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Q/SCI



**ACCESSORIES RANGE REPORT FOR FANS
ACCORDING TO THE EUROPEAN STANDARD EN
12101-3:2015, “SMOKE AND HEAT CONTROL
SYSTEMS. PART 3: SPECIFICATION FOR POWERED
SMOKE AND HEAT CONTROL VENTILATORS
(FANS)”**

File number: 20/21609-8-1

Sponsor:

SOLER & PALAU SISTEMAS DE VENTILACIÓN S.L.U
C/ Llevant, 4
Polígono Industrial Llevant
08150 Parets del Vallés
Barcelona

Report date:

9th January 2020

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1 Objective

Assessment of valid accessories for installation in the different fan ranges from SOLER & PALAU SISTEMAS DE VENTILACIÓN S.L.U.

The assessment is carried out according the standard EN 12101-3:2015, “Smoke and heat control systems. Part 3: Specification for powered smoke and heat control ventilators (Fans)”, test evidence of the accessories according to EN 12101-3 and laboratory experience.

The different accessories are listed in section 2 of this report.

The different ranges and the list of accessories for each range are listed in section 3 of this report.

The drawings of the different accessories are attached in Annex 1.

2 Accessories

The accessories concerned are the following:

Accessories	Description
ARO BRIDA TGT/THGT	Circular duct matching flange
EMB-xxxT	Bellmouth inlet
ACOPEL F400	Circular flexible connection
CLAR	Backdraught Shutters
DEF.ASP.IFHT	Inlet guard protection grille
DEF.ASP.TJHT	Inlet guard protection grille
DEF.ASP.TGT/THGT	Inlet guard protection grille
DEF.DES.TGT/THGT	Outlet guard protection grille
PIE SOPORTE TGT/THGT	Support feet
SIL CZ	Silencers
SIL CZO	Silencers
AM-xxM / DSD	Antivibration mount
PER-CN	Over pressure louvre
PER-CR	Over pressure louvre
CVD	Grid
ACOP RECT F400	Flexible connection
INT-xx/6P-F400	On-Off Switch
BI-xx	Coupling sloping covers
JAE	Flexible coupling
JBR	Flange
JBS JBS-V	Flat roof up stand
JCA JCA N	Backdraft shutter
JCC	Coupling
JMS	Support
JPA	Adapter plate
KAD F400	Flexible connector
KBA	Flange
KBD	Support
KRJ	Grid
PAVZ	Rubber Antivibration Mounts
CTI	Outdoor cover
APC	Discharge protection guards
FD	Coupling
CHTI	Cover
INLET FLANGE	Inlet frange
OUTLET FLANGE	Outlet flange
INTZ	Proximity switches
PILOTAIR 2002	Relay box
BDEZ/DPS	Differential pressure probe
VSD CFW	Frequency Converter

Accessories	Test evidence / Assessment
ARO BRIDA TGT/THGT	Tested on range THGT F400 (12/4372-1473) and on range CVST F400 (10/100522-2227).
EMB-xxxT	Tested on range THGT F400 (12/4372-1473).
ACOPEL F400	Tested on range THGT F400 (12/4372-1473) and on range CHAT-N F400 (16/11629-1940).
CLAR	Tested on range THGT F400 (12/4372-1473) and on range CHGT F400 (17/13774-2143).
DEF.ASP.IFHT	Tested on range IFHT F400 (15/9872-2901) and on range IFHT F300 (15/9872-2900).
DEF.ASP.TJHT	Tested on range TJHU F400 (13/6351-221) and on range TJHU F300 (12/4372-1765).
DEF.ASP.TGT/THGT	Tested on range THGT F400 (12/4372-1473), on range THGT F300 (12/4372-1471) and on range HGHT F400 (10/100522-62M1).
DEF.DES.TGT/THGT	No negative influence on the operating performance of the fan.
PIE SOPORTE TGT/THGT	Tested on range THGT F400 (12/4372-1473), on range THGT F300 (12/4372-1471) and on range THGT F200 (17/13774-2142).
SIL CZ	Tested on range THGT F400 (12/4372-1473), on range TJHT F400 (08/32311849), on range TJHU F200 (12/4372-663), TJHU F300 (12/4372-1765) and on range TJHU F400 (13/6351-221).
SIL CZO	Tested on range TJHT F400 (08/32311849).
AM-xxM / DSD	Tested on range CHGT F400 (17/13774-2143) and on range CHAT-N F400 (16/11629-1940).
PER-CN	Tested on range CHAT-N F400 (16/11629-1940).
PER-CR	Tested on range CHGT F300 (14/7966-1784) and on range CHAT-N F400 (16/11629-1940).
CVD	No negative influence on the operating performance of the fan.
ACOP RECT F400	Tested on range CHGT F400 (17/13774-2143).
INT-xx/6P-F400	Tested on range THGT F400 (12/4372-1473), on range TJHU F200 (12/4372-663), TJHU F300 (12/4372-1765), on range TJHU F400 (13/6351-221), on range IFHT F300 (15/9872-2900), on range CHGT F400 (17/13774-2143) and on range HGHT F400 (10/100522-62M1).
BI-xx	No negative influence on the operating performance of the fan.
JAE	Tested on range CHTH-CTHB/CTVT-CTVB F400 (09/32300855) and on range CTVT HP F400 (16/9872-1556).
JBR	Tested on range CHTH-CTHB/CTVT-CTVB F400 (09/32300855) and on range CTVT HP F400 (16/9872-1556).
JBS JBS-V	Tested on range CHTH-CTHB/CTVT-CTVB F400 (09/32300855) and on range CTVT HP F400 (16/9872-1556).
JCA JCA N	Tested on range CHTH-CTHB/CTVT-CTVB F400 (09/32300855) and on range CTVT HP F400 (16/9872-1556).
JCC	No negative influence on the operating performance of the fan.
JMS	No negative influence on the operating performance of the fan.
JPA	Tested on range CHTH-CTHB/CTVT-CTVB F400 (09/32300855) and on range CTVT HP F400 (16/9872-1556).
KAD F400	Tested on range CHMT F400 (09/100522-2231M1) and on range CRMT F400 (09/100522-2230).
KBA	No negative influence on the operating performance of the fan.
KBD	No negative influence on the operating performance of the fan.
KRJ	No negative influence on the operating performance of the fan.
PAVZ	Tested on range BSP F400 (09/100522-2228M1).

CTI	Tested on range CHAT-N F400 (16/11629-1940).
APC	Tested on range CHAT-N F400 (16/11629-1940).
FD	No negative influence on the operating performance of the fan.
CHTI	No negative influence on the operating performance of the fan.
INLET FLANGE	No negative influence on the operating performance of the fan.
OUTLET FLANGE	No negative influence on the operating performance of the fan.
INTZ	Tested on range BSP F400 (09/100522-2228M1).
PILOTAIR 2002	No negative influence on the operating performance of the fan.
BDEZ/DPS	Tested on range BSP F400 (09/100522-2228M1).
VSD CFW *	Tested on range THGT F400 (12/4372-1473), on range THGT F300 (12/4372-1471), THGT F200 (17/13774-2142), on range TJHU F400 (13/6351-221), on range TJHU F300 (12/4372-1765), on range TJHU F200 (12/4372-663), on range IFHT F300 (15/9872-2900) and on range IFHT F400 (15/9872-2901).

* Additionally, the VSD CFW accessory must comply with the following specifications for each range:

- Tests made with a frequency converter are valid for DOL operation at the same voltage and frequency.
- When the initial assessment is performed direct on line (DOL), no further test is required for use with converter provided that:
 - any of the four filters described following is used with the converter; and
 - the power of the motor is de-rated by 20 % or by a factor that will result in the DOL or lower temperature rise

The filters for frequency converters are:

- VSD + sinusoidal filter. Voltage drop 10%, losses to be added 0%.
- Du/dt filter. Voltage drop negligible, losses to be added 0,1 to 1,5 % due to filter + 8-14 % due to VSD (PWM).
- Motor termination unit. Voltage drop negligible, losses to be added 0,1 to 1,5 % due to filter + 8-14 % due to VSD (PWM).
- Output reactor. Voltage drop negligible, losses to be added 0,1 to 1,5 % + 8-14 % due to VSD (PWM).

3 Relation between ranges and accessories

The following ranges could be installed with the following accessories:

Range	Accessories
THGT F400	ARO BRIDA TGT/THGT
	EMB-xxxT
	ACOPEL F400
	CLAR
	DEF.ASP.TGT/THGT
	DEF.DES.TGT/THGT
	PIE SOPORTE TGT/THGT
	SIL CZ
	SIL CZO
	AM-xxM / DSD
	PER-CN
	PER-CR
	INT-xx/6P-F400
	VSD CFW
THGT/2 F400	ARO BRIDA TGT/THGT
	EMB-xxxT
	ACOPEL F400
	CLAR
	DEF.ASP.TGT/THGT
	DEF.DES.TGT/THGT
	PIE SOPORTE TGT/THGT
	SIL CZ
	SIL CZO
	AM-xxM / DSD
	PER-CN
	PER-CR
	INT-xx/6P-F400
	VSD CFW
THGT F300	ARO BRIDA TGT/THGT
	EMB-xxxT
	ACOPEL F400
	CLAR
	DEF.ASP.TGT/THGT
	DEF.DES.TGT/THGT
	PIE SOPORTE TGT/THGT
	SIL CZ
	SIL CZO
	AM-xxM / DSD
	PER-CN
	PER-CR
	INT-xx/6P-F400
	VSD CFW
THGT F200	ARO BRIDA TGT/THGT
	EMB-xxxT
	ACOPEL F400

	CLAR
	DEF.ASP.TGT/THGT
	DEF.DES.TGT/THGT
	PIE SOPORTE TGT/THGT
	SIL CZ
	SIL CZO
	AM-xxM / DSD
	PER-CN
	PER-CR
	INT-xx/6P-F400
	VSD CFW
TJHT F400	DEF.ASP.TJHT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	VSD CFW
TJHT F300	DEF.ASP.TJHT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	VSD CFW
TJHT F200	DEF.ASP.TJHT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	VSD CFW
TJHU F400	DEF.ASP.TJHT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	VSD CFW
TJHU F300	DEF.ASP.TJHT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	VSD CFW
TJHU F200	DEF.ASP.TJHT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	VSD CFW
IFHT F400	DEF.ASP.IFHT
	INT-xx/6P-F400
	VSD CFW
IFHT F300	DEF.ASP.IFHT
	INT-xx/6P-F400
	VSD CFW
CHGT F300	ARO BRIDA TGT/THGT
	ACOPEL F400
	CLAR

	AM-xxM / DSD
	PER-CN
	PER-CR
	CVD
	ACOP RECT F400
	INT-xx/6P-F400
	VSD CFW
CHGT F400	CLAR
	AM-xxM / DSD
	PER-CN
	PER-CR
	CVD
	ACOP RECT F400
	INT-xx/6P-F400
CTHT-CTHB / CTVT-CTVB F400	VSD CFW
	BI-xx
	JAE
	JBR
	JBS JBS-V
	JCA JCA N
	JCC
CTVT HP F400	JMS
	JPA
	BI-xx
	JAE
	JBR
	JBS JBS-V
	JCA JCA N
CTVT HP F400	JCC
	JMS
	JPA
	BI-xx
	JAE
	JBR
	JBS JBS-V
HGHT F300	JCA JCA N
	JCC
	JMS
	JPA
	ARO BRIDA TGT/THGT
	EMB-xxxT
	ACOPEL F400
HGHT F400	DEF.ASP.TGT/THGT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	JBS JBS-V
	ARO BRIDA TGT/THGT
	EMB-xxxT
	ACOPEL F400

	DEF.ASP.TGT/THGT
	SIL CZ
	SIL CZO
	INT-xx/6P-F400
	JBS JBS-V
CVHN F400	PER-CN
	PER-CR
	ACOP RECT F400
	PAVZ
	CVD
	CHTI
CVHT F400	PER-CN
	PER-CR
	ACOP RECT F400
	PAVZ
	CVD
	CHTI
CVST F400	ARO BRIDA TGT/THGT
	PER-CN
	PER-CR
	CTI
CRMTC F400	PER-CN
	PER-CR
CHMTC F400	PER-CN
	PER-CR
CHAT-N F400	ACOPEL F400
	AM-xxM / DSD
	PER-CN
	PER-CR
	CTI
	APC
CHVT-CHVB F400	ACOPEL F400
	AM-xxM / DSD
	PER-CN
	PER-CR
	ACOP RECT F400
	CTI
	APC
	FD
CHXT F400	ACOPEL F400
	AM-xxM / DSD
	PER-CN
	PER-CR
	ACOP RECT F400
	CTI
	APC
	FD
CHMT F400	ACOPEL F400
	KAD F400
	KBA

	KBD
	KRJ
CRMT F400	ACOPEL F400
	KAD F400
	KBA
	KBD
	KRJ
BSP F400	ACOPEL F400
	PAVZ
	INLET FLANGE
	OUTLET FLANGE
	INTZ
	PILOTAIR 2002
	BDEZ/DPS
CRRT-TR F400	ACOPEL F400
	PAVZ
	INLET FLANGE
	OUTLET FLANGE
	INTZ
	PILOTAIR 2002
	BDEZ/DPS

The ranges of fans mentioned together with each of the accessories allowed for each range will maintain the performance obtained and mentioned in their corresponding range report according to the standard in 12101-3: 2015, Smoke and heat control systems. Part 3: Specification for powered smoke and heat control ventilators (Fans)".

Fire Resistance Testing Technician
LGAI Technological Center, S.A.

Fire Laboratory Responsible
LGAI Technological Center, S.A.

The results of the tests carried out refer only and exclusively to the sample, and in the moment and under the conditions indicated herein.
LGAI is not responsible for the information supplied by the petitioner.

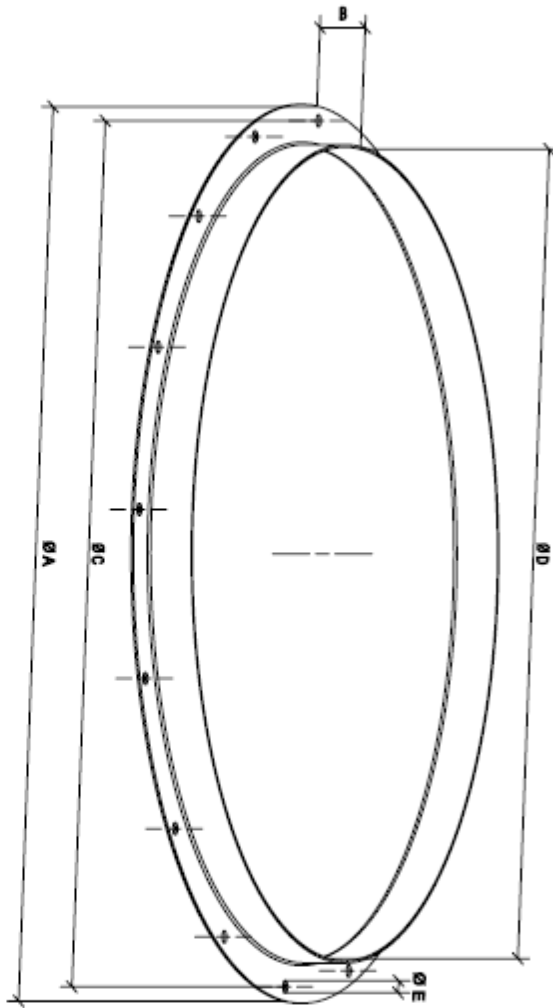
Service Quality Guarantee

Applus+, guarantees that this task has been carried out following the exigencies of our Quality and Sustainability System, complying with the contractual conditions and legal regulation.

Within the framework of our improvement programme, we appreciate any comment you may deem appropriate, addressing them to the responsible who signs this document or to the Quality Director of Applus+, to the e-mail address: satisfaccion.cliente@applus.com

