

Air Management System

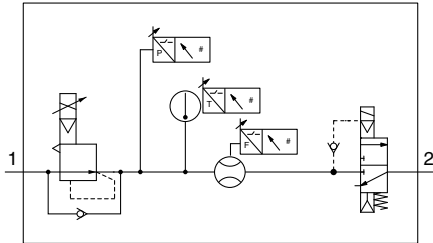
Electro-Pneumatic Regulator Type

25A-AMS20A/30A/40A/60A Series

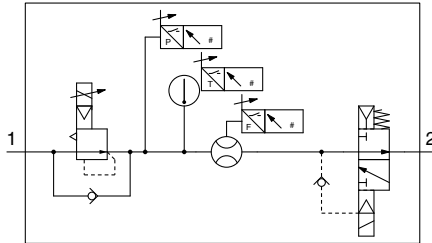


RoHS

Symbol
N.C.



N.O.



How to Order

25A-AMS **40** **A-F** **04** **C** **-PN** **-MLG**

Series compatible with
secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦

		Symbol	Description	①				
				Body size				
				20	30	40	60	
②	Pipe thread type	R	Rc	●	●	●	●	
		N	NPT	●	●	●	●	
		F	G	●	●	●	●	
		H	Without attachments	●	●	●	●	
+								
③	Port size	01	1/8	●	—	—	—	
		02	1/4	●	●	—	—	
		03	3/8	—	●	●	—	
		04	1/2	—	—	●	—	
		06	3/4	—	—	—	●	
		10	1	—	—	—	●	
		00	Without attachments	●	●	●	●	
+								
④	Electro-Pneumatic regulator, Residual pressure relief 3-port solenoid valve	N.O./N.C.	C	N.C. (Normally closed)	●	●	●	●
			D	N.O. (Normally open)	●	●	●	●
+								
⑤	Air management hub	Protocol	SA	Standalone (When wireless adapter is connected*3: Wireless remote)	●	●	●	●
			PN	PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
			EN	EtherNet/IP™, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
			EC	EtherCAT*4 (When wireless adapter is connected*3: Wireless base)	●	●	●	●
+								
⑥	Electro-Pneumatic regulator, Air management hub	Unit	K*1	EXA1/ITV: Units selection function	●	●	●	●
			M*2	EXA1/ITV: SI units only	●	●	●	●
+								
⑦	Residual pressure relief 3-port solenoid valve	Manual override	G	Non-locking push type	●	●	●	●
			E	Push-turn locking type (Manual)	●	●	●	●

*1 Applies to overseas destinations only

*2 Fixed units
Instantaneous flow: L/min
Accumulated flow : L
Pressure : kPa, MPa
Temperature : °C

*3 The wireless adapter is sold separately. (Refer to page 22.)

*4 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

* The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.

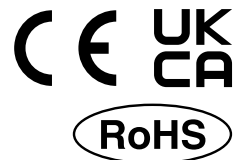
Refer to the Web Catalog.

- Specifications/Dimensions
- * Same as the standard product

Click here for details. >>>

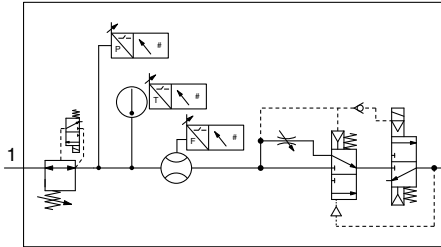


Air Management System Regulator Type

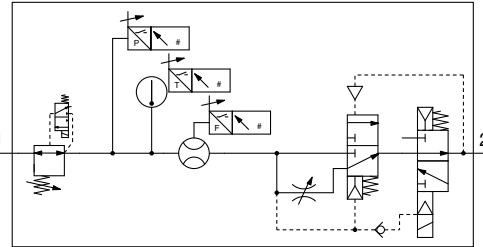


25A-AMS20B/30B/40B/60B Series

Symbol
N.C.



N.O.



How to Order

25A-AMS **40** **B** - **F** **04** **C** - **PN** - **M** **L** **G**

Series compatible with
secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦

	Symbol	Description	① Body size			
			20	30	40	60
②	R	Rc	●	●	●	●
	N	NPT	●	●	●	●
	F	G	●	●	●	●
③	+					
	01	1/8	●	—	—	—
	02	1/4	●	●	—	—
	03	3/8	—	●	●	—
	04	1/2	—	—	●	—
	06	3/4	—	—	—	●
	10	1	—	—	—	●
④	+					
	00	Without attachments	●	●	●	●
⑤	Residual pressure relief 3-port solenoid valve	N.O./N.C.				
		C	●	●	●	●
⑥	Air management hub	D	●	●	●	●
⑦	Air management hub	Protocol				
⑧	Regulator/Residual pressure relief 3-port solenoid valve	Manual override				

*1 For port size "00", specify thread type of the standby regulator (ARS).

*2 Applies to overseas destinations only

*3 Fixed units Instantaneous flow: L/min

Accumulated flow : L

Pressure : kPa, MPa

Temperature : °C

*4 The wireless adapter is sold separately. (Refer to page 22.)

