



EMERSON ASSET MANAGEMENT TAG FOR ANDERSON GREENWOOD AND CROSBY PRESSURE RELIEF VALVES

INSTALLATION INSTRUCTIONS

Before installation these instructions must be carefully read and understood.



1 INTRODUCTION

1.1 SCOPE OF THE MANUAL

This document provides guidelines on installation of the Emerson Asset Management Tag on the Anderson Greenwood and Crosby Pressure Relief Valves.

2 PRODUCT DESCRIPTION

Using radio frequency identification (RFID) technology, Asset Management Tags enable you to store and retrieve critical information about a valve's construction, service information and regulatory certification on a digital chip that stays with the assembly. Using a handheld RFID reader, the tag contents are read and loaded into the Asset Connect App for further analysis.

When you make data-driven decisions, you can optimize your operations planning and better manage your maintenance spend. The data stored on the tag can be exported into your Computerized Maintenance Management System (CMMS) to give you a full view of your operation.

TABLE OF CONTENTS

1. Introduction	1
1.1 Scope of the Manual	1
2. Product Description	1
3. Configurations, Specifications and Certifications	1
4. Installation	2
4.1 Low Pressure Pilot Relief Valve	2
4.2 High Pressure Pilot Operated or Direct Spring Relief Valve	3
5. Tag Orientation	3
6. Maintenance	4
7. Parts List	5

WARNING

The installation and operation instructions for the specific Pressure Relief Valve, the data sheet and reference manual for the asset management tag should be fully read and understood before installation.

For personal and system safety, and for optimum product performance, make sure you thoroughly understand the contents before installing, using, or maintaining this product.

Failure to do so may result in injury to personnel or cause damage to the equipment.

3 CONFIGURATIONS, SPECIFICATIONS AND CERTIFICATIONS

TABLE 1 AVAILABLE VALVE CONFIGURATIONS

Brand	Type	Series
Anderson Greenwood	Direct Spring	80
Anderson Greenwood	High Pressure Pilot Operated	200, 400 and 800
Anderson Greenwood	Low Pressure Pilot Operated	90 and 9000
Crosby	Direct Spring	Omni and J-Series

TABLE 2 AMT SPECIFICATIONS AND CERTIFICATIONS

FM Class I Div I ATEX and IECEx Certified
-40 to 185°F [-40 to 85°C] Operating Temperature
8192 bit user memory (~1000 characters)
Global antenna enables equipment tracking in all world areas.
Bracket design functions as antenna, resonator to achieve higher read ranges

EMERSON ASSET MANAGEMENT TAG FOR ANDERSON GREENWOOD AND CROSBY PRESSURE RELIEF VALVES

INSTALLATION INSTRUCTIONS

4 INSTALLATION

WARNING

When the pressure relief valve is under pressure never place any part of your body near the outlet/exhaust of the valve.

Failure to do so may result in injury to personnel or cause damage to the equipment.

WARNING

Installation of this Asset Management Tag in an explosive environment must be in accordance with the appropriate local, national, and international standards, codes, and practices. Please review the approvals section of the Emerson Asset Management Tag reference manual for any restrictions associated with a safe installation. Failure to do so may result in injury to personnel or cause damage to the equipment.

CAUTION

The Asset Management Tag is intended for a specific temperature range (-40 to 185°F) and other application specifications. Failure to adhere to these specifications could result in the malfunction of the product, property damage, or personal injury.

NOTICE

The figures are illustrative, the actual configuration will vary depending on valve size, type, and accessories.

4.1 Anderson Greenwood Low Pressure Pilot Relief Valves

For 90 or 9000 Series pilot-operated valves, use the steps below for Asset Management Tag mounting.

1. To install the Asset Management Tag and bracket assembly use one of the existing cap bolts as a mounting position. See Figure 1.

WARNING

To avoid process leaks:

- Do not attempt to loosen or remove any bolt while the valve is in service.
- Use only bolts supplied or sold by Emerson as spare parts.

Failure to do so may result in injury to personnel or cause damage to the equipment.

2. Remove the standard cap bolt where the Asset Management Tag needs to be mounted.

CAUTION

Place the Asset Management Tag facing from outlet flange for safe access.

3. Ensure that the tube fittings do not interfere with the line of sight between the Asset Management Tag and the handheld RFID reader.
4. Place the Asset Management Tag on to the cap and reinstall the cap bolt. See Figure 2.
5. Tighten the cap bolt as specified in the valve's installation and maintenance instructions. See Figure 3. These instructions may be requested from the factory or are available at Emerson.com

