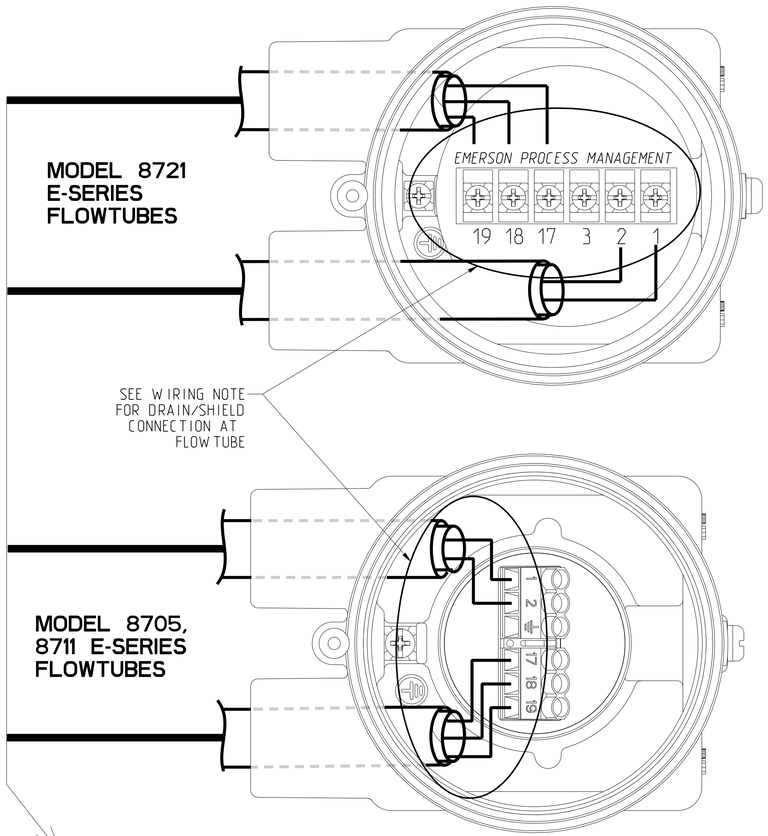
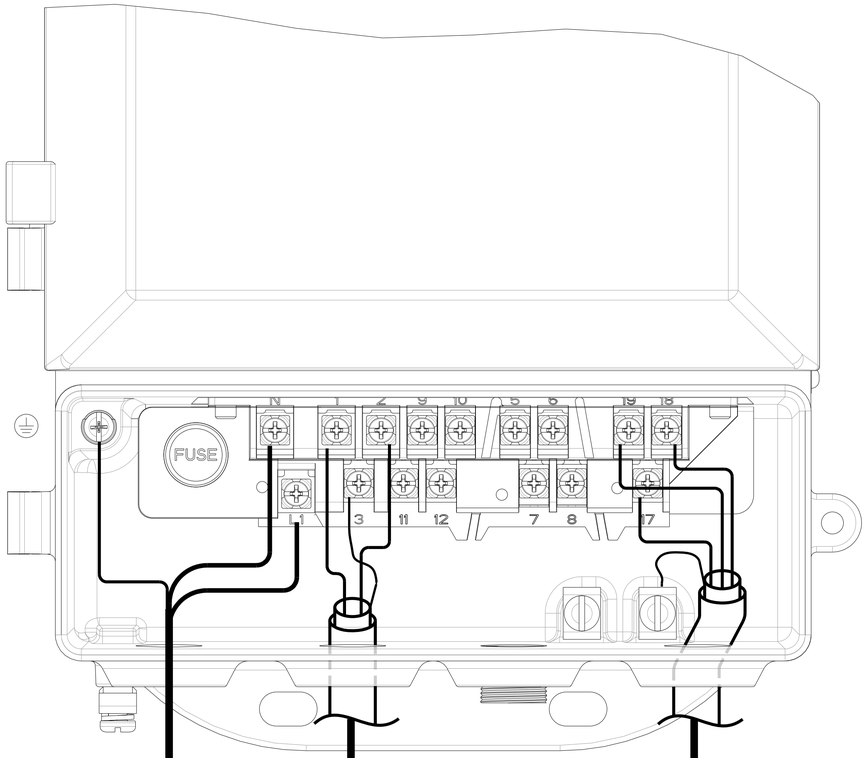
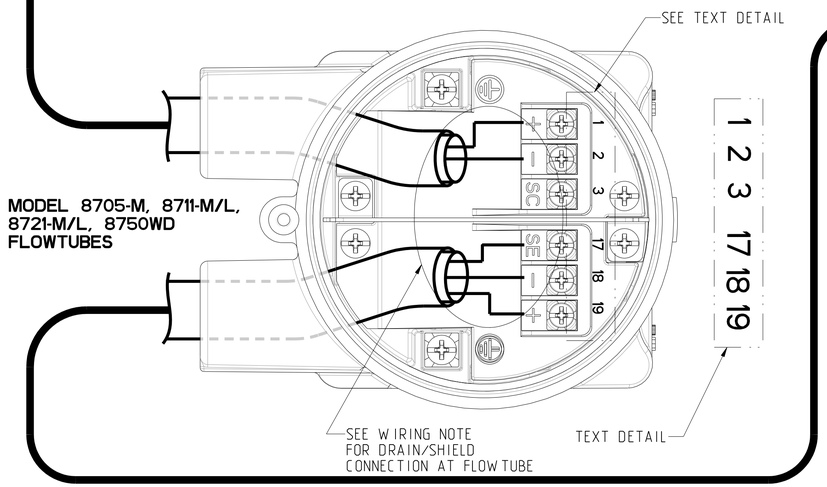
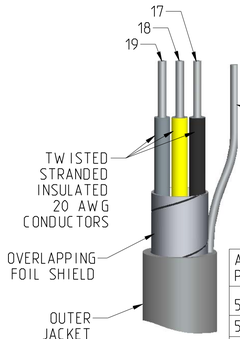
THIS SHEET FOR 8712EM OR 8750WDM TRANSMITTER WIRING USING COMPONENT CABLES

