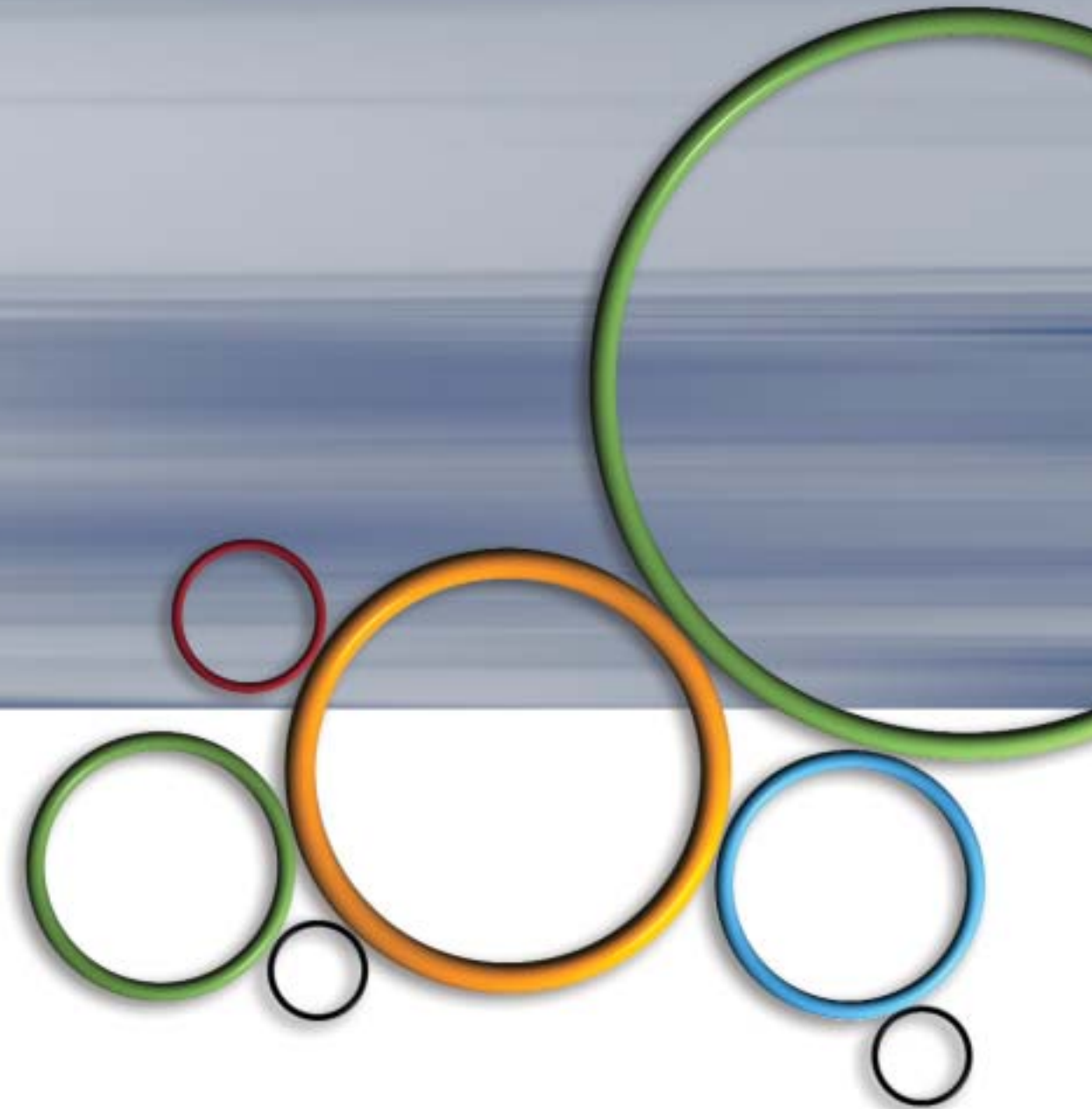
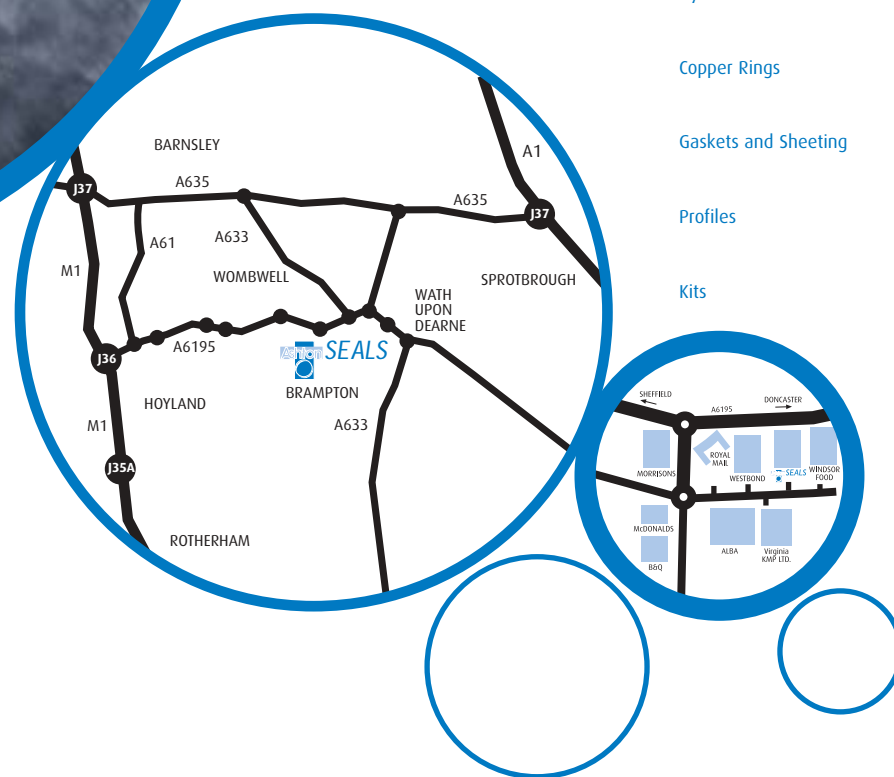


