

Assembly Type ABS AT Series

Absolute Scale Unit (Slim Type)

ABS AT1300 Series

(Resolution 0.001/0.01/0.05 μm)



ABSOLUTE™

Features

- Outstanding resistance to contamination compared to conventional optical types by using a new detection principle (in-house testing result).
- Features a new coolant-proof design incorporating a high-performance rubber seal to provide higher reliability in the harsh factory environment.
- Delivers high accuracy and the outstanding resolution of 0.001 μm , the best-in-class in absolute scales.
- Allows space-saving design thanks to a slim form. (AT500-S and AT500-H are compatible with each other in installation.)
- Supports the interfaces of various manufacturers allowing a variety of system configurations.

Meaning of Model No.

ABS AT13□□□ - □□□□ - □

Interface specifications

Applicable system	Model
FANUC CORPORATION Serial α i Series	ABS AT135□
Mitsubishi Electric Corporation MDS-D/MDS-DH Series	ABS AT134□
Mitsubishi Electric Corporation MELSERVO servo amplifier MR-J4 Series	ABS AT134□A
Yaskawa Electric Corporation Servopack Σ -7 Series	ABS AT138□A
Mitutoyo ENSIS	ABS AT130□A

Effective range

Type of the scale unit
S: High rigidity type
H: High accuracy type

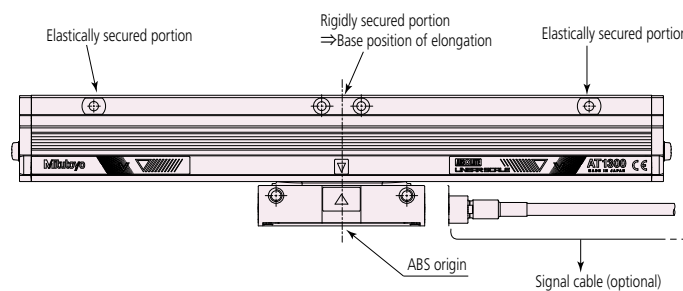
Note 1: Be sure to contact each manufacturer for details of the applicable systems.

Note 2: ABS AT13□□□

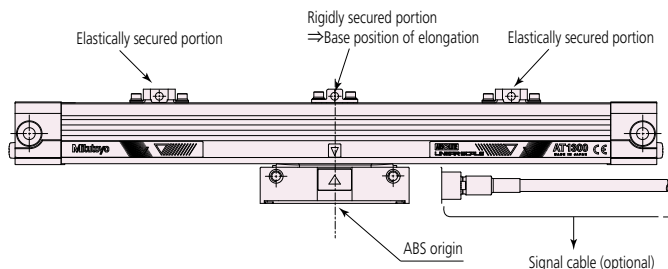
Resolution Transmission method
7: 0.001 μm Nothing: Full duplex communication
4: 0.01 μm A: Half-duplex communication
3: 0.05 μm

Scale configuration

[ABS AT1300-S Series]



[ABS AT1300-H Series]



Note: Signal cable is optional.

For Output specifications and Lineup of Cables, refer to page 62 and 63.

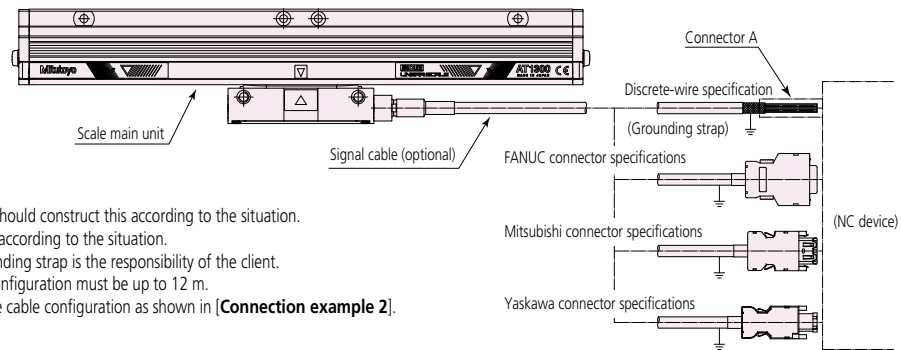
Mitutoyo

Specifications

Items	Model	High rigidity type	High accuracy type
		ABS AT13□□(A)-S	ABS AT13□□(A)-H
Detection method		Optical linear encoder	
Mounting method		Multi-point elastic fixing	3 or 5-point elastic fixing
Reference position for expansion due to temperature variation		Center of the effective measuring length	
Effective range		19 types: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1800, 2000, 2200 mm	15 types: 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 750, 800, 900, 1000 mm
Resolution		0.001/0.01/0.05 μm	
Maximum response speed		3,000 mm/s	
Indication accuracy (20° C)		3 + 3L _o /1000 (μm)	2 + 2L _o /1000 (μm)
Expansion coefficient		≈8×10 ⁻⁶ /K	
Vibration resistance		≤196 m/s ² (55 - 2000 Hz)	≤147 m/s ² (55 - 2000 Hz)
Shock resistance		≤343 m/s ² (1/2 sin 11 ms)	≤196 m/s ² (1/2 sin 11 ms)
Power supply voltage		5 VDC ± 10%	
Maximum current consumption		270 mA (Max)	
Operational temperature/humidity ranges		0 to 50 °C 20 to 80%RH (non-condensing)	
Storage temperature/humidity ranges		-20 to 70 °C 20 to 80%RH (non-condensing)	

