FlexLouver™ Rack Arm Systems

by DRAPER

Please check all appropriate selections and attach a drawing showing shape, mullion locations, and verified dimensions.

Opening Size: _____

Opening Shape (attach drawing): _____

Select Installation Location
- ☐ Interior
- ☐ Exterior

Select Installation Option
- ☐ Jamb (Recess)
- ☐ Wall (Face)

Select Installation Orientation
- ☐ Vertical
- ☐ Horizontal
- ☐ Angle

Select Aluminum Frame Options
- ☐ Perimeter Frame
- ☐ Nylon Brushes
- ☐ Hinged Frame (to give access to glazing for cleaning)

Select Rack Arm Style
- ☐ Standard
- ☐ Heavy Duty
- ☐ Box

How Many Rack Arms?: _____

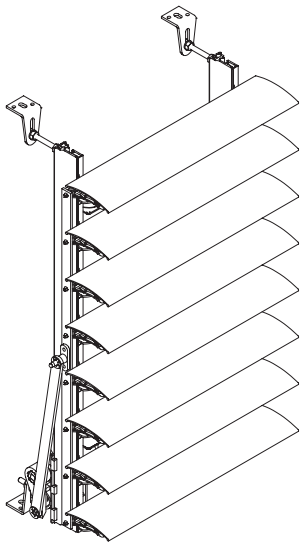
Select Louver Size and Color
- ☐ 50A
  - ☐ Silver RAL 9006
  - ☐ White RAL 9010
- ☐ 75E
  - ☐ Silver RAL 9006
  - ☐ White RAL 9010
  - ☐ Natural Anodized
  - ☐ Custom RAL Color: _____
- ☐ 80R
  - ☐ Silver RAL 9006
  - ☐ White RAL 9010
- ☐ 88E
  - ☐ Silver RAL 9006
  - ☐ White RAL 9010
  - ☐ Natural Anodized
  - ☐ Custom RAL Color: _____

Louver Width: _____

Select Operator and Control Options
- ☐ Manual (Gearbox and Crank Handle)
- ☐ Motorized
  - ☐ 110V AC Tubular Motor
    - ☐ 4:1 Reduction Gearbox
    - ☐ 7:1 Reduction Gearbox
  - ☐ 24V AC Tubular Motor
    - ☐ 4:1 Reduction Gearbox
    - ☐ 7:1 Reduction Gearbox
  - ☐ 110V AC Belimo Motor
  - ☐ 24V AC Belimo Motor

  Controls
  - ☐ 115V Wall Switch for Single Shade Control
  - ☐ Low Voltage and/or Multiple Shade Control*

**Please see Draper's IntelliFlex® Control System Planning Sheet to design a control solution for this product. The form is available at www.draperinc.com, or by contacting Draper.*



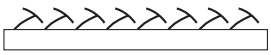
- ☐ Radio Technology Motors
  - ☐ 110-120V AC Radio Technology Motor

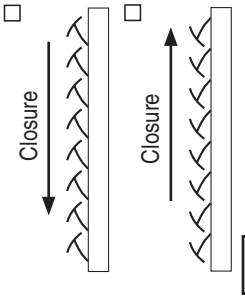
  Controls
  - ☐ Altus RF
    - ☐ 1-Channel Transmitter
    - ☐ 4-Channel Transmitter
    - ☐ 5-Channel Transmitter with scroll wheel
    - ☐ Dry Contact Interface
    - ☐ Single Motor Sun Sensor
  - ☐ Wireless Wall Switch
    - ☐ 1-Channel (Circle one: White/Ivory)
    - ☐ 4-Channel (Circle one: White/Ivory)
    - ☐ Chronis 1-Channel with 24-hour Timer
  - ☐ Multi-Link Universal RTS Interface (5-channel)
  - ☐ Multi-Link RS232 to RTS Interface (16-channel)

