

CUMSA

INNOVATIVE SOLUTIONS
FOR YOUR MOLDS





CUMSA

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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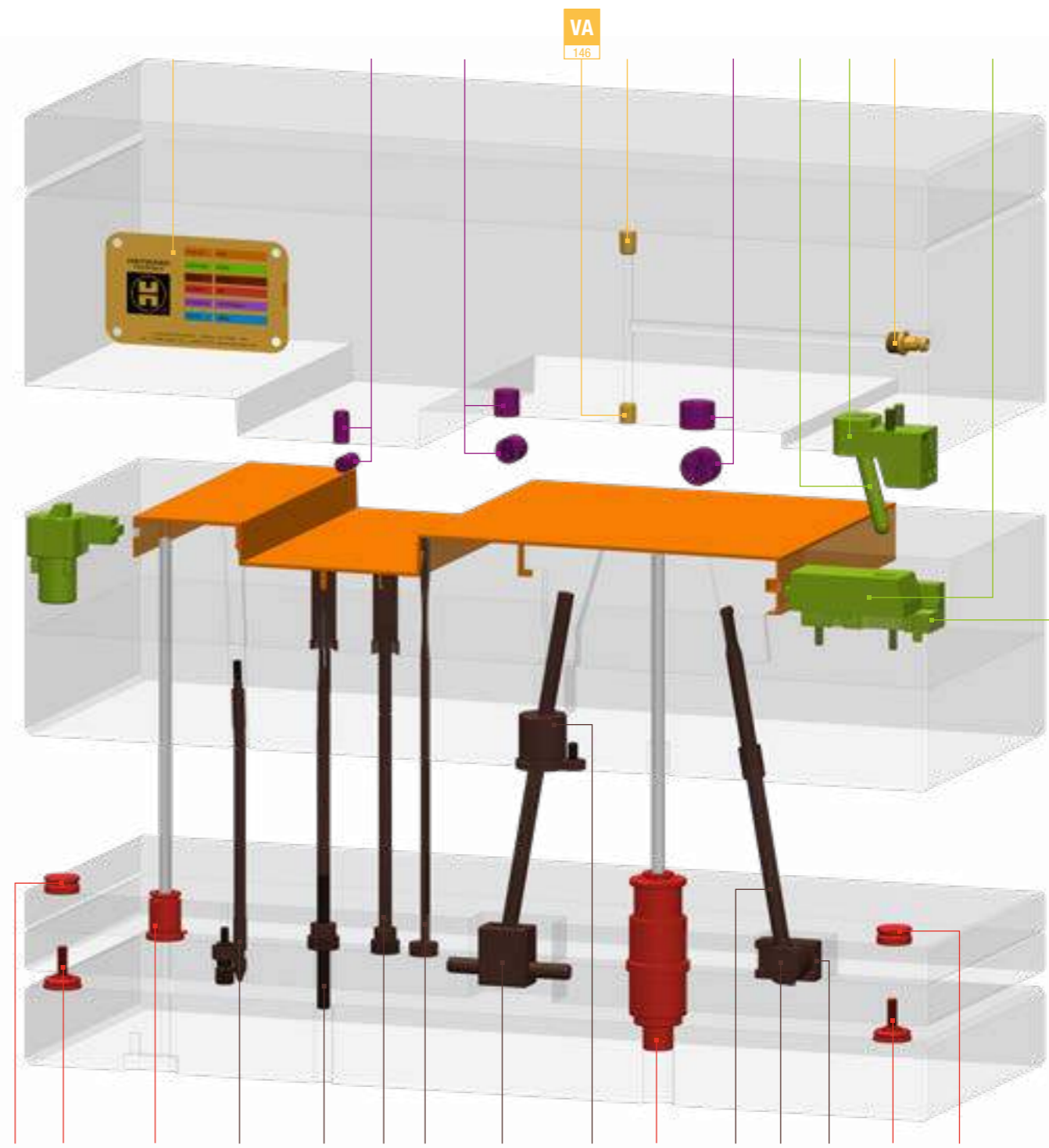
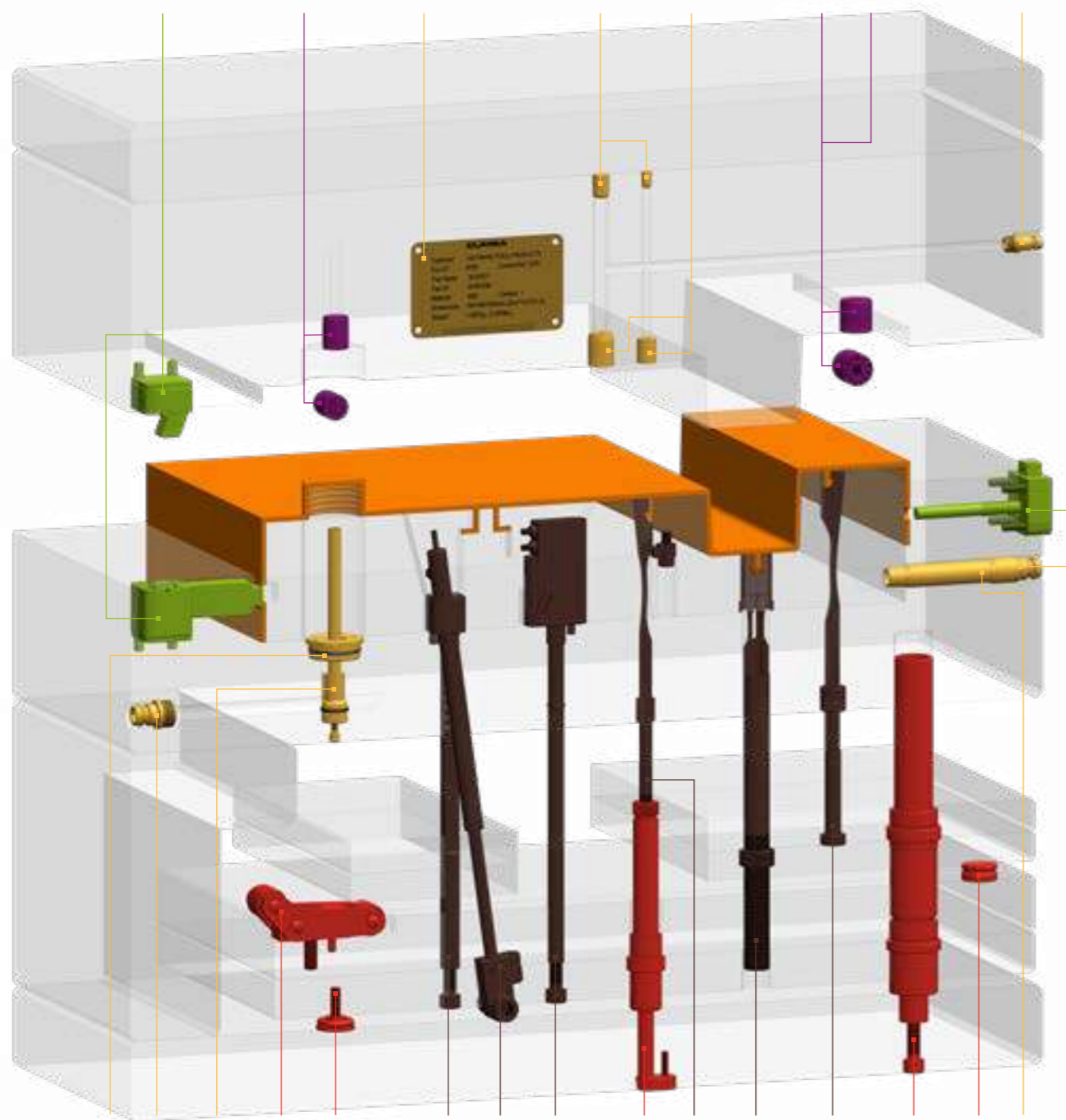
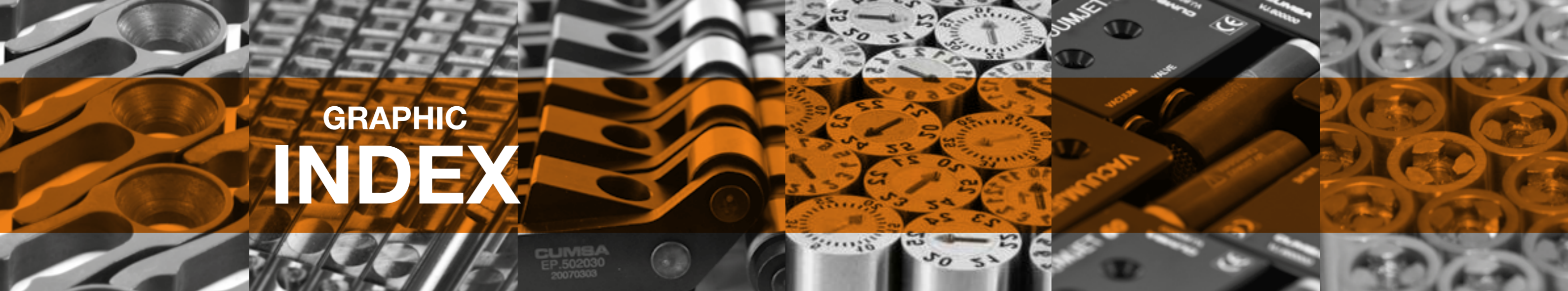
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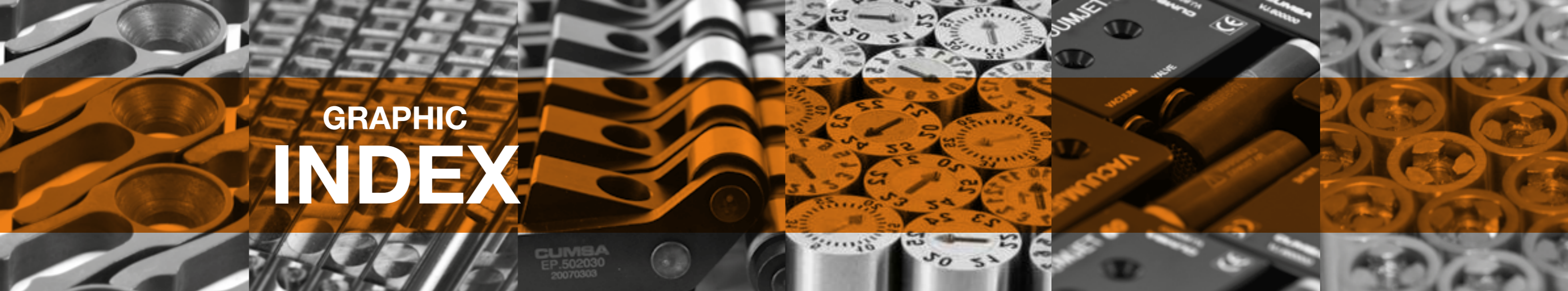
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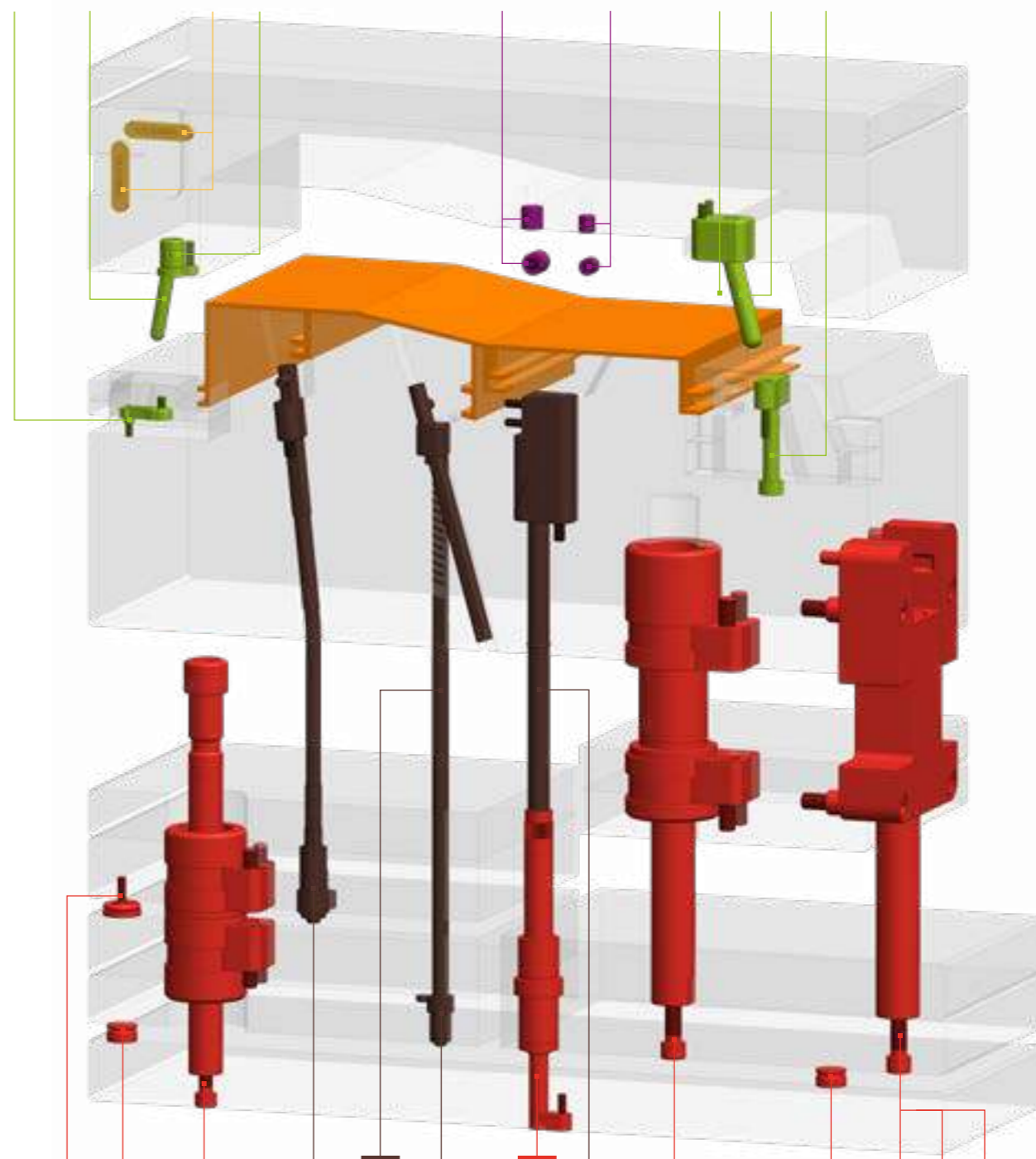
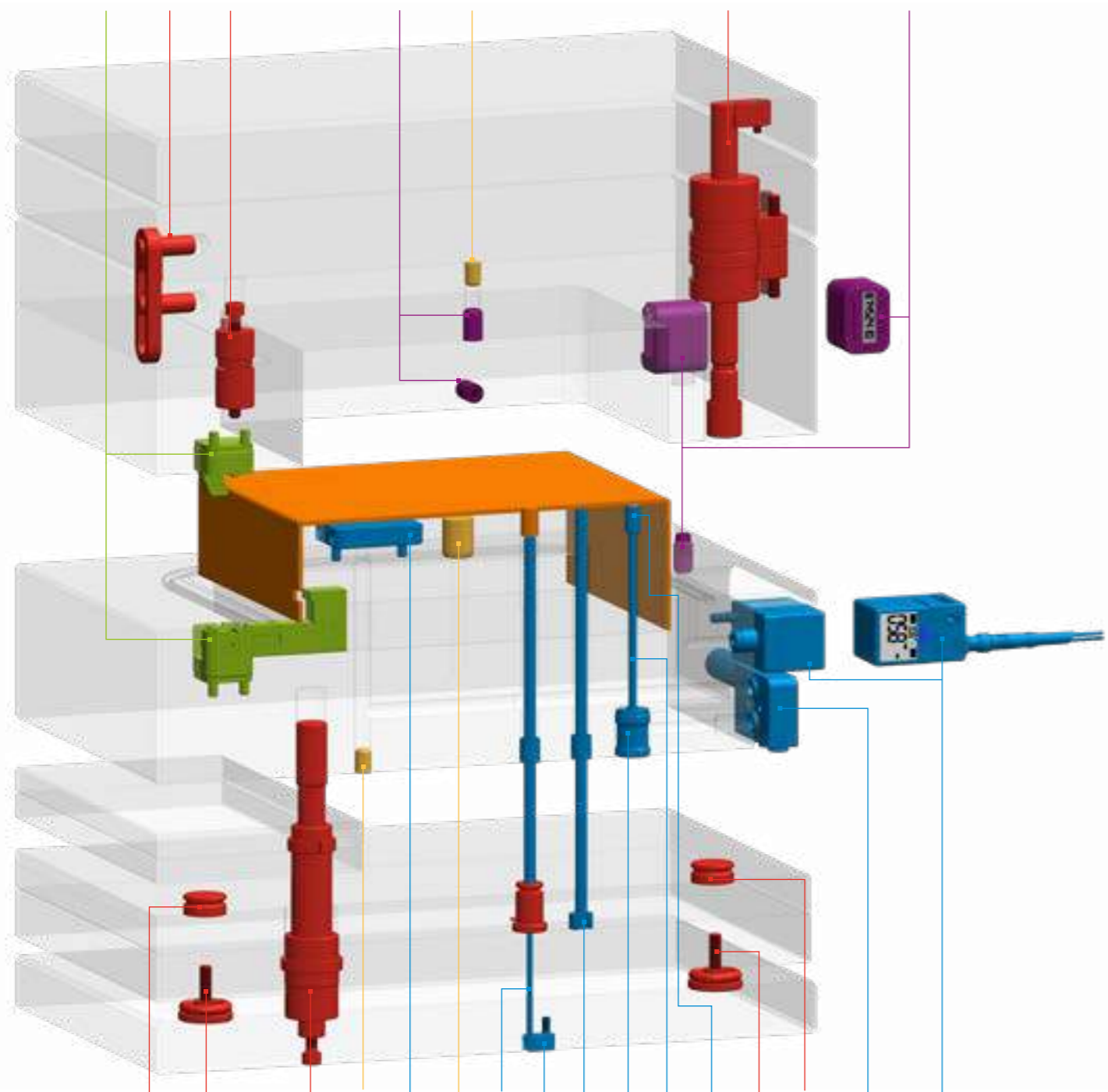
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GRAPHIC INDEX



CUMSA
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DR
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SLIDES

SLIDES INDEX

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INDICE CORSA / ÍNDICE CORREDIÇAS / INDEX CHARIOTS

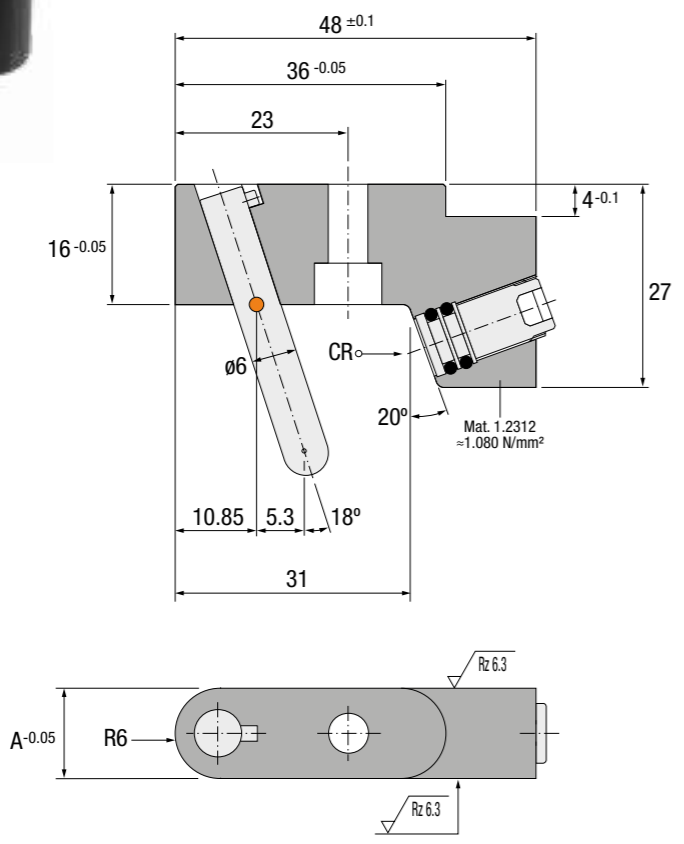
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MG



Patented



Cad Insertion Point

Ref.	A	CR (N)
MG.121648	12	50.000
MG.201648	20	90.000

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

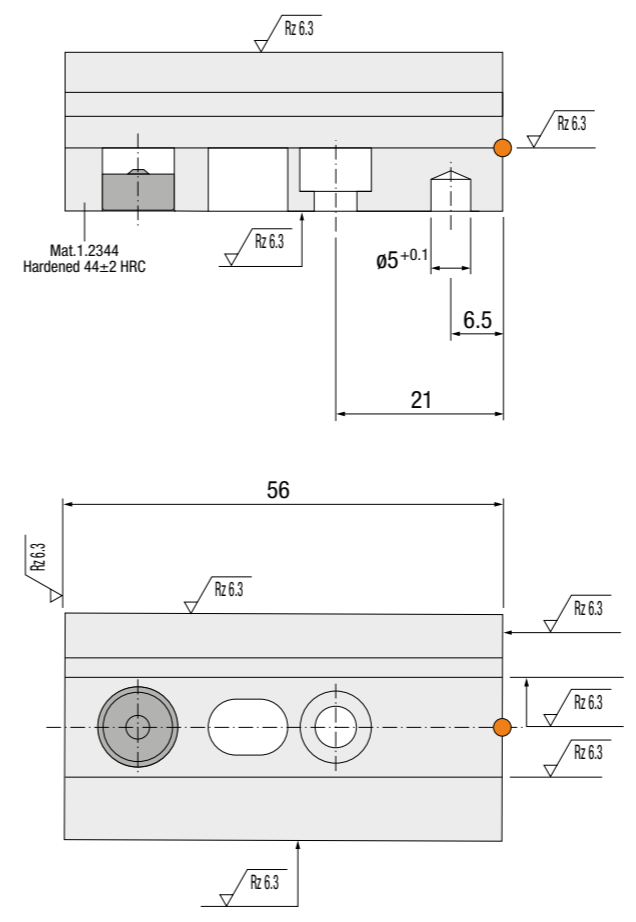
MINI GUIDE

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

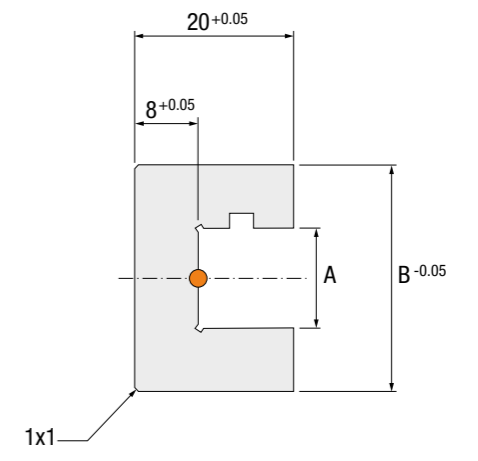
MINI BASE

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

Cad Insertion Point



Ref.	A	B
MB.122056	12.5	28
MB.202056	20.5	36



MB

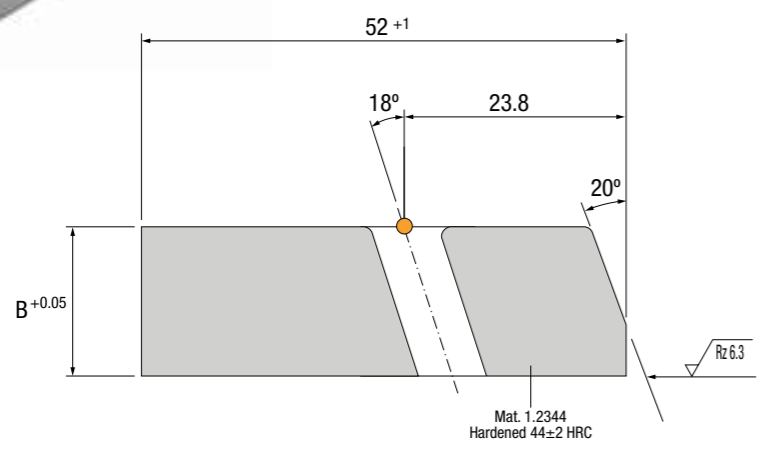


Patented

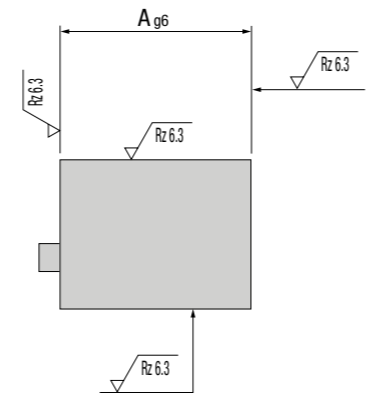
MC



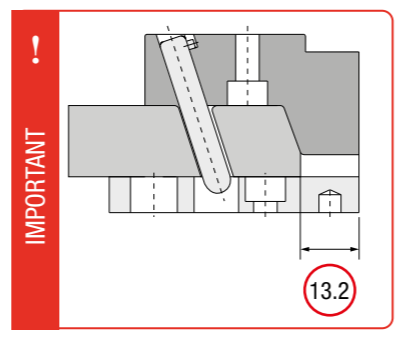
Patented



Cad Insertion Point



Ref.	A	B
MC.121252	12.5	12
MC.121652	12.5	16
MC.201252	20.5	12
MC.201652	20.5	16



IMPORTANT !

13.2

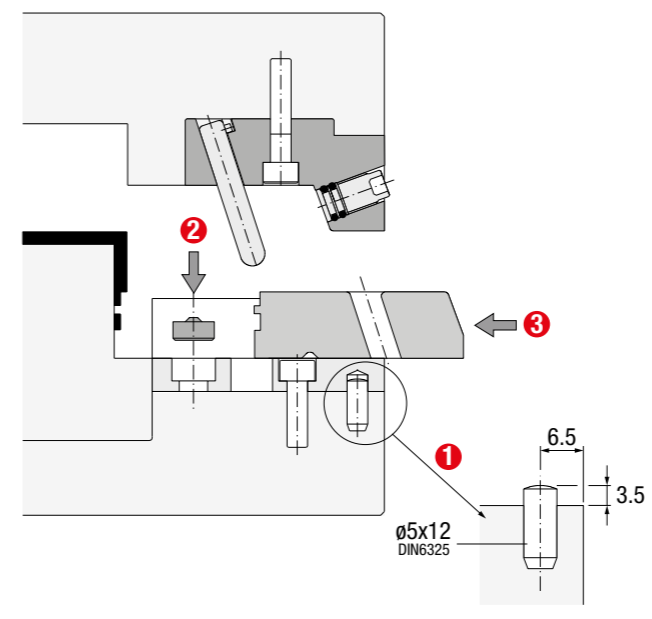
MINI SLIDE

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

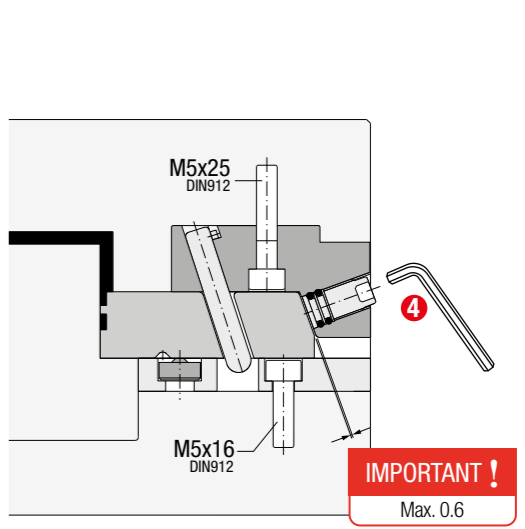
Installation Guidelines

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Mold Open



Mold Closed



IMPORTANT !
 Max. 0.6

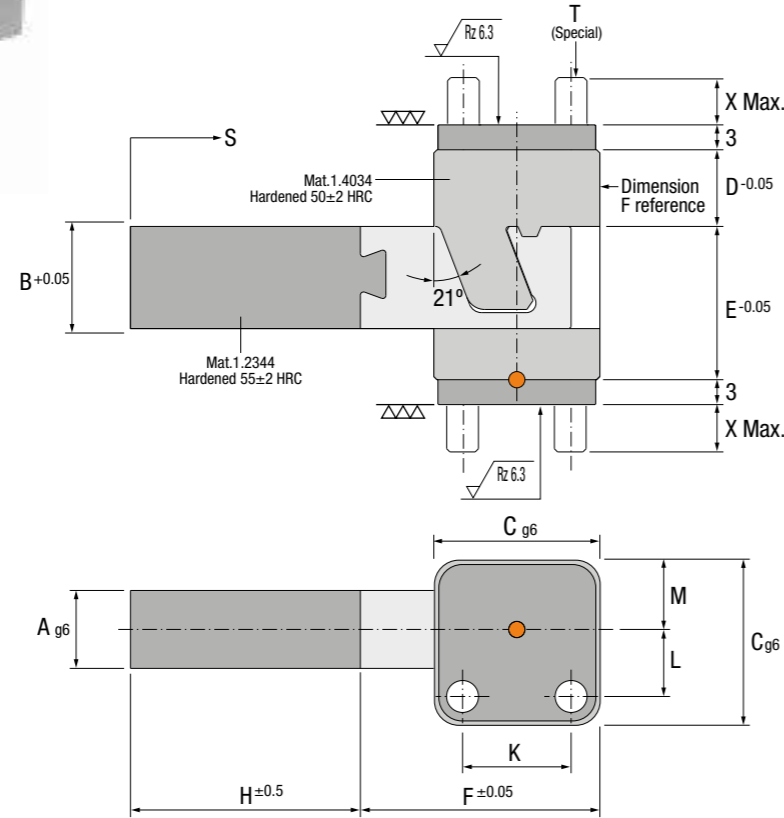
SU



SLIDE UNIT

ES Conjunto de Corredera DE Schieber Einheit
IT Gruppo Carrello PT Elemento Móvel FR Chariot

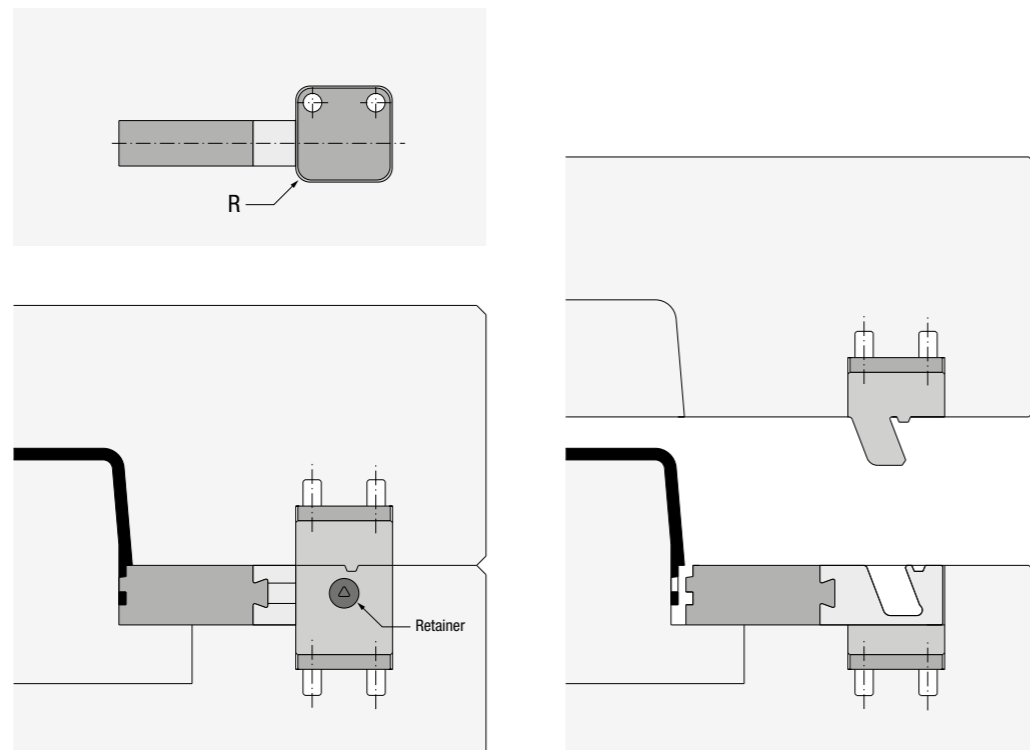
● Cad Insertion Point



Ref.	A	B	C	D	E	F	H	K	L	M	R	S	T	X
SU.081220	8.2	12	20	10	18	28	32	12.5	8.25	8	3.75	3	M4	6.2
SU.121626	12.2	16	26	12	24	37.5	36	17	10.5	11	4.5	4	M5	7.2
SU.162032	16.2	20	32	16	30	46.5	40	22	13	14	5	5	M6	9.2

Installation Guidelines

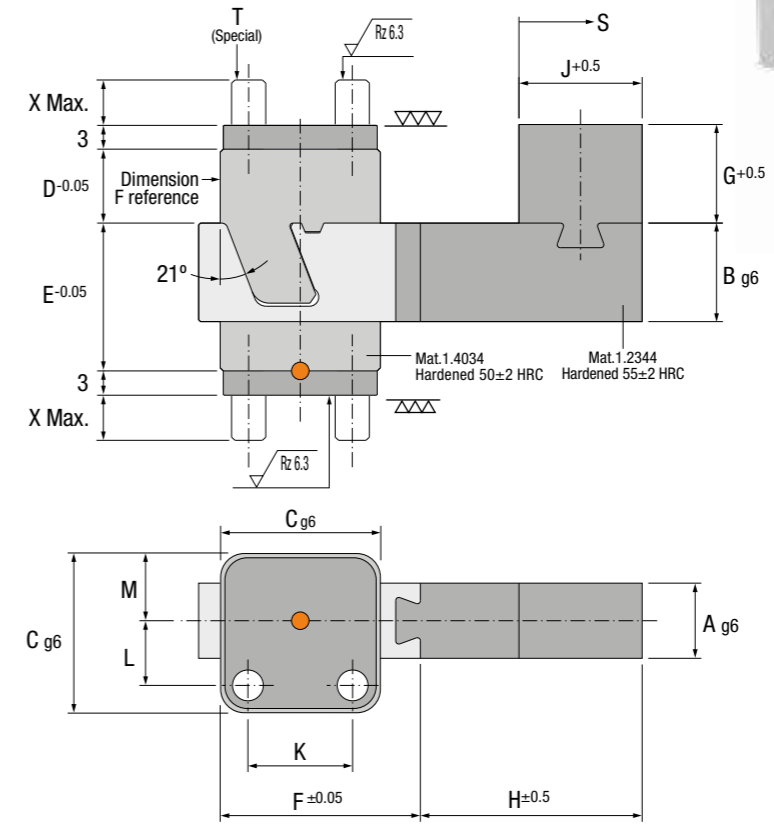
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



UNDERCUT UNIT

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

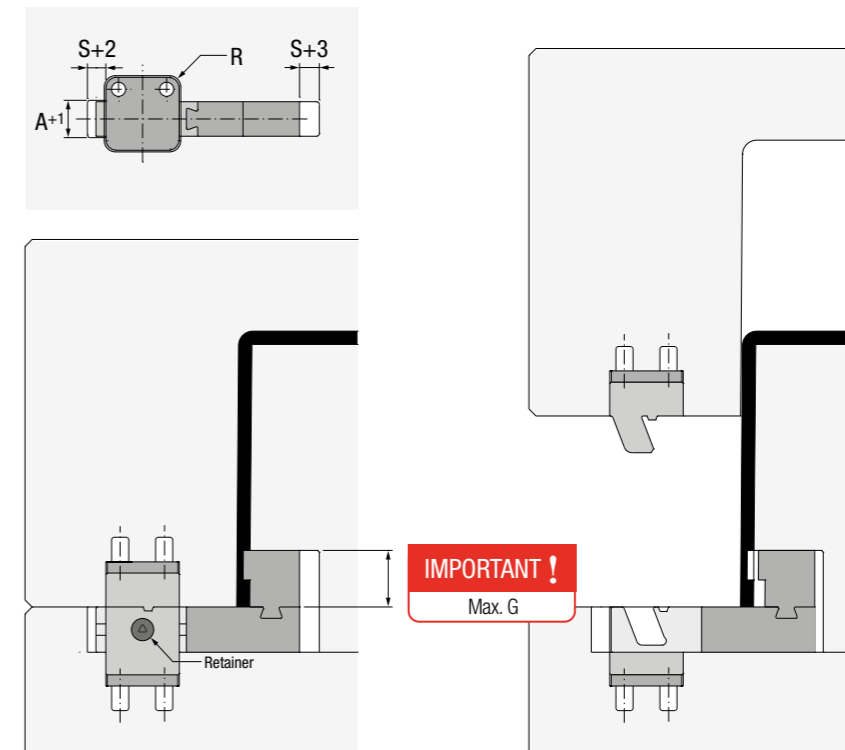
● Cad Insertion Point



Ref.	A	B	C	D	E	F	G	H	J	K	L	M	R	S	T	X
UU.081220	8.2	12	20	10	18	24.5	12	32	16	12.5	8.25	8	3.75	3	M4	6.2
UU.121626	12.2	16	26	12	24	32.5	16	36	20	17	10.5	11	4.5	4	M5	7.2
UU.162032	16.2	20	32	16	30	41	20	50	25	22	13	14	5	5	M6	9.2

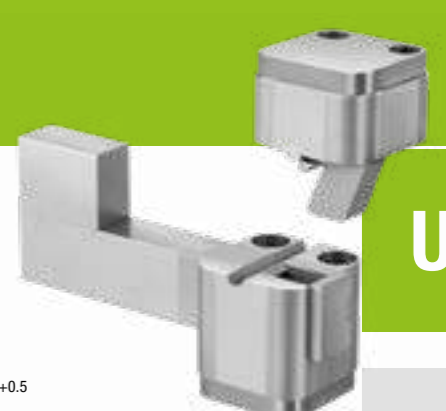
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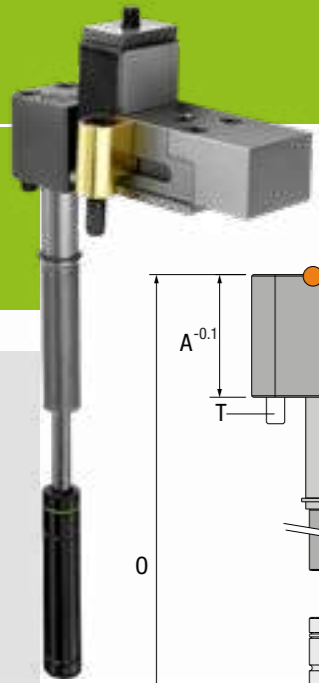


IMPORTANT!
Max. G

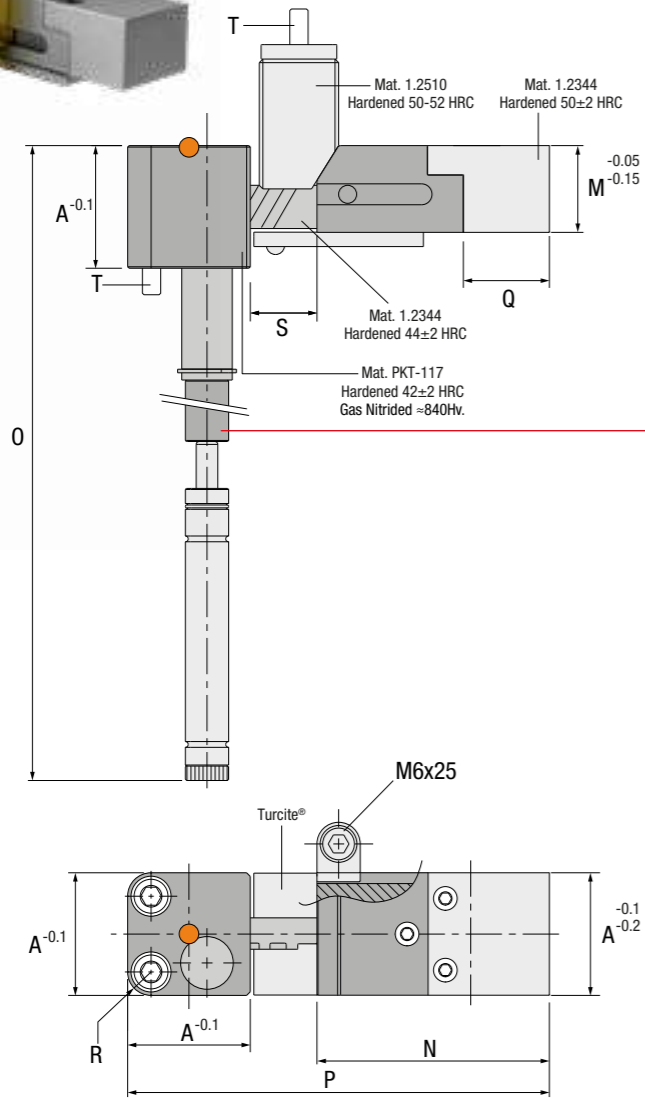
UU



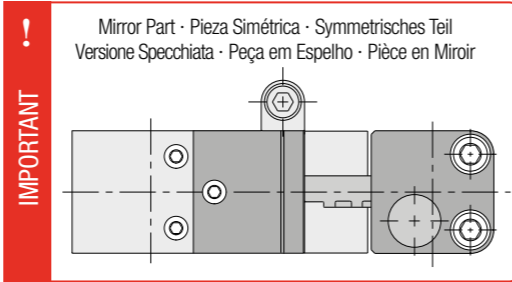
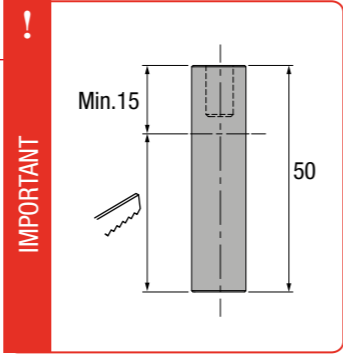
Patented



PUSH-BACK SLIDE
 ES Corredera Push-Back DE Rückzugsschieber
 IT Carrello Respingente PT Elemento Movel de Pressão FR Push-Back Chariot



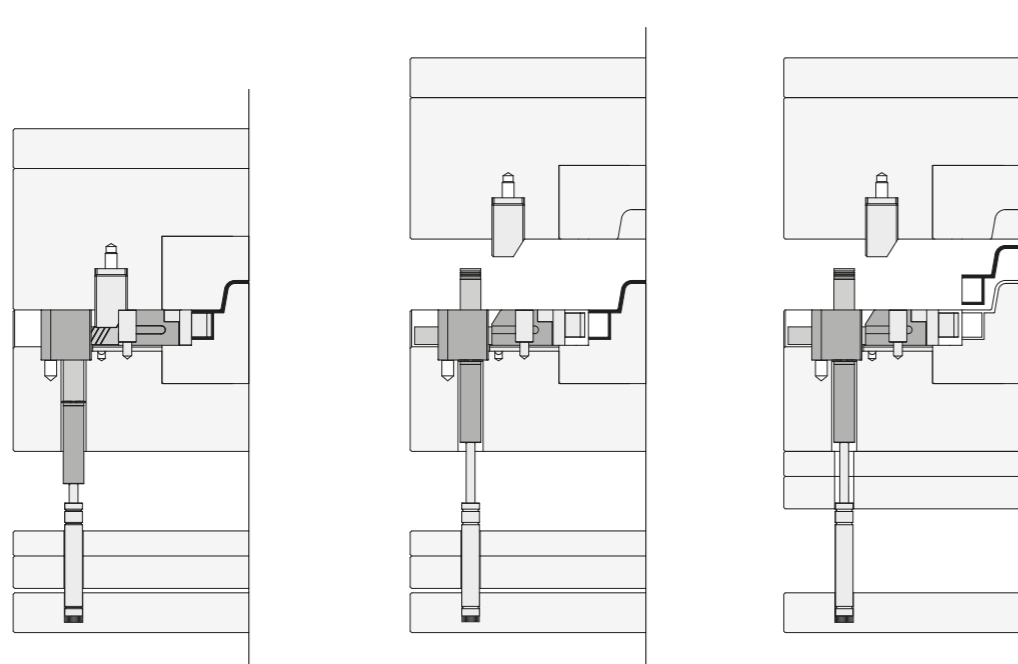
● Cad Insertion Point



Ref.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Ref.
PB.282820	28	24	14	19	17	4	8.5	6.5	20	34.5	22	20	50	169	97.5	19	5.5	12	M6	26	19	24	PB.282820-S
PB.343424	34	28	16	24	21	5	10.5	8	24	41.5	25	24	60	209	117.5	24	6.5	16	M8	32	22	28	PB.343424-S

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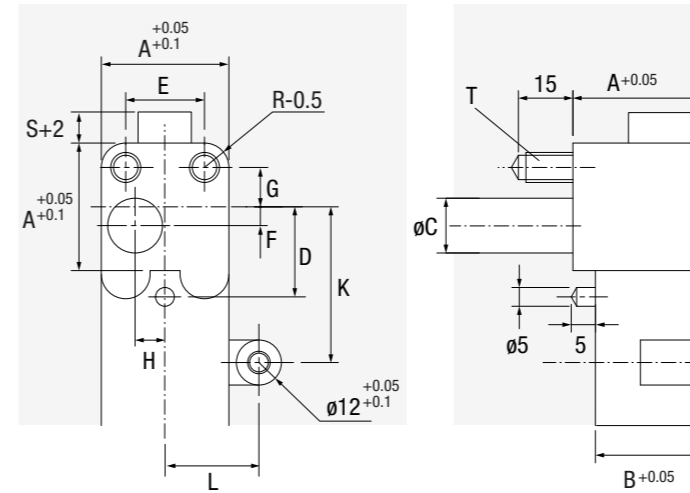
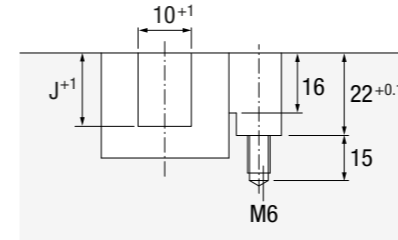


INSTALLATION GUIDELINES

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

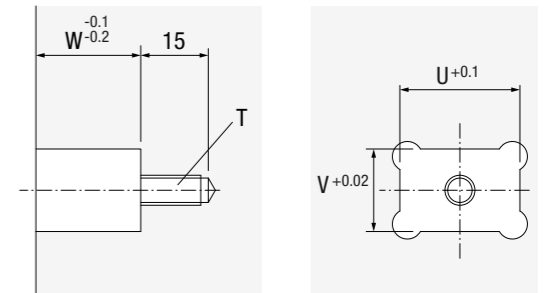
Core Housing

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



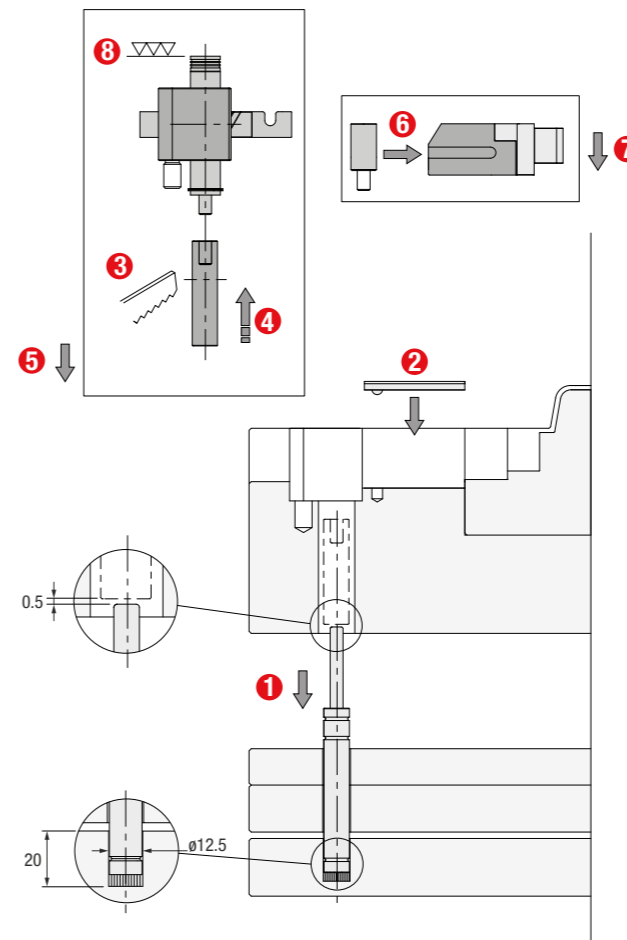
Cavity Housing

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



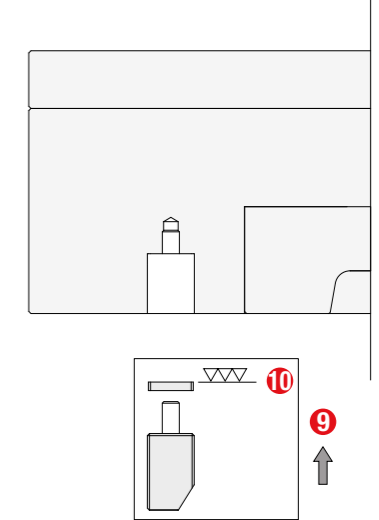
Core Slide Installation

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



Cavity Slide Installation

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

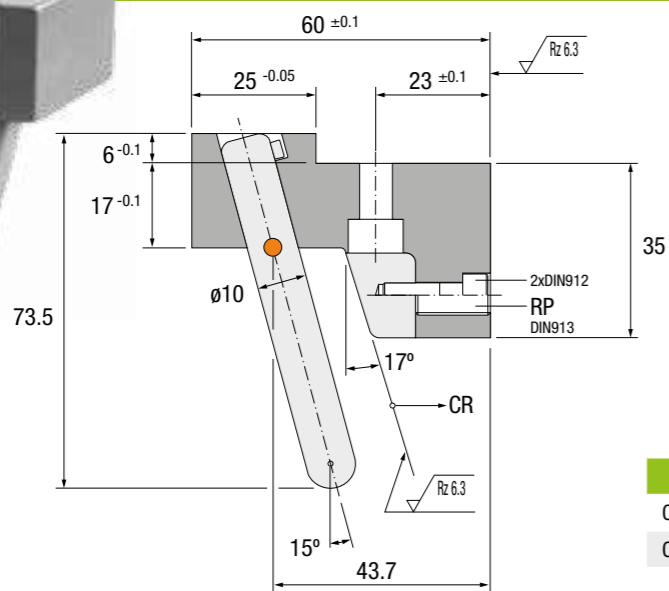


CG



HEEL UNIT - SET

ES Cuña Guía - SET DE Keilführungs - SET
IT Contrasto Guida - SET PT Guia Cunha - SET FR Guide de Chariot - SET



● Cad Insertion Point

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.

Patented

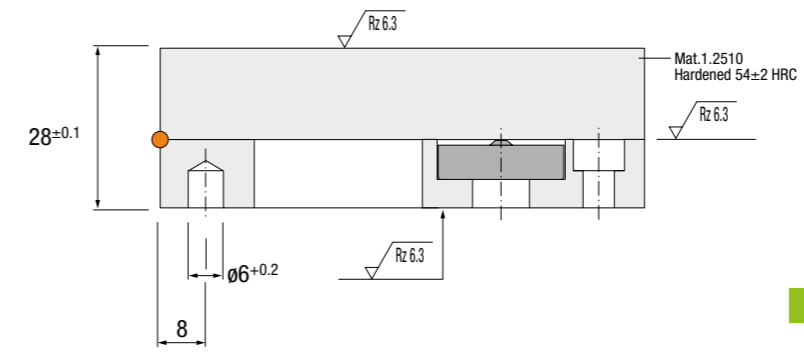
SLIDE BASE

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



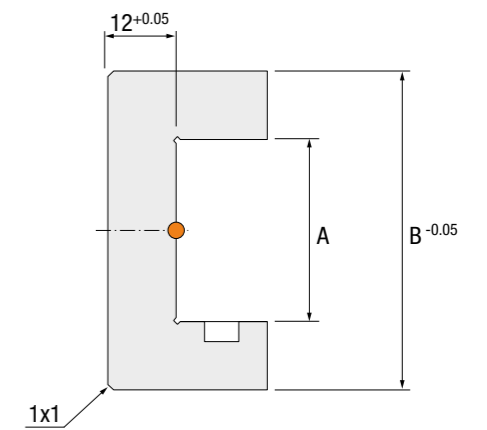
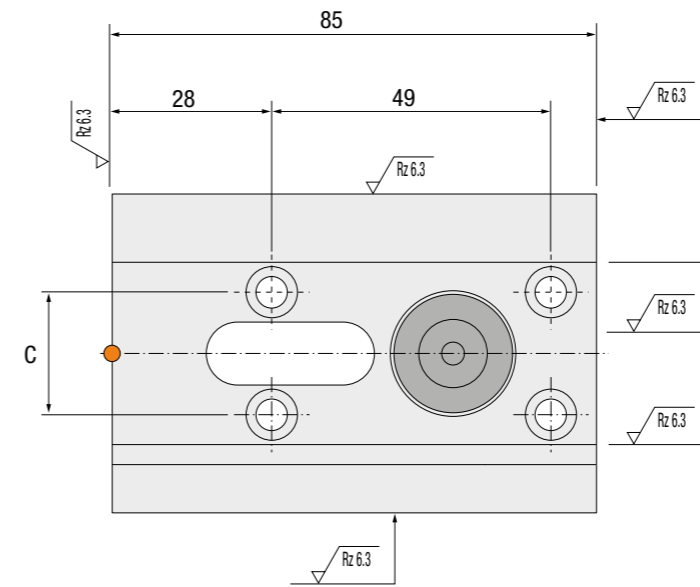
BC

● Cad Insertion Point



Ref.	A	B	C
BC.322885	32	56	21.5
BC.422885	42	66	26.5

Patented



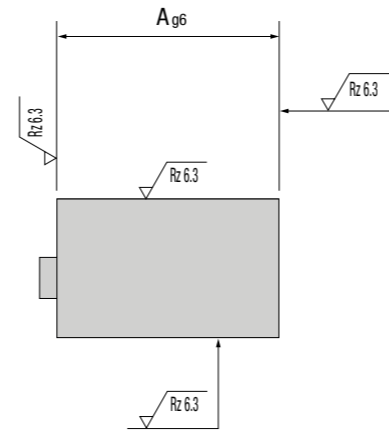
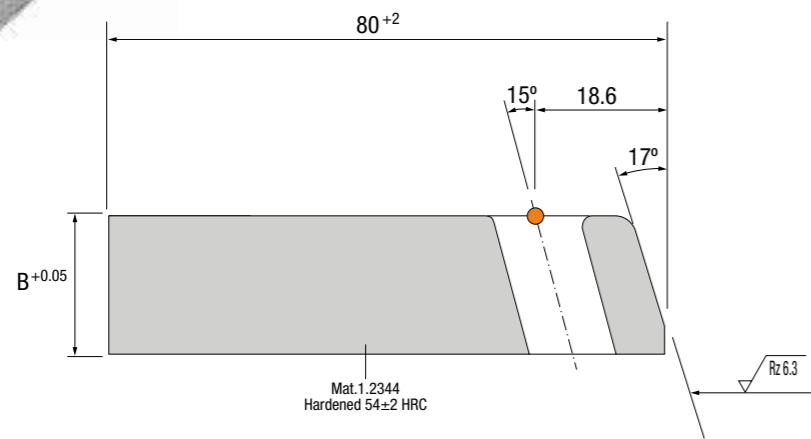
CA



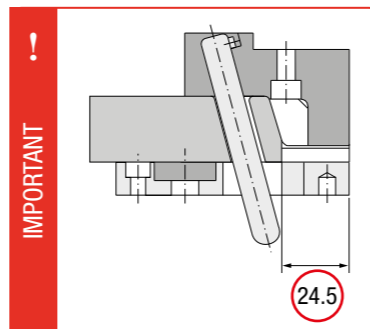
ADJUSTED SLIDE

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

● Cad Insertion Point



Ref.	A	B
CA.322080	32	20
CA.322480	32	24
CA.422080	42	20
CA.422480	42	24



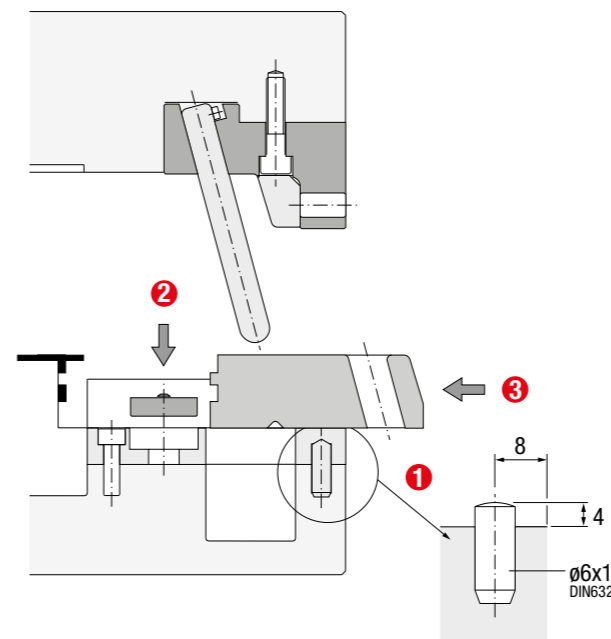
IMPORTANT !

Patented

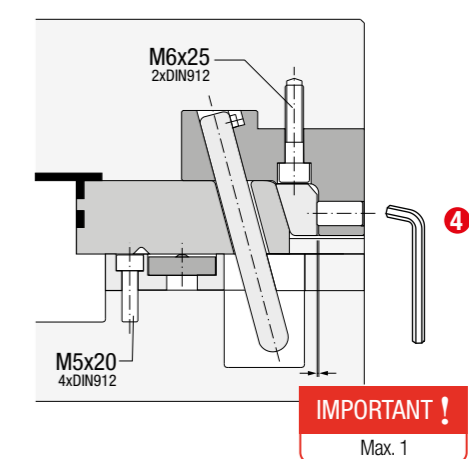
Installation Guidelines

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Mold Open



Mold Closed



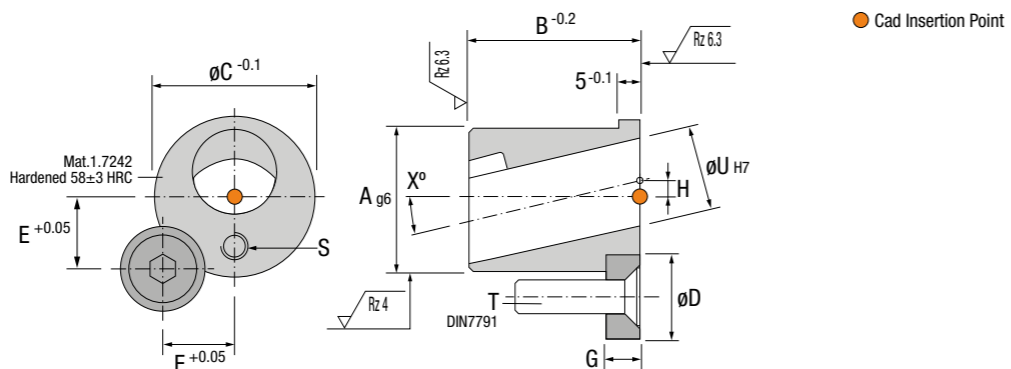
IMPORTANT !

