



Allpex

**Malleable Iron Fittings (Black and Galvanised) to
BS EN 10242-1995/ISO 49; BS 143 & BS 1256:2000;
Malleable Iron Pipe Clips, Brackets & Sundries,
Rapido Compression Couplings,
Steel Tubulars to BS EN 10255:2004 (BS 1387:1985)**



Allpex Ltd.

261, Water Road, Wembley Middlesex HA0 1HX, United Kingdom.

Tel +44 (0) 208 810 4546, Fax +44 (0) 208 810 4849.

www.allpex.com



Scope & Application:

Malleable cast iron fittings are one of the widely used pipe fittings with a long history of usage. Due to their durability and mechanical strength they are increasingly popular in a number of applications. These fittings are used in sanitary, heating & gas installations, cooling & air conditioning, sprinkler & fire extinguishing systems, hydraulic & pressured air pipe work, in machine construction such as oil, cooling & lubrication pipes, petrol stations & gas lines etc.

Important features of the product are:

- Female threads with reinforcing band protects threads at entry.
- Very large range of products minimises the need for combinations and hence the cost.
- High purity zinc galvanising ensures the quality of potable water, prevents rust formation in storage or stagnant conditions and is ideal for anaerobic sealing.
- Precise threads and their accurate axial alignment ensure high sealing force and true pipe alignment.
- All fittings are pressure tested individually.

Standards & Specifications:

All Allpex/Atusa malleable iron fittings comply with the international ISO 49 standard as well as the corresponding national standards. e.g. BS 10242:1995, EN 45012, BS 143 and BS 1256, DIN 2950, NFA 29-801 and UNI 5192. Maximum working pressure is 25kg/mm² for temperatures up to 120°C and 20kg/mm² from 120°C to 300°C.

Materials and Specification:

All fittings are made of white heart malleable cast iron according to EN-CJMW-400-05 (W 40-05) within ISO 5922 equivalent to GTW 40-05 of DIN 1692 and W 40-05 of BS 6681. The threads are cut according to ISO 7/1 i.e. parallel internal thread (female) and tapered external thread (male).

Each fitting is individually pressure tested according to the BS EN 10242:1995, BS 143 and ISO 49 standards in order to ensure the quality of material and manufacture.

Working Pressure and Temperature Rating:

As specified in the standard EN 10242:1995, the fittings are fit for the transmission of fluids and gases up to the following limits of pressure and temperatures:

- a) Normal Applications
 - Minimum service temperature - 20°C
 - Pressure to the minimum service temperature - 25 bar
 - Maximum working pressure for temperatures between 20°C to 120°C - 25 bar
 - Maximum working pressure for temperatures between 120°C to 300°C - 20 to 25 bar
- b) Special Applications
For special applications to temperatures less than 20°C or any other different from the normal applications, to be checked with the manufacturer.

Malleable iron fittings can be used in most types of installations for the transport of fluids - liquids, air, water, natural gas, fuel gas, hydrocarbons etc.

Galvanisation:

Malleable iron fittings are hot dip galvanised according to EN 10242:1995. The 98.5% pure zinc coating exceeds 500g / m² which gives an average of over 70 µm.

The process of hot dip galvanising provides the fittings with a zinc coating that is bonded metallurgically to the base material. The metallurgical bond provides a strong adhesion between the zinc and the base material. The thickness of the zinc coating and the adhesion between the zinc and the base material gives white heart malleable iron fittings an optimal and near permanent corrosion protection. Due to the purity of the zinc layer, the fittings may be especially recommended for the use in drinking water.

Washing and Varnishing Processes:

All fittings are thoroughly washed and dried to remove residues, chips, cutting compound and contamination from the machining process. Finally the fittings are finished with a coating of special anticorrosion varnish.

Nominal pipe diameter and connecting thread sizes:

mm	6	8	10	15	20	25	32	40	50	65	80	100
Inch	1/8	¼	3/8	½	¾	1	1 ¼	1 ½	2	2 ½	3	4

Threaded joints (male & female):

Fittings are machined with taper external (male) threads and parallel internal (female) threads and comply with the ISO 7/1 standard which is equivalent to the UNE 19.009, DIN 2999 and BS 21. The machining process used ensures the threads are aligned with a deviation of less than 0.5° (30') as required by the product standards.

Compression joints:

The white heart malleable cast iron compression pipe fittings are threaded with internal and external parallel threads (compression nut & body) according to ISO 228/1. The process of machining used for fittings guarantees an alignment of the threads with a deviation of less than 0.5° as required by the product standard.

Product Marking:

All malleable iron fittings are manufactured and marked as per relevant BS EN & ISO standards.

Allpex® is a registered trade mark of Allpex Ltd. U.K. Copyright © Allpex Ltd. U.K. All rights reserved. The contents of this publication are for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, expressed or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products and packaging at any time without notice. E. & O.E.



RECOMMENDED INSTALLATION TIPS

- The surfaces of the threads should be cleaned before joining.
- Use of appropriate thread sealing material for the installation which is applied on male threads.

Suitable Material for applications:

Application	(A) Non hardening sealing paste	(B) PFTE Teflon sealing tape	(C) Hemp With minimum (A)	(D) Hemp	(E) Special sealing paste
Potable water	*	**	*	*	
Hot water	*	**	*		
Natural gas & GLPS	*	***			
Compressed air	*	***			
Chemical fluids up to 160					*

* Usable with or without hemp; ** The thickness of the sealing tape should be above 0.1mm; *** Special thickness check with local gas authority if not then min 0.3mm.

- The sealing material should be applied homogeneously and evenly on the external male thread using the recommendations shown above.
- The joint is made by inserting taper male thread of the fitting into the female thread and hand tightening followed by tightening with a tool in accordance with the dimensions shown below in "Threaded Joints".
- A lubricant should be used in case of using hemp without a sealing paste.
- Check if all axes of the different threaded joint components are aligned according to the tolerances as indicated in ISO 49.

