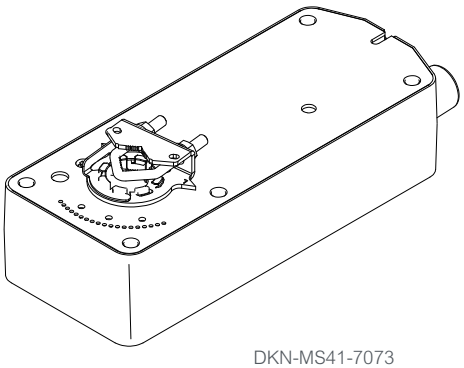
DKN-MS41-7xx3 Series

7Nm (60 lb-in.) & 15Nm (133 lb-in.) Spring Return Actuator Installation Instructions



DKN-MS41-7073
DKN-MS41-7153

Requirements

- Job wiring diagrams
- Tools and hardware (not provided):
  - #8 sheet metal screws (for universal bracket)
  - 10 mm open end wrench or socket wrench (universal V-clamp)

Precautions

Notice

- Electrical shock hazard! Disconnect the power supply (line power) before installation to prevent electric shock and equipment damage.
- Make all connections in accordance with the job wiring diagram and in accordance with national and local electrical codes. Use copper conductors only.
- Do not drill holes in the actuator body. Six pre-drilled holes are located on each side, under the label (Figure 2).

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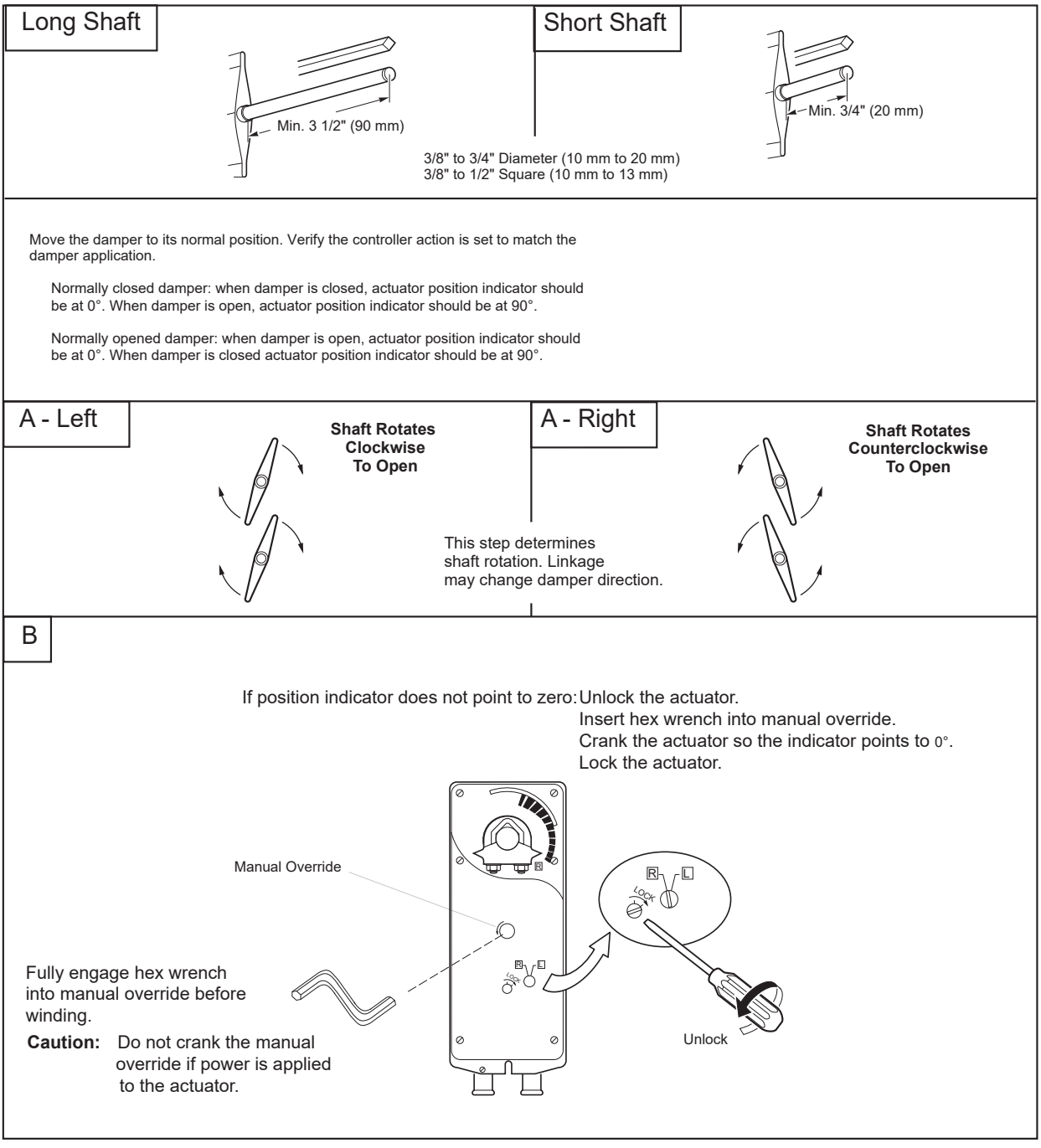
Mounting

