

AXF and AXR Articulated Arms

External Product Information - Rev. B (US Only)

Atlas Copco



Contents

Introduction	3
AXF and AXR Overview	4
AXF Options	
Mounting	5
Balance Control	5
Parking Brake	5
Set-Up	6
End-of-Arm Configuration	7
Vertical Rod	7
Offset Vertical Rod	7
AXF Accessories	
Vertical Travel Limiter	8
Position Recognition Switch	8
Parking Hook	8
Position Switch Assemblies	8
AXR Accessories	
Parking Brake	9
Parking Hook	9
Position Switch Assemblies	9
Handle Mounting	9
AXF and AXR Options	
Tool Holders	10
Handle Rotate	11
Handle Mounting	11
Rotate	11
AXF and AXR Accessories	
Controller and HMI Mounting	12
Accessory Mounting System	13
AXF Technical Data	
Dimensional Diagram	14
AXR Technical Data	
Dimensional Diagram	15
AXF Technical Data	16
AXR Technical Data	19
AXF and AXR Ordering Number	20
AXF and AXR Standard	
Configuration	23



AXF & AXR Articulated Arms



The AXF Articulated Arm is an over-under boom-to-parallel configuration that provides workspace efficiency with its large working area and small footprint.



The AXR Articulated Arm is an inverted configuration for overhead rail mounting. This is ideal for use on moving lines providing increased productivity and floor space savings.

EASE OF CONFIGURATION

- ▶ Modular design
- ▶ Fast setup and installation
- ▶ Lower integration cost

ERGONOMICS AND SAFETY

- ▶ Low handling forces
- ▶ Smooth movement
- ▶ Ease of operator handling
- ▶ Prevent injury to operator

INCREASED PRODUCTIVITY

- ▶ Large working area
- ▶ Small footprint
- ▶ Production flexibility

AXF & AXR Articulated Arms

270 NM TO 2000 NM



Arm Model	Mounting	Maximum Torque Nm	Maximum Payload kg (lb)	Air Supply Pressure		Vertical Travel mm (in)	Reach Length			
				bar	psi		2 m	3 m	4 m	5 m
AXF1	Floor	270	40 (88)	4	60	750 (29.5)	•	•	+	
AXF2	Floor	1000	90 (198)	6	90	1800 (70.9)		•	•	+
AXF3	Floor	2000	100 (220)	6	90	1800 (70.9)			•	
AXR1	Rail	370	35 (77)*	4	60	750 (29.5)	•			
							6.6 ft	9.8 ft	13.1 ft	16.4 ft

* See page 14 for specific payload capacity by model

- Standard arm configuration
- + Standard arm configuration with cantilevered extension

AXF Articulated Arms - options

MOUNTING

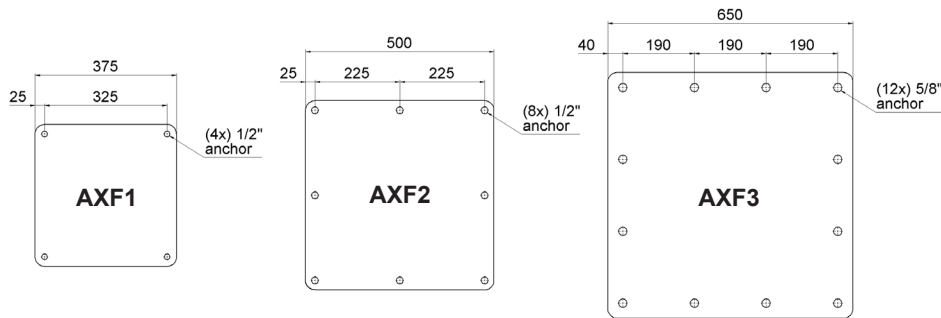
AX Articulated Arms can be mounted in various configurations to suit numerous application requirements. If more space is needed between the assembly line and the location of the pillar, the cantilevered pillar is available, giving you up to one meter of extended reach. Two pillar types are available to suit mounting position requirements, with multiple height options available for each to meet application-specific height requirements.

- ▶ Standard Pillar
 - Shoulder pivot located directly above pillar base
- ▶ Cantilevered Pillar
 - Shoulder pivot offset from pillar base
 - Allows mounting of arm further from part when flexibility is critical



REQUIRED EQUIPMENT

- Base plate anchors – see User Guide for more information



BALANCE CONTROL

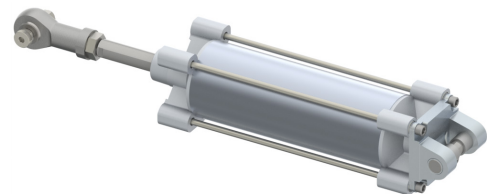
The balance control is a lift-assist offering zero-gravity positioning of the tool. The balance control system includes air preparation and safety components standard with the system. A balance control option is selected based on load capacity and arm model requirements with respect to the air supply pressure. The balancing force can be adjusted based on the system weight.

