

# RTJ - ring type joints

## General characteristics

- RTJ are metallic sealing rings suitable for high pressure (up to 1500 bar) and high temperature (up to 1000 °C) applications
- RTJ are supplied in two basic profiles: oval (M8) or octagonal (M9)
- RTJ are always used in combination with special flanges which ensure good and reliable sealing with the correct choice of material and profile

## Recommended flange surface finish

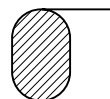
Profile R, RX: 1,6 (µm)

Profile BX: 0,8 (µm)

## Standard gasket profiles

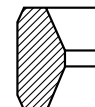
### M8-R oval

Model M8 is a standard RTJ of the oval type and designed for flanges with standard ring joint grooves.



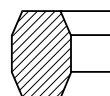
### M12-RX

Model M12-RX is for pressures up to 750 bar. The RX series RTJ are interchangeable with the standard R models. The bolt lengths must be extended because of the RX series additional height.



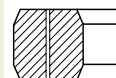
### M9-R octagonal

Model M9 is standard RTJ of the octagonal type and designed for flanges with standard ring joint grooves.



### M11-BX

M11-BX is RTJ for very high pressures - up to 1500bar. This RTJ is suited only for API-type BX flanges and grooves. Model BX incorporates a pressure balance hole to ensure equalisation of pressure.



## Standard core materials

CSN	AISI ASTM	DIN material No.	DIN specification	Hardness HB	Temperature [°C]		Density [g/cm³]
					Min.	Max.	
11 373, 11 375	Carbon steel	1.0038	RSt.37.2 CS	100 – 130	-40	+500	7,85
17 247	321	1.4541	X6CrNiTi 18-10	130 – 190	-250	+550	7,9
17 249	304L	1.4306	X2CrNi 19-10	130 – 190	-250	+550	7,9
17 251	309	1.4828	X15CrNiSi 20-12	130 – 190	-100	+1000	7,9
17 348	316Ti	1.4571	X6CrNiMoTi 17-12-2	130 – 190	-100	+550	7,8
17 349	316L	1.4404	X2CrNiMo 17-12-2	130 – 190	-100	+550	7,9