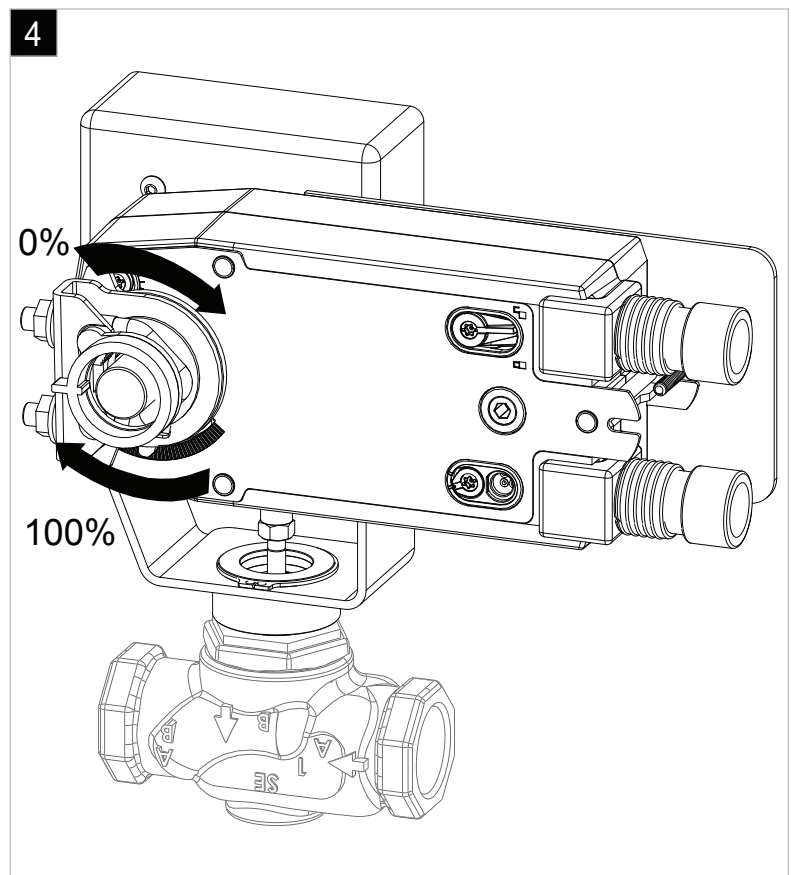
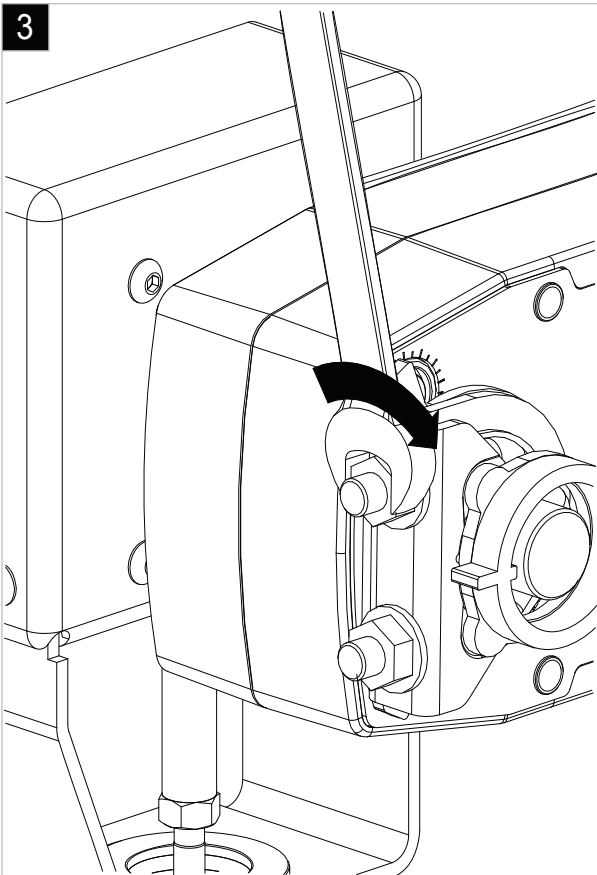
