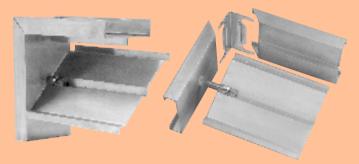


# **Exclusively from Duro Dyne!**

# SIDE-GLIDE SYSTEM

Duro Dyne has long been a pioneer in Damper Hardware components. Now **Duro Dyne** engineering has resulted in a break through concept for an easy and economical method for Multiblade Damper fabrication.

## Frames, Blades & Corners



**Duro Dyne** has designed and developed an innovative assembly system of prefabricated frames, blades and corners. The additional components compliment the Side Glide rail and bracket linkage system. The frames, manufactured from extruded aluminum, consist of two distinct parts: a side configuration and a top/bottom piece with a built in blade stop. The blades, also manufactured from extruded aluminum, are 6" and 9-3/4" wide, and by incorporating the innovative top/bottom frame design, only two type of blades are ever required. The "hammer in" corners insert easily and are self-locking.

With **Duro Dyne's** latest innovation, material handling and fabrication is minimal. There is no longer the need to worry about excessive labor and material costs associated with the manufacturing of dampers. As an added feature, only the most basic tools are required.

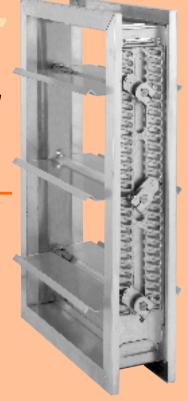
# **KEY FEATURES**

### Frames, Blades & Corners:

- Quick and easy assembly, no excessive drilling or metal forming required.
- Frames and Blades are manufactured from corrosion resistant extruded aluminum. Frames and Blades are lightweight, yet strong!
- Frames utilize the integration of blade stops, thus requiring the need for only two types of blades.
- Corners are zinc coated, rigid, self-locking and are easily installed.

### **Blade Linkage**





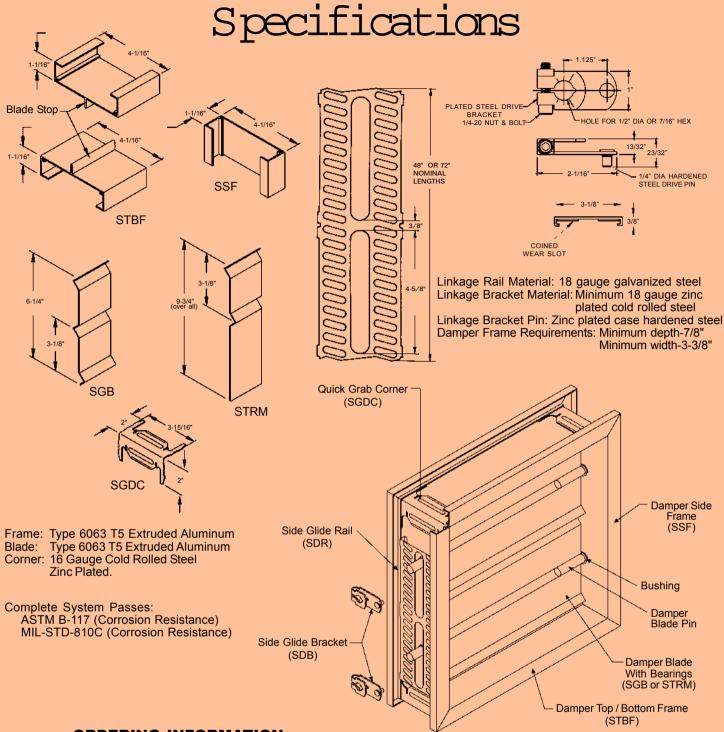
Side damper linkage has many variations. Gears, chain and linkage rods are all typical methods of coordinating blade movement and each method has its own inherent disadvantages, such as cost, being difficult to assemble or adjust and the customization of parts.

With **Duro Dyne's** new patented Side-Glide<sup>™</sup> hardware damper blade linkage and adjustment become simple. Consisting of one standard linkage rail per damper and one linkage bracket per blade, assembly and adjustment are easy. It makes no difference whether you are making parallel or opposed blade dampers or varying the size of the blades; the rail and brackets are always the same.

# KEY FEATURES

### **Blade Linkage:**

- Assemble damper linkage in seconds.
- Fewer moving parts-less noise and adjustment.
- Mix blade sizes on damper without special preparation.
- Works with parallel or opposed blades.
- Blades can be as small as 3".
- Linkage bracket fits 1/2" round, 7/16" hex or 3/8" square rod
- Rail available in 4' and 6' lengths.
- Patents pending.



# **ORDERING INFORMATION**

Item#	Model	Description	Packaging
Frames, B	lades & Corners		
2121 2122 2123 2124 2125 2126 2127 2128	STBF-6 STBF-10 SSF-6 SSF-10 SGB-6 SGB-10 SGDC STRM-6	Top/Bottom Damper Frame (6') Top/Bottom Damper Frame (10') Side Damper Frame (6') Side Damper Frame (10') 6" Damper Blade (6' length) 6" Damper Blade (10' length) Quick Grab Damper Corner 9-3/4" Trim Blade (6' length)	10 lengths per carton 100 per carton 10 lengths per carton
2129 <b>Linkage S</b> 2116 2117 2118	STRM-10 ystem SDB SDR-4 SDR-6	9-3/4" Trim Blade (10' length)  Linkage Bracket  Linkage Rail-4 Foot  Linkage Rail-6 Foot	10 lengths per carton 100 per carton 10 lengths per carton 10 lengths per carton

# Multi-Blade Damper Hardware

NEVA-BIND™ **DURO BLADE KIT** FOR PARALLEL DAMPERS

Duro Dyne's exclusively patented "NEVA-BIND" Linkage Bracket will always align itself to assure smooth, non-binding operation even on the heaviest damper blades. Above, or at unequal distance from the blade axis, it is capable of adjusting itself all four ways, in-out, up-down, sideways and rotation. Each carton contains all necessary hardware for one blade of a multi-blade damper.

	v.	
	_3	

Opposed Action Dampers minimize turbulence and the control of the air is more linear. Exclusive Neva-Bind, 4 way selfadjustability which Duro Dyne "OPAX" kits feature, automatically compensate for any construction inaccuracies and maintains linear operation. The critical dimensions between linkage points are also maintained during operation. "OPAX" provides opposed action of damper blades and holds the blades rigidly in position eliminating rattle or flutter. These linkage kits contain all the necessary hardware for two opposed action damper blades.

