

# D-A54K series



Applicable cylinder	Symbol
ACM Ø40,Ø50,Ø63,Ø80,Ø100 ACL Ø125,Ø140,Ø150,Ø160 KP70HL/140HL Ø40,Ø50,Ø63,Ø80	

Auto Switch

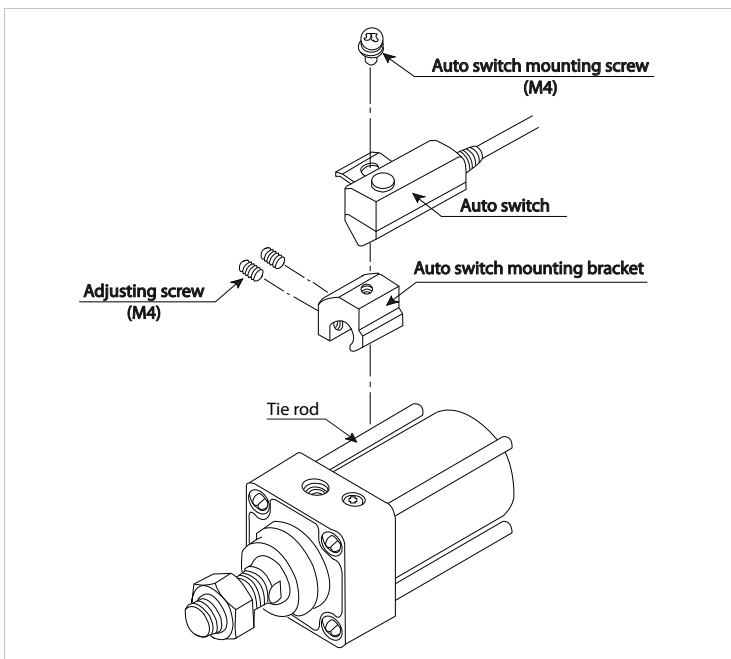
## Specifications

Model	D-A54K			D-A56K	D-A64K		
Application	Relay, PLC			IC circuit	Relay, PLC, IC circuit		
Voltage	DC24V	AC110V	AC220V	DC4~8V	DC24V	AC110V	AC220V
Current range	5~50mA	5~25mA	5~12.5mA	20mA	50mA	25mA	12.5mA
Contact protection circuit	Built-in			None	Built-in		
Internal voltage drop	≤2.4V			≤0.8V	-		
Internal resistance	-			-	≤10Ω		
Indicator lamp	Red LED			None			
Wire length	1m (Standard), 3m, 5m						

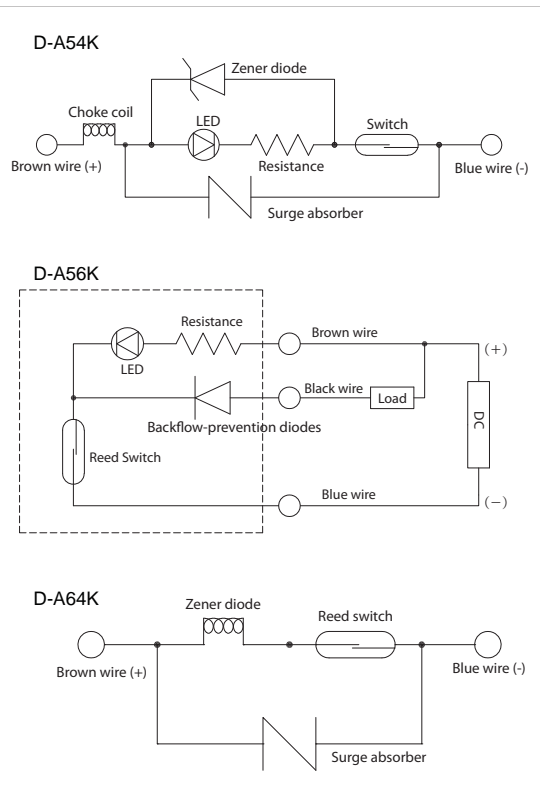
## Weight

Model		D-A54k	Unit: g
Wire length(m)	1	36	
	3	86	
	5	136	

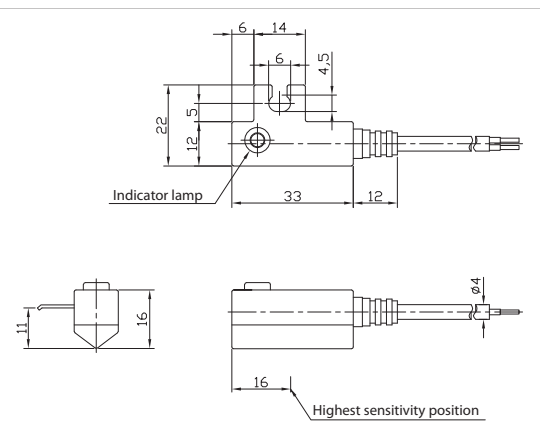
## Mounting



## Circuit Diagram



## Dimensions



# D-C72K / D-C73K series



Applicable cylinder	Symbol
ACP Ø6, Ø10, Ø16 ACS2/3 Ø20, Ø25, Ø32, Ø40	

## Specifications

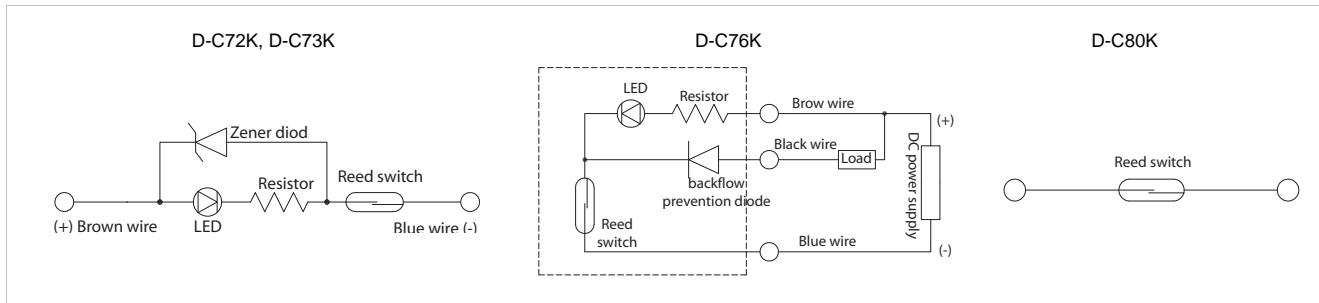
Model	D-C72K			D-C73K		D-C76K	D-C80K	
Application	Relay, PLC					IC circuit	Relay, PLC, IC circuit	
Voltage	DC24V	AC110V	AC220V	DC24	AC110V	DC4~8V	DC24V	AC110V
Current range	5~50mA	5~25mA	5~12.5mA	5~50mA	5~25mA	20mA	50mA	20mA
Contact protection circuit	None							
Internal voltage drop	≤ 2.4V					≤0.8V	0V	
Indicator lamp	Red LED						None	
Wire length	1m (Standard), 3m, 5m							

