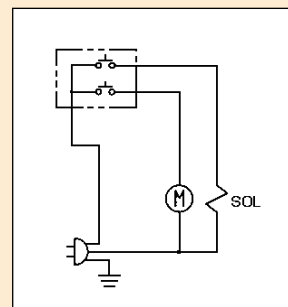
With SVS-2C 2-way normally closed solenoid valve for load lifting and holding.



■ Hydraulics circuit



■ Electric circuit

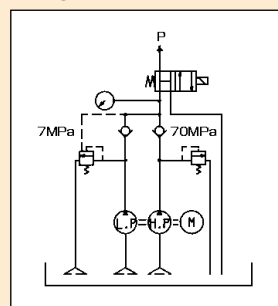


UP-45SVG-2 solenoid valve pump

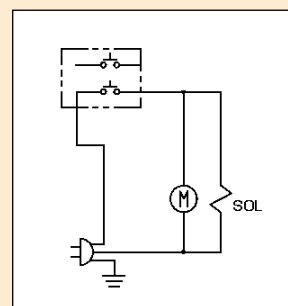
With SVS-2H 2-way normally open solenoid valve for auto-return applications where load holding is not required.



■ Hydraulics circuit



■ Electric circuit

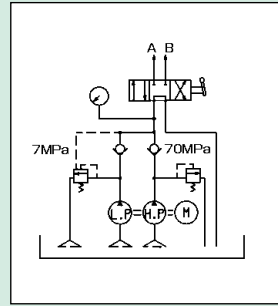


UP-45SVG-7 manual valve pump

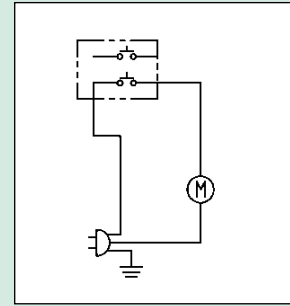
With MVS-4 4-way 3-pos. manual valve. the photo shows the pumps with an optional pressure switch.



Hydraulic circuit



Electric circuit

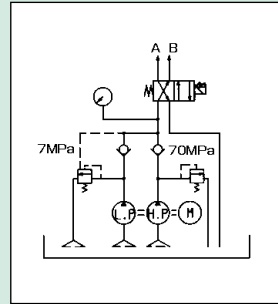


UP-45SVG-5 solenoid valve pump

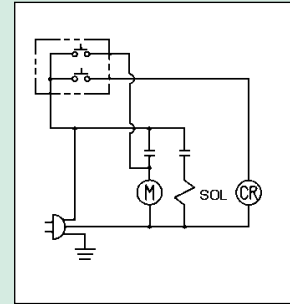
With MVS-4 4-way 3-pos. manual valve. the photo shows the pumps with an optional pressure switch.



Hydraulic circuit



Electric circuit

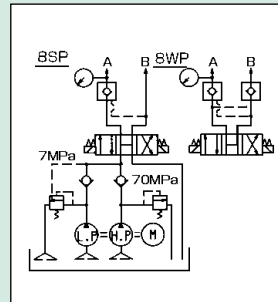


UP-45SVG-8SP UP-45SVG-8WP solenoid valve pump

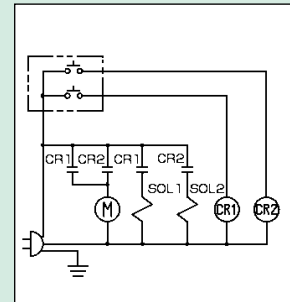
With SVS-4H 4-way 3-pos. solenoid valve and VPCS-10 or VPCW-10 pilotoperated check valve for positive load holding.



Hydraulic circuit



Electric circuit

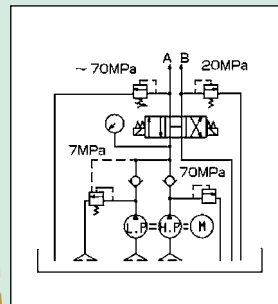


UP-45SVG-8R solenoid valve pump

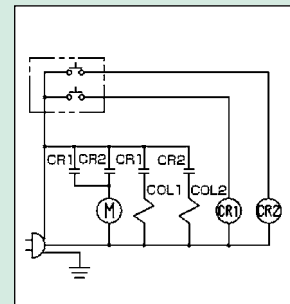
With SVS-4H 4-way 3-pos. solenoid valve and WDRL-10 relief valve for adjusting pressure.



