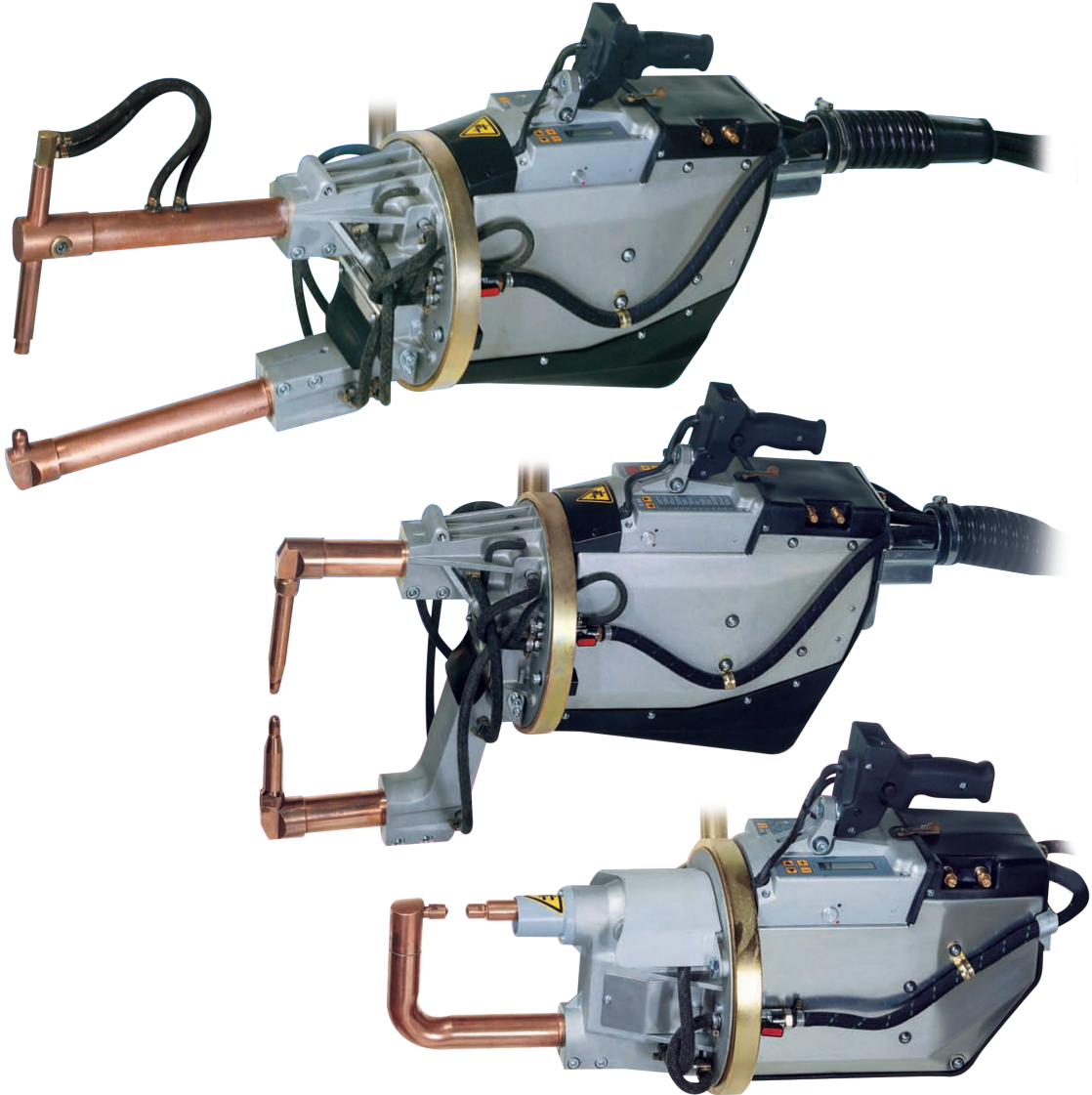


TECNA®

**SPOT WELDING GUNS
MEDIUM & HEAVY DUTY
16-75 kVA**

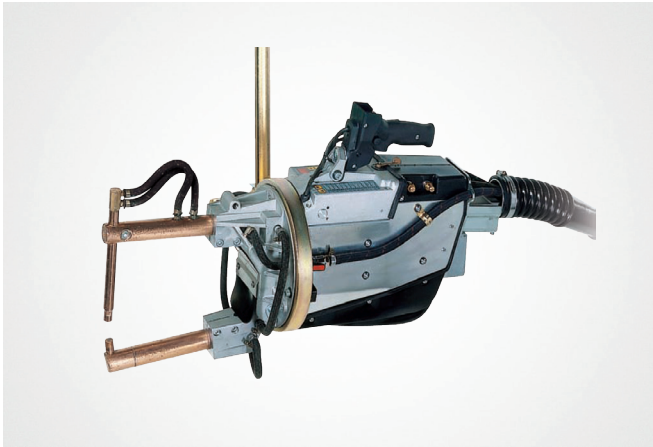


CE

Spot Weld, Inc.
2290 Wycliff St.
St. Paul, MN 55114

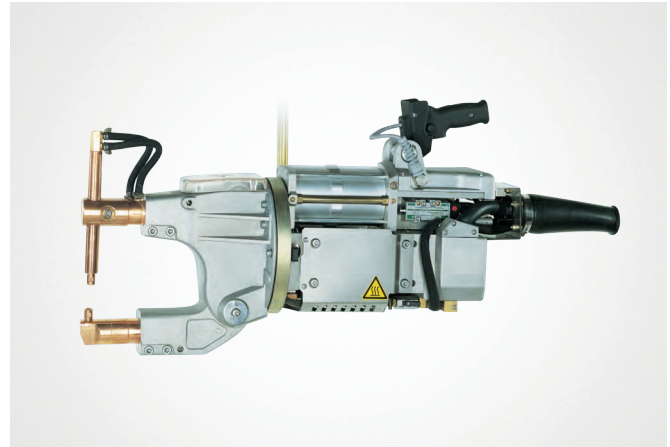
RWMA
MEMBER

DESIGNED FOR HIGH QUALITY WELDS AND REDUCED INSTALLATION COSTS



MEDIUM DUTY SPOT WELDING GUNS

16-38 KVA rated @ 50% duty cycle, air operated and water-cooled. Integrated microprocessor-based solid-state digital controls.



HEAVY DUTY SPOT WELDING GUNS

32-75 KVA rated @ 50% duty cycle, air operated and water-cooled. Microprocessor-based solid-state digital controls are available as either integrated or external units.

FEATURES

- High electrode force allows for smaller dimensions and safer components.
- Transformers meet ISO 5826 standards.
- Accurate maneuverability at any angle is guaranteed by gyro suspension mounted on sealed bearings, coupled with a TECNA balancer.
- Adjustable weld stroke.
- Rotation lock features allows locking of multiple axes of motion.
- Long weld stroke enables welding in difficult-to-reach areas, including welding reinforcements and ribs.
- Temporary extra stroke allows reaching into tough spots.
- Lube-free pneumatic circuit eliminates oil mist from your shop environment.
- Lube-free oil-less chromium-plated cylinder and shaft offer a long service life.
- Trigger-handle controls enable selection between 2 welding programs, as well as operation of retraction valve and 'weld/ no-weld' function.
- High electrical efficiency.
- Copper secondary circuit is completely water-cooled.
- Safety prevents accidental initiation.
- Accepts a broad range of standard and special arms to accommodate special applications. "C" type gun assists in accessing unconventional areas.

OPTIONAL EQUIPMENT

Arms and electrodes (in addition to those listed in this brochure, many special configurations are available to satisfy various requirements).