*5 EtherCAT is not compatible with OPC UA. In addition,
the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

* The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.

Refer to the Web Catalog.

- Specifications/Dimensions
- * Same as the standard product

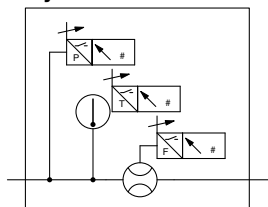
Click here for details. >>>



Air Management Hub

25A-EXA1 Series

Symbol



How to Order

25A-EXA1-40-SA-ML

Series compatible with secondary batteries

1

2

3



		Symbol	Description	1			
				Body size			
				20	30	40	60
				For 25A-AMS20	For 25A-AMS30	For 25A-AMS40	For 25A-AMS60
2	Protocol	SA	Standalone (When wireless adapter is connected*3: Wireless remote)	●	●	●	●
		PN	PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
		EN	EtherNet/IP™, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
		EC	EtherCAT*4 (When wireless adapter is connected*3 : Wireless base)	●	●	●	●
				+			
3	Unit	K*1	Units selection function	●	●	●	●
		M*2	SI units only	●	●	●	●

*1 Applies to overseas destinations only

*2 Fixed units Instantaneous flow: L/min, Accumulated flow: L, Pressure: kPa/MPa, Temperature: °C

*3 The wireless adapter is sold separately. (Refer to page 22.)

*4 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

Refer to the Web Catalog.

- Specifications/Dimensions
- * Same as the standard product

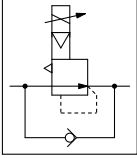
Click here for details. >>>



Standby Electro-Pneumatic Regulator

25A-ITV2050 to 3050-X399

Symbol
N.C./N.O.



How to Order



For 25A-AMS20A	25A-ITV2050-IL 20-1-K-X399
For 25A-AMS30A	25A-ITV2050-IL 30-1-K-X399
For 25A-AMS40A	25A-ITV3050-IL 40-1-K-X399
For 25A-AMS60A	25A-ITV3050-IL 60-1-K-X399

Series compatible with
secondary batteries

① Applicable AMS□A size

20	For 25A-AMS20A
30	For 25A-AMS30A
40	For 25A-AMS40A
60	For 25A-AMS60A

② Type of actuation

1	Normally closed
2	Normally open

③ Pressure display unit

K	Units selection function
M	SI units only

Refer to the Web Catalog.

- Specifications/Dimensions
- * Same as the standard product

Click here for details. >>>

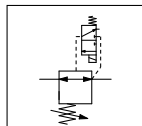


Standby Regulator

RoHS

25A-AR20S to 50S Series

Symbol



How to Order



Series compatible with
secondary batteries

25A-AR **30** S- **03** -Y-15V **4**

1

2

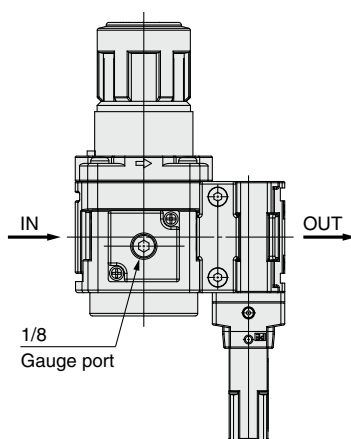
3

4

	Symbol	Description	1			
			Body size			
			20	30	40	50
			For 25A-AMS20B	For 25A-AMS30B	For 25A-AMS40B	For 25A-AMS60B
2	Pipe thread type	Nil	Rc			
		N	NPT			
		F	G			
3	Port size (Screws are IN side only.)	+				
		02	1/4			
		03	3/8			
		04	1/2			
		10	1			
4	Pilot valve	Manual override				
		Nil	Non-locking push type			
		E	Push-turn locking type (Manual)			

Gauge port view

* Same for all sizes



Refer to the Web Catalog.

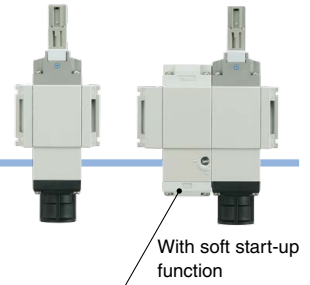
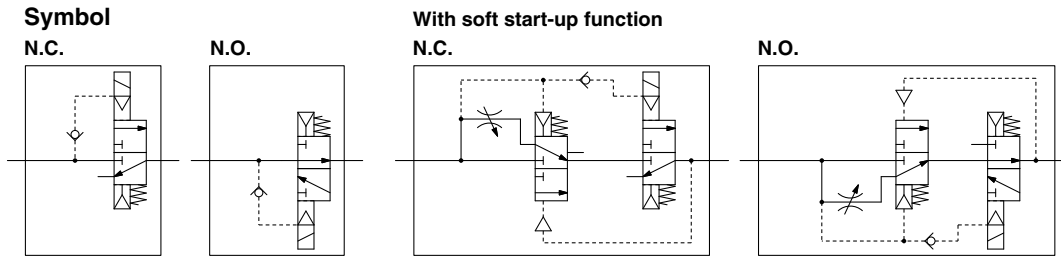
- Specifications/Dimensions
- * Same as the standard product

