

Asset Management Tag



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Section 1: Introduction

1.1 Scope of Manual

This instruction manual includes product specifications, reference materials, installation, and parts ordering information for the Emerson Asset Management Tag.

The instruction manual also describes using Asset Connect software to access information on the Asset Management Tag. Refer to the Asset Connect Quick Start Guide for information on how to use this downloadable application as well as information on requirements for the reader/writer, and PC or tablet.

Do not install, operate or maintain an Asset Management Tag without being fully trained and qualified in valve, actuator, valve accessory, and other applicable process equipment installation, operation, and maintenance. To avoid personal injury or property damage, it is important to carefully read, understand, and follow all the contents of this manual, including all safety cautions and warnings. If you have any questions about these instructions, contact your Emerson sales office before proceeding.

1.2 Description

Asset Management Tags are intrinsically safe devices which use Radio Frequency Identification (RFID) technology to allow for digital storage, collection, and identification of equipment information. Asset Management Tags can be ordered as an accessory on an assembly or can be purchased individually for existing in-field equipment to be populated utilizing Asset Connect software or with the support of your Emerson sales office and service center.

A reader/writer device is needed to communicate with the Asset Management Tag using UHF RFID wireless technology. Information gathered from the Asset Management Tag which has been read by the reader/writer will then be shared to the Asset Connect Software on either a PC or Tablet using Bluetooth wireless technology.

Figure 1 Equipment for reading/writing an Asset Management Tag



1. Asset Management Tag

2. Reader/Writer

Reader/Writer not available for sale from Emerson Automation Solutions
Additional information can be found in the Quick Start Guide

3. PC or Tablet

Asset Connect software is designed specifically for the Asset Management Tag
Compatible with Windows 7 or Windows 10 operating systems
Bluetooth radio and applicable drivers must be installed

1.3 Specifications

Specifications for the Asset Management Tag are listed in table 1.

Table 1. Specifications

Temperature Limits	Operating: -40°C to 85°C (-40°F to 185°F)
	Storage: -40°C to 90°C (-40°F to 194°F)
Operating Frequency	860-960 MHz (Worldwide)
Construction Materials	Tag Housing: PPS, Polyphenylene Sulfide
	Mounting Bracket: 316 SST
Mounting Styles	Mounting Screws (Tag Housing to Mounting Bracket): Steel with RoHS Compliant Zinc Chromate
	Casing
	Yoke
Minimum Read/Write Range Distance	Universal
	20 ft (6.09 m) read range
	1 ft (0.30 m) write range
Hazardous Area Approvals	Range dependent on reader/writer selected
	FM (US/Canada) – Intrinsically Safe (refer to D104401X012)
	ATEX – Intrinsically Safe (refer to D104402X012)
Electrical Classifications	IECEX – Intrinsically Safe (refer to D104403X012)
	Type 4X, IP68
Other Standards	UHF EPC Class 1 Gen 2
	ISO/IED 18000-6C
	GS1 EPC TDS 1.6
	ATA Spec 2000
	SAE AS5678
	DIN 40050-9

1.4 Education Services

For information on available courses for the Asset Management Tag, as well as a variety of other products and services, contact:

Emerson Automation Solutions
Educational Services - Registration
Phone: +1-641-754-3771 or +1-800-338-8158
e-mail: education@emerson.com
emerson.com/education

Section 2: Device Information

Available fields for stored information on the Asset Management Tag are shown below in figure 2.

Figure 2 Asset Management Tag Storage Fields

The screenshot displays the Emerson Asset Connect interface for an Asset Management Tag. The interface is organized into several sections:

- Identification Fields:**
 - Cust PO: 184440-0-PO-172516-1-IS
 - P & ID Tag: UV1-30494S
 - Serial Number: F001164761
 - User Defined: (empty)
 - Tag EPC: P&ID Tag: UV1-30494S
 - Content Revision: 3
 - HEX EPC: 5556312D3330343934530000000000
 - Tag ID: E280115020001504762C1800
- Valve Components:**
 - Valve:**
 - Manufacturer: FISHER
 - Model: EAT 30x36 CLASS 300
 - Serial Number: F001164761
 - Actuator:**
 - Manufacturer: FISHER
 - Model: 685 14 CYL
 - Actuator Serial Number: F001164761
 - Positioner:**
 - Manufacturer: FISHER
 - Model: DVC6200
 - Serial Number: F001164761
- Accessories:**
 - Accessory 1:**
 - Model: ASCO EB8316G384MB
 - Description: 3/2 24VDC
 - Accessory 2:**
 - Model: ASCO 8290B071
 - Description: 2-WAY 1 NPT 1 PT NO 19 CV
 - Accessory 3:**
 - Model: ASCO 8290A073
 - Description: 2-WAY 1.25 NPT 1.25 PT NO 32 C
 - Accessory 4:**
 - Model: FISHER SS-263
 - Description: 1 NPT 3/4 Port 150# SST
- Other Documentation:**
 - Device Criticality: (empty)
 - Ship Date: 6/7/2017
- Service Details:**
 - Job Number: CSD15785553
 - Install Date: 10/14/2017
 - Scratchpad: Slight bit of wear noticed actuator piston rod.
 - Last Calibration Date: 2/7/2018
 - Calibration Due Date: 2/8/2019
 - Last Service Date: MM/DD/YYYY
 - Service Due Date: 10/1/2023
 - Last Inspection Date: 6/15/2018
 - Inspection Due Date: 7/15/2018