NOTE

- See page 15 for balance control technical information

INCLUDED EQUIPMENT

- Pneumatic cylinder and mounting
- Precision pneumatic control circuit
- Air preparation with mounting



PARKING BRAKE

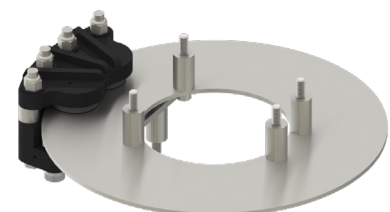
Parking Brakes are used to keep the arm from drifting while it is not in use by the operator. They ensure the unattended arm will not cause damage to parts or injure operators when the parking brake is engaged.

NOTE

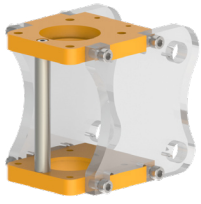
- Parking Brakes are not designed to react torque generated by the tool.

INCLUDED EQUIPMENT

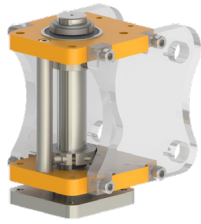
- Pneumatic parking brakes
- Pneumatic control circuit
- On/off switch and mounting



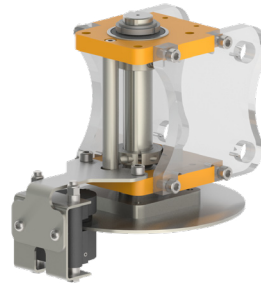
AXF Articulated Arms - options



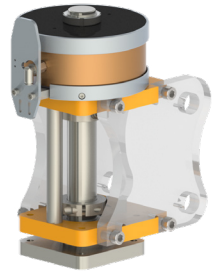
Fixed



Rotating



Rotating with
Parking Brake



Rotating with
Reaction Brake

**END-OF-ARM
CONNECTION**

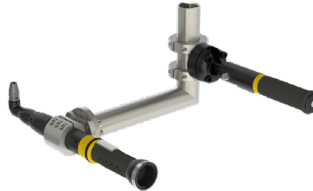
**VERTICAL
ROD**



Vertical Rod - Straight



Vertical Rod - Offset



**TOOL
HOLDER**
Refer to Tool
Holder product
presentation



Fixed Plate -
Vertical



Dual-Axis
Straight



Fixed Plate -
Horizontal



Fixed Clamp -
Angle



Dual-Axis
Rotating Body



Rotating Body -
Angle

AXF Articulated Arms - options

END-OF-ARM CONNECTION

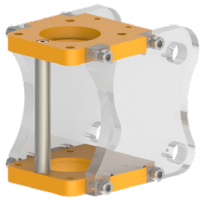
Both fixed and rotating options are available for flexible application set-ups. The designs feature roller bearings on the rotating models, which allow the operator a smooth and ergonomic handling experience.

INCLUDED EQUIPMENT

- End-of-Arm Connection (selected per application)
- Pneumatic control circuit (for Parking / Reaction brakes only)
- Safety switch and cables (for Reaction Brake only)

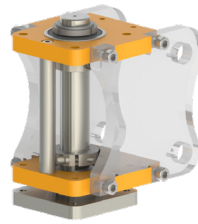
REQUIRED EQUIPMENT

- Arm Parking Brake accessory (for Reaction Brake only)



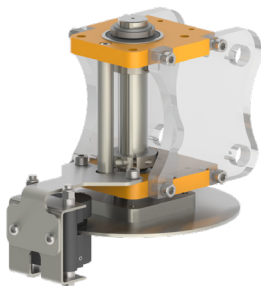
FIXED

- ▶ Fixed position mounting
- ▶ 90° incremental positioning of vertical rod



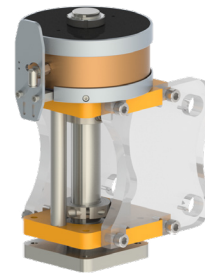
ROTATING

- ▶ Adjustable rotation stops
- ▶ PRS adaptable



ROTATING WITH PARKING BRAKE

- ▶ Adjustable rotation stops
- ▶ PRS adaptable



ROTATING WITH REACTION BRAKE

- ▶ Adjustable rotation stops
- ▶ PRS adaptable

VERTICAL ROD

The vertical rod is used to connect a tool holder to the hand adapter on the articulated arm. Available in numerous fixed lengths, it can be configured to suit part height or clearance requirements.



