

**GENSCO**

## **DYNASET PRIORITY VALVE**

**PV SAE 3/4" – 1 1/4"**

□ GENSCO EQUIPMENT (1990) Inc.  
53 Carlaw Avenue  
Toronto, Canada  
M4M 2R6  
Phone: 416-465-7521  
Fax: 416-465-4489

□ GENSCO AMERICA INC.  
5307 Dividend Drive  
Decatur, Georgia 30035  
Phone: 770-808-8711  
Fax: 770-808-8739

Across USA Call 1-800-268-6797  
E Mail: [info@genscoequip.com](mailto:info@genscoequip.com)  
Internet: [www.genscoequip.com](http://www.genscoequip.com)  
*Serving industry world wide since 1919*



## WARRANTY

ALL ORDERS FOR PRODUCT ARE SUBJECT TO THE FOLLOWING:

Gensco Equipment (1990) Inc. warrants each product to be free from defects in material and workmanship under normal use and service. Gensco Equipment's obligation under this warranty is limited to repairing or supplying, at our option, a part or parts to replace any defective part or parts which fail, within one (1) year from date of original sale. No product shall be returned without prior authorized approval, and if authorized, the transportation charges shall be prepaid to Gensco Equipment, Toronto, Canada, or Gensco America, Decatur, GA. Unauthorized returns will not be accepted.

The provisions of this warranty shall not apply to any part or parts which have been subject to misuse, negligence or accident, or which have been repaired or altered outside of Gensco Equipment's service department in any way, so, as in the judgment of Gensco Equipment to affect adversely its performance, stability or reliability.

Gensco Equipment neither assumes nor authorizes anyone to assume for it any other obligation or liability for any loss or damage, either direct, incidental or consequential, resulting from or arising out of, or in connection with, any of its defective part or parts.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATION OR LIABILITY ON THE PART OF GENSCO EQUIPMENT OF ANY NATURE WHATSOEVER.

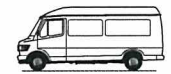
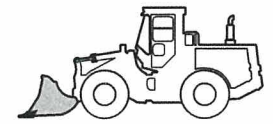
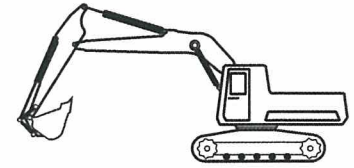
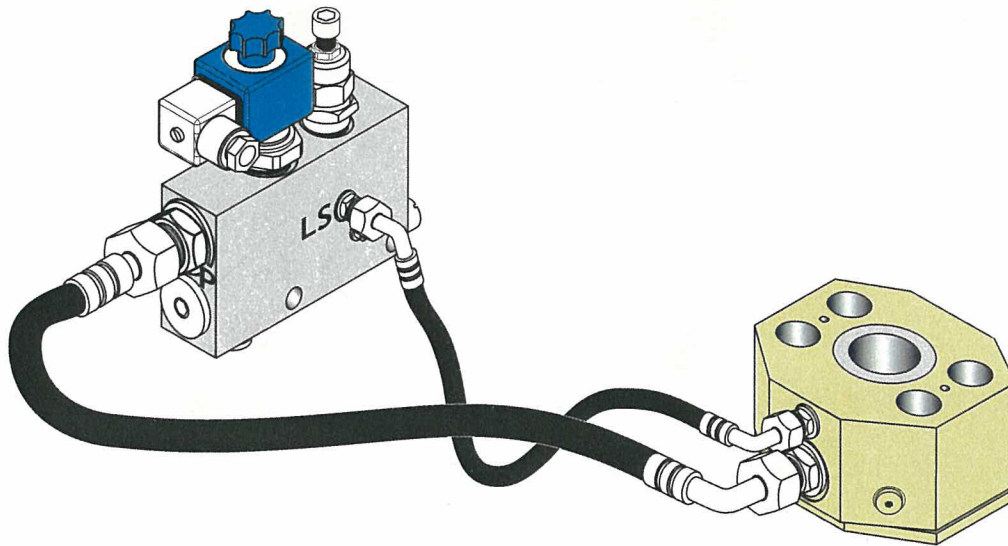
## RETURN POLICY

A Returned Goods Authorization must be obtained from Gensco Equipment prior to the return of any product. All shipments to us must be sent freight prepaid. Upon inspection, should the Quality Control Department determine the product to be defective, credit will be issued accordingly.

For product returned in an "as new" condition, the restocking charges are as follows:

RETURNED FROM DATE OF ORIGINAL SHIPMENT	STOCK ITEMS	SPECIAL ORDER ITEMS
120 Days	20%	50%

## DYNASET PRIORITY VALVE PV SAE 3/4" - 1 1/4"



DYNASET PRIORITY VALVES OF PV SAE SERIES ARE ESPECIALLY DESIGNED TO ENABLE EASY AND RELIABLE INSTALLATION OF DEYNASET HYDRAULIC GENERATOR TO A HYDRAULIC SYSTEM OF ANY TYPE.

DYNASET PRIORITY VALVE ENABLES TO OPERATE YOUR DYNASET-UNIT SIMULTANEOUSLY WITH OTHER HYDRAULIC EXECUTORS.

DYNASET PRIORITY VALVE ENSURES THE PRIORISED AND NON-FLUCTUATING HYDRAULIC FLUID FLOW TO YOUR DYNASET-UNIT.

DYNASET PRIORITY VALVE IS DESIGNED TO OPERATE TOGETHER WITH HYDRAULIC PUMP'S CONTROL IN HYDRAULIC SYSTEM OF ANY TYPE.

DYNASET PV SAE priority valve includes following components:

1. Sandwich-mounted **PRESSURE COMPENSATOR** with SAE-flange specification; Pressure compensator includes one seal flange (1.20) as standard.

2. **LS-VALVE**

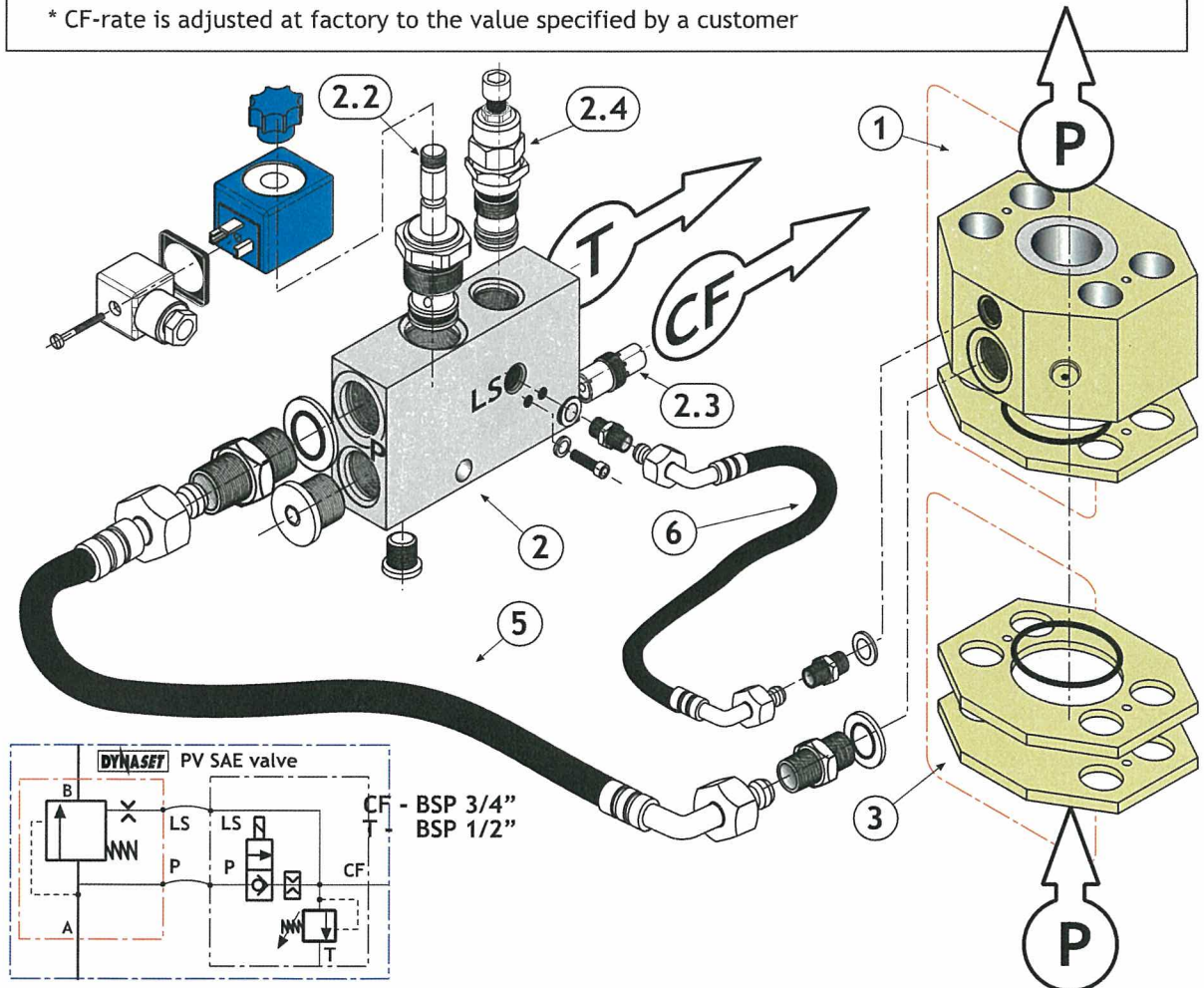
- 2.2 Solenoid valve 12/24V;
  - 2.3 Flow limiting valve.
  - 2.4 Pressure relief valve.
3. AN OPTIONAL height adjustment kit.

