



شرکت ملی گاز ایران
مدیریت پژوهش و فناوری
امور تدوین استانداردها

IGS

مشخصات فنی خرید

اتصالات فولاد به پلی اتیلن

P.E. Gas Piping : Transition Fittings (T.F.)

This standard specification is reviewed and updated by the relevant technical committee(T.C.) on November 2024. The approved modifications by T.C. as **amendment No. 1** were approved by Standard Council of NIGC at session No. 653 on Nov. 2024 and notified to the standard users. These modifications are included in the present edition of the IGS

(THIRD) EDITION

AMENDMENTS OF IGS-M-PL-014-3(3)

The amendments are indicated here are directly equivalent sections or clauses to **IGS-M-PL-014-3(3)**. All other paragraphs which are not amended by this supplementary shall remain valid as written. The following annotations, as specified hereunder, have been used at the beginning of each paragraph to indicate the type of change made to that paragraph of **IGS-M-PL-014-3(3)**.

Sub. (Substitution) "The paragraph in **IGS-M-PL-014-3(3)** shall be deleted and replaced by the new paragraph in this supplementary

Del. (Deletion) "The paragraph in **IGS-M-PL-014-3(3)** shall be deleted without any replacement".

Add. (Addition) "The new paragraph with the new number shall be added to the relevant section of **IGS-M-PL-014-3(3)** ".

Mod. (Modification) "Part of the clause or paragraph in **IGS-M-PL-014-3(3)** shall be modified and/or the new description and/or statement shall be added to that clause or paragraph as given in this supplementary.

1. SCOPE

Add.

Note 1:

This standard specification is reviewed and updated by the relevant technical committee(T.C.) on November 2024. The approved modifications by T.C. as amendment No. 1 were approved by Standard Council of NIGC at session No. 653 on Nov. 2024 and notified to the standard users.

5. MATERIAL

5.1. Steel Parts

Sub.

5.1.1. The steel part of TFs shall be made of grade B pipe in accordance with IGS M-PL-001(1) and IGS-M-PL-001(2) depending on its diameter with following specifications:

- a) Steel spigot of all TFs shall be made of grade B and seamless pipes.
- b) Remained steel pipe (except spigot) of TFs shall be beveled end, HFW Carbon Steel pipe.

7. MINIMUM LENGTH AND THICKNESS OF PE AND STEEL PARTS of TFS

Transition fitting dimensions shall be according to table 2.

Mod.

(Dimensions of steel part and PE part of following sizes of TFs indicated in Table 2 were modified).

Table 2: TF dimensions

Item	Size mm × Inch	P.E. Part		Steel Part	
		Length(mm)	W.T(mm)	Length(mm)	W.T(Inch)
6	125 mm × 4"	480	11.4	300	0.172
7	90mm × 6"	250	8.2	300	0.172
8	125 mm × 6"	480	11.4	300	0.172
10	160 mm × 6"	480	14.6	300	0.172

10. DELIVERY CONDITIONS

Mod.

(Number of TFs in one carton box for TF size 63mm×2 in table 4 was modified)

10.2 packing

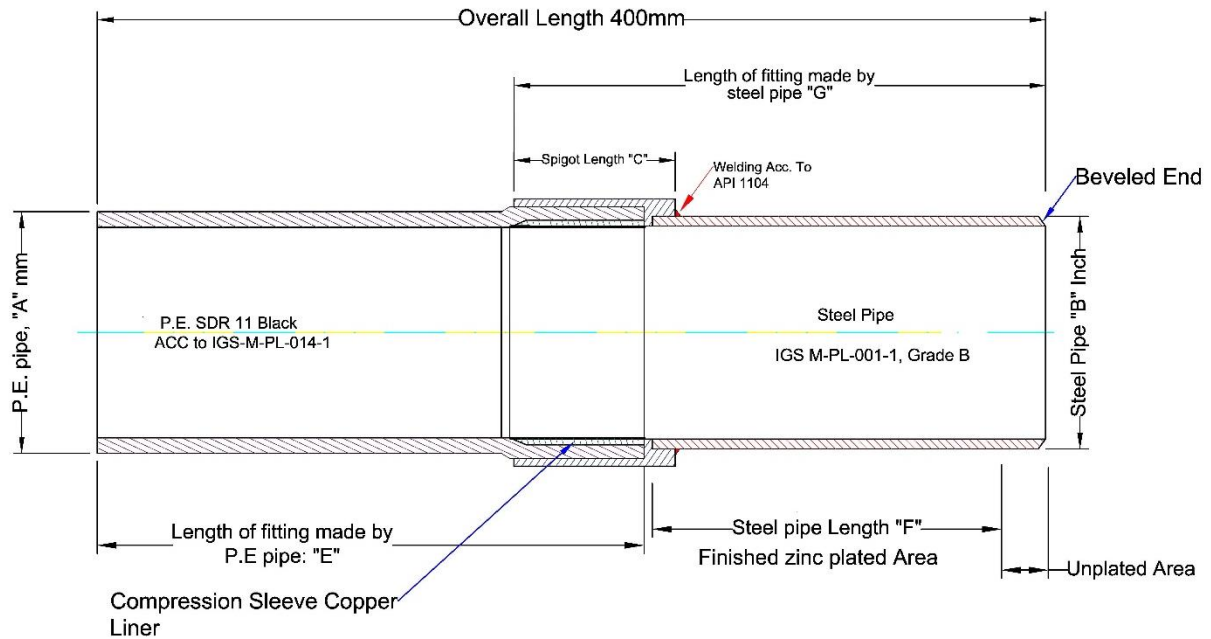
Table 4: packing method

TF size	Number in one packing	Packing type
63mm×2 in	8	5 layers' strong carton box

