

AIRMAN®

🇯🇵 JAPANESE QUALITY SINCE 1938

Mini -Excavator

Zero Tail Swing Type

Ax-u-7 Series

Compliant with the EU stage V exhaust emission regulations



AX17u-7 / AX19u-7 / AX26u-7



AX17u-7



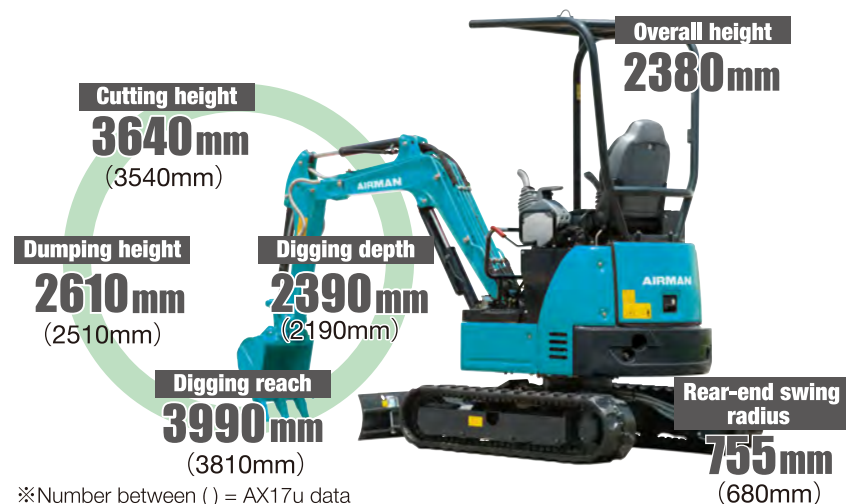
AX26u-7

HOKUETSU INDUSTRIES EUROPE B.V.

Mini-Excavator AX17u-7 / AX19u-7

3

High Performance



Neutral Engine Start System

The engine cannot start unless the shut-off lever is in the lock position for safe operation.

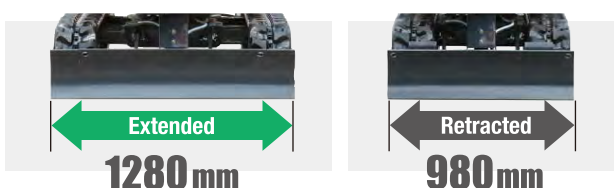


Hydraulic Pilot Control

Hydraulic pilot control levers provide light, smooth control of the front, blade, swing and travel. The levers are ergonomically arranged for easier and less tiring operation.

Adjustable Crawlers and Blade

Tracks can be extended and retracted by control lever: retracted for truck transport and easy access to narrow job sites; and extended for surefooted excavation.



ROPS/OPG (TOP Guard) 3-Pillar Canopy

The rugged 3-pillar canopy effectively protects the operator against tipping over and is ruggedly designed in accordance with the ROPS* standard. All models are protected with an OPG** top guard against falling objects.



*Roll-Over Protective Structure
**Operator Protective Guard

Easy Maintenance

Vertically Sliding Engine Cover

The upright engine cover, upgraded from the conventional model, slides vertically with less rearward projection for ease of maintenance in confined spaces.



Easy Access for Engine Maintenance

With the seat tilted up, the top of engine is exposed for easy maintenance.



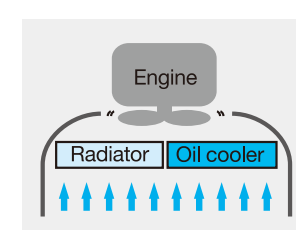
Enlarged Fuel Inlet

Large fuel port has been fitted as per larger Airman models for quick filling.



Easy to clean Radiator

The radiator and oil cooler are arranged side by side for easy cleaning. Ventilation ports on the radiator cover are enlarged for more efficient cooling.



Mini-Excavator AX26u-7

High Performance



Neutral Engine Start System

The engine cannot start unless the shut-off lever is in the lock position for safe operation.



Hydraulic Pilot Control

Hydraulic pilot control levers provide light, smooth control of the front, blade, swing and travel. The levers are ergonomically arranged for easier and less tiring operation.



