### PROGRESSION CS PROGRESSION CS plus

## PROGRESSION CS / PROGRESSION CS plus

#### **Technical Data Sheet 150**

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Please see the latest issue at www.reinz- industrial.com

Material

**PROGRESSION CS** consists of a 0.25 mm thick steel core (ST2 K40), coated both sides with a 65 μm layer of high- grade nitrile rubber (NBR).

**PROGRESSION CS plus** has a 0.20 mm thick stainless spring steel core (1.4310), coated both sides with a 75  $\mu$ m layer of high- grade nitrile rubber (NBR).

**Properties** 

Gaskets made of **PROGRESSION CS** and **PROGRESSION CS plus** are always beaded. This gives these special rubber/ metal gaskets a unique combination of important sealing properties:

- very good conformability to irregular sealing surfaces
- utmost sealability against liquids and gases
- high elasticity of the installed gasket (recovery)
- mechanical strength

Furthermore, these gaskets exhibit very good thermal resistance and are resistant to oils, fuels, anti- freeze, refrigerants (Freons), biodegradable lubricants, and non-polar solvents.

**Application** 

For cylinder head gaskets or other sealed joints subjected to high mechanical and/ or thermal stresses, e.g. intake & exhaust manifolds, oil pans, valve covers, transmission flanges, axles, engine anicillaries and valves, as well as for housings, compressors, pumps, and refrigerating modules. Used especially for narrow sealing faces with low surface pressure.

**Surfaces** 

The gasket material is coated on both sides with a non- stick layer. Therefore, additional surface treatment is unnecessary in most cases.



### PROGRESSION CS PROGRESSION CS plus

Technical Data PROGRESSION CS: (nominal thickness 0.38 mm)	Weight per surface unit Progression CS Progression CS plus	kg/ m² kg/ m²	2.15 1.73
PROGRESSION CS plus: (nominal thickness 0.35 mm)	Residual stress acc. to DIN 52 913 16 h, 300 °C Swelling to ASTM F 146:	N/ mm²	> 45
•	in IRM 903 Oil (replaces ASTM Oil No. 3) 5 h, 150 °C increase in thickness	%	< 7
	in ASTM Fuel B 5 h, room temp. increase in thickness	%	< 10
	in water / anti- freeze (50:50) 5 h, 100 °C increase in thickness	%	< 5
	Short- term <b>peak temperature</b>	°C	240
	Operating temperature	°C	-40 up to +200



The data quoted above are valid for the material "as delivered" without any additional treatment. In view of the countless possible installation and operating conditions, definitive conclusions cannot be drawn for all applications regarding the behaviour in a sealed joint. Therefore, we do not give any warranty for technical data, as they do not represent assured characteristics. If you have any doubt, please contact us and specify the exact operating conditions.

# Form of delivery

**Gaskets** 

according to drawing, dimensions supplied, or other

arrangements, max. width 500 mm.

Nominal thicknesses and tolerances (mm)

**PROGRESSION CS** 

0.38  $\pm 0.04$ 

**PROGRESSION CS plus** 

0.35  $\pm 0.04$