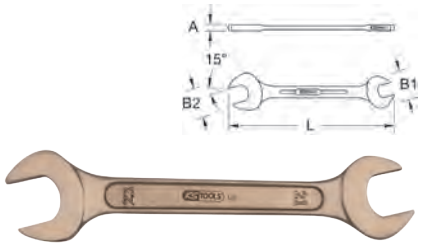
NON SPARKING OPEN ENDED SPANNER

BRONZE*plus* double open ended spanner

- In accordance to DIN 895 / ISO 3318 / ISO 1085
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	L mm	A mm	B1 mm	B2 mm	kg
963.7005	6x7	125.0	6.0	15.0	17.0	0.07
963.7006	6x8	125.0	6.0	15.0	17.0	0.07
963.7007	7x8	125.0	6.0	19.0	22.0	0.07
963.7008	7x9	125.0	6.0	19.0	22.0	0.07
963.7009	8x9	125.0	6.0	19.0	22.0	0.07
963.7010	8x10	125.0	6.0	19.0	22.0	0.06
963.7011	9x10	125.0	6.0	19.0	22.0	0.06
963.7012	9x11	140.0	7.0	22.0	27.0	0.09
963.7013	10x11	140.0	7.0	22.0	27.0	0.09
963.7014	10x12	140.0	7.0	22.0	27.0	0.09
963.7015	10x13	140.0	7.0	22.0	27.0	0.08
963.7016	10x14	160.0	7.5	27.0	30.0	0.18
963.7017	11x13	160.0	7.5	27.0	30.0	0.18
963.7018	11x14	160.0	7.5	27.0	30.0	0.18
963.7019	12x13	160.0	7.5	27.0	30.0	0.18
963.7020	12x14	160.0	7.5	27.0	30.0	0.17
963.7021	16x15	160.0	7.5	27.0	30.0	0.17
963.7022	14x15	200.0	8.0	30.0	36.0	0.17
963.7023	14x16	200.0	8.0	30.0	36.0	0.22
963.7024	14x17	200.0	8.0	30.0	36.0	0.22
963.7025	16x17	200.0	8.0	35.0	38.0	0.21
963.7026	16x18	200.0	8.0	35.0	38.0	0.21
963.7027	17x19	225.0	10.0	35.0	38.0	0.35
963.7028	17x22	225.0	10.0	39.0	44.0	0.32
963.7029	18x19	225.0	10.0	39.0	44.0	0.32
963.7030	18x20	225.0	10.0	39.0	44.0	0.31
963.7031	18x21	225.0	10.0	39.0	44.0	0.30
963.7032	19x22	240.0	11.0	39.0	44.0	0.44
963.7033	19x24	240.0	11.0	44.0	48.0	0.42
963.7034	20x22	240.0	11.0	44.0	48.0	0.44
963.7035	21x23	240.0	11.0	44.0	48.0	0.42
963.7036	22x24	240.0	11.0	44.0	48.0	0.42
963.7037	22x27	270.0	12.0	48.0	54.0	0.73
963.7038	23x26	270.0	12.0	48.0	54.0	0.73
963.7039	24x26	270.0	12.0	48.0	54.0	0.73
963.7040	24x27	270.0	12.0	48.0	54.0	0.73
963.7041	24x30	270.0	13.0	54.0	60.0	0.70
963.7042	25x28	270.0	13.0	54.0	60.0	0.70
963.7043	26x29	270.0	13.0	54.0	60.0	0.70
963.7044	27x29	300.0	13.0	54.0	60.0	0.81
963.7045	27x30	300.0	13.0	54.0	60.0	0.80
963.7046	27x32	300.0	14.0	59.0	62.0	0.80
963.7047	30x32	300.0	14.0	59.0	62.0	0.78
963.7048	30x34	320.0	16.0	70.0	75.0	1.24
963.7049	30x36	320.0	16.0	70.0	75.0	1.22
963.7050	32x34	320.0	16.0	70.0	75.0	1.20
963.7051	32x36	320.0	16.0	70.0	75.0	1.14
963.7052	34x36	320.0	16.0	70.0	75.0	1.10
963.7053	35x38	370.0	16.0	75.0	88.0	1.48
963.7054	36x41	370.0	16.0	75.0	88.0	1.48
963.7055	41x46	370.0	18.0	85.0	100.0	1.45
963.7056	46x50	390.0	19.0	95.0	105.0	1.40
963.7057	50x55	440.0	20.0	100.0	115.0	1.70
963.7058	50x60	440.0	22.0	110.0	125.0	1.70
963.7059	55x60	470.0	22.0	110.0	125.0	1.80
963.7060	60x65	470.0	22.0	125.0	135.0	1.80
963.7061	65x70	630.0	24.0	130.0	145.0	3.50
963.7062	70x80	630.0	24.0	140.0	155.0	3.40
963.7063	75x80	630.0	24.0	150.0	165.0	3.30
963.7065	7/32x1/4"	125.0	6.0	15.0	17.0	0.07
963.7066	1/4x5/16"	125.0	6.0	15.0	17.0	0.07
963.7067	5/16x3/8"	125.0	6.0	19.0	22.0	0.06
963.7068	3/8x7/16"	140.0	7.0	22.0	27.0	0.09
963.7069	7/16x1/2"	140.0	7.0	22.0	27.0	0.09
963.7070	1/2x5/8"	160.0	7.5	27.0	30.0	0.17
963.7071	1/2x9/16"	160.0	7.5	27.0	30.0	0.17
963.7072	1/2x11/16"	200.0	8.0	30.0	36.0	0.22
963.7073	9/16x5/8"	200.0	8.0	30.0	36.0	0.22
963.7074	9/16x3/4"	200.0	8.0	30.0	38.0	0.22
963.7075	19/32x11/16"	200.0	8.0	35.0	38.0	0.22
963.7076	19/32x25/32"	200.0	8.0	35.0	38.0	0.22
963.7077	5/8x11/16"	200.0	8.0	35.0	38.0	0.20
963.7078	5/8x3/4"	225.0	10.0	39.0	44.0	0.31
963.7079	11/16x25/32"	225.0	10.0	39.0	44.0	0.30
963.7080	11/16x7/8"	225.0	10.0	39.0	44.0	0.30
963.7081	3/4x7/8"	225.0	10.0	39.0	44.0	0.30
963.7082	3/4x25/32"	225.0	10.0	39.0	44.0	0.30
963.7083	3/4x13/16"	225.0	10.0	39.0	44.0	0.31
963.7084	3/4x7/8"	225.0	10.0	39.0	44.0	0.31
963.7085	25/32x13/16"	225.0	10.0	39.0	44.0	0.30
963.7086	25/32x7/8"	225.0	10.0	39.0	44.0	0.30
963.7087	13/16x7/8"	225.0	10.0	39.0	44.0	0.30
963.7088	7/8x15/16"	225.0	10.0	39.0	44.0	0.30
963.7089	7/8x31/32"	240.0	10.0	44.0	48.0	0.40
963.7090	7/8x1"	240.0	10.0	44.0	48.0	0.40
963.7091	7/8x1.1/16"	270.0	12.0	48.0	54.0	0.72
963.7092	15/16x1"	270.0	12.0	48.0	54.0	0.72
963.7093	15/16x1.1/16"	270.0	12.0	48.0	54.0	0.72
963.7094	1x1.1/8"	270.0	12.0	48.0	54.0	0.70
963.7095	1x1.5/16"	300.0	14.0	59.0	62.0	0.75
963.7096	1.1/16x1.1/4"	300.0	14.0	59.0	62.0	0.75
963.7097	1.1/8x1.5/16"	300.0	14.0	59.0	62.0	0.75
963.7098	1.1/16x1.7/16"	320.0	16.0	70.0	75.0	1.22
963.7099	1.1/8x1.1/2"	320.0	16.0	70.0	75.0	1.15
963.7100	1.1/4x1.3/8"	320.0	16.0	70.0	75.0	1.15
963.7101	1.1/4x1.7/16"	320.0	16.0	70.0	75.0	1.15
963.7102	1.5/16x1.1/2"	370.0	16.0	75.0	88.0	1.48
963.7103	1.1/4x1.5/8"	370.0	16.0	75.0	88.0	1.40
963.7104	1.3/8x1.1/2"	370.0	16.0	75.0	88.0	1.40
963.7105	1.7/16x1.5/8"	370.0	16.0	75.0	88.0	1.40
963.7106	1.1/2x1.11/16"	370.0	16.0	75.0	88.0	1.40
963.7107	1.5/8x1.1/4"	370.0	16.0	75.0	88.0	1.40
963.7108	1.5/8x1.3/4"	370.0	16.0	75.0	88.0	1.35
963.7109	1.11/16x1.7/8"	370.0	18.0	85.0	100.0	1.35
963.7110	1.11/16x2"	390.0	19.0	95.0	105.0	1.70
963.7111	1.13/16x2"	390.0	19.0	95.0	105.0	1.70
963.7112	1.3/4x2.1/16"	390.0	19.0	95.0	105.0	1.70
963.7113	2x2.3/16"	440.0	20.0	100.0	115.0	1.70
963.7114	2x2.5/16"	440.0	20.0	100.0	115.0	1.70
963.7115	2.3/16x2.3/8"	470.0	22.0	110.0	125.0	1.80
963.7116	2.1/4x2.3/8"	470.0	22.0	110.0	125.0	1.80

