

Dimensions for NPS 2 CL150 through 1500 Slip-On Flange Connections for Fisher™ L2, L2e, and L2sj Level Controllers

This supplement contains dimensions for NPS 2 CL150 through 1500 slip-on flange connections for L2, L2e, and L2sj level controllers.

Refer to the Maintenance section of the appropriate instruction manual for instructions on removing the sensor from the controller, and disassembly of the sensor connector.

Refer to the appropriate instruction manual for all other information regarding the L2, L2e, or L2sj level controller.

- L2 dimensions—refer to figure 2 and table 1
- L2e dimensions—refer to figure 3 and table 2
- L2sj dimensions—refer to figure 4 and table 3

Flange Orientation

Orient the controller so that the case is level. See figure 1 for the proper sensor orientation for flange welding.

⚠ WARNING

To maintain code/standard compliance, weld fabrication must meet the requirements of AS ME Section IX. Failure to meet these requirement could result in personal injury and/or property damage.

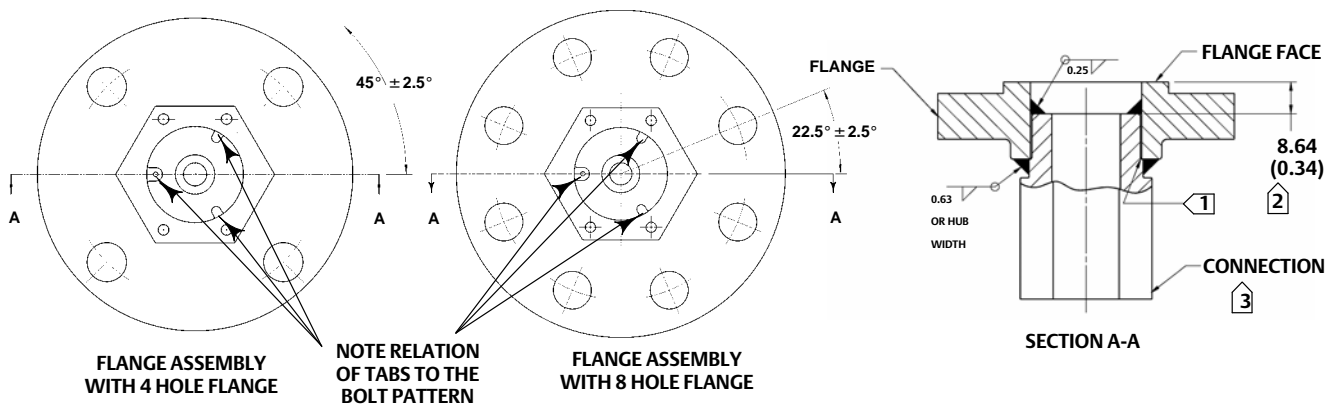
⚠ WARNING

To maintain compliance with NACE MR0175, weld fabrication must meet the requirements of NACE MR0175, paragraph 5.3. Failure to meet these requirements could result in personal injury and/or property damage.

Note

Slip-on flanges are not supplied with the L2, L2e, or L2sj level controller. Contact your [Emerson sales office](#) or Local Business Partner for information on obtaining a slip-on flange construction.

Figure 1. Sensor Orientation for Slip-On Flange Mounting



3485013-C

1 CONNECTION SHOULDER TO BOTTOM ON FLANGE HUB EXCEPT WHEN END-TO-FLANGE FACE IS LESS THAN 8.64 mm (0.34 INCH)

2 DIMENSION ONLY APPLIES WHEN CONNECTION CAN BE INSERTED SUCH THAT CONNECTION END-TO-FLANGE CONNECTION IS LESS THAN 8.64 mm (0.34 INCH)