Various lengths of supply cables/hoses are available at customer request. 50' is standard length supplied.

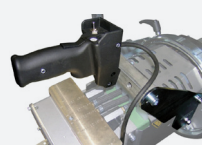
Available long-life shielded supply cable.



Mounts

Twin-handle mount – one trigger handle, one grip handle – mounts control handle to one side of spot gun, and additional grip handle on other side.

Part # 3103 (L, LL, C)
Part # 3104 (LG, LLG, CG)



Twin-handle mount – dual trigger-handles – mount two control handles, one on each side of spot gun. Available with either 2- or 4-position schedule selectors. Requires TE470 control.

Part # 3123 (L, LL, C)
Part # 3124 (LG, LLG, CG)



Underside mount – mounts control handle on underside of spot gun.

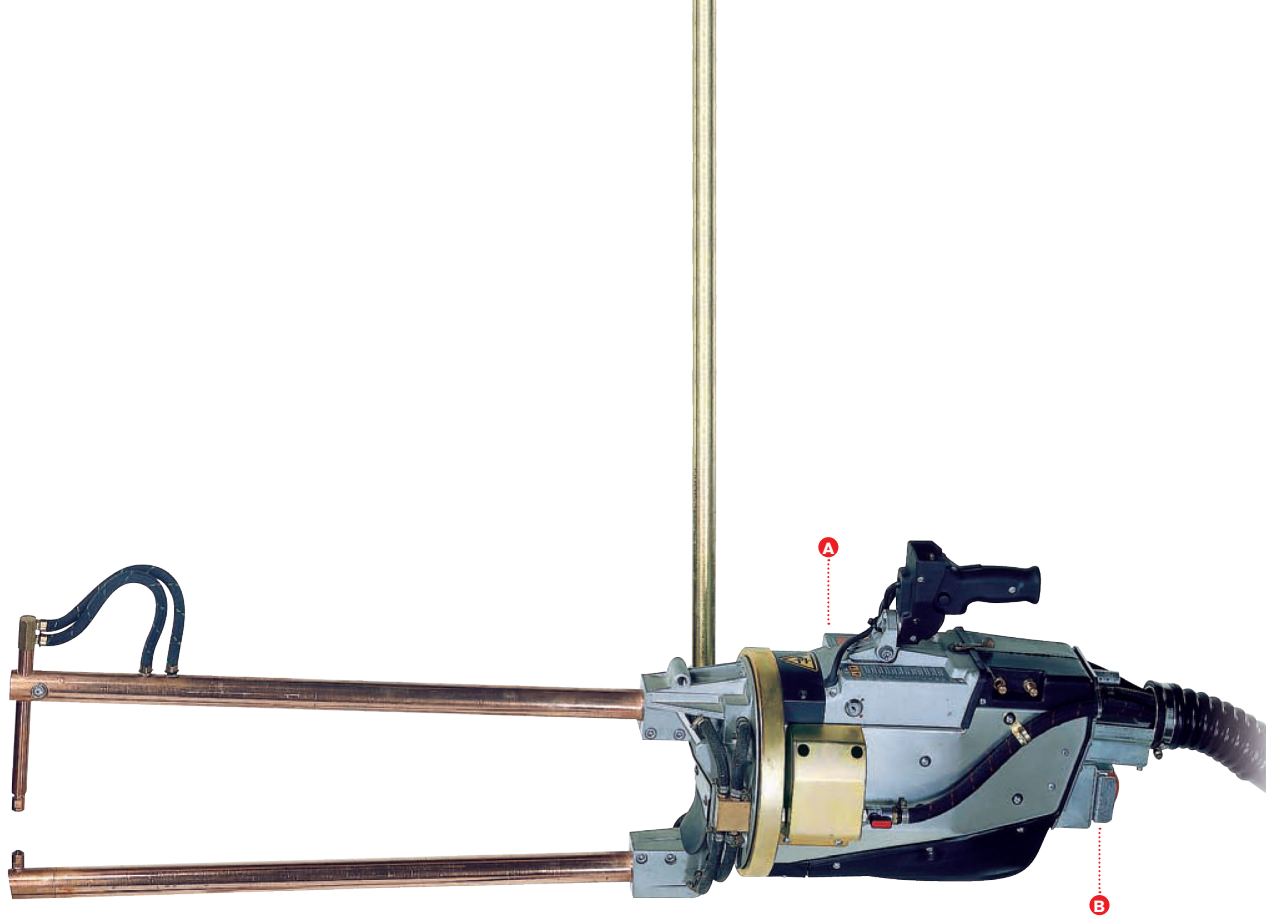
Part # 3313 (3321, 3322, 3323, 3324)
Part # 3314 (3327, 3328)



Filter Regulator Combo

Filter assembly with integrated regulator.

Part # TEFRG



STANDARD EQUIPMENT

- Suspended Spot Gun with choice of built-in control unit (TE300, TE450 or TE470).
- Integrated earth leakage detection and circuit breaker/GFCI. Must specify voltage and frequency of welder at time of order.
- Integrated Filter-Regulator Unit with gauge.
- Includes 50' of supply cable and hoses.
- Emergency stop causes operation to cease immediately.

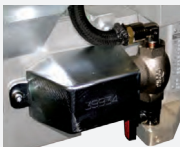
A CONTROL UNIT TE 300 (Standard)

- 2 welding programs with direct recall by toggle switch on trigger handle.
- Pre-weld, slope and impulse functions.
- Single and auto-repeat modes.
- Programming lockout switch with removable key (option 3111).



B EMERGENCY STOP BUTTON

- Immediately stops welder operation.



Water Flow Switch
Prevents welding when water is not circulating through the welder.

Part # 3105 (L - LL)
Part # 3106 (C)
Part # 3107 (LG - LLG)
Part # 3108 (C)



Program Lockout Switch

Removable key selector for lockout of programming mode.

Part # 3111 (TE 300)



Balancers

Equipped with Rotating Hook (Option R) and two-position lock-unlock switch, operable from the ground (Option B).

For capacity, see the specifications table.



Control Unit TE 450/470

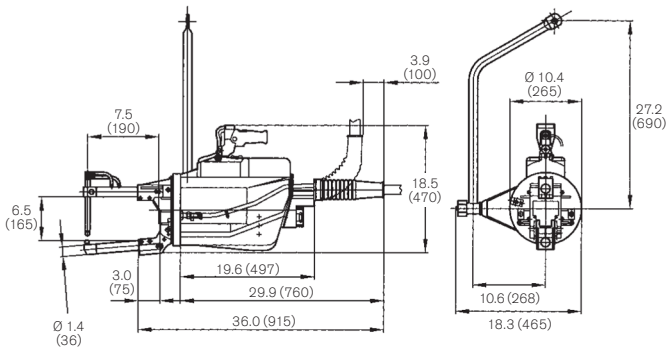
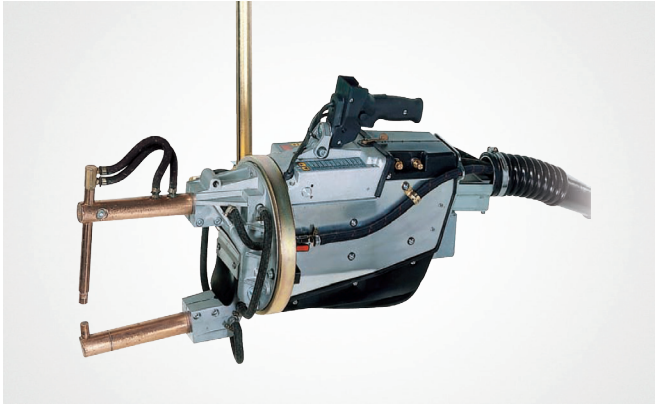
- 63 welding programs, 2 with direct recall by toggle switch on trigger handle. *Additional options available, see below.
- Display of welding

current (KA) and conduction angle.

