

BONDED WASHERS (DOWTY SEALS) Technical Specifications

Bonded washers, or commonly referred to as “Dowty Seals” are used when sealing parallel thread Male stud adaptors into parallel ports. There are several factors that will affect the performance of the product, not limited to, but including, the torque of the adaptor, the centring of the seal, and the performance characteristics of the threaded portion of the connection.

The table below indicates the data relevant to the various sizes. The products offered by Fluid Connectors are of the carbon steel washer and Nitrile (NBR) sealing portion. The working temperature range is -30°C to 110°C. The relevant standards for this sealing method, whilst not directly on the seal itself is ISO1179-1 for BSPP, and ISO 9974-1 for Metric Connections.

BSPP BONDED WASHERS			
Size	Part No.	ISO 1179-1 Pressure (Bar)	Approx. Burst Pressure (Bar)
1/8”	DSB-02	320	1500
1/4”	DSB-04	320	1550
3/8”	DSB-06	320	1260
1/2”	DSB-08	250	1150
5/8”	DSB-10	250	1250
3/4”	DSB-12	250	1060
1”	DSB-16	250	810
1 ¼”	DSB-20	160	690
1 ½”	DSB-24	160	690
2”	DSB-32	160	700
METRIC BONDED WASHERS			
Size	Part No.	ISO 9974-1 Pressure (Bar)	Approx. Burst Pressure (Bar)
M5	DSM-05	630	1500
M6	DSM-06	630	1510
M10	DSM-10	630	1450

METRIC BONDED WASHERS			
Size	Part No.	ISO 9974-1 Pressure (Bar)	Approx. Burst Pressure (Bar)
M12	DSM-12	630	1680
M14	DSM-14	630	1510
M16	DSM-16	630	1400
M18	DSM-18	630	1275
M20	DSM-20	630	1150
M22	DSM-22	400	1100
M24	DSM-24	400	1050
M26	DSM-26	400	1050
M27	DSM-27	400	1130
M28	DSM-28	400	1000
M30	DSM-30	400	860
M33	DSM-33	400	880
M36	DSM-36	250	880
M42	DSM-42	250	940