Technical Information

Electrostatic charges occurring during production processes often cause severe disruptions, reducing production speed and product quality.

The series R36 ion blower nozzles versus similar products have a substantially higher ionization power and a longer range.

The ion blower nozzles and the ion blower nozzle supports are fixed installed; the ion blower pistol is designed for manual use.

Charged surfaces which attract dirt particles can be effectively discharged, keeping the surfaces free of dust before converting and finishing.

The compact design of the new ion blower nozzle and its high efficiency allow a wide variety of applications.

The benefits:

- high degree of discharging efficiency
- compact design
- small dimensions
- easy installation
- flow-optimized air nozzle
- variable air supply

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Ion Blower Nozzle R36
Ion Blower Pistol PR36
Ion Blower Nozzle Support LR36

TI-en-2043-2004

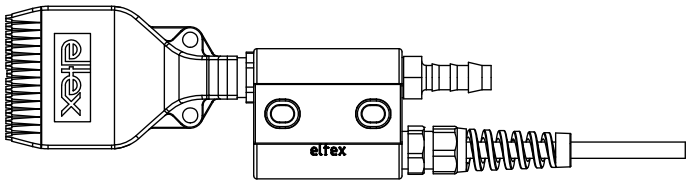
electrostatic innovations

Variants

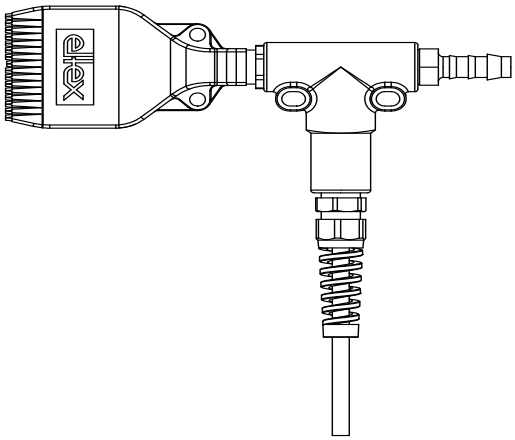
R36 ion blower nozzle

- Fishtail nozzle: R36/_F

axial design



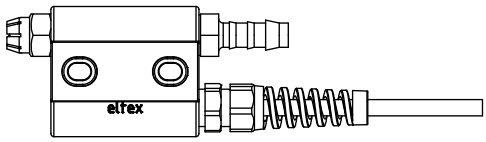
radial design



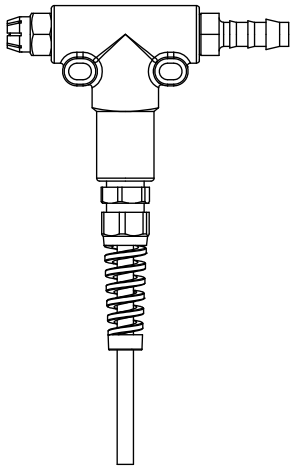
Z-116954y_1+2

- Circular jet nozzle: R36/_K

axial design



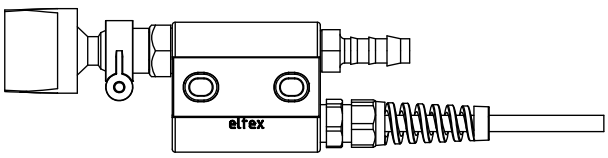
radial design



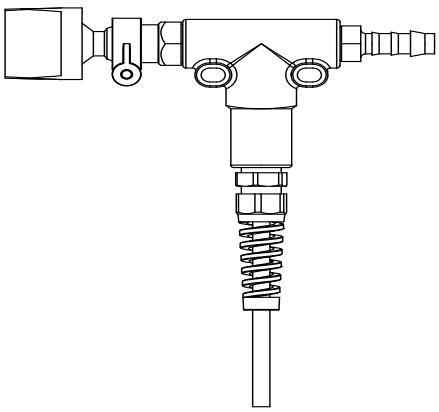
Z-116954y_4+3

- Compact fishtail nozzle: R36/_W

axial design



radial design



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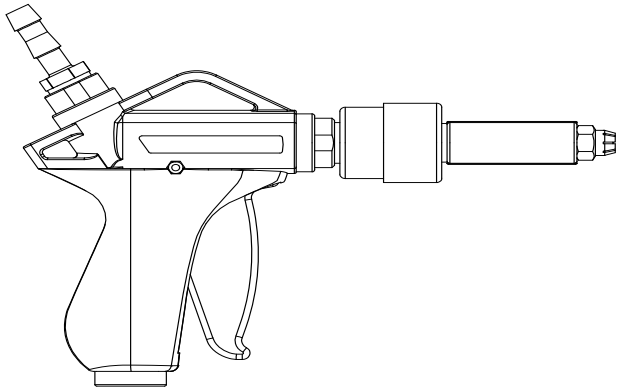
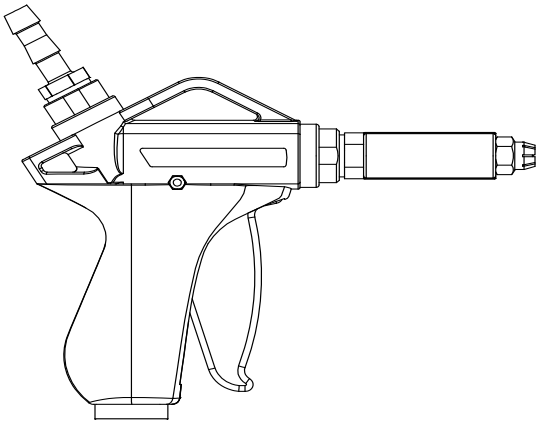
PR36 ion blower pistol

Top air connection

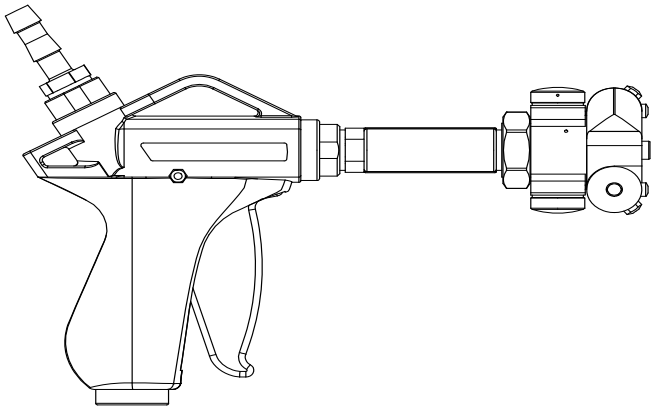
Circular jet nozzle with filter: PR36/GK



