



# Kraftfahrt-Bundesamt

DE-24932 Flensburg

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## MITTEILUNG

ausgestellt von:

**Kraftfahrt-Bundesamt**

über die Erweiterung der Genehmigung  
für einen Typ eines CNG/LNG-Bauteils nach der Regelung Nr. 110  
einschließlich der Änderung .

## COMMUNICATION

issued by:

**Kraftfahrt-Bundesamt**

concerning approval extended  
of a type of CNG/LNG component pursuant to Regulation No. 110  
including amendment .

Nummer der Genehmigung: **E1\*110R04/00\*0107\*04**  
Approval No.

1. Betreffendes CNG/LNG -Bauteil:  
CNG/LNG component considered:  
**Flexible Kraftstoffleitungen**  
**Flexible fuel lines**

Typ:

Type:

**SS-TC8EC1EC2-xxx-093**

2. Fabrik- oder Handelsmarke:  
Trade name or mark:  
**Swagelok**

Ausführungen:

Versions:

**SS-TC4EC1EC2-xxx-093**

**SS-TC4EC1EC2-xxx-0429**

**SS-TC6EC1EC2-xxx-093**

**SS-TC6EC1EC2-xxx-0429**

**SS-TC8EC1EC2-xxx-0429**

**SS-TC12EC1EC2-xxx-093**

**SS-TC12EC1EC2-xxx-0429**



# Kraftfahrt-Bundesamt

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Nummer der Genehmigung: E1\*110R04/00\*0107\*04  
Approval No.:

3. Name und Anschrift des Herstellers:  
Manufacturer's name and address:  
**Swagelok Company**  
**US-Solon, OH 44139**
4. Gegebenenfalls Name und Anschrift des Vertreters des Herstellers:  
If applicable, name and address of manufacturer's representative:  
**Entfällt**  
**Not applicable**
5. Zur Genehmigung vorgelegt am:  
Submitted for approval on:  
**04.02.2020**
6. Technischer Dienst, der die Prüfungen für die Genehmigungen durchführt:  
Technical service responsible for conducting approval tests:  
**KIWA Nederland B.V.**  
**NL-7300 AC Apeldoorn**
7. Datum des Gutachtens des Technischen Dienstes:  
Date of report issued by that service:  
**20.02.2020**
8. Nummer des Gutachtens des Technischen Dienstes:  
Number of report issued by that service:  
**160700908**
9. Die Genehmigung wird **erweitert**  
Approval **extended**



# Kraftfahrt-Bundesamt

DE-24932 Flensburg

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Nummer der Genehmigung: E1\*110R04/00\*0107\*04

Approval No.:

10. Grund oder Gründe für die Erweiterung der Genehmigung:  
Reason(s) of extension of approval:

**Änderung der Typbezeichnung**  
**Change of the type designation**

**Aktualisierung der Ausführungen**  
**Update of versions**

**Technische Änderungen**  
**Technical modifications**

**Anpassung an die Änderungsserie 04 der Regelung**  
**Adaption to the 04 series of amendment of the regulation**

11. Ort: **DE-24932 Flensburg**  
Place:

12. Datum: **26.02.2020**  
Date:

13. Unterschrift: **Im Auftrag**  
Signature:

(Jörg Burgkhardt)



14. Die mit dem Antrag auf Erteilung einer Genehmigung oder Erweiterung eingereichten Unterlagen sind auf Anforderung erhältlich.  
The documents filed with the application or extension of approval can be obtained upon request.



# Kraftfahrt-Bundesamt

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Nummer der Genehmigung: E1\*110R04/00\*0107\*04  
Approval No.:

## Anlage Appendix

zur ECE-Typgenehmigungs Mitteilung Nr. **E1\*110R04/00\*0107\*04**  
to ECE type-approval certificate No.