OPAX®
BLADE KIT
FOR OPPOSED
<b>ACTION DAMPERS</b>



ltem#	Model	Bearing Size
2001	BK-1	7/16"
2002	BK-2	1/2"







# **MULTI-BLADE DAMPER PARTS**

(All Steel Parts Zinc or Cadmium Plated) ALL PACKED 100 PER CARTON UNLÉSS NOTED

#### **Blade Brackets**

Item#	Model	Rod Size
2005	BKP-814	1/4"
2006	BKP-856	5/16"
2007	BKP-838	3/8"



Standard Bracket as supplied in BK-1 and BK-2 Parallel Kits.



Item #2008 - Model BKP-22 - High Bracket as supplied in Opax Blade Kits BKO-3 and BKO-4

Item #2011 - Model BKP-25 - High Bracket (not Neva-Bind) with Brass Pivot & Steel Set Screw (Not Shown)



Item #2009 - Model BKP-23 - Lo Bracket and Linkage Rod as supplied in Opax Blade Kits.

Item #2010 - Model BKP-24 - Lo Bracket - No Rod.



Item #2016 - Model BKP-13 - Strap and set screws.



Item #2025 - Model BKP-71 - Self-aligning strap "V" groove does not deform blade.

# Rod Clips



Item #8053 - Model KP-25 - 3/8" Damper Rod Clips (U-Bolts)

Item #8054 - Model KP-26 - 1/2" Damper Rod Clips (U-Bolts)

Item #8055 - Model KP-27 - 5/8" Damper Rod Clips (U-Bolts)

# **Bushings**







Item #2012 - Model BKP-9 - Bronze Bushings 7/16" dia. ID. as supplied in BK-1 Parallel Blade Kits and BKO-3 Opax Kits.

Item #2013 - Model BKP-10 - Bronze Bushings 1/2" dia. ID. as supplied in BK-2 Parallel Blade Kits and BKO-4 Opax Kits.

Item #2240 - Model BKP-80 - Plastic Bushing 1/4" dia. ID.

Item #2241 - Model BKP-81 - Plastic Bushing 1/4" sq. ID.

Item #2242- Model BKP-82 - Plastic Bushing 3/8" dia. ID.

Item #2243 - Model BKP-83 - Plastic Bushing 3/8" sq. ID.

Item #2079 - Model BKP-64 - Plastic Bushing 1/2" dia. ID.

Item #2244 - Model BKP-84 - Plastic Bushing 1/2" sq. ID.



Item #2014 - Model BKP-14 - Ball Bearing Bushing 7/16" ID.

Item #2015 - Model BKP-30 - Ball Bearing Bushing 1/2" ID.

**Cut Rods** 

Item #2017- Model No. BKP-1 - 7/16" diameter rod, 2-1/2" long. (100 Per Ctn.)

Item #2019- Model No. BKP-5 - 1/2" diameter rod, 2-1/2" long. (100 Per Ctn.)

Item #2018 - Model No. BKP-2 - 7/16" diameter rod, 6" long. (100 Per Ctn.)

Item #2020 - Model No. BKP-6 - 1/2" diameter rod, 6" long. (100 Per Ctn.)

# BKP-11

Item #2076 - Model No. BKP-11 - 1/2" diameter rod, 6" long, milled and drilled. (50 per

Item #2022 - Model No. BKP-4 - 7/16" diameter. to 1/2" square, 6" long. (50 Per Ctn.)

Item #2023 - Model No. BKP-7 - 1/2" diameter to 1/2" square, 6" long. (50 Per Ctn.)

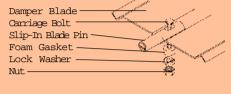
Item #2024 - Model No. BKP-70 - 7/16" diameter to 3/8" square, 6" long. (50 Per Ctn.)

### Slide Pins

With Duro Dyne's complete line of Damper Slide Pins (10 in all), nearly every configuration requirement can be satisfied. Duro Dyne's Damper Slide Blade Pin selection provides a low cost alternative to damper hardware such as straps, set screws and solid pins. Installatio is as easy as 1-2-3.

- 1. Punch hole in Damper Blade
- 2. Position Pin on Blade
- 3. Lock in position by tightening 1/4" hex nut after sliding pin into damper bushing.







Item #2094 - Model No. DBP-1A - 7/16" diameter and 1/2" diameter slide pin, 5/8" Length.



Pin Size

ltem#	Model	Pin Size
2221	RDBP-100A	1/2" Round Pin 1" Long
2222	RDBP-150A	1/2" Round Pin 1½" Long
2223	RDBP-200A	1/2" Round Pin 2" Long

ltem#	Model	Pin Size
2215	SDBP-100A	3/8" Sq. Pin 1" Long
2216	SDBP-150A	3/8" Sq. Pin 1½" Long
2217	SDBP-200A	3/8" Sq. Pin 2" Lang

2218 HDBP-100A 7/16" Hex Pin 1	"Long
2219 HDBP-150A 7/16" Hex Pin 1	½" Long
2220 HDBP-200A 7/16" Hex Pin 2	"Long

### DAMPER ASSEMBLY UTILIZING SHOP MATERIALS

#### A. MAKING THE FRAME

(Same for both parallel and opposed dampers)

- 1. Out a piece of channel for the frame 1/4" less than the duct size, for clearance.
- 2 SIDE FRAME:
  - a. Mark off 5/16" from each end.
  - b. Divide the section inside these marks into as many parts as there are blades required.
  - c. Mark for each pivot at the center of each blade section (b).
  - d. Drill or punch a 5/8" hole at each pivot (c). Insert self-oiling bushings (tap fit).
- 3. Weld the sides and bottoms of the frames. Be sure to keep them square.
- 4. On large frames weld on corner braces to keep the frame square. Place any braces on the side of the frame which will not interfere with blade movement. Attach top and bottom end stops, if required. Cement felt, if required, with insulation adhesive.