Annex 1: Accessories drawings

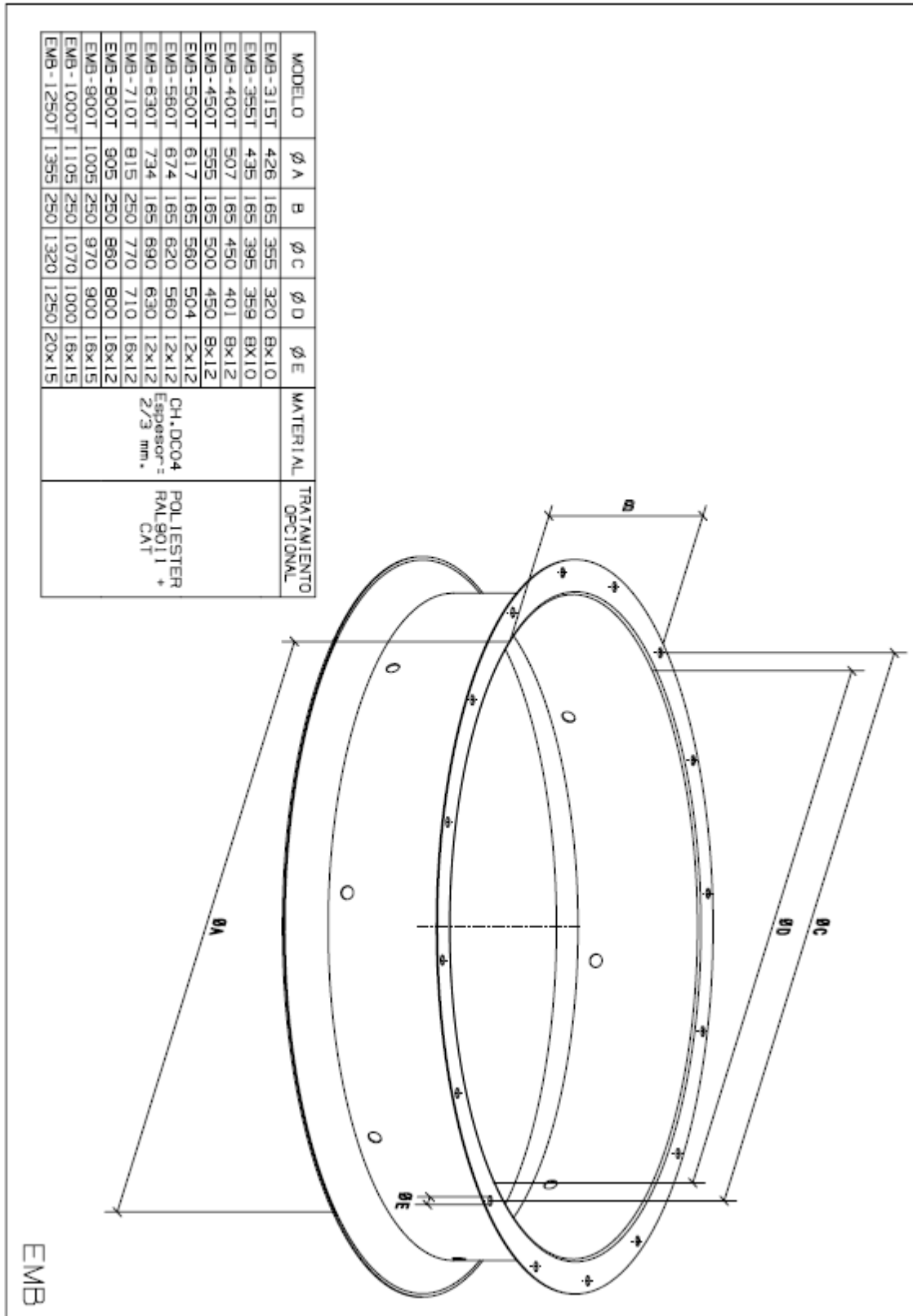
ARO BRIDA TGT/THGT



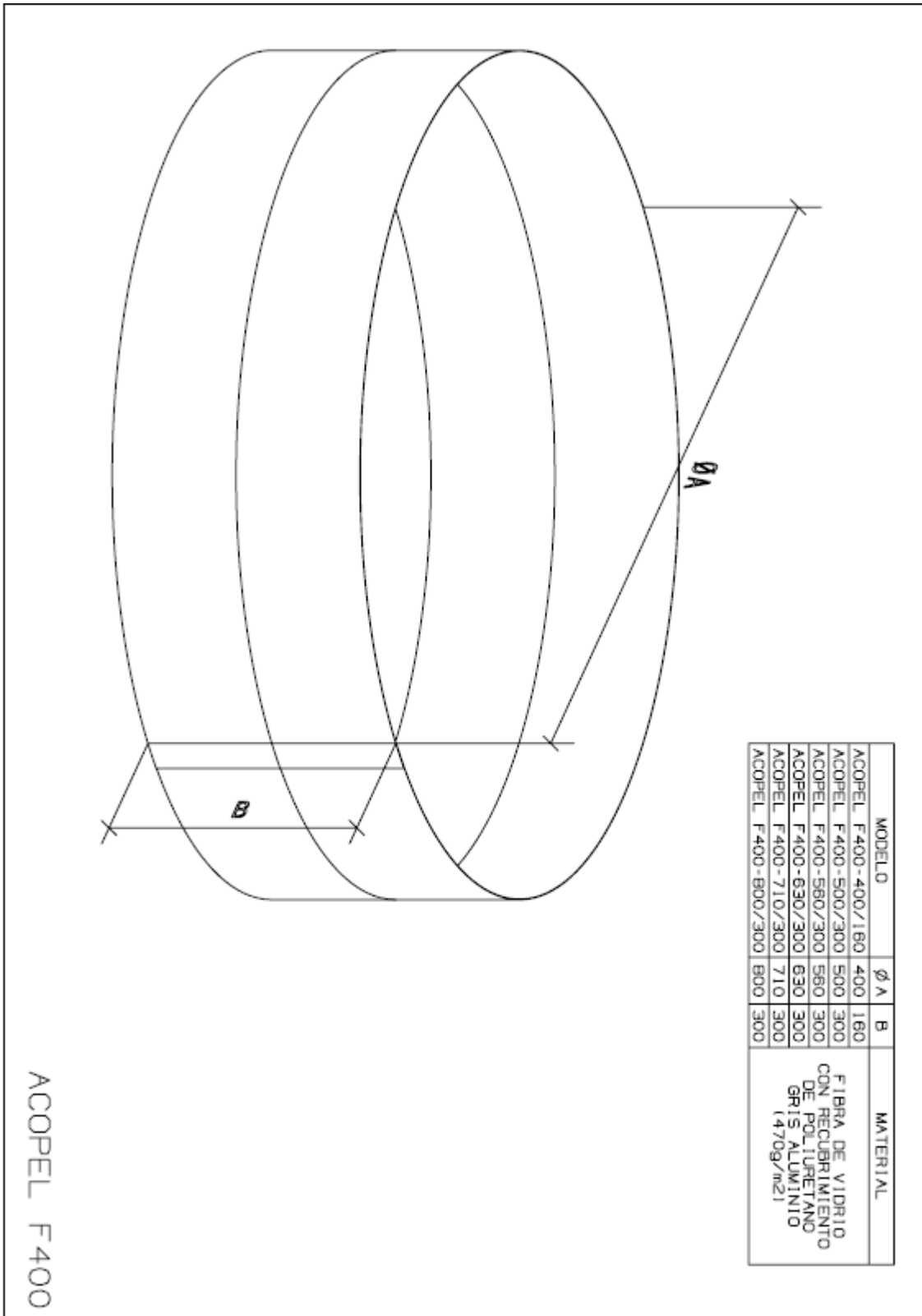
MODELO	Ø A	B	Ø C	Ø D	Ø E	NUM. DE AGUJ.	MATERIAL	TRATAMIENTO OPCIONAL
ARO BRIDA TGT/THGT-400	487	63	450	400	12	8	CH-0005 / INOX304 / INOX316 Espesor: 1,5mm	GALVANIZADO /PINTURA EPO RAL
ARO BRIDA TGT/THGT-450	537	63	500	450	12	8		
ARO BRIDA TGT/THGT-500	595	69	560	500	12	12		
ARO BRIDA TGT/THGT-580	655	69	620	560	12	12		
ARO BRIDA TGT/THGT-630	725	69	690	630	12	12		
ARO BRIDA TGT/THGT-710	806	69	770	710	12	16		
ARO BRIDA TGT/THGT-800	896	69	860	800	12	16		
ARO BRIDA TGT/THGT-900	1006	100	970	900	12	16		
ARO BRIDA TGT/THGT-1000	1105	65	1070	1000	15	16		
ARO BRIDA TGT/THGT-1250	1355	65	1320	1250	15	20		

