

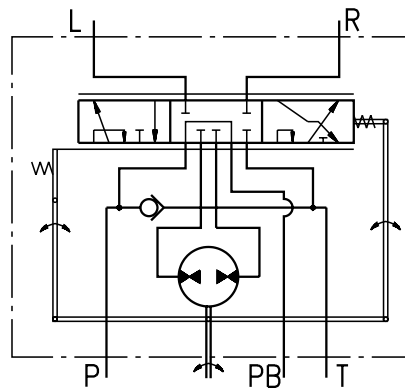
HYDROSTATIC STEERING UNIT TYPE HKU.../4PB



The hydrostatic steering unit is available for steering medium and large sized transport vehicles as building and agricultural machines.

HKU.../4PB works as standard steering unit with auxiliary port destined for flow providing additional vehicles functions. When the steering wheel is not turned, the flow will be delivered to port PB. After steering wheel has been turned a part of flow will be deviated to the steering unit and the flow through port PB will be inconstant.

It is not recommended to use this unit in systems with auxiliary functions during the vehicle steering.

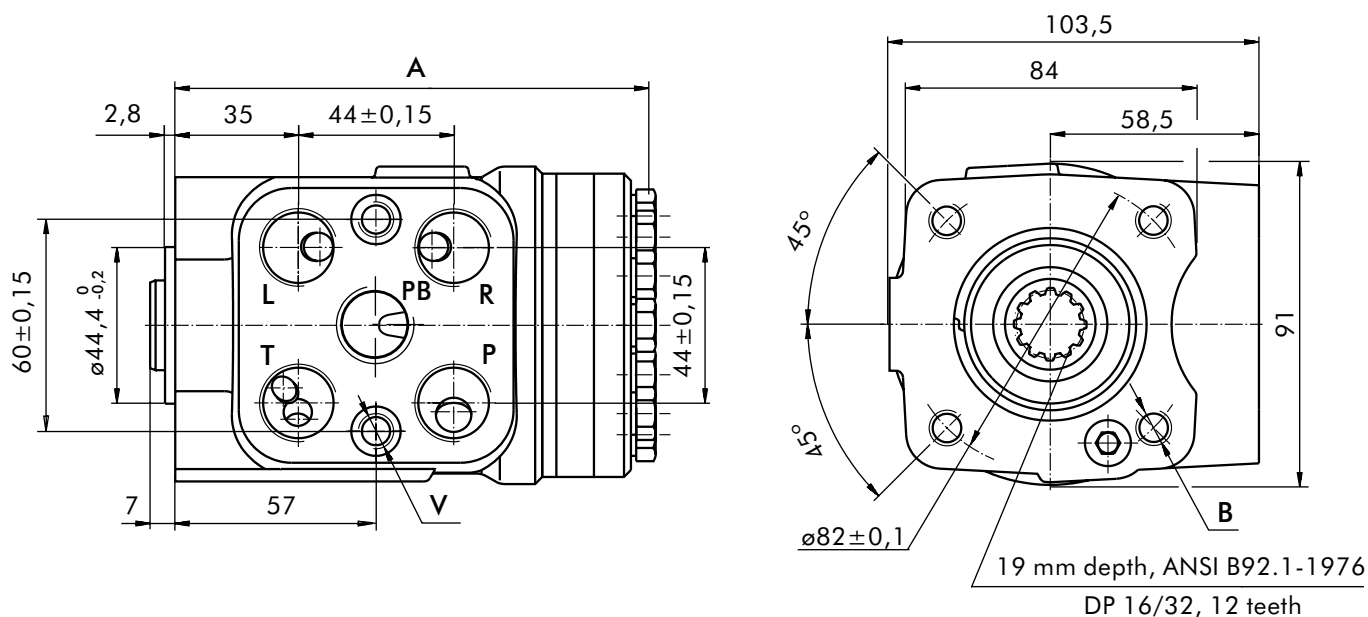


"Open Center - Non Load Reaction"
HKU.../4PB - Power Beyond

SPECIFICATION DATA

Parameters	Type					
	HKU 40/4PB	HKU 50/4PB	HKU 63/4PB	HKU 80/4PB	HKU 100/4PB	HKU 125/4PB
Displacement, [cm ³ /rev]	39,6	49,5	65,6	79,2	99,0	123,8
Rated Flow -5 Port (Power Beyond) [l/min]	15					
Rated Pressure, [bar]	125					
Max. Pressure in Line PB, [bar]	125					
Max. Cont. Pressure in Line T - P _T , [bar]	10					
Max. Torque at Servoamplifying, [Nm]	2,8 (by P _{T,max})					
Max. Torque w/o Servoamplifying, [Nm]	135					
Weight, [kg]	5,3	5,4	5,5	5,6	5,7	5,8
Dimension A, [mm]	130,8	132,2	133,9	136,2	138,8	142,2

