

Pivot Sets and
Components

DORMA LM

Whatever your pivot requirements, turn to DORMA and put the weight of your door on our pivots. DORMA's commitment to quality is your assurance of durability and long life.

DORMA pivots support door weight effectively in a variety of applications. Like all DORMA products, our pivots are available in an array of finishes to enhance and complement surrounding decor.

DORMA's LM Series of pivots using brass and steel are designed for long life and trouble-free operation. Each pivot and pivot set meets DORMA's exacting specifications for support of rated and non-rated high-traffic interior and exterior openings, extra-heavy doors, or lead-lined doors. Pivots for 20 minute and 3 hour fire-rated doors comply with applicable codes.

DORMA pivots span a wide variety of styles and applications that can interface with other DORMA products on wood, aluminum, or hollow metal doors and frames. They can also be used on doors of special design such as paneled doors, and doors of unusual weight, thickness, or material.

Pivots and pivot sets, durable and long lasting, accommodate doors weighing up to 1000 lb. Pivot sets are available for center hung, 3/4" offset, and 1-1/2" offset. Components are offered for center hung, 3/4" offset, 1-1/2" offset, and pocket pivot applications. Floor bearings with numerous spindle heights are available to accommodate an array of bottom door clearances.

Center Hung walking beam top pivots and bottom arms are mortised into the door. Floor bearings are surface applied or grouted into the floor, depending on which pivot set/floor bearing is used. Pivot sets are available for doors weighing from 200 lb to 660 lb. Heavy-duty versions are available for doors up to 1000 lb. Center hung pivots and pivot sets can be single-acting (must use an applied stop) or double-acting.

3/4" Offset pivots and pivot sets are available for non-rated and fire-rated applications. Pivot sets use full mortise pivots. Optional intermediate pivots are recommended for use with pivot sets. Side jamb bottom arm is available for conditions where floor preparation is not desired. Lead-lined door pivots and pivot sets are available for varying door thicknesses.

1-1/2" Offset pivots and pivot sets are available for non-rated and fire-rated applications. All pivots are full-mortise. Optional intermediate pivots are recommended for use with pivot sets.

Pocket Pivots are available for non-rated and fire-rated openings that require the door to open 90° into a pocket and flush with the frame rabbet and adjacent wall.



Technical Details:

- Center hung, 3/4" offset, 1-1/2" offset, and pocket door pivots available.
- Pivots standard design includes needle bearings with hardened pins for durability and long life.
- 3/4" and 1-1/2" offset versions available for flush and 1/8" inset door and frame conditions. Flush versions are standard.
- Pivot sets are available for non-rated, 20 minute rated, and up to 3 hour fire-rated applications.
- Intermediate pivots are recommended with offset pivot sets.
- Pivot sets available for lead-lined doors weighing up to 800 lb. Can also be used on non lead-lined doors.
- Lead-lined door pivots available for varying door thicknesses. The hole pattern in the pivots is staggered to straddle the lead in the center of the door.
- Pocket pivots available for 90° pocket door applications that require the door to be flush with an adjacent wall.
- Pivots and pivot sets furnished standard with all machine screws. Half or all wood screw options available.

Certification:

The DORMA LM Series is listed by U.L. and C.U.L. under their continuing reinspection programs. The LM Series is certified to the requirements of ANSI A156.4.

ISO 9001:2000



The quality management system at the Reamstown, PA facility is certified to ISO-9001.*



*DORMA Door Controls Inc., dba: DORMA Architectural Hardware

Specification:

DORMA's LM Pivot Series produced from brass or steel for interior and exterior non-rated and fire-rated doors. Top pivots and bottom arms will be center hung, 3/4" or 1-1/2" offset. Intermediate pivots will be 3/4" or 1-1/2" offset. Side jamb bottom pivot will be 3/4" offset. Top and intermediate pivots will be full mortise configurations. Bottom arms and side jamb pivot will be mortised. Pivots can be substituted within a pivot set, assuming the offset is the same. Offset 3/4" and 1-1/2" top pivots are available for doors that are inset 1/8" from the frame face while standard intermediate and bottom arms are templated accordingly. Center hung pivots will accommodate double-acting and single-acting doors. Center hung single-acting will use an applied stop. Pocket pivots will accommodate doors opening 90° that must be flush with an adjacent wall. All pivots and pivot sets will incorporate needle bearings and lubricated hardened steel pivot pins treated to prevent corrosion. All pivots and pivot sets will be available in a variety of finishes.