Max. 1

GR

ANGLE PIN HOUSING

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



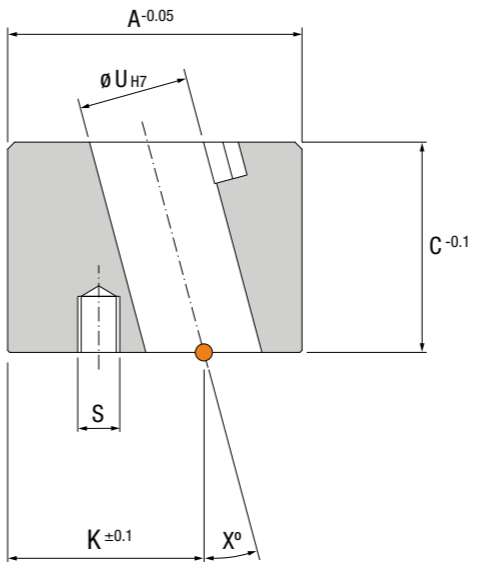
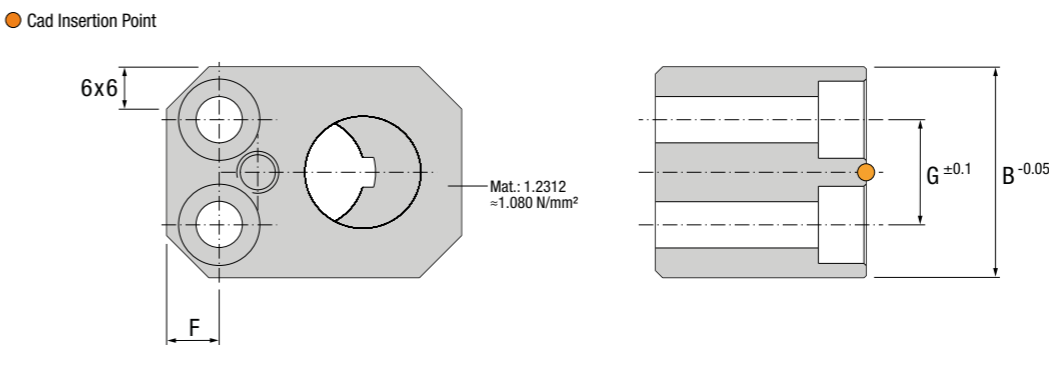
Ref.	A	B	C	D	E	F	G	H	S	T	U	X°
GR.182622-..	18	26	22	12	10.8	7.5	6	3.8	M5x5	M5x16	10	15
GR.222826-..	22	28	26	16	11	11	6	4	M6x6	M6x16	12	15
GR.283432-..	28	34	32	16	13	13	6	5	M6x6	M6x16	16	15
GR.344038-..	34	40	38	20	17	17	8	5.5	M8x6	M8x20	20	15
GR.424546-..	42	45	46	20	19.5	19.5	8	6	M8x6	M8x20	24	15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

Patented

ANGLE PIN HOUSING

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



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

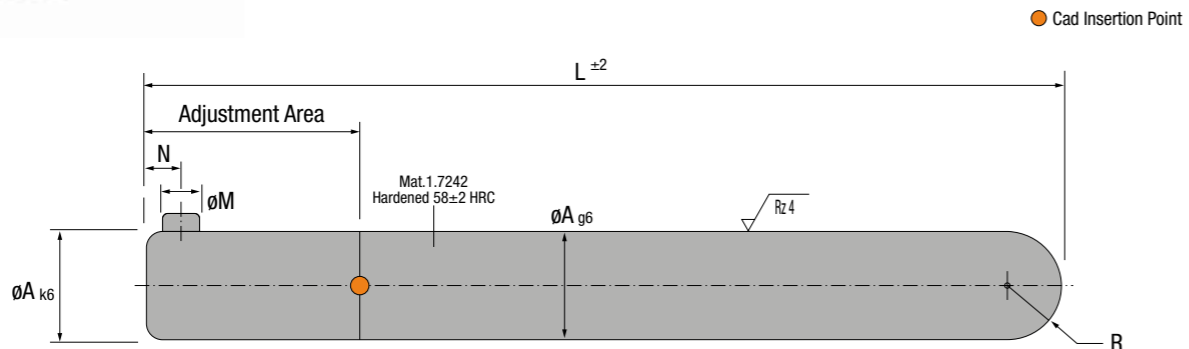
BG

Patented

GI

ANGLE PIN

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

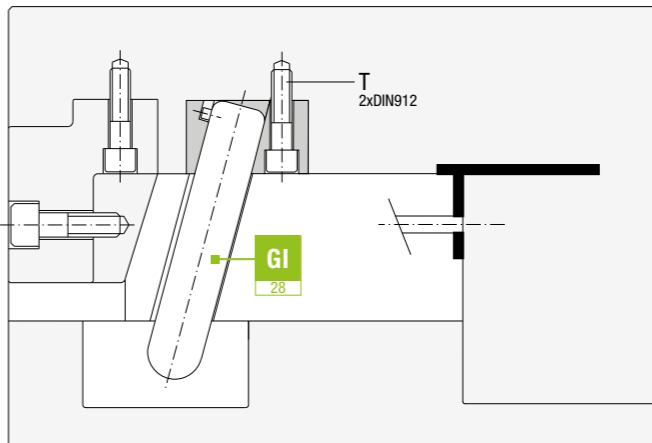


Ref.	A	Adjustment Area	M	N	L	R
Gi.010...	10	≈ 25	4	4	075 090 105	5
Gi.012...	12	≈ 30	4	4	095 110 130	6
Gi.016...	16	≈ 35	4	4	115 135 160	8
Gi.020...	20	≈ 40	6	6	140 165 190	10
Gi.024...	24	≈ 45	6	6	170 195 220	12
Gi.028...	28	≈ 50	6	6	200 225 250	14

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.

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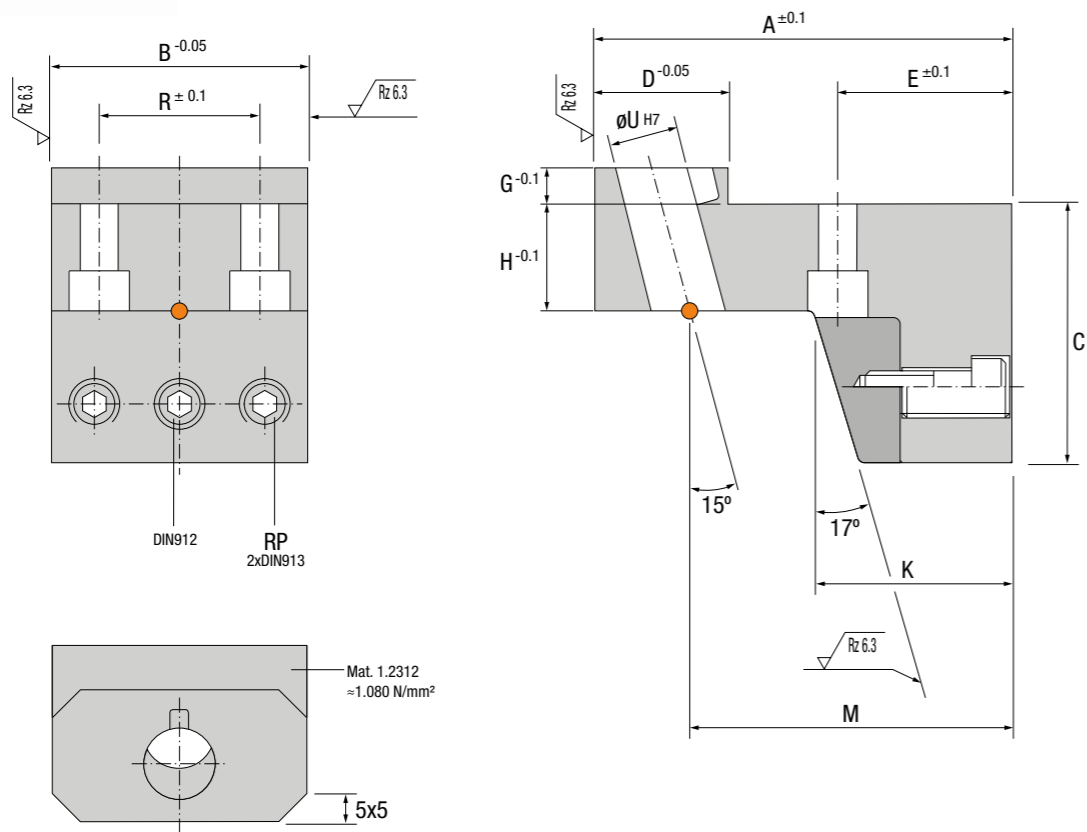
CG



HEEL UNIT

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

● Cad Insertion Point

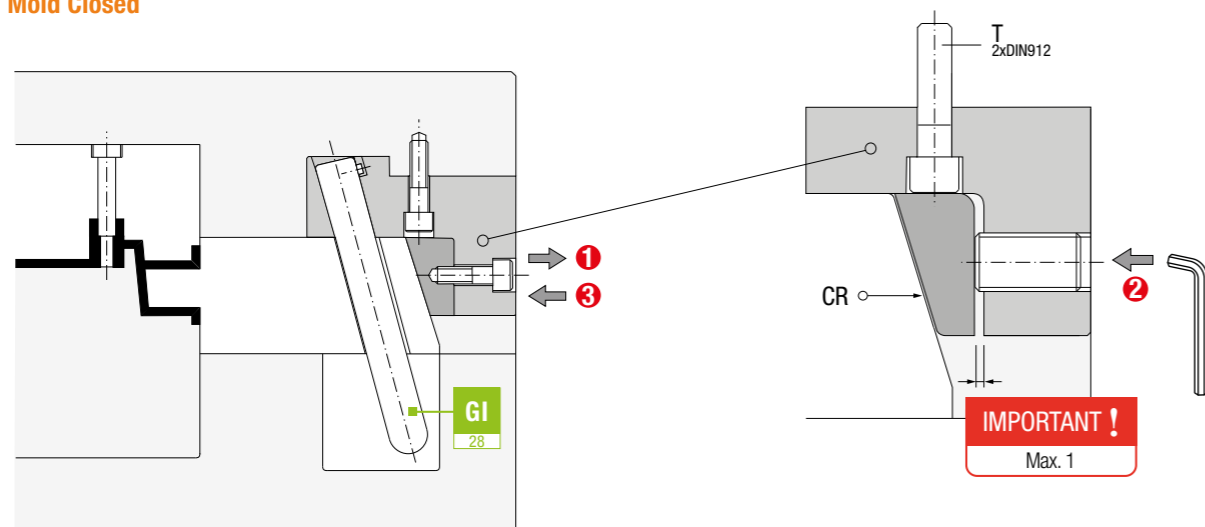


Ref.	A	B	C	D	E	G	H	K	M	R	T	U	RP	CR (N)
CG.603035	60	30	35	25	23	6	17	29	43.7	17	M6x25	10	081015	180.000
CG.604035	60	40	35	25	23	6	17	29	43.7	22	M6x25	10	101015	320.000
CG.754049	75	40	49	30	32	7	20	39	58	22	M8x30	12	101020	320.000
CG.864857	86	48	57	35	36	8	24	44	65	28	M8x35	16	121025	480.000

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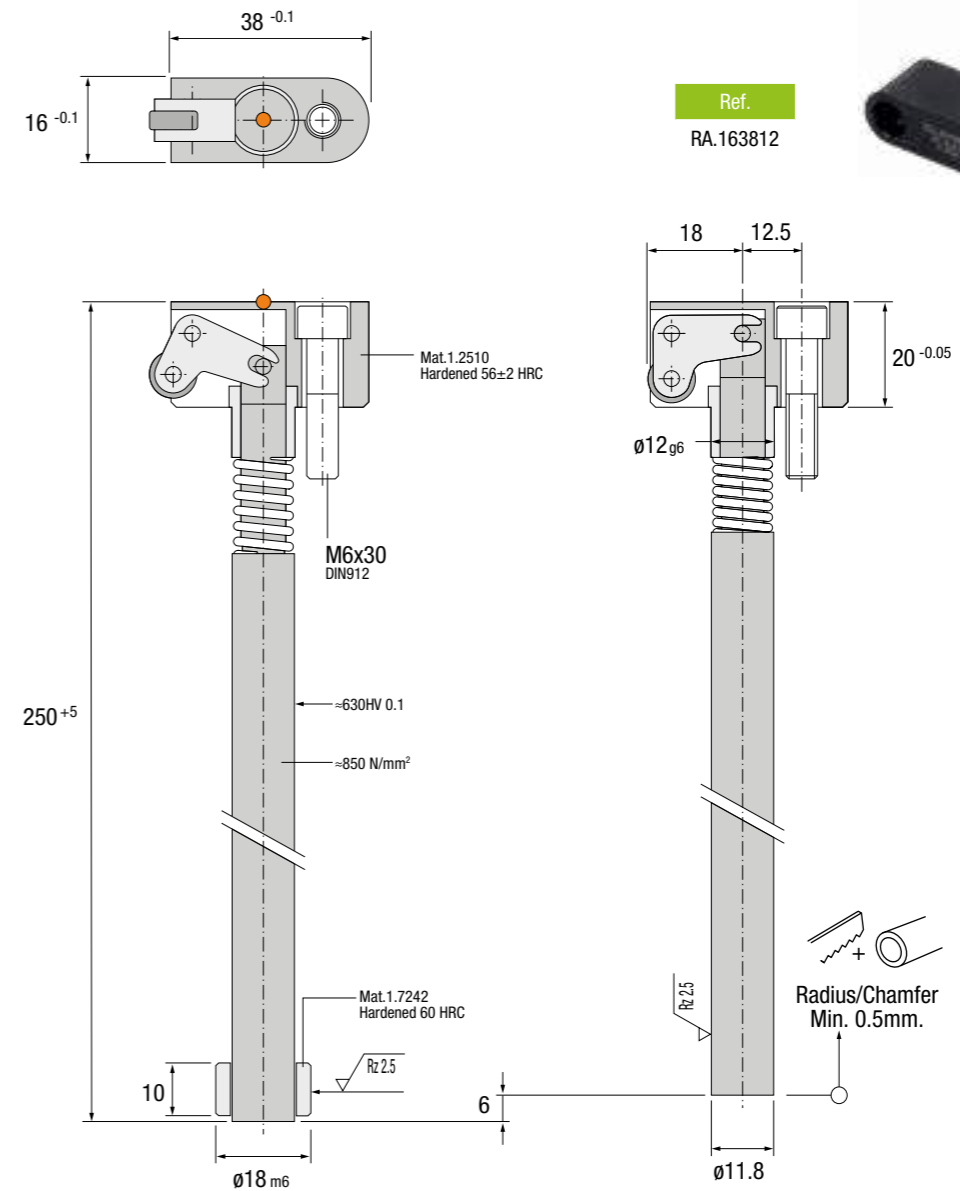
Mold Closed



AUTOMATIC RETAINER

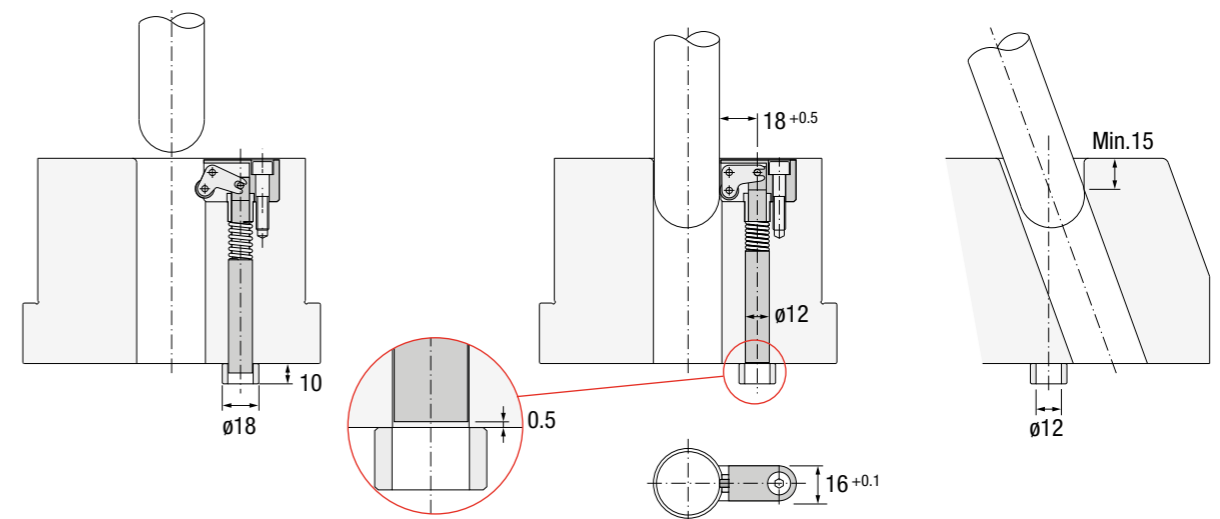
ES Retensor Automático DE Zuhaltung Automatisch
IT Ritensore Automatico PT Retensor Automático FR Retenue Automatique

● Cad Insertion Point



Installation Guidelines

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RA



Patented

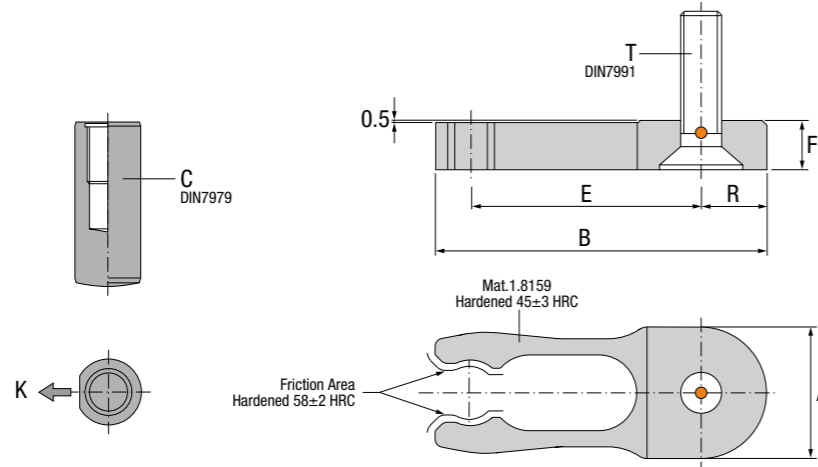
RC



SLIDE RETAINER

ES Retensor Corredera DE Schiebersicherung
IT Ritenore 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	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

Patented



Max. 150°C

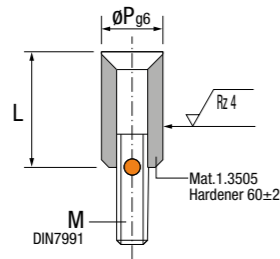
PO



OPTIONAL DOWEL PIN

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

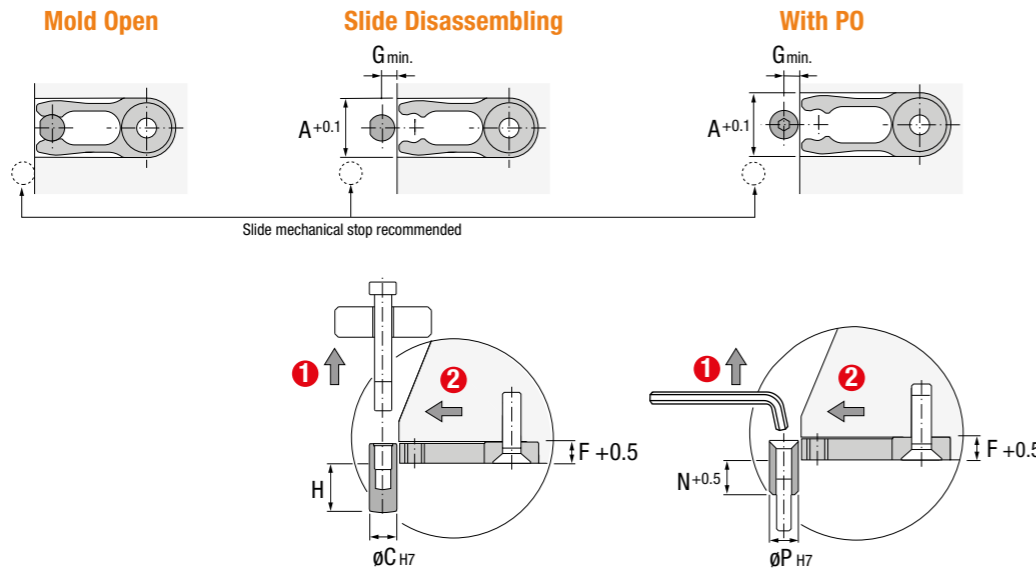
● Cad Insertion Point



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

Installation Guidelines

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Patented

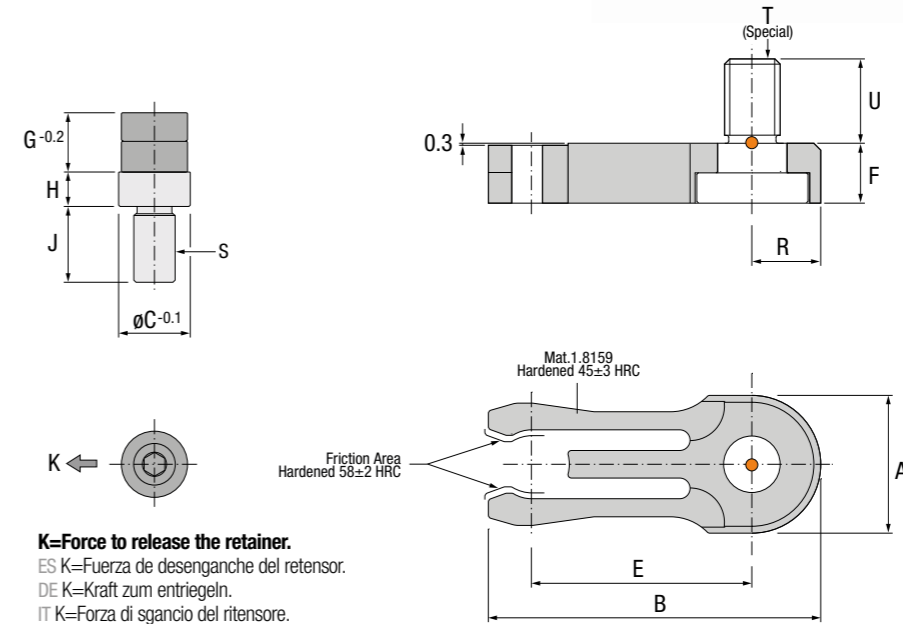
SLIDE RETAINER

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

● Cad Insertion Point



RCM



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

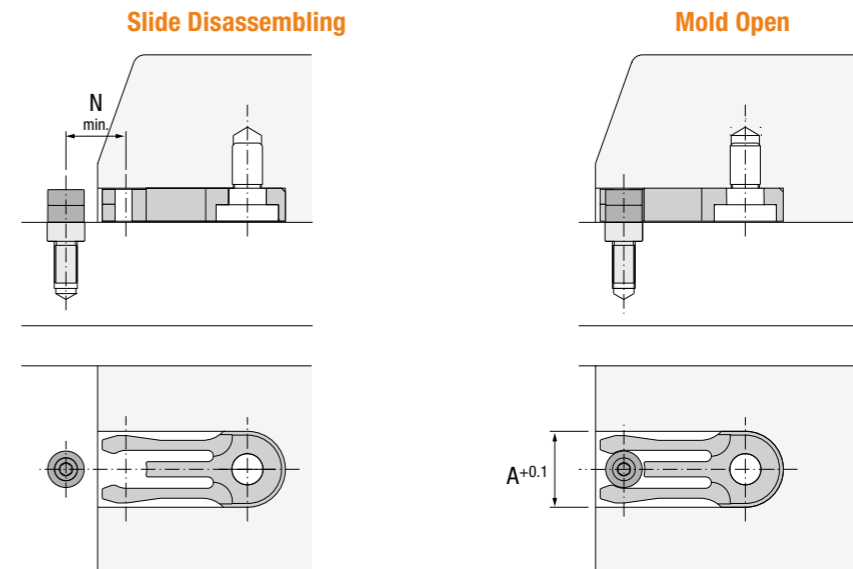
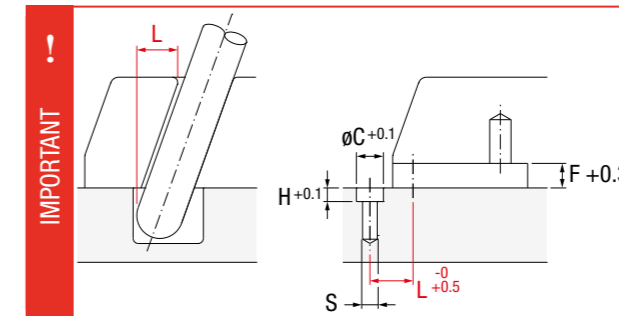
Patented



Max. 150°C

Installation Guidelines

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

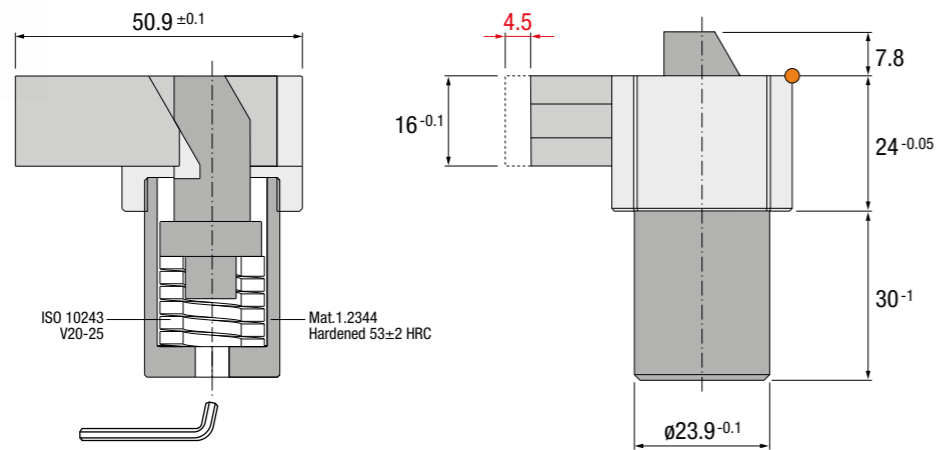


UC

CORE CAM

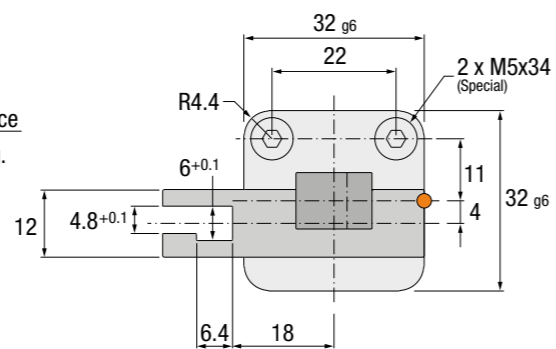
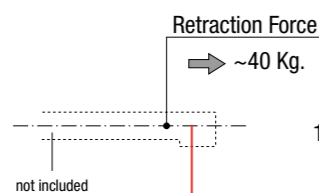
ES Unidad de Punzonado DE Kernstifthalter
IT Unità di Punzonatura PT Unidade de Furação FR Guide Broche

● Cad Insertion Point



Ref.

UC.325445

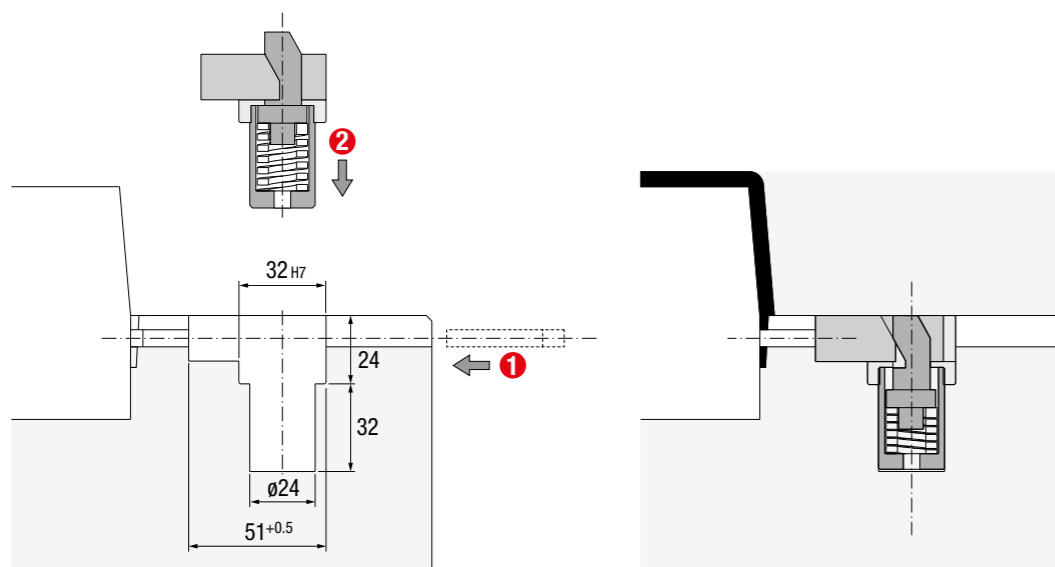


IMPORTANT !
Option for machining keyway.
Posibilidad de mecanizado anti giro.
Möglichkeit zur Herstellung einer Aussparung.
Possibilità di lavorazione anti giro.
Possibilidade de maquina anti-rotação.
Possibilitè d'indexer la broche.

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

Installation Guidelines

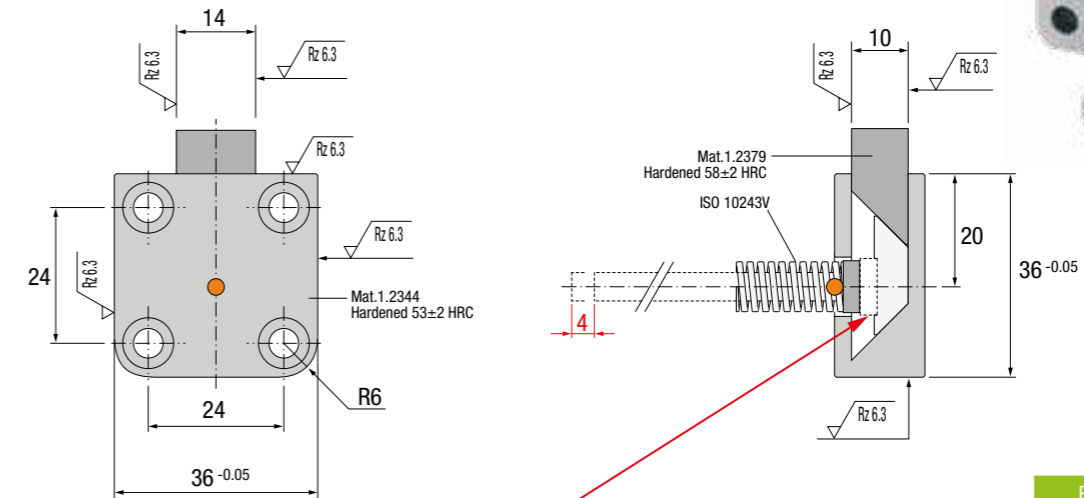
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



COMPACT CORING UNIT

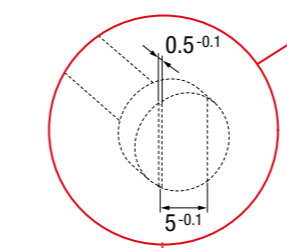
ES Unidad Apriete DE Kompakt Kernstifthalter
IT Unità Compatta di Punzonatura PT Unidade de Aperto FR Butée de Broche

● Cad Insertion Point



Ref.

UA.363616

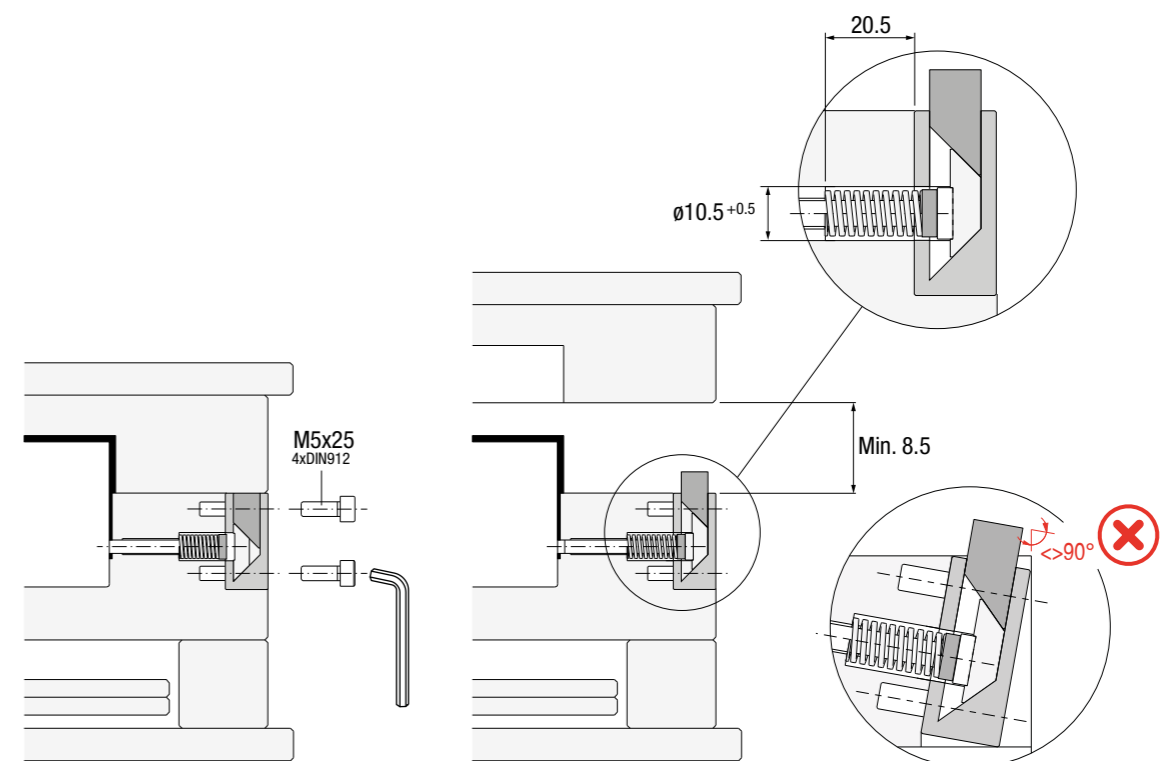


IMPORTANT !
Option for machining keyway.
Posibilidad de mecanizado anti giro.
Möglichkeit zur Herstellung einer Aussparung.
Possibilità di lavorazione anti giro.
Possibilidade de maquina anti-rotação.
Possibilitè d'indexer la broche.

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

Installation Guidelines

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



UA

Patented

Max. 150°C



2

UNDERCUTS

UNDERCUTS INDEX

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INDICE NEGATIVI / ÍNDICE NEGATIVOS / INDEX CONTRE DÉPOUILLES - CLIPS

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Double Cremaillere

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Verbindungsschlauch
Tubo Collegamento
Tubo de Ligação
Tube de Liaison

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Distribuidor Refrigeración
Verteilerschlauch
Distributore Refrigerazione
Distribuidor de Refrigeração
Distribution de Refroidissement

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90° Plate Connector
Conector Placa a 90°
90° Platten-Verbindungsstück
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Smart Worm Lifter
Smart Worm Lifter
Balancé Smart Worm
Patin Smart Worm

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

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Doppelauswerfer
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Kreuzauswerfer
Espulsore Elastico
Extractor Elástico
Éjecteur Tulipe

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Patin Vertical - DL
Vertikal Schrägschieber - DL
Pattino Automatico - DL
Patim Automático - DL
Cale Automatique - DL

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Dog Lifter - DG
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Vertikal Schrägschieber - DG
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Angled Guide Bush
Casquillo Inclinado
Schrägbuchse
Bussola Inclinata
Casquillo Inclinado
Cale Escamotable

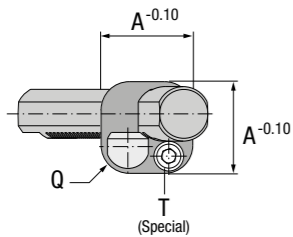
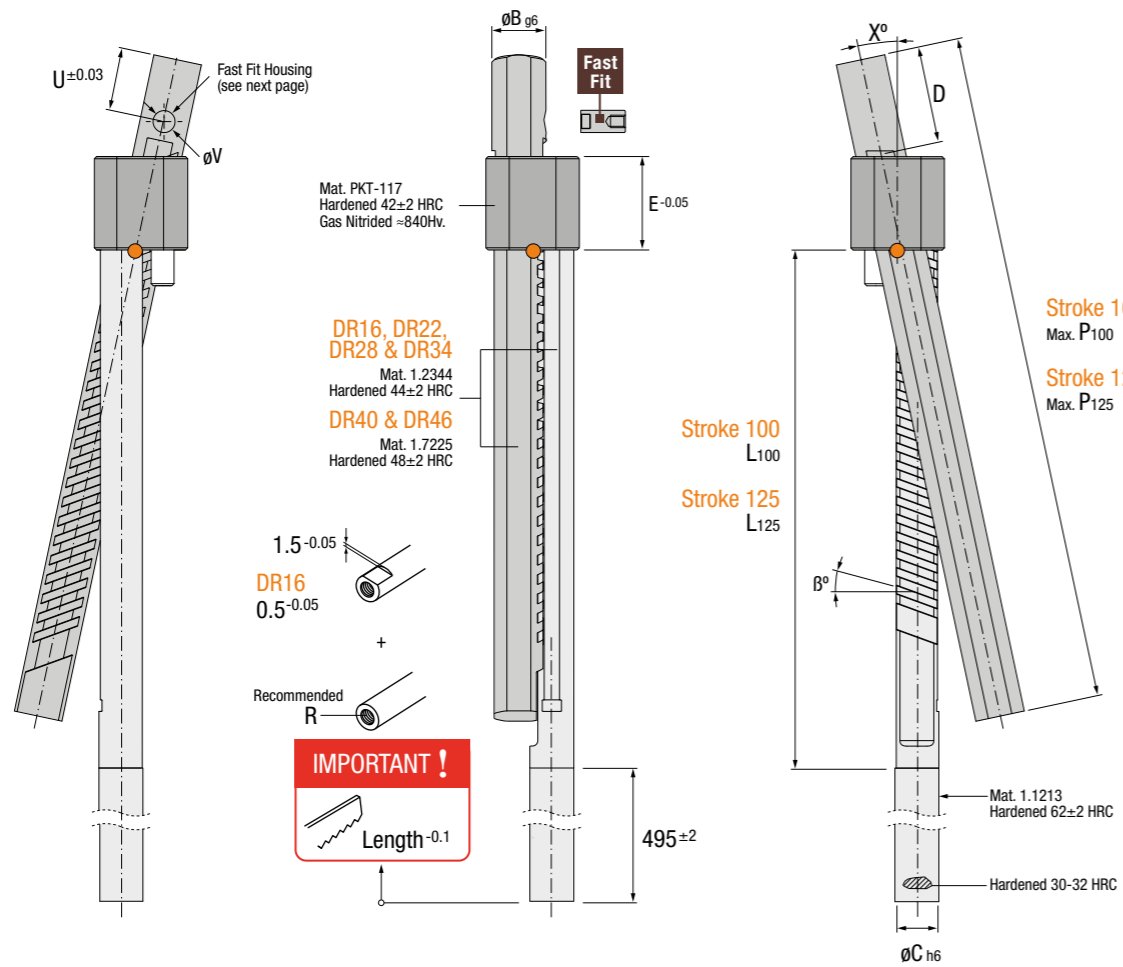
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Special Sprung Core
Pinza Plana Especial
Sonder Federnder Auswerfer
Pinza Plana Speciale
Pinça Plana Especial
Éjecteur de Forme Special

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.

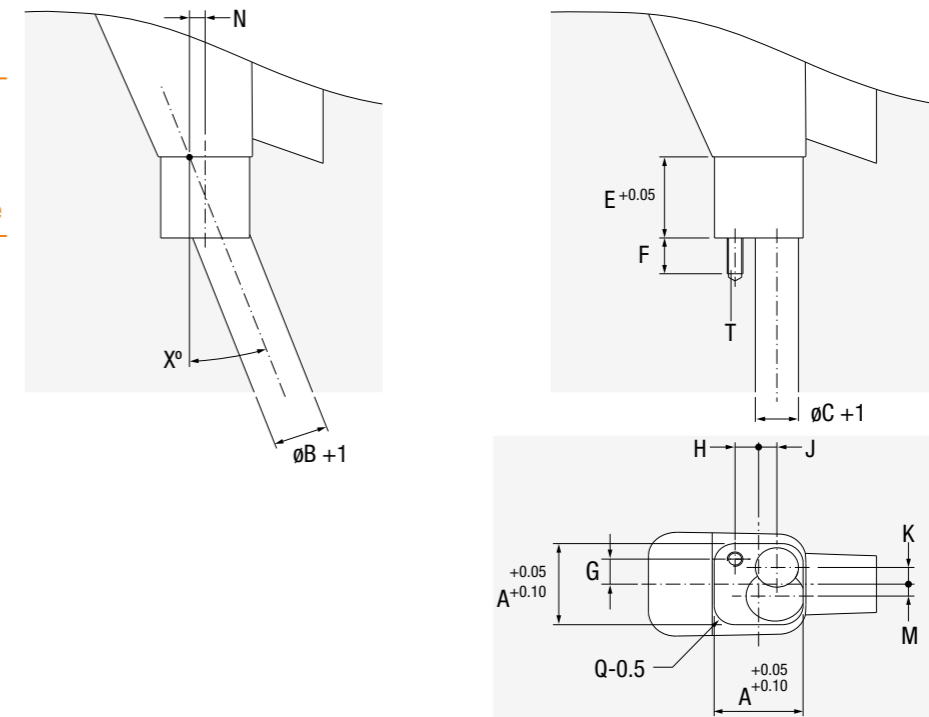
Stroke 100	Stroke 125	X°	A	B	C	D	E	L100	P100	L125	P125	Q	R	T	U	V	Stroke 100-S	Stroke 125-S
DR.16100L-x	-	8 12 16	- 16	9 8	20 20	142	178	-	-	4	M5	M5	10	6			DR.16100L-x-S	-
DR.22100L-x	DR.22125L-x	8 12 16	20 22	12 12	30 22	148	202	202	261	6.5	M6	M6	17	8			DR.22100L-x-S	DR.22125L-x-S
DR.28100L-x	DR.28125L-x	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 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.
Sostituite la **X** del codice con l'angolo X° desiderato (8°, 12°, 16° o 20°) e indicate la β° richiesta.
Substituí 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.

INSTALLATION GUIDELINES

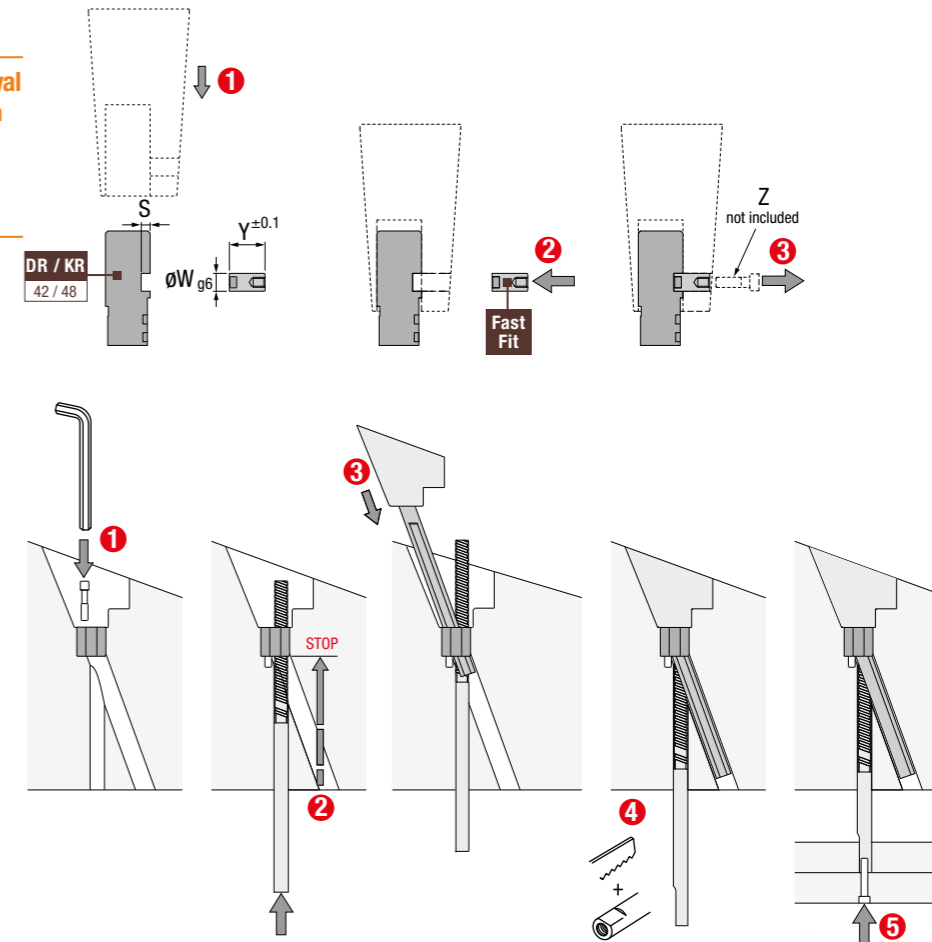
ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

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

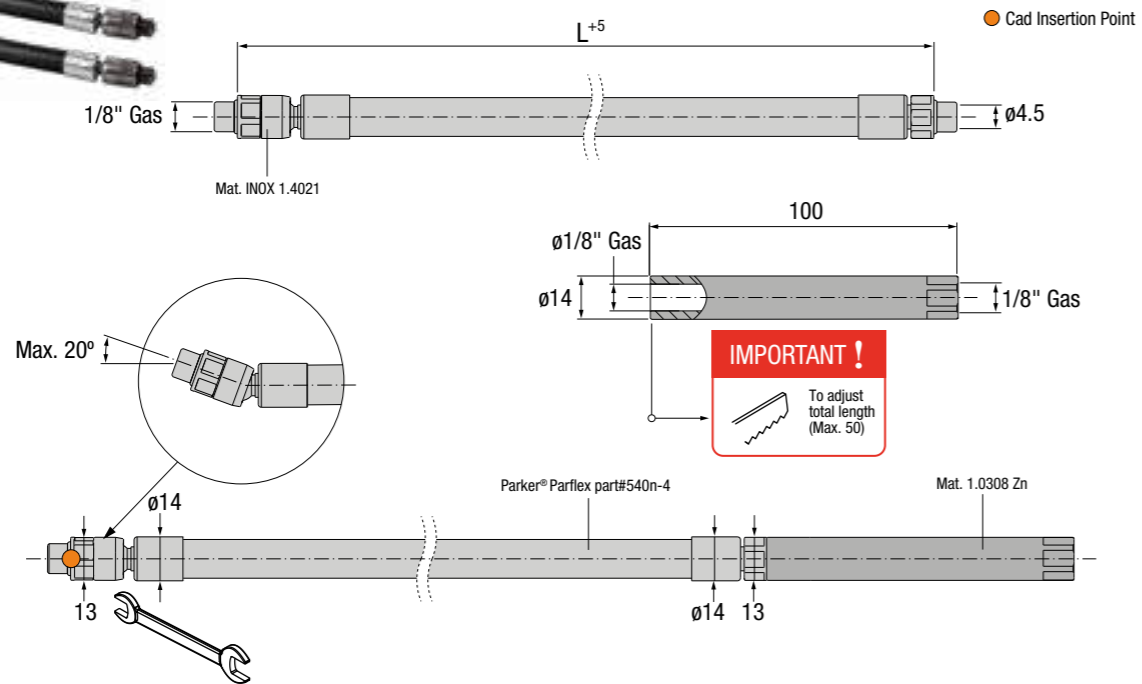
FAST FIT:
Installation and Removal
Instalación y Desinstalación
Montage und Demontage
Montaggio e Smontaggio
Instalação e Desinstalação
Montage et Démontage



DK

DR COOLING HOSE

ES Refrigeración DR DE Kühlungsschlauch für DR
IT Refrigerazione DR PT Refrigeração DR FR Refroidissement DR



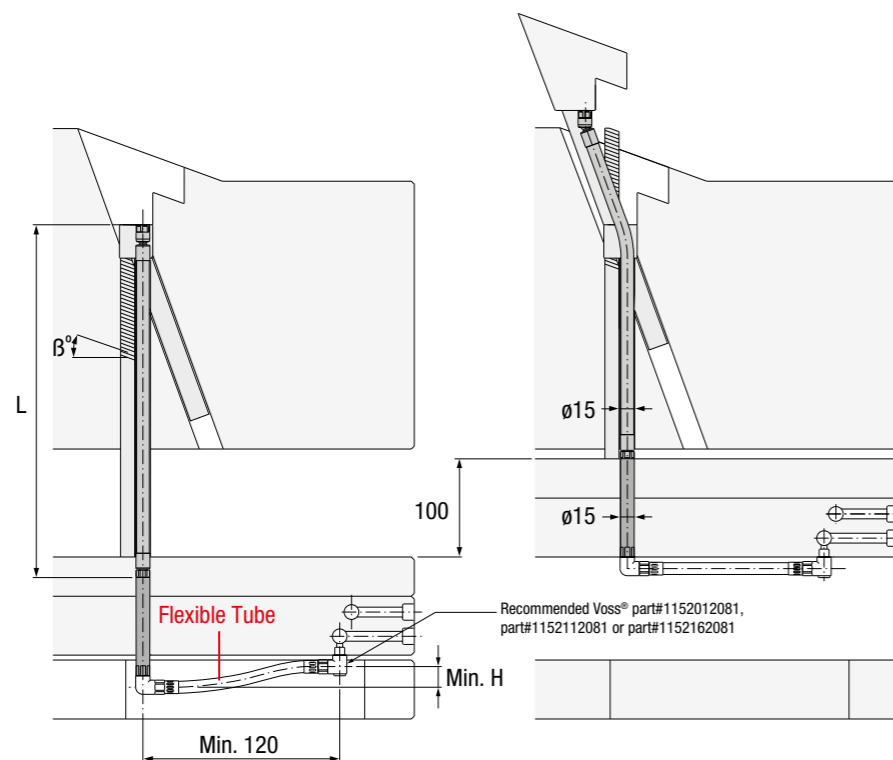
Max. Cooling Fluid 50°C

Ref.	β°	H			
		DR.xxxxx-8	DR.xxxxx-12	DR.xxxxx-16	DR.xxxxx-20
DK.141818-...	Negative to 0°	10	10	10	10
	+1° to +9°	10	10	10	15
	+10° to +20°	10	15	20	25
	>+20°	15	20	25	30

IMPORTANT! Indicate the required **L** dimension; the length will be rounded up to the next multiple of 25mm.
Indicar la cota **L** deseada. Se suministrará redondeada al múltiplo superior de 25mm.
Gewünschte Länge **L** angeben. Die Länge wird auf die nächste Vielfachen von 25 mm abgerundet.
Indicare la lunghezza **L** desiderata; la quota richiesta sarà arrotondata al multiplo di 25mm superiore.
Indicar a cota **L** desejada. Será fornecido com a dimensão múltipla de 25mm seguinte.
Indiquer la cote **L** désirée. Celle-ci sera arrondie à un multiple supérieur de 25 mm.

