

使用說明書內容變更通知

HS7A 型 非接觸式安全開關

茲因 HS7A 型 非接觸式安全開關的使用說明書內容有所變更，特此通知。詳情請參閱下文。

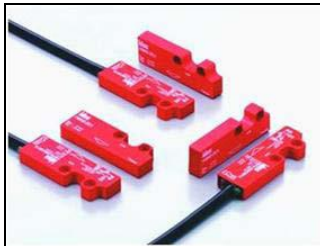
對象機種

HS7A 型 非接觸式安全開關 全機種

(型號以「HS7A-DMC」或「HS7A-DMP」開始的所有機種)

型號			
HS7A-DMC5902	HS7A-DMC7902	HS7A-DMP5002	HS7A-DMP7002
HS7A-DMC5912	HS7A-DMC7912	HS7A-DMP5012	HS7A-DMP7012
HS7A-DMC5905	HS7A-DMC7905	HS7A-DMP5005	HS7A-DMP7005
HS7A-DMC5915	HS7A-DMC7915	HS7A-DMP5015	HS7A-DMP7015
HS7A-DMC59010	HS7A-DMC79010		
HS7A-DMC59110	HS7A-DMC79110		

HS7A-DMC



HS7A-DMP



實施時期

2016 年 4 月出貨品起陸續實施。 ※變更前後的製品可能會混合出貨。

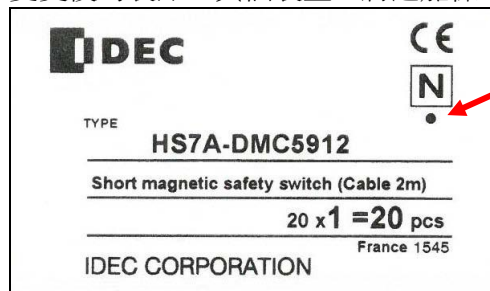
變更內容

為了在安裝時能更穩定的動作，因此變更了此非接觸式安全開關本體及促動開關的動作方向的 SAO(安全輸出 ON 時最小動作距離)、動作區域的相關內容。

另外，追加了一部份注意事項說明。(如附件一、二的紅框所示)

辨識方法

變更後的製品，其個裝盒上將追加標示「●」(黑點)。



標示「●」(黑點)

< 標示期間：2016 年 9 月份製造品為止 >

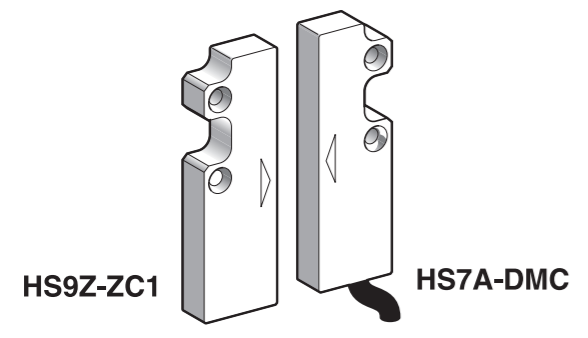
其他

型號、價格及其他製品規格均無變更。

(第 1 頁/共 3 頁)

INSTRUCTION SHEET

Coded Magnetic Switches
HS7A-DMC



Confirm that the delivered product is what you have ordered. Read this instruction sheet to make sure of correct operation. Make sure that the instruction sheet is kept by the end user.

The products have been designed in accordance with the standards in effect : IEC 60947-5-1, EN 292, EN 60204-1 to ensure the safety of machine operators and machine operating reliability, and have obtained the UL/CSA certifications

SAFETY NOTE

CAUTION

The use of the safety relay modules is required for the monitoring of the coded magnetic safety switches.

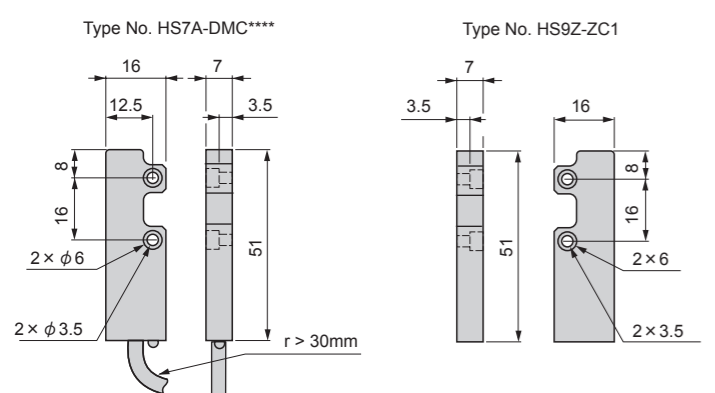
When correctly installed and connected to the HR1S safety relay modules they produce a category 4 control circuit per EN ISO 13849-1 (2 redundant contacts monitored by one HR1S safety relay module or FS series safety controller. See user's manual for wiring with safety controller).