BRONZE*plus* double open ended spanner set

- In accordance to DIN 895
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

			kg
963.7064	12 pcs	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x26 - 25x28 - 30x32 mm	3.50
963.7117	8 pcs	1/4x5/16 - 3/8x7/16 - 7/16x1/2 - 1/2x9/16 - 9/16x5/8 - 5/8x11/16 - 3/4x7/8 - 15/16"x1"	1.70

BRONZE*plus* Double open ended spanner

- Jaw 15° and 75° offset
- Both jaws the same size
- Extra flat heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

	mm	A mm	B mm	L mm	g
963.7118	4	6.0	12.0	70.0	7
963.7119	4,5	6.0	12.0	70.0	7
963.7120	5	6.0	15.0	78.0	7
963.7121	5,5	6.0	15.0	78.0	10
963.7122	6	6.0	15.0	78.0	10
963.7123	7	6.0	19.0	91.0	10
963.7124	8	6.0	19.0	96.0	15
963.7125	9	6.0	22.0	103.0	15
963.7126	10	6.0	22.0	105.0	20
963.7127	11	7.0	25.0	116.0	20
963.7128	12	7.0	25.0	116.0	35
963.7129	13	7.0	30.0	131.0	35
963.7130	14	8.0	30.0	131.0	35

BRONZE*plus* Double open ended spanner-set

- Jaw 15° and 75° offset
- Both jaws the same size
- Extra flat heads
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

			g
963.7131	10 pcs	5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm	180

BRONZE*plus* Double open ended spanner

- Jaw 15° offset
- Extra flat heads
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	mm	A mm	B1 mm	B2 mm	L mm	g
963.7132	3x3,5	5.0	9.0	12.0	50.0	5
963.7133	4x4,5	5.0	12.0	14.0	60.0	5
963.7134	5x5,5	6.0	12.0	14.0	70.0	6
963.7135	6x7	6.0	14.0	16.0	80.0	8
963.7136	8x9	6.0	17.0	20.0	90.0	10
963.7137	10x11	6.0	20.0	22.0	100.0	12

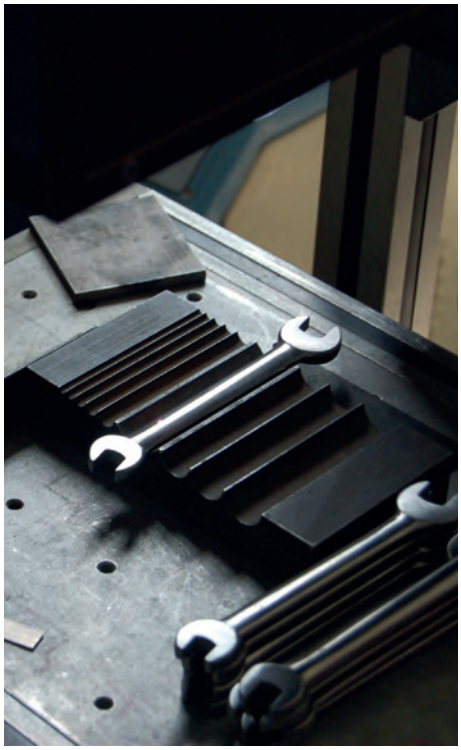
		A mm	B1 mm	B2 mm	L mm	g
963.7138	5/32x3/16“	5.0	12.0	14.0	60.0	5
963.7139	3/16x7/32“	6.0	12.0	14.0	70.0	6
963.7140	1/4x9/32“	6.0	14.0	16.0	80.0	8
963.7141	1/4x5/16“	6.0	14.0	16.0	80.0	8
963.7142	5/16x11/32“	6.0	17.0	20.0	90.0	10
963.7143	5/16x3/18“	6.0	17.0	20.0	90.0	10
963.7144	5/16x13/32“	6.0	20.0	22.0	100.0	12
963.7145	3/8x7.16“	6.0	20.0	22.0	100.0	12

BRONZE*plus* open ended spanner

- In accordance to DIN 894 / ISO 3380
- Jaw 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

