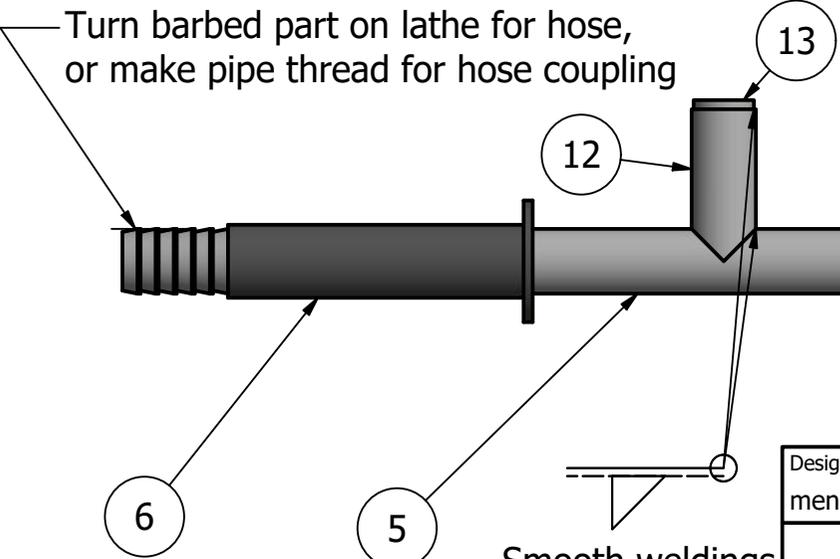
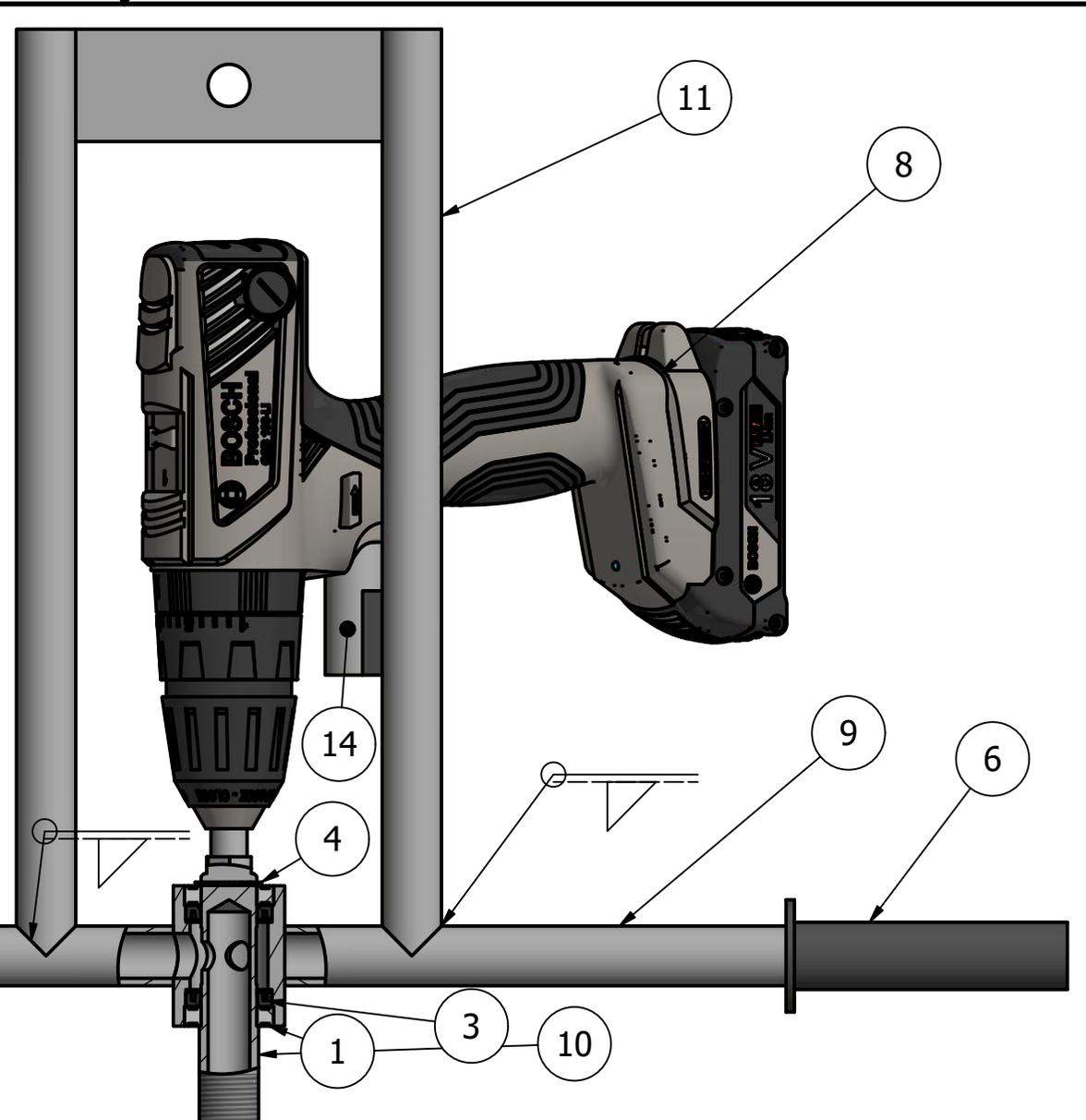