1. Zusätzliche Angaben zur Typgenehmigung eines Typs eines CNG/LNG-Bauteils nach der Regelung Nr. 110  
Additional information concerning the type approval of a type of CNG/LNG components pursuant to Regulation No. 110

- 1.11. Flexible Kraftstoffleitungen  
Flexible fuel lines
- 1.11.1. Arbeitsdruck (Arbeitsdrücke): **3 Mpa / -40 C up to +120 °C**  
Working pressure(s):
- 1.11.2. Werkstoff: **PTFE**  
Material:  
**Edelstahl**  
**stainless steel**



# Kraftfahrt-Bundesamt

DE-24932 Flensburg

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Nr. der Genehmigung: E1\*110R04/00\*0107\*04

Approval No.:

- Anlage -

## Nebenbestimmungen und Rechtsbehelfsbelehrung

### Nebenbestimmungen

Die Einzelerzeugnisse der reihenweisen Fertigung müssen mit den Genehmigungsunterlagen genau übereinstimmen. Die in der bisherigen Genehmigung enthaltenen Auflagen gelten auch für diese Erweiterung.

Das bisherige Genehmigungszeichen

**E1** 110 R - 010107 "C"

wird geändert in:

**E1** 110 R - 040107 "C"

### Rechtsbehelfsbelehrung

Gegen diese Genehmigung kann innerhalb eines Monats nach Bekanntgabe Widerspruch erhoben werden. Der Widerspruch ist **beim Kraftfahrt-Bundesamt, Fördestraße 16, DE-24944 Flensburg**, schriftlich oder zur Niederschrift einzulegen.

- Attachment -

## Collateral clauses and instruction on right to appeal

### Collateral clauses

The individual production of serial fabrication must be in exact accordance with the approval documents. The requirements contained in the previous approval are also valid for this amendment.

### Instruction on right to appeal

This approval can be appealed within one month after notification. The appeal is to be filed in writing or as a transcript at the **Kraftfahrt-Bundesamt, Fördestraße 16, DE-24944 Flensburg**.

- NOTES:  
 1.) XXX = CUSTOMER REQUESTED LENGTH  
 2.) 093 OR 0429 = DESIGNATOR FOR ECE R110 HOSE  
 3.) EC1 & EC2 REPRESENT END CONNECTIONS FROM TABLE.  
 4.) LABELS ARE PLACED A MAX OF EVERY 45cm [18"] ALONG HOSE  
 5.) S AFTER XXX = HOSE LENGTH SPRING GUARD.  
 6.) LABELS WITH ECE R-110 INFORMATION ARE VISIBLE BETWEEN SPRING COILS.

MO./YR.