#### **B. MAKING THE BLADES**

Same for both parallel and opposed dampers 1. Material:

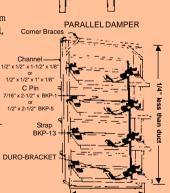
Gauge	Blade Width	Activating Brackets Required per blade
20	to 36"	1
16	to 48"	1 or 2
12	to 52"	2

#### 2 CUT:

- a. "WIDIH" dimension 3/16" less than the inside of frame.
- b "HEIGHT" dimension: Allow for approximately 7/8" "shrinkage" due to forming; approximately 1/4" blade overlap; approximately 3/16" end clearance to frame.

Mark the blades as shown and bend on the scribe lines.

# SIDE FRAME Bushing 7/16" I.D.- BKP-9 1/2" I.D.- BKP-10 END STOR PARALLEL DAMPER Corner Braces



# DAMPER BLADE "Width" 3/16" less than inside of frame

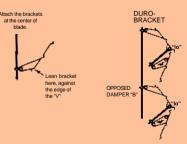
# C. MOUNTING THE HARDWARE

Attach the brackets as shown in drawing "B". (Always drive a "lo" blade, never a "hi" blade.)

Itam# Madel

	"B"	Distance "C"
~*		1"
	6"	1-3/16"
[Ci] 10	יי7	1-1/4"
	_ 8"	1-5/16"
	יי9	1–3/8"
Distance C from center	10"	1-3/8"
of "V" in blade to center of mounting holes on LO bracke	. 11"	1-7/16"
(Scribe mark on bracket).	12"	1-1/2"

#### PARALLEL HARDWARE



### D. ASSEMBLING THE DAMPER

- 1. Lay the damper frame flat on the bench.
- Place the blades inside the frame in the approximate required position (correct overlap, etc.)
- Place 2 bearing pins in each center blade groove.
- Slide the pins under the straps (loosen the set-screws) and into the frame. Tighten the strap set-screws.
- 5. Attach all linkage rods.

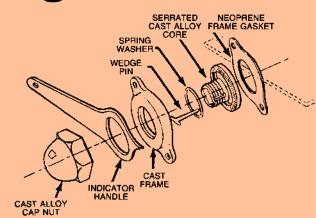
# Specline Damper Regulators

# MINIMUM LEAKAGE DAMPER REGULATORS

Specline Regulators are designed for minimum leakage applications. Each regulator is comprised of a frame, an indicator handle, a serrated cast alloy core and a cast alloy nut. Serrations on the cast alloy core mesh with serrations in the frame to firmly lock the regulator in position. A spring washer situated between the core and the cast frame allows for smooth non-binding adjustment. A wedge pin is used to eliminate rattle and take up slack between regulator and damper shaft.

All SR and SRH type regulators include a cast alloy nut and a neoprene frame gasket.

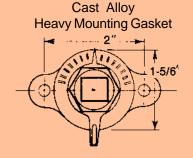
All SRHS, SRS and SRST type regulators utilize a stamped regulator frame. The SRHS and SRS include a neoprene frame gasket.



# INDICATOR STYLE REGULATOR SET WITH HEX NUT AND ACORN NUT

# Regulator Height 5/8"

**SRH-Series** 



Regulator Height 1-3/8"

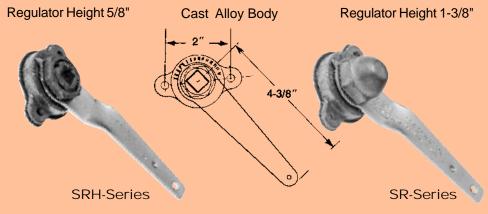


**SR-Series** 

Packed 10 Per Carton

Item#	Model	Shaft Size
8010	SRH-240	1/4" Hex Nut
8012	SRH-280	3/8" Hex Nut
8014	SRH-220	1/2" Hex Nut
Item#	Model	Shaft Size
8001	SR-140	1/4" Acorn Nut
8003	SR-380	3/8" Acorn Nut
8005	SR-120	1/2" Acorn Nut

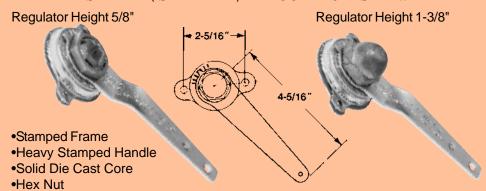
### HANDLE REGULATOR SET WITH HEX NUT AND ACORN NUT



### Packed 10 Per Carton

Item#	Model	Shaft Size
8011	SRH-248	1/4" Hex Nut
8013	SRH-288	3/8" Hex Nut
8015	SRH-228	1/2" Hex Nut
Item#	Model	Shaft Size
8002	SR-148	1/4" Acorn Nut
8002 8004	SR-148 SR-388	1/4" Acorn Nut 3/8" Acorn Nut
	•	.,

### HANDLE STYLE (STAMPED) REGULATOR SET WITH HEX NUT & ACORN NUT

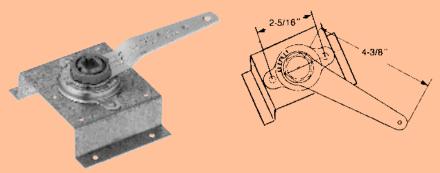


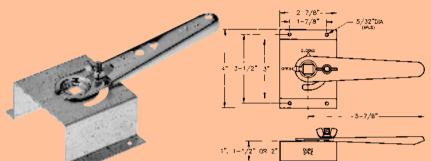
# Packed 10 Per Carton

ı	item#	Model	Shaft Size
	8016	SRHS-148	1/4" Hex Nut
	8017	SRHS-388	3/8" Hex Nut
	8018	SRHS-128	1/2" Hex Nut
	Item#	Model	Shaft Size
	Item# 8022	Model SRS-148	Shaft Size 1/4" Acorn Nut
	8022	SRS-148	1/4" Acorn Nut

