Information about protection class IP69K

Testing criteria for system of protection IP69K according to DIN 40050-9:1993

Test conditions for 1st Characteristic number (6)

Degree of protection against solid foreign matter IP 6X (dust-tight), vacuum test with dust/air mixture

Vacuum:	≤ 2kPa (20mbar)
Testing time:	8 h
Testing dust:	Talcum powder
Grain size distribution:	≤ 50µm - ≥75µm

Test conditions for 2nd Characteristic number (9K)

System of protection test against penetration of water

Testing device	high pressure water jet / fan nozzle
Spraying angle	0°-30°-60°-90°
Distance	100 – 150mm – on turntable – rpm (5 ±1) 1/min
Water flow	14 – 16l/min ± 5%
Water pressure	8000 – 10000 kPa (80 – 100bar)
Water temperature	80°±5°C
Testing time	30 sec. for every position

Definition of the first characteristic number (6)

Characteristic number	Short description	Definition
6	Dust tight	No dust penetration

Definition of the second characteristic number (9K)

Characteristic number	Short description	Definition
9K	Protected against water penetration during cleansing with high pressure jet / steam jet	A water jet being squirted from any direction under very high pressure against the enclosure may cause no damage.