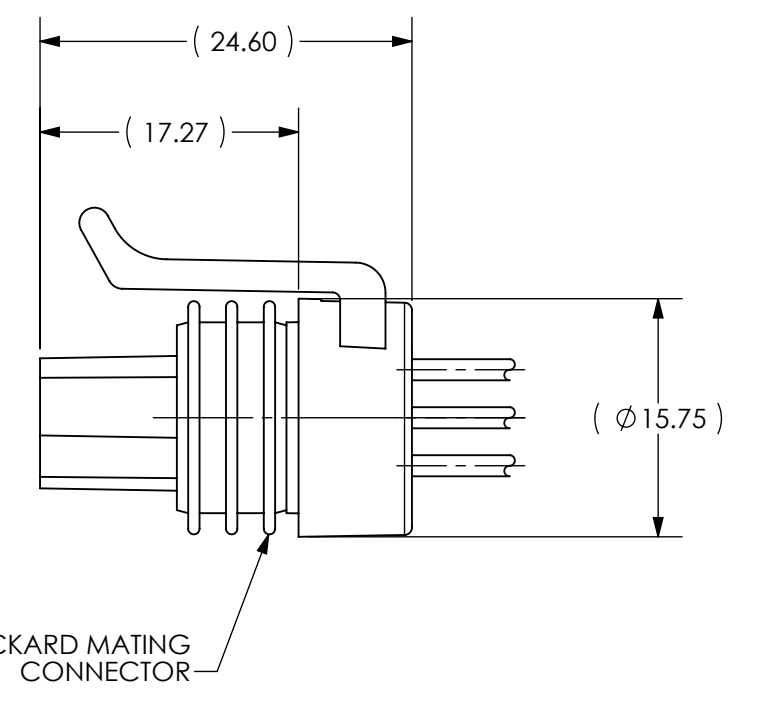
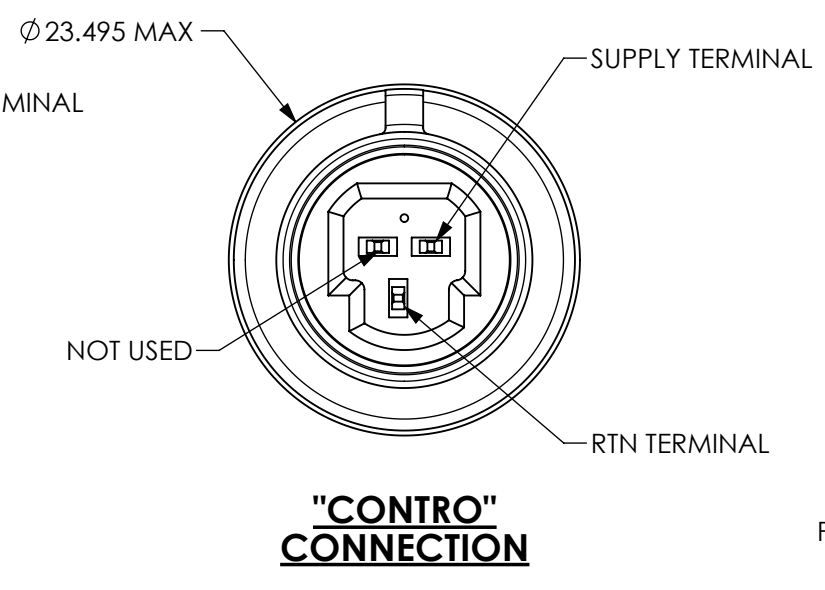
