



Section 5

# Steel Fittings

# Material Specifications

British Standard Threads							
ALL MEASUREMENTS IN MM							
NOMINAL BORE OF PIPE		APPROX OUTSIDE DIAMETER	NUMBER OF THREADS PER INCH	PITCH	DEPTH OF THREADS	DIAMETER AT GAUGE PLANE	LENGTH OF USEFUL THREAD
IMPERIAL	METRIC	A		P	H	B	E
1/8	6	10.16	28	0.907	0.581	9.72	6.5
1/4	8	13.66	19	1.337	0.856	13.15	9.7
3/8	10	17.17	19	1.337	0.856	16.66	10.1
1/2	15	21.51	14	1.814	1.162	20.95	13.2
3/4	20	27.00	14	1.814	1.162	26.44	14.5
1	25	33.93	11	2.309	1.479	33.24	16.8
1 1/4	32	42.59	11	2.309	1.479	41.91	19.1
1 1/2	40	48.48	11	2.309	1.479	47.80	19.1
2	50	60.47	11	2.309	1.479	59.61	23.4
2 1/2	65	76.09	11	2.309	1.479	75.18	26.7
3	80	88.87	11	2.309	1.479	87.88	29.8
4	100	114.14	11	2.309	1.479	113.03	35.8
5	125	139.65	11	2.309	1.479	138.43	40.1
6	150	165.12	11	2.309	1.479	163.83	40.1

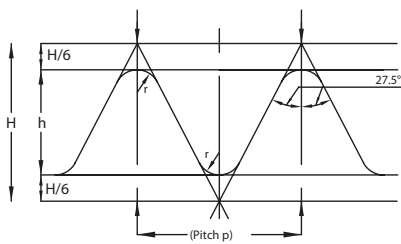


Fig. 1. (Parallel)  
 $H = 0.960491 \times p$   
 $h = 0.640327 \times p$   
 $r = 0.137329 \times p$

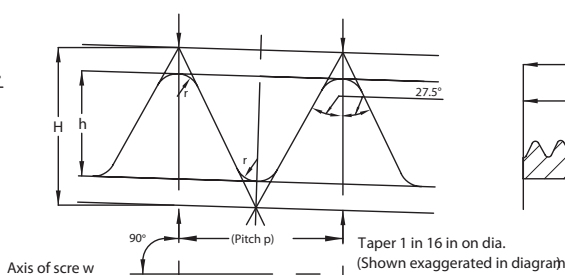


Fig. 2. (Taper)  
 $H = 0.960237 \times p$   
 $h = 0.640327 \times p$   
 $r = 0.137278 \times p$

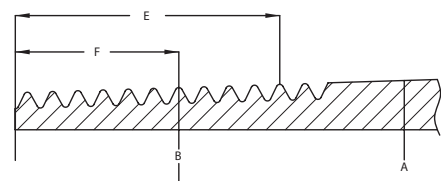


Fig. 3. (Taper)

### Chemical Composition Of Seamless Steel Fittings

C MAX. (%)	S MAX. (%)	P MAX. (%)
0.25	0.35	0.09

### Chemical Composition Of Fabricated Fittings

C MAX. (%)	Mn MAX. (%)	P MAX. (%)	S MAX. (%)
0.25	1.40	0.045	0.045

### Mechanical Properties Of Seamless Steel Fittings

TENSILE STRENGTH MIN. (N/mm <sup>2</sup> )	ELONGATION MIN. (%)
320	20

### Mechanical Properties of Fabricated Fittings

TENSILE STRENGTH MIN. (N/mm <sup>2</sup> )	YEILD STRENGTH MIN. (N/mm <sup>2</sup> )	ELONGATION MIN. (%)
320	195	20

## Black Steel Unions – Taper Threads

**STEEL UNIONS:** Black steel Unions are used in a wide range of make-and-break joints such as : Filters, valves, hoses, machinery etc.; general piping installations requiring periodic disconnections; high or low pressure assemblies in air, oil, gas and water. Available in Steel-Steel, Steel-Bronze and Bronze-Bronze seats in Female-Female and Male-Female types.

### SEATINGS

-Ball to Cone Seating in the following combinations:-

#### Steel-Steel

This is a general purpose combination recommended where vibration is present. The seats are Integral and therefore are the most economically priced. This union will suit almost any application. Zinc coating improves the efficiency of the joints to a marked degree where corrosion is present.

#### Steel-Bronze

A good seat combination where corrosion due to the material used in the line or where condensation is present and when periodic disconnection is required.

Zinc coating improves the efficiency of the joint

#### Bronze-Bronze

Should corrosion – due to material in the pipe line or condensation be a major factor, and where consistent disconnection is required, this seat combination is advised. Ideally suited to steam lines.

Zinc coating improves the corrosion resistance of the seat area.

### THREADING – Taper threads only.

External (R) and internal (RC) series to AS 1722 Part 1.