Finishes:

Plated Finishes:

Primed for Painting: 600.
 Brass: 605 (Bright) or 606 (Satin).
 Bronze: 611 (Bright), 612 (Satin), or 613 (Oxidized Satin Oil Rubbed).
 Nickel: 618 (Bright) or 619 (Satin).
 Chrome: 625 (Bright) or 626 (Satin).





Sprayed Finishes:

Aluminum: 689.
 Bronze: 691 (Dull), 690 (Statuary), or 695 (Dark Duranodic).
 Gold: 696
 Black: 693.

Optional Special Color Sprayed Finishes: Specify code number or submit 3 color chip samples.


Warranty: 5 years

Cross Reference Chart

DORMA	Rixson
OP440	117
OPF440 	F117
OPJ350	195
OPH750	117-1/2
OPHF750 	F117-1/2
OPL440	L147
OPL800	L117
OP15200	117 × 1-1/2"
OP15500	117-1/2 × 1-1/2"
OPF15200 	F117 × 1-1/2"
OPF15500 	F117-1/2 × 1-1/2"
CP440	370
CPA440	370
CP660	117-3/4
CP1000	H117-3/4

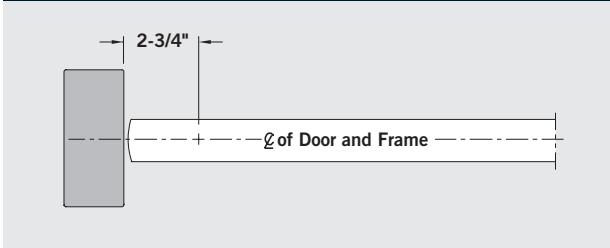
NOTE: Comparison is based upon application type and maximum door weight capacity, which may vary between manufacturers. Based on information obtained from trade sources, it is our judgement that these products are most similar. Exact equivalency is not guaranteed.

ANSI Conversion Chart

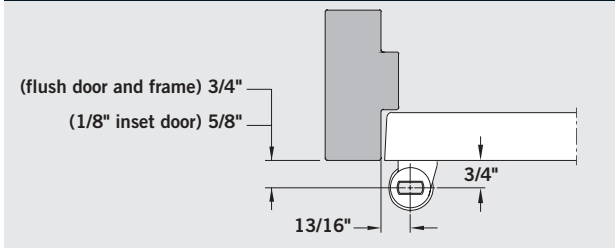
ANSI Number	ANSI Requirement/Function	DORMA Pivot Sets	DORMA Pivots	Required Components
CO7011	Center Pivoted, 1000 lb Door max.	CP1000		
CO7021	Center Pivoted, 250 lb Door max.	CP660		
CO7032	Center Pivoted, 150 lb Door max.	CP440, CPA440		
CO7121	Offset Pivoted, 250 lb Door max.	OPH750, OP1550		
CO7131	Offset Pivoted, Side Jamb Bottom Pivot, 250 lb Door max.	OPJ350		
CO7162	Offset Pivoted, 150 lb Door max.	OP440, OPL440, OP15200		
CO7172	Offset Pivoted, Side Jamb Bottom Pivot, 150 lb Door max.	OPJ350		
CO7202 	Offset Pivoted, Labeled Fire Doors, 150 lb Door max.	OPF440, OPLF440, OPF15200		
CO7311	Offset Pivoted, Lead-Lined Intermediate Pivot		75240	
CO7321	Offset Pivoted, Intermediate Pivot		75220, 15220	
CO7371	Offset Pivoted, Intermediate Pivot, Labeled Fire Doors		75233, 15233	
CO7382	Offset Pivoted, Full Mortise Intermediate Pivot (light-duty)		75210	

