

[rngi.net](http://rngi.net)

**Telemetry system sealer kit**

**KGTS-35R1**

## TELEMETRY SYSTEM SEALER KIT KGTS-35R1.

Telemetry system sealer kit KGTS-35R1 is designed to seal internal flow path of drilling pipes.

### Technical specifications of telemetry system sealer kit KGTS-35R1

Parameter name	KGTS-35R1
Pressurized conducting rope diameter	$\frac{3}{16}$ " / 4,76 mm; $\frac{7}{32}$ " / 5,56 mm; $\frac{1}{4}$ " / 6,35 mm; $\frac{5}{16}$ " / 7,94 mm
Circulating fluid pressure, max, Psi (atm)	5144 (350)
Sealing pressure, max, Psi (atm)	7348 (500)
Maximum load on the sealer from conducting rope, N (kg)	15•10 <sup>3</sup> (1500)
Stem coupling thread as per API Spec 5B TBG	NUE-2 $\frac{3}{8}$ "»
Overall dimensions of the sealer on the swivel, inch / mm	47 $\frac{1}{4}$ " x 24 $\frac{13}{32}$ " x 12 $\frac{19}{32}$ " / 1200x620x320»
Overall dimensions of the hydro station, inch / mm	48 $\frac{27}{64}$ " x 19 $\frac{11}{16}$ " x 24 $\frac{51}{64}$ " / 1230x500x630
Hydraulic fluid as per GOST 20799-88	In summer: Oil I-20,30,40 In winter: multigrade low-temperature hydraulic oil, AMG-10
Hydraulic tank volume, L	12
Ambient operating temperature, °C	-40 - +45
Weight, max	88.2 lbs / 40 kg

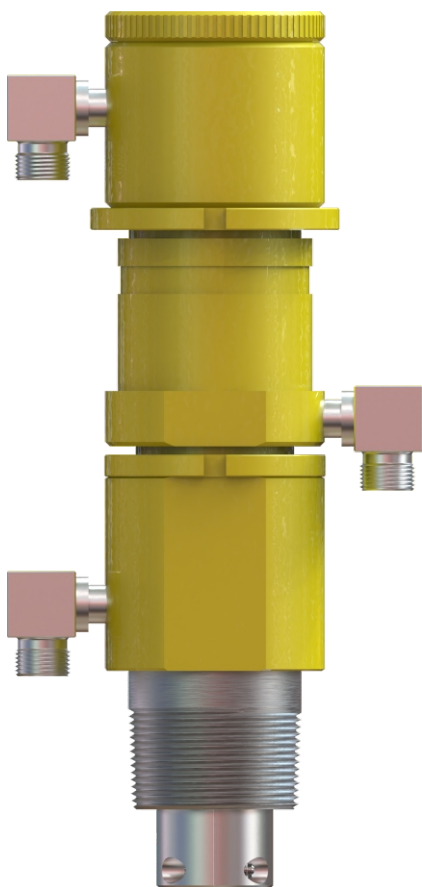


fig. 1

#### Completeness:

- 1) Sealer head – 1 pc;
- 2) Snatch block with positioning groups – 1 pc;
- 3) Hydro station – 1 pc;
- 4) Pressure hose (length 30 m, climatic version -40...+70 C, with fittings) – 1 pc;
- 5) Drainage hose (length 30 m, climatic version -40...+70 C, fitting on one side) - 1 pc.
- 6) Set of replacement parts (taking into account the established):
  - KGTS-35R1.10.15 -02 – Gasket (pos. 1 ; 4,76) – 1 pc.;
  - KGTS-35R1.10.15-03 – Gasket (pos. 1 ; 5,56) – 1 pc.;
  - KGTS-35R1.10.15-04 – Gasket (pos. 1 ; 6,35) – 1 pc.;
  - KGTS-35R1.10.15-05 – Gasket (pos. 1 ; 7,94) – 1 pc.;
  - KGTS-35R1.10.16 -02 – Washer (pos. 12 ; 4,76) – 1 pc.;
  - KGTS-35R1.10.16 -03 – Washer (pos. 12 ; 5,56) – 1 pc.;
  - KGTS-35R1.10.16 -04 – Washer (pos. 12 ; 6,35) – 1 pc.;
  - KGTS-35R1.10.16 -05 – Washer (pos. 12 ; 7,94) – 1 pc.;
  - KGTS-35R1.10.18-02 - Distance sleeve (pos. 8; 4,98) - 1 pc.;
  - KGTS-35R1.10.18-03 - Distance sleeve (pos. 8; 5,79) - 1 pc.;
  - KGTS-35R1.10.18-04 - Distance sleeve (pos. 8; 6,68) - 1 pc.;
  - KGTS-35R1.10.18-05 - Distance sleeve (pos. 8; 8,28) - 1 pc.;
  - KGTS-35R1.10.19-02 - Flow tube (pos. 7; 4,98) - 1 pc.;
  - KGTS-35R1.10.19-03 - Flow tube (pos. 7; 5,79) - 1 pc.;
  - KGTS-35R1.10.19-04 - Flow tube (pos. 7; 6,68) - 1 pc.;
  - KGTS-35R1.10.19-05 - Flow tube (pos. 7; 8,28) - 1 pc.;
- 7) Set of spare parts:
  - O-rings as per GOST 9833-73/18829-73:
    - 030-036-36 – 2pcs;
    - 040-046-36 – 1 pc;
    - 046-052-36 – 2pcs;
- 8) Service manual – 1 pc.