Hydraulic circuit



Electric circuit

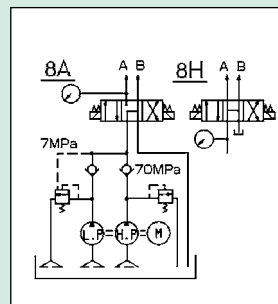


UP-45SVG-8A solenoid valve pump

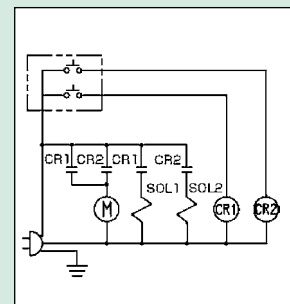
With SVS-4A 4-way 3-pos. "A" port block solenoid valve.



Hydraulic circuit



Electric circuit

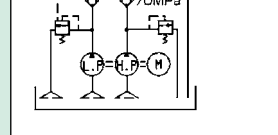


UP-45SVG-8H solenoid valve pump

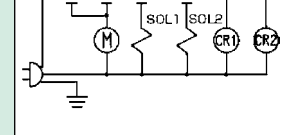
With SVS-4H 4-way 3-pos. open center solenoid valve.



Hydraulic circuit



Electric circuit

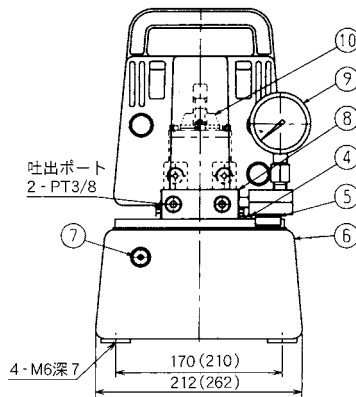
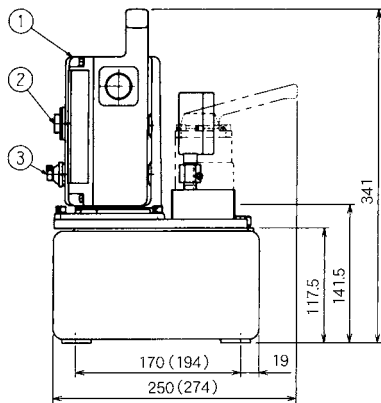


Stacking valves and Accessories

Description	Model	Photos	Used with pump models
Pressure gauge	PGF-63-1000G		All models of UP-45SVG- Series pumps
2-pos. push button switch	SW-1		All models of UP-45SVG- Series pumps
Self-hold push button switch	SW-3		Option
Universal Pressure switch	PS-100MP		Option
3-way 2-pos. manual valve	MVS-3		UP-45SVG-1
4-way 3-pos. manual valve	MVS-4		UP-45SVG-7
4-way 3-pos. solenoid valve	SVS-4H		UP-45SVG-8SP UP-45SVG-8WP UP-45SVG-8R UP-45SVG-8H
	SVS-4A		UP-45SVG-8A
2-way normally closed solenoid valve	SVS-2C		UP-45SVG-4
2-way normally open solenoid valve	SVS-2H		UP-45SVG-2
4-way 2-pos. solenoid valve	SVS-5		UP-45SVG-5
pilot-operated check valve	VPCS-10		UP-45SVG-8SP
	VPCW-10		UP-45SVG-8WP
Fitting plate for pressure gauge or pressure switch	MBS-10		UP-45SVG-2 UP-45SVG-5 UP-45SVG-8SP / 8WP UP-45SVG-8R UP-45SVG-8A / 8H
Fitting adaptors for pressure gauge or pressure switch	GT-10 (for pressure gauge)		UP-45SVG-0 UP-45SVG-1 UP-45SVG-7
	PT-10 (for pressure switch)		Option
Relief valve	WDRL-10		UP-45SVG-8R
Counter balance valve	SQ-10		Option