ARO BRIDA TGT/THGT

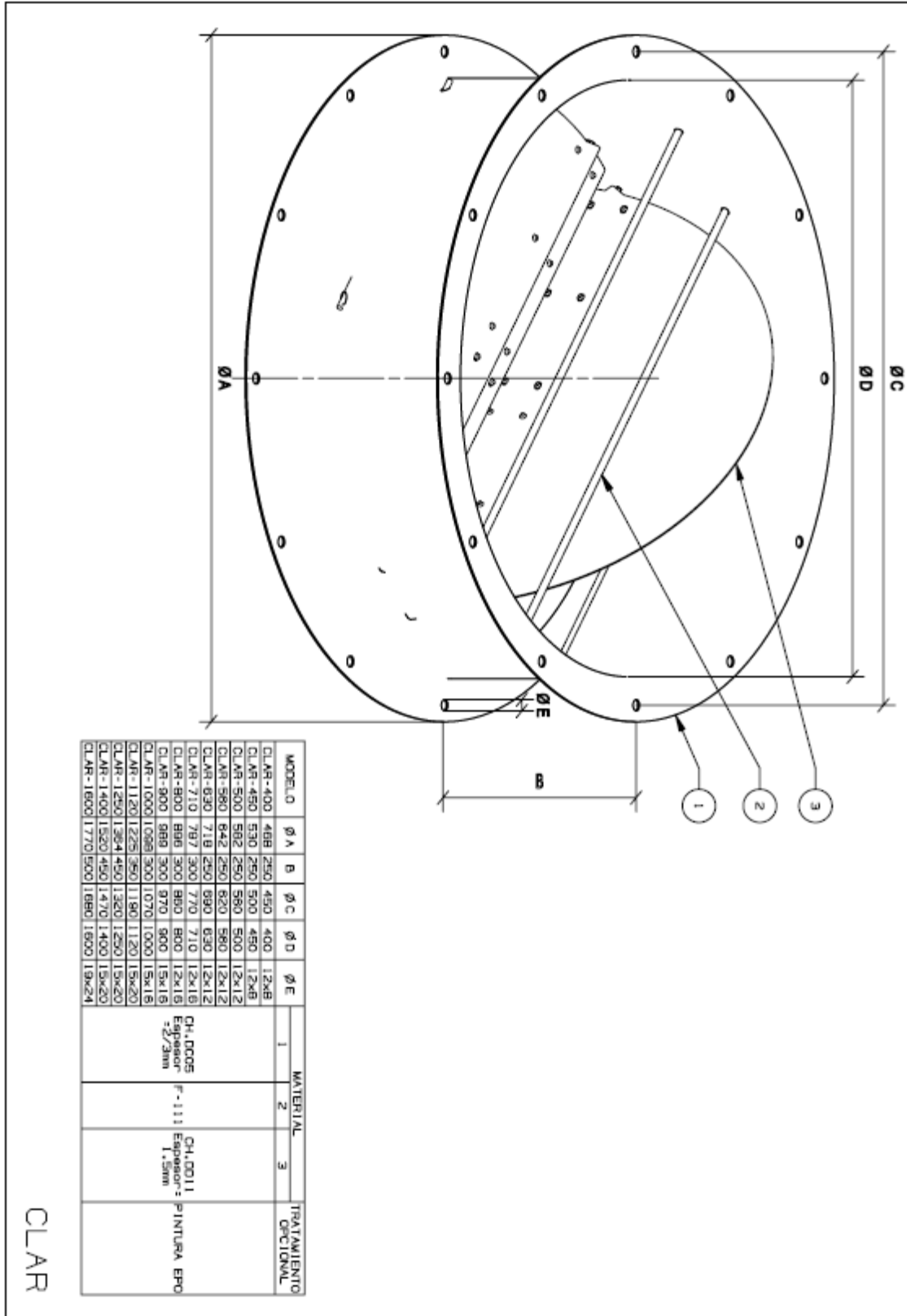
EMB-xxxT



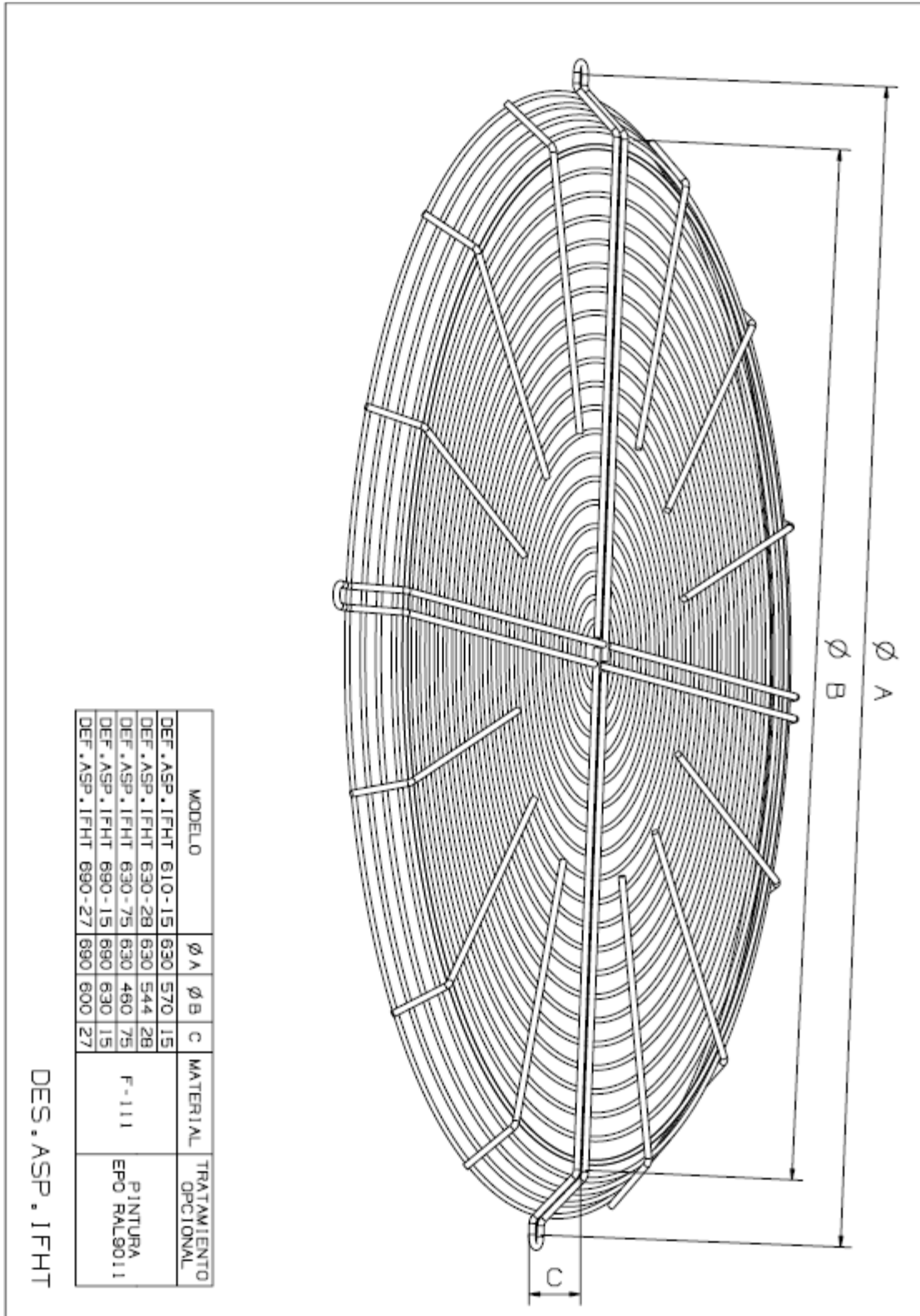
ACOPEL F400



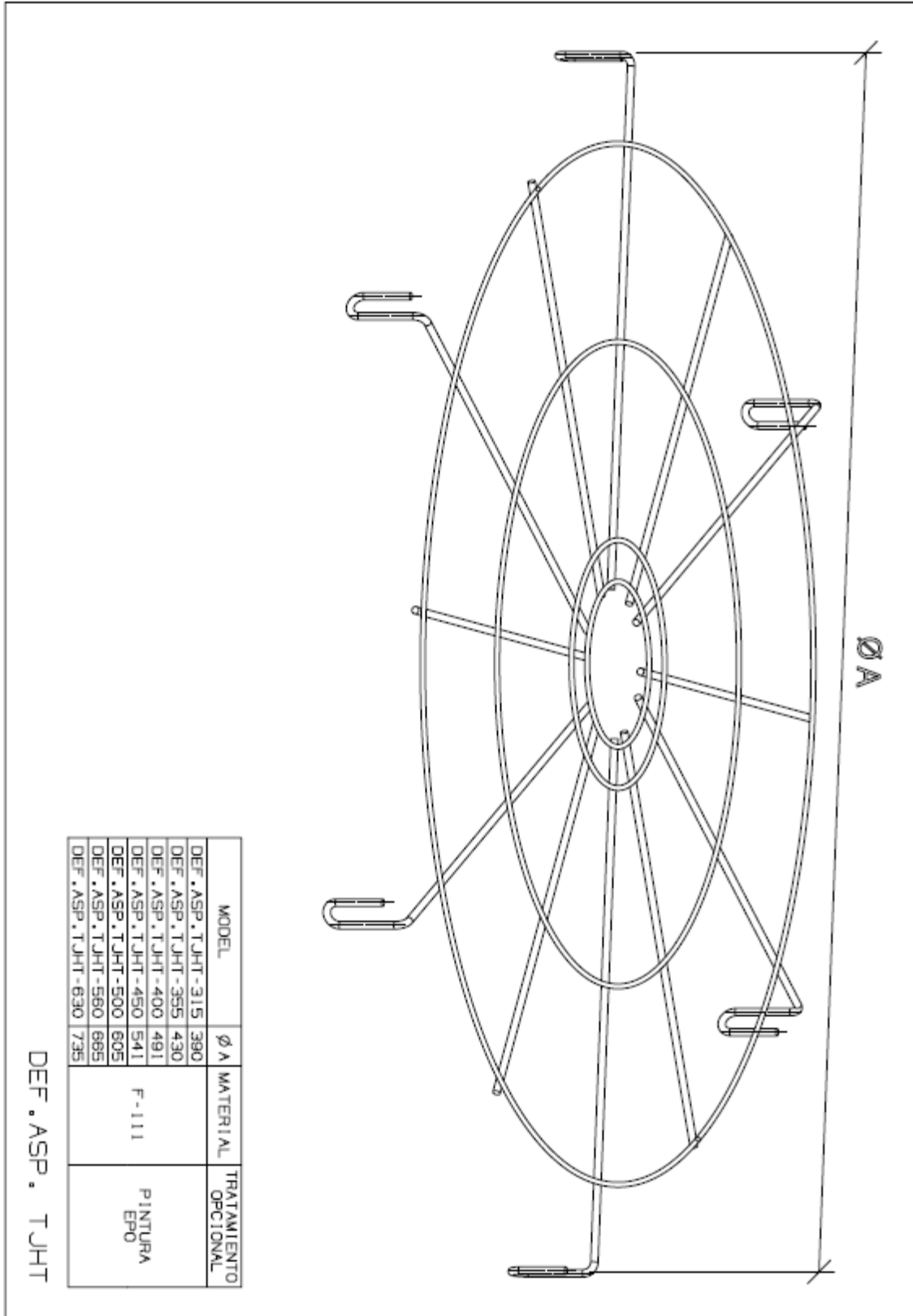
CLAR



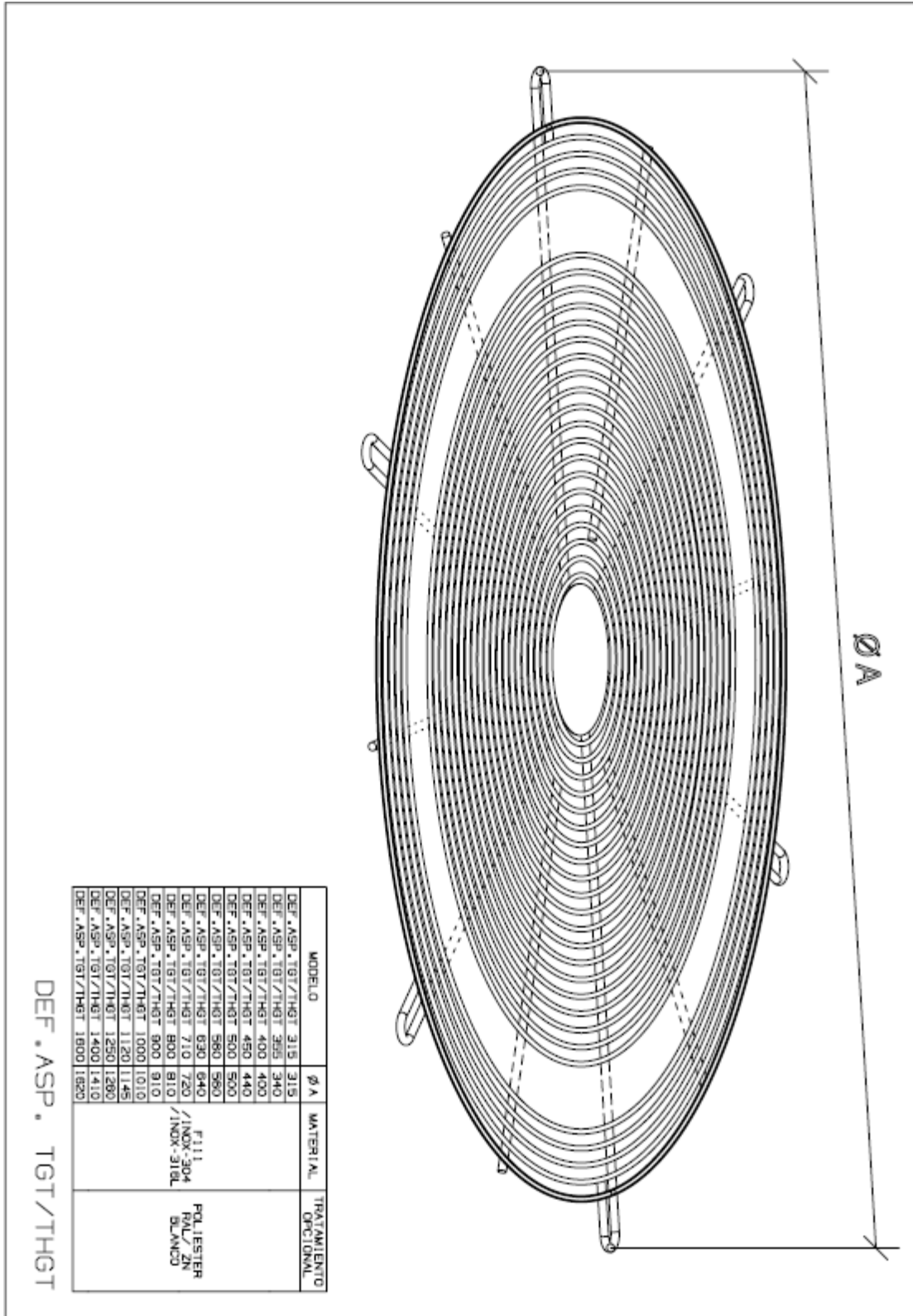
DEF.ASP.IFHT



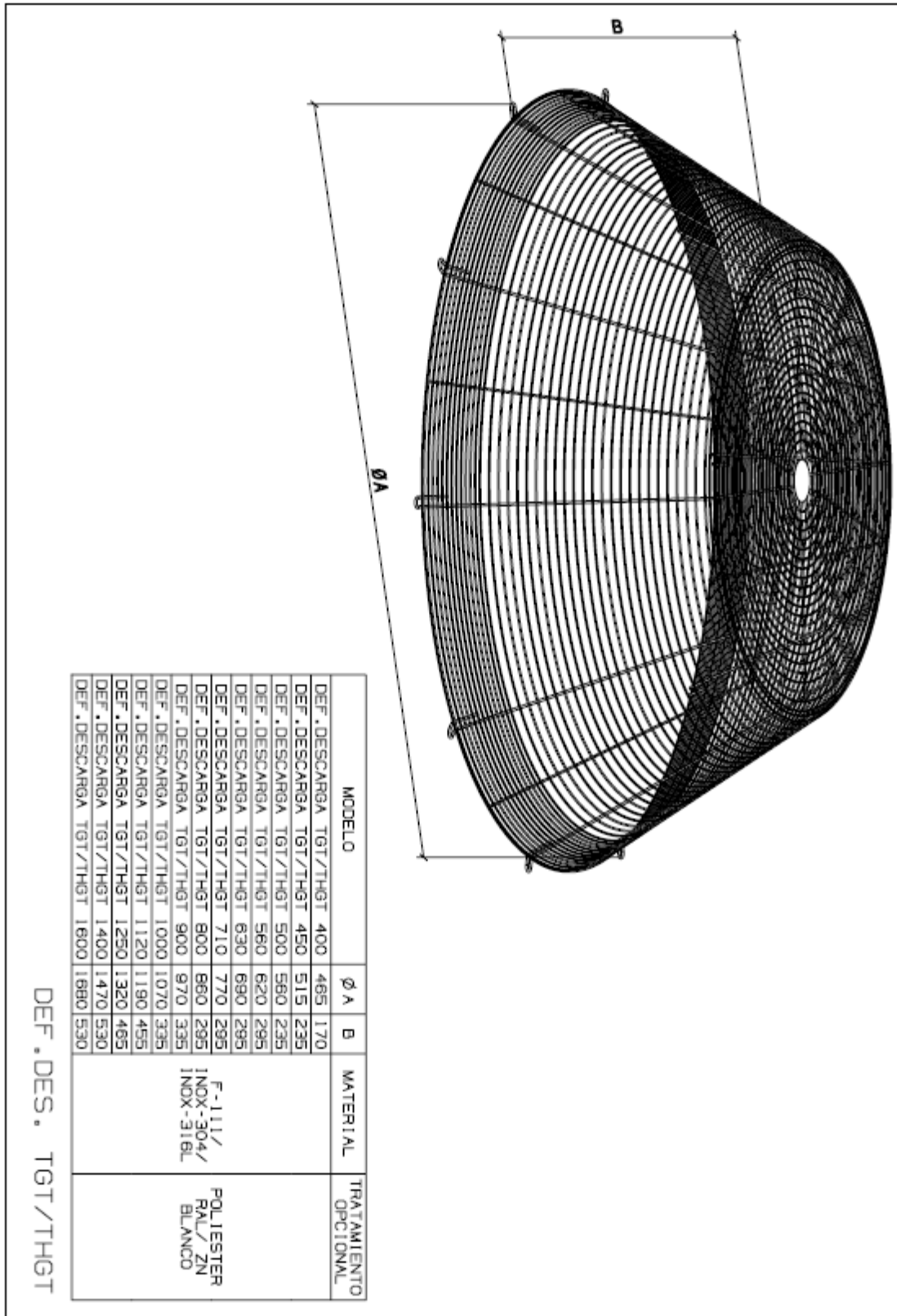
DEF.ASP.TJHT



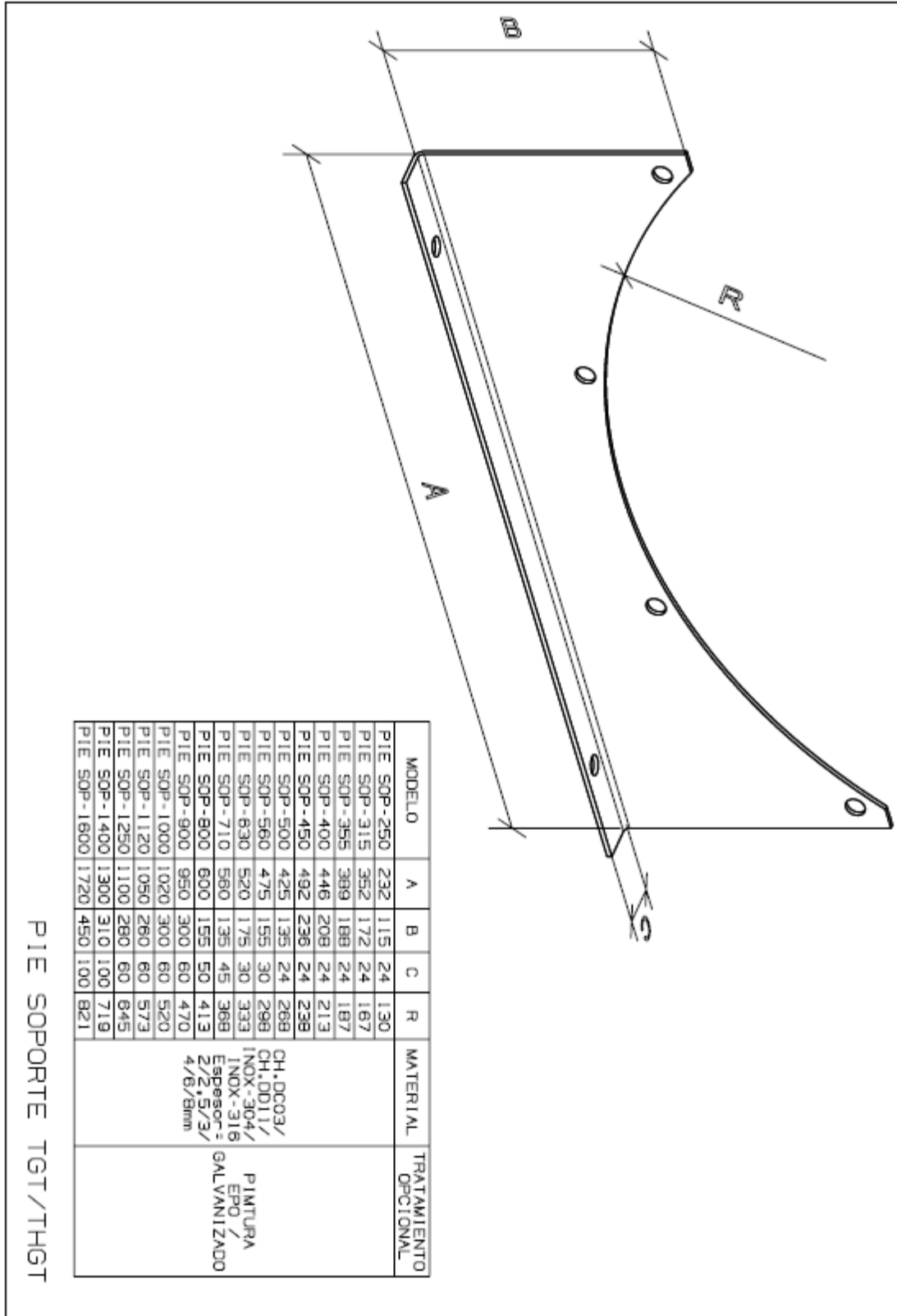
DEF.ASP.TGT/THGT



