

Technical proposal

BKOK-R1 Float shoe with check valve

BKOK-R1 Float shoe with check valve is designed for equipping the casing string bottom in order to ensure self-filling of the descended columns with the drilling mud from the well without its overflowing from the column to the mouth. To perform the "stop" ring function and to provide the leak-proof fit of bypass plugs on it in the process of pushing the cementing slurry into the outer annulus and to prevent the backflow of liquid from the well to the column after consolidation is completed. The inclination of the borehole axis at the valve installation site should not exceed 20°.


Materials:

Steel 40H GOST 4543-71;

Aluminum alloy D16 GOST 4784-97;

Control shroud – cast iron SCH20 GOST 1412-85;

Hyperthermal rubber RK1802 TS 2512-046-00152081-2003;

The connecting thread of the shoe is available to choose:

- | | |
|--|--------------------------|
| 1) OTTM GOST 632-80 | <input type="checkbox"/> |
| 2) OTTG GOST 632-80 | <input type="checkbox"/> |
| 3) Short triangular thread GOST 632-80 | <input type="checkbox"/> |
| 4) Buttress GOST 51906-2002 | <input type="checkbox"/> |

Operating temperature, max +160° C;

Peak discharge 40 l/s.

Pic.1 BKOK-R1 Float shoe with check valve.

Parameter name	BKOK-114R1	BKOK-127R1	BKOK-140R1	BKOK-146R1	BKOK-168R1	BKOK-178R1	BKOK-194R1
Maximum working pressure, PSI (atm)	3674 (250)	3674 (250)	3674 (250)	3674 (250)	3674 (250)	3674 (250)	3674 (250)
External diameter	5 1/4" / 133±1,3 mm	5 3/4" / 146±1,4 mm	6 1/4" / 159±1,5 mm	6 1/2" / 166±1,6 mm	7 3/8" / 188±1,8 mm	7 13/16" / 198±1,9 mm	8 1/2" / 216±2,1 mm
ID of the valve body, min.	3 13/16" / 97,1 mm	4 1/4" / 108,6 mm	4 11/16" / 118,7 mm	4 15/16" / 124,7 mm	5 3/4" / 147 mm	6 1/8" / 156 mm	6 3/4" / 172 mm
Diameter of the ball	1 3/4" / 45±0,4 mm	1 3/4" / 45±0,4 mm	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm
Valve height, max.	16 7/16" / 417 mm	17 1/8" / 435 mm	19 3/32" / 485 mm	19 13/16" / 503 mm	20 1/4" / 514 mm	19 1/2" / 497 mm	20 3/16" / 513 mm
Valve weight, lbs (kg), max.	33.1 (15,53)	37.5 (17,81)	50.7 (23,7)	55.1 (25,92)	70.5 (32,23)	86 (39,93)	97 (44,05)

Parameter name	BKOK-219R1	BKOK-245R1	BKOK-273R1	BKOK-299R1	BKOK-324R1	BKOK-340R1	BKOK-426R1
Maximum working pressure, PSI (atm)	2204 (150)	2204 (150)	1470 (100)	1470 (100)	1470 (100)	1470 (100)	735 (50)
External diameter	9 5/8" / 245±2,4 mm	10 5/8" / 270±2,7 mm	11 3/4" / 299±2,9 mm	12 3/4" / 324±3 mm	13 13/16" / 351±3 mm	14 3/8" / 365±3 mm	17 3/4" / 451±3 mm
ID of the valve body, min.	7 5/8" / 195 mm	8 7/8" / 225 mm	9 13/16" / 249 mm	10 13/16" / 274,5 mm	11 13/16" / 300 mm	12 11/16" / 316 mm	15 3/4" / 400 mm
Diameter of the ball	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm	3" / 76±0,5 mm
Valve height, max.	21 3/8" / 543 mm	22 1/4" / 565 mm	22 1/4" / 565 mm	22 5/16" / 567 mm	22 7/8" / 581 mm	23 1/2" / 598 mm	25 1/4" / 641 mm
Valve weight, lbs (kg), max.	132.3 (60,66)	172 (78,84)	191.8 (87,7)	209.4 (95,88)	257.9 (117,46)	271.2 (123)	434.3 (197,35)