



PT. BUSUR KILAT PERKASA

NEW

SAMBUNGAN PIPA BESI BERKUALITAS MALLEABLE IRON PIPE FITTINGS

KEPUASAN PELANGGAN ADALAH KEPUASAN KAMI

- ELBOWS
- CAPS
- PLUGS
- TEES
- CROSSES
- LONG BENDS



Call Center :
(021) 539 6364

Sertifikasi

TKDN





SAMBUNGAN PIPA DARI BESI COR MALLEABLE

Sambungan Pipa merek G telah memiliki sertifikat SNI (Standar Nasional Indonesia) dan diproduksi dengan mengimplementasikan Sistem Manajemen Mutu ISO 9001 sebagai jaminan kualitas produk dan pelayanan.

Sambungan Pipa merek G sudah memiliki sertifikat TKDN sesuai Peraturan Menteri Perindustrian Nomor 11/M-IND/PER/3/2006 tentang Pedoman Teknis Penggunaan Produksi Dalam Negeri

KEUNGGULAN DAN MANFAAT



Dapat digunakan untuk jaringan air, minyak, gas dan udara.



Tahan terhadap api.



Aman digunakan, tidak mengandung zat kimia berbahaya.



Dapat digunakan untuk jaringan bertekanan tinggi (hingga 25 bar)



Variasi Produk lengkap, lebih dari 200 jenis dengan ukuran 1/4 sampai 6".



Ramah Lingkungan dan dapat didaur ulang



Kuat dan tahan lama, terbuat dari besi cor malleable dan dilapisi dengan lapisan Zinc (Special High Grade Zinc 99.995%).



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SPESIFIKASI TEKNIK

STANDAR PRODUK

Desain	SNI 0139
Ulir / Drat	ISO 7-1
Material	SNI 0139
Pelapisan	SNI 0139
Bentuk Penguatan	Banded, Plain

Note: SNI 0139 setara dengan JIS B 2301

SIFAT MEKANIK BAHAN

Kekuatan Tarik	Min 300 N/mm ²
Kelenturan	Min 6%
Kekerasan	Max 150 HB

TEKANAN KERJA MAKSIMAL

Suhu (C°)	Tekanan Kerja Maksimal
-20 sampai 120	25 bar
120 sampai 300	Interpolated values
> 300	20 bar

UJI TEKanan HIDROSTATIK (KEKUATAN DESAIN)

Ukuran	Tekanan
1/4 - 4"	100 bar
5 dan 6"	64 bar



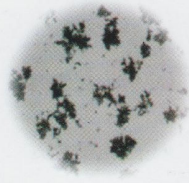
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SAMBUNGAN PIPA DARI BESI COR MALLEABLE

Besi Cor Malleable adalah besi cor yang memiliki tingkat kelenturan yang tinggi sehingga tidak mudah pecah dibanding besi cor biasa. Ini dikarenakan besi cor malleable telah mengalami proses Heat Treatment sehingga sifatnya menjadi lentur dan kuat.

PELAPISAN ZINC

Dengan kekuatan dan kelenturan yang tinggi, Besi Cor Malleable Hitam sangat cocok digunakan untuk pembuatan alat kelengkapan berulir, SAMBUNGAN PIPA, komponen di bidang otomotif dan lain sebagainya.



Gambar Mikrostruktur Besi Cor Malleable Hitam



Gambar Mikrostruktur Besi Cor Biasa

MALLEABLE FITTING

Compression test with heat treatment



NON - MALLEABLE FITTING

Compression test without heat treatment



Gambar Perbedaan Sambungan Pipa Besi Malleable dan Non Malleable

PELAPISAN ZINC

Produk Sambungan Pipa merek G dilapisi dengan zinc dengan metode pelapisan Hot Dip Galvanized dengan ketebalan $70\mu\text{m}$ ($500\text{gr}/\text{m}^2$) sehingga tahan terhadap karat hingga puluhan tahun.



Gambar Mikrostruktur untuk beberapa pelapisan Zinc.

DIMENSI DASAR UNTUK DRAT/ ULIR

Informasi ini diambil dari Standar ISO 7-1.

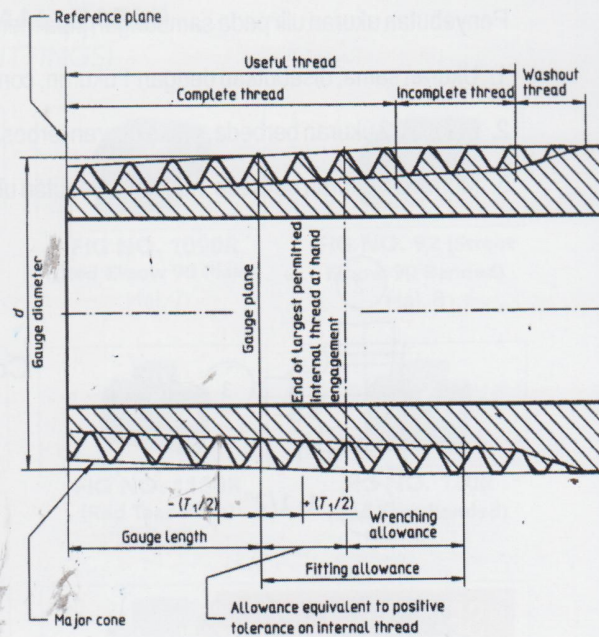
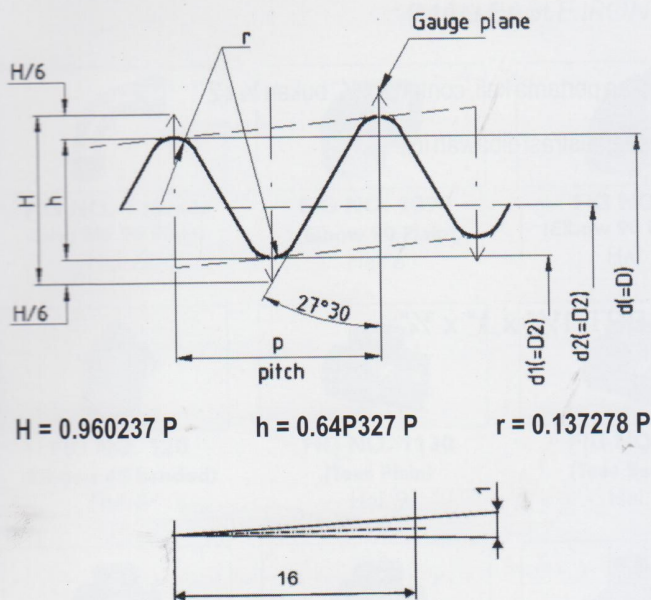