SRHS-Series SRS-Series

## ELEVATED REGULATOR SETS FOR INSULATED DUCTS WITH HEX NUT





### Packed 10 Per Carton

Pack				
Item	Model	Handle	Stand	_
		Code	Height	
8184	SRST 1-148 w/SRHS-148	1/4"	1"	
8318	SRST 1-1/2-148 w/SRHS-148	1/4"	1-1/2"	
8196	SRST 2-148 w/SRHS-148	1/4"	2"	
8019	SRST 1-388 w/SRHS-388	3/8"	1"	
8020	SRST 1-1/2-388 w/SRHS-388	3/8"	1-1/2"	
8021	SRST 2-388 w/SRHS-388	3/8"	2"	
8208	SRST 1-128 w/SRHS-128	1/2"	1"	
8384	SRST 1-1/2-128 w/SRHS-128	1/2"	1-1/2"	
8177	SRST 2-128 w/SRHS-128	1/2"	2"	

ltem#	Model	Handle Code	Stand Height	
7201	ESO-14-100	1/4"	1"	
7203	ESO-14-150	1/4"	1-1/2"	
7205	ESO-14-200	1/4"	2"	
7207	ESO-38-100	3/8"	1"	
7209	ESO-38-150	3/8"	1-1/2"	
7211	ESO-38-200	3/8"	2"	
7213	ESO-12-100	1/2"	1"	
7215	ESO-12-150	1/2"	1-1/2"	
7217	ESO-12-200	1/2"	2"	

Also Available for Round Duct and with

# 90° ANGLE DRIVE DIE CAST MITRE GEAR ASSEMBEgels.



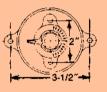
# Packed 5 Per Carton

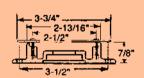
Item#	Model	Description
8135	AD-38	Mitre Gear
		Assembly

# CONCEALED STYLE REGULATOR SET WITH HEX NUT

Attractive Cast Alloy Corrosion Resistive Plated Cover



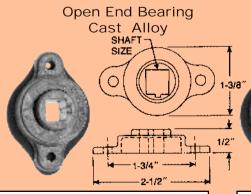




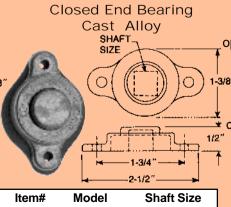
### Packed 5 Per Carton

Item#	Model	Shaft Size
8007	SRC-140	1/4"
8008	SRC-380	3/8"
8009	SRC-120	1/2"

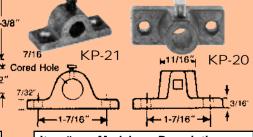
# SPECLINE PARTS AND ACCESSORIES



	<b>H</b>	2-1/2		
Item#	Model	Shaft Size		
8025	SB-114	1/4"		
8027	SB-138	3/8"		
8029	SB-112	1/2"		
Packed 25 per carton				



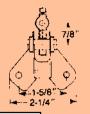
# Damper And Deflector Castings Control of 3/8" round rod where used to operate dampers. Either type can be used.

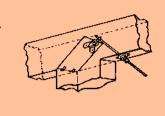


Item#	Model	Description
8037	KP-20	Damper Casting
8038	KP-21	Deflector Casting
	Packed 10	00 per carton

# Splitter Damper Bracket Steel Bracket, Brass Pivot

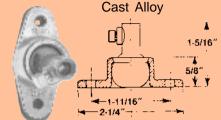






Splitter Damper Hardware



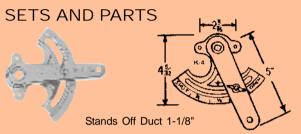


Item#	Model	Shaft Size		
8032	SRP-14	1/4"		
8033	SRP-516	5/16"		
Packed 25 per carton				

Shaft Size ltem# Model 8034 SRP-40 1/4" 5/16" 8035 SRP-50 Packed 25 per carton

Typical Application Using Ball Joint and Damper **Bracket** 

# Quadline Damper Quadrants



# 3/8" OUADRANT SETS

(for dampers up to 20")

These heavy gauge Plated Steel quadrants are designed with excellent handle action as well as quick wing nut adjustment and locking of the damper. The frame is marked to show the exact position of the damper. For use on square or round ducts.

Item#	8050	8051	8049	8059
Model	KS-38	KS-385	KS-385L	K-4
Set Consists Of:	K-4 quadrant; KP-9R round	K-4 quadrant; KP-7 spring loc	K-4 quadrant; KP-7L long	3/8" quadrant only
	end bearing; KP-9S square end bearing	bearing; KP-9S long square end bearing	spring loc bearing; KP-9L long square end bearing	(100 per Carton)
Packed 1 Set Per Carto	n -	-		

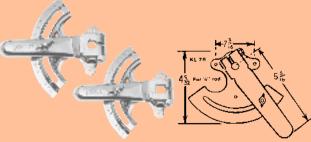


# 1/2" QUADRANT SETS

(for dampers up to 30")

These heavy gauge Plated Steel quadrants are designed with excellent handle action as well as quick wing nut adjustment and locking of the damper. The frame is marked to show the exact position of the damper. For use on square or round ducts.

Item#	8052	8060
Model	KS-12	K-5
Set Consists Of:	K-5 quadrant; KP-10R	1/2" quadrant only
	round end bearing; KP-10S	(100 per Carton)
	square end bearing	
Packed 1 Set Per Carto	on .	



# Stands Off Duct 1-3/16"

# 1/2" SHAFT LOC QUADRANT SETS

(for dampers up to 30")

"Shaft Loc" Quadrants are stamped of heavy gauge steel and clearly indicate the position of the damper.

The quadrant handle (available for either 1/2" square or round shafts) is unique in that it locks the shaft of the damper to it by means of a powerful friction holding device strong enough to cut into the damper shaft eliminating damper rattle. The shaft is easily locked with 1/2" open end wrench. For use on square or round ducts.

