

Furnace window type series O2004

Product information

Types

Article designation	Item number	Intended use with
O2004	7410x01	Transmitter / receiver light barriers in R26 format - each receiver, each transmitter requires its own furnace window.
		for example receiver: 1614Ex13 PV2009/4E /e2 /3M16 /i-i /ta /p1 /24VDC 1616Ex12 PU2009/4E /e2 /3M16 /i-i /ta /p1 /24VDC 1614Ex16 PV2009/4E /e2 /3M16 /i-i /ta /24VDC 1613Ex13 PV2010/4E /e2 /3M16 /i-i /ta /24VDC 1614NEx03 PV2009/4nE /e2 /3M16 /i-i /ta /24VDC
		for example transmitter (can be combined with the receivers, above): 1888x15 PS20R26 /1M16 /ii /ir 1888x16 PS20R26 /1M16 /ii /p1 /ir
O2004*07	7410M07x01	Transmitter / receiver light barrier type PP2031_Ex combined with optics O1 / 42
		for example receiver: 4138Ex01 PP2031E Ex /e2, combined with 8253x01 O1/42
		for example transmitter: 4138Sx01 PP2031S Ex /ir /24VDC, combined with 8253x01 O1/42
O2004/100	7412x01	Diffuse-reflex sensor ET103/2000*01
		For example: 1202M01x05 ET103/2000*01 /e2 /i /p1 /fx /stLU5 /24VDC
O2004/100*03	7412M03x01	Diffuse-reflex sensor ET103/3000*01
		for example: 1203M01x06 ET103/3000*01 /e2 /i /p1 /fx /stLU5 /24VDC
O/d2004	7411x01	Transmitter / receiver light barriers in R26 format - each receiver, each transmitter requires its own furnace window.
		for example receiver: 1614Ex13 PV2009/4E /e2 /3M16 /i-i /ta /p1 /24VDC 1616Ex12 PU2009/4E /e2 /3M16 /i-i /ta /p1 /24VDC 1614Ex16 PV2009/4E /e2 /3M16 /i-i /ta /24VDC 1613Ex13 PV2010/4E /e2 /3M16 /i-i /ta /24VDC 1614NEx03 PV2009/4nE /e2 /3M16 /i-i /ta /24VDC
		for example transmitter (can be combined with the receivers, above): 1888x15 PS20R26 /1M16 /ii /ir 1888x16 PS20R26 /1M16 /ii /p1 /ir

Fotoelektrik Pauly - Lichtschranken / Light barriers



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Description

The furnace window is intended for use on industrial furnace systems. The furnace window is flanged to a furnace wall duct.

The supplied seals are to be inserted into the flange interface.

The furnace windows are mounted in a sealed manner and shield the furnace atmosphere from the outside

The furnace window itself is designed as an interchangeable window and can easily be exchanged if necessary.

Optical sensors are typically used for material flow tracking and / or space occupancy detection in the furnace.

The optical sensors observe the interior of the furnace through the furnace window.

Optical sensors can be mounted on the furnace window with sensor-specific fastening systems.

The furnace window is equipped with an air nozzle. A stream of air can be directed into the furnace via the air nozzle. The air flow reduces the influence of heat radiation and the flight of dust up to the window.

The air connection is made via the supplied air connection pieces which are screwed into the 2 x G3 / 8" purge air connections provided on the mounting flange of the furnace window.

The purge air pressure to be set operationally depends on the furnace and the heating process. The furnace manufacturer determines the operating pressure required for the furnace system.

The housing components of the furnace windows have a corrosion-resistant surface finish using the thick-film passivation process. For this purpose, a zinc layer and a coating based on compounds containing chromium (III) are applied to the steel components.

Information on the series versions

Series O2004

The field of view has a clear diameter of 54 mm.

A pipe with the key data: diameter 88.9x3.2 [mm] according to DIN2448, with a standard flange ND16, NW80 according to DIN2576, is recommended as the furnace wall duct.

The adaptation to the furnace wall duct is done via a standard flange ND16, NW80 according to DIN2576.

Dimensions, see data sheet E 74101.pdf.

For the calculation of the purge air quantities specific to the air nozzle, these guide values are to be used: approx. 3m³/h @ 30mbar, approx. 5m³/h @ 100mbar (at a purge air temperature of 25 ° C).





Series O2004/100

The field of view has a clear diameter of 100 mm.

A pipe with the key data: Diameter 139.7x4 [mm] according to DIN2448, with a standard flange ND16, NW125 according to DIN2576, is recommended as the furnace wall duct.

The adaptation to the furnace wall duct is done via a standard flange ND16, NW125 according to DIN2576.

Dimensions, see data sheet D_74121.pdf.

For the calculation of the purge air quantities specific to the air nozzle, these guide values are to be used: approx. 3m³/h @ 30mbar, approx. 6m³/h @ 100mbar (at a purge air temperature of 25 ° C).

Series O/d2004

The field of view has a clear diameter of 54 mm.

A pipe with the key data: diameter 88.9x3.2 [mm] according to DIN2448, with a modified assembly of 2 standard flanges ND16, NW80 according to DIN2576, is recommended as the furnace wall duct.

The adaptation to the furnace wall duct is done by a modified assembly of 2 standard flanges ND16, NW80 according to DIN2576.

Dimensions, see data sheet D 74111.pdf.

For the calculation of the air nozzle-specific purge air quantities, these guide values are to be used: approx. 6m³/h @ 30mbar, approx. 10m³/h @ 100mbar (at a purge air temperature of 25 ° C).

PDF: E_74102.pdf | E_74122.pdf SRC: E_741n2_02004_02004-100.docx

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