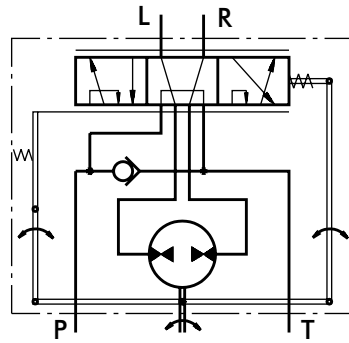


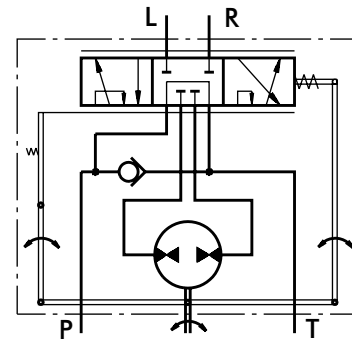
HYDROSTATIC STEERING UNITS TYPE HKU.../3, 4



The newly designed HKU steering units, with radial distribution, incorporate two rotary tracing valves in the housing, which turn on the metering pump.



"Open Center - Load Reaction"
Version 3 - HKU.../3



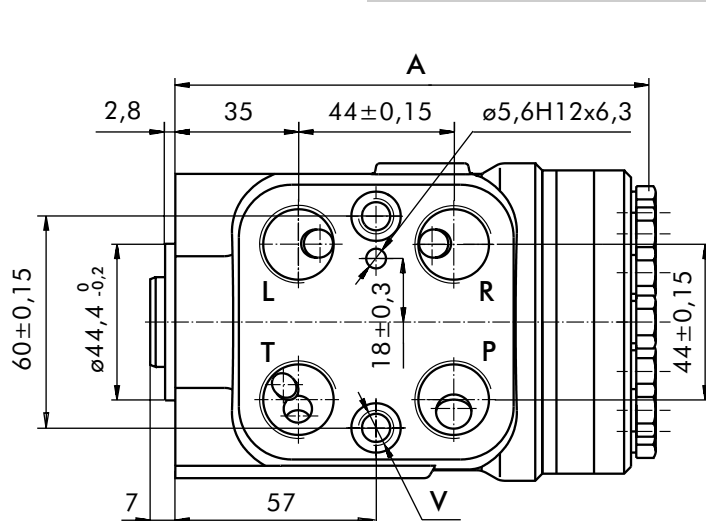
"Open Center - Non Load Reaction"
Version 4 - HKU.../4

SPECIFICATION DATA

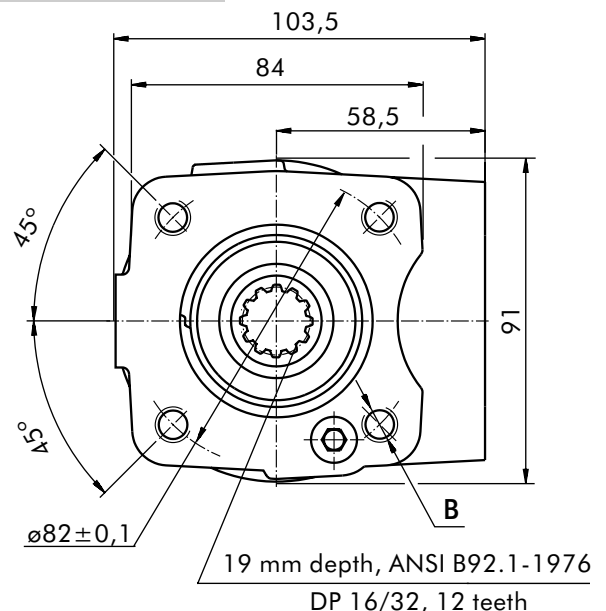
| Parameters | Type | | | | | | | | | | | | | | | |
|--|----------------------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--|
| | HKU 40/3 | HKU 50/3 | HKU 63/3 | HKU 80/3 | HKU 100/3 | HKU 125/3 | HKU 160/3 | HKU 200/3 | HKU 250/3 | HKU 320/3 | HKU 400/3 | | | | | |
| | HKU 40/4 | HKU 50/4 | HKU 63/4 | HKU 80/4 | HKU 100/4 | HKU 125/4 | HKU 160/4 | HKU 200/4 | HKU 250/4 | HKU 320/4 | HKU 400/4 | HKU 500/4 | HKU 630/4 | HKU 800/4 | HKU 1000/4 | |
| Displacement [cm ³ /rev] | 39,6 | 49,5 | 65,6 | 79,2 | 99,0 | 123,8 | 158,4 | 198 | 247,5 | 316,8 | 396 | 495 | 618,7 | 793 | 990 | |
| Rated Flow* [l/min] | 4 | 5 | 6 | 8 | 10 | 13 | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | | |
| Rated Pressure [bar] | 160 | | | | | | | | | | | | 140 | | 100 | |
| 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] | 5,3 | 5,4 | 5,5 | 5,6 | 5,7 | 5,8 | 6,0 | 6,3 | 6,5 | 7,0 | 7,4 | 8,0 | 8,7 | 9,6 | 10,6 | |
| Dimension A [mm] | 130,8 | 132,2 | 133,9 | 136,2 | 138,8 | 142,2 | 146,8 | 152,2 | 158,8 | 168,2 | 178,8 | 192 | 209,3 | 232,2 | 258,6 | |