REVISION TABLE			
REVISION	ECO NO.	APP'D	DATE
AD	1086590	PMK	7/17/18
DESCRIPTION			
ADD FIELDBUS TO OUTPUT TABLE SHEETS 1 AND 2			



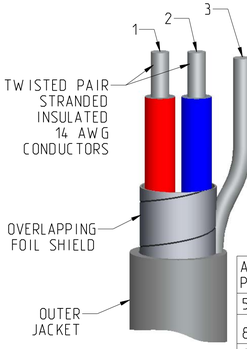






DETAIL "A"
19 (+) ELECTRODE
18 (-) ELECTRODE
17 ELECTRODE SHIELD/DRAIN

ALPHA DIRECT PART NUMBERS	CABLE OUTSIDE DIAMETER
518244[1]	0.195"/4.95mm
518245	
518189[2]	0.249"/6.32mm
840309[1][2]	
ALPHA EQUIVALENT:2413C	



DETAIL "B"
1 (+) COIL
2 (-) COIL
3 COIL SHIELD/DRAIN

ALPHA DIRECT PART NUMBERS	CABLE OUTSIDE DIAMETER
518243	0.296"/7.52mm
840310[2]	0.394"/10.0mm
ALPHA EQUIVALENT:2442C	

8712EM WIRING DIAGRAM

TERMINAL	DESCRIPTION		TERMINAL	DESCRIPTION	
N / L2	- DC, AC	A	7	SEE OUTPUT DETAIL	-
L1	+ DC, AC		8	SEE OUTPUT DETAIL	
GRND	PS GROUND	-	9	+ DIGITAL IN/OUT 2	B
1	COIL POSITIVE	A	10	- DIGITAL IN/OUT 2	
2	COIL NEGATIVE		11	+ DIGITAL IN/OUT 1	
3	COIL SHIELD		12	- DIGITAL IN/OUT 1	
5	+ PULSE	-	17	ELECTRODE REFERENCE	-
6	- PULSE		18	ELECTRODE NEGATIVE	
-			19	ELECTRODE POSITIVE	

OUTPUT DETAIL

OUTPUT	ANALOG,HART INTERNAL POWER	ANALOG,HART EXTERNAL POWER	MODBUS RS-485	FIELDBUS
7	-	+	A	C
8	+	-	B	

A REPLACE SAFETY COVER BEFORE USE.
B DI/DO (IF ORDERED).
C OUTPUT IS POLARITY INSENSITVE.

