

HYDROSTATIC STEERING UNIT TYPE HKUQ.../4



HKUQ.../4 is a new series of hydrostatic steering units with an additionally increased flow. The hydrostatic steering unit type HKUQ/4 is available for steering medium and large sized vehicles, allowing easy control either in servo-amplified mode or in emergency operation.

HKUQ/4 is an Open Center-Non Load Reaction hydrostatic steering in which restrictor for amplifying factor from 1,3 to 2,5 is built-in.

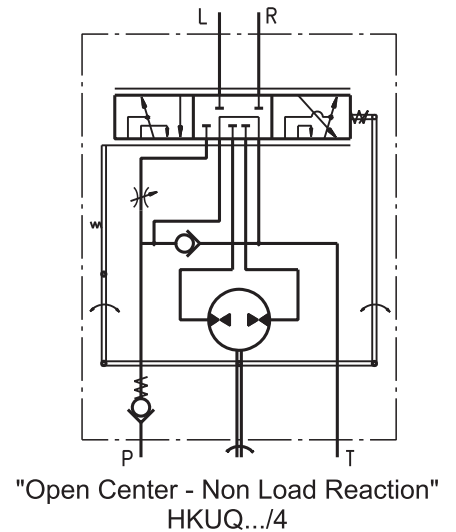
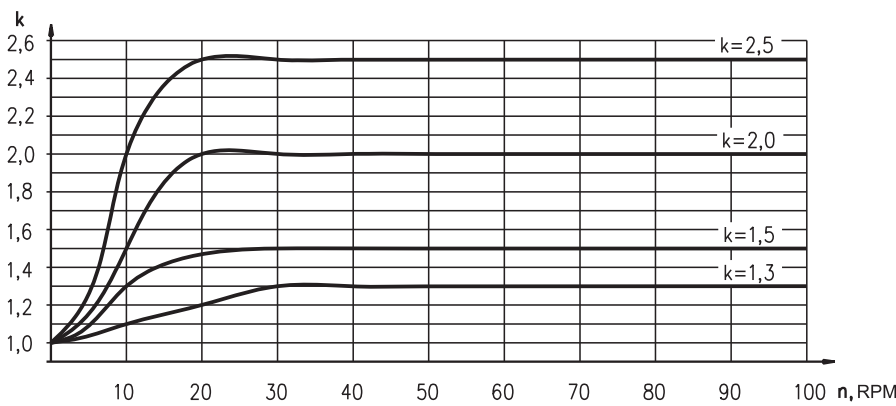
In accordance with the size of the gear wheel set and amplifying factor, HKUQ4 has the following working volume:

- from 80 cm³ to 200 cm³ for emergency operation mode (manual steering without servo-amplifying);

- from 100 cm³ to 500 cm³ for normal operation mode (with total flow amplifying).

There is no servo-amplifying of flow if low steering speed up to 10 RPM is applied. In steering speed increase over 20 RPM there is total servo-amplifying of flow. In this mode gear wheel set flow and restrictor flow are added.

VARIABLE AMPLIFYING FACTOR

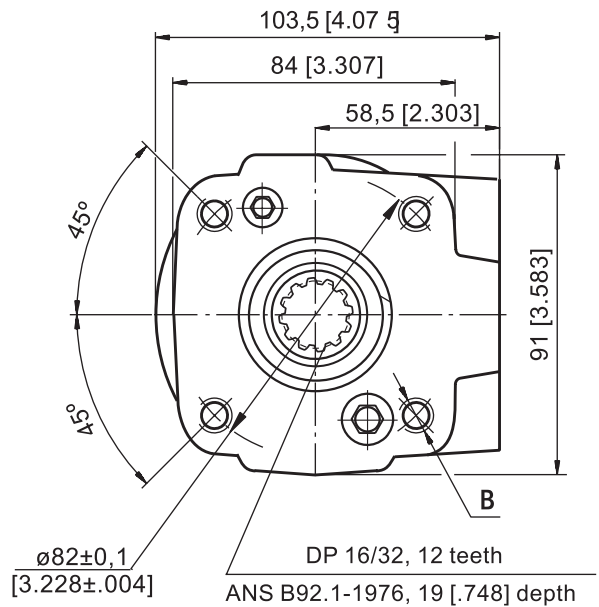
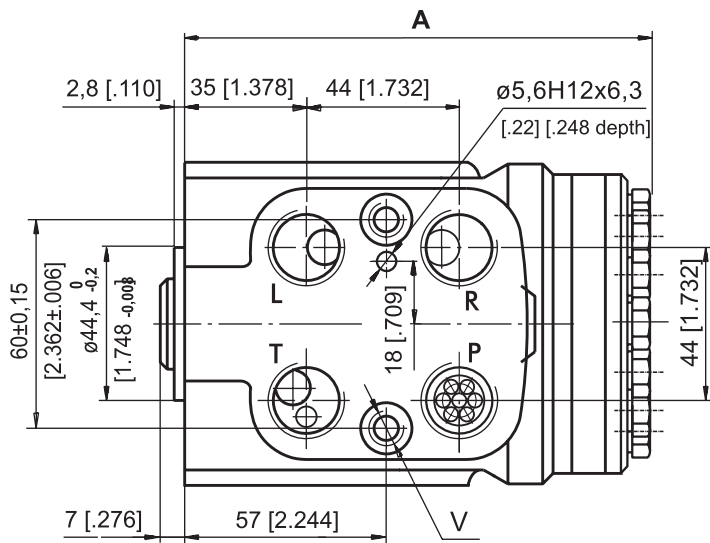