DIMENSIONS AND MOUNTING DATA



THREADED PORTS for HKU.../4PB

code	Ports - P, T, R, L, PB Thread	Column Mounting Thread - B	Valve Mounting Thread - V
-	G3/8 17 mm depth	4 x M10 18 mm depth	2 x M10x1 16 mm depth
A	9/16 - 18 UNF O-ring 17 mm depth	4x 3/8 - 16 UNC 15,7 mm depth	2 x 3/8 - 24 UNF 14,2 mm depth

ORDER CODE for HKU.../4PB

	1	2	3	4	5
HKU		/ 4PB	-		

Pos.1 - **Displacement code** (see Specification Data)

40	- 39,6 [cm ³ /rev]
50	- 49,5 [cm ³ /rev]
63	- 65,6 [cm ³ /rev]
80	- 79,2 [cm ³ /rev]
100	- 99,0 [cm ³ /rev]
125	- 123,8 [cm ³ /rev]

Pos.2 - **Versions**

4PB - Version 4 "Open Center - Non Load Reaction" with 5 ports(Power Beyond)

Pos.3 - **Ports**

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

Pos.4 - **Option (Paint)***

- omit - No Paint
- P** - Painted
- PC** - Corrosion Protected Paint

Pos.5 - **Design Series**

- omit - Factory specified

NOTES:

* Colour at customer's request.

The steering units are mangano-phosphatized as standard.

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.

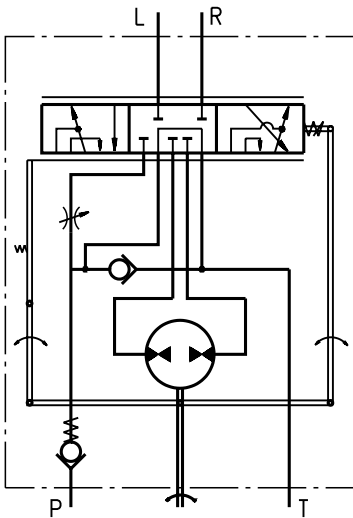
HKUQ.../4 is an "Open Center-Non Load Reaction" hydrostatic steering in which restrictor for amplifying factor from 1,3 to 2,5 is built-in.

In accordance with the size of the gear wheel set and amplifying factor, HKUQ...4 has the following working volume:

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

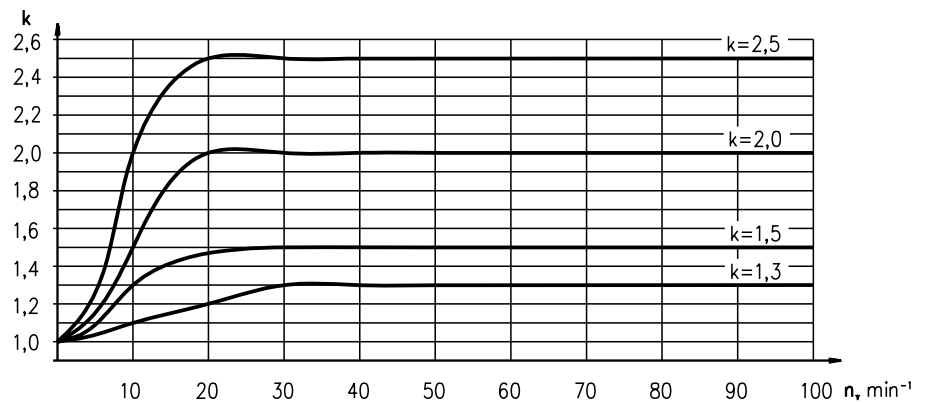
- from 100 cm³ to 500 cm³ for normal operation mode (with total flow amplifying).

There is no servo-amplifying of flow if low steering speed till 10 min⁻¹ is applied. In steering speed increase over 20 min⁻¹ there is total servo-amplifying of flow. In this mode gear wheel set flow and restrictor flow are added.