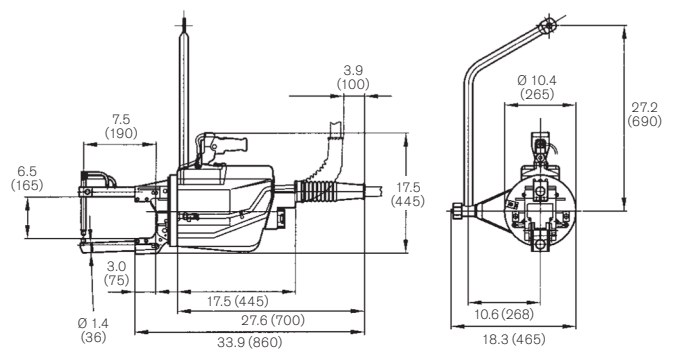
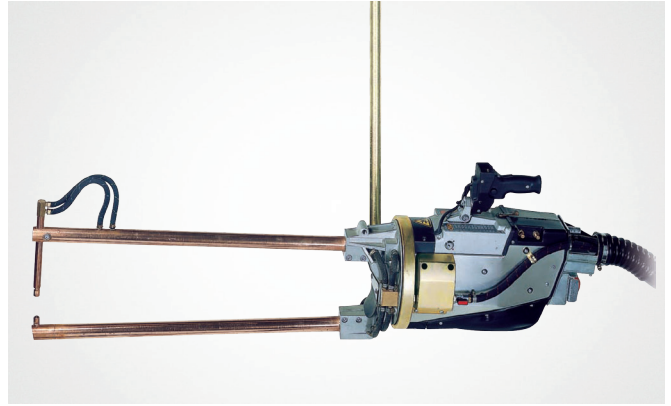
- Constant Current Mode.
- Weld Current or Conduction Angle Limits.
- Stepper Function with programmable curve.
- Automatic retraction stroke function.
- Slope, impulse, pre- and post-weld functions.
- Adjustment of time in half-cycles.

- Weld counter.
- *Trigger handle options include: 1 trigger handle allowing direct selection between 2 programs (included with TE450); 1 trigger handle allowing direct selection between 4 programs (optional, requires TE470); 2 trigger handles, each allowing direct selection between 2 programs, for a total of 4 programs (optional, requires TE470).

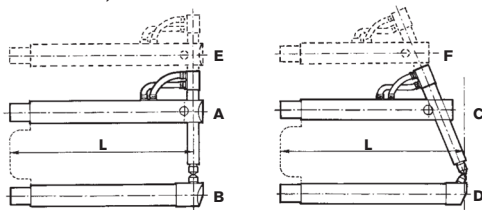
LTG-3321



LTG-3322

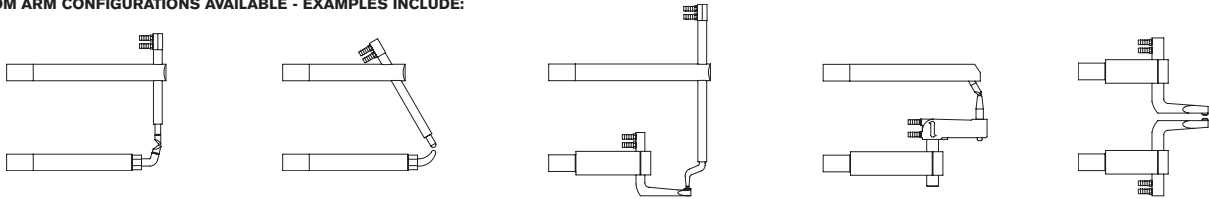


ARMS FOR LTG-3321, LTG-3322



L	in (mm)	7.5 (190)	9.8 (250)	13.8 (350)	20 (508)	25.6 (650)	31.5 (800)
A	Part #	4850	4854	4858	4862	4866	4870
B	Part #	4852	4856	4860	4864	4868	4872
C	Part #	4851	4855	4859	4863	4867	4871
D	Part #	4853	4857	4861	4865	4869	4873

CUSTOM ARM CONFIGURATIONS AVAILABLE - EXAMPLES INCLUDE:



ARMS FEATURES WITH LTG-3321

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
			min in (mm)	max in (mm)	min in (mm)	max in (mm)
7.5 (190)	744 (338)	7.3 (3.3)	0.2 (5)	0.8 (20)	1.1 (28)	1.6 (40)
9.8 (250)	590 (268)	9.5 (4.3)	0.2 (6)	1.0 (25)	1.4 (35)	2.0 (50)
13.8 (350)	438 (199)	12.8 (5.8)	0.3 (8)	1.3 (34)	1.9 (47)	2.8 (70)
20 (508)	264 (120)	18.7 (8.5)	0.5 (13)	2.2 (56)	2.8 (70)	4.4 (112)
25.6 (650)	249 (113)	23.4 (10.6)	0.6 (15)	2.4 (60)	3.3 (84)	4.7 (120)
31.5 (800)	205 (93)	28.7 (13)	0.7 (18)	2.9 (73)	4.0 (102)	5.7 (146)

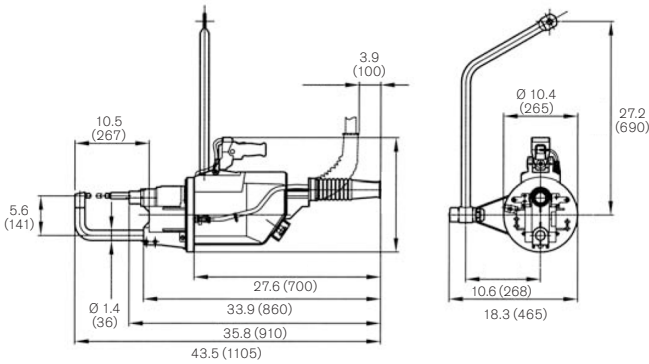
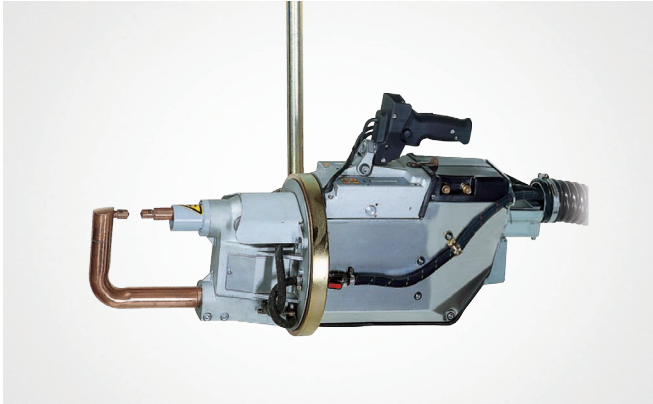
* Electrode force at 87 psi (6 bar)