PARTS LIST		
ITEM	QTY	PART NUMBER
1	2	6804-2RS-C3
2	1	Housing
3	2	OAS-21X31X5-NBR
4	1	DIN 471 - 20 x 1,2(1)
5	1	Hose_connector
6	2	Handle
8	1	ASSY_Cordless_drill
9	1	HandleBar
10	1	Axis
11	1	Assy_lift_bar
12	1	Rope_guide
13	1	Cap_0.5inch_pipe
14	1	Assy_drill_holder



Smooth weldings
for rope guide
with file

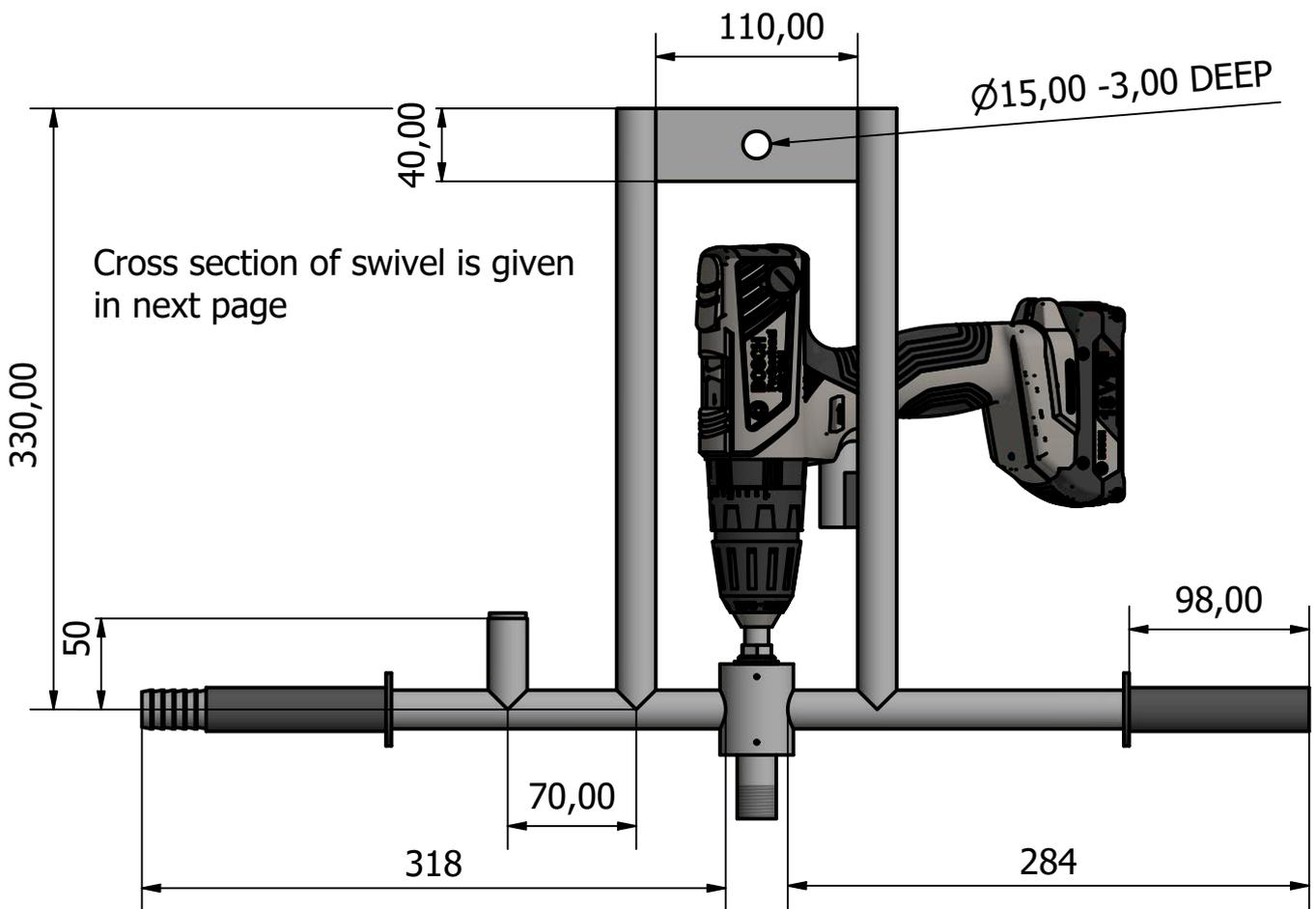
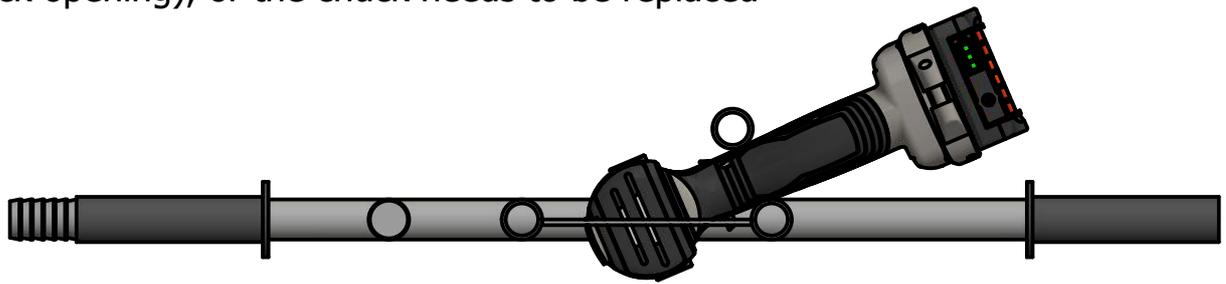
Designed by mennojan	Checked by	Approved by	Date	Date 29/12/2021
			Overview	
Drawing_total			Edition	Sheet 1 / 5