Select Operator Location
- ☐ Bottom
- ☐ Center
- ☐ Top

Select Direction of Louver Operation*

☐ ← Closure



☐ 

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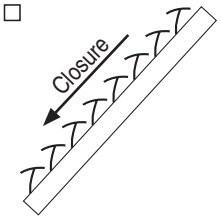
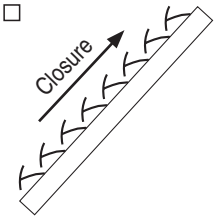
☐ 

☐ 

****For selected option, please mark with an "M" the preferred motor location (top, bottom, or middle).***

PROJECT: _____

_____

ARCHITECT: _____

CONTRACTOR: _____

SUPPLIER: _____

DATE: _____ REVISED: _____

DRAPER®

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Specifications

Electric Operator:

110V Tubular Motor: Located inside an aluminum tube and connected to a reduction gearbox, which in turn connects to the drive shaft. Motor shall be equipped with a disconnect plug on the motor lead. Motor and gearbox assembly to be mounted directly to one of the rack arms. Motor shall be an asynchronous unit, start and run, single phase type (110V–60Hz or 230V–50Hz) thermally protected brushless motor with permanently lubricated bearings and integral gearbox manufactured from non-corrosive metal gears containing a 3 phase planetary gear reducer. Non-metal planetary gearboxes will not be acceptable. Motor shall contain a conical steel brake allowing no slippage and adjusting to high torque. Motor speed shall range from 12 to 20 rpm and draw 1.1 to 3.4 amp as selected by the manufacturer for proper system operation. Motor shall be equipped with externally located limit switches which allow exact setting of the fully open and fully closed positions. System incorporates a separate metal gearbox, and fixing components to reduce the operating speed of the system, and allow connection of the drive to the drive shaft. 4:1 reduction gearbox or 7:1 reduction gearbox available.

Belimo Motor: 110V Belimo motor with a current draw of approximately 0.2A shall be mounted to one of the rack arms and also directly onto the drive shaft. The motor shall incorporate an override to allow the drive shaft to be manually rotated. The motor shall have adjustable mechanical open and closed limits, allowing a maximum slat rotation of approximately 95°. Motor speed shall be approximately 0.2 rpm meaning that the system will take approximately 90 seconds to move from fully open to fully closed.

Crank Operator:

System to incorporate a metal gearbox, and associated fixing components to operate the system. The gearbox is to be mounted onto one of the rack arms. Gearbox to incorporate a drive wheel, fixed handle, or articulated crank handle. If this option is chosen, the length of the handle is to be specified.

Hardware:

Rack Arms: Standard, heavy duty or box style. Racks arms to be manufactured from extruded aluminum and to incorporate a slot into which the pivot arms are located. The connection of the pivot arm to the rack arm extrusion must ensure that it cannot disconnect from the extrusion when under load. Rack arms to be supplied fully assembled for installation complete with nylon pivot arms, nylon slat clips, extruded alumium operating strip and nylon bearing bracket.

Drive Shaft: Hexagonal extruded aluminum drive shaft. 14 mm across flats. Internal 7 mm square cavity to accept shaft for gearbox coupling.

Louvers: Louvers to be manufactured from aluminum. Flexible crowned 2" (50mm) 50E and rolled edge 3 1/8" (80mm) 80R louvers to have a double stove enameled finish with optional perforation. 3" (75mm) and 3½" (88mm) 88E louvers to be manufactured from extruded aluminum. The 88E louver is designed to interlock in the closed position to provide high levels of light exclusion. Colors: 50E and 80R—silver RAL 90006 or white RAL 9010. 75E and 88E—clear anodized or polyester powder coated to a standard RAL color.

Brackets: Two standard options available. **Option 1:** Stainless steel studding that connects directly to the rack arm extrusion and aluminum angle bracket allowing adjustable connection to the glazing framing or building structure.