* Rated Flow at 100 RPM.

DIMENSIONS AND MOUNTING DATA

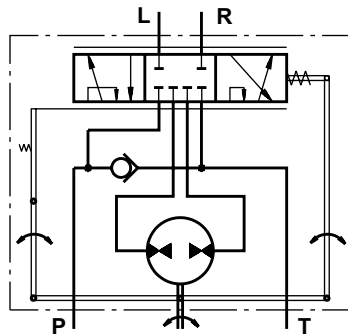


The ports are shown in the Table of page 7.



HYDROSTATIC STEERING UNIT TYPE HKU.../7

The HKU.../7 is a "Closed Center - Non Load Reaction" hydrostatic steering unit, designed for integration into systems with built-in hydroaccumulator, achieving minimal energy losses.



"Closed Center - Non Load Reaction"
Version 7 - HKU.../7

When connecting to a differential cylinder the L and R ports of the steering unit must be connected as follows: L to the greater piston area, and R - to the smaller one.

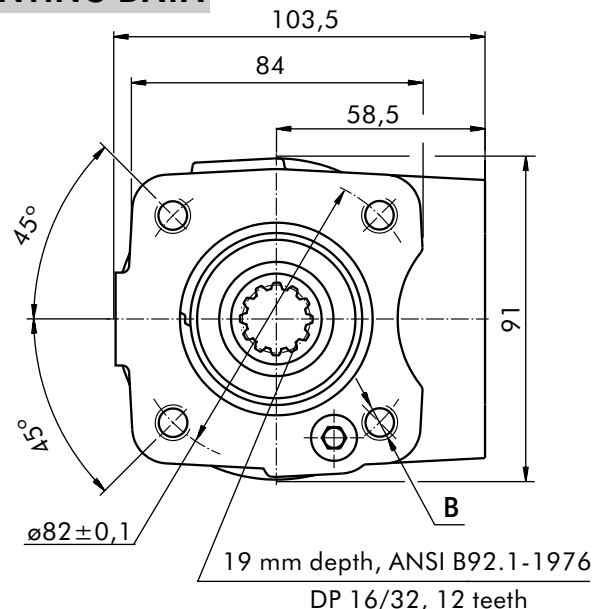
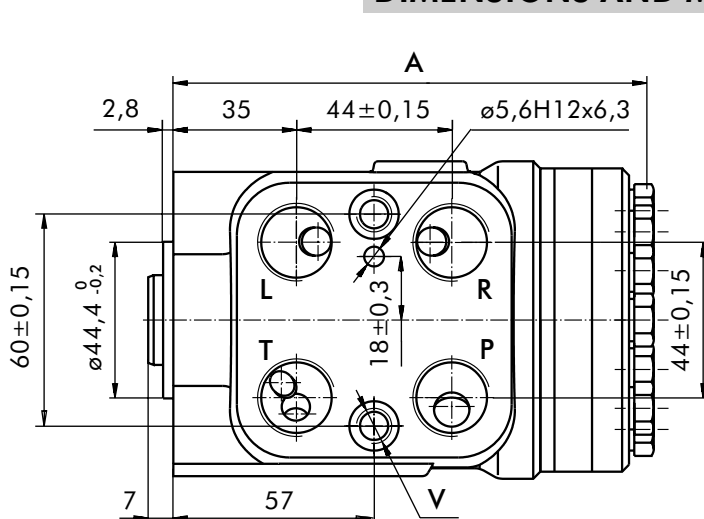
For the "Closed Center - Non Load Reaction" and "Closed Center - Non Reaction and Load Sensing" steering units it is possible to observe Thermal Shock - condition caused when the hydraulic system has operated for some time without turning the steering wheel, causing the fluid in the reservoir and the system to heat up while the steering unit is relatively cool (i.e. there is more than 50°F [10°C] difference in the temperature). If, under the condition of Thermal Shock, the steering wheel is turned very quickly, it is possible to experience temporary seizure and have the internal parts of the steering unit damaged. The temporary seizure may be followed by a total free wheeling.

