# <u>Gas Detector with Signal Converter</u> <u>SD-3GH Series SPECIFICATION</u>

Model		SD-3GH	SD-3DGH	
Detection principle		Semiconductor type		
Detection gas <sup>*1</sup>		Combustible gas and toxic gas		
Display		7-segment LED (5 digits), 3-color lamp (red, green, yellow)		
Detection range <sup>*1</sup>		Depends on sensor specifications		
Alarm set points*1		Depends on sensor specifications		
Sampling metho	d*1	Diffusion type	Suction type (pour into by external unit)	
Setting flow r		_	0.4 - 1.5 L/min	
Power supply i		Power lamp lit (green)		
rener capping i	Alarm type	Two-step alarm (H-HH)		
Gas	Indication	Alarm lamp lit (red)		
alarm	Reset type*1	Auto reset or self-latching		
	Self-diagnosis	System abnormality (E-9), sensor abnormality (E-1)		
	Indication	Fault lamp lit (yellow), error code display		
Fault alarm	Indication	System abnormality: Self-latching		
	Reset type	Sensor abnormality: Auto reset (self-latchi	ng if concer is disconnected)	
	Self-diagnosis		agnosis, communication diagnosis, sensor warning	
Wawaina				
Warnings	Display	Blinking display alternating between gas co	ncentration and error code	
<b>F</b> 11	Operation	Same as normal operation		
Functions	1 *1	Alarm delay, suppression, HART communicatio		
External outpu		Gas concentration signal (4-20 mA DC with H		
	Transmission	3-wire analog transmission (common power su	pply <power common="" signal,="" supply,="">) or</power>	
	Method	2-wire analog transmission (current source)		
	Transmission	4-20 mA DC (non-insulated linear output)		
Gas	Specifications	Maximum load resistance 600 $\Omega$ (with derating depending on power supply voltage)		
concentration	Specifications	Resolution: max. 200 divisions (depending o	n specifications)	
signal	Transmission	Shielded cable 1.25 sq (1.308 mm <sup>2</sup> /AWG16) or		
-	cable*2	2.0 sq (2.08 mm <sup>2</sup> /AWG14) (same as power supp	v cable)	
	Transmission			
	Distance*6	For 1.25 sq (1.308 mm <sup>2</sup> /AWG16): Not exceeding 1.25 km For 2.0 sq (2.08 mm <sup>2</sup> /AWG14): Not exceeding 2 km (with derating depending on supply voltage)		
	Distance	SPDT (× 3): 2 alarms, 1 fault output, non-exciting at normal (exciting at alarm) or exciting		
Alarm contact	(Ontional)*1	at normal (non-exciting at alarm), 250 V AC, 2 A; 30 V DC, 1 A (resistance load), Minimum load		
		5V DC, 0.1A		
	Input voltage range*3			
		24 V DC (18 V - 30 V DC) Shielded cable 1.25 cg (1.209 mm <sup>2</sup> /AWC16) cg		
Power supply	Power supply cable*2*6	Shielded cable 1.25 sq (1.308 mm <sup>2</sup> /AWG16) or		
		2.0 sq (2.08 mm <sup>2</sup> /AWG14) (same as transmission cable)		
Power consumption		Max. 4.5 W		
	Power consumption Material	Stainless steel: SCS14 (equivalent to SUS31	6)	
		Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5	
		Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada	6)	
	Material Cable connectors*1	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25×< td=""></m25×<>	
Housing	Material	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex:Flame proof packing method <m20×< td=""><td>6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5&gt;(Compatible cables <math>\phi</math> 6.0~12.0mm), <m25×< td=""></m25×<></td></m20×<>	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25×< td=""></m25×<>	
Housing	Material Cable connectors*1 Tube connecting port Degrees of protection	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX : M25 $\times$ 1.5, conversion ada Japan Ex : Flame proof packing method <m20 <math="">\times 1.5&gt;(Compatible cables <math>\phi</math>12.0<math>\sim</math>16.0mm) - Equivalent to IP66/67</m20>	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables φ6.0~12.0mm), <m25× NPT1/4 (with SUS elbow union for 0.Dφ8-1t)</m25× 	
Housing	Material Cable connectors*1 Tube connecting port	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX : M25 $\times$ 1.5, conversion ada Japan Ex : Flame proof packing method <m20 <math="">\times 1.5&gt;(Compatible cables <math>\phi</math>12.0<math>\sim</math>16.0mm) -</m20>	6) pter (optional): NPT3/4, NPT1/2, M20 $\times$ 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25 <math="">\times NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t)</m25>	
Housing	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX : M25 $\times$ 1.5, conversion ada Japan Ex : Flame proof packing method <m20 <math="">\times 1.5&gt;(Compatible cables <math>\phi</math>12.0<math>\sim</math>16.0mm) - Equivalent to IP66/67</m20>	6) pter (optional): NPT3/4, NPT1/2, M20 $\times$ 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25 <math="">\times NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t)</m25>	
Housing	Material Cable connectors*1 Tube connecting port Degrees of protection	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX : M25 $\times$ 1.5, conversion ada Japan Ex : Flame proof packing method <m20 <math="">\times 1.5&gt;(Compatible cables <math>\phi</math>12.0<math>\sim</math>16.0mm) - Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting (</m20>	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables φ6.0~12.0mm), <m25× NPT1/4 (with SUS elbow union for 0.Dφ8-1t) optional)</m25× 	
Housing	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 $\times$ 1.5, conversion ada Japan Ex: Flame proof packing method <m20 <math="">\times 1.5&gt;(Compatible cables <math>\phi</math>12.0<math>\sim</math>16.0mm) - Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) <math>\times</math> 277(H) <math>\times</math> 127(D) mm</m20>	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25× NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm</m25× 	
_	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex: Flame proof packing method <m20 ×<br="">1.5&gt;(Compatible cables <math>\phi</math>12.0~16.0mm) - Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections)</m20>	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25× NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm (excluding projections) Approx. 7.0 kg</m25× 	
