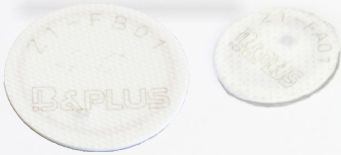


Simple RF-ID! 8-bit system

- Reading program is unnecessary
- The best way of jig or dies management
- 8-bit ID tag available in 120°C

Flexible ID tag



The glass fiber housing is so flexible that it is not broken even if it is bent.



Ceramic ID tag

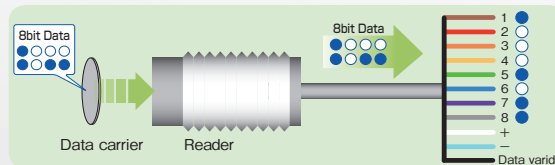
Ceramic tags have excellent chemical resistance and oil resistance.



Max. 8-bit=256 kinds of identification possible!

Advantages

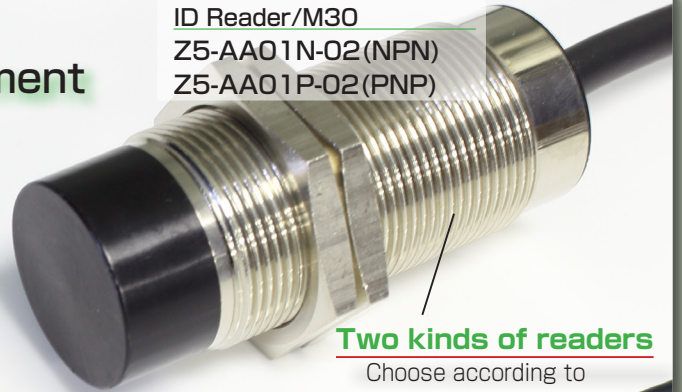
- Reduce maintenance
- Automate the jig exchange
- Error proofing etc.



ID Reader is parallel output

ID Reader/M30

- Z5-AA01N-02 (NPN)
- Z5-AA01P-02 (PNP)



Two kinds of readers

Choose according to installation location



ID Reader/ Compact shape

- Z5-AA03N-02 (NPN)
- Z5-AA03P-02 (PNP)

Diamond shape

Firmly fixed with 2 screws



By using 8-bit system, one ID reader can solve all the problems like as below!

Case 1

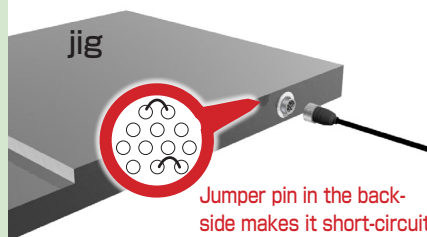
The machine flag which arranged proximity



- Need a space
- When it gets out of position and detects, it turns out to become a different data.

Case 2

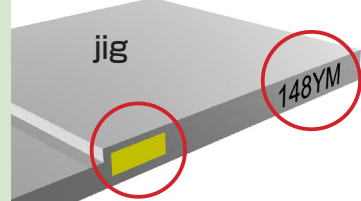
The short circuit connector identification.



- Need a person to pull a connector only for identification.
- Damage, abrasion of a connector
- Forgets to pull a connector

Case 3

Visual observation, owing to a worker, of the marking and color identification.



- In the case of marking identification, it is left to a worker; a burden on worker.
- In the case of color discrimination, lack of color and the deterioration of the color cannot be distinguished.

