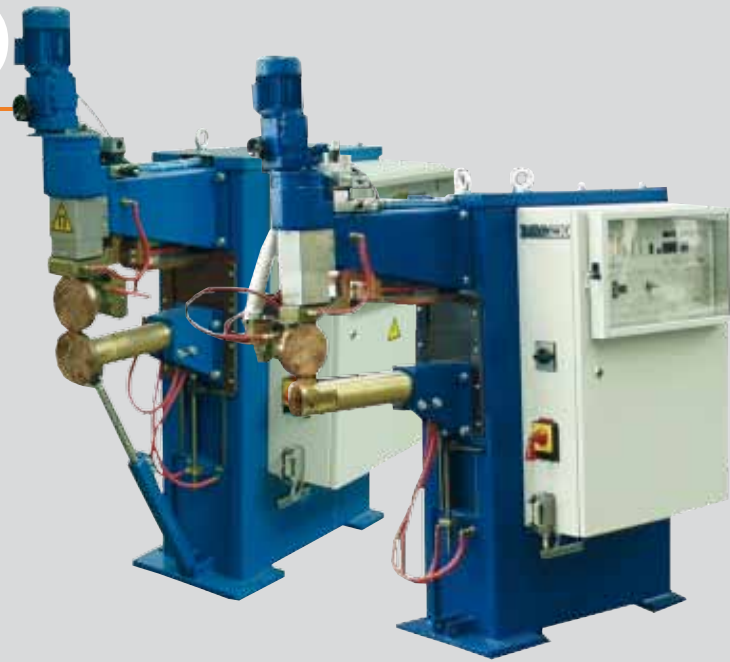


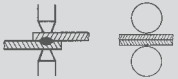
# PMS

## RESISTANCE WELDING MACHINE

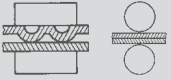
### PMS 11-6/N



**N**  
SEAM welding machine with cross or longitudinal arms



**AN**  
COMB. SPOT-/SEAM-  
welding machine



**BN**  
COMB. PROJECTION-/SEAM-  
welding machine

### TECHNICAL DETAILS

Ausführung	Maß H
A-EH	1421,5
A-EH	1506
A-DHZ	1542
A-DHZF	1609

- non-distortion machine frame with ribbed shell construction
- generously-dimensioned switching cabinet for taking welding and machine controls
- Stable design of the upper & lower arm with welding-related fittings
- Drive for the upper roller head via polarity-change motor with regulatory gearing and intermediate articulated shaft
- Infinite height adjustment of the lower arm, fitted with a choice of with roller head in transverse or longitudinal seam version i.e. spot or projection welding gear
- Upper roller head can be swung 90° and is suitable for either transverse or longitudinal seam versions
- Prestroke speed infinitely pre-selectable via hand-wheel
- Combined motor protective fusing and reversing switch for switching-over the rotational direction when seam welding i.e. for standstills when spot or projection welding
- Special electrode force cylinder with precision guide of the piston rod together with a built-in guiding column guarantees exact work in the whole stroke range
- 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
- welding transformer cast in resin for water-cooling and thermal protective switch is fully enclosed in the primary side
- primary and secondary coils vacuum cast
- compressed air service unit as standard, consisting of filter, regulator and manometer

### OPTIONAL FEATURES

- double stroke cylinder (DH)
- double stroke cylinder + travel for working stroke (DHZ)
- double stroke cylinder + travel and sequencing (DHZF)
- Filterschalldämpfer für ölfreie Abluft und zur Reduzierung des Geräuschpegels
- flow monitor for monitoring the cooling water amount
- adjusting device for raising and lowering the lower arm
- 4-step switch mounted in switching cabinet
- main switch mounted in switching cabinet
- pressure-compensator to reconcile tool tolerances
- model as 3-phase direct current machine
- synchronised thyristor control unit acc. to choice