Drill actuation can be done with brake lever (bicycle), or rotating handle (accelerator motorcycle). Details are not specified, as it depends highly on used drill and type of handle.

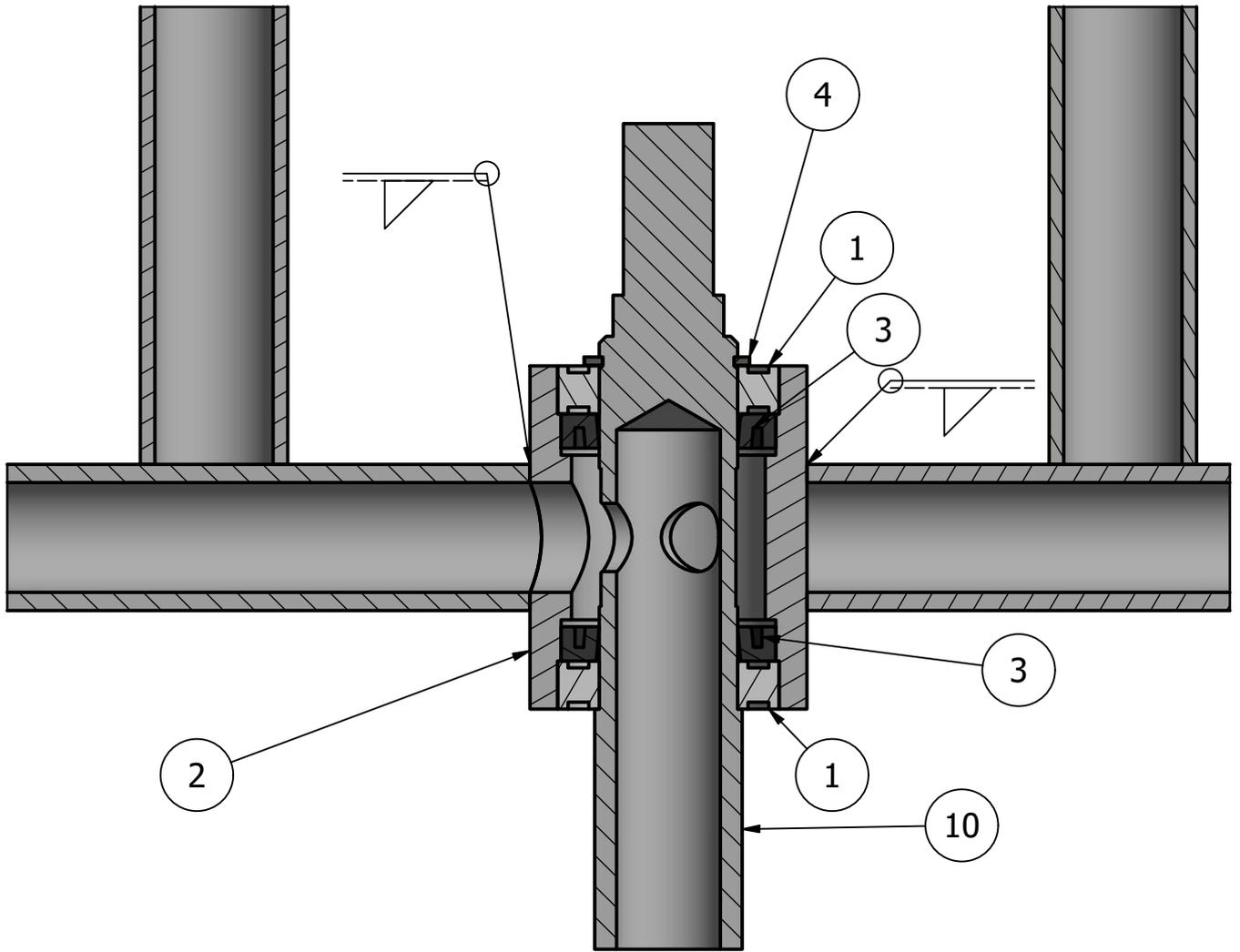
The depicted drill is only for illustration. In practise, any drill with a max torque of ± 54 Nm and a speed of 450 RPM works for non rocky soils. Used drills with good result:

- Hitachi/Hikoki DS18DJL (cordless with 1.5Ah batteries)
- Makita DF0300 (corded)

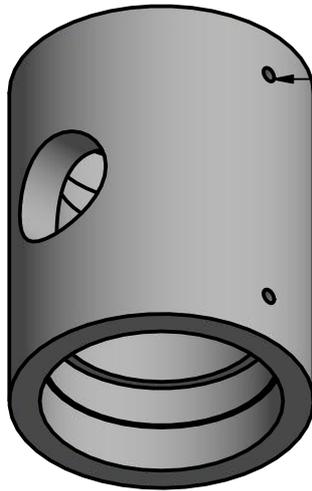