5-6. **HYDRAULIC HOSES.**

**CONSTRUCTION I**

VALVE MODEL	PV SAE size	LSV model	p max bar	Q CF, max * l/min
PV SAE 3/4-40 lpm-12/24 V	3/4 "	LSV 40	350	35
PV SAE 3/4-60 lpm-12/24 V	3/4 "	LSV 60	350	55
PV SAE 1-40 lpm-12/24 V	1 "	LSV 40	350	35
PV SAE 1-60 lpm - 12/24 V	1 "	LSV 60	350	55
PV SAE 1 1/4 -40 lpm -12/24 V	1 1/4"	LSV 40	350	35
PV SAE 1 1/4 -60 lpm -12/24 V	1 1/4"	LSV 60	350	55

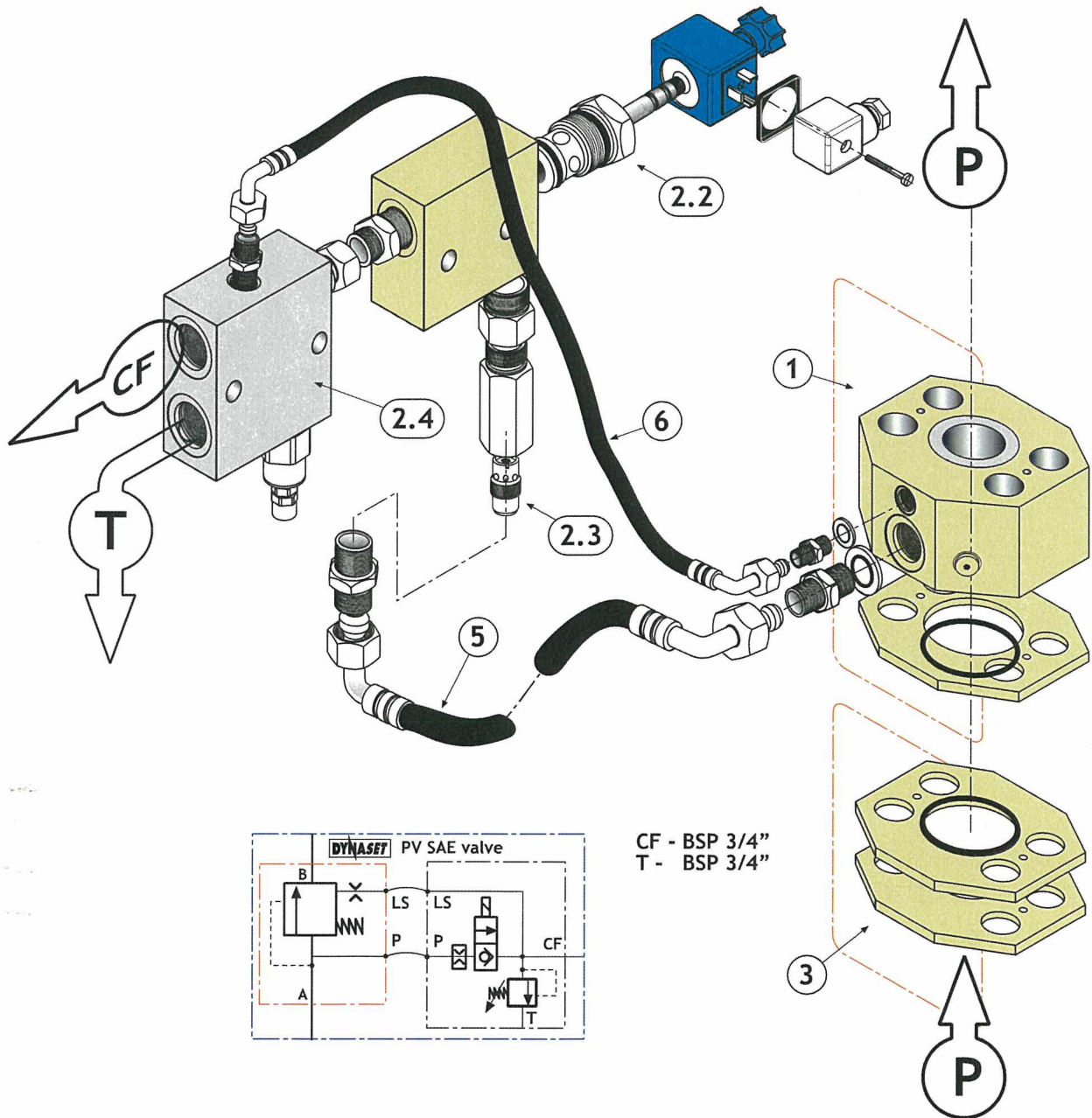
\* CF-rate is adjusted at factory to the value specified by a customer



**CONSTRUCTION II**

VALVE MODEL	PV SAE size	LSV model	P max bar	Q CF, max * l/min
PV SAE 3/4-95 lpm-12/24 V	3/4 "	LSV 95	350	85
PV SAE 1-95 lpm - 12/24 V	1 "	LSV 95	350	85
PV SAE 1 1/4 -95 lpm -12/24 V	1 1/4"	LSV 95	350	85

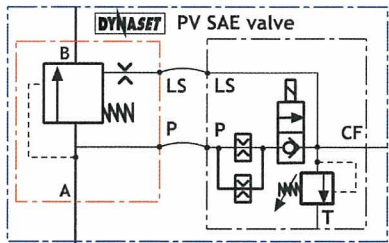
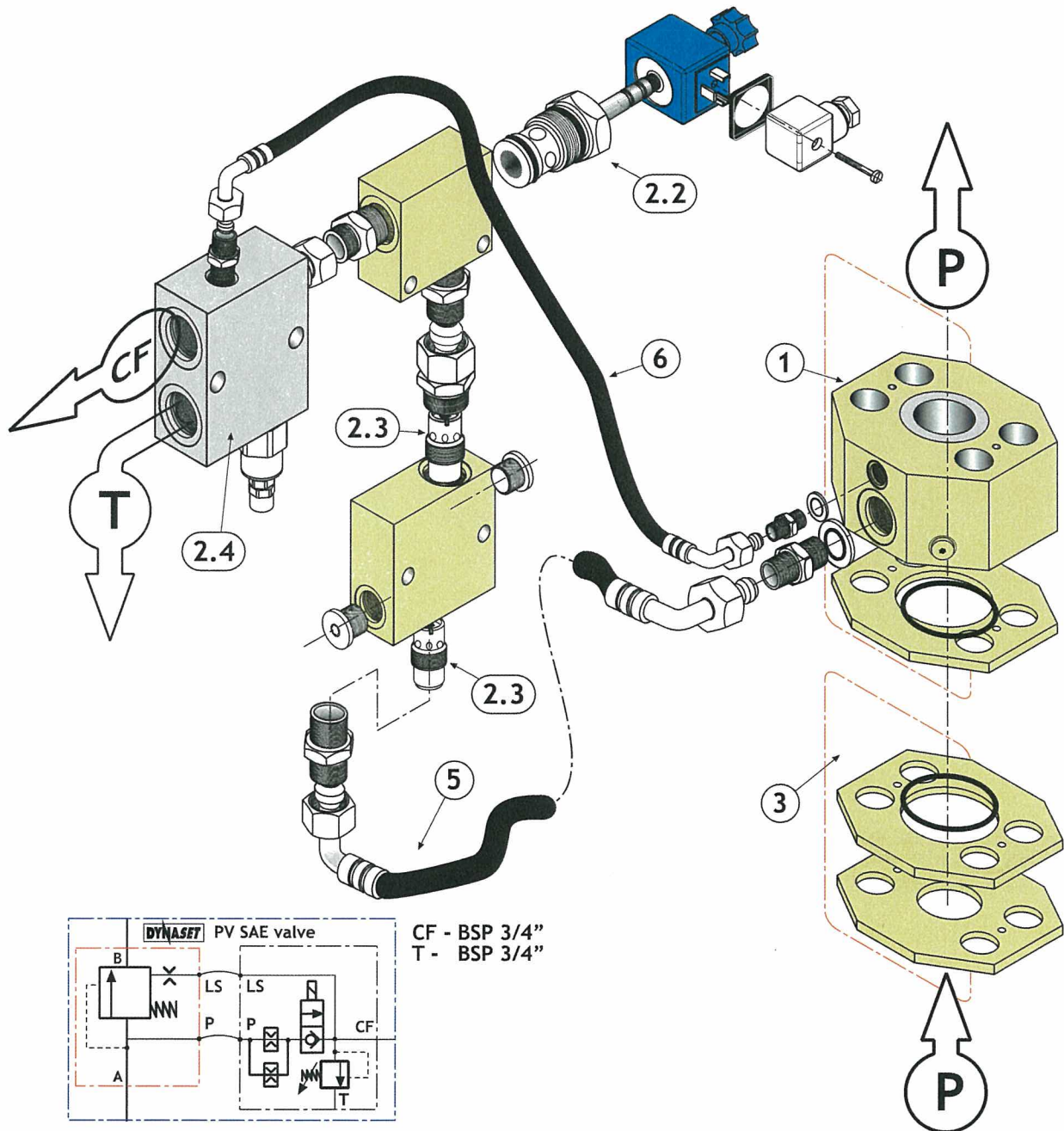
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**CONSTRUCTION III**

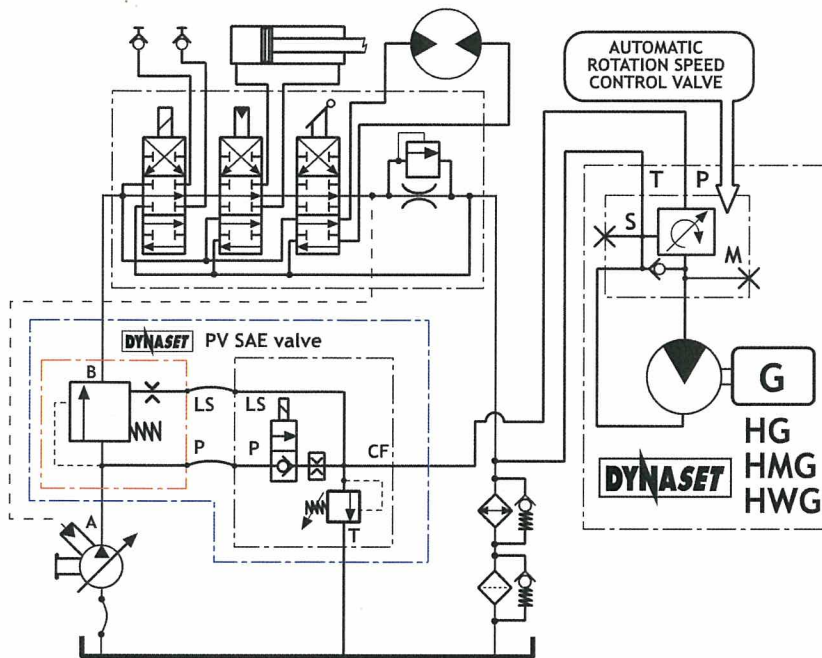
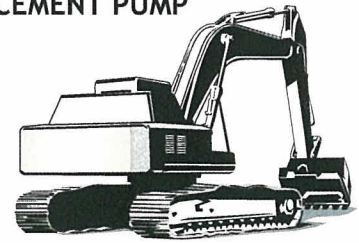
VALVE MODEL	PV SAE size	LSV model	P max bar	Q CF, max * l/min
PV SAE 3/4-150 lpm-12/24 V	3/4 "	LSV 150	350	140
PV SAE 1-150 lpm - 12/24 V	1 "	LSV 150	350	140
PV SAE 1 1/4 -150 lpm -12/24 V	1 1/4"	LSV 150	350	140