### SPECIFICATIONS

H J Asmuss. Steel Fittings are pressure tested by application of internal pressure, under which they are required to withstand, without signs of leakage, failure or plastic deformation the following tests:

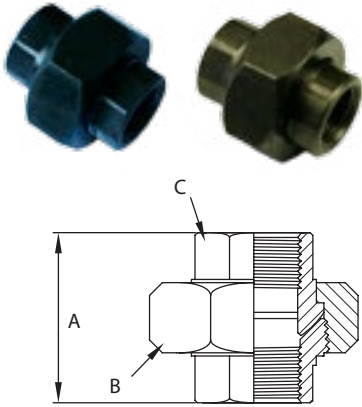
- All sizes of unions up to 2" nominal bore individually tested to 2000 p.s.i. and sample tested to 3000 p.s.i.
- All sizes of unions over 2" nominal bore individually tested to 1500 p.s.i.
- All sizes of ordinary sockets samples tested to 750 p.s.i.
- All sizes of other fittings sample tested to 750 p.s.i.

Dimensions – mm											
DN	8	10	15	20	25	32	40	50	65	80	100
A*	57	57	67	78	86	101	108	119	138	154	165
B	35	35	42	52	61	74	82	102	122	143	167
C	22	22	26	34	40	50	55	70	88	104	128
D	13	13	17	19	21	24	25	28	29	32	38
E*	42	42	46	56	60	73	80	86	106	118	122

NOTES: 1. Dimension B – Nut is Hexagon up to DN 25. Nut is Octagon DN 32 and larger.  
2. Dimension C – Body Flats are all Octagon.  
3.\* Dimensions A & E are approximately overall length in mm.

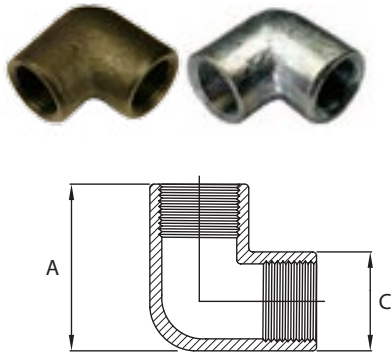
## Black Mild Steel Female-Female Union

Seats Available – Steel-Steel, Steel-Bronze, Bronze-Bronze. **All Unions have BSPT thread.**



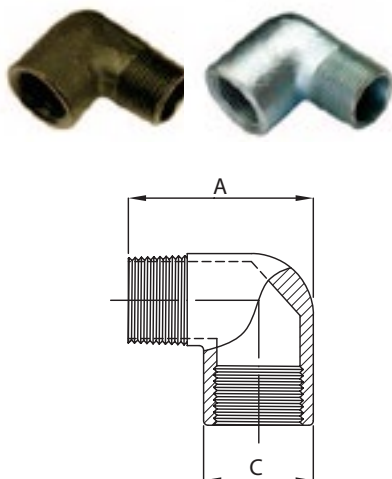
Black Mild Steel Female-Female Union							
CODE			METRIC SIZE	A	ACROSS FLATS		APPROX KG/PC
STEEL-STEEL	BRONZE-STEEL	BRONZE-BRONZE			B	C	
	WBUB008		8	42	35	21	0.16
WBUS010	WBUB010		10	42	35	21	0.14
WBUS015	WBUB015	WBUBB015	15	46	42	26	0.23
WBUS020	WBUB020	WBUBB020	20	54	52	34	0.41
WBUS025	WBUB025	WBUBB025	25	61	61	40	0.59
WBUS032	WBUB032	WBUBB032	32	71	76	50	0.91
WBUS040	WBUB040	WBUBB040	40	82	83	56	1.28
WBUS050	WBUB050	WBUBB050	50	88	101	70	2.01

## Black & Galvanized Mild Steel Female-Female Elbow



Black & Galvanized Mild Steel Female-Female Elbow					
CODE		METRIC SIZE	A	C	APPROX KG/PC
BLACK	GALVANISED				
WBE006		6	32	19	0.08
WBE008		8	32	19	0.06
WBE010		10	36	22	0.08
WBE015	WGE015	15	46	28	0.17
WBE020	WGE020	20	53	34	0.24
WBE025	WGE025	25	66	42	0.43
WBE032	WGE032	32	76	50	0.63
WBE040	WGE040	40	86	58	0.97
WBE050	WGE050	50	98	69	1.32
WBE065		65	114	83	1.55
WBE080		80	138	97	2.57
WBE100		100	179	124	4.41

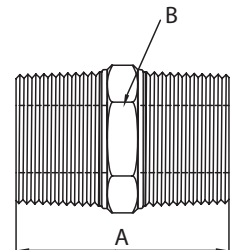
## Black & Galvanized Mild Steel Male-Female Elbow



Black & Galvanized Mild Steel Male-Female Elbow					
CODE		METRIC SIZE	A	C	APPROX KG/PC
BLACK	GALVANISED				
WBEMF008		8	40	19	0.05
WBEMF010		10	44	22	0.07
WBEMF015	WGEMF015	15	58	28	0.17
WBEMF020	WGEMF020	20	67	34	0.22
WBEMF025	WGEMF025	25	70	43	0.35
WBEMF032	WGEMF032	32	90	50	0.61
WBEMF040	WGEMF040	40	97	57	0.82
WBEMF050	WGEMF050	50	115	70	1.15