Click here for details. >>>



Residual Pressure Relief 3-Port Solenoid Valve

25A-VP346E/546E/746E/946E-X660/X661



How to Order

25A-VP **3** **46E-5** **KVO** **Z** **1** - **X660**

① ② ③ ④ ⑤

• Series compatible with secondary batteries

① Series

3	For 25A-AMS20	VP300
5	For 25A-AMS30	VP500
7	For 25A-AMS40	VP700
9	For 25A-AMS60	VP900

② M12 connector

		Pin assignment	Series			
			VP300	VP500	VP700	VP900
KO	Without connector		—	—	—	●
KVO	Without connector		●	●	●	—

③ Manual override

Nil	Non-locking push type
E	Push-turn locking type (Manual)

④ Soft start-up function

Nil	None
S	With soft start-up function

⑤ Type of actuation

X660	N.C. (Normally closed)
X661	N.O. (Normally open)

Refer to the Web Catalog.

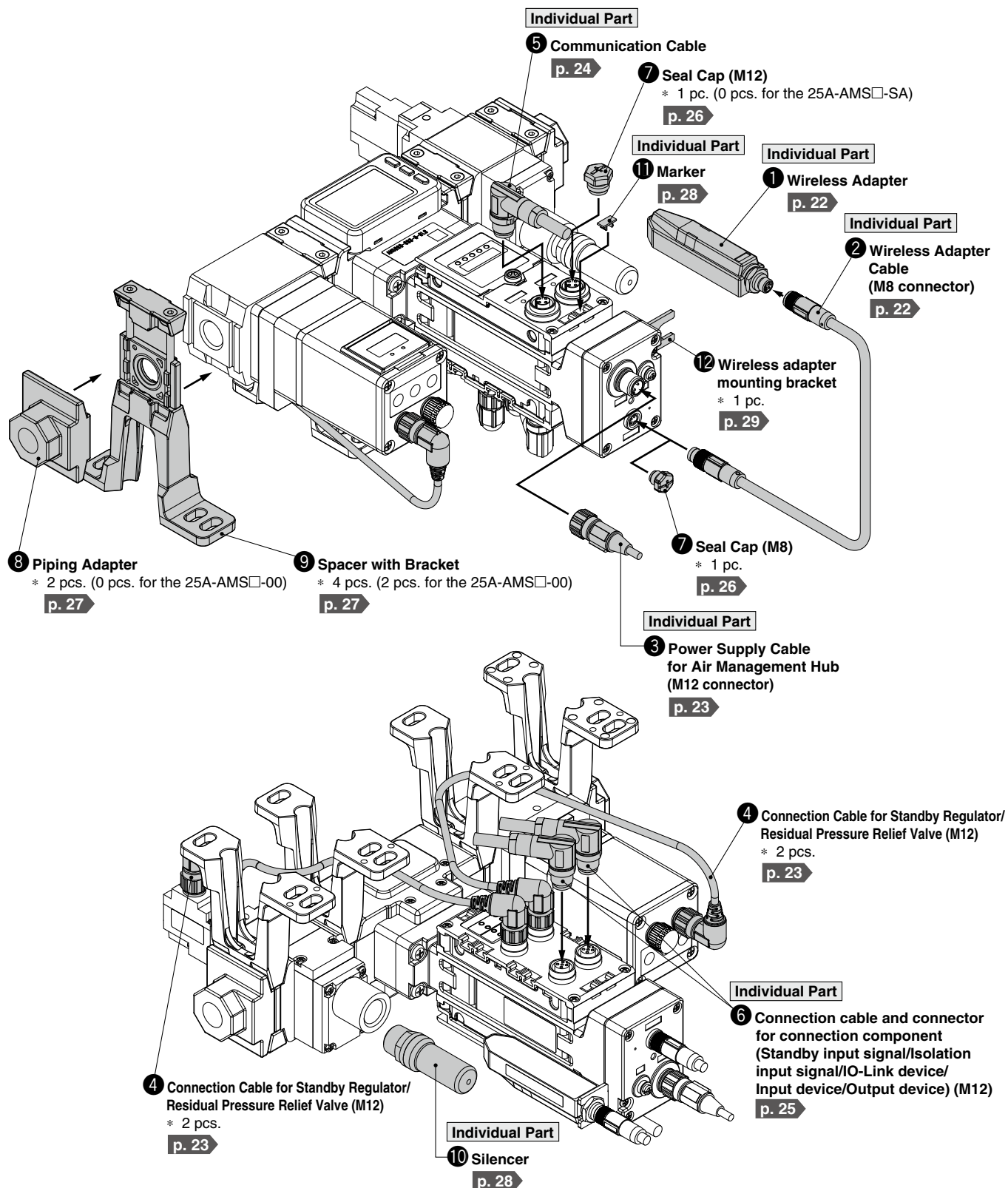
- Specifications/Dimensions
- * Same as the standard product

Click here for details. >>>



25A-AMS20/30/40/60 Series Accessories

List of Accessories



* The number of pieces included for the 25A-AMS

① Wireless Adapter

Wireless adapter for air management hub EXA1

A wireless adapter needs to be connected to both the wireless base and the wireless remote.