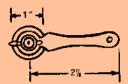
Item#	8063	8064
Model	KL-7	KL-7R
Shaft Description	1/2" square Shaft loc quadrant	1/2" round Shaft loc quadrant

#### Packed 100 Per Carton

# Stampline Regulators

# FOR CONTROLLING SMALL DAMPERS





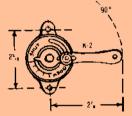
### 1/4" "JIFFY" REGULATOR SETS

(for dampers up to 10")

These efficient, low cost, heavy gauge, plated steel regulators install in a "jiffy" by slipping the washer and handle over the threaded square end bearing. The wing nut locks the damper in position. The position of the handle shows the position of the damper in the duct. For use on round or square ducts.

Item#	8039	8046	8102	8220
Model	KS-7	KS-7L	JB-1	JB-1L
Set Consists Of:	KP5 1/4" threaded bearing, handle; KP-6 spring loc	KP5L 1/4" long threaded bearing, handle; KP-6L	KP5 1/4" threaded bearing, handle; 5/16-18 wingnut &	KP5L 1/4" long threaded bearing, handle; 5/16-18
Packed 10 per Carton 10 Cartons per Box	bearing, bevelled wingnut & washer	long spring loc bearing, bevelled wingnut & washer	washer (100 per Carton)	wingnut & washer (100 per Carton)





### 1/4" DIAL REGULATOR SETS AND BEARINGS

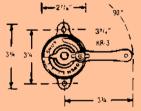
(for dampers up to 10")

These heavy gauge plated steel regulators are among the most popular on the market. They minimize air leakage and reduce rattle. A wing nut locks the damper in position, yet permits quick readjustment. The dial shows the damper position at a glance. The regulator mounts easily on round or square ducts.

Item#	8040	8041	8047	8056
Model	KS-14	KS-145	KS-145L	K-2
Set Consists Of:	K-2 regulator; KP-8S square end bearing; KP-8R	K-2 regulator; KP-6 spring loc bearing; KP-8S square end	K-2 regulator; KP-6L long spring loc bearing; KP-8L	1/4" regulator only (100 per Carton)
Packed 10 per Carton 10 Cartons per Box	round end bearing	bearing	long square end bearing	,

# FOR CONTROLLING LARGER DAMPERS





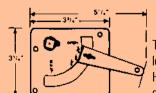
### 3/8" DIAL REGULATOR SETS AND END BEARINGS

(for dampers up to 20")

The following sets and parts are the same as the 1/4" size shown above except designed for larger dampers. The 3/8" bearings and regulator are suitable to use on round as well as square duct. Clear markings on the regulator indicate the damper position which can be locked securely by a wing nut.

Item#	8044	8045	8045	8058
Model	KSR-19	KSR-195	KSR-195L	KR-3
Set Consists Of:	KR-3 regulator; KP-9R	KR-3 regulator; KP-7	KR-3 regulator; KP-7L long	3/8" dial regulator only
Packed 1 Set Per Carton	round end bearing; KP-9S square end bearing	spring loc bearing; KP-9S square end bearing	spring loc bearing; KP-9L long square end bearing	(100 per Carton)





# 3/8" "WEDGE LOC" REGULATOR SETS

(for dampers up to 20")

This attractive rectangular regulator features exclusive "Wedge Loc" action which firmly locks the bearing to the regulator handle when the damper is set – prevents rattling. Heavy construction, minimum air leakage and easy adjustability make this ideal for large dampers in round or square ducts.

Item#	8042	8043	8048	8042
Model	KS-19	KS-195	KS-195L	K-3
Set Consists Of:	K-3 regulator; KP-9R round	K-3 regulator; KP-7 spring loc	K-3 regulator; KP-7L long	3/8" wedge loc regulator
Packed 1 Set Per Carton	end bearing; KP-9S square end bearing	bearing; KP-9S square end bearing	spring loc bearing; KP-9L long square end bearing	only (100 per Carton)

# **End Bearings**

# (PACKED 100 PER CARTON)

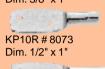
3/8" Square



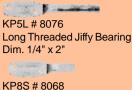


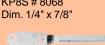






KP10RL#8180 Dim. 1/2" x 2-1/4"





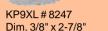
KP8L # 8069

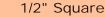
1/4" Square





KP9L#8072 Dim. 3/8" x 2-1/2"









Dim. 1/2" x 2-1/4"

# Spec-Seal™

# **DAMPER REGULATOR**

The Spec-Seal Regulator utilizes a special rubber seal for applications up to 500°F constant temperature. It eliminates leakage and rattle even at many times the pressure found in high pressure systems. The handle's unique design utilizes a highly-visible orange plastic cover showing the damper position. This unit, made of heavy-gauge, zinc-plated steel, is made in four styles to accommodate 3/8" and 1/2" round or square bearing shafts. It is also available in stainless steel for use with 1/2" square bearing shafts.

Item#	Model	Bearing Type
8153	AL-38	3/8 Square
8154	AL-38R	3/8 Round
8158	AL-38L	3/8 Square Long
8150	AL-12	1/2 Square
8152	AL-12R	1/2 Round
8157	AL-12L	1/2 Square Long
8301	AL-12SS	1/2 Stainless Square
Qι	ıantity per caı	ton: 10 sets

## Each Set Consists of:

- Regulator
- End Bearing Support
- 2 Rubber Seals
   2 Metal Washers
- 2 End Bearings



# Ouad Seal

# SELF FORMING SILICONE **GASKET**

Quad Seal works in conjunction with Spec-Seal hardware, flexible duct connector, air regulators, quadrants, testports, screws or any other applications requiring an airtight gasket seal. Quad Seal is 100% RTV Silicone Rubber and has a continuous temperature rating from -60°F to 500°F. Its automatic dispensing system eliminates mess and minimizes waste.