OFFSET VERTICAL ROD

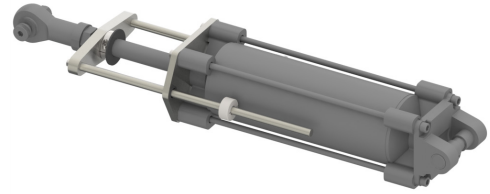
A Tool Holder Offset is used to position the tool holder away from the vertical rod when access space to a fastener is limited.



AXF Articulated Arms - accessories

VERTICAL TRAVEL LIMITER

A Travel Limiter is used when the extensive standard vertical travel of an articulated arm can pose a risk to operator or equipment safety. This is most commonly an issue when there is limited clearance height above the arm. The up/down limiter can be adjusted to limit travel independently in either direction (up/down). The down stroke limiter allows only down direction travel limiting.



POSITION RECOGNITION SYSTEM - PRS

The PRS is an integrated, standalone error-proofing system that is highly flexible. Combined with an Atlas Copco articulated arm, the system tracks the exact position of the tool ensuring the correct fasteners are tightened to the correct torque and always in the correct sequence.

The PRS offers high-level process security for applications that range from simple to complex. The system incorporates the functionality of a Power Focus 4000 / 600 / 6000 or Power MACS 4000 tightening system with position control.

BENEFITS

- ▶ Maintains a high quality standard regardless of the operator
- ▶ Reduces the need for additional quality checks later
- ▶ Ensures all process documentation is available per application and fastener



Operation Mode

PARKING HOOK

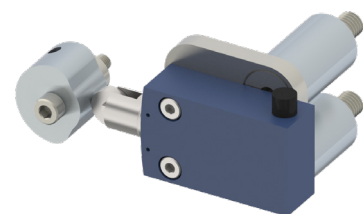
The parking hook provides a secure location to store the arm away from the work area during extended periods of downtime and maintenance.



POSITION SWITCH ASSEMBLIES

The available position switch assemblies utilize mechanical switches mounted at different points on the arm to indicate when the arm is in a specific position. These switches are often used in conveyor lines to ensure that all tools are clear of the conveyor before advancing the parts. Standard position limit switch assemblies are available for each pivot.

- ▶ Position Switch Assembly – Shoulder
 - Indicates when shoulder joint is rotated to a specific position
- ▶ Position Switch Assembly – Parking Hook
 - Indicates when parallel arm is parked in the parking hook
- ▶ Position Switch Assembly – Parallel Up/Down
 - Indicates when the arm is at a specified range in its vertical travel



INCLUDED EQUIPMENT

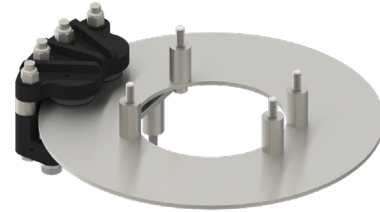
- Switch with 1 meter open-end cable and mounting

AXR Articulated Arms - accessories

PARKING BRAKE

Parking Brakes are used to keep the arm from drifting while it is not in use by the operator. They ensure the unattended arm will not cause damage to parts or injure operators when the parking brake is engaged.

- ▶ Parking Brake - Trolley Carriage
- ▶ Parking Brake - Elbow Pivot Brake Assemblies



NOTE

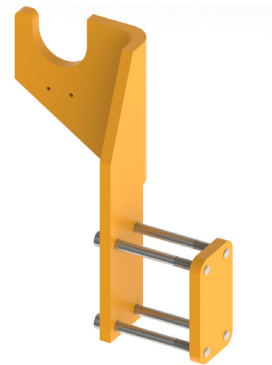
- Parking Brakes are not designed to react torque generated by the tool.

INCLUDED EQUIPMENT

- Pneumatic parking brakes
- Pneumatic control circuit
- On/off switch and mounting

PARKING HOOK

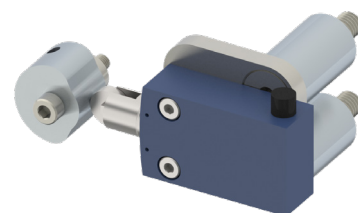
The parking hook provides a secure location to store the arm away from the work area during extended periods of downtime and maintenance.



POSITION SWITCH ASSEMBLIES

The available position switch assemblies utilize mechanical switches mounted at different points on the arm to indicate when the arm is in a specific position. These switches are often used in conveyor lines to ensure that all tools are clear of the conveyor before advancing the parts. Standard position limit switch assemblies are available for each pivot.

- ▶ Position Switch Assembly – Parking Hook
 - Indicates when parallel arm is parked in the parking hook
- ▶ Position Switch Assembly – Parallel Up/Down
 - Indicates when the arm is at a specified range in its vertical travel



INCLUDED EQUIPMENT

- Switch with 1 meter open-end cable and mounting

HANDLE MOUNTING

The handle mount assembly provides an adjustable, ergonomic operator handling point used to move the arm up and down the line of travel. It can be mounted in numerous orientations on the upper parallel arm.



