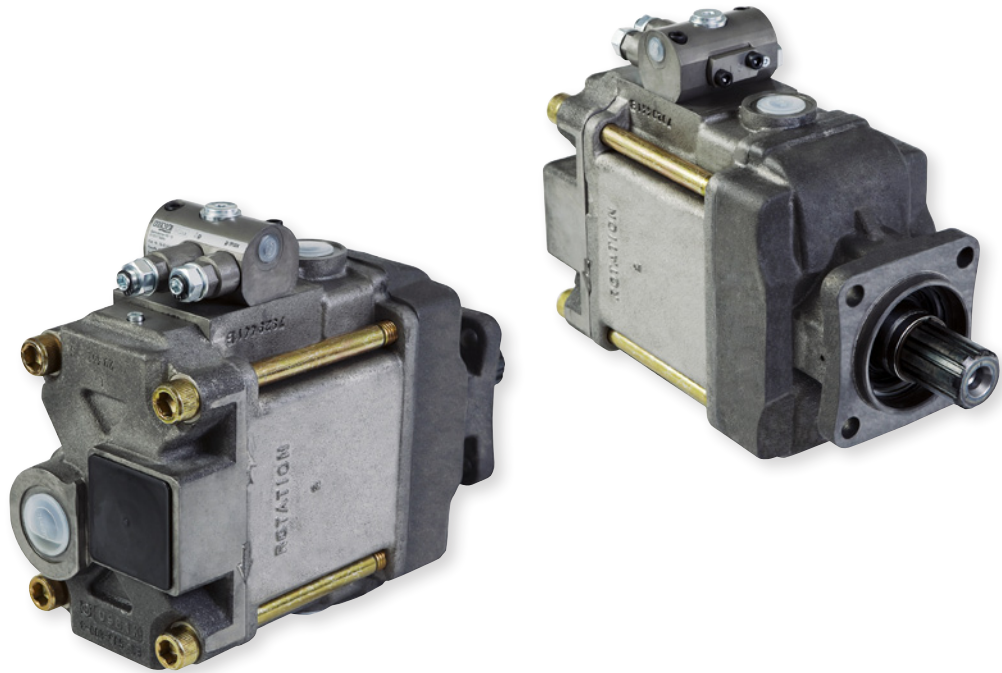




Pump SVH 062, 092, 112



Sunfab SVH is a variable axial piston pump for load sensing systems, designed for direct installation on the truck's power take off.

Sunfab SVH is constructed for a maximum pressure of 40 MPa and is available in sizes of 62, 92 and 112 cm³/rev.

Sunfab SVH is intended for rigorous use on forestry cranes, general cargo cranes, suction vehicles, refuse collection vehicles, etc.

Sunfab SVH has an extremely slender pump housing for a variable pump, enabling direct mounting on the power take off. Of course, Sunfab SVH can also be mounted on a frame bracket via an intermediate shaft.

Sunfab SVH is rotation-direction dependent and should be ordered in either right-hand or left-hand designs.