# 'O' RINGS

A comprehensive range of products available from Ashton Seals

- Lubrication
- O-Rings
- O-Ring Cord
- FEP Encapsulated O-Rings
- Oil Seals
- Back-up Rings
- Quad®-Rings
- Bonded Seals
- Anti-Vibration Machinery Mounts
- Mechanical Seals
- JM Clipper Seals
- Selon Seals
- VR Rotary Seals
- Moulded Parts
- Hydraulic Seals
- Copper Rings
- Gaskets and Sheeting
- Profiles
- Kits

Ashton Seals Ltd. • PO Box 269 • Cortonwood Drive • Cortonwood Business Park • Brampton • Barnsley S73 0YP  
 T. +44 (0)1226 273700 • F. +44 (0)1226 756774 • E. [ask@ashtonseals.com](mailto:ask@ashtonseals.com) • [www.ashtonseals.com](http://www.ashtonseals.com)















## NITRILE

COMPOUND REFERENCE . K6

MATERIAL REFERENCE : 70MN

HARDNESS RANGE: 70±5 SHORE

70MN is based on an Acrylonitrile Butadiene Copolymer material and is resistant to all mineral oils, water and watery liquids, combustion gases and hot air, as well as numerous chemicals.

70MN is a general purpose material and is used in a variety of applications.