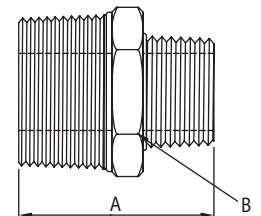
## Black & Galvanised Mild Steel Nipple

Black & Galvanised Mild Steel Nipple					
CODE		METRIC SIZE	A	ACROSS FLATS	APPROX KG/PC
BLACK	GALVANISED			B	
WBN006		6	27	11	0.01
WBN008		8	33	16	0.03
WBN010		10	34	19	0.04
WBN015	WGN015	15	46	22	0.07
WBN020	WGN020	20	47	27	0.08
WBN025	WGN025	25	52	35	0.13
WBN032	WGN032	32	61	47	0.27
WBN040	WGN040	40	61	52	0.31
WBN050	WGN050	50	68	61	0.48
WBN065		65	79	79	0.77
WBN080		80	88	92	1.35
WBN100		100	101	117	2.32

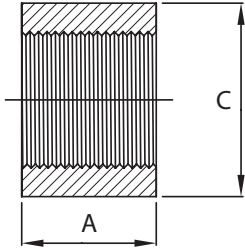


## Black & Galvanised Mild Steel Reducing Nipple

Black & Galvanised Mild Steel Reducing Nipple					
CODE		METRIC SIZE	A	ACROSS FLATS	APPROX KG/PC
BLACK	GALVANISED			B	
WBNR008006		8 X 6	30	16	0.02
WBNR010006		10 X 6	31	19	0.03
WBNR010008		10 X 8	34	19	0.04
WBNR015008		15 X 8	40	22	0.05
WBNR015010		15 X 10	40	22	0.06
WBNR020008		20 X 8	42	27	0.10
WBNR020010		20 X 10	42	27	0.07
WBNR020015	WGNR020015	20 X 15	47	27	0.09
WBNR025015	WGNR025015	25 X 15	50	35	0.13
WBNR025020		25 X 20	50	35	0.13
WBNR032015		32 X 15	55	47	0.20
WBNR032020		32 X 20	55	47	0.25
WBNR032025		32 X 25	57	47	0.24
WBNR040015		40 X 15	57	52	0.50
WBNR040020		40 X 20	57	52	0.32
WBNR040025		40 X 25	59	52	0.30
WBNR040032		40 X 32	63	52	0.34
WBNR050020		50 X 20	60	61	0.41
WBNR050025		50 X 25	62	61	0.52
WBNR050032		50 X 32	66	61	0.51
WBNR050040		50 X 40	66	61	0.49

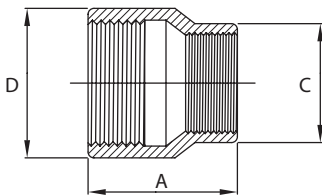


## Black & Galvanised Mild Steel Socket



Black & Galvanised Mild Steel Socket					
CODE		METRIC SIZE	A	C	APPROX KG/PC
BLACK	GALVANISED				
WBSF006	WGSF006	6	19.3	15.6	0.01
WBSF008	WGSF008	8	27.0	18.5	0.03
WBSF010	WGSF010	10	28.0	22.0	0.04
WBSF015	WGSF015	15	37.0	27.0	0.07
WBSF020	WGSF020	20	39.0	32.5	0.09
WBSF025	WGSF025	25	46.0	39.5	0.15
WBSF032	WGSF032	32	51.0	49.0	0.22
WBSF040	WGSF040	40	51.0	56.0	0.29
WBSF050	WGSF050	50	60.0	68.0	0.44
WBSF065	WGSF065	65	69.0	84.0	0.67
WBSF080	WGSF080	80	75.0	98.0	0.96
WBSF100	WGSF100	100	87.0	124.0	1.55
WBSF125	WGSF125	125	96.0	151.0	2.37
WBSF150	WGSF150	150	96.0	178.0	3.03

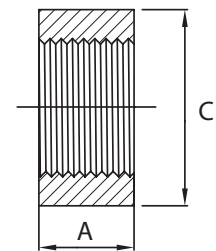
## Black Mild Steel Reducing Socket



Black Mild Steel Reducing Socket					
CODE	METRIC SIZE	A	C	D	APPROX KG/PC
WBSR015008	15 X 8	36	22	28	0.08
WBSR015010	15 X 10	36	22	28	0.08
WBSR020010	20 X 10	39	30	34	0.15
WBSR020015	20 X 15	39	30	34	0.14
WBSR025015	25 X 15	47	31	41	0.20
WBSR025020	25 X 20	47	31	41	0.20
WBSR032015	32 X 15	57	30	50	
WBSR032020	32 X 20	57	38	50	0.36
WBSR032025	32 X 25	57	44	50	0.35
WBSR040015	40 X 15	60	30	57	0.50
WBSR040020	40 X 20	60	38	57	0.43
WBSR040025	40 X 25	60	44	57	0.43
WBSR040032	40 X 32	60	50	57	0.40
WBSR050015	50 X 15	63	31	69	
WBSR050020	50 X 20	63	38	69	0.60
WBSR050025	50 X 25	63	44	69	0.60
WBSR050032	50 X 32	63	50	69	0.60
WBSR050040	50 X 40	63	57	69	0.60