\* CF-rate is adjusted at factory to the value specified by a customer

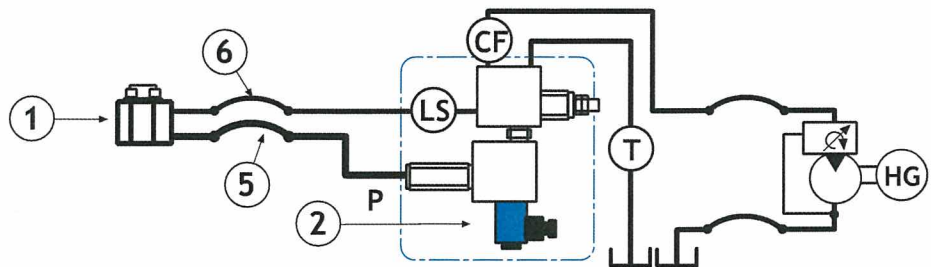
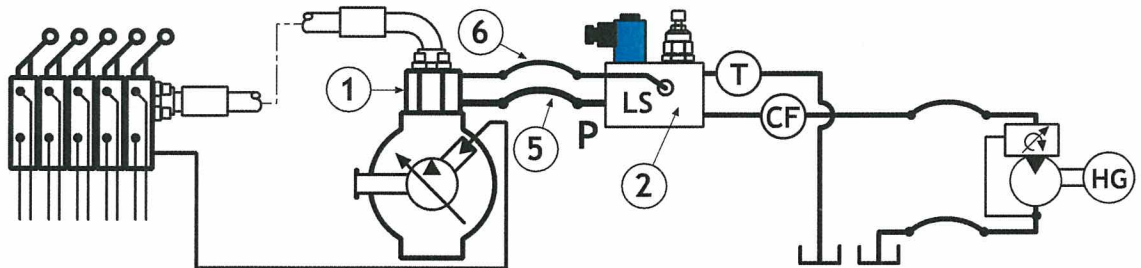


CF - BSP 3/4"  
T - BSP 3/4"

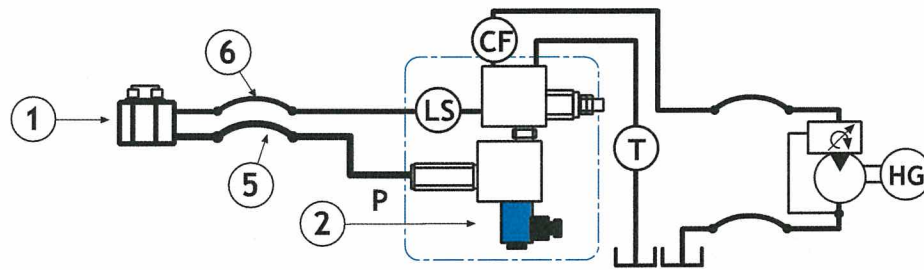
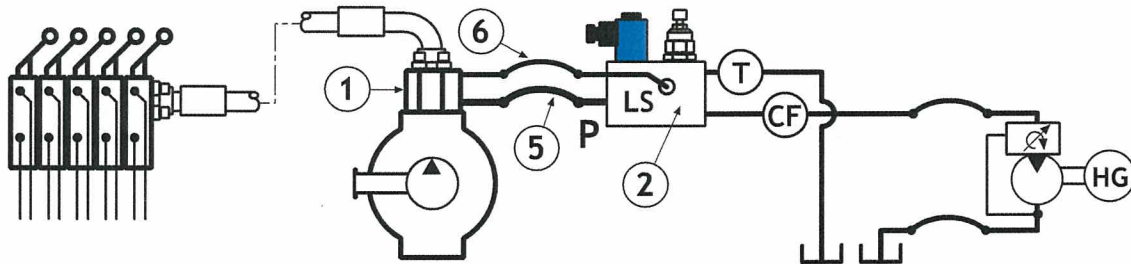
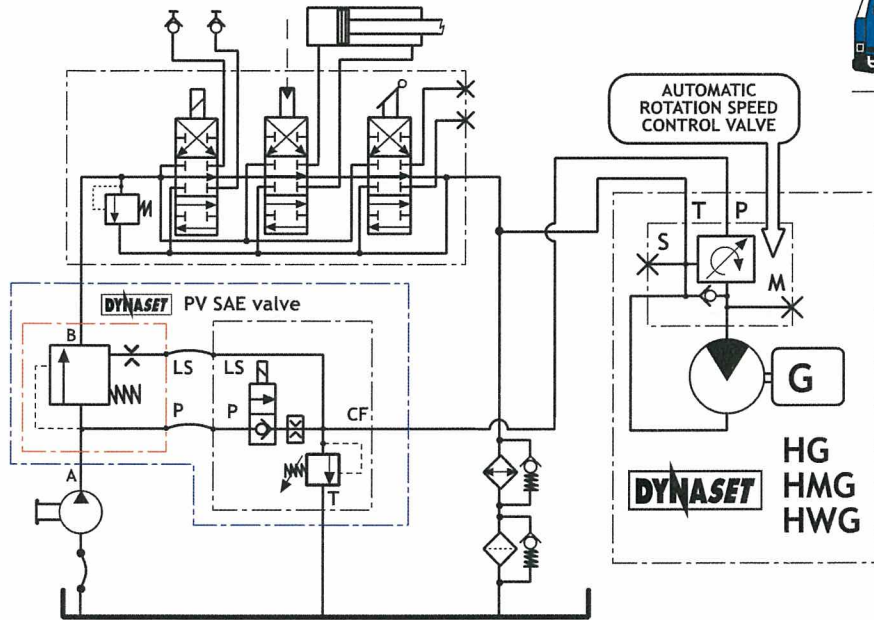
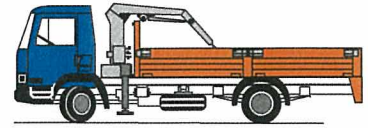
**1. OPEN CENTRE HYDRAULIC SYSTEM WITH VARIABLE DISPLACEMENT PUMP**



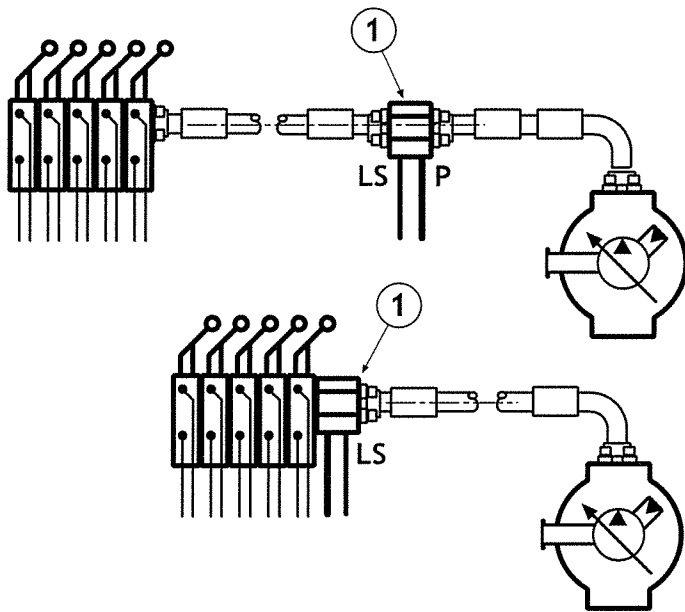
PV SAE priority valve is designed for the installation to main pressure line (ref to pages 5 - 7).  
Pre-adjusted, independent from other functions and prioritised hydraulic flow for DYNASET-unit comes from the solenoid valve.



