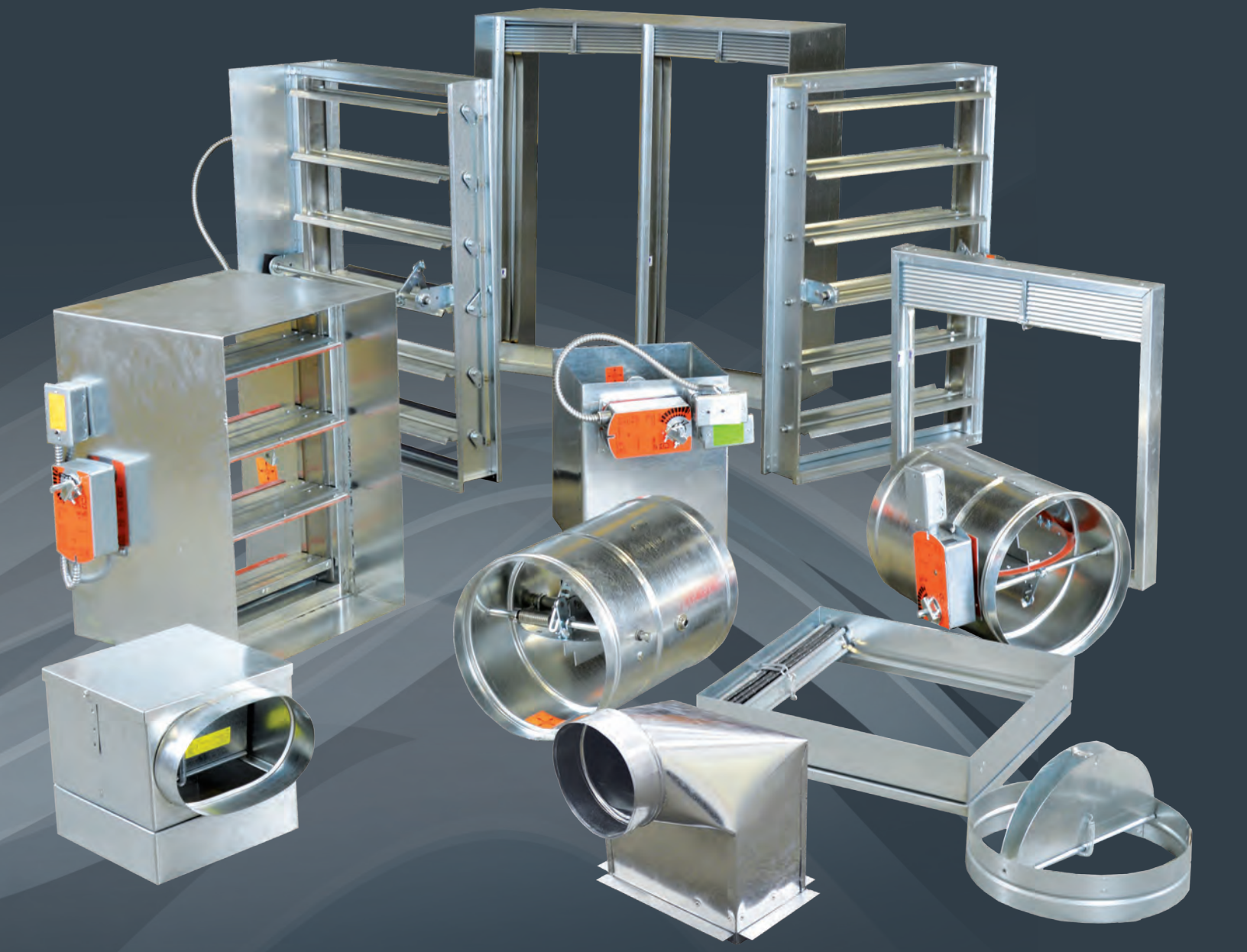
POTTORFF®

LIFE SAFETY PRODUCTS

COMBINATION FIRE/SMOKE DAMPERS • SMOKE DAMPERS
FIRE DAMPERS • CEILING RADIATION DAMPERS



SELECTION GUIDE

COMBINATION FIRE/SMOKE DAMPERS

MODEL	AMCA RATING	UL HOUR RATING	LEAKAGE CLASS	BLADE TYPE	MATERIAL	MAX VELOCITY (fpm)	MAX PRESSURE (in.wg)	MAX ASSEMBLY TEMP (°F)	PG
STANDARD									
FSD-141	AIR	1½	1	TRIPLE-V	GALV	2000	4	350	3
FSD-142	AIR	1½	2	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-143	–	1½	3	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-151	AIR	1½	1	AIRFOIL	GALV	4000	8	350	4
FSD-152	–	1½	2	AIRFOIL	GALV	4000	8	350	4
FSD-151-SS	–	1½	1	STAINLESS AIRFOIL	STAINLESS	2000	4	350	4
FSD-152-SS	–	1½	2	STAINLESS AIRFOIL	STAINLESS	2000	4	350	4
FSD-151V	–	1½	1	VERT AIRFOIL	GALV	2000	4	250	4
FSD-152V	–	1½	2	VERT AIRFOIL	GALV	4000	4	250	4
FSD-341	–	3	1	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-342	–	3	2	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-343	–	3	3	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-351	–	3	1	AIRFOIL	GALV	4000	8	350	4
FSD-352	–	3	2	AIRFOIL	GALV	4000	8	350	4
ACTUATOR IN THE AIRSTREAM – OUT-OF-PARTITION									
FSD-141-OP	–	1½	1	TRIPLE-V	GALV	2000	4	350	5
FSD-142-OP	–	1½	2	TRIPLE-V	GALV	2000	4	350	5
FSD-143-OP	–	1½	3	TRIPLE-V	GALV	2000	4	350	5
FSD-151-OP	–	1½	1	AIRFOIL	GALV	4000	8	350	5
FSD-152-OP	–	1½	2	AIRFOIL	GALV	4000	8	350	5
FSD-171-OP	–	1½	1	TRIPLE-V	GALV	2000	4	350	5
FSD-172-OP	–	1½	2	TRIPLE-V	GALV	2000	4	350	5
SIDE PANEL – FRONT/ACCESS									
FSD-141-SP	–	1½	1	TRIPLE-V	GALV	2000	4	350	5
FSD-142-SP	–	1½	2	TRIPLE-V	GALV	2000	4	350	5
FSD-151-SP	–	1½	1	AIRFOIL	GALV	4000	8	350	5
FSD-152-SP	–	1½	2	AIRFOIL	GALV	4000	8	350	5
TRUE ROUND									
FSD-125R	–	1½	1	ROUND	GALV/SS	3000	4	350	6
TUNNEL TYPE CORRIDOR CEILING									
FSD-171	–	1½*	1	TRIPLE-V	GALV	2000	4	350	6
FSD-172	–	1½*	2	TRIPLE-V	GALV	2000	4	350	6
FSD-171-OP	–	1½*	1	TRIPLE-V	GALV	2000	4	350	5
FSD-172-OP	–	1½*	2	TRIPLE-V	GALV	2000	4	350	5