# RESISTANCE WELDING MACHINE PMS 11-6 N

Technical Data according to DIN 44753

Group	Parameters	Nominal Throat Depth 350 mm				Spezial-Nachtschweißtrafo			
		Model		Model		Model			
		AN	B/N	AN	B/N	NQ	NL		
Electrical Part	Power rating (50 %)	kVA	50		80		80		
	Continuous output	kVA	35,4		56,6		56,6		
	Maximum short-circuit power	kVA	138	165/138	262	319/262	122	112	
	Maximum welding power	kVA	111	132/111	209	255/209	97	90	
	Machine voltage	V	5,0 bzw. (2,5/3,4/4,2/5,0) <sup>9)</sup>		7,0 bzw. (3,5/4,75/5,93/7,0) <sup>9)</sup>		3,5 - 4,75 <sup>9)</sup>		
			0 bzw. 4 <sup>9)</sup>		0 bzw. 4 <sup>9)</sup>		2		
	Mains connection	Rated primary voltage	V	400		400		400	
		Rated primary current	A	131		210		210	
		Rated frequency	Hz	50		50		50	
		Supply power	kVA	83	99/83	157	191/157	73	67
		Main switch / Fusing <sup>1)</sup>	A	HL 125/100		HL 250/160		HL 250/160	
		Wire range	mm <sup>2</sup>	25		50		50	
	Secondary current	Rated operating current	kA	9,72	9,76/9,72	11,26	11,29/11,26	16,26	16,25
		Permanent current <sup>2)</sup>	kA	6,87	6,9/6,87	7,96	7,98/7,96	11,5	11,5
		Short-circuit current	kA	27,4	32,7/27,4	37	45,4/37	25	23
		Highest welding current	kA	21,9	26,2/21,9	29,6	36,3/29,6	20	18,4
permitt. duty cycle alt max. weld. curr.		%	9,8	6,9/9,8	7,2	4,8/7,2	33	39	
Mechanical Part	Cylinder EH	Electrode stroke max	mm	90					
		Electrode force min. / max.	daN	100/600					
		Max. movements / 10 mm stroke	min <sup>-1</sup>	400					
		Air consumption 1000 strokes <sup>3)</sup>	m <sup>3</sup>	0,9					
	Cylinder DH, DHZ, DHZF	Electrode str. max. work + operat. str.	mm	---					
		Electrode force min. / max.	daN	---					
		Max. movements / 10 mm stroke	min <sup>-1</sup>	---					
		Air consumption 1000 strokes	m <sup>3</sup>	---					
	Spot mounting „A“	Throat gap. min./max.	mm	115/415					
		Electrode arm-Ø	mm	85/60					
		Electrode holder-Ø	mm	30					
		Electrode holder adjustability	mm	180					
		Spot electrode seat no./outer Ø	mm	2/19					
	Projection mounting „B“ und „C“	Clamping plate above W x D	mm	130 x 130					
		Clamping plate below W x D	mm	130 x 130					
		Clamping plate sep. min/max	mm	140/440					
		T-grooves/separation mm x no	mm	10 DIN 650/63 x 2					
	Seam mounting	Roller electr. above Ø cross/long	mm	160/160					
		Roller electr. below Ø cross/long	mm	160/125					
		Working stroke speed min./max.	m/min <sup>-1</sup>	0,63/5,7					
	Comp. air	Pipe conn./nom. width/thread.		NW 16/R ½“					
		Operating pressure min. / max.	bar	6/10					
	Cooling water	Pipe conn./nom. width / thread.		NW 20/R ¾“					
		Operating pressure min./max.	bar	2/5					
Consumption at max. loading		l/min <sup>-1</sup>	10 bzw. 6 <sup>7)</sup>	12 bzw. 8 <sup>7)</sup>	12 bzw. 8 <sup>7)</sup>	12 bzw. 8 <sup>7)</sup>			
Machine dimensions	Width x depth x height <sup>6)</sup>	mm	780 x 1353 x 1852						
	Weight machine / cabinet <sup>4)</sup>	kg	505/65	525/65	550/65	570/65	550/65		
Shipping data	Gross weight <sup>4)</sup>	kg							
	Box: Width x depth x height	mm							
	Volume	m <sup>3</sup>							
Op. Part	Welding values	Steel sheet C-content < 0,2 % <sup>5)</sup>	mm	7 + 7 bzw. 1,5 + 1,5		8 + 8 bzw. 2 + 2		2 + 2	
		Brass sheet <sup>5)</sup>	mm	4 + 4		5 + 5		---	
		Aluminium sheet <sup>5)</sup>	mm	2 + 2		3 + 3		---	
		Round steel Ø C-content < 0,2 % <sup>5)</sup>	mm	20 + 20		22 + 22		---	
Power stage	Thyristor power stage	IW	1/500 IW		1/900 IW		1/500 IW		
Notes	Technical alterations reserved. The table contents refer to standard models.								
	1) operating class gL 2) at max. transformer level 3) at operating pressure 6 bar, 20 mm stroke 4) DH+10 kg, DHZ+12 kg, DHZF+15 kg		5) subject to size influences 6) excl. switching cabinet, width =510 mm 7) excl. thyristor power stage			8) act. throat depth = at model A + 2,65 mm/ N - 5 mm/BN - 10 mm 9) for special equipment with 4-step switching			