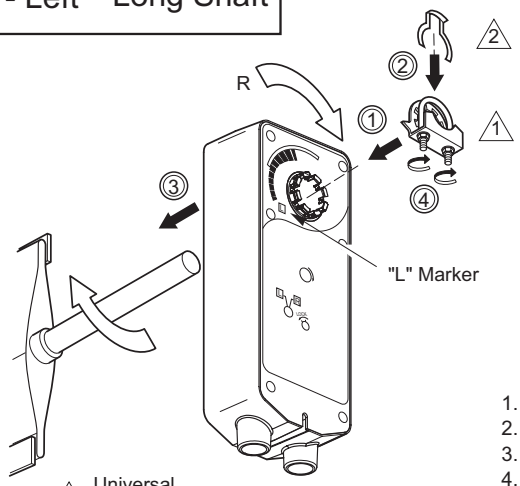
DKN-MS41-7xx3 Series Installation

Notice

- The DKN-MS41-7073 and DKN-MS41-7153 series actuators come equipped with a standard universal mounting installed.
  - If the universal clamp is not set to 0° on the position indicator, manually wind the actuator in the direction indicated with hex wrench from -5° to 0° and lock with a screwdriver.
- The DKN-MS41-7xx3 actuators are equipped with a manual override. The manual override is to be used only when power is not applied to the unit.
  - When operating manual override, back off 5° from full open mechanical stop to ensure proper release.
  - Do not attempt to use the manual override with actuators mounted in tandem. Damage to the gear train could occur.
  - Using power tools to adjust the manual override will cause damage to the gears.
  - To unlock manual override without power, crank the manual override in the direction indicated a minimum of 5°.



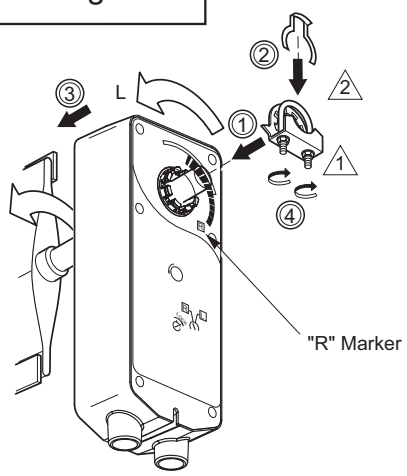
C - Left - Long Shaft



1. Universal mounting clamp.
2. Retaining clip.

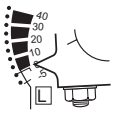
1. Assemble mounting clamp.
2. Assemble retaining clip.
3. Place actuator over shaft.
4. Hand tighten clamp nuts.