Use the safety switches for an interlocking device in compliance with laws and regulations of the country in which it is being used.

1 Specifications

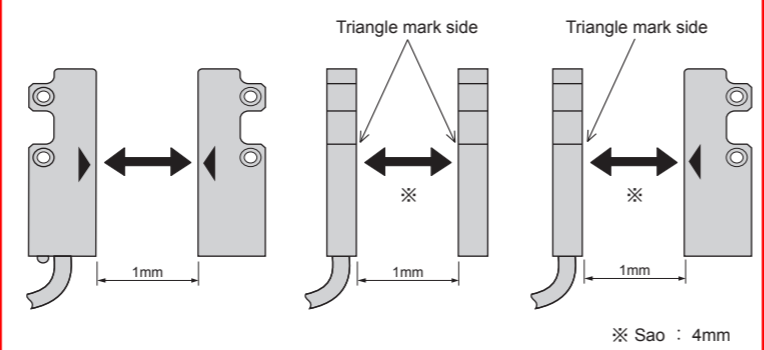
Conforming to standards	IEC / EN 60947-5-1 EN ISO / ISO 14119 UL 508, CSA C22.2 No.14
Interlocking device Type / the level of coded	Type 4 interlocking device / low level coded actuator (EN ISO 14119)
Ambient air temperature	Operation : -13° F to 185° F (-25°C+85°C) (no freezing) Storage : -40° F to 185° F (-40°C+85°C) (no freezing)
Vibration resistance	10 gn (10-150 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn (11 ms) conforming to IEC 60068-2-7
Protection against electric shock	Class II as per IEC 60536
Degree of protection	IP67
Degree of pollution	3, conforming to IEC /EN 60947-5-1
Rated operating characteristics	Ue = 24VDC Ie = 100 mA
Protection (using without safety relay module)	500 mA gG (gL) cartridge fuse (use type CC in the United States)
Repeat accuracy	≤10%
Hysteresis	≤20%
Frequency of operating cycle	150 Hz
Drop out voltage	I=10mA 0,1V without LED; 2,4V with LED I=100mA 1V without LED; 4,2V with LED
Functional switches	Closing - Opening
Cable connection	By cable 4 x AWG 23 (0.25mm ²) length 78.74 in, 196.85 in or 393.70 in (2m, 5m, 10m), depending on model

2 Dimensions (mm)



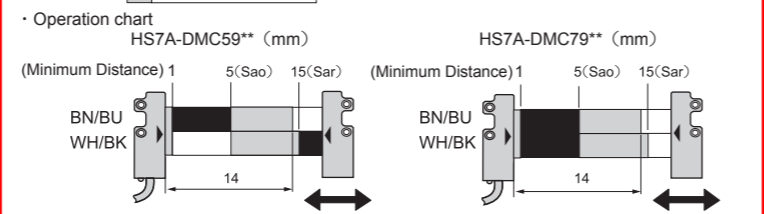
3 Operation

Functional directions - Minimum distance between the safety switch and the magnet

