

ERGO LUX – extraction arms



Purpose

ERGO LUX extraction arms are developed for capturing the welding dusts and gases, as well as other fine dusts, directly at the emission source. Therefore, the contamination is not expanding within the room and is not being inhaled by the endangered workers. The appliance is designed for the most demanding users, appreciating its functionality and modern design.

The extraction arms are manufactured in a hanging- or standing version. It can work independently, with a single extraction fan, or in a group of local exhausts, connected to the main collecting ductwork with a central fan.

Structure

ERGO LUX extraction arms consist of following assemblies:

- swivel – integrated with a tight shut-off damper (additional equipment),
- self-braking rotary hood,
- adjustment damper,
- two pipe segments – integrated with frictional joints,
- gas springs – to stabilise the weight of the subsequent pipe segments.

Operational use

The extraction arm is constructed for installing on a wall or a column by means of a wall bracket. Simultaneously, to the wall bracket can be fastened a suitable fan or a connection piece. As standard, the extraction arm is equipped with an adjustment damper placed directly after the hood. On demand, the device can be equipped with an additional shut-off damper in the swivel. In case of extended extraction system (consisting of many extraction arms), when operator closes shut-off dampers in the not being in operation extraction arms, the flow efficiencies of the other extraction arms are significantly increased.

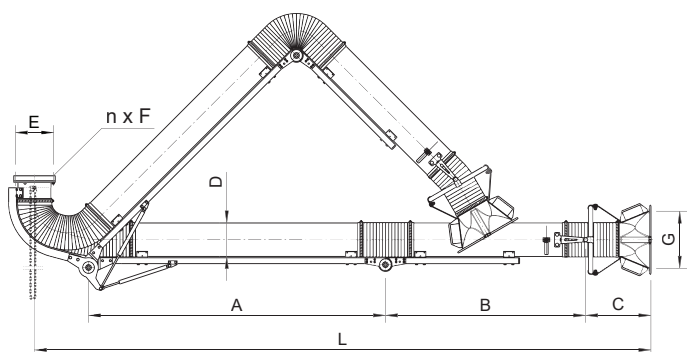
Adequately adjusted frictional joints, along with the springs, provide the comfort of arm manoeuvring and easy position setting by gripping at the suction hood. The hood is equipped with self-braking joints enabling its setting within two operational planes. There is a protective mesh in the hood inlet, to prevent the glowing particles from entering the extraction arm.

On demand, the hood can be equipped with a halogen spot-light to light up the operational field.

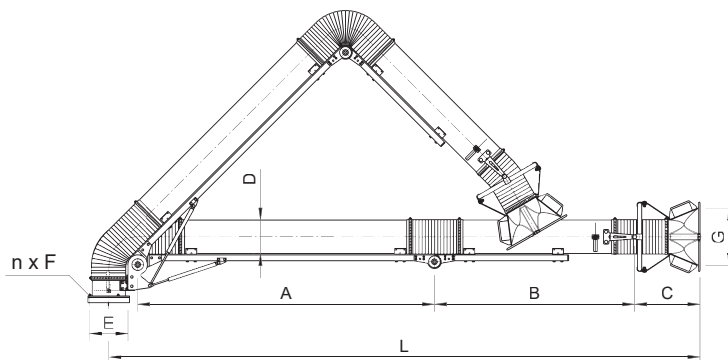
Recommended volume flows of the subsequent arm sizes are: 2000 m³/h for diameter Dn = 200 mm, 1000 m³/h for Dn = 160 mm, 700 m³/h for Dn = 125 mm, 350 m³/h for Dn = 100 mm.



Hanging version



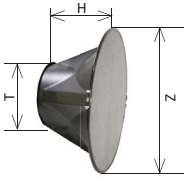
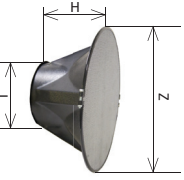
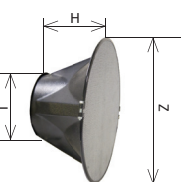
Standing version