Applications

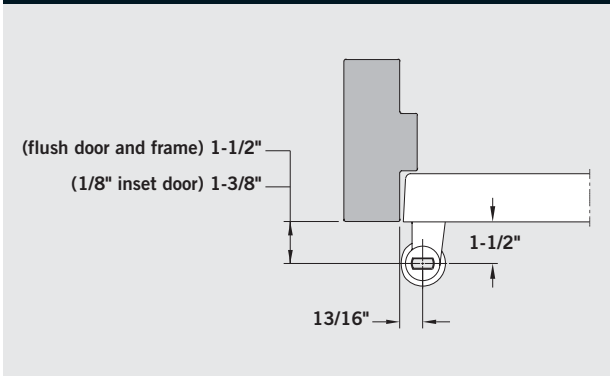
Center Hung - Single or Double Acting



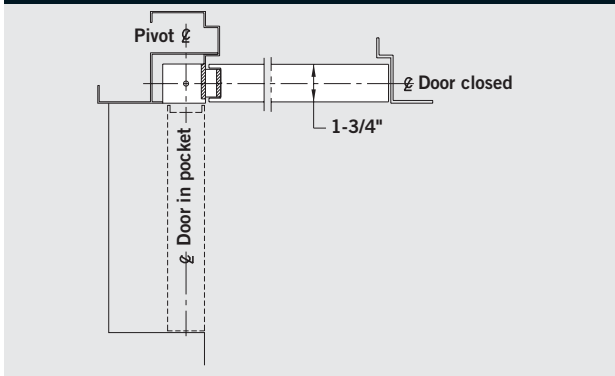
3/4" Offset Hung - Single Acting



1-1/2" Offset Hung - Single Acting



90° Pocket Pivot Hung



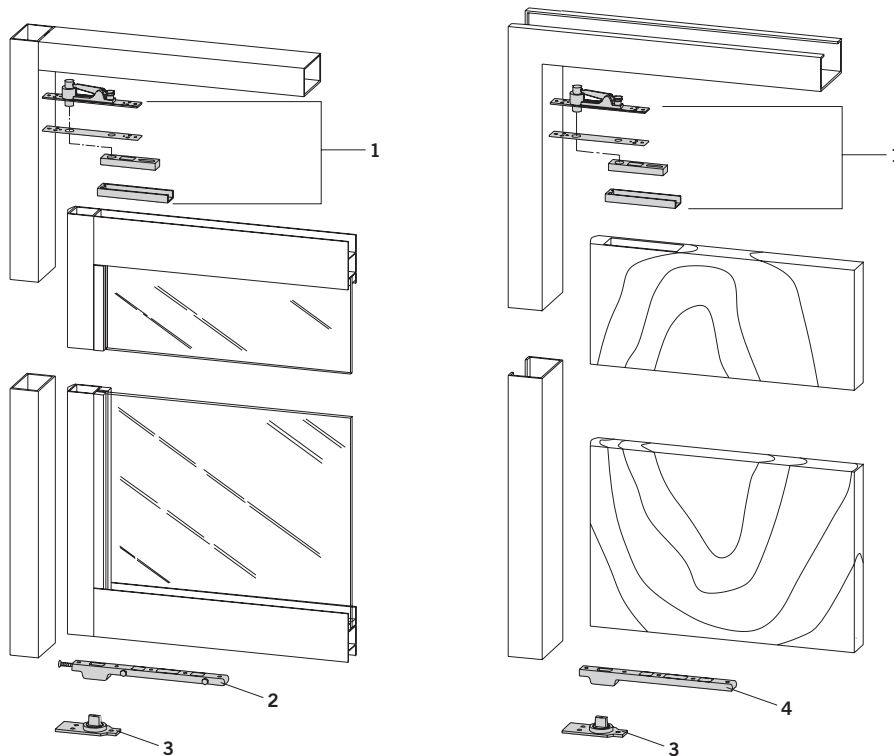
Pivot Set Selection Chart

Pivot Set	Application	Maximum Door Width	Maximum Door Weight	Fire Rated	Center Hung Double-Acting	Offset Hung Single-Acting
OP440	3/4" offset standard	4'-0"	440 lb			✓
OPF440	3/4" offset, up to 3 hour fire rated	4'-0"	440 lb	✓		✓
OPJ350	3/4" offset side jamb	4'-0"	350 lb			✓
OPH750	3/4" offset heavy-duty	4'-0"	750 lb			✓
OPHF750	3/4" offset heavy-duty, up to 3 hour fire rated	4'-0"	750 lb	✓		✓
OPL440	3/4" offset lead-lined	4'-0"	440 lb			✓
OPL800	3/4" offset lead-lined	4'-0"	800 lb			✓
OP15200	1-1/2" offset	3'-6"	200 lb			✓
OP15500	1-1/2" offset heavy-duty	4'-0"	500 lb			✓
OPF15200	1-1/2" offset, up to 3 hour fire rated	3'-6"	200 lb	✓		✓
OPF15500	1-1/2" offset heavy-duty, up to 3 hour fire rated	4'-0"	500 lb	✓		✓
CP440	Center hung, wood or steel door	4'-0"	440 lb		✓	
CPA440	Center hung, aluminum door	4'-0"	440 lb		✓	
CP660	Center hung medium-duty, wood or steel door	4'-0"	660 lb		✓	
CP1000	Center hung heavy-duty, wood or steel door	6'-0"	1000 lb		✓	

