

**Features**

- Aluminum and stainless steel enclosures
- Ex de and Ex tb certified
- Integration of electrical components and operating elements in Ex d enclosures as per customer specification
- Customizable configuration of operators, terminals and cable entries as per specification
- Various enclosure size and design variants
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Choice of viewing windows for monitoring instruments

**Function**

Ex d and Ex e control and distribution panels are combined in an efficient, flanged assembly that provides improved functionality. Normal industrial electrical components are installed in the Ex d part of the assembly, while certified Ex e components like LED indicators, pushbuttons, control switches, ammeters, and connection terminals are installed in the Ex e enclosure, which is easy to access. During field installation, cables are easily connected inside the Ex e enclosure with Ex e cable glands and the appropriate terminals. This avoids the need for field-installed Ex d cable glands, or even barrier glands, and enables safe operation and easy maintenance of the complete assembly.



**Type Code / Model Number**

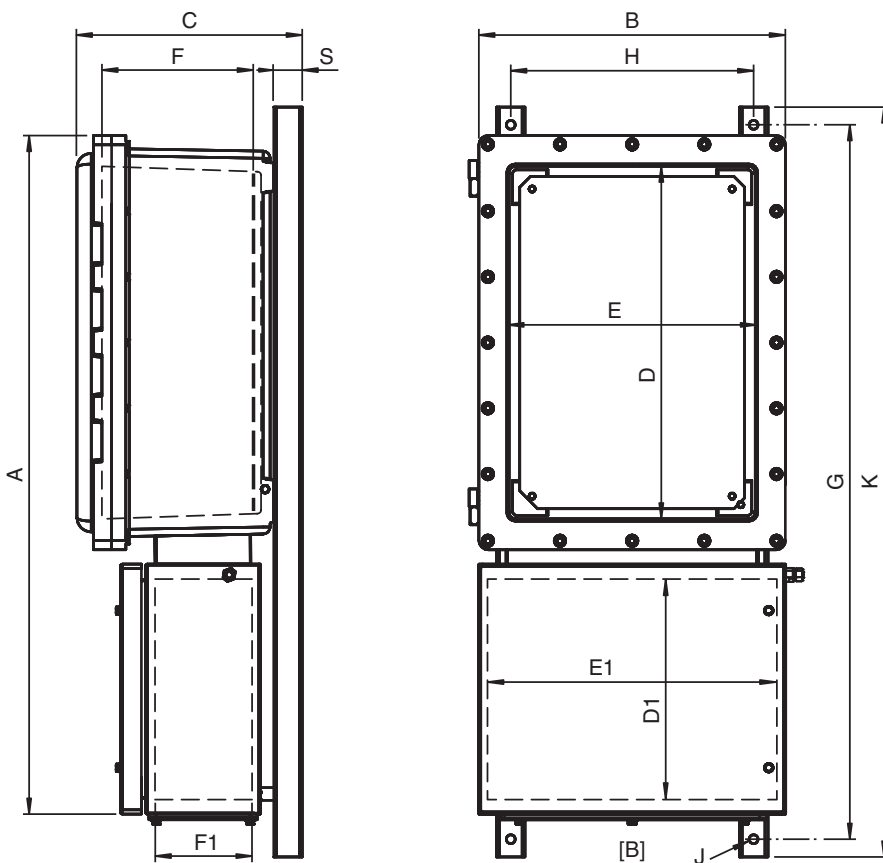
|             |                               |  |  |  |  |  |  |  |  |  |
|-------------|-------------------------------|--|--|--|--|--|--|--|--|--|
| <b>Type</b> |                               |  |  |  |  |  |  |  |  |  |
| FP          | flanged panel                 |  |  |  |  |  |  |  |  |  |
|             | <b>Ex d enclosure type</b>    |  |  |  |  |  |  |  |  |  |
|             | EJB*                          | EJB type in aluminum, Ex d IIB+H <sub>2</sub> (* = enclosure size, see selection table)        |  |  |  |  |  |  |  |  |
|             | EJBX*                         | EJB type in stainless steel, Ex d IIB+H <sub>2</sub> (* = enclosure size, see selection table) |  |  |  |  |  |  |  |  |
|             | GUB                           | GUB type in aluminum, Ex d IIC   |  |  |  |  |  |  |  |  |
|             | GUBX                          | GUB type in stainless steel, Ex d IIC  |  |  |  |  |  |  |  |  |