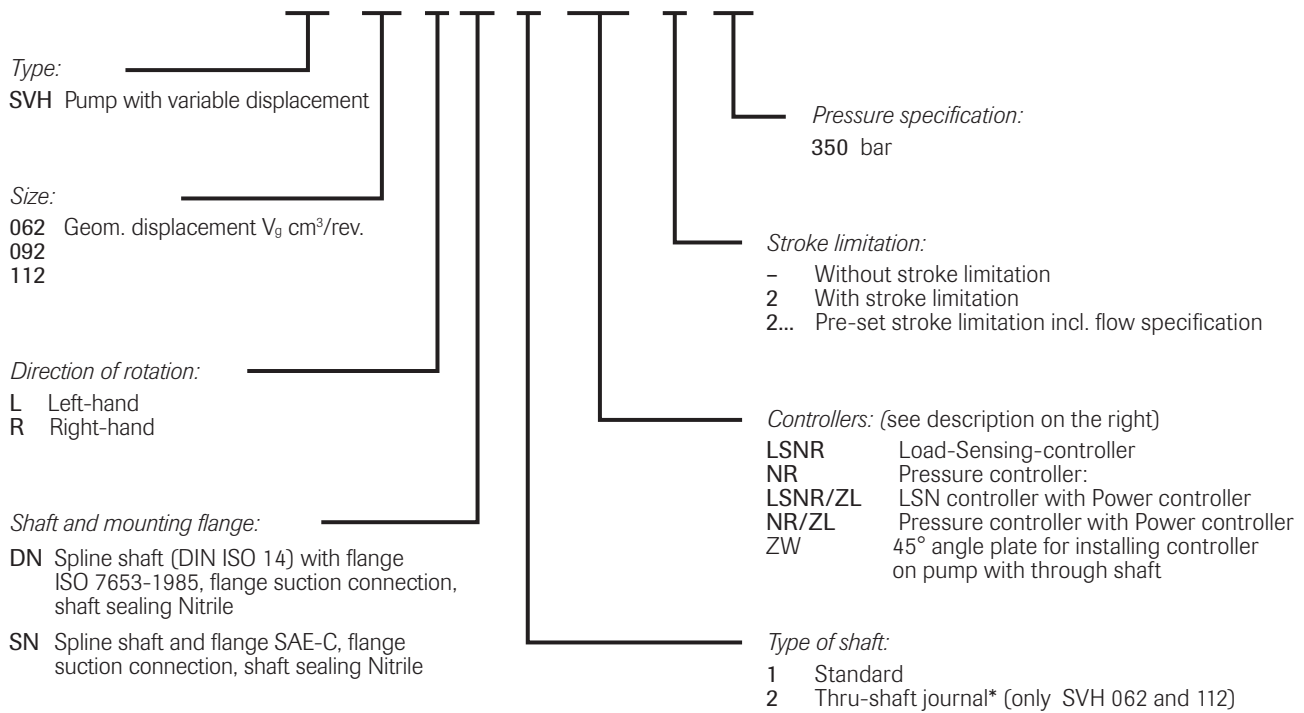
Other advantages of Sunfab SVH:

- Short reaction time when resetting the flow
- Compact installation dimensions
- High pressure
- Externally drained for best cooling
- Rugged construction and long service life
- Low noise emission
- Low power-to-weight-ratio

Versions, main data

Example:

SVH - 092 - L DN - 1 - LSNR - 2 - 350



* Version with thru-shaft

Available flange design including coupling sleeves

Coding	Description
SAE-A	Flange SAE-A, spline shaft
SAE-B/2	Flange SAE-B-2-hole, spline shaft
SAE-B/4	Flange SAE-B-4-hole, spline shaft

Note: An additional support has to be provided for pump combinations

Typ SVH		062	092	112	
Nominal oil flow at max. setting angle and pump speed rpm	500	31.2	43.6	55.2	
	1000	62.4	87.2	110.4	
	1500	93.6	130.8	165.6	
Displacement	cm ³ /rev	62.4	87.2	110.4	
Max. pump speed	rpm	2500	2300	2200	
Max. working pressure	continuous	MPa	35	35	35
	intermittent	MPa	40	40	40
Mass with controller	kg	23.2	27.2	29.9	
Tare-weight torque	Nm	30.0	35.3	40.0	
Max. torque	Nm	430	530	600	
Direction of rotation	supplied in right or left-hand designs				

Subject to design alteration

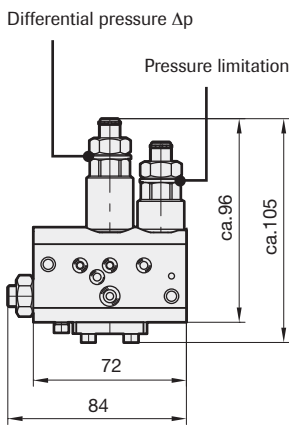
Description of the controllers

- LSNR Load-Sensing controller with integrated pressure limitation

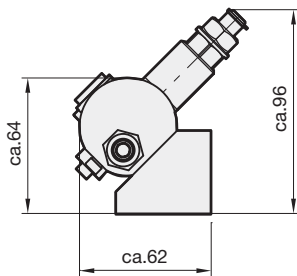
- NR Pressure controller, adjustable directly at the pump. The Pressure controller automatically maintains a constant system pressure independent of the required flow. There fore it is suited for constant pressure systems, where differing flow is required or as efficient pressure limitation of the hydraulic system..