ROPS/OPG (TOP Guard) Cab and 4-pillar Canopy

The rugged cab and 4-pillar canopy effectively protects the operator against tipping and are ruggedly designed in accordance with the ROPS* standard. All models are protected with an OPG** top guard against falling objects.

*Roll-Over Protective Structure **Operator Protective Guard

Easy Maintenance



Vertically Sliding Engine Cover

The upright engine cover, upgraded from the conventional model, slides vertically with less rearward projection for ease of maintenance in confined spaces.



Easy Access for Engine Maintenance

With the seat tilted up, the top of engine is exposed for easy maintenance.



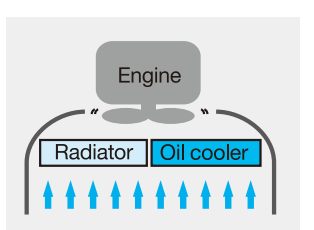
Enlarged Fuel inlet

Large fuel port has been fitted as per larger Airman models for quick filling.



Easy to clean Radiator

The radiator and oil cooler are arranged side by side for easy cleaning. Ventilation ports on the radiator cover are enlarged for more efficient cooling.



SPECIFICATIONS AX17u/AX19u

ENGINE	
Model	3TNV70
Type	Water-cooled, 4-cycle, swirl combustion chamber injection type diesel engine
No. of cylinders	3
Rated power	
ISO 14396, net	11.5 kW at 2400 min ⁻¹
ISO 9249, net	10.6 kW at 2400 min ⁻¹
SAE J1349, net	10.6 kW at 2400 min ⁻¹
Maximum torque	48.8 Nm at 1800 min ⁻¹
Piston displacement	0.854 L
Bore and stroke	70 mm x 74 mm
Batteries	1 × 12 V / 36 Ah

HYDRAULIC SYSTEM	
Hydraulic Pumps	
Main pumps	2 variable displacement axial piston pumps
	1 gear pump
Maximum oil flow	2 x 19.2 L/min
	1 x 10.8 L/min
Pilot pump	1 gear pump
Maximum oil flow	6.5 L/min

Hydraulic Motors	
Travel	2 variable displacement axial piston motors
Swing	1 gear motor

Relief Valve Settings	
Implement circuit	20.6 MPa (210 kgf/cm ²)
Swing circuit	13.7 MPa (140 kgf/cm ²)
Travel circuit	20.6 MPa (210 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)

	Quantity	Bore	Rod diameter	Stroke
Boom (3-Pillar canopy)	1	60 mm	35 mm	435mm
Arm	1	60(55)mm	35(30)mm	406 mm
Bucket	1	55 mm	30 mm	311 mm
Blade	1	65 mm	35 mm	94 mm
Boom swing	1	60 mm	30 mm	298 mm
Span	1	50 mm	30 mm	312 mm

*() value are for AX17u

UPPERSTRUCTURE	
Swing Device	
The axial piston motor with planetary reduction gear is bathed in oil and the swing circle is single-row.	
The swing parking brake is of the spring-set/hydraulic-released disc type.	
Swing speed	9.4 min ⁻¹
Swing torque	1.4 kNm

BUCKET AND ARM DIGGING FORCE		
	AX17u	AX19u
Arm length	0.93 m	1.13 m
Bucket digging force ISO	16.0 kN (1 630 kgf)	16.0 kN (1 630 kgf)
Bucket digging force SAE : PCSA	12.5 kN (1 270 kgf)	12.6kN(1280kgf)
Arm crowd force ISO	8.6 kN (880 kgf)	9.2kN(940kgf)
Arm crowd force SAE : PCSA	7.9 kN (810 kgf)	8.5kN(870kgf)

