

Avseal® II Blind Sealing Plug

Hole Spacing Calculation



Formula

$$\text{Spacing Factor} = 12 \cdot x^{0.6}$$

Where x is the Tensile Strength (N/mm²) of the application material.

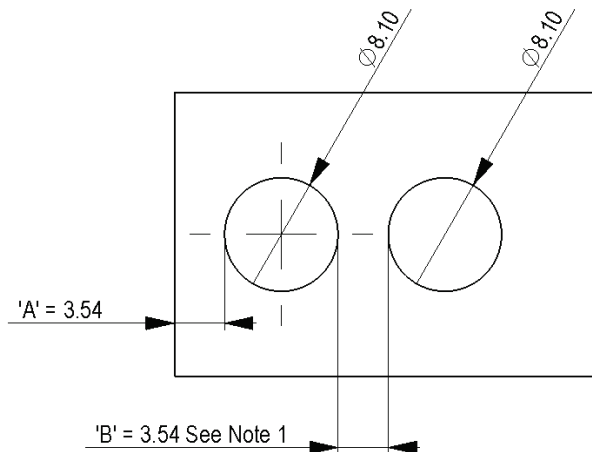
Minimum distance from edge and between holes = Spacing Factor · Hole Diameter

Example

Application Material MRI 153M at 20°C, Tensile Strength = 250 N/mm²

Spacing Factor = $12 \cdot 250^{0.6} = 0.4369$

Minimum distance from edge and between holes = $0.4369 \cdot 8.10 \text{ mm} = 3.54 \text{ mm}$



Note 1

If the hole next to the hole with the Avseal® II plug is going to be filled with another Avseal® II plug then the 'B' = 2 · 'B' in the above example 'B' would be 7.08 mm

Material	Tensile N/mm ²	Hole Diameter mm	Spacing Factor	Distance from edge and between holes mm
MRI 153M (at 20°C)	250	4.8	0.4369	2.097
MRI 153M (at 20°C)	250	8.0	0.4369	3.495
ZE 41 T5	220	4.8	0.4717	2.264
ZE 41 T5	220	8.0	0.4717	3.774



An Acument™ Global Technologies Company

Avdel USA LLC
614 NC Highway 200 South
Stanfield, North Carolina 28163
Tel. +1 704 888-7100 · Fax -0258
infoAvdel-USA@acument.com

www.avdel-global.com

Avdel Canada, a Division of
Acument Canada Limited
87 Disco Road
Rexdale, Ontario M9W 1M3
Tel. +1 416 67906-22 · Fax -78
infoAvdel-Canada@acument.com

© 2009 Acument Intellectual Properties, LLC

Avseal® is a trademark of Avdel UK Limited

06.2009

Data shown is subject to change without prior notice as a result of continuous product development and improvement policy.
Your local Avdel representative is at your disposal should you need to confirm latest information.

Avseal® II Blind Sealing Plug

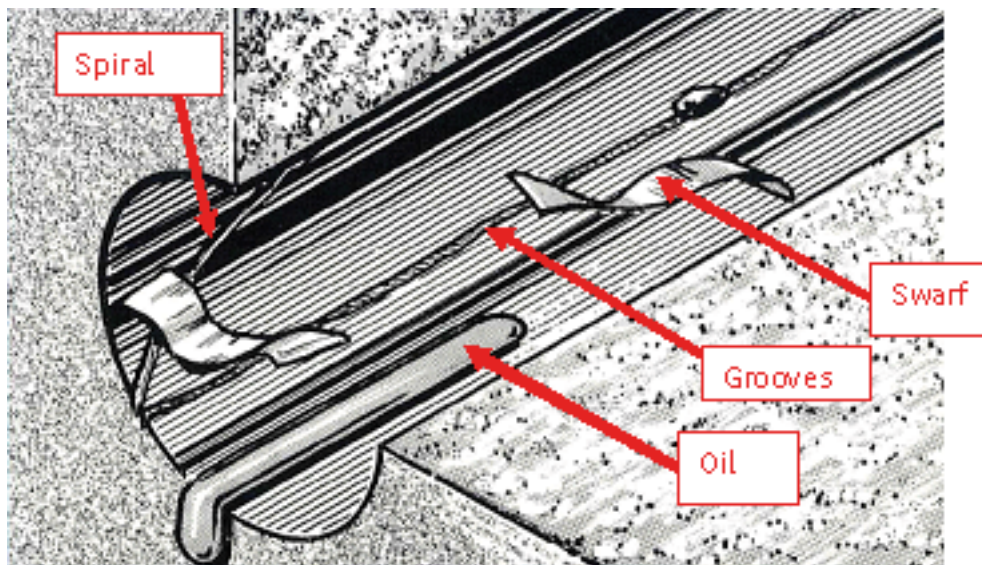
Hole Condition



Hole condition prior to placing Avseal® II sealing plug

For consistent performance, holes for Avseal® II sealing plugs must comply with the following parameters.

1. Hole diameter limits must be taken from the current Avseal® II sealing plug data sheet and where possible the recommended hole size should be used.
2. The presence of grease, oil, swarf or any surface marks such as grooves and spiral marks must be avoided. The picture below shows examples of incorrect hole preparation.



An Acument™ Global Technologies Company

Avdel USA LLC
614 NC Highway 200 South
Stanfield, North Carolina 28163
Tel. +1 704 888-7100 · Fax -0258
infoAvdel-USA@acument.com

www.avdel-global.com

Avdel Canada, a Division of
Acument Canada Limited
87 Disco Road
Rexdale, Ontario M9W 1M3
Tel. +1 416 67906-22 · Fax -78
infoAvdel-Canada@acument.com

© 2009 Acument Intellectual Properties, LLC

Avseal® is a trademark of Avdel UK Limited

06.2009

Data shown is subject to change without prior notice as a result of continuous product development and improvement policy.
Your local Avdel representative is at your disposal should you need to confirm latest information.

Avseal® II Blind Sealing Plug

Hole Surface Texture



Surface Texture Definition

R_a , Roughness average is the arithmetic mean deviation of roughness profile.

Surface Texture Limits

The hole must be prepared with a surface finish between R_a 1.27 μ m – 6.35 μ m using a drill.

The drill or application must continue to rotate while exiting; this avoids drill return marks which will be continuous lines which can cause leak paths.

Surface Texture Equivalents

The table below should only be used for guidance.

R_a - μ m	1.6	3.2	6.3
R_a - μ inch	63	125	250
N-Grade	N7	N8	N9
Process	Drilling (Average application)		



An Acument™ Global Technologies Company

Avdel USA LLC
614 NC Highway 200 South
Stanfield, North Carolina 28163
Tel. +1 704 888-7100 · Fax -0258
infoAvdel-USA@acument.com

www.avdel-global.com

Avdel Canada, a Division of
Acument Canada Limited
87 Disco Road
Rexdale, Ontario M9W 1M3
Tel. +1 416 67906-22 · Fax -78
infoAvdel-Canada@acument.com

© 2009 Acument Intellectual Properties, LLC

Avseal® is a trademark of Avdel UK Limited

06.2009

Data shown is subject to change without prior notice as a result of continuous product development and improvement policy.
Your local Avdel representative is at your disposal should you need to confirm latest information.