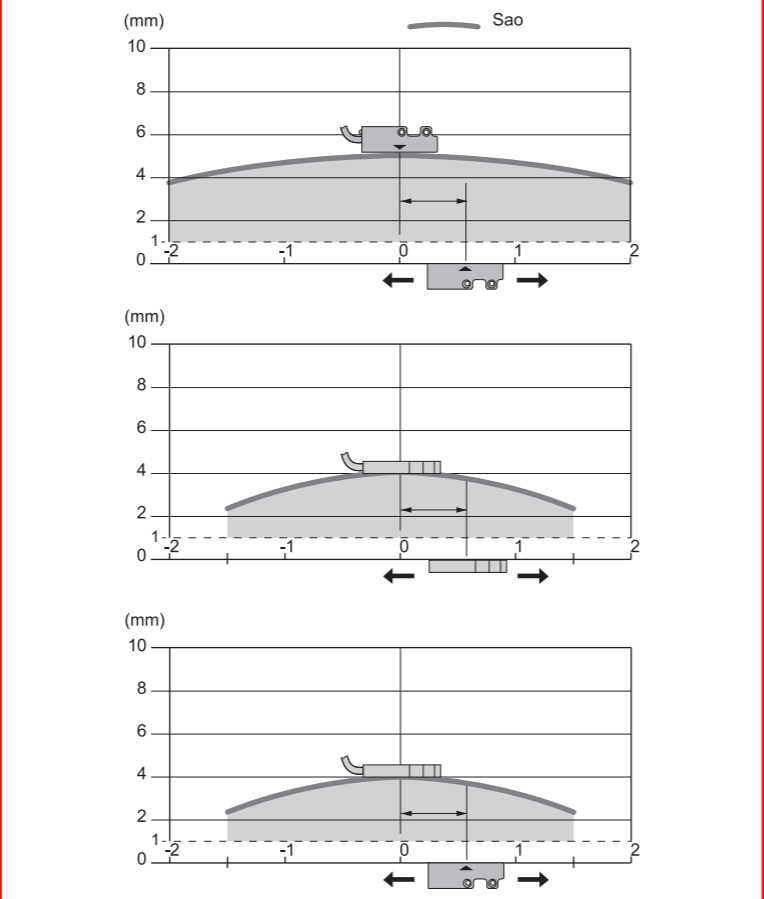


Contact status
-Contact closed (1)
-Contact open (0)
-Transient state

Sao : Assured Operation Distance
Sar : Assured Release Distance

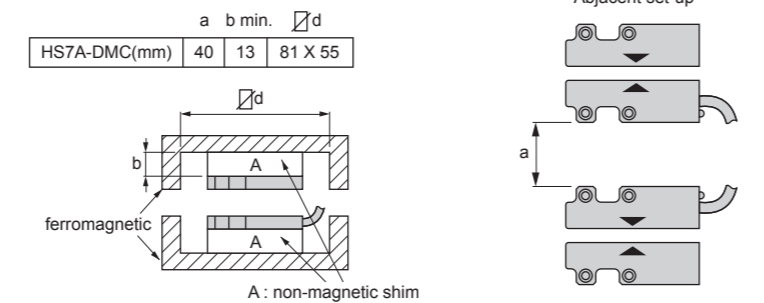


Sensing area

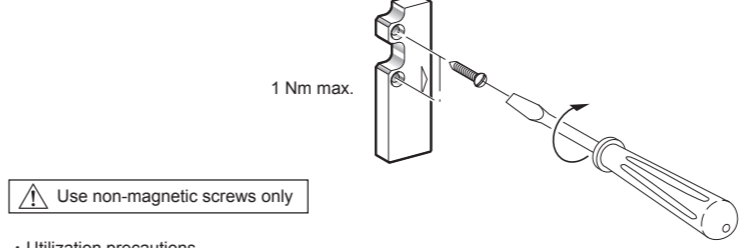


4 Mounting

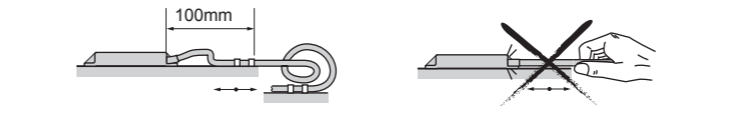
Required arrangement with ferromagnetic mounting support



Tightening torque, Tightening capacity

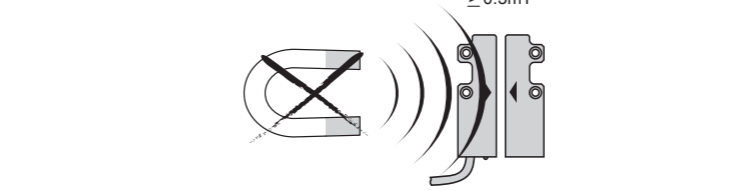


Utilization precautions



Adjustment of coded magnetic switches
The safety switch must not be used as a mechanical stop for your mobile protector, or be adjusted using a hammer.
The switch and actuator should be aligned by fitting of each shapes.