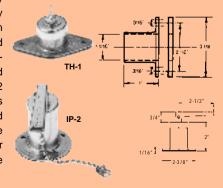


Item#	Model	Quantity per carton
8159	QS-85	12

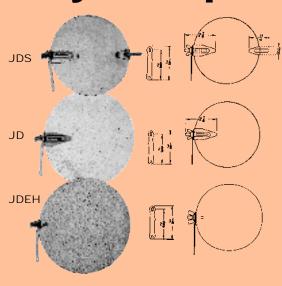
# Instrument Test Port

The Instrument Test Port has a heavy duty cast zinc alloy construction with a heavy gauge zinc plated cap. Its Neoprene Expansion Plug can withstand up to 180°F and has resisted pressures up to 90 psi when installed. The TH-1 accommodates 1" of insulating materials and has an inside diameter of 1-1/16". The IP-2 accommodates 2" of insulation material and has an inside diameter of 1-1/8". Both are designed for high velocity systems. A flat neoprene mounting gasket is supplied. However, for maximum protection against leakage, we recommend using Quad Seal (left).

Item#	Model	Quantity
8036	TH-1	per ctn.
8398	IP-2	25



# **Jiffy Dampers**



The "JDS" Series Jiffy Damper offers the contractor a quality round damper at a cost lower than most shop-made dampers. The Duro Dyne JDS series utilizes quality Rapit Spring and Solid End Bearing sets.

#### Packed 10 per carton

The "JD" Series Jiffy Damper offers added economy in those applications where a supporting solid tail bearing is not required on the damper. The Duro Dyne JD Damper utilizes one Rapit Spring End Bearing.

#### Packed 10 per carton

The "JDEH & JDE" Series Jiffy Damper offers an inexpensive alternative for low pressure applications. The Duro Dyne Economy Damper utilizes one threaded stud as a support bearing. Available with handle or without.

Packed 100 per carton only.

Item#	Model	Damper Dia.
8092	JDS-4	4"
8093	JDS-5	5"
8094	JDS-6	6"
8095	JDS-7	7"
8096	JDS-8	8"
8097	JDS-9	9"
8137	JDS-10	10"
8098	JD-4	4"
8099	JD-5	5"
8100	JD-6	6"
8101	JD-7	7"
8146	JD-8	8"
8231	JD-9	9"
8140	JD-10	10"
7111	*JDE6	6"
7120	**JDEH6	6"

<sup>\*</sup>JDE and JDEH series dampers available in other sizes

# 'Rapit' Damper Quadrants

The RAPIT is an inexpensive, rattle-free regulator for quick installation on balance or splitter dampers. It is formed from rustresistant, heavy gauge, galvanized steel and installs in seconds. The Rapit will penetrate and secure to round or rectangular damper blades up to 24 gauge steel. It has a fully retractable bearing of zinc alloy, threaded to accept a 5/16-18 wing nut and a handle that indicates the damper position. It's as easy to use as 1-2-3.



Note: Not recommended for use in systems over 400 ° F.

- 1. Slip the bearing over the edge of the damper at the bearing line.
- 2. Lay the assembly on any firm surface and rap the prong with a hammer. One blow drives the prong through the damper blade, holding it securely to the damper.
- 3. When hit with a hammer, the prong will automatically form up tight by the anvil, which is built into the bottom of the "Rapit" Bearing.

#### RAPIT REGULATOR SETS AND PARTS

Model	RB-56	RS-156	RS-256	RS-356			
Item#	8087	8086	8085	8233	1000 page 1000 p		
Consists of:	1 RB-50 Rapit spring	1 RB-50 Rapit spring	2 RB-50 Rapit spring	1 RB-50 Rapit spring			0
	bearing; 1 RP-3 washer;	bearing; 1 RP-3 washer;	bearings; 1 RP-3 washer;	bearing; 1 RB-25T	RB-50	RP-1	RP-3
	1 RP-2 wing nut	1 RP-1 handle; 1 RP-2	1 RP-1 handle; 1 RP-2	threaded Rapit solid	Bearing	Handle	Washer
		wing nut	wing nut	bearing; 1 RP-3 washer;		CHARLES OF	907
		!		1 RP-1 handle; 1 RP-2	RB-25T	RP-1T	RP-2
				wing nut			
Packaging:	20 sets per carton	10 sets per carton	10 sets per carton	10 sets per carton	Bearing	папие	Wing Nut
	100 sets per master ctn.						

Model	RB-50	RB-25T	RP-1	RP-1T	RP-2	RP-3
Item#	8088	8201	8089	8198	8090	8091
Description:	rapit opining bearing	Threaded Rapit solid bearing	Rapit handle	Rapit handle for RB-25T threaded bearing	Rapit wing nut	Rapit washer
Packaging:	100 per carton	100 per carton	100 per carton	100 per carton	100 per carton	100 per carton

<sup>\*\*</sup>JDEH series dampers contain handles

# Standard Access

**Rugged Quality Construction Designed For Fast** Secure Installation Without Using Tools! **IAD Access Doors** 

The IAD Door has been designed to create an airtight seal utilizing a moisture, oil and grease resistant neoprene gasketing between the door to the frame and the frame to the duct. The door panel is constructed out of 24 gauge galvanized steel and filled with a 1" 1-1/2 lb. fiberglass insulation (K factor .26+.03@75°F). The frame is 24 gauge galvanized steel with punched steel tabs along each side, which locks the frame into the ductwork. Smaller frame corner tabs make installation easy. Double camlock latches are used on doors 14" and larger (12" and smaller have one camlock). Special models and sizes can be fabricated with multiple walls of steel or see-through panels or Cam-Lock only style. (Installation Note: All holes should be cut 1-1/8" smaller than the door.)