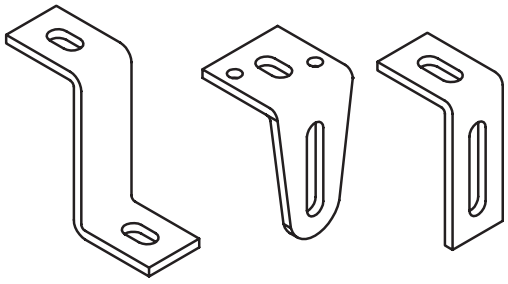
Option 2: Aluminum angles that fix directly to the rack arm and the building structure. Aluminum brackets supplied with a clear anodized finish or polyester powder coated to a standard RAL color. Custom brackets to meet a specific project requirement are also available on request.

Aluminum Frame: Rack arms can be installed in an extruded aluminum frame incorporating black nylon brushes, as appropriate, to reduce the amount of light penetration around the perimeter of the system. Nylon brushes are only suitable for the 75E and 88E systems. Frame to be connected directly to the building or skylight structure. Frames may optionally incorporate hinges and gas struts to allow the frame to be hinged open to allow access to the glazing for cleaning. Black nylon brushes optionally available to reduce the amount of light penetration between the frame and the skylight structure to which it is attached.

Please note: Specifications subject to change without notice.

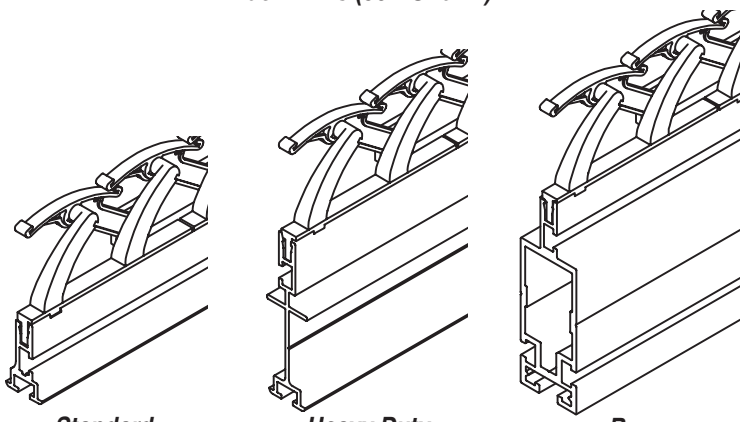
Typical Parts of a FlexLouver Rack Arm System

Brackets



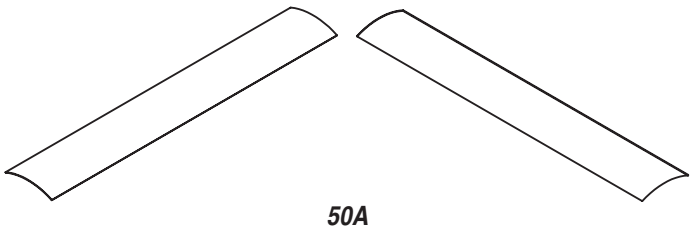
(Varies by project/application)

Rack Arms (50A Shown)

