

SERVICE BULLETIN

Bulletin No. 01-11
January 31, 2011

To: ITW Finishing Equipment Americas Distributors

Subject: RF-1 Flowmeter Obsolescence (77214-00 & A10830-00 Fiberoptic)

As reference in notification dated, November 2, 2010 below find the service instructions to assist in converting your customers' to the new flow meter.

The 77214-00 fiberoptic RF-1 flowmeter and the A10830-00 fiberoptic RF-1 flowmeter (manifold mount) are being replaced. The recommended replacement for the non-manifold mounted version is A12713-00 and the recommended replacement for the manifold-mounted version is A12714-00. Most of the parts are not interchangeable between the two meters. Replacement shafts and gears for the RF-1 meters will continue to be available to support existing units in the field. However, the bodies and sensors will no longer be available as replacement parts. The new sensor assembly will work with the RF-1 bodies. Refer to the drawing and the chart below for complete details.

0	Description	A10830 F.O. RF-1 Part Number	Interchangeable	A12713-00 Part Number
1	Flowmeter Cable Assembly	A12409-XX	No	A12768-XX
2	Sensor Assembly	77355-00*	No	A12719-00
3	Socket Head Cap Screws	¼" – 20 x 1" L.	No	M6x1 x 30mm L.
4	Upper Housing	N/A	No	N/A
5	Shaft Set (2)	76271-00**	No	A12716-00
6	Gear Set (2)	76270-00**	No	A12715-00
	TI Coated Gear Set (2)	26270-01	No	A12715-01
7	Teflon O-Ring	13076-35***	Yes	13076-35***
8	Lower Housing	77358-00	No	A12717-00

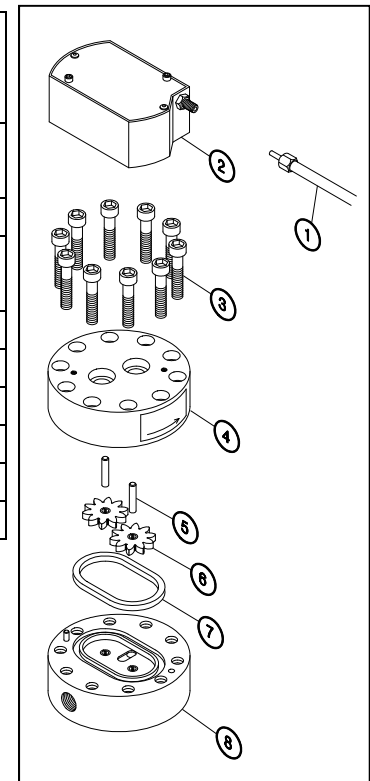
* This part is now obsolete. There is no direct replacement part available.

** Shaft and gear sets to fit the RF-1 flowmeters will continue to be stocked.

*** Kit of 5 O-Rings is P/N: 76272-00

Electrical Connections

The new A12713-00 fiberoptic flowmeter does not have quadrature output signal capabilities. Refer to figure on the next page to upgrade a product that previously used the quadrature capabilities of the fiberoptic RF-1 flowmeter to the new A12713-00 flowmeter.



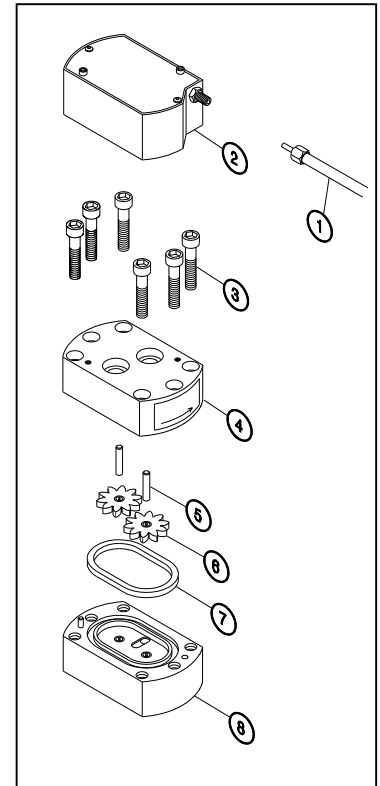
Manifold Mount Version

0	Description	77214-00 F.O. RF-1 Part Number	Interchangeable	A12714-00 Part Number
1	Flowmeter Cable Assembly	A12409-XX	No	A12768-XX
2	Sensor Assembly	77355-00*	No	A12719-00
3	Socket Head Cap Screws	¼" – 20 x 1" L.	No	M6x1 x 30mm L.
4	Upper Housing	N/A	No	N/A
5	Shaft Set (2)	76271-00**	No	A12716-00
6	Gear Set (2)	76270-00**	No	A12715-00
	TI Coated Gear Set (2)	26270-01	No	A12715-01
7	Teflon O-Ring	13076-35***	Yes	13076- 35***
8	Lower Housing	N/A	No	N/A

* This part is now obsolete. There is no direct replacement part available.