System Configuration (Example)

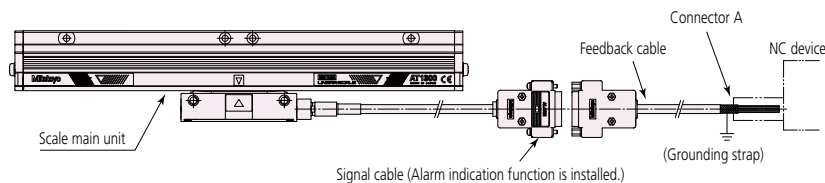
[Connection example 1]



(NOTE)

1. The signal cable is an option. The client should construct this according to the situation.
2. The client should configure connector A according to the situation.
3. Installation of connector A and the grounding strap is the responsibility of the client.
4. Each cable length in the above system configuration must be up to 12 m.
If any cable length exceeds 12 m, use the cable configuration as shown in [Connection example 2].

[Connection example 2]



- Connector A on the NC unit side needs to be prepared by the client.
- Connecting work of connector A and the earth bar should be performed by the client.
Follow the manual of the NC unit to be used for the detailed description of this connection.
- When using a client prepared feedback cable, refer to the following.
Maximum cable length (signal cable + feedback cable)···29 m*
Recommended cable material: A66L-0001-0286 (supplied by Hitachi Cable, Ltd. or Oki Electric Cable Co., Ltd.)
* If the total length of cables is 13 to 29 m, then the maximum signal cable length should be 6 m.

(NOTE)

1. If you use other than the recommended cable above-described, be sure to use a shielded cable in which the total impedance of power lines (+5 V and 0 V) is 0.65 Ω or less for the entire length.
2. Route the feedback cable so that it will not be repeatedly bent.

Output specifications

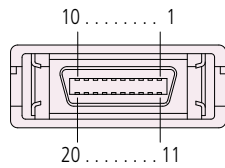
• Flying lead specifications

Wire color	Signal
Brown	SD
Red	*SD
Orange	RQ (REQ)
Yellow	*RQ (REQ)
White (2P)	+5 V
Black (2P)	GND
Shield wire	F.G

* Cable to be constructed by the client (A total of 29 m with the signal cable).

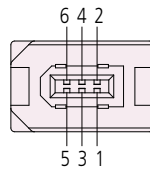
• FANUC connector specifications

Pin No.	Signal
1	SD
2	*SD
5	RQ (REQ)
6	*RQ (REQ)
12, 14	GND
18, 20	+5 V
16	F.G
3, 4, 7 - 11, 13, 15, 17, 19	Not used



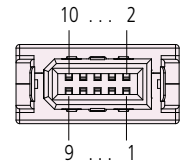
• Yaskawa connector specifications

Pin No.	Signal
1	5 V
2	GND
5	S
6	/S
3, 4	Not used
Connector shell	F.G



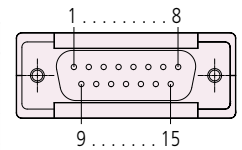
• Mitsubishi connector specifications

Pin No.	Signal
1	5 V
2	GND
3	RQDT
4	\overline{RQDT}
7	DT
8	\overline{DT}
5, 6, 9, 10	Not used
Connector shell	F.G



• Signal cable (Alarm indication function is installed) (D-sub connector: Pin contact, 15-pin)

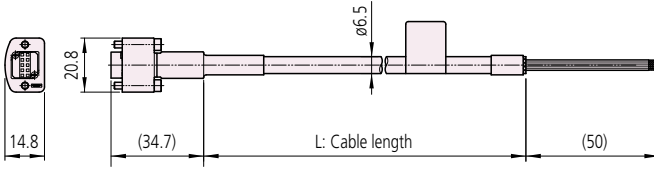
Pin No.	Signal
1, 2, 13	GND
3, 4, 11	+5 V
5	DT
6	\overline{DT}
7	RQDT
8	\overline{RQDT}
9, 10, 12, 14	Not used
15	F.G
Connector shell	F.G