|             | <b>Ex d enclosure variant</b> |  |  |  |  |  |  |  |  |  |
|             |                               | standard variant   |  |  |  |  |  |  |  |  |
|             | W                             | variant with viewing window (see individual data sheets)                                       |  |  |  |  |  |  |  |  |
|             |                               | <b>GUB enclosure size (EJB sizes see enclosure type)</b>                                       |  |  |  |  |  |  |  |  |
|             |                               | *  | see selection table                          |  |  |  |  |  |  |  |
|             |                               | <b>Ex e enclosure type</b>   |  |  |  |  |  |  |  |  |
|             |                               | FS   | stainless steel enclosure with return flange |  |  |  |  |  |  |  |
|             |                               | <b>Ex e enclosure size</b>   |  |  |  |  |  |  |  |  |
|             |                               | *  | see selection table                          |  |  |  |  |  |  |  |
|             |                               | <b>Ex e enclosure positioning</b>  |  |  |  |  |  |  |  |  |
|             |                               |  | below Ex d enclosure                         |  |  |  |  |  |  |  |
|             |                               | T  | on top of Ex d enclosure                     |  |  |  |  |  |  |  |
|             |                               | L  | left of Ex d enclosure                       |  |  |  |  |  |  |  |
|             |                               | <b>Version index</b>   |  |  |  |  |  |  |  |  |
|             |                               | *  | sequential                                   |  |  |  |  |  |  |  |
|             |                               | <b>Production location</b>   |  |  |  |  |  |  |  |  |
|             |                               | *  | variant-specific                             |  |  |  |  |  |  |  |
|             |                               | <b>Variant number</b>  |  |  |  |  |  |  |  |  |
|             |                               |  | -Yxxxxxx                                     |  |  |  |  |  |  |  |