	mm	A mm	B mm	L mm	kg
963.7146	6	6.0	21.0	90.0	0.01
963.7147	7	6.0	21.0	90.0	0.01
963.7148	8	6.0	21.0	90.0	0.01
963.7149	9	6.0	21.0	90.0	0.01
963.7150	10	7.0	28.0	100.0	0.03
963.7151	11	7.0	28.0	100.0	0.02
963.7152	12	7.0	33.0	140.0	0.05
963.7153	13	7.0	33.0	140.0	0.04
963.7154	14	8.0	40.0	165.0	0.08
963.7155	15	8.0	40.0	145.0	0.08
963.7156	16	8.0	40.0	165.0	0.07
963.7157	17	8.0	40.0	165.0	0.07
963.7158	18	8.0	40.0	165.0	0.07
963.7159	19	10.0	44.0	190.0	0.10
963.7160	20	10.0	44.0	190.0	0.10
963.7161	21	12.0	46.0	205.0	0.14
963.7162	22	12.0	46.0	205.0	0.13
963.7163	23	14.0	52.0	220.0	0.17
963.7164	24	14.0	52.0	220.0	0.17
963.7165	25	14.0	57.0	220.0	0.16
963.7166	26	14.0	57.0	220.0	0.16
963.7167	27	14.0	57.0	220.0	0.15
963.7168	28	15.0	63.0	250.0	0.27
963.7169	29	15.0	63.0	250.0	0.26
963.7170	30	15.0	63.0	250.0	0.25
963.7171	32	16.0	69.0	285.0	0.34
963.7172	33	16.0	69.0	285.0	0.34
963.7173	34	17.0	75.0	285.0	0.32
963.7174	35	17.0	75.0	285.0	0.32
963.7175	36	17.0	75.0	285.0	0.30
963.7176	37	17.0	75.0	285.0	0.30
963.7177	38	18.0	86.0	330.0	0.54
963.7178	41	18.0	86.0	330.0	0.52
963.7179	42	18.0	86.0	330.0	0.50
963.7180	46	21.0	95.0	360.0	0.65
963.7181	47	21.0	95.0	360.0	0.63
963.7182	50	22.0	105.0	440.0	1.10
963.7183	52	22.0	105.0	440.0	1.10
963.7184	54	23.0	117.0	440.0	1.05
963.7185	55	23.0	117.0	440.0	1.05
963.7186	56	23.0	117.0	440.0	1.00
963.7187	58	23.0	125.0	480.0	1.48
963.7188	60	23.0	125.0	480.0	1.48
963.7189	63	24.0	135.0	520.0	1.70
963.7190	65	24.0	135.0	520.0	1.70
963.7191	67	25.0	145.0	520.0	1.70
963.7192	70	25.0	145.0	540.0	1.90
963.7193	71	25.0	145.0	540.0	1.90
963.7194	75	25.0	155.0	540.0	1.80
963.7195	77	25.0	155.0	540.0	1.80
963.7196	80	27.0	165.0	630.0	2.90
963.7197	82	27.0	165.0	630.0	2.80
963.7198	85	29.0	175.0	680.0	3.40
963.7199	88	30.0	185.0	680.0	3.30
963.7200	90	30.0	185.0	680.0	3.20
963.7201	94	32.0	195.0	830.0	5.00
963.7202	95	32.0	195.0	830.0	4.80
963.7203	100	32.0	209.0	800.0	5.90
963.7204	105	33.0	210.0	850.0	8.90
963.7205	110	33.0	230.0	900.0	9.00
963.7206	115	33.0	240.0	950.0	9.30
963.7207	120	35.0	245.0	990.0	9.60
963.7208	125	35.0	250.0	1000.0	8.30
963.7209	130	35.0	270.0	1000.0	8.30
963.7210	135	35.0	275.0	1000.0	8.30

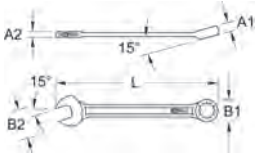
		A mm	B mm	L mm	kg
963.7211	1/4“	6.0	21.0	90.0	0.01
963.7212	5/16“	6.0	21.0	90.0	0.01
963.7213	11/32“	6.0	21.0	90.0	0.01
963.7214	3/8“	6.0	21.0	90.0	0.01
963.7215	13/32“	7.0	28.0	100.0	0.03
963.7216	7/16“	7.0	28.0	100.0	0.02
963.7217	1/2“	7.0	33.0	140.0	0.04
963.7218	9/16“	8.0	40.0	165.0	0.08
963.7219	19/32“	8.0	40.0	165.0	0.08
963.7220	5/8“	8.0	40.0	165.0	0.07
963.7221	11/16“	8.0	40.0	165.0	0.07
963.7222	3/4“	10.0	44.0	190.0	0.10
963.7223	25/32“	10.0	44.0	190.0	0.10
963.7224	13/16“	12.0	46.0	205.0	0.14
963.7225	7/8“	12.0	46.0	205.0	0.13
963.7226	15/16“	14.0	57.0	220.0	0.17
963.7227	31/32“	14.0	57.0	220.0	0.17
963.7228	1“	14.0	57.0	220.0	0.16
963.7229	1.1/16“	14.0	57.0	220.0	0.15
963.7230	1.1/8“	15.0	63.0	250.0	0.27
963.7231	1.3/16“	15.0	63.0	250.0	0.25
963.7232	1.1/4“	16.0	69.0	285.0	0.34
963.7233	1.5/16“	16.0	69.0	285.0	0.34
963.7234	1.3/8“	17.0	75.0	285.0	0.32
963.7235	1.7/16“	17.0	75.0	285.0	0.30
963.7236	1.1/2“	18.0	86.0	330.0	0.54
963.7237	1.9/16“	18.0	86.0	330.0	0.52
963.7238	1.5/8“	18.0	86.0	330.0	0.52
963.7239	1.11/16“	18.0	86.0	330.0	0.50
963.7240	1.3/4“	21.0	95.0	360.0	0.65
963.7241	1.13/16“	21.0	95.0	360.0	0.65
963.7242	1.7/8“	21.0	95.0	360.0	0.63
963.7243	2“	22.0	105.0	440.0	1.10
963.7244	2.1/16“	22.0	105.0	440.0	1.10
963.7245	2.1/8“	22.0	105.0	440.0	1.05
963.7246	2.3/16“	22.0	105.0	440.0	1.05
963.7247	2.1/4“	23.0	125.0	480.0	1.00
963.7248	2.5/16“	23.0	125.0	480.0	1.48
963.7249	2.3/8“	23.0	125.0	520.0	1.48
963.7250	2.7/16“	24.0	135.0	520.0	1.70
963.7251	2.1/2“	24.0	135.0	520.0	1.70
963.7252	2.9/16“	24.0	135.0	520.0	1.70
963.7253	2.5/8“	24.0	135.0	520.0	1.70
963.7254	2.3/4“	25.0	145.0	540.0	1.90
963.7255	2.13/16“	25.0	145.0	540.0	1.90
963.7256	2.15/16“	25.0	155.0	540.0	1.90
963.7257	3“	25.0	155.0	540.0	1.80
963.7258	3.1/8“	27.0	165.0	630.0	2.90
963.7259	3.1/4“	27.0	165.0	630.0	2.80
963.7260	3.3/8“	30.0	185.0	680.0	3.40
963.7261	3.1/2“	30.0	185.0	680.0	3.30
963.7262	3.5/8“	30.0	185.0	680.0	3.20
963.7263	3.3/4“	32.0	195.0	830.0	5.00
963.7264	3.7/8“	32.0	195.0	830.0	4.80