SMOKE DAMPERS

MODEL	BLADE TYPE	UL555S LEAKAGE CLASS	UL HOUR RATING		MATERIAL	MAX DYNAMIC CLOSURE VELOCITY (fpm)		MAX PRESSURE (in.wg)	MAX TEMP (°F)	PG
			CEILING	FIRE		VERT WALLS	HORIZ FLOORS			
STANDARD										
SD-141	TRIPLE-V	1	–	–	GALV	2000	2000	4	350	9
SD-142	TRIPLE-V	2	–	–	GALV/SS	2000	2000	4	350	9
SD-143	TRIPLE-V	3	–	–	GALV/SS	2000	2000	4	350	9
SD-151	AIRFOIL	1	–	–	GALV	4000	4000	8	350	9
SD-152	AIRFOIL	2	–	–	GALV	4000	4000	8	350	9
SD-151-V	VERT AIRFOIL	1	–	–	GALV	2000	–	4	250	9
SD-152-V	VERT AIRFOIL	2	–	–	GALV	4000	–	4	250	9
TRUE ROUND										
SD-25R	ROUND	1	–	–	GALV/SS	3000	3000	4	350	9
CEILING RADIATION/SMOKE										
CFS-171	TRIPLE-V	1	3*	1½	GALV	–	2000	4	350	9
CFS-172	TRIPLE-V	2	3*	1½	GALV	–	2000	4	350	9

** Tunnel Type Corridor ceiling installation has 1 hr rating*

CEILING RADIATION DAMPERS

MODEL	UL HOUR RATING	BLADE TYPE	MATERIAL	PG
STANDARD				
CFD-15	3	BUTTERFLY	GALV	10
CFD-15-LP	3	LOW PROFILE BUTTERFLY	GALV	10
CFD-20	3	FOLDED CURTAIN	GALV	10
TRUE ROUND				
CFD-15R	3	ROUND BUTTERFLY	GALV	10
WOOD TRUSS SYSTEMS				
CFD-521	1	BUTTERFLY	GALV	10
CFD-521-90	1	BUTTERFLY – 90° PLENUM	GALV	10
CFD-521-BT	1	BUTTERFLY – R-6.3 OR 8.0 INSULATED OUTLET BOX	GALV	10
CFD-521-IP	1	BUTTERFLY – R-6.5 OR 8.7 INSULATED DUCT BOARD OUTLET BOX	GALV	10
CFD-521-NP	1	BUTTERFLY	GALV	10
CFD-521-NP90	1	BUTTERFLY – FIELD INSTALLED 90° PLENUM	GALV	10
COLD FORMED STEEL TRUSS SYSTEMS				
CFD-521-ST	1	BUTTERFLY – R-6.5 OR 8.7 INSULATED DUCT BOARD OUTLET BOX	GALV	10

FIRE DAMPERS

MODEL	STATIC DYNAMIC	UL HOUR RATING	CLASS	BLADE TYPE	MATERIAL	MAX DYNAMIC CLOSURE VELOCITY (fpm)		MAX PRESSURE (in.wg)	PG
						VERT WALLS	HORIZ FLOORS		
STANDARD									
FD-140	DYNAMIC	1½	–	TRIPLE-V	GALV/SS	4000*	4000*	6	11
FD-150	DYNAMIC	1½	–	AIRFOIL	GALV	4000*	4000*	6***	11
FD-340	DYNAMIC	3	–	TRIPLE-V	GALV/SS	4000*	–	6	11
FD-350	DYNAMIC	3	–	AIRFOIL	GALV	4000*	4000*	6**	11
CURTAIN STYLE BLADES									
VFD-10-A	STATIC	1½	A	CURTAIN	GALV/SS	–	–	–	12
VFD-10-B	STATIC	1½	B	CURTAIN	GALV/SS	–	–	–	12
VFD-10-C	STATIC	1½	C	CURTAIN	GALV/SS	–	–	–	12
VFD-10D-A	DYNAMIC	1½	A	CURTAIN	GALV/SS	4000	4000	4	12
VFD-10D-B	DYNAMIC	1½	B	CURTAIN	GALV/SS	4000	4000	4	12
VFD-10D-C	DYNAMIC	1½	C	CURTAIN	GALV/SS	4000	4000	4	12
VFD-30-A	STATIC	3	A	CURTAIN	GALV/SS	–	–	–	12
VFD-30-B	STATIC	3	B	CURTAIN	GALV/SS	–	–	–	12
VFD-30-C	STATIC	3	C	CURTAIN	GALV/SS	–	–	–	12
VFD-30D-A	DYNAMIC	3	A	CURTAIN	GALV/SS	4000	–	4	12
VFD-30D-B	DYNAMIC	3	B	CURTAIN	GALV/SS	4000	–	4	12
VFD-30D-C	DYNAMIC	3	C	CURTAIN	GALV/SS	4000	–	4	12
CURTAIN-INTEGRAL MOUNTING ANGLE									
VFD-10-IMA	STATIC	1½	A	CURTAIN	GALV	–	–	–	12
VFD-10-IMB	STATIC	1½	B	CURTAIN	GALV	–	–	–	12
VFD-10D-IMA	DYNAMIC	1½	A	CURTAIN	GALV	4000	–	4	12
VFD-10D-IMB	DYNAMIC	1½	B	CURTAIN	GALV	4000	–	4	12
OUT-OF-PARTITION									
FD-140-OP	DYNAMIC	1½	–	TRIPLE-V	GALV/SS	4000	4000	6	11
FD-150-OP	DYNAMIC	1½	–	AIRFOIL	GALV	4000	4000	6**	11
VFD-10-OP	STATIC	1½	–	CURTAIN	GALV	–	–	–	12
VFD-10D-OP	DYNAMIC	1½	–	CURTAIN	GALV	4000	4000	4	12
TRUE ROUND									
FD-125R	DYNAMIC	1½	–	ROUND	GALV/SS	2000	2000	4	11
VFD-15R	STATIC	1½	–	ROUND	GALV	–	–	–	11
VFD-35R	STATIC	3	–	ROUND	GALV	–	–	–	11
THINLINE									
VFD-10-TLA	STATIC	1½	A	THINLINE CURTAIN	GALV	–	–	–	12
VFD-10-TLB	STATIC	1½	B	THINLINE CURTAIN	GALV	–	–	–	12
VFD-10D-TLA	DYNAMIC	1½	A	THINLINE CURTAIN	GALV	4000*	–	4	12
VFD-10D-TLB	DYNAMIC	1½	B	THINLINE CURTAIN	GALV	4000*	–	4	12

