

# THE NEW STANDARD AND FULL-METAL SERIES

DCA / D7A

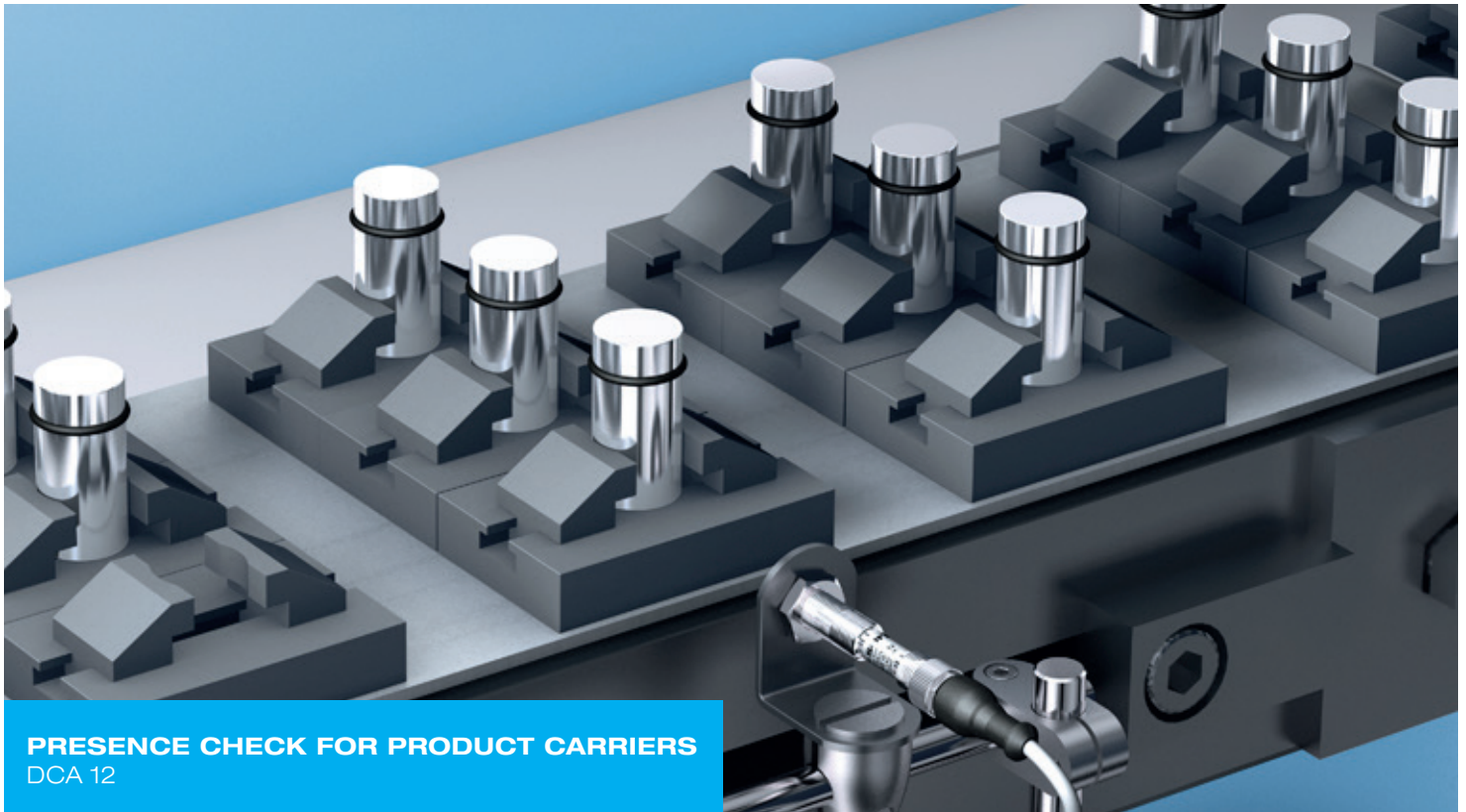
 **di-soric**

# INDUCTIVE PROXIMITY SWITCHES

## DCA/D7A SERIES

### AN ENLARGEMENT OF OFFERING WITH EXTENDED SENSING RANGE FOR MAXIMUM RESULT.

The di-soric DCA/D7A series inductive proximity switches are available from size Ø 3 mm up to M30 and thanks to the various standard, double and extended operating distances suitable for various applications.