### Composition and principle of operation of telemetry system sealer kit KGTS-35R1

Sealer (fig.2) consist of sealer head (pos.1), fixed to the swivel inlet (pos.2) through which the conducting rope (pos.3) of the used telemetry system, snatch block (pos.4), hydro station (pos.5), pressure hose 6 and drain hose is passed 7.

The snatch block is designed to center the conducting rope with the hole of the sealer head and for the smooth descent of the telemetry system.

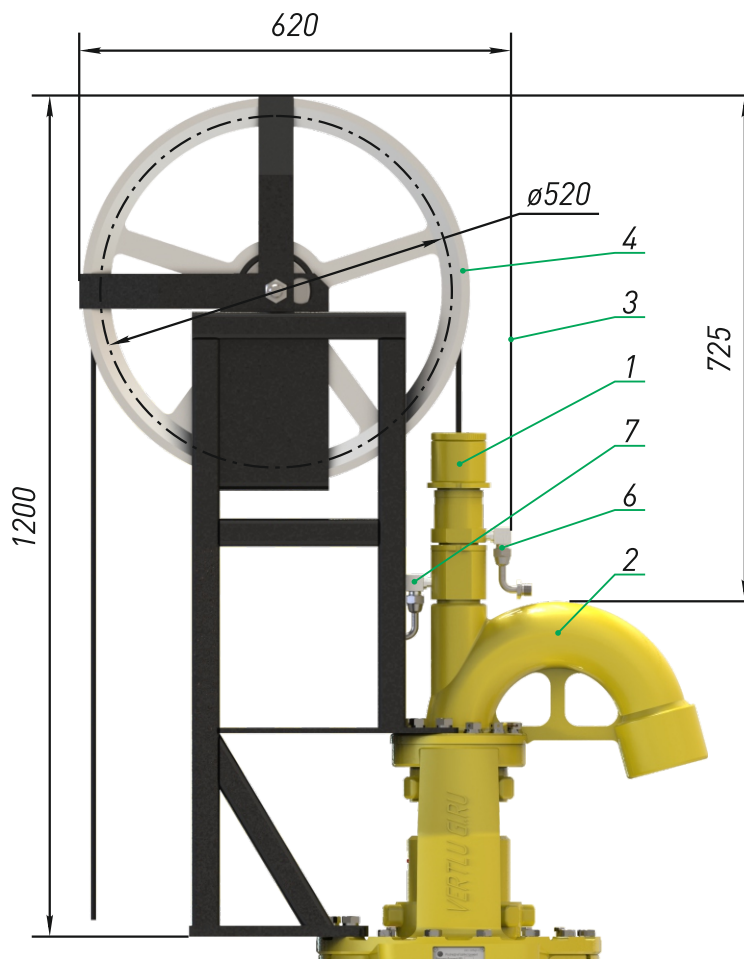


fig. 2

### Composition and principle of operation of telemetry system sealer kit KGTS-35R1

Sealer head (fig. 3) is designed to seal internal flow path of drilling pipes. The seal is achieved by compressing the sealer (pos.1), located in the case (pos.2), under the action of the piston (pos.3) through the distance sleeve (pos.8), the piston is driven by the hydraulic fluid supplied from the hydro station. The hydraulic liquid enters the cavity «A» through the nozzle (pos.4). O-rings (pos.5 and pos.6) prevent leakage of hydraulic fluid. Additional sealing is provided by a gap seal on the flow tube (pos.7). If the solution leaks, it is drained through the fitting (pos.10). To prevent splashing of the seeping solution through the unevenness of the conducting rope, a replaceable sealing washer (pos.12) is provided, fixed with a nut (pos.11). Parts 1, 8, 12, 7 are made of two halves to facilitate installation.