NON SPARKING COMBINATION SPANNER

BRONZE*plus* combination spanner, offset

- FlankTraction profile
- In accordance to DIN 3113 Form A / ISO 3318 / ISO 7738
- Jaw 15° offset
- Ring head 15° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	A1 mm	A2 mm	B1 mm	B2 mm	L mm	kg
963.7265	6	6.0	5.0	11.0	20.0	130.0	0.05
963.7266	7	6.0	5.0	11.0	20.0	130.0	0.06
963.7267	8	7.0	6.0	15.0	17.0	135.0	0.06
963.7268	9	7.0	6.0	18.0	22.0	150.0	0.10
963.7269	10	7.0	6.0	18.0	22.0	150.0	0.09
963.7270	11	7.0	6.0	18.0	22.0	150.0	0.09
963.7271	12	9.0	7.0	20.0	25.0	190.0	0.17
963.7272	13	10.0	7.0	22.0	32.0	190.0	0.17
963.7273	14	10.0	7.0	22.0	32.0	190.0	0.16
963.7274	15	11.0	8.0	27.0	34.0	210.0	0.23
963.7275	16	11.0	8.0	27.0	34.0	210.0	0.23
963.7276	17	11.0	8.0	27.0	34.0	210.0	0.22
963.7277	18	13.0	9.0	31.0	40.0	230.0	0.33
963.7278	19	13.0	9.0	31.0	40.0	230.0	0.33
963.7279	20	13.0	9.0	31.0	40.0	230.0	0.33
963.7280	21	14.0	9.0	36.0	43.0	250.0	0.36
963.7281	22	14.0	9.0	36.0	43.0	250.0	0.36
963.7282	23	14.0	9.0	36.0	43.0	250.0	0.35
963.7283	24	15.0	10.0	38.0	48.0	270.0	0.50
963.7284	25	15.0	10.0	38.0	48.0	270.0	0.48
963.7285	26	15.0	10.0	38.0	48.0	270.0	0.47
963.7286	27	17.0	13.0	43.0	55.0	280.0	0.67
963.7287	28	17.0	13.0	43.0	55.0	280.0	0.68
963.7288	29	17.0	13.0	43.0	55.0	280.0	0.63
963.7289	30	20.0	13.0	49.0	60.0	300.0	0.73
963.7290	32	22.0	14.0	53.0	64.0	300.0	0.65
963.7291	34	22.0	14.0	53.0	64.0	320.0	0.95
963.7292	36	22.0	14.0	54.0	72.0	330.0	0.93
963.7293	38	23.0	16.0	58.0	82.0	400.0	2.15
963.7294	41	24.0	16.0	61.0	87.0	410.0	2.00
963.7295	46	24.0	18.0	67.0	95.0	410.0	1.90
963.7296	50	27.0	18.0	75.0	100.0	540.0	3.40
963.7297	55	27.0	22.0	90.0	105.0	520.0	3.50
963.7298	60	32.0	27.0	92.0	125.0	515.0	3.30
963.7299	65	34.0	28.0	95.0	140.0	500.0	3.20
963.7300	70	35.0	28.0	100.0	145.0	510.0	3.80
963.7301	75	35.0	29.0	105.0	157.0	680.0	3.90
963.7302	80	36.0	29.0	112.0	165.0	680.0	4.00

		A1 mm	A2 mm	B1 mm	B2 mm	L mm	kg
963.7307	1/4“	7.0	6.0	15.0	17.0	135.0	0.05
963.7308	5/16“	7.0	6.0	15.0	17.0	135.0	0.05
963.7309	11/32“	7.0	6.0	18.0	22.0	150.0	0.06
963.7310	3/8“	7.0	6.0	18.0	22.0	150.0	0.06
963.7311	7/16“	7.0	6.0	18.0	22.0	150.0	0.06
963.7312	1/2“	10.0	7.0	22.0	32.0	190.0	0.11
963.7313	9/16“	10.0	7.0	22.0	32.0	190.0	0.11
963.7314	19/32“	11.0	8.0	27.0	34.0	210.0	0.20
963.7315	5/8“	11.0	8.0	27.0	34.0	210.0	0.20
963.7316	11/16“	13.0	9.0	31.0	40.0	230.0	0.23
963.7317	3/4“	13.0	9.0	31.0	40.0	230.0	0.23
963.7318	25/32“	13.0	9.0	31.0	40.0	230.0	0.23
963.7319	13/16“	14.0	9.0	36.0	43.0	250.0	0.30
963.7320	7/8“	14.0	9.0	36.0	43.0	250.0	0.30
963.7321	15/16“	15.0	10.0	38.0	48.0	270.0	0.41
963.7322	31/32“	15.0	10.0	38.0	48.0	270.0	0.41
963.7323	1“	15.0	10.0	38.0	48.0	270.0	0.41
963.7324	1.1/16“	17.0	13.0	43.0	55.0	280.0	0.51
963.7325	1/1/8“	17.0	13.0	43.0	55.0	280.0	0.51
963.7326	1.3/16“	22.0	14.0	53.0	64.0	300.0	0.57
963.7327	1.1/4“	22.0	14.0	53.0	64.0	300.0	0.57
963.7328	1.5/16“	22.0	14.0	53.0	64.0	300.0	0.57
963.7329	1.3/8“	22.0	14.0	55.0	72.0	330.0	0.84

		A1 mm	A2 mm	B1 mm	B2 mm	L mm	kg
963.7438	1/4x5/16"	6.0	6.0	12.0	14.0	170.0	0.11
963.7439	5/16x3/8"	6.0	6.0	12.0	14.0	170.0	0.10
963.7440	3/8x7/16"	8.0	8.0	17.0	20.0	180.0	0.14
963.7441	7/16x1/2"	9.0	9.0	20.0	23.0	195.0	0.19
963.7442	1/2x9/16"	9.0	9.0	20.0	23.0	195.0	0.18
963.7443	1/2x19/32"	10.0	10.0	22.0	26.0	230.0	0.24
963.7444	9/16x5/8"	10.0	10.0	22.0	26.0	230.0	0.25
963.7445	19/32x11/16"	10.0	10.0	22.0	26.0	230.0	0.23
963.7446	5/8x11/16"	10.0	10.0	22.0	26.0	230.0	0.24
963.7447	5/8x3/4"	12.0	12.0	26.0	30.0	280.0	0.40
963.7448	11/16x3/4"	12.0	12.0	26.0	30.0	280.0	0.40
963.7449	11/16x25/32"	12.0	12.0	26.0	30.0	280.0	0.38
963.7450	3/4x25/32"	12.0	12.0	26.0	30.0	280.0	0.36
963.7451	3/4x7/8"	12.0	12.0	26.0	30.0	280.0	0.37
963.7452	13/16x7/8"	12.0	12.0	26.0	30.0	280.0	0.38
963.7453	25/32x13/16"	12.0	12.0	26.0	30.0	280.0	0.35
963.7454	7/8x15/16"	14.0	14.0	35.0	37.0	300.0	0.51
963.7455	7/8x1"	14.0	14.0	35.0	37.0	300.0	0.50
963.7456	7/8x1.1/16"	15.0	15.0	38.0	42.0	330.0	0.65
963.7457	15/16x1"	15.0	15.0	38.0	42.0	330.0	0.67
963.7458	1x1.1/8"	15.0	15.0	38.0	42.0	330.0	0.66
963.7459	1.1/16x1.1/8"	15.0	15.0	42.0	47.0	370.0	1.00
963.7460	1.1/16x1.1/4"	15.0	15.0	42.0	47.0	370.0	0.90
963.7461	1.1/8x1.5/16"	15.0	15.0	42.0	47.0	370.0	0.88
963.7462	1.3/16x1.5/16"	18.0	18.0	52.0	54.0	430.0	0.85
963.7463	1.1/4x1.5/16"	18.0	18.0	52.0	54.0	430.0	1.20
963.7464	1.1/4x1.3/8 „	18.0	18.0	52.0	54.0	430.0	1.30
963.7465	1.1/4x1.7/16"	18.0	18.0	52.0	54.0	430.0	1.30
963.7466	1.5/16x1.1/2"	18.0	18.0	52.0	54.0	430.0	1.20
963.7467	1.3/8x1.1/2"	18.0	18.0	54.0	56.0	450.0	1.40
963.7468	1.7/16x1.5/8"	18.0	18.0	54.0	56.0	450.0	1.45
963.7469	1.5/8x1.13/16"	20.0	20.0	63.0	68.0	460.0	1.80
963.7470	1.11/16x1.7/8"	20.0	20.0	63.0	68.0	460.0	1.80
963.7471	1.13/16x2"	24.0	24.0	69.0	74.0	480.0	2.10
963.7472	1.3/4x2.1/16"	24.0	24.0	69.0	74.0	480.0	2.00
963.7473	2x2.3/16"	24.0	24.0	80.0	90.0	540.0	3.00
963.7474	2 x2.3/8"	24.0	24.0	80.0	90.0	540.0	2.80
963.7475	2.3/16x2.3/8"	24.0	24.0	80.0	90.0	540.0	2.80
963.7476	2.1/4x2.7/16"	24.0	24.0	80.0	90.0	540.0	2.70

