



Embedded Poles

Embedded Poles

High dielectric strength without any further external measures

Optimum protection of the vacuum interrupter from moisture, dust and external damage

Suitable for different climatic conditions and altitudes of site

High reliability and long life



Embedded Poles

Easy adaption to circuit-breaker

Maintenance-free

High quality standard





Manufacturing Execution System (MES) enabled

Efficient increase of the dielectric strength without usage of green-house gas



Embedded Poles

For indoor application (standard)

PT1	P3	P4	P4-S
			
VGE4 / VG4 / VG4-S / VGE4-S	VG4 / VG4-S / VG6	VG5 / VG4 / VG4-S	VG5 / VG4
12 / 17,5 kV	12 / 17,5 kV	24 kV	...24 kV
...1250 A	...1600 A	...1250 A	...1250 A
...31,5 kA	...40 kA	...25 kA	...20 kA
...95 / 42 kV ¹⁾	...95 / 42 kV ¹⁾	...125 / 50 kV ¹⁾	...125 / 50 kV ¹⁾
50.000 ²⁾	30.000 ²⁾	30.000 ²⁾	30.000 ²⁾

¹⁾ Rated lightning impulse withstand voltage / rated power frequency withstand voltage
²⁾ Mechanical operating cycles

Embedded Poles

For indoor application (high current)