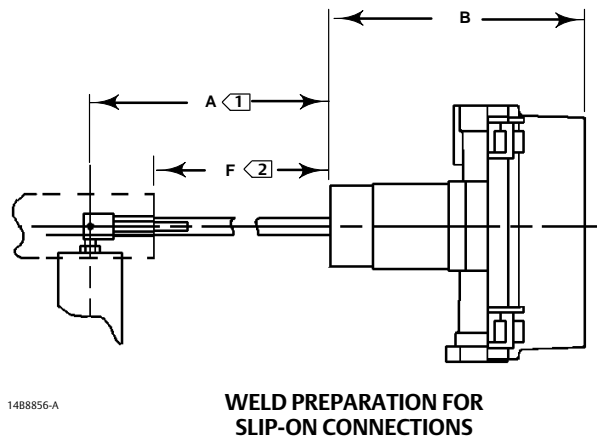
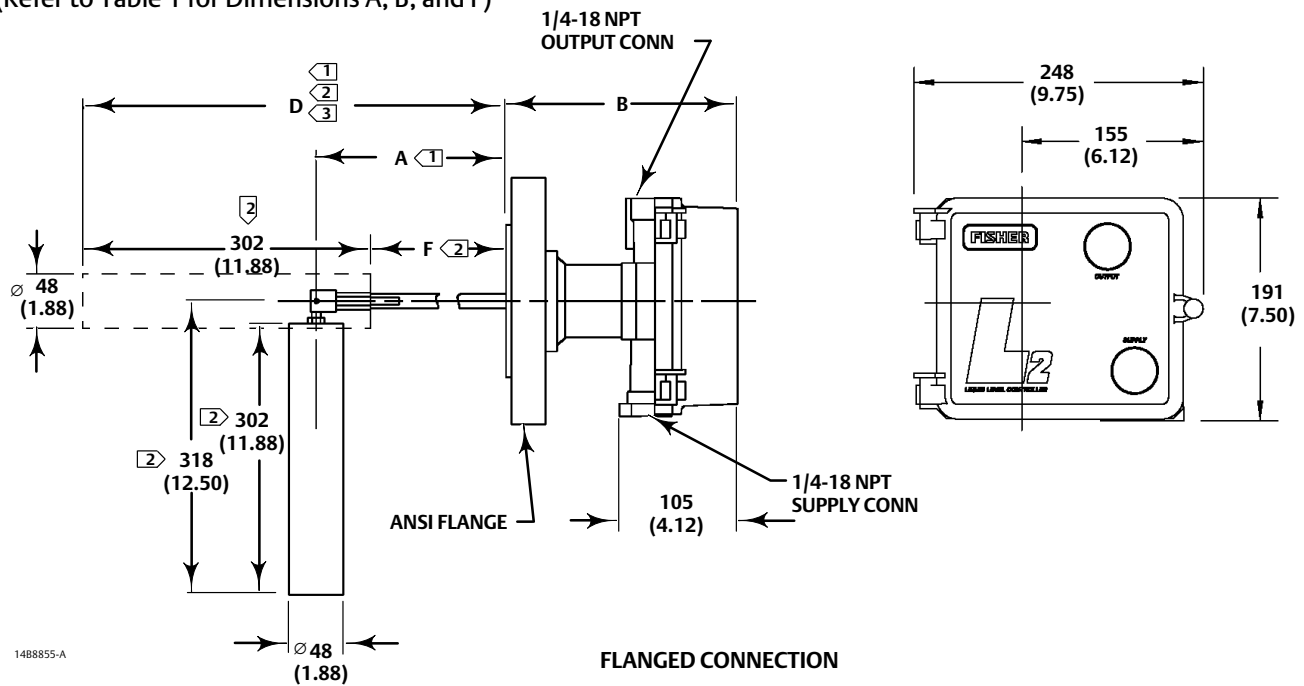
3 CONNECTION USED FOR ORIENTATION

mm
(INCH)

Related Documents

- Bulletin 34.2:L2—Fisher L2 Liquid Level Controller, [D103034X012](#)
- Fisher L2 Liquid Level Controller Instruction Manual, [D103032X012](#)
- Bulletin 34.2:L2e—Fisher L2 Electric Level Controller, [D103532X012](#)
- Fisher L2e Electric Level Controller Instruction Manual, [D103531X012](#)
- Bulletin 34.2:L2sj—Fisher L2sj Low Emission Liquid Level Controller, [D103229X012](#)
- Fisher L2sj Low Emission Liquid Level Controller Instruction Manual, [D103216X012](#)