### PHYSICAL PROPERTIES

Hardness SHORE	70±5
Tensile Strength	14 mPa
Elongation at Break (%)	350

AIR AGED 70 hrs @ 100°C

125°C

Hardness Change	6	+10
Tensile Change (%)	+14	+23
Elongation Change (%)	-16	-30

COMPRESSION SET 22 hrs @ 100°C 8.0%

AGED IN ASTM No 1 OIL 70 hrs @ 100°C

125°C

Hardness Change	+5	+9
Tensile Change (%)	+18	+19
Elongation Change (%)	-14	-28
Volume Change (%)	-5	-6

AGED IN ASTM No 3 OIL 70 hrs @ 100°C

125°C

Hardness Change	-4	-4
Tensile Change (%)	-2	±0
Elongation Change (%)	-12	-21
Volume Change	+12.5	+13.2

AGED IN WATER 70 hrs @ 100°C

Hardness Change	0
Tensile Change (%)	+9
Elongation Change	-12
Volume Change	+14.7

COLD BRITTLENESS

(ASTM D.746) -39°C

## NITRILE

COMPOUND REFERENCE . K4

MATERIAL REFERENCE : 60MN

HARDNESS RANGE: 60±5 SHORE

60MN is based on an Acrylonitrile Butadiene Copolymer material and is resistant to all mineral oils, water and watery liquids, combustion gases and hot air, as well as numerous chemicals.

60MN is a general purpose material and is used in a variety of applications.

### PHYSICAL PROPERTIES

Hardness SHORE	60±5
Tensile Strength	14N/mm <sup>2</sup>
Elongation at Break (%)	400

AIR AGED 70 hrs @ 100°C

125°C

Hardness Change	+6	+11
Tensile Change (%)	+10	+20
Elongation Change (%)	-19	-41

COMPRESSION SET 24 hrs @ 100°C 16%

AGED IN ASTM No 1 OIL 70 hrs @ 100°C

125°C

Hardness Change	+5	+9
Tensile Change (%)	+16	+19
Elongation Change (%)	-18	-30
Volume Change (%)	-6	-6.4

AGED IN ASTM No 3 OIL 70 hrs @ 100°C

Hardness Change	-6	-9
Tensile Change (%)	+9	+19
Elongation Change (%)	-17	-30
Volume Change	+3.3	

AGED IN WATER 70 hrs @ 100°C

Hardness Change	-1
Tensile Change (%)	+2
Elongation Change	-17
Volume Change	+6

COLD BRITTLENESS

(ASTM D.746) -40°C

## NITRILE

COMPOUND REFERENCE . K0

MATERIAL REFERENCE : 90MN

HARDNESS RANGE: 90±5 SHORE

90MN is based on an Acrylonitrile Butadiene Copolymer material and is resistant to all mineral oils, water and watery liquids, combustion gases and hot air, as well as numerous chemicals.

90MN is a general purpose material and is used in a variety of applications.

### PHYSICAL PROPERTIES

Hardness SHORE	90±5
Tensile Strength	15.7N/mm <sup>2</sup>
Elongation at Break (%)	180

AIR AGED 70 hrs @ 100°C

Hardness Change	+3
Tensile Change (%)	+2
Elongation Change (%)	-8

COMPRESSION SET 20 hrs @ 100°C 6%

AGED IN ASTM No 1 OIL 70 hrs @ 100°C

Hardness Change	+3
Tensile Change (%)	-1
Elongation Change (%)	-12
Volume Change (%)	-4.2

AGED IN ASTM No 3 OIL 70 hrs @ 100°C

Hardness Change	-9
Tensile Change (%)	-5
Elongation Change (%)	-12
Volume Change	+13.1

AGED IN WATER 72 hrs @ 100°C

Hardness Change	-2
Tensile Change (%)	-0.8
Elongation Change	-9.3
Volume Change	+6.1

COLD BRITTLENESS

(ASTM D.746) -35°C

## E.P.D.M. PEROXIDE CURED

COMPOUND REFERENCE . E70N02V

HARDNESS RANGE: 70±5 SHORE

### PHYSICAL PROPERTIES

Hardness SHORE	70±5
Tensile Strength	13.5N/mm <sup>2</sup>
Elongation at Break (%)	270