**2000 FPM on multi-section | **4 in.wg. below 8" in height | ***4 in.wg. when sizes exceed 64"×48" or 32"×96"*

FIRE/SMOKE DAMPERS

FSD-140 AND FSD-340 SERIES — TRIPLE-V BLADE – COMBINATION FIRE/SMOKE DAMPER

Combination fire/smoke dampers combine the fire barrier protection of a fire damper and smoke control of a smoke damper. Pottorff tests all of our combination fire/smoke dampers to UL's stringent requirements for fire resistance and leakage control. The FSD-140 and FSD-340 series dampers are equipped with triple-V interlocking blades that perform to standards when velocities are 2000 fpm or less. These dampers are an economical solution to fire and smoke control in HVAC systems.

- 1½ to 3 Hour UL 555 Rating
- Class I, II, and III UL 555S Ratings
- Meets NFPA Standards
- Stainless steel option available on certain models
- CSFM Listing
- Maximum Temperature: 350°



FSD-142 WITH SLEEVE



FSD-141 WITH SIDE PLATE



ECONOMICAL ROLL-FORMED TRIPLE-V GROOVED BLADES

Certified Ratings:
Pottorff certifies that the models FSD-141 and FSD-142 shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings only.

MODEL	UL555 FIRE RESISTANCE (hr)	UL555S LEAKAGE CLASS	MIN SIZE (in)	DAMPER MAXIMUM SIZE (in)		MAXIMUM DYNAMIC CLOSURE RATING		STAINLESS OPTION	AMCA CERT
				WALL	FLOOR	VELOCITY (fpm)	PRESSURE (in.wg.)		
FSD-141	1½	1	6×6	144×96	108×48	2000	4	–	●
FSD-142	1½	2	6×6	144×96	108×48	2000	4	●*	●
FSD-143	1½	3	6×6	144×96	108×48	2000	4	●*	–
FSD-341	3	1	6×6	108×96	–	2000	4	–	–
FSD-342	3	2	6×6	108×96	–	2000	4	●*	–
FSD-343	3	3	6×6	108×96	–	2000	4	●*	–

** Stainless Steel Max. Size: 36"× 48"*

FIRE/SMOKE DAMPERS

FSD-150 AND FSD-350 SERIES — AIRFOIL BLADE – COMBINATION FIRE/SMOKE DAMPER

Pottorff's FSD-150 and FSD-350 series are our high performance combination fire/smoke dampers. The low-profile airfoil blade allows for lower pressure drop, airflow velocities up to 4000 fpm and pressures up to 8 in.wg.

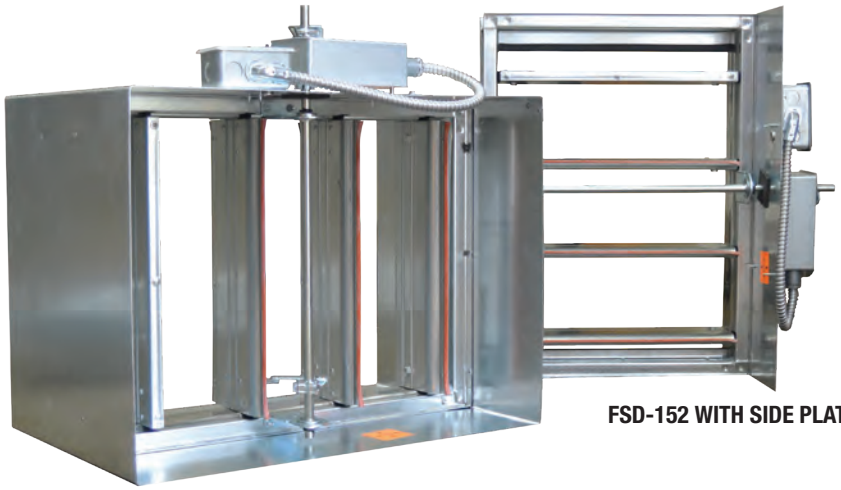
- 1½ to 3 Hour UL 555 Rating
- Class I and II UL 555S Ratings
- Horizontal and vertical blade models
- Meets NFPA Standards
- CSFM Listing
- Maximum Temperature: 350°
- Stainless Models Available

UL APPROVED FOR CLASS 1 LEAKAGE AT 4000 FPM AND 8 IN.WG STATIC PRESSURE!

STAINLESS STEEL MODELS NOW AVAILABLE FOR CORROSIVE AND HIGH HUMIDITY ENVIRONMENTS!



FSD-151 WITH SLEEVE



FSD-152 WITH SIDE PLATE

FSD-151-V VERTICAL BLADE OPTION



LOW PROFILE AIRFOIL BLADES FOR HIGH PERFORMANCE

Certified Ratings:
Pottorff certifies that the model FSD-151 shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings only.

