

The YA90-FR is a universal fully sealed flush contact with magnetic shielding. This variant is manufactured with fire retardant plastics. The contact has installer selectable End of Line (EOL) and alarm contact bypass resistors. **This contact is only suitable for fully supervised (EOL) installations.**

Operation:

The contact will operate with a gap of approximately 20mm between the magnet and reed. This gap will reduce if mounted on or near ferromagnetic materials (steel doors, etc)

Installation:

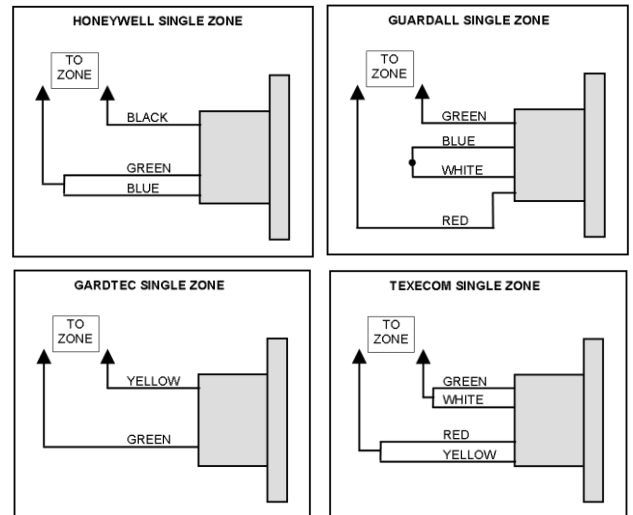
Drill a 26mm diameter, 15mm deep hole in the door frame for the contact and a 25mm diameter, 18mm deep hole in the door for the magnet. Insert each half into the prepared mounting surfaces, feeding the cable from the contact appropriately. Fix both halves using the screws provided. Select the appropriate wiring format and resistor values (see tables). Ensure that unused wires and any trimmed wires cannot short out to any other connections. Only two connections are made to the control panel alarm circuit, providing both the alarm and tamper information.

Single Zone Wiring:

Use the following table and example diagrams to select the correct wiring for a single contact. Where two wire colours are listed, they are intended to be joined together.

PANEL	EOL	ALARM
Honeywell / Ademco	1k - Black	1k - Green / Blue
Europlex (3GS & Apex)	2k2 - Red / Yellow	2k2 - Green / Brown
Castle, Menvier, Pyronix, Scantronix, Texecom (Premier)	2k2 - Red / Yellow	4k7 - Green / White
Siemens & Aritech	4k7 - Yellow	4k7 - Green / White
Gardtec	4k7 - Yellow	6k8 - Green
Guardall**	4k1 - Red	4k1 - Green

For Guardall, you **must join the blue wire to the white wire & insulate.

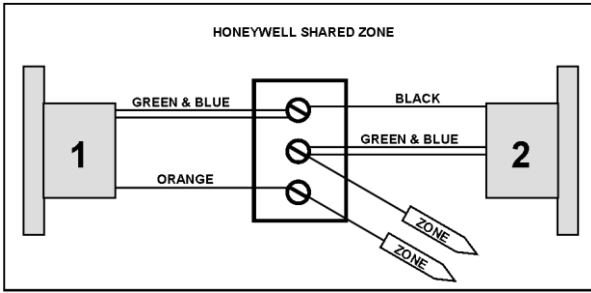

Shared Zone Wiring:

It is possible for two YA90-FR contacts to share a zone.

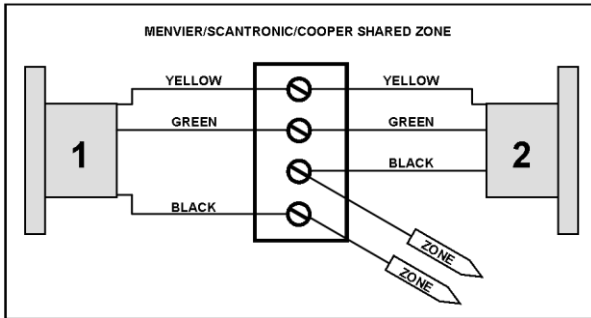
SHARED ZONE				
PANEL	CONTACT 1		CONTACT 2	
WIRING NOTE	ZONE WIRE(S)	JOIN THESE WIRES IN A SUITABLE JUNCTION BOX	ZONE WIRE(S)	ZONE WIRE(S)
Honeywell, Ademco	Orange	Green + Blue	Black	Green + Blue
Europlex (3GS & Apex)	Orange	Green + Brown	Red + Yellow	Green + Brown
Pyronix, Texecom (Premier)	Orange	Green + White	Red + Yellow	Green + White
Siemens & Aritech	Orange	Green + White	Yellow	Green + White
Gardtec	Orange	Green	Yellow	Green
Guardall / Menvier / Scantronic / Castle	See wiring diagrams - For Guardall, you must join the blue wire of each contact to its own white wire.			

Shared Zone Diagrams:

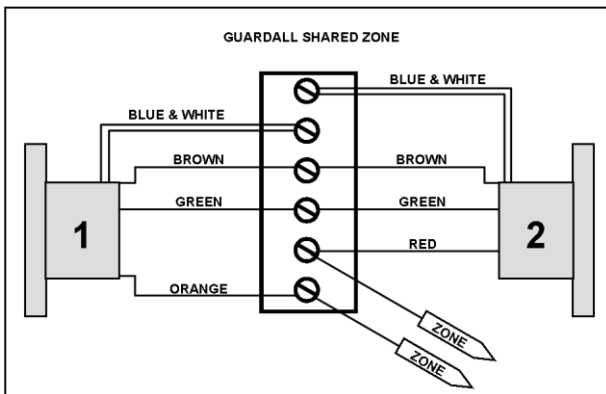
The following diagrams show specific wiring arrangements. In all wiring arrangements, ensure that all leftover wires are insulated to prevent shorts.



This is the standard wiring style for most panels. **Ensure you select the correct wire colours to get the correct resistances for your panel.**



Menvier/Scantronic/Cooper/Castle panels follow an alternative wiring scheme.



Guardall panels follow an alternative wiring scheme.

If wiring for Guardall, you **must** also join the blue wire of each contact to its own white wire as shown on the diagram.

Shared Zone Resistances

The following table gives the resistance for each situation for several panels:

NOTE : New panels are being introduced regularly. If using on a shared zone, disable **masking** where possible and check fault/tamper values against the table to ensure that the operation of both contacts on the zone doesn't lead to a fault/tamper on the panel.

PANEL	Both Contacts CLOSED	Contact 1 OPEN	Contact 2 OPEN	Both Contacts OPEN
Honeywell / Ademco	1k	2k	2k	3k
Europlex (3GS & Aplex)	2k2	4k0	4k0	5k8
Pyronix (PCX), Texecom (Premier)	2k2	6k9	6k9	11k6
Siemens & Aritech, Pyronix (Matrix)	4k7	9k4	9k4	14k1
Gardtec	4k7	11k5	11k5	18k3
Guardall	4k1	7k5	7k5	8k6
Menvier/Scantronic/Castle/Cooper	2k	6k	6k	7k6