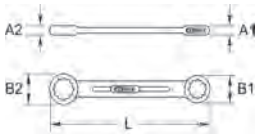
BRONZE*plus* double ring ended spanner set

- FlankTraction profile
- In accordance to DIN 838 / ISO 1085 / ISO 10104 / ISO 3318
- Ring head 75° offset
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

			kg
963.7437	12 pcs	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32 mm	4.10
963.7477	8 pcs	1/4"x5/16" - 3/8"x7/16" - 7/16"x1/2" - 1/2"x9/16" - 9/16"x5/8" - 8/5"x11/16" - 3/4"x7/8" - 15"/16x1"	2.10

BRONZE*plus* double ring ended spanner, straight

- FlankTraction profile
- In accordance to DIN 838
- Straight form
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	A1 mm	A2 mm	B1 mm	B2 mm	L mm	kg
963.7478	6x7	6.0	6.0	12.0	14.0	100.0	0.01
963.7479	8x9	7.0	7.0	15.0	18.0	115.0	0.02
963.7480	8x10	7.0	7.0	15.0	18.0	120.0	0.02
963.7481	9x11	8.0	8.0	17.0	20.0	125.0	0.02
963.7482	10x11	8.0	8.0	17.0	20.0	130.0	0.02
963.7483	10x13	9.0	9.0	20.0	23.0	130.0	0.02
963.7484	12x13	9.0	9.0	20.0	23.0	140.0	0.04
963.7485	12x14	9.0	9.0	20.0	23.0	140.0	0.05
963.7486	13x14	9.0	9.0	20.0	23.0	140.0	0.05
963.7487	13x15	9.0	9.0	20.0	23.0	140.0	0.05
963.7488	13x17	10.0	10.0	22.0	26.0	155.0	0.05
963.7489	14x15	10.0	10.0	22.0	26.0	155.0	0.05
963.7490	14x17	10.0	10.0	22.0	26.0	155.0	0.05
963.7491	16x17	12.0	12.0	26.0	30.0	170.0	0.07
963.7492	16x18	12.0	12.0	26.0	30.0	170.0	0.07
963.7493	17x19	12.0	12.0	26.0	30.0	190.0	0.08
963.7494	18x19	12.0	12.0	26.0	30.0	190.0	0.08
963.7495	19x22	14.0	14.0	35.0	37.0	200.0	0.12
963.7496	19x24	14.0	14.0	35.0	37.0	200.0	0.12
963.7497	20x22	14.0	14.0	35.0	37.0	200.0	0.12
963.7498	21x23	14.0	14.0	35.0	37.0	200.0	0.12
963.7499	22x24	14.0	14.0	35.0	37.0	200.0	0.12
963.7500	24x26	15.0	15.0	38.0	42.0	210.0	0.14
963.7501	24x27	15.0	15.0	38.0	42.0	210.0	0.13
963.7502	24x30	16.0	16.0	42.0	47.0	255.0	0.19
963.7503	25x28	16.0	16.0	42.0	47.0	255.0	0.20
963.7504	26x28	16.0	16.0	42.0	47.0	255.0	0.19
963.7505	27x29	16.0	16.0	42.0	47.0	255.0	0.19
963.7506	27x32	16.0	16.0	46.0	50.0	265.0	0.23
963.7507	30x32	16.0	16.0	46.0	50.0	265.0	0.23
963.7508	30x36	18.0	18.0	52.0	54.0	285.0	0.28
963.7509	32x36	18.0	18.0	52.0	54.0	285.0	0.28
963.7510	36x41	20.0	20.0	54.0	64.0	460.0	0.33
963.7511	41x46	21.0	21.0	63.0	68.0	432.0	0.81
963.7512	46x50	24.0	24.0	69.0	74.0	477.0	1.04

		A1 mm	A2 mm	B1 mm	B2 mm	L mm	kg
963.7513	1/4x5/16"	6.0	6.0	12.0	14.0	100.0	12
963.7514	5/16x3/8"	7.0	7.0	15.0	18.0	115.0	16
963.7515	3/8x7/16"	8.0	8.0	17.0	20.0	125.0	22
963.7516	7/16x9/16"	9.0	9.0	20.0	23.0	140.0	45
963.7517	1/2x5/8"	10.0	10.0	22.0	26.0	155.0	50
963.7518	1/2x19/32"	9.0	9.0	20.0	23.0	140.0	45
963.7519	9/16x11/16"	10.0	10.0	22.0	26.0	155.0	50
963.7520	5/8x25/32"	12.0	12.0	26.0	30.0	190.0	80
963.7521	11/16x3/4"	12.0	12.0	26.0	30.0	190.0	80
963.7522	3/4x7/8"	14.0	14.0	35.0	37.0	200.0	120
963.7523	13/16x15/16"	14.0	14.0	35.0	37.0	200.0	120
963.7524	15/16x1.1/16"	15.0	15.0	38.0	42.0	210.0	130
963.7525	1x1.1/8"	16.0	16.0	42.0	47.0	255.0	200
963.7526	1.3/16x1.1/4"	16.0	16.0	46.0	50.0	265.0	228

BRONZE*plus* single-end box wrench, straight

- FlankTraction profile
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

	mm	A mm	B mm	L mm	kg
963.7527	14	10.5	24.0	140.0	0.13
963.7528	15	10.5	24.0	140.0	0.13
963.7529	16	11.5	29.0	155.0	0.15
963.7530	17	11.5	29.0	155.0	0.15
963.7531	18	12.0	30.0	170.0	0.25
963.7532	19	12.0	30.0	170.0	0.28
963.7533	20	13.5	35.0	190.0	0.28
963.7534	21	13.5	35.0	190.0	0.30
963.7535	22	13.5	35.0	190.0	0.30
963.7536	23	14.5	38.0	215.0	0.30
963.7537	24	14.5	38.0	215.0	0.40
963.7538	25	16.0	42.0	230.0	0.43
963.7539	26	16.0	42.0	230.0	0.45
963.7540	27	16.0	42.0	230.0	0.50
963.7541	28	17.0	48.0	265.0	0.52
963.7542	29	17.0	48.0	265.0	0.51
963.7543	30	17.0	48.0	265.0	0.50
963.7544	32	17.0	51.0	265.0	0.45
963.7545	33	17.0	51.0	265.0	0.43
963.7546	34	17.5	51.0	290.0	0.67
963.7547	35	17.5	51.0	290.0	0.66
963.7548	36	17.5	55.0	290.0	0.65
963.7549	37	21.0	65.0	325.0	0.90
963.7550	38	21.0	65.0	325.0	0.90
963.7551	41	21.0	65.0	325.0	0.90
963.7552	42	21.0	65.0	325.0	0.90
963.7553	46	23.0	72.0	365.0	1.10
963.7554	47	23.0	72.0	365.0	1.10
963.7555	50	24.5	79.0	400.0	1.40
963.7556	52	26.0	87.0	430.0	1.80
963.7557	54	26.0	87.0	430.0	1.70
963.7558	55	26.5	87.0	445.0	1.65
963.7559	56	27.5	93.0	465.0	1.80
963.7560	58	27.5	93.0	465.0	1.80
963.7561	60	27.5	93.0	465.0	2.00
963.7562	63	29.0	100.0	500.0	2.30
963.7563	65	29.0	100.0	500.0	2.10
963.7564	67	29.0	100.0	500.0	2.00
963.7565	70	30.0	107.0	550.0	3.00
963.7566	71	30.0	107.0	550.0	2.80
963.7567	75	32.0	115.0	620.0	5.00
963.7568	77	32.0	115.0	620.0	5.00
963.7569	80	32.0	125.0	620.0	4.50
963.7570	82	32.0	125.0	620.0	4.30
963.7571	85	35.0	130.0	650.0	5.00
963.7572	88	37.0	138.0	650.0	4.80
963.7573	90	37.0	138.0	650.0	4.20
963.7574	94	39.0	145.0	700.0	5.20
963.7575	95	39.0	145.0	700.0	5.20

