Pneumatic Damper Actuators

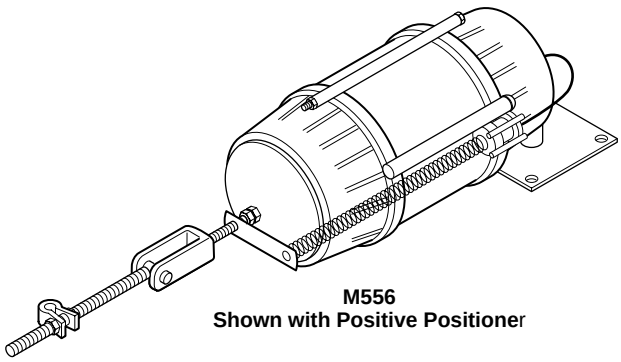
These actuators are designed for use in pneumatic control systems to position air control dampers in response to signals from pneumatic controllers. The M556 is a large swivel-mounted actuator with an adjustable crank arm having a clamp to fit a 1/2 in. O.D. damper shaft.

The M570 Series damper actuators are used in pneumatic control systems to position automatic air dampers upon receipt of an air pressure signal from a control device. These actuators are equipped with right angle brackets and are adaptable to air conditioning, multi-zone, heating, ventilating, fan coil units, unit ventilators, mixing boxes, and VAV terminal boxes. M573 and M574 are also available as post-mounted actuators.

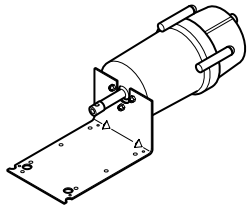
The M583 is used in classroom type unit ventilators. Special mounting kits are available for adapting the actuator to the various makes and models of classroom type units. The M584 is designed for use on large volume unit ventilators. An internal spring arrangement permits the actuator to operate gradually to a preset percentage of total stroke, hesitate for a preset pressure range, and then complete its full travel. When combined with other control devices, these actuators may be adjusted to perform as required by ASHRAE control cycles for unit ventilators.

Features:

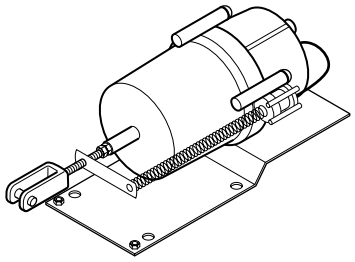
- Rigid, corrosion-resistent glass-filled nylon bodies.
- M556, M573 and M574 have 303 stainless-steel shafts.
- M556, M573 and M574 available with or without N800-0555 positioner.



M556
Shown with Positive Positioner



M572/M573/M574
Right Angle Mounted
Shown without Positive Positioner



M573/M574
Post Mounted Actuator
Shown with N800-0555
Positive Positioner

Model Chart

2 in. Stroke (3 sq. in.).

Siebe Model No.	Wholesale Model No.	Spring Range psig	Mounting	Description
M572-2308	2472-010	3 to 12	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M572-2311	2472-110			Actuator with complete linkage for 1/2 in. damper shafts
M572-8308	2472-020	4 to 8		Actuator with ball joint to accept 5/16 in. push rod
M572-8311	2472-120			Actuator with complete linkage for 1/2 in. damper shafts
M572-3308	2472-030	5 to 10		Actuator with ball joint to accept 5/16 in. push rod
M572-3311	2472-130			Actuator with complete linkage for 1/2 in. damper shafts
M572-5308	2472-040	8 to 13		Actuator with ball joint to accept 5/16 in. push rod
M572-5311	2472-140	10 to 15		Actuator with complete linkage for 1/2 in. damper shafts
M572-6308	2472-050			Actuator with ball joint to accept 5/16 in. push rod
M572-6311	2472-150			Actuator with complete linkage for 1/2 in. damper shafts

Hesitation Actuator.