CAUTION

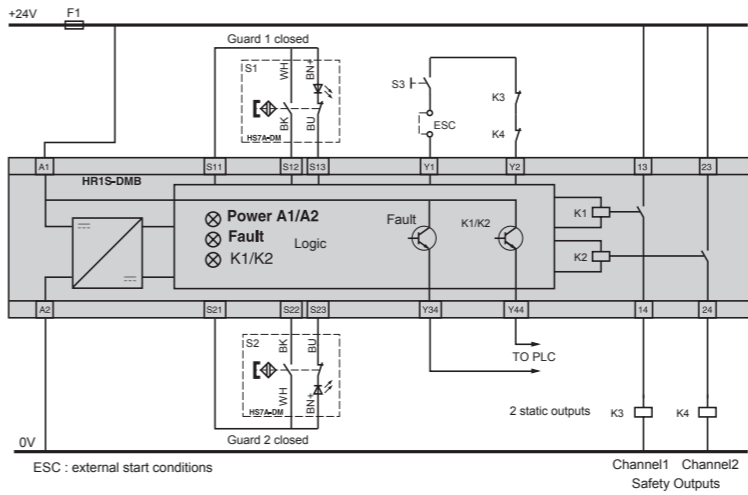


5 Wiring diagram

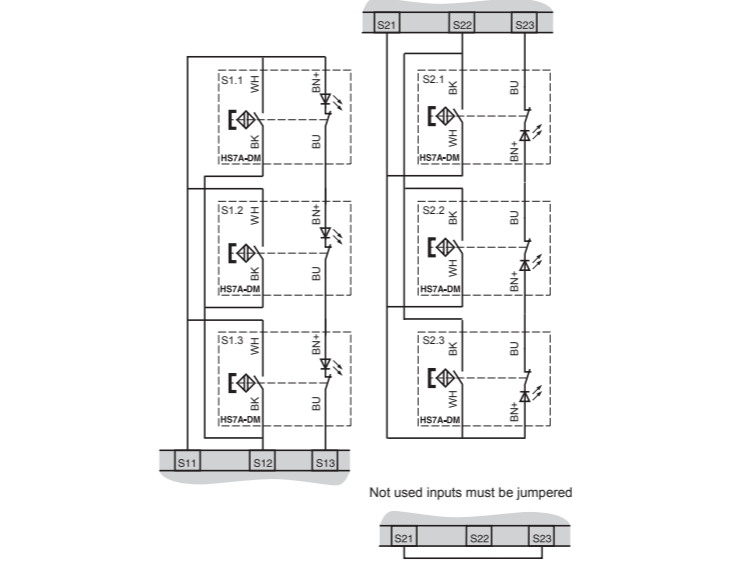
WARNING

HAZARDOUS VOLTAGE
Disconnect all power before working on equipment.
Electric shock will result in death or serious injury.
* Illustration of contacts with magnet present

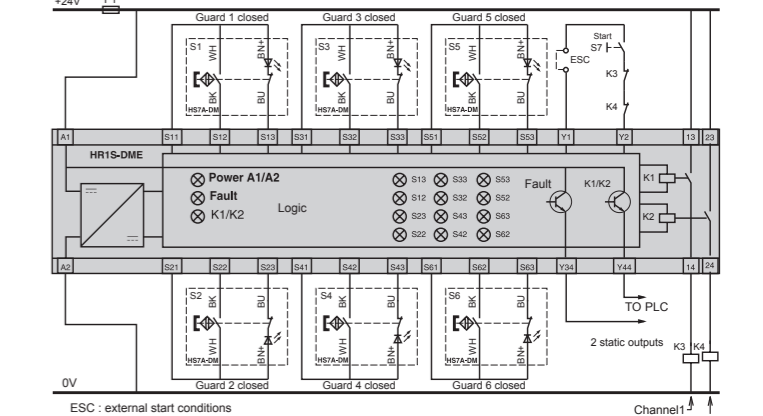
Cat. 4 / PL=e (EN ISO 13849-1) / SIL3 - HR1S-DMB + HS7A-DMC59** (NC+NO) + HS9Z-ZC1



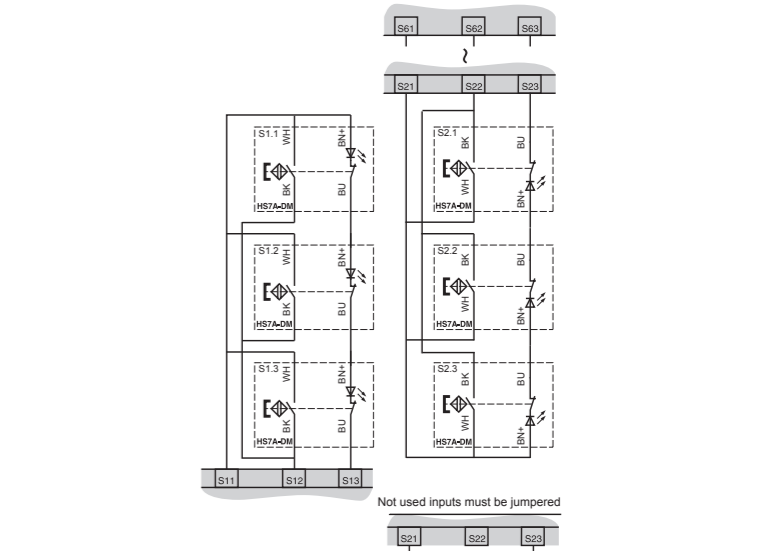
Cat. 3 / PL=d (EN ISO 13849-1) / SIL2 - HR1S-DMB



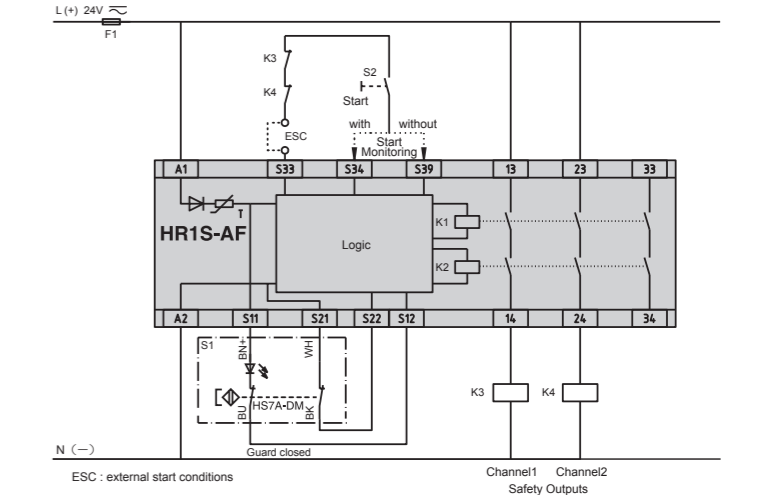
Cat. 4 / PL=e (EN ISO 13849-1) / SIL3 - HR1S-DME + HS7A-DMC59** (NC+NO) + HS9Z-ZC1



Cat. 3 / PL=d (EN ISO 13849-1) / SIL2 - HR1S-DME



Cat. 4 / PL=e (EN ISO 13849-1) / SIL3 - HR1S-AF + HS7A-DMC79** (NO+NO) + HS9Z-ZC1



Connectable HS7A-DMC per Input.