	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex: Flame proof packing method $\langle$ M20× 1.5>(Compatible cables $\phi$ 12.0~16.0mm) - Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25 ×<br="">NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm (excluding projections) Approx. 7.0 kg changes)</m25>	
Operating temp	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 $\times$ 1.5, conversion ada Japan Ex: Flame proof packing method <m20 <math="">\times 1.5&gt;(Compatible cables <math>\phi</math>12.0<math>\sim</math>16.0mm) - Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) <math>\times</math> 277(H) <math>\times</math> 127(D) mm (excluding projections) Approx. 6.7 kg</m20>	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25 ×<br="">NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm (excluding projections) Approx. 7.0 kg changes)</m25>	
Operating temp Operating humi	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4 dity range*4	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex: Flame proof packing method $\langle$ M20 × 1.5>(Compatible cables $\phi$ 12.0~16.0mm) - Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden Japan Ex: -20 °C - +70 °C (no sudden change	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25 ×<br="">NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm (excluding projections) Approx. 7.0 kg changes)</m25>	
Operating temp Operating humi Operation meth	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4 dity range*4 od	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex : Flame proof packing method $\langle$ M20 × 1.5>(Compatible cables $\phi$ 12.0~16.0mm) - Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden Japan Ex : -20 °C - +70 °C (no sudden change 0 %RH - 95 %RH (no condensation) Dedicated magnet control key	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25 ×<br="">NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm (excluding projections) Approx. 7.0 kg changes)</m25>	
Operating temp Operating humi Operation meth	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4 dity range*4 od tion	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex: Flame proof packing method $\langle$ M20× 1.5>(Compatible cables $\phi$ 12.0~16.0mm) — Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden Japan Ex: -20 °C - +70 °C (no sudden change 0 %RH - 95 %RH (no condensation) Dedicated magnet control key Flameproof construction	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5>(Compatible cables $\phi$ 6.0~12.0mm), <m25 ×<br="">NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm (excluding projections) Approx. 7.0 kg changes) s)</m25>	
Operating temp Operating humi Operation meth Type of protec	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4 dity range*4 od	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex: Flame proof packing method $\langle$ M20 × 1.5 $\rangle$ (Compatible cables $\phi$ 12.0 $\sim$ 16.0mm) — Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden Japan Ex: -20 °C - +70 °C (no sudden change 0 %RH - 95 %RH (no condensation) Dedicated magnet control key Flameproof construction II 2G Ex db II C T5/T4 Gb, -50°C $\leq$ Ta $\leq$ +44°C/+	6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5> (Compatible cables $\phi$ 6.0~12.0mm), <m25 ×<br="">NPT1/4 (with SUS elbow union for 0.D<math>\phi</math>8-1t) optional) Approx. 171(W) × 289(H) × 127(D) mm (excluding projections) Approx. 7.0 kg changes) s) 70°C (when lightning arrester is not installed),</m25>	
Operating temp Operating humi Operation meth Type of protec Explosion-	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4 dity range*4 od tion ATEX/UKEX	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex : Flame proof packing method $\langle$ M20 × 1.5> (Compatible cables $\phi$ 12.0~16.0mm) — Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden Japan Ex : -20 °C - +70 °C (no sudden change 0 %RH - 95 %RH (no condensation) Dedicated magnet control key Flameproof construction II 2G Ex db II C T5/T4 Gb, -50°C $\leq$ Ta $\leq$ +44°C/+ -40°C $\leq$ Ta $\leq$ +44°C/+70°C (when lightning arre	<pre>6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5&gt;(Compatible cables φ6.0~12.0mm), <m25×< td=""></m25×<></pre>	
Operating humi Operation meth Type of protec Explosion- proof	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4 dity range*4 od tion	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex: Flame proof packing method $\langle$ M20 × 1.5 $\rangle$ (Compatible cables $\phi$ 12.0 $\sim$ 16.0mm) — Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden Japan Ex: -20 °C - +70 °C (no sudden change 0 %RH - 95 %RH (no condensation) Dedicated magnet control key Flameproof construction II 2G Ex db II C T5/T4 Gb, -50°C $\leq$ Ta $\leq$ +44°C/+ -40°C $\leq$ Ta $\leq$ +44°C/+70°C (when lightning arree Ex db II C T5/T4 Gb, -50°C $\leq$ Ta $\leq$ +44°C/+70°C	<pre>6) 6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5&gt;(Compatible cables φ 6.0~12.0mm), <m25×< td=""></m25×<></pre>	
Operating temp Operating humi Operation meth Type of protec Explosion-	Material Cable connectors*1 Tube connecting port Degrees of protection Installation type*1 External dimensions*5 Weight*5 erature range*4 dity range*4 od tion ATEX/UKEX	Stainless steel: SCS14 (equivalent to SUS31 ATEX/IECEx/UKEX: M25 × 1.5, conversion ada Japan Ex : Flame proof packing method $\langle$ M20 × 1.5> (Compatible cables $\phi$ 12.0~16.0mm) — Equivalent to IP66/67 Wall mounting (standard)/2B pole mounting ( Approx. 171(W) × 277(H) × 127(D) mm (excluding projections) Approx. 6.7 kg ATEX/IECEx/UKEX: -40 °C - +70 °C (no sudden Japan Ex : -20 °C - +70 °C (no sudden change 0 %RH - 95 %RH (no condensation) Dedicated magnet control key Flameproof construction II 2G Ex db II C T5/T4 Gb, -50°C $\leq$ Ta $\leq$ +44°C/+ -40°C $\leq$ Ta $\leq$ +44°C/+70°C (when lightning arre	<pre>6) pter (optional): NPT3/4, NPT1/2, M20 × 1.5 1.5&gt;(Compatible cables φ6.0~12.0mm), <m25×< td=""></m25×<></pre>	