Installation Guidelines

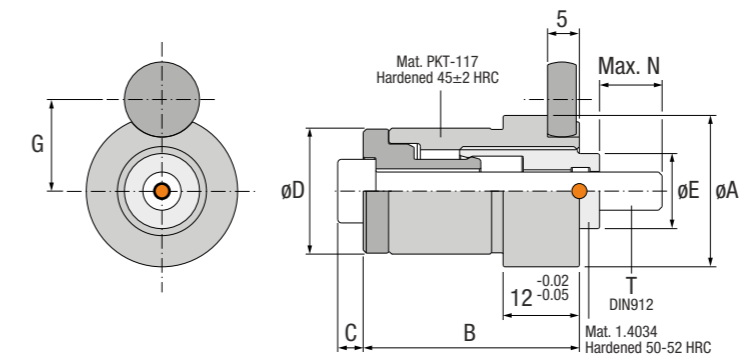
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



ADJUSTABLE FIXING

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

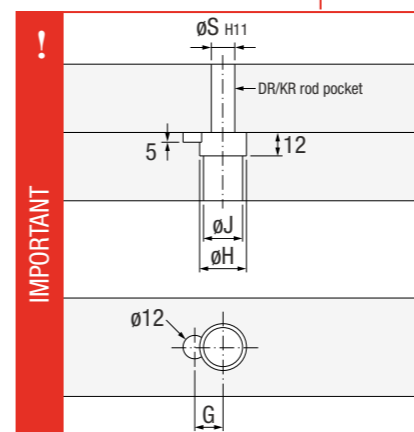
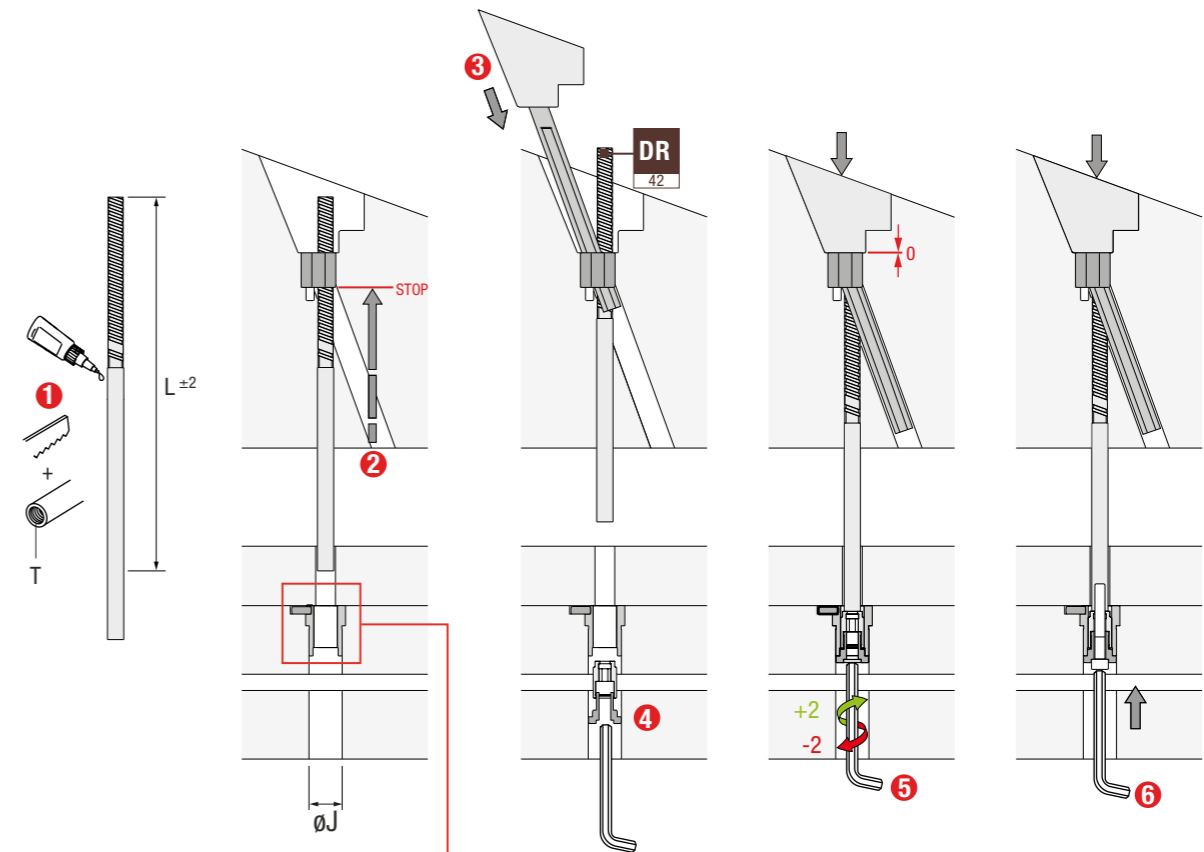
● Cad Insertion Point



Ref.	A	B	C	D	E	G	H	J	N	T	S	Compatible with
RF.161605	19.8	34	3	15.8	7.8	12.5	20	16	18	M5x45	8	DR16
RF.222006	23.8	34	4	19.8	11.8	14.5	24	20	18	M6x45	12	DR22/KR22
RF.282408	27.8	42	0	23.8	13.8	16.5	28	24	20	M8x50	14-16	DR28/DR34/KR28/KR34
RF.403210	35.8	42	0	31.8	19.8	20.5	36	32	24	M10x50	20-24	DR40/DR46

Installation Guidelines

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



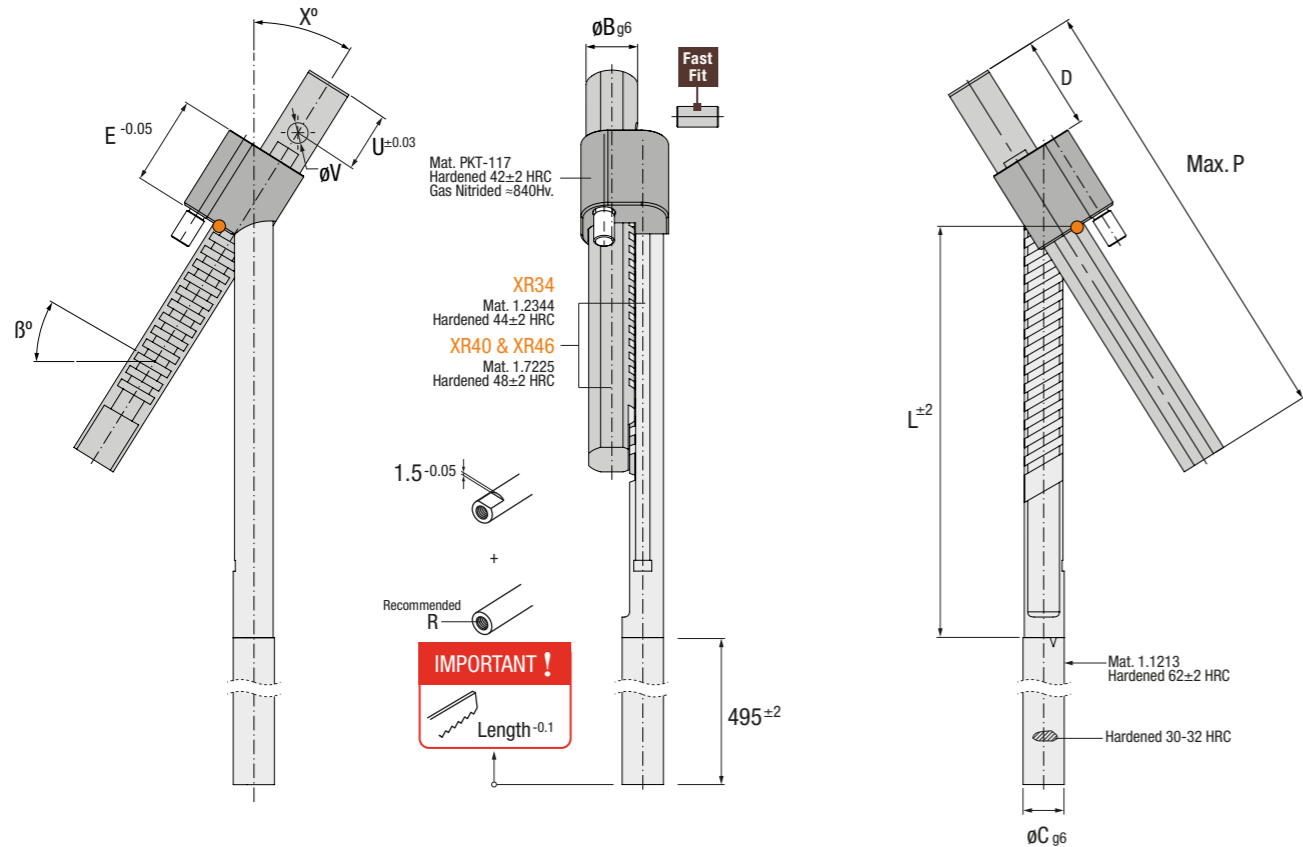
RF

Patented
 Max. 120°C

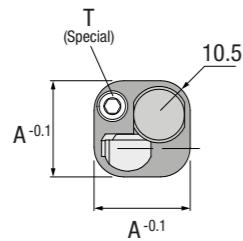
XTREME DOUBLE RACK

ES Doble Cremallera Xtreme DE Xtreme Double Rack
 IT Doppia cremagliera Xtreme PT Xtreme Double Rack FR Double Cremaillere Xtreme

● Cad Insertion Point



IMPORTANT!
 Length^{-0.1}



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

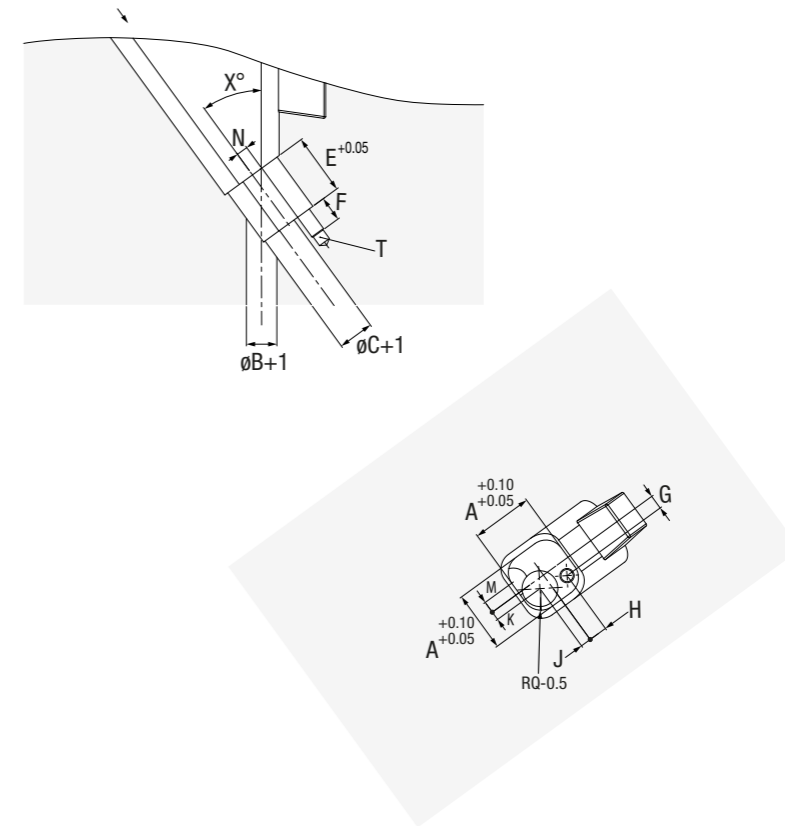
Stroke 100	X°	A	B	C	D	E	L	P	R	T	U	V	Stroke 100-S
XR34100L-x	24 28 32 36	34	20	16	36	34	159	225	M8	M8	23	8	XR34100L-x-S
XR40100L-x	24 28 32 36	40	22	20	36	40	170	240	M10	M10	20	10	XR40100L-x-S
XR46100L-x	24 28 32 36	46	24	24	42	46	174	255	M10	M12	26	10	XR46100L-x-S

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 indichiate 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

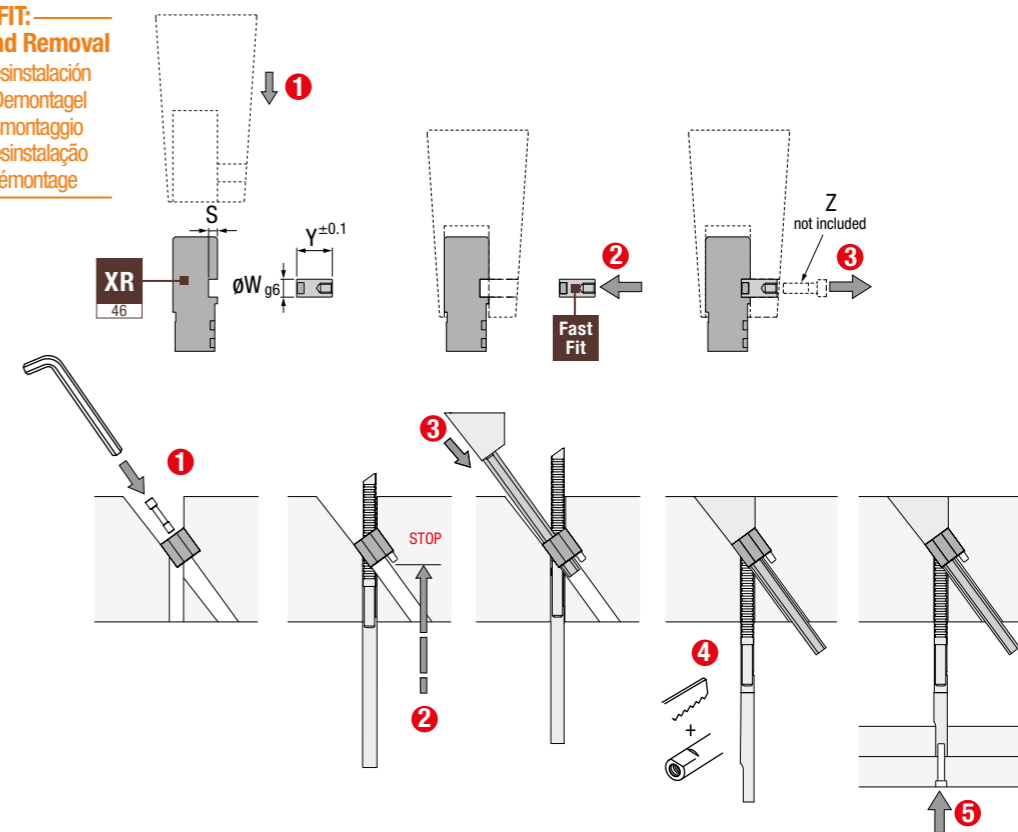
ES Consejos de Instalación DE Richtlinien zur Installation
 IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

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:
 Instalación y Desinstalación
 Montage und Demontage
 Montaggio e Smontaggio
 Instalação e Desinstalação
 Montage et Démontage



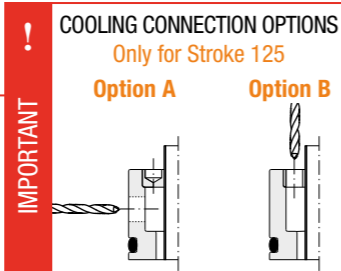
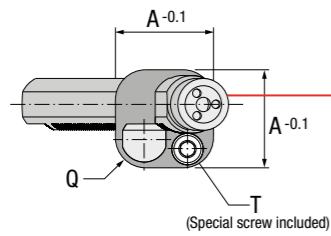
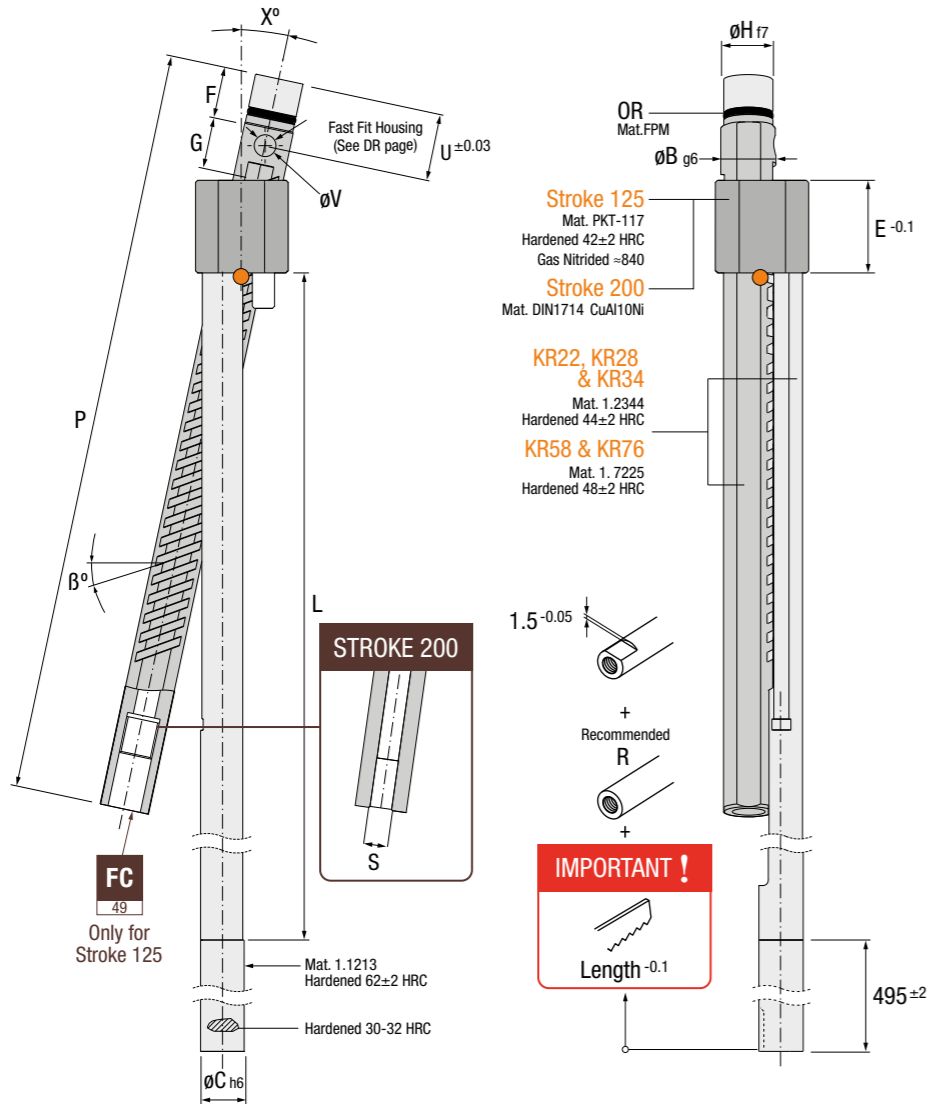
KR

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 !

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

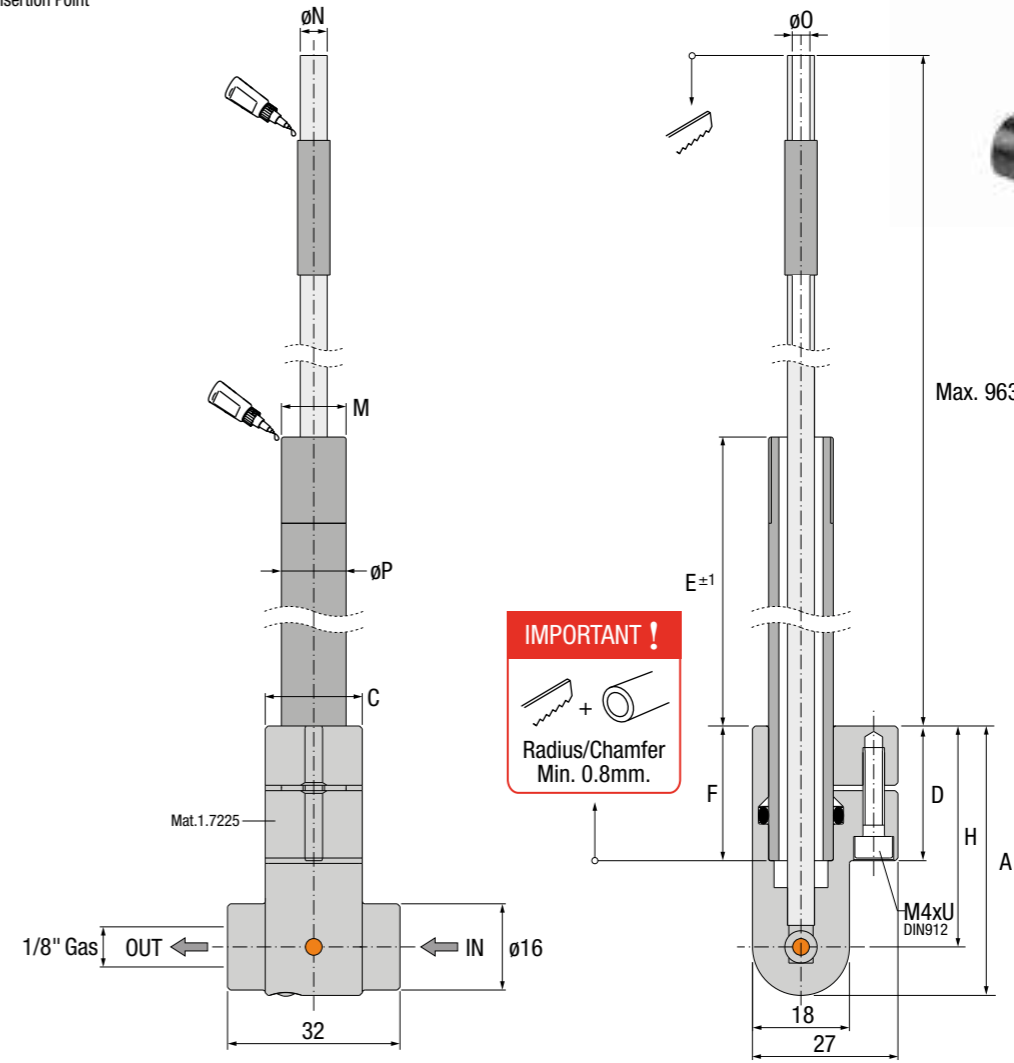
IMPORTANT !

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 Refroidissement KR

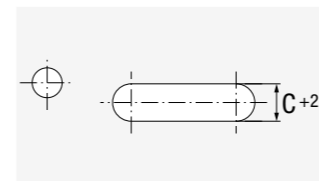
● Cad Insertion Point



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 ref.	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

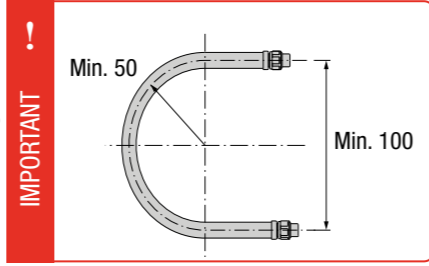
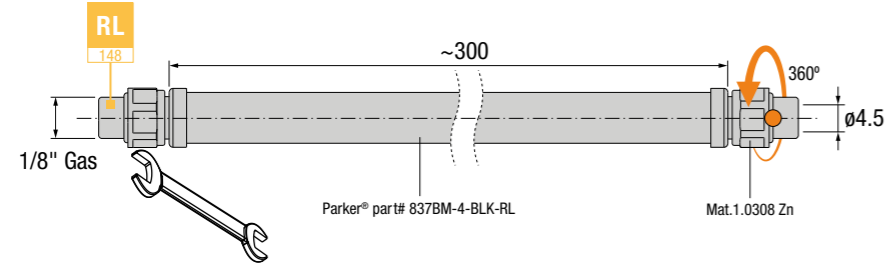
Max. 80°C

MK

CONNECTION HOSE

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

● Cad Insertion Point



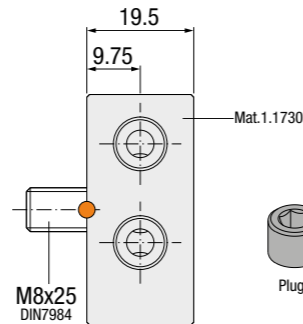
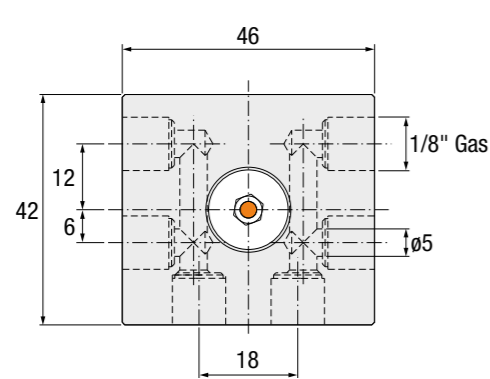
Ref.
MK.120300

Max.
80°C

RD

COOLING DISTRIBUTOR

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



Ref.
RD.182012

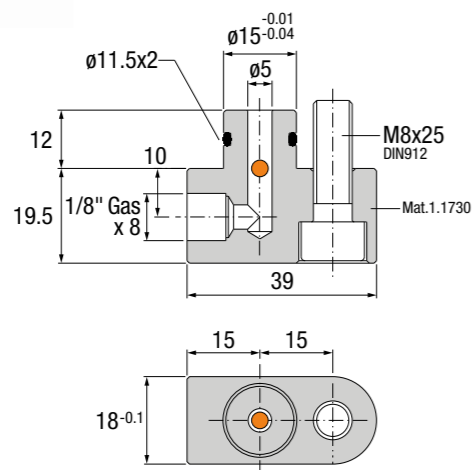
2x1/8" DIN906 (Included)
Plugs

Max.
80°C

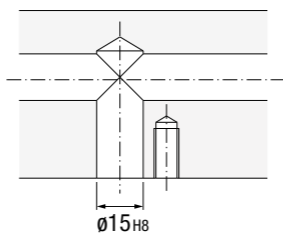
CK

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°



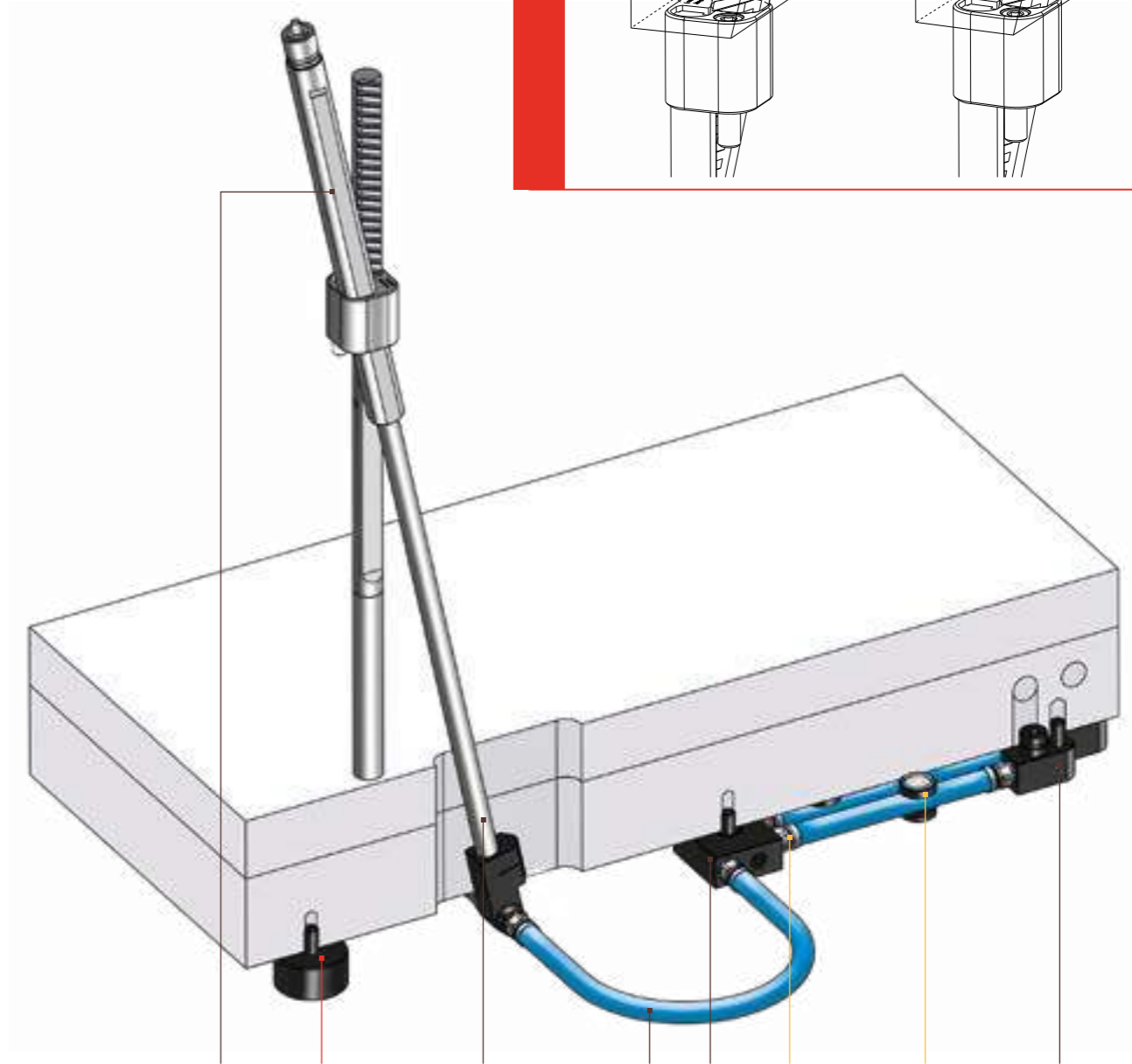
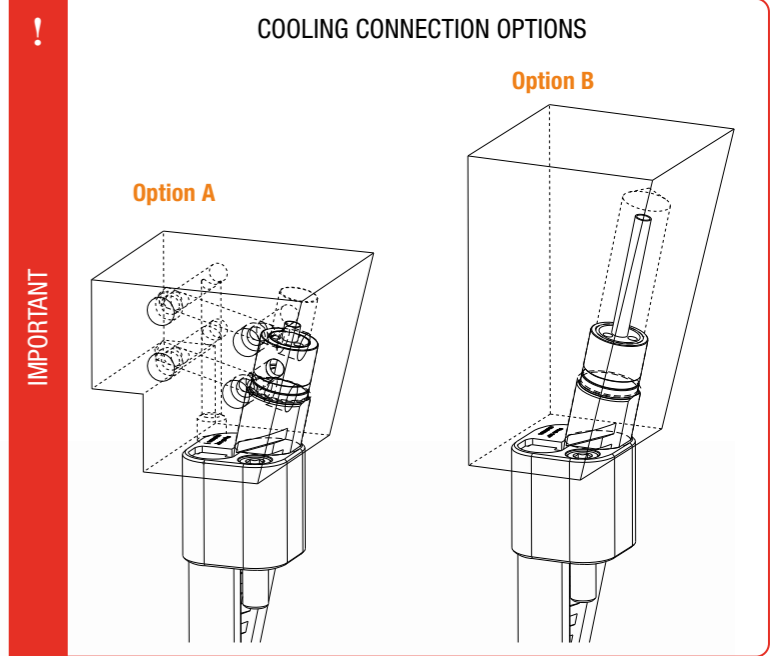
Ref.
CK.181839



Max.
80°C

INSTALLATION GUIDELINES

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



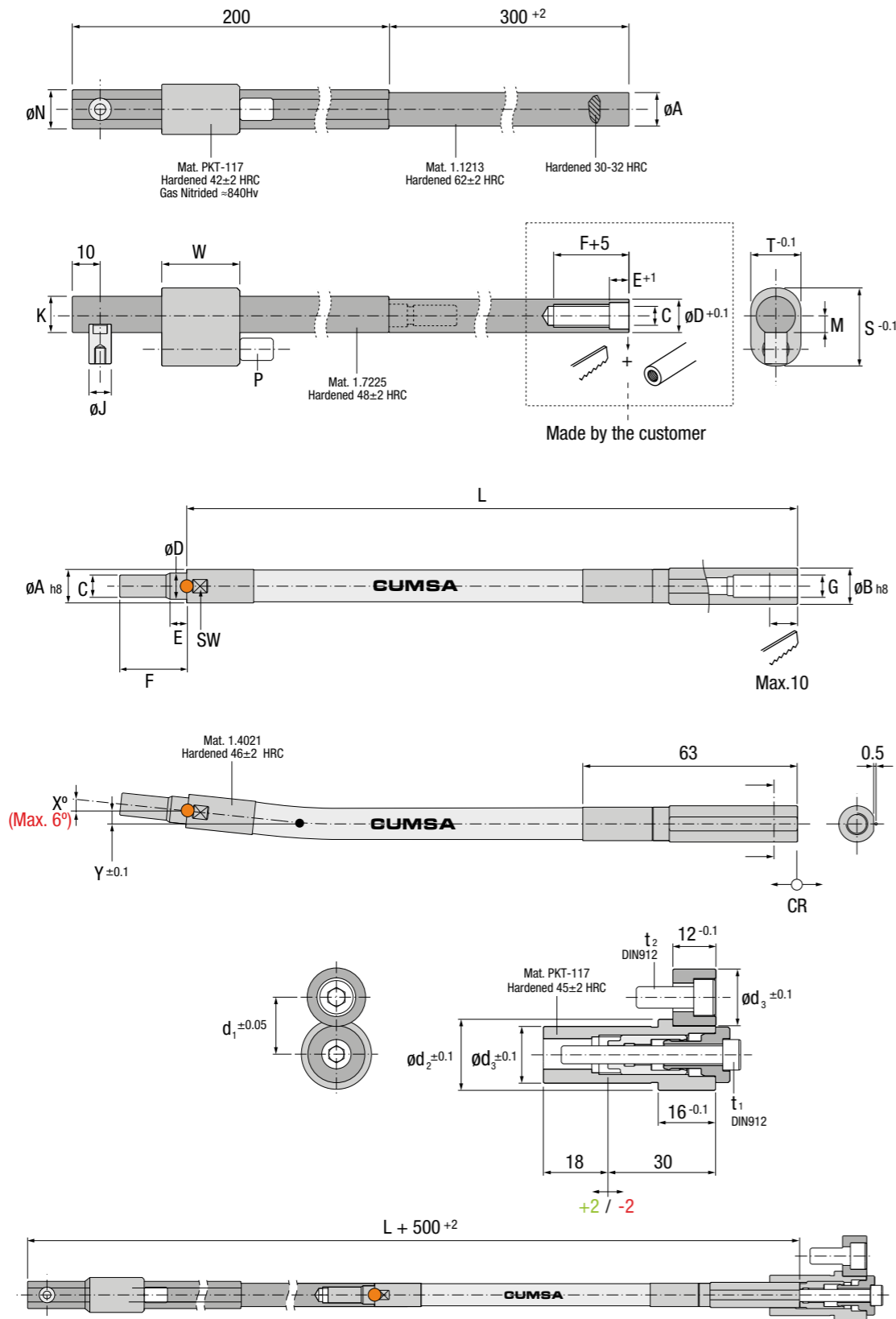
WL

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



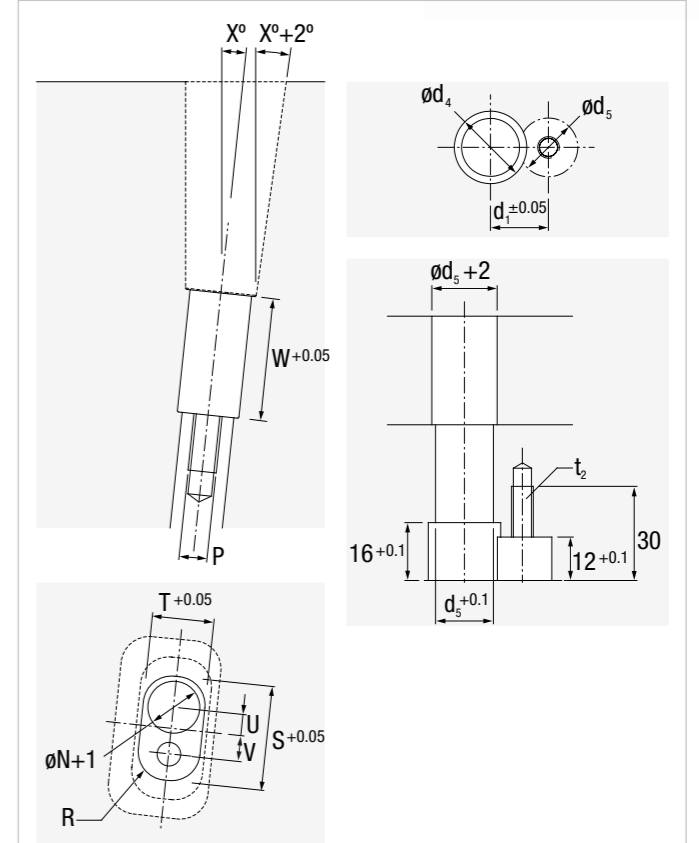
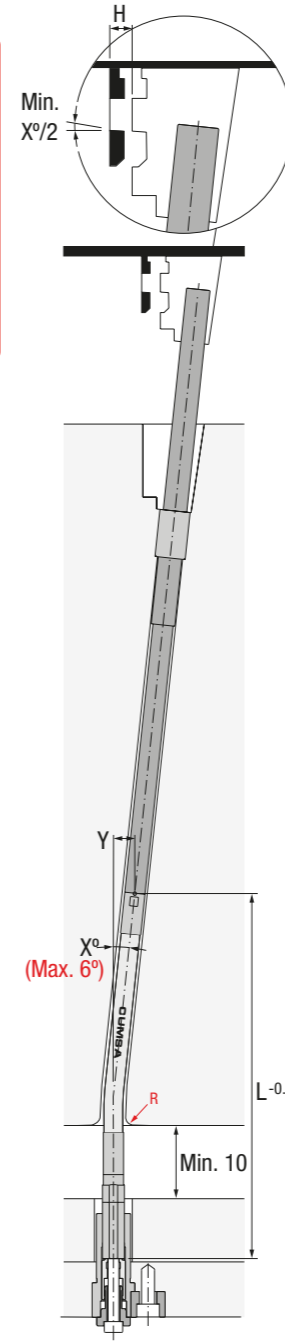
Ref.	A	B	C	D	d ₁	d ₂	d ₃	E	F	G	J	K	L	M	N	P	S	SW	T	t ₁	W	d ₄	d ₅	R	t ₂	U	V	Z	CR(N)	Stroke
WL080100	8	9	M5	5.5	16	19.8	15.8	3.5	18	M5	6	9.5	205	4.5	10	M6	22	7	13	M5x45	26	20	16	6	M6	4.5	5.5	40	1.500	100
WL080125	8	9	M5	5.5	16	19.8	15.8	3.5	18	M5	6	9.5	240	4.5	10	M6	22	7	13	M5x45	26	20	16	6	M6	4.5	5.5	50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

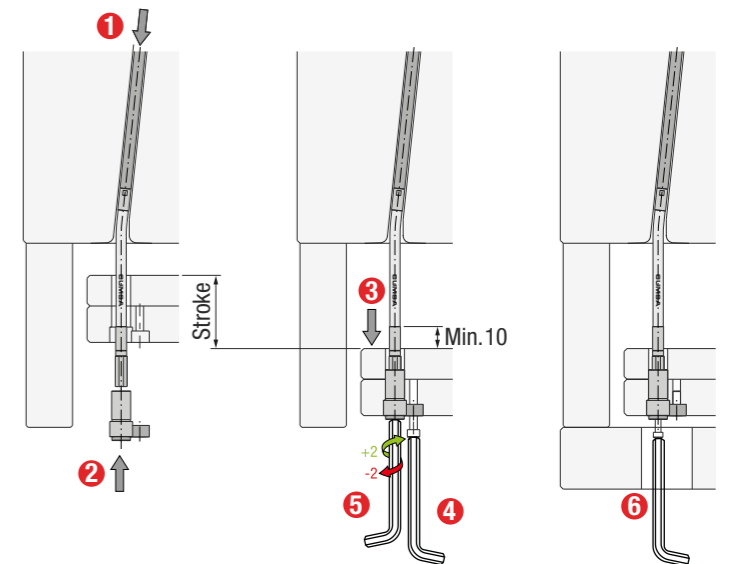
ES Consejos de Instalación DE Richtlinien zur Installation
 IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

! 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 Mecanico no postigo moldante.
 Créer un Arrêt Mécanique sur la pièce de la partie moulante.

! IMPORTANT
 $\phi B^{+0.5}$
 Z±2



X°	WL...x100		WL...x125	
	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

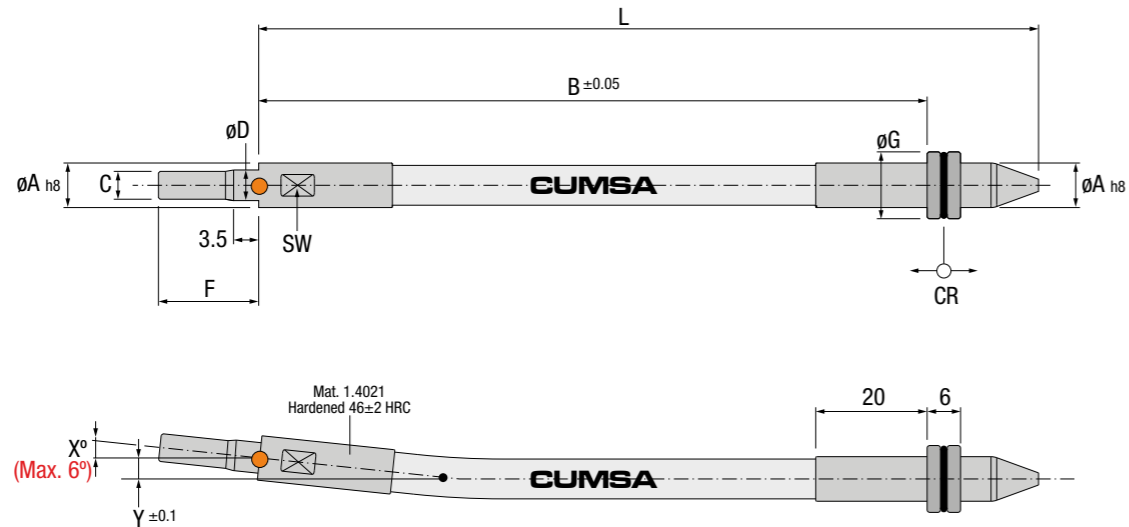
WP



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

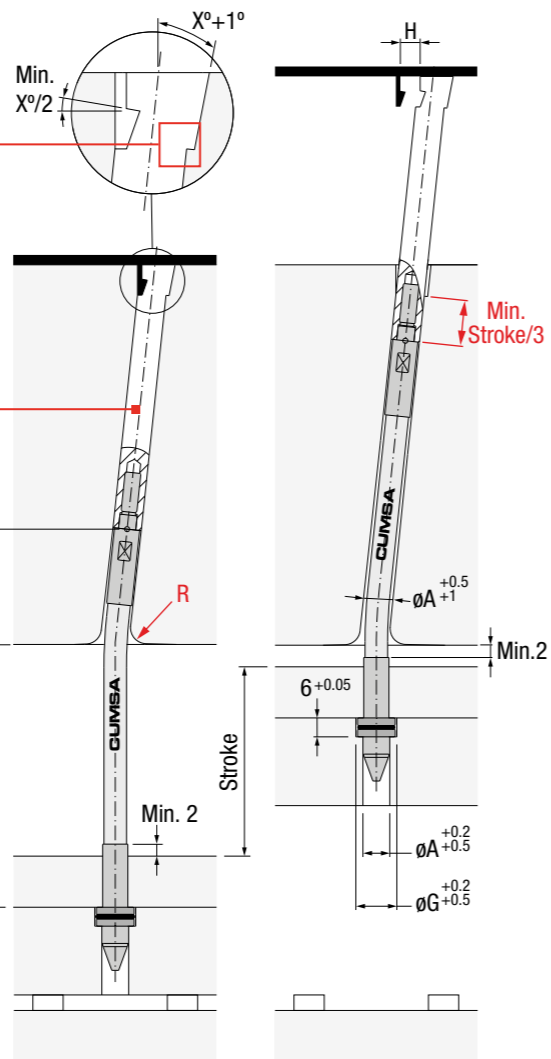
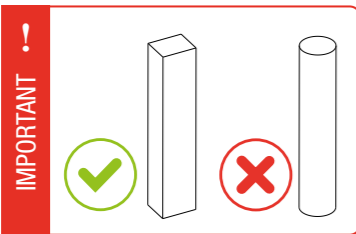


Ref.	A	B	C	D	F	G	L	SW	Z	CR (N)	Max. Stroke
WP.060030	6	90	M4	4.5	12	10	108	5	30	1.000	30
WP.060060	6	120	M4	4.5	12	10	138	5	35	1.000	60
WP.080030	8	90	M5	5.5	18	12	110	7	30	1.500	30
WP.080060	8	120	M5	5.5	18	12	140	7	35	1.500	60

Installation Guidelines

Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · 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.

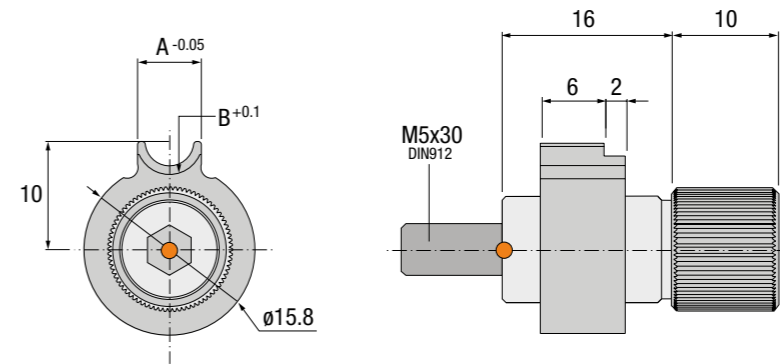


X°	Y	WP.xx0030		WP.xx0060	
		H	H	H	H
1°	0.60	0.52	1.04		
2°	1.20	1.05	2.09		
3°	1.80	1.57	3.14		
4°	2.40	2.10	4.19		
5°	3.00	2.63	5.25		
Max. 6°	3.50	3.15	6.31		

WP ADJUSTABLE FIXING

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

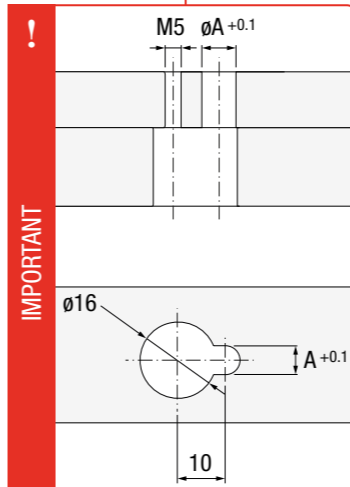
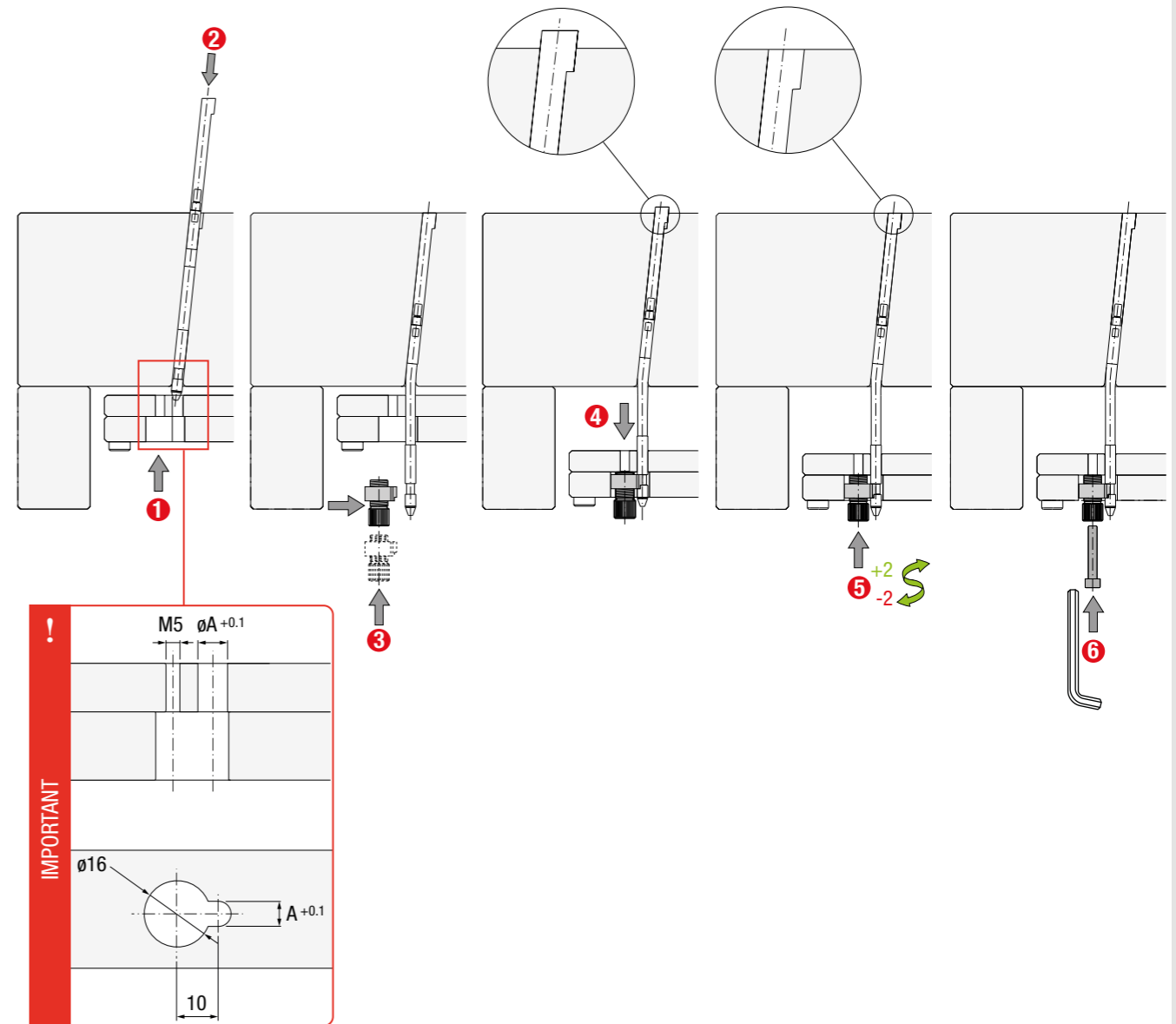
● Cad Insertion Point



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

Installation Guidelines

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



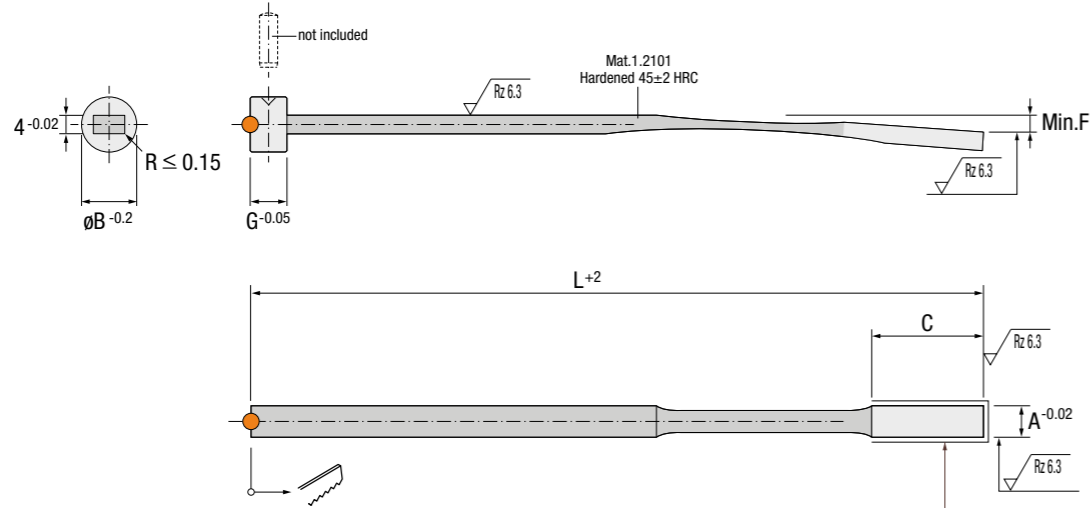
WF

PF

FLEXIBLE CORE

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

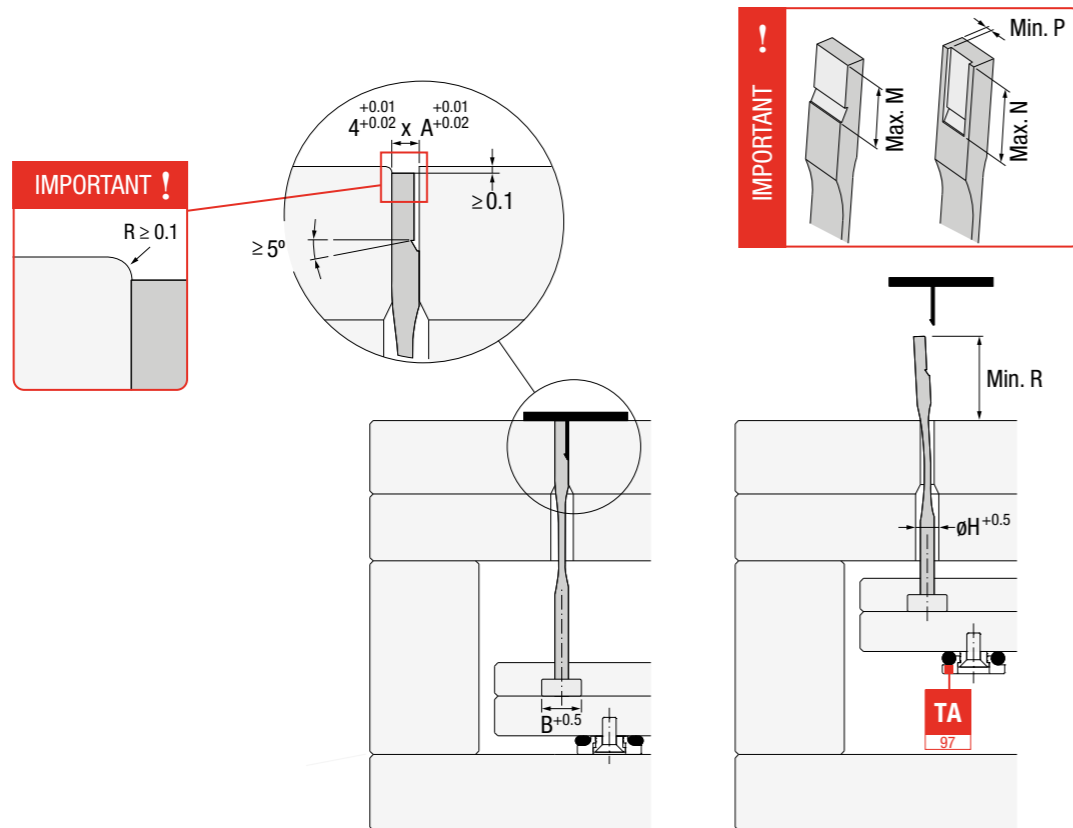
● Cad Insertion Point



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

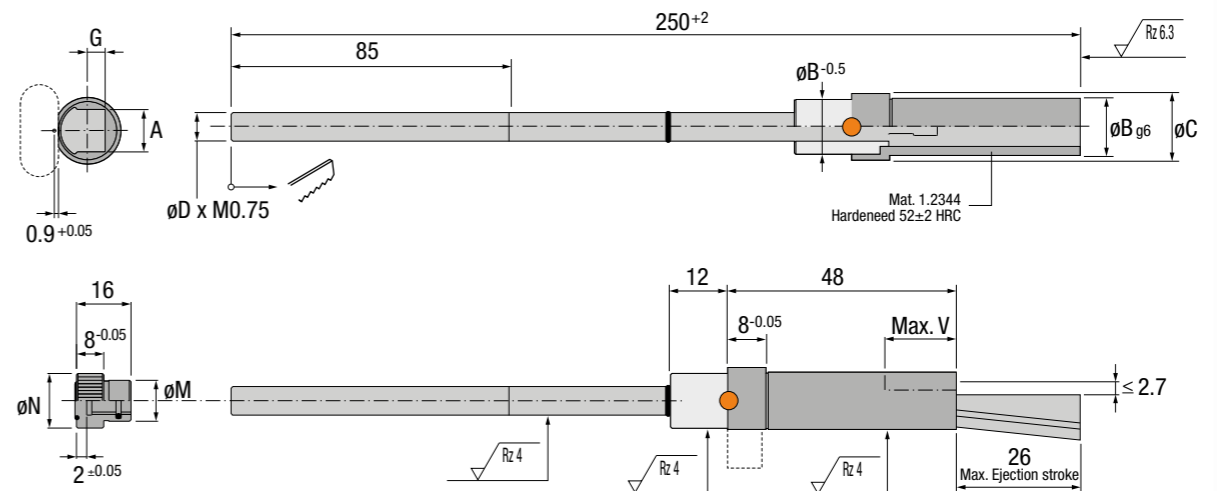
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



STANDARD LIFTER

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

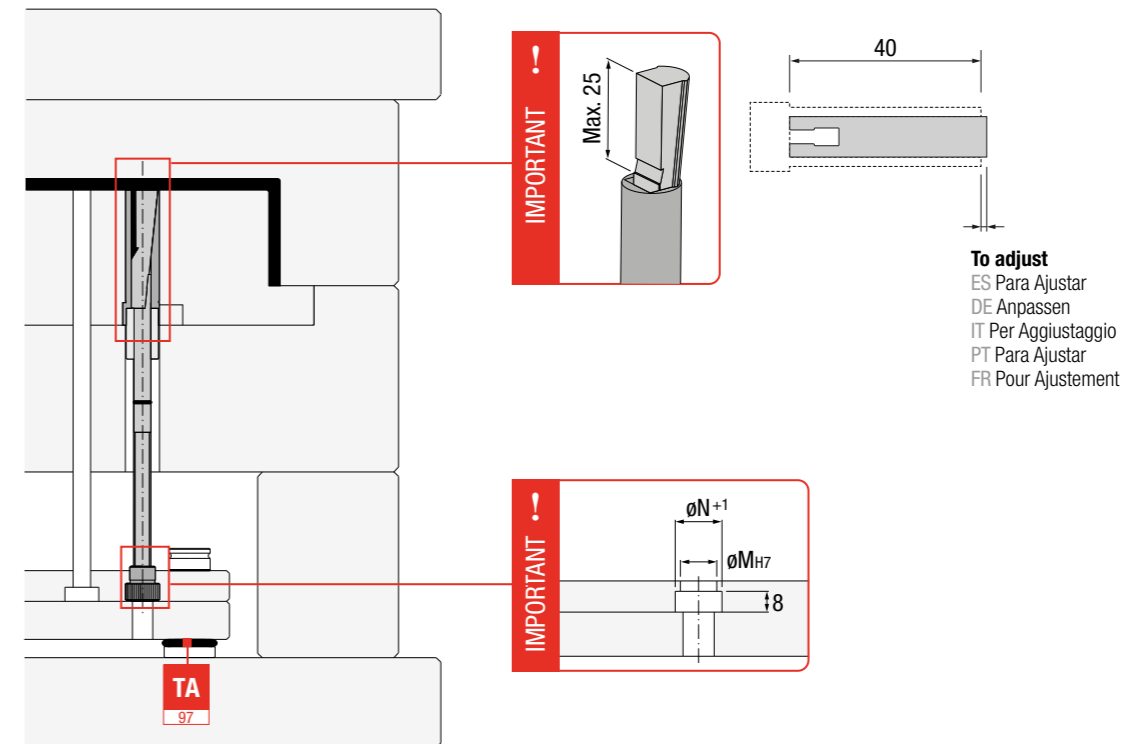
● Cad Insertion Point



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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To adjust
ES Para Ajustar
DE Anpassen
IT Per Aggiustaggio
PT Para Ajustar
FR Pour Ajustement

PS

Patented

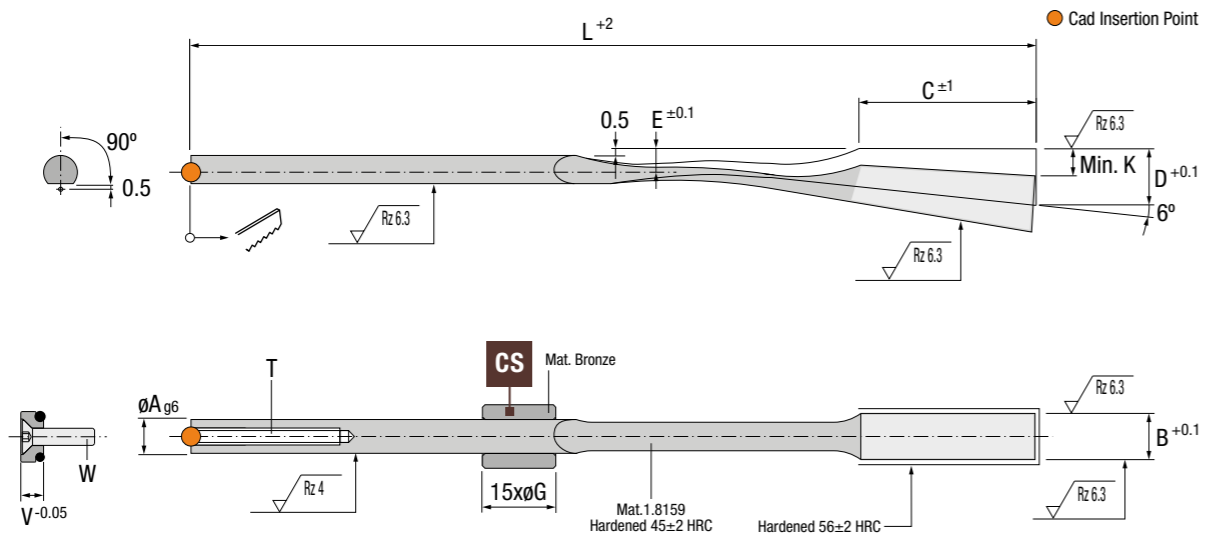
PW

Patented

Max. 150°C

SPRUNG CORE

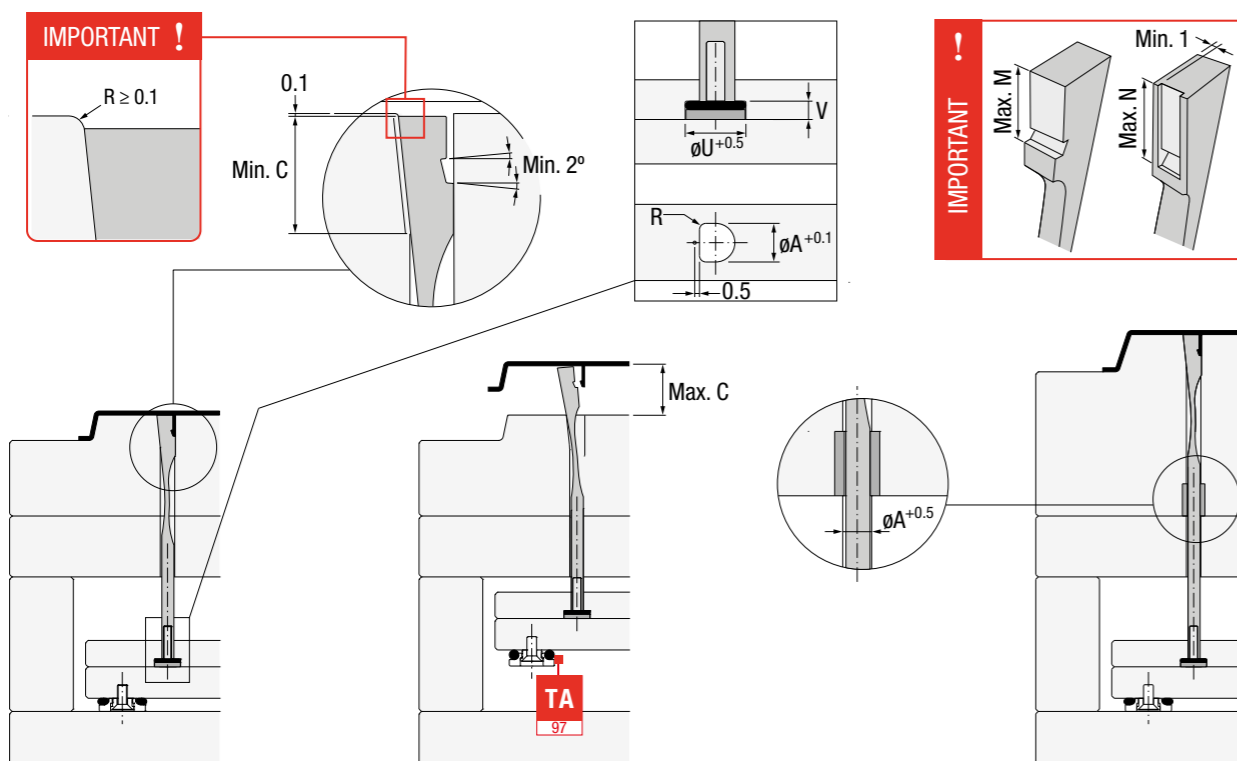
ES Pinza Plana DE Flexibler Federauswerfer
IT Pinza Piana PT Pinça Plana FR Ejecteur de Forme



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

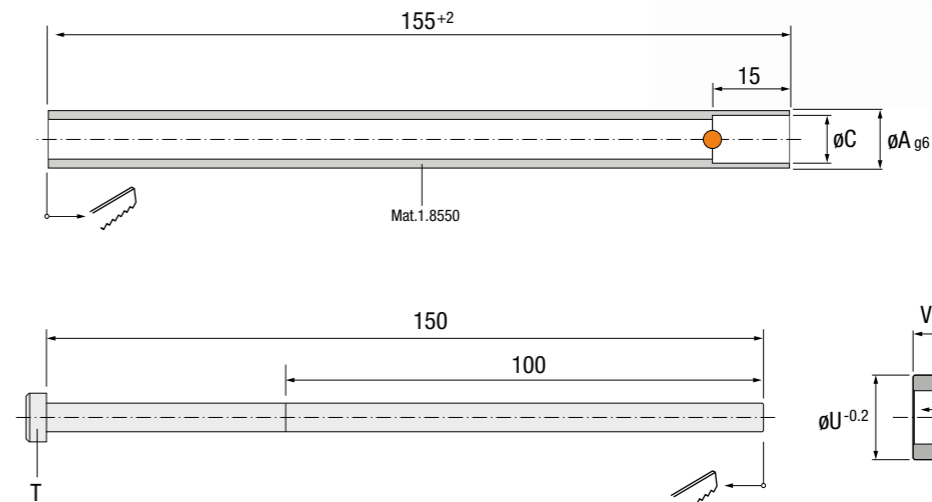
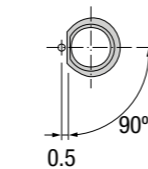
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



SPRUNG CORE EXTENSION

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

● Cad Insertion Point

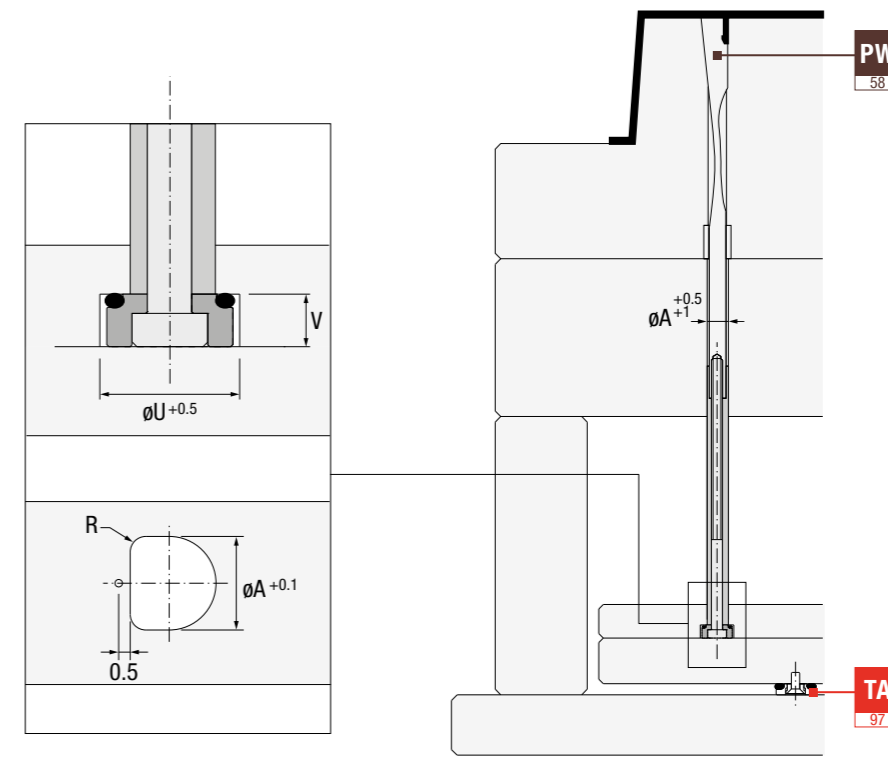


Ref.	A	C	R	S	T	U	V
AP.080615	8	6	1.25	9.5x2	M4 (DIN7991)	14	5
AP.100815	10	8	2	11.5x2	M5 (DIN7984)	16	6
AP.121015	12	10	2.5	14.5x2.5	M6 (DIN7984)	20	8

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.
Possibilitè d'obtenir une longueur standard de 315mm.