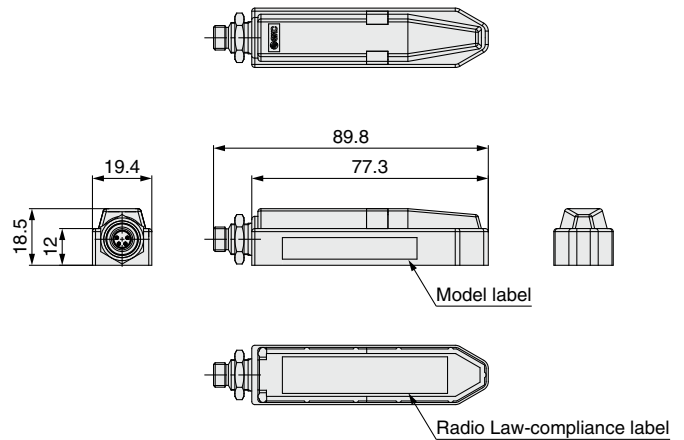
EXW1-A11N

Specifications

	Item	Specifications
Wireless communication	Protocol	SMC original protocol (SMC encryption)
	Radio wave type (spread)	Frequency Hopping Spread Spectrum (FHSS)
	Frequency	2.4 GHz (2403 to 2481 MHz)
	Number of frequency channels	79 ch
	Channel bandwidth	1.0 MHz
	Communication speed	1 Mbps
	Communication distance	Approx. 100 m (Depending on the operating environment)
Electrical	Power supply voltage range	24 VDC +10%
	Current consumption	50 mA or less
	Enclosure	IP67
General	Ambient temperature (Operating temperature)	0 to 50°C
	Ambient temperature (Storage temperature)	-10 to 60°C
	Ambient humidity	35 to 85%RH (No condensation)
	Withstand voltage	500 VAC, 1 min
	Insulation resistance	500 VDC, 10 MΩ or more
	Vibration resistance	Conforms to EN 61131-2 5 < = f < 8.4 Hz 3.5 mm 8.4 < = f < 150 Hz 9.8 m/s ²
	Impact resistance	Conforms to EN 61131-2 147 m/s ² , 11 ms
	Standards	CE/UKCA marking, UL (CSA)*1
	Weight	40 g

*1 UL (CSA) compliance applies only when connected to an EXA1 air management hub.

*2 Order the wireless adapter cable separately.



Connector

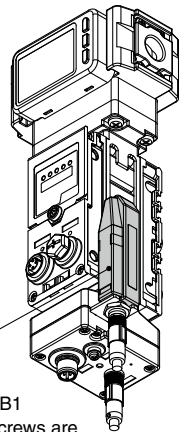
M8, 4-pin, plug	Terminal no.	Description
	1	24V (US1)
	2	Internal bus B
	3	0V (US1)
	4	Internal bus A

Wireless adapter

* Included parts: Fixing bracket

* Fixing bracket part no.: 25A-EXA1-AB1

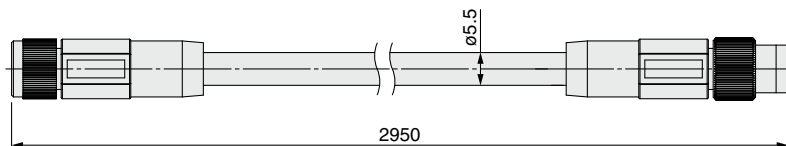
* Only the screws are stainless steel.



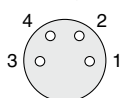
② Wireless Adapter Cable [M8 connector, For EXW1-A11N, With connectors on both sides (socket/plug)]

EXW1-AC030-SSPS Straight 2950 mm

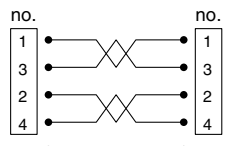
* This product must be used in a fixed position.



Socket connector pin arrangement

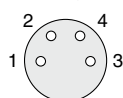


Terminal no.



Connections

Plug connector pin arrangement



Item	Specifications
Cable O.D.	ø5.5 mm
Conductor nominal cross section	AWG24
Wire O.D. (Including insulator)	1.12 mm
Min. bending radius	22 mm

25A-AMS20/30/40/60 Series

③ Power Supply Cable (M12 connector, For EXA1)

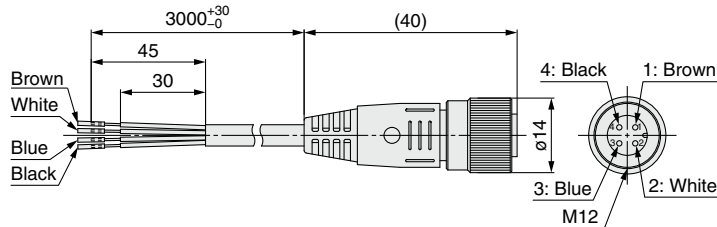
* The shape of the M12 connector is A-coded (Normal key).

