



JIANZHI

SINCE 1982



CONTACT US

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Jianzhi Malleable Iron Pipe Fittings >> www.jianzhipipefitting.com
Jianzhi Grooved Pipe Fittings >> www.jianzhifittings.com

2024/4

THE GUIDE TO JIANZHI PRODUCTS

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



Quality Pipe Fittings Since 1982.
Safer. No Leak.

Making Pipe Fittings Durable FOREVER

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.



4,500
employees



90%
Reorder rate



99.96%
Qualified rate



1 in 440000
return rate



JIANZHI Predecessor

- 1982-Established and named "Yutian first plumbing plant".
- 1993-Renamed as "TangShan 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-Renamed as "Hebei JIANZHI Casting Group Ltd"
- 2007-JIANZHI's first generation hydraulic testing machine was developed successfully
- 2008-Obtaining UL, Took part in the building project for the 2008 Beijing Olympic Games
- 2010-Obtaining CE
- 2011-Built a new factory in Chifeng
- 2013-JIANZHI pipe fitting has been awarded the "Chinese Malleable Pipe Fitting Famous Brand"
- 2013-Obtaining TSE certification
- 2014-Completed two factories and a galvanizing plant in Chifeng
 - Brand "JIANZHI" has been named the "China Famous Brand"
 - Obtaining ISO 9001, ISO 14001 and ISO 18000
- 2015-Obtaining ABNT
 - Obtaining 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.
- 2020-Gold Award for high quality castings
- 2021-Single champion product of manufacturing industry
- 2022-CEO-Ren jiu hong was awarded the lifetime achievement award from the China Foundry Association
- 2023-Put into use Automatic Storage & Retrieval System

COMPANY HISTORY



7 ADVANTAGES

PART 1

Safer. No Leak.

One by one, 0.6 MPa air pressure is applied before packaging, which ensures that the pipe fittings are airtight.

PART 3

Easy For Installation;
Reduce Assembly Time.

High precision thread, 40% higher than the BS standard. It is easier for workers to install, thus saving them time, labor, and labor costs.

PART 5

Easy For Sale.

Develop a more comprehensive cooperative business proposal so that cooperators can sell without concerns.

PART 7

40 Years Of Professional Casting.

Over the past 40 years, the Jianzhi group has been deeply involved in the foundry industry. Product qualified rates exceed 99.96%.

PART 2

The service life of 50 years.

There is an average thickness of 70 μ m of zinc layer, which is moisture-proof and rust-proof. As long as proper maintenance is performed, the service life can be as long as 50 years.

PART 4

Fast Delivery; Guarantee On Time.

"Approximately 25,000 tons of conventional products are kept in stock, with an average delivery time of 10-15 days.

An annual maximum capacity of 400,000 tons of non-spot products can be produced, with an average delivery time of 25-30 days."

PART 6

The Highest Bonus Is 200 USD.

A \$200 reward will be awarded each time a Jianzhi brand grey malleable iron pipe fitting is discovered by global end users.

A BRIEF INTRODUCTION TO SOME OF JIANZHI'S BUSINESS PARTNERS.



CHINA GAS is one of the largest trans-regional energy service enterprises in China.

China State Construction Engineering is the largest construction company in the world by revenue and the 8th largest general contractor in terms of overseas sales, as of 2020. In the 2022 Fortune Global 500, CSCEC was ranked as the ninth-largest public company in the world.

CHINA WATER is one of the largest integrated water affairs operators providing raw water, tap water, sewage treatment and related value-added services.

China Railway Construction Corporation Limited (abbreviated CRCC) is a listed construction enterprise based in Beijing, China, that was the second largest construction and engineering company in the world by revenue in 2014.

KunLun, is directly affiliated with China National Petroleum Corporation. CNPC was ranked fourth in the 2022 Fortune Global 500, a global ranking of the largest corporations by revenue.

WANDA GROUP is a Chinese multinational conglomerate founded in Dalian, Liaoning and headquartered in Beijing. It is a private property developer and owner of Wanda Cinemas and the Hoyts Group. Wanda Group ranks 28th on the 2020 China Top 500 Private Enterprises List.

Vanke is a large residential real estate developer in China. Vanke was also ranked 96th in the Forbes Global 2000 in 2020.

XINFANGSHENG GROUP is one of China's leading industrial product service platforms. The company focuses on platform creation, all-category sales of industrial products, and international trade.

ADVANCED PRODUCTION EQUIPMENT

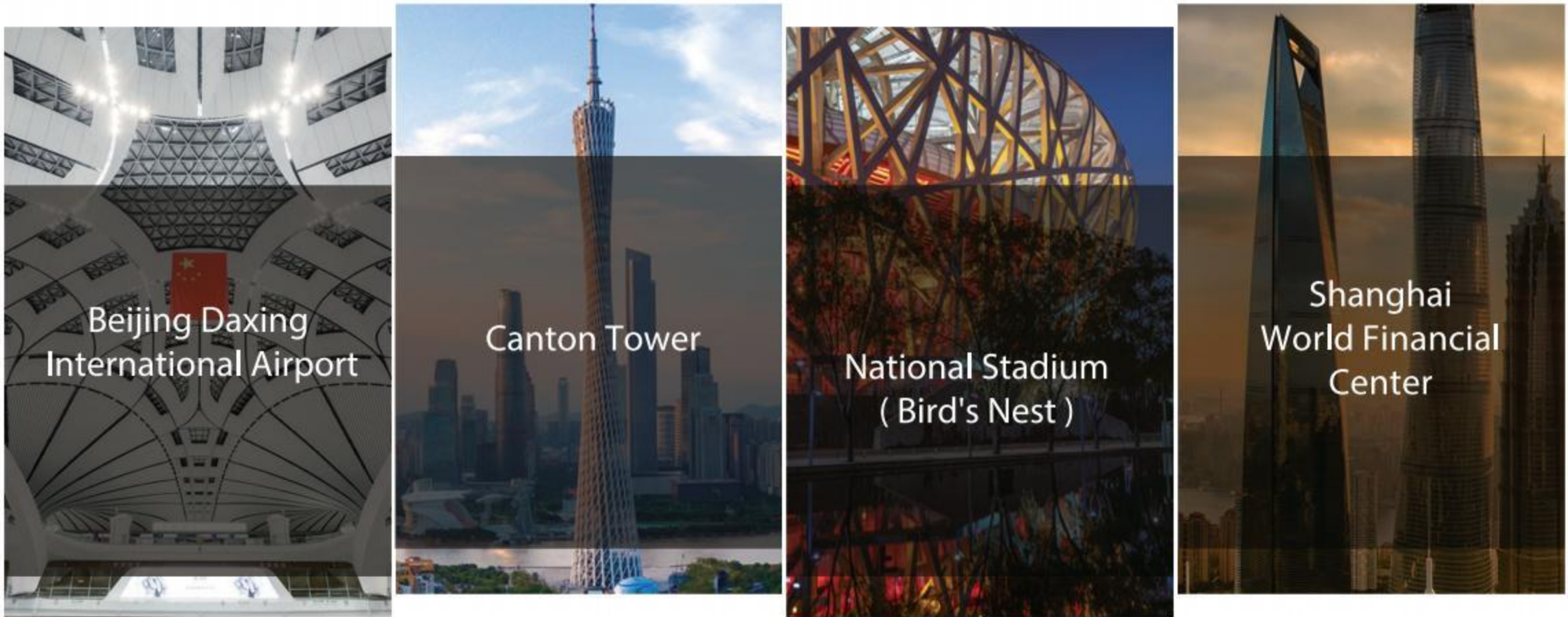
High precision equipment is quality assurance. All production workshops of JIANZHI are equipped with advanced production and testing equipment. Including the DISA vertical molding line imported from Denmark, the horizontal automatic molding line imported from Japan, and the FONDARC sand mixer imported 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.



OVERVIEW

Material:	EN1562 Or ISO 5922	Pressure /Temperature Ratings	
Design & Dimensions:	EN10242 Or ISO 49	Temp F°	PSI
Threads:	EN10226 / ASME B 1.20.1 / ISO228 / ISO 7-1	-20 to 150	363
Tensile Strength:	350 MPA	200	265
Elongation:	10%	250	225
Zinc Coating:	70µm	300	185
Working Pressure:	363 PSI	350	150
Size Available	1/8"-6"	366	150
Types	Heavy Duty Banded, Medium Duty Banded, Light Duty Beaded	400	110
Surface Treatment	Hot-dip Galvanized, Electrogalvanization, Black	450	75

FAMOUS CASES



APPLICATION



Gas



Fire Pipes



Water supply pipeline



Heating pipe



Oil pipeline



System water pipeline



Building gas pipeline



Water treatment

CERTIFICATES



STANDARD REFERENCES

In this brochure, Jianzhi brand threaded pipe fittings in malleable cast iron conform to the international IOS49 and the European EN 10242 standards.

The connecting threads conform to the international ISO 7-1 and to the European EN 10226.

The material used is high quality blackheart malleable cast iron in accordance with the requirements of EN 1562: EN-GJMB-350-10 (ISO5922).

These products are primarily used in installations connected to water, gas, oil, and other fluid systems. The main function of these fittings is to connect pipes or to change the direction of fluid flow.

1. REQUIRED CHARACTERISTICS

1.1 Permissible working pressure and temperature

Fittings of all sizes are required to be suitable for maximum permissible working pressures within the temperature ranges specified in Table 1. Intermediate pressure ratings at temperatures between 120°C and 300°C shall be obtained by linear interpolation. The lowest service temperature for fittings is -20 degrees Celsius in normal applications. It is recommended to consult the manufacturer for special applications at temperatures below -20°C.

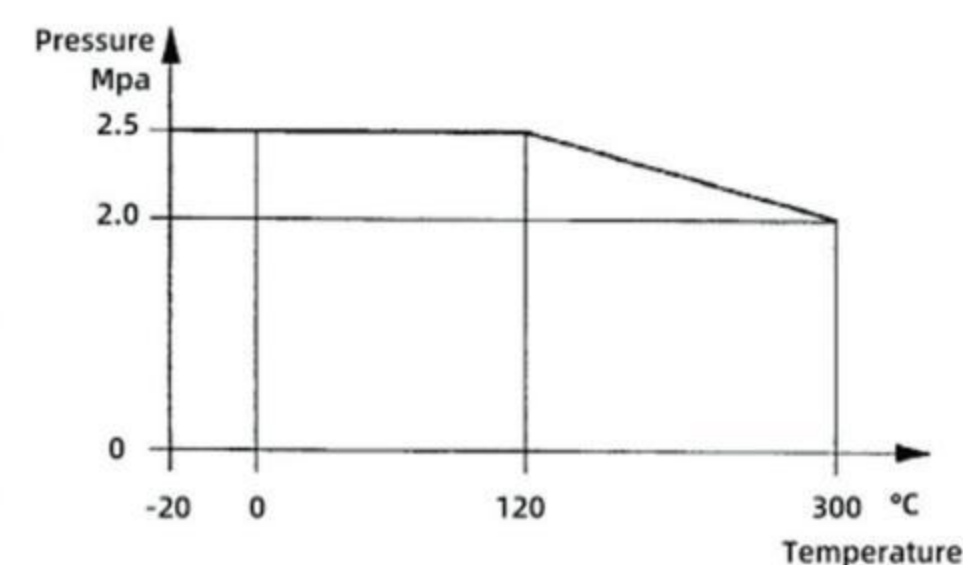


Figure1 - Pressure/temperature ratings

1.2 Design strength

Pressure-containing fittings including the component parts of unions shall be designed to withstand the design test pressures given in Table 2. Each size of the fitting shall be type tested in accordance with Table 2.

TABLE 1 - PRESSURE/TEMPERATURE RATINGS

Service temperature °C	Maximum permissible working pressure Mpa
-20 to 120	2.5
120 to 300	Interpolated values
300	2.0

TABLE 2 - DESIGN TEST PRESSURES

Hydrostatic design test pressure (gauge)	
Sizes 1/8 to 4	Sizes 5 and 6
10 Mpa	6.4 Mpa

2.SURFACE LAYER

Black or galvanized (hot dip zinc coating) fittings are available. And the zinc coating meet the following requirements. If the customer need a special protective layer to protect against superficial rust, the requests is also applied.