Figure 2. Fisher L2 Liquid Level Controller—Dimensions with Slip-On Flange
(Refer to Table 1 for Dimensions A, B, and F)



NOTES:

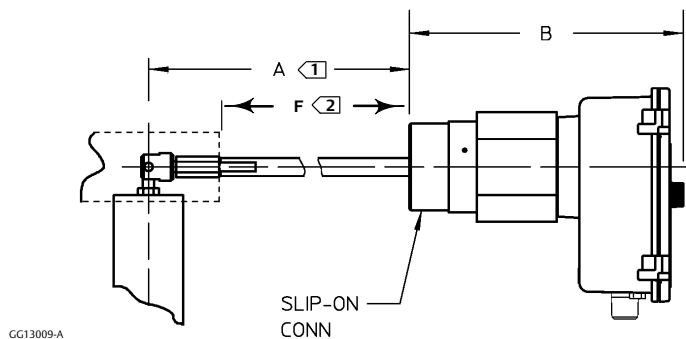
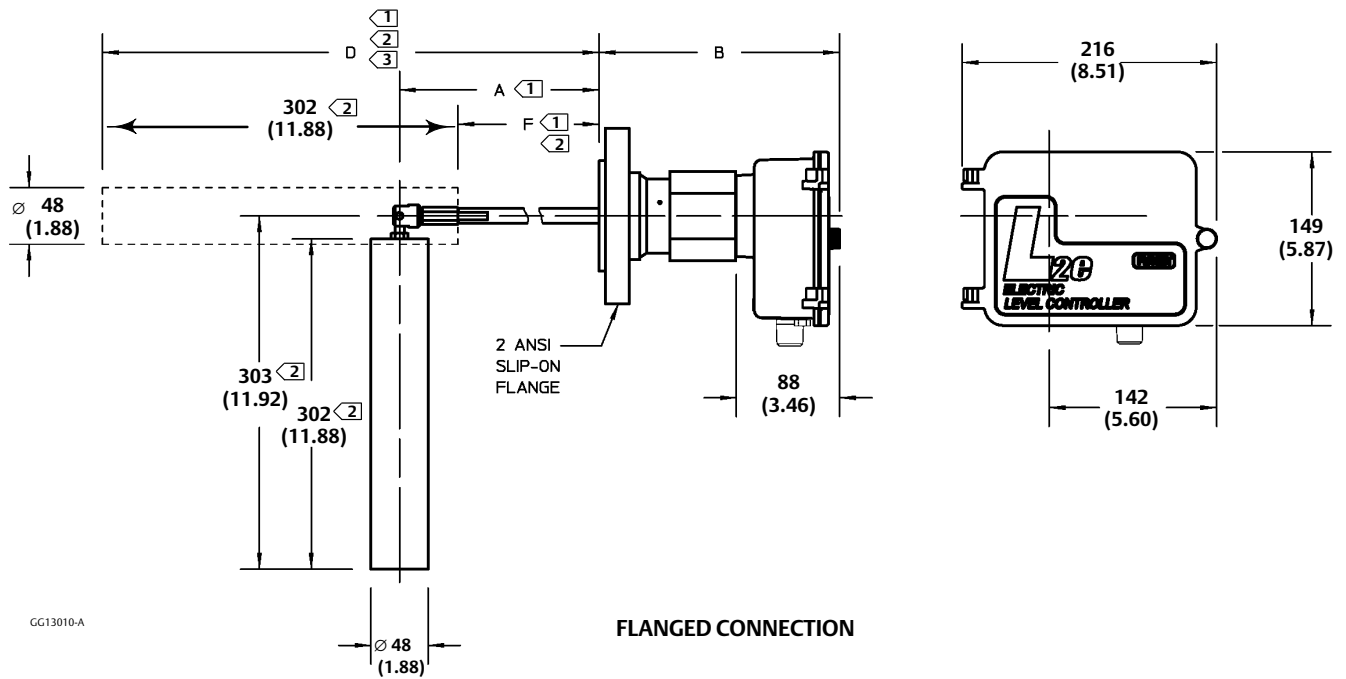
- 1 DIMENSIONS A AND D INCLUDE ONE STANDARD 6-INCH (152 mm) EXTENSION. CONTACT YOUR EMERSON Automation Solutions SALES OFFICE FOR OPTIONAL EXTENSION LENGTHS.
- 2 DIMENSIONS VALID WITH STANDARD DISPLACERS ONLY
- 3 DIMENSION D IS EQUAL TO DIMENSION F PLUS 302 mm (11.88 INCH)

mm
(INCH)

