



JIANZHI



JIANZHI



THE GUIDE TO JIANZHI PRODUCTS

Hebei JIANZHI Casting Group Ltd.
A well-known trademark of malleable iron pipe fittings in China

WWW.MALLEABLEIRON-PIPEFITTING.COM

CONTACT US

HEBEI JIANZHI CASTING GROUP CO., LTD.

INTERNATION DEP:

ADD: Yutian, Hebei Province, China.

Zip Code: 064100

Tel No.: +86 022 8848 8866

Phone No.: +86 186 9802 7872

Email: sales1@jianzhi-fitting.com

Global Official Website ➤ www.malleableiron-pipefitting.com

Jianzhi Malleable Iron Pipe Fittings ➤ www.jianzhipipefitting.com

Jianzhi Grooved Pipe Fittings ➤ www.jianzhifittings.com

2022

PRODUCT MANUAL

An aerial photograph of a large industrial facility, likely a casting plant. The building has a long, rectangular structure with a blue roof and grey walls. Several tall, blue chimneys are visible, rising from the roof. The facility is surrounded by a paved area and a green field. A small truck is visible in the foreground, and a person is walking on the paved area. The sky is overcast.

JIANZHI

THE ONLY

**environmentally-certified casting
manufacturer that can continuously
produce 24 hours a day in China.**



Built to Make the World Safer

WHO IS JIANZHI?

Founded in 1982, Jianzhi is a leading manufacturer and supplier of cast iron pipe fittings. Till now, Jianzhi has about 4,500 employees and more than 350 technical engineers with distributors covering over 100 countries around the world.

Jianzhi is committed to building a safer world by bringing premium cast iron pipe fittings to every household and building.

BUSINESS MODEL OF JIANZHI:

Cooperating with distributors all over the world and working to make the list grow is the business model of Jianzhi. Helping all partners to unleash their untapped potential and make profits is the service philosophy of Jianzhi.

On the manufacturing side, Jianzhi strictly controls the cost to ensure a stable supply of high-quality products and fast delivery. On the marketing side, Jianzhi helps the customers to formulate their marketing strategies.

The over 90% reorder rate shows the recognition from every customer.

SOCIAL CONTRIBUTIONS OF JIANZHI:

Higher revenue for all partners;
Continuously innovative and strict quality control to ensure the safety of every pipeline system;
Driving forces for the stable development of the foundry industry as a standing member of China Foundry Association;
Eco-friendly manufacturing procedures to promote sustainable development;
More job opportunities.



COMPANY HISTORY

Founded in 1982, a century-old enterprise



- **1982**- Established and named "Yutian first plumbing plant" .
- **1993**- Renamed as "Tang Shan malleable water plumbing industries LTD"
- **1994**- Invent "Chain Link Type Quality Control"
- **1996**- "JIANZHI" was awarded as a famous brand product in Hebei Province of China
- **2000**-Renamed as " TangShan JIANZHI Malleable Ltd"
- **2002**-Passed international quality management system certification
- **2005**-PRenamed as "Hebei JIANZHI Casting Group Ltd"
- **2007**-JIANZHI's first generation hydraulic testing machine was developed successfully
- **2008**-Passed UL, Took part in the building project for the 2008 Beijing Olympic Games
- **2010**-Passed CE
- **2011**-Built a new factory in Chifeng
- **2013**-JIANZHI pipe fitting has been named the "Chinese Malleable Pipe Fitting Famous Brand"
- **2013**-Passed Turkey TSE
- **2014**-Completed two factories and a galvanizing plant in Chifeng
Brand "JIANZHI" has been named the "China Famous Brand"
Passed ISO 9001, ISO 14001 and ISO 18000
- **2015**- Passed Brazil ABNT
Passed American FM
Grooved fitting passed CCC certification
- **2017**-JIANZHI introduced the world's most advanced DISA line.
- **2019**-JIANZHI cooperates with the Foundry College of The Open University of China,become the teaching practice base of the college and solve our demand for technological talents.

CERTIFICATES

JIANZHI PIPE FITTINGS
SAFER, NO LEAK!

CERTIFICATE OF COMPLIANCE

Certificate Number 20180621-EX27485
Report Reference EX27485-20180620
Issue Date 2018-JUNE-21

Issued to: HEBEI JIANZHI CASTING GROUP LTD
Pangzhuangzi
Southeast Of Yutian County
Tangshan
Hebei 064000 CHINA

This is to certify that representative samples of FITTINGS, RUBBER GASKETED
See Addendum Page

Standard(s) for Safety: UL 213, Rubber Gasketed Fittings for Fire-Protection Service.

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Barry
Barry Mohrman, Director North American Certification Program
UL LLC
Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at 1-800-451-6822 or 1-800-451-6822.

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Certificate Number 20180621-EX27485
Report Reference EX27485-20180620
Issue Date 2018-JUNE-21

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Rubber Gasketed fittings Models as following table listed for use with cut, rolled or grooved steel pipe. The sizes, pipe schedules, groove types and rated working pressure are as follows:

Rigid Coupling (for use with grooved end pipe or this manufacturer's grooved end fittings)

Model	Groove Type	Pipe	Size (in.)	Rated Pressure (psig)
XGQT01	Cut, Rolled	GB/T3091	1, 1-1/2, 2, 3OD, 3, 4, 5-1/2OD, 6-1/2OD, 6	300
XGQT01	Cut, Rolled	GB/T21835	4-1/4OD, 5-1/4OD, 6-1/4OD, 8, 10, 12	300

Split Flange (for use with grooved end pipe or this manufacturer's grooved end fittings)

Model	Groove Type	Pipe	Size (in.)	Rated Pressure (psig)
XGQT14	Cut, Rolled	GB/T3091	3OD, 3, 4, 5-1/2OD, 6-1/2OD, 6	225
XGQT14	Cut, Rolled	GB/T21835	4-1/4OD, 5-1/4OD, 6-1/4OD, 8	225

(Side outlet) Mechanical Tee

Model	Outlet Type	Pipe	Size (in.)	Rated Pressure (psig)
XGQT15	Grooved	GB/T 3091	4 × 1, 1-1/2, 2, 3OD 5-1/2OD × 3OD, 3 6-1/2OD × 2, 3OD, 3, 4 8 × 2, 3OD, 3, 4	300
XGQT15	Grooved	GB/T21835	3OD × 1, 1-1/4, 1-1/2, 2 3 × 1, 1-1/4, 1-1/2, 2 4 × 1, 1-1/4, 1-1/2, 2, 3OD, 3 5-1/2OD × 1, 1-1/4, 1-1/2, 2, 3OD, 3 6-1/2OD × 1, 1-1/4, 1-1/2, 2, 3OD, 3, 4	300
XGQT15S	Threaded	GB/T 3091	3OD × 1, 1-1/4, 1-1/2, 2 3 × 1, 1-1/4, 1-1/2, 2 4 × 1, 1-1/4, 1-1/2, 2, 3OD, 3 5-1/2OD × 1, 1-1/4, 1-1/2, 2, 3OD, 3 6-1/2OD × 1, 1-1/4, 1-1/2, 2, 3OD, 3, 4	300
XGQT15S	Threaded	GB/T21835	4-1/4OD × 1, 1-1/4, 1-1/2, 2, 3OD, 3 6-1/4OD × 1, 1-1/4, 1-1/2, 2, 3OD, 3 8 × 1, 1-1/4, 1-1/2, 2, 3OD, 3	300

Notes:
GB/T3091 refers to steel pipe manufactured in accordance with GB/T3091.
GB/T21835 refers to steel pipe manufactured in accordance with GB/T21835.

Barry
Barry Mohrman, Director North American Certification Program
UL LLC
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证书号: 20180621-EX27485

实用新型专利证书

实用新型名称: 一种橡胶密封式消防接口

发明人: 张树强, 李树强, 李树强, 李树强, 李树强

专利号: ZL 2018 2 1078895.5

专利申请日: 2018年06月21日

专利公告日: 2019年02月07日

专利权人: 河北建支铸造集团有限公司

授权公告日: 2019年02月07日

局长: 申长南

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授权公告日: 2019年02月07日

局长: 申长南

Certificate of Compliance

This certificate is issued for the following:

Non-Gasketed Pipe Fittings for Use with Aboveground Fire Protection Systems

Model 291	Model 241	Model 280
Malleable Iron Plug	Malleable Iron Bushing	Malleable Iron Pipe Nipple
Model 270	Model 240	
Malleable Iron Straight Coupling	Malleable Iron Concentric Reducer	

Prepared for: Hebei Jianzhi Casting Group Co Ltd
Pang Zhuang Zi
Southeast of Yutian County
Tangshan City, Hebei Province 064100
China

Manufacturer: Hebei Jianzhi Casting Group Co Ltd
Pang Zhuang Zi
Southeast of Yutian County
Tangshan City, Hebei Province 064100
China

FM Approvals Class: 1920 - "Pipe Couplings and Fittings for Aboveground Fire Protection Systems"

Approval Identification: 3058846 Approval Granted: May 5, 2017

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

David B. Fuller
David B. Fuller
AVP, Manager of Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
Norwood, MA 02062 USA

Certificate of Compliance

This certificate is issued for the following:

Non-Gasketed Pipe Fittings for Use with Aboveground Fire Protection Systems

Model 90	Model 90R	Model 130
Malleable Iron 90° Elbow	Malleable Iron 90° Reducing Elbow	Malleable Iron Equal Tee
Model 130R	Model 180	Model 180R
Malleable Iron Reducing Tee	Malleable Iron Equal Cross	Malleable Iron Reducing Cross

Prepared for: Hebei Jianzhi Casting Group Co Ltd
Pang Zhuang Zi
Southeast of Yutian County
Tangshan City, Hebei Province 064100
China

Manufacturer: Hebei Jianzhi Casting Group Co Ltd
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Certificate of Compliance

This certificate is issued for the following:

Non-Gasketed Pipe Fittings for Aboveground Fire Protection Systems

Model XGQT16	Model XGQT09	Model XGQT07
Grooved End Cap	Grooved Equal Cross	Equal Tee
Model XGQT03	Model XGQT04	Model XGQT08
90 Degree Grooved Elbow	45 Degree Grooved Elbow	Threaded Reducing Tee
Model XGQT11	Model XGQT11S	Model XGQT10S
Grooved Concentric Reducer	Threaded Concentric Reducer	Threaded Reducing Cross
Model XGQT05	Model XGQT06	Model XGQT10
22.5 Degree Grooved Elbow	11.25 Degree Grooved Elbow	Grooved Reducing Cross

Prepared for: Hebei Jianzhi Casting Group Co Ltd
Pang Zhuang Zi
Southeast of Yutian County
Tangshan City, Hebei Province 064100
China

Manufacturer: Hebei Jianzhi Casting Group Co Ltd
Pang Zhuang Zi
Southeast of Yutian County
Tangshan City, Hebei Province 064100
China

FM Approvals Class: 1920 - "Pipe Couplings and Fittings for Aboveground Fire Protection Systems"

Approval Identification: 3054543 Approval Granted: July 16, 2015
Approval Reissued: August 28, 2015

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

David B. Fuller
David B. Fuller
AVP, Manager of Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
Norwood, MA 02062 USA

CERTIFICATE

质量管理体系认证证书

证书编号: 00217Q266483L

获证组织: 河北建支铸造集团有限公司

认证依据: GB/T 19001-2016/ISO 9001:2015

《质量管理体系 要求》

覆盖的产品及过程: 可锻铸铁管接头、沟槽式管接头、给水型可锻铸铁管件、沟槽式管接头的设计、生产及相关技术服务

发证日期: 2017年11月07日 有效期至: 2020年11月24日

注册号: CQM-99-2002-0002-0001

方圆标志认证集团

CERTIFICATE

环境管理体系认证证书

证书编号: 00217Q271183L

获证组织: 河北建支铸造集团有限公司

认证依据: GB/T 24001-2016/ISO 14001:2015

《环境管理体系 要求及使用指南》

覆盖的产品及过程: 可锻铸铁管接头、沟槽式管接头、给水型可锻铸铁管件、沟槽式管接头的设计、生产及相关技术服务

发证日期: 2017年11月07日 有效期至: 2020年11月24日

注册号: CQM-99-2002-0002-0002

方圆标志认证集团

CERTIFICATE

职业健康安全管理体系认证证书

证书编号: 00217S1250963L

获证组织: 河北建支铸造集团有限公司

认证依据: GB/T 28001-2011/OHSA 18001:2007

《职业健康安全管理体系 要求》

覆盖的产品及过程: 可锻铸铁管接头、沟槽式管接头、给水型可锻铸铁管件、沟槽式管接头的设计、生产及相关技术服务

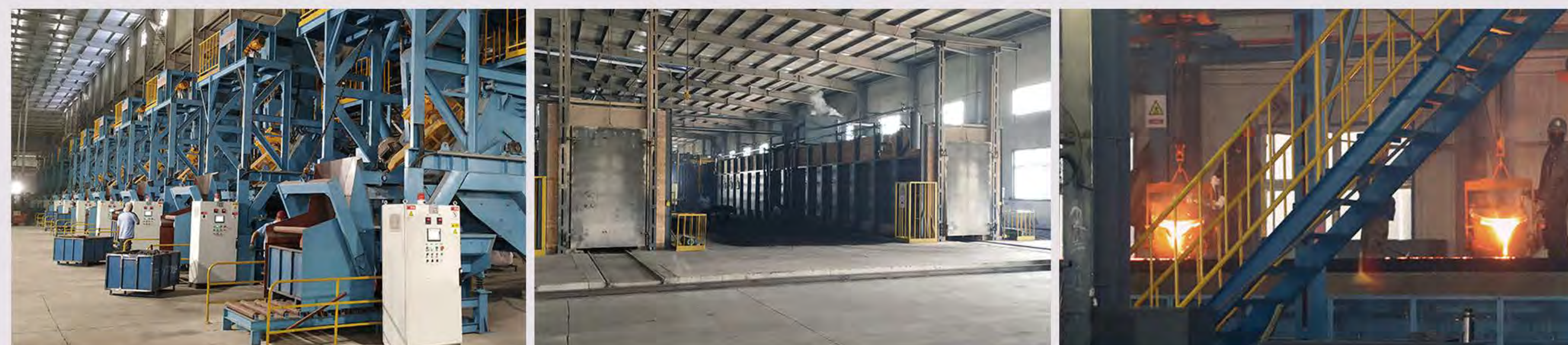
发证日期: 2017年11月07日 有效期至: 2020年11月24日

注册号: CQM-99-2002-0002-0003

方圆标志认证集团

Advanced production equipment

High-quality products and sophisticated equipment are the most basic production guarantee. All production workshops of JIANZHI are equipped with advanced production and testing equipment. Including the DISA vertical molding line imported from Denmark, the horizontal automatic molding line imported from Japan, and the FONDARC sand mixer imported from France. Independent CNC numerical control center for mold processing. At the same time, there is also self-developed laboratory testing equipment and so on.



MALLEABLE IRON FITTINGS -CLASS 150 (STANDARD) GALVANIZED & BLACK



STANDARD SPECIFICATIONS:

Material:	EN1562 Or ISO5922
Design & Dimensions:	EN10242 Or ISO49
Threads:	EN10226 Or ISO7-1
Tensile Strength:	350 MPA
Elongation:	10%
Zinc Coating:	70μm
Working Pressure:	363 PSI
Size Available	1/8" -6"
Types	Heavy Duty Banded, Medium Duty Banded, Light Duty Beaded
Surface Treatment	Hot-dip Galvanized, Electro galvanization, Black

Code

JZ= Jianzhi Brand

GAL= Galvanized Fittings

BLK= Black Fittings

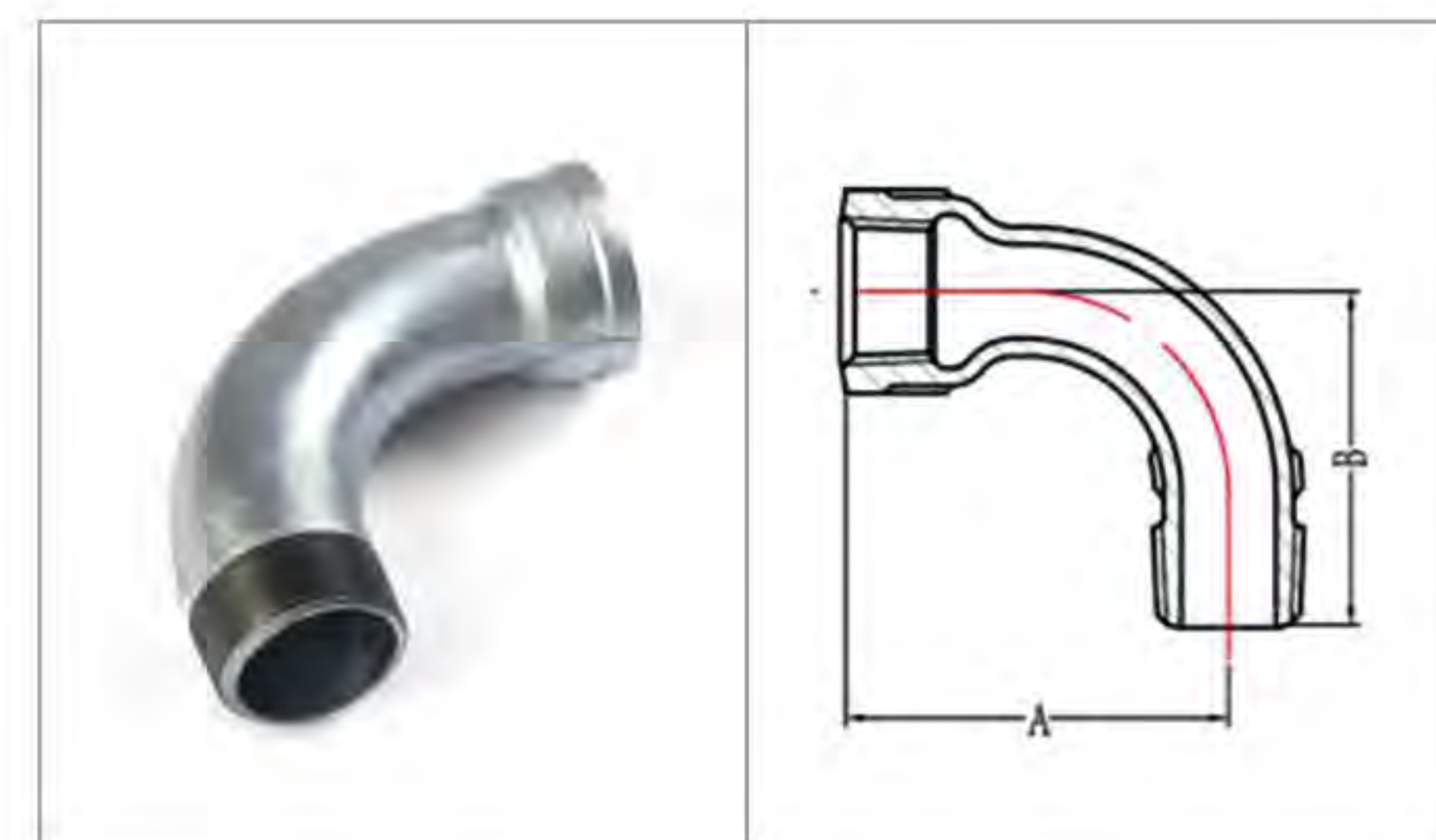
9001= Products Model & Size

Example:

JZGAL9001=Jianzhi Brand Galvanized Fittings, 90 Degree Elbow, Size:6" ;

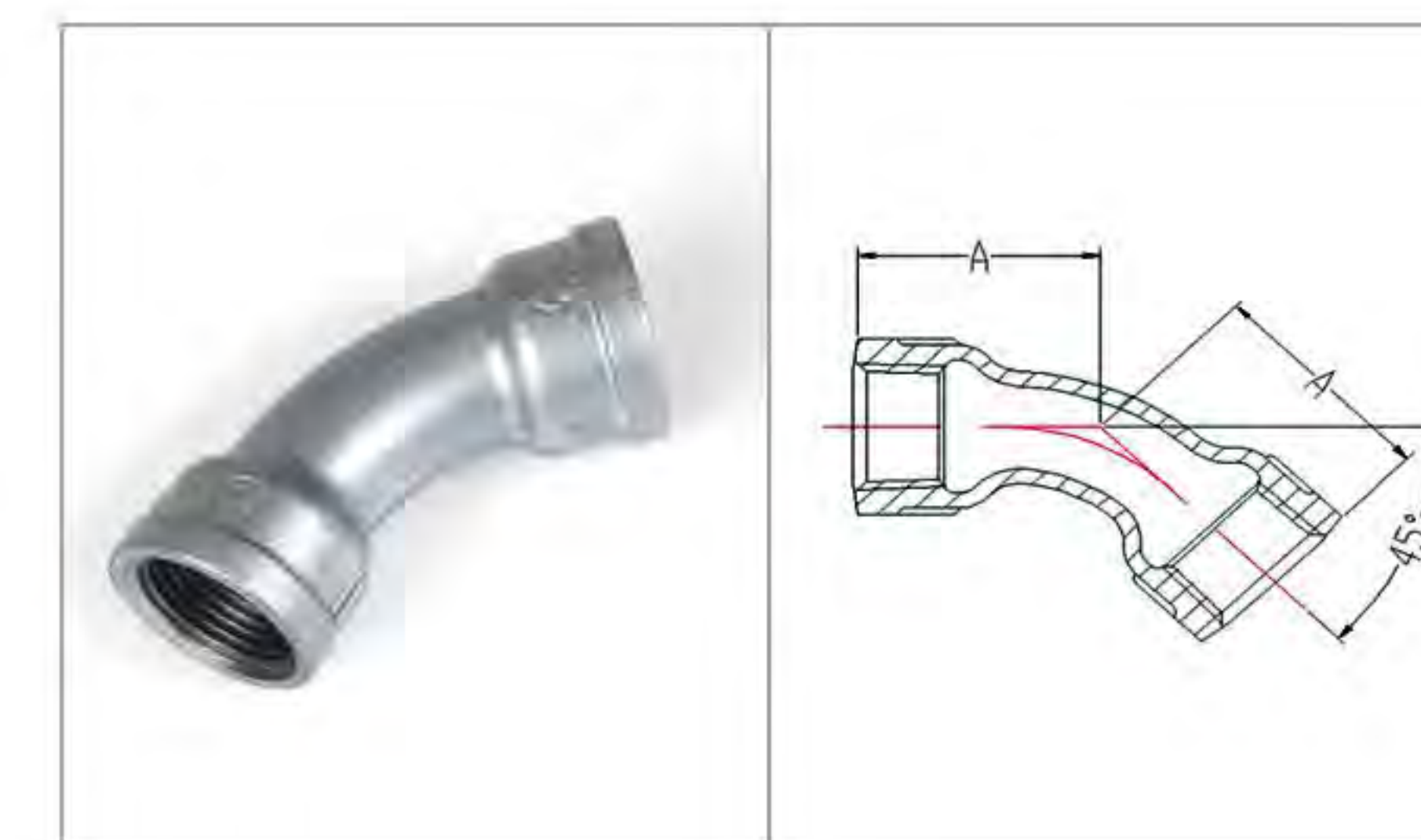


Fig.1
90 Degree M&F Long Bend



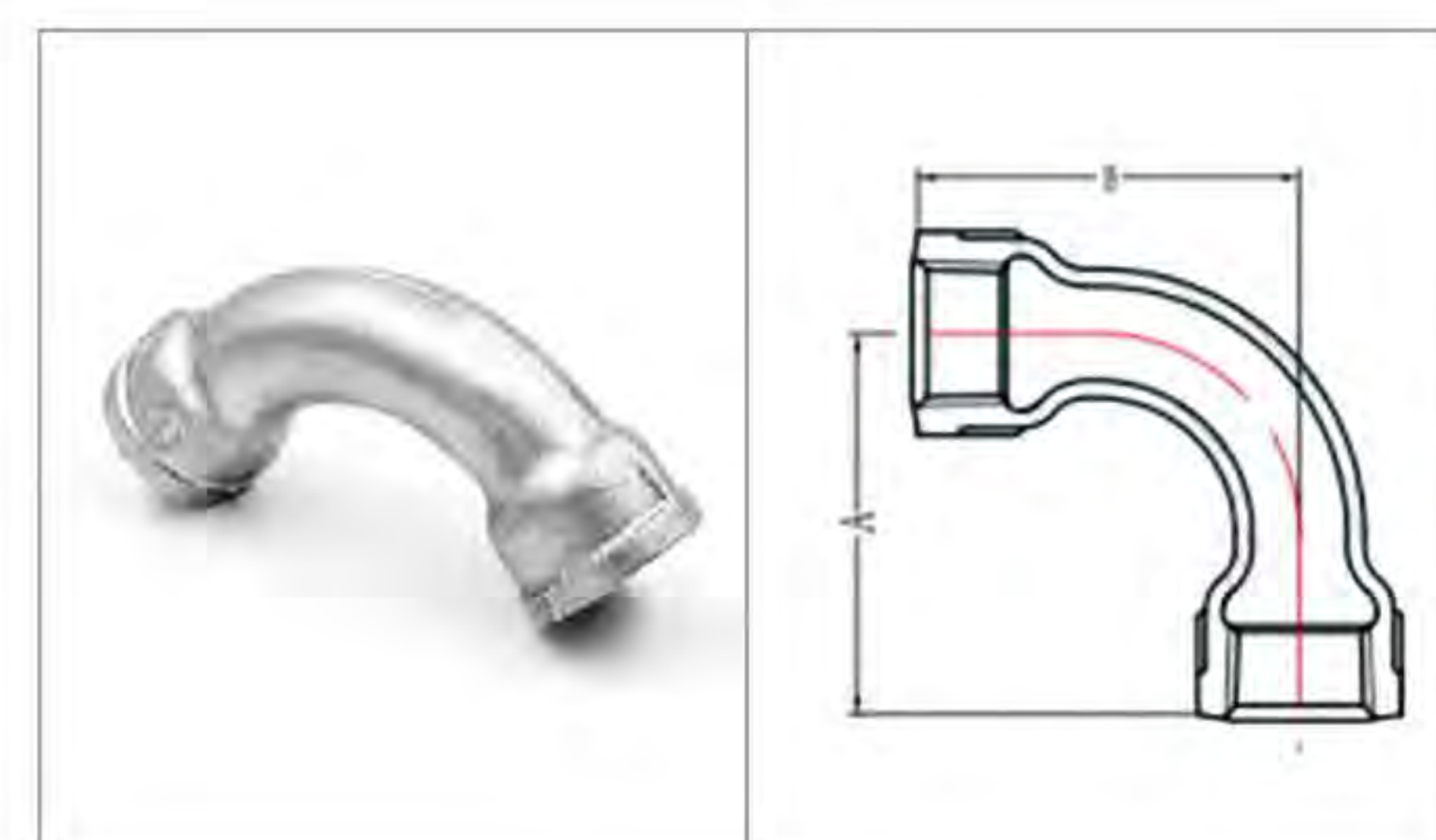
Code	Size		A	B	Unit Weight		Packing Carton
	NPS	DN			Black g	Galv. g	
JZGAL1001	3/8"	10	48	42	71.54	73	400
JZGAL1002	1/2"	15	55	48	115.64	118	280
JZGAL1003	3/4"	20	69	60	187.18	191	150
JZGAL1004	1"	25	85	75	304.78	311	80
JZGAL1005	1-1/4"	32	105	95	519.4	530	50
JZGAL1006	1-1/2"	40	116	105	665.42	679	24
JZGAL1007	2"	50	140	131	1123.08	1146	12
JZGAL1008	2-1/2"	65	176	165	2067.8	2110	8
JZGAL1009	3"	80	205	190	2955.68	3016	6
JZGAL1010	4"	100	260	245	5396.86	5507	2