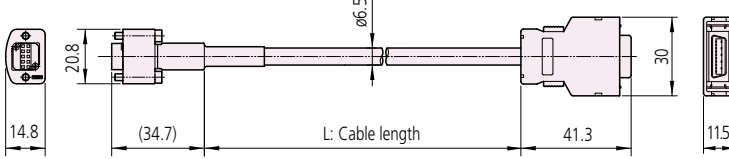
Cable Dimensions

Unit: mm

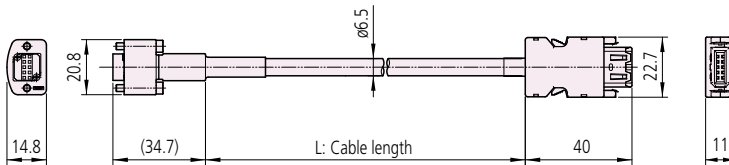
Flying lead specifications



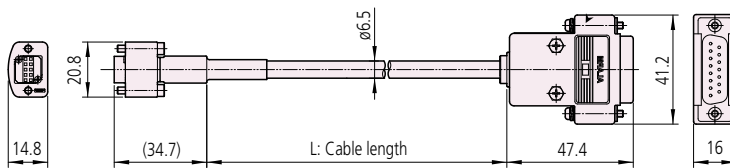
FANUC connector specifications



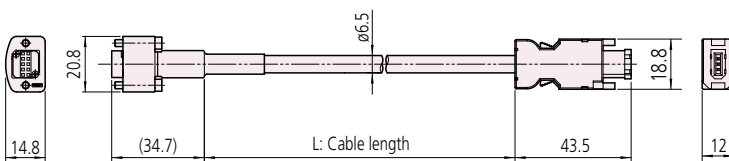
Mitsubishi connector specifications



Signal cable (Alarm indication function is installed) (D-sub connector: Pin contact, 15-pin)



Yaskawa connector specifications



Order No.	Model	Cable length (m)
06AFS310-1	AT1300 discrete-wire cable 1 m	1
06AFS310-2	AT1300 discrete-wire cable 2 m	2
06AFS310-3	AT1300 discrete-wire cable 3 m	3
06AFS310-4	AT1300 discrete-wire cable 4 m	4
06AFS310-5	AT1300 discrete-wire cable 5 m	5
06AFS310-6	AT1300 discrete-wire cable 6 m	6
06AFS310-7	AT1300 discrete-wire cable 7 m	7
06AFS310-8	AT1300 discrete-wire cable 8 m	8
06AFS310-9	AT1300 discrete-wire cable 9 m	9
06AFS310-12	AT1300 discrete-wire cable 12 m	12

Order No.	Model	Cable length (m)
06AFS312-1	AT1300 Cable FUNUC 1 m	1
06AFS312-2	AT1300 Cable FUNUC 2 m	2
06AFS312-3	AT1300 Cable FUNUC 3 m	3
06AFS312-4	AT1300 Cable FUNUC 4 m	4
06AFS312-5	AT1300 Cable FUNUC 5 m	5
06AFS312-6	AT1300 Cable FUNUC 6 m	6
06AFS312-7	AT1300 Cable FUNUC 7 m	7
06AFS312-8	AT1300 Cable FUNUC 8 m	8
06AFS312-9	AT1300 Cable FUNUC 9 m	9
06AFS312-12	AT1300 Cable FUNUC 12 m	12

Order No.	Model	Cable length (m)
06AFS311-1	AT1300 Cable MDS-D 1 m	1
06AFS311-2	AT1300 Cable MDS-D 2 m	2
06AFS311-3	AT1300 Cable MDS-D 3 m	3
06AFS311-4	AT1300 Cable MDS-D 4 m	4
06AFS311-5	AT1300 Cable MDS-D 5 m	5
06AFS311-6	AT1300 Cable MDS-D 6 m	6
06AFS311-7	AT1300 Cable MDS-D 7 m	7
06AFS311-8	AT1300 Cable MDS-D 8 m	8
06AFS311-9	AT1300 Cable MDS-D 9 m	9
06AFS311-12	AT1300 Cable MDS-D 12 m	12