MODEL	UL555 FIRE RESISTANCE (hr)	UL555S LEAKAGE CLASS	MIN SIZE (in)	DAMPER MAXIMUM SIZE (in)		MAXIMUM DYNAMIC CLOSURE RATING		AMCA CERT
				WALL	FLOOR	VELOCITY (fpm)	PRESSURE (in.wg.)	
FSD-151	1½	1	8×6	144×48 128×96	120×96	4000	8	●
FSD-152	1½	2	8×6	144×48 128×96	120×96	4000	8	–
FSD-151-SS STAINLESS STEEL BLADES	1½	1	8×6	96×72	–	2000	4	–
FSD-152-SS STAINLESS STEEL BLADES	1½	2	8×6	96×72	–	2000	4	–
FSD-151V VERTICAL BLADES	1½	1	8×8	96×32	–	2000	4	–
FSD-152V VERTICAL BLADES	1½	2	8×8	96×32	–	4000	4	–
FSD-351	3	1	8×6	120×96	64×96	4000	8	–
FSD-352	3	2	8×6	120×96	64×96	4000	8	–

FIRE/SMOKE DAMPERS

OUT-OF-PARTITION AND SIDE PANEL

Out-of-Partition dampers feature the actuator within the airstream. This allows direct service through the face of the HVAC grille.

- 1½ hour UL 555 Rating
- Class I, II and III UL 555S Ratings
- Meets NFPA Standards
- CSFM Listing
- Maximum Temperature: 350°



FSD-151-OP



FSD-151-SP

Side Panel dampers are specifically designed to have an out of the airstream actuator with direct access from the face of the damper through the HVAC grille.

- UL 555 1½ Hour Rating
- Class I, and II UL 555S Ratings
- Meets NFPA Standards
- CSFM Listing
- Maximum Temperature: 350°



ECONOMICAL ROLL-FORMED TRIPLE-V GROOVED BLADES



LOW PROFILE AIRFOIL BLADES FOR HIGH PERFORMANCE

MODEL	UL555 FIRE RESISTANCE (hr)	UL555S LEAKAGE CLASS	BLADE TYPE	MIN SIZE (in)	DAMPER MAXIMUM SIZE (in)			MAXIMUM DYNAMIC CLOSURE RATING	
					WALL	FLOOR	CORRIDOR CEILING	VELOCITY (fpm)	PRESSURE (in.wg.)
OUT-OF-PARTITION									
FSD-141-0P	1½	1	3V	10×6	36×48	36×48	–	2000	4
FSD-142-0P	1½	2	3V	10×6	36×48	36×48	–	2000	4
FSD-143-0P	1½	3	3V	10×6	36×48	36×48	–	2000	4
FSD-151-0P	1½	1	AIRFOIL	10×6	36×36	36×36	–	4000	8
FSD-152-0P	1½	2	AIRFOIL	10×6	36×36	36×36	–	4000	8
FSD-171-0P	1½*	1	3V	10×6	24×24	24×24	24×24	2000	4
FSD-172-0P	1½*	2	3V	10×6	24×24	24×24	24×24	2000	4
SIDE PANEL									
FSD-141-SP	1½	1	3V	14×8	44×48	44×48	–	2000	4
FSD-142-SP	1½	2	3V	14×8	44×48	44×48	–	2000	4
FSD-151-SP	1½	1	AIRFOIL	16×8	40×36	40×36	–	4000	8
FSD-152-SP	1½	2	AIRFOIL	16×8	40×36	40×36	–	4000	8

** Tunnel Type Corridor ceiling installation has 1 hr rating*

FIRE/SMOKE DAMPERS

FSD-170 SERIES — TUNNEL CORRIDOR DAMPERS



FSD-171

Tunnel corridor dampers are efficient for installation in horizontal openings of metal stud or wood stud tunnel-type corridor ceilings. These combination fire/smoke dampers feature economical triple-V blades.

- 1½ Hour UL 555 Rating
- Class I, II and III UL 555S Classified
- Meets NFPA Standards
- Out-of-Partition models available
- CSFM Listing
- Maximum Temperature: 350°

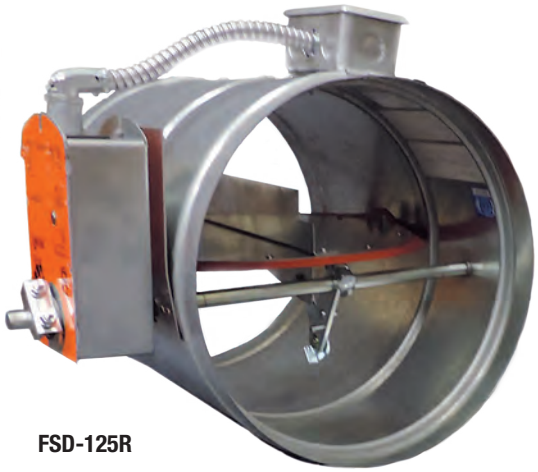


ECONOMICAL ROLL-FORMED TRIPLE-V GROOVED BLADES

FSD-125R — TRUE ROUND

The FSD-125R is a combination fire/smoke damper that installs precisely within round ducted systems. It is UL 555 rated to 1½ hours and perform to 3000 fpm.

- Class I and II UL 555S Ratings
- Square Mounting Plates are standard
- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing



FSD-125R

MODEL	UL555 FIRE RESISTANCE (hr)	UL555S LEAKAGE CLASS	MIN SIZE (in)	DAMPER MAXIMUM SIZE (in)			MAXIMUM DYNAMIC CLOSURE RATING		STAINLESS OPTION
				WALL	FLOOR	CORRIDOR CEILING	VELOCITY (fpm)	PRESSURE (in.wg.)	
TUNNEL CORRIDOR									
FSD-171	1½*	1	6×6	24×24	24×24	24×24	2000	4	–
FSD-172	1½*	2	6×6	24×24	24×24	24×24	2000	4	–
FSD-171-OP	1½*	1	10×6	24×24	24×24	24×24	2000	4	–
FSD-172-OP	1½*	2	10×6	24×24	24×24	24×24	2000	4	–
TRUE ROUND									
FSD-125R	1½	1	6Ø	24Ø	24Ø	–	3000	4	●

** Tunnel Type Corridor ceiling installation has 1 hr rating*

ELEVATED TEMPERATURE/AIRFLOW LABORATORY

Pottorff's commitment to accurate and credible performance data is highlighted by our state-of-the-art elevated temperature test lab. Features include:

- 5000 fpm maximum velocity
- 500° F maximum temperature
- 20 in.wg. maximum static pressure
- UL-555 and UL-555S compliance testing
- AMCA 500D performance testing

The lab features a 4375 cu.ft. chamber with 25 nozzles, 8 settling screens and a 35 million BTU burner. The system has three fans capable of generating up to 97,000 CFM. All equipment has been designed per AMCA 500D and is currently in the process of getting UL and AMCA certification. This lab allows Pottorff to streamline product development efforts, as well as enhance current product offerings.