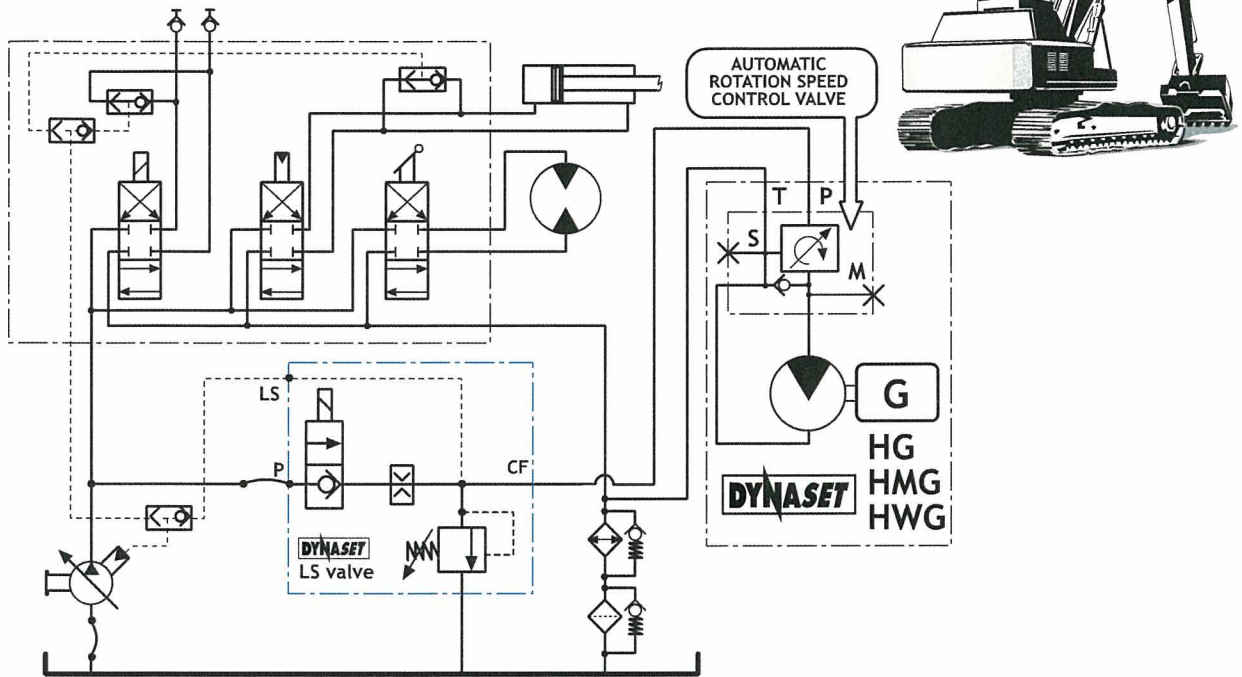
2. HYDRAULIC SYSTEM WITH CONSTANT DISPLACEMENT PUMP



## 1 - 2 OPTIONS FOR AN INSTALLATION OF PRESSURE COMPENSATOR

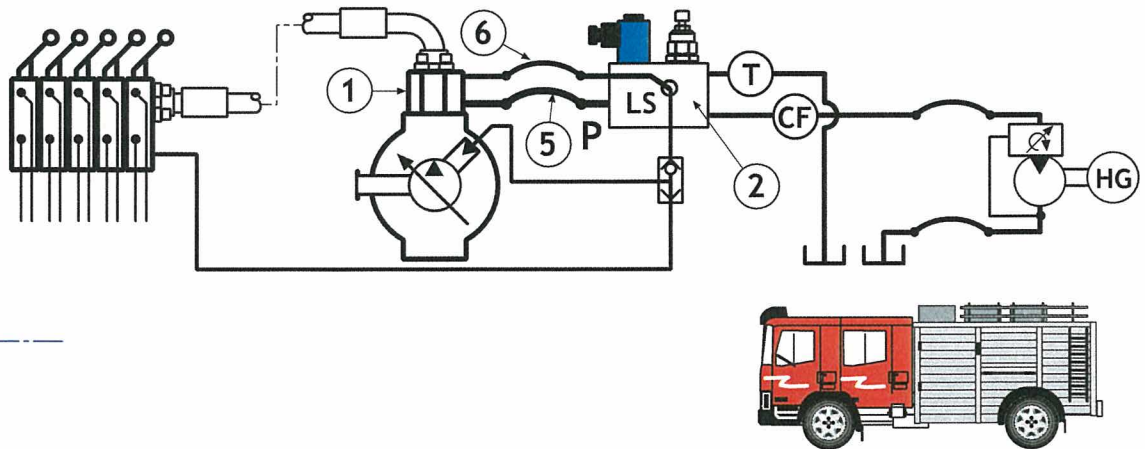


**3. CLOSED CENTRE HYDRAULIC SYSTEM WITH VARIABLE DISPLACEMENT PUMP**

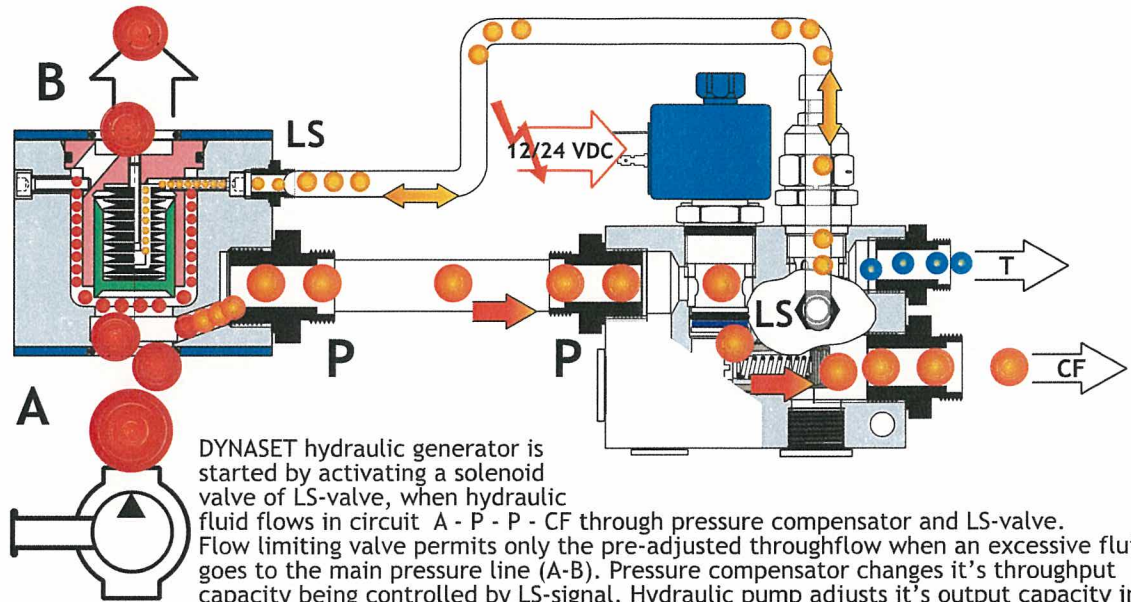


It is recommended to install DYNASET hydraulic generator to a closed centre hydraulic system of an excavator (see diagram above) without pressure compensator, using only a LS-valve of required capacity. Installed to a closed centre hydraulic system of a modern excavator, pressure compensator may cause certain deceleration of machine's movements and functions when the prioritised flow to the generator is on - pls. consult DYNASET's experts !

For all other carriers with closed centre hydraulics (fire trucks etc.) an installation of DYNASET hydraulic generator can be made using a complete PV SAE valve .



When an excavator's engine is on without any executor being used, a hydraulic pump levels to the idle mode producing the flow conditioned by the hydraulic system of a machine.

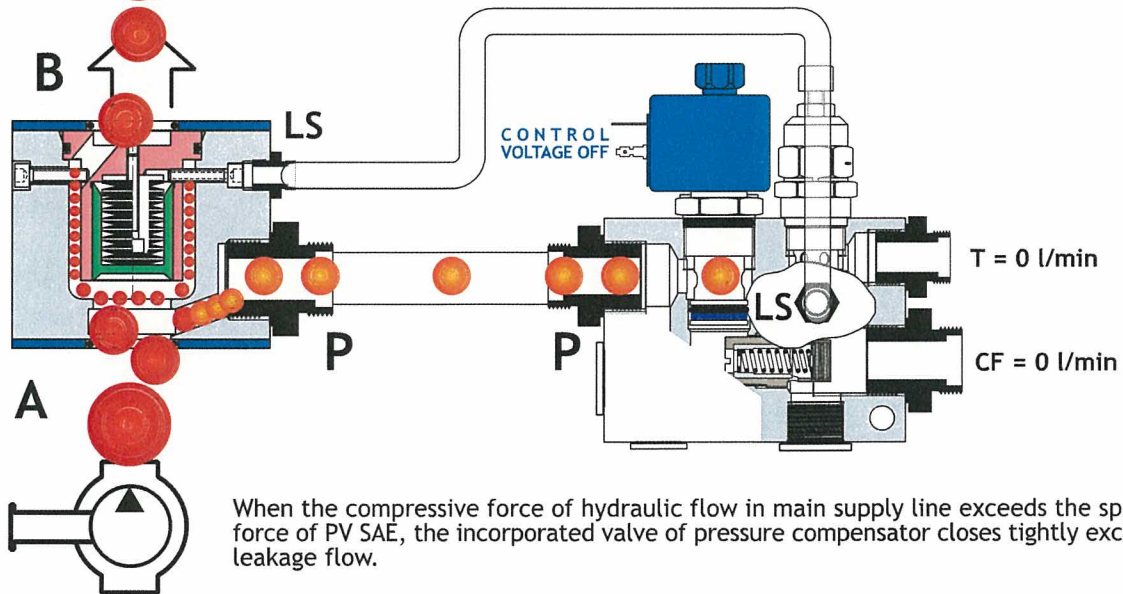


DYNASET hydraulic generator is started by activating a solenoid valve of LS-valve, when hydraulic fluid flows in circuit A - P - P - CF through pressure compensator and LS-valve. Flow limiting valve permits only the pre-adjusted throughflow when an excessive fluid goes to the main pressure line (A-B). Pressure compensator changes it's throughput capacity being controlled by LS-signal. Hydraulic pump adjusts it's output capacity in accordance with the mentioned LS-signal as well as with the LS-signal of the machine's hydraulic system.

Pressure relief valve of LS-valve protects the hydraulic generator against damaging by dicecting the hydraulic fluid to the tank (T) if pressure rises over the limit.

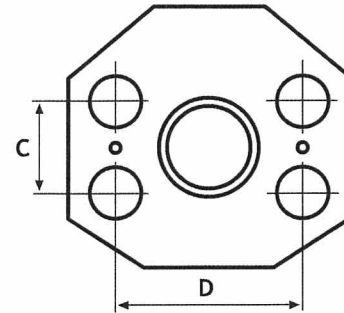
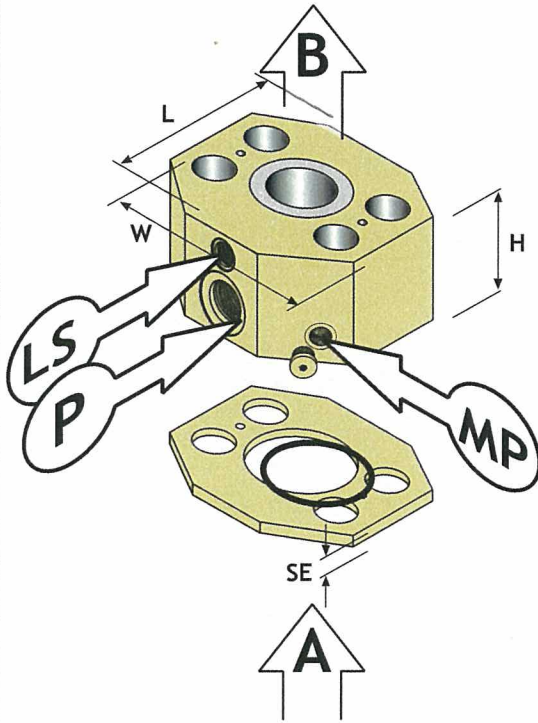
When any other hydraulic operating unit (cylinder, motor, PTO etc.) is being actuated, PV SAE, having ensured demanded and PRIORISED hydraulic flow to the DYNASET unit (CF), opens main supply line directing requested hydraulic flow for the corresponding function. Operation of a pressure compensator is controlled by a LS-signal according to a current capacity request.

If controlled flow (CF) for DYNASET-unit is not requested, solenoid valve closes corresponding circuit and all the hydraulic flow is at system's disposal.

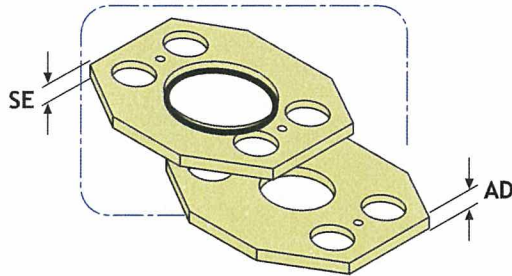


When the compressive force of hydraulic flow in main supply line exceeds the spring force of PV SAE, the incorporated valve of pressure compensator closes tightly excluding leakage flow.

**PRESSURE COMPENSATOR DYNASET PV SAE**



		PV SAE 3/4"	PV SAE 1"	PV SAE 1 1/4"
C	mm	23	27,2	31,5
D	mm	49	55,6	63,5
L	mm	64	73	89
W	mm	67,5	82	95
H	mm	60	65	72
P		BSP 1/2"	BSP 3/4"	BSP 3/4"
LS		BSP 1/8"	BSP 1/8"	BSP 1/8"
MP		BSP 1/8"	BSP 1/8"	BSP 1/8"
SE	mm	3	3	3
AD	mm	6	6	6



**OPTIONS:**

- 1 HEIGHT ADJUSTMENT KIT  
SEALING PLATE (SE);  
ADAPTER PLATE (AD).
- 2 BOLTS (4-8 pcs), metric or imperial.