Fig.41
45 Degree Femal Long Bend



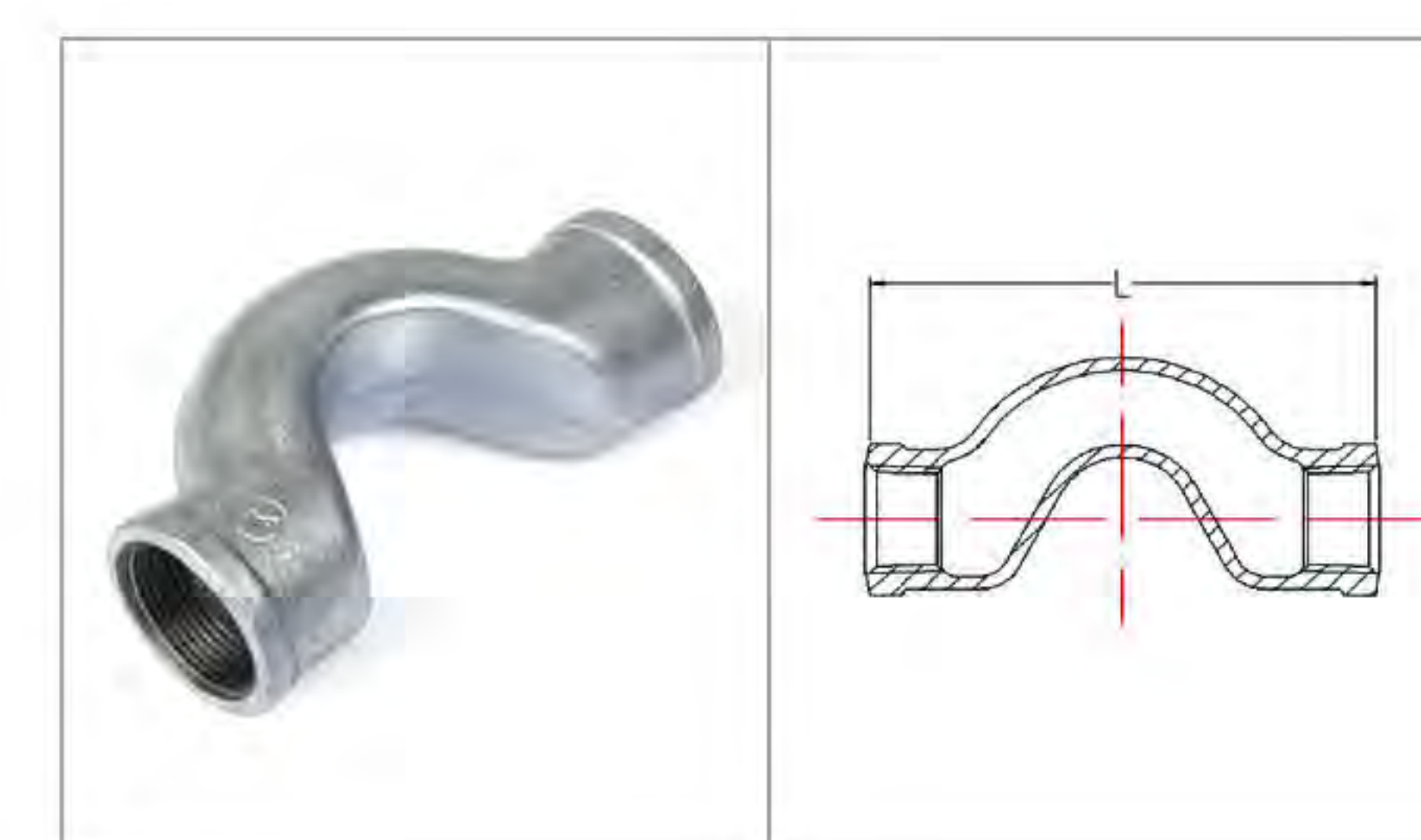
Code	Size		A	Unit Weight		Packing Carton
	NPS	DN		Black g	Galv. g	
JZGAL4101	1/2"	15	36	119.56	122	180
JZGAL4102	3/4"	20	43	180.32	184	160
JZGAL4103	1"	25	51	286.16	292	80
JZGAL4104	1-1/4"	32	64	461.58	471	50
JZGAL4105	1-1/2"	40	68	0		24
JZGAL4106	2"	50	81	0		12
JZGAL4107	2-1/2"	65	99	0		8
JZGAL4108	3"	80	113	0		6
JZGAL4109	4"	100	142	0		2

Fig.2
90 Degree Femal Long Bend



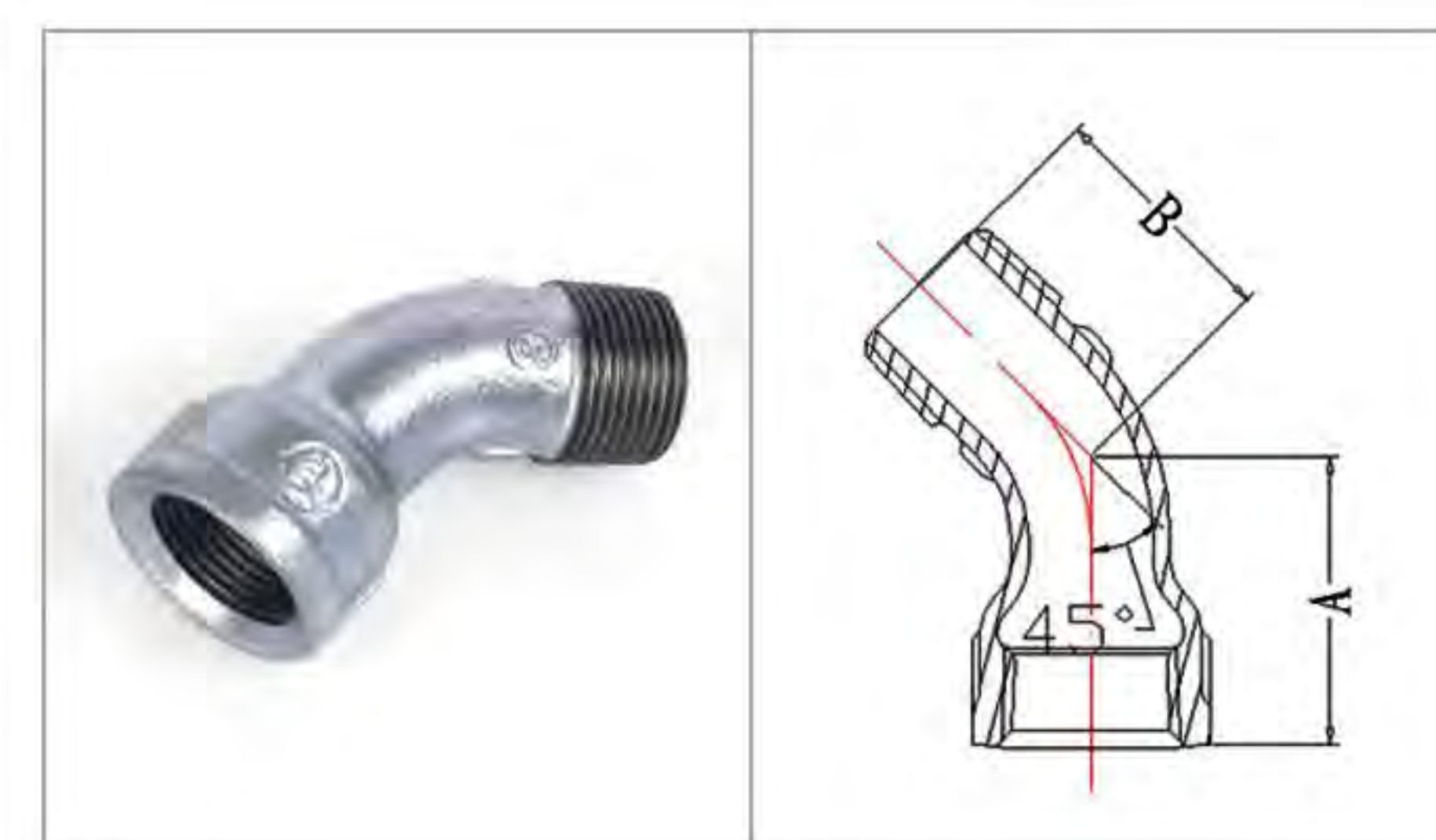
Code	Size		A	B	Unit Weight		Packing Carton
	NPS	DN			Black g	Galv. g	
JZGAL201	3/8"	10	48	42	87.22	89	400
JZGAL202	1/2"	15	55	48	142.1	145	220
JZGAL203	3/4"	20	69	60	223.44	228	120
JZGAL204	1"	25	85	75	372.4	380	70
JZGAL205	1-1/4"	32	105	95	607.6	620	40
JZGAL206	1-1/2"	40	116	105	807.52	824	20
JZGAL207	2"	50	140	131	1268.12	1294	12
JZGAL208	2-1/2"	65	176	165	2243.22	2289	8
JZGAL209	3"	80	205	190	3234	3300	6
JZGAL210	4"	100	260	245	6056.4	6180	2

Fig.85
Crossover



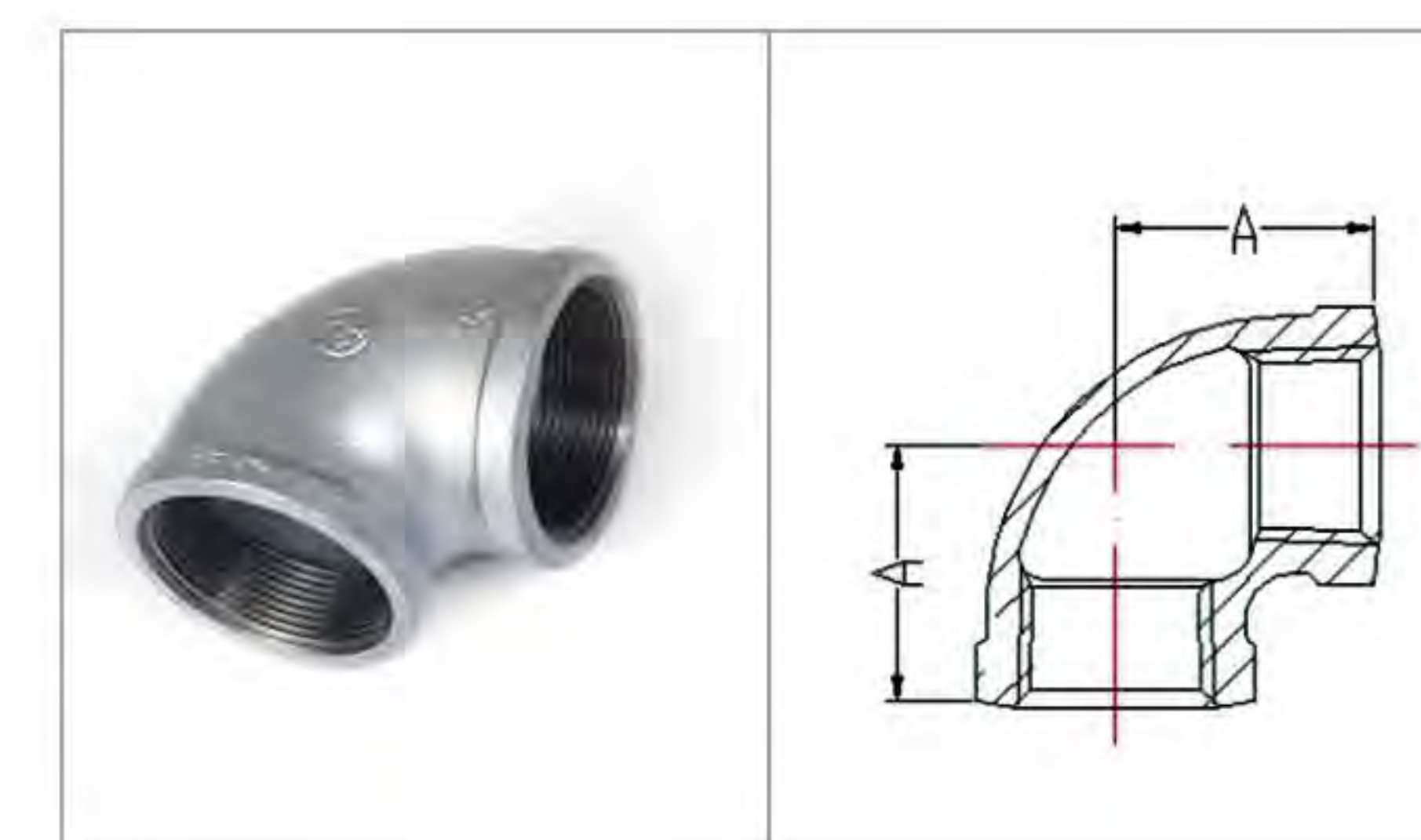
Code	Size		L	Unit Weight		Packing Carton
	NPS	DN		Black g	Galv. g	
JZGAL8501	1/2"	15	90	184.24	188	150
JZGAL8502	3/4"	20	104	281.26	287	90
JZGAL8503	1"	25	120	436.1	445	50
JZGAL8504	1-1/4"	32	149	698.74	713	32
JZGAL8505	1-1/2"	40	160	871.22	889	26
JZGAL8506	2"	50	194	1511.16	1542	12

Fig.40
45 Degree M&F Long Bend



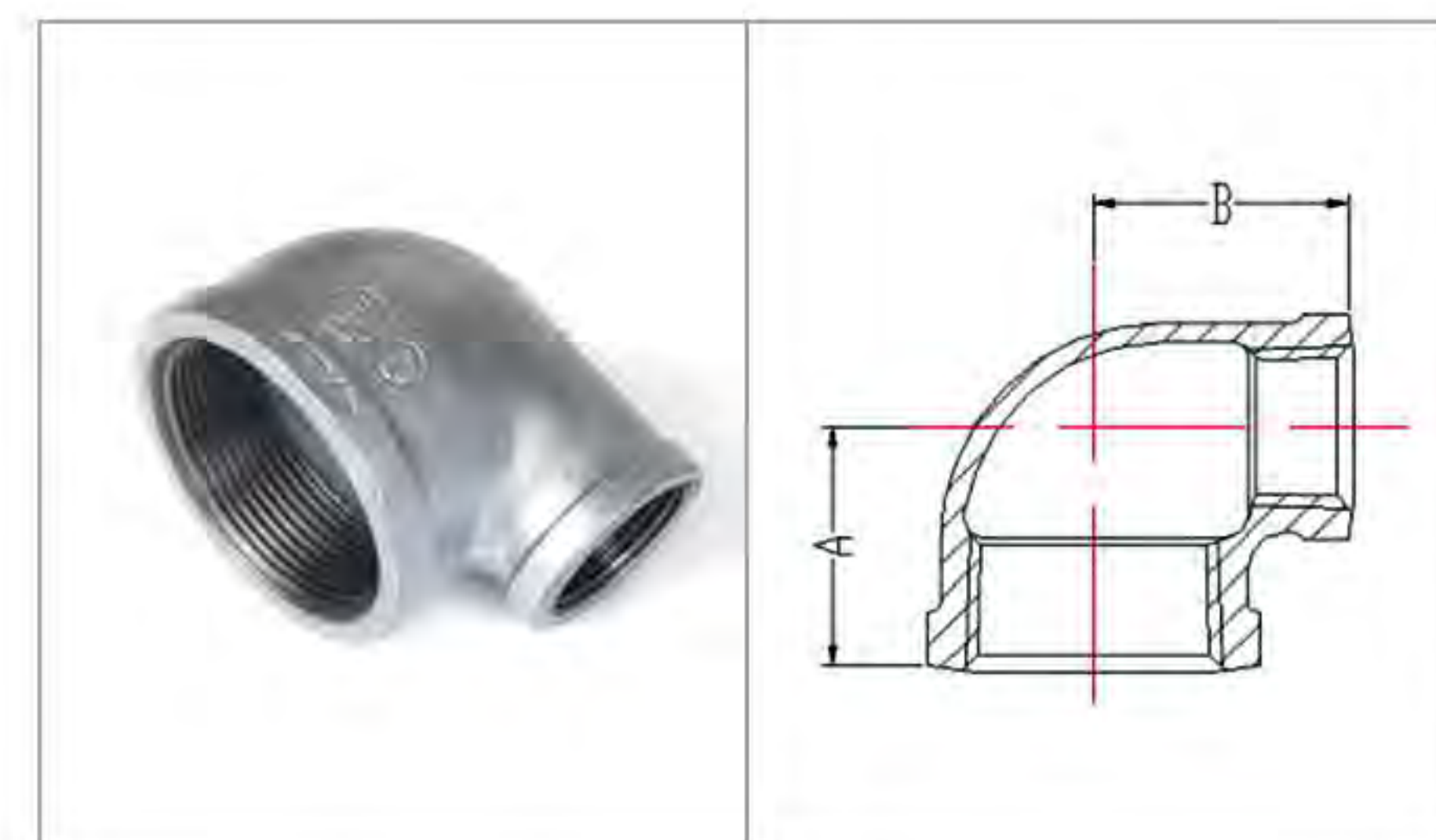
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	NPS	DN			Black g	Galv. g	
JZGAL4001	1/2"	15	36	30	87	88	180
JZGAL4002	3/4"	20	43	36	88	144	160
JZGAL4003	1"	25	51	42	89	224	80
JZGAL4004	1-1/4"	32	64	54	90	362	50
JZGAL4005	1-1/2"	40	68	58	91	450	24
JZGAL4006	2"	50	81	70	92	752	12
JZGAL4007	2-1/2"	65	99	86	93	1344	8
JZGAL4008	3"	80	113	100	94	1963	6
JZGAL4009	4"	100	143	126			2

Fig.90
90° Elbow, Equal



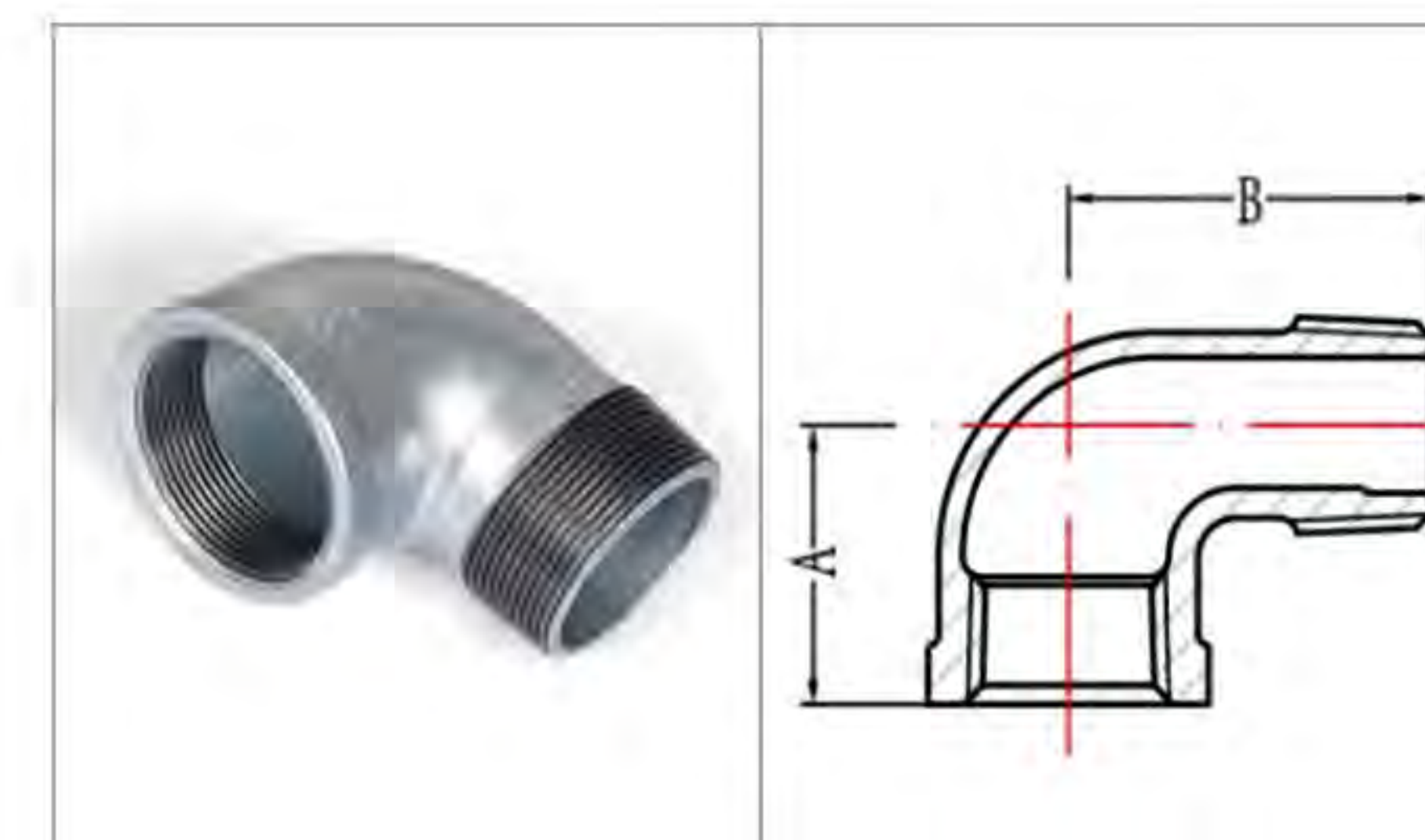
Code	Size		A	Unit Weight		Packing Carton
	NPS	DN		Black g	Galv. g	
JZGAL9001	1/8"	6	18	30.38	31	600
JZGAL9002	1/4"	8	20	42.14	43	600
JZGAL9003	3/8"	10	24	60.76	62	500
JZGAL9004	1/2"	15	27	96.04	98	400
JZGAL9005	3/4"	20	32	139.16	142	210
JZGAL9006	1"	25	37	213.64	218	120
JZGAL9007	1-1/4"	32	44.5	340.06	347	64
JZGAL9008	1-1/2"	40	48.5	423.36	432	48
JZGAL9009	2"	50	57	674.24	688	32
JZGAL9010	2-1/2"	65	68.5	1068.2	1090	16
JZGAL9011	3"	80	77.5	1489.6	1520	10
JZGAL9012	4"	100	96.5	2700.88	2756	6
JZGAL9013	6"	150	129	6089.72	6214	2

Fig.90R
90° Elbow, Reducing



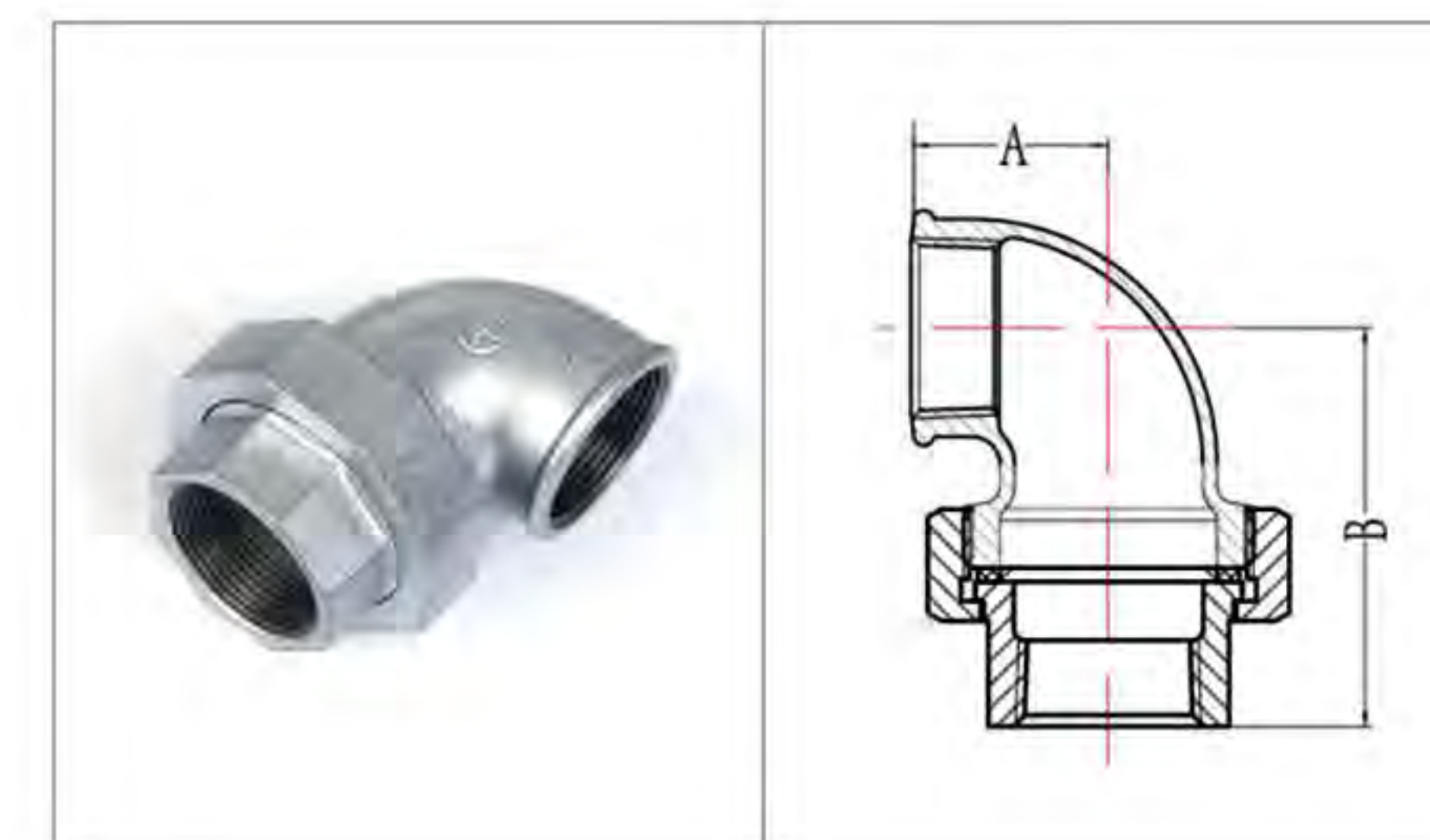
Code	Size		A	B	Unit Weight		Packing
	NPS	DN			Black	Galv.	Carton
			mm	mm	g	g	Pcs/ctn
JZGAL90R01	1/2" x 3/8"	15×10	25	25	74.48	76	270
JZGAL90R02	3/4" x 1/2"	20×15	29	30	122.5	125	270
JZGAL90R03	1" x 3/8"	25×10	29	31	143.08	146	160
JZGAL90R04	1" x 1/2"	25×15	31	33	161.7	165	160
JZGAL90R05	1" x 3/4"	25×20	34	35	184.24	188	160
JZGAL90R06	1-1/4" x 3/8"	32×10	31	36	213.64	218	100
JZGAL90R07	1-1/4" x 1/2"	32×15	34	37	227.36	232	100
JZGAL90R08	1-1/4" x 3/4"	32×20	36	40	252.84	258	100
JZGAL90R09	1-1/4" x 1"	32×25	40	41	285.18	291	90
JZGAL90R10	1-1/2" x 1/2"	40×15	35	41	266.56	272	90
JZGAL90R11	1-1/2" x 3/4"	40×20	37	43	302.82	309	90
JZGAL90R12	1-1/2" x 1"	40×25	41	45	342.02	349	70
JZGAL90R13	1-1/2" x 1-1/4"	40×32	45	47	400.82	409	56
JZGAL90R14	2" x 1/2"	50×15	37	47	398.86	407	68
JZGAL90R15	2" x 3/4"	50×20	40	49	423.36	432	52
JZGAL90R16	2" x 1"	50×25	43	51	476.28	486	50
JZGAL90R17	2" x 1-1/4"	50×32	47	53	552.72	564	40
JZGAL90R18	2" x 1-1/2"	50×40	51	54	588	600	30
JZGAL90R19	2-1/2" x 1/2"	65×15	40.5	56	579.18	591	46
JZGAL90R20	2-1/2" x 3/4"	65×20	43.5	57	613.48	626	40
JZGAL90R21	2-1/2" x 1"	65×25	47.5	59	686	700	34
JZGAL90R22	2-1/2" x 1-1/4"	65×32	51.5	61	732.06	747	30
JZGAL90R23	2-1/2" x 1-1/2"	65×40	54.5	61	772.24	788	26
JZGAL90R24	2-1/2" x 2"	65×50	59.5	64	904.54	923	24
JZGAL90R25	3" x 1/2"	80×15	42.5	64	735.98	751	36
JZGAL90R26	3" x 3/4"	80×20	45.5	65	770.28	786	30
JZGAL90R27	3" x 1"	80×25	49.5	67	830.06	847	20
JZGAL90R28	3" x 1-1/4"	80×32	54.5	69	931.98	951	20
JZGAL90R29	3" x 1-1/2"	80×40	57.5	71	952.56	972	20
JZGAL90R30	3" x 2"	80×50	61.5	71	1166.2	1190	12
JZGAL90R31	3" x 2-1/2"	80×65	71.5	74	1319.08	1346	12
JZGAL90R32	4" x 1/2"	100×15	49.5	78	1311.24	1338	14
JZGAL90R33	4" x 3/4"	100×20	53.5	79	1326.92	1354	14
JZGAL90R34	4" x 1"	100×25	56.5	82	1405.32	1434	14
JZGAL90R35	4" x 1-1/4"	100×32	60.5	85	1550.36	1582	14
JZGAL90R36	4" x 1-1/2"	100×40	62.5	85	1621.9	1655	10
JZGAL90R37	4" x 2"	100×50	68.5	86	1711.08	1746	10
JZGAL90R38	4" x 2-1/2"	100×65	77.5	89	1957.06	1997	8
JZGAL90R39	4" x 3"	100×80	82.5	90	2164.82	2209	8