DEF.DES.TGT/THGT

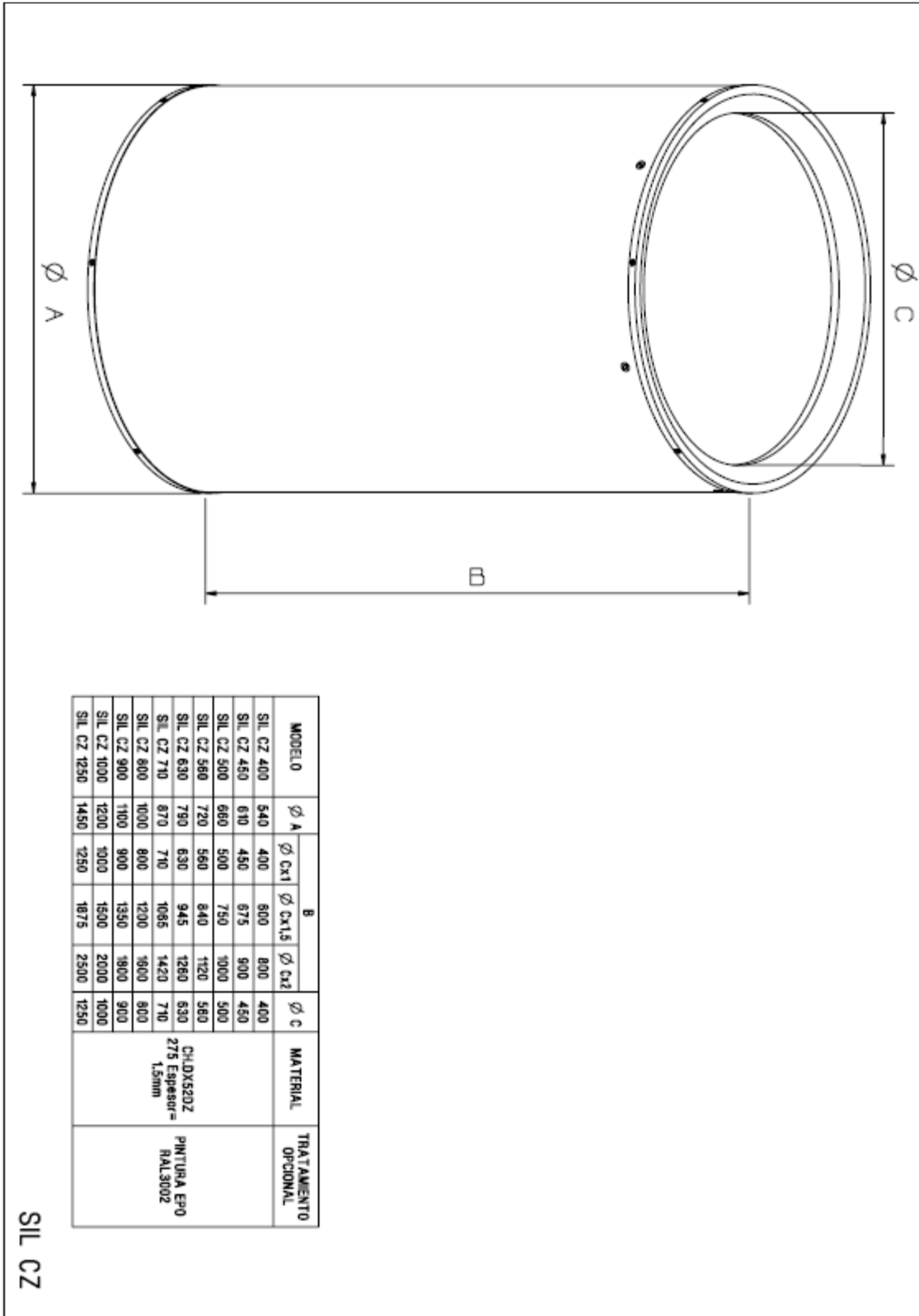


PIE SOPORTE TGT/THGT



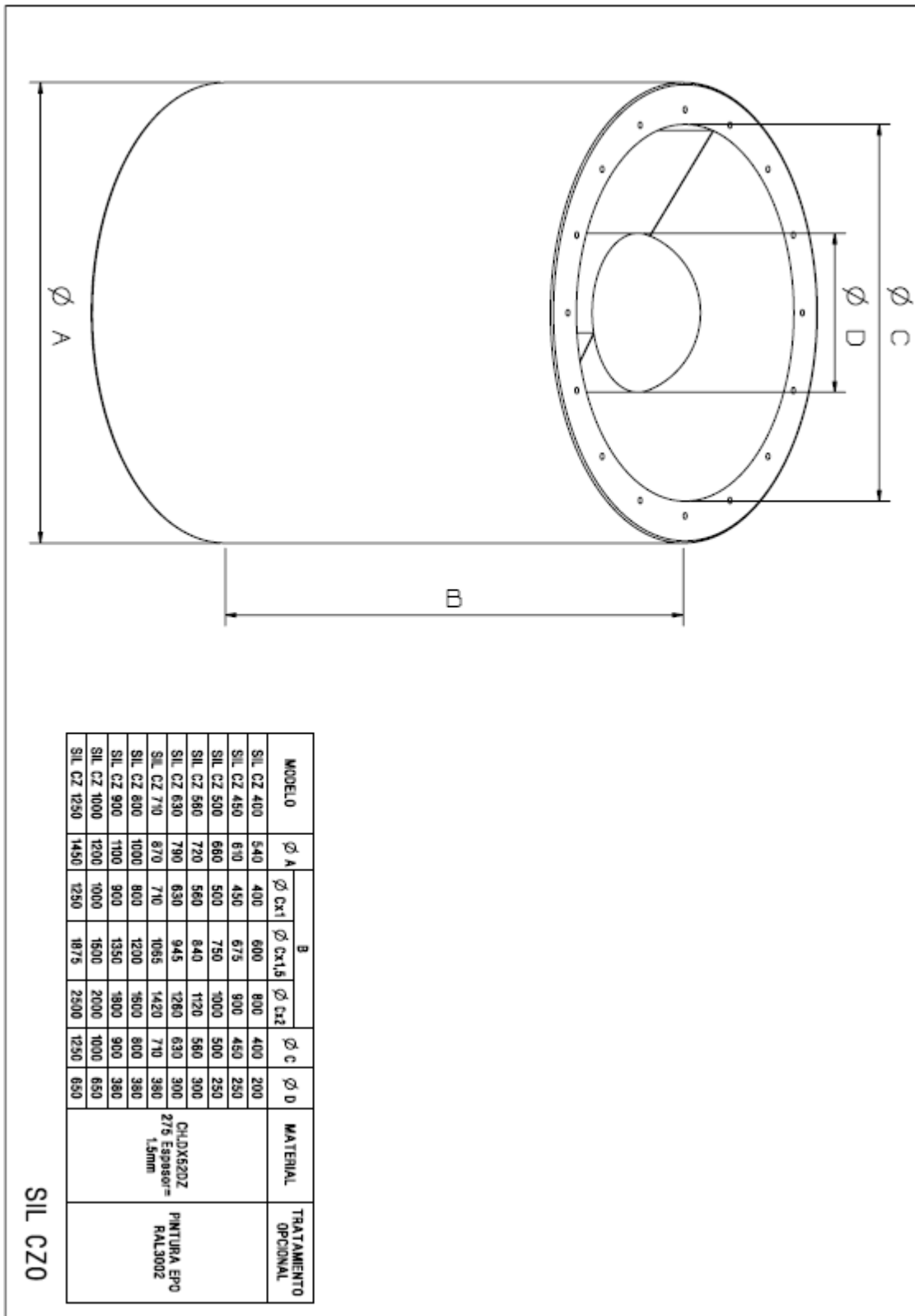
SIL

CZ

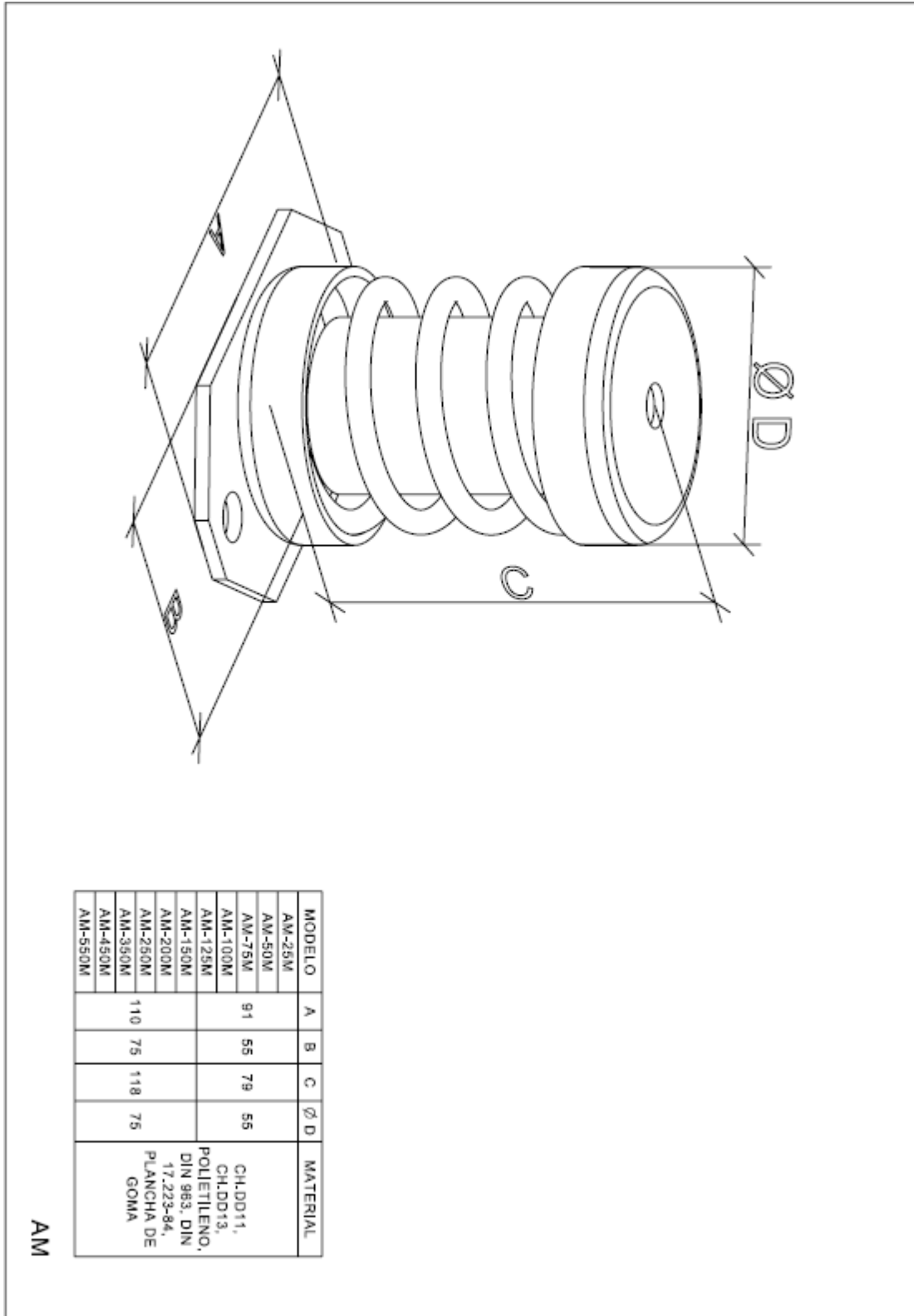


SIL CZ

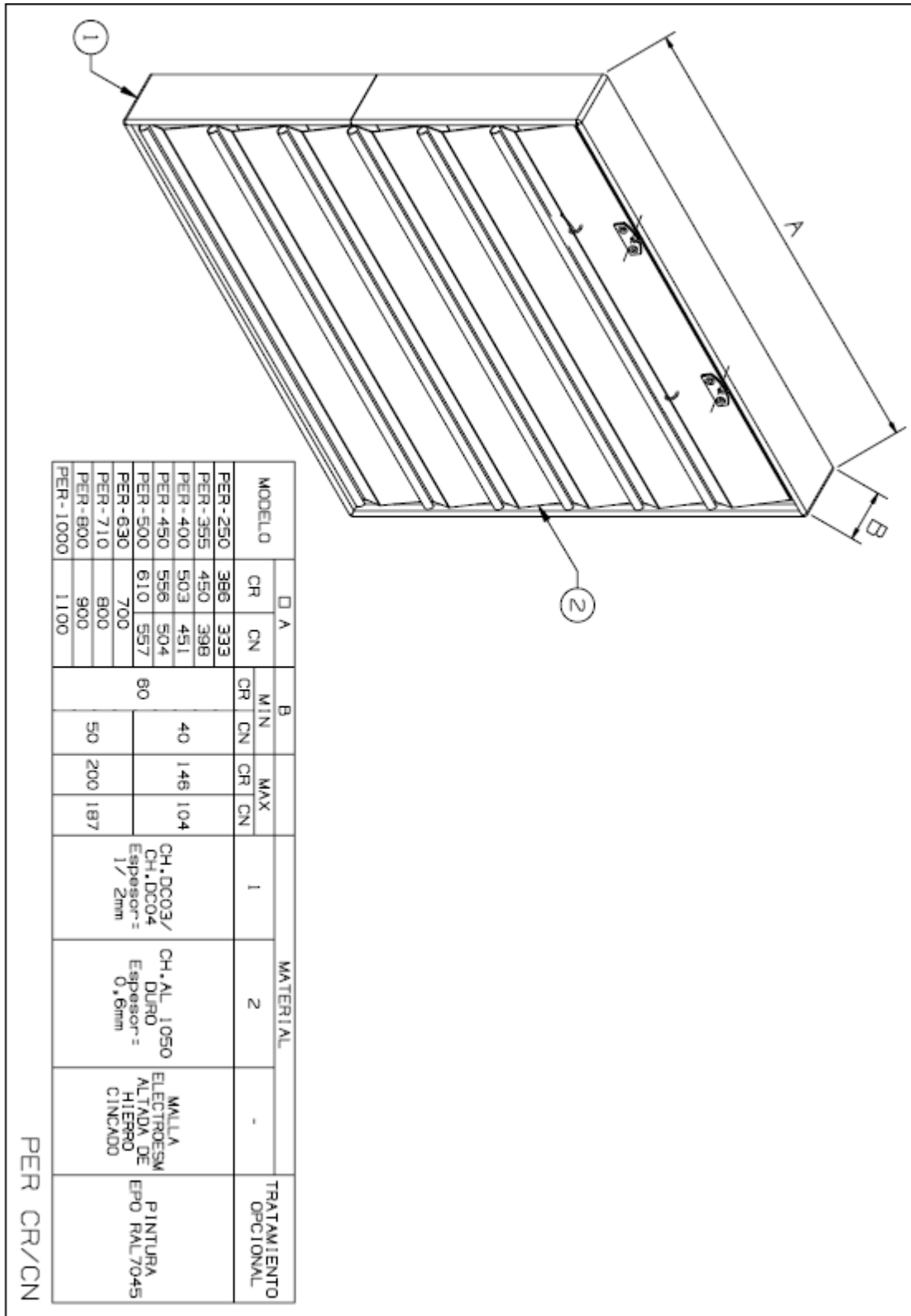
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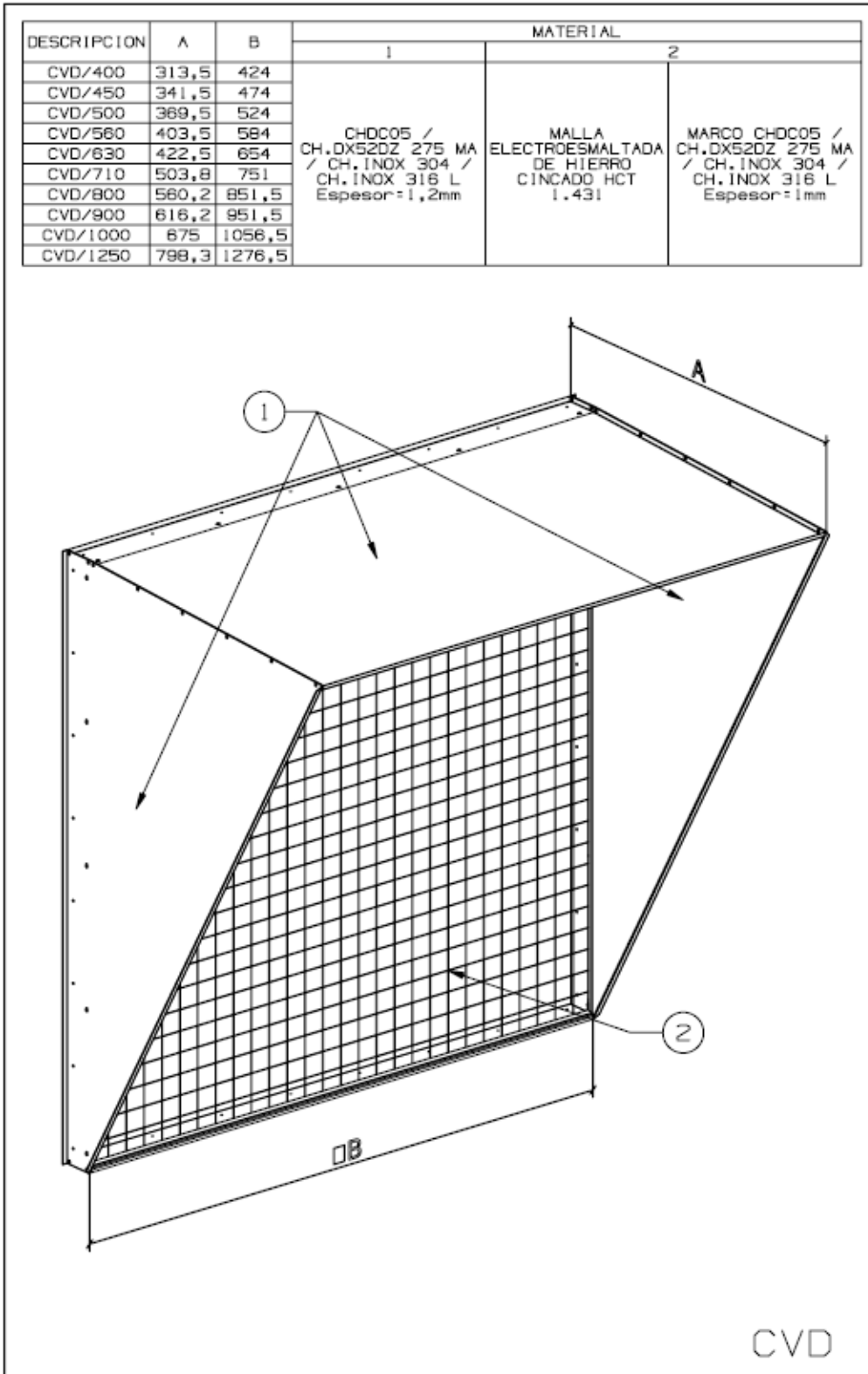
AM-xxM / DSD