## Weight

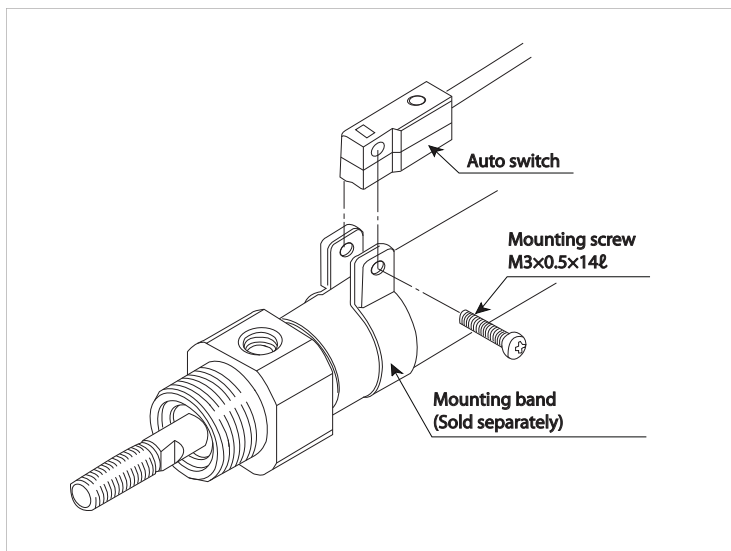
Unit: g

Model	D-C72K, D-C73K	
Wire length (m)	1	16
	3	44
	5	72

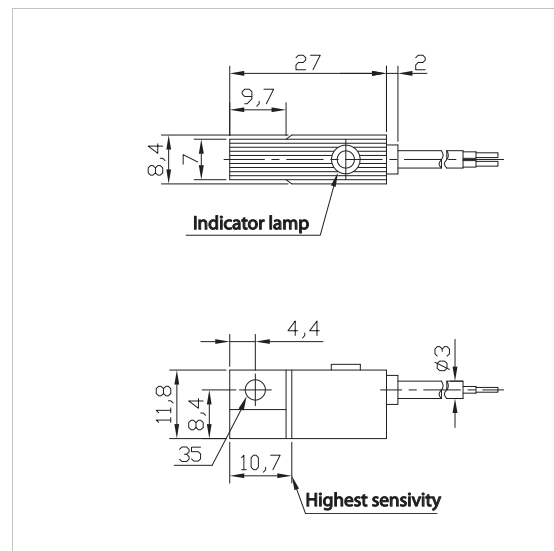
## Circuit Diagram



## Mounting



## Dimensions



# D-A72K / D-A73K series



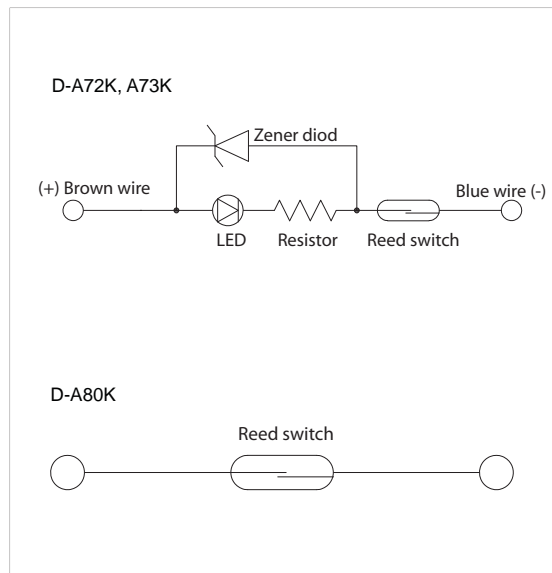
Applicable cylinder	Symbol
ADF Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125	

Auto Switch

## Specifications

Model	D-A72K			D-A73K		D-A80K	
Application	Relay, PLC			Relay, PLC		Relay, PLC, IC circuit	
Voltage	DC24V	AC110V	AC220V	DC24V	AC110V	DC24V	AC110V
Current range	5~50mA	5~25mA	5~12.5mA	5~50mA	5~25mA	50mA	25mA
Contact protection circuit	None						
Internal voltage drop	≤2.4V					0V	
Indicator lamp	Red LED					None	
Wire length	1m (Standard), 3m, 5m						

## Circuit Diagram

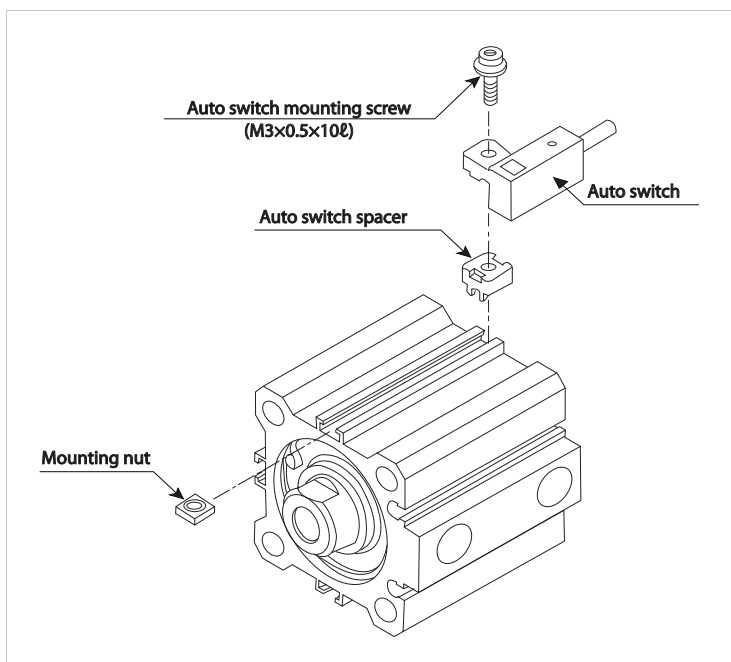


## Weight

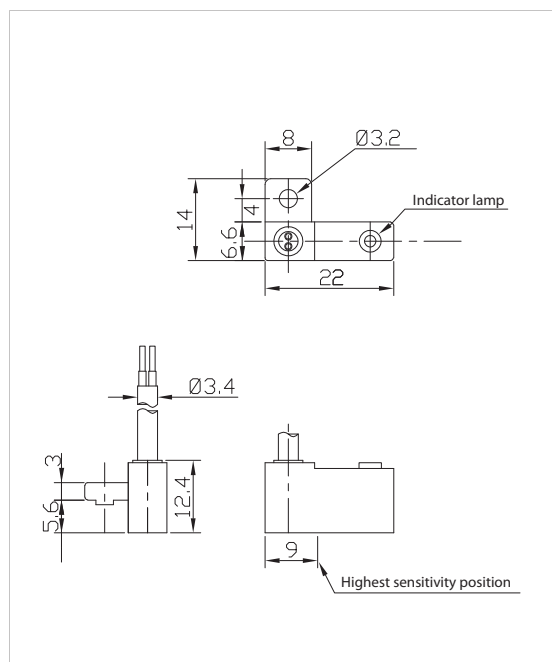
Unit: g

Model	D-A72K		D-A73K	
Wire length(m)	1	16	16	16
	3	46	46	46
	5	76	76	76

## Mounting



## Dimensions



# D-A93K series



V type

Applicable cylinder	Symbol
Direct attachment/ ADF Ø12,Ø16,Ø20,Ø25,Ø32,Ø40,Ø50,Ø63,Ø80,Ø100,Ø125	
Bracket attachment/ ACM Ø40,Ø50,Ø63,Ø80,Ø100 ACL Ø125,Ø140,Ø150,Ø160 KP70HL/140HL Ø40,Ø50,Ø63,Ø80	

## Specifications

Model	D-A90(V)K		D-A93(V)K		D-A96(V)K
Application	Relay, PLC		Relay, PLC		IC circuit
Voltage	DC24V	AC110V	DC24V	AC110V	DC4~8V
Current range	50mA	20mA	5~40mA	5~20mA	20mA
Contact protection circuit	None				
Internal voltage drop	0V		≤2.7V		≤0.8V
Indicator lamp	None		Red LED		
Wire length	1m (Standard), 3m, 5m				