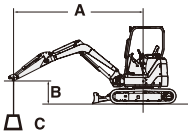
BACKHOE ATTACHMENTS						
Boom and arm are of welded, box-section design. AX17u : 1.82m boom and 0.93m arm are available.						
Buckets AX19u : 1.82m boom and 1.13m arm are available.						
Capacity	Width		No. of teeth	Weight	Recommendation	
ISO heaped	Without side cutters	With side cutters			AX17u Arm 0.93 m	AX19u Arm 1.13 m
0.020 m ³	250 mm	300 mm	3	32.0 kg	○	○
0.035 m ³	300 mm	350 mm	3	34.6 kg	○	○
0.040 m ³	350 mm	400 mm	3	36.6kg	○	○
0.044 m ³	400 mm	450 mm	3	38.6 kg	○	□
0.050 m ³	450 mm	500 mm	3	40.9 kg	□	△

○ Suitable for materials with density of 2 000 kg/m³ or less
△Suitable for materials with density of 1 100kg/m³ or less

□ Suitable for materials with density of 1 600 kg/m³ or less

LIFTING CAPACITIES (Without bucket) AX17u /AX19u

- Notes: 1. Ratings are based on ISO 10567.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is the center-line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.



A: Load radius
B: Load point height
C: Lifting capacity

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

AX17u 3-Pillar Canopy Version, Blade above Ground						 Rating over-front	 Rating over-side or 360 degrees	Unit: 1 000 kg		
Conditions	Load point height m	Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m				
										meter
Boom 1.82 m	2							0.26	0.24	2.98
Arm 0.93 m	1			0.45	0.42	0.25	0.23	0.22	0.20	3.27
Heavier counterweight 120 kg	0 (Ground)			0.42	0.39	0.24	0.22	0.22	0.21	3.15
Rubber shoe 230 mm	-1	*1.12	*1.12	0.42	0.39			0.29	0.28	2.58

AX17u 3-Pillar Canopy Version, Blade on Ground						 Rating over-front	 Rating over-side or 360 degrees	Unit: 1 000 kg		
Conditions	Load point height m	Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m				
										meter
Boom 1.82 m	2							*0.40	0.24	2.98
Arm 0.93 m	1			*0.70	0.42	*0.44	0.23	*0.41	0.20	3.27
Heavier counterweight 120 kg	0 (Ground)			*0.81	0.39	*0.46	0.22	*0.42	0.21	3.15
Rubber shoe 230 mm	-1	*1.12	*1.12	*0.63	0.39			*0.42	0.28	2.58

AX19u 3-Pillar Canopy Version, Blade above Ground						 Rating over-front	 Rating over-side or 360 degrees	Unit: 1 000 kg		
Conditions	Load point height m	Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m				
										meter
Boom 1.82 m	2					0.30	0.28	0.27	0.26	3.18
Arm 1.13m	1			0.53	0.49	0.29	0.27	0.24	0.22	3.44
Counterweight 240 kg	0 (Ground)			0.49	0.46	0.28	0.26	0.24	0.23	3.34
Rubber shoe 230 mm	-1	0.94	0.94	0.49	0.46			0.30	0.29	2.81

AX19u 3-Pillar Canopy Version, Blade on Ground						 Rating over-front	 Rating over-side or 360 degrees	Unit: 1 000 kg		
Conditions	Load point height m	Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m				
										meter
Boom 1.82 m	2					0.36	0.28	0.36	0.26	3.18
Arm 1.13m	1			0.64	0.49	0.42	0.27	0.38	0.22	3.44
Counterweight 240 kg	0 (Ground)			0.81	0.46	0.46	0.26	0.39	0.23	3.34
Rubber shoe 230 mm	-1	0.94	0.94	0.69	0.46			0.41	0.29	2.81

SPECIFICATIONS AX26u

ENGINE	
Model	3TNV76
Type	Water-cooled, 4-cycle, swirl combustion chamber injection type diesel engine
No. of cylinders	3
Rated power	
ISO 14396, net	15.6 kW at 2 500 min ⁻¹
ISO 9249, net	14.5 kW at 2 500 min ⁻¹
SAE J1349, net	14.5 kW at 2 500 min ⁻¹
Maximum torque	64.1 Nm at 1 800 min ⁻¹
Piston displacement	1.115 L
Bore and stroke	76 mm x 82 mm
Batteries	1 × 12 V / 36 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps	
Main pumps	2 variable displacement axial piston pumps 1 gear pump
Maximum oil flow	2 x 30.0 L/min 1 x 16,3 L/min
Pilot pump	1 gear pump
Maximum oil flow	6.8 L/min

