


WILLIAM JOHNSTON
 & COMPANY LIMITED

 Glasgow Tel: +44 (0) 141 620 1666 | Inverness Tel: +44 (0) 1463 238 673
sales@williamjohnston.co.uk | www.williamjohnston.co.uk
Black Closed Cell Firm Neoprene WJSPA312


Property	Unit	Result	Test Method
Specification according to:			
ASTM D1056-87			2 C3 A1 B2 P
NFR99-211-80/RENAULT 03-10-102/PSAB67 1016			3C 16 B3
FMVSS 302(49 CFR Ch.V § 571.302)/ISO 3795			PASS e >= 2MM
UL94			e>=2mm HF1
Colour		BLACK	
Cellular Structure		Closed	
Density	kg/m ³	180 +-25	ISO845-88
Shore hardness 00		50-60°	ASTM D 2240
Compression deflection 25 % deflection	kPa	65-90	ASTM D1056-07
Compression deflection 50% Deflection	Kpa	130-270	NFR 99211-80
Water absorption	%	<=5	ASTM D1056
Compression set 50 % deflection 22 h 23 °C	%	<= 25	ASTM D1056-07 at 23°C
Compression set 50 % deflection 22 h 40 °C	%	< =60	NFR 9921180 at 40°C
Accelerated ageing after 7 days at 70°C- Dimensional change	%	-6/0	ISO 188
Accelerated ageing after 7 days at 70°C- change in compression	%	-30/+30	ASTM D1056-07
Dimensional Stability- change of dimension after 3 h at 80C	%	-5/0	FORD WSK-M2D419-A
Ultimate Elongation	%	155	ISO 1798-97
Tensile Strength	Kpa	1050	ISO 1798-97
Tear Resistance	kN/m	3.2	ISO 34-1 (Ba)-94/ASTM D624 DIE C
Ozone Resistance		200 pphm 30°C/24h 20% Elongation, No Cracking	ISO 1431-1 (2004)
Temperature Range	Continuous	-40°C to +85°C	
Temperature range	Intermittent	up to 110°C	
Environmental protection		Recyclable	(CE)No 1907/2006 (reach)_2000/53/ce_2002/95/c e(rohs)_imds_gadsl_cfc free

Change Control Date	Change
3/2/16	Created

Disclaimer
 Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications for the Products. In specific applications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.