Installation Tips:

- Do not install pipes and fittings in direct contact or buried into gypsum, lime or cement plasters.
- If required then they should be covered using lagging of water proofing tape or other proprietary protection.
- Protect from water contact or humidity on external surfaces.
- Do not use the installation as earthing connection for electrical circuits.
- Do not connect directly to copper or copper alloy installations as it could produce galvanic effect and resultant corrosion. If required use a di-electric fitting to separate the two.

Dimensions of Fittings:

The dimensions of malleable iron fittings do not exceed the tolerances required by the product standard ISO 49.

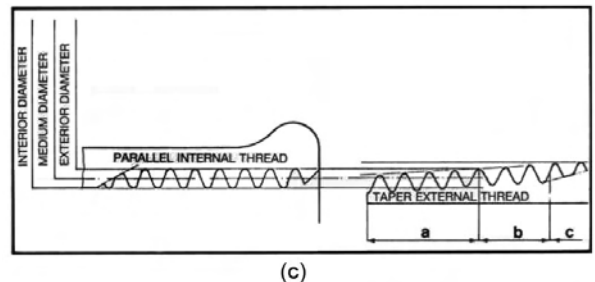
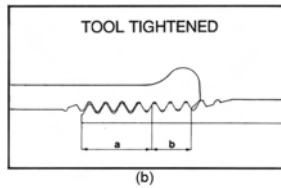
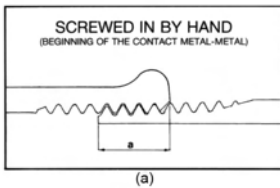
Dimensions (mm)	30	30-50	50-75	75-100	100-150	150-200	200
Tolerances (mm)	1.5	2.0	2.5	3.0	3.5	4.0	5.0

Threaded Joints

The Taper (male) / Parallel (female) threaded joint provides a reliable tight fit. The taper male thread compresses into the parallel female thread, resulting wedge action provides a tight joint. Small amount of sealing material helps to compensate any deviation in thread profile which can not be avoided due to the nature of the machining process. Material malleability allows female sockets to expand slightly under the tightening stress which gives even engagement of threads and stress absorption.





Length of thread engagement (for fittings & tube)

- "a" - Required thread length for hand tightened fix.
- "b" - Length of thread engagement under contact stress (tool tightened).
- "c" - Thread end with fully formed crest & unformed roots.



The length "b" is > 1 ½ times the pitch of the thread. This implies a minimum tightening by tool of 1 ½ turns.











Thread Size	Pitch (mm)	Diameter			External Threads			Usable Thread Length
		Ext. (mm)	Med. (mm)	Int. (mm)	Length "a" (Hand screwed) mm	Length "b" (tool-tightened) (Crest - mm.)		
1/4	1.337	13.157	12.301	11.445	6.0	2 3/4 3.7	9.7	
3/8	1.337	16.662	15.806	14.950	6.4	2 3/4 3.7	10.1	
1/2	1.814	20.955	19.793	18.631	8.2	2 3/4 5.0	13.2	
3/4	1.814	26.441	25.279	24.117	9.5	2 3/4 5.0	14.5	
1	2.309	33.249	31.770	30.291	10.4	2 3/4 6.4	16.8	
1 1/4	2.309	41.910	40.431	38.952	12.7	2 3/4 6.4	19.1	
1 1/2	2.309	47.803	46.324	44.845	12.7	2 3/4 6.4	19.1	
2	2.309	59.614	58.135	56.656	15.9	3 1/4 7.5	23.4	
2 1/2	2.309	75.184	73.705	72.226	17.5	4 9.2	26.7	
3	2.309	87.884	86.405	84.962	20.6	4 9.2	29.8	
4	2.309	113.030	111.551	110.072	25.4	4 1/2 10.4	35.8	









SIZE	BLACK	BAG	BOX	GALV.
1A, 90° Long Radius Bend, M x F (ISO D4)				
				
¼	MB1A-B	10	250	MZ1A-B
¾	MB1A-C	10	125	MZ1A-C
½	MB1A-D	10	100	MZ1A-D
¾	MB1A-E	10	60	MZ1A-E
1	MB1A-F		40	MZ1A-F
1¼	MB1A-G		20	MZ1A-G
1½	MB1A-H		15	MZ1A-H
2	MB1A-I		8	MZ1A-I
2½	MB1A-J		3	MZ1A-J
3	MB1A-K		4	MZ1A-K
4	MB1A-L		2	MZ1A-L
2A, 90° Long Radius Bend, F x F (ISO D1)				
				
¼	MB2A-B	10		MZ2A-B
¾	MB2A-C	10	50	MZ2A-C
½	MB2A-D	10	90	MZ2A-D
¾	MB2A-E	10	50	MZ2A-E
1	MB2A-F		35	MZ2A-F
1¼	MB2A-G		20	MZ2A-G
1½	MB2A-H		14	MZ2A-H
2	MB2A-I		8	MZ2A-I
2½	MB2A-J		2	MZ2A-J
3	MB2A-K		4	MZ2A-K
4	MB2A-L		2	MZ2A-L
40, 45° Obtuse Bend, M x F (ISO G4/45°)				
				
¼	MB40-B	10	300	MZ40-B
¾	MB40-C	10	200	MZ40-C
½	MB40-D	10	120	MZ40-D
¾	MB40-E	10	80	MZ40-E
1	MB40-F		50	MZ40-F
1¼	MB40-G		25	MZ40-G
1½	MB40-H		18	MZ40-H
2	MB40-I		10	MZ40-I
2½	MB40-J		6	MZ40-J
3	MB40-K		3	MZ40-K
4	MB40-L		4	MZ40-L
41, 45° Obtuse Bend, F x F (ISO G1/45°)				
				