**Duct Insulation - Outside** 



Standard Sizes:

Item# Model IAD 6" x 6" 8320 8168 IAD 8" X 8" 8169 IAD 10" X 10" IAD 12" X 12" 8170 8171 IAD 14" X 10" 8167 IAD 14" X 14" IAD 16" X 16" 8172 8173 IAD 18" X 18" IAD 20" X 20" 8174 8175 IAD 24" X 24" Packed 10 Per Carton; (Item# 8172 thru 8175 packed 5 per carton)

Adhesive Film

**Excellent Memory** 

Low-Pressure Seal

# Access Doors

Locking Devices

Item#	Model	Shaft Size	Qty. Per Ctn.
8015	SP-5	1/4" dia.	25
8106	SP-10	3/8" dia.	10
8107	SP-20	1/2" dia.	10
8138	CAM-LOCK	_	100
8108	SL-1	_	100

**General Information** 



Adhesive Film

Non-Disintegrating:

Excellent Weatherability;

High-Pressure Seal:

Unaffected by Grease,

Mildew, Ozone, Gasoline Vapor Proof, Waterproof.

# Reddi-Stick Gasketing GASKETING COMPARISON CHART

Adhesive

Non-Disintegrating:

Good Weatherability;

High-Pressure Seal;

Fungi Resistant.

**NEOPRENE** SPONGE RUBBER VINYL FOAM (PVC) **URETHANE** Color Light Gray Charcoal Gray Black Black Type Close Cell Open Cell Close Cell Open Cell Density 8 lbs./cu.ft 2 lbs./cu.ft. 4-5.5 lbs./cu.ft 2-5 lbs./cu.ft Water Absorption by % Weight Low Low High High Temp. Range (Constant) – 40 - 180° – 20 - 175° – 20 - 150° - 30 - 275° Temp. Range (Intermit.) – 40 - 200° - 30 - 300° – 20 - 225° – 20 - 175° **Ultimate Tensile Strength** (Typical Properties) PSI 30 PSI 13 - 50 PSI 90 PSI 60 - 90 PSI **Elongation (Typical Properties) %** 150% 175% 150% 150% K Factor 0.24 - 0.280.22 - 0.230.26 0.24 - 0.28Flame Resistance UL94HF1 UL94HF1 U.L. Test # UL94HF1 UL94HF1 D-1564 **ASTM Desig.** D-1667 D-1056-68 D-1056-73 **Adhesive** Bonded **Direct-Coated Bonded Bonded** 

Adhesive Film

Low-Pressure Seal;

Unaffected by Grease,

Mildew, Fungus,

Aromatic Oils;

Low-Heat Transfer

VINYL	FOAM (PVC	<b>E)</b>			URETHAN	IE			NEOPREN	E			SPONGE	RUBBER	
	•	T	hickness			TI	nickness			TI	nickness			TI	hickness
			x				x				X				x
Item#	Model	Length	Width	Item#	Model	Length	Width	Item#	Model	Length	Width	Item#	Model	Length	Width
8123	PVC 18-12	50'/RL	1/8" x 1/2"	8126	UF 3-12	50'/RL	3/16" x 1/2	8129	BN 18-12	50'/RL	1/8" x 1/2"	8132	SD 18-12	50'/RL	1/8" x 1/2"
8124	PVC 14-34	50'/RL	1/4" x 3/4"	8127	UF 14-34	50'/RL	1/4" x 3/4"	8130	BN 14-34	50'/RL	1/4" x 3/4"	8133	SD 14-34	50'/RL	1/4" x 3/4"
8125	PVC 38-34	25'/RL	3/8" x 3/4"	8128	LF 38-34	25'/RL	3/8" x 34"	8131	BN 38-34	25'/RL	3/8" x 3/4"	8134	SD 38-34	25'/RL	3/8" x 3/4"
								8261	BN 316-34	50'/RL	3/16" x 3/4"				

# Piano Hinges

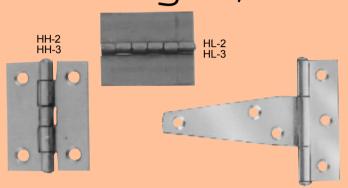




Item#	Model	Size	Description
8117	HP-116	1-1/16" x 3'	Piano hinge,
8118	HP-112	1-1/2" x 3'	no holes,
8119	HP-23	2" x 3'	plain steel
Qty. per	ctn. 25 - Spe	cial sizes availa	ble upon request

Item#	Model	Size	Description		
8120	HPH-116	1-1/16" x 3'	Piano hinge, with holes,		
8121	HPH-112	1-1/2" x 3'	zinc plated		
Qty. per ctn. 25 - Special sizes available upon request					

# Butt Hinges / 'T' Hinges



ltem#	Model	Size	Description	Finish
8109	HH-2	2" x 1 9/16"	Light, narrow butt	Zinc
8110	HH-3	3" X 2"	hinge, fast pin,	plated
			w/ screw holes.	
8111	HL-2	2" x 1 9/16"	Light narrow butt	
8112	HL-3	3" x 2"	hinge, fast pin,	Steel
			w/out screw holes.	
8115	HT-3	3"	Light 'T' hinge	Zinc
8116	HT-5	5"	fast pin	plated
	Qty. per ct	Qty. per ctn. 25 – Special sizes available upon request		

# Fire Damper Hardware



All fusible links classified by Underwriter's Laboratories, Inc. and Factory Mutual Laboratories

Item#	Model	Description	Dim. A	Dim. B
2032	FLS-39	temperature rating 165° 10 pound load	1"	1-1/2"
2033	FL-43	temperature rating 165° 30 pound load	1-3/4"	2-9/16"
2034	FL-41	temperature rating 212° 30 pound load	1-3/4"	2-9/16"
2035	FL-42	temperature rating 386° 30 pound load	1-3/4"	2-9/16"
		Packed 100 per carton	1	

# Hanging Strap

**Duro Dyne provides 3 types of Hanging Strap** fabrics which are waterproof, grease, oil & acid resistant, and have low smoke & flame development.

# **Vinyl Duro Strap**

Item#: 10190 Size: 1.5" x 200' Flame Spread: 12 Smoke Development: 38

Tensile Strength: Warp-70 lbs./ln. Fill-70 lbs./ln

Heat Resistance: 200° F

Tear Strength: Warp- 8 lbs./ln, Fill-11 lbs./ln

Thread Count: 28 x 14

Quantity per carton: 10 rolls

Fabric: Black vinvl coated polyester fill Total Fabric Thickness: .022" Approx.