90-ZS-37-A-X258

Lead wire with M12 connector

Cable Specifications

Item	Specifications
Conductor	Nominal cross section AWG23
Insulator	Outside diameter Approx. 1.1 mm
	Color Brown, Blue, Black, White
Sheath	Finished outside diameter $\phi 4$



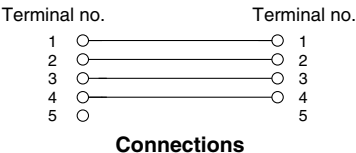
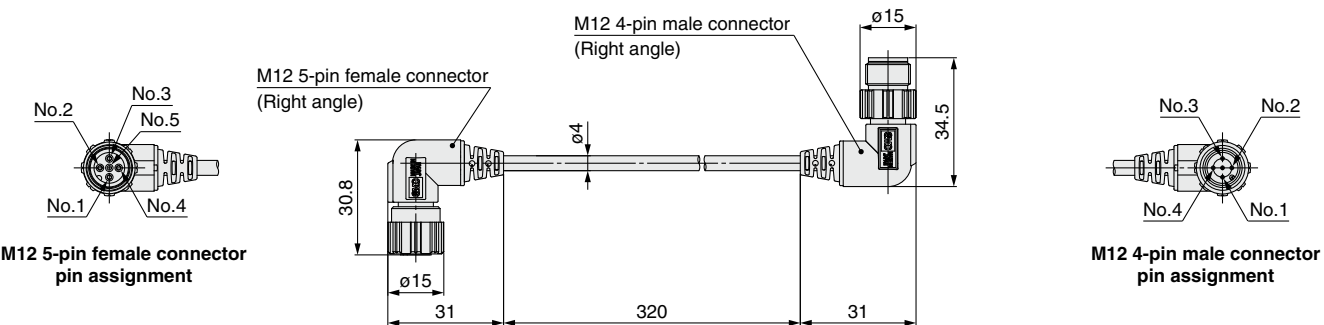
Pin no.	Pin name	Wire color
1	DC(+)	Brown
2	N.C.	White
3	DC(-)	Blue
4	N.C.	Black

④ Connection Cable for Standby Regulator/Residual Pressure Relief Valve [With M12 angle connectors on both sides (male/female)]

25A-EXA1-AC1 Cable length L: 320 mm

* Included with 25A-AMS□A/B air management systems

25A-EXA1-AC2 Cable length L: 220 mm



Component and Connection Cable Suitable Table

Body size	Standby electro-pneumatic regulator	Standby regulator	Residual pressure relief 3-port solenoid valve
20			
30			
40	25A-EXA1-AC1	25A-EXA1-AC2	25A-EXA1-AC2
60			25A-EXA1-AC1

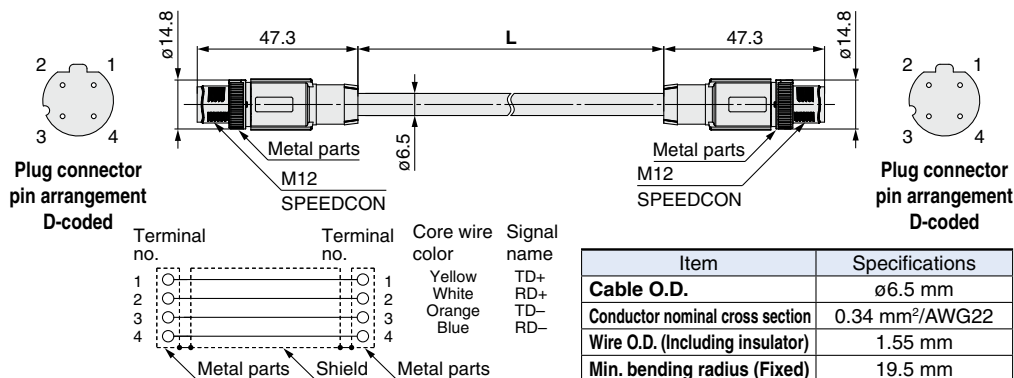
⑤ Communication Cable

For EtherCAT® For PROFINET For EtherNet/IP™

EX9-AC 005 EN-PSPS (With connector on both sides (Plug/Plug))

• Cable length (L)

005	500 mm
010	1000 mm
020	2000 mm
030	3000 mm
050	5000 mm
100	10000 mm

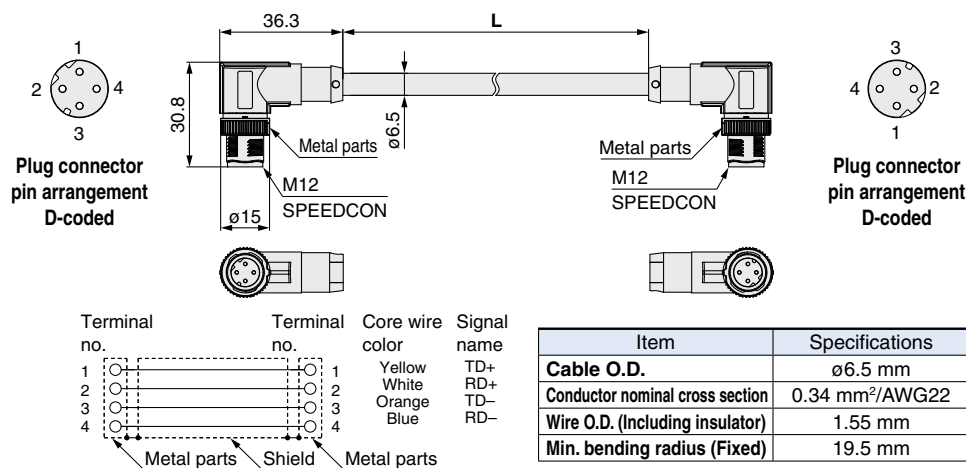


Connections (Straight cable)

