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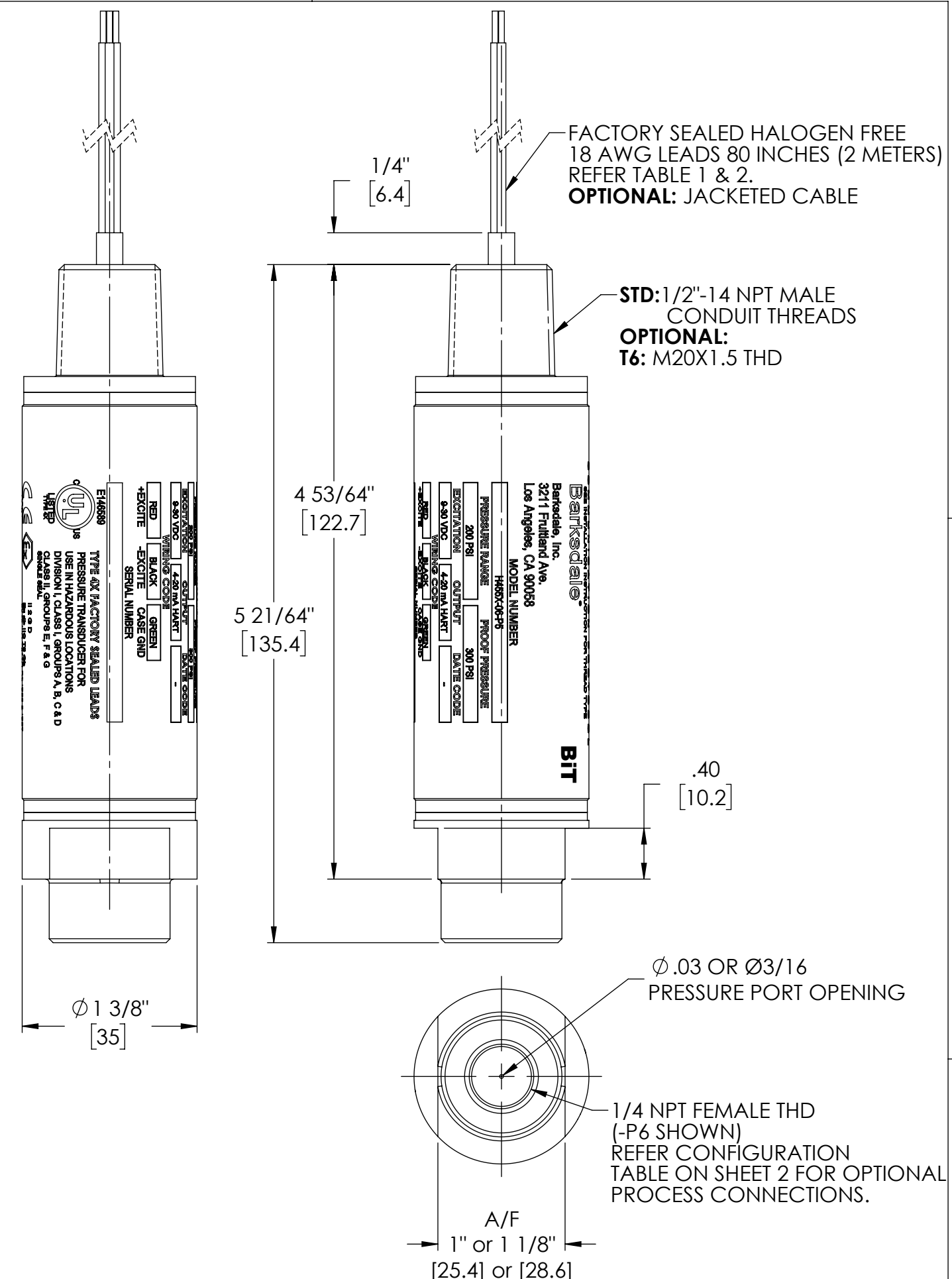
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TABLE 1. FREE LEAD WIRE CONNECTIONS				
MODEL No.	RED	BLACK	GREEN	WHITE
H455X	+ EXCITATION	- EXCITATION	EARTH GROUND	NOT INCLUDED
455X	+ EXCITATION	- EXCITATION	EARTH GROUND	NOT INCLUDED
452X	+ EXCITATION	- EXCITATION	EARTH GROUND	VOLTAGE OUTPUT