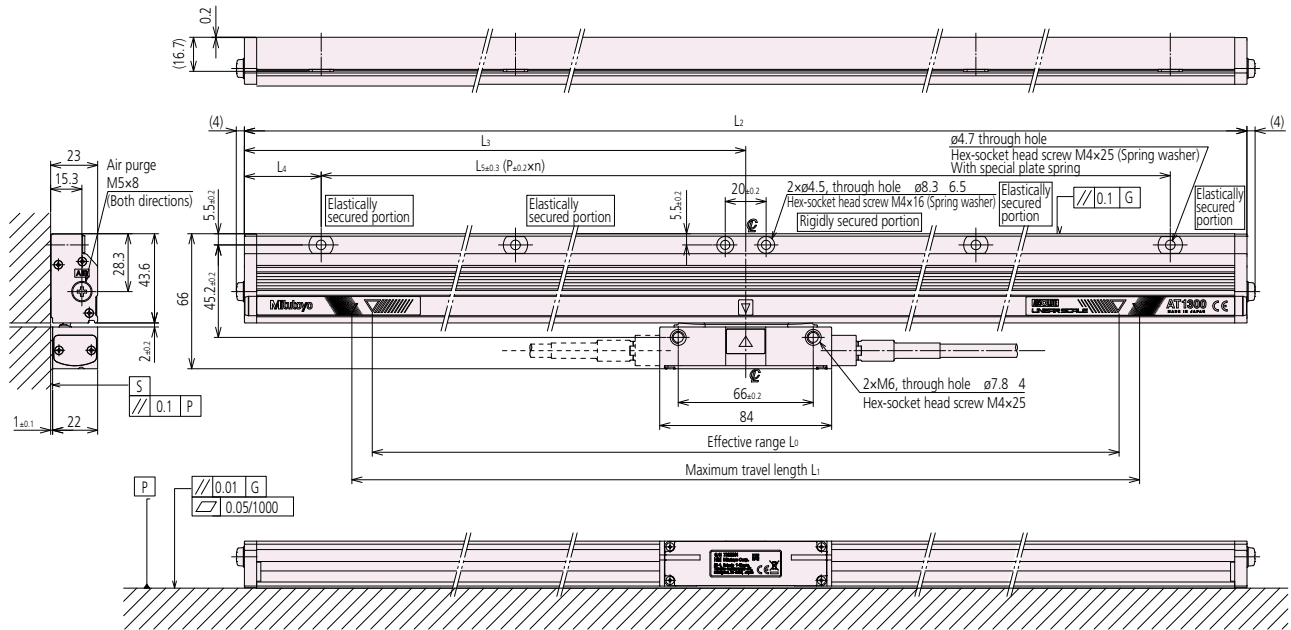
Order No.	Model	Cable length (m)
06AFS313-1	AT1300 Cable D15 1m	1
06AFS313-2	AT1300 Cable D15 2m	2
06AFS313-3	AT1300 Cable D15 3m	3
06AFS313-4	AT1300 Cable D15 4m	4
06AFS313-5	AT1300 Cable D15 5m	5
06AFS313-6	AT1300 Cable D15 6m	6
06AFS313-7	AT1300 Cable D15 7m	7
06AFS313-8	AT1300 Cable D15 8m	8
06AFS313-9	AT1300 Cable D15 9m	9
06AFS313-12	AT1300 Cable D15 12m	12

Order No.	Model	Cable length (m)
06AGN986-1	AT1300 Cable YASKAWA 1 m	1
06AGN986-2	AT1300 Cable YASKAWA 2 m	2
06AGN986-3	AT1300 Cable YASKAWA 3 m	3
06AGN986-4	AT1300 Cable YASKAWA 4 m	4
06AGN986-5	AT1300 Cable YASKAWA 5 m	5
06AGN986-6	AT1300 Cable YASKAWA 6 m	6
06AGN986-7	AT1300 Cable YASKAWA 7 m	7
06AGN986-8	AT1300 Cable YASKAWA 8 m	8
06AGN986-9	AT1300 Cable YASKAWA 9 m	9
06AGN986-12	AT1300 Cable YASKAWA 12 m	12

External View

• ABS AT1300-S Series

Unit: mm



(Note)

1. G represents the machine guide.
2. P indicates the mating surface for mounting the aluminum frame.
3. S indicates the mating surface for mounting the detector head.
4. For the dimensions L_0 to L_3 and P in the figure, refer to the Dimensions list.

Dimensions

Resolution: 0.05 μm

Order No.	Model	Effective range L_0 (mm)	Maximum travel length L_1 (mm)	Overall length L_z (mm)	Distance to the center point L_3 (mm)	Mounting pitch L_4 (mm)	Mounting pitch L_5 (mm)	Mounting pitch P (mm)	n
559-500-□3	ABS AT13□3(A)-100-S	100	120	225	112.5	37.5	150	75	2
559-502-□3	ABS AT13□3(A)-200-S	200	220	325	162.5	37.5	250	125	2
559-504-□3	ABS AT13□3(A)-300-S	300	320	425	212.5	37.5	350	175	2
559-506-□3	ABS AT13□3(A)-400-S	400	420	525	262.5	62.5	400	200	2
559-508-□3	ABS AT13□3(A)-500-S	500	520	625	312.5	62.5	500	125	4
559-509-□3	ABS AT13□3(A)-600-S	600	620	725	362.5	62.5	600	150	4
559-510-□3	ABS AT13□3(A)-700-S	700	720	825	412.5	62.5	700	175	4
559-512-□3	ABS AT13□3(A)-800-S	800	820	925	462.5	62.5	800	200	4
559-513-□3	ABS AT13□3(A)-900-S	900	920	1025	512.5	62.5	900	150	6
559-514-□3	ABS AT13□3(A)-1000-S	1000	1020	1125	562.5	37.5	1050	175	6
559-515-□3	ABS AT13□3(A)-1100-S	1100	1120	1225	612.5	87.5	1050	175	6
559-516-□3	ABS AT13□3(A)-1200-S	1200	1220	1325	616.5	62.5	1200	200	6
559-517-□3	ABS AT13□3(A)-1300-S	1300	1320	1425	712.5	112.5	1200	150	8
559-518-□3	ABS AT13□3(A)-1400-S	1400	1420	1525	762.5	62.5	1400	175	8
559-519-□3	ABS AT13□3(A)-1500-S	1500	1520	1625	812.5	112.5	1400	175	8
559-520-□3	ABS AT13□3(A)-1600-S	1600	1620	1725	862.5	62.5	1600	200	8
559-521-□3	ABS AT13□3(A)-1800-S	1800	1820	1925	962.5	87.5	1750	175	10
559-522-□3	ABS AT13□3(A)-2000-S	2000	2020	2125	1062.5	62.5	2000	200	10
559-523-□3	ABS AT13□3(A)-2200-S	2200	2220	2325	1162.5	112.5	2100	175	12