Hydraulic Motors	
Travel	2 variable displacement axial piston motors
Swing	1 gear motor

Relief Valve Settings	
Implement circuit	24.5 MPa (250 kgf/cm²)
Swing circuit	18.6 MPa (190 kgf/cm²)
Travel circuit	24.5 MPa (250 kgf/cm²)
Pilot circuit	3.9 MPa (40 kgf/cm²)

	Quantity	Bore	Rod diameter	Stroke
Boom (4-Pillar canopy)	1	75 mm	45 mm	567 mm
Boom (Cab)	1	75 mm	45 mm	553 mm
Arm	1	65 mm	40 mm	549 mm
Bucket	1	55 mm	35 mm	437 mm
Blade	1	75 mm	45 mm	144 mm
Boom swing	1	75 mm	40 mm	415 mm

UPPERSTRUCTURE

Swing Device	
The axial piston motor with planetary reduction gear is bathed in oil and the swing circle is single-row. The swing parking brake is of the spring-set/hydraulic-released disc type.	
Swing speed	9.1 min ⁻¹ (rpm)
Swing torque	3.6 kNm (367 kgfm)

BUCKET AND ARM DIGGING FORCE	
Arm length	1.30 m
Bucket digging force ISO	22.3 kN (2 270 kgf)
Bucket digging force SAE : PCSA	18.0 kN (1 830 kgf)
Arm crowd force ISO	14.5 kN (1 480 kgf)
Arm crowd force SAE : PCSA	13.6 kN (1 390 kgf)

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. A 2.10 m boom and 1.30 m arm are available.

Buckets		No. of teeth	Weight	Recommendation	
Capacity	Width			ISO heaped	Arm 1.30 m
	Without side cutters	With side cutters			
0.07 m³	400 mm	450 mm	3	61.0 kg	○
0.08 m³	450 mm	500 mm	3	64.0 kg	○

Suitable for materials with density of 2 000 kg/m³ or less

UNDERCARRIAGE

Tracks
Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame.

Numbers of Rollers on Each Side	
Upper roller	1
Lower rollers	4

Travel Device	
Each track driven by a 2-speed axial piston motor. Parking brake is of the spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.	
Travel speeds	High : 0 to 4.5 km/h Low : 0 to 2.9 km/h
Maximum traction force ...	20.1 kN (2 050 kgf)
Gradeability	47% (25 degree) continuous

SERVICE REFILL CAPACITIES

Fuel tank	31.3 L
Engine coolant	3.1 L
Engine oil	3.7 L
Travel device (each side)	0.6 L
Hydraulic system	39.0 L
Hydraulic oil tank	24.0 L

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure				
4-PILLAR CANOPY Including 2.10 m boom, 0.08 m³ bucket (ISO heaped) .				
Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm²)
Rubber shoe	300 mm	1.30 m	2 570 *	25.9 (0.26)

* Operating weight with fully serviced, +80 kg operator ISO 6016.

CAB				
Including 2.10 m boom, 0.08 m³ bucket (ISO heaped) .				
Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm²)
Rubber shoe	300 mm	1.30 m	2 720 *	25.9 (0.26)

* Operating weight with fully serviced, +80 kg operator ISO 6016.

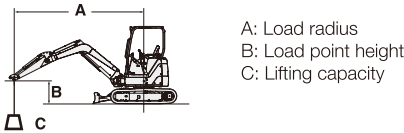
SOUND LEVEL

Sound level canopy according to ISO 6396	LpA 78 dB(A)
Sound level CAB according to ISO 6396	LpA 78 dB(A)
External sound level according to ISO 6395 and EU Directive 2000/14/EC	LwA 93 dB(A)

Operator's Cab	
An independent spacious cab, 1 050 mm wide by 1 610 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened.	
* International Organization for Standardization	

LIFTING CAPACITIES (Without bucket) AX26u

- Notes:
1. Ratings are based on ISO 10567.
 2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = Ground.