Figure 3 — Terms relating to external threads

Taper Thread

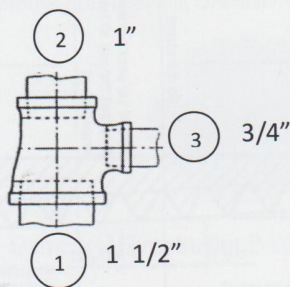
Dimensi dalam milimeter

Designation of threads size		Number of thread in 25.4 mm	Pitch	Height (depth) Of thread	Diameters at gauge plane			Length of useful thread			Gauge Length			Tolerance on position of gauge plane	
					Major	Pitch	Minor	Max	Nominal	Min	Max	Nominal	Min	On External thread	On Internal thread
Inch	mm		P	h	d	d2	d1							Turns of thread	
1/8	4	28	0.907	0.581	9.728	9.147	8.566	7.4	6.5	5.6	4.9	4	3.1	± 1	± 1 ¼
1/4	8	19	1.337	0.856	13.157	12.301	11.445	11.0	9.7	8.4	7.3	6	4.7	± 1	± 1 ¼
3/8	10	19	1.337	0.856	16.662	15.806	14.950	11.4	10.1	8.8	7.7	6.4	5.1	± 1	± 1 ¼
1/2	15	14	1.814	1.162	20.955	19.793	18.631	15.0	13.2	11.4	10.0	8.2	6.4	± 1	± 1 ¼
3/4	20	14	1.814	1.162	26.441	25.279	24.117	16.3	14.5	12.7	11.3	9.5	7.7	± 1	± 1 ¼
1	25	11	2.309	1.479	33.249	31.770	30.291	19.1	16.8	14.5	12.7	10.4	8.1	± 1	± 1 ¼
1 ¼	32	11	2.309	1.479	41.910	40.431	38.952	21.4	19.1	16.8	15.0	12.7	10.4	± 1	± 1 ¼
1 ½	40	11	2.309	1.479	47.803	46.324	44.845	21.4	19.1	16.8	15.0	12.7	10.4	± 1	± 1 ¼
2	50	11	2.309	1.479	59.614	58.135	56.656	25.7	23.4	21.1	18.2	15.9	13.6	± 1	± 1 ¼
2 ½	65	11	2.309	1.479	75.184	73.705	72.226	30.2	26.7	23.2	21.0	17.5	14.0	± 1 ½	± 1 ½
3	80	11	2.309	1.479	87.884	86.405	84.926	33.3	29.8	26.3	24.1	20.6	17.1	± 1 ½	± 1 ½
4	100	11	2.309	1.479	113.030	111.551	110.072	39.3	35.8	32.3	28.9	25.4	21.9	± 1 ½	± 1 ½
5	125	11	2.309	1.479	138.430	136.951	135.472	43.6	40.1	36.6	32.1	28.6	25.1	± 1 ½	± 1 ½
6	150	11	2.309	1.479	163.830	162.351	160.872	43.6	40.1	36.6	32.1	28.6	25.1	± 1 ½	± 1 ½

PENYEBUTAN / PENAMAAN

Penyebutan ukuran ulir pada sambungan pipa merk G sesuai dengan standard SNI 0139 : 2008

1. Ukuran sama, disebutkan dengan 1 ukuran, contoh $\frac{3}{4}$ "
2. Memiliki 2 ukuran berbeda, maka ukuran terbesar disebutkan pertama kali, contoh $2 \times \frac{1}{2}$ " bukan $\frac{1}{2} \times 2$
3. Memiliki 3 ukuran berbeda, maka penyebutan ukuran sesuai ilustrasi dibawah ini,



Contoh : BRT $1\frac{1}{2}$ " x 1" x $\frac{3}{4}$ "

SERTIFIKASI



: Sertifikasi kesesuaian kualitas produk dengan SNI 0139 : 2008



Sertifikasi Sistem Manajemen Mutu ISO 9001 dari TUV-Nord



Sertifikasi material bebas timbal hitam (Pb) dari IAPMO R&T



Sertifikasi TKDN tentang Pedoman Teknis Penggunaan Produksi Dalam Negeri



SAMBUNGAN PIPA BESI MALLEABLE (MALLEABLE IRON PIPE FITTINGS)