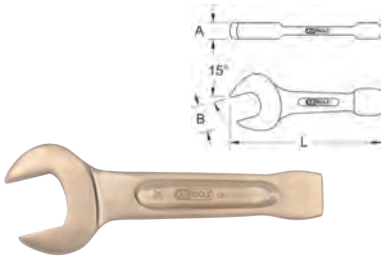
		A mm	B mm	L mm	kg
963.7576	1/2"	10.5	24.0	140.0	0.13
963.7577	9/16"	10.5	24.0	140.0	0.13
963.7578	19/32"	10.5	24.0	140.0	0.13
963.7579	5/8"	11.5	29.0	155.0	0.15
963.7580	11/16"	11.5	29.0	155.0	0.15
963.7581	3/4"	12.0	30.0	170.0	0.28
963.7582	25/32"	13.5	35.0	190.0	0.28
963.7583	13/16"	13.5	35.0	190.0	0.30
963.7584	7/8"	13.5	35.0	190.0	0.30
963.7585	15/16"	14.5	38.0	215.0	0.40
963.7586	31/32"	14.5	38.0	215.0	0.43
963.7587	1"	16.0	42.0	230.0	0.43
963.7588	1.1/16"	16.0	42.0	230.0	0.50
963.7589	1.1/8"	17.0	48.0	265.0	0.52
963.7590	1.3/16"	17.0	48.0	265.0	0.50
963.7591	1.1/4"	17.0	51.0	265.0	0.45
963.7592	1.5/16"	17.0	51.0	265.0	0.43

		A mm	B mm	L mm	kg
963.7593	1.3/8“	17.5	51.0	290.0	0.66
963.7594	1.7/16“	21.0	65.0	325.0	0.90
963.7595	1.1/2“	21.0	65.0	325.0	0.90
963.7596	1.9/16“	21.0	65.0	325.0	0.85
963.7597	1.5/8“	21.0	65.0	325.0	0.90
963.7598	1.11/16“	21.0	65.0	325.0	0.85
963.7599	1.3/4“	23.0	72.0	365.0	1.20
963.7600	1.13/19“	23.0	72.0	365.0	1.10
963.7601	1.7/8“	23.0	72.0	365.0	1.10
963.7602	2“	24.5	79.0	400.0	1.40
963.7603	2.1/16“	26.0	87.0	430.0	1.80
963.7604	2.1/8“	26.0	87.0	430.0	1.70
963.7605	2.3/16“	26.5	87.0	445.0	1.65
963.7606	2.1/4“	27.5	93.0	465.0	1.80
963.7607	2.5/16“	27.5	93.0	465.0	1.80
963.7608	2.3/8“	27.5	93.0	465.0	2.00
963.7609	2.7/16“	29.0	100.0	500.0	2.10
963.7610	2.1/2“	29.0	100.0	500.0	2.00
963.7611	2.9/16“	29.0	100.0	500.0	2.10
963.7612	2.3/4“	30.0	107.0	550.0	3.00
963.7613	2.15/16“	32.0	115.0	620.0	5.00
963.7614	3“	32.0	115.0	620.0	5.00
963.7615	3.1/8“	32.0	115.0	620.0	4.50
963.7616	3.3/8“	35.0	130.0	650.0	5.00
963.7617	3.1/2“	37.0	138.0	650.0	4.80
963.7618	3.3/4“	39.0	145.0	700.0	5.20

NON SPARKING IMPACT SPANNERS

BRONZE*plus* slogging open ended spanner

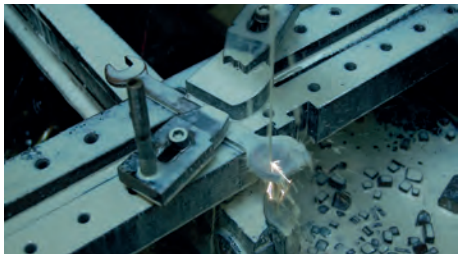
- In accordance to DIN 133
- Jaw 15° offset
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	A mm	B mm	L mm	kg
963.7619	14	11.0	30.0	180.0	0.35
963.7620	17	11.0	36.0	125.0	0.12
963.7621	19	12.0	40.0	120.0	0.13
963.7622	22	13.0	44.0	135.0	0.15
963.7623	24	14.0	46.0	150.0	0.20
963.7624	27	16.0	55.0	180.0	0.38
963.7625	28	16.0	55.0	180.0	0.37
963.7626	29	17.0	63.0	190.0	0.36
963.7627	30	17.0	63.0	190.0	0.35
963.7628	32	17.0	64.0	210.0	0.68
963.7629	33	19.0	70.0	210.0	0.67
963.7630	34	19.0	70.0	210.0	0.66
963.7631	35	20.0	75.0	210.0	0.65
963.7632	36	20.0	75.0	210.0	0.64
963.7633	38	21.0	80.0	210.0	0.63
963.7634	41	21.0	85.0	220.0	0.79
963.7635	42	21.0	85.0	220.0	0.75
963.7636	46	22.0	97.0	250.0	1.15
963.7637	47	22.0	97.0	255.0	1.20
963.7638	50	23.0	105.0	275.0	1.35
963.7639	52	23.0	105.0	275.0	1.50
963.7640	54	25.0	115.0	300.0	1.90
963.7641	55	25.0	115.0	290.0	1.60
963.7642	56	25.0	125.0	290.0	1.55
963.7643	58	25.0	125.0	290.0	1.50
963.7644	60	26.0	125.0	320.0	2.60
963.7645	63	27.0	135.0	330.0	3.00
963.7646	65	27.0	135.0	330.0	3.00
963.7647	67	28.0	135.0	380.0	4.20
963.7648	70	28.0	135.0	380.0	3.80
963.7649	71	28.0	135.0	380.0	3.70
963.7650	75	30.0	155.0	380.0	3.60