SPECIFICATION DATA

| Parameters | Type | | | | | | | | | | | | | | | |
|---------------------------------------|---------------------------|----------|----------|----------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | HKU 40/7 | HKU 50/7 | HKU 63/7 | HKU 80/7 | HKU 100/7 | HKU 125/7 | HKU 158/7 | HKU 160/7 | HKU 198 | HKU 200/7 | HKU 250/7 | HKU 320/7 | HKU 400/7 | HKU 500/7 | HKU 630/7 | HKU 800/7 |
| Displacement, [cm ³ /U] | 39,6 | 49,5 | 65,6 | 79,2 | 99,0 | 123,8 | 158,4 | 198 | 247,5 | 316,8 | 396 | 495 | 618,7 | 793 | | |
| Rated Flow*, [l/min] | 4 | 5 | 6 | 8 | 10 | 13 | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | | |
| Rated Pressure, [bar] | 175 | | | | | | | | | | | | | | | |
| Max. Cont. Pressure in Line T, [bar] | 20 | | | | | | | | | | | | | | | |
| Max. Torque at Servoamplifying, [Nm] | 6 (by P _T max) | | | | | | | | | | | | | | | |
| Max. Torque w/o Servoamplifying, [Nm] | 120 | | | | | | | | | | | | | | | |
| Weight, [kg] | 5,3 | 5,4 | 5,5 | 5,6 | 5,7 | 5,8 | 6,0 | 6,3 | 6,5 | 7,0 | 7,4 | 8,0 | 8,7 | 9,6 | | |
| Dimension A, [mm] | 130,8 | 132,2 | 133,9 | 136,2 | 138,8 | 142,2 | 146,8 | 152,2 | 158,8 | 168,2 | 178,8 | 192 | 209,3 | 232,2 | | |

* Rated Flow at 100 RPM.

DIMENSIONS AND MOUNTING DATA



The ports are shown in the Table of page 7.

THREADED PORTS

| 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 |

ORDER CODE

| | | | | | |
|--------------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| H K U | | / | - | | |

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] |
| 160 | - 158,4 [cm ³ /rev] |
| 200 | - 198,0 [cm ³ /rev] |
| 250 | - 247,5 [cm ³ /rev] |
| 320 | - 316,8 [cm ³ /rev] |
| 400 | - 396,0 [cm ³ /rev] |
| 500 | - 495,0 [cm ³ /rev] |
| 630 | - 618,7 [cm ³ /rev] |
| 800 | - 792,0 [cm ³ /rev] |
| 1000 | - 990,0 [cm ³ /rev] |

Pos.2 - Versions

| | |
|----------|---|
| 3 | - Version 3 "Open Center - Load Reaction" |
| 4 | - Version 4 "Open Center - Non Load Reaction" |
| 7 | - Version 7 "Closed Center - Non Load Reaction" |

Pos.3 - Ports

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

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.