2.SURFACE LAYER

2.1Chemical composition of the zinc coating

The content by mass of the accompanying elements in the finish zinc coating does not exceed the following maximum values:

Aluminium (Al)	0.1%
Antimony (Sb)	0.01%
Arsenic (As)	0.02%
Bismuth (Bi)	0.01%
Cadmium (Cd)	0.01%
Copper (Cu)	0.1%
Lead (Pb)	1.6%, in individual cases 1.8%
Tin (Sn)	0.1%

2.2Coating mass per surface unit

The surface related mass of the zinc coating does not less than 500 g/m², as an average of 5 fittings. This corresponds to a medium layer thickness of 70µm.It does not less than 450 g/m² (63µm) when it is measured on an individual sample.

$$\bar{S} = \frac{m_A}{7.2}$$

$\bar{S}$ is the medium layer thickness of the zinc coating in µm.
 m_A is the surface related mass of the zinc coating in g/m².

2.3Surface condition of the zinc coating

The zinc coating on the internal surface of the fitting is continuous, with the exception of machined black surfaces.In the special case of larger material cross-sections the iron-zinc alloy phases may grow through. The internal zinc coating are free from zinc blisters, zinc burrs, non-metallic remainders.

3.DIMENSIONS AND TOLERANCES

The main dimensions of the pipe fittings are given in the product specification and dimension table on the following pages. If the size is not specified, the manufacturer shall negotiate with the purchaser. Where maximum or minimum dimensions are not specified, the tolerances for face-to-face and face-to-centre dimensions of pipe fittings are as given in Table 3.

TABLE 3 - TOLERANCE ON LENGTH

Dimension	≤30	>30~≤50	>50~≤75	>75~≤100	>100~≤150	>150~≤200	>200
Tolerance	±1.5	±2.0	±2.5	±3.0	±3.5	±4.0	±5.0

NOTE:

1. Fittings sizes shown in brackets are optional sizes and which may have a limited availability.
2. The face-to-face and face-to-centre dimensions of unions may not always comply with the tolerance given due to the compound effect of piece tolerances and design upon the final assembly.

Laying lengths are given for assistance and guidance during installation. Their accuracy is dependent upon the tolerances given in 7.1 and on the tolerance of the threads specified in ISO 7-1 (or EN10226).

4.THREADS

4.1 Choice of thread

4.1.1 Jointing thread

Fittings shall be threaded in accordance with ISO7-1 (Or EN10226).

4.1.2 Fastening threads

The threads of backnuts, union nuts and their mating threads shall be in accordance with ISO 228-1 (Or ENISO228).

4.2 Alignment of threads

The axes of the screw threads are accurate within $\pm 0.3^\circ$ of the specified angle.

4.3 Chamfering

The outlets of the fittings shall have a chamfer.

On internal threads, the chamfer has a minimum included angle of 90° , and the diameter at the face exceeds the major diameter of the thread.

On external threads, the chamfer should be a minimum included angle of 60° and the diameter at the face not exceed the minor diameter of the thread at that face.

4.4 Taper thread

The basic form of the taper pipe thread is as shown in figure 2. The taper is 1 to 16, measured on the diameter. The angle between the flanks, measured in an axial plane section, is 55° , the flanks making equal angles with the axis.

The thread profiles are rounded off equally at crests and roots by circular arcs blending tangentially with the flanks in such a manner as to give the same thread height h as for parallel threads.

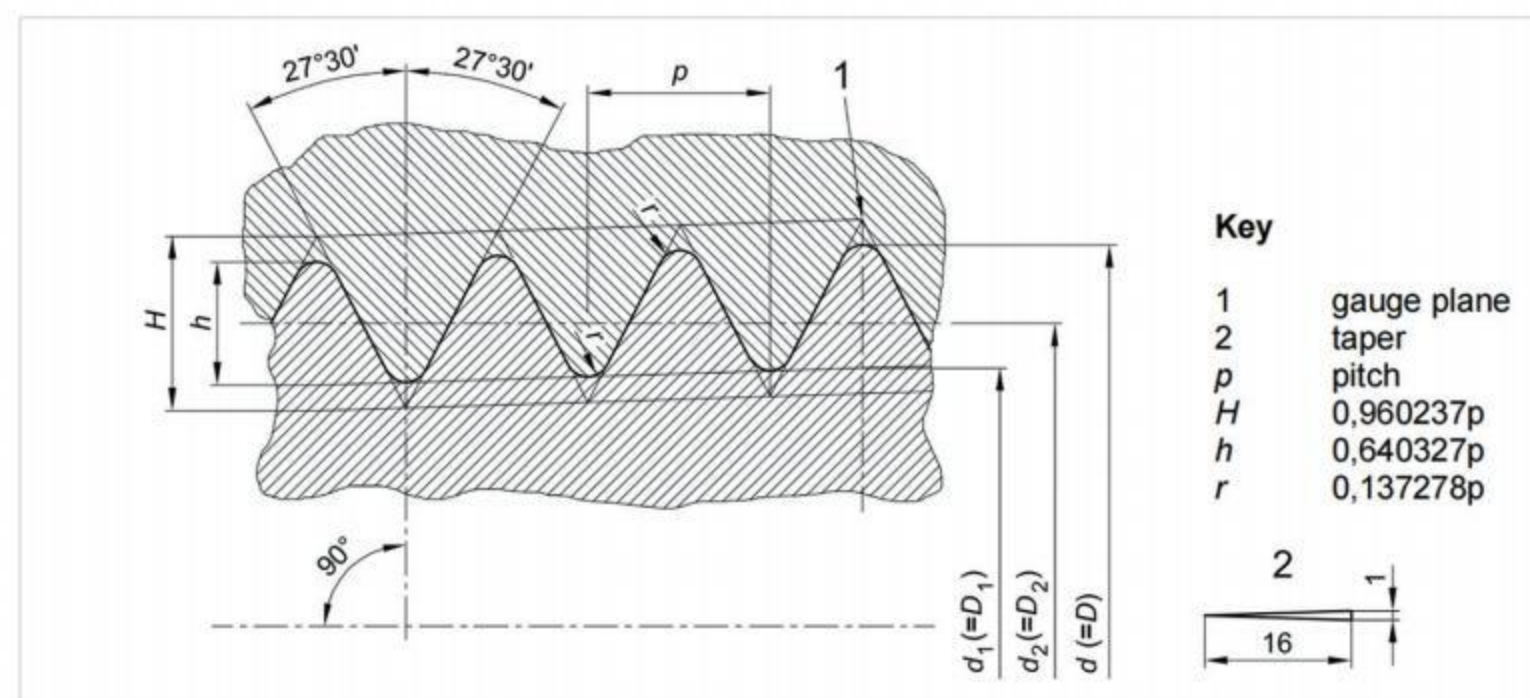


Figure 2 — Taper thread

4.5 Parallel thread

The basic form of the parallel pipe thread is as shown in figure 3. The angle between the flanks, measured in an axial plane section, is 55° . The thread profiles are rounded equally at crests and roots by circular arcs blending tangentially with the flanks.

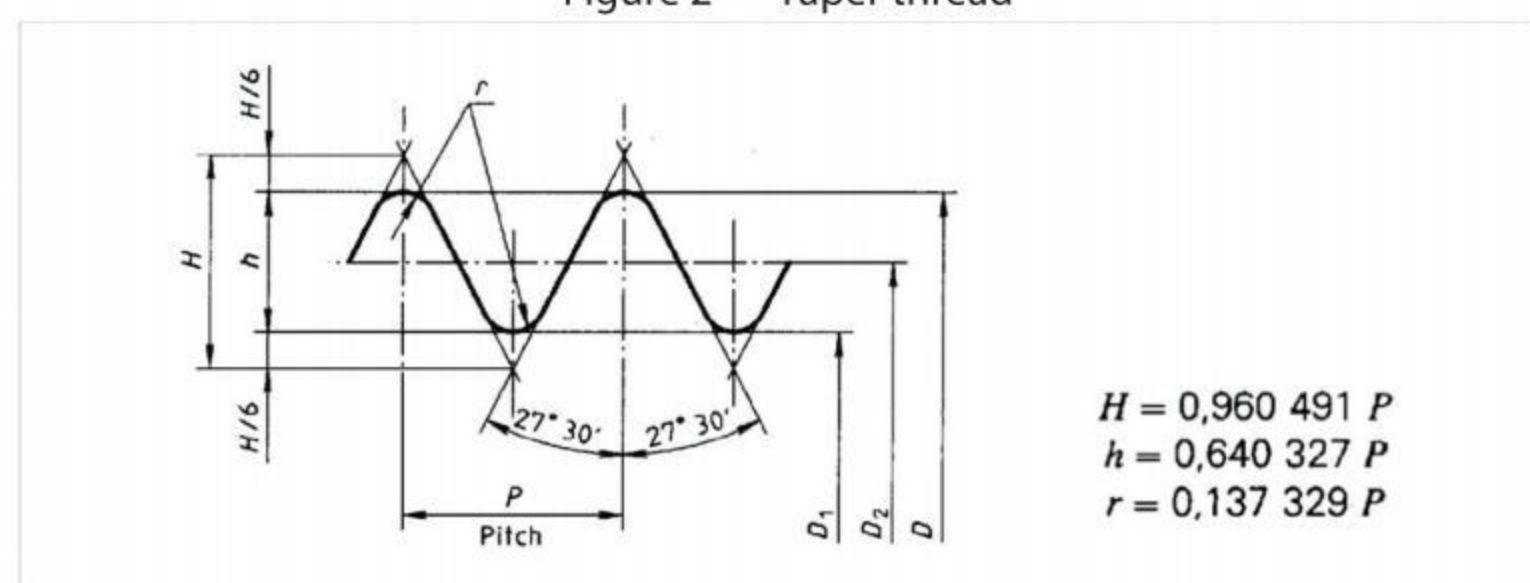


Figure 3 — Parallel thread

4.6 Thread lengths

4.6.1 External thread

The terms relating to the external taper pipe thread are given in figure 4.

The length of the useful thread, allowable in practice, is the sum of the lengths of the complete and incomplete threads, excluding the washout thread. The minimum length of the useful thread must be not less than the minimum gauge length plus the fitting allowance.

4.6.2 Internal thread

The design of internally threaded parts are such that they can receive external threads up to the lengths given in column 16 of table 4. The minimum lengths L_{min} of useful thread in the case of internal threads with free run-out shall be not less than 80 % of the values given in column 17 of table 4. (See figure 5.)