PRESENCE CHECK FOR PRODUCT CARRIERS  
DCA 12



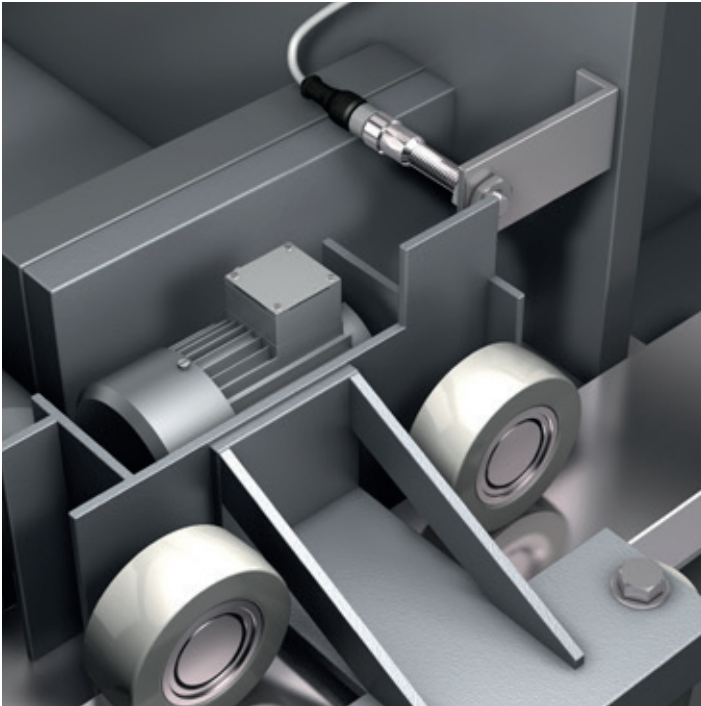
### KEY BENEFITS

- Product selection range has been significantly extended to cater to various application requirements
- Standard, double and extended operating distance offers wider choice of selection to meet various demanding application
- Available in both long and short housing versions
- This series now includes the DC 2-wires products range with “non-polarised” connectivity
- The NEW improved end-cap design with status LED offering 360° illumination that provides better visibility

# OPERATING DISTANCE THAT CAN NOW STRETCH FURTHER

## AVAILABLE WITH CABLE, CONNECTOR OR PIG-TAIL

From the standard application to highest technical requirements, di-soric inductive proximity switches perform all tasks perfectly. A complete product program, always on the state of the newest technology and convincing by its impressive quality and reliability.



### DETECTING METALLIC SURFACES

D7A 08 VB 03



### PRESENCE CHECK

DCA 18

Diameter Ø3 mm (SS Housing)	0.6	0.8	1.0mm
Ø4mm and M4 (SS Housing)	0.6	0.8	1.0-1.5mm
Ø5mm and M5 (SS/BNP Housing)	0.8	1.0	1.5mm
M8 (SS/BNP Housing)	1.0 - 4.0	3.0 - 6.0	4.0 - 8.0mm
M12 (SS/BNP Housing)	2.0 - 4.0	4.0 - 8.0	6.0 - 12.0mm
M18 (SS/BNP Housing)	5.0 - 8.0	8.0 - 16.0	12.0 - 23.0mm
M30 (SS/BNP Housing)	10.0 - 15.0	10.0 - 15.0	22.0 - 40.0mm



Flush/Non-Flush Mounting
  Standard Sensing Range
  Double Sensing Range
  Extended Sensing Range

# PRODUCT KEY

## DCA/D7A SERIES



**DCA** | **K** | **12** | **M** | **B** | **02** | **P** | **S** | **-3**

<b>DCA</b>	Inductive Standard Series
<b>D7A</b>	Inductive Full-Metal Series

<b>K</b>	Cylindrical Short-housing
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<b>3.0</b>	Ø 3.0
<b>4.0</b>	Ø 4.0
<b>04</b>	M4
<b>05</b>	M5
<b>6.5</b>	Ø 6.5
<b>08</b>	M8
<b>12</b>	M12
<b>18</b>	M18
<b>30</b>	M30

<b>M</b>	Brass, Nickel-Plated
<b>V</b>	Stainless steel

<b>B</b>	Flush Mounting
<b>N</b>	Non-Flush Mounting
<b>Q</b>	Quasi-Flush Mounting