A numeral for symbol □ in each Order No. and Model No. indicates the following.

- 0: Supports Mitutoyo ENSIS high-speed serial interface
- 3: Supports Mitsubishi Electric Corporation (MDS-D/MDS-DH Series), high-speed serial interface
- 4: Supports Mitsubishi Electric Corporation (MELSERVO MR-J4 Series), high-speed serial interface
- 5: Supports FANUC CORPORATION, high-speed serial interface
- 8: Supports Yaskawa Electric Corporation, high-speed serial interface

Dimensions

Resolution: 0.01 μm

Order No.	Model	Effective range L ₀ (mm)	Maximum travel length L ₁ (mm)	Overall length L ₂ (mm)	Distance to the center point L ₃ (mm)	Mounting pitch L ₄ (mm)	Mounting pitch L ₅ (mm)	Mounting pitch P (mm)	n
559-500-□4	ABS AT13□4(A)-100-S	100	120	225	112.5	37.5	150	75	2
559-502-□4	ABS AT13□4(A)-200-S	200	220	325	162.5	37.5	250	125	2
559-504-□4	ABS AT13□4(A)-300-S	300	320	425	212.5	37.5	350	175	2
559-506-□4	ABS AT13□4(A)-400-S	400	420	525	262.5	62.5	400	200	2
559-508-□4	ABS AT13□4(A)-500-S	500	520	625	312.5	62.5	500	125	4
559-509-□4	ABS AT13□4(A)-600-S	600	620	725	362.5	62.5	600	150	4
559-510-□4	ABS AT13□4(A)-700-S	700	720	825	412.5	62.5	700	175	4
559-512-□4	ABS AT13□4(A)-800-S	800	820	925	462.5	62.5	800	200	4
559-513-□4	ABS AT13□4(A)-900-S	900	920	1025	512.5	62.5	900	150	6
559-514-□4	ABS AT13□4(A)-1000-S	1000	1020	1125	562.5	37.5	1050	175	6
559-515-□4	ABS AT13□4(A)-1100-S	1100	1120	1225	612.5	87.5	1050	175	6
559-516-□4	ABS AT13□4(A)-1200-S	1200	1220	1325	616.5	62.5	1200	200	6
559-517-□4	ABS AT13□4(A)-1300-S	1300	1320	1425	712.5	112.5	1200	150	8
559-518-□4	ABS AT13□4(A)-1400-S	1400	1420	1525	762.5	62.5	1400	175	8
559-519-□4	ABS AT13□4(A)-1500-S	1500	1520	1625	812.5	112.5	1400	175	8
559-520-□4	ABS AT13□4(A)-1600-S	1600	1620	1725	862.5	62.5	1600	200	8
559-521-□4	ABS AT13□4(A)-1800-S	1800	1820	1925	962.5	87.5	1750	175	10
559-522-□4	ABS AT13□4(A)-2000-S	2000	2020	2125	1062.5	62.5	2000	200	10
559-523-□4	ABS AT13□4(A)-2200-S	2200	2220	2325	1162.5	112.5	2100	175	12