Fig.92
90 Degree M&F Elbow



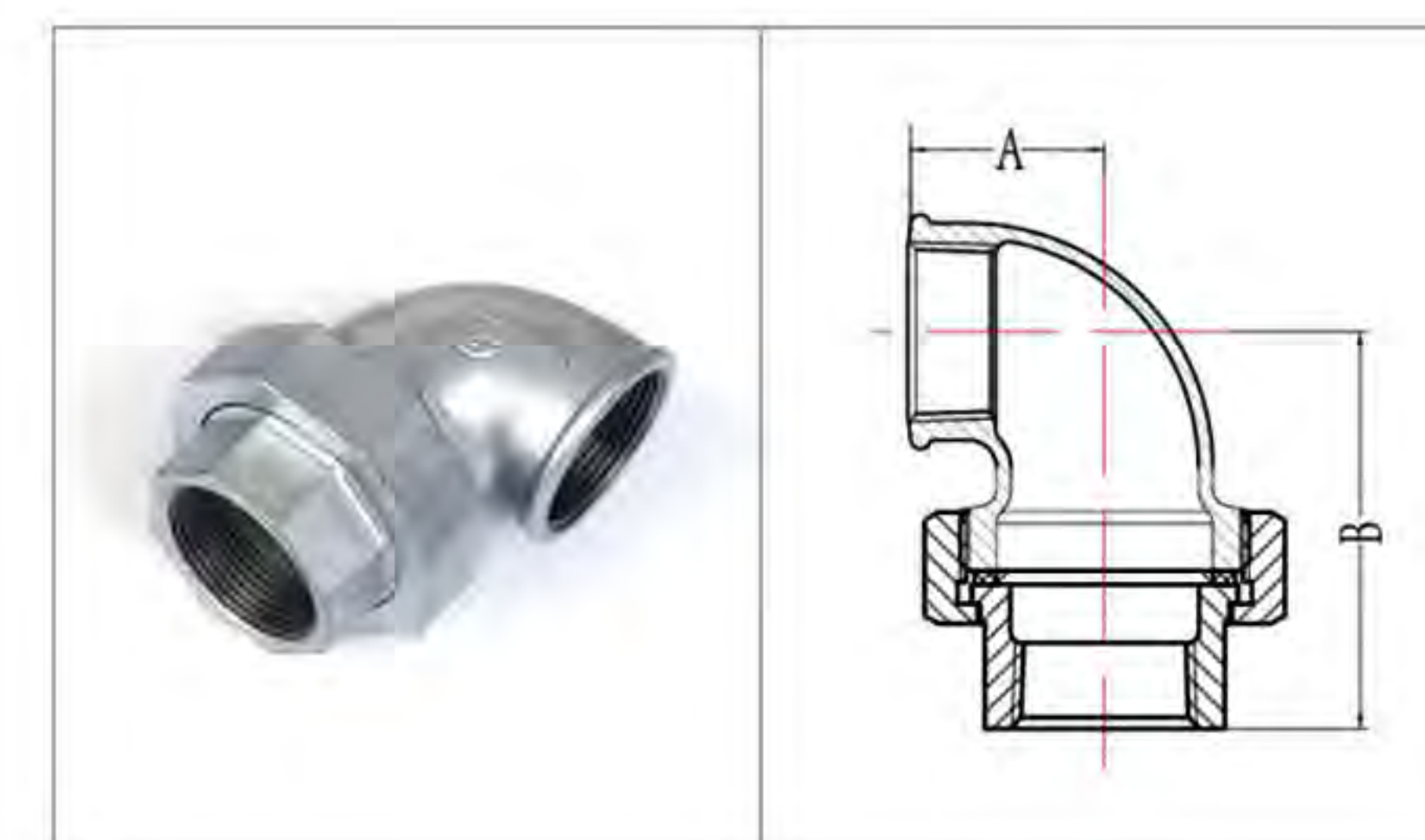
Code	Size		A	B	Unit Weight		Packing
	NPS	DN			Black	Galv.	Carton
			mm	mm	g	g	Pcs/ctn
JZGAL9201	1/4"	8	20	28	37.24	38	600
JZGAL9202	3/8"	10	25	33	54.88	56	500
JZGAL9203	1/2"	15	28	38	87.22	89	300
JZGAL9204	3/4"	20	33	44	132.3	135	180
JZGAL9205	1"	25	38	52	204.82	209	104
JZGAL9206	1-1/4"	32	45	60	339.08	346	60
JZGAL9207	1-1/2"	40	50	65	434.14	443	52
JZGAL9208	2"	50	58	74	701.68	716	26
JZGAL9209	2-1/2"	65	69	90	1125.04	1148	12
JZGAL9210	3"	80	77.5	100	1547.42	1579	10
JZGAL9211	4"	100	96.5	120	2703.82	2759	6

Fig.95
Union Elbow, flat seat



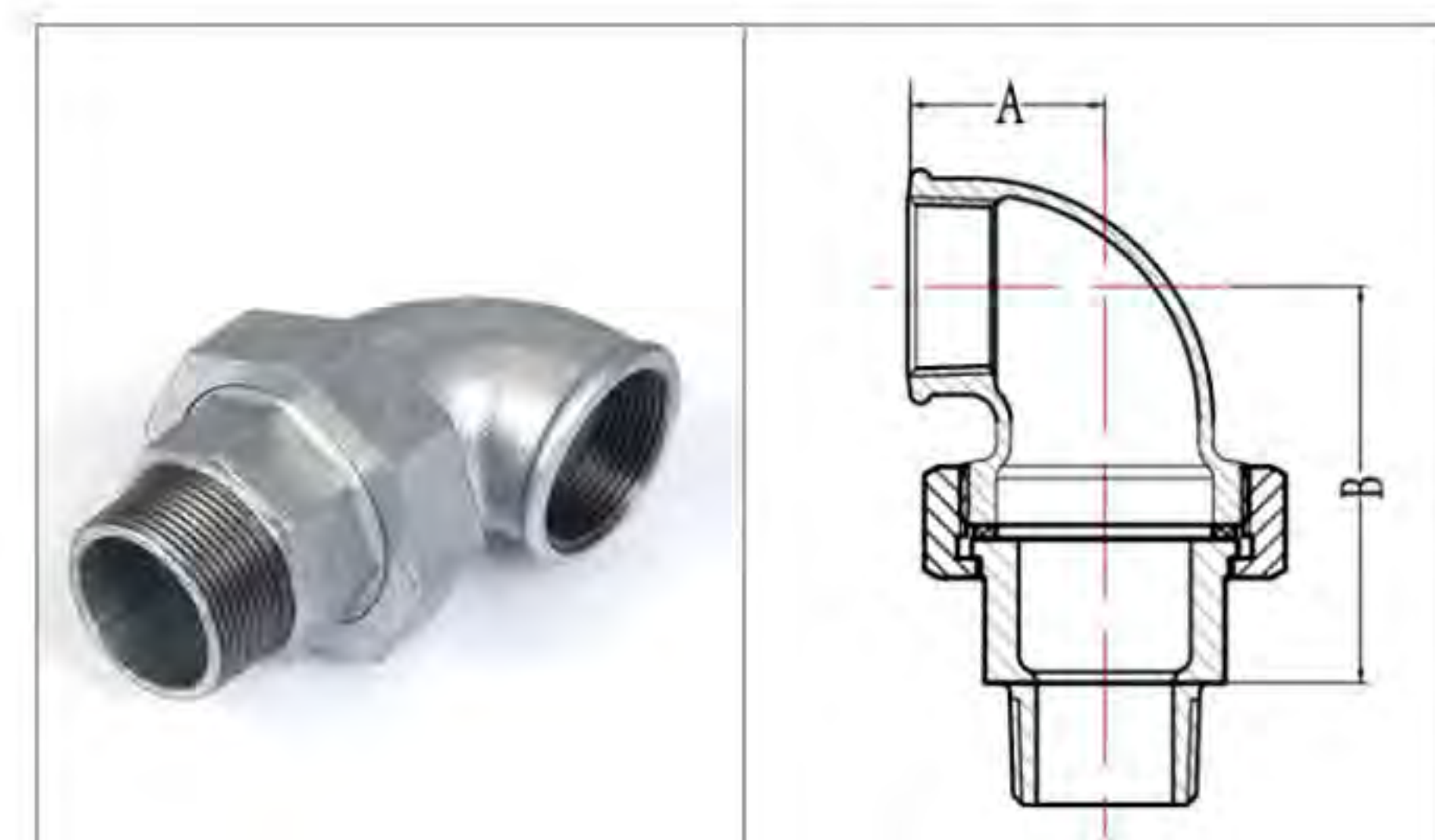
Code	Size		A	B	Unit Weight		Packing
	NPS	DN			Black	Galv.	Carton
			mm	mm	g	g	Pcs/ctn
JZGAL9501	1/2"	15	24.5	54	194.04	198	60
JZGAL9502	3/4"	20	29	60	303.8	310	40
JZGAL9503	1"	25	35	68	471.38	481	30
JZGAL9504	1-1/4"	32	42	80	703.64	718	20
JZGAL9505	1-1/2"	40	45.5	86	873.18	891	18
JZGAL9506	2"	50	53.5	97	1327.9	1355	10

Fig.96
Union Elbow, conical seat



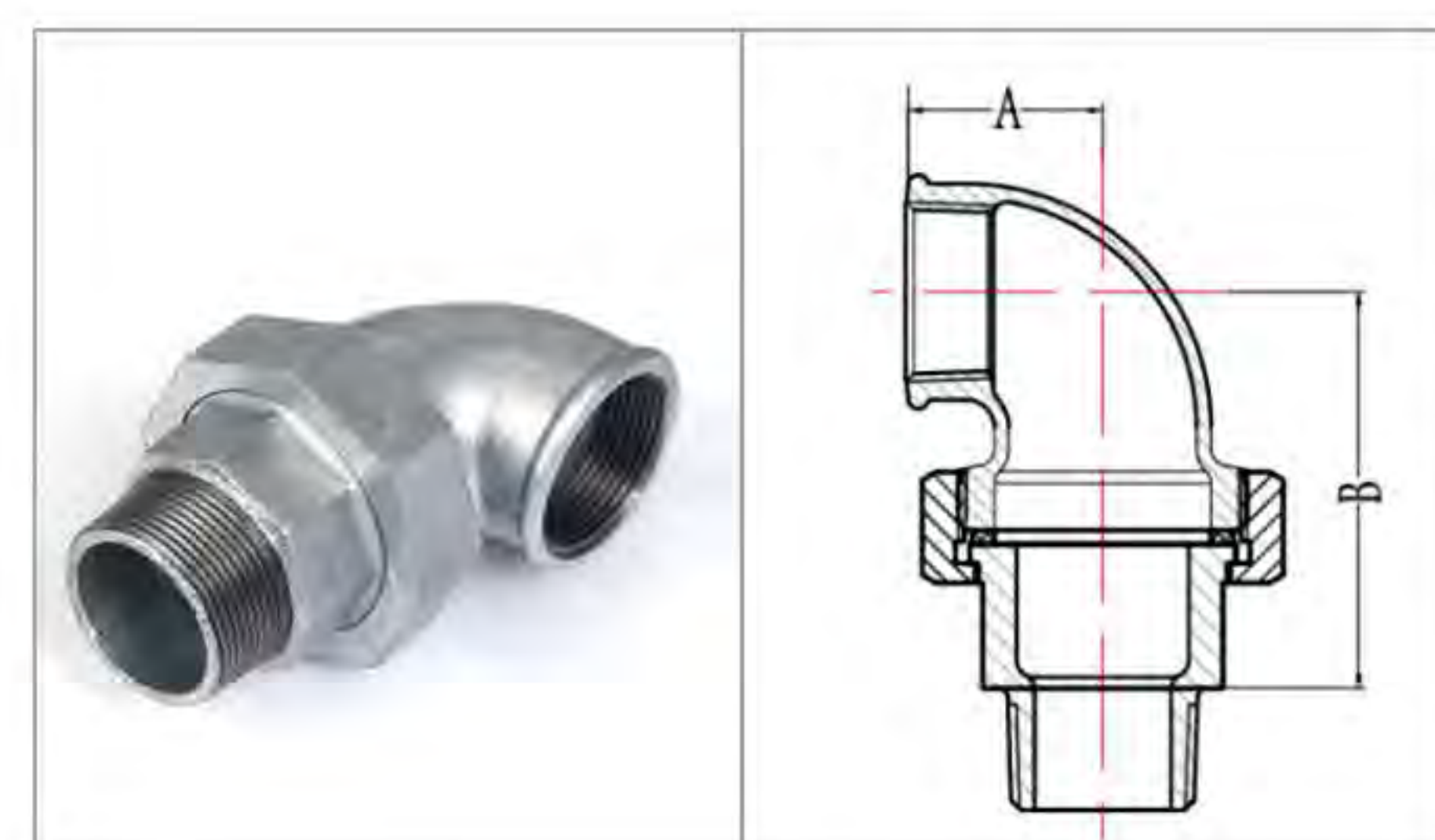
Code	Size		A	B	Unit Weight		Packing
	NPS	DN			Black	Galv.	Carton
			mm	mm	g	g	Pcs/ctn
JZGAL9601	1/2"	15	27	49.5	217.56	222	60
JZGAL9602	3/4"	20	32	57	313.6	320	40
JZGAL9603	1"	25	37	64.5	442.96	452	30
JZGAL9604	1-1/4"	32	44.5	74.5	797.72	814	20
JZGAL9605	1-1/2"	40	48.5	82	918.26	937	18
JZGAL9606	2"	50	57	94	1399.44	1428	10

Fig.97
 Union Elbow, flat seat, M&F



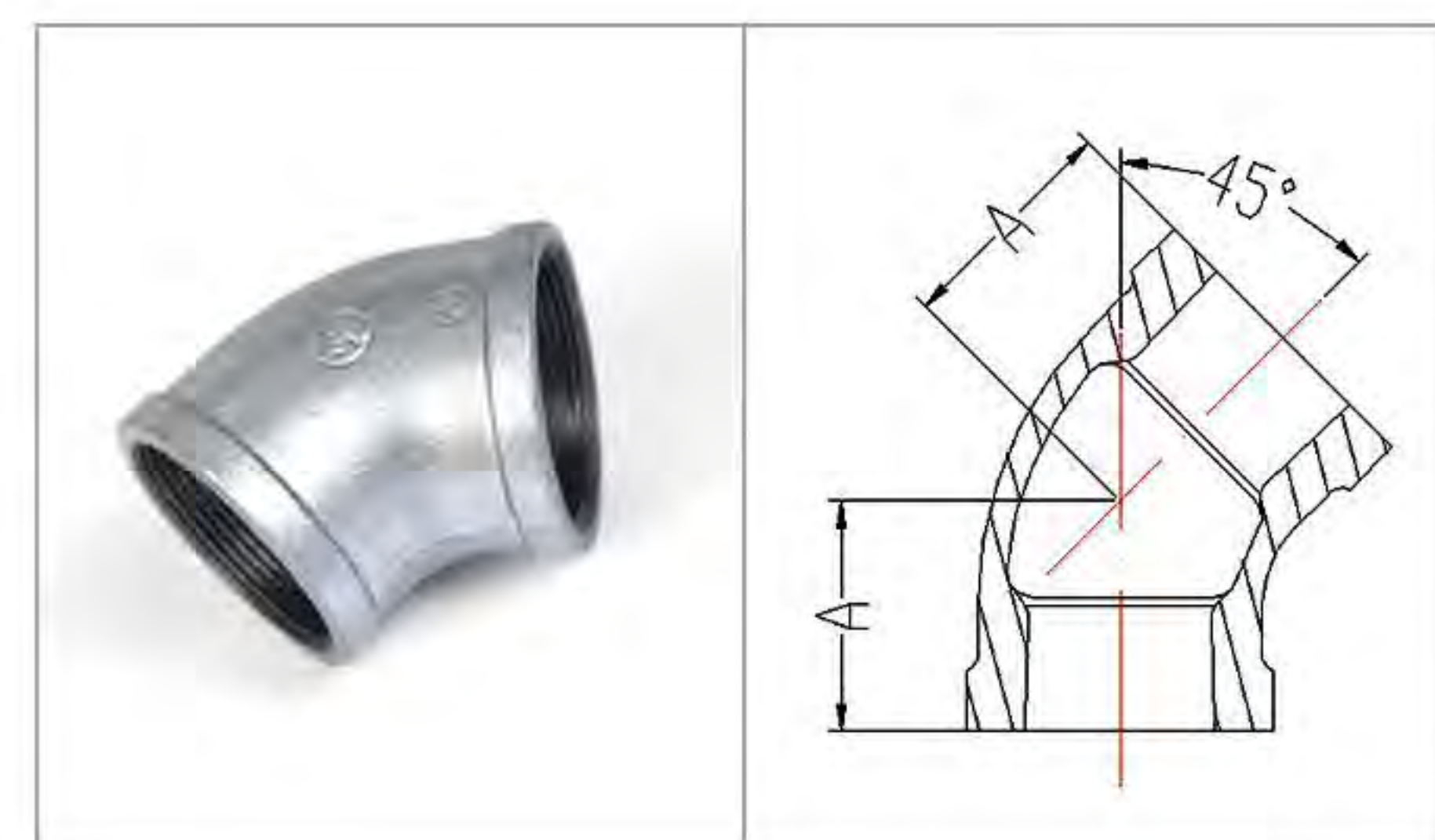
Code	Size		A	B	Unit Weight		Packing Carton
	NPS	DN			Black g	Galv. g	
JZGAL9701	1/2"	15	24.5	72	220.5	225	60
JZGAL9702	3/4"	20	29	80	328.3	335	40
JZGAL9703	1"	25	35	90	517.44	528	30
JZGAL9704	1-1/4"	32	42	105	770.28	786	20
JZGAL9705	1-1/2"	40	45.5	111	969.22	989	16
JZGAL9706	2"	50	53.5	125	1473.92	1504	10

Fig.98
 M&F Conical Union Elbow



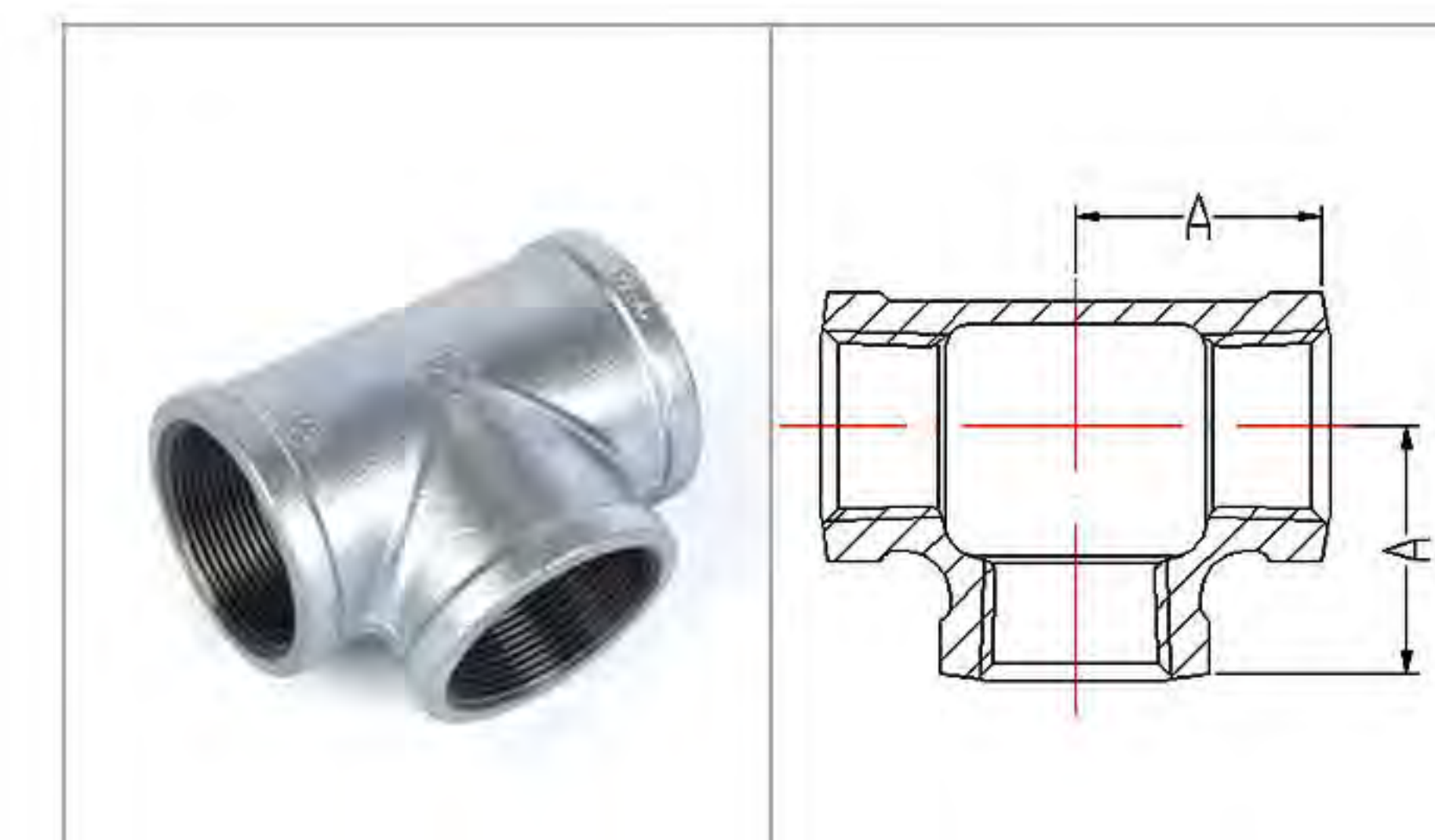
Code	Size		A	B	Unit Weight		Packing Carton
	NPS	DN			Black g	Galv. g	
JZGAL9801	1/2"	15	27	67.5	247.94	253	60
JZGAL9802	3/4"	20	32	77	384.16	392	40
JZGAL9803	1"	25	37	86.5	495.88	506	30
JZGAL9804	1-1/4"	32	44.5	99.5	895.72	914	20
JZGAL9805	1-1/2"	40	48.5	107	1017.24	1038	16
JZGAL9806	2"	50	57	122	1724.8	1760	10

Fig.120
 45° Elbow



Code	Size		A	Unit Weight		Packing Carton
	NPS	DN		Black g	Galv. g	
JZGAL12001	1/4"	8	18	46.06	47	500
JZGAL12002	3/8"	10	20	56.84	58	500
JZGAL12003	1/2"	15	22	91.14	93	400
JZGAL12004	3/4"	20	25	131.32	134	240
JZGAL12005	1"	25	28	196.98	201	140
JZGAL12006	1-1/4"	32	33	315.56	322	96
JZGAL12007	1-1/2"	40	36	392	400	72
JZGAL12008	2"	50	43	646.8	660	36
JZGAL12009	2-1/2"	65	48.5	933.94	953	20
JZGAL12010	3"	80	53.5	1274	1300	12
JZGAL12011	4"	100	64.5	2164.82	2209	6
JZGAL12012	6"	150	129	4738.3	4835	4