DIMENSIONS (mm)

UP-45SVG-1、7

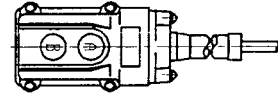


No.	Description
1	Electric motor
2	Metal receptacle
3	Power cord, 2M
4	H.P. relief valve
5	Oil feeding plug
6	Reservoir
7	Oil gauge
8	Discharge block
9	Pressure gauge
10	Manual valve

Power cord, 2.5M

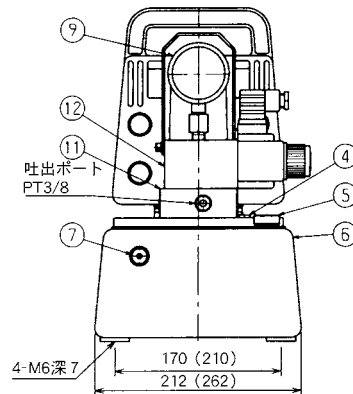
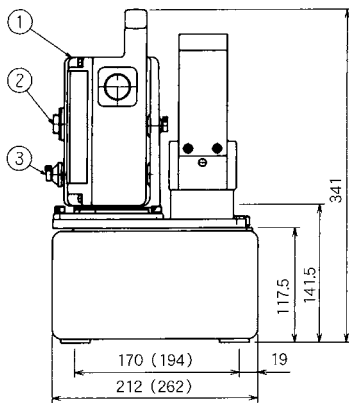


Hand pendant, 2.5M



() size is 5 ℓ tank. (usable oil 4 ℓ)

UP-45SVG-4

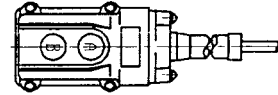


No.	Description
1	Electric motor
2	Metal receptacle
3	Power cord, 2M
4	H.P. relief valve
5	Oil feeding plug
6	Reservoir
7	Oil gauge
9	Pressure gauge
10	Discharge block
11	2-way solen. valve

Power cord, 2.5M

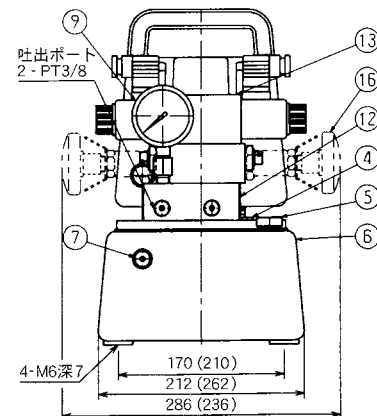
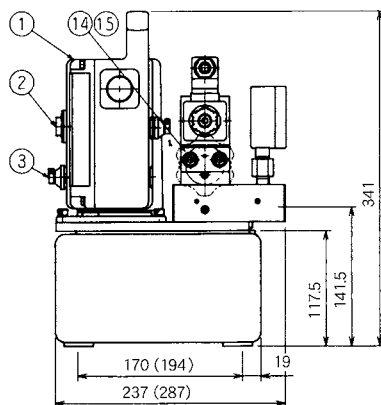


Hand pendant, 2.5M



() size is 5 ℓ tank. (usable oil 4 ℓ)

UP-45SVG-8SP、8WP、8R

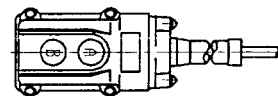


No.	Description
1	Electric motor
2	Metal receptacle
3	Power cord, 2M
4	H.P. relief valve
5	Oil feeding plug
6	Reservoir
7	Oil gauge
9	Pressure gauge
12	Discharge block
13	4-way solen. valve
14	Single check valve
15	Double check valve
16	Double relief valve

Power cord, 2.5M



Hand pendant, 2.5M



() size is 5 ℓ tank. (usable oil 4 ℓ)

※ Relief valve is with one side handle.

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