ARMS FEATURES WITH LTG-3322

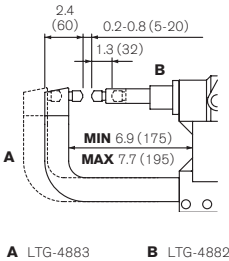
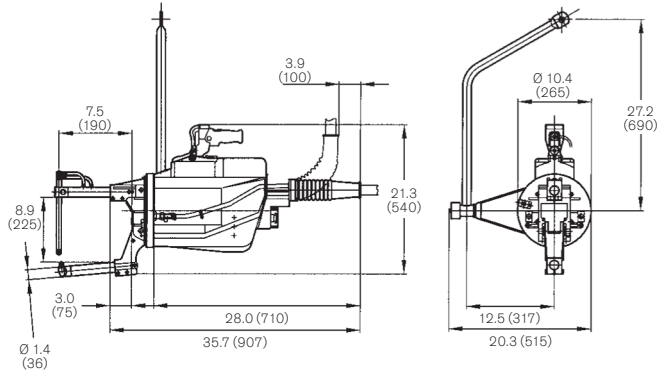
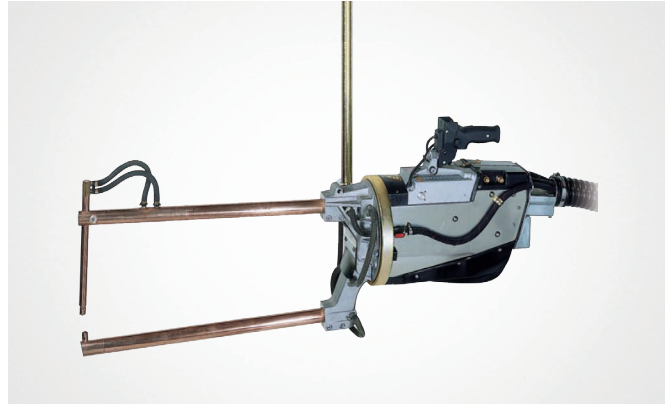
L	F*	Set weight (approx.)	Short stroke		Long Stroke	
			min in (mm)	max in (mm)	min in (mm)	max in (mm)
7.5 (190)	629 (286)	7.3 (3.3)	0.2 (6)	1.0 (25)	1.2 (30)	1.9 (48)
9.8 (250)	499 (227)	9.5 (4.3)	0.3 (7)	1.2 (30)	1.5 (38)	2.4 (60)
13.8 (350)	397 (168)	12.8 (5.8)	0.4 (10)	1.6 (41)	2.0 (50)	3.1 (80)
20 (508)	264 (120)	18.7 (8.5)	0.5 (13)	2.2 (56)	2.8 (70)	4.4 (112)
25.6 (650)	209 (95)	23.4 (10.6)	0.7 (18)	2.8 (72)	3.5 (90)	5.5 (140)

* Electrode force at 87 psi (6 bar)

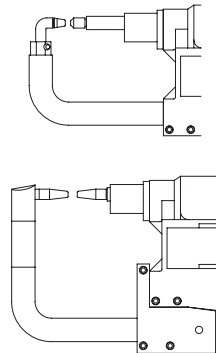
LTG-3323



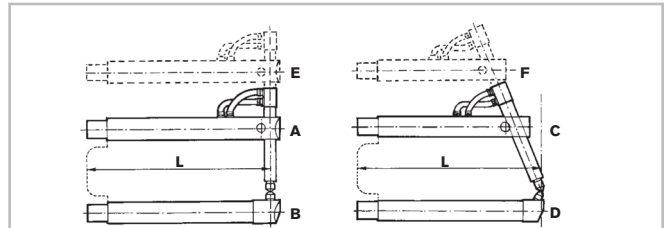
LTG-3324



CUSTOM ARM CONFIGURATIONS AVAILABLE
EXAMPLES INCLUDE:



A LTG-4883 B LTG-4882



Custom arm configurations available

L	in (mm)	7.5 (190)	9.8 (250)	13.8 (350)	20 (508)	25.6 (650)	31.5 (800)
E	Part #	-	4874	4876	4878	4880	-
B	Part #	-	4856	4860	4864	4868	-
F	Part #	-	4875	4877	4879	4881	-
D	Part #	4853	4857	4861	4865	4869	4873

ARMS FEATURES WITH LTG-3323

part #	L	F*	Set weight (approx.)	Short stroke		Long Stroke	
				min in (mm)	max in (mm)	min in (mm)	max in (mm)
4882 4883	660 (300)	7.1 (3.2)	0.2 (5)	0.8 (20)	1.4 (35)	2.0 (50)	
4882 4884	660 (300)	8.6 (3.9)	0.2 (5)	0.8 (20)	1.4 (35)	2.0 (50)	

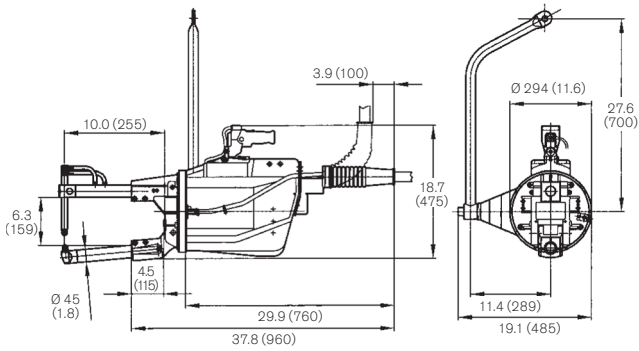
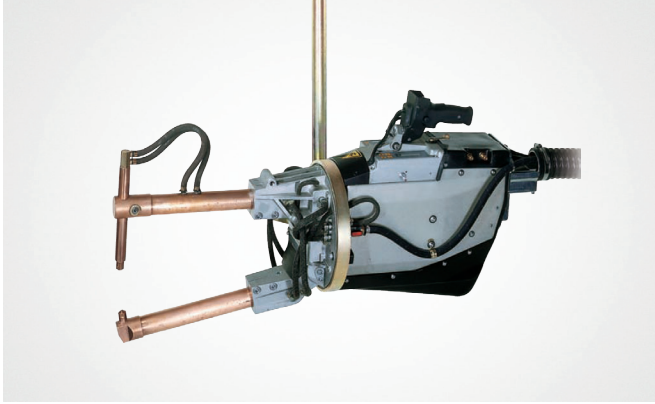
* Electrode force at 87 psi (6 bar)

ARMS FEATURES WITH LTG-3324

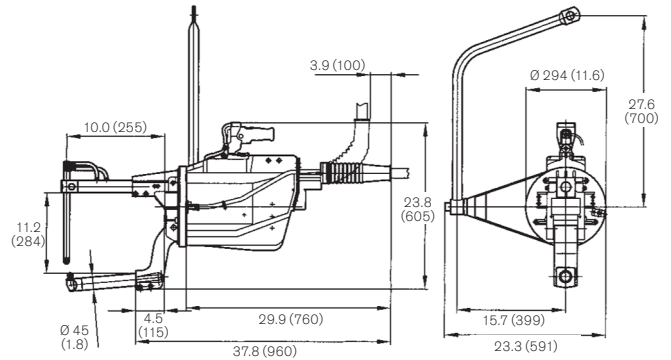
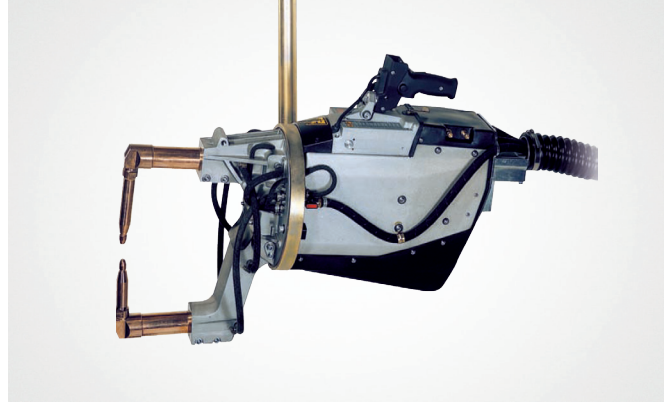
in (mm)	L	F*	Set weight (approx.)	Short stroke		Long Stroke	
				min in (mm)	max in (mm)	min in (mm)	max in (mm)
9.8 (250)	656 (268)	9.9 (4.5)	0.2 (6)	1.0 (25)	1.4 (35)	2.0 (50)	
13.8 (350)	438 (199)	13.2 (6)	0.3 (8)	1.3 (34)	1.9 (47)	2.8 (70)	
20 (508)	308 (140)	19.2 (8.7)	0.5 (12)	1.9 (48)	2.6 (65)	3.8 (97)	
25.6 (650)	249 (113)	23.8 (10.8)	0.6 (15)	2.4 (60)	3.3 (84)	4.7 (120)	

