Standard pumps

Variable displacement axial piston pump type V60N

Thanks to its sturdy construction, the variable displacement axial piston pump is designed for direct flange mounting to the power take-off on commercial vehicle gearboxes, or for standard connection using an SAE flange. The benchmark figures for this product are 130 cm^3/rev and 450 bar end pressure, allowing for a wide range of applications. These are supported by a high self-suction speed rating and low noise level. Variations with thru-shaft for flange mounting additional variable displacement axial piston pumps and auxiliary pumps are also available. Several different controllers offer the user a wide range of application possibilities. Particular advantages with regard to the mutual coordination arise from a combined application of variable displacement axial piston pumps with proportional directional spool valves type PSV and possibly required load-holding valves type LHT and LHDV.

Features and benefits:

- Good performance/weight ratio
- High self-suction speed
- Different shaft and flange versions

Intended applications:

- Machines for forestry and agricultural purposes
- Cranes and lifting equipment
- Truck-mounted concrete pumps
- Municipal trucks

Nomenclature:	**Variable displacement axial piston pump**
Design:	**Individual pump Pump combination**
p_{max}:	**400 bar (continuous), 450 bar (peak)**
Q_{max}:	**87 ... 190 lpm (1450 rpm)**
$V_{g\ max}$:	**60 ... 130 cm^3/rev**

Design and order coding example

V60N - 110 | R | S F | N | - 1 | - 0 | - 03 | /LSNR | -2 | - 320

Pressure specification [bar]

Additional versions With/without max. stroke limitation

Controllers

Load-sensing controller:
- For proportional directional spool valve with pressure limitation (LSNR)

Pressure controller:
- For constant pressure systems (NR)

Power controller, intermediate plate
- to restrict the drive torque (/ZL)

Release

Additional function

Shaft version With/without thru-shaft, radial ports

Seal material
- NBR (N), FKM (V)

Shaft journal/flange
- ISO 14 parallel key splined shaft (D)
- SAE-C, SAE-B J 744 spline shaft (S)
- DIN ISO 7653 (Y)
- SAE-C, SAE-B J 744 (F)

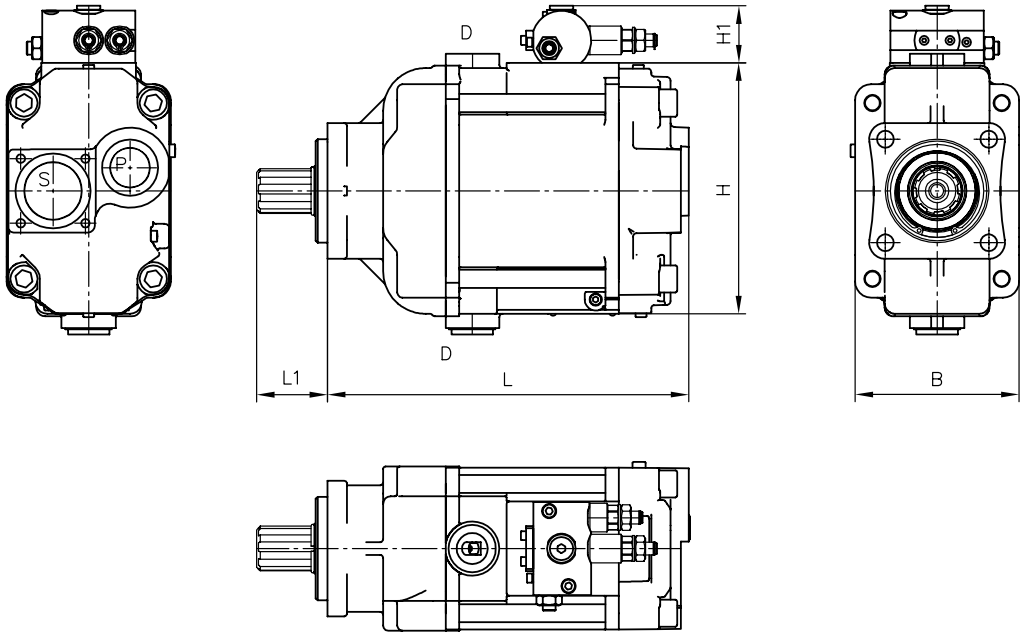
Rotation direction Anti-clockwise (L), clockwise (R)

Basic type, nominal size
- Individual pumps
- Tandem pumps

Function

General parameters and dimensions

V60N



Characteristic values

	Geom. delivery volume	Delivery flow[1]	Nom. pressure	Self-suction speed	Dimensions [mm]					m [kg]
	V_g [cm³/rev]	Q_{max} [lpm]	p_{nom} (p_{max}) [bar]	n [rpm]	L	L1	H	H1	B	
V60N - 060	60	87	350 (400)	2500	254	55	181	44	115	23
V60N - 090	90	130		2300	277	55	189	44	120	26,7
V60N - 110	110	160		2200	279	55	191	44	125	29
V60N - 130	130	188	400 (450)	2100	269,5	55	210	45,1	130	30,8

1) Approximate reference value at 1450 rpm

Ports:

	Drain port D	LS signal port	Suction port S	Pressure port P
V60N - 060	G 3/4	G 1/4	Flange ∅ 1 1/2	G 1
V60N - 090				
V60N - 110				
V60N - 130				