At the bottom of the interface, there are four main action buttons: Read, Write, Clear Field, and Save Data. A status bar at the very bottom indicates: "Pull & hold trigger to read the tag data. Reading Block 16 of 16. Done."

Section 3: Installation

Asset Management Tags can be ordered as an accessory to be installed on an assembly or can be purchased for existing in-field equipment to be populated utilizing Asset Connect software or with the support of your Emerson sales office and service center.

If the Asset Management Tag assembly is being installed on process equipment in the field, observe all installation warnings, cautions, and notes provided in the Instruction Manuals for all applicable equipment.

Figure 3 Asset Management Tag Assembly



⚠ WARNING

Avoid personal injury or damage to property from sudden release of pressure or uncontrolled process fluid. Before starting installation on, or removal from, existing in-field equipment:

- Always wear protective gloves, clothing, and eyewear when performing any installation or removal operations to avoid personal injury.
- Follow all warnings, cautions, notes, and instruction procedures provided in the Instruction Manuals for all applicable equipment to ensure hazardous conditions are not created.
- If mounting onto or removing from a valve, use bypass valves or completely shut off the process to isolate the valve from process pressure. Relieve process pressure on both sides of the valve. Drain the process media from both sides of the valve.
- If mounting onto or removing from an actuator casing, vent the power actuator loading pressure.
- If mounting onto or removing from other equipment containing process pressure or process fluid, relieve and isolate the equipment from process pressure and drain process media.
- Use lock-out procedures to be sure that the above measures stay in effect while you work on the equipment.
- Check with your process or safety engineer for any additional measures that must be taken to protect against process media.

The Asset Management Tag is pre-affixed to the bracket and must remain installed as an assembly for optimal read range. Three mounting styles have been engineered to optimize read range as well as provide mounting flexibility onto a wide range of equipment, reference table 2 for assembly part numbers.

Figure 4 Emerson Asset Management Tag shown on a Fisher™ easy-e™ with Fisher 667 size 45i Actuator and FIELDVUE™ DVC6200 Digital Valve Controller

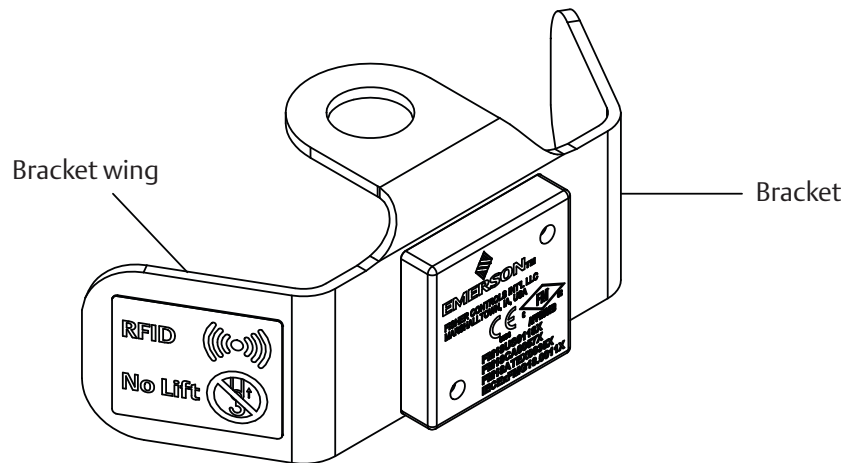


3.1 Mounting Considerations

- Installation of the Asset Management Tag assembly must take into consideration line-of-sight when using the reader/writer to communicate.
- To avoid negatively impacting the read/write distance, the Asset Management Tag assembly should not be obscured by tubing or other metal equipment and should not be installed such that the wings of the bracket touch any metal surface.

