IGS-M-PL-002-4(0)

Jun.2021

Approved

مصوب



شرکت ملی گاز ایران مدیریت پژوهش و فنآوری امور تدوین استانداردها

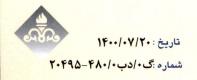
IGS

مشخصات فني خريد

شیرهای توپی پیچی فولادی اندازه ۱/۲ الی ۲ اینچ کلاس ۸۰۰

Female Threaded end Carbon Steel Ball Valves Size 1/2" through 2", Class Rating 800

Fax: (9821)-8487-5032 http://igs.nigc.ir











ابلاغ مصوبه هيأت مديره





مدير محترم پژوهش و فناوري



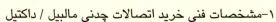


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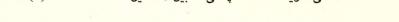


به استحضار می رساند در جلسه ۱۹۳۸ مورخ ۱۴۰۰/۰۶/۱۴ هیات مدیره، نامه شماره گه/۲۰۰۰/۹۶۷ مورخ ۱۴۰۰/۰۶/۰۶ آن مدیریت درمورد تصویب نهایی مقررات فنی شرکت ملی گاز ایران به شرح زیر مطرح و مورد تصویب قرار گرفت.

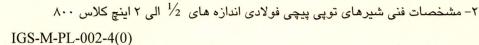
IGS-M-PL-037(4)



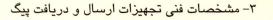








IGS-M-PL-028(4)







الهام ملكي دبير هيات مديره







رونوشت: مديرعامل محترم شركت ملى گاز ايران اعضای محترم هیات مدیره مشاور و رئیس دفتر محترم مدیرعامل سرپرست محترم امور حقوقى

رئيس محترم حسابرسي داخلي رئيس محترم امور مجامع







Foreword

This standard specification is intended to be mainly used by N.I.G.C. and contractors, and has been prepared base on interpretation of recognized standards and technical documents, as well as knowledge, backgrounds and experiences in gas industries at national and international levels.

Iranian Gas Specification (IGS) are prepared, reviewed and amended by technical standard committees within NIGC standardization division of research and technology management and submitted to "the standards council of NIGC" for approval.

IGSs are subjected to revision, amendment or withdrawal, if required, and thus the latest edition of IGS shall be checked / inquired by NIGC'S users.

This standard must not be modified or altered by NIGC employees or its contractors. Any deviation or conflicts between this specification and other applicable standards, codes, procedure or well-known manufacturer's specifications must be resolved in writing by the user or its representative through Manager, Engineering Department or standardization division of NIGC.

The technical standard committee welcomes comments and feedbacks from concerned or interested corporate and individuals about this standard, and may revise this document accordingly based on the received feedbacks.

General Definitions

Throughout this standard the following definitions, where applicable, should be followed:

- 1- "STANDARDIZATION DIV." is organized to deal with all aspects of industry standards in NIGC. Therefore, all enquiries for clarification or amendments are requested to be directed to mentioned division.
- 2- "COMPANY": refers to National Iranian Gas Company (NIGC).
- 3- "SUPPLIER": refers to a firm who will supply the service, equipment or material to IGS specification whether as the prime producer or manufacturer or a trading firm.
- 4- "SHALL": is used where a provision is mandatory.
- 5- "SHOULD": is used where a provision is advised only.
- 6- "MAY": is used where a provision is completely discretionary.

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1. SCOPE

This standard covers the minimum requirements for female threaded end carbon steel ball valves with NPS 1/2 through NPS 2, ASME class rating 800, service temperature range from -29 °C to +38 °C, meeting the requirements of ASME B 31.8 suitable for non-sour natural gas transmission and distribution system.

Note: This specification supersedes IGS- PL-10-4 (1): 1375 "Ball Valves Class Rating 800.

2. Normative References

Throughout this standard specification the standards and codes which mentioned in ISO 17292: 2015 are referred to. The applicability of changes in standards and codes that occur after the date of this standard that referred shall be mutually agreed upon by the purchaser and supplier and / or manufacturer

ASTM A240: 2006"Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications"

3. Design

Design, manufacturing, materials, dimensions, tolerances, inspection, testing and marking shall be according to ISO 17292: 2015 except as supplemented or amended by this specification.

- **3.1** Pressure / temperature rating of the valves covered by this specification shall be in accordance with ASME B16.34. All metallic/nonmetallic parts shall meet the applicable valve pressure-temperature rating and service condition
- 3.2 The ball shall have a cylindrical bore and shall be of a solid, one-piece construction
- 3.3 Female screwed ends shall be NPT according to ASME B 1.20.1

4. Materials

Metallic and non-metallic parts shall be as follow:

The related material certificates shall be issued by manufacturer.

4.1 shell

The body, body insert, boy cap, cover and trunnion cap shall be forged carbon steel at least ASTM A105.

4.2 Trim

The ball, stem, metal seats or seat retainers shall be austenitic stainless steel, grade 316.



4.3. Material Repair

Weld repair of parts is not permitted.

5. Testing and inspection

5.1 Pressure tests

5.1.1 Closure tightness test

Each valve shall be hydrostatically seat tested on each side/seat with 1.1 times of the valve's pressure rating. No visible or any other evidence of leakage is permitted.

5.2. Supplementary examination

5.2.1 Fire testing

Fire test shall be in accordance with ISO 10497.



BALL VALVE #800 DATA SHEET								
Manufacturer:	Enquiry No:		Tender/Job NO:					
General specification:		Rev:						
Customer Name:		Date:						
Item: from:		Quantity:	NPS:	Class:				
GENERAL								
Valve Model:								
OPERATION TEMP. RATING:	DESIGNE STANDARD CODE							
VALVE SPECIFICATION								
Drawing Number:								
Bore Size Category: Cylin	ndrical FULL	□ REDUCE □	DOUBLE RE	DUCE				
END CONNECTION:	EEW ASTM	B.1.20.1 END TO	END:					
Ball Construction: TRUNNIU	IN MOUNTED □One Pi	ece □Solid						
	BODY CON	ISTRUCTION:						
ANTI BLOW OUT STEM	□Yes □No	Locking Device: □Yes	□No					
ANTI STATIC DEVICE □Yes □No								
Fire safe Standard: Fire safe Certificate: □Yes □No								
OPERATION: Manually Lever Type Position Stops Locking Device								
Material	BODY:							
	BALL:							
Stem:								
O-Rings:								
	SEAT:							
Painting:								
Deviation from IGS-M-PL-002-4(0)":								
Notes								
1-This Data Sheet should be completed for each item by manufacturer.								
2- Any deviation from this specification shall clearly specified by manufacturer.								
3- This Data Sheet shall be signed and stamped by manufacturer, authorized employee for purchaser approval.								