Fig.130
 Equal Tee



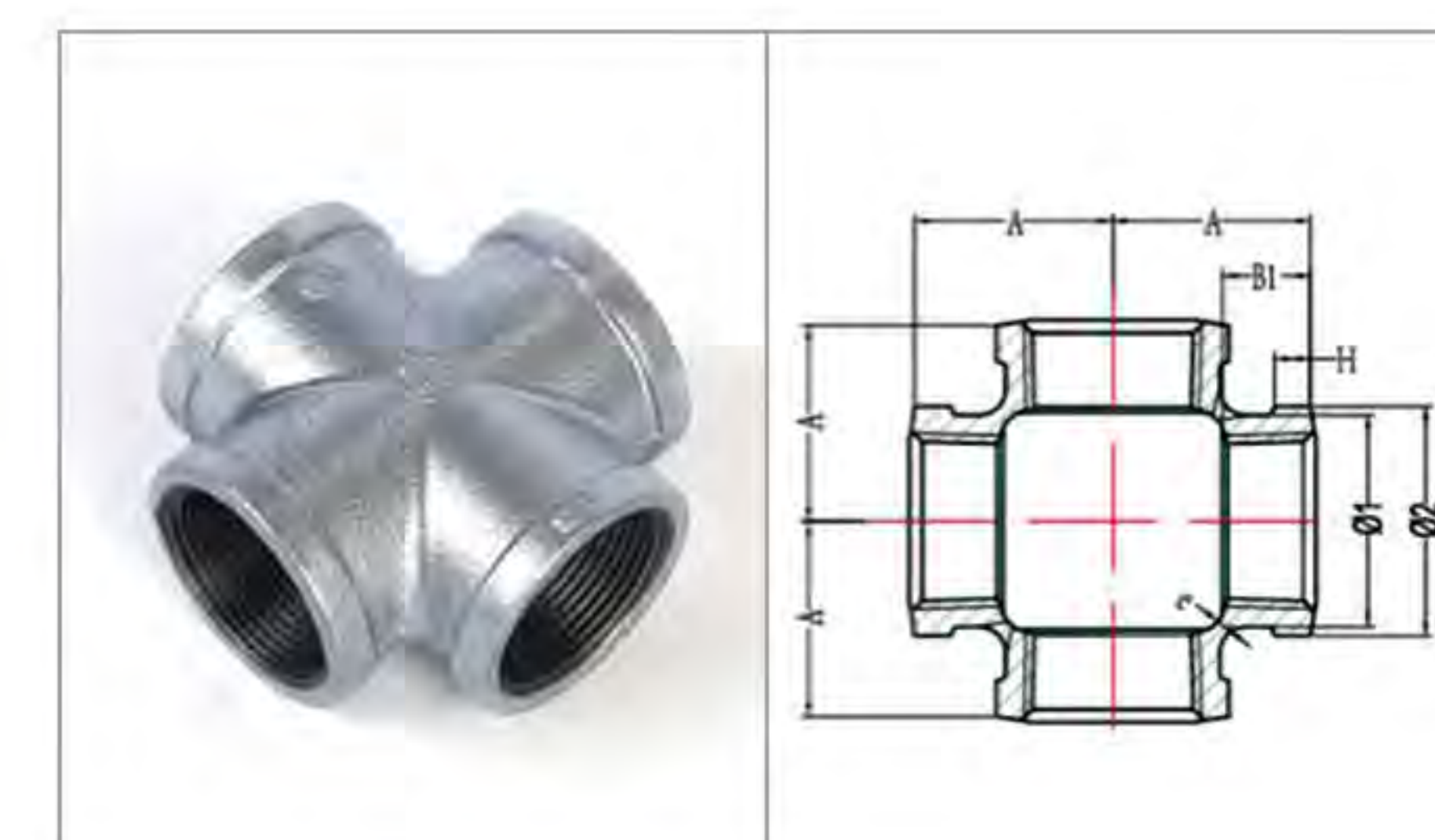
Code	Size		A	Unit Weight		Packing Carton
	NPS	DN		Black g	Galv. g	
JZGAL13001	1/8"	6	18	44.1	45	400
JZGAL13002	1/4"	8	20	63.7	65	400
JZGAL13003	3/8"	10	24	88.2	90	300
JZGAL13004	1/2"	15	27	137.2	140	240
JZGAL13005	3/4"	20	32	198.94	203	140
JZGAL13006	1"	25	37	308.7	315	90
JZGAL13007	1-1/4"	32	44.5	479.22	489	56
JZGAL13008	1-1/2"	40	48.5	600.74	613	40
JZGAL13009	2"	50	57	977.06	997	20
JZGAL13010	2-1/2"	65	68.5	1520.96	1552	12
JZGAL13011	3"	80	77.5	2045.26	2087	10
JZGAL13012	4"	100	96.5	3589.74	3663	4
JZGAL13013	6"	150	129	8157.52	8324	2

Fig.165
 Lateral Y Branch Tee 45

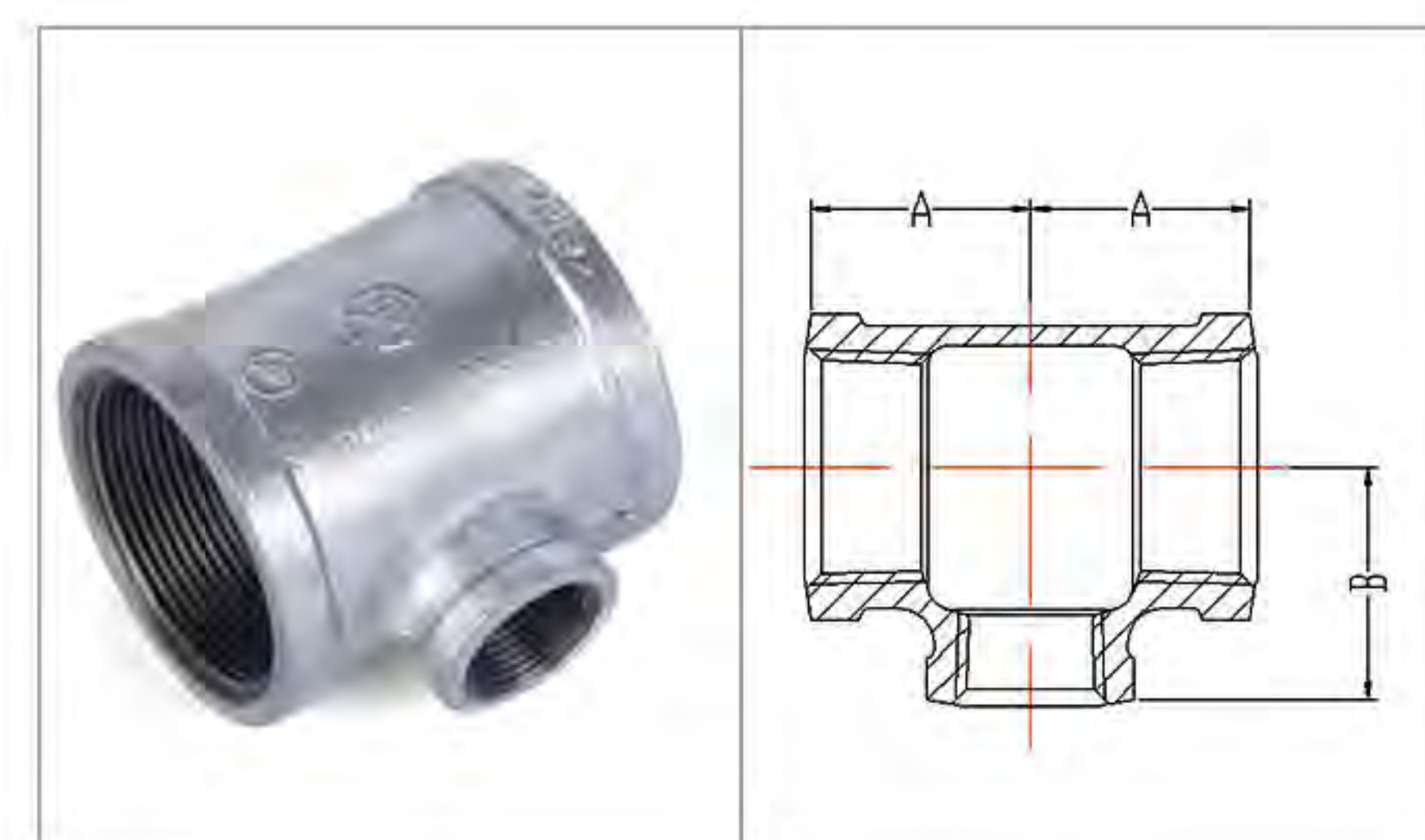


Code	Size		A	B	Unit Weight		Packing Carton
	NPS	DN			Black g	Galv. g	
JZGAL16501	1/2"	15	42	18	161.7	165	240
JZGAL16502	3/4"	20	51.5	18.5	244.02	249	100
JZGAL16503	1"	25	62	23	375.34	383	80
JZGAL16504	1-1/4"	32	75	28	595.84	608	40
JZGAL16505	1-1/2"	40	82	30	743.82	759	30
JZGAL16506	2"	50	100.5	32.5	1189.72	1214	16
JZGAL16507	2-1/2"	65	125	39	1935.5	1975	10
JZGAL16508	3"	80	140	45	2651.88	2706	8
JZGAL16509	4"	100	180	55	4817.68	4916	2

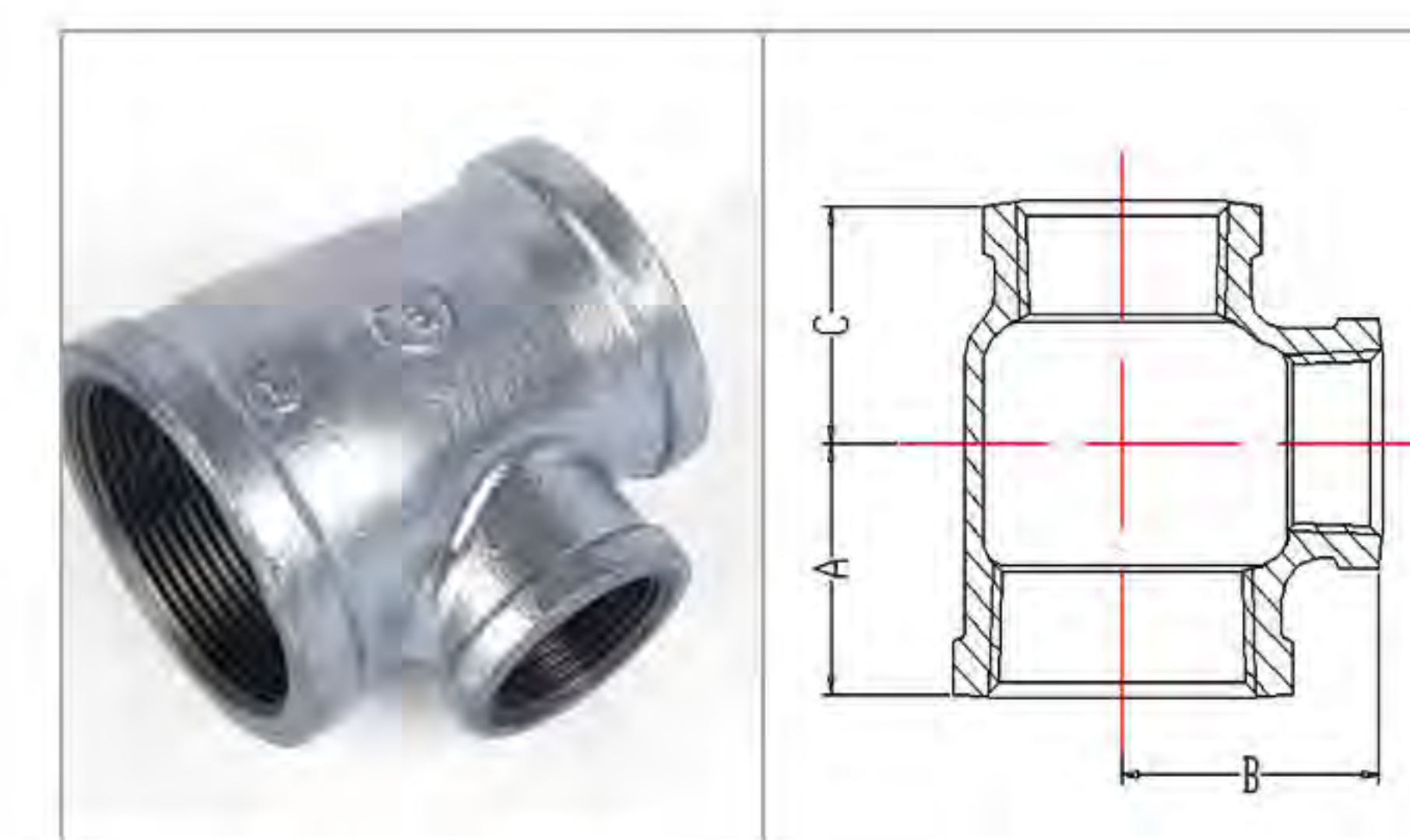
Fig.180
 180° Cross



Code	Size		A	Unit Weight		Packing Carton
	NPS	DN		Black g	Galv. g	
JZGAL18001	1/2"	15	27	167	170	180
JZGAL18002	3/4"	20	32	246	251	96
JZGAL18003	1"	25	37	380	388	72
JZGAL18004	1-1/4"	32	44.5	576	588	36
JZGAL18005	1-1/2"	40	48.5	712	727	30
JZGAL18006	2"	50	57	1147	1170	12
JZGAL18007	2-1/2"	65	68.5	1740	1776	10
JZGAL18008	3"	80	77.5	2478	2529	6
JZGAL18009	4"	100	96.5	4211	4297	2

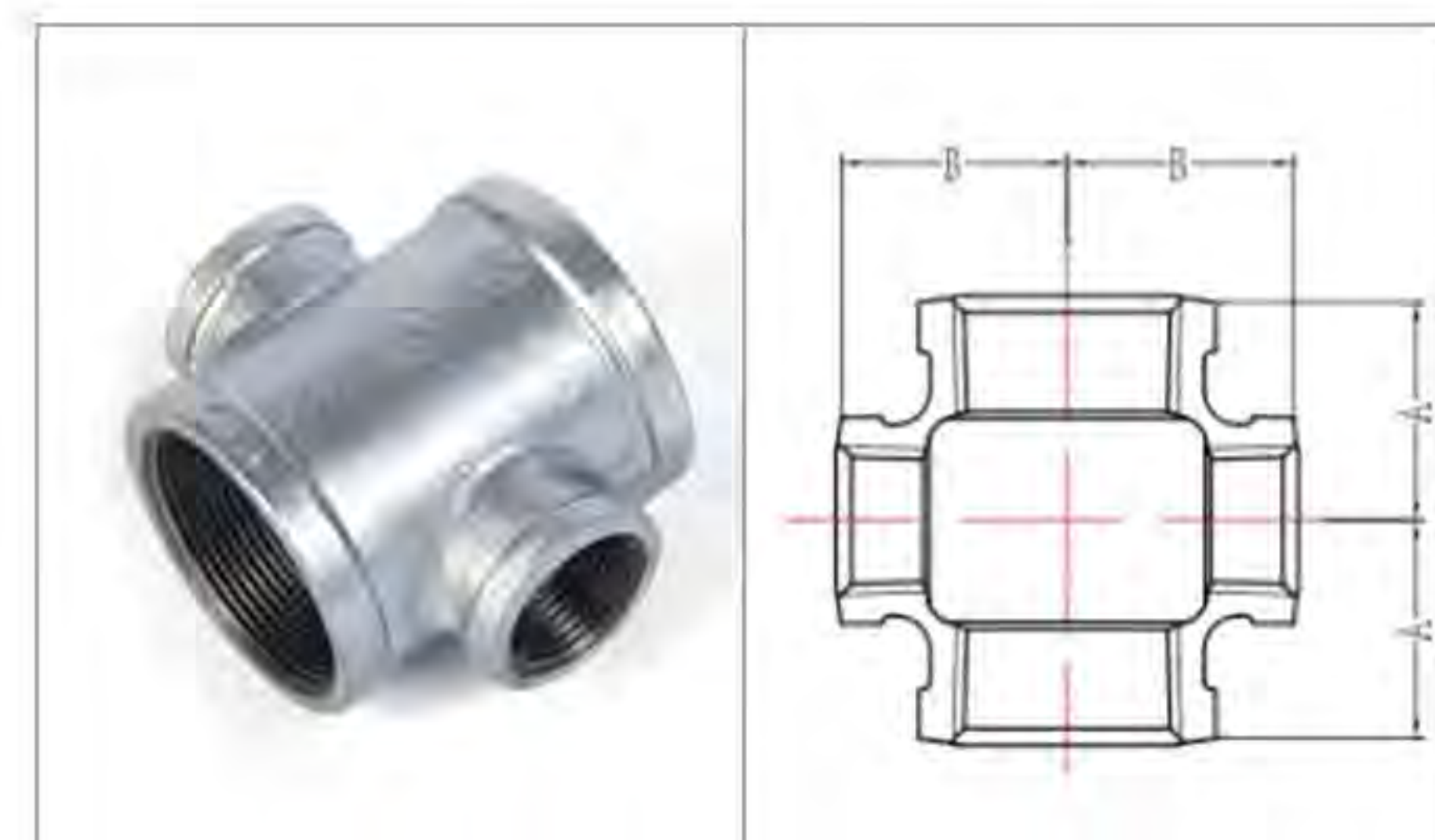
Fig.130R
 Reducing Tee


Code	Size		A	B	Unit Weight		Packing Carton
	NPS	DN			Black g	Galv. g	
JZGAL130R01	1/2×3/8	15×10	25	25	/	/	/
JZGAL130R02	3/4 "x 1/2"	20×15	29	30	180.32	184	150
JZGAL130R03	1 "x 3/8"	25×10	29	31	225.4	230	100
JZGAL130R04	1" x 1/2"	25×15	31	33	238.14	243	100
JZGAL130R05	1 "x 3/4"	25×20	34	35	261.66	267	100
JZGAL130R06	1-1/4" x 3/8"	32×10	31	36	309.68	316	64
JZGAL130R07	1-1/4" x 1/2"	32×15	34	37	341.04	348	64
JZGAL130R08	1-1/4" x 3/4"	32×20	36	40	371.42	379	64
JZGAL130R09	1-1/4" x 1"	32×25	40	41	407.68	416	64
JZGAL130R10	1-1/2" x 1/2"	40×15	35	41	406.7	415	52
JZGAL130R11	1-1/2" x 3/4"	40×20	37	43	427.28	436	52
JZGAL130R12	1-1/2" x 1"	40×25	41	45	481.18	491	42
JZGAL130R13	1-1/2" x 1-1/4"	40×32	45	47	557.62	569	42
JZGAL130R14	2 "x 1/2"	50×15	37	47	589.96	602	40
JZGAL130R15	2 "x 3/4"	50×20	40	49	642.88	656	40
JZGAL130R16	2 "x 1"	50×25	43	51	687.96	702	30
JZGAL130R17	2 "x 1-1/4"	50×32	47	53	750.68	766	30
JZGAL130R18	2" x 1-1/2"	50×40	51	54	826.14	843	24
JZGAL130R19	2-1/2" x 1/2"	65×15	40.5	56	887.88	906	24
JZGAL130R20	2-1/2" x 3/4"	65×20	43.5	57	919.24	938	24
JZGAL130R21	2-1/2" x 1"	65×25	47.5	59	1017.24	1038	20
JZGAL130R22	2-1/2" x 1-1/4"	65×32	51.5	61	1075.06	1097	16
JZGAL130R23	2-1/2" x 1-1/2"	65×40	54.5	61	1145.62	1169	16
JZGAL130R24	2-1/2" x 2"	65×50	59.5	64	1294.58	1321	16
JZGAL130R25	3 "x 1/2"	80×15	42.5	64	1114.26	1137	12
JZGAL130R26	3 "x 3/4"	80×20	45.5	65	1174.04	1198	12
JZGAL130R27	3 "x 1"	80×25	49.5	67	1267.14	1293	12
JZGAL130R28	3 "x 1-1/4"	80×32	54.5	69	1342.6	1370	12
JZGAL130R29	3 "x 1-1/2"	80×40	57.5	71	1440.6	1470	12
JZGAL130R30	3 "x 2"	80×50	61.5	71	1589.56	1622	10
JZGAL130R31	3 "x 2-1/4"	80×65	71.5	74	1862	1900	10
JZGAL130R32	4 "x 1/2"	100×15	49.5	78	1915.9	1955	8
JZGAL130R33	4 "x 3/4"	100×20	53.5	79	2038.4	2080	8
JZGAL130R34	4 "x 1"	100×25	56.5	82	2100.14	2143	8
JZGAL130R35	4 "x 1-1/4"	100×32	60.5	85	2214.8	2260	6
JZGAL130R36	4 "x 1-1/2"	100×40	62.5	85	2303.98	2351	6
JZGAL130R37	4 "x 2"	100×50	68.5	86	2558.78	2611	6
JZGAL130R38	4" x 2-1/2"	100×65	77.5	89	2799.86	2857	6
JZGAL130R39	4 "x 3"	100×80	82.5	90	3138.94	3203	6

Fig.131R
 Reducing Tee


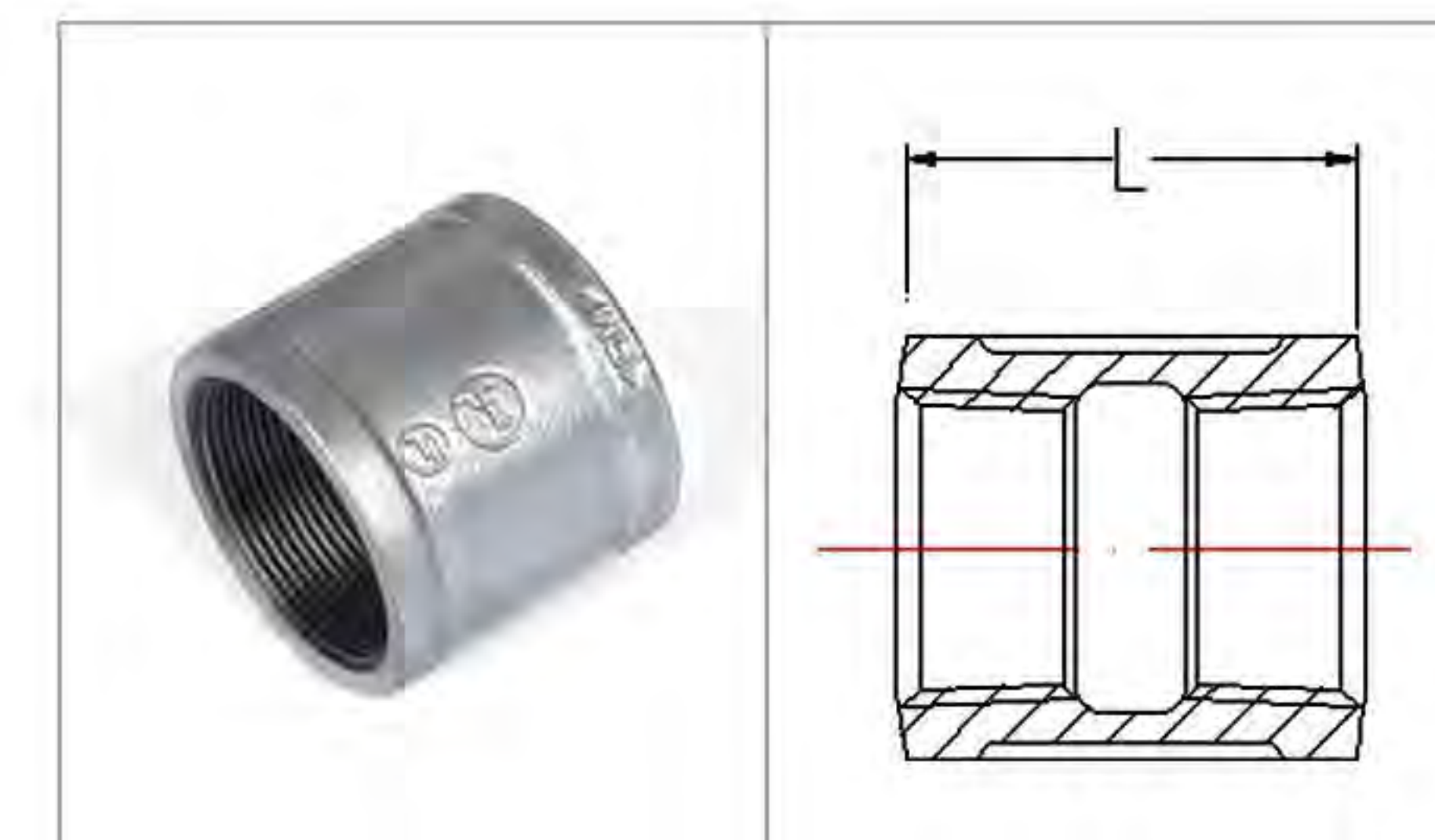
Code	Size		A	B	C	Unit Weight		Packing Carton
	NPS	DN				Black g	Galv. g	
JZGAL131R01	3/4"×1/2"×1/2"	20×15×15	29	30	27	159.74	163	120
JZGAL131R02	1"×1/2"×3/4"	25×15×20	31	33	29	191.1	195	120
JZGAL131R03	1"×3/4"×3/4"	25×20×20	34	35	32	157.78	161	120
JZGAL131R04	1-1/4"×1/2"×1"	32×15×25	34	37	31	234.22	239	80
JZGAL131R05	1-1/4"×3/4"×1"	32×20×25	36	40	34	287.14	293	60
JZGAL131R06	1-1/4"×1"×1"	32×25×25	39	40	36	355.74	363	60
JZGAL131R07	1-1/4"×1-1/4"×1"	32×32×25	44.5	44.5	41	406.7	415	40
JZGAL131R08	1-1/2"×1/2"×1-1/4"	40×15×32	35	41	34	539.98	551	32
JZGAL131R09	1-1/2"×3/4"×1-1/4"	40×20×32	37	43	36	514.5	525	36
JZGAL131R10	1-1/2"×1"×1"	40×25×25	40	44	36	641.9	655	28
JZGAL131R11	1-1/2"×1"×1-1/4"	40×25×32	41	45	40	711.48	726	20
JZGAL131R12	1-1/2"×1-1/4"×1"	40×32×25	45	47	41	879.06	897	16
JZGAL131R13	1-1/2"×1-1/4"×1-1/4"	40×32×32	45	47	44.5	1056.44	1078	12
JZGAL131R14	1-1/2"×1-1/2"×1"	40×40×25	48.5	48.5	45	1025.08	1046	16
JZGAL131R15	1-1/2"×2"×1-1/4"	40×50×32	54	51	53	1336.72	1364	10
JZGAL131R16	2"×1/2"×1-1/2"	50×15×40	37	47	35	1622.88	1656	10
JZGAL131R17	2"×3/4"×1-1/2"	50×20×40	40	49	37	2530.36	2582	6
JZGAL131R18	2"×1"×1-1/4"	50×25×32	43	51	40	299.88	306	64
JZGAL131R19	2"×1"×1-1/2"	50×25×40	42	49	40	344.96	352	68
JZGAL131R20	2"×1-1/4"×1-1/4"	50×32×32	47	53	44.5	392	400	60
JZGAL131R21	2"×1-1/4"×1-1/2"	50×32×40	47	53	45	491.96	502	40
JZGAL131R22	2"×1-1/2"×1"	50×40×25	51	54	45	377.3	385	42
JZGAL131R23	2"×1-1/2"×1-1/2"	50×40×40	51	54	48.5	406.7	415	40
JZGAL131R24	2"×2"×1"	50×50×25	57	57	51	451.78	461	40
JZGAL131R25	2-1/2"×1/2"×2"	65×15×50	40.5	56	37	534.1	545	36
JZGAL131R26	2-1/2"×3/4"×2"	65×20×50	43.5	57	40	620.34	633	30
JZGAL131R27	2-1/2"×1"×2"	65×25×50	45	58	42	702.66	717	24
JZGAL131R28	2-1/2"×1-1/4"×1-1/2"	65×32×40	51.5	61	45	599.76	612	30
JZGAL131R29	2-1/2"×1-1/4"×2"	65×32×50	51.5	61	47	673.26	687	30
JZGAL131R30	2-1/2"×1-1/2"×2"	65×40×50	54.5	61	51	525.28	536	36
JZGAL131R31	2-1/2"×2"×2"	65×50×50	59.5	64	57	525.28	536	36
JZGAL131R32	3"×1"×2-1/2"	80×25×65	49.5	67	47.5	525.28	536	36
JZGAL131R33	3"×1-1/4"×2-1/2"	80×32×65	54.5	69	51.5	552.72	564	24
JZGAL131R34	3"×1-1/2"×2-1/2"	80×40×65	57.5	71	54.5	562.52	574	24
JZGAL131R35	3"×2"×2-1/2"	80×50×65	61.5	71	59.5	705.6	720	16
JZGAL131R36	3"×2-1/2"×2-1/2"	80×65×65	71.5	74	68.5	754.6	770	16