For the Makita, the axis of the swivel needs to be turned down to 10mm (max chuck opening), or the chuck needs to be replaced



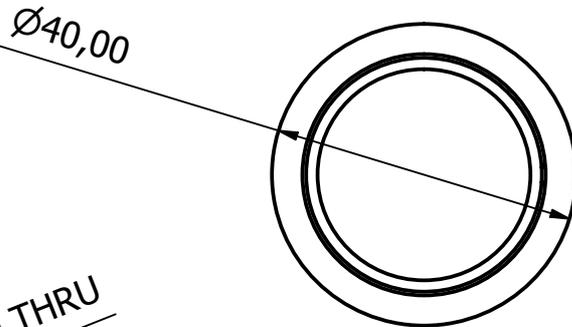
Designed by mennojan	Checked by	Approved by	Date	Date 29/12/2021
All pipes are 0.5" (21.3 x 2.11mm) All flat is 3mm thick			Main component dimensions	
Drawing_total			Edition	Sheet 2 / 5



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	6804-2RS-C3	
2	1	Housing	
3	2	OAS-21X31X5-NBR	
4	1	DIN 471 - 20 x 1,2(1)	Spring Retaining Ring
10	1	Axis	
Designed by mennojan	Checked by	Approved by	Date 29/12/2021
		Cross section swivel	
Drawing_total		Edition	Sheet 3 / 5