- LSNR/ZL Power controller (torque limitation) in combination with LSNR.
Product "Pressure x Displacement" = constant
Adjustment range: 25...100% of max. drive torque

- NR/ZL Power controller (torque limitation) in combination with pressure controller N
Adjustment range: 25...100% of max. drive torque



Controllers LSNR and NR



Pressure adjustment	Pressure range (bar)	Δp (bar)/rev.
Pressure limitation	20 ... 400	50
Differential pressure Δp	20 ... 55	12.5

Additional characteristic values

- Mounting** Power take off of commercial vehicles (flange ISO 7653-1985 for trucks) or flange assembly (flange SAE-C)

- Surface** Nitro-carb hardened

- Direction of rotation** Left-hand or Right-hand. Change of the direction of rotation by turning the pump end plate as well as exchange of the port plate.

- Installed position** Any, please note mounting instructions.

- Hydraulic fluid** Hydraulic oil acc. to DIN 51524 table 2 and 3; ISO VG 10 to 68 acc. to DIN 51519

Viscosity range: min. approx. 10; max. approx. 1000 mm²/s

Optimal operation range: approx. 10–35 mm²/s

Also suitable are biologically degradable pressure fluids type HEES (synth. Ester) at operation temperatures up to approx. +70 °C.

Recommended contamination level ≤ 19/16/13 conforming DIN ISO 4406

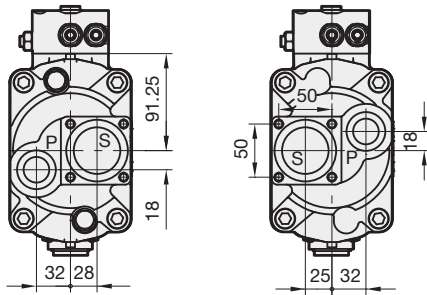
- Temperature** Ambient: approx. -40...+60 °C

Fluid: -25...+80 °C, pay attention to the viscosity range!

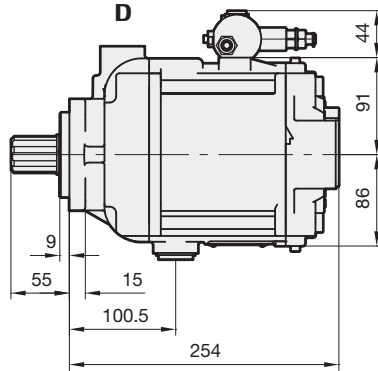
Start temperature down to -40 °C is allowable (Pay attention to the viscosity range during start!), as long as the operation temperature during subsequent running is at least 20K (Kelvin) higher.

- Pressure range** Differential pressure Δp 20–55 bar (factory setting 27 bar).
Pressure limitation 20–400 bar.

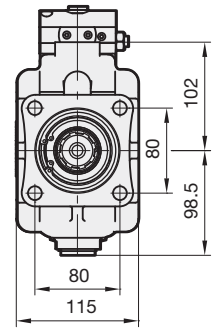
Dimensions SVH 062



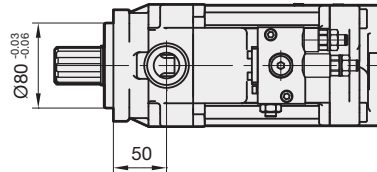
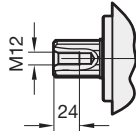
Displayed in the right and left hand version