Table 1. Fisher L2 Liquid Level Controller—Dimension A, B, and F (see figure 2)

| SIZE AND RATING | | DIMENSIONS A, B, AND F | | | | | |
|--------------------------|------------------|------------------------|-----|-----|--------|-------|-------|
| | | A | B | F | A | B | F |
| | | mm | | | Inches | | |
| 2 | CL150 RF | 326 | 202 | 277 | 12.85 | 7.96 | 10.90 |
| | CL300 RF | 326 | 202 | 277 | 12.85 | 7.96 | 10.90 |
| | CL600 RF | 320 | 209 | 270 | 12.58 | 8.23 | 10.63 |
| | CL600 RTJ | 318 | 211 | 268 | 12.52 | 8.29 | 10.57 |
| | CL900/1500 RF | 299 | 230 | 249 | 11.77 | 9.04 | 9.82 |
| | CL900/1500 RTJ | 297 | 231 | 248 | 11.71 | 9.10 | 9.76 |
| 3 x 2 | CL150 RF | 326 | 202 | 277 | 12.85 | 7.96 | 10.90 |
| | CL300 RF | 321 | 207 | 272 | 12.65 | 8.17 | 10.70 |
| | CL600 RF | 312 | 217 | 262 | 12.27 | 8.54 | 10.32 |
| | CL600 RTJ | 310 | 219 | 261 | 12.21 | 8.60 | 10.26 |
| | CL900 RF | 296 | 233 | 246 | 11.65 | 9.17 | 9.70 |
| | CL900 RTJ | 294 | 234 | 245 | 11.58 | 9.23 | 9.63 |
| | CL1500 FR | 286 | 242 | 237 | 11.27 | 9.54 | 9.32 |
| | CL1500 RTJ | 285 | 244 | 235 | 11.20 | 9.61 | 9.25 |
| 4 x 2 | CL150 RF | 326 | 202 | 277 | 12.85 | 7.96 | 10.90 |
| | CL300 RF | 316 | 212 | 267 | 12.46 | 8.35 | 10.51 |
| | CL600 RF | 304 | 225 | 254 | 11.96 | 8.85 | 10.01 |
| | CL600 RTJ | 302 | 226 | 253 | 11.90 | 8.91 | 9.95 |
| | CL900 RF | 296 | 233 | 246 | 11.65 | 9.17 | 9.70 |
| | CL900 RTJ | 294 | 234 | 245 | 11.58 | 9.23 | 9.63 |
| | CL1500 RF | 277 | 252 | 227 | 10.90 | 9.92 | 8.95 |
| | CL1500 RTJ | 275 | 253 | 226 | 10.83 | 9.98 | 8.88 |
| 6 x 2 | CL150 RF | 324 | 204 | 275 | 12.77 | 8.04 | 10.82 |
| | CL300 RF | 310 | 219 | 261 | 12.21 | 8.60 | 10.26 |
| | CL600 RF | 292 | 236 | 243 | 11.52 | 9.30 | 9.57 |
| | CL600 RTJ | 291 | 238 | 241 | 11.45 | 9.36 | 9.50 |
| | CL900 RF | 272 | 257 | 222 | 10.71 | 10.10 | 8.76 |
| | CL900 RTJ | 270 | 258 | 221 | 10.64 | 10.17 | 8.69 |
| | CL1500 RF | 242 | 287 | 192 | 9.52 | 11.29 | 7.57 |
| | CL1500 RTJ | 239 | 290 | 189 | 9.40 | 11.42 | 7.45 |
| NPS 2 slip-on Connection | Weld preparation | 335 | 194 | 285 | 13.19 | 7.62 | 11.24 |

