

CUMSA

INNOVATIVE SOLUTIONS
FOR YOUR MOLDS



SLIDES



UNDERCUTS



EJECTION



TRACEABILITY



VACUUM



ACCESSORIES



269

HISTORY

A written history, but still with a long way to go

CUMSA was founded by Mr. Alberto Navarra in 1979, when, in association with a small group of Spanish toolmakers, decided to combine their knowledge and create the company.

Their objective was to develop mold projects from the initial stages of design through the serial plastic parts production.

From the early beginning, the company was focused on expanding its operations outside of Spain. Consequently, they first reached out to Mexico, Denmark, and the USA.

In 1992 CUMSA decided to make a 180° turn, took advantage of Mr. Alberto Navarra deep knowledge of the tooling industry, and started to create an innovative range of standard components for molds.

Since then, many products have become a reference standard in the mold making industry due to their simplicity in functionality as well as easy assembling and adjusting. All the products are designed as a result of a deep R+D process, keeping in mind the challenges that designers, mold-makers and molders have to deal with.

Nowadays, CUMSA continues as a family owned and operated company, headquartered in Barcelona, Spain, with subsidiaries in the USA, Portugal, Italy, and China, focused on the design, manufacturing and distribution of innovative standard components for the mold making and molding industries.



CUMSA

INNOVATIVE SOLUTIONS
FOR YOUR MOLDS



BLOCK
CYLINDER



CARTRIDGE
CYLINDER



COOLED BLOCK
CYLINDER



COOLED CARTRIDGE
CYLINDER



SENSORS



LARGE STROKE
CYLINDER



WORLDWIDE PRESENCE

Globalization is our DNA

CUMSA has focused since its beginnings in exporting their products, so any CUMSA component can be purchased by any toolmaker or molder in any country worldwide. This gives CUMSA the chance to grow as a company, discover new problems all around the world, and find how to solve them in different ways. This vision allows the company the opportunity to have a great international presence, with a distribution network over 45 countries.

CUMSA distribution group is divided by 5 owned facilities:

- EUROCUMSA in Marinha Grande area (Portugal), established in 1998.
- CUMSA Italia in Milano area (Italy), established in 2004.
- CUMSA Standard parts for molds Co. Ltd. , in Shenzhen (China), and CUMSA Asia Pacific, Ltd., in Hong Kong, both established in 2009.
- CUMSA USA in Troy (Michigan-USA), established in 2012.

CUMSA components are directly delivered from its headquarters to Spain and Germany, as well as to those other countries where non CUMSA official dealer is present.

By the end of 2017, another production plant was built in Portugal. CUMSA Tech, whose main goal is the manufacturing of hydraulic cylinders specially designed for the mold making industry, and in addition to, produce a few other components included in this catalogue.

CUMSA VALUES

**Alone we can do so little,
together we can do so much**

CUMSA values are how we believe a company should be. A place where every single worker is an essential part of the process to achieve the objectives as a team.

Each letter of CUMSA name represents our 5 TOP values:

C for Creativity:

Going one step further, creating trendy products, and applying the latest technologies. The creativity should be in all areas of our work.

U for Unity:

We believe that the growth, the progress and the objectives can only be achieved if every single person of the team works with the same goal in mind. Trust, respect, and mutual support are crucial in our working environment.

M for Motivation

Being flexible and agile, with optimism and positive energy is something we look for in our employees. As well as proposing new challenges with self-confidence, fun and a passion for work.

S for Service

Excellence in the service to customers, subsidiaries, suppliers, colleagues, and in general to all the partners of our day to day.

A for Attitude

Open minded, determination to do more and better things, with a lot of attention to detail. Falling and rising, never giving up, improving, exploring, innovating, taking risks, growing, and succeeding.

QUALITY

**Quality is not an act,
it is a habit**

We are committed to the development of effective products and services. Since 1997, CUMSA is certified by a Quality Management System according to the ISO-9001 standards, which is annually audited by the international leading company Det Norske Veritas AS who verifies that all processes meet the standard requirements.

At CUMSA the four 4 main areas of the quality management system are applied to:

- Continuous investment in new IT technologies, production, and testing systems, as well as in new machines to optimize all the processes.
- Quality control through all stages of the production process until the product is delivered to the customer.
- Continuous employee training to increase knowledge and quality awareness regarding services and products.
- Fast and valuable answers to customer's needs, to help them to achieve their requirements.



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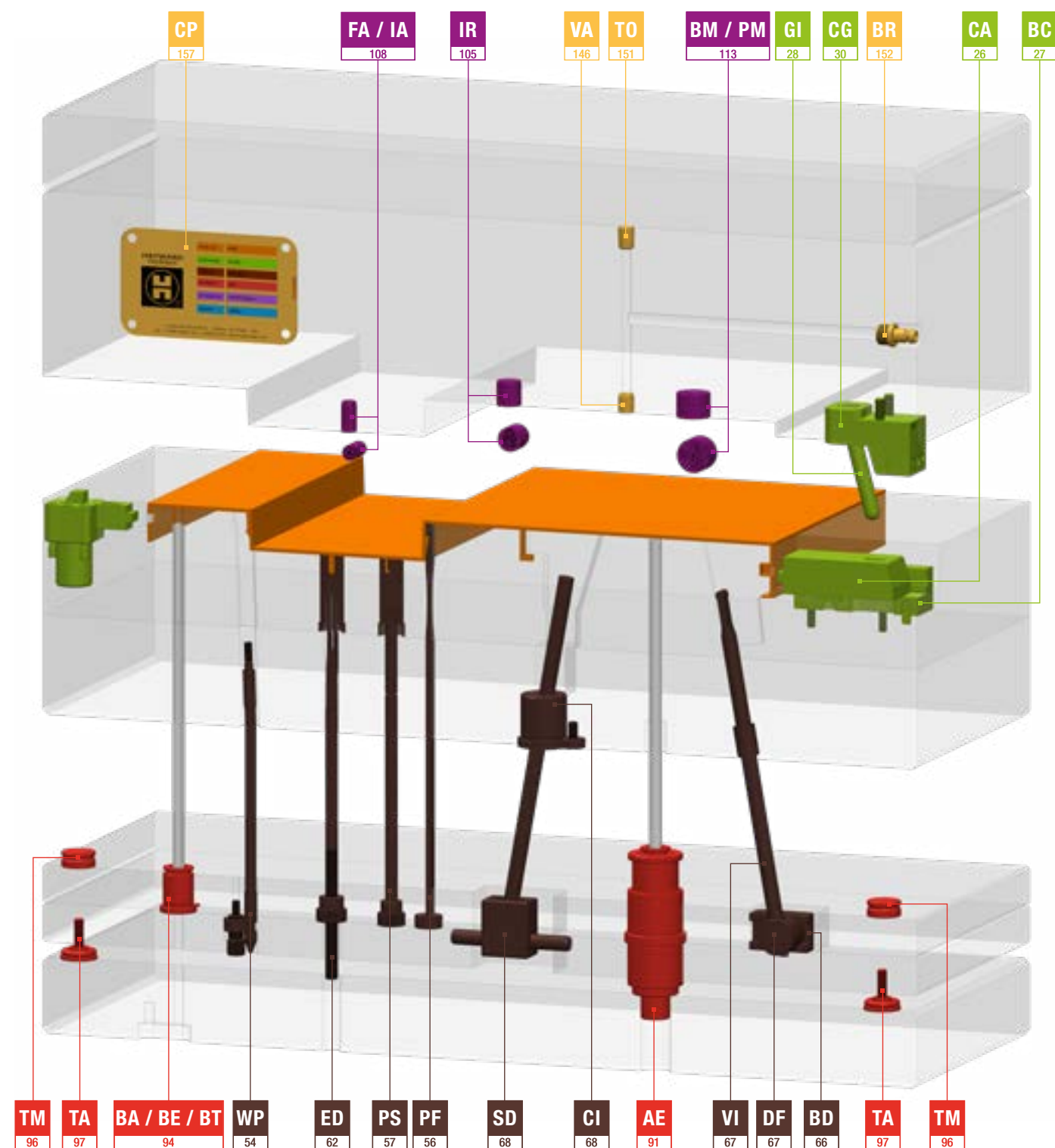
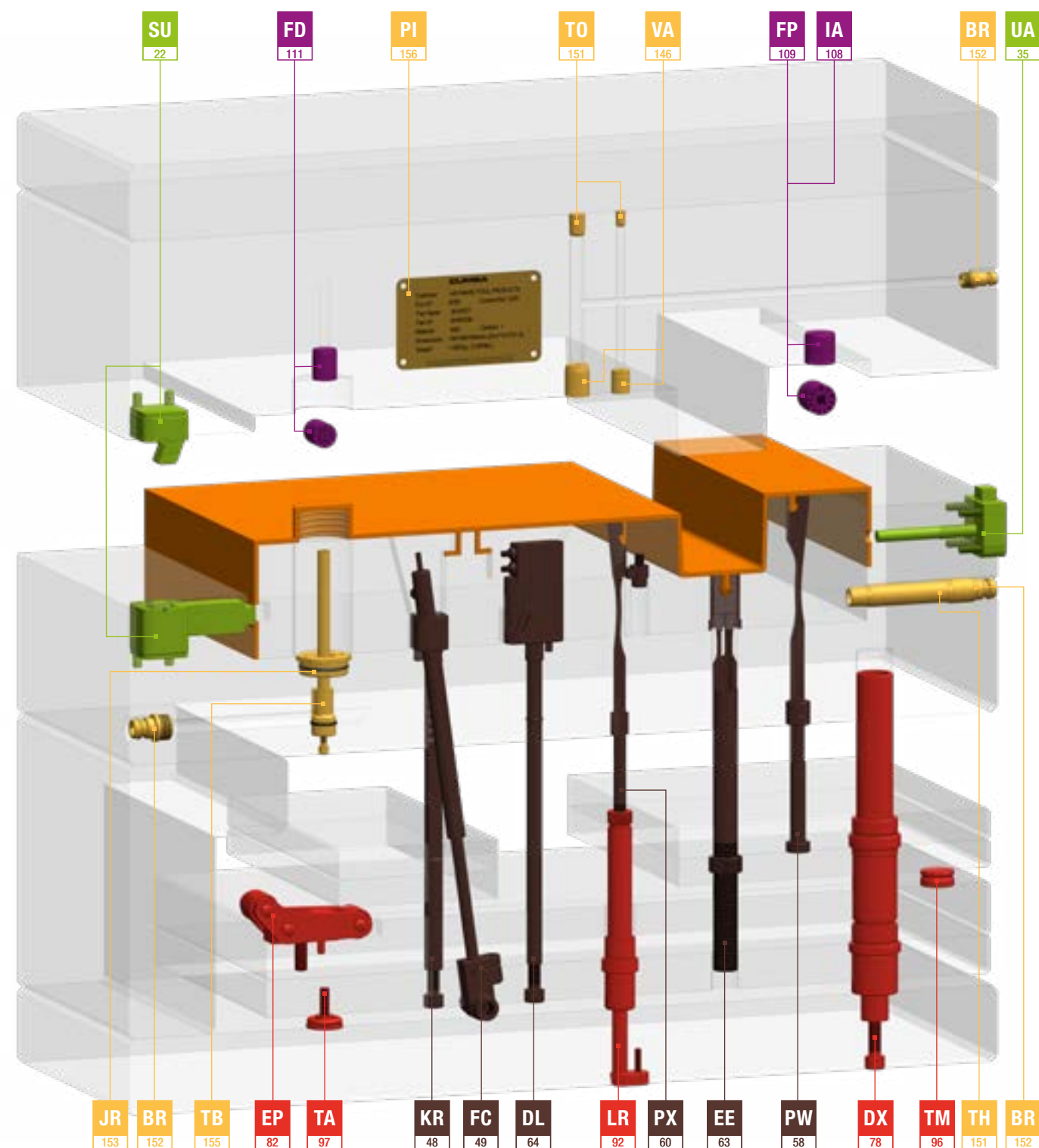
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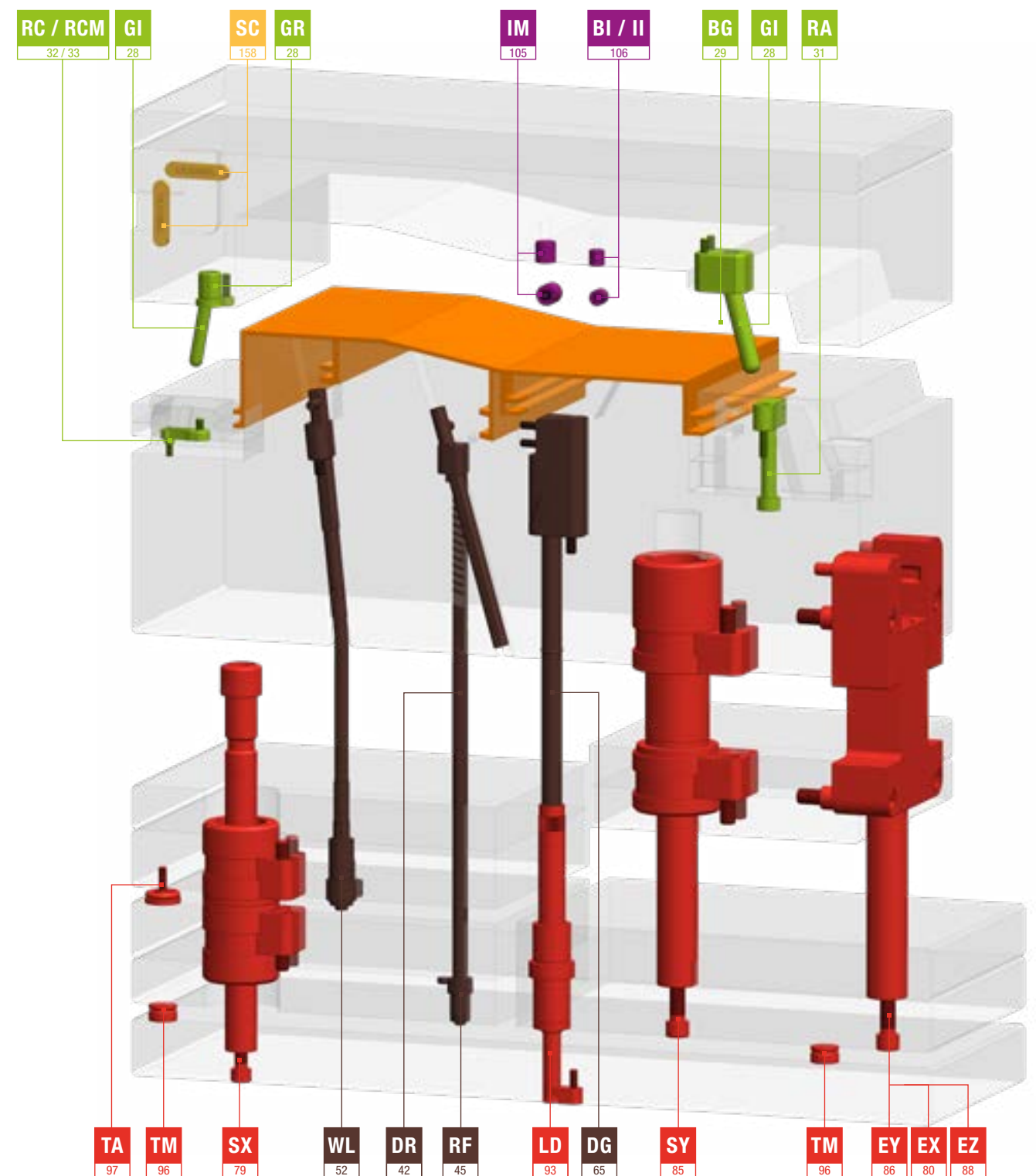
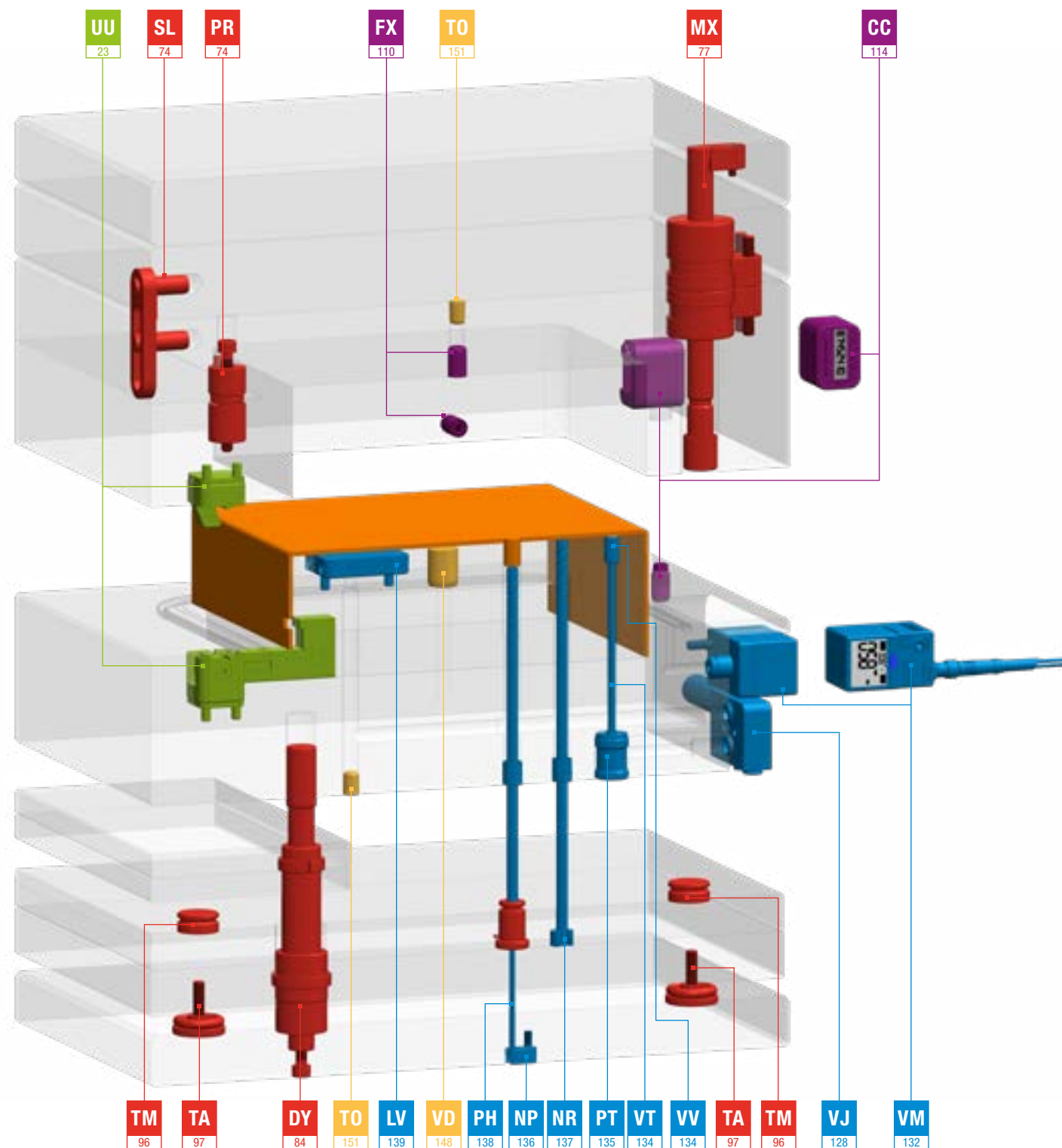
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GRAPHIC INDEX



GRAPHIC INDEX



A close-up photograph of a metal mold, likely for injection molding, featuring a grid of circular cavities. The mold is made of a dark, polished metal, and the cavities are arranged in a repeating pattern. The lighting highlights the metallic texture and the depth of the cavities.

1

SLIDES

SLIDES INDEX

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MG

SLIDES



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MC

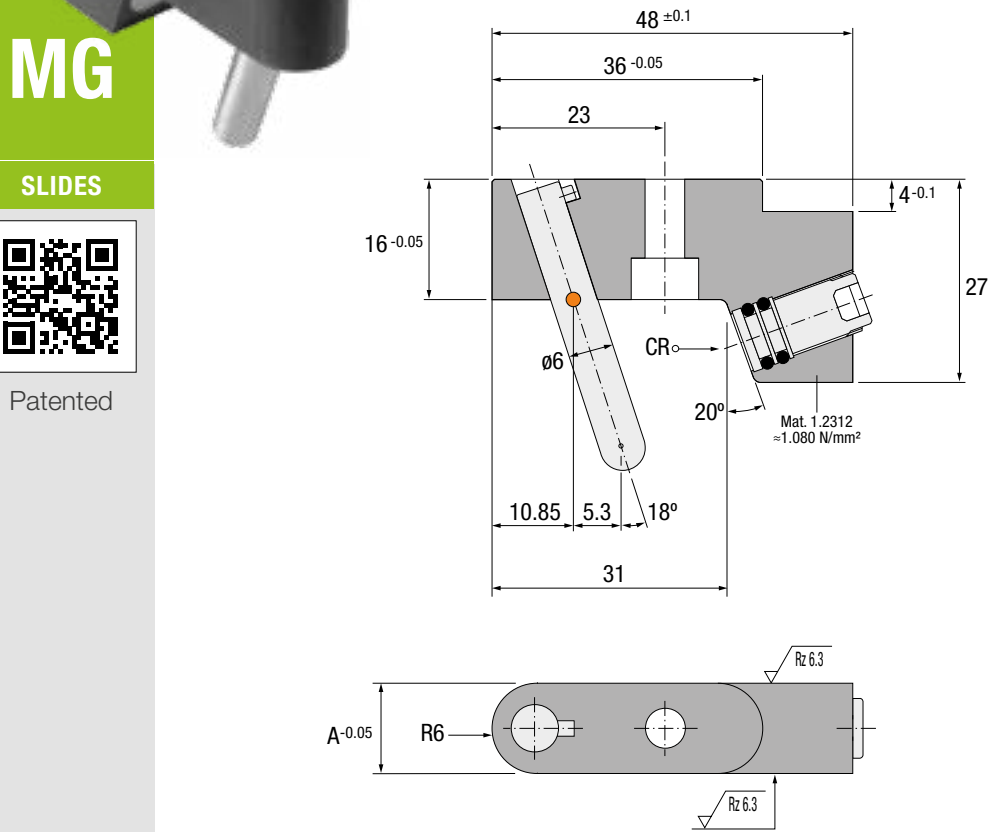
SLIDES



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MINI GUIDE

ES Mini Guia DE Mini Schieberführung
IT Mini Guida PT Mini Guia FR Mini Guide

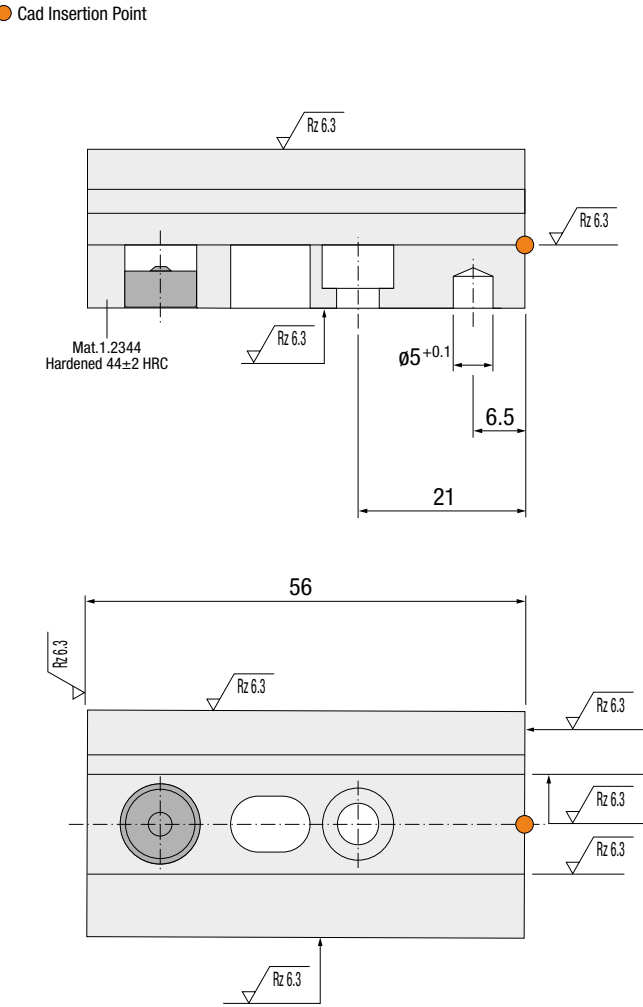


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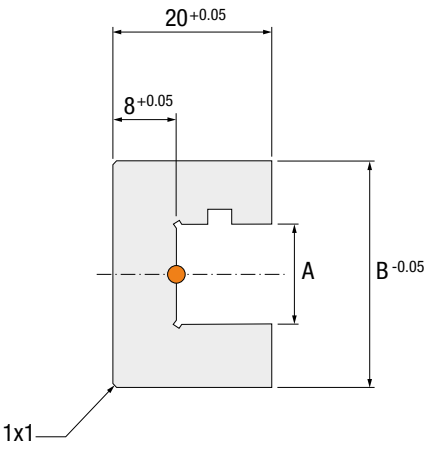
IMPORTANT !
Standard stroke of 4mm.
Recorrido estándar de 4mm.
Standard Hub 4mm.
Corsa carrello 4mm.
Curso standard de 4mm.
Course standard de 4mm.

MINI BASE

ES Mini Base DE Mini Basis
IT Mini Base PT Mini Base FR Mini Base

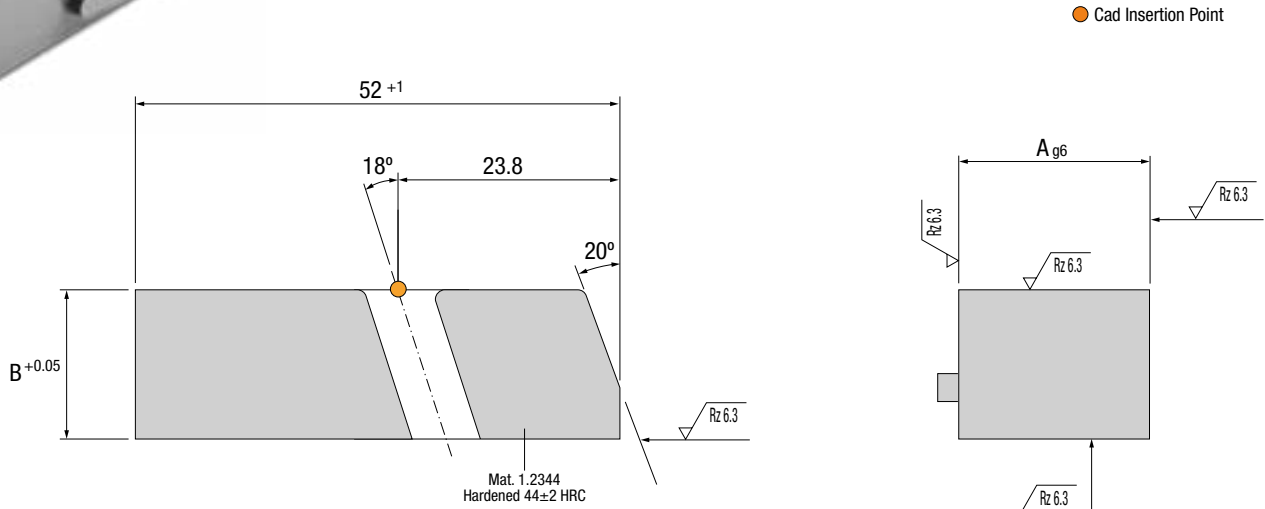


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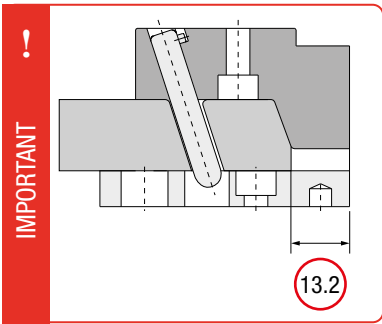


MINI SLIDE

ES Mini Corredera DE Mini Schieber
IT Mini Carrello PT Mini Corrediça FR Mini Coulisseau



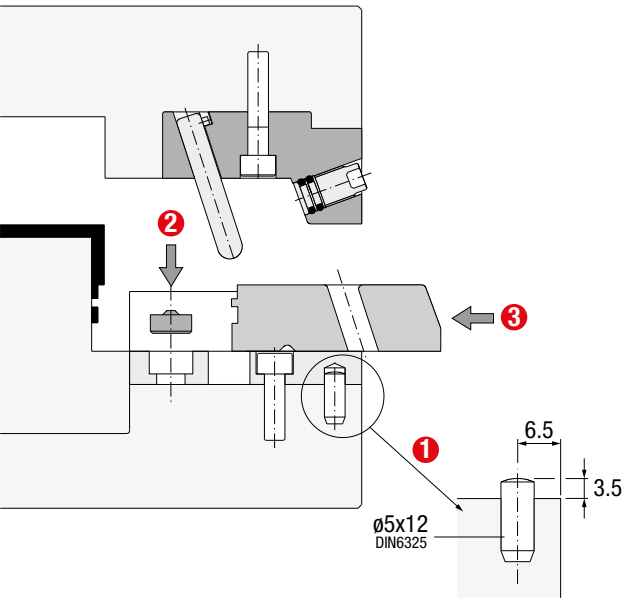
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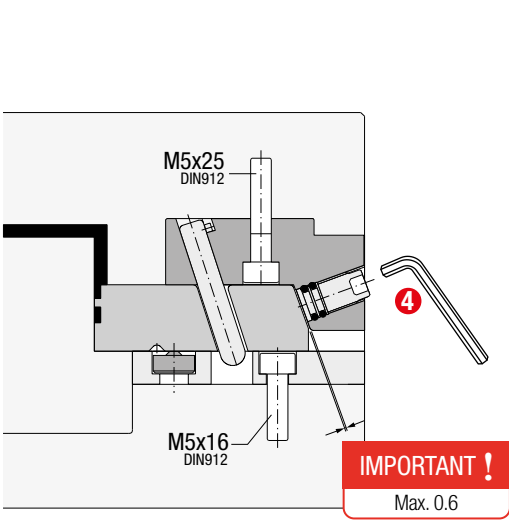
Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation

Mold Open



Mold Closed



IMPORTANT !
Max. 0.6

MB

SLIDES



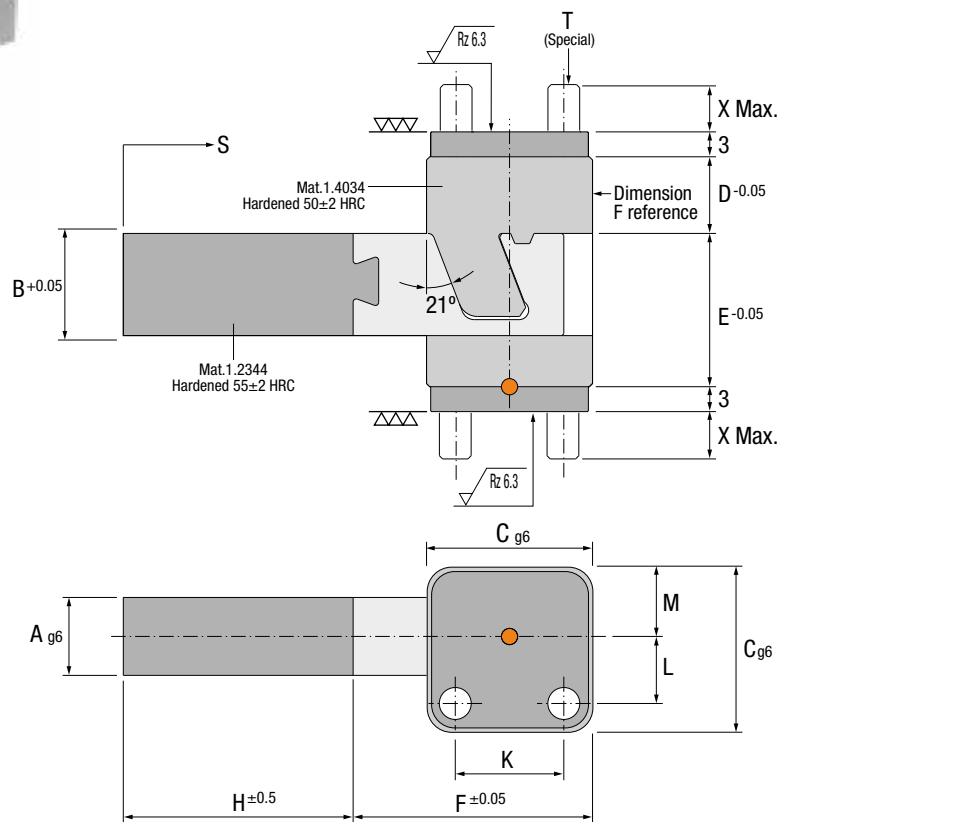
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SU

SLIDES



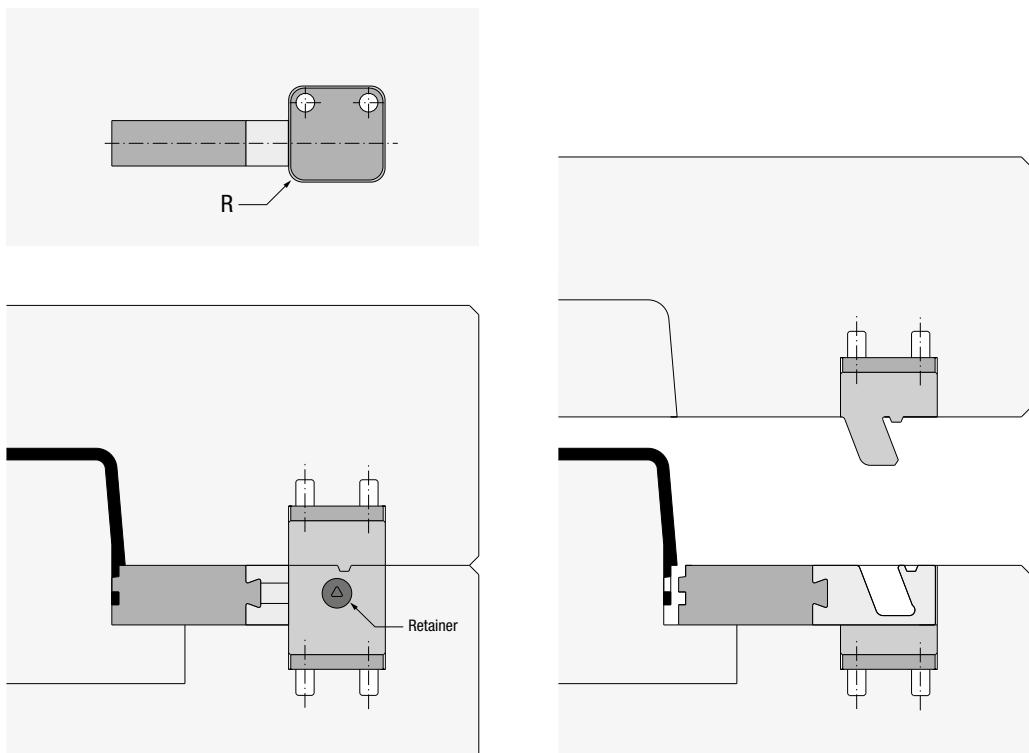
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SU.162032	16.2	20	32	16	30	46.5	40	22	13	14	5	5	M6	9.2

Installation Guidelines

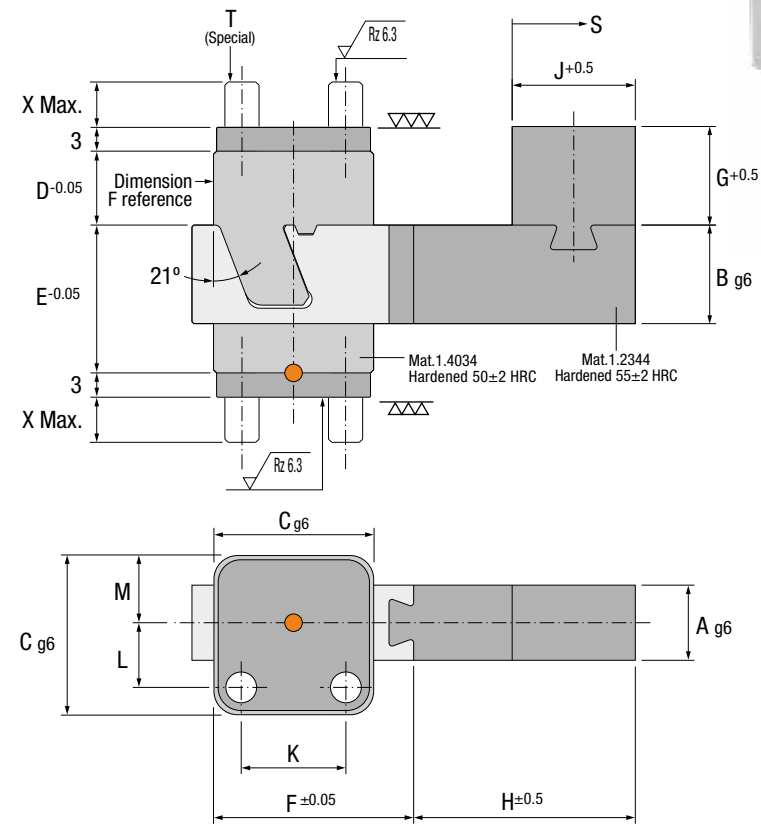
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



UNDERCUT UNIT

ES Corredera para Negativos DE Verdeckte Schieber
IT Carrello per Sottosquadra PT Elemento Móvel Interior FR Chariot Intérieur

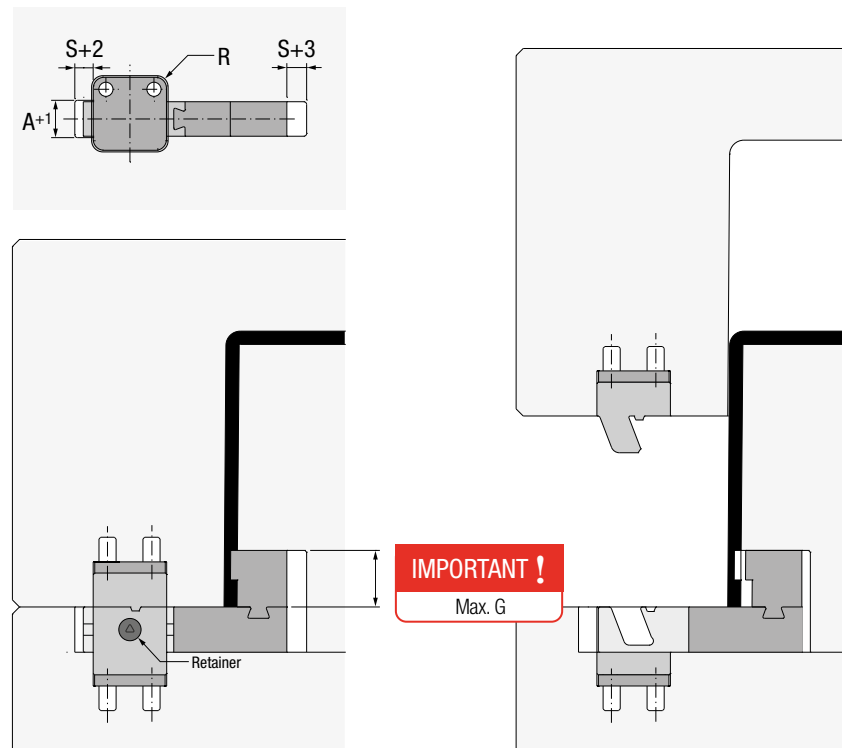
● Cad Insertion Point



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Installation Guidelines

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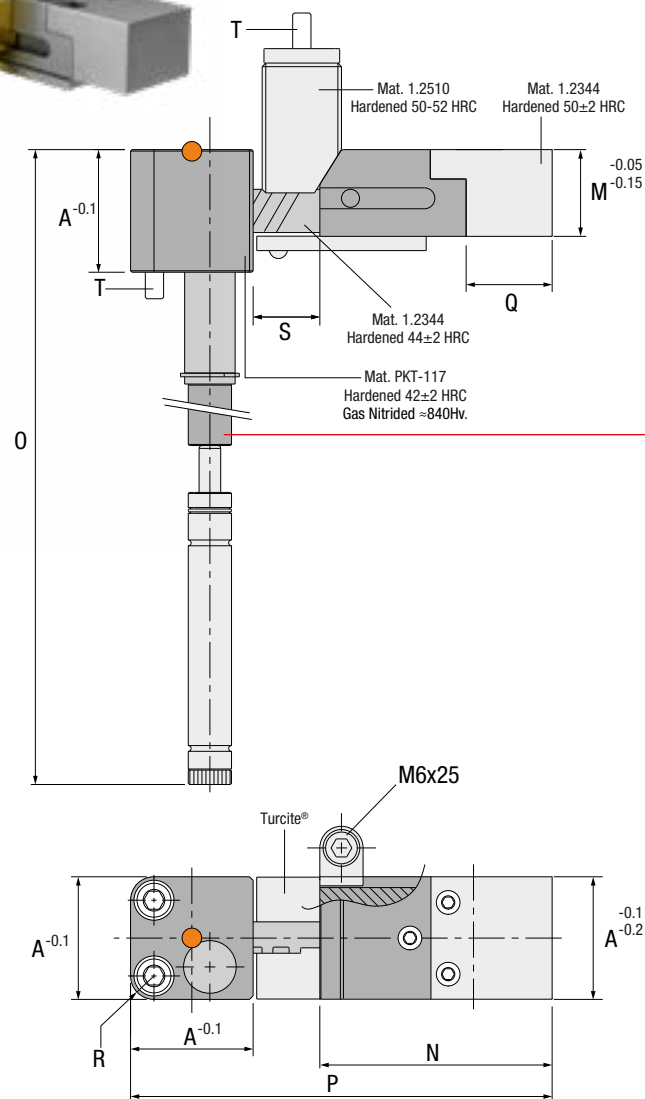
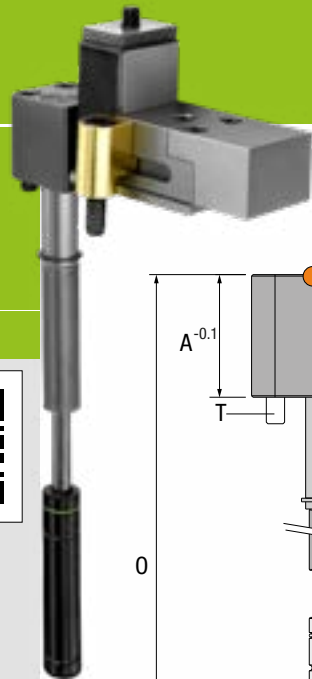
UU

SLIDES

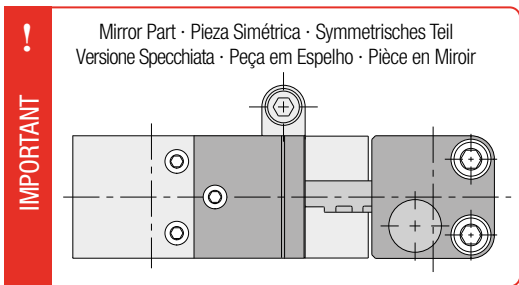
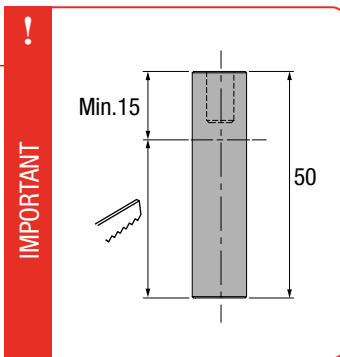


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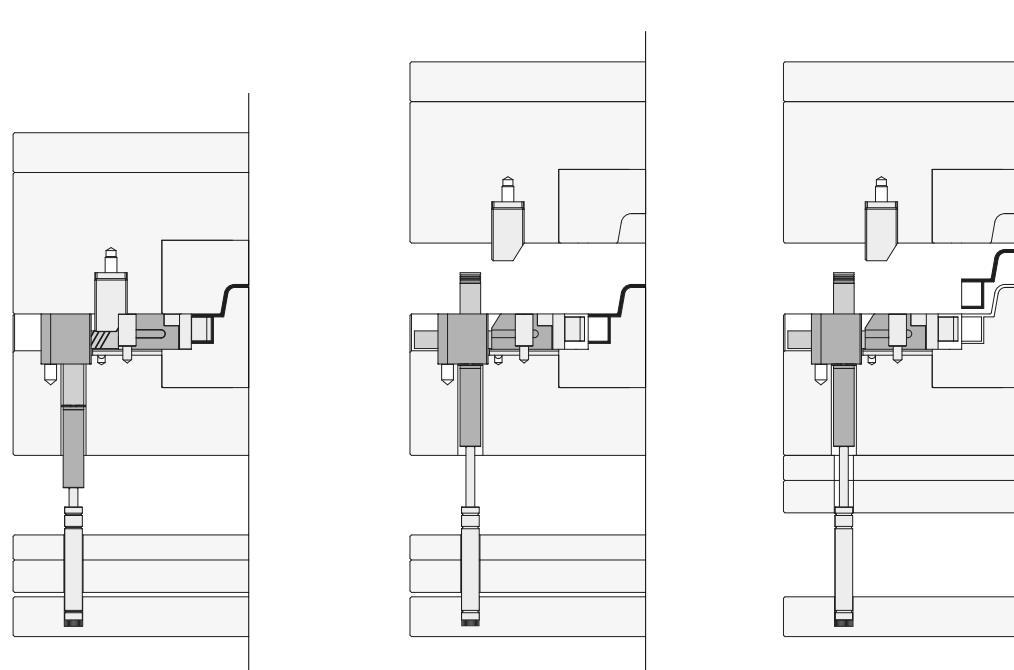
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Installation Guidelines

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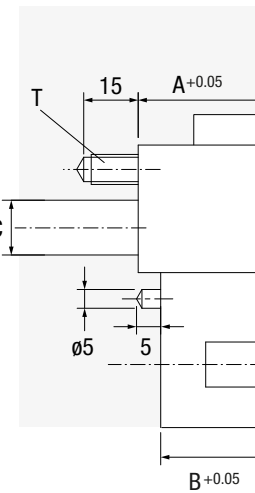
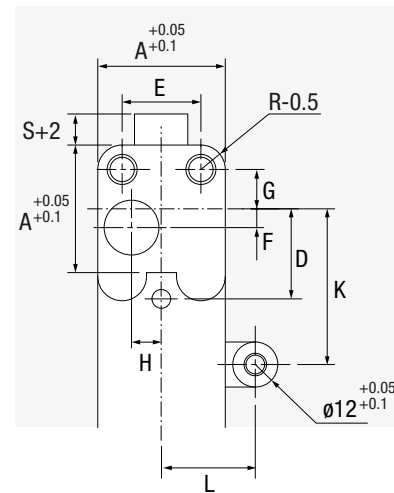
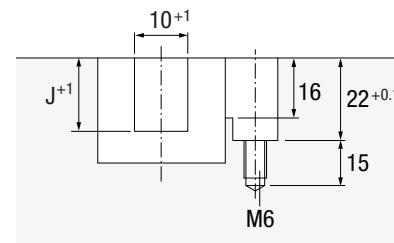


INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

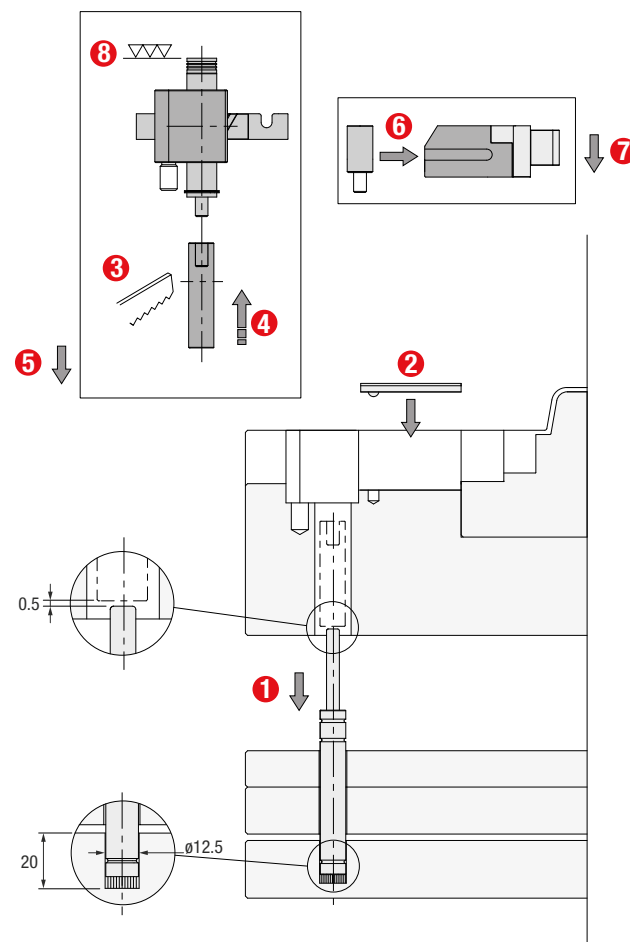
Core Housing

Alojamiento Placa Punzón · Einbaumaße PB Führung · Sede nel Punzone · Alojamento Bucha · Logement dans l'empreinte



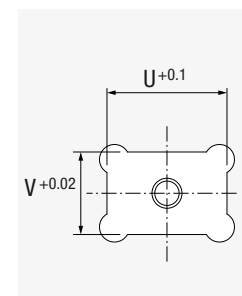
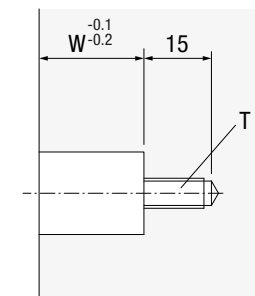
Core Slide Installation

Instalación Placa Punzón · Einbaumaße DR Führung · Installazione piastra punzone · Alojamento na Bucha · Logement dans l'empreinte



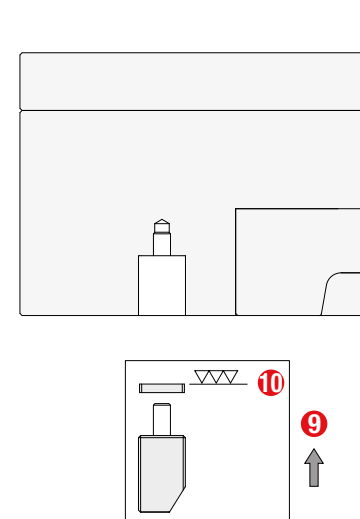
Cavity Housing

Alojamiento Placa Cavidad · Einbaumaße DR Führung · Sede piastra cavità · Alojamento na Cavidade · Logement dans l'empreinte



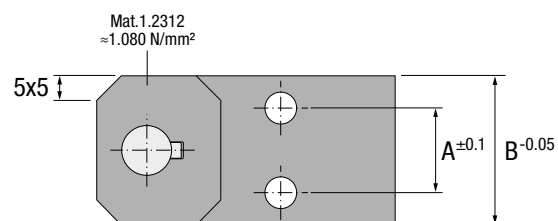
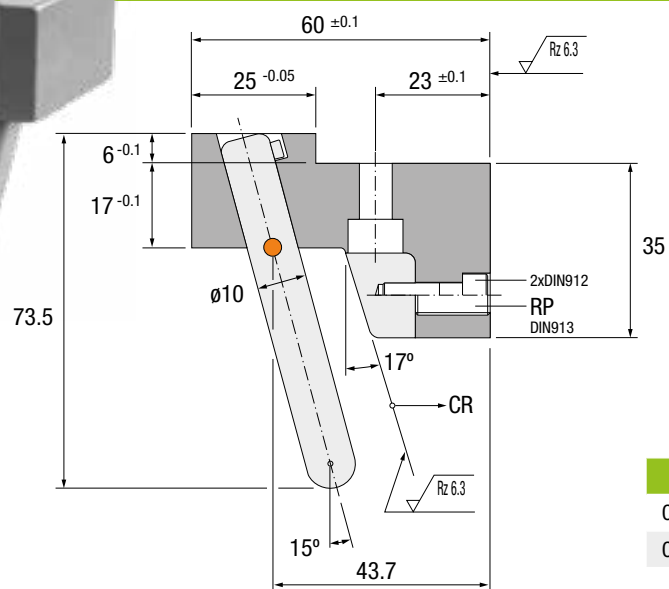
Cavity Slide Installation

Instalación Placa Cavidad · Einbaumaße DR Führung · Installazione piastra cavità · Instalação da correção no lado da cavidade · Logement dans l'empreinte



CG

SLIDES



Ref.	A	B	CR (N)	RP	Includes
CG.603075	17	30	180.000	081015	GI.010075
CG.604075	22	40	320.000	101015	GI.010075

IMPORTANT !

Standard stroke of 12mm.
Recorrido estándar de 12mm.
Standard Hub 12mm.
Corsa carrello 12mm.
Curso standard de 12mm.
Course standard de 12mm.

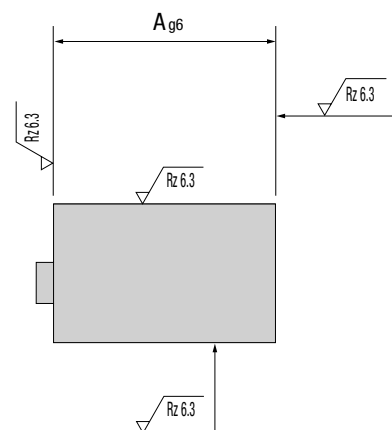
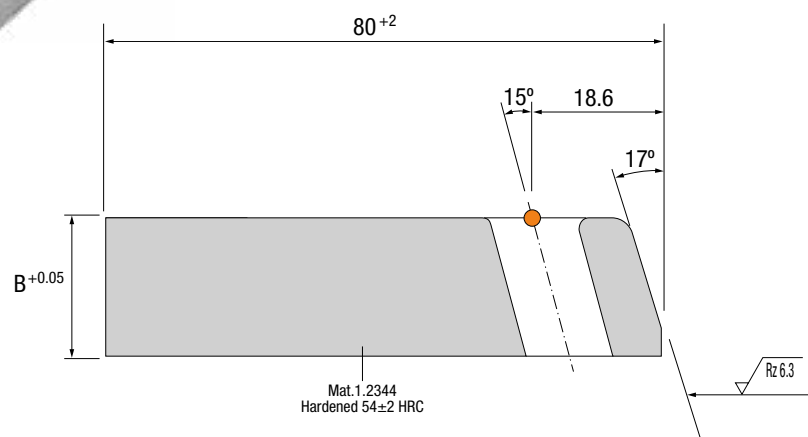
ADJUSTED SLIDE

ES Corredera Ajustada DE Vorabgestimmter Schieber
IT Carrello Aggiustato PT Corredica Ajustada FR Coulisseau de Chariot



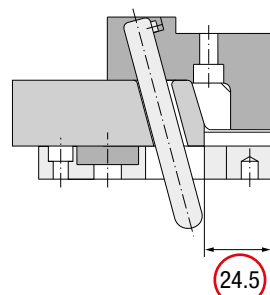
CA

SLIDES



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CA.422480	42	24

IMPORTANT



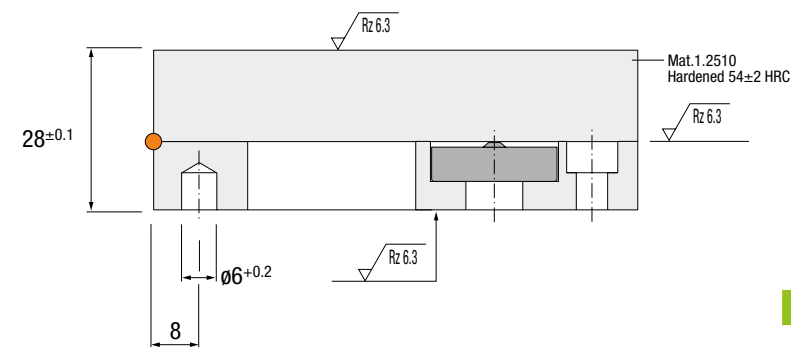
SLIDE BASE

ES Base Corredera DE Basisführung
IT Base Carrello PT Base da Corrediza FR Embase Coulisseau

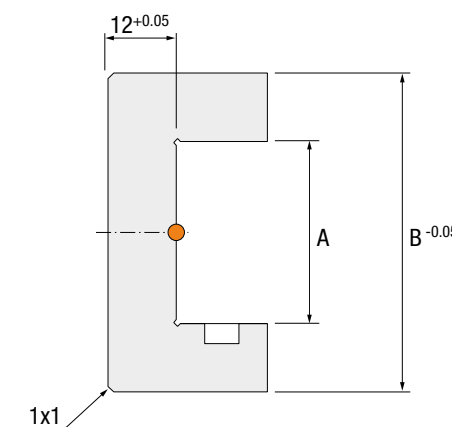
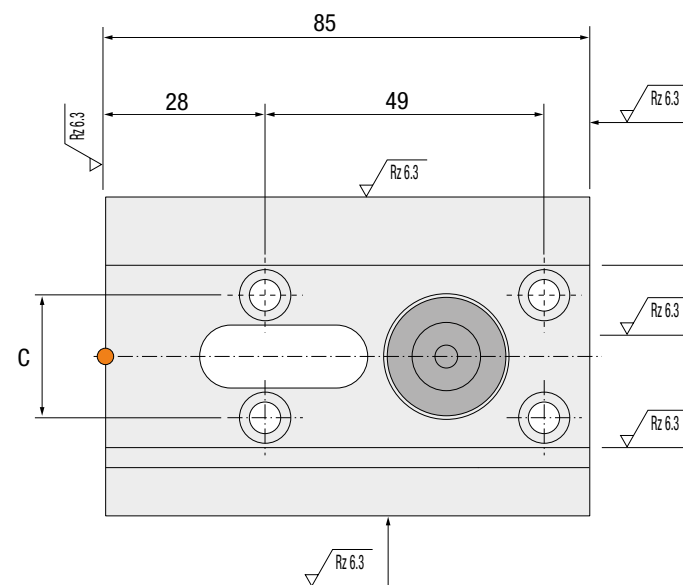


BC

SLIDES



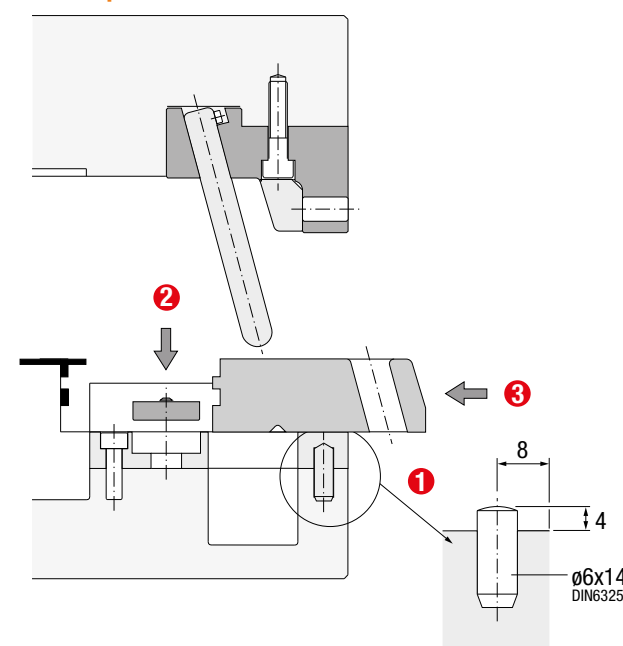
Ref.	A	B	C
BC.322885	32	56	21.9
BC.422885	42	66	26.9



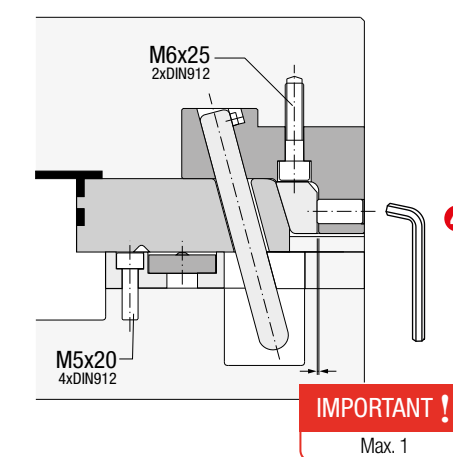
– Installation Guidelines

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Mold Open



Mold Closed



IMPORTANT !

Max. 1

GR

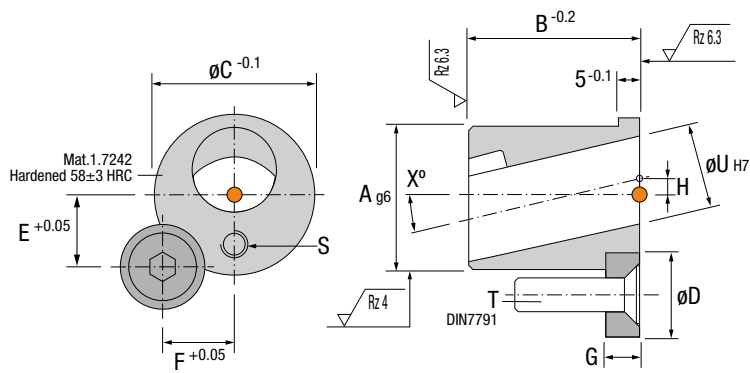
SLIDES



Patented

ANGLE PIN HOUSING

ES Guía Regulable DE Schägstiftbuchse
IT Bussola Regolabile PT Guia Regulável FR Guidadge de Verrouillage



● Cad Insertion Point

Ref.	A	B	C	D	E	F	G	H	S	T	U	X°	
GR.182622-..	18	26	22	12	10.8	7.5	6	3.8	M5x5	M5x16	10	10	15
GR.222826-..	22	28	26	16	11	11	6	4	M6x6	M6x16	12	10	15
GR.283432-..	28	34	32	16	13	13	6	5	M6x6	M6x16	16	10	15
GR.344038-..	34	40	38	20	17	17	8	5.5	M8x6	M8x20	20	10	15
GR.424546-..	42	45	46	20	19.5	19.5	8	6	M8x6	M8x20	24	10	15
GR.465050-..	46	50	50	20	21	21	8	7	M8x6	M8x20	28	10	15

IMPORTANT !
Indicate the desired **X** dimension after the reference.
Indicar al final de la referencia, la cota **X** deseada.
Gewünschte **X** Dimension angeben, nach der Referenznr.
Indicare la quota **X** desiderata alla fine del codice.
Indique o dimensão **X** desejada depois da referência.
Préciser le début de référence et le compléter par la dimension **X** souhaitée.

