



The metallized clamping insert ensures a secure 360° contact to the shielding braid and thus permanent EMC protection even in dynamic applications.

Photo: HUMMEL AG

EMC protection even in dynamic applications

EMC cable gland HSK-M-EMC-D relies on the clamping insert principle

Electromagnetic interference can cause lasting disruption to the functioning of electrical equipment. Shielded cables protect the signal lines from these interference influences - but only until they are inserted into a housing or control cabinet. At these critical transitions, it is the task of the cable gland to protect the exposed lines inside the housing from electromagnetic waves. It dissipates these waves via the surface of the housing, thereby using the principle of the Faraday cage to protect the cabling and the components inside.

Component manufacturers use a wide range of techniques for EMC protection. However, a clamping element integrated in the cable gland has proven its worth, which ensures a complete contact of the shielding braid. The cable gland HSK-M-EMC-D EMC from HUMMEL AG also follows this principle. When the union nut is tightened, the metallized clamping body is fixed to the shielding all round. The advantage: this design also withstands dynamic applications. There can be no gaps in the connection due to assembly errors or material fatigue. The 360° protection is permanently guaranteed.

In addition, the assembly time for the premium screw connection HSK-M-EMC-D is significantly shorter. With conventional systems, the shielding has to be laboriously separated, precisely fitted and fixed. With the clamping insert principle, it is not even necessary to separate the shielding. The cable is stripped in the relevant area, the cable gland with the integrated clamping element is positioned and tightened. The HSK-M-EMC-D is certified according to UL, cUL and NEMA. This is important for all machine and plant manufacturers serving the North American market. UL certification is virtually obligatory there, because without UL there is no insurance cover. Plant manufacturers have clear

advantages if they can present certificates for all their components and assemblies. This saves time and costs on site when commissioning the machines. The NEMA protection classes are only partially comparable with the European concept of IP protection classes. NEMA distinguishes between indoor and outdoor applications. That is why machine builders have to look very carefully. An indoor certificate for a component is of little use if the system will later be outdoors. The EMC cable glands from HUMMEL AG are available in metric, NPT and PG thread types. Ex-versions for potentially explosive atmospheres are also available. The cable glands fulfil protection class IP68 / IP 69K.

