



connecting cable.

To prevent defective contacts, do not touch the connecting terminals of the connectors with bare hands.

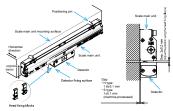
Disposal of Old Electrical & Electronic Equipment (applicable in the European Union and other European countries with separate collection systems)

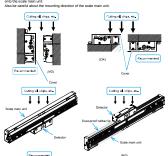


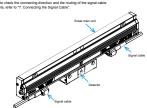
China RoHS Compliance Information
This product meets China RoHS requirements. See the table
产品中有害物疾的名称及合量

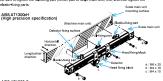
		有害物质											
部件名称		18	汞	W	六价镍	多溴联苯	多溴二苯醚						
		(Pb)	(Hg)	(Cd)	(Cr (VI))	(P88)	(PBDE)						
	本体	0	0	0	0	0	0						
	电气设备部分	×	0	0	0	0	0						
	配件	0	0	0	0	0	0						

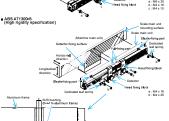


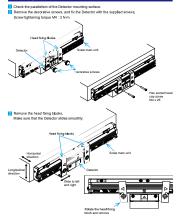


















	High precision specification	High rigidity specification					
Items	ABS AT 1300-H Series	ABS AT1300-S Series					
Scale main unit installation specifications	Elastic firing at three or five points						
Datum point position for length variation due to temperature changes	Center of effective measurement length						
ABS origin point (output data is 0)	Center of effective measurement length						
Effective measurement length (mm)	100, 150, 200, 250, 300 350, 400, 450, 500, 600 700, 750, 800, 900, 1000	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1100 1200, 1300, 1400, 1500 1600, 1800, 2000, 2200					
Detection method	Photoelectric type ABS linear encoder						
VO method	High-speed serial interface						
Resolution (µm)	0.001/0.01/0.05						
Maximum response speed (m/min)	180						
Indication precision (µm) at 20 °C	2+2L/1000 L _c : Effective measurement length (mm)	3+3L/1000 L _c : Effective measurement length (mm)					
Coefficient of thermal expansion	#8 x	10°/K					
Vibration resistance (55 Hz—2000 Hz)	s 147 m/s²	≤ 196 m/s²					
Shock resistance (1/2 sin, 11 ms)	≤ 196 m/s²	s 343 m/s²					
Power supply voltage/current consumption	5 VDC ± 10% / 270 s	nA (maximum value)					
Signal cable length	Maximum 29 m (signal	cable + feedback cable)					
Used'storage temperature and humidity range	0 °C—50 °C / -20 °C—70 °C, 20 %—80 % RH (non condensation)						
to a conference	According to the Manager of the Control of the Cont	is Consection and ESSUIC Companies					

- 0	Discrete-wire speci	fication cable				
ſ	Cable color	Signal	Cable color	Signal		
ſ	Brown	DT	White	+5 V		
ſ	Red	/DT	Black	GND		
ſ	Orange	RQDT	Shielded wire	Frame ground		
Ì	Yellow	/RQDT				

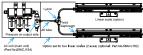
Items	Specifications
Maximum particle diameter (µm)	0.1
Lowest pressure dew point (°C)	+3
Oil concentration (mg/m3)	0.01

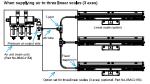
Conditions	Air flow rate
Using Mitutoyo's fixed diaphragm (ID: e0.9)	Make adjustment with the air pressure, so that the air flow becomes 10 L/min—20 L/min (per scale unit). Reference values when supplying air to one axis are as follows. # Ear pressure is 0.1 MPa: approx. 12 L/min # Ear pressure is 0.2 MPa: approx. 10 L/min
Using other fixed diaphragms	Make edjustment with the air pressure, so that the air flow becomes 10 Limir—20 Limir (per scale unit).
Using flow rate adjustable	Make adjustment with the air pressure, so that the air flow becomes 10 Limis—20 Limis pair scale until. For information on the air flow and pressure relationships, refer to the flow characteristic (I) of the fixed dispharger and flow-pressure relationship provided by each presumable component manufacturer.
	NOTICE Make sure not to supply a large amount of air before making adjustments. Otherwise, it may cause correceints to break thereby essetting in malfunctions.