* Electrode force at 87 psi (6 bar)

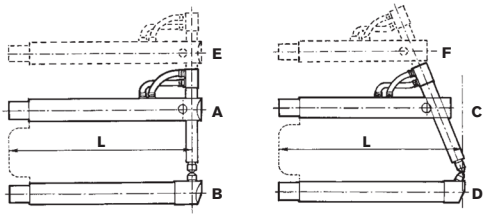
LTG-3327



LTG-3328



ARMS FOR LTG-3327, LTG-3328



Custom arm configurations available

L	in (mm)	10.0 (255)	16.1 (408)	24.0 (610)	32.3 (820)	40.6 (1030)
A	Part #	4750	4756	4762	4768	4774
B	Part #	4752	4758	4764	4770	4776
C	Part #	4751	4757	4763	4769	4775
D	Part #	4753	4759	4765	4771	4777
E	Part #	4754	4760	4766	4772	-
F	Part #	-	4761	4767	4773	-

ARMS FEATURES WITH LTG-3327

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
			min in (mm)	max in (mm)	min in (mm)	max in (mm)
10.0 (255)	1529 (695)	6.5	0.4 (10)	1.0 (26)	1.8 (45)	2.4 (60)
16.1 (408)	849 (386)	9.5	0.5 (12)	1.4 (35)	2.6 (65)	3.3 (85)
24.0 (610)	581 (264)	13.5	0.9 (22)	2.4 (60)	3.9 (100)	5.4 (136)
32.3 (820)	431 (196)	18	1.2 (30)	3.0 (75)	5.1 (130)	6.9 (175)
40.6 (1030)	343 (156)	22	1.6 (40)	3.9 (100)	6.5 (165)	8.9 (225)

* Electrode force at 87 psi (6 bar)

ARMS FEATURES WITH LTG-3328

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
			min in (mm)	max in (mm)	min in (mm)	max in (mm)
10.0 (255)	1529 (695)	15.4 (7)	0.4 (10)	1.0 (26)	1.8 (45)	2.4 (60)
16.1 (408)	849 (386)	22.0 (10)	0.5 (12)	1.4 (35)	2.6 (65)	3.3 (85)
24.0 (610)	581 (264)	30.9 (14)	0.9 (22)	2.4 (60)	3.9 (100)	5.4 (136)
32.3 (820)	431 (196)	39.7 (18)	1.2 (30)	3.0 (75)	5.1 (130)	6.9 (175)

* Electrode force at 87 psi (6 bar)

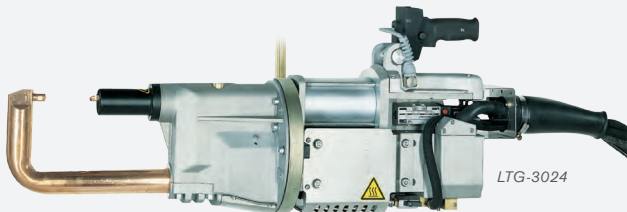
SPECIFICATIONS	LTG-	3321	3322	3323	3324	3327	3328
Gun type		L	L	C	L	L	L
Power at 50%	kVA	16	23	23	23	38	38
Max power	kVA	37	65	63	52	110	92
Short circuit current	kA	16.000	21.000	21.000	16.500	27.000	22.500
Thermal current at 100%	kA	4.000	4.250	4.250	4.250	5.400	5.400
Secondary voltage	V	2.8	3.8	3.8	3.8	5	5
Supply voltage 60 Hz *	V	440	440	440	440	440	440
Cable section up to 30 m	mm ²	10	16	16	16	25	25
Delayed fuses @ 440 vac	A	32	40	40	40	80	80
Arms spacing	in (mm)	6.5 (165)	6.5 (165)	4.7 (120)	8.9 (225)	6.1 (155)	11.0 (280)
Arms min. length	in (mm)	7.5 (190)	7.5 (190)	–	9.8 (250)	9.8 (250)	9.8 (250)
Max electrode force (8 bar)	lbs (daN)	629 (286)	744 (338)	660 (300)	590 (268)	1529 (695)	1529 (695)
Working stroke	in (mm)	0.2-1.0 (6-25)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-1.0 (6-25)	0.4-1.0 (10-26)	0.4-1.0 (10-26)
Max stroke	in (mm)	1.2-1.9 (30-48)	1.1-1.6 (28-40)	1.4-2.0 (35-50)	1.4-2.0 (35-50)	1.8-2.4 (45-60)	1.8-2.4 (45-60)
Arms max length	in (mm)	25.6 (650)	31.5 (800)	–	25.6 (650)	40.6 (1030)	32.2 (820)
Max electrode force (8 bar)	lbs (daN)	209 (95)	205 (93)	–	249 (113)	343 (156)	431 (196)
Working stroke	in (mm)	0.7-2.8 (18-72)	0.7-2.9 (18-73)	–	0.6-2.4 (15-+60)	1.6-3.9 (40-100)	1.2-3.0 (30-75)
Max stroke	in (mm)	3.5-5.5 (90-140)	4.0-5.7 (102-146)	–	3.3-4.7 (84-120)	6.5-8.9 (165-225)	5.1-6.9 (130-175)
Compressed air supply	psi (bar)	94 (6.5)	94 (6.5)	94 (6.5)	94 (6.5)	94 (6.5)	94 (6.5)
Air per 1000 spots at kP (5 bar)	Nm ³	4	4	4	4	7.5	7.5
Hose inside Ø	in (mm)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)
Water cooling at 250 kP (2.5 bar)	gpm (lpm)	1.85 (7)	1.85 (7)	2.11(8)	1.85 (7)	2.11(8)	2.11(8)
Max thickness mild steel sheet							
with arms min length	in (mm)	0.1 + 0.1 (3 + 3)	0.2 + 0.2 (4 + 4)	0.2 + 0.2 (4 + 4)	0.1 + 0.1 (3.5 + 3.5)	0.2 + 0.2 (5 + 5)	0.2 + 0.2 (5 + 5)
with arms L = 20 in (508 mm)	in (mm)	0.07 + 0.07 (1.8 + 1.8)	0.1 + 0.1 (3 + 3)	–	0.1 + 0.1 (3 + 3)	0.1 + 0.1 (3.5 + 3.5)	0.1 + 0.1 (3.5 + 3.5)
with arms max length	in (mm)	0.05 + 0.05 (1.2 + 1.2)	0.08 + 0.08 (2 + 2)	–	0.08 + 0.08 (2 + 2)	0.08 + 0.08 (2 + 2)	0.1 + 0.1 (2.5 + 2.5)
cross wire max Ø	in (mm)	0.4 + 0.4 (10 + 10)	0.6 + 0.6 (14 + 14)	0.6 + 0.6 (14 + 14)	0.5 + 0.5 (12 + 12)	0.6 + 0.6 (16 + 16)	0.6 + 0.6 (16 + 16)
Welding rate per minute							
0.04 + 0.04 in (1 + 1 mm) class A		66	80	80	80	100	100
0.06 + 0.06 in (1.5 + 1.5 mm) class A		–	32	32	32	44	44
0.08 + 0.08 in (2 + 2 mm) class A		14	16	16	16	20	20
0.1 + 0.1 in (2.5 + 2.5 mm) class A		–	–	–	–	14	14
0.1 + 0.1 in (3 + 3 mm) class B		–	–	–	–	8	8
Net weight (with cables, hoses, suspension and shortest arms)	lbs (kg)	101 (46)	115 (52)	117 (53)	121 (55)	168 (76)	172 (78)
Packing box dimensions	in (mm)	15 x 33.5 x 21.7 (380 x 850 x 550)	15 x 33.5 x 21.7 (380 x 850 x 550)	13 x 44.1 x 24.8 (330 x 1120 x 630)	13 x 44.1 x 24.8 (330 x 1120 x 630)	29.9 x 41 x 19.7 (760 x 1050 x 500)	29.9 x 41 x 19.7 (760 x 1050 x 500)
Spring balancer							
short arms capacity required	lbs (kg)	99-121 (45-55)	121-143 (55-65)	121-143 (55-65)	121-143 (55-65)	165-198 (75-90)	165-198 (75-90)
long arms capacity required	lbs (kg)	121-143 (55-65)	143-165 (65-75)	–	143-165 (65-75)	198-231 (90-105)	198-231 (90-105)