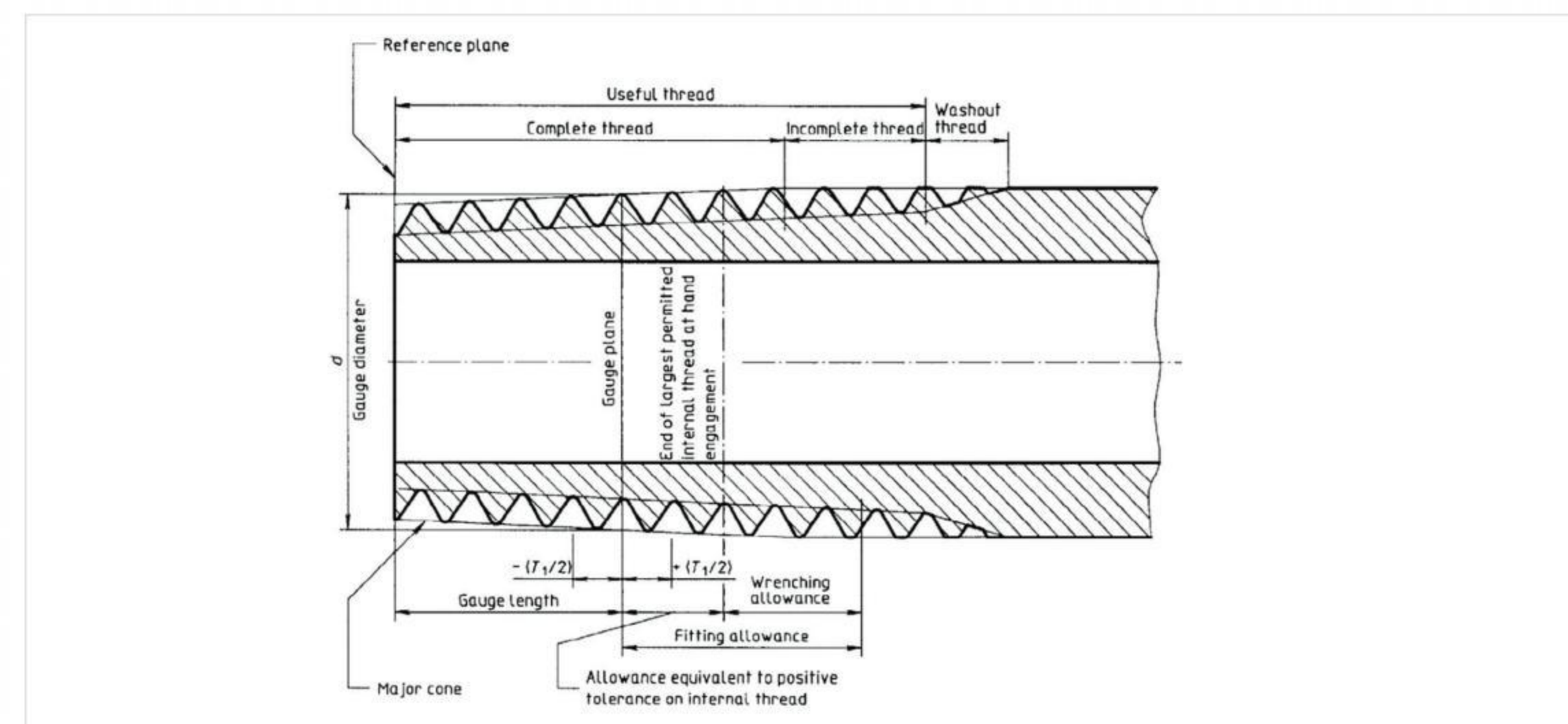


Figure 4 — Terms relating to external threads

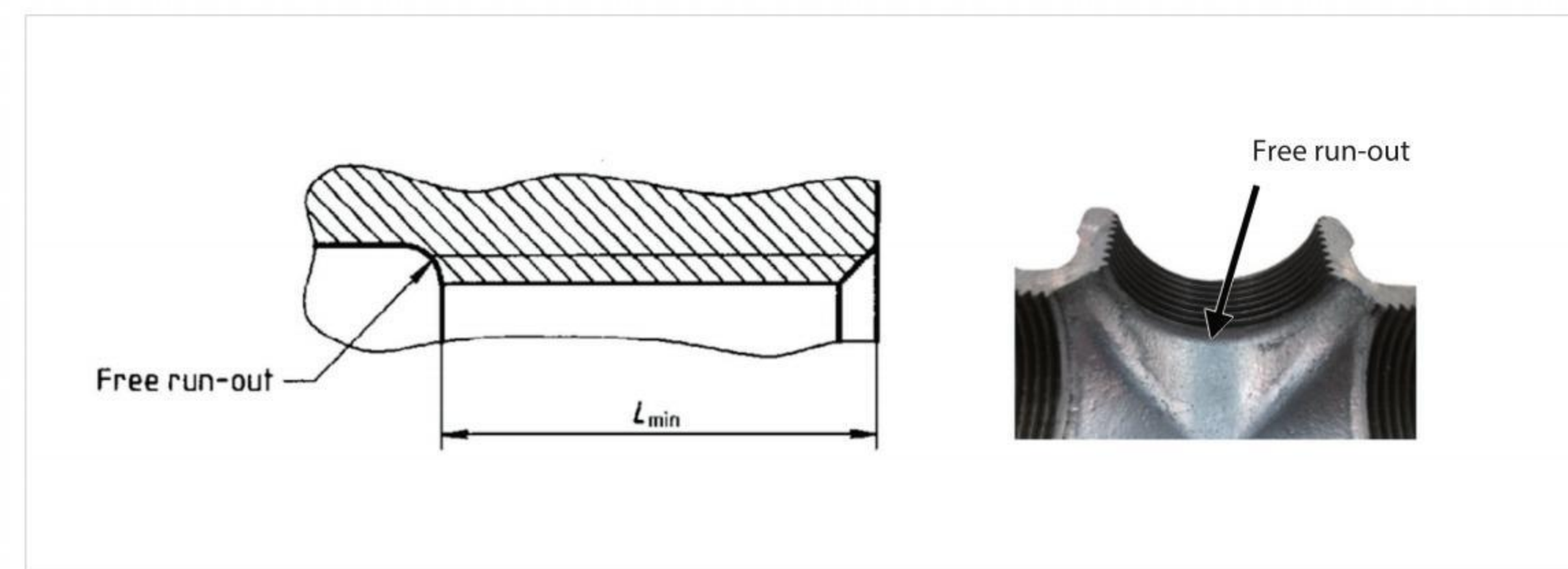


Figure 5 — Internal threads with free run-out

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Designation of thread size	Number of threads in 25.4mm	Pitch	Height of thread	Diameters at gauge plane			Gauge length (external thread)					Tolerance on position of gauge plane on internal thread			Length of useful external thread not less than			Fitting allowance		Diametral tolerance 1) on parallel internal threads
				Major (gauge diameter)	Pitch	Minor	Nominal	Tolerance ±T/2	max.	min.	Tolerance ±T/2	For nominal gauge length	For maximum gauge length	For minimum gauge length	Turns of thread	2)	Turns of thread			
																		2)	Turns of thread	
1/16	28	0.907	0.581	7.723	7.142	6.561	4	0.9	1	4.9	3.1	1.1	1 1/4	6.5	7.4	5.6	2.5	2 3/4	±0.071	
1/8	28	0.907	0.581	9.728	9.147	8.566	4	0.9	1	4.9	3.1	1.1	1 1/4	6.5	7.4	5.6	2.5	2 3/4	±0.071	
1/4	19	1.337	0.856	13.157	12.301	11.445	6	1.3	1	7.3	4.7	1.7	1 1/4	9.7	11	8.4	3.7	2 3/4	±0.104	
3/8	19	1.337	0.856	16.662	15.806	14.950	6.4	1.3	1	7.7	5.1	1.7	1 1/4	10.1	11.4	8.8	3.7	2 3/4	±0.104	
1/2	14	1.814	1.162	20.955	19.793	18.631	8.2	1.8	1	10.0	6.4	2.3	1 1/4	13.2	15	11.4	5.0	2 3/4	±0.142	
3/4	14	1.814	1.162	26.441	25.279	24.117	9.5	1.8	1	11.3	7.7	2.3	1 1/4	14.5	16.3	12.7	5.0	2 3/4	±0.142	
1	11	2.309	1.479	33.249	31.770	30.291	10.4	2.3	1	12.7	8.1	2.9	1 1/4	16.8	19.1	14.5	6.4	2 3/4	±0.180	
1 1/4	11	2.309	1.479	41.910	40.431	38.952	12.7	2.3	1	15.0	10.4	2.9	1 1/4	19.1	21.4	16.8	6.4	2 3/4	±0.180	
1 1/2	11	2.309	1.479	47.803	46.324	44.845	12.7	2.3	1	15.0	10.4	2.9	1 1/4	19.1	21.4	16.8	6.4	2 3/4	±0.180	
2	11	2.309	1.479	59.614	58.135	56.656	15.9	2.3	1	18.2	13.6	2.9	1 1/4	23.4	25.7	21.1	7.5	3 1/4	±0.180	
2 1/2	11	2.309	1.479	75.184	73.705	72.226	17.5	3.5	1 1/2	21.0	14.0	3.5	1 1/2	26.7	30.2	23.2	9.2	4	±0.216	
3	11	2.309	1.479	87.884	86.405	84.926	20.6	3.5	1 1/2	24.1	17.1	3.5	1 1/2	29.8	33.3	26.3	9.2	4	±0.216	
4	11	2.309	1.479	113.030	111.551	110.072	25.4	3.5	1 1/2	28.9	21.9	3.5	1 1/2	35.8	39.3	32.3	10.4	4 1/2	±0.216	
5	11	2.309	1.479	138.430	136.951	135.472	28.6	3.5	1 1/2	32.1	25.1	3.5	1 1/2	40.1	43.6	36.6	11.5	5	±0.216	
6	11	2.309	1.479	163.830	162.351	160.872	28.6	3.5	1 1/2	32.1	25.1	3.5	1 1/2	40.1	43.6	36.6	11.5	5	±0.216	

NOTE—The main dimensions were converted into mill metres on the basis of 1 inch=25.4mm, beginning with the number of threads per inch, which determines the pitch P, the formula $h(P \text{ the height of thread})=0.640327P$ and the major diameter at the gauge plane. Pitch diameter and minor diameter were then compiled by subtracting once or twice respectively the height of thread h from the major diameter.

The nominal gauge length, the tolerances and the fitting allowance were directly computed. The remaining lengths given in table 1 were obtained by subtracting or adding the tolerances or fitting allowance respectively to the nominal gauge length. Tolerances and fitting allowance are expressed in millimetres and in number of turns of thread.

1) For parallel internally threaded parts the diametral tolerances are derived from the tolerances in column 14 by multiplying with the corresponding pitch in column 3 and with 1/6 the amount of taper. Informative tolerances in millimetres are obtained from the mandatory values in turns of thread by multiplication with the corresponding pitch in column 3 and rounding to the nearest 0.1 mm.

TABLE 4 - THREAD DIMENSIONS

NOTE—The main dimensions were converted into millimetres on the basis of 1 inch=25.4mm, beginning with the number of threads per inch, which determines the pitch P, the formula h(the height of thread)=0.640327P and the major diameter at the gauge plane, Pitch diameter and minor diameter were then compiled by subtracting once or twice respectively the height of thread h from the major diameter.

The nominal gauge length, the tolerances and the fitting allowance were directly computed. The remaining lengths given in table 1 were obtained by subtracting or adding the tolerances or fitting allowance respectively to the nominal gauge length. Tolerances and fitting allowance are expressed in millimetres and in number of turns of thread.

1) For parallel internally threaded parts the diametral tolerances are derived from the tolerances in column 14 by multiplying with the corresponding pitch in column 3 and with 1/6, the amount of taper.

2) Informative tolerances in millimetres are obtained from the mandatory values in turns of thread by multiplying with the corresponding pitch in column 3 and rounding to the nearest 0.1mm.

5. LEAK TIGHTNESS TEST

One of the following methods will be used for testing all pressure containing fittings (after they have been machinized, but before they are protected by any other protective coating other than zinc coating). As a result of this testing, each fitting must not show any signs of leakage. To ensure the authenticity of the test results, all test equipment is equipped with a qualified monitoring pressure gauge:

a) by the application of an internal hydrostatic pressure of not less than 2 MPa, test requirements are refer to table 5;

TABLE 5 - TEST REQUIREMENTS

Pipe fittings dimensions (inch)	Test time (s)	Test result
1/8~2	≥15	Each fitting must not show any
2 1/2~6	≥60	signs of leakage or damage

b) by the application of an internal pneumatic pressure of not less than 0.5 MPa, whilst the fitting is completely immersed in water or light oil;

c) by other tests which ensure an equivalent quality.

All Jianzhi brand fittings are satisfy an internal pneumatic pressure tightness test of 0.6 MPa, without any signs of leakage.