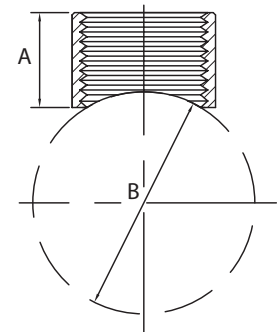
## Black Mild Steel Half Socket

Black Mild Steel Half Socket				
CODE	METRIC SIZE	A	C	APPROX KG/PC
WBSH010	10	12.2	22.0	0.02
WBSH015	15	16.0	27.0	0.03
WBSH020	20	19.1	32.5	0.04
WBSH025	25	21.1	39.5	0.06
WBSH032	32	28.1	49.0	0.11
WBSH040	40	25.3	56.0	0.17
WBSH050	50	28.3	68.0	0.20
WBSH065	65	30.6	84.0	0.38

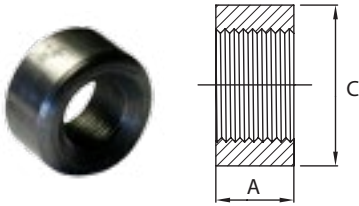


## Black Mild Steel Profile Socket

Black Mild Steel Profile Socket				
CODE	METRIC SIZE	A	B (DIA.)	APPROX KG/PC
WBSP015025	15 X 25			
WBSP015050	15 X 50	26.0	28.0	0.10
WBSP020050	20 X 50	30.0	32.0	0.10
WBSP025032	25 X 32	33.5	42.4	0.10
WBSP025040	25 X 40	32.5	48.3	0.10
WBSP025050	25 X 50	31.2	60.3	0.10
WBSP025065	25 X 65	30.3	76.0	0.10
WBSP025080	25 X 80	29.8	88.9	0.10
WBSP025100	25 X 100	29.2	114.0	0.10
WBSP025150	25 X 150	28.5	165.1	0.10
WBSP032040	32 X 40	37.0	48.3	0.14
WBSP032050	32 X 50	34.2	60.3	0.14
WBSP032065	32 X 65	32.5	76.0	0.14
WBSP032080	32 X 80	31.6	88.9	0.14
WBSP032100	32 X 100	30.6	114.0	0.14
WBSP032150	32 X 150	30.5	165.1	0.14
WBSP040050	40 X 50	37.6	60.3	0.19
WBSP040065	40 X 65	34.9	76.0	0.19
WBSP040080	40 X 80	33.7	88.9	0.19
WBSP040100	40 X 100	32.2	114.0	0.19
WBSP040150	40 X 150	30.7	165.1	0.19
WBSP050050	50 X 50	48.1	60.3	0.23
WBSP050065	50 X 65	41.1	76.0	0.23
WBSP050080	50 X 80	38.6	88.9	0.23
WBSP050100	50 X 100	36.0	114.0	0.23
WBSP050150	50 X 150	33.5	165.1	0.23

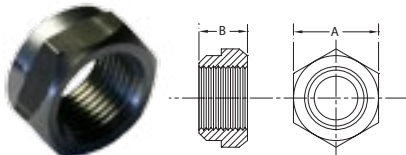


## Black Mild Steel Pap



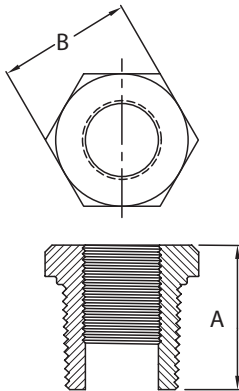
Black Mild Steel Pap				
CODE	METRIC SIZE	A	B	APPROX KG/PC
WBSHP010	10	28.57	15.75	0.05
WBSHP015	15	28.57	15.75	0.04

## Black Mild Steel Hexagon Pap



Black Mild Steel Hexagon Pap				
CODE	METRIC SIZE	A	B	APPROX KG/PC
WBSHP/015	1/2	28.57	16	0.04

## Black & Galvanised Mild Steel Bush

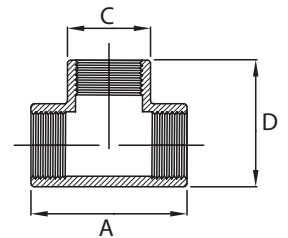


Black & Galvanised Mild Steel Bush					
CODE		METRIC SIZE	A	B	APPROX KG/PC
BLACK	GALVANISED				
WBB008006		8 X 6	20	15	0.01
WBB010006		10 X 6	21	19	0.02
WBB010008		10 X 8	21	19	0.02
WBB015008		15 X 8	27	22	0.04
WBB015010		15 X 10	27	22	0.03
WBB020008		20 X 8	28	27	0.07
WBB020010		20 X 10	28	27	0.06
WBB020015	WGB020015	20 X 15	28	27	0.05
WBB025008		25 X 8	30	35	0.13
WBB025010		25 X 10	30	35	0.12
WBB025015	WGB025015	25 X 15	30	35	0.11
WBB025020	WGB025020	25 X 20	30	35	0.08
WBB032015		32 X 15	36	47	0.25
WBB032020	WGB032020	32 X 20	36	47	0.24
WBB032025	WGB032025	32 X 25	36	47	0.19
WBB040015	WGB040015	40 X 15	38	52	0.33
WBB040020	WGB040020	40 X 20	38	52	0.30
WBB040025	WGB040025	40 X 25	38	52	0.25
WBB040032		40 X 32	38	52	0.17
WBB050015		50 X 15	41	61	0.50
WBB050020	WGB050020	50 X 20	41	61	0.50
WBB050025	WGB050032	50 X 25	41	61	0.43
WBB050032	WGB050040	50 X 32	41	61	0.41
WBB050040		50 X 40	41	61	0.35
WBB065040		65 X 40	47	79	0.97
WBB065050		65 X 50	47	79	0.68
WBB080040		80 X 40	54	92	1.46
WBB080050		80 X 50	54	92	1.17
WBB080065		80 X 65	54	92	0.84