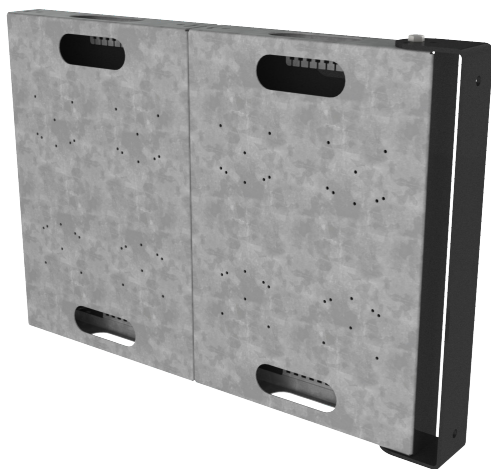
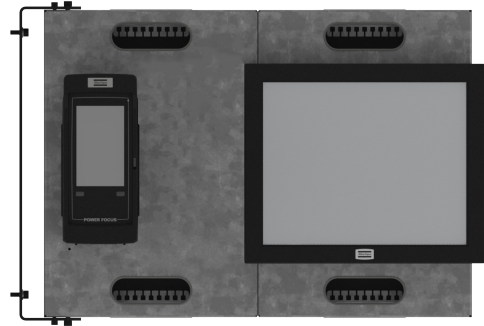
AXF and AXR Articulated Arms - accessories

CONTROLLER AND HMI MOUNTING

Controller and HMI Mounting Systems enable compact, all-in-one solutions. Using accessory mounting straps, the systems can be positioned anywhere along the pillar for optimum visibility. Cables are contained and protected within the mounting enclosure.

COMPATIBLE WITH

- The systems accommodate Power Focus 4000 / 600 / 6000 controllers, Power MACS 4000 controllers, and ComNode / MaxiDisplay HMIs.



CONTROLLER MOUNTING ASSEMBLY

A Controller Mounting Assembly is used to mount to an existing structure. The Controller Mounting Assembly includes all benefits of the Controller Mounting Systems, but doesn't include the Accessory Mounting Straps.

INCLUDED EQUIPMENT

- (2) M10 mounting screws

AXF and AXR Articulated Arms - accessories

ACCESSORY MOUNTING SYSTEM

The Accessory Mounting System has been designed to allow simple configuration of purpose-built systems. The system supports various Atlas Copco Quality Integrated Fastening products and other accessories.

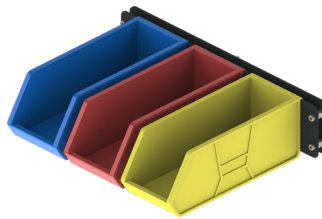
Options exist for both pillar and vertical rod mounting to ensure optimal accessibility of accessories.

REQUIRED EQUIPMENT

- Mounting Option for Pillar, Vertical Rod or pillar rail
- Quality Integrated Fastening hardware (where applicable)
- Operator Handle (where applicable)