For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

AX26u 4-Pillar Canopy Version, Blade above Ground

Conditions	Load point height m	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		meter		
Boom 2.10 m	2					0.54	0.40			0.35	0.25	3.93
Arm 1.30m	1					0.51	0.32	0.33	0.24	0.32	0.23	4.07
Counterweight 240 kg	0 (Ground)			0.91	0.62	0.48	0.33			0.33	0.24	3.90
Rubber shoe 300 mm	-1	*1.68	*1.68	0.92	0.63	0.48	0.35			0.41	0.30	3.35
	-2			0.88	0.68					0.88	0.57	2.01

AX26u 4-Pillar Canopy Version, Blade on Ground

Conditions	Load point height m	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		meter		
Boom 2.10 m	2					0.75	0.40			0.59	0.25	3.93
Arm 1.30m	1					1.01	0.37	0.76	0.24	0.63	0.23	4.07
Counterweight 240 kg	0 (Ground)			1.81	0.62	1.18	0.35			0.77	0.24	3.90
Rubber shoe 300 mm	-1	*1.68	*1.68	1.94	0.63	1.09	0.35			0.89	0.30	3.35
	-2			0.88	0.68					0.88	0.67	2.01

AX26u CAB Version, Blade above Ground

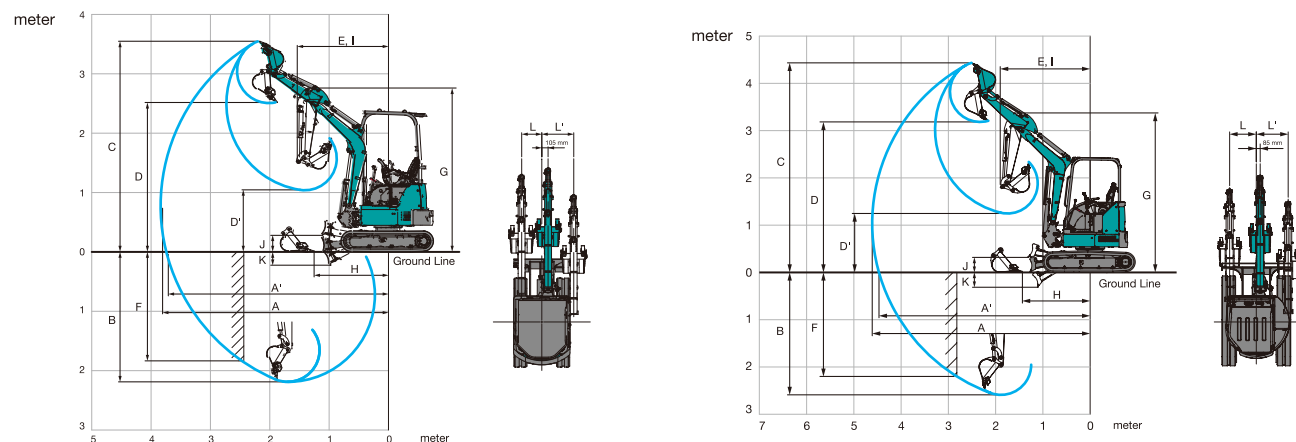
Conditions	Load point height m	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		meter		
Boom 2.10 m	2					0.56	0.41			0.35	0.26	3.93
Arm 1.30m	1					0.52	0.38	0.33	0.24	0.33	0.24	4.07
Counterweight 240 kg	0 (Ground)			0.93	0.64	0.50	0.36			0.34	0.25	3.90
Rubber shoe 300 mm	-1	*1.68	*1.68	0.94	0.65	0.50	0.36			0.43	0.31	3.35
	-2			0.88	0.69					0.88	0.69	2.01