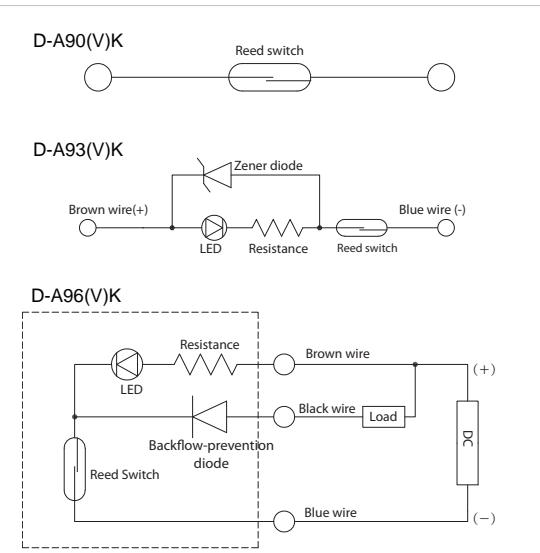
※ V indicates vertical type. (ex. D-A93VK)

## Weight

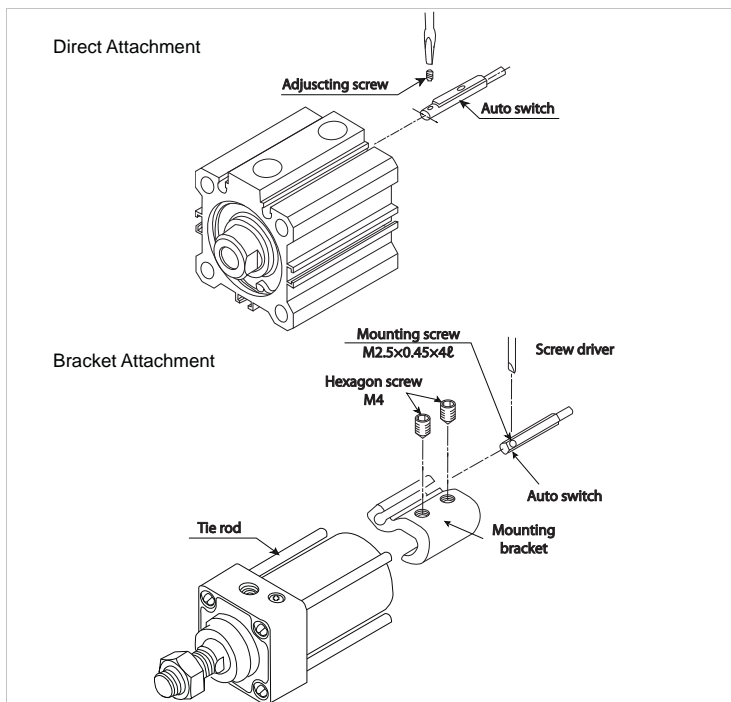
Model	D-A93(V)K	
Wire length(m)	1	10
	3	30
	5	50

Unit: g

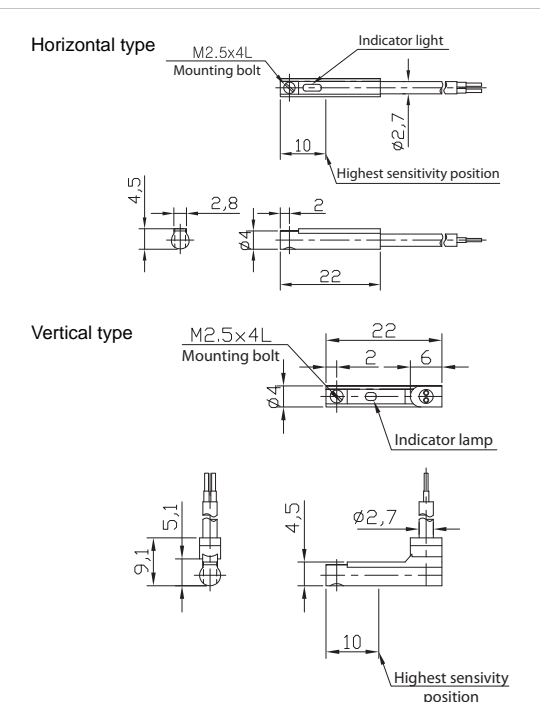
## Circuit Diagram



## Mounting



## Dimensions



# D-Z72K / D-Z73K / D-Z82K series



Applicable cylinder	Symbol
KP125A/160A Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80	

Auto Switch

## Specifications

Model	D-Z72K, D-Z82K			D-Z73K		D-Z76K	D-Z80K	
Application	Relay, PLC					IC circuit	Relay, PLC, IC circuit	
Voltage	DC24V	AC110V	AC220V	DC24V	AC110V	DC4~8V	DC24V	AC110V
Current range	5~50mA	5~25mA	5~12.5mA	5~50mA	5~25mA	20mA	50mA	20mA
Contact protection circuit	None							
Internal voltage drop	≤2.4V					≤0.8V	0V	
Indicator lamp	Red LED						None	
Wire length	1m (Standard), 3m, 5m							

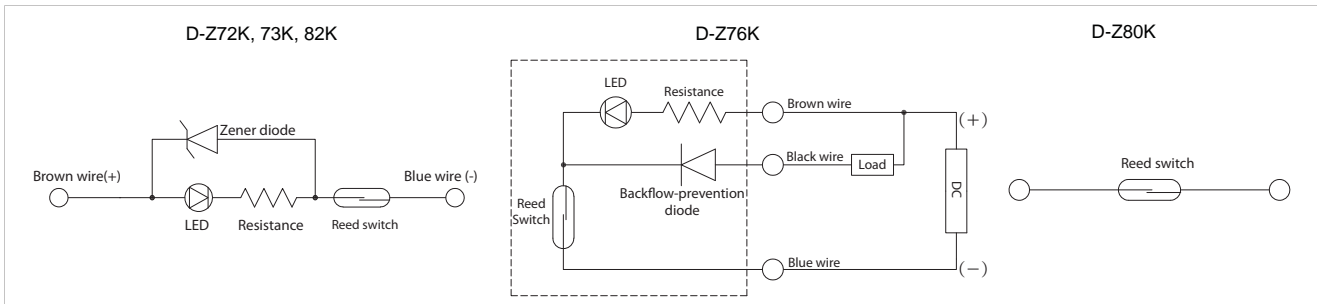
## Weight

Unit: g

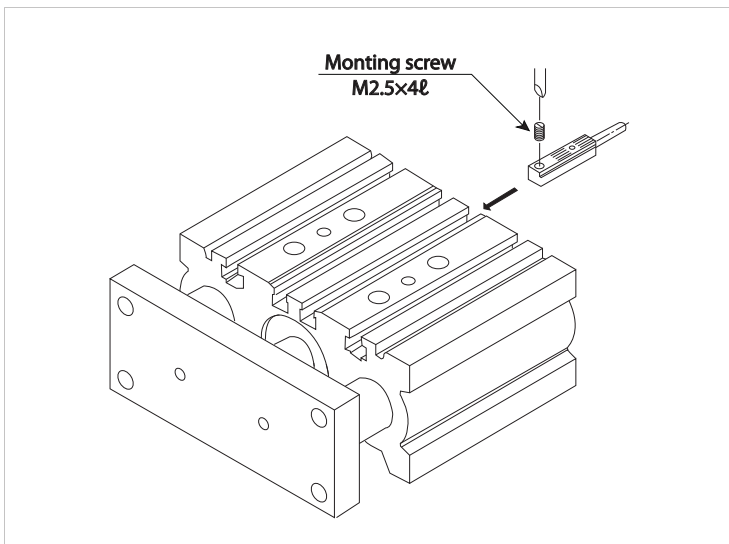
Model	D-Z72K, D-Z73K, D-Z82K	
Wire length (m)	1	12
	3	34
	5	56

\* D-Z82K is auto switch for hydraulic cylinder.