<b>-2</b>	Cable 2m, 2-poles
<b>-3</b>	Cable 2m, 3-poles
<b>-4</b>	Cable 2m, 4-poles
<b>-B3</b>	Connector M12, 3-poles
<b>-B4</b>	Connector M12, 4-poles
<b>-T3</b>	Connector M8, 3-poles
<b>-T4</b>	Connector M8, 4-poles
<b>-K-Bx</b>	Pigtail Connector M12, x-poles
<b>-K-Tx</b>	Pigtail Connector M8, x-poles

<b>S</b>	Normally-Open (NO)
<b>O</b>	Normally-Closed (NC)
<b>SO</b>	Antivalent (NO/NC)

<b>P</b>	PNP
<b>N</b>	NPN

<b>02</b>	Operating Sensor Distance
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# TECHNICAL DATA

## INDUCTIVE PROXIMITY SWITCHES – STANDARD (SIZE 3 TO 30)

Size	Flush	Non flush	Quasi flush	Operating distance (mm)	DC/3-wires/PNP	DC/3-wires/NPN	DC/2-wires	Option
Ø3	■			0.6 / 0.8 / 1.0	DCA 3.0 VB 0.6 Px - yy	DCA 3.0 VB 0.6 Nx - yy		x = (S) Normally-Open or (O) Normally-Closed yy = (3) Cable ; (K-T3) M8 Pigtail
Others - Available upon request i.e. Cable-length or Pigtail etc.								
Ø4	■			0.6 / 0.8 / 1.0	DCA 4.0 VB 0.6 Px - yy	DCA 4.0 VB 0.6 Nx - yy		x = (S) Normally-Open or (O) Normally-Closed yy = (3) Cable ; (T3) M8 Connector or (K-T3) M8 Pigtail
M4	■			0.6 / 0.8 / 1.0	DCA 04 VB 0.6 Px - yy	DCA 04 VB 0.6 Nx - yy		
				1.5	DCA 04 VN 1.5 Px - yy	DCA 04 VN 1.5 Nx - yy		
Others - Available upon request i.e. Cable-length or Pigtail etc.								
M5	■			0.8 / 1.0 / 1.5	DCA 05 VB 0.8 Px - yy	DCA 05 VB 0.8 Nx - yy		x = (S) Normally-Open or (O) Normally-Closed yy = (3) Cable ; (T3) M8 Connector or (K-T3) M8 Pigtail
M5, Short	■			0.8 / 1.0 / 1.5	DCAK 05 VB 0.8 Px - yy	DCAK 05 VB 0.8 Nx - yy		
Others - Available upon request i.e. Cable-length or Pigtail etc.								
Ø6.5	■	■		2.0	DCA 6.5 VB 02 Px - yy	DCA 6.5 VB 02 Nx - yy	DCA 6.5 VB 02 x - yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable ; (T3) M8 or (B3) M12 Connector
				4.0 / 6.0 / 8.0	DCA 6.5 VN 04 Px - yy	DCA 6.5 VN 04 Nx - yy	DCA 6.5 VN 04 x - yy	
				3.0 / 4.0	DCA 6.5 VQ 03 Px - yy	DCA 6.5 VQ 03 Nx - yy		
Ø6.5, Short	■	■		2.0	DCAK 6.5 VB 02 Px - yy	DCAK 6.5 VB 02 Nx - yy	DCAK 6.5 VB 02 x - yy	
				4.0 / 6.0 / 8.0	DCAK 6.5 VN 04 Px - yy	DCAK 6.5 VN 04 Nx - yy	DCAK 6.5 VN 04 x - yy	
				3.0 / 4.0	DCAK 6.5 VQ 03 Px - yy	DCAK 6.5 VQ 03 Nx - yy		
Others - Available upon request i.e. Cable-length or Pigtail etc.								
M8	■	■		1.0 / 2.0	DCA 08 VB 01 Px - yy	DCA 08 VB 01 Nx - yy	DCA 08 VB 01 x - yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable ; (T3) M8 or (B3) M12 Connector