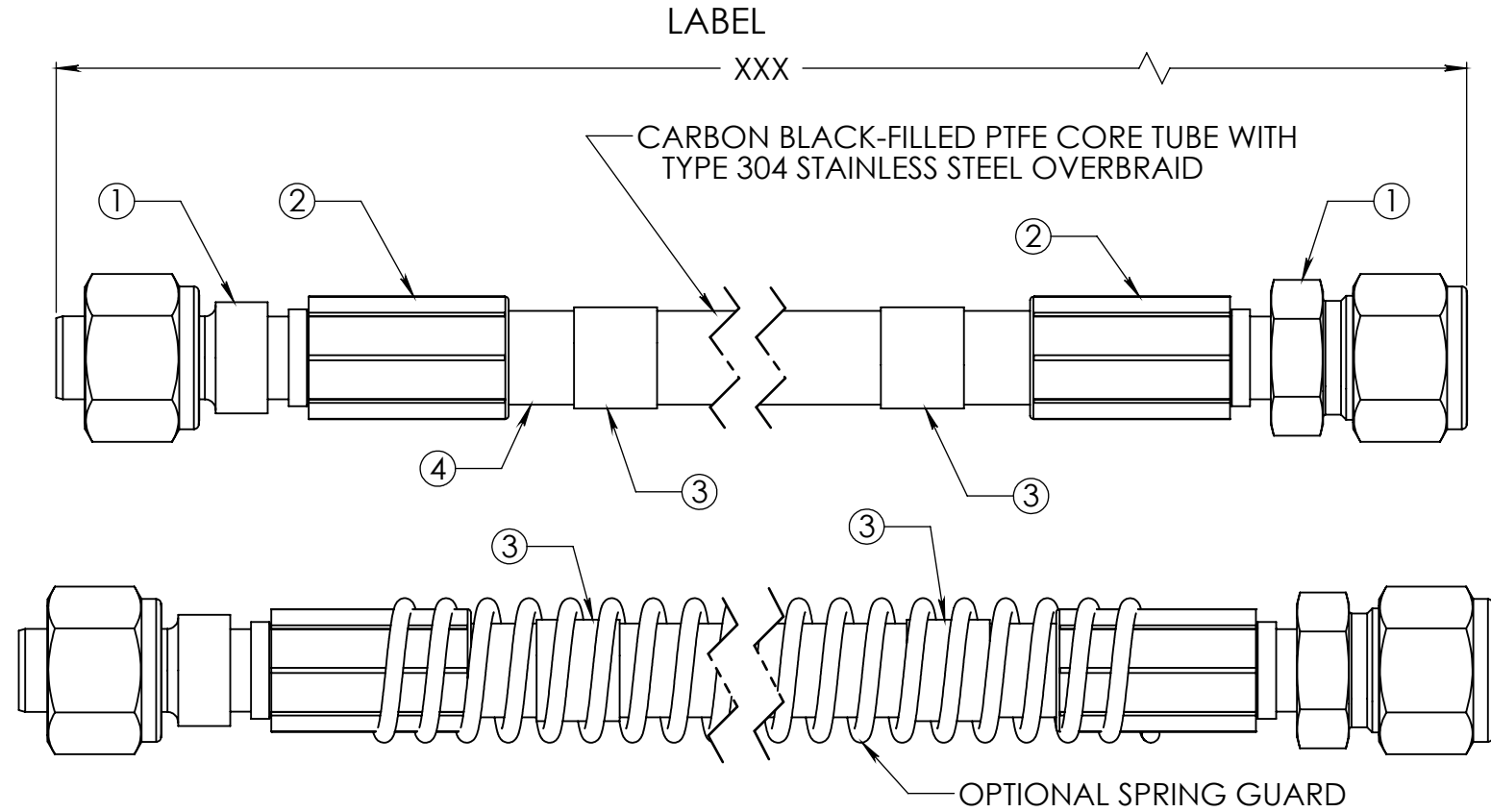
E1

CNG CLASS 1  
 -40°C TO +120°C [C]

1/4 IN. MEDIUM PRESSURE HOSE    110R - 040107

LABEL DESCRIPTION:  
 BLACK LABEL W/SILVER TEXT  
 ADHESIVE TYPE = 3M 468

ITEM	DESCRIPTION
1	END CONNECTION
2	CRIMP COLLAR
3	LABEL
4	HOSE



END CONNECTION	SIZE	PART NUMBER DESIGNATOR
SWAGELOK TUBE FITTING	FRACTIONAL - 1/4" and 5/16"	SL4 and SL5
	METRIC - 6MM and 8MM	SM6 and SM8
SWAGELOK TUBE ADAPTER	FRACTIONAL - 1/4" and 5/16"	TA4 and TA5
	METRIC - 6MM and 8MM	TM6 and TM8
MALE PIPE THREADS	NPT - 1/4"	PM4
	ISO 7 - 1/4"	MT4
37° MALE FLARE	1/4"	AN4
SAE MALE (O-RING)	1/8" to 1/4"	ST2,...ST4



Project no. 191100745

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 .XX ±.031  
 .XXX ±.015  
 ANGLES ±1 DEGREE  
 -- DIMENSIONS ARE INCHES NEXT TO [MILLIMETERS].