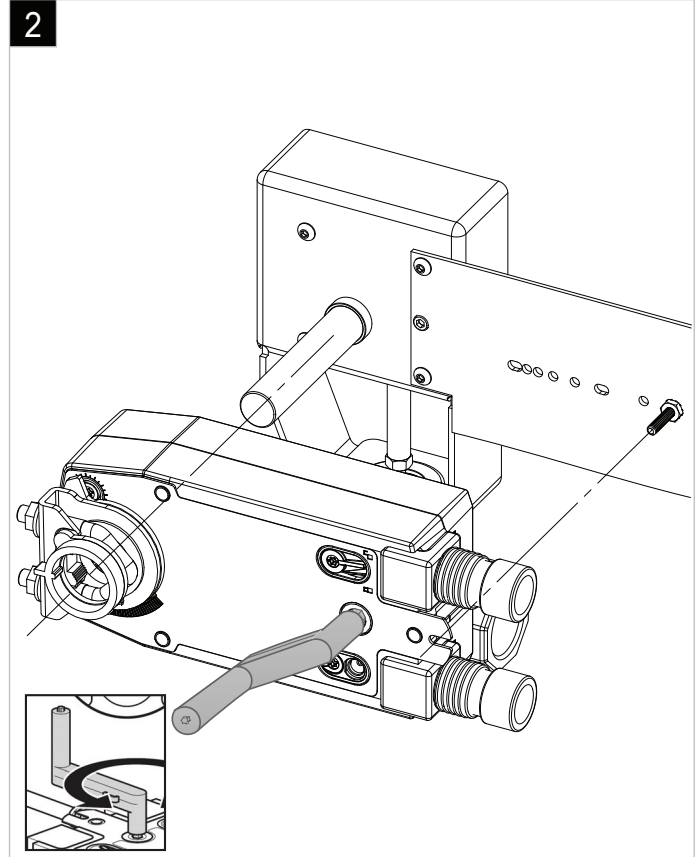
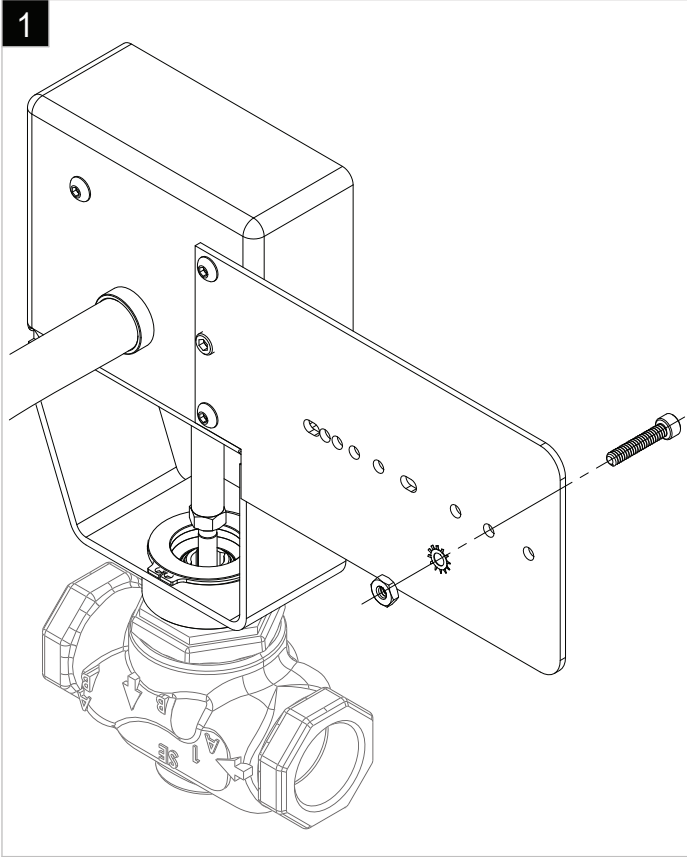


