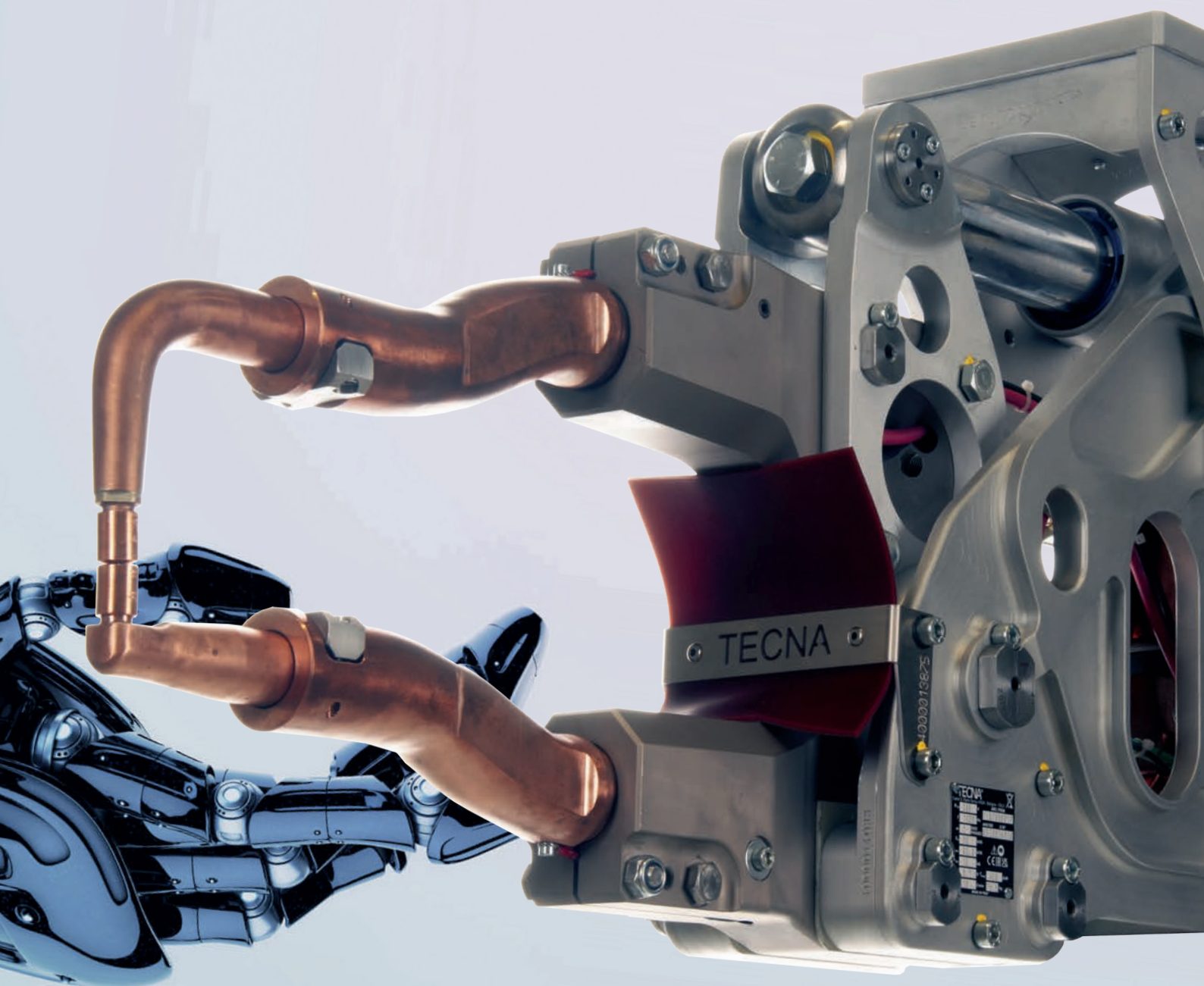


**MFDC
TECH**

TECNA[®]

Resistance Welding Systems & Balancers

**spot welding solutions
for automation**

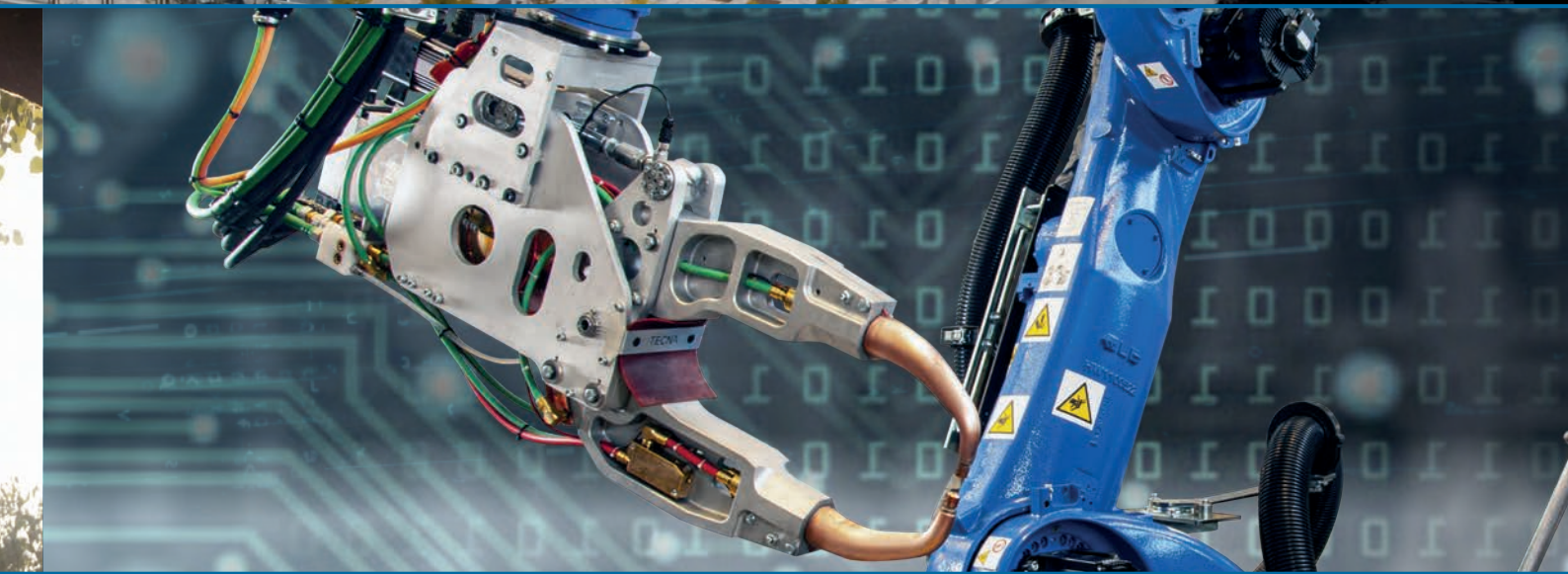


www.tecna.net



TECNA S.P.A. - VIA MEUCCI, 27 - CASTEL SAN PIETRO TERME





TECNA: Excellence in Resistance Welding

TECNA means Excellence. Since its foundation over 50 years ago, TECNA has grown as a **worldwide leading reference in resistance welding and spring balancers.**

At our headquarters in Castel San Pietro Terme, Italy, our passion for technology joins **assiduous work for continuous development and innovation.**

With decades of experience, TECNA is a trusted supplier of major players in the automotive and aerospace industries and all fields where resistance welding sees its application. **TECNA welders are approved and certified by top car manufacturers worldwide.**

ISO 9001 and ISO 14001 certifications, as well as strict quality checks and tests, define the procedures and guarantee that product quality and safety are maintained at the highest levels. Every machine is duly tested and certified before shipping.

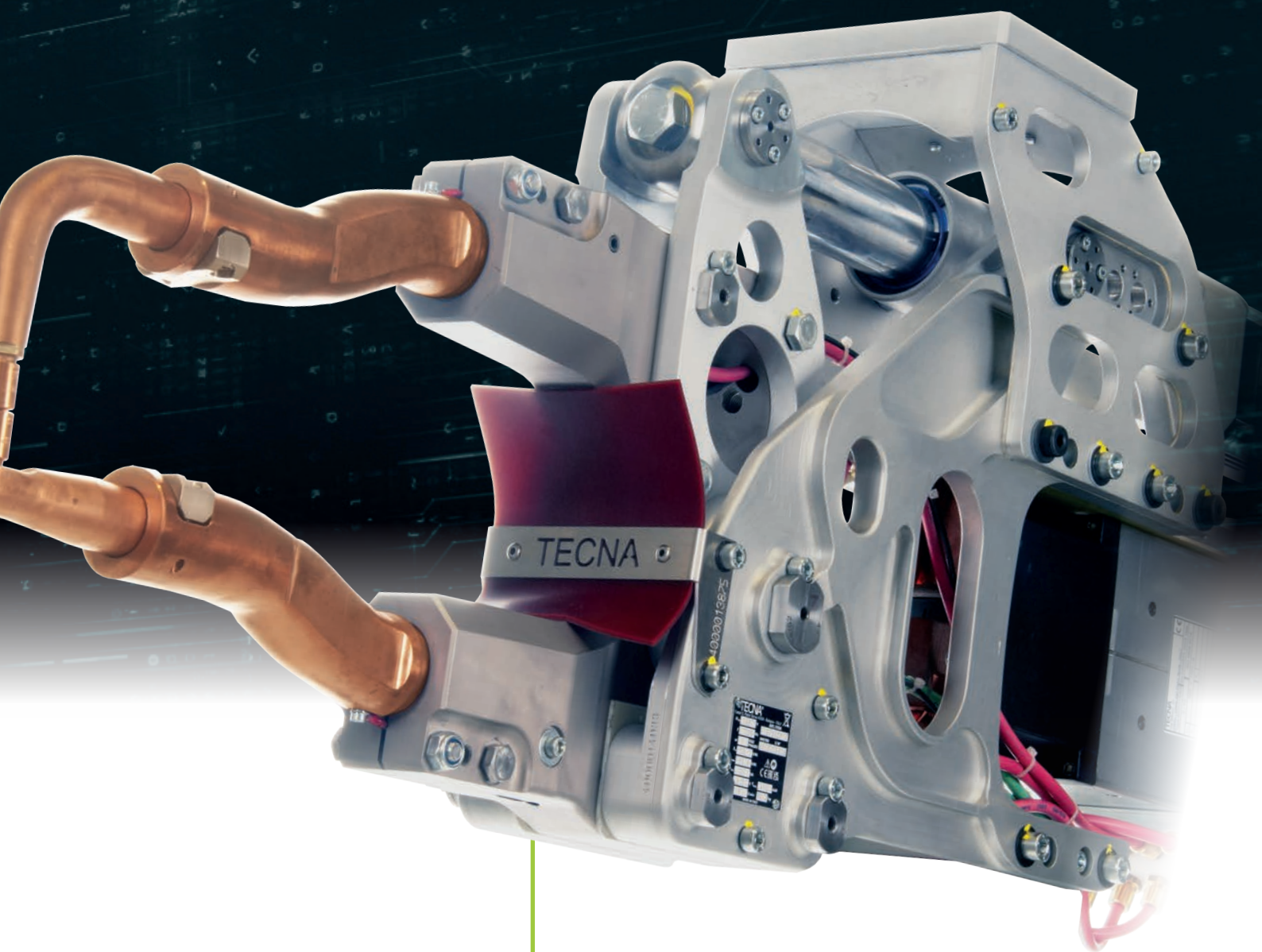
TECNA offers the widest range of welding machines and equipment, from single-phase and three-phase to the latest cutting-edge inverter and hybrid capacitor discharge technologies. Our products obtain **the highest quality welds and guarantee the best performance in terms of energy efficiency.**

Additionally, TECNA provides customers with a **comprehensive line of accessories for resistance welding equipment.** From the most advanced measurement instruments to the latest digital welding control technologies, all accessories feature advanced functions of networking and automatic file export to analyze and store test results.



TECNA also manufactures specialized equipment for automotive body welding and repair. All systems come with next-generation welding controls and energy-efficient inverter technology. To experience the greatest synergy between man and machine we especially recommend the Smart Mode, where ease of use joins a fully automatic self-learning system. The operator does not even need to know what metal or thickness she or he is welding.

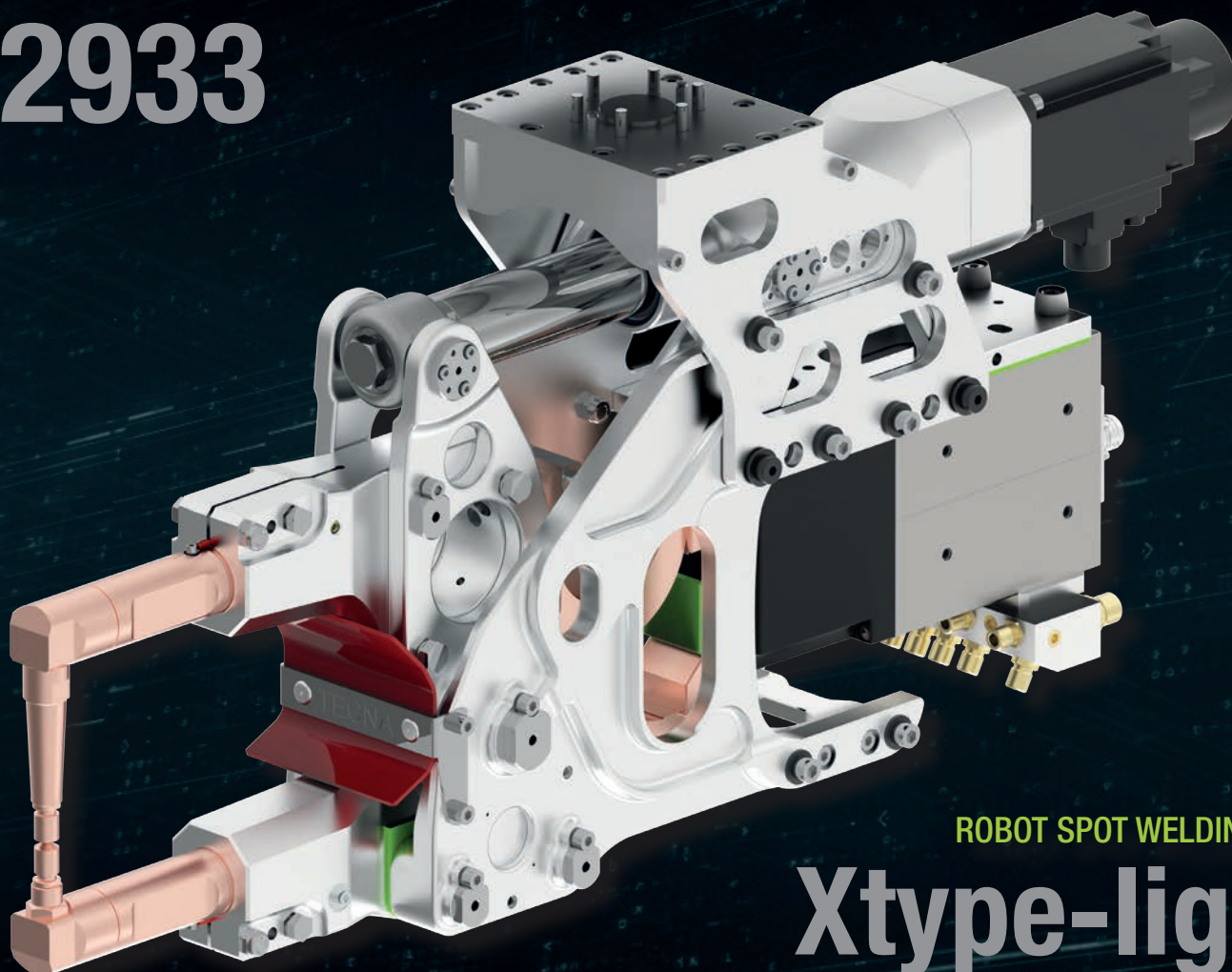
The field of resistance welding is constantly evolving with demands of quality, and most important of control around the process. TECNA keeps evolving with it, and by DNA runs ahead **to anticipate needs and create new trends thanks to the continuous research & development.**



**MFDC
TECH**

**direct drive
servomotor
spot welding gun**

2933



ROBOT SPOT WELDING GUN

Xtype-light

ACTUATOR TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data

Type	*MFDC 47 kVA	*MFDC 90 kVA Light
Nominal power at 50%, kVA	47	90
No load secondary voltage, V	6,1	9,1
Thermal current, kA	5	6
Short circuit current, kA	20	25

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

		Actuator sizes	
Welding force, daN	Arm length	4,9 Nm	
	300 mm	600	
	450 mm	470	
	600 mm	380	
**Gun mass, kg (Arm length 300 mm)		72,9	74,9
Gun water cooling, l/min		12	12

motor

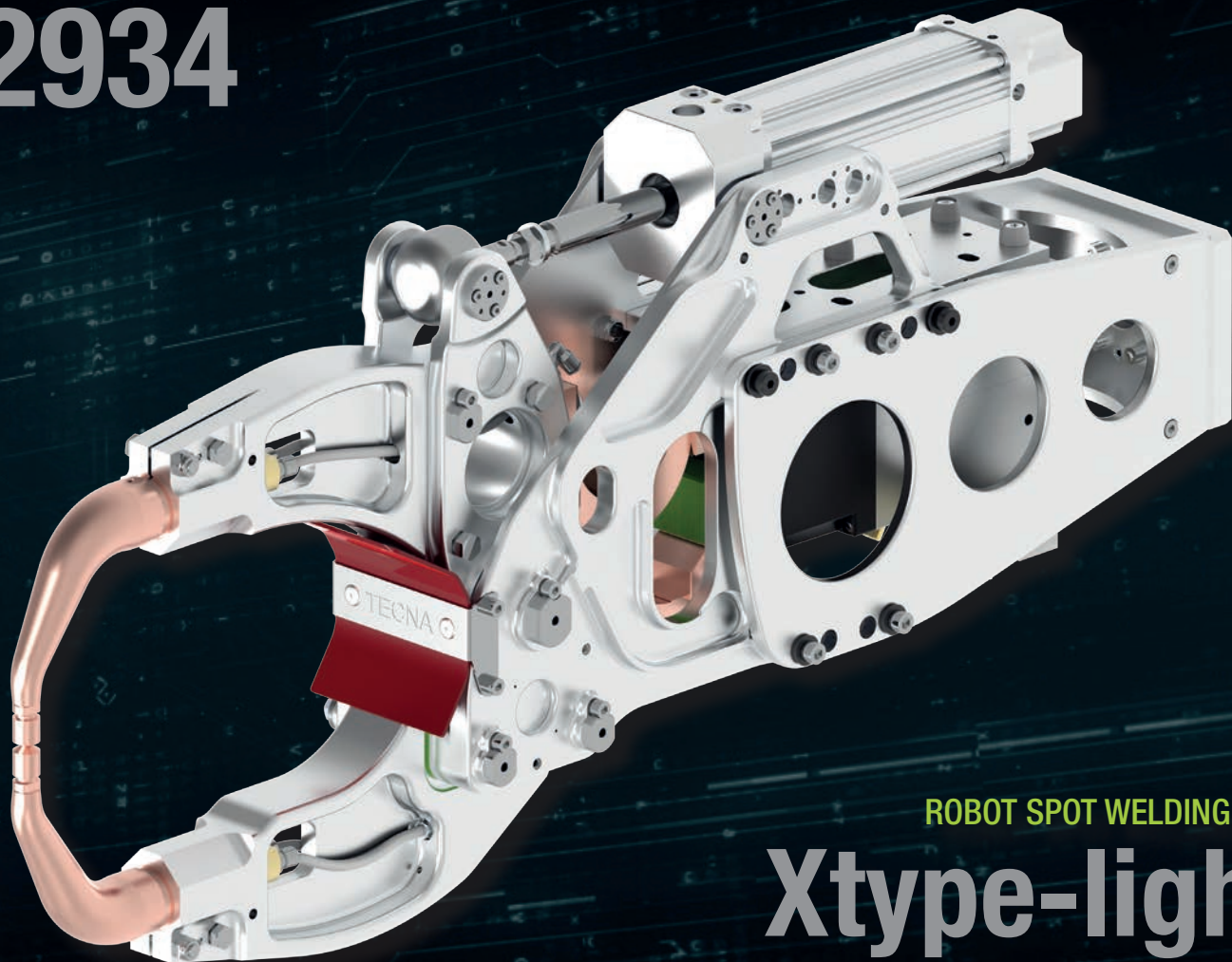
Servomotor speed, rpm	3000
-----------------------	------

transformer

Type	MFDC 47 kVA	MFDC 90 kVA Light
weight, kg	14,6	16,8
water cooling, l/min	4	4

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2934



ROBOT SPOT WELDING GUN

Xtype-light

INVERTED ROLLER SCREW ACTUATORS THIRD PART MOTOR

electrical data

Type	*MFDC 47 kVA	*MFDC 90 kVA Light
Nominal power at 50%, kVA	47	90
No load secondary voltage, V	6,1	9,1
Thermal current, kA	5	6
Short circuit current, kA	20	25