FIGURE 1 - TAG AND BRACKET ASSEMBLY

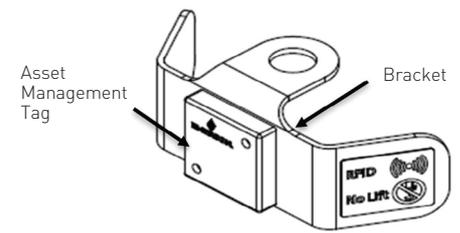
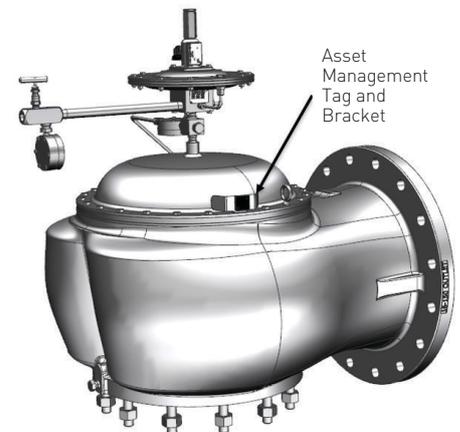


FIGURE 2 - ASSET MANAGEMENT TAG INSTALLED



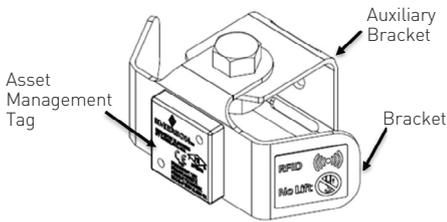
FIGURE 3 - 90/9000 SERIES PILOT-OPERATED VALVE CONFIGURATION WITH ASSET MANAGEMENT TAG



EMERSON ASSET MANAGEMENT TAG FOR ANDERSON GREENWOOD AND CROSBY PRESSURE RELIEF VALVES

INSTALLATION INSTRUCTIONS

FIGURE 4 - TAG, BRACKET AND THE AUXILIARY BRACKET ASSEMBLY



4.2 Anderson Greenwood or Crosby Direct Spring Pressure Relief Valves and Anderson Greenwood High Pressure Pilot Operated Pressure Relief Valves

For Crosby (J and Omni Series) and Anderson Greenwood (80 Series) direct spring and Anderson Greenwood (200, 400, 800 Series) pilot operated pressure relief valves, use the steps below for Asset Management Tag mounting.

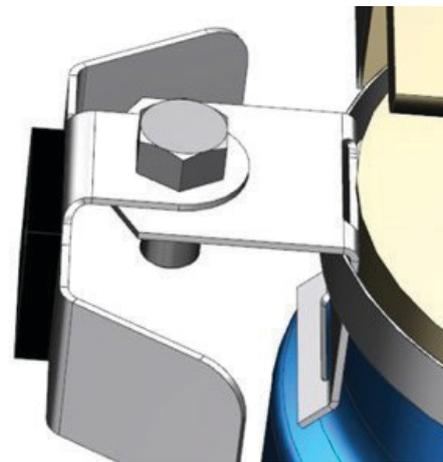
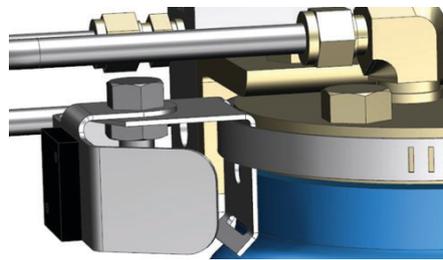
1. The required parts are the tag and bracket assembly with the auxiliary bracket.
2. Assemble Asset Management Tag and bracket assembly to the auxiliary bracket using the supplied $\frac{3}{8}$ " hex head bolt, washer and nut.
3. Cut the $\frac{1}{2}$ " wide stainless steel band to the required length to fit the size of main valve cap (200/400/800 Series) or bonnet/cap (J, Omni and 80 Series).
4. Assemble band splicers and worm drive clamp to $\frac{1}{2}$ " wide stainless steel band.

CAUTION

*Remove sharp edges, as needed, after cutting stainless steel band.
Failure to do so may result in injury to personnel.*

5. Wrap band around the main valve cap (200/400/800 Series) or bonnet/cap (J, Omni and 80 Series).
6. Loosen the tight worm drive clamp around the cap/bonnet using flat head screwdriver or a $\frac{5}{16}$ " standard socket and a wrench.
7. Place Asset Management Tag and auxiliary bracket assembly (auxiliary bracket side) between the band and main valve cap/bonnet. See Figure 5.

FIGURE 5 - TAG, BRACKET AND THE AUXILIARY BRACKET ASSEMBLY



8. Tighten worm drive clamp enough to hold the Asset Management Tag and the auxiliary bracket assembly in place. Torque between 25-30 in-lbs. Do not overtighten.
9. Examine steel band around for horizontal alignment, Asset Management Tag position and assembly tightness.
10. For recommended location of the Asset Management Tag on valves see Figures 8 to 11.

CAUTION

*Never place the Asset Management Tag near to the outlet/exhaust of the valve.
Failure to do so may result in injury to personnel or cause damage to the equipment.*

FIGURE 6 - ASSET MANAGEMENT TAG ORIENTATION (HORIZONTAL)



FIGURE 7 - ASSET MANAGEMENT TAG ORIENTATION (VERTICAL)



5 TAG ORIENTATION

As standard, the Asset Management Tag assembly is installed in the same side and aligned with the valve nameplate. The user may relocate the tag based on their installation. As much as possible, the tag must face away from outlet/exhaust flange.