"Open Center - Non Load Reaction"
HKUQ.../4

VARIABLE AMPLIFYING FACTOR

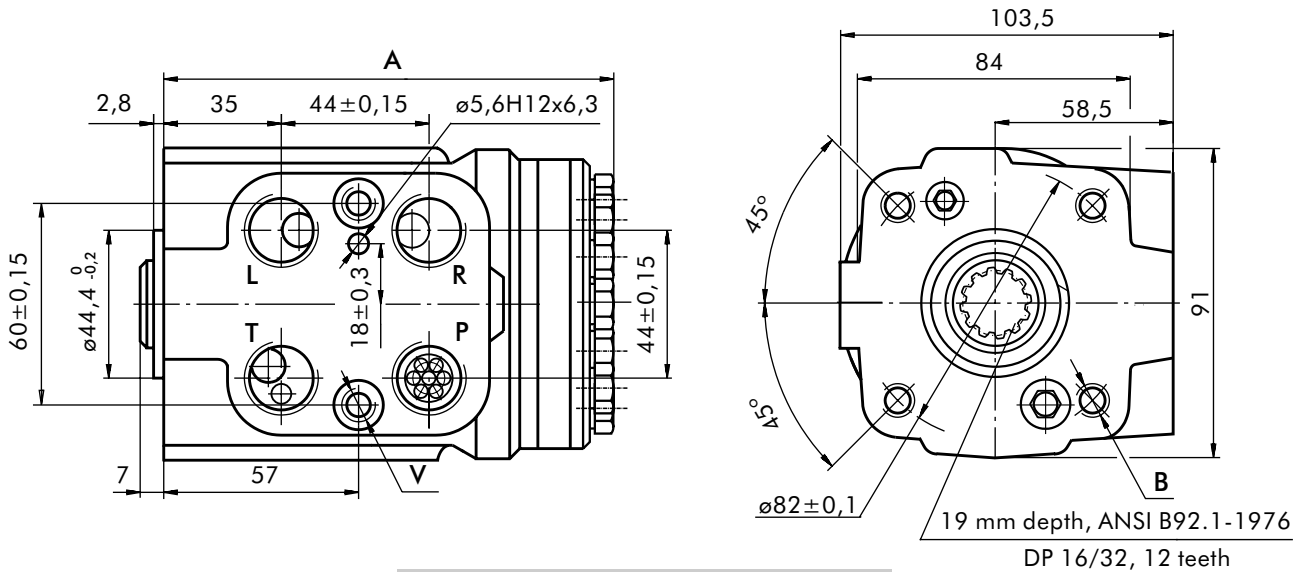


SPECIFICATION DATA

Parameters	Type																			
	HKUQ 80/.../4				HKUQ 100/.../4				HKUQ 125/.../4				HKUQ 160/.../4				HKUQ 200/.../4			
Displacement - without servo-amplifying (in emergency mode) - with servo-amplifying [cm ³ /rev]	79,2				99,0				123,8				158,4				198			
Rated Flow* [l/min]	10	12,5	16	20	12,5	16	20	25	16	20	25	32	20	25	32	40	25	32	40	50
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]	160																			
Max. Cont. Pressure in Line T - P _T [bar]	25																			
Max. Torque at Servoamplifying [Nm]	6 (by P _{T,max})																			
Max. Torque w/o Servoamplifying [Nm]	120																			
Weight, avg. [kg]	5,6				5,7				5,8				6,0				6,3			
Dimension A [mm]	136,2				138,8				142,2				146,8				152,2			

* Rated Flow at 100 RPM.

DIMENSIONS AND MOUNTING DATA



THREADED PORTS for HKUQ...

code	Ports - P*, T, R, L Thread	Column Mounting Thread - B	Valve Mounting Thread - V
-	G1/2 17 mm depth	4 x M10 18 mm depth	2 x M10x1 16 mm depth
A	3/4 - 16 UNF O-ring 17 mm depth	4x 3/8 - 16 UNC 15,7 mm depth	2 x 3/8 - 24 UNF 14,2 mm depth
M	M22x1,5 17 mm depth	4 x M10 18 mm depth	2 x M10x1 16 mm depth
MX	M20x1,5 17 mm depth	4 x M10 18 mm depth	2 x M10x1 16 mm depth

*Threaded Port **P** min 16 mm depth.

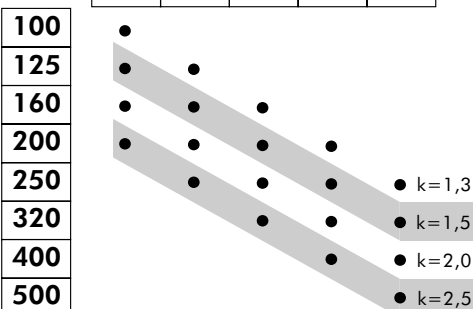
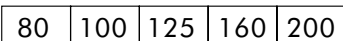
ORDER CODE for HKUQ...



Pos.1 - **Displacement code** (see Specification Data page 10)

- 80** - 79,2 [cm³/rev]
- 100** - 99,0 [cm³/rev]
- 125** - 123,8 [cm³/rev]
- 160** - 158,4 [cm³/rev]
- 200** - 198,0 [cm³/rev]

Pos.2 - **Displacement with amplifying factor 1,3; 1,5; 2,0 or 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)
- MX** - Metric (ISO 262)

Pos.5 - **Option (Paint)****

- omit - No Paint
- P** - Painted
- 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 customer's request.

The steering units are mangano-phosphatized as standard.