				2.0 / 4.0 / 6.0 / 8.0	DCA 08 VN 02 Px - yy	DCA 08 VN 02 Nx - yy	DCA 08 VN 02* x - yy	
				3.0 / 4.0	DCA 03 VQ 03 Px - yy	DCA 08 VQ 03 Nx - yy		
M8, Short	■	■		1.0 / 2.0	DCAK 08 VB 02 Px - yy	DCAK 08 VB 01 Nx - yy	DCAK 08 VB 01 x - yy	
				2.0 / 4.0 / 6.0 / 8.0	DCAK 08 VN 02 Px - yy	DCAK 08 VN 02 Nx - yy	DCAK 08 VN 02* x - yy	
				3.0 / 4.0	DCAK 08 VQ 03 Px - yy	DCAK 08 VQ 03 Nx - yy		
* Available with 2.0 & 4.0mm, Others - Available upon request i.e. Cable-length or Pigtail etc.								
M12	■	■		2.0 / 4.0	DCA 12 MB 02 Px - yy	DCA 12 MB 02 Nx - yy	DCA 12 MB 02 x - yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable or (B3) M12 Connector
				4.0 / 8.0 / 10 / 12	DCA 12 MN 04 Px - yy	DCA 12 MN 04 Nx - yy	DCA 12 MN 04* x - yy	
				6.0 / 8.0	DCA 12 MQ 06 Px - yy	DCA 12 MQ 06 Nx - yy		
M12, Short	■	■		2.0 / 4.0	DCAK 12 MB 02 Px - yy	DCAK 12 MB 02 Nx - yy	DCAK 12 MB 02 x - yy	
				4.0 / 8.0 / 10 / 12	DCAK 12 MN 04 Px - yy	DCAK 12 MN 04 Nx - yy	DCAK 12 MN 04* x - yy	
				6.0 / 8.0	DCAK 12 MQ 06 Px - yy	DCAK 12 MQ 06 Nx - yy		
* Available with 4.0 & 8.0mm, Others - Available upon request i.e. Cable-length or Pigtail etc.								
M18	■	■		5.0 / 8.0	DCA 18 MB 05 Px - yy	DCA 18 MB 05 Nx - yy	DCA 18 MB 05 x - yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable or (B3) M12 Connector
				8.0 / 16 / 20 / 23	DCA 18 MN 08 Px - yy	DCA 18 MN 08 Nx - yy	DCA 18 MN 08* x - yy	
				12 / 15	DCA 18 MQ 12 Px - yy	DCA 18 MQ 12 Nx - yy		
M18, Short	■	■		5.0 / 8.0	DCAK 18 MB 05 Px - yy	DCAK 18 MB 05 Nx - yy	DCAK 18 MB 05 x - yy	
				8.0 / 16 / 20 / 23	DCAK 18 MN 08 Px - yy	DCAK 18 MN 08 Nx - yy	DCAK 18 MN 08* x - yy	
				12 / 15	DCAK 18 MQ 12 Px - yy	DCAK 18 MQ 12 Nx - yy		
* Available with 8.0 & 16mm, Others - Available upon request i.e. Cable-length or Pigtail etc.								
M30	■	■		10 / 15	DCA 30 MB 10 Px - yy	DCA 30 MB 10 Nx - yy	DCA 30 MB 10 x - yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable or (B3) M12 Connector
				15 / 25 / 40	DCA 30 MN 15 Px - yy	DCA 30 MN 15 Nx - yy	DCA 30 MN 15* x - yy	
				22 / 25	DCA 30 MQ 22 Px - yy	DCA 30 MQ 22 Nx - yy		
M30, Short	■	■		10 / 15	DCAK 30 MB 10 Px - yy	DCAK 30 MB 10 Nx - yy	DCAK 30 MB 10 x - yy	
				15 / 25 / 40	DCAK 30 MN 15 Px - yy	DCAK 30 MN 15 Nx - yy	DCAK 30 MN 15* x - yy	
				22 / 25	DCAK 30 MQ 22 Px - yy	DCAK 30 MQ 22 Nx - yy		
* Available with 15 & 25mm, Others - Available upon request i.e. Cable-length or Pigtail etc.								