Coding D
Flange ISO 7653-1985



14T-12/24DP



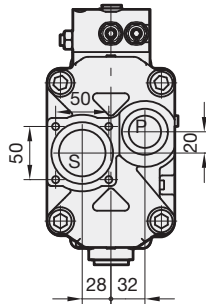
Dimensions SVH 092

Connection DIN ISO 228/1:

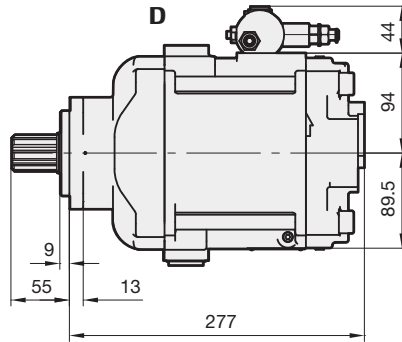
- P = Pressure outlet G 1
- S = Flange suction connection
- D = Case drain G 3/4

for UNF connection SAE J 514:

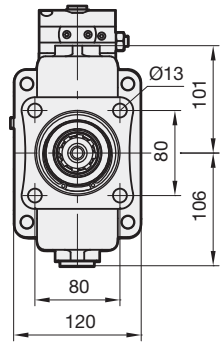
- P = 1 1/4-12 UN-2B
- S = 1 7/8-12 UN-2B
- D = 7/8-14 UNF-2B
- LS = G 1/4 (DIN ISO 228/1)
with adapter for 7/16-20 (SAE-4)



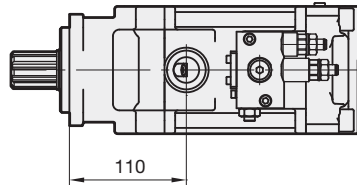
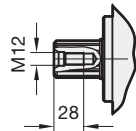
Displayed in the right hand version



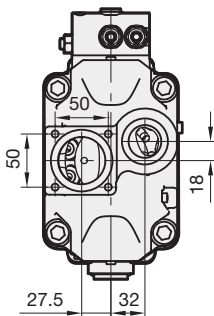
Coding D
Flange ISO 7653-1985



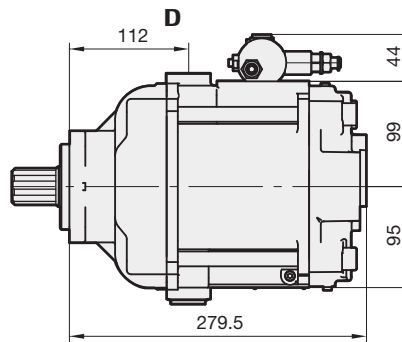
14T-12/24DP



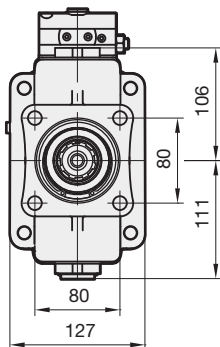
Dimensions SVH 112



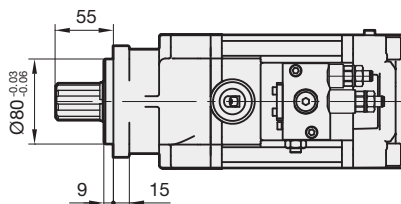
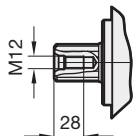
Displayed in the right hand version



