



## TECHNICAL DATA

### DCM NOZZLE FOR OXEO PR FIRE EXTINGUISHING SYSTEM (NITROGEN AND ARGON)

The Viking Corporation | 210 N Industrial Park Drive | Hastings MI 49058

Viking Special Hazards | Technical Services: 877-384-5464 | Email: techsvcs@vikingcorp.com | www.vikinggroupinc.com

The technical data described herein is for components of the Viking Oxexo PR Fire Extinguishing Systems.

Visit the Viking website for the latest edition of the technical data and system manuals.

### 1. DESCRIPTION

The Viking Oxexo DCM nozzle may only be used as room protection nozzles in stationary Oxexo PR Fire Extinguishing Systems utilizing Argon (IG-01) or Nitrogen (IG-100). The Viking Oxexo DCM nozzles are installed to distribute the extinguishing agent evenly in the extinguishing zone in the calculated flooding time. The nozzle is provided with threads on the inlet and outlet side to enable mounting of the nozzle from the outside, for example, in bag houses, dust collectors and machining centers.

### 2. LISTINGS AND APPROVALS



UL Listed\* - EX5248



ULC Listed\* - EX5248



FM Approved: Clean Agent Fire Extinguishing System

\*Listed as a component of an Oxexo PR Fire Extinguishing System

### 3. TECHNICAL DATA

#### Specifications

- Argon (IG-01) or Nitrogen (IG-100)
- Connecting Thread: 1/2" NPT or 3/4" NPT
- Temperature Range: -4 °F to 122 °F
- Minimum Nozzle Pressure:
  - Argon: 448.0 PSI
  - Nitrogen: 367.4 PSI

#### Material Standards

- Body: Stainless Steel, UNS-S31600

#### Accessories

##### Required:

Dust Protection Seal, 1/2" NPT or 3/4" NPT, **FM Approved only**

- **Material:** Aluminum Foil with Klingersil

##### Optional:

Flange, 1/2" NPT or 3/4" NPT (**Not part of nozzle approval**)

- **Material:** Stainless Steel, 302, Class 150 Fitting

**Ordering Information: Refer to Table 1.**

### 4. INSTALLATION

The nozzle must be located 1' from the top of the enclosure in order to achieve proper distribution of agent. The DCM nozzle is provided in either 1/2" NPT or 3/4" NPT thread on the inlet and outlet. With proper installation material, the nozzle can be mounted from the outside in bag houses, dust collectors and machining centers. To prevent obstructions to the nozzle orifice, the foil gasket must be used. The nozzle must be installed in the calculation area and should never be directly over sensitive equipment or devices. Modifications to the DCM nozzles are not allowed.

### 5. MAINTENANCE

At least once a year, service and maintenance must be performed on the nozzle to ensure it's operation.

1. Nozzles must be removed from the piping and the orifice of the nozzle be cleaned of any debris that may have accumulated. This is done by carefully blowing compressed air into the nozzle. Once this is completed, the nozzles may be re-installed.
2. If there are any nozzles that have been damaged, they must be replaced. They cannot be repaired or reconditioned and re-installed.
3. Spare nozzles should always be stored in their original packaging in dry conditions and protected against damage.



**WARNING:** Cancer and Reproductive Harm-  
www.P65Warnings.ca.gov



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**TABLE 1: ORDERING INFORMATION**