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes		Exlar GTW80	Tolomatic CSWL3	Exlar GTW80	Tolomatic CSWL3
Welding force, daN	Arm length	4,5 Nm	6 Nm	4,5 Nm	6 Nm
	300 mm	600	600	600	600
	450 mm	460	580	460	580
	600 mm	350	470	350	470
**Gun mass, kg (Arm length 300 mm)		66,7	64,7	66,7	64,7
Gun water cooling, l/min			12	12	12

motor

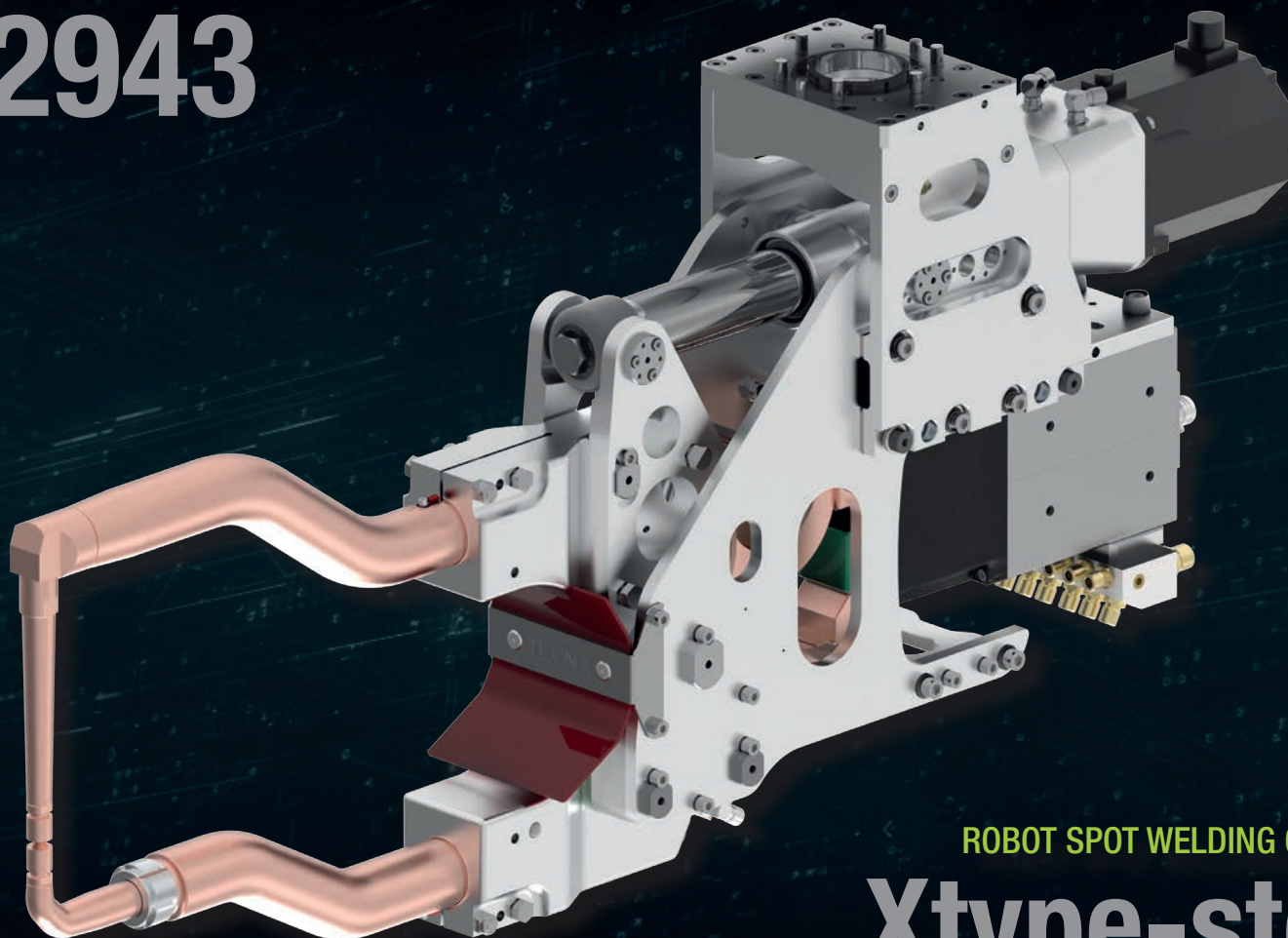
Servomotor speed, rpm	3000
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transformer

Type	MFDC 47 kVA	MFDC 90 kVA Light
weight, kg	14,6	16,8
water cooling, l/min	4	4

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2943



ROBOT SPOT WELDING GUN

Xtype-std

ACTUATOR TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data

Type	*MFDC 47 kVA	*MFDC 90 kVA Heavy
Nominal power at 50%, kVA	47	90
No load secondary voltage, V	6,1	9,1
Thermal current, kA	5	6,7
Short circuit current, kA	20	30

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

		Actuator sizes					
Welding force, daN	Arm length	6 Nm	9,5 Nm		11 Nm		
	300 mm	800	850		850		
	450 mm	550	750		750		
	600 mm	420	650		650		
**Gun mass, kg (Arm length 300 mm)		83	83	83	86	86	86
Gun water cooling, l/min		12	12	12	12	12	12

motor

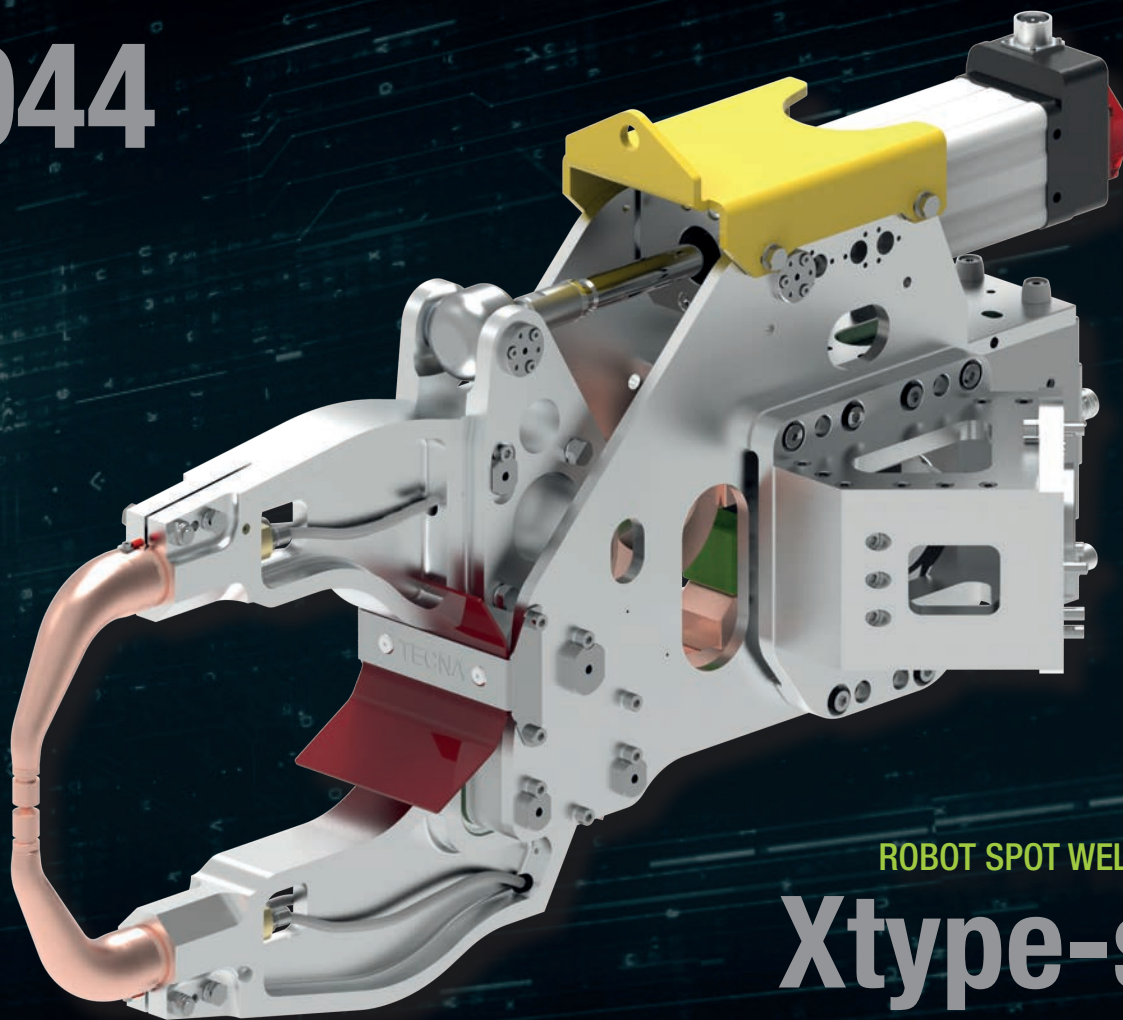
Servomotor speed, rpm	3000
-----------------------	------

transformer

Type	MFDC 47 kVA	MFDC 90 kVA Heavy
weight, kg	14,6	17,8
water cooling, l/min	4	4

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2944



ROBOT SPOT WELDING GUN

Xtype-std

INVERTED ROLLER SCREW ACTUATORS THIRD PART MOTOR

electrical data

Type	*MFDC 47 kVA	*MFDC 90 kVA Heavy
Nominal power at 50%, kVA	47	90
No load secondary voltage, V	6,1	9,1
Thermal current, kA	5	6,7
Short circuit current, kA	20	30

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes		Exlar GTW100	Tolomatic CSWX3-MVx4WC	Exlar GTW100	Tolomatic CSWX3-MVx4WC
Welding force, daN	Arm length	12 Nm	13,4 Nm	12 Nm	13,4 Nm
	300 mm	850	850	850	850
	450 mm	750	800	750	800
	600 mm	650	700	650	700
**Gun mass, kg (Arm length 300 mm)		83,4	83,5	86,4	86,4
Gun water cooling, l/min		12	12	12	12

motor

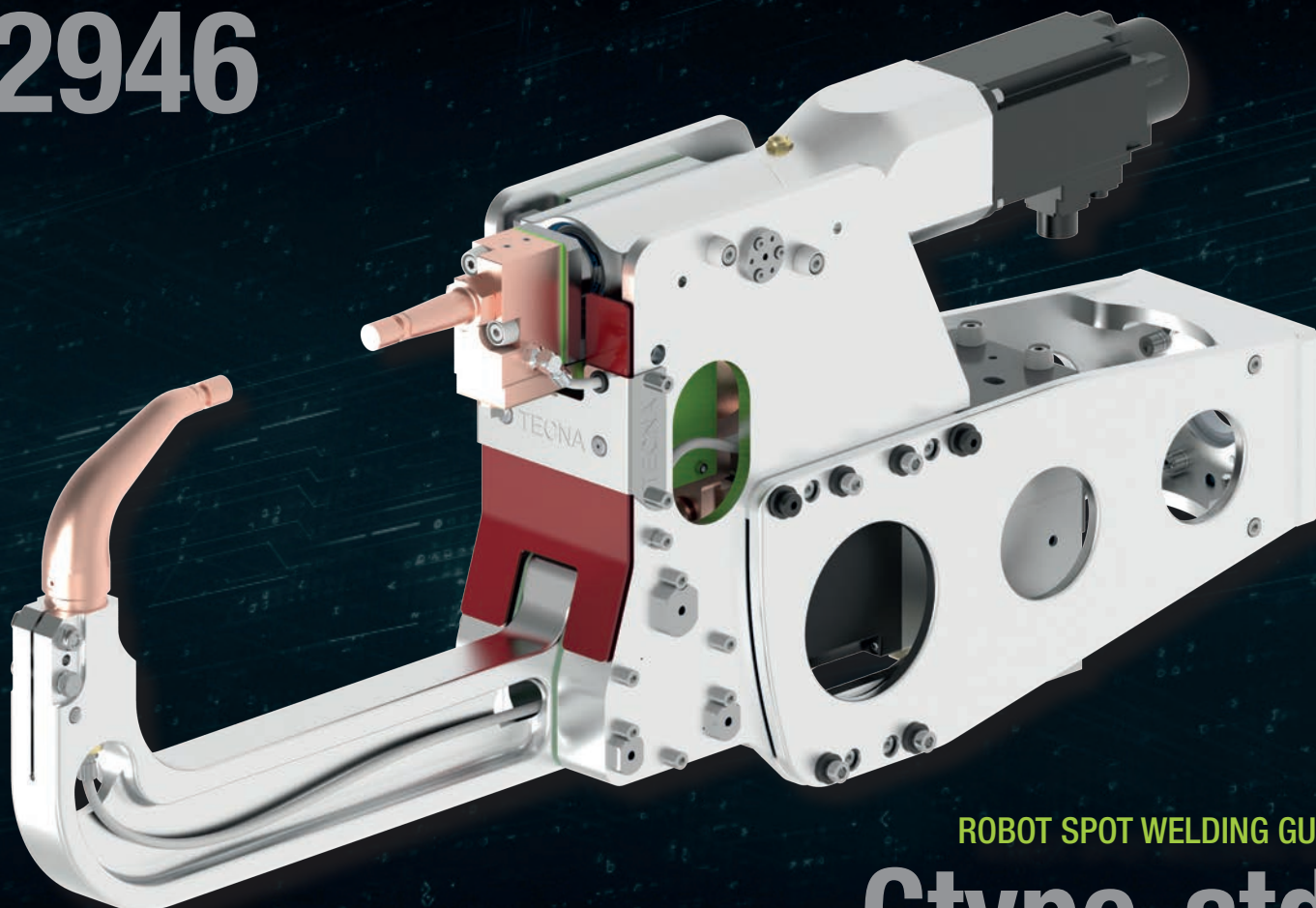
Servomotor speed, rpm	3000
-----------------------	------

transformer

Type	MFDC 47 kVA	MFDC 90 kVA Heavy
weight, kg	14,6	17,8
water cooling, l/min	4	4

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2946



ROBOT SPOT WELDING GUN

Ctype-std

ACTUATOR TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data	2946		
Type	MFDC 47 kVA	MFDC 90 kVA Light	MFDC 90 kVA Heavy
Nominal power at 50%, kVA	47	90	90
No load secondary voltage, V	6,1	9,1	9,1
Thermal current, kA	5	6,0	6,7
Short circuit current, kA	20	25	30

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

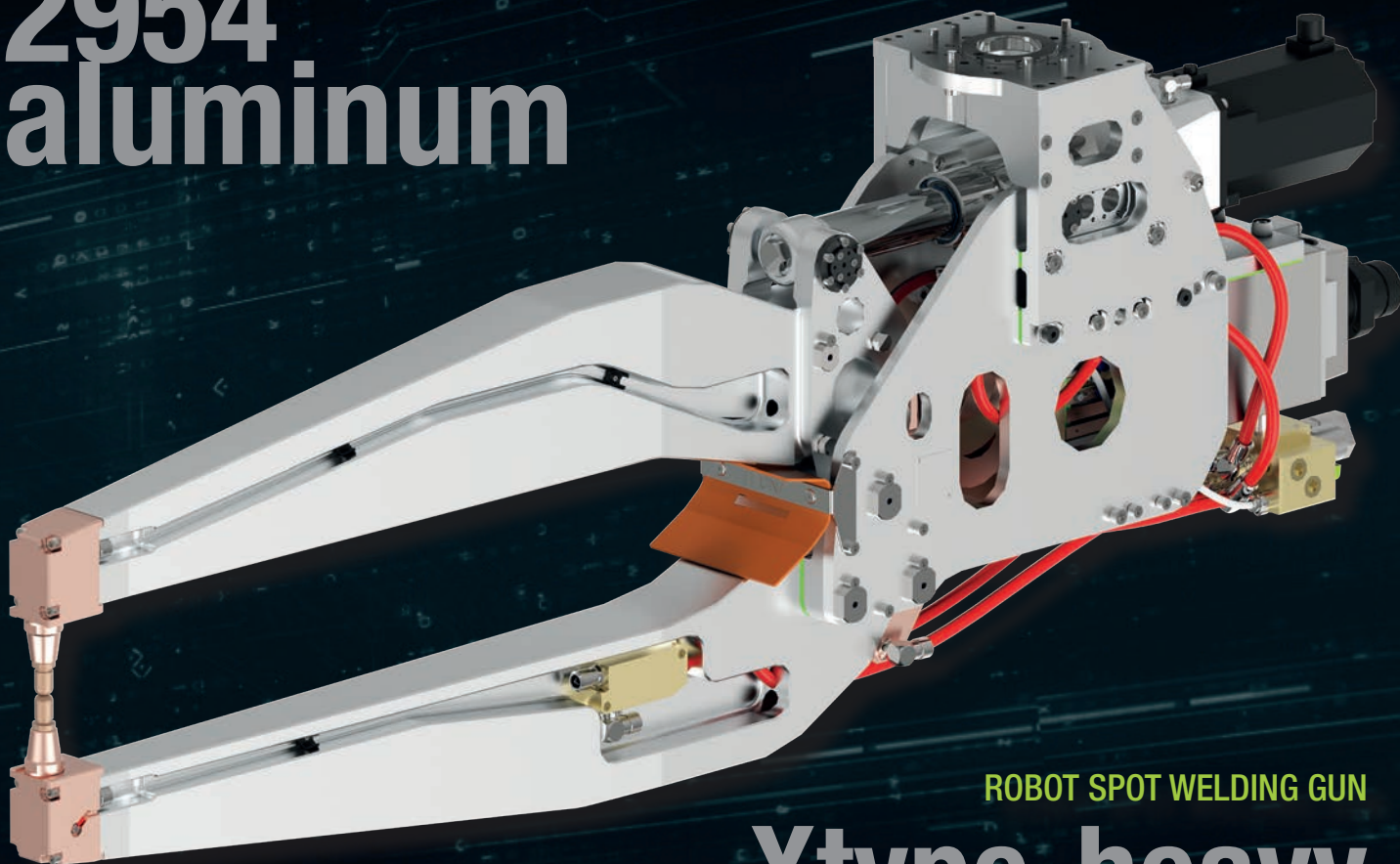
general data			
Actuator sizes			
Welding force, daN	Arm length	4,9 Nm	
	100 mm	500	
	150 mm	500	
**Gun mass, kg (Arm length 300 mm)		81	84
Gun water cooling, l/min		11	11

motor	
Servomotor speed, rpm	3000

transformer			
Type	MFDC 47 kVA	MFDC 90 kVA Light	MFDC 90 kVA Heavy
weight, kg	14,6	16,8	17,8
water cooling, l/min	4	4	4

** The weight of the guns is with 100 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2954 aluminum



ROBOT SPOT WELDING GUN

Xtype-heavy

ACTUATOR TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data	2954
Type	MFDC 160 kVA
Nominal power at 50%, kVA	160
No load secondary voltage, V	9,1
Thermal current, kA	8,82
Short circuit current, kA	42