Resolution: 0.001 μm

Order No.	Model	Effective range L ₀ (mm)	Maximum travel length L ₁ (mm)	Overall length L ₂ (mm)	Distance to the center point L ₃ (mm)	Mounting pitch L ₄ (mm)	Mounting pitch L ₅ (mm)	Mounting pitch P (mm)	n
559-500-□7	ABS AT13□7(A)-100-S	100	120	225	112.5	37.5	150	75	2
559-502-□7	ABS AT13□7(A)-200-S	200	220	325	162.5	37.5	250	125	2
559-504-□7	ABS AT13□7(A)-300-S	300	320	425	212.5	37.5	350	175	2
559-506-□7	ABS AT13□7(A)-400-S	400	420	525	262.5	62.5	400	200	2
559-508-□7	ABS AT13□7(A)-500-S	500	520	625	312.5	62.5	500	125	4
559-509-□7	ABS AT13□7(A)-600-S	600	620	725	362.5	62.5	600	150	4
559-510-□7	ABS AT13□7(A)-700-S	700	720	825	412.5	62.5	700	175	4
559-512-□7	ABS AT13□7(A)-800-S	800	820	925	462.5	62.5	800	200	4
559-513-□7	ABS AT13□7(A)-900-S	900	920	1025	512.5	62.5	900	150	6
559-514-□7	ABS AT13□7(A)-1000-S	1000	1020	1125	562.5	37.5	1050	175	6
559-515-□7	ABS AT13□7(A)-1100-S	1100	1120	1225	612.5	87.5	1050	175	6
559-516-□7	ABS AT13□7(A)-1200-S	1200	1220	1325	616.5	62.5	1200	200	6
559-517-□7	ABS AT13□7(A)-1300-S	1300	1320	1425	712.5	112.5	1200	150	8
559-518-□7	ABS AT13□7(A)-1400-S	1400	1420	1525	762.5	62.5	1400	175	8
559-519-□7	ABS AT13□7(A)-1500-S	1500	1520	1625	812.5	112.5	1400	175	8
559-520-□7	ABS AT13□7(A)-1600-S	1600	1620	1725	862.5	62.5	1600	200	8
559-521-□7	ABS AT13□7(A)-1800-S	1800	1820	1925	962.5	87.5	1750	175	10
559-522-□7	ABS AT13□7(A)-2000-S	2000	2020	2125	1062.5	62.5	2000	200	10
559-523-□7	ABS AT13□7(A)-2200-S	2200	2220	2325	1162.5	112.5	2100	175	12

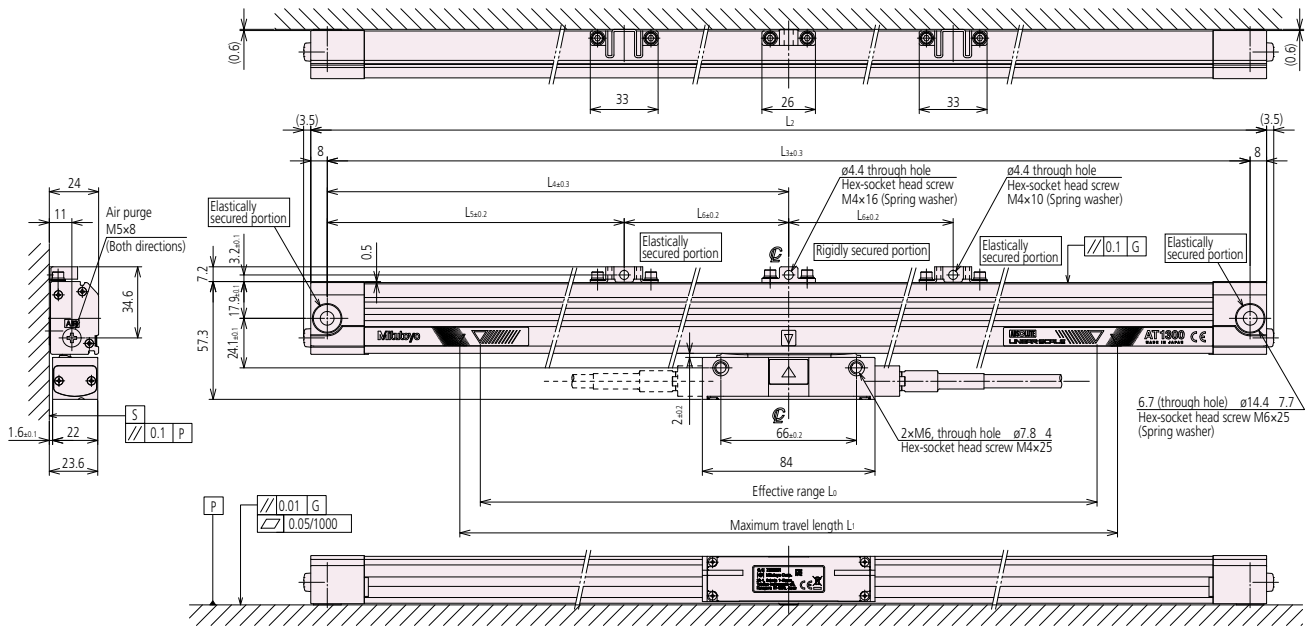
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- 4: Supports Mitsubishi Electric Corporation (MELSERVO MR-J4 Series), high-speed serial interface
- 5: Supports FANUC CORPORATION, high-speed serial interface
- 8: Supports Yaskawa Electric Corporation, high-speed serial interface

External View

• ABS AT1300-H Series

Unit: mm



(Note)

1. G represents the machine guide.
2. P indicates the mating surface for mounting the aluminum frame.
3. S indicates the mating surface for mounting the detector head.
3. For the dimensions L_0 to L_{50} , P and in the figure, refer to the Dimensions list.