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DWG. NO. SS-TC4EC1EC2-XXX-093

SHEET 1 of 1  
 SCALE NONE  
 REV. B

- NOTES:  
 1.) XXX = CUSTOMER REQUESTED LENGTH  
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**Swagelok** MO./YR.

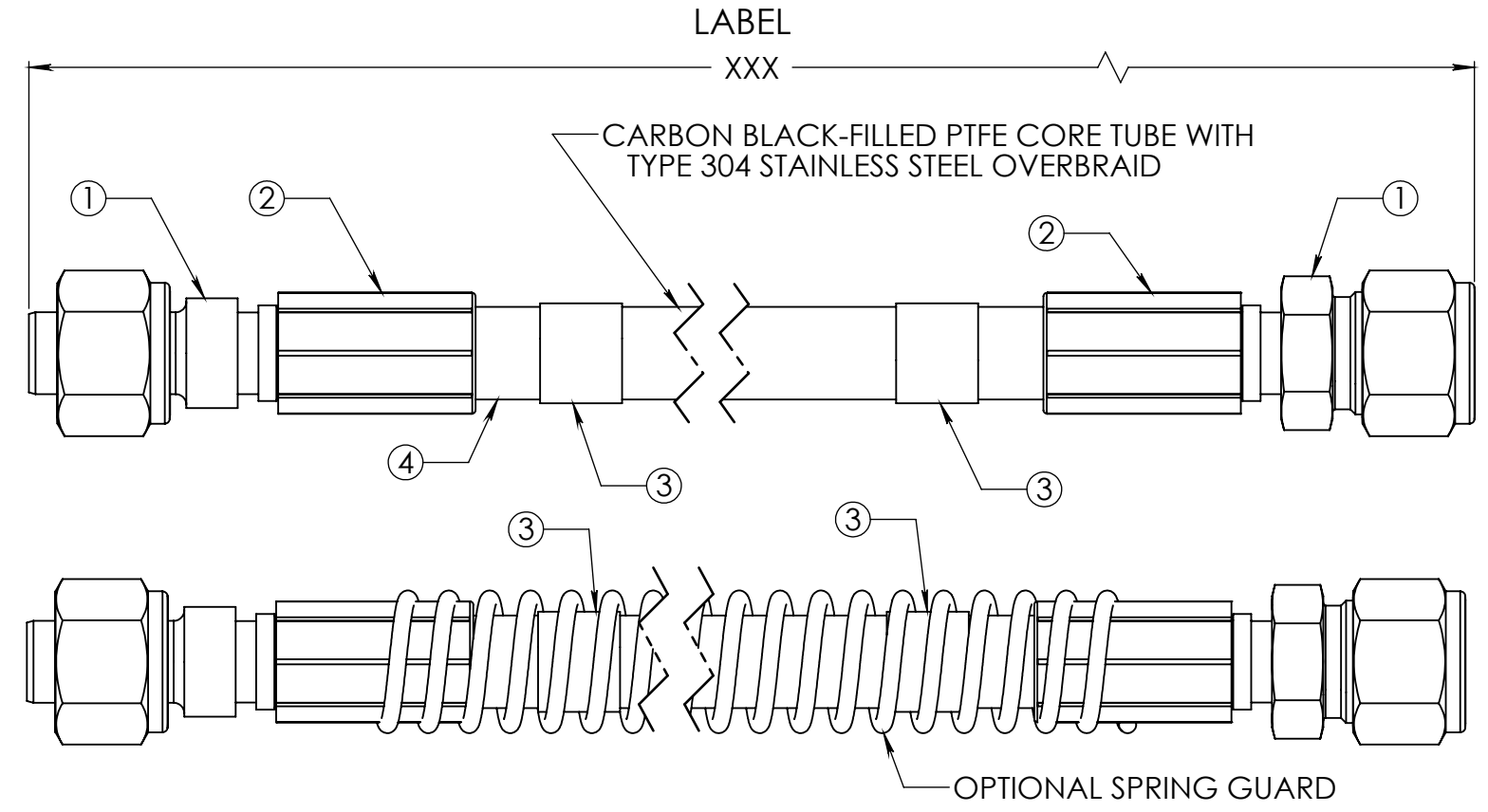
**E1**

**CNG CLASS 1**  
**-40°C TO +120°C [C]**

**3/8 IN. MEDIUM PRESSURE HOSE 110R - 040107**

LABEL DESCRIPTION:  
 BLACK LABEL W/SILVER TEXT  
 ADHESIVE TYPE = 3M 468

ITEM	DESCRIPTION
1	END CONNECTION
2	CRIMP COLLAR
3	LABEL
4	HOSE



END CONNECTION	SIZE	PART NUMBER DESIGNATOR
SWAGELOK TUBE FITTING	FRACTIONAL - 3/8"	SL6
	METRIC - 8MM and 10MM	SM8 and SM10