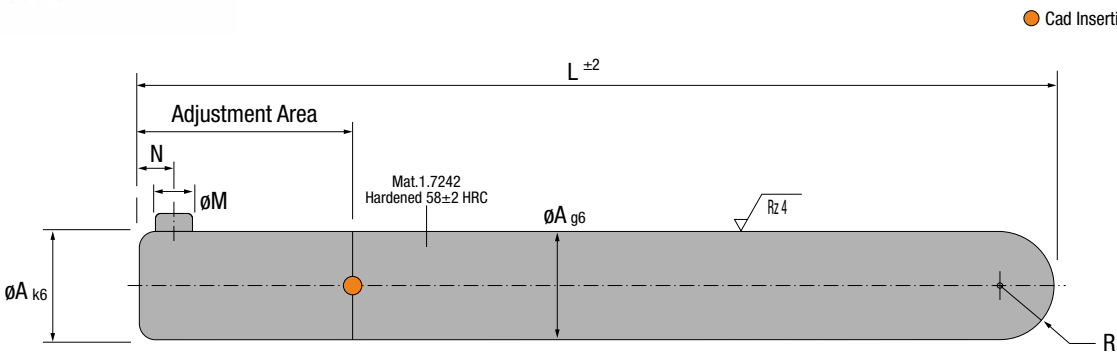
GI

SLIDES



ANGLE PIN

ES Guía Inclinada DE Schrägstift
IT Colonna Inclinata PT Guia Inclinada FR Doigt de Demoulage



● Cad Insertion Point

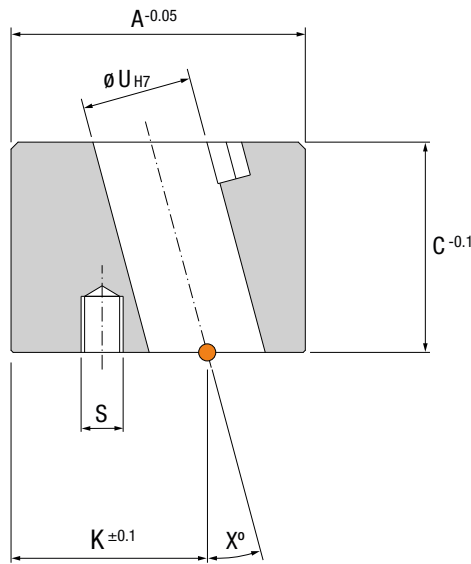
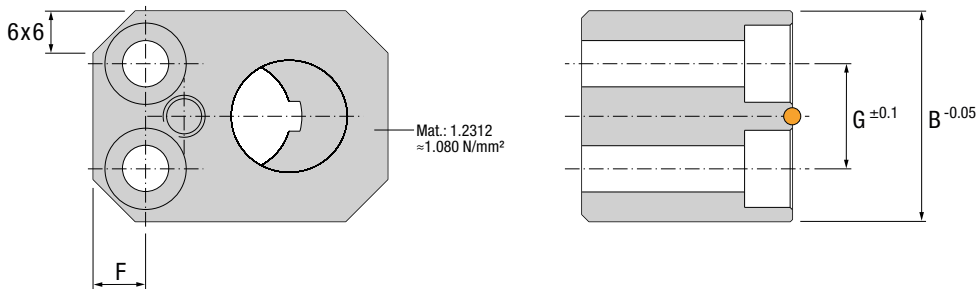
Ref.	A	Adjustment Area	M	N	L	R
Gi.010...	10	≈ 25	4	4	075 090 105	5
Gi.012...	12	≈ 30	4	4	095 110 130	6
Gi.016...	16	≈ 35	4	4	115 135 160	8
Gi.020...	20	≈ 40	6	6	140 165 190	10
Gi.024...	24	≈ 45	6	6	170 195 220	12
Gi.028...	28	≈ 50	6	6	200 225 250	14

IMPORTANT !
Indicate the desired **L** dimension after the reference.
Indicar al final de la referencia, la cota **L** deseada.
Gewünschte **L** Dimension angeben, nach der Referenznr.
Indicare la quota **L** desiderata alla fine del codice.
Indique o dimensão **L** desejada depois da referência.
Préciser le début de référence et le compléter par la dimension **L** souhaitée.

ANGLE PIN HOUSING

ES Base Guía DE Schägstiftbuchse
IT Base Portacolonna PT Porta Guias FR Socle de Guidage

● Cad Insertion Point

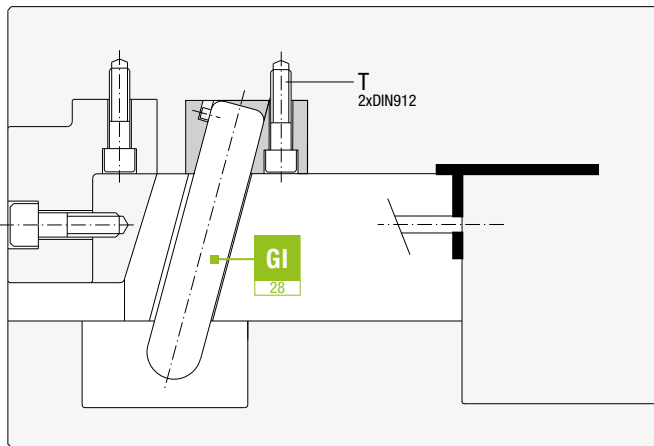


Ref.	A	B	C	F	G	K	S	T	U	X	
BG.423016-..	42	30	30	7.5	15	28	M6	M6x35	16	15	20
BG.504020-..	50	40	36	9	22	34	M8	M8x40	20	15	20
BG.554020-..	55	40	40	9	22	38	M8	M8x45	24	15	20
BG.655028-..	65	50	45	12	26	45	M10	M10x50	28	15	20

IMPORTANT !
Indicate the desired **X** dimension after the reference.
Indicar al final de la referencia, la cota **X** deseada.
Gewünschte **X** Dimension angeben, nach der Referenznr.
Indicare la quota **X** desiderata alla fine del codice.
Indique o dimensão **X** desejada depois da referência.
Préciser le début de référence et le compléter par la dimension **X** souhaitée.

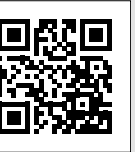
Installation Guidelines

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BG

SLIDES



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CG

SLIDES



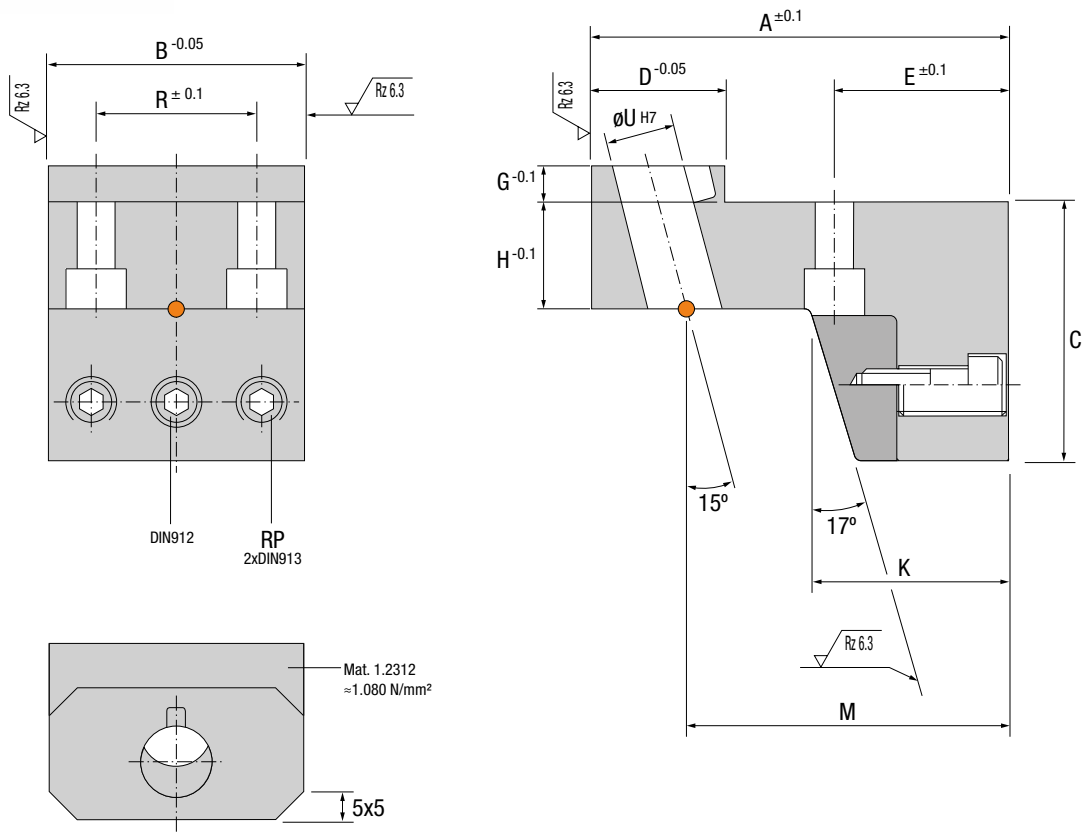
Patented



HEEL UNIT

ES Cuña Guía DE Einstellbare Zuhaltung
IT Contrasto Guida PT Guia Cunha FR Base de Verrouillage

● Cad Insertion Point

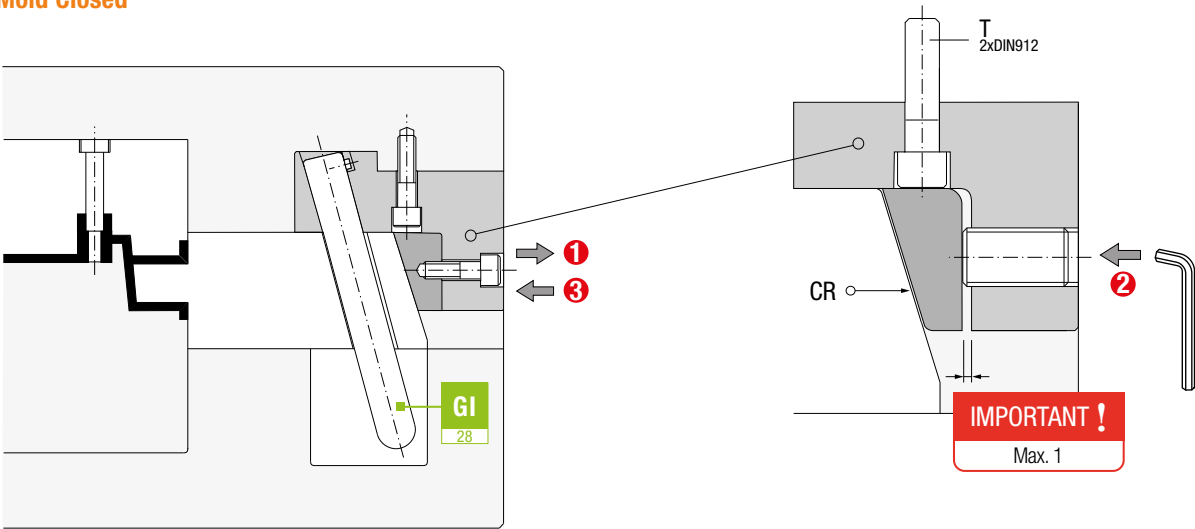


Ref.	A	B	C	D	E	G	H	K	M	R	T	U	RP	CR (N)
CG.603035	60	30	35	25	23	6	17	29	43.7	17	M6x25	10	081015	180.000
CG.604035	60	40	35	25	23	6	17	29	43.7	22	M6x25	10	101015	320.000
CG.754049	75	40	49	30	32	7	20	39	58	22	M8x30	12	101020	320.000
CG.864857	86	48	57	35	36	8	24	44	65	28	M8x35	16	121025	480.000

Installation Guidelines

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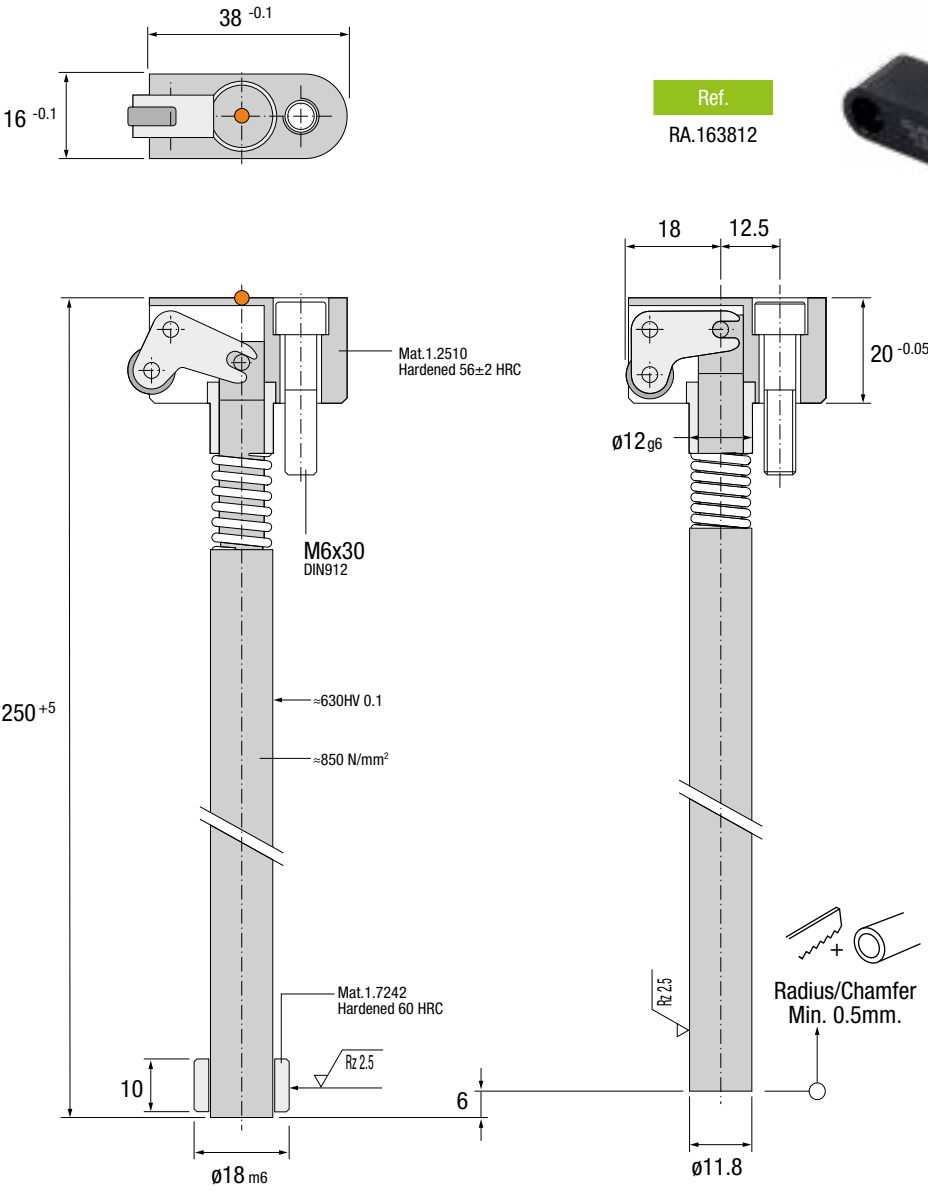
Mold Closed



AUTOMATIC RETAINER

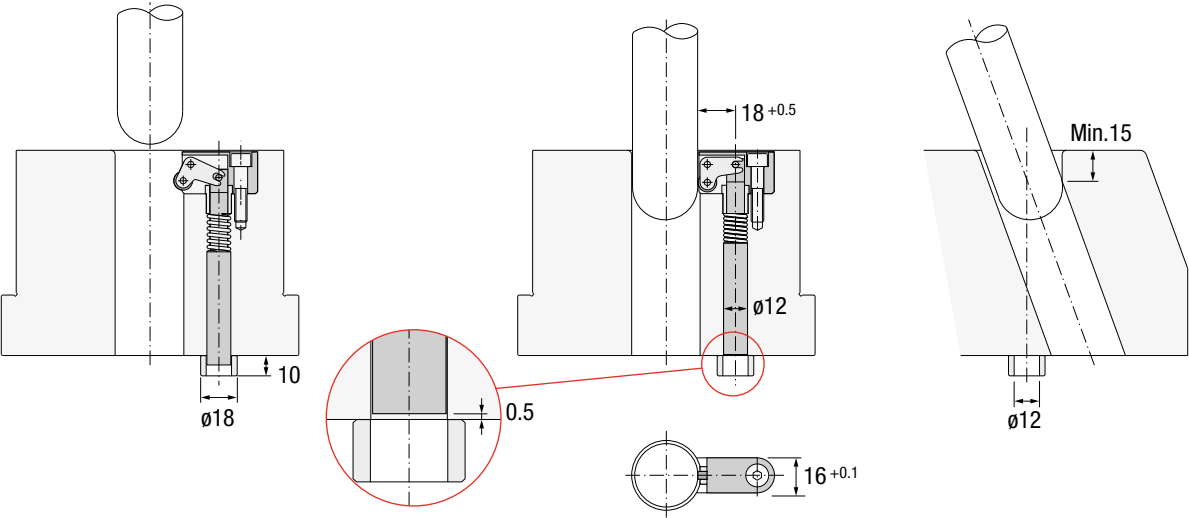
ES Retensor Automático DE Zuhaltung Automatisch
IT Ritenore Automatico PT Retensor Automático FR Retenue Automatique

● Cad Insertion Point



Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



RA

SLIDES



Patented

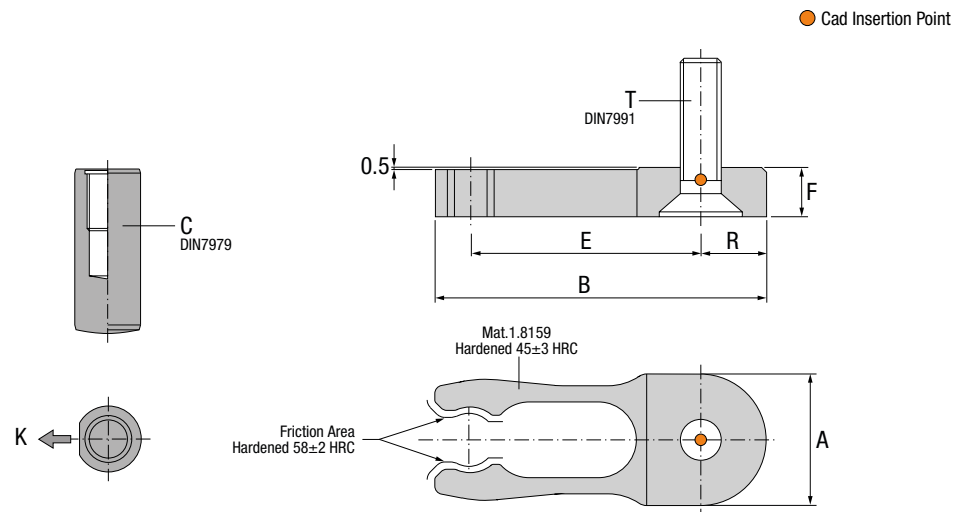


RC

SLIDES



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Max.
150°C**K=Force to release the retainer.**

ES K=Fuerza de desenganche del retensor.
DE K=Kraft zum entriegeln.
IT K=Forza di sgancio del ritenore.
PT K=Força necessária para libertar o retensor.
FR K=Force de libération de la retenue.

Ref.	A	B	C	E	F	G	H	K	R	T
RC.123006	12	30	6x20	21	4.7	4	16	5 kg.	6	M5x16
RC.164008	16	40	8x20	28	5.7	5	15	7 kg.	8	M6x20
RC.205010	20	50	10x24	34	7.7	6	17	14 kg.	10	M8x25
RC.246012	24	60	12x32	42	9.7	7	23	21 kg.	12	M10x30
RC.328012	32	80	16x40	56	11.7	9	27	28 kg.	16	M12x35
RC.328016	32	80	16x40	56	15.7	9	25	38 kg.	16	M12x50

SLIDE RETAINER

ES Retensor Corredera DE Schiebersicherung
IT Ritenore Carrello PT Retensor de Corrediças FR Blocage de Coulisseau

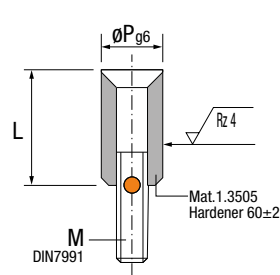
Cad Insertion Point

PO

SLIDES



Patented



Ref.	L	M	N	P
PO.120320	12	M3x20	7.5	6
PO.150425	15	M4x25	10	8
PO.200530	20	M5x30	13	10
PO.250635	25	M6x35	16	12
PO.340850	34	M8x50	23	16

OPTIONAL DOWEL PIN

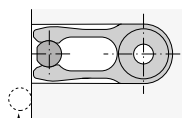
ES Pasador Opcional DE Zylinderstift (Optional)
IT Riferimento Opzionale PT Cavilha Opcional FR Goupille Optionnel

Cad Insertion Point

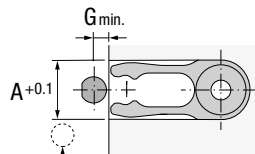
Installation Guidelines

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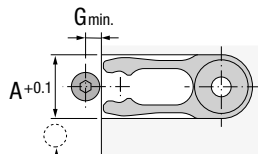
Mold Open



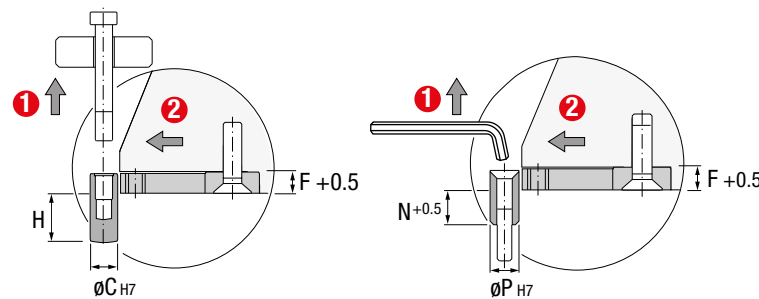
Slide Disassembling



With PO



Slide mechanical stop recommended



CUMSA

S

U

E

T

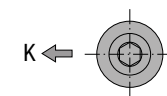
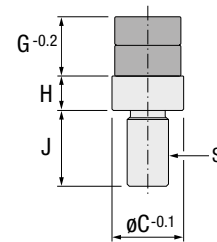
V

A

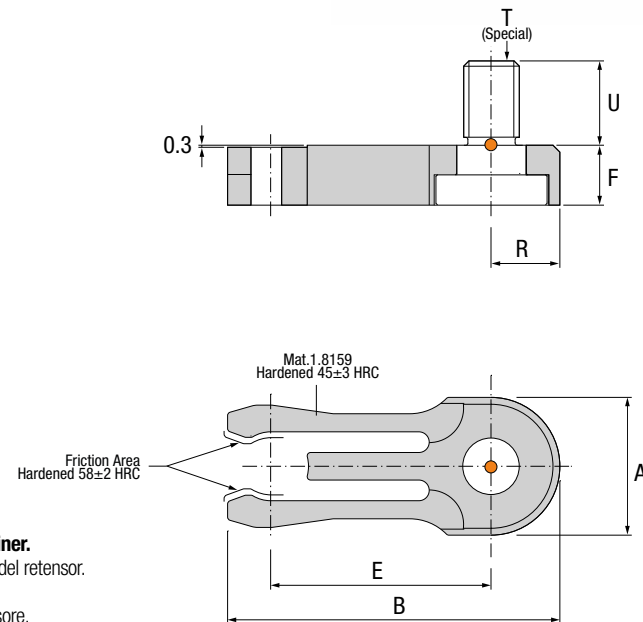
SLIDE RETAINER

ES Retensor Corredera DE Schiebersicherung
IT Retensore Carrello PT Retensor de Corrediças FR Blocage de Coulisseau

Cad Insertion Point

**K=Force to release the retainer.**

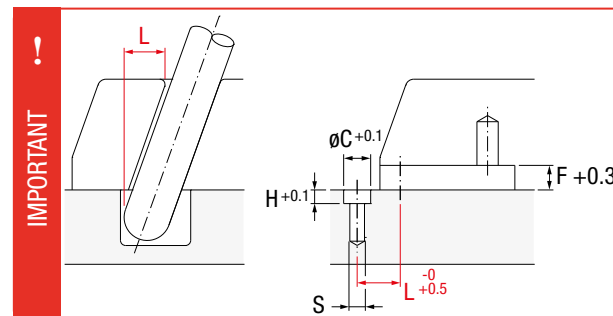
ES K=Fuerza de desenganche del retensor.
DE K=Kraft zum entriegeln.
IT K=Forza di sgancio del ritenore.
PT K=Força necessária para libertar o retensor.
FR K=Force de libération de la retenue.



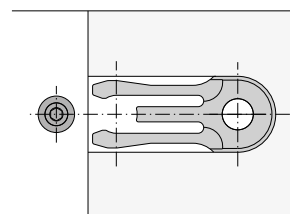
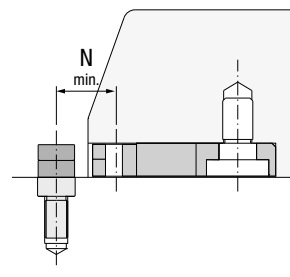
Ref.	A	B	C	E	F	G	H	J	K	N	R	S	T	U
RCM.163808	16	38	8	25	7.6	7.6	4	10	10 kg.	7	8	M5	M6	9
RCM.204810	20	48	10	32	8.7	8.6	5	11	14 kg.	8	10	M6	M8	12
RCM.245712	24	57	12	37.5	9.6	9.6	6	12	18 kg.	9	12	M8	M10	15

Installation Guidelines

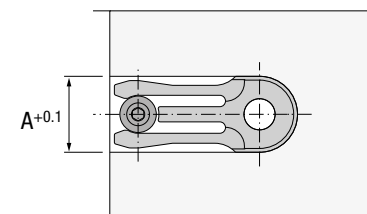
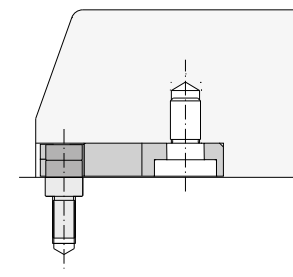
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



Slide Disassembling



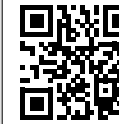
Mold Open



CUMSA

RCM

SLIDES



Patented

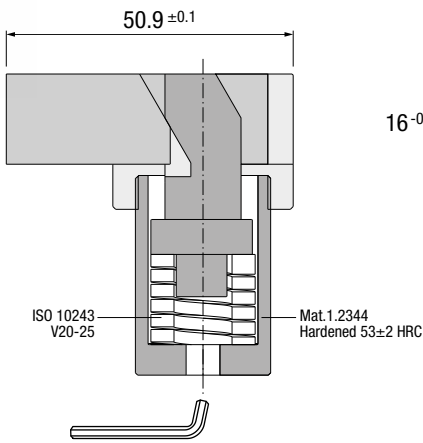
Max.
150°C

UC

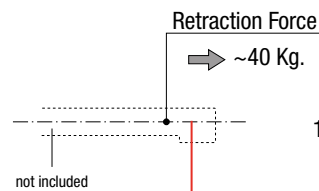
SLIDES



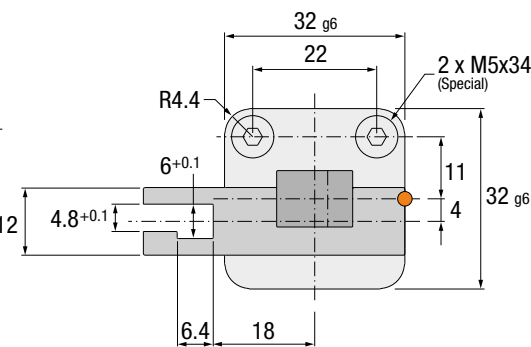
Patented



Ref.
UC.325445



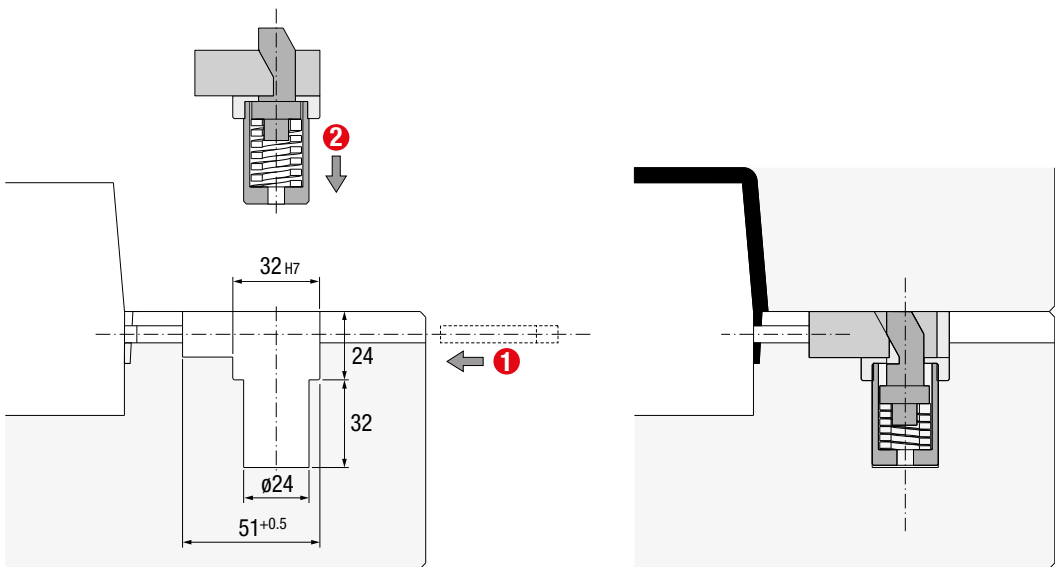
IMPORTANT !
Option for machining keyway.
Posibilidad de mecanizado antigiro.
Möglichkeit zur Herstellung einer Aussparung.
Possibilità di lavorazione antigiro.
Possibilidade de maquinar anti-rotação.
Possibilit  d'indexer la broche.



IMPORTANT !
Standard stroke of 4.5mm.
Recorrido est andar de 4.5mm.
Standard Hub 4.5mm.
Cursa del asta 4.5mm.
Curso standard de 4.5mm.
Course standard de 4.5mm.

Installation Guidelines

Consejos de Instalaci n · Richtlinien zur Installation · Consigli di Installazione · Instru  es de Instala  o · Mode d'Installation

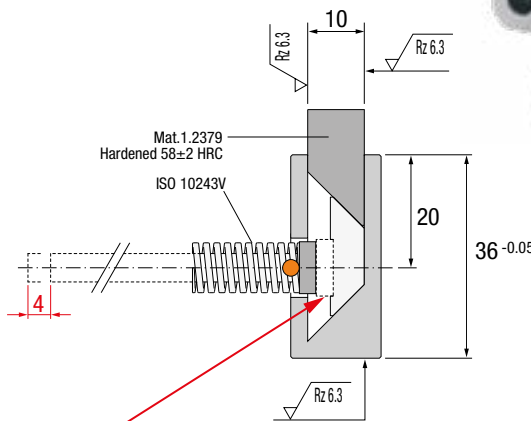
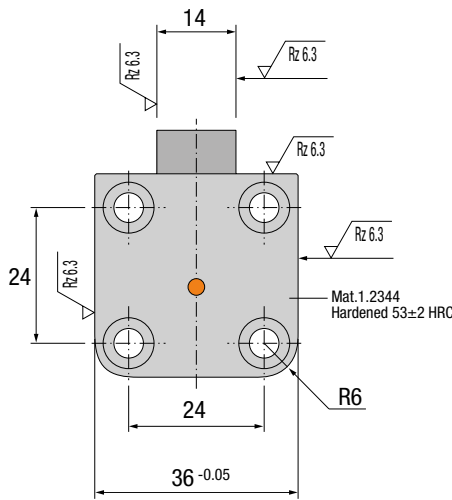


● Cad Insertion Point

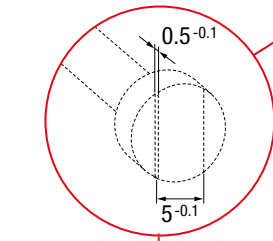
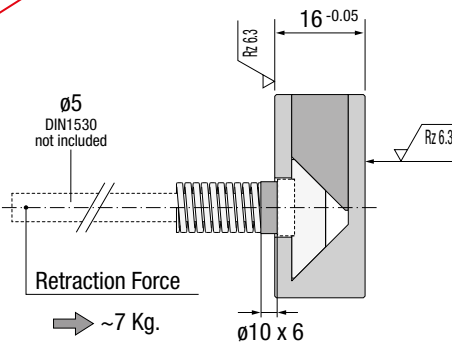
COMPACT CORING UNIT

ES Unidad Apriete DE Kompakt Kernstifthalter
IT Unit  Compatta di Punzonatura PT Unidade de Fura  o FR But  e de Broche

● Cad Insertion Point



Ref.
UA.363616

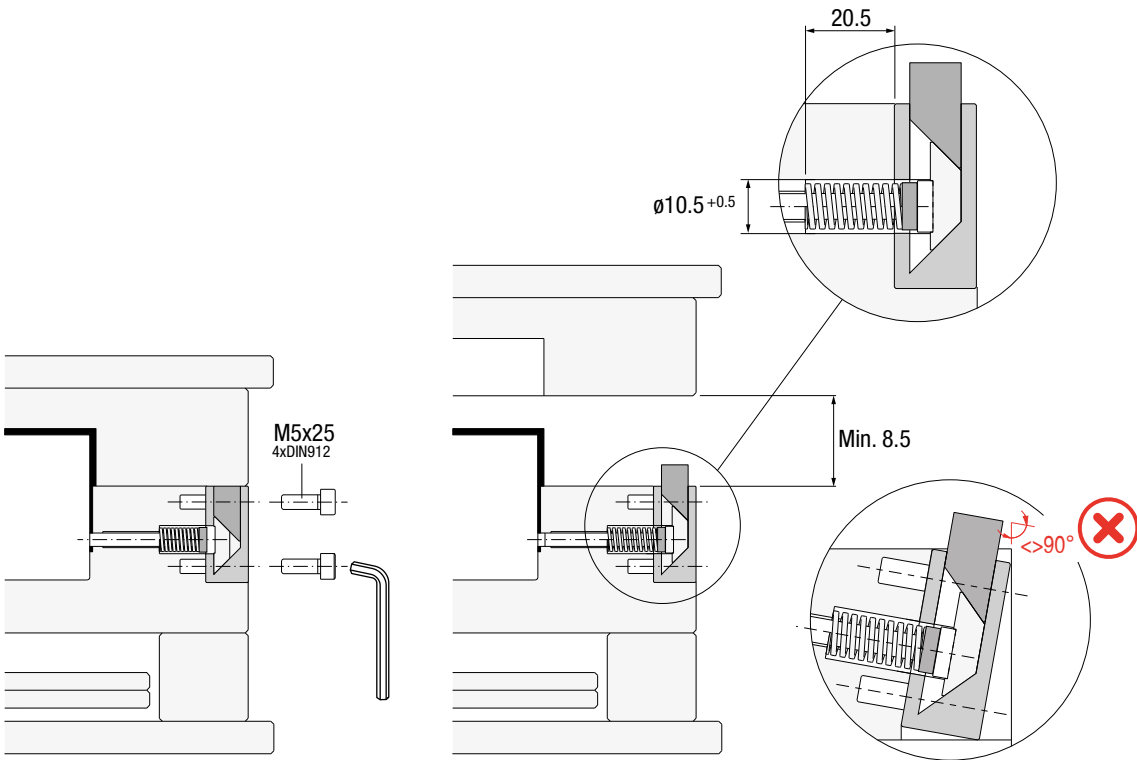


IMPORTANT !
Option for machining keyway.
Posibilidad de mecanizado antigiro.
M glichkeit zur Herstellung einer Aussparung.
Possibilit  di lavorazione antigiro.
Possibilidade de maquinar anti-rota  o.
Possibilit  d'indexer la broche.

IMPORTANT !
Standard stroke of 4mm.
Recorrido est andar de 4mm.
Standard Hub 4mm.
Cursa del asta 4mm.
Curso standard de 4mm.
Course standard de 4mm.

Installation Guidelines

Consejos de Instalaci n · Richtlinien zur Installation · Consigli di Installazione · Instru  es de Instala  o · Mode d'Installation



UA

SLIDES



Patented





2

UNDERCUTS

UNDERCUTS INDEX

ÍNDICE NEGATIVOS / INHALTSVERZEICHNIS HINTERSCHNEIDUNGEN
INDICE NEGATIVI / ÍNDICE NEGATIVOS / INDEX CONTRE DÉPOUILLES - CLIPS

42/
DR



Double Rack Lifter
Doble Cremallera
Zweifach Zahnstangen-System
Doppia Cremagliera
Duplo Rack
Double Cremaillere

44/
DK



DR Cooling Hose
Refrigeración DR
Kühlungsschlauch Für DR
Refrigerazione DR
Refrigeração DR
Refruidissement DR

45/
RF



Adjustable Fixing
Fijación Regulable
Fijación Regulable
Einstellbare Befestigung
Fissaggio Regolabile
Fixação Regulável
Fixation Reglable

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XR



Xtreme Double Rack
Doble Cremallera Xtreme
Xtreme Double Rack
Doppia cremagliera Xtreme
Xtreme Double Rack
Double Cremaillere Xtreme

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KR



Cooled Rack Lifter
Doble Cremallera Refrigerada
Gekühltes Zweifach Zahnstangen System
Doppia Cremagliera con Refrigerazione
Duplo Rack Refrigerado
Double Rack Réfrigéré

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FC



KR Cooling Hose
Tubo Refrigeración KR
KR Kühlungsschlauch
Sistema Refrigerazione KR
Tubo de Refrigeração KR
Tube de Rrefroidissement KR

50/
MK



Connection Hose
Tubo Conexión
Verbindungsschlauch
Tubo Collegamento
Tubo de Ligação
Tube de Liaison

50/
RD



Cooling Distributor
Distribuidor Refrigeración
Verteilerschlauch
Distributore Refrigerazione
Distribuidor de Refrigeração
Distribution de Refroidissement

50/
CK



90° Plate Connector
Conector Placa a 90°
90° Platten-Verbindungsstück
Collegamento Piastra a 90°
Conector de Placa a 90°
Connexion Dans la Plaque de 90°

52/
WL



Smart Worm Lifter
Patin Smart Worm
Smart Worm Lifter
Smart Worm Lifter
Balancé Smart Worm
Patin Smart Worm

54/
WP



Smart Worm Pin
Expulsor Smart Worm
Smart Worm Pin
Pin Smart Worm
Extractor Smart Worm
Ejection Smart Worm

55/
WF



WP Adjustable Fixing
Fijación Regulable WP
WP Einstellbare Befestigung
Fissaggio Regolabile WP
Fixação Regulável WP
Fixation Reglable WP

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PF



Flexible Core
Pinza Flexible
Flexibler Federauswerfer
Pinza Flessibile
Pinça Flexive
Éjecteur Flexible

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PS



Standard Lifter
Patin Standard
Schrägschieber
Pattino Standard
Patin Standard
Patin Standard

58/
PW



Sprung Core
Pinza Plana
Federnder Auswerfer
Pinza Plana
Pinça Plana
Éjecteur de Forme

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AP



Sprung Core Extension
Alargo Pinza
Verlängerung Fed. Auswerfer
Prolunga Pinza
Acrésceto da Pinça
Rallonge d'Éjecteur

60/
PX



Xtra Sprung Core
Pinza Extra
Xtra Federnder Auswerfer
Pinza Plana Extra
Pinça Plana Extra
Éjecteur de Forme Extra

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CX



PX Cutting Jig
Útil de Corte para PX
PX Anpassungslehre
Utensile per Lavorazione PX
Acessório para Corte da PX
PX Accessoire d'Ajustement

62/
ED



Double Ejector
Expulsor Doble
Doppelauswerfer
Espulsore Doppio
Extractor Duplo
Éjecteur Double

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EE



Tulip Ejector
Expulsor Elástico
Kreuzauswerfer
Espulsore Elastico
Extractor Elástico
Éjecteur Tulipe

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DL



Dog Lifter - DL
Patin Vertical - DL
Vertikal Schrägschieber - DL
Pattino Automatico - DL
Patin Automático - DL
Cale Automatique - DL

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DG



Dog Lifter - DG
Patin Vertical - DG
Vertikal Schrägschieber - DG
Pattino Automatico - DG
Patin Automatico - DG
Cale Automatique - DG

66/
BD



Horizontal and Adaptable Base
Base Deslizamiento
Führungsplatte für Waagerechte und
Schräge Fläche
Base di Scorrimento
Base Deslizamento
Embase de Mouvement

67/
DF



Fixed Lifter Base
Deslizamiento Fijo
Gelenkstück für Schrägauswerfer
Scorrimento Fisso
Deslizamento Fixo
Glissière Fixe

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VI



Lifter Shaft
Varilla Figura
Stange für Geteilten Auswerfer
Asta per Inserto Figura
Haste Balancé
Queue d'aronde

68/
SD



Undercut Base Unit
Soporte Deslizamiento
Schrägauswerfer Basisführung
Supporto di Scorrimento
Suporte de Deslizamiento
Douille de Guidage

68/
CI



Angled Guide Bush
Casquillo Inclinado
Schrägbuchse
Bussola Inclinata
Casquillo Inclinado
Cale Escamotable

69/
SPECIAL



Special Sprung Core
Pinza Plana Especia
Sonder Federnder Auswerfer
Pinza Plana Speciale
Pinça Plana Especial
Éjecteur de Forme Special

DOUBLE RACK SYSTEM
by CUMSA

SELECTION TABLE: WHICH DR / KR DO I NEED?

ES TABLA DE SELECCIÓN: Qué DR / KR / XR necesito?
DE AUSWAHLTABELLE: Welcher DR / KR / XR ist am besten geeignet?
IT TABELLA PER SCELTA: Di quale DR / KR / XR ho bisogno?
PT TABELA DE SELEÇÃO: Qual é o DR / KR / XR que preciso?
FR TABLEAU DE CORRESPONDANCE: Quel est le DR / KR que j'ai besoin?



Stroke 100 (XR)

Table with 16 columns: Stroke 100 (XR), 16 rows of data for various models and angles.

Stroke 125 (DR / KR)

Table with 16 columns: Stroke 125 (DR / KR), 16 rows of data for various models and angles.

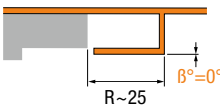
Stroke 100 (DR)
Stroke 200 (KR)
(Multiply S value x2)

Table with 16 columns: Stroke 100 (DR) / Stroke 200 (KR), 16 rows of data for various models and angles.

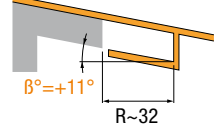
Stroke 100 (DR)
Stroke 200 (KR)
(Multiply S value x2)

Table with 16 columns: Stroke 100 (DR) / Stroke 200 (KR), 16 rows of data for various models and angles.

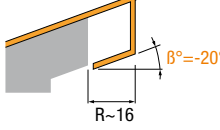
Neutral angles (β°=0°)



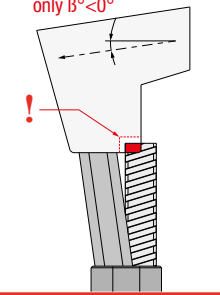
Positive Angles (β°>0°)



Negative Angles (β°<0°)

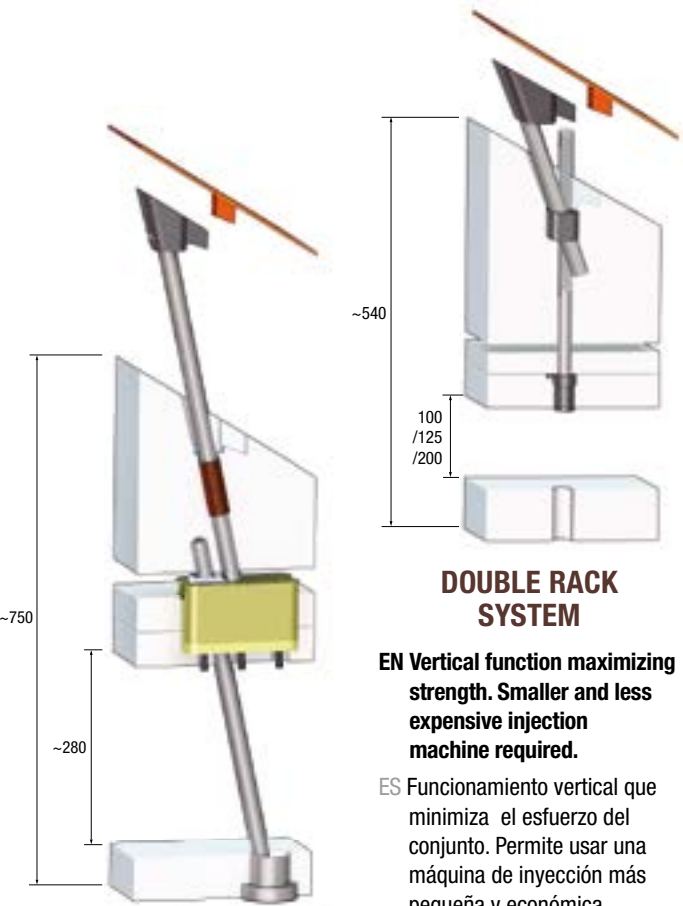


IMPORTANT !



COMPARE

Comparativa · Vergleich · Confronto · Comparativo · Comparatif



DOUBLE RACK SYSTEM

EN Vertical function maximizing strength. Smaller and less expensive injection machine required.
ES Funcionamiento vertical que minimiza el esfuerzo del conjunto. Permite usar una máquina de inyección más pequeña y económica.
DE Vertikale Funktion mit maximaler Kraft. Ein kleineres Werkzeug kann eventuell eine kleinere und günstiger Spritzgießmaschine benötigen.
IT Funzionamento verticale che minimizza lo sforzo. Permette di usare una macchina d'iniezione più piccola ed economica.
PT Funcionamento na vertical minimizando o esforço. Permite o uso de máquinas de injeção de menores dimensões e mais económicas.
FR Fonctionnement vertical réduisant les efforts. Permet de réduire la dimension de la presse d'injection et ainsi de réaliser des économies.

CONVENTIONAL SYSTEM

EN Eliminates the need for high-precision angled housings in the core plates.
ES Elimina los complicados taladros inclinados de alta precisión.
DE Es wird keine hochpräzise Schrägbohrung in der Formplatte benötigt.
IT Elimina le complicate lavorazioni inclinate ad alta precisione.
PT Elimina a necessidade de furos inclinados com precisão.
FR Termine les logements inclinés de haute précision.

DR

UNDERCUTS

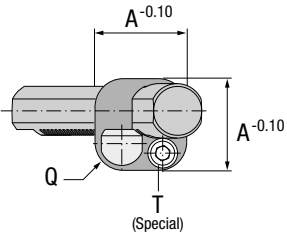
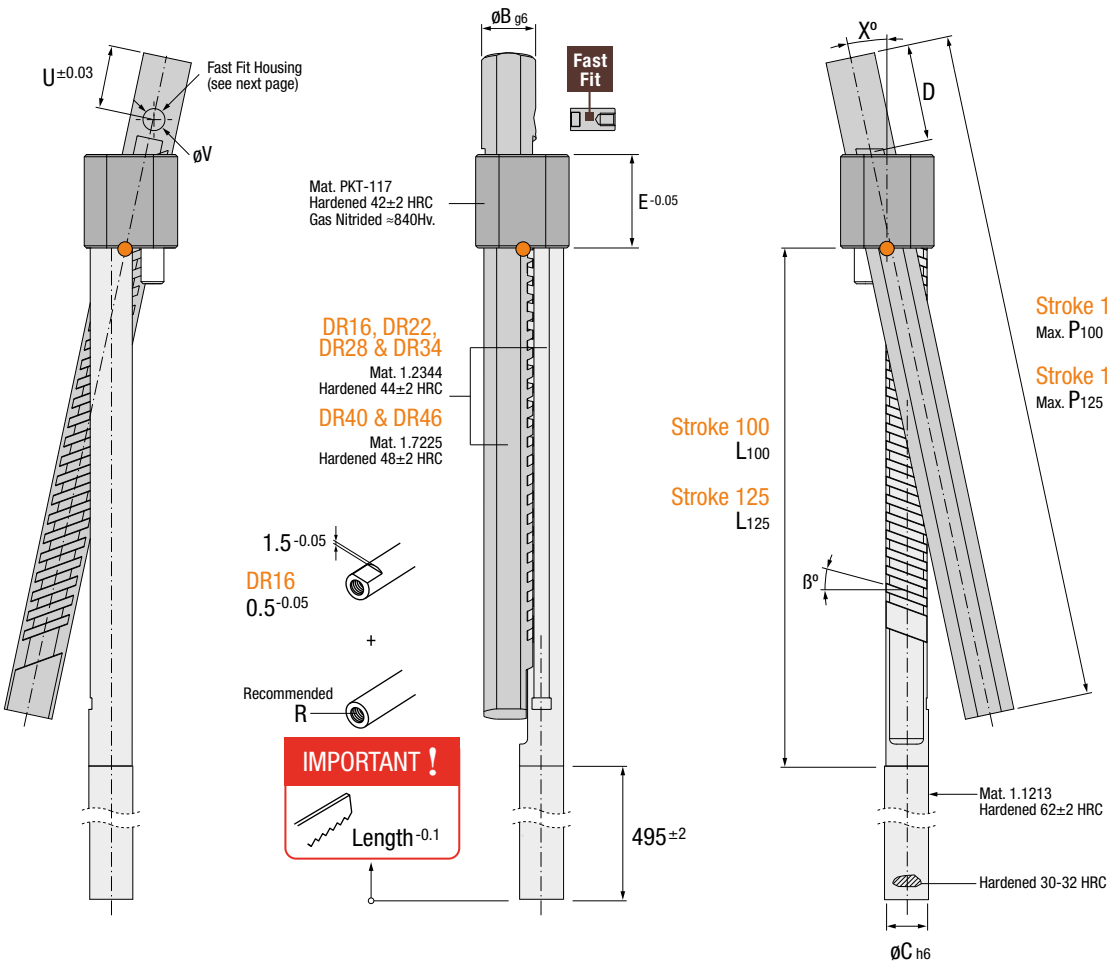


Patented

DOUBLE RACK LIFTER

ES Doble Cremallera DE Zweifach Zahnstangen-System
IT Doppia Cremagliera PT Duplo Rack FR Double Cremaillere

● Cad Insertion Point



IMPORTANT !
Mirror Part.
Pieza Simétrica.
Symmetrisches Teil.
Versione a Specchio.
Peça em Espelho.
Pièce en Miroir.

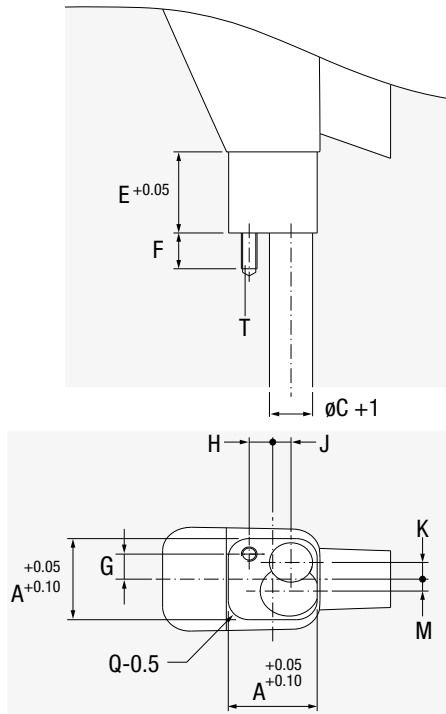
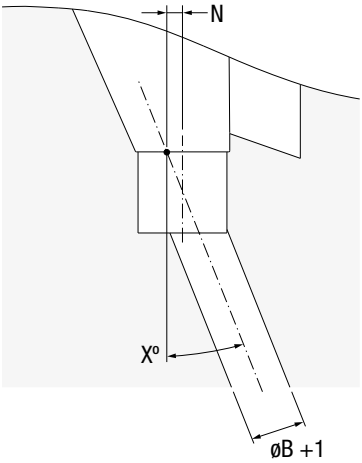
Stroke 100	Stroke 125	X°				A	B	C	D	E	L100	P100	L125	P125	Q	R	T	U	V	Stroke 100-S	Stroke 125-S
DR.16100L-x	-	8	12	16	-	16	9	8	20	20	142	178	-	-	4	M5	M5	10	6	DR.16100L-x-S	-
DR.22100L-x	DR.22125L-x	8	12	16	20	22	12	12	30	22	148	202	202	261	6.5	M6	M6	17	8	DR.22100L-x-S	DR.22125L-x-S
DR.28100L-x	DR.28125L-x	8	12	16	20	28	16	14	36	28	152.5	214	194.5	266	8.5	M8	M8	23	8	DR.28100L-x-S	DR.28125L-x-S
DR.34100L-x	DR.34125L-x	8	12	16	20	34	20	16	36	34	160.5	227	188.5	264	10.5	M8	M8	23	8	DR.34100L-x-S	DR.34125L-x-S
DR.40100L-x	DR.40125L-x	8	12	16	20	40	22	20	36	40	170	244	204	284	10.5	M10	M10	20	10	DR.40100L-x-S	DR.40125L-x-S
DR.46100L-x	DR.46125L-x	8	12	16	20	46	24	24	42	46	175	258	201	289	10.5	M10	M12	26	10	DR.46100L-x-S	DR.46125L-x-S

IMPORTANT !
Replace the **X** in the reference with the required X° dimension (8°, 12°, 16° or 20°) and indicate the required B°.
Sustituir la **X** de la referencia por la cota X° deseada (8°, 12°, 16° o 20°), e indique el ángulo B° requerido.
Ersetzen Sie das **X** der Referenz durch den gewünschten X° Winkel (8°, 12°, 16° oder 20°). Geben Sie den benötigten B° Winkel an.
Sostituire la **X** del codice con l'angolo X° desiderato (8°, 12°, 16° o 20°) e indichiate la B° richiesta.
Substituir o **X** da referencia pela cota X° desejada (8°, 12°, 16° o 20°), e indique o angulo B° pretendido.
Remplacez la valeur **X** par la valeur angulaire X désirée (8, 12, 16 ou 20). Ensuite indiquez l'angle B° correspondant.

INSTALLATION GUIDELINES

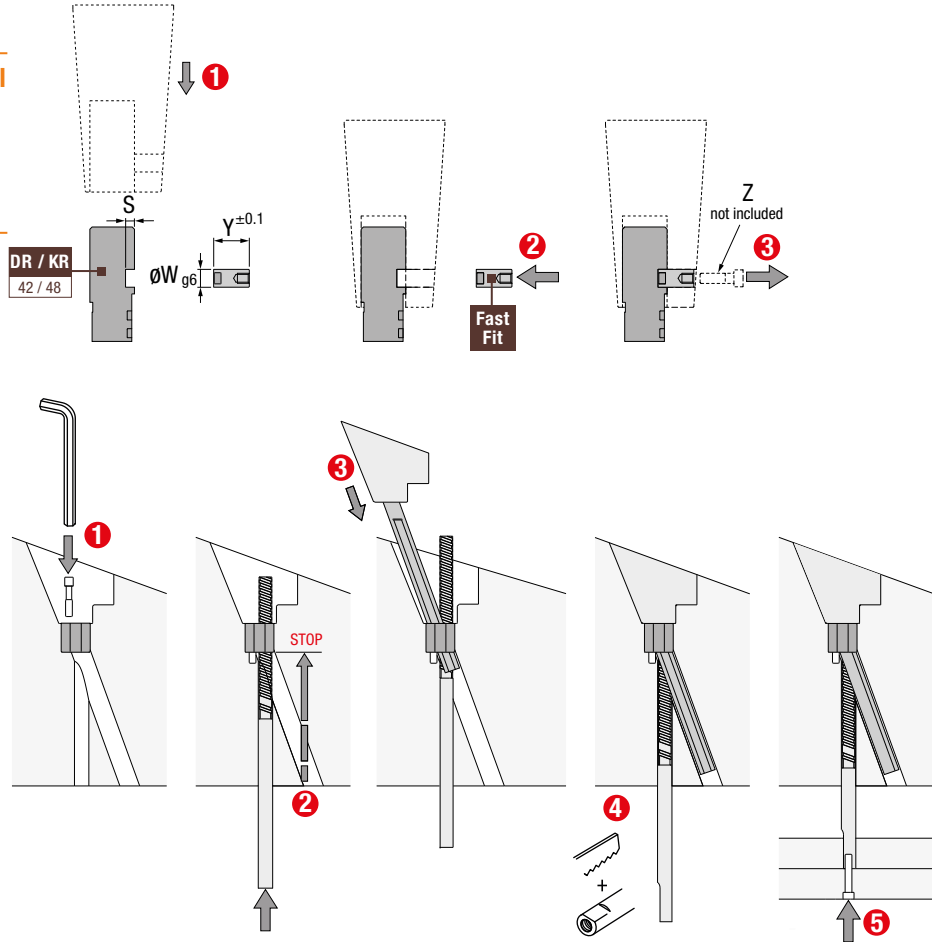
ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

Core Housing
Alojamiento Placa Punzón
Einbaumaße DR Führung
Sede nel Punzone
Alojamento Bucha
Logement dans l'empreinte



Stroke 100	Stroke 125	Stroke 200	F	G	H	J	K	M	N	S	T	W	Y	Z
DR.16100L-..	-	-	10	4.6	4.6	3	2.35	3	2.8	2.5	M5	6	9	M4
DR.22100L-..	DR.22125L-.. / KR.22125L-..	-	13	5.6	5.6	4.2	3.7	4.2	3.5	2.5	M6	8	12	M4
DR.28100L-..	DR.28125L-.. / KR.28125L-..	-	16	7.5	7.5	5	5.4	4.8	4.8	2.5	M8	8	13.5	M4
DR.34100L-..	DR.34125L-.. / KR.34125L-..	-	16	10.5	8	7	7	5	6	4	M8	8	16	M4
DR.40100L-..	DR.40125L-..	-	20	11	11	7	8	7	7	4	M10	10	20	M6
DR.46100L-..	DR.46125L-..	-	25	13	13	8	8	9	9	5	M12	10	24	M6
-	-	KR.58200L-..	28	15.5	15.5	10	12.2	11.2	10	5	M14	12	30	M6
-	-	KR.76200L-..	36	21	21	13	15.2	15.2	12	6	M18	12	36	M6

FAST FIT:
Installation and Removal
Instalación y Desinstalación
Montage und Demontage
Montaggio e Smontaggio
Instalação e Desinstalação
Montage et Démontage



DR

UNDERCUTS



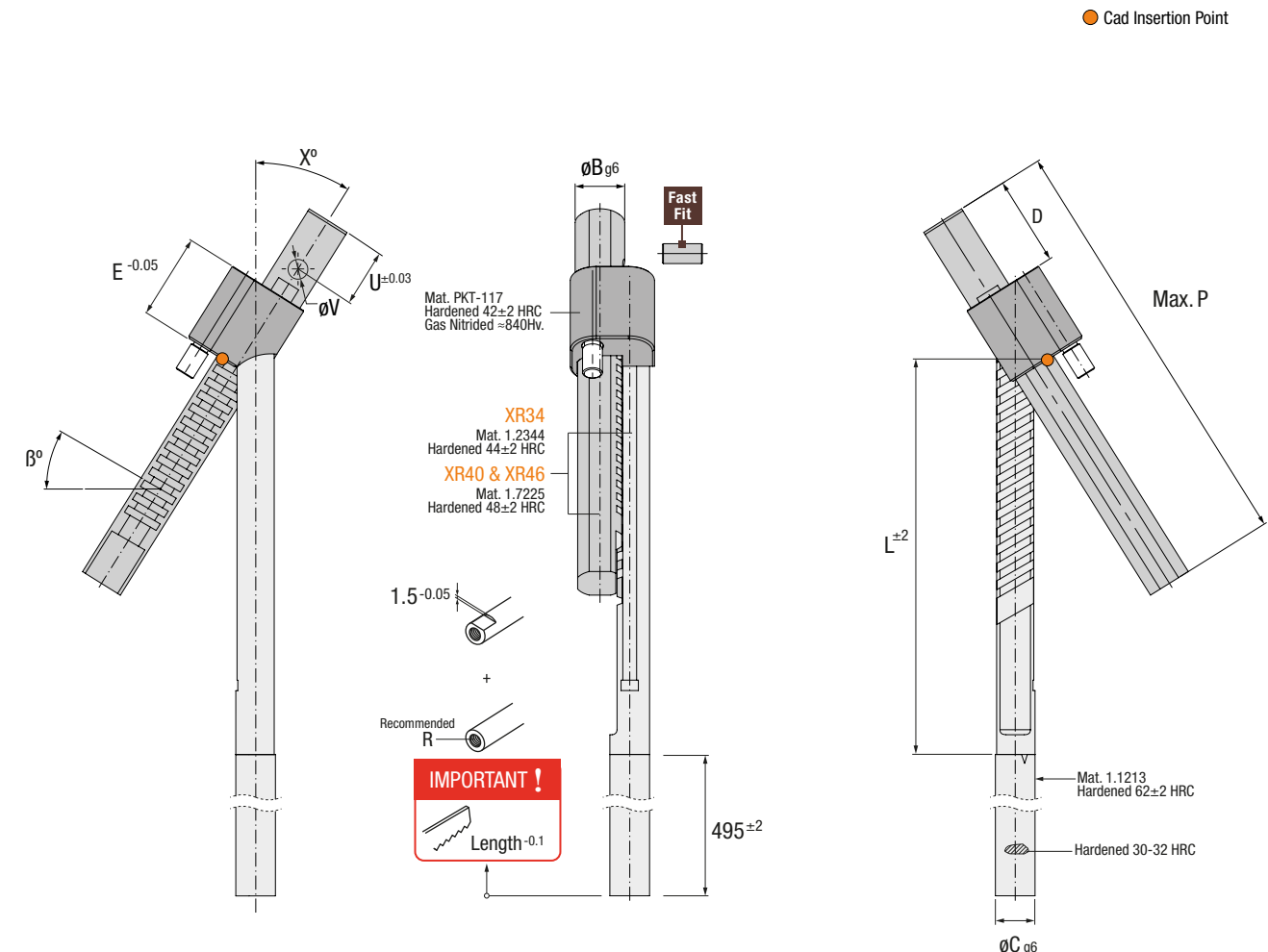
PLAY

XR

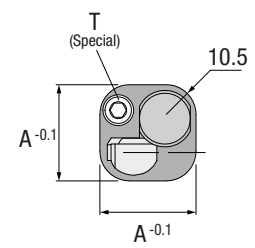
UNDERCUTS



Patented
Max. 120°C



IMPORTANT !
Length -0.1



IMPORTANT !
Mirror Part.
Pieza Simétrica.
Symmetrisches Teil.
Versione specchiata.
Peça em Espelho.
Pièce en Miroir.

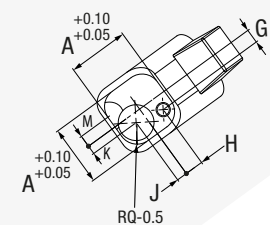
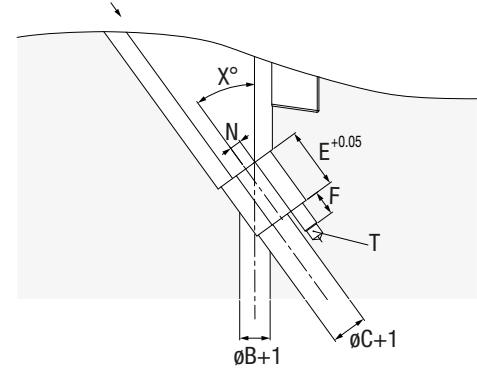
Stroke 100	X°	A	B	C	D	E	L	P	R	T	U	V	Stroke 100-S
XR34100L-x	24 28 32 36	34	20	16	36	34	159	225	M8	M8	23	8	XR34100L-x-S
XR40100L-x	24 28 32 36	40	22	20	36	40	170	240	M10	M10	20	10	XR40100L-x-S
XR46100L-x	24 28 32 36	46	24	24	42	46	174	255	M10	M12	26	10	XR46100L-x-S

IMPORTANT !
Replace the **X** in the reference with the required X° dimension (24°, 28°, 32° or 36°) and indicate the required B°.
Sustituir la **X** de la referencia por la cota X° deseada (24°, 28°, 32° or 36°), e indique el ángulo B° requerido.
Ersetzen Sie das **X** der Referenz durch den gewünschten X° Winkel (24°, 28°, 32° or 36°). Geben Sie den benötigten B° Winkel an.
Sostituire la **X** del codice con l'angolo X° desiderato (24°, 28°, 32° or 36°) e indicate la B° richiesta.
Substituir o **X** da referencia pela cota X° desejada (24°, 28°, 32° or 36°), e indique o ângulo B° pretendido.
Remplacez la valeur **X** par la valeur angulaire X désirée (24°, 28°, 32° or 36°). Ensuite indiquez l'angle B° correspondant.