¼	MB41-B	10	220	MZ41-B
¾	MB41-C	10	150	MZ41-C
½	MB41-D	10	100	MZ41-D
¾	MB41-E	10	60	MZ41-E
1	MB41-F		40	MZ41-F
1¼	MB41-G		22	MZ41-G
1½	MB41-H		15	MZ41-H
2	MB41-I		9	MZ41-I
2½	MB41-J		4	MZ41-J
3	MB41-K		2	MZ41-K
4	MB41-L		2	MZ41-L

SIZE	BLACK	BAG	BOX	GALV.
85, Crossover, F x F				
				
¾	MB85-C	10	100	MZ85-C
½	MB85-D	10	60	MZ85-D
¾	MB85-E	10	30	MZ85-E
1	MB85-F		20	MZ85-F
1¼	MB85-G		10	MZ85-G
90, 90° Elbow, F x F (ISO A1)				
				
¼	MB90-A	10	400	MZ90-A
¼	MB90-B	10	350	MZ90-B
¾	MB90-C	10	250	MZ90-C
½	MB90-D	10	120	MZ90-D
¾	MB90-E	10	90	MZ90-E
1	MB90-F		50	MZ90-F
1¼	MB90-G		30	MZ90-G
1½	MB90-H		22	MZ90-H
2	MB90-I		12	MZ90-I
2½	MB90-J		7	MZ90-J
3	MB90-K		4	MZ90-K
4	MB90-L		2	MZ90-L
90R, Reducing Elbow, F x F (ISO A1)				
				
½ x ¾	MB90R-DC	10	120	MZ90R-DC
¾ x ¾	MB90R-EC	10	90	MZ90R-EC
¾ x ½	MB90R-ED	10	90	MZ90R-ED
1 x ½	MB90R-FD	10	50	MZ90R-FD
1 x ¾	MB90R-FE	10	50	MZ90R-FE
1¼ x ½	MB90R-GD	10	50	MZ90R-GD
1¼ x ¾	MB90R-GE	10	50	MZ90R-GE
1¼ x 1	MB90R-GF		40	MZ90R-GF
1½ x 1	MB90R-HF		35	MZ90R-HF
1½ x 1¼	MB90R-HG		25	MZ90R-HG
2 x 1¼	MB90R-IG		15	MZ90R-IG
2 x 1½	MB90R-IH		15	MZ90R-IH
92, Elbow, M x F (ISO A4)				
				
¼	MB92-B	10	350	MZ92-B
¾	MB92-C	10	250	MZ92-C
½	MB92-D	10	150	MZ92-D
¾	MB92-E	10	90	MZ92-E
1	MB92-F	10	50	MZ92-F
1¼	MB92-G		30	MZ92-G
1½	MB92-H		22	MZ92-H
2	MB92-I		12	MZ92-I
2½	MB92-J		7	MZ92-J
3	MB92-K		4	MZ92-K
4	MB92-L		2	MZ92-L
96, Union Elbow, F x F (Taper Seat, Iron) (ISO UA11)				
				
¾	MB96-C	10	80	MZ96-C
½	MB96-D	10	50	MZ96-D
¾	MB96-E	10	40	MZ96-E







continued in the next column.....

SIZE	BLACK	BAG	BOX	GALV.
continued from previous column.....				
96, Union Elbow, F x F (Taper Seat, Iron)				
1	MB96-F	10	28	MZ96-F
1¼	MB96-G		14	MZ96-G
1½	MB96-H		10	MZ96-H
2	MB96-I		6	MZ96-I
2½	MB96-J		4	MZ96-J
3	MB96-K		2	MZ96-K
98, Union Elbow, M x F (Taper Seat, Iron) (ISO UA12)				
				
¾	MB98-C	10	80	MZ98-C
½	MB98-D	10	50	MZ98-D
¾	MB98-E	10	30	MZ98-E
1	MB98-F		23	MZ98-F
1¼	MB98-G		12	MZ98-G
1½	MB98-H		10	MZ98-H
2	MB98-I		6	MZ98-I
2½	MB98-J		3	MZ98-J
3	MB98-K		2	MZ98-K
120, 45° Obtuse Elbow, F x F (ISO A1/45°)				
				
½	MB120-D	10	150	MZ120-D
¾	MB120-E	10	90	MZ120-E
1	MB120-F	10	60	MZ120-F
121, 45° Obtuse Elbow, M x F (ISO A4/45°)				
				
½	MB121-D	10	150	MZ121-D
¾	MB121-E	10	100	MZ121-E
1	MB121-F	10	50	MZ121-F
130, Tee, F x F x F (ISO B1)				
				
¼	MB130-B	10	220	MZ130-B
¾	MB130-C	10	120	MZ130-C
½	MB130-D	10	70	MZ130-D
¾	MB130-E	10	60	MZ130-E
1	MB130-F	10	30	MZ130-F
1¼	MB130-G		20	MZ130-G
1½	MB130-H		14	MZ130-H
2	MB130-I		10	MZ130-I
2½	MB130-J		5	MZ130-J
3	MB130-K		4	MZ130-K
4	MB130-L		2	MZ130-L
131, Pitcher Tee, F x F x F (ISO E1)				
				
½	MB131-D	10	50	MZ131-D
¾	MB131-E	10	40	MZ131-E
1	MB131-F	10	20	MZ131-F
1¼	MB131-G		14	MZ131-G
1½	MB131-H		8	MZ131-H

SIZE	BLACK	BAG	BOX	GALV.	SIZE	BLACK	BAG	BOX	GALV.	SIZE	BLACK	BAG	BOX	GALV.					
130-R, Reducing Tee, F x F x F (ISO B1) (middle size branch)					continued from previous column.....					continued from previous column.....									
																			
