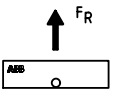


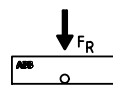
| REV | DESCRIPTION | DATE | DEPT./INIT. |
|-----|--|------------|----------------|
| A | New document | 2002-11-21 | ATCF/FM/GB/LEN |
| B | PFCL 301E was PFTL 301E | 2002-11-22 | ATCF/FM/GB/LEN |
| C | Instruction for single load cell application added. | 2007-04-12 | PA/FM/GF/ZR |
| D | PFEA122 added together with information of PROFINET and EtherNet/IP connectors. "Mains 100-240 V ac" was "Mains 115/230 VAC". Title updat. | 2022-06-02 | PAMA/FMGF /LH |
| D | connectors. "Mains 100-240 V ac" was "Mains 115/230 VAC". Title updat. | 2022-06-02 | PAMA/FMGF /LH |

LOAD CELL IN TENSION

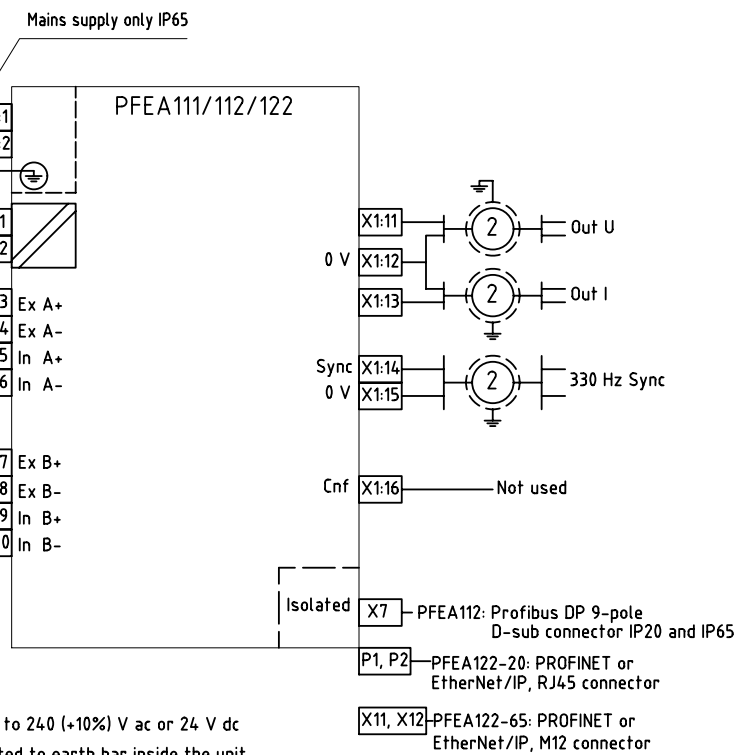
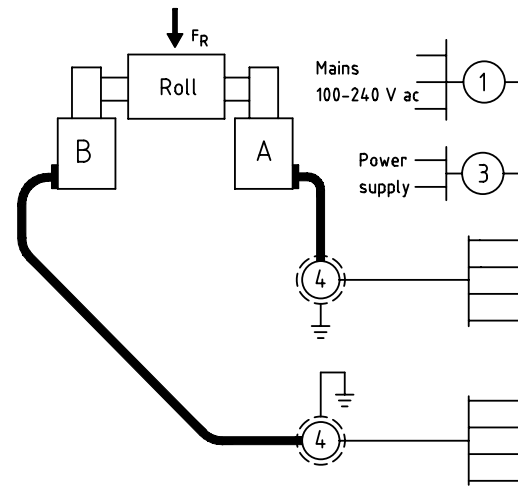
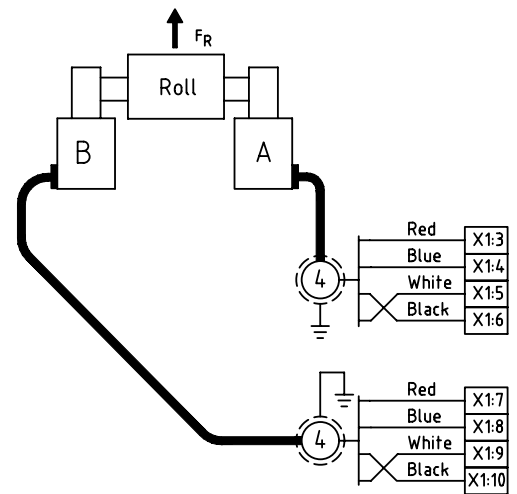


With the cable connection below, increased Force in the direction of the arrow results in a positive output signal change.

LOAD CELL UNDER COMPRESSION



With the cable connection below, increased Force in the direction of the arrow results in a positive output signal change.

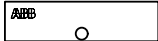


For single Load Cell application connect shorting wire at:
 -when single load cell A between X1:7 & X1:8 or
 -when single load cell B between X1:3 & X1:4

IP20:
 Power Supply 24 V dc
 Signal earth (0V) connected to Tension Electronics metal plate
 Cable Shields should be connected to earth close to the Tension Electronics

IP65:
 Power Supply 100 (-15%) to 240 (+10%) V ac or 24 V dc
 Signal earth (0V) connected to earth bar inside the unit
 Cable Shields should be connected to earth bar inside the unit

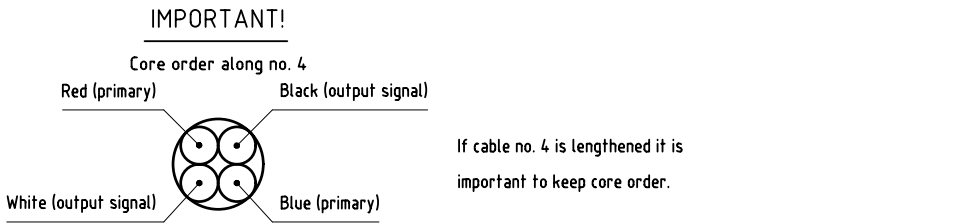
Cable resistance between X1:3 and X1:8 must not exceed 5 ohm.

PFCL301E 


The circle on the Load Cell marks the cable outlet, use this for the orientation of the Load Cell

F_R = Resultant Force on Load Cells

| CABLE LIST | |
|------------|---|
| ① | 3 x 1,5...2,5 mm ² [14...12 AWG] |
| ② | 2 x 0,4...1 mm ² [22...18 AWG] — Shielded |
| ③ | 2 x 1,5...2,5mm ² [14...12AWG] |
| ④ | 4 x 0,5 mm ² [20 AWG] — Shielded, fixed with Load Cell |



Prohibited substances set out in the current document "ABB List of Prohibited and Restricted substances" shall not be used. Restricted substances in concentrations above the accepted levels must be declared.

| | | | | | |
|--|-----------|------------------|------------|-------------------------------------|--------------------|
| Prep. | PAMA/FMGF | Lars Hinders | 2022-08-15 | Circuit diagram | Cont.sh./No of sh. |
| Appr. | PAMA/FMGF | Håkan F Wintzell | 2022-08-17 | Tension Electronics PFEA111/112/122 | |
| Resp.dept | PAMA/FMGF | | | Tension Electronics PFEA111/112/122 | - |
|  ABB AB | | | | Document number | Sheet |
| | | | | 3BSE02814.0D0065 | 2 |
| Product family : PFEA Product type designation : PFEA 111/112/122 Product information : PFE100 | | | | Long. | Rev. |
| Project or order number : Customer reference : Modify date : 2022-07-05 14:55:58 | | | | en | D |

Document status : Approved