1) SELECT ORIFICE DIAMETER AND THEN 2) SELECT PART NUMBER TO THE LEFT OF ORIFICE DIAMETER

1/2" DCM Nozzle				3/4" DCM Nozzle	
Part Number <sup>1</sup>	Orifice Dia. (inch)	Part Number <sup>1</sup>	Orifice Dia.(inch)	Part Number <sup>1</sup>	Orifice Dia. (inch)
23379-0118	.118	23379-0256	.256	24245-0413	.413
23379-0122	.122	23379-0268	.268	24245-0433	.433
23379-0126	.126	23379-0283	.283	24245-0453	.453
23379-0134	.134	23379-0299	.299	24245-0472	.472
23379-0142	.142	23379-0315	.315	24245-0492	.492
23379-0150	.150	23379-0331	.331	24245-0512	.512
23379-0157	.157	23379-0346	.346	24245-0531	.531
23379-0165	.165	23379-0362	.362	24245-0551	.551
23379-0173	.173	23379-0378	.378	24245-0571	.571
23379-0181	.181	23379-0394	.394	24245-0591	.591
23379-0189	.189	23379-0413	.413	24245-0610	.610
23379-0197	.197	23379-0433	.433	24245-0630	.630
23379-0209	.209	23379-0453	.453	24245-0650	.650
23379-0220	.220	23379-0472	.472	24245-0669	.669
23379-0232	.232	23379-0492	.492		
23379-0244	.244				

**Accessories**

**Dust Protection Seal, 1/2"**: Part Number 24454

**Dust Protection Seal, 3/4"**: Part Number 24455

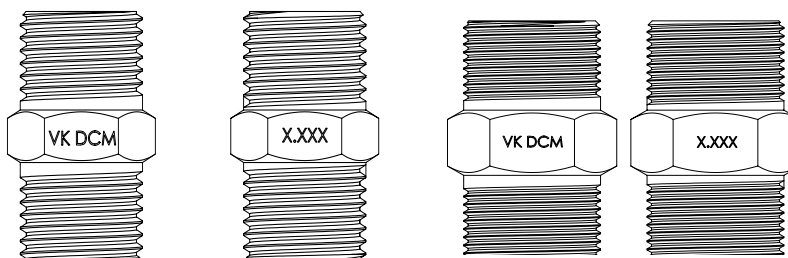
**Flange, 1/2" NPT**: Part Number 24459 (Optional)

**Flange, 3/4" NPT**: Part Number 24460 (Optional)

**Footnote**

<sup>1</sup> In Design Manager, the "-" will not appear in the part number.

One wrench boss will have the manufacturer initials (VK) and the model of the nozzle (DCM). The opposite wrench boss will have the orifice diameter (inch) (X.XXX).