CONTROL CENTER

Our staff can control testing parameters at this computer integrated control station.

TEST MODEL

Models are mounted here to simulate their installation in typical HVAC ductwork.

4375 CUBIC FOOT CHAMBER



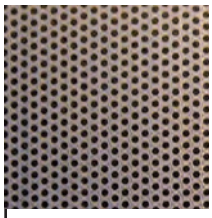
35 MILLION BTU

This burner can generate up to 35 million BTU, giving it the ability to perform elevated temperature testing and meet most requirements defined by life safety needs.



NOZZLES

25 – 10 in. cast and machined aluminum nozzles that help control amount of airflow through the system.



SETTLING SCREENS

Eight individual settling screens to produce the most laminar air possible.



THREE FANS

Two Twin Loren Cook centrifugal paddle blade fans producing a total of 90,000 cfm and up to 10 in.wg. of static pressure, and a Loren Cook centrifugal paddle blade fan capable of 9,000 cfm and 30 in.wg. of static pressure.



DUCT WORK

This duct work meets AMCA 500D requirements in sizes from 6"×6" to 72"×48".

PLENUM

This gives us the ability to adjust to the ductwork and test products in many sizes up to 125"×125".

SMOKE DAMPERS

SD-140 SERIES, SD-150 SERIES AND TRUE ROUND SMOKE DAMPERS



SD-141 WITH SMOKE DETECTOR

A smoke damper provides a positive shutoff of HVAC ducts to help prevent the spread of smoke through an air control system. Pottorff smoke dampers pass UL's 555S stringent leakage testing requirements and are available in Class I, II, and III.

- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing
- Maximum Temperature: 350°



ECONOMICAL ROLL-FORMED TRIPLE-V GROOVED BLADES



LOW PROFILE AIRFOIL BLADES FOR HIGH PERFORMANCE



SD-25R

The SD-25R round duct smoke damper installs precisely within round ducted systems.

CEILING RADIATION SMOKE DAMPERS



CFS-171

A ceiling radiation smoke damper is utilized to protect penetrations in fire rated ceilings or floors in HVAC systems. Pottorff's CFS-170 series passes UL's stringent testing for fire resistance and leakage control.

- UL 555C 3 Hour Rating
- Class I and II UL 555S
- Meets NFPA Standards
- CSFM Listing
- Maximum Temperature: 350°
- Standard Sleeve Outlet Box
- Standard Top Duct Connection
- Optional Side Duct Connection

MODEL	UL555S LEAKAGE CLASS	BLADE TYPE	MIN SIZE (in)	DAMPER MAXIMUM SIZE (in)		MAXIMUM DYNAMIC CLOSURE RATING		STAINLESS OPTION
				WALL	FLOOR	VELOCITY (fpm)	PRESSURE (in.wg.)	
SD-141	1	3V	6×6	144×96 288×48	144×96 288×48	2000	4	–
SD-142	2	3V	6×6	144×96 288×48	144×96 288×48	2000	4	●
SD-143	3	3V	6×6	144×96 288×48	144×96 288×48	2000	4	●
SD-151	1	AIRFOIL	8×6	144×96 288×48	144×96 288×48	4000	8	–
SD-152	2	AIRFOIL	8×6	144×96 288×48	144×96 288×48	4000	8	–
SD-151-V	1	VERT AIRFOIL	8×8	96×36	–	2000	4	–
SD-152-V	2	VERT AIRFOIL	8×8	96×36	–	4000	4	–
TRUE ROUND								
SD-25R	1	ROUND	6 Ø	24 Ø	24 Ø	3000	4	●
CEILING RADIATION/SMOKE								
CFS-171	3*	3V	6×6	12×12 24w or 12h ≤ 144in²	–	2000	4	–
CFS-172	3*	3V	6×6	12×12 24w or 12h ≤ 144in²	–	2000	4	–

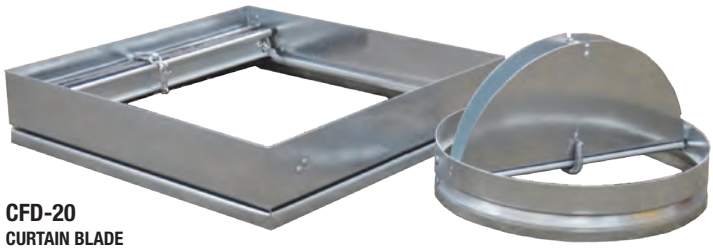
** Tunnel Type Corridor ceiling installation has 1 hr rating*

CEILING RADIATION DAMPERS

STANDARD AND TRUE ROUND

Pottorff's ceiling radiation dampers create radiant heat barriers in HVAC systems. They are installed horizontally in the ceiling membrane of combustible floor-ceiling or roof-ceiling assemblies.

- UL 555C Rating up to 3 Hours
- Meets NFPA Standards
- Warnock Hersey Listing
- Galvanized Steel Construction
- CSFM Listing



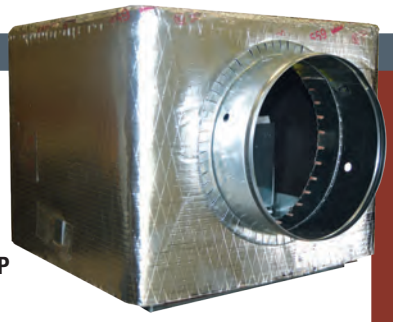
CFD-20
CURTAIN BLADE

CFD-15R
BUTTERFLY BLADE

WOOD TRUSS SYSTEM

Pottorff's ceiling radiation dampers are the proffered solution for wood truss systems, and ideal for multi-family projects.