Fig.180R
M&F Conical Union Elbow



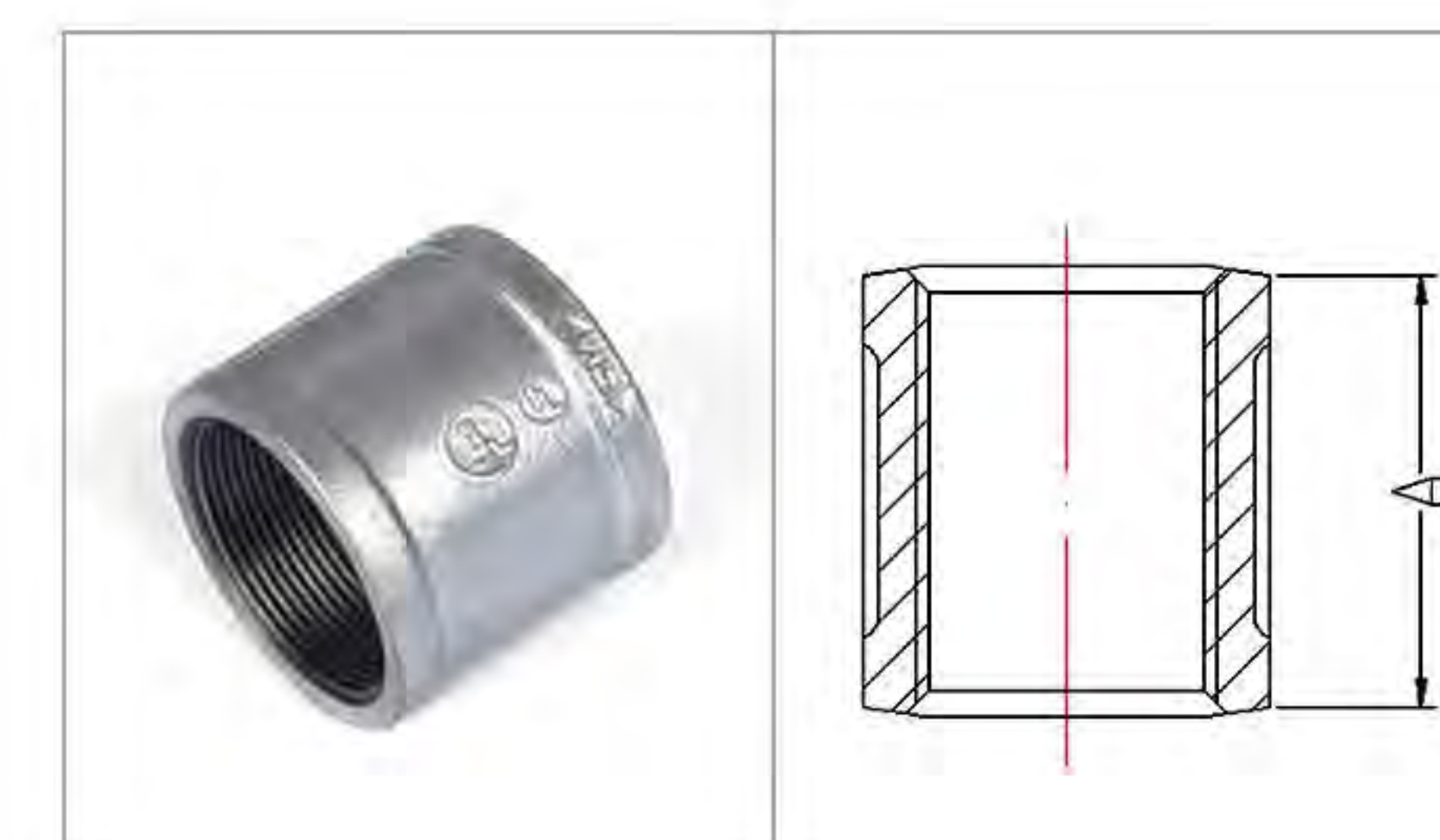
Code	Size		A	B	Unit Weight		Packing Carton Pcs/ctn
	NPS	DN			Black g	Galv. g	
JZGAL180R01	3/4 "x 1/2"	20×15	29	30	199	203	120
JZGAL180R02	1" x 1/2"	25×15	31	33	261	266	96
JZGAL180R03	1 "x 3/4"	25×20	34	35	310	316	80
JZGAL180R04	1-1/4" x 1/2"	32×15	34	37	365	372	64
JZGAL180R05	1-1/4" x 3/4"	32×20	36	40	407	415	60
JZGAL180R06	1-1/4" x 1"	32×25	40	41	460	469	56
JZGAL180R07	1-1/2" x 1/2"	40×15	35	41	414	422	52
JZGAL180R08	1-1/2" x 3/4"	40×20	37	43	473	483	52
JZGAL180R09	1-1/2" x 1"	40×25	41	45	522	533	42
JZGAL180R10	1-1/2" x 1-1/4"	40×32	45	47	646	659	34
JZGAL180R11	2 "x 1/2"	50×15	37	47	616	629	36
JZGAL180R12	2 "x 3/4"	50×20	40	49	674	688	36
JZGAL180R13	2 "x 1"	50×25	43	51	743	758	28
JZGAL180R14	2 "x 1-1/4"	50×32	47	53	832	849	28
JZGAL180R15	2" x 1-1/2"	50×40	51	54	901	919	20
JZGAL180R16	2-1/2" x 1/2"	65×15	40.5	56	878	896	20
JZGAL180R17	2-1/2" x 3/4"	65×20	43.5	57	950	969	20
JZGAL180R18	2-1/2" x 1"	65×25	47.5	59	1035	1056	18
JZGAL180R19	2-1/2" x 1-1/4"	65×32	51.5	61	1174	1198	16
JZGAL180R20	2-1/2" x 1-1/2"	65×40	54.5	61	1201	1225	14
JZGAL180R21	2-1/2" x 2"	65×50	59.5	64	1438	1467	10
JZGAL180R22	3 "x 1/2"	80×15	42.5	64	1107	1130	12
JZGAL180R23	3 "x3/4"	80×20	45.5	65	1155	1179	12
JZGAL180R24	3 "x 1"	80×25	49.5	67	1290	1316	12
JZGAL180R25	3 "x 1-1/4"	80×32	54.5	69	1438	1467	12
JZGAL180R26	3 "x 1-1/2"	80×40	57.5	71	1560	1592	10
JZGAL180R27	3 "x 2"	80×50	61.5	71	1695	1730	10
JZGAL180R28	3 "x 2-1/2"	80×65	71.5	74	1981	2021	8
JZGAL180R29	4 "x 1/2"	100×15	49.5	78	1826	1863	6
JZGAL180R30	4 "x 3/4"	100×20	53.5	79	1886	1924	6
JZGAL180R31	4 "x 1"	100×25	56.5	82	2025	2066	6
JZGAL180R32	4 "x 1-1/4"	100×32	60.5	85	2264	2310	6
JZGAL180R33	4 "x 1-1/2"	100×40	62.5	85	2288	2335	4
JZGAL180R34	4 "x 2"	100×50	68.5	86	2529	2581	4
JZGAL180R35	4" x 2-1/2"	100×65	77.5	89	2819	2877	4
JZGAL180R36	4 "x 3"	100×80	82.5	90	3177	3242	4

Fig.200
Part thread socket



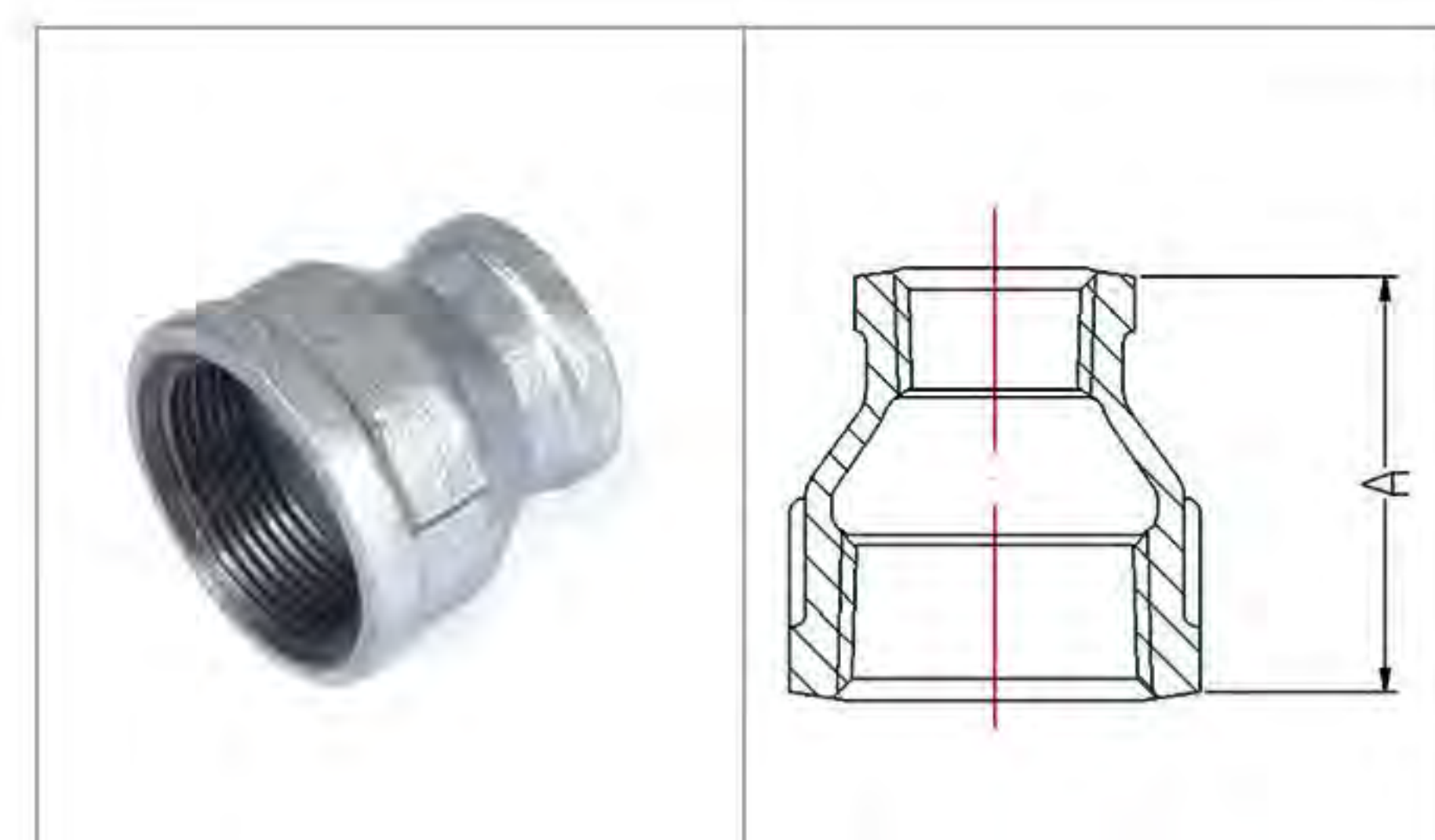
Code	Size		L	Unit Weight		Packing Carton Pcs/ctn
	NPS	DN		Black g	Galv. g	
JZGAL22001	1/8"	6	23.5	/	/	/
JZGAL22002	1/4"	8	26	36.26	37	800
JZGAL22003	3/8"	10	29	46.06	47	700
JZGAL22004	1/2"	15	35	80.36	82	450
JZGAL22005	3/4"	20	38	113.68	116	300
JZGAL22006	1"	25	44	176.4	180	180
JZGAL22007	1-1/4"	32	49	264.6	270	120
JZGAL22008	1-1/2"	40	53	319.48	326	72
JZGAL22009	2"	50	63	543.9	555	48
JZGAL22010	2-1/2"	65	72	825.16	842	32
JZGAL22011	3"	80	77	1003.52	1024	24
JZGAL22012	4"	100	91	1702.26	1737	10
JZGAL22013	6"	150	118	3776.92	3854	4

Fig.270
Entire thread sockets



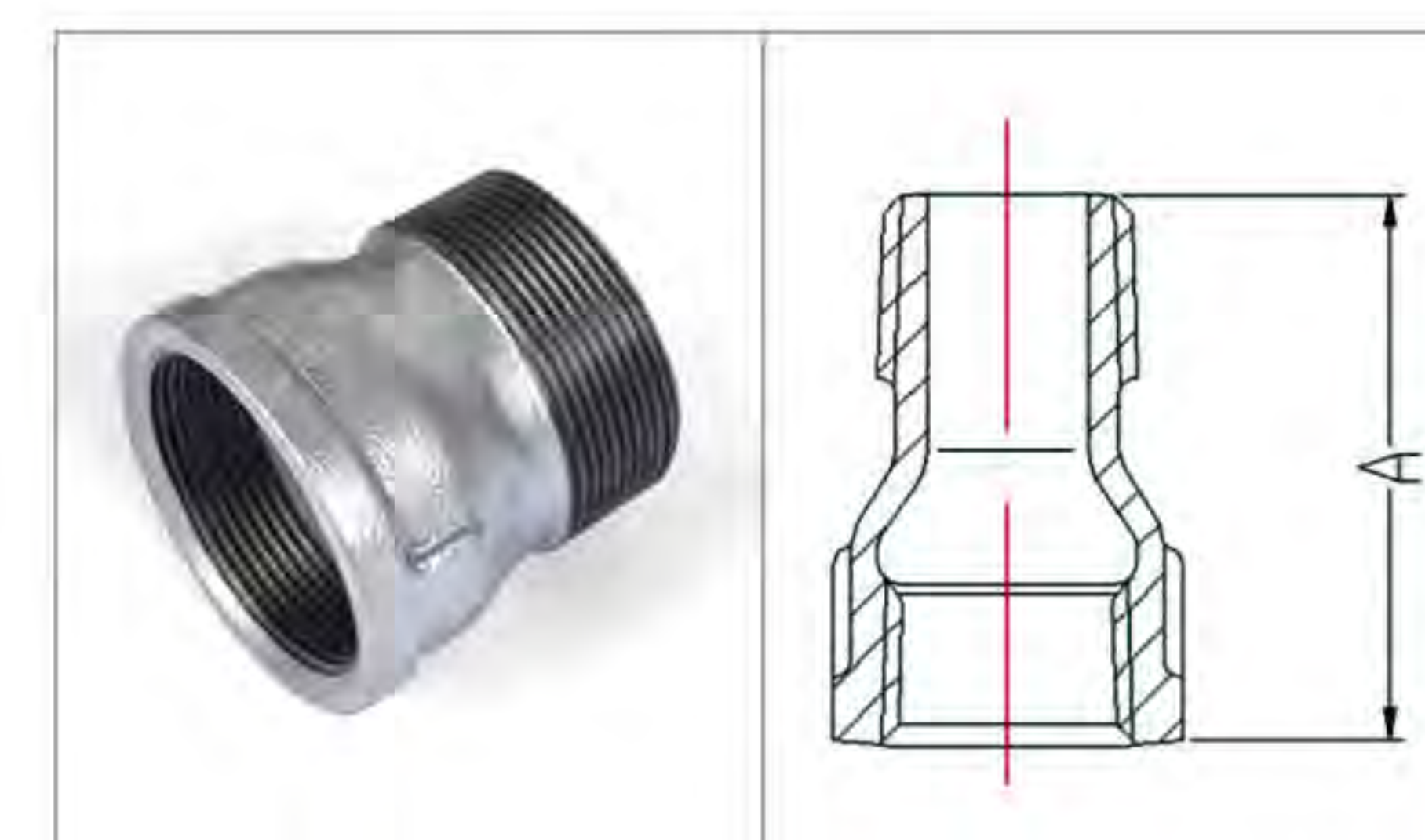
Code	Size		A	Unit Weight		Packing Carton Pcs/ctn
	NPS	DN		Black g	Galv. g	
JZGAL27001	1/4"	8	26	38.22	39	800
JZGAL27002	3/8"	10	29	48.02	49	700
JZGAL27003	1/2"	15	35	82.32	84	450
JZGAL27004	3/4"	20	38	115.64	118	300
JZGAL27005	1"	25	44	178.36	182	180
JZGAL27006	1-1/4"	32	49	263.62	269	120
JZGAL27007	1-1/2"	40	53	338.1	345	72
JZGAL27008	2"	50	63	583.1	595	48
JZGAL27009	2-1/2"	65	72	822.22	839	32
JZGAL27010	3"	80	77	1065.26	1087	24
JZGAL27011	4"	100	91	1774.78	1811	10
JZGAL27012	6"	150	118	3789.66	3867	4

Fig.240
 Part thread socket



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	NPS	DN	mm	g	g	Pcs/ctn
JZGAL24001	3/8" x 1/4"	10×8	29	42	43	500
JZGAL24002	1/2" x 1/4"	15×8	35	66	67	500
JZGAL24003	1/2" x 3/8"	15×10	36	69	70	500
JZGAL24004	3/4 "x 1/4"	20×8	38	86	88	360
JZGAL24005	3/4 "x 3/8"	20×10	38	91	93	360
JZGAL24006	3/4 "x 1/2"	20×15	38	105	107	360
JZGAL24007	1" x 1/4"	25×8	44	132	135	200
JZGAL24008	1" x 3/8"	25×10	44	128	131	200
JZGAL24009	1" x 1/2"	25×15	44	142	145	200
JZGAL24010	1 "x 3/4"	25×20	44	150	153	200
JZGAL24011	1-1/4" x 1/2"	32×15	49	203	207	144
JZGAL24012	1-1/4" x 3/4"	32×20	49	214	218	144
JZGAL24013	1-1/4" x 1"	32×25	49	225	230	120
JZGAL24014	1-1/2" x 1/2"	40×15	53	247	252	140
JZGAL24015	1-1/2" x 3/4"	40×20	53	254	259	140
JZGAL24016	1-1/2" x 1"	40×25	53	277	283	120
JZGAL24017	1-1/2" x 1-1/4"	40×32	53	312	318	100
JZGAL24018	2 "x 1/2"	50×15	63	392	400	80
JZGAL24019	2 "x 3/4"	50×20	63	406	414	80
JZGAL24020	2 "x 1"	50×25	63	414	422	72
JZGAL24021	2 "x 1-1/4"	50×32	63	435	444	72
JZGAL24022	2" x 1-1/2"	50×40	63	475	485	48
JZGAL24023	2-1/2" x 1/2"	65×15	72	60	580	60
JZGAL24024	2-1/2" x 3/4"	65×20	72	60	590	60
JZGAL24025	2-1/2" x 1"	65×25	72	60	606	60
JZGAL24026	2-1/2" x 1-1/4"	65×32	72	60	627	60
JZGAL24027	2-1/2" x 1-1/2"	65×40	72	60	647	60
JZGAL24028	2-1/2" x 2"	65×50	72	40	728	40
JZGAL24029	3 "x 1/2"	80×15	71	40	713	40
JZGAL24030	3 "x 3/4"	80×20	71	40	750	40
JZGAL24031	3 "x 1"	80×25	71	40	762	40
JZGAL24032	3 "x 1-1/4"	80×32	71	40	780	40
JZGAL24033	3 "x 1-1/2"	80×40	71	40	801	40
JZGAL24034	3 "x 2"	80×50	71	36	856	36
JZGAL24035	3 "x 2-1/2"	80×65	71	24	878	24
JZGAL24036	4 "x 1/2"	100×15	84	20	1162	20
JZGAL24037	4 "x 3/4"	100×20	84	20	1248	20
JZGAL24038	4 "x 1"	100×25	84	20	1258	20
JZGAL24039	4"x 1-1/4"	100×32	84	20	1305	20
JZGAL24040	4 "x 1-1/2"	100×40	84	20	1320	20
JZGAL24041	4 "x 2"	100×50	84	16	1353	16
JZGAL24042	4" x 2-1/2"	100×65	84	14	1406	14
JZGAL24043	4 "x 3"	100×80	84	12	1467	12

Fig.529
 Socket M&F



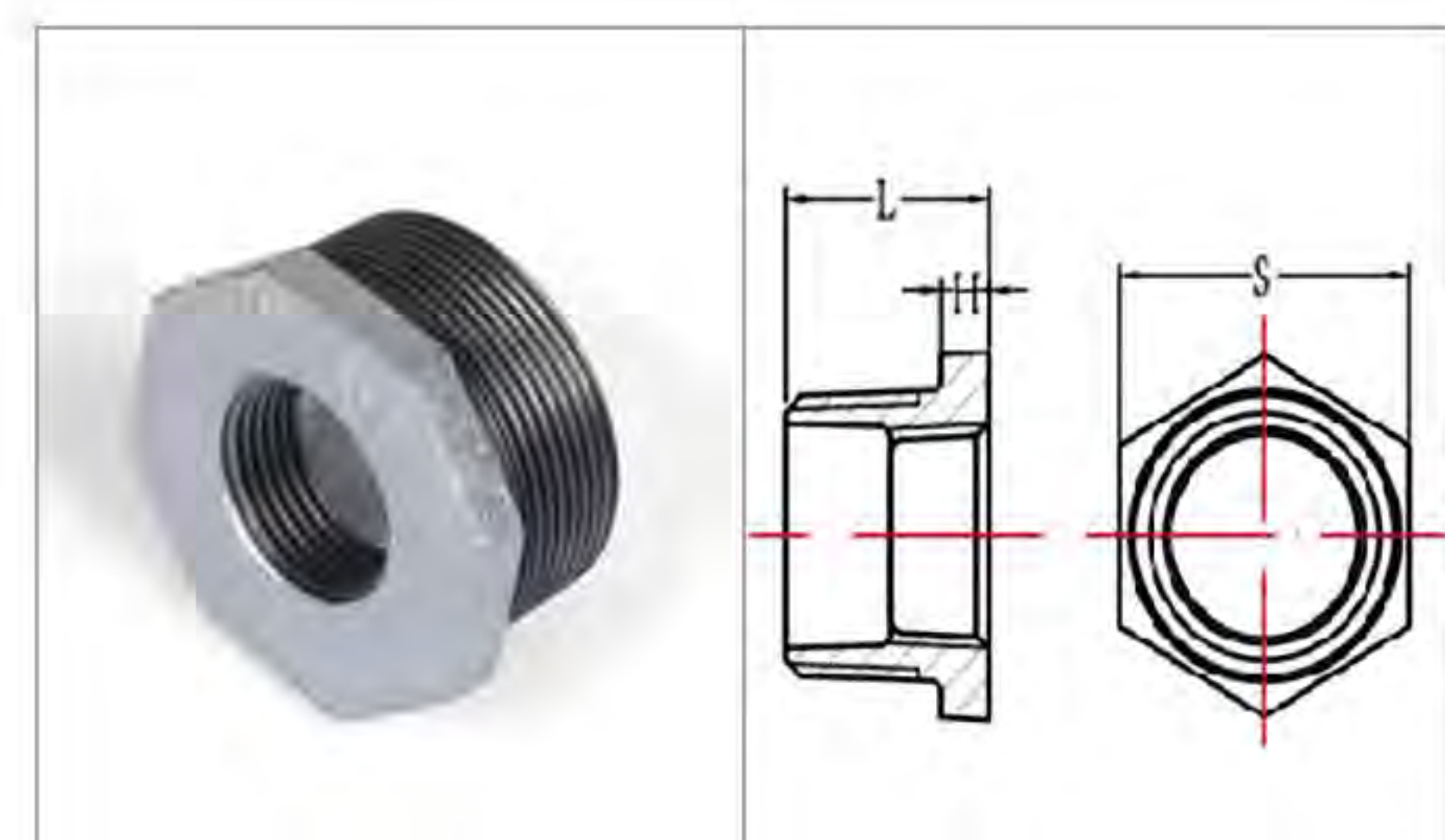
Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	NPS	DN	mm	g	g	Pcs/ctn
JZGAL529A01	1/2"	15	44	56.8	58	600
JZGAL529A02	3/4"	20	45	89.2	91	380
JZGAL529A03	1"	25	52	137.2	140	180
JZGAL529A04	1-1/4"	32	57	198.0	202	120
JZGAL529A05	1-1/2"	40	60	249.9	255	80
JZGAL529A06	2"	50	66	384.2	392	48
JZGAL529A07	3/4" x 1/2"	20×15	54	110.7	113	300
JZGAL529A08	1 "x 3/4"	25×20	54	140.1	143	180
JZGAL529A09	1-1/4" x 1"	32×25	59	212.7	217	120

Fig.246
 Socket reducing, M&F



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	NPS	DN	mm	g	g	Pcs/ctn
JZGAL24601	3/4 "x 1/2"	20X15	47	93.1	95	380
JZGAL24602	1" x 1/2"	25X15	54	132.3	135	180
JZGAL24603	1 "x 3/4"	25X20	54	143.08	146	180
JZGAL24604	1-1/4" x 3/4"	32X20	59	202.86	207	120
JZGAL24605	1-1/4" x 1"	32X25	59	213.64	218	120
JZGAL24606	1-1/2" x 3/4"	40X20	62	252.84	258	80
JZGAL24607	1-1/2" x 1"	40X25	62	266.56	272	80
JZGAL24608	1-1/2" x 1-1/4"	40X32	62	288.12	294	80
JZGAL24609	2 "x 1"	50X25	69	397.88	406	48
JZGAL24610	2 "x 1-1/4"	50X32	69	425.32	434	48
JZGAL24611	2" x 1-1/2"	50X40	69	429.24	438	48