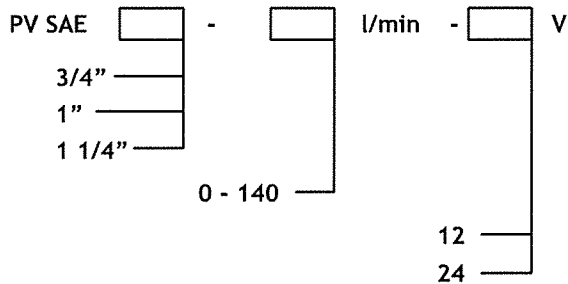
			PV SAE 3/4"	PV SAE 1"	PV SAE 1 1/4"
OPENING PRESSURE		BAR	13,5	14	17,5
MAX. PRESSURE		BAR	350	350	350
MAX. FLOW	A - B	L/MIN	200	350	450
MAX. FLOW	A - P	L/MIN	70	100	145
PRESSURE DROP AT MAX. FLOW	A - B completely open	BAR	2,9	2,8	3,0
	A - P	BAR	3,0	3,0	3,5
SAE - FLANGE	3000 - 6000 psi		SAE 3/4"	SAE 1"	SAE 1 1/4"
PRESSURE HOSE	LENGTH SIZE	mm	800 R 1/2	800 R 5/8	800 R 3/4
CONTROL HOSE	LENGTH SIZE	mm	1000 R 1/4	1000 R 1/4	1000 R 1/4

## HOW TO ORDER:

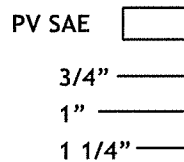
1. PRESSURE COMPENSATOR is to be chosen according to the main pump's flange size.
2. LS-VALVE is to be chosen according to the required oil flow (CF).

NOTE ! Flow limiting valve is adjusted at factory to the requested value and can not be re-adjusted !

3. SOLENOID VALVE's COIL is to be chosen according to the on-board voltage of a vehicle (12 or 24 VDC).



PRESSURE COMPENSATOR IS AVAILABLE SEPARATELY:



## HYDRAULIC FLUIDS

Wide range of standard hydraulic fluids can be used with the DYNASET hydraulic equipment. Depending on the operating temperature, following mineral hydraulic oils are recommended:

- ISO VG 32S for oil's operation temperature up to 70 °C;
- ISO VG 46S for oil's operation temperature up to 80 °C;
- ISO VG 68S for oil's operation temperature up to 90 °C.

Synthetic and bio-oils can be used as well if their viscosity characteristics and lubricating efficiency are corresponding to above mineral oils. Automatic transmission fluids and even engine oils can be used, provided that they are allowed to be used in hydraulic system of your carrier machine. To use special hydraulic fluids a with DYNASET equipment, please be kindly requested to contact nearest DYNASET representative for an advice.

## SAFETY PRECAUTIONS

The pressure in hydraulic fluid circuit is considerably high. Thereat the technical condition of your equipment should be under constant scrutiny. Especially couplings, valves and hoses should be maintained tight and clean as well as kept under constant observation.

Hydraulic leakages must be rectified immediately to avoid injuries caused by pressure and hot oil blowouts. Follow all your local safety instructions related to the high pressure hydraulics.

Hydraulic system of a carrier machine should be maintained according to the service program.

In order to exclude possible accidents, it is not allowed to clean or inspect PV SAE valve when hydraulic fluid circuit is pressurised. Prior to any cleaning, inspection and service hydraulic system of your carrier machine must be stopped and all hydraulic fluid circuits dissipated.

Always wear appropriate clothing and safety equipment such as goggles, ear protection and safety shoes at all times when maintaining the PV SAE valve. Beware of machinery parts warmed by hot hydraulic oil.

**AN EXTERME CLEANLINESS MUST BE MAINTAINED WHEN CARRYING OUT ANY SERVICE DISSASSEMBLING OR REPAIR OF HRN-TOOL AND HYDRAULIC SYSTEM. THIS IS CRUCIAL TO ENSURE SAFE, RELIABLE AND LONG-LIFE OPERATION OF YOUR EQUIPMENT.**

Operators and maintenance personnel must always comply with local safety regulations and precautions in order to close out the possibility of damages and accidents.

All installation and service of both hydraulic and electric equipment must be performed by qualified and experienced personnel only.

## WARRANTY

DYNASET products are warranted against defects in materials and workmanship for a period of 6 (six) months from the date of purchase. Exceptions are parts subject to normal wear and tear, such as seals and other parts that become worn through normal use of the unit.

Warranty covers detective parts solely. Expenditure incidental to shipping and replacement are not covered by present warranty.

The warranty is void if product has been modified, provided with parts other than original or misused.

**GENSCO**

## **DYNASET LOAD SENSING VALVE**

**LSV 40**  
**LSV 60**  
**LSV 90**  
**LSV 150**

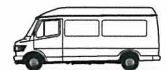
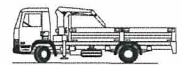
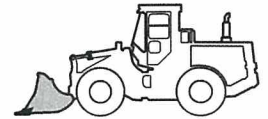
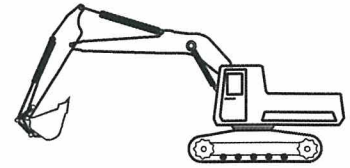
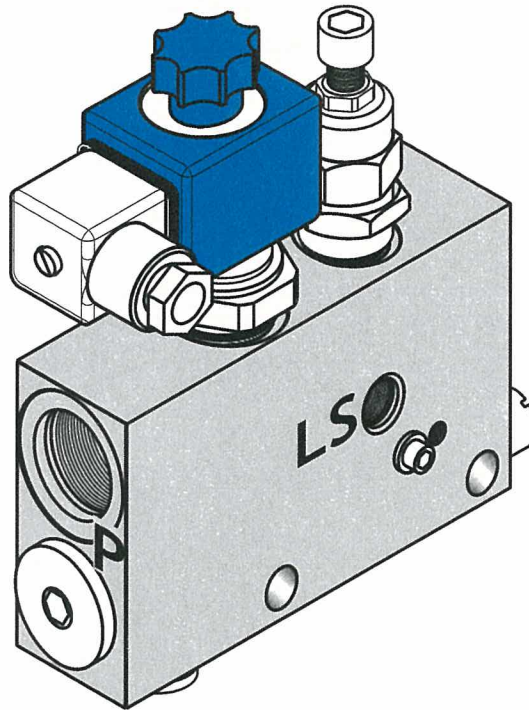
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53 Carlaw Avenue  
Toronto, Canada  
M4M 2R6  
Phone: 416-465-7521  
Fax: 416-465-4489

□ GENSICO AMERICA INC.  
5307 Dividend Drive  
Decatur, Georgia 30035  
Phone: 770-808-8711  
Fax: 770-808-8739

Across USA Call 1-800-268-6797  
E Mail: [info@genscoequip.com](mailto:info@genscoequip.com)  
Internet: [www.genscoequip.com](http://www.genscoequip.com)  
*Serving industry world wide since 1919*

## DYNASET LOAD SENSING VALVE

LSV 40  
LSV 60  
LSV 90  
LSV150



DYNASET LSV LOAD SENSING VALVES ARE ESPECIALLY DESIGNED TO ENABLE EASY AND RELIABLE INSTALLATION OF DYNASET HYDRAULIC GENERATOR TO A CLOSED CENTRE HYDRAULIC SYSTEM.

DYNASET LSV-VALVE ENABLES TO OPERATE YOUR DYNASET-UNIT SIMULTANEOUSLY WITH OTHER HYDRAULIC EXECUTORS.

DYNASET LSV-VALVE ENSURES THE NON-FLUCTUATING HYDRAULIC FLUID FLOW TO YOUR DYNASET-UNIT.

DYNASET LSV-VALVE IS DESIGNED TO OPERATE TOGETHER WITH HYDRAULIC PUMP'S CONTROL.

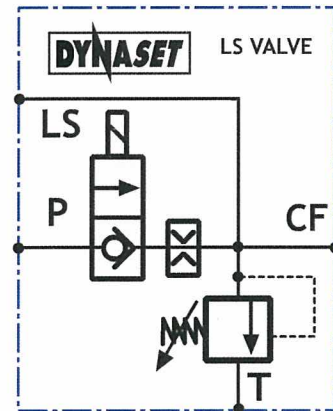
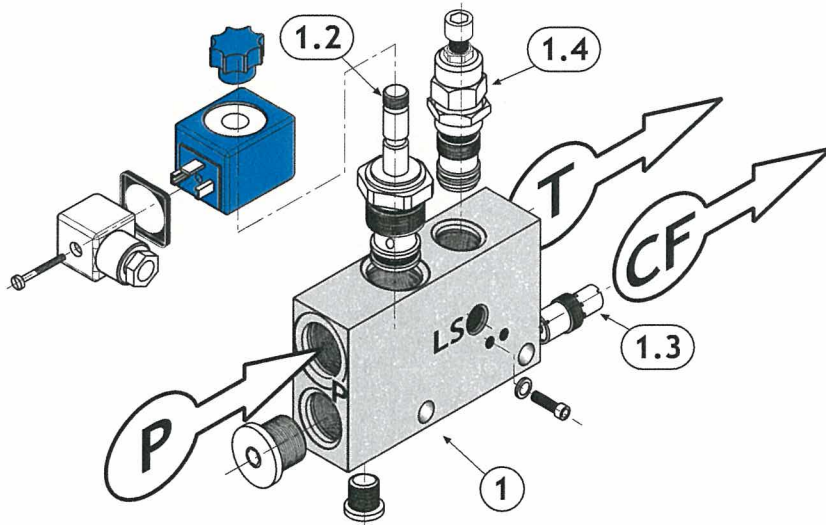
DYNASET LSV valve includes following components:

- 1.2 Solenoid valve 12/24V;
- 1.3 Flow limiting valve.
- 1.4 Pressure relief valve

**CONSTRUCTION I**

VALVE MODEL	p max bar	Q CF, max * l/min	HYDRAULIC PORTS			
			P	CF	LS	T
LSV40- xx lpm-12/24 V	350	40	BSP 3/4"	3/4"	1/8"	1/2"
LSV60- xx lpm-12/24 V	350	60	BSP 3/4"	3/4"	1/8"	1/2"

