Design Guidelines

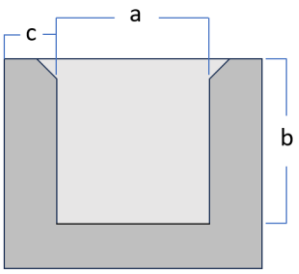
Inserts

ONKENHOUT TRISERT – MESSING insert for plastics

- Material: Messing Brass BS EN 12164CW 614N
- Thread: Metrisch Metric
- Assembly method: Inschroeven Screw in

Add a chamfer of 0.50 - 1.0 mm on the edges for the best visual result





Thread	Type	Hole diameter [1] [mm] (a)	*Insert length [mm]*	Min. hole depth [mm] (b)	Wall thickness [2] [mm] (c)
M3	A	**4.3**	*4.00*	5.00	2.00
M3	B	**4.3**	*5.25*	6.25	2.00
M4	A	**6.0**	*5.60*	6.80	2.30
M4	B	**6.0**	*7.10*	8.30	2.30
M5	A	**7.0**	*6.40*	7.60	2.70
M5	B	**7.0**	*8.40*	9.60	2.70
M6	A	**8.2**	*7.90*	9.10	3.15
M6	B	**8.2**	*9.80*	11.00	3.15
M8	A	**10.4**	*9.50*	11.00	4.00
M8	B	**10.4**	*12.40*	13.90	4.00

Please note, direct access to the hole is required to be able to place the insert.
Other sizes are available on request.

[1] Required hole diameter for the 3D printed part.
[2] Minimum wall thickness surrounding the feature.

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Revision date: July 2026

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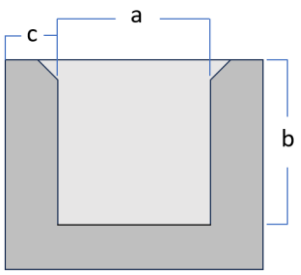
Inserts

ONKENHOUT TRISERT – RVS A4 insert for plastics
Selected for food contact applications

- Material: RVS A4 (316) SS 316
- Thread: Metrisch Metric
- Assembly method: Inschroeven Screw in

Add a chamfer of 0.50 - 1.0 mm on the edges for the best visual result





Thread	Hole diameter [1] [mm] (a)	*Insert length [mm]*	Min. hole depth [mm] (b)	Wall thickness [mm] (c)
M3	**4.3**	*5.25*	6.25	2.00
M4	**6.0**	*7.10*	8.30	2.30
M5	**7.0**	*8.40*	9.60	2.70
M6	**8.2**	*9.80*	11.00	3.15
M8	**10.4**	*12.40*	13.90	4.00

Please note, direct access to the hole is required to be able to place the insert.
Other sizes are available on request.

[1] Required hole diameter for 3D printed part.
[2] Minimum wall thickness surrounding the feature.

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Design Guidelines

Ruimen // Reaming

MACHINE REAMER H7

Add a chamfer of 0.50 - 1.0 mm on the edges for the best visual result

	Diameter [mm]	Tolerance [1] [mm]	Hole diameter [2] [mm]	Max. depth [3] [mm]
	Ø 3.0	± 0.05	**2.8**	15
	Ø 4.0	± 0.05	**3.8**	19
	Ø 5.0	± 0.05	**4.8**	23
	Ø 6.0	± 0.05	**5.7**	26
	Ø 8.0	± 0.05	**7.7**	33

Please note, direct access to the hole is required to execute reaming.
Other sizes are available on request.

Minimum wall thickness of 2.0 mm surrounding the feature.

[1] Tolerance of H7 is valid for the used tooling. We do not deburr the edges.
[2] Required hole diameter for 3D printed part.
[3] Minimum hole depth for blind holes is the required depth + 2.0 mm.

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Design Guidelines

Tappen // Threading

THREADING Gas thread type BSP 55°

Add a chamfer of 0.50 - 1.0 mm on the edges for the best visual result

	Type	Hole diameter [1] [mm]	Min. wall thickness [2] [mm]	Max. depth [3] [mm]
	G1/8	**8.70**	**4.00**	26
	G1/4	**11.8**	**4.50**	18
	G3/8	**15.3**	**5.00**	18
	G3/4	**24.5**	**5.00**	22

Please note, direct access to the hole is required to execute threading.
Other sizes are available on request.

[1] Required hole diameter for 3D printed part.
[2] Minimum wall thickness surrounding the feature.
[3] Minimum hole depth for blind holes is the required depth + additional hole depth of 6.0 mm.

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Design Guidelines

Tappen // Threading

THREADING Machine treading TCE HSSE

Add a chamfer of 0.50 - 1.0 mm on the edges for the best visual result

	Type	Hole diameter [1] [mm]	Min. wall thickness [2] [mm]	Max. depth [mm]	Additional hole depth [3] [mm]
	M3	**2.5**	2.00	7.50	3.0
	M4	**3.3**	2.30	10.00	4.2
	M5	**4.2**	2.70	15.00	4.8
	M6	**5.0**	3.15	16.50	6.0
	M8	**6.8**	4.00	16.50	7.5
	M10	**8.5**	4.00	25.00	9.0
	M12	**10.2**	4.00	25.00	10.5

[1] Required hole diameter for 3D printed part.
[2] Minimum wall thickness surrounding the feature.
[3] Minimum hole depth for blind holes is the required depth + additional hole depth in mm.

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