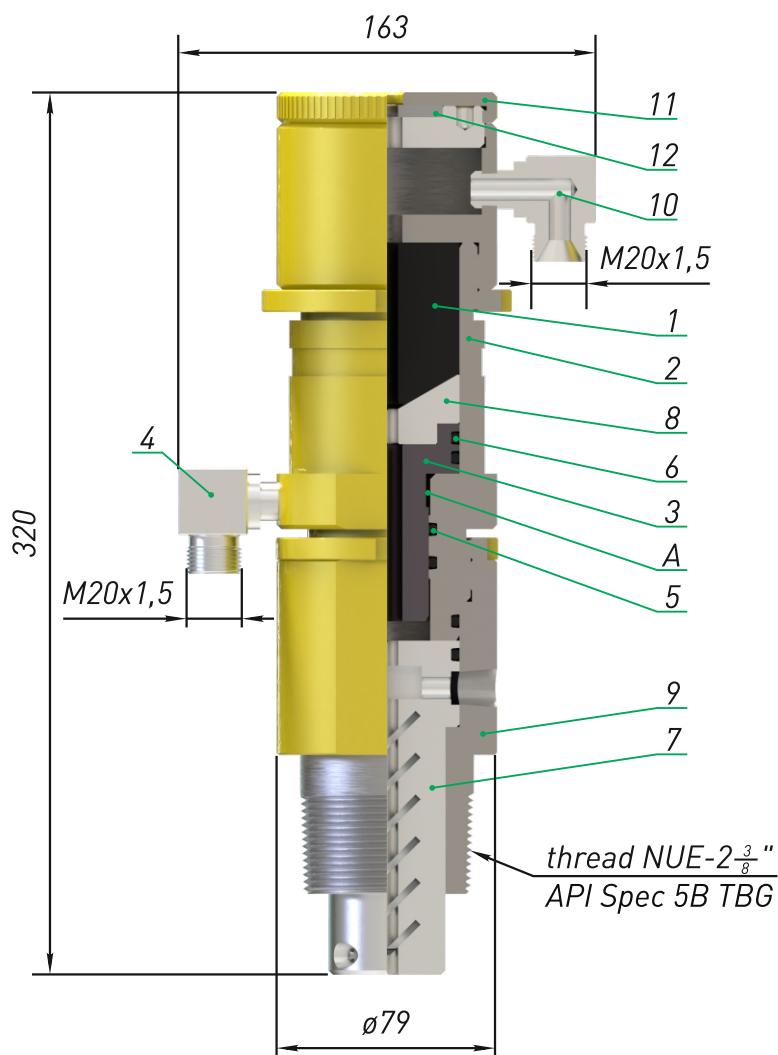


fig. 3

#### Composition and principle of operation of telemetry system sealer kit KGTS-35R1

Hydro station (Fig. 4) is designed to pressurization into sealer head. Hand pump (pos.1) is mounted to the platform (pos.2) with bolts (pos.3). The operator, being on the platform (pos.2), uses the handle (pos.4) to create pressure in the system. A pressure gauge (pos.5) is located on the pump to determine the pressure. The liquid enters the pump through the suction sleeve (pos.6), a mesh filter (pos.7) is installed at the pump inlet, then the liquid under pressure enters the head through the sleeve (pos.8). When the safety valve is activated, pressure is released through the sleeve (pos.9) into the tank. There is a drain plug (pos.10) in the tank to drain the hydraulic fluid before transportation.