Installation Guidelines

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



AP

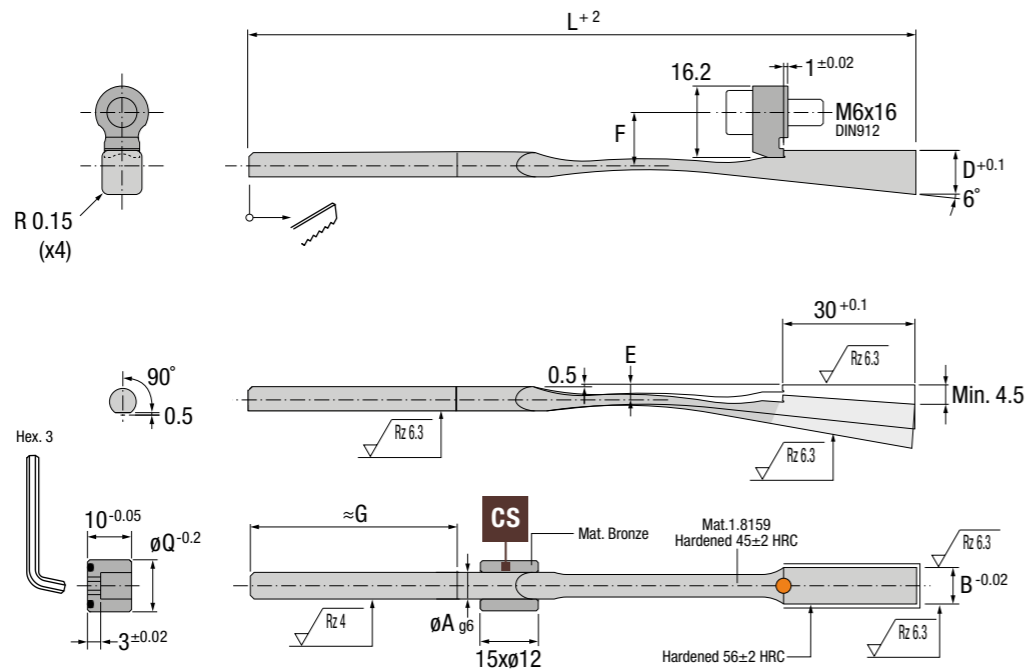
Patented

PX

XTRA SPRUNG CORE

ES Pinza Extra DE Xtra Federnder Auswerfer
IT Pinza Piana Extra PT Pinça Plana Extra FR Ejecteur de Forme Extra

● Cad Insertion Point

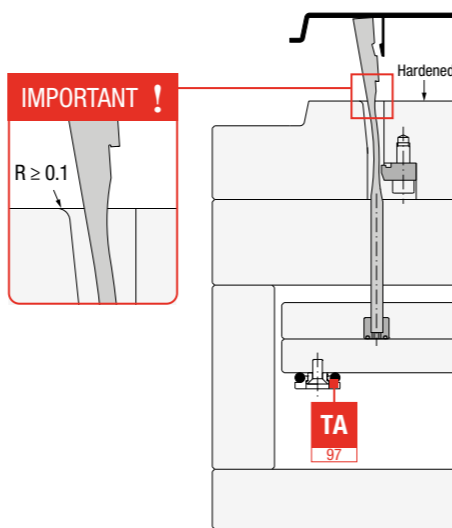
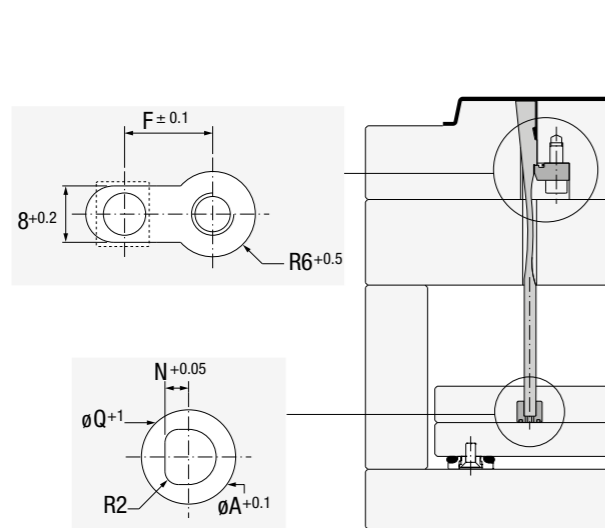
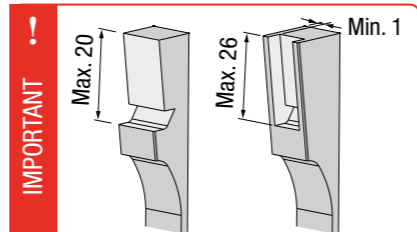
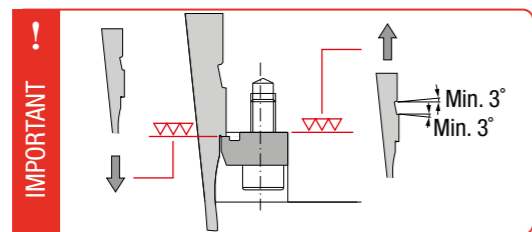


Ref.	A	B	D	E	F	L=175		L=250		L=325		N	Q
						≈G	CS	≈G	CS	≈G	CS		
PX.060630-...	6	6.2	10	3.5	12.5	60	-	80	●	80	●	2.5	12
PX.060830-...	6	8.2	10	3.5	12.5	60	-	80	●	80	●	2.5	12
PX.081030-...	8	10.2	11.2	4.5	13.5	60	-	80	●	80	●	3.5	14
PX.081230-...	8	12.2	11.2	4.5	13.5	60	-	80	●	80	●	3.5	14

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.
Indiquer la cote L désirée per compléter le référence.

Installation Guidelines

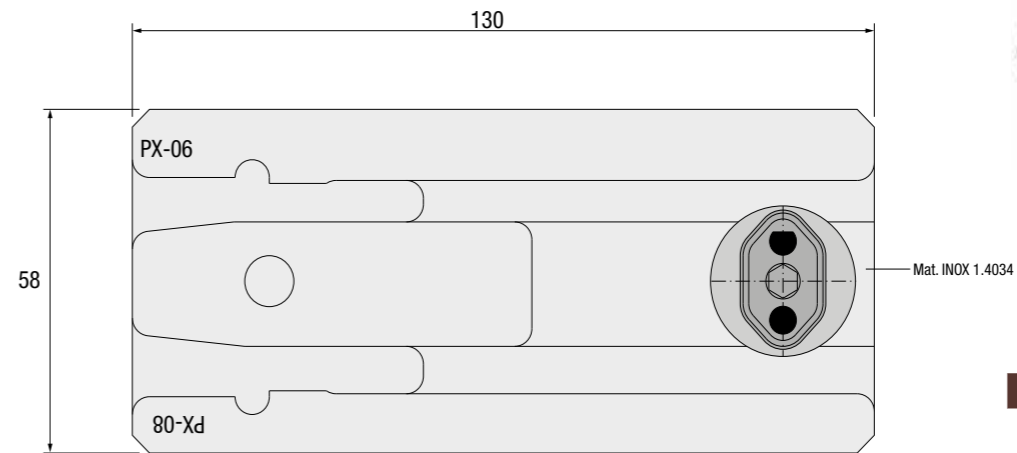
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



PX CUTTING JIG

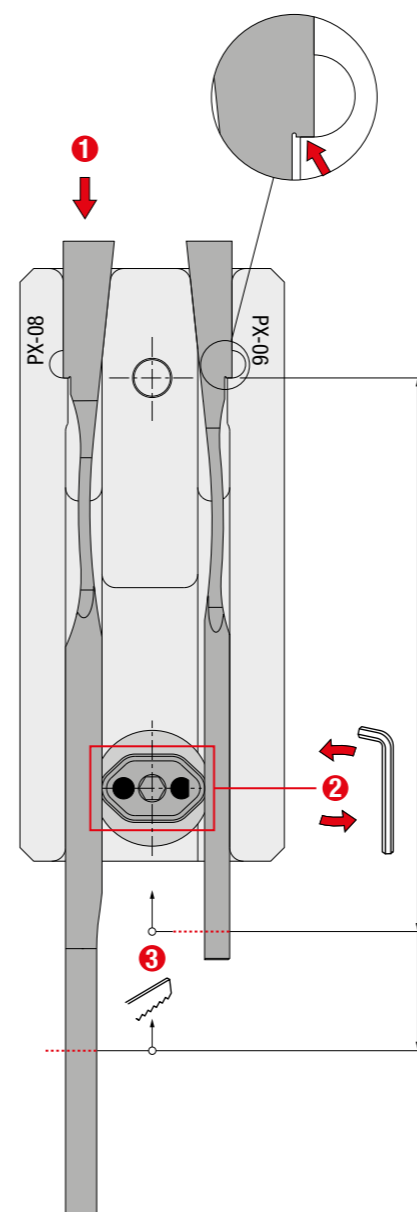
ES Útil de Corte para PX DE PX Anpassungslehre
IT Utensile per Lavorazione PX PT Acessório para Corte da PX FR PX Accessoire d'Ajustement

● Cad Insertion Point



Use Guidelines

Consejos de Uso · Richtlinien zur Verwendung · Consigli di Uso · Instruções de Utilização · Mode d'Emploi



1 Insert the PX into the corresponding slot, for 6 or 8mm. shank. Ensure that the shape of the PX head is adjusted in the housing support.

ES Insertar la PX en el alojamiento correspondiente, según sea de diámetro 6 u 8. Verificar que haga tope el perfil de la pinza con el alojamiento del útil.

DE Den federnden Auswerfer PX in den CX einsetzen. Prüfen, dass der federnde Auswerfer am Profil der Anpassungslehre richtig sitzt.

IT Inserire la PX nella relativa sede, a seconda del diametro 6 o 8. Verificare che la testa della pinza sia in battuta sulla sporgenza all'interno dell'utensile.

PT Colocar a PX no alojamento correspondente, em função do diâmetro da haste de 6 ou 8 mm. Verificar se o batente da PX está completamente encostado ao encosto do acessório.

FR Positionner le PX dans son logement correspondant au diamètre de la tige, 6 ou 8 mm. Vérifier que la vis centrale soit en pression contre les faces de mise en position.

2 Use an allen key to select the correct option: flat ● or ● round.

ES Utilizar una llave allen para seleccionar la posición de cara plana ● o ● redonda, según sea el caso.

DE Mit einem Imbusschlüssel wählen Sie das runde ● oder flache ● Profil.

IT Usare una brugola per ruotare l'inserto in basso, a seconda che il gambo sia piano ● o rotondo ●.

PT Utilizar uma chave de allen para seleccionar a posição adequada, face plana ● ou redonda ●.

FR Utiliser une clé 6 pans afin de positionner le type de cale, forme ronde ● ou plane ●.

3 Cut the PX to the required dimension.

ES Cortar la PX a la dimensión requerida.

DE Den PX auf das gewünschte Maß kürzen.

IT Tagliare la PX alla quota necessaria.

PT Cortar a PX na dimensão requerida.

FR Couper le PX suivant la longueur voulue.

CX

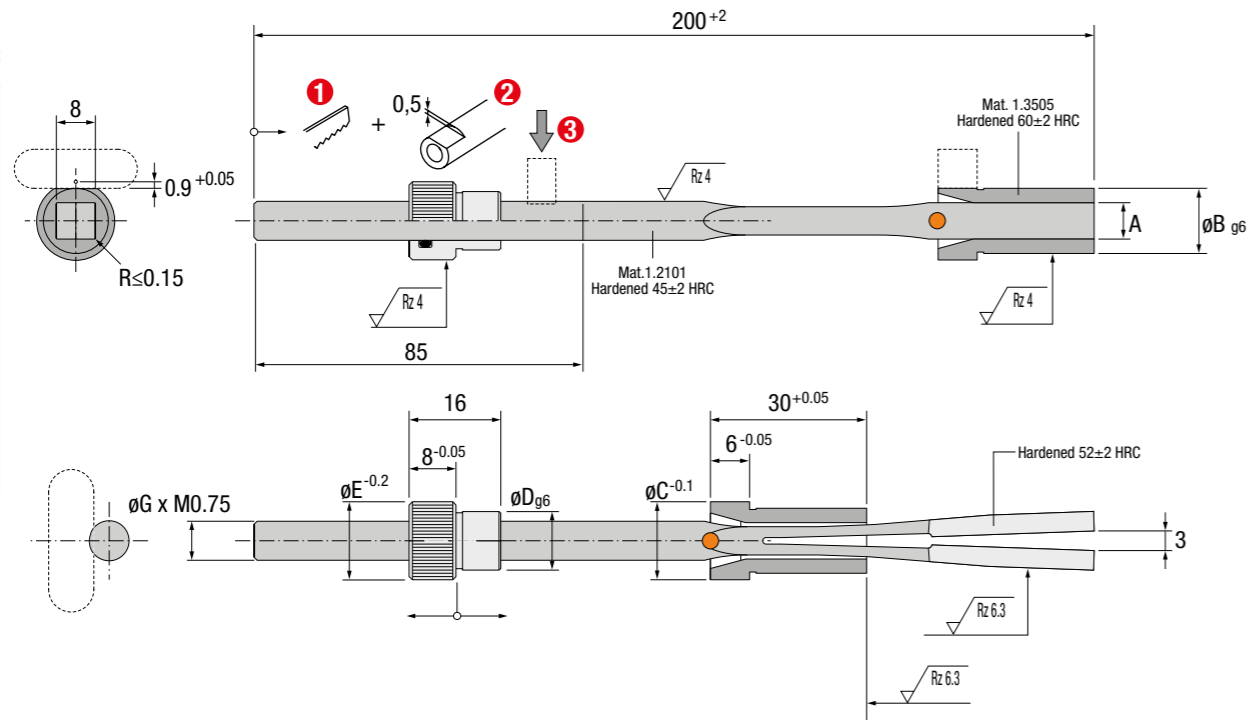


ED

DOUBLE EJECTOR

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

● Cad Insertion Point



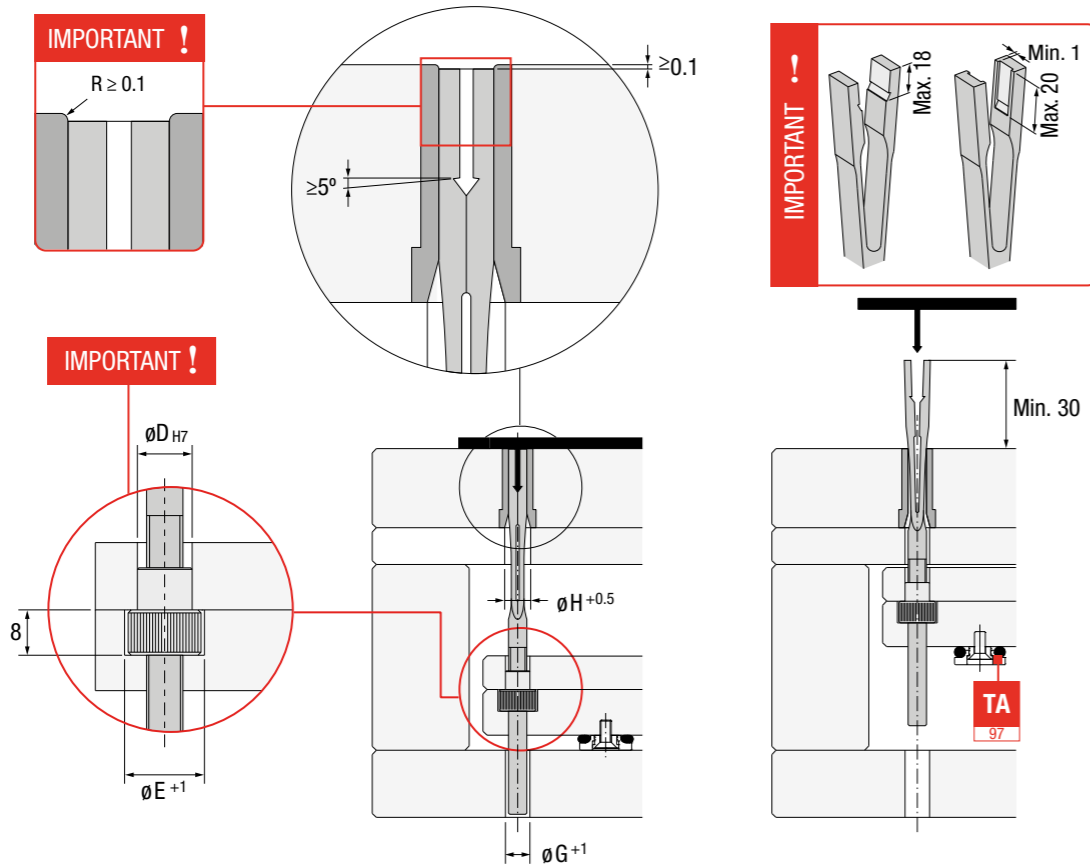
Patented
Max. 150°C

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

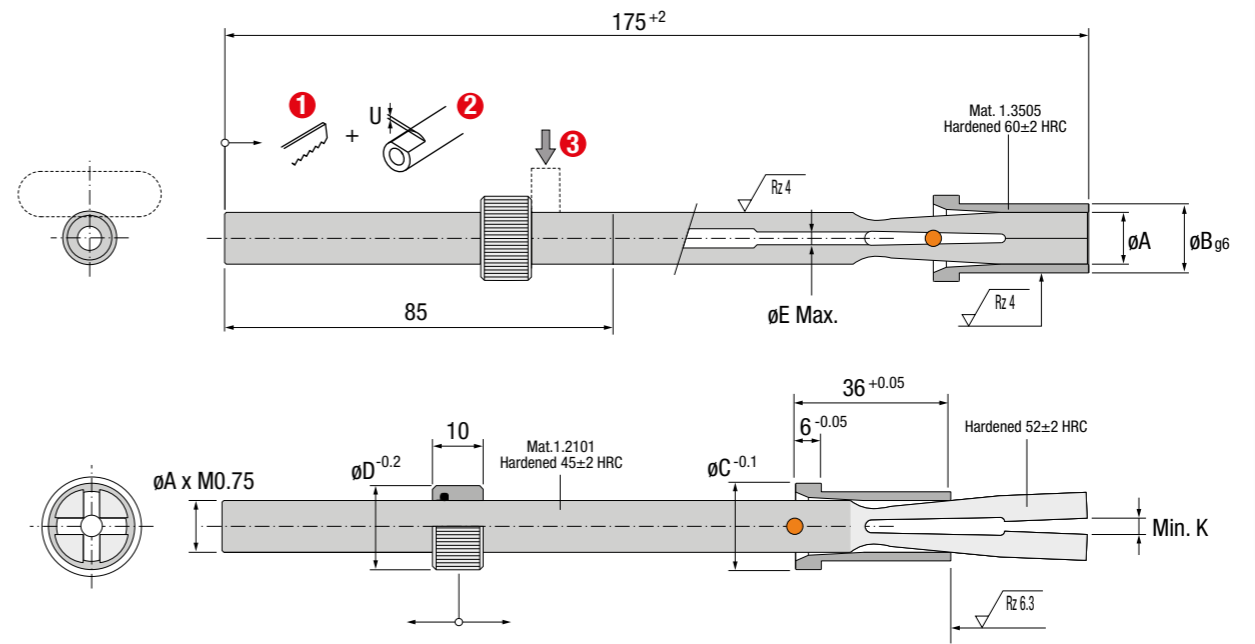
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



TULIP EJECTOR

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

● Cad Insertion Point



EE

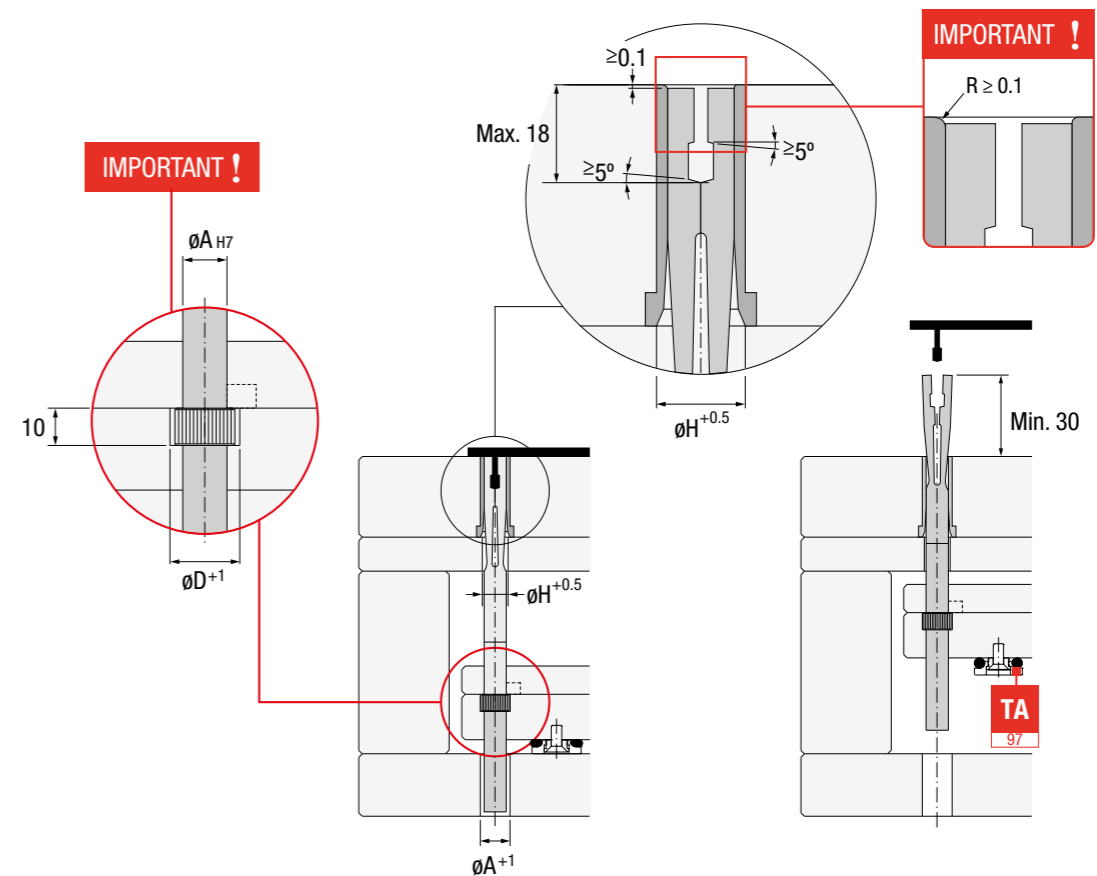
Patented
Max. 150°C

IMPORTANT !
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.

Ref.	A	B	C	D	E	H	K	U	Balinit 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	●

Installation Guidelines

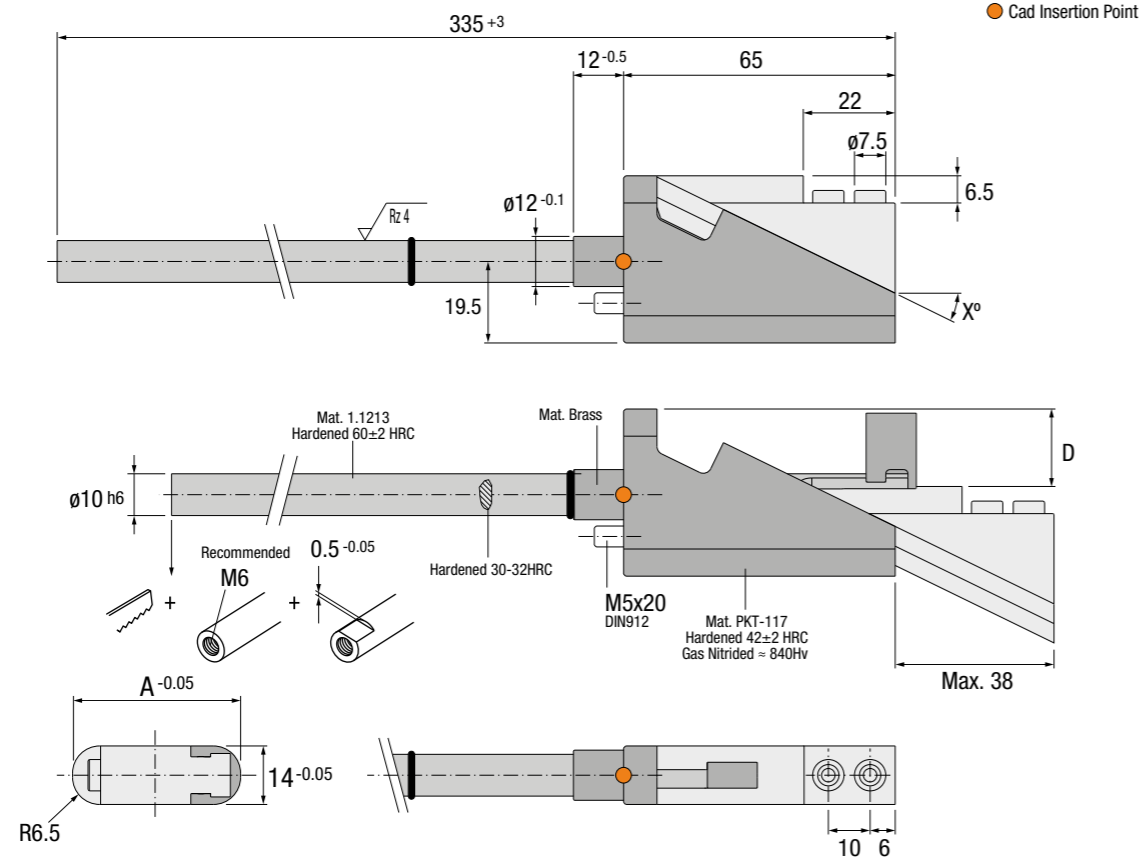
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



DL

DOG LIFTER - DL

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



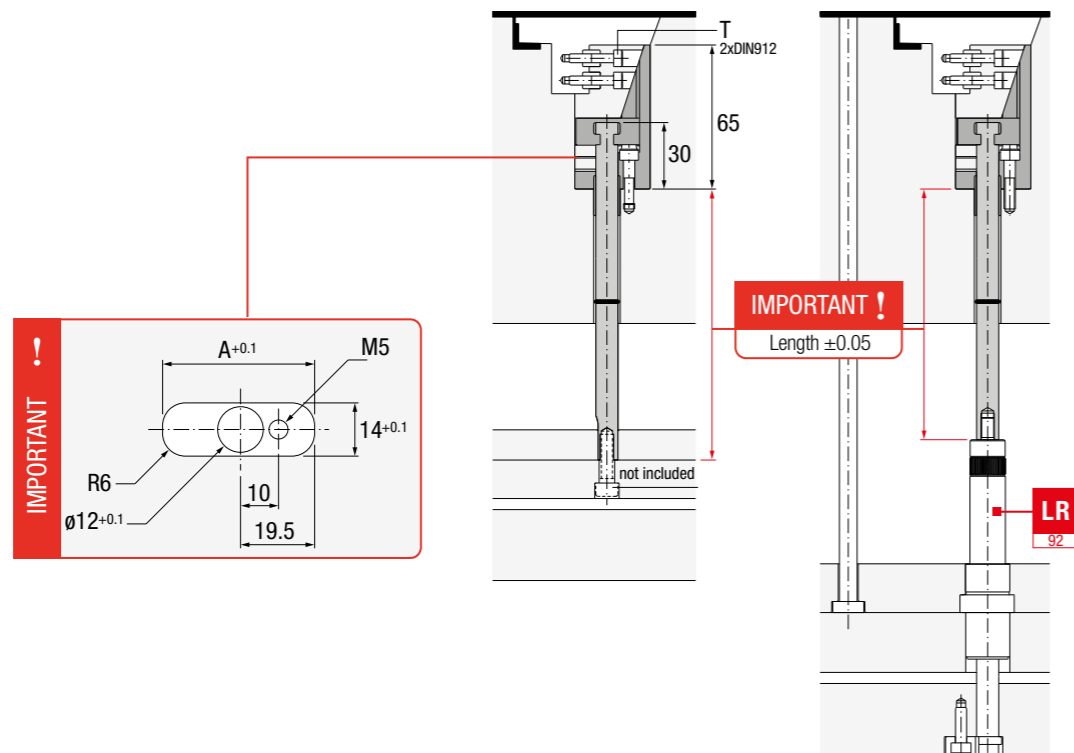
Patented

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

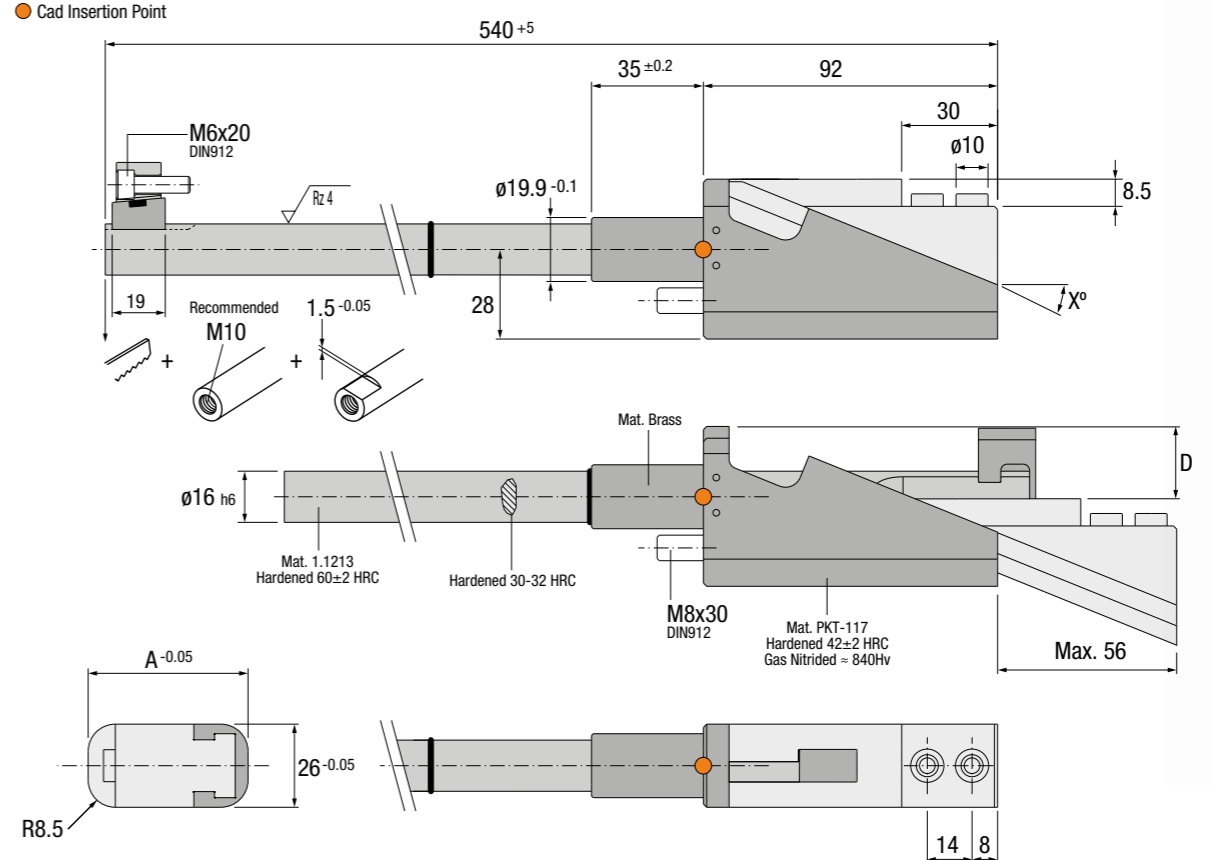
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



DG

DOG LIFTER - DG

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



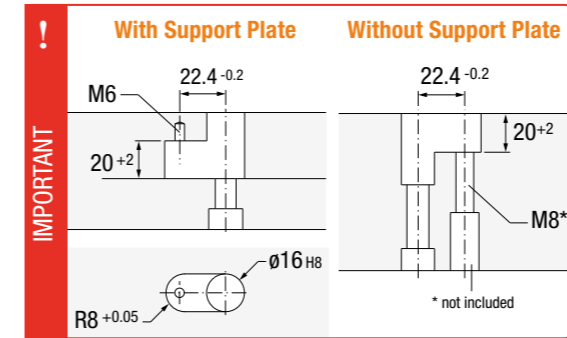
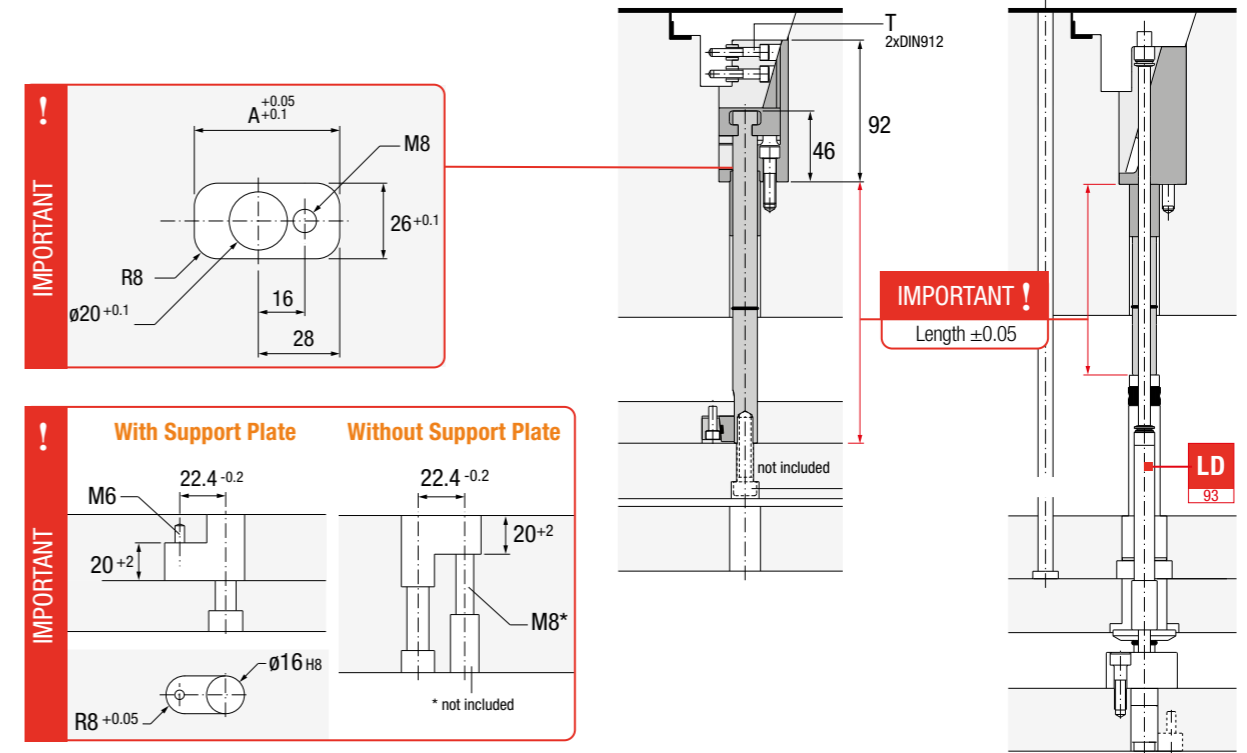
Patented

IMPORTANT ! Special angles available upon request, please contact: technical@cumsa.com
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 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

Installation Guidelines

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

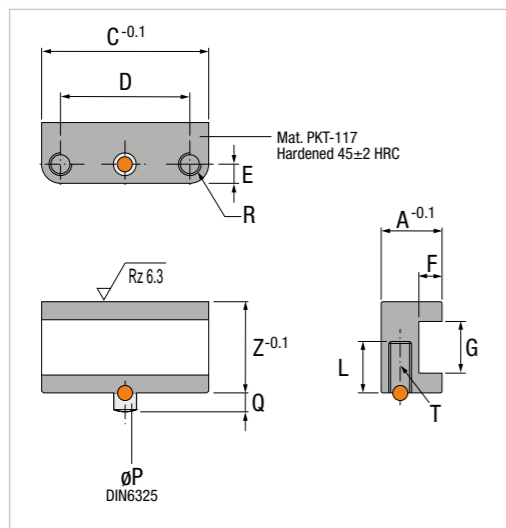




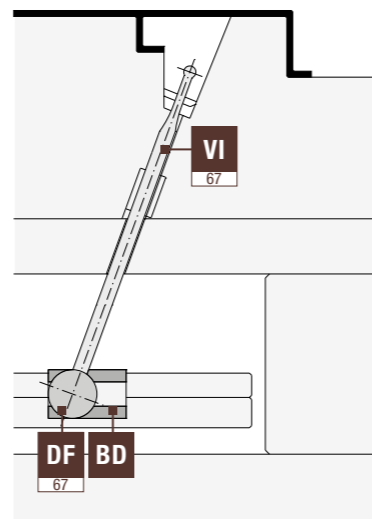
BD

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

● Cad Insertion Point

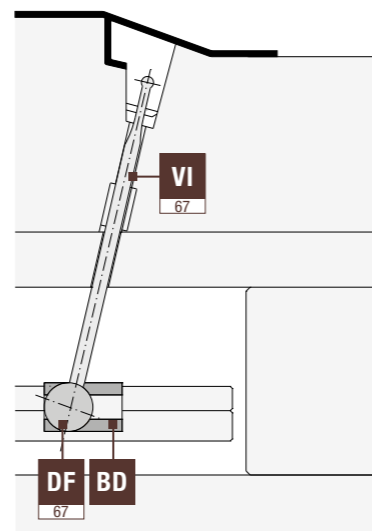
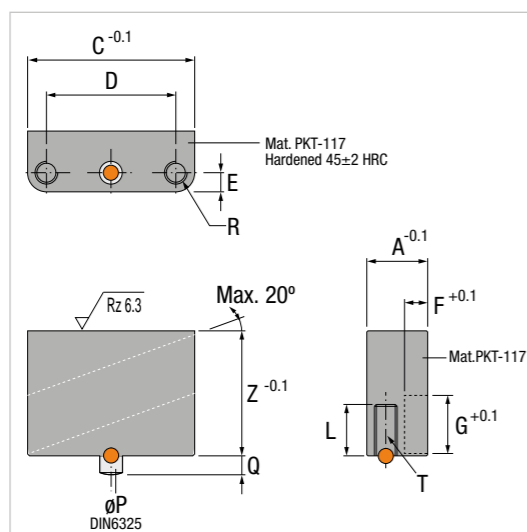


Horizontal Undercuts

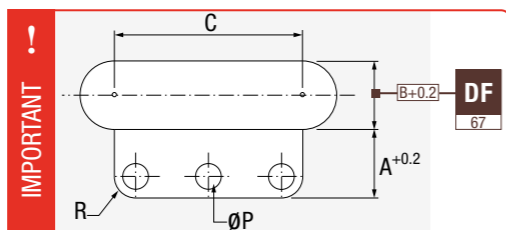


Ref.	A	C	D	E	F	G	L	P	Q	R	T	Z
BD.122036	12	36	28	4	4.8	11.5	10	5	5	4	M5	20
BD.142266	14	66	42	4	6.3	11.5	10	5	5	4	M5	22
BD.162440	16	40	30	5	6.3	13.5	12	6	5	5	M6	24
BD.203260	20	60	44	5	8.3	19	15	6	5	5	M6	32
BD.253872	25	72	56	7	10.3	21	18	8	5	6	M8	38
BD.314890	31	90	74	8	13.3	28	18	10	8	8	M10	48

Angled Undercuts



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

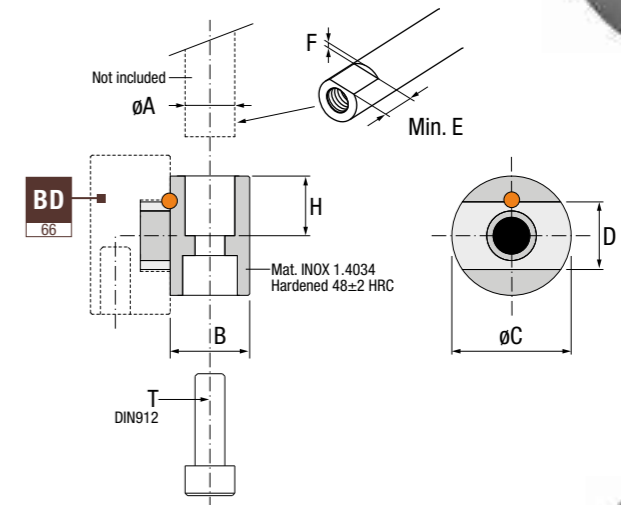
ES Deslizamiento Fijo DE Gelenkstück für Schrägauswerfer
 IT Scorrimento Fisso PT Deslizamento Fixo FR Glissière Fixe

● Cad Insertion Point



DF

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

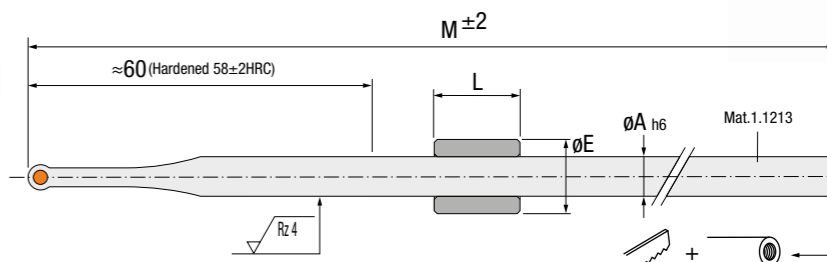


LIFTER SHAFT

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

● Cad Insertion Point

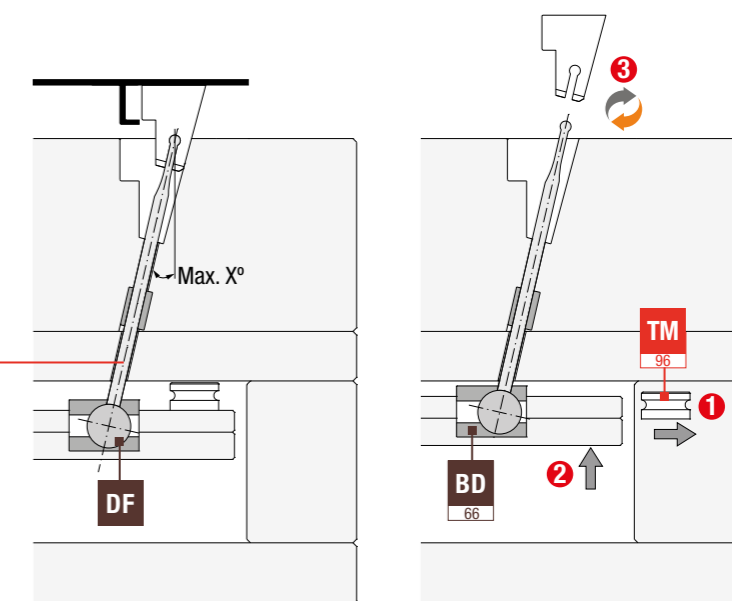
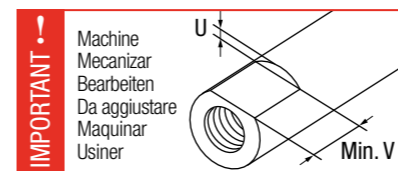
Ref.	A	E	L	M	U	V	X
VI.064200	6	10	15	214	0.5	12	5
VI.085200	8	12	20	217	0.5	12	10
VI.106200	10	14	20	219	0.5	14	15
VI.127200	12	16	20	222	1	14	20



VI

Installation Guidelines

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

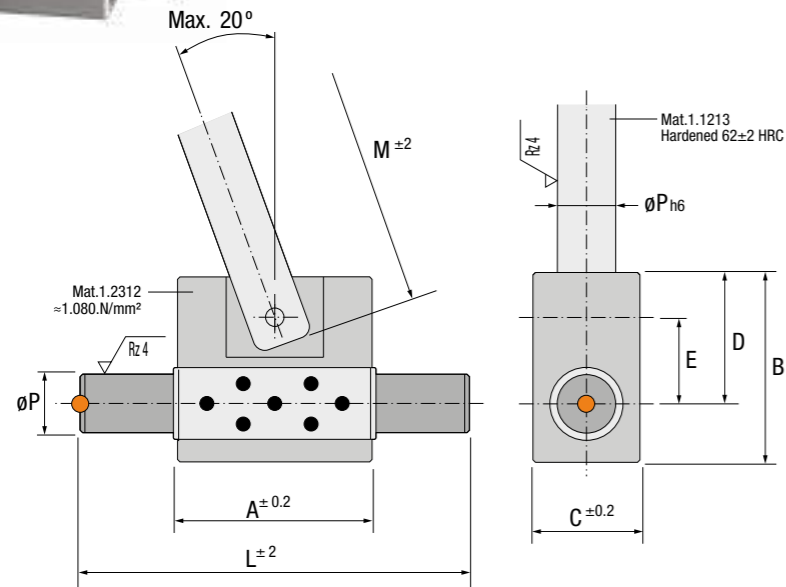


Patented

UNDERCUT BASE UNIT

ES Soporte Deslizamiento DE Schrägäuswerfer Basisführung
IT Supporto di Scorrimento PT Suporte de Deslizamiento FR Douille de Guidage

● Cad Insertion Point



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**).

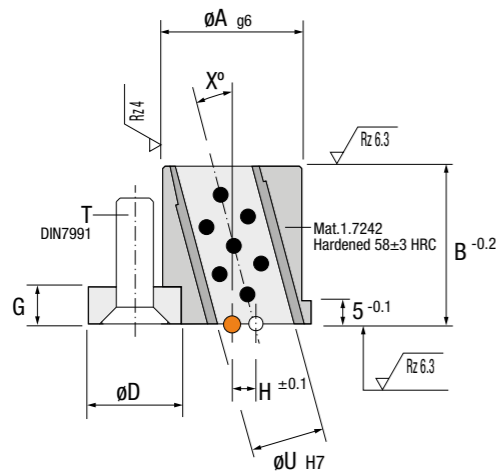
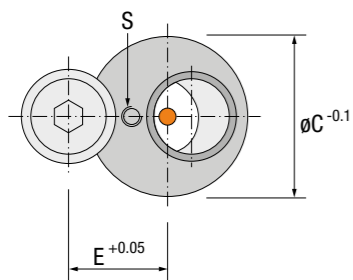
IMPORTANT ! The unit and the rod are delivered separately.
El cuerpo y la varilla se entregan separados.
Die Schubstange ist nicht montiert.
Il gruppo e l'asta si consegnano separatamente.
O corpo e a haste são fornecidos em separado.
Le corps et la tige sont livrés démontés.

ANGLED GUIDE BUSH

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

● Cad Insertion Point

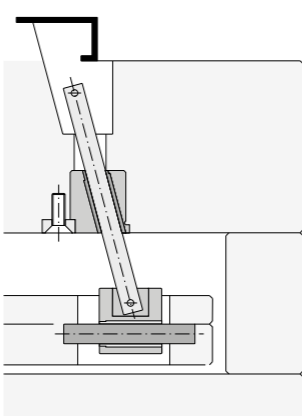
Ref.	A	B	C	D	E	G	H	S	T	U	X
CI.3034GR-5	30	34	34	16	20	6	0	M4x6	M6x16	10	5
CI.3438GR-5	34	38	38	20	24	8	0	M6x6	M8x20	12	5
CI.4040GR-5	40	40	44	20	27	8	0	M6x6	M8x20	16	5
CI.3034GR-10	30	34	34	16	20	6	7	M6x6	M6x16	10	10
CI.3438GR-10	34	38	38	20	24	8	8.5	M8x6	M8x20	12	10
CI.4040GR-10	40	40	44	20	27	8	8.5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



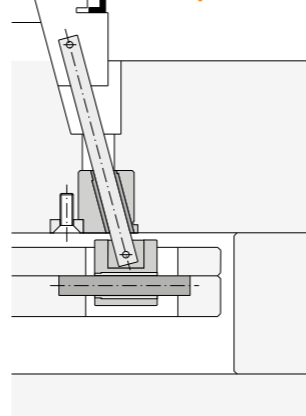
Installation Guidelines

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Mold Closed



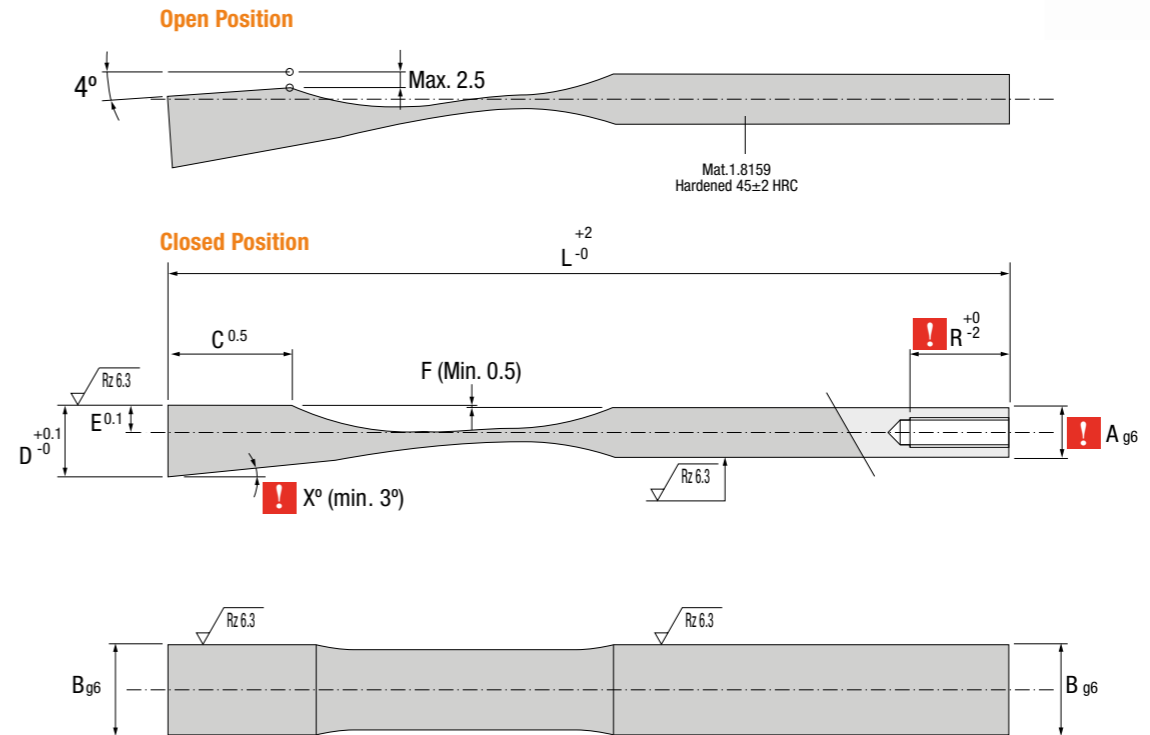
Mold Open



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?

- 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.
- 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.