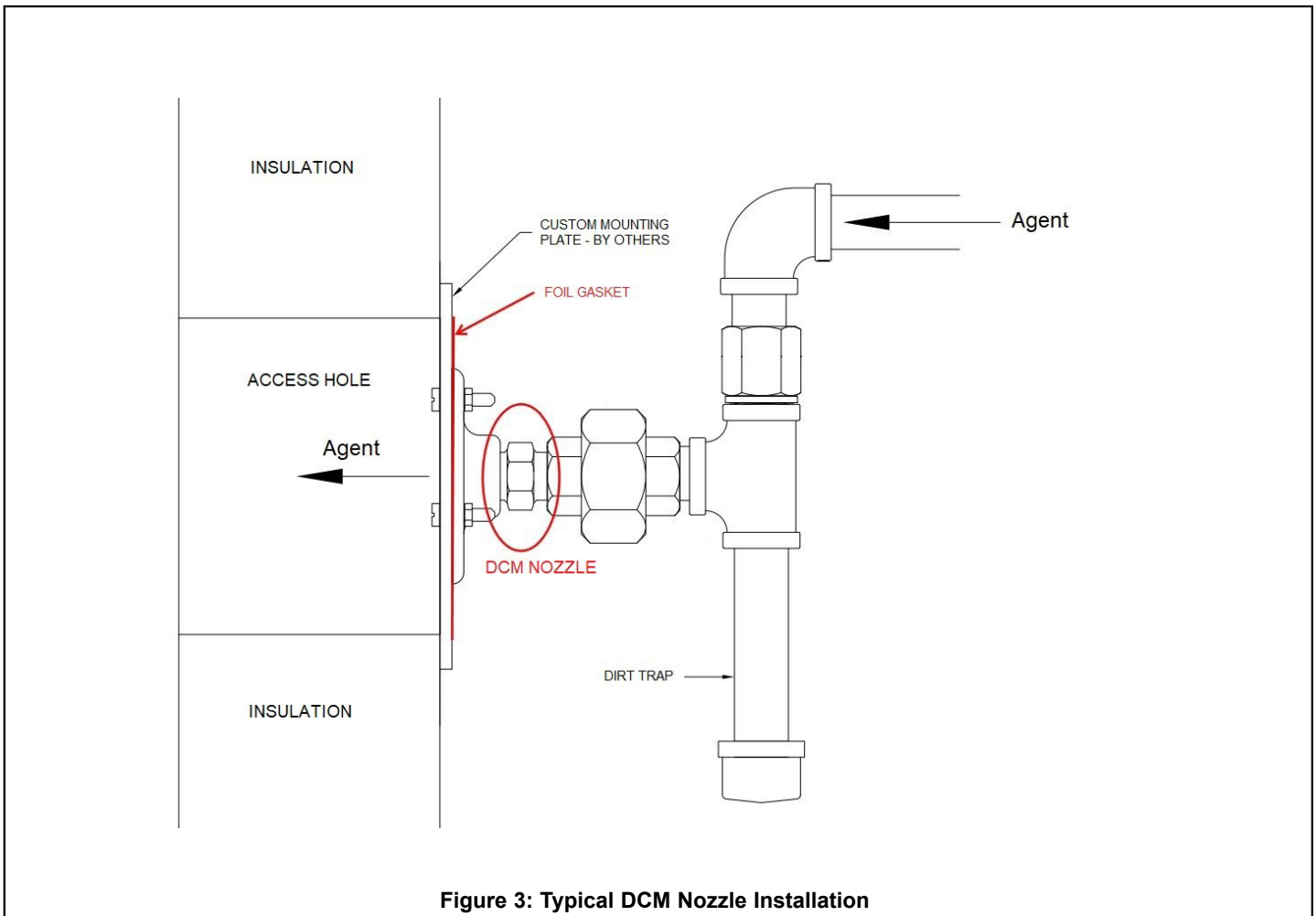
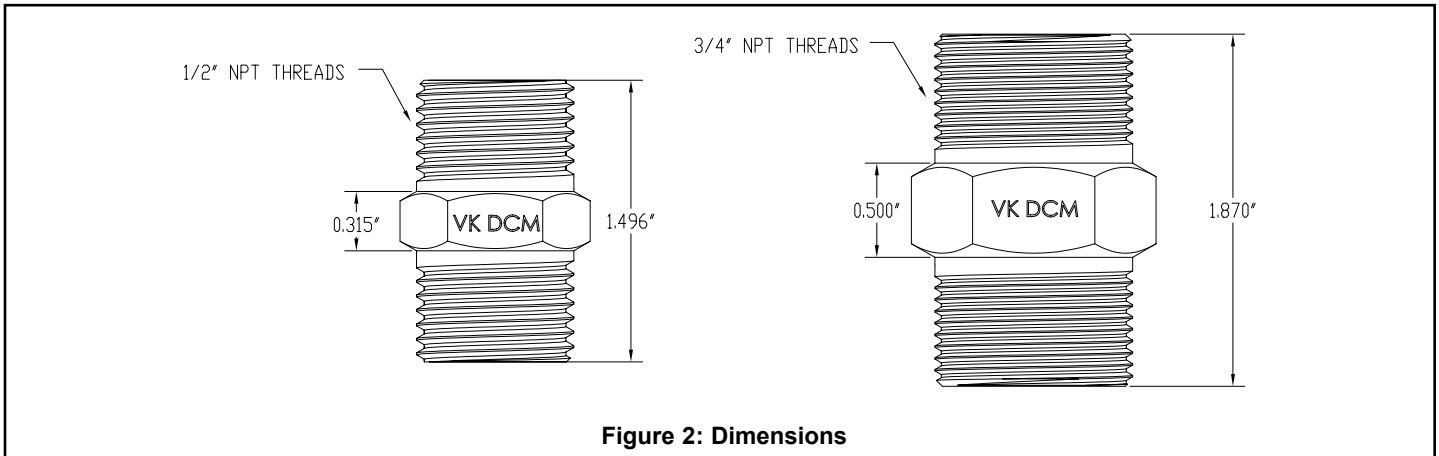
**Figure 1: Nozzle Markings**