Siebe Model No.[a]	Wholesale Model No	Stroke	Diaphragm Area	Spring Range psig	Mounting	Description
M583-0520	2463-863	2 in.	7 sq. in.	1 to 4 and 8 to 12	Post-mtd.	Actuator with stamped clevis, clevis pin and bracket; for use on air handlers where factory mounting has not been established
M584-0211	2464-861	3 in.	11 sq. in.	1 to 4 and 8 to 13	Right-angle	Actuator with pushrod and stamped crankarm for 90° rotation of 1/2 in. damper shaft

[a] Total stroke of these hesitation actuators takes place in two stages, from 1 to 4 and 8 to 12 (or 8 to 13) psig. No shaft movement from 4 to 8 psig.

3 in. Stroke (7 sq. in.).

Siebe Model No.	Wholesale Model No.	Spring Range psig	Mounting	Description
M573-2108	2473-010	3 to 12	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M573-2111	2473-110		Right-angle	Actuator with complete linkage for 1/2 in. damper shafts
M573-2520	2473-210		Post-mtd.	Actuator with clevis and pin
M573-8108	2473-020	4 to 8	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M573-8111	2473-120			Actuator with complete linkage for 1/2 in. damper shafts
M573-8520	2473-220		Post-mtd.	Actuator with clevis and pin
M573-3108	2473-030	5 to 10	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M573-3111	2473-130			Actuator with complete linkage for 1/2 in. damper shafts
M573-3520	2473-230		Post-mtd.	Actuator with clevis and pin
M573-1108	2473-060	8 to 13	Right-angle	Actuator with complete linkage and positive positioner for 5/16 in. push rod and 1/2 in. damper shafts
M573-1111	2473-160			
M573-1520	2473-260		Post-mtd.	Actuator with positive positioner
M573-5108	2473-040		Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M573-5111	2473-140			Actuator with complete linkage for 1/2 in. damper shafts
M573-5520	2473-240		Post-mtd.	Actuator with clevis and pin
M573-6108	2473-050	10 to 15	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M573-6111	2473-150		Right-angle	Actuator with complete linkage for 1/2 in. damper shafts
M573-6520	2473-250		Post-mtd.	Actuator

4 in. Stroke (11 sq. in.).

Siebe Model No.	Wholesale Model No.	Spring Range psig	Mounting	Description
M574-2208	2474-010	3 to 12	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M574-2211	2474-110			Actuator with complete linkage for 1/2 in. damper shafts
M574-2520	2474-210		Post-mtd.	Actuator with clevis and pin
M574-8208	2474-020	4 to 8	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M574-8520	2474-220		Post-mtd.	Actuator with clevis and pin
M574-3208	2474-030	5 to 10	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M574-3211	2474-130			Actuator with complete linkage for 1/2 in. damper shafts
M574-3520	2474-230		Post-mtd.	Actuator with clevis and pin
M574-1208	2474-060	8 to 13	Right-angle	Actuator with complete linkage and positive positioner for 5/16 in. push rod and 1/2 in. damper shafts
M574-1211	2474-160			
M574-1520	2474-260		Post-mtd.	Actuator with positive positioner
M574-5208	2474-040		Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M574-6208	2474-050	10 to 15	Right-angle	Actuator with ball joint to accept 5/16 in. push rod
M574-6211	2474-150		Right-angle	Actuator with complete linkage for 1/2 in. damper shafts
M574-6520	2474-250		Post-mtd.	Actuator

6 in. Stroke (24.8 sq. in.).

Siebe Model No.	Wholesale Model No.	Spring Range psig	Mounting	Description
M556-14	2466-011[a]	8 to 13	Swivel-mtd.	60° to 120° adj. linkage to accept 1/2 in. shafts w/positioner [a] (with 5 psi span feedback spring).
M556-51	2466-051			60° to 120° adjustable linkage to accept 1/2 in. shafts
M556-5101	M556-5101			No linkage. Hole in end of shaft is tapped to receive a 3/8" - 16 machine screw.

[a] A 10 psi span positive positioner spring is also supplied with the actuator.