AX26u CAB Version, Blade on Ground

Conditions	Load point height m	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		meter		
Boom 2.10 m	2					0.75	0.41			0.59	0.26	3.93
Arm 1.30m	1					1.01	0.38	0.74	0.24	0.63	0.24	4.07
Counterweight 240 kg	0 (Ground)			1.81	0.64	1.18	0.36			0.77	0.25	3.90
Rubber shoe 300 mm	-1	*1.68	*1.68	1.94	0.65	1.09	0.36			0.89	0.31	3.35
	-2			0.88	0.69					0.88	0.69	2.01

WORKING RANGES & DIMENSIONS

WORKING RANGES



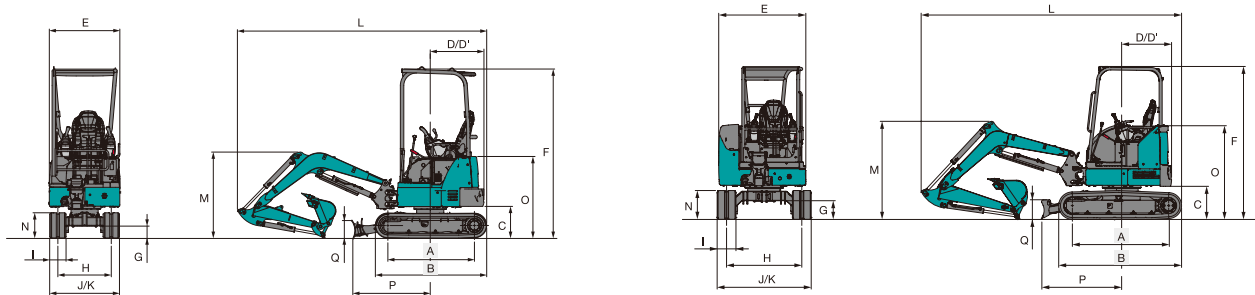
This illustration shows with 0,93 m arm, 0,044 m³ bucket and 230 mm rubber shoes and heavier counterweight 240 kg.

This illustration shows with 1,17 m arm, 0,08 m³ bucket and 300 mm rubber shoes.

Unit: mm

	AX17u-7	AX19u-7	AX26u-7	
	Arm 0.93 m	Arm 1.30 m	Arm 1.30 m	
	3-Pillar Canopy	3-Pillar Canopy	4-Pillar Canopy	Cab
A Max. digging reach	3 810	3 990	4 710	
A' Max. digging reach (on ground)	3 720	3 900	4 570	
B Max. digging depth	2 190	2 390	2 730	
C Max. cutting height	3 540	3 640	4 450	4 260
D Max. dumping height	2 510	2 610	3 200	3 030
D' Min. dumping height	1 040	850	1 120	1 030
E Min. swing radius	1 530	1 620	1 940	2 020
F Max. vertical wall digging depth	1 840	2 020	2 200	
G Front height at Min. swing radius	2 770	2 770	3 380	3 290
H Min. level crowding distance	1 230	1 170	1 430	
I Working radius at Min. swing radius (Max. boom-swing angle)	1 060	1 060	1 270	1 320
J Blade bottom highest position above ground	230	230	320	
K Blade bottom lowest position above ground	260	260	315	
L/L' Offset distance	355 / 555	355 / 555	555 / 700	
Max. boom-swing angle (deg.)	70 / 50	70 / 50	70 / 60	

DIMENSIONS



This illustration shows with 0,93 m arm, 0,044 m³ bucket and 230 mm rubber shoes and heavier counterweight 240 kg.

This illustration shows with 1,17 m arm, 0,08 m³ bucket and 300 mm rubber shoes.

Unit: mm

	AX17u-7	AX19u-7	AX26u-7	
	3-Pillar Canopy	3-Pillar Canopy	4-Pillar Canopy	Cab
A Distance between tumblers	1 210	1 210	1 530	
B Undercarriage length	1 570	1 570	1 960	
C Counterweight clearance	450	450	540	
D Rear-end swing radius	680	755	870	
D' Rear-end length	680	755	870	
E Overall width of upperstructure	990	990	1 390	1 420
F Overall height of cab	2 380	2 380	2 430	
G Min. ground clearance	165	165	300	
H Track gauge (Retract / Extend)	750 / 1 050	750 / 1 050	1 200	
I Track shoe width	230	230	300	
J Undercarriage (Blade) width (Retract / Extend)	980 / 1 280	980 / 1 280	1 500	
K Overall width (Retract / Extend)	990 / 1 280	990 / 1 280	1 500	
L Overall length	3 500	3 540	4 100	
M Overall height of boom	1 210	1 390	1 640	
N Track height	360	360	465	
O Engine cover-height	1 150	1 150	1 490	1 470
P Horizontal distance to blade	1 090	1 090	1 280	
Q Blade height	260	260	320	

Data in () are dimensions of counterweight 120 kg.