ID tag

Type code	Z1-AA04-02K	Z1-EA02-128	Z1-FA01-128	Z1-FB01-128	Z1-EC02-128	Z1-B011-128									
Features	D-2N Compatible on installation ID tag	Ceramic ID tag	Flexible ID tag	Flexible ID tag	Ceramic ID tag	Long distance ID tag									
Size	30,30,6mm	φ 9.5 x 2.7 mm	φ 9.5 x 0.9 mm	φ 28 x 0.8 mm	φ 26 x 3.4 mm (hole φ 6)	φ 50 x 8.3 mm									
Mounting on steel	Yes	Yes	No	No	Yes	Yes									
Material	PBT	Zirconia ceramic	Glass fiber cloth	Glass resin cloth	Almina ceramic	PA6									
IC chip	MB 89 R 118	I-CODE SLI , I-CODE SLIX													
Available memory capacity	2K byte/FRAM	112byte (EEPROM)													
Operating temperature	-25...+70°C	-20...+80°C				-20...+85°C									
Storage temperature	-40...+85°C	-25...+120°C 1)													
protective construction	IP67	IP60 2)	IP67	IP67	IP67	IP67									
Mounting	M3screw ³⁾ (Tightening torque 0.5Nm)	with double-stick tape on the back	with double-stick tape on the back	with double-stick tape on the back	M5 screw ³⁾ with double-stick tape on the back	M4 Screw ³⁾									
Read/Write cycles , Data retention time	Read/Write cycles : Unlimited, Data retention time : 10 years	Read cycles : Unlimited , Write cycles : 100,000 , Data retention time : 10 years													
Standard	Comply with ISO15693(Frequency 13.56MHz)														
Mounting	Metal mounting	Non metal mounting	Metal mounting	Non metal mounting	Metal mounting	Non metal mounting	Metal mounting	Non metal mounting	Metal mounting	Non metal mounting	Metal mounting	Non metal mounting	Metal mounting	Non metal mounting	
Read distance(mm)	0 ~ 12	0 ~ 16	0 ~ 5.5	0 ~ 7	-	0 ~ 18	-	0 ~ 30	0 ~ 12	0 ~ 12	Length:Width ways ways	Length:Width ways ways	Length:Width ways ways	Length:Width ways ways	
Center offset	Distance 0mm	±7	±9	±4	±4	-	±7	-	±14	±8	±8	±17	±9	±19	±11
	4mm	±8	±10	±2	±3	-	±7	-	±14	±8	±8	±15	±8	±19	±12
	8mm	±8	±10	-	-	-	±8	-	±14	±5	±5	±10	±6	±18	±12
	10mm	±5	±9	-	-	-	±7	-	±14	±2	±2	±6	±4	±17	±12
	12mm	±0	±9	-	-	-	±7	-	±14	±0	±0	±0	±0	±16	±12
	14mm	-	±6	-	-	-	±4	-	±14	-	-	-	-	±15	±11
	16mm	-	±0	-	-	-	±4	-	±14	-	-	-	-	±13	±9
	20mm	-	-	-	-	-	-	±13	-	-	-	-	-	±6	±4
	22mm	-	-	-	-	-	-	±13	-	-	-	-	-	±0	±0
	30mm	-	-	-	-	-	-	±12	-	-	-	-	-	-	-

* Regarding Z1 - FB01 - 128, distance varies depending on shape, M30 or compact. The above data is of the M30 shape data.

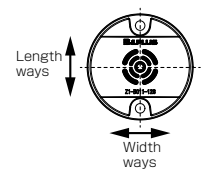
For details, refer to the user's guide.

- Please contact us if the storage temperature would be over 120°C .
- Please contact us if you intend to use in a location that requires Z1-EA02-128 water proof.
- M3 M4 and M5 metal screws are not available. Please prepare in your side.
- Z1-B011-128 has different offset depending on the moving direction of ID tag. When it' s installed as described below, up and down movement means vertical direction, left and right movement means lateral direction.
- Communication distance and axial deviation values are all reference values.

{Other notes}

· The order unit of ID tag is 5 pieces

· When bending the ID tag please avoid internal IC chip When bending, the communication distance becomes short.



Mounting

To avoid the surrounding metal and mutual interference when you install ID Reader, please keep area greater than or equal to value shown in below table. Also, if the non-metallic area depends on the combination of ID tag and Read/write head and ID tag, please keep non-metallic area of the greater value.

Type code	Fig.	Non-metallic area (mm)		Fig.	Mutual interference (mm)
		A	C		D
Z1-EA02-128	1	30	0(20)	2	60
Z1-FA01-128	1	56	20	2	90
Z1-FB01-128	1	70	20	2	110
Z1-EC02-128	1	60	0(20)	2	70
Z1-B011-128	1	70	0(20)	2	100
Z1-AA04-02K	1	70	0(20)	2	70

"Metal mounting" means directly mounted on the metal. but it refers to the absence of metal around except rear of the ID tag.