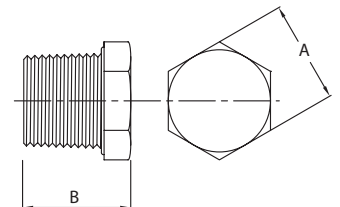
## Black & Galvanised Mild Steel Equal Tee

Black & Galvanised Mild Steel Equal Tee						
CODE		METRIC SIZE	A	C	D	APPROX KG/PC
BLACK	GALVANISED					
WBT006		6	46	20	33	0.11
WBT008		8	46	20	33	0.08
WBT010		10	48	21	35	0.09
WBT015	WGT015	15	63	30	46	0.23
WBT020	WGT020	20	71	35	51	0.31
WBT025	WGT025	25	88	43	65	0.55
WBT032	WGT032	32	106	51	75	0.72
WBT040	WGT040	40	108	58	83	1.00
WBT050	WGT050	50	131	71	101	1.57
WBT065		65	151	84	118	1.95
WBT080		80	178	99	135	3.09
WBT100		100	233	124	174	5.63

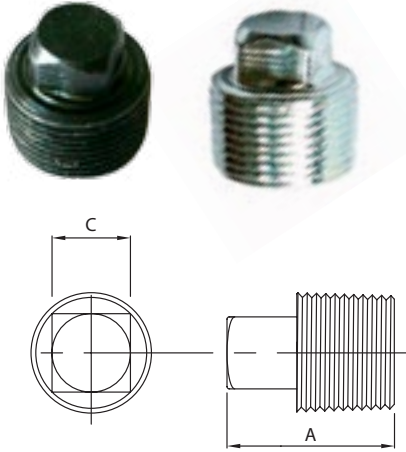


## Black & Galvanised Mild Steel Plug

Black & Galvanised Mild Steel Plug					
CODE		METRIC SIZE	ACROSS FLATS	B	APPROX KG/PC
BLACK	GALVANISED		A		
WBPH006		6	11.0	16.7	0.01
WBPH008		8	16.0	19.8	0.02
WBPH010		10	19.0	21.4	0.04
WBPH015	WGP015	15	22.2	27.0	0.07
WBPH020	WGP020	20	27.0	28.6	0.12
WBPH025	WGP025	25	35.0	30.9	0.20
WBPH032	WGP032	32	47.2	36.5	0.41
WBPH040	WGP040	40	52.1	38.1	0.55
WBPH050	WGP050	50	61.3	41.3	0.88
WBPH080		80	92.1	54.0	2.56
WBPH100		100	115.8	61.9	4.93

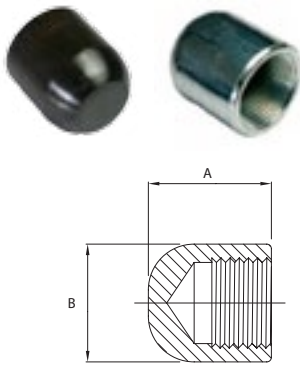


## Black & Galvanised Mild Steel Square Head Plug



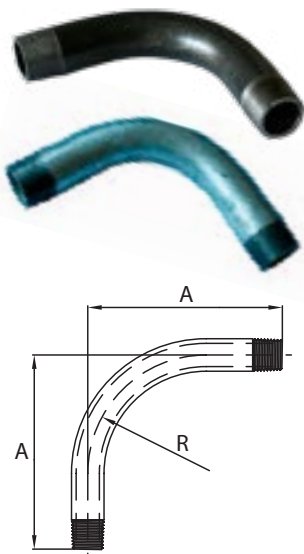
Black & Galvanised Mild Steel Square Head Plug				
CODE	METRIC SIZE	A	C	APPROX KG/PC
WBPS006	6	15	6	0.01
WBPS008	8	17	8	0.01
WBPS010	10	22	11	0.02
WBPS015	15	23	12	0.04
WBPS020	20	27	19	0.08
WBPS025	25	33	19	0.15
WBPS032	32	41	22	0.33
WBPS040	40	47	27	0.44
WBPS050	50	47	32	0.70
WBPS065	65	50		1.10
WBPS080	80	57		1.70