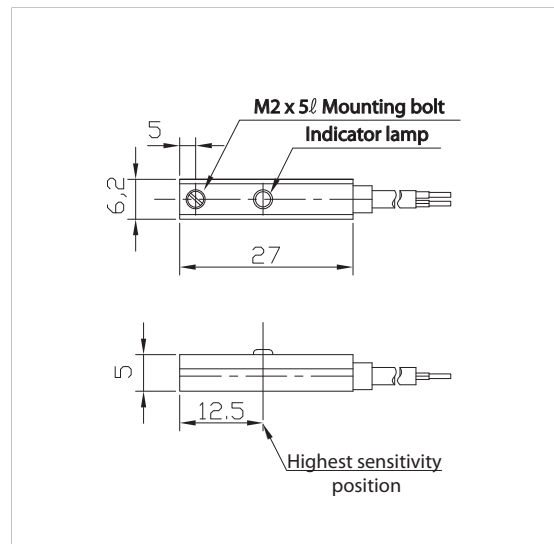
## Circuit Diagram



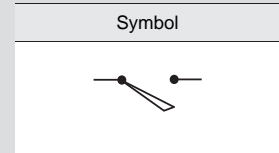
## Mounting



## Dimensions



# MA-1 / MA-2H series



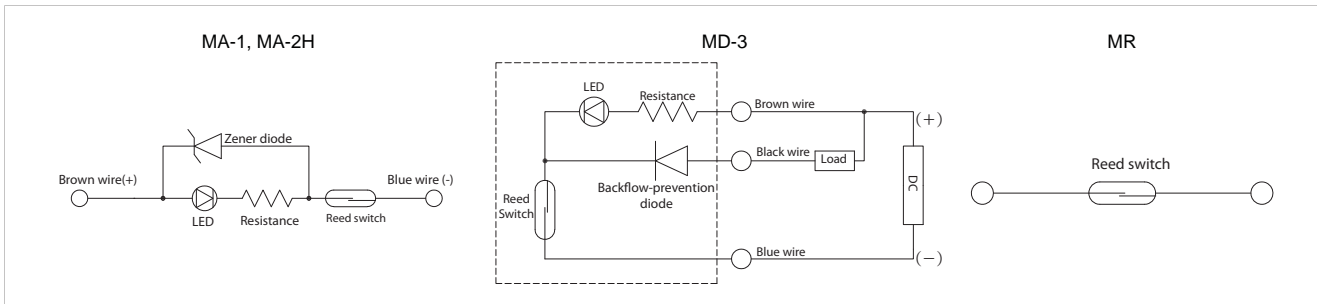
## Specifications

Model	MA-1		MA-2H		MD-3	MR
Application	Relay, PLC				IC circuit	Relay, PLC, IC circuit
Voltage	DC24V	AC110V	DC24V	AC110V~AC220V	DC4~8V	DC24V, AC110V
Current range	5~50mA	5~25mA	5~50mA	5~25mA	≤20mA	
Contact protection circuit	None					
Internal voltage drop	≤2.4V			≤0.8V		0V
Indicator lamp	Red LED				None	
Wire length	1m (Standard), 3m, 5m					

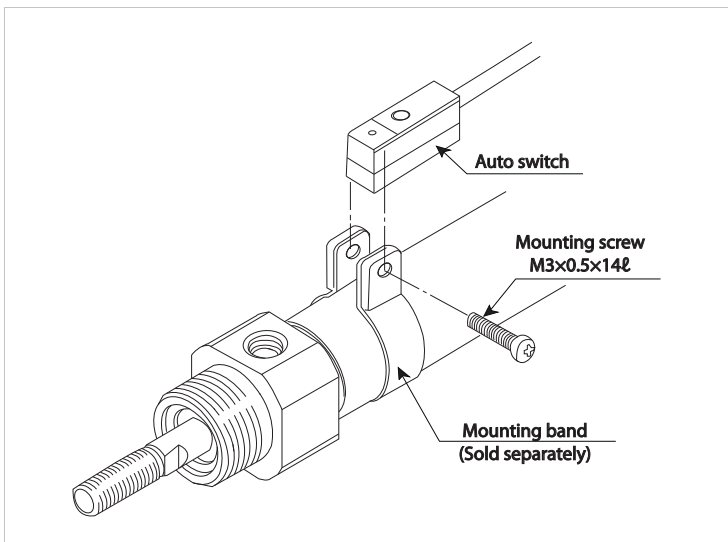
## Weight

Model		MA-1	Unit: g
Wire length (m)	1	20	
	3	70	
	5	112	

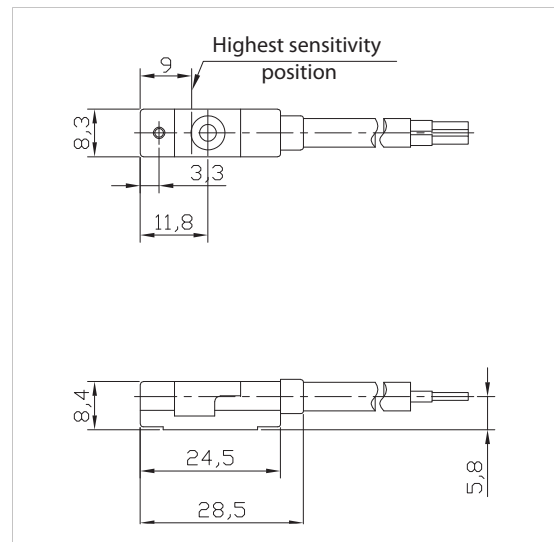
## Circuit Diagram



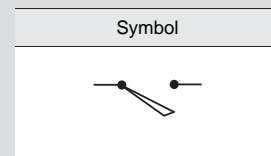
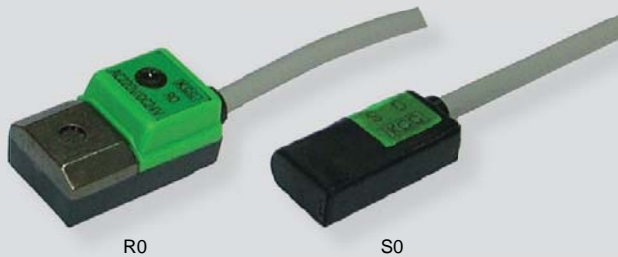
## Mounting



## Dimensions



# R0 / S0 series



Auto Switch

## Specifications

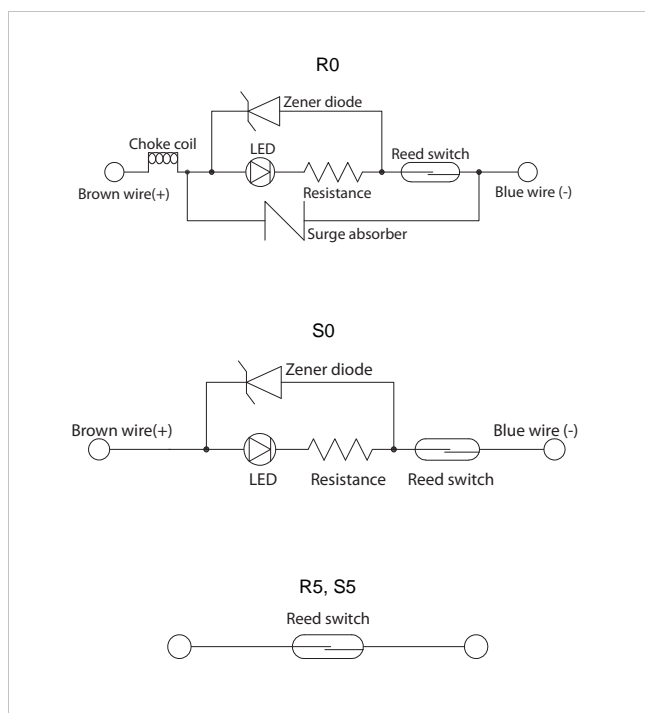
Model	R0			R5		S0		S5	
Application	Relay, PLC			Relay, PLC, IC circuit		Relay, PLC		Relay, PLC, IC circuit	
Voltage	DC24V	AC110V	AC220V	DC24V	AC110V, 220V	DC24	AC110V	DC24V	AC110V, 220V
Current range	5~50mA	5~25mA	5~12.5mA	≤50mA	≤20mA	5~50mA	5~50mA	≤50mA	≤20mA
Contact protection circuit	Built-in			None		Built-in		None	
Internal voltage drop	≤2.4V			0V		≤2.4V		0V	
Indicator lamp	Red LED			None		Red LED		None	
Wire length	1m (Standard), 3m, 5m								