INSTALLATION GUIDELINES

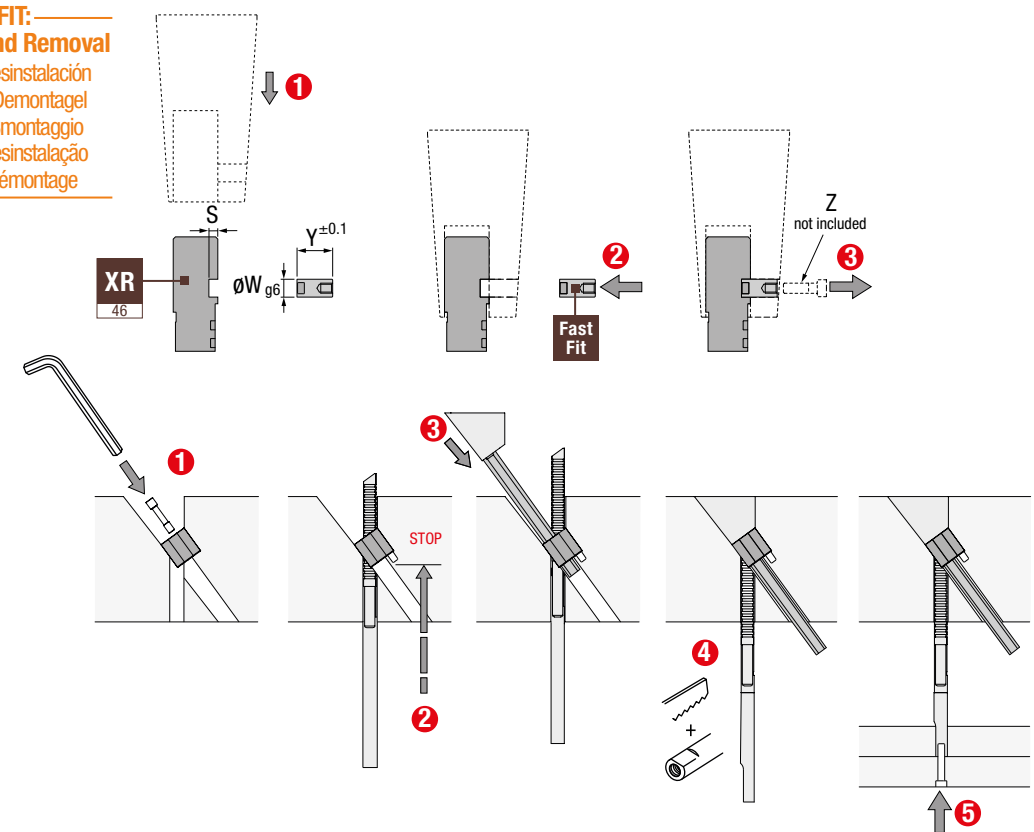
ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

Core Housing
Alojamiento Placa Punzón
Einbaumaße DR Führung
Sede nel Punzone
Alojamento Bucha
Logement dans l'empreinte



Stroke 100	F	G	H	J	K	M	N	S	T	W	Y	Z
XR34100L-..	16	8	10.5	6	5	7	6	4	M8	8	16	M4
XR40100L-..	20	11	11	7	7	8	7	4	M10	10	20	M6
XR46100L-..	25	13	13	9	9	8	8	5	M12	10	24	M6

FAST FIT:
Installation and Removal
Instalación y Desinstalación
Montage und Demontage
Montaggio e Smontaggio
Instalação e Desinstalação
Montage et Démontage



XR

UNDERCUTS



PLAY

KR

UNDERCUTS

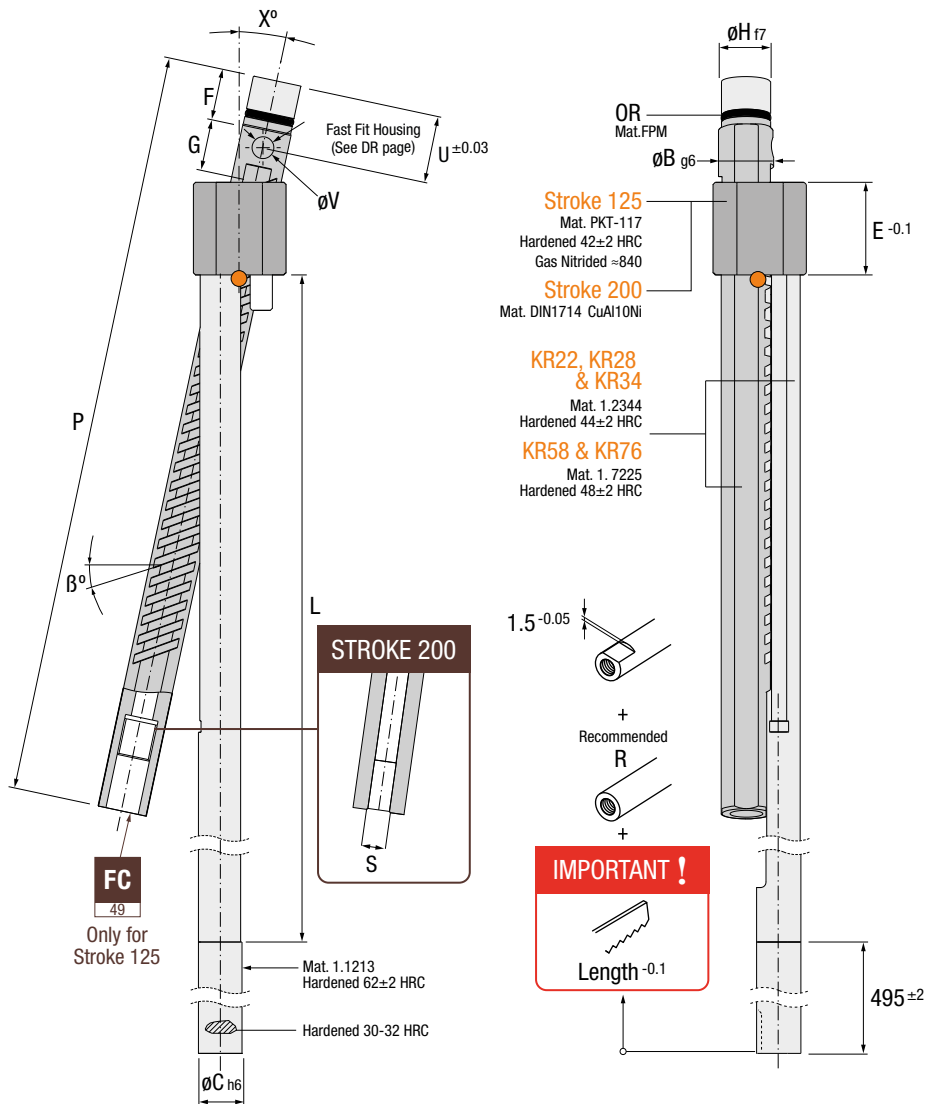


Patented

COOLED RACK LIFTER

ES Doble Cremallera Refrigerada DE Gekühltes Zweifach Zahnstangen System
IT Doppia Cremagliera con Refrigerazione PT Duplo Rack Refrigerado FR Double Rack Réfrigéré

Cad Insertion Point



IMPORTANT !
Length -0.1

! COOLING CONNECTION OPTIONS
Only for Stroke 125
Option A **Option B**

! IMPORTANT !
Mirror part.
Pieza simétrica.
Symmetrisches Teil.
Versione a specchio.
Peça em espelho.
Pièce en miroir.

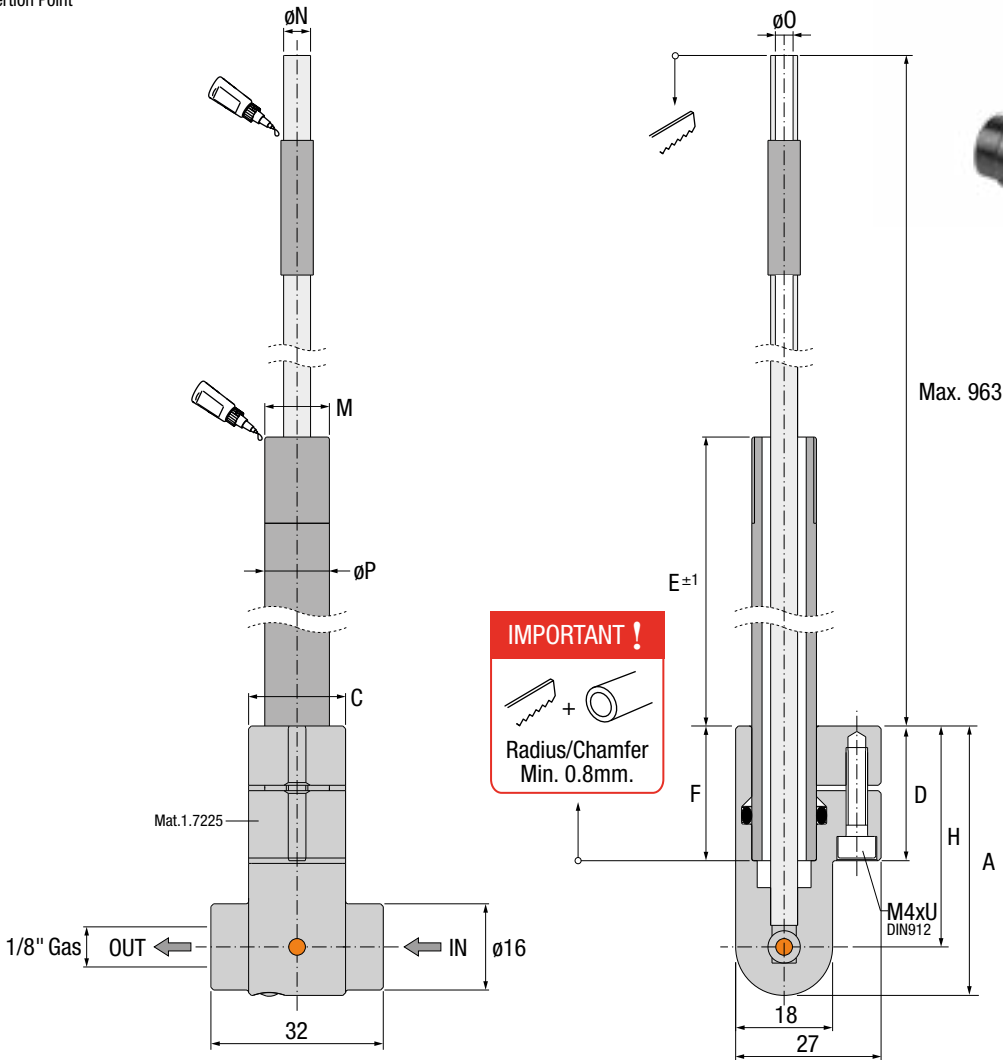
	Ref.	X°	A	B	C	E	F	G	H	L	P	Q	R	S	T	U	V	OR	Mirror Ref. -S
Stroke 125	KR.22125L-x	8 12 16 20	22	12	12	22	16	20	10.8	282	260	6.5	M6	-	M6	23	8	8x1.25	KR.22125L-x-S
	KR.28125L-x	8 12 16 20	28	16	14	28	16	20	13.8	294.5	272	8.5	M8	-	M8	23	8	11x1.3	KR.28125L-x-S
	KR.34125L-x	8 12 16 20	34	20	16	34	18	20	17.8	311.5	275	10.5	M8	-	M8	25	8	14x1.78	KR.34125L-x-S
Stroke 200	KR.58200L-x	8 12 16 -	58	30	30	66	25	55	26	362	430	13.5	M20	1/4"Gas	M14	60	12	21x2.5	KR.58200L-x-S
	KR.76200L-x	8 12 16 -	76	40	40	80	30	60	34	392	470	17	M24	3/8"Gas	M18	70	12	28x3	KR.76200L-x-S

! IMPORTANT !
Replace the **x** in the reference with the required X° dimension (8°, 12°, 16° or 20°) and indicate the required β°.
Sustituir la **x** de la referencia por la cota X° deseada (8°, 12°, 16° o 20°), e indique el ángulo β° requerido.
Ersetzen Sie das **x** der Referenz durch den gewünschten X° Winkel (8°, 12°, 16° oder 20°). Geben Sie den benötigten β° Winkel an.
Sostituire la **x** del codice con l'angolo X° desiderato (8°, 12°, 16° o 20°) e indichiate la β° richiesta.
Substituir o **x** da referencia pela cota X° desejada (8°, 12°, 16° o 20°), e indique o angulo β° pretendido.
Remplacez la valeur **x** par la valeur angulaire X désirée (8, 12, 16 ou 20). Ensuite indiquez l'angle β° correspondant.

KR COOLING HOSE

ES Tubo Refrigeración KR DE KR Kühlungsschlauch
IT Sistema Refrigerazione KR PT Tubo de Refrigeração KR FR Tube de Rrefroidissement KR

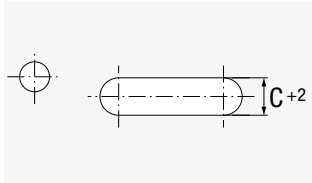
Cad Insertion Point



Ref.	A	C	D	E	F	H	M	N	O	P	U	Compatible With
FC.220500	40	15	18	483.5	16.5	31	M8x1	3.5	3	8	10	KR.22125L
FC.280500	50	18	25	475	25	41	M10x1	4.5	4	10	16	KR.28125L
FC.340500	50	18	25	475	25	41	M12x1	5	4.5	12	16	KR.34125L

Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



! IMPORTANT

R ef.	Q					
	β ≤ 0°	0° < β ≤ 10°	10° < β ≤ 20°	20° < β ≤ 25°	25° < β ≤ 30°	30° < β ≤ 35°
KR.xx125L-8	10	15	18	20	23	25
KR.xx125L-12	10	16	22	25	29	-
KR.xx125L-16	10	18	26	31	-	-
KR.xx125L-20	10	20	31	-	-	-

FC

UNDERCUTS



Max. 80°C

MK

UNDERCUTS



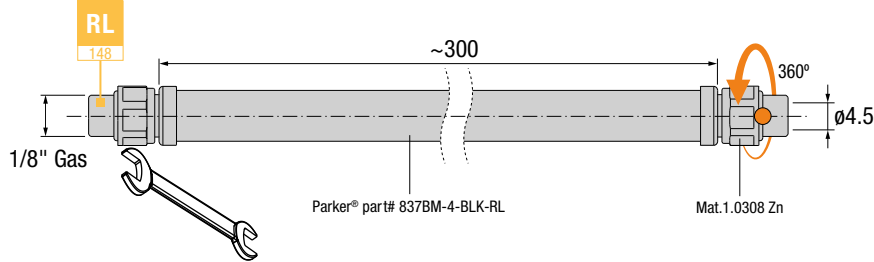
Max.
80°C



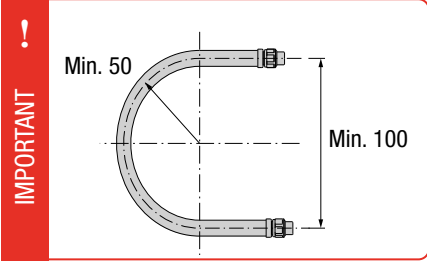
CONNECTION HOSE

ES Tubo Conexión DE Verbindungsschlauch
IT Tubo Collegamento PT Tubo de Ligação FR Tube de Liaison

● Cad Insertion Point



Ref.
MK.120300



RD

UNDERCUTS

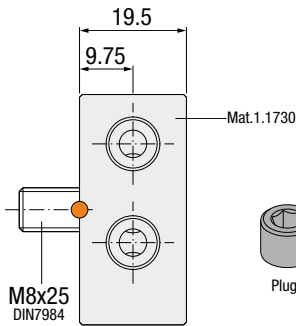
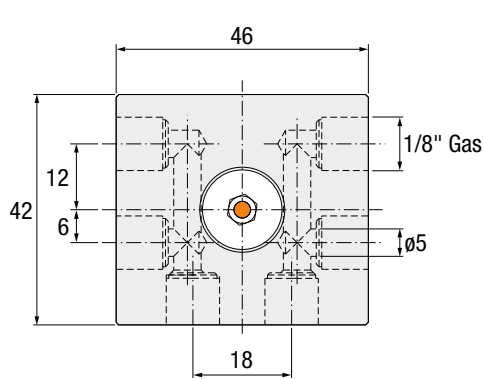


Max.
80°C

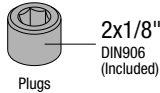


COOLING DISTRIBUTOR

ES Distribuidor Refrigeración DE Verteilerschlauch
IT Distributore Refrigerazione PT Distribuidor de Refrigeração FR Distribution de Refroidissement



Ref.
RD.182012



CK

UNDERCUTS

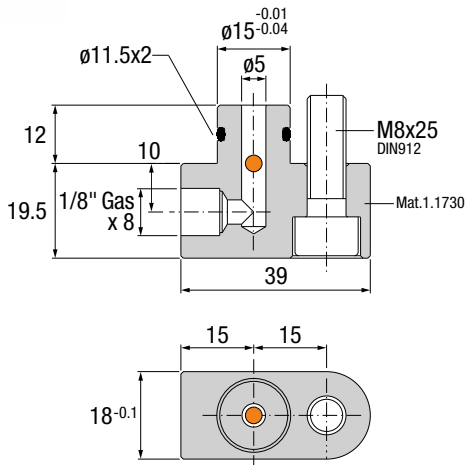


Max.
80°C

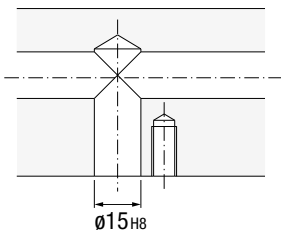


90° PLATE CONNECTOR

ES Conector Placa a 90° DE 90° Platten-Verbindungsstück
IT Collegamento Piastra a 90° PT Conector de Placa a 90° FR Connexion Dans la Plaque de 90°

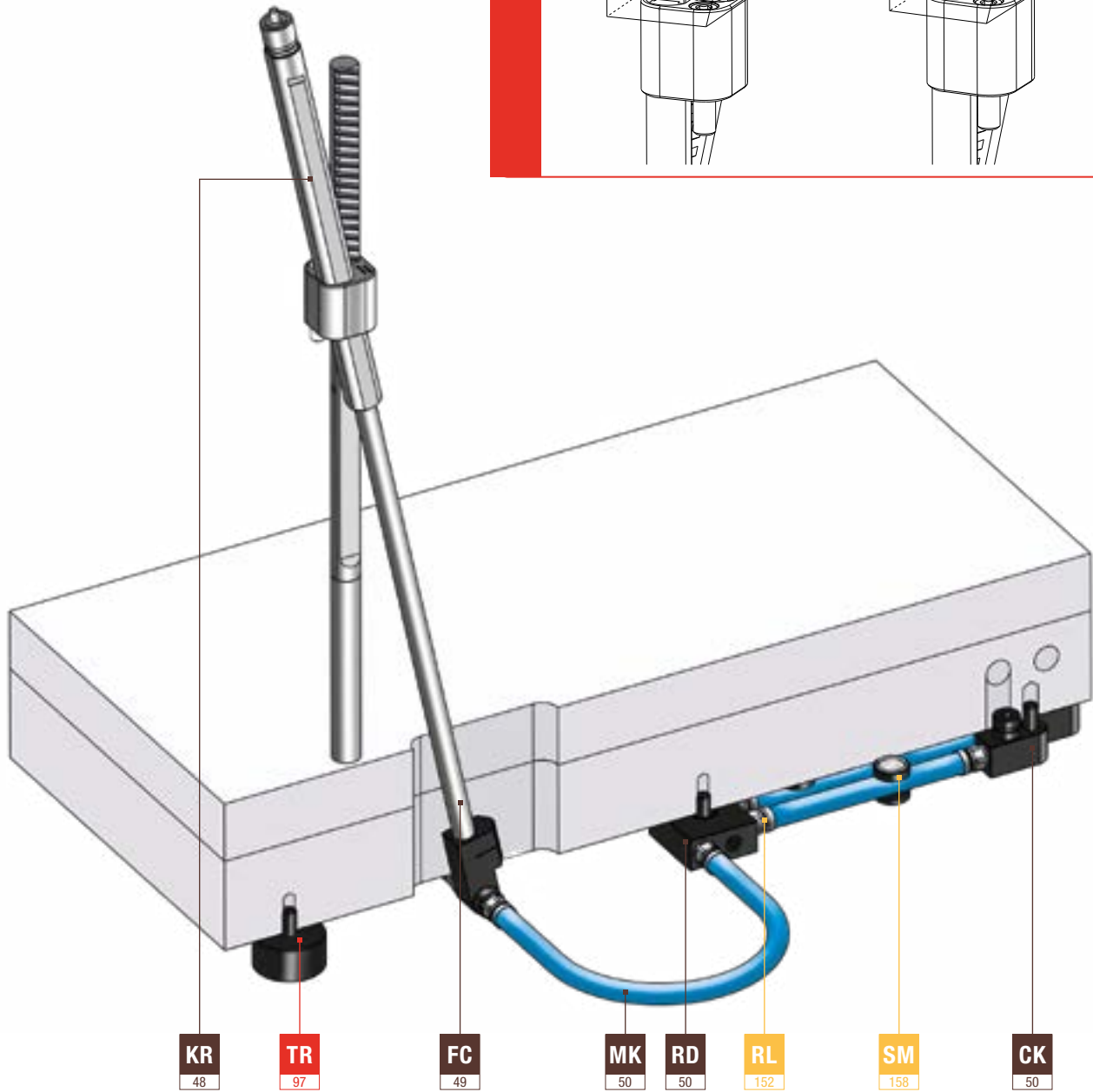
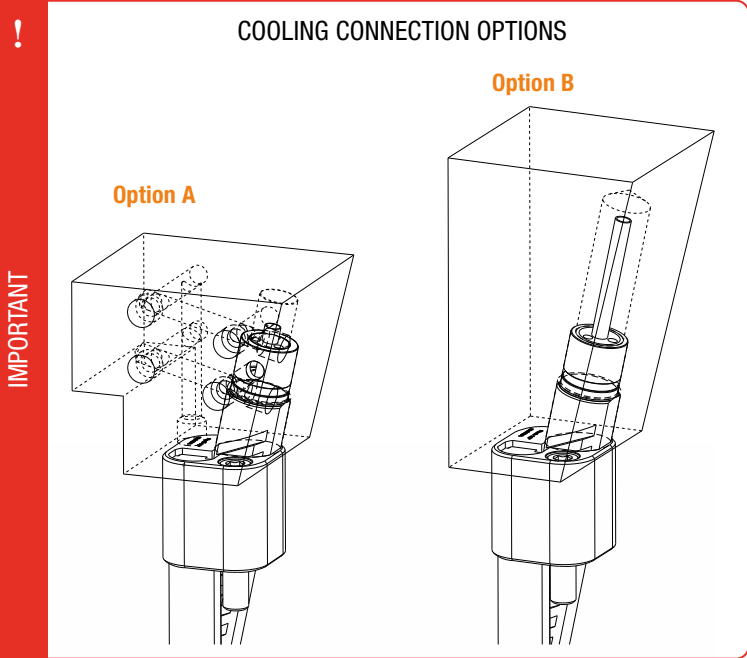


Ref.
CK.181839



INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



WL

UNDERCUTS

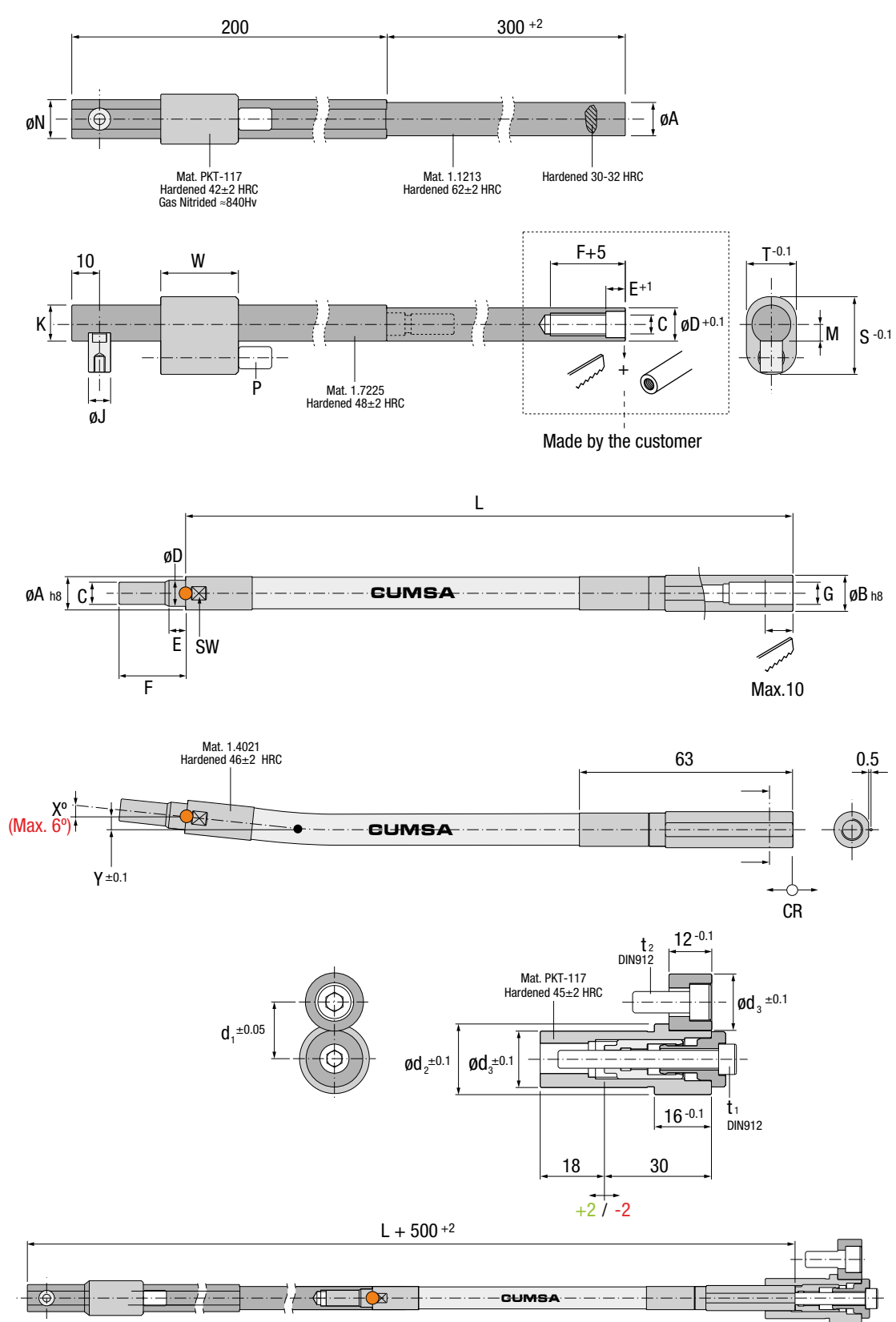


Patented
Max. 120°C

SMART WORM LIFTER

ES Patin Smart Worm DE Smart Worm Lifter
IT Smart Worm Lifter PT Balancé Smart Worm FR Patin Smart Worm

● Cad Insertion Point

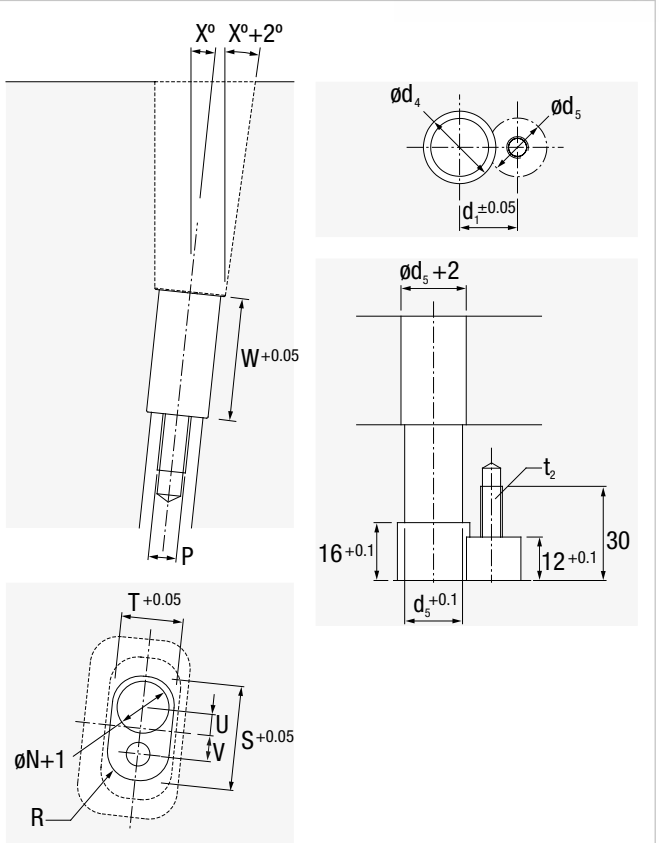
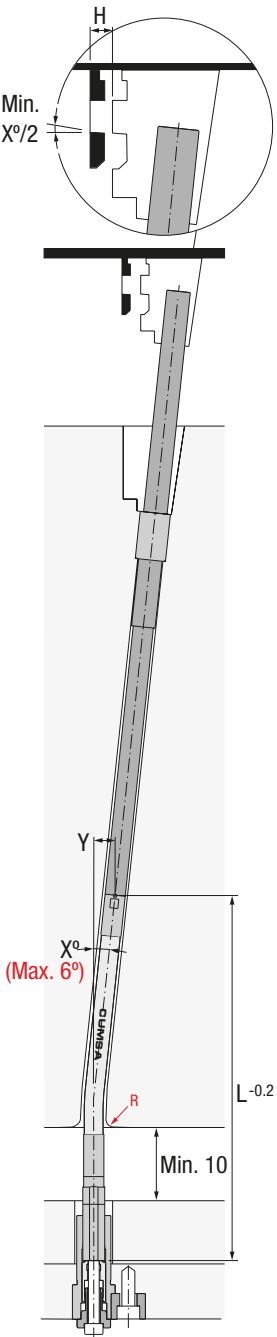
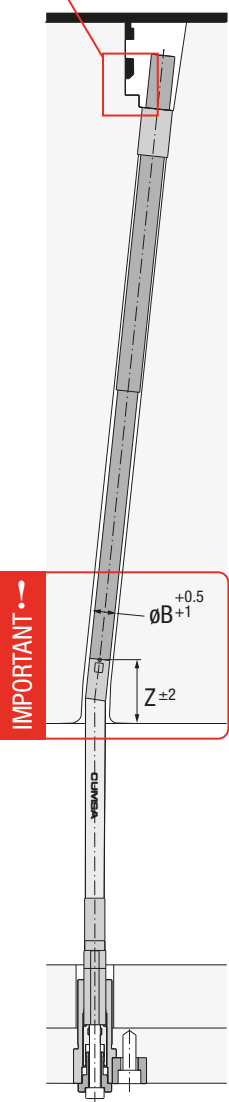


Ref.	A	B	C	D	d ₁	d ₂	d ₃	E	F	G	J	K	L	M	N	P	S	SW	T	t ₁	W	d ₄	d ₅	R	t ₂	U	V	Z	CR(N)	Stroke
WL080100	8	9	M5	5.5	16	19.8	15.8	3.5	18	M5	6	9.5	205	4.5	10	M6	22	7	13	M5x45	26	20	16	6	M6	4.5	5.5	40	1.500	100
WL080125	8	9	M5	5.5	16	19.8	15.8	3.5	18	M5	6	9.5	240	4.5	10	M6	22	7	13	M5x45	26	20	16	6	M6	4.5	5.5	50	1.500	125
WL120100	12	13	M8	9.4	19.5	23.8	19.8	6	24	M6	8	13	205	6.2	14	M8	28	11	18	M6x45	28	24	20	8	M8	4	8	40	2.500	100
WL120125	12	13	M8	9.4	19.5	23.8	19.8	6	24	M6	8	13	240	6.2	14	M8	28	11	18	M6x45	28	24	20	8	M8	4	8	50	2.500	125

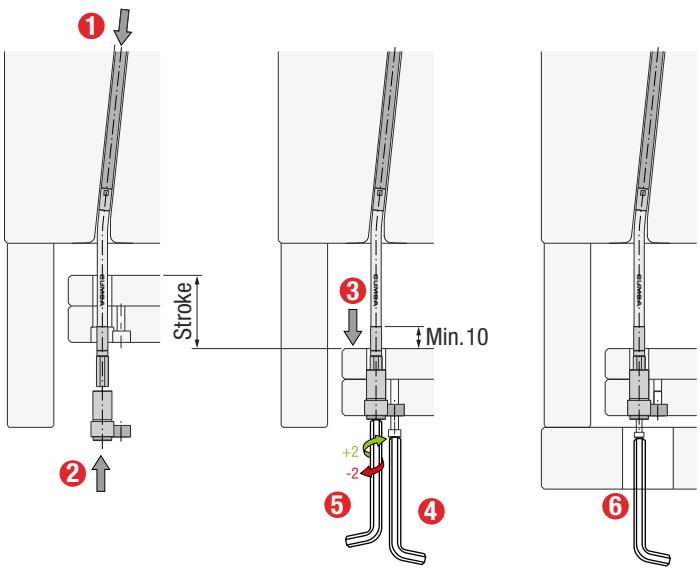
INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

! IMPORTANT
Design a Mechanical Stopper on the insert.
Realice un Tope Mecánico en el inserto.
Der Benutzer konstruiert selbst den mechanischen Anschlag am Einsatz.
Realizzare un Fermo Meccanico sull'inserto.
Criar um Batente Mecânico no postigo moldante.
Créer un Arrêt Mécanique sur la pièce de la partie moulante.



	WL...xx100		WL...xx125	
X°	H	Y	H	Y
1°	1.74	0.60	2.18	0.60
2°	3.49	1.20	4.36	1.20
3°	5.24	1.80	6.55	1.80
4°	6.99	2.40	8.74	2.40
5°	8.75	3.00	10.90	3.00
Max 6°	10.50	3.50	13.10	3.50



WL

UNDERCUTS



PLAY

WP

UNDERCUTS



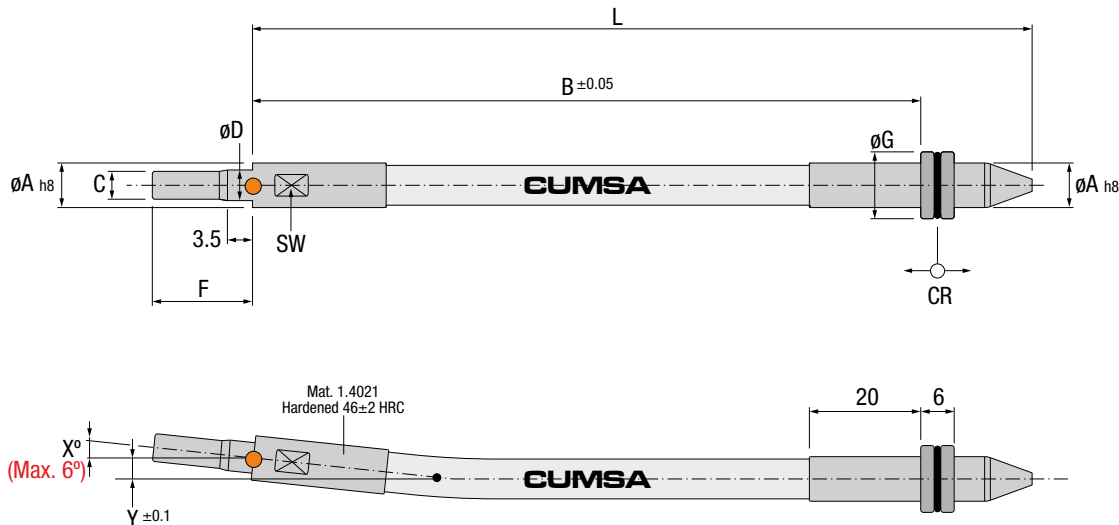
Patented
Max. 120°C



SMART WORM PIN

ES Expulsor Smart Worm DE Smart Worm Pin
IT Pin Smart Worm PT Extractor Smart Worm FR Ejection Smart Worm

● Cad Insertion Point

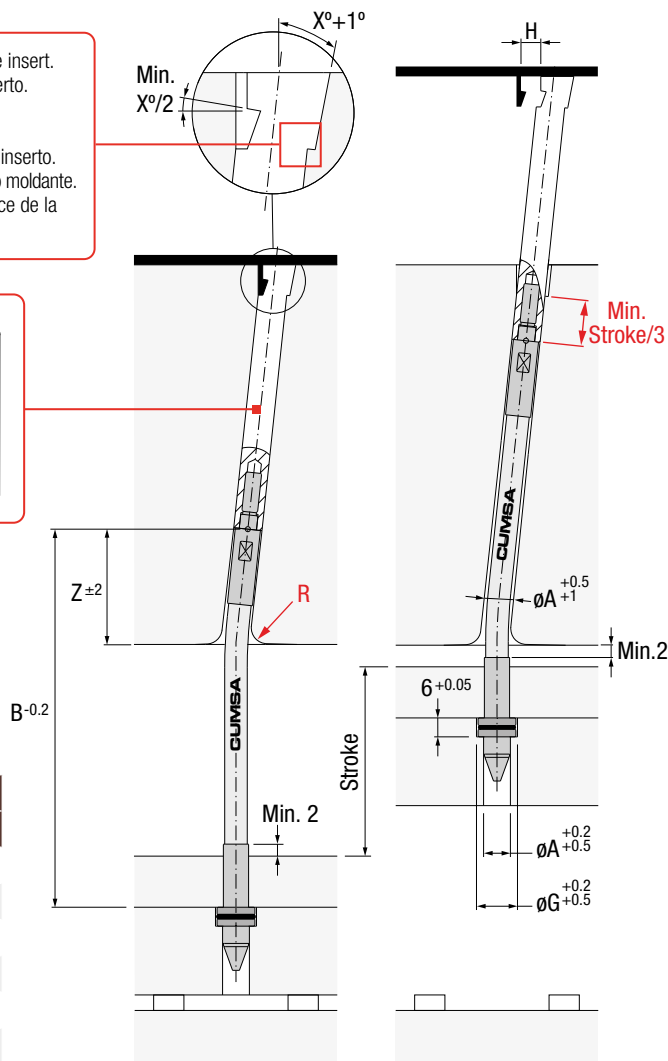
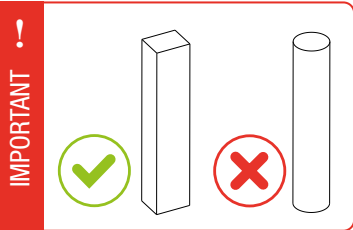


Ref.	A	B	C	D	F	G	L	SW	Z	CR (N)	Max. Stroke
WP.060030	6	90	M4	4.5	12	10	108	5	30	1.000	30
WP.060060	6	120	M4	4.5	12	10	138	5	35	1.000	60
WP.080030	8	90	M5	5.5	18	12	110	7	30	1.500	30
WP.080060	8	120	M5	5.5	18	12	140	7	35	1.500	60

Installation Guidelines

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IMPORTANT
Design a Mechanical Stopper on the insert.
Realice un Tope Mecánico en el inserto.
Der Benutzer konstruiert selbst den mechanischen Anschlag am Einsatz.
Realizzare un fermo meccanico sull'inserto.
Criar um batente mecânico no postigo moldante.
Créer un arrêt mécanique sur la pièce de la partie moulante.

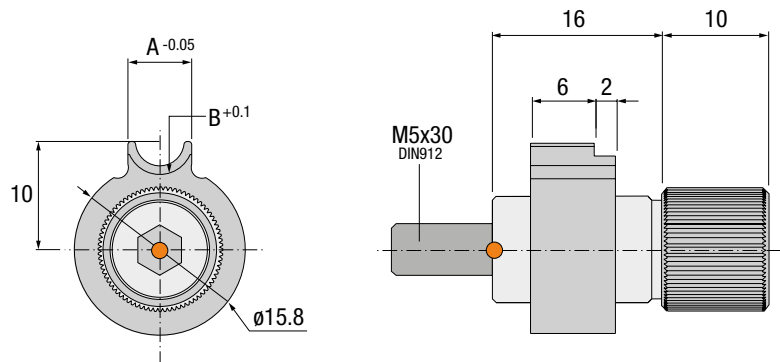


X°	Y	WP.xx0030	WP.xx0060
1°	0.60	0.52	1.04
2°	1.20	1.05	2.09
3°	1.80	1.57	3.14
4°	2.40	2.10	4.19
5°	3.00	2.63	5.25
Max. 6°	3.50	3.15	6.31

WP ADJUSTABLE FIXING

ES Fijación Regulable WP DE WP Einstellbare Befestigung
IT Fissaggio Regolabile WP PT Fixação Regulavel WP FR Fixation Reglable WP

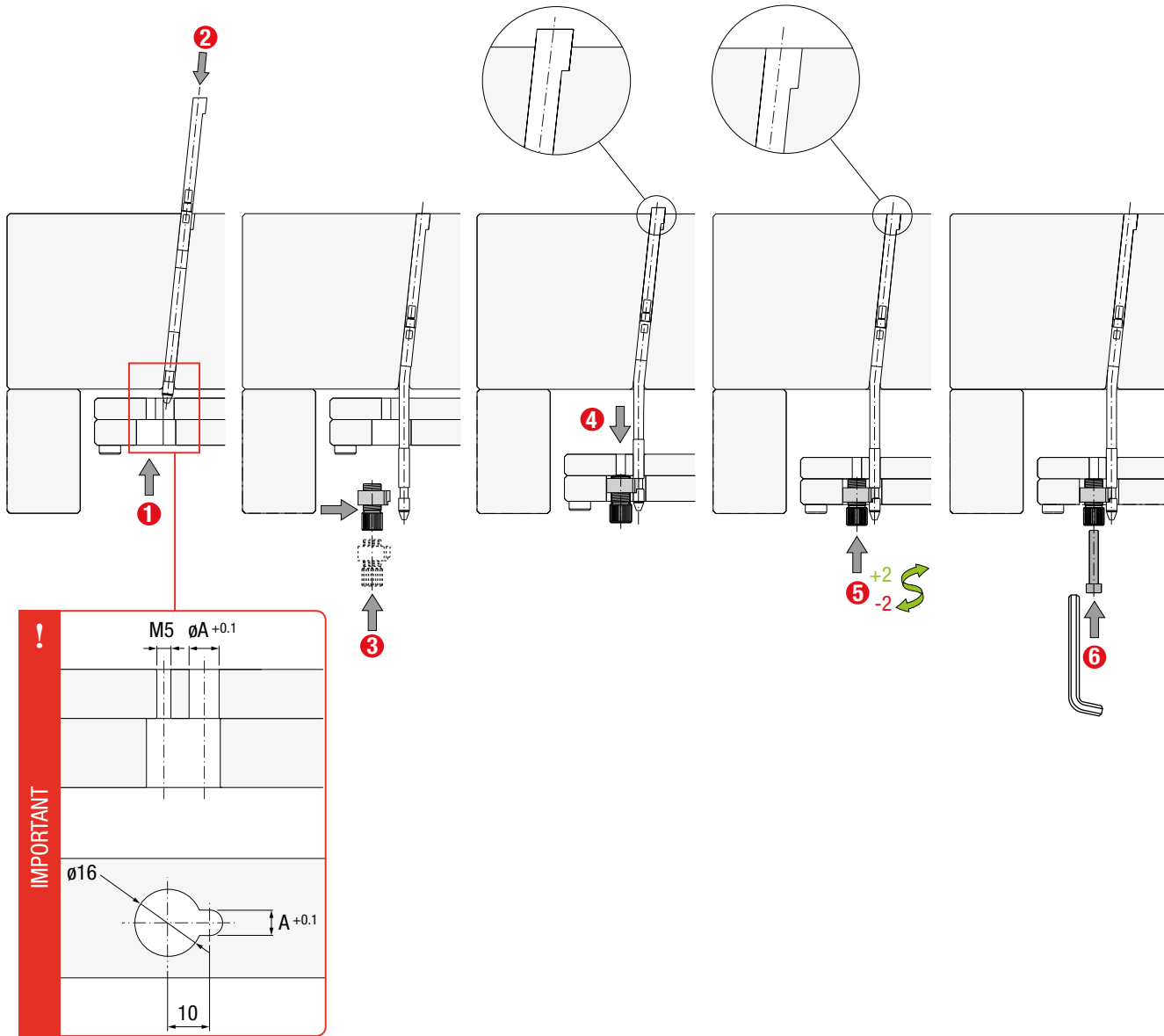
● Cad Insertion Point



Ref.	A	B	Compatible With
WF.061608	6	3.1	WP.060xxx
WF.081608	8	4.1	WP.080xxx

Installation Guidelines

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WF

UNDERCUTS



PF

UNDERCUTS

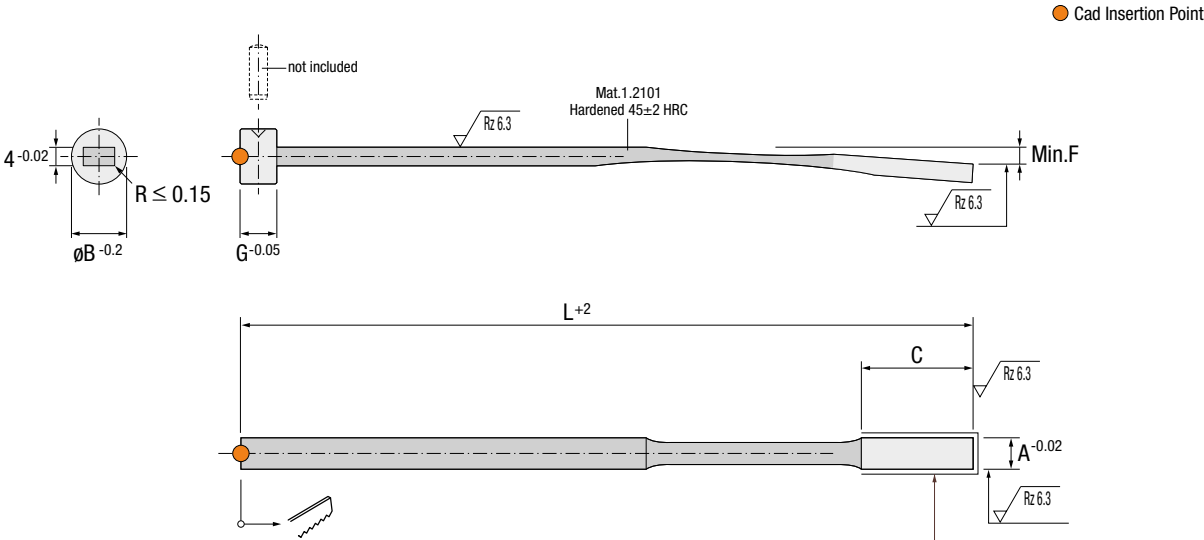


Patented



FLEXIBLE CORE

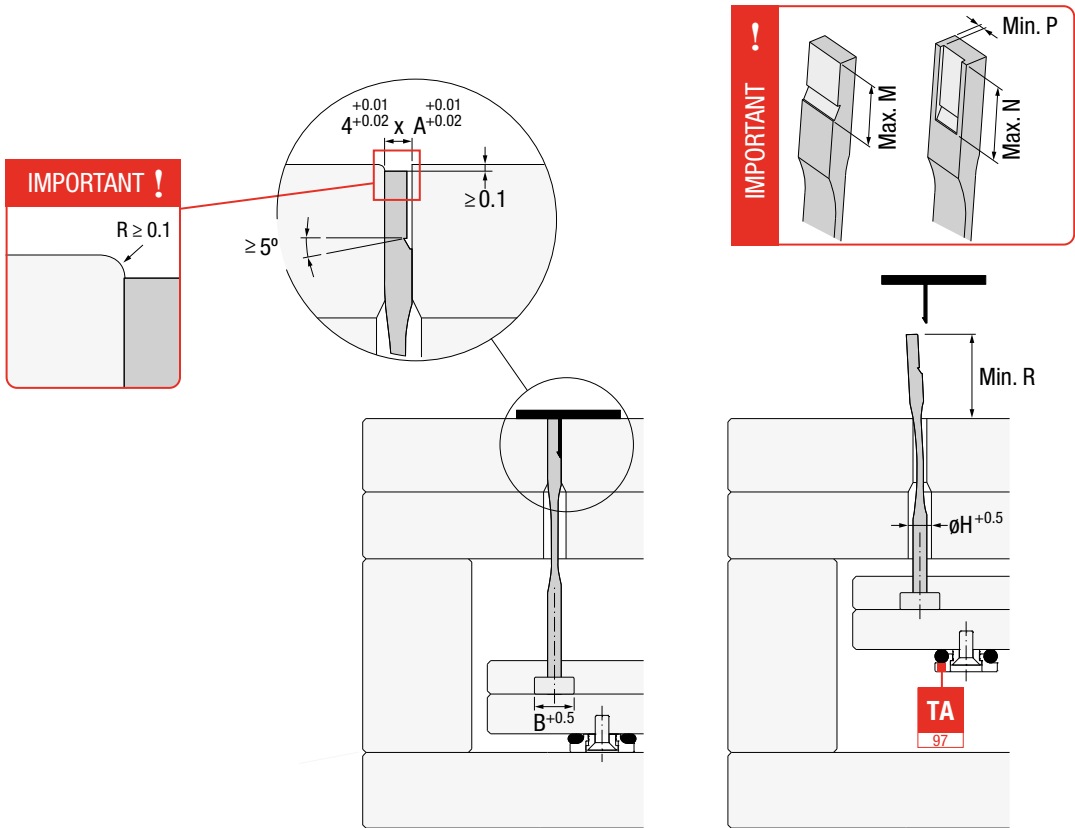
ES Pinza Flexible DE Flexibler Federauswerfer
IT Pinza Flessibile PT Pinça Flexível FR Ejecteur Flexible



Ref.	A	B	C	F	G	H	L	M	N	P	R	Balinit C®	Hardened
PF.044150	4	8	24	2.5	6	6	150	12	14	0.8	30	●	52±2 HRC
PF.054150	5	8	24	2.5	6	6.5	150	12	14	0.8	30	●	52±2 HRC
PF.064200	6	12	30	2.8	8	7.5	200	18	20	1	36	●	52±2 HRC
PF.0642WB	6	12	30	2.8	8	7.5	200	18	20	1	36	-	56±2 HRC
PF.084200	8	14	30	2.8	8	9	200	18	20	1	36	●	52±2 HRC
PF.0842WB	8	14	30	2.8	8	9	200	18	20	1	36	-	56±2 HRC
PF.104200	10	16	30	2.8	8	11	200	18	20	1	36	●	52±2 HRC
PF.1042WB	10	16	30	2.8	8	11	200	18	20	1	36	-	56±2 HRC
PF.124200	12	18	30	2.8	8	13	200	18	20	1	36	●	52±2 HRC
PF.1242WB	12	18	30	2.8	8	13	200	18	20	1	36	-	56±2 HRC

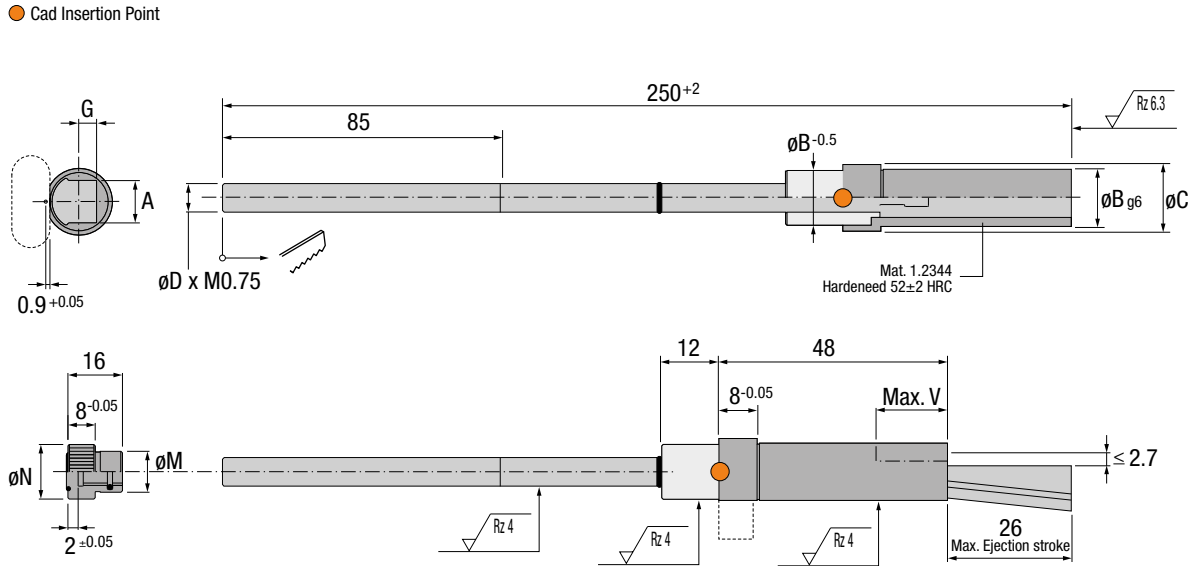
Installation Guidelines

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STANDARD LIFTER

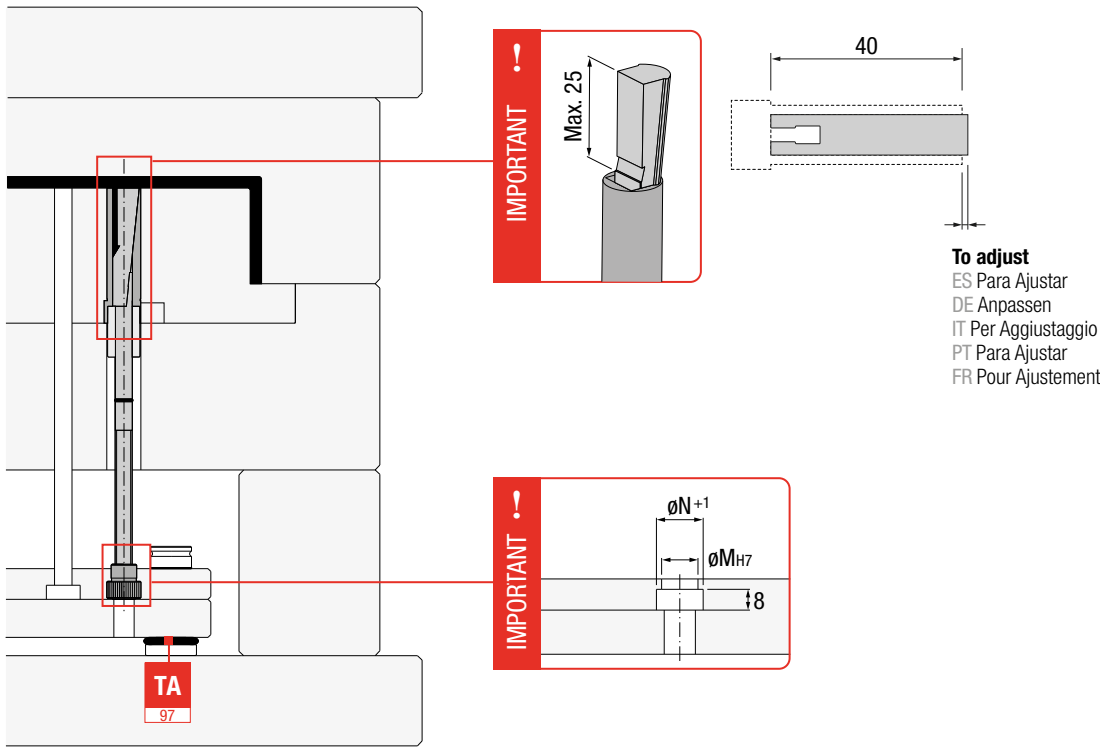
ES Patin Standard DE Schrägschieber
IT Pattino Standard PT Patim Standard FR Patin Standard



Ref.	A	B	C	D	G	M	N	R	V
PS.062250	6.2	10	12	6	3.4	12	16	1.25	8
PS.082250	8.2	12	14	6	4	12	16	1.25	15
PS.102250	10.2	14	16	8	4.2	14	18	2	15
PS.122250	12.2	16	18	8	4.2	14	18	2	20

Installation Guidelines

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PS

UNDERCUTS



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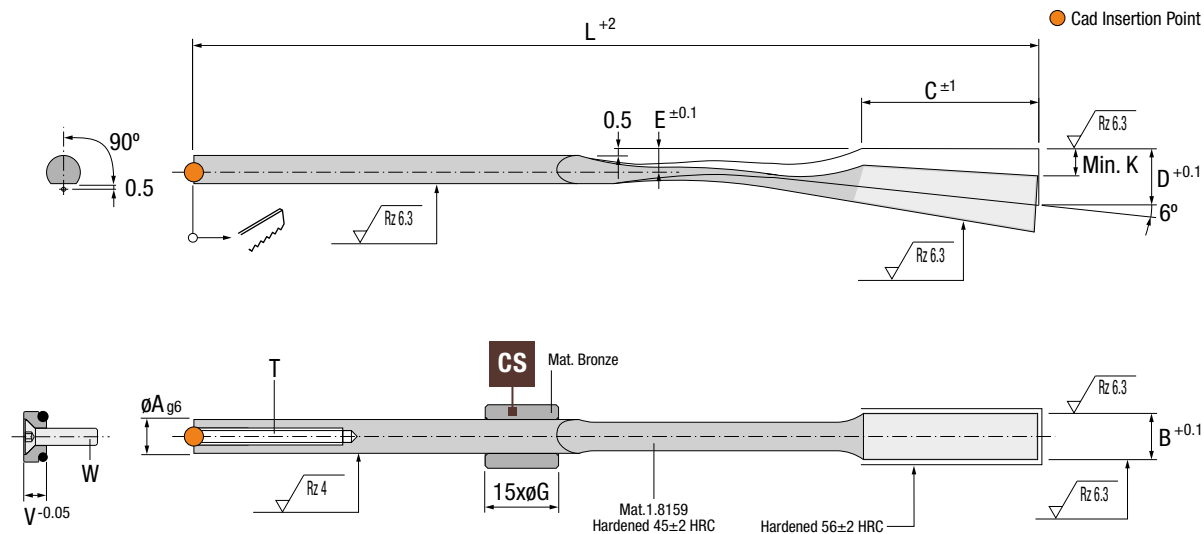
PW

UNDERCUTS



Patented
Max. 150°C

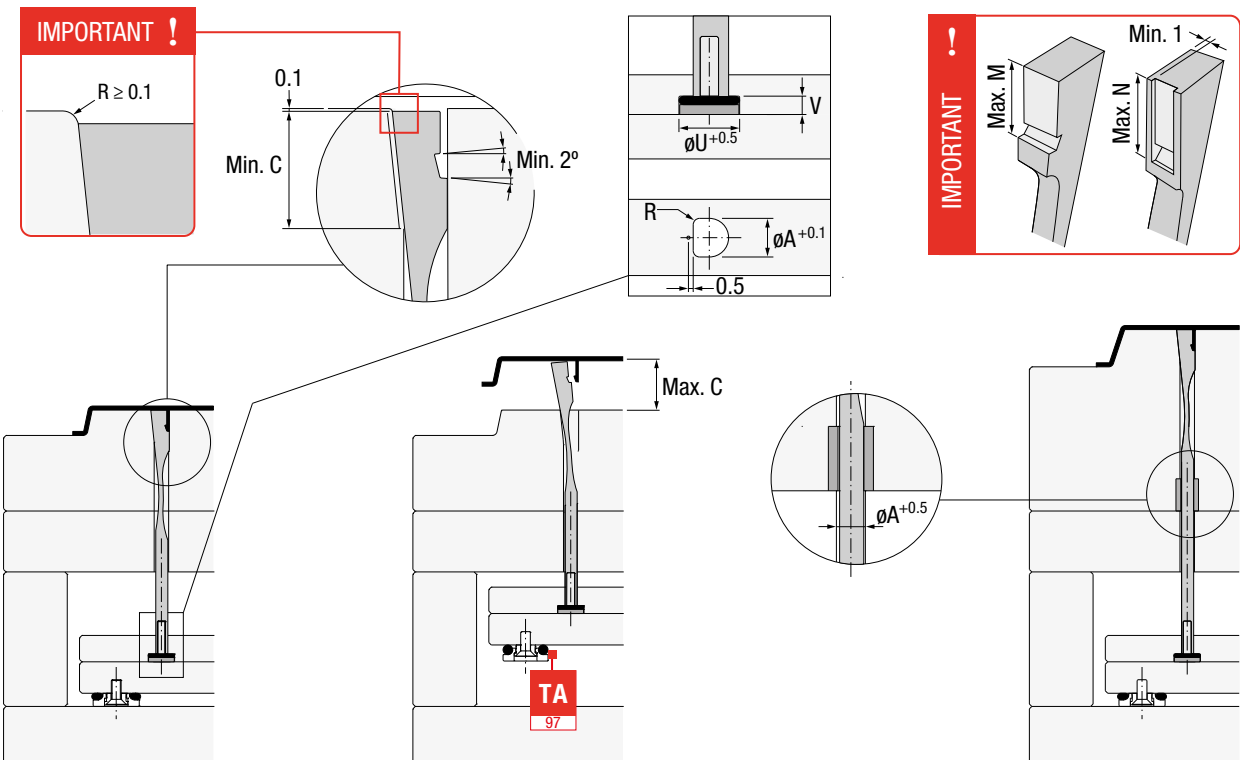
SPRUNG CORE
ES Pinza Plana DE Flexibler Federauswerfer
IT Pinza Piana PT Pinça Plana FR Ejecteur de Forme



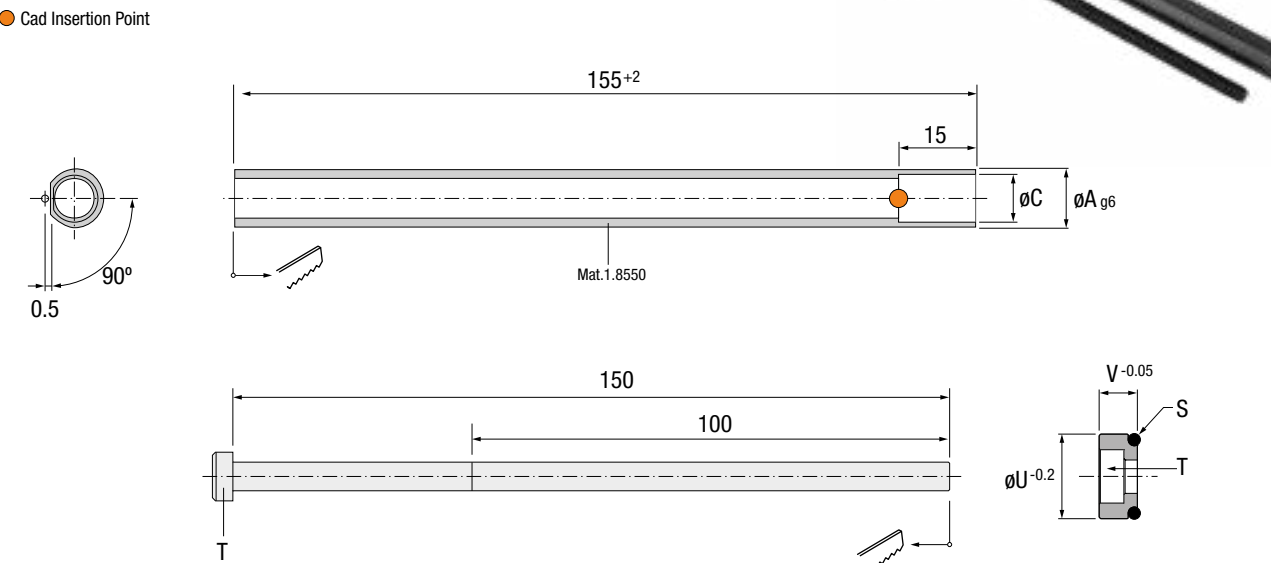
Ref.	A	B	C	D	E	G	K	L	M	N	R	T	U	V	W	CS
PW.060622	6	6.2	22	9	3.5	-	3.5	125	16	18	1.25	M4x36	12	5	M4x16 (DIN7991)	-
PW.060630	6	6.2	30	10	3.5	12	4.5	175	20	26	1.25	M4x36	12	5	M4x16 (DIN7991)	●
PW.060822	6	8.2	22	9	3.5	-	3.5	125	16	18	1.25	M4x36	12	5	M4x16 (DIN7991)	-
PW.060830	6	8.2	30	10	3.5	12	4.5	175	20	26	1.25	M4x36	12	5	M4x16 (DIN7991)	●
PW.080825	8	8.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16 (DIN7984)	-
PW.081025	8	10.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16 (DIN7984)	-
PW.081030	8	10.2	30	11.2	4.5	12	4.5	175	20	26	2	M5x36	14	6	M5x16 (DIN7984)	●
PW.081225	8	12.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16 (DIN7984)	-
PW.081230	8	12.2	30	11.2	4.5	12	4.5	175	20	26	2	M5x36	14	6	M5x16 (DIN7984)	●
PW.101430	10	14.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16 (DIN7984)	●
PW.101630	10	16.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16 (DIN7984)	●
PW.101830	10	18.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16 (DIN7984)	●

Installation Guidelines

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SPRUNG CORE EXTENSION
ES Alargo Pinza DE Verlängerung Fed. Auswerfer
IT Prolunga Pinza PT Acrescento da Pinça FR Rallonge d'Ejecteur

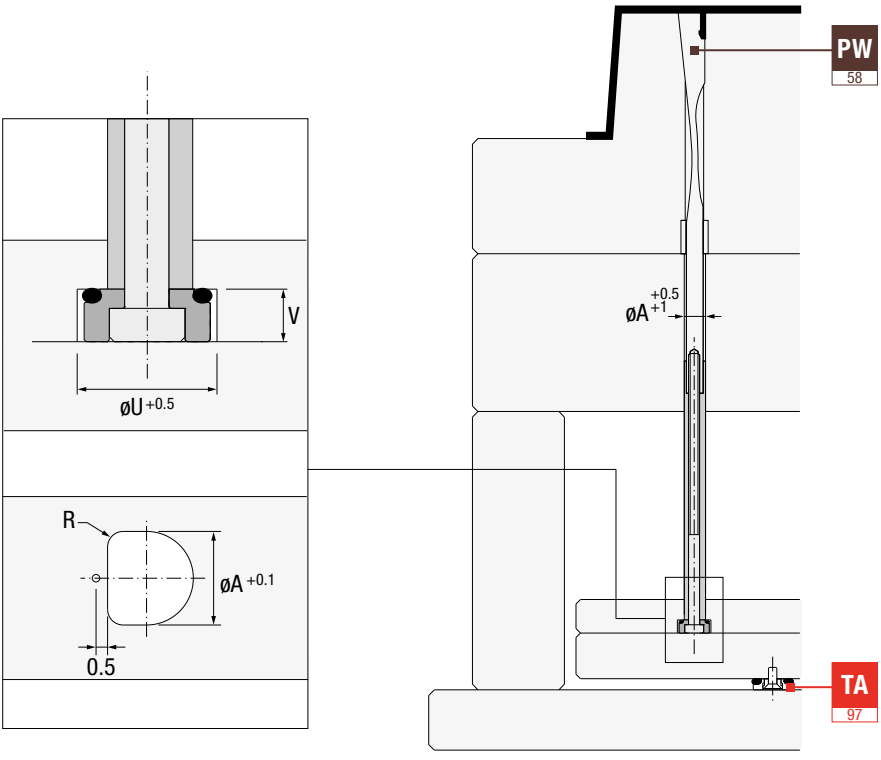


Ref.	A	C	R	S	T	U	V
AP.080615	8	6	1.25	9.5x2	M4 (DIN7991)	14	5
AP.100815	10	8	2	11.5x2	M5 (DIN7984)	16	6
AP.121015	12	10	2.5	14.5x2.5	M6 (DIN7984)	20	8

IMPORTANT !
Enables a standard length of the PW up to 315mm.
Permite un alargamiento extra de la PW hasta 315mm.
Verlängerung PW bis 315 mm möglich.
Permette un prolungamento extra della PW fino a 315mm.
Possibilidade de obter um comprimento standard de 315mm.
Possibilité d'obtenir une longueur standard de 315mm.