Circular jet nozzle without filter: PR36/OK

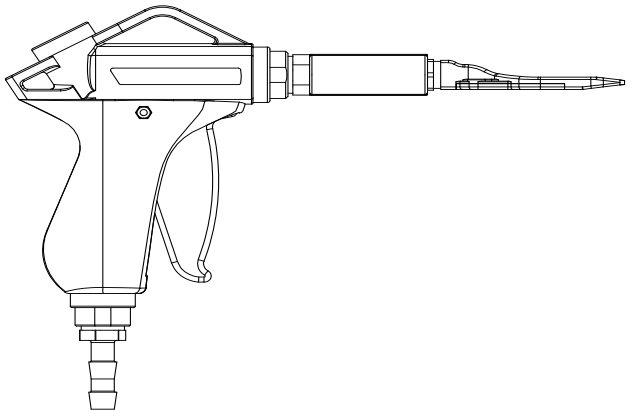


Rotating nozzle: PR36/OC



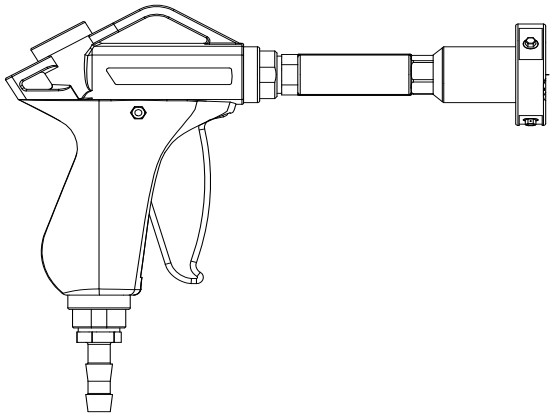
Bottom air connection

Fishtail nozzle without filter: PR36/NF



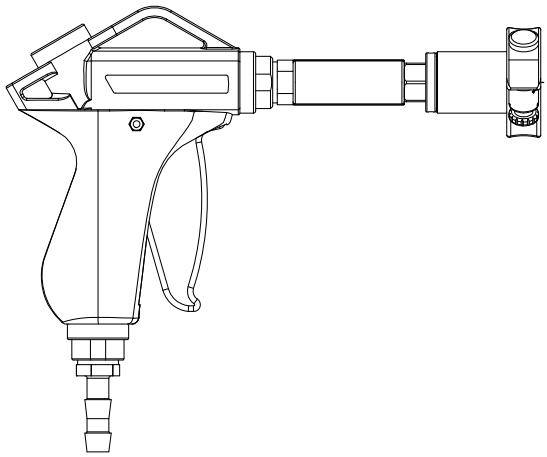
Z-116954y_7+8

Rotating nozzle: easyCLEAN PR36/NE



Z-116954y_9+10

Rotating nozzle: PR36/NV

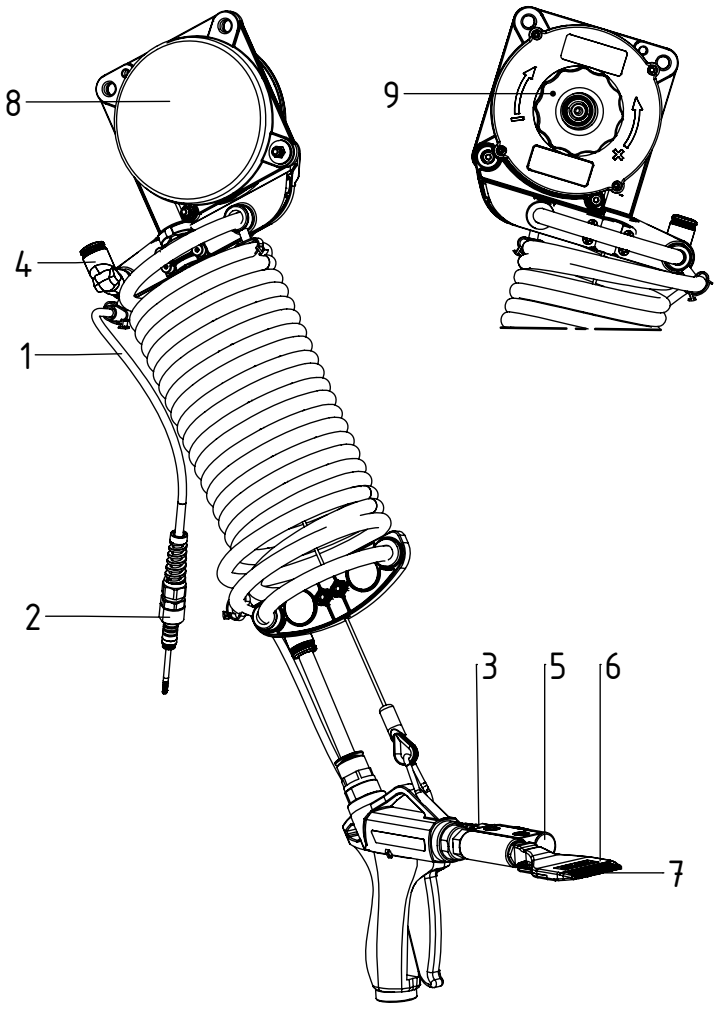


Z-116954y_11 + Z-116954ay_13

The grease filter serves to eliminate grease and fat particles from the blower pistol. Cleaned apparatuses air must be used as blowing air.