Dimensions

Resolution: 0.05 μm

Order No.	Model	Effective range L_0 (mm)	Maximum travel length L_1 (mm)	Overall length L_2 (mm)	Distance to the center point L_4 (mm)	Mounting pitch L_3 (mm)	Mounting pitch L_5 (mm)	Mounting pitch L_6 (mm)
559-524-□3	ABS AT13□3(A)-100-H	100	120	265	124.5	249	—	—
559-525-□3	ABS AT13□3(A)-150-H	150	170	315	149.5	299	—	—
559-526-□3	ABS AT13□3(A)-200-H	200	220	365	174.5	349	—	—
559-527-□3	ABS AT13□3(A)-250-H	250	270	415	199.5	399	—	—
559-528-□3	ABS AT13□3(A)-300-H	300	320	465	224.5	449	—	—
559-529-□3	ABS AT13□3(A)-350-H	350	370	515	249.5	499	—	—
559-530-□3	ABS AT13□3(A)-400-H	400	420	565	274.5	549	—	—
559-531-□3	ABS AT13□3(A)-450-H	450	470	615	299.5	599	—	—
559-532-□3	ABS AT13□3(A)-500-H	500	520	665	324.5	649	—	—
559-533-□3	ABS AT13□3(A)-600-H	600	620	765	(374.5)	749	204.5	170
559-534-□3	ABS AT13□3(A)-700-H	700	720	865	(424.5)	849	224.5	200
559-535-□3	ABS AT13□3(A)-750-H	750	770	915	(449.5)	899	224.5	225
559-536-□3	ABS AT13□3(A)-800-H	800	820	965	(474.5)	949	224.5	230
559-537-□3	ABS AT13□3(A)-900-H	900	920	1065	(524.5)	1049	264.5	260
559-538-□3	ABS AT13□3(A)-1000-H	1000	1020	1165	(574.5)	1149	284.5	290

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- 3: Supports Mitsubishi Electric Corporation (MDS-D/MDS-DH Series), high-speed serial interface
- 4: Supports Mitsubishi Electric Corporation (MELSERVO MR-J4 Series), high-speed serial interface
- 5: Supports FANUC CORPORATION, high-speed serial interface
- 8: Supports Yaskawa Electric Corporation, high-speed serial interface

Dimensions

Resolution: 0.01 μm

Order No.	Model	Effective range L_0 (mm)	Maximum travel length L_1 (mm)	Overall length L_2 (mm)	Distance to the center point L_4 (mm)	Mounting pitch L_3 (mm)	Mounting pitch L_5 (mm)	Mounting pitch L_6 (mm)
559-524-□4	ABS AT13□4(A)-100-H	100	120	265	124.5	249	—	—
559-525-□4	ABS AT13□4(A)-150-H	150	170	315	149.5	299	—	—
559-526-□4	ABS AT13□4(A)-200-H	200	220	365	174.5	349	—	—
559-527-□4	ABS AT13□4(A)-250-H	250	270	415	199.5	399	—	—
559-528-□4	ABS AT13□4(A)-300-H	300	320	465	224.5	449	—	—
559-529-□4	ABS AT13□4(A)-350-H	350	370	515	249.5	499	—	—
559-530-□4	ABS AT13□4(A)-400-H	400	420	565	274.5	549	—	—
559-531-□4	ABS AT13□4(A)-450-H	450	470	615	299.5	599	—	—
559-532-□4	ABS AT13□4(A)-500-H	500	520	665	324.5	649	—	—
559-533-□4	ABS AT13□4(A)-600-H	600	620	765	(374.5)	749	204.5	170
559-534-□4	ABS AT13□4(A)-700-H	700	720	865	(424.5)	849	224.5	200
559-535-□4	ABS AT13□4(A)-750-H	750	770	915	(449.5)	899	224.5	225
559-536-□4	ABS AT13□4(A)-800-H	800	820	965	(474.5)	949	224.5	230
559-537-□4	ABS AT13□4(A)-900-H	900	920	1065	(524.5)	1049	264.5	260
559-538-□4	ABS AT13□4(A)-1000-H	1000	1020	1165	(574.5)	1149	284.5	290