|  |        |    |  |     |     |   |     |      |          |
|--|--------|----|--|-----|-----|---|-----|------|----------|
| FP.  | EJB20A | W3 |  | .FS | 08B | T | .V1 | .ITA | -Y123456 |
| Example: Ex d enclosure type EJB in aluminum, size 20A, with rectangular window size 3, combined with Ex e enclosure in stainless steel, size 08B, positioned on top of Ex d enclosure, version 1, produced in Italy |        |    |  |     |     |   |     |      |          |

Release date 2019-06-17 T172061

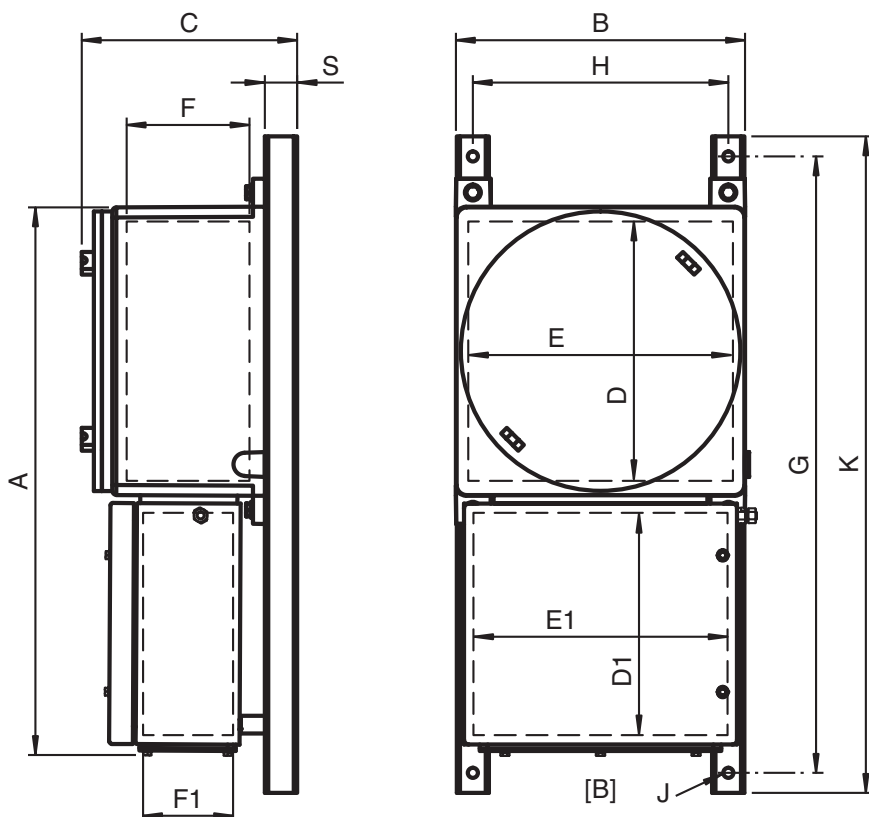
| <b>Technical Data</b>  |  |
|--|--|
| <b>Electrical specifications</b>                               |  |
| Operating voltage  | 1000 V DC / 1500 V AC max.   |
| Operating current  | 1600 A max.  |
| <b>Mechanical specifications</b>                               |  |
| Enclosure range  | details of Ex e enclosure see datasheet Control Stations FXLS*   |
| Dimensions   | see data table<br>values might differ slightly due to casting and manufacturing tolerances   |
| Enclosure cover  | see data table   |
| <b>Cover fixing</b>  |  |
| Screws   | see data table   |
| Cover seal   | none, O-ring for IP66/67   |
| Degree of protection   | IP66 (IP66/67 with O-ring)   |
| Mounting   | see data table   |
| Grounding  | M10 internal/external brass grounding bolt through enclosure body  |
| Mass   | see data table<br>valid for empty enclosure, will increase according to integrated components  |
| <b>Material</b>  |  |
| Enclosure  | Aluminum alloy<br>AISI 316L, (1.4404) stainless steel  |
| Finish   | epoxy coated RAL 7005 (grey) or shot peened  |
| O-Ring   | silicone   |
| Flamepath grease   | Greasil MS4 or NEVER SEEZ Marine Grade, GUB petroleum jelly  |
| Glass  | thermo-resistant tempered glass  |
| <b>Ambient conditions</b>                                      |  |
| Ambient temperature  | -50 ... 60 °C (-58 ... 140 °F)<br>depending on integrated components   |
| <b>Data for application in connection with hazardous areas</b> |  |
| EU-Type Examination Certificate                                | see data table   |
| Maximum power dissipation                                      | see data table<br>maximum power dissipation at T4/+40 °C enclosure without window  |
| <b>International approvals</b>                                 |  |
| IECEX approval   | see data table   |
| Further approvals  | available on request   |
| <b>Conformity</b>  |  |
| Degree of protection   | EN60529  |
| CE marking   | 0080 or 0102, see type label   |
| <b>General information</b>                                     |  |
| Ordering information   | This device will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.  |
| Supplementary information                                      | EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> . |

Dimensions



| Legend |  |
|--------|--|
| A      | Height   |
| B      | Width  |
| C      | Depth  |
| D      | Internal height                                |
| E      | Internal width                                 |
| F      | Internal depth to surface mounting plate       |
| D1     | Internal height Ex e enclosure                 |
| E1     | Internal width Ex e enclosure                  |
| F1     | Internal depth Ex e enclosure                  |
| G      | Mounting holes distance, vertical              |
| H      | Mounting holes distance, horizontal            |
| J      | Mounting holes diameter                        |
| K      | Maximum external dimension with mounting frame |
| S      | Depth mounting frame                           |
| [B]    | Cable entry face, Ex e enclosure               |

Dimension values see data table. Image and drawing are generic for this device type and may deviate from the specific variant.