## Weight

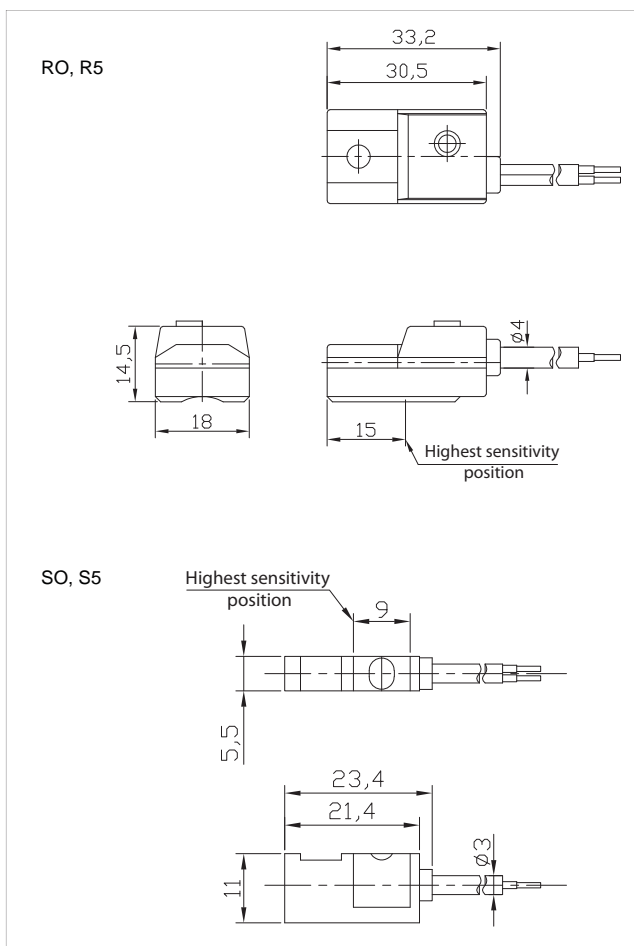
Unit: g

Model		R0	S0
Wire length(m)	1	36	14
	3	86	42
	5	136	70

## Circuit Diagram



## Dimensions



# D-F59K / D-F5PK / D-J59K series

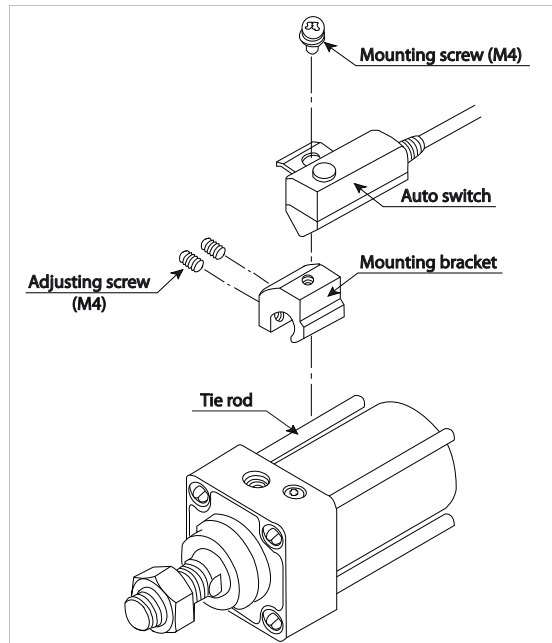


Applicable cylinder	Symbol
ACM Ø40,Ø50,Ø63,Ø80,Ø100 ACL Ø125,Ø140,Ø150,Ø160 KP70HL/140HLØ40,Ø50,Ø63,Ø80	

## Specifications

Model	D-F59K	D-F5PK	D-J59K
Wiring method	3-wire		2-wire
Output	NPN	PNP	-
Load	Relay, PLC, IC circuit		DC24V Relay, PLC
Voltage	DC5, 12, 24V (DC4.5~28V)		-
Current consumption	≤8mA	≤10mA	-
Load voltage	≤DC28V	-	DC24V (DC10~28V)
Load current	≤150mA	≤100mA	5~150mA
Internal voltage drop	≤0.8V		≤3V
Indicator lamp	Red LED		
Wire length	1m (Standard), 3m, 5m		