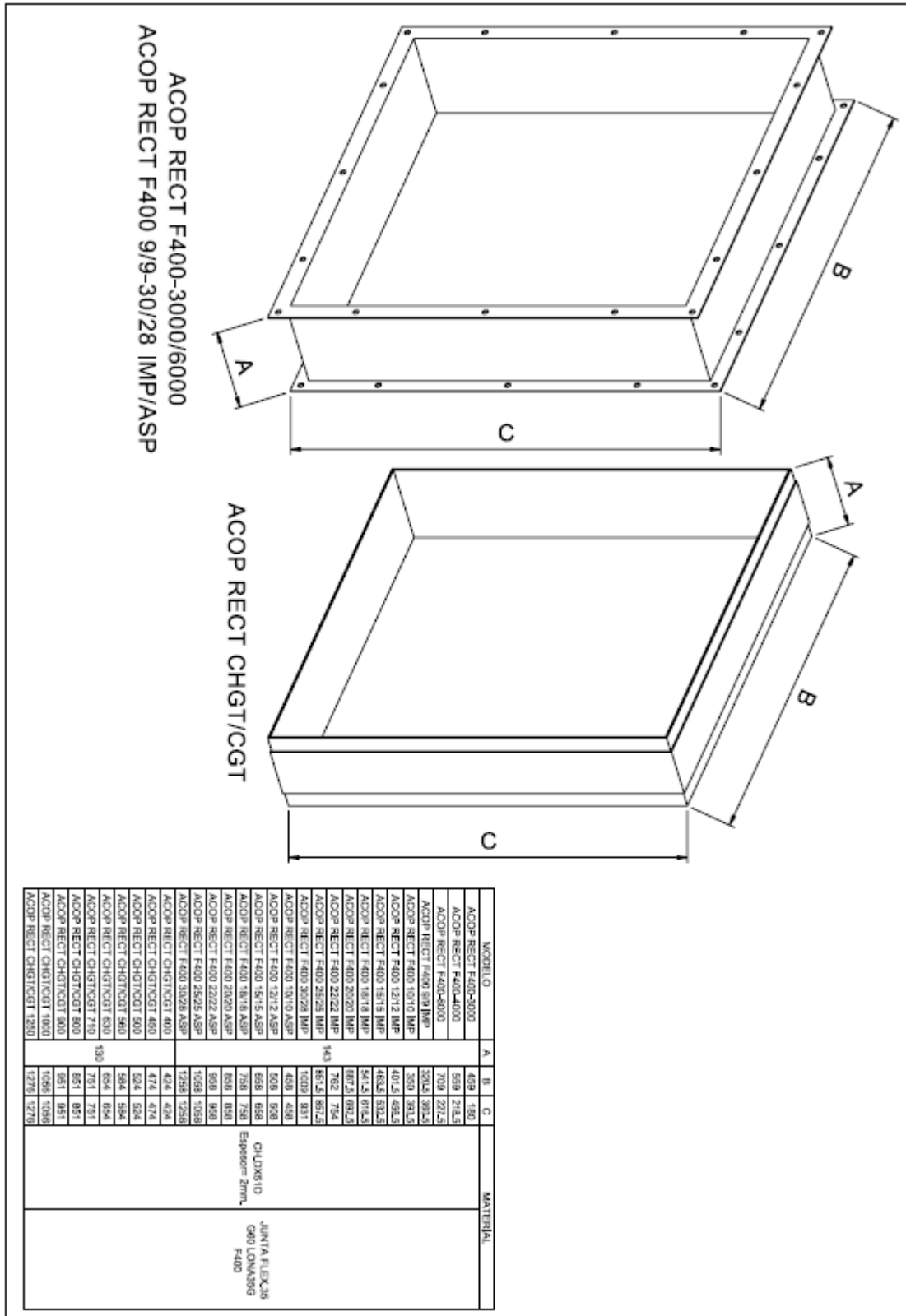
PER-CN / PER-CR



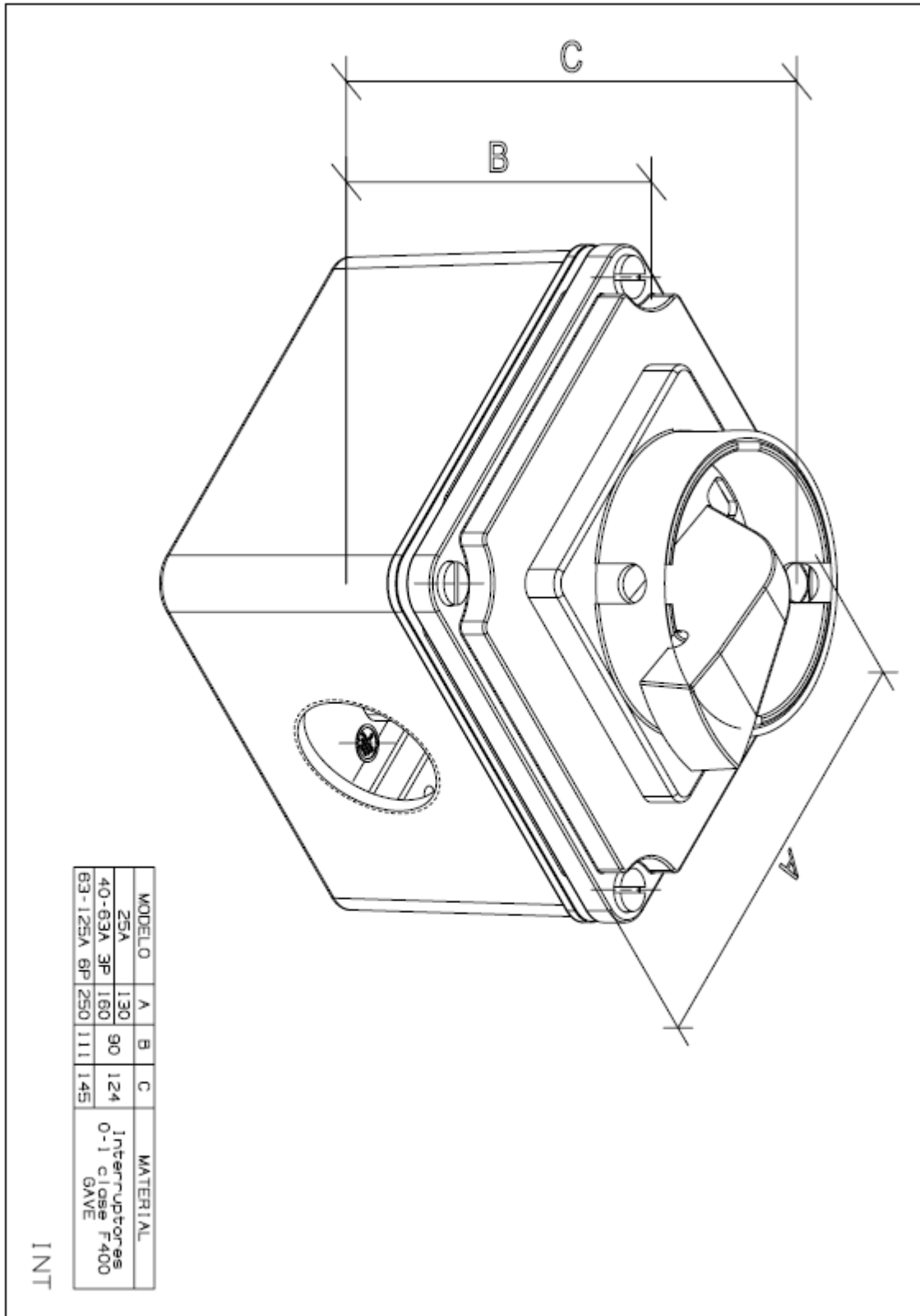
CVD



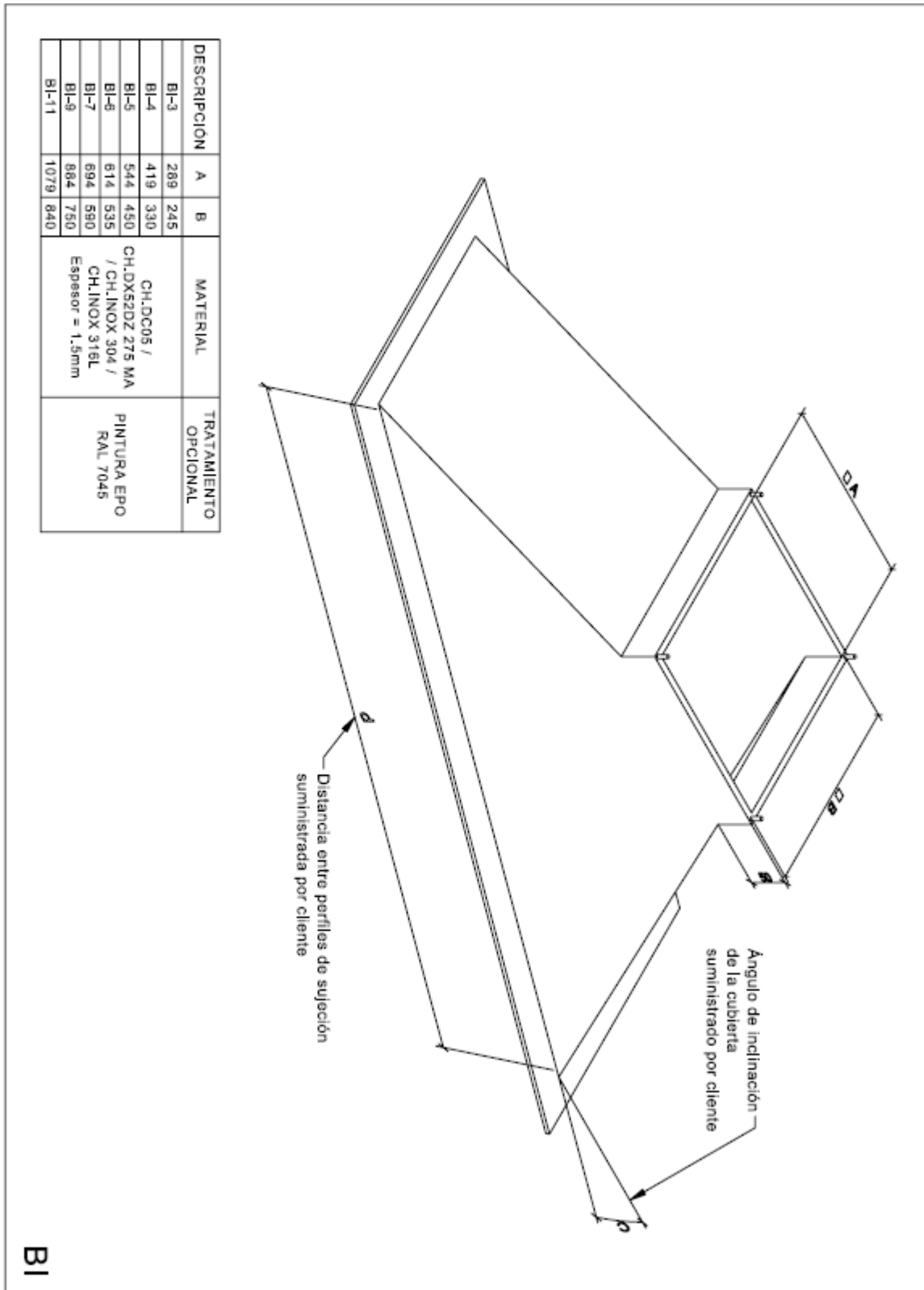
ACOP RECT F400



INT-xx/6P-F400

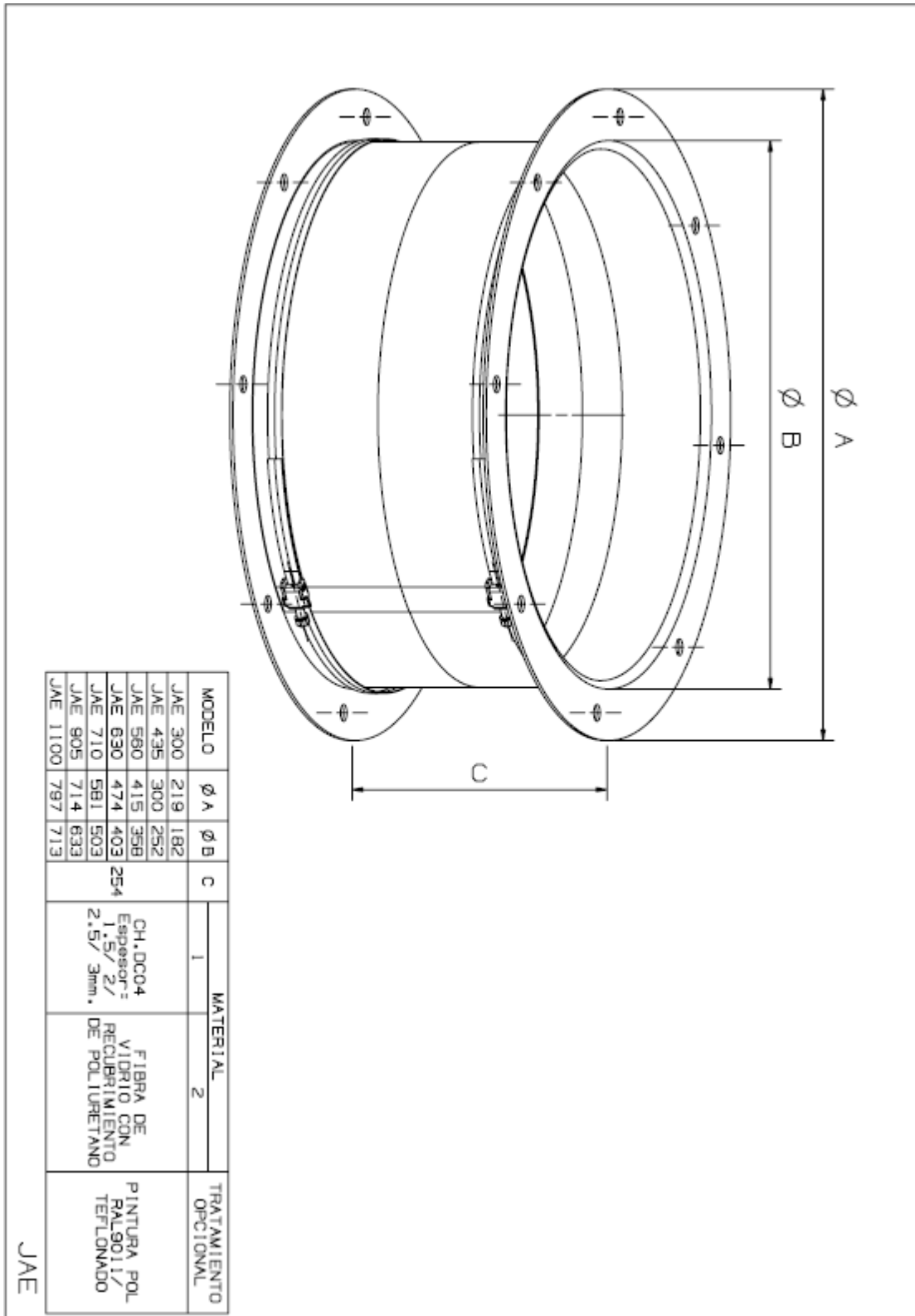


BI-xx

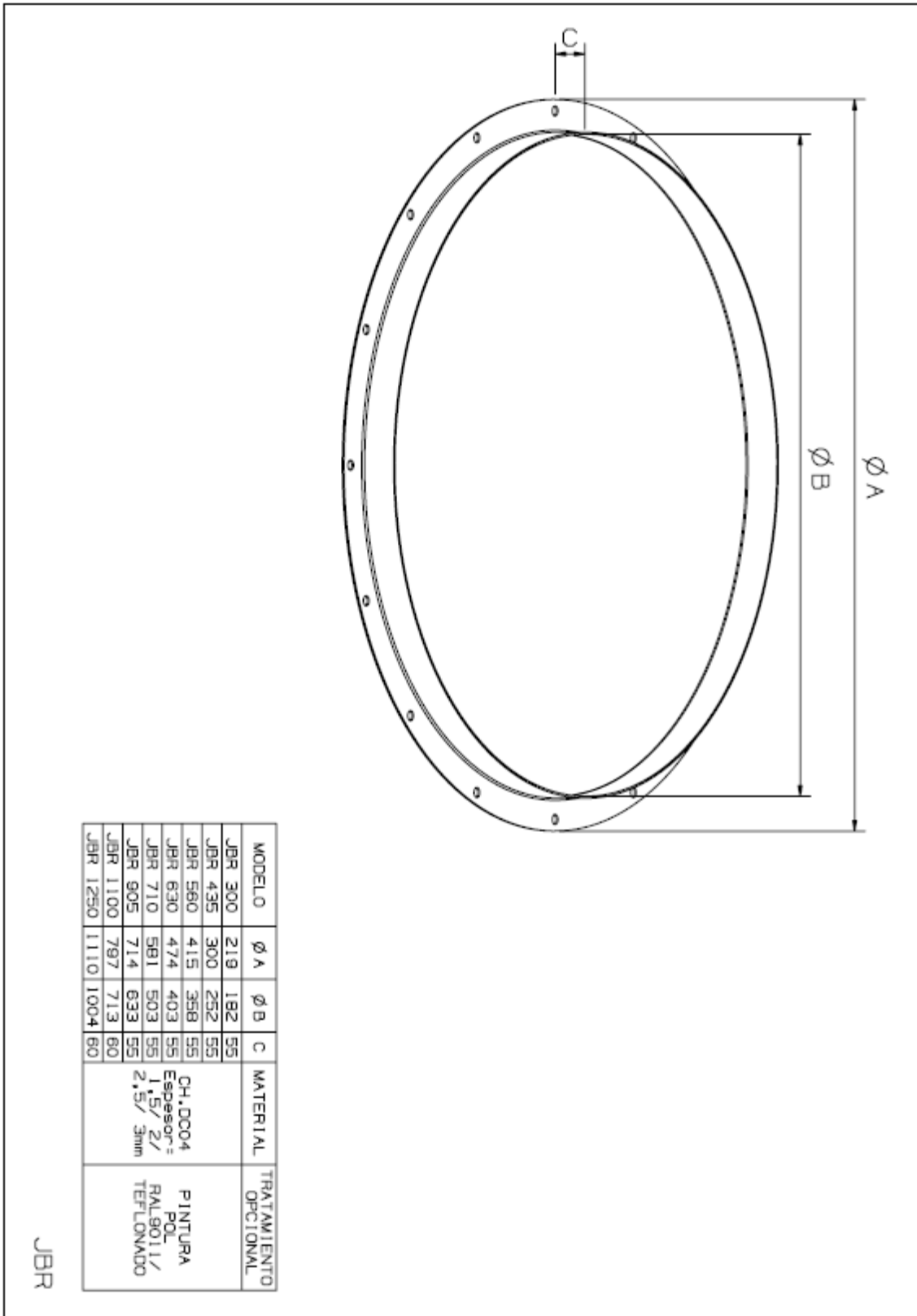


BI

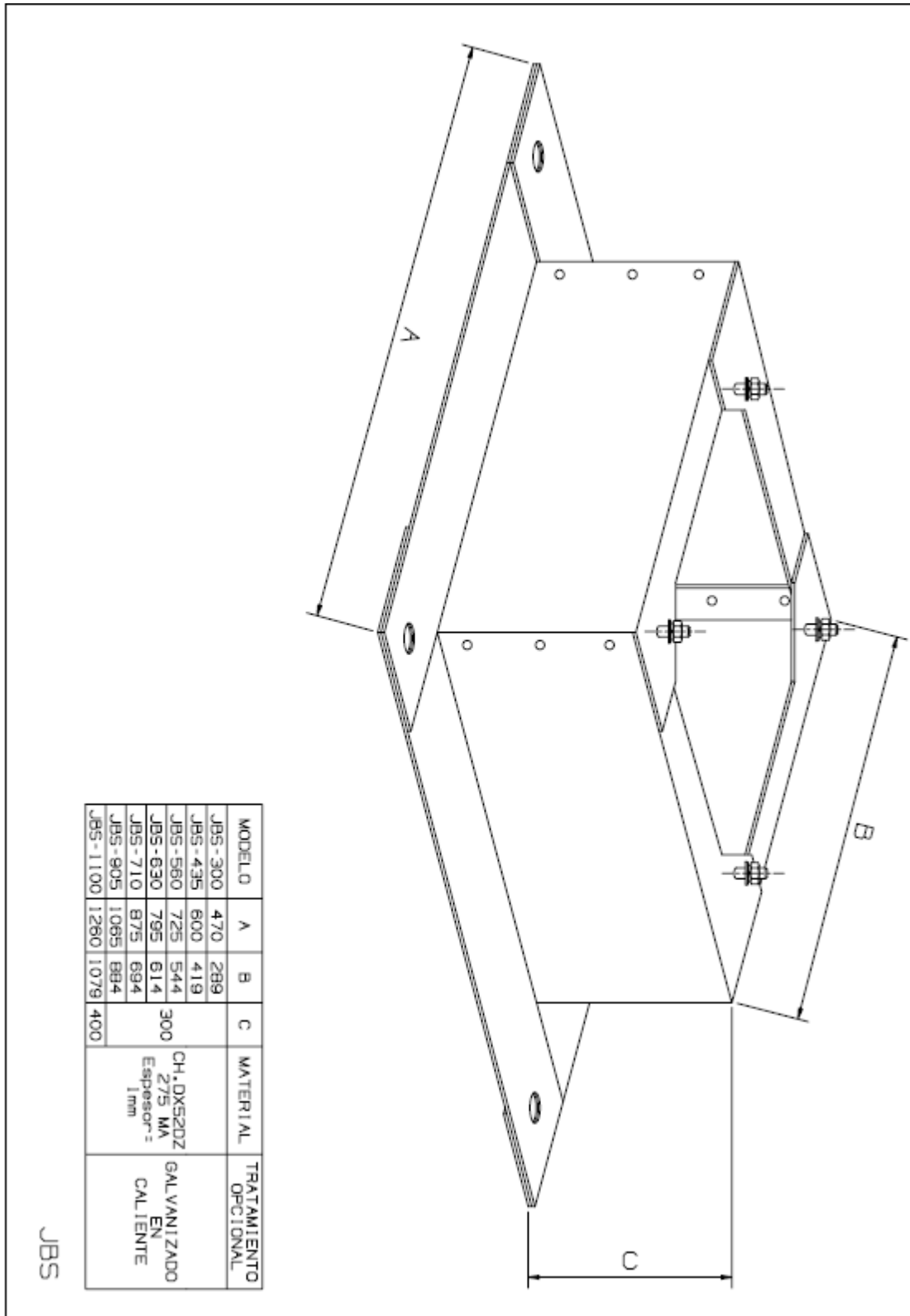
JAE



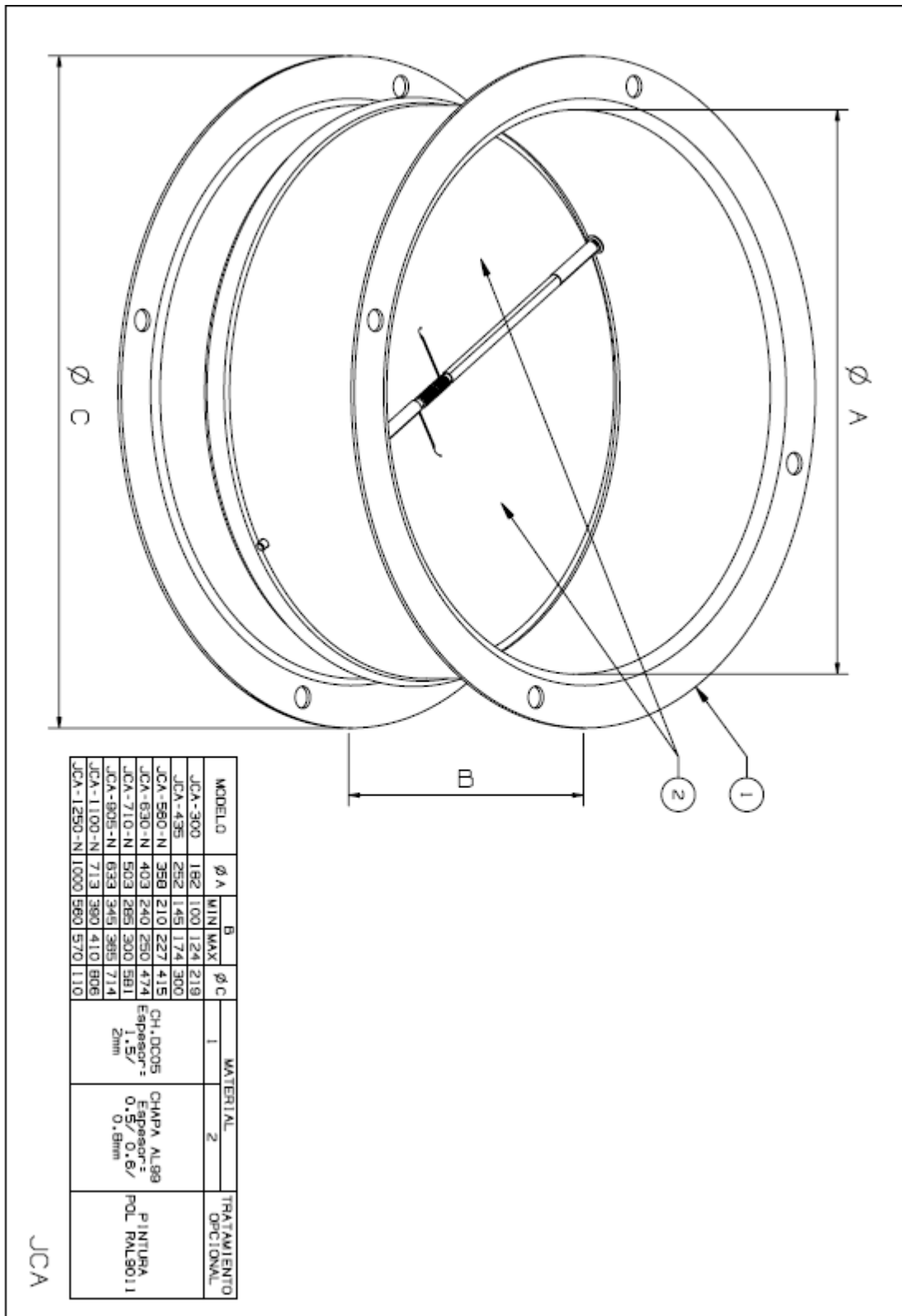
JBR



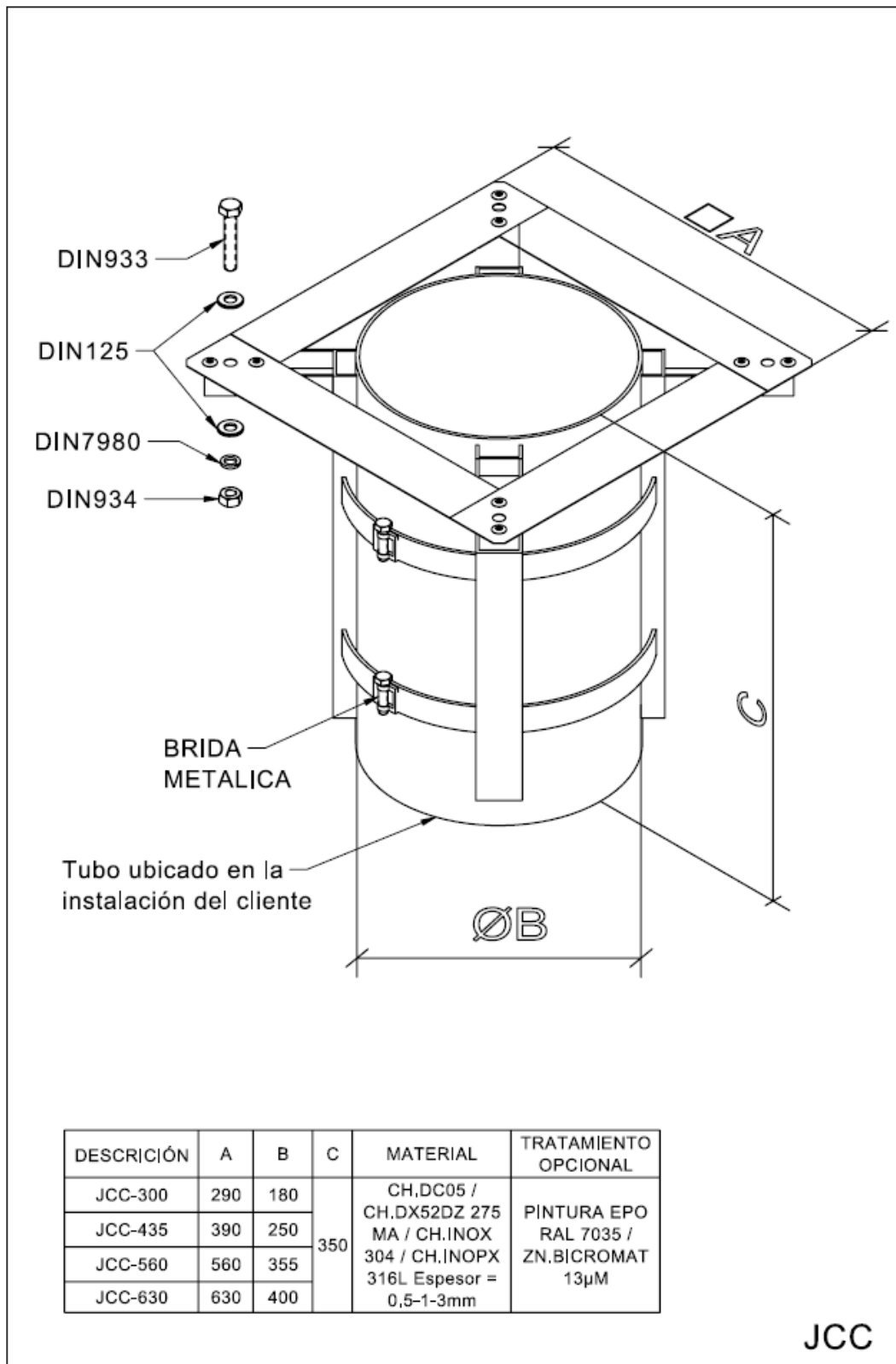
JBS JBS-V



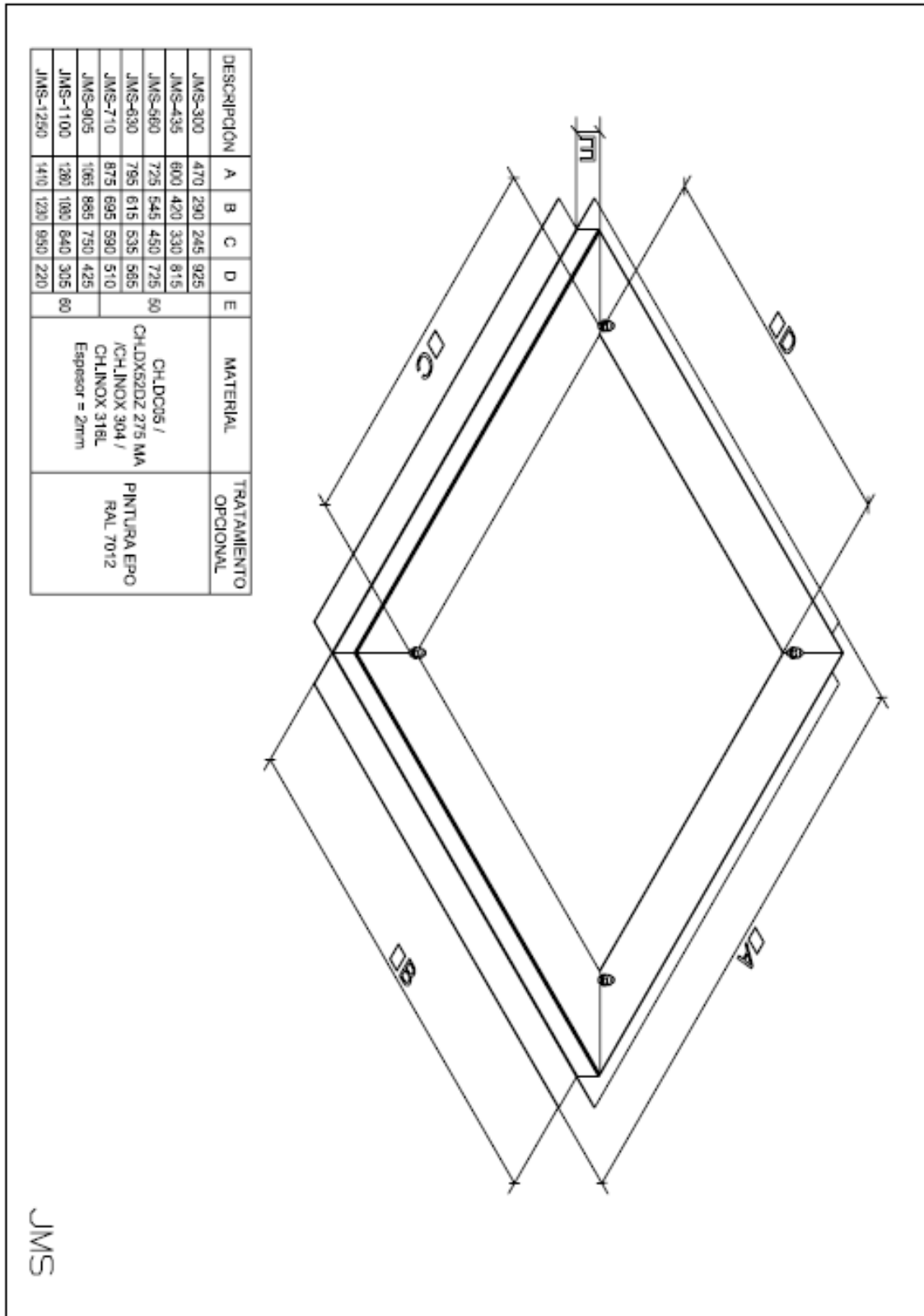
JCA JCA N



JCC

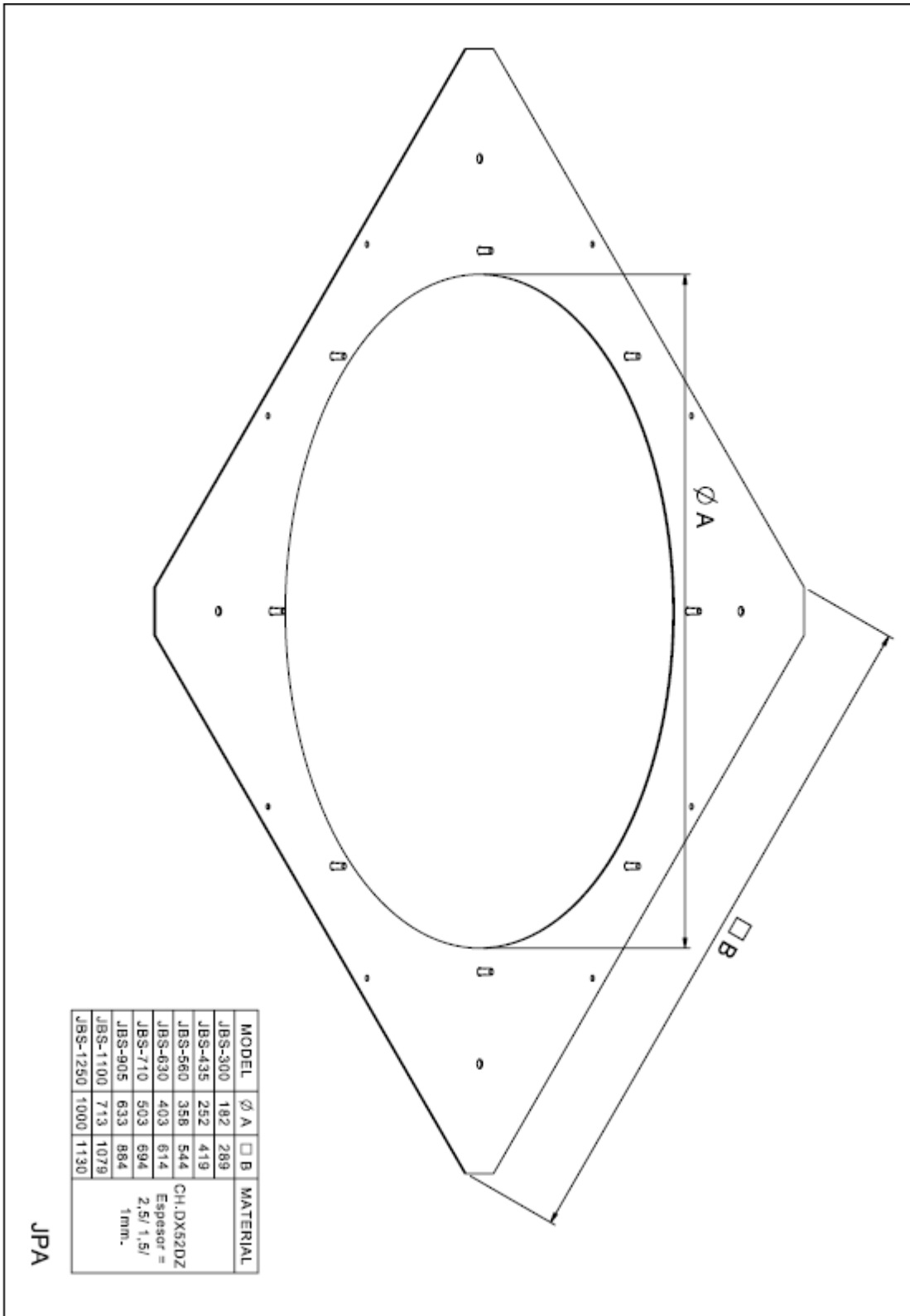


JMS

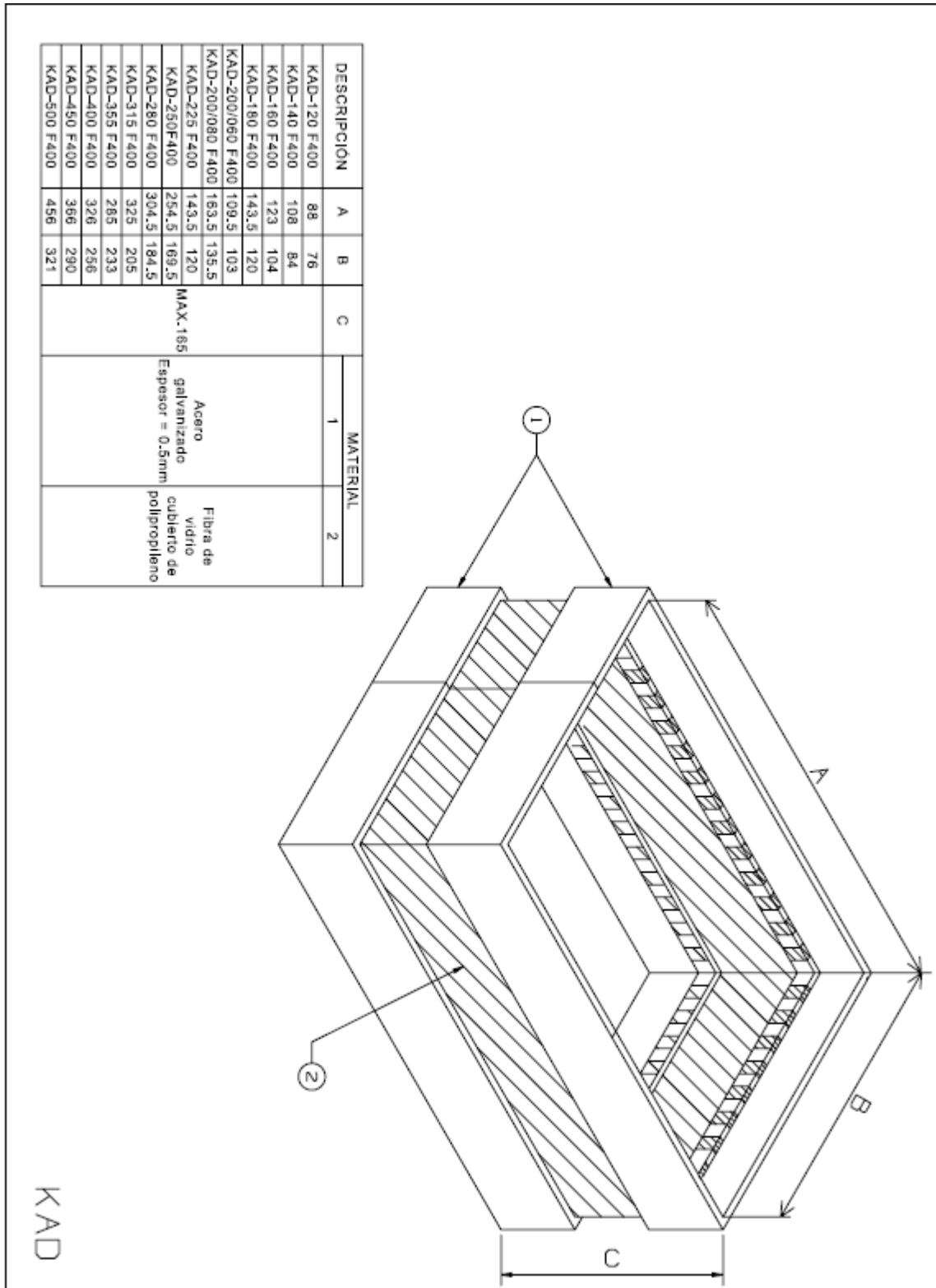


JMS

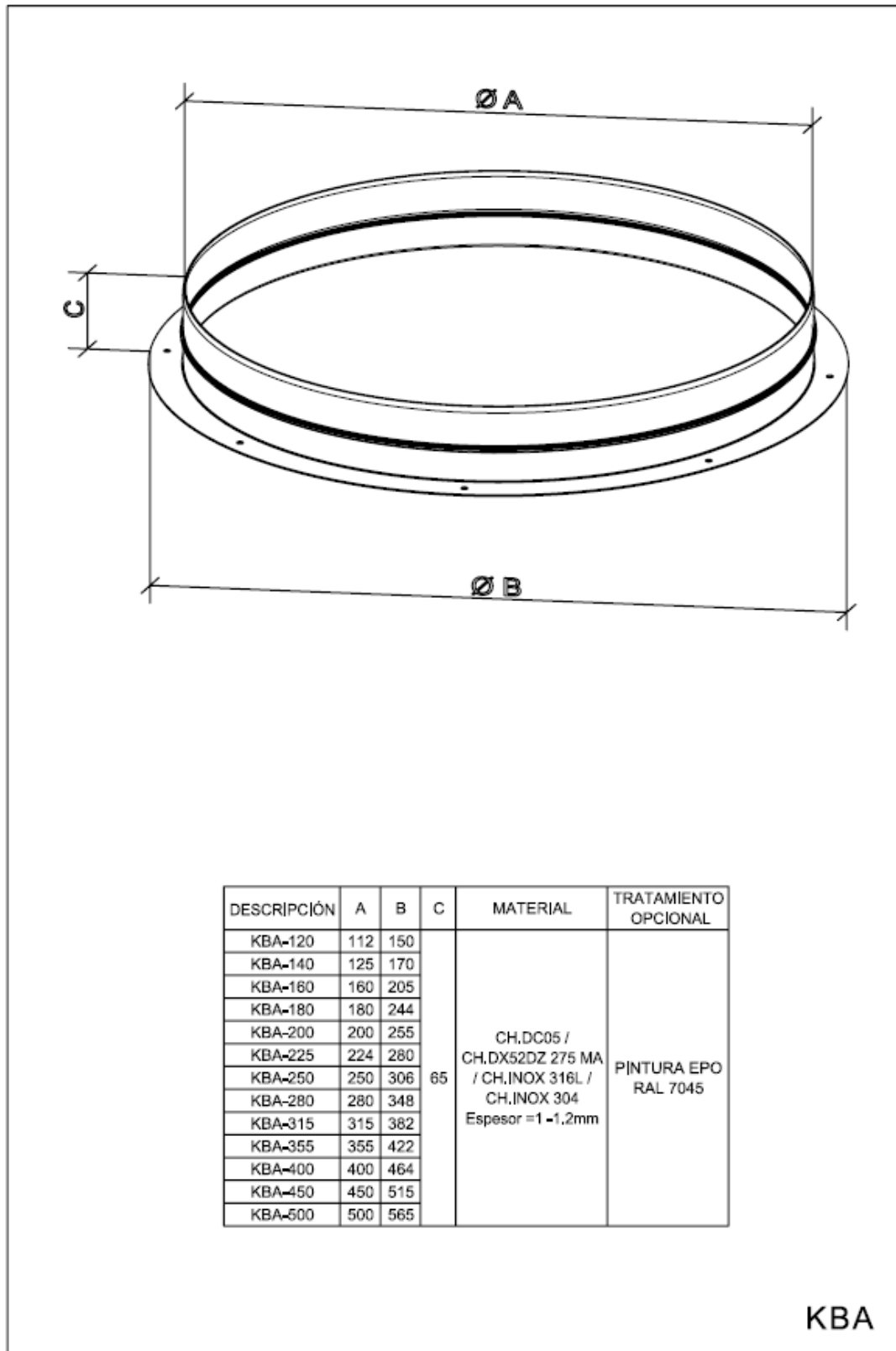
JPA



KAD F400



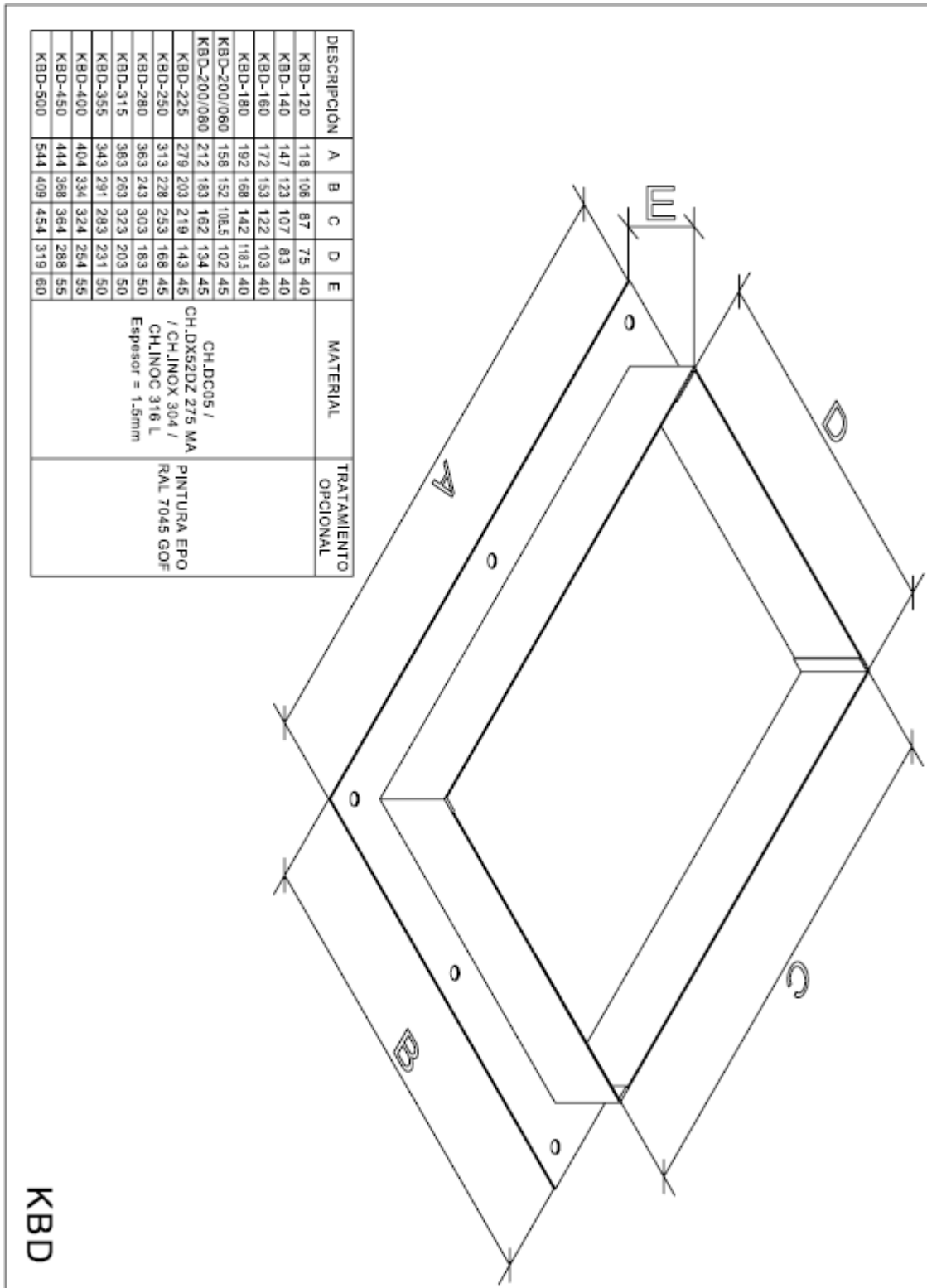
KBA



DESCRIPCIÓN	A	B	C	MATERIAL	TRATAMIENTO OPCIONAL
