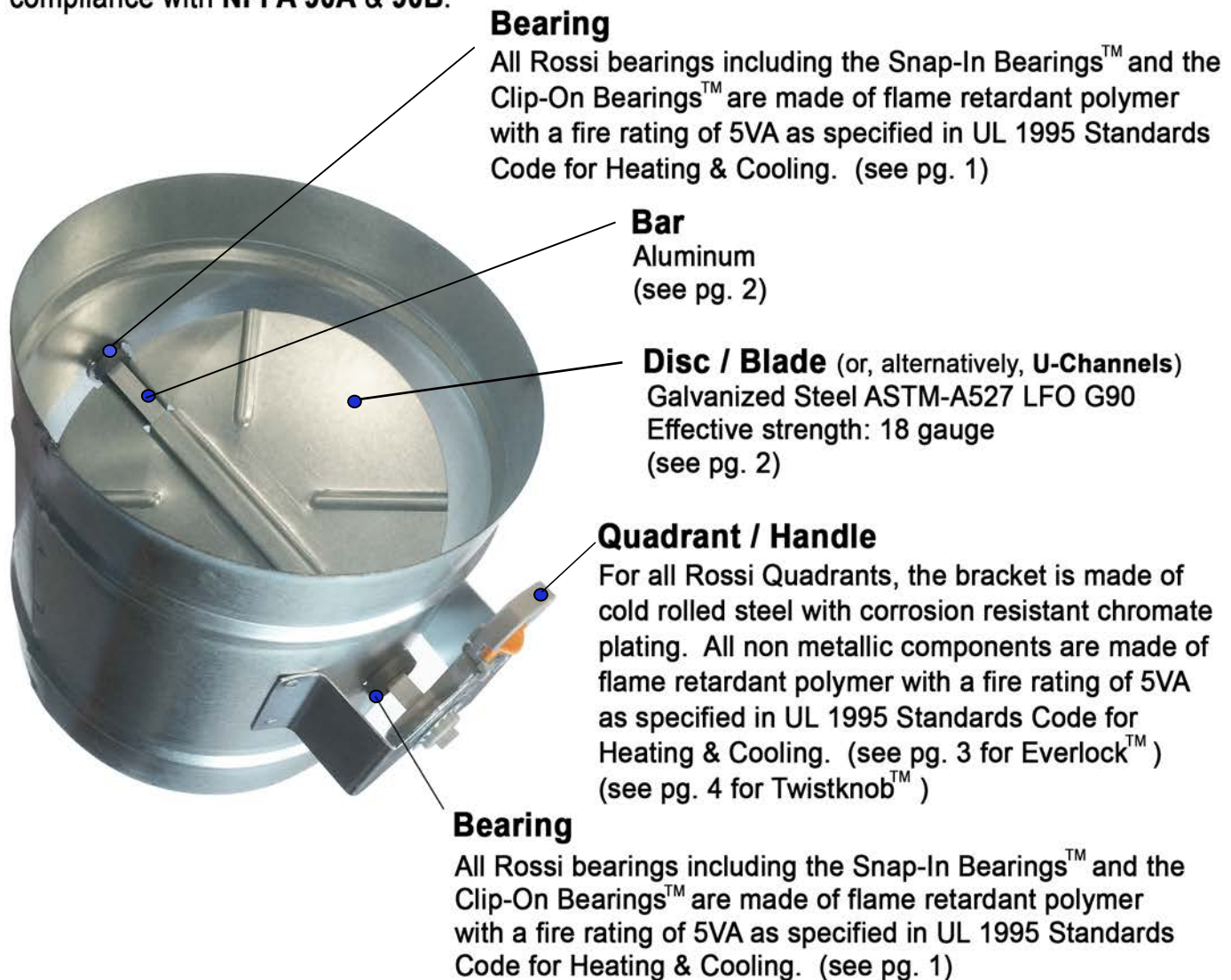


P 818.252.3811
F 818.252.3812
www.RossiHardware.com
info@RossiHardware.com

Positive Locking Air Volume Control DamperTM
manufactured by Rossi Hardware.

The Rossi Positive Locking Air Volume Control DamperTM is designed to address the problem of wingnut-operated air volume control dampers losing their air balance due to vibrations in the duct system. Such vibrations cause the wingnut to loosen such that the damper handle & blade flop around in the air current and lose the balancing position. This requires additional test and balancing costs to troubleshoot and re-balance the air system. The Rossi EverlockTM quadrant uses a positive locking thumb trigger (with no wingnut) to ensure the handle's position remains where it is set and never loses its balance. All components of the Rossi air volume control damper system, including the quadrants, the bearings, the rods, the blades and uchannels, adhere to all **UL requirements, Plenum ratings and SMACNA standards** for manual dampers; and are in compliance with **NFPA 90A & 90B**.