Ion blower nozzle R36E
Combination of bar body, nozzle and permanently connected high voltage cable

Ion blower nozzle PR36 with balancer and duo spiral tube
with air supply and cable routing R36



1 High voltage cable
2 Plug X
3 Cable gland (non-detachable)
4 Air connection
5 Bar element
6 Blower nozzle
7 Emission tip
8 Balancer
9 Adjusting wheel of the balancer

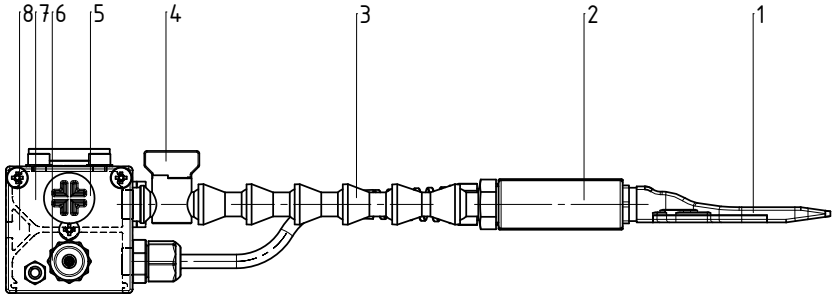
Ion Blower Nozzle Support LR36

Flexible ball-joint hoses allow the accurate alignment of individual nozzles.