\*1 Please specify your request when ordering.

\*2 To ensure explosion protection, use a cable designed for use in temperatures at least 5 °C above the maximum anticipated ambient temperature. \*3 Use a power supply capable of minimum temporary output of 2.5 A to ensure that fuses blow normally in the event of a product abnormality.

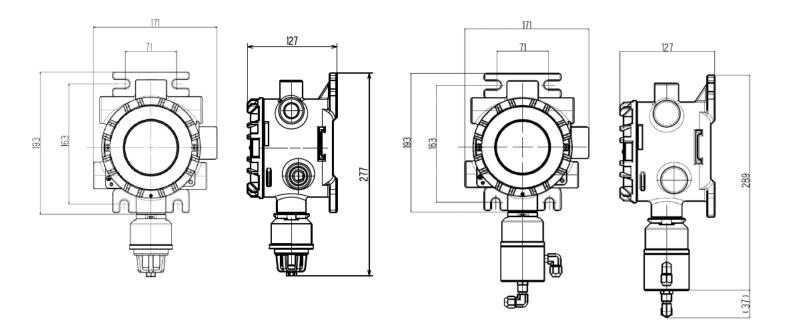
\*4 In accordance with sensor specifications if restrictions apply due to sensor specifications.

\*5 External dimensions and weight exclude cable gland.