Release date 2019-06-17 T172061

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

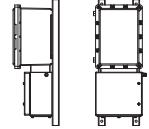
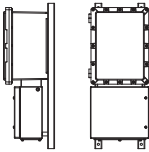
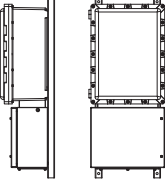
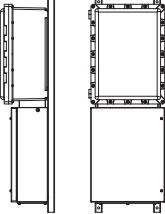
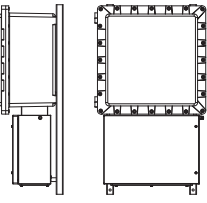
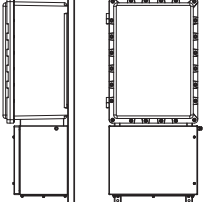
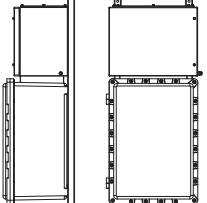
Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

Selection Table Ex d IIB+H<sub>2</sub>

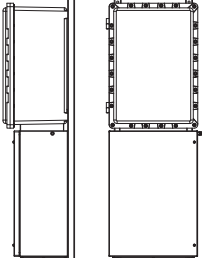
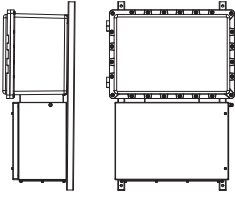
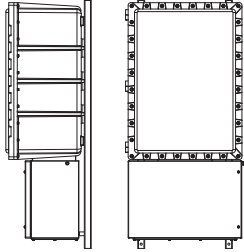
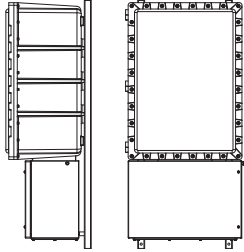
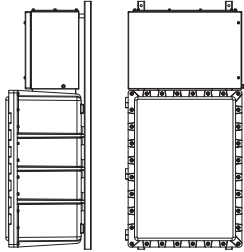
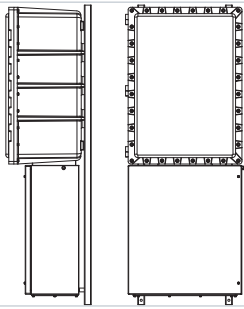
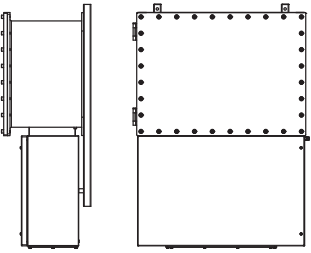
| Type              | Ex d enclosure material | External dimensions [mm] |     |       |        |    | Mounting [mm] |     |      | Sketch  |
|-------------------|-------------------------|--------------------------|-----|-------|--------|----|---------------|-----|------|---|
|                   |                         | A                        | B   | C     | K      | S  | G             | H   | J    |   |
| FPEJB8B.FS02B     | Aluminum alloy          | 657                      | 290 | 272   | 738    | 40 | 688           | 200 | 12.5 |    |
| FPEJBX8B.FS02B    | Stainless steel         | 638                      | 268 | 270.5 | 738    | 40 | 688           | 250 | 12.5 |   |
| FPEJB10B.FS04B    | Aluminum alloy          | 774                      | 358 | 300   | 847.5  | 40 | 797.5         | 250 | 12.5 |    |
| FPEJBX10B.FS04B   | Stainless steel         | 764                      | 340 | 303.5 | 847.5  | 40 | 797.5         | 320 | 12.5 |   |
| FPEJB15A.FS05B    | Aluminum alloy          | 981.5                    | 452 | 320   | 1070   | 40 | 1020          | 340 | 12.5 |   |
| FPEJBX15A.FS05B   | Stainless steel         | 963                      | 430 | 303.5 | 1070   | 40 | 1020          | 430 | 12.5 |   |
| FPEJB15A.FS05C    | Aluminum alloy          | 1181.5                   | 452 | 320   | 1270   | 40 | 1220          | 340 | 12.5 |  |
| FPEJBX15A.FS05C   | Stainless steel         | 1135                     | 430 | 303.5 | 1270   | 40 | 1220          | 430 | 12.5 |   |
| FPEJB17Q.FS07.5B  | Aluminum alloy          | 1035.5                   | 630 | 400   | 1103   | 40 | 1053          | 483 | 12.5 |  |
| FPEJBX17Q.FS07.5B | Stainless steel         | 1015                     | 594 | 356.5 | 1103   | 40 | 1053          | 583 | 12.5 |   |
| FPEJB18B.FS06B    | Aluminum alloy          | 1174                     | 538 | 440   | 1233   | 40 | 1183          | 415 | 12.5 |  |
| FPEJBX18B.FS06B   | Stainless steel         | 1150                     | 524 | 406.5 | 1243.5 | 40 | 1193.5        | 505 | 12.5 |   |
| FPEJB18B.FS06BT   | Aluminum alloy          | 1174                     | 538 | 440   | 1233   | 40 | 1183          | 415 | 12.5 |  |