## Mounting

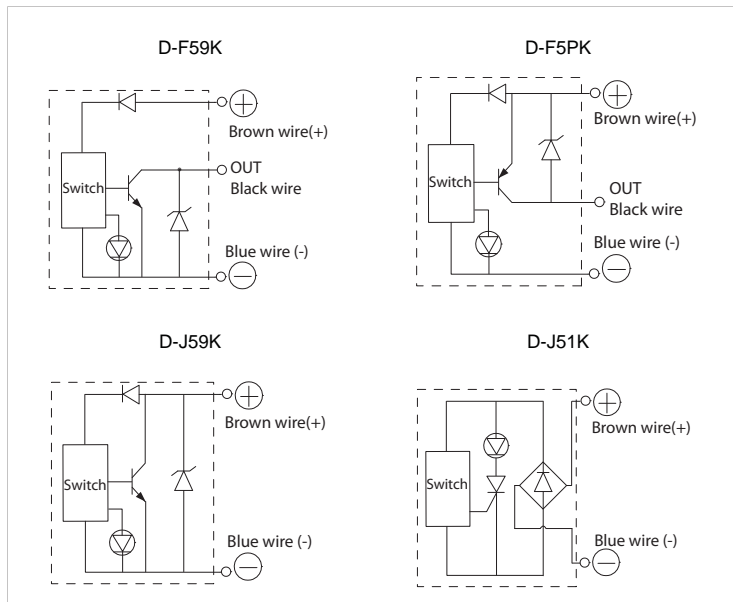


## Weight

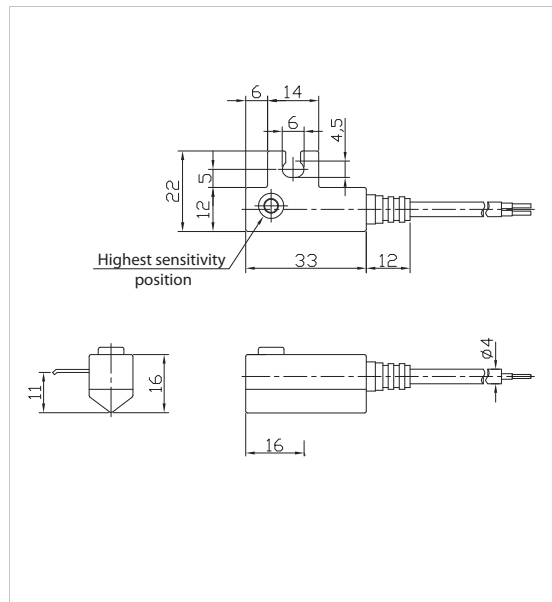
Unit: g

Model	D-F59K	D-F5PK	D-J59K
Wire length(m)			
1	38		36
3	96		86
5	152		136

## Circuit Diagram



## Dimensions





# D-H7A1K / D-H7A2K / D-H7BK series



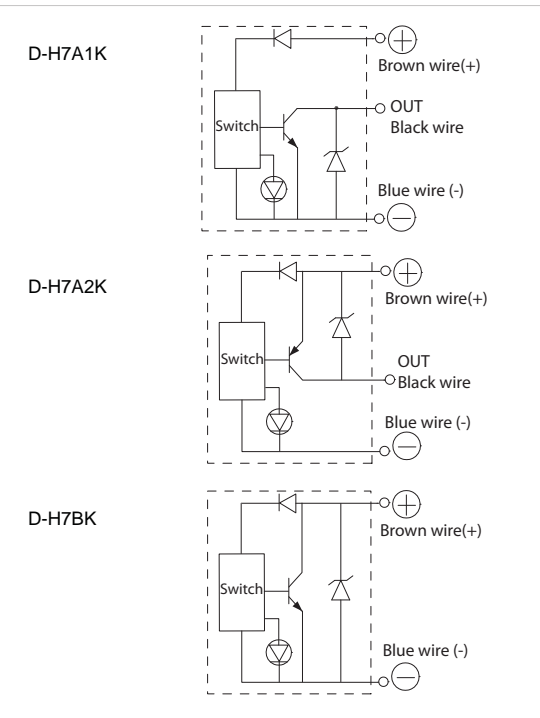
Applicable cylinder	Symbol
ACP Ø6, Ø10, Ø16 ACS2/3 Ø20, Ø25, Ø32, Ø40	

Auto Switch

## Specifications

Model	D-H7A1K	D-H7A2K	D-H7BK
Wiring method	3-wire		2-wire
Output	NPN	PNP	-
Load	Relay, PLC, IC circuit		DC24V Relay, PLC
Voltage	DC5, 12, 24V (DC4.5~28V)		-
Current consumption	≤8mA	≤10mA	-
Load voltage	DC28V	-	DC24V (DC10~28V)
Load current	≤150mA	≤100mA	5~150mA
Internal voltage drop	≤0.8V		≤3V
Indicator lamp	Red LED		
Wire length	1m (Standard), 3m, 5m		

## Circuit Diagram

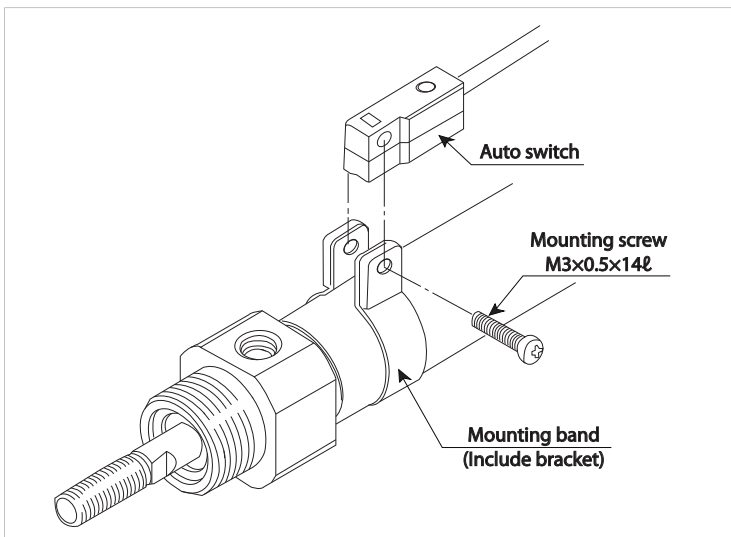


## Weight

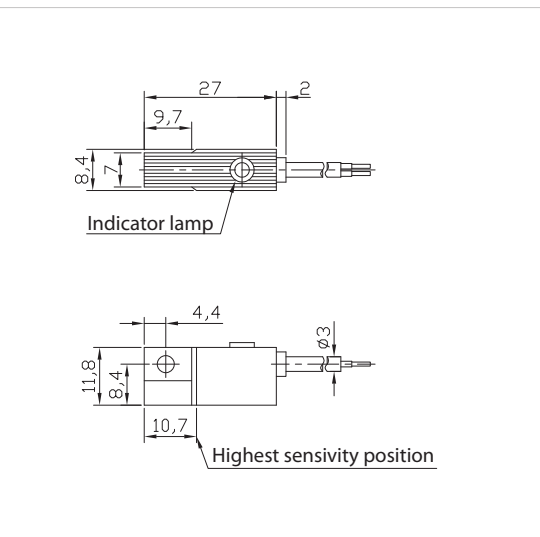
Unit: g

Model		D-H7A1K	D-H7A2K	D-H7BK
Wire length(m)	1	18		16
	3	51		44
	5	83		72

## Mounting



## Dimensions



# D-F7NVK / D-F7PVK / D-F7BVK series

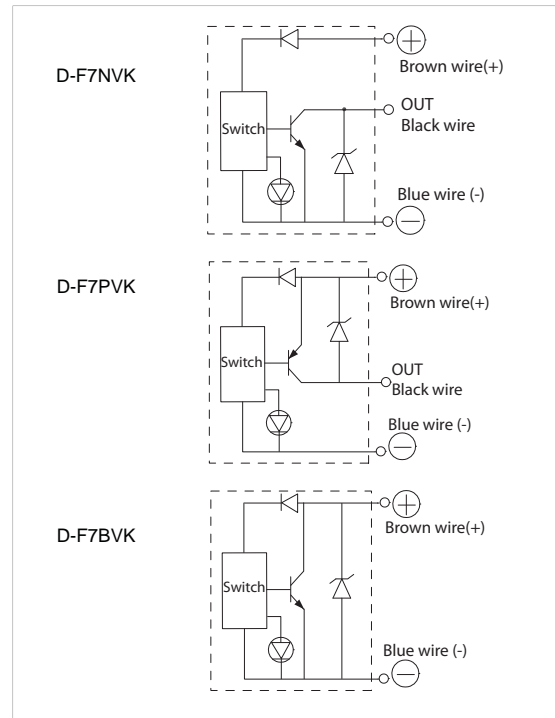


Applicable cylinder	Symbol
ADF Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125	

## Specifications

Model	D-F7NVK	D-F7PVK	D-F7BVK
Wiring method	3-wire		2-wire
Output	NPN	PNP	-
Load	Relay, PLC, IC circuit		DC24VRelay, PLC
Voltage	DC5, 12, 24V (DC4.5~28V)		-
Current consumption	≤8mA	≤10mA	-
Load voltage	≤DC28V	-	DC24V (DC10~28V)
Load current	≤150mA	≤100mA	5~150mA
Internal voltage drop	≤0.8V		≤3V
Indicator lamp	Red LED		
Wire length	1m (Standard), 3m, 5m		