TABLE 2. JACKETED CABLE WIRE CONNECTIONS (-J Option)				
MODEL No.	WHITE	BROWN	GREEN	YELLOW
H455X	+ EXCITATION	- EXCITATION	EARTH GROUND	NOT INCLUDED
455X	+ EXCITATION	- EXCITATION	EARTH GROUND	NOT INCLUDED
452X	+ EXCITATION	- EXCITATION	EARTH GROUND	VOLTAGE OUTPUT

ADDITIONAL SPECIFICATIONS	
CATEGORY	SPECIFICATIONS
LONG TERM STABILITY:	±0.2% FSO /yr OF CALIBRATION CURVE
TYPICAL LIFE CYCLE:	100 MILLION CYCLES
TEMPERATURE SHIFT:	ZERO & SPAN: : 0.0125% PER °F OVER THE COMPENSATED TEMPERATURE RANGE.
VIBRATION:	15 G'S, 10-2000 HZ, MIL-STD 202, METHOD 204
SHOCK:	50 g's, 11 ms, MIL-STD 202 METHOD 213, COND. G.
WEIGHT:	453 Grams



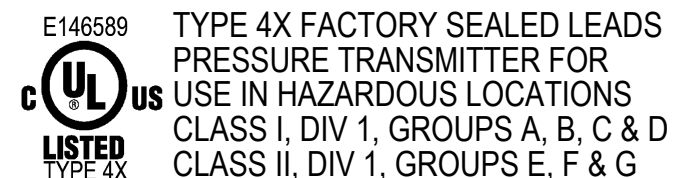
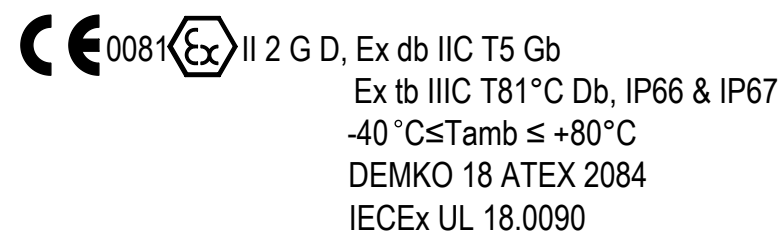
- 16. PRESSURE RANGES INDICATED HAVE BUILT-IN PRESSURE SURGE PROTECTOR. ADD "-Z17" SUFFIX FOR HIGH PRESSURE MODELS WITH NO SNUBBER FOR USE WITH HIGH VISCOSITY MEDIA.
ORIFICE SIZE WITH -Z17: BLANK,-P6,-P4,-P5,-P12,-P13,-P1,-P14: Ø.188"[4.78]; -P11: Ø.125"[3.17], -P10,-P3,-P2: Ø.093"[2.36]; -P15: Ø.063"[1.60]
ORIFICE SIZE WITHOUT -Z17: UP TO 10kPSI= Ø.030"[0.76], FOR -UL AND 15K TO 30kPSI=Ø.020"[0.5].
- 15. PART NUMBERS: ARE RATED IN PSIG. FOR RATING IN PSIA INSERT "-A" FOLLOWING THE PRESSURE RATING. (EXAMPLE: H455X-04-A IS RATED IN PSIA, H455X-04 IS RATED IN PSIG)

14. MATERIAL OF CONSTRUCTION:
HOUSING, ELECTRICAL CONNECTION: 304 STAINLESS STEEL, OPTIONAL: 316L STAINLESS STEEL.

13. WETTED MATERIAL:
SENSOR:
STANDARD: THIN-FILM SENSOR, 17-4 PH STAINLESS STEEL (15k-30k PSI AND 10k PSI WITH -UL OPTION) MODELS
STANDARD: DIFFUSED SILICON SENSOR, 316L STAINLESS STEEL (UP TO 10k PSI) MODELS
FITTING (PROCESS CONNECTION):
STANDARD: 17-4 PH STAINLESS STEEL (ALL RANGES)
OPTIONAL: 316 & 316L STAINLESS STEEL (UP TO 10k PSI)