Technical data

	Type	Part no	Dimensions								Weight [kg]
			D [mm]	L [m]	A [mm]	B [mm]	C [mm]	E [mm]	n x F [mm]	G [mm]	
Hanging version	Standard hood	ERGO LUX-M/1,5	Ø100	1,8	630	555	335	Ø155	6xØ6,5	Ø235	10
		ERGO LUX-M/2	Ø100	2,2	960	675	335	Ø155	6xØ6,5	Ø235	11
		ERGO LUX-K/2	Ø125	2,3	1055	650	335	Ø155	6xØ6,5	Ø235	12,5
		ERGO LUX-K/3	Ø125	3,0	1540	915	335	Ø155	6xØ6,5	Ø235	14
		ERGO LUX-L/2	Ø160	2,3	905	790	335	Ø194	6xØ6,5	Ø295	17,5
		ERGO LUX-L/3	Ø160	3,15	1530	1030	335	Ø194	6xØ6,5	Ø295	19,5
		ERGO LUX-L/4	Ø160	3,8	1910	1260	335	Ø194	6xØ6,5	Ø295	22
		ERGO LUX-D/2	Ø200	2,3	905	790	335	Ø246	8xØ8,5	Ø335	19
		ERGO LUX-D/3	Ø200	3,15	1530	1030	335	Ø246	8xØ8,5	Ø335	22,5
		ERGO LUX-D/4	Ø200	3,8	1910	1260	335	Ø246	8xØ8,5	Ø335	25
	Hood with halogen light	ERGO LUX-LL/2	Ø160	2,3	905	790	335	Ø194	6xØ6,5	Ø295	17,5
		ERGO LUX-LL/3	Ø160	3,15	1530	1030	335	Ø194	6xØ6,5	Ø295	19,5
		ERGO LUX-LL/4	Ø160	3,8	1910	1260	335	Ø194	6xØ6,5	Ø295	22
		ERGO LUX-DL/2	Ø200	2,3	905	790	335	Ø246	8xØ8,5	Ø335	19
		ERGO LUX-DL/3	Ø200	3,15	1530	1030	335	Ø246	8xØ8,5	Ø335	22
Standing version	Standard hood	ERGO LUX-M/1,5-R	Ø100	1,6	630	555	335	Ø155	6xØ6,5	Ø235	9,5
		ERGO LUX-M/2-R	Ø100	2,1	960	675	335	Ø155	6xØ6,5	Ø235	10,5
		ERGO LUX-K/2-R	Ø125	2,2	1055	650	335	Ø155	6xØ6,5	Ø235	12,5
		ERGO LUX-K/3-R	Ø125	2,9	1540	915	335	Ø155	6xØ6,5	Ø235	14
		ERGO LUX-L/2-R	Ø160	2,2	905	790	335	Ø194	6xØ6,5	Ø295	17
		ERGO LUX-L/3-R	Ø160	3,0	1530	1030	335	Ø194	6xØ6,5	Ø295	19
		ERGO LUX-L/4-R	Ø160	3,65	1910	1260	335	Ø194	6xØ6,5	Ø295	21
		ERGO LUX-D/2-R	Ø200	2,2	905	790	335	Ø246	8xØ8,5	Ø335	17,5
		ERGO LUX-D/3-R	Ø200	3,0	1530	1030	335	Ø246	8xØ8,5	Ø335	21
		ERGO LUX-D/4-R	Ø200	3,65	1910	1260	335	Ø246	8xØ8,5	Ø335	23,5
	Hood with halogen light	ERGO LUX-LL/2-R	Ø160	2,2	905	790	335	Ø194	6xØ6,5	Ø295	17
		ERGO LUX-LL/3-R	Ø160	3,0	1530	1030	335	Ø194	6xØ6,5	Ø295	19
		ERGO LUX-LL/4-R	Ø160	3,65	1910	1260	335	Ø194	6xØ6,5	Ø295	21
		ERGO LUX-DL/2-R	Ø200	2,2	905	790	335	Ø246	8xØ8,5	Ø335	17,5
		ERGO LUX-DL/3-R	Ø200	3,0	1530	1030	335	Ø246	8xØ8,5	Ø335	21
		ERGO LUX-DL/4-R	Ø200	3,65	1910	1260	335	Ø246	8xØ8,5	Ø335	23,5

