

Spot Welding Machine PL

parallel stroke, pneumatically-operated

Technical Data:

type:	PL 40/63	PL 80/100
power rating at 50%:	40/63kVA	80/100kVA
rated voltage:	400V/50Hz	
throat depth:	250-550mm	350-650mm
electrode force:	100-600daN	
electrode stroke:	65mm	90mm
electrode holder-Ø:	25mm	30mm
electrode seat:	Mk2	
start:	foot switch	



Technical Details:

- solid machine frame
- welding transformer cast in resin for water-cooling and thermal protective switch is fully enclosed in the primary side
- adjustable throat depth
- adjustable arm distance
- prefixed electrode holder
- switching cabinet for taking the welding control, mounted on the right of the machine
- main switch acc. to VDE 0113
- lockable viewing window
- electrode force cylinder with precision slide unit
- electrode force can be infinitely regulated
- speed of working and return strokes of the cylinders can be regulated separately via throttle
- 2 separate cooling water circuits for cooling the current-carrying parts and the power stage
- compressed air service unit as standard, consisting of filter, regulator and manometer

Welding Control:

MPS 10β (standard)

- 8 welding programs
- single spot and series spot
- upslope and impuls function
- automatic mains recognition of 50/60Hz
- main voltage compensation
- status display via LED's
- stepping and locking kontakt

Extra Equipment:

- throat depth 450-750mm (only at PL 40/63)
- tube arm
- doppel foot pedal for operation mode „currentless contact“
- flow monitor for monitoring the cooling water amount
- forearm support
- doppel stroke cylinder (DH)
PL 40/63: 45+20mm stroke
PL 80/100: 65+25mm stroke
- special parts for invisible welding of stainless steel
- laserpointer
- flexible mountings
- welding controller with enlarge functions

Spot Welding Machine PL 40/63 + PL 80/100

technical Data acc. to DIN 44753 / ISO 669

Type		PL 40		PL 63		PL 80	PL 100	
Through depth	mm	250-550	450-750	250-550	450-750	350-650		
Machine power	Power rating (50%)	kVA	40		63		80	100
	Continuous output	kVA	28,3		44,5		56,6	70,7
	Maximum short-circuit power	kVA	148	123	228	192	306	425
	Maximum welding power	kVA	118	98	182	154	245	340
Machine voltage	Secondary idling voltage	V	5,5		7,02		8,33	9,9
	Number of regulation Steps		0					
Mains connection	Rated primary voltage	V	400					
	Rated frequency	Hz	50/60					
	Supply power	kVA	89	74	137	115	184	255
	Fusing (carrier)	A	P3-63/63	P3-63/50	KG251/100	KG251/80	KG251/125	KG316/160
	Wire range (cable length < 15m)	mm ²	16	10	25	16	25	25
Secondary current	Rated operating current	kA	7,22	7,14	8,77	8,70	9,34	9,62
	Permanent current	kA	5,11	5,05	6,20	6,15	6,61	6,80
	Short-circuit-current	kA	26,2	21,5	31,5	26,3	35,0	41,5
	Highest welding current	kA	21,0	17,2	25,2	21,0	28,0	33,2
	Permit. Duty cycle at highest weld cur.	%	5,9	8,6	6	8,5	5,5	4,2
Cylinder EH single stroke	Electrode stroke max.	mm	65					
	Electrode force max.	daN	100/600					
	Max. movements at 10mm stroke	min ⁻¹	300					
	Air consumption / 1000 strokes	m ³	0,75					
Cylinder DH double stroke	Work stroke + approach stroke max.	mm	45 + 20					
	Electrode force max.	daN	100/600					
	Max. movements at 10mm stroke	min ⁻¹	300					
	Air consumption / 1000 strokes	m ³	0,85					
Spot mounting	Throat gap	mm	150/310					
	Electrode arm-Ø	mm	50 above / 60 below					
	Electrode holder-Ø	mm	25					
	Spot electrode seat		Mk2					
Comp. air	Pipe connection		NG 13 / G ½"					
	Operating pressure max.	bar	6/10					
Cooling water	Pipe connection in / out		NG 20 / G ¾"					
	Operating pressure max.	bar	2/5					
	Entry temperature	°C	18					
	Consumption at max. loading	l/min	4					
Machine measurements	Width x depth x height	mm	657 x 1000 - 1500 x 1510 EH / 1620 DH				701 x 1220 - 1520 x 1584 EH / 1702 DH	
	Weight	kg	315	340	325	350	480	495
	Power stage	Thyristor power stage	1/60L		1/90L		1/500IW	
Welding values	Steel sheet (C-content ≤ 0,2%)	mm	6+6	5+5	7+7	6+6	8+8	8+8
	Brass sheet	mm	3+3	2+2	4+4	3+3	5+5	5+5
	Aluminium sheet	mm	1,5+1,5	1+1	2+2	1,5+1,5	3+3	3+3
	Round steel-Ø (C-content ≤ 0,2%)	mm	18+18	16+16	20+20	18+18	22+22	22+22

Technical alterations reserved. The table contents refer to standard models.

Welding controllers options:



MPS 200

8 times and max. 8 welding programs, language adjustable

options:
secondary current control,
secondary current monitoring



MPS 15043

15 times and max. 100 welding programs, current program, stepper, printer interface RS 232

options:
secondary current control,
secondary current monitoring