* 220V also available, other voltage/frequency combinations available

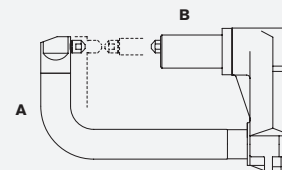
Specifications subject to change without notice.

SPECIFICATIONS	LTG-	3020	3024	3032	3040	
Gun type		C	C	CG	CG	
Power at 50%	kVA	32	36	53	60	
Max power	kVA	90	115	150	192	
Short circuit current	kA	20	22.8	26.5	30	
Thermal current at 100%	kA	4	4	5.3	5.3	
Secondary voltage	V	5.6	6.3	7.1	8	
Supply voltage 60 Hz *	V	440	440	440	440	
Cable section up to 30 m	mm ²	16	16	25	25	
Delayed fuses @ 440 vac	A	63	63	100	125	
Arms centerline distance	in (mm)	5.5 (140)	5.5 (140)	5.8 (148)	5.8 (148)	
Insulated arms connection Ø	in (mm)	1.7 (42)	1.7 (42)	1.9 (47)	1.9 (47)	
Non insulated arms connection Ø	in (mm)	1.7 (44)	1.7 (44)	1.9 (49)	1.9 (49)	
Ø gyro suspension	in (mm)	9.6 (244)	9.6 (244)	11.6 (294)	11.6 (294)	
Arms min. length	in (mm)	-	-	-	-	
Max electrode force (8 bar)	lbs (daN)	1100 (500)	1100 (500)	1364 (620)	1364 (620)	
Working stroke	in (mm)	0.2-1.2 (5-30)	0.2-1.2 (5-30)	0.2-1.2 (5-30)	0.2-1.2 (5-30)	
Max stroke	in (mm)	3.0-3.9 (75-100)	3.0-3.9 (75-100)	3.0-3.9 (75-100)	3.0-3.9 (75-100)	
Arms max length	in (mm)	-	-	-	-	
Max electrode force (8 bar)	daN	-	-	-	-	
Working stroke	in (mm)	-	-	-	-	
Max stroke	in (mm)	-	-	-	-	
Compressed air supply	psi (bar)	116 (8)	116 (8)	116 (8)	116 (8)	
Air per 1000 spots	short stroke long stroke	Nm ³ /8 bar Nm ³ /8 bar	4 12	4 12	5 15	5 15
Ø supply hose	in (mm)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)	
Water cooling	gpm (lpm)	1.7 (6)	1.7 (6)	1.7 (6)	1.7 (6)	
Max thickness mild steel sheet						
with arms min length	in/class (mm)/class	0.1 + 0.1/B (3 + 3/B)	0.1 + 0.1/B (3 + 3/B)	0.2 + 0.2/B (4 + 4/B)	0.1 + 0.1/B (4 + 4/B)	
with arms L = 20 in (508 mm)	in/class (mm)/class	-	-	-	-	
with arms max length	in/class (mm)/class	-	-	-	-	
cross wire max Ø	in (mm)	0.5 (14)	0.6 (16)	0.7 (18)	0.8 (20)	
Welding rate per 1/Welding class						
0.04 + 0.04 in (1 + 1 mm)	N°/class	70/A	70/A	125/A	125/A	
0.06 + 0.06 in (1.5 + 1.5 mm)	N°/class	30/A	30/A	50/A	50/A	
0.08 + 0.08 in (2 + 2 mm)	N°/class	15/B	15/B	25/B	25/B	
0.1 + 0.1 in (2.5 + 2.5 mm)	N°/class	10/B	10/B	17/B	17/B	
0.1 + 0.1 in (3 + 3 mm)	N°/class	6/B	6/B	10/B	10/B	
Net weight	lbs (kg)	112 (51)	117 (53)	157 (71)	165 (75)	
(with cables, hoses, suspension without arms)						
Balancer: short arms	part #	9412	9412	9413	9413	
long arms	part #	-	-	-	-	

