

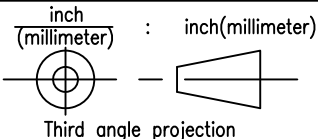
HAZARDOUS AREA

APPROVED FOR CLASS I, II AND III, DIVISION 1,
GROUPS A, B, C, D, E, F AND G HAZARDOUS LOCATIONS.

NON-HAZARDOUS AREA

Rev.	Date	Sign/Appr	Description	Rev.	Date	Sign/Appr	Description
1	5/17/96	RPH	PBX-q series added. Only page 1 affected.	2	1/17/97	RPH	SB, SB14, SB15, PC3, RC2, PC2 added. Capacities consolidated.
3	3/11/99	RPH	RC-3, ZLB, HM1, PC3, CPB, ULB added.	4	7/13/00	RPH	BK2, DSB2, DSB5 added. "d" range expanded.
5	10/6/05	RPH	PC3, PC3B, PC3C, PC22, PC42, PC46, PC60 added.	5	10/6/05	RPH	SB2, SB8 added. "q" range expanded
6	7/12/07	DB	ULG added.	7	10/13/09	DB	STAHL P/N CHANGED TO 9002/10-187-270-001
7	10/13/09	DB	STAHL P/N CHANGED TO 9002/10-187-020-001	7	10/13/09	DB	STAHL P/N CHANGED TO 9002/77-093-040-001
8	2/25/15	DB	PC7, CC1, Q50, PC30, SB9, XT50 added	9	9/25/15	DB	ADD 300t TO CAPACITY d
10	12/16/21	DB	ADD PC4 LOAD CELLS & REMOVE SHEETS 2, 3 & 4	11	10/24/22	DB	ADD CN3 LOAD CELL

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DEC x or Fract.	TOL ±0.015(0.4)	Break Corners	0.010(0.25) Max.
DEC xx	TOL ±0.010(0.25)	Angular TOL	±1/2
DEC xxx	TOL ±0.005(0.12)	Mach. Finish	125

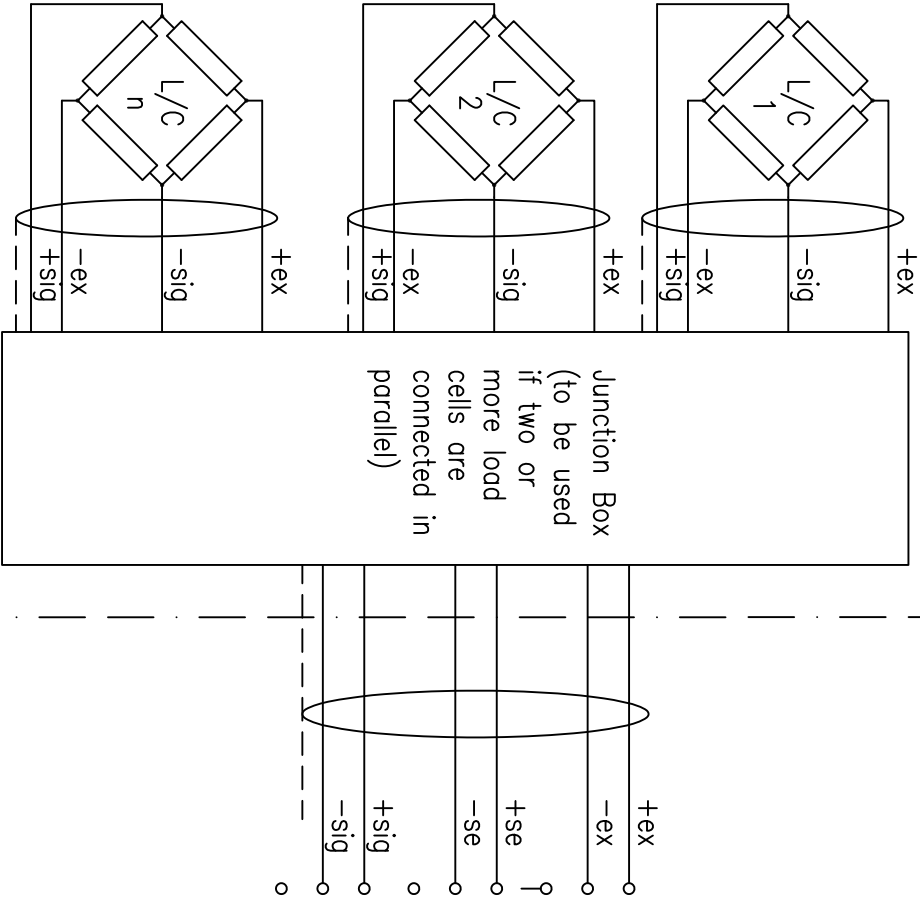
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$V_{max} = 29.9 \text{ V.}$
 $I_{max} = 0.450 \text{ A.}$
 $C_i = 0.$
 $L_i = 0.$