6. GUIDE/INTRODUCTION

- 1.GB=Heavy Banded
- 2.QB=Medium Banded
- 3.YB=Banded
- 4.BLK=Black
- 5.GAL=Hot dip galvanized
- 6.EAL=Electro galvanized
- 7.9006=The code and the size of the pipe fittings

7. DESIGNATION OF SIZE

Example:

Reducing tee, 1 for 1-1/2" and 2 for 1-1/4" pipe and 3 for 1" pipe fittings

As shown in the figure:

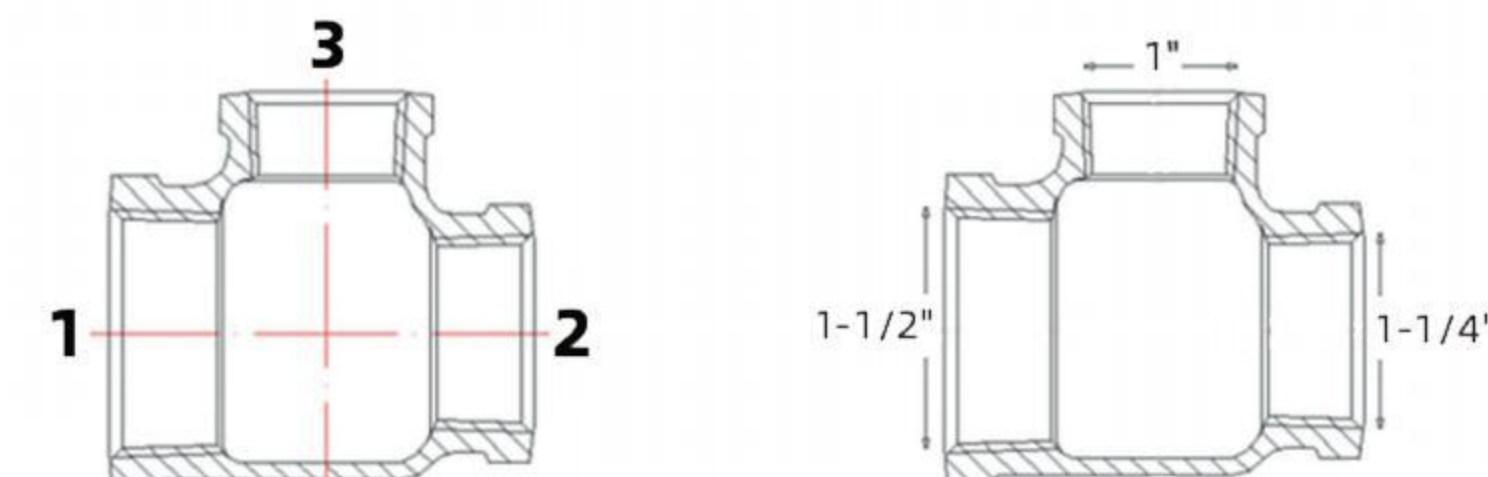




Fig.90

90° Elbow, Equal



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ9006	1/8"	6	18	30.38	31	600
JZ9008	1/4"	8	20	42.14	43	600
JZ9010	3/8"	10	24	60.76	62	500
JZ9015	1/2"	15	27	96.04	98	400
JZ9020	3/4"	20	32	139.16	142	210
JZ9025	1"	25	37	213.64	218	120
JZ9032	1 - 1/4"	32	44.5	340.06	347	64
JZ9040	1 - 1/2"	40	48.5	423.36	432	48
JZ9050	2"	50	57	674.24	688	32
JZ9065	2 - 1/2"	65	68.5	1068.2	1090	16
JZ9080	3"	80	77.5	1489.6	1520	10
JZ90100	4"	100	96.5	2700.88	2756	6
JZ90150	6"	150	129	6089.72	6214	2

Fig.92

90° M&F Elbow, Equal



Code	Size		A	B	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZ9208	1/4"	8	20	28	37.24	38	600
JZ9210	3/8"	10	25	33	54.88	56	500
JZ9215	1/2"	15	28	38	87.22	89	300
JZ9220	3/4"	20	33	44	132.3	135	180
JZ9225	1"	25	38	52	204.82	209	104
JZ9232	1-1/4"	32	45	60	339.08	346	60
JZ9240	1-1/2"	40	50	65	434.14	443	52
JZ9250	2"	50	58	74	701.68	716	26
JZ9265	2-1/2"	65	69	90	1125.04	1148	12
JZ9280	3"	80	77.5	100	1547.42	1579	10
JZ92100	4"	100	96.5	120	2703.82	2759	6

Fig.90R

90° Elbow, Reducing



Code	Size		A	B	Unit Weight		Packing		
	BSPT	DN			mm	mm	Black	Galv.	Carton
							g	g	Pcs/ctn
JZ90R1510	1/2" x 3/8"	15×10	25	25	74.48	76	270		
JZ90R2015	3/4" x 1/2"	20×15	29	30	122.5	125	270		
JZ90R2510	1 "x 3/8"	25×10	29	31	143.08	146	160		
JZ90R2515	1 "x 1/2"	25×15	31	33	161.7	165	160		
JZ90R2520	1 "x 3/4"	25×20	34	35	184.24	188	160		
JZ90R3210	1-1/4" x 1/2"	32×10	31	36	213.64	218	100		
JZ90R3215	1-1/4" x 1/2"	32×15	34	37	227.36	232	100		
JZ90R3220	1-1/4" x 3/4"	32×20	36	40	252.84	258	100		
JZ90R3225	1-1/4" x 1"	32×25	40	41	285.18	291	90		
JZ90R4015	1-1/2" x 1/2"	40×15	35	41	266.56	272	90		
JZ90R4020	1-1/2" x 3/4"	40×20	37	43	302.82	309	90		
JZ90R4025	1-1/2" x 1"	40×25	41	45	342.02	349	70		
JZ90R4032	1-1/2" x 1-1/4"	40×32	45	47	400.82	409	56		
JZ90R5015	2 "x 1/2"	50×15	37	47	398.86	407	68		
JZ90R5020	2 "x 3/4"	50×20	40	49	423.36	432	52		
JZ90R5025	2"x 1"	50×25	43	51	476.28	486	50		
JZ90R5032	2 "x 1-1/4"	50×32	47	53	552.72	564	40		
JZ90R5040	2 "x 1-1/2"	50×40	51	54	588	600	30		
JZ90R6515	2-1/2" x 1/2"	65×15	40.5	56	579.18	591	46		
JZ90R6520	2-1/2" x 3/4"	65×20	43.5	57	613.48	626	40		
JZ90R6525	2-1/2" x 1"	65×25	47.5	59	686	700	34		
JZ90R6532	2-1/2 "x 1-1/4"	65×32	51.5	61	732.06	747	30		
JZ90R6540	2-1/2 "x 1-1/2"	65×40	54.5	61	772.24	788	26		
JZ90R6550	2-1/2" x 2"	65×50	59.5	64	904.54	923	24		
JZ90R8015	3 "x 1/2"	80×15	42.5	64	735.98	751	36		
JZ90R8020	3 "x 3/4"	80×20	45.5	65	770.28	786	30		
JZ90R8025	3 "x 1"	80×25	49.5	67	830.06	847	20		
JZ90R8032	3 "x 1-1/4"	80×32	54.5	69	931.98	951	20		
JZ90R8040	3 "x 1-1/2"	80×40	57.5	71	952.56	972	20		
JZ90R8050	3 "x 2"	80×50	61.5	71	1166.2	1190	12		
JZ90R8065	3 "x 2-1/2"	80×65	71.5	74	1319.08	1346	12		
JZ90R10015	4 "x 1/2"	100×15	49.5	78	1311.24	1338	14		
JZ90R10020	4 "x3/4"	100×20	53.5	79	1326.92	1354	14		
JZ90R10025	4 "x 1"	100×25	56.5	82	1405.32	1434	14		
JZ90R10032	4 "x 1-1/4"	100×32	60.5	85	1550.36	1582	14		
JZ90R10040	4 "x 1-1/2"	100×40	62.5	85	1621.9	1655	10		
JZ90R10050	4 "x 2"	100×50	68.5	86	1711.08	1746	10		
JZ90R10065	4 "x 2-1/2"	100×65	77.5	89	1957.06	1997	8		
JZ90R10080	4 "x 3"	100×80	82.5	90	2164.82	2209	8		

Fig.120

45° Elbow



Code	Size		A mm	Unit Weight		Packing Carton Pcs/ctn
	BSPT	DN		Black	Galv.	
				g	g	
JZ12008	1/4"	8	18	46.06	47	500
JZ12010	3/8"	10	20	56.84	58	500
JZ12015	1/2"	15	22	91.14	93	400
JZ12020	3/4"	20	25	131.32	134	240
JZ12025	1"	25	28	196.98	201	140
JZ12032	1-1/4"	32	33	315.56	322	96
JZ12040	1-1/2"	40	36	392	400	72
JZ12050	2"	50	43	646.8	660	36
JZ12065	2-1/2"	65	48.5	933.94	953	20
JZ12080	3"	80	53.5	1274	1300	12
JZ120100	4"	100	64.5	2164.82	2209	6
JZ120150	6"	150	129	4738.3	4835	4

Fig.1

90° M&F Long Sweep Bend



Code	Size		A mm	B mm	Unit Weight		Packing Carton Pcs/ctn
	BSPT	DN			Black	Galv.	
					g	g	
JZ110	3/8"	10	48	42	71.54	73	400
JZ115	1/2"	15	55	48	115.64	118	280
JZ120	3/4"	20	69	60	187.18	191	150
JZ125	1"	25	85	75	304.78	311	80
JZ132	1-1/4"	32	105	95	519.4	530	50
JZ140	1-1/2"	40	116	105	665.42	679	24
JZ150	2"	50	140	130	1123.08	1146	12
JZ165	2-1/2"	65	176	165	2067.8	2110	8
JZ180	3"	80	205	190	2955.68	3016	6
JZ1100	4"	100	260	245	5396.86	5507	2

Fig.2

90° Female Long Sweep Bend



Code	Size		A mm	Unit Weight		Packing Carton Pcs/ctn
	BSPT	DN		Black	Galv.	
				g	g	
JZ210	3/8"	10	48	87.22	89	400
JZ215	1/2"	15	55	142.1	145	220
JZ220	3/4"	20	69	223.44	228	120
JZ225	1"	25	85	372.4	380	70
JZ232	1-1/4"	32	105	607.6	620	40
JZ240	1-1/2"	40	116	807.52	824	20
JZ250	2"	50	140	1268.12	1294	12
JZ265	2-1/2"	65	176	2243.22	2289	8
JZ280	3"	80	205	3234	3300	6
JZ2100	4"	100	260	6056.4	6180	2

Fig.40

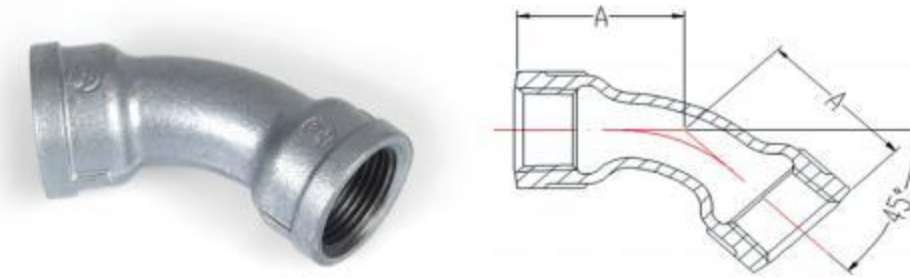
45° M&F Short Sweep Bend



Code	Size		A mm	B mm	Unit Weight		Packing Carton Pcs/ctn
	BSPT	DN			Black	Galv.	
					g	g	
JZ4015	1/2"	15	36	30	87	88	180
JZ4020	3/4"	20	43	36	88	144	160
JZ4025	1"	25	51	42	89	224	80
JZ4032	1-1/4"	32	64	54	90	362	50
JZ4040	1-1/2"	40	68	58	91	450	24
JZ4050	2"	50	81	70	92	752	12
JZ4065	2-1/2"	65	99	86	93	1344	8
JZ4080	3"	80	113	100	94	1963	6
JZ40100	4"	100	142	126			2

Fig.41

45 Degree Female Short Sweep Bends



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ4115	1/2"	15	36	119.56	122	180
JZ4120	3/4"	20	43	180.32	184	160
JZ4125	1"	25	51	286.16	292	80
JZ4132	1-1/4"	32	64	461.58	471	50
JZ4140	1-1/2"	40	68			24
JZ4150	2"	50	81			12
JZ4165	2-1/2"	65	99			8
JZ4180	3"	80	113			6
JZ41100	4"	100	142			2

Fig.220

Part Thread Socket



Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ22006	1/8"	6	23.5	/	/	/
JZ22008	1/4"	8	26	36.26	37	800
JZ22010	3/8"	10	29	46.06	47	700
JZ22015	1/2"	15	35	80.36	82	450
JZ22020	3/4"	20	38	113.68	116	300
JZ22025	1"	25	44	176.4	180	180
JZ22032	1-1/4"	32	49	264.6	270	120
JZ22040	1-1/2"	40	53	319.48	326	72
JZ22050	2"	50	63	543.9	555	48
JZ22065	2-1/2"	65	72	825.16	842	32
JZ22080	3"	80	77.5	1003.52	1024	24
JZ220100	4"	100	91.5	1702.26	1737	10
JZ220150	6"	150	118	3776.92	3854	4