Specifications

Construction	
Housing	Glass-filled nylon.
Diaphragm	Neoprene, rolling type.
Shaft	Stainless Steel on M556, M573, M574. Nickel plated steel on M572, M583, M584.
Stroke	Refer to Model Chart.
Spring	Retract actuator shaft on loss of air pressure.
Ambient temperature limits	-20 to 180°F (-29 to 82°C).
Supply air pressure	Clean, dry, oil free air required.
Nominal	20 psig (138 kPa). [M580 Series nominal 0 to 15 psig (0 to 103 kPa).]
Maximum	30 psig (207 kPa).
Air consumption (positioner models)	0.017 scfm.
Adjustments	
Hesitation stroke start point	4 psig (28 kPa); stroke adjustable 20% to 70% prior to 4 psig.
Finish stroke start point	8 psig (55 kPa); stroke adjustable 80% to 30% after 8 psig.
Connections	Barbed fitting for 1/4 in. O.D. plastic tubing.

M556 Series (2466 Series), M572 Series (2472 Series), M573 Series (2473 Series), M574 Series (2474 Series), M583 Series (2463 Series), M584 Series (2464 Series)

Specifications (Continued)

Dimensions

M556	5-3/4 dia. x 17 L in. (146 x 432 mm).
M573	3-3/4 dia. x 14 L in. (95 x 356 mm).
M574	4-5/8 dia. x 15-1/8 L in. (117 x 384 mm).

Accessories

Siebe Model No.	Wholesale Model No.	Description
AM-112	—	Slotted crank arm for 3/8 in. shaft
AM-113	—	Slotted crank arm for 1/2 in. shaft.
AM-115	—	Slotted crank arm for 7/16 in. shaft.
AM-122	—	Straight connector.
AM-123	—	Damper clip.
AM-125	—	5/16 x 20 in. damper rod.
AM-125-048	—	5/16 x 48 in. damper rod.
AM-132	—	Ball joint connector.
N5-75	—	1/2 in. I.D. shaft coupling to extend damper drive shafts (includes four set screws).
N800-0555 — Box	20-064	Positive Positioner.
N800-1403	—	Slotted crank arm for 3/8 in. shaft.
N800-1404	—	Slotted crank arm for 1/2 in. shaft.
N800-1414	—	3-hole crank arm for 3/8 in. shaft (for 2, 3, 4 in. strokes).
N800-1415	—	3-hole crank arm for 1/2 in. shaft (for 2, 3, 4 in. strokes).
M556 Kits		
—	2850-031	Add-on positioner kit, 3 psig span. Includes positioner and mounting hardware.
—	2850-053	Add-on positioner kit, 5 psig span. Includes positioner and mounting hardware.
—	2850-054	Add-on positioner kit, 10 psig span. Includes positioner and mounting hardware.
M573 Kits		
—	2850-017	Add-on positioner kit, 5 psig span feedback spring.
—	2850-018	Add-on positioner kit, 10 psig span feedback spring.
—	2850-028	Add-on positioner kit, 3 psig span feedback spring.
M574 Kits		
—	2850-019	Add-on positioner kit, 5 psig feedback spring.
—	2850-020	Add-on positioner kit, 10 psig span feedback spring.
—	2850-030	Add-on positioner kit, 3 psig span feedback spring.
Diaphragms		
N800-9422	21-840	For M572 (2472) Series.
N800-9423	21-841	For M573 (2473) Series.
N800-9424	21-842	For M574 (2474) Series.
N800-9426	21-104	For M556 (2466) Series.
Replacement Springs for M572 Series		
N800-4204	21-975	3 to 12 psig.
N800-4203	21-976	5 to 10 psig.
N800-4205	21-977	8 to 13 psig.
N800-4206	21-978	10 to 15 psig.
N800-4208	21-979	4 to 8 psig.
Replacement Springs for M573 Series		
N800-4302	21-980	3 to 12 psig.
N800-4303	21-981	5 to 10 psig.
N800-4305	21-982	8 to 13 psig.
N800-4306	21-983	10 to 15 psig.
N800-4308	21-984	4 to 8 psig.
Replacement Springs for M574 Series		
N800-4402	21-985	3 to 12 psig.
N800-4403	21-986	5 to 10 psig.
N800-4405	21-987	8 to 13 psig.
N800-4406	21-988	10 to 15 psig.
N800-4408	21-989	4 to 8 psig.