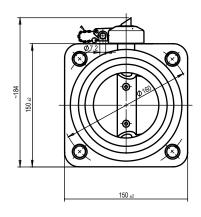


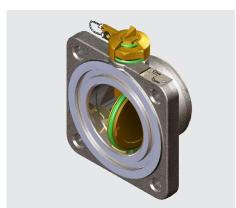
## **Comparison Radiator Valves**

metal-sealed and soft-sealed type

Characteristics	Type A / B	Type A OR / B OR
Sealing type (clap)	metal-sealed	soft-sealed (O-ring)
Valve body material	1.0570 / S355J2G3 (forged)	1.0570 / S355J2G3 (forged)
Valve body material optional	stainless steel 316L (forged)	stainless steel 316L (forged)
Stem tightening	isolated; thrust screw / member	isolated; thrust screw / member
Leakage in operation condition	none	none
Standard	DIN 42560 / EN 50216-8:2005	DIN 42560 / EN 50216-8:2005
Allowed leakage (clap)	< 0,5 dm <sup>3</sup> /h at 100 kPa; 30,5 cSt	none ≤ 100 kPa
Vacuum tightness (clap)	-	> 0,01 kPa (0,0014 psi)
Delivery condition	complete	assembly kit A OR / complete B OR
Maintenance	none	< 10 years







## Conclusion

On the one hand the metal-sealed valve is very durable and reliable along the transformer's lifetime and due to the metal sealing a very little internal leakage at the clap will occur. The soft-sealed valve with the O-ring gasket around its clap doesn't show any internal leakage neither under vacuum on the other hand but due to usual aging of the gasket compound the O-ring needs to be replaced after a proper time of use.

Taking this under consideration the metal-sealed valve should be the preferred solution for standard applications where a little leakage could be accepted while assembling/disassembling the transformers radiators.