130-R, Reducing Tee, F x F x F (ISO B1)					130-R, Reducing Tee, F x F x F (ISO B1)					240, Reducing Socket, F x F (ISO M2)					240, Reducing Socket, F x F (ISO M2)				
3/8x1/2x3/8	MB130R-CDC	10	120	MZ130R-CDC	1 1/2x1 1/2x1 1/4	MB130R-HHG		15	MZ130R-HHG	1 1/4x3/4	MB240-GE	10	60	MZ240-GE					
3/8x3/4x3/8	MB130R-CEC	10	90	MZ130R-CEC	1 1/2x2x1 1/2	MB130R-IIH		10	MZ130R-IIH	1 1/4x1/2	MB240-GF	10	50	MZ240-GF					
1/2x3/8x3/8	MB130R-DCC	10	110	MZ130R-DCC	2x1/2x1 1/2	MB130R-IDH		18	MZ130R-IDH	1 1/2x1/2	MB240-HD		50	MZ240-HD					
1/2x3/8x1/2	MB130R-DCD	10	110	MZ130R-DCD	2x1/2x2	MB130R-IDI		15	MZ130R-IDI	1 1/2x3/4	MB240-HE		50	MZ240-HE					
1/2x1/2x3/8	MB130R-DDC	10	110	MZ130R-DDC	2x3/4x1 1/2	MB130R-IEH		16	MZ130R-IEH	1 1/2x1	MB240-HF		45	MZ240-HF					
1/2x3/4x3/8	MB130R-DEC	10	70	MZ130R-DEC	2x3/4x2	MB130R-IEI		15	MZ130R-IEI	1 1/2x1 1/4	MB240-HG		40	MZ240-HG					
1/2x3/4x1/2	MB130R-DED	10	70	MZ130R-DED	2x1x1 1/2	MB130R-IFH		15	MZ130R-IFH	2x1/2	MB240-ID		30	MZ240-ID					
1/2x1x1/2	MB130R-DFD	10	60	MZ130R-DFD	2x1x2	MB130R-IFI		12	MZ130R-IFI	2x3/4	MB240-IE		30	MZ240-IE					
3/4x3/8x3/8	MB130R-ECC	10	70	MZ130R-ECC	2x1 1/4x1	MB130R-IGF		12	MZ130R-IGF	2x1	MB240-IF		25	MZ240-IF					
3/4x3/8x1/2	MB130R-ECD	10	70	MZ130R-ECD	2x1 1/4x1 1/4	MB130R-IGG		12	MZ130R-IGG	2x1 1/4	MB240-IG		22	MZ240-IG					
3/4x1/2x3/8	MB130R-ECE	10	70	MZ130R-ECE	2x1 1/4x1 1/2	MB130R-IGH		12	MZ130R-IGH	2x1 1/2	MB240-IH		22	MZ240-IH					
3/4x1/2x1/2	MB130R-EDC	10	70	MZ130R-EDC	2x1 1/4x2	MB130R-IGI		12	MZ130R-IGI	2 1/2x1 1/2	MB240-JH		14	MZ240-JH					
3/4x1/2x3/4	MB130R-EDE	10	60	MZ130R-EDE	2x1 1/2x1	MB130R-IHF		12	MZ130R-IHF	2 1/2x2	MB240-JI		10	MZ240-JI					
3/4x3/4x3/8	MB130R-EED	10	50	MZ130R-EED	2x1 1/2x1 1/2	MB130R-IHH		10	MZ130R-IHH	3x1 1/4	MB240-KG		10	MZ240-KG					
3/4x1x1/2	MB130R-EFD	10	40	MZ130R-EFD	2x1 1/2x2	MB130R-IHI		10	MZ130R-IHI	3x1 1/2	MB240-KH		10	MZ240-KH					
3/4x1x3/4	MB130R-EFE	10	35	MZ130R-EFE	2x2x1	MB130R-IIF		10	MZ130R-IIF	3x2	MB240-KI		10	MZ240-KI					
3/4x1 1/4x3/4	MB130R-EGE	10	50	MZ130R-EGE	2x2x1 1/4	MB130R-IIG		10	MZ130R-IIG	3x2 1/2	MB240-KJ		8	MZ240-KJ					
1x3/8x3/4	MB130R-FCE	10	50	MZ130R-FCE	2x2x1 1/2	MB130R-IIH		10	MZ130R-IIH	4x2	MB240-LI		6	MZ240-LI					
1x3/8x1	MB130R-FCF	10	50	MZ130R-FCF	2x2 1/2x2	MB130R-IJI		6	MZ130R-IJI	4x2 1/2	MB240-LJ		6	MZ240-LJ					
1x1/2x3/8	MB130R-FDC	10	50	MZ130R-FDC	2 1/2x1x2 1/2	MB130R-JFJ		8	MZ130R-JFJ	4x3	MB240-LK		6	MZ240-LK					
1x1/2x1/2	MB130R-FDD	10	50	MZ130R-FDD	2 1/2x1 1/4x2 1/2	MB130R-JGJ		8	MZ130R-JGJ	241, Hexagon Reducing Bush, M x F (ISO N4)									
1x1/2x3/4	MB130R-FDE	10	50	MZ130R-FDE	2 1/2x1 1/2x2 1/2	MB130R-JHJ		8	MZ130R-JHJ										
1x1/2x1	MB130R-FDF	10	40	MZ130R-FDF	2 1/2x2x2	MB130R-JII		6	MZ130R-JII										
1x3/4x1/2	MB130R-FED	10	40	MZ130R-FED	2 1/2x2x2 1/2	MB130R-JIJ		6	MZ130R-JIJ	1/4x1/2	MB241-BA	10	400	MZ241-BA					
1x3/4x3/4	MB130R-FEE	10	40	MZ130R-FEE	3x1x3	MB130R-KFK		5	MZ130R-KFK	3/8x1/2	MB241-CA	10	400	MZ241-CA					
1x1x3/8	MB130R-FFC	10	40	MZ130R-FFC	3x1 1/2x3	MB130R-KHK		4	MZ130R-KHK	3/8x1/4	MB241-CB	10	400	MZ241-CB					
1x1x1/2	MB130R-FFD	10	40	MZ130R-FFD	3x2x3	MB130R-KIK		4	MZ130R-KIK	1/2x1/4	MB241-DB	10	350	MZ241-DB					
1x1x3/4	MB130R-FFE	10	30	MZ130R-FFE	3x2 1/2x3	MB130R-KJK		3	MZ130R-KJK	1/2x3/8	MB241-DC	10	350	MZ241-DC					
1x1 1/4x1	MB130R-FGF	30	30	MZ130R-FGF	4x1/2x4	MB130R-LDL		2	MZ130R-LDL	3/4x1/4	MB241-EB	10	200	MZ241-EB					