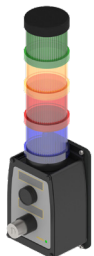
Shelf



Bin Rack



Socket Selector 4 /
Bit Selector 8



Stacklight



Operator Panel



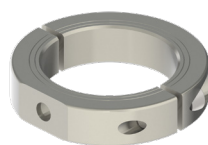
MiniDisplay



Operator Handle



Pillar Accessory Rail



Vertical Rod
Accessory Mounting - Single

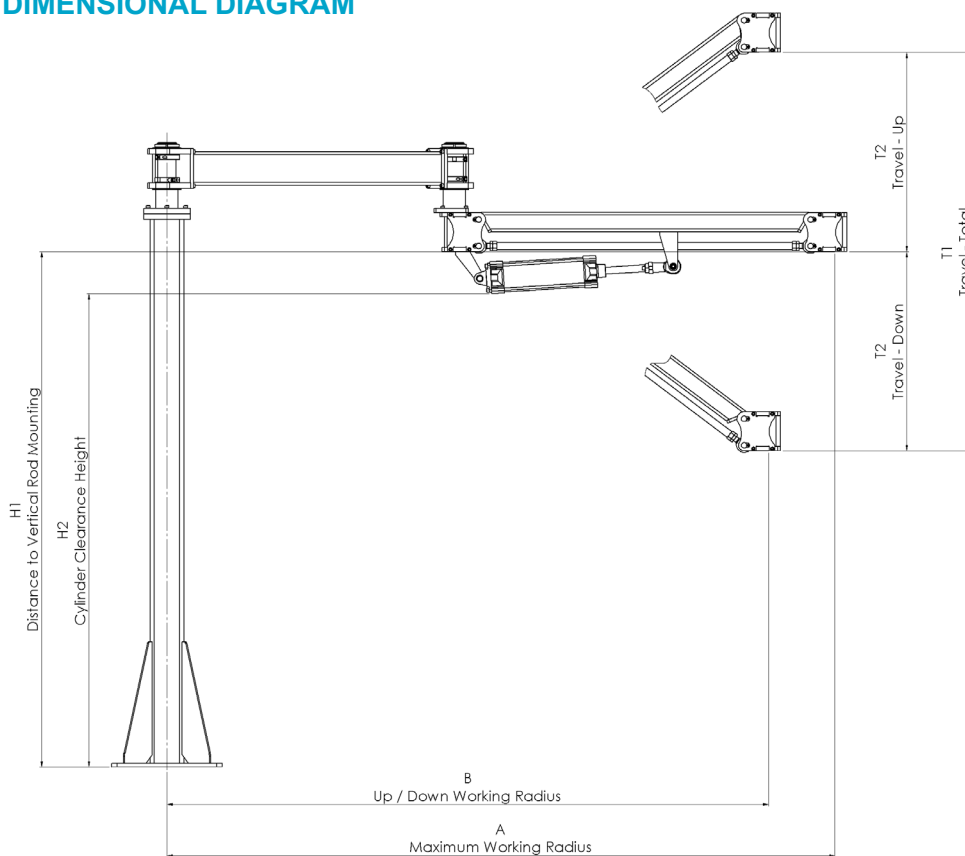


Accessory Offset -
Angular

AXF Articulated Arms - technical data

Arm Model	Maximum Working Radius	Up/Down Working Radius	Minimum Working Radius	Vertical Travel Total	Vertical Travel Up/Down	Height	
	A mm (in)	B mm (in)	C mm (in)	T ₁ mm (in)	T ₂ mm (in)	H1 mm (in)	H2 mm (in)
AXF1-2	2157 (85)	2086 (82)	372 (15)	750 (30)	375 (15)	2145 (84)	1969 (78)
AXF1-3	3123 (123)	3052 (120)	481 (19)	750 (30)	375 (15)	2145 (84)	1969 (78)
AXF1-4C	3123 (123)	3052 (120)	481 (19)	750 (30)	375 (15)	2145 (84)	1969 (78)
AXF2-3	3116 (123)	2825 (111)	476 (19)	1800 (71)	900 (35)	2337 (92)	2147 (85)
AXF2-4	4081 (161)	3791 (149)	595 (23)	1800 (71)	900 (35)	2337 (92)	2147 (85)
AXF2-5C	4081 (161)	3791 (149)	595 (23)	1800 (71)	900 (35)	2337 (92)	2147 (85)
AXF3-4	4120 (162)	3829 (151)	616 (24)	1800 (71)	900 (35)	2240 (88)	2064 (81)

DIMENSIONAL DIAGRAM

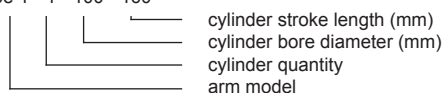


BALANCE CONTROL

Arm Model	Description	4.1 bar / 60 psi	5.2 bar / 75 psi	6.2 bar / 90 psi
AXF1	Balance Control - Type 1 - 1-100-160	40 (88)	40 (88)	40 (88)
AXF2	Balance Control - Type 2 - 1-125-320	50 (110)	70 (154)	90 (198)
AXF3	Balance Control - Type 3 - 1-125-400	45 (99)	70 (154)	100 (220)
AXR1-S	Balance Control - Type 1 - 1-100-160	35 (77)	35 (77)	35 (77)
AXR1-B	Balance Control - Type 1 - 1-100-160	30 (66)	35 (77)	35 (77)

Balance Control naming convention:

