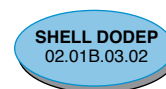
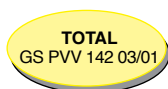


Material data sheets

FR58/90



Material data sheet	Compound number	414	Revision: 3
	Polymer type:	FKM	02/03/2009

General description: FR58/90 is a fluorocarbon terpolymer based synthetic rubber, reinforced with carbon black and bisphenol cured.

General properties: FR58/90 has good rapid gas decompression resistant properties, making it suitable for many high-pressure gas applications.

Temperature capability: -27°C to +210°C (-17°F to +410°F).

TYPICAL PROPERTIES

Property	Unit	Value
Hardness	IRHD	89
Tensile strength (TS)	MPa (psi)	15 (2176)
Modulus @ 50% elongation	MPa (psi)	5.1 (740)
Modulus @ 100% elongation	MPa (psi)	8.5 (1233)
Elongation at break (E @ B)	%	190
Low temperature torsion modulus, T₇₀	°C (°F)	-12 (10)
Compression set: 24 hours @ 175°C (347°F)	%	25
Compression set: 24 hours @ 200°C (392°F)	%	32
Air ageing: 70 hours @ 250°C (482°F)		
Change in hardness	IRHD	0
Change in TS	%	-7
Change in E @ B	%	-11
Fluid immersion testing: Fuel C, 70 hours @ 23°C (74°F)		
Change in hardness	IRHD	0
Change in TS	%	-17
Change in E @ B	%	+3
Change in volume	%	+2
Fluid immersion testing: Liquid 101, 70 hours @ 200°C (392°F)		
Change in hardness	IRHD	-6
Change in TS	%	-22
Change in E @ B	%	+16
Change in volume	%	+7
Fluid immersion testing: Oil No 3 (IRM 903), 70 hours @ 150°C (302°F)		
Change in hardness	IRHD	-1
Change in TS	%	-10
Change in E @ B	%	-7
Change in volume	%	+3
Fluid immersion testing: Oil No 1 (ASTM No 1), 168 hours @ 150°C (302°F)		
Change in hardness	IRHD	+1
Change in TS	%	+5
Change in E @ B	%	0
Change in volume	%	-10

All tests carried out in accordance with the relevant BS/BS ISO methods (see table on page 23).