

Braking module expandable without modification

The braking module holds rotors securely in brake position.

The braking module from HAWE Hydraulik SE, Munich, for hydraulically operated rotor brakes on a wind turbine is a compact unit requiring little space. It contains a 3-way pressure reducing valve with zero-leakage in closed position due to its construction as a seated valve. This means it maintains the pressure at the brake in an emergency or in case of loss of the power supply even over a period of days, in compliance with the requirements of German Lloyd. An integrated safety valve function provides additional security if external forces act on the rotor in windy weather. This combination in a single cartridge valve is unique on the hydraulics market.

The pressure reducing valve can be used for a working pressure of up to max. 380 bar and a pump pressure up to max. 500 bar. Volume flows up to max. 22 l/min. are possible.

HAWE Hydraulik uses steel for all pressurized parts and can thus manufacture components of great compactness and strength. The braking module is mounted directly on the valve control block. If the turbine manufacturer requires any additional or different functions not contained in the braking module after the hydraulic system has been put into operation, the braking module remains as it is because these functions are implemented via conventional intermediate plates with industrial standard connection hole pattern NG 6. These are flanged onto the valve control block under the braking module.

The braking module is suitable for rotors of wind turbines with a generating capacity from 10 kW up to several megawatts.