C - Right - Long Shaft



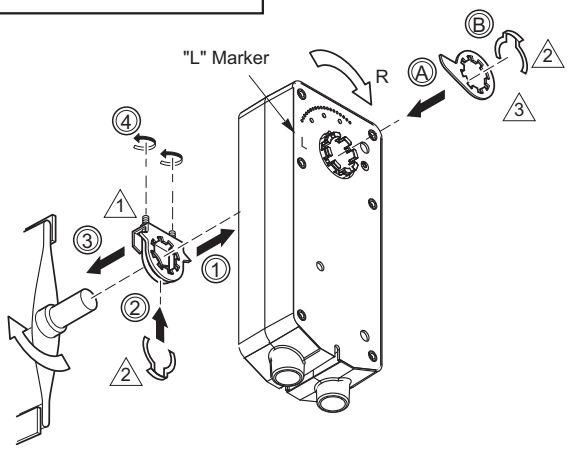
1. Universal mounting clamp.
2. Retaining clip.

For DKN-MS41-7073 and DKN-MS41-7153 actuators:



Correct clamp mounting position if actuator is locked with 5° preload.

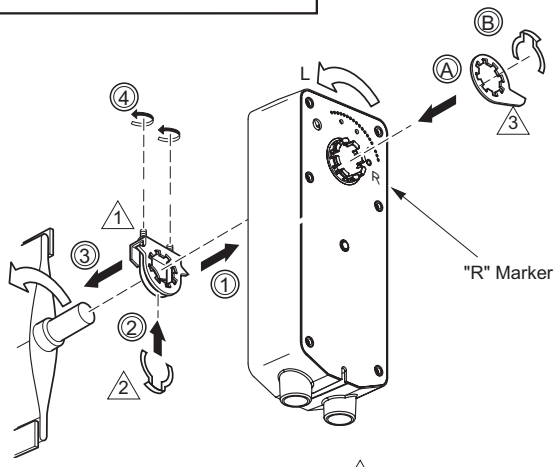
C - Left - Short Shaft



1. Universal clamp.
2. Retaining clip.
3. Damper position indicator.

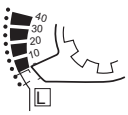
A. Assemble damper position indicator.
B. Assemble retaining clip.
1. Position mounting clamp.
2. Assemble retaining clip.
3. Slide actuator over shaft.
4. Hand tighten clamp nuts.

C - Right - Short Shaft

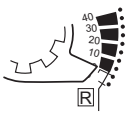


1. Universal clamp.
2. Retaining clip.
3. Damper position indicator.

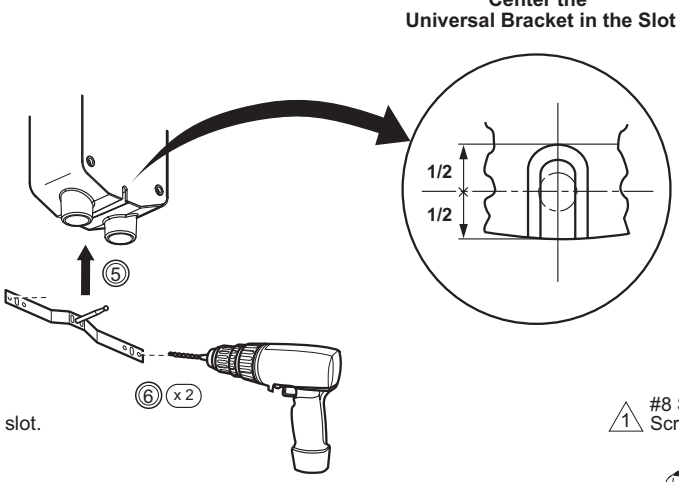
For DKN-MS41-7073 and DKN-MS41-7153 actuators:

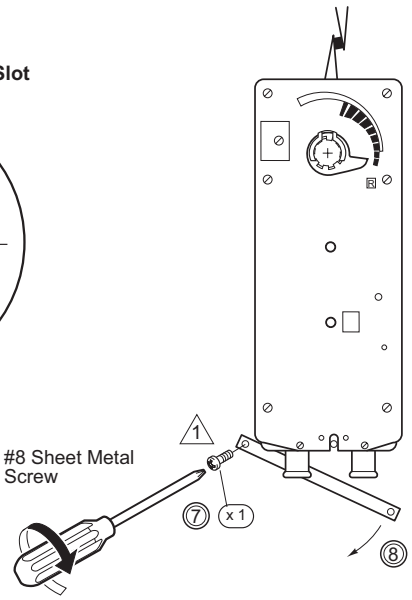


Correct pointer mounting position if actuator is locked at 5° preload.



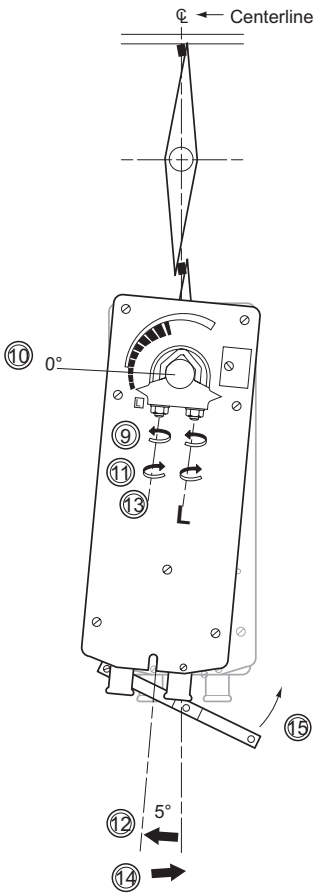
D - Left and Right



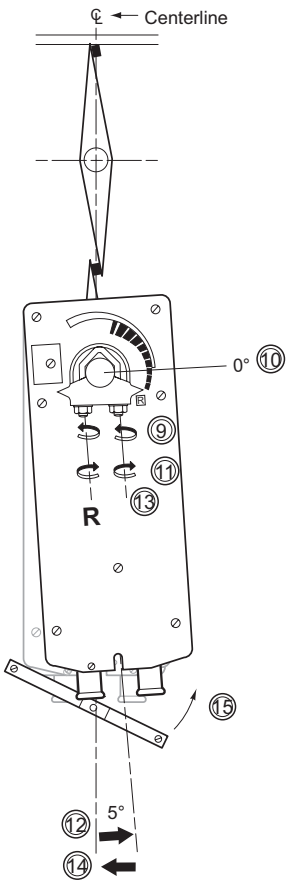


5. Center bracket in slot.
6. Drill two holes.
7. Start one screw.
   For DKN-MS41-7073 and DKN-MS41-7153 actuators, insert and tighten both screws.
8. Swing bracket down.