Installation Guidelines

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AP

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Patented

UNDERCUTS



Patented

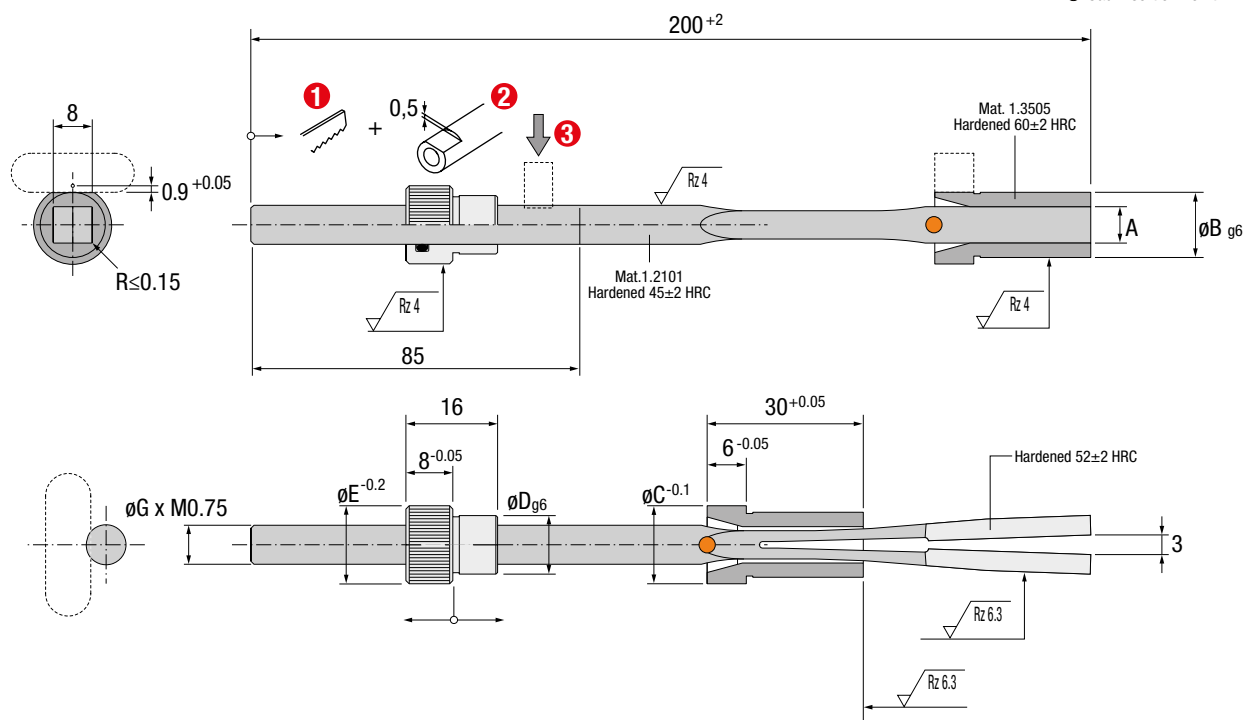
Max.
150°C



DOUBLE EJECTOR

**ES Expulsor Doble DE Doppelauswerfer
IT Espulsore Doppio PT Extractor Duplo FR Éjecteur Double**

● Cad Insertion Point



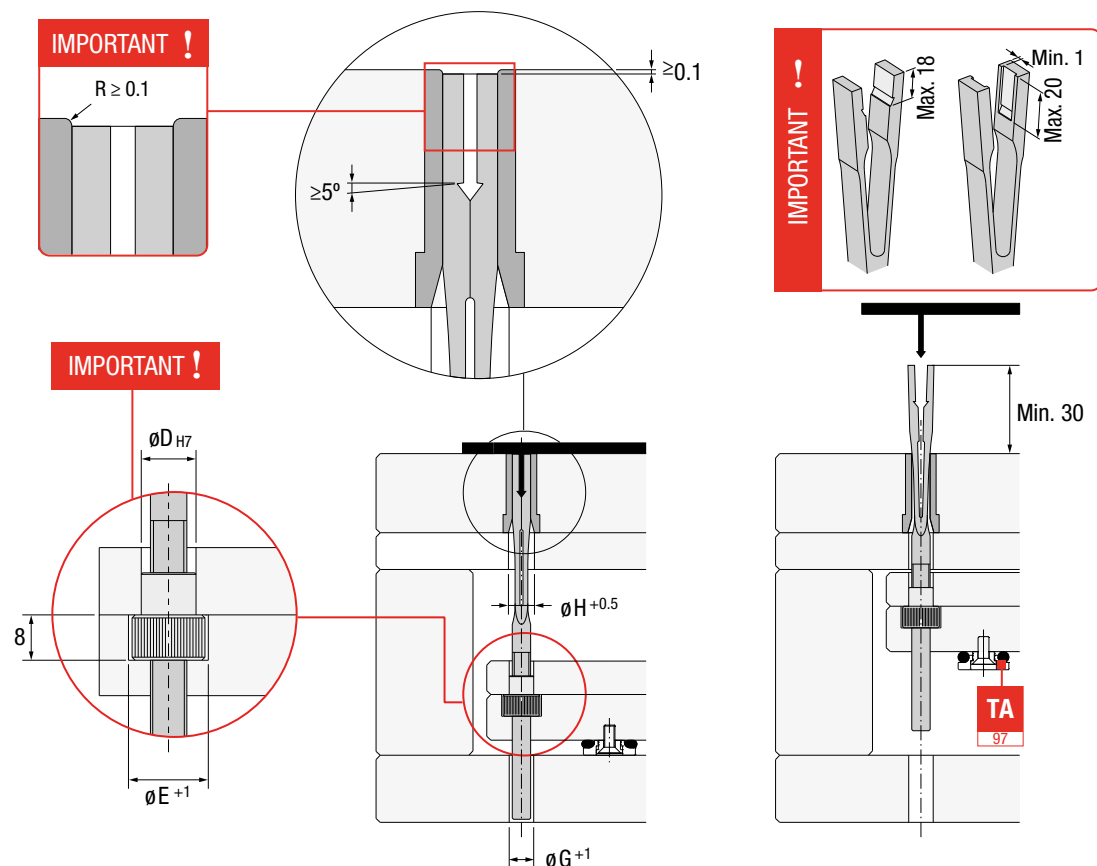
Ref.	A	B	C	D	E	G	H	Balinit C [®]
ED.068200	6	12	14	10	14	6	10	●
ED.088200	8	14	16	12	16	8	12	●
ED.108200	10	16	18	14	18	8	14	●
ED.128200	12	16	18	16	20	8	15	●

IMPORTANT !

Special lengths of 275 and 350mm. upon request.
Largos especiales de 275 y 350mm. bajo demanda.
Sonderlängen von 275 und 350mm. auf Anfrage.
Lunghezza speciale 275/350mm. su richiesta.
Dimensões especiais de 275 e 350mm. quando pedido.
Longueurs spéciales de 275 et 350mm. sur demande.

- Installation Guidelines

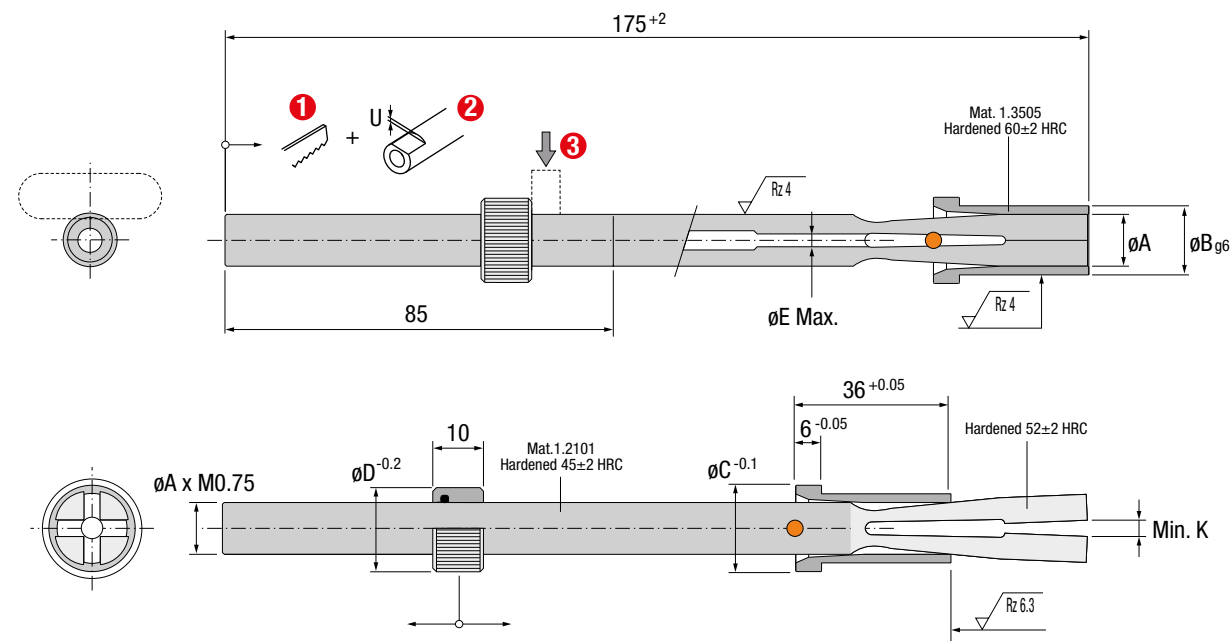
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



TULIP EJECTOR

ES Expulsor Elástico DE Kreuzauswerfer
IT Espulsore Elastico PT Extractor Elástico FR Éjecteur Tulipe

● Cad Insertion Point

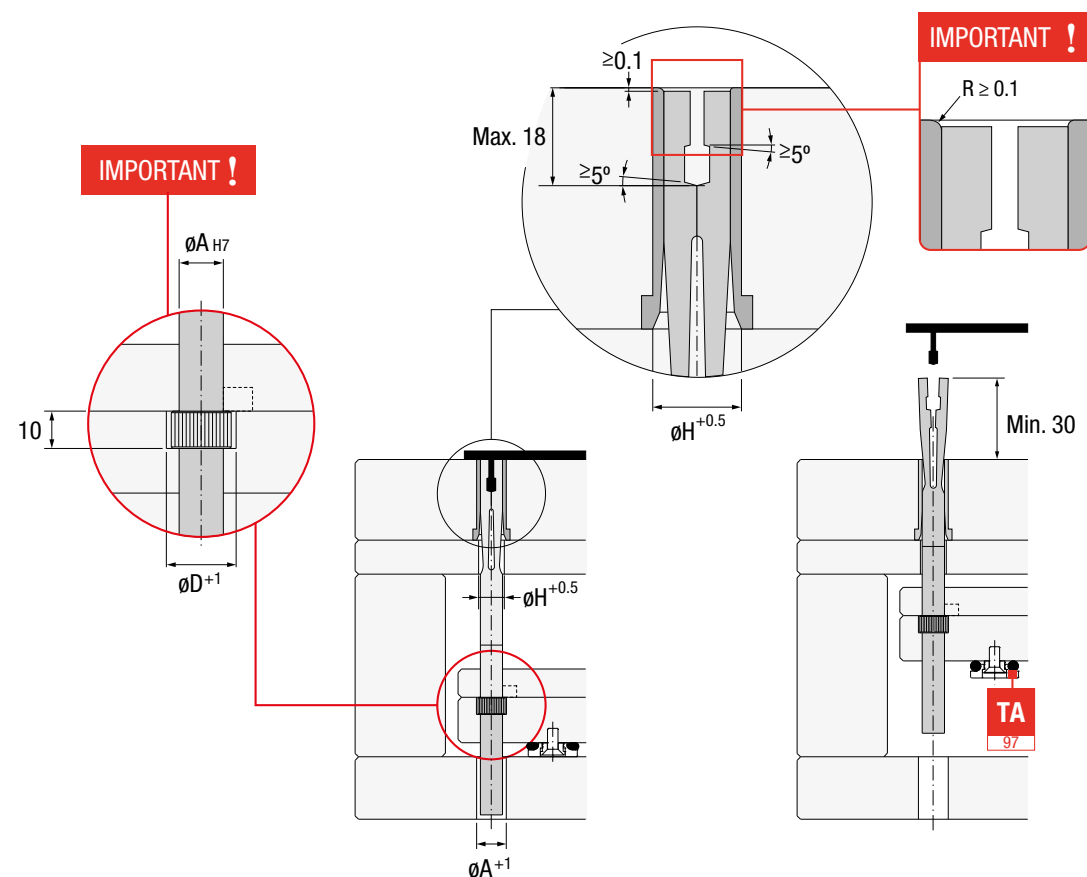


Ref.	A	B	C	D	E	H	K	U	Balint C [®]
EE.060175	6	10	12	12	-	9	2.8	0.5	●
EE.082175	8	12	14	14	2	11	2.8	0.5	●
EE.103175	10	14	16	16	3	13	2.8	0.5	●
EE.124175	12	16	18	18	4	15	3	0.5	●
EE.168175	16	20	22	22	8	19	3	1	●

Special lengths of 250 and 325mm. upon request.
 Largos especiales de 250 y 325mm. bajo demanda.
 Sonderlängen von 250 und 325mm. auf Anfrage.
 Lunghezza speciale 250/325mm. su richiesta.
 Dimensões especiais de 250 e 325mm. quando pedido.
 Longueurs spéciales de 250 et 325mm. sur demande.

– Installation Guidelines

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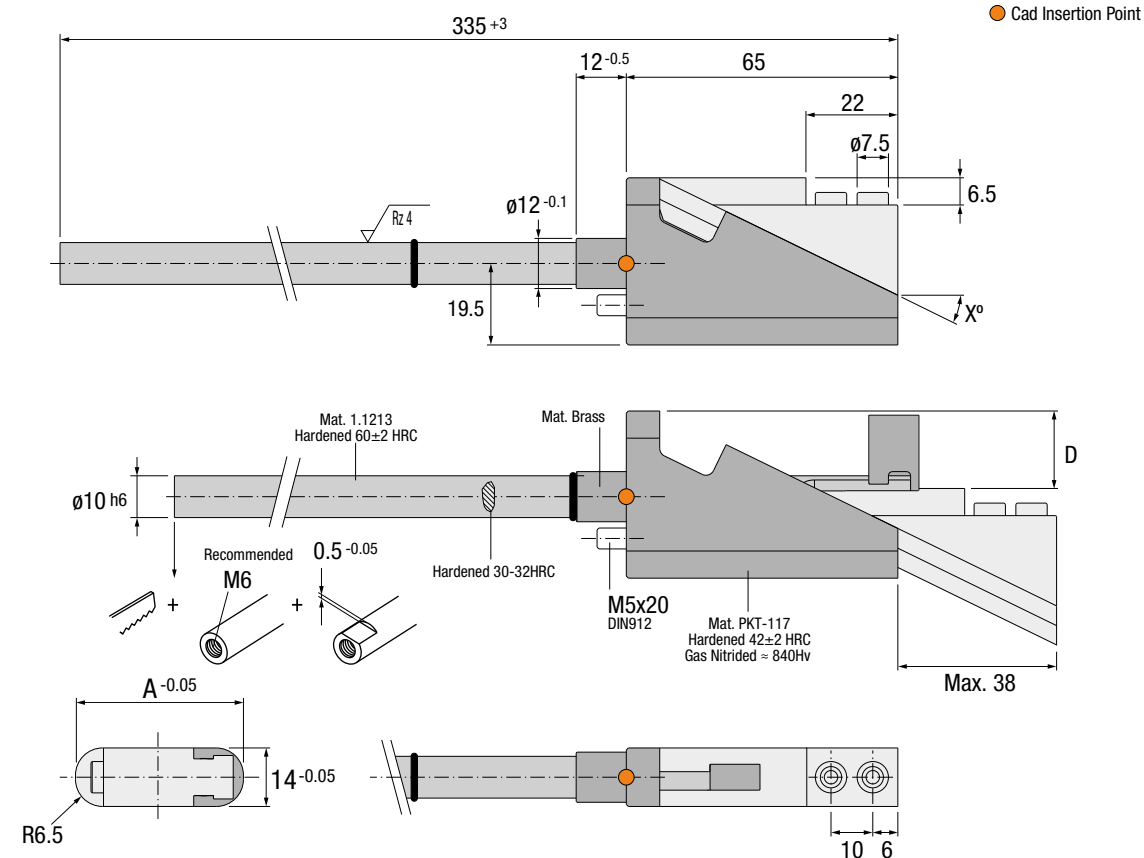


DL

UNDERCUTS



Patented



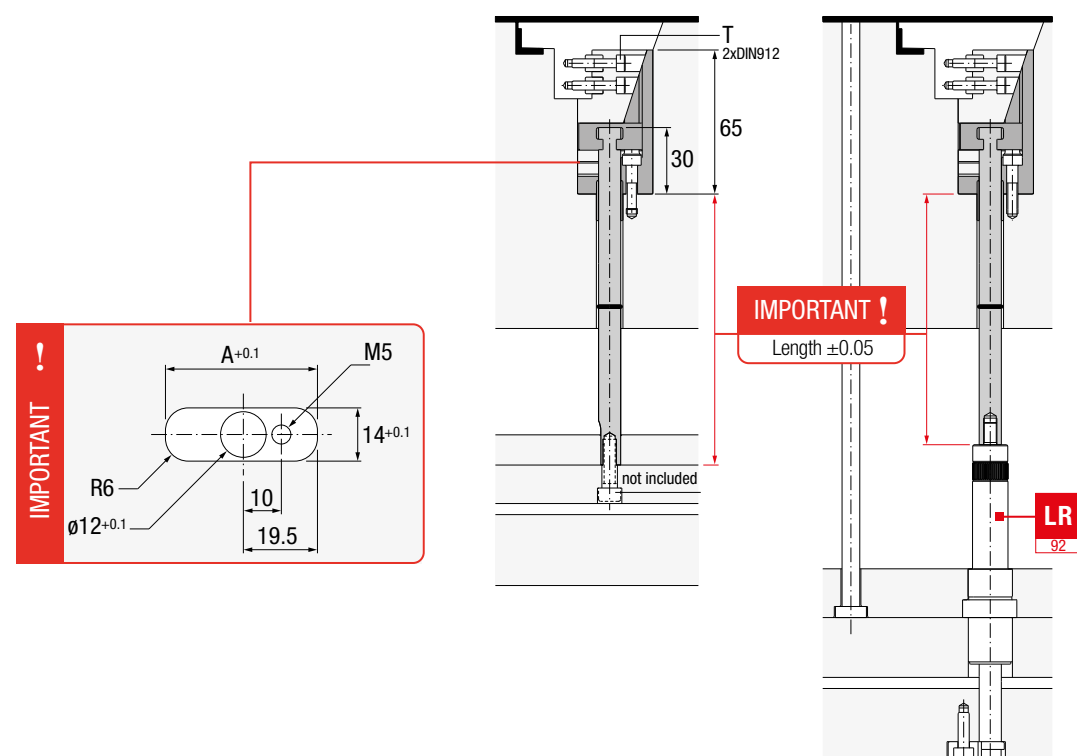
Ref.	A	D	T	X
DL.143465	34	12	M4x20	18
DL.144065	40	18	M4x25	26
DL.144665	46	22	M4x30	31

IMPORTANT !

Special angles available upon request, please contact: technical@cumsa.com
 Ángulos especiales disponibles bajo demanda, por favor, contactar: technical@cumsa.com
 Sonderwinkeln auf Anfrage, bitte kontaktieren Sie: technical@cumsa.com
 Angoli speciali disponibili su richiesta, nel caso, scrivete a: technical@cumsa.com
 Ângulos especiais por encomenda, por favor contactar: technical@cumsa.com
 Pour les angles spécifiques, merci de contacter: technical@cumsa.com

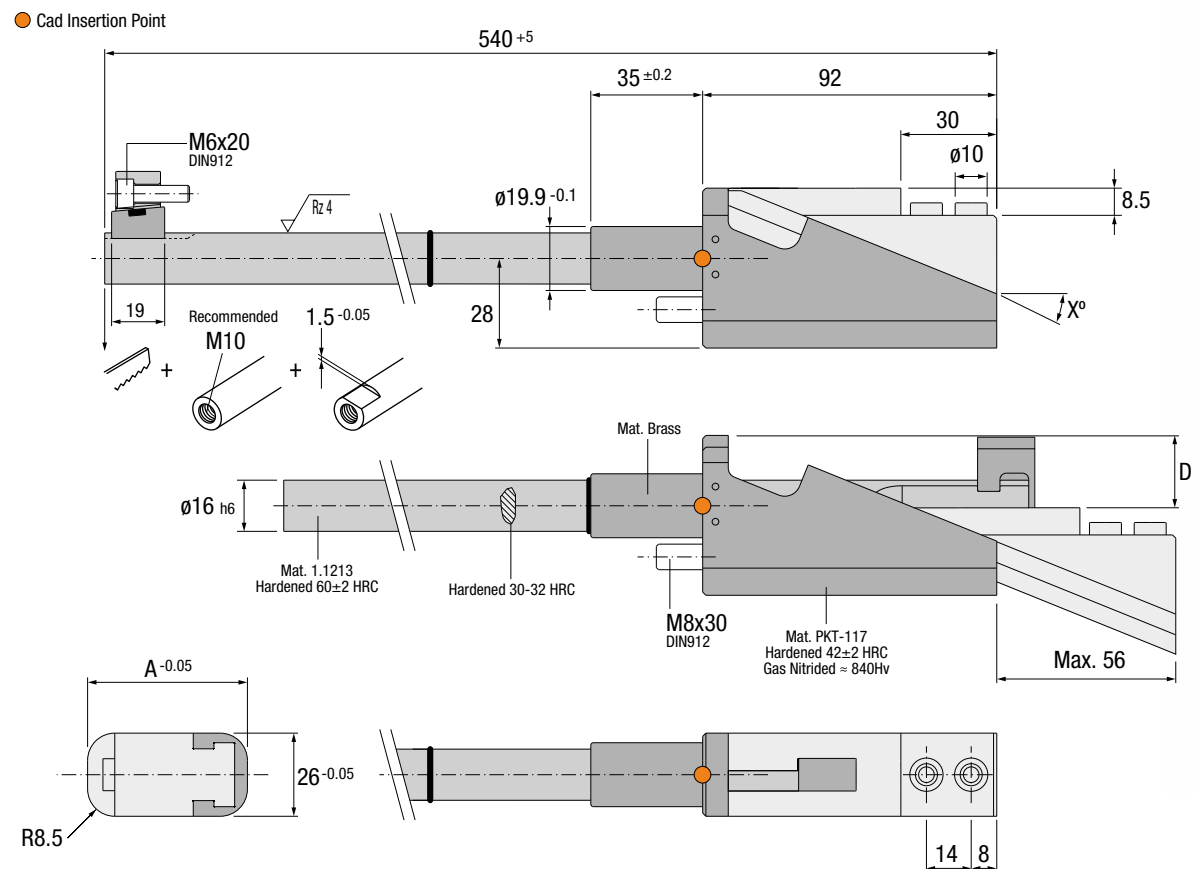
Installation Guidelines

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DOG LIFTER - DG

ES Patin Vertical - DG DE Vertikal Schrägschieber - DG
 IT Pattino Automatico - DG PT Patim Automatico - DG FR Cale Automatique - DG



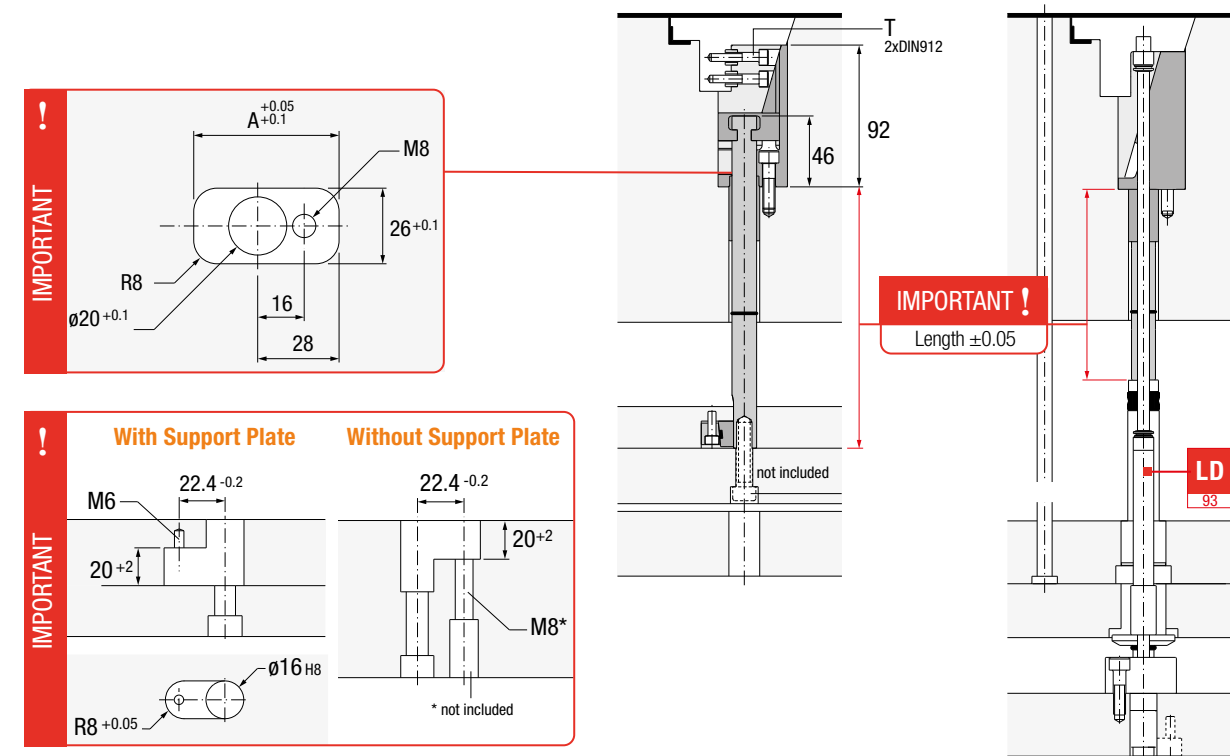
IMPORTANT !

Special angles available upon request, please contact: technical@cumsa.com
 Ángulos especiales disponibles bajo demanda, por favor, contactar: technical@cumsa.com
 Sonderwinkeln auf Anfrage, bitte kontaktieren Sie: technical@cumsa.com
 Angoli speciali disponibili su richiesta, nel caso, scrivete a: technical@cumsa.com
 Ângulos especiais por encomenda, por favor contactar: technical@cumsa.com
 Pour les angles spécifiques, merci de contacter: technical@cumsa.com

Ref.	A	D	T	X
DG.264592	45	16	M6x30	16
DG.265092	50	22	M6x30	22
DG.265592	55	26	M6x35	26

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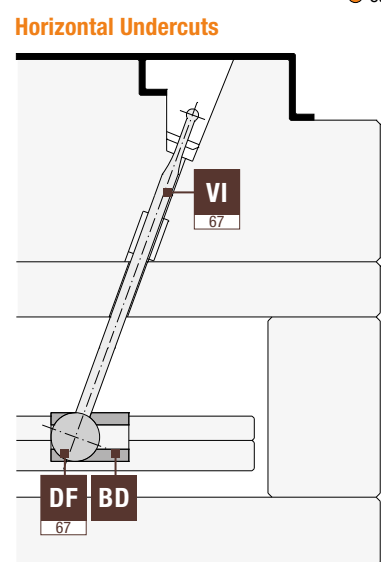
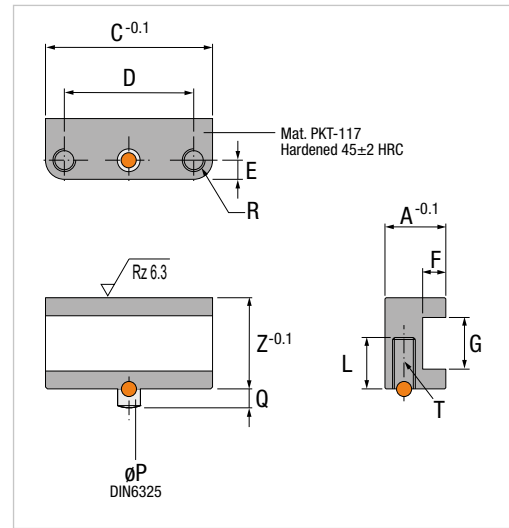


BD

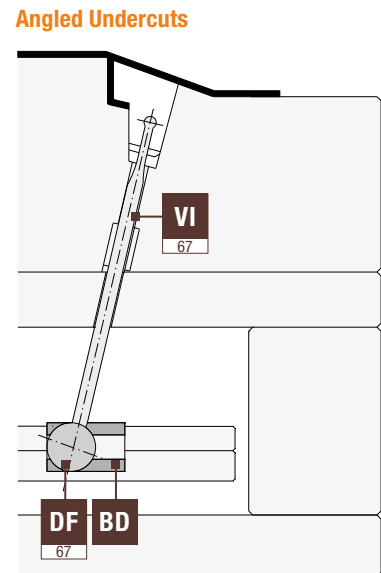
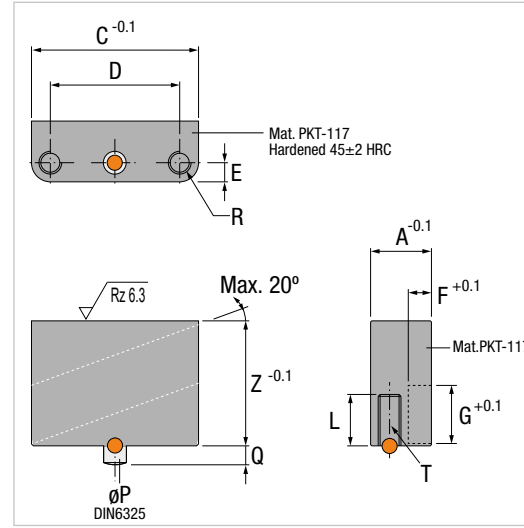
UNDERCUTS



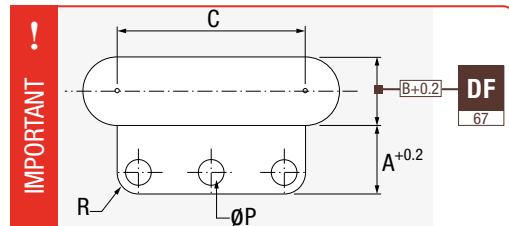
HORIZONTAL AND ADAPTABLE BASE
ES Base Deslizamiento DE Führungsplatte für Waagerechte und Schräge Fläche
IT Base di Soccorimento PT Base Deslizamiento FR Embase de Mouvement



Ref.	A	C	D	E	F	G	L	P	Q	R	T	Z
BD.122036	12	36	28	4	4.8	11.5	10	5	5	4	M5	20
BD.142266	14	66	42	4	6.3	11.5	10	5	5	4	M5	22
BD.162440	16	40	30	5	6.3	13.5	12	6	5	5	M6	24
BD.203260	20	60	44	5	8.3	19	15	6	5	5	M6	32
BD.253872	25	72	56	7	10.3	21	18	8	5	6	M8	38
BD.314890	31	90	74	8	13.3	28	18	10	8	8	M10	48



Ref.	A	C	D	E	F	G	L	P	Q	R	T	Z
BD.122836	12	36	28	4	4.8	11.5	10	5	5	4	M5	28
BD.143866	14	66	42	4	6.3	11.5	10	5	5	4	M5	38
BD.163240	16	40	30	5	6.3	13.5	12	6	5	5	M6	32
BD.204060	20	60	44	5	8.3	19	15	6	5	5	M6	40
BD.254672	25	72	56	7	10.3	21	18	8	5	6	M8	46
BD.315890	31	90	74	8	13.3	28	18	10	8	8	M10	58



FIXED LIFTER BASE
ES Deslizamiento Fijo DE Gelenkstück für Schrägauswerfer
IT Scorrimento Fisso PT Deslizamiento Fixo FR Glissière Fixe



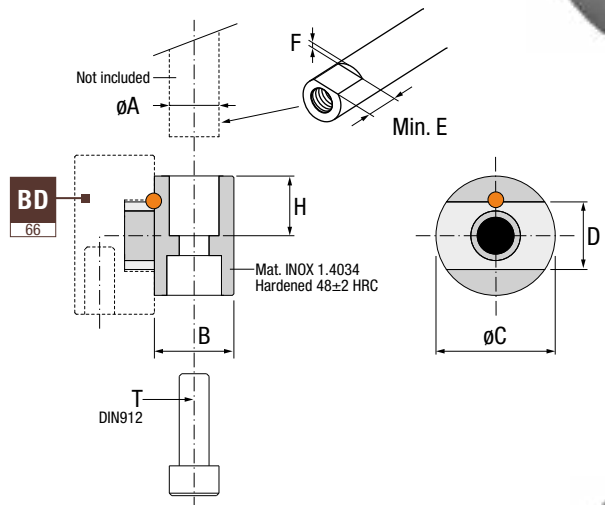
DF

UNDERCUTS



Cad Insertion Point

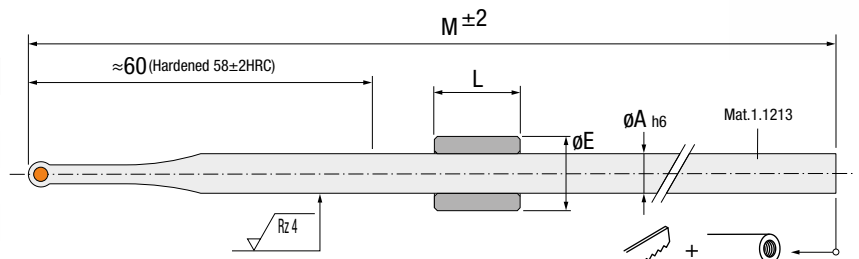
Ref.	A	B	C	D	E	F	H	T
DF.061220	6	12	20	11.5	12	0.5	10	M4x12
DF.081220	8	12	20	11.5	12	0.5	10	M5x12
DF.101624	10	16	24	13.5	14	0.5	12	M6x16
DF.121624	12	16	24	13.5	14	1	12	M8x16
DF.162032	16	20	32	19	18	1.5	16	M8x22
DF.202538	20	25	38	21	21	1.5	19	M10x25
DF.253148	25	31	48	28	26	2	24	M12x35



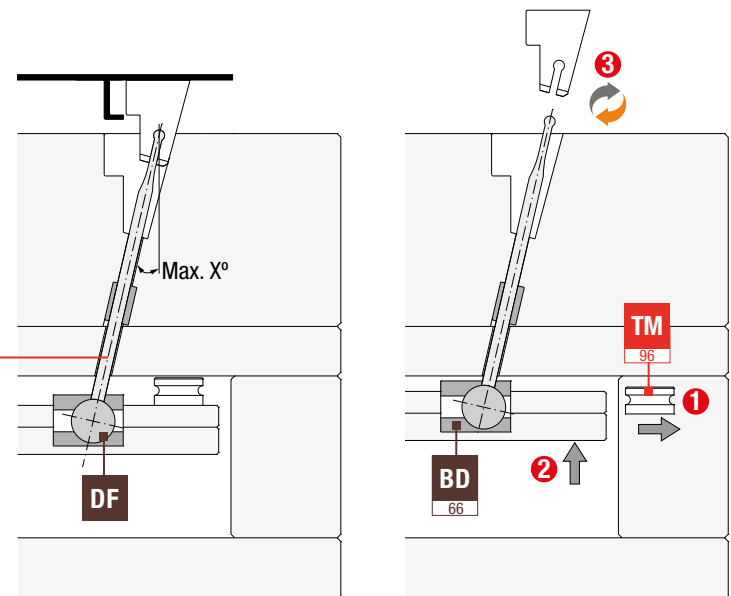
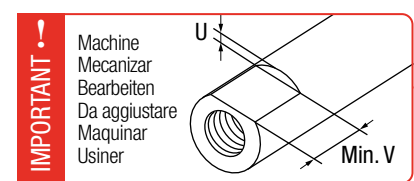
LIFTER SHAFT
ES Varilla Figura DE Stange für Geteilten Auswerfer
IT Asta per inserto figura PT Haste Balancé FR Queue d'Aronde

Cad Insertion Point

Ref.	A	E	L	M	U	V	X
VI.064200	6	10	15	214	0.5	12	5
VI.085200	8	12	20	217	0.5	12	10
VI.106200	10	14	20	219	0.5	14	15
VI.127200	12	16	20	222	1	14	20

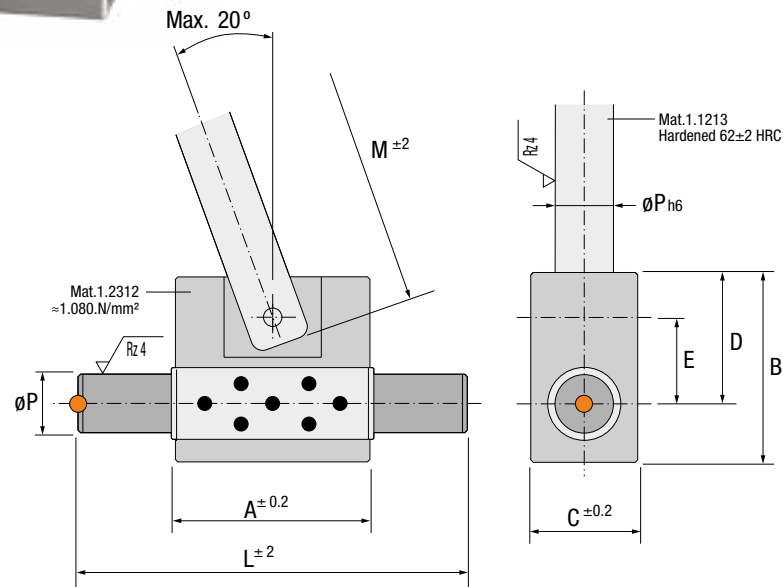


Installation Guidelines
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SD

UNDERCUTS



Ref.	A	B	C	D	E	L	M	P
SD.3220GR	32	37	20	27	18	80	180	10
SD.3824GR	38	40	24	28	19	80	210	12
SD.4528GR	45	44	28	30	21	100	250	16

IMPORTANT !
Longer **M** available as special.
Posibilidad de varilla (cota **M**) más larga.
Längere **M**-Maße als Sonderfertigung verfügbar.
Possibilità di avere **M** speciale di lunghezza maggiore.
Cota **M** de maiores dimensões por encomenda.
Possibilité de tige plus longue (cote **M**).

IMPORTANT !
The unit and the rod are delivered separately.
El cuerpo y la varilla se entregan separados.
Die Schubstange ist nicht montiert.
Il gruppo e l'asta si consegnano separatamente.
O corpo e a haste são fornecidos em separado.
Le corps et la tige sont livrés démontés.

ANGLED GUIDE BUSH

ES Casquillo Inclinado DE Schrägbuchse
IT Bussola Inclinata PT Casquilho Inclinado FR Cale Escamotable

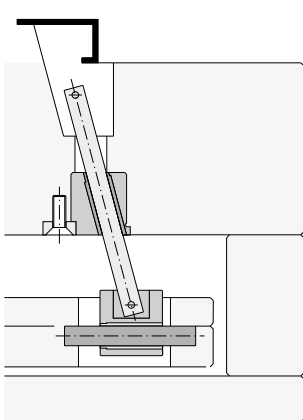
● Cad Insertion Point

Ref.	A	B	C	D	E	G	H	S	T	U	X
CI.3034GR-5	30	34	34	16	20	6	0	M4x6	M6x16	10	5
CI.3438GR-5	34	38	38	20	24	8	0	M6x6	M8x20	12	5
CI.4040GR-5	40	40	44	20	27	8	0	M6x6	M8x20	16	5
CI.3034GR-10	30	34	34	16	20	6	7	M6x6	M6x16	10	10
CI.3438GR-10	34	38	38	20	24	8	8.5	M8x6	M8x20	12	10
CI.4040GR-10	40	40	44	20	27	8	8.5	M8x6	M8x20	16	10
CI.3034GR-15	30	34	34	16	20	6	7	M6x6	M6x16	10	15
CI.3438GR-15	34	38	38	20	24	8	8.5	M8x6	M8x20	12	15
CI.4040GR-15	40	40	44	20	27	8	8.5	M8x6	M8x20	16	15
CI.3034GR-20	30	34	34	16	20	6	7	M6x6	M6x16	10	20
CI.3438GR-20	34	38	38	20	24	8	8.5	M8x6	M8x20	12	20
CI.4040GR-20	40	40	44	20	27	8	8.5	M8x6	M8x20	16	20

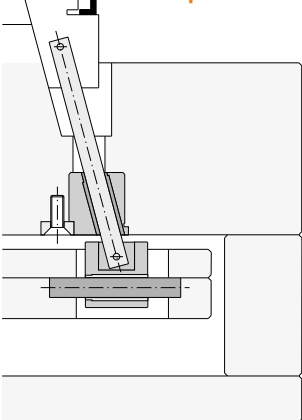
Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione
Instruções de Instalação · Mode d'Installation

Mold Closed



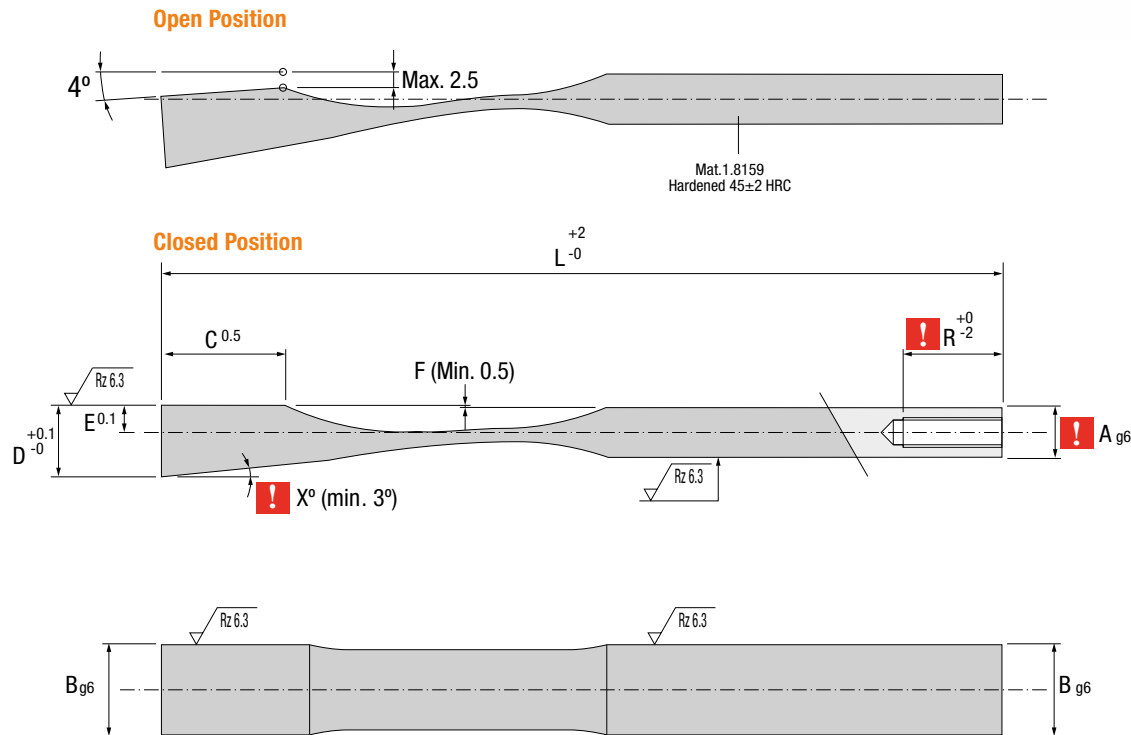
Mold Open



SPECIAL SPRUNG CORE

ES Pinza Plana Especial DE Sonder Federnder Auswerfer
IT Pinza Piana Speciale PT Pinça Plana Especial FR Ejecteur de Forme Special

● Cad Insertion Point



IMPORTANT !
The dimensions A, R and X° will be determined by CUMSA depending on the head dimensions required by the customer.
Las cotas A, R y X° serán determinadas en CUMSA según las dimensiones de la cabeza solicitadas por el cliente.
Die Maße A, R, und X° werden von CUMSA festgelegt und sind abhängig von den gewünschten Kopfmaßen.
Le quote A, R e X° saranno determinate da CUMSA secondo le dimensioni della testa richieste dal cliente.
A cota A, R y X° serão determinadas pela CUMSA segundo as dimensões da cabeça solicitada pelo cliente.
Les cotes A, R et X° sont déterminées par CUMSA en fonction des dimensions de la tête de l'éjecteur.

Ref.	B	C	D	E	F	L	Quantity

How To Order This Part?

¿Cómo Realizar un Pedido? · Bestellvorgang · Come Realizzare un Ordine? · Como Realizar um Pedido? · Comment Effectuer une Ommande?

1 ORDER. When the enquiry is received, Cumsa will design the sprung core and send the drawing to the customer, with the unit price and the delivery time, for acceptance.

ES PEDIDO. Una vez recibida la solicitud, CUMSA diseñará el plano de la pieza y lo enviará al cliente, junto con el precio y el plazo para su aprobación.

DE BESTELLUNG. Nach Erhalt der Anfrage erstellt CUMSA eine Zeichnung des Fed. Auswerfers incl. Stückpreis und Lieferzeit, die vom Kunden freigegeben werden muss.

IT ORDINE. Una volta ricevuta la richiesta, CUMSA disegnerà il progetto corrispondente e lo invierà al cliente, unito al prezzo e al tempo di consegna, per la sua approvazione.

PT PEDIDO. Uma vez recebida a consulta, a CUMSA desenha a peça e envia o mesmo para o cliente, com o preço e prazo para a sua aprovação.

FR COMMANDE : A la réception de votre demande, CUMSA dessinera le plan de détail de votre éjecteur spécial. Le dessin, ainsi que le prix et le délai seront joints dans l'attente de votre validation.

2 DELIVERY. 4 weeks, from order confirmation.

ES ENTREGA. El plazo de entrega es de 4 semanas, tras la confirmación del pedido.

DE LIEFERUNG. Lieferzeit 4 Wochen ab Auftragsbestätigung.

IT REALIZZAZIONE. Il tempo di consegna è di 4 settimane, data conferma ordine.

PT ENTREGA. O prazo de entrega é de 4 semanas a partir da data de confirmação.

FR REALISATION : Le délai de livraison est de 4 semaines, à partir de la validation de l'offre.

SPECIAL

UNDERCUTS



Patented

A close-up photograph of a mechanical assembly, likely a conveyor system, featuring a series of black rollers and metal components. A semi-transparent red square is overlaid on the right side of the image, containing a large white number '3'. Below the number, the word 'EJECTION' is written in white capital letters, flanked by two horizontal white lines. In the bottom left corner, the text 'CUMSA EP.502030 20070303' is visible on a metal part.

3

EJECTION

CUMSA
EP.502030
20070303

EJECTION INDEX

ÍNDICE EXPULSIÓN / INHALTSVERZEICHNIS AUSWERFEN
INDICE ESPULSIONE / ÍNDICE EXTRACÇÃO / INDEX ÉJECTIONS

74/

PR

Plate Retainer
Retensor Placas
Platten Verriegelung
Ritensore Piastra
Retensor de Placa
Tire Plaques



74/

SL

Stroke Limiter
Limitador de Recorrido
Hubbegrenzer
Limitatore Apertura
Limitador de Curso
Limiteur de Course



75/

RM

Modular Retainer
Retensor Modular
Mitnehmer Modular
Ritensore Modulare
Retensor Modular
Retenue Modulée



76/

GS

Latch Lock
Gatillo Simple / Klinenzug
Gancia Sgancia / Gatilho Simples
Crochet Ouverture Gradué



77/

MX

Internal Latch Lock
Gatillo Interno / Interner Klinenzug
Gancia Sgancia Interno / Gatilho Interno
Tire Plaque Interne



78/

DX

Superior Double Ejector
Doble Expulsión Superior
Zweistufenauswerfer DX
Doppia Espulsione Superiore
Dupla Extracção Superior
Double Ejection Supérieur



SX

Superior Plate Separator
Separador Placas Superior
Superior Zweistufenauswerfer
Separatore Piastra Superiore
Separador de Chapas Superior
Séparateur de Plaques



80/

EX

External Superior Plate Separator
Separador Placas Superiores Externa
Externe Obere Plattentrennung
Separatore Piastra Superiori Esterno
Separador Chapas Superior Externo
Séparateur Plaque Supérieure Externe



82/

EP

Plate Accelerator
Elevador Placas
Auswerferplatten-Beschleuniger
Acceleratore Piastra Espulsione
Accelerador de Chapa
Accélérateur Batterie d'Éjection



83/

DE

Double Ejection
Doble Expulsión
Zweistufenauswerfer
Doppia Espulsione
Dupla Extracção
Double Ejection



84/

DY

Rear Double Ejector
Doble Expulsión Inferior
Zweistufenauswerfer DY
Doppia Espulsione Inferiore
Dupla extracção inferior
Double Ejection inférieure



85/

SY

Compact Double Ejection
Doble Expulsión Compacta
Kompakter Zweistufenauswerfer
Doppia Espulsione Compatta
Dupla Extracção Compacta
Double Ejection Compact



86/

EY

External Double Ejection
Doble Expulsión Externa
Externer Zweistufenauswerfer
Doppia Espulsione Esterna
Dupla Extracção Externa
Double Éjection Externe



88/

EZ

External Synchronized Plates
Sincronizador de Placas Externo
Externe Plattensynchronisation
Sincronizzatore di Piastre Esterno
Sincronizador Chapas Externo
Synchronisation Mouvement Plaques



90/

EW

EX-EY-EZ Rod Extension
Alargo EX-EY-EZ
EX-EY-EZ Verlängerungsstange
Estensione EX-EY-EZ
Extensor para EX-EY-EZ
Extention pour EX-EY-EZ



90/

EB

EX-EY-EZ EXTERNAL FIXING
Fijación Externa EX-EY-EZ
EX-EY-EZ Externe Befestigung
EX-EY-EZ Fissaggio Esterno
Fixação Externa EX-EY-EZ
Fixation Externe pour EX-EY-EZ



91/

AE

Accelerated Ejector
Acelerador Expulsión
Vorschub-Auswerfer
Acceleratore di Espulsione
Accelerador de Extracção
Accélérateur d'Éjection



92/

LR

Threaded Limiter
Limitador con Rosca
Auswerfer Begrenzer mit Gewindeaufnahme
Limitatore Filettato
Limitador com Rosca
Limiteur avec Vis



92/

AL

Threaded Limiter Adapter
Adaptador para Limitador Roscado
Gewindeadapter
Adattatore per Limitatore Filettato
Adaptador para Limitador Roscado
Adaptateur pour Limiteur avec Vis



93/

LD

Dog Lifter Limiter
Limitador Patín
Hubbegrenzer
Limitatore Pattino
Limitador Patim Automático
Limiteur



94/

BA
BE
BT

Ejector Base
Base Expulsora
Aufnahme für Auswerfer
Base Espulsore
Base de Extractores
Embases d'Éjection



95/

VE

Headless Ejector Pin
Varilla Expulsora
Auswerfer ohne Kopf
Asta Espulsore
Extractor Sem Cabeça
Ejecteur sans Tête



95/

TE

Headless Sleeve Ejector
Tubular Expulsión
Auswerferhülsen ohne Kopf
Espulsore Tubolare
Extractor Tubular sem Cabeça
Tubulaire sans Tête



96/

DP

Ejector Foot
Distanciador Placa
Anschlagscheibe
Distanziale Piastra
Botão de Encosto
Repos de Batterie



96/

TM

Safety Stopper
Tope Magnético
Abstandhalter, magnetisch
Blocco Magnetico
Bloco Magnético
Butée Magnétique



97/

TR

Ejector Plate Spacer
Distanciador Placa
Auswerferplatte Abstandhalter
Distanziale Piastra
Espaçador de Chapas
Entretoise de Passage



97/

TA

Shock Absorber
Tope Amortiguador
Dämpfungsscheibe
Blocco Ammortizzante
Batente Amortecedor
Repos de Batterie avec Amortissement



PR

EJECTION

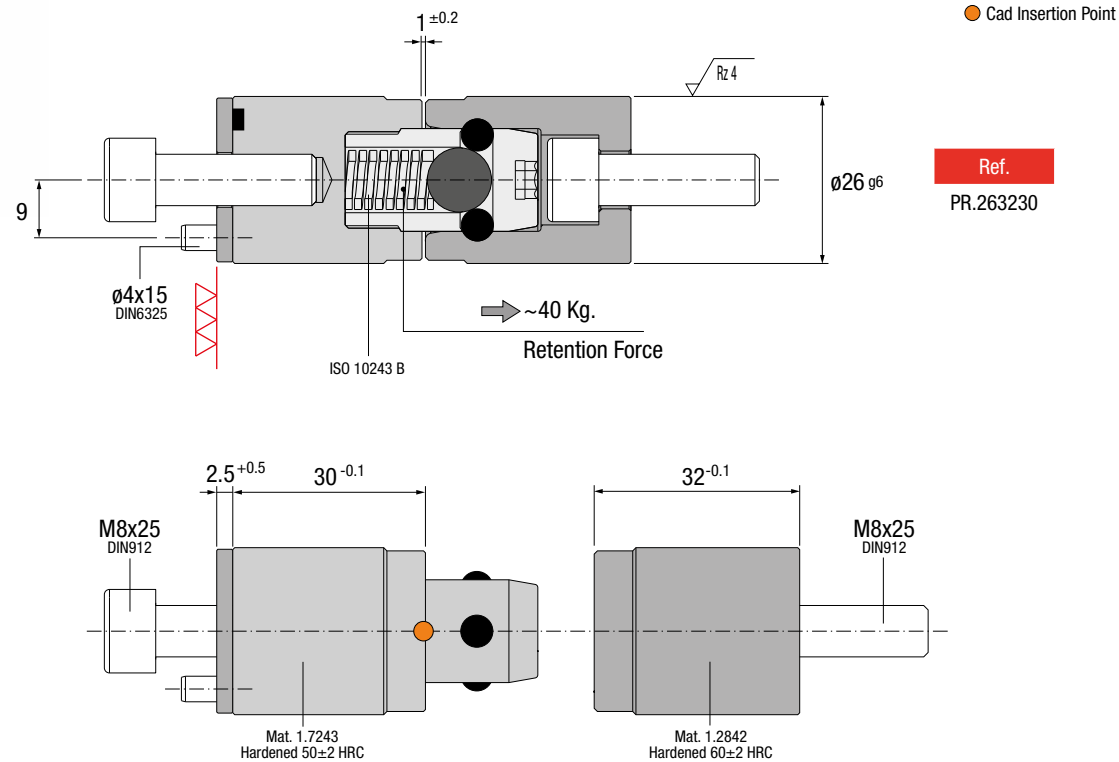


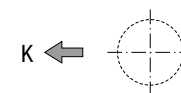
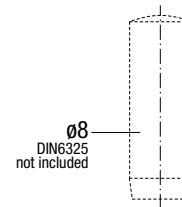
PLATE RETAINER

ES Retensor Placas DE Platten Verriegelung
IT Ritenore Piastra PT Retensor de Placa FR Tire Plaques

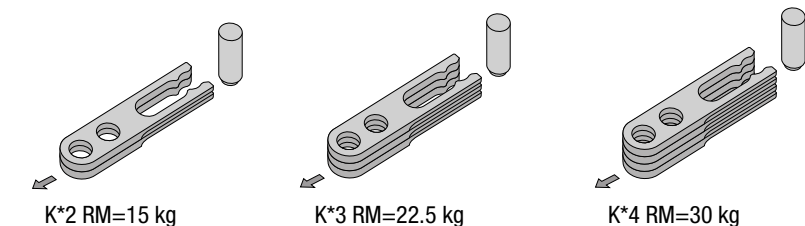
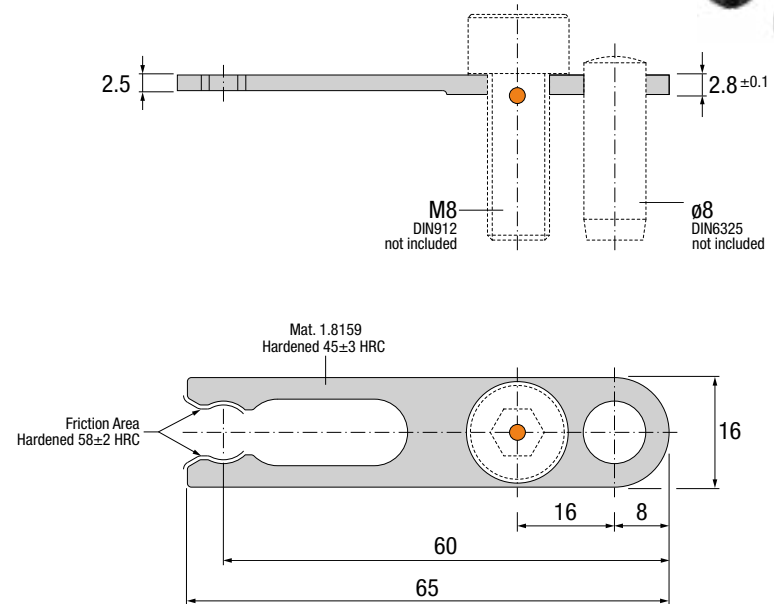
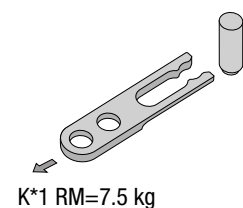
MODULAR RETAINER

ES Retensor Modular DE Mitnehmer Modular
IT Ritenore Modulare PT Retensor Modular FR Retenue Modulée

Cad Insertion Point



Ref.
RM.651608

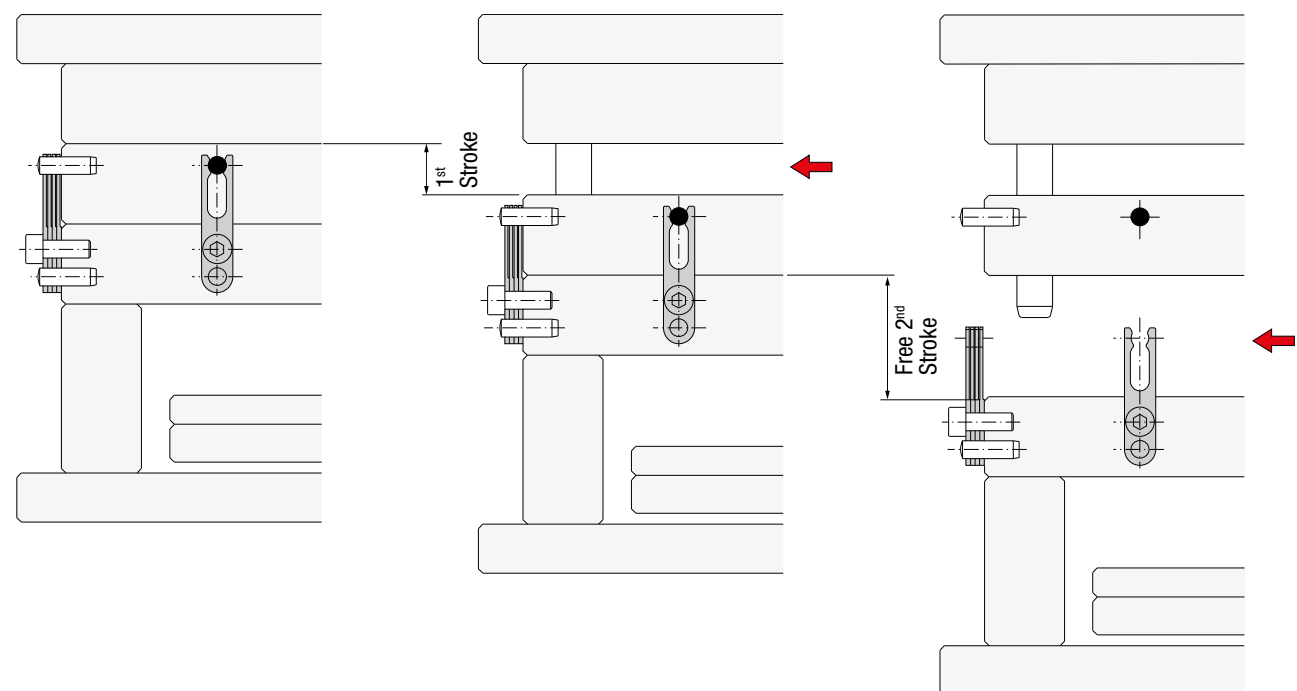


IMPORTANT !

K=Approximate resistance value that can be obtained by grouping clips.
K=Valor aproximado de resistencia que se puede obtener agrupando clips.
K=Zirka Widerstand beim Einbau entsprechend obiger Darstellung.
K=Valore approssimativo di resistenza che si può ottenere raggruppando più ritenori.
K=Valor aproximado de resistência que se pode obter agrupando clips.
K=Valeur approximative que l'on peut obtenir en assemblant les retenues.

