

# HEROCOMP PTFE COMPOUNDS COMP RJ SERIES



**Herocomp PTFE COMP RJ** is a **polytetrafluoroethylene (PTFE) compound** filled with **high temperature resistant organic filler**.

This special filler is added into high quality Virgin PTFE in different percentages in order to fulfill specific customer requirements. The family of **RJ Compounds** is particularly suitable for **medium loading applications in critical environmental conditions for dry running and oil-free maintenance applications**. The special formulation of this compound permits to obtain high performance technical components with a **very low coefficient of friction and a high wear resistance**, which means an **extended operating life-time of moulded parts, self-lubrication effect and low maintenance properties**.

## MAIN BENEFITS

- ✓ Very low coefficient of friction
- ✓ Self-lubricating effect
- ✓ Extreme long-term wear resistance
- ✓ High temperature resistance
- ✓ Resistant against aggressive chemicals for corrosion and rust free components
- ✓ Long term operating life

## PROCESSING

- ✓ Compression moulding
- ✓ Automatic moulding
- ✓ Isostatic moulding
- ✓ RAM extrusion

## APPLICATIONS

- ✓ Self-lubricated bearings and piston rings
- ✓ Sealing elements
- ✓ Technical components and shaped parts
- ✓ Skived films and sheets

Heroflon's Comp RJ Series includes compounds with **different percentages of filler, from 7% up to 30%**. Moreover these compounds can also be formulated with **Virgin Modified PTFE** base polymer.

Comp RJ Series available grades are: **Non Free-Flowing (NFF), Free-Flowing (FF), Free-Flowing High Density (FF/HD) and Pre-Sintered (E)**.

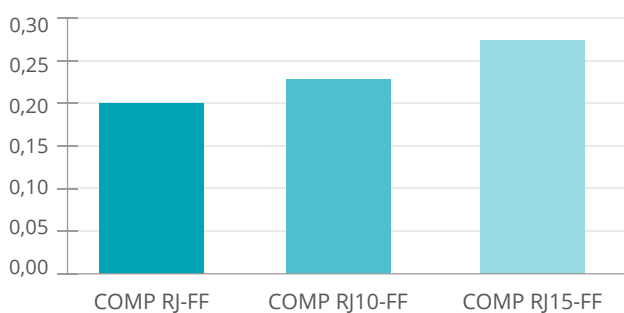


PROPERTY	TEST METHOD	UNIT	COMP.RJ-FF	COMP.RJ10-FF	COMP.RJ15-FF
Bulk density	ASTM D4894	g/l	640	610	610
Specific gravity	ASTM D4894	-	2,05	1,94	1,94
Tensile strength	ASTM D4894	MPa	22	15	15
Elongation	ASTM D4894	%	275	220	200
Hardness	NEEDLE	Shore D	60	60	60
Diametric shrinkage	INTERNAL	%	3,1	3,7	3,7
Coefficient of friction	ISO 7148	-	0,20	0,21	0,27
K Factor	ISO 7148	x10 <sup>-7</sup> mm <sup>3</sup> /N.m	8,5	3,9	3,3
Deformation under load @23°C (70°F), 13 MPa, 24 h	ASTM D621	%	4,8	5,0	5,2
Deformation under load @260°C (500°F), 4 MPa, 24 h	ASTM D621	%	6,2	6,3	6,4
PV Limit (P x V)	-	MPa m/s	0,21	0,23	0,26
Thermal linear expansion @150°C (302°F)	ASTM D696	mm/mm °C 10E-5	6,60	6,20	5,90
Thermal linear expansion @260°C (500°F)	ASTM D696	mm/mm °C 10E-5	8,10	7,80	7,20

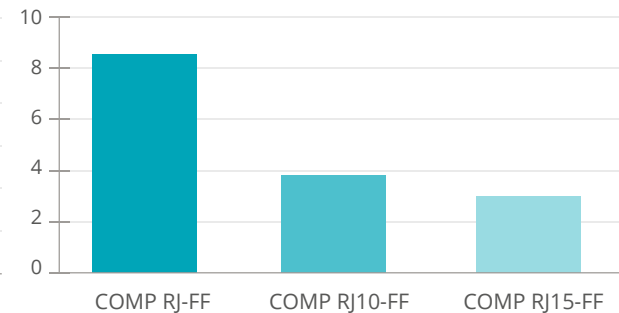
There are Typical Values not suitable for specification purposes

**FF:** Free-Flowing

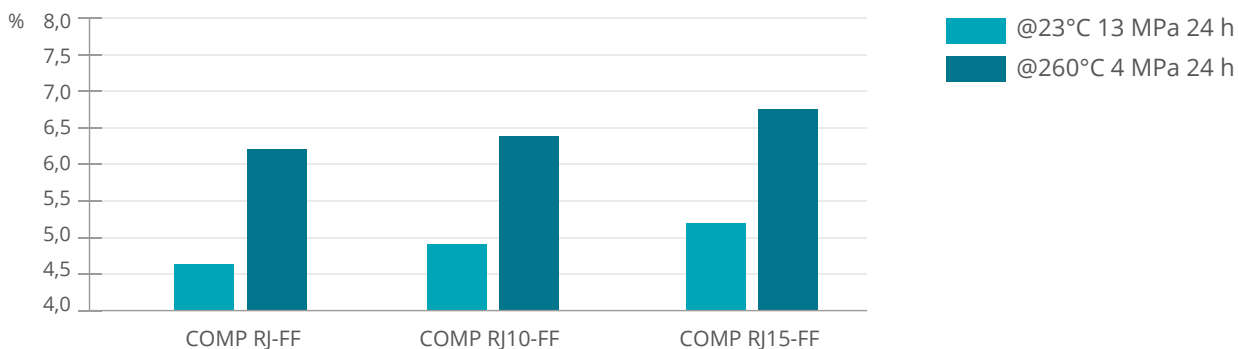
#### Coefficient of Friction



#### K Factor x10<sup>-7</sup> mm<sup>3</sup>/N.m 10



#### Deformation Under Load



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