	HS7A-DMC59**		HS7A-DMC79**	
	without LED	with LED	without LED	with LED
HR1S-DMB/DME	6	3	6	1
HR1S-AF			6	1

Type

Type No.	LED	Cable	Contact	Type No.	LED	Cable	Contact
HS7A-DMC5902	without	2m	NO + NC	HS7A-DMC7902	without	2m	NO + NO
HS7A-DMC5912	with	2m		HS7A-DMC7912	with	2m	
HS7A-DMC5905	without	5m	NO + NC	HS7A-DMC7905	without	5m	NO + NO
HS7A-DMC5915	with			HS7A-DMC7915	with		
HS7A-DMC59010	without	10m	NO + NC	HS7A-DMC7910	without	10m	NO + NO
HS7A-DMC59110	with			HS7A-DMC79110	with		

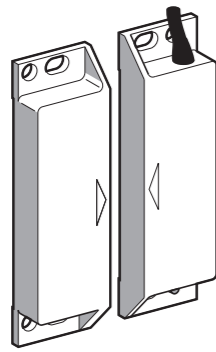
IDEC CORPORATION

DECLARATION OF CONFORMITY
We, IDEC CORPORATION 6-64, Nishimiyahara 2-chome Yodogawa-ku, Osaka 532-0004, Japan declare under our sole responsibility that the product:
Description: Non-contact Safety Switch
Series Name: HS7A Series
Model No.: HS7A-DMC59** (** = 02, 12, 05, 15, 010, or 110), HS7A-DMC79** (** = 02, 12, 05, 15, 010, or 110) to which this declaration relates is in conformity with the EC Directive on the following standard(s) or other normative document(s). In case of alteration of the product, not agreed upon by us, this declaration will lose its validity.
Applicable EC Directive: Low Voltage Directive (2006/95/EC)
EC Directive of Electromagnetic Compatibility (2004/108/EC)
Machinery Directive (2006/42/EC)
Applicable Standard(s) : EN ISO 13849-1, EN ISO 14119, EN 60204-1, EN 62061, EN 60947-1, EN 60947-5-1
Authorized Representative in EU : IDEC ELEKTROTECHNIK GmbH Wendenstrasse 331, D-20537 Hamburg, Germany
W916343840111 A06 2/2