FIG NO. 1 (Bends
Long MF 90 Plain)
Hal. 6



FIG NO. 1090
(Elbow 90 Plain)
Hal. 6



FIG NO. 90
(Elbow 90 Banded)
Hal. 7



FIG NO. 1090R
(Red Elbow 90 Plain)
Hal. 7



FIG NO. 92 (Street
Elbow 90 Banded)
Hal. 8



FIG NO. 120
(Elbows 45 banded)
Hal. 8



FIG NO. 1130
(Tees Plain)
Hal. 9



FIG NO. 130
(Tees Banded)
Hal. 9



FIG NO. 1130R
(Red Tees Plain)
Hal. 10



FIG NO. 130R
(Red Tees Banded)
Hal. 10 -11



FIG NO. 1180
(Crosses Plain)
Hal. 11



FIG NO. 180
(Crosses Banded)
Hal. 12



FIG NO. 1221
(Side Outlet Elbow)
Hal. 12



FIG NO. 1223
(Side Outlet Tees)
Hal. 12



FIG NO. 1240
(Red Socket Plain)
Hal. 13



FIG NO. 240
(Red Sockets Banded)
Hal. 13 - 14



RTL
(Red Tees Elbow)
Hal. 14



FIG NO. 241
(Bushings)
Hal. 15&16



FIG NO. 245
(Red Hex Nipples)
Hal. 16



FIG NO. 1271
(Sockets Plain)
Hal. 16



FIG NO. 271
(Sockets Banded)
Hal. 17



FIG NO. 280
(Hex Nipples)
Hal. 17



FIG NO. 291
(Plugs)
Hal. 18



FIG NO. 300
(Caps Plain)
Hal. 18



FIG NO. 300
(Caps Banded)
Hal. 18



FIG NO. 310
(Locknuts)
Hal. 19



FIG NO. 322
(Round Flanges)
Hal. 19



FIG NO. 330
(Unions)
Hal. 20

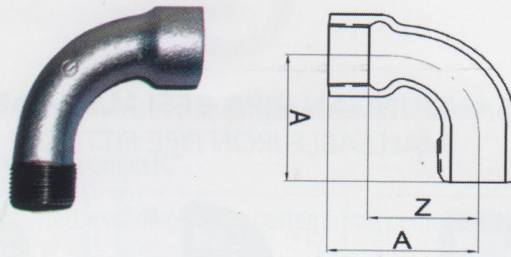


FIG NO. 529A
(Ext Pieces Plain)
Hal. 20

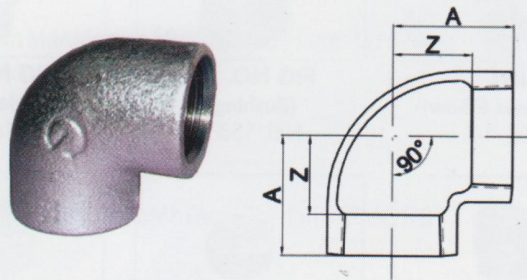


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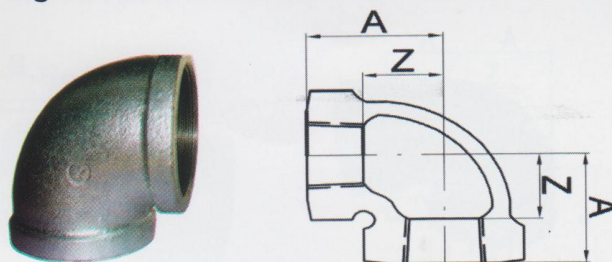
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Fig No. 1 - BENDS LONG M&F 90° PLAIN (MF 90L)

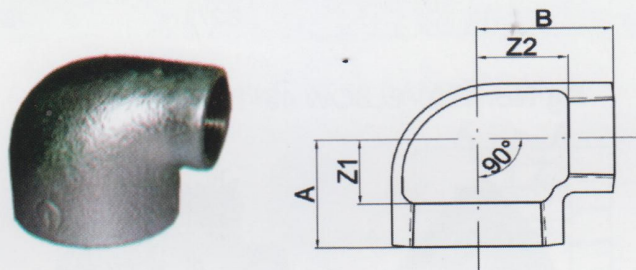
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
1/2"	15	225	115	52	41
3/4"	20	150	206	65	53
1"	25	80	338	82	68
1 1/4"	32	43	570	100	84
1 1/2"	40	30	790	115	99
2"	50	25	1.428	140	119
BENDS LONG M&F BANDED (MF 90L)					
2 1/2"	65	13	2.586	175	152
3"	80	8	3.865	205	178
4"	100	4	6.820	260	228

Fig No. 1090 - ELBOW 90° PLAIN (L 90)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
1/4"	8	825	37	19	11
3/8"	10	525	56	23	14
1/2"	15	300	88	27	16
3/4"	20	210	130	32	20
1"	25	100	194	38	24
1 1/4"	32	60	320	46	30
1 1/2"	40	50	439	48	32
2"	50	50	722	57	36

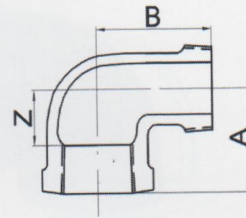
Fig No. 90 - ELBOW 90° BANDED (BL 90)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
2 1/2"	65	30	1.300	69	46
3"	80	20	1.770	78	51
4"	100	8	3.700	97	65
5"	125	5	5.480	113	76
6"	150	3	7.950	132	95

Fig No. 1090R - REDUCING ELBOW 90° PLAIN (RL 90)