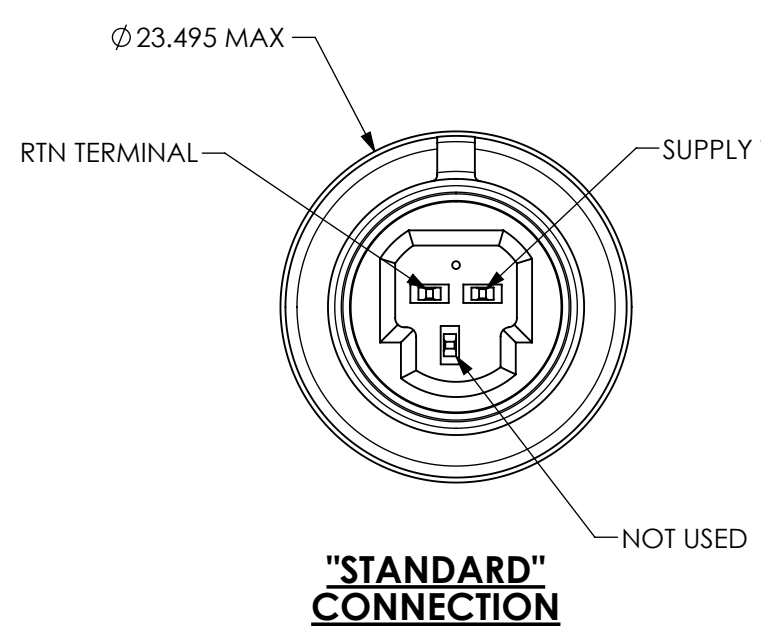
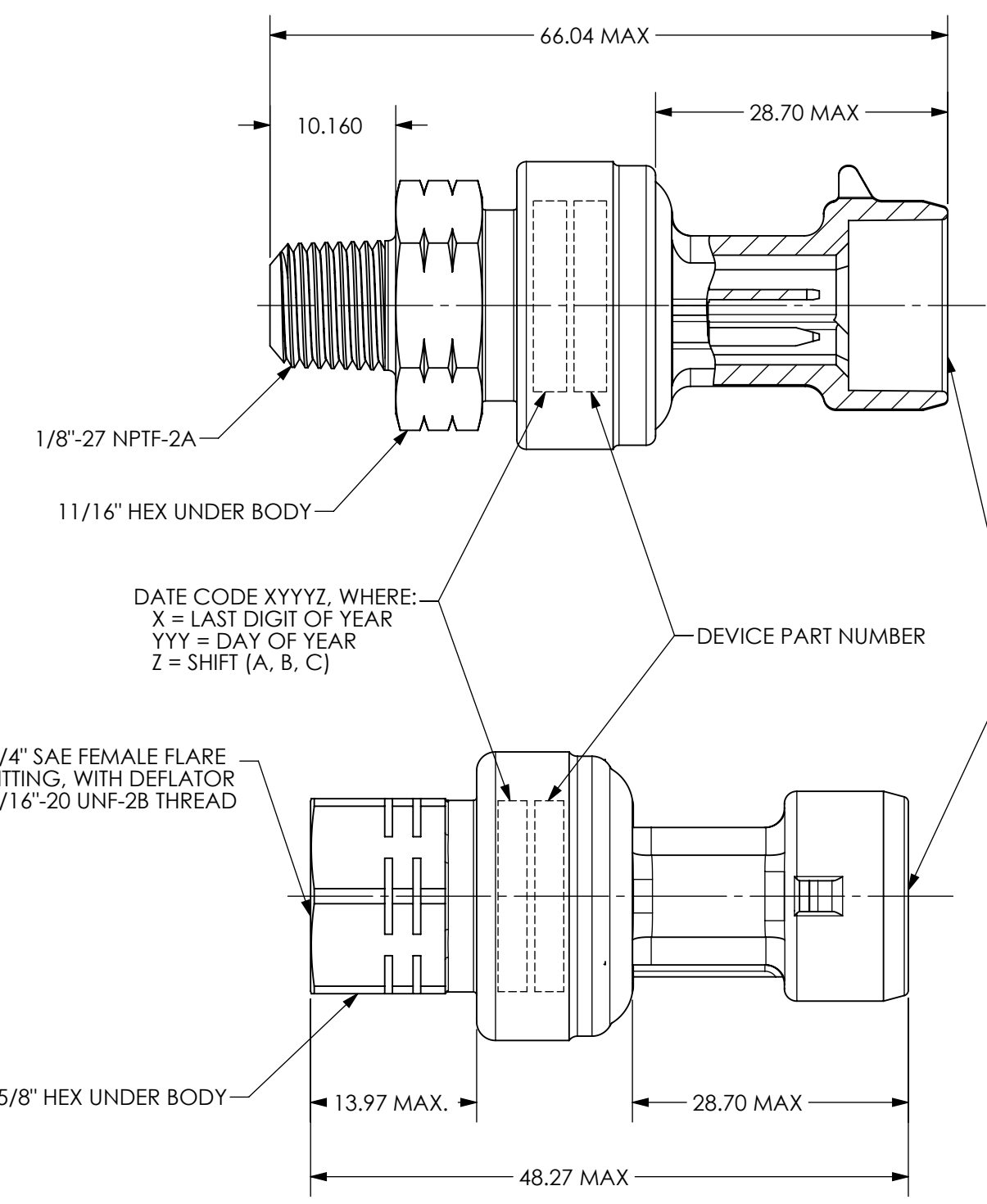