# **EZ Strap**

Item#: 10182 Size: 1.5" x 300' Flame Spread: 10 Smoke Development: 27 Tensile Strength: 310 lbs. Heat Resistance: 180° F Tear Strength: 125 lbs.

Total Fabric Thickness: .020" Approx.

Quantity per carton: 10 rolls

Thread Count: 28 x 14 Fabric: Proprietary plastic

**Woven Econo Strap** 

Item#: 10192 Size: 1.75" x 300' Flame Spread: 5 Smoke Development: 20

Tensile Strength: Warp-850 lbs./ln., Fill-360 lbs./ln.

Heat Resistance: 330° F Thread Count: 850 x 360

Fabric: Grey woven polypropylene Total Fabric Thickness: .025" Approx.

Quantity per carton: 24 rolls



# **Dyn-O-Ties®**

Whenever your job calls for securing round flexible duct to outlets, pipes or fittings, you can do the job better, faster, and at a lower cost using **DYN-O-TIES™**, flexible duct ties.

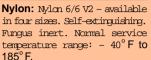
No tapes, no screws, no clamps. Position the flexible duct and slip a **DYN-O-TIE** around the flexible duct over the joint. Draw the **DYN-O-TIE** tight with our ratchet action hand tool. A push with the thumb completes the job by clipping off the excess nylon tab for the neatest and most secure connection you could want.

For those jobs requiring steel connections, Duro Dyne has designed a new stainless steel **DYN-O-TIE**. The same basic installation process applies when using the **DIT-1SS** installation tool.

**DYN-O-TIES**, when properly installed, provide secure, self-extinguishing joints when connecting certain types of flexible duct listed by Underwriters Laboratories Inc., class 1.

ltem#	Model	Туре	Length	Max. Dia.	Pkg.	Pkg./Ctn
0054	DN 00	Nicion	20	6"	25	20
8251	DN-22	Nylon	22	-	25	20
8252	-	Nylon	22	6"	100	5
8253	DNF-22	Nylon	22	6"	500	1
8307	DN-33	Nylon	33	9"	25	20
8308	DNC-33	Nylon	33	9"	100	5
8309	DNF-33	Nylon	45	9"	500	1
		•				
8269	DT-34	Stainless	33	9"	25	20
						-
8264	DN-45	Nylon	45	14"	25	20
0201	DIV 10	1191011	.0		20	20
8262	DNX-60	Nylon	60	18"	25	20
0202	DIAV-00	TAYTOTT	00	10	20	20
All materials shipped in meeter certains of EOO pieces						
All materials shipped in master cartons of 500 pieces.						







Stainless Steel: 430 stainless steel .020" x .3125 x 34" long.

Test Results\*: Stainless Steel 500 lbs.

Test Results\*: Nylon-275 lbs.

\*Test Method: Tie is secured at both ends forming a loop. A weight is suspended from the bottom of loop to determine tensile strength of DYN-O-TIE strap.

# Mini Dyn-O-Ties®

Made of molded natural color 6/6 nylon, these ties are perfect for bundling wires. The ties are designed to meet ASTM D638 for tensile strength and ASTM D789 for melting point. Not for use with DIT-2.

Item#	8378	8383
Model	DNC-8.5	DNC-14.5
Overall Length inches	8.5	14.5
Width inches	.130	.187
Bundle Diameter inches	1/16 - 2	1/16 - 3
Minimum Loop Tensile	40	50
Tensile Strength	11.2	11.2
Melting Point	491° F	491° F
UL Flammability	94V-2	94V-2

Packed 5 - 100 packs to a carton.

# Dyn-O-Tie® Gun INSTALLATION TOOL

The DIT-2 gun is light weight and commonly used to install most makes of nylon duct ties.

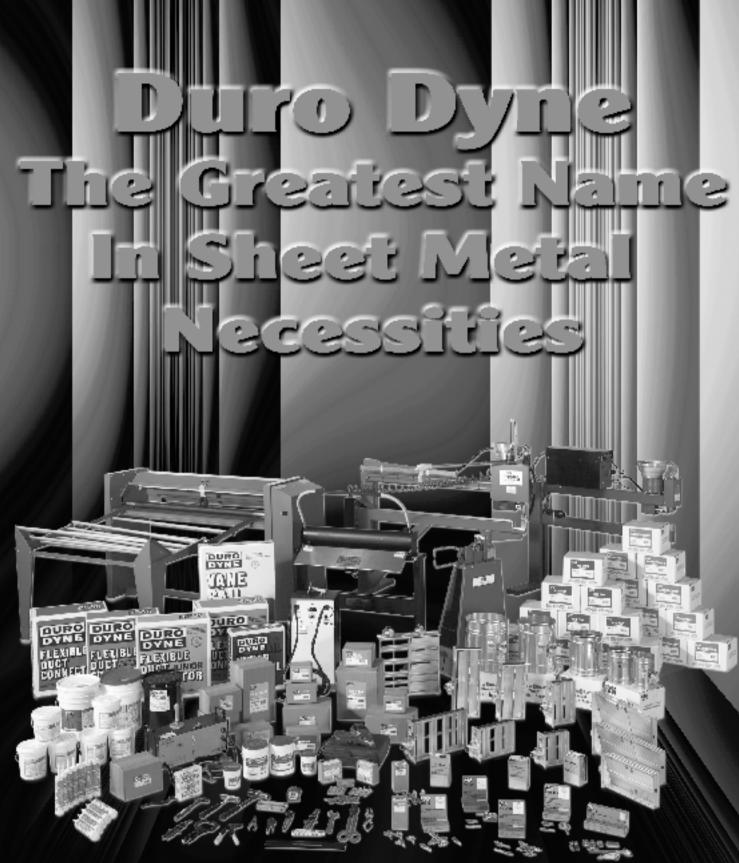
The DIT-1SS gun with a specially designed nose piece is designed to install Duro Dyne type DT-34 stainless steel duct ties.

Item#	Model	Description
8229	DIT-2	For use w/nylon
8263	DIT-1SS	For use w/stainless





DTT-1SS





www.durodyne.com E-mail: durodyne@durodyne.com