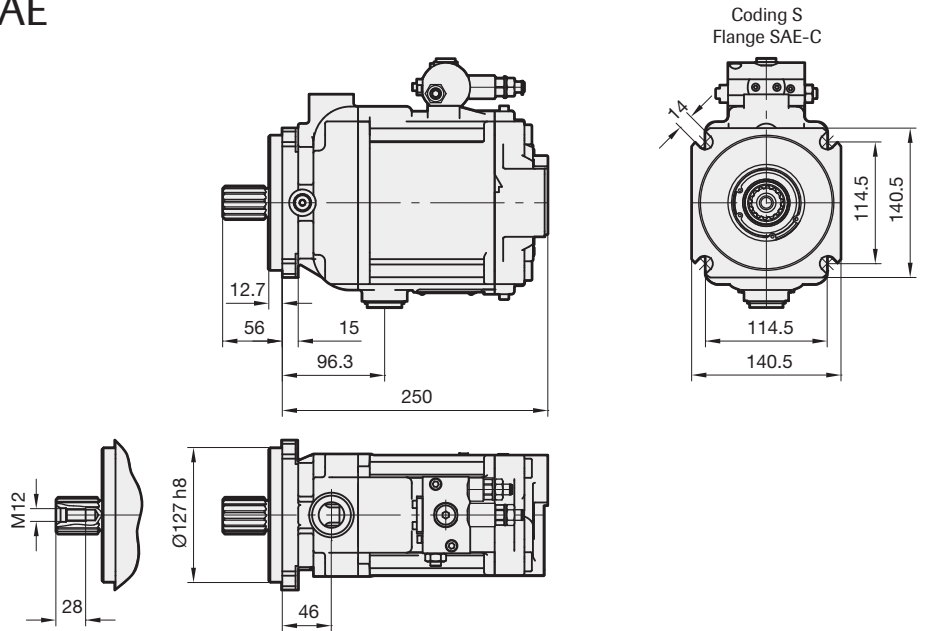
Coding D
Flange ISO 7653-1985



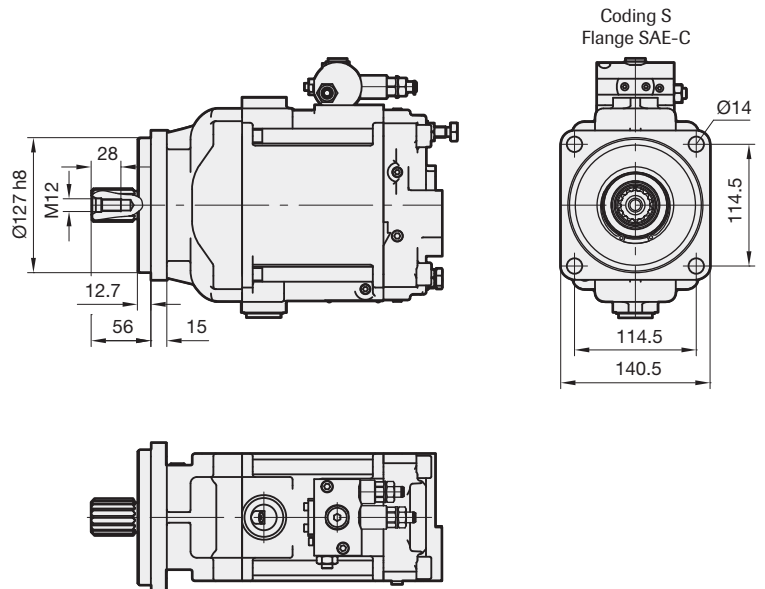
14T-12/24DP



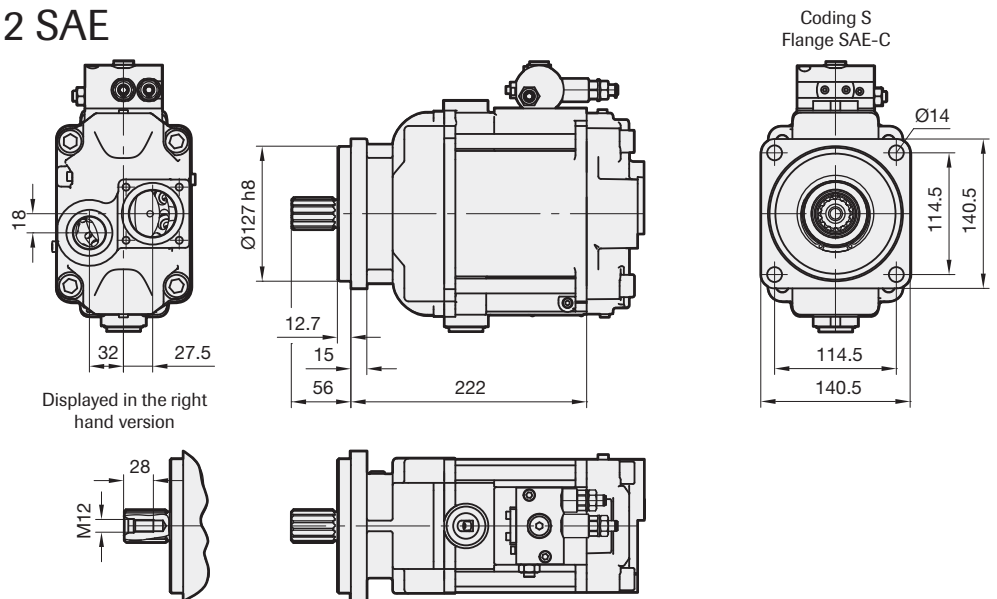
Dimensions SVH 062 SAE



Dimensions SVH 092 SAE



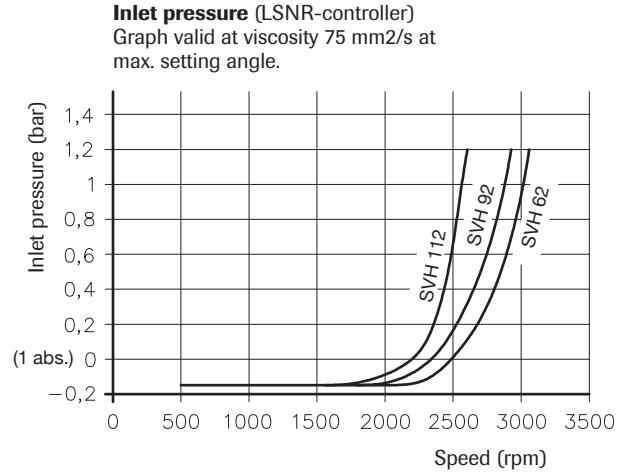