Bearing

All Rossi bearings including the Snap-In BearingsTM and the Clip-On BearingsTM are made of flame retardant polymer with a fire rating of 5VA as specified in UL 1995 Standards Code for Heating & Cooling. (see pg. 1)

Bar

Aluminum
(see pg. 2)

Disc / Blade (or, alternatively, **U-Channels**)

Galvanized Steel ASTM-A527 LFO G90
Effective strength: 18 gauge
(see pg. 2)

Quadrant / Handle

For all Rossi Quadrants, the bracket is made of cold rolled steel with corrosion resistant chromate plating. All non metallic components are made of flame retardant polymer with a fire rating of 5VA as specified in UL 1995 Standards Code for Heating & Cooling. (see pg. 3 for EverlockTM) (see pg. 4 for TwistknobTM)

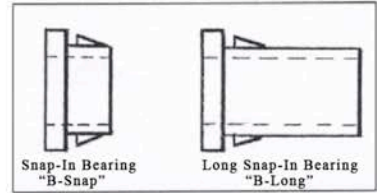
Bearing

All Rossi bearings including the Snap-In BearingsTM and the Clip-On BearingsTM are made of flame retardant polymer with a fire rating of 5VA as specified in UL 1995 Standards Code for Heating & Cooling. (see pg. 1)

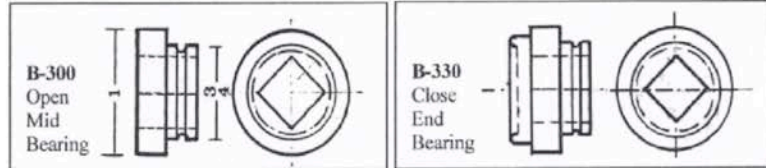
PRODUCT DATA SHEET / SUBMITTAL Snap-In Bearings™ / Clip-On Bearings™

Rossi products adhere to all UL requirements, Plenum ratings and SMACNA standards for manual dampers; and comply with NFPA 90A & 90B.

SNAP-IN BEARINGS (*patent pending*): These bearings simply snap into a 3/4" hole and automatically lock into place, dramatically cutting down assembly time. SNAP-IN Bearings also come in longer size (1.5") (B-Long) for use with inside-insulated (lined) duct & fittings. B-Longs are recommended for all pressure class applications. B-Snaps are recommended for Low or Medium pressure systems.



CLIP-ON BEARINGS (*patent pending*): These bearings also snap into a 3/4" hole with an E-Clip securing the bearing from the opposite side in seconds, greatly reducing assembly time.



B-300s are open-mid bearings & B-330s are closed-end. Recommended for high or negative pressure jobs.

1) BEARINGS

MATERIAL: Polyamide 66 (PA66), Flame Retardant, Glass Reinforced Engineering Polymer, (PA66) or equivalent. This is the material outlined for use in all Non-Metallic Components as specified in the UL 1995 Standards Code for Heating & Cooling (CSA-C22.2 No. 238 UL 1995) with the required flammability rating of 5VA.

Polyamide 66 (PA66), Flame Retardant, Glass Reinforced, designated "Zytel" furnished as pellets.																			
										H	D								
										V	4	C							
										Thk	Flame	W	H	A	RTI		T	9	T
Material Dsg	Color	mm	Class	I	I	Elec	Imp	Str	R	5	I								
FR50+(f1)	ALL	0.35	V-0	—	—	—	—	—	—	—	—								
		0.75	V-0	0	0	130	105	105	—	—	—								
	NC	1.5	5VA	0	0	130	115	115	—	—	—								
	BK	3.0	5VA	0	0	130	115	120	1	6	2								

Tensile Modulus, psi	Tensile Strength @ Break, psi	Deflection Temp, °F	Impact Strength, Ft-Lb/In	Flexural Modulus, psi	Flexural Strength @ Break, psi	Elongation @ Yield
480,000	9,500	450° @ 66 psi 380° @ 264 psi	Notched IZOD: 4.00 Unnotched IZOD: 16.00	330,000	12,000	7%

2) O-RING: **MATERIAL:** (Vulcanized Fiber) ASTM D710 (also avail. in Phenolic, Kapton & Spring Steel)

Compressive Strength, psi	Resistance to Cont.Heat, °F	Shear Strength, psi	Tension Strength, psi	Hardness	Water Absorption
20,000-30,000	212	11,000-15,000	6,000-12,000	R60-R100	11%



3) E-CLIP: SE-74ST or E—75ST (Retaining Ring)

High Carbon Spring Steel	Rockwell Hardness	Scale
SAE 1060-1090	47-52 (HRC)	C



Finish: Zinc Plated + Dichromate Dip, Salt spray Test: 96 Hours/ (240 Hours with Addl Lacquer Dip)



Proudly made in the USA.

www.RossiHardware.com

Rossi products adhere to all UL requirements, Plenum ratings and SMACNA standards for manual dampers; and comply with NFPA 90A & 90B.