## Black & Galvanised Mild Steel Cap



Black & Galvanised Mild Steel Cap					
CODE		METRIC SIZE	A	B	APPROX KG/PC
BLACK	GALVANISED				
WBC020	WGC020	20	38.1	34.9	0.15
WBC025	WGC025	25	44.5	41.3	0.24
WBC032		32	50.8	50.8	0.39
WBC040		40	54.0	57.2	0.43
WBC050		50	60.3	69.9	0.78

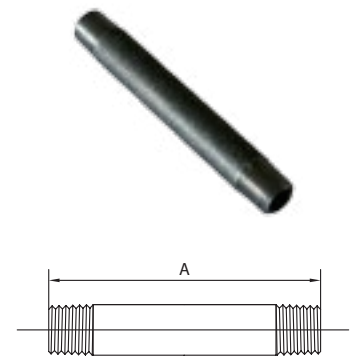
## Black & Galvanised Mild Steel M/M Bend 90 Degrees



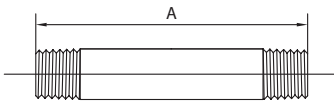
Black & Galvanised Mild Steel M/M Bend 90 Degrees					
CODE		METRIC SIZE	A	R	APPROX KG/PC
BLACK	GALVANISED				
WBLB006	WGLB006	6	57		0.1
WBLB008	WGLB008	8	64	41	0.08
WBLB010	WGLB010	10	73	48	0.12
WBLB015	WGLB015	15	86	57	0.18
WBLB020	WGLB020	20	102	73	0.29
WBLB025	WGLB025	25	121	89	0.53
WBLB032	WGLB032	32	146	108	0.83
WBLB040	WGLB040	40	165	127	1.06
WBLB050	WGLB050	50	203	159	1.85
WBLB065	WGLB065	65	248	197	3.29
WBLB080	WGLB080	80	292	232	5.22
WBLB100	WGLB100	100	381	308	9.74
WBLB150	WGLB150	150	653		24.6

## Black & Galvanised Mild Steel Barrel Nipple

Black & Galvanised Mild Steel Barrel Nipple				
CODE		METRIC SIZE	A	APPROX KG/PC
BLACK	GALVANISED			
	WGBN00625	6	25	0.01
WBBN00630	WGBN00630		30	0.01
WBBN00640	WGBN00640		40	0.01
WBBN00650	WGBN00650		50	0.02
WBBN00660	WGBN00660		60	0.02
WBBN00670	WGBN00670		70	0.03
WBBN00680	WGBN00680		80	0.03
WBBN00690	WGBN00690		90	0.03
	WGBN00825	8	25	0.02
WBBN00830	WGBN00830		30	0.02
WBBN00840	WGBN00840		40	0.03
WBBN00850	WGBN00850		50	0.03
WBBN00860	WGBN00860		60	0.04
WBBN00870	WGBN00870		70	0.04
WBBN00880	WGBN00880		80	0.05
WBBN00890	WGBN00890		90	0.06
WBBN01030	WGBN01030	10	30	0.03
WBBN01040	WGBN01040		40	0.04
WBBN01050	WGBN01050		50	0.04
WBBN01060	WGBN01060		60	0.05
WBBN01070	WGBN01070		70	0.06
WBBN01080	WGBN01080		80	0.07
WBBN01090	WGBN01090		90	0.08
WBBN01540	WGBN01540	15	40	0.05
WBBN01550	WGBN01550		50	0.06
WBBN01560	WGBN01560		60	0.08
WBBN01570	WGBN01570		70	0.09
WBBN01580	WGBN01580		80	0.10
WBBN01590	WGBN01590		90	0.11
WBBN02040	WGBN02040	20	40	0.07
WBBN02050	WGBN02050		50	0.09
WBBN02060	WGBN02060		60	0.11
WBBN02070	WGBN02070		70	0.13
WBBN02080	WGBN02080		80	0.15
WBBN02090	WGBN02090		90	0.17
	WGBN02540	25	40	0.12
WBBN02550	WGBN02550		50	0.15
WBBN02560	WGBN02560		60	0.18
WBBN02570	WGBN02570		70	0.21
WBBN02580	WGBN02580		80	0.23
WBBN02590	WGBN02590		90	0.26
	WGBN03250	32	50	0.19
WBBN03260	WGBN03260		60	0.23
WBBN03270	WGBN03270		70	0.27

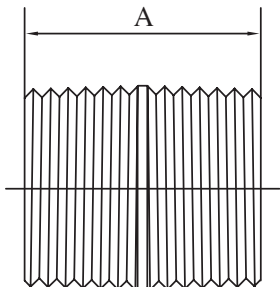


## Black & Galvanised Mild Steel Barrel Nipple (cont)



Black & Galvanised Mild Steel Barrel Nipple				
CODE		METRIC SIZE	A	APPROX KG/PC
BLACK	GALVANISED			
WBBN03280	WGBN03280		80	0.30
WBBN03290	WGBN03290		90	0.34
	WGBN04050	40	50	0.22
WBBN04060	WGBN04060		60	0.26
WBBN04070	WGBN04070		70	0.31
WBBN04080	WGBN04080		80	0.35
WBBN04090	WGBN04090		90	0.39
	WGBN05050	50	50	0.31
WBBN05060	WGBN05060		60	0.37
WBBN05070	WGBN05070		70	0.43
WBBN05080	WGBN05080		80	0.50
WBBN05090	WGBN05090		90	0.56
WBBN06580	WGBN06580	65	80	0.64
WBBN06590	WGBN06590		90	0.72
WBBN08080	WGBN08080	80	80	0.83
WBBN08090	WGBN08090		90	0.93
WBBN10090	WGBN10090	100	100	1.45