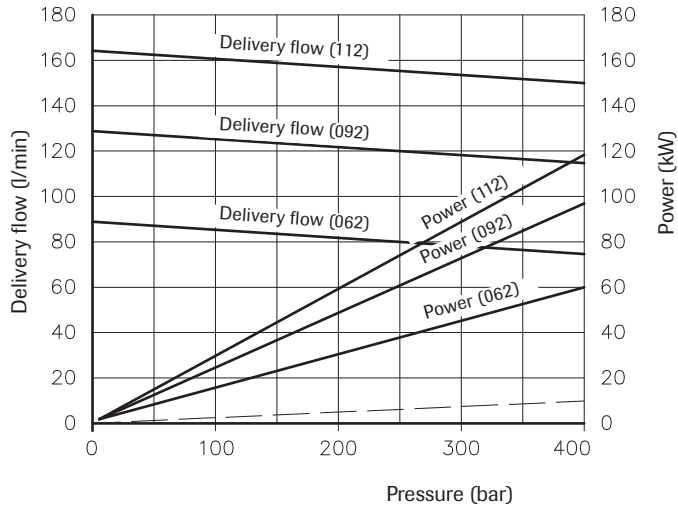
Dimensions SVH 112 SAE



Curves

Flow and Power

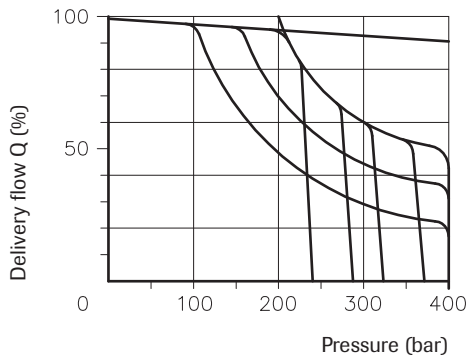
Charts show flow/pressure (without controller). Power at max. setting angle and power at min. setting angle and 1500 rpm