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

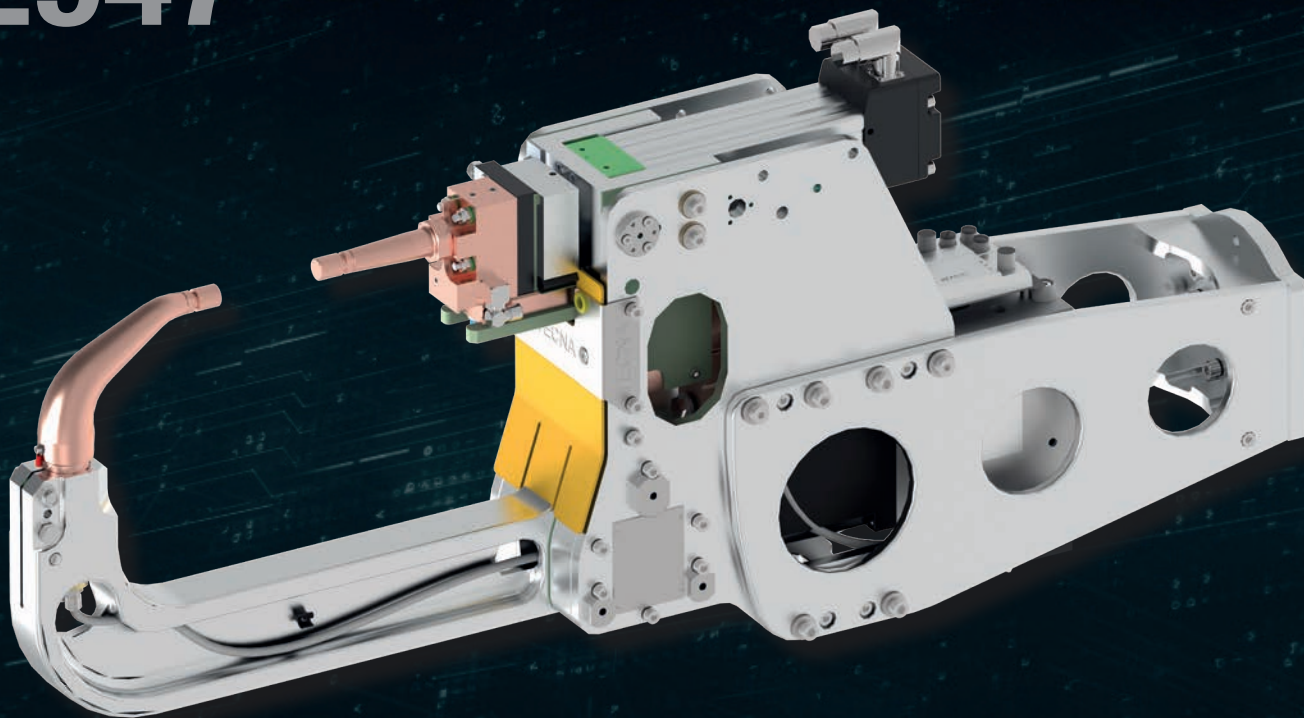
general data		
Actuator sizes		Fanuc BIS12-3000-B
Welding force, daN	Arm length	11 Nm
	450 mm	900
	600 mm	870
	1000 mm	500
**Gun mass, kg (Arm length 300 mm)		159
Gun water cooling, l/min		32

motor	
Servomotor speed, rpm	3000

transformer	
Type	MFDC 160 kVA
weight, kg	31,8
water cooling, l/min	8,8

** The weight of the guns is with 450 mm arms, with arm fitting, with power transformer and servomotor 13,7Kg.

2947



ROBOT SPOT WELDING GUN

Ctype-std

INVERTED ROLLER SCREW ACTUATORS THIRD PART MOTOR

electrical data	2947	
Type	MFDC 47 kVA	MFDC 90 kVA Light
Nominal power at 50%, kVA	47	90
No load secondary voltage, V	6,1	9,1
Thermal current, kA	5	6,0
Short circuit current, kA	20	30

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

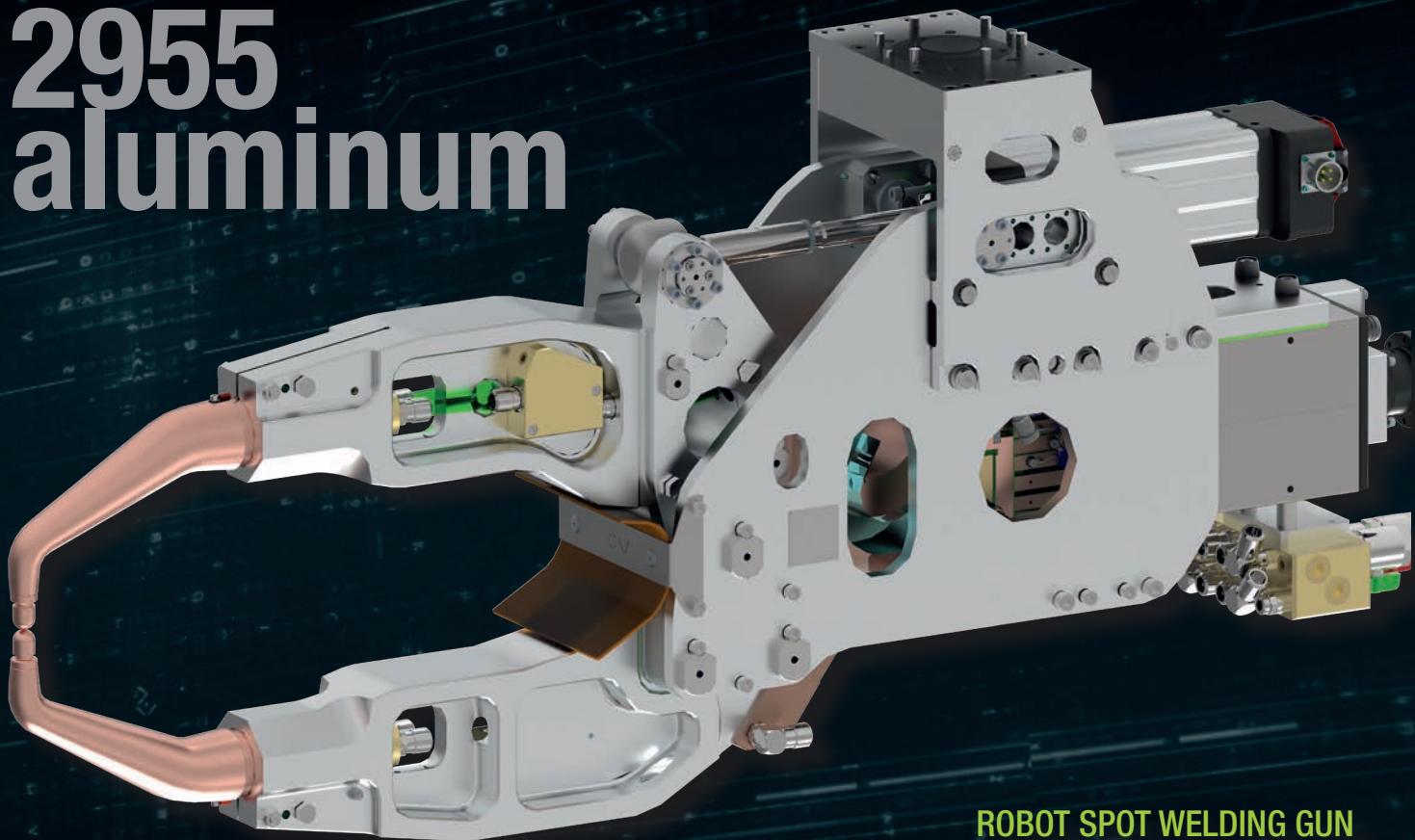
general data		
Actuator sizes		Exlar GTW80
Welding force, daN	Arm length	4,5 Nm
	100 mm	500
	150 mm	500
**Gun mass, kg (Arm length 300 mm)		71
Gun water cooling , l/min		11

motor	
Servomotor speed, rpm	3000

transformer		
Type	MFDC 47 kVA	MFDC 90 kVA Light
weight, kg	14,6	16,8
water cooling, l/min	4	4

** The weight of the guns is with 100 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2955 aluminum



ROBOT SPOT WELDING GUN

Xtype-heavy

ACTUATOR TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data	2955
Type	MFDC 160 kVA
Nominal power at 50%, kVA	160
No load secondary voltage, V	9,1
Thermal current, kA	8,82
Short circuit current, kA	42

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data			
Actuator sizes		Exlar GTW100	Tolomatic CSWX3-MVx4WC
Welding force, daN	Arm length	12,23 Nm	13,4 Nm
	450 mm	900	970
	600 mm	800	970
	1000 mm	500	550
**Gun mass, kg (Arm length 300 mm)		156	
Gun water cooling , l/min		32	32

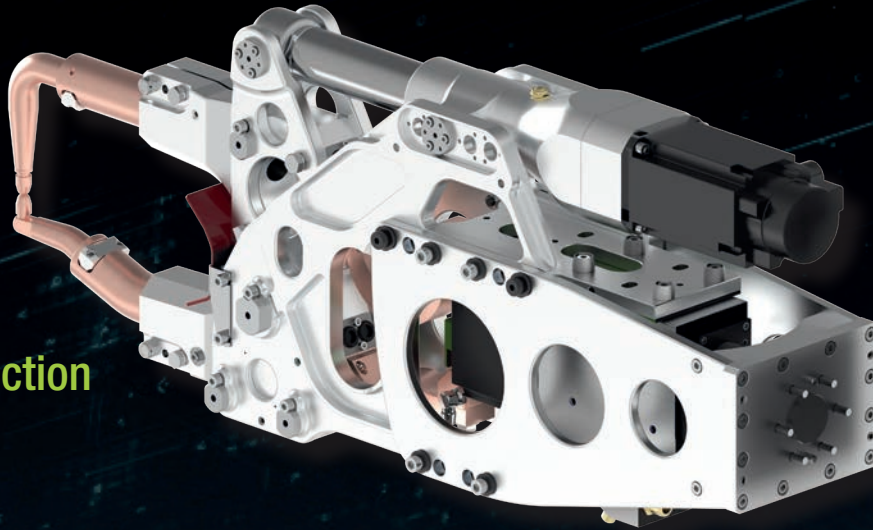
motor	
Servomotor speed, rpm	3000

transformer	
Type	MFDC 160 kVA
weight, kg	31,8
water cooling, l/min	8,8

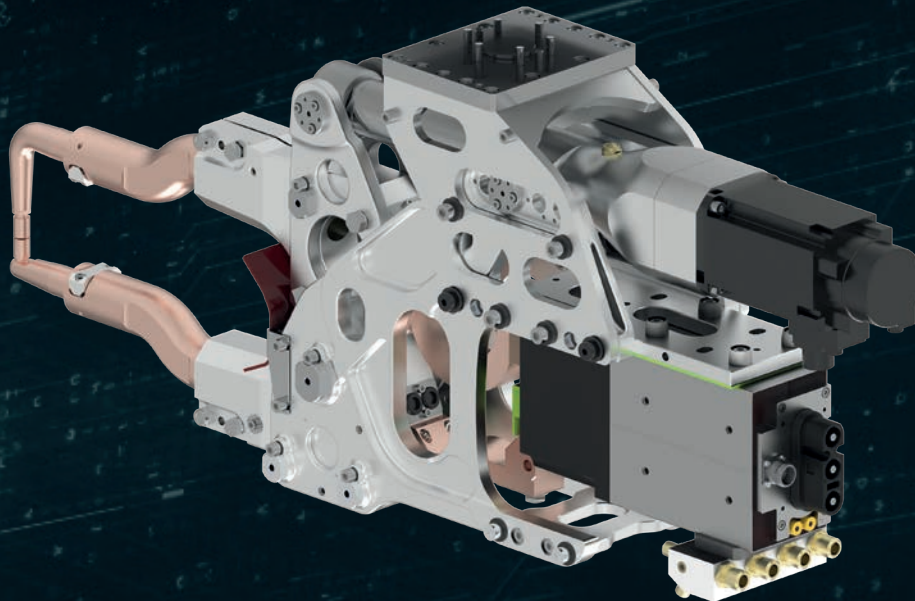
** The weight of the guns is with 450 mm arms, with arm fitting, with power transformer and servomotor 13,7Kg.

gun coupling to robot

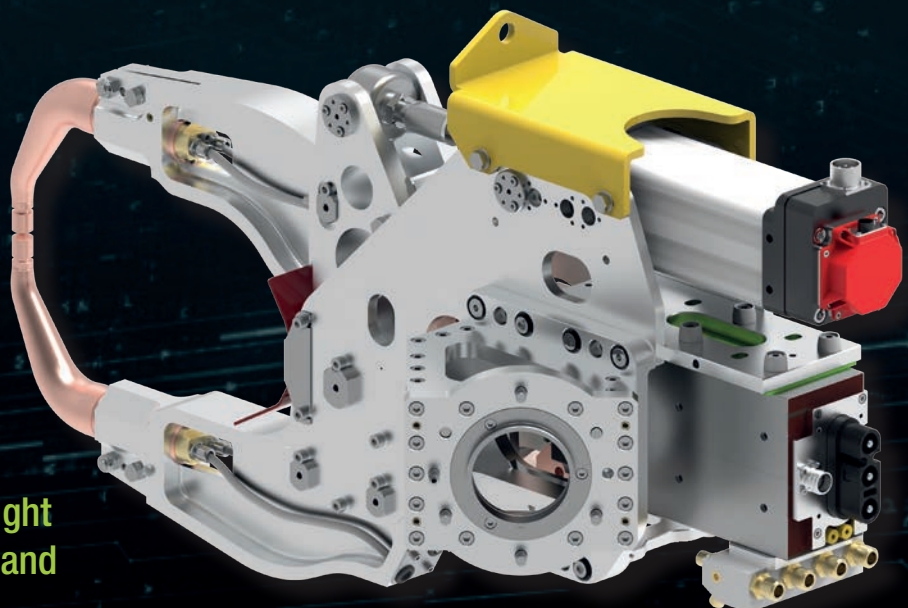
REAR connection



TOP connection



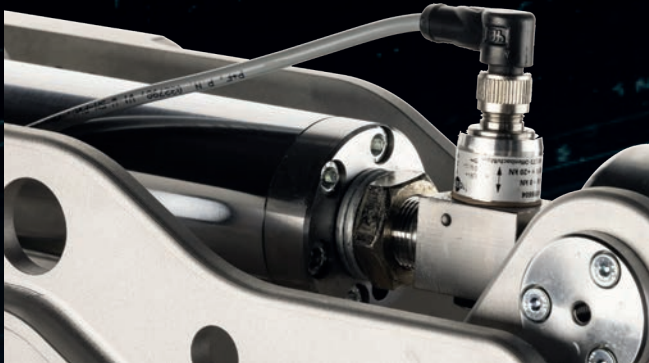
45° connection
every guns is available in its right
or left MIRROR configuration and
symmetrical Guns



options

actuator load cell

2933/2934/2943/2944/2954

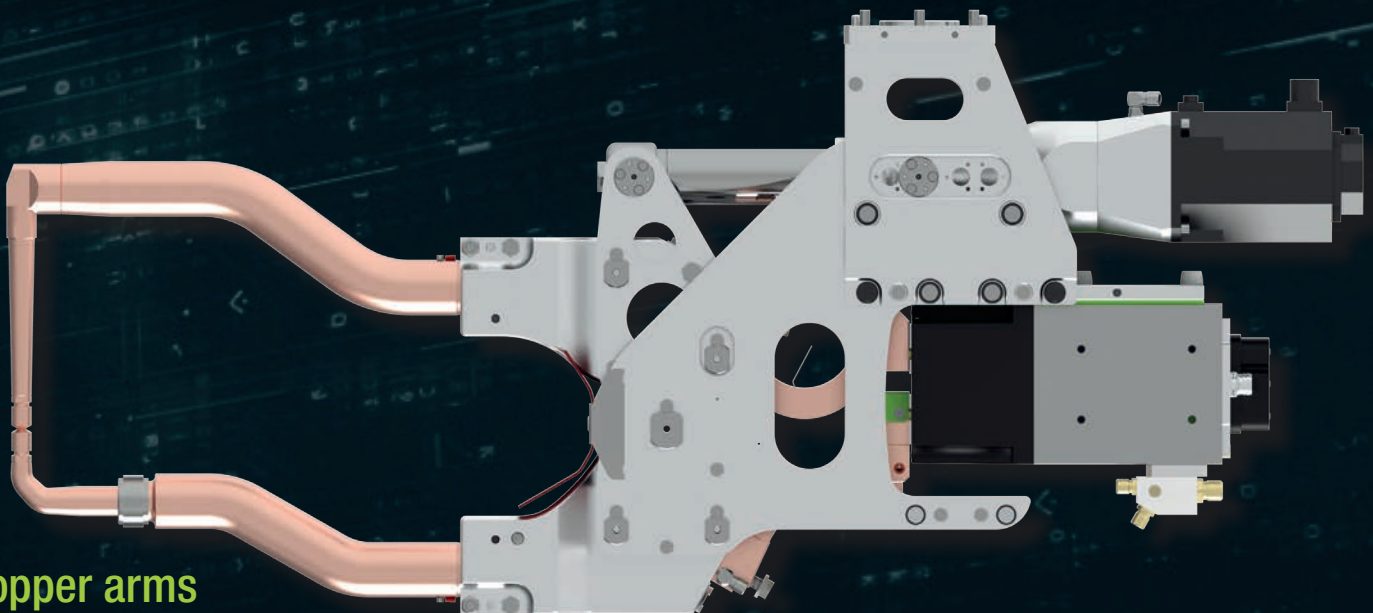


cooling servomotor

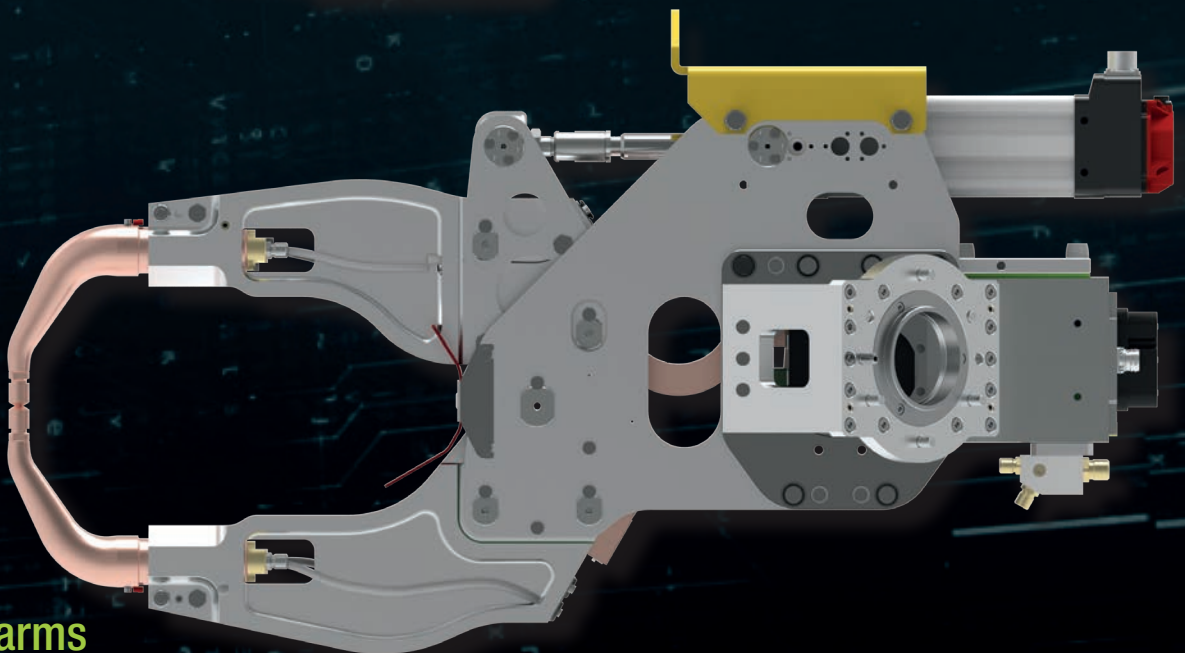


welding arms configuration

copper arms

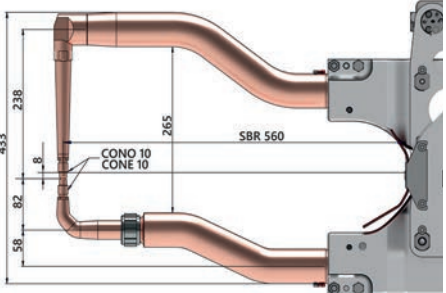
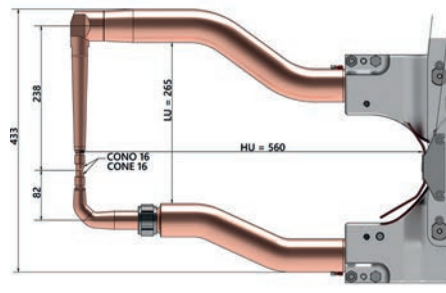
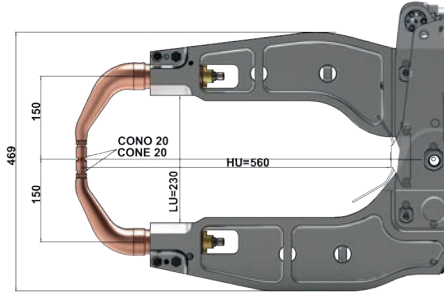
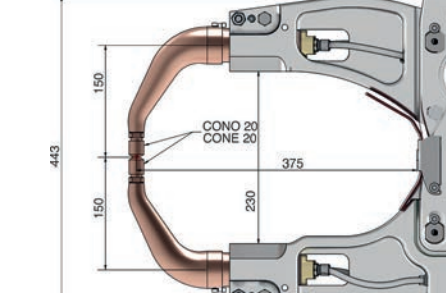
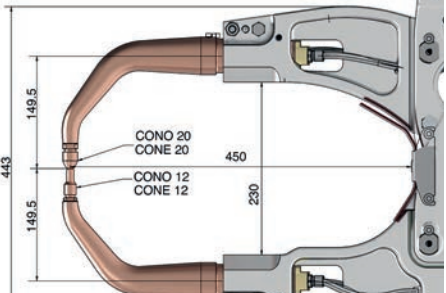
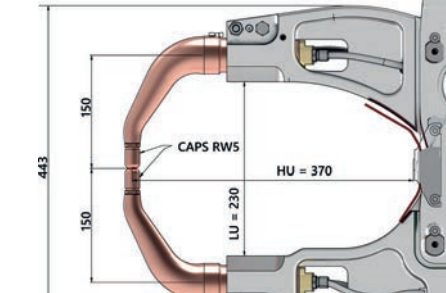
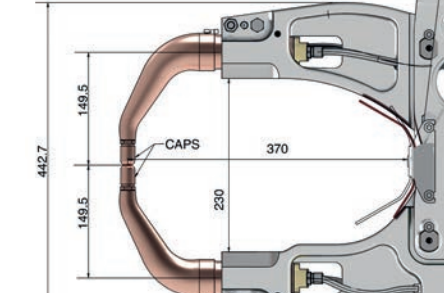
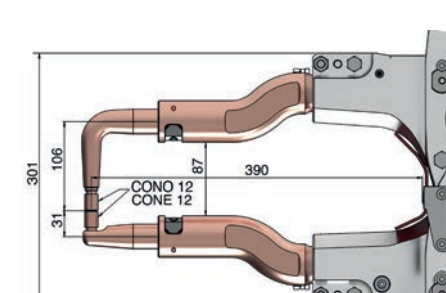
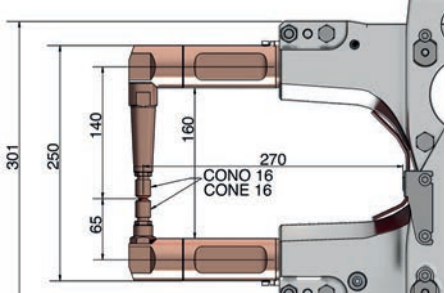
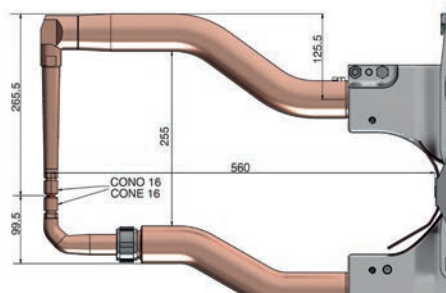