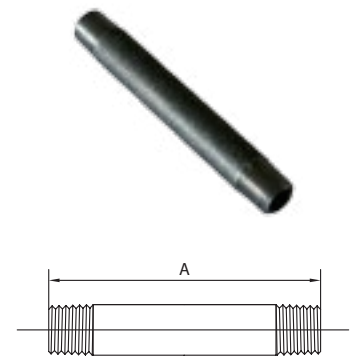
## Black Mild Steel Close Nipple



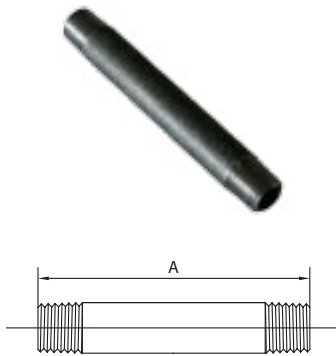
Black Mild Steel Close Nipple				
CODE		METRIC SIZE	A	APPROX KG/PC
BLACK	GALVANISED			
WBBN006CT	WGBN006CT	6	23	0.00
WBBN008CT	WGBN008CT	8	27	0.01
WBBN010CT	WGBN010CT	10	28	0.02
WBBN015CT	WGBN015CT	15	37	0.03
WBBN020CT	WGBN020CT	20	40	0.06
WBBN025CT	WGBN025CT	25	46	0.16
WBBN032CT	WGBN032CT	32	51	0.20
WBBN040CT	WGBN040CT	40	51	0.20
WBBN050CT	WGBN050CT	50	60	0.30
WBBN065CT	WGBN065CT	65	69	0.35
WBBN080CT	WGBN080CT	80	75	0.64
WBBN100CT	WGBN100CT	100	75	0.85

## Black & Galvanised Mild Steel Barrel Piece

Black & Galvanised Mild Steel Barrel Piece				
CODE		METRIC SIZE	A	APPROX KG/PC
BLACK	GALVANISED			
WBBP006100	WGBP006100	6	100	0.04
	WGBP006125		125	0.05
WBBP006130	WGBP006130		130	0.05
WBBP006150	WGBP006150		150	0.05
WBBP008100	WGBP008100	8	100	0.06
	WGBP008125		125	0.08
WBBP008130	WGBP008130		130	0.08
WBBP008150	WGBP008150		150	0.09
WBBP010100	WGBP010100	10	100	0.09
	WGBP010125		125	0.11
WBBP010130	WGBP010130		130	0.11
WBBP010150	WGBP010150		150	0.13
WBBP015100	WGBP015100	15	100	0.13
	WGBP015120		120	0.15
WBBP015130	WGBP015130		130	0.16
WBBP015150	WGBP015150		150	0.19
WBBP015200	WGBP015200		200	0.25
WBBP015250	WGBP015250		250	0.32
WBBP015300	WGBP015300		300	0.38
WBBP015400			400	0.51
WBBP015450	WGBP015450		450	0.57
WBBP015500	WGBP015500		500	0.63
WBBP015600	WGBP015600		600	0.76
WBBP020100	WGBP020100	20	100	0.19
WBBP020130	WGBP020130		130	0.24
WBBP020150	WGBP020150		150	0.28
WBBP020200	WGBP020200		200	0.37
WBBP020250	WGBP020250		250	0.47
WBBP020300	WGBP020300		300	0.56
WBBP020400	WGBP020400		400	0.75
WBBP020450	WGBP020450		450	0.84
WBBP020500	WGBP020500		500	0.94
WBBP020600	WGBP020600		600	1.12
WBBP025100	WGBP025100	25	100	0.29
WBBP025130	WGBP025130		130	0.38
WBBP025150	WGBP025150		150	0.44
WBBP025200	WGBP025200		200	0.59
WBBP025250	WGBP025250		250	0.73
WBBP025300	WGBP025300		300	0.88
WBBP025400	WGBP025400		400	1.17
WBBP025450	WGBP025450		450	1.32
WBBP025500	WGBP025500		500	1.47
WBBP025600	WGBP025600		600	1.76
WBBP032100	WGBP032100	32	100	0.38



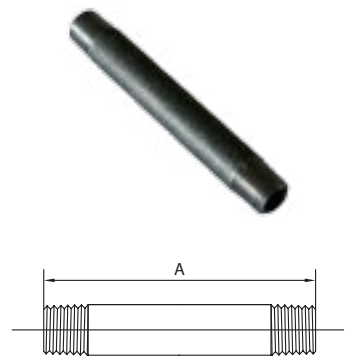
Black & Galvanised Mild Steel Barrel Piece (cont)