E- Left

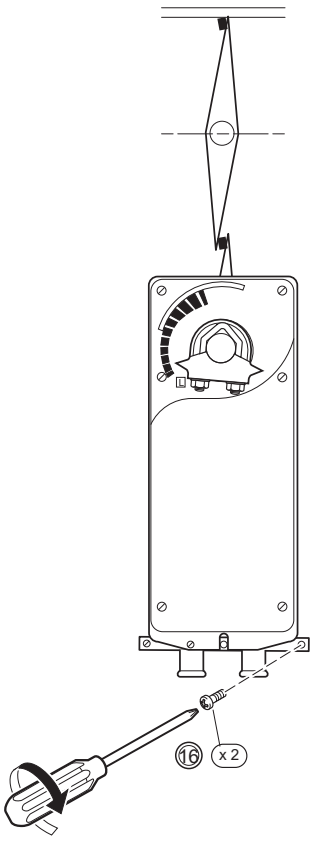


E- Right

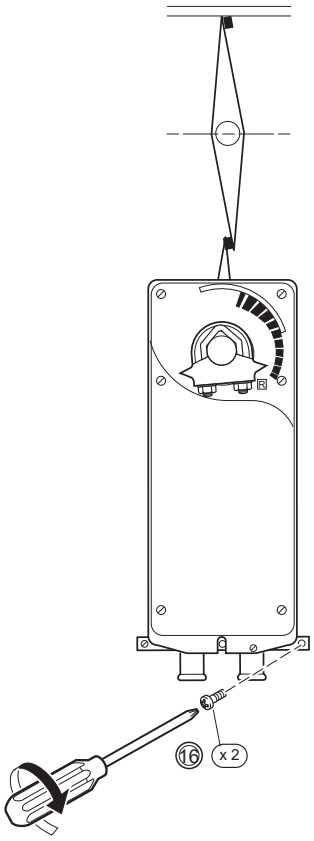


9. Loosen clamp nuts.
10. Check that the shaft is in full zero position.
11. Tighten clamp nuts to 8 - 10 ft-lb (11 - 14 Nm). This completes the installation
12. Swing actuator 5° in the direction of travel. Do not move shaft.
13. Tighten clamp nuts to 8 - 10 ft-lb (11 - 14 Nm).
14. Move bottom of actuator back into position.
15. Pivot bracket back into position.

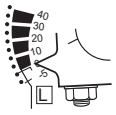
F- Left



F- Right



16. Tighten bracket screws.



Correct pointer position after mounting.

The lock on DKN-MS41-7073 and DKN-MS41-7153 will release on first power-up.

Rotation Limitation

Rotation Limitation for DKN-MS41-7xx3 Series

Note: Limiting the rotation of the actuator also reduces the system throttling range. Be sure to adjust the controller's throttling range accordingly.

The rotation limiter is used in conjunction with the tab on the universal clamp or the position indicator. In order to function properly, the clamp or indicator must be mounted correctly.

The rotation limiter controls the rotational output of the DKN-MS41-7073 and DKN-MS41-7153 actuators. It is used in applications where a damper has a designed rotation that is less than 90°, for example with a 45° or 60° rotating damper. It can also be used to provide a minimum damper position which is easily set, or changed, without removing the actuator from the damper.

1. Determine the amount of damper rotation required.
2. Locate the rotation limiter on the actuator so that its edge lines up with the degree graduation on the actuator face which corresponds with the required rotation. See Figure 1.
3. Find the appropriate cross hair location through the slot of the rotation limiter. This is the mounting location for the retaining screw.
4. Pierce through the label material to allow easy fastening of the retaining screw.
5. Position the rotation limiter back to the desired position, making sure the locating "teeth" on the rotation limiter are engaged into the locating holes on the actuator.
6. Fasten the rotation limiter to the actuator using the self-tapping screw provided.
7. Test the damper rotation by applying power and the required control signal. Readjust if necessary.

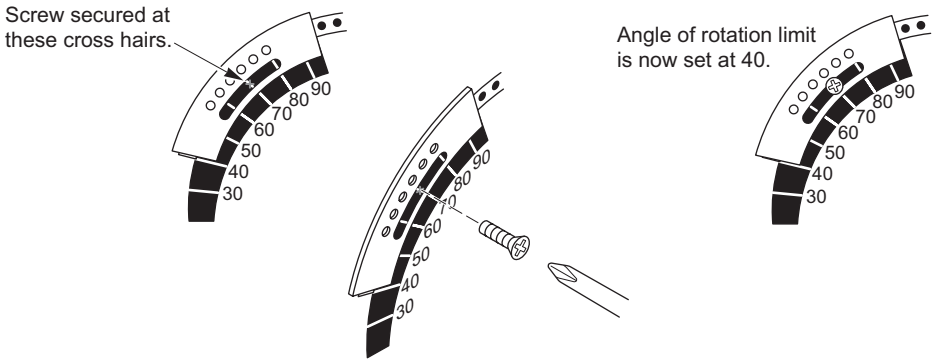


Figure 1 Securing the Rotation Limiter.