Duct fabricators often cut discs out of metal and go through a time consuming process simply to attach the disc to a bar. This involves drilling holes and using u-bolts. That was until Rossi introduced the first discs with a built-in channel for the bar to pass through. Our pre die cut and formed damper discs (blades) save significant manufacturing time and labor, assure consumer confidence in product uniformity, and provide an unparalleled system for quick assembly of dampers. And Rossi discs (or blades) are the only ones designed to be stackable. One hundred and fifty Rossi damper discs stacked together come to less than 10” high, significantly reducing inventory space.

And for fabricators who want to cut their own discs out of scrap metal, they can use Rossi’s U-Channels to affix their discs to the bar thereby still using Rossi’s bearings and handles.

1) DAMPER DISCS (or Blades)

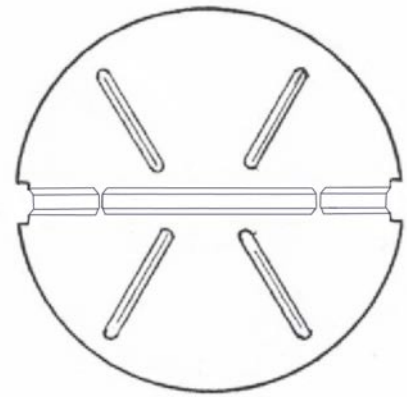
MATERIAL: G90 Galvanized (ASTM-A527 LFO). Available in 4” to 16” diameter. 4”-14” blades are 22 Gauge. 16” blades are 20 Gauge. A 3/8” full length bar fits through the formed channel in the center of each damper blade.

2) BARS (or Shafts)

MATERIAL: 3/8” square Aluminum bar (or shaft).

3) U-Channels

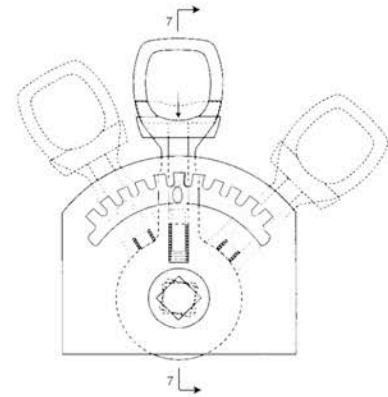
MATERIAL: G90 Galvanized (ASTM-A527 LFO). Available to fit 3/8” square Aluminum bar (or shaft).



Proudly made in the USA.

Rossi products adhere to all UL requirements, Plenum ratings and SMACNA standards for manual dampers; and comply with NFPA 90A & 90B.

EVERLOCK (*patent pending*) – Self locking damper handle. Created to replace the less reliable *friction* locks on the market with the first *positive* (absolute) lock. Fully hand operational without the need for any tools.



1) BRACKET

MATERIAL: Cold Rolled Steel / ASTM A – 1008, 18 GA. Nom. thickness .0478 Tol. Range .0438 to .0518. The bracket is manufactured in a single cut & formed process, using a progressive Die, Designed for use with both 1.5” and 2” wrapping or any other such stand-off applications. Completed with a white Chromate plating process which provides durable corrosion resistance. Auto Plating = ASTM B-633 TYPE II (white) Class FE\ZN8 or SC2 Thickness .0003.

2) HANDLE & THUMB TRIGGER

MATERIAL: Polyamide 66 (PA66), Flame Retardant, Glass Reinforced Engineering Polymer, (PA66) or equivalent. This is the material outlined for use in all Non-Metallic Components as specified in the UL 1995 Standards Code for Heating & Cooling (CSA-C22.2 No. 238 UL 1995) with the required flammability rating of 5VA.