WIRING NOTE

DRAIN/SHIELD OF COIL TERMINAL (SC, 3 OR TERMINAL GROUND) AND DRAIN/SHIELD OF ELECTRODE WIRING IS NOT CONNECTED ON FLOWTUBE END IN TYPICAL INSTALLATIONS.

AN ADDITIONAL CORRECTLY SIZED SAFETY EARTH CONDUCTOR WILL BE REQUIRED ON INSTALLATIONS REQUIRING SHIELDS GROUNDED TO CHASSIS/EARTH AT BOTH ENDS OF THE REMOTE CABLE. THERE MUST BE 1 OHM OR LESS OF RESISTANCE AT EACH END OF THE SAFETY GROUND AT THE DEVICE WITH RESPECT TO THE EARTH SAFETY GROUND.

SEE DETAIL "A" FOR ELECTRODE WIRE CONSTRUCTION
SEE DETAIL "B" FOR COIL DRIVE WIRE CONSTRUCTION

CABLE WIRING REQUIRE USING CABLE GLANDS INSTALLED IN HOUSING CONDUITS. UNUSED CONDUITS SHOULD BE CLOSED

TERMINAL NUMBER AND CONDUCTOR INSULATOR WIRE COLOR		
ROSEMOUNT CABLING KITS 08732-0065-XXXX	ALPHA PART NUMBERS 518244,[1] 518245 518189,[2] 840309[1][2]	ALPHA PART NUMBERS 518243, 840310[2]
19 WHITE	19 WHITE	
18 YELLOW	18 YELLOW	
17 BLACK	17 BLACK	
1 RED	-	1 RED
2 BLUE	-	2 BLUE
3 DRAIN (SHIELD)	-	3 DRAIN (SHIELD)

NOTES:
STANDARD TEMPERATURE: RATED (-20°C TO 75°C)
(1) INTRINSICALLY SAFE, LIGHT BLUE JACKET
(2) EXTENDED TEMPERATURE (RATED -50°C TO 125°C)

DRAWING NO. 08712-1504

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY. ROSEMOUNT

UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES.
-DEC TOLERANCES-
.X ± .1 [2.5]
.XX ± .02 [0.5]
.XXX ± .010 [0.25]
FRACTIONS ± 1/32 ANGLES ± 2°

SURFACE FINISH UNLESS OTHERWISE SPECIFIED 125 | 3RD ANGLE | SIZE D | SCALE - | REV AD

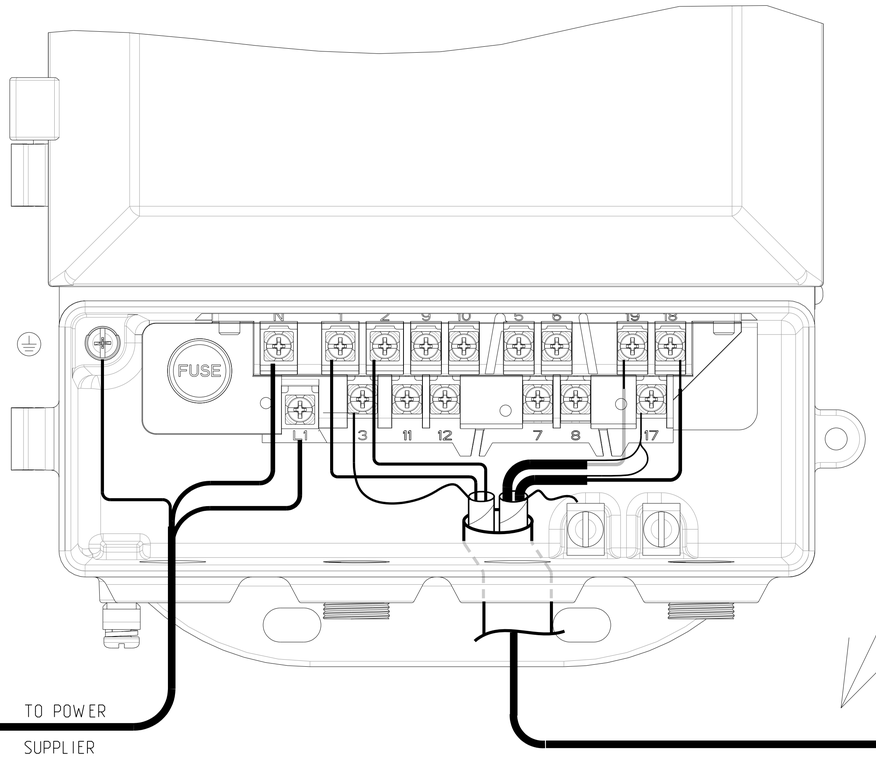
EMERSON. ROSEMOUNT
8200 Market Boulevard - Chanhassen, MN 55317 USA