Fig.270

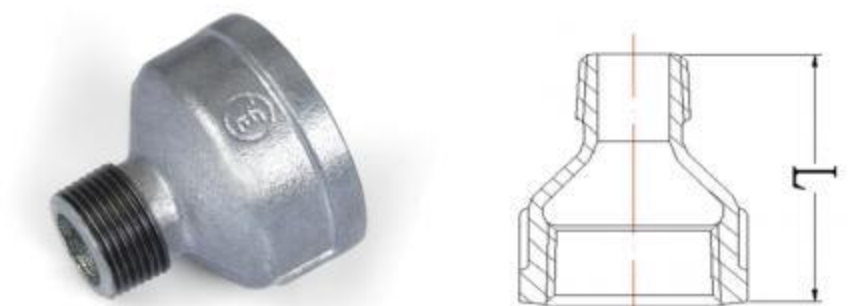
Entire Thread Socket



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ27008	1/4"	8	26	38.22	39	800
JZ27010	3/8"	10	29	48.02	49	700
JZ27015	1/2"	15	35	82.32	84	450
JZ27020	3/4"	20	38	115.64	118	300
JZ27025	1"	25	44	178.36	182	180
JZ27032	1-1/4"	32	49	263.62	269	120
JZ27040	1-1/2"	40	53	338.1	345	72
JZ27050	2"	50	63	583.1	595	48
JZ27065	2-1/2"	65	72	822.22	839	32
JZ27080	3"	80	77.5	1065.26	1087	24
JZ270100	4"	100	91.5	1774.78	1811	10
JZ270150	6"	150	118	3789.66	3867	4

Fig.246

Socket Reducing, M&F



Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ2462015	3/4 "x 1/2"	20X15	47	93.1	95	380
JZ2462515	1" x 1/2"	25X15	54	132.3	135	180
JZ2462520	1 "x 3/4"	25X20	54	143.08	146	180
JZ2463220	1-1/4" x 3/4"	32X20	59	202.86	207	120
JZ2463225	1-1/4" x 1"	32X25	59	213.64	218	120
JZ2464020	1-1/2" x 3/4"	40X20	62	252.84	258	80
JZ2464025	1-1/2" x 1"	40X25	62	266.56	272	80
JZ2464032	1-1/2" x 1-1/4"	40X32	62	288.12	294	80
JZ2465025	2 "x 1"	50X25	69	397.88	406	48
JZ2465032	2 "x 1-1/4"	50X32	69	425.32	434	48
JZ2465040	2" x 1-1/2"	50X40	69	429.24	438	48

Fig.240

Socket, Reducing



Code	Size		A	Unit Weight		Packing
	BSPT	DN		Black	Galv.	Carton
				g	g	Pcs/ctn
JZ240108	3/8" x 1/4"	10×8	29	42	43	500
JZ240158	1/2" x 1/4"	15×8	35	66	67	500
JZ2401510	1/2" x 3/8"	15×10	36	69	70	500
JZ240208	3/4 "x 1/4"	20×8	38	86	88	360
JZ2402010	3/4 "x 3/8"	20×10	38	91	93	360
JZ2402515	3/4 "x 1/2"	20×15	38	105	107	360
JZ240258	1" x 1/4"	25×8	44	132	135	200
JZ2402510	1" x 3/8"	25×10	44	128	131	200
JZ2402515	1" x 1/2"	25×15	44	142	145	200
JZ2402520	1 "x 3/4"	25×20	44	150	153	200
JZ2403215	1-1/4" x 1/2"	32×15	49	203	207	144
JZ2403220	1-1/4" x 3/4"	32×20	49	214	218	144
JZ2403225	1-1/4" x 1"	32×25	49	225	230	120
JZ2404015	1-1/2" x 1/2"	40×15	53	247	252	140
JZ2404020	1-1/2" x 3/4"	40×20	53	254	259	140
JZ2404025	1-1/2" x 1"	40×25	53	277	283	120
JZ2404032	1-1/2" x 1-1/4"	40×32	53	312	318	100
JZ2405015	2 "x 1/2"	50×15	63	392	400	80
JZ2405020	2 "x 3/4"	50×20	63	406	414	80
JZ2405025	2 "x 1"	50×25	63	414	422	72
JZ2405032	2 "x 1-1/4"	50×32	63	435	444	72
JZ2405040	2" x 1-1/2"	50×40	63	475	485	48
JZ2406515	2-1/2" x 1/2"	65×15	72	568	580	60
JZ2406520	2-1/2" x 3/4"	65×20	72	578	590	60
JZ2406525	2-1/2" x 1"	65×25	72	594	606	60
JZ2406532	2-1/2" x 1-1/4"	65×32	72	614	627	60
JZ2406540	2-1/2" x 1-1/2"	65×40	72	634	647	60
JZ2406550	2-1/2" x 2"	65×50	72	713	728	40
JZ2408015	3 "x 1/2"	80×15	77.5	699	713	40
JZ2408020	3 "x 3/4"	80×20	77.5	735	750	40
JZ2408025	3 "x 1"	80×25	77.5	747	762	40
JZ2408032	3 "x 1-1/4"	80×32	77.5	764	780	40
JZ2408040	3 "x 1-1/2"	80×40	77.5	785	801	40
JZ2408050	3 "x 2"	80×50	77.5	839	856	36
JZ2408065	3 "x 2-1/2"	80×65	77.5	860	878	24
JZ24010015	4 "x 1/2"	100×15	91.5	1139	1162	20
JZ24010020	4 "x 3/4"	100×20	91.5	1223	1248	20
JZ24010025	4 "x 1"	100×25	91.5	1233	1258	20
JZ24010032	4"x 1-1/4"	100×32	91.5	1279	1305	20
JZ24010040	4 "x 1-1/2"	100×40	91.5	1294	1320	20
JZ24010050	4 "x 2"	100×50	91.5	1326	1353	16
JZ24010065	4" x 2-1/2"	100×65	91.5	1378	1406	14
JZ24010080	4 "x 3"	100×80	91.5	1438	1467	12
JZ24015080	6"x4"	150×80	118			

Fig.529a

Socket M&F



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ529A15	1/2"	15	44	56.8	58	600
JZ529A20	3/4"	20	45	89.2	91	380
JZ529A25	1"	25	52	137.2	140	180
JZ529A32	1-1/4"	32	57	198.0	202	120
JZ529A40	1-1/2"	40	60	249.9	255	80
JZ529A50	2"	50	66	384.2	392	48

Fig.280

Hexagon Nipple



Code	Size		L	S	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZ2808	1/4"	8	36	16.7	29.4	30	1000
JZ28010	3/8"	10	36	19.8	30.38	31	1000
JZ28015	1/2"	15	44	23.6	55.86	57	600
JZ28020	3/4"	20	47	29.2	84.28	86	300
JZ28025	1"	25	53	36	134.26	137	200
JZ28032	1-1/4"	32	56	45	186.2	190	140
JZ28040	1-1/2"	40	58	51	227.36	232	104
JZ28050	2"	50	68	63	365.54	373	56
JZ28065	2-1/2"	65	73	79.4	543.9	555	36
JZ28080	3"	80	81	91.6	768.32	784	24
JZ280100	4"	100	95	117	1237.74	1263	12
JZ280150	6"	150	107	170			

Fig.245

Nipple, Reducing



Code	Size		L mm	S mm	Unit Weight		PCS/ CTN.
					Black	Galv.	
	BSPT	DN			g	g	
JZ245158	1/2" x 1/4"	15x8	44	22	47.04	48	600
JZ2451510	1/2" x 3/8"	15x10	44	22	59.78	61	600
JZ2452015	3/4" x 1/2"	20x15	47	29.9	91.14	93	400
JZ2452515	1" x 1/2"	25x15	53	35.8	115.64	118	260
JZ2452520	1" x 3/4"	25x20	53	35.8	137.2	140	240
JZ2453215	1-1/4" x 1/2"	32x15	57	45.6	177.38	181	160
JZ2453220	1-1/4" x 3/4"	32x20	57	45.6	181.3	185	140
JZ2453225	1-1/4" x 1"	32x25	57	45.6	192.08	196	140
JZ2454015	1-1/2" x 1/2"	40x15	59	50.5	202.86	207	130
JZ2454020	1-1/2" x 3/4"	40x20	59	50.5	207.76	212	130
JZ2454025	1-1/2" x 1"	40x25	59	50.5	225.4	230	120
JZ2454032	1-1/2" x 1-1/4"	40x32	59	50.5	235.2	240	100
JZ2455015	2" x 1/2"	50x15	68	63.5	323.4	330	75
JZ2455020	2" x 3/4"	50x20	68	63.5	334.18	341	72
JZ2455025	2" x 1"	50x25	68	63.5	343	350	72
JZ2455032	2" x 1-1/4"	50x32	68	63.5	352.8	360	72
JZ2455040	2" x 1-1/2"	50x40	68	63.5	366.52	374	60
JZ2456550	2-1/2" x 2"	65x50	73	79.4			
JZ2458050	3" x 2"	80x50	81	91.6	749.7	765	24
JZ2458065	3" x 2-1/2"	80x65	81	91.6			
JZ24510050	4" x 2"	100x50	95	117			
JZ24510065	4" x 2-1/2"	100x65	95	117			
JZ24510080	4" x 3"	100x80	95	117			

Fig.130

Tee, Equal



Code	Size		A mm	Unit Weight		Packing Carton Pcs/ctn
				Black	Galv.	
	BSPT	DN		g	g	
JZ1306	1/8"	6	18	44.1	45	400
JZ1308	1/4"	8	20	63.7	65	400
JZ13010	3/8"	10	24	88.2	90	300
JZ13015	1/2"	15	27	137.2	140	240
JZ13020	3/4"	20	32	198.94	203	140
JZ13025	1"	25	37	308.7	315	90
JZ13032	1-1/4"	32	44.5	479.22	489	56
JZ13040	1-1/2"	40	48.5	600.74	613	40
JZ13050	2"	50	57	977.06	997	20
JZ13065	2-1/2"	65	68.5	1520.96	1552	12
JZ13080	3"	80	77.5	2045.26	2087	10
JZ130100	4"	100	96.5	3589.74	3663	4
JZ130150	6"	150	129	8157.52	8324	2