Patented



3

EJECTION

CUMSA
EP.502030
20070303

EJECTION INDEX

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

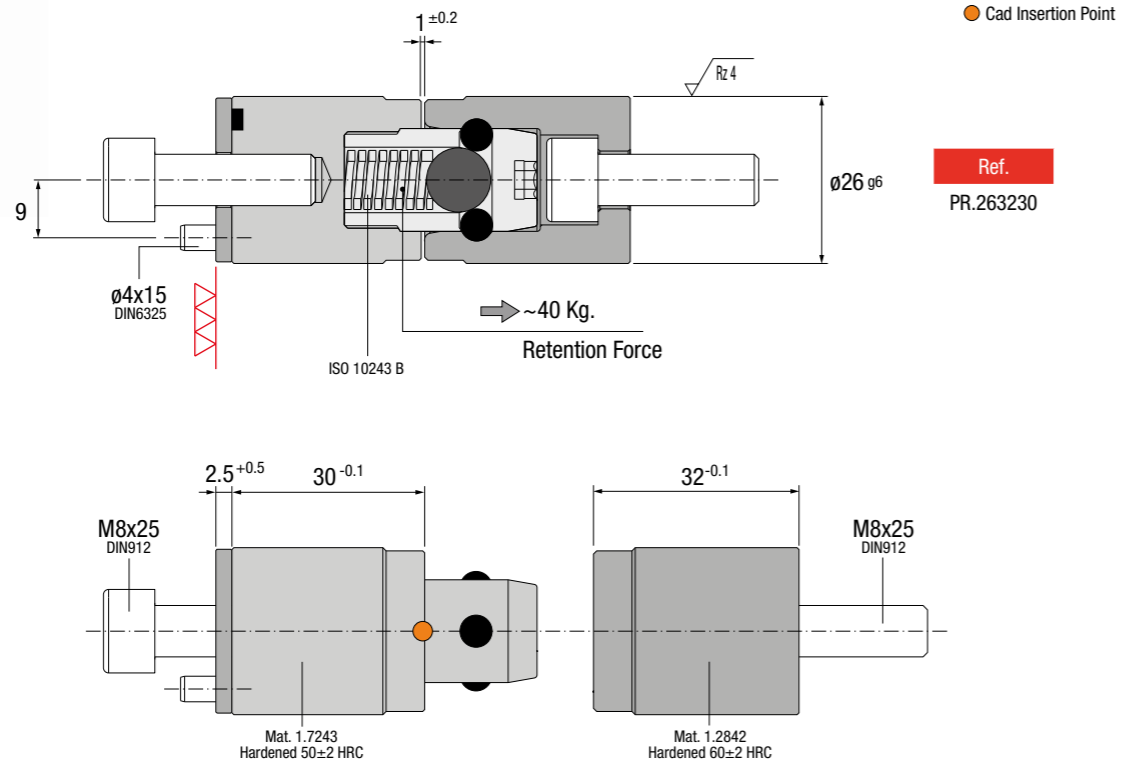
<p>74/</p>  <p>Plate Retainer Retensor Placas Platten Verriegelung Ritensore Piastra Retensor de Placa Tire Plaques</p>	<p>74/</p>  <p>Stroke Limiter Limitador de Recorrido Hubbegrenzer Limitatore Apertura Limitador de Curso Limiteur de Course</p>	<p>75/</p>  <p>Modular Retainer Retensor Modular Mitnehmer Modular Ritensore Modulare Retensor Modular Retenue Modulée</p>	<p>88/</p>  <p>External Synchronized Plates Sincronizador de Placas Externo Externe Plattensynchronisation Sincronizzatore di Piastre Esterno Sincronizador Chapas Externo Synchronisation Mouvement Plaques</p>	<p>90/</p>  <p>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</p>	
<p>76/</p>  <p>Latch Lock Gatillo Simple / Klinkezug Gancia Sgancia / Gatilho Simples Crochet Ouverture Gradué</p>	<p>77/</p>  <p>Internal Latch Lock Gatillo Interno / Interner Klinkezug Gancia Sgancia Interno / Gatilho Interno Tire Plaque Interne</p>	<p>78/</p>  <p>Superior Double Ejector Doble Expulsión Superior Zweistufenauswerfer DX Doppia Espulsione Superiore Dupla Extracção Superior Double Ejection Supérieure</p>	<p>90/</p>  <p>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</p>	<p>91/</p>  <p>Accelerated Ejector Acelerador Expulsión Vorschub-Auswerfer Acceleratore di Espulsione Acelerador de Extracção Accélérateur d'Éjection</p>	<p>92/</p>  <p>Threaded Limiter Limitador con Rosca Auswerfer Begrenzer mit Gewindeaufnahme Limitatore Filettato Limitador com Rosca Limiteur avec Vis</p>
<p>80/</p>  <p>Superior Plate Separator Separador Placas Superior Superior Zweistufenauswerfer Separatore Piastra Superiore Separador de Chapas Superior Séparateur de Plaques</p>	<p>80/</p>  <p>External Superior Plate Separator Separador Placas Superiores Externa Externe Obere Plattentrennung Separatore Piastre Superiori Esterno Separador Chapas Superior Externo Séparateur Plaque Supérieure Externe</p>	<p>92/</p>  <p>Threaded Limiter Adapter Adaptador para Limitador Roscado Gewindeadapter Adattatore per Limitatore Filettato Adaptador para Limitador Roscado Adaptateur pour Limiteur avec Vis</p>	<p>93/</p>  <p>Dog Lifter Limiter Limitador Patín Hubbegrenzer Limitatore Pattino Limitador Patim Automático Limiteur</p>	<p>94/</p>  <p>Ejector Base Base Expulsora Aufnahme für Auswerfer Base Espulsore Base de Extractores Embases d'Éjection</p>	
<p>82/</p>  <p>Plate Accelerator Elevador Placas Auswerferplatten-Beschleuniger Acceleratore Piastra Espulsione Acelerador de Chapa Accélérateur Batterie d'Éjection</p>	<p>83/</p>  <p>Double Ejection Doble Expulsión Zweistufenauswerfer Doppia Espulsione Dupla Extracção Double Ejection</p>	<p>84/</p>  <p>Rear Double Ejector Doble Expulsión Inferior Zweistufenauswerfer DY Doppia Espulsione Inferiore Dupla extracção inferior Double Ejection inférieure</p>	<p>95/</p>  <p>Headless Ejector Pin Varilla Expulsora Auswerfer ohne Kopf Asta Espulsore Extractor Sem Cabeça Éjecteur sans Tête</p>	<p>95/</p>  <p>Headless Sleeve Ejector Tubular Expulsión Auswerferhülsen ohne Kopf Espulsore Tubolare Extractor Tubular sem Cabeça Tubulaire sans Tête</p>	<p>96/</p>  <p>Ejector Foot Distanciador Placa Anschlagscheibe Distanziale Piastra Botão de Encosto Repos de Batterie</p>
<p>85/</p>  <p>Compact Double Ejection Doble Expulsión Compacta Kompakter Zweistufenauswerfer Doppia Espulsione Compatta Dupla Extracção Compacta Double Ejection Compact</p>	<p>86/</p>  <p>External Double Ejection Doble Expulsión Externa Externer Zweistufenauswerfer Doppia Espulsione Esterna Dupla Extracção Externa Double Éjection Externe</p>	<p>96/</p>  <p>Safety Stopper Tope Magnético Abstandhalter, magnetisch Blocco Magnetico Bloco Magnético Butée Magnétique</p>	<p>97/</p>  <p>Ejector Plate Spacer Distanciador Placa Auswerferplatte Abstandhalter Distanziale Piastra Espaçador de Chapas Entretoise de Passage</p>	<p>97/</p>  <p>Shock Absorber Tope Amortiguador Dämpfungsscheibe Blocco Ammortizzante Batente Amortecedor Repos de Batterie avec Amortissement</p>	

PR



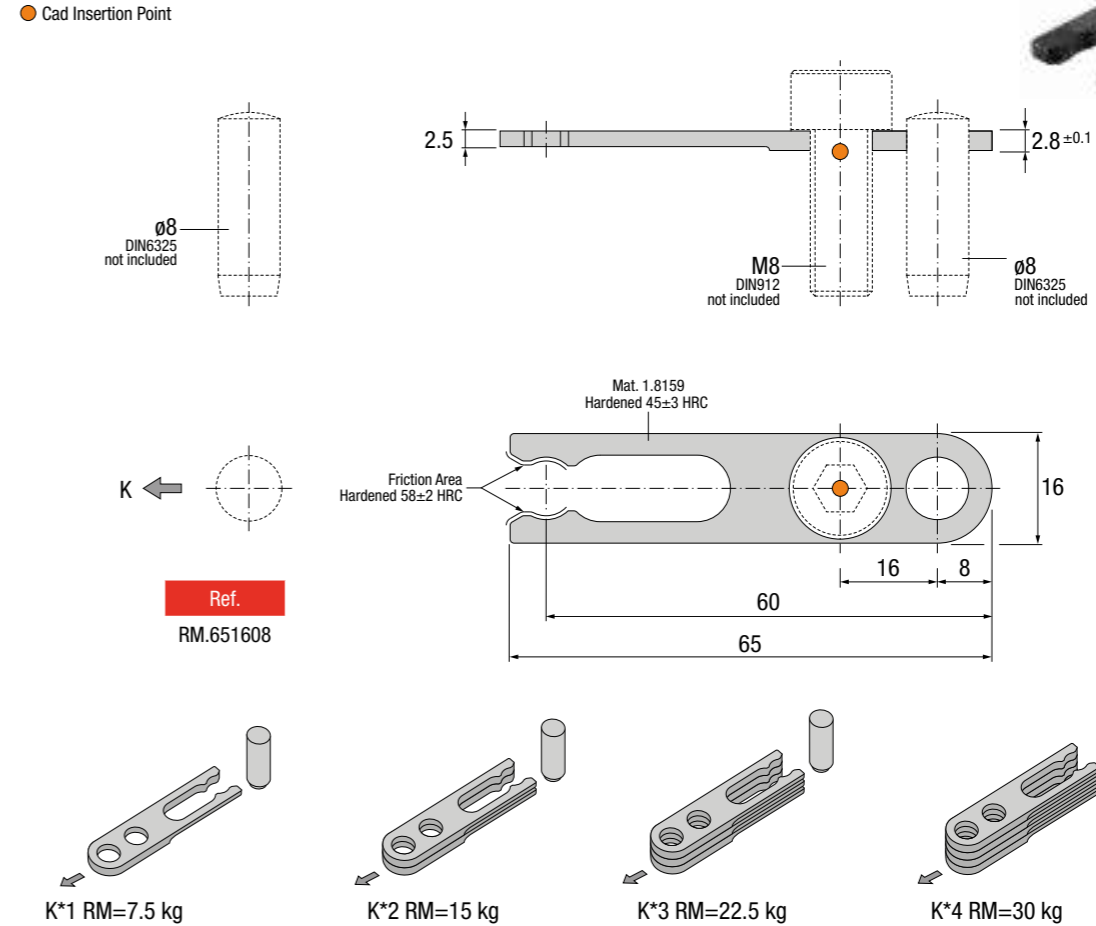
PLATE RETAINER

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



MODULAR RETAINER

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



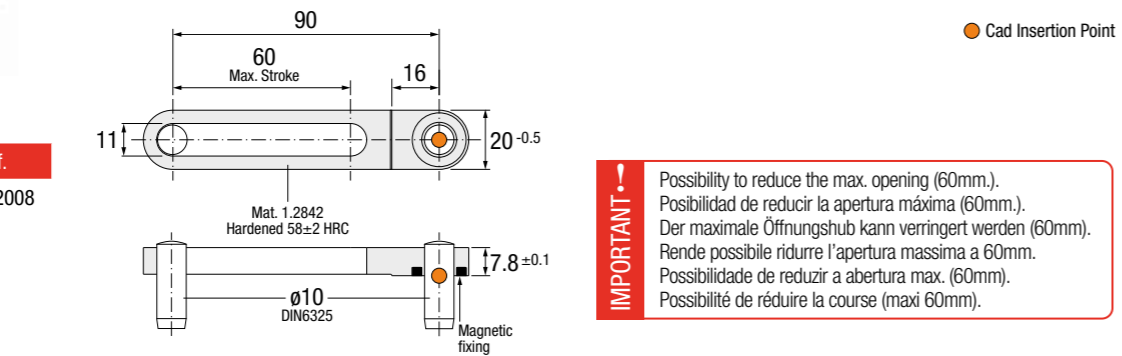
RM



SL

STROKE LIMITER

ES Limitador de Recorrido DE Hubbegrenzer
IT Limitatore Apertura PT Limitador de Curso FR Limiteur de Course



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).

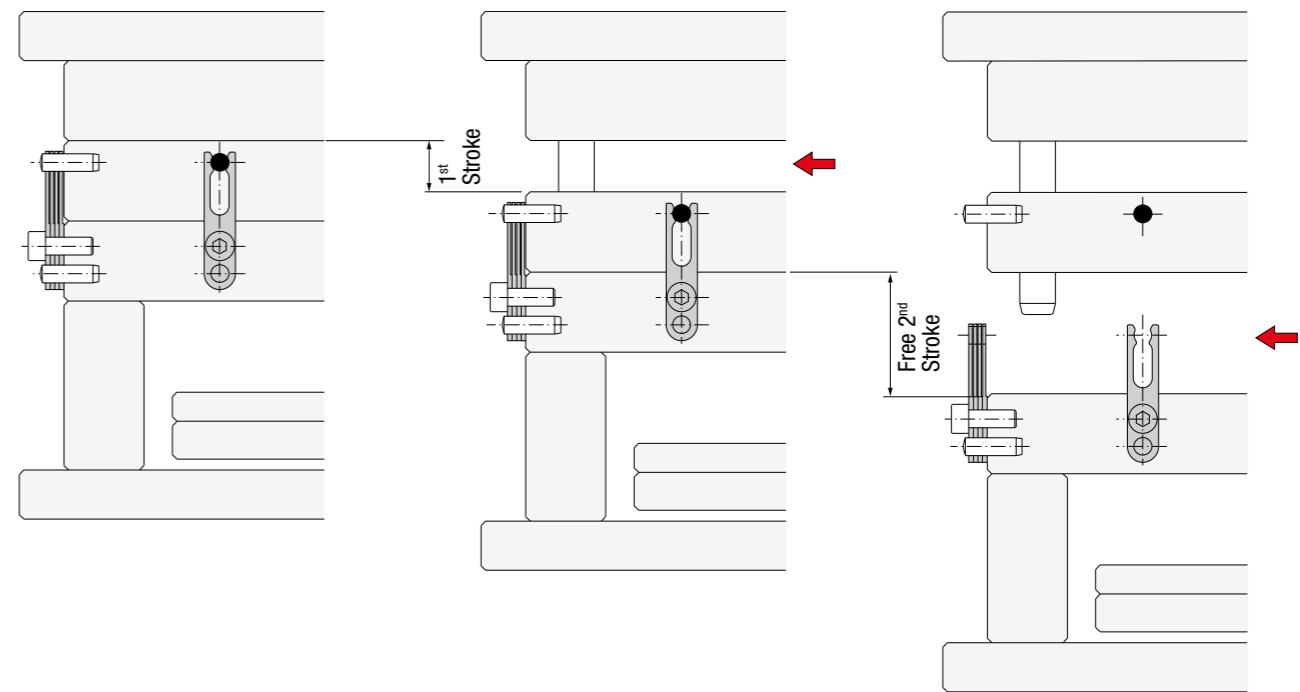
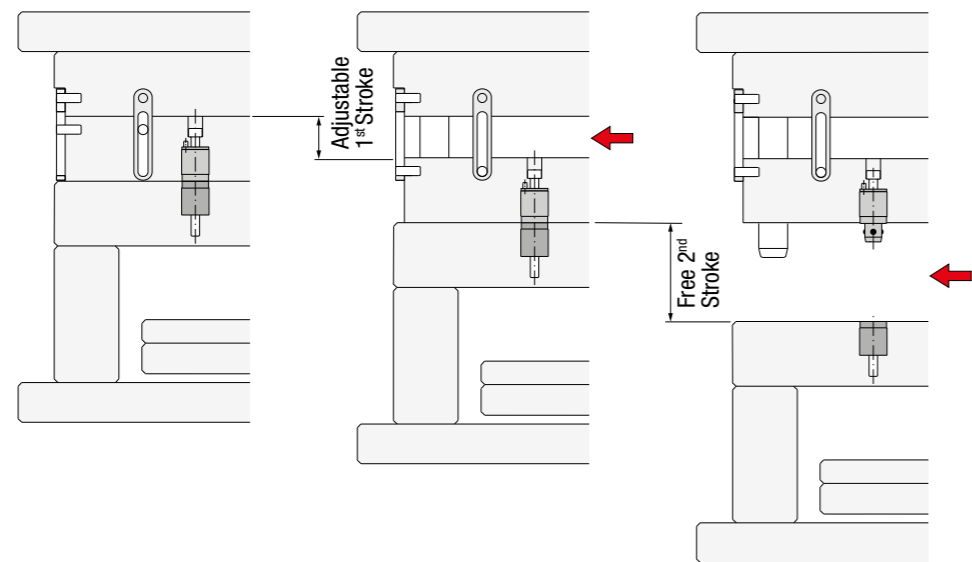
IMPORTANT !
K=Approximate resistance value that can be obtained by grouping clips.
K=Valor aproximado de resistencia que se puede obtener agrupando clips.
K=Zirka Widerstand beim Einbau entsprechend obiger Darstellung.
K=Valore approssimativo di resistenza che si può ottenere raggruppando più ritensori.
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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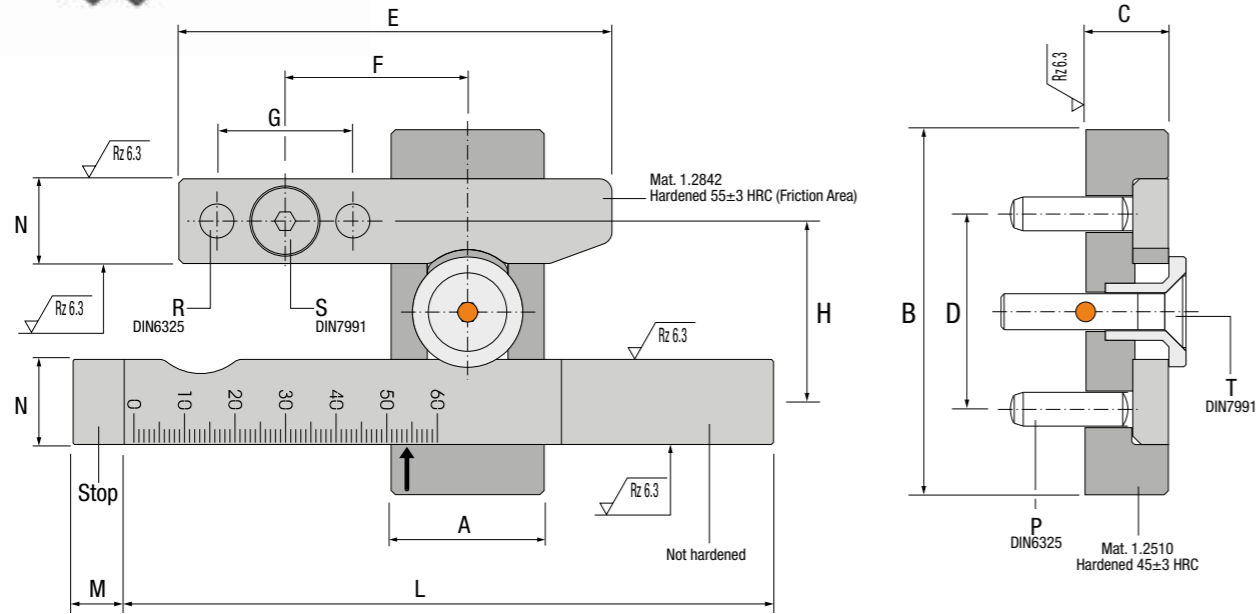
Patented

Max. 150°C

GS**LATCH LOCK**

ES Gatillo Simple DE Klinkezug
IT Gancia Sgancia PT Gatilho Simples FR Crochet Ouverture Gradué

● Cad Insertion Point

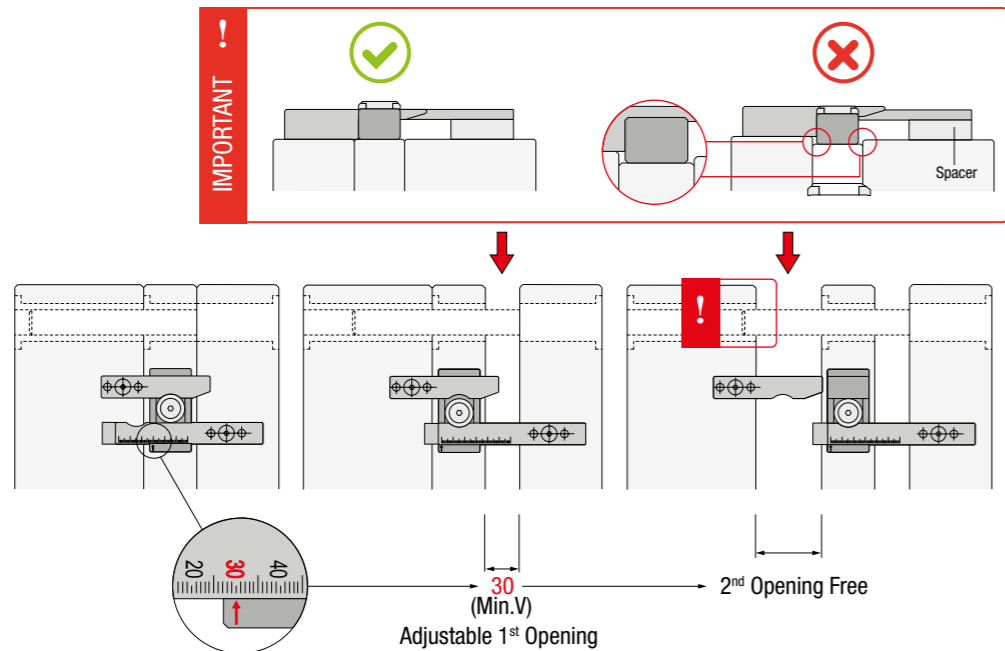


IMPORTANT! After selecting the required stroke, fix the scale lever.
Después de seleccionar el recorrido deseado, fijar la leva graduada.
Nach der Wahl des gew. Hubes befestigen Sie die skalierte Leiste.
Dopo aver selezionato la corsa richiesta, fissare la riga graduata.
Depois de seleccionar o curso adequado, fixe a régua graduada.
Après avoir sélectionné la course d'ouverture, fixer la règle graduée.

Ref.	A	B	C	D	E	F	G	H	L	M	N	P (x2)	R (x4)	S (x2)	T	V	Scale
GS.226616	22	66	16	38	75	30	25	32	105	10	15	Ø6x20	Ø6x30	M6x30	M6x35	10	40
GS.368619	36	86	19	46	102	43	32	42.7	153	12	20	Ø8x24	Ø8x36	M8x35	M8x40	11.5	60
GS.421024	42	106	24	56	124	51	40	50.2	190	15	24.5	Ø10x30	Ø10x40	M10x40	M10x45	14	80

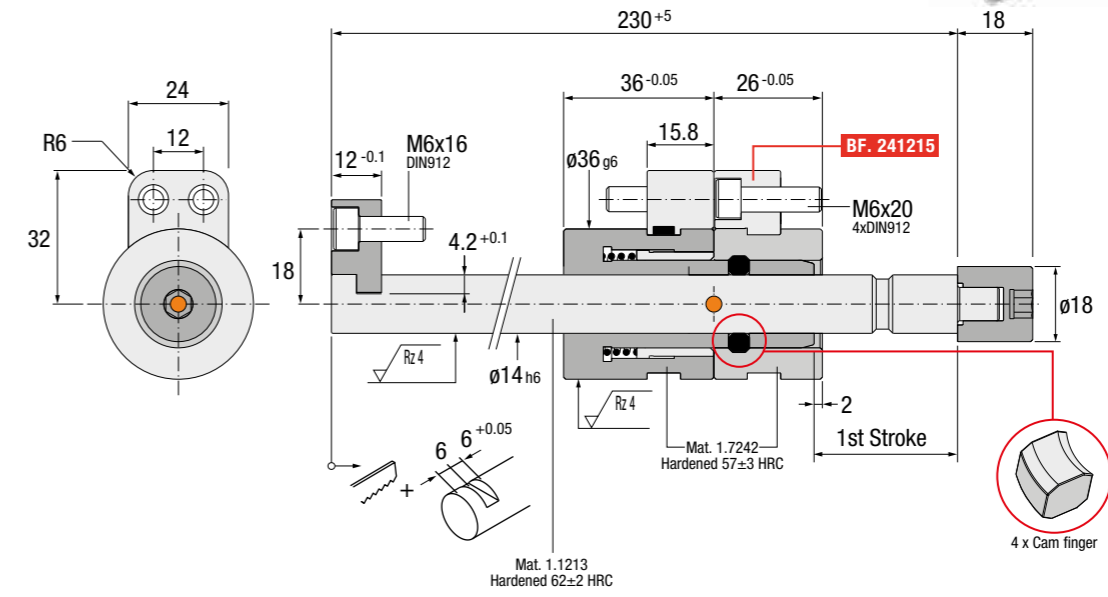
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**INTERNAL LATCH LOCK**

ES Gatillo Interno DE Interner Klinkezug
IT Gancia Sgancia Interno PT Gatilho Interno FR Tire Plaque Interne

● Cad Insertion Point

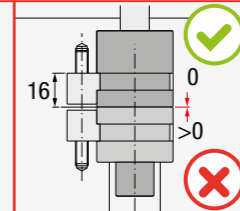
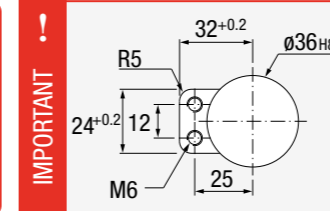
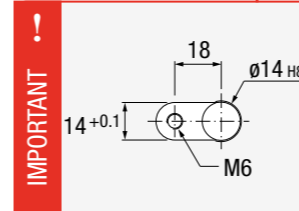
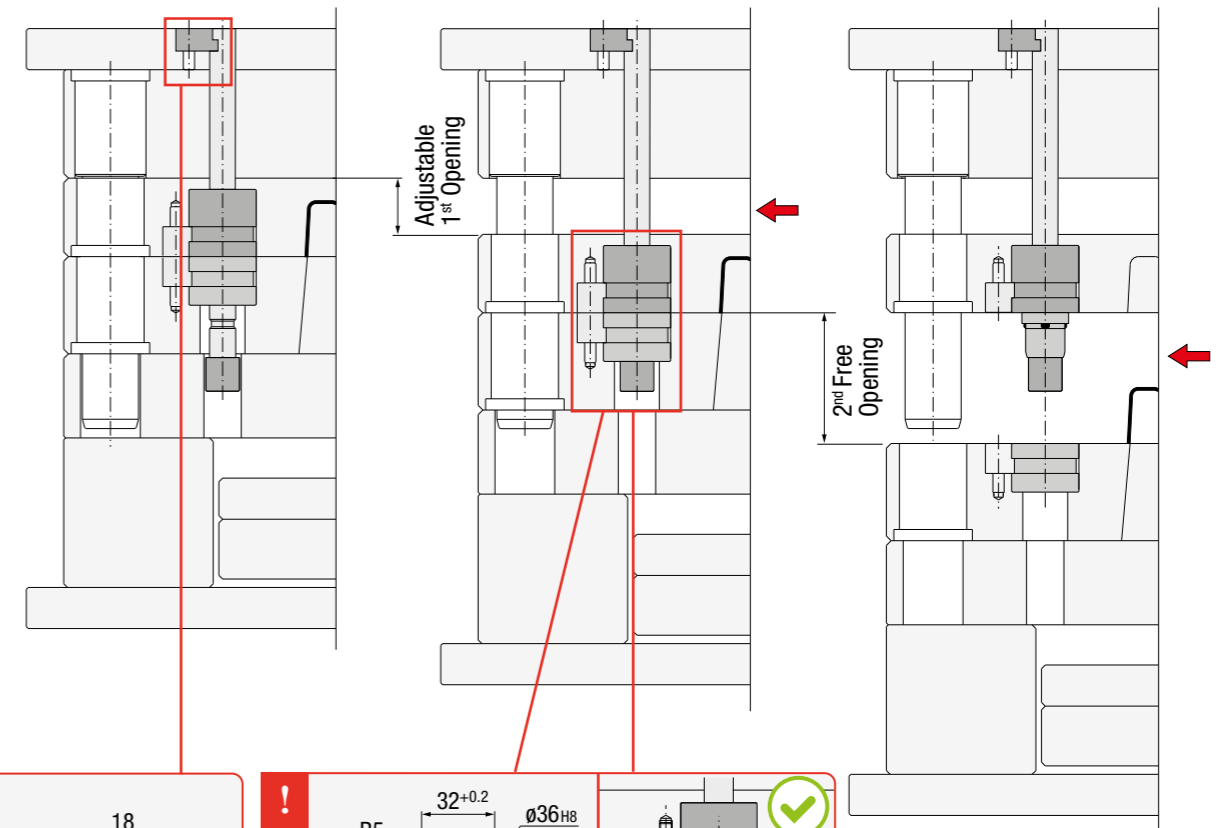


Ref.
MX.143662

IMPORTANT! 2 BF.241215 units included. More units can be ordered separately.
Se suministran 2 unidades de BF.241215. Se pueden pedir más unidades por separado.
2 St. BF.241215 enthalten. Mehr Einheiten können einzeln bestellt werden.
Vengono forniti 2 BF.241215. E' possibile ordinarne altri separatamente.
2 unidades BF.241215 incluídas. Possibilidade de encomendar mais unidades individualmente.
2 unités BF.241215 inclus. Possibilitée de commander à la pièce.

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**MX**

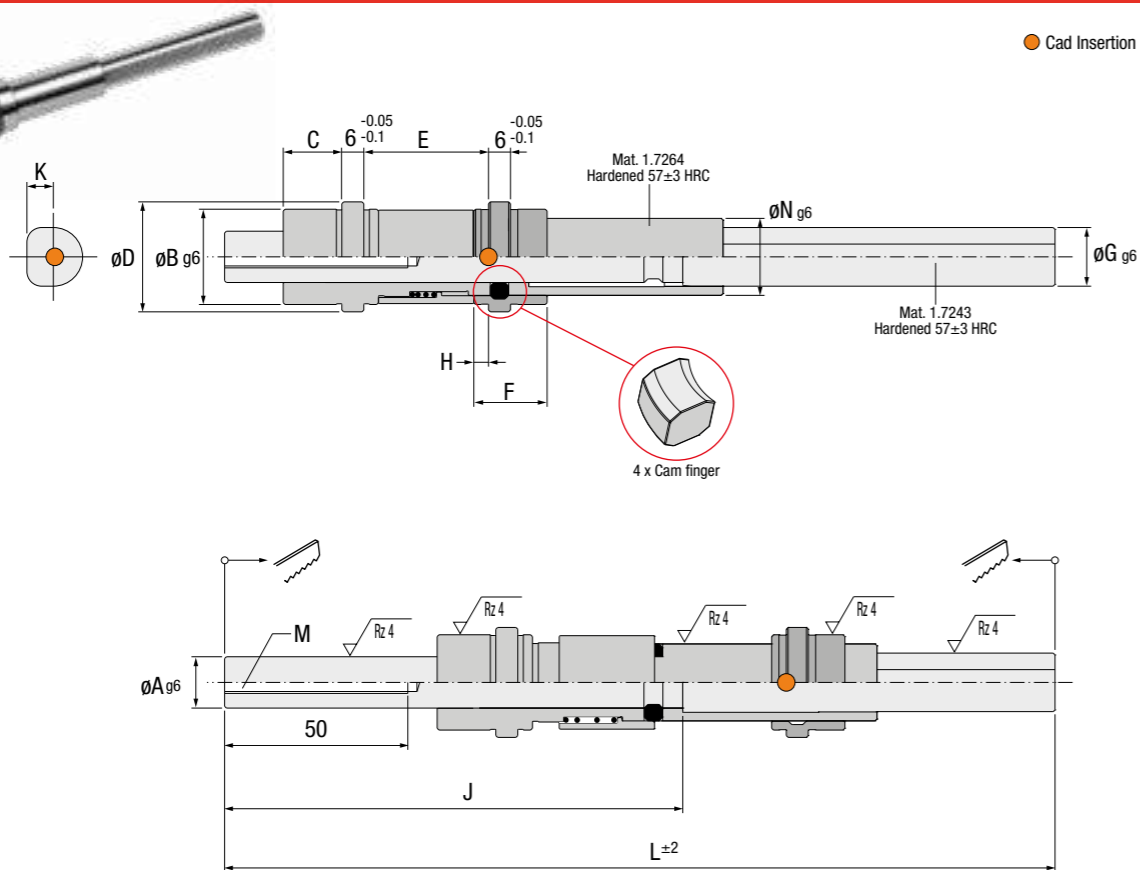
Patented

SUPERIOR DOUBLE EJECTOR

ES Doble Expulsión Superior DE Zweistufenauswerfer DX
IT Doppia Espulsione Superiore PT Dupla Extracção Superior FR Double Ejection Supérieur

DX

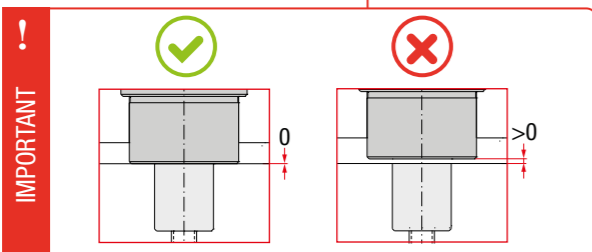
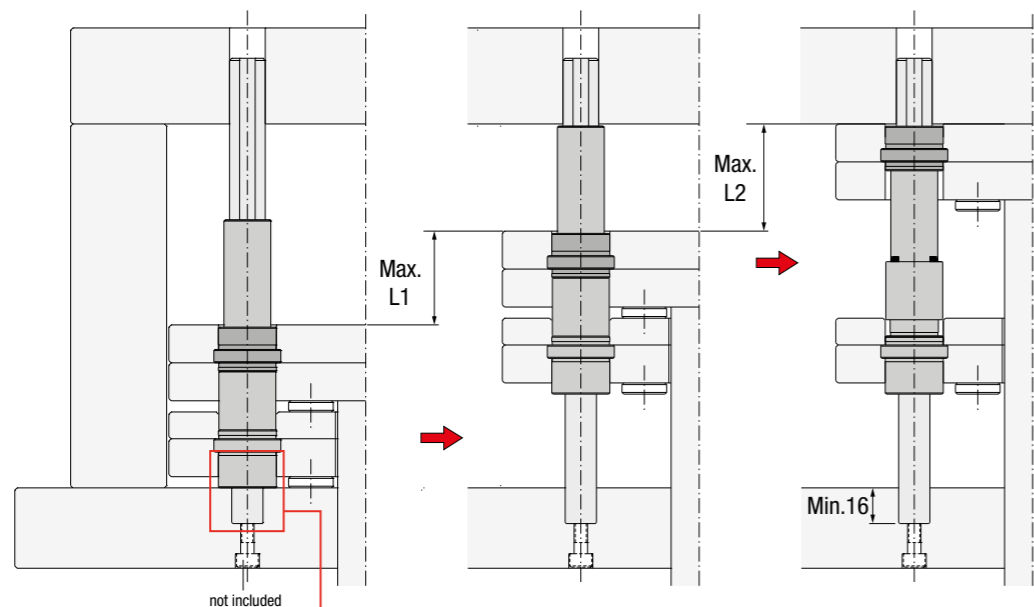
● Cad Insertion Point



Ref.	A	B	C	D	E	F	G	H	J	K	L	M	N	L1	L2
DX.142622	14	26	16	30	34	20	16	4	125	7.2	243	M6	21	42	48
DX.163027	16	30	21	34	44	23	18	6	152	8	314	M8	24	54	80

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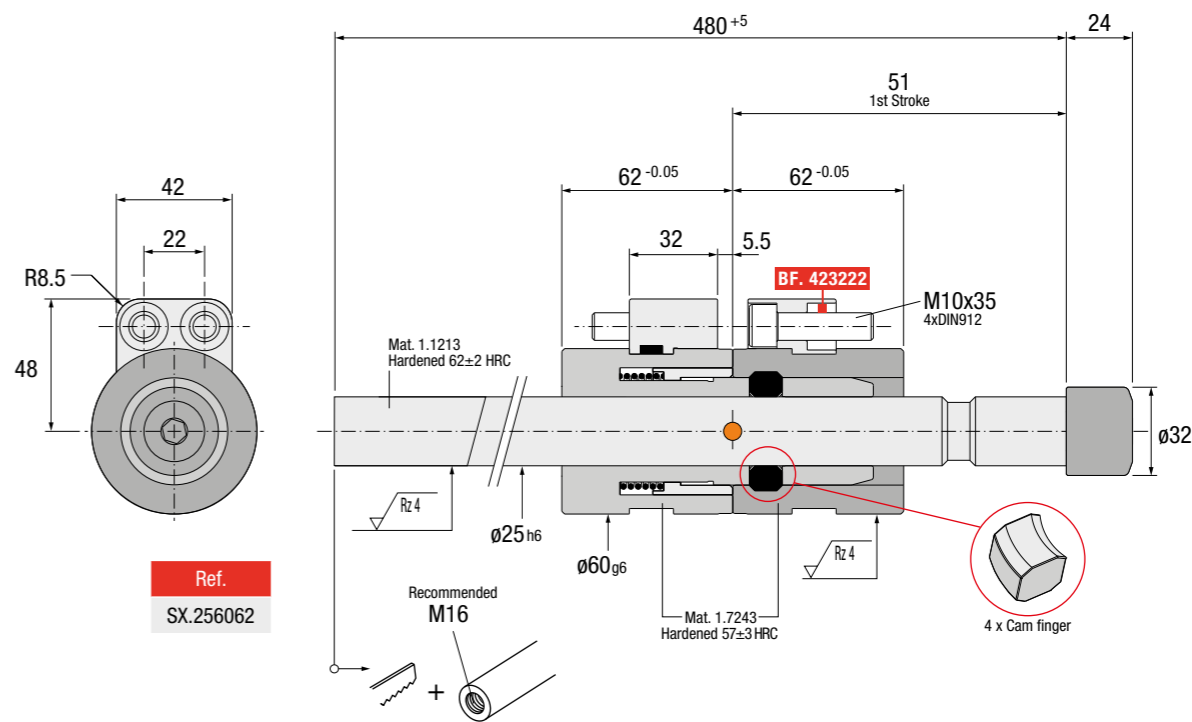
Patented
Max. 150°C

SUPERIOR PLATE SEPARATOR

ES Separador Placas Superior DE Superior Zweistufenauswerfer
IT Separatore Piastra Superiore PT Separador de Chapas Superior FR Séparateur de Plaques

SX

● Cad Insertion Point

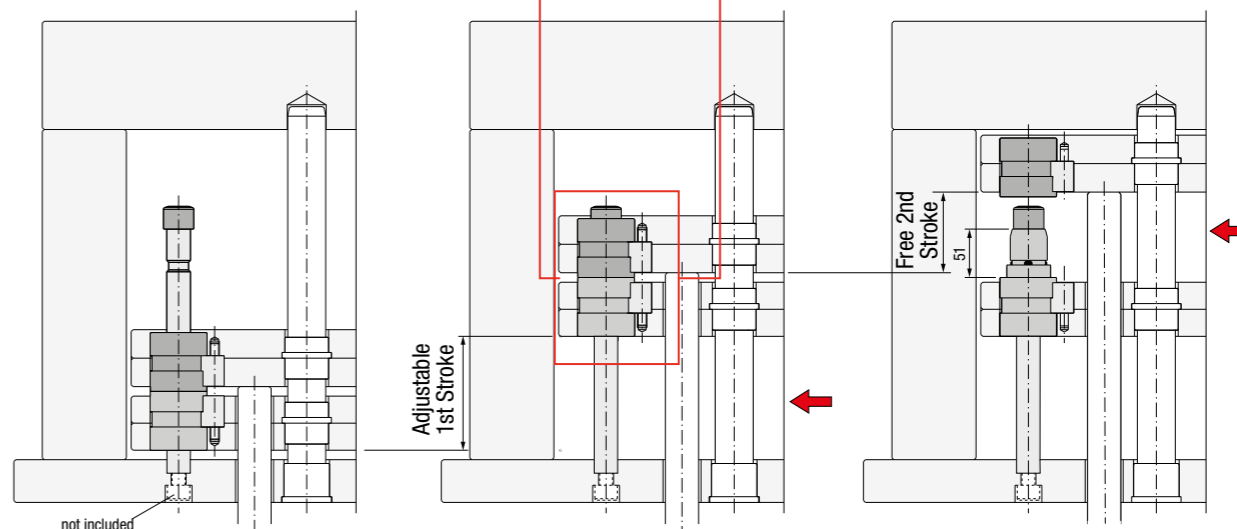
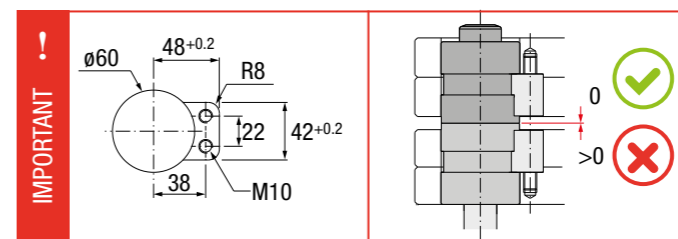


Ref.
SX.256062

IMPORTANT !
2 BF.423222 units included. More units can be ordered separately.
Se suministran 2 unidades de BF.423222. Se pueden pedir más unidades por separado.
2 St. BF.423222 enthalten. Mehr Einheiten können einzeln bestellt werden.
Vengono forniti 2 BF.423222. E' possibile ordinarne altri separatamente.
2 unidades BF.423222 incluidas. Possibilidade de encomendar mais unidades individualmente.
2 unités BF.423222 inclus. Possibilitée de commander à la pièce.

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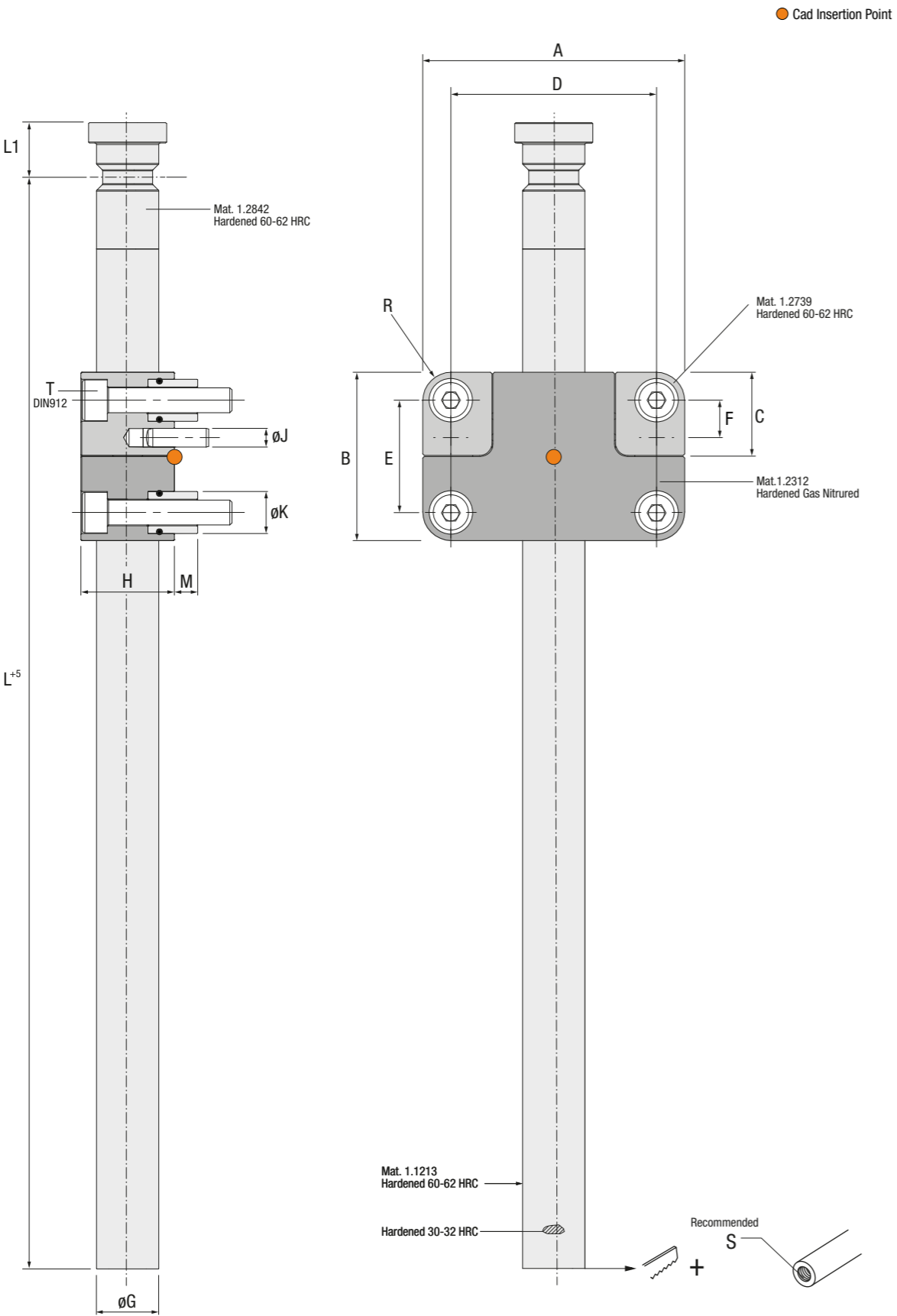
EXTERNAL SUPERIOR PLATE SEPARATOR

ES Separador Placas Superiores Externa DE Externe Obere Plattentrennung
 IT Separatore Piastre Superiori Esterno PT Separador Chapas Superior Externo FR Séparateur Plaque Supérieure Externe

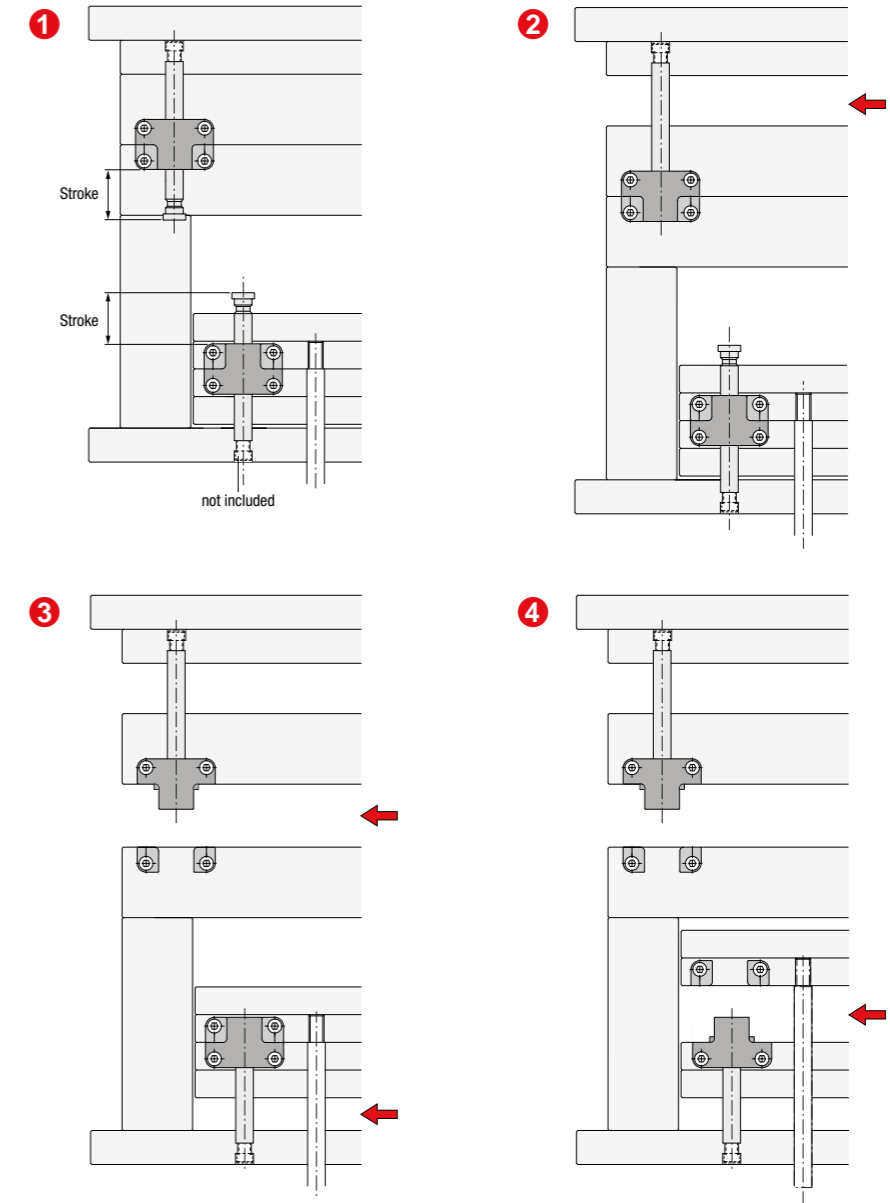
INSTALLATION GUIDELINES

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

EX



● Cad Insertion Point



EX

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

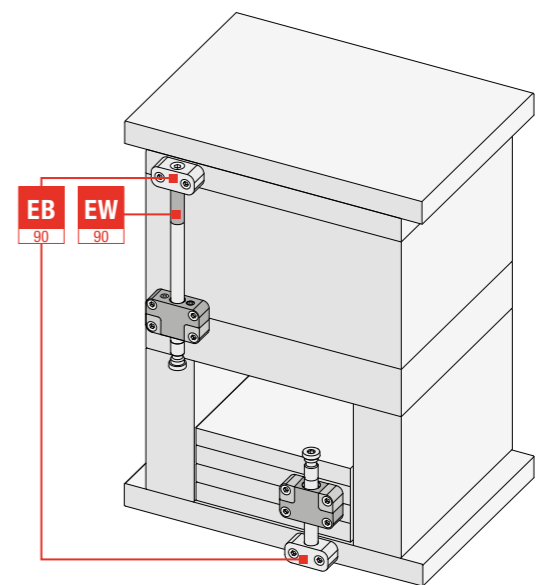
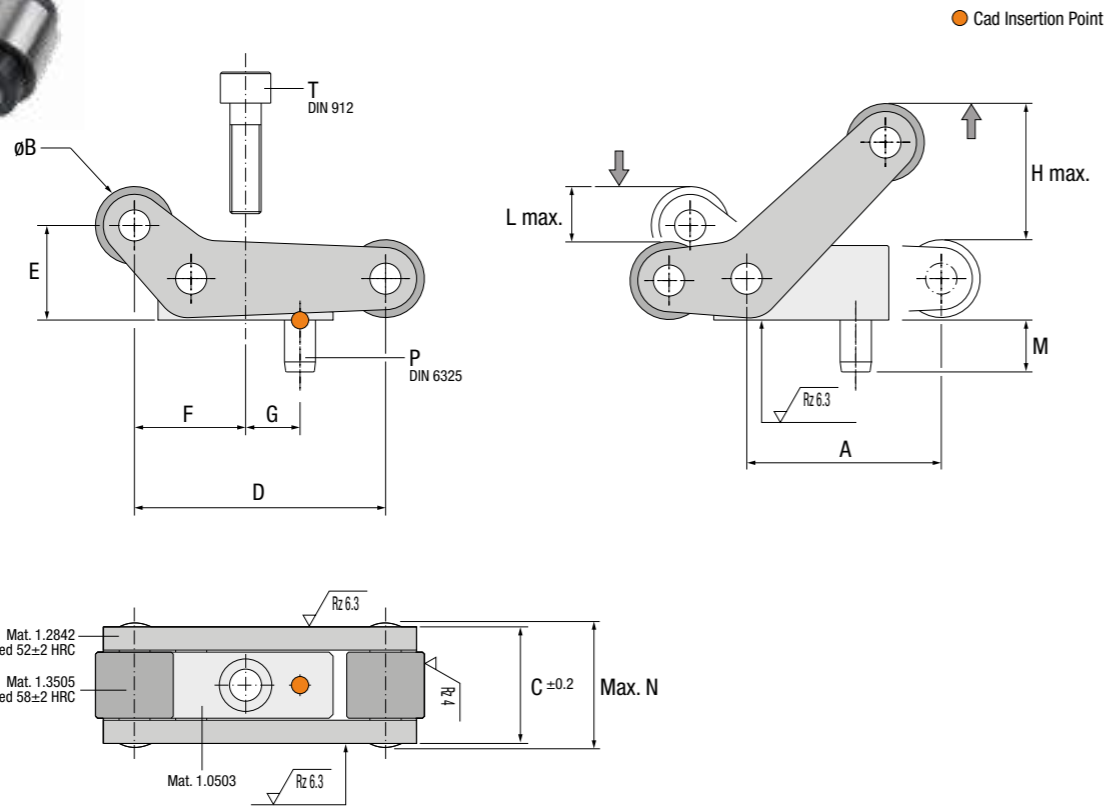


PLATE ACCELERATOR

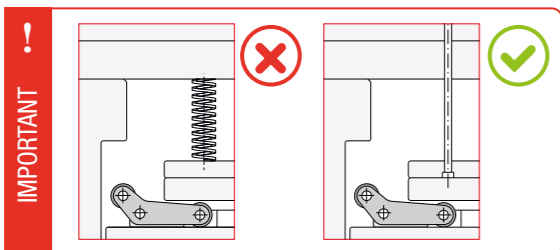
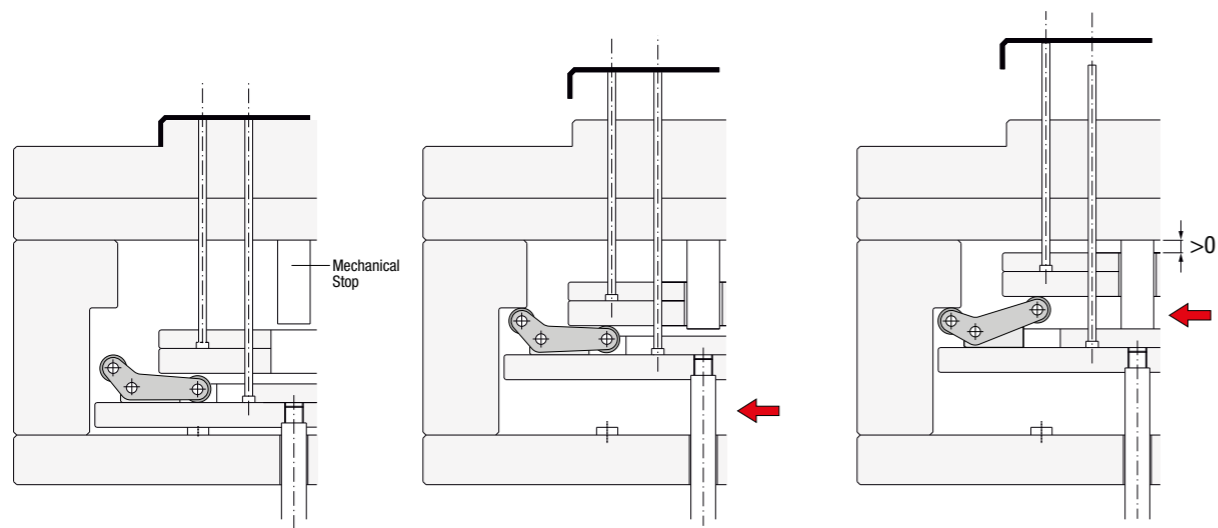
ES Elevador Placas DE Auswerferplatten-Beschleuniger
IT Acceleratore Piastra Espulsione PT Acelerador de Chapa FR Accélérateur Batterie d'Ejection



Ref.	A	B	C	D	E	F	G	H max.	L max.	M	N	P	T	Max. Force
EP.200813	20	8	13.2	25.8	9.4	11.4	5.9	11.6	4.4	5	15	Ø2.5x10	M3x12	125 kg.
EP.251016	25	10	16	32.3	11.8	14.3	7	15	5.7	6	18.5	Ø3x12	M4x16	250 kg.
EP.371522	37.5	15	22	48.5	17.7	21.5	10.5	23.5	9.1	8	25	Ø4x16	M6x25	350 kg.
EP.502030	50	20	30	64.6	23.6	28.6	14	32	12.5	10	34	Ø5x20	M8x30	800 kg.

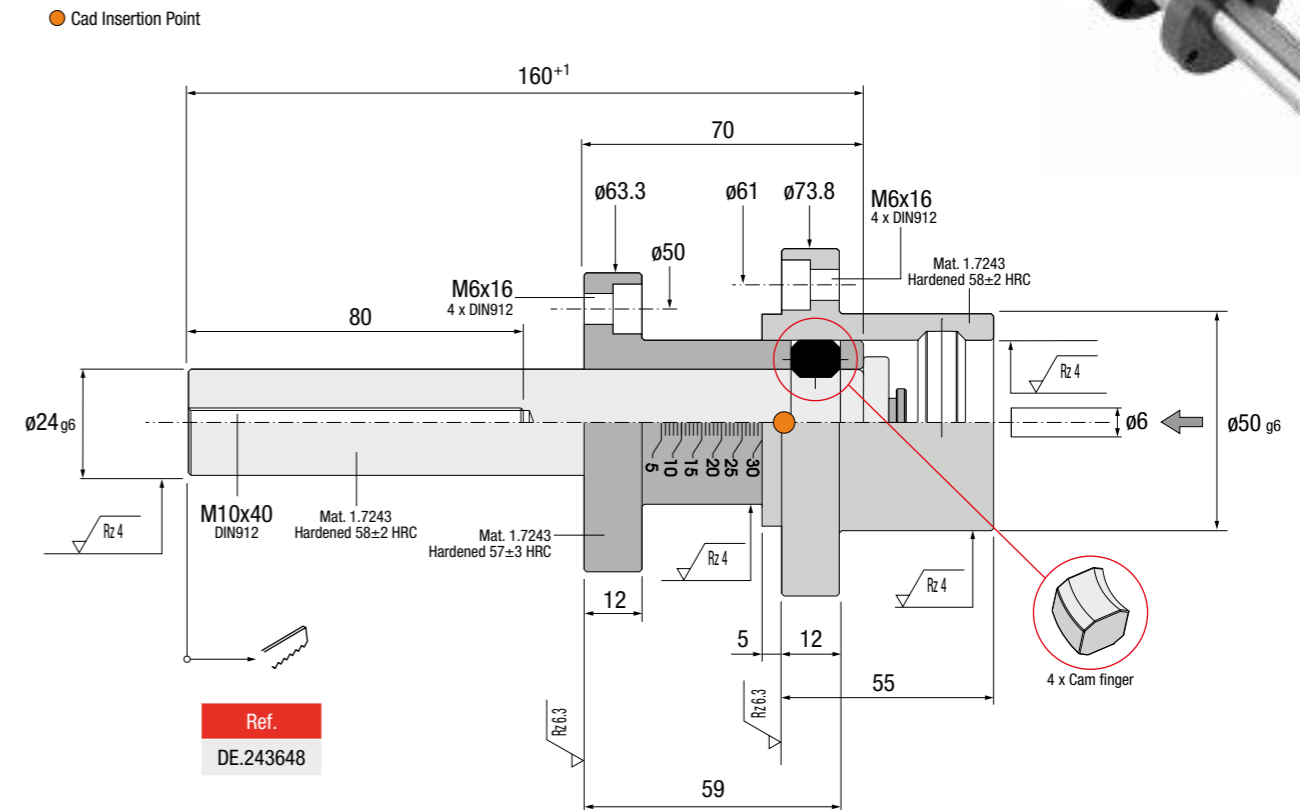
Installation Guidelines

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



DOUBLE EJECTION

ES Doble Expulsión DE Zweistufenauswerfer
IT Doppia Espulsione PT Dupla Extracção FR Double Ejection

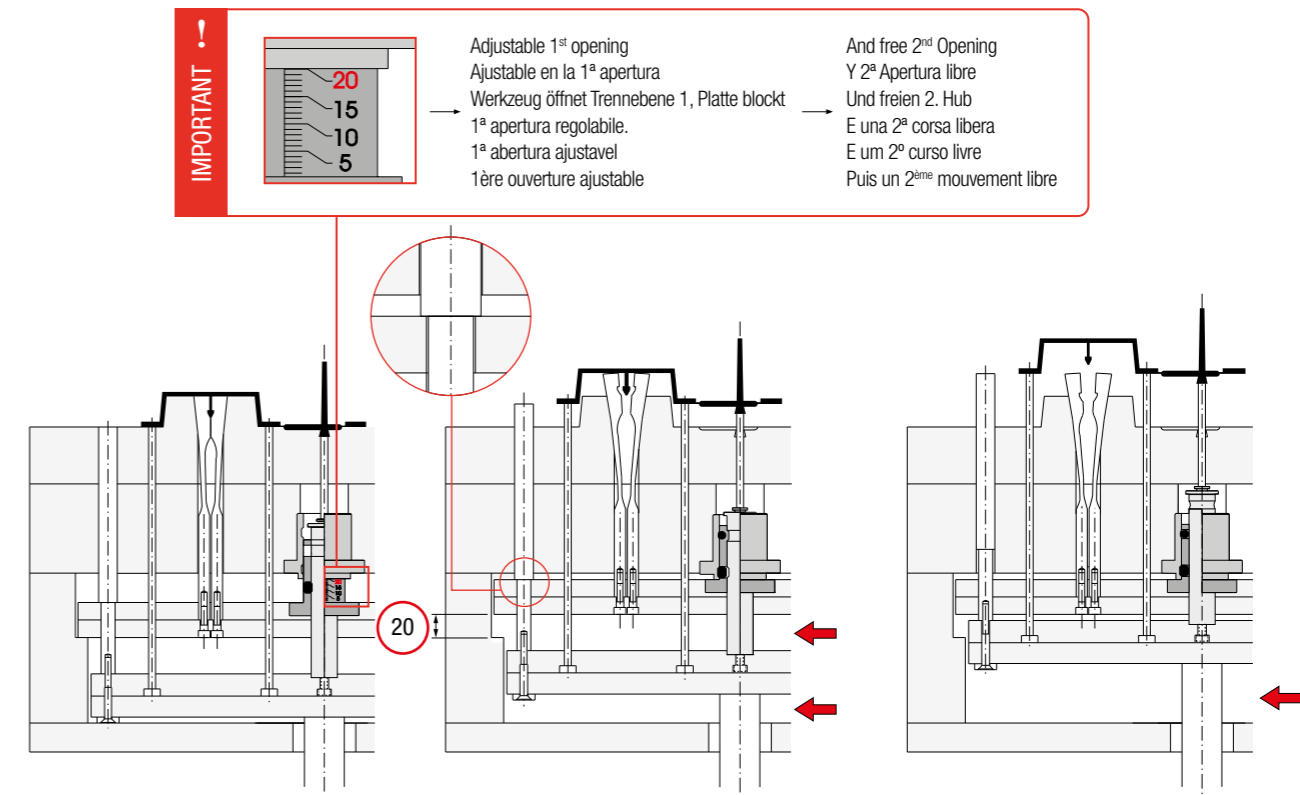


Ref.
DE.243648

IMPORTANT !
Use the scale from 0 to 30mm, to select the first stroke.
Seleccionar el primer recorrido mediante la regulación de 0 a 30 mm.
Um den 1. Hub festzulegen, die Einteilung von 0 - 30 mm.
Selezionare la prima corsa mediante la regolazione da 0 a 30mm.
Selecconar o primeiro curso mediante a regulação de 0 a 30 mm.
Sélectionner la 1ère course par le curseur de 0 à 30 mm.