- UL 555C Rating of 1 Hour
- Meets NFPA Standards
- Warnock Hersey Listing
- Galvanized Steel Construction
- CSFM Listing



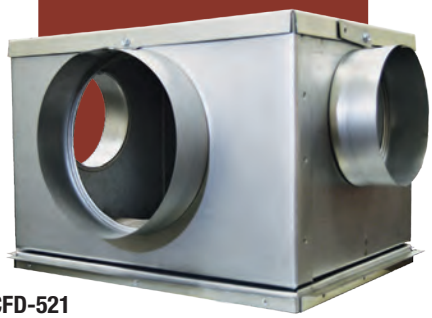
CFD-521-IP

FOR MORE EXPANDED INSTALLATION OPTIONS,
SEE PAGE 13

- Mounting with Boot Rails
- Expanded Duct Connections
- Extended Plenum Height



CFD-521-90
BUTTERFLY BLADE



CFD-521

MODEL	UL555 FIRE RESISTANCE (hr)	BLADE TYPE	MIN SIZE (in)	MAXIMUM SIZE (in) ROOF/FLOOR CEILING ASSEMBLIES	MAXIMUM SIZE (in) UL RATED WOOD-TRUSS ASSEMBLIES	SLEEVE OUTLET BOX	DUCT CONNECTION TOP	DUCT CONNECTION SIDE	OUTLET BOX R VALUE
STANDARD									
CFD-15	3	BUTTERFLY	4×6	24×24	–	O	●	O	–
CFD-15-LP	3	LOW PROFILE BTRFLY	6×12	24×24	–	O	●	O	–
CFD-20	3	CURTAIN	4×4	24×24	–	O	●	O	–
TRUE ROUND									
CFD-15R	3	ROUND BUTTERFLY	4 Ø	24 Ø	–	O	●	–	–
WOOD TRUSS SYSTEMS									
CFD-521	1	BUTTERFLY	4×6	–	18×18 24w or 20h ≤ 324 in²	●	O*	●*	–
CFD-521-90	1	BUTTERFLY	4×4 (4 Ø)	–	12×12 (10 Ø) 14w×10h or 10w×14h ≤ 144 in²	●	–	–	–
CFD-521-BT	1	BUTTERFLY	4×6	12×12 24w or 24h ≤ 144 in²	12×12 (10 Ø) 24w or 24h ≤ 144 in²	●	●	–	R-6.3 or 8.0
CFD-521-IP	1	BUTTERFLY	4×6	–	16×16 24w or 20h ≤ 256 in²	●	O*	●*	R-6.5 or 8.7
CFD-521-NP	1	BUTTERFLY	4×6	–	16×16 24w×20h ≤ 256 in²	●	O*	●*	–
CFD-521-NP90	1	BUTTERFLY	4×6 (4 Ø)	–	12×12 (10 Ø) 14w or 10h ≤ 144 in²	●	–	–	–
COLD FORMED STEEL TRUSS SYSTEMS									
CFD-521-ST	1	BUTTERFLY	4×6	16×14	–	●	–	●	R-6.5 or 8.7

** See Installation instructions for duct connection size and location restrictions*

O OPTIONAL ● STANDARD

FIRE DAMPERS

1½ AND 3HR RATED FIRE DAMPERS



FD-140

Fire dampers are fire protection products used in heating, ventilation, and air conditioning ducts to prevent the spread of fire inside the ductwork through fire-resistance rated walls and floors. Fire dampers are UL555 tested and designed to close upon the detection of elevated heat.

- 1½ and 3 Hour UL 555 Rating
- System pressures up to 6 in.wg.
- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing



ECONOMICAL ROLL-FORMED TRIPLE-V GROOVED BLADES



LOW PROFILE AIRFOIL BLADES FOR HIGH PERFORMANCE

TRUE ROUND

Our round fire dampers are designed for use in fire rated walls and floors and are the perfect, economical, choice for round ducted systems. They are UL555 tested and designed to close upon the detection of elevated heat.

- 1½ and 3 Hour Rating
- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing



FD-125R

VFD-15R

MODEL	UL555 FIRE RESISTANCE (hr)	BLADE TYPE	MIN SIZE (in)	DAMPER MAXIMUM SIZE (in)		MAXIMUM DYNAMIC CLOSURE RATING		STAINLESS OPTION
				WALL	FLOOR	VELOCITY (fpm)	PRESSURE (in.wg.)	
STANDARD								
FD-140	1½	3V	6×6	72×48 36×96	72×48	4000*	6	●
FD-150	1½	AIRFOIL	8×6	128×96	120×96	4000*	6***	–
FD-340	3	3V	6×6	72×48 36×96	–	4000*	6	●
FD-350	3	AIRFOIL	8×6	120×96	64×96	4000*	6**	–
OUT-OF-PARTITION								
FD-140-OP	1½	3V	6×6	36×48	36×48	4000	6	–
FD-150-OP	1½	AIRFOIL	8×6	36×36	36×36	4000	6**	–
TRUE ROUND								
FD-125R	1½	ROUND	8Ø	24Ø	24Ø	2000	4	●
VFD-15R	1½	ROUND BUTTERFLY	6Ø	20Ø	20Ø	–	–	–
VFD-35R	3	ROUND BUTTERFLY	6Ø	20Ø	–	–	–	–

**2000 FPM on multi-sections | **4 in.wg. below 8" in height | ***4 in.wg. below 8" in height when sizes exceed 64"×48" or 32"×96"*

See catalog online for stainless steel max sizes

FIRE DAMPERS

CURTAIN BLADE FIRE DAMPERS — STATIC AND DYNAMIC



Fire dampers with curtain style blades are a cost savings solution to dynamic and static fire control. 1½ and 3 Hour UL 555 Rating

- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing

OUR VFD-10D IS THE LARGEST SINGLE SECTION CURTAIN FIRE DAMPER IN THE INDUSTRY.

