



OPERATIONAL SWIVEL VE-60R1

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:

	VE-60R1
Cargo capacity kN (tf)	600 (60)
Working pressure, MPa (atm)	21 (210)
Stem maximum rotations c ⁻¹	3.33
Stem feedthrough hole diameter, mm	64
Feedline feedthrough hole diameter, mm	64
Adapter sub feedthrough hole diameter, mm*	D1
Stem coupling thread as per GOST 631-75	BT-102 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 73
Operating ambient temperature, °K (°C)	233 (-40)÷343 (+70)
Weight, kg, max.	220

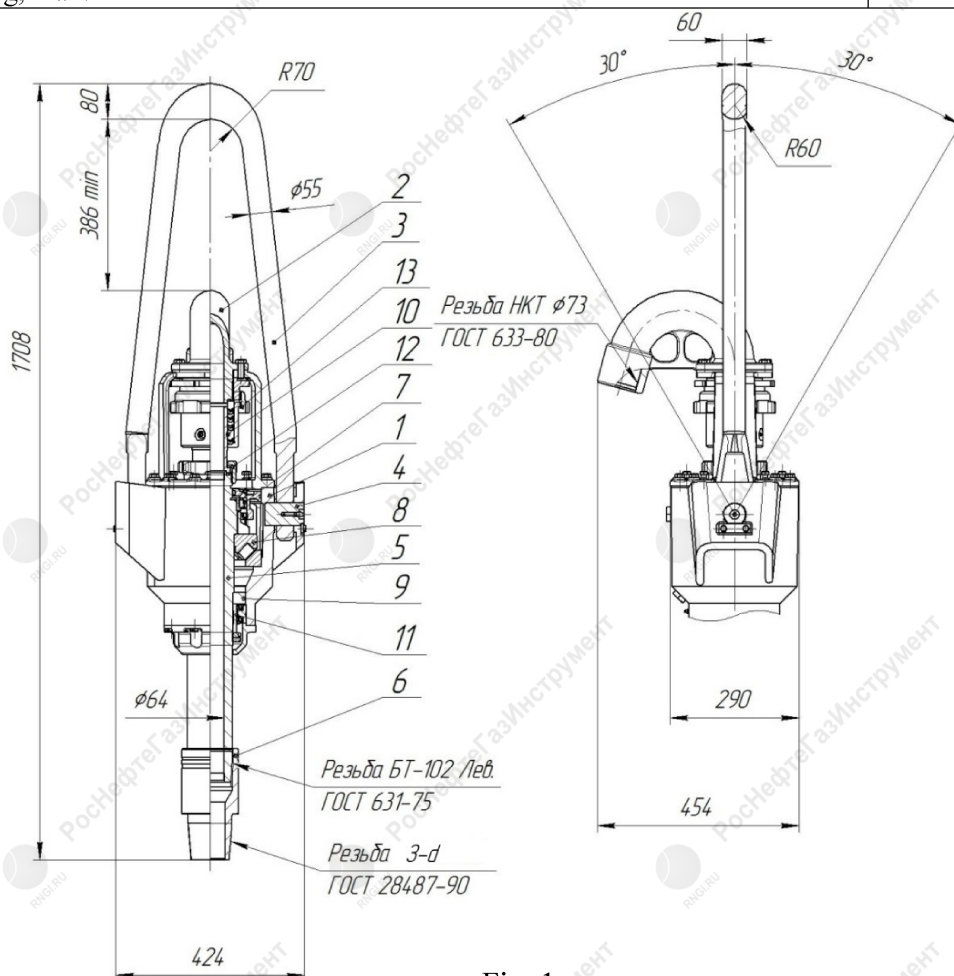


Fig. 1

Main technical features of stem subs:

Table 2

Adapter sub	Tool-joint thread GOST 28487-90	D1, mm	Include in the set
VE-60R1.00.09-01	Z-73 Left	29	<input type="checkbox"/>
VE-60R1.00.09-02	Z-76 Left	29	<input type="checkbox"/>
VE-60R1.00.09-03	Z-86 Left	54	<input type="checkbox"/>
VE-60R1.00.09	Z-102 Left	68	<input type="checkbox"/>

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

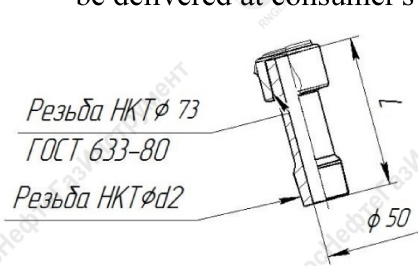


Figure 2

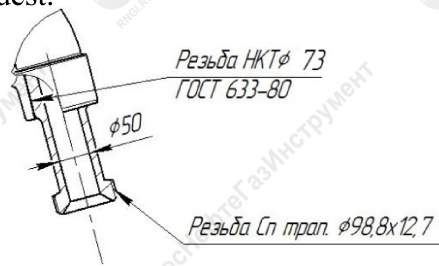


Figure 3

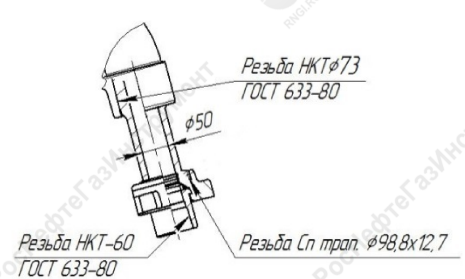


Figure 4

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

Table 3

Adapter sub	L1, mm	Thread NKT d2	Drawing	Include in the set
N NKT73x N NKT89	259	89	2	<input type="checkbox"/>
N NKT73x N NKT73	252	73	2	<input type="checkbox"/>
N NKT73 x N NKT60	215	60	2	<input type="checkbox"/>
N NKT73 x NBRS2"	285	-	3	<input type="checkbox"/>
N NKT73 from BRS2"	285	60	4	<input type="checkbox"/>

Completeness:

- 1) Operational swivel VE-60R1 – 1 pc;
- 2) Set of spare parts kit**:
 - Nozzle VE-60R1.01.01 – 1 pc;
 - Pump bucket VE-60R1.01.06 – 4 pcs;
 - Ring 080-090-58-2-3 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.