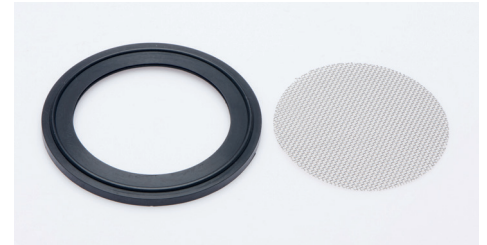


ACL[®] Mesh Gaskets



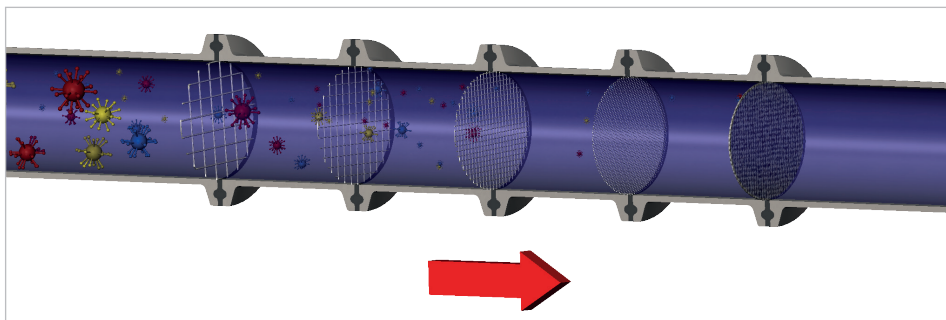
Our single layer screen mesh gaskets range from 10 mesh to 100 mesh and are offered from stock with either black EPDM or clear silicone outers – USP Class VI compliant. However, alternative outers are available on request. The gaskets are unbonded; therefore the mesh or outer can be replaced relatively easily.

Using Mesh Gaskets

As you can see from our graphic illustration (below), the tighter the mesh, the more effective the particulate capture. The higher the mesh number, the smaller the opening size. The standard measurement of the mesh size is wires per inch – eg. mesh 10 equates to ten wires per inch in both directions, leading to square holes. Mesh gaskets can also be used to reduce pressure

flow in a line for various applications. We recommend regular checks on the mesh to ensure cleanliness and functionality. Captured particles will quickly lead to reduced efficiency and a drop in pressure.

To accompany the range of mesh gaskets, Advanced Couplings also offers Orifice Plates made from fully certified SS 316L, to suit the sizes stated above. All come with a polished mirror finish.



Available Sizes

- BS4825 – 1" thru 4"
- DIN32676 – DIN25 thru DIN100

For further information contact:

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+44(0)1535 669 216

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+44 (0)1535 610 243

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ACL® Mesh Gaskets

Selecting Mesh Size

In order to select the correct mesh size for your application you must first consider the size of the particulates that must be captured. This will dictate the mesh size required.

Secondly, the pressure drop should be calculated to ensure it is within the expected limits. The mesh must also be cleaned on a regular basis to avoid clogging and further pressure drop.

Mesh	Inches	mm	Microns
100	0.0065	0.1651	165
80	0.007	0.1778	177
60	0.009	0.2286	228
40	0.015	0.8636	380
20	0.034	0.8636	862

Pressure Drop Equation for Liquids

$$\Delta P = G \times (Q / C_v)^2 \times C_r$$

ΔP = Pressure drop (psi)
 G = Specific gravity of liquid
 Q = Flow rate (GPM)
 C_v = Flow coefficient factor
 C_r = Correction factor for mesh and viscosity

Cv Correction Factor

Centistokes	(SSU)	Perf. (Unlined)	20 Mesh	40 Mesh	60 Mesh	80 Mesh	100 Mesh
2	(Water) 30	1.0	1.05	1.2	1.4	1.6	1.7
10	60	1.1	1.15	1.4	1.5	1.8	1.8
20	100	1.2	1.25	1.5	1.6	1.9	2.1
32	150	1.3	1.35	1.6	1.7	2.0	2.2
43	200	1.4	1.45	1.7	1.8	2.1	2.3
54	250	1.45	1.5	1.75	1.85	2.2	2.35
76	350	1.5	1.6	1.8	1.9	2.3	2.45
100	500	1.6	1.7	1.9	2.1	2.4	2.6
162	750	1.65	1.9	2.1	2.3	2.5	2.7
216	1000	1.7	2.0	2.2	2.4	2.6	2.8
325	1500	1.8	2.1	2.3	2.6	2.75	3.0
433	2000	1.9	2.2	2.4	2.7	2.9	3.2
650	3000	2.0	2.3	2.6	2.9	3.5	3.5
866	4000	2.1	2.45	2.8	3.15	3.6	3.9
1083	5000	2.2	2.6	3.0	3.4	3.8	4.2
1624	7500	2.35	2.8	3.4	3.8	4.3	4.75
2200	10000	2.5	3.0	3.5	4.0	4.5	5.0
3000	13500	3.0	3.5	-	-	-	-
5000	22500	4.0	4.5	5.0	5.5	6.0	6.5
6000	27300	4.2	-	-	-	-	-
15000	67000	6.0	6.5	7.0	7.5	8.0	8.5
18900	86000	8.0	8.5	-	-	-	-
20000	89300	8.5	9.0	-	-	-	-

Quality Assurance

The ACL Quality Management System is certified according to EN ISO 9001:2015. We ensure that our suppliers also maintain a certified Quality Management System.

The materials used in the fabrication of ACL's mesh gaskets is UK sourced and produced.

All technical information and advice given here is based on our previous experiences and/or test results. We give this information to the best of our knowledge, but assume no legal responsibility. Customers are asked to check the suitability and usability in the specific application, since the performance of the product can only be judged when all necessary operating data are available. Specifications are subject to change without notice. ACL's terms and conditions of sale apply to the purchase and sale of the product.

Further Information

For detailed selection criteria, technical information, installation guidelines or to contact ACL, please visit our website:

www.advanced-couplings.com

Issue 1 - Dec 2019

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