ZONE	REV.	REVISION DESCRIPTION	ECN NO.	DATE
	H	ADDED PRESSURE RANGE AND OUTPUT CHARACTERISTICS;AM	ECO-357640	24-Mar-2020



CONNECTOR DESIGNED TO PART NUMBER 12078088 REV. 01 TO MATE WITH PACKARD CONNECTOR 12065287 REV. B1.

NOTES:

1. APPLICATION NOTE:
- SENSATA PRESSURE SENSORS OF FAMILY 87CP/88CP ARE NOT INTENDED TO USE AS SAFETY DEVICES AND MAY NOT BE UTILIZED FOR THIS SAFETY FUNCTION.
 - THE SENSOR MUST ONLY BE USED FOR PRESSURE MEASUREMENT; REGULATING THE APPLICATION.
 - THE INFORMATION, RECEIVED FROM THE SENSOR BY CUSTOMER SOFTWARE, SHALL BE TRANSFERRED INTO A CUSTOMER CONTROL UNIT WHICH REGULATES/STEERS THE APPLICATION.
 - NEXT TO THE SENSOR, THERE IS ALWAYS A HIGH-PRESSURE CUTOFF SWITCH MUST BE INSTALLED IN THE SAME APPLICATION, TO PROTECT THE SYSTEM.

87CP X X X XXX X X

FAMILY DESCRIPTION	
LOW PRESSURE, 4-20mA, STD ACCURACY	

HEXPORT MATERIAL	
CODE	MATERIAL
7	BRASS
8	PLATED STEEL
9	STAINLESS STEEL

PRESSURE SEALS		
CODE	SEAL MATERIAL	SEAL TEMPERATURE
F	FLUROSILICONE	(-45 °C TO +135 °C)
H	HYDROGEN'D NITRILE	(-20 °C TO +135 °C)
N	NEOPRENE	(-37 °C TO +120 °C)
V	FLUOROCARBON	(-26 °C TO +135 °C)

PRESSURE REFERENCE	
CODE	DESCRIPTION
A	ABSOLUTE (NO VENT)
G	RELATIVE (VENT)
S	SEALED GAGE (NO VENT)

LOW PRESSURE RANGE		
CODE	OPERATING PRESSURE	
M07	0...7	BAR
M08	0.5...8	BAR
M10	1...10	BAR
M11	1...11	BAR
M12	-1...11	BAR
M16	1...16	BAR
M19	1...19.2	BAR
M20	1...20	BAR
M31	1...31	BAR
M34	0...34.5	BAR
M35	1...35	BAR
M45	1...45.8	BAR
M46	1...46	BAR