Dimensional Data

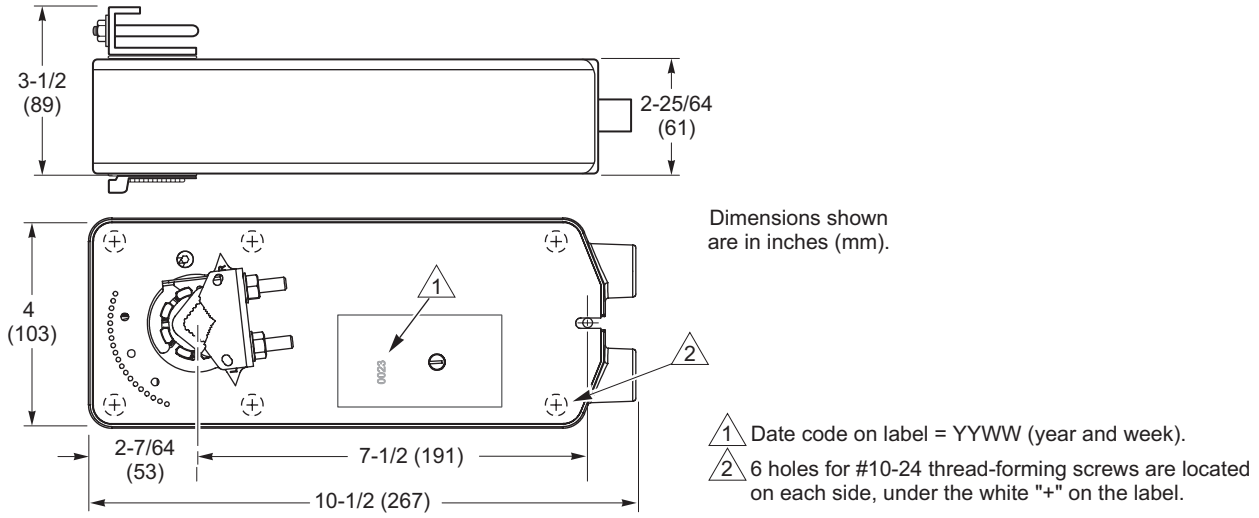


Figure 2 Mounting Dimensions

Typical Applications (Wiring Diagrams)

DKN-MS41-7073 and DKN-MS41-7153

Notice: This product contains a half-wave rectifier power supply. It must not be powered with transformers that are used to power other devices utilizing non-isolated full-wave rectifier power supplies. Refer to EN-206 Guidelines for Powering Multiple Devices from a Common Transformer.