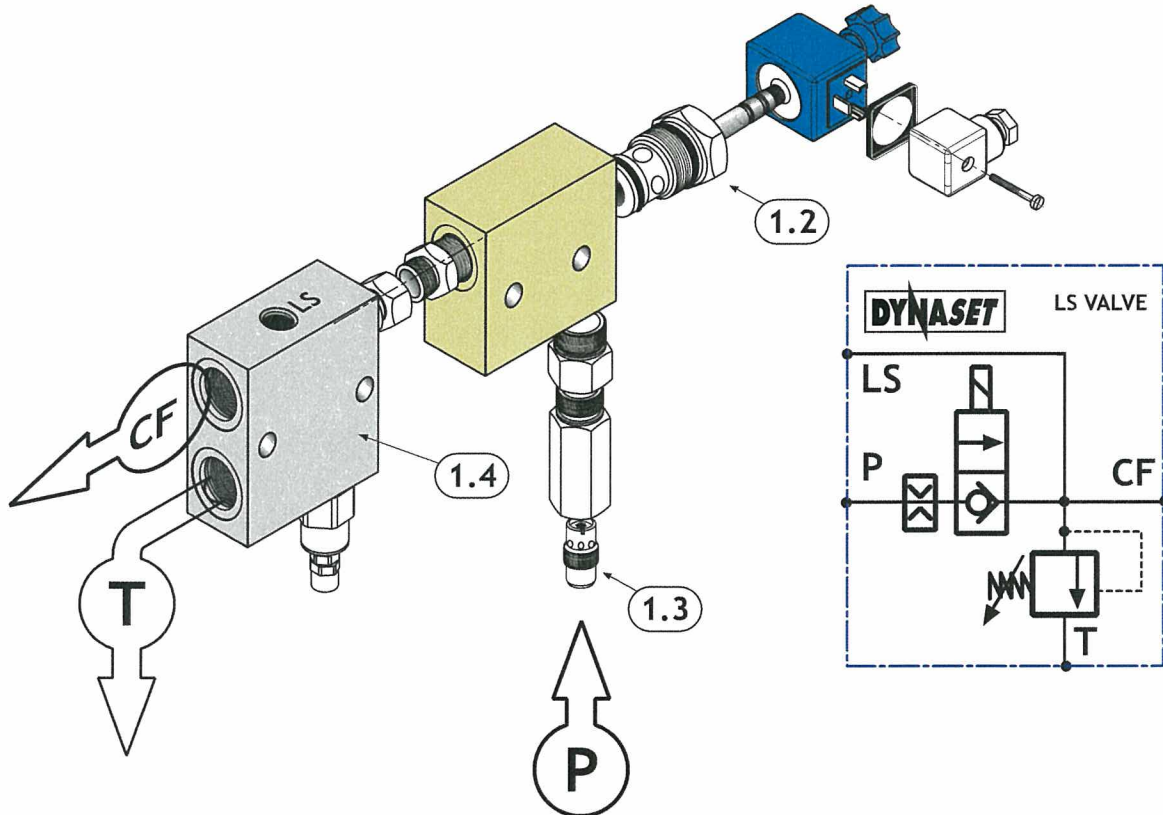
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**CONSTRUCTION II**

VALVE MODEL	p max bar	Q CF, max * l/min	HYDRAULIC PORTS				
			P	CF	LS	T	
LSV95 - xx lpm-12/24 V	350	95	BSP	3/4"	3/4"	1/4"	3/4"

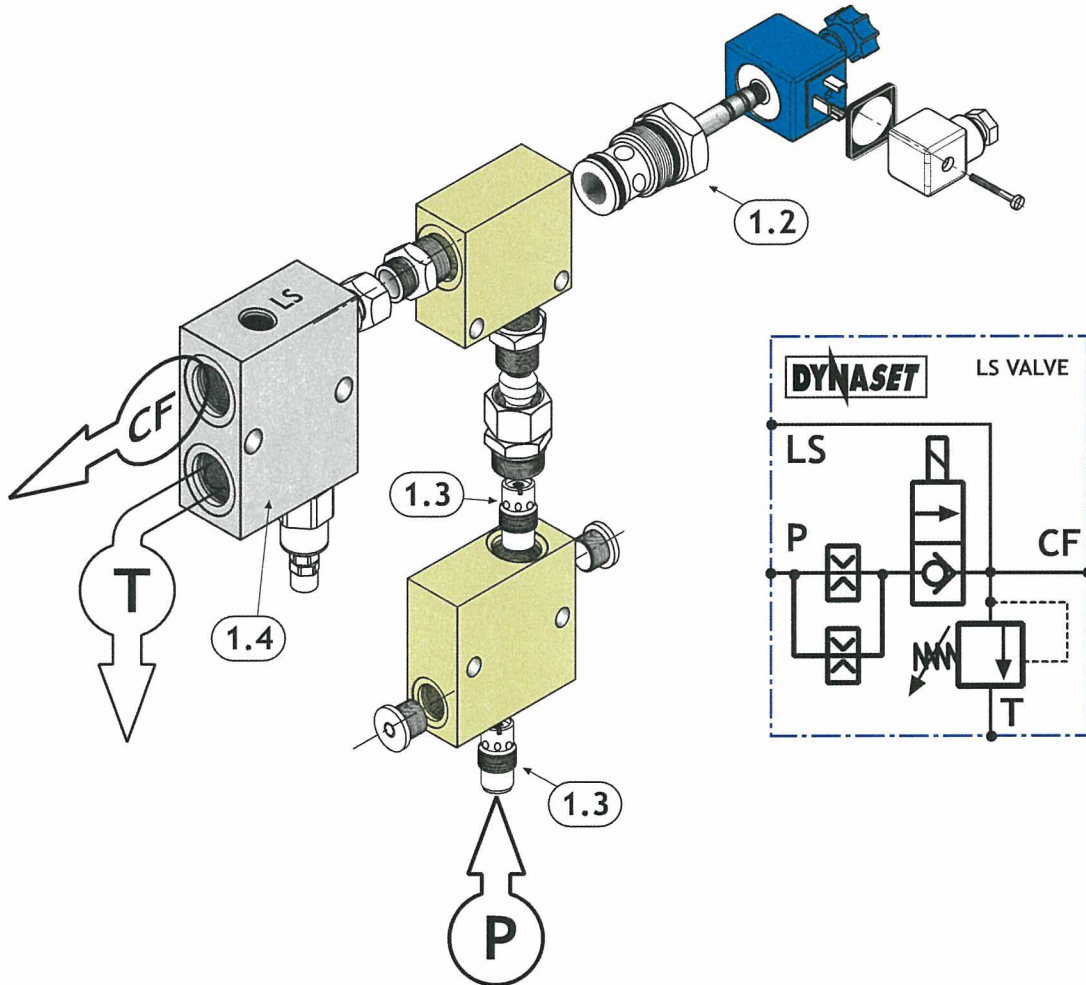
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**CONSTRUCTION III**

VALVE MODEL	p max bar	Q CF, max * l/min	HYDRAULIC PORTS				
			P	CF	LS	T	
LSV150 - xx lpm-12/24 V	350	150	BSP	1"	3/4"	1/4"	3/4"

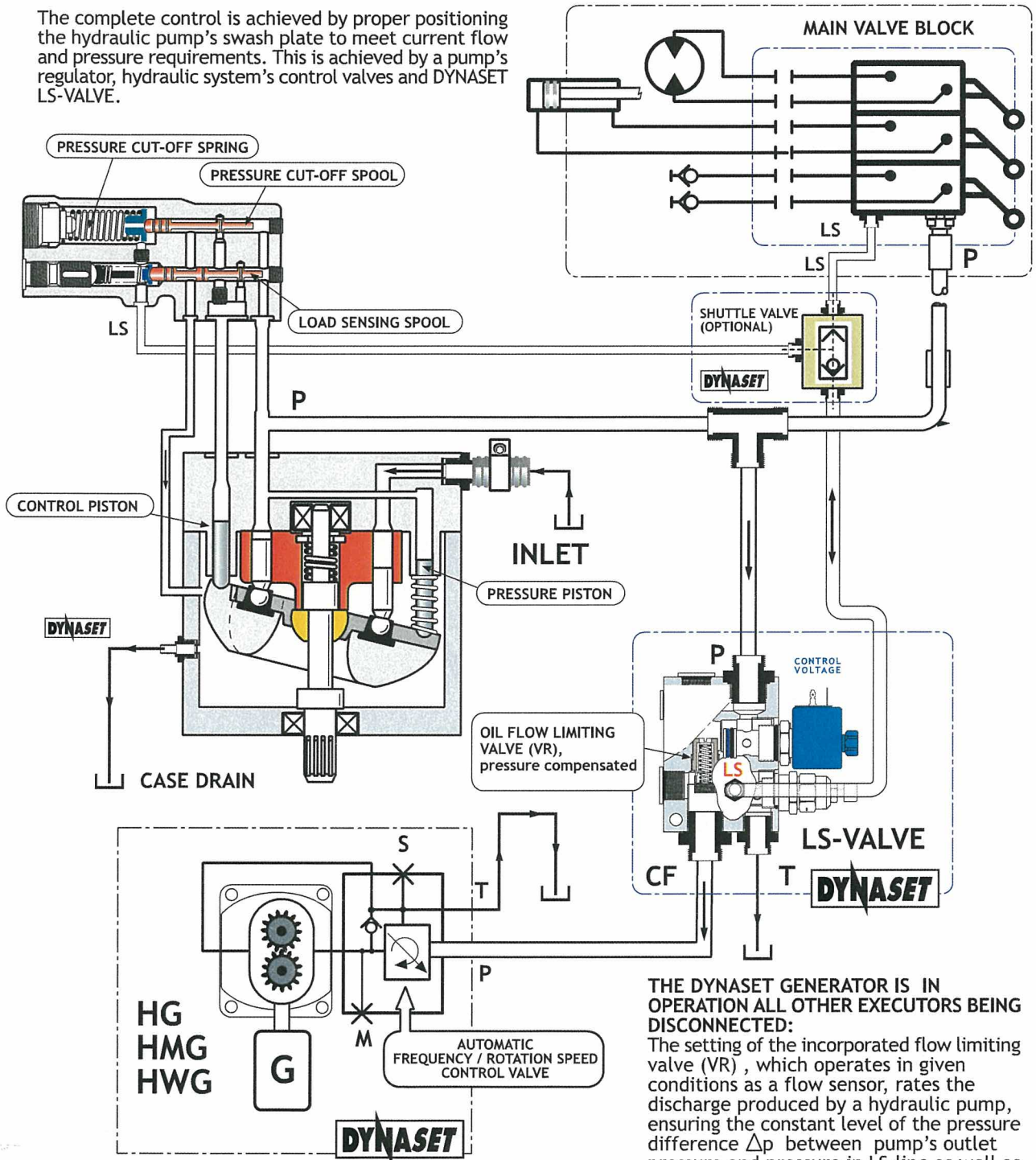
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**INSTALLATION / OPERATION**

The complete control is achieved by proper positioning the hydraulic pump's swash plate to meet current flow and pressure requirements. This is achieved by a pump's regulator, hydraulic system's control valves and DYNASET LS-VALVE.