Each single nozzle is fitted with an air valve to set the desired flow profile. The air supply may be connected to an air supply available.

The standard type of the ion blower nozzle support is employed with the R36/AF fishtail nozzle. After consultations with Eltex, other blower nozzles may be integrated.

1 fishtail nozzle type F
2 base body R36
3 ball-joint hose
4 air valve
5 compressed air connection
D12 resp. G 3/8" blanking plug
6 high voltage connector
7 air distributor
8 fixing slot for sliding nuts M5



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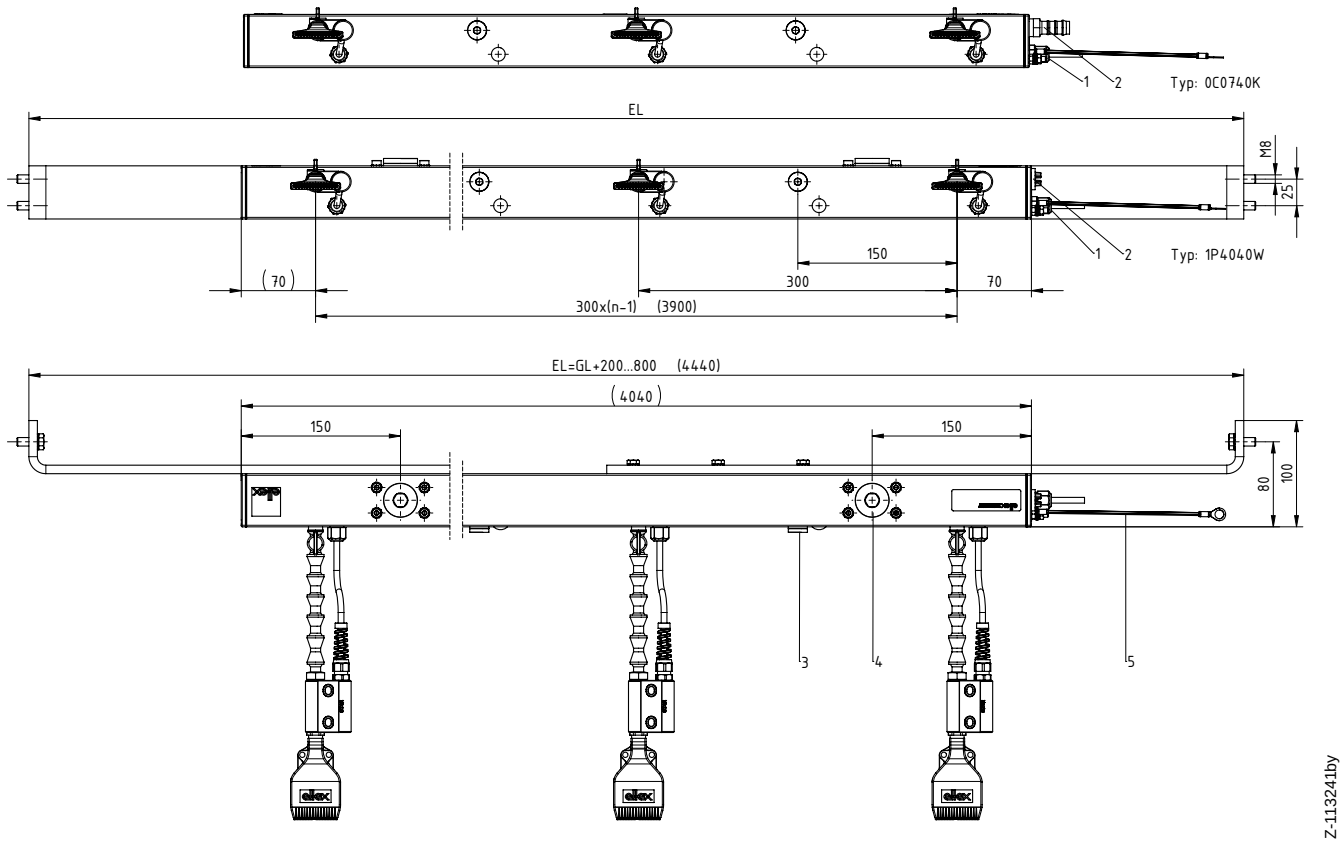
nozzles	total length	installation length	air connection		variant
n = pieces	GL in mm	EL in mm	frontal	rear	
1 nozzle	140 mm	-	1	x	A0140
2 nozzles	440 mm	1200 - 1400	1	1	B0440
3 nozzles	740 mm	1200 - 1540	1	1	C0740
4 nozzles	1040 mm	1240 - 1840	1	1	D1040
5 nozzles	1340 mm	1540 - 2140	1	1	E1340
6 nozzles	1640 mm	1840 - 2440	1	1	F1640
7 nozzles	1940 mm	2140 - 2740	1	1	G1940
8 nozzles	2240 mm	2440 - 3040	1	1	H2240
9 nozzles	2540 mm	2740 - 3340	x	1	I2540
10 nozzles	2840 mm	3040 - 3640	x	2	K2840
11 nozzles	3140 mm	3340 - 3940	x	2	L3140
12 nozzles	3440 mm	3640 - 4240	x	2	M3440
13 nozzles	3740 mm	3940 - 4540	x	3	N3740
14 nozzles	4040 mm	4240 - 4840	x	3	P4040
15 nozzles	4340 mm	4540 - 5140	x	3	Q4340