Figure 3. Fisher L2e Electric Level Controller—Dimensions with Slip-On Flange
(Refer to Table 2 for Dimensions A, B, and F)



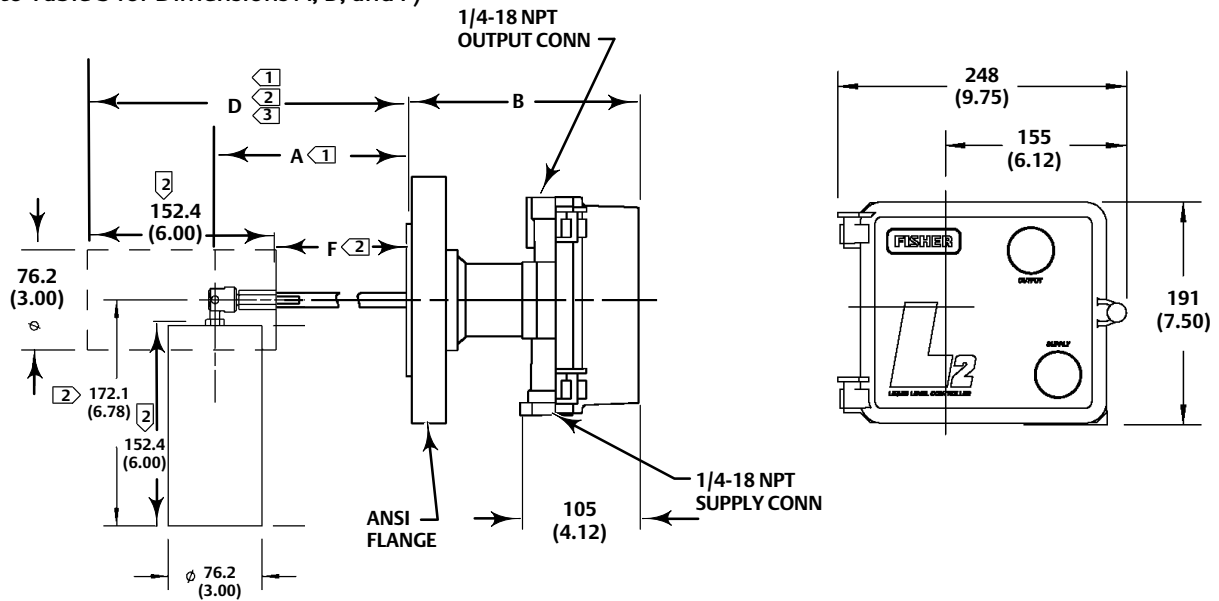
- NOTES:
- 1> DIMENSIONS A AND D INCLUDE ONE STANDARD 6-INCH (152 mm) EXTENSION. CONTACT YOUR EMERSON Automation Solutions SALES OFFICE FOR OPTIONAL EXTENSION LENGTHS.
 - 2> DIMENSIONS VALID WITH STANDARD DISPLACERS ONLY
 - 3> DIMENSION D IS EQUAL TO DIMENSION F PLUS 302 mm (11.88 INCH)

mm
(INCH)

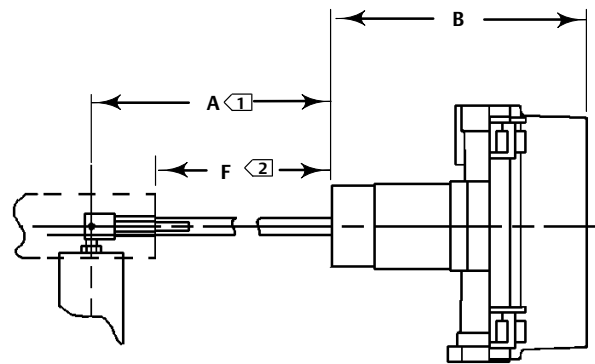
Table 2. Fisher L2e Electric Level Controller—Dimension A, B, and F (see figure 3)