SWAGELOK TUBE ADAPTER	FRACTIONAL - 3/8"	TA6
	METRIC - 8MM and 10MM	TM8 and TM10
MALE PIPE THREADS	NPT - 1/4" and 3/8"	PM4 and PM6
	ISO 7 - 1/4" and 3/8"	MT4 and MT6
37° MALE FLARE	3/8"	AN6
SAE MALE (O-RING)	1/4" to 1/2"	ST4,...ST8



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**Swagelok**

DWG. NO. SS-TC6EC1EC2-XXX-093

SHEET 1 of 1  
 SCALE NONE  
 REV. B

- NOTES:  
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 4.) LABELS ARE PLACED A MAX OF EVERY 45cm [18"] ALONG HOSE.  
 5.) S AFTER XXX = HOSE LENGTH SPRING GUARD.  
 6.) LABELS WITH ECE R-110 INFORMATION ARE VISIBLE BETWEEN SPRING COILS.

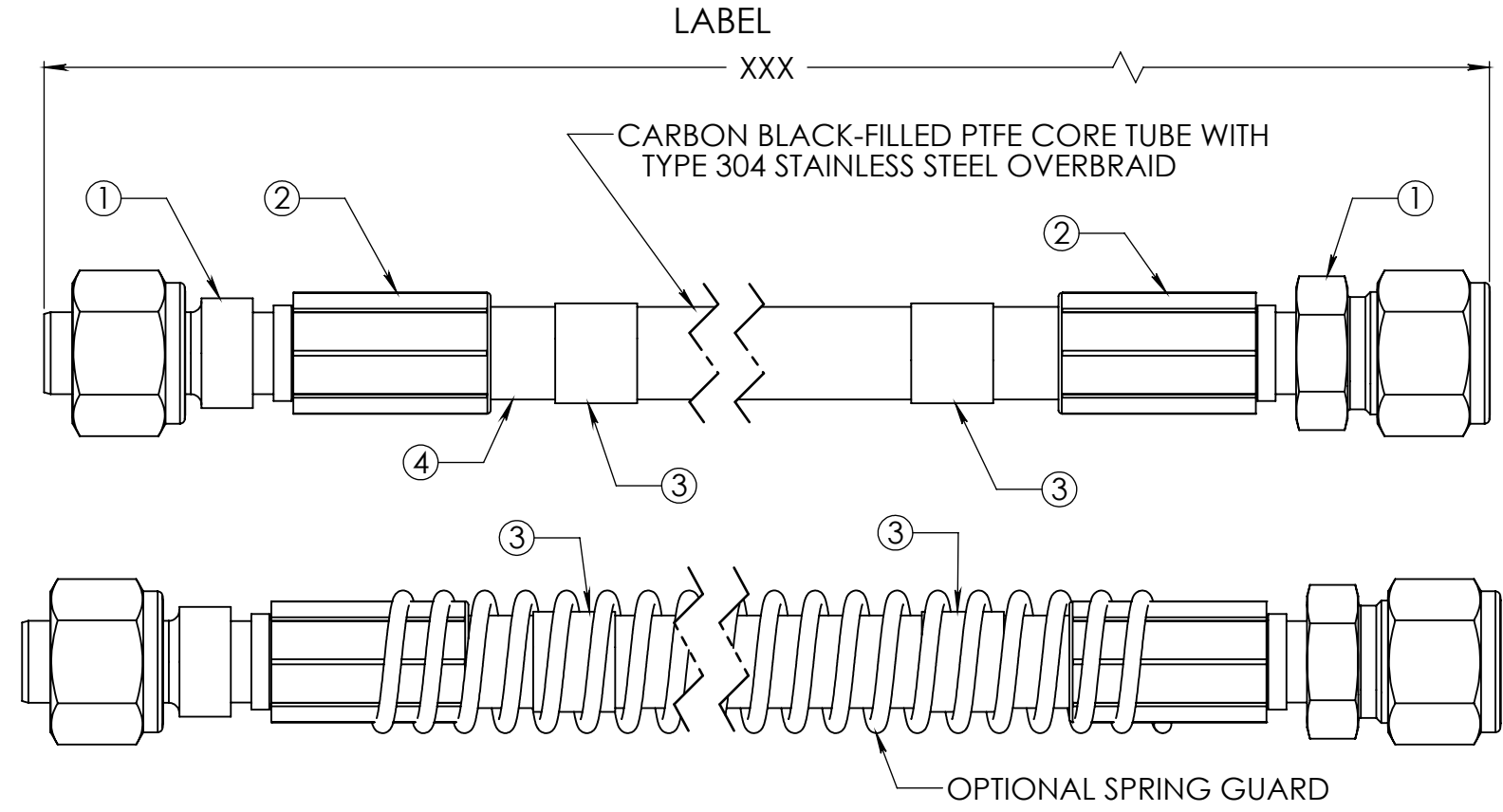
MO./YR.