Fig.241
Bushings



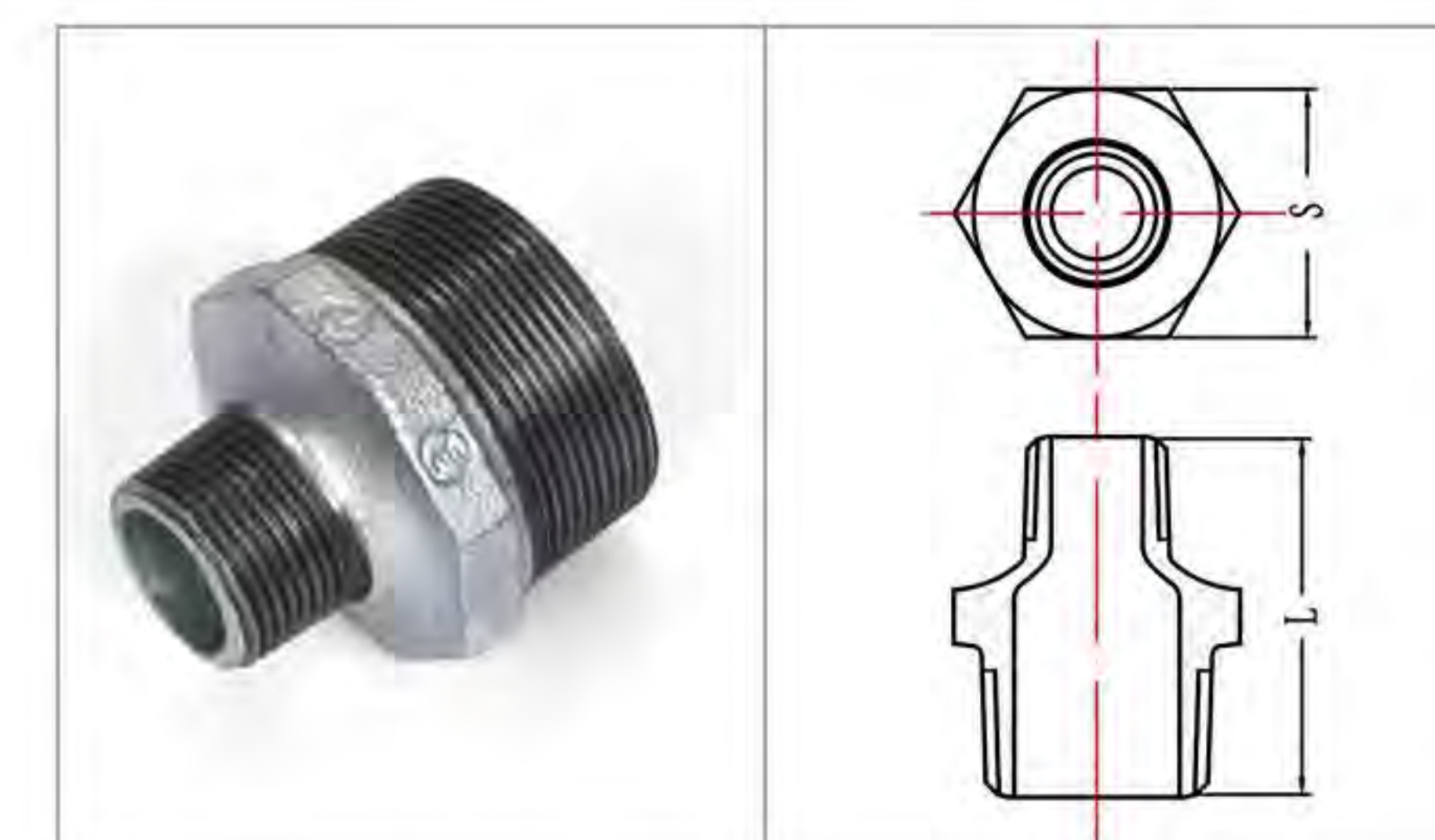
Code	Size		L mm	S mm	H mm	Unit Weight		Packing
	NPS	DN				Black g	Galv. g	Carton
								Pcs/ctn
JZGAL24101	1/4"×1/8"	8×6	18.5	16.8	6	14.7	15	1800
JZGAL24102	3/8" x 1/8"	10×6	18	20	6	22.54	23	1500
JZGAL24103	3/8" x 1/4"	10×8	18.5	18.4	6	18.62	19	1800
JZGAL24107	3/4 "x 3/8"	15×8	22.5	22	6	61.74	63	500
JZGAL24106	3/4 "x 1/4"	15×10	22.5	22	6	66.64	68	600
JZGAL24105	1/2" x 3/8"	20×8	24.5	29.6	6	32.34	33	960
JZGAL24104	1/2" x 1/4"	20×10				38.22	39	900
JZGAL24108	3/4 "x 1/2"	20×15				50.96	52	600
JZGAL24109	1 "x 1/4"	25×8	28	37.4	6.5	105.84	108	300
JZGAL24110	1 "x 3/8"	25×10				111.72	114	300
JZGAL24111	1" x 1/2"	25×15				97.02	99	300
JZGAL24112	1 "x 3/4"	25×20	30	45.6	7	81.34	83	300
JZGAL24113	1-1/4" x 1/2"	32×15				167.58	171	200
JZGAL24114	1-1/4" x 3/4"	32×20				151.9	155	200
JZGAL24115	1-1/4" x 1"	32×25	30	50	7.5	126.42	129	200
JZGAL24116	1-1/2" x 1/2"	40×15				197.96	202	160
JZGAL24117	1-1/2" x 3/4"	40×20				207.76	212	160
JZGAL24118	1-1/2" x 1"	40×25	30	50	7.5	182.28	186	160
JZGAL24119	1-1/2" x 1-1/4"	40×32				123.48	126	160
JZGAL24120	2 "x 1/2"	50×15				289.1	295	96
JZGAL24121	2 "x 3/4"	50×20	33	64.1	8.5	298.9	305	96
JZGAL24122	2 "x 1"	50×25				342.02	349	96
JZGAL24123	2 "x 1-1/4"	50×32				302.82	309	96
JZGAL24124	2" x 1-1/2"	50×40	29	79.6	9	255.78	261	96
JZGAL24125	2-1/2" x 1/2"	65×15				441	450	68
JZGAL24126	2-1/2" x 3/4"	65×20				456.68	466	68
JZGAL24127	2-1/2" x 1"	65×25	29	79.6	9	448.84	458	68
JZGAL24128	2-1/2" x 1-1/4"	65×32				512.54	523	68
JZGAL24129	2-1/2" x 1-1/2"	65×40				519.4	530	68
JZGAL24130	2-1/2" x 2"	65×50	42	93	10	446.88	456	68
JZGAL24131	3 "x 1/2"	80×15				633.08	646	36
JZGAL24132	3 "x 3/4"	80×20				632.1	645	36
JZGAL24133	3 "x 1"	80×25	42	93	10	650.72	664	36
JZGAL24134	3 "x 1-1/4"	80×32				637.98	651	36
JZGAL24135	3 "x 1-1/2"	80×40				694.82	709	36
JZGAL24136	3 "x 2"	80×50	49	118.4	11	773.22	789	36
JZGAL24137	3 "x 2-1/2"	80×65				556.64	568	36
JZGAL24138	4 "x 1/2"	100×15				1070.16	1092	18
JZGAL24139	4 "x 3/4"	100×20	49	118.4	11	1085.84	1108	18
JZGAL24140	4 "x 1"	100×25				1078.98	1101	18
JZGAL24141	4"x 1-1/4"	100×32				1126.02	1149	18
JZGAL24142	4 "x 1-1/2"	100×40	49	118.4	11	1097.6	1120	18
JZGAL24143	4 "x 2"	100×50				1121.12	1144	18
JZGAL24144	4" x 2-1/2"	100×65				1350.44	1378	18
JZGAL24145	4 "x 3"	100×80				1203.44	1228	18

Fig.280
Hexagon nipples



Code	Size		L mm	S mm	Unit Weight		Packing
	NPS	DN			Black g	Galv. g	Carton
							Pcs/ctn
JZGAL28001	1/4"	8	36	16.7	29.4	30	1000
JZGAL28002	3/8"	10	36	19.2	30.38	31	1000
JZGAL28003	1/2"	15	44	23.6	55.86	57	600
JZGAL28004	3/4"	20	47	29.2	84.28	86	300
JZGAL28005	1"	25	53	36	134.26	137	200
JZGAL28006	1-1/4"	32	56	45	186.2	190	140
JZGAL28007	1-1/2"	40	58	51	227.36	232	104
JZGAL28008	2"	50	68	63	365.54	373	56
JZGAL28009	2-1/2"	65	73	79.4	543.9	555	36
JZGAL28010	3"	80	81	91.6	768.32	784	24
JZGAL28011	4"	100	95	117	1237.74	1263	12

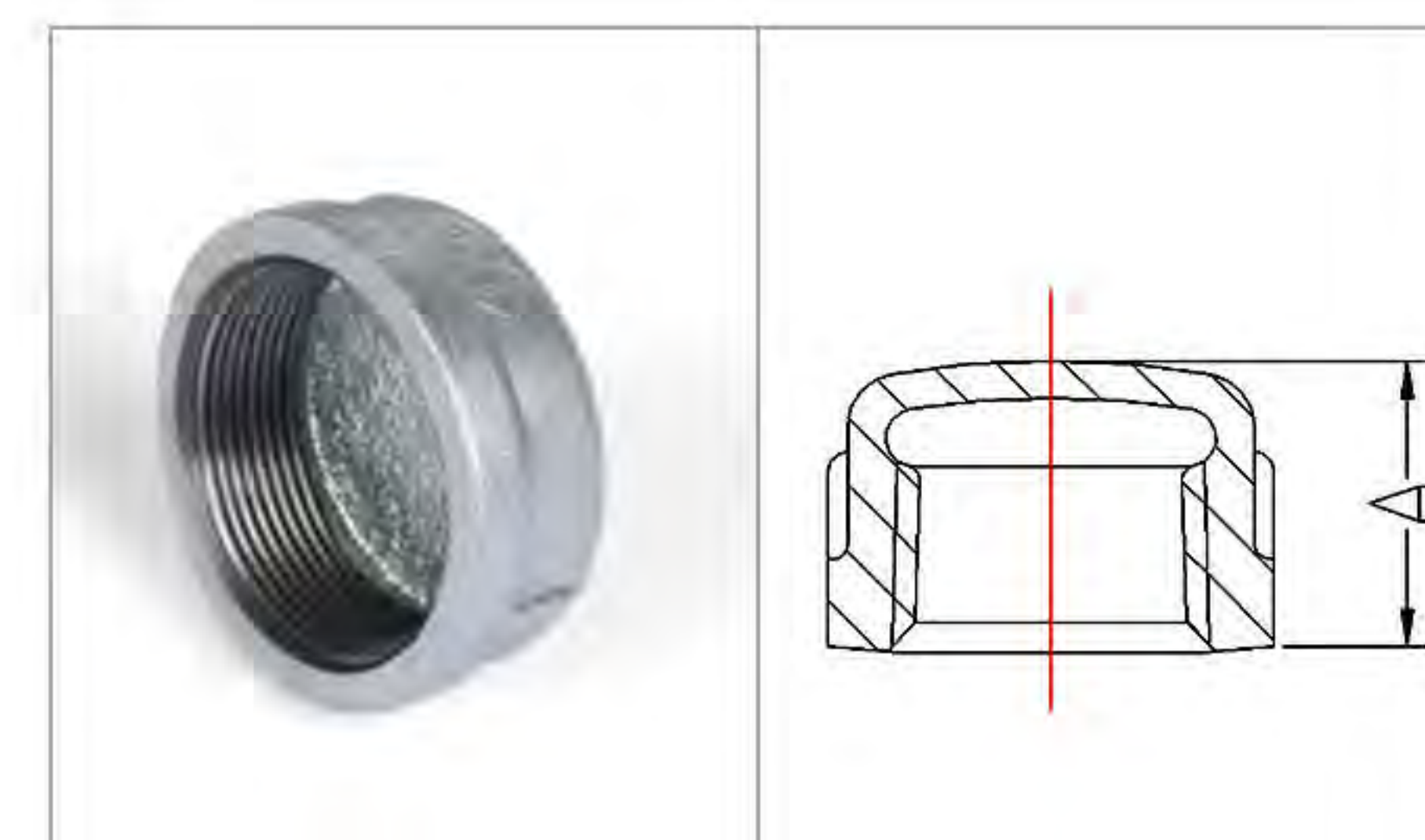
Fig.245
Nipple, reducing



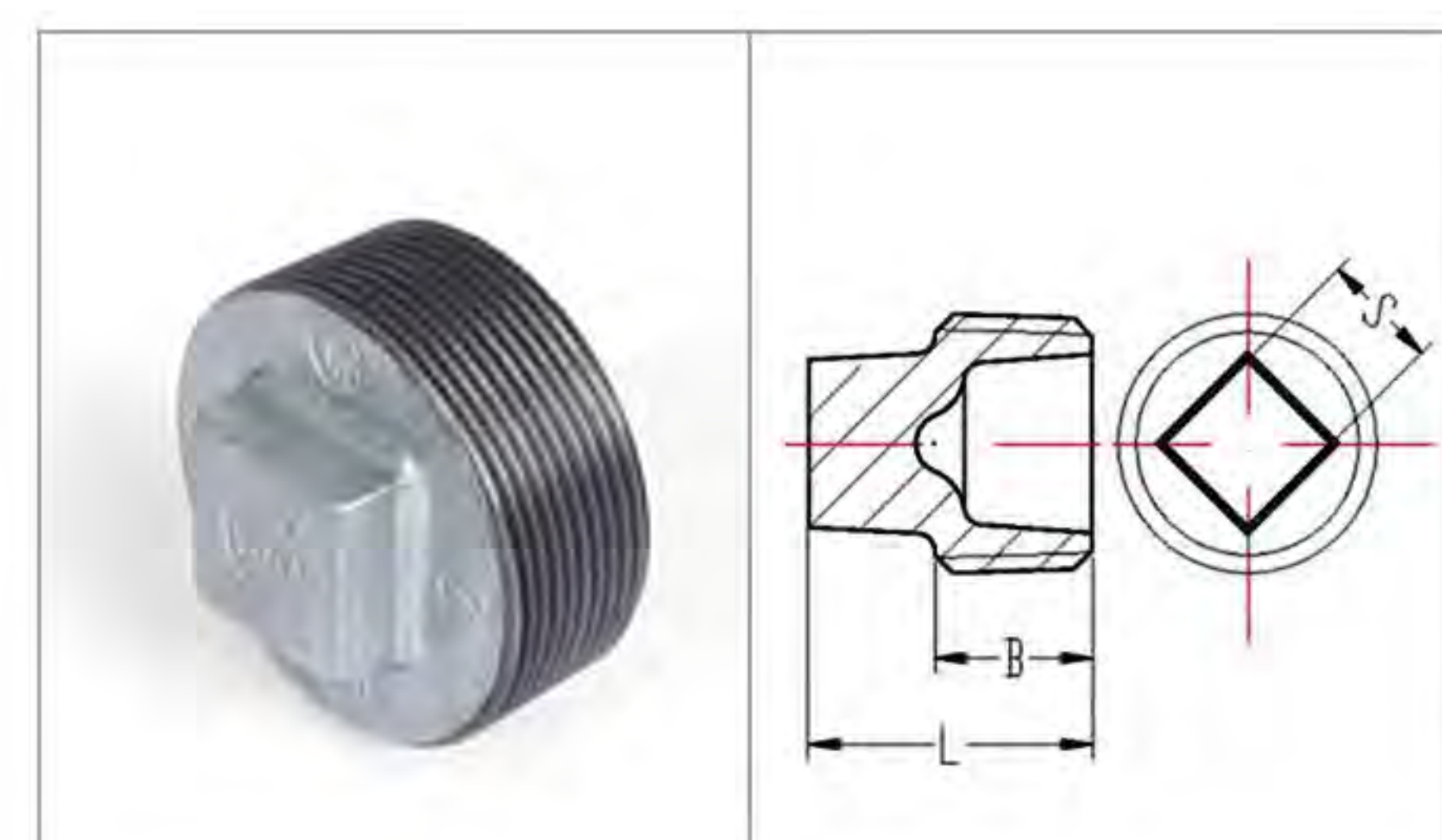
Code	Size		L mm	S mm	Unit Weight		PCS/ CTN.
	NPS	DN			Black g	Galv. g	
JZGAL24501	1/2" x 1/4"	15×8	44	22	47.04	48	600
JZGAL24502	1/2" x 3/8"	15×10	44	24.4	59.78	61	600
JZGAL24503	3/4 "x 1/2"	20×15	47	29.9	91.14	93	400
JZGAL24504	1" x 1/2"	25×15	53	36.8	115.64	118	260
JZGAL24505	1 "x 3/4"	25×20	53	36.8	137.2	140	240
JZGAL24506	1-1/4" x 1/2"	32×15	57	45.6	177.38	181	160
JZGAL24507	1-1/4" x 3/4"	32×20	57	45.6	181.3	185	140
JZGAL24508	1-1/4" x 1"	32×25	57	45.6	192.08	196	140
JZGAL24509	1-1/2" x 1/2"	40×15	59	50.5	202.86	207	130
JZGAL24510	1-1/2" x 3/4"	40×20	59	50.5	207.76	212	130
JZGAL24511	1-1/2" x 1"	40×25	59	50.5	225.4	230	120
JZGAL24512	1-1/2" x 1-1/4"	40×32	59	50.5	235.2	240	100
JZGAL24513	2 "x 1/2"	50×15	68	63.5	323.4	330	75
JZGAL24514	2 "x 3/4"	50×20	68	63.5	334.18	341	72
JZGAL24515	2 "x 1"	50×25	68	63.5	343	350	72
JZGAL24516	2 "x 1-1/4"	50×32	68	63.5	352.8	360	72
JZGAL24517	2" x 1-1/2"	50×40	68	63.5	366.52	374	60
JZGAL24518	2-1/2" "x 2"	65×50	73	79.4	/	/	/
JZGAL24519	3 "x 2"	80×50	81	91.6	749.7	765	24
JZGAL24520	3"×2-1/2"	80×65	81	91.6	/	/	/
JZGAL24521	4"×2"	100×50	95	117	/	/	/
JZGAL24522	4"×2-1/2"	100×65	95	117	/	/	/
JZGAL24523	4"×3"	100×80	95	117	/	/	/

Fig.290
Beaded PLUG

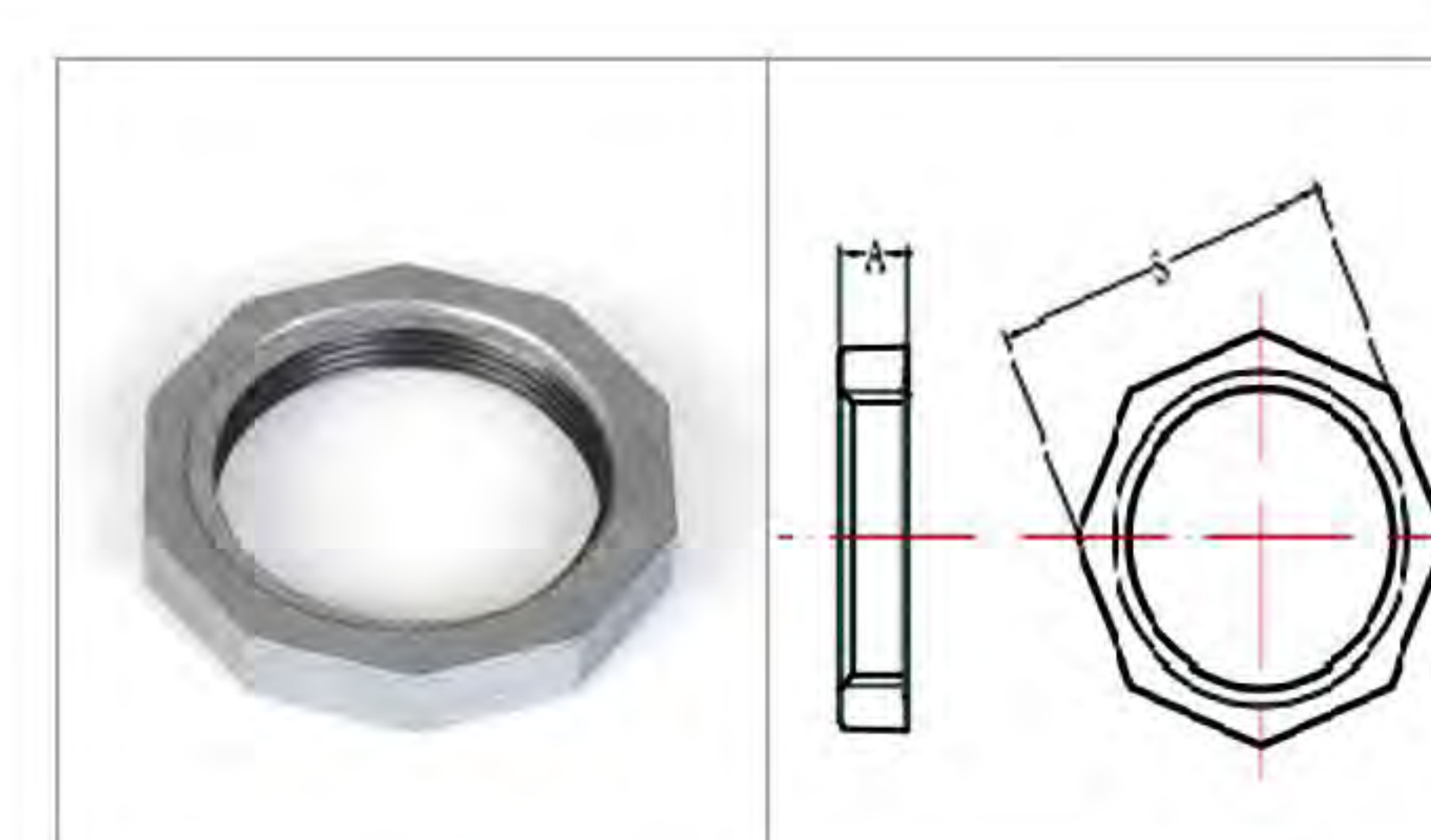

Code	Size		A	S	Unit Weight		Packing Carton
	NPS	DN			Black	Galv.	
			mm	mm	g	g	Pcs/ctn
JZGAL29001	1/4"	8	22.5	6	17.64	18	2000
JZGAL29002	3/8"	10	25	7	29.4	30	1300
JZGAL29003	1/2"	15	28	10	35.28	36	900
JZGAL29004	3/4"	20	32	12	55.86	57	600
JZGAL29005	1"	25	36	16	93.1	95	300
JZGAL29006	1-1/4"	32	38.5	20	148.96	152	220
JZGAL29007	1-1/2"	40	41	22	177.38	181	150
JZGAL29008	2"	50	47	28	293.02	299	80
JZGAL29009	2-1/2"	65	48.5	30	512.54	523	64
JZGAL29010	3"	80	53	34	748.72	764	36
JZGAL29011	4"	100	72	44	1097.6	1120	28

Fig.301
Cap,round


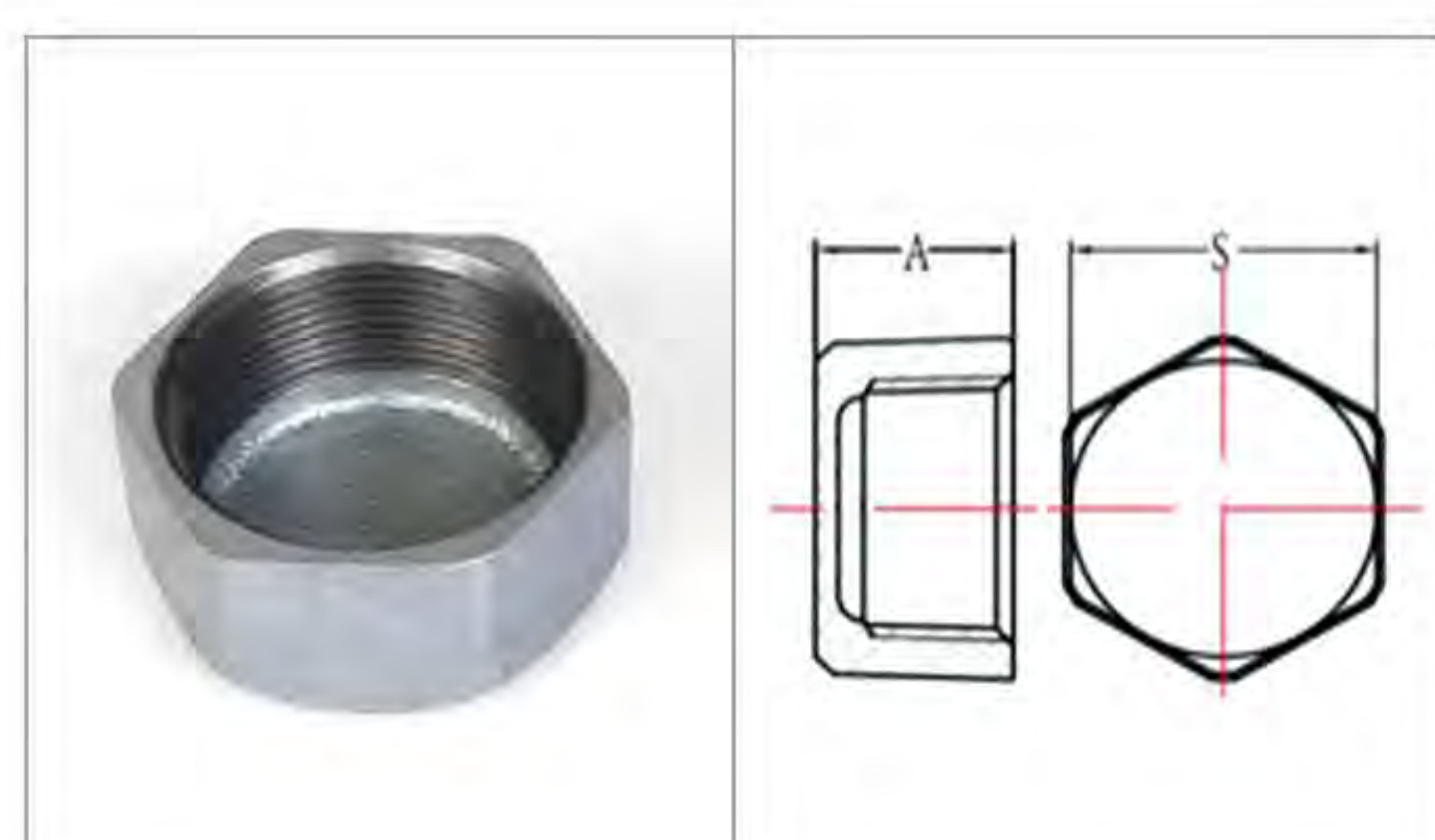
Code	Size		A	Unit Weight		Packing Carton
	NPS	DN		Black	Galv.	
			mm	g	g	Pcs/ctn
JZGAL30101	1/4"	8	16		25	1200
JZGAL30102	3/8"	10	17	29.4	30	1200
JZGAL30103	1/2"	15	19	47.04	48	700
JZGAL30104	3/4"	20	22	68.6	70	500
JZGAL30105	1"	25	24	106.82	109	360
JZGAL30106	1-1/4"	32	27	162.68	166	220
JZGAL30107	1-1/2"	40	28	203.84	208	160
JZGAL30108	2"	50	32	319.48	326	100
JZGAL30109	2-1/2"	65	36	432.18	441	60
JZGAL30110	3"	80	39	610.54	623	38
JZGAL30111	4"	100	46	1078.98	1101	20