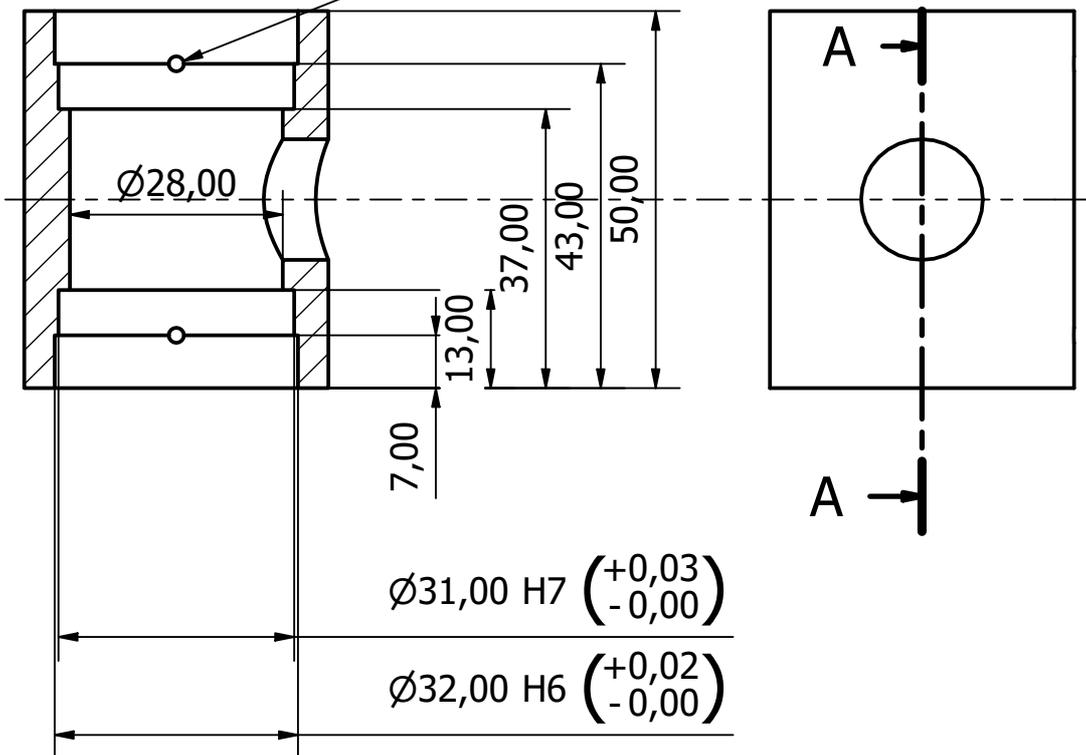


Weep holes.
If seals start leaking, water comes out here without destroying bearings. It is then time to change the seals.



A-A (1 : 1)

$\varnothing 2,00$ THRU



Note that bearing tolerance is a bit over-specified. After turning the housing part, it will be welded to the handles and deform.. That's why it should be a clearance fit before welding.

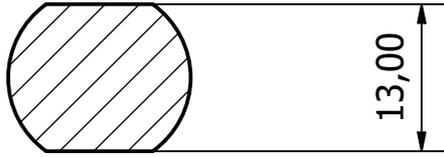
After welding, the bearing holes can be sanded with fine sanding paper to obtain a loose fit again for the bearings.

Designed by mennojan	Checked by	Approved by	Date	Date 29/12/2021
			Part 2: Housing	
			Drawing_total	Edition Sheet 4 / 5

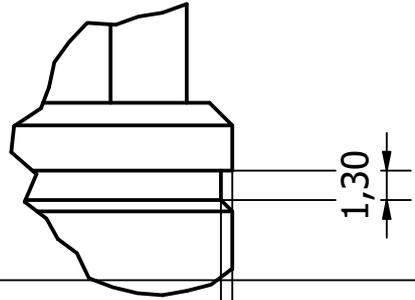


B-B (1.5:1)

C (3 : 1)