1x1 1/2x1	MB130R-FHF	22	22	MZ130R-FHF	4x3/4x4	MB130R-LEL		2	MZ130R-LEL	3/4x3/8	MB241-EC	10	200	MZ241-EC					
1 1/4x3/8x1 1/4	MB130R-GCG	30	30	MZ130R-GCG	4x1x4	MB130R-LFL		2	MZ130R-LFL	3/4x1/2	MB241-ED	10	200	MZ241-ED					
1 1/4x1/2x1	MB130R-GDF	35	35	MZ130R-GDF	4x1 1/2x4	MB130R-LHL		2	MZ130R-LHL	1x3/8	MB241-FC	10	140	MZ241-FC					
1 1/4x1/2x1 1/4	MB130R-GDG	30	30	MZ130R-GDG	4x2x4	MB130R-LIL		2	MZ130R-LIL	1x1/2	MB241-FD	10	140	MZ241-FD					
1 1/4x3/4x1/2	MB130R-GED	40	40	MZ130R-GED	4x2 1/2x4	MB130R-LJL		2	MZ130R-LJL	1x3/4	MB241-FE	10	140	MZ241-FE					
1 1/4x3/4x3/4	MB130R-GEE	35	35	MZ130R-GEE	4x3x4	MB130R-LKL		2	MZ130R-LKL	1 1/4x3/8	MB241-GC	10	80	MZ241-GC					
1 1/4x3/4x1	MB130R-GEF	32	32	MZ130R-GEF	180, 90° Cross, F x F x F x F (ISO C1)					1 1/4x1/2	MB241-GD	10	80	MZ241-GD					
1 1/4x3/4x1 1/4	MB130R-GEG	30	30	MZ130R-GEG						1 1/4x3/4	MB241-GE	10	80	MZ241-GE					
1 1/4x1x3/8	MB130R-GFC	30	30	MZ130R-GFC						1 1/4x1	MB241-GF	10	80	MZ241-GF					
1 1/4x1x1/2	MB130R-GFD	32	32	MZ130R-GFD	3/8	MB180-C	10	100	MZ180-C	1 1/2x1/2	MB241-HD	10	70	MZ241-HD					
1 1/4x1x3/4	MB130R-GFE	30	30	MZ130R-GFE	1/2	MB180-D	10	70	MZ180-D	1 1/2x3/4	MB241-HE	10	70	MZ241-HE					
1 1/4x1x1	MB130R-GFF	28	28	MZ130R-GFF	3/4	MB180-E	10	40	MZ180-E	1 1/2x1	MB241-HF	10	70	MZ241-HF					
1 1/4x1 1/4	MB130R-GFG	25	25	MZ130R-GFG	1	MB180-F		28	MZ180-F	1 1/2x1 1/4	MB241-HG	10	70	MZ241-HG					
1 1/4x1 1/4x1/2	MB130R-GGD	30	30	MZ130R-GGD	1 1/4	MB180-G		16	MZ180-G	2x1/2	MB241-ID		30	MZ241-ID					
1 1/4x1 1/4x3/4	MB130R-GGE	25	25	MZ130R-GGE	1 1/2	MB180-H		10	MZ180-H	2x3/4	MB241-IE		30	MZ241-IE					
1 1/4x1 1/4x1	MB130R-GGF	25	25	MZ130R-GGF	2	MB180-I		7	MZ180-I	2x1	MB241-IF		30	MZ241-IF					
1 1/4x1 1/2x1	MB130R-GHF	20	20	MZ130R-GHF	2 1/2	MB180-J		3	MZ180-J	2x1 1/4	MB241-IG		30	MZ241-IG					
1 1/4x1 1/2x1 1/4	MB130R-GHG	18	18	MZ130R-GHG	3	MB180-K		2	MZ180-K	2x1 1/2	MB241-IH		30	MZ241-IH					
1 1/2x3/8x1 1/2	MB130R-HCH	28	28	MZ130R-HCH	4	MB180-L		1	MZ180-L	2 1/2x1	MB241-JF		20	MZ241-JF					
1 1/2x1/2x1 1/4	MB130R-HDG	28	28	MZ130R-HDG	240, Reducing Socket, F x F (ISO M2)					2 1/2x1 1/4	MB241-JG		20	MZ241-JG					
1 1/2x1/2x1 1/2	MB130R-HDH	25	25	MZ130R-HDH						2 1/2x1 1/2	MB241-JH		20	MZ241-JH					
1 1/2x3/4x1 1/4	MB130R-HEG	25	25	MZ130R-HEG						2 1/2x2	MB241-JI		20	MZ241-JI					
1 1/2x3/4x1 1/2	MB130R-HEH	22	22	MZ130R-HEH	1/4x1/8	MB240-BA	10	400	MZ240-BA	3x1	MB241-KF		10	MZ241-KF					
1 1/2x1x1	MB130R-HFF	25	25	MZ130R-HFF	3/8x1/4	MB240-CB	10	400	MZ240-CB	3x1 1/4	MB241-KG		10	MZ241-KG					
1 1/2x1x1 1/4	MB130R-HFG	22	22	MZ130R-HFG	1/2x3/8	MB240-DC	10	200	MZ240-DC	3x1 1/2	MB241-KH		10	MZ241-KH					
1 1/2x1x1 1/2	MB130R-HFH	20	20	MZ130R-HFH	3/4x3/8	MB240-EC	10	140	MZ240-EC	3x2	MB241-KI		15	MZ241-KI					
1 1/2x1 1/4x1 1/4	MB130R-HGG	18	18	MZ130R-HGG	3/4x1/2	MB240-ED	10	140	MZ240-ED	3x2 1/2	MB241-KJ		15	MZ241-KJ					
1 1/2x1 1/4x1 1/2	MB130R-HGH	17	17	MZ130R-HGH	1x3/8	MB240-FC	10	100	MZ240-FC	4x2	MB241-LI		8	MZ241-LI					
1 1/2x1 1/2x1 1/2	MB130R-HHD	17	17	MZ130R-HHD	1x1/2	MB240-FD	10	90	MZ240-FD	4x2 1/2	MB241-LJ		8	MZ241-LJ					
1 1/2x1 1/2x3/4	MB130R-HHE	17	17	MZ130R-HHE	1x3/4	MB240-FE	10	80	MZ240-FE	4x3	MB241-LK		8	MZ241-LK					
1 1/2x1 1/2x1	MB130R-HHF	17	17	MZ130R-HHF	1 1/4x3/8	MB240-GC	10	60	MZ240-GC	continued in the next column.....									
continued in the next column.....					continued in the next column.....					continued in the next column.....									