KBA-120	112	150	65	CH.DC05 / CH.DX52DZ 275 MA / CH.INOX 316L / CH.INOX 304 Espesor =1 -1,2mm	PINTURA EPO RAL 7045
KBA-140	125	170			
KBA-160	160	205			
KBA-180	180	244			
KBA-200	200	255			
KBA-225	224	280			
KBA-250	250	306			
KBA-280	280	348			
KBA-315	315	382			
KBA-355	355	422			
KBA-400	400	464			
KBA-450	450	515			
KBA-500	500	565			

KBA

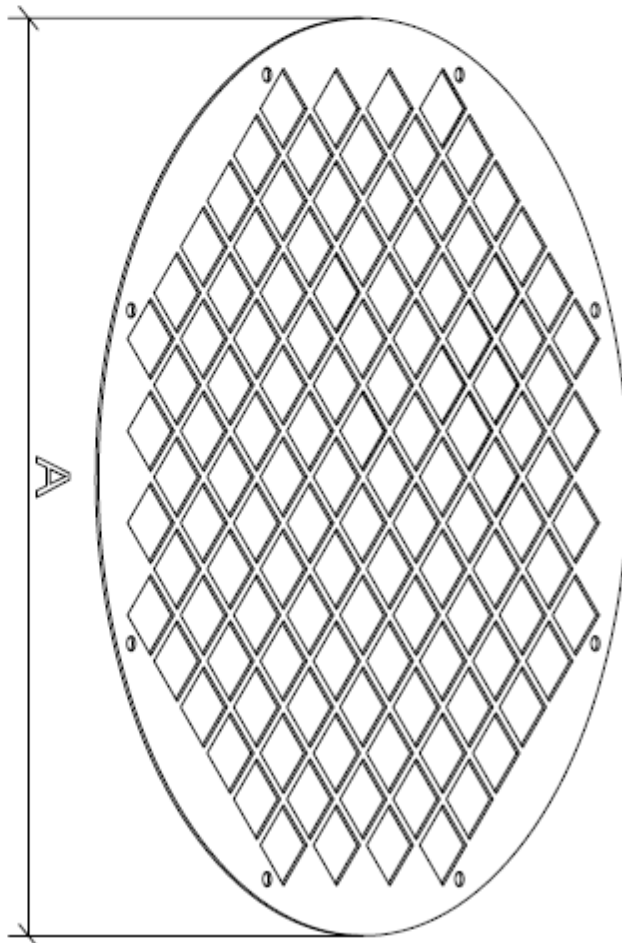
KBD



KBD

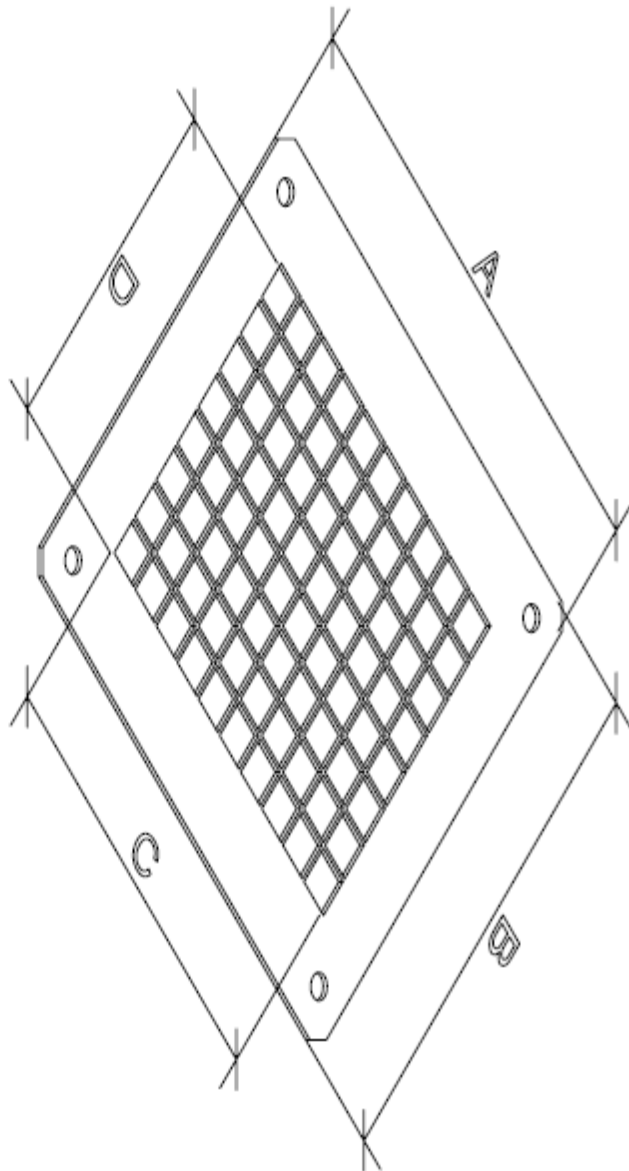
KRJ

DESCRIPCION	Ø A	MATERIAL	TRATAMIENTO OPCIONAL
KRJ-120	148	CH.DC005 / CH.DXS20Z 275 MA / CH.INOX 304 / CH.INOX 316 L Espesor = 1,2 - 1,5 mm	PINTURA EPO RAL 7035
KRJ-140	185		
KRJ-160	200		
KRJ-180	242		
KRJ-200	264		
KRJ-225	278		
KRJ-250	282		
KRJ-280	320		
KRJ-315	354		
KRJ-355	394		
KRJ-400	438		
KRJ-450	485		
KRJ-500	584		