* Other voltage/frequency combinations are available



ARMS FOR LTG-3020, LTG-3024, LTG-3032, LTG-3040



LTG-3020, 3024

A 4401 B 4402

LTG-3032, 3040

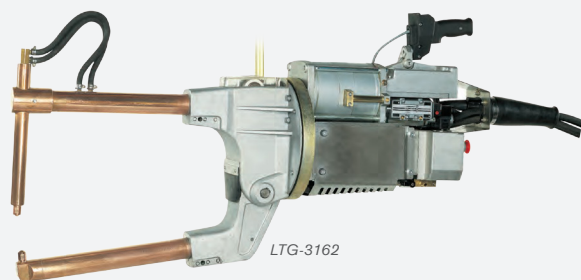
A 4410 B 4411

Custom arm configurations available

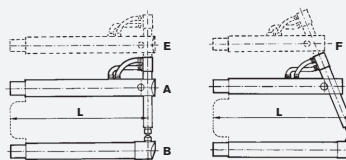
SPECIFICATIONS	LTG-	3154	3160	3166	3156	3162	3168
Gun type		LG	LG	LG	LLG	LLG	LLG
Power at 50%	kVA	53	60	75	53	60	75
Maximum power	kVA	147	192	90	110	90	256
Short circuit current	kA	26	30	20	22	20	32
Thermal current at 100%	kA	5.3	5.3	5.3	5.3	5.3	5.3
Secondary voltage	V	7.1	8	5.6	6.3	5.6	10
Supply voltage 60 Hz	V	440	440	440	440	440	440
Cable section up to 30 m	mm ²	25	25	35	25	25	35
Delayed fuses @ 440 vac	A	100	125	63	63	63	150
Arms spacing	in (mm)	8.6 (219)	8.6 (219)	8.6 (219)	12.3 (312)	12.3 (312)	12.3 (312)
Insulated arms connection Ø	in (mm)	1.9 (47)	1.9 (47)	1.9 (47)	1.9 (47)	1.9 (47)	1.9 (47)
Non insulated arms connection Ø	in (mm)	1.9 (49)	1.9 (49)	1.9 (49)	1.9 (49)	1.9 (49)	1.9 (49)
Ø gyro suspension	in (mm)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)
Arms min. length	in (mm)	10.0 (255)	10.0 (255)	10.0 (255)	10.0 (255)	10.0 (255)	10.0 (255)
Max electrode force (8 bar)	lbs (daN)	1881 (855)	1881 (855)	1881 (855)	1881 (855)	1881 (855)	1881 (855)
Working stroke	in (mm)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)
Max stroke	in (mm)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)
Arms max length	in (mm)	40.6 (1030)	40.6 (1030)	40.6 (1030)	40.6 (1030)	40.6 (1030)	40.6 (1030)
Max electrode force (8 bar)	lbs (daN)	539 (245)	539 (245)	539 (245)	539 (245)	539 (245)	539 (245)
Working stroke	in (mm)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)
Maximum stroke	in (mm)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 (180-250)
Compressed air supply	psi (bar)	116 (8)	116 (8)	116 (8)	116 (8)	116 (8)	116 (8)
Air per 1000 spots	short stroke long stroke	Nm ³ /8 bar Nm ³ /8 bar	5 11	5 11	5 11	5 11	5 11
Ø supply hose	in (mm)	0.5 (13)	0.5 (13)	0.5 (13)	0.5 (13)	0.5 (13)	0.5 (13)
Water cooling	gpm (lpm)	2.2 (8)	2.2 (8)	2.2 (8)	2.2 (8)	2.2 (8)	2.2 (8)
Max thickness mild steel sheet							
with arms min length	in/class (mm)/class	0.1 + 0.1/B (4 + 4/B)	0.2 + 0.2/B (4.5 + 4.5/B)	0.2 + 0.2/B (4.5 + 4.5/B)	0.2 + 0.2/B (4 + 4/B)	0.2 + 0.2/B (4.5 + 4.5/B)	0.2 + 0.2/B (4.5 + 4.5/B)
with arms L = 20 in (508 mm)	in/class (mm)/class	0.1 + 0.1/B (2.8 + 2.8/B)	0.1 + 0.1/B (2.8 + 2.8/B)	0.1 + 0.1/B (2.8 + 2.8/B)	0.1 + 0.1/B (2.8 + 2.8/B)	0.1 + 0.1/B (2.8 + 2.8/B)	0.1 + 0.1/B (2.8 + 2.8/B)
with arms max length	in/class (mm)/class	0.1 + 0.1/C (3 + 3/C)	0.1 + 0.1/C (3 + 3/C)	0.1 + 0.1/C (3 + 3/C)	0.1 + 0.1/C (3 + 3/C)	0.1 + 0.1/C (3 + 3/C)	0.1 + 0.1/C (3 + 3/C)
cross wire max Ø	in (mm)	0.7 (18)	0.8 (20)	0.8 (20)	0.7 (18)	0.8 (20)	0.8 (20)
Welding rate per 1/Welding class							
0.04 + 0.04 in (1 + 1 mm)	N°/class	125/A	125/A	125/A	125/A	125/A	125/A
0.06 + 0.06 in (1.5 + 1.5 mm)	N°/class	50/A	50/A	50/A	50/A	50/A	50/A
0.08 + 0.08 in (2 + 2 mm)	N°/class	25/B	25/B	25/B	25/B	25/B	25/B
0.1 + 0.1 in (2.5 + 2.5 mm)	N°/class	17/A	17/A	17/A	17/A	17/A	17/A
0.1 + 0.1 in (3 + 3 mm)	N°/class	10/A	10/A	10/A	10/A	10/A	10/A
Net weight	lbs (kg)	172 (78)	181 (82)	192 (87)	174 (79)	183 (83)	183 (83)
(with cables, hoses, suspension without arms)							
Balancer: short arms	part #	9414	9414	9422	9414	9414	9422
long arms	part #	9422	9422	9422	9422	9422	9422

* Other voltage/frequency combinations are available

ARMS FOR LTG-3154, LTG-3160, LTG-3166, LTG-3156, LTG-3162, LTG-3168



LTG-3162

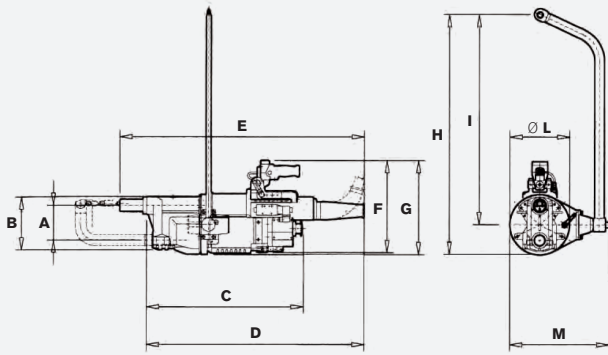


Custom arm configurations available

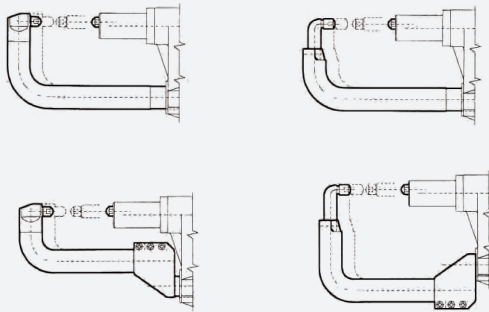
L	in (mm)	10.0 (255)	16.1 (408)	24.0 (610)	32.3 (820)	40.6 (1030)
A	Part #	4420	4426	4432	4438	4444
B	Part #	4424	4430	4436	4442	4448
C	Part #	4421	4427	4433	4439	4445
D	Part #	4425	4431	4437	4443	4449
E	Part #	4422	4428	4434	4440	4446
F	Part #	4423	4429	4435	4441	4447

Specifications subject to change without notice.

DIMENSIONS FOR LTG-3020, LTG-3024, LTG-3032, LTG-3040

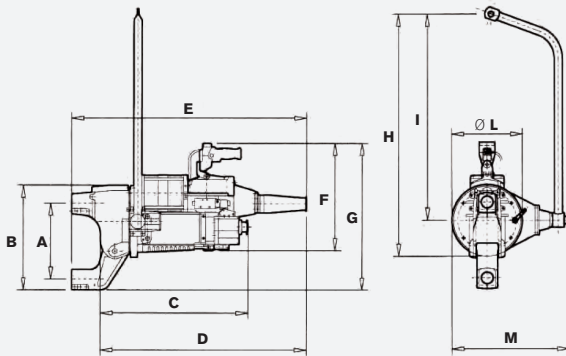


LTG	3020 in (mm)	3024 in (mm)	3032 in (mm)	3040 in (mm)
A	5.5 (140)	5.5 (140)	5.8 (148)	5.8 (148)
B	8.7 (220)	8.7 (220)	9.1 (230)	9.1 (230)
C	24.8 (630)	24.8 (630)	25.2 (640)	25.2 (640)
D	34.6 (880)	34.6 (880)	35.8 (910)	35.8 (910)
E	39.0 (990)	39.0 (990)	40.4 (1025)	40.4 (1025)
F	15.9 (405)	15.9 (405)	17.3 (440)	17.3 (440)
G	16.3 (415)	16.3 (415)	18.5 (470)	18.5 (470)
H	38.2 (970)	38.2 (970)	39.2 (995)	39.2 (995)
I	33.4 (848)	33.4 (848)	33.4 (848)	33.4 (848)
Ø L	9.6 (244)	9.6 (244)	11.6 (294)	11.6 (294)
M	16.1 (410)	16.1 (410)	19.3 (490)	19.3 (490)