INSTRUCTION SHEET

Coded Magnetic Switches
HS7A-DMP

HS9Z-ZP1 HS7A-DMP



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SAFETY NOTE

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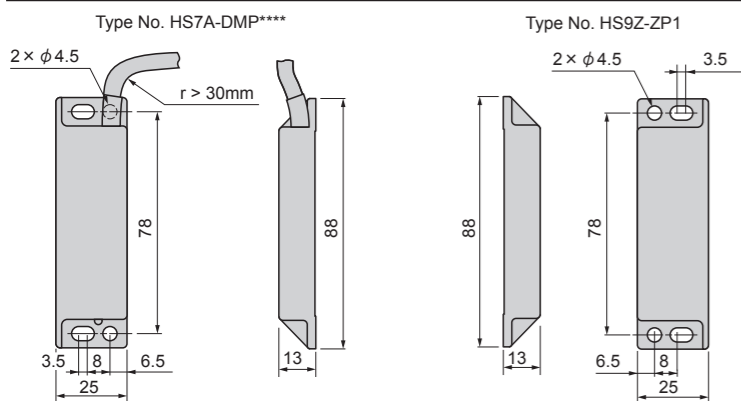
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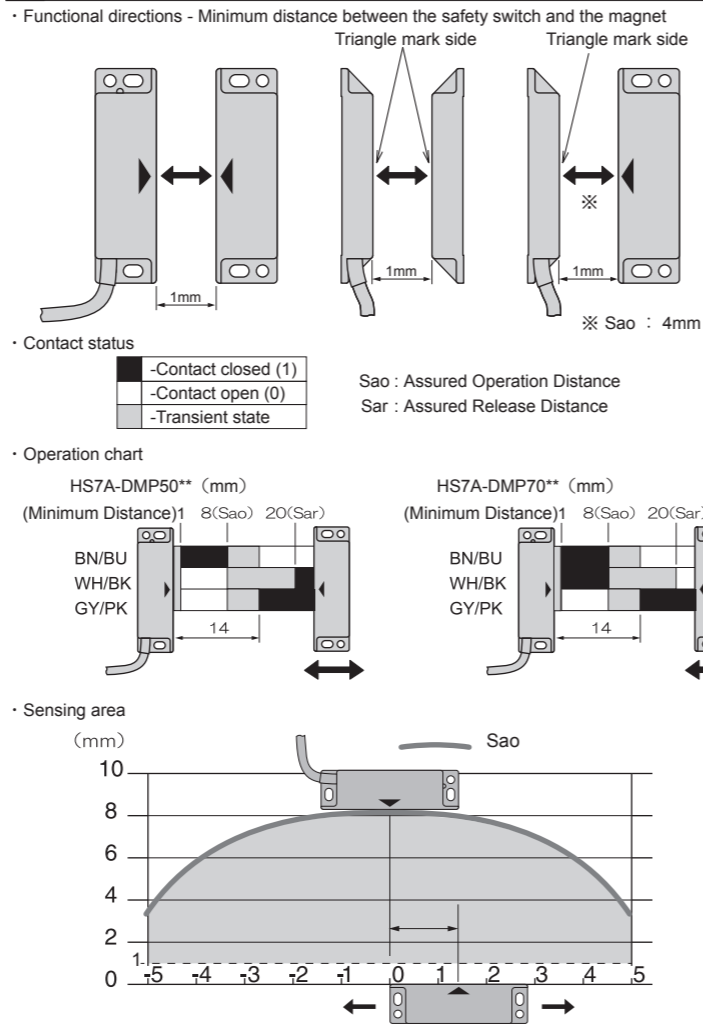
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Functional switches	Closing - Opening
Cable connection	By cable 6 x AWG 23 (0.25mm ²) length 78.74 in, 196.85 in (2m, 5m), depending on model

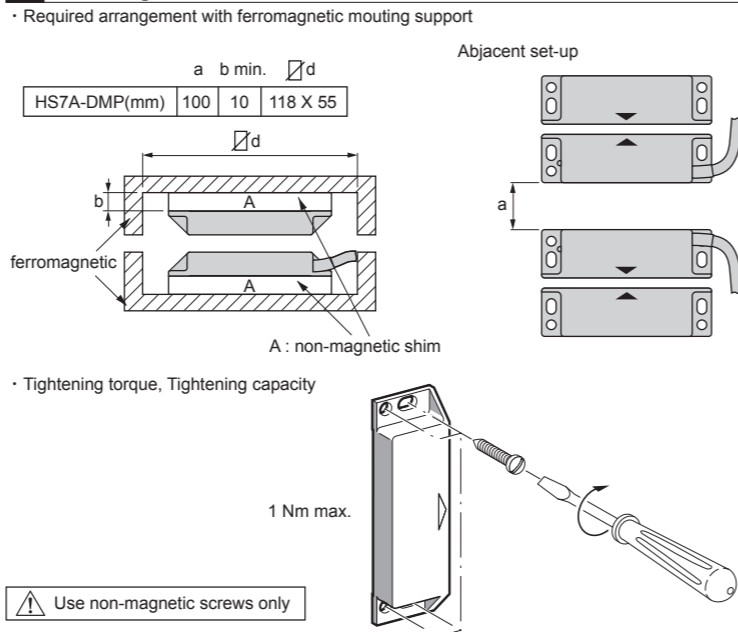
2 Dimensions (mm)