ANNEX A: Drawing of Spigot type TF, Size Range 25mm Up to 63mm

Sub. the drawing with following:

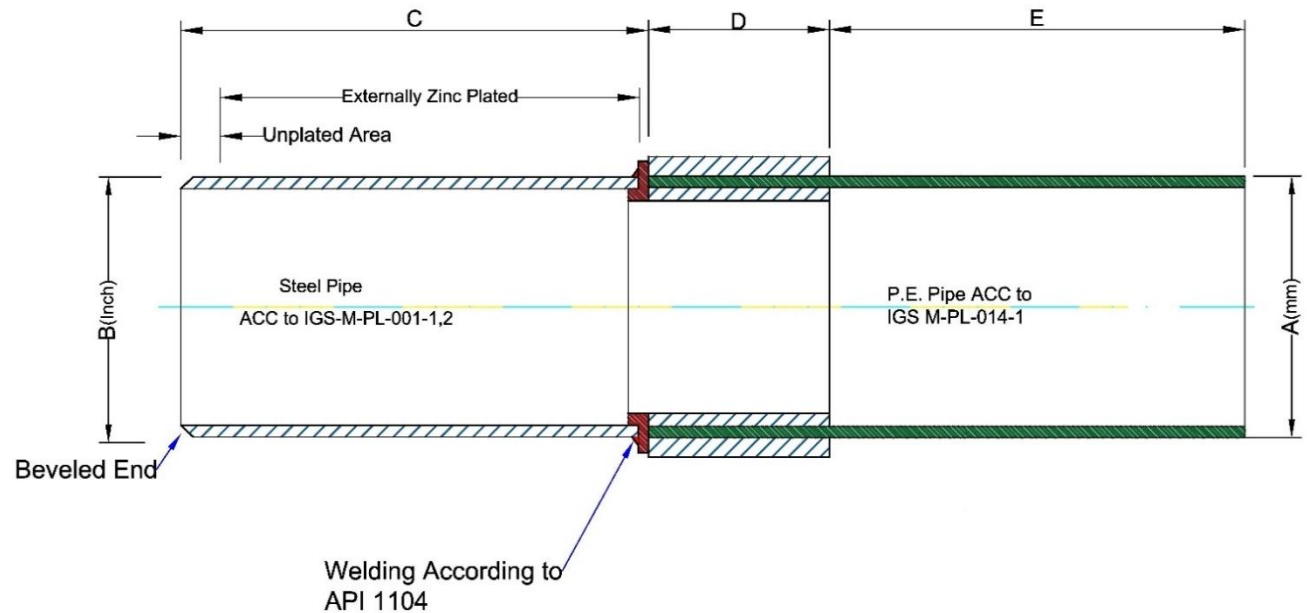
(The Phrase of “seamless” was removed from the drawing)



ANNEX B: Drawing of Spigot-type TF, size range: 90mm up to 225mm

Mod.

(The Phrase of “seamless” was removed from the drawing)



Mod.

Dimensions of steel part and PE part of following sizes of Table of TF dimension were modified

TF Dimensions for size range: 90mm up to 225mm

Item	Size A×B	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
2	90×6	90	168.3	300	60	250
4	125×4	125	114.3	300	75	480
5	125×6	125	168.3	300	75	480
7	160×6	160	168.3	300	90	480

Table 3: Marking Items

Item	Mark symbol
Code of the standard	IGS-M-PL-014-3
Manufacturer's name and / or trademark	Name or Symbol
Nominal outside diameter of pipe	e.g. 110mm×4 in
Design application series	e.g. SDR 11
Production date (Year / month)	e.g. 2025/09
Batch Number	e.g. 1234
Purchaser Specification :NIGC , abbreviation name of purchaser (Gas province company)	e.g. NIGC-TPGC

10. DELIVERY CONDITIONS

10.1 General

Prior to packing the fittings shall be dusted, cleaned internally and externally. Packing shall be sufficient to withstand, without irritation, rough handling during loading/unloading, inland transport and shall be used high quality wooden or carton. Every product shall be put inside a transparent and strong LDPE packaging bag with breathing holes on which the name, address and details of the manufacturing company are printed.

10.2 packing

10.2.1-Inlet and outlet of every TF shall be plugged by strong enough plastic caps.

10.2.2-packing shall be according to following table 4

Table 4: packing method

TF size	Number in one packing	Packing type
25mm×3/4 in	40	5 layers' strong carton box
32mm× 1 in	30	5 layers' strong carton box
63mm×2 in	20	5 layers' strong carton box
90 mmX4"	50	Wooden box
110 mmX4"	50	Wooden box
125 mm X4"	30	Wooden box
90mmX6"	50	Wooden box