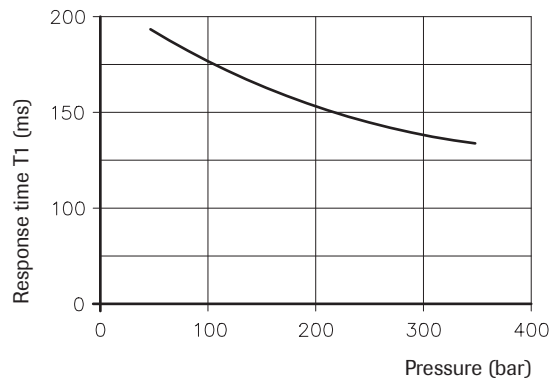
Controller curve

Coding **L**

Pressure / Delivery flow

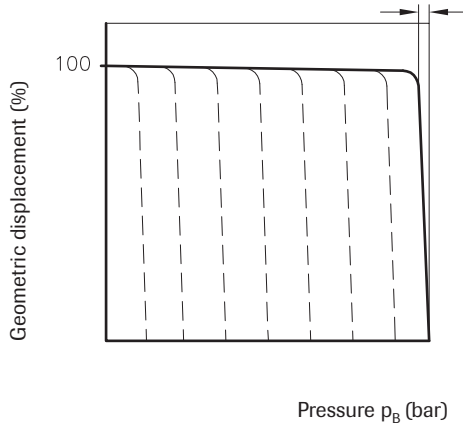


Response time T1 (LSNR-controller)

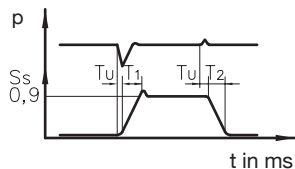
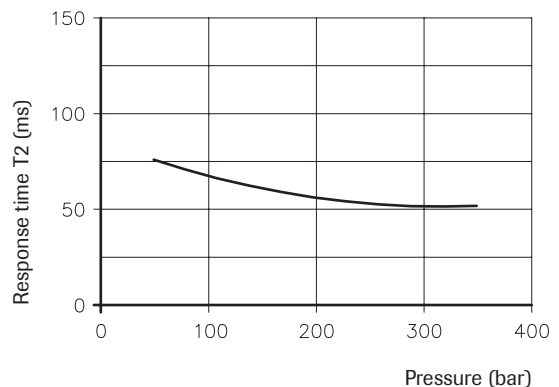


Coding **LSNR**

approx. 4 bar



Response time T2 (LSNR-controller)