Fig.291
Plain plugs


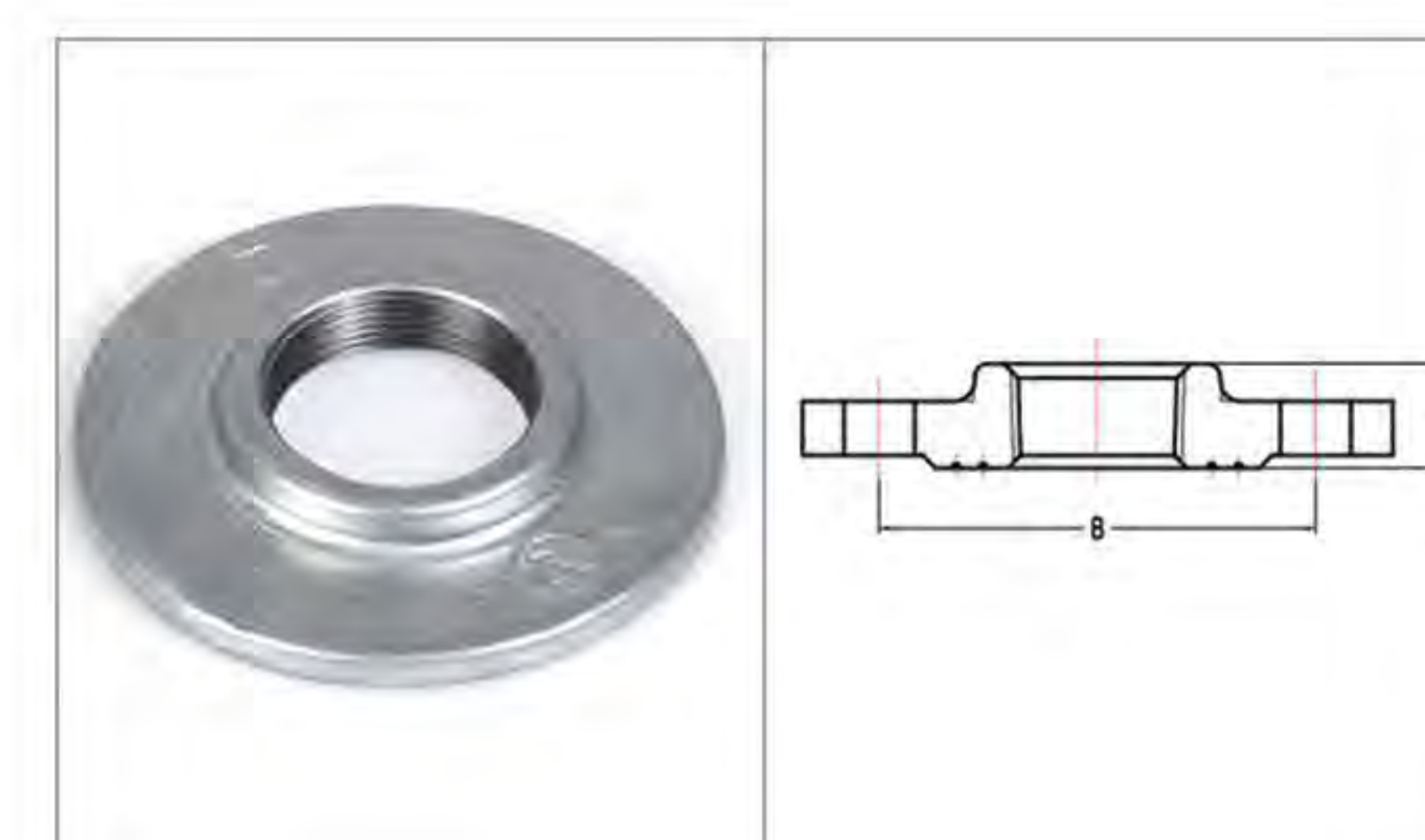
Code	Size		L	B	S	Unit Weight		Packing Carton
	NPS	DN				Black	Galv.	
			mm	mm	mm	g	g	Pcs/ctn
JZGAL29101	1/4"	8	15.5	10	6	8.82	9	2400
JZGAL29102	3/8"	10	17	10	7	15.68	16	2200
JZGAL29103	1/2"	15	22.5	13	10	24.5	25	1400
JZGAL29104	3/4"	20	24	14	12	36.26	37	800
JZGAL29105	1"	25	27	16.5	15	57.82	59	500
JZGAL29106	1-1/4"	32	30	20	18	103.88	106	300
JZGAL29107	1-1/2"	40	31	21	22	140.14	143	200
JZGAL29108	2"	50	36	25	26	230.3	235	120
JZGAL29109	2-1/2"	65	40.5	26.5	30	348.88	356	72
JZGAL29110	3"	80	45.5	29.5	34	512.54	523	64
JZGAL29111	4"	100	57	38	44	978.04	998	36

Fig.310
Backnut


Code	Size		A	S	Unit Weight		Packing Carton
	NPS	DN			Black	Galv.	
			mm	mm	g	g	Pcs/ctn
JZGAL31001	1/2"	15	9	29	28.42	29	700
JZGAL31002	3/4"	20	10	36	44.1	45	500
JZGAL31003	1"	25	11	45	75.46	77	400
JZGAL31004	1-1/4"	32	11	56	99.96	102	300
JZGAL31005	1-1/2"	40	12	63	135.24	138	240
JZGAL31006	2"	50	13	77	205.8	210	160
JZGAL31007	2-1/2"	65	15	93	298.9	305	60
JZGAL31008	3"	80	18	109	495.88	506	50
JZGAL31009	4"	100	21	137	841.82	859	40

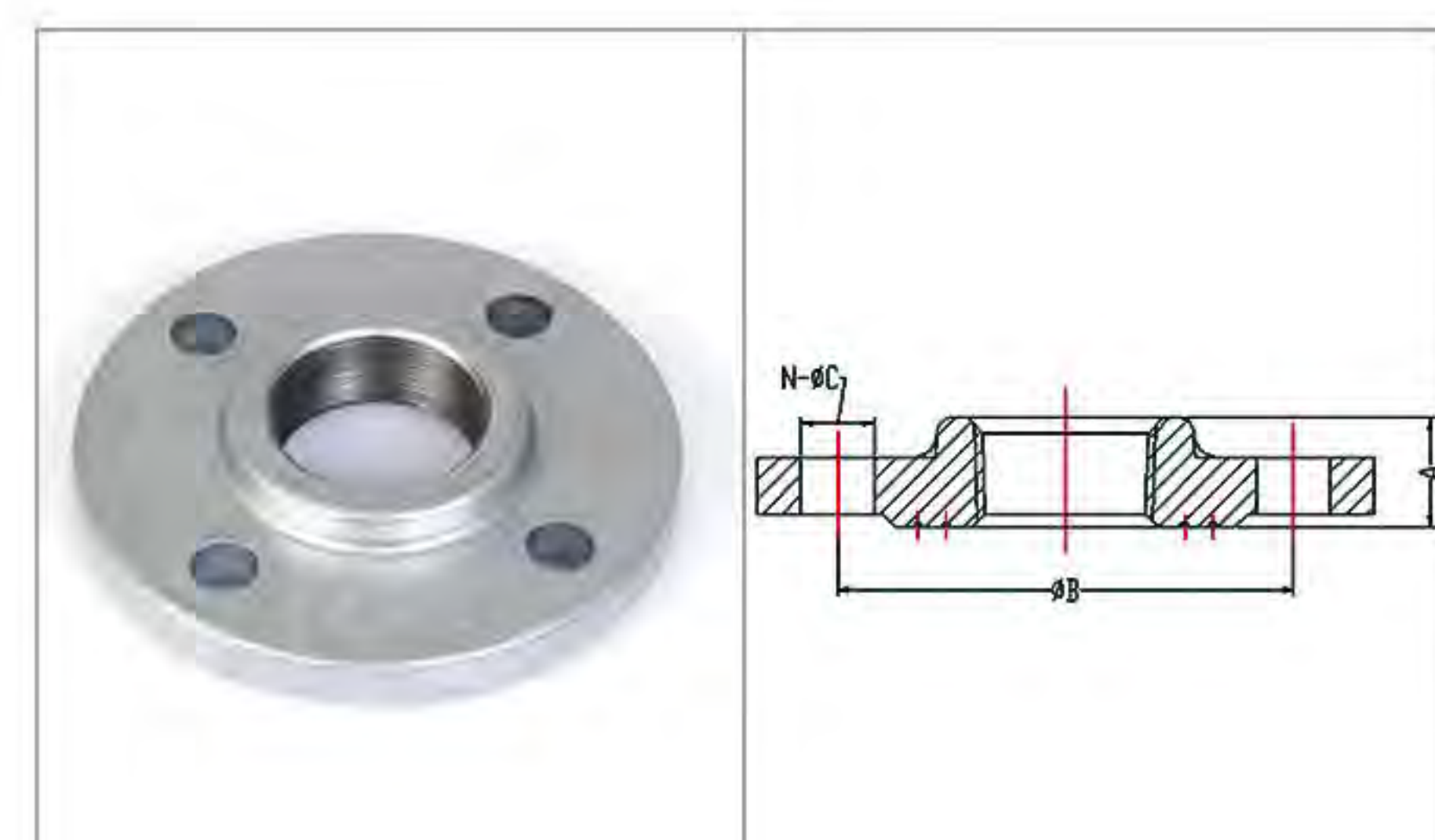
Fig.300
Caps


Code	Size		A	S	Unit Weight		Packing Carton
	NPS	DN			Black	Galv.	
			mm	mm	g	g	Pcs/ctn
JZGAL30001	3/8"	10	17	20.6	29.4	30	1200
JZGAL30002	1/2"	15	19	24.6	44.1	45	700
JZGAL30003	3/4"	20	22	30.4	68.6	70	500
JZGAL30004	1"	25	24	37.2	106.82	109	360
JZGAL30005	1-1/4"	32	27	47	180.32	184	220
JZGAL30006	1-1/2"	40	28	53	223.44	228	160
JZGAL30007	2"	50	32	65	349.86	357	100

Fig.321
Round Flange,Without Bolt


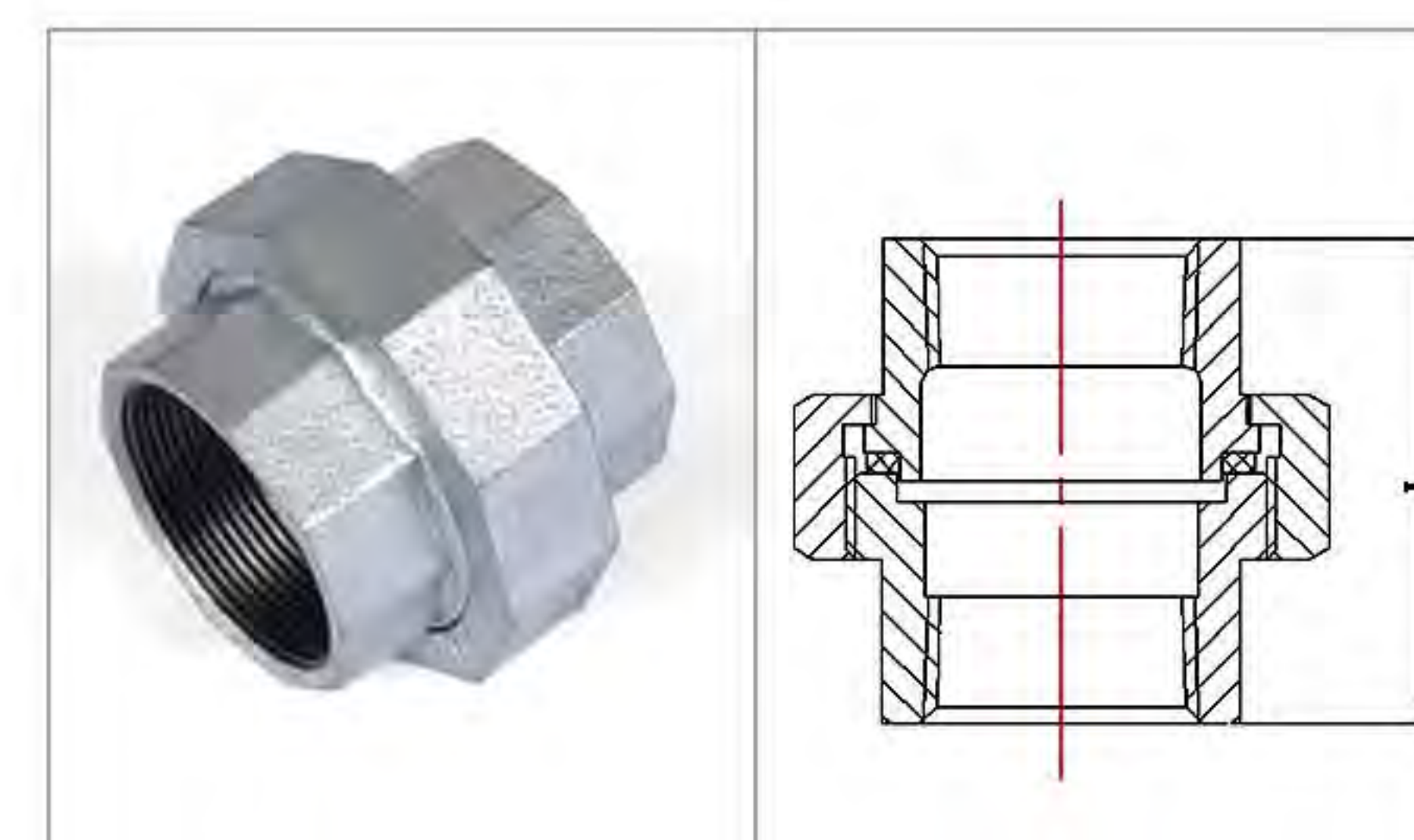
Code	Size		A	B	C	Unit Weight		Packing Carton
	NPS	DN				Black	Galv.	
			mm	mm	mm	g	g	Pcs/ctn
JZGAL32101	1/2"	15	13.5	4.5	78	165.62	169	120
JZGAL32102	3/4"	20	16	5	87	224.42	229	100
JZGAL32103	1"	25	18	5.5	97	300.86	307	60
JZGAL32104	1-1/4"	32	15	6	120	512.54	523	40
JZGAL32105	1-1/2"	40	16	7	130	669.34	683	40
JZGAL32106	2"	50	18	8	140	865.34	883	30
JZGAL32107	2-1/2"	65	20	9	160	1303.4	1330	16
JZGAL32108	3"	80	22	10	190	1869.84	1908	12
JZGAL32109	4"	100	24	11	210	2326.52	2374	10

Fig.329
Round Flange
With 4 Bolt HoleS



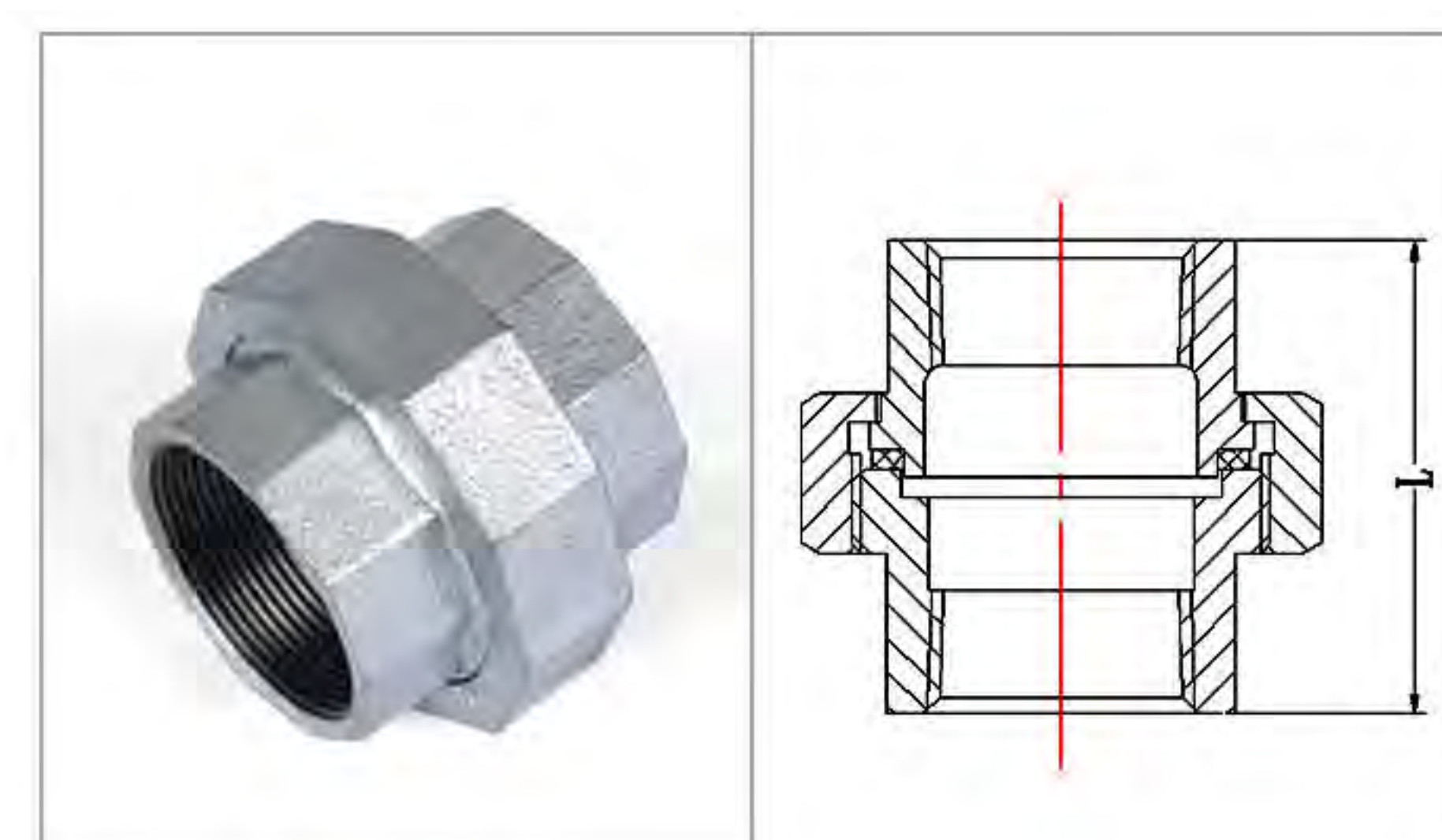
Code	Size		A	B	N-C	Unit Weight		Packing
	NPS	DN				Black	Galv.	Carton
			mm	mm	mm	g	g	Pcs/ctn
JZGAL32901	1-1/4"	32	24	105	4-18	1431.78	1461	20
JZGAL32902	1-1/2"	40	26	110	4-18	1684.62	1719	20
JZGAL32903	2"	50	29	125	4-18	2223.62	2269	16
JZGAL32904	2-1/2"	65	33	145	4-18	3087	3150	12
JZGAL32905	3"	80	34	160	8-18	3543.68	3616	8
JZGAL32906	4"	100	39	180	8-18	4154.22	4239	8
JZGAL32907	6"	150	42	240	8-22	7644	7800	4

Fig.342
Union,conical brass seat



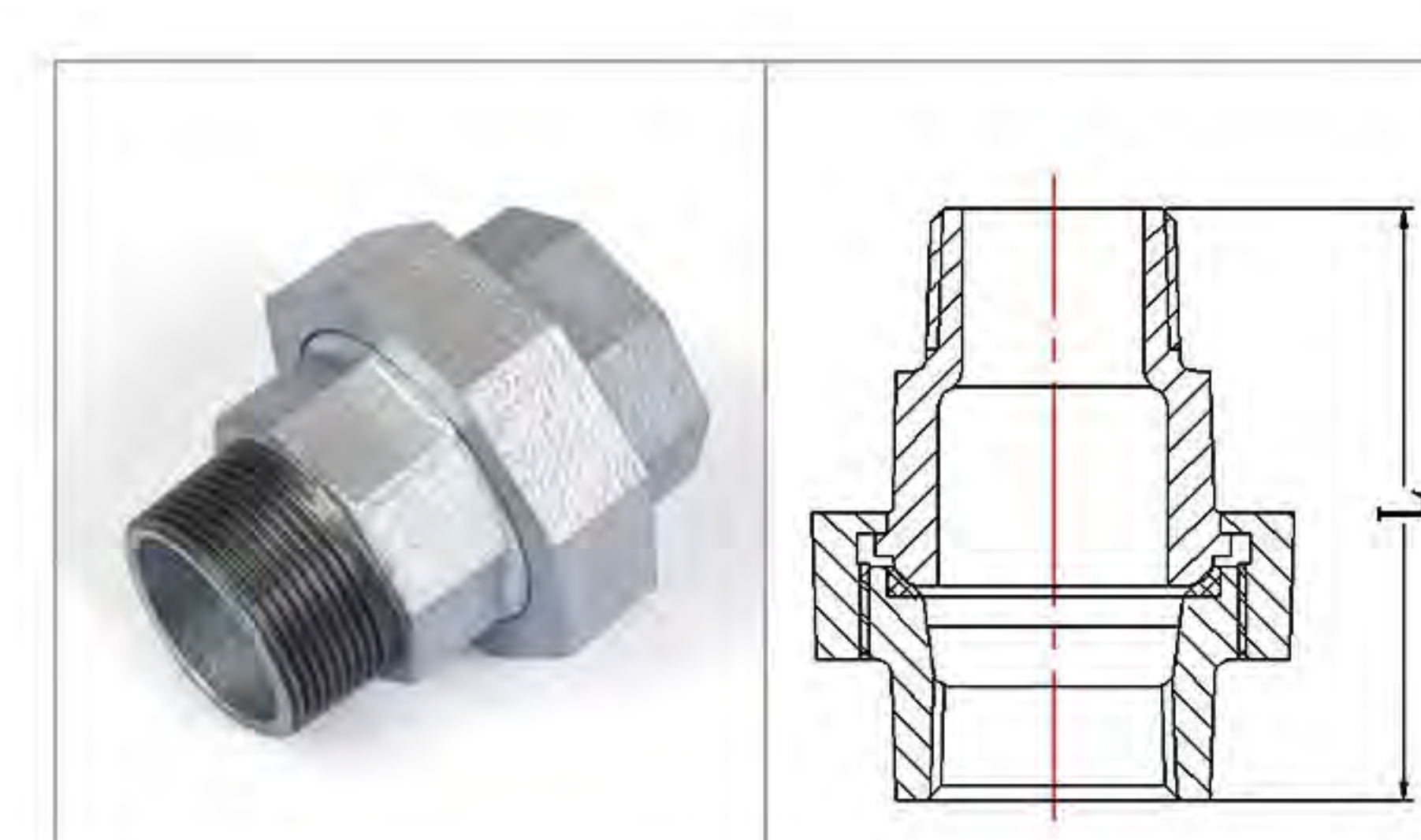
Code	Size		L	Unit Weight		Packing
	NPS	DN		Black	Galv.	Carton
			mm	g	g	Pcs/ctn
JZGAL34201	1/4"	8	42	104.86	107	200
JZGAL34202	3/8"	10	45	143.08	146	200
JZGAL34203	1/2"	15	47	168.56	172	180
JZGAL34204	3/4"	20	51	256.76	262	120
JZGAL34205	1"	25	56.5	333.2	340	88
JZGAL34206	1-1/4"	32	64	583.1	595	56
JZGAL34207	1-1/2"	40	70	731.08	746	36
JZGAL34208	2"	50	78.5	1058.4	1080	28
JZGAL34209	2-1/2"	65	84.5	1804.18	1841	12
JZGAL34210	3"	80	94	2314.76	2362	10
JZGAL34211	4"	100	110	3731.84	3808	6

Fig.330
Union,flat seat



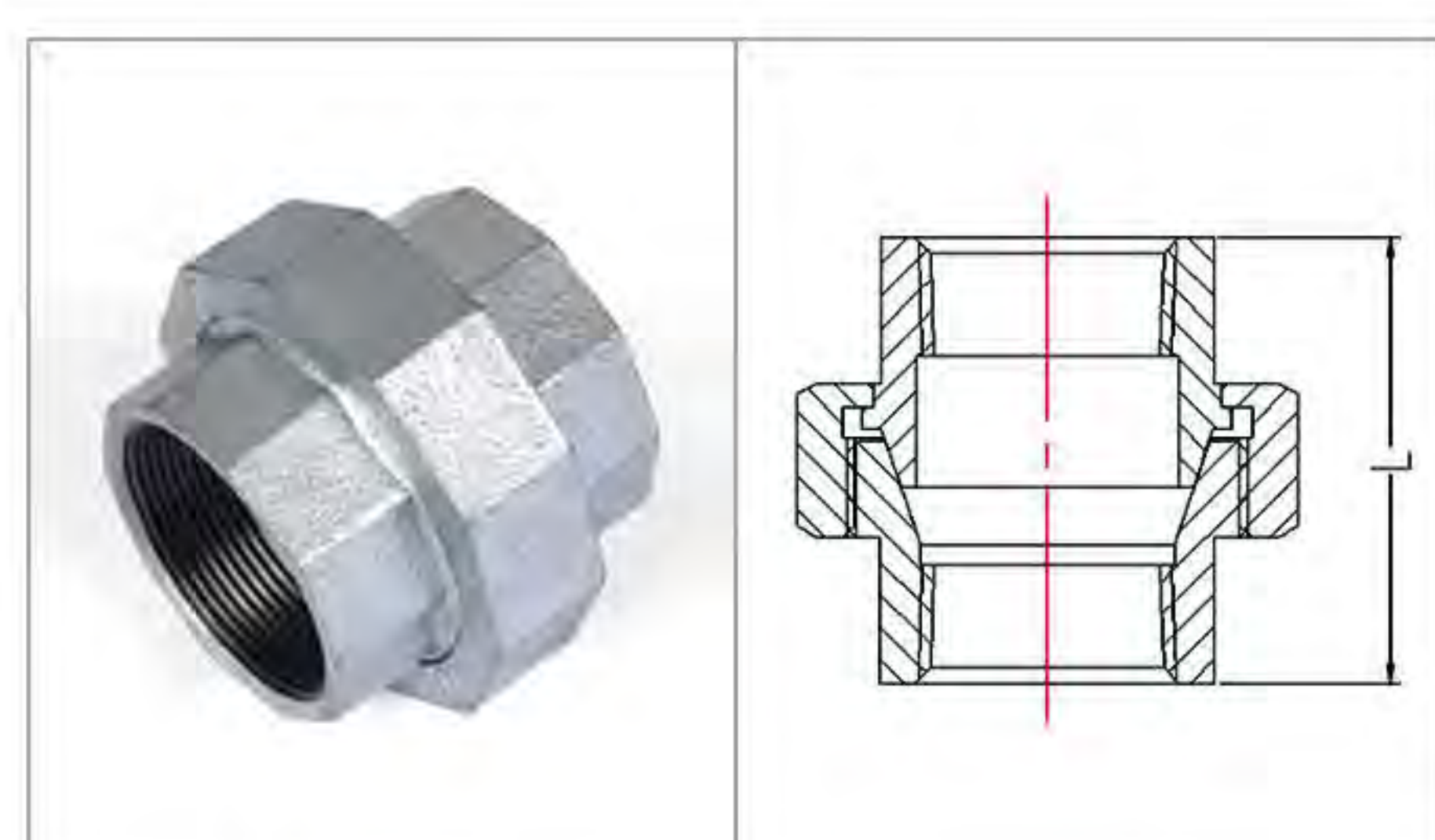
Code	Size		L	Unit Weight		Packing
	NPS	DN		Black	Galv.	Carton
			mm	g	g	Pcs/ctn
JZGAL33001	3/8"	10	39	156.8	160	280
JZGAL33002	1/2"	15	46	200.9	205	180
JZGAL33003	3/4"	20	50	265.58	271	120
JZGAL33004	1"	25	56	392	400	88
JZGAL33005	1-1/4"	32	63	583.1	595	56
JZGAL33006	1-1/2"	40	68	733.04	748	36
JZGAL33007	2"	50	76	1056.44	1078	28
JZGAL33008	2-1/2"	65	83	1675.8	1710	12
JZGAL33009	3"	80	80	2175.6	2220	10
JZGAL33010	4"	100	100	3724	3800	6