NF-X1 Actuators with G2 and G3 Globe Valves



Spring Return Actuator with On/Off, Floating Point and -SR

Function	a
Max	100% ↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ↺ ↻ ↼ ↽ ↾ ↿

On/Off

120 VAC
230 VAC

Function	a
Max	100% ↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ↺ ↻ ↼ ↽ ↾ ↿

24 VAC up to 240 VAC

Actuator	Wire Number	Color
NF24-SR-US	5	Wht
NF24-SR-S-US	5	Org

VDC / 4 to 20 mA

Spring Return Actuator with MFT

Function	a
Max	100% ↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ↺ ↻ ↼ ↽ ↾ ↿

Triac Sink

Function	a
Max	100% ↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ↺ ↻ ↼ ↽ ↾ ↿

Triac Source

Function	a
Max	100% ↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ↺ ↻ ↼ ↽ ↾ ↿

Triac Sink with Separate Transformer

On/Off

Function	a
Max	100% ↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ↺ ↻ ↼ ↽ ↾ ↿

On/Off

Floating Point

Functions	a	b	c
Min*	0% ↖	↗	↘
Mid*	50% ↖	↗	↘
Max*	100% ↖	↗	↘
Normal**	Control mode acc. to Y	↗	↘

Floating Point

Function	a
Max	100% ↖ ↗ ↘ ↙ ↚ ↛ ↜ ↝ ↞ ↠ ↡ ↢ ↣ ↤ ↥ ↦ ↧ ↨ ↩ ↪ ↫ ↬ ↭ ↮ ↯ ↰ ↱ ↲ ↳ ↴ ↵ ↶ ↷ ↸ ↹ ↺ ↻ ↼ ↽ ↾ ↿ ↺ ↻ ↼ ↽ ↾ ↿

PWM

VDC / 4 to 20 mA

Actuator	Wire Number	Color
NF24-MFT-US	5	Org

VDC / 4 to 20 mA

Override Control Min, Mid, Max Postions

Functions	a	b	c
Min*	0% ↖	↗	↘
Mid*	50% ↖	↗	↘
Max*	100% ↖	↗	↘
Normal**	Control mode acc. to Y	↗	↘

Override Control Min, Mid, Max Postions

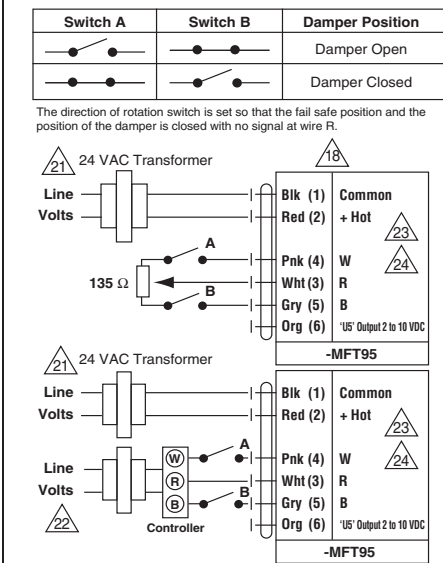
Notes:

- Meets cULus requirements without the need of an electrical ground connection
- Actuators with appliance cables are numbered.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Actuators may also be powered by 24 VDC.
- Only connect common to neg. (-) leg of control circuits.
- A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC.
- Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line.
- Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink.
- For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller. The actuator internal common reference is not compatible.
- Actuators may be connected in parallel if not mechanically mounted to the same shaft. Power consumption and input impedance must be observed.
- Actuators with plenum rated cable do not have numbers on wires; use color codes instead.
- All 120 VAC, 230 VAC, and UP actuators use appliance rated cables.
- UP models use "L" instead of "H" on #2 wire.

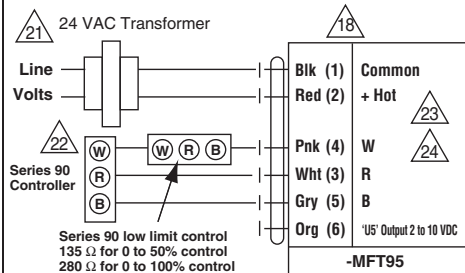
Auxiliary Switches

- GRN Green
- Verde Verde
- ORG Orange
- Anaranjado Alaranjado
- PNK Pink
- Rosado Rosa
- Cor-de-ros
- WHT White
- Blanco Blanco
- Blanc Blanc
- Branco Branco
- RED Red
- Rouge Rouge
- Vermelho Vermelho
- BLK Black
- Negro Negro
- Noir Noir
- Preto Preto