aluminum arms



welding arms configuration

SLIM LINE ROBOT GUN ARM & HOLDER VARIANTS

Design code	Design shape	Design code	Design shape
II91020208		II91020212	
II91020213		II91020215	
II91020216		II91020217	
II91020218		II91020219	
II91020221		II91020222	

welding arms configuration

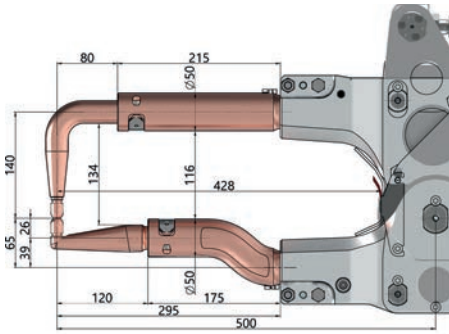
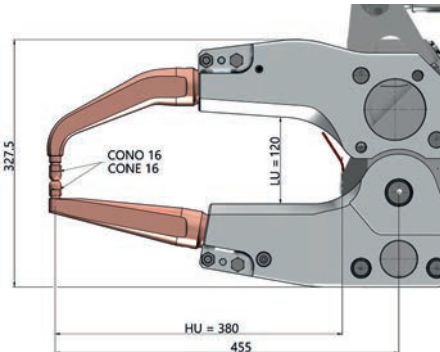
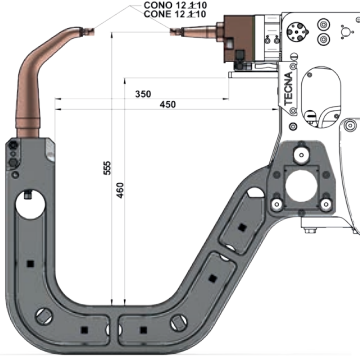
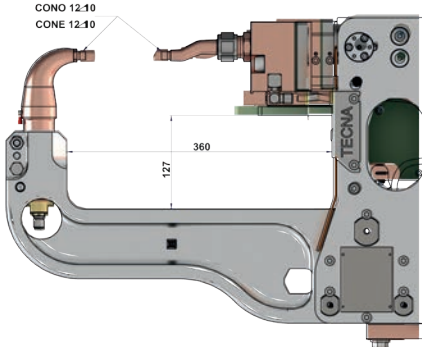
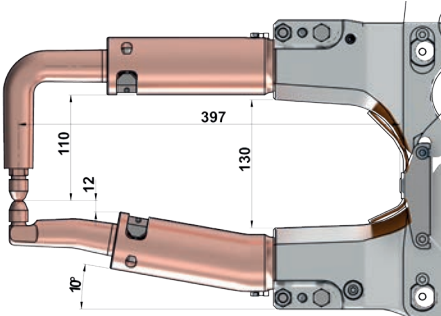
SLIM LINE ROBOT GUN ARM&HOLDER VARIANTS

Design code	Design shape	Design code	Design shape
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II91020100		II91020106	
II91020200		II91020201	
II91020204		II91020205	
II91020206		II91020207	

welding arms configuration

SLIM LINE ROBOT GUN ARM & HOLDER VARIANTS			
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II91020252			
II91020270			
II91020273			
II91020263			
II91020266			

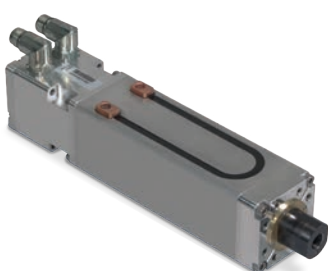
welding arms configuration

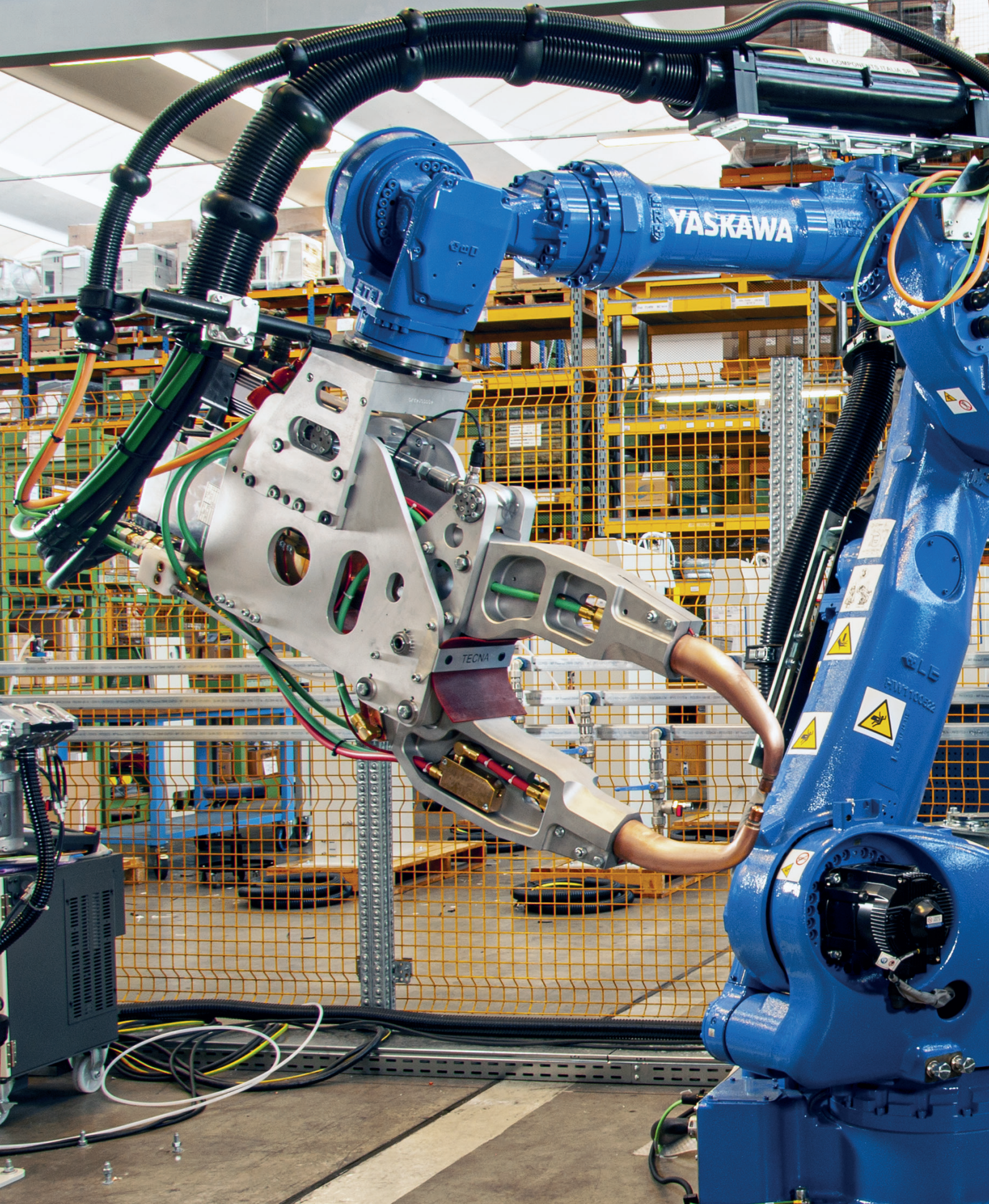
SLIM LINE ROBOT GUN ARM & HOLDER VARIANTS			
Design code	Design shape	Design code	Design shape
II91020263	 Technical drawing of the robot gun arm II91020263. Dimensions include: 80, 215, 140, 134, 116, 428, 65, 39, 26, 120, 295, 175, 500, and $\varnothing 50$.	II91020266	 Technical drawing of the robot gun arm II91020266. Dimensions include: 327.5, LU = 120, HU = 380, and 455. Labels include CONO 16 and CONE 16.
II91020290	 Technical drawing of the robot gun arm II91020290. Dimensions include: 350, 450, 505, 460, and 127. Labels include CONO 12.1:10, CONE 12.1:10, and @ TECNIA 30.10.	II91020291	 Technical drawing of the robot gun arm II91020291. Dimensions include: 360, 127, and 127. Labels include CONO 12.1:10, CONE 12.1:10, and @ TECNIA 30.10.
II91020292	 Technical drawing of the robot gun arm II91020292. Dimensions include: 110, 12, 10, 130, and 397.		

ACTUATOR TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

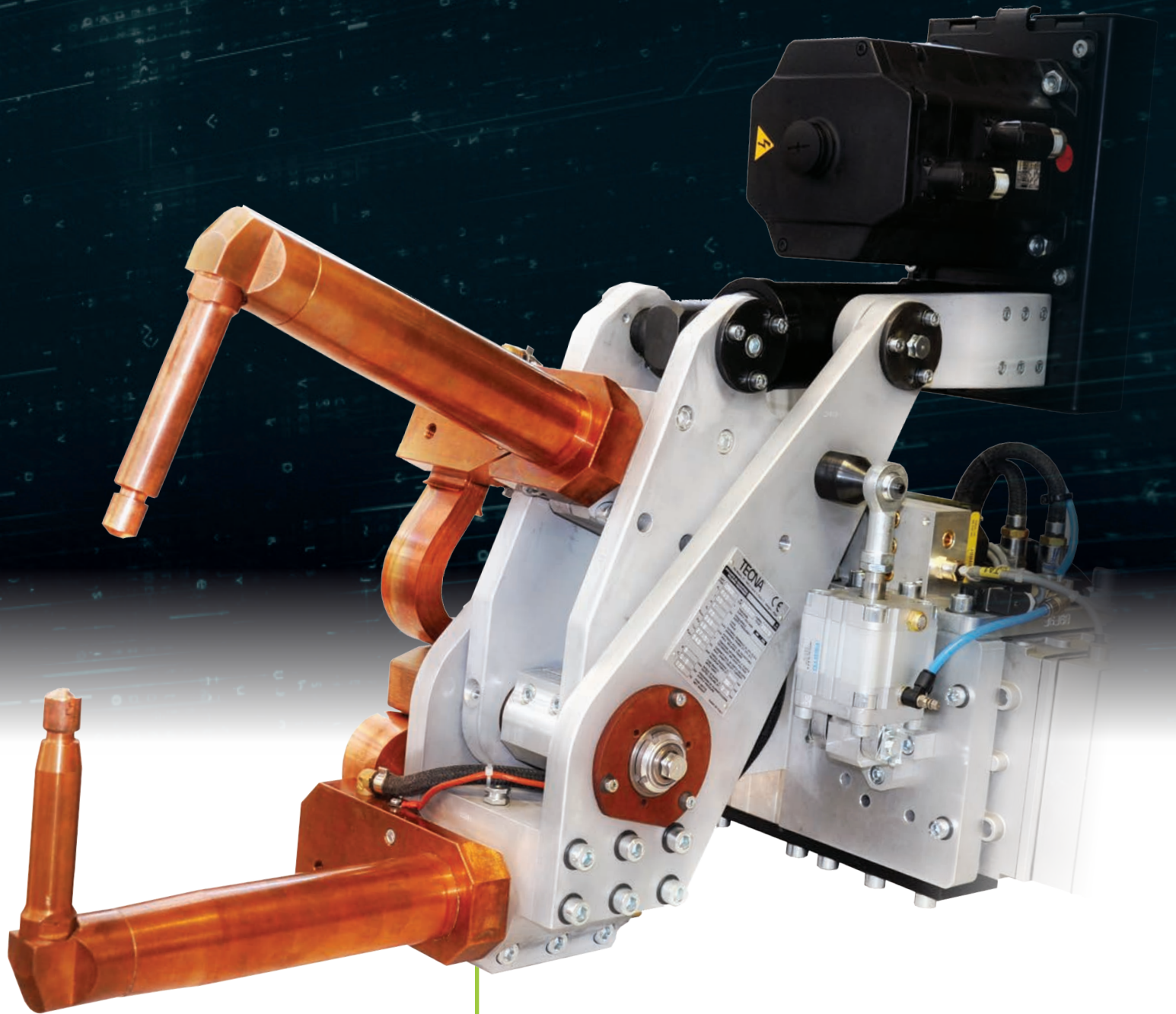
	Producer	Model	Absorption [kW]	Rated Torque [Nm]	Weight [kg]
	Yaskawa	SGM7A-15	1,5	4,9	6,0
		SGM7A-20	2,0	6,36	6,8
		SGM7A-25	2,5	7,96	8,7
	Fanuc	BiS8-4000-B	1,2	7,0	9,6
		BiS12-3000-B	1,8	11	13,7
	ABB	MU200	1,5	6,4	10,3
	Kawasaki	R2AA13200 LCP2S	2	9,5	n.d.
	Nachi	W-L02152	2	9,5	12
	Kuka	MG110-130- 40-S0	2,4	8,25	13,7
	Hyundai	TSM3508	3,7	11,7	11,9
	Estun	EM3G-09D	0,85	5,41	7,3
		EM3G-18D	1,8	11,5	10

THIRD PART MOTOR

	Producer	Model	Absorption [kW]	Rated Torque [Nm]	Weight [kg]
	Rexroth	MS2N05 DOBRN-BMDG1	1,74	4,74	8,4
		MS2N06 DOBRN-BMDG1	2,48	6,2	10,5
		MS2N07 DOBRN-BMDG1	4,64	14,7	20
	Exlar	GTW80	1,127	4,51	6,8
		GTW100	2,829	12,23	13,1
	Tolomatic	CSWL3 [water cooling]	3,63	8,6	4,8
		CSWX3 MVx3WC [water cooling]	3,43	9,7	12,2
		CSWX3 MVx4WC [water cooling]	4,92	13,4	13,2
		SWA4	4,92	17,8	14,1
	Kinnege	DA99	1,8	7,9	12,7



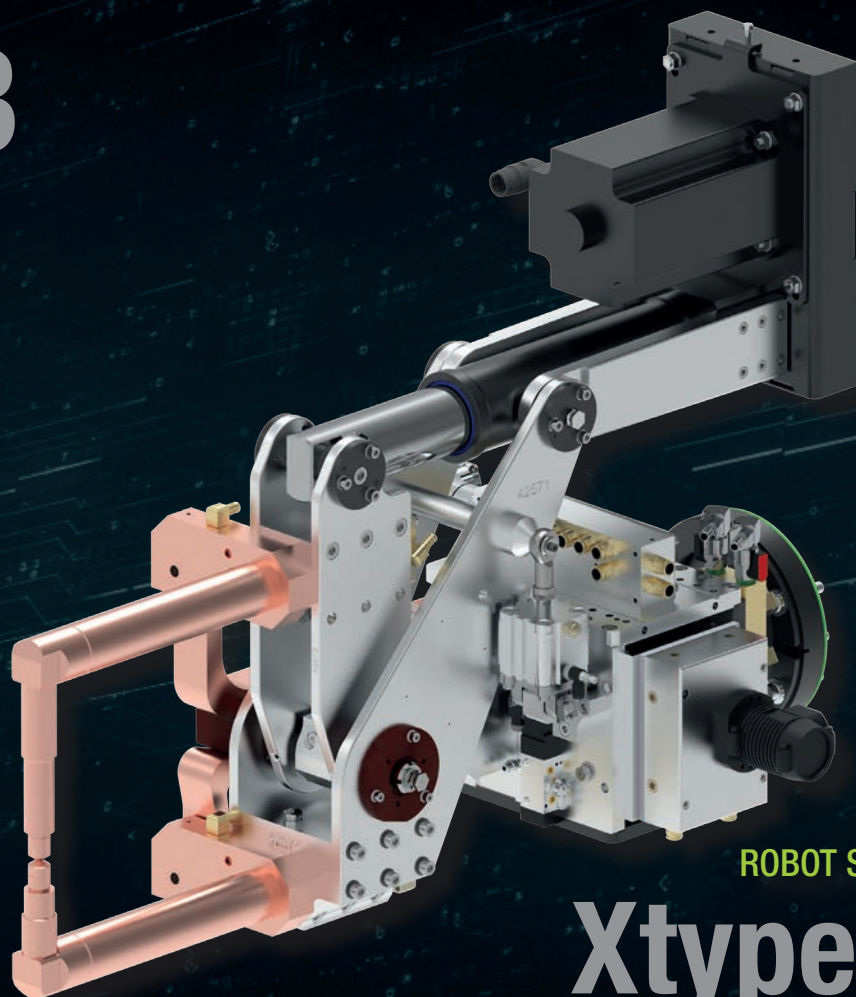
**new generation
servomotor spot welding gun**



**MFDC
TECH**

**belt driven servomotor
spot welding gun**

2923



ROBOT SPOT WELDING GUN

Xtype-light

BELT DRIVEN TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data

Type	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	90
No load secondary voltage, V	9,9
Thermal current, kA	6,1
Short circuit current, kA	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes	6 Nm			
Welding force, daN	Arm code [length]		Arm code [length]	
	4921 [300 mm]	509	4925 [500 mm]	339
	4922 [350 mm]	453	4926 [600 mm]	290
	4923 [400 mm]	407	4927 [700 mm]	254
	4924 [450 mm]	371		
**Gun mass, kg (Arm length 300 mm)	95			
Gun water cooling, l/min	15			

motor

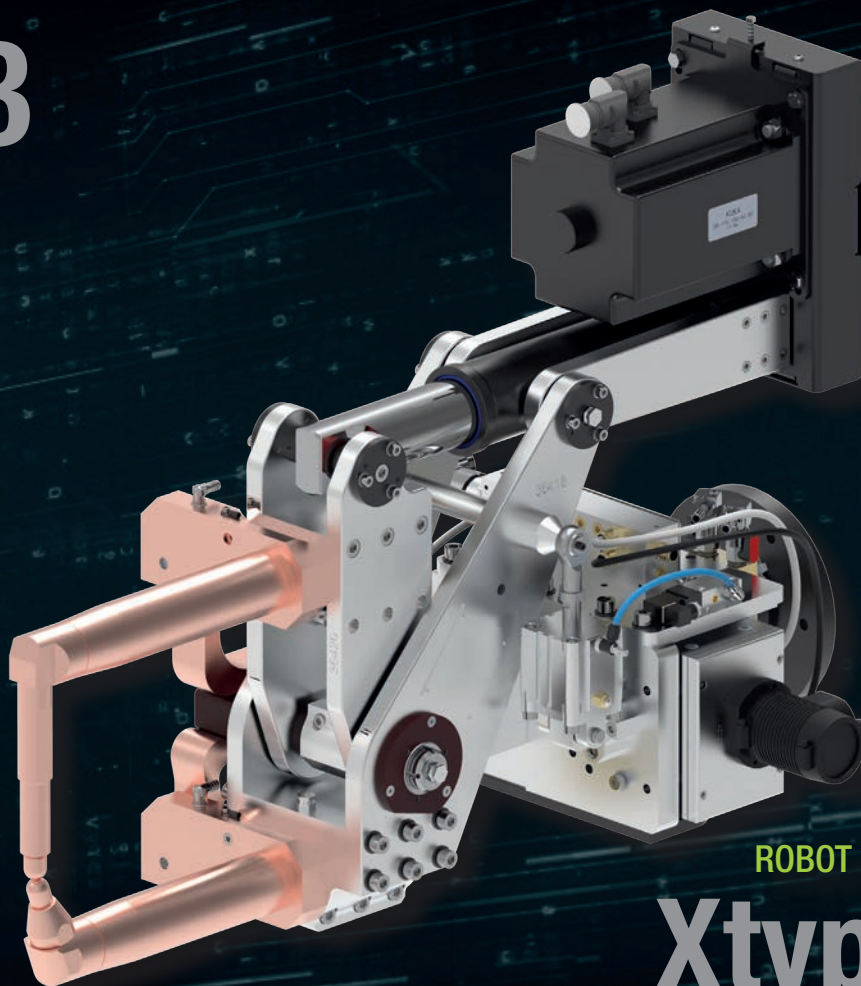
Servomotor speed, rpm	3000
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transformer

