

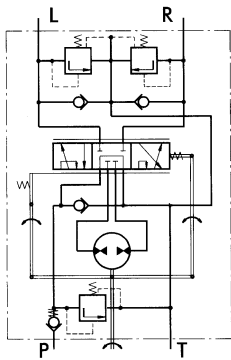


APPLICATION :

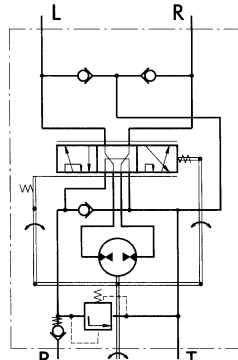
For use on steering of low speed vehicles, extensively used on such as forklifts, tractors, construction equipment, rudder of ship , mowers, mining and industrial positioning requirement.

DESCRIPTION OF UNIT HSUS :

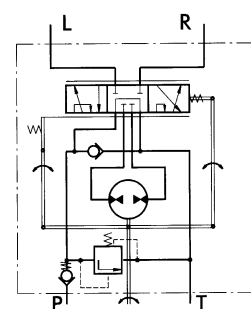
It can be used to control power steering force with light operating force. It is safe, reliable and smooth in the function and operation. This is achieved with hydraulic power from vehicle system entering the pressure port (P) of HSUS unit and being directed to steering cylinders through tank posts L (left) and R (right) by turning input shaft either direction. Return flow from each cylinder is through tank port (T). The HSUS unit is complete with metering pump and rotary positioning valves and integral relief valves and check valves.(see above hydraulic circuit diagrams)..



HSUS.../1 Version -1
"Open Center - Non Load Reaction"
With Built-in Valves



HSUS.../2 Version -2
"Open Center - Load Reaction"
With Built-in Valves



HSUS.../4 Version -4
"Open Center - Non Load Reaction"
With Built-in Valves

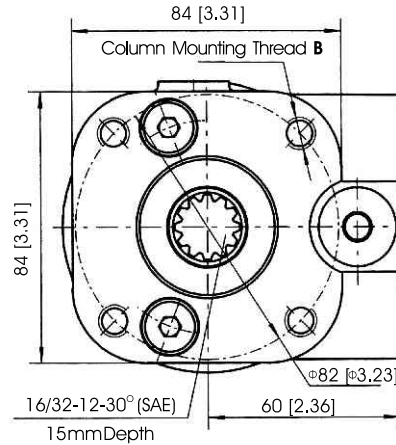
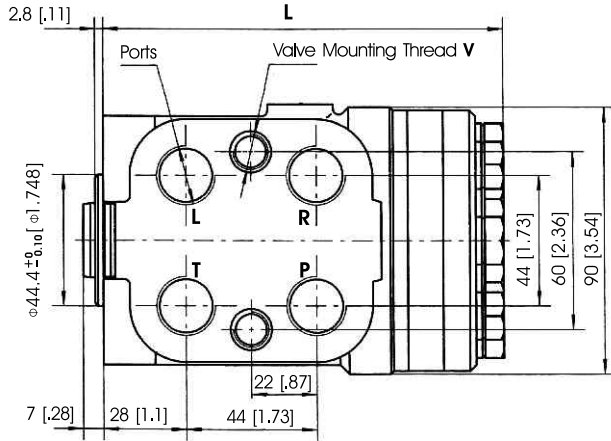
Specifications

Parameters	Type									
	HSUS 50	HSUS 63	HSUS 80	HSUS 100	HSUS 125	HSUS 160	HSUS 200	HSUS 250	HSUS 315	HSUS 400
Version	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4	1 / 2 / 4
Displacement cc/rev (cu.in)	50.8 (3.1)	62.9 (3.8)	79.8 (4.9)	99.6 (6.1)	124.5 (7.6)	159.6 (9.8)	199.4 (12.2)	249.2 (15.2)	316.5 (19.4)	399.7 (24.4)
Rated Flow l/min (gpm)	5 (1.3)	6 (1.6)	8 (2.1)	9 (2.4)	11 (2.9)	15 (4)	17 (4.5)	24 (6.3)	30 (7.9)	40 (10.6)
Rated Pressure bar (PSI)	160 (2320)									
Relief Valve Pressure Setting bar (PSI)	80 (1160)		100 (1450)		120 (1740)		140 (2030)		160 (2320)	
Shock Valve Pressure Setting bar (PSI)	140 (2030)		160 (2320)		180 (2610)		200 (2900)		220 (3190)	
Max. Cont. Pressure in Line T bar (PSI)	20 (290)									
Max. Torque-Powered Nm (lb.-in.)	5(44)									
D Type Weight kg (lb)	5.75 (12.68)	5.82 (12.83)	5.89 (12.99)	5.96 (13.14)	6.1 (13.45)	6.3 (13.89)	6.5 (14.33)	6.73 (14.98)	7.1 (15.65)	7.5 (16.53)
E Type Weight kg (lb)	6.04 (13.31)	6.11 (13.47)	6.18 (13.62)	6.27 (13.82)	6.4 (14.11)	6.6 (14.55)	6.79 (14.97)	7.02 (15.48)	7.39 (16.29)	7.79 (17.17)
D Type Dimension L mm (in.)	130 (5.12)	132 (5.2)	134 (5.28)	137 (5.39)	140 (5.51)	145 (5.71)	150 (5.91)	156 (6.14)	166 (6.54)	176 (6.93)
E Type Dimension L mm (in.)	140 (5.51)	142 (5.59)	144 (5.67)	146 (5.75)	149 (5.87)	154 (6.06)	159 (6.26)	165 (6.5)	175 (6.89)	185 (7.28)