Installation Guidelines

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



IMPORTANT !

Adjustable 1st opening
Ajustable en la 1ª apertura
Werkzeug öffnet Trennebene 1, Platte blockt
1ª apertura regulabile.
1ª abertura ajustavel
1ère ouverture ajustable

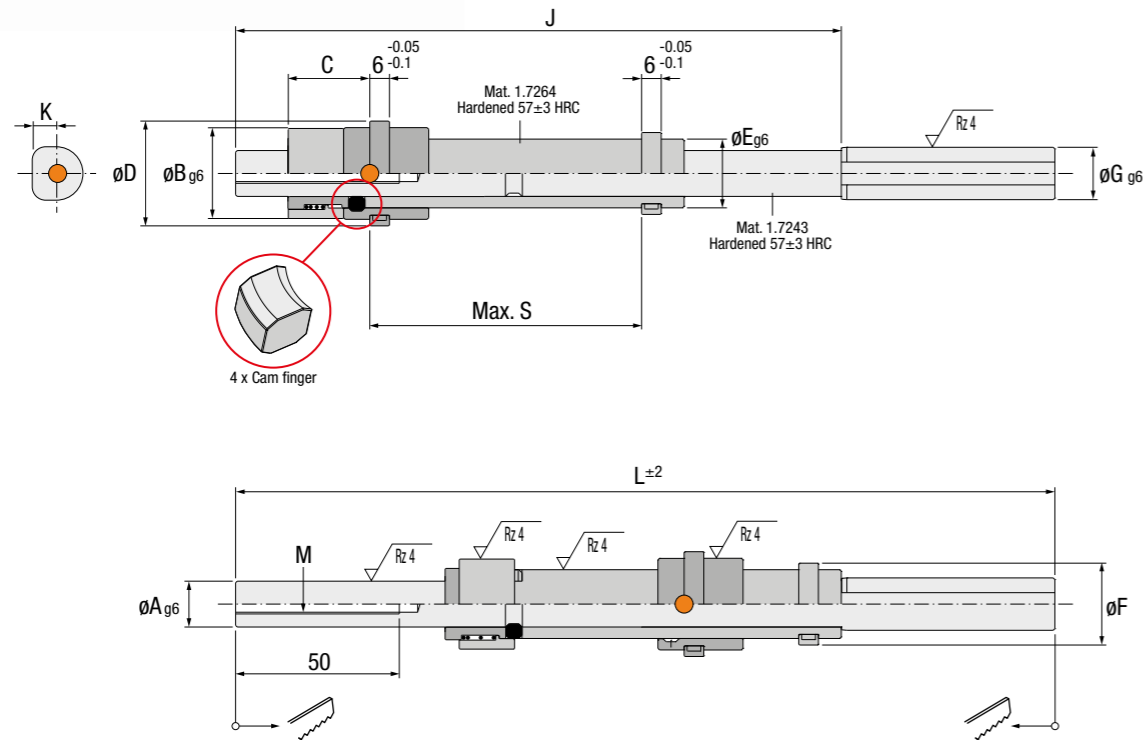
And free 2nd Opening
Y 2ª Apertura libre
Und freien 2. Hub
E una 2ª corsa libera
E um 2º curso livre
Puis un 2^{ème} mouvement libre

DY

REAR DOUBLE EJECTOR

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

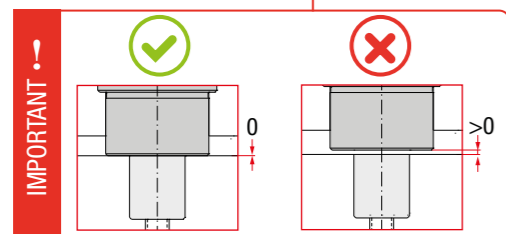
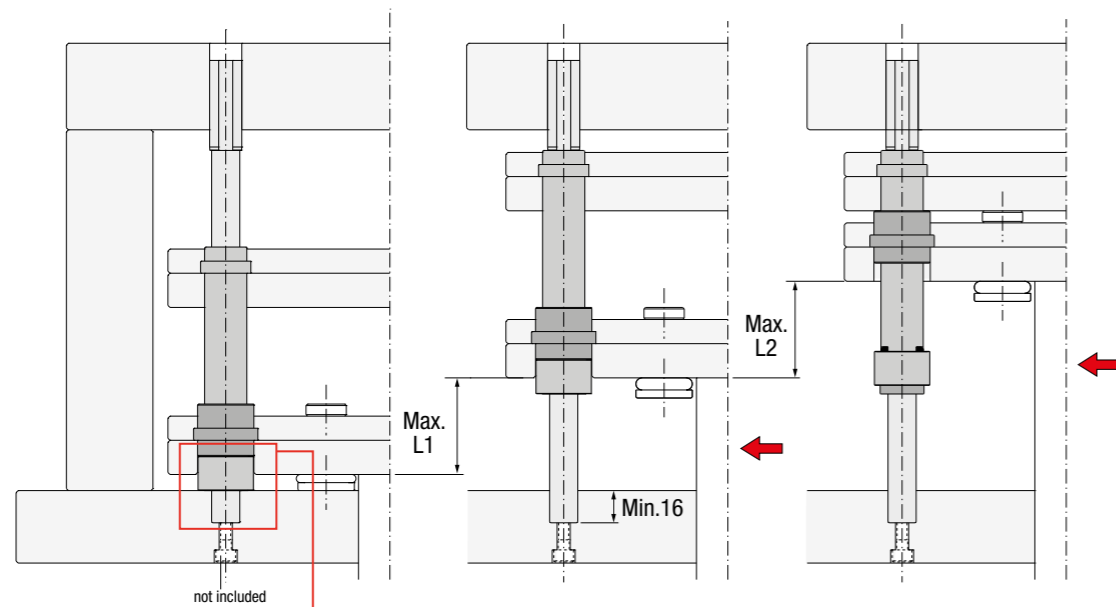
● Cad Insertion Point



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

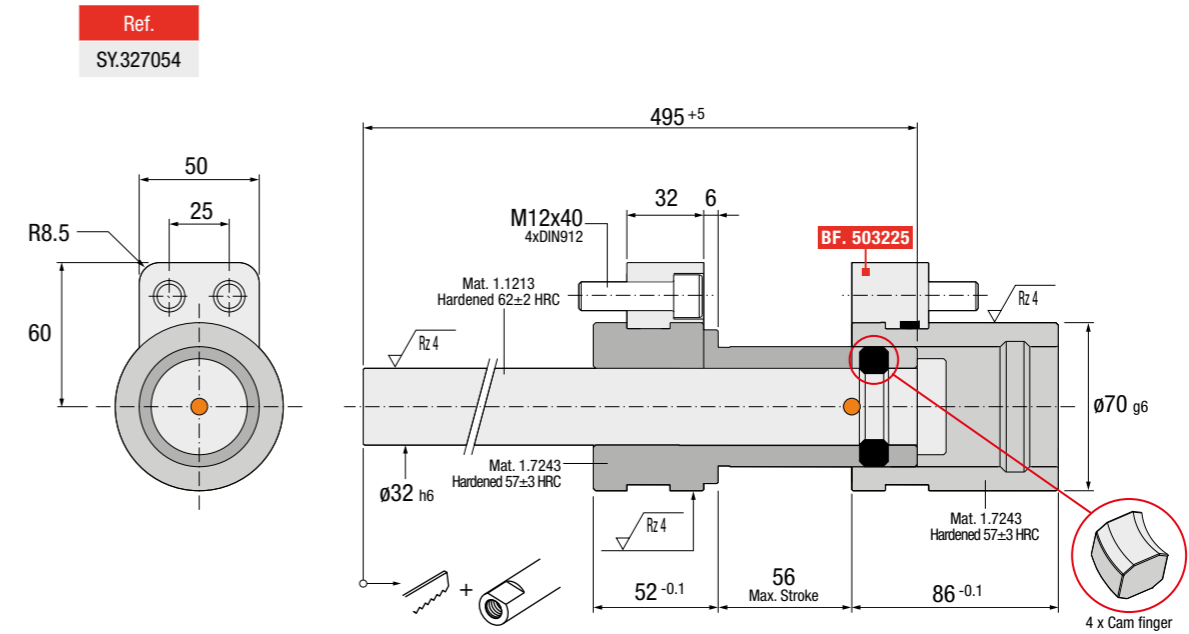
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



COMPACT DOUBLE EJECTION

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

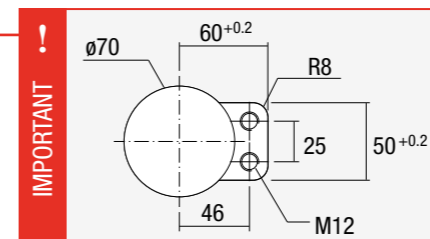
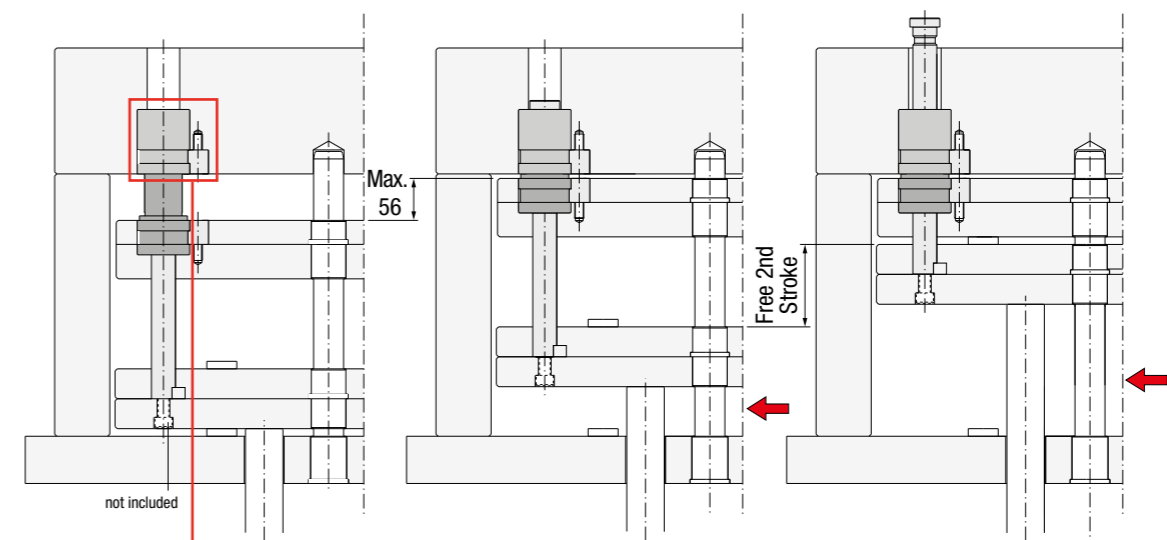
● Cad Insertion Point



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

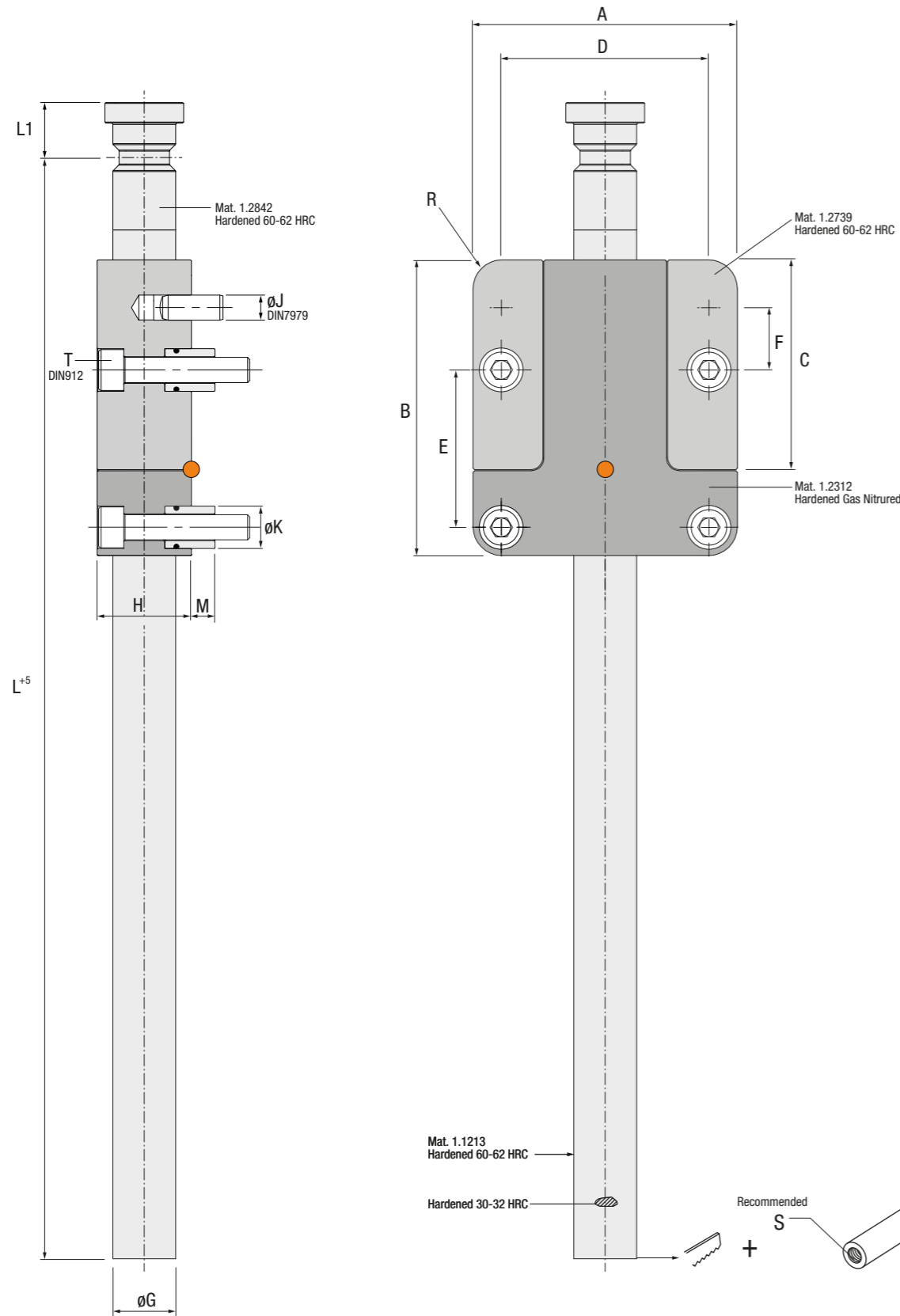
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



EXTERNAL DOUBLE EJECTION

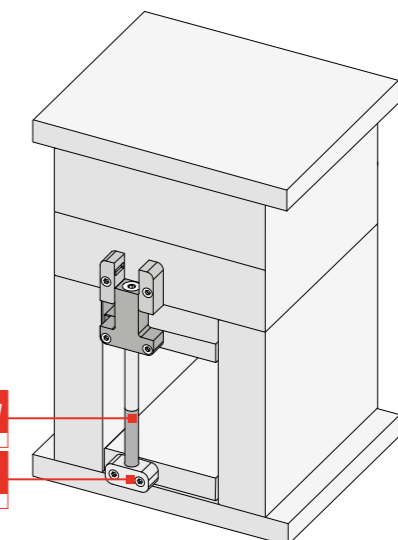
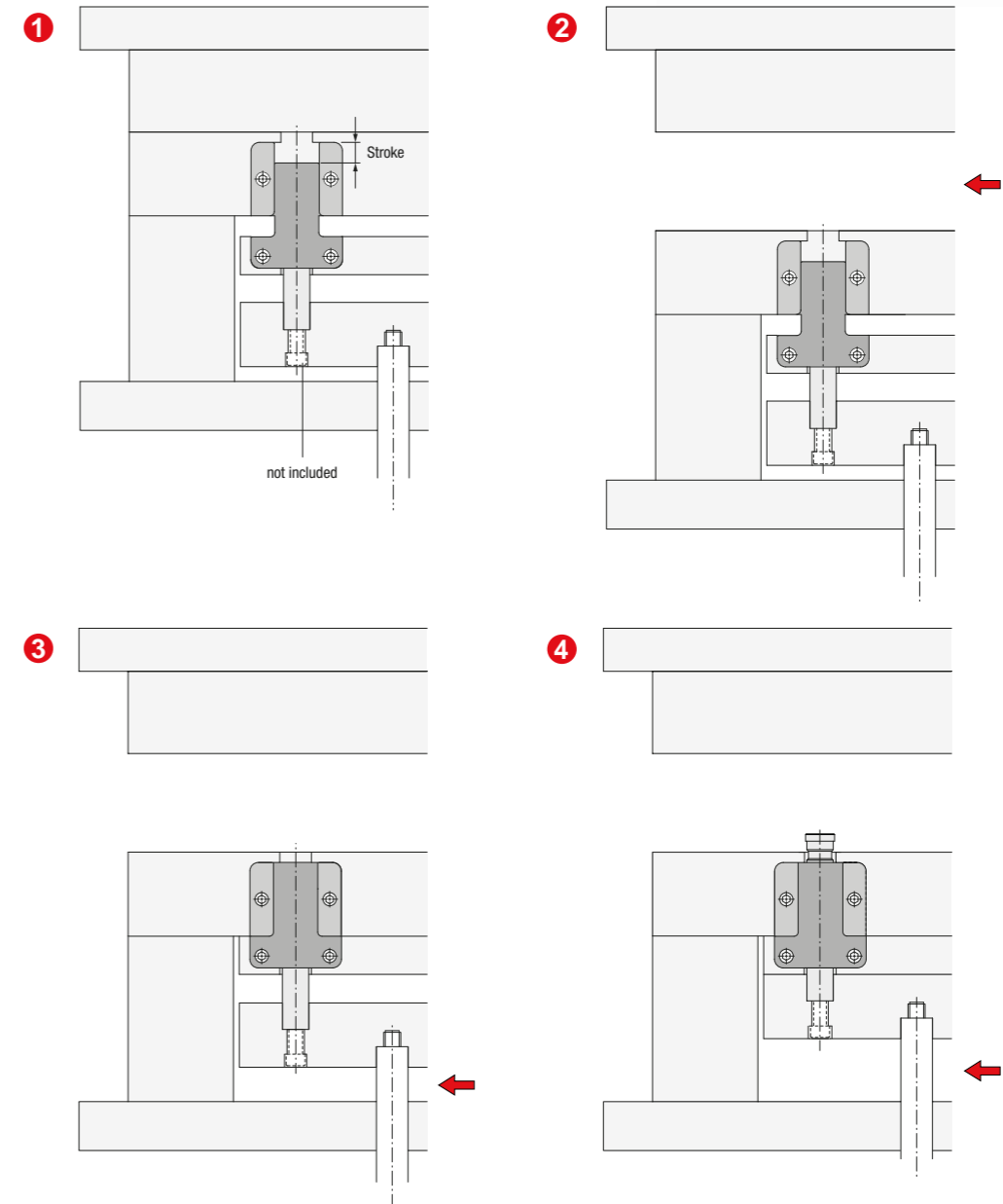
ES Doble Expulsión Externa DE Externer Zweistufenauswerfer
 IT Doppia Espulsione Esterna PT Dupla Extração Externa FR Double Ejection Externe

● Cad Insertion Point



INSTALLATION GUIDELINES

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

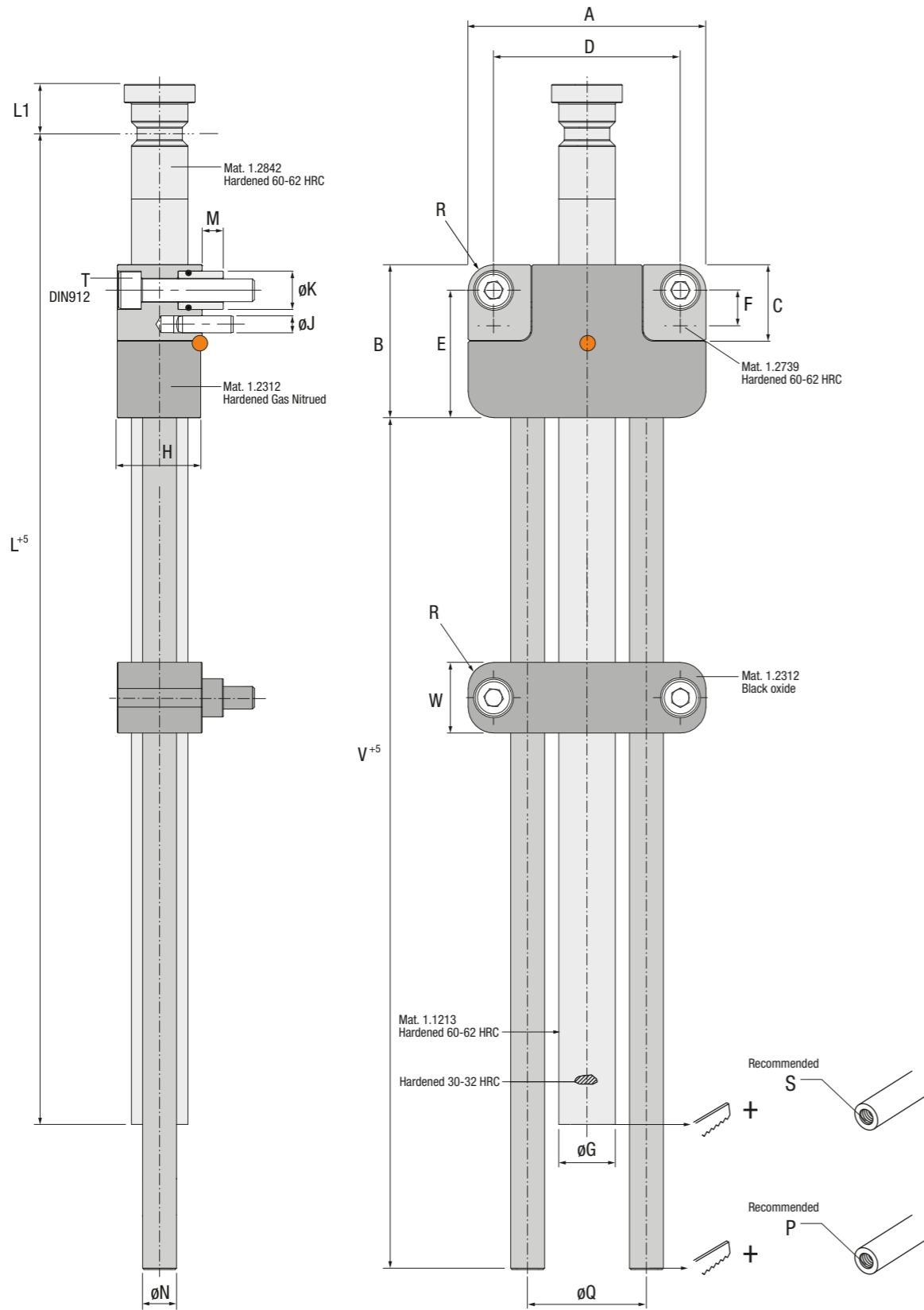


Ref.	A	B	C	D	E	F	G	H	J	K	L	L1	M	R	S	T	Min. Stroke	Max. Stroke	RF (N)
EY.140600	62	70	50	48	38	18	14	22	ø6x20	10.5	348	13	5.5	7.2	M8	M6x30	6	30	4.000
EY.200800	84	94	67	66	50	26	20	30	ø8x20	13.5	348	17.5	7.5	9.2	M12	M8x40	8	40	9.000
EY.321200	126	144	102	102	82	38	32	46	ø10x30	18.5	530	27	11.5	12.5	M16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

EXTERNAL SYNCHRONIZED PLATES

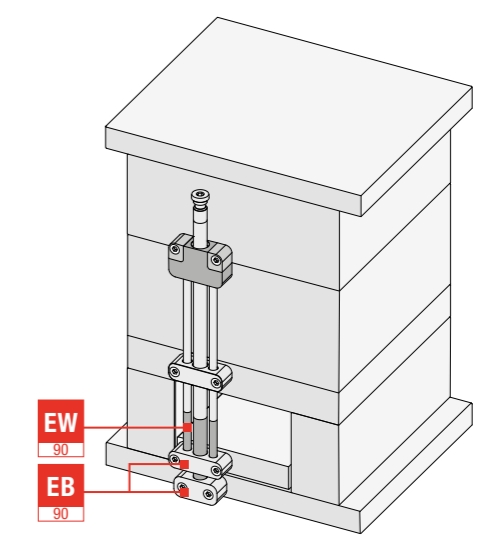
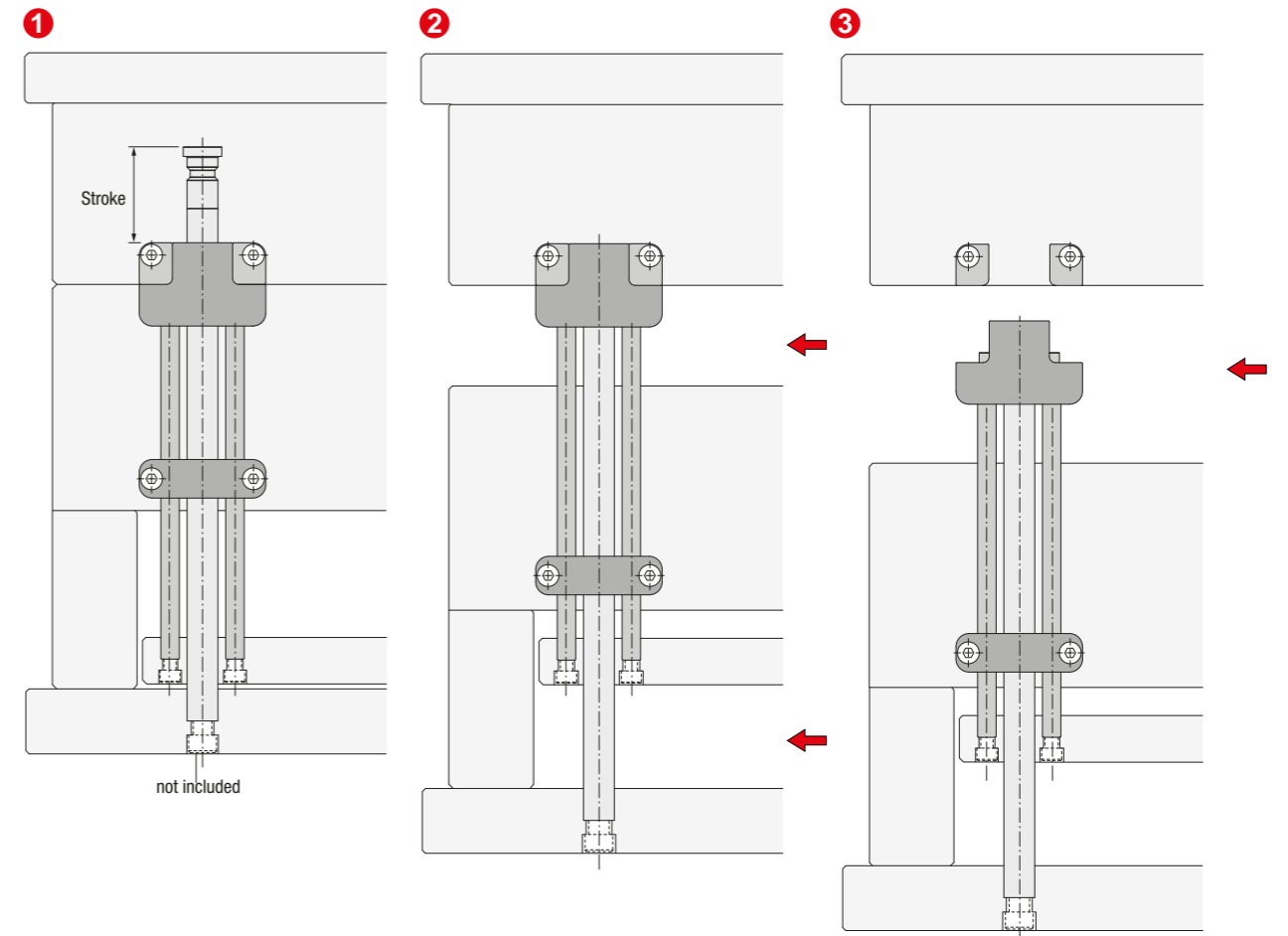
ES Sincronizador de Placas Externo DE Externe Plattensynchronisation
 IT Sincronizzatore di Piastre Esterno PT Sincronizador Chapas Externo Externa FR Synchronisation Mouvement Plaques

● Cad Insertion Point



INSTALLATION GUIDELINES

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

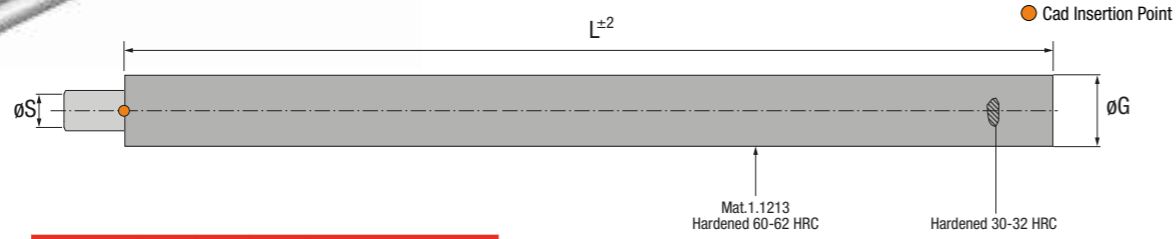


Ref.	A	B	C	D	E	F	G	H	J	K	L	L1	M	N	P	Q	R	S	T	V	W	Min. Stroke	Max. Stroke	RF (N)
EZ.140608	62	40	20	48	33	9	14	22	ø4x14 (DIN6325)	10.5	348	13	5.5	8	M5	30	7.2	M8	M6x30	300	20	4	250	4.000
EZ.200812	84	54	27	66	45	12	20	30	ø6x20 (DIN7979)	13.5	348	17.5	7.5	12	M8	42	9.2	M12	M8x40	300	25	5	250	9.000
EZ.321220	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

EW

EX-EY-EZ ROD EXTENSION

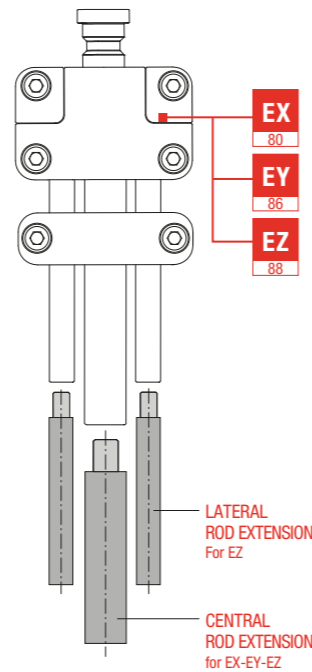
ES Alargo EX-EY-EZ DE EX-EY-EZ Verlängerungsstange
IT Estensione EX-EY-EZ PT Extensor para EX-EY-EZ FR Extension pour EX-EY-EZ



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

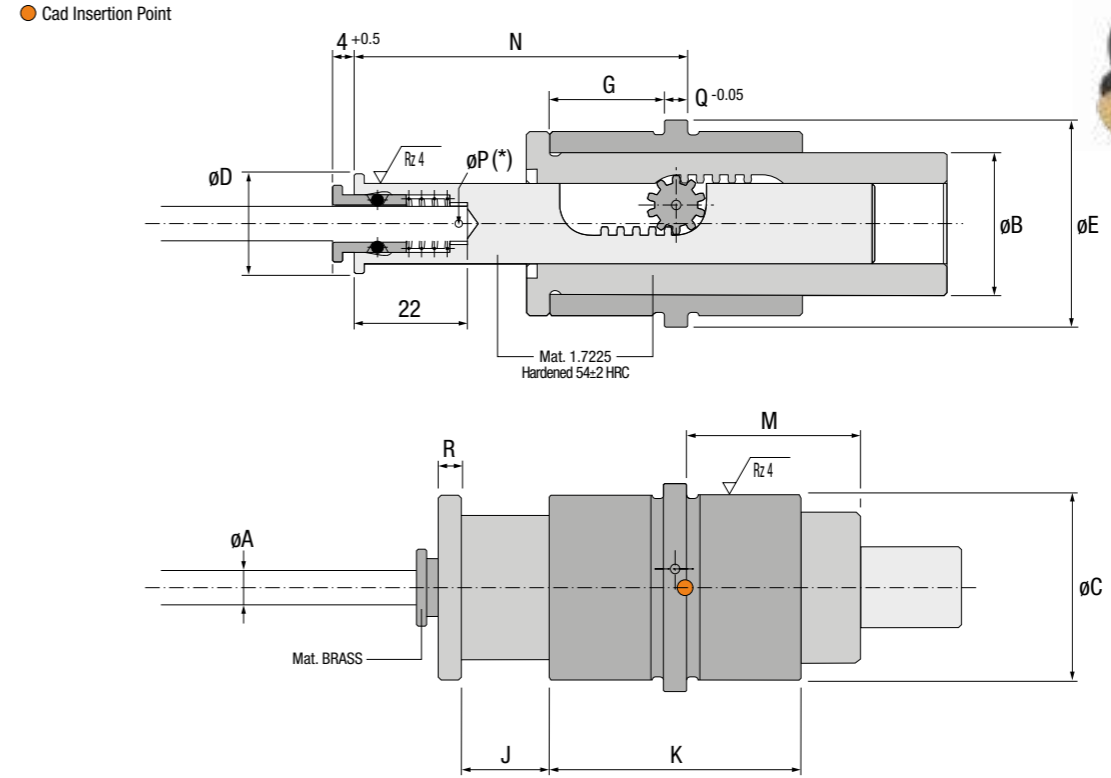
LATERAL ROD EXTENSION				
Ref.	G	L	S	Compatible with
EW.140833	8	330	M5	EZ.14
EW.201233	12	330	M8	EZ.20
EW.322049	20	495	M12	EZ.32
EW.502549	25	495	M16	EZ.50

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 laterales para cada EZ.
Demander 2 extensions latérales pour chacune EZ.



ACCELERATED EJECTOR

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

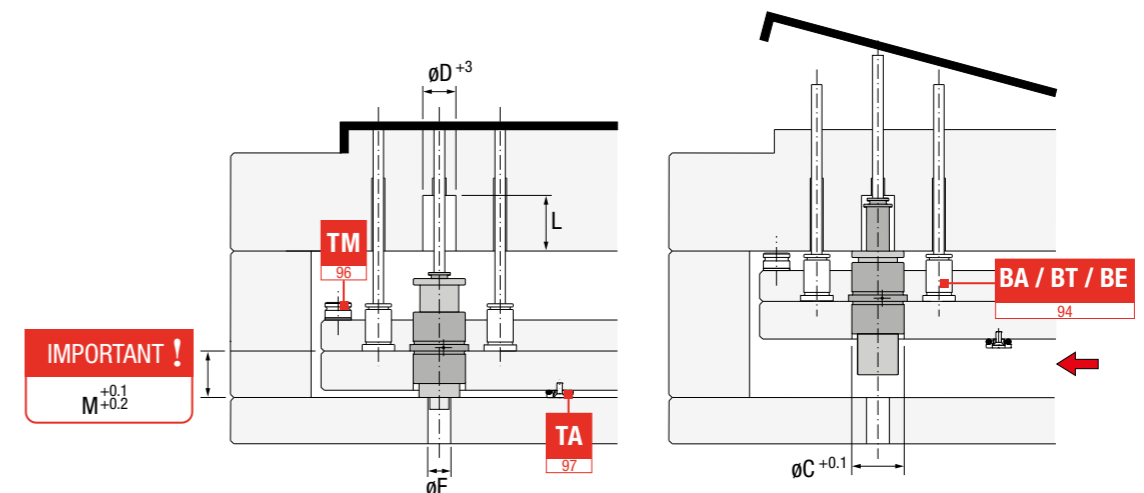


Ref.	A	B	C	D	E	F	G	J	K	L	M	N	P	Q	R
AE.031620	3	16	20	12.5	22	13	14	8	32	22	17	37	-	4	3
AE.041620	4	16	20	12.5	22	13	14	8	32	22	17	37	-	4	3
AE.052430	5	24	30	16	34	16	20	15	44	36	27	57	2	4	3
AE.062430	6	24	30	16	34	16	20	15	44	36	27	57	2	4	3
AE.082430	8	24	30	17	34	17	20	15	44	36	27	57	2	4	3
AE.103036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

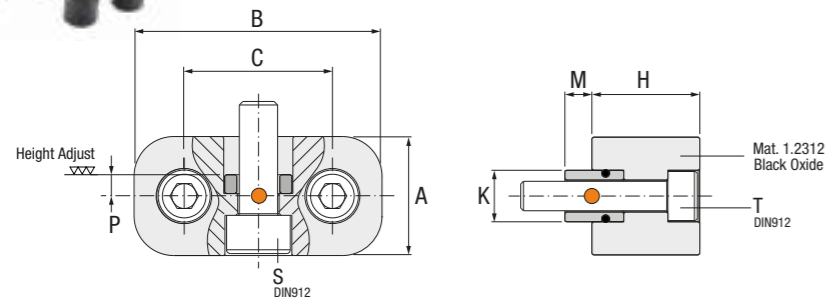
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



EB

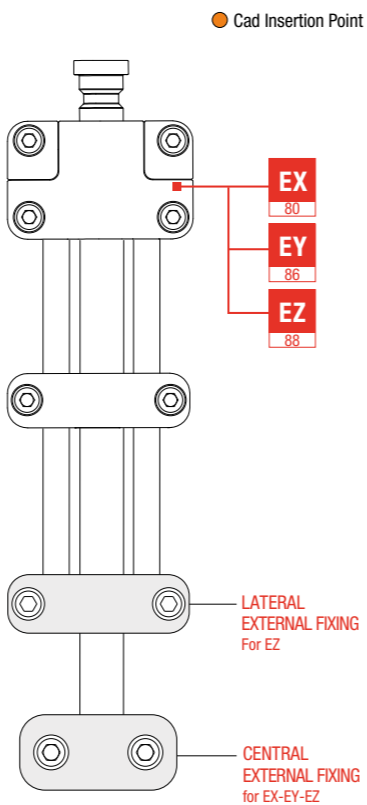
EX-EY-EZ EXTERNAL FIXING

ES Fijación Externa EX-EY-EZ DE EX-EY-EZ Externe Befestigung
IT EX-EY-EZ Fissaggio Esterno PT Fixação Externa EX-EY-EZ FR Fixation Externe pour EX-EY-EZ



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



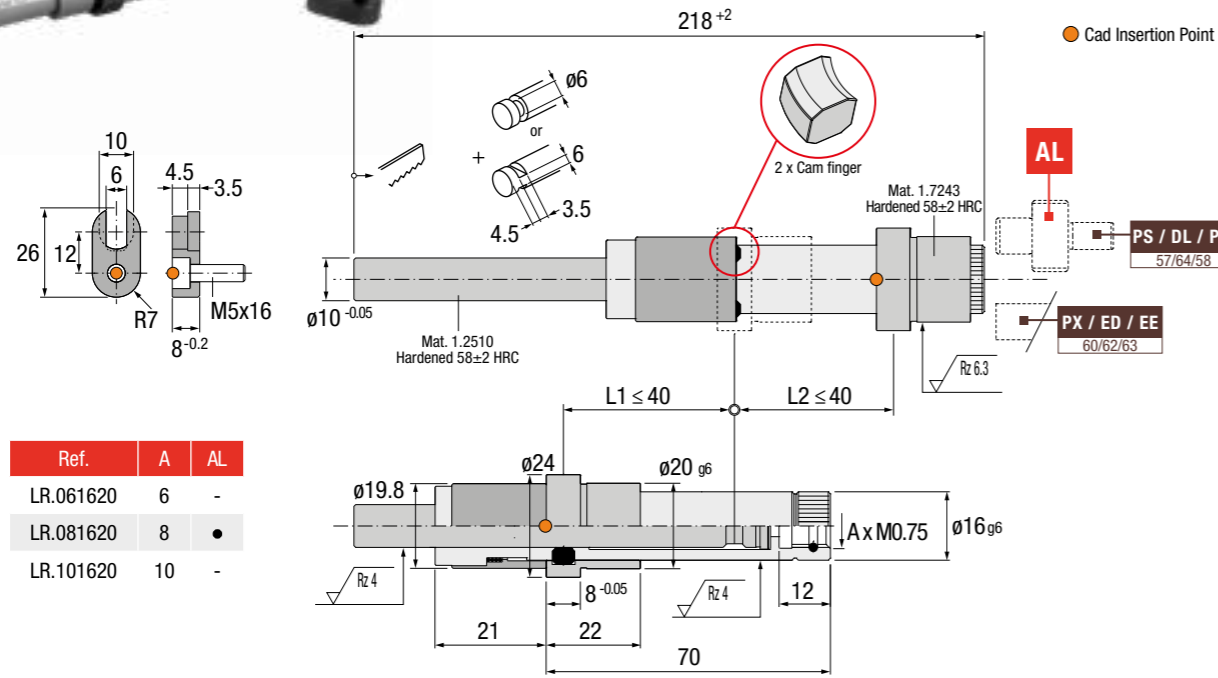
AE

Patented

LR

THREADED LIMITER

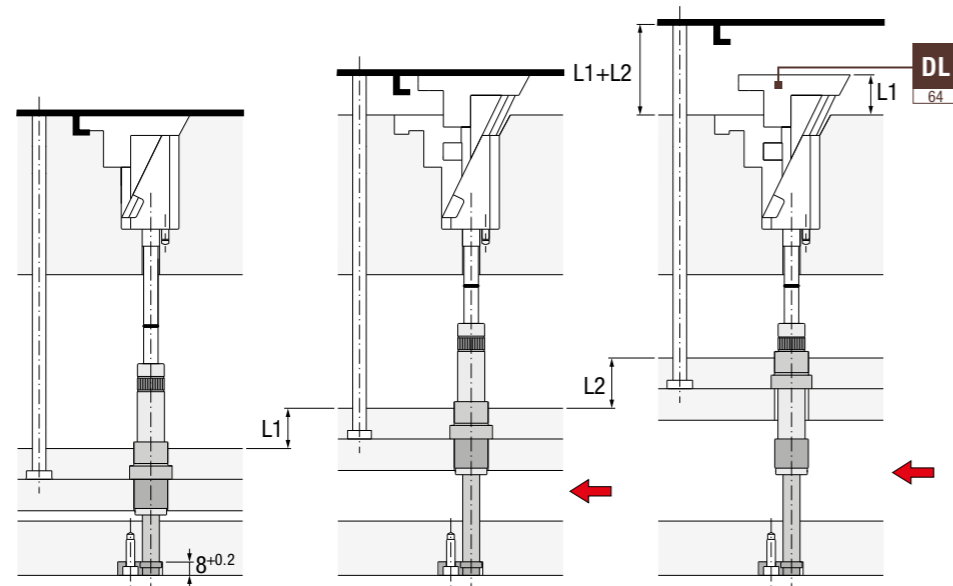
ES Limitador con Rosca DE Auswerfer - Begrenzer mit Gewindeaufnahme
IT Limitatore Filettato PT Limitador com Rosca FR Limiteur avec Vis



Ref.	A	AL
LR.061620	6	-
LR.081620	8	•
LR.101620	10	-

Installation Guidelines

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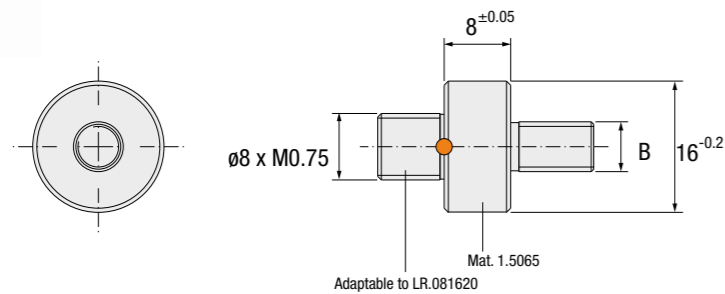


Max. 150°C

AL

THREADED LIMITER ADAPTER

ES Adaptador para Limitador Roscado DE Gewindeadapter
IT Adattatore per Limitatore Filettato PT Adaptador para Limitador Roscado FR Cadaptateur pour Limiteur avec Vis



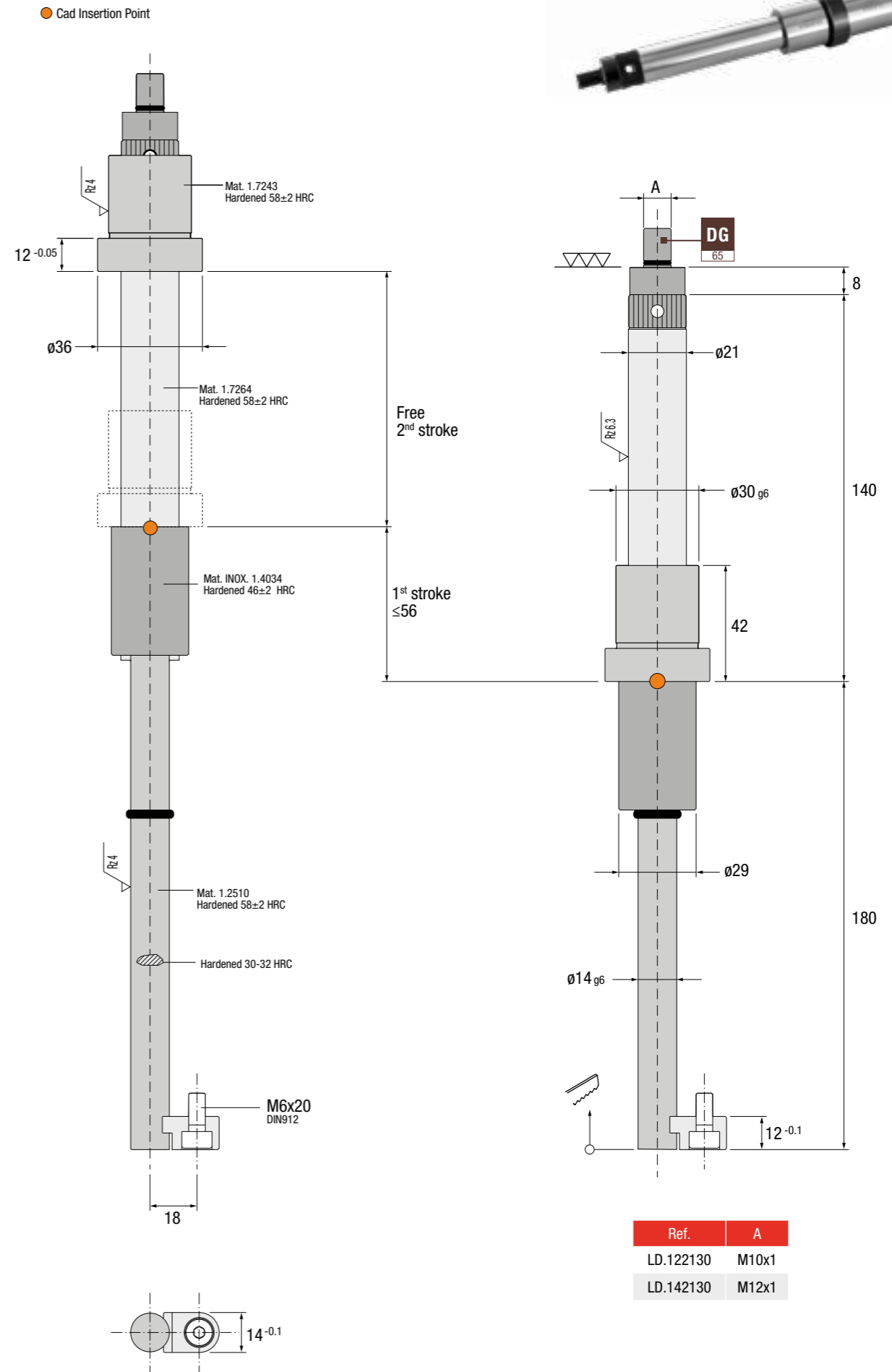
Ref.	B
AL.0800M4	M4x10
AL.0800M5	M5x10
AL.0800M6	M6x10
AL.0800M8	M8x10

DOG LIFTER LIMITER

ES Limitador Patín DE Hubbegrenzer
IT Limitatore Pattino PT Limitador Patim Automático FR Limiteur



LD



Ref.	A
LD.122130	M10x1
LD.142130	M12x1

Patented

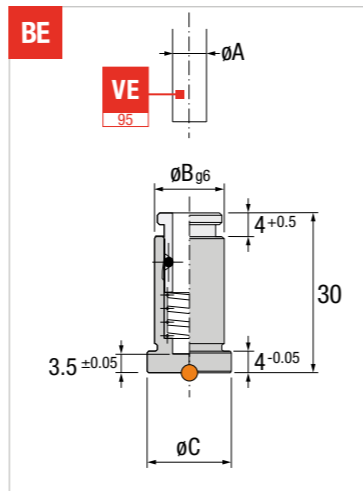
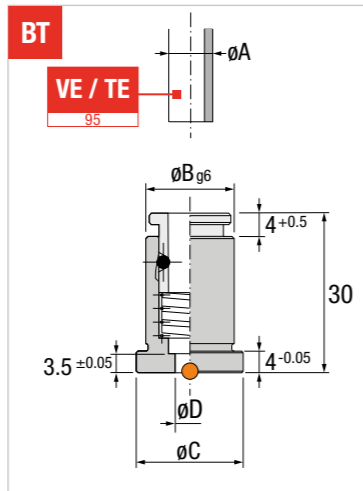
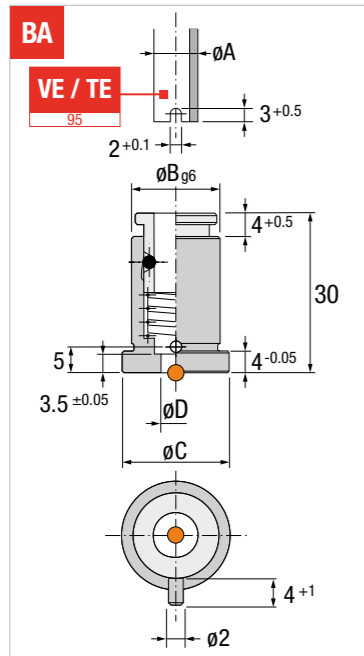


BA-BE-BT

EJECTOR BASE

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

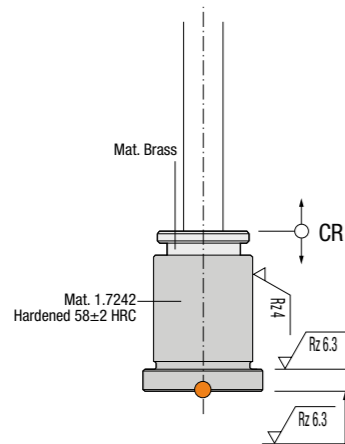
Cad Insertion Point



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

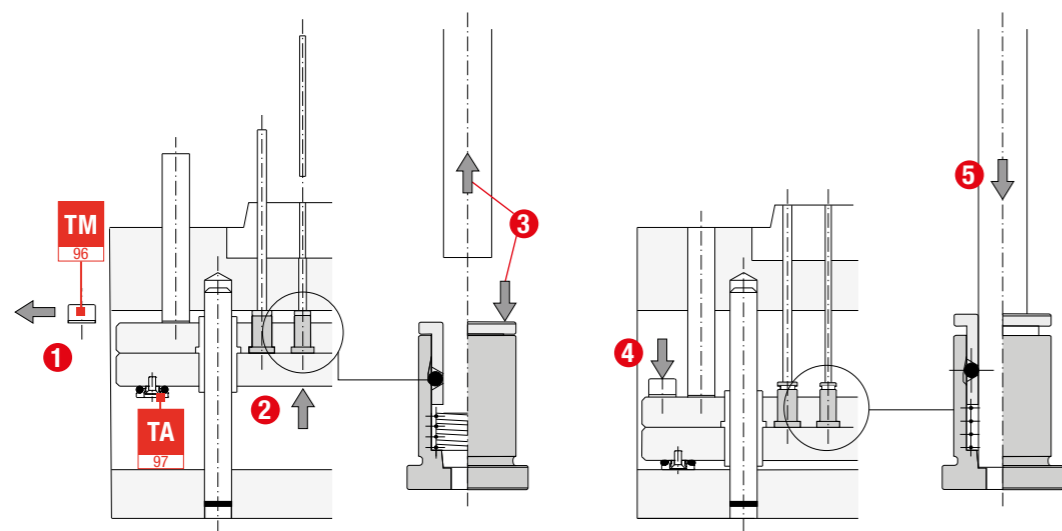
Ref.	A	B	C	D	CR (N)
BA.061418	6	14	18	3.5	≥ 3.800
BA.081620	8	16	20	5.5	≥ 5.100
BA.101822	10	18	22	7	≥ 6.400
BA.122024	12	20	24	9	≥ 7.600

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

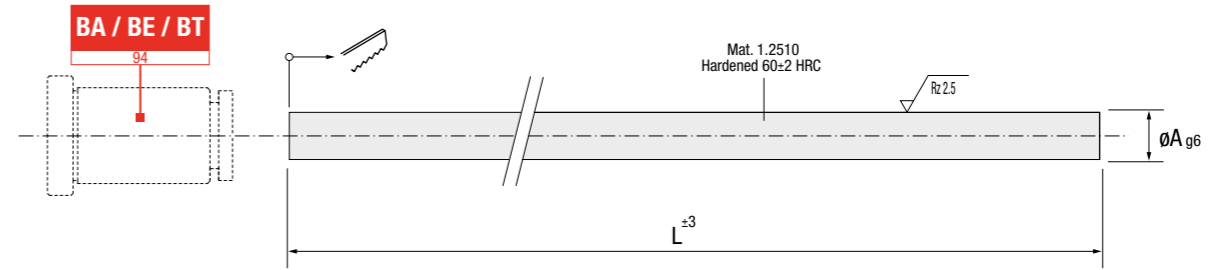
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



HEADLESS EJECTOR PIN

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

Cad Insertion Point



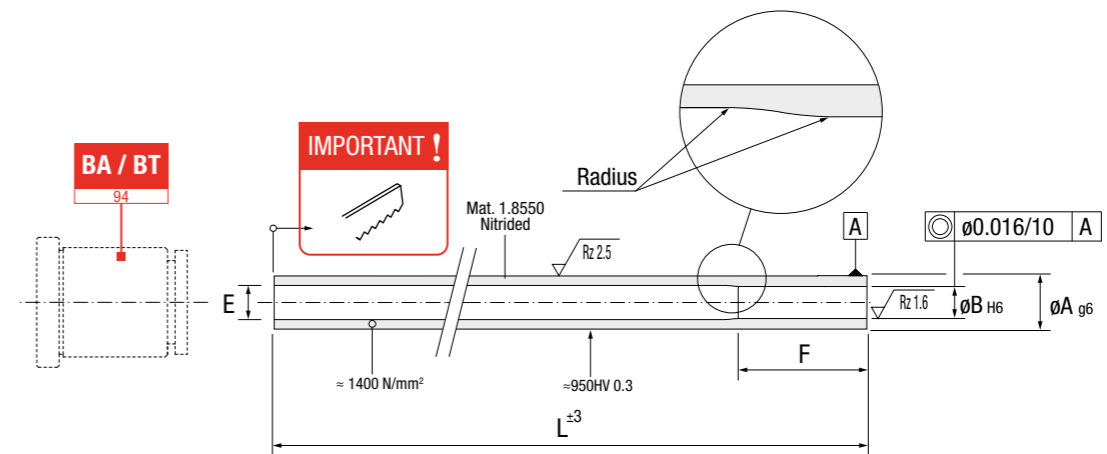
IMPORTANT !
Indicate the desired **L** dimension after the reference.
Indicar la cota **L** necesaria después de la referencia.
Gewünschte Länge **L** angeben.
Indicare la quota **L** desiderata dopo il codice.
Indique a dimensão **L** desejada depois da referência.
Indiquer longueur (**L**) désirée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

Patented
Max. 150°C

VE

Patented

TE

Patented

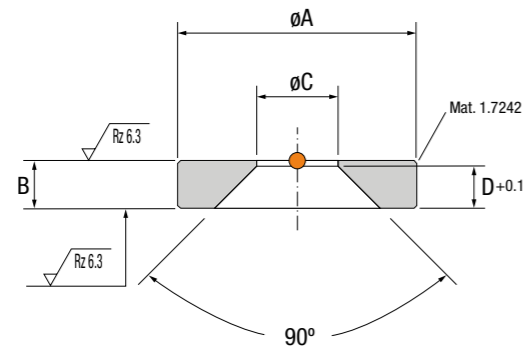
DP



EJECTOR FOOT

ES Distanciator Placa DE Anschlagsscheibe
IT Distanziale Piastra PT Botão de Encosto FR Repos de Batterie

● Cad Insertion Point

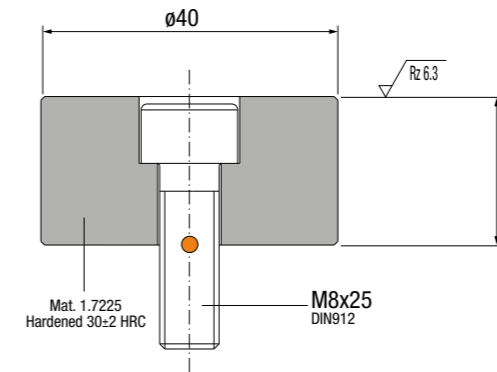


Ref.	A	B	C	D
DP.200506	20	5	6.5	3.5
DP.250508	25	5	8.5	4.4
DP.280610	28	6	12	5.5

EJECTOR PLATE SPACER

ES Distanciator 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



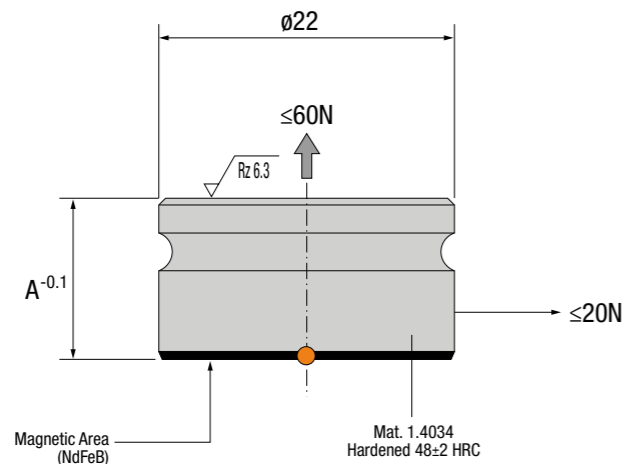
TM



SAFETY STOPPER

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

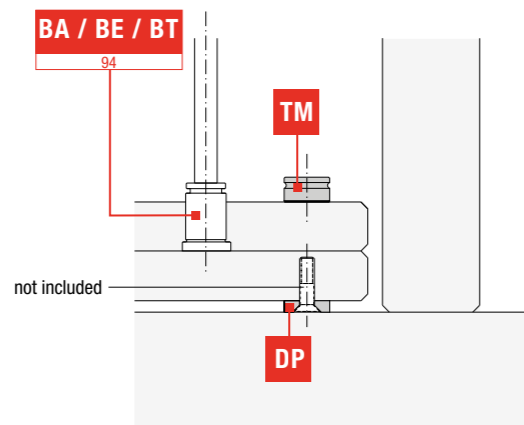
● Cad Insertion Point



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

Installation Guidelines

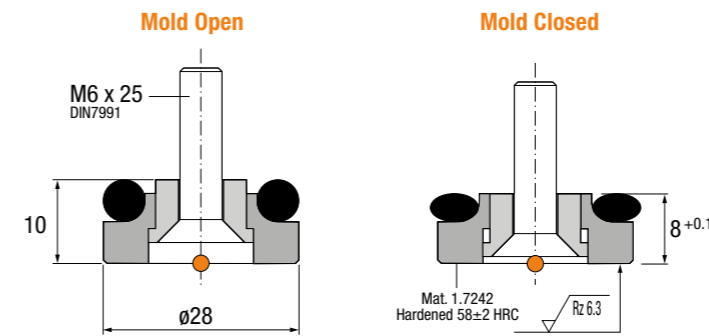
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



SHOCK ABSORBER

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

● Cad Insertion Point

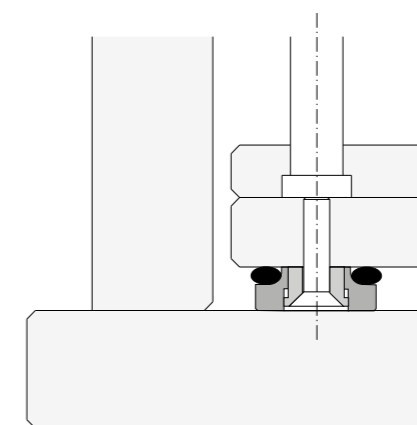


Ref.
TA.280806

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



The background of the image shows a close-up of a dial lock mechanism. Several circular dials are visible, each with a needle and numbers around the perimeter. The dials are arranged in a row, and the needles are pointing to different numbers. A purple rectangular overlay is positioned in the center of the image, containing the number '4' and the word 'TRACEABILITY'.