** Shaft and gear sets to fit the RF-1 flowmeters will continue to be stocked.

*** Kit of 5 O-Rings is P/N: 76272-00



Electrical Connections

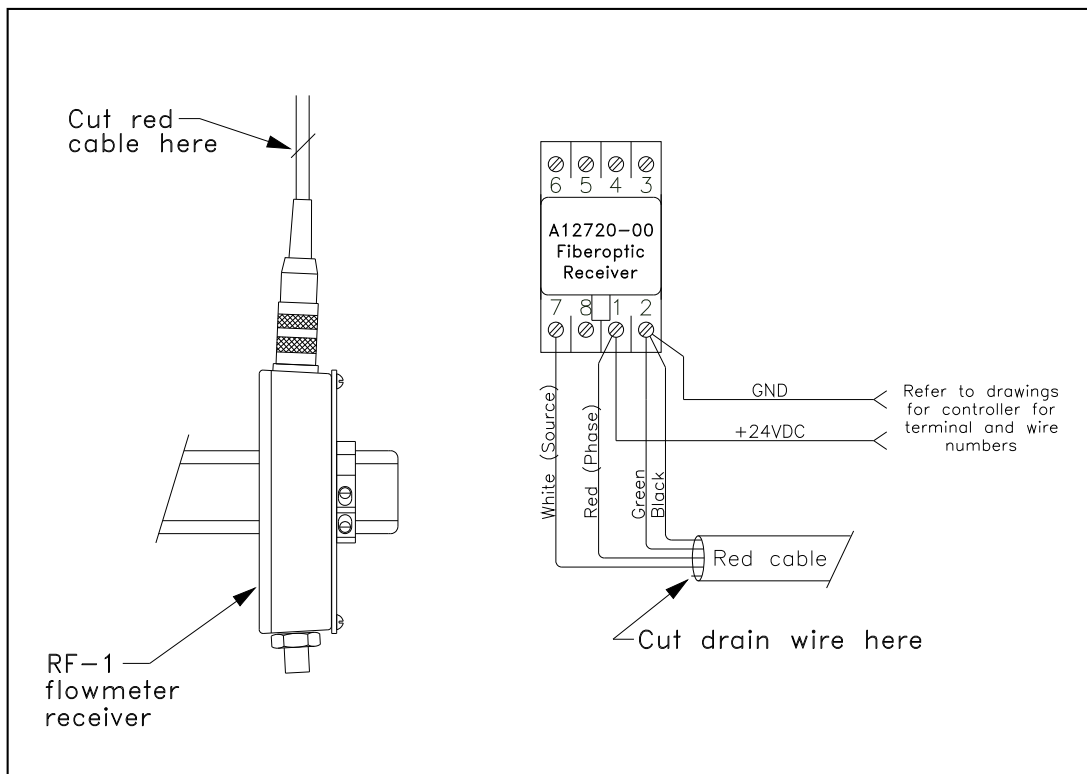
The new A12714-00 fiberoptic flowmeter does not have quadrature output signal capabilities. Refer to figure on the next page to upgrade a product that previously used the quadrature capabilities of the fiberoptic RF-1 flowmeter to the new A12714-00 flowmeter.

Note: Part Number corrected for Manifold Mount Version in table above.

Converting Existing Systems

Refer to figure below... To convert an existing ITW product that uses the fiberoptic RF-1 flowmeter (such as the DynaFlow or RansFlow controllers), follow the procedure outlined below:

1. Turn power off to the controller being upgraded.
2. Disconnect the red flowmeter cable from the RF-1 fiberoptic receiver and cut the cable as shown in the figure below.
3. Carefully remove the Teflon jacket and foil shield approximately 2 inches from the end of the cable.
4. Strip about 3/8" of insulation from each of the 4 wires (red, green, white, and black).
5. Cut the drain (un-insulated wire) even with the end of the Teflon jacket, as shown.
6. Remove the RF-1 receiver from the DIN rail and replace it with the A12720-00 receiver and socket.
7. Connect the 4 wires stripped in step 4 as shown below.
8. The A12409-XX fiberoptic cable must then be removed and replaced with the A12768-XX cable.
9. Install the new flowmeter in place of the old. Threaded pipe connections are the same (3/8" AN) on both non-manifold mounted meters. Dimensions on manifold mounted meters are also equal therefore; replacement is simply a matter of removing the old meter and replacing it with the new meter.



Important Note: As these new flowmeters do not incorporate quadrature signal capabilities, they cannot detect reverse fluid flow conditions and generate a fault if reverse flow occurs. Therefore, it is imperative that check valves be used and properly maintained at the inlets of all mix blocks that implement simultaneous flow on multiple channels (such as the DynaFlow and RansFlow fluid panels). Since fluids are typically not at equal pressures at the inlet of these mix blocks, it is possible to backflow one material into the supply of a lower pressure material, thereby contaminating the supply if functional check valves are not used.