SPECIFICATION DATA

Parameters	Type																			
	HKUQ 80/.../4				HKUQ 100/.../4				HKUQ 125/.../4				HKUQ 160/.../4				HKUQ 200/.../4			
Displacement - without servo-amplifying (in emergency mode) cm ³ /rev	79,2 [4.83]				99,0 [6.04]				123,8 [7.56]				158,4 [9.67]				198 [12.08]			
- with servo-amplifying [in ³ /rev]	100 [6.10]	125 [7.62]	160 [9.76]	200 [12.2]	125 [7.62]	160 [9.76]	200 [12.2]	250 [15.25]	160 [9.76]	200 [12.2]	250 [15.25]	320 [19.52]	200 [12.2]	250 [15.25]	320 [19.52]	400 [24.4]	250 [15.25]	320 [19.52]	400 [24.4]	500 [30.5]
Rated Flow* l/min [GPM]	10 [2.64]	12,5 [3.30]	16 [4.22]	20 [5.28]	12,5 [3.30]	16 [4.22]	20 [5.28]	25 [6.60]	16 [4.22]	20 [5.28]	25 [6.60]	32 [8.45]	20 [5.28]	25 [6.60]	32 [8.45]	40 [10.57]	25 [6.60]	32 [8.45]	40 [10.57]	50 [13.2]
Amplifying Factor (at shaft revolution over 20 min ⁻¹)	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5
Rated Pressure bar [PSI]	170 [2465]																			
Max. Cont. Pressure in Line T bar [PSI]	25 [363]																			
Max. Torque at Servoamplifying Nm [lb-in]	3 [26]																			
Max. Torque w/o Servoamplifying Nm [lb-in]	120 [1065]																			
Weight, avg. kg [lb]	5,6 [12.4]				5,7 [12.6]				5,8 [12.8]				6,0 [13.2]				6,3 [13.9]			
Dimension A mm [in]	136,2 [5.36]				138,8 [5.47]				142,2 [5.60]				146,8 [5.78]				152,2 [5.99]			

* Rated Flow at 100 RPM.

DIMENSIONS AND MOUNTING DATA



Code	Ports - P*, T, R, L Thread	Column Mounting Thread - B	Valve Mounting Thread - V
-	G1/2 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
M	M22x1,5 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
A	3/4 - 16 UNF O-ring 17 [.67] depth	4 x 3/8 - 16 UNC 15,7 [.62] depth	2 x 3/8 - 24 UNF 14,2 [.56] depth



*Threaded Ports P min 16 [.63] depth for pipe mounting.

ORDER CODE for HKUQ...



Pos.1 - Displacement code

80	- 79,2 [4.83] cm ³ /rev [in ³ /rev]
100	- 99,0 [6.04] cm ³ /rev [in ³ /rev]
125	- 123,8 [7.56] cm ³ /rev [in ³ /rev]
160	- 158,4 [9.67] cm ³ /rev [in ³ /rev]
200	- 198,0 [12.10] cm ³ /rev [in ³ /rev]

Pos.2 - Displacement with amplifying factor 1,3; 1,5; 2,0 or 2,5

	80	100	125	160	200
100	■				
125	■	■			
160	■	■	■		
200	■	■	■	■	
250	■	■	■	■	■
320	■	■	■	■	■
400	■	■	■	■	■
500	■	■	■	■	■

■ k=1,3
 ■ k=1,5
 ■ k=2,0
 ■ k=2,5

Pos.3 - Versions

4 - Version 4 Open Center - Non Load Reaction

Pos.4 - Ports

- omit - BSPP (ISO 228)
- A** - SAE (ANSI B 1.1 - 1982)
- M** - Metric (ISO 262)

Pos.5 - Option (Paint)**

- omit - No Paint
- P** - Painted Low Gloss Color
- PC** - Corrosion Protected Paint

Pos.6 - Design Series

omit - Factory specified

NOTES:

- * Exemplary designation of steering unit with displacement 200 cm³ and amplifying factor 2,5: HKUQ 200/500/4
- ** Colour at customers request.

The steering units are mangano-phosphatized as standard.