

**DRILLING SWIVEL VB-140R1**

Swivel is designed to retain a rotating drilling and other tool hanging with simultaneous supply of the operational fluid from the pump to the pipe string under drilling and oilfield enterprise conditions.

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:

	VB-140R1
Cargo capacity kN (tf)	1400 (140)
Working pressure, MPa (atm)	350 (35)
Stem maximum rotations c ⁻¹	3.33
Stem feedthrough hole diameter, mm	75
Feedline feedthrough hole diameter, mm	75
Adapter sub feedthrough hole diameter, (D1), mm*	80
Stem coupling thread as per GOST 631-75	BT-127 Left
Coupling thread on the adapter - tool-joint thread as per GOST 50864-96*	Z-D (see table 2)
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.	420

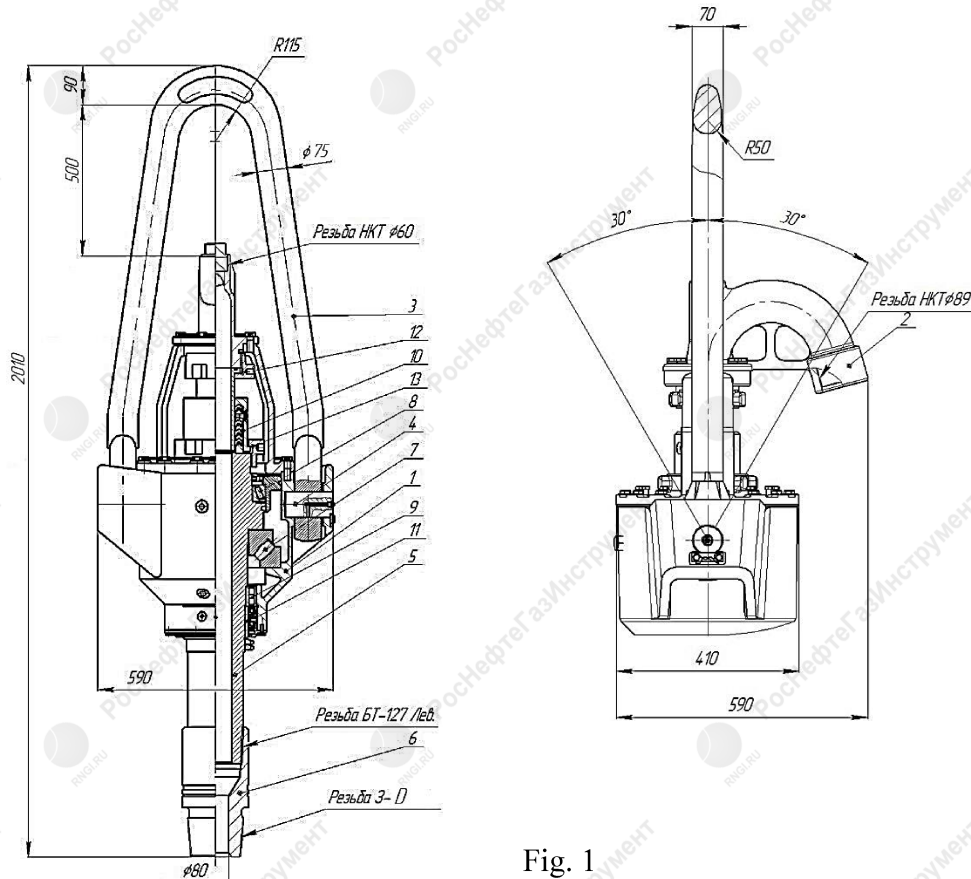


Fig. 1

Main technical features of the stem sub:

Table 2

Adapter sub	Tool-joint thread GOST 50864-96 (see fig. 1)	D1, mm	Include in the set
VB-140R1.00.29	Z-73 Left (Lifting capacity 80 tf)	36	<input type="checkbox"/>
VB-140R1.00.27	Z-76 Left (Lifting capacity 107 tf)	45	<input type="checkbox"/>
VB-140R1.00.28	Z-86 Left (Lifting capacity 114 tf)	54	<input type="checkbox"/>
VB-140R1.00.30	Z-88 Left (Lifting capacity 120 tf)	54	<input type="checkbox"/>
VB-140R1.00.26	Z-102 Left	54	<input type="checkbox"/>
VB-140R1.00.31	Z-108 Left	54	<input type="checkbox"/>
VB-140R1.00.32	Z-117 Left	58	<input type="checkbox"/>
VB-140R1.00.25	Z-121 Left	75	<input type="checkbox"/>
VB-140R1.00.09	Z-133 Left	80	<input type="checkbox"/>

By default the package includes a sub with the thread Z-133 Left Feedline subs (fig. 2), adapter sub under BRS2” (fig. 3) and adapter sub from BRS2 (fig. 4) may be delivered at consumer's request.

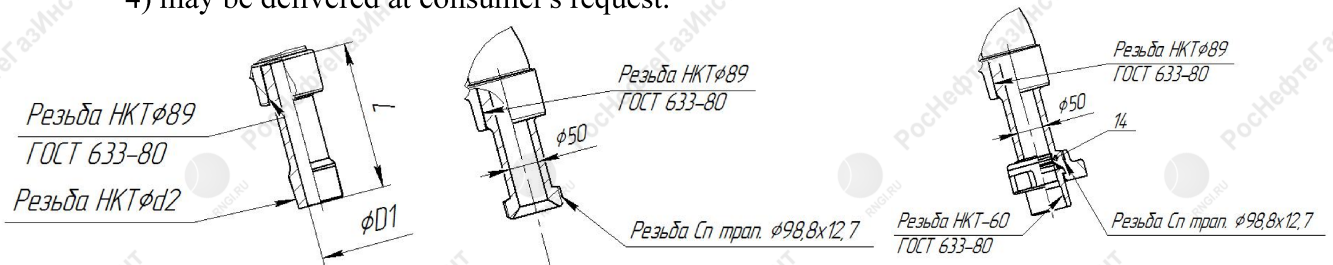


Figure 2 Figure 3 Figure 4

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

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 with BRS2”	285	50	60	4	<input type="checkbox"/>

Completeness:

- 1) Drilling swivel VB-140R1 – 1 pc;
- 2) Set of spare parts kit**:
 - Nozzle VB-140R1.01.01– 1 pc;
 - Pump bucket VB-140R1.01.06 – 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 or extended set of spare parts kit.