SIZE	BLACK	BAG	BOX	GALV.
245, Reducing Hexagon Nipple, M x M (ISO N8)				
				
¼x¼	MB245-BA	10	400	MZ245-BA
¾x¼	MB245-CA	10	400	MZ245-CA
¾x¼	MB245-CB	10	400	MZ245-CB
½x¼	MB245-DB	10	250	MZ245-DB
½x¾	MB245-DC	10	230	MZ245-DC
¾x¾	MB245-EC	10	140	MZ245-EC
¾x½	MB245-ED	10	150	MZ245-ED
1x½	MB245-FD	10	100	MZ245-FD
1x¾	MB245-FE	10	100	MZ245-FE
1¼x½	MB245-GD	10	60	MZ245-GD
1¼x1	MB245-GE	10	60	MZ245-GE
1¼x1	MB245-GF	10	50	MZ245-GF
1½x¾	MB245-HE	50	50	MZ245-HE
1½x1	MB245-HF	50	50	MZ245-HF
1½x1¼	MB245-HG	45	45	MZ245-HG
2x1	MB245-IF	25	25	MZ245-IF
2x1¼	MB245-IG	25	25	MZ245-IG
2x1½	MB245-IH	25	25	MZ245-IH
2½x2	MB245-JI	14	14	MZ245-JI
3x2½	MB245-KJ	8	8	MZ245-KJ
270, Female Socket, F x F (ISO M2)				
				
⅛	MB270-A	10	400	MZ270-A
¼	MB270-B	10	400	MZ270-B
⅜	MB270-C	10	250	MZ270-C
½	MB270-D	10	180	MZ270-D
¾	MB270-E	10	110	MZ270-E
1	MB270-F	10	80	MZ270-F
1¼	MB270-G	45	45	MZ270-G
1½	MB270-H	35	35	MZ270-H
2	MB270-I	20	20	MZ270-I
2½	MB270-J	12	12	MZ270-J
3	MB270-K	9	9	MZ270-K
4	MB270-L	4	4	MZ270-L
280, Hexagon Nipple, M x M (ISO N8)				
				
⅛	MB280-A	10	400	MZ280-A
¼	MB280-B	10	400	MZ280-B
⅜	MB280-C	10	300	MZ280-C
½	MB280-D	10	200	MZ280-D
¾	MB280-E	10	130	MZ280-E
1	MB280-F	10	80	MZ280-F
1¼	MB280-G	10	40	MZ280-G
1½	MB280-H	40	40	MZ280-H
2	MB280-I	20	20	MZ280-I
2½	MB280-J	10	10	MZ280-J
3	MB280-K	8	8	MZ280-K
4	MB280-L	4	4	MZ280-L
290, Flanged Plug (ISO T9)				
				
⅛	MB290-A	10	400	MZ290-A
¼	MB290-B	10	400	MZ290-B
⅜	MB290-C	10	400	MZ290-C
½	MB290-D	10	300	MZ290-D

SIZE	BLACK	BAG	BOX	GALV.
continued from previous column.....				
290, Flanged Plug (ISO T9)				
¾	MB290-E	10	200	MZ290-E
1	MB290-F	10	120	MZ290-F
1¼	MB290-G	10	80	MZ290-G
1½	MB290-H	10	60	MZ290-H
2	MB290-I	40	40	MZ290-I
2½	MB290-J	20	20	MZ290-J
3	MB290-K	15	15	MZ290-K
4	MB290-L	8	8	MZ290-L
291, Plain Plug without Flange (ISO T8)				
				
⅛	MB291-A	10	400	MZ291-A
¼	MB291-B	10	400	MZ291-B
⅜	MB291-C	10	400	MZ291-C
½	MB291-D	10	300	MZ291-D
¾	MB291-E	10	200	MZ291-E
1	MB291-F	10	120	MZ291-F
1¼	MB291-G	10	80	MZ291-G
1½	MB291-H	10	60	MZ291-H
2	MB291-I	40	40	MZ291-I
2½	MB291-J	20	20	MZ291-J
3	MB291-K	15	15	MZ291-K
4	MB291-L	8	8	MZ291-L
300, End Cap (ISO T1)				
				
⅛	MB300-A	10	400	MZ300-A
¼	MB300-B	10	400	MZ300-B
⅜	MB300-C	10	400	MZ300-C
½	MB300-D	10	280	MZ300-D
¾	MB300-E	10	180	MZ300-E
1	MB300-F	10	130	MZ300-F
1¼	MB300-G	10	80	MZ300-G
1½	MB300-H	10	60	MZ300-H
2	MB300-I	40	40	MZ300-I
2½	MB300-J	25	25	MZ300-J
3	MB300-K	15	15	MZ300-K
4	MB300-L	8	8	MZ300-L
312, Backnut (ISO P4)				
				
