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# Vacuum Sensor

- The 4-CH multi-flange contributes to conserve vacuum chamber space.
- One-touch fiber installation significantly reduces man-hours (4-CH flange).
- The fiber unit for outside can be freely cut on both ends, thus avoiding messy routing.
- A screw-type 1-CH flange is also available.
- Heat-resistant vacuum fiber is also available for high-temperature environments.



## Configuration (typical example)



## **Ordering Information**

### Sensors

#### Flanges

Shape Item		Model	
	4-CH flange	E32-VF4	
<b>S</b>	1-CH flange	E32-VF1	

#### Vacuum Fibers

Shape	Item	Model *
$\bigcirc$	Through- beam, straight model	E32-T51V 1M
	Through- beam, L-shaped model	E32-T54V 1M
R	Through- beam, Heat- resistant model	E32-T84SV 1M

 $^{\ast}\,$  A 0.5-m type is also available. Please inquire for more information.

#### Fiber Unit for Outside

Shape	Item	Model
$\bigcirc$	General	E32-T10V 2M

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#### Accessories (Order Separately) Mounting Brackets

Shape	hape Model		Remarks
Re	E39-L54V	2	Can be used with the E32-T54V.

## Rating/Performance

#### Flanges

Number of channels		4	1 CH	
ltem	Model	E32-VF4	E32-VF1	
Leakage		1 x 10-10 Pam <sup>3</sup> /s or	less	
Ambient temperat	ure	Operating/storage: -25 to +55°C		
Material		Aluminum (A5056) Stainless steel (SUS304) Aluminum (A5056)		
Flange se	al material	Fluoroelastomer (Viton)		
Weight (Packed state)		Approx. 280 g	Approx. 240 g	

#### Lens Unit

Shape	Model	Quantity	Remarks
ŶŶ	E39-F1V	2	Long distance lens unit: Can be used with the E32- T51V and E32-T54V.

#### Fiber Unit for Outside

	Sensor type	Fiber Unit for Outside	
Item Model		E32-T10V	
Standard length		2 m (free cutting allowed)	
Ambient temperature		Operating/storage: -25 to +70°C	
Permissible bending radius		25 mm min.	
Weight (Packed state)		Approx. 170 g	
	Core	Acrylics	
Mate- rial	Sheath	Fluororesin	
	Protection tube	Black polyethylene	

#### Vacuum Fibers

Sensor type			Vacuum-side fiber transmission type		
Item		Model	E32-T51V	E32-T54V	E32-T84SV
Stand	lard length		1 m (no free cutting)		
Sen		Super long- distance mode:	250 mm	200 mm	600mm
sing dis-	When using the E3X-DA-N	Standard mode:	200 mm	130mm	480mm
tan- ce	LSX-DA-N	Super high- speed mode:	70mm	50 mm	180mm
	When using the E3X-NA		100 mm	65mm	250 mm
Ambient temperature		Operating/storage: -25 to +120°C		Operating/storage: - 25 to +200°C	
Admissible bending radius		30 mm min.		25 mm min.	
Weight (Packed state)		Approx. 180 g	Approx. 170 g	Approx. 180 g	
	Core		Quartz		Optical glass
Ma	Sheath		Fluororesin		Optical glass
Ma- terial	Protection tube		Fluororesin		Stainless steel (SUS304)
	Fiber head/Connection tube		Aluminum (A5056) Stainless steel (SUS304)		

#### Lens Unit

		Sensor type	Long-Distance Lens Units	
Item		Model	E39-F1V	
Applica	able Fiber		E32-T51V	E32-T54V
Sens-	When using the E3X-DA-N	Super-long-dis- tance mode:	1280mm	630mm
ing		Standard mode:	1000mm	500 mm
dis- tance		Super-high- speed mode:	360mm	250 mm
	When using the E3X-NA		600mm	390mm
Ambie	nt temperature		Operating/storage: -25 to +120°C	
Weight (Packed state)			Approx. 5 g	
Mate-	Housing		Aluminum (A5056)	
rial	Lens		Optical glass	

#### **Precautions**

Important

#### Mounting

#### Cleaning

Although Flanges, Vacuum Fibers, and Lens Units are cleaned before shipping, clean them with alcohol before use in high-vacuum chambers to make sure there is no foreign matter on them.

#### Pulling and compression

Do not expose the fiber unit to pulling, compression, or other undo force (29.4 N or less).

#### Dimensions (Unit: mm)

#### Sensors Flanges

E32-VF4



Miscellaneous

This vacuum-proof fiber unit is used to detect various types of work in a high-vacuum and 120°C (in parts 200°C) high-tem-

perature chamber (vacuum chamber).

Application

Note: 1 . Set the O-Ring V40 to come to the wall of the vacuum chamber on the atmosphere side. 2 . Mounting hole:38±0.5 mm

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