

**ATEX Compliant**

**Decentralized Serial Wiring (GW System, 4 Branches)**

# 56-EX500 Series



## How to Order

**GW Unit**



GW unit

**56-EX500-G PR1A**

ATEX category 3

Communication protocol

PR1A	PROFIBUS DP
DN1-X8	DeviceNet™

CE Ex II 3G Ex nA IIC T4 Gc 5°C ≤ Ta ≤ 45°C  
II 3D Ex tc IIIC T57°C Dc IP65

(56-EX500-GPR1A)

CE Ex II 3G Ex nA IIC T4 Gc 5°C ≤ Ta ≤ 45°C  
II 3D Ex tc IIIC T53°C Dc IP65

(56-EX500-GDN1-X8)

## Specifications

### GW Unit

Model	56-EX500-GDN1-X8	56-EX500-GPR1A
Protocol	DeviceNet™	PROFIBUS DP
Communication speed	125/250/500 kbps	(9.6/19.2/45.45/93.75/187.5/500 kbps), (1.5/3/6/12 Mbps)
Rated voltage	24 VDC	
Power supply voltage range	Input and control unit power supply: 24 VDC ±10% Valve power supply: 24 VDC +10%/−5%	
Current consumption	200 mA or less (single GW unit)	
Number of inputs/outputs	Maximum 64 inputs/64 outputs	Maximum 32 inputs/64 outputs
Number of input/output branches	4 branches (16 inputs/16 outputs per branch)	4 branches (8 inputs/16 outputs per branch)
Input supply current	Max. 2.8 A (Max. 0.7 A per branch)	Max. 1.4 A (Max. 0.35 A per branch)
Output supply current	Max. 3.0 A (Max. 0.75 A per branch)	
Branch cable length	5 m or less between connected devices (10 m or less per branch)	
Operating temperature range	Operating: 5 to 45°C, Stored: −25 to 70°C (No freezing and condensation)	
Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)	
Enclosure	IP65	
Weight	470 g	

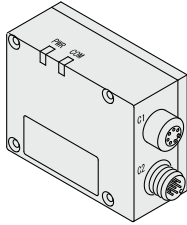
All other specifications are the same as the standard products EX500 series.  
For details, refer to the **Web Catalog**.

Type 1	EX260
Type 2	EX123/124/126
Type 3	EX500
Type 1	EX600
Type 2	EX245
Type 3	EX250
Type 1	EX120/121/122
Type 2	EX140
Type 3	EX180
Type 1	EX510
Type 2	M8/M12
Type 3	ATEX

# 56-EX500 Series

## How to Order

SI Unit



### 56 - EX500 - S001

• ATEX category 3

• Applicable solenoid valve: SV series



II 3G Ex nA IIC T5 5°C ≤ Ta ≤ 45°C  
II 3D Ex tc IIIC T52°C Dc IP67

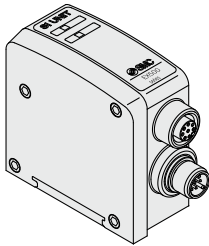
## Specifications

### SI Unit

Model		56-EX500-S001
Output specifications	Number of outputs	16 points
	Output type	Sink/NPN (Positive common)
	Supplied current	Max. 0.65 A
	Rated voltage	24 V
Internal current consumption		100 mA or less
Environmental resistance	Enclosure	IP67
	Operating temperature range	Operating: 5 to 45°C, Stored: -25 to 70°C (No freezing and condensation)
	Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)
Standards		CE marking (EMC directive/RoHS directive), UL (CSA)
Weight		115 g