Type	MFDC 90 kVA [40090]
weight, kg	27,3
water cooling, l/min	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2903



ROBOT SPOT WELDING GUN

Xtype-std

BELT DRIVEN TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data

Type	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	90
No load secondary voltage, V	9,9
Thermal current, kA	6,1
Short circuit current, kA	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes		11 Nm		
Welding force, daN	Arm code [length]		Arm code [length]	
	4901 [300 mm]	939	4905 [500 mm]	625
	4902 [350 mm]	834	4906 [600 mm]	535
	4903 [400 mm]	750	4907 [700 mm]	468
	4904 [450 mm]	682		
**Gun mass, kg (Arm length 300 mm)		95		
Gun water cooling, l/min		15		

motor

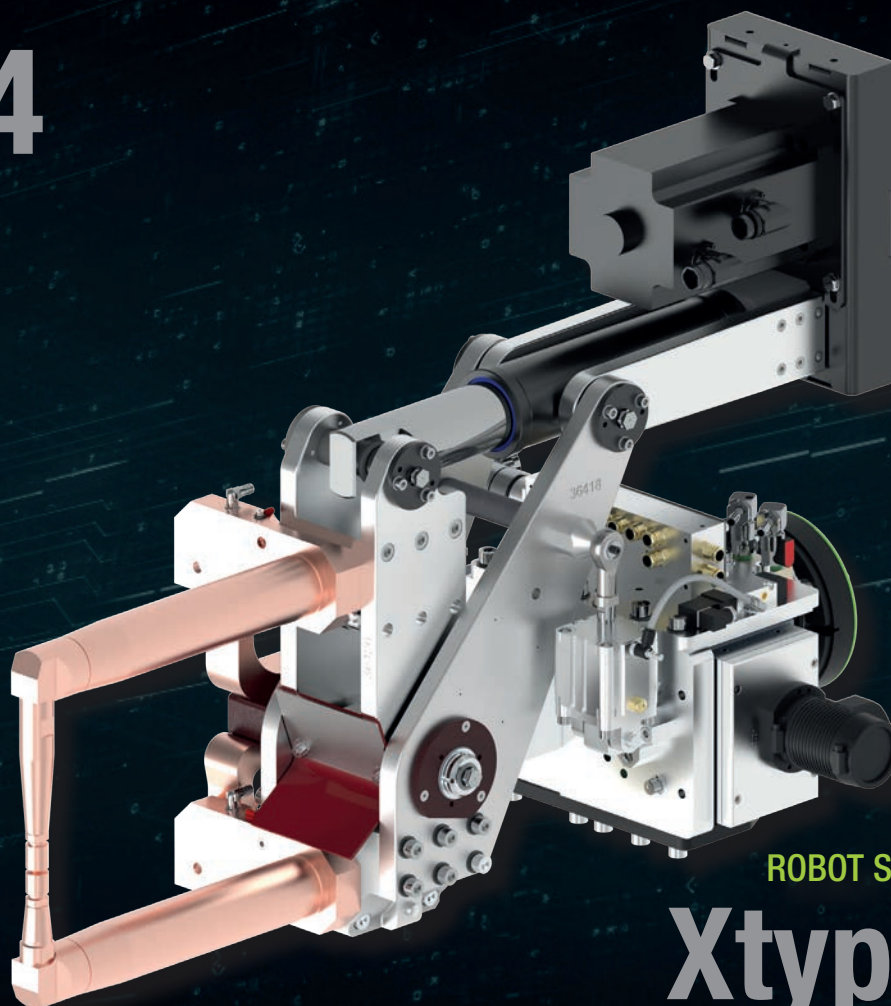
Servomotor speed, rpm	3000
-----------------------	------

transformer

Type	MFDC 90 kVA [40090]
weight, kg	27,3
water cooling, l/min	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 13,7Kg.

2904



ROBOT SPOT WELDING GUN

Xtype-std

BELT DRIVEN TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data

Type	*MFDC 56 kVA [39965]
Nominal power at 50%, kVA	56
No load secondary voltage, V	8,4
Thermal current, kA	4,44
Short circuit current, kA	25

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes	6 Nm			
Welding force, daN	Arm code [length]		Arm code [length]	
	4901 [300 mm]	509	4905 [500 mm]	339
	4902 [350 mm]	453	4906 [600 mm]	290
	4903 [400 mm]	407	4907 [700 mm]	254
	4904 [450 mm]	371		
**Gun mass, kg (Arm length 300 mm)	88			
Gun water cooling, l/min	15			

motor

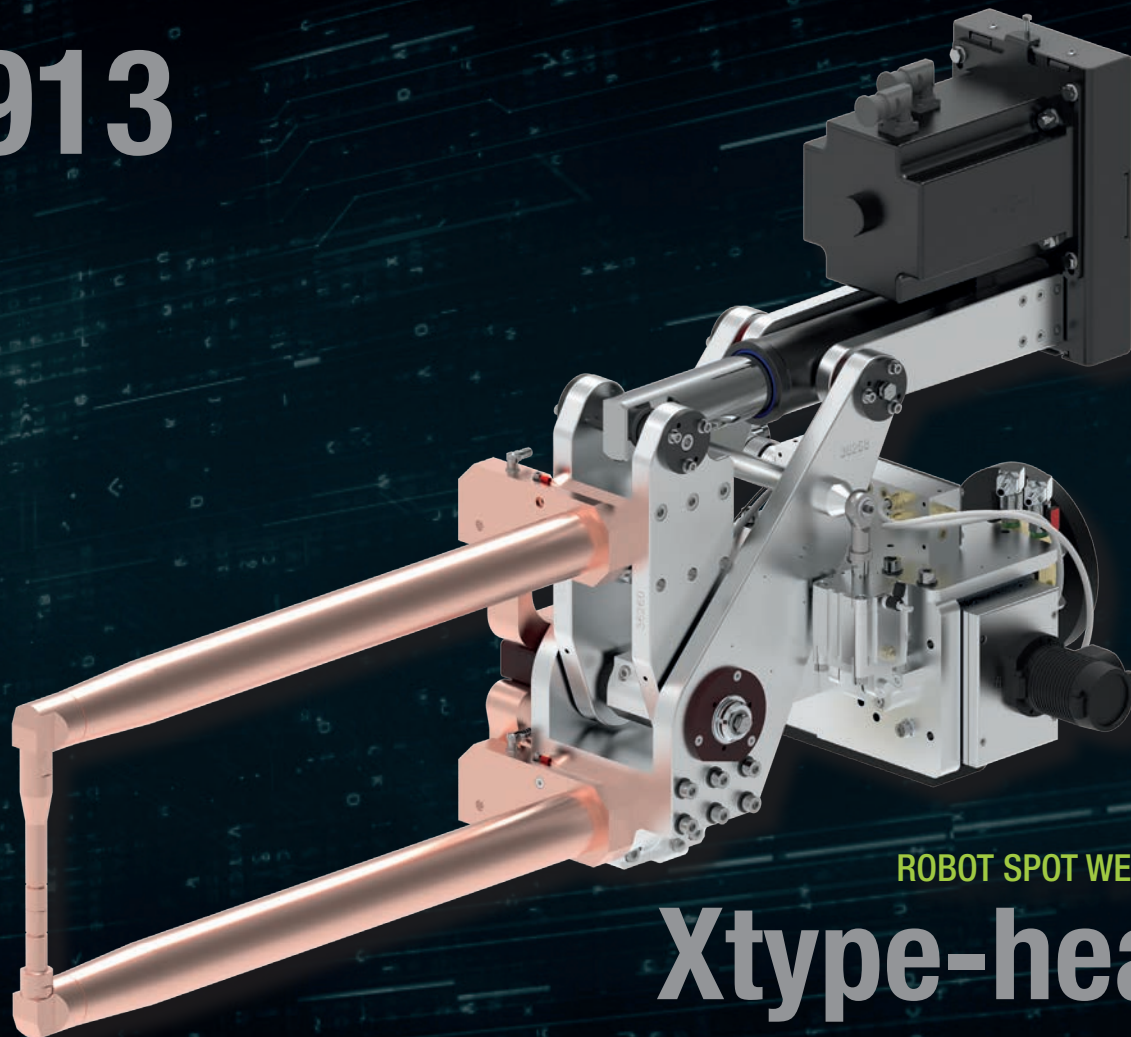
Servomotor speed, rpm	3000
-----------------------	------

transformer

Type	MFDC 56 kVA [39965]
weight, kg	19,7
water cooling, l/min	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 6Kg.

2913



ROBOT SPOT WELDING GUN

Xtype-heavy

BELT DRIVEN TECNA AND SERVOMOTOR OF ROBOT MANUFACTURER

electrical data

Type	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	90
No load secondary voltage, V	9,9
Thermal current, kA	6,1
Short circuit current, kA	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes	11 Nm			
Welding force, daN	Arm code [length]		Arm code [length]	
	4921 [300 mm]	509	4925 [500 mm]	339
	4922 [350 mm]	453	4926 [600 mm]	290
	4923 [400 mm]	407	4927 [700 mm]	254
	4924 [450 mm]	371		
**Gun mass, kg (Arm length 300 mm)	95			
Gun water cooling, l/min	15			

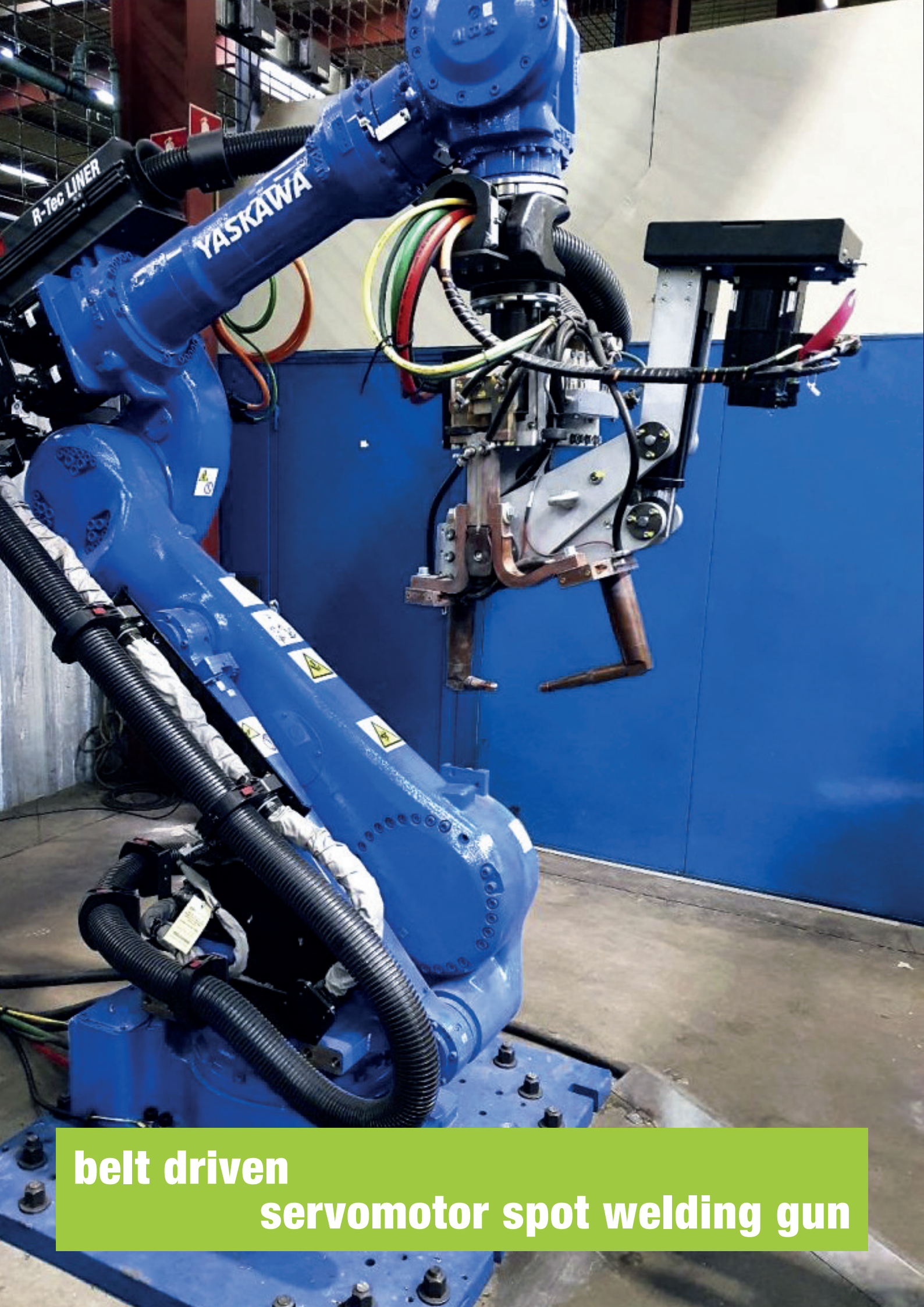
motor

Servomotor speed, rpm	3000
-----------------------	------

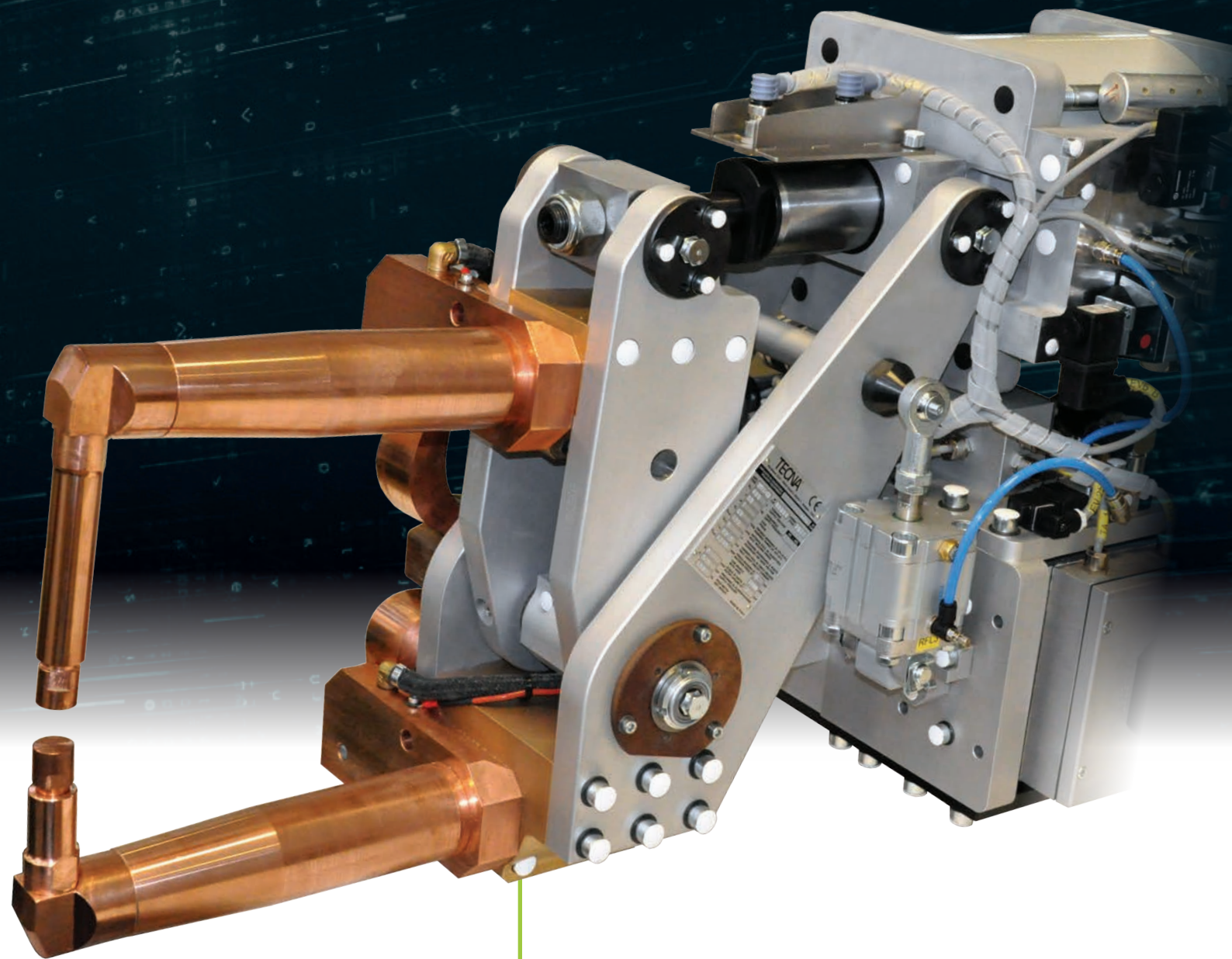
transformer

Type	MFDC 90 kVA [40090]
weight, kg	27,3
water cooling, l/min	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer and servomotor 13,7Kg.



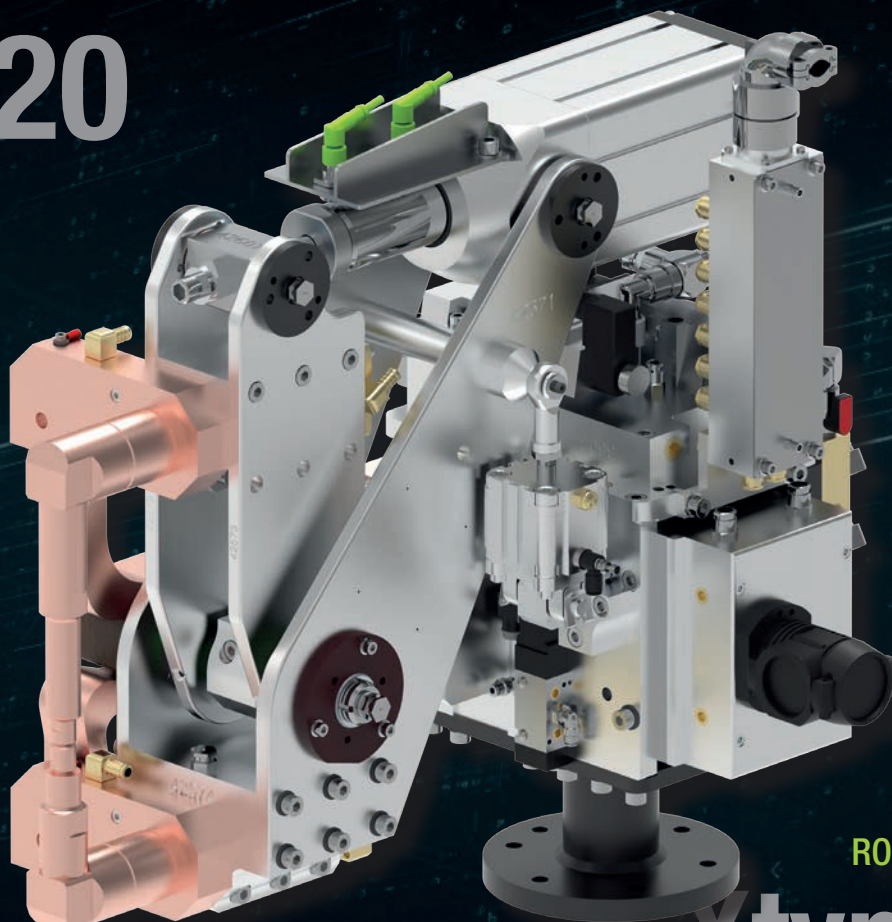
**belt driven
servomotor spot welding gun**