Fig.331
Union,flat seat,M&F



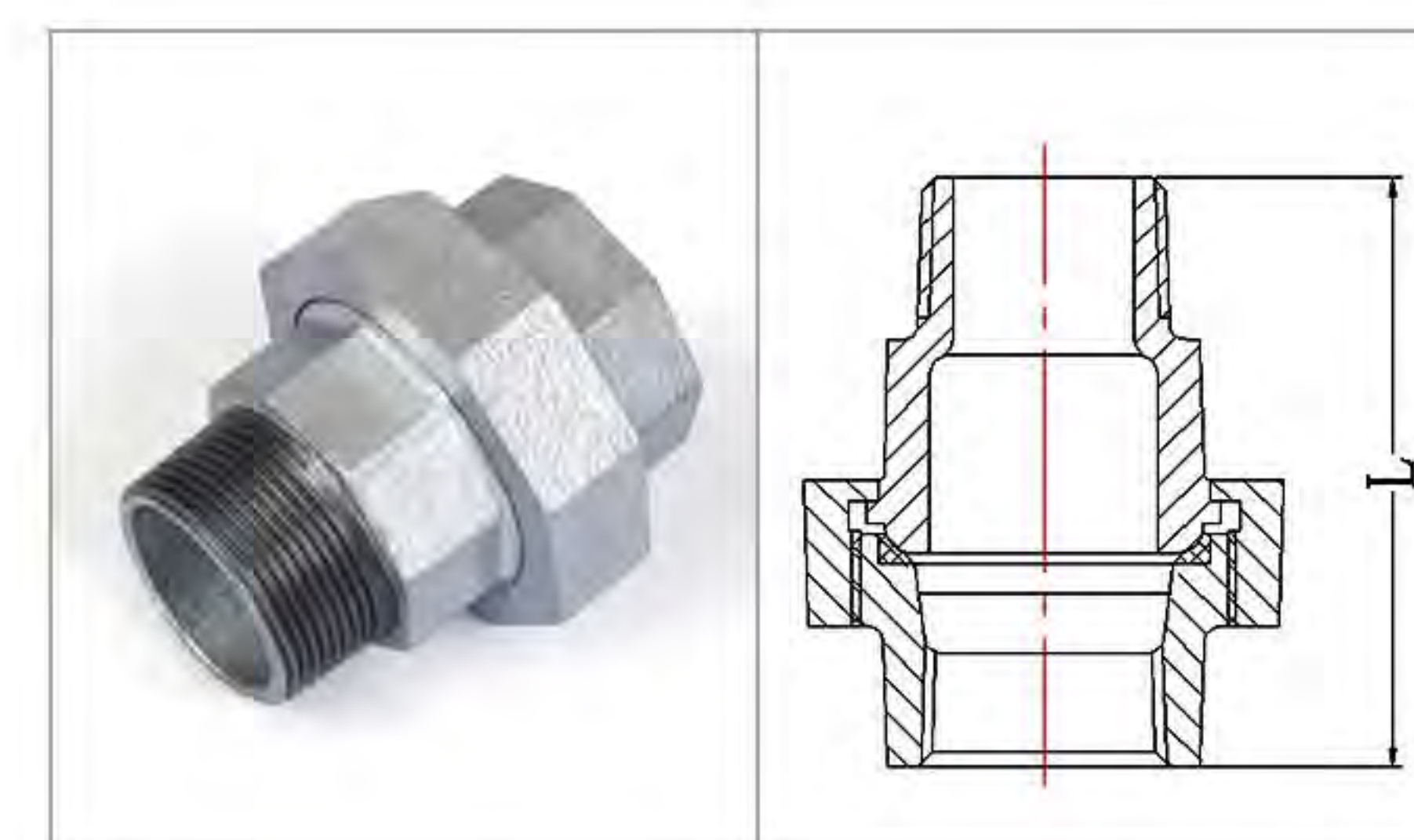
Code	Size		L	Unit Weight		Packing
	NPS	DN		Black	Galv.	Carton
			mm	g	g	Pcs/ctn
JZGAL33101	1/2"	15	60	219.52	224	140
JZGAL33102	3/4"	20	70	275.38	281	120
JZGAL33103	1"	25	78	423.36	432	80
JZGAL33104	1-1/4"	32	88	661.5	675	40
JZGAL33105	1-1/2"	40	93	784	800	32
JZGAL33106	2"	50	104	1200.5	1225	20

Fig.340
Union,conical seat



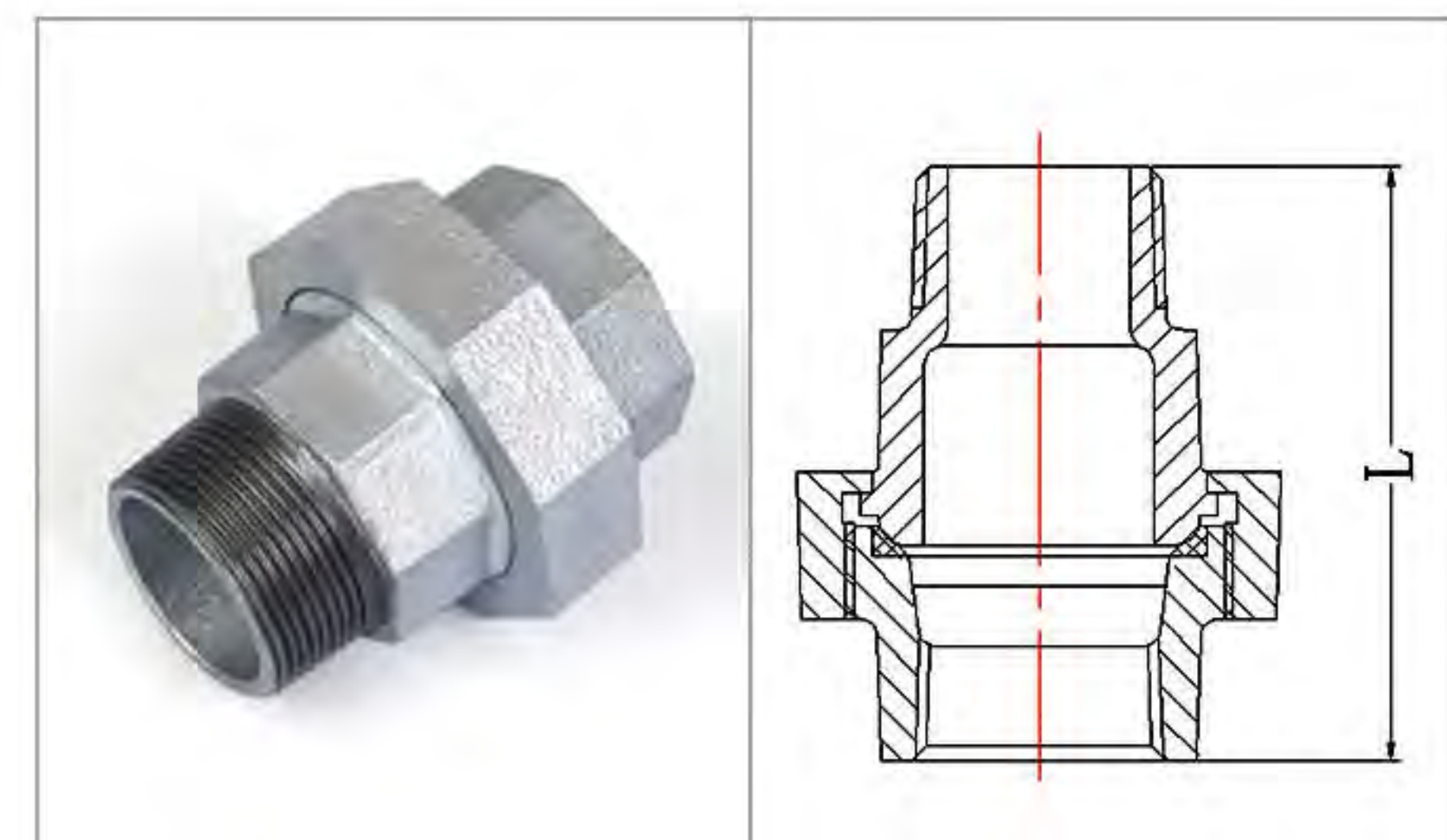
Code	Size		L	Unit Weight		Packing
	NPS	DN		Black	Galv.	Carton
			mm	g	g	Pcs/ctn
JZGAL34001	1/4"	8	42	103.88	106	200
JZGAL34002	3/8"	10	45	152.88	156	200
JZGAL34003	1/2"	15	47	164.64	168	180
JZGAL34004	3/4"	20	51.5	251.86	257	120
JZGAL34005	1"	25	57	330.26	337	88
JZGAL34006	1-1/4"	32	65	560.56	572	56
JZGAL34007	1-1/2"	40	71	703.64	718	36
JZGAL34008	2"	50	79	1023.12	1044	28
JZGAL34009	2-1/2"	65	85.5	1615.04	1648	12
JZGAL34010	3"	80	94.5	2242.24	2288	10
JZGAL34011	4"	100	110.5	3615.22	3689	6

Fig.341
Union,conical seat,M&F



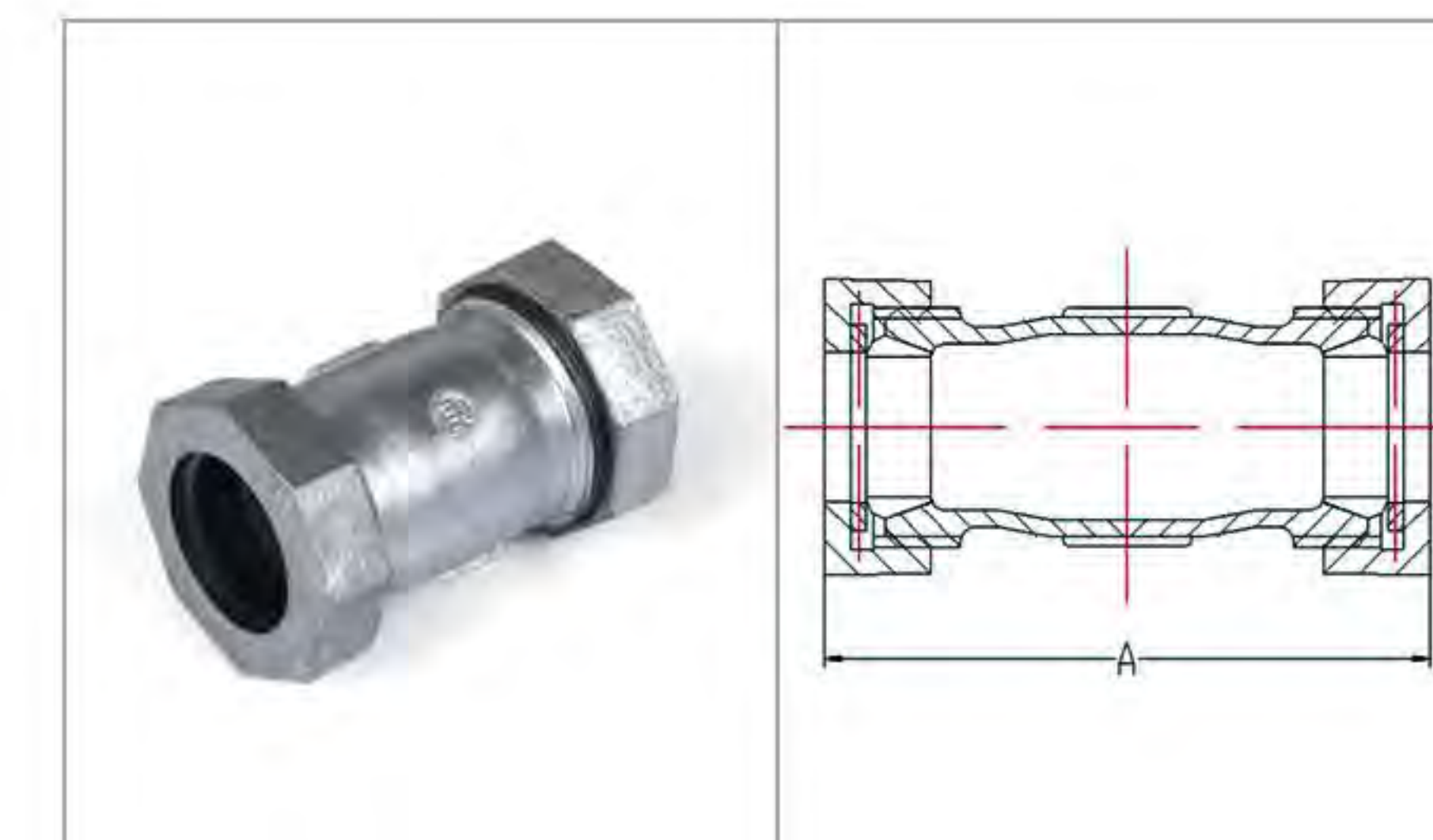
Code	Size		L	Unit Weight		Packing
	NPS	DN		Black	Galv.	Carton
			mm	g	g	Pcs/ctn
JZGAL34101	1/2"	15	65	196	200	140
JZGAL34102	3/4"	20	71.5	289.1	295	120
JZGAL34103	1"	25	79	392	400	80
JZGAL34104	1-1/4"	32	90	635.04	648	40
JZGAL34105	1-1/2"	40	96	801.64	818	32
JZGAL34106	2"	50	107	1149.54	1173	20

Fig.343
 Brass Unions,
 Taper Seat, M&F



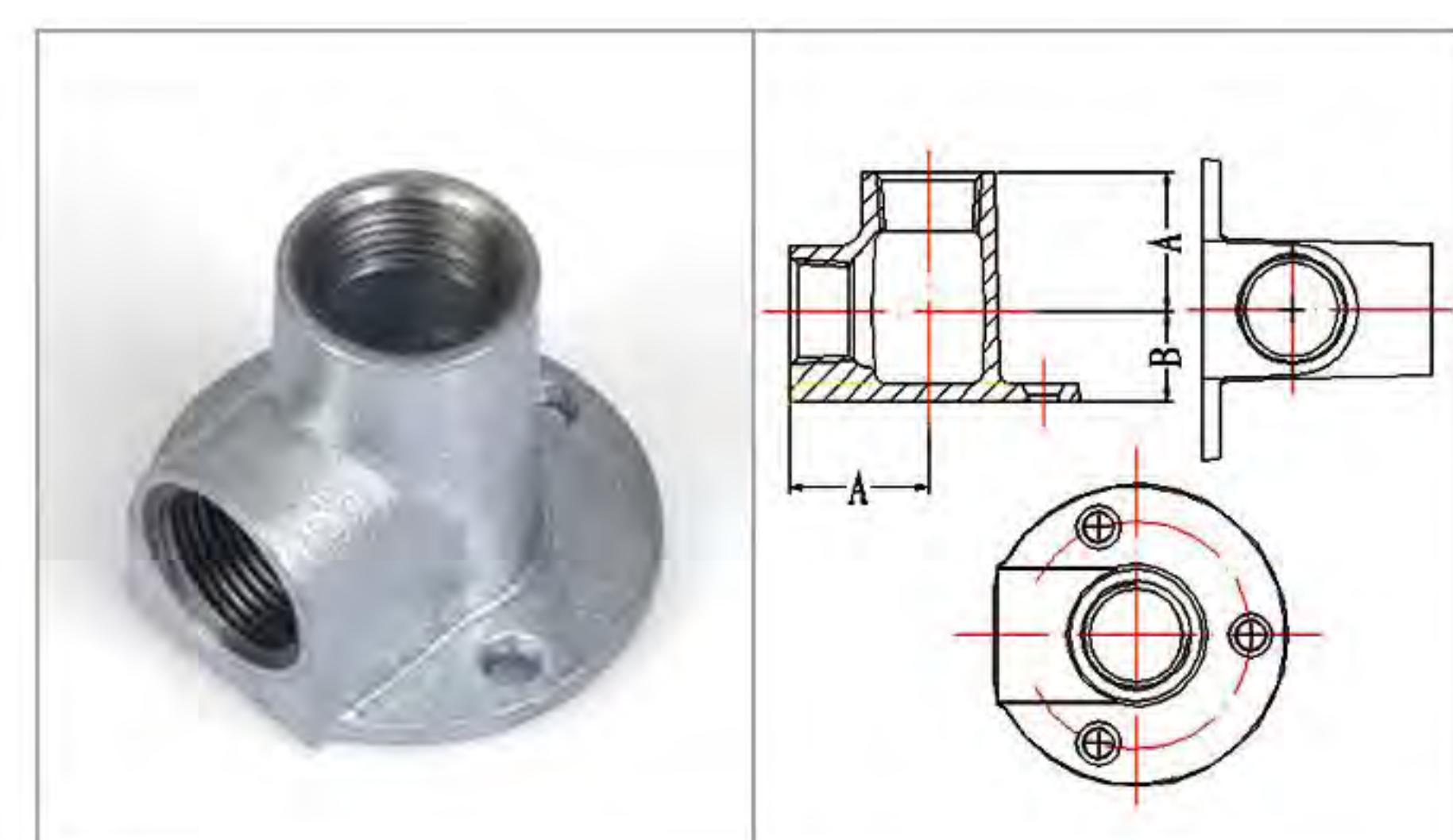
Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	NPS	DN	mm	g	g	Pcs/ctn
JZGAL34301	1/2"	15	65	191.1	195	140
JZGAL34302	3/4"	20	71.5	286.16	292	120
JZGAL34303	1"	25	79	378.28	386	80
JZGAL34304	1-1/4"	32	90	637	650	40
JZGAL34305	1-1/2"	40	96	800.66	817	32
JZGAL34306	2"	50	107	1205.4	1230	20

Fig.LCC
 Long Compression Coupling



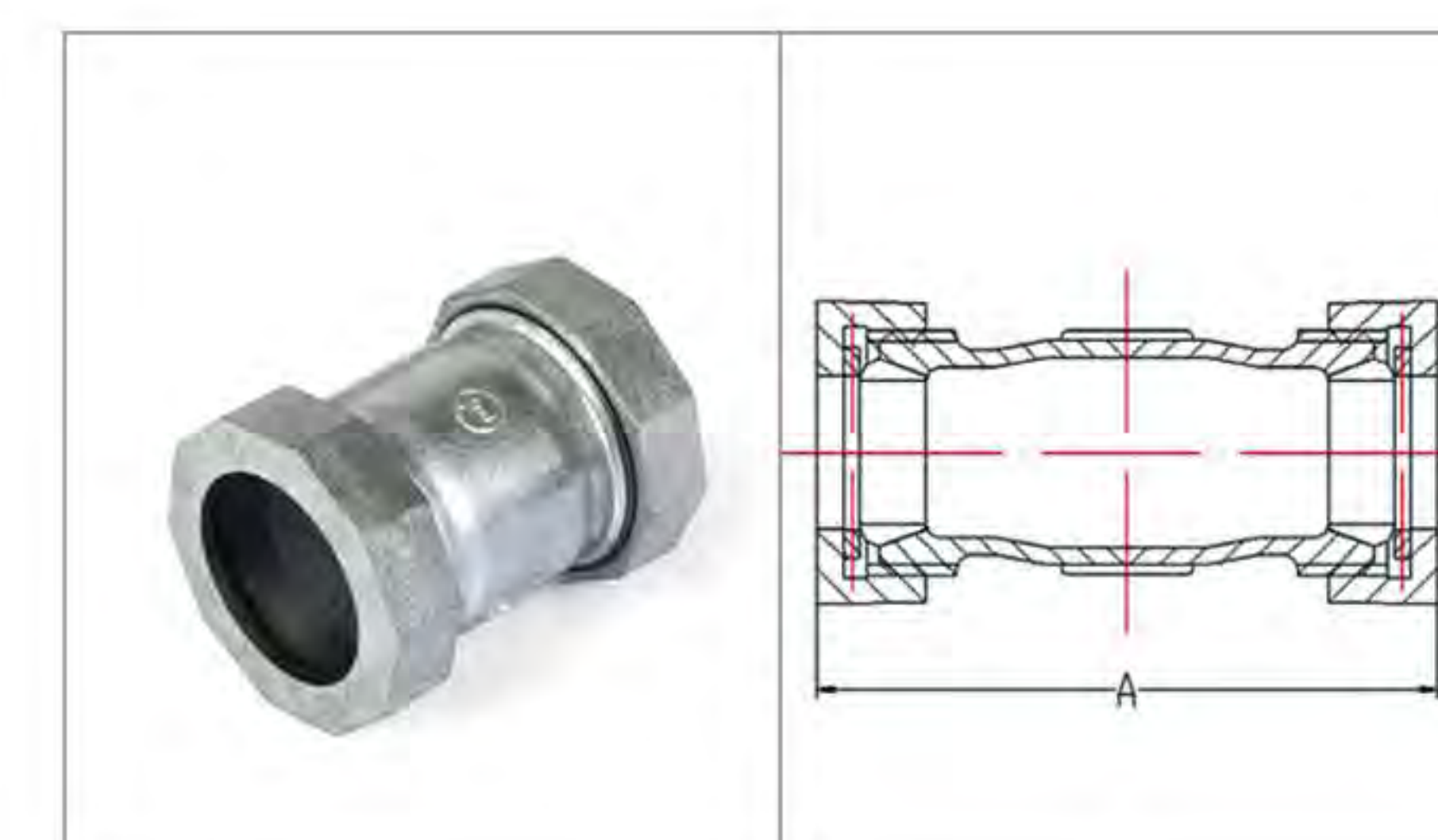
Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	NPS	DN	mm	g	g	Pcs/ctn
JZGALLCC01	1/2"	15	93			140
JZGALLCC02	3/4"	20	101			120
JZGALLCC03	1"	25	109			80
JZGALLCC04	1 1/4"	32	114			40
JZGALLCC05	1 1/2"	40	118			32
JZGALLCC06	2"	50	121			20
JZGALLCC07	2 1/2"	65	154			/
JZGALLCC08	3"	80	175			/

Fig.471
 Union, flat seat



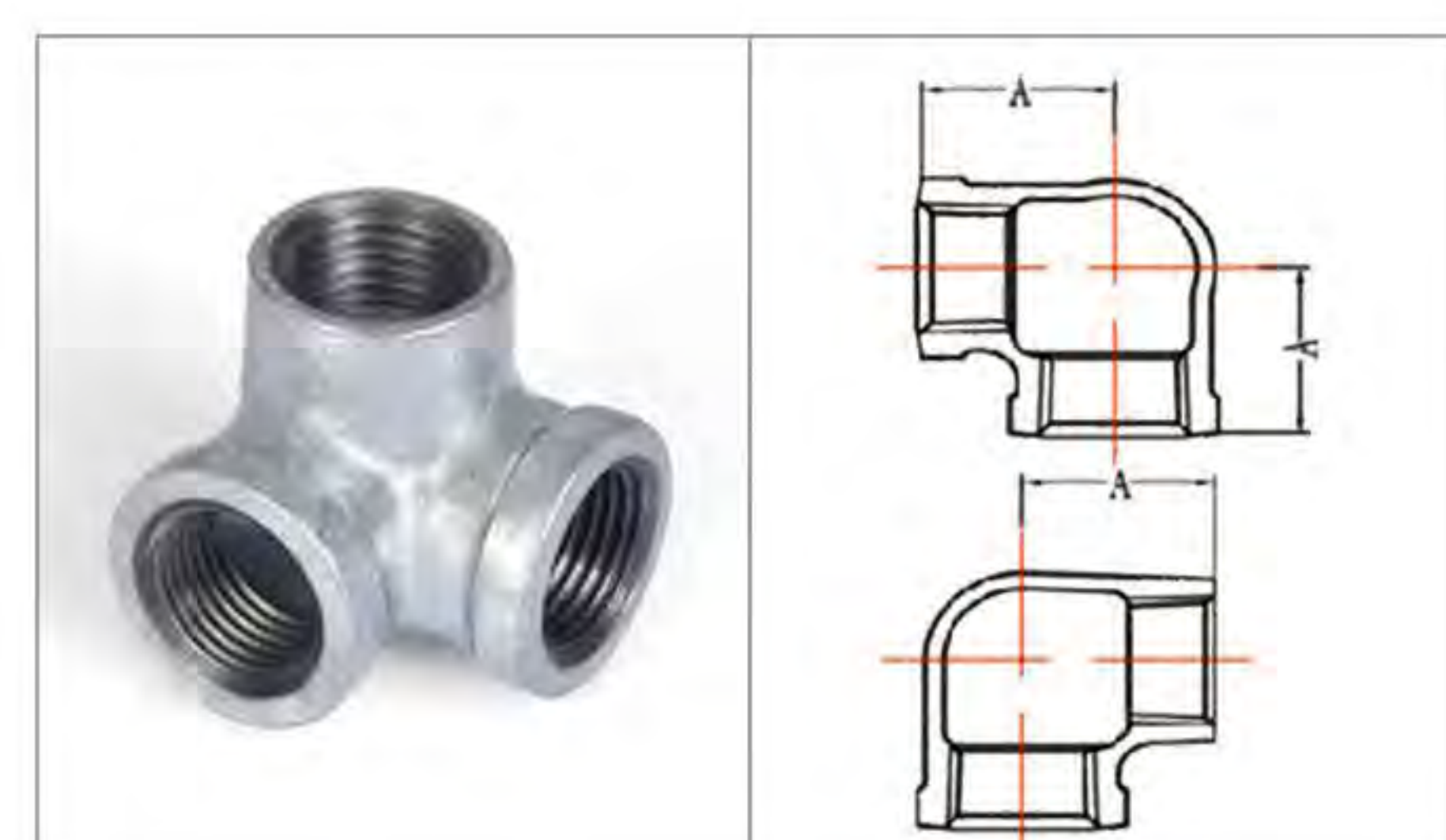
Code	Size		A	B	Unit Weight		Packing
					Black	Galv.	Carton
	NPS	DN	mm	mm	g	g	Pcs/ctn
JZGAL47101	1/2"	15	28	33	181.3	185	150
JZGAL47102	3/4"	20	18	20	259.7	265	100

Fig.SCC
 Short Compression Coupling



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	NPS	DN	mm	g	g	Pcs/ctn
JZGALSCC01	1/2"	15	53	292.0	298	140
JZGALSCC02	3/4"	20	58	370.4	378	120
JZGALSCC03	1"	25	64	558.6	570	80
JZGALSCC04	1-1/4"	32	70	711.5	726	40
JZGALSCC05	1-1/2"	40	75	818.3	835	32
JZGALSCC06	2"	50	80	1076.0	1098	20

Fig.1221
 Banded Side Outlet Elbow



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	NPS	DN	mm	g	g	Pcs/ctn
JZGAL122101	1/2"	15	27	125.4	128	240
JZGAL122102	3/4"	20	32	196.0	200	140
JZGAL122103	1"	25	37	300.9	307	90