Release date 2019-06-17 T172061

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com PEPPERL+FUCHS

Selection Table Ex d IIB+H<sub>2</sub>

| Type            | Ex d enclosure material | External dimensions [mm] |     |       |        |    | Mounting [mm] |     |      | Sketch  |
|-----------------|-------------------------|--------------------------|-----|-------|--------|----|---------------|-----|------|---|
|                 |                         | A                        | B   | C     | K      | S  | G             | H   | J    |   |
| FPEJB18B.FS06C  | Aluminum alloy          | 1504                     | 538 | 440   | 1563   | 40 | 1513          | 415 | 12.5 |    |
| FPEJB18BL.FS08B | Aluminum alloy          | 1018.5                   | 751 | 440   | 1117   | 40 | 1067          | 509 | 12.5 |    |
| FPEJB20A.FS08B  | Aluminum alloy          | 1393                     | 687 | 531   | 1439   | 40 | 1389          | 510 | 12.5 |   |
| FPEJBX20A.FS08B | Stainless steel         | 1387                     | 672 | 475.5 | 1454.5 | 40 | 1404.5        | 630 | 12.5 |   |
| FPEJB20A.FS08BT | Aluminum alloy          | 1393                     | 687 | 531   | 1439   | 40 | 1389          | 510 | 12.5 |  |
| FPEJB20A.FS08C  | Aluminum alloy          | 1693                     | 687 | 531   | 1739   | 40 | 1689          | 510 | 12.5 |  |
| FPEJB20AL.FS09B | Aluminum alloy          | 1305                     | 937 | 531   | 1376.5 | 40 | 1326.5        | 668 | 12.5 |  |

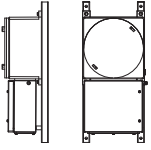
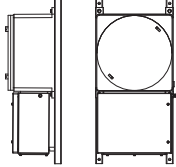
Release date 2019-06-17 T172061

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".



Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

Selection Table Ex d IIC

| Type            | Ex d enclosure material | External dimensions [mm] |       |     |        |    | Mounting [mm] |     |      | Sketch  |
|-----------------|-------------------------|--------------------------|-------|-----|--------|----|---------------|-----|------|---|
|                 |                         | A                        | B     | C   | K      | S  | G             | H   | J    |   |
| FP.GUB1H.FS01B  | Aluminum alloy          | 440                      | 220   | 214 | 580    | 40 | 530           | 178 | 12.5 |    |
| FP.GUBX1H.FS01B | Stainless steel         | 441                      | 201   | 225 | 580    | 40 | 530           | 178 | 12.5 |   |
| FP.GUB3L.FS04B  | Aluminum alloy          | 668                      | 358   | 253 | 817.5  | 40 | 767.5         | 318 | 12.5 |    |
| FP.GUBX3L.FS04B | Stainless steel         | 657                      | 347   | 258 | 811    | 40 | 761           | 318 | 12.5 |   |
| FP.GUB4.FS05B   | Aluminum alloy          | 807.5                    | 447.5 | 310 | 958    | 40 | 908           | 410 | 12.5 |   |
| FP.GUBX4.FS05B  | Stainless steel         | 814                      | 454   | 322 | 959.5  | 40 | 909.5         | 410 | 12.5 |   |
| FP.GUB5.FS07    | Aluminum alloy          | 961                      | 555   | 401 | 1128   | 40 | 1078          | 500 | 12.5 |  |
| FP.GUBX5.FS07   | Stainless steel         | 950                      | 555   | 380 | 1120.5 | 40 | 1070.5        | 495 | 12.5 |   |

Data for application in connection with hazardous areas

| Type    | Operating voltage [V max.] | Operating current [A max.] | EU-Type Examination Certificate           | Marking  | IECEx approval                           | EAC approval                |
|---------|----------------------------|----------------------------|---|--|--|-----------------------------|
| FP.EJB* | 1000 V DC<br>1500 V AC     | 1600                       | INERIS 14 ATEX 0022X<br>CML 16 ATEX 3009X |  II 2 GD<br>Ex db IIB+H <sub>2</sub> T* Gb<br>Ex tb IIIC T** °C Db<br>T6/T85 °C @ Ta +60 °C<br>T5/T90 °C @ Ta +60 °C<br>T4/T120 °C @ Ta +60 °C<br>T3/T140 °C @ Ta +60 °C with window<br>Ex e enclosure:<br>Ex de ib IIC T6, T5, T4 Gb | IECEx INE 14.0029X<br>IECEx CML 16.0008X | TC RU C-IT.<br>AA87.B.00156 |
| FP.GUB* | 1000 V DC<br>1500 V AC     | 1600                       | INERIS 14 ATEX 0035X<br>CML 16 ATEX 3009X |  II 2 GD<br>Ex db IIC T* Gb<br>Ex tb IIIC T** °C Db<br>T6/T85 °C @ Ta +60 °C<br>T5/T90 °C @ Ta +60 °C<br>T4/T120 °C @ Ta +60 °C<br>T3/T140 °C @ Ta +60 °C with window<br>Ex e enclosure:<br>Ex de ib IIC T6, T5, T4 Gb                | IECEx INE 14.0042X<br>IECEx CML 16.0008X | TC RU C-IT.<br>AA87.B.00156 |

