

STUD WELDING TECHNOLOGY BY 🗫 SCHÖLER + BOLTE



STUD WELDING UNITS FOR DRAWN ARC AND SHORT CYCLE STUD WELDING

## HIGHLIGHTS AND SPECIAL EQUIPMENT



#### WELDING PARAMETER MONITORING AND DOCUMENTATION

The welding parameter monitoring, integrated as standard in all series PRO-D stud welding units, enables a quality control of the finished welds.

#### Features:

- » recording of welding current, welding time and arc voltage for each weld
- » recording of stud travel (lift, piston runtime and immersion depth) for each weld (only when a welding gun resp. an automatic welding head with travel measuring system is used)
- » comparison of the recorded welding parameters (actual values) to the parameters of a reference weld (set values) (tolerances adjustable)

- » in case of variances to the reference weld a warning is displayed or the unit is locked for further welds until the release by the operator (functionality can be switched off)
- » storage of the last ten welding parameter sets
- » optional (also retrofitable): welding parameter memory for the storage of 24500 welding parameter sets (storage with date and time) with USB-interface for data transmission (welding parameter sets) to a PC

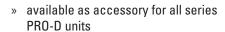


### **AUTOMATIC STUD FEEDING**

- » An automatic module enables the connection of the automatic stud feeder VBZ and an automatic welding gun.
- » For multi gun units each gun connection can be equipped with an automatic module.



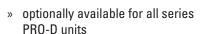
#### ADAPTER BOX PRO-SPLIT



- » enables the operation of up to four stud welding guns with different adjustment values for welding current and time on one unit
- » automatic detection of used gun
- » weld counter for each gun connection
- » with up to four shielding gas modules



#### SHIELDING GAS MODULE FOR STUD WELDING WITH SHIELDING GAS



- » enables stud welding with shielding gas for weld pool backing
- » shielding gas pre- and post-flow time continuously adjustable
- » For multi gun units each gun connection can be equipped with a shielding gas module.







# TECHNICAL DATA AND CHARACTERISTICS

	PRO-D 1200 basic	PRO-D 1200	PRO-D 1600 basic	PRO-D 1600	PRO-D 2200 basic	PRO-D 2200	PRO-D 2800 basic	PRO-D 2800
Welding method								
Drawn arc (ceramic ferrule) [suitable for weld through deck]	Х	х	х	х	x [x]	x [x]	x [x]	x [x]
Short cycle	х	х	х	Х	х	х	х	Х
Drawn arc (shielding gas)	0	0	0	0	0	0	0	0
Max. welding diameter (mm)								
Drawn arc (ceramic ferrule)	12	12	16	16	22	22	25	25
Short cycle	10	10	10	10	10	10	10	10
Drawn arc (shielding gas)	12	12	12	12	12	12	12	12
Welding current (A)	200-900	200-900	200-1400	200-1400	200-2100	200-2100	200-2600	200-2600
Welding time (mS)	10-1000	10-1000	10-3000	10-3000	10-3000	10-3000	10-3000	10-3000
Constant current regulation	х	х	Х	х	Х	х	Х	х
Welding parameter monitoring								
Welding parameter monitoring		х		х		х		x
Welding parameter memory with USB-interface for data transmission to a PC		0		0		0		0
Gun connections								
1 gun connection	X	X	Х	Х	Х	Х	Х	Х
2 gun connections				0		0		0
4 gun connections				0		0		0
Utilisable with adapter box PRO-SPLIT		x		х		х		х
Operation Microprocessor control	Х	х	х	х	х	х	х	х
Welding programme storage		x		х		х		х
Device lock with PIN code		X		х		х		х
Weld counter (resettable)	0	х	0	х	0	х	0	х
Lift test	х	х	х	х	х	х	х	Х
Repeat cycle lock	Х	х	Х	х	х	х	Х	х
Electronic function control	х	х	х	х	х	х	х	х
Self diagnosis system	х	х	х	х	х	х	х	х
Automatic function test	х	х	х	Х	Х	Х	Х	х
Shielding gas module	0	0	0	0	0	0	0	0
Automatic stud feeding		0		0		0		0
Error diagnosis systems								
Excess temperature	x	х	х	x	х	х	х	х
Phase failure	X	x	x	x	x	x	x	х



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	PRO-D 1200 basic	PRO-D 1200	PRO-D 1600 basic	PRO-D 1600	PRO-D 2200 basic	PRO-D 2200	PRO-D 2800 basic	PRO-D 2800
Damage on welding/control cable	х	х	х	х	х	х	х	х
Damage on solenoid	X	Х	Х	х	х	х	х	х
Interfaces								
CAN-BUS		0		0		0		0
Anybus		0		0		0		0
USB		0		0		0		0
Lifting eyes	0	0	X	Х	Х	X	X	Х
2 swivel castors, 2 fixed castors	0	0	х	х	х	х	х	x
Robust, powder-coated metal housing	Х	х	х	х	х	х	х	Х
Dimensions								
Width (mm)	275	275	555	555	555	555	610	610
Height (mm)	260	260	680	680	680	680	680	680
Length (mm)	470	470	790	790	790	790	900	900
Weight (kg)	43,5	43,5	169	169	245	245	316	316
Electric connection								
Mains supply (V) at 50/60 Hz	400 (230/ 460)	400 (230/ 460)	230/ 400/ 415/ 460	230/ 400/ 415/ 460	230/ 400/ 415/460	230/ 400/ 415/ 460	230/ 400/ 415/ 460	230/ 400/ 415/ 460
Mains fuse external	35 AT	35 AT	35 AT	35 AT	63 AT	63 AT	125 AT	125 AT
Mains plug CEE	32 A	32 A	32 A	32 A	63 A	63 A	125 A	125 A
Protection	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
Control cable socket for welding guns	12-pin	12-pin	12-pin	12-pin	12-pin	12-pin	12-pin	12-pin
Suitable welding guns								
PHM-10	Х	Х	0	0	0	0	0	0
PHM-12	X	Х	0	0	0	0	0	0
PHM-160	0	0	0	0	0	0	0	0
PHM-161	0	0	х	Х	0	0	0	0
GD 16	Х	х	х	х	0	0	0	0
GD 19	0	0	0	0	0	0	0	0
GD 22	0	0	0	0	х	х	0	0
GD 25	0	0	0	0	0	0	х	х
PHA-500		0		0		0		0
PHA-500-6		0		0		0		0



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