Black & Galvanised Mild Steel Barrel Piece				
CODE		METRIC SIZE	A	APPROX KG/PC
BLACK	GALVANISED			
WBBP032130	WGBP032130		130	0.49
WBBP032150	WGBP032150		150	0.57
WBBP032200	WGBP032200		200	0.76
WBBP032250	WGBP032250		250	0.95
WBBP032300	WGBP032300		300	1.14
	WGBP032350		350	1.33
WBBP032400	WGBP032400		400	1.52
WBBP032450	WGBP032450		450	1.70
WBBP032500	WGBP032500		500	1.89
WBBP032600	WGBP032600		600	2.27
WBBP040100	WGBP040100	40	100	0.44
WBBP040130	WGBP040130		130	0.57
WBBP040150	WGBP040150		150	0.66
WBBP040200	WGBP040200		200	0.87
WBBP040250	WGBP040250		250	1.09
WBBP040300	WGBP040300		300	1.31
WBBP040400	WGBP040400		400	1.75
WBBP040450	WGBP040450		450	1.97
WBBP040500	WGBP040500		500	2.19
WBBP040600	WGBP040600		600	2.62
WBBP050100	WGBP050100	50	100	0.62
WBBP050130	WGBP050130		130	0.80
WBBP050150	WGBP050150		150	0.93
WBBP050200	WGBP050200		200	1.24
WBBP050250	WGBP050250		250	1.55
WBBP050300	WGBP050300		300	1.86
WBBP050400	WGBP050400		400	2.48
WBBP050450	WGBP050450		450	2.79
WBBP050500	WGBP050500		500	3.10
WBBP050600	WGBP050600		600	3.72
WBBP065100	WGBP065100	65	100	0.79
WBBP065130	WGBP065130		130	1.03
WBBP065150	WGBP065150		150	1.19
WBBP065200	WGBP065200		200	1.59
WBBP065250	WGBP065250		250	1.99
WBBP065300	WGBP065300		300	2.38
WBBP065400	WGBP065400		400	3.18
WBBP065450	WGBP065450		450	3.58
WBBP065500	WGBP065500		500	3.97
WBBP065600	WGBP065600		600	4.77
WBBP080100	WGBP080100	80	100	1.03
WBBP080130	WGBP080130		130	1.34
WBBP080150	WGBP080150		150	1.55
WBBP080200	WGBP080200		200	2.07

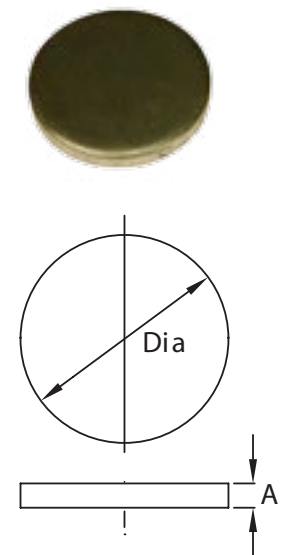
## Black & Galvanised Mild Steel Barrel Piece (cont)

Black & Galvanised Mild Steel Barrel Piece				
CODE		METRIC SIZE	A	APPROX KG/PC
BLACK	GALVANISED			
WBBP080250	WGBP080250		250	2.59
WBBP080300	WGBP080300		300	3.10
WBBP080400	WGBP080400		400	4.14
WBBP080450	WGBP080450		450	4.66
WBBP080500	WGBP080500		500	5.17
WBBP080600	WGBP080600		600	6.21
WBBP100100	WGBP100100	100	100	1.45
WBBP100130	WGBP100130		130	1.89
WBBP100150	WGBP100150		150	2.18
WBBP100200	WGBP100200		200	2.90
WBBP100250	WGBP100250		250	3.63
WBBP100300	WGBP100300		300	4.35
WBBP100400	WGBP100400		400	5.80
WBBP100450	WGBP100450		450	6.53
WBBP100500	WGBP100500		500	7.25
WBBP100600	WGBP100600		600	8.70
WBBP125200		125	200	3.58
WBBP150150		150	150	3.19

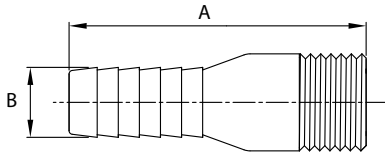


## Black Mild Steel Blank End

Black Mild Steel Blank End				
CODE	METRIC SIZE	Dia	A	APPROX KG/PC
WBBE025	25	31	4.7	0.03
WBBE032	32	37	4.7	0.04
WBBE040	40	45	4.7	0.07
WBBE050	50	57	4.7	0.09
WBBE065	65	73	4.7	0.15
WBBE080	80	87	4.7	0.18
WBBE100	100	112	4.7	0.4
WBBE150	150	163	4.7	0.48



## Galvanised Mild Steel Hose Tail



Galvanised Mild Steel Hose Tail				
CODE	METRIC SIZE	A	B	APPROX KG/PC
WGHT015	15	79.3	13.5	0.06
WGHT020	20	84.5	19.9	0.12
WGHT025	25	86.6	26.2	0.15
WGHT032	35	105.4	32.5	0.24
WGHT040	40	102.7	38.9	0.28
WGHT050	50	115.5	51.6	0.4
WGHT065	65	140.8	64.3	0.64
WGHT080	80	162.1	77.0	0.85
WGHT100	100	181.4	102.2	1.57
WGHT150	150			