

# MICROSWITCH MISFEED SENSOR UNITS

— HOLE FEED TYPE —

④ The hole feed type requires machining of a hole on the punch plate for installing the relation pin ④.

Part No.	Name	Catalog No.	Material	Part No.	Name	Catalog No.	Material
①	Misfeed pin	MFAS MFAL MFAF	Equivalent to SKD11 H 60~63HRC	⑤	Spring for relation pin	WF	P.1400
②	Spring for misfeed pin	WL	P.1401	⑥	Plug for relation pin	NB	S45C H 34~43HRC
③	Screw plug	MSW	P.819	⑦	Microswitch	Z-15GD55-B	Made by OMRON
④	Relation pin	RB-N	SK4 Black oxide	⑧	Protective cover	AP-Z	Made by OMRON

Type	WL Spring constant 1N/mm (0.1kgf/mm)				WF Spring constant 0.5N/mm (0.05kgf/mm)				⑦ Microswitch (Z-15GD55-B)	
	D5	D6	D8	D10	Type	ℓ <sub>1</sub>	d	max.F		
② WL	25	0.65	10	0.75	10	0.9	10	0.9	10	• Operation force OF: 540g • Return force RF: Min.114g • Movement before operation PT: 1.8mm • Movement after operation OT: Min. 1.6mm • Movement differential (hysteresis) MD: Max. 0.06mm • Operating position OP: 21.5±0.5mm • Service temperature range: -15~80°C
	30	0.7	12	0.8	12	0.9	12	0.9	12	
	35	0.7	14	0.8	14	0.9	14	0.9	14	
	40	0.7	16	0.8	16	0.9	16	0.9	16	
	45	0.75	18	0.85	18	1.0	18	1.0	18	
	50	0.75	20	0.85	20	1.0	20	1.0	20	
	55	0.75	22	0.85	22	1.0	22	1.0	22	
	60	0.8	24	0.9	24	1.0	24	1.0	24	
	65	0.8	26	0.9	26	1.1	26	1.1	26	
	70	0.85	28	1.0	28	1.1	28	1.1	28	
③ MSW	M10×P1.5		M10×P1.5		M12×P1.5		M14×P1.5			
	φD <sub>1</sub>		6		8		10			
	⑤ WF		10*		15*		20*			
	⑥		10*		15*		20*			

(\* For WF10~30, neither end is ground.) Spring load (N)=Spring constant (N/mm) × Deflection F (mm) (N)=kgf × 9.80665

## ① Misfeed pin

B	Catalog No.	Type	L							P	Base unit price 0.01mm increments 1~4 pieces	Volume discount unit price		
			D	5	6	7	8	9	10			10~19	20~50	
10	MFAS	5	50	60	70	80	90	100	2.00~4.97	Quotation				
15		6	50	60	70	80	90	100	2.00~5.97					
		8	50	60	70	80	90	100	3.00~7.97					
15	MFAL	5	60	70	80	90	100	2.00~4.97						
21		6	60	70	80	90	100	2.00~5.97						
		8	60	70	80	90	100	3.00~7.97						
27	MFAF	5	60	70	80	90	100	2.00~4.97						
		6	60	70	80	90	100	2.00~5.97						
32		8	70	80	90	100	3.00~7.97							
		10	60	70	80	90	110	3.00~9.97						

Order **Catalog No.** MFAL 10 - **L** 80 - **P** P6.00

Days to Ship **Quotation**

Alterations **Catalog No.** MFAL 10 - **L(LC)** LC79 - **P(PC)** P6.00 - (BC-HC-NTC-PKC)

Alteration	Code	Spec.	1Code
PC	PC	Tip diameter change PC ≥ 0.50 (D=5) PC ≥ P <sub>min</sub> /2 (D=6~10) 0.01mm increments	Quotation
BC	BC	Tip length change Y+2 ≤ BC ≤ Bmax. BC ≤ L(LC) - 30 0.1mm increments	Quotation
LC	LC	L dimension change 0.1mm increments If difference between L dimension and tip length is 30 or less, tip length is adjusted to L-30.	Quotation

Alteration	Code	Spec.	1Code
HC	HC	Head diameter change D ≤ HC < D+2 0.1mm increments	Quotation
NTC	NTC	Elimination of tip taper	Quotation
PKC	PKC	Tip diameter tolerance change P+0.01 → +0.005	Quotation

## ② Sensor units (②③④⑤⑥⑦⑧)

Catalog No.	Type	D	②				⑤	Base unit price 1~4 sets	Volume discount unit price		
			Type	ℓ	Type	ℓ <sub>1</sub>			5~9	10~19	20~50
MF	WL	5	25	30	35	40	10	Quotation			
		6	45	50	55	60	30				
		8	65	70			35				
		10					45				
						50					

Order **Catalog No.** MF 10 - **② Type-ℓ** WL 30 - **⑤ Type-ℓ<sub>1</sub>** WF 30

Days to Ship **Quotation**

## ③ Component parts (Individual parts)

Part No.	Name	Catalog No.	Base unit price 1~4 pieces	Volume discount unit price		
				5~9	10~19	20~50
④	Relation pin	RB-N				
⑥	Plug for relation pin	NB				
⑦	Microswitch	Z-15GD55-B				
⑧	Protective cover	AP-Z				

Refer to the corresponding pages for details of the following components.

Part No.	Name	Catalog No.	Page
②	Spring for misfeed pin	WL	P.1401
③	Screw plug	MSW	P.819
⑤	Spring for relation pin	WF	P.1400

Order **Catalog No.** RB-N **Days to Ship** **Quotation**

## Microswitch mounting plates **RoHS** MFA

## Standard for selecting thickness (T) of the microswitch mounting plate

The plate thickness must be decided assuming the use of a protective cover.

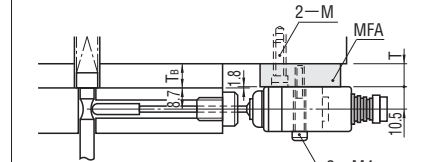


Plate thickness (T) = Backing plate thickness (T<sub>B</sub>) - 1.8  
Backing plate thickness (T<sub>B</sub>) Mounting plate thickness (T)

Backing plate thickness (T <sub>B</sub> )	Mounting plate thickness (T)
10	8.2
13	11.2
16	14.2
20	18.2

Catalog No.	Type	T	Base unit price 1~4 pieces	Volume discount unit price		
				5~9	10~19	20~50
MFA		8.2				
		11.2				
		12.1				
		14.2				
		18.2				

Order **Catalog No.** MFA 8.2

Days to Ship **Quotation**