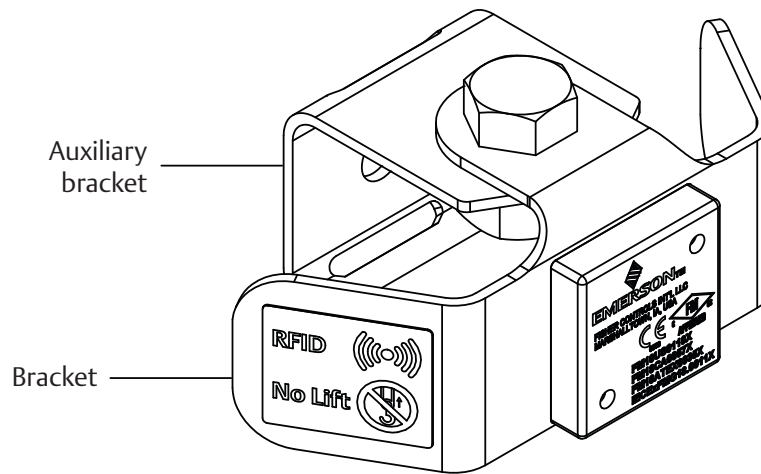
3.2 Installing a Casing Mounted Asset Management Tag

Figure 5 Casing Mounted Asset Management Tag Assembly



1. Review Mounting Considerations when planning installation location of Asset Management Tag.
2. When available, mount using a longer casing bolt, and mount below the lower casing with the bracket pointed downward and facing outward. Reference figures 3 and 4 above.
3. Ensure that mounting of the Asset Management Tag, does not prevent full thread engagement of the casing bolting. If mounting the tag prevents complete thread engagement, mount using a longer casing bolt of the same material specification.
4. Ensure casing bolt is tightened per torque specifications in the applicable product instruction manual.

Figure 6 Yoke and Universal Mounting



3.3 Installing a Yoke Mounted Asset Management Tag

1. Review Mounting Considerations when planning installation location of Asset Management Tag.
 2. Mount auxiliary bracket to available actuator yoke connection.
- Install Asset Management Tag assembly to the mounted auxiliary bracket by placing bolt through the top and follow with washer and nut on the bottom side of the auxiliary bracket and tighten.

3.4 Installing a Universal Mounted Asset Management Tag

1. Review Mounting Considerations when planning installation location of Asset Management Tag.
 2. Install auxiliary bracket to equipment with user supplied wire or strap.
- Install Asset Management Tag assembly to the mounted auxiliary bracket by placing bolt through the top and follow with washer and nut on the bottom side of the auxiliary bracket and tighten.

Section 4: Related Documents

- Product Bulletin: Asset Management Tag
- Quick Start Guide: Asset Connect Software

All documents are available at Emerson.com/AssetTag

Section 5: Parts Ordering

⚠ WARNING

Use only genuine Emerson replacement parts. Components that are not supplied by Emerson should not, under any circumstances, be used in any Emerson product. Use of components not supplied by Emerson may void your warranty, might adversely affect the performance of the product, and could cause personal injury or property damage.

Section 6: Kits

The Asset Management Tag is pre-affixed to the bracket and must remain installed as an assembly for optimal read range and ease of installation for all three mounting styles. Reference the installation section of this manual for additional details.

NOTE:

Contact your Emerson sales office for part ordering information.

Table 2. Instruction Manual Table

Brand	Actuator Model	Actuator Size	Part Number	Mounting Type	List Price
Fisher	585C	All	GE89292X012	Yoke	\$100
	655	A			
		B			
		32, 33, 34	GE89295X012		
		42, 43, 44			
		35, 36	GE89294X012		
	45, 46				
	656	All	GE89295X012	Casing	
	657, 657-4	30/30i	GE89295X012		
		34/34i			
40/40i					
46/46i					
60/60i					

Brand	Actuator Model	Actuator Size	Part Number	Mounting Type	List Price	
Fisher	657, 657-4	45/45i	GE89294X012	Casing	\$100	
		50/50i				
		70/70i				
		87				
		80	GE89296X012			
		100	GE89297X012			
	667, 667-4	30/30i	GE89295X012			
		34/34i				
		40/40i				
		46/46i				
		60/60i				
		76/76i				
		45/45i	GE89294X012			
		50/50i				
		70/70i				
		87				
	80	GE89296X012				
	100	GE89297X012				
	685, 685SE/SR	12-26	GE89293X012			Universal
	1061	All	GE89292X012			Yoke
	2052	1	GE89299X012			
		2				
		3	GE91686X012			
	3025	P460	GE91686X012			
		P462				
		P462-200				
		P900				
	Baumann™	16	GE94806X012			
		32	GE89298X012			
		54	GE91686X012			
70		GE89293X012				
SV		GE89293X012	Universal			
D3	All pneumatic	GE94805X012	Casing			
D4						
easy-Drive™						
FieldQ	All	GE89293X012	Universal			
Bettis™ G-Series (G Series DA, G Series SR)						
GX	225	GE91686X012	Casing			
	750					
	1200					
Lever-Lock	All	GE89293X012	Universal			
M-Series						
All Other Actuator Types	All					

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