

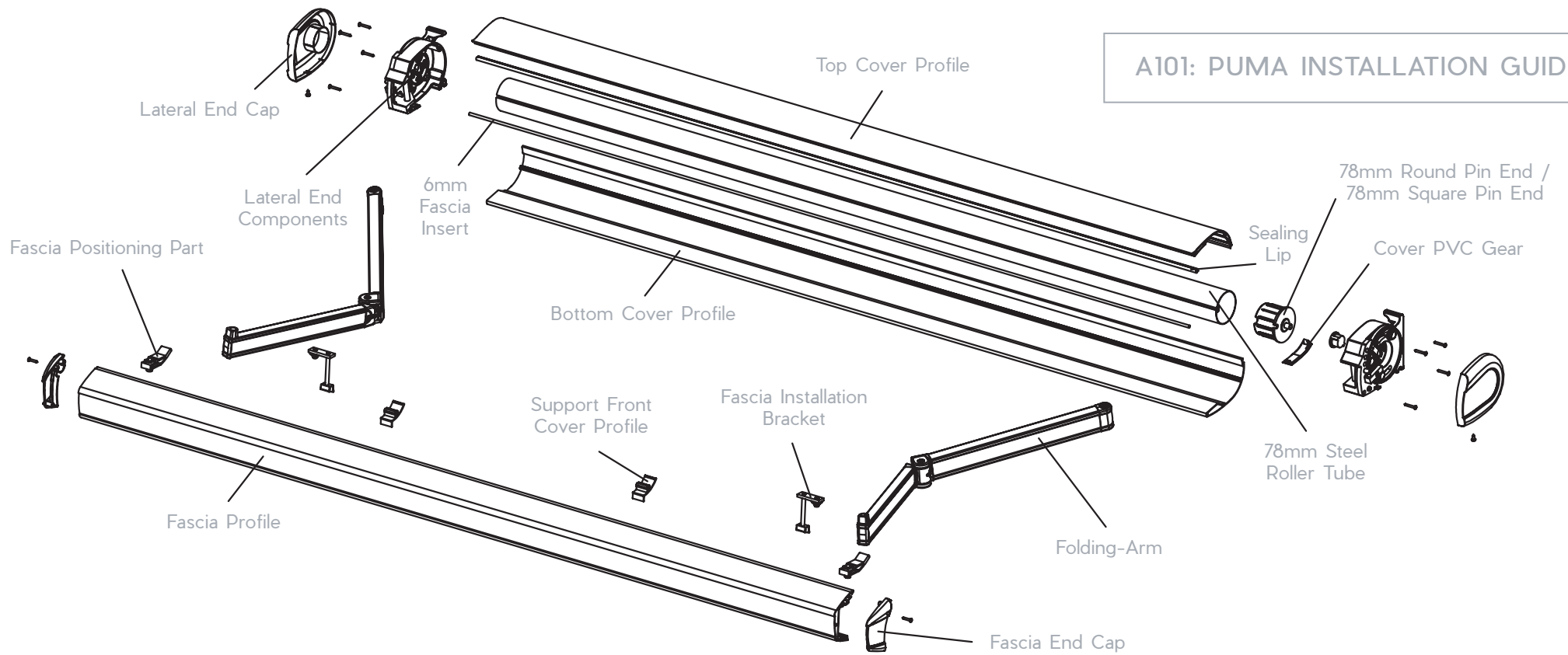


JAMES ROBERTSHAW

est.1860

BESPOKE AWNINGS & BLINDS

A101: PUMA INSTALLATION GUIDE



A-SERIES
A101: FOLDING-ARM AWNING COLLECTION

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1. Safety notes, warnings & installation information

1.1. Explanation of the safety notes:

Safety notes and important information are integrated in the text as appropriate. The following symbols are used to alert the reader/user of the instructions.



This symbol means that the relevant note is important for the safety of persons or for the function of the awning.



