



Data Sheet

# Hydraulic Steering Unit VSP



### What is VSP type steering unit

For small, low HP tractors, or any application needing a steering unit with standard options, good performance and manual steering capabilities.

The VSP steering product combines low cost with good performance, high quality and reliable delivery.

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

This means you can reduce vehicles cost, without jeopardizing Quality, Delivery and Support.

#### Applications:

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

### Features

- Variants: ON, OR, LS
- Displacements: 50-200 cc/rev.
- One or more built-in valve functions: pressure relief, shock, suction and check valve in pump connection and in LS line
- Port threads as required to DIN, ISO or SAE standards
- Low steering torque
- Low pressure drop

VSP program:

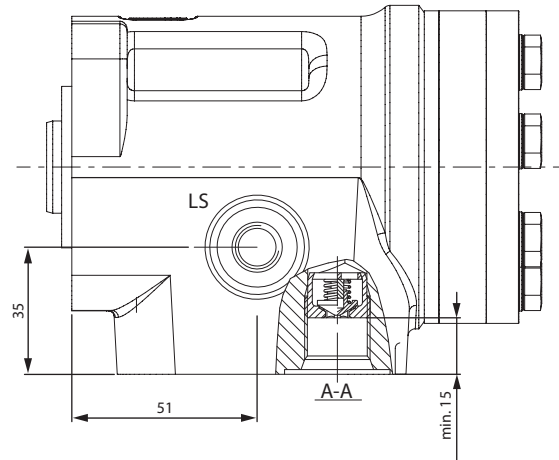
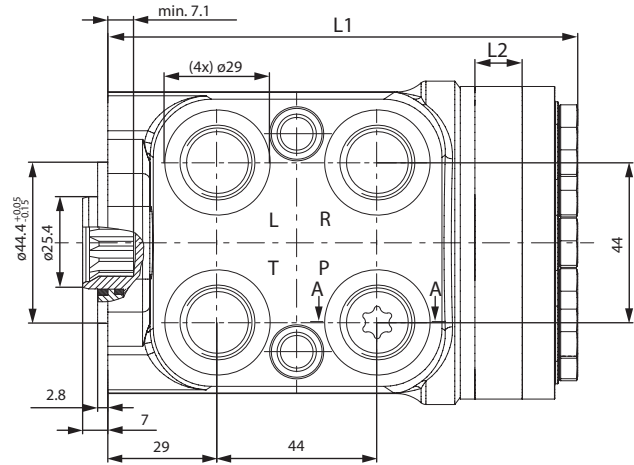
VSP steering unit will be available in

- Open center
- Load sensing
- Reaction and non reaction versions

VSP Dimensions:

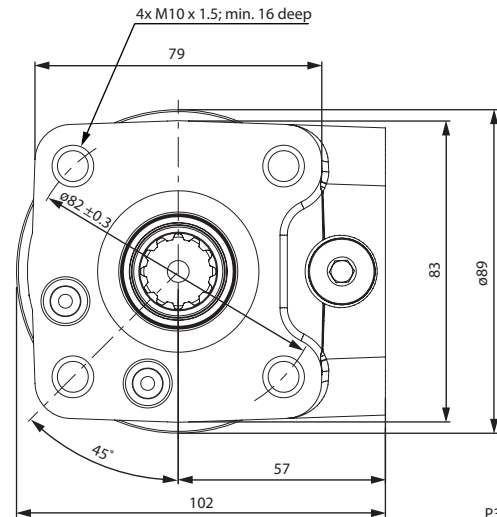
VSP specifications:

<b>Displacement:</b>	50, 70, 80, 100, 125, 160 and 200 cc/rev		
<b>Max. system pressure/ max P-T port pressure</b>	170 bar [2465 PSI] 190 bar [2755 PSI] (High Spec)		
<b>Max. back pressure/ max. T-port pressure</b>	20 bar [290 PSI] 30 bar [435 PSI] (High Spec)		
<b>Max. flow, Open center versions</b>	50 l/min [13.21 US gal/min]		
<b>Input torque (for standard neutral spring kit 150-4209)</b>	0.8 - 4 Nm [7.08-35.40 lbf·in]		
<b>Valve functions</b>	Check valve for manual steering standard on all versions. Possibility of pressure relief, shock and suction valves, check valve in P and in LS (dynamic only)		
<b>Port options</b>		P, T, L, R	LS
	DIN 3852-2	BSP G 1/2"	G 1/4"
	ISO 6149-1	M18x1.5	M12x1.5
	ISO 11926-1	3/4-16 UNF	7/16 -20 UNF
<b>Neutral pressure drop, ON/OR versions</b>	3 bar [43.5 PIS] at 20 l/min [5.28 US gal/min] and at viscosity 21 cSt		



VSP Dimensions

Type	L1, mm [in]	L2, mm [in]	Weight kg [lb]
VSP 50	125 [4.92]	6.5 [0.26]	5.2 [11.46]
VSP 70	127 [4.99]	9.1 [0.36]	5.3 [11.68]
VSP 80	128 [5.04]	10.4 [0.41]	5.3 [11.68]
VSP 100	131 [5.16]	13.0 [0.51]	5.4 [11.90]
VSP 125	134 [5.28]	16.2 [0.64]	5.5 [12.13]
VSP 160	139 [5.47]	20.8 [0.82]	5.6 [12.35]
VSP 200	144 [5.67]	26.0 [1.02]	5.8 [12.79]



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