Value in () shows the required space to keep the communication distance as same as no-metal mounting.

Non-metallic area A of ID Reader and ID tag of button type should be concentric.

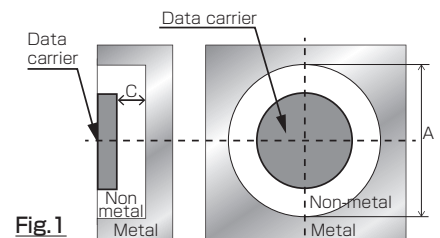


Fig.1

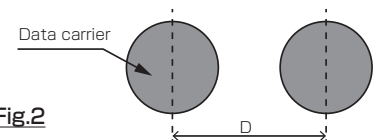
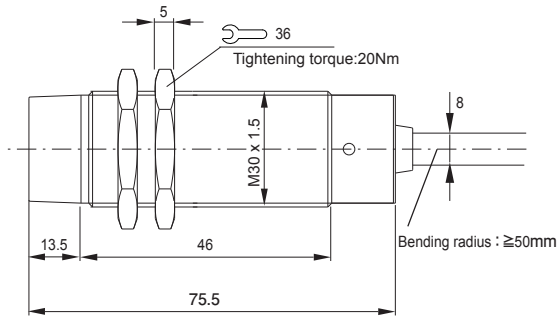


Fig.2

ID Reader <M30 / Compact shape>

M30

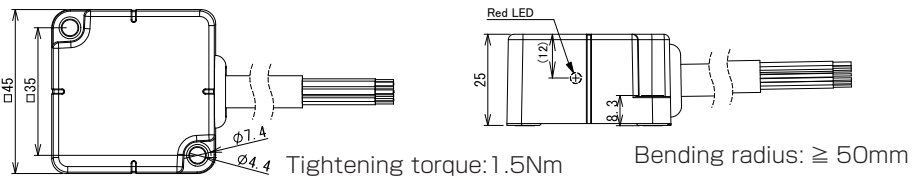


Type code	Cable type	NPN	Z5-AA01N-__
		PNP	Z5-AA01P-__
Supply voltage / Current consumption	24V DC +10% -20% (including ripple) / max.60mA		
Output signal	Parallel(8bit+Data valid)		
Frequency	13.56MHz (Comply with ISO 15693)		
Operating temperature	0...+50°C		
Storage temperature	-25...+80°C		
protective construction	IP67		
Cable specification	Material	PUR	
	Cable length	2m, 5m, 10m(Standard cable length=2m/Max.25m*)	

Compact shape



*When the cable length exceeds 10 m, it is outside of the CE compliant range. Please separately apply surge measures.



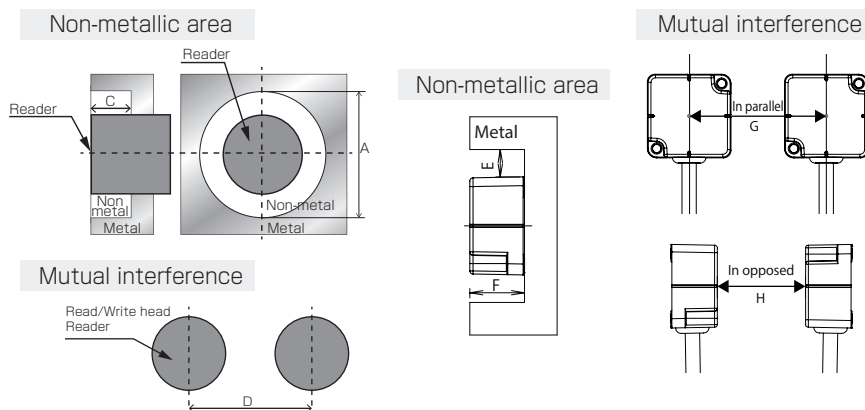
Type code	Cable type	NPN	Z5-AA01N-__
		PNP	Z5-AA01P-__
Supply voltage / Current consumption	24V DC +10% -20% (including ripple) / max.70mA		
Output signal	Parallel(8bit+Data valid)		
Frequency	13.56MHz (Comply with ISO 15693)		
Operating temperature	0...+50°C		
Storage temperature	0...+70°C		
protective construction	IP67		
Cable specification	Material	PUR	
	Cable length	2m,5m, 10m(Standard cable length=2m/Max.25m*)	

*When the cable length exceeds 10 m, it is outside of the CE compliant range. Please separately apply surge measures.