**THE DYNASET GENERATOR IS IN OPERATION ALL OTHER EXECUTORS BEING DISCONNECTED:**  
 The setting of the incorporated flow limiting valve (VR), which operates in given conditions as a flow sensor, rates the discharge produced by a hydraulic pump, ensuring the constant level of the pressure difference  $\Delta p$  between pump's outlet pressure and pressure in LS-line as well as constant hydraulic flow for the DYNASET generator.

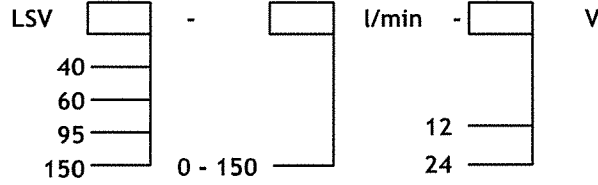
**WHEN THE DYNASET GENERATOR IS OPERATED ALONG WITH OTHER HYDRAULIC EXECUTORS :**  
 The pressure in LS control line is defined by system's maximum functional pressure, when the pump outlet pressure levels correspondingly. Flow limiting valve's pressure compensation constrains the flow increase, sequential to the mentioned  $\Delta p$  rise, through the LS-valve, ensuring constant hydraulic flow to the DYNASET generator.

**HOW TO ORDER:**

1  
LS-VALVE is to be chosen according to the required oil flow (CF).

NOTE ! Flow limiting valve is adjusted at factory to the requested value and can not be re-adjusted !

2.  
SOLENOID VALVE's COIL is to be chosen according to the on-board voltage of a vehicle (12 or 24 VDC).



**HYDRAULIC FLUIDS**

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**SAFETY PRECAUTIONS**

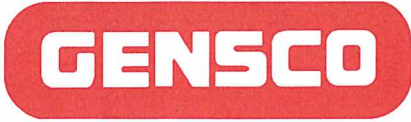
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**AN EXTERME CLEANLINESS MUST BE MAINTAINED WHEN CARRYING OUT ANY SERVICE DISSASSEMBLING OR REPAIR OF LSV-VALVE AND HYDRAULIC SYSTEM. THIS IS CRUCIAL TO ENSURE SAFE, RELIABLE AND LONG-LIFE OPERATION OF YOUR EQUIPMENT.**

Operators and maintenance personnel must always comply with local safety regulations and precautions in order to close out the possibility of damages and accidents. All installation and service of both hydraulic and electric equipment must be performed by qualified and experienced personnel only.

**WARRANTY**

DYNASET products are warranted against defects in materials and workmanship for a period of 6 (six) months from the date of purchase. Exceptions are parts subject to normal wear and tear, such as seals and other parts that become worn through normal use of the unit. Warranty covers detective parts solely. Expenditure incidental to shipping and replacement are not covered by present warranty. The warranty is void if product has been modified, provided with parts other than original or misused.



# DYNASET FLOW LIMITERS

**VR 50**

**VR 95**

**VRD 180**

□ GENSCO EQUIPMENT (1990) Inc.  
53 Carlaw Avenue  
Toronto, Canada  
M4M 2R6  
Phone: 416-465-7521  
Fax: 416-465-4489

□ GENSCO AMERICA INC.  
5307 Dividend Drive  
Decatur, Georgia 30035  
Phone: 770-808-8711  
Fax: 770-808-8739

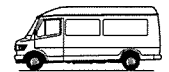
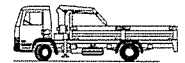
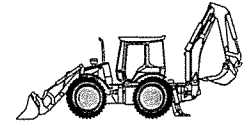
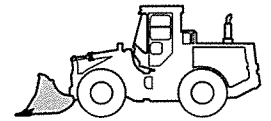
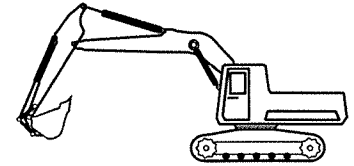
Across USA Call 1-800-268-6797  
E Mail: [info@genscoequip.com](mailto:info@genscoequip.com)  
Internet: [www.genscoequip.com](http://www.genscoequip.com)  
*Serving industry world wide since 1919*

# DYNASET FLOW LIMITERS

## VR 50

## VR 95

## VRD 180



DYNASET VR FLOW LIMITERS ARE ESPECIALLY DESIGNED TO ACHIEVE RELIABLE HYDRAULIC FLUID FLOW CONTROL IN ORDER TO KEEP FLOW CONSTANT, ENSURING PROPER OPERATION OF DYNASET HYDRAULIC GENERATOR.

DYNASET PRESSURE COMPENSATED OIL FLOW LIMITER FOR IN-LINE INSTALLATION provides extra fast control of hydraulic fluid flow.

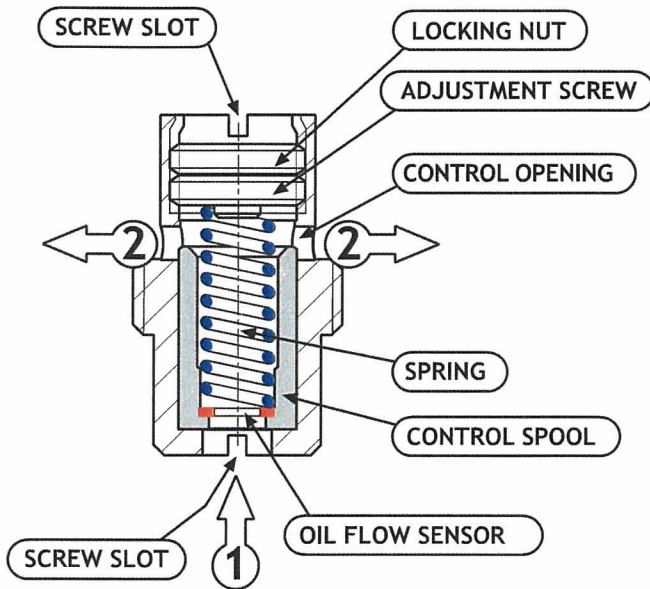
DYNASET OIL FLOW LIMITER is especially designed for use in LS-hydraulic systems with several simultaneously running executors.

DYNASET OIL FLOW LIMITER is an essential part of a DYNASET PRIORITY VALVE which enables the trouble-free operation of a DYNASET generator in open centre hydraulic systems.

Outlet flow rate is independent of the pressure and viscosity.  
The flow rate is determined by a fixed measuring sensor. DYNASET FLOW LIMITER is pre-adjusted at factory.

## BASIC CONSTRUCTION AND FUNCTION

The basic DYNASET FLOW LIMITER corresponds to the glow limiting cartridge valve, which can be fitted into different control blocks and housings. Depending on a flow limiter's capacity, the complete valve includes an appropriate housing.



1 = FREE FLOW.  
2 = CONTROLLED FLOW.

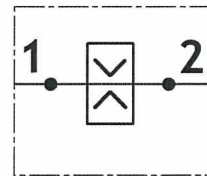
DYNASET pressure compensated flow limiters are fixed orifice valves with back-up differential pressure compensator for hydraulic systems.

The differential pressure compensator consists of a control spool, spring, control opening and the adjustment screw to adjust the control pressure differential. The oil flow sensor determines the flow adjustment range. The flow from 1 to 2 in the valve is specified by a pressure drop in the oil flow sensor. The compensating spool moves into a control position which corresponds to the equilibrium between the force related to the pressure drop via the oil flow sensor on the other hand and the spring force on the other.

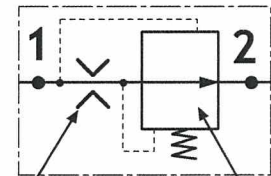
As the flow rate increases, e. g. increasing pressure drop, the diameter of the control opening is reduced in accordance with the increased pressure drop, until a force equilibrium exists once more.

Due to the continuous adjustment of the compensating spool in accordance with the prevailing pressure drop, a constant flow in control direction 1-2 is ensured.