HEX UNDER BODY		
CODE	THREAD	HEX
2	1/8"-27 NPTF-2A	11/16" UNDER
5	7/16"-20 UNF-2B W/ DEFLATOR	5/8" UNDER

ELECTRICAL CONNECTOR	
CODE	DESCRIPTION
5	TWO TAIL PACKARD CONNECTOR STANDARD
7	TWO TAIL PACKARD CONNECTOR "CONTRO"

MATERIAL	
CONNECTOR:	PPO 30% GLASS FILLED
INSULATOR:	CDA 260 BRASS
TERMINALS:	WITH Sn PLATE

SPECIFICATIONS	mA OUTPUT
1. POWER SUPPLY VOLTAGE	6 TO 30 VDC
2. ENVIRONMENTAL(AMBIANT) TEMPERATURE	-20 °C TO +135 °C
3. STORAGE TEMPERATURE	-40 °C TO +150 °C
4. MEDIUM(FUILD) TEMPERATURE	-40 °C TO +135 °C
5. OUTPUT LOAD (WHERE Vs-ACTUAL SUPPLY V)	(Vs-7)/0.02
6. PERFORMANCE(STATIC ERROR BAND @ 25°C)	+/-1% SPAN@16Vdc
7. LINEARITY	<+/-0.75% SPAN
8. ERROR BAND	-20 °C TO +100 °C ±2% SPAN
9. TOTAL ERROR BAND	-20 °C TO +135 °C -3.5%/+2% SPAN
10. OVERVOLTAGE/REVERSE PROTECTION	39 Vdc
11. PROOF PRESSURE	>1.5 TIME PRESSURE RANGE
12. BURST PRESSURE	>3 TIME PRESSURE RANGE
13. RANDOM VIBRATION	10 Grms(25-2000Hz)
14. EMC (512 MHz - 1 GHz acc,EN61000-4-3)	30 V/m
15. ESD (EN61000-4-2)	8kV IN AIR,4kV CONTACT

FOR REFERENCE ONLY, CHECK LATEST REVISION BEFORE USE. PARTS MADE TO THIS PRINT MUST CONFORM TO E9898 REV. E.

DRAWN T. BREITENBACH DATE 12-OTC-2011	ENGINEER K. Maslova DATE 19-DEC-2017	APPROVED W. Alink DATE 19-DEC-2017	DATE
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INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES

DECIMALS: X.XXX ±.005
ANGLES: X.X° ±1°

DO NOT SCALE DRAWING
THIRD ANGLE PROJECTION

Sensata Technologies 529 PLEASANT STREET P.O. BOX 2964 ATTLEBORO, MA 02703

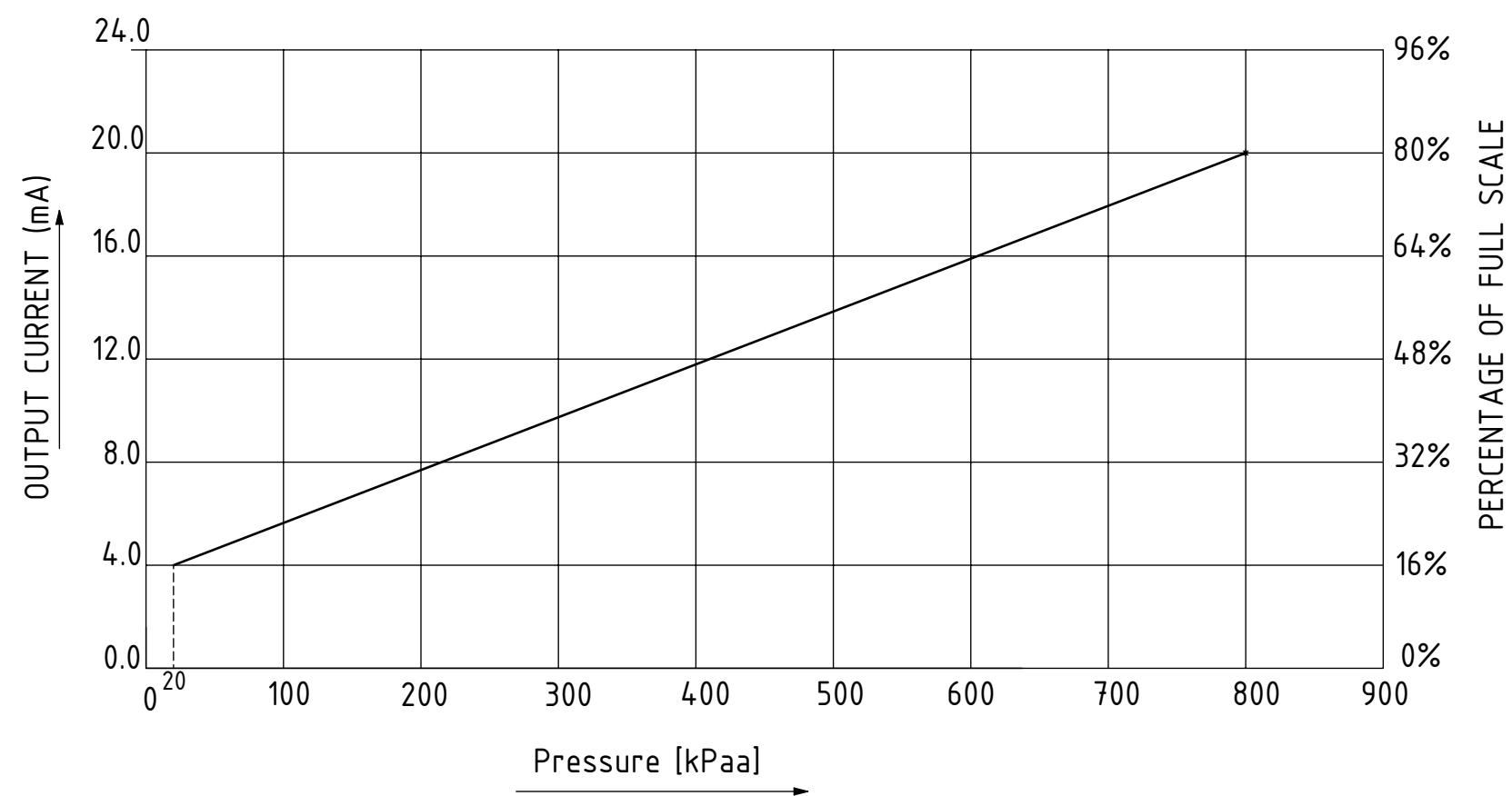
TITLE: 87CP 4-20mA LOW PRESSURE TRANSDUCER ENVELOPE DRAWING