TITLE 8712EM OR 8750WDM TRANSMITTER WIRING. INSTALLATION DRAWING

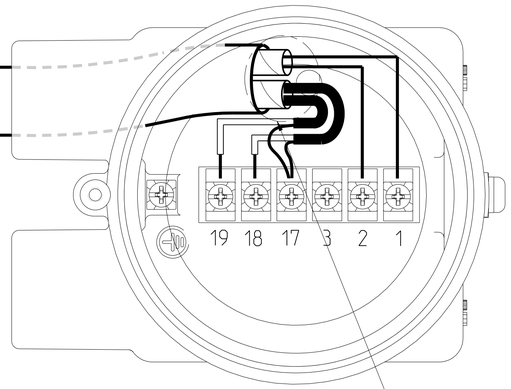
DR. K.KONYUKHOV	JUN.2017	DRAWING NO.	08712-1504
APP'D M.MIKOLICHEK	JUL.2017		
DO NOT SCALE PRINT	CAD MAINTAINED. (PRO/E)	PRODUCT CODE -	DOC TYPE - SHEET 1 OF 2

FORM REV. A4

THIS SHEET FOR 8712EM OR 8750WDM TRANSMITTER WIRING USING COMBINATION ELECTRODE AND COIL DRIVE CABLE

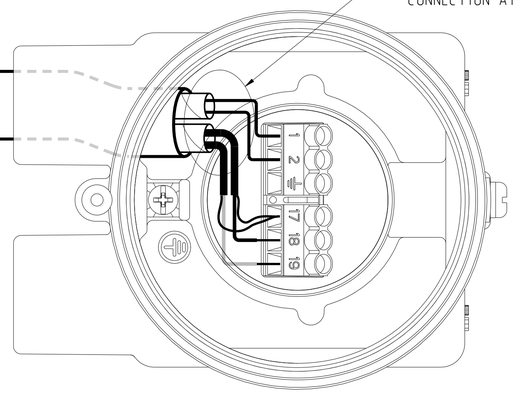


MODEL 8721
E-SERIES
FLOWTUBES



SEE WIRING NOTE
FOR DRAIN/SHIELD
CONNECTION AT FLOWTUBE

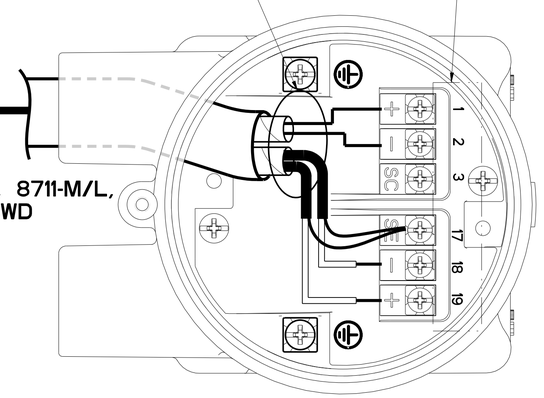
MODEL 8705,
8711 E-SERIES
FLOWTUBES



SEE WIRING NOTE
FOR DRAIN/SHIELD
CONNECTION AT FLOWTUBE

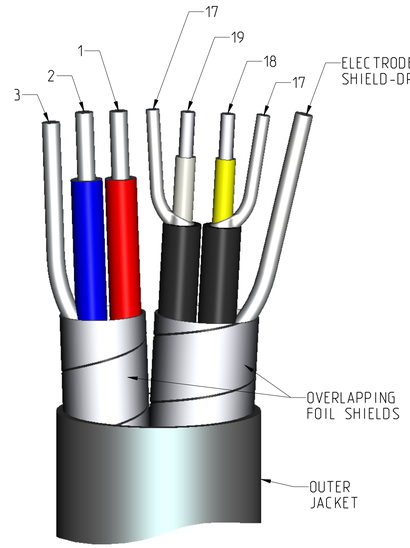
SEE TEXT DETAIL

MODEL 8705-M, 8711-M/L,
8721-M/L, 8750WD
FLOWTUBES



1 2 3 17 18 19

TEXT DETAIL



DETAIL "C"