\*6 Depends on the type of cable.

### Dimensional drawings (Excluding cable gland)

## <Diffusion type>



Terminal Block Diagram

<Using 3-core cable>

Terminal No.	Power/signal cable connec	tion
1	Power supply (+)	24 V DC
2	Common (Power supply (-), signal (-))	4-20 mA
3	Signal (+)	with HART
4	Not used	

#### <Using 4-core cable>

<Suction type>
 \* Pour into by external unit

Terminal No.	Power/signal cable connection	
1	Power supply (+)	
2	Power supply (-)	24 V DC
3	Signal (+)	4-20 mA with
4	Signal (-)	HART

### <Contact output (Optional)>

Relay1 (ALARM1)

Terminal No.	Cable connection
1	N. O.
2	Common
3	N. C.

Relay2 (ALARM2)

Terminal No.	Cable connection
1	N. O.
2	Common
3	N. C.

### Relay3 (FAULT)

Terminal No.	Cable connection
1	N. O.
2	Common
3	N. C.

N.O. : Normal Open

N.C. : Normal Close

# Gas Detector with Signal Converter SD-3GHS Series SPECIFICATION

Model		SD-3GHS	SD-3DGHS	
Detection principle		Semiconductor type		
Detection gas		Carbon disulfide		
Display		7-segment LED (5 digits), 3-color lamp (red, green, yellow)		
Detection range <sup>*1</sup>		Depends on sensor specifications		
Alarm set points*1		Depends on sensor specifications		
Sampling metho	d	Diffusion type	Suction type (pour into by external unit)	
Setting flow r			0.4 - 1.5 L/min	
Power supply i		Power lamp lit (green)		
	Alarm type	Two-step alarm (H-HH)		
Gas	Indication	Alarm lamp lit (red)		
alarm	Reset type*1	Auto reset or self-latching		
	Self-diagnosis	System abnormality (E-9), sensor abnormality (E-1)		
	Indication	Fault lamp lit (yellow), error code display		
Fault alarm	Indioderon	System abnormality: Self-latching	bray	
	Reset type	Sensor abnormality: Auto reset (self-la	taking if consor is disconnected)	
	Self-diagnosis		y diagnosis, communication diagnosis, sensor warning	
Waynainaa				
Warnings	Display	Blinking display alternating between gas	s concentration and error code	
Function -	Operation	Same as normal operation		
Functions	1 •1	Alarm delay, suppression, HART communica		
External output			th HART output), contact output (optional)	
	Transmission		r supply <power common="" signal,="" supply,="">) or</power>	
	Method	2-wire analog transmission (current sou	rce)	
	Transmission	4-20 mA DC (non-insulated linear output)		
Gas	Specifications	Maximum load resistance 600 $\Omega$ (with derating depending on power supply voltage)		
concentration	Specifications	Resolution: max. 200 divisions (dependin	ng on specifications)	
signal	Transmission	Shielded cable 1.25 sq (1.308 mm²/AWG16) or		
0	cable*2	2.0 sq (2.08 mm²/AWG14) (same as power supply cable)		
	Transmission	For 1.25 sq (1.308 mm <sup>2</sup> /AWG16): Not exceeding 1.25 km		
	Distance <sup>*6</sup>			
	DIStance	For 2.0 sq (2.08 mm <sup>2</sup> /AWG14): Not exceeding 2 km (with derating depending on supply voltage)		
Alarm contact	(Ontional) *1	SPDT (× 3): 2 alarms, 1 fault output, non-exciting at normal (exciting at alarm) or exciting		
ATATIN CONLACT	(optional)	at normal (non-exciting at alarm), 250 V AC, 2 A; 30 V DC, 1 A(resistance load), Minimum load 5V DC, 0.1A		
	Input valtage renge*3			
	Input voltage range*3	24 V DC (18 V - 30 V DC)		
Power supply	Power supply cable*2*6	Shielded cable 1.25 sq (1.308 mm²/AWG16) or		
		2.0 sq (2.08 mm²/AWG14) (same as transmission cable)		
	Power consumption	Max. 4.5 W		
	Material	Stainless steel: SCS14 (equivalent to S		
		ATEX/IECEx/UKEX: M25 × 1.5, conversion adapter (optional): NPT3/4, NPT1/2, M20 × 1.5		
	Cable connectors*1	Japan Ex: Flame proof packing method <m20 1.5="" ×=""> (Compatible cables <math>\phi</math> 6.0~12.0mm), <m25 td="" ×<=""></m25></m20>		
		1.5>(Compatible cables $\phi$ 12.0~16.0mm)		
Housing	Tube connecting port	_	NPT1/4 (with SUS elbow union for 0.D $\phi$ 8-1t)	
Housing	Degrees of protection	Equivalent to IP66/67		
	Installation type*1	Wall mounting (standard)/2B pole mounting	ng (optional)	
	External dimensions*5	Approx. 171(W) × 277(H) × 127(D) mm	Approx. 171(W) × 289(H) × 127(D) mm	
	External dimensions"	(excluding projections)	(excluding projections)	
	Weight <sup>*5</sup>	Approx. 6.7 kg	Approx. 7.0 kg	
<b>a</b>		ATEX/IECEx/UKEX : -40 °C - +70 °C (no su	dden changes)	
Operating temp	erature range <sup>*4</sup>	Japan Ex : −20 °C - +70 °C (no sudden ch	-	
Operating humi	dity range <sup>*4</sup>	0 %RH - 95 %RH (no condensation)	<b>3</b> ,	
Operation meth		Dedicated magnet control key		
Type of protec		Flameproof construction		
1,90 01 procee			C/+70°C (when lightning arrester is not installed)	
Explosion-	ATEX/UKEX	$-40^{\circ}C \leq Ta \leq +47^{\circ}C/+70^{\circ}C$ (when lightning a		
proof				
approvals	IECEx	Ex db II C T6/T4 Gb, $-50^{\circ}C \le Ta \le +47^{\circ}C/+70^{\circ}C$ (when lightning arrester is not installed),		
αρριοναιδ	Japan Ex	$-40^{\circ}C \leq Ta \leq +47^{\circ}C/+70^{\circ}C$ (when lightning arrester is installed)		
Japan Ex Ex db II C T4 Gb, -20°C≦Ta≦+70°C				
Certification 1 Please specify your request when ordering		CE Marking, UKCA Marking		