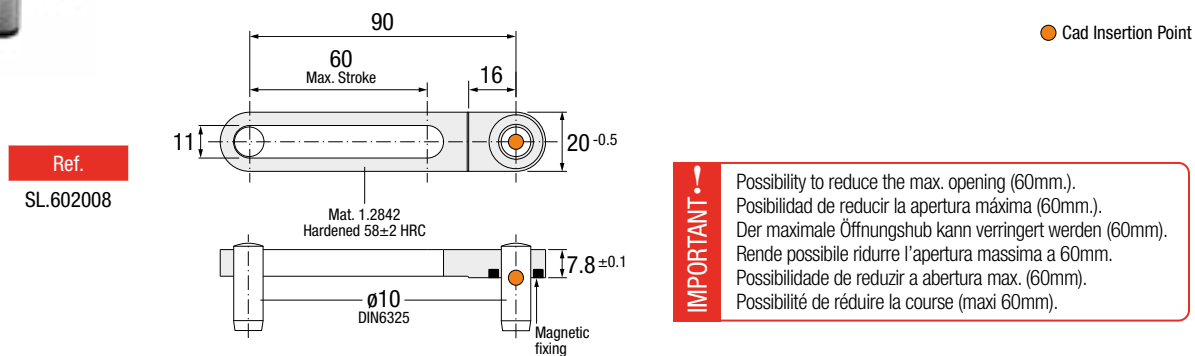
Installation Guidelines

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SL

EJECTION

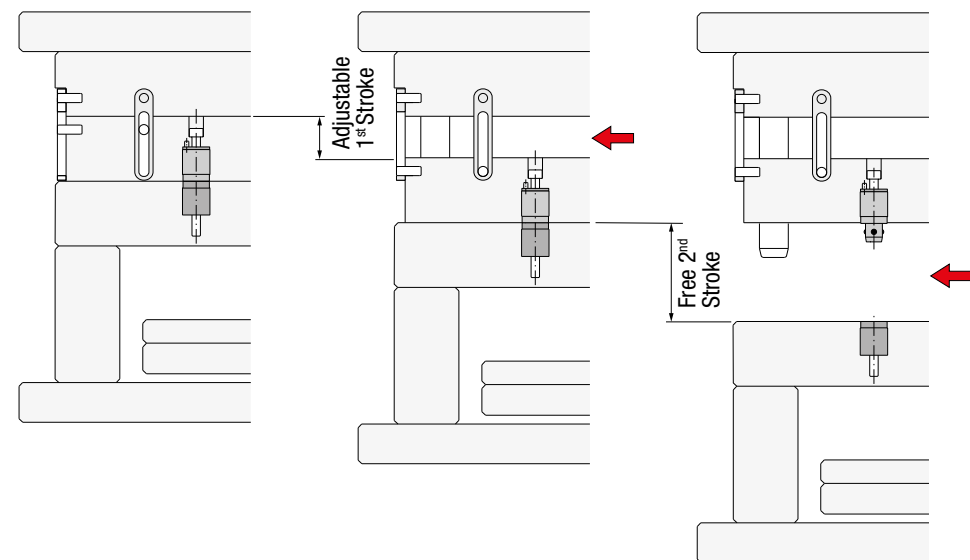


IMPORTANT !

Possibility to reduce the max. opening (60mm.).
Posibilidad de reducir la apertura máxima (60mm.).
Der maximale Öffnungshub kann verringert werden (60mm).
Rende possibile ridurre l'apertura massima a 60mm.
Possibilidade de reduzir a abertura max. (60mm).
Possibilité de réduire la course (maxi 60mm).

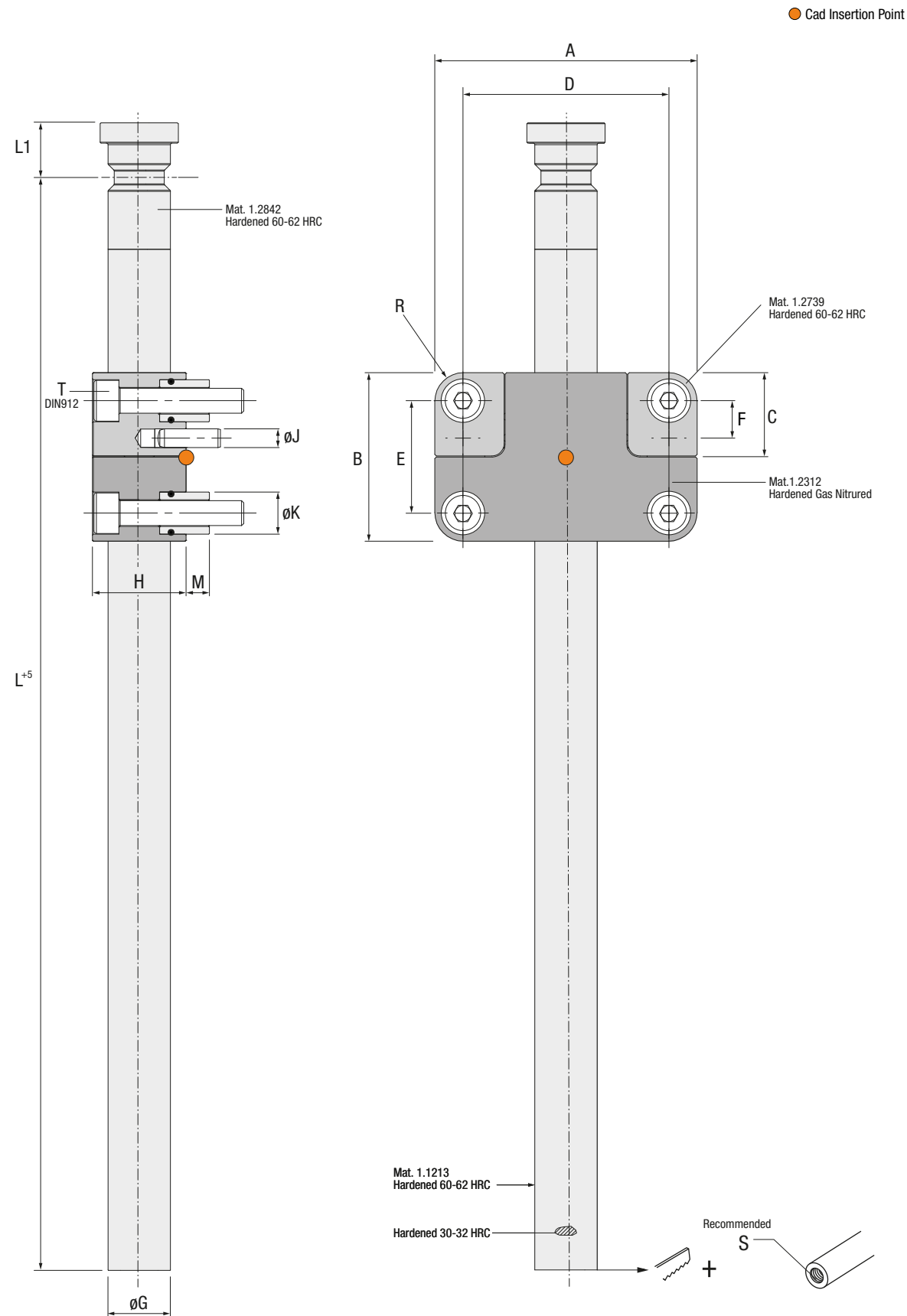
Installation Guidelines

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EX

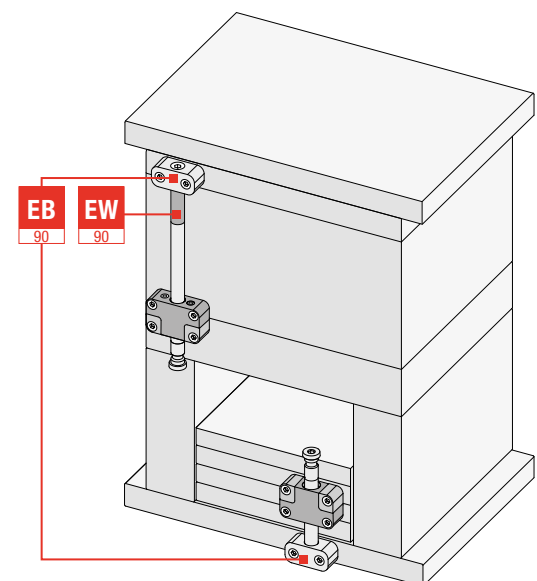
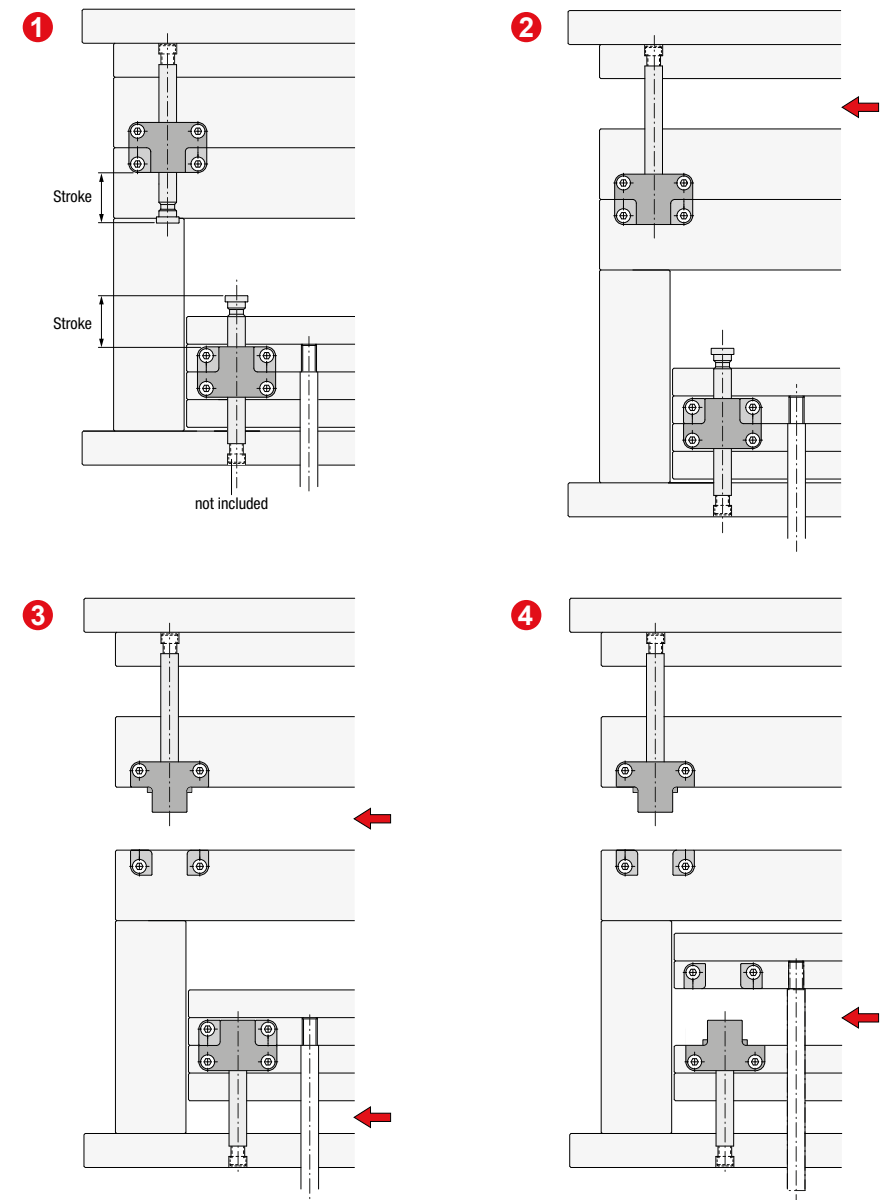
EJECTION



Ref.	A	B	C	D	E	F	G	H	J	K	L	L1	M	R	S	T	Min.Stroke	Max.Stroke	RF (N)
EX.140600	62	40	20	48	26	9	14	22	ø4x14 (DIN6325)	10.5	348	13	5.5	7.2	M8	M6x30	4	250	4.000
EX.200800	84	54	27	66	36	12	20	30	ø6x20 (DIN7979)	13.5	348	17.5	7.5	9.2	M12	M8x40	5	250	9.000
EX.321200	126	84	42	102	60	20	32	46	ø10x30 (DIN7979)	18.5	530	27	11.5	12.5	M16	M12x65	8	375	20.000
EX.501600	174	120	60	140	86	26	50	64	ø12x40 (DIN7979)	25	530	40	15.5	17	M24	M16x90	10	375	40.000

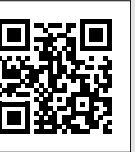
INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



EX

EJECTION



DY

EJECTION



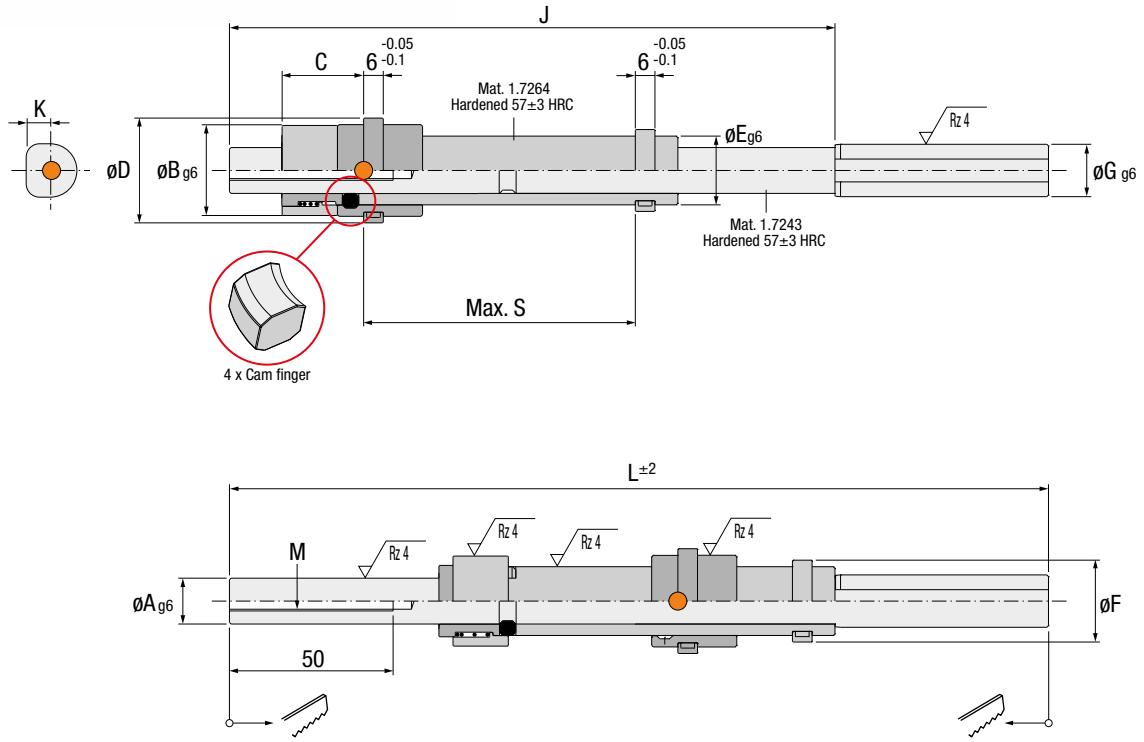
Patented

Max. 150°C

REAR DOUBLE EJECTOR

ES Doble Expulsión Inferior DE Zweistufenauswerfer DY
IT Doppia Espulsione Inferiore PT Dupla extracção inferior FR Double Ejection inférieure

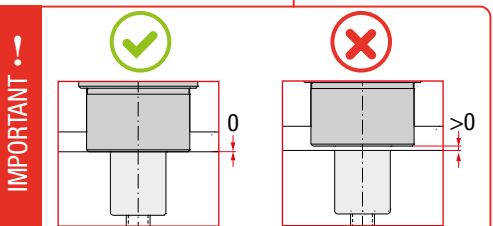
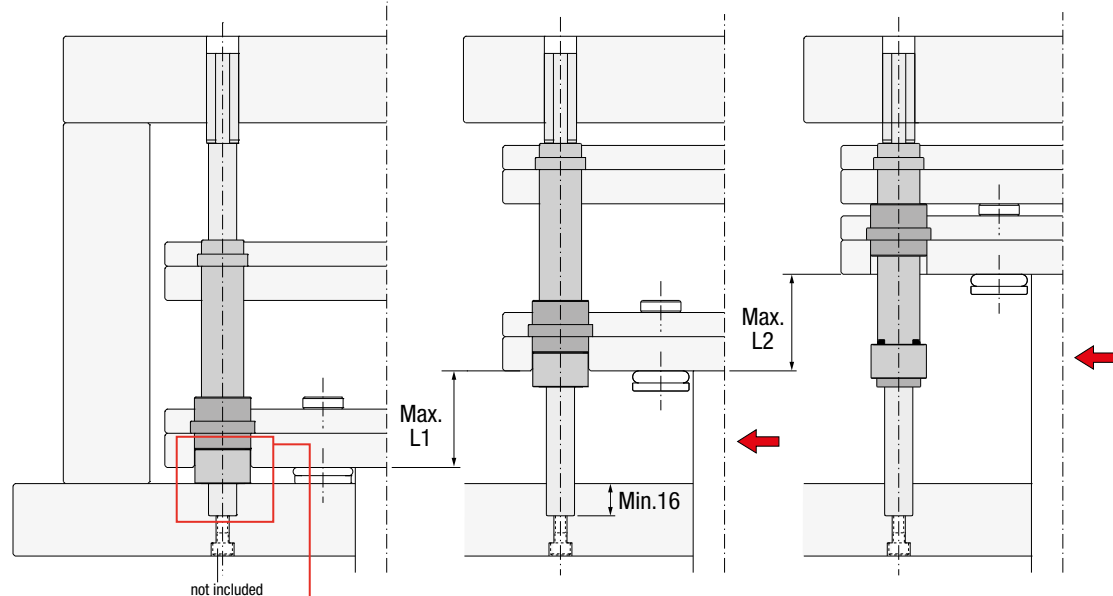
Cad Insertion Point



Ref.	A	B	C	D	E	F	G	J	K	L	M	L1	L2	S
DY.142825	14	28	25	32	21	25	16	185	7.2	270	M6	48	62	83
DY.163230	16	32	30	36	24	28	18	252	8	337	M8	60	89	123

Installation Guidelines

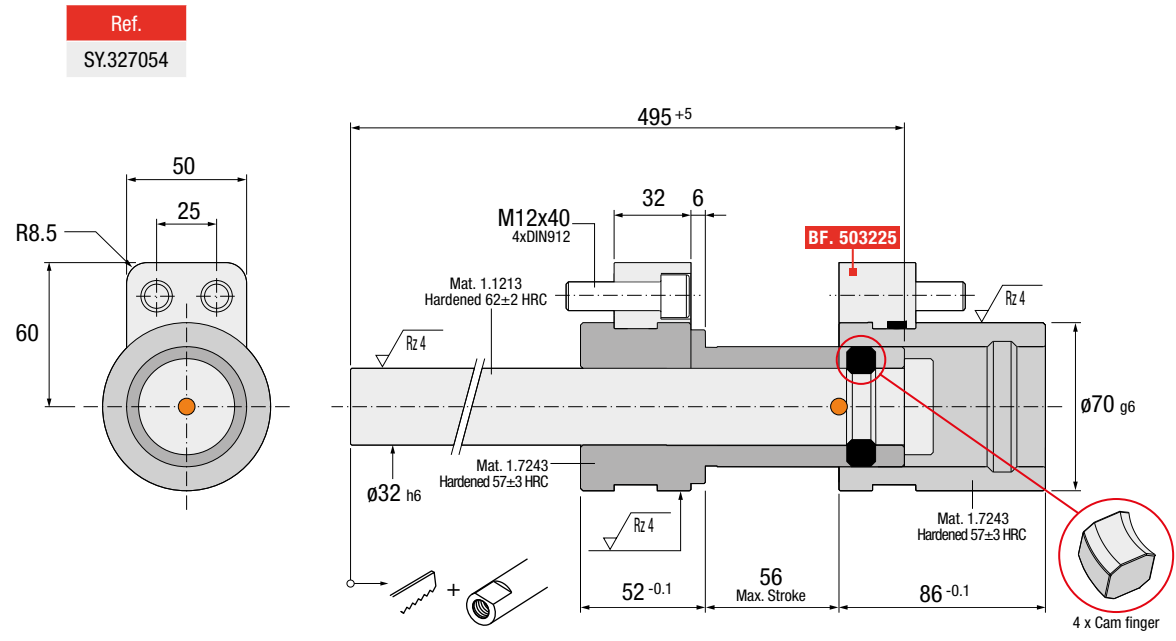
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



COMPACT DOUBLE EJECTION

ES Doble Expulsión Compacta DE Kompakter Zweistufenauswerfer
IT Doppia Espulsione Compatta PT Dupla Extração Compacta FR Double Ejection Compact

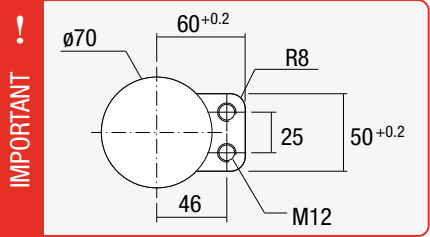
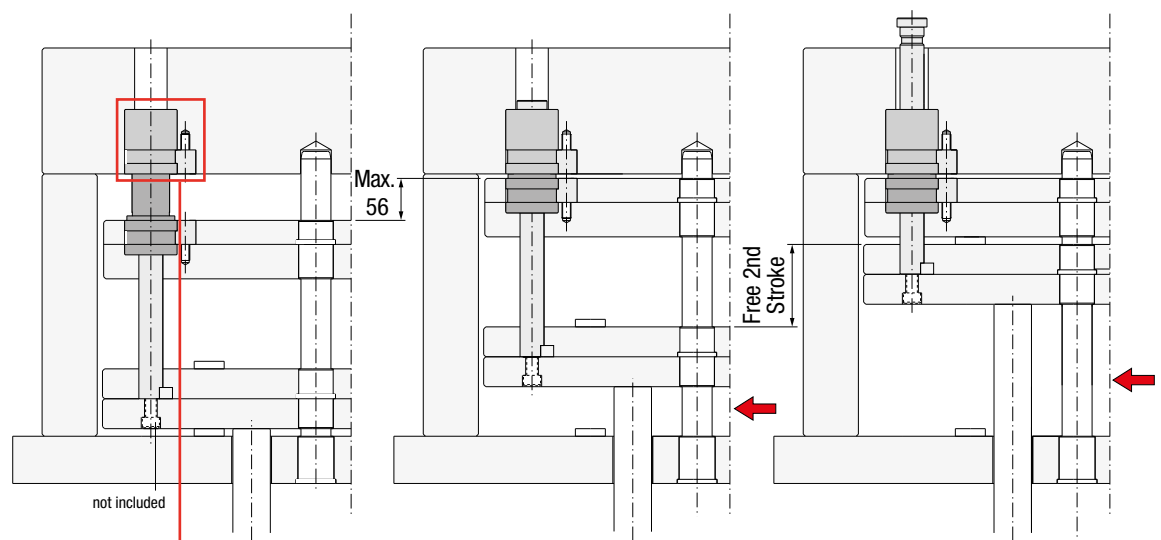
Cad Insertion Point



IMPORTANT !
2 BF.503225 units included. More units could be ordered separately.
Se suministran 2 unidades de BF.503225. Se pueden pedir más unidades por separado.
2 St. BF.503225 enthalten. Mehr Einheiten können einzeln bestellt werden.
Vengono forniti 2 BF.503225. E' possibile ordinare altri separatamente.
2 unidades BF.503225 incluidas. Possibilidade de encomendar mais unidades individualmente.
2 unités BF.503225 inclus. Possibilité de commander à la pièce.

Installation Guidelines

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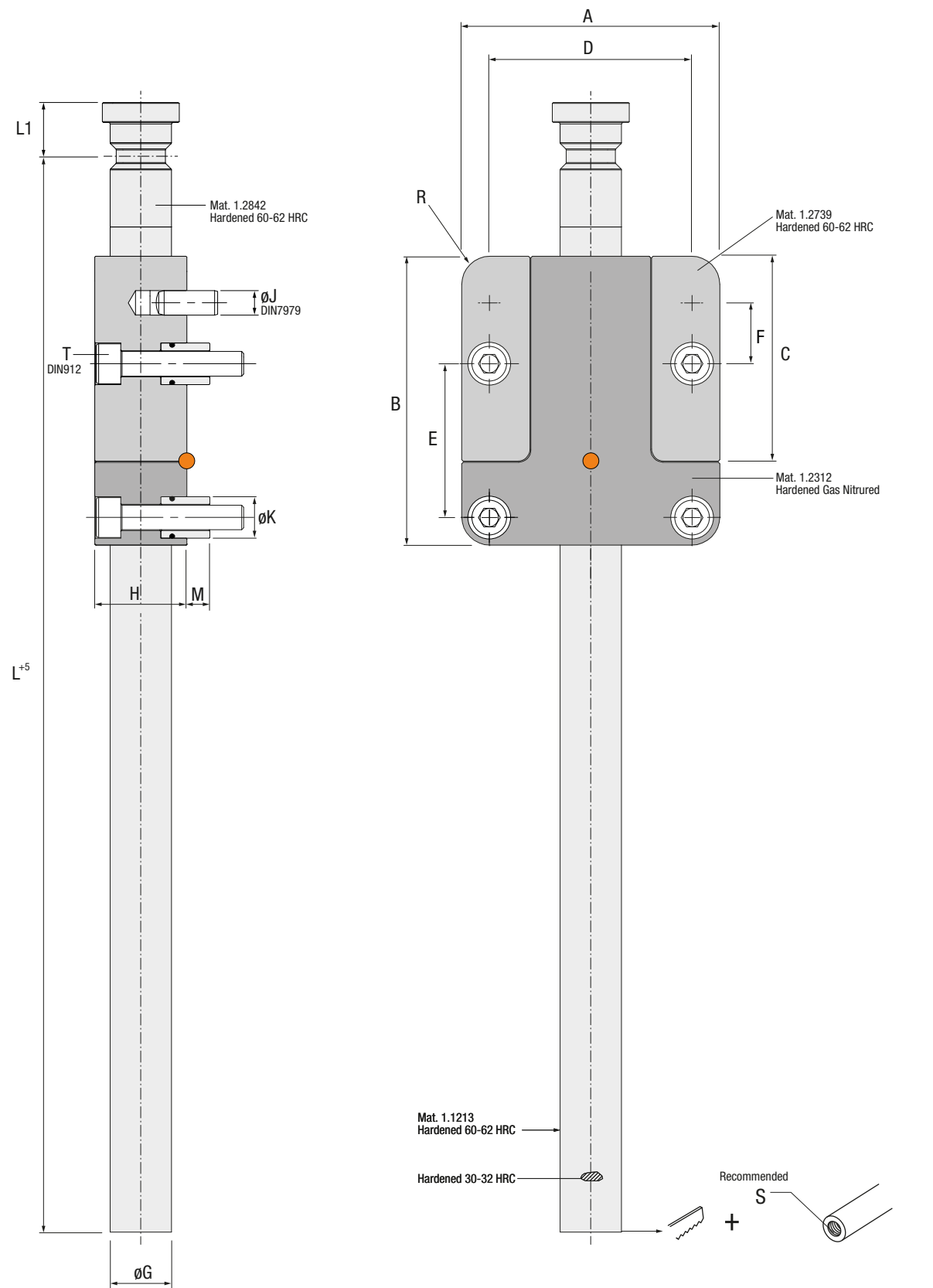


SY

EJECTION



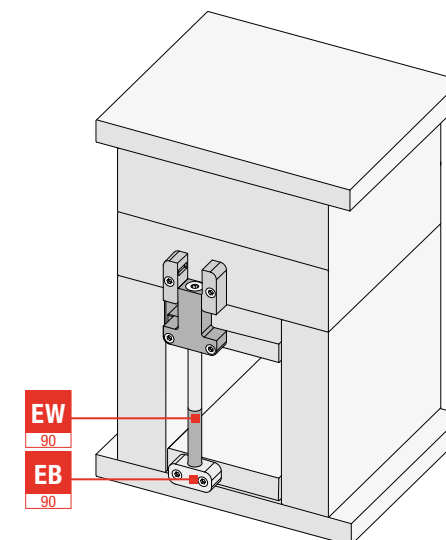
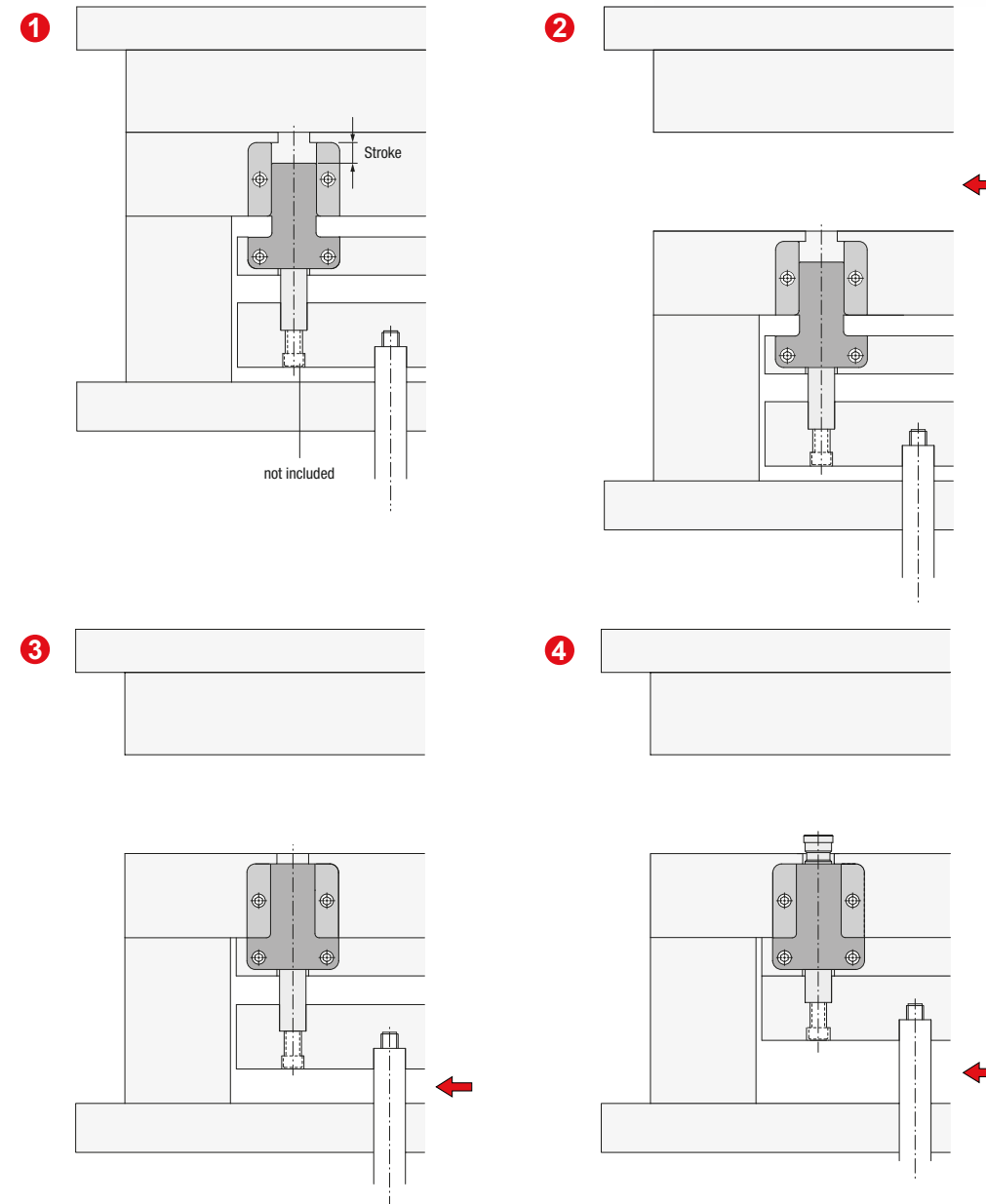
Patented



Ref.	A	B	C	D	E	F	G	H	J	K	L	L1	M	R	S	T	Min. Stroke	Max. Stroke	RF (N)
EY.140600	62	70	50	48	38	18	14	22	ø6x20	10.5	348	13	5.5	7.2	M8	M6x30	6	30	4.000
EY.200800	84	94	67	66	50	26	20	30	ø8x20	13.5	348	17.5	7.5	9.2	M12	M8x40	8	40	9.000
EY.321200	126	144	102	102	82	38	32	46	ø10x30	18.5	530	27	11.5	12.5	M16	M12x65	14	60	20.000
EY.501600	174	200	140	140	113	53	50	64	ø12x40	25	530	40	15.5	17	M24	M16x90	20	80	40.000

INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



EW
90
EB
90



PLAY

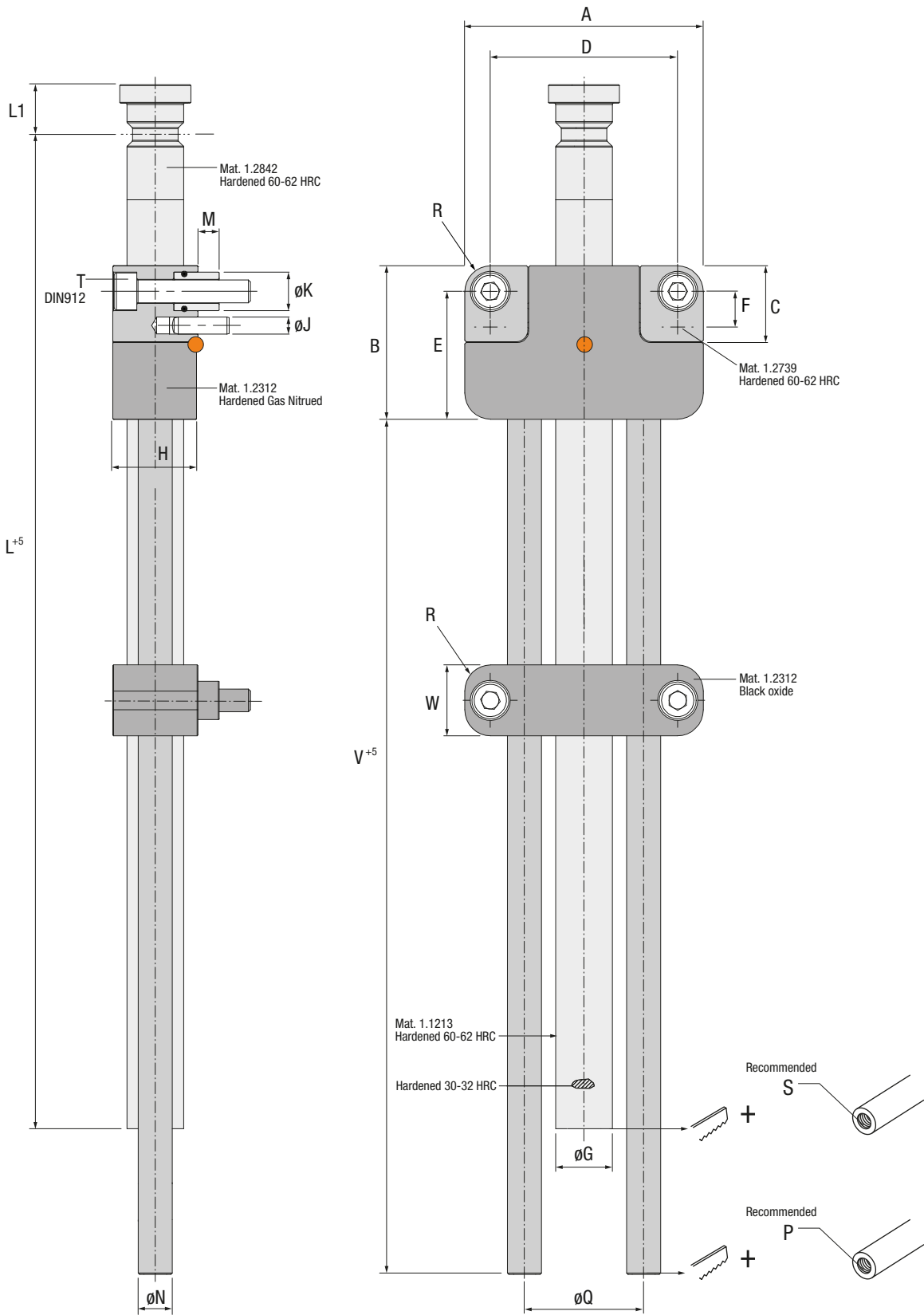
EZ

EJECTION

EXTERNAL SYNCHRONIZED PLATES

ES Sincronizador de Placas Externo DE Externe Plattensynchronisation
IT Sincronizzatore di Piastre Esterno PT Sincronizador Chapas Externo Externa FR Synchronisation Mouvement Plaques

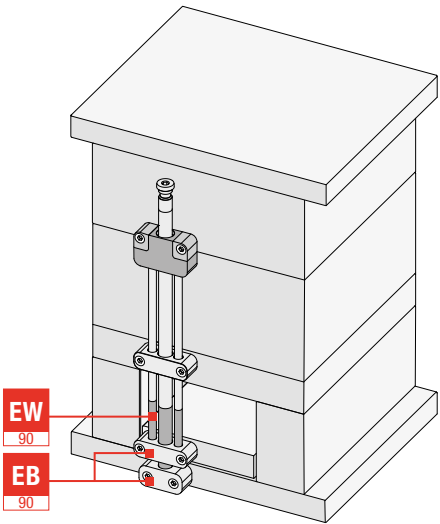
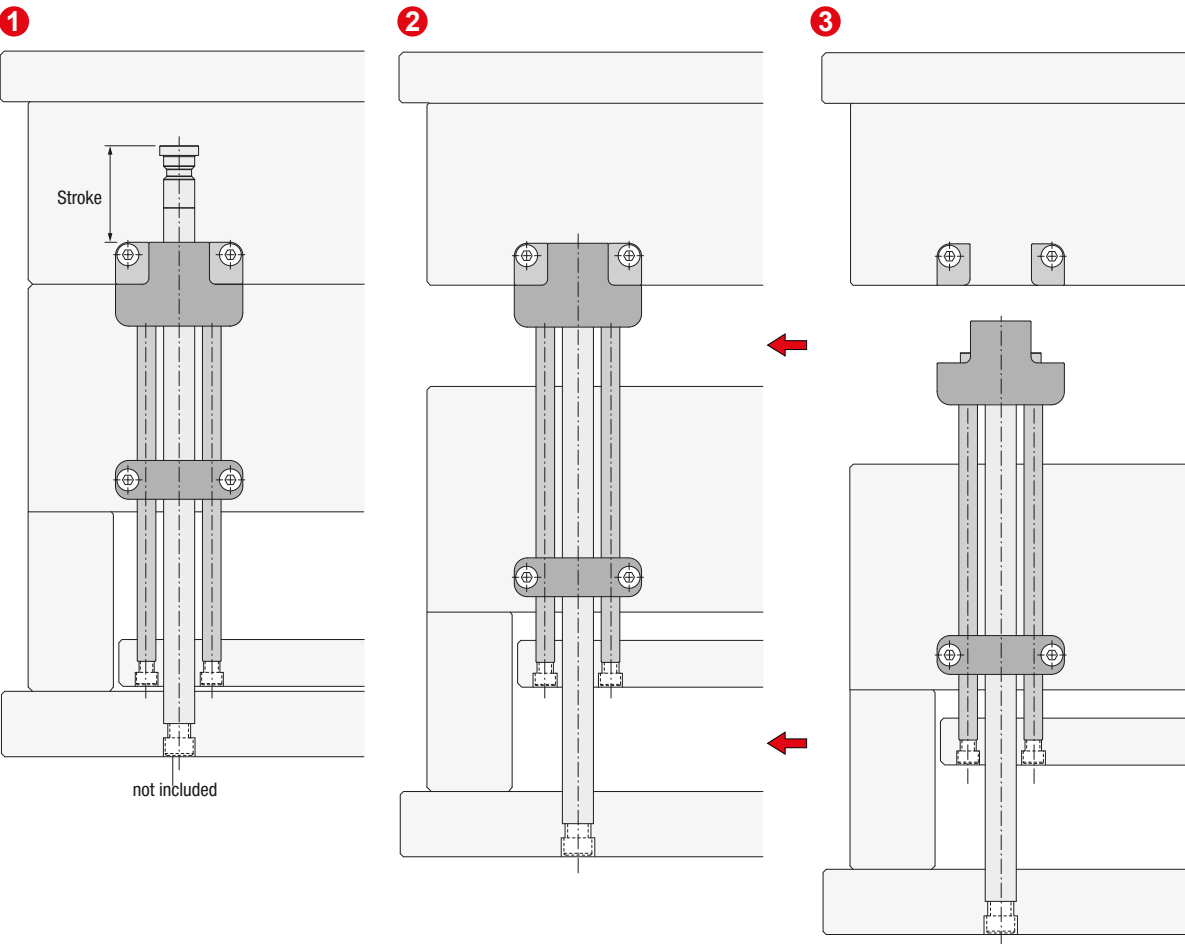
● Cad Insertion Point



Ref.	A	B	C	D	E	F	G	H	J	K	L	L1	M	N	P	Q	R	S	T	V	W	Min. Stroke	Max. Stroke	RF (N)
EZ.140608	62	40	20	48	33	9	14	22	ø4x14 (DIN6325)	10.5	348	13	5.5	8	M5	30	7.2	M8	M6x30	300	20	4	250	4.000
EZ.200812	84	54	27	66	45	12	20	30	ø6x20 (DIN7979)	13.5	348	17.5	7.5	12	M8	42	9.2	M12	M8x40	300	25	5	250	9.000
EZ.321220	126	84	42	102	72	20	32	46	ø10x30 (DIN7979)	18.5	530	27	11.5	20	M12	65	12.5	M16	M12x65	450	42	8	375	20.000
EZ.501625	174	120	60	140	103	26	50	64	ø12x40 (DIN7979)	25	530	40	15.5	25	M16	92	17	M24	M16x90	450	60	10	375	40.000

INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



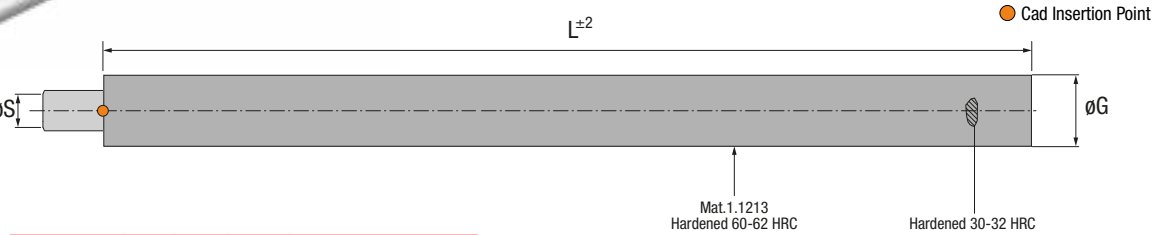
EZ

EJECTION

PLAY

EW

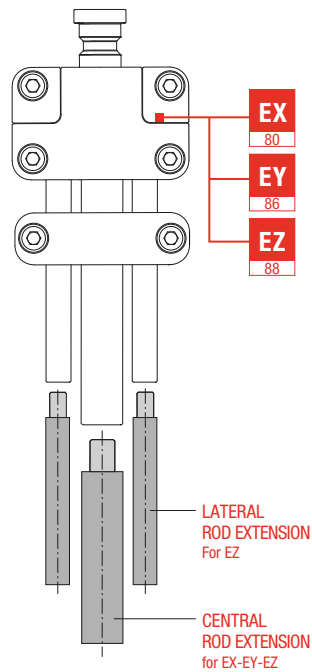
EJECTION



CENTRAL ROD EXTENSION				
Ref.	G	L	S	Compatible with
EW.140033	14	330	M8	EX.14 / EY.14 / EZ.14
EW.200033	20	330	M12	EX.20 / EY.20 / EZ.20
EW.320049	32	495	M16	EX.32 / EY.32 / EZ.32
EW.500049	50	495	M24	EX.50 / EY.50 / EZ.50

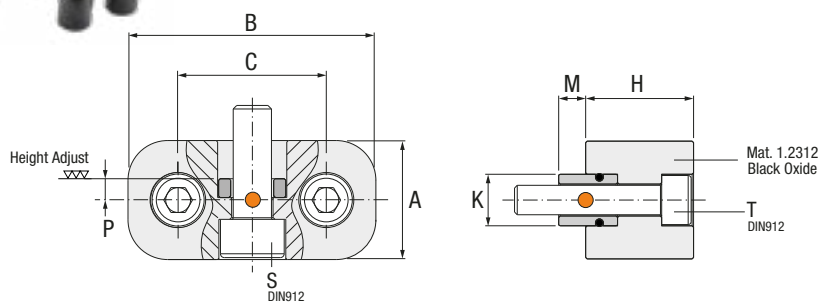
LATERAL ROD EXTENSION				
Ref.	G	L	S	Compatible with
EW.140833	8	330	M5	EZ.14
EW.201233	12	330	M8	EZ.20
EW.322049	20	495	M12	EZ.32
EW.502549	25	495	M16	EZ.50

IMPORTANT !
Order 2 lateral rod extension for each EZ.
Pedir 2 extensiones laterales para cada EZ.
Bestellen Sie 2 seitliche Stangenverlängerung für jeden EZ.
Ordinare 2 estensioni laterali per ogni EZ.
Pedir 2 extensores laterals para cada EZ.
Demander 2 extensions latérales pour chacune EZ.



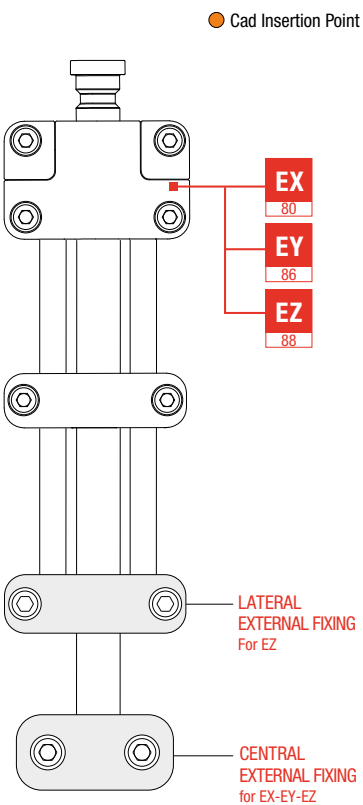
EB

EJECTION



CENTRAL EXTERNAL FIXING										
Ref.	A	B	C	K	H	M	P	S	T	Compatible with
EB.140020	24	50	30	10.5	22	5.5	4.5	M8x25	M6x30	EX.14 / EY.14 / EZ.14
EB.200025	34	60	38	13.5	30	7.5	7	M12x35	M8x40	EX.20 / EY.20 / EZ.20
EB.320042	50	86	52	18.5	46	11.5	11	M16x45	M12x65	EX.32 / EY.32 / EZ.32
EB.500060	66	100	64	25	64	15.5	15	M24x60	M16x90	EX.50 / EY.50 / EZ.50

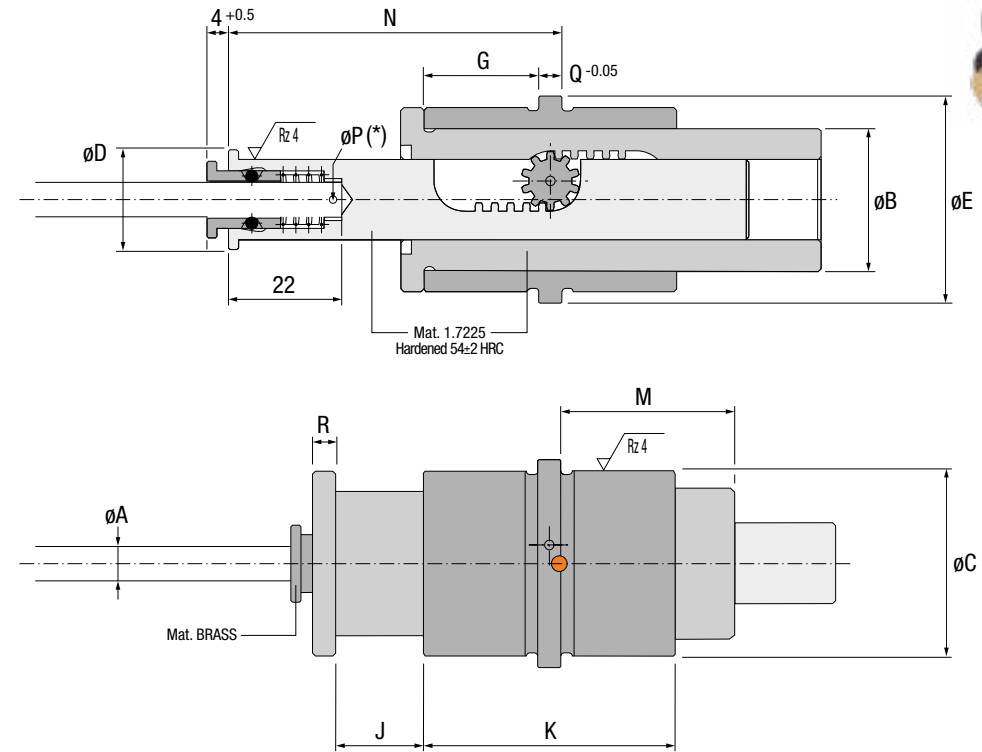
LATERAL EXTERNAL FIXING										
Ref.	A	B	C	K	H	M	P	S	T	Compatible with
EB.140824	20	62	48	10.5	22	5.5	6	M5x20	M6x30	EZ.14
EB.201234	25	84	66	13.5	30	7.5	6.5	M8x25	M8x40	EZ.20
EB.322050	42	126	102	18.5	46	11.5	15	M12x50	M12x65	EZ.32
EB.502566	60	174	140	25	64	15.5	19	M16x60	M16x90	EZ.50



ACCELERATED EJECTOR

ES Acelerador Expulsión DE Vorschub-Auswerfer
IT Acceleratore di Espulsione PT Acelerador de Extracção FR Accélérateur d'Éjection

● Cad Insertion Point

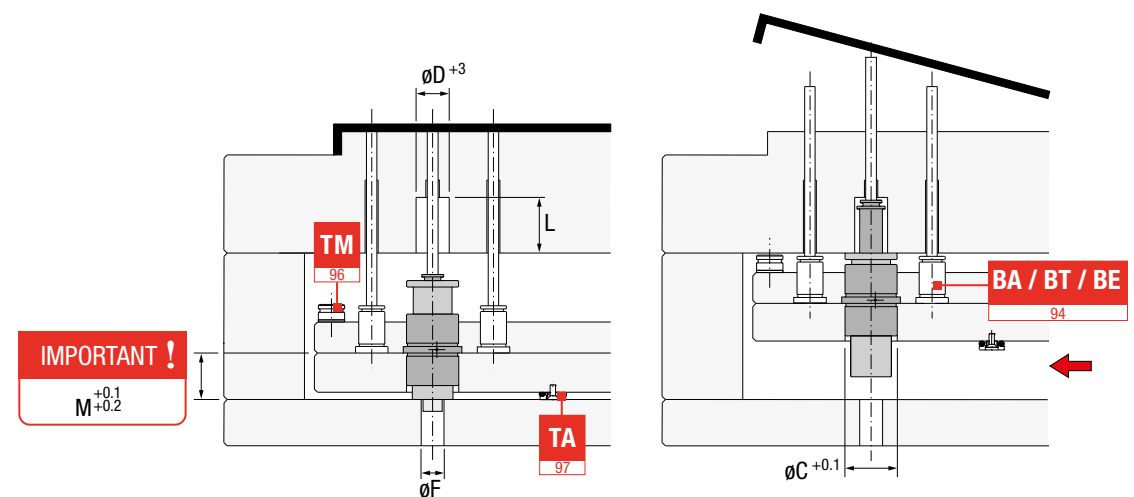


Ref.	A	B	C	D	E	F	G	J	K	L	M	N	P	Q	R
AE.031620	3	16	20	12.5	22	13	14	8	32	22	17	37	-	4	3
AE.041620	4	16	20	12.5	22	13	14	8	32	22	17	37	-	4	3
AE.052430	5	24	30	16	34	16	20	15	44	36	27	57	2	4	3
AE.062430	6	24	30	16	34	16	20	15	44	36	27	57	2	4	3
AE.082430	8	24	30	17	34	17	20	15	44	36	27	57	2	4	3
AE.103036	10	30	36	21.5	40	21	28	20	62	46	34	78	2	6	4
AE.123036	12	30	36	21.5	40	21	28	20	62	46	34	78	2	6	4

IMPORTANT !
(*) Possibility to key for using a curved ejector pin. (except AE.031620 & AE.041620)
(*) Posibilidad de usar un antigiro para los expulsores con forma. (excepto AE.031620 & AE.041620)
(*) Verdrehsicherung möglich für einen Auswerfer mit Kontur. (außer AE.031620 & AE.041620)
(*) Possibilità di usare un antirrotazione per gli espulsori sagomati. (salvo AE.031620 & AE.041620)
(*) Possibilidade de posicionar para extractores com perfil. (except AE.031620 & AE.041620)
(*) Possibilité d'indexer l'éjecteur. (sauf AE.031620 & AE.041620)

Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



AE

EJECTION



Patented



EJECTOR BASE

ES Base Expulsora DE Aufnahme für Auswerfer
IT Base Espulsore PT Base de Extractores FR Embases d'Ejection

Cad Insertion Point

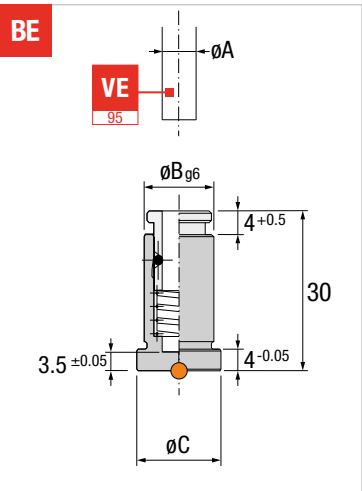
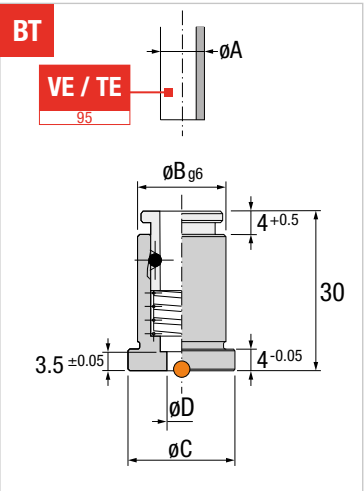
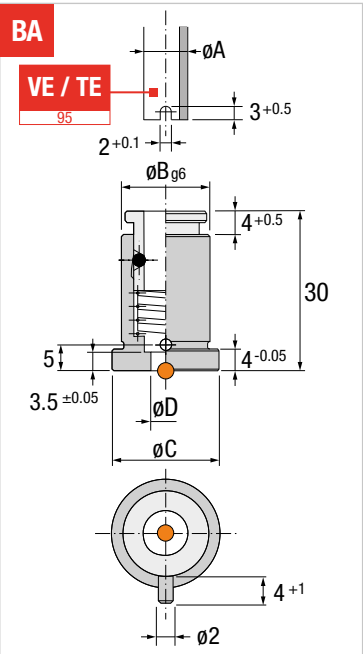
BA-BE-BT

EJECTION



Patented

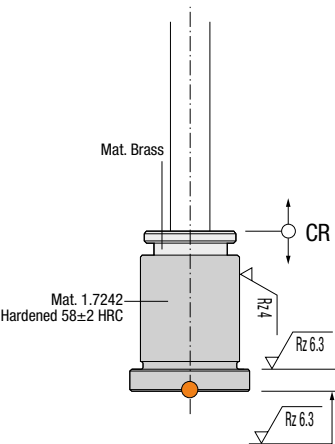
Max. 150°C



Ref.	A	B	C	CR (N)
BE.031115	3	11	15	≥ 2.550
BE.041216	4	12	16	≥ 2.550
BE.051317	5	13	17	≥ 3.800

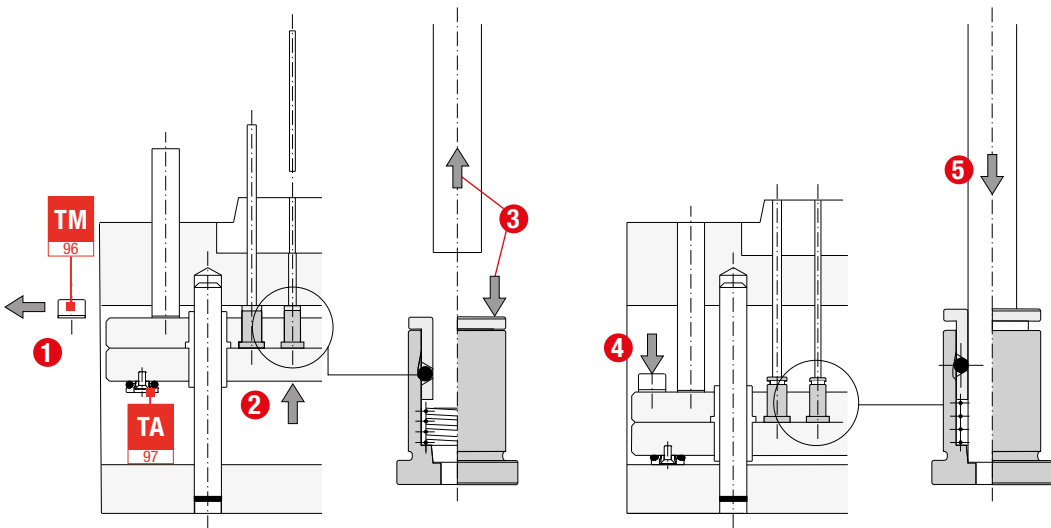
Ref.	A	B	C	D	CR (N)
BA.061418	6	14	18	3.5	≥ 3.800
BA.081620	8	16	20	5.5	≥ 5.100
BA.101822	10	18	22	7	≥ 6.400
BA.122024	12	20	24	9	≥ 7.600

Ref.	A	B	C	D	CR (N)
BT.061418	6	14	18	4.2	≥ 3.800
BT.081620	8	16	20	6.2	≥ 5.100
BT.101822	10	18	22	7	≥ 6.400
BT.122024	12	20	24	9	≥ 7.600



Installation Guidelines

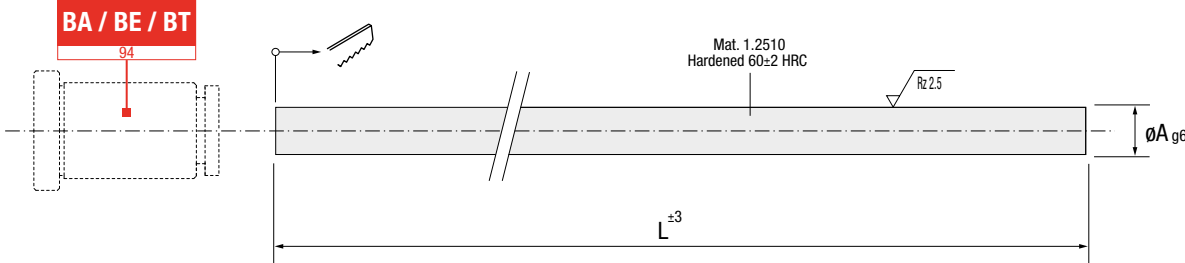
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



HEADLESS EJECTOR PIN

ES Varilla Expulsora DE Auswerfer ohne Kopf
IT Asta Espulsore PT Extractor sem Cabeça FR Ejecteur sans Tête

Cad Insertion Point



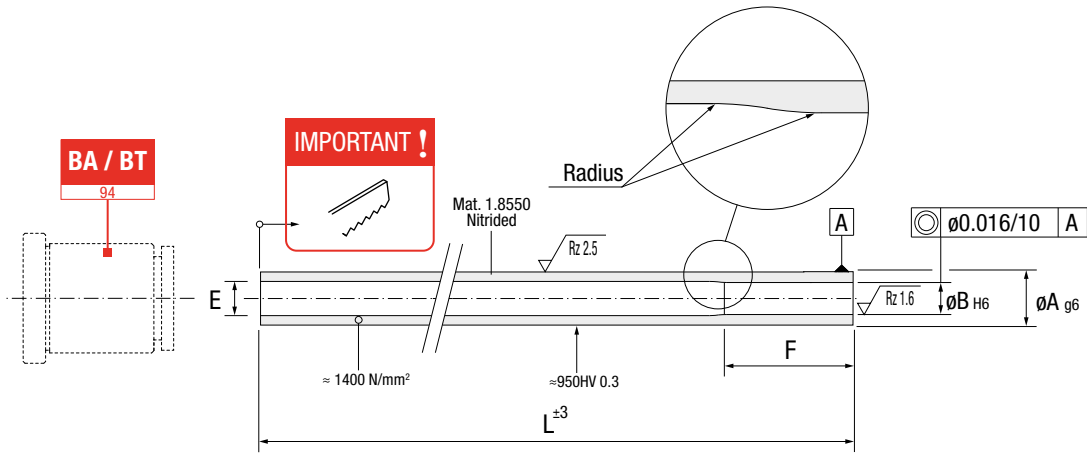
IMPORTANT !
Indicate the desired **L** dimension after the reference.
Indicar la cota **L** necesaria después de la referencia.
Gewünschte Länge **L** angeben.
Indicare la quota **L** desiderata dopo il codice.
Indique a dimensão **L** desejada depois da referência.
Indiquer longueur (**L**) désirée après référence.

Ref.	A	L
VE.030...	3	600
VE.080...	8	800 1000
VE.100...	10	600 800

HEADLESS SLEEVE EJECTOR

ES Tubular Expulsión DE Auswerferhülsen ohne Kopf
IT Espulsore Tubolare PT Extractor Tubular sem Cabeça FR Tubulaire sans Tête

Cad Insertion Point



IMPORTANT !
Indicate the desired **L** dimension after the reference.
Indicar la cota **L** necesaria después de la referencia.
Gewünschte Länge **L** angeben.
Indicare la quota **L** desiderata dopo il codice.
Indique a dimensão **L** desejada depois da referência.
Indiquer longueur (**L**) désirée après référence.