This symbol highlights important product information for the installation engineer.

1.2. General safety information:



The A101: Puma Folding-Arm awning has been designed and manufactured in conformity with DIN EN 13561. However, when the awning system is installed or operated, the persons involved in the respective activity maybe at risk if the relevant instructions are not observed. Only qualified companies or trained personnel maybe permitted to install James Robertshaw folding-arm awning systems. Always observe the information and notes within this Installation Guide. A failure to observe the relevant information and to forward to the end user the supplied User Guide booklet will render the manufacturer's liability null and void.



The safety-at-work and accident prevention regulations must be complied with. In particular, a person performing special work at height must be suitably secured. The notes within the product and its packaging must be observed.

2. Installation

2.1. Tools, resources and materials:

- > Drill.
- > Drill bits, suitable for the drilling substrate and the fixing brackets.
- > Ratchet (catrake) with socket, or SW 17 ring spanner (SW19 for M12).
- > SW 5 Allen key.
- > SW 7, SW 13 and SW 17 ring spanners.
- > Crosshead screwdriver.
- > Spirit level and string for alignment.
- > String to align the brackets.
- > Test cable, resp. adjustment set (for initial operation).

2.2. Installation preparations:

i Transport the awning to the site of installation, ensuring that the orientation is correct. The location of the drive side is indicated in the notes provided.

! Secure the installation zone (the secured zone must be at least equivalent to the size of the fully deployed awning). If the awning is hoisted to higher installation positions with pulleys, the awning must be removed from the packaging. When attaching the hoists, ensure that the awning is properly fastened, but not damaged. Hoist the awning exclusively in horizontal position and evenly.

Before commencing the installation, please verify the type and number of brackets is in conformity with the order and whether the installation substrate is the same as that stated on your order. It significant differences make the safe installation of the folding-arm awning seems doubtful; please consult the manufacturer of the system and an installation specialist.

If the information above is not observed, the folding-arm awning system may fall down and put the health and safety of persons at risk!

2.3. Wind resistance classes:

Definition:

DIN EN 13561 Item 4.3. defines different wind resistance classes for awnings. Classification of A101: Puma Folding-Arm Awning depends on the quality of the product. The higher the class, the better the quality of the product.

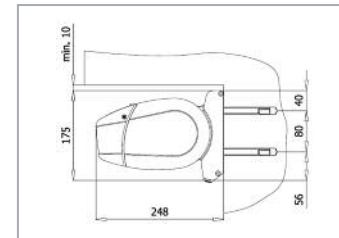
WIND RESISTANCE CLASS	DESCRIPTION	BEAUFORT SCALE WIND FORCE	WIND SPEED
CLASS 0	UNDEFINED; PRODUCT UNTESTED OR UNSUITABLE		
CLASS 1	GENTLE BREEZE	4	20 - 27 km/h
CLASS 2	FRESH BREEZE	5	28 - 37 km/h
CLASS 3	STRONG WIND	6	38 - 48 km/h