SIZE: C DWG NO.: 87CP REV.: H

SCALE: 2:1 SOLIDWORKS SHEET 1 OF 2

PROJECT: 1

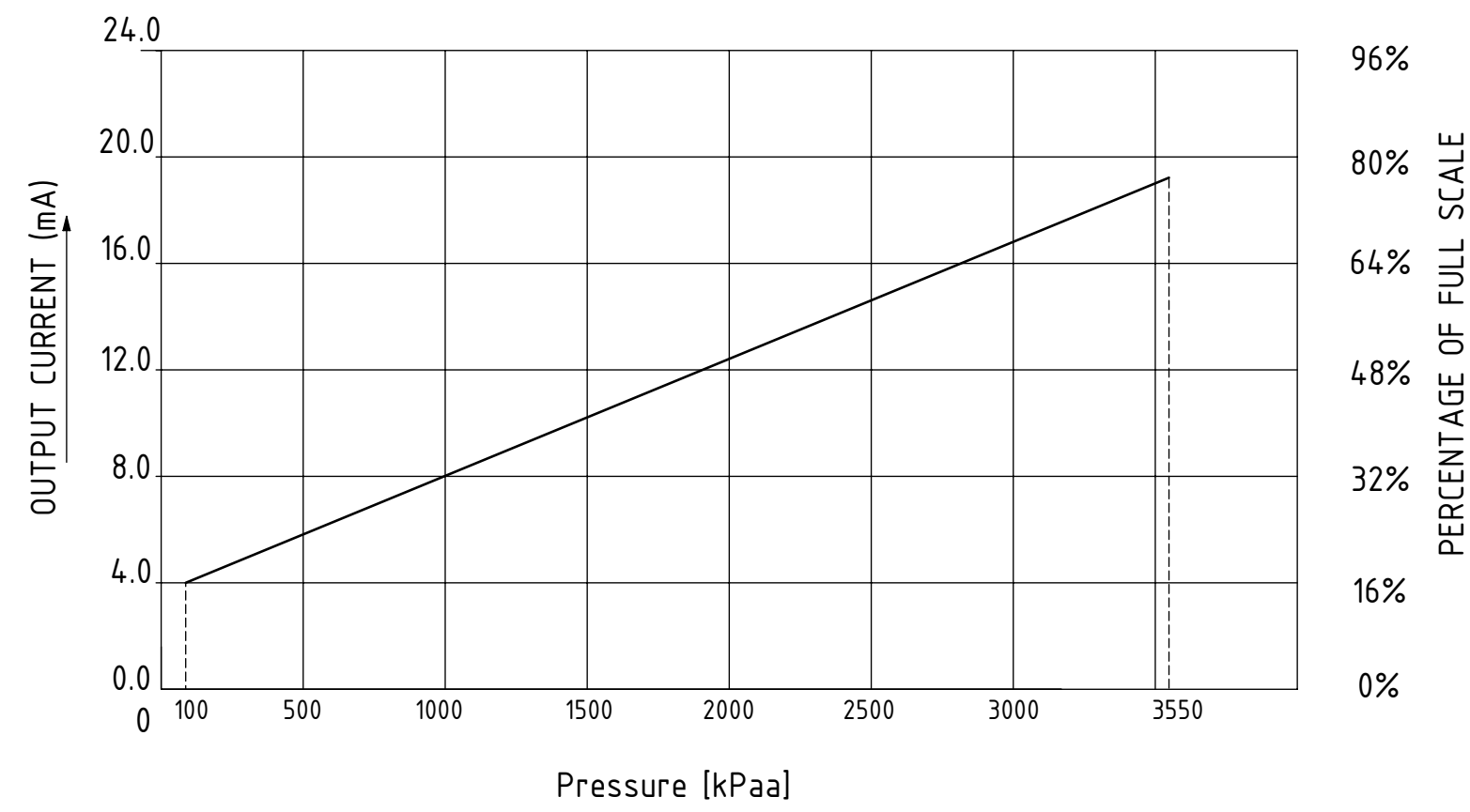
OUTPUT CHARACTERISTICS FOR 88CPXXM07SX



$I_{out} \text{ (mA)} = 0.0205 * P \text{ [kPaa]} + 3.5897$
 $\%FS = 0.08205 * P \text{ [kPaa]} + 14.3590$
 FULL SCALE (FS) = 25mA

