



ENCLOSURE OPTIONS

KB DRAINS / BREATHERS

ATEX/IEC Ex Certified



KB1-4X



KB1BCEN



KB1DCEN

Class I, Div. 1 & 2, Groups B^①, C, D
Class I, Zones 1 & 2, Groups IIB + H2^①
Class II, Div. 1 & 2, Groups E, F, G
Class III, Enclosure Type 3, 4 & 4X^③
II 2 G Ex d IIB IIC^② T226°C Gb IP44
Ta = -50°C to +60°C

UL Listed - File E10514
cSP US Certified - File LR11716
FM Approved Certified File 25215
IEC Ex CSA 10.0007U
SIRA 10ATEX1351U



- ① See chart below for suitability
② Warning – not for use in acetylene atmosphere
③ Enclosure Type 4 & 4X for KB1-4X and KB1-4XS6 only

Applications

When installed in the top of an enclosure, these fittings act as breathers which allows air flow through the enclosure. Bottom installations permit water from condensation to drain from the enclosure continuously. The drains and breathers are offered in a variety of hub sizes, 1/4, 3/8 & 1/2 inch NPT and metric M16 & M20.

Body Material

Aluminum with optional stainless steel or brass available for special orders.

Volume

For use in enclosures with a maximum internal volume to 9526 cubic inches or 160 liters.

CATALOG NUMBER	THREAD SIZE	BODY MATERIAL	THIRD PARTY	SUITABILITY USA	THIRD PARTY	SUITABILITY CANADA	THIRD PARTY	SUITABILITY ATEX/IEC Ex
KB1BCEN BREATHER KB1DCEN DRAIN KB1M20BCEN BREATHER KB1M20DCEN DRAIN	1/2 NPT 1/2 NPT M20 M20	ALUMINUM ALUMINUM ALUMINUM ALUMINUM	CSAus CSAus CSAus CSAus	CLASS I GROUPS B, C & D CLASS I, ZONES 1 & 2 GR IIB+H2 CLASS II GROUPS E, F, & G CLASS III ENCL TYPE 3	c CSA c CSA c CSA c CSA	CLASS I GROUPS C & D CLASS I, ZONES 1 & 2 GR IIB CLASS II GROUPS E, F & G CLASS III ENCL TYPE 3	SIRA/CSA SIRA/CSA SIRA/CSA SIRA/CSA	II 2 G Ex d IIC T226°C Gb IP44 ^②
KB1-4X KB1-4XS6	1/2 NPT 1/2 NPT	ALUMINUM 316SS	UL CSAus UL CSAus	CLASS I GROUPS B, C & D CLASS I, ZONES 1 & 2 GR IIB+H2 CLASS II GROUPS E, F, & G CLASS III ENCL TYPE 3 TYPE 3, 4 & 4X	c CSA c CSA	CLASS I GROUPS C & D CLASS I, ZONES 1 & 2 GR IIB CLASS II GROUPS E, F & G CLASS III ENCL TYPE 3 TYPE 3, 4 & 4X	N/A	N/A

Note: See Fitting Section for dimensions

KDE SERIES DRAIN BREATHER

Applications

When installed in the bottom of a thin wall enclosure the KDE allows water from condensation to drain continuously out of the enclosure. The drain breathers are installed through clearance holes and held secured with a internal locknut. The silicone external o ring makes a hose down tight seal.

Features

- Sealing o-ring supplied as standard and suitable for use in a -55°C to +80°C temperature range.
- Variety of thread sizes 1/2 & 3/4 NPT, 1/2 & 3/4 NPSM, M20 & M25.
- Available in 300 series stainless steel, 316 stainless steel, aluminum and 30% glass filled nylon.
- Internal 316 stainless steel locknut supplied as standard. When tighten to the proper torque the joint makes a hose down tight seal for type 4, 4X & IP66 application.

Materials



KDEGF0M20



KDES60M20

- 303 or 304 stainless steel, 316 stainless steel, brass, aluminum or 30% glass filled nylon.
- Internal locknut 316 stainless steel.
- High temp silicone o-ring

Class I, Div. 2, Groups A, B, C, D
Class I, Zone 1 & 2, Ex e / AEx e IIC,
A/Ex tb
Class II, Div. 1^① & 2, Groups E, F, G
Class III, Ambient Temperature Range
-55°C to +80°C
Enclosure Type 3, 4 & 4X^② IP66

Ex II 2 G D CE 0518
Ex e IIC Gb
Ex tb IIIC Db IP66
Ta = -55°C to +80°C

cSP US 2714851
CML 15ATEX3028X
IECEx QPS 15.0002X
Seguranc Ex IEx 15.0154X INMETRO

- ① Class II Div. 1 Canada only, Div. 2 in the US
② Type 4X in 316 & 304 SS, Aluminum & Nylon Materials



MATERIAL / CATALOG NUMBER					
ENTRY THREAD SIZE & TYPE	GLASS FILLED PA6 NYLON	ALUMINUM	316 STAINLESS STEEL	BRASS	NICKEL PLATED BRASS
M20	KDEGF0M20	KDEAL0M20	KDES60M20	KDEBR0M20	KDEBR1M20
M25	KDEGF0M25	KDEAL0M25	KDES60M25	KDEBR0M25	KDEBR1M25
1/2" NPT	KDEGF0050	KDEAL0050	KDES60050	KDEBR0050	KDEBR1050
3/4" NPT	KDEGF0075	KDEAL0075	KDES60075	KDEBR0075	KDEBR1075

Note: Other thread forms and materials available upon request.