Ref.	A	B	E	F	L
TE.063...	6	3	3.2	30	400 500 600 800
TE.106...	10	6	6.2	40	400 500 600 800
TE.128...	12	8	8.2	45	400 500 600 800

VE

EJECTION



Patented

TE

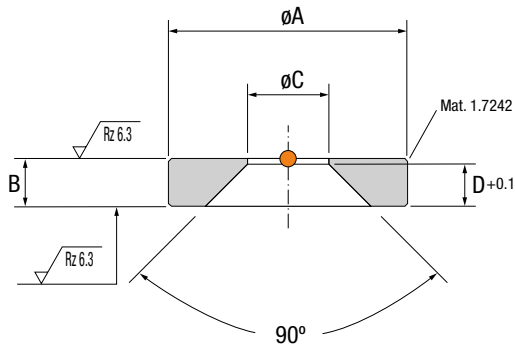
EJECTION



Patented

DP

EJECTION



Ref.	A	B	C	D
DP.200506	20	5	6.5	3.5
DP.250508	25	5	8.5	4.4
DP.280610	28	6	12	5.5

Cad Insertion Point

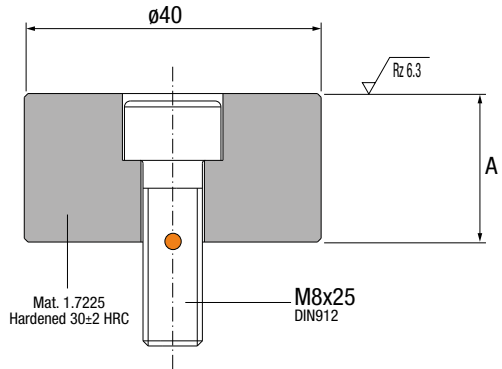
EJECTOR FOOT

ES Distanciador Placa DE Anschlagscheibe
IT Distanziale Piastra PT Botão de Encosto FR Repos de Batterie

EJECTOR PLATE SPACER

ES Distanciador Placa DE Auswerferplatte Abstandhalter
IT Distanziale Piastra PT Espaçador de Chapas FR Entretoise de Passage

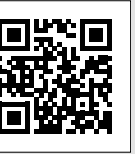
Cad Insertion Point



Ref.	A
TR.204008	20
TR.404008	40

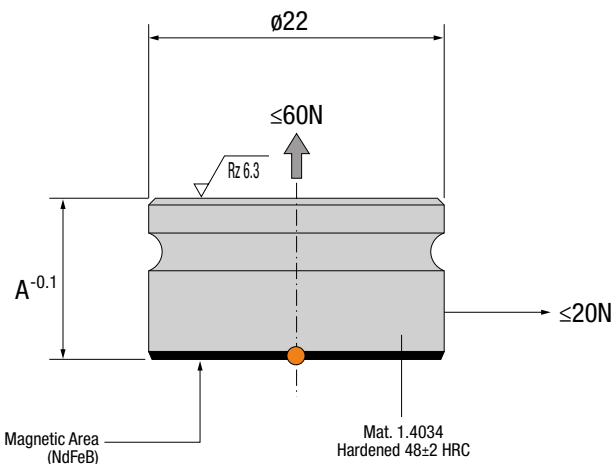
TR

EJECTION



TM

EJECTION



Ref.	A
TM.102214	10
TM.122214	12.5
TM.152214	15
TM.202214	20

Cad Insertion Point

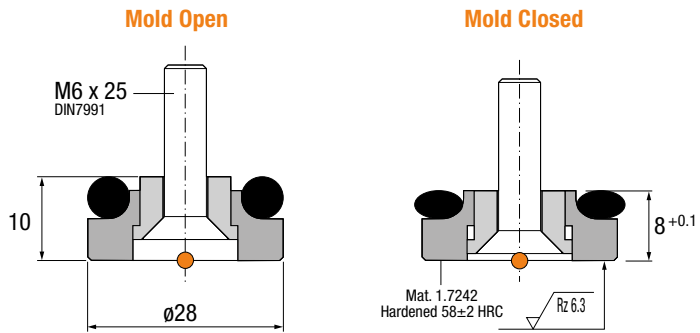
SAFETY STOPPER

ES Tope Magnético DE Abstandhalter Magnetisch
IT Blocco Magnetico PT Bloco Magnético FR Butée Magnétique

SHOCK ABSORBER

ES Tope Amortiguador DE Dämpfungsscheibe
IT Blocco Ammortizzante PT Batente Amortecedor FR Repos de Batterie avec Amortissement

Cad Insertion Point



Ref.
TA.280806

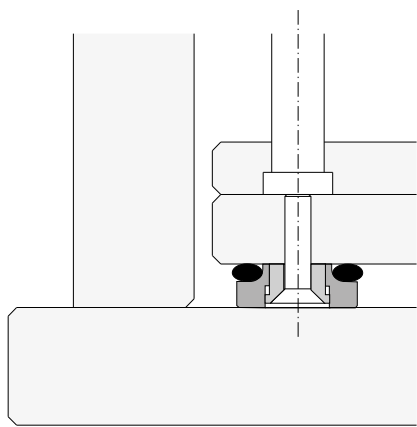
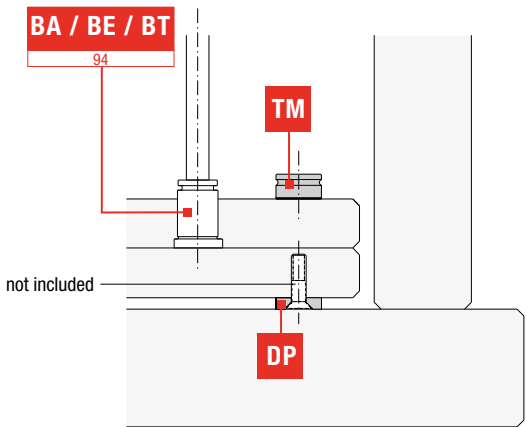
IMPORTANT !
Supplied only in bags of 4 units.
Suministrado en bolsas de 4 uds.
Verpackungseinheit 4 Stück.
Vendute in confezioni da 4 pezzi.
Fornecidos em sacos de 4 unidades.
Emballé en sac de 4 unités.

Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation

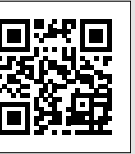
Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



TA

EJECTION





4

TRACEABILITY

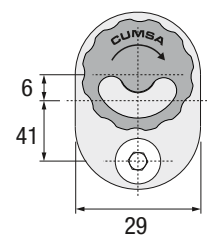
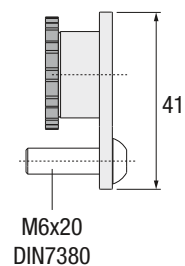
TRACEABILITY INDEX

ÍNDICE TRAZABILIDAD / INHALTSVERZEICHNIS KENNZEICHNUNG
INDICE RINTRACCIABILITÀ / ÍNDICE RASTREABILIDADE / INDEX TRAÇABILITÉS

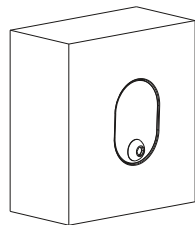
102/ FR Remote Date Stamp Fechador Remoto Ferngesteuerter Datumssteller Datario Remoto Remote Date Stamp Dateur à Reglage Exterieur 	102/ CF Remote Date Stamp Shaft Set Conjunto Varilla para Fechador Remoto Fernbedienbares Wellenset Set Asta per Datario Remoto Conjunto Transmissão para Datador Remoto Jeu de Tige pour Changement d'Information 	109/ FP Date Stamp Plus Fechador Anual Plus Datumsteller Plus Datario Annuale Plus Datador Anual Plus Dateur Plus 	109/ EF Removal Jig Extractor Fechador Abzieher für Datumsteller Estrattore Datario Extrator de Datador Extracteur pour Dateur 		
102/ MN Remote Comand Mando Remoto Fernbedienbar Comando Remoto Comando Remoto Commande à Distance 	104/ TK Turning Key Llave de Giro Montageschlüssel Chiave der Aggiornamento Chave de Rotação Clé de Changement d'Information 	104/ CT Shaft Cutting Jig Util de Corte para la Varilla Einstellungsvorrichtung Zum Ablängen Utensile per Taglio Asta Gabarito para Corte de Veio de Transmissão Outil de Coupe pour les Tiges 	110/ FX Xtra Date Stamp Fechador Extra Xtra Datumsteller Datario Extra Datador Extra Dateur Extra 	110/ IX Xtra Insert Inserto Extra Xtra Einsatz Inserto Extra Postiço Extra Insert Extra 	111/ FD Double Date Stamp Fechador Doble Zweifach-Datumstempel Datario Doppio Datador Duplo Dateur Double 
105/ IR Reference Insert Inserto Referencia Recyclingeinsätze Inserti di Riciclaggio Indicadores de Reciclagem Pion de Recyclage 	105/ IM Mark Insert Inserto Marca Einsätze für Symbole Inserto Simbolo Postiço de Marcas Insert de Marquage 	112/ FT Temperature Dater Fechador Temperatura Datumsteller, wärmebeständig Datario Temperatura Datador Temperatura Dateur Haute Température 	112/ IT Temperature Insert Inserto Temperatura Einsätze, wärmebeständig Inserto Temperatura Indicador Temperatura Insert Haute Température 		
106/ BI +II Interchangeable Insert Inserto Intercambiable Einsatz, austauschbar Inserto Intercambiabile Postiço Intermutável Ensemble Interchangeable 	106/ IG Turning Insert Inserto Giratorio Einsätze Drehbar Inserto Girante Postiço Giratório Insert Tournant 	107/ FU +IU Unit Date Stamp Fechador Unitario Datumstellereinheit Datario Unitario Datador Unitário Kit Mini Dateur 	113/ BM Block Base Base Monobloque Aufnahme Datumsblock Base Monoblocco Base Monobloco Multi Dateur 	113/ PM Block Insert Postiço Monobloque Einsätze für Datumsblöcke Inserto Monoblocco Postiço Monobloco Inserts Multi Dateur 	114/ CC Cycle Counter Contador Ciclos Zählwerk Conta Cicli Contador de Ciclos Compteur de Cycle 
108/ FA Date Stamp Fechador Anual Datumsteller Datario Annuale Datador Anual Corps Dateur 	108/ IA Date Insert Inserto Anual Einsätze für Datumsteller Inserto Datario Indicador Anual Insert Dateur 				

TK

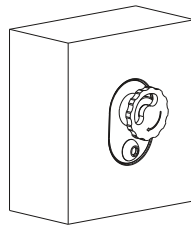
TRACEABILITY

TURNING KEY
SUPPORTTURNING
KEYRef.
TK.412903

Warehouse and transport position
Posición en almacén y durante el transporte
Werkzeuglager- und Transportposition
Posizione in magazzino e durante il trasporto
Posição de molde em armazém
Position lors du stockage et du transport

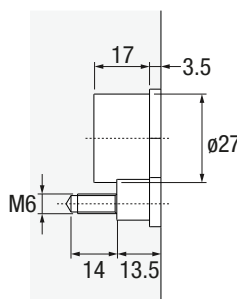
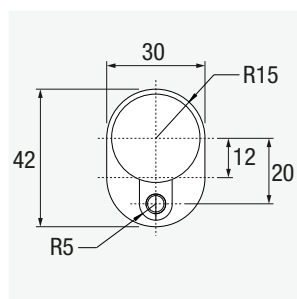


Molding position
Posición en producción
Werkzeugpositionfixierung
Posizione di stampaggio
Posição de molde em injeção
Position lors de la production



Installation Guidelines

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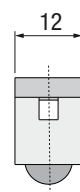
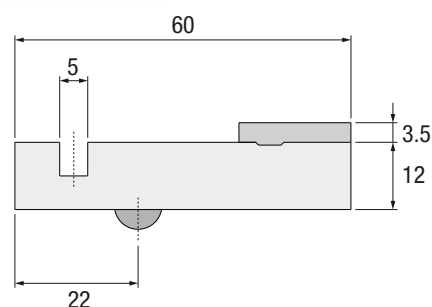
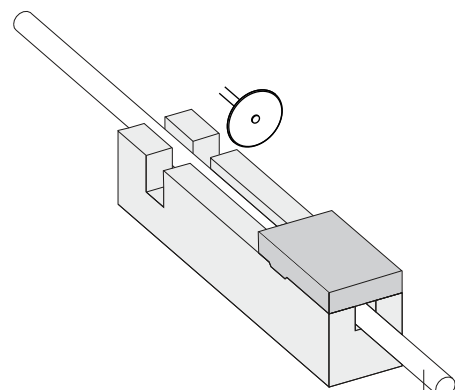


SHAFT CUTTING JIG

ES Util de Corte para la Varilla DE Einstellungsvorrichtung Zum Ablängen
IT Utensile per Taglio Asta PT Gabarito para Corte de Veio de Transmissão FR Outil de Coupe Pour les Tiges

CT

TRACEABILITY

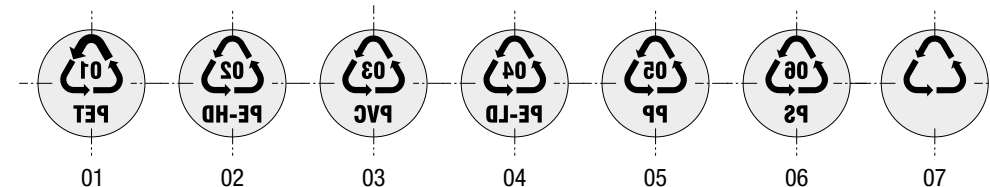
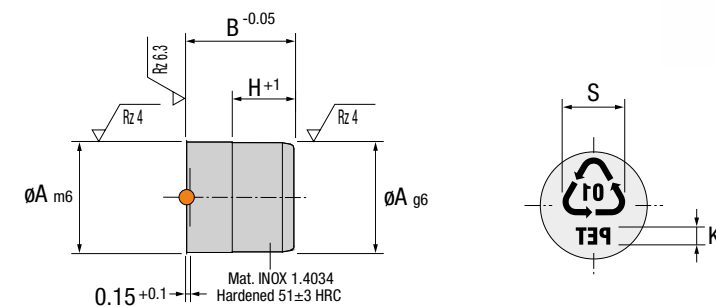
Ref.
CT.601212FLEXIBLE
SHAFT

REFERENCE INSERT

ES Inserto Referencia DE Recyclingeinsätze
IT Inserti di Riciclaggio PT Indicadores de Reciclagem FR Pion de Recyclage

IR

TRACEABILITY



Ref.	A	B	E	H	K	S
IR.1012..	10	12	8	7	1.5	5.6
IR.1212..	12	12	10	7	1.8	6.8
IR.1616..	16	16	12	9	2.4	9
IR.2016..	20	16	16	9	3.2	11.5

IMPORTANT !

Indicate the model after the reference.
Indicar el modelo después de la referencia.
Wählen Sie den Typ entsprechend der Referenz.
Indicare il modello dopo il codice.
Indicar o modelo depois da referência.
Indiquer le sigle après la référence.

MARK INSERT

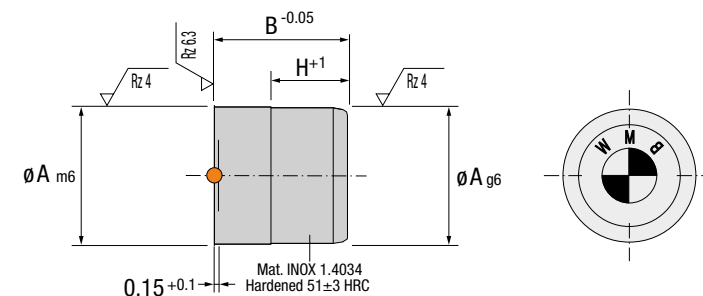
ES Inserto Marca DE Einsätze für Symbole
IT Inserto Simbolo PT Postiço de Marcas FR Insert de Marquage

IM

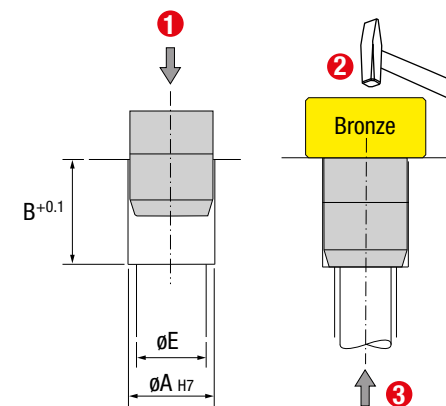
TRACEABILITY



Cad Insertion Point



Installation Guidelines

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IMPORTANT !

Send DXF file with your design.
Envíenos un archivo DXF con su diseño.
Senden Sie als DXF File.
Inviare un file DXF con il disegno dell'incisione richiesta.
Envie-nos um ficheiro em DXF com o seu desenho.
Envoyez nous le fichier DXF du dessin.

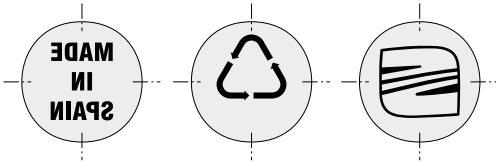
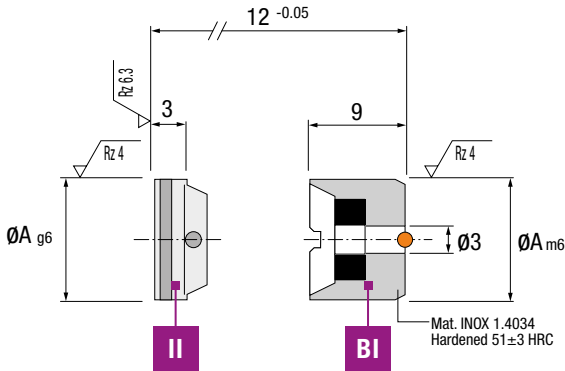
BI+II

TRACEABILITY



INTERCHANGEABLE INSERT
ES Inserto Intercambiable DE Einsatz Austauschbar
IT Inserto Intercambiabile PT Postiço Intermutável FR Ensemble Interchangeable

Cad Insertion Point



Ref.	A	E	Ref.	Blank Ref.
BI.101209	10	6	II.101203	II.101203-BLANK
BI.121209	12	8	II.121203	II.121203-BLANK
BI.161209	16	10	II.161203	II.161203-BLANK

IMPORTANT !
Send DXF file with your design.
Envíenos un archivo DXF con su diseño.
Senden Sie als DXF File.
Inviare un file DXF con il disegno dell'incisione richiesta.
Envie-nos um ficheiro em DXF com o seu desenho.
Envoyez nous le fichier DXF du dessin.

UNIT DATE STAMP
ES Fechador Unitario DE Datumstellereinheit
IT Datario Unitario PT Datador Unitário FR Kit Mini Dateur

Cad Insertion Point

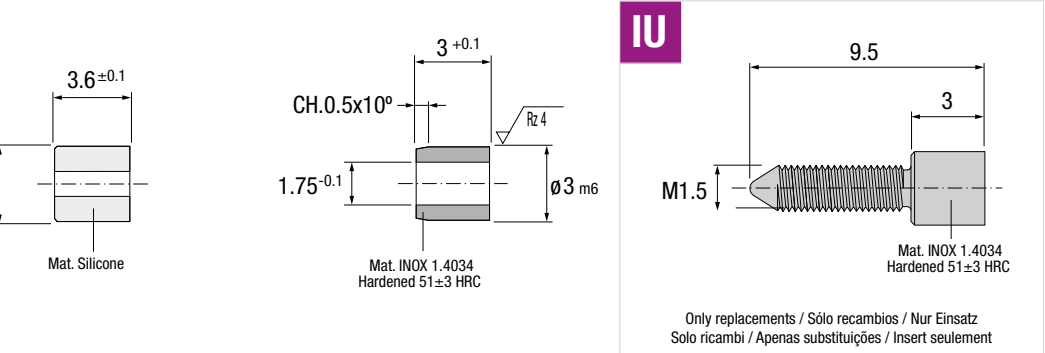
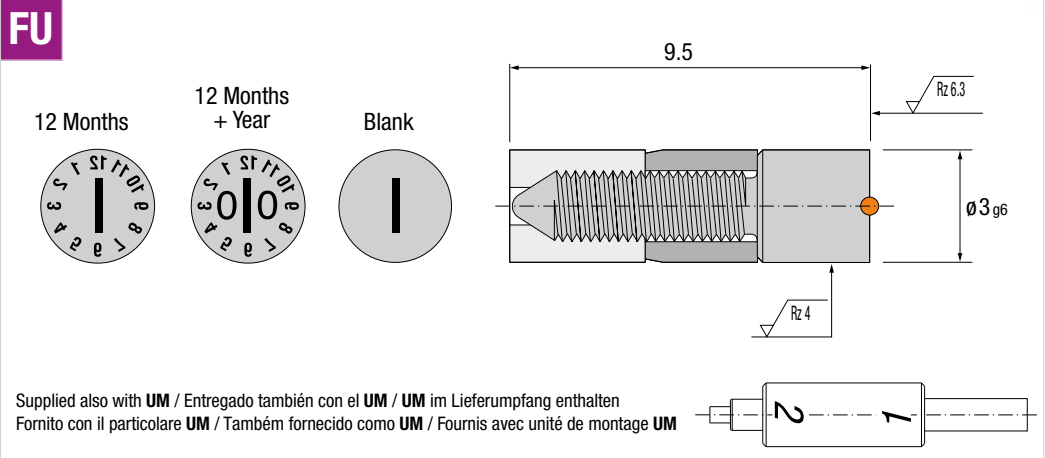


FU+IU

TRACEABILITY



Patented
Max. 150°C

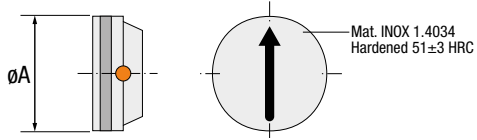


12 Months	12 Months+Year	Blank
FU.0310SF	FU.031012-..	FU.031000
IU.0310SF	IU.031095-..	IU.031000

IMPORTANT !
Indicate the year after the reference.
Indicar el año después de la referencia.
Geben Sie das Jahr nach dem Verweis an.
Indicare l'anno dopo il codice.
Indicar o ano depois da referência.
Indiquer l'année après la référence.

TURNING INSERT

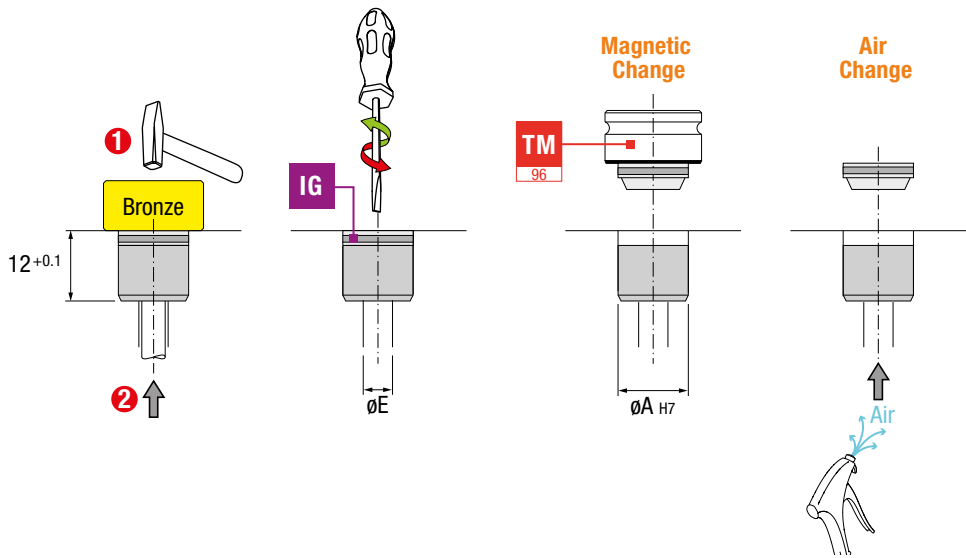
ES Inserto Giratorio DE Einsätze Drehbar
IT Inserto Girante PT Postiço Giratório FR Insert Tournant



Ref.	A
IG.101203	10
IG.121203	12
IG.161203	16

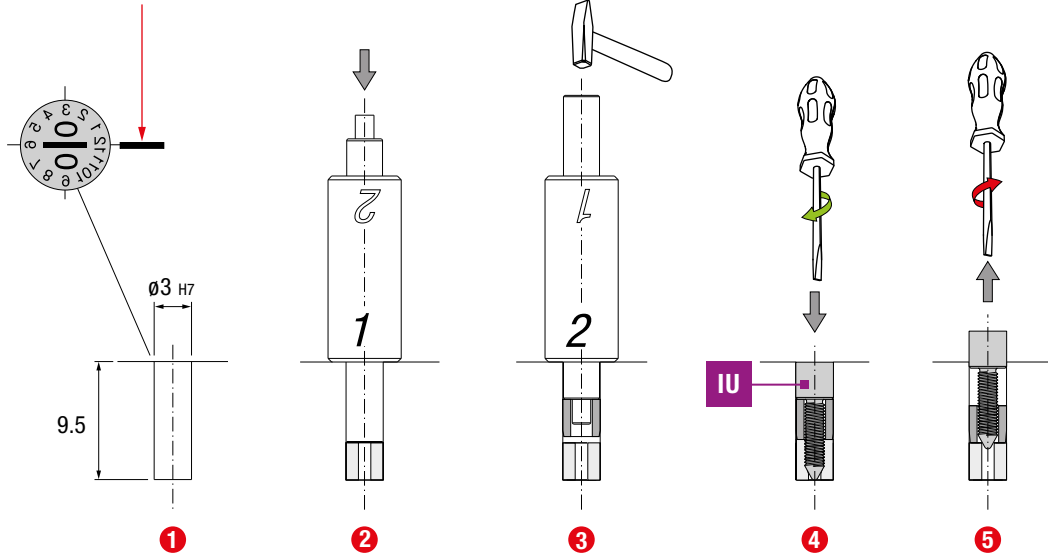
Installation Guidelines

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Engrave on the mould.
ES Grabar en el molde.
DE Gravur an der Form.
IT Incidere sullo stampo.
PT Gravar no molde.
FR Gravure sur le moule.

Year change.
ES Cambio de año.
DE Jahreswechsel.
IT Cambio dell'anno.
PT Mudança de ano.
FR Changement de l'année.

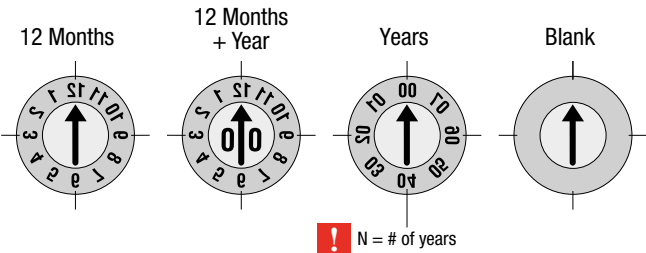
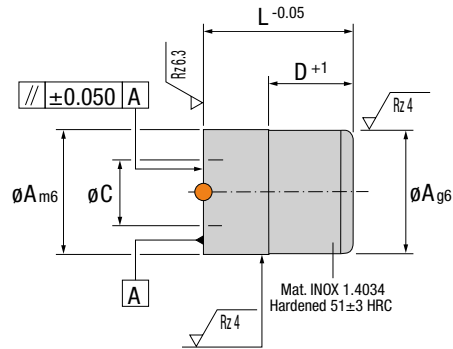


FA

TRACEABILITY



Patented



IMPORTANT !
Special engraving available under request.
Grabados especiales bajo demanda.
Andere Gravuren auf Anfrage.
Incisioni speciali su richiesta.
Gravações especiais por encomenda.
Gravure spéciale par commande.

IMPORTANT !
Indicate the year after the reference.
Indicar el año después de la referencia.
Geben Sie das Jahr nach dem Verweis an.
Indicare l'anno dopo il codice.
Indicar o ano depois da referência.
Indiquer l'année après la référence.

12 Months	12 Months+Year	Years	Blank	A	C	D	E	L	N
FA.0422SF	FA.042212-..	FA.042204-..	FA.042200	4	2.2	6	3.5	12	4
FA.0530SF	FA.053012-..	FA.053004-..	FA.053000	5	3	6	3.5	12	4
FA.0632SF	FA.063212-..	FA.063205-..	FA.063200	6	3.2	12	4	20	5
FA.0847SF	FA.084712-..	FA.084705-..	FA.084700	8	4.7	12	6	20	5
FA.1057SF	FA.105712-..	FA.105706-..	FA.105700	10	5.7	12	8	20	6
FA.1267SF	FA.126712-..	FA.126708-..	FA.126700	12	6.7	12	10	20	8
FA.1687SF	FA.168712-..	FA.168710-..	FA.168700	16	8.7	12	12	20	10
FA.2007SF	FA.200712-..	FA.200710-..	FA.200700	20	10.7	12	14	20	10

DATE STAMP

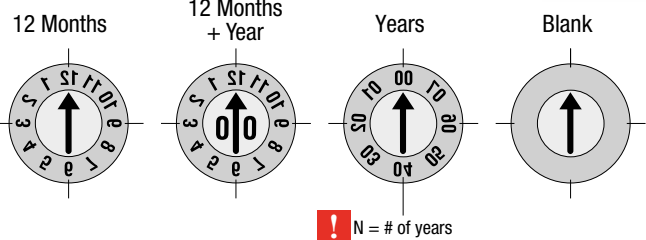
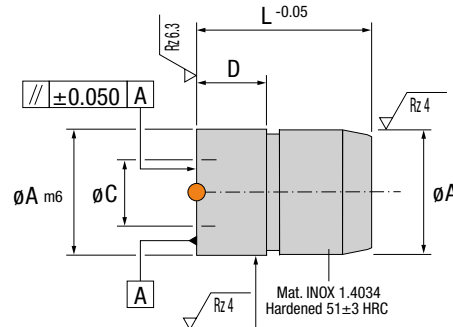
ES Fechador Anual DE Datumsteller
IT Datario Annuale PT Datador Anual FR Corps Dateur

● Cad Insertion Point

DATE STAMP PLUS

ES Fechador Anual Plus DE Datumsteller Plus
IT Datario Annuale Plus PT Datador Anual Plus FR Dateur Plus

● Cad Insertion Point



12 Months	12 Months+ Year	Years	Blank	A	C	D	L	N
FP.0422SF	FP.042212-..	FP.042204-..	FP.042200	4	2.2	5.5	12	4
FP.0530SF	FP.053012-..	FP.053004-..	FP.053000	5	3	5.5	12	4
FP.0632SF	FP.063212-..	FP.063205-..	FP.063200	6	3.2	8	20	5
FP.0847SF	FP.084712-..	FP.084705-..	FP.084700	8	4.7	8	20	5
FP.1057SF	FP.105712-..	FP.105706-..	FP.105700	10	5.7	8	20	6
FP.1267SF	FP.126712-..	FP.126708-..	FP.126700	12	6.7	8	20	8
FP.1687SF	FP.168712-..	FP.168710-..	FP.168700	16	8.7	8	20	10
FP.2007SF	FP.200712-..	FP.200710-..	FP.200700	20	10.7	8	20	10

IMPORTANT !
Special engraving available under request.
Grabados especiales bajo demanda.
Andere Gravuren auf Anfrage.
Incisioni speciali su richiesta.
Gravações especiais por encomenda.
Gravure spéciale par commande.

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FP

TRACEABILITY

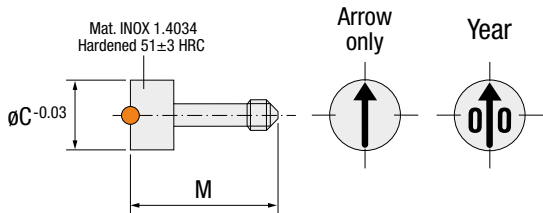


Patented



IA

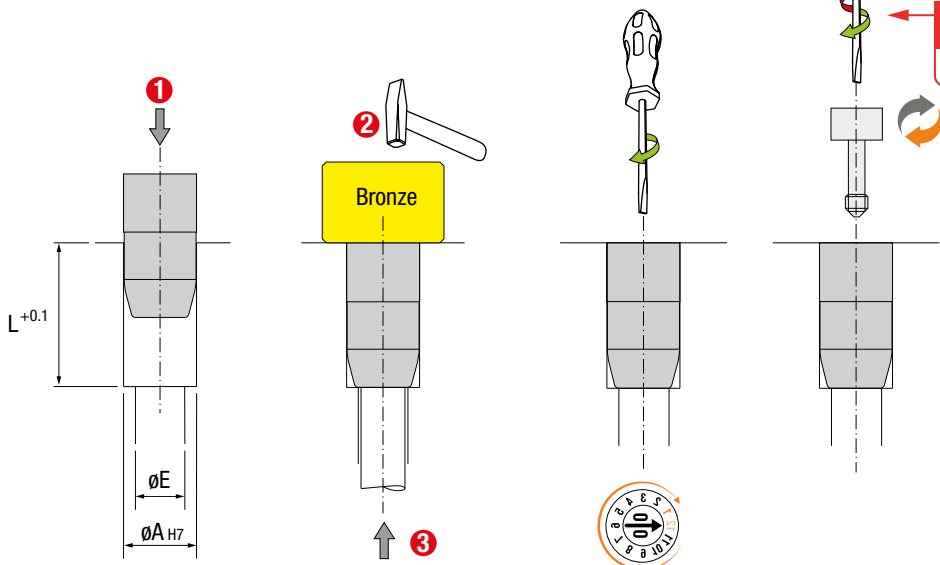
TRACEABILITY



Arrow Only	Year	C	M
IA.2275SF	IA.2275..	2.2	7.7
IA.3075SF	IA.3075..	3	7.7
IA.3217SF	IA.3217..	3.2	17
IA.4717SF	IA.4717..	4.7	17
IA.5717SF	IA.5717..	5.7	17
IA.6717SF	IA.6717..	6.7	17
IA.8717SF	IA.8717..	8.7	17
IA.1007SF	IA.1007..	10.7	17

Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione
Instruções de Instalação · Mode d'Installation

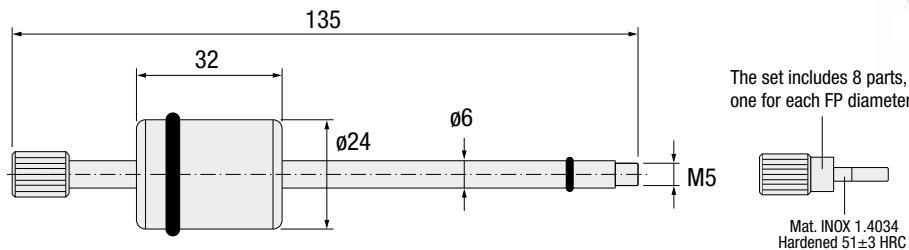


IMPORTANT !
CLICK!

REMOVAL JIG

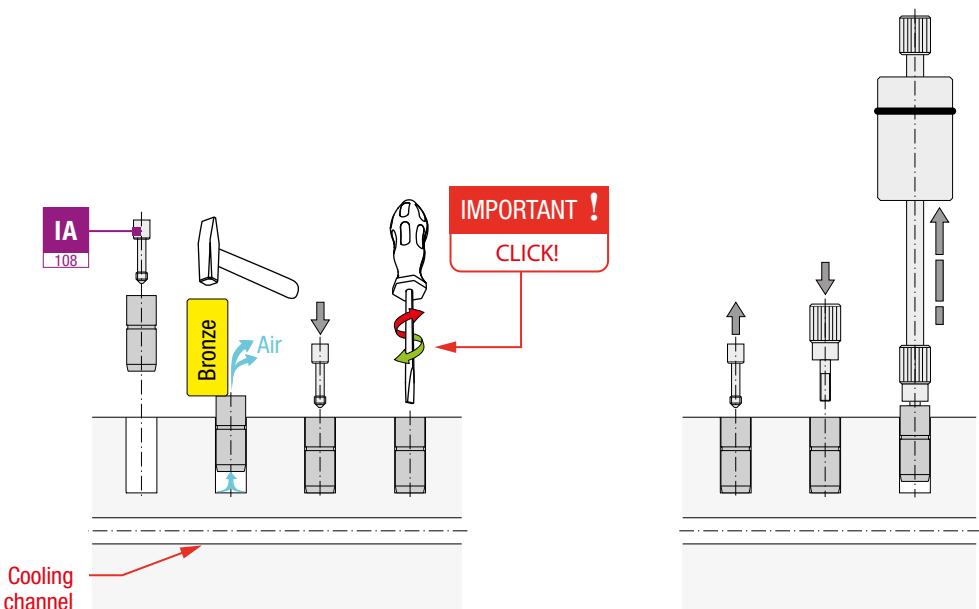
ES Extractor Fechador DE Abzieher für Datumsteller
IT Estrattore Datario PT Extrator de Datador FR Extracteur pour Dateur

Ref.
EF.322405-SET



Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



IMPORTANT !
CLICK!

EF

TRACEABILITY

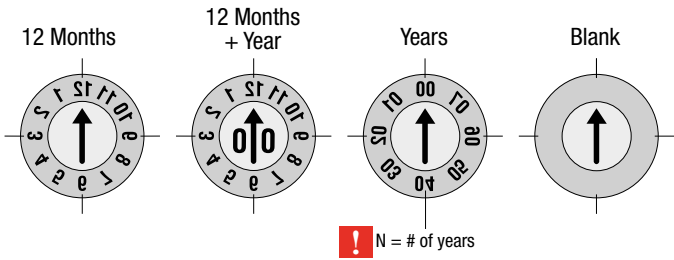
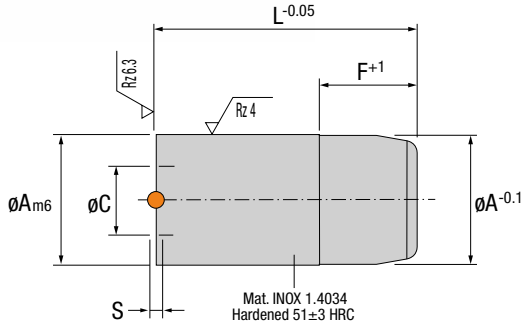


FX

XTRA DATE STAMP

ES Fechador Extra DE Xtra Datumsteller
IT Datario Extra PT Datador Extra FR Dateur Extra

Cad Insertion Point



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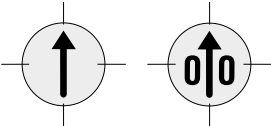
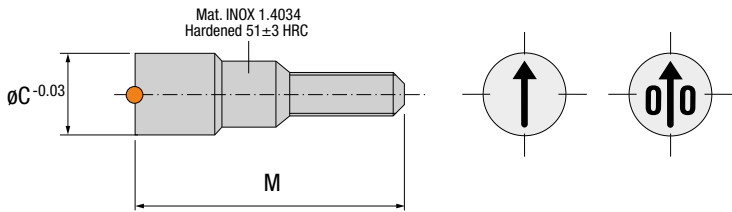
12 Months	12 Months+Year	Years	Blank	A	C	E	F	L	N	S
FX.0421SF	FX.042112-..	FX.042104-..	FX.042100	4	2.1	2	1.6	5	4	0.25
FX.0531SF	FX.053112-..	FX.053104-..	FX.053100	5	3.1	2.5	2.5	8	4	0.2
FX.0632SF	FX.063212-..	FX.063205-..	FX.063200	6	3.2	4	6	16	5	0.25
FX.0847SF	FX.084712-..	FX.084705-..	FX.084700	8	4.7	6	6	16	5	0.25
FX.1057SF	FX.105712-..	FX.105706-..	FX.105700	10	5.7	8	6	16	6	0.35
FX.1267SF	FX.126712-..	FX.126708-..	FX.126700	12	6.7	10	6	16	8	0.35

IX

XTRA INSERT

ES Inserto Extra DE Xtra Einsatz
IT Inserto extra PT Postiço Extra FR Insert Extra

Cad Insertion Point

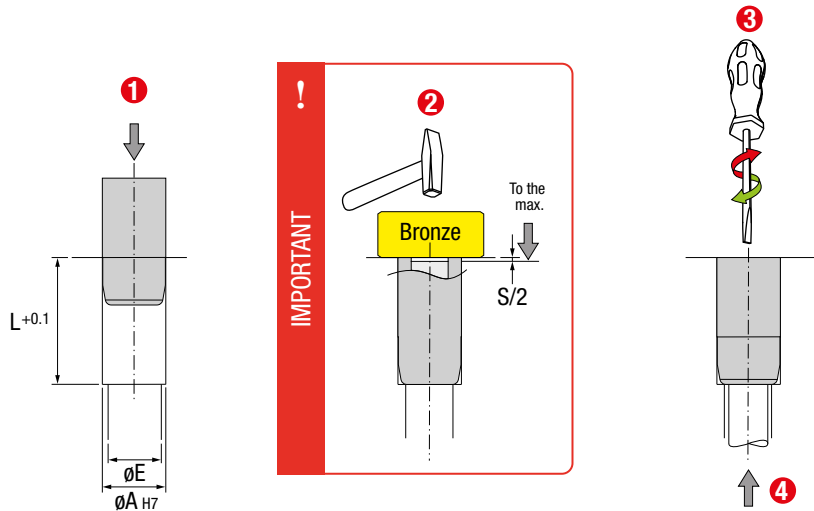


Arrow only	Annual	C	M
IX.2148SF	IX.2148..	2.1	4.8
IX.3178SF	IX.3178..	3.1	7.8
IX.3215SF	IX.3215..	3.2	15.5
IX.4715SF	IX.4715..	4.7	15.5
IX.5715SF	IX.5715..	5.7	15.5
IX.6715SF	IX.6715..	6.7	15.5

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Indicare l'anno dopo il codice.
Indicar o ano depois da referência.
Indiquer l'année après la référence.

Installation Guidelines

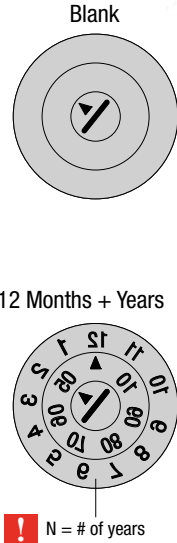
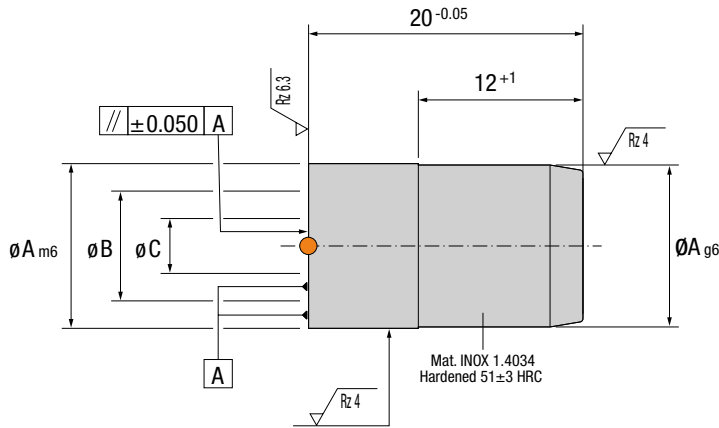
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione
Instruções de Instalação · Mode d'Installation



DOUBLE DATE STAMP

ES Fechador Doble DE Zweifach-Datumstempel
IT Datario Doppio PT Datador Duplo FR Dateur Double

Cad Insertion Point



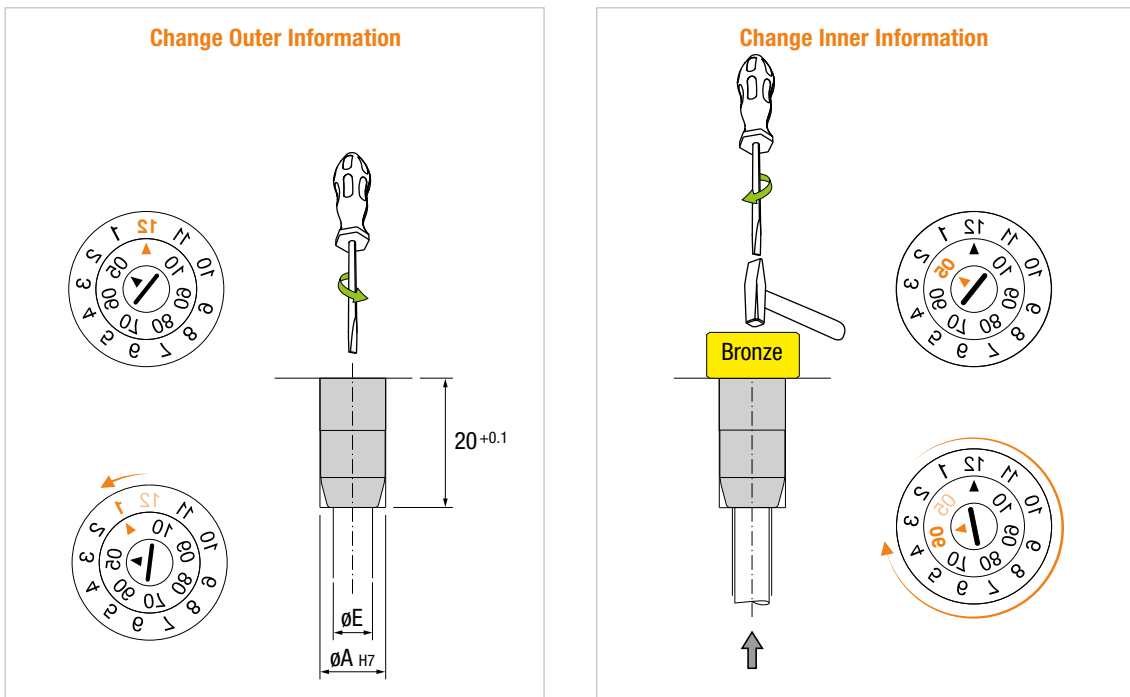
12 Month+Year	Blank	A	B	C	E	N
FD.080512-..	FD.080500	8	5.5	3	6	5
FD.120812-..	FD.120800	12	8	4	10	6
FD.161012-..	FD.161000	16	10.5	5.3	12	10

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Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



FD

TRACEABILITY



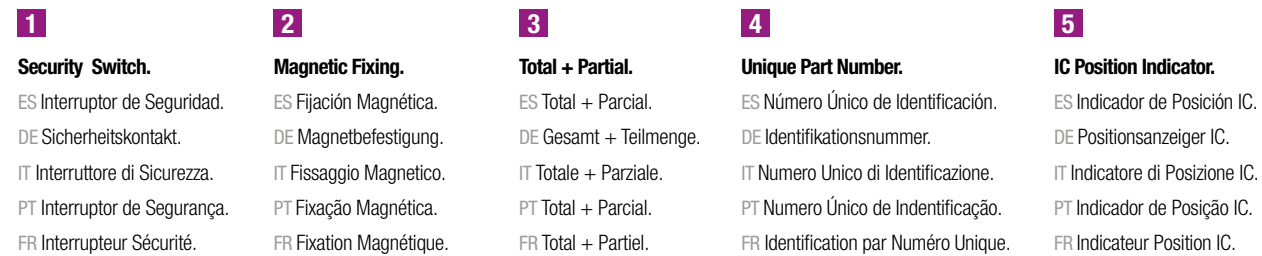
Patented

Max.
100°C

CC

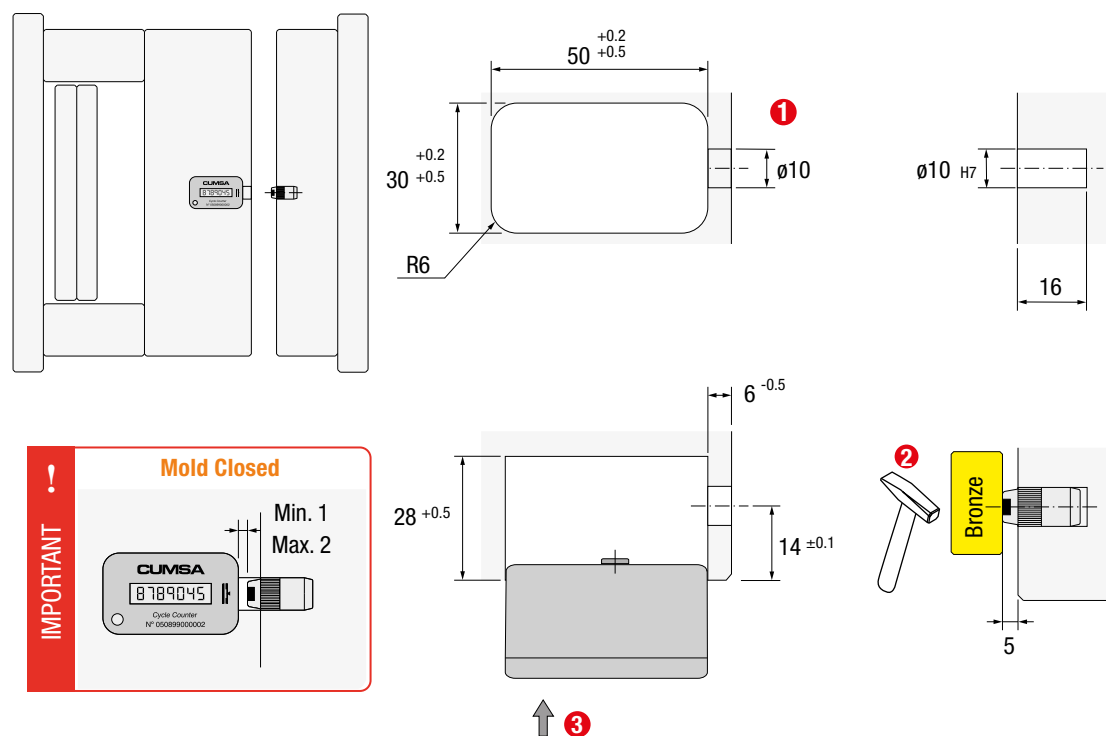


Max.
60°C



– Installation Guidelines

Mold Open





5

VACUUM

VACUUMJET SYSTEM INDEX

ÍNDICE SIETEMA DE VACÍO / INHALTSVERZEICHNIS VACUUMJET-SYSTEM
INDICE SISTEMA VACUUM JET / ÍNDICE SISTEMA DE VÁCUO / INDEX SISTÈME DE VIDE

124/

VB

Double Action Vacuumjet
Unidad de Vacío de Doble Acción
Double Action Vacuumjetsystem
Vacuumjet Doppia Azione
Vacuumjet Duplo Efeito
Vacuumjet Double Effet



126/

SV

Smart Vacuumjet
Vacuumjet Intelligente
Smart Vacuumjetsystems
Smart Vacuumjet
Vacuumjet Intelligente
Vacuumjet Intelligent



128/

VJ

Vacuumjet Unit
Unidad de Vacío (Vacuumjet)
Vacuumjet Steuereinheit
Vacuumjet Unidade de Vácuo (Vacuumjet)
Unité de Vide



130/

VG

Vacuumjet +
Unidad de Vacío (Vacuumjet +)
Vacuumjet +
Vacuumjet +
Unidade de Vácuo (Vacuumjet +)
Unité de Vide (Vacuumjet +)



132/

VM

Vacuum Control
Controlador Vacuumjet
Vacuum Regeleinheit
Unità di controllo Vacuum
Controlador Vacuumjet
Contrôle Vacuumje



134/

VV

Vacuumjet Valve
Válvula Vacuumjet
Vacuumjet Ventil
Valvola Vacuumjet
Válvula Vacuumjet
Soupape Vacuumjet



134/

VT

Vacuumjet Valve Tube
Tubo Válvula Vacuumjet
Vacuumjet Ventilrohr
Tubo Valvola Vacuumjet
Tubo Válvula Vacuumjet
Tube soupape Vacuumjet



135/

PT
+PA

Pneumatic Piston
Pistón Neumático
Pneumatikkolben
Pistone Pneumatico
Pistom Pneumático
Piston Pneumatique



135/

PT

Pneumatic Piston
Pistón Neumático
Pneumatikkolben
Pistone Pneumatico
Pistom Pneumático
Piston Pneumatique



136/

VP

Spiral Ejector
Expulsor en Espiral
Spiral Auswerfer
Espulsore con Spirale
Extractor com Espiral
Ejecteur avec Spiral



136/

NP

Non-rotating Head for Ejector Pins
Base Anti-rotación para Expulsores
Verdrehgesicherter Kopf
Base Anti-Giro per Espulsori
Cabeça Anti-Rotativa Embasses
Anti-Rotation pour Éjecteurs



137/

VS

Spiral Sleeve
Tubular en Espiral
Spiral Hülse
Espulsore con Spirale
Tubular com Espiral
Ejecteur Avec spiral



137/

NR

Keyed Tubular Base
Base Anti-Rotación para Tubulares
Hülseaufnahme Verdreh Gesichert
Base Anti-giro per Cannocchiali
Base Anti-rotação para Tubulares
Embosses Anti-Rotation pour Tubulaires



138/

PH

Ejectors
Expulsores
Auswerfer
Espulsori
Extractores
Éjecteurs



138/

CV

Vacuumjet Plug
Casquillo Vacuumjet
Vacuumjet Dichtstopfen
Bussola Vacuumjet
Casquillo Vacuumjet
Bague Vacuumjet



139/

LV

Laminar Gas Vent
Salida de Gases Laminar
Laminargasventil
Uscita dei Gas Laminare
Postiço de Ventilação Laminar
Eventation Laminare



140 /

TV

Connection Tube
Tubo Conexión
Verbindungsrohr
Tubo Connessione
Tubo de Ligação
Tube de Connexion



140/

JV

Vacuumjet Seal
Sello Vacuumjet
Vacuumjet Dichtschnur
Guarnizione Vacuumjet
Vedante Vacuumjet
Joint Vacuumjet



WHAT DOES VACUUM STAND FOR?

To vacuum is to remove the air out of a space, therefore, leaving this space completely empty, creating a negative pressure.

WHY IS IT INTERESTING TO CREATE A VACUUM INSIDE MOLDS?

During the injection process there is an invisible pressure within the cavity, making it difficult to fill, this pressure is the air! The air is cornered, compressed and heated by plastic, and is pushed outside the mold through its clearances, complicating therefore the cavity filling, and creating problems in the process, in the plastic part and slowing down the cycle time.

¡We need to extract the air from the cavity or at least minimize its influence in the process!

HOW CAN WE EXTRACT THE AIR?

CUMSA has developed a series of products to enable the vacuuming of mold cavities. Discover these products in this catalogue!

From just 20-30% of vacuum created, improvements in the process can be observed; therefore, it is important to balance the level of vacuum with the time needed, to find the best option to suit your particular needs.

WHAT BENEFITS COULD MY MOLD ACHIEVE WITH THE VACUUM?

In the injected plastic part:

- Superior visual appearance (less sink marks).
- Dimensional stability (less weld lines).
- Uniform color.
- High mechanical resistance due to perfect plastic distribution.

In the process:

- Reduced cycle time.
- Lower injection temperature & pressure.
- Increase in production.

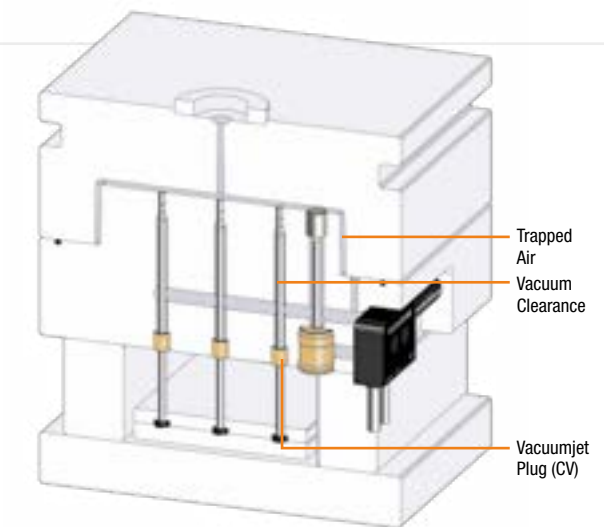
WHAT IS NEEDED TO CREATE THE VACUUM?

- Complete sealing of the mold to achieve optimal vacuum results.
- 1 or 2 electrovalves, depending on the model selected.
- No need of any additional vacuum pump/mechanism.

MOLD CLOSED

With the mold closed, air is trapped inside the cavity. If injection starts, the air will be cornered, heated and compressed by the plastic, producing poor quality plastic parts.

We have to create vacuum!

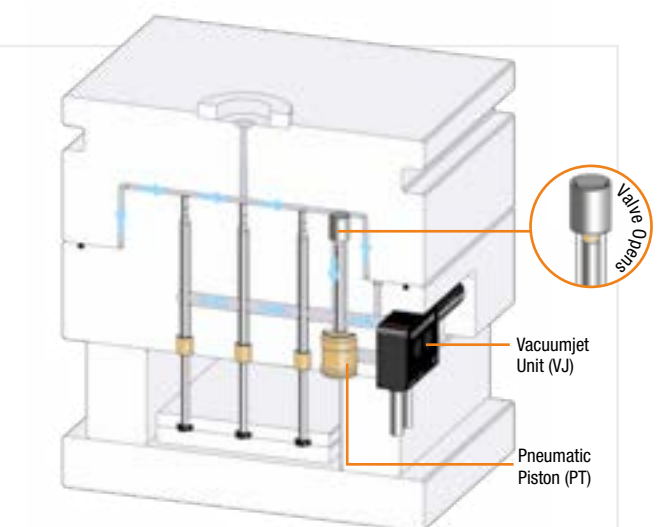


CREATING THE VACUUM IN THE CAVITY

To optimize the injection process we have to take out the air from the cavity.

There are several methods to accomplish this, but in all of them it is the injected plastic that pushes out the air. With VACUUMJET, when it is activated prior to the injection, a valve is opened and the air is vacuumed, therefore, leaving the cavity in optimal conditions for injection.

→ Air Flow

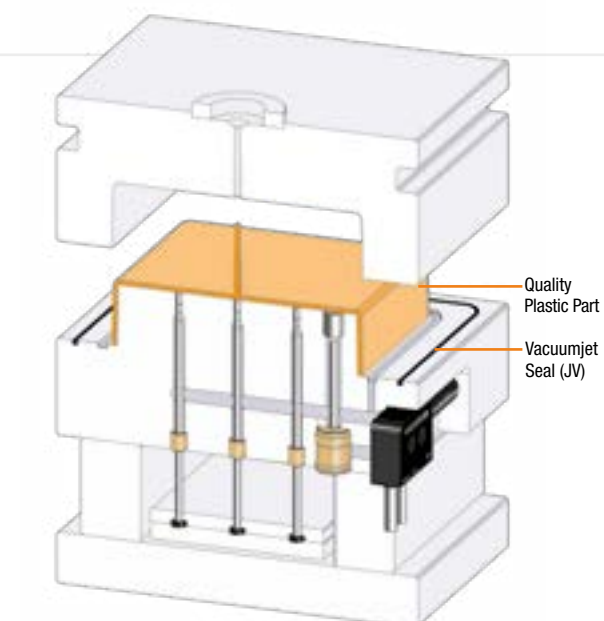


INJECTION STARTS

The VACUUMJET continues sucking the air during all the injection process, to guarantee the maximum ease of the plastics fluidity, therefore reducing the pressure needed.

EJECTION PROCESS

When the injection is finished, the VACUUMJET stops, and as with all molds, the plastic is cooled and the part is ejected...but with the VACUUMJET system, we obtain greater quality plastic part, with at least the same injection time, if not faster, and without altering the optimal injection parameters.



VACUUMJET SYSTEM

by **CUMSA**

WICH PRODUCT IS THE BEST FOR MY MOLD?

DO I NEED TO CONTROL THE VACUUM LEVEL?	YES			
DO I HAVE SPACE FOR A VACUUM VALVE?	YES		NO	
DO I NEED REVERSE BLOWING?	YES	NO	YES	NO
HOW MANY ELECTROVALVES DO I NEED?	2  SV	2  VM + VJ	2  VM + VB	1  VM + VG

The Vacuumjet + (VG model) can be added to any combination to increase vacuuming power and speed up the vacuum process. For each VG model, a separate compressed air circuit is needed to assure that we always have at least 6 BARS of air pressure.

NO				DO I NEED TO CONTROL THE VACUUM LEVEL?
YES		NO		DO I HAVE SPACE FOR A VACUUM VALVE?
YES	NO	YES	NO	DO I NEED REVERSE BLOWING?
3  VJ + VB	2  VJ	2  VB	1  VG	HOW MANY ELECTROVALVES DO I NEED?

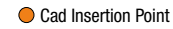
The use of Spiral Ejector or Spiral Sleeve (VP & VS) is mandatory when not using a valve. However, it is also recommended when using a valve to maintain the vacuum achieved throughout the rest of the process.

ES Unidad de Vacío de Doble Acción **DE** Double Action Vacuumjetsystem
IT Vacuumjet Doppia Azione **PT** Vacuumjet Duplo Efeito **FR** Vacuumjet Double Effet

ES Consejos de Instalación **DE** Richtlinien zur Installation
IT Consigli di Installazione **PT** Instruções de Instalação **FR** Mode d'Installation

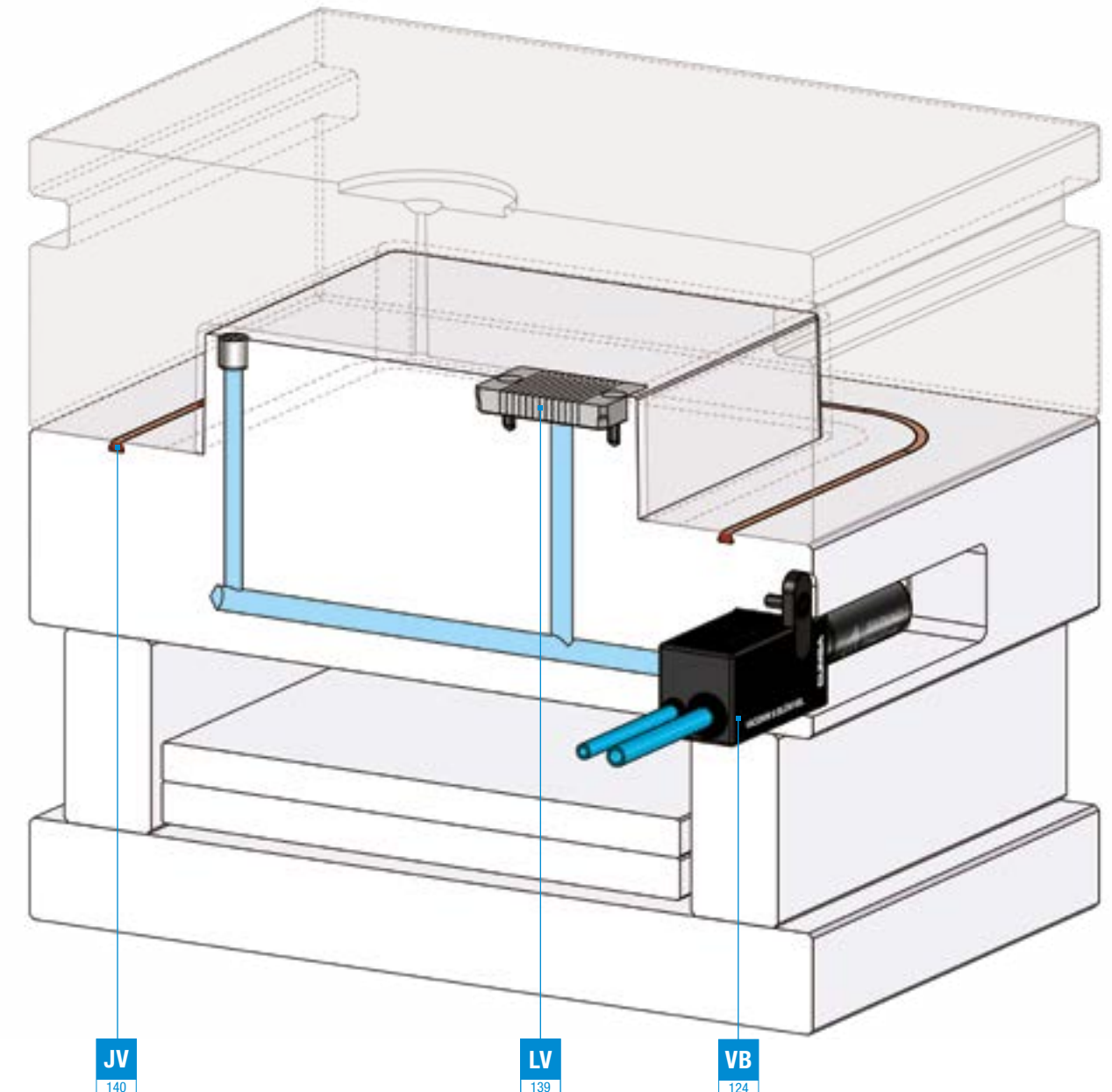
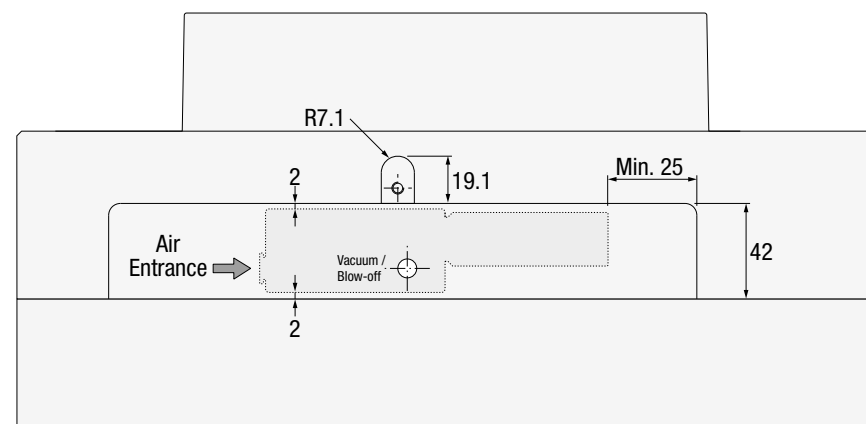


Max.
80°C



Ref.	Supply Pressure	Max. Vacuum	Max. Flow	Consumption
VB.607638	5-6 BAR	-900 mbar	75 L/ Min.	60 L/ Min.