SIMPLIFIED SYMBOL



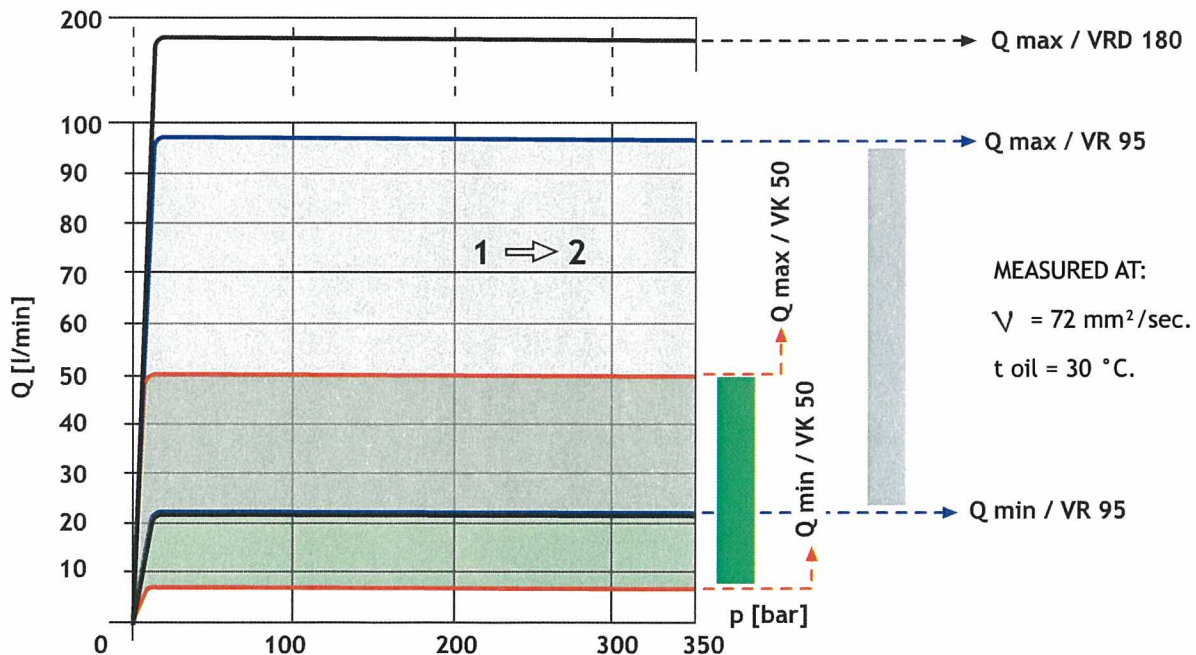
DETAILED SYMBOL



OIL FLOW SENSOR

PRESSURE COMPENSATOR

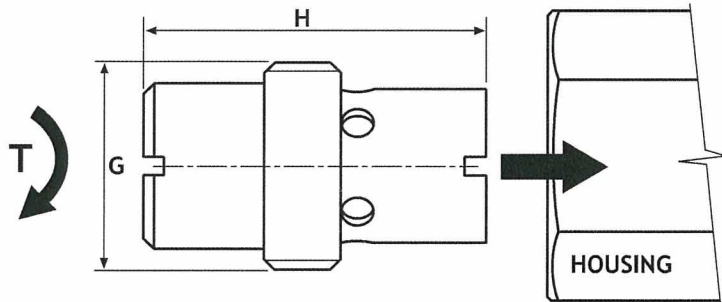
## FLOW RATE (Q) DEPENDENCY ON PRESSURE



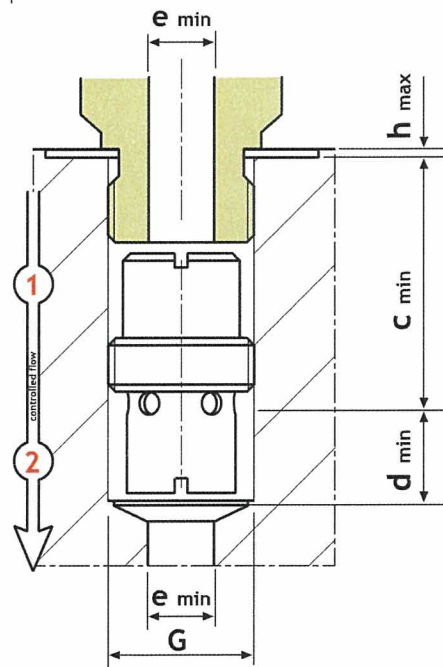
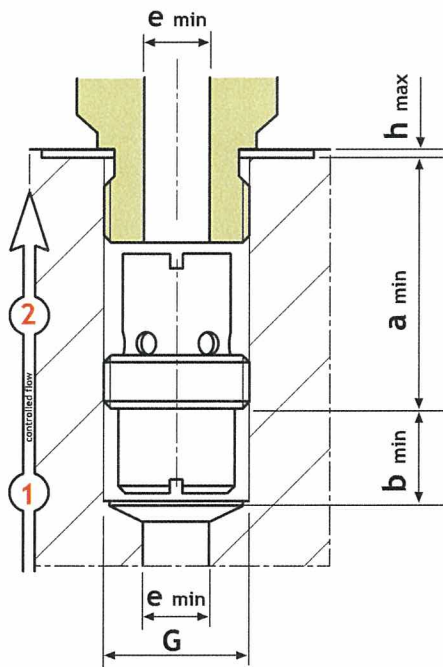
**BASIC CARTRIDGE INSTALLATION DIMENSIONS**

VALVE CARTRIDGE FOR:	STOCK NUMBER	p max bar	Q CF, max * l/min	DIMENSIONS		WEIGHT g
				H, mm	G	
VR 50PK-1/2- xx lpm	13004280	350	50	37	BSP 1/2"	49
VR 95PK- 3/4-xx lpm	13004430	350	95	51	BSP 3/4"	112

\* CF-rate is adjusted at factory to the value specified by a customer.



	TORQUE T, Nm
VR 50PK-1/2- xx lpm	8 - 12
VR 95PK- 3/4-xx lpm	12 - 18

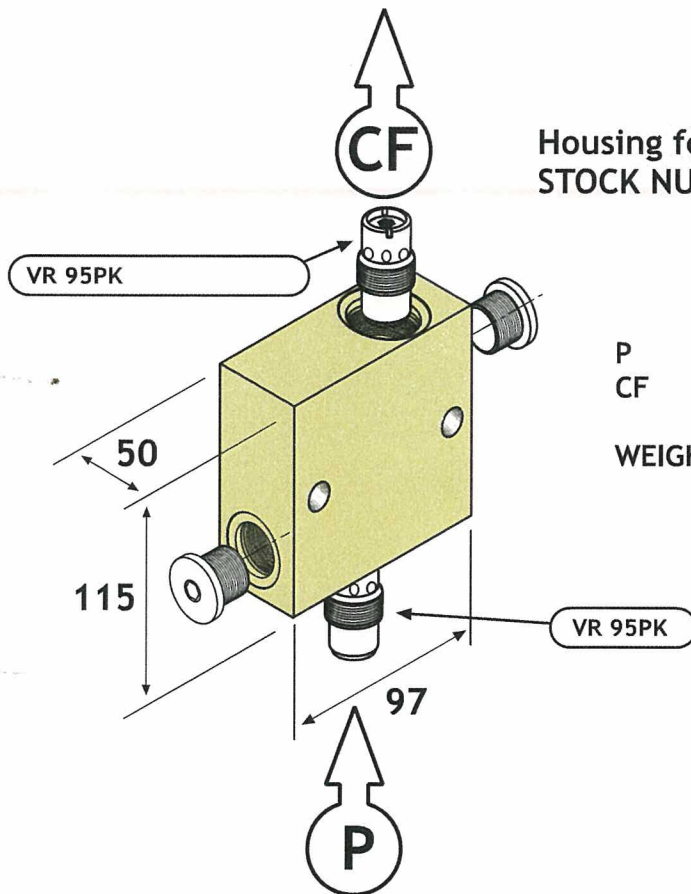
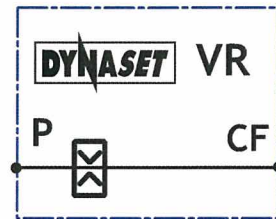
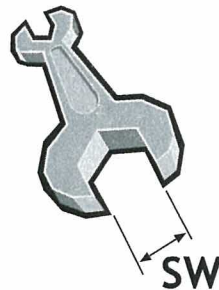


VALVE CARTRIDGE FOR:	DIMENSIONS, mm						
	G	a min	b min	c min	d min	e min	h max
VR 50PK-1/2- xx lpm	BSP 1/2"	40	15	37	18	10	2,5
VR 95PK-3/4- xx lpm	BSP 3/4"	51	24	51	24	12	2,5

The installation dimensions listed above are minimum values for pipe threads and male threads to DIN 3852.

AVAILABLE HOUSINGS

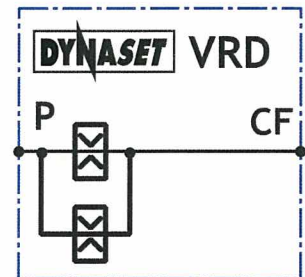
HOUSING FOR:	STOCK NUMBER	P	CF	L mm	l mm	SW mm	WEIGHT kg
VR 50PK-1/2- xx lpm	13004400	BSP 1/2"	BSP 1/2"	82	14	27	0,2
VR 95PK- 3/4-xx lpm	13004460	BSP 3/4"	BSP 3/4"	98	16	36	0,43



Housing for VRD 180PK-1"-xx lpm  
STOCK NUMBER: 07030797

P BSP 1 "  
CF BSP 1 "

WEIGHT 3,3 kg



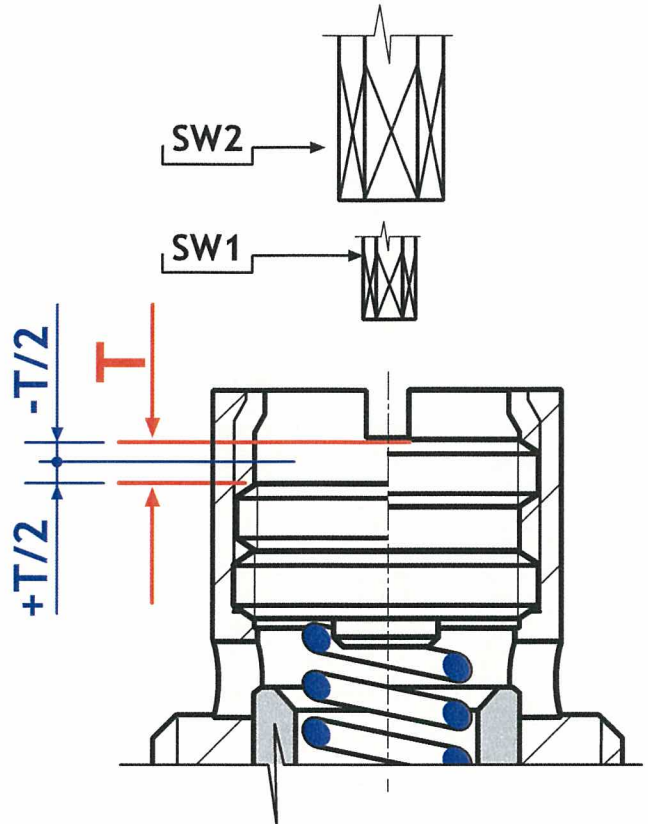
**ON-SITE TUNING**

The flow tuning can only be made when the valve is taken out from its housing. In order to change the flow rate setting the locking nut has to be loosened. By turning the adjustment screw in the appropriate direction (+ increase flow; - reduce flow), the flow rate is tuned. Subsequently, the adjustment screw is secured by means of the locking nut.

**NOTE !**  
The edging on both sides of the valve body limits the adjustment range. Do not force the locking nut past the adjustment limit.

**T - TUNING RANGE:**  
For VR 50: T = approx. 3 mm  
For VR 95 T = approx. 3 mm

**FACTORY SETTING:**  
The adjustment screw is set at factory approximately to the middle of the tuning range, which is about 2 - 10 % of the pre-adjusted nominal rate of the flow limiter.



**HYDRAULIC DETAILS**

**NOMINAL PRESSURE:**  $p_N = 350$  bar on all ports;

**WORKING PRESSURE RANGE:**  
 $\Delta p$  = the required control pressure differential  $p_1 - p_2$ . If the differential pressure is lower, the valve operates as a speed control valve.  $p_{1\max} = 350$  bar;

**HYDRAULIC FLUID TEMPERATURE RANGE:**  
 $t_{\min} = -20$  °C;  
 $t_{\max} = +80$  °C;

**VISCOSITY RANGE**  
 $\nu_{\min} = 2,8$  mm<sup>2</sup>/sec;  
 $\nu_{\max} = 380$  mm<sup>2</sup>/sec.

## HYDRAULIC FLUIDS:

Wide range of standard hydraulic fluids can be used with the DYNASET hydraulic equipment. Depending on the operating temperature, following mineral hydraulic oils are recommended:

- ISO VG 32S for oil's operation temperature up to 70 °C;
- ISO VG 46S for oil's operation temperature up to 80 °C;
- ISO VG 68S for oil's operation temperature up to 90 °C.

Synthetic and bio-oils can be used as well if their viscosity characteristics and lubricating efficiency are corresponding to above mineral oils. Automatic transmission fluids and even engine oils can be used, provided that they are allowed to be used in hydraulic system of your carrier machine.

To use special hydraulic fluids a with DYNASET equipment, please be kindly requested to contact nearest DYNASET representative for an advice.

## HOW TO ORDER:

VR / VRD FLOW LIMITER is to be chosen according to the required oil flow (CF).



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