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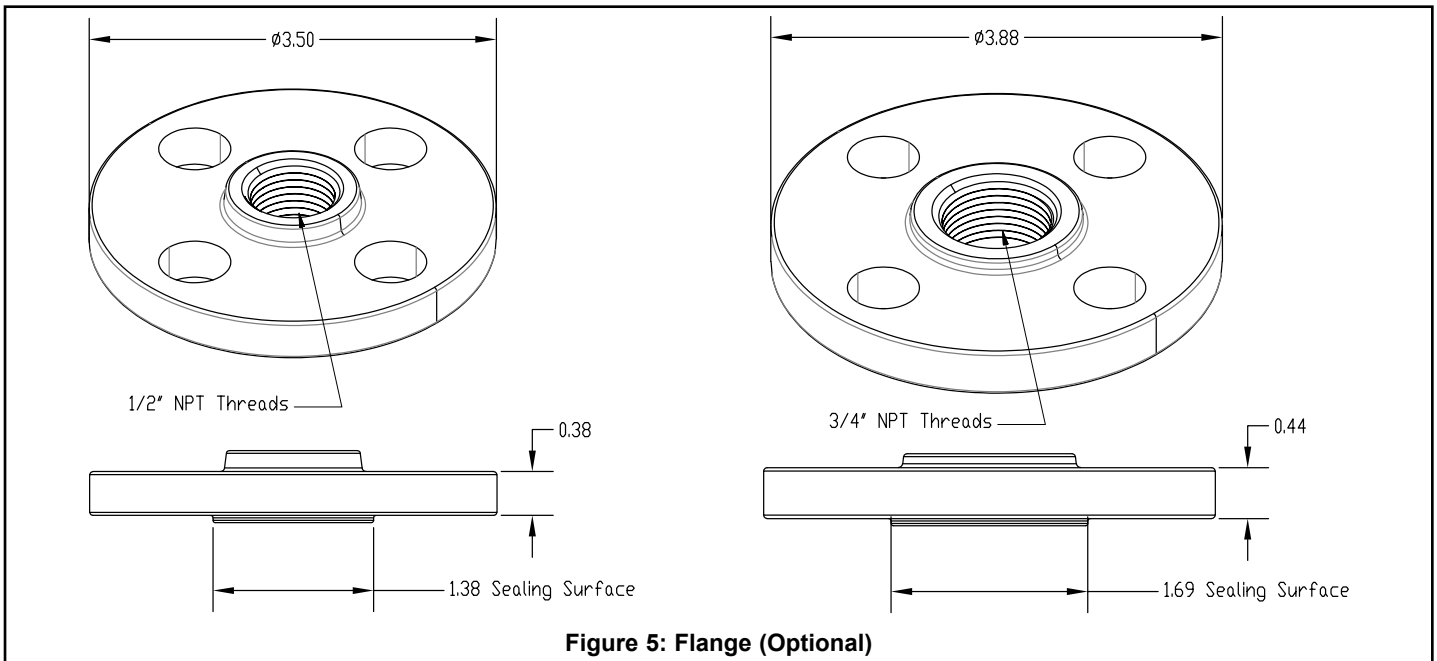
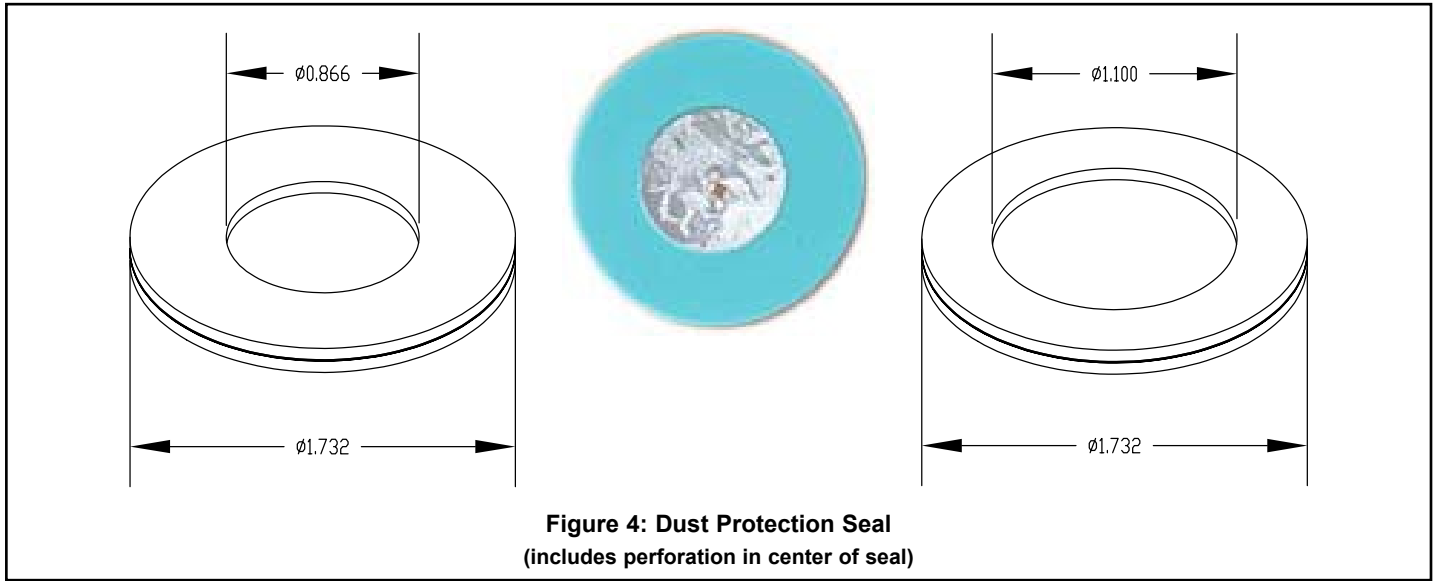