EQUIPMENT

AX17u / 19u

ENGINE	
Alternator 12V-40A	●
Cartridge-type engine oil filter	●
Electric fuelfeed pump	●
Fuel main filter	●
Radiator reserve tank	●
Water-separator for engine fuel	●

HYDRAULIC SYSTEM	
Full-flow filter	●
Hydraulic pilot type control levers	●
Pilot control shut-off lever with neutral engine start system	●
Pilot filter	●
Suction filter	●
Swing parking brake	●
Travel parking brake	●
Two-speed travel system	●
Valve for extra piping	●

* Hokuetsu Industries EUROPE B.V. cannot be held liable for theft, any system will just minimize the risk of theft.

Standard and optional equipment may vary by country, so please consult your Hokuetsu dealer for details.

● : Standard equipment

○ : Optional equipment

3-PILLAR CANOPY	
Anti-slip plate	●
Arm rests	●
Electric horn	●
Floor mat	●
ROPS/OPG canopy	●
Seat belt	●
Suspension seat	●

UPPER STRUCTURE	
Batteries 1X36 Ah	●
Batteries disconnect switch	●
Counterweight 120 kg AX17u	●
Heavier counterweight 240 kg AX19u	●

UNDERCARRIAGE	
Retractable undercarriage	●
Rubber shoe 230 mm	●

FRONT ATTACHMENTS	
Arm 0.93 m (AX17u)	●
Boom 1.82 m (AX17u)	●
Arm 1.13 m (AX19u)	●
Boom 1.82 m (AX19u)	●
Extra piping	●
HN bushing	●

Standard and optional equipment may vary by country, so please consult your Hokuetsu dealer for details.

● : Standard equipment

○ : Optional equipment

4-PILLAR CANOPY	
Anti-slip plate	●
Arm rests	●
Drink holder	●
Electric horn	●
Floor mat	●
Power outlet 12V (inside)	●
ROPS/OPG canopy	●
Seat belt	●
Suspension seat	●

CAB	
AM/FM radio	○
Anti-slip plate	●
Arm rests	●
Defroster	●
Drink holder	●
Electric horn	●
Floor mat	●
Heater	●
Power outlet 12V (inside)	●
Power outlet 12V (outside)	●
ROPS/OPG cab	●
Seat belt	●
Spare power supply	●
Suspension seat	●
Window washer	●
Wiper	●

UPPER STRUCTURE	
Auxiliary function lever (AFL)	○
Auxiliary overload relief valve	○
Batteries 1X36 Ah	●
Batteries disconnect switch	●
Counterweight (cab) 210 kg	●
Counterweight (4-pillar canopy) 240 kg	●
Pilot accumulator	○

UNDERCARRIAGE	
Rubber shoe 300 mm	●

FRONT ATTACHMENTS	
Arm 1.30 m	●
Boom 2.10 m	●
Extra piping	●
HN bushing	●

* Hokuetsu Industries EUROPE B.V. cannot be held liable for theft, any system will just minimize the risk of theft.

The Airman family from 1.100 kg to 5.500 kg



SAFETY

- Operate safely in accordance with the proper operation manual.
- To prevent troubles and accidents, make sure to perform daily and preventive maintenance checks.

AIRMAN®

HOKUETSU INDUSTRIES EUROPE B.V.

Aalsmeerderdijk 156, 1438 AX Oude Meer, The Netherlands

Tel: 31-20-6462636 Fax: 31-20-6462191

E-mail: info@hokuetsu.nl

DISTRIBUTOR :