

Data Sheet

Hydraulic Steering Unit

VSPP

Steering solution

The VSPP is a steering unit with integrated priority valve inside the envelope of the standard VSP housing. This brings about a very compact solution minimizing installation space, cost and time.

The VSPP is suitable for small, low HP tractors, or any application needing a steering unit with standard options, good performance and manual steering capabilities.

The VSPP steering unit combines low cost with good performance, high quality and reliable delivery.

VSPP meets vehicle requirements with the same high support and service level as any other Danfoss product.

Applications:

- Tractors
- Forklift trucks
- Backhoe loaders
- Telehandlers
- Combines



Features

- With integrated priority valve, max pump flow: 80 l/min
- Variants: LS dynamic
- Displacements: 50-400 cc/rev
- Built-in valve functions: pressure relief, shock, suction and check valve between priority valve and steering unit part, check valve in LS line
- Port threads as required to DIN or ISO standards
- Low steering torque
- Low pressure drop

Comprehensive technical literature is online at www.danfoss.com

VSPP Steering Unit

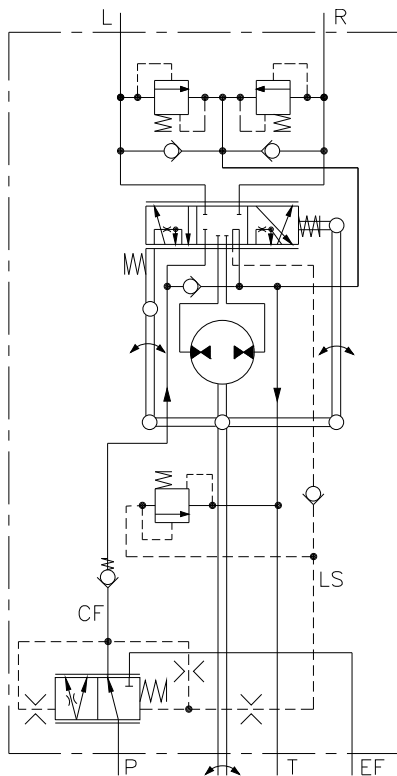
VSPP program

VSPP steering unit will be available in load sensing dynamic version.

VSPP characteristics

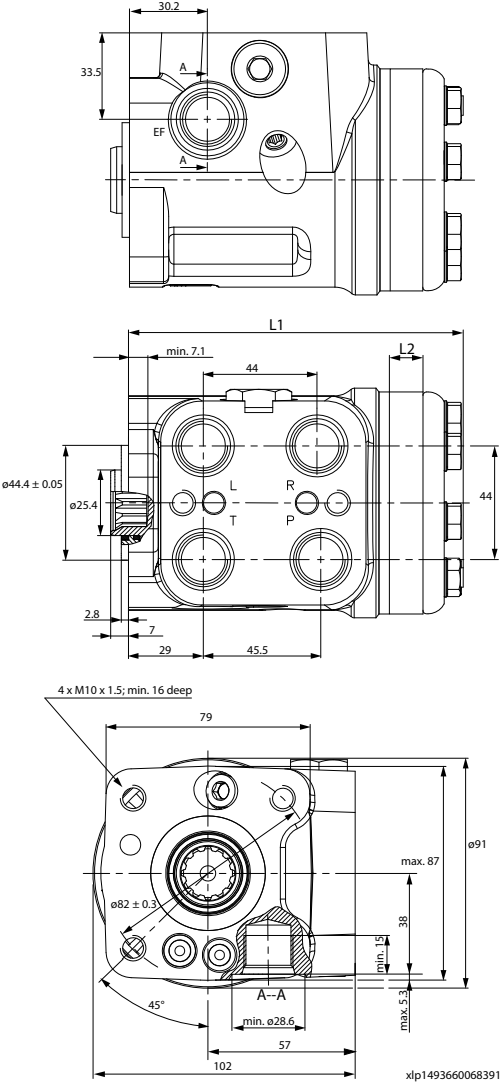
Displacement	50, 70, 80, 100, 125, 160, 200, 250, 315 and 400 cc/rev	
Max. system pressure/ max P-T port pressure	190 bar [2755 psi]	
Max. P and EF port pressure	230 bar [3335 psi]	
Max. T-port pressure	30 bar [435 psi]	
Max. flow	80 l/min [21.1 US gal/min]	
Input torque (for standard neutral spring kit 150-4209)	0.8 to 4 N·m [7.08 to 35.40 lbf·in]	
Valve functions	Check valve for manual steering, pressure relief, shock and suction valves, check valve between priority valve and steering unit part, check valve in LS	
Port options	P, T, L, R, EF	
	DIN 3852-2	BSP G ½ in
	ISO 6149-1	M18x1.5
	ISO 11926-1	3/4-16 UNF
Neutral pressure drop, P-EF at load on EF>10 bar	<5 bar [72.5 psi] at 40 l/min [10.6 US gal/min] and at viscosity 21 cSt	

VSPP cetop





VSPD dimensions



VSPD types dimensions

Type	L1, mm [in]	L2, mm [in]	Weight kg [lb]
VSPD 50	125 [4.92]	6.5 [0.26]	5.2 [11.46]
VSPD 70	127 [4.99]	9.1 [0.36]	5.3 [11.68]
VSPD 80	128 [5.04]	10.4 [0.41]	5.3 [11.68]
VSPD 100	131 [5.16]	13.0 [0.51]	5.4 [11.90]
VSPD 125	134 [5.28]	16.2 [0.64]	5.5 [12.13]
VSPD 160	139 [5.47]	20.8 [0.82]	5.6 [12.35]
VSPD 200	144 [5.67]	26.0 [1.02]	5.8 [12.79]
VSPD 250	150 [5.91]	32.5 [1.28]	6.0 [13.23]
VSPD 315	159 [6.26]	40.9 [1.61]	6.2 [13.67]
VSPD 400	170 [6.69]	52.0 [2.05]	7.0 [15.43]

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