

### DRILLING SWIVEL VB-80R1

The swivel is designed to provide the rotation of the drill string and supply of washing liquid during repair work in oil and gas wells.

The swivel consists (Fig. 1) of the housing 1 with the feed line 2, a link 3, installed in the lugs of the housing 1 with the possibility of swinging on the pivot studs 4, a stem 5 with the sub 6 mounted on the bearings 7, 8 and 9 with rotation in the housing 1, and the upper 10 and lower 11 seals. The top seal 10 is quick-detachable and connects to the feed 2 and stem 5 with the nuts 12 and 13.

#### Main technical features:

Table 1

	<b>VB-80P1</b>
Cargo capacity kN (tf)	800 (80)
Working pressure, MPa (atm)	25 (250)
Stem maximum rotations $c^{-1}$ (rot.\min)	3.33 (200)
Stem feedthrough hole diameter, mm	75
Feedline feedthrough hole diameter, mm	75
Adapter sub feedthrough hole diameter, mm*	D1
Stem coupling thread as per GOST 631-75	BT-114 Left
Coupling thread on the adapter - tool-joint thread as per GOST 28487-90*	Z-d
Coupling thread of the side feedline as per GOST 633-80	NKT 89
Coupling thread on the feedline under the measure while drilling as per GOST 633-80	NKT 60
Operating ambient temperature, °K (°C)	233(-40)÷343 (+70)
Weight, kg, max.	340

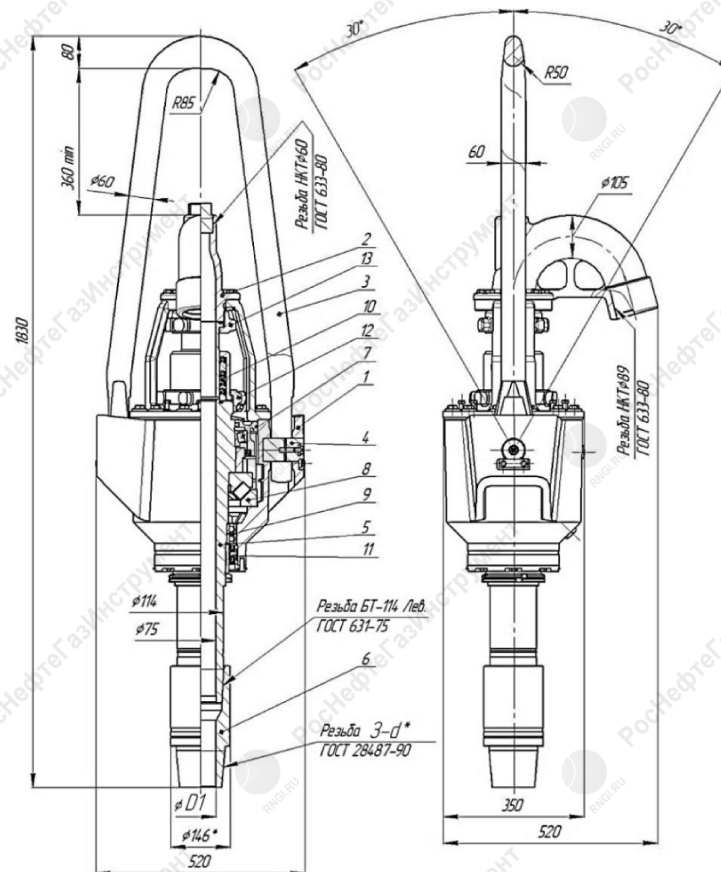


Fig. 1

#### Main technical features of stem subs: (underline as necessary)

Adapter sub	Tool-joint thread d GOST 28487-90	D1, mm	Include in the set
VB-80R1.00.09-01	Z-73 Left	36	<input type="checkbox"/>
VB-80R1.00.09-02	Z-76 Left	45	<input type="checkbox"/>
VB-80R1.00.09-03	Z-86 Left	54	<input type="checkbox"/>
VB-80R1.00.09-04	Z-102 Left	54	<input type="checkbox"/>
VB-80R1.00.09-05	Z-108 Left	54	<input type="checkbox"/>
VB-80R1.00.09-06	Z-133 Left	75	<input type="checkbox"/>
VB-80R1.00.09	Z-121 Left	75	<input type="checkbox"/>

Feedline subs (fig. 2), an adapter sub under BRS2" (fig. 3) and an adapter sub from BRS (fig. 4) may be delivered at consumer's request.

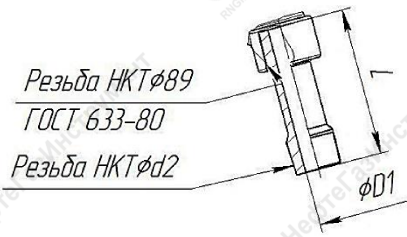


Figure 2

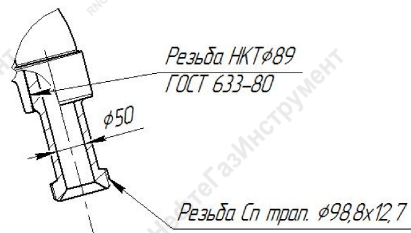


Figure 3

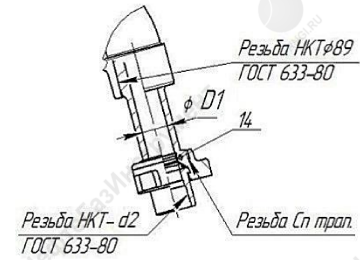


Figure 4

Main technical features of NKT (pumping and compression pipe) adapter subs to the feedline:  
(underline as necessary)

Table 3

Adapter sub	L1, mm	D1, mm	Thread NKT d2	Drawing	Include in the set
N NKT89 x N NKT89	252	50	89	2	<input type="checkbox"/>
N NKT89 x N NKT73	212	50	73	2	<input type="checkbox"/>
N NKT89 x N NKT60	212	50	60	2	<input type="checkbox"/>
N NKT89 x N BRS2"	285	50	-	3	<input type="checkbox"/>
N NKT89 from BRS 2"	285	50	60	4	<input type="checkbox"/>
N NKT89 from BRS 2,5"	300	62	73	4	<input type="checkbox"/>
N NKT89 from BRS 3"	315	75	89	4	<input type="checkbox"/>

Completeness:

- 1) Drilling swivel VB-80R1 – 1 pc;
- 2) Set of spare parts kit\*\*:
  - Nozzle VB-80R1.01.01 – 1 pc;
  - Nozzle VB-80R1.01.06 – 4 pcs;
  - Ring 095-105-58-2-3 GOST 18829-73 – 2 pcs;
- 3) Operating instruction – 1 pc;

\* As per consumer's request it is possible to produce a sub with other technical features (see. table 2).

\*\*As per consumer's request it is possible to deliver an additional set of spare parts kit.