Classification of A101: Puma Folding-Arm Awning

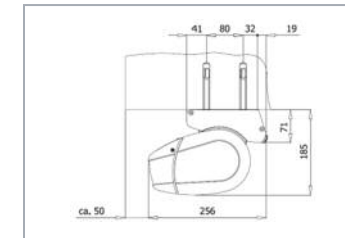
VERSION/EXTENDED LENGTH	1500MM	2000MM	2500MM	3000MM
WIND CLASS	3	3	2	2

2.4. Installation Variations:

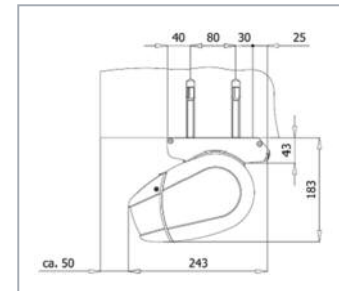
Face-Fix Brackets



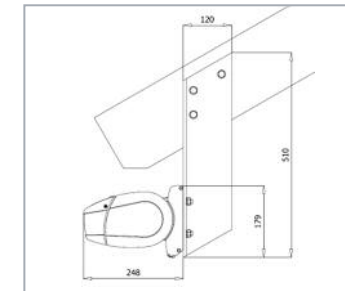
Top-Fix Brackets



Top-Fix Brackets



Rafter Brackets



2.5. Installation height and position of the brackets:

! The folding-arm awning can produce crushing forces and shear stress between the drop profile and the cassette, on the folding-arms and also at the point where the different profiles meet. In the interest of safety, the installation height must be a minimum of 2.50m. If the situation requires an installation height less than the stated minimum height, it is necessary to operate the awning manually or with a switch installed at a location from where the moving parts can be observed.

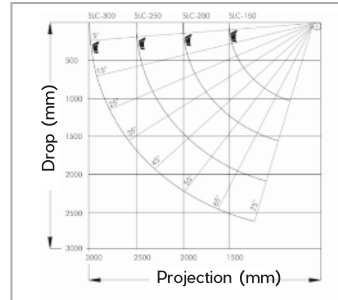
Determination of the installation height for wall installed awnings:

The installation height depends on the extended length and inclination of the awning.

Please refer to the drawing on page 4 for basic orientation.

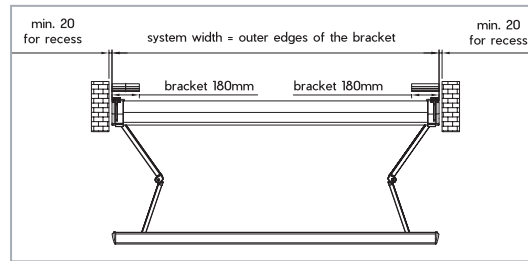
⚠ Always ensure that there is sufficient headroom.

The use of the folding-arm awning as a means of protection against rain and wind is limited. In any event, the maximum inclination for such applications must be a minimum of 15° – this is factory set on every James Robertshaw folding-arm awning system. The limitations of use are clear in the relevant and supplied User Guide booklet.



Position of the brackets:

⚠ The position of the brackets is determined by the width of the awning system, this dimension can be established by measuring the awning or can be found within the order documents. The outer edges of the brackets should be the same as the width of the system; the awning unit may protrude, but by no more than 10mm. The lateral parts must not protrude beyond the brackets at the side, i.e. the brackets must be fully aligned with the fastening elements of the awning.



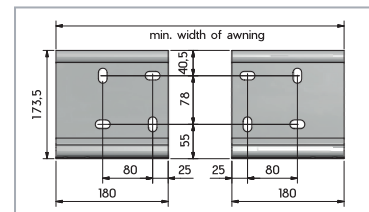
The fixing screws (threaded rods, concrete anchors, etc.) for the brackets must not protrude and restrict with the cassette. Failure to observe this could lead to damage or the awning could fall off the wall.

i Drilling holes for brackets:

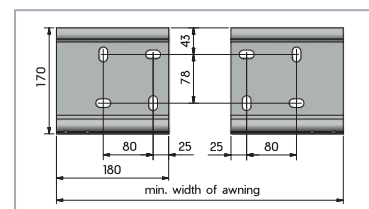
Place the brackets' drilling outline on the chosen bracket positions.

For structural reasons, fixings must be used in all bracket drill holes. Select the appropriate drill bit for the respective base material and installation method.

Face fix brackets



Top fix brackets



2.6. Installation technique:

Due to the weight of the awning and the maximum wind load, the dowels can be subjected to pulling forces up to 4,000N (approximately 410kg) if the awning is face-fix, respectively up to 7,650N (approx. 780kg) if the awning is top-fix.