\*1 Please specify your request when ordering.

\*2 To ensure explosion protection, use a cable designed for use in temperatures at least 5 °C above the maximum anticipated ambient temperature. \*3 Use a power supply capable of minimum temporary output of 2.5 A to ensure that fuses blow normally in the event of a product abnormality.

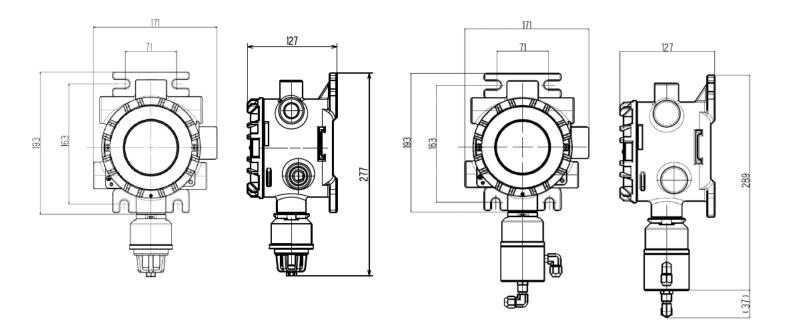
\*4 In accordance with sensor specifications if restrictions apply due to sensor specifications

\*5 External dimensions and weight exclude cable gland.

\*6 Depends on the type of cable.

### Dimensional drawings (Excluding cable gland)

## <Diffusion type>



Terminal Block Diagram

<Using 3-core cable>

Terminal No.	Power/signal cable connec	tion
1	Power supply (+)	24 V DC
2	Common (Power supply (-), signal (-))	4-20 mA
3	Signal (+)	with HART
4	Not used	

### <Using 4-core cable>

<Suction type>
 \* Pour into by external unit

Terminal No.	Power/signal cable connection	
1	Power supply (+)	
2	Power supply (-)	24 V DC
3	Signal (+)	4-20 mA with
4	Signal (-)	HART

### <Contact output (Optional)>

Relay1 (ALARM1)

Terminal No.	Cable connection
1	N. O.
2	Common
3	N. C.

Relay2 (ALARM2)

Terminal No.	Cable connection
1	N. O.
2	Common
3	N. C.

### Relay3 (FAULT)

Terminal No.	Cable connection
1	N. O.
2	Common
3	N. C.

N.O. : Normal Open

N.C. : Normal Close