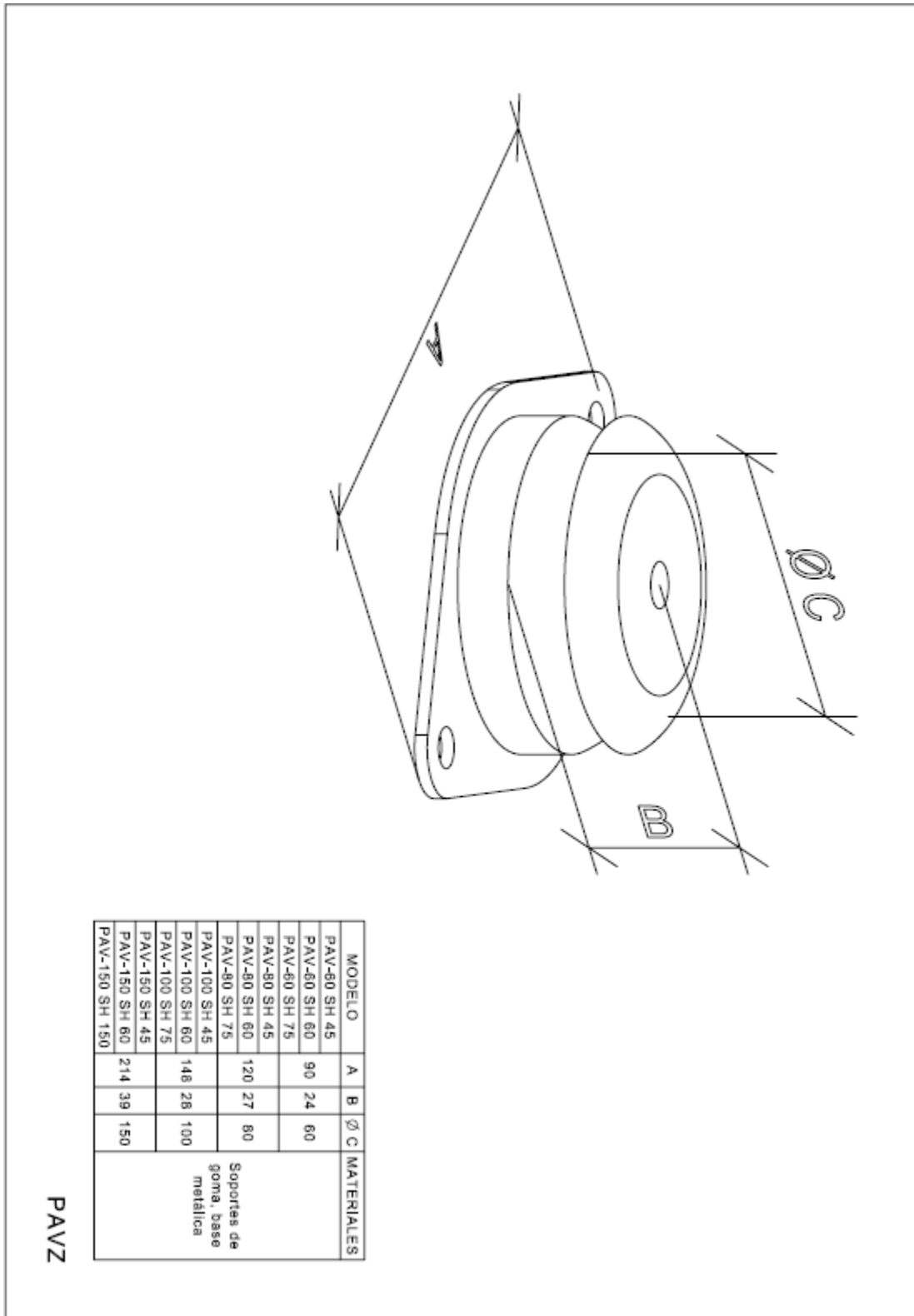
KRJ

DESCRIPCIÓN	A	B	C	D	MATERIAL	TRATAMIENTO OPCIONAL
KRJ-120X100	171	152	126	100,6		
KRJ-140X115	192	168	166,5	140,7		
KRJ-160X130	212	183	166,5	140,7	CH.DC05 /	
KRJ-218X140	279	203	218,1	153,6	CH.DX52DZ 275 MA	PINTURA EPO
KRJ-250X165	312	228	253	164,1	/ CH.INOX 304 /	RAL 7035
KRJ-300X184	362	242	303,8	189,5	CH. INOX 316 L	
KRJ-320X200	382	262	321,3	202,2	EspeSor = 1,2mm	
KRJ-320X250	403	333	321,3	253		

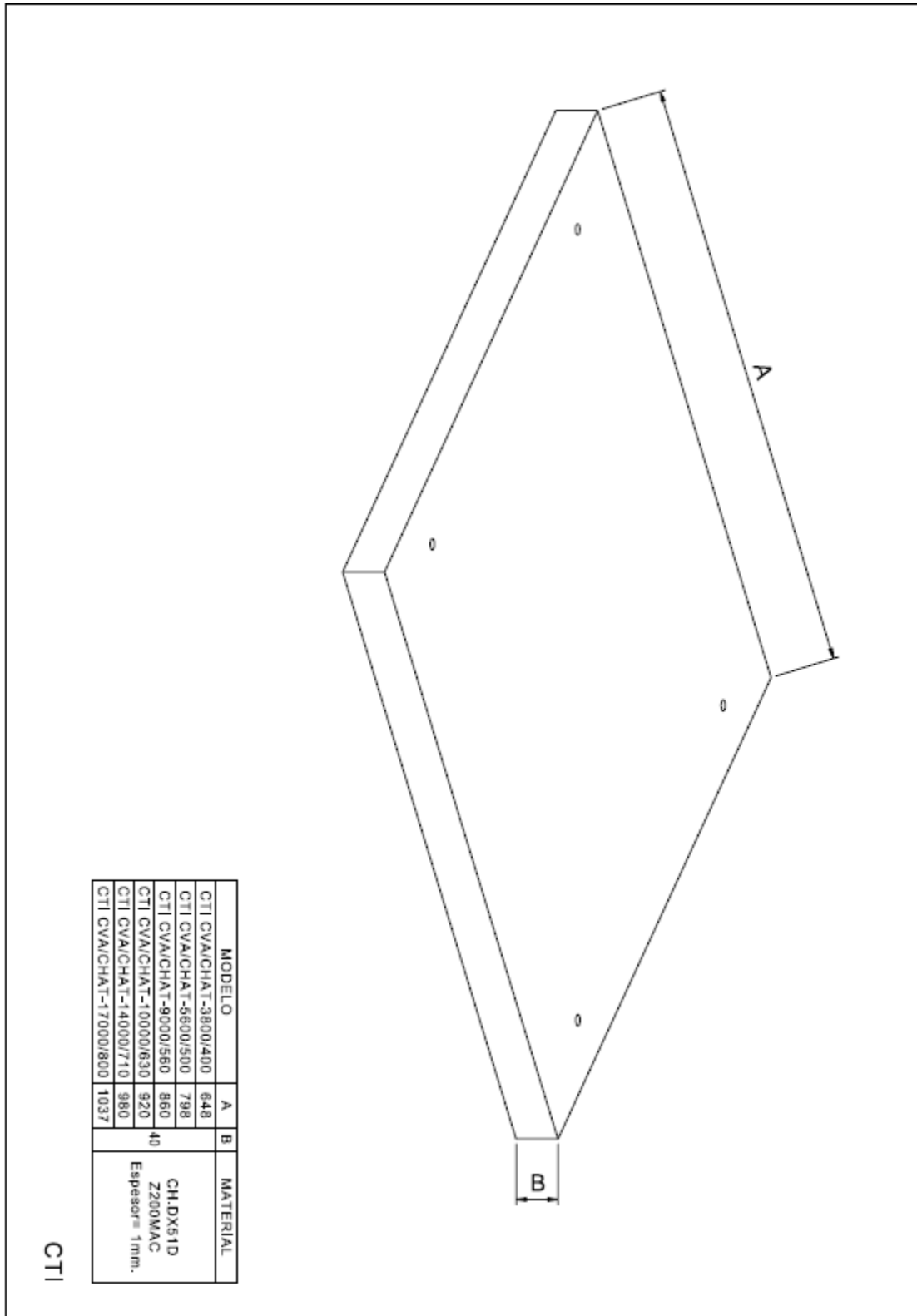


KRJ

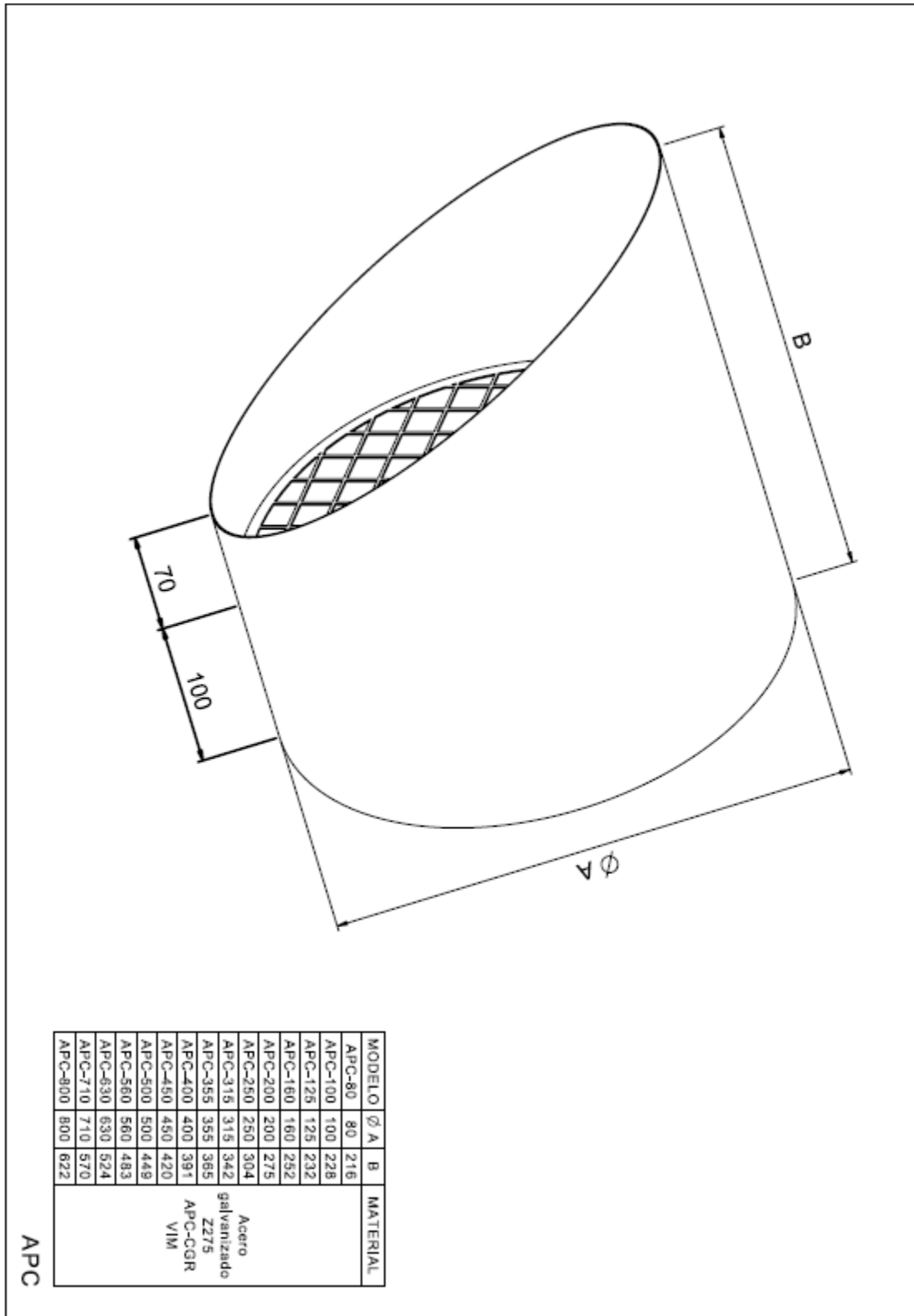
PAVZ



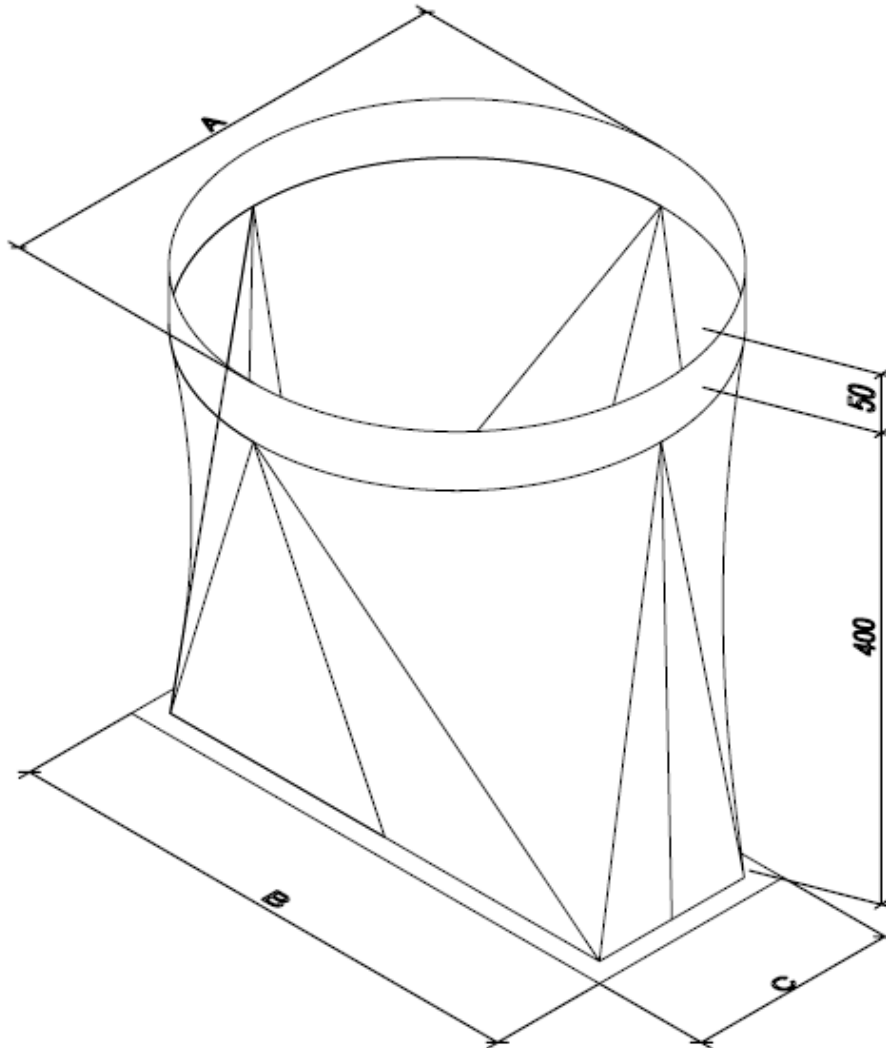
CTI



APC



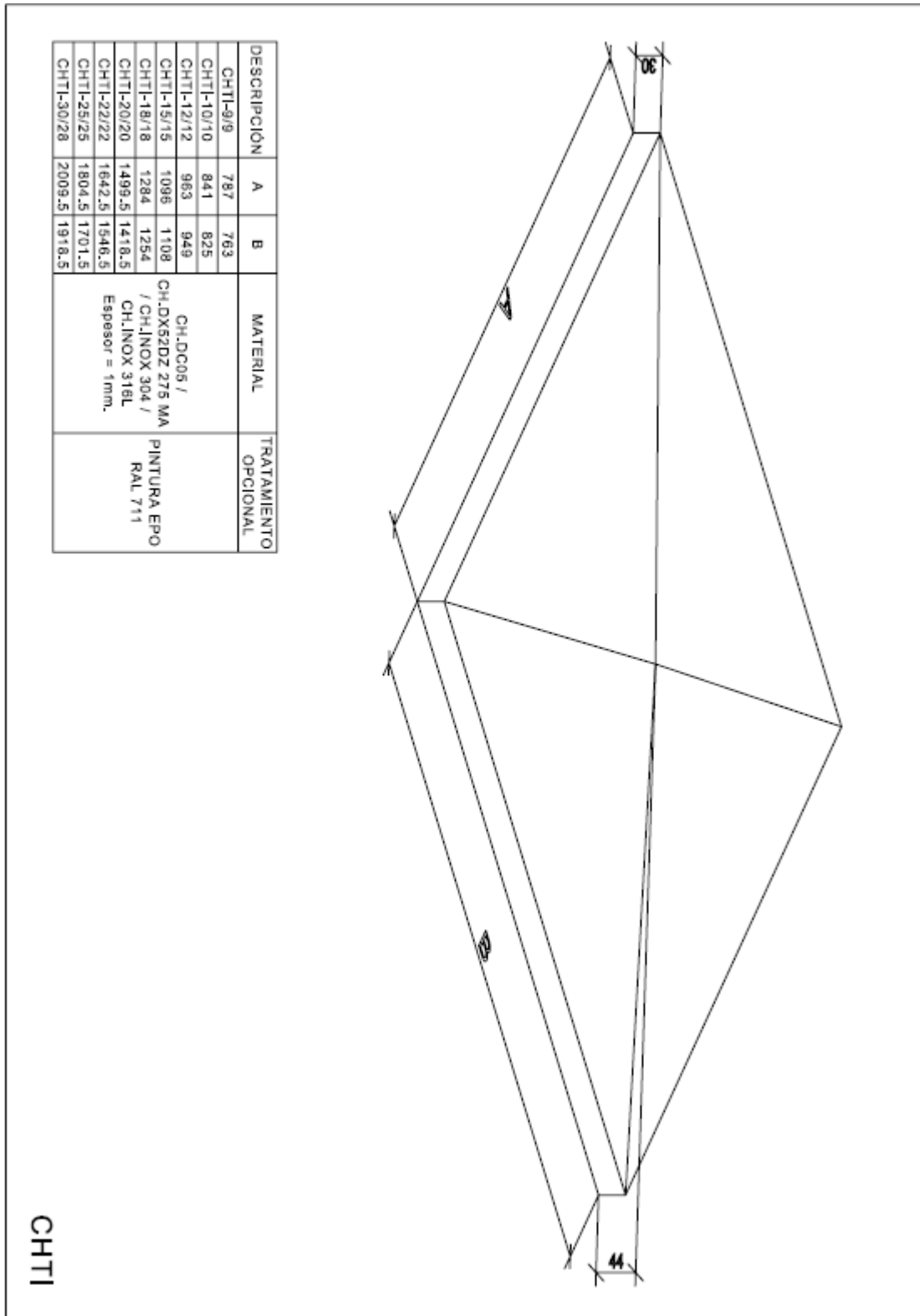
FD



DESCRIPCIÓN	A	B	C	MATERIAL	TRATAMIENTO OPCIONAL
FD-3000	315	459	180	CH,DC05 / CH,DX52DZ 275 MA / CH,INOX 304 / CH,INOX 316L Espesor = 1mm.	PINTURA EPO RAL 7035
FD-4000	355	559	219		
FD-6000	400	709	228		