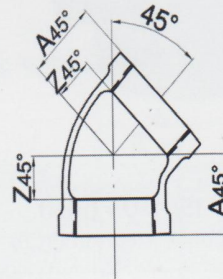
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			A	B	Z1	Z2
3/4 X 1/2"	20 X 15	195	124	29	30	17	19
1 X 1/2"	25 X 15	150	176	32	33	18	22
1 X 3/4"	25 X 20	135	176	34	35	20	23
1 1/4 X 1/2"	32 X 15	140	250	34	38	18	27
1 1/4 X 3/4"	32 X 20	105	250	38	40	22	28
1 1/4 X 1"	32 X 25	90	290	40	42	24	28
1 1/2 X 1/2"	40 X 15	80	296	35	42	19	31
1 1/2 X 1"	40 X 25	80	330	41	45	25	31

Fig No. 92 - STREET ELBOW 90° BANDED (BSL 90)



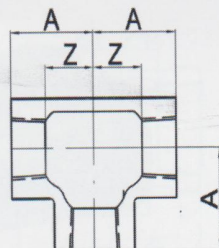
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)		
INCH	METRIC			A	B	Z
1/2"	15	270	100	27	40	16
3/4"	20	180	162	32	47	20
1"	25	120	240	38	54	24
1 1/4"	32	65	400	46	62	30
1 1/2"	40	50	502	48	68	32
2"	50	45	782	57	79	36
2 1/2"	65	25	1.300	69	92	46
3"	80	15	2.273	78	104	51

Fig No. 120 - ELBOW 45° BANDED (BL 45)



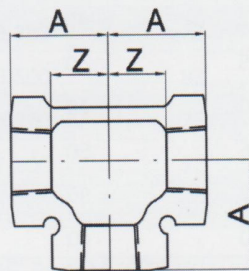
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A45	Z45
1/2"	15	300	98	21	10
3/4"	20	210	142	25	13
1"	25	120	230	29	15
1 1/4"	32	90	360	34	18
1 1/2"	40	55	497	37	21
2"	50	35	698	42	21
2 1/2"	65	35	1.097	49	26
3"	80	20	1.478	54	27
4"	100	9	2.860	65	33
5"	125	5	4.800	74	37
6"	150	3	6.520	82	45

Fig No. 1130 - TEES PLAIN (T)

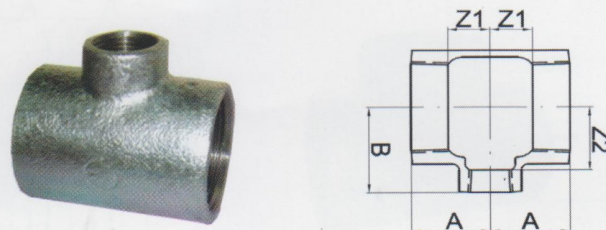


UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
1/4"	8	450	58	19	11
3/8"	10	300	82	23	14
1/2"	15	210	109	27	16
3/4"	20	100	178	32	20
1"	25	80	250	38	24
1 1/4"	32	45	464	46	30
1 1/2"	40	35	594	48	32
2"	50	40	827	57	36

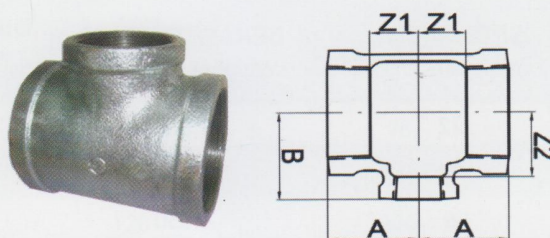
Fig No. 130 - TEES BANDED (BT)



UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
2 1/2"	65	22	1.562	69	46
3"	80	14	2.330	78	51
4"	100	6	4.550	97	65
6"	150	3	10.200	132	95

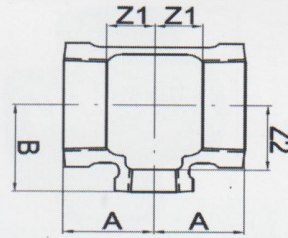
Fig No. 1130R - REDUCING TEES PLAIN (RT)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			A	B	Z1	Z2
1/2 X 1/4"	15 X 8	225	112	24	24	13	16
1/2 X 3/8"	15 X 10	225	126	26	25	15	16
3/4 X 1/2"	20 X 15	135	170	29	30	17	19
1 X 1/2"	25 X 15	105	237	32	33	18	22
1 X 3/4"	25 X 20	84	250	34	35	20	23
1 1/4 X 1/2"	32 X 15	70	332	34	38	18	27
1 1/4 X 3/4"	32 X 20	65	389	38	40	22	28
1 1/4 X 1"	32 X 25	55	394	40	42	24	28
1 1/2 X 1/2"	40 X 15	58	404	35	42	19	31
1 1/2 X 3/4"	40 X 20	50	444	38	43	22	31
1 1/2 X 1"	40 X 25	45	498	41	45	25	31
1 1/2 X 1 1/4"	40 X 32	40	564	45	48	29	32
2 X 1/2"	50 X 15	60	502	38	48	17	37
2 X 3/4"	50 X 20	60	600	41	49	20	37
2 X 1"	50 X 25	50	584	44	51	23	37
2 X 1 1/4"	50 X 32	50	780	48	54	27	38
2 X 1 1/2"	50 X 40	40	786	52	55	31	39

Fig No. 130R - REDUCING TEES BANDED (BRT)