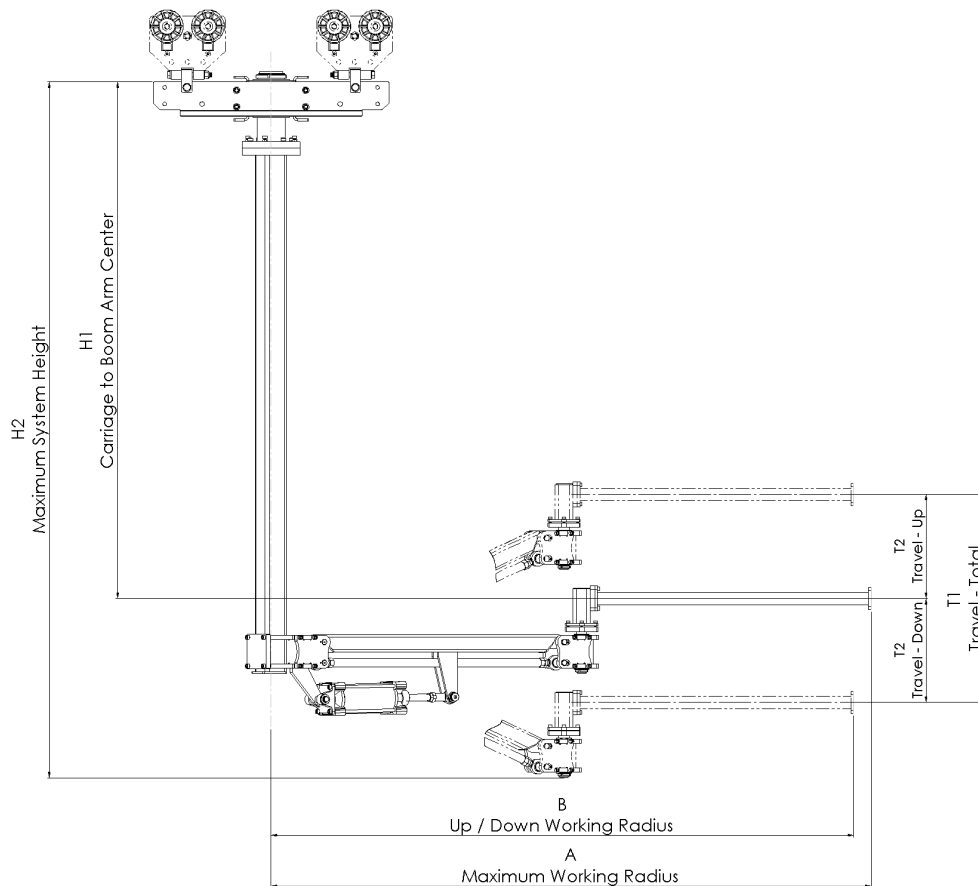
Balance Control - Type 1 - 1 - 100 - 160



AXR Articulated Arms - technical data

Arm Model	Maximum Working Radius	Up/Down Working Radius	Minimum Working Radius	Vertical Travel Total	Vertical Travel Up/Down	Height	
	A mm (in)	B mm (in)	C mm (in)	T ₁ mm (in)	T ₂ mm (in)	H1 mm (in)	H2 mm (in)
AXR1-2-10-S	2269 (89)	2198 (87)	396 (16)	750 (30)	375 (15)	1869 (74)	2522 (99)
AXR1-2-10-B	2269 (89)	2198 (87)	396 (16)	750 (30)	375 (15)	1869 (74)	2574 (101)
AXR1-2-12-S	2269 (89)	2198 (87)	396 (16)	750 (30)	375 (15)	2469 (97)	3122 (123)
AXR1-2-12-B	2269 (89)	2198 (87)	396 (16)	750 (30)	375 (15)	2469 (97)	3174 (125)

DIMENSIONAL DIAGRAM



AXF Articulated Arms - ordering number - AXF1

Arm Model	AXF1-2	AXF1-3	AXF1-4C
	Mass kg (lb)	Mass kg (lb)	Mass kg (lb)
Arm	178 (392)	190 (419)	269 (593)
Options			
Balance Control - Single Cylinder	10.3 (23)	10.3 (23)	10.3 (23)
End-of-Arm Connections			
Fixed	2.8 (6)	2.8 (6)	2.8 (6)
Rotating	5.3 (12)	5.3 (12)	5.3 (12)
Rotating with Parking Brake	7.9 (17)	7.9 (17)	7.9 (17)
Rotating with Reaction Brake	8.2 (18)	8.2 (18)	8.2 (18)
Vertical Rod			
600 mm	2.3 (5)	2.3 (5)	2.3 (5)
750 mm	-	-	-
800 mm	2.9 (6)	2.9 (6)	2.9 (6)
1000 mm	3.5 (8)	3.5 (8)	3.5 (8)
1250 mm	-	-	-
Offset Vertical Rod			
800 mm H x 250 mm L	4.8 (11)	4.8 (11)	4.8 (11)
1000 mm H x 500 mm L	-	-	-
Accessories			
Parking Brakes	7.9 (18)	7.9 (18)	7.9 (18)
Controller Mounting			
400 mm	8.3 (18)	8.3 (18)	8.3 (18)
800 mm	16.6 (37)	16.6 (37)	16.6 (37)
Parking Hook	1.5 (3)	1.5 (3)	1.5 (3)
Position Recognition System - PRS			
3-Axis	1.5 (3)	1.5 (3)	1.5 (3)
4-Axis - for Rotate	2 (4)	2 (4)	2 (4)
4-Axis - for Rotate with Reaction Brake	2 (4)	2 (4)	2 (4)
+1-Axis for Rotate Accessory	0.5 (1)	0.5 (1)	0.5 (1)
Encoder Cables - PRS			
3-Axis	0.5 (1)	0.5 (1)	0.5 (1)
4-Axis	0.5 (1)	0.5 (1)	0.5 (1)
5-Axis	0.5 (1)	0.5 (1)	0.5 (1)
HMI Kit - PRS			
MaxiDisplay-Ethernet Switch (IP67)-Cable	11 (24)	11 (24)	11 (24)
ComNode-Ethernet Cable	16 (35)	16 (35)	16 (35)
Synatec-Ethernet Cable	-	-	-
Position Switches			
Parking Hook	0.5 (1)	0.5 (1)	0.5 (1)
Parallel Up / Down	1 (2)	1 (2)	1 (2)
Vertical Travel Limiter			
Down-Stroke	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)
Up- / Down-Stroke	3.8 (8)	3.8 (8)	3.8 (8)