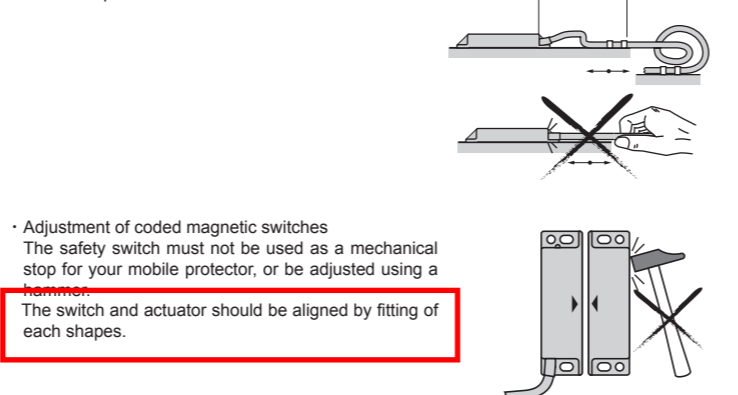
3 Operation



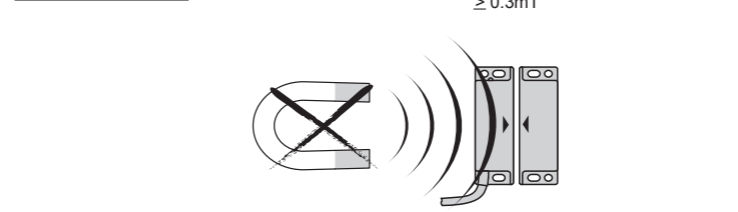
4 Mounting



Utilization precautions



CAUTION



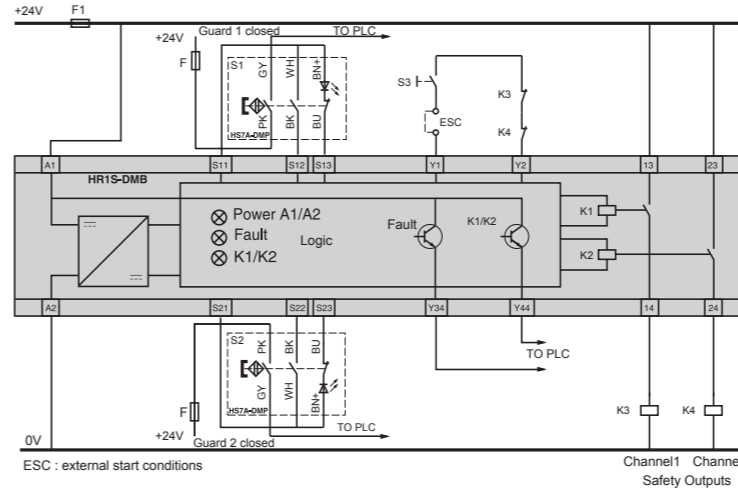
5 Wiring diagram

WARNING

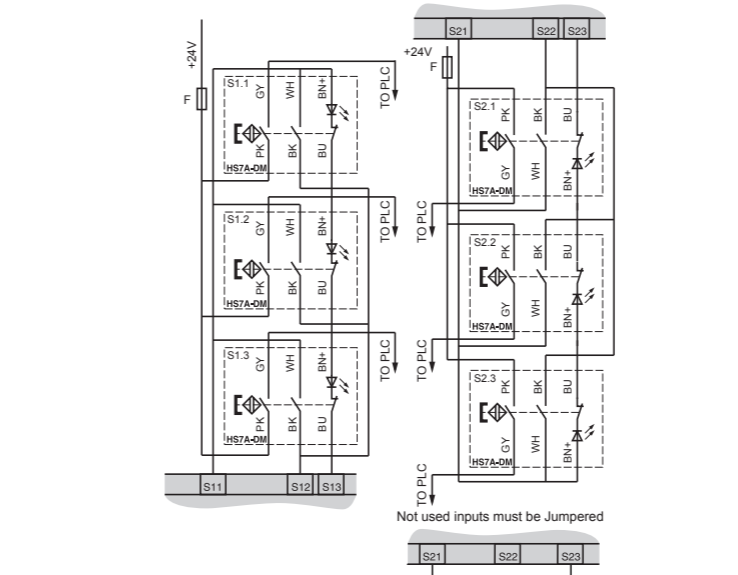
HAZARDOUS VOLTAGE
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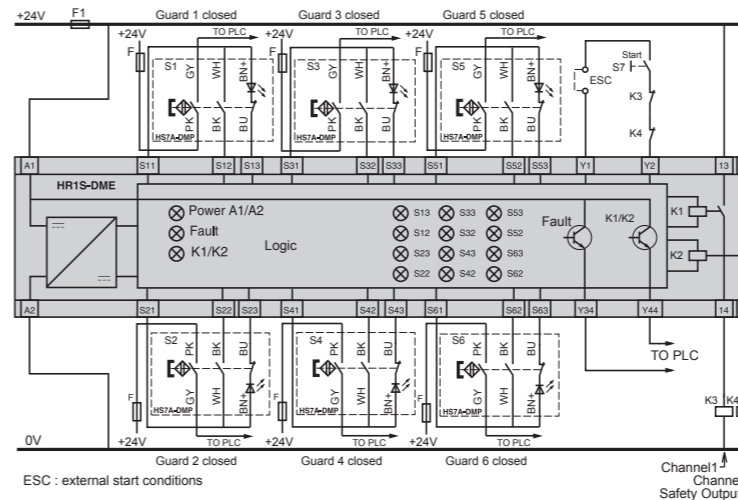
Cat. 4 / PL=e (EN ISO 13849-1) / SIL3
- HR1S-DMB + HS7A-DMP50** (NC+NC+NO) + HS9Z-ZP1