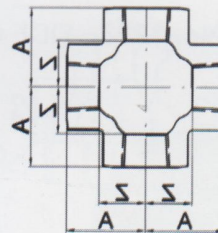
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			A	B	Z1	Z2
2 1/2 X 1/2"	65 X 15	22	1.000	41	57	18	46
2 1/2 X 3/4"	65 X 20	20	1.051	44	58	21	46
2 1/2 X 1"	65 X 25	20	1.230	48	60	25	46
2 1/2 X 1 1/4"	65 X 32	20	1.290	52	62	29	46
2 1/2 X 1 1/2"	65 X 40	18	1.300	55	62	32	46
2 1/2 X 2"	65 X 50	25	1.416	60	65	37	44

Fig No. 130R - REDUCING TEES BANDED (BRT)



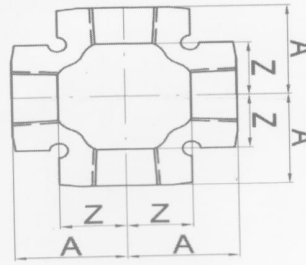
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			A	B	Z1	Z2
3 X 1/2"	80 X 15	28	1.300	46	66	-	-
3 X 3/4"	80 X 20	24	1.370	46	66	19	54
3 X 1"	80 X 25	24	1.520	50	68	23	54
3 X 1 1/4"	80 X 32	24	1.635	55	70	28	54
3 X 1 1/2"	80 X 40	24	1.747	58	72	31	56
3 X 2"	80 X 50	20	1.840	62	72	35	51
3 X 2 1/2"	80 X 65	18	2.040	72	75	45	52
4 X 1"	100 X 25	16	2.500	57	83	25	69
4 X 1 1/4"	100 X 32	14	2.270	61	86	29	70
4 X 1 1/2"	100 X 40	10	2.580	63	86	31	70
4 X 2"	100 X 50	9	2.605	69	87	37	66
4 X 2 1/2"	100 X 65	6	3.380	78	90	46	67
4 X 3"	100 X 80	6	3.500	83	91	51	64
6 X 2"	150 X 50	4	5.970	75	116	38	95
6 X 3"	150 X 80	3	7.200	92	120	55	93
6 X 4"	150 X 80	3	7.780	102	125	65	93

Fig No. 1180 - CROSSES PLAIN (CR)



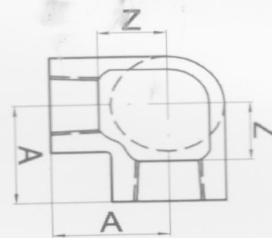
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
1/2"	15	135	175	27	16
3/4"	20	90	233	32	20
1"	25	60	410	38	24
1 1/4"	32	40	570	46	30
1 1/2"	40	30	740	48	32
2"	50	18	1.151	57	36

Fig No. 180 - CROSSES BANDED (BCR)



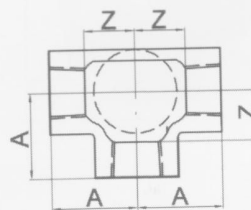
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
2 1/2"	65	9	2.100	69	46
3"	80	5	2.790	78	51
4"	100	5	6.180	97	65

Fig No. 1221 - SIDE OUTLET ELBOW PLAIN (SOE)

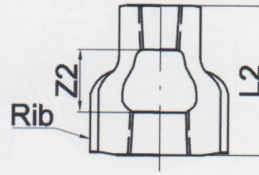


UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
3/4"	20	150	181	32	20
1"	25	90	300	38	24

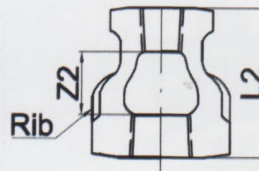
Fig No. 1223 - SIDE OUTLET TEES PLAIN (SOT)



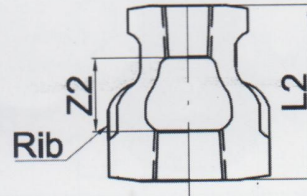
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			A	Z
3/4"	20	120	206	32	20
1"	25	70	336	38	24

Fig No. 1240 - REDUCING SOCKETS WITH RIBS PLAIN (RS)

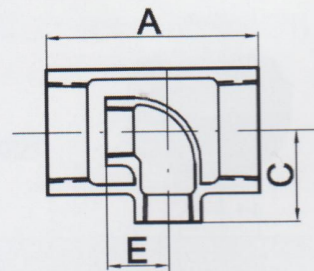
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			L2	Z2
3/8 X 1/4"	10 X 8	750	45	28	11
1/2 X 1/4"	15 X 8	600	60	34	15
1/2 X 3/8"	15 X 10	375	59	34	14
3/4 X 1/2"	20 X 15	300	85	38	15
1 X 1/2"	25 X 15	225	115	42	17
1 X 3/4"	25 X 20	195	137	42	16
1 1/4 X 1/2"	32 X 15	160	203	48	21
1 1/4 X 3/4"	32 X 20	130	210	48	20
1 1/4 X 1"	32 X 25	120	222	48	18
1 1/2 X 1/2"	40 X 15	125	240	52	25
1 1/2 X 3/4"	40 X 20	110	257	52	24
1 1/2 X 1"	40 X 25	110	236	52	22
1 1/2 X 1 1/4"	40 X 32	90	250	52	20
2 X 1/2"	50 X 15	100	330	58	26
2 X 3/4"	50 X 20	90	370	58	25
2 X 1"	50 X 25	90	349	58	23
2 X 1 1/4"	50 X 32	90	381	58	21
2 X 1 1/2"	50 X 40	65	430	58	21