12. 450X SERIES EXPLOSION PROOF PRESSURE TRANSMITTERS ARE LISTED FOR USE IN HAZARDOUS LOCATIONS AS FOLLOWS:

APPROVALS:



SINGLE SEAL APPROVAL PER ANSI/ISA 12.27.01 UP TO 10K PSI RANGES.
COMPLIANCES: CE, CRN, NACE

11. THERMAL, ZERO AND SPAN EFFECT: ±0.0125% PER °F OVER THE COMPENSATED TEMPERATURE RANGE.

10. SPAN ACCURACY: ±1% FSO AT 75° F (24°C).

9. SPAN ADJUSTMENT (TURN DOWN): 10:1 (WITH HART OPTION)

8. ZERO BALANCE: ±1% FSO AT 75° F (24°C).

7. RESPONSE TIME: H455X: <70ms; 455X & 452X: <50ms.

6. COMPENSATED TEMPERATURE RANGE: 0 to +165°F (-18 to +74°C).
STORAGE TEMPERATURE RANGE: -40 to +185°F (-40 to +85°C)
MEDIA TEMPERATURE RANGE: -40 to +176°F (-40 to +80°C)
OPERATING (AMBIENT) TEMPERATURE: -40 to +176°F (-40 to +80°C).

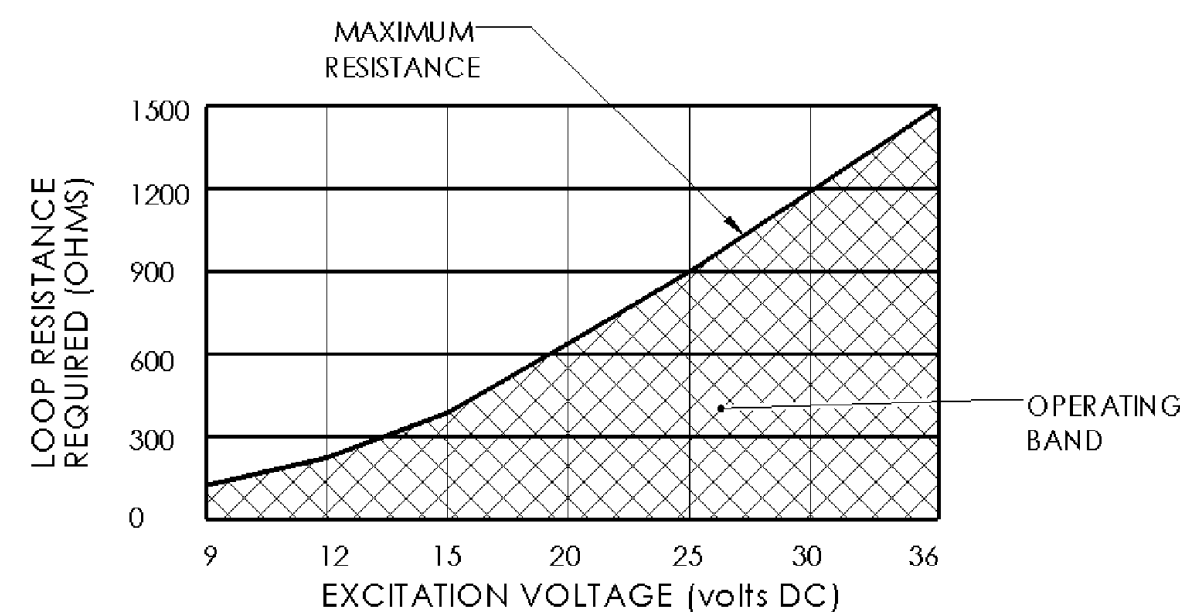
5. ACCURACY (LINEARITY, HYSTERESIS, REPEATABILITY): ±0.25% FSO AT 75° F.
±0.10% FSO AT 75° F (OPTIONAL).
±.5% FOR VACUUM ONLY [-23] TYP.