① ② ③ ④ ⑤ ⑥ ⑧ ⑩

APPROVED LOAD CELLS:

SB4-a, SB5-a, SB6-b, SB7-b, PC1-b, RC1-d, PBX-e, SLB-f, SB14-a, SB15-a, PC6-b, RC2-d, PC2-g, RC3-d, ZLB-b, HM1-g, PC3-b, CPB-e, BK2-a, DSB2-h, DSB5-h, PCB-g, PCBB-g, PCBC-g, PC22-b, PC42-b, PC46-g, PC60-g, SB2-d, SB8-b, PC7-b, CC1-d
Q50-h, PC30-b, SB9-e, PC4-b, CN3-f

APPROVED FORCE TRANSDUCERS:

UB1-a, UB5-a, UB6-b, UB7-b, ULB-a, ULG-i

APPROVED EXTENSOMETER:

XT50

- a = Capacity any between 100 kg and 10 ton; 200 lb and 20 klb; 1 kN and 100 kN.
- b = Capacity any between 5 kg and 500 kg; 10 lb and 1 klb; 50 N and 5 kN.
- d = Capacity any between 5 klb and 500 klb; 2 ton and 300 ton, 20 kN and 2.5 MN. ④
- x = Letter to define customer (e.g. "F" = Flintab) ⑨ ②
- e = Capacity any between 0.5 kg and 2500 kg; 1 lb and 5 klb; 5 N and 25 kN.
- f = Capacity any between 200 lb and 20 klb; 100 kg and 10000 kg; 1kN and 100 kN.
- g = Capacity any between 20 kg and 1000 kg; 50 lb and 2000 lb; 200 N and 10 kN. ⑤
- h = Capacity any between 100 kg and 100 ton; 200 lb and 200 klb; 1 kN and 1 MN.
- ⑥ i = Capacity any between 100lbs and 10klb

The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus when the following is true:

$V_{max} \geq V_{oc}, V_t \text{ or } U_o;$
 $I_{max} \geq I_{sc}, I_t \text{ or } I_o \text{ (Combined } I_{sc}, I_t \text{ or } I_o \text{ of ALL BARRIERS } \leq I_{max});$
 $C_a \geq C_i + C_{cable};$
 $L_a \geq L_i + L_{cable}.$

THE NOTES BELOW APPLY TO ALL FOUR (4) PAGES

NOTES:

1. MAX. CABLE LENGTH = 100 FT.
2. n = MAX. NUMBER OF LOAD CELLS THAT CAN BE CONNECTED IN PARALLEL WITHOUT EXCEEDING MAX. TOTAL CAPACITANCE AND MAX. TOTAL INDUCTANCE.
3. INSTALLATION SHOULD BE IN ACCORDANCE WITH ANSI/ISA RP12.06.01 "INSTALLATION OF INTRINSICALLY SAFE SYSTEM FOR HAZARDOUS (CLASSIFIED) LOCATIONS" AND THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70)
4. APPARATUS CONNECTED TO THE SYSTEM SHALL NOT USE OR GENERATE VOLTAGE GREATER THAN 250 V.
5. INSTALL INTRINSIC SAFE BARRIERS IN ACCORDANCE WITH BARRIER INSTRUCTIONS.
6. SUBSTITUTION OF COMPONENTS MAY VOID FACTORY MUTUAL APPROVAL.
7. THE ASSOCIATED APPARATUS MUST BE FM APPROVED
8. NO REVISION TO DRAWING WITHOUT PRIOR FM APPROVAL

Qty				Item No.	Name	Dwng No./Material	Remarks
D	C	B	A	Designed RPH	Checked RPH	2/10/95	Scale NONE
GENERAL CONTROL DRAWING							
ENTITY MODE							
Circuit Diagram							Assembly
Reg. No.							Drawing No. HUDSON, MA 01749, USA
Sheet 1 of 1							Rev. No. 3-2145711