



Vacuum interrupters and Embedded Poles

High competence technology.

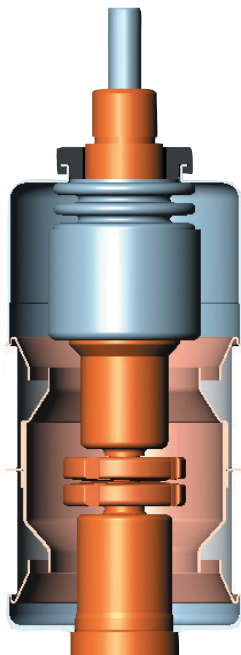
Vacuum interrupters

The interruption of current in vacuum is recognized as the ideal switching technology in the medium voltage range and is also applied in high and low voltage applications. Excellent switching capabilities combined with highest reliability as well as compact design make the most-economical switching device solutions possible.

The summary of benefits:

- Compact and robust design for highest demands
- Latest production and processes for high reliability and long life
- Silicone casting for outstanding external dielectric properties
- High quality management according to DIN EN ISO 9001
- Worldwide dominant switching-technology in the medium voltage range
- Environmental friendly and maintenance-free for life

The conduction and interruption of short circuit currents places great demands on the compact and functional design of a vacuum interrupter.



Vacuum interrupters preassembled under clean room conditions – Evacuating and brazing in one process to achieve the ultra-high vacuum.



Made by ABB –
Vacuum interrupters and Embedded Poles –
components for all your needs



Embedded Poles

ABB offers vacuum interrupters and Embedded Poles universal in application with more than 30 years of experience in vacuum technology.

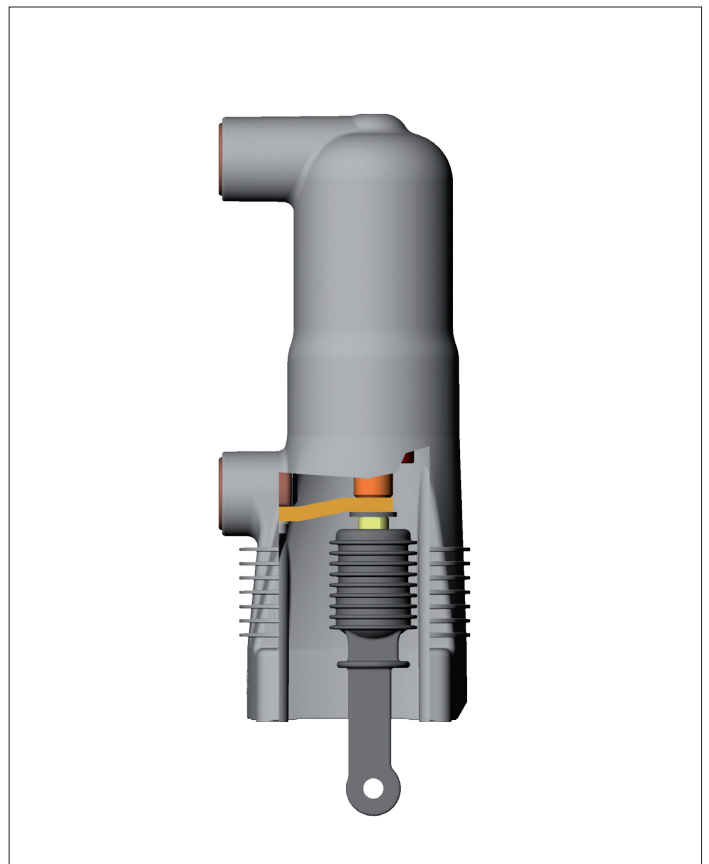
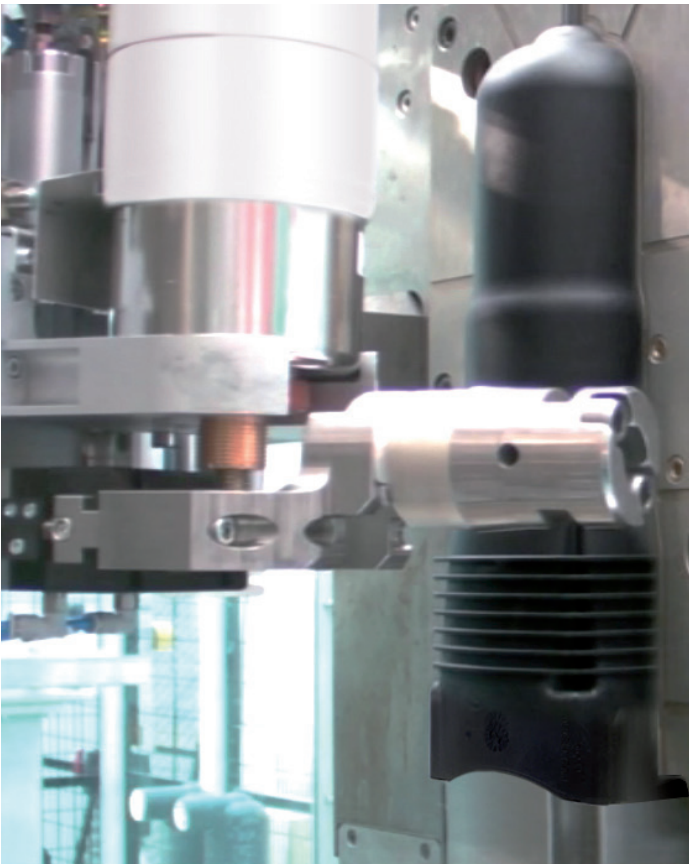
Best materials, the latest technologies and manufacturing processes are applied to ensure highest possible quality in series production.