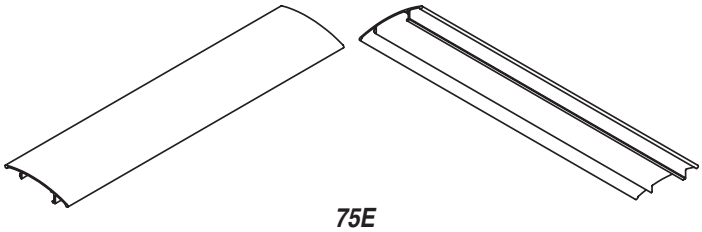


Standard ***Heavy Duty*** ***Box***

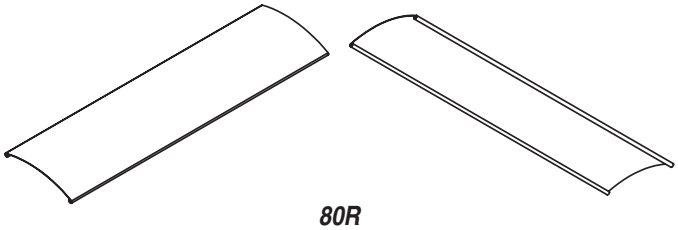
Louvers



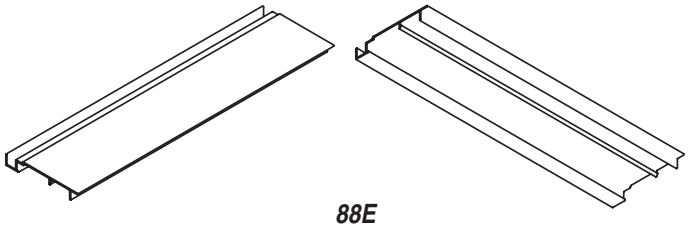
50A



75E



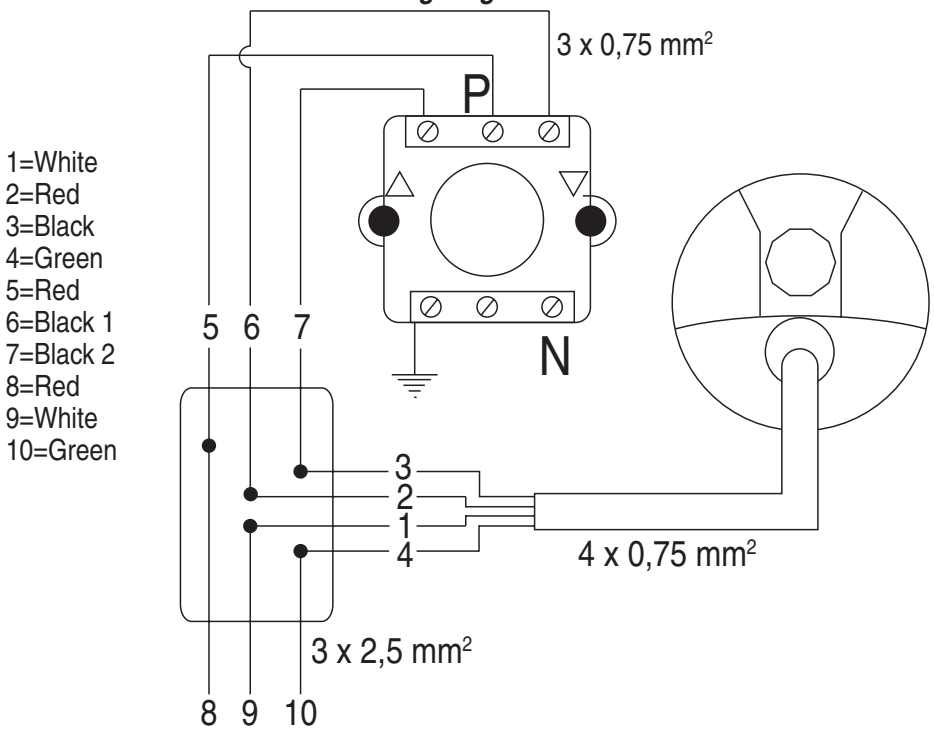
80R



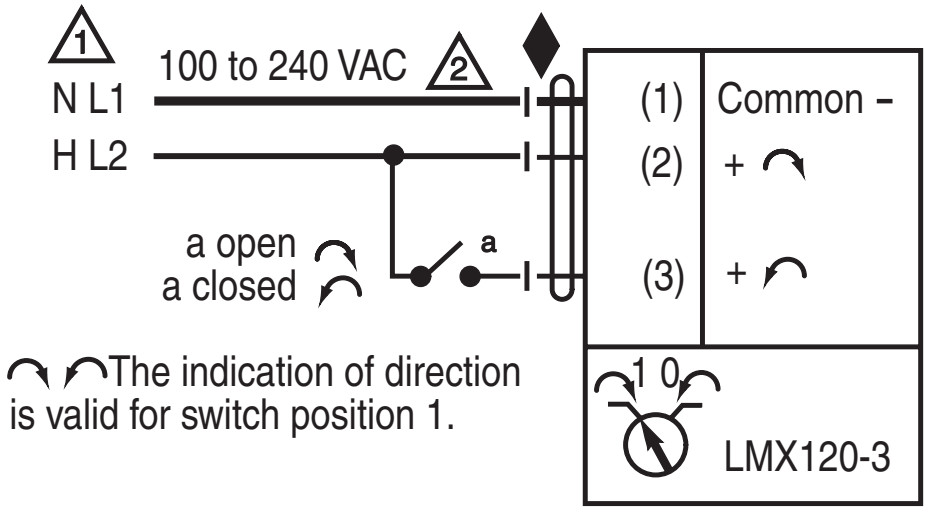
88E

Wiring Diagrams

Wiring Diagram—Standard Motor



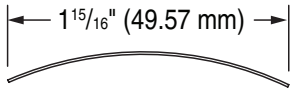
Wiring Diagram—Belimo Motor