S_s = Regulating distance actuator

T_u = Delay < 3 ms

T_1 = Response time min to max

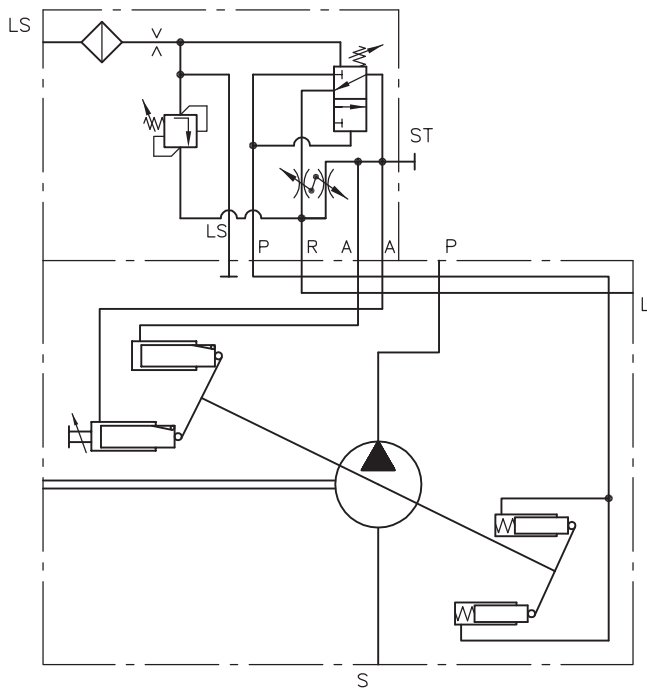
T_2 = Response time max to min

p = Pressure

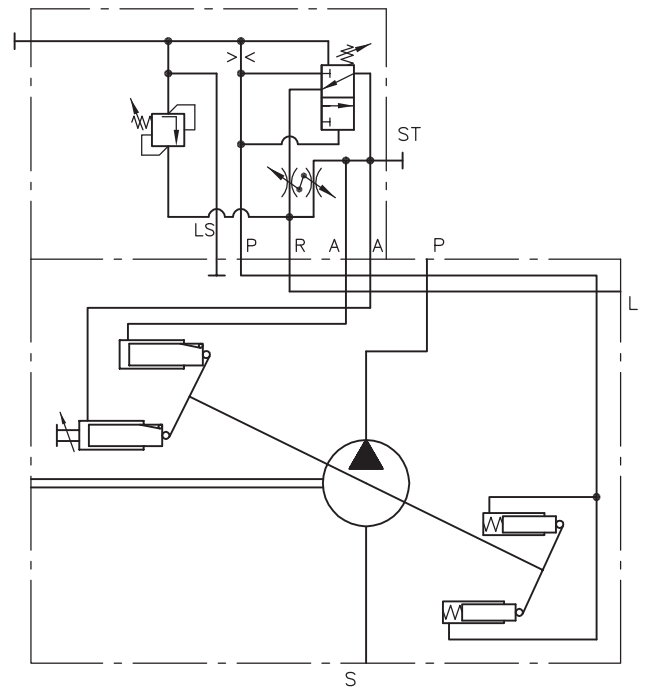
LS-line min. length 1.5 m, min. internal diameter 12 mm

Controller symbols

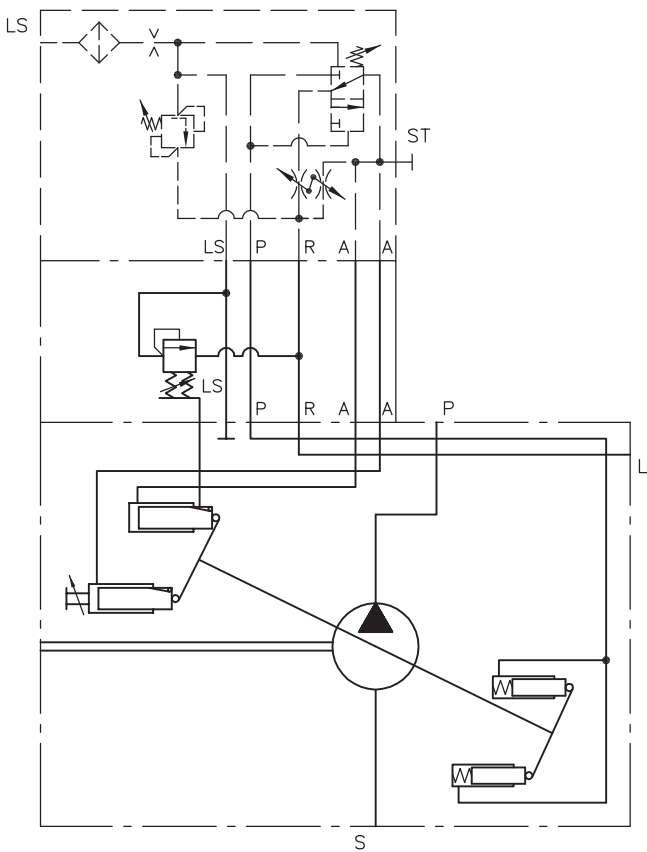
Coding **LSNR**



Coding **NR**



Coding **LSNR/ZL**



**WARNING**

When the pump is running:

1. Do not touch the pressure hose
2. Watch out for rotating parts
3. The pump and hoses may be hot