MODEL	UL555 FIRE RESISTANCE (hr)	STATIC DYNAMIC	MIN SIZE (in) WALL	MIN SIZE (in) FLOOR	DAMPER MAXIMUM SIZE (in) WALL	DAMPER MAXIMUM SIZE (in) FLOOR	MAXIMUM DYNAMIC CLOSURE RATING VELOCITY (fpm)	MAXIMUM DYNAMIC CLOSURE RATING PRESSURE (in.wg.)	STAINLESS OPTION
CURTAIN STYLE BLADES									
VFD-10-A	1½	STATIC	4×4	6×6	120×80 80×120	80×80	–	–	●
VFD-10-B	1½	STATIC	4×2	6×4	120×76 80×116	80×76	–	–	●
VFD-10-C	1½	STATIC	4×2	4×3	118×75 78×115	78×75	–	–	●
VFD-10D-A	1½	DYNAMIC	6×6	6×6	72×120 120×72	36×36 72×18	4000**	4	●
VFD-10D-B	1½	DYNAMIC	6×4	6×4	120×69 72×117	36×34 72×16	4000**	4	●
VFD-10D-C	1½	DYNAMIC	4×3	4×3	118×68 70×116	34×33 70×15	4000**	4	●
VFD-30-A	3	STATIC	4×4	6×10	108×24	76×96	–	–	●
VFD-30-B	3	STATIC	4×2	6×8	108×21	76×93	–	–	●
VFD-30-C	3	STATIC	4×2	4×7	106×20	74×91	–	–	●
VFD-30D-A	3	DYNAMIC	6×6	–	108×24	–	4000	4	●
VFD-30D-B	3	DYNAMIC	6×4	–	108×21	–	4000	4	●
VFD-30D-C	3	DYNAMIC	4×3	–	106×20	–	4000	4	●
CURTAIN INTEGRAL MOUNTED ANGLE									
VFD-10-IMA	1½	STATIC	4×4	–	48×48	–	–	–	–
VFD-10-IMB	1½	STATIC	4×2	–	48×44	–	–	–	–
VFD-10D-IMA	1½	DYNAMIC	6×6	–	36×48	–	4000	4	–
VFD-10D-IMB	1½	DYNAMIC	6×4	–	36×44	–	4000	4	–
OUT-OF-PARTITION									
VFD-10-OP	1½	STATIC	6×6	6×6	36×36	36×36	–	–	–
VFD-10D-OP	1½	DYNAMIC	6×6	6×6	36×36	36×36	4000	4	–
THINLINE									
VFD-10-TLA	1½	THINLINE STATIC	4×4	–	36×72 72×36	–	–	–	–
VFD-10-TLB	1½	THINLINE STATIC	4×2	–	36×65 72×29	–	–	–	–
VFD-10D-TLA	1½	THINLINE DYNAMIC	6×6	–	72×36 36×72	–	4000*	4	–
VFD-10D-TLB	1½	THINLINE DYNAMIC	6×4	–	72×29 36×65	–	4000*	4	–

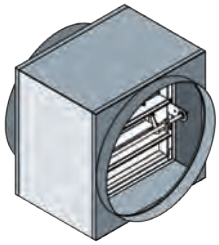
*2000 FPM on multi-section | ** 2000 FPM. Limited sizes for 4000 FPM (See catalog online) See catalog online for stainless steel max sizes

OPTIONS/INSTALLATION

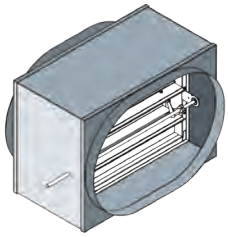
CONNECTION FLEXIBILITY

TRANSITION DUCT CONNECTIONS

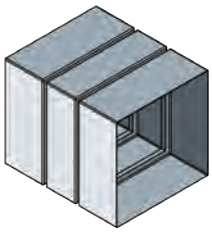
When duct connections are not the same shape or size as the damper, optional factory transitions include:



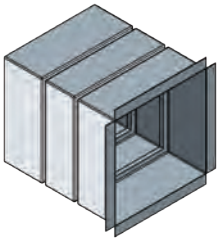
ROUND



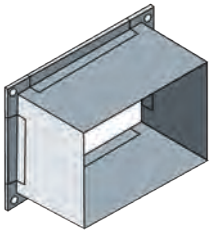
OVAL



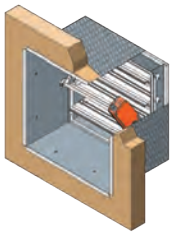
SQUARE



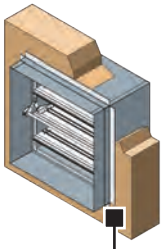
FLANGE CONNECTION



FLANGE DUCT CONNECTION



OUT-OF-PARTITION INSTALLATION



SINGLE SIDE MOUNTING ANGLES

SINGLE SIDE MOUNTING ANGLES

A Pottorff innovation, this labor saving system requires mounting angles on only one side of the partition.

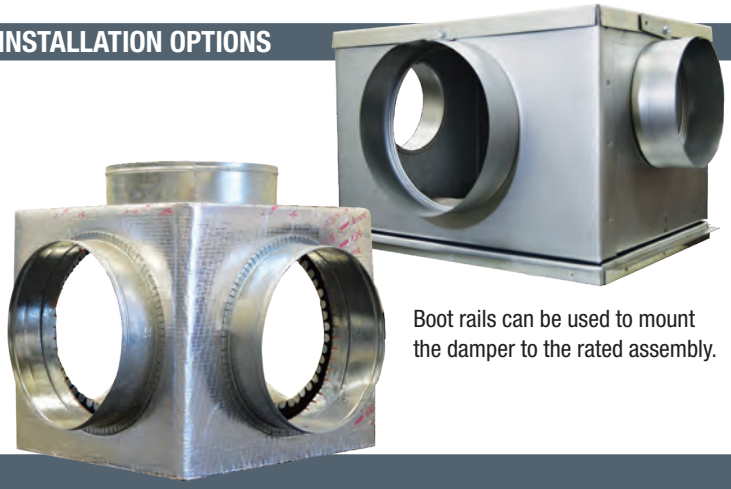
- UL 555 tested for vertical and horizontal dampers
- Installs in masonry, wood stud and metal stud walls
- Can be concealed underneath the drywall on metal stud walls

WOOD TRUSS RATED CEILING RADIATION DAMPER INSTALLATION OPTIONS

INSTALLATION OPTIONS

When the CFD-521, CFD-521-IP and CFD-521-NP dampers are configured to close within 1/8" of the gypsum board used in wood truss floor/ceiling and roof/ceiling assemblies, duct connections can now be made on the top of the damper, or on any combination of sides.

The plenum height can now be extended to allow duct connections in roof/ceiling assemblies with increased insulation to adhere to new, more stringent energy guidelines.