4. DIGITAL AMPLIFIER (CURRENT/VOLTAGE OUTPUT):
H455X: 4 - 20 mA (WITH HART OPTION)
455X: 4 - 20 mA
452X: 1 - 5 VDC

3. EXCITATION VOLTAGE:
H455X: 9 TO 30 VDC (WITH HART OPTION)
455X: 9 TO 30 VDC (CLASS 2 POWER SUPPLY)
452X: 12 TO 30 VDC (CLASS 2 POWER SUPPLY)

2. PROOF PRESSURE: 2X RANGE FOR UP TO 7500 PSI MODELS;
1.5X RANGE FOR 7500 - 30000 PSI MODELS.

1. PRESSURE RANGE: REFER PRODUCT CONFIGURATOR ON PAGE 2.
NOTES: UNLESS OTHERWISE SPECIFIED



DRAWN PAVAN	DATE 05-16-2017	EXPLOSION PROOF BARKSDALE INTELLIGENT TRANSMITTER WITH OPTIONAL HART COMM PROTOCOL	NEXT ASSEMBLY 982211 982212 982213 982214	00011144	C	11-01-2018
CHECKED	DATE		00011075	B	09-11-2018	
APPROVED YONG K	DATE XX-XX-2017	UNLESS OTHERWISE SPECIFIED	REFERENCE DPM DPM-4202.034	00010982	A	07-24-2018
DIMENSIONAL TOLERANCES			DIST. <input type="checkbox"/> Gmh	A.10	07-17-2018	
FRACTIONAL DECIMAL ANGULAR	±1/16 ±.010 ±5°	Barksdale CONTROL PRODUCTS www.barksdale.com	PCO #	REV.	DATE	
DIMENSIONS IN BRACKETS ARE IN MILLIMETERS			CRANE Barksdale, Inc./Barksdale GmbH A Subsidiary of Crane Co.	WEIGHT	SCALE 1:1	DWG. C
		Los Angeles, CA 90058-0843 Ph: 323-589-6181 Fax: 323-583-6252				REV. C
						SHEET 1 OF 2

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PRODUCT CONFIGURATOR

EXAMPLE: H455X T6 -29 BA -P6 -Z17-A1-Z801



BASE MODEL

HART COMMUNICATION PROTOCOL 4 - 20 mA Current Output with HART Comm. Protocol	H455X
4 - 20 mA Digital Amplifier (Current Output)	455X
1-5 VDC Digital Amplifier (Voltage Output)	452X

ELECTRICAL CONNECTION

1/2"-14 NPT Male conduit	BLANK
M20 x 1.5 Male conduit	T6

PRESSURE RANGE

PSI	BAR	PRESSURE RANGE
0-29.9" of Hg (Vac.)	0 to -1 Bar (Vac.)	-23
0-15 PSI	0-1 Bar	-01
0-30 PSI	0-2 Bar	-21
0-50 PSI	0-3 Bar	-03
0-60 PSI	0-4 Bar	-22
0-100 PSI	0-7 Bar	-04
0-150 PSI	0-10 Bar	-05
0-200 PSI	0-15 Bar	-06
0-300 PSI	0-20 Bar	-07
0-500 PSI	0-40 Bar	-08
0-1,000 PSI	0-70 Bar	-10
0-1,500 PSI	0-100 Bar	-11
0-2,000 PSI	0-150 Bar	-12
0-3,000 PSI	0-200 Bar	-13
0-4,000 PSI	0-300 Bar	-14
0-5,000 PSI	0-350 Bar	-15
0-6,000 PSI	0-400 Bar	-16
0-7,500 PSI	0-500 Bar	-17
0-10,000 PSI	0-700 Bar	-18
0-15,000 PSI	0-1,000 Bar	-29
0-20,000 PSI	0-1,400 Bar	-30
0-22,000 PSI	0-1,500 Bar	-31
0-25,000 PSI	0-1,700 Bar	-32
0-30,000 PSI	0-2,000 Bar	-33