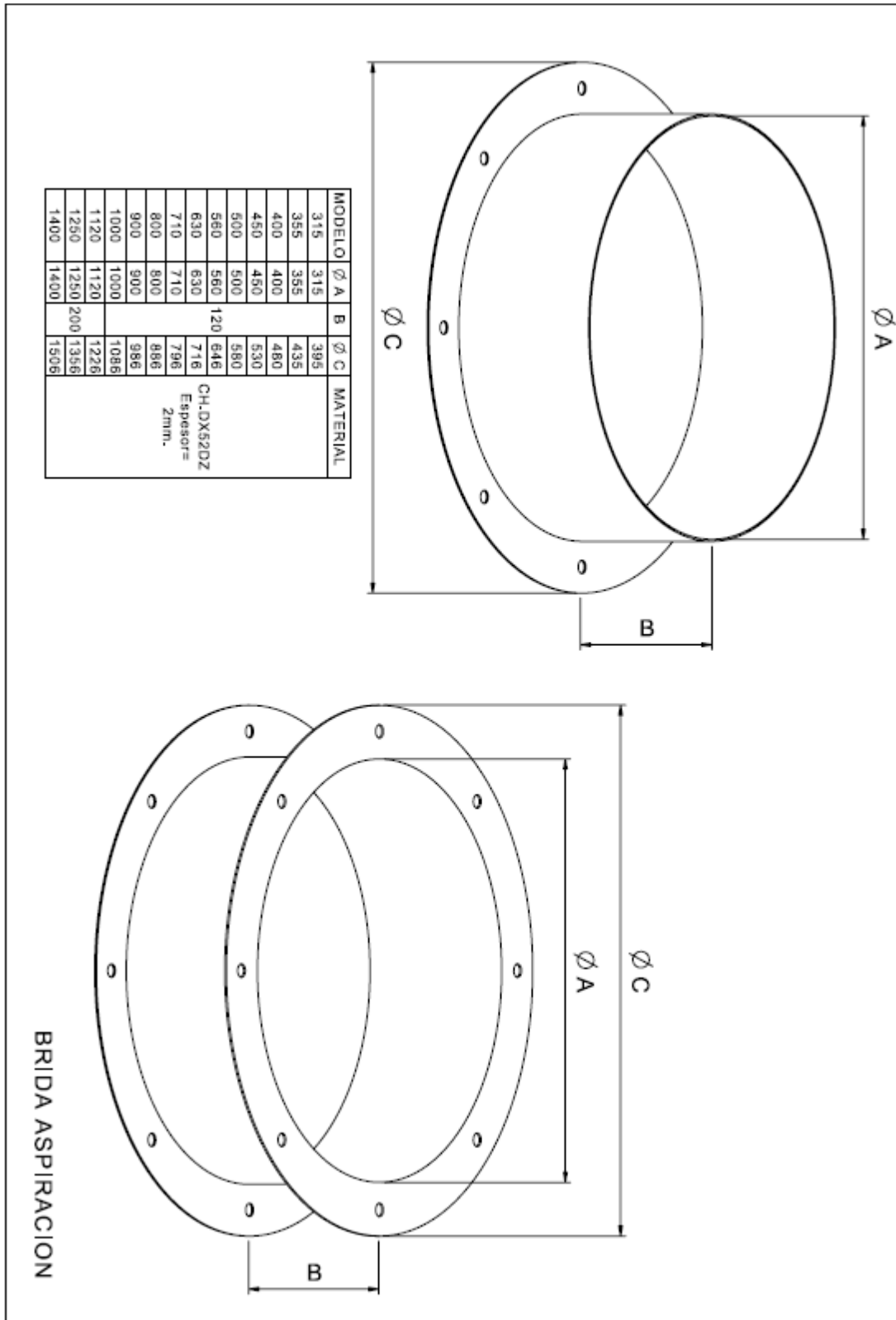
FD

CHTI

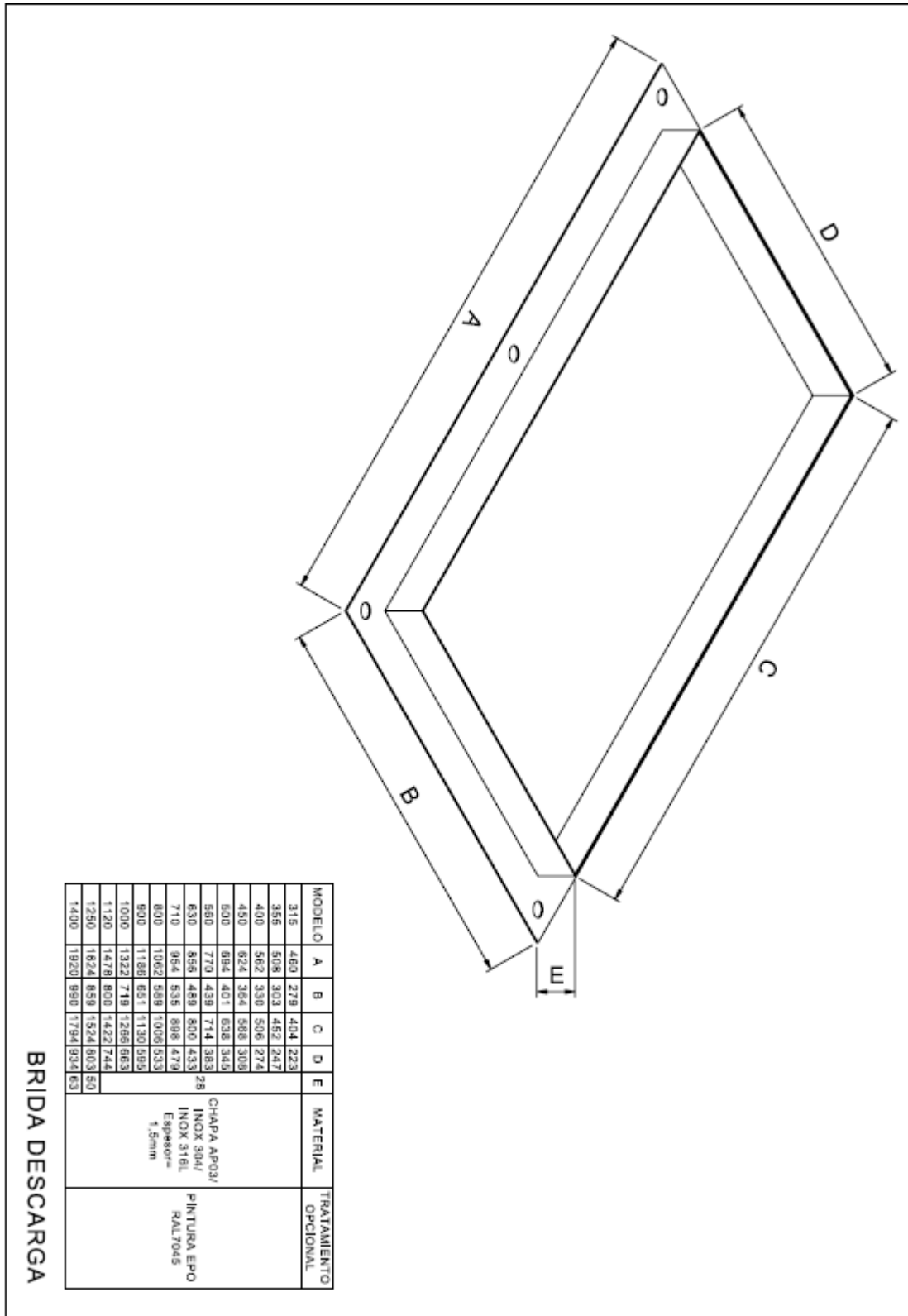


CHTI

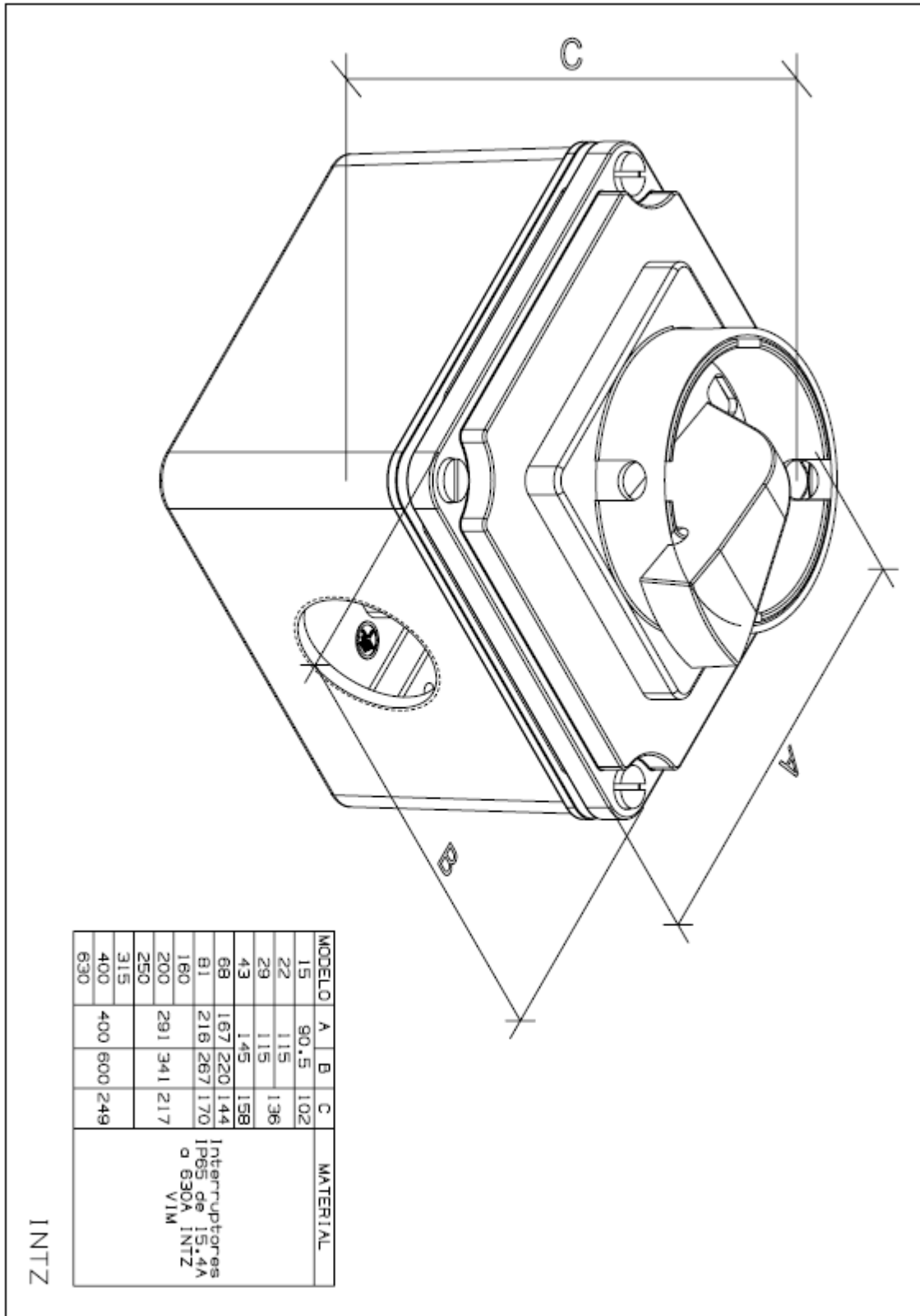
INFLET FLANGE



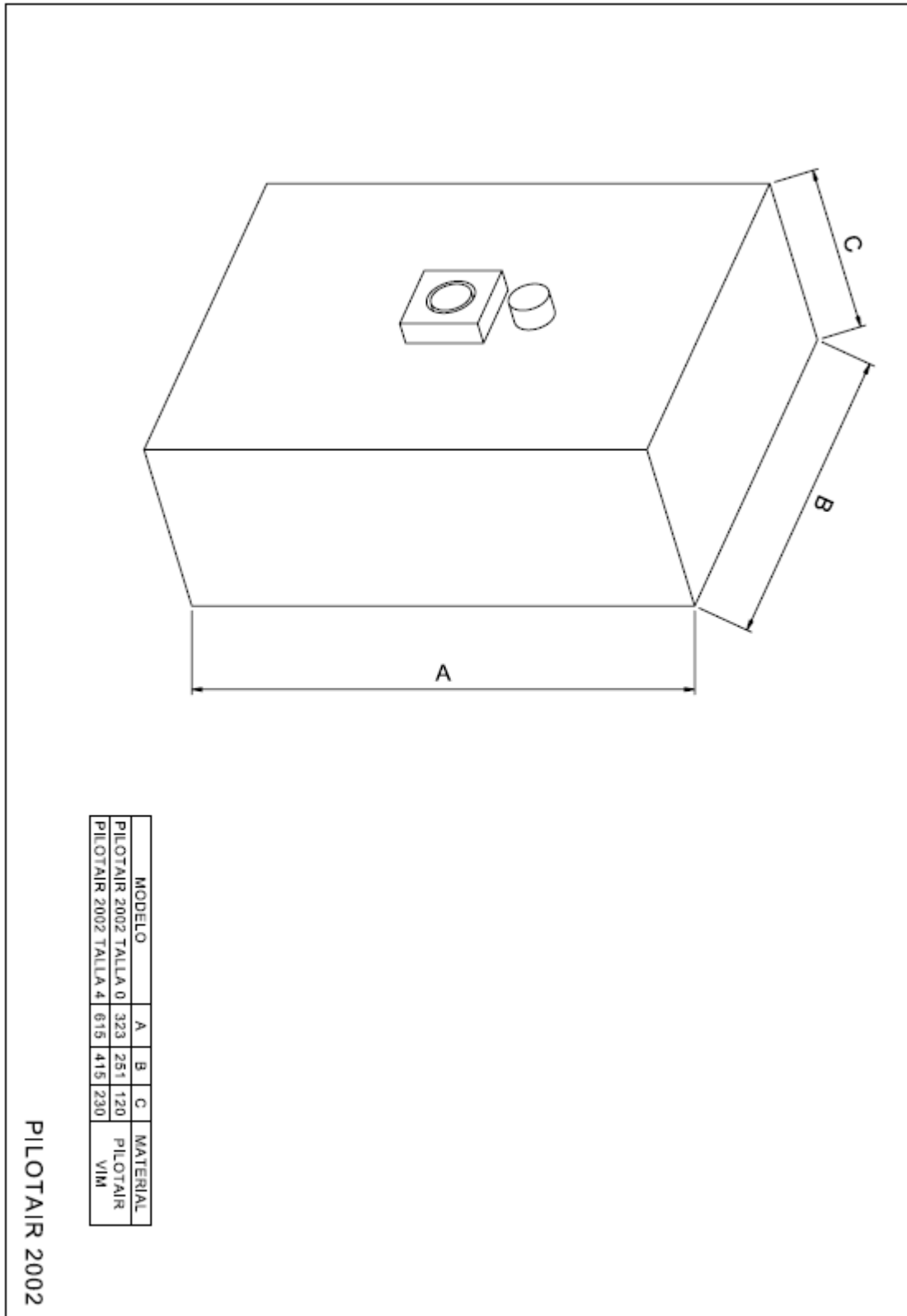
OUTLET FLANGE



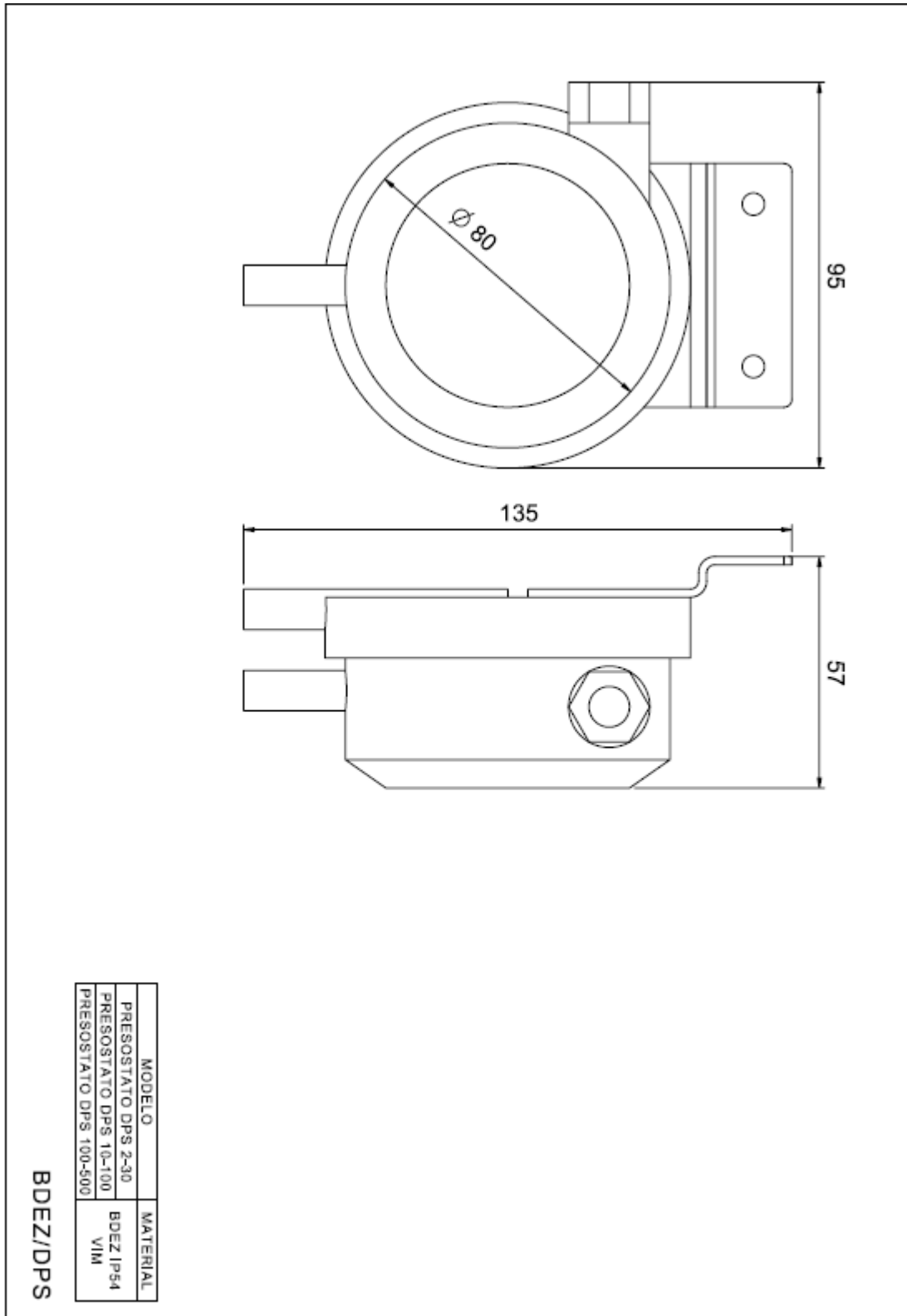
INTZ



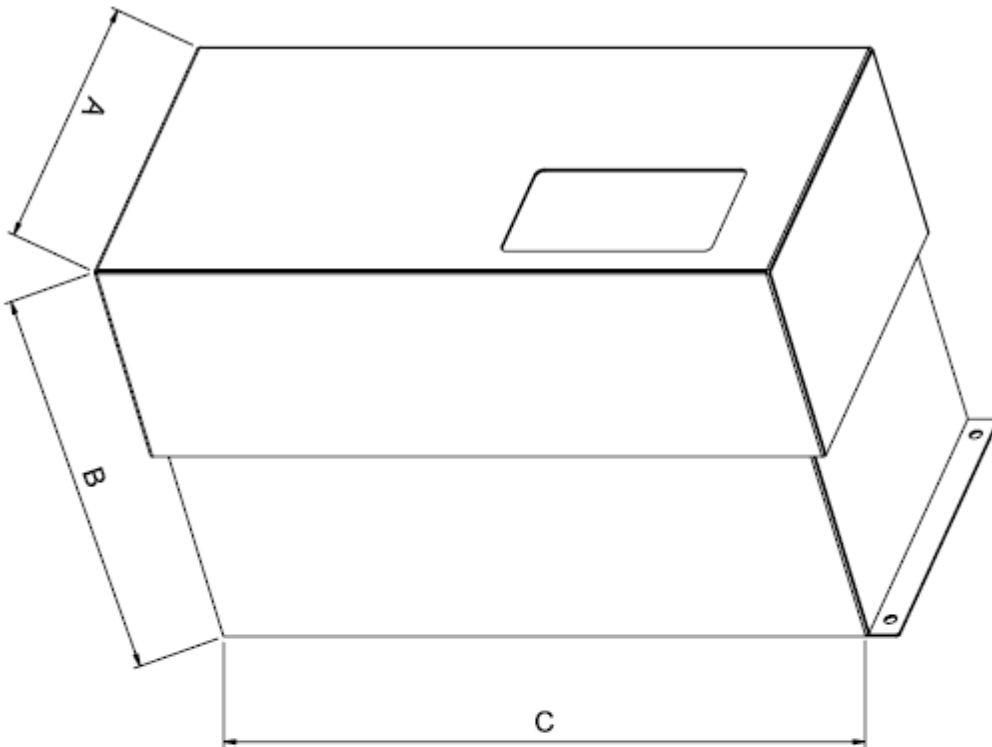
PILOTAIR 2002



BDEZ/DPS



VSD CFW



MODELO	A	B	C	MATERIAL
CFW700	220	293	448	CFW700C45P0T4 WEG
CFW09	335	274	550	CFW090070T3848 WEG

VSD CFW