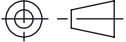



| REV. | ZONE | ECN        | DESCRIPTION                         | DATE      | BY  |
|------|------|------------|-------------------------------------|-----------|-----|
| 1    |      | US132204-A | TYPO, WIRE COLOR ON PINS 3 & 4      | 5/1/2020  | MAM |
| 2    |      | US132204-B | UPDATED SPECS ON SHEET 2            | 7/21/2020 | MAM |
| 3    |      | US132204-B | ADDED SEPARATE SPECS FOR 0250 FLOW. | 7/28/2020 | MAM |

HOW TO ORDER  
LFU20-##-####-DUW02544

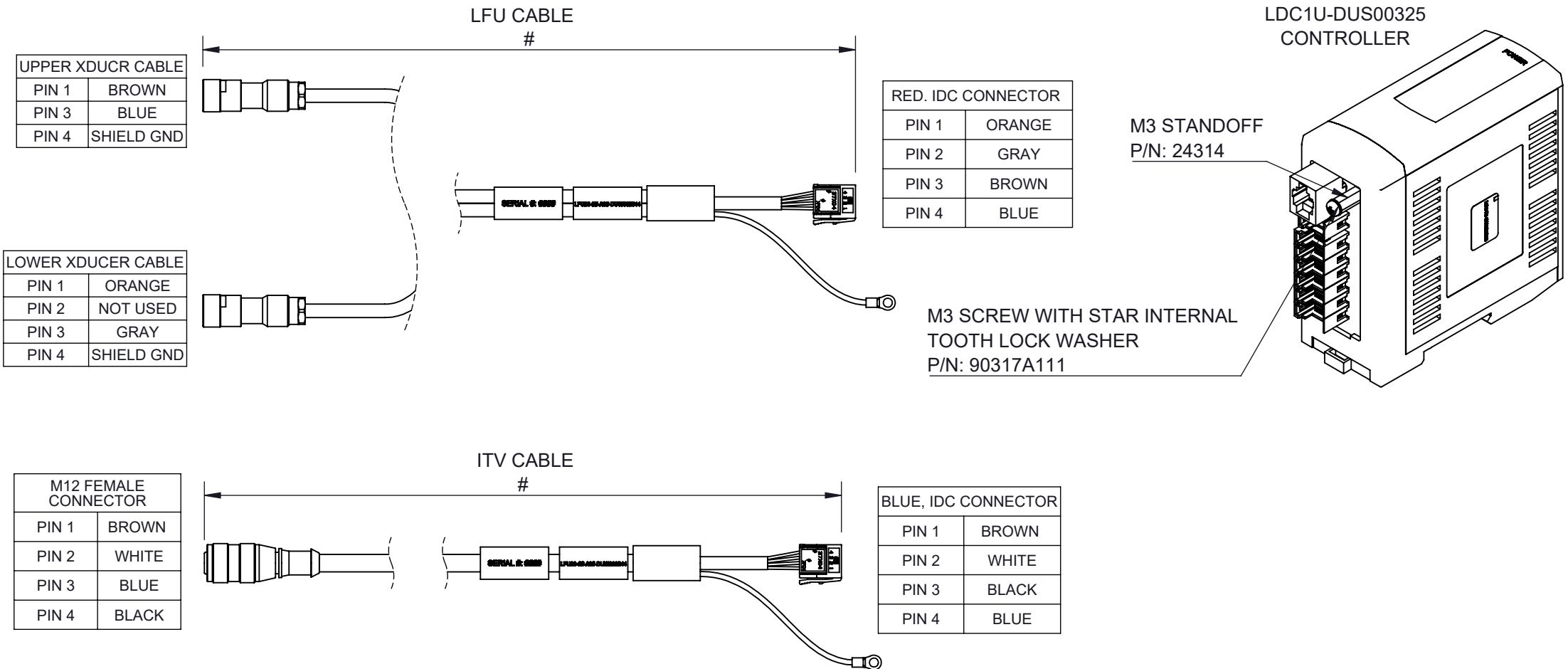
| CABLE LENGTH |     |
|--------------|-----|
| 02           | 2m  |
| 03           | 3m  |
| 05           | 5m  |
| 10           | 10m |

| CALIBRATED FLOW |        |
|-----------------|--------|
| 0250            | 250mL  |
| 0500            | 500mL  |
| 1000            | 1000mL |
| 1500            | 1500mL |