4

TRACEABILITY

TRACEABILITY INDEX

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

102/

Remote Date Stamp
Fechador Remoto
Ferngesteuerter Datumsteller
Datario Remoto
Remote Date Stamp
Dateur à Reglage Exterieur



102/

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/

Date Stamp Plus
Fechador Anual Plus
Datumsteller Plus
Datario Annuale Plus
Datador Anual Plus
Dateur Plus



109/

Removal Jig
Extractor Fechador
Abzieher für Datumsteller
Estrattore Datario
Extrator de Datador
Extracteur pour Dateur



102/

Remote Comand
Mando Remoto
Fernbedienbar
Comando Remoto
Comando Remoto
Commande à Distance



104/

Turning Key
Llave de Giro
Montageschlüssel
Chiave der Aggiornamento
Chave de Rotação
Clé de Changement d'Information



104/

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/

Xtra Date Stamp
Fechador Extra
Xtra Datumsteller
Datario Extra
Datador Extra
Dateur Extra



110/

Xtra Insert
Inserto Extra
Xtra Einsatz
Inserto Extra
Postiço Extra
Insert Extra



111/

Double Date Stamp
Fechador Doble
Zweifach-Datumstempel
Datario Doppio
Datador Duplo
Dateur Double



105/

Reference Insert
Inserto Referencia
Recyclingeinsätze
Inserti di Riciclaggio
Indicadores de Reciclagem
Pilon de Recyclage



105/

Mark Insert
Inserto Marca
Einsätze für Symbole
Inserto Simbolo
Postiço de Marcas
Insert de Marquage



112/

Temperature Dater
Fechador Temperatura
Datumsteller, wärmebeständig
Datario Temperatura
Datador Temperatura
Dateur Haute Température



112/

Temperature Insert
Inserto Temperatura
Einsätze, wärmebeständig
Inserto Temperatura
Indicador Temperatura
Insert Haute Température



106/

Interchangeable Insert
Inserto Intercambiabile
Einsatz, austauschbar
Inserto Intercambiabile
Postiço Intermutável
Ensemble Interchangeable



106/

Turning Insert
Inserto Giratorio
Einsätze Drehbar
Inserto Girante
Postiço Giratório
Insert Tournant



107/

Unit Date Stamp
Fechador Unitario
Datumstellereinheit
Datario Unitario
Datador Unitário
Kit Mini Dateur



113/

Block Base
Base Monobloque
Aufnahme Datumsblock
Base Monoblocco
Base Monoblocco
Kit Mini Dateur



113/

Block Insert
Postiço Monobloque
Einsätze für Datumsblöcke
Inserto Monoblocco
Postiço Monoblocco
Inserts Multi Dateur



114/

Cycle Counter
Contador Ciclos
Zählwerk
Conta Cicli
Contador de Ciclos
Compteur de Cycle



108/

Date Stamp
Fechador Anual
Datumsteller
Datario Annuale
Datador Anual
Corps Dateur

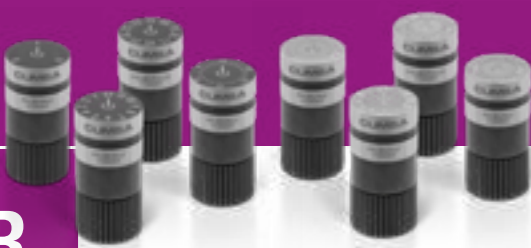


108/

Date Insert
Inserto Anual
Einsätze für Datumsteller
Inserto Datario
Indicador Anual
Insert Dateur



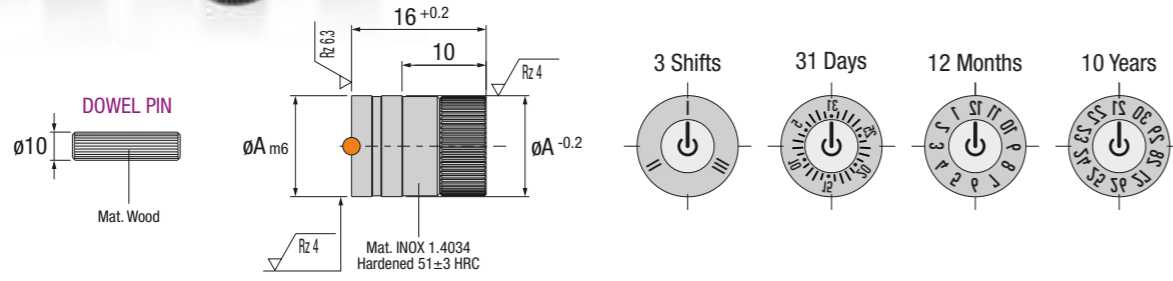
FR



REMOTE DATE STAMP

ES Fechador Remoto DE Ferngesteuerter Datumssteller
IT Datario Remoto PT Datador Remoto FR Dateur à Reglage Extérieur

● Cad Insertion Point



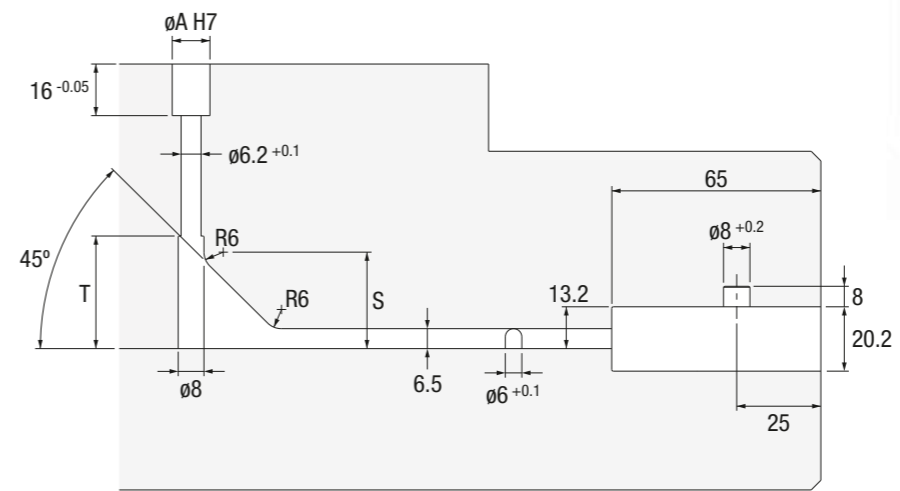
	3 Shifts	31 Days	12 Months	10 Years	A
Raised lettering	FR.08HR03	FR.08HR31	FR.08HR12	FR.08HR10-..	8
	FR.12HR03	FR.12HR31	FR.12HR12	FR.12HR10-..	12
Recessed lettering	FR.08LR03	FR.08LR31	FR.08LR12	FR.08LR10-..	8
	FR.12LR03	FR.12LR31	FR.12LR12	FR.12LR10-..	12

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.

Patented
Max. 150°C

INSTALLATION GUIDELINES

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



FR

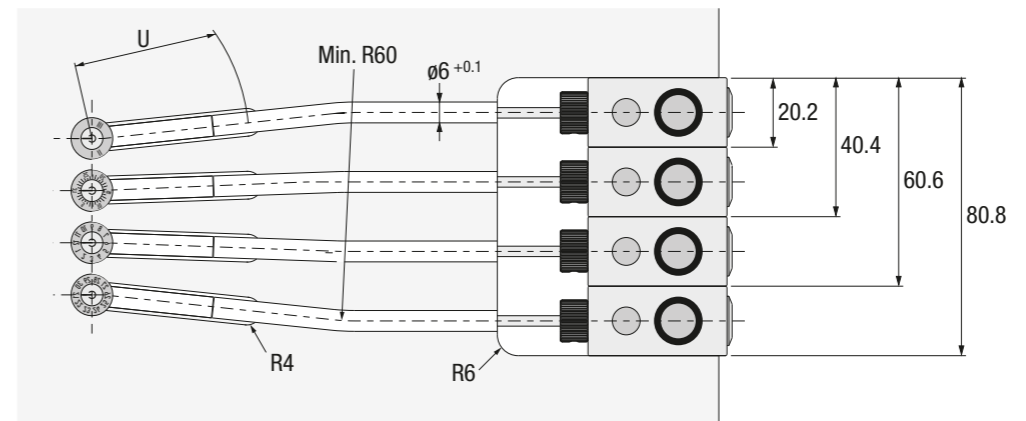
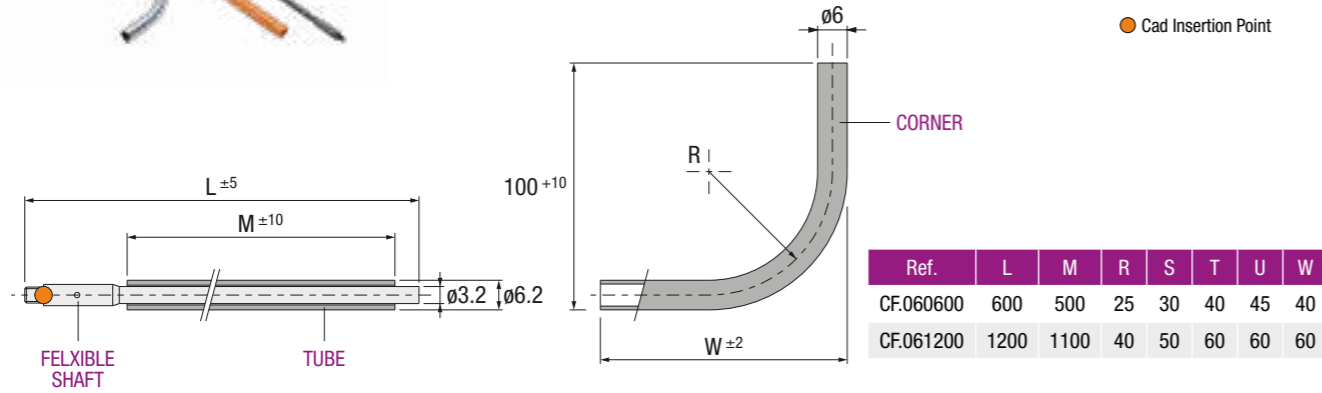


CF

REMOTE DATE STAMP SHAFT SET

ES Conjunto Varilla para Fechador Remoto DE Fernbedienbares Wellenset IT Set Asta per Datario Remoto
PT Conjunto de Transmissão para Datador Remoto FR Jeu de Tige pour Changement d'Information

● Cad Insertion Point

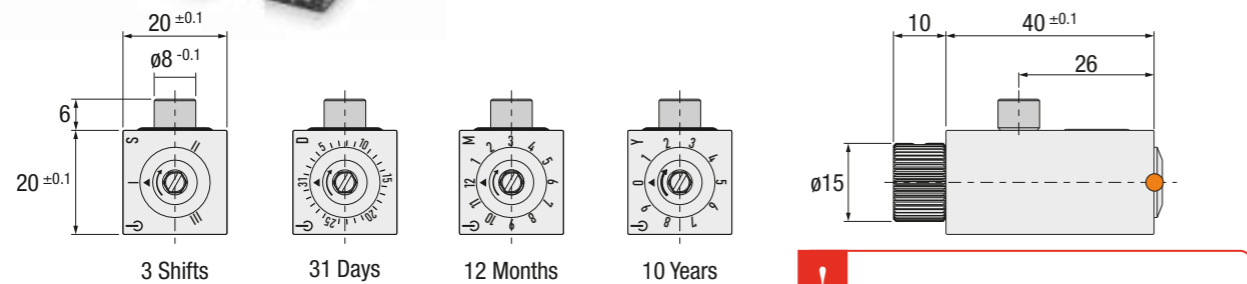


MN

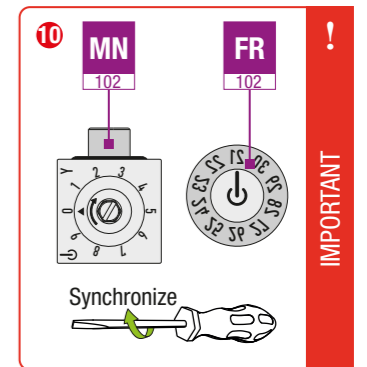
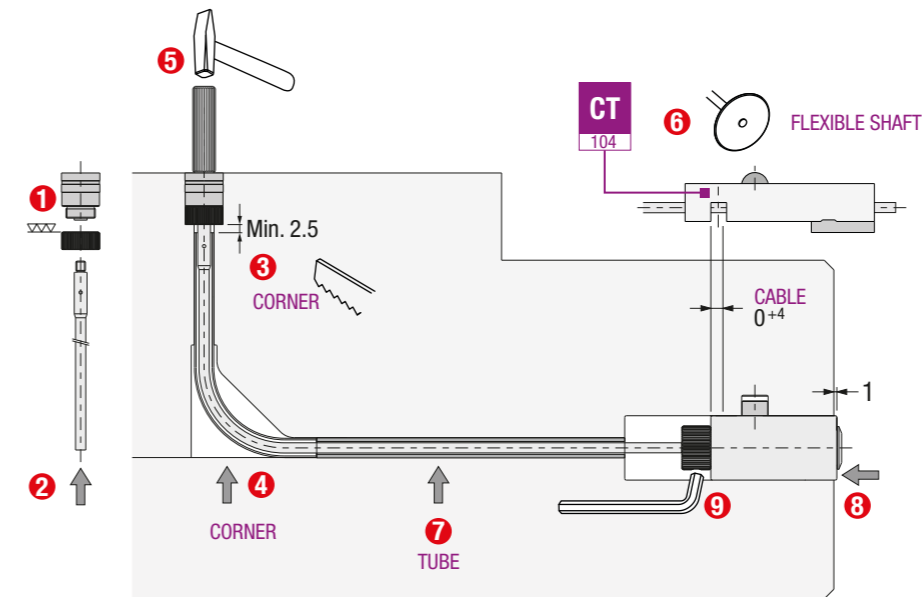
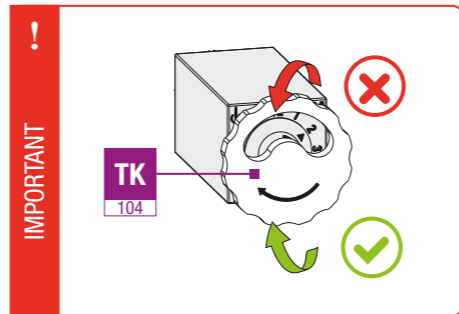
REMOTE COMMAND

ES Mando Remoto DE Fernbedienbar
IT Comando Remoto PT Comando Remoto FR commande à Distance

● Cad Insertion Point



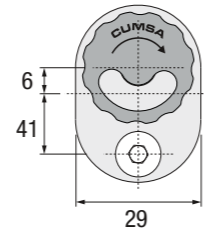
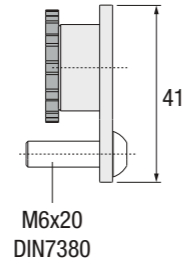
Ref.	# of Positions
MN.202003	3 (Shifts)
MN.202010	10 (Years)
MN.202012	12 (Months)
MN.202031	31 (Days)



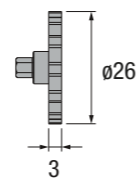
TK



TURNING KEY SUPPORT

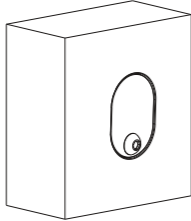


TURNING KEY

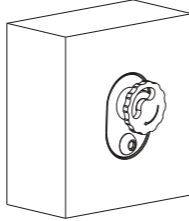


Ref. TK.412903

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

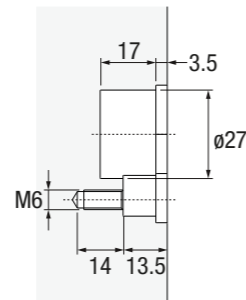
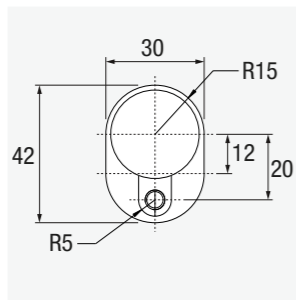


Molding position
 Posición en producción
 Werkzeugpositionfixierung
 Posizione di stampaggio
 Posição de molde em injeção
 Position lors de la production



Installation Guidelines

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

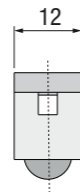
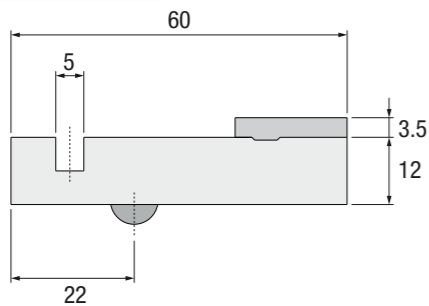


CT

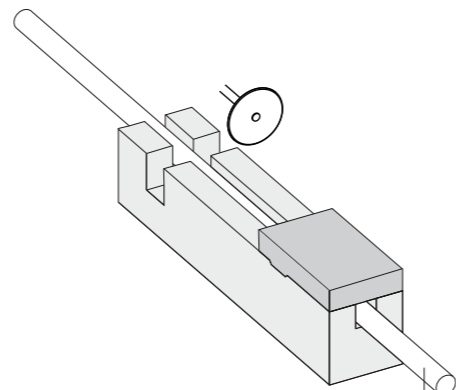


SHAFT CUTTING JIG

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



Ref. CT.601212



FLEXIBLE SHAFT

TURNING KEY

ES Llave de Giro DE Montageschlüssel
 IT Chiave per Aggiornamento PT Chave de Rotação FR Clé de Changement d'Information

● Cad Insertion Point

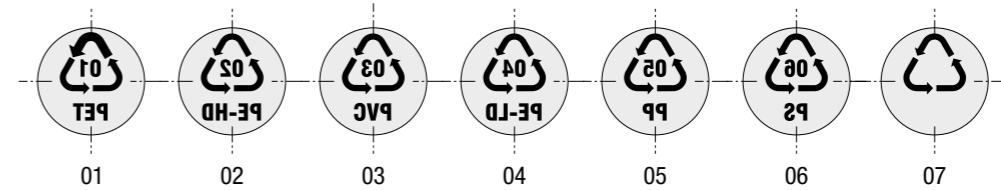
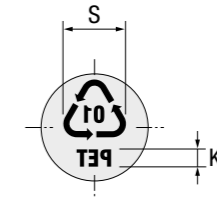
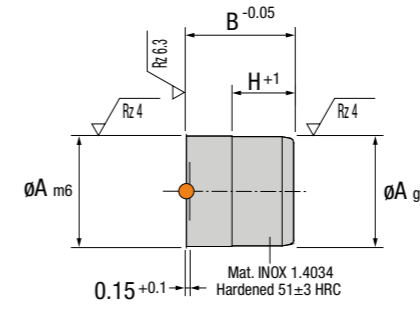
REFERENCE INSERT

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

● Cad Insertion Point



IR



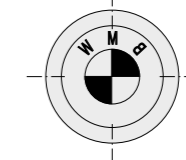
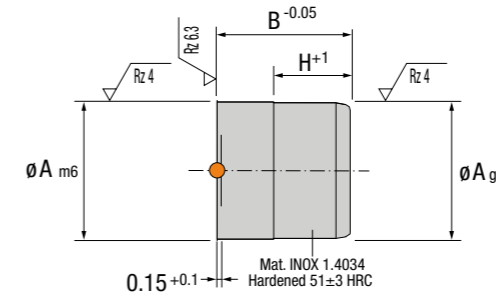
Ref.	A	B	E	H	K	S
IR.1012..	10	12	8	7	1.5	5.6
IR.1212..	12	12	10	7	1.8	6.8
IR.1616..	16	16	12	9	2.4	9
IR.2016..	20	16	16	9	3.2	11.5

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 Posição de Marcas FR Insert de Marquage

● Cad Insertion Point



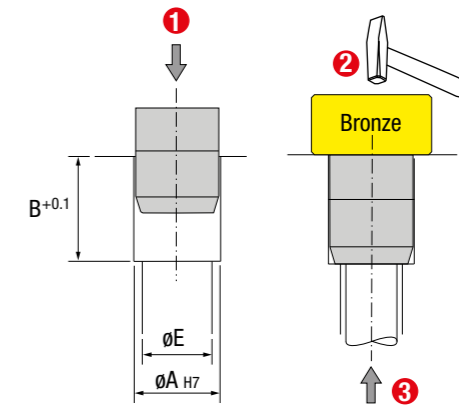
IM

Installation Guidelines

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

Ref.	Blank Ref.	A	B	E	H
IM.041000	IM.041000-BLANK	4	10	2	6
IM.051000	IM.051000-BLANK	5	10	3	6
IM.061000	IM.061000-BLANK	6	10	4	6
IM.081200	IM.081200-BLANK	8	12	6	7
IM.101200	IM.101200-BLANK	10	12	8	7
IM.121200	IM.121200-BLANK	12	12	10	7
IM.161600	IM.161600-BLANK	16	16	12	9
IM.201600	IM.201600-BLANK	20	16	16	9

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.

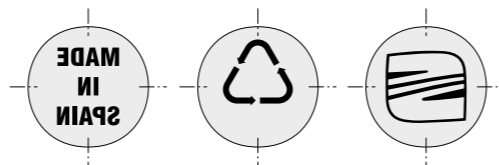
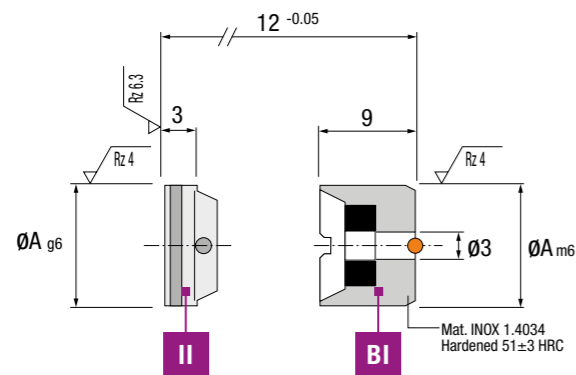


INTERCHANGEABLE INSERT

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

● Cad Insertion Point

BI+II

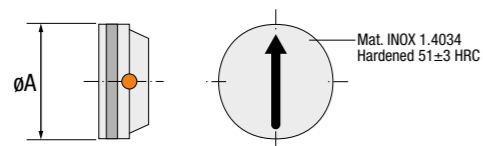


Ref.	A	E	Ref.	Blank Ref.
BI.101209	10	6	II.101203	II.101203-BLANK
BI.121209	12	8	II.121203	II.121203-BLANK
BI.161209	16	10	II.161203	II.161203-BLANK

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.

TURNING INSERT

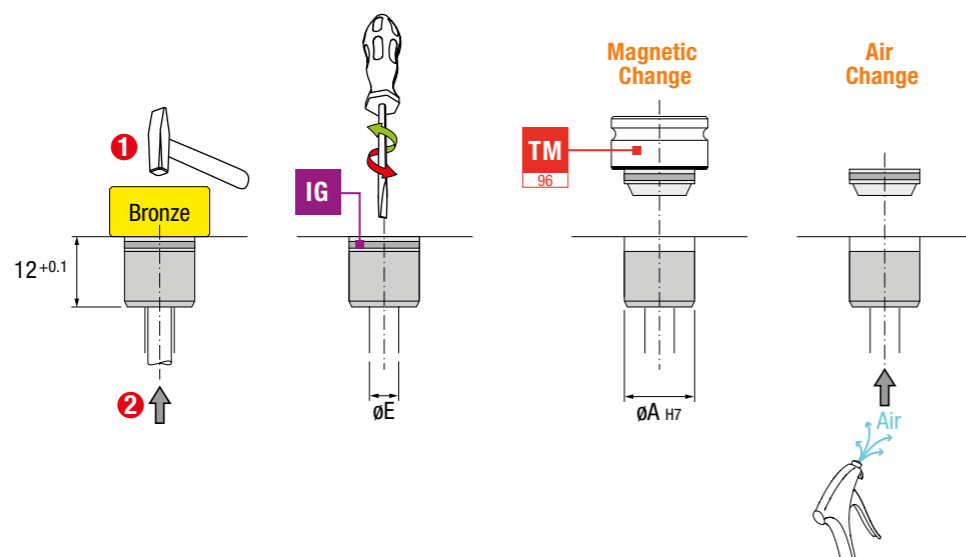
ES Inserto Giratorio DE Einsätze Drehbar
IT Inserto Girante PT Postiço Giratório FR Insert Tournant



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

Installation Guidelines

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

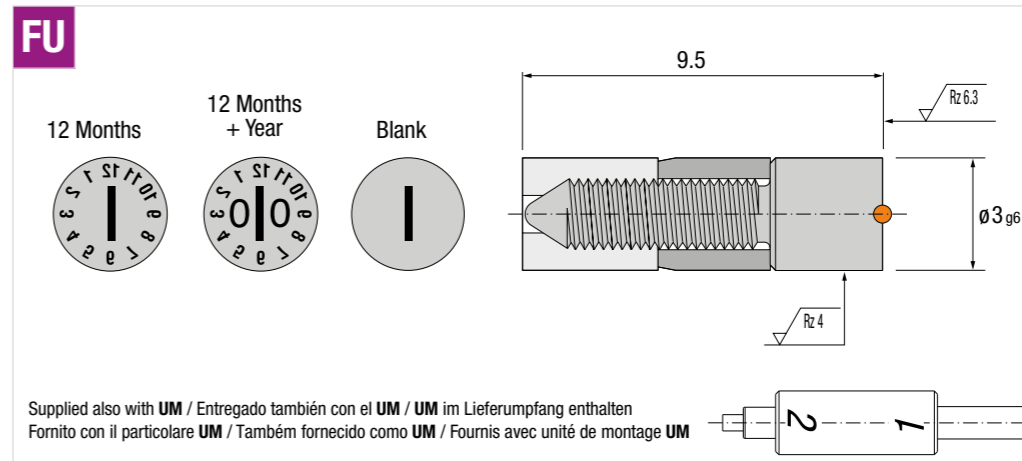


UNIT DATE STAMP

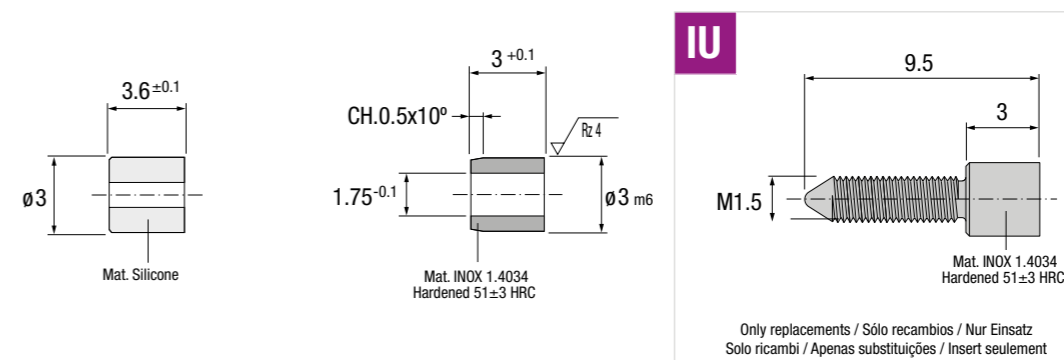
ES Fechador Unitario DE Datumstellereinheit
IT Datario Unitario PT Datador Unitário FR Kit Mini Dateur

● Cad Insertion Point

FU+IU



Supplied also with UM / Entregado también con el UM / UM im Lieferumfang enthalten
Fornito con il particolare UM / Também fornecido como UM / Fournis avec unité de montage UM



Only replacements / Sólo recambios / Nur Ersatz
Solo ricambi / Apenas substituições / Insert seulement

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

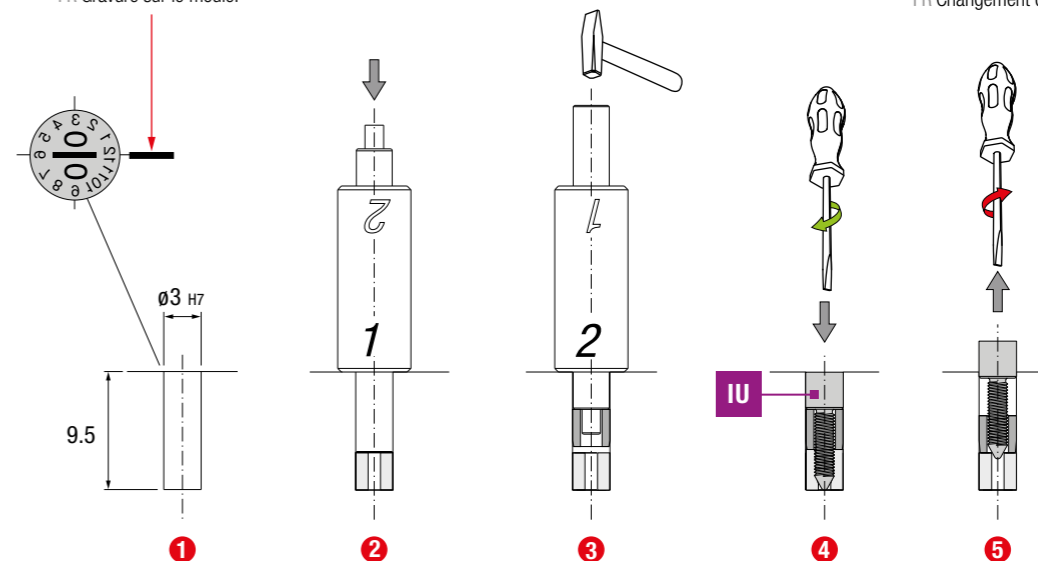
IMPORTANT! Indicate the year after the reference.
Indicar el año después de la referencia.
Geben Sie das Jahr nach dem Verweis an.
Indicare l'anno dopo il codice.
Indicar o ano depois da referência.
Indiquer l'année après la référence.

Installation Guidelines

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

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.

Patented

Max. 150°C

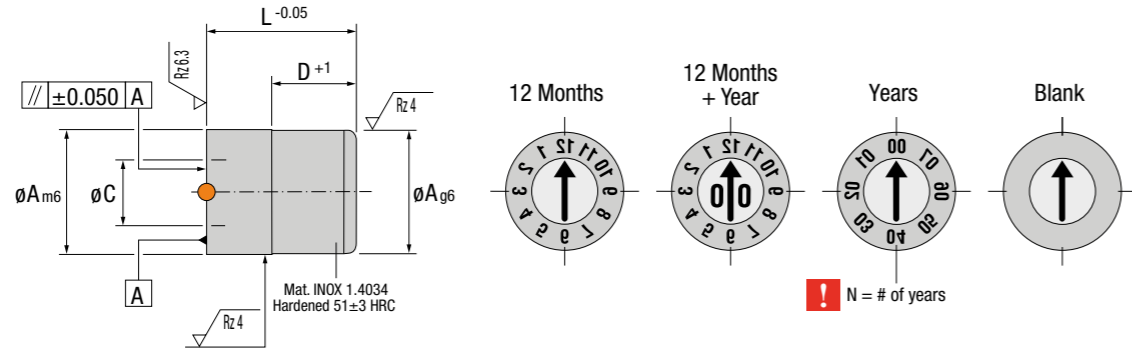
FA

DATE STAMP

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



● Cad Insertion Point



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

Patented



Max. 150°C

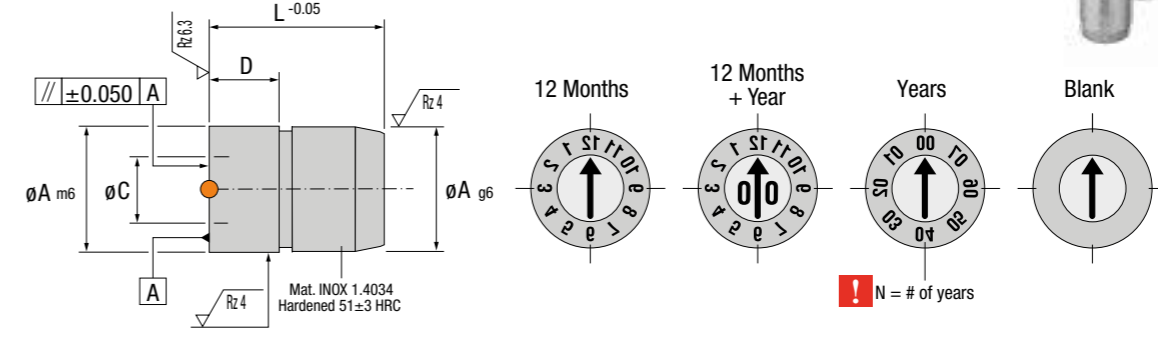
FP

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.

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.

Patented

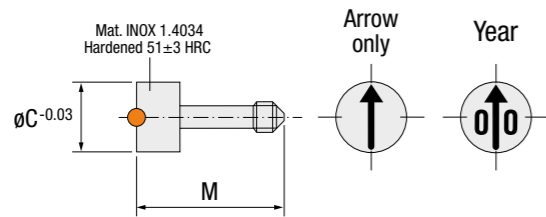


Max. 150°C

IA

DATE INSERT

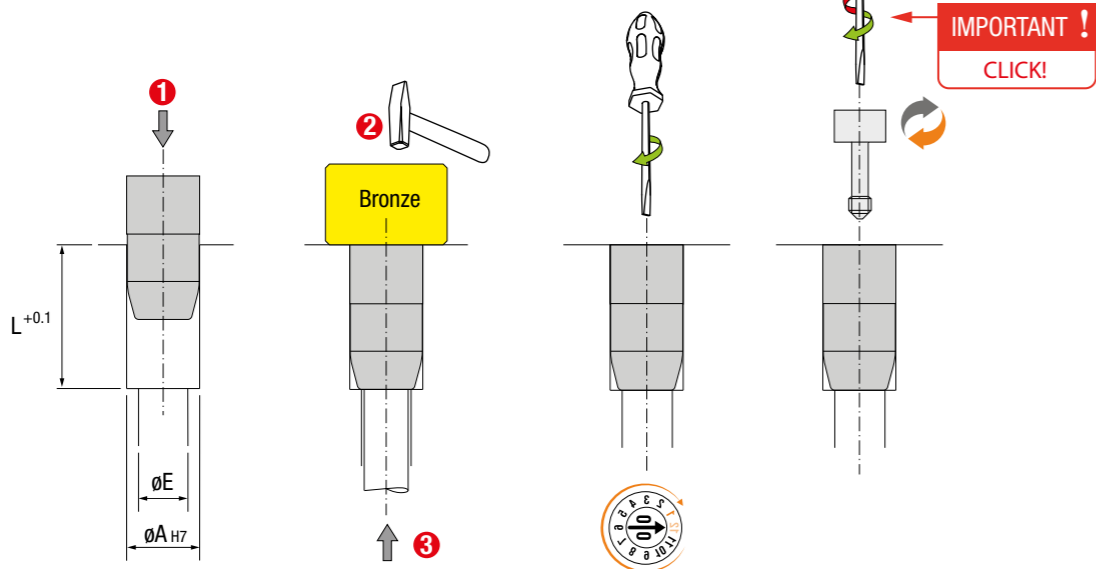
ES Inserto Anual DE Einsätze für Datumsteller
IT Inserto Datario PT Indicador Anual FR Insert Dateur



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

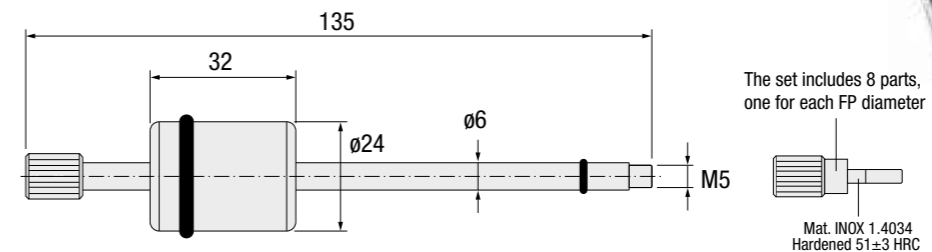


REMOVAL JIG

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

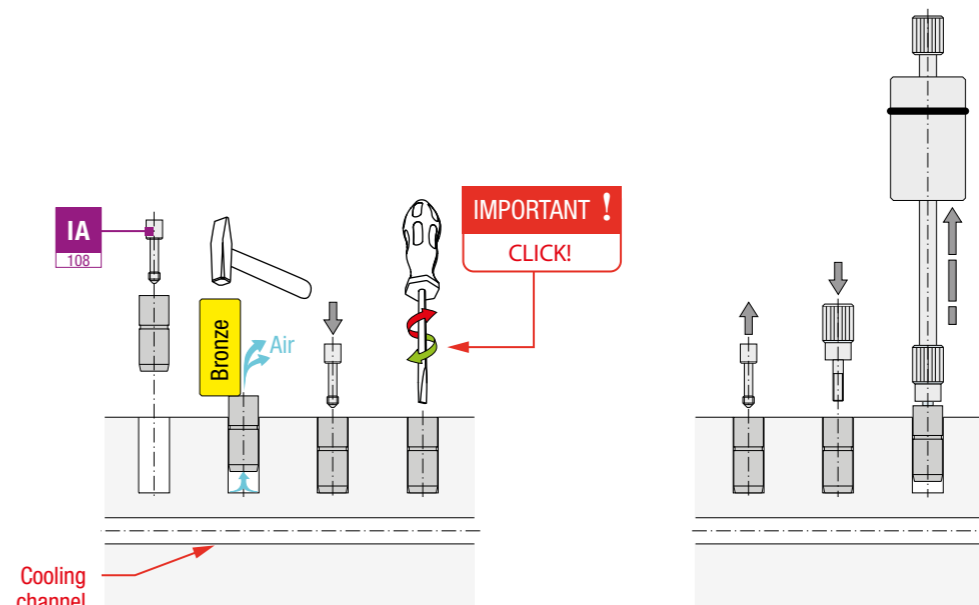


Ref. EF.322405-SET



Installation Guidelines

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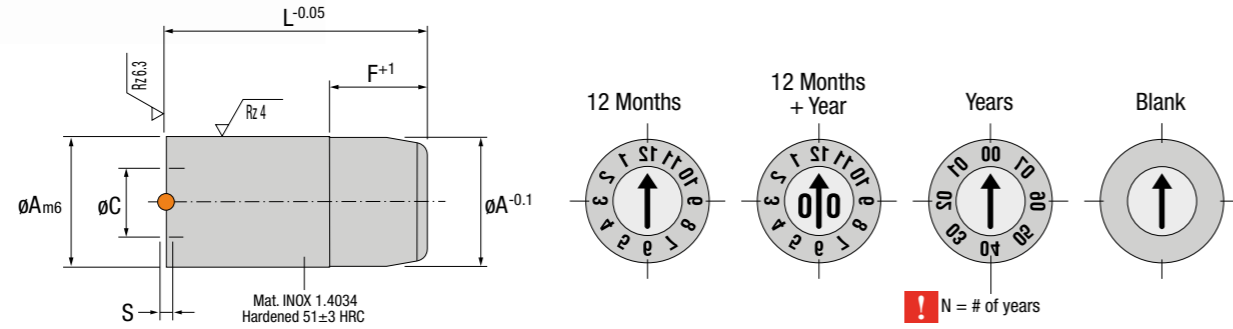


EF

FX

XTRA DATE STAMP

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



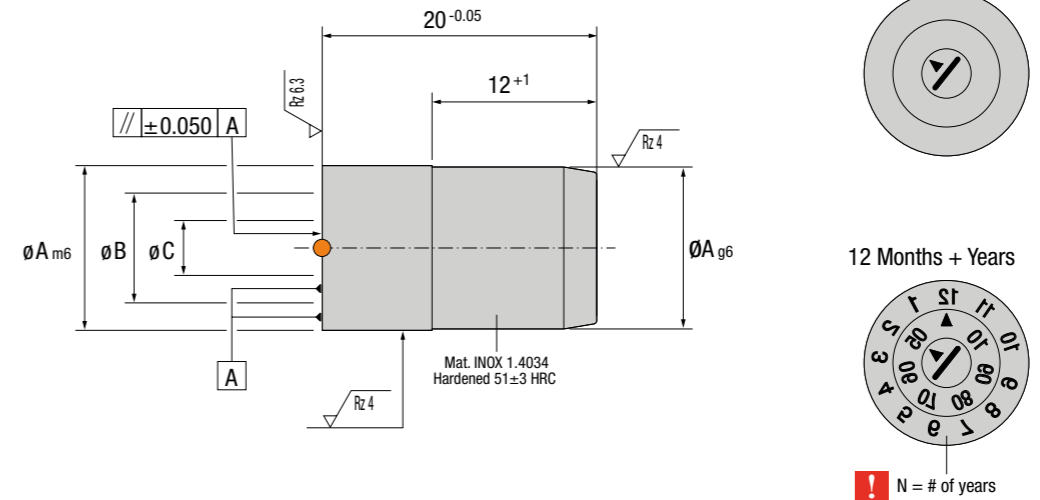
IMPORTANT ! Special engraving available under request.
Grabados especiales bajo demanda.
Andere Gravuren auf Anfrage.
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Gravações especiais por encomenda.
Gravure spéciale par commande.

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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	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

DOUBLE DATE STAMP

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



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

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.

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

FD

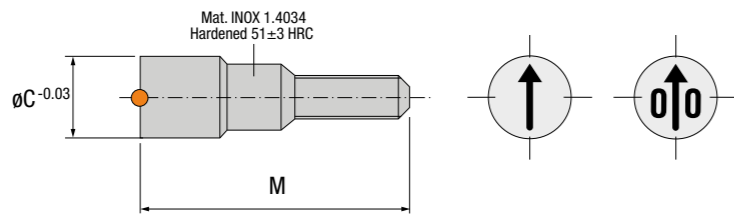
Patented

Max. 100°C

IX

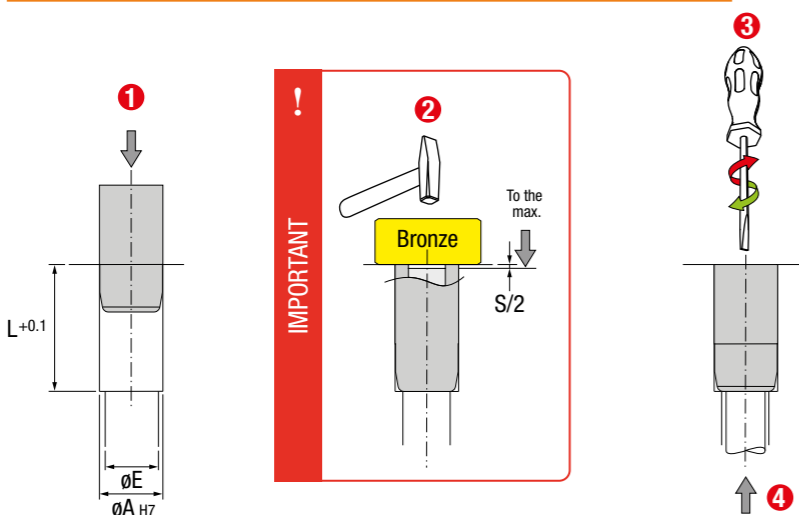
XTRA INSERT

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



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

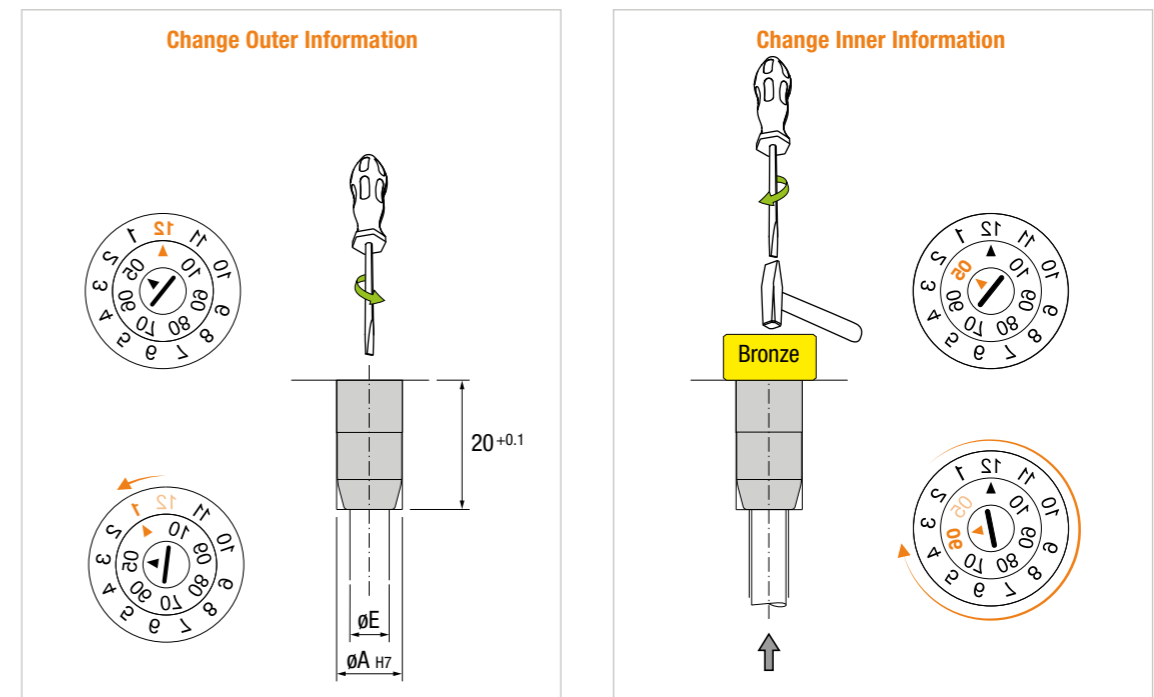
Installation Guidelines
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IMPORTANT ! Indicate the year after the reference.
Indicar el año después de la referencia.
Geben Sie das Jahr nach dem Verweis an.
Indicare l'anno dopo il codice.
Indicar o ano depois da referência.
Indiquer l'année après la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

Installation Guidelines

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

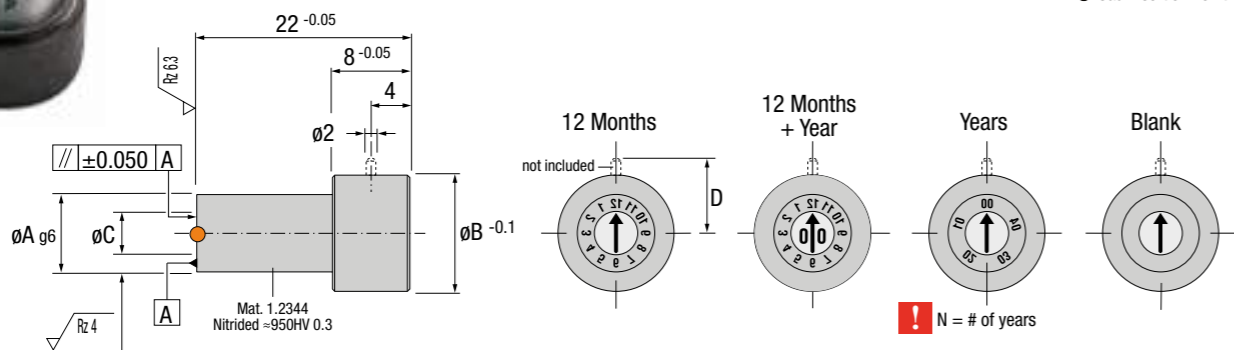


FT



TEMPERATURE DATER
 ES Fechador Temperatura DE Datumsteller Wärmebeständig
 IT Datario Temperatura PT Datador Temperatura FR Dateur Haute Température

● Cad Insertion Point



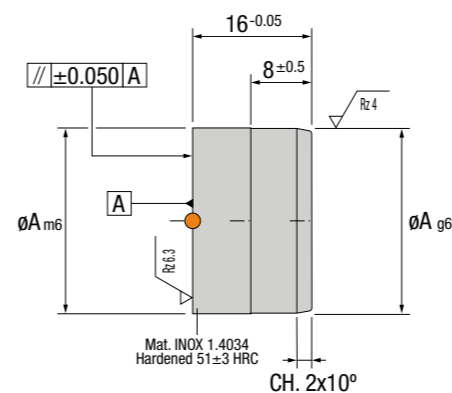
12 Months	12 Month+Year	Years	Blank	A	B	C	D	N
FT.0847SF	FT.084712-..	FT.084705-..	FT.084700	8	12	4.7	11	5
FT.1267SF	FT.126712-..	FT.126708-..	FT.126700	12	16	6.7	12	8

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 du produit.

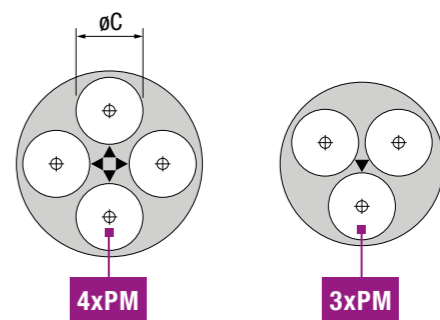
BLOCK BASE

ES Base Monobloque DE Aufnahme Datumsblock
 IT Base Monoblocco PT Base Monobloco FR Multi Dateur

● Cad Insertion Point



Ref.	A	C	E	#PM
BM.160603	16	6.5	8	3
BM.180604	18	6.5	8	4
BM.220903	22	8.8	10	3
BM.250904	25	8.8	10	4
BM.281103	28	11.5	12	3
BM.321104	32	11.5	12	4



IMPORTANT !
 Select separately the 3 or 4 PM needed.
 Seleccionar los 3 o 4 PM's requeridos.
 3 oder 4 Stück PM mitbestellen.
 Specificare i 3 o 4 inserti PM desiderati.
 Pedir os 3 ou 4 PM necessários.
 Demander les 3 ou 4 inserts PM nécessaires.

BM



Patented
 Max. 150°C

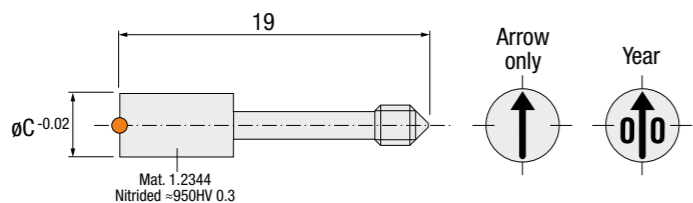
IT



TEMPERATURE INSERT
 ES Inserto Temperatura DE Einsätze Wärmebeständig
 IT Inserto Temperatura PT Indicador Temperatura FR Insert Haute Température

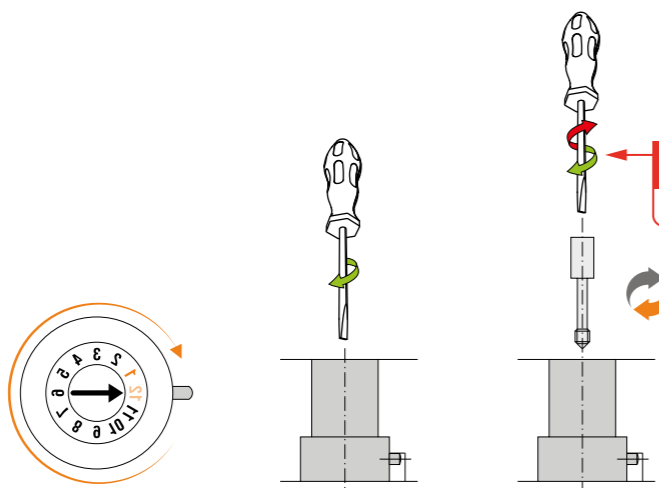
Arrow only	Year	C
IT.4719SF	IT.4719..	4.7
IT.6719SF	IT.6719..	6.7

IMPORTANT !
 Indicate the year after the reference.
 Indicar el año después de la referencia.
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 Indicare l'anno dopo il codice.
 Indicar o ano depois da referência.
 Indiquer l'année après la référence.



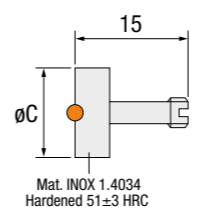
Installation Guidelines

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BLOCK INSERT

ES Postizo Monobloque DE Einsätze für Datumsblöcke
 IT Inserto Monoblocco PT Postiço Monobloco FR Inserts Multi Dateur



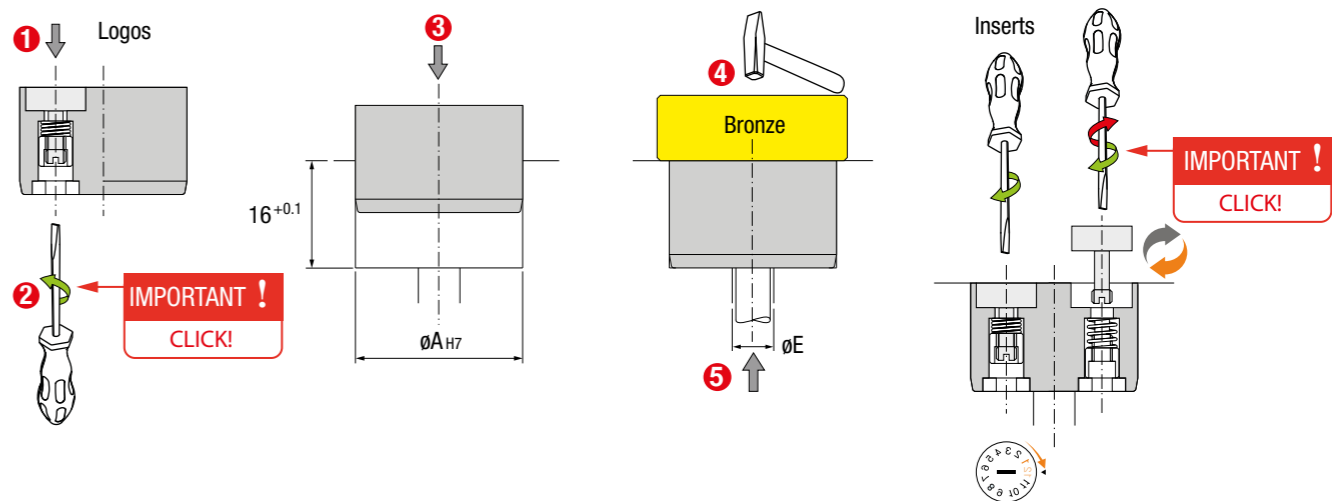
Ref.	C
PM.0615-...	6.5
PM.0915-...	8.8
PM.1115-...	11.5

IMPORTANT !
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 Gravações especiais por encomenda.
 Gravure spéciale par commande.