# TECHNICAL DATA

## INDUCTIVE PROXIMITY SENSORS, ANTIVALET (SIZE 6.5 ... 30)

Size	Flush	Non flush	Quasi flush	Operating distance (mm)	DC / 4 Wires / PNP	DC / 4 Wires / NPN	Option
Ø6.5	■			2.0	DCA 6.5 VB 02 PSO-yy	DCA 6.5 VB 02 NSO-yy	x = (S) Normally-Open and (O) Normally-Closed yy = (4) Cable (T4) M8 or (B4) M12 Connector
	■			2.0	DCAK 6.5 VB 02 PSO-yy	DCAK 6.5 VB 02 NSO-yy	
M8	■			1.0 / 2.0	DCA 08 VB 01 PSO-yy	DCA 08 VB 01 NSO-yy	x = (S) Normally-Open and (O) Normally-Closed yy = (4) Cable (T4) M8 or (B4) M12 Connector
	■	■		2.0	DCA 08 VN 02 PSO-yy	DCA 08 VN 02 NSO-yy	
M8, Short	■			1.0 / 2.0	DCAK 08 VB 02 PSO-yy	DCAK 08 VB 01 NSO-yy	
	■	■		2.0	DCAK 08 VN 02 PSO-yy	DCAK 08 VN 02 NSO-yy	
M12	■			2.0 / 4.0	DCA 12 MB 02 PSO-yy	DCA 12 MB 02 NSO-yy	x = (S) Normally-Open and (O) Normally-Closed yy = (4) Cable (T4) M8 or (B4) M12 Connector
	■	■		4.0 / 8.0 / 10 / 12	DCA 12 MN 04 PSO-yy	DCA 12 MN 04 NSO-yy	
	■		■	6.0 / 8.0	DCA 12 MQ 06 PSO-yy	DCA 12 MQ 06 NSO-yy	
M12, Short	■			2.0 / 4.0	DCAK 12 MB 02 PSO-yy	DCAK 12 MB 02 NSO-yy	
	■	■		4.0 / 8.0 / 10 / 12	DCAK 12 MN 04 PSO-yy	DCAK 12 MN 04 NSO-yy	
	■		■	6.0 / 8.0	DCAK 12 MQ 06 PSO-yy	DCAK 12 MQ 06 NSO-yy	
M18	■			5.0 / 8.0	DCA 18 MB 05 PSO-yy	DCA 18 MB 05 NSO-yy	x = (S) Normally-Open and (O) Normally-Closed yy = (4) Cable (T4) M8 or (B4) M12 Connector
	■	■		8.0 / 16 / 20 / 23	DCA 18 MN 08 PSO-yy	DCA 18 MN 08 NSO-yy	
	■		■	12 / 15	DCA 18 MQ 12 PSO-yy	DCA 18 MQ 12 NSO-yy	
M18, Short	■			5.0 / 8.0	DCAK 18 MB 05 PSO-yy	DCAK 18 MB 05 NSO-yy	
	■	■		8.0 / 16 / 20 / 23	DCAK 18 MN 08 PSO-yy	DCAK 18 MN 08 NSO-yy	
	■		■	12 / 15	DCAK 18 MQ 12 PSO-yy	DCAK 18 MQ 12 NSO-yy	
M30	■			10 / 15	DCA 30 MB 10 PSO-yy	DCA 30 MB 10 NSO-yy	x = (S) Normally-Open and (O) Normally-Closed yy = (4) Cable (T4) M8 or (B4) M12 Connector
	■	■		15 / 25 / 40	DCA 30 MN 15 PSO-yy	DCA 30 MN 15 NSO-yy	
	■		■	22	DCA 30 MQ 22 PSO-yy	DCA 30 MQ 22 NSO-yy	
M30, Short	■			10 / 15	DCAK 30 MB 10 PSO-yy	DCAK 30 MB 10 NSO-yy	
	■	■		15 / 25 / 40	DCAK 30 MN 15 PSO-yy	DCAK 30 MN 15 NSO-yy	
	■		■	22	DCAK 30 MQ 22 PSO-yy	DCAK 30 MQ 22 NSO-yy	

Others - Available upon request i.e. Cable-length or Pig-tail etc.