The following table defines the maximum dowel forces depending on the size of the awning, the type of bracket and the wind class (according to Table 2.3):

101: PUMA MAXIMUM PULLING FORCES DEPENDING ON THE SYSTEM WIDTH [N]					
INSTALLATION	WIDTH	EXTENDED LENGTH [mm]			
		1500	2000*	2500*	3000*
WALL	3000mm	2.480	2.000	1.850	-
	4000mm	1.980	2.580	2.340	3.120
	5000mm	3.930	3.160	2.830	3.770
CEILING	3000mm	2.480	2.000	1.850	-
	4000mm	1.980	2.580	2.340	3.120
	5000mm	3.930	3.160	2.830	3.770

*Grey cells: only Wind Class 2 is available.
Wide bracket with a width of 120mm

i The standard number of supplied brackets is appropriate for these values if installed in concrete. If the supporting capacity of the base material is less than that of concrete and if injection anchors are used, please consult a qualified installation engineer.

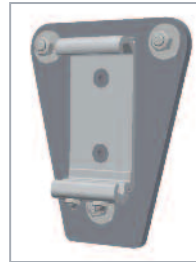
A reduction of the dowel forces can be achieved by using suitable (larger) spreader plates. For dimensioning information in dependence of the installation base, please consult any qualified installation engineer or contact the system manufacturer.

Downgrading of the wind class on the grounds of bad installation conditions is permissible only in limit cases and subject to the agreement of the final user.

Installation on thermally insulated façades:

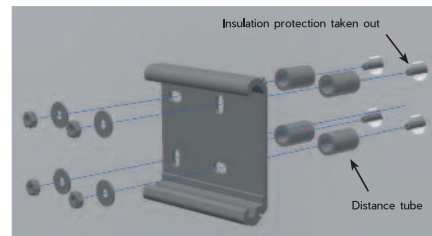
Insulating plaster and full multi-layer thermal insulation are not pressure stable. Therefore, it is necessary to use distancers for the entire surface of the awning brackets or at least for the area around the screws.

The picture on the right illustrates one possible variant:



Bracket installation:

Loosely fasten all brackets and achieve true alignment. Even out irregularities of the base by using suitable spacers. Then tighten all nuts and bolts and check that brackets are firmly attached.



2.7. Installing the folding-arm awning:

! Ensure that sufficient personnel are available to lift the awning. The awning weighs up to 60kg; the weights are defined on the packaging.

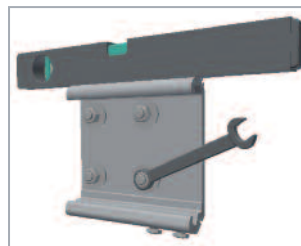
- > Tilt the awning upwards slightly and then hook into the brackets from below (from bottom to top).
- > Now push awning back, then let the awning down.

i The awning will support itself only if it is installed on a wall and positioned correctly, but in any event it still needs to be secured.

- > Insert the blocking pieces at the side into the grooves between bracket and lateral part.
- > Laterally align the awning and screw in the locking screws with an SW 5 Allen key until the awning does not have any more play.

This secures the awning and prevents it from falling down.

! **Caution:** Bracket (1) must be fully aligned with the lateral part (2). Ensure the lateral part does not protrude beyond the awning. Failure to observe this could lead to damage or malfunction, or the awning could fall off the wall.



3. Initial operation

Before the initial operation of the folding-arm awning, remove all objects (e.g. ladders, tools etc.) from the full projection range (in/out) of the folding-arm awning and from underneath the awning. During the trial operation, ensure that nobody is in this area – there is a risk of injury in case of a malfunction.

3.1. With hand crank:

! Insert the hook of the hand crank in the eye of the driving gear and extend the awning until the cloth becomes slack.

Turn back briefly to achieve the optimum cloth tension.

When winding up the awning for the first time, check that the covering is wound up properly and that the folding-arms fold correctly (parallel). The covering (cloth) must always be wound up on the upper side of the cloth roller.