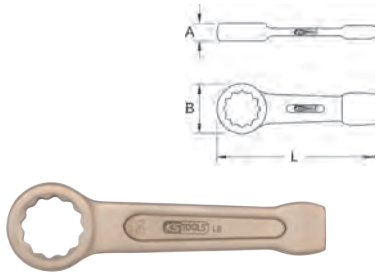
	mm	A mm	B mm	L mm	kg
963.7651	77	30.0	155.0	380.0	5.00
963.7652	80	32.0	165.0	370.0	4.80
963.7653	82	32.0	165.0	370.0	4.70
963.7654	85	32.0	170.0	370.0	4.50
963.7655	88	34.0	185.0	430.0	7.20
963.7656	90	34.0	185.0	430.0	7.00
963.7657	94	36.0	200.0	430.0	6.90
963.7658	95	36.0	200.0	430.0	6.80
963.7659	100	38.0	215.0	470.0	9.50
963.7660	105	38.0	215.0	470.0	9.30
963.7661	110	40.0	235.0	510.0	14.10
963.7662	115	40.0	235.0	510.0	13.30
963.7663	120	42.0	250.0	545.0	16.40
963.7664	125	42.0	250.0	545.0	15.50
963.7665	130	45.0	270.0	575.0	19.80
963.7666	135	45.0	270.0	575.0	19.20
963.7667	140	45.0	282.0	575.0	19.00
963.7668	145	48.0	295.0	640.0	27.00
963.7669	150	48.0	302.0	640.0	26.80
963.7670	155	48.0	320.0	640.0	26.50
963.7671	160	48.0	320.0	640.0	26.30
963.7672	165	50.0	340.0	715.0	39.50
963.7673	170	50.0	340.0	715.0	38.50
963.7674	175	55.0	355.0	715.0	37.00
963.7675	180	55.0	367.0	715.0	36.00
963.7676	185	55.0	390.0	715.0	35.80
963.7677	190	55.0	390.0	715.0	38.50
963.7678	195	55.0	390.0	715.0	38.50
963.7679	200	55.0	400.0	715.0	38.00
963.7680	205	55.0	400.0	715.0	37.50
963.7681	210	55.0	410.0	715.0	37.00
963.7682	220	55.0	410.0	715.0	36.50
963.7683	230	55.0	410.0	715.0	36.50

		A mm	B mm	L mm	kg
963.7684	1“	14.0	46.0	150.0	0.20
963.7685	1.1/16“	16.0	55.0	180.0	0.38
963.7686	1.1/8“	16.0	55.0	180.0	0.37
963.7687	1.3/16“	17.0	63.0	190.0	0.35
963.7688	1.1/4“	17.0	64.0	210.0	0.68
963.7689	1.5/16“	19.0	70.0	210.0	0.67
963.7690	1.3/8“	19.0	70.0	210.0	0.65
963.7691	1.7/16“	20.0	75.0	210.0	0.64
963.7692	1.1/2“	20.0	75.0	210.0	0.63
963.7693	1.9/16“	21.0	85.0	220.0	0.75
963.7694	1.5/8“	21.0	85.0	220.0	0.79
963.7695	1.11/16“	21.0	85.0	220.0	0.75
963.7696	1.3/4“	22.0	97.0	250.0	1.10
963.7697	1.13/16“	22.0	97.0	250.0	1.15
963.7698	1.7/8“	22.0	97.0	255.0	1.20
963.7699	2“	23.0	105.0	275.0	1.35
963.7700	2.1/16“	23.0	105.0	275.0	1.50
963.7701	2.1/8“	25.0	115.0	300.0	1.90
963.7702	2.3/16“	25.0	115.0	290.0	1.60
963.7703	2.1/4“	25.0	115.0	290.0	1.50
963.7704	2.5/16“	25.0	115.0	290.0	1.50
963.7705	2.3/8“	26.0	125.0	320.0	2.60
963.7706	2.7/16“	27.0	135.0	330.0	3.00
963.7707	2.1/2“	27.0	135.0	330.0	3.00
963.7708	2.9/16“	27.0	135.0	330.0	3.00
963.7709	2.5/8“	28.0	155.0	380.0	4.20
963.7710	2.3/4“	28.0	155.0	380.0	3.80
963.7711	2.13/16“	28.0	155.0	380.0	3.70
963.7712	2.15/16“	30.0	155.0	380.0	3.50
963.7713	3“	30.0	155.0	380.0	4.00
963.7714	3.1/8“	32.0	165.0	370.0	4.80
963.7715	3.1/4“	32.0	165.0	370.0	4.70
963.7716	3.3/8“	32.0	165.0	370.0	4.50
963.7717	3.1/2“	34.0	185.0	430.0	7.20
963.7718	3.5/8“	34.0	185.0	430.0	7.00
963.7719	3.3/4“	36.0	200.0	430.0	6.80
963.7720	3.7/8“	36.0	200.0	430.0	6.60
963.7721	4“	37.0	210.0	470.0	9.50
963.7722	4.1/8“	37.0	210.0	470.0	9.50
963.7723	4.1/2“	40.0	235.0	510.0	13.30



BRONZE*plus* slogging ring spanner

- FlankTraction profile (12 point)
- In accordance to DIN 7444
- With impact area
- For heavy duty applications
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)



	mm	A mm	B mm	L mm	kg
963.7724	17	15.0	38.0	150.0	0.40
963.7725	19	15.0	38.0	150.0	0.40
963.7726	22	15.0	38.0	150.0	0.35
963.7727	24	15.0	38.0	150.0	0.35
963.7728	27	18.0	45.0	190.0	0.60
963.7729	28	18.0	45.0	190.0	0.58
963.7730	29	19.0	50.0	190.0	0.56
963.7731	30	19.0	50.0	190.0	0.55
963.7732	32	19.0	53.0	190.0	0.58
963.7733	33	19.0	53.0	190.0	0.57
963.7734	34	21.0	58.0	210.0	0.68
963.7735	35	21.0	58.0	210.0	0.70
963.7736	36	21.0	58.0	210.0	0.69
963.7737	37	21.0	58.0	210.0	0.68
963.7738	38	21.0	63.0	230.0	1.10
963.7739	41	21.0	63.0	230.0	1.00
963.7740	42	21.0	63.0	230.0	1.00
963.7741	46	23.0	70.0	240.0	1.25
963.7742	47	23.0	70.0	240.0	1.27
963.7743	50	27.0	77.0	255.0	1.40
963.7744	52	27.0	77.0	255.0	1.40
963.7745	54	27.0	85.0	255.0	1.35
963.7746	55	27.0	85.0	255.0	1.34
963.7747	56	27.0	85.0	255.0	1.33
963.7748	57	27.0	85.0	255.0	1.30
963.7749	58	29.0	92.0	280.0	2.50
963.7750	60	29.0	92.0	280.0	2.40
963.7751	63	30.0	104.0	295.0	2.90
963.7752	65	30.0	104.0	295.0	2.80
963.7753	67	30.0	104.0	295.0	2.70
963.7754	70	33.0	110.0	320.0	3.40
963.7755	71	33.0	110.0	320.0	3.30
963.7756	75	35.0	115.0	320.0	3.20
963.7757	76	35.0	115.0	320.0	3.10
963.7758	77	35.0	115.0	320.0	3.00
963.7759	80	37.0	120.0	355.0	3.60
963.7760	82	37.0	120.0	355.0	3.50
963.7761	85	42.0	125.0	365.0	5.00
963.7762	88	44.0	135.0	360.0	4.80
963.7763	90	44.0	135.0	360.0	4.60
963.7764	94	45.0	145.0	360.0	4.50
963.7765	95	45.0	145.0	360.0	4.40
963.7766	100	46.0	150.0	360.0	4.20
963.7767	105	46.0	150.0	360.0	3.90
963.7768	110	47.0	165.0	450.0	8.60
963.7769	115	47.0	165.0	450.0	8.10
963.7770	120	48.0	182.0	480.0	9.70
963.7771	125	48.0	182.0	480.0	9.50
963.7772	128	50.0	196.0	520.0	13.20
963.7773	130	50.0	196.0	520.0	13.20
963.7774	135	50.0	196.0	520.0	12.90
963.7775	140	50.0	196.0	520.0	12.90
963.7776	145	52.0	220.0	580.0	19.00
963.7777	150	52.0	220.0	580.0	18.00
963.7778	155	52.0	220.0	580.0	17.20
963.7779	160	52.0	220.0	580.0	19.00
963.7780	165	54.0	245.0	650.0	28.00
963.7781	170	54.0	245.0	650.0	27.70
963.7782	175	54.0	245.0	650.0	27.00
963.7783	180	54.0	245.0	650.0	26.00
963.7784	185	56.0	270.0	700.0	32.70
963.7785	190	56.0	270.0	700.0	32.20
963.7786	195	56.0	270.0	700.0	31.80
963.7787	200	56.0	270.0	700.0	31.00