Fig No. 240 - REDUCING SOCKETS WITH RIBS BANDED (BRS)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			L2	Z2
2 1/2 X 1 1/2"	65 X 15	50	644	65	31
2 1/2 X 3/4"	65 X 20	40	570	65	30
2 1/2 X 1"	65 X 25	40	647	65	28
2 1/2 X 1 1/4"	65 X 32	40	702	65	26
2 1/2 X 1 1/2"	65 X 40	40	690	65	26
2 1/2 X 2"	65 X 50	40	746	65	21

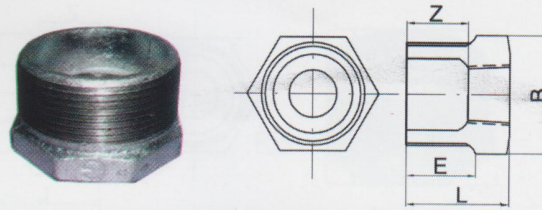
Fig No. 240 - REDUCING SOCKETS WITH RIBS BANDED (BRS)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			L2	Z2
3 X 3/4"	80 X 20	34	816	72	33
3 X 1"	80 X 25	35	852	72	31
3 X 1 1/4"	80 X 32	35	968	72	29
3 X 1 1/2"	80 X 40	34	920	72	29
3 X 2"	80 X 50	25	930	72	24
3 X 2 1/2"	80 X 65	35	1.088	72	22
4 X 1"	100 X 25	14	1.725	-	-
4 X 1 1/4"	100 X 32	14	1.580	-	-
4 X 1 1/2"	100 X 40	20	1.411	-	-
4 X 2"	100 X 50	25	1.552	85	32
4 X 2 1/2"	100 X 65	20	1.620	85	30
4 X 3"	100 X 80	25	1.573	85	26
6 X 2"	150 X 50	12	3.600	-	-
6 X 2 1/2"	150 X 65	12	3.350	-	-
6 X 3"	150 X 80	12	3.380	-	-
6 X 4"	150 X 100	6	3.840	105	36

REDUCING TEES ELBOWS (RTL)

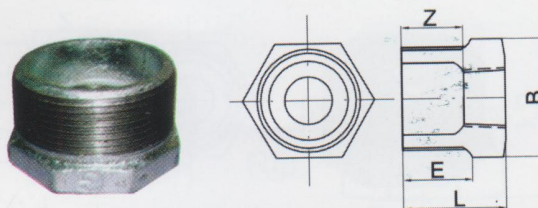
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)		
INCH	METRIC			A	C	E
1 1/4 X 1/2"	32 X 15	60	44	84	36	24.25

Fig No. 241 - BUSHING (HB)



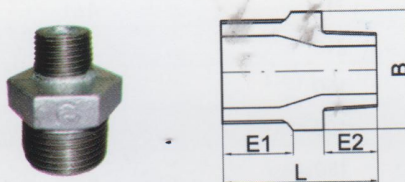
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			L	E	B	Z
3/8 X 1/4"	10 X 8	1500	22	18	13	21	10
1/2 X 1/4"	15 X 8	1050	39	21	16	26	13
1/2 X 3/8"	15 X 10	1000	34	21	16	26	12
3/4 X 3/8"	20 X 10	450	75	24	18	32	15
3/4 X 1/2"	20 X 15	450	58	24	18	32	13
1 X 1/2"	25 X 15	360	117	27	20	38	16
1 X 3/4"	25 X 20	330	98	27	20	38	15
1 1/4 X 1/2"	32 X 15	195	206	30	22	46	19
1 1/4 X 3/4"	32 X 20	210	161	30	22	46	18
1 1/4 X 1"	32 X 25	210	153	30	22	46	16
1 1/2 X 1/2"	40 X 15	150	236	32	23	54	21
1 1/2 X 3/4"	40 X 20	150	236	32	23	54	20
1 1/2 X 1"	40 X 25	150	212	32	23	54	18
1 1/2 X 1 1/4"	40 X 32	150	180	32	23	54	16
2 X 1/2"	50 X 15	90	386	36	25	63	25
2 X 3/4"	50 X 20	90	374	36	25	63	19
2 X 1"	50 X 25	90	414	36	25	63	22
2 X 1 1/4"	50 X 32	90	350	36	25	63	20
2 X 1 1/2"	50 X 40	90	282	36	25	63	20
2 1/2 X 1/2"	65 X 15	60	578	39	28	80	27
2 1/2 X 3/4"	65 X 20	60	648	39	28	80	26
2 1/2 X 1"	65 X 25	60	629	39	28	80	25
2 1/2 X 1 1/4"	65 X 32	60	620	39	28	80	23
2 1/2 X 1 1/2"	65 X 40	60	640	39	28	80	23
2 1/2 X 2"	65 X 50	60	473	39	28	80	18
3 X 1/2"	80 X 15	35	890	44	32	95	32
3 X 3/4"	80 X 20	40	934	44	32	95	33
3 X 1"	80 X 25	40	928	44	32	95	30
3 X 1 1/4"	80 X 32	40	1.010	44	32	95	28
3 X 1 1/2"	80 X 40	40	1.030	44	32	95	28
3 X 2"	80 X 50	35	862	44	32	95	23
3 X 2 1/2"	80 X 65	35	600	44	32	95	21
4 X 1"	100 X 25	24	1.418	51	37	120	40
4 X 1 1/4"	100 X 32	24	1.575	51	37	120	38
4 X 1 1/2"	100 X 40	24	1.500	51	37	120	35
4 X 2"	100 X 50	24	1.500	51	37	120	30