Example circuit

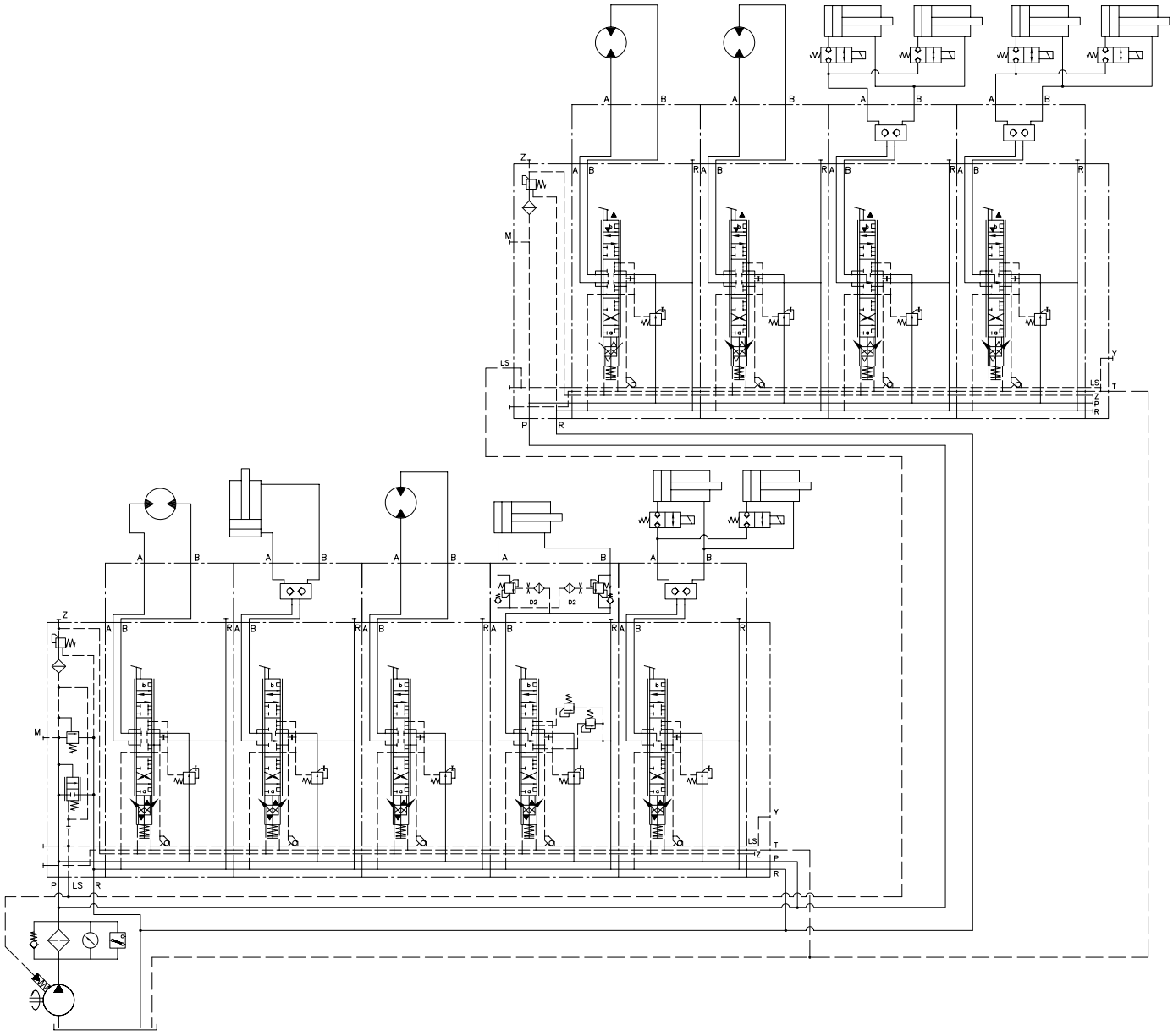
V60N-130 RSFN-1-0-0.00 / LSNR-2-250

PSV 31/D280-2

- A 2 L 25/25/EA1/2
- A 2 H 40/40/EA1/2 DRH
- A 2 L 25/25/EA1/2
- A 2 H 3/3 A 100 B 100/EA1/2 AL-0-D 4/120-BL-0-D 4/120
- A 2 H 3/3/EA1/2 DRH
- E 18-G 24

PSV 31-1

- A2 L 25/25/EA1/2
- A2 L 25/25/EA1/2
- A2 H 3/3/EA1/2 DRH
- A2 H 3/3/EA1/2 DRH
- E 1 - G24



Associated technical data sheets:

- Type V60N variable displacement axial piston pump: D 7960 N

Similar products:

- Variable displacement axial piston pumps type V40M: D 7961
- Type V30D and V30E variable displacement axial piston pumps: D 7960, D 7960 E
- Type K60N fixed displacement axial piston pump: D 7960 K
- Type M60N axial piston motors: D 7960 M

Suitable prop. directional spool valves:

- Type PSL/PSV sizes 2, 3 and 5: D 7700-2, D 7700-3, D 7700-5
- Type PSLF/PSVF sizes 3, 5 and 7: D 7700-F, D 7700-7F

Suitable load-holding valves:

- Type LHK, LHDV, LHT: D 7100, D 7770, D 7918

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