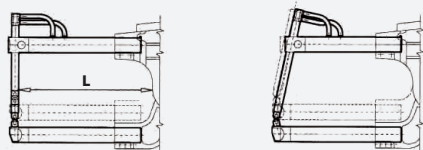


Custom arm configurations available

DIMENSIONS FOR LTG-3154, LTG-3160, LTG-3166, LTG-3156, LTG-3162, LTG-3168



LTG	3154 in (mm)	3160 in (mm)	3166 in (mm)	3156 in (mm)	3162 in (mm)	3168 in (mm)
A	8.7 (220)	8.7 (220)	8.7 (220)	12.4 (315)	12.4 (315)	12.4 (315)
B	13.4 (340)	13.4 (340)	13.4 (340)	17.1 (435)	17.1 (435)	17.1 (435)
C	21.7 (552)	22.4 (570)	24.5 (622)	21.7 (552)	22.4 (570)	24.5 (622)
D	34.3 (870)	34.3 (870)	34.8 (885)	34.3 (870)	34.3 (870)	34.8 (885)
E	38.2 (970)	38.2 (970)	38.8 (985)	38.2 (970)	38.2 (970)	38.8 (985)
F	16.9 (430)	16.9 (430)	16.9 (430)	16.9 (430)	16.9 (430)	16.9 (430)
G	19.7 (500)	19.7 (500)	19.7 (500)	23.4 (595)	23.4 (595)	23.4 (595)
H	39.2 (995)	39.2 (995)	39.2 (995)	39.2 (995)	39.2 (995)	39.2 (995)
I	33.4 (848)	33.4 (848)	33.4 (848)	33.4 (848)	33.4 (848)	33.4 (848)
Ø L	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)
M	19.3 (490)	19.3 (490)	19.3 (490)	23.0 (585)	23.0 (585)	23.0 (585)

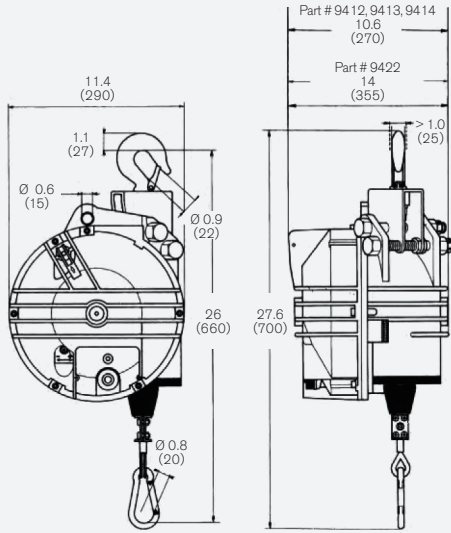


L in (mm)	F @ 94 psi (6 bar) lbs (daN)	F @ 115 lbs (8 bar) lbs (daN)	Arm Weight lbs (kg)
10.0 (255)	1419 (645)	1881 (855)	~ 19.8 (9)
16.1 (408)	946 (430)	1265 (575)	~ 28.7 (13)
24.0 (610)	660 (300)	880 (400)	~ 37.5 (17)
32.3 (820)	506 (230)	671 (305)	~ 48.5 (22)
40.6 (1030)	407 (185)	539 (245)	~ 61.7 (28)

Custom arm configurations available

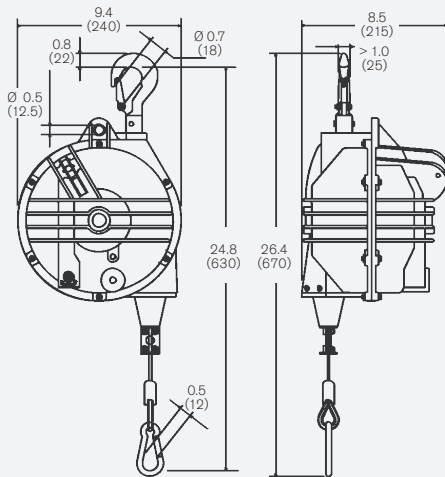
Specifications subject to change without notice.

SPRING BALANCERS



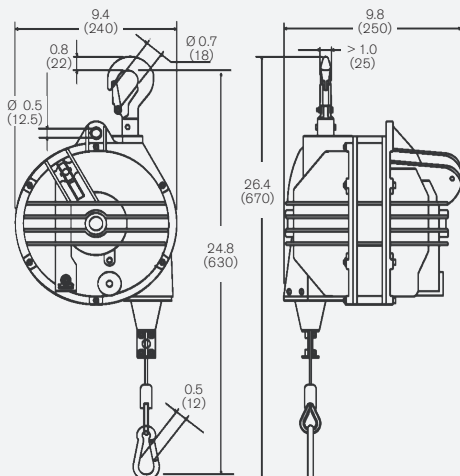
Part #	load range	weight	packaging	in (mm)
	lbs (kg)	lbs (kg)	lbs (kg)	
9412BR	154 - 176 (70 - 80)	61 (27.8)	68 (31)	23.6 x 12.6 x 13 (600 x 320 x 330)
9413BR	175 - 198 (80 - 90)	63 (28.8)	71 (32)	23.6 x 12.6 x 13 (600 x 320 x 330)
9422BR	220 - 265 (100 - 120)	85 (38.7)	94 (42.5)	23.6 x 12.6 x 13 (600 x 320 x 330)

Option "R", lower swivel type hook.
Option "B", lock control from the floor.



Part #	load range	weight	packaging	in (mm)
	lbs (kg)	lbs (kg)	lbs (kg)	
9367BR	99 - 121 (45 - 55)	28 (12.5)	32 (14.5)	17.9 x 10.6 x 11 (455 x 270 x 110)
9368BR	121 - 143 (55 - 65)	30 (13.6)	34 (15.6)	17.9 x 10.6 x 11 (455 x 270 x 280)
9369BR	143 - 165 (65 - 75)	32 (14.5)	36 (16.5)	17.9 x 10.6 x 11 (455 x 270 x 280)

Option "R", lower swivel type hook.
Option "B", lock control from the floor.



Part #	load range	weight	packaging	in (mm)
	lbs (kg)	lbs (kg)	lbs (kg)	
9370BR	165 - 198 (75 - 90)	38 (17.3)	42 (19)	17.9 x 10.6 x 11 (455 x 270 x 280)
9371BR	198 - 232 (90 - 105)	40 (18)	44 (20)	17.9 x 10.6 x 11 (455 x 270 x 280)

Option "R", lower swivel type hook.
Option "B", lock control from the floor.

CONTROL UNITS TE 300 & TE 450/470



TE 300



TE 470

Available Parameters	TE 300	TE 450/470
Squeeze 1	00 - 99 ~	00 - 99 ~
Squeeze	01 - 99 ~	01 - 99 ~
Pre-weld	00 - 60 ~	00.0 - 99.0 ~
Pre-power	01 - 99%	05 - 99%
Cold 1	00 - 50 ~	00 - 50 ~
Slope up	00 - 29 ~	00 - 25 ~
Weld 1	01 - 60 ~	00.5 - 99.5 ~
Power 1	01 - 99%	05 - 99% 1.0 - 36.0 kA
# of Impulses	01 - 09	01 - 09
Cold 2	-	00 - 50 ~
Slope down	-	00 - 25 ~
Cold 3	-	00 - 50 ~
Post-weld	-	00.0 - 99.0 ~
Post-power	-	05 - 99%
Hold time	01 - 99 ~	01 - 99 ~
Off time	00 - 98/99 ~	00 - 99 ~
Current min	-	1.0 - 36.00 kA
Angle min	-	005 - 180°
Current max	-	1.0 - 36.0 kA
Angle max	-	005 - 180°
Pressure	-	0.5 - 10.0 bar

All times are given in cycles.

Spot Weld, Inc.
 2290 Wycliff St.
 St. Paul, MN 55114
 800-582-5229
 swi@spotweldinc.com