Fig No. 241 - BUSHING (HB)



UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			L	E	B	Z
4 X 2 1/2"	100 X 65	24	1.450	51	37	120	28
4 X 3"	100 X 80	24	1.250	51	37	120	24
6 X 2"	150 X 50	8	3.460	64	46	170	43
6 X 2 1/2"	150 X 65	8	3.500	64	46	170	41
6 X 3"	150 X 80	8	3.420	64	46	170	37
6 X 4"	150 X 100	8	3.840	64	46	170	32

Fig No. 245 - REDUCING HEXAGON NIPPLES (RN)

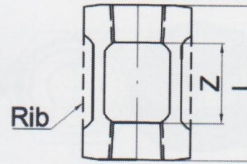


UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			L	E1	E2	B
3/4 X 1/2"	20 X 15	240	109	45	18	16	32
1 X 1/2"	25 X 15	255	149	48	20	16	38
1 X 3/4"	25 X 20	225	130	50	20	18	38
1 1/4 X 1"	32 X 25	120	219	54	22	20	46

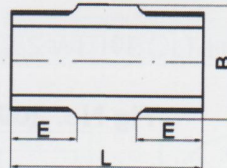
Fig No. 1271 - SOCKET TAPPER THREAD WITH RIBS PLAIN (S)



UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			L	Z
1/2"	15	390	70	35	13
3/4"	20	240	103	40	16
1"	25	160	146	45	17
1 1/4"	32	110	206	50	18
1 1/2"	40	85	285	55	23
2"	50	60	452	60	18

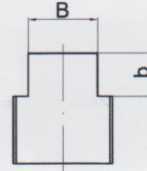
Fig No. 271 - SOCKET TAPPER THREAD WITH RIBS BANDED (BS)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			L	Z
1/4"	8	975	46	25	9
3/8"	10	600	65	30	12
2 1/2"	65	32	858	70	24
3"	80	20	1.210	75	21
4"	100	20	2.160	85	21
5"	125	10	2.840	95	21
6"	150	7	4.290	105	31

Fig No. 280 - HEXAGON NIPPLES (N)

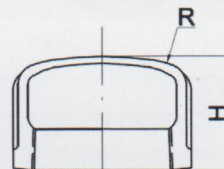
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)		
INCH	METRIC			L	E	B
1/4"	8	1200	28	34	12	17
3/8"	10	825	44	36	13	21
1/2"	15	450	74	42	16	26
3/4"	20	240	100	47	18	32
1"	25	180	152	52	20	38
1 1/4"	32	120	195	56	22	46
1 1/2"	40	85	275	60	23	54
2"	50	60	426	66	25	63
2 1/2"	65	45	645	73	28	80
3"	80	40	866	81	32	95
4"	100	22	1.350	92	37	120
5"	125	12	2.316	104	42	145
6"	150	8	3.750	116	46	170

Fig No. 291 - PLUGS (P)



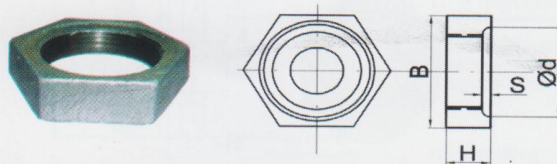
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			B	b
1/4"	8	2100	14	9	8
3/8"	10	1500	25	12	9
1/2"	15	1050	40	14	10
3/4"	20	675	63	17	11
1"	25	360	92	19	12
1 1/4"	32	225	146	23	13
1 1/2"	40	150	180	26	14
2"	50	105	270	32	15
2 1/2"	65	50	440	41	18
3"	80	40	637	46	19
4"	100	30	1.070	58	22
6"	150	10	2.126	77	28

Fig No. 300 - ROUND CAPS (C)



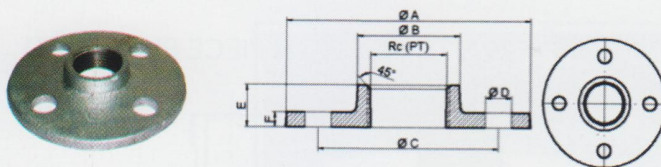
UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			H	R
1/2"	15	630	51	20	78
3/4"	20	330	80	24	95
1"	25	210	123	28	125
1 1/4"	32	165	173	30	150
1 1/2"	40	150	220	32	170
2"	50	80	374	36	215
ROUND CAPS BANDED (BC)					
2 1/2"	65	40	720	42	270
3"	80	30	906	45	310
4"	100	18	1.540	55	405
6"	150	6	3.470	65	580

Fig No. 310 - LOCKNUTS (LN)

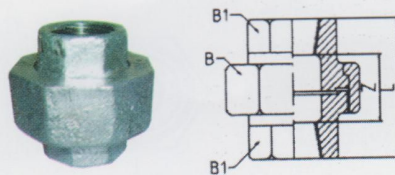


UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			H	d	S	B
1/2"	15	1050	37	9	28	1.2	32
3/4"	20	660	51	10	34	1.5	38
1"	25	450	79	11	40	1.5	46
1 1/4"	32	300	102	12	50	1.5	54
1 1/2"	40	150	143	13	55	2.5	63
2"	50	120	240	15	68	2.5	77
2 1/2"	65	75	480	17	88	2.5	100
3"	80	50	630	18	100	2.5	115
4"	100	25	1.196	22	125	2.5	145
6"	150	12	2.000	30	180	2.5	200