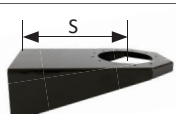
Hoods

Sort of hood	Material	Type	Part no.	Z [mm]	T [mm]	H [mm]	Weight [kg]	Application	Equipment
	plastic ABS	MST	810H47	330	100	190	0,47	ERGO LUX-M/1,5 ERGO LUX-M/2	- replaceable inlet mesh
		KST	810H48	330	125	190	0,48	ERGO LUX-K/2 ERGO LUX-K/3	
	plastic ABS	LST	810H49	365	170	190	0,56	ERGO LUX-L/2 ERGO LUX-L/3 ERGO LUX-L/4	- replaceable inlet mesh
		DST	810H50	415	210	190	0,69	ERGO LUX-D/2 ERGO LUX-D/3 ERGO LUX-D/4	
	plastic ABS	LLT	810H11	365	170	190	0,56	ERGO LUX-LL/2 ERGO LUX-LL/3 ERGO LUX-LL/4	- replaceable inlet mesh - halogen spot-light 12V - switch
		DLT	810H12	415	210	190	0,69	ERGO LUX-DL/2 ERGO LUX-DL/3 ERGO LUX-DL/4	

Inlet wire-mesh for ERGO LUX hoods

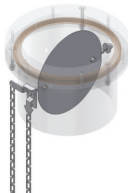
	Type	Part no.	Weight [kg]	Type of hood
	DST	834Z36	0,31	DST
	LST	834Z37	0,24	LST
	MKST	834Z38	0,20	MST, KST
	LLT	834Z39	0,23	LLT
	DLT	834Z40	0,30	DLT

Wall brackets

Sort of bracket	Material	Type	Part no.	S [mm]	Weight [kg]	Suitable extraction arms
	steel sheet	WBN-125-K	817W52	250	3	ERGO LUX-M and ERGO LUX-K
		WBN-160-L	817W53	320	4,6	ERGO LUX-L
		WBN-200-D	817W54	340	6,1	ERGO LUX-D

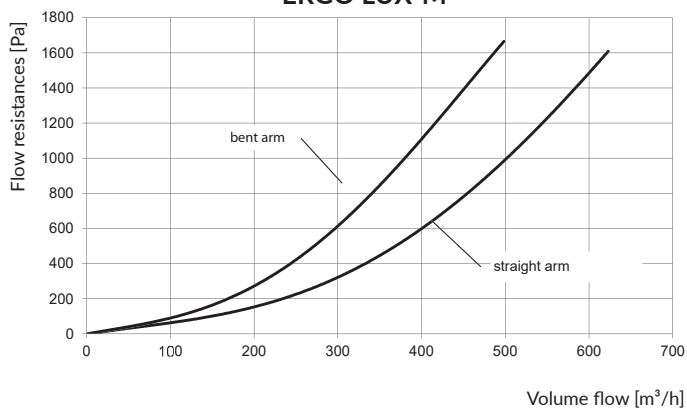
Additional equipment

Shut-off damper

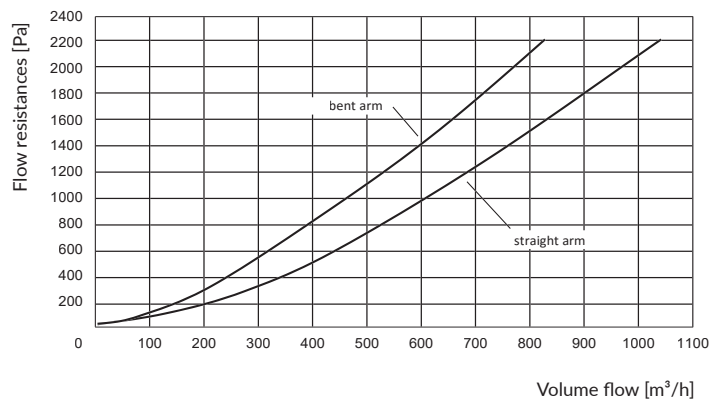
	Type	Part no.	Remarks	Suitable extraction arms
	PO-ERGO LUX-M	829P12	A tight damper to cut off entirely the air flow in the extraction arm. The damper is located in the swivel.	ERGO LUX-M
	PO-ERGO LUX-K	829P13		ERGO LUX-K
	PO-ERGO LUX-L	829P14		ERGO LUX-L
	PO-ERGO LUX-D	829P15		ERGO LUX-D