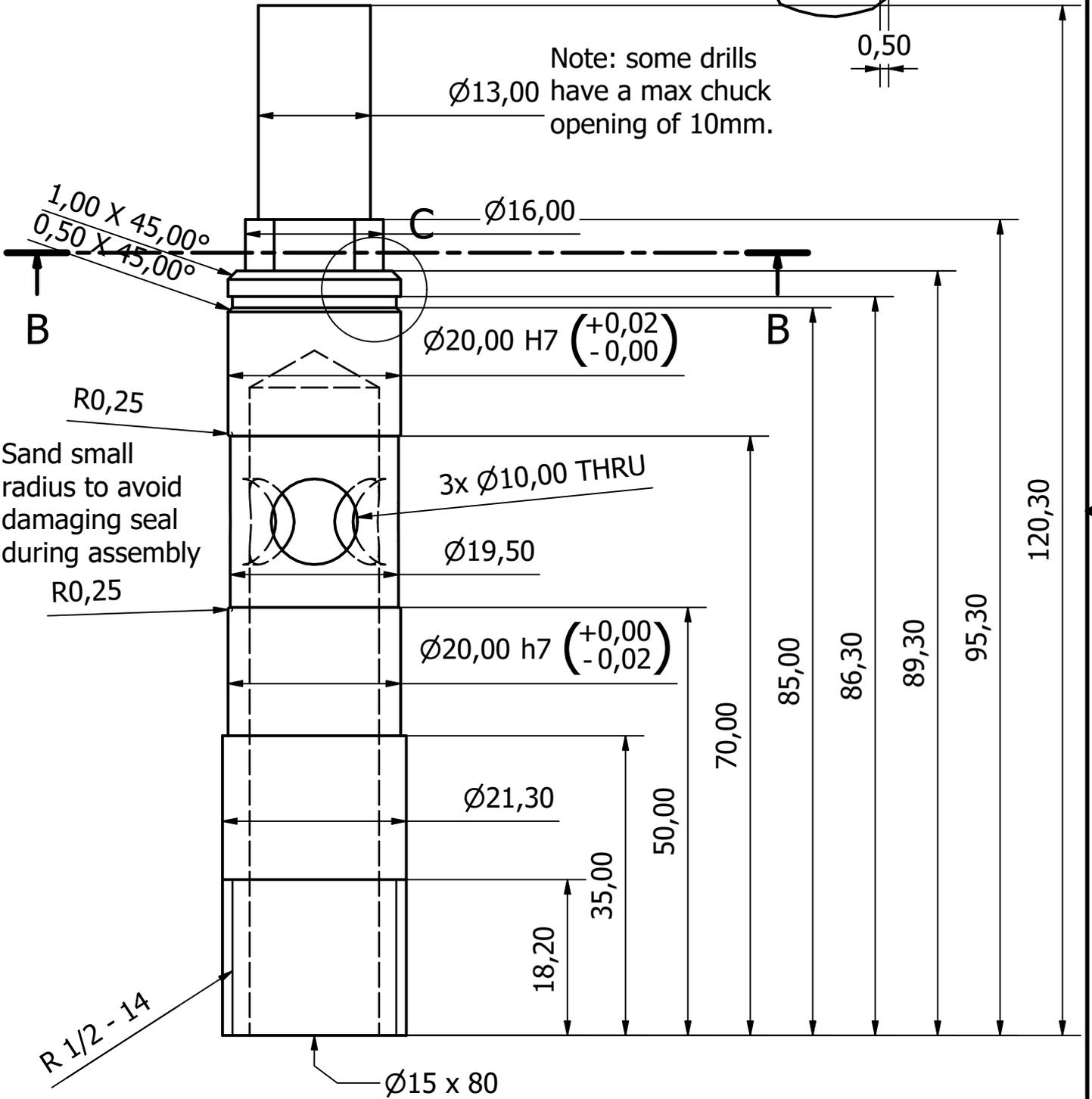
13,00



1,30

0,50

Note: some drills
Ø13,00 have a max chuck
opening of 10mm.



1,00 X 45,00°
0,50 X 45,00°

Ø16,00

B

Ø20,00 H7 (+0,02 / -0,00)

B

R0,25

Sand small
radius to avoid
damaging seal
during assembly

3x Ø10,00 THRU

Ø19,50

R0,25

Ø20,00 h7 (+0,00 / -0,02)

70,00

85,00

86,30

89,30

95,30

120,30

Ø21,30

50,00

35,00

18,20

R 1/2 - 14

Ø15 x 80

Designed by mennojan	Checked by	Approved by	Date	Date 29/12/2021
Material used: S355J2G3C+C Stainless steel could be better to prevent corrosion			Part 10: Axis	
Drawing_total			Edition	Sheet 5 / 5