EX9-AC 005 EN-PAPA (With angled connector on both sides (Plug/Plug))

• Cable length (L)

005	500 mm
010	1000 mm
020	2000 mm
030	3000 mm
050	5000 mm
100	10000 mm



Connections (Straight cable)

25A-AMS20/30/40/60 Series

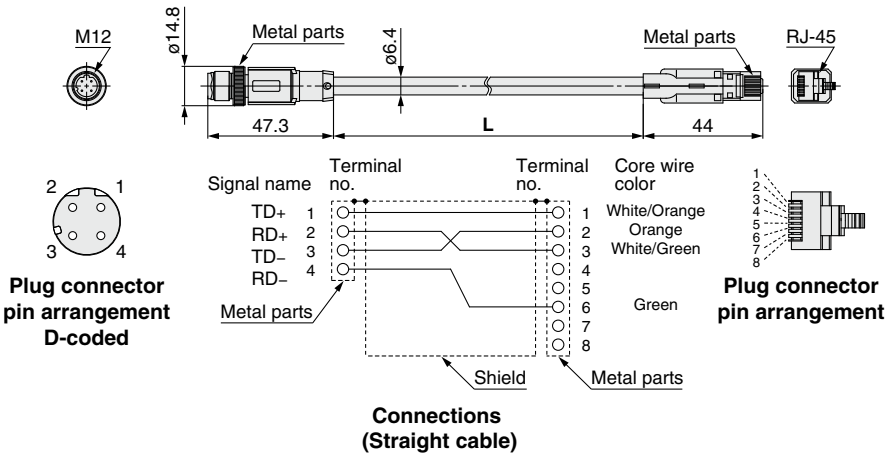
5 Communication Cable

For EtherCAT® For PROFINET For EtherNet/IP™

EX9-AC 020 EN-PSRJ (Plug/RJ-45 connector)

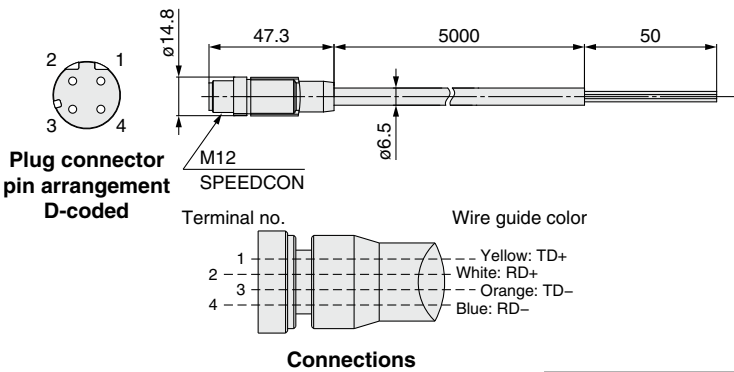
• Cable length (L)

010	1000 mm
020	2000 mm
030	3000 mm
050	5000 mm
100	10000 mm



Item	Specifications
Cable O.D.	$\phi 6.4$ mm
Conductor nominal cross section	0.14 mm ² /AWG26
Wire O.D. (Including insulator)	0.98 mm
Min. bending radius (Fixed)	26 mm

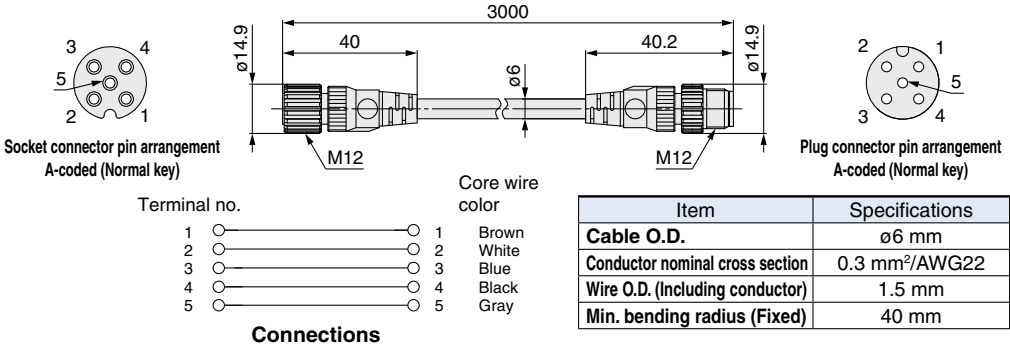
PCA-1446566 (Plug)



Item	Specifications
Cable O.D.	$\phi 6.5$ mm
Conductor nominal cross section	AWG22
Wire O.D. (Including insulator)	1.55 mm
Min. bending radius (Fixed)	45.5 mm

⑥ Connection cable and connector for connection component
(Standby input signal/Isolation input signal/IO-Link device/Input device/Output device) (M12)

IO-Link Device Cable
90-ZS-37-A-X547



⑦ Seal Cap (10 pcs.)