## Circuit Diagram

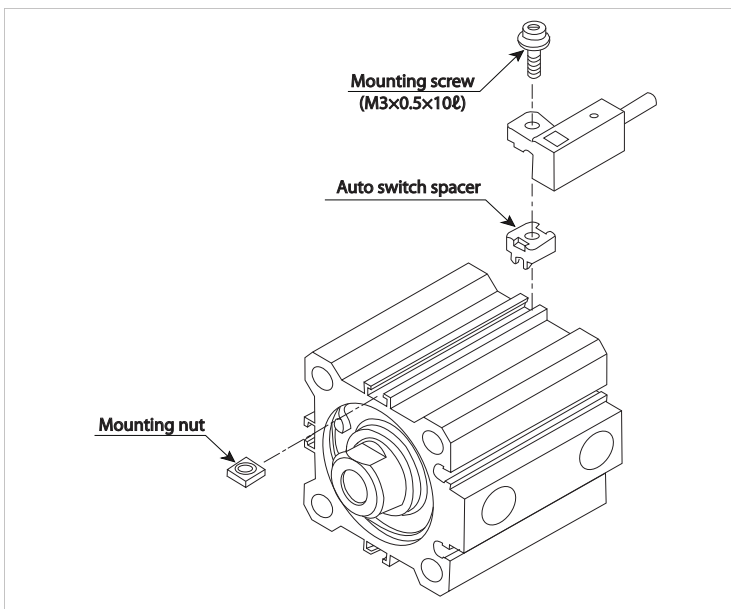


## Weight

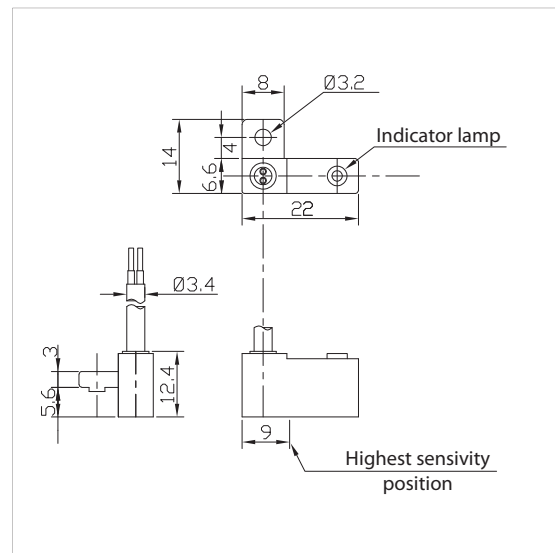
Model		D-F7NVK	D-F7PVK	D-F7BVK
Wire length(m)	1	18		16
	3	53		46
	5	87		76

Unit: g

## Mounting



## Dimensions



# D-F9N(V)K / D-F9P(V)K / D-F9B(V)K series



Applicable cylinder	Symbol
Direct mounting/ ADF Ø12,Ø16,Ø20,Ø25,Ø32,Ø40,Ø50,Ø63,Ø80,Ø100,Ø125  Bracket mounting/ ACM Ø40,Ø50,Ø63,Ø80,Ø100 ACL Ø125,Ø140,Ø150,Ø160 KP70HL/140HL Ø40,Ø50,Ø63,Ø80	

Auto Switch

## Specifications

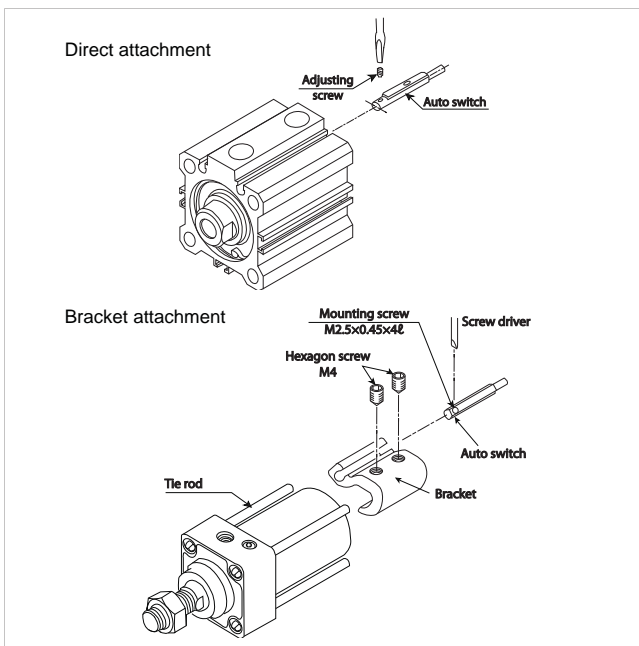
Model	D-F9N(V)K	D-F9P(V)K	D-F9B(V)K
Wiring method	3-wire		2-wire
Output	NPN	PNP	-
Load	DC24V Relay, PLC		
Voltage	DC5, 12, 24V (DC4.5~28V)		-
Current consumption	≤8mA	≤10mA	-
Load voltage	≤DC28V	-	DC24V (DC10~28V)
Load current	≤80mA		5~30mA
Internal voltage drop	≤0.4V	≤1.5V	≤4.5V
Indicator lamp	Red LED		
Wire length	1m (Standard), 3m, 5m		