AXF Articulated Arms - ordering number - AXF2

Arm Model	AXF2-3	AXF2-4	AXF2-5C
	Mass kg (lb)	Mass kg (lb)	Mass kg (lb)
Arm	258 (569)	411 (906)	497 (1096)
Options			
Balance Control - Single Cylinder	12.7 (28)	12.7 (28)	12.7 (28)
End-of-Arm Connections			
Fixed	4.2 (9)	4.2 (9)	4.2 (9)
Rotating	8.3 (18)	8.3 (18)	8.3 (18)
Rotating with Parking Brake	10.6 (23)	10.6 (23)	10.6 (23)
Rotating with Reaction Brake	15 (33)	15 (33)	15 (33)
Vertical Rod			
600 mm	-	-	-
750 mm	7 (15)	7 (15)	7 (15)
800 mm	-	-	-
1000 mm	9.5 (21)	9.5 (21)	9.5 (21)
1250 mm	11.2 (25)	11.2 (25)	11.2 (25)
Offset Vertical Rod			
800 mm H x 250 mm L	-	-	-
1000 mm H x 500 mm L	16 (35)	16 (35)	16 (35)
Accessories			
Parking Brakes	7.9 (18)	7.9 (18)	7.9 (18)
Controller Mounting			
400 mm	8.3 (18)	8.3 (18)	8.3 (18)
800 mm	16.6 (37)	16.6 (37)	16.6 (37)
Parking Hook	1.5 (3)	1.5 (3)	1.5 (3)
Position Recognition System - PRS			
3-Axis	1.5 (3)	1.5 (3)	1.5 (3)
4-Axis - for Rotate	2 (4)	2 (4)	2 (4)
4-Axis - for Rotate with Reaction Brake	2 (4)	2 (4)	2 (4)
+1-Axis for Rotate Accessory	0.5 (1)	0.5 (1)	0.5 (1)
Encoder Cables - PRS			
3-Axis	0.5 (1)	0.5 (1)	0.5 (1)
4-Axis	0.5 (1)	0.5 (1)	0.5 (1)
5-Axis	0.5 (1)	0.5 (1)	0.5 (1)
HMI Kit - PRS			
MaxiDisplay-Ethernet Switch (IP67)-Cable	11 (24)	11 (24)	11 (24)
ComNode-Ethernet Cable	16 (35)	16 (35)	16 (35)
Synatec-Ethernet Cable	-	-	-
Position Switches			
Parking Hook	0.5 (1)	0.5 (1)	0.5 (1)
Parallel Up / Down	1 (2)	1 (2)	1 (2)
Vertical Travel Limiter			
Down-Stroke	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)
Up- / Down-Stroke	5.1 (11)	5.1 (11)	5.1 (11)

AXF Articulated Arms - ordering number - AXF3

Arm Model	AXF3-4
	Mass kg (lb)
Arm	511 (1127)
Options	
Balance Control - Single Cylinder	27 (60)
End-of-Arm Connections	
Fixed	8.9 (20)
Rotating	12.5 (28)
Rotating with Parking Brake	14.3 (32)
Rotating with Reaction Brake	24.5 (54)
Vertical Rod	
600 mm	-
750 mm	10 (22)
800 mm	-
1000 mm	12.8 (28)
1250 mm	15.5 (34)
Offset Vertical Rod	
800 mm H x 250 mm L	-
1000 mm H x 500 mm L	21.2 (47)
Accessories	
Parking Brakes	10 (22)
Controller Mounting	
400 mm	8.3 (18)
800 mm	16.6 (37)
Parking Hook	1.5 (3)
Position Recognition System - PRS	
3-Axis	1.5 (3)
4-Axis - for Rotate	2 (4)
4-Axis - for Rotate with Reaction Brake	2 (4)
+1-Axis for Rotate Accessory	0.5 (1)
Encoder Cables - PRS	
3-Axis	0.5 (1)
4-Axis	0.5 (1)
5-Axis	0.5 (1)
HMI Kit - PRS	
MaxiDisplay-Ethernet Switch (IP67)-Cable	11 (24)
ComNode-Ethernet Cable	16 (35)
Synatec-Ethernet Cable	-
Position Switches	
Parking Hook	0.5 (1)
Parallel Up / Down	1 (2)
Vertical Travel Limiter	
Down-Stroke	0.2 (0.4)
Up- / Down-Stroke	5.1 (11)