## INDUCTIVE PROXIMITY SENSORS, FULL-METAL (SIZE 8 ... 30)

Size	Flush	Non flush	Quasi flush	Operating distance (mm)	DC/3-wires/PNP	DC/3-wires/NPN	DC/2-wires	Option
M8	■			1.0 / 2.0 / 3.0	D7A 08 VB 01 Px-yy	D7A 08 VB 01 Nx-yy	D7A 08 VB 01* x-yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable ; (T3) M8 or (B3) M12 Connector
	■	■		2.0 / 3.5 / 4.0	D7A 08 VN 02 Px-yy	D7A 08 VN 02 Nx-yy	D7A 08 VN 02** x-yy	
M8, Short	■			1.0 / 2.0 / 3.0	D7AK 08 VB 01 Px-yy	D7AK 08 VB 01 Nx-yy	D7AK 08 VB 01* x-yy	
	■	■		2.0 / 3.5 / 4.0	D7AK 08 VN 02 Px-yy	D7AK 08 VN 02 Nx-yy	D7AK 08 VN 02** x-yy	
* Available with 1.0 & 2.0 mm and ** 2mm								
M12	■			2.0 / 4.0 / 6.0	D7A 12 VB 02 Px-yy	D7A 12 VB 02 Nx-yy	D7A 12 VB 02 x-yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable or (B3) M12 Connector
	■	■		4.0 / 6.0	D7A 12 VN 04 Px-yy	D7A 12 VN 04 Nx-yy	D7A 12 VN 04 x-yy	
M12, Short	■			2.0 / 4.0	DCAK 12 VB 02 Px-yy	D7AK 12 VB 02 Nx-yy	D7AK 12 VB 02 x-yy	
	■	■		4.0 / 6.0	DCAK 12 VN 04 Px-yy	D7AK 12 VN 04 Nx-yy	D7AK 12 VN 04 x-yy	
M18	■			5.0 / 8.0	D7A 18 VB 05 Px-yy	D7A 18 VB 05 Nx-yy	D7A 18 VB 8 x-yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable or (B3) M12 Connector
	■	■		8.0 / 10	D7A 18 VN 08 Px-yy	D7A 18 VN 08 Nx-yy	DCA 18 VN 08* x-yy	
M18, Short	■			5.0 / 8.0	D7AK 18 VB 05 PxS-yy	D7AK 18 VB 05 Nx-yy	DCAK 18 VB 05** x-yy	
	■	■		8.0 / 10	D7AK 18 VN 08 Px-yy	D7AK 18 VN 08 Nx-yy	DCAK 18 VN 08*** x-yy	
*Available with 8.0, ** 5.0mm and *** 8.0mm								
M30	■			10	D7A 30 VB 10 Px-yy	D7A 30 VB 10 Nx-yy	D7A 30 VB 10 x-yy	x = (S) Normally-Open or (O) Normally-Closed yy = (2) or (3) Cable or (B3) M12 Connector
	■	■		13	D7A 30 VN 13 Px-yy	D7A 30 VN 13 Nx-yy	D7A 30 VN 13 x-yy	
M30, Short	■			10	D7AK 30 VB 10 Px-yy	D7AK 30 VB 10 Nx-yy	D7AK 30 VB 10 x-yy	
	■	■		13	D7AK 30 VN 13 Px-yy	D7AK 30 VN 13 Nx-yy	D7AK 30 VN 13 x-yy	

Others - Available upon request i.e. Cable-length or Pigtail etc.

# CONNECTION DIAGRAMS

## DCA/D7A SERIES

Type	Function	Cable type	Connection	Connector Type	Connection
2-wires DC (polarised)	Normally-Open (NO)				
	Normally-Closed (NC)				
2-wires DC (non-polarised)	Normally-Open (NO)				
	Normally-Closed (NC)				
3-wires DC (NPN or PNP)	Normally-Open (NO)				
	Normally-Closed (NC)				
4-wires DC (Antivalent)	Normally-Open (NO)				
	Normally-Closed (NC)				
Normally-Closed (NC)					

Color indication: BN = brown WH = white BK = black BU = blue (Wire Colors in accordance with EN60947-5-2 standard)

## ACCESSORIES

Connection cables		PVC 2.5 m	PVC 5.0 m	PVC 10.0 m
	M8, 3-wires straight	TKPM-Z-2.5	TKPM-Z-5	TKPM-Z-10
	M8, 3-wires angled	TKPM-W-2.5	TKPM-W-5	TKPM-W-10
	M12, straight	VKPM-Z-2.5/4	VKPM-Z-5/4	VKPM-Z-10/4
	M12, angled	VKPM-W-2.5/4	VKPM-W-5/4	VKPM-W-10/4

Mounting brackets		
	for M8	SH 8
	for M12	SH 12
	for M18	SH 18
	for M30	SH 30

**SOLUTIONS. CLEVER. PRACTICAL.**

**di-soric  
Pte. Ltd.**

33 Ubi Avenue 3, #03-47 Vertex  
Singapore 408868

Phone: +65/66 34 38 43  
Fax: +65/66 34 38 44

[info.sg@di-soric.com](mailto:info.sg@di-soric.com)  
[www.di-soric.com](http://www.di-soric.com)

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