¼	MB312-B	10	400	MZ312-B
⅜	MB312-C	10	400	MZ312-C
½	MB312-D	10	400	MZ312-D
¾	MB312-E	10	300	MZ312-E
1	MB312-F	10	200	MZ312-F
1¼	MB312-G	10	120	MZ312-G
1½	MB312-H	10	90	MZ312-H
2	MB312-I	10	60	MZ312-I
2½	MB312-J	35	35	MZ312-J
3	MB312-K	25	25	MZ312-K
4	MB312-L	12	12	MZ312-L

SIZE	BLACK	BAG	BOX	GALV.
340, Straight Union, F x F (ISO U11)				
(Taper seat, iron)				
				
¼	MB340-B	10	140	MZ340-B
⅜	MB340-C	10	100	MZ340-C
½	MB340-D	10	80	MZ340-D
¾	MB340-E	10	50	MZ340-E
1	MB340-F	10	30	MZ340-F
1¼	MB340-G		20	MZ340-G
1½	MB340-H		18	MZ340-H
2	MB340-I		10	MZ340-I
2½	MB340-J		7	MZ340-J
3	MB340-K		4	MZ340-K
4	MB340-L		2	MZ340-L
341, Straight Union, M x F (ISO U12)				
(Taper seat, iron)				
				
¼	MB341-B	10	120	MZ341-B
⅜	MB341-C	10	100	MZ341-C
½	MB341-D	10	60	MZ341-D
¾	MB341-E	10	40	MZ341-E
1	MB341-F		35	MZ341-F
1¼	MB341-G		18	MZ341-G
1½	MB341-H		15	MZ341-H
2	MB341-I		10	MZ341-I
2½	MB341-J		4	MZ341-J
3	MB341-K		2	MZ341-K
4	MB341-L		1	MZ341-L
SIZE	BLACK	BAG	BOX	Union nut size
Male Pump Union				
				
¾	MB4201047	2		1½
1	MB4201057	2		1½
1	MB4201058	2		2
1¼	MB4201068	2		2
Female Pump Union				
				
1¼	MB4101067	2		1½

Note: Pump unions are supplied in combinations of union end and backnut. Please check the sizes while ordering.
e.g.: MB4201047 consists of ¾" male union + 1½" union nut.

continued in the next column.....

SIZE	BLACK	BAG	BOX	GALV.	SIZE	BLACK	BAG	BOX	GALV.	SIZE	BLACK	BAG	BOX	GALV.
------	-------	-----	-----	-------	------	-------	-----	-----	-------	------	-------	-----	-----	-------

Rapido range compression fittings

MZ770, Galvanised Iron Rapido Socket

Tube end x Tube end



1/2		5	50	MZ770-D
3/4		5	25	MZ770-E
1		4	16	MZ770-F
1 1/4		3	12	MZ770-G
1 1/2		3	9	MZ770-H
2		2	6	MZ770-I
2 1/2		1	4	MZ770-J
3			2	MZ770-K
4			1	MZ770-L

MZ740, Galvanised Iron Rapido Female

Coupler, Female Thread x Tube end



1/2		5	60	MZ740-D
3/4		5	30	MZ740-E
1		4	20	MZ740-F
1 1/4		4	16	MZ740-G
1 1/2		3	12	MZ740-H
2		2	6	MZ740-I
2 1/2		2	6	MZ740-J
3			2	MZ740-K
4			1	MZ740-L

MZ746, Galvanised Iron Rapido Male

Coupler, Male Thread x Tube end



1/2		5	55	MZ746-D
3/4		5	30	MZ746-E
1		4	20	MZ746-F
1 1/4		4	16	MZ746-G
1 1/2		3	12	MZ746-H
2		2	6	MZ746-I
2 1/2		2	6	MZ746-J
3			2	MZ746-K
4			1	MZ746-L

Pipe clips, Brackets, Hangers & Sundries

Pipe Clips (Malleable Iron & Galvanised)

Screw on Bracket



1/4	JMB10-B	25	400	JMZ10-B
3/8	JMB10-C	25	250	JMZ10-C
1/2	JMB10-D	25	200	JMZ10-D
3/4	JMB10-E	25	125	JMZ10-E
1	JMB10-F	25	60	JMZ10-F
1 1/4	JMB10-G	25	50	JMZ10-G
1 1/2	JMB10-H	25	40	JMZ10-H
2	JMB10-I	25	25	JMZ10-I
2 1/2	JMB10-J	1	5	JMZ10-J
3	JMB10-K	1	5	JMZ10-K
4	JMB10-L	1	3	JMZ10-L

Single Rings, M10 tapped



1/4	JMB14/10-B	100	450	JMZ14/10-B
3/8	JMB14/10-C	50	350	JMZ14/10-C
1/2	JMB14/10-D	50	225	JMZ14/10-D
3/4	JMB14/10-E	50	150	JMZ14/10-E
1	JMB14/10-F	25	125	JMZ14/10-F
1 1/4	JMB14/10-G	5	60	JMZ14/10-G
1 1/2	JMB14/10-H	5	30	JMZ14/10-H
2	JMB14/10-I	5	30	JMZ14/10-I

Rectangular Back Plate, Female tap



10	JMB19RF-10	25	600	JMZ19RF-10
12	JMB19RF-12	25	400	JMZ19RF-12

Steel Pipe clips with lining



1/4				JSZ14R/10-B
3/8				JSZ14R/10-C
1/2				JSZ14R/10-D
3/4				JSZ14R/10-E
1				JSZ14R/10-F
1 1/4				JSZ14R/10-G
1 1/2				JSZ14R/10-H
2				JSZ14R/10-I
2 1/2				JSZ14R/10-J
3				JSZ14R/10-K
4				JSZ14R/10-L