When the end positions (in and out) are reached, do not force hand crank further. Otherwise the gearing may be damaged.

3.2 With electric motor:

The limits of the motor are factory set. If corrections are necessary on location, please contact the manufacturer for advice.

Fully extend the awning and check switch-off point.

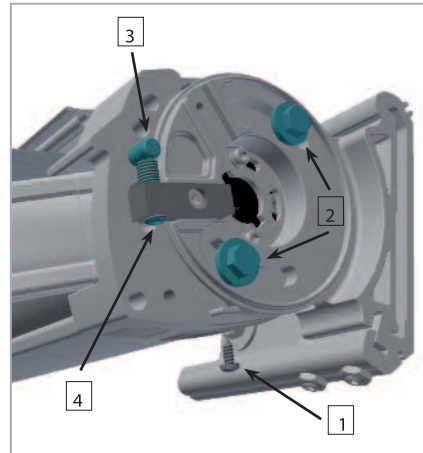
In the maximum projection, the awning fabric is fully taut.

When retracting the awning, check that the fabric is rolled up correctly and that the folding-arms retract correctly (parallel).

Electrical installation work and connections to the mains must be carried out exclusively by a licensed electrical company.

3.3. Setting the pitch inclination of the awning:

- > Half extend the awning.
- > Remove the screws from the underside of side covers (1) and remove the covers.
- > Slightly loosen hex-head screws (2) with ring spanner or ratchet with SW17 socket (do not remove fully!).
- > For fine adjustment, slightly lift to relieve the weight and turn threaded pin (4) as appropriate.



i If the adjustment of the threaded pin as such is not sufficient, the cylinder pin can be inserted in a different bore (12° offset per bore).

- > To insert the cylinder pin in another bore, also relieve weight on the arm, then insert cylinder pin in the correct bore and perform fine adjustment.
- > In the event of a significant change of the inclination setting (more than 12°), the arms must be adjusted alternately.
- > After the arm adjustment, firmly tighten screws (2).
- > Put on covers and secure with screws (1)

3.4. Completing the installation / transfer to the client:

- > Clear site. Remove packaging materials from site and dispose according to local regulations.
- > The installation engineer is requested to enter the JAMES ROBERTSHAW order / reference number and the product names in the 'Product Identification' item of the supplied User Manual so that future questions can be answered more efficiently.
- > Hand over to the client all instructions concerning the installation and operation of the awning as well as the instructions for the electrical connections of control units and switches.

! Give client comprehensive instructions about the operation of the awning. Failure to observe the instructions and incorrect operation can result in damages to the awning and accidents.

- > Notify client of the wind resistance class of the awning.

4. Removing the Folding-Arm Awning

! Ensure that the area around the awning is free of obstruction. Isolate the power to automated awnings and take steps to ensure that they cannot be switched on again.

- > Remove the awning when retracted.
- > Removal of the awning is the reverse of the installation procedure.

5. Troubleshooting

TYPE OF DEFECT	CAUSE	REMEDY
DRIVING GEAR DOES NOT WORK.	No power.	Check connection (specialised company).
	Driving gear not correctly connected.	Check connection (specialist company).
	Thermal protection of the driving gear activated.	Wait for 15-20 mins, then operate again.
	Remote control batteries empty.	Check light signal on sending unit, replace batteries.
	Higher-level control unit prevents manual operation.	Wait until higher-level signal is not activated any more.
SYSTEM DOES NOT EXTEND OR RETRACT FULLY.	End positions of the driving gear changed, or incorrect end position setting.	Reset or re-program end positions (see instructions about driving gear adjustment).
AWNING MAKES GRATING NOISES.	Insufficient lubrication.	Spray arm articulation bearing with a suitable lubricant. (e.g. Teflon spray)
SYSTEM DOES NOT CLOSE ON ONE SIDE.	Fabric unevenly sewn.	Line covering on this side by applying fabric tape to cloth roller.