## Weight

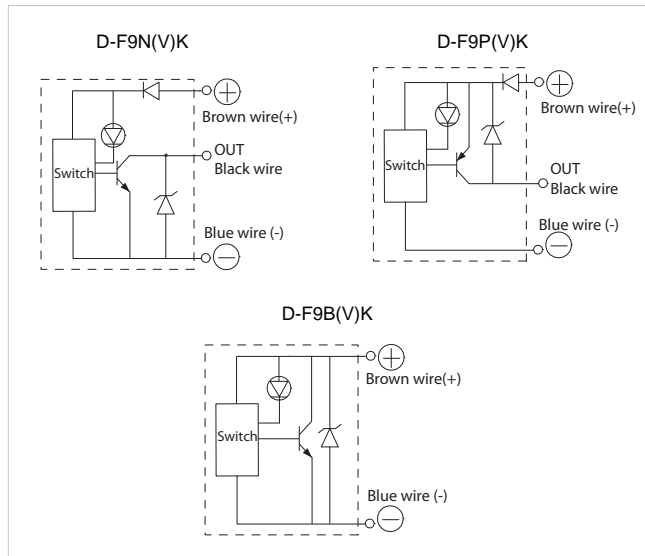
Unit: g

Model	D-F9N(V)K	D-F9P(V)K	D-F9B(V)K
1	11	11	10
3	36	36	30
5	60	60	50

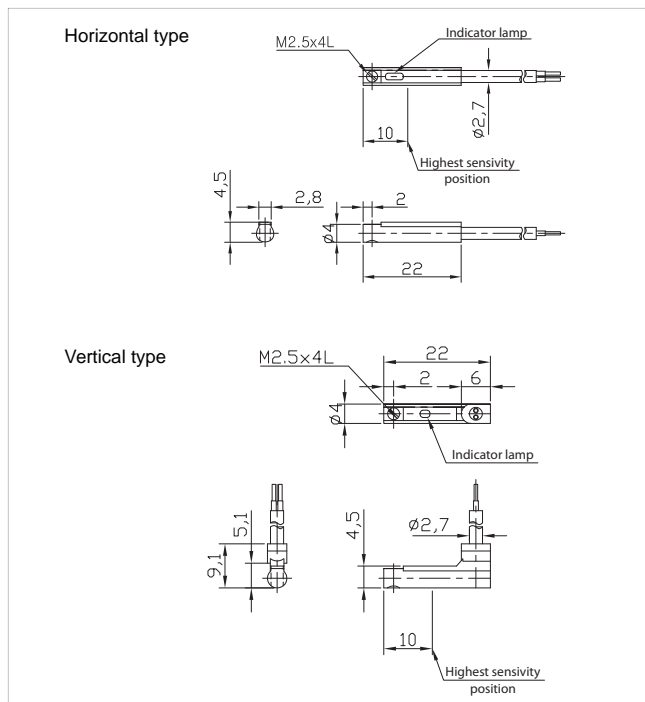
## Mounting



## Circuit Diagram



## Dimensions



# D-Y59AK / D-Y7PK / D-Y59BK series

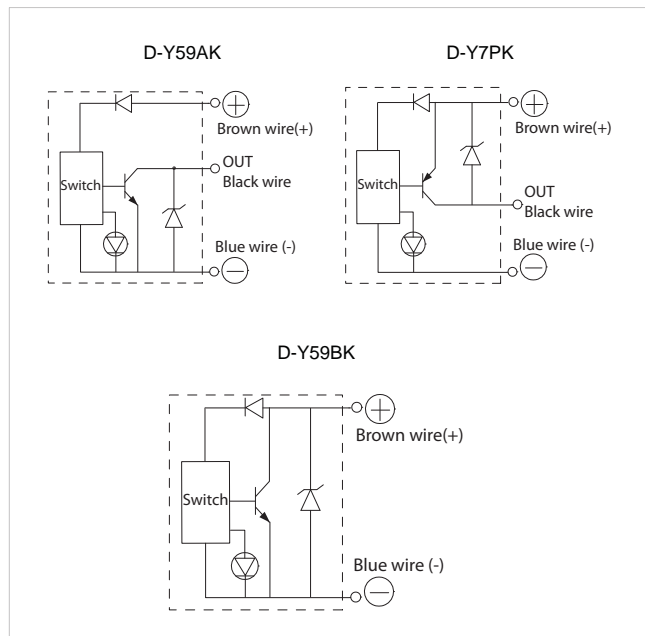


Applicable cylinder	Symbol
KP125A/160A Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80	

## Specifications

Model	D-Y59AK	D-Y7PK	D-Y59BK
Wiring method	3-wire		2-wire
Output	NPN	PNP	-
Load	Relay, PLC, IC circuit		DC24V Relay, PLC
Voltage	DC5, 12, 24V (DC4.5~28V)		-
Current consumption	≤12mA	≤15mA	-
Load voltage	≤DC28V	-	DC24V (DC10~28V)
Load current	≤150mA	≤100mA	5~150mA
Internal voltage drop	≤0.8V		≤3V
Indicator lamp	Red LED		
Wire length	1m (Standard), 3m, 5m		

## Circuit Diagram

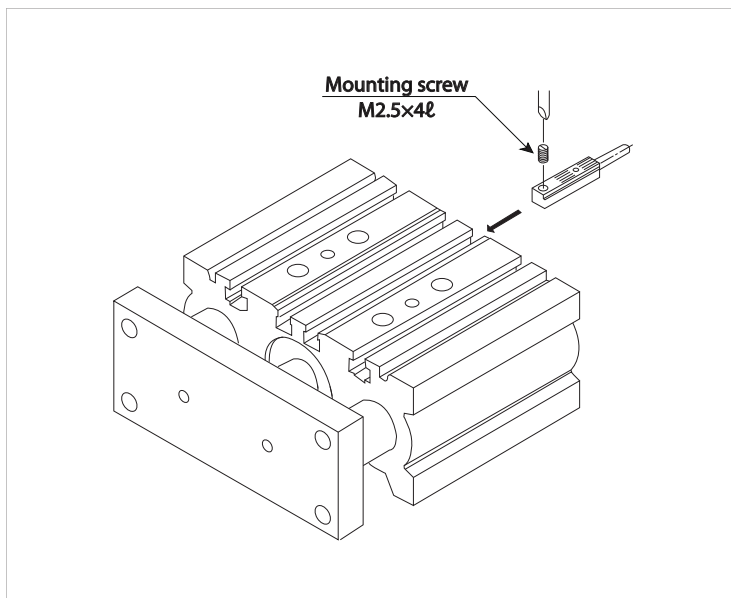


## Weight

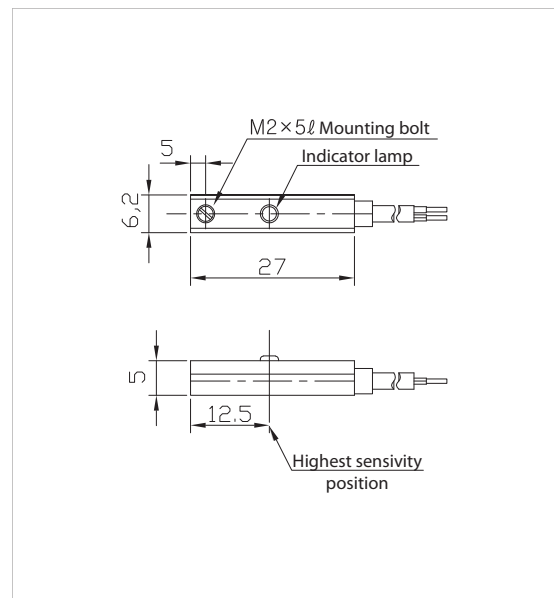
Unit: g

Model	D-Y59AK	D-Y59BK	D-Y7P(V)
Wire length (m)			
1	13	12	
3	37	34	
5	60	56	

## Mounting



## Dimensions



## Tie Rod Mount

For Auto Switch D-A5○



For Auto Switch D-A9○



Auto Switch

Applicable cylinder	Bore size (mm)	Mount part no.	Applicable auto switch	Mount part no.	Applicable auto switch
ACM	Ø40	D-A54 MOUNT 40/50/63	Reed Type D-A54K  Solid State Type D-F59K, D-F5PK, D-J59K, D-J51K	D-A93 MOUNT 40/50/63	Reed Type D-A93(V)K
	Ø50			D-A93 MOUNT 80/100	
	Ø63			D-A93 MOUNT 125/140	
	Ø80			D-A93 MOUNT 150/160	
ACL	Ø100	D-A54 MOUNT 80/100		D-A93 MOUNT 80/100	Solid State Type D-F9N(V)K, D-F9P(V)K, D-F9B(V)K
	Ø125	D-A54 MOUNT 125/140		D-A93 MOUNT 125/140	
	Ø140	D-A54 MOUNT 150/160		D-A93 MOUNT 150/160	
	Ø150	D-A54 MOUNT 150/160		D-A93 MOUNT 150/160	
KP70HL/140HL	Ø160	D-A54 MOUNT 150/160		D-A93 MOUNT 150/160	
	Ø40	D-A54 MOUNT 80/100		D-A93 MOUNT 80/100	
	Ø50	D-A54 MOUNT 125/140	D-A93 MOUNT 125/140		
	Ø63	D-A54 MOUNT 125/140	D-A93 MOUNT 125/140		
	Ø80	D-A54 MOUNT 150/160	D-A93 MOUNT 150/160		

※ D-A54 MOUNT 63, D-A93 MOUNT 63 are applicable to medium size cylinders of other companies. (S○○, T○○)

## Free Band & Exclusive Band



Applicable cylinder	Bore size (mm)	Band part no.	Applicable auto switch	Band part no.	Applicable auto switch			
ACP	10	D-C72/73 BAND-ACP B10	Reed Type D-C72K D-C73K  Solid State Type D-H7A1K, D-H7A2K, D-H7BK	MA-1 Free band ※ For sizes Ø10~Ø40	Reed Type MA-1K MA-2HK			
	16	D-C72/73 BAND-ACP B16						
ACS2	20	D-C72/73 BAND-ACS2 B20						
	25	D-C72/73 BAND-ACS2 B25						
	32	D-C72/73 BAND-ACS2 B32						
	40	D-C72/73 BAND-ACS2 B40						
ACS3	20	D-C72/73 BAND-ACS3 B20						
	25	D-C72/73 BAND-ACS3 B25						
	32	D-C72/73 BAND-ACS3 B32						
	40	D-C72/73 BAND-ACS3 B40						