| SIZE AND RATING | | DIMENSIONS A, B, AND F | | | | | |
|--------------------------|------------------|------------------------|-----|-----|--------|-------|-------|
| | | A | B | F | A | B | F |
| | | mm | | | Inches | | |
| 2 | CL150 RF | 326 | 200 | 277 | 12.85 | 7.86 | 10.90 |
| | CL300 RF | 326 | 200 | 277 | 12.85 | 7.86 | 10.90 |
| | CL600 RF | 320 | 207 | 270 | 12.58 | 8.13 | 10.63 |
| | CL600 RTJ | 318 | 208 | 268 | 12.52 | 8.19 | 10.57 |
| | CL900/1500 RF | 299 | 227 | 249 | 11.77 | 8.94 | 9.82 |
| | CL900/1500 RTJ | 297 | 229 | 248 | 11.71 | 9.00 | 9.76 |
| 3 x 2 | CL150 RF | 326 | 200 | 277 | 12.85 | 7.86 | 10.90 |
| | CL300 RF | 321 | 205 | 272 | 12.65 | 8.07 | 10.70 |
| | CL600 RF | 312 | 214 | 262 | 12.27 | 8.44 | 10.32 |
| | CL600 RTJ | 310 | 216 | 261 | 12.21 | 8.50 | 10.26 |
| | CL900 RF | 296 | 230 | 246 | 11.65 | 9.07 | 9.70 |
| | CL900 RTJ | 294 | 232 | 245 | 11.58 | 9.13 | 9.63 |
| | CL1500 FR | 286 | 240 | 237 | 11.27 | 9.44 | 9.32 |
| | CL1500 RTJ | 285 | 242 | 235 | 11.20 | 9.51 | 9.25 |
| 4 x 2 | CL150 RF | 326 | 200 | 277 | 12.85 | 7.86 | 10.90 |
| | CL300 RF | 316 | 210 | 267 | 12.46 | 8.25 | 10.51 |
| | CL600 RF | 304 | 222 | 254 | 11.96 | 8.75 | 10.01 |
| | CL600 RTJ | 302 | 224 | 253 | 11.90 | 8.81 | 9.95 |
| | CL900 RF | 296 | 230 | 246 | 11.65 | 9.07 | 9.70 |
| | CL900 RTJ | 294 | 232 | 245 | 11.58 | 9.13 | 9.63 |
| | CL1500 RF | 277 | 249 | 227 | 10.90 | 9.82 | 8.95 |
| | CL1500 RTJ | 275 | 251 | 226 | 10.83 | 9.88 | 8.88 |
| 6 x 2 | CL150 RF | 324 | 202 | 275 | 12.77 | 7.94 | 10.82 |
| | CL300 RF | 310 | 216 | 261 | 12.21 | 8.50 | 10.26 |
| | CL600 RF | 292 | 234 | 243 | 11.52 | 9.20 | 9.57 |
| | CL600 RTJ | 291 | 235 | 241 | 11.45 | 9.26 | 9.50 |
| | CL900 RF | 272 | 254 | 222 | 10.71 | 10.00 | 8.76 |
| | CL900 RTJ | 270 | 256 | 221 | 10.64 | 10.07 | 8.69 |
| | CL1500 RF | 242 | 284 | 192 | 9.52 | 11.19 | 7.57 |
| | CL1500 RTJ | 239 | 288 | 189 | 9.40 | 11.32 | 7.45 |
| NPS 2 slip-on Connection | Weld preparation | 335 | 191 | 285 | 13.19 | 7.52 | 11.24 |

Figure 4. Fisher L2sj Liquid Level Controller—Dimensions with Slip-On Flange
(Refer to Table 3 for Dimensions A, B, and F)



FLANGED CONNECTION



148856-A

WELD PREPARATION FOR SLIP-ON CONNECTIONS

NOTES:

- 1 DIMENSIONS A AND D INCLUDE ONE STANDARD 3-INCH (76.2 mm) EXTENSION. CONTACT YOUR EMERSON PROCESS MANAGEMENT SALES OFFICE FOR OPTIONAL EXTENSION LENGTHS.
- 2 DIMENSION VALID WITH STANDARD DISPLACERS ONLY
- 3 DIMENSION D IS EQUAL TO DIMENSION F PLUS 152.4 mm (6.00 INCH)

mm
(INCH)