PT2



VG4-S / VG6

12 / 17,5 kV

...3150 A¹⁾

...40 kA

...95 / 42 kV²⁾

50.000³⁾

P2



VG4-S / VG6

12 / 17,5 kV

3150 A¹⁾

...40 kA

...95 / 42 kV²⁾

30.000³⁾

P5



VG4-S / VG6

24 kV

...2500 A¹⁾

...31,5 kA

...125 / 50 kV²⁾

30.000³⁾

P6



VG6 / VG8 / VG8-S

36 / 40,5 kV

...2500 A

...40 kA

...200 / 95 kV²⁾

30.000³⁾

P7



VG7

12 / 17,5 kV

...3150 A¹⁾

...50 kA

...95 / 42 kV²⁾

30.000³⁾

Embedded Poles

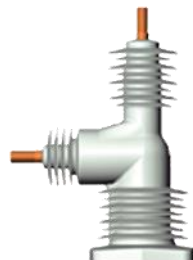
For outdoor application

OPO



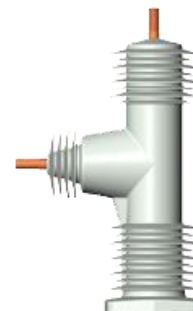
12 kV
...630 A
...20 kA

OP1



15 / 27 kV
...1000 A¹⁾
...16 / 12 kA¹⁾

OP2

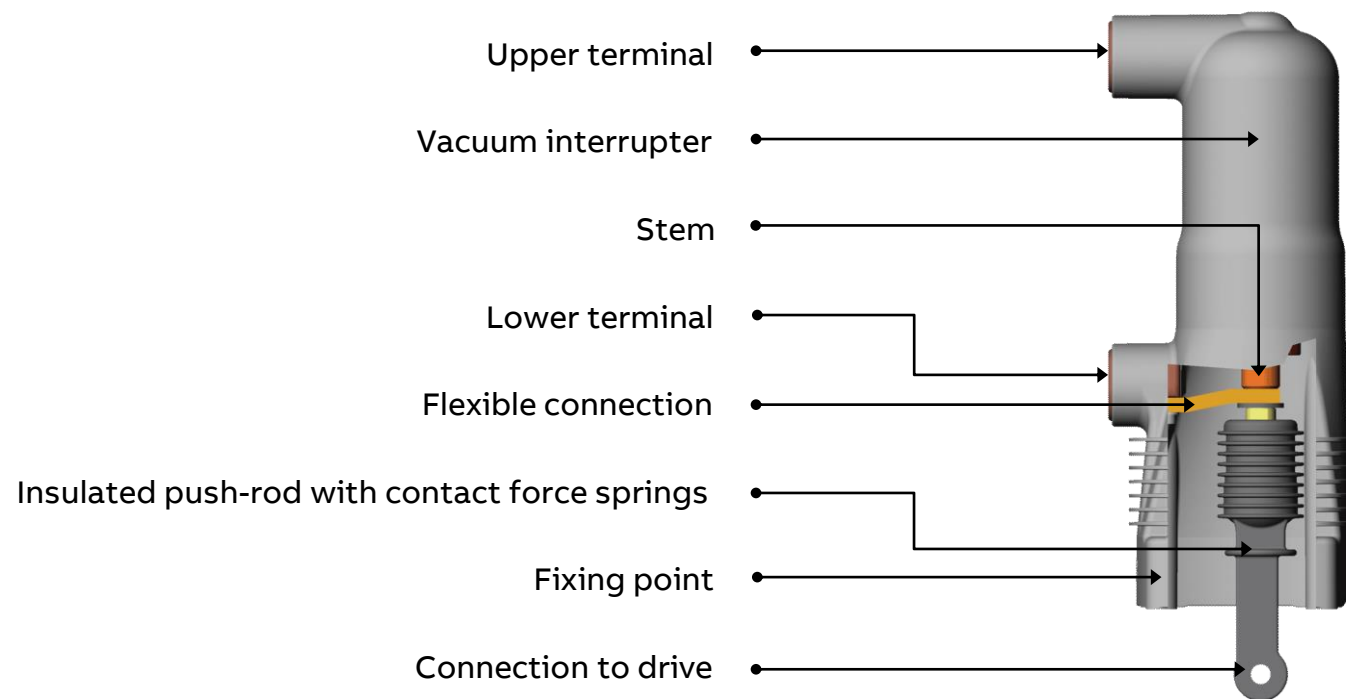


38 kV
...1200 A¹⁾
...16 kA¹⁾

Embedded Poles

Innovative Technology

Schematic diagram



Embedded Poles

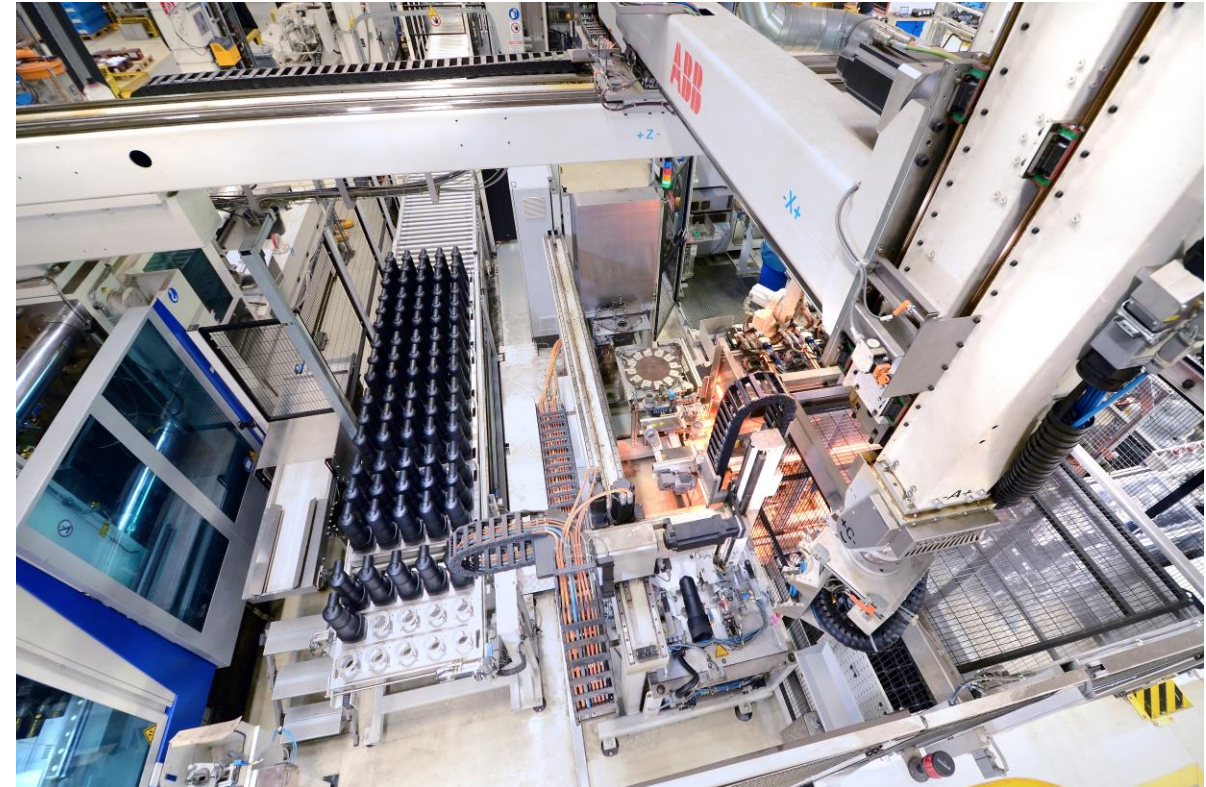
State-of-the-art manufacturing process

Latest manufacturing methods guarantee process stability and quality at reduced environmental stress

Consistent development of products and processes

Control and monitoring of all essential process parameters

Efficient increase of the dielectric strength without usage of greenhouse gas



Embedded Poles

Quality control

Verification of dimensional conformity

Measurement of voltage drop across the pole

Mechanical function test

Checking of contact spring force

Examination by visual assessment



Embedded Poles

Applications as core components

The applications as core components include

- Power plants
- Transformer substations
- Chemical industry
- Steel industry
- Automobile industry
- Airport power supply
- Shipbuilding
- Power supply to buildings



Vacuum Interrupters and Embedded Poles from ABB

Our values for the customer

Quality & Support



- Individual customer solutions and support (e.g. short leadtimes)
- Full access to technical competence and test labs (e.g. type test support)
- Dedicated customer support for day-to-day issues

Reliability & Performance



- Latest production and extended quality methods with high degree of automation (e.g. series X-ray check)
- Benefit from the large production volume (global supplier base with full risk management)
- Proven in all ABB vacuum products

Innovation



- Innovations on ABB components give competitive advantages for our partners
- Full in-house contact production and material control (z.B. batch-wise real-life making/breaking tests)
- Full access to latest embedding technologies

**The right core
component for your
apparatus**

ABB