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



SV

VACUUM

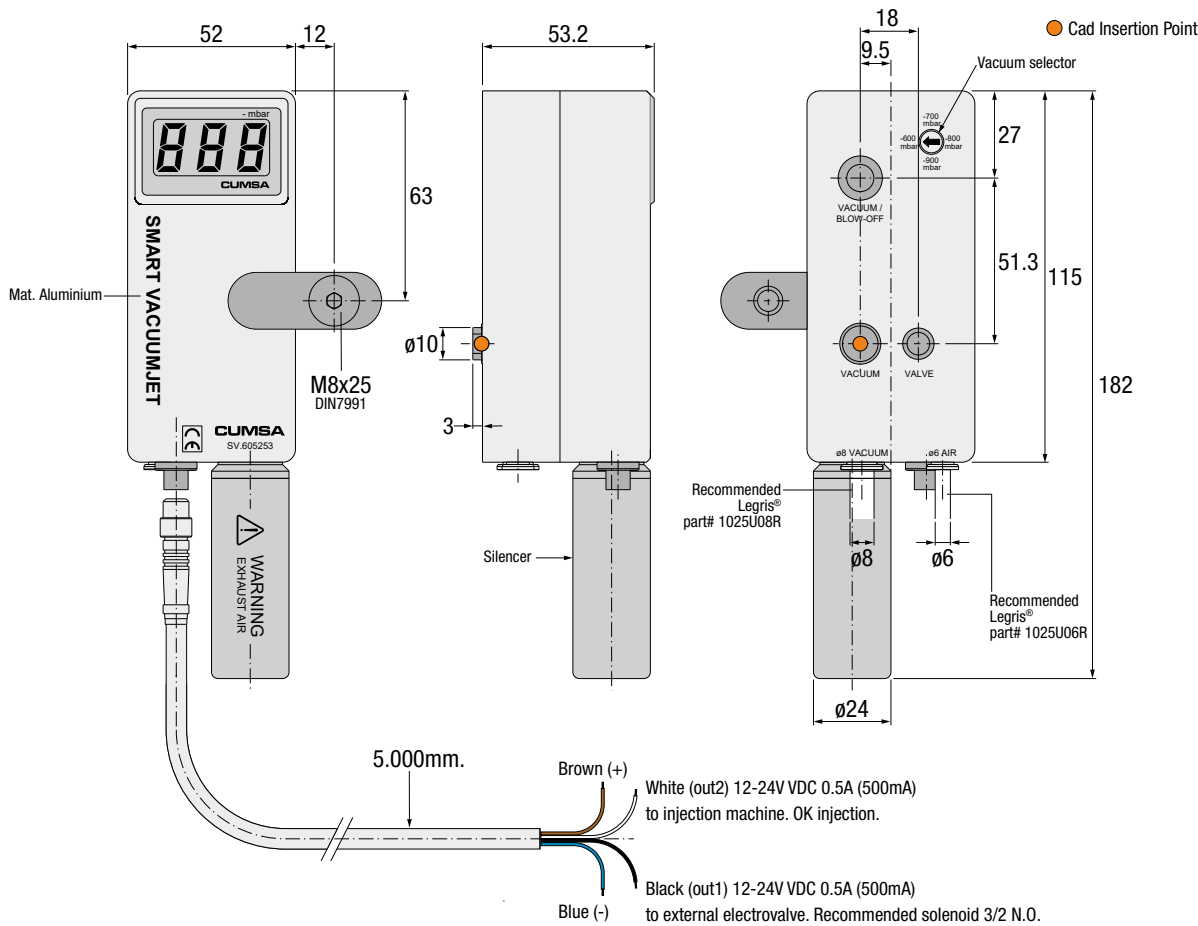


Patented

Max. 80°C

SMART VACUUMJET

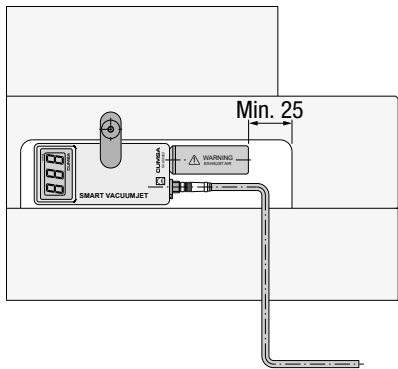
ES Vacuumjet Inteligente DE Smart Vacuumjetsystems
IT Smart Vacuumjet PT Vacuumjet Inteligente FR Vacuumjet



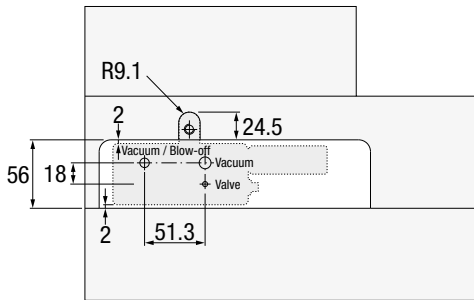
Ref.	Supply Pressure	Max. Vacuum	Max. Flow	Consumption
SV.605253	5-6 BAR	-900 mbar	75 L./ Min.	60 L./ Min.

Installation Guidelines

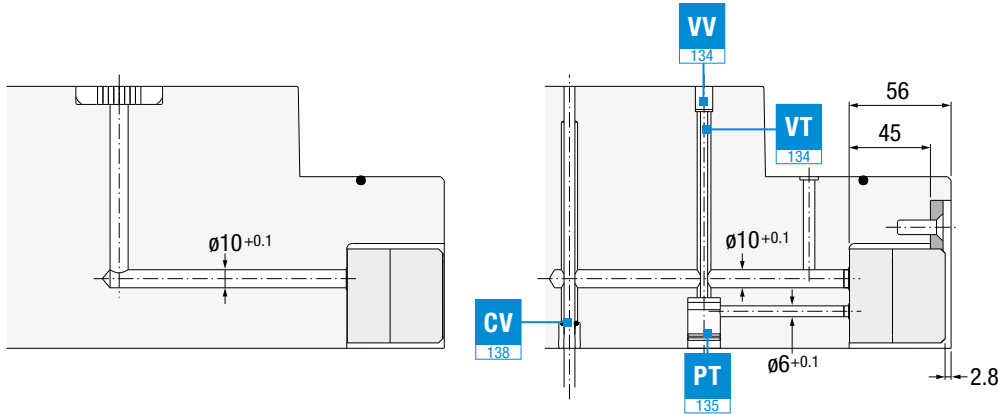
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



Vacuum / Blow-off Section



Vacuum Section



INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



SV

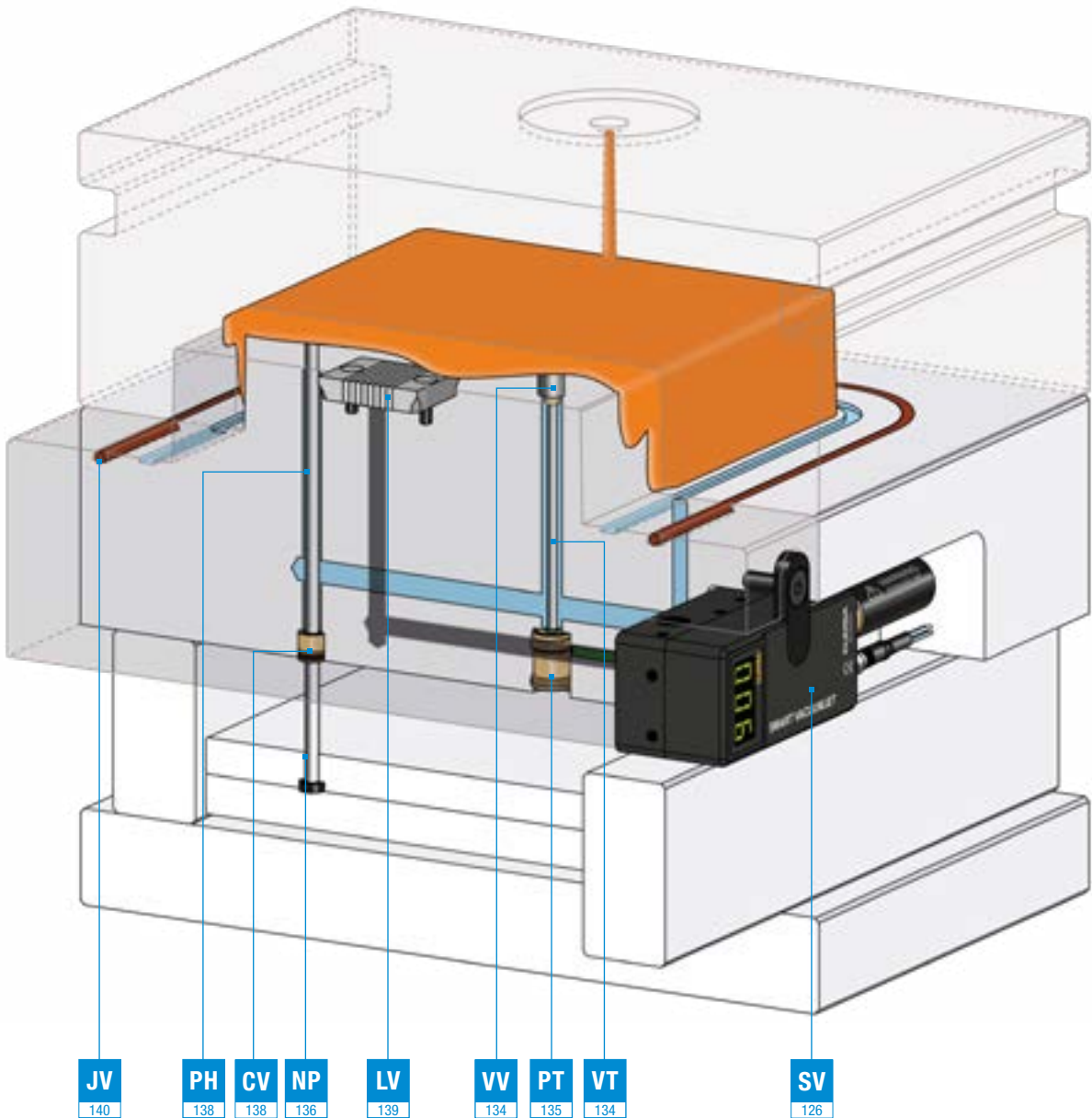
VACUUM



PLAY

Vacuum

Blow-off



VJ

VACUUM



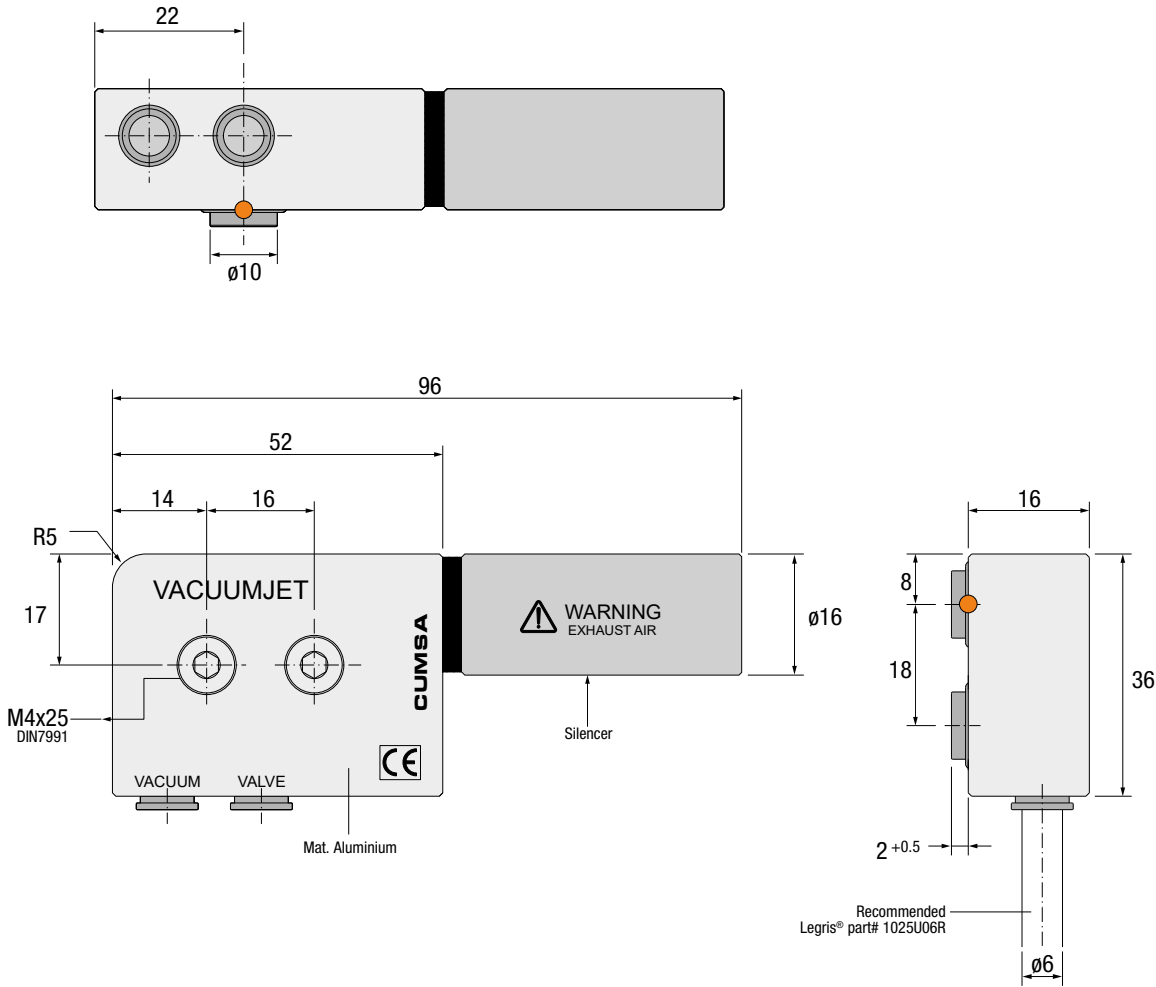
Patented

Max. 80°C

VACUUMJET UNIT

ES Unidad de Vacío (Vacuumjet) DE Vacuumjet Steuereinheit
IT Vacuumjet PT Unidade de Vácuo (Vacuumjet) FR Unité de Vide

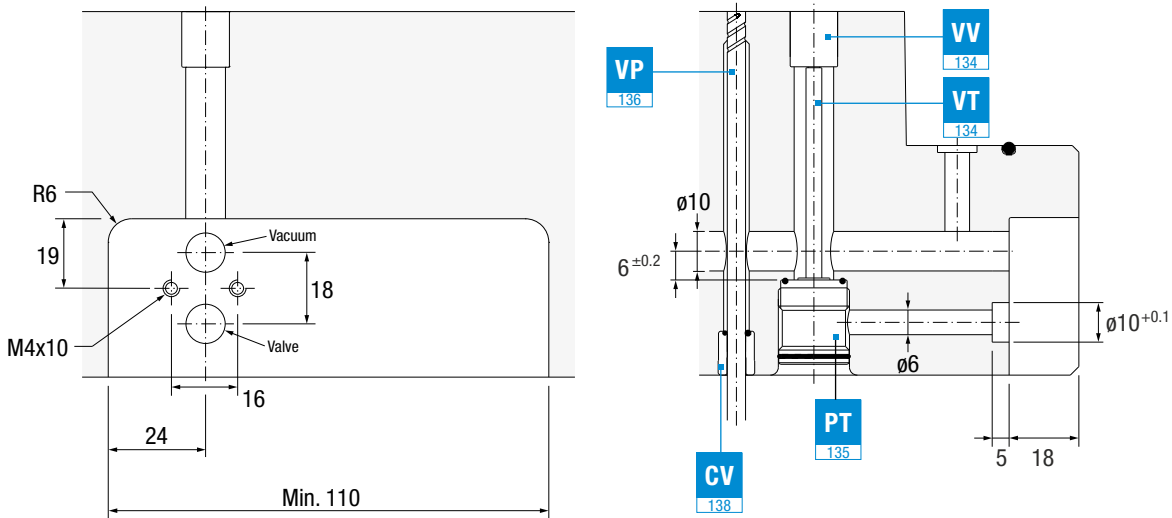
● Cad Insertion Point



Ref.	Supply Pressure	Max. Vacuum	Max. Flow	Consumption
VJ.600000	5-6 BAR	-900 mbar	75 L./ Min.	60 L./ Min.

Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



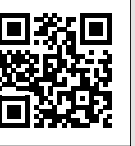
INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



VJ

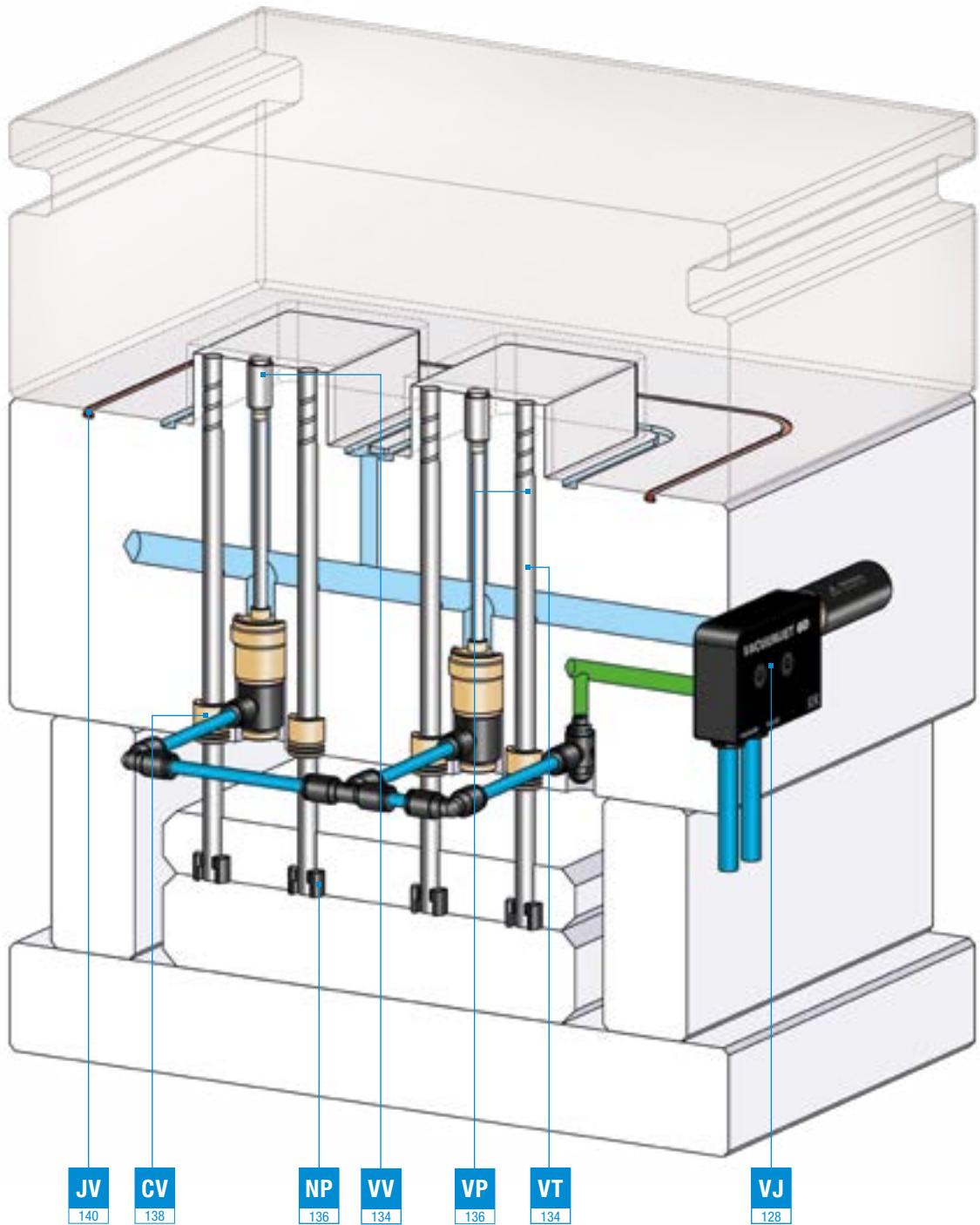
VACUUM



PLAY

Vacuum

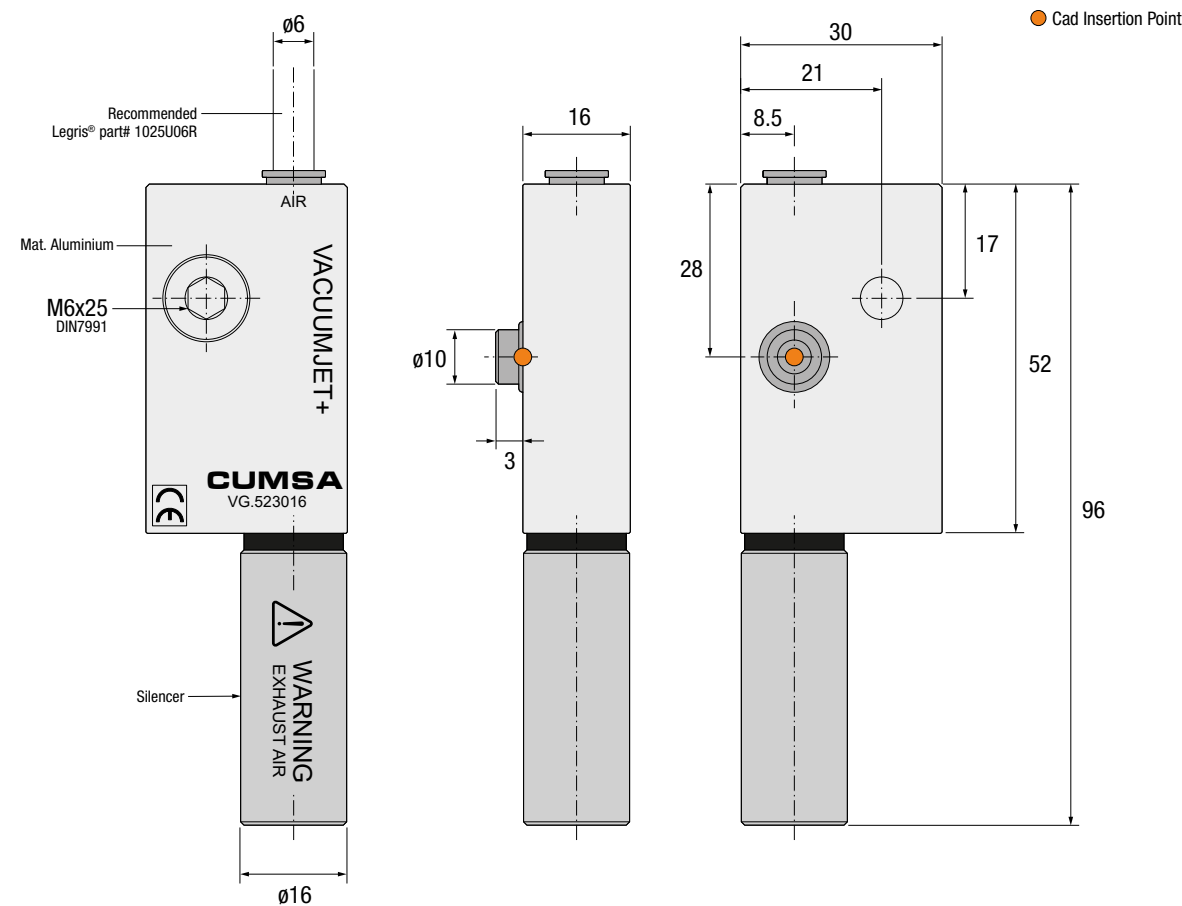
Compressed air





Patented

Max. 80°C

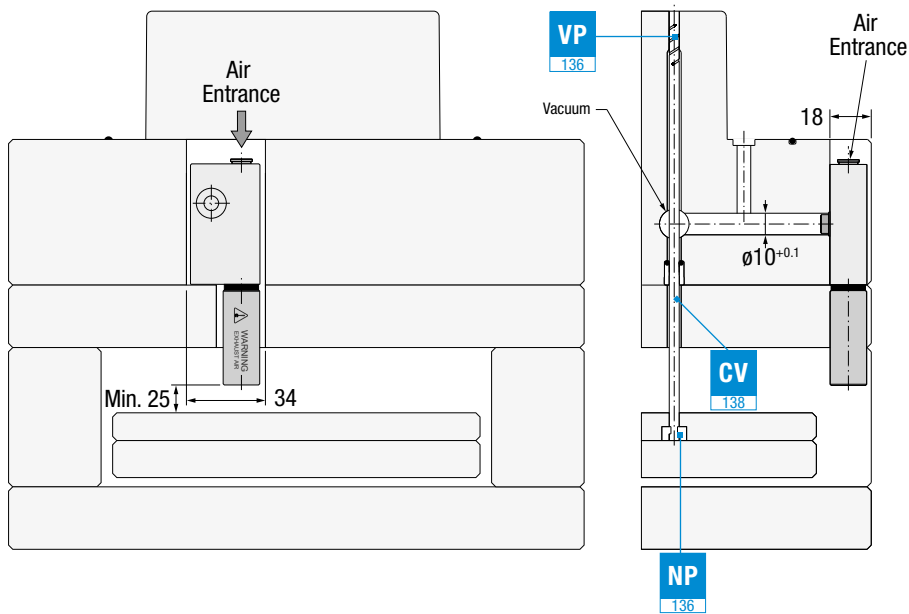


Ref.	Supply Pressure	Max. Vacuum	Max. Flow	Consumption
VG.523016	5-6 BAR	-900 mbar	75 L./ Min.	60 L./ Min.

IMPORTANT Several units can be connected together in the same Vacuum circuit.
En un solo circuito de vacío se pueden conectar varias unidades.
Mehrere Einheiten können zusammen im gleichen Vakuumkreislauf angeschlossen werden.
In un solo circuito si possono collegare diverse unità.
Em apenas um circuito de ar podemos ligar varias unidades.
Avec un seul circuit d'air nous pouvons relier plusieurs unités.

Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



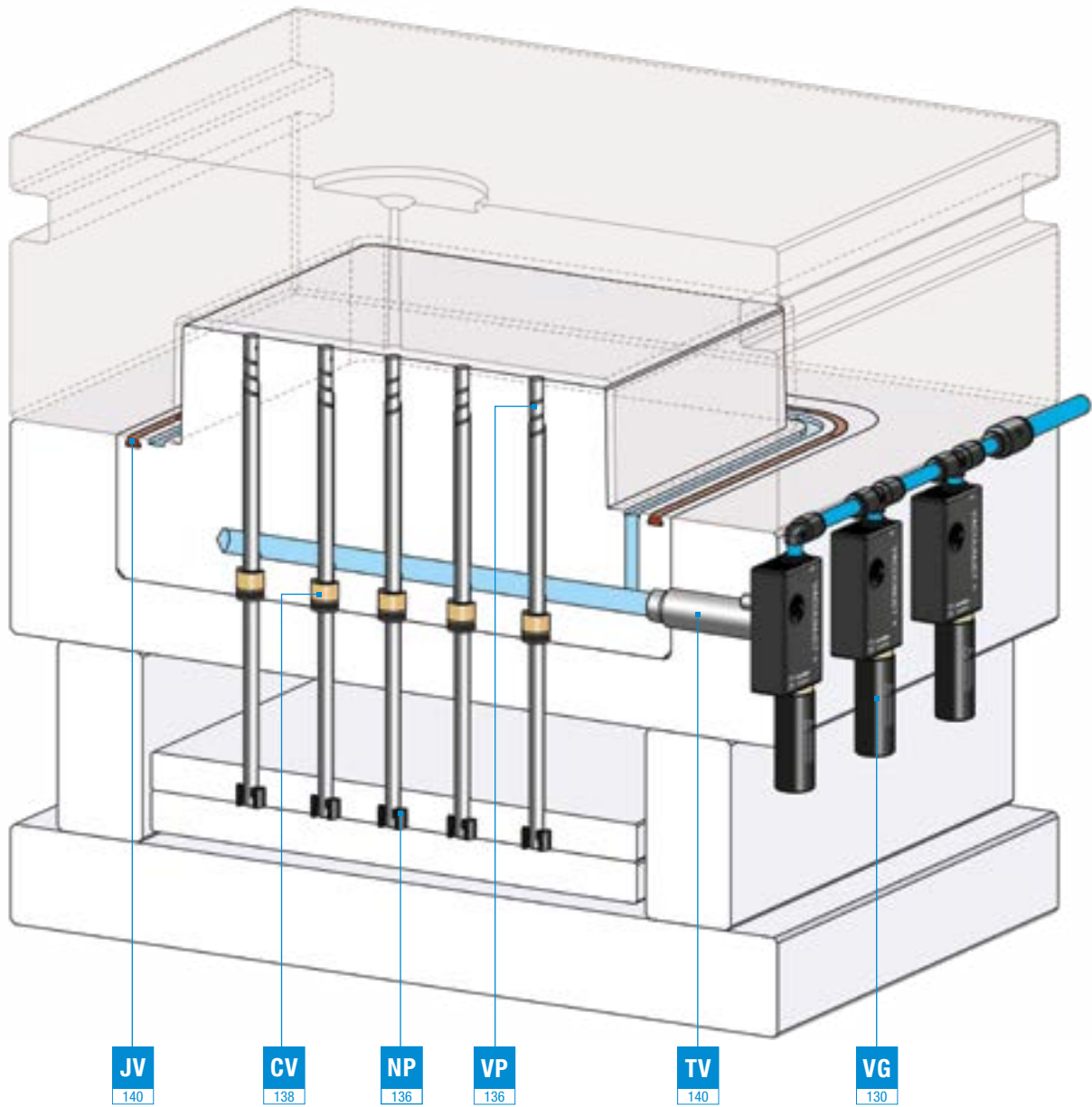
INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



PLAY

Vacuum





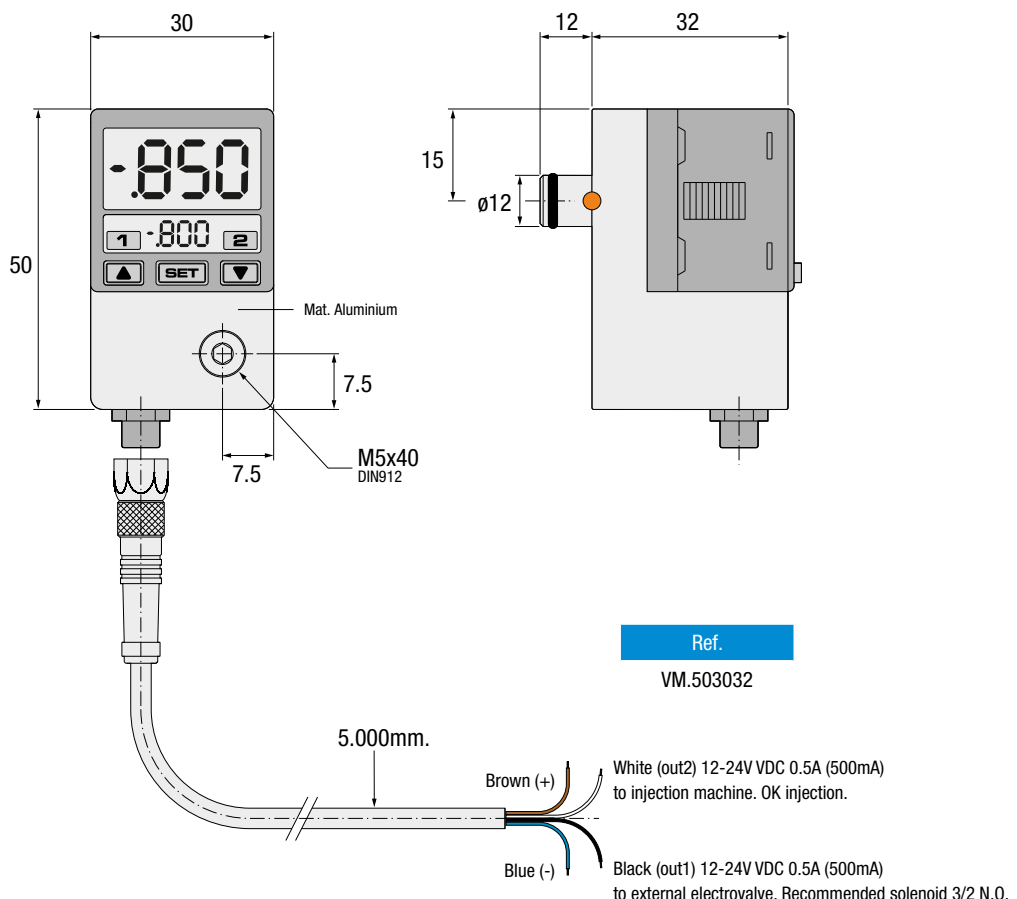
Patented

Max. 80°C

VACUUM CONTROL

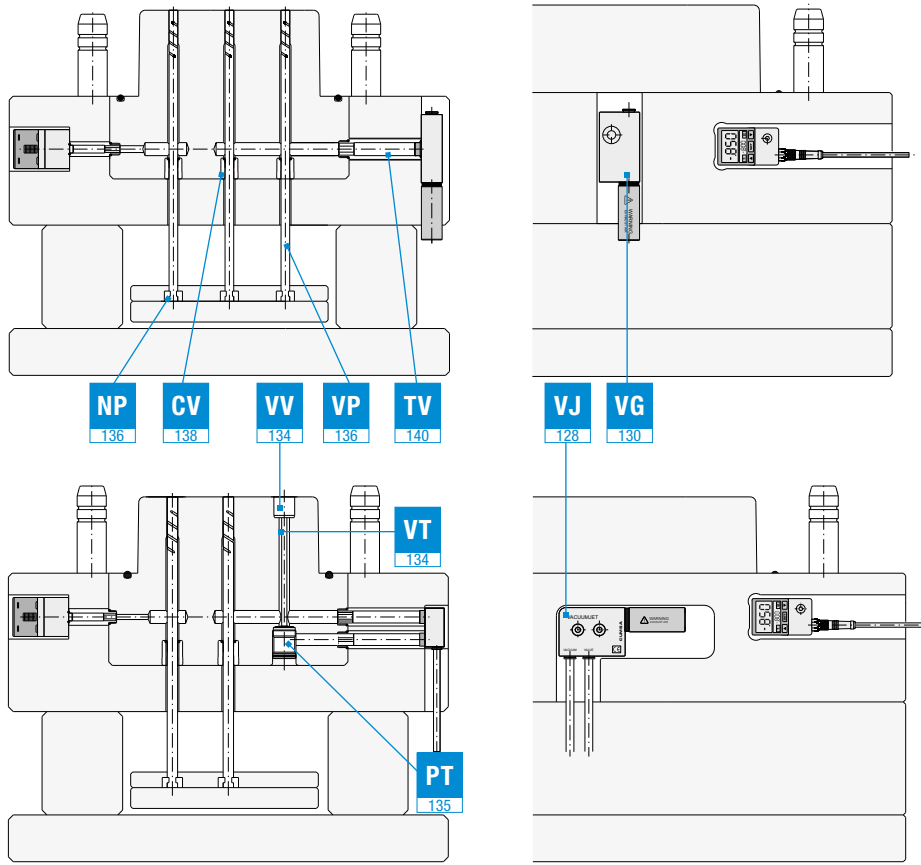
ES Controlador Vacuumjet DE Vacuum Regeleinheit
IT Unità di Controllo Vacuum PT Controlador Vacuumjet FR Contrôle Vacuumjet

● Cad Insertion Point



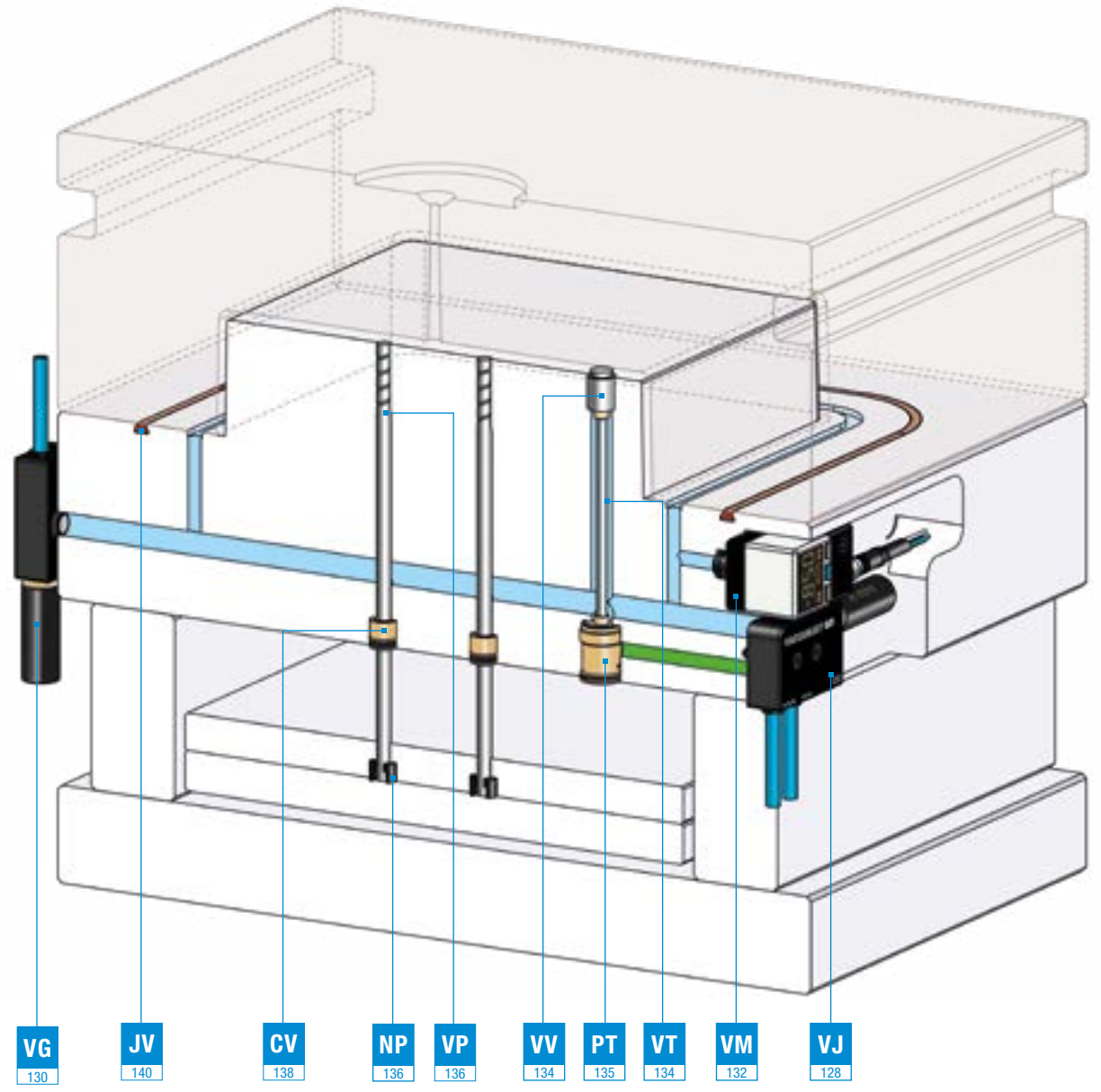
Installation Guidelines

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INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



PLAY

Vacuum

Compressed air

VV

VACUUM

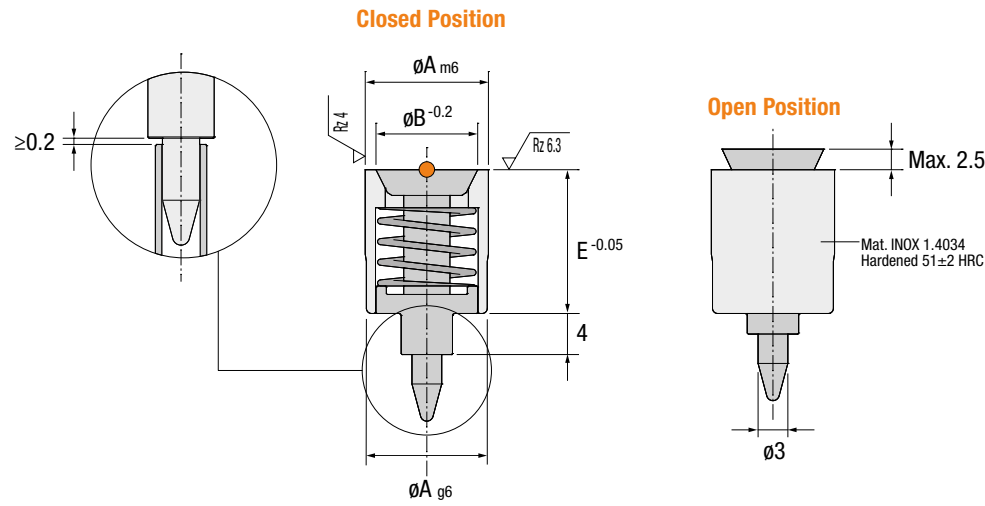


Patented
Max. 150°C



VACUUMJET VALVE
ES Válvula Vacuumjet DE Vacuumjet Ventil
IT Valvola Vacuumjet PT Válvula Vacuumjet FR Soupape Vacuumjet

Cad Insertion Point



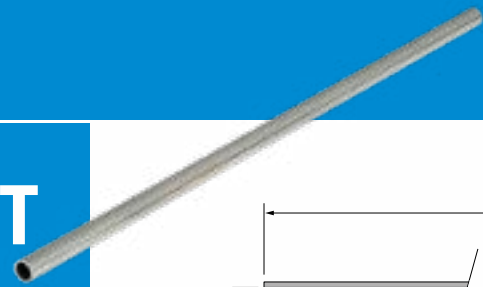
Ref.	A	B	C	D	E
VV.086414	8	6.7	10	6.5	14
VV.121014	12	9.8	10	10	14
VV.161416	16	14	10	10	16

VT

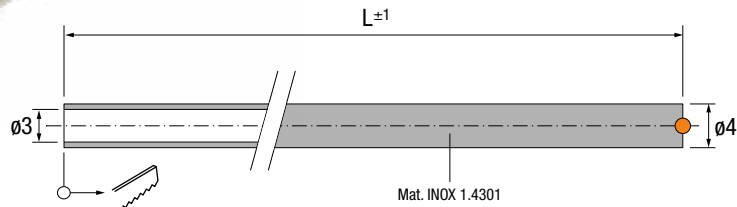
VACUUM



Patented



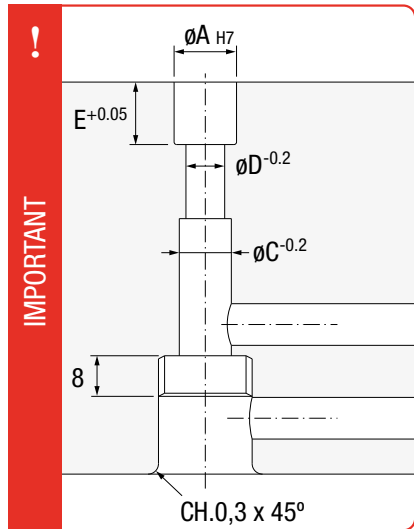
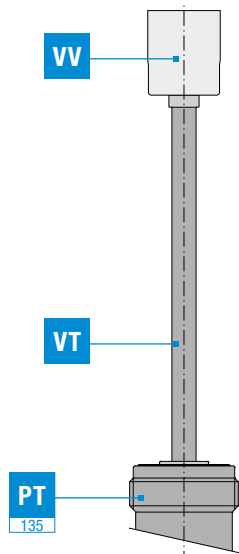
VACUUMJET VALVE TUBE
ES Tubo Válvula Vacuumjet DE Vacuumjet Ventilrohr
IT Tubo Valvola Vacuumje PT Tubo Válvula Vacuumjet FR Tube soupape Vacuumjet



Ref.	L
VT.043209	209
VT.043500	500

Installation Guidelines

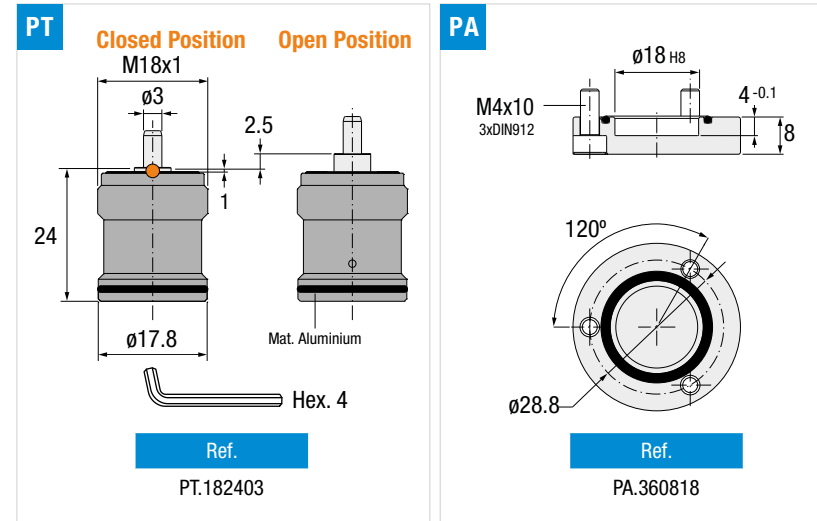
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



PNEUMATIC PISTON

ES Pistón Neumático DE Pneumatikkolben
IT Pistone Pneumatico PT Pistom Pneumático FR Piston Pneumatique

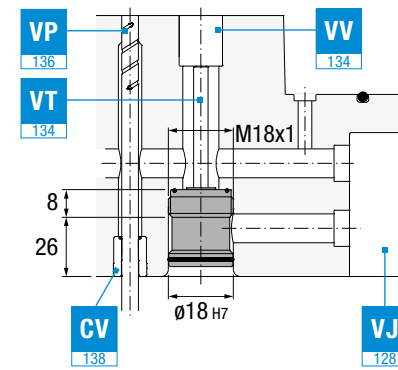
Cad Insertion Point



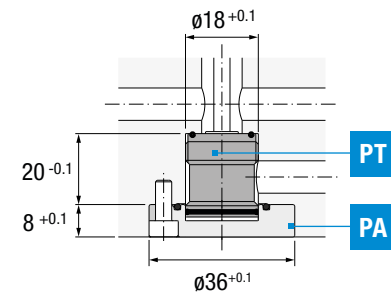
Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation

Option PT



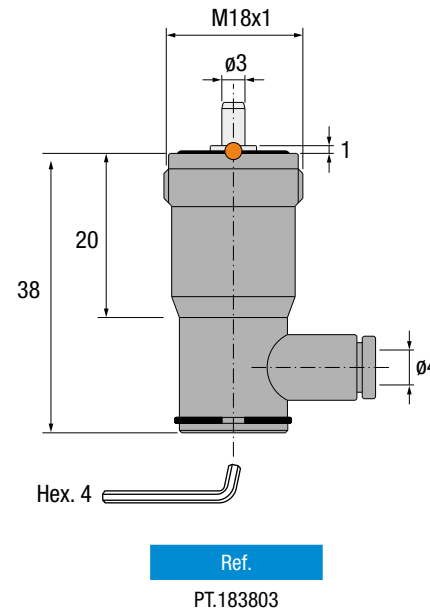
Option PT+PA



PNEUMATIC PISTON

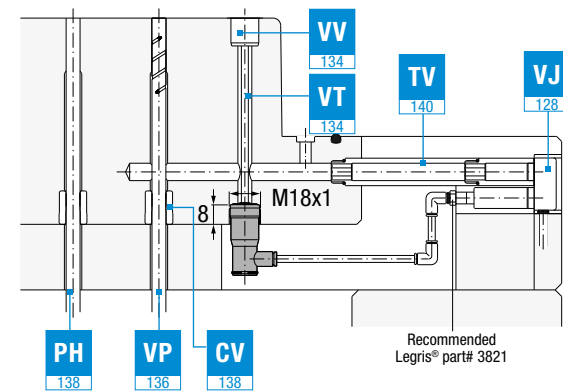
ES Pistón Neumático DE Pneumatikkolben
IT Pistone Pneumatico PT Pistom Pneumático FR Piston Pneumatique

Cad Insertion Point



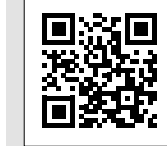
Installation Guidelines

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PT+PA

VACUUM

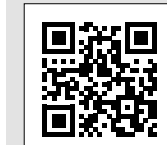


Patented
Max. 150°C



PT

VACUUM



Patented
Max. 80°C



VP

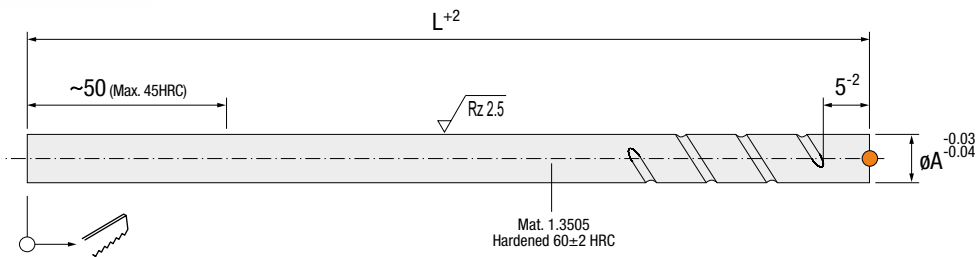
VACUUM



Patented

SPIRAL EJECTOR
ES Expulsor en Espiral DE Spiral Auswerfer
IT Espulsore con Spirale PT Extractor com Espiral FR Ejecteur avec Spiral

Cad Insertion Point

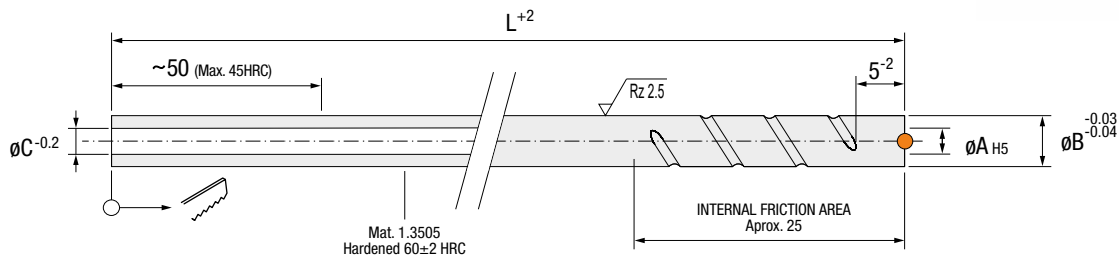


Ref.	A	L		
VP.060527-...	6	150	250	350
VP.080527-...	8	150	250	350
VP.100530-...	10	150	250	350
VP.120530-...	12	150	250	350

IMPORTANT !
Indicate the desired **L** dimension after the reference.
Indicar al final de la referencia, la cota **L** deseada.
Gewünschte Länge **L** angeben.
Indicare la quota **L** desiderata alla fine del codice.
Indique o dimensão **L** desejada depois da referência.
Préciser le début de référence et le compléter par la dimension **L** souhaitée.

SPIRAL SLEEVE
ES Tubular en Espiral DE Spiral Hülse
IT Espulsore con Spirale PT Tubular com Espiral FR Ejecteur avec Spiral

Cad Insertion Point



IMPORTANT !
Indicate the desired **L** dimension after the reference.
Indicar al final de la referencia, la cota **L** deseada.
Gewünschte Länge **L** angeben.
Indicare la quota **L** desiderata alla fine del codice.
Indique o dimensão **L** desejada depois da referência.
Préciser le début de référence et le compléter par la dimension **L** souhaitée.

Ref.	A	B	C	L		
VS.030060-...	3	6	3.2	150	250	350
VS.050080-...	5	8	5.2	150	250	350
VS.060100-...	6	10	6.2	150	250	350
VS.080120-...	8	12	8.2	150	250	350

VS

VACUUM



Patented

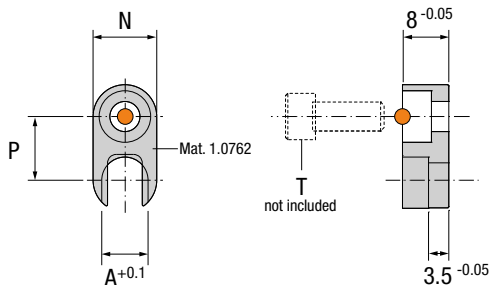
NP

VACUUM



NON-ROTATING HEAD FOR EJECTOR PINS
ES Base Anti-Rotación para Expulsores DE Verdrehgesicherter Kopf
IT Base Anti-Giro per Espulsori PT Cabeça Anti-Rotativa FR Embasses Anti-Rotation pour Éjecteurs

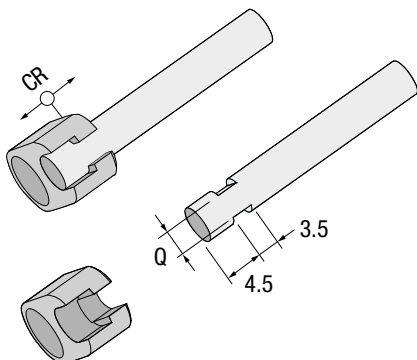
Cad Insertion Point



Ref.	A	N	P	Q	T	CR(N)
NP.030908	3.2	9	8	2	M4	4.000
NP.050908	5.2	9	8	3.5	M4	8.000
NP.061108	6.2	11	11	4	M5	9.000
NP.081108	8.1	11	11	5.5	M5	12.000

Installation Guidelines

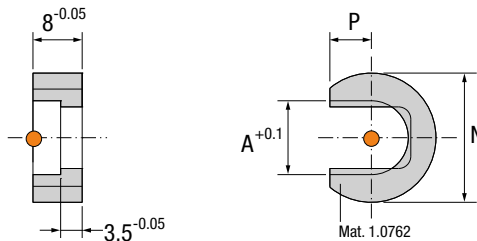
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



KEYED TUBULAR BASE
ES Base Anti-Rotación para Tubulares DE Hülsenaufnahme Verdreh Gesichert
IT Base anti-Giro per Cannocchiali PT Base Anti-Rotação para Tubulares FR Embasses Anti-Rotation pour Tubulaires

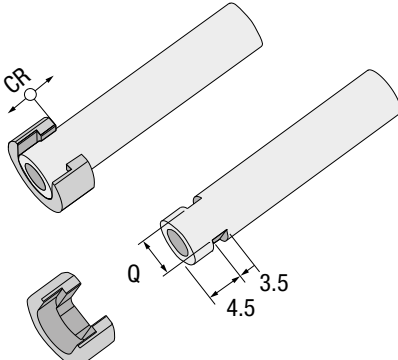
Cad Insertion Point

Ref.	A	N	P	Q	CR (N)
NR.061208	6.1	12	4	4	8.000
NR.081408	8.1	14	4.5	5.5	11.000
NR.101608	10.1	16	5.5	7.5	13.000
NR.122008	12.1	20	6.5	9.5	16.000



Installation Guidelines

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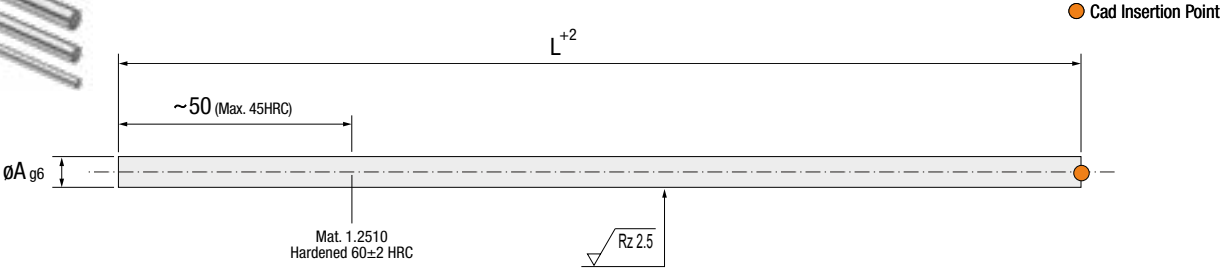
NR

VACUUM



PH

VACUUM

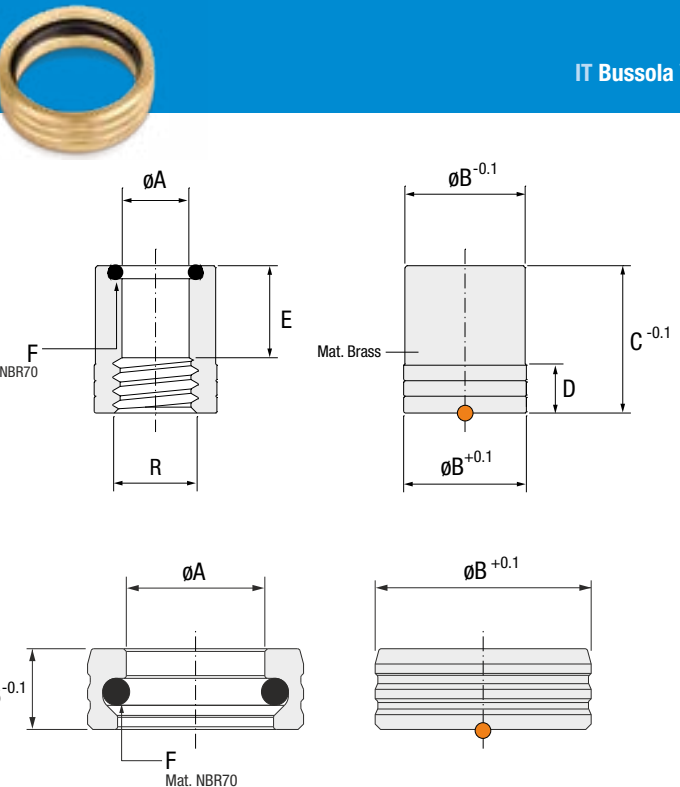


Ref.	A	L
PH.130000-...	3	250 330 500
PH.150000-...	5	250 330 500
PH.160000-...	6	250 330 500
PH.180000-...	8	250 330 500

IMPORTANT !
Indicate the desired **L** dimension after the reference.
Indicar al final de la referencia, la cota **L** deseada.
Gewünschte Länge **L** angeben.
Indicare la quota **L** desiderata alla fine del codice.
Indique o dimensão **L** desejada depois da referência.
Préciser le début de référence et le compléter par la dimension **L** souhaitée.

CV

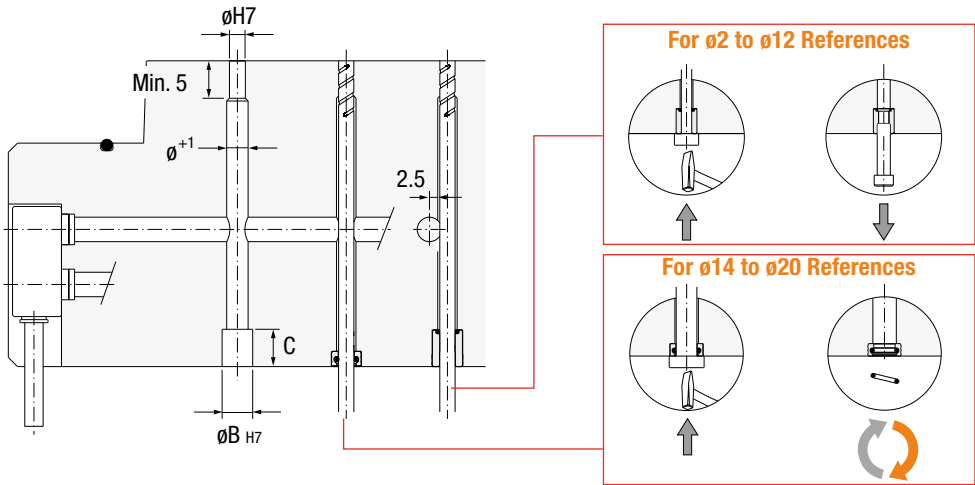
VACUUM



Ref.	A	B	C	D	E	F	R
CV.020812	2	8	12	4.5	8	2x1.5	M3
CV.030812	3	8	12	4.5	8	3x1.5	M4
CV.041012	4	10	12	4.5	8	4x1.5	M5
CV.051012	5	10	12	4.5	8	5x1.5	M6
CV.061212	6	12	12	4.5	8	6x1.5	M8
CV.081416	8	14	16	7	10	8x2	M10
CV.101616	10	16	16	7	10	10x2	M12
CV.121816	12	18	16	7	10	12x2	1/4 GAS

Ref.	A	B	F
CV.142006	14	20	14x2
CV.162206	16	22	16x2
CV.202606	20	26	20x2

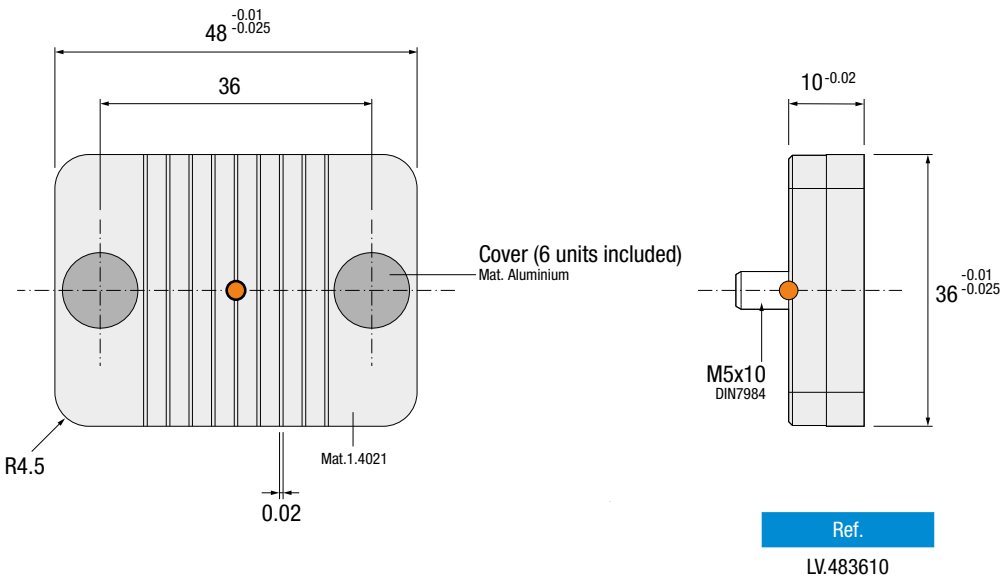
Installation Guidelines
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



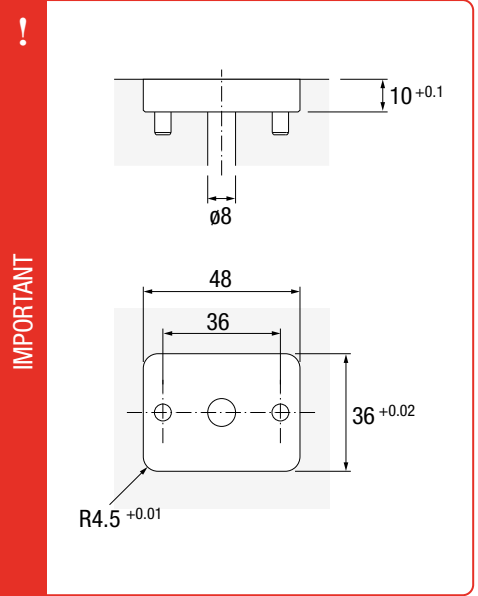
LAMINAR GAS VENT

ES Salida de Gases Laminar DE Laminargasventil
IT Uscita dei Gas Laminare PT Postiço de Ventilação Laminar FR Eventation Laminaire

Cad Insertion Point



Installation Guidelines
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



LV

VACUUM

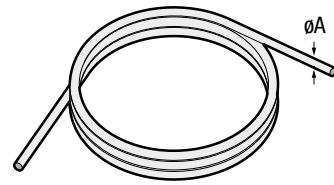


**ES Sello Vacuumjet DE Vacuumjet Dichtschnur
IT Guarnizione Vacuumjet PT Vedante Vacuumjet FR Joint Vacuumjet**

JV

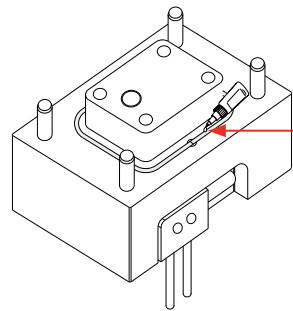


Max.
200°C



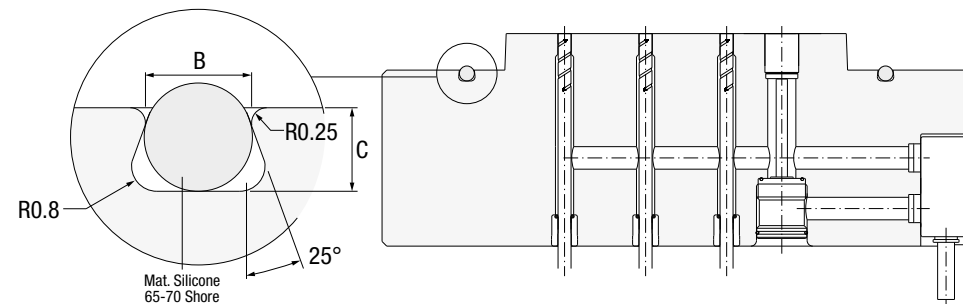
Ref.	A	B	C	mm
JV.030200	3	2.2	2.7	2.000
JV.050200	5	3.8	4.2	2.000

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



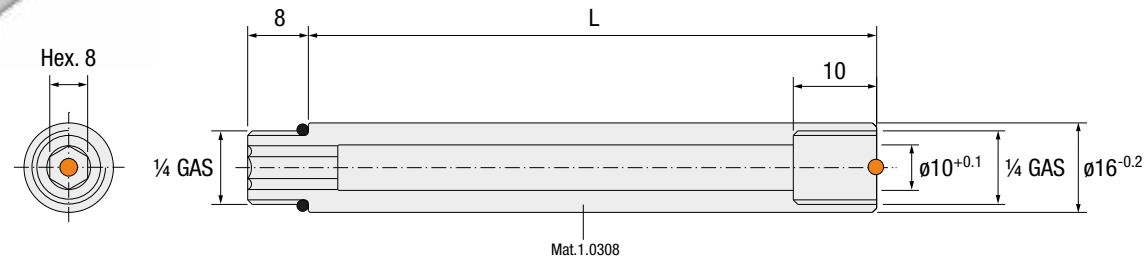
IMPORTANT •

Ensure joint is sealed using silicon.
 Sellar con silicona la entrada de herramienta.
 Dichtschnur an den Enden mit Silikon verkleben.
 Sigillare con silicone l'entrata dell'utensile.
 Vedar a linha de junta.
 Coller ensemble les extrémités du joint.