A101: FOLDING-ARM AWNING COLLECTION

**A101: Cheetah****Residential | Light Commercial Non-Cassette System**

> Operation: Mechanical gearbox | RTS or IO Somfy motor

- > Specification: Width (mm): Up to 6,000 in a single section with 2 x folding-arms, 7,000 with 3 x folding-arms, 18,000 in a coupled section with up to 6 x folding-arms
- > Specification: Projection (mm): 1,500, 2,000, 2,500, 3,000
- > Application: Residential | light commercial installations
- > Standard Fabrics: Irisun acrylic collection | Ferrari Precontraint 302 PVC
- > Wind classification: Beaufort 5 - fresh breeze and Beaufort 6 - strong wind

**A101: Bobcat****Residential | Light Commercial Full-Cassette System**

> Operation: Mechanical gearbox | RTS or IO Somfy motor

- > Specification: Width (mm): Up to 4,500 in a single section with 2 x folding-arms
- > Specification: Projection (mm): 1,500, 2,000, 2,500
- > Application: Residential | light commercial installations
- > Standard Fabrics: Irisun acrylic collection | Ferrari Precontraint 302 PVC
- > Wind classification: Beaufort 5 - fresh breeze

**A101: Puma****Residential | Commercial Full-Cassette System**

> Operation: Mechanical gearbox | RTS or IO Somfy motor

- > Specification: Width (mm): Up to 5,000 in a single section with 2 x folding-arms
- > Specification: Projection (mm): 1,500, 2,000, 2,500, 3,000
- > Application: Residential | light commercial installations
- > Standard Fabrics: Irisun acrylic collection | Ferrari Precontraint 302 PVC
- > Wind classification: Beaufort 5 - fresh breeze and Beaufort 6 - strong wind

**A101: Jaguar****Commercial Non-Cassette System**

> Operation: Mechanical gearbox | RTS or IO Somfy motor

> Specification: Width (mm): Up to 6,500

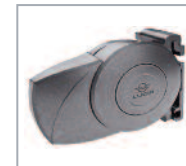
- in a single section with 2 x folding-arms, 7,000 with 3 x folding-arms, 19,500 in a coupled section with up to 6 x folding-arms
- > Specification: Projection (mm): 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500
- > Application: Commercial installations
- > Standard Fabrics: Irisun acrylic collection | Ferrari Precontraint 302 PVC
- > Wind classification: Beaufort 6 - strong wind

**A101: Panther****Commercial Semi-Cassette System**

> Operation: Mechanical gearbox | RTS or IO Somfy motor

> Specification: Width (mm): Up to 6,500

- in a single section with 2 x folding-arms, 7,000 with 3 x folding-arms, 19,500 in a coupled section with up to 6 x folding-arms
- > Specification: Projection (mm): 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500
- > Application: Commercial installations
- > Standard Fabrics: Irisun acrylic collection | Ferrari Precontraint 302 PVC
- > Wind classification: Beaufort 6 - strong wind

**A101: Tiger****Residential | Commercial Full-Cassette System**

> Operation: Mechanical gearbox | RTS or IO Somfy motor

- > Specification: Width (mm): Up to 6,000 in a single section with 2 x folding-arms
- > Specification: Projection (mm): 2,000, 2,500, 3,000, 3,500, 4,000
- > Application: Residential | commercial installations
- > Standard Fabrics: Irisun acrylic collection | Ferrari Precontraint 302 PVC
- > Wind classification: Beaufort 6 - strong wind



ROLLER BLINDS



VERTICAL BLINDS



SKYLIGHT BLINDS



BESPOKE BLINDS



AWNINGS



CANOPIES



PARASOLS



GLASS PERGOLAS



RETRACTABLE ROOFS



BARRIERS



PLANTERS



RETRACTABLE
PARAPET GLASS



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