**MFDC
TECH**

**pneumatic
spot welding gun**

2920



ROBOT SPOT WELDING GUN

Xtype-light

PNEUMATIC ACTUATOR TECNA

electrical data

Type	*MFDC 56 kVA [39965]	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	56	90
No load secondary voltage, V	8,4	9,9
Thermal current, kA	4,44	6,1
Short circuit current, kA	25	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes [6 bar]	Ø100 mm			
Welding force, daN	Arm code [length]		Arm code [length]	
	4921 [300 mm]	319	4925 [500 mm]	212
	4922 [350 mm]	284	4926 [600 mm]	182
	4923 [400 mm]	255	4927 [700 mm]	159
	4924 [450 mm]	232		
**Gun mass, kg (Arm length 300 mm)	57		64	
Gun water cooling, l/min	15		15	

cylinder

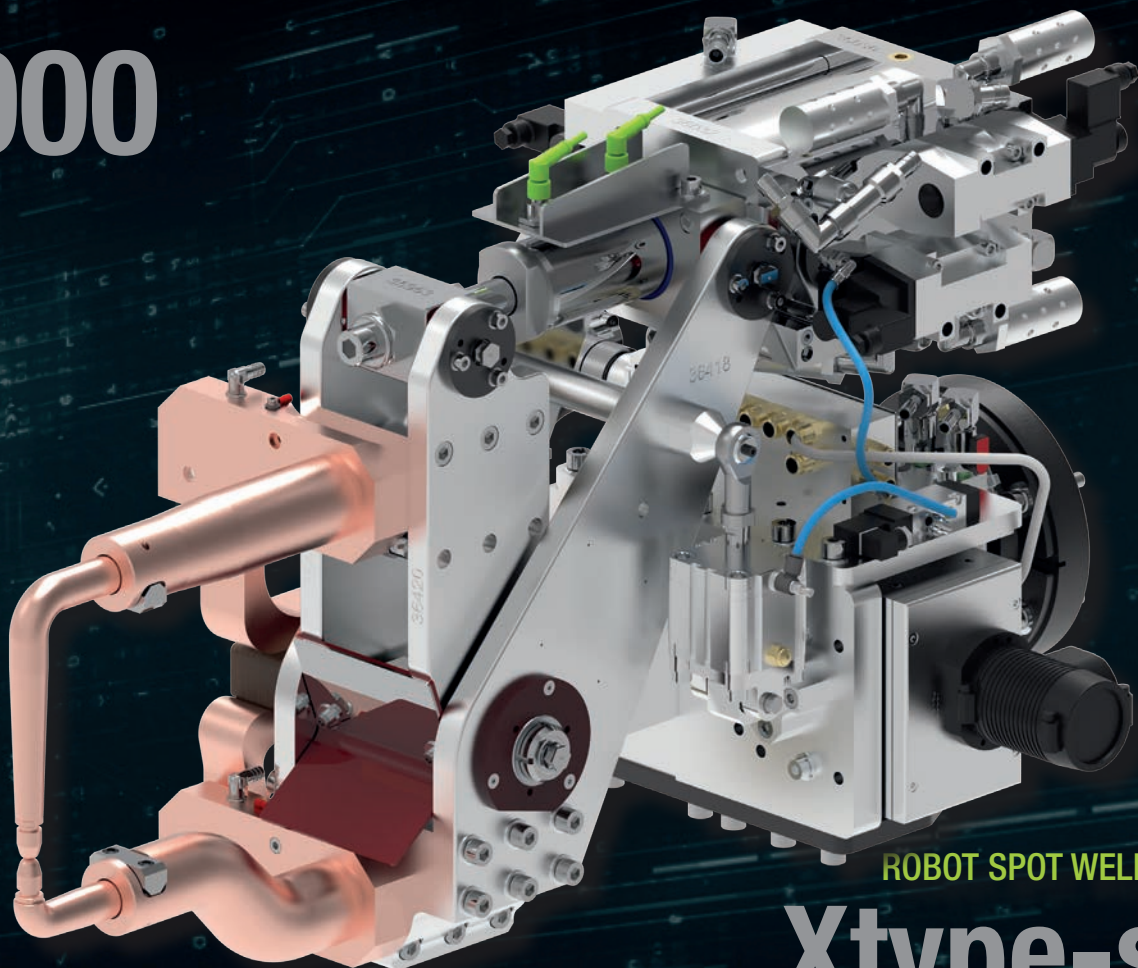
diameter, mm	Ø100
--------------	------

transformer

Type	MFDC 56 kVA [39965]	MFDC 90 kVA [40090]
weight, kg	19,7	27,3
water cooling, l/min	6	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer.

2900



ROBOT SPOT WELDING GUN

Xtype-std

PNEUMATIC ACTUATOR TECNA

electrical data

Type	*MFDC 56 kVA [39965]	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	56	90
No load secondary voltage, V	8,4	9,9
Thermal current, kA	4,44	6,1
Short circuit current, kA	25	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes [6 bar]		Ø125 mm		
Welding force, daN	Arm code [length]		Arm code [length]	
	4901 [300 mm]	500	4905 [500 mm]	333
	4902 [350 mm]	444	4906 [600 mm]	285
	4903 [400 mm]	399	4907 [700 mm]	249
	4904 [450 mm]	363		
**Gun mass, kg (Arm length 300 mm)	73		80	
Gun water cooling, l/min	15		15	

cylinder

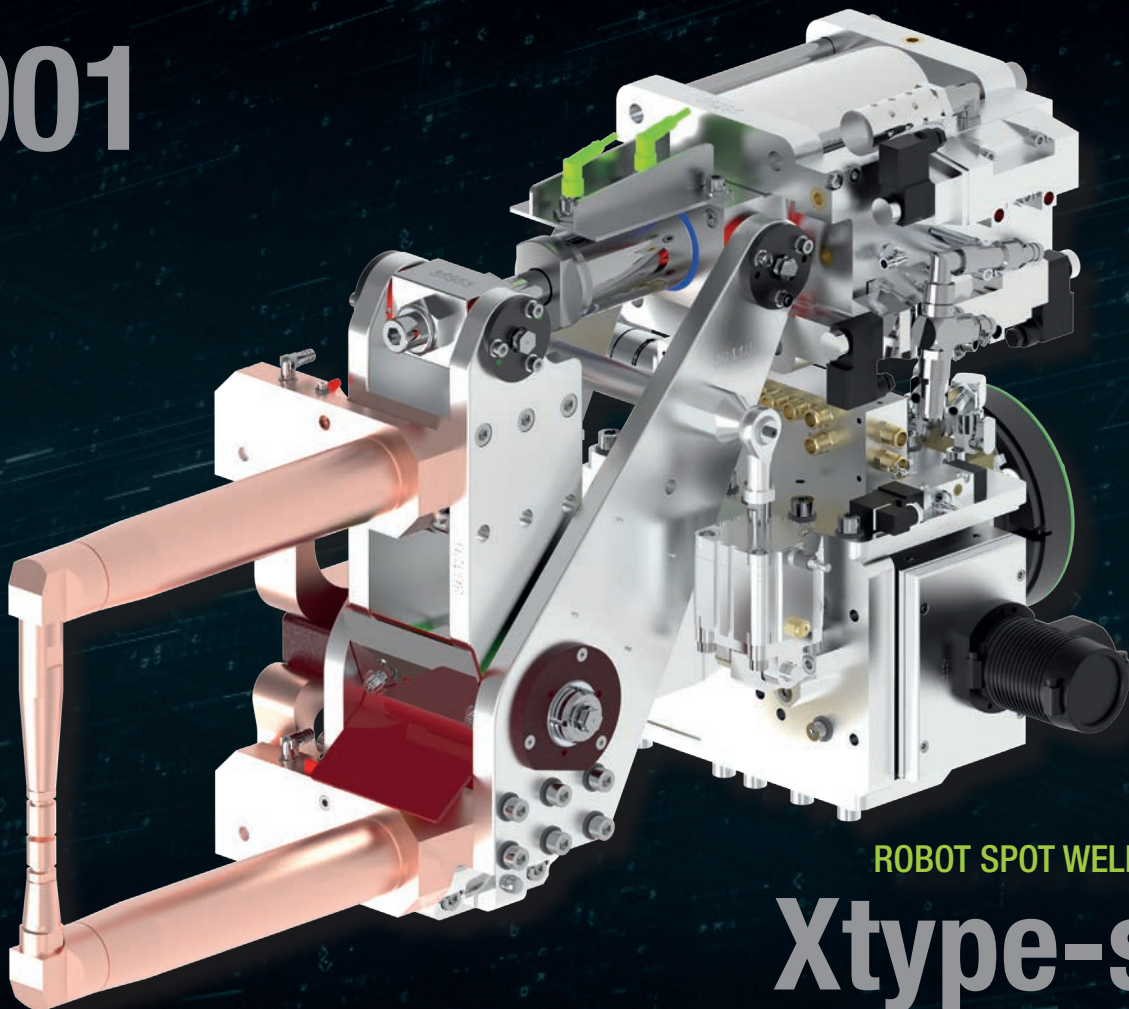
diameter, mm	Ø125
--------------	------

transformer

Type	MFDC 56 kVA [39965]	MFDC 90 kVA [40090]
weight, kg	19,7	27,3
water cooling, l/min	6	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer.

2901



ROBOT SPOT WELDING GUN

Xtype-std

PNEUMATIC ACTUATOR TECNA

electrical data

Type	*MFDC 56 kVA [39965]	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	56	90
No load secondary voltage, V	8,4	9,9
Thermal current, kA	4,44	6,1
Short circuit current, kA	25	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes [6 bar]	Ø160 mm			
	Arm code [length]		Arm code [length]	
Welding force, daN	4921 [300 mm]	819	4925 [500 mm]	545
	4922 [350 mm]	728	4926 [600 mm]	467
	4923 [400 mm]	655	4927 [700 mm]	409
	4924 [450 mm]	595		
**Gun mass, kg (Arm length 300 mm)	79		86	
Gun water cooling, l/min	15		15	

cylinder

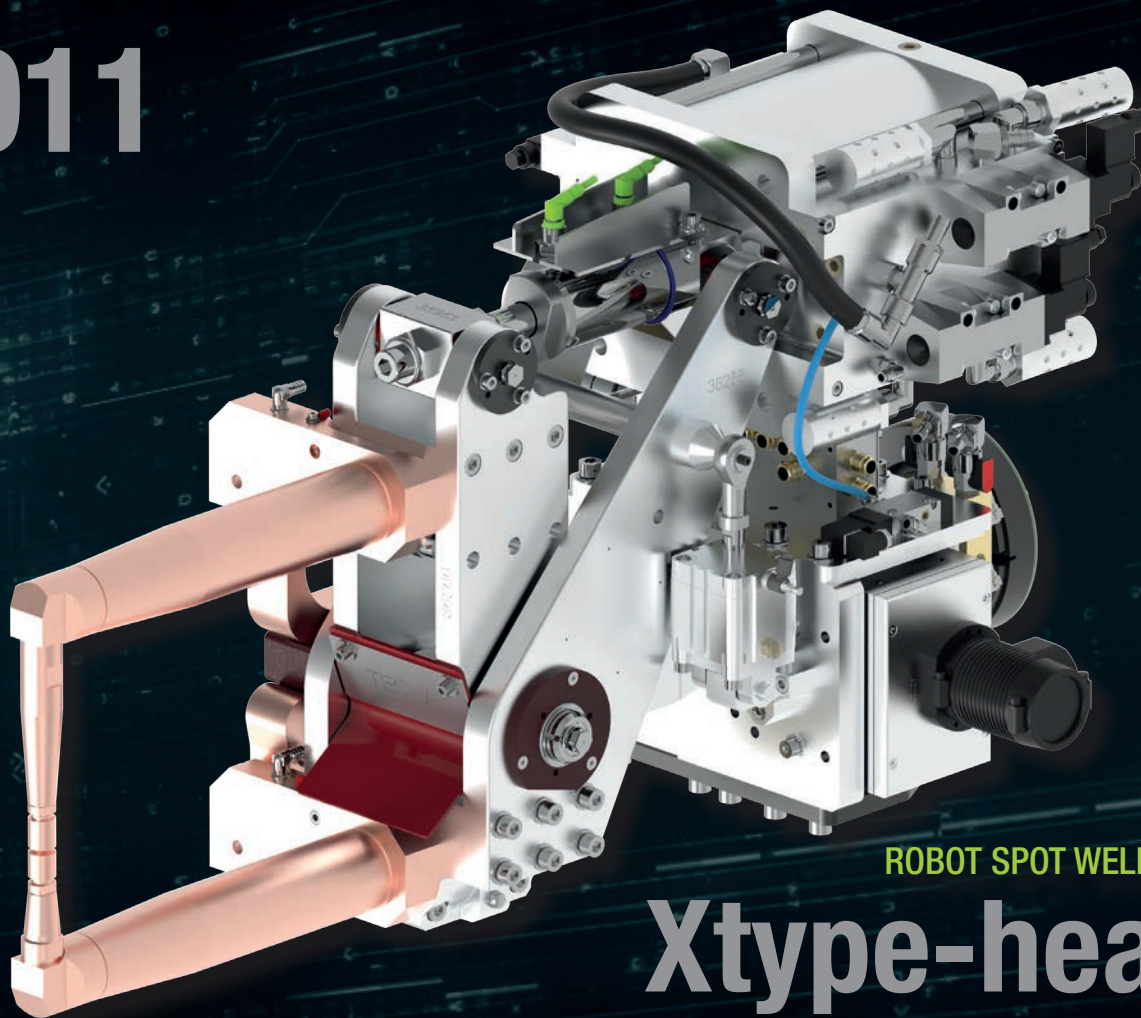
diameter, mm	Ø160
--------------	------

transformer

Type	MFDC 56 kVA [39965]	MFDC 90 kVA [40090]
weight, kg	19,7	27,3
water cooling, l/min	6	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer.

2911



ROBOT SPOT WELDING GUN

Xtype-heavy

PNEUMATIC ACTUATOR TECNA

electrical data

Type	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	90
No load secondary voltage, V	9,9
Thermal current, kA	6,1
Short circuit current, kA	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes [6 bar]		Ø200 mm		
Welding force, daN	Arm code [length]		Arm code [length]	
	4911 [300 mm]	1280	4915 [500 mm]	852
	4912 [350 mm]	1137	4916 [600 mm]	730
	4913 [400 mm]	1023	4917 [700 mm]	638
	4914 [450 mm]	930		
**Gun mass, kg (Arm length 300 mm)		89		
Gun water cooling, l/min		15		

cylinder

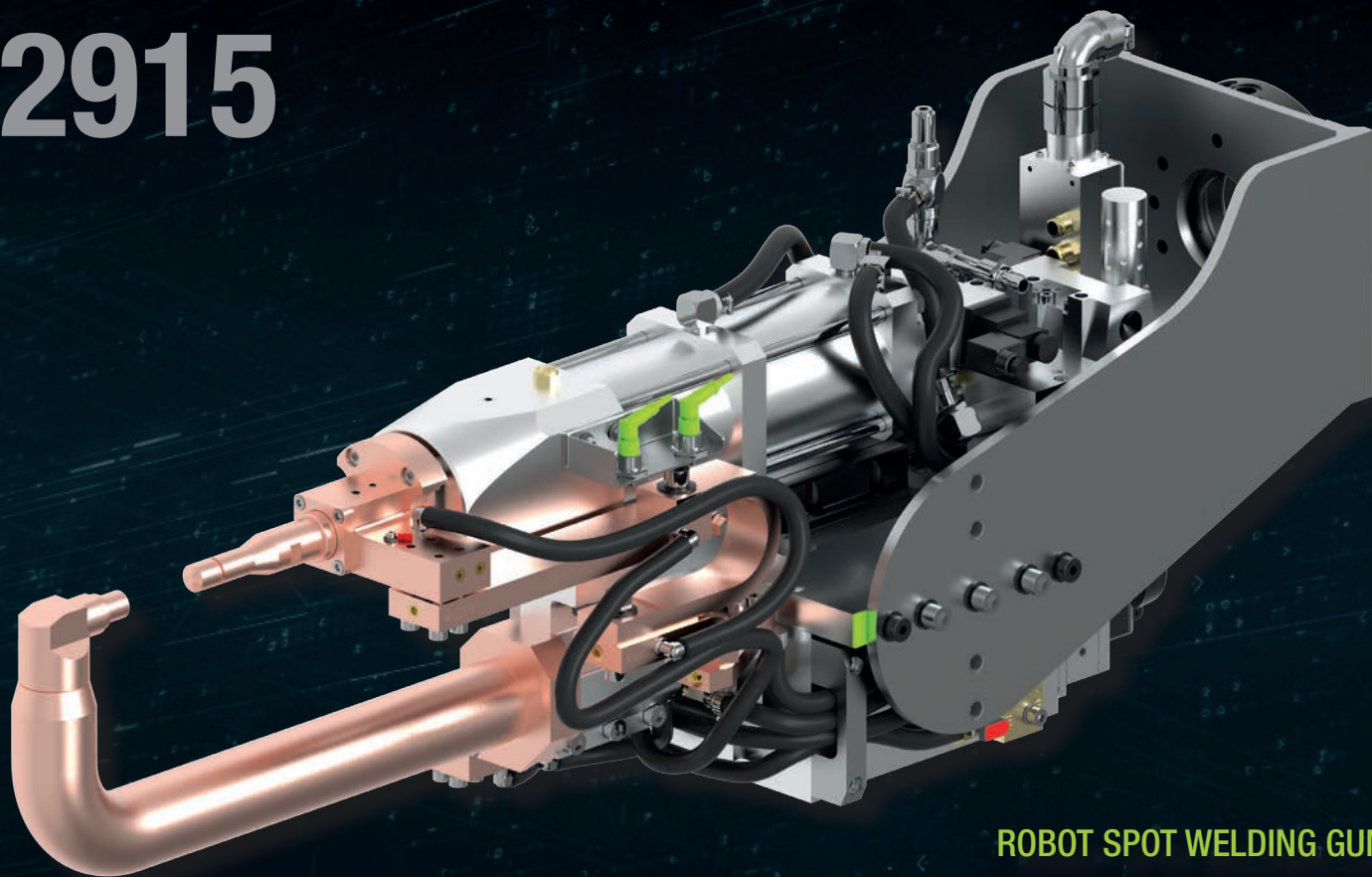
diameter, mm	Ø200
--------------	------

transformer

Type	MFDC 90 kVA [40090]
weight, kg	27,3
water cooling, l/min	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer.

2915



ROBOT SPOT WELDING GUN

Ctype-std

PNEUMATIC ACTUATOR TECNA

electrical data

Type	*MFDC 56 kVA [39965]	*MFDC 90 kVA [40090]
Nominal power at 50%, kVA	56	90
No load secondary voltage, V	8,4	9,9
Thermal current, kA	4,44	6,1
Short circuit current, kA	25	32

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data

Actuator sizes [6 bar]	Ø100 mm	
Welding force, daN	Arm code	
	l1573	840
**Gun mass, kg	98	
Gun water cooling, l/min	15	

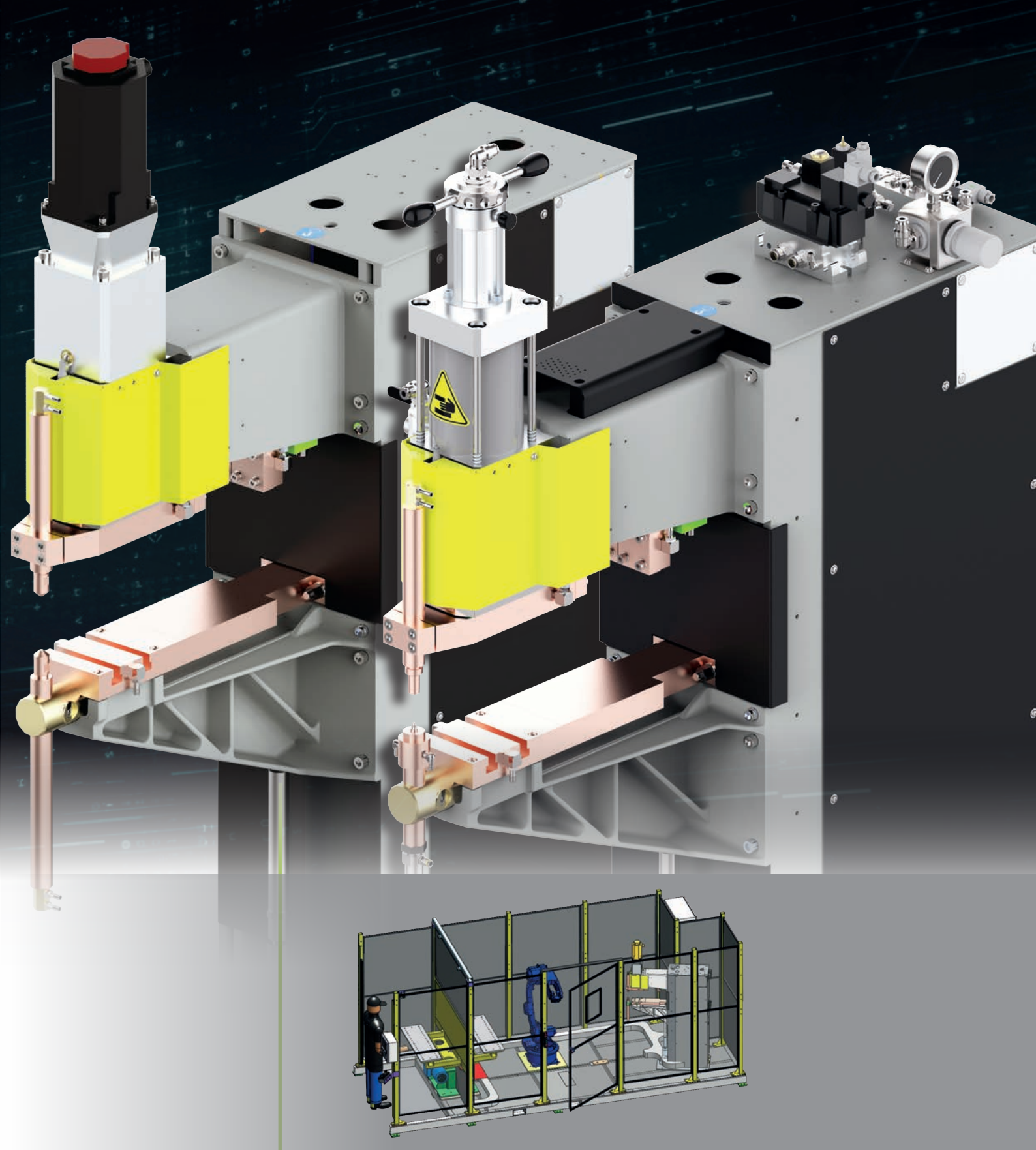
cylinder

diameter, mm	Ø100
--------------	------

transformer

Type	MFDC 56 kVA [39965]	MFDC 90 kVA [40090]
weight, kg	19,7	27,3
water cooling, l/min	6	6