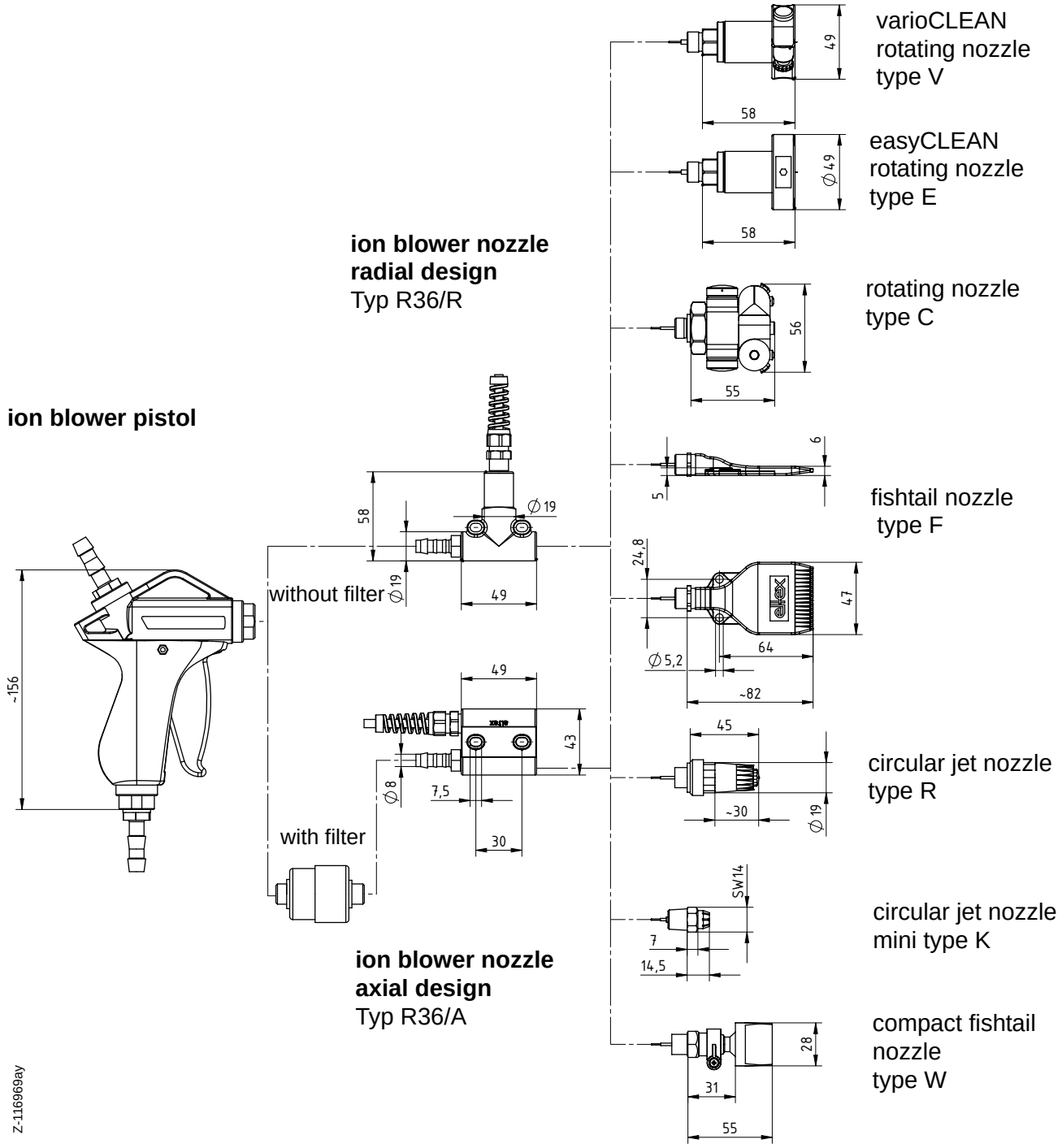
Dimensions LR36



EL = installation length (GL + 200 ... 800)
GL = total length of the carrier section
n = number of nozzles (standard up to n = 15)

1 high voltage connector
2 compressed air connection: DN 12 resp. G 3/8" blanking plug
3 blanking plug: G 1/4"
4 compressed air connection: G 3/4" from 9 nozzles (optional from 6 nozzles)
5 grounding cable

Dimensions ion blower nozzles and ion blower pistols



The figures are showing the available design. After consultations with Eltex is the integration of commercial plastic blower nozzles possible.

as shown on
appliance marking:

Technical specifications

Operating voltage	5 resp. 6 kV, 50/60 Hz
High voltage supply	via Eltex power supplies, operating voltage max. 6 kV AC
Ambient operating temperature	0...+80°C (+32...+176°F) with blown air; blown air temperature max. 30°C 0...+60°C (+32...+140°F) without compressed air
Ambient humidity	max. 70%, no dewing permitted
Bar element	plastic (PA 6.6 30 % GF)
Emission tip	tungsten, current-limited and low capacitance
Contact protection	contact protected according to EN 61140
Profile	aluminium anodised
Assembly	R36: with attachment lugs of the bar element LR36: mounting brackets (on demand) The groove in the nozzle carrier is designed to hold the sliding nuts. These are used to mount user-defined the blower nozzle support.