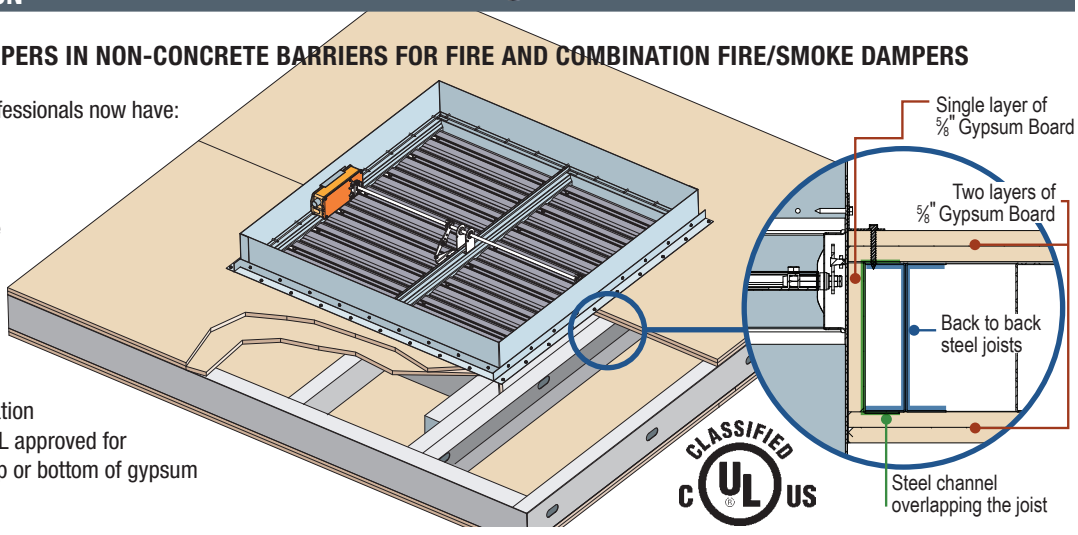
Boot rails can be used to mount the damper to the rated assembly.

UL I503 – INSTALLATION

HORIZONTAL MOUNT DAMPERS IN NON-CONCRETE BARRIERS FOR FIRE AND COMBINATION FIRE/SMOKE DAMPERS

With this installation, design professionals now have:

- Increased flexibility
- More usable space
- Reduced installation time



Pottorff offers Fire and Combination Fire/Smoke Dampers that are UL approved for horizontal installations at the top or bottom of gypsum and steel stud shafts.

ACCESSORIES

ACTUATORS/SMOKE DETECTORS

ACTUATORS

Electric actuators and pneumatic actuators ensure top quality actuation for smoke and combination fire/smoke dampers.

- Compact
- Maintenance free

Standard model is 120 VAC, power-open, spring-close, external mount electric actuator. 24 VAC, 230 VAC, and modulating control options are also available.



PNEUMATIC ACTUATOR

MODULATING ACTUATOR OPTIONS

Pottorff has expanded modulating actuator options for our out-of-partition and horizontally mounted steel airfoil combination fire/smoke dampers. The Belimo FSAFB24-SR(S) modulating actuator can be selected as an option on Pottorff's horizontally mounted FSD-151 and FSD-152 dampers in assemblies up to 120" × 48" and on FSD-151-OP and FSD-152-OP dampers up to 36" × 24".

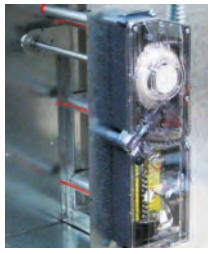


FSAFB24-SR
ELECTRIC ACTUATOR

FACTORY MOUNTED SMOKE DETECTORS

Smoke detector features fully integrated electrical wiring with a single point connection. A Pottorff innovation, this detector eliminates costly installation, wiring and interface coordination.

- UL and NFPA approved
- Standard external mount with duct velocity of 100-4000 fpm
- Optional internal mount system is ideal when detection is required under zero-flow conditions



D4120

FIRE CLOSURE AND POSITION INDICATIONS

Our fire dampers are held open using a UL listed fusible link which melts at a predetermined temperature to permit the damper to close for protection. We now offer the PI-10 switch package which can be used to signal an alarm or fire control system to indicate blade closure on VFD dampers. Our fire/smoke dampers typically utilize a thermostat sensor that interrupts the power to the damper actuator and closes the damper.

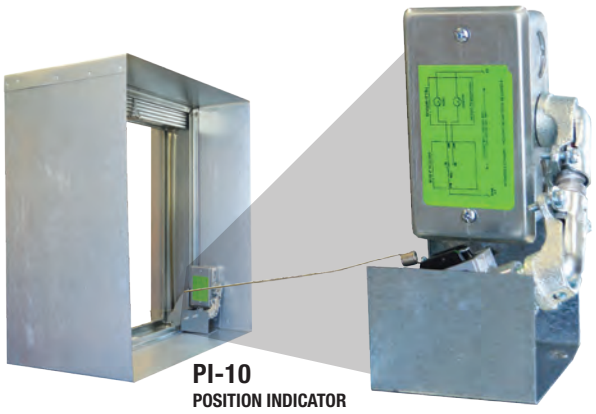
- The PI-10 can be used in static or dynamic systems
- The HS-10 features a single temperature fire closure with manual test/reset buttons
- The DRS-30 features a dual temperature fire closure with manual test/reset buttons and integral PI-50
- The PI-50 features positive open and closed blade position signal
- Maintenance free



DRS-30



HS-10



PI-10
POSITION INDICATOR

ACTUATOR ENCLOSURES	MANUFACTURER
ZS-100 – GALVANIZED	BELIMO
ZS-260 – EXPLOSION PROOF	BELIMO
ZS-300 – STAINLESS STEEL	BELIMO
DUCT SMOKE DETECTORS	
2151 – 0-3000 FPM	SYSTEM SENSOR
D4120 – 100-4000 FPM	SYSTEM SENSOR
FIRE RELEASING DEVICE	
DRS-30 – TWO TEMPERATURE	POTTORFF
HS-10 – ONE TEMPERATURE	POTTORFF

INDICATOR SWITCH PACKAGE	MANUFACTURER
PI-10	POTTORFF
PI-50 – DUAL POSITION INDICATOR	POTTORFF
REMOTE CONTROL PANELS	
RCP-1 – SINGLE POSITION	POTTORFF
RCP-1K – SINGLE STATION W/KEY	POTTORFF
RCP-1M – MOMENTARY TEST SWITCH	POTTORFF
RCP-1M-NL – MOMENTARY TEST SWITCH	POTTORFF
REMOTE LIGHT PANELS	
RLP-1 – 1-POSITION INDICATOR SWITCH	POTTORFF
RLP-2 – 2-POSITION INDICATOR SWITCH	POTTORFF