D Type

Dimensions and Mounting Data

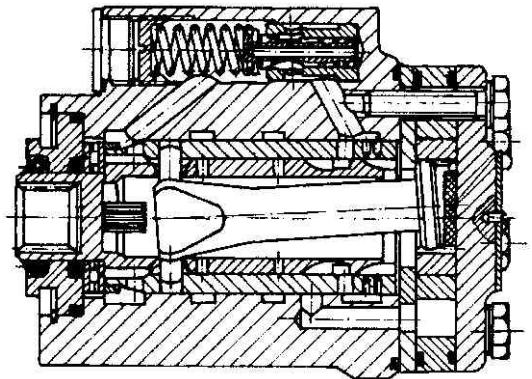
(Inch) show in brackets []



Thread Ports

Code	Ports – P, T, R, L Thread	Column Mounting Thread - B	Valve Mounting Thread - V
-	G 1/2 14 mm depth	4 x M10 x 1.5 16 mm depth	2 x M10 x 1 16 mm depth
GA*	G 3/8 14 mm depth	4 x M10 x 1.5 16 mm depth	2 x M10 x 1 16 mm depth
U	3/4 – 16UNF O-ring 14 mm depth	4 x 3/8 – 16UNC 0.63 [16] depth	2 x 3/8 – 24UNF 0.63 [16] depth
UA*	9/16 – 18UNF O-ring 14 mm depth	4 x 3/8 – 16UNC 0.63 [16] depth	2 x 3/8 – 24UNF 0.63 [16] depth
M	M22 x 1.5 14 mm depth	4 x M10 x 1.5 16 mm depth	2 x M10 x 1 16 mm depth

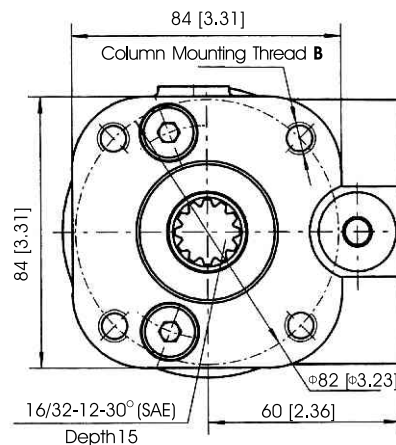
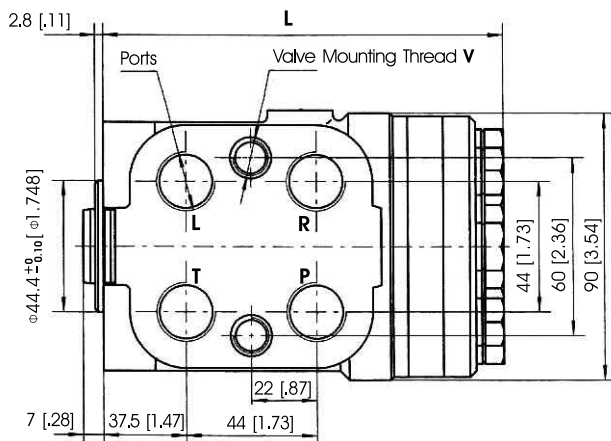
* These threads are for displacements from HSUS50 to HSUS125 only.



E Type

Dimensions and Mounting Data

(Inch) show in brackets []



Ordering Information

	1	2	3	4	5	6
HSUS		/	-			

Pos.1 Displacement Code

- 50** - 50.8cc / 3.1 [in.3/r]
- 63** - 62.9cc / 3.8 [in.3/r]
- 80** - 79.8cc / 4.9 [in.3/r]
- 100** - 99.6cc / 6.1 [in.3/r]
- 125** - 124.5cc / 7.6 [in.3/r]
- 160** - 159.6cc / 9.8 [in.3/r]
- 200** - 199.4cc / 12.2 [in.3/r]
- 250** - 249.2cc / 15.2 [in.3/r]
- 315** - 316.5cc / 19.4 [in.3/r]
- 400** - 399.7cc / 24.4 [in.3/r]

Pos.2 Versions Code

- 1** - "Open Center - Non Load Reaction"
- 2** - "Open Center - Load Reaction"
- 4** - "Open Center - Non Load Reaction"

Pos.3 Relief Valve Pressure Settings, bar(Psi)

- 80** - 80 [1160]
- 100** - 100 [1450]
- 120** - 120 [1740]
- 140** - 140 [2030]
- 160** - 160 [2320]

Pos.4 Ports Code

- Omit** - G 1/2
- GA** - G 3/8
- U** - 3/4 - 16 UNF "O" Ring
- UA** - 9/16-18 UNF "O" Ring
- M** - Metric

Pos.5 Type Code

- Omit** - D Type
- E** - E Type

Pos.6 Design Series

- Omit** - Factory use only