AIR AGED 70 hrs @ 100°C

Hardness	+10 max
Tensile Change (%)	>/= -25
Elongation Change (%)	>/= -25

COMPRESSION SET 70 hrs @ 100°C 35% max

AGED IN WATER 70 hrs @ 100°C

Hardness	±5
Volume Change (%)	±5

## FLOUROLASTOMER

COMPOUND REFERENCE . G6

MATERIAL REFERENCE : 75VI

HARDNESS RANGE: 75±5 SHORE

### PHYSICAL PROPERTIES

Hardness SHORE	75±5
Tensile Strength	13.4 mPa
Elongation at Break (%)	187

AIR AGED 70 hrs @ 250°C

Hardness Change	+2
Tensile Change (%)	-6
Elongation Change (%)	-1

COMPRESSION SET 22 hrs @ 200°C 10%

COMPRESSION SET 22 hrs @ 150°C 25.1%

AGED IN ASTM No 1 OIL 168 hrs @ 150°C

Hardness Change	-1
Tensile Change (%)	-2
Elongation Change (%)	-7
Volume Change (%)	+0.1

AGED IN ASTM No 3 OIL 70 hrs @ 150°C

Hardness Change	-2
Tensile Change (%)	-11
Elongation Change (%)	-7.5
Volume Change	+3

AGED IN WATER 70 hrs @ 100°C

Hardness Change	0
Tensile Change (%)	-12
Elongation Change	+6
Volume Change	+2

COLD BRITTLENESS

(ASTM D.2137) -10°C

## SILICONE

COMPOUND REFERENCE .F6

MATERIAL REFERENCE : 70SI

HARDNESS RANGE: 70±5 SHORE

### PHYSICAL PROPERTIES

Hardness SHORE	70±5
Tensile Strength	70kg/cm <sup>2</sup>
Elongation at Break (%)	200

AIR AGED 72 hrs @ 200°C

Hardness Change	+3
Tensile Change (%)	-15
Elongation Change (%)	-30

COMPRESSION SET 22 hrs @ 175°C 23%

AGED IN ASTM No 1 OIL 70 hrs @ 175°C

Hardness Change	-14
Tensile Change (%)	-11
Elongation Change (%)	-11
Volume Change (%)	+14.5

AGED IN ASTM No 3 OIL 70 hrs @ 175°C

Hardness Change	-24
Tensile Change (%)	-56
Elongation Change (%)	-40
Volume Change	+53

COLD BRITTLENESS

(ASTM D.746) -60°C  
(The sample rings have been post cured for 4 hours @200°C.)

# PRODUCT LIST

## SEALS DIVISION

- >> O-Rings
- >> O-Ring Cord
- >> Bonded Seals
- >> In-Line Filter Seals
- >> Mechanical Seals
- >> JM Clipper Seals
- >> Oil Seals
- >> Selon Seals
- >> Seloc Seals
- >> Quad®-Rings
- >> FEP Encapsulated O-Rings

## LUBRICATION DIVISION

- >> Grease Guns
- >> Grease Nipples
- >> Grease Nipple Kits
- >> Connectors
- >> Nylon & Rubber Hoses
- >> Oil Cans
- >> Bucket Pumps

## GASKET DIVISION

- >> Compressed synthetic fibre (CSF)
- >> Commercial Rubber
- >> Neoprene
- >> Nitrile
- >> EPDM
- >> Butyl
- >> Silicone
- >> Viton®
- >> Rubber Matting
- >> Insertion/Diaphragm Rubber
- >> Felt
- >> Nylon
- >> Gasket Paper/Cellulose Fibre
- >> Cork
- >> PTFE Extruded and Moulded Rod and Tube
- >> PTFE Sheeting: Virgin, Expanded or Filled
- >> PTFE Envelopes

## KITS

- >> Standard Kits
- >> Automotive Air Conditioning Kits
- >> Plumbers Kits
- >> Splicing Kits
- >> Bonded Seals Kits
- >> Grease Nipple Kits
- >> Bespoke Kits



The above tables are for information only, different compounds have varying properties.