AXR Articulated Arms - ordering number - AXR1

Arm Model	AXR1-2-10-S	AXR1-2-10-B	AXR1-2-12-S	AXR1-2-12-B
	Mass kg (lb)	Mass kg (lb)	Mass kg (lb)	Mass kg (lb)
Arm	89 (197)	96 (213)	96 (213)	103 (227)
Options				
Balance Control - Single	10.3 (23)	10.3 (23)	10.3 (23)	10.3 (23)
4-Trolley Carriage - Rotating - 600 mm x 600 mm	47 (104)	47 (104)	47 (104)	47 (104)
Accessories				
Post				
1900 mm	28.4 (63)	28.4 (63)	28.4 (63)	28.4 (63)
2500 mm	35.5 (78)	35.5 (78)	35.5 (78)	35.5 (78)
Parking Brakes				
Trolley Carriage	4.2 (9)	4.2 (9)	4.2 (9)	4.2 (9)
Elbow	2.7 (6)	2.7 (6)	2.7 (6)	2.7 (6)
Parking Hook	2.1 (5)	2.1 (5)	2.1 (5)	2.1 (5)
Position Switch Assemblies				
Parking Hook	0.5 (1)	0.5 (1)	0.5 (1)	0.5 (1)
Parallel Arm Up / Down	1 (2)	1 (2)	1 (2)	1 (2)
Handle Mount - Parallel Arm	2 (4)	2 (4)	2 (4)	2 (4)

AXF Articulated Arms

- ordering number - accessories

Arm Model	AXF1	AXF2	AXF3
	Mass kg (lb)	Mass kg (lb)	Mass kg (lb)
Shelf - Small	2.6 (6)	2.6 (6)	2.6 (6)
Shelf - Large	3 (7)	3 (7)	3 (7)
Bin Rack Assembly - (3) Bins			
Black	5 (11)	5 (11)	5 (11)
Blue	5 (11)	5 (11)	5 (11)
Red	5 (11)	5 (11)	5 (11)
Yellow	5 (11)	5 (11)	5 (11)
Blue / Red / Yellow	5 (11)	5 (11)	5 (11)
Selector 4 / Bit Selector 8 Mounting - 70 mm	3.4 (8)	3.4 (8)	3.4 (8)
Selector 8 / Selector for Large Sockets Mounting - 70 mm	5 (11)	5 (11)	5 (11)
Stacklight Mounting	0.8 (2)	0.8 (2)	0.8 (2)
Operator Panel Mounting - 70 mm	3.1 (7)	3.1 (7)	3.1 (7)
Indicator Box Mounting - 140 mm	1.4 (3)	1.4 (3)	1.4 (3)
MiniDisplay Mounting - 140 mm	1.4 (3)	1.4 (3)	1.4 (3)
MaxiDisplay Mounting - 140 mm	2.8 (6)	2.8 (6)	2.8 (6)
Handle Mounting	0.8 (2)	0.8 (2)	0.8 (2)
Pillar Accessory Rail	4 (9)	4 (9)	4 (9)
Express Component Mounting Kit	0.4 (1)	0.4 (1)	0.4 (1)
Wide Bracket Mounting Kit	1.9 (4)	1.9 (4)	1.9 (4)
Vertical Rod Accessory Mount			
Single Clamp	0.4 (1)	0.4 (1)	0.5 (1)
Double Clamp	0.7 (2)	0.8 (2)	1 (2)
Accessory Offset			
Angular - 70 mm	1.8 (4)	1.8 (4)	1.8 (4)
Angular - 140 mm	2 (4)	2 (4)	2 (4)
Angular - 250 mm	2.2 (5)	2.2 (5)	2.2 (5)
Angular - 400 mm	2.5 (5)	2.5 (5)	2.5 (5)
Straight - 70 mm	1.9 (4)	1.9 (4)	1.9 (4)
Straight - 140 mm	2.1 (5)	2.1 (5)	2.1 (5)
Straight - 250 mm	2.3 (5)	2.3 (5)	2.3 (5)
Straight - 400 mm	2.6 (6)	2.6 (6)	2.6 (6)

Committed to sustainable productivity

We stand by our responsibilities towards our customers,
towards the environment and the people around us.
We make performance stand the test of time.
This is what we call — Sustainable Productivity.

The Atlas Copco logo consists of the company name in a white, italicized serif font, centered between two horizontal white bars of equal length.

Atlas Copco