PA66 Specifications:

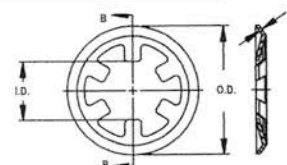
Tensile Modulus, psi	Tensile Strength @ Break, psi	Deflection Temp, °F	Impact Strength, Ft-Lb/In	Flexural Modulus, psi	Flexural Strength @ Break, psi	Elongation @ Yield
480,000	9,500	450° @ 66 psi 380° @ 264 psi	Notched IZOD: 4.00 Unnotched IZOD: 16.00	330,000	12,000	7%

Polyamide 66 (PA66), Flame Retardant, Glass Reinforced, designated “Zytel” furnished as pellets.

Material Dsg	Color	Min Thk mm	Flame Class	H H		RTI		V	4	C
				W	A	Elec	Mech			
				I	I	Imp	Str	R	5	I
FR50+(f1)	ALL	0.35	V-0	—	—	—	—	—	—	—
		0.75	V-0	0	0	130	105	105	—	—
	NC	1.5	5VA	0	0	130	115	115	—	—
	BK	3.0	5VA	0	0	130	115	120	1	6 2

3) COMPRESSION SPRING

MATERIAL: Stainless Steel Type 302-OD .25 WIRE .026 free length = 7/8” (.875 in). COILS 10 – CLOSED NOT GROUND.



4) RETAINING RING: EXT.SELF-LOCK TX-75ST-ZF

MATERIAL: Carbon Spring Steel SAE 1074-1075 with Zink Bright Plating. C-SCALE Rockwell Hardness 47 to 51. Country of Origin: U.S.A.



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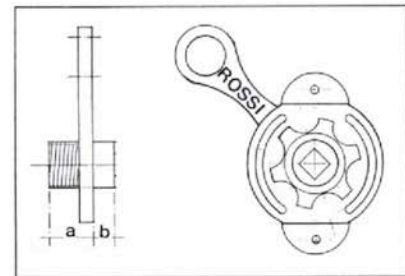
Rossi products adhere to all UL requirements, Plenum ratings and SMACNA standards for manual dampers; and comply with NFPA 90A & 90B.

TWISTKNOB (*patent pending*) – Fully hand operational, without the need for any tools. The Twistknob is made from a specially designed engineering polymer with an increased surface area resulting in the strongest friction lock on the market.

(Twistknob Flat)

1) BRACKET

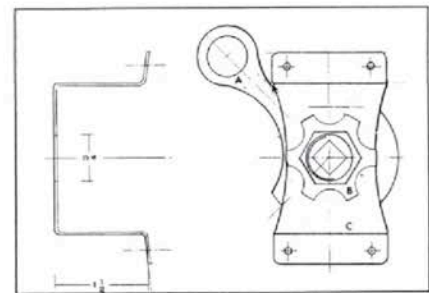
MATERIAL: Cold Rolled Steel / ASTM A – 1008, 18 GA. Nom. thickness .0478 Tol. Range .0438 to .0518. The bracket is manufactured in a single cut & formed process, using a progressive Die, Designed for use with both 1.5” and 2” wrapping or any other such stand-off applications. Completed with a white Chromate plating process which provides durable corrosion resistance. Auto Plating = ASTM B-633 TYPE II (white) Class FE\ZN8 or SC2 Thickness .0003.



(Twistknob Standoff)

2) HANDLE & SECURING KNOB

MATERIAL: Polyamide 66 (PA66), Flame Retardant, Glass Reinforced Engineering Polymer, (PA66) or equivalent. This is the material outlined for use in all Non-Metallic Components as specified in the UL 1995 Standards Code for Heating & Cooling (CSA-C22.2 No. 238 UL 1995) with the required flammability rating of 5VA.



PA66 Specifications:

Tensile Modulus, psi	Tensile Strength @ Break, psi	Deflection Temp, °F	Impact Strength, Ft-Lb/In	Flexural Modulus, psi	Flexural Strength @ Break, psi	Elongation @ Yield
480,000	9,500	450° @ 66 psi 380° @ 264 psi	Notched IZOD: 4.00 Unnotched IZOD: 16.00	330,000	12,000	7%

Polyamide 66 (PA66), Flame Retardant, Glass Reinforced, designated “Zytel” furnished as pellets.

Material Dsg	Color	Min Thk mm	Flame Class	H W I	H A I	RTI			H V	D 4	
						Elec	Mech		T	9	C
							Imp	Str	R	5	I
FR50+(f1)	ALL	0.35	V-0	—	—	—	—	—	—	—	—
		0.75	V-0	0	0	130	105	105	—	—	—
	NC	1.5	5VA	0	0	130	115	115	—	—	—
	BK	3.0	5VA	0	0	130	115	120	1	6	2



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