



STANDARDIZED NODES

QUILL UNIT PJR-A H

Quill unit PJR - A H may perform drilling, tapping and threading operations

Description of basic version of unit

Hydraulic telescopic steel quill is slid into the cylinder body. Pressure oil is led to back part of flange of body. Quill travel is limited by two adjustable rest screws.

The spindle as per DIN 69002 rests in the front part of the quill on ball bearings with an oblique-angled contact. The conical hollow of the HSK-C type spindle as per DIN 69063-1 is fitted with a four-point manually controlled clamping housing of tool holders. In the back of the quill rests the actuator shaft, which is linked to the spindle with a flexible zero play connector. The spindle is sealed with treated pressurized air.

The gear box with belt drive and electrical motor of the spindle drive is screwed on the back end of the quill. There are rolling housings in the box body with two guide rods fixed in the rear flange of the quill body. A switch is attached to the rear door of the box and serves for checking for a belt rupture (once the belt has ripped, the programmed and real spindle speeds differ from one another).

Inner flow of cutting fluid

If necessary, a rotating feed of cutting fluid is mounted to the rear end of the shaft.

Work position of unit

The unit may operate in any position.

Technical parameters of the unit

Type name of the unit	PJR 80/125 A hydraulic	PJR 100/125 A hydraulic
Maximum travel of quill [mm]	125	125
Spindle diameter in bearings [mm]	45	45
Spindle end	HSK-C 40 (alt. 50)	HSK-C 50
Max. spindle speed [min^{-1}]	8000	4500 (alt. 7000)
Nominal/maximum/limit torque on the spindle [Nm] ¹⁾	25/43/86	40/60/120
Electric motor	asynchronous motor or servo motor (selected on the basis of required parameters)	
Axis force at pressure 6.3 MPa [kN]	10	16
Minimum feed [$\text{mm}\cdot\text{min}^{-1}$]	20	12,5
Oil consumption for feed 100 $\text{mm}\cdot\text{min}^{-1}$ [$\text{dm}^3\cdot\text{min}^{-1}$]	0,206	0,346
Unit weight [kg] ²⁾	73	117

Note:

- 1) rated torque.....at permanent load (see DIN 69002)
maximum torque....at interrupted load (rated torque of clutch)
limit torque.....limit load (maximum clutch torque)
- 2) calculated values – will be specified upon evaluation for a particular motor

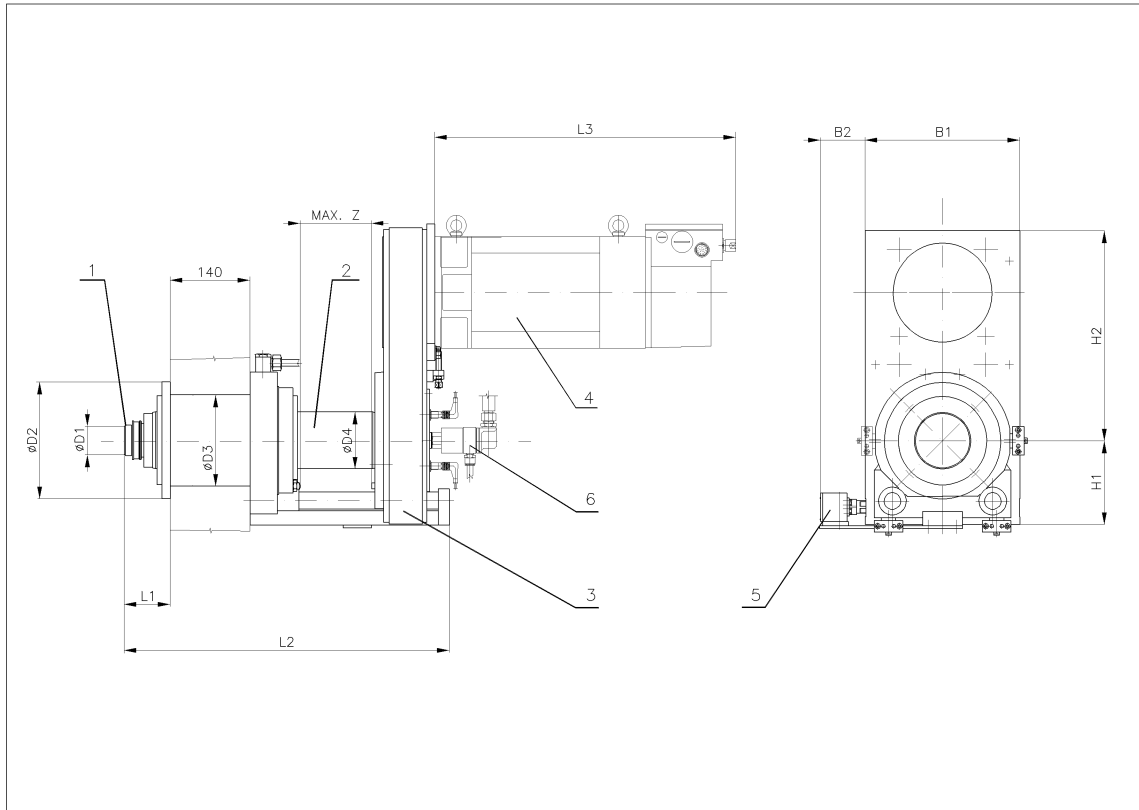
- *The detailed data is not binding with respect to ongoing development; the basic version can be adapted according to customer requirements.*

Basic connecting dimensions

dimensions in

mm

Type name of the unit	B1	B2	D1	D2	D3 h6	D4	H1	H2	L1	L2	L3	Z
PJR 80/125 A	210	79	40 (50)	165	125	80	103	350	70	552	according to motor	125
PJR 100/125 A	272	79	50	205	160	100	147	373	81	572		125



- 1...spindle
- 2...quill
- 3...actuator box
- 4...electric motor
- 5...end switch
- 6...rotation feed of cutting fluid

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