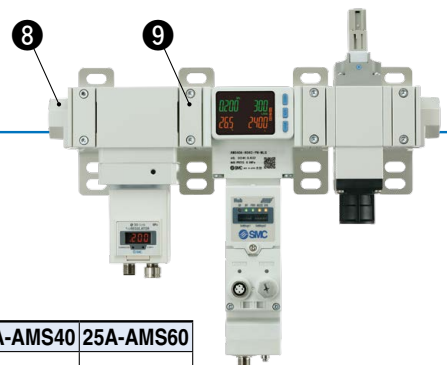
Be sure to mount a seal cap on any unused I/O connectors.
Otherwise, the specified enclosure cannot be maintained.



25A-AMS20/30/40/60 Series

⑧ Piping Adapter

A piping adapter allows for the installation/removal of the component without removing the piping and thus makes maintenance easier.



E 200 - 01 - D

Applicable size

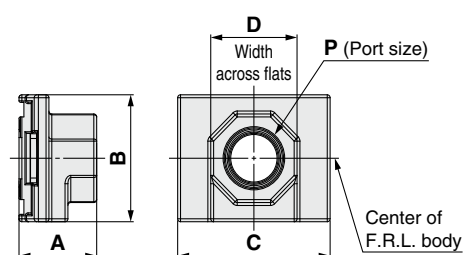
200	25A-AMS20
300	25A-AMS30
400	25A-AMS40
600	25A-AMS60

Thread type

Symbol	Thread type
Nil	Rc
F	G
N	NPT

Port size

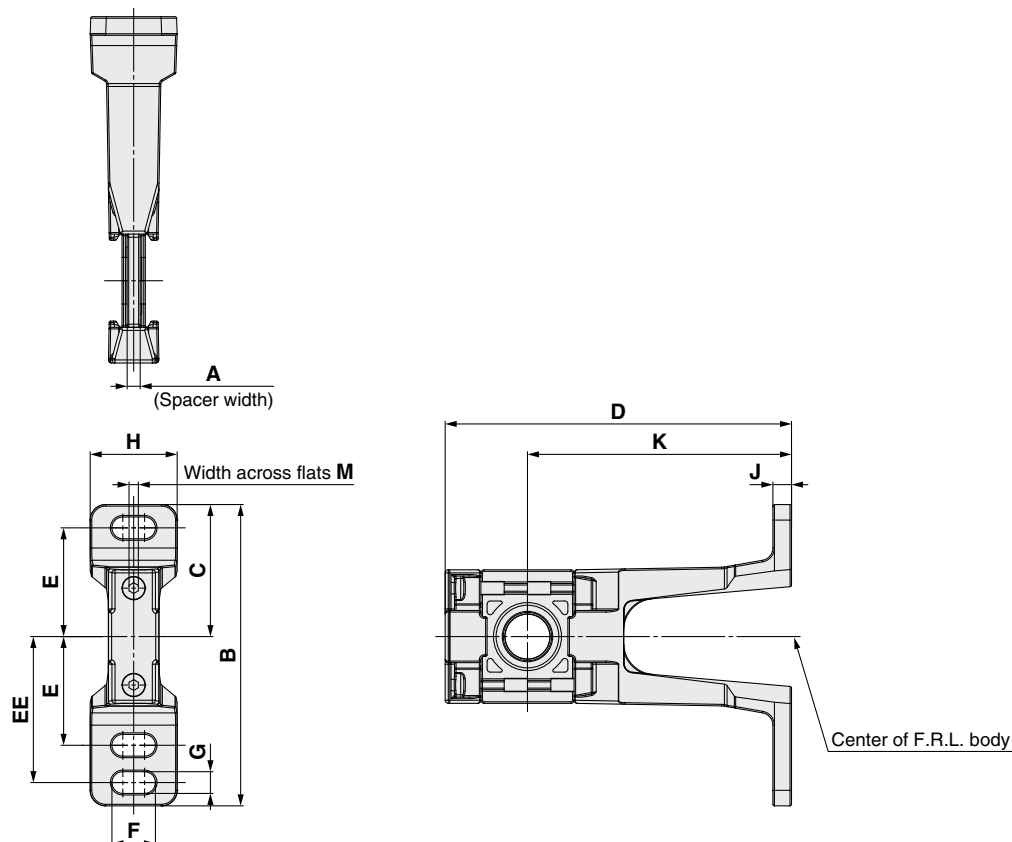
Symbol	Port size	25A-AMS20	25A-AMS30	25A-AMS40	25A-AMS60
01	1/8	●			
02	1/4	●	●		
03	3/8		●	●	
04	1/2			●	
06	3/4				●
10	1				●



Model	P	A	B	C	D
E200-01-D	1/8	24	35	42	24
E200-02-D	1/4	24	35	42	24
E300-02-D	1/4	27	43	53	30
E300-03-D	3/8	27	43	53	30
E400-03-D	3/8	30	51	71	36
E400-04-D	1/2	30	51	71	36
E600-06-D	3/4	39	64	90	46
E600-10-D	1	39	64	90	46

* A spacer with bracket is required for modular unit.

