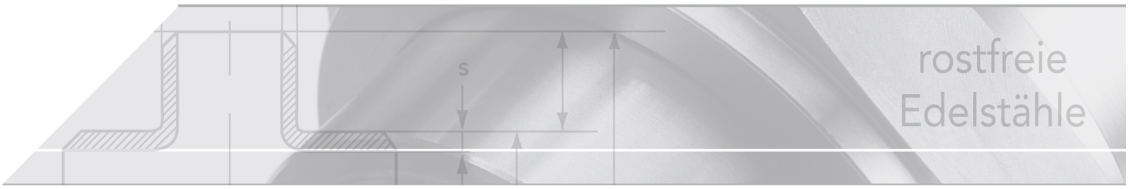
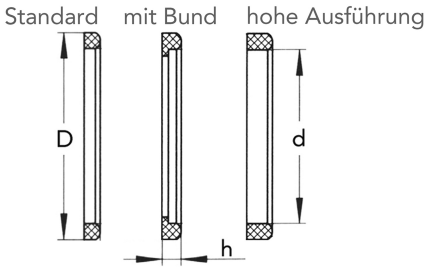


seal DIN 11851

short name: 211*



technical product sheet

Typ	DN	D	d	h	Nr.	Art.-Nr.
Standard	10	20	12	4,5	211	GL-211-010
Standard	15	26	18	4,5	211	GL-211-015
Standard	20	33	23	4,5	211	GL-211-020
Standard	25	40	30	5,0	211	GL-211-025
Standard	32	46	36	5,0	211	GL-211-032
Standard	40	52	42	5,0	211	GL-211-040
Standard	50	64	54	5,0	211	GL-211-050
Standard	65	81	71	5,0	211	GL-211-065
Standard	80	95	85	5,0	211	GL-211-080
Standard	100	114	104	6,0	211	GL-211-100
Standard	125	142	130	7,0	211	GL-211-125
Standard	150	167	155	7,0	211	GL-211-150
mit Bund	10	20	12	5,5	211B	GL-211-B10
mit Bund	15	26	18	5,5	211B	GL-211-B15
mit Bund	20	33	23	5,5	211B	GL-211-B20
mit Bund	25	40	30	6,0	211B	GL-211-B25
mit Bund	32	46	36	6,0	211B	GL-211-B32
mit Bund	40	52	42	6,0	211B	GL-211-B40
mit Bund	50	64	54	6,0	211B	GL-211-B50
mit Bund	65	81	71	6,0	211B	GL-211-B65
mit Bund	80	95	85	6,0	211B	GL-211-B80
mit Bund	100	114	104	6,0	211B	GL-211-BA0
mit Bund	125	142	130	7,0	211B	GL-211-BB0
mit Bund	150	167	155	7,0	211B	GL-211-BC0
hoch	25	40	30	8,0	211H	GL-211-H25
hoch	32	46	36	8,0	211H	GL-211-H32
hoch	40	52	42	8,0	211H	GL-211-H40
hoch	50	64	54	8,0	211H	GL-211-H50
hoch	65	81	71	8,0	211H	GL-211-H65
hoch	80	95	85	8,0	211H	GL-211-H80
hoch	100	114	104	8,0	211H	GL-211-HA0
hoch	125	142	130	8,0	211H	GL-211-HB0
hoch	150	167	155	8,0	211H	GL-211-HC0

available material: EPDM, HNBR, Perbunan, Silikon, Teflon, VITON

Beverage fittings › unions › seals

Typ	DN	D	d	h	Nr.	Art.-Nr.

Resistance list

Designation	Temperature	EPDM	NBR	Silicon	Viton
wine		1	1	2	2
fruit juice		1	1	2	3
beer		1	1	2	2
spices, cold		1	1	2	3
spices, hot		2	2	3	3
ethanol		1	2	2	2
whey	90°C	1	1	2	3
dairy product					
-"- max.13% Fett		1	1	2	2
-"- 13-38% Fett		2	1	2	2
-"- > 38% Fett		4	1	2	2
butterfat 98%	80°C	4	1	2	2
olive oil	80°C	4	1	2	1
water, demin.	80°C	1	2	2	3
hot water /vapor	150°C	1	2	2	4
acetic acid	23°C	1	1	1-3	4
acetic acid	80°C	1	3	1-3	4
nitric acid	80°C	1	2	2	4
CIP cleaning mea	80°C	1-2	2	2-4	3
caustic soda	80°C	1	1	2	2
ASTM Oil # 1		5	1	2	1
ASTM Oil # 2		5	1	4	1
ASTM Oil # 3		5	3	4	1
resistance<=150°		1	1	1	1
cold flexibility		1	3	2	3
wear resistance		2	1	4	2
notch impact str		2	1	3	2

Key:

1 negligible

2 minor influence

3 medium influence

4 major influence

5 unsuitable

EPDM

Ethylene-propylene-diene rubber

color

- black

Operating temperature

- Continuous operation from -40°C to 140°C
- Steam sterilizable to 130°C

typ. area of application

good swelling resistance for:

- Diluted anorganic and organic acids
- Bases
- Polar organic media
- Oxidizing media
- Bases and ketones
- In hot water and steam up to 130°C
- Good ozone, aging, and weather resistance

Application limits

not for use with:

- For plant and animal oils
- Aliphatic, aromatic and chlorinated hydrocarbons
- Mineral oils

Perbunan
(NBR)

color
- blue

operating temperature
- continuous operation from -25°C to 110°C
- Steam sterilizable for short periods to 130°C

typ. area of application
good swelling resistance for:
- Aliphatic hydrocarbons
- Propane
- Butane
- Gasoline
- Mineral oils
- Mineral oil-based fats
- Many diluted acids and bases (room temperature)

Application limits
not resistant for:
- polar solvents
- chlorinated hydrocarbons
- Ketones
- Aromatics (benzene)
- Esters

Silicon
(VMQ)

color
- brown-red
- optionally natural/ transparent

operating temperature
- Resistant in water up to 100°C
- Steam sterilizable for short periods from 120°C to 130°C
- Can be cleaned in weak acids and bases to 70°C - 80°C

typ. area of application
- High thermal load capacity
- Good resistance to cold
- Well-suited for foods
- Dielectric characteristics
- Very good resistance against oxygen and ozone
- Good resistance to alcohols
- Physiologically and dermatologically harmless

application limits
high swelling for:
- Low molecular weight esters and ethers
- Aliphatic and aromatic hydrocarbons
- Concentrated acids and alkalis

Viton
(FPM)

Farbe
- black

operating temperature
- Continuous operation from -25°C to 200°C
- Steam sterilizable for short periods to 130°C

typ. area of application
good swelling resistance for:
- Mineral oils
- Plant and animal oils
- Fats (also certain additives)
- Aliphatic and aromatic hydrocarbons
- Fuels

application limits
strongly swelling for:
- Polar solvents
- Acetone
- Methyl ketone
- Ethyl acetate
- Diethyl ether
- Low molecular weight organic acids (formic and acetic acids)
- Ammonia gases, amines
- Alkalis
- Dioxanes
- Overheated water steam

PTFE
(Polytetrafluorethylen z.B. Teflon)

color
- white

operating temperature
- continuous operation from -200°C to 230°C

typ. area of application
Extremely good chemical resistance to almost all media

application limits
- No elastic recovery
- After applying pressure, the material stays deformed