** The weight of the guns is with 300 mm arms, with arm fitting, with power transformer.



**MFDC
TECH**

**inverter
spot and projection
welding machines for automation**



INVERTER SPOT AND PROJECTION WELDING MACHINE

617X

PNEUMATIC ACTUATOR TECNA

electrical data	6171/6172/6173	6174/6175/6176	6177/6178/6179
Type	*MFDC 90 kVA [40139]	*MFDC 160 kVA [37610]	*MFDC 200 kVA [40314]
Nominal power at 50%, kVA	90	160	200
No load secondary voltage, V	9,9	12,3	10,4
Thermal current, kA	6,4	8,8	13
Short circuit current, kA	32	40	60

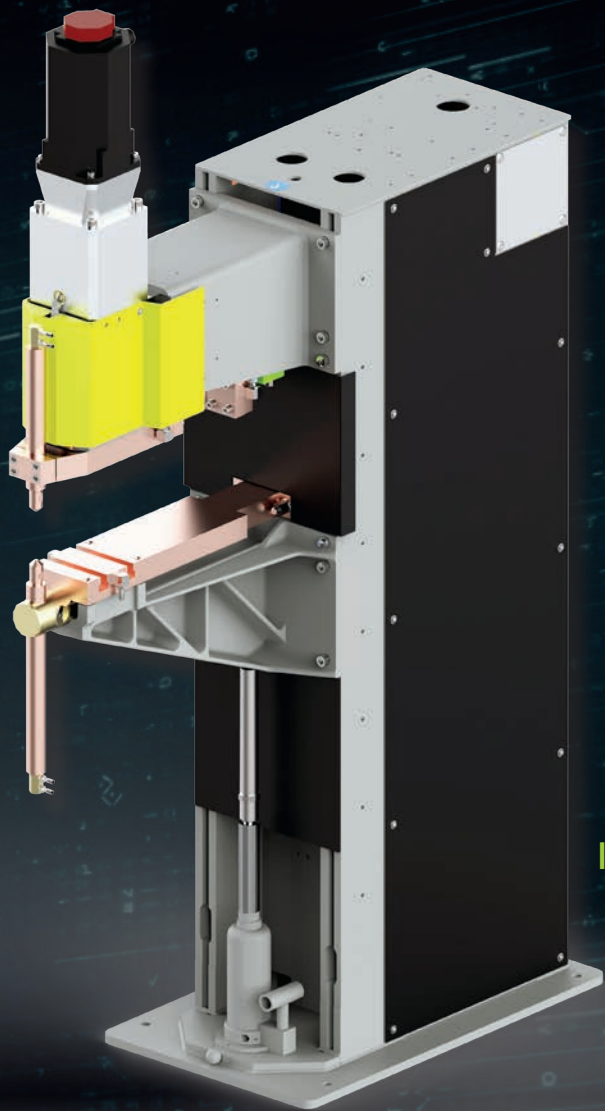
* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data						
Actuator sizes [6 bar]			Ø125 mm			
Welding force, daN		Depth spot, mm	Depth projections, mm	Force, daN		**Mass, kg
				std	opt.6135	
	6171/6174/6177	390	265	736	1242	
	6172/6175/6178	540	415	736	1242	
	6173/6176/6179	800	--	736	1242	412,00

cylinder	
diameter, mm	Ø125

transformer			
Type	MFDC 90 kVA [40139]	MFDC 160 kVA [37610]	MFDC 200 kVA [40314]
weight, kg	27,3	31,8	62,7
water cooling, l/min	6	8	12

** The weight of the machines is meant without power transformer.



INVERTER SPOT AND PROJECTION WELDING MACHINE

618X

ACTUATOR TECNA AND SERVOMOTOR OF WELD MANUFACTURER

electrical data	6181/6182/6183	6184/6185/6186	6187/6188/6189
Type	*MFDC 90 kVA [40139]	*MFDC 160 kVA [37610]	*MFDC 200 kVA [40314]
Nominal power at 50%, kVA	90	160	200
No load secondary voltage, V	9,9	12,3	10,4
Thermal current, kA	6,4	8,8	13
Short circuit current, kA	32	40	60

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.

general data					
Actuator sizes		[11Nm] BIS12-3000 B			
Welding force, daN		Depth spot, mm	Depth projections, mm	Force, daN	**Mass, kg
	6181/6184/6187	390	265	1200	363,20
	6182/6185/6188	540	415	1200	383,20
	6183/6186/6189	800	--	736	417,20

cylinder	
diameter, mm	Ø125

transformer			
Type	MFDC 90 kVA [40139]	MFDC 160 kVA [37610]	MFDC 200 kVA [40314]
weight, kg	27,3	31,8	62,7
water cooling, l/min	6	8	12

** The weight of the machines is meant without power transformer.



RESISTANCE WELDING INVERTER POWER SOURCE

1861W-1862W

POWERED BY SENSUM



	1861W	1862W
Transformer	MFDC 56 kVA	MFDC 90 kVA
I_{max}	25000 A	32000 A
Mains supply, V (3 phases)	400	400
Input frequency, Hz	50	50
MAX primary current, A	500	700
Cooling type	WATER COOLING (heavy duty)	

Dimensions H/W/D, cm	600 x 447 x 760	600 x 447 x 760
Weight, kg	70	75

transformer				
Type	*MFDC 56 kVA [40138]	*MFDC 90 kVA [40139]	*MFDC 47 kVA [4000016240]	*MFDC 90 kVA [4000013409]
Nominal power at 50%, kVA	56	90	47	90
No load secondary voltage, V	9,1	9,9	6,1	9,1
Thermal current, kA	6,0	6,4	5	6
Short circuit current, kA	25	32	20	30
weight, kg	18	27,3	15,4	18
water cooling, l/min	4	6	4	4

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.



RESISTANCE WELDING INVERTER POWER SOURCE FULL OPTIONAL

1865W-1866W

POWERED BY SENSUM

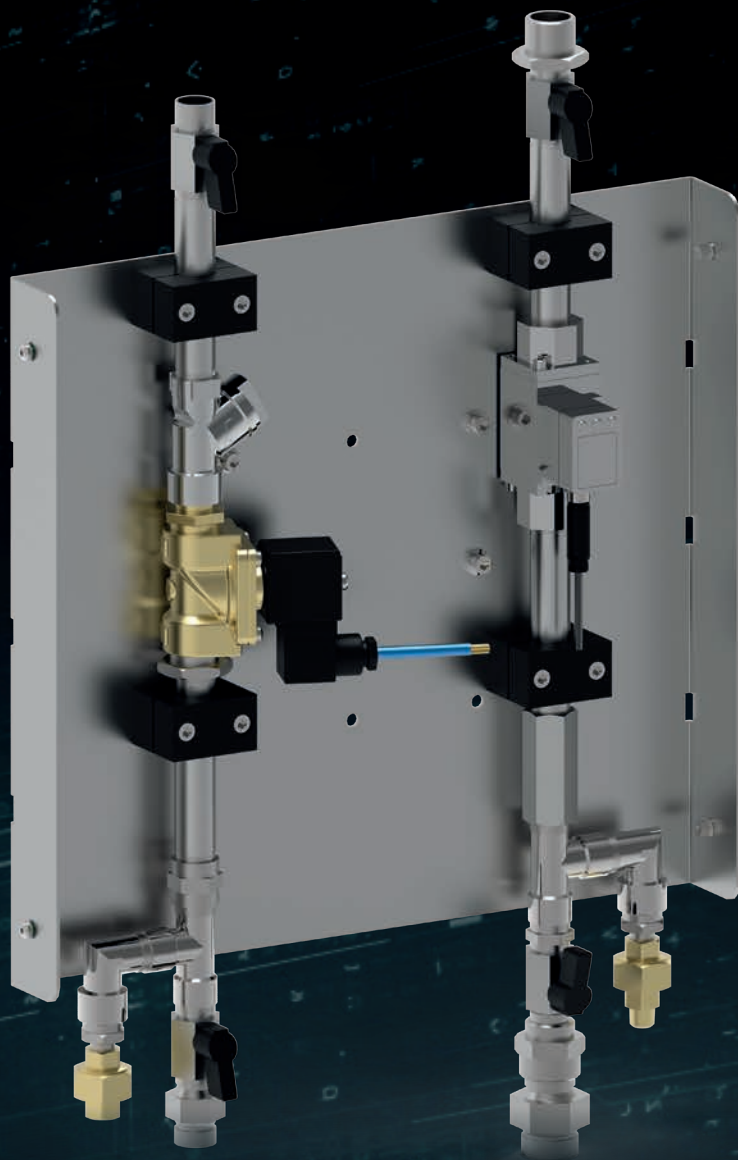


	1865W	1866W
Transformer	MFDC 90 kVA	MFDC 160 kVA
I_{max}	32000 A	42000 A
Mains supply, V (3 phases)	400	400
Input frequency, Hz	50	50
MAX primary current, A	700	1000
Cooling type	WATER COOLING (heavy duty)	

Dimensions H/W/D, cm	600 x 530 x 1350	600 x 530 x 1350
Weight, kg	200	215,6

transformer			
Type	*MFDC 90 kVA [40139]	*MFDC 90 kVA [4000013410]	*MFDC 160 kVA [37610]
Nominal power at 50%, kVA	90	90	160
No load secondary voltage, V	9,9	9,1	12,3
Thermal current, kA	6,4	6,75	8,8
Short circuit current, kA	32	32	40
weight, kg	27,3	19	31,8
water cooling, l/min	6	4	8

* Transformers available with 500 V / 1000 Hz or alternatively 600 V / 1000 Hz power supply.



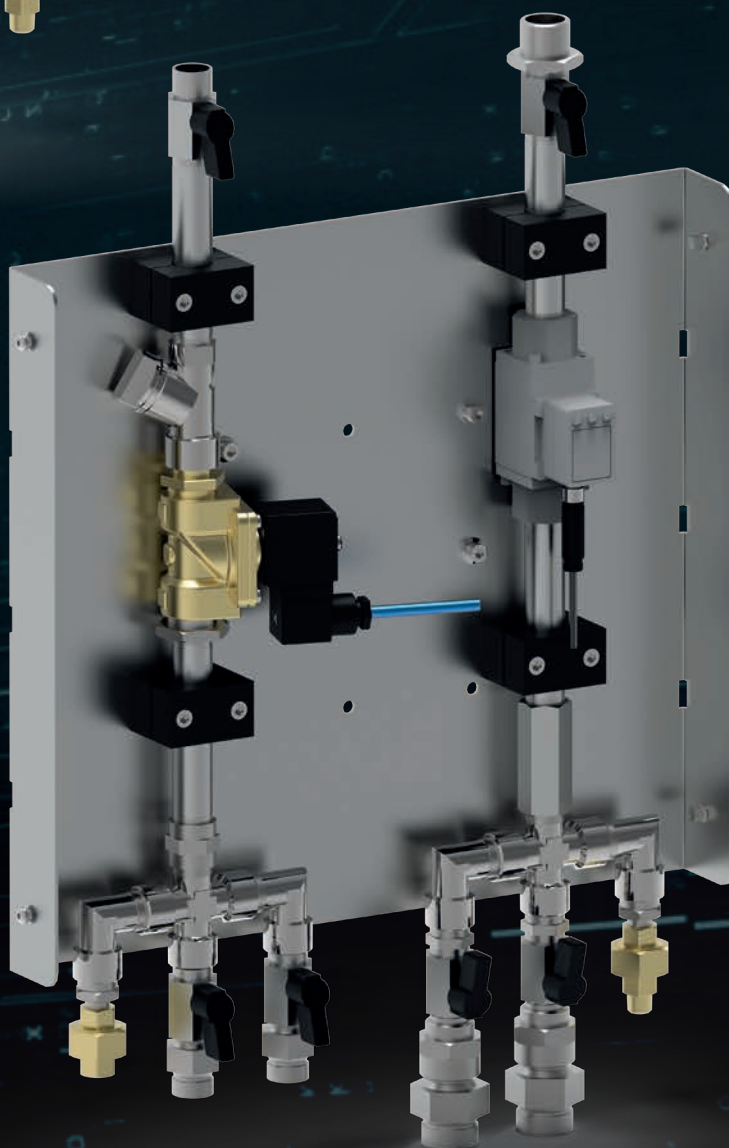
WATER GROUP FOR ROBOT GUN
72900000142

STEEL GUN

WATER GROUP FOR ROBOT GUN

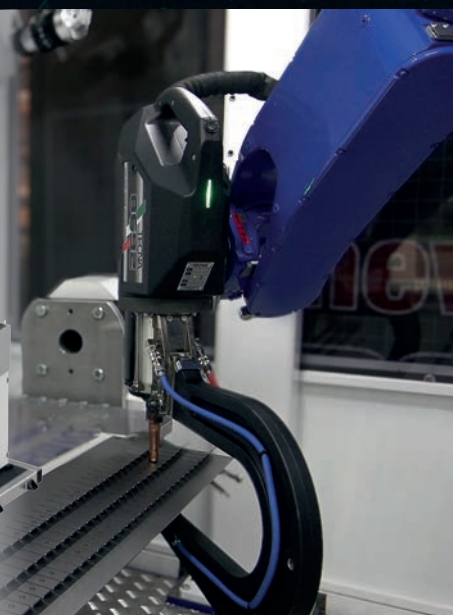
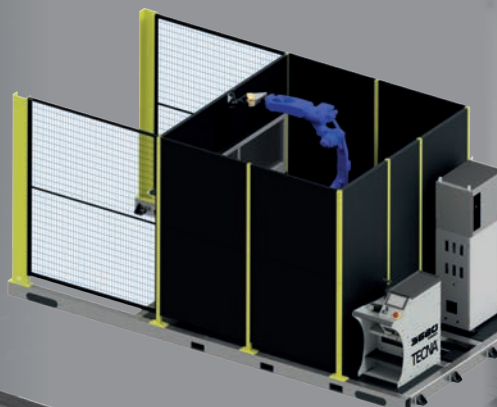
72900000135

ALUMINIUM GUN

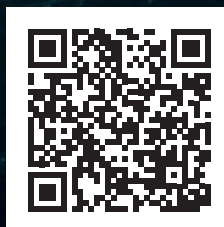




3680SI
end line



QR code to this site



INVERTER END LINE

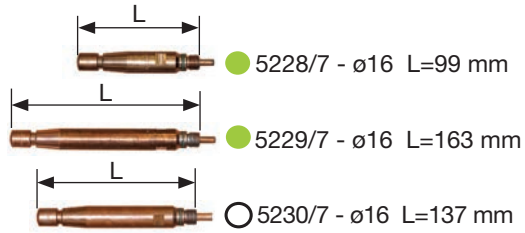
3680SI

TECNA WELD MANUFACTURER

technical features	3680SI 8692	3680SI 8692
Supply voltage	400 VACx3~50 Hz	220 VACx3~50/60 Hz
ins fuses, A	32 - delayed	50 - delayed
Welding current, kA	15.5	
Content of the water tank, l	25	
Dimensions height/width/depth, cm	233 / 72 / 98	
Total weight without accessories, kg	165	
"C" gun	8692	8692
Cables length, m	4	6
Nominal power 50% ED, kVA	22	22
Maximum welding power, kVA	129	129
Thermal current 100%, kA	2,05	2,5
No load secondary voltage, V	7,7	7,7
Max. electrode force [at 8 bar], daN	580	580
Recognition sensor	S	S
Gun weight without arms, kg	10,8	10,8

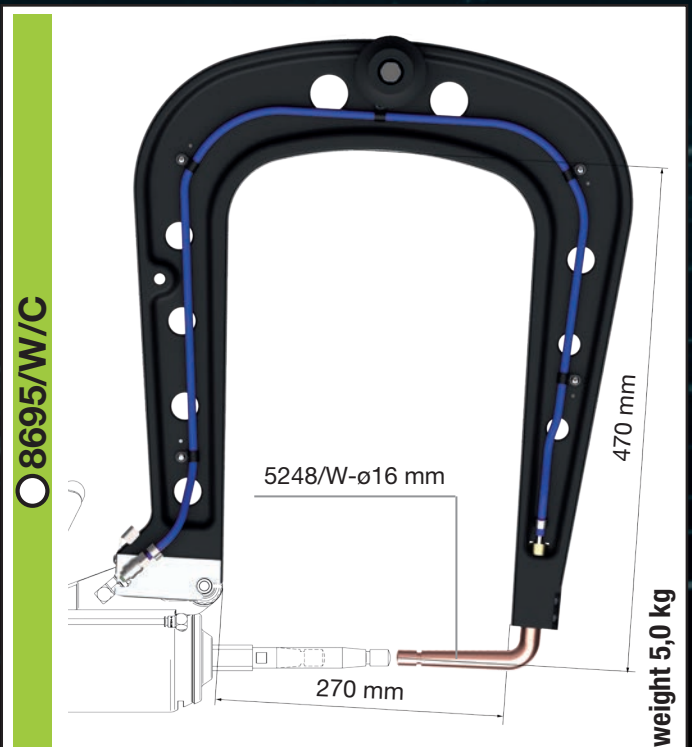
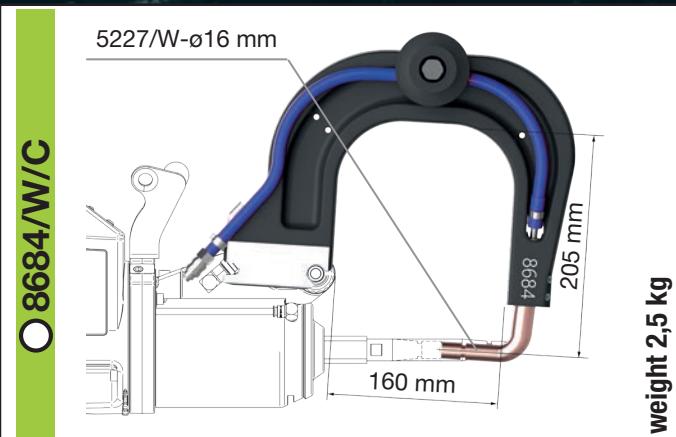
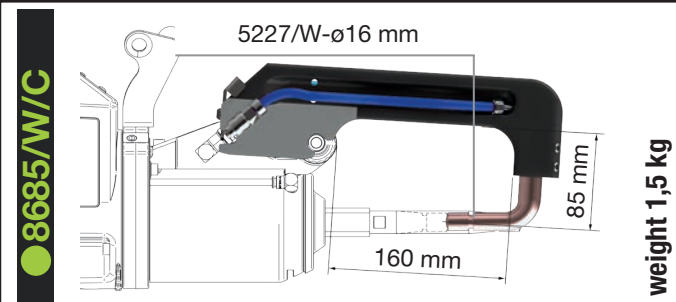
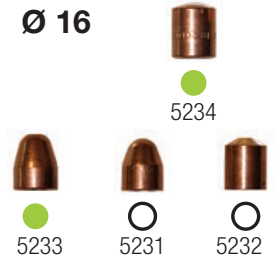
ARMS/ELECTRODES