Fig.130R

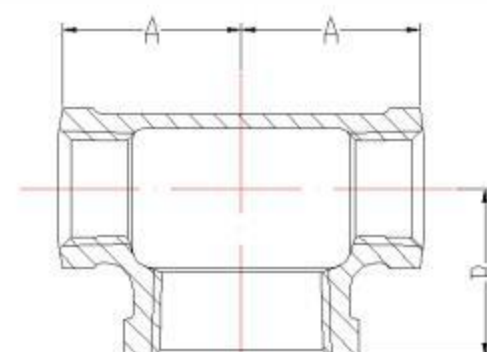
Tee, Reducing



Code	Size		A mm	B mm	Unit Weight		Packing Carton Pcs/ctn
					Black	Galv.	
	BSPT	DN			g	g	
JZ130R2015	3/4" x 1/2"	20x15	29	30	180.32	184	150
JZ130R2510	1" x 3/8"	25x10	29	31	225.4	230	100
JZ130R2515	1" x 1/2"	25x15	31	33	238.14	243	100
JZ130R2520	1" x 3/4"	25x20	34	35	261.66	267	100
JZ130R3210	1-1/4" x 3/8"	32x10	31	36	309.68	316	64
JZ130R3215	1-1/4" x 1/2"	32x15	34	37	341.04	348	64
JZ130R3220	1-1/4" x 3/4"	32x20	36	40	371.42	379	64
JZ130R3225	1-1/4" x 1"	32x25	40	41	407.68	416	64
JZ130R4015	1-1/2" x 1/2"	40x15	35	41	406.7	415	52
JZ130R4020	1-1/2" x 3/4"	40x20	37	43	427.28	436	52
JZ130R4025	1-1/2" x 1"	40x25	41	45	481.18	491	42
JZ130R4032	1-1/2" x 1-1/4"	40x32	45	47	557.62	569	42
JZ130R5015	2" x 1/2"	50x15	37	47	589.96	602	40
JZ130R5020	2" x 3/4"	50x20	40	49	642.88	656	40
JZ130R5025	2" x 1"	50x25	43	51	687.96	702	30
JZ130R5032	2" x 1-1/4"	50x32	47	53	750.68	766	30
JZ130R5040	2" x 1-1/2"	50x40	51	54	826.14	843	24
JZ130R6515	2-1/2" x 1/2"	65x15	40.5	56	887.88	906	24
JZ130R6520	2-1/2" x 3/4"	65x20	43.5	57	919.24	938	24
JZ130R6525	2-1/2" x 1"	65x25	47.5	59	1017.24	1038	20
JZ130R6532	2-1/2" x 1-1/4"	65x32	51.5	61	1075.06	1097	16
JZ130R6540	2-1/2" x 1-1/2"	65x40	54.5	61	1145.62	1169	16
JZ130R6550	2-1/2" x 2"	65x50	59.5	64	1294.58	1321	16
JZ130R8015	3" x 1/2"	80x15	42.5	64	1114.26	1137	12
JZ130R8020	3" x 3/4"	80x20	45.5	65	1174.04	1198	12
JZ130R8025	3" x 1"	80x25	49.5	67	1267.14	1293	12
JZ130R8032	3" x 1-1/4"	80x32	54.5	69	1342.6	1370	12
JZ130R8040	3" x 1-1/2"	80x40	57.5	71	1440.6	1470	12
JZ130R8050	3" x 2"	80x50	61.5	71	1589.56	1622	10
JZ130R8065	3" x 2-1/2"	80x65	71.5	74	1862	1900	10
JZ130R10015	4" x 1/2"	100x15	49.5	78	1915.9	1955	8
JZ130R10020	4" x 3/4"	100x20	53.5	79	2038.4	2080	8
JZ130R10025	4" x 1"	100x25	56.5	82	2100.14	2143	8
JZ130R10032	4" x 1-1/4"	100x32	60.5	85	2214.8	2260	6
JZ130R10040	4" x 1-1/2"	100x40	62.5	85	2303.98	2351	6
JZ130R10050	4" x 2"	100x50	68.5	86	2558.78	2611	6
JZ130R10065	4" x 2-1/2"	100x65	77.5	89	2799.86	2857	6
JZ130R10080	4" x 3"	100x80	82.5	90	3138.94	3203	6

Fig.131R

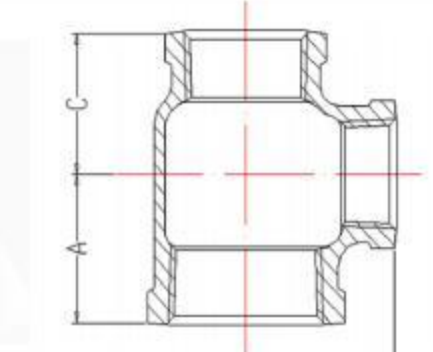
Tee Reducing



Code	Size		A	B	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZGAL131R1520	1/2"×3/4"	15×20	30	29	163	163	120
JZGAL131R1525	1/2"×1"	15×25	33	31	203	203	120
JZGAL131R2025	3/4"×1"	20×25	35	34	239	249	80
JZGAL131R2032	3/4"×1¼"	20×32	40	36	293	309	60
JZGAL131R2532	1"×1¼"	25×32	41	40	363	366	60
JZGAL131R2540	1"×1½"	25×40	45	41	415	422	40
JZGAL131R2550	1"×2"	25×50	51	43	551	553	32
JZGAL131R3240	1¼"×1½"	32×40	47	45	525	525	36
JZGAL131R3250	1¼"×2"	32×50	53	47	655	663	28
JZGAL131R4050	1½"×2"	40×50	54	51	726	720	20
JZGAL131R4065	1½"×2½"	40×65	61	54.5	897	950	16
JZGAL131R4080	1½"×3"	40×80	71	57.5	1078	1120	12
JZGAL131R5065	2"×2½"	50×65	63	58	1046	1064	16
JZGAL131R5080	2"×3"	50×80	71	61.5	1364	1384	10
JZGAL131R6580	2½"×3"	65×80	74	71.5	1656	1688	10
JZGAL131R80100	3"×4"	80×100	90	82.5	2582	2766	6

Fig.131R

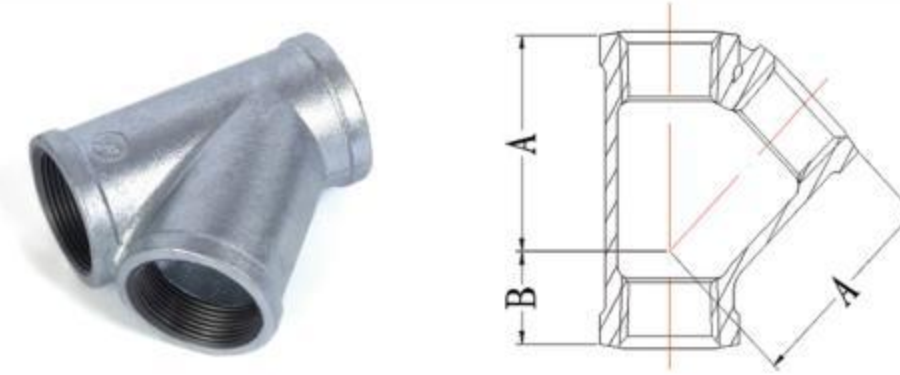
Tee Reducing



Code	Size		A	B	C	Unit Weight		Packing
						Black	Galv.	Carton
	BSPT	DN				mm	mm	mm
JZ131R201515	3/4" x1/2" x1/2"	20x15x15	29	30	27	159.74	163	120
JZ131R251520	1" x1/2" x3/4"	25x15x20	31	33	29	191.1	195	120
JZ131R252020	1" x3/4" x3/4"	25x20x20	34	35	32	157.78	161	120
JZ131R321525	1-1/4" x1/2" x1"	32x15x25	33	37	31	234.22	239	80
JZ131R322025	1-1/4" x3/4" x1"	32x20x25	36	40	34	287.14	293	60
JZ131R322525	1-1/4" x1" x1"	32x25x25	39	40	36	355.74	363	60
JZ131R323225	1-1/4" x1-1/4" x1"	32x32x25	44.5	44.5	41	406.7	415	40
JZ131R401532	1-1/2" x1/2" x1-1/4"	40x15x32	35	41	33	539.98	551	32
JZ131R402032	1-1/2" x3/4" x1-1/4"	40x20x32	37	43	36	514.5	525	36
JZ131R402525	1-1/2" x1" x1"	40x25x25	40	44	36	641.9	655	28
JZ131R402532	1-1/2" x1" x1-1/4"	40x25x32	41	45	40	711.48	726	20
JZ131R403225	1-1/2" x1-1/4" x1"	40x32x25	45	47	41	879.06	897	16
JZ131R403232	1-1/2" x1-1/4"x1-1/4"	40x32x32	45	47	44.5	1056.44	1078	12
JZ131R404025	1-1/2" x1-1/2" x1"	40x40x25	48.5	48.5	45	1025.08	1046	16
JZ131R405032	1-1/2" x2" x1-1/4"	40x50x32	54	51	53	1336.72	1364	10
JZ131R501540	2" x1/2" x1-1/2"	50x15x40	37	47	35	1622.88	1656	10
JZ131R502040	2" x3/4" x1-1/2"	50x20x40	40	49	37	2530.36	2582	6
JZ131R502532	2" x1" x1-1/4"	50x25x32	43	51	40	299.88	306	64
JZ131R502540	2" x1" x1-1/2"	50x25x40	42	49	40	344.96	352	68
JZ131R503232	2" x1-1/4" x1-1/4"	50x32x32	47	53	44.5	392	400	60
JZ131R503240	2" x1-1/4" x1-1/2"	50x32x40	47	53	45	491.96	502	40
JZ131R504025	2" x1-1/2" x1"	50x40x25	51	54	45	377.3	385	42
JZ131R504040	2" x1-1/2" x1-1/2"	50x40x40	51	54	48.5	406.7	415	40
JZ131R505025	2" x2" x1"	50x50x25	57	57	51	451.78	461	40
JZ131R651550	2-1/2" x1/2" x2"	65x15x50	40.5	56	37	534.1	545	36
JZ131R652050	2-1/2" x3/4" x2"	65x20x50	43.5	57	40	620.34	633	30
JZ131R652550	2-1/2" x1" x2"	65x25x50	45	58	42	702.66	717	24
JZ131R653240	2-1/2" x1-1/4"x1-1/2"	65x32x40	51.5	61	45	599.76	612	30
JZ131R653250	2-1/2" x1-1/4" x2"	65x32x50	51.5	61	47	673.26	687	30
JZ131R654050	2-1/2" x1-1/2" x2"	65x40x50	54.5	62	51	525.28	536	36
JZ131R655050	2-1/2" x2" x2"	65x50x50	59.5	64	57	525.28	536	36
JZ131R802565	3" x1" x2-1/2"	80x25x65	49.5	67	47.5	525.28	536	36
JZ131R803265	3" x1-1/4" x2-1/2"	80x32x65	54.5	69	51.5	552.72	564	24
JZ131R804065	3" x1-1/2" x2-1/2"	80x40x65	57.5	71	54.5	562.52	574	24
JZ131R805065	3" x2" x2-1/2"	80x50x65	61.5	71	59.5	705.6	720	16
JZ131R806565	3" x2-1/2" x2-1/2"	80x65x65	71.5	74	68.5	754.6	770	16

Fig.165

Lateral Y Branch 45° Tee



Code	Size		A	B	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZ16515	1/2"	15	42	18	161.7	165	240
JZ16520	3/4"	20	51.5	18.5	244.02	249	100
JZ16525	1"	25	62	23	375.34	383	80
JZ16532	1 - 1/4"	32	75	28	595.84	608	40
JZ16540	1 - 1/2"	40	82	30	743.82	759	30
JZ16550	2"	50	100.5	32.5	1189.72	1214	16
JZ16565	2 - 1/2"	65	125	39	1935.5	1975	10
JZ16580	3"	80	140	45	2651.88	2706	8
JZ165100	4"	100	180	55	4817.68	4916	2

Fig.180

Cross Female



Code	Size		A	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN	mm	g	g	Pcs/ctn
JZ18015	1/2"	15	27	167	170	180
JZ18020	3/4"	20	32	246	251	96
JZ18025	1"	25	37	380	388	72
JZ18032	1-1/4"	32	44.5	576	588	36
JZ18040	1-1/2"	40	48.5	712	727	30
JZ18050	2"	50	57	1147	1170	12
JZ18065	2-1/2"	65	68.5	1740	1776	10
JZ18080	3"	80	77.5	2478	2529	6
JZ180100	4"	100	96.5	4211	4297	2