ES Tubo Conexión **DE** Verbindungsrohr
IT Tubo connessione **PT** Tubo de Ligação **FR** Tube de connexion

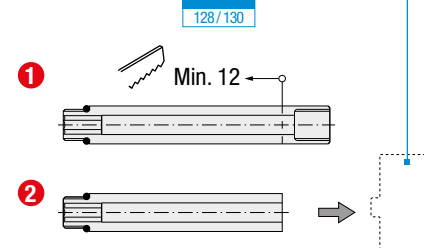
TV



Ref.	B	L
TV.141650	16	50
TV.141675	16	75

IMPORTANT !

Connection to





6

ACCESSORIES

ACCESSORIES INDEX

ÍNDICE ACCESORIOS / INHALTSVERZEICHNIS ZUBEHÖR
INDICE ACCESSORI / ÍNDICE ACESSÓRIOS / INDEX ACCESSOIRES

146/

VA

Air Valve
Válvula Aire
Luftventil
Valvola Aria
Válvula de Ar
Soupape à Air



146/

FV

Filter Valve
Filtro Válvula
Filterventil
Filtro Valvola
Válvula Filtro
Soupape à Filtre



147/

VH

High Pressure Air Valve
Válvula de Aire para Alta Presión
Luftventil für Hochdruck
Valvola d'Aria per Alte Pressioni
Válvula de Ar para Alta Pressão
Soupape à Air Pour Haute Pression



148/

VD

Double Valve
Válvula Doble
Ventil, Doppelt Wirkend
Valvola Doppia
Válvula Dupla
Double Valve



149/

SA

Sprue Adjuster
Desvío Colada
Angussweiche
Deviazione Colata
Desvio Jito
Régleurs de Carotte



150/

UM

Marking Unit
Unidad de Marcado
Prägestempel
Unità di Marcatura
Unidade de Marcação
Unité de marquage



150/

RR

Interchangeable Wheel
Rueda Recambio
Austauschbare Prägeräder
Ruota di Ricambio
Roda de Substituição
Rondelle de Remplacement



151/

TH

Extension Tube
Tubo Hembra
Verlängerungsrohr
Tubo Prolunga
Tubo de Extensão
Tube à Version



151/

TO

Water Plug for Insert Faces
Tapón Obturador
Verschlussstopfen
Tappo Otturatore
Tampão para Zonas Moldantes
Bouchon Obturateur



152/

BR

Water Connector
Boquilla Refrigeración
Anschlussstück
Bussola Refrigerazione
Record
Raccord de Refroidissement



152/

RL

Cooling Connector
Conector Refrigeración
Kühlung Kupplungsstück
Attacco Refrigerazione
Conector de Refrigeração
Connexion de Refroidissement



153/

JR

Seal Bearing
Junta Rotativa
Dichtring
Alimentatore Rotativa
Junta Rotativa
Fontaine Rotative



154/

SB

Seal Bearing
Junta Rotativa
Dichtscheibe
Guarnizione Rotativa
Junta Rotativa
Joint Rotatif



155/

TB

Seal Bearing Tube
Tubo Junta Rotativa
Dichtscheibenrohr
Tubo Alimentatore
Rotativo Tubo Alimentatore Rotativo
Tube Joint Rotatif



155/

TL

Brass Pipe
Tubo Laminado
Messingrohr
Tubo Laminato
Tubo Laminado
Tube Standard



156/

PI

Identification Plate
Placa Identificación
Typenschild
Piastra Identificazione
Placa de Identificação
Plaque d'Identification



157/

CP

Color Plate
Placa a Color
Farbige Platten
Piastra a Colori
Placa a Cores
Plaq. Selon Couleur



158/

SC

Cable Retainer
Sujeta Cables
Kabelhalter
Piastrina di Cablaggio
Retensor de Cabos
Plaque Blocage Cable



158/

SM

Hose Retainer
Sujeta Tubos
Schlauchhalter
Ferma Cavi
Retensor de Mangueira
Retenu de Tuyau



VA

ACCESSORIES



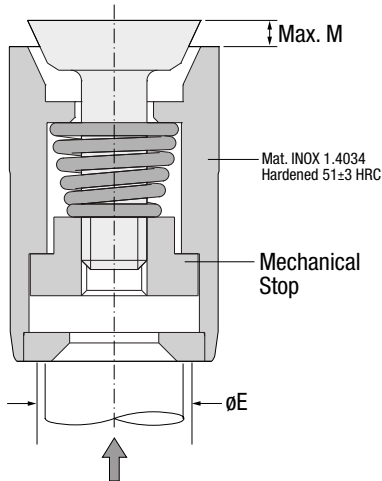
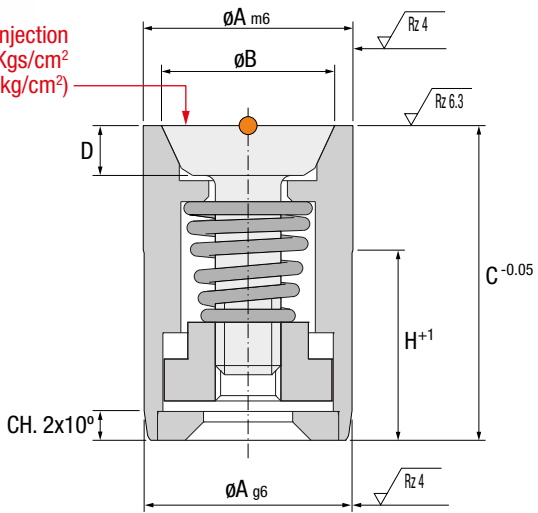
Max. 150°C
Min. 3 BARS

AIR VALVE

ES Válvula Aire DE Luftventil
IT Valvola Aria PT Válvula de Ar FR Soupape à Air

● Cad Insertion Point

Maximum Injection Pressure: 1200 Kgs/cm² (1BAR ~ 1kg/cm²)



Ref.	A	B	C	D	E	H	M
VA.050412	5	3.4	12	2.1	4	7	2.5
VA.065212	6	5.2	12	1.8	4	7	0.95
VA.086512	8	6.6	12	1.9	4	7	0.95
VA.100812	10	8.2	12	2.7	8	7	0.95
VA.121012	12	9.7	12	2.7	10	7	0.95
VA.161320	16	12.6	20	4	12	12	1.55
VA.201720	20	16.9	20	4	16	12	1.55

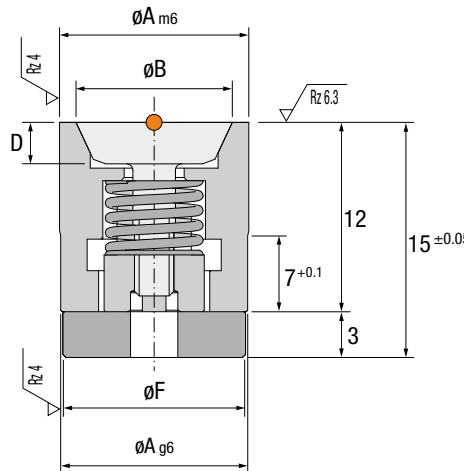
IMPORTANT !
Reference VA.050412, do not include mechanical stop.
La referencia VA.050412, no incluye tope mecánico.
Referenz VA.050412 ohne mechanischen Anschlag.
L'articolo VA050412 non include freno meccanico.
A referencia VA.050412 não tem batente mecânico.
La référence VA.050412 n'inclut pas la butée mécanique.

HIGH PRESSURE AIR VALVE

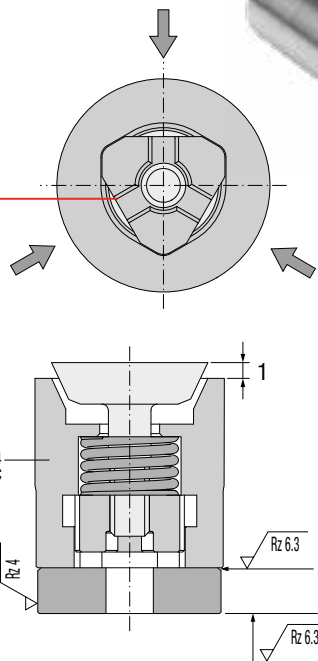
ES Válvula de Aire para Alta Presión DE Luftventil für Hochdruck
IT Valvola d'Aria per Alte Pressioni PT Válvula de Ar para Alta Pressão FR Soupape à Air Pour Haute Pression

● Cad Insertion Point

IMPORTANT !
Triple air entrance to ensure balanced opening.
Triple entrada de aire para asegurar una apertura equilibrada.
Dreifacher Lufteinlaß um ein ausgeglichene Öffnung sicherzustellen.
L'ingresso dell'aria è triplo per assicurare un'apertura equilibrata.
Tripla entrada de ar para uma abertura equilibrada.
Triple entrée d'air pour une ouverture équilibrée.



Ref.	A	B	D	E	F	H
VH.065215	6	5.4	1.9	4	5.8	0.25
VH.086515	8	6.7	2	5	7.8	0.75
VH.121015	12	9.7	2.7	5	11.8	1



VH

ACCESSORIES



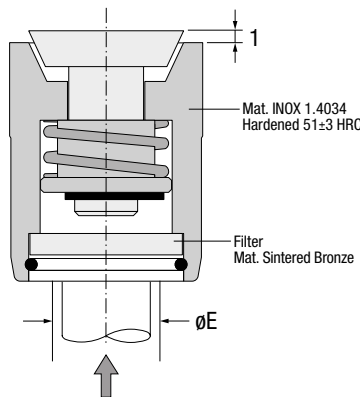
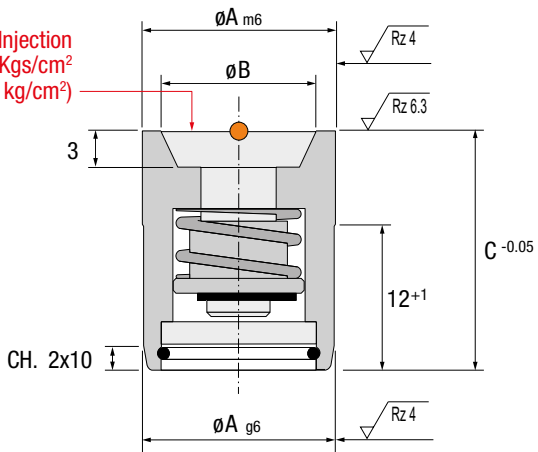
Max. 150°C
Min. 2 BARS
Max. 10 BARS

FILTER VALVE

ES Filtro Válvula DE Filterventil
IT Filtro Valvola PT Válvula Filtro FR Soupape à Filtre

● Cad Insertion Point

Maximum Injection Pressure: 1200 Kgs/cm² (1BAR ~ 1kg/cm²)

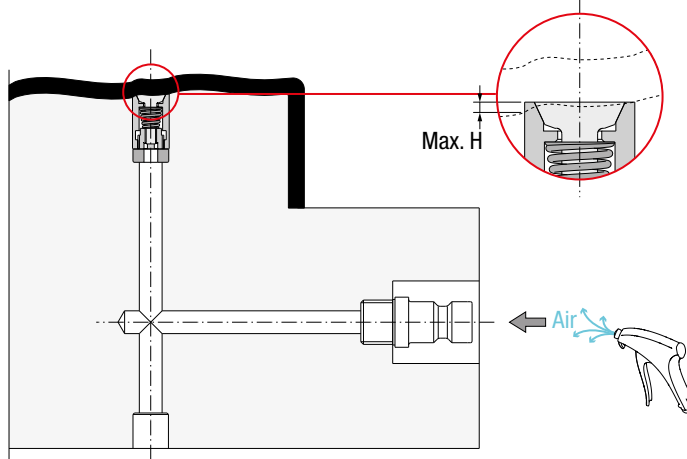
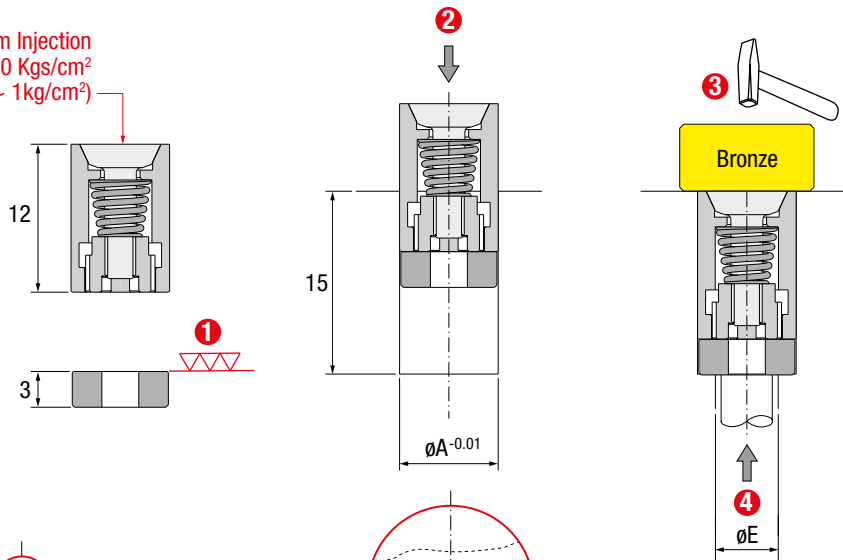


Ref.	A	B	C	E
FV.161320	16	13	20	14
FV.201720	20	17	20	18

Installation Guidelines

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Maximum Injection Pressure: 2500 Kgs/cm² (1BAR ~ 1kg/cm²)



IMPORTANT !
Maximum machining allowed.
Medida máxima de mecanizado.
Maximale Bearbeitung erlaubt.
Quota massima di lavorazione.
Medida máxima a maquinar.
Valeur maximum d'usinage.

VD

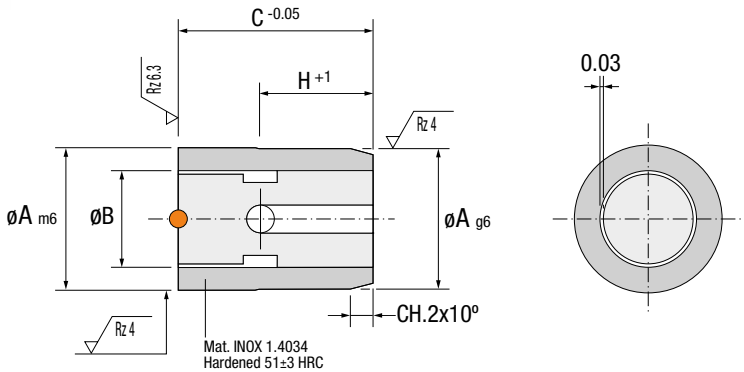
ACCESSORIES



DOUBLE VALVE

ES Válvula Doble DE Ventil, doppelt wirkend
IT Valvola DoppiaPT Válvula Dupla FR Double Valve

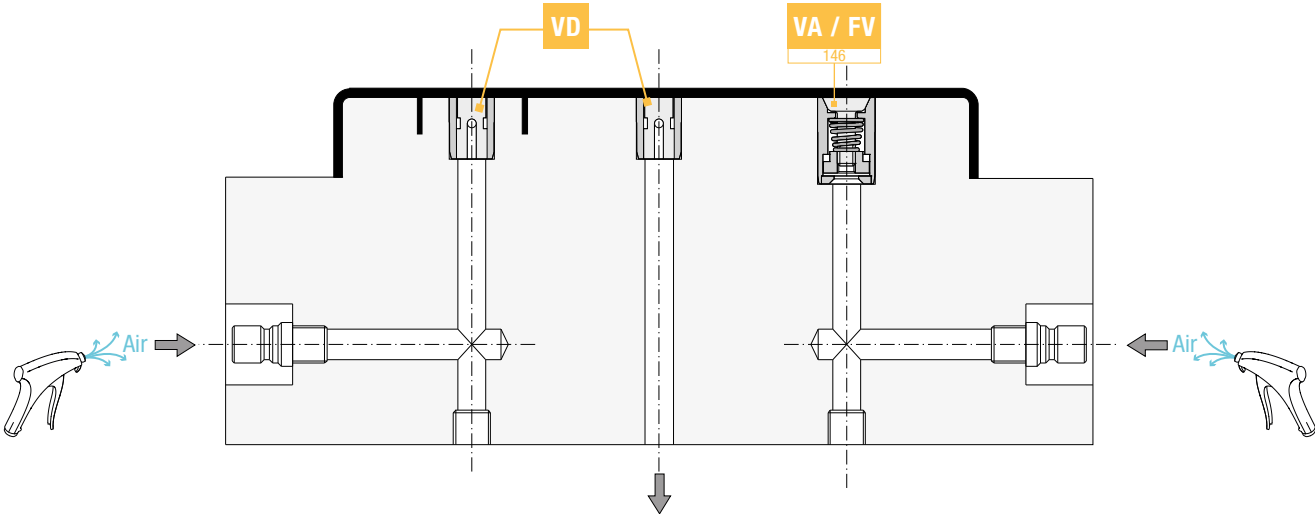
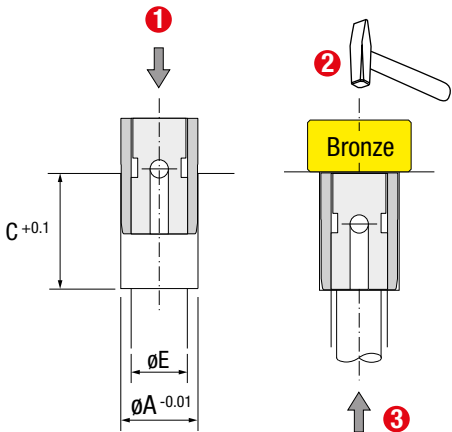
● Cad Insertion Point



Ref.	A	B	C	E	H
VD.080512	8	5	12	4	7
VD.100612	10	6	12	5	7
VD.120812	12	8	12	7	7
VD.161020	16	10	20	9	12

Installation Guidelines

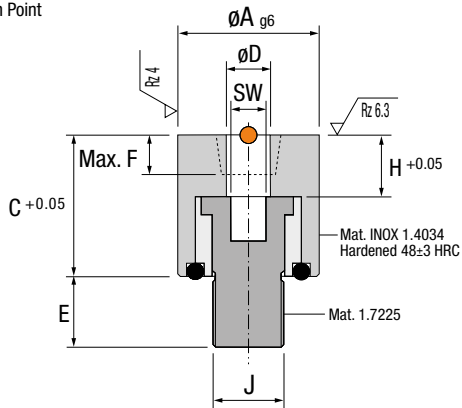
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



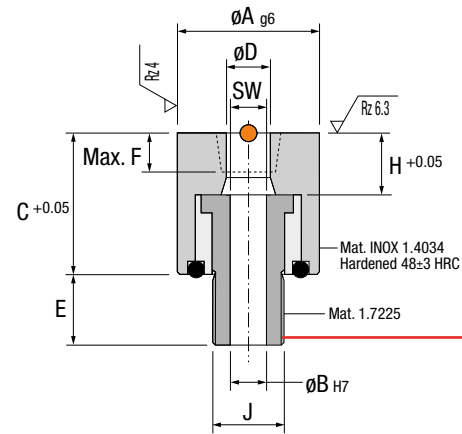
SPRUE ADJUSTER

ES Desvío Colada DE Angussweiche
IT Deviazione Colata PT Desvio Jito FR Régleurs de Carotte

● Cad Insertion Point



Ref.	A	C	D	E	F	H	J	SW
SA.120014	12	14	4.1	6	3	5	M6	3
SA.160016	16	16	5.1	8	5	7	M8	4
SA.200018	20	18	6.1	10	6	9	M10	5
SA.240022	24	22	9.5	12	10	14.5	M14	8



Ref.	A	B	C	D	E	F	H	J	SW
SA.120314	12	3	14	4.1	6	3	5	M6	3
SA.160416	16	4	16	5.1	8	5	7	M8	4
SA.200518	20	5	18	6.1	10	6	9	M10	5
SA.240822	24	8	22	9.5	12	10	14.5	M14	8

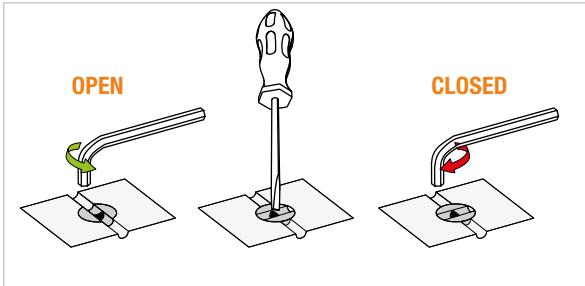
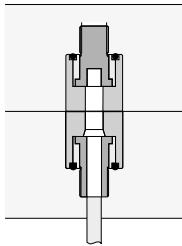
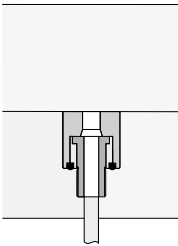
IMPORTANT !
With ejector bore.
Con alojamiento para expulsor.
Mit Auswerferbohrung.
Con alloggiamento per espulsore.
Com alojamento para extractor.
Avec placement pour l'éjecteur.

Installation Guidelines

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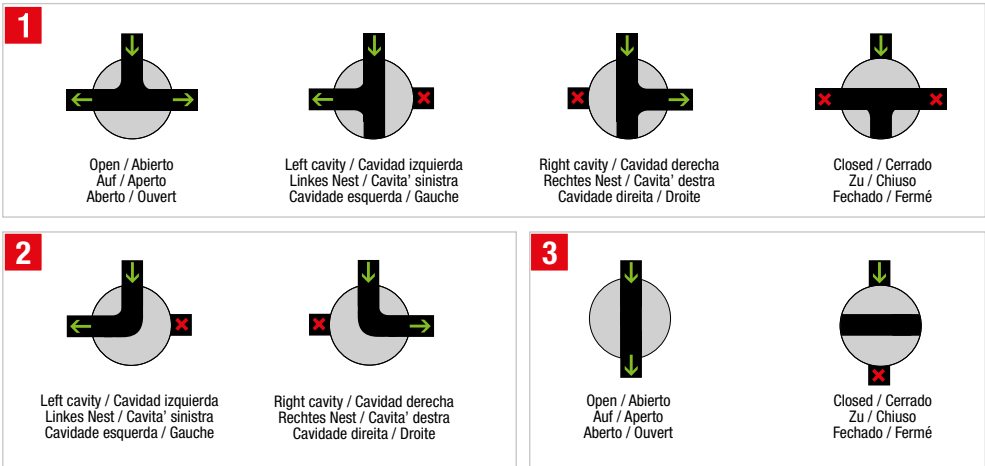
Trapezoidal runner

Full round runner



Possible configurations

Posibles Aplicaciones · Einsatzmöglichkeiten · Possibili Applicazioni · Possíveis Aplicações · Possibilités d'Application



SA

ACCESSORIES



Patented

Max. 100°C



UM

ACCESSORIES

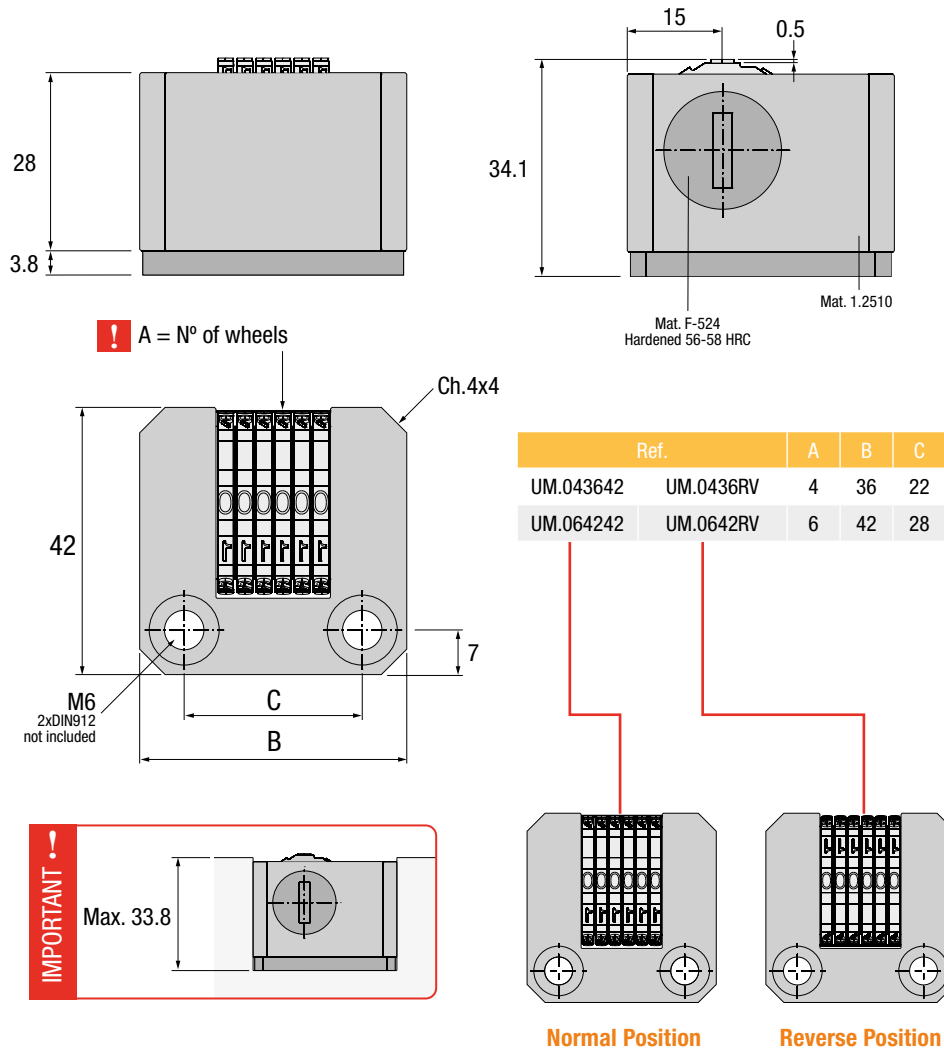


Patented



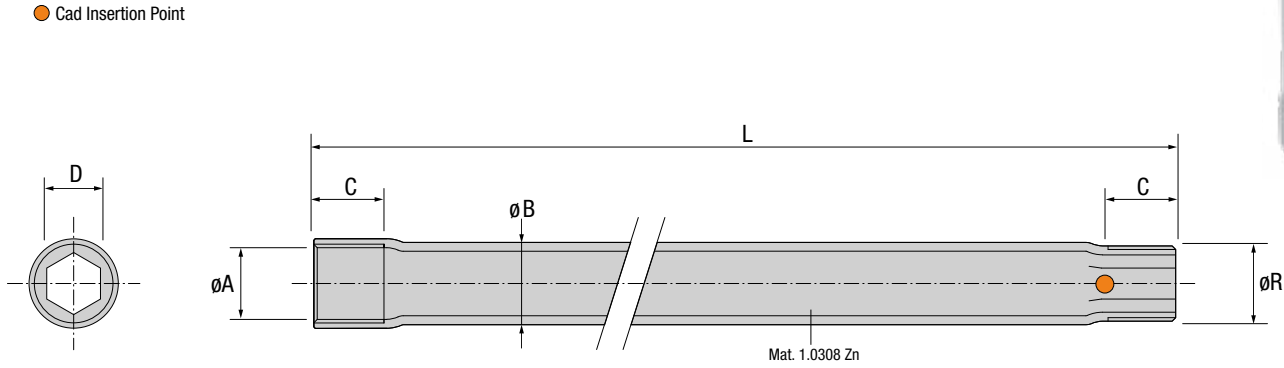
MARKING UNIT

ES Unidad de Marcado DE Prägestempel
IT Unità di Marcatura PT Unidade de Marcação FR Unité de Marquage



EXTENSION TUBE

ES Tubo Hembra DE Verlängerungsrohr
IT Tubo Prolunga PT Tubo de Extensão FR Tube à Version



IMPORTANT !

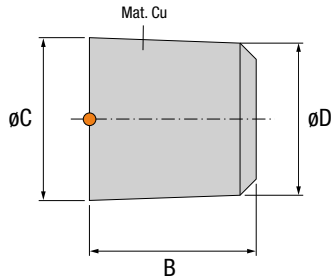
Indicate the desired **L** dimension after the reference.
Indicar la cota **L** necesaria después de la referencia.
Gewünschte Länge **L** angeben.
Indicare la quota **L** desiderata dopo il codice.
Indique a dimensão **L** desejada depois da referência.
Indiquer longueur (**L**) désirée après référence.

Ref.	A	B	C	D	R	L				
TH.181005-...	1/8"	10	9.5	5	1/8"	50	75	100	125	-
TH.141408-...	1/4"	14	11.5	8	1/4"	50	75	100	125	150

WATER PLUG FOR INSERT FACES

ES Tapón Obturador DE Verschlussstopfen
IT Tappo Otturatore PT Tampão para Zonas Moldantes FR Bouchon Obturateur

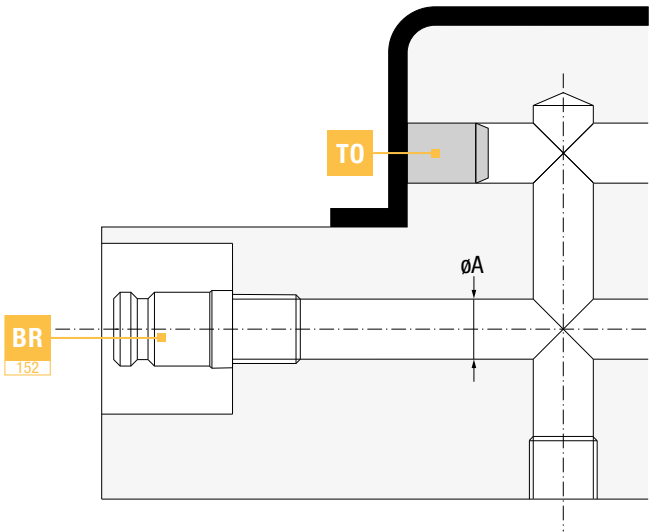
Cad Insertion Point



Ref.	A	B	C	D
T0.061063	6	10	6.3	5.9
T0.081284	8	12	8.4	7.9
T0.101410	10	14	10.5	9.9
T0.151615	15	16	15.5	14.9

Installation Guidelines

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RR

ACCESSORIES

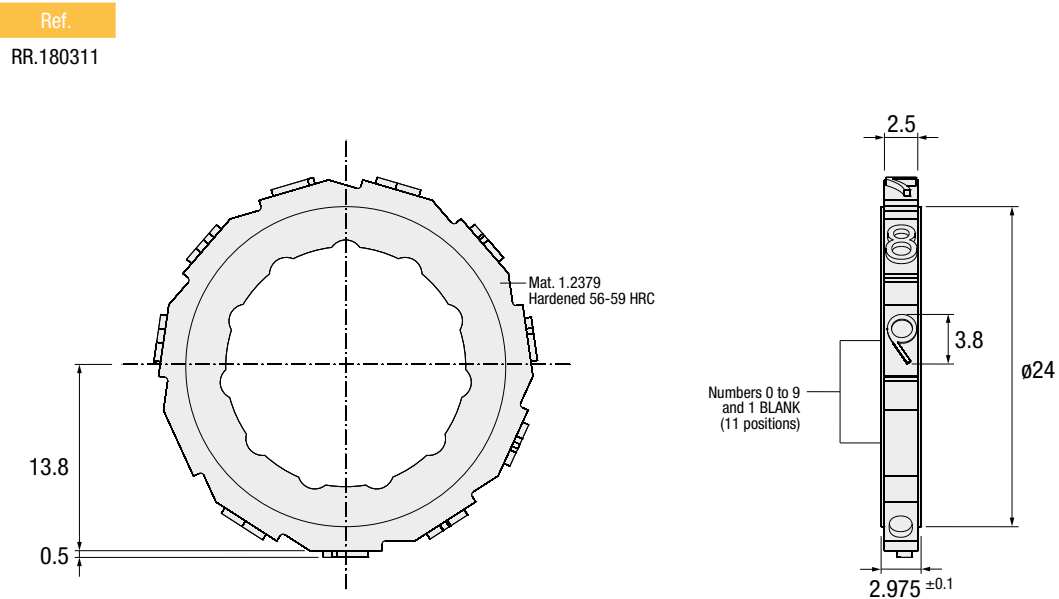


Patented



INTERCHANGEABLE WHEEL

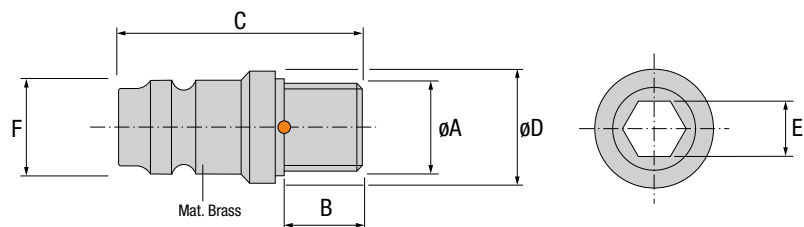
ES Rueda Recambio DE Austauschbare Prägeräder
IT Ruota di Ricambio PT Roda de Substituição FR Rondelle de Remplacement



European
System

WATER CONNECTOR

ES Boquilla Refrigeración DE Anschlussstück
IT Bussola Refrigerazione PT Record FR Raccord de Refroidissement

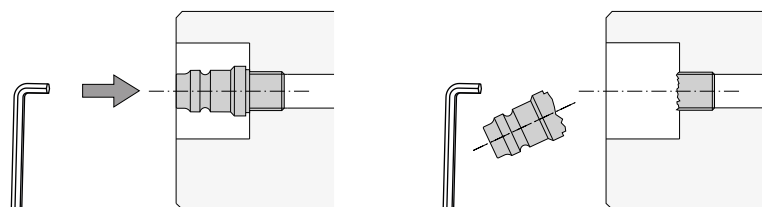


● Cad Insertion Point

Ref.	A	B	C	D	E	F
BR.10E0C5	G M10	7	24	11	5	9
BR.18E0C5	G 1/8"	7	24	11	5	9
BR.14E0C5	G 1/4"	9	26	15	5	9
BR.14E0C8	G 1/4"	9	26	15	8	13.5
BR.38E0C8	G 3/8"	9	26	15	8	13.5

- Installation Guidelines

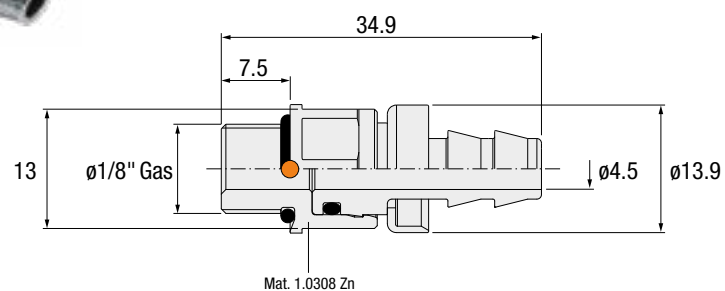
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



Max.
80°C

COOLING CONNECTOR

ES Conector Refrigeración DE Kühlung Kuppelungsstück
IT Attacco Refrigerazione PT Conector de Refrigeração FR Connexion de Refroidissement

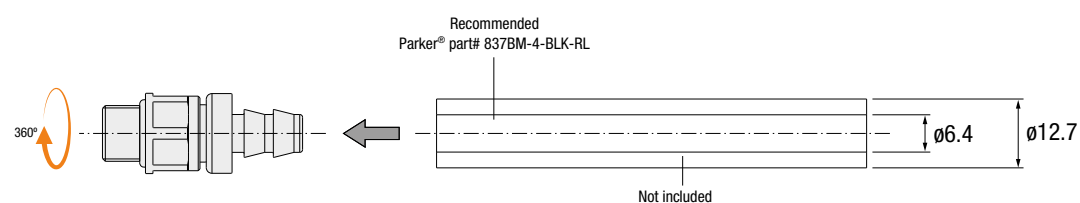


Ref.

RL181235

- Installation Guidelines

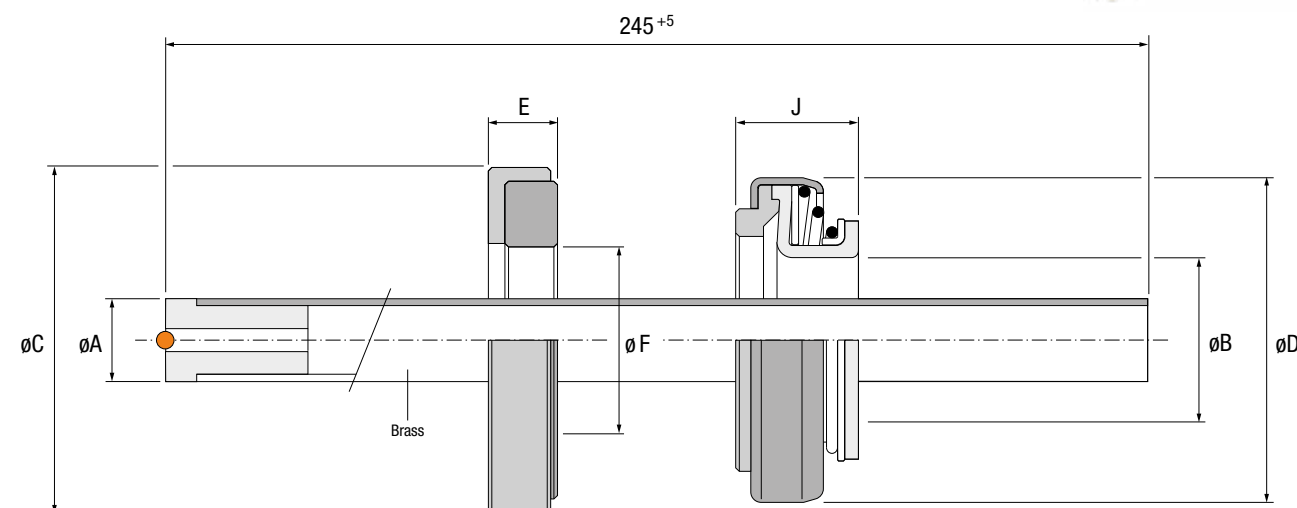
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



SEAL BEARING



Max.
80°C



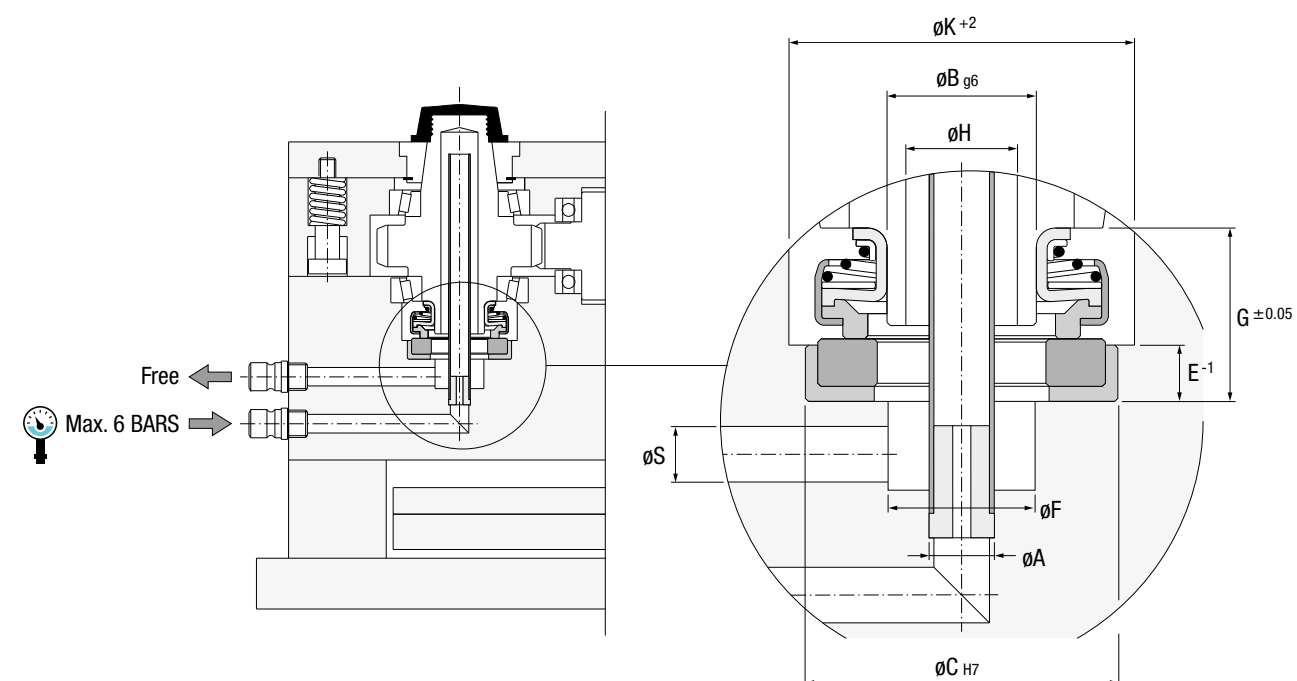
Ref.	A	B	C	D	E	F	G	H	J	K	S
JR.061226	6	12	26	24	8	13	21	8.5	13	26	5
JR.081529	8	15	29.5	32	8	17	21	10.5	13	35	7
JR.101942	10	19	42	39	8	21	21	14	13	41	9
JR.122245	12	22	45	42	10	26	23	17	13	45	11
JR.162550	16	25	50	47	10	27	24	22	14	50	15

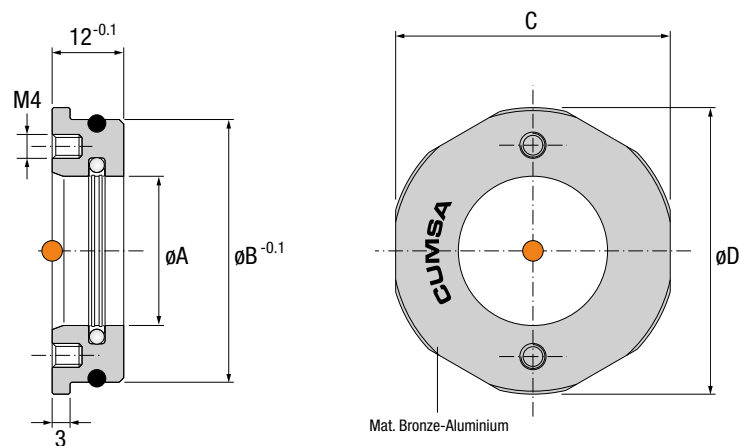
IMPORTANT !

Every seal must have a separate exit, do not connect in-line. Do not dry-run the parts.
Cada junta debe tener una salida diferente, no conectar en línea. No trabajar en seco.
Nicht in Reihe verbinden, jedes Teil benötigt einen separaten Ausgang. Die JR Drichtung nicht trocken laufen lassen.
Ogni figura deve avere un proprio foro di refrigerazione, non bisogna collegare i fori in linea. Non usare a secco.
Cada junta deve ter uma saída individual, não ligar em série. Não utilizar a seco.
Chaque circuit doit être indépendant et non raccordé en série. Ne pas utiliser à sec.

– Installation Guidelines

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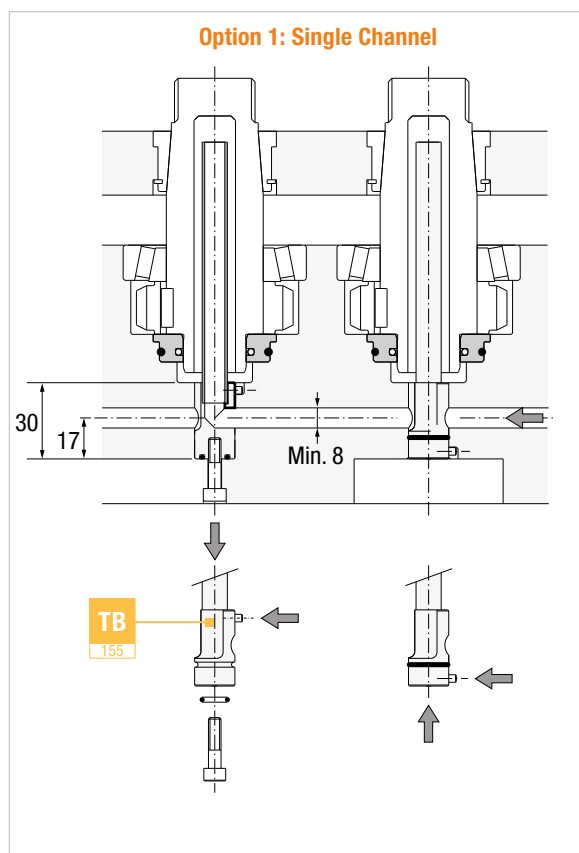




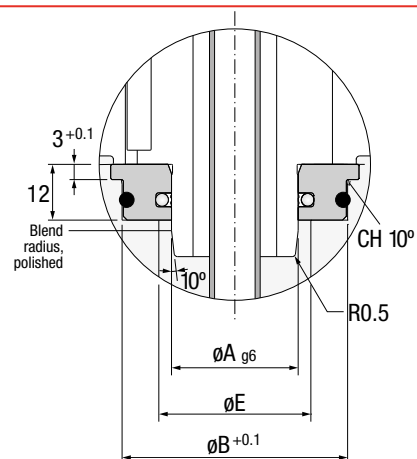
● Cad Insertion Point

Ref.	A	B	C	D	E
SB.143234	14	32	34	36	18
SB.183638	18	36	38	40	22
SB.254446	25	44	46	48	30
SB.325254	32	52	54	56	36

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation

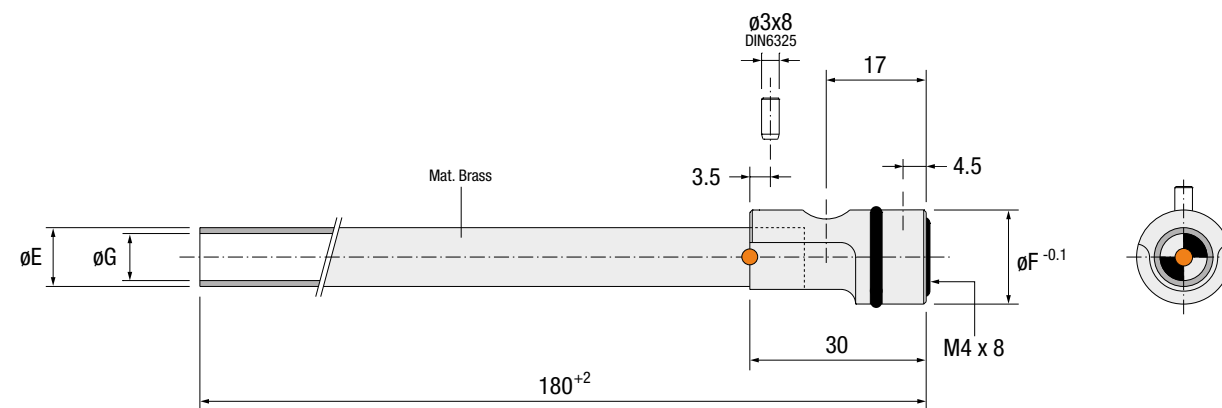


IMPORTANT



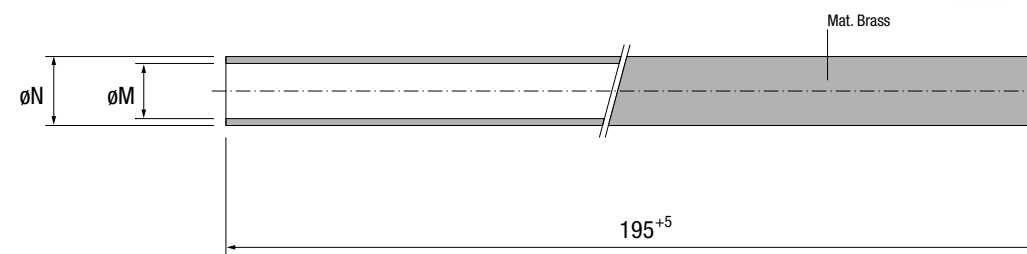
IMPORTANT ! Use only grease or oil without solid additives.
 Usar solamente aceites o grasas sin aditivos sólidos.
 Verwenden Sie nur Fett oder Öl ohne Beimischung von Feststoffen.
 Usare esclusivamente olii o grassi senza additivi solidi.
 Usar apenas lubrificantes sem aditivos sólidos.
 Seulement utiliser avec huile ou graisse sans additifs solide.

ES Tubo Junta Rotativa DE Dichtscheibenrohr
IT Tubo Alimentatore Rotativo PT Tubo Junta Rotativa FR Tube Joint Rotatif



● Cad Insertion Point

Ref.	E	F	G
TB.061230	6	12	4
TB.081430	8	14	6
TB.101630	10	16	8
TB.122030	12	20	10



Ref.	M	N
TL.040620	4	6
TL.060820	6	8
TL.081020	8	10
TL.101220	10	12

Patented

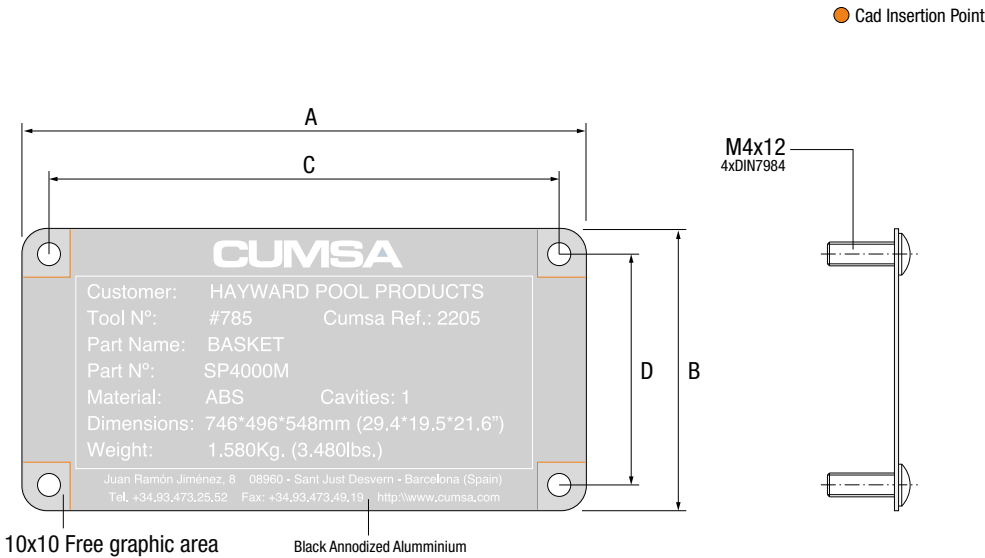
TI



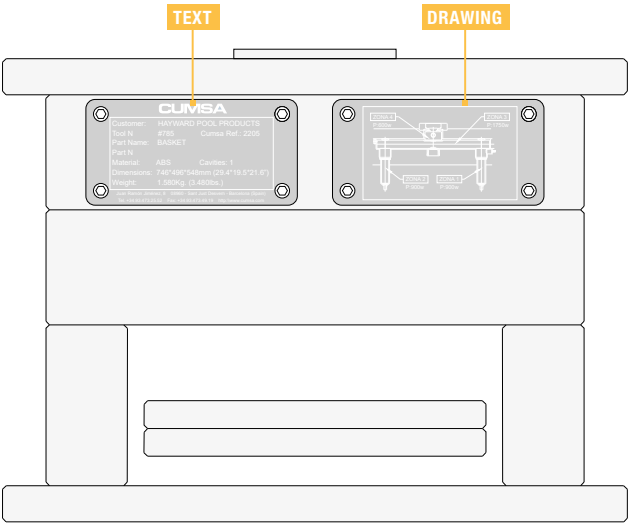
Laser Marking
Max. 200°C

IDENTIFICATION PLATE

ES Placa Identificación DE Typenschild
IT Piastra Identificazione PT Placa de Identificação FR Plaque d'Identification



Ref.	Drawing	A	B	C	D
PI.068345	PI.068345-DW	68	34	59	25
PI.090455	PI.090455-DW	90	45	81	36
PI.120605	PI.120605-DW	120	60	111	51
PI.160805	PI.160805-DW	160	80	151	71



How to order this part?

Cómo realizar un pedido? · Bestellvorgang · Come realizzare un ordine? · Como realizar um pedido? · Comment effectuer une commande?

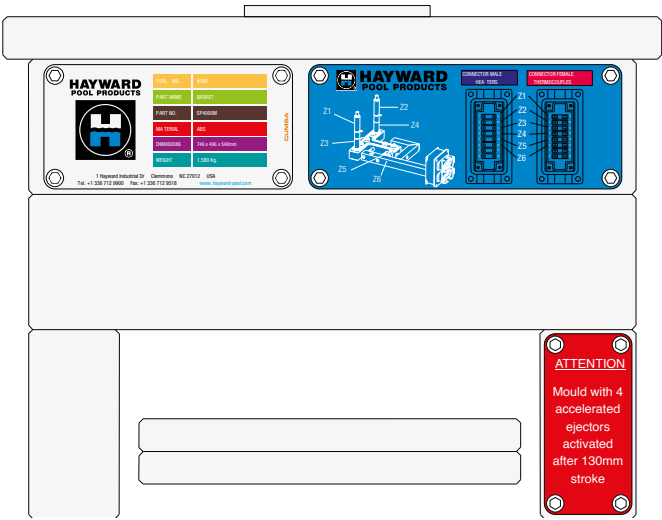
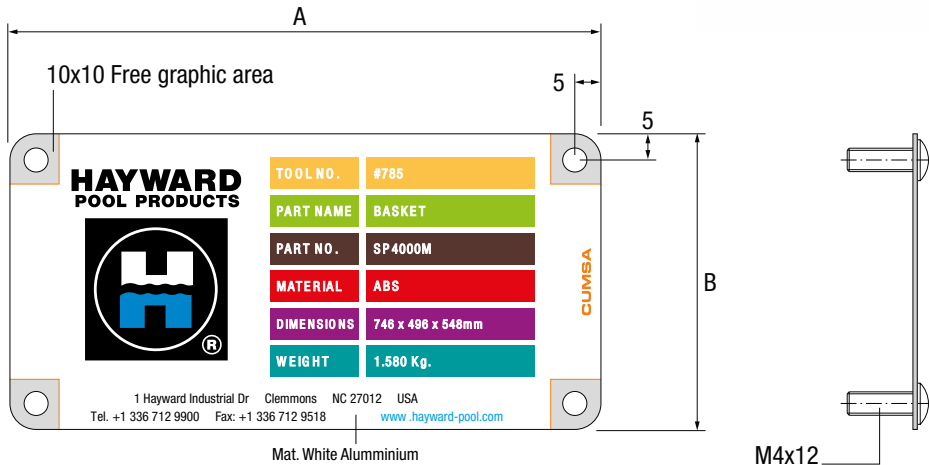
- DESIGN. The DXF/PDF file containing the required design must be sent by email.**
ES DISEÑO. Nos envían por e-mail un archivo en formato DXF/ PDF que contenga el diseño a grabar.
DE AUSSEHEN. Text oder Zeichnung im DXF/PDF-Format per e-Mail.
IT DISEGNO. Inviateci via e-mail un archivio in formato DXF/ PDF che contengall disegno da incidere.
PT DESENHO. Enviar por e-mail um arquivo em formato DXF/ PDF que contenha o desenho a gravar.
FR CONCEPTION : Envoyer par e-mail un fichier au format DXF/PDF contenant la conception de la plaque à graver.

- DELIVERY: Unless otherwise advised, the model "TEXT" plates will be finished in 48 hours and the model "DRAWING" in 72 hours, both cases upon customer order confirmation.**
ES REALIZACION: Salvo indicación contraria, las placas del modelo "TEXT" (Texto) estarán finalizadas en 48 horas y las del modelo "DRAWING" (Dibujo) en 72 horas, en ambos casos después de la confirmación del pedido por parte del cliente.
DE LIEFERUNG: Wenn es keine vorgeschriebenen Termine gibt, die Ausführung als "TEXT" ist fertig zur Auslieferung nach 48 Std., die Ausführung als "DRAWING" (Zeichnung) nach 72 Std, jeweils nach erteilter Auftragsbestätigung.
IT REALIZZAZIONE: salvo indicazione contraria, le placchette del modello TEXT saranno terminate in 48 ore e quelle del modello DRAWING in 72 ore, in entrambi i casi solo dopo la conferma dell'ordine da parte del cliente.
PT PRAZO DE ENTREGA: Salvo indicação contrária, as placas de modelo "TEXT" serão entregues num prazo máximo de 48h e as de modelo "DRAWING" em 72 horas, em ambos os casos, depois da confirmação de encomenda por parte do cliente.
FR RÉALISATION : Sauf indication contraire, les plaques du modèle «TEXT » (Texte) seront réalisées dans les 48 heures et celles du modèle « DRAWING » (Dessin) dans les 72 heures, dans les deux cas, il faudra la validation de la commande par le client.

FULL COLOR PLATE

ES Placas a Color DE Farbige Platten
IT Piastra a Colori PT Placa Totalmente a Cores FR Plaquettes Selon Couleur

Cad Insertion Point



Ref.	Max. A	Max. B
CP.050070	70	50
CP.060100	100	60
CP.070120	120	70
CP.080160	160	80
CP.100200	200	100
CP.140200	200	140
CP.200200	200	200
CP.200285	285	200
CP.280370	370	280

How to order this part?

Cómo realizar un pedido? · Bestellvorgang · Come realizzare un ordine? · Como realizar um pedido? · Comment effectuer une commande?

- Send a PDF file with the desired design.**
ES Envien un archivo PDF con el diseño requerido.
DE Senden Sie uns eine PDF mit Ihrem Wunschbild.
IT Inviare il file PDF con il disegno desiderato.
PT Envie um PDF com a imagem pretendida.
FR Envoyez un PDF avec votre image.
- Unless otherwise advised, the plaque will be finished in 48-72 hours, after customer order confirmation.**
ES Salvo indicación contraria, las placas estarán disponibles en 48-72 horas después de la confirmación del cliente.
DE Soweit nichts anderes angegeben ist, werden die Platten innerhalb von 48-72 Stunden nach Auftragsbestätigung gefertigt.
IT Salvo avvisi contrari, la produzione dura 48-72h dalla conferma d'ordine del cliente.
PT As placas estarão prontas em 48-72 após confirmação, salvo indicação em contrário.
FR Les plaquettes seront prêtes en 48-72h après confirmation, sauf indication contraire.

IMPORTANT !
The PDF file, must contain the plate in a 1:1 scale. Do not draw the holes and the rounded angles in your design.
El archivo PDF debe tener la placa en escala 1:1. No dibujen los agujeros ni las esquinas redondas en su fichero.
Bitte die Zeichnung in PDF und soll auf 1:1 skaliert sein. Zeichnen Sie bitte keine Bohrungen und keine runden Ecken.
Il file PDF deve contenere la placca in scala 1:1. Non disegnare i fori e gli angoli arrotondati.
A imagem em PDF deverá vir a escala de 1:1. Não desenhe os furos nem os cantos redondos.
L'image en pdf doit être à l'échelle 1:1. Ne pas dessiner les passages de vis, ni les rayons.



Max. 100°C

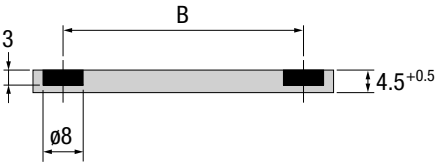
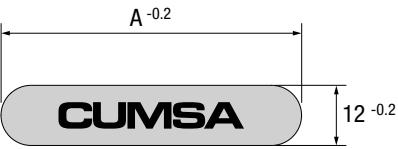


SC

ACCESSORIES



CABLE RETAINER
ES Sujeta Cables DE Kabelhalter
IT Piastrina di Cablaggio PT Retensor de Cabos FR Plaque Blocage Cable

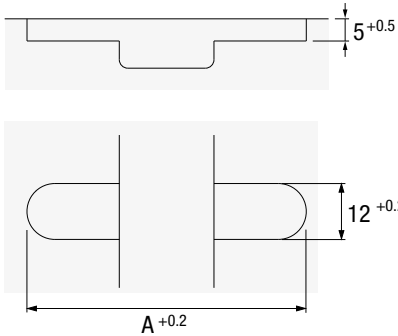
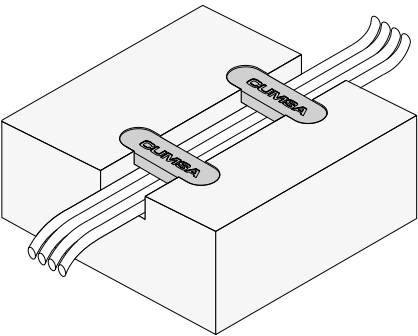


Ref.	A	B	Material	Max. Temp.
SC.401245	40	28	Nylon	80°C
SC.401245H	40	28	PA+30% Glass Fiber	150°C
SC.601245	60	48	Nylon	80°C
SC.601245H	60	48	PA+30% Glass Fiber	150°C

IMPORTANT !
Supplied in bags of 10 units.
Suministrado en bolsas de 10 uds.
Verpackungseinheit 10 Stück.
Vendute in confezioni da 10 pezzi.
Fornecidos em sacos de 10 unidades.
Emballé en sac de 10 unités.

Installation Guidelines

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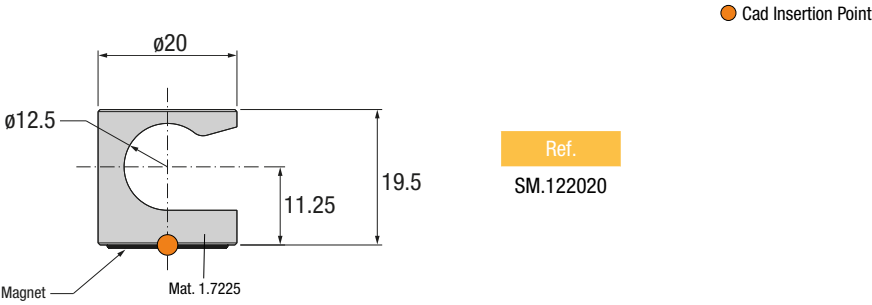


ACCESSORIES



Max.
80°C

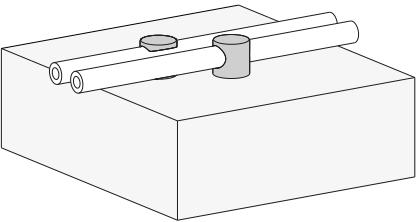
HOSE RETAINER
ES Sujeta Tubos DE Schlauchhalter
IT Ferma Cavi PT Retensor de Mangueira FR Retenu de Tuyau



Ref.
SM.122020

Installation Guidelines

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**THE
FUTURE
IS
HERE**