## How to Order

SI Unit



### 56 - EX500 - Q001

• ATEX category 3

Applicable solenoid valve: SY/VQC/S0700 series

• SI unit type

1	For without EX9 output block
2	For EX9 output block mounting

• Output type

0	Sink/NPN (Positive common)
1	Source/PNP (Negative common)



II 3G Ex nA IIC T5 5°C ≤ Ta ≤ 45°C  
II 3D Ex tc IIIC T54°C Dc IP67

## Specifications

### SI Unit

Model		56-EX500-Q001	56-EX500-Q101
Output specifications	Number of outputs	16 points	
	Output type	Sink/NPN (Positive common)	Source/PNP (Negative common)
	Rated voltage	24 VDC	
	Supplied current	Max. 0.75 A	
Internal current consumption		100 mA or less	
Environmental resistance	Enclosure	IP67	
	Operating temperature range	Operating: 5 to 45°C, Stored: -25 to 70°C (No freezing and condensation)	
	Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)	
Standards		CE marking (EMC directive/RoHS directive)	
Weight		105 g	

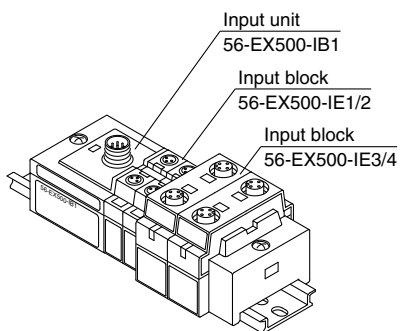
## How to Order

### Input Unit

### 56-EX500-IB1

•ATEX category 3

CE  II 3G Ex nA IIC T5 Gc X 5°C ≤ Ta ≤ 45°C  
II 3D Ex tc IIIC T60°C Dc X IP65




### Input Block


### 56-EX500-IE 1

•ATEX category 3

•Block type

CE  II 3G Ex nA IIC T5 Gc 5°C ≤ Ta ≤ 45°C  
II 3D Ex tc IIIC T60°C Dc IP65

(Input block 56-EX500-IE1 to 4)

CE  II 3G Ex nA IIC T5 Gc 5°C ≤ Ta ≤ 45°C  
II 3D Ex tc IIIC T66°C Dc IP65

(Input block 56-EX500-IE5 to 6)

1	M8 connector, 2 inputs, PNP sensor input
2	M8 connector, 2 inputs, NPN sensor input
3	M12 connector, 2 inputs, PNP sensor input
4	M12 connector, 2 inputs, NPN sensor input
5	M8 connector, 8 points integrated type, PNP sensor input
6	M8 connector, 8 points integrated type, NPN sensor input

## Specifications

### Input Unit

Model	56-EX500-IB1
Connection block	EX500-IE□ (Mixed combination is possible.)
Number of inputs	Max. 8 points (56-EX500-GPR1A)
	Max. 16 points (56-EX500-GDN1-X8)
Block supply voltage	24 VDC
Block supply current	Max. 0.35 A (56-EX500-GPR1A)
	Max. 0.7 A (56-EX500-GDN1-X8)
Current consumption	100 mA or less
Operating temperature range	Operating: 5 to 45°C Stored: -25 to 70°C (No freezing and condensation)
Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)
Enclosure	IP65
Weight*1	100 g (Input unit + End block)

\*1 Not including the DIN rail weight

### Input Block

Model	56-EX500-IE1,3,5	56-EX500-IE2,4,6
Input type	PNP sensor input	NPN sensor input
Sensor connector	IE1/2/5/6: M8 connector (3 pins), IE3/4: M12 connector (4 pins)	
Number of inputs	IE1/2/3/4: 2 inputs, IE5/6: 8 inputs	
Rated voltage	24 VDC	
Sensor supply current	Max. 30 mA/Sensor	
Operating temperature range	Operating: 5 to 45°C Stored: -25 to 70°C (No freezing and condensation)	
Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)	
Enclosure	IP65	
Weight	IE1/2: 20 g, IE3/4: 40 g, IE5/6: 55 g	

Type 1	EX260
	EX123/124/126
Type 2	EX500
	EX600
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	EX250
Type 1	EX120/121/122
	EX140
	EX180
Type 2	EX510
	M8/M12
	ATEX