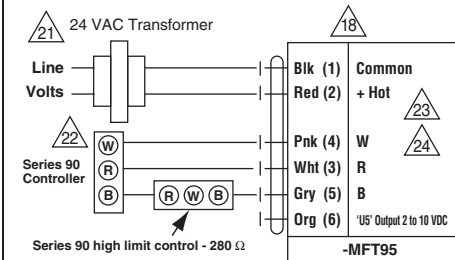
MFT95



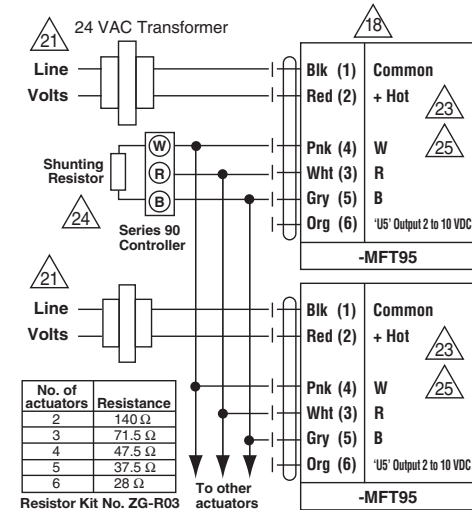
Override



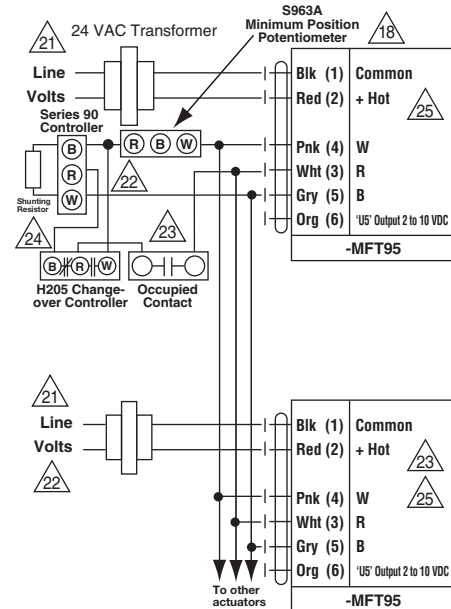
Low Limit Control



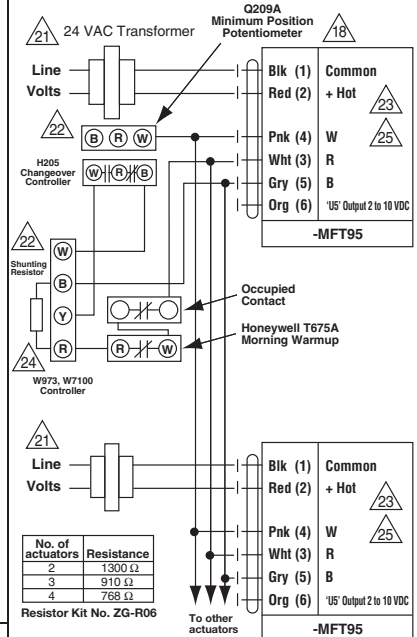
High Limit Control



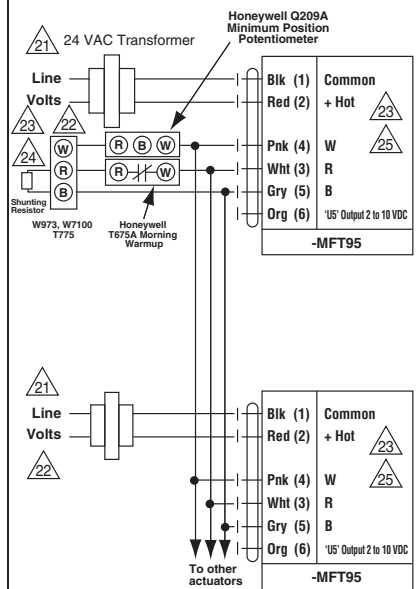
Wiring multiple actuators to a Series 90 Controller



Wiring Multiple Actuators to a Series 90 Controller using Minimum Position Potentiometer



Used with the W973 and W7100 controllers



Typical Wiring Diagrams for Multiple Actuators used with the W973, W7100 and T775 controllers

Notes:

- 18 Actuators with plenum rated cable do not have numbers on wires; use color codes instead.
- 21 Provide overload protection and disconnect as required.
- 22 Actuators and controller must have separate transformers.
- 23 Consult controller instruction data for more detailed information.
- 24 Resistor value depend on the type of controller and the number of actuators. No resistor required for one actuator. Honeywell® resistor kits may be used.
- 25 To reverse control rotation, use the reversing switch.

Slave	Slave	Master	Master	BRN	BLU	GRY	ORG	PNK	WHT	RED	BLK
Slave	Esclavo	Master	Amo	Brown	Blue	Gray	Orange	Pink	White	Red	Black
Esclavo	Esclavo	Maitre	Mestre	Marron	Azul	Gris	Anaranjado	Rosado	Blanco	Rouge	Negro
Esclavo	Esclavo	Maitre	Mestre	Brun	Bleu	Gris	Orange	Rosa	Blanc	Vermelho	Preto
Esclavo	Esclavo	Maitre	Mestre	Marron	Azul	Cincento	Alaranjado	Cor-de ros	Branco		