Logos						Inserts					
00	01	02	03	04	05	SF	101	102	103	104	105
06	07	08	09	10	11	106	107	108	109	110	111

Installation Guidelines

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PM



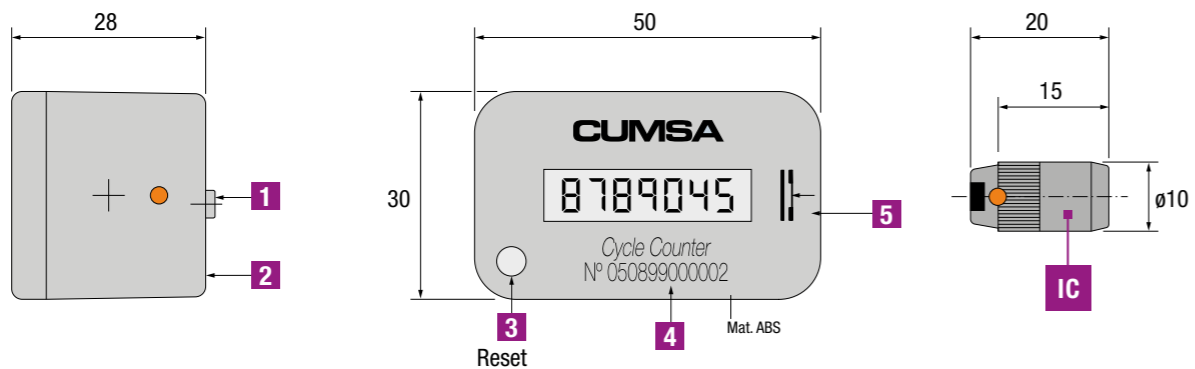
Patented

CC

CYCLE COUNTER

ES Contador Ciclos DE Zählwerk
IT Conta Cicli PT Contador de Ciclos FR Compteur de Cycle

● Cad Insertion Point

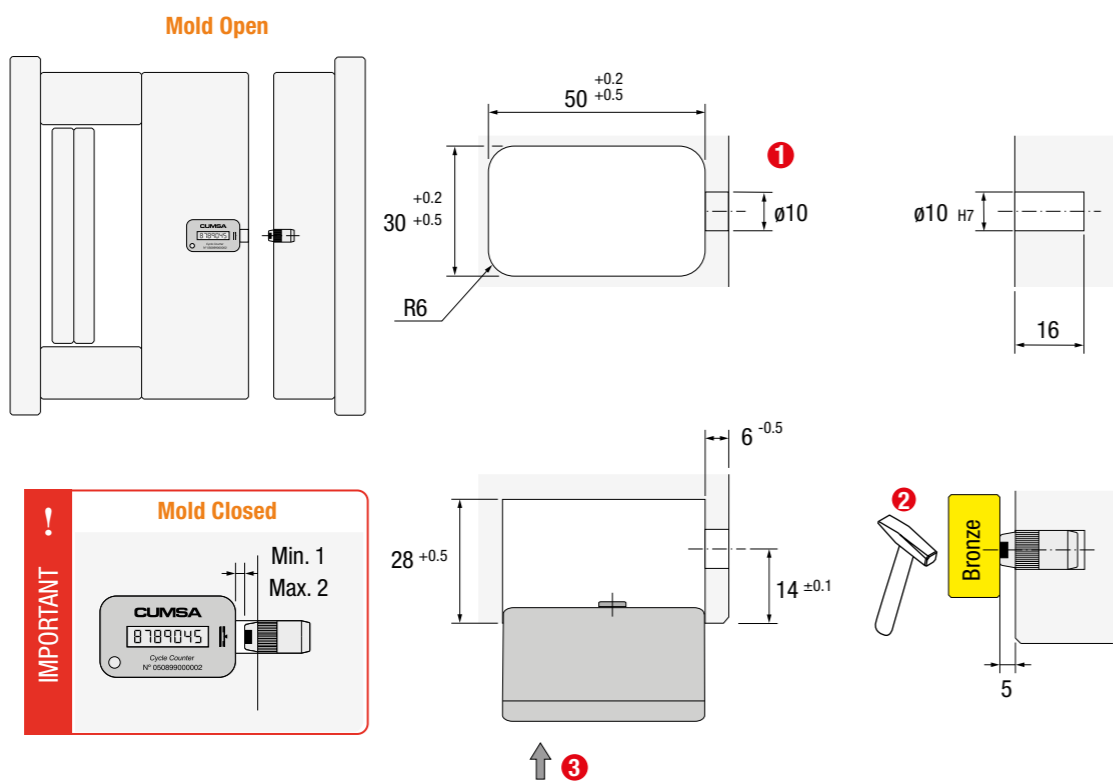


- | | | | | |
|--|--|--|--|---|
| <p>1
Security Switch.
ES Interruptor de Seguridad.
DE Sicherheitskontakt.
IT Interruttore di Sicurezza.
PT Interruptor de Segurança.
FR Interrupteur Sécurité.</p> | <p>2
Magnetic Fixing.
ES Fijación Magnética.
DE Magnetbefestigung.
IT Fissaggio Magnetico.
PT Fixação Magnética.
FR Fixation Magnétique.</p> | <p>3
Total + Partial.
ES Total + Parcial.
DE Gesamt + Teilmenge.
IT Totale + Parziale.
PT Total + Parcial.
FR Total + Partiel.</p> | <p>4
Unique Part Number.
ES Número Único de Identificación.
DE Identifikationsnummer.
IT Numero Unico di Identificazione.
PT Numero Único de Identificação.
FR Identification par Numéro Unique.</p> | <p>5
IC Position Indicator.
ES Indicador de Posición IC.
DE Positionsanzeiger IC.
IT Indicatore di Posizione IC.
PT Indicador de Posição IC.
FR Indicateur Position IC.</p> |
|--|--|--|--|---|

Ref.	Cycles / Min	Replaceable Battery
CC.HS5328	Up to 500	ER 14250 ½ AA

Installation Guidelines

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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/

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



126/

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



128/

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



130/

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



132/

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



134/

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



134/

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



135/

Pneumatic Piston
 Pistón Neumático
 Pneumatikkolben
 Pistone Pneumatico
 Pistom Pneumático
 Piston Pneumatique



135/

Pneumatic Piston
 Pistón Neumático
 Pneumatikkolben
 Pistone Pneumatico
 Pistom Pneumático
 Piston Pneumatique



136/

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



136/

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/

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



137/

Keyed Tubular Base
 Base Anti-rotación para Tubulares
 Hülsenaufnahme Verdreh Gesichert
 Base Anti-giro per Cannocchiali
 Base Anti-rotação para Tubulares
 Embasses Anti-Rotation pour Tubulaires



138/

Ejectors
 Expulsores
 Auswerfer
 Espulsori
 Extractores
 Éjecteurs



138/

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



139/

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



140 /

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



140/

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.

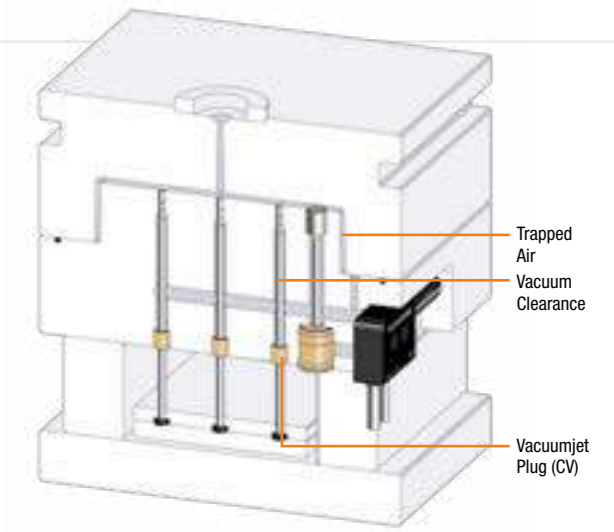
WHAT IS NEEDED TO CREATE THE VACUUM?

- 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!

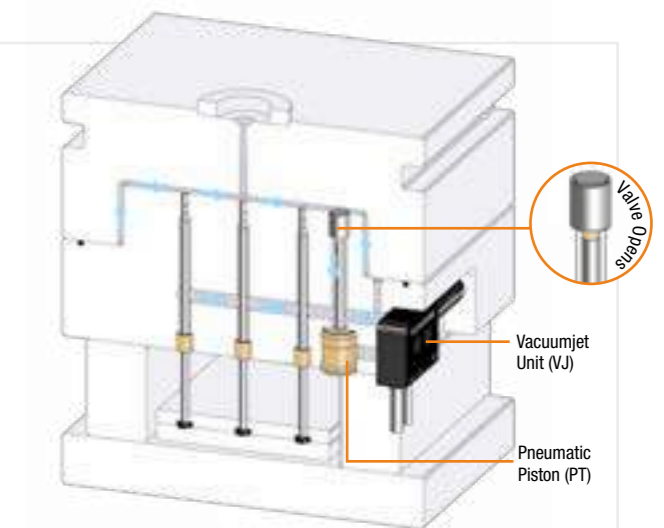


CREATING THE VACUUM IN THE CAVITY

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

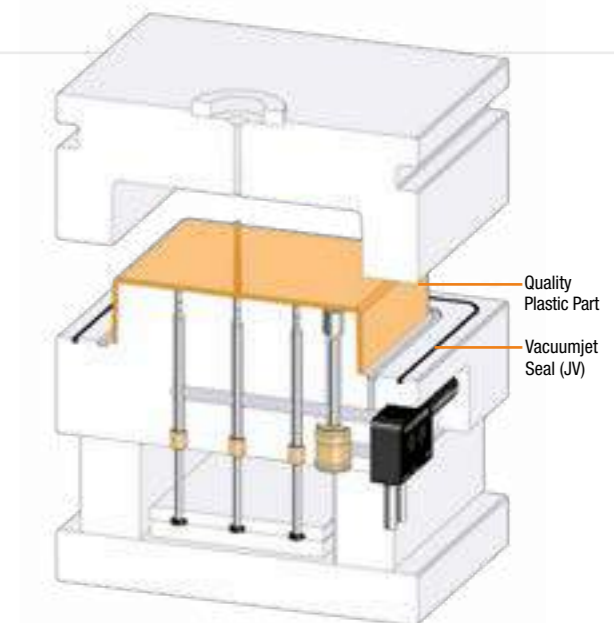


INJECTION STARTS

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 	2 	2 	1 
	SV	VM + VJ	VM + VB	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 	2 	2 	1 	HOW MANY ELECTROVALVES DO I NEED?
VJ + VB	VJ	VB	VG	

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.

DOUBLE ACTION VACUUMJET

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

INSTALLATION GUIDELINES

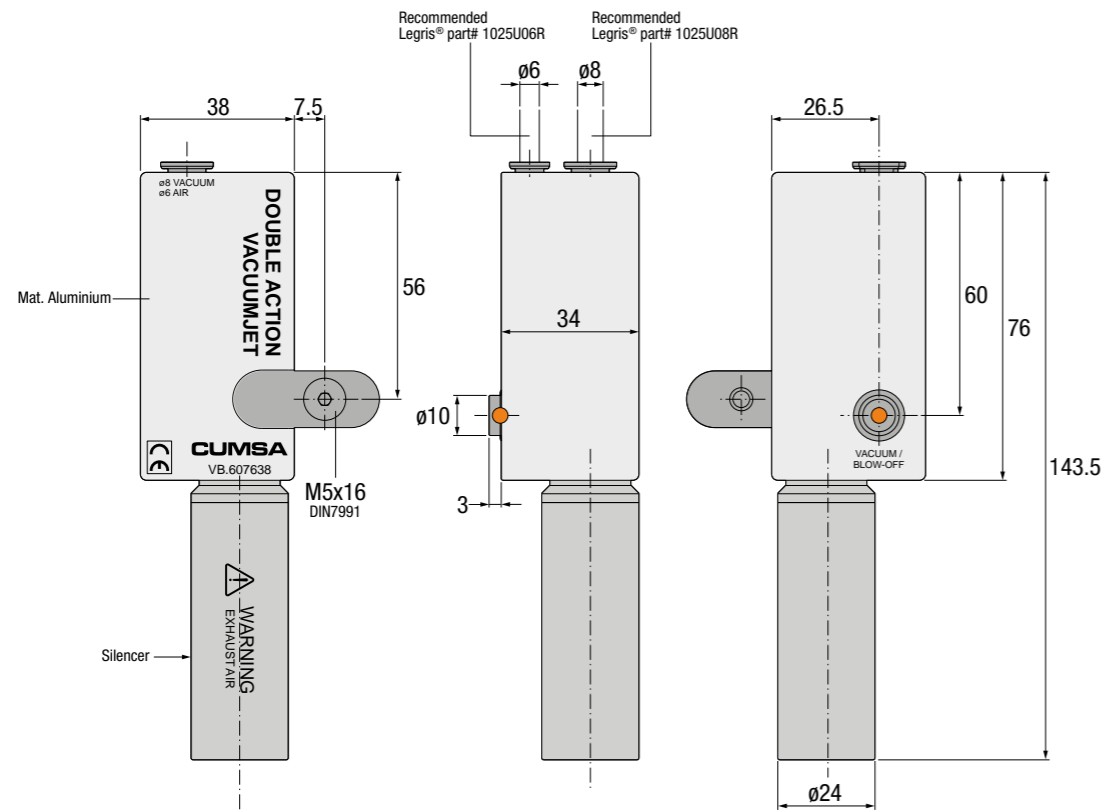
ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



VB

VB

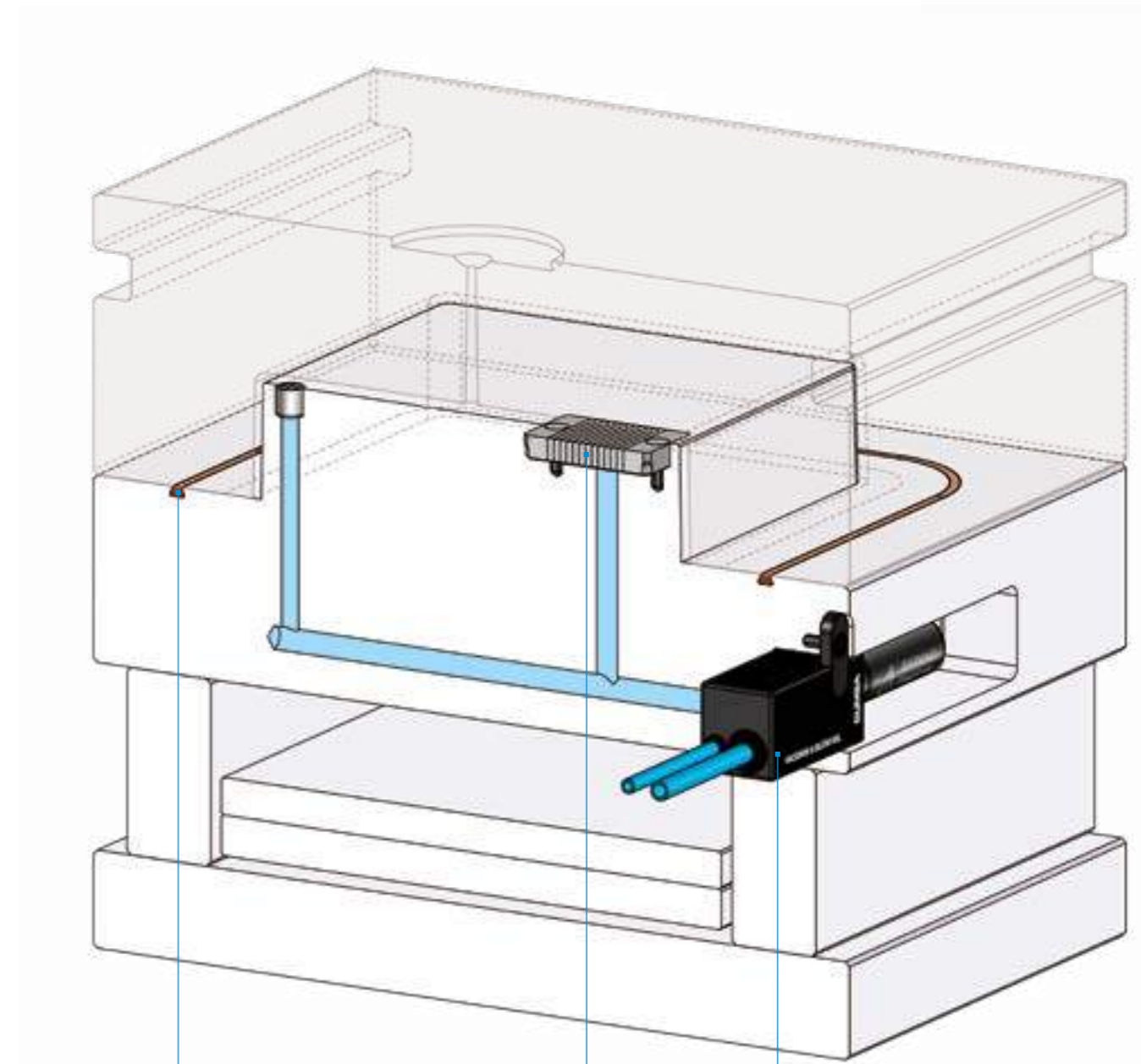
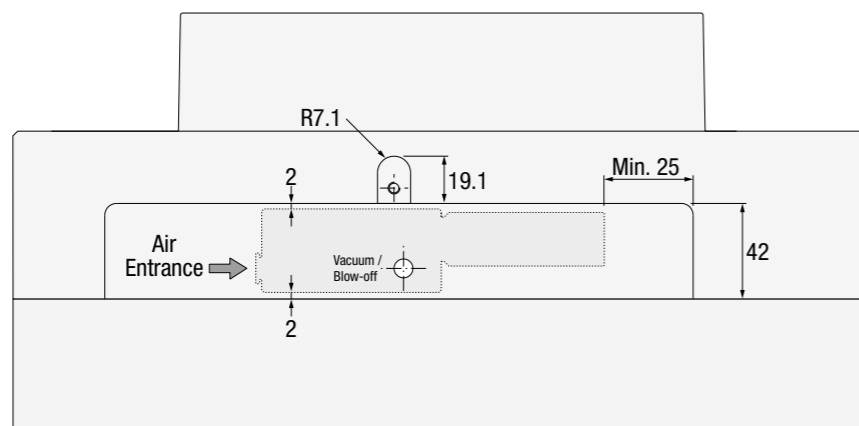
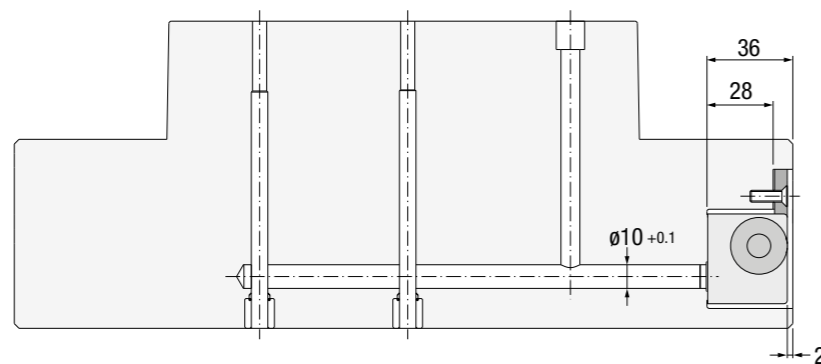
● Cad Insertion Point



Ref.	Supply Pressure	Max. Vacuum	Max. Flow	Consumption
VB.607638	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



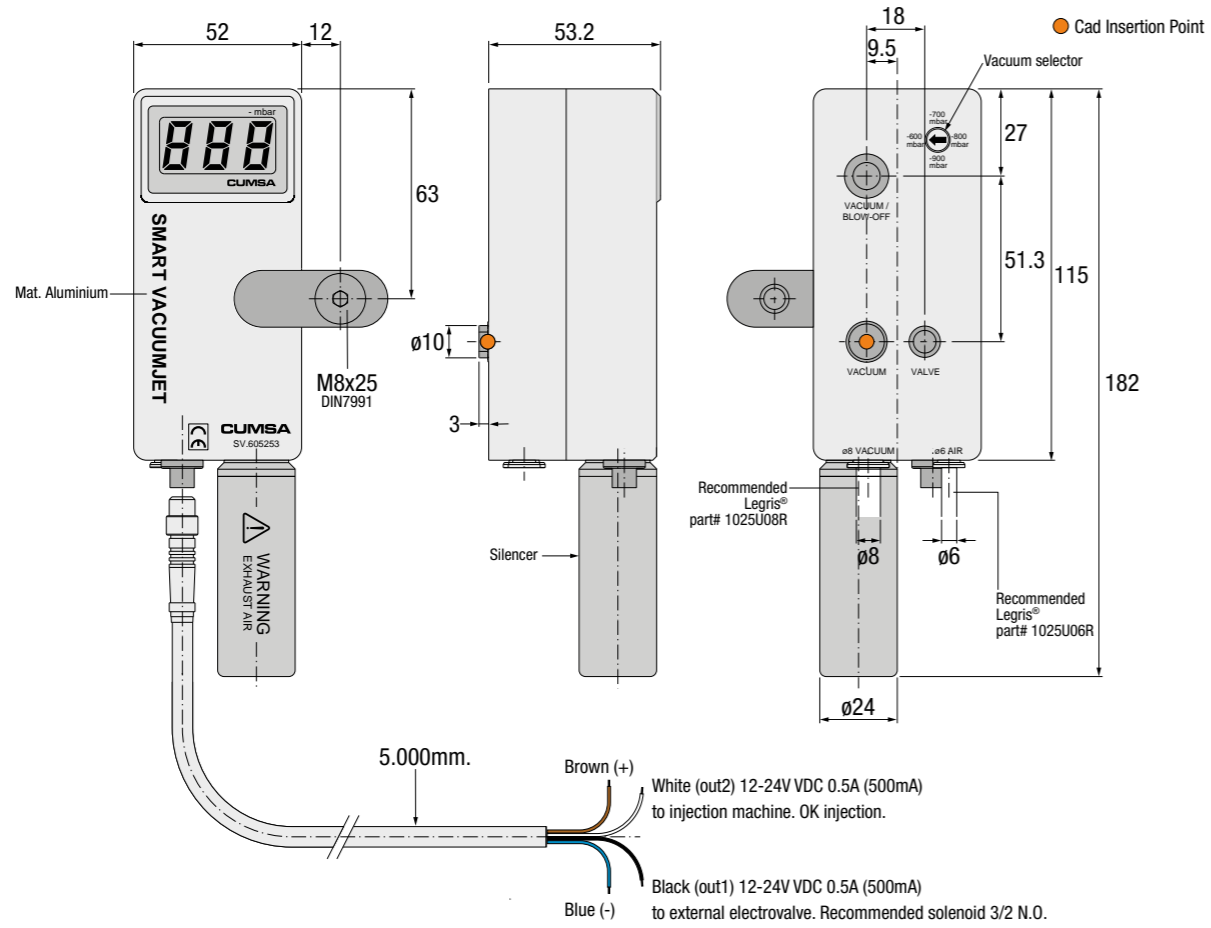
Vacuum
Blow-off

SMART VACUUMJET

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

INSTALLATION GUIDELINES

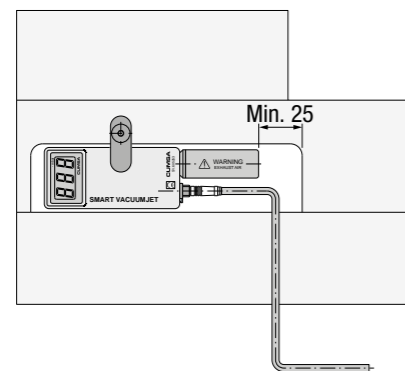
ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



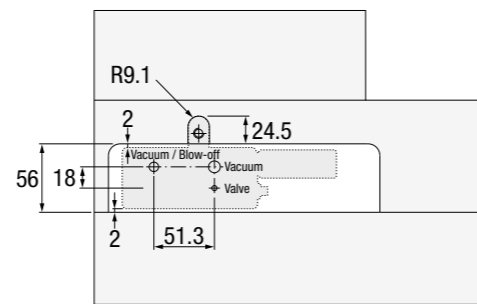
Ref.	Supply Pressure	Max. Vacuum	Max. Flow	Consumption
SV.605253	5-6 BAR	-900 mbar	75 L./ Min.	60 L./ Min.

Installation Guidelines

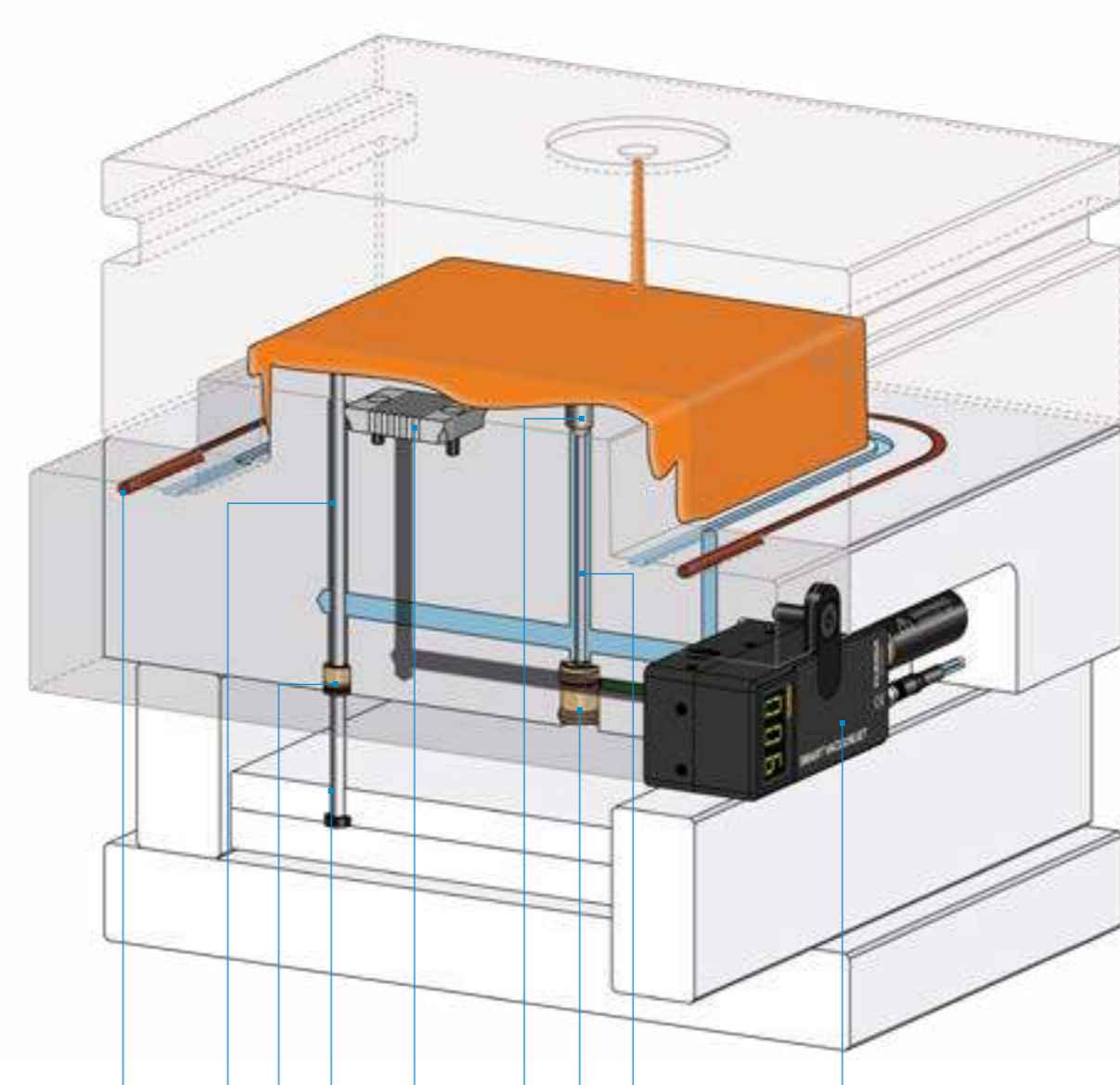
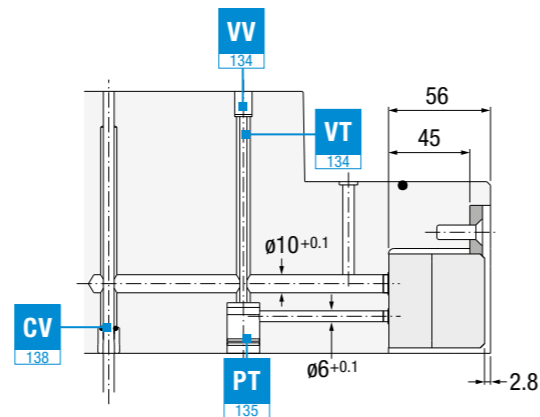
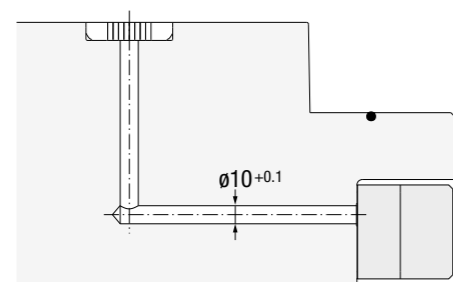
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



Vacuum / Blow-off Section



Vacuum Section



Vacuum
Blow-off

VACUUMJET UNIT

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

INSTALLATION GUIDELINES

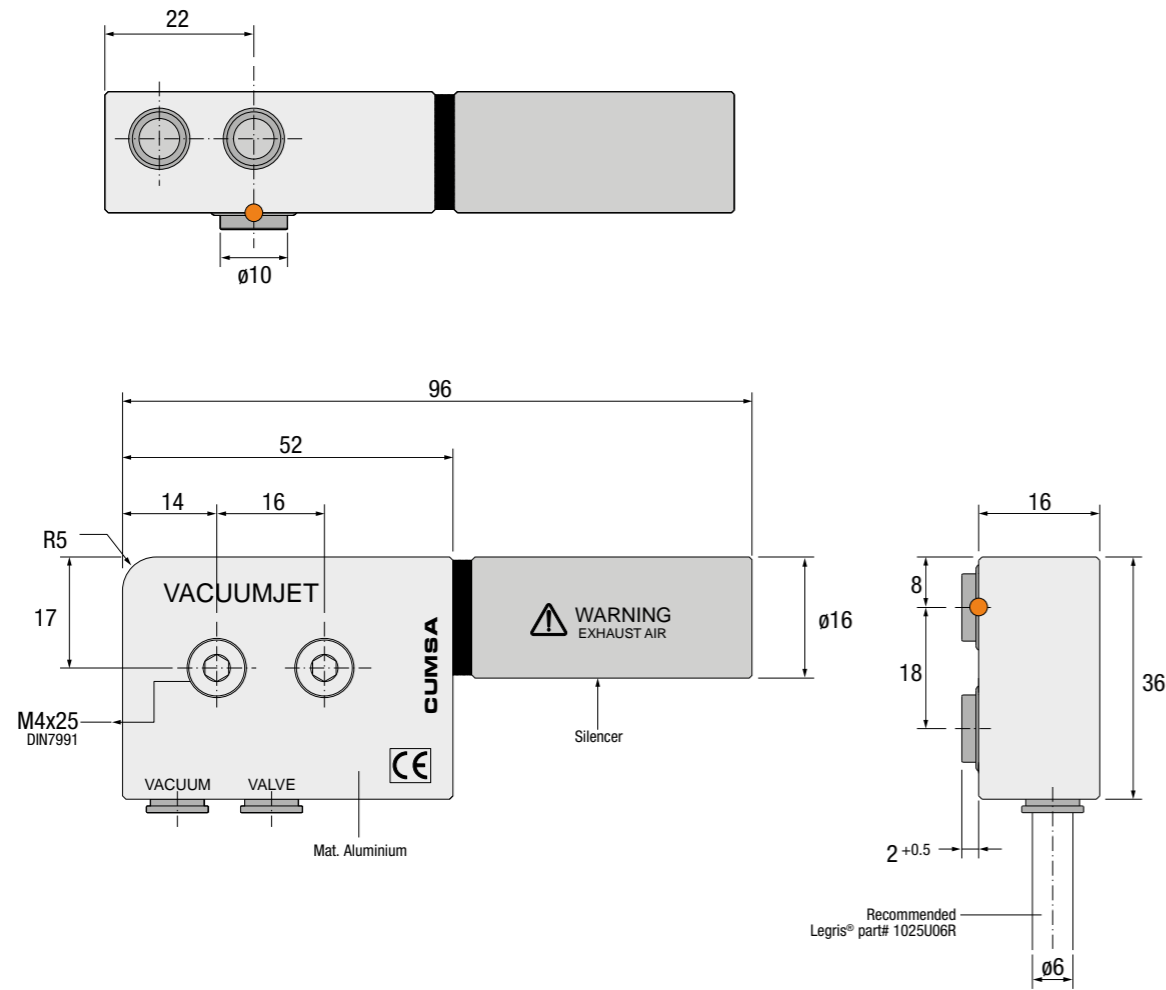
ES Consejos de Instalación DE Richtlinien zur Installation
 IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

VJ

VJ



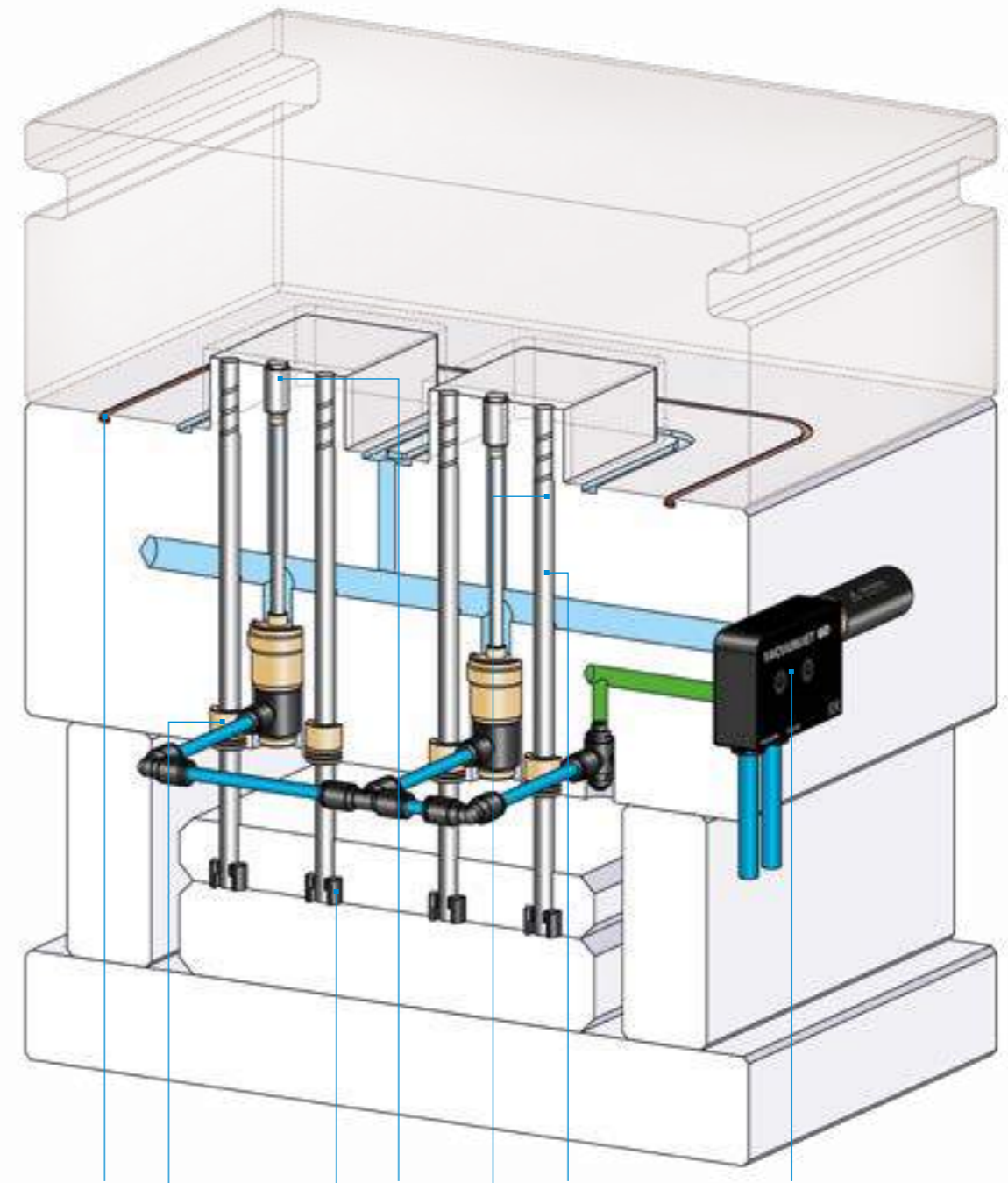
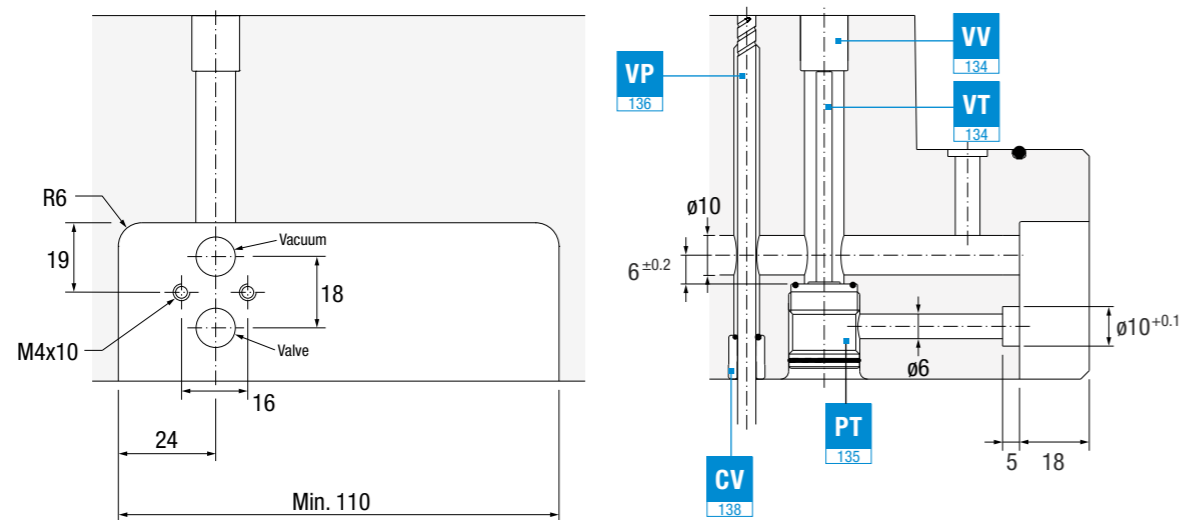
● Cad Insertion Point



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

Installation Guidelines

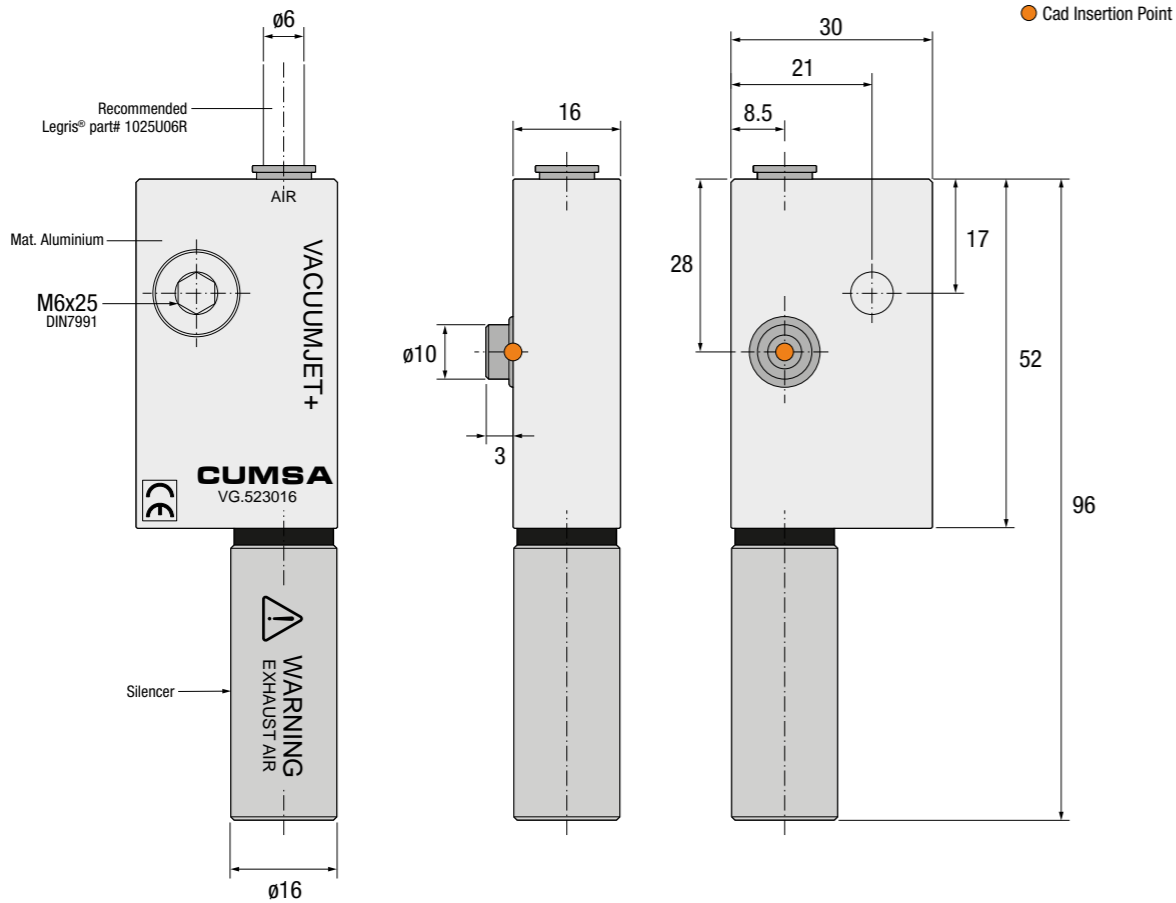
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



Vacuum
 Compressed air

VACUUMJET +

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

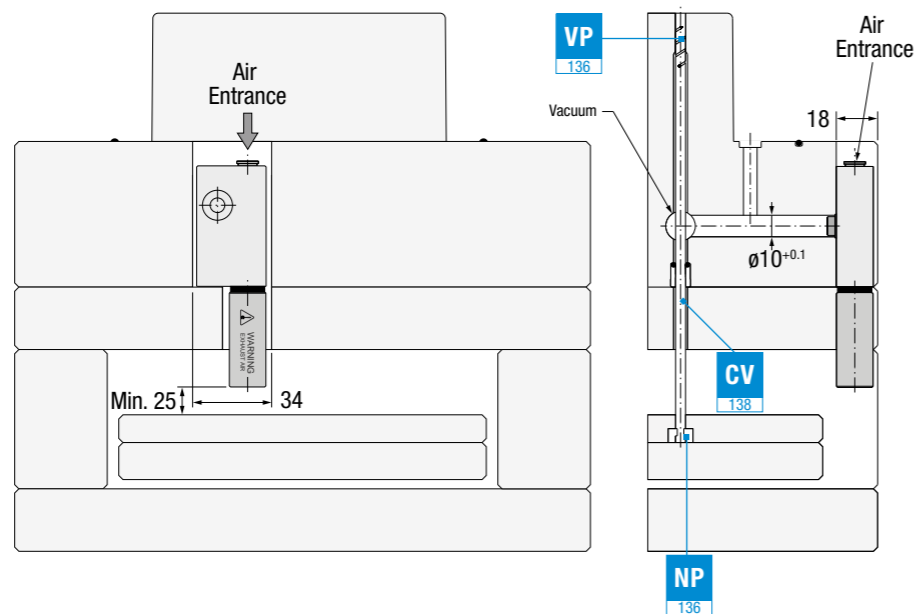


Ref.	Supply Pressure	Max. Vacuum	Max. Flow	Consumption
VG.523016	5-6 BAR	-900 mbar	75 L./ Min.	60 L./ Min.

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.

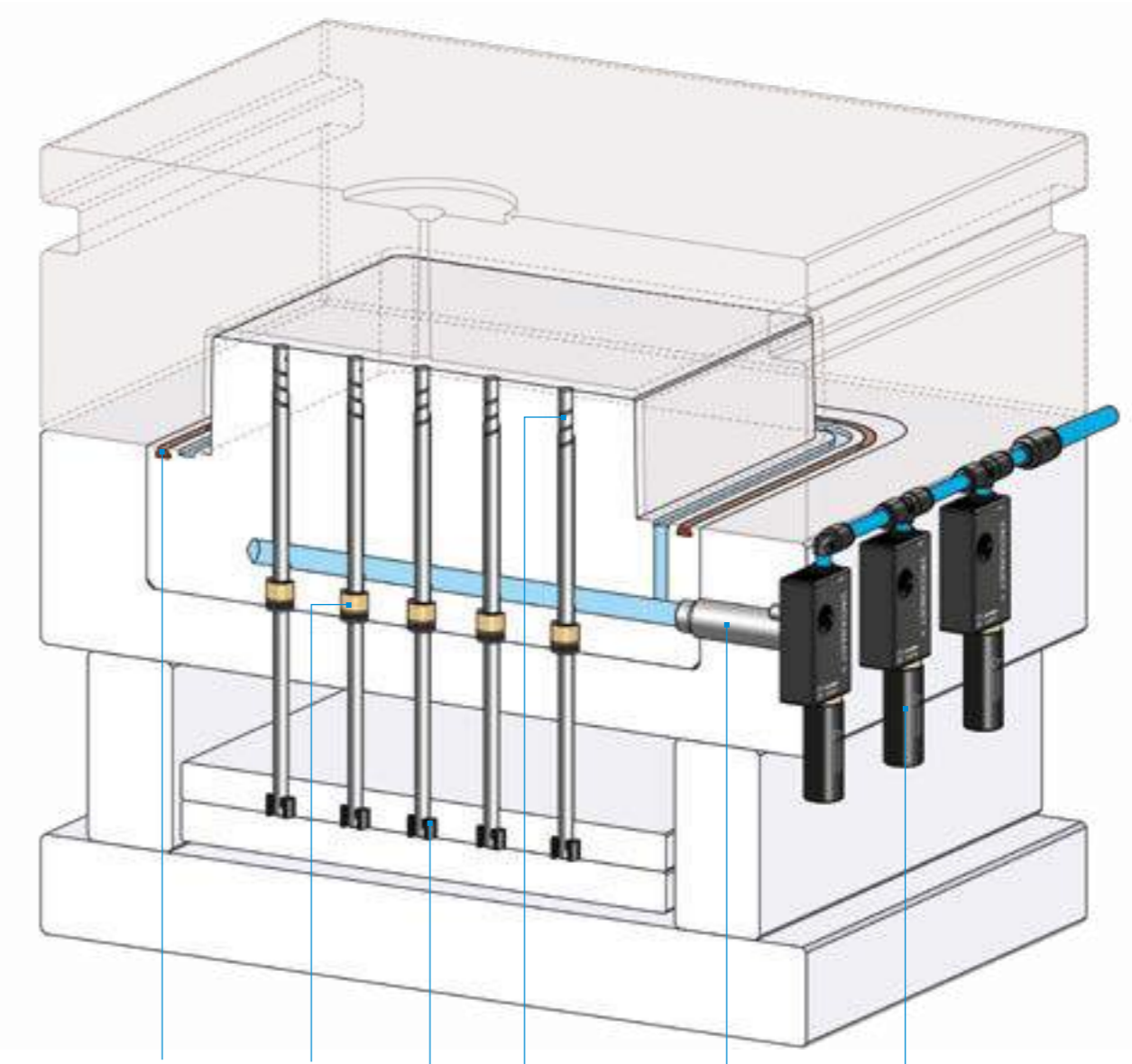
Installation Guidelines

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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



VACUUM CONTROL

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

INSTALLATION GUIDELINES

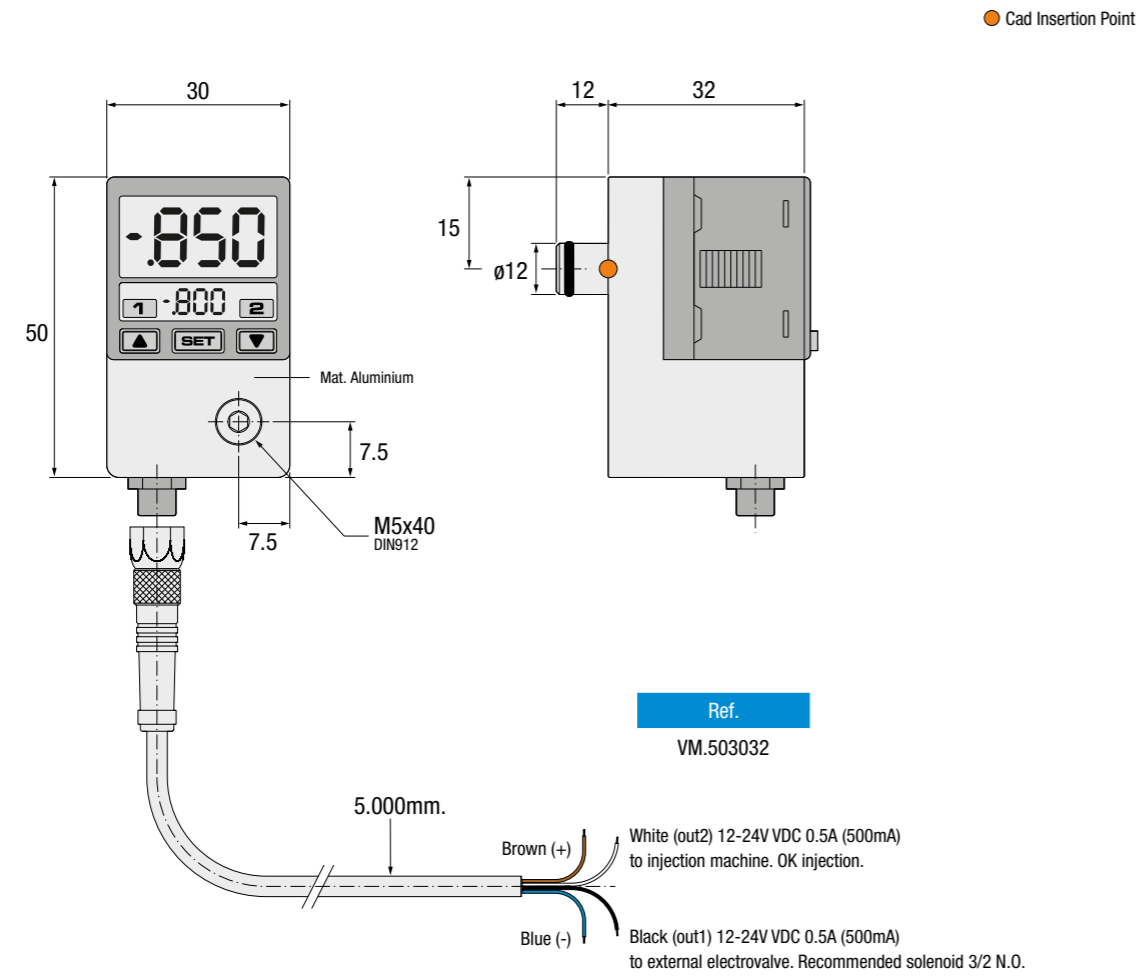
ES Consejos de Instalación DE Richtlinien zur Installation
 IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation



VM

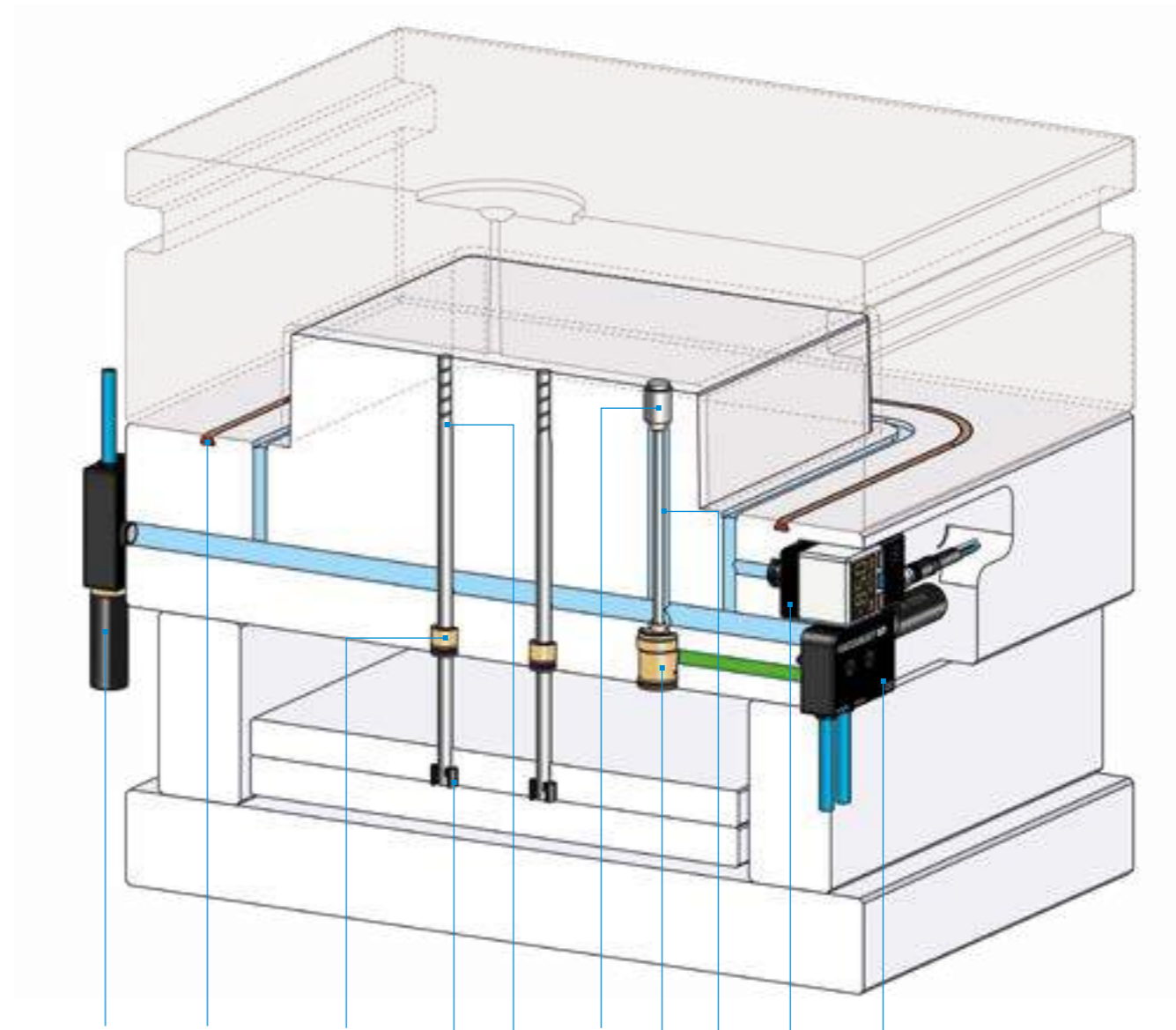
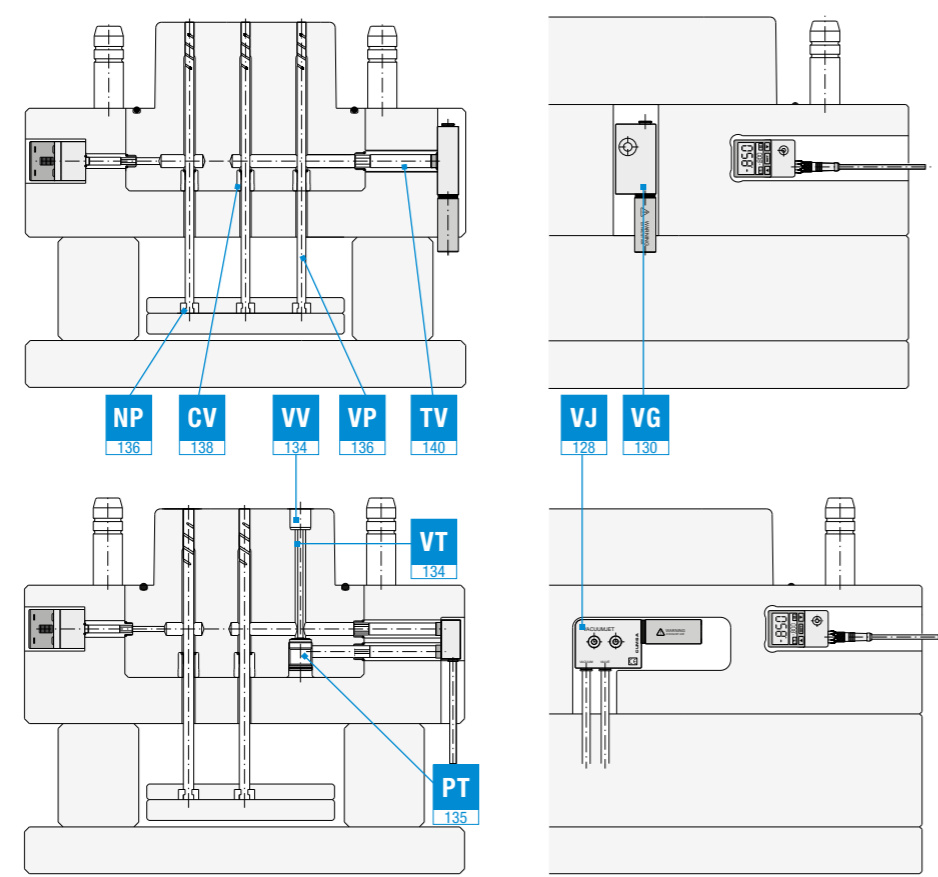
VM

Patented
 Max. 80°C



Installation Guidelines

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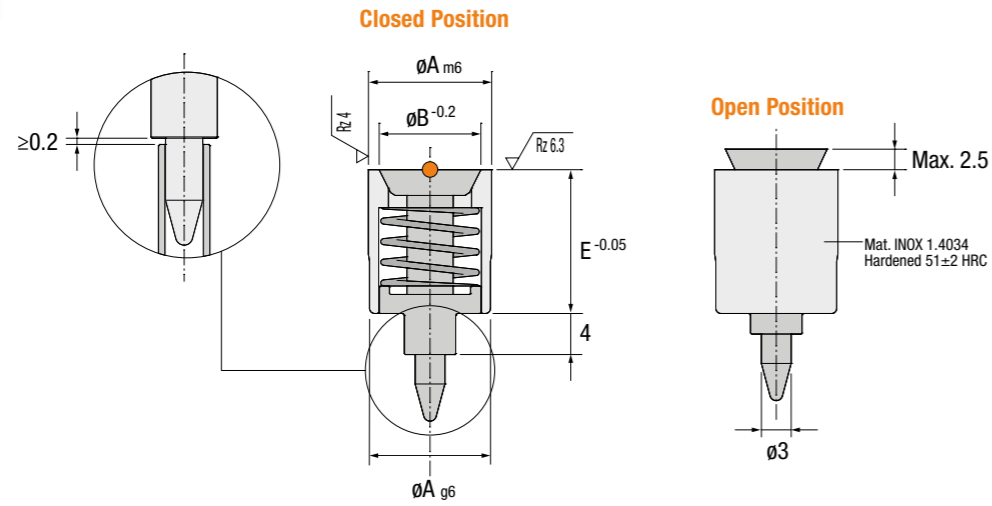
WW



VACUUMJET VALVE

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

● Cad Insertion Point

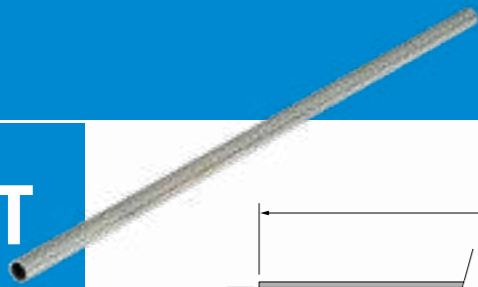


Ref.	A	B	C	D	E
W.086414	8	6.7	10	6.5	14
W.121014	12	9.8	10	10	14
W.161416	16	14	10	10	16

Patented

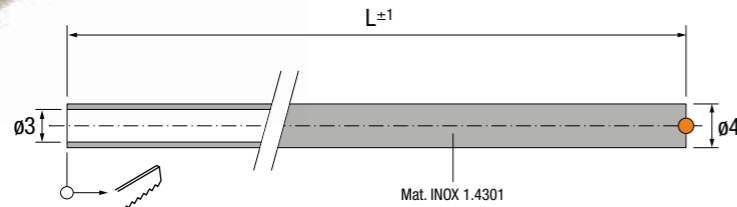


VT



VACUUMJET VALVE TUBE

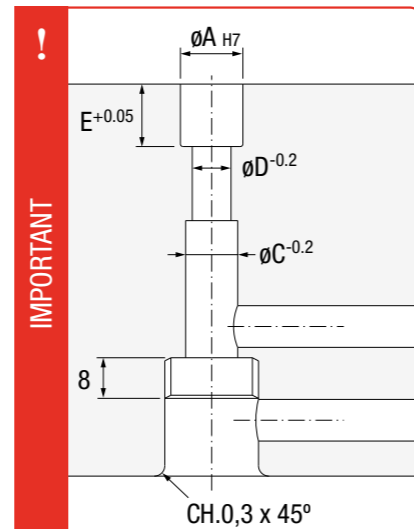