The summary of benefits:

- High dielectric strength without any further external precautions
- Optimum protection of the vacuum interrupter from moisture, dust and external damage
- Suitability for different climatic conditions and altitude of site
- High reliability and long life
- Easy adaption on the circuit-breaker
- High quality standard and maintenance-free
- Efficient increase of the dielectric strength without usage of greenhouse gas

Embedded Poles in the mould – for specific applications, ABB also uses silicone in a special technique for direct embedding of vacuum interrupters.

Using a special casting technology, the vacuum interrupter is directly embedded. The maintenance-free vacuum interrupter thus forms a solid unit together with the complete pole.



Performance features at a glance.

Vacuum interrupters				
Type	Rated voltage	Rated current	Rated short-circuit breaking current	Mechanical operating cycles
VS1	7.2 kV	...400 A	...4 kA	...1,000,000
VS2	12 kV	...400 A	...4 kA	...1,000,000
VS4	24 ¹⁾ kV	...630 A	...4 kA	...30,000
VS5	27 ¹⁾ kV	...800 A	...4 kA	...30,000
VG5-L	27 ¹⁾ kV	...800 A	...4 kA	...30,000
VGE5 ²⁾	12/17.5 ¹⁾ kV	...630 A	...16 kA	...30,000
VG5 ²⁾	12 kV	...1250 A	...20 kA	...30,000
	17.5 ¹⁾ /24 ¹⁾ kV	...1250 A	...16 kA	...30,000
VGE4 ²⁾	12/17.5 ¹⁾ kV	...1250 A	...25 kA	...30,000
VG4 ²⁾	12/17.5 ¹⁾ kV	...2500 A	...25 kA	...30,000
	24 ¹⁾ kV	...2500 A	...20 kA	...30,000
VG4-S ²⁾	12/17.5 ¹⁾ kV	...2500 A	...31.5 kA	...30,000
	24 ¹⁾ kV	...2500 A	...25 kA	...30,000
VG10	36 ¹⁾ kV	...2000 A	...20 kA	...30,000
VG6 ²⁾	12/17.5 kV	...3150 A	...40 kA	...30,000
	24 ¹⁾ /36 ¹⁾ kV	...3150 A	...31.5 kA	...30,000
VG8 ²⁾	36 ¹⁾ kV	...3150 A	...31.5 kA	...30,000
VG8-S ²⁾	36 ¹⁾ kV	...3150 A	...40 kA	...30,000
VG7	12/17.5 kV	...3150 A	...50 kA	...30,000
VG11	12 kV	...3150 A	...63 kA	...10,000
VGHC2	1.2 kV	...3200 A	...65 kA	...100,000

¹⁾ Only with additional external insulation
²⁾ Vacuum interrupter in silicone embedding technique on request

Embedded Poles				
Type	Rated voltage	Rated current	Rated short-circuit breaking current	
Indoor				
PT1	12/17.5 kV	...1250 A	...31.5 kA	
PT2 *	12/17.5 kV	...2500 A ¹⁾	...40 kA	
P2	12/17.5 kV	3150 A ¹⁾	...40 kA	
P3	12/17.5 kV	...1600 A	...40 kA	
P7	12/17.5 kV	...3150 A ¹⁾	...50 kA	
P4	24 kV	...1250 A	...25 kA	
P4-S	24 kV	...1250 A	...20 kA	
P5	24 kV	...2500 A ¹⁾	...31.5 kA	
P6	36/40.5 kV	...2500 A	...40 kA	
Outdoor				
OP0	...12 kV	...630 A	...20 kA	
OP1	...27 kV	...1000 A	...16 kA	
OP2	...38 kV	...1200 A	...16 kA	

* Pole available soon
¹⁾ 2500 A/3150 A with heat-sink

- Detailed dimensions and data sheets on request
- All data must be verified by customer test

Higher values on request

Contact us

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