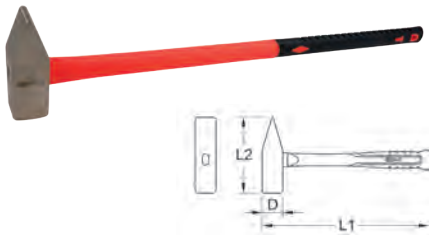
BRONZE*plus* Sledge hammer

- In accordance to DIN 1042
- With hickory handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)

	g	D mm	L1 mm	L2 mm	kg
963.2030	2500	50.0	900.0	165.0	2.60
963.2031	3000	55.0	900.0	175.0	3.15
963.2032	4000	60.0	900.0	180.0	4.15
963.2033	5000	68.0	900.0	185.0	5.15
963.2034	6000	74.0	900.0	190.0	6.15
963.2035	8000	78.0	900.0	195.0	8.15
963.2036	9000	82.0	900.0	200.0	9.15
963.2037	10000	85.0	900.0	210.0	10.15
963.2038	12000	90.0	900.0	220.0	12.15
963.2039	15000	100.0	900.0	230.0	15.15

BRONZE*plus* Sledge hammer

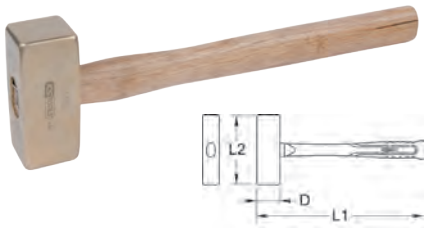
- In accordance to DIN 1041
- With fiberglass handle
- Head and edge areas ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2040	3000	55.0	900.0	175.0	3.15
963.2041	4000	60.0	900.0	180.0	4.15
963.2042	5000	68.0	900.0	185.0	5.15
963.2043	8000	78.0	900.0	195.0	8.15
963.2044	10000	85.0	900.0	210.0	10.15

BRONZE*plus* club hammer

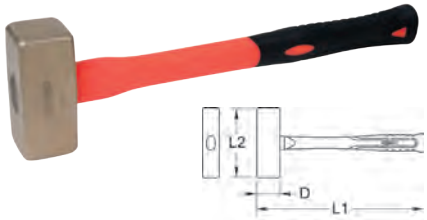
- In accordance to DIN 6475
- With hickory handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2050	1000	40.0	400.0	95.0	1.15
963.2051	1250	40.0	400.0	115.0	1.40
963.2052	1500	45.0	400.0	115.0	1.70
963.2053	2000	50.0	400.0	115.0	2.20
963.2054	2500	55.0	400.0	130.0	2.70
963.2055	3000	55.0	900.0	145.0	3.25
963.2056	4000	60.0	900.0	150.0	4.25
963.2057	5000	65.0	900.0	170.0	5.25
963.2058	6000	70.0	900.0	170.0	6.25
963.2059	8000	75.0	900.0	190.0	8.30
963.2060	10000	80.0	900.0	210.0	10.30

BRONZE*plus* club hammer

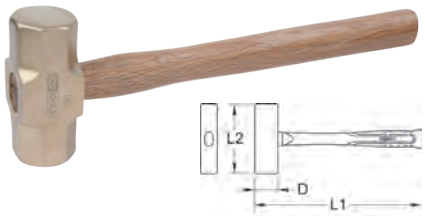
- In accordance to DIN 6475
- With fiberglass handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2061	1000	40.0	400.0	105.0	1.30
963.2062	1250	42.0	400.0	110.0	1.60
963.2063	1500	44.0	400.0	115.0	1.85
963.2064	2000	48.0	400.0	130.0	2.35
963.2065	2500	52.0	400.0	150.0	2.85
963.2066	3000	54.0	900.0	155.0	3.40
963.2067	4000	58.0	900.0	160.0	4.40
963.2068	5000	64.0	900.0	165.0	5.40
963.2069	6000	67.0	900.0	175.0	6.40
963.2070	8000	75.0	900.0	190.0	8.40
963.2071	10000	78.0	900.0	205.0	10.40

BRONZE*plus* Mining hammer

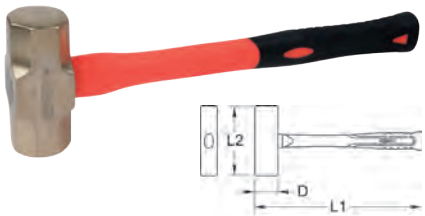
- In accordance to DIN 6475
- With hickory handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2080	1000	40.0	350.0	115.0	1.40
963.2081	1500	44.0	400.0	118.0	1.94
963.2082	2500	55.0	400.0	150.0	2.94
963.2083	3500	58.0	900.0	160.0	3.94
963.2084	5000	65.0	900.0	175.0	5.45
963.2085	8000	80.0	900.0	200.0	8.45

BRONZE*plus* Mining hammer

- In accordance to DIN 6475
- With fiberglass handle
- Surfaces polished ground
- Edges rounded off
- Non sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium bronze (non ferrous alloy)



	g	D mm	L1 mm	L2 mm	kg
963.2086	1000	40.0	350.0	115.0	1.45
963.2087	1500	44.0	400.0	118.0	2.00
963.2088	2500	55.0	400.0	150.0	3.00
963.2089	3500	58.0	900.0	160.0	4.00
963.2090	5000	65.0	900.0	175.0	5.55
963.2091	8000	80.0	900.0	200.0	8.55

BRONZE*plus* Hand hammer

- In accordance to DIN 1041
- With hickory handle
- American form
- Surfaces polished ground
- Non-sparking
- Explosion proof
- Corrosion resistant
- Wear resistant
- Aluminium-Bronze (Non-Ferrous-Alloy)

	g	D mm	L1 mm	L2 mm	kg
963.2120	700	30.0	310.0	115.0	0.85
963.2121	1200	40.0	400.0	135.0	1.37
963.2122	1600	40.0	400.0	140.0	1.79