

Spot Welding Machine PMS 12-5

Technical Data:

power rating at 50%:	100, 125 or 160kVA
rated voltage:	400V/50Hz
throat depth:	350, 550, 750 or 1050mm
electrode force:	120-720daN, 165-990daN, 215-1290daN
electrode stroke:	max. 100mm
electrode holder-Ø:	35mm
electrode seat:	Mk3
start:	foot switch



Technical Details:

- non-distortion machine frame with ribbed shell construction
- welding transformer cast in resin for water cooling and thermal protective switch is fully enclosed in the primary side
- switching cabinet for taking the welding control, mounted on the right of the machine
- absolute separation between machine and switching unit
- infinitely adjustable height of lower arm
- electrode force cylinder with precision guide and external rotational protection
- very good performance factor via the close coupling of the secondary circuits
- electrode force can be infinitely regulated
- speed of working and return strokes of the cylinders can be regulated separately via throttle
- 4 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

Extra Equipment:

- double stroke cylinder (DH), 75 + 25mm stroke
- double stroke cylinder with approach stroke and sequencing (DJZF) 0-100mm approach stroke for working stroke, 0-100mm operational stroke
- cylinder with extended force range **95-1290daN**
- tube arm
- flow monitor for monitoring the cooling water amount
- forearm support
- adjusting device for raising and lowering the lower arm
- pressure-free lowering of upper arm via hand-valve
- electronic electrode force switch
- main switch
- program selector switch
- proportional valve for controlling the electrode force
- return stroke monitoring
- cylinder with low friction driving
- special parts for invisible welding of stainless steel
- laserpointer
- flexible mountings
- welding controller with enlarge functions

Model:

A spot welding machine

Spot Welding Machine PMS 12-5

technical Data acc. to DIN 44753 / ISO 669

nominal throat depth: 350mm

Type	PMS 12-5				
Model	A				
Machine power	Power rating (50%)	kVA	100	125	160
	Continuous output	kVA	70,7	88,4	113
	Maximum short-circuit power	kVA	390	460	548
	Maximum welding power	kVA	312	368	438
Machine voltage	Secondary idling voltage	V	8,33	9,09	9,75
	Number of regulation Steps		0		
Mains connection	Rated primary voltage	V	400		
	Rated primary current	A	250	312,5	400
	Rated frequency	Hz	50		
	Supply power	kVA	234	276	329
	Primary short-circuit current	A	975	1150	1370
	Fusing (carrier)	A	KG 251 / 160	KG 251 / 160	KG 316 / 200
	Wire range (cable length < 15m)	mm ²	35	35	50
Secondary current	Rated operating current	kA	11,7	13,4	16
	Permanent current	kA	8,3	9,5	11,3
	Short-circuit-current	kA	46	49,5	55
	Highest welding current	kA	36,8	39,6	44
	Permit. Duty cycle at highest weld cur.	%	5,1	5,7	6,6
Cylinder EH Single stroke	Electrode stroke max.	mm	100		
	Electrode force max.	daN	165/990	215/1290 bzw. 95/1290	
	Max. movements at 10mm stroke	min ⁻¹	200		
	Air consumption / 1000 strokes	m ³	3	3,1	3,1
Cylinder DH double stroke	Work stroke + approach stroke max.	mm	100 / 75+25 DH / 0-100 + 0-100 DHZ + DHZF		
	Electrode force max.	daN	165/990	215/1290 bzw. 95/1290	
	Max. movements at 10mm stroke	min ⁻¹	200		
	Air consumption / 1000 strokes	m ³	3,3	3,4	3,4
Spot mounting	Throat gap	mm	110 / 410		
	Electrode arm-Ø	mm	75		
	Electrode holder-Ø	mm	35		
	Spot electrode seat		Mk3		
Comp. Air	Pipe connection		NG20 / G ¾"		
	Operating pressure max.	bar	6 / 10		
Cooling water	Pipe connection in / out		NG20 / G ¾"		
	Operating pressure max.	bar	4 / 6		
	Entry temperature	°C	18		
	Consumption at max. loading	l/min	10	12	12
Machine measurements	Width x depth x height	mm	775 x 1330 x 1745,5 EH / 1876,5 DH		
	Weight	kg	705 EH / 715 DH	735 EH / 745 DH	760 EH / 770 DH
Power stage	Thyristor power stage	IW	1/500IW	1/500IW	1/900IW
Welding values	Steel sheet (C-content ≤ 0,2%)	mm	12 + 12	12 + 12	12 + 12
	Brass sheet	mm	6 + 6	6 + 6	7 + 7
	Aluminium sheet	mm	4 + 4	4 + 4	5 + 5
	Round steel-Ø (C-content ≤ 0,2%)	mm	26 + 26	26 + 26	28 + 28

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

Welding controllers options:



MPS 200

8 times and max. 8 welding programs, language adjustabel

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