Mounting

To avoid the surrounding metal and mutual interference when you install Reader, please keep area greater than or equal to value shown in below table. Also, if the non-metallic area depends on the combination of ID tag and Read/write head and ID tag, please keep non-metallic area of the greater value.

Type code	Non-metallic area(mm)				Mutual interference		
	A	C	E	F	D	G	H
Z5-AA01__-PU-__	70	20			60		
Z5-AA03__-PU-__			20	25	60	200	



Mounting bracket (an optional extra)

B-PLUS-BLOP-01

- Cylinder shape (M30) can also be installed.
- made from SUS, hard to rust material.

for compact type



for M30 type

Reader/Writer



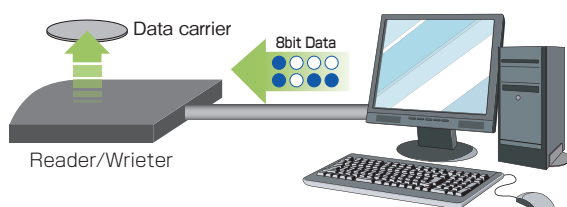
ID Reader/Writer writes to the ID tag by USB or RS-232C connecting to the PC.

Type code	Z6-01-R	Z6-01-U
Connection type	RS-232C type	USB type
Supply voltage	Power supply from AC adapter	5V DC (USB BUS-power)
Size	120mm x 72mm x 20mm 、 cable length 1m	
PC support version	Windows XP / Vista / 7 / 8 / 10	
Software for writing	Using the bundled application software	
Operating temperature	0...+50°C	
Storage temperature	-10...+70°C	
included	AC adaptor	CD-ROM

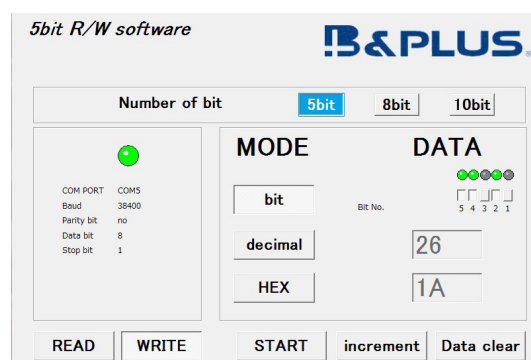
CE approval on Z6-01-R only.

Write System

USB or RS-232C



It is easy to write data by using the bundled application software.

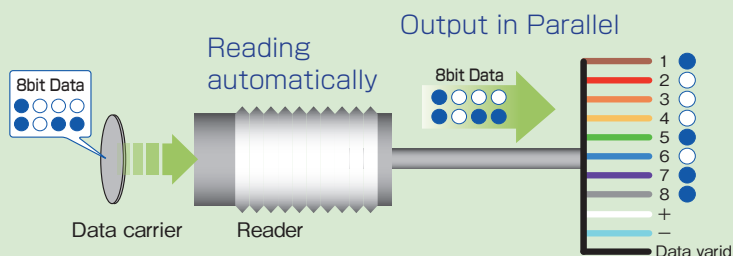


- ① Connect the PC and Reader / Writer via USB or RS232C.
- ② Place the Data carrier on the Reader / Writer.
- ③ Just click on the data from the PC.

※ Data writing to ID tag service is available, please contact us.

Read system

Read system



ID Reader starts reading automatically at the same time the ID tag enters in to the reading area. It outputs the 8-bit data directly in parallel.

B & PLUS K.K.

Mail : bp-tech@b-plus-kk.jp

Web : <http://www.b-plus-kk.jp>

* Contents is subject to change without notice.