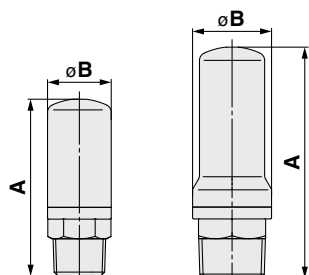
⑨ Spacer with Bracket



Model	A	B	C	D	E	EE	F	G	H	J	K	M	Applicable size
25A-Y200T-2-D	3.2	97	42.5	106	35	47	14	7	28	6	85	2	25A-AMS20
25A-Y300T-2-D	4.2	97	42.5	111.5	35	47	14	7	28	6	85	3	25A-AMS30
25A-Y400T-1-D	5.2	115	50	120.5	40	55	18	9	32	7	85	3	25A-AMS40
25A-Y600T-2-D	6.2	140	60	145	50	70	20	11	37	8	100	4	25A-AMS60

⑩ Silencer

Compact Resin Type

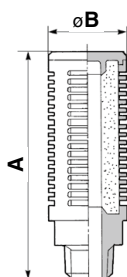
AN20
AN30, AN40


Dimensions

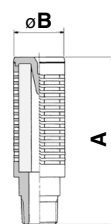
[mm]

Model	Port size R	A	B
AN20-02	1/4	45	16.5
AN30-03	3/8	58.5	20
AN40-04	1/2	68	24

High Noise Reduction Type

AN202 to 402


High Noise Reduction Type

ANA1-06


Dimensions

[mm]

Model	Port size R	A	B
AN202-02	1/4	64	22
AN302-03	3/8	84	28
AN402-04	1/2	95	34

Dimensions

[mm]

Model	Port size R	A	B
ANA1-06	3/4	111	46

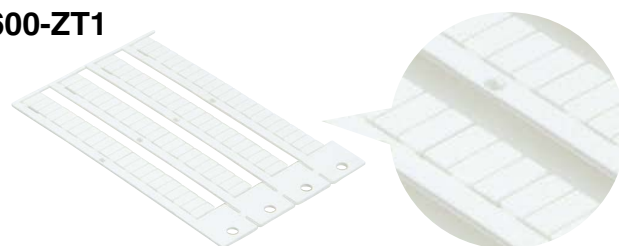
Compatibility Chart for Residual Pressure Relief Valve and Silencers

	Silencer	Compact resin type			High noise reduction type			
	Model	AN20-02	AN30-03	AN40-04	AN202-02	AN302-03	AN402-04	ANA1-06
	Port size	1/4	3/8	1/2	1/4	3/8	1/2	3/4
25A-VP346E	X660 (N.C.)	○	—	—	○	—	—	—
	X661 (N.O.)	○	—	—	—	—	—	—
25A-VP546E	X660 (N.C.)	—	○	—	—	○	—	—
	X661 (N.O.)	—	○	—	—	—	—	—
25A-VP746E	X660 (N.C.)	—	—	○	—	—	○	—
	X661 (N.O.)	—	○	—	—	—	—	—
25A-VP946E	X660 (N.C.)	—	—	—	—	—	—	○*1
	X661 (N.O.)	—	—	—	—	—	—	○

*1 Combined with silencer bushing:
25A-AMS-AB1

⑪ Marker (1 sheet, 88 pcs.)

The signal name of I/O device and each unit address can be entered and mounted on each unit.

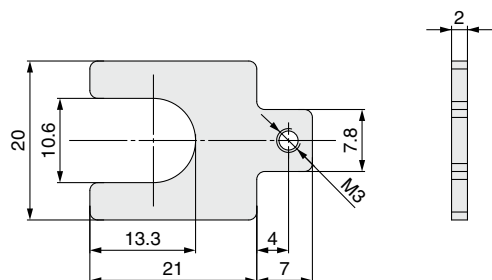
EX600-ZT1


25A-AMS20/30/40/60 Series

⑫ Wireless Adapter Mounting Bracket

1 round head combination screw (M3 x 10) is included.

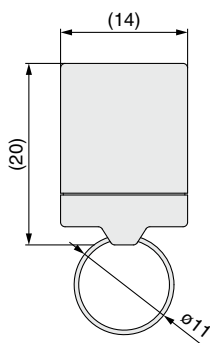
25A-EXA1-AB1



⑬ IO-Link Device Tool License Key

USB dongle

EX9-ZSW-LDT1



* The IO-Link Device Tool V5-PE (V5 or later only) manufactured by TMG Technologie und Engineering GmbH (hereinafter referred to as TMG) is required for setting IO-Link devices. The IO-Link Device Tool can be downloaded for free from TMG's website. However, to use it for more than 30 days, a license key for the IO-Link Device Tool is required.