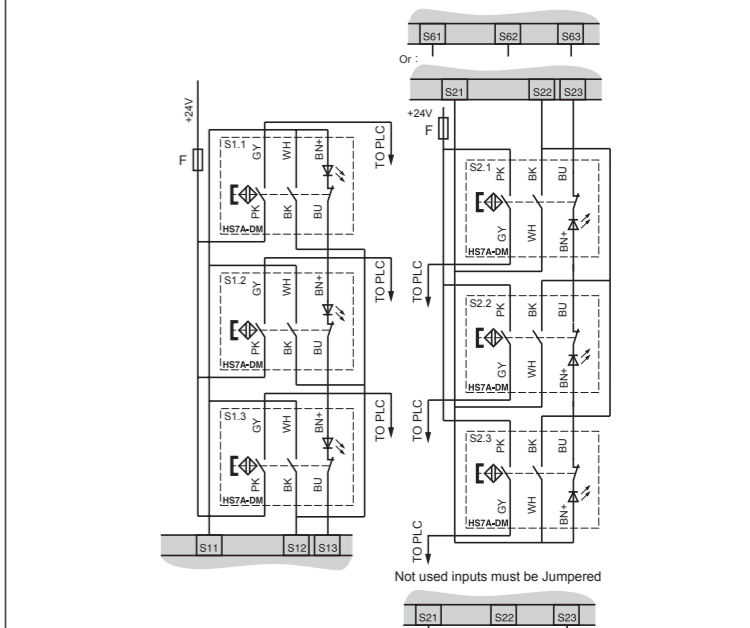
Cat. 3 / PL=d (EN ISO 13849-1) / SIL2 - HR1S-DME



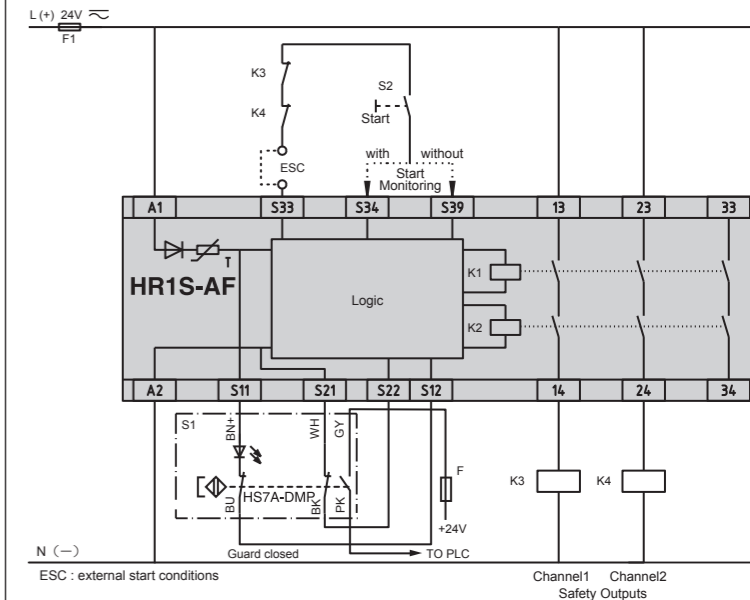
Cat. 4 / PL=e (EN ISO 13849-1) / SIL3
- HR1S-DME + HS7A-DMP50** (NC+NC+NO) + HS9Z-ZP1



Cat. 3 / PL=d (EN ISO 13849-1) / SIL2 - HR1S-DME



Cat. 4 / PL=e (EN ISO 13849-1) / SIL3
- HR1S-AF + HS7A-DMP70** (NO+NO+NC) + HS9Z-ZP1



Connectable HS7A-DMP per Input.

	HS7A-DMP50**		HS7A-DMP70**	
	without LED	with LED	without LED	with LED
HR1S-DMB/DME	6	3	6	1
HR1S-AF			6	1

Type

Type No.	LED	Cable	Contact	Type No.	LED	Cable	Contact
HS7A-DMP5002	without		NO	HS7A-DMP7002	without		NO
HS7A-DMP5012	with	2m	+	HS7A-DMP7012	with	2m	+
HS7A-DMP5005	without		NC	HS7A-DMP7005	without		NC
HS7A-DMP5015	with	5m	+	HS7A-DMP7015	with	5m	+

IDEC CORPORATION

DECLARATION OF CONFORMITY

We, IDEC CORPORATION 6-64, Nishimiyahara 2-chome Yodogawa-ku, Osaka 532-0004, Japan declare under our sole responsibility that the product:
Description: Non-contact Safety Switch
Series Name: HS7A Series
Model No.: HS7A-DMP50** (** = 02, 12, 05, or 15), HS7A-DMP70** (** = 02, 12, 05, or 15) to which this declaration relates is in conformity with the EC Directive on the following standard(s) or other normative document(s). In case of alteration of the product, not agreed upon by us, this declaration will lose its validity.
Applicable EC Directive: Low Voltage Directive (2006/95/EC)
EMC Directive of Electromagnetic Compatibility (2004/108/EC)
Machinery Directive (2006/42/EC)

Applicable Standard(s) : EN ISO 13849-1, EN ISO 14119, EN 60204-1, EN 62061, EN 60947-1, EN 60947-5-1
Authorized Representative in EU : IDEC ELEKTROTECHNIK GmbH Wendenstrasse 331, D-20537 Hamburg, Germany