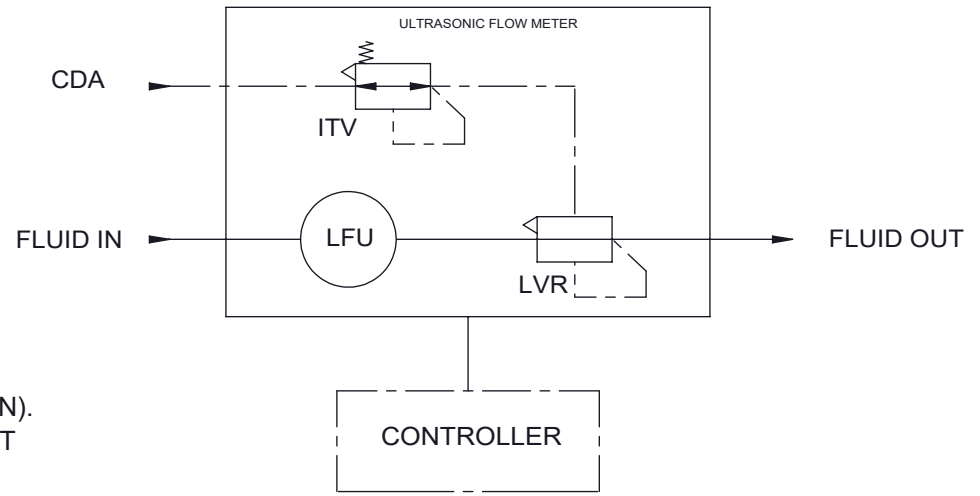
|  |   |                    |  |  |                                     |
|--|---|--------------------|--|--|-------------------------------------|
| 1  | LFU20-##-####-A01-DUW02544  |                    | LOW FLOW FLUID CONTROLLER  |  | 1                                   |
| ITEM NO.   | PART NUMBER   |                    | DESCRIPTION  |  | QTY.                                |
| UNITS<br>mm  |  | SCALE<br>FREE      |  <b>SMC Corporation of America</b><br><small>THIS DRAWING CONTAINS CONFIDENTIAL INFORMATION PROPRIETARY TO SMC CORPORATION OF AMERICA. IT MUST NOT BE REPRODUCED OR DISCLOSED TO OTHERS OR USED IN ANY OTHER WAY, IN PART OR IN WHOLE, EXCEPT AS AUTHORIZED IN WRITING BY SMC CORPORATION OF AMERICA.</small> |  |                                     |
| DRAWN BY<br>MICHAEL J. REIDY   |   | DATE<br>12/10/2018 |  |  |                                     |
| APPROVED BY<br><br><b>REFER TO EDM SYSTEM</b>  |   |                    | DESCRIPTION<br><br>LOW FLOW FLUID CONTROLLER   |  |                                     |
| <b>PRINTED DOCUMENTS ARE UNCONTROLLED</b><br>REFER TO EDM SYSTEM FOR CONTROLLED DOCUMENT |   |                    |  |  |                                     |
| CAD FILE<br>LFU20-##-####-DUW02544   |   | SIZE<br>B          | DRAWING/PART No.   |  | SHEET 1 OF 2                        |
|  |   |                    | LFU20-##-####-DUW02544   |  | REVISION<br><div><div>3</div></div> |

- NOTES: (UNLESS OTHERWISE SPECIFIED)
- ALL DIMENSIONS ARE FOR REFERENCE ONLY.
  - ALL DIMENSIONS ARE IN mm.
  - SEE SHEET 2 FOR CONTROLLER DETAILS AND SPECIFICATIONS.
  - MACHINED PARTS MEET FM4910 ANSI STANDARD.
  - TESTED AND CALIBRATED PER STANDARD SMC PROCEDURES.

| SPECIFICATIONS         |      |   |
|------------------------|------|---|
| ACCURACY               | 0500 | ±3% Setpoint @ ≥30%F.S.Flow<br>±0.75% F.S @ <30%F.S. Flow |
|                        | 1000 |   |
|                        | 1500 |   |
|                        | 0250 | ±3% F.S.@ ≥30%F.S. Flow<br>±5% F.S @ <30%F.S. Flow        |
|                        |      |   |
|                        |      |   |
| RISE TIME(s)           |      | 3   |
| SETTLING TIME(s)       |      | 5   |
| STABILITY              |      | ±3% Setpoint @ 10-100% F.S.                               |
| OPERATING PRESSURE     |      | 20-60 PSI   |
| POWER                  |      | 24 VDC +/- 10%  |
| CURRENT CONSUMPTION    |      | <200mA (<4.8 W) @ 24 VDC                                  |
| CONTROL INPUT SIGNAL   |      | 0-10 VDC (SEE NOTE 7)                                     |
| FEEDBACK OUTPUT SIGNAL |      | 0-10 VDC  |
| AMBIENT TEMPERATURE    |      | 10-50°C<br>(NO FREEZING)<br>(SEE NOTE 1)                  |
| FLUID TEMPERATURE      |      | 10-50°C<br>(NO FREEZING)<br>(SEE NOTE 4)                  |
| ORIENTATION            |      | VERTICAL  |



FLUID SCHEMATIC



| CONTROLLER CONFIGURATION AND PID SETTINGS |  |   |   |                  |
|---|--|---|---|------------------|
| FW REVISION                               | PID PARAMETER  | PRE-FILTER SETTINGS   | FILTER SETTINGS   | LOW LEVEL CUTOFF |
| 2010.0608                                 | P = 12.00<br>I = 5.50<br>D = 1.00<br>I CORR. FACTOR = 1.00 | TIME DOMAIN FILTER = 0<br>BAD DATA REJECTION = 5<br>PREFILTER AVERAGE TIME = 20 | FLOW DAMPING = 0.5<br>SENSITIVITY = 9<br>HYSTERESIS = 1<br>MIN. HYSTERESIS = 50 | 10mL             |

- SPECIFICATION NOTES:
- TEMPERATURE BASED ON 30%-80% RELATIVE HUMIDITY (NO CONDENSATION).
  - EXCESSIVE IMPACTS DIRECTLY ON PART MAY EFFECT THE PERFORMANCE.
  - ENSURE THE PRODUCT IS MOUNTED VERTICALLY TO AVOID BUBBLE ENTRAPMENT.
  - KEEP EACH ITV AND LFU WIRE HARNESS WITH UNIT IT WAS CALIBRATED WITH. DO NOT USE CABLES FROM OTHER LFC UNITS.
  - INFINILINK PID+ MUST BE RAN ON UNIT BEFORE USE.
  - FOR OPTIMAL PERFORMANCE, FLUID TEMPERATURE MUST REMAIN CONSISTANT AND HAVE SIMILAR VISCOSITY TO DI WATER.
  - ACTUAL RANGE DEPENDS ON THE LOW FLOW CUT OFF SETTING BASED ON THE FLOW RANGE OF THE UNIT.