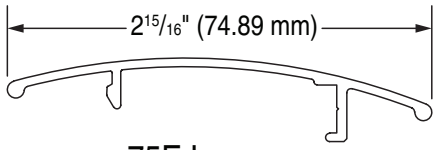
On/Off Control

FlexLouver™ Rack Arm Systems by Draper

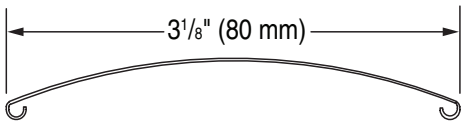
Louvers



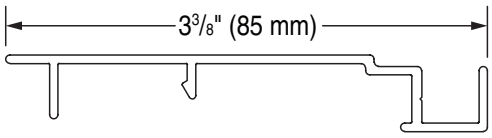
50A Louver



75E Louver

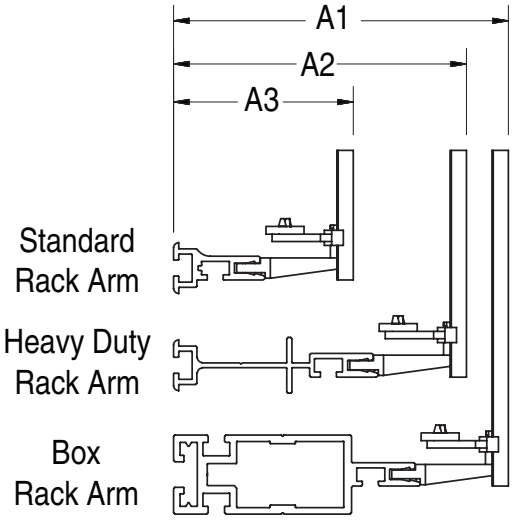


80R Louver

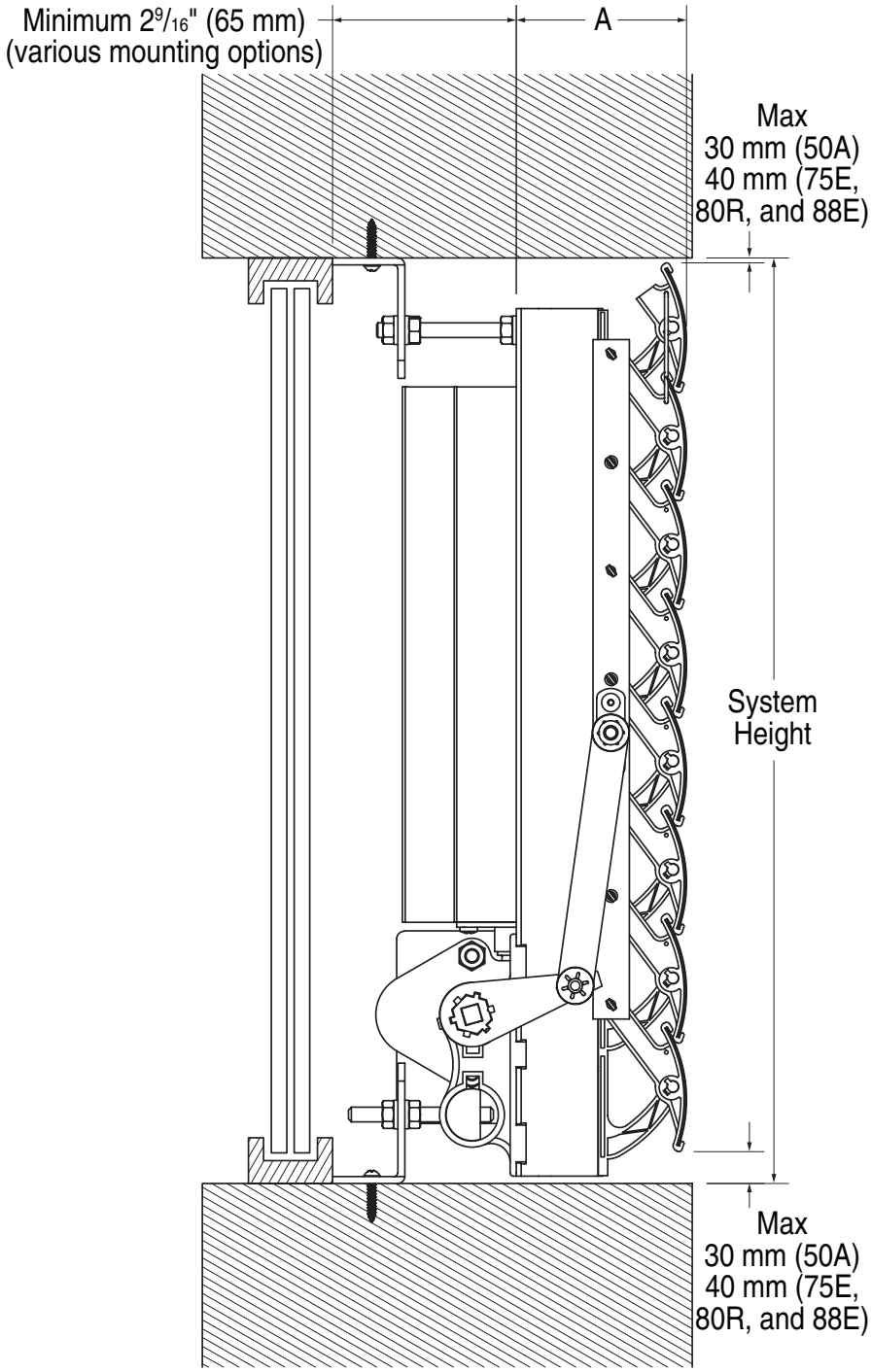


88E Louver

Rack Arms



Dimensions



"A" (Closed)	50A	75E	80R	88E
A1	5 3/16" (131 mm)	5 7/8" (149 mm)	5 11/16" (145 mm)	5 13/16" (145 mm)
A2	4½" (115 mm)	5¼" (133 mm)	5 1/16" (129 mm)	5 3/16" (145 mm)
A3	2¾" (70 mm)	3½" (88 mm)	3 5/16" (84 mm)	3 7/16" (145 mm)

"A" (Open)	50A	75E	80R	88E
A1	6" (152 mm)	6 15/16" (177 mm)	7 3/16" (183 mm)	7½" (190 mm)
A2	5 5/16" (136 mm)	6 5/16" (160 mm)	6 9/16" (166 mm)	6 7/8" (174 mm)
A3	3 5/8" (91 mm)	4 9/16" (116 mm)	4 13/16" (122 mm)	5 1/8" (130 mm)