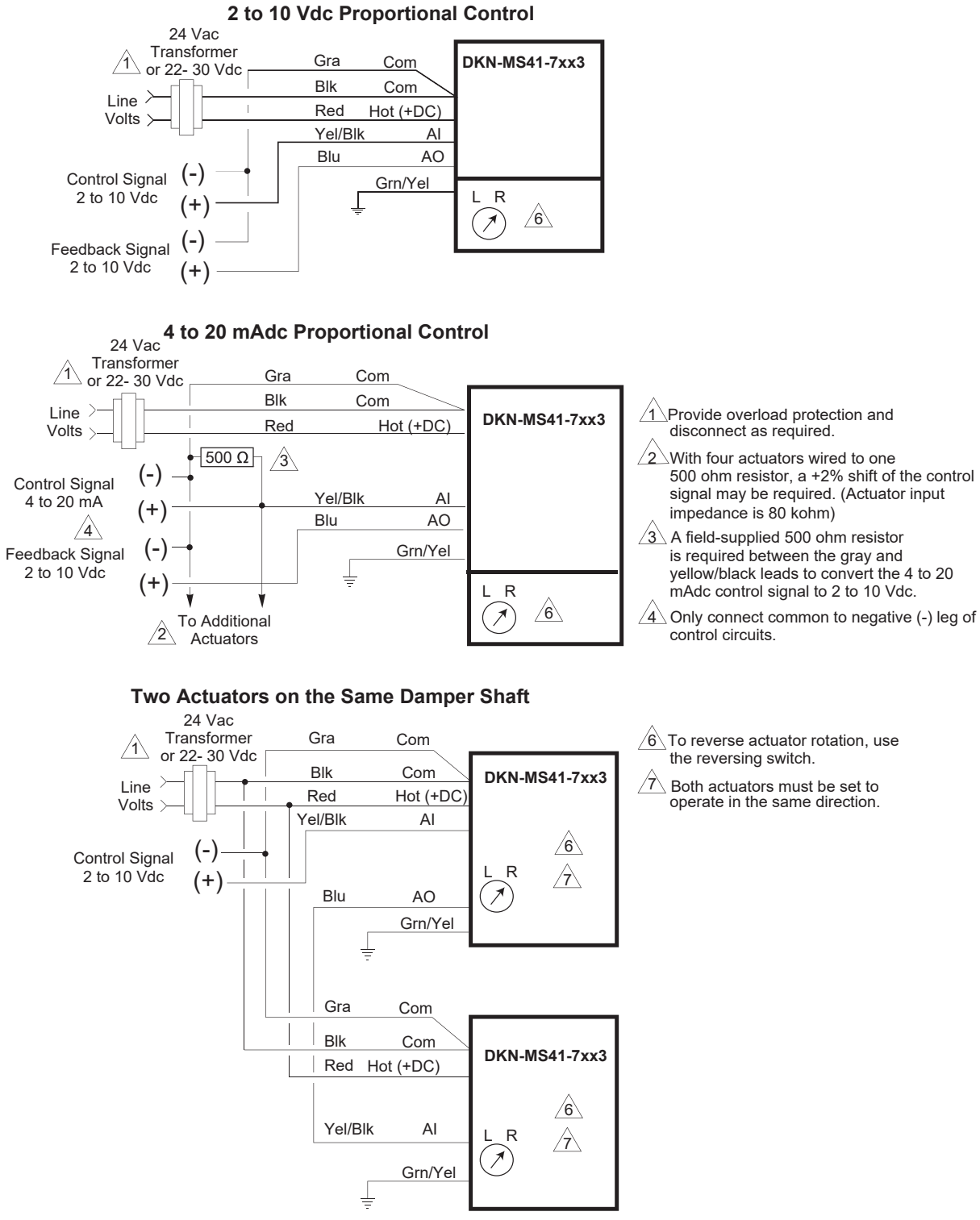


Figure 3 DKN-MS41-7xx3 Typical Wiring Diagrams

Commercial Reference	Range Brand		Product Description			
DKN-MS41-7xx3	DAIKIN LINEAR ACTUATORS		DKN-MS41 PROPORTIONAL 60 LB-IN SPRING-RETURN DKN-MS41 PROPORTIONAL 133 LB-IN SPRING-RETURN			
	有害物质 - Hazardous Substances					
部件名称 Part Name	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI)	多溴联苯 (PBB)	多溴二苯醚(PBDE)
属部件 Metal Parts	X	O	O	O	O	O
塑料部件 Plastic Parts	O	O	O	O	O	O
电子件 Electronic	X	O	O	O	O	O
线缆和线缆附件 Cables & cabling accessories	O	O	O	O	O	O

本表格依据 SJ/T11364 的规定编制。
O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。
（企业可在此处，根据实际情况对上表中打 “X” 的技术原因进行进一步说明。）

This table is made according to SJ/T 11364.
O: indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.
X: indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572