Flow charts of ERGO LUX extraction arms

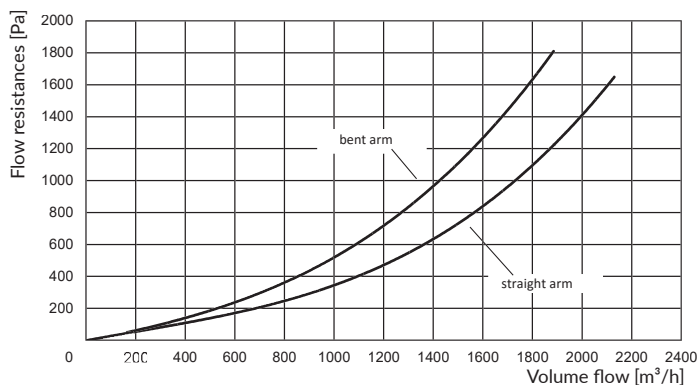
ERGO LUX-M



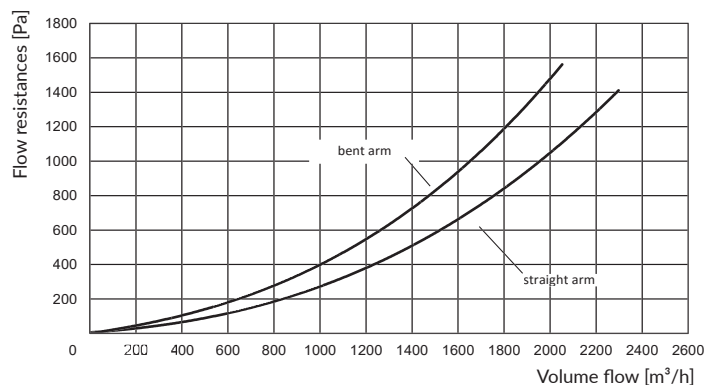
ERGO LUX-K



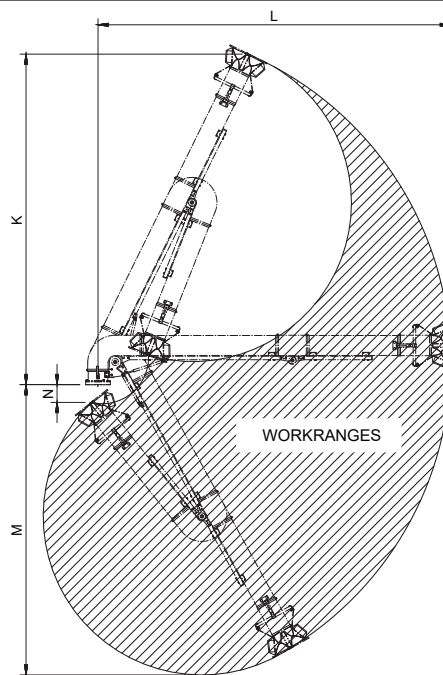
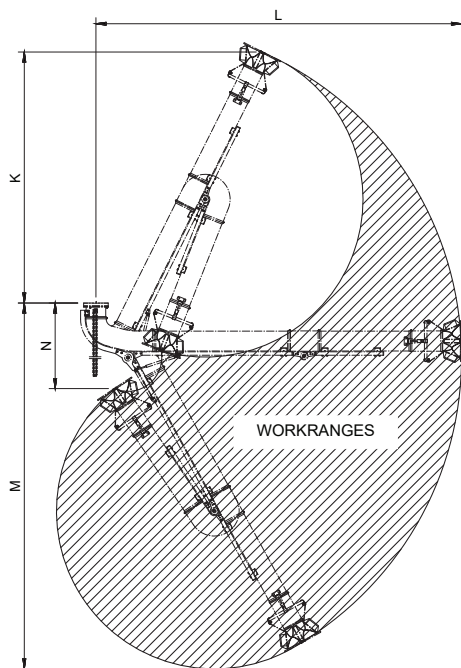
ERGO LUX-L



ERGO LUX-D



Workranges of the ERGO LUX extraction arms



Type	K [m]	L [m]	M [m]	N [m]
ERGO LUX-L(L)/2; ERGO LUX-D(L)/2	1,4	2,3	2,4	0,6
ERGO LUX-L(L)/3; ERGO LUX-D(L)/3	2,2	3,2	3,2	0,75
ERGO LUX-L(L)/4; ERGO LUX-D(L)/4	2,7	3,8	3,7	1,2

Type	K [m]	L [m]	M [m]	N [m]
ERGO LUX-L(L)/2-R; ERGO LUX-D(L)/2-R	2,0	2,2	1,7	0
ERGO LUX-L(L)/3-R; ERGO LUX-D(L)/3-R	2,85	3,0	2,5	0,15
ERGO LUX-L(L)/4-R; ERGO LUX-D(L)/4-R	3,4	3,65	3,0	0,5