Table 3. Fisher L2sj Liquid Level Controller—Dimension A, B, and F (see figure 4)

| SIZE AND RATING | | DIMENSIONS A, B, AND F | | | | | |
|--------------------------|------------------|------------------------|-----|-----|--------|-------|------|
| | | A | B | F | A | B | F |
| | | mm | | | Inches | | |
| 2 | CL150 RF | 250 | 202 | 201 | 9.85 | 7.96 | 7.90 |
| | CL300 RF | 250 | 202 | 201 | 9.85 | 7.96 | 7.90 |
| | CL600 RF | 243 | 209 | 194 | 9.58 | 8.23 | 7.63 |
| | CL600 RTJ | 242 | 211 | 192 | 9.52 | 8.29 | 7.57 |
| | CL900/1500 RF | 223 | 230 | 173 | 8.77 | 9.04 | 6.82 |
| | CL900/1500 RTJ | 221 | 231 | 172 | 8.71 | 9.10 | 6.76 |
| 3 x 2 | CL150 RF | 250 | 202 | 201 | 9.85 | 7.96 | 7.90 |
| | CL300 RF | 245 | 207 | 195 | 9.65 | 8.17 | 7.70 |
| | CL600 RF | 235 | 217 | 186 | 9.27 | 8.54 | 7.32 |
| | CL600 RTJ | 234 | 219 | 184 | 9.21 | 8.60 | 7.26 |
| | CL900 RF | 220 | 233 | 170 | 8.65 | 9.17 | 6.70 |
| | CL900 RTJ | 218 | 234 | 168 | 8.58 | 9.23 | 6.63 |
| | CL1500 FR | 210 | 242 | 161 | 8.27 | 9.54 | 6.32 |
| | CL1500 RTJ | 208 | 244 | 159 | 8.20 | 9.61 | 6.25 |
| 4 x 2 | CL150 RF | 250 | 202 | 201 | 9.85 | 7.96 | 7.90 |
| | CL300 RF | 240 | 212 | 191 | 9.46 | 8.35 | 7.51 |
| | CL600 RF | 228 | 225 | 178 | 8.96 | 8.85 | 7.01 |
| | CL600 RTJ | 226 | 226 | 177 | 8.90 | 8.91 | 6.95 |
| | CL900 RF | 220 | 233 | 170 | 8.65 | 9.17 | 6.70 |
| | CL900 RTJ | 218 | 234 | 168 | 8.58 | 9.23 | 6.63 |
| | CL1500 RF | 201 | 252 | 151 | 7.90 | 9.92 | 5.95 |
| | CL1500 RTJ | 199 | 253 | 149 | 7.83 | 9.98 | 5.88 |
| 6 x 2 | CL150 RF | 248 | 204 | 199 | 9.77 | 8.04 | 7.82 |
| | CL300 RF | 234 | 219 | 184 | 9.21 | 8.60 | 7.26 |
| | CL600 RF | 216 | 236 | 167 | 8.52 | 9.30 | 6.57 |
| | CL600 RTJ | 215 | 238 | 165 | 8.45 | 9.36 | 6.50 |
| | CL900 RF | 196 | 257 | 146 | 7.71 | 10.10 | 5.76 |
| | CL900 RTJ | 194 | 258 | 145 | 7.64 | 10.17 | 5.69 |
| | CL1500 RF | 166 | 287 | 116 | 6.52 | 11.29 | 4.57 |
| | CL1500 RTJ | 162 | 290 | 113 | 6.40 | 11.42 | 4.45 |
| NPS 2 slip-on Connection | Weld preparation | 259 | 194 | 209 | 10.19 | 7.62 | 8.24 |

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Emerson Automation Solutions
Marshalltown, Iowa 50158 USA
Sorocaba, 18087 Brazil
Cernay, 68700 France
Dubai, United Arab Emirates
Singapore 128461 Singapore

www.Fisher.com