High voltage connection	connection to Eltex high voltage cable, type KE (specify lenght) R36: shielded, prefabricated, exchangeable R36E / PR36 / LR36: additionally glued in, not exchangeable
Air connection	R36: DN 8 mm hose; PR36: DN 10 mm hose / G 1/4" LR36: DN 12 mm hose resp. G 3/8" frontal, for greater lengths G 3/4" on the back, please see the list page 5
Dimensions	see figures
Weight	R36/_F: approx. 60 g, PR36/_F: approx. 240 g, PR36/_C: approx. 410 g, without hv cable LR36: approx. 2 kg/m
Air pressure	max. 6 x 10^5 Pa, deviating air pressures, see table "air consumption"
UL-Approval	File No. E227156 (as shown on appliance marking)

Air consumption [Nm³/h] Air pressure [10^5 Pa]	**Typical values** **0.5**	**1.0**	**1.5**	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**	**4.5**	**5.0**	**5.5**	**6.0**
(P)R36/_F, (P)R36/_R	3	7	9	12	15	17	20	23	26	29	32	34
(P)R36/_K	1.7	3.4	5.1	60	6.8	8.5	9.4	11.0	12.7	13.6	15.3	17
(P)R36/_W	4	8										
(P)R36/_E min. 4 x 10^5 Pa, max. 6 x 10^5 Pa									11.7	13.0	14.1	15.2*
(P)R36/_V min. 2.5 x 10^5 Pa, max. 6 x 10^5 Pa												13.4**
(P)R36/_C Nozzle inserts Ø 1.2***												25.8*
min. 5 x 10^5 Pa 1.6												47.4*
max. 6 x 10^5 Pa 1.8												59.4*
2.0												72.6*

*** Standard

* at 6 x 10^5 Pa with 2 nozzle inserts per side
** at 6 x 10^5 Pa with 2 x 1.6 mm nozzle diameter

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