OPTIONS

-ZVxx	Custom Voltage Output (Available on 452X only) Up to 10VDC. Consult Factory.	
-Z17	Without pressure surge protector	16
-SC	All 316 Stainless Steel construction (NACE)	19
-SS	316L Stainless Steel wetted material (NACE)	19
-UL	cULus in addition to ATEX & IECEx approvals (-18 range code only)	22
-A1	Accuracy BFSL 0.1% FSO (LHR) at 75°F	
-ZXXY	Special pressure ranges XX - significant digits Y - number of trailing zeros	
-Wxxx	Custom length of Free Leads (in inches)	18
-Jxxx	Jacketed Cable	

PROCESS CONNECTIONS

BLANK	1/4" NPT, Male
- P6	1/4" NPT, Female
- P4	1/2" NPT, Male
- P5	1/2" NPT, Female
- P10	G 1/4, washer seal, Male
- P12	G 1/4, Washer seal, Female
- P11	G 1/2, Washer seal, Male
- P13	G 1/2, Washer seal, Female
- P3	7/16-20, with 37° Flared, Male
- P1	7/16-20, with 37° Flared, Female
- P2	7/16-20, SAE #4, ORB, Male
- P14	7/16-20, SAE #4, ORB, Female
- P15	HF4 Autoclave, 1/4" Tube, Female (9/16-18 UNF-28 THD)

PRESSURE UNIT & TYPE

BLANK	PSI - Gauge Pressure
A	PSI - Absolute Pressure (Not applicable with "-23" range)
B	Bar - Gauge Pressure
BA	Bar - Absolute Pressure (ranges start from -1 Bar) (Not applicable with "-23" range)

22 "-UL" OPTION ONLY AVAILABLE FOR 10,000 PSI RANGE. NO cULus APPROVAL FOR 10K PSI RANGE WITHOUT -UL OPTION. cULus APPROVAL STANDARD FOR ALL OTHER RANGES. ATEX & IECEx APPROVALS STANDARD FOR ALL RANGES.

21 "-P15" AVAILABLE WITH ALL PRESSURE RANGES.

20 15k TO 30k PSI PRESSURE RANGES AVAILABLE ONLY WITH "-P15" PROCESS CONNECTION. MUST USE HIGH-PRESSURE MATING FITTING/TUBING CONNECTIONS RATED FOR 60,000 PSI OF HF4 TYPE.

19 AVAILABLE UP TO 10K PSI RANGE. -SS OPTION IS INCLUDED IN -SC OPTION. MATERIAL OF PROCESS CONNECTION IS 316L STAINLESS STEEL WITH -SC OPTION.

18 STANDARD MODIFICATIONS: ADD IDENTIFIER TO P/N (EXAMPLE: H455X-01-W180 = STANDARD 0-15 PSI HART MODEL WITH 180 INCH LONG WIRES).

17. TYPE 4X ENCLOSURE ENVIROMENTAL RATING IP66 & IP67

24 ABSOLUTE RANGES AVAILABLE FOR UP TO 300 PSI MODELS.

- 23. IEC/EN 55011: CONDUCTED EMISSION AND RADIATED EMISSION FOR CLASS A LIMITS
- IEC/EN 61000-4-2: ELECTROSTATIC DISCHARGE (ESD) TEST - CONTACT DISCHARGE +/-4KV, AIR DISCHARGE +/-8KV
- IEC/EN 61000-4-3: RADIATED RF, EM FIELD IMMUNITY - 80MHZ-1GHZ, 3V/M
- IEC/EN 61000-4-4: H455X: EFT(BURST) TEST, +/-2KV
455X/452X: EFT(BURST) TEST, +/-1KV
- IEC/EN 61000-4-5: H455X: SURGE TEST, +/-1KV BETWEEN LINE AND EARTH GND
455X/452X: SURGE TEST NOT APPLICABLE; CLASS 2 POWER SUPPLY USED AT INPUT OF THE DEVICE.
- IEC/EN 61000-4-6: CONDUCTED RF IMMUNITY, 150KHZ-80MHZ, 3V



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WEIGHT	SCALE	DWG.	REV.
	1:1	C	C
SHEET 2 OF 2			

450X