Resolution: 0.001 μm

Order No.	Model	Effective range L_0 (mm)	Maximum travel length L_1 (mm)	Overall length L_2 (mm)	Distance to the center point L_4 (mm)	Mounting pitch L_3 (mm)	Mounting pitch L_5 (mm)	Mounting pitch L_6 (mm)
559-524-□7	ABS AT13□7(A)-100-H	100	120	265	124.5	249	—	—
559-525-□7	ABS AT13□7(A)-150-H	150	170	315	149.5	299	—	—
559-526-□7	ABS AT13□7(A)-200-H	200	220	365	174.5	349	—	—
559-527-□7	ABS AT13□7(A)-250-H	250	270	415	199.5	399	—	—
559-528-□7	ABS AT13□7(A)-300-H	300	320	465	224.5	449	—	—
559-529-□7	ABS AT13□7(A)-350-H	350	370	515	249.5	499	—	—
559-530-□7	ABS AT13□7(A)-400-H	400	420	565	274.5	549	—	—
559-531-□7	ABS AT13□7(A)-450-H	450	470	615	299.5	599	—	—
559-532-□7	ABS AT13□7(A)-500-H	500	520	665	324.5	649	—	—
559-533-□7	ABS AT13□7(A)-600-H	600	620	765	(374.5)	749	204.5	170
559-534-□7	ABS AT13□7(A)-700-H	700	720	865	(424.5)	849	224.5	200
559-535-□7	ABS AT13□7(A)-750-H	750	770	915	(449.5)	899	224.5	225
559-536-□7	ABS AT13□7(A)-800-H	800	820	965	(474.5)	949	224.5	230
559-537-□7	ABS AT13□7(A)-900-H	900	920	1065	(524.5)	1049	264.5	260
559-538-□7	ABS AT13□7(A)-1000-H	1000	1020	1165	(574.5)	1149	284.5	290

A numeral for symbol □ in each Order No. and Model No. indicates the following.

- 0: Supports Mitutoyo ENSIS high-speed serial interface
- 3: Supports Mitsubishi Electric Corporation (MDS-D/MDS-DH Series), high-speed serial interface
- 4: Supports Mitsubishi Electric Corporation (MELSERVO MR-J4 Series), high-speed serial interface
- 5: Supports FANUC CORPORATION, high-speed serial interface
- 8: Supports Yaskawa Electric Corporation, high-speed serial interface

ABS AT1300 Signal Check Program

- The ABS AT1300 signal check program can diagnose the scale signal by connecting the ABS AT1300 Series to the conversion unit connected to a PC with the "ABS AT1300 signal check program" installed.

The ABS AT1300 signal check program allows the PC to execute the following.

- 1) Confirm and save the scale signal by "Signal Confirmation".
- 2) Confirm the scale error position by "Position Measurement".
- 3) Check error history by "Error History Check".

Required items

Item	Quantity	Details	Notes
PC*	1	DOS/V (Windows version)	Provided by user
Conversion unit	1	USB-485 (422) DS15P (System Sacom Industry Corp.)	Optional (bundle)
Connection cable A	1	USB cable	
Connection cable B	1	RS-485 cable or RS-422 cable	
Application software	1	ABS AT1300 Signal Check Program	

* This program requires a PC with the following operating environment.

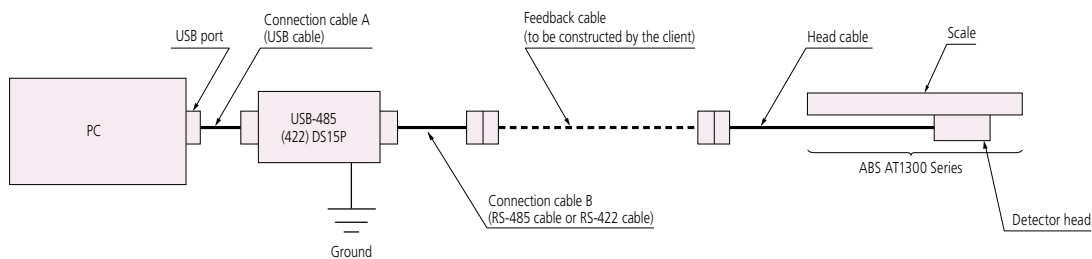
CPU	: 1 GHz or faster
Memory	: 1 GB min.
Program size	: 10 MB
OS	: Windows 7 or later
Monitor	: 1024x768 or higher is recommended

"Conversion unit, application software" set

Order No.	Applicable model	Conversion unit	Connecting cable B
06AGE490	AT1303A AT1304A AT1307A	USB-485 DS15P	MIT cable (Mitutoyo ENSIS)
06AFY987	AT1343A AT1344A AT1347A	USB-485 DS15P	MEL cable (Mitsubishi Electric Corporation)
06AFY988	AT1343 AT1344 AT1347	USB-422 DS15P	MDS cable (Mitsubishi Electric Corporation)
06AFY989	AT1353 AT1354 AT1357	USB-422 DS15P	FANUC cable
06AGQ287	AT1383A AT1384A AT1387A	USB-485 D15P	Y/MAT cable (Yasukawa Electric Corporation)

Note: Each manufacture I/F has different Part No., since connection cable B and Conversion unit are different for each I/F.

Connection details



Note: To prevent the possibility of electric shock the device must be grounded.