For optimal signal strength, install the Asset Management Tag in the horizontal position (Figure 6). In the vertical position (Figure 7), the signal strength may be reduced and affect the read/write range of the Asset Management Tag.

EMERSON ASSET MANAGEMENT TAG FOR ANDERSON GREENWOOD AND CROSBY PRESSURE RELIEF VALVES

INSTALLATION INSTRUCTIONS

WARNING

Never use the Asset Management Tag to lift the valve during installation or maintenance. Failure to comply may result in death, serious injury or equipment damage.

6 MAINTENANCE

WARNING

- Before performing any maintenance operations:
- Do not remove any component from the valve while it is still pressurized.
 - Adhere to all safety standards and best practices for operating the equipment.
 - For low pressure pilot relief valves, 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.
 - Use lock-out procedures to be sure that the above measures stay in effect while you work on the equipment.
 - The valve may contain process media that is pressurized, even when the valve has been removed from the process.
 - Check with your process or safety engineer for any additional measures that must be taken to protect against process media.

Failure to do so may result in injury to personnel or cause damage to the equipment. The Asset Management Tag must be inspected periodically, the frequency of inspection depends on the service and local practices.

FIGURE 8 - 200/400/800 SERIES HIGH PRESSURE PILOT OPERATED PRESSURE RELIEF VALVES WITH ASSET MANAGEMENT TAG

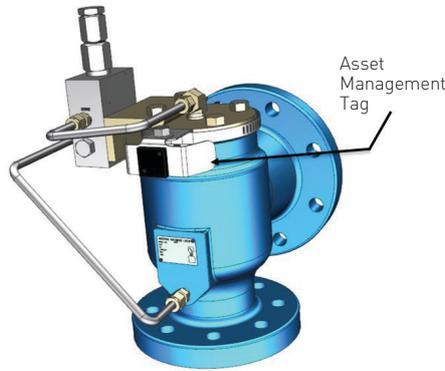


FIGURE 9 - 80 SERIES DIRECT SPRING PRESSURE RELIEF VALVES WITH ASSET MANAGEMENT TAG

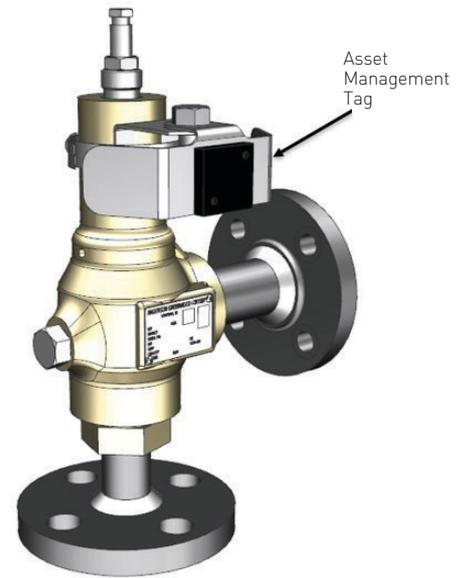


FIGURE 10 - OMNI DIRECT SPRING PRESSURE RELIEF VALVES WITH ASSET MANAGEMENT TAG

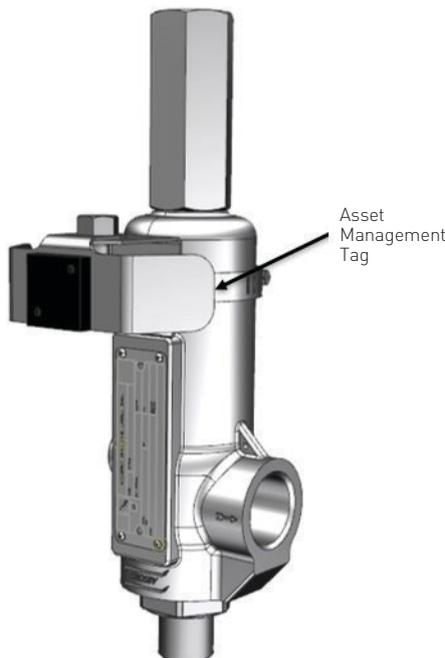


FIGURE 11 - J-SERIES DIRECT SPRING PRESSURE RELIEF VALVES WITH ASSET MANAGEMENT TAG



EMERSON ASSET MANAGEMENT TAG FOR ANDERSON GREENWOOD AND CROSBY PRESSURE RELIEF VALVES

INSTALLATION INSTRUCTIONS

7 PARTS LIST

WARNING

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

For part number information, see Table 3.

Contact your Emerson Sales office if more information is required.

TABLE 3 PARTS LIST

Component	Figure	Part Number
Tag and bracket assembly	Figure 1	11491758
Tag and Bracket Assembly with Auxiliary Bracket	Figure 2	11491756
Stainless steel band	N/A	Consult Factory

D104578X012 © 2020 Emerson Electric Co. All rights reserved 03/20. Emerson is a mark owned by one of the companies in the Emerson Automation Solutions business unit of Emerson Electric Co. The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are property of their respective owners.

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

Emerson Electric Co. does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson Electric Co. product remains solely with the purchaser.

Emerson.com/FinalControl