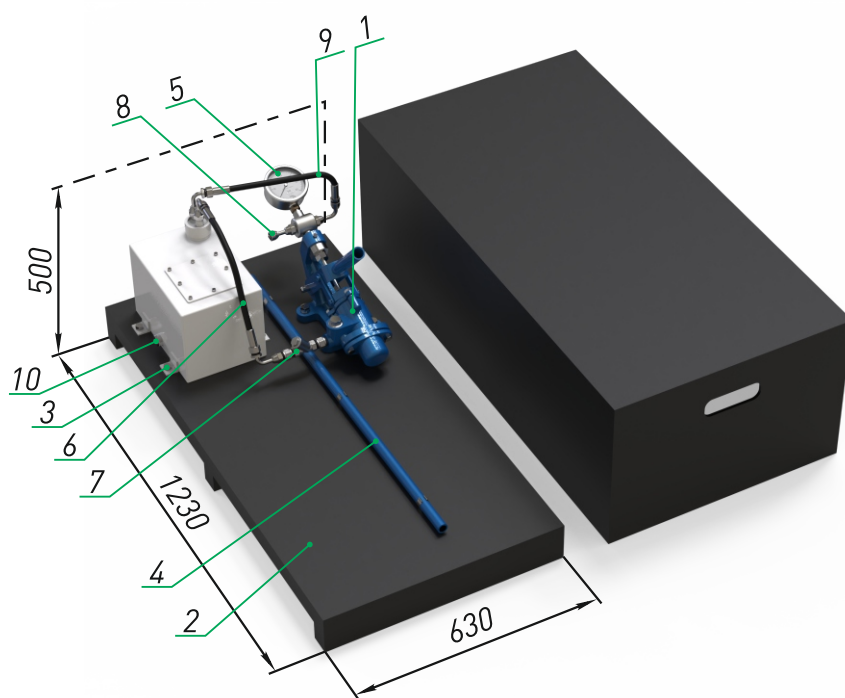
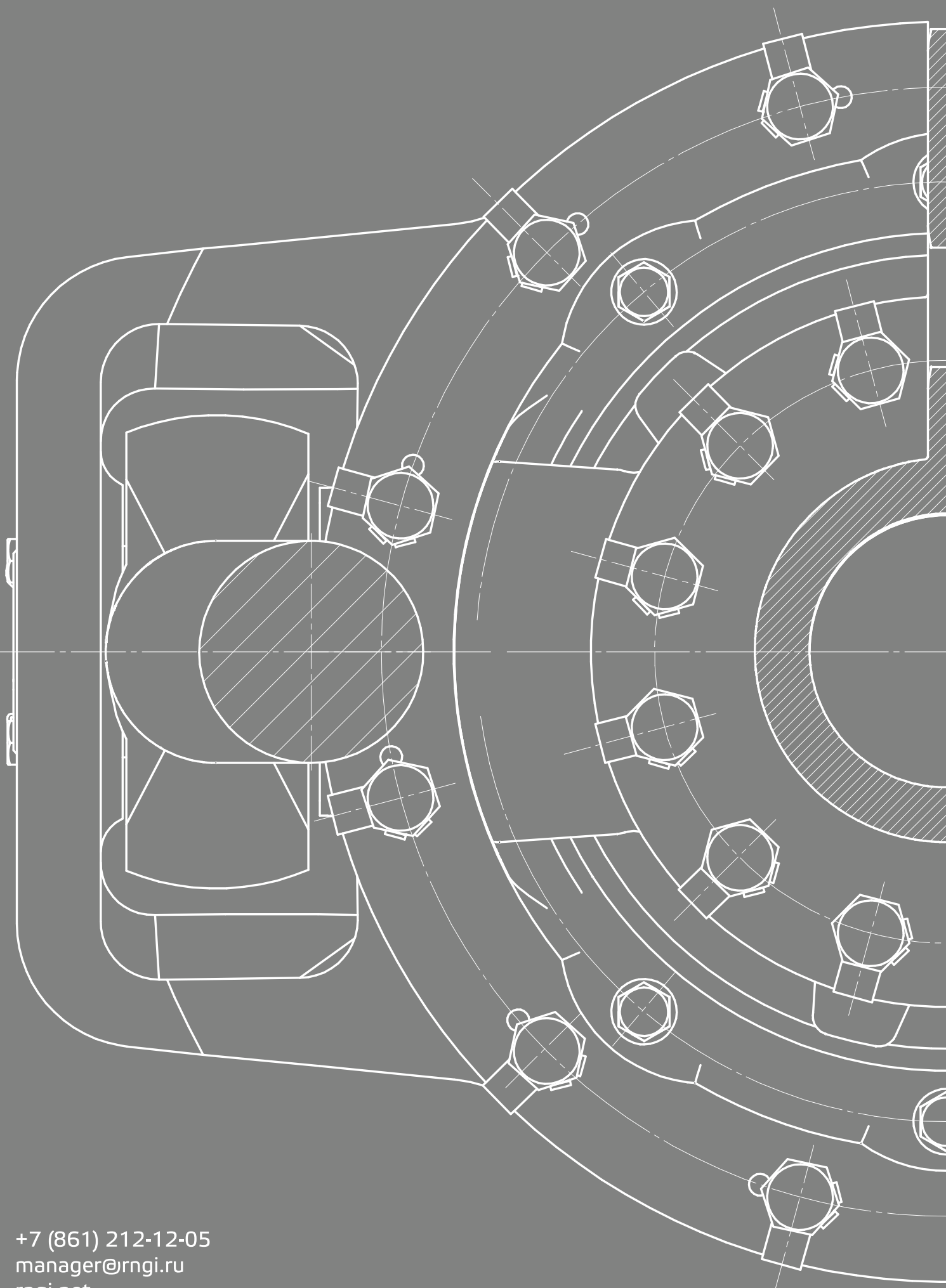


fig. 4



+7 (861) 212-12-05  
manager@rngi.ru  
rngi.net