Release date 2019-06-17 T172061

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com PEPPERL+FUCHS

## Internal Dimensions and Enclosure Details

| Type               | Ex d enclosure material | Ex d enclosure internal dimensions [mm] |     |     | Ex e enclosure internal dimensions [mm] |     |     | Mass approx. [kg] | Max. power dissipation at T4/+40 °C Ex d enclosure [W] |
|--------------------|-------------------------|---|-----|-----|---|-----|-----|-------------------|--|
|                    |                         | D                                       | E   | F   | D1                                      | E1  | F1  |                   |  |
| FP.EJB8B.FS02B     | Aluminum alloy          | 300                                     | 200 | 186 | 203                                     | 209 | 145 | 30                | 236  |
| FP.EJBX8B.FS02B    | Stainless steel         | 300                                     | 200 | 195 | 203                                     | 209 | 145 | 47                | 236  |
| FP.EJB10B.FS04B    | Aluminum alloy          | 370                                     | 260 | 215 | 253                                     | 279 | 145 | 40                | 356  |
| FP.EJBX10B.FS04B   | Stainless steel         | 370                                     | 260 | 225 | 253                                     | 279 | 145 | 80                | 353  |
| FP.EJB15A.FS05B    | Aluminum alloy          | 500                                     | 350 | 219 | 303                                     | 369 | 195 | 72                | 540  |
| FP.EJBX15A.FS05B   | Stainless steel         | 500                                     | 350 | 220 | 303                                     | 369 | 195 | 115               | 540  |
| FP.EJB15A.FS05C    | Aluminum alloy          | 500                                     | 350 | 219 | 503                                     | 369 | 195 | 77                | 540  |
| FP.EJBX15A.FS05C   | Stainless steel         | 500                                     | 350 | 220 | 503                                     | 369 | 195 | 121               | 540  |
| FP.EJB17Q.FS07.5B  | Aluminum alloy          | 500                                     | 500 | 278 | 353                                     | 494 | 205 | 110               | 593  |
| FP.EJBX17Q.FS07.5B | Stainless steel         | 500                                     | 500 | 270 | 353                                     | 494 | 205 | 168               | 593  |
| FP.EJB18B.FS06B    | Aluminum alloy          | 640                                     | 427 | 318 | 353                                     | 454 | 295 | 127               | 864  |
| FP.EJBX18B.FS06B   | Stainless steel         | 640                                     | 430 | 320 | 353                                     | 454 | 295 | 194               | 864  |
| FP.EJB18B.FS06BT   | Aluminum alloy          | 640                                     | 427 | 318 | 353                                     | 454 | 295 | 127               | 864  |
| FP.EJB18B.FS06C    | Aluminum alloy          | 640                                     | 427 | 318 | 683                                     | 454 | 295 | 163               | 864  |
| FP.EJB18BL.FS08B   | Aluminum alloy          | 427                                     | 640 | 318 | 403                                     | 599 | 295 | 131               | 864  |
| FP.EJB20A.FS08B    | Aluminum alloy          | 805                                     | 555 | 393 | 403                                     | 599 | 295 | 229               | 1616   |
| FP.EJBX20A.FS08B   | Stainless steel         | 800                                     | 550 | 380 | 403                                     | 599 | 295 | 354               | 1616   |
| FP.EJB20A.FS08BT   | Aluminum alloy          | 805                                     | 555 | 393 | 403                                     | 599 | 295 | 229               | 1616   |
| FP.EJB20A.FS08C    | Aluminum alloy          | 805                                     | 555 | 393 | 800                                     | 550 | 380 | 240               | 1616   |
| FP.EJB20AL.FS09B   | Aluminum alloy          | 555                                     | 805 | 393 | 553                                     | 849 | 295 | 241               | 1616   |
| FP.GUB1H.FS01B     | Aluminum alloy          | 170                                     | 170 | 150 | 183                                     | 139 | 125 | 16                | 143  |
| FP.GUBX1H.FS01B    | Stainless steel         | 173                                     | 173 | 150 | 183                                     | 139 | 125 | 35                | 143  |
| FP.GUB3L.FS04B     | Aluminum alloy          | 325                                     | 325 | 183 | 253                                     | 279 | 145 | 34                | 293  |
| FP.GUBX3L.FS04B    | Stainless steel         | 325                                     | 325 | 185 | 253                                     | 279 | 145 | 105               | 293  |
| FP.GUB4.FS05B      | Aluminum alloy          | 410                                     | 410 | 215 | 303                                     | 369 | 195 | 62                | 466  |
| FP.GUBX4.FS05B     | Stainless steel         | 410                                     | 410 | 228 | 303                                     | 369 | 195 | 168               | 466  |
| FP.GUB5.FS07       | Aluminum alloy          | 513                                     | 513 | 269 | 353                                     | 494 | 205 | 86                | 749  |
| FP.GUBX5.FS07      | Stainless steel         | 510                                     | 510 | 288 | 353                                     | 494 | 205 | 241               | 749  |

Release date 2019-06-17 T172061

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**