Fig.180R

Cross, Female, Reducing



Code	Size		A	B	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZ180R2015	3/4 "x 1/2"	20×15	29	30	199	203	120
JZ180R2515	1" x 1/2"	25×15	31	33	261	266	96
JZ180R2520	1 "x 3/4"	25×20	34	35	310	316	80
JZ180R3215	1-1/4" x 1/2"	32×15	34	37	365	372	64
JZ180R3220	1-1/4" x 3/4"	32×20	36	40	407	415	60
JZ180R3225	1-1/4" x 1"	32×25	40	41	460	469	56
JZ180R4015	1-1/2" x 1/2"	40×15	35	41	414	422	52
JZ180R4020	1-1/2" x 3/4"	40×20	37	43	473	483	52
JZ180R4025	1-1/2" x 1"	40×25	41	45	522	533	42
JZ180R4032	1-1/2" x 1-1/4"	40×32	45	47	646	659	34
JZ180R5015	2 "x 1/2"	50×15	37	47	616	629	36
JZ180R5020	2 "x 3/4"	50×20	40	49	674	688	36
JZ180R5025	2 "x 1"	50×25	43	51	743	758	28
JZ180R5032	2 "x 1-1/4"	50×32	47	53	832	849	28
JZ180R5040	2" x 1-1/2"	50×40	51	54	901	919	20
JZ180R6515	2-1/2" x 1/2"	65×15	40.5	56	878	896	20
JZ180R6520	2-1/2" x 3/4"	65×20	43.5	57	950	969	20
JZ180R6525	2-1/2" x 1"	65×25	47.5	59	1035	1056	18
JZ180R6532	2-1/2" x 1-1/4"	65×32	51.5	61	1174	1198	16
JZ180R6540	2-1/2" x 1-1/2"	65×40	54.5	61	1201	1225	14
JZ180R6550	2-1/2" x 2"	65×50	59.5	64	1438	1467	10
JZ180R8015	3 "x 1/2"	80×15	42.5	64	1107	1130	12
JZ180R8020	3 "x3/4"	80×20	45.5	65	1155	1179	12
JZ180R8025	3 "x 1"	80×25	49.5	67	1290	1316	12
JZ180R8032	3 "x 1-1/4"	80×32	54.5	69	1438	1467	12
JZ180R8040	3 "x 1-1/2"	80×40	57.5	71	1560	1592	10
JZ180R8050	3 "x 2"	80×50	61.5	71	1695	1730	10
JZ180R8065	3 "x 2-1/2"	80×65	71.5	74	1981	2021	8
JZ180R10015	4 "x 1/2"	100×15	49.5	78	1826	1863	6
JZ180R10020	4 "x 3/4"	100×20	53.5	79	1886	1924	6
JZ180R10025	4 "x 1"	100×25	56.5	82	2025	2066	6
JZ180R10032	4 "x 1-1/4"	100×32	60.5	85	2264	2310	6
JZ180R10040	4 "x 1-1/2"	100×40	62.5	85	2288	2335	4
JZ180R10050	4 "x 2"	100×50	68.5	86	2529	2581	4
JZ180R10065	4" x 2-1/2"	100×65	77.5	89	2819	2877	4
JZ180R10080	4 "x 3"	100×80	82.5	90	3177	3242	4

Fig.330

Union, Flat Seat



Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ33010	3/8"	10	39	156.8	160	280
JZ33015	1/2"	15	46	200.9	205	180
JZ33020	3/4"	20	50	265.58	271	120
JZ33025	1"	25	56	392	400	88
JZ33032	1-1/4"	32	63	583.1	595	56
JZ33040	1-1/2"	40	68	733.04	748	36
JZ33050	2"	50	76	1056.44	1078	28
JZ33065	2-1/2"	65	83	1675.8	1710	12
JZ33080	3"	80	93	2175.6	2220	10
JZ330100	4"	100	113.5	3724	3800	6

Fig.331

Union, Flat Seat, M&F



Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ33115	1/2"	15	64	219.52	224	140
JZ33120	3/4"	20	70	275.38	281	120
JZ33125	1"	25	78	423.36	432	80
JZ33132	1-1/4"	32	88	661.5	675	40
JZ33140	1-1/2"	40	93	784	800	32
JZ33150	2"	50	104	1200.5	1225	20

Fig.340

Union, Taper Seat



Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ3408	1/4"	8	42	103.88	106	200
JZ34010	3/8"	10	45	152.88	156	200
JZ34015	1/2"	15	47	164.64	168	180
JZ34020	3/4"	20	51.5	251.86	257	120
JZ34025	1"	25	57	330.26	337	88
JZ34032	1-1/4"	32	65	560.56	572	56
JZ34040	1-1/2"	40	71	703.64	718	36
JZ34050	2"	50	79	1023.12	1044	28
JZ34065	2-1/2"	65	85.5	1615.04	1648	12
JZ34080	3"	80	94.5	2242.24	2288	10
JZ340100	4"	100	110.5	3615.22	3689	6

Fig.341

Union, Taper Seat, M&F



Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ34115	1/2"	15	65	196	200	140
JZ34120	3/4"	20	71.5	289.1	295	120
JZ34125	1"	25	79	392	400	80
JZ34132	1 - 1/4"	32	90	635.04	648	40
JZ34140	1 - 1/2"	40	96	801.64	818	32
JZ34150	2"	50	107	1149.54	1173	20

Fig.342

Brass Unions, Taper Seat



Code	Size		L	Unit Weight		Packing
	BSPT	DN		Black	Galv.	Carton
				g	g	Pcs/ctn
JZ3428	1/4"	8	42	104.86	107	200
JZ34210	3/8"	10	45	143.08	146	200
JZ34215	1/2"	15	47	168.56	172	180
JZ34220	3/4"	20	51	256.76	262	120
JZ34225	1"	25	56.5	333.2	340	88
JZ34232	1- 1/4"	32	64	583.1	595	56
JZ34240	1- 1/2"	40	70	731.08	746	36
JZ34250	2"	50	78.5	1058.4	1080	28
JZ34265	2- 1/2"	65	84.5	1804.18	1841	12
JZ34280	3"	80	94	2314.76	2362	10
JZ342100	4"	100	110	3731.84	3808	6

Fig.343

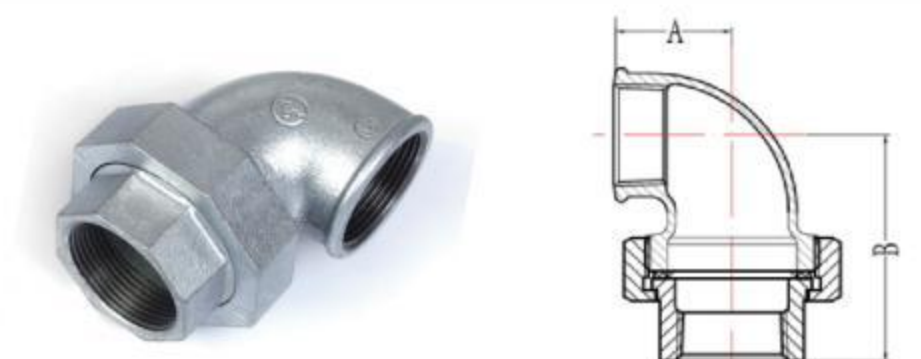
Union, Flat Seat, M&F



Code	Size		L	Unit Weight		Packing
				Black	Galv.	Carton
	BSPT	DN		mm	g	g
JZ34315	1/2"	15	65	191.1	195	140
JZ34320	3/4"	20	71	286.16	292	120
JZ34325	1"	25	78.5	378.28	386	80
JZ34332	1- 1/4"	32	89	637	650	40
JZ34340	1- 1/2"	40	95	800.66	817	32
JZ34350	2"	50	106.5	1205.4	1230	20

Fig.95

Union Elbow Flat Seat Female



Code	Size		A	B	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZ9515	1/2"	15	24.5	54	194.04	198	60
JZ9520	3/4"	20	29	60	303.8	310	40
JZ9525	1"	25	35	68	471.38	481	30
JZ9532	1-1/4"	32	42	80	703.64	718	20
JZ9540	1-1/2"	40	45.5	86	873.18	891	18
JZ9550	2"	50	53.5	97	1327.9	1355	10

Fig.97

Union, Taper Seat, M&F



Code	Size		A	B	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZ9715	1/2"	15	24.5	72	220.5	225	60
JZ9720	3/4"	20	29	80	328.3	335	40
JZ9725	1"	25	35	90	517.44	528	30
JZ9732	1-1/4"	32	42	105	770.28	786	20
JZ9740	1-1/2"	40	45.5	111	969.22	989	16
JZ9750	2"	50	53.5	125	1473.92	1504	10

Fig.241

Bushing



Code	Size	L	S	H	Unit Weight		Packing	
					Black	Galv.	Carton	
	BSPT	DN	mm	mm	mm	g	g	Pcs/ctn
JZ24186	1/4" x1/8"	8x6	18.5	16.8	6	14.7	15	1800
JZ241106	3/8" x 1/8"	10x6	18	20	6	22.54	23	1500
JZ241108	3/8" x 1/4"	10x8	18.5	18.4	6	18.62	19	1800
JZ241158	3/4 "x 3/8"	15x8	22.5	22	6	61.74	63	500
JZ2411510	3/4 "x 1/4"	15x10	22.5	22	6	66.64	68	600
JZ241208	1/2" x 3/8"	20x8	24.5	29.6	6	32.34	33	960
JZ2412010	1/2" x 1/4"	20x10	24.5	29.6	6	38.22	39	900
JZ2412015	3/4 "x 1/2"	20x15	24.5	29.6	6	50.96	52	600
JZ241258	1 "x 1/4"	25x8	28	37.4	6.5	105.84	108	300
JZ2412510	1 "x 3/8"	25x10	28	37.4	6.5	111.72	114	300
JZ2412515	1" x 1/2"	25x15	28	37.4	6.5	97.02	99	300
JZ2412520	1 "x 3/4"	25x20	28	37.4	6.5	81.34	83	300
JZ2413215	1-1/4" x 1/2"	32x15	30	45.6	7	167.58	171	200
JZ2413220	1-1/4" x 3/4"	32x20	30	45.6	7	151.9	155	200
JZ2413225	1-1/4" x 1"	32x25	30	45.6	7	126.42	129	200
JZ2414015	1-1/2" x 1/2"	40x15	30	50	7.5	197.96	202	160
JZ2414020	1-1/2" x 3/4"	40x20	30	50	7.5	207.76	212	160
JZ2414025	1-1/2" x 1"	40x25	30	50	7.5	182.28	186	160
JZ2414032	1-1/2" x 1-1/4"	40x32	30	50	7.5	123.48	126	160
JZ2415015	2 "x 1/2"	50x15	33	64.1	8.5	289.1	295	96
JZ2415020	2 "x 3/4"	50x20	33	64.1	8.5	298.9	305	96
JZ2415025	2 "x 1"	50x25	33	64.1	8.5	342.02	349	96
JZ2415032	2 "x 1-1/4"	50x32	33	64.1	8.5	302.82	309	96
JZ2415040	2" x 1-1/2"	50x40	33	64.1	8.5	255.78	261	96
JZ2416515	2-1/2" x 1/2"	65x15	39	79.6	9	441	450	68
JZ2416520	2-1/2" x 3/4"	65x20	39	79.6	9	456.68	466	68
JZ2416525	2-1/2" x 1"	65x25	39	79.6	9	448.84	458	68
JZ2416532	2-1/2" x 1-1/4"	65x32	39	79.6	9	512.54	523	68
JZ2416540	2-1/2" x 1-1/2"	65x40	39	79.6	9	519.4	530	68
JZ2416550	2-1/2" x 2"	65x50	39	79.6	9	446.88	456	68
JZ2418015	3 "x 1/2"	80x15	42	93	10	633.08	646	36
JZ2418020	3 "x 3/4"	80x20	42	93	10	632.1	645	36
JZ2418025	3 "x 1"	80x25	42	93	10	650.72	664	36
JZ2418032	3 "x 1-1/4"	80x32	42	93	10	637.98	651	36
JZ2418040	3 "x 1-1/2"	80x40	42	93	10	694.82	709	36
JZ2418050	3 "x 2"	80x50	42	93	10	773.22	789	36
JZ2418065	3 "x 2-1/2"	80x65	42	93	10	556.64	568	36
JZ24110015	4 "x 1/2"	100x15	49	118.4	11	1070.16	1092	18
JZ24110020	4 "x 3/4"	100x20	49	118.4	11	1085.84	1108	18
JZ24110025	4 "x 1"	100x25	49	118.4	11	1078.98	1101	18
JZ24110032	4"x 1-1/4"	100x32	49	118.4	11	1126.02	1149	18
JZ24110040	4 "x 1-1/2"	100x40	49	118.4	11	1097.6	1120	18
JZ24110050	4 "x 2"	100x50	49	118.4	11	1121.12	1144	18
JZ24110065	4" x 2-1/2"	100x65	49	118.4	11	1350.44	1378	18
JZ24110080	4 "x 3"	100x80	49	118.4	11	1203.44	1228	18
JZ24115080	6" x 3"	150x80	60	170.8	13			
JZ241150100	6" x 4"	150x100	60	170.8	13			

Fig.290

Beaded Plug



Code	Size		A	S	Unit Weight		Packing
					Black	Galv.	Carton
	BSPT	DN			mm	mm	g
JZ2908	1/4"	8	22.5	6	17.64	18	2000
JZ29010	3/8"	10	25	7	29.4	30	1300
JZ29015	1/2"	15	28	10	35.28	36	900
JZ29020	3/4"	20	32	12	55.86	57	600
JZ29025	1"	25	36	16	93.1	95	300
JZ29032	1-1/4"	32	38.5	20	148.96	152	220
JZ29040	1-1/4"	40	41	22	177.38	181	150
JZ29050	2"	50	47	28	293.02	299	80
JZ29065	2-1/2"	65	53	30	512.54	523	64
JZ29080	3"	80	58	34	748.72	764	36
JZ290100	4"	100	72	44	1097.6	1120	28