SATURATION FOR BOTH OUTPUT CHARACTERISTIC CHARTS: LOW: 6.62% ±1%FS
 HIGH: 93.88 ±1.5FS

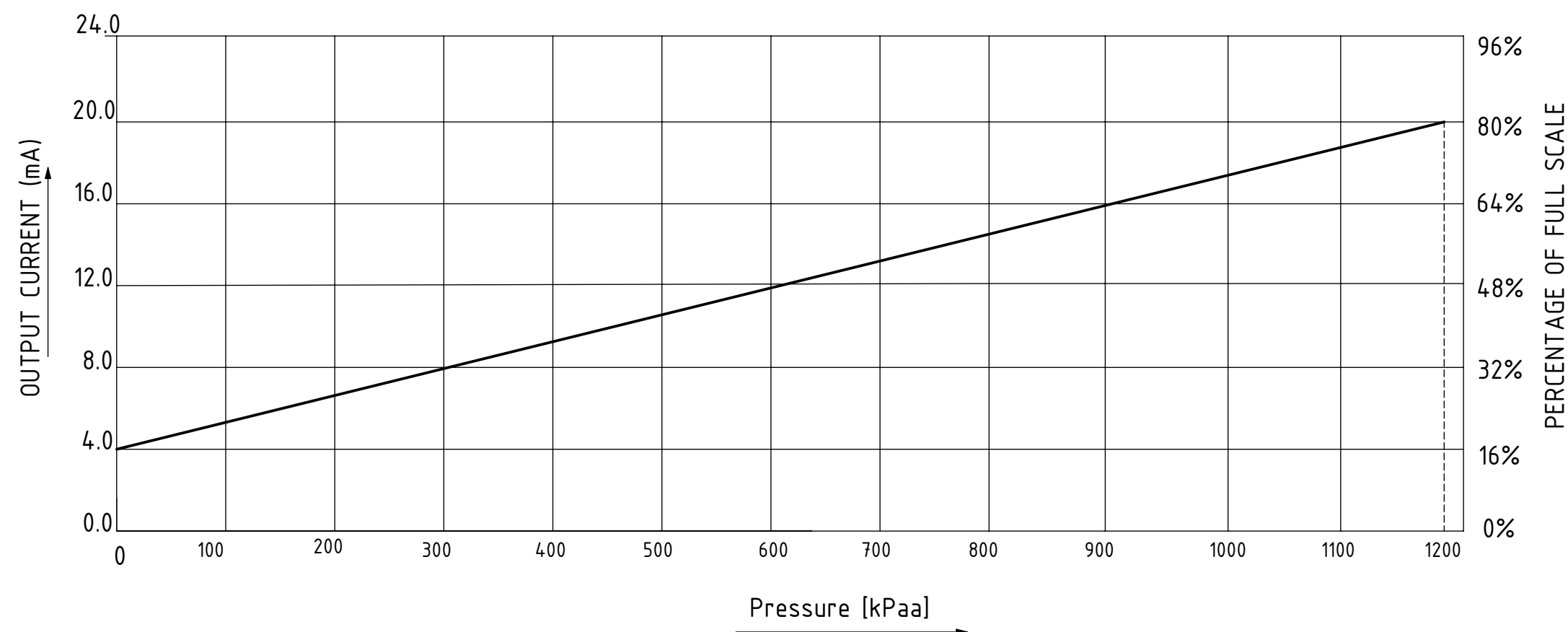
OUTPUT CHARACTERISTICS FOR 87CPXXM34SX



$I_{out} \text{ (mA)} = 0.00464 * P \text{ [kPaa]} + 3.536$
 $\%FS = 0.0186 * P \text{ [kPaa]} + 14.145$
 FULL SCALE (FS) = 25mA

SATURATION FOR BOTH OUTPUT CHARACTERISTIC CHARTS: LOW: 6.62% ±1%FS
 HIGH: 93.88 ±1.5FS

OUTPUT CHARACTERISTICS FOR 87CPXXM12SX



$I_{out} \text{ (mA)} = 0.01333 * P \text{ [kPaa]} + 4.000$
 $\%FS = 0.0533 * P \text{ [kPaa]} + 16.000$
 FULL SCALE (FS) = 25mA

SATURATION FOR BOTH OUTPUT CHARACTERISTIC CHARTS: LOW: 6.62% ±1%FS
 HIGH: 93.88 ±1.5FS

Sensata Technologies
 JAN TINBERGENSTRAAT 80
 7559 SP HENGELLO
 THE NETHERLANDS

DRAWING SIZE	DRAWING NUMBER	REV
A2	87CP	H
SCALE 2:1	SOLIDWORKS	SHEET 2 OF 2