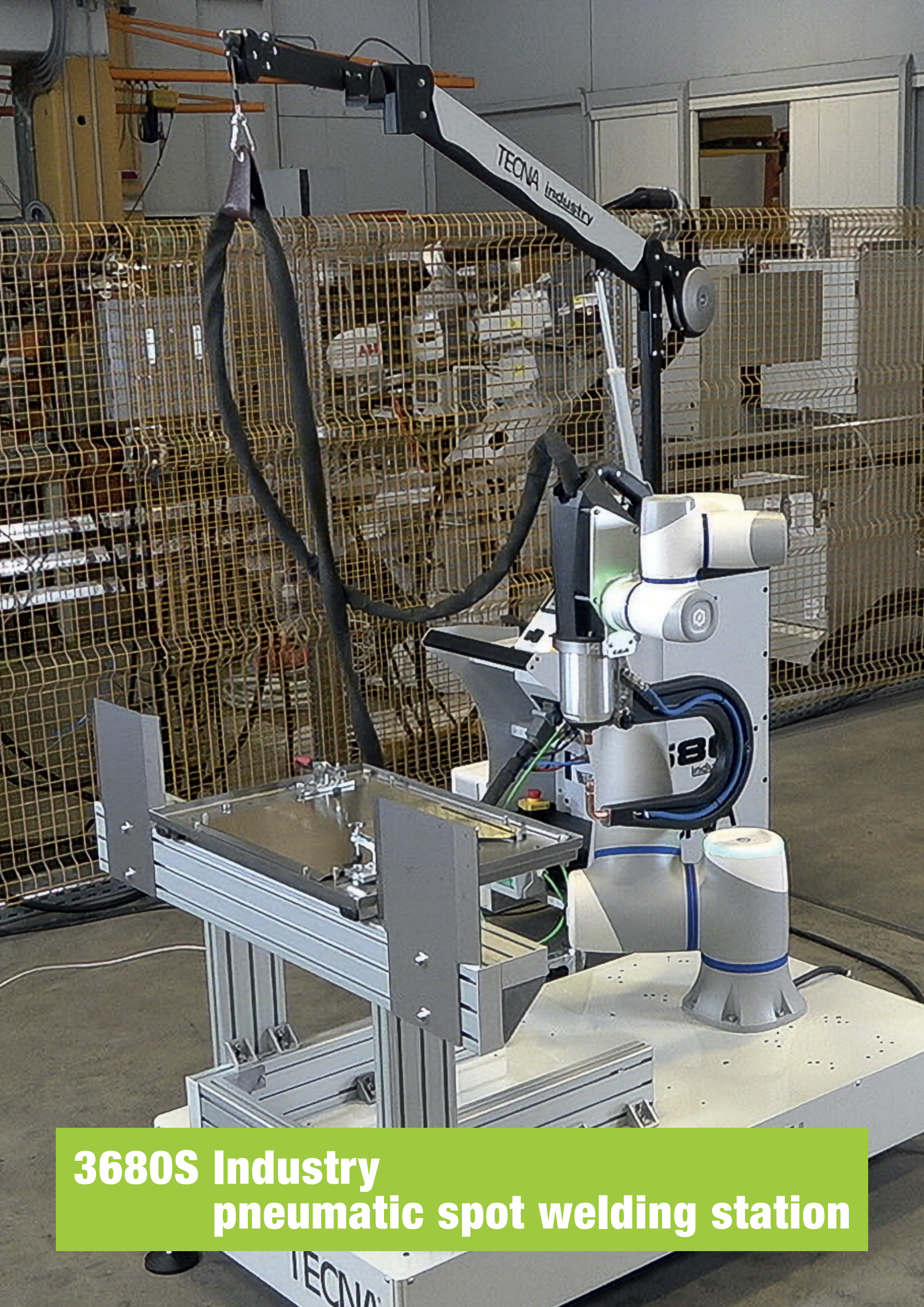
8692



● STANDARD ○ ON DEMAND

$\varnothing 16$

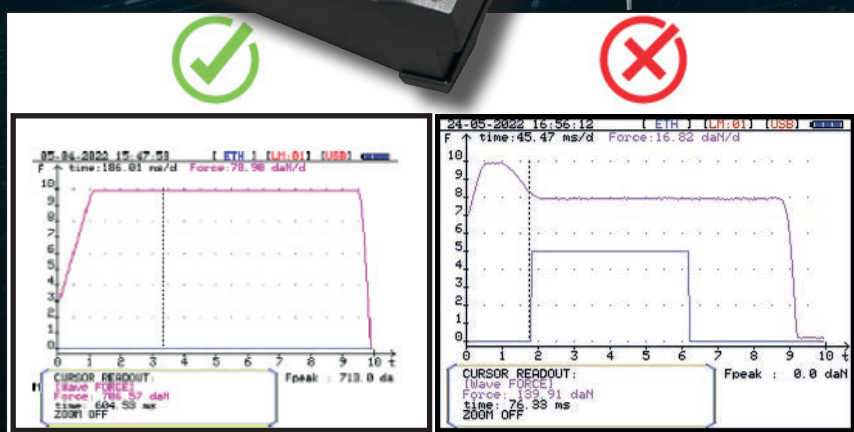
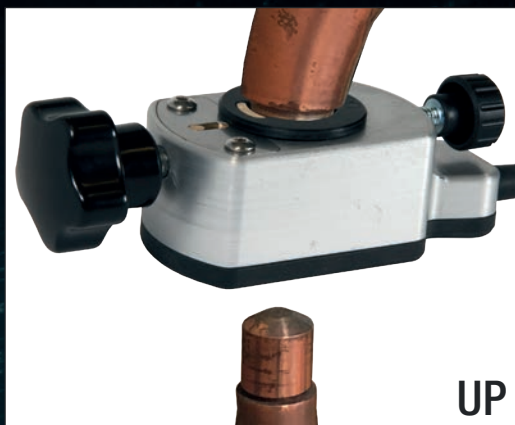




3680S Industry
pneumatic spot welding station



**high performance
instrument**



TE1700C - 1665A

MEASUREMENT SYSTEMS



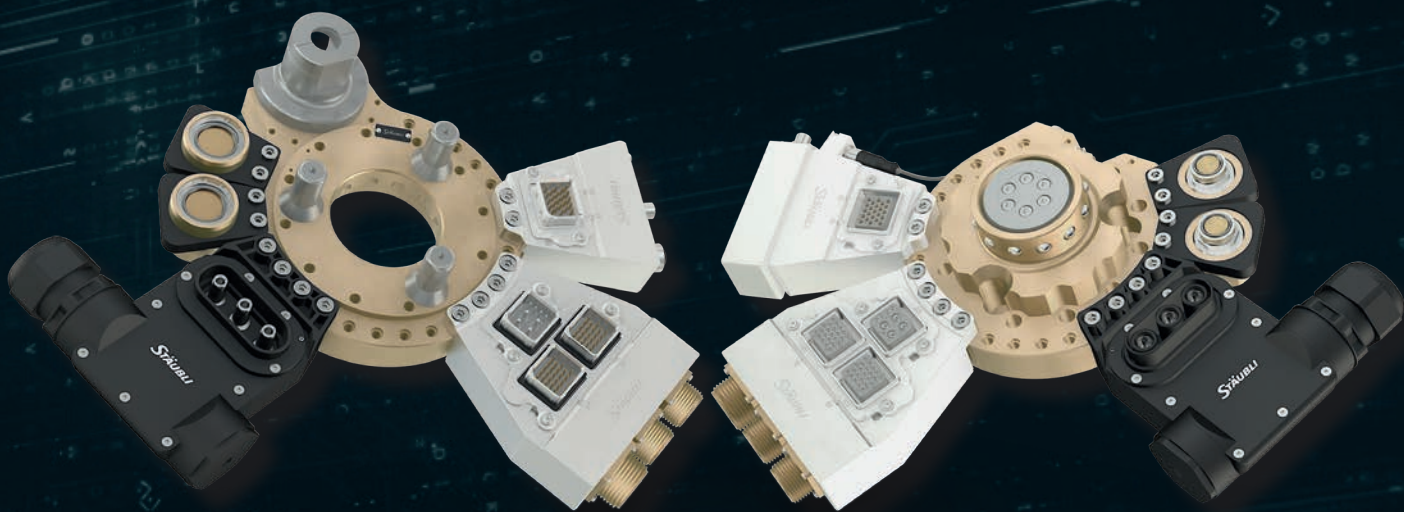
Item	7320000447
4000016209	Adapter Cap diam 22 mm
4000016208	Adapter Cap diam 20 mm
4000016207	Adapter Cap diam 19 mm
4000016210	Adapter Cap diam 18 mm
4000016206	Adapter Cap diam 16 mm
4000016205	Adapter Cap diam 13 mm
4000016211	Adapter Cap diam 12 mm



Technical Specifications 1665A	
Force Range 1665A	100 to 2000 daN (1665)
Resolution Force	0.1 daN
Technical Specifications TE1700C	
Data Output	Ethernet or Wi-fi
Power supply	110-240 Vac. 50/60 Hz
Battery duration	Batterie ricaricabili Ni-Mh con autonomia di circa 8 ore Rechargeable Ni-Mh Batteries with a performance of about 8 hours.
Dimensions LxWxH	198x102x179
Weight	1.3 kg

THIRD PART

Solutions by **STÄUBLI**



For flexible applications
STÄUBLI ROBOTIC TOOL CHANGING SYSTEMS

MPS631

perfect tailored for welding application

MPS 631

max. static moment* Mx/My	5000 Nm
max. static moment* Mz	5000 Nm
max. dynamic moment** Mx/My	17500 Nm
max. dynamic moment** Mz	17500 Nm
max. payload	630 kg
Robot flange Pitch circle diameter	PCD 160***
Height (coupled)	100 mm
Repeatability	+/- 0,01 mm

* CONTROLLED STOP / ** EMERGENCY STOP / ***ALSO AVAILABLE WITH PCD 200

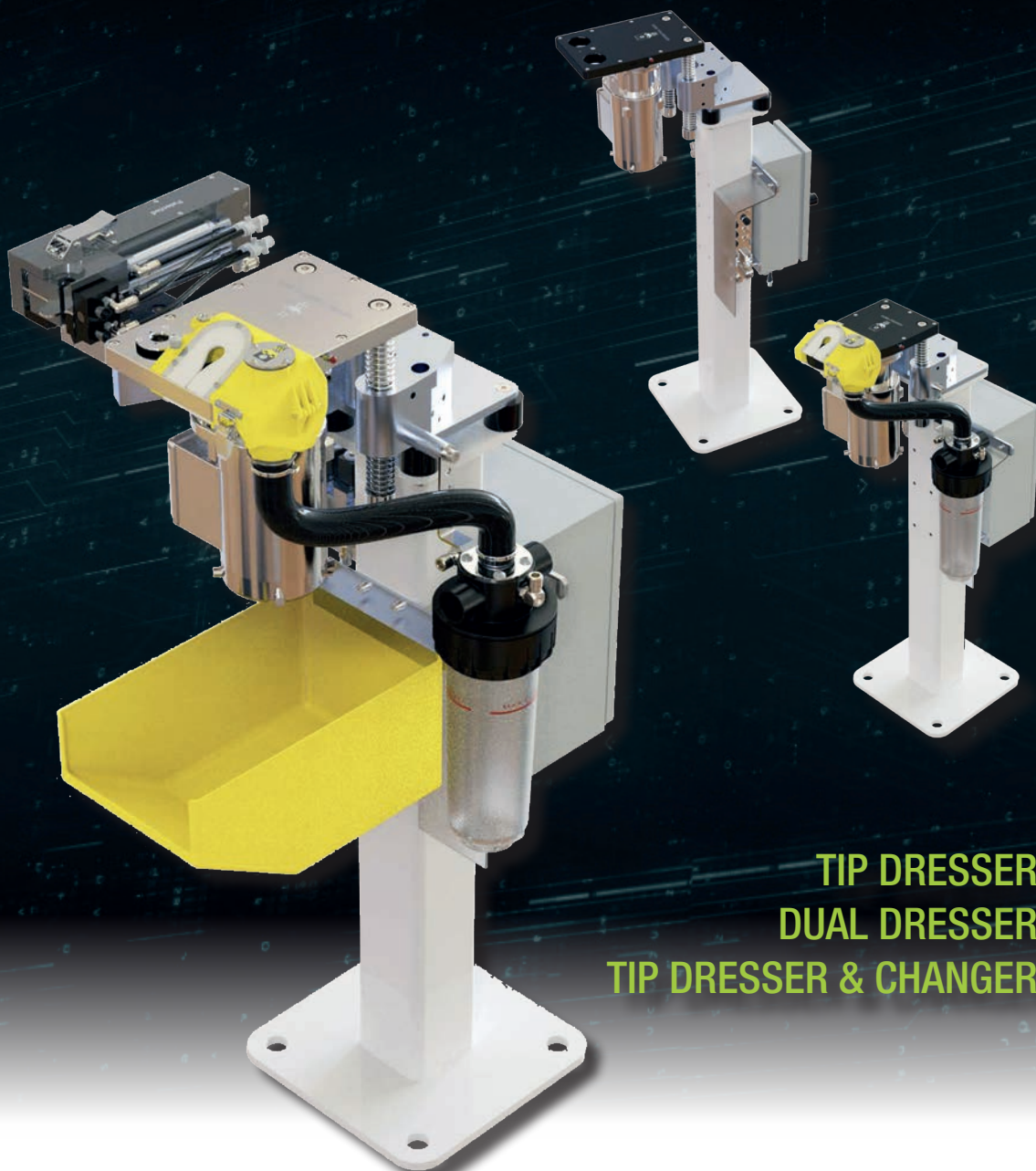
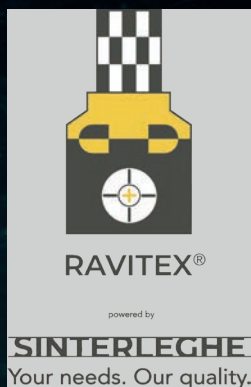
Your benefits:

- ✓ Robust and easy to use **Safety System** complying Performance Level d / Cat.3
- ✓ Long lasting **Electric Connectors** with MultiLam® technology
- ✓ Wide range of **Modules** with high flexible configuration principle
- ✓ Tolerances adaptable **Tool Stand** with floatable system

QR code to this site



The illustration shown in this page is just a representation of configuration and can vary especially with regard to the design, size and details of the product.



TIP DRESSER
DUAL DRESSER
TIP DRESSER & CHANGER

Specifications	CEE South America - Africa - India	China	USA
Power supply	Y 400 - 415 V Y 480 - 480 V	Y 400 VAC	Y 400-415 V Y 460-480 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Power	0,8 kW	0,8 kW	0,8 kW
Duty Cycle	S3-7%	S1	S3-7%
Certification	CE	CCC	AM-UL
Inner diameter air supply pneumatic tube	suggested Ø 10 mm minimum Ø 6 mm	suggested Ø 10 mm minimum Ø 6 mm	suggested Ø 10 mm minimum Ø 6 mm
IP protection level	55-65	55-65	55-65

BIDIRECTIONAL REALISING SYSTEM FOR ELECTRODE ALUMINIUM AND STEEL SHEET

Patents: EU:EP 3227046 CHINA: CN 107206537 USA: US 10.737.350 B2 JAPAN: J6564038 BRASIL: PI 0811814 KOREA- CANADA-MEXICO-INDIA: Being released

Key performances	Key benefits
Self-adaptive electrode release pair: from 30 Nm to 120 Nm	+ 30 ÷ 60 % electrode holder life
Releasing the upper and lower electrode in the same position	- 30 ÷ 50 : robot arm movements

ELECTRODE MAGAZINE FOR ELECTRODE ALUMINIUM AND STEEL SHEET

Patents EU EP 3043949 CHINA:CN 105722632B KOREA -10-2205121 – USA US 10.843.289 B2 – JAPAN- BRASIL- CANADA-MEXICO-INDIA: Being released

Key performances	Key benefits
Electrode presence sensors in the loading bay	electrode detection guarantee
Upper and lower electrode loaded at the same time	- 30 ÷ 50 : robot arm movements
Optional: up to 500 electrodes automatically powered simultaneously for 2 or 4 tip changers	Use in industry 4.0 welding guns autonomy up to 30 days



RMD COMPONENTS ITALIA
DRESS PACK
FOR EVERY TYPE OF ROBOT

QR code to this site

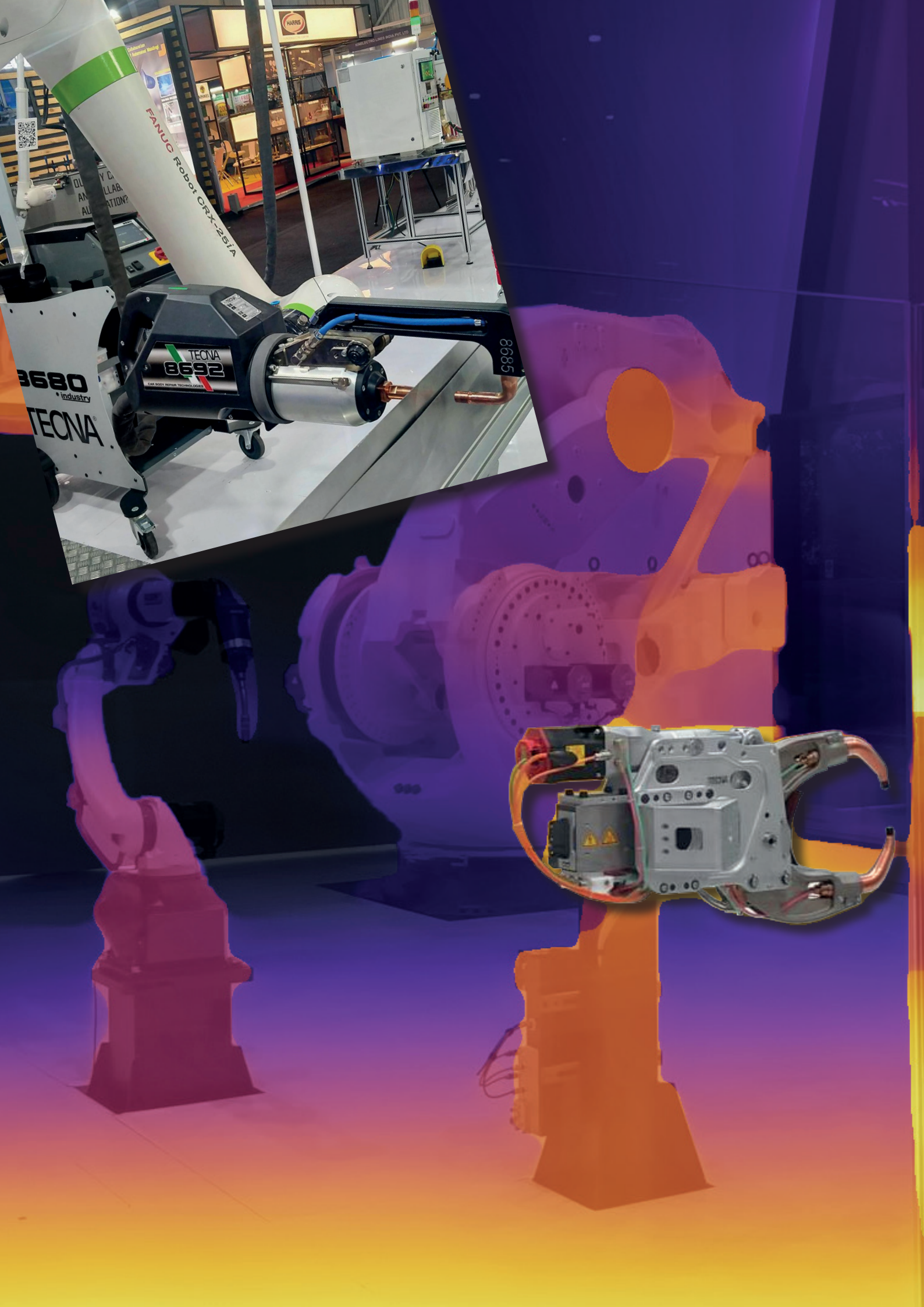


RC5-0050-00-XXX
SPS80 / SP165 / SP210

N° 3 corde 35mm²
N° 2 tubi 1/2" H₂O
N° 1 Cavo motore/cavo encoder/cavo segnali pinze

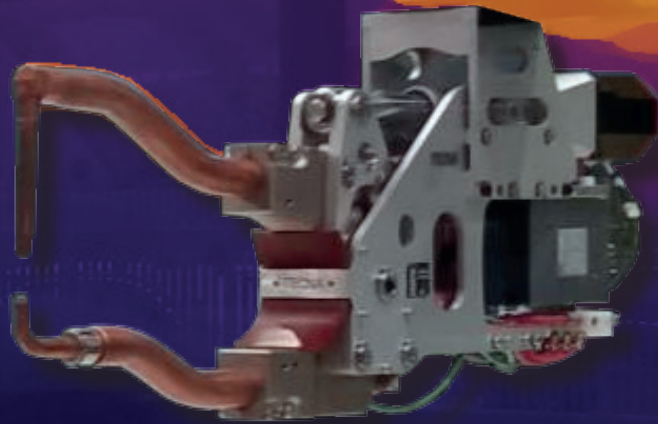
RC5-0020-00-XXX
SP210 / SP225 Alu

N° 3 corde 90mm²
N° 2 tubi 3/4" Rit.+2 tubi 1/2" Mand.
N° 1 Cavo motore/cavo encoder/cavo segnali pinze





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