Steel Pipe Clips without lining









1/4				JSZ14/10-B
3/8				JSZ14/10-C
1/2				JSZ14/10-D
3/4				JSZ14/10-E
1				JSZ14/10-F
1 1/4				JSZ14/10-G
1 1/2				JSZ14/10-H
2				JSZ14/10-I
2 1/2				JSZ14/10-J
3				JSZ14/10-K
4				JSZ14/10-L

Zinc Plated Steel Threaded Rod

(Steel studding) - 1 meter lengths



M6				JSZT6-100
M8				JSZT8-100
M10				JSZT10-100
M12				JSZT12-100
M16				JSZT16-100

SIZE	BLACK	BAG	BOX	GALV.	SIZE	BLACK	BAG	BOX	GALV.	SIZE	BLACK	BAG	BOX	GALV.
STB1, Socket (FixFi) (Parallel Thread) 					STB3B, Taper Nipple (Taper Male thread) 					STB22, Back Nut 				
¼	STB1-B			STZ1-B	¼	STB3B-B			STZ3B-B	¼	STB22-B			STZ22-B
⅜	STB1-C			STZ1-C	⅜	STB3B-C			STZ3B-C	⅜	STB22-C			STZ22-C
½	STB1-D			STZ1-D	½	STB3B-D			STZ3B-D	½	STB22-D			STZ22-D
¾	STB1-E			STZ1-E	¾	STB3B-E			STZ3B-E	¾	STB22-E			STZ22-E
1	STB1-F			STZ1-F	1	STB3B-F			STZ3B-F	1	STB22-F			STZ22-F
1¼	STB1-G			STZ1-G	1¼	STB3B-G			STZ3B-G	1¼	STB22-G			STZ22-G
1½	STB1-H			STZ1-H	1½	STB3B-H			STZ3B-H	1½	STB22-H			STZ22-H
2	STB1-I			STZ1-I	2	STB3B-I			STZ3B-I	2	STB22-I			STZ22-I
STB2, Connecting Piece, (Taper Male threads) 					STB3C, Barrel Nipple (Taper Male thread) 									
¼x100	STB2-B100			STZ2-B100	¼	STB3C-B			STZ3C-B					
¼x150	STB2-B150			STZ2-B150	⅜	STB3C-C			STZ3C-C					
¼x200	STB2-B200			STZ2-B200	½	STB3C-D			STZ3C-D					
¼x250	STB2-B250			STZ2-B250	¾	STB3C-E			STZ3C-E					
⅜x100	STB2-C100			STZ2-C100	1	STB3C-F			STZ3C-F					
⅜x150	STB2-C150			STZ2-C150	1¼	STB3C-G			STZ3C-G					
⅜x200	STB2-C200			STZ2-C200	1½	STB3C-H			STZ3C-H					
⅜x250	STB2-C250			STZ2-C250	2	STB3C-I			STZ3C-I					
½x100	STB2-D100			STZ2-D100	STB4, Single Long screw, (One end taper, other parallel Male thread) (body only, no nut or socket) 									
½x150	STB2-D150			STZ2-D150	¼x100	STB4-B100			STZ4-B100					
½x200	STB2-D200			STZ2-D200	¼x150	STB4-B150			STZ4-B150					
½x250	STB2-D250			STZ2-D250	¼x200	STB4-B200			STZ4-B200					
¾x100	STB2-E100			STZ2-E100	¼x250	STB4-B250			STZ4-B250					
¾x150	STB2-E150			STZ2-E150	⅜x100	STB4-C100			STZ4-C100					
¾x200	STB2-E200			STZ2-E200	⅜x150	STB4-C150			STZ4-C150					
¾x250	STB2-E250			STZ2-E250	⅜x200	STB4-C200			STZ4-C200					
1x100	STB2-F100			STZ2-F100	⅜x250	STB4-C250			STZ4-C250					
1x150	STB2-F150			STZ2-F150	½x100	STB4-D100			STZ4-D100					
1x200	STB2-F200			STZ2-F200	½x150	STB4-D150			STZ4-D150					
1x250	STB2-F250			STZ2-F250	½x200	STB4-D200			STZ4-D200					
1¼x150	STB2-G150			STZ2-G150	½x250	STB4-D250			STZ4-D250					
1¼x200	STB2-G200			STZ2-G200	¾x100	STB4-E100			STZ4-E100					
1¼x250	STB2-G250			STZ2-G250	¾x150	STB4-E150			STZ4-E150					
1¼x300	STB2-G300			STZ2-G300	¾x200	STB4-E200			STZ4-E200					
1½x150	STB2-H150			STZ2-H150	¾x250	STB4-E250			STZ4-E250					
1½x200	STB2-H200			STZ2-H200	1x100	STB4-F100			STZ4-F100					
1½x250	STB2-H250			STZ2-H250	1x150	STB4-F150			STZ4-F150					
1½x300	STB2-H300			STZ2-H300	1x200	STB4-F200			STZ4-F200					
2x150	STB2-I150			STZ2-I150	1x250	STB4-F250			STZ4-F250					
2x200	STB2-I200			STZ2-I200	1¼x150	STB4-G150			STZ4-G150					
2x250	STB2-I250			STZ2-I250	1¼x200	STB4-G200			STZ4-G200					
2x300	STB2-I300			STZ2-I300	1¼x250	STB4-G250			STZ4-G250					
STB3A, Running Nipple (Parallel Male Thread) 														
¼	STB3A-B			STZ3A-B										
⅜	STB3A-C			STZ3A-C										
½	STB3A-D			STZ3A-D										
¾	STB3A-E			STZ3A-E										
1	STB3A-F			STZ3A-F										
1¼	STB3A-G			STZ3A-G										
1½	STB3A-H			STZ3A-H										
2	STB3A-I			STZ3A-I										