Fig.291

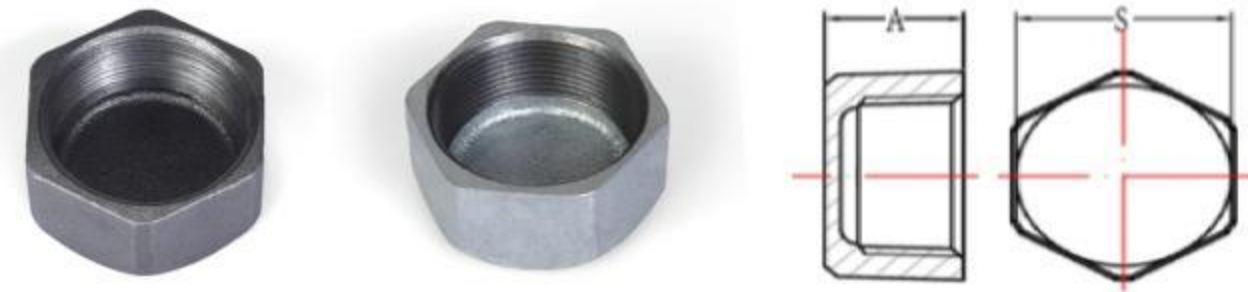
Plain Plug



Code	Size		L	B	S	Unit Weight		Packing
						Black	Galv.	Carton
	BSPT	DN				mm	mm	mm
JZ2918	1/4"	8	15.5	10	6	8.82	9	2400
JZ29110	3/8"	10	17	10	7	15.68	16	2200
JZ29115	1/2"	15	22.5	13	10	24.5	25	1400
JZ29120	3/4"	20	24	14	12	36.26	37	800
JZ29125	1"	25	27	16.5	15	57.82	59	500
JZ29132	1-1/4"	32	30	20	18	103.88	106	300
JZ29140	1-1/2"	40	31	21	22	140.14	143	200
JZ29150	2"	50	36	25	26	230.3	235	120
JZ29165	2-1/2"	65	40.5	27	30	348.88	356	72
JZ29180	3"	80	45.5	29.5	34	512.54	523	64
JZ291100	4"	100	58.5	38	44	978.04	998	36
JZ291150	6"	150	65	42	65			

Fig.300

Cap



Code	Size		A	S	Unit Weight		Packing Carton
					Black	Galv.	
	BSPT	DN	mm	mm	g	g	Pcs/ctn
JZ30010	3/8"	10	17	20.6	29.4	30	1200
JZ30015	1/2"	15	19	24.6	44.1	45	700
JZ30020	3/4"	20	22	30.4	68.6	70	500
JZ30025	1"	25	24	37.2	106.82	109	360
JZ30032	1-1/4"	32	27	47	180.32	184	220
JZ30040	1-1/2"	40	28	53	223.44	228	160
JZ30050	2"	50	32	65	349.86	357	100

Fig.301

Round Cap



Code	Size		A	Unit Weight		Packing Carton
				Black	Galv.	
	BSPT	DN	mm	g	g	Pcs/ctn
JZ3018	1/4"	8	16	24.5	25	1200
JZ30110	3/8"	10	17	29.4	30	1200
JZ30115	1/2"	15	19	47.04	48	700
JZ30120	3/4"	20	22	68.6	70	500
JZ30125	1"	25	24	106.82	109	360
JZ30132	1-1/4"	32	27	162.68	166	220
JZ30140	1-1/2"	40	27.5	203.84	208	160
JZ30150	2"	50	32	319.48	326	100
JZ30165	2-1/2"	65	36	432.18	441	60
JZ30180	3"	80	39	610.54	623	38
JZ301100	4"	100	46	1078.98	1101	20
JZ301150	6"	150	56			

Fig.321

Round Flange
Without Bolt Hole



Code	Size		A	B	C	Unit Weight		Packing Carton
						Black	Galv.	
	BSPT	DN	mm	mm	mm	g	g	Pcs/ctn
JZ32115	NPS	15	13.5	4.5	78	165.62	169	120
JZ32120	3/4"	20	16	5	87	224.42	229	100
JZ32125	1"	25	18	5.5	97	300.86	307	60
JZ32132	1-1/4"	32	15	6	120	512.54	523	40
JZ32140	1-1/2"	40	16	7	130	669.34	683	40
JZ32150	2"	50	18	8	140	865.34	883	30
JZ32165	2-1/2"	65	20	9	160	1303.4	1330	16
JZ32180	3"	80	22	10	190	1869.84	1908	12
JZ321100	4"	80	24	11	210	2326.52	2374	10

Fig.321P

Round Flange
with 4 Bolt holes



Code	Size		A	B	C	D	Unit Weight		Packing	
							Black	Galv.	Carton	
	BSPT	DN	mm	mm	mm	mm	g	g	Pcs/ctn	
JZ321P15	1/2"	15	15	5	67	94.5	4×Ø14	1431.78	1461	20
JZ321P20	3/4"	20	16	5	73	99.5	4×Ø14	1684.62	1719	20
JZ321P25	1"	25	19	6	83	114.3	4×Ø14	2223.62	2269	16
JZ321P32	1-1/4"	32	21	6	87	119.2	4×Ø14	3087	3150	12
JZ321P40	1-1/2"	40	21	7	98	134	4×Ø14	3543.68	3616	8
JZ321P50	2"	50	26	8	115	150	4×Ø18	4154.22	4239	8
JZ321P65	2-1/2"	65	30	9	127	164	4×Ø18	7644	7800	4
JZ321P80	3"	80	33	10	146	184	4×Ø18			
JZ321P100	4"	100	39	11	178	214	4×Ø18			
JZ321P150	6"	150	40	13	235	279	8×Ø18			

Fig.329

Round Flange



Code	Size		A	B	N-C	Unit Weight		Packing Carton
						Black	Galv.	
	BSPT	DN	mm	mm	mm	g	g	Pcs/ctn
JZ32932	1-1/4"	32	24	105	4-18	1431.78	1461	20
JZ32940	1-1/2"	40	26	115	4-18	1684.62	1719	20
JZ32950	2"	50	29	125	4-18	2223.62	2269	16
JZ32965	2-1/2"	65	33	145	4-18	3087	3150	12
JZ32980	3"	80	34	160	8-18	3543.68	3616	8
JZ329100	4"	100	39	180	8-18	4154.22	4239	8
JZ329150	6"	150	42	240	8-22	7644	7800	4

Fig.310

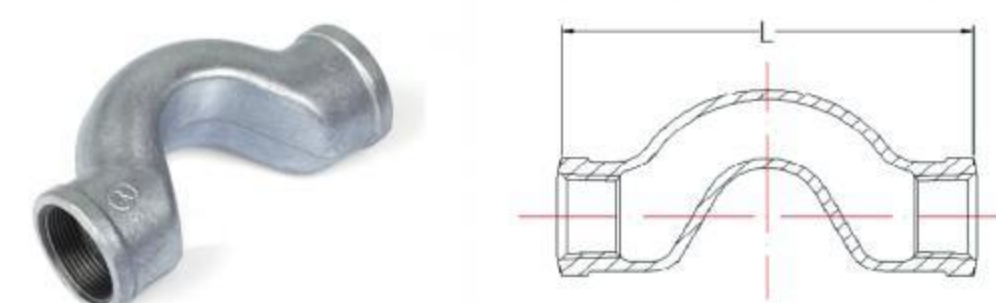
Backnut



Code	Size		A	S	Unit Weight		Packing Carton
					Black	Galv.	
	BSPT	DN	mm	mm	g	g	Pcs/ctn
JZ31015	1/2"	15	9	29	28.42	29	700
JZ31020	3/4"	20	10	36	44.1	45	500
JZ31025	1"	25	11	45	75.46	77	400
JZ31032	1-1/4"	32	11	56	99.96	102	300
JZ31040	1-1/2"	40	12	63	135.24	138	240
JZ31050	2"	50	13	77	205.8	210	160
JZ31065	2-1/2"	65	15	93	298.9	305	60
JZ31080	3"	80	18	109	495.88	506	50
JZ310100	4"	100	21	137	841.82	859	40

Fig.85

Crossover



Code	Size		L	Unit Weight		Packing Carton
				Black	Galv.	
	BSPT	DN	mm	g	g	Pcs/ctn
JZ8515	1/2"	15	90	184.24	188	150
JZ8520	3/4"	20	104	281.26	287	90
JZ8525	1"	25	120	436.1	445	50
JZ8532	1-1/4"	32	149	698.74	713	32
JZ8540	1-1/2"	40	160	871.22	889	26
JZ8550	2"	50	194	1511.16	1542	12

Fig.471

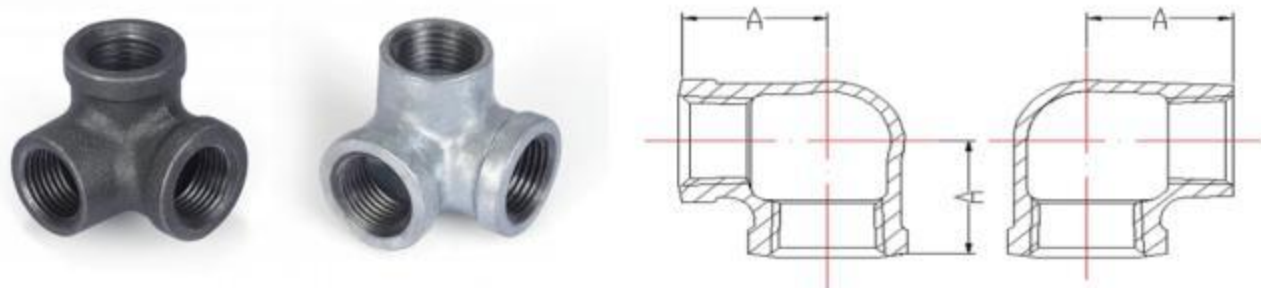
Wall Elbow



Code	Size		A	B	Unit Weight		Packing Carton
					Black	Galv.	
	BSPT	DN	mm	mm	g	g	Pcs/ctn
JZ47115	1/2"	15	28	18	181.3	185	150
JZ47120	3/4"	20	33	20	259.7	265	100

Fig.1221

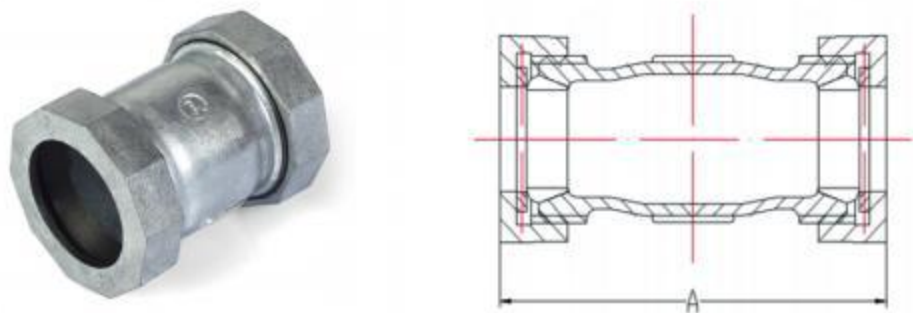
Side Outlet Elbow



Code	Size		A	Unit Weight		Packing
	BSPT	DN		Black	Galv.	Carton
			mm	g	g	Pcs/ctn
JZ122115	1/2"	15	27	125.4	128	240
JZ122120	3/4"	20	32	196.0	200	140
JZ122125	1"	25	37			

Fig.SCC

Short Compression Coupling



Code	Size		A	Unit Weight		Packing
	BSPT	DN		Black	Galv.	Carton
			mm	g	g	Pcs/ctn
JZSCC15	1/2"	15	71	292.0	298	140
JZSCC20	3/4"	20	77	370.4	378	120
JZSCC25	1"	25	84	558.6	570	80
JZSCC32	1-1/4"	32	92	711.5	726	40
JZSCC40	1-1/2"	40	97	818.3	835	32
JZSCC50	2"	50	108	1076.0	1098	20