TERMINAL NUMBER AND CONDUCTOR INSULATOR WIRE COLOR
ROSEMOUNT COMBINATION COIL/ELECTRODE CABLE COLOR CODING PART NUMBERS STANDARD 08732-0065-2001 (1) (FEET) STANDARD 08732-0065-2002 (1) (METERS) SUBMERSIBLE 08732-0065-3001 (2) (FEET) SUBMERSIBLE 08732-0065-3002 (2) (METERS)
19 WHITE
18 YELLOW
17 BLACK
– DRAIN (ELECTRODE SHIELD)
1 RED
2 BLUE
3 DRAIN (COIL SHIELD)

NOTES:
OUTSIDE DIAMETER OF ALL PART NUMBERS:
0.450"/11.43mm
JACKET COLOR/TEMPERATURE RATING
(1) GRAY - RATED -20°C TO 80°C
(2) BLACK - RATED -20°C TO 80°C DRY
60°C WET (SUBMERGED)

DRAWING NO. 08712-1504

8712EM WIRING DIAGRAM

TERMINAL	DESCRIPTION		TERMINAL	DESCRIPTION	
N / L2	- DC, AC	△A	7	SEE OUTPUT DETAIL	-
L1	+ DC, AC		8	SEE OUTPUT DETAIL	
GRND	PS GROUND	-	9	+ DIGITAL IN/OUT 2	△B
1	COIL POSITIVE	△A	10	- DIGITAL IN/OUT 2	
2	COIL NEGATIVE		11	+ DIGITAL IN/OUT 1	
3	COIL SHIELD		12	- DIGITAL IN/OUT 1	
5	+ PULSE	-	17	ELECTRODE REFERENCE	-
6	- PULSE		18	ELECTRODE NEGATIVE	
-			19	ELECTRODE POSITIVE	

OUTPUT DETAIL

OUTPUT	ANALOG,HART INTERNAL POWER	ANALOG,HART EXTERNAL POWER	MODBUS RS-485	FIELDBUS
7	-	+	A	△C
8	+	-	B	

△A REPLACE SAFETY COVER BEFORE USE.
△B DI/DO (IF ORDERED).
△C OUTPUT IS POLARITY INSENSITIVE.

WIRING NOTE

DRAIN/SHIELD OF COIL TERMINAL (SC, 3 OR TERMINAL GROUND) AND DRAIN/SHIELD OF ELECTRODE WIRING IS NOT CONNECTED ON FLOWTUBE END IN TYPICAL INSTALLATIONS.

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SEE DETAIL "C" FOR WIRE CONSTRUCTION

CABLE WIRING REQUIRE USING CABLE GLANDS INSTALLED IN HOUSING CONDUITS. UNUSED CONDUITS SHOULD BE CLOSED

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY. ROSEMOUNT

UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES.

-DEC TOLERANCES-
.X ± .1 [2.5]
.XX ± .02 [0.5]
.XXX ± .010 [0.25]
FRACTIONS ± 1/32 ANGLES ± 2°

SURFACE FINISH UNLESS OTHERWISE SPECIFIED 125 | 3RD ANGLE | SIZE D | SCALE 5/4 | REV AD

EMERSON. ROSEMOUNT
8200 Market Boulevard - Chanhassen, MN 55317 USA

TITLE 8712EM OR 8750WDM TRANSMITTER WIRING. INSTALLATION DRAWING

DR. K.KONYUKHOV | JUN.2017 | DRAWING NO. 08712-1504
APP'D M.MIKOLICHEK | JUL.2017

DO NOT SCALE PRINT | CAD MAINTAINED. (PRO/E) | PRODUCT CODE - | DOC TYPE - | SHEET 2 OF 2

FORM REV. A1