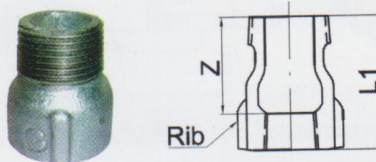
Fig No. 322 - ROUND FLANGES WITH BOLT HOLE (RF)



UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)					
INCH	METRIC			A	B	C	D	E	F
1/2"	15	160	37	95.5	27.0	67.0	14.5	12	5.0
3/4"	20	125	51	101.5	33.0	73.0	14.5	14	5.0
1"	25	90	79	114.3	41.0	83.0	14.5	16	6.0
1 1/4"	32	70	102	120.0	50.0	89.0	14.5	19	6.5
1 1/2"	40	55	143	133.4	56.0	98.4	14.5	19	6.5
2"	50	35	240	152.0	69.0	114.3	17.5	21	7.5
2 1/2"	65	30	480	165.0	87.0	128.0	17.5	23	8.0
3"	80	20	630	184.0	99.0	146.0	17.5	23	9.5
4"	100	18	1.300	211.0	126.5	178.0	17.5	24	9.5
6"	150	8	4.800	281.0	185.0	236.0	22.2	34	13.0

Fig No. 330 - UNION FEMALE FLAT SEAT IRON TO IRON SEAT WITH GASKET (FU)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)			
INCH	METRIC			L	Z	B	B1
1/4"	8	375	95	42	22	31	17
3/8"	10	225	155	45	25	37	19
1/2"	15	150	180	48	22	42	21
3/4"	20	90	261	52	22	49	24
1"	25	80	397	58	24	59	27
1 1/4"	32	50	545	65	27	69	30
1 1/2"	40	35	738	70	32	78	33
2"	50	30	1.100	78	30	93	37
2 1/2"	65	20	1.690	85	31	112	42
3"	80	13	2.330	95	35	127	47
4"	100	6	3.696	-	-	-	-
6"	150	2	10.400	-	-	-	-

Fig No. 529A - EXTENSION PIECE PLAIN (EXT)

UKURAN (Size)		ISI/DUS (BIJI) Content/carton (PCS)	BERAT/UNIT (gr) Weight/pieces (gr)	DIMENSI (mm) Dimension (mm)	
INCH	METRIC			L1	Z
1/2"	15	450	62	40	29
3/4"	20	300	80	48	36
1"	25	165	165	55	41

SERTIFIKAT SNI 0139 : 2008



Kementerian Perindustrian
REPUBLIK INDONESIA

KEMENTERIAN PERINDUSTRIAN
BALAI BESAR LOGAM DAN MESIN
LEMBAGA SERTIFIKASI PRODUK BBLM
(LSPro BBLM)



YKAN
LSP-029-IDN

SERTIFIKAT PRODUK PENGGUNAAN TANDA SNI
SNI MARKING PRODUCT CERTIFICATE
No : 002/002/05.14/1/2015

Diberikan kepada / Issued to	: PT. TRI SINAR PURNAMA
Perusahaan / Company	
Alamat / Address	: Jl. Raya Semarang - Boja, Wates, Ngaliyan, Semarang 50188 - Jawa Tengah
Lokasi pabrik / Factory location	: Dk. Nglorok, Campurejo, Boja, Kendal, Jawa Tengah, Indonesia
Nomor SNI / SNI Number	: SNI 0139 : 2008
Komoditi / Commodity	: Penyambung Pipa Berulir Dari Besi Cor Malleabel Hitam
Tipe / Jenis / Type / Kind	: Terlengkap
Merak / Trade Mark	: - TSP
	: - G
Sistem Mutu yang digunakan / Quality System Applied	: SNI ISO 9001 : 2008
Masa Berlaku Sertifikat / Certificate Validity	: 4 tahun / 4 Years
Tipe Sertifikasi / Type of Certification	: 5

Bandung, 21 Januari 2015
Ketua LSPro BBLM
[Signature]
Ir. Eddy Siswanto, MAM

Masa berlaku Sertifikat / Certificate Validity
Tanggal Terdaftar / Registered Date : 21 Januari 2015
Tanggal Kadaluarsa / Expiration Date : 21 Januari 2019

Jl. Sangkaring No.12 Bandung 40135 Jawa Barat - Indonesia
Telp. (022) 2503171, Fax. (022) 2503978
Email : lsp_pro_midco@yahoo.co.id
Website : www.bblm.go.id

F-02-01/20

SERTIFIKAT ISO 9001 : 2008



CERTIFICATE

**Management System as per
ISO 9001 : 2008**

In accordance with TUV NORD Indonesia procedures, it is hereby certified that

PT. TRI SINAR PURNAMA

Head Office & Manufacture :
Desa Kedungpani, Kel. Wates, Kec. Ngaliyan,
Semarang 50188, Indonesia

Manufacture :
Dukuh Nglorok, Desa Campurejo, Kec. Boja
Kabupaten Kendal 51381 Indonesia



applies a management system in line with the above standard for the following scope

**Design and Manufacturing of Galvanized and Black Malleable
Cast Iron Pipe Fittings and Other Castings**

Certificate Registration No. 16 100 0519
Audit Report No. I-519/2014

Valid until 2017-11-25
Initial Certification 2008-11-24



TUV NORD Indonesia Certification Body
TUV NORD Group

Jakarta, 2014-11-21

This certification was conducted in accordance with the TUV NORD Indonesia auditing and certification procedures and is subject to regular surveillance audits.

PT TUV NORD Indonesia, Perkantoran Hijau Arkade Tower F 7th Floor, Jl. Jend. T.B. Simatupang Kav. 88, Jakarta Selatan 12520

