

$$d_e = 9,52 \text{ mm} \div 50,80 \text{ mm}$$

$$3/8'' \div 2''$$

**F/20**



Tube		Hole		Reamer body		Reamer shank			
<b>de</b>		<b>Df = df</b>		<b>F20-BDY</b>	Cutting edges	<b>F20-SHK</b>	<b>L</b>		Morse taper
inches	mm	mm	inches	Code	N	Code	mm	inches	N
<b>3/8"</b>	9,52	9,75	0.384	<b>F20-BDY-0975-#</b>	3	<b>F20-3/8"-SHK2-60</b>	60,00	2.362	2
	10,00	10,20	0.402	<b>F20-BDY-1020-#</b>					
	10,00	10,25	0.404	<b>F20-BDY-1025-#</b>					
	12,00	12,20	0.480	<b>F20-BDY-1220-#</b>					
	12,00	12,25	0.482	<b>F20-BDY-1225-#</b>					
<b>1/2"</b>	12,70	12,90	0.508	<b>F20-BDY-1290-#</b>					
		12,95	0.510	<b>F20-BDY-1295-#</b>					
	13,00	13,20	0.520	<b>F20-BDY-1320-#</b>					
	13,00	13,25	0.522	<b>F20-BDY-1325-#</b>					
	14,00	14,20	0.559	<b>F20-BDY-1420-#</b>					
	14,00	14,25	0.561	<b>F20-BDY-1425-#</b>					
	15,00	15,20	0.598	<b>F20-BDY-1520-#</b>					
	15,00	15,25	0.600	<b>F20-BDY-1525-#</b>					
<b>5/8"</b>	15,87	16,10	0.634	<b>F20-BDY-1610-#</b>					
		16,20	0.638	<b>F20-BDY-1620-#</b>					
	16,00	16,20	0.638	<b>F20-BDY-1620-#</b>					
		16,25	0.640	<b>F20-BDY-1625-#</b>					
	17,00	17,25	0.679	<b>F20-BDY-1725-#</b>					
	17,00	17,30	0.681	<b>F20-BDY-1730-#</b>					
	18,00	18,25	0.718	<b>F20-BDY-1825-#</b>					
	18,00	18,30	0.720	<b>F20-BDY-1830-#</b>					
<b>3/4"</b>	19,05	19,25	0.758	<b>F20-BDY-1925-#</b>					
		19,30	0.760	<b>F20-BDY-1930-#</b>					
	20,00	20,25	0.797	<b>F20-BDY-2025-#</b>					
	22,00	22,25	0.876	<b>F20-BDY-2225-#</b>					
	22,00	22,30	0.878	<b>F20-BDY-2230-#</b>					
<b>7/8"</b>	22,22	22,50	0.886	<b>F20-BDY-2250-#</b>					
	25,00	25,25	0.994	<b>F20-BDY-2525-#</b>					
	25,00	25,30	0.996	<b>F20-BDY-2530-#</b>					
<b>1"</b>	25,40	25,65	0.010	<b>F20-BDY-2565-#</b>					
		25,70	1.012	<b>F20-BDY-2570-#</b>					
<b>3/4" GAS</b>	26,90	27,20	1.071	<b>F20-BDY-2720-#</b>					
	27,00	27,30	1.075	<b>F20-BDY-2730-#</b>					
<b>1.1/4"</b>	31,75	32,10	1.264	<b>F20-BDY-3210-#</b>					
	32,00	32,25	1.270	<b>F20-BDY-3225-#</b>					
<b>1" GAS</b>	33,70	34,00	1.339	<b>F20-BDY-3400-#</b>					
<b>1.1/2"</b>	38,10	38,50	1.516	<b>F20-BDY-3850-#</b>					
<b>1.1/4" GAS</b>	42,40	42,80	1.685	<b>F20-BDY-4280-#</b>					
<b>1.3/4"</b>	44,45	44,80	1.764	<b>F20-BDY-4480-#</b>					
<b>1.1/2" GAS</b>	48,30	48,80	1.921	<b>F20-BDY-4880-#</b>					
<b>2"</b>	50,80	51,50	2.028	<b>F20-BDY-5150-#</b>					

for carbon steel tube sheets **C**

for stainless steel tube sheets **SS**

**F20-BDY-nnnn-#**

**F20-SHK-###**

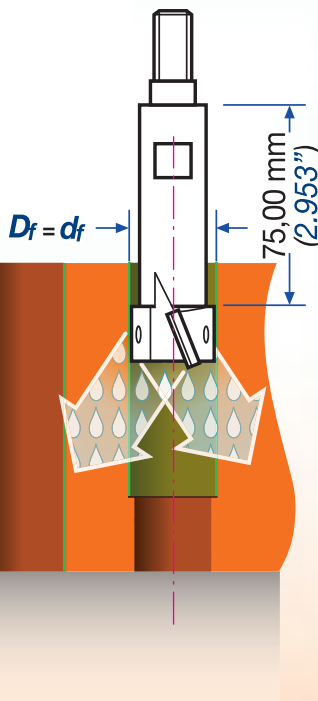
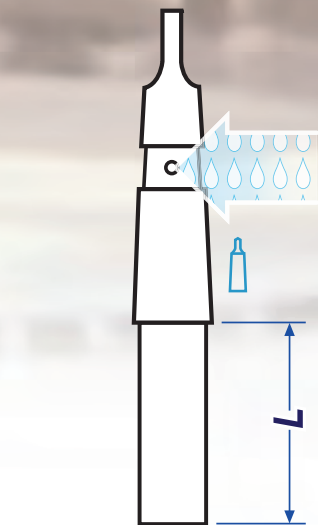
**L** - Special length on request

Revised

# F/20



## Reamers with Tungsten Carbide inserts for tube sheet holes



F20-SHK

F20-BDY



A comprehensive set of reamers for tube sheet holes with Tungsten Carbide inserts and channels allowing coolant to flow through.

Made using high-quality materials and with ISO h8 tolerance, they are offered with Morse taper.

They are manufactured in two modular pieces, to significantly reduce production cost.




The Tungsten Carbide cutting inserts are arranged geometrically at the end of the F20-BDY body in order to optimise the cut according to the hole size.

The F20 reamers are designed for holes ranging between 9,75 and 51,50 mm (0.384" to 2.028") and depths of up to 195 mm (7.677").

F20 reamers with customised sizes and cutting edge number available upon request.

### Cutting edges

The number of Tungsten Carbide cutting inserts is optimised according to the hole diameter, to assure maximum precision during cutting. As indicated in the table to the side:

- 3  9,75 to 32,25 mm (0.384" to 1.270")
- 5  34,00 to 44,80 mm (1.339" to 1.764")
- 6  48,80 to 51,50 mm (1.921" to 2.028")

Tungsten Carbide

## F/20

### Sample order codes

The hole of a tube sheet for  $d_e 3/4"$  (19,05 mm) tube will have an end diameter of 19,25 ÷ 19,30 mm; as a consequence the hole needs to be drilled by means of a Ø 18,50 mm twist drill; then it shall be widened to 19,25 mm using the F20 series reamer.

Referring to the F20 reamer table to the side you will be able to select the following codes:

F20-BDY-1925-C (1 reamer body)

F20-3/4"SHK3-120 (1 reamer shank)