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FLAMMABLE LIQUID CONCENTRATIONS - DCM NOZZLES		
FUEL	IG-100	IG-01
Acetone	48.9	56.2
Acetonitrile	48.9	56.2
Aviation Gas	48.9	56.2
Benzene	48.9	56.2
Diesel No. 2	49.5	56.8
Ethane	49.5	56.8
Ethyl acetate	50.3	57.7
Ethyl alcohol	59.9	68.8
Ethylene glycol	56.1	64.5
Gasoline-NoLead	51	58.5
Heptane, commercial	48.9	56.2
i-Octane	48.9	56.2
i-Propyl alcohol	55.4	63.6
Kerosene	51.0	58.5
Lube Oil @500F	52.5	60.2
Methane	48.9	56.2
Methyl alcohol	71.7	82.3
Methyl isobutyl ketone	51.8	59.4
Morpholine	58.4	67.1
n-Butane	48.9	56.2
n-Heptane	48.9	56.2
n-Hexane	49.5	56.8
n-Octane	50.3	57.7
n-Pentane	48.9	56.2
n-Propyl alcohol	56.9	65.3
Propane	49.5	56.8
Tetrahydrofuran	54.6	62.8
Toluene	48.9	56.2
Transformer Oil	51.8	59.4
Xylene	48.9	56.2