

**Operating and assembly instructions for cable glands (KV/CG)
 of the ignition protective class Ex "e"**

Type: U 2. UNI Ex e, brass nickel-plated

Application

The cables glands (KVs/CGs) U 2. UNI Ex e are used to insert permanently laid lines and cables into a connection space or housing of an explosion-protected electrical operating material of the appliance group II and categories 2 G/D and 3 G/D. The connection space or housing must conform to the ignition protective class "Increased safety – Ex e" in accordance with the standards EN 60079-0:2004, EN 60079-7:2003 and EN 50281-1-1:1999.

The KLE is suitable for operating material with the degree of mechanical risk "high" as per EN 60079.

In selecting the material for the sealing insert, the ambient, surface and operating temperature at the installation point is to be observed.

With proper assembly of the KLE, the protective class IP 68 according to IEC 529 or EN 60529 can be attained.

Designation

The KLE U 2. UNI Ex e conforms with the standards EN 60079-0:2004, EN 60079-7:2003 and EN 50281-1-1:1999. They were subjected to an EC design test in accordance with EC directive 94/9/EC by the Physical-Technical Federal Institute (PTB).

They are therefore designated as follows:

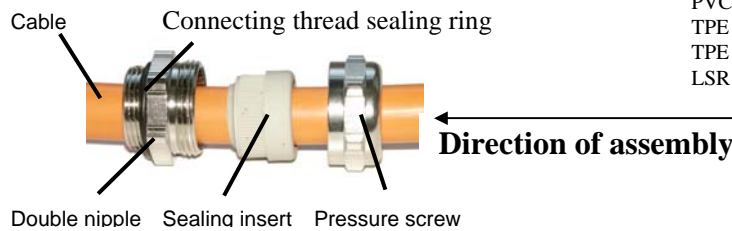
⊕ Ex II 2 G/D Ex e II PTB 98 ATEX 3109 IP 68 XX CE0102

and with the connecting thread type and size, e.g. M 16 or Pg 21.

Application temperature range:

Material	Temperature range
PVC	- 20° C - + 85° C
TPE - V	- 40° C - + 135° C
TPE	- 40° C - + 115° C
LSR	- 60° C - + 180° C

Assembly



The Pflitsch socket spanner M28 can be used as a tool.

Minimum wall thicknesses for installation in appliances with threaded holes: 5.0 mm (plastic); 3.0 mm (metal)

Minimum wall thicknesses for installation in appliances with throughholes: 2.0 mm (plastic); 1.0 mm (metal)

Pointer for strain relief of the cable gland:

The KLE with the standard pressure screw is only suitable for permanently laid lines and cables. In this case, the operator must adopt appropriate measures to ensure strain relief.

Sealing rings must not be cut out with a knife

Housing holes that are not used must be sealed with an Ex closure plug. KLEs with corresponding thread sizes are to be sealed with a closed sealing insert or with a UNI Ex e blind sealing insert. Non-used holes of multi-sealing inserts are to be sealed with a bolt.

Disassembly:

Disassembly is carried out in the reverse order.

Maintenance:

The KLEs are to be included in the inspection and maintenance of the electrical operating material.

Connection dimensions for throughholes										
metr.	M 10	M 12	M 16	M 20	M 25	M 32	M 40	M 50	M 63	M 72
d [mm] 0/+ 0,3	10,0	12,0	16,0	20,0	25,0	32,0	40,0	50,0	63,0	72,0
Pg	7	9	11	13,5	16	21	29	36	42	48
d [mm] 0/+0,3	12,5	15,5	19	20,5	22,5	28,5	37	47	54	59,5
NPT	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
d [mm] 0/+0,3	17,1	21,3	26,6	33,3	42,0	48,1	60,1			

Tightening torque

thread	M10	M12	M16	M20	M25	M32	M40	M50	M63	
Nm	6	6	8	10	10	15	20	20	20	
thread	Pg 7	Pg 9	Pg 11	Pg 13,5	Pg 16	Pg 21	Pg 29	Pg 36	Pg 42	Pg 48
Nm	6,25	6,25	6,25	6,25	7,5	10	10	10	10	10