All bottom arms and floor bearings, excluding the 75320 side jamb pivot, can be used on fire doors. Top and intermediate pivots for 20 minute rated and up to 3 hour rated doors can be assembled with a bottom arm and floor bearing of common application to create specialty fire rated sets. See component drawings for specific details on the standard, fire rated, lead-lined, and electrified components and their compatibility in the various applications.

NFPA 80 requires that labeled fire doors up to 60" in height be provided with 2 pivots and an additional pivot for each 30" of door height or fraction thereof. The same recommendation applies for non-labeled doors. Distance between pivots may exceed 30".

Center Hung – Single or Double Acting



CPA440 Pivot Set

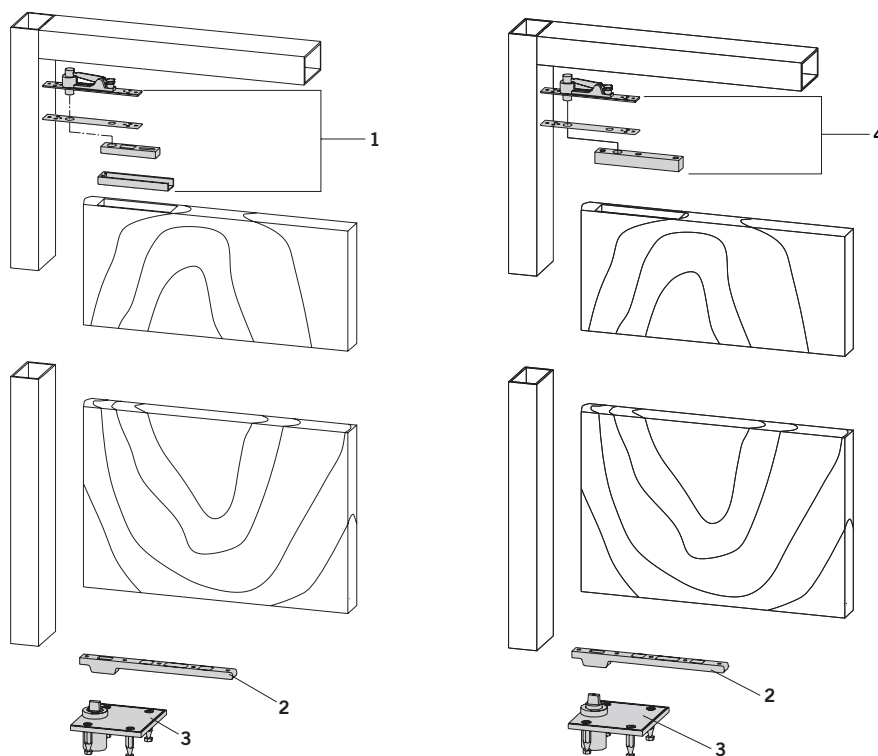
For aluminum doors up to 4'-0" wide and weighing up to 440 lb.

1. No. 8062 Top Pivot
2. No. 7422 Bottom Arm
3. No. 7471K Floor Bearing

CP440 Pivot Set

For wood or hollow metal doors up to 4'-0" wide and weighing up to 440 lb.

1. No. 8062 Top Pivot
4. No. 7421 Bottom Arm
3. No. 7471K Floor Bearing



CP660 Pivot Set

For wood or steel doors up to 4'-0" wide and weighing up to 660 lb.

1. No. 8062 Top Pivot
2. No. 7421 Bottom Arm
3. No. 7471HD Floor Bearing

CP1000 Pivot Set

For wood or steel doors up to 6'-0" wide and weighing up to 1000 lb.

4. No. HD8062 Top Pivot
2. No. 7421 Bottom Arm
3. No. 7471HD Floor Bearing