E1

**CNG CLASS 1**  
**-40°C TO +120°C [C]**  
**1/2 IN. MEDIUM PRESSURE HOSE 110R - 040107**

LABEL DESCRIPTION:  
 BLACK LABEL W/SILVER TEXT  
 ADHESIVE TYPE = 3M 468

ITEM	DESCRIPTION
1	END CONNECTION
2	CRIMP COLLAR
3	LABEL
4	HOSE



END CONNECTION	SIZE	PART NUMBER DESIGNATOR
SWAGELOK TUBE FITTING	FRACTIONAL - 3/8" to 5/8"	SL6,... SL10
	METRIC - 10MM to 16MM	SM10,... SM16
SWAGELOK TUBE ADAPTER	FRACTIONAL - 3/8" to 5/8"	TA6,... TA10
	METRIC - 10MM to 16MM	TM10,... TM16
MALE PIPE THREADS	NPT - 3/8" and 1/2"	PM6 and PM8
	ISO 7 - 3/8" and 1/2"	MT6 and MT8
37° MALE FLARE	1/2"	AN8
SAE MALE (O-RING)	3/8" to 5/8"	ST6,... ST10



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SHEET 1 of 1  
 SCALE NONE  
 REV. B



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**MO./YR.**  
110R-040107

**CNG CLASS 1**  
-40°C TO +120°C [C]

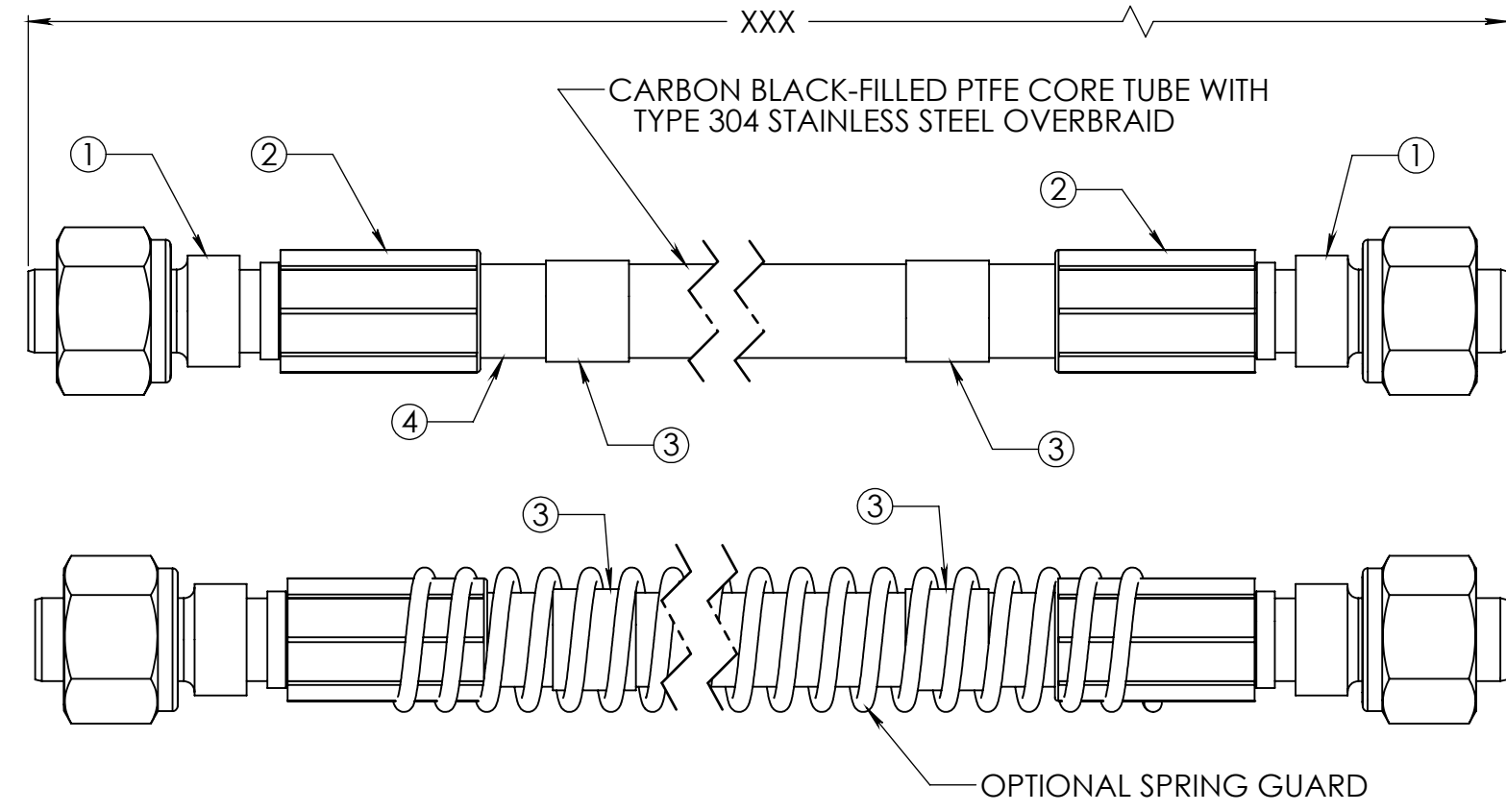
E1

**3/4 IN. MEDIUM PRESSURE HOSE**

LABEL DESCRIPTION:  
 BLACK LABEL W/SILVER TEXT  
 ADHESIVE TYPE = 3M 468

LABEL

ITEM	DESCRIPTION
1	END CONNECTION
2	CRIMP COLLAR
3	LABEL
4	HOSE



END CONNECTION	SIZE	PART NUMBER DESIGNATOR
SWAGELOK TUBE ADAPTER	METRIC - 16MM TO 20MM	TM16,... TM20
	FRACTIONAL - 3/4"	TA12



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