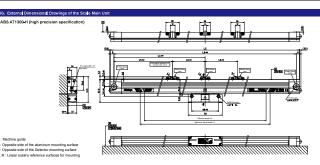
				Part No.		
No.	Component	Appearance	Specifications	Part No. (Mitutoyo)	Manufacturer Model	
(1)	Air filter	V	Hust: Compressed air Maximum operating pressure: 1.0 MPa Proof pressure: 1.5 MPa Maximum pericle diameter (Hiration): 5 µm Secondary oil concentration: -		F1000-8-W (CKD)	
(2)	Oil mist filter		Platif. Compressed air Maximum operating pressure: 1.0 MPa Proof pressure: 1.5 MPa Maximum partide dismater (Platitar); 0.01 µm Secondary oil concentration: 0.01 mg/m3 or below Element replacement: one year (0.00 hours) or when pressure is lowered to 0.1 MPa or lower.	-	M1000-8-W (CKD)	
(3)	High performance of mist filter	¥	Fluid: Compressed air Maximum operating pressure: 1.0 MPa Proof pressure: 1.5 MPa Maximum partide Gameter (Pladise); 0.01 pm Secondary oil concentration: 0.001 regim3 or below Element replacement: one year (8000 hours) or when pressure is lowered to 0.1 MPa or how	-	MX1000-8-W (CKD)	
(4)	Regulator	à	Fluid: Compressed air Maximum operating pressure: 1.0 MPa Proof pressure: 1.5 MPa Set pressure range: 0.1 MPa—0.7 MPa Oil proof treatment type		RA-050-L (CKD)	
(5)	Fixed diaphragm	1	Plaid: Air Set pressure range: 0.1 MPa—0.9 MPa Screw tightering torque: 1.0 N:m—1.5 N·m Flow rate at pressure 0.1 MPa: Approx. 12.7 Limin (per axes) Flow rate at pressure 0.2 MPa: Approx. 19 L/ emin (per axes)	06ACJ155	PC6-M5M-0.9 (Pisco custom order)	
(1) to (4)	Airunit	See the next figure.	Equivalent to ISO-8573 - Cliess 1.4.1 Maximum partide diameter officialist(0.01 pm Lowest pressure deserpoint - Oil concentration (oil mist concentration): 0.001 regins or less on 1.001 regins or less on Floor rate at pressure O.1 MPar 12.7 Limin (per axis) (per axis) Man to applace each element 1 year	06ACJ154		



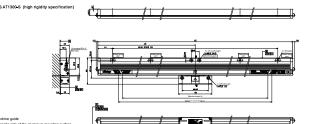




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Set No.	Applicable models	Include	d items				
06AFY988			Conversion unit manual				
06AFY987			Device Driver (CD-ROM) Installation manual				
06AFY989	ABS 1350	(one of the units below)	Connecting cable A (USB cable) Connecting cable B				



													Unit: mm	
Effective length L ₀	Maximum travel distance L ₁	Full length L ₂	Mounting pitch L ₃	r.	L	L	Effective length L ₁	Maximum travel distance L,	Full length L ₂	Mounting pitch L ₁	L,	L	L,	
100	120	265	249	124.5	Λ		500	520	665	649	324.5		/	
150	170	315	299	149.5	\		600	620	765	749	(374.5)	204.5	170	
200	220	365	349	174.5	\		700	720	865	849	(424.5)	224.5	200	
250	270	415	399	199.5	\		750	770	915	899	(449.5)	224.5	225	
300	320	465	449	224.5	\	\	800	820	965	949	(474.5)	244.5	230	
350	370	515	499	249.5	l \	\	900	920	1065	1049	(524.5)	264.5	260	
400	420	565	549	274.5	\	\	1000	1020	1165	1149	(574.5)	284.5	290	
450	470	615	599	299.5	\	\ \								



S: Opposite side of the Detector mounting surface Q, R: Linear scale's reference surfaces for mounting				:!!				111							<i> </i>	
															Unit of L0 to	L5 and P:
Effective length L ₁	Maximum travel distance L _i	Full length L ₃	L ₃	L,	La	Р	n		Effective length L _s	Maximum travel distance L	Full length L ₂	L ₀	L	L	Р	
100	120	225	112.5	37.5	150	75	2	1	1100	1120	1225	612.5	87.5	1050	175	6
200	220	325	162.5	37.5	250	125	2	1	1200	1220	1325	616.5	62.5	1200	200	6
300	320	425	212.5	37.5	350	175	2	1	1300	1320	1425	712.5	112.5	1200	150	8
400	420	525	262.5	62.5	400	200	2	1	1400	1420	1525	762.5	62.5	1400	175	8
500	520	625	312.5	62.5	500	125	4	1	1500	1520	1625	812.5	112.5	1400	175	8

length L _e	travel distance L ₁	Full length L ₂	L ₃	L,	L	Р	n	length L _c	distance L,	Full length L ₂	L ₀	L	L,	Р	•
100	120	225	112.5	37.5	150	75	2	1100	1120	1225	612.5	87.5	1050	175	6
200	220	325	162.5	37.5	250	125	2	1200	1220	1325	616.5	62.5	1200	200	6
300	320	425	212.5	37.5	350	175	2	1300	1320	1425	712.5	112.5	1200	150	8
400	420	525	262.5	62.5	400	200	2	1400	1420	1525	762.5	62.5	1400	175	8
500	520	625	312.5	62.5	500	125	4	1500	1520	1625	812.5	112.5	1400	175	8
600	620	725	382.5	62.5	600	150	4	1600	1620	1725	862.5	62.5	1600	200	8
700	720	825	412.5	62.5	700	175	4	1800	1820	1925	962.5	87.5	1750	175	10
800	820	925	462.5	62.5	800	200	4	2000	2020	2125	1062.5	62.5	2000	200	10
900	920	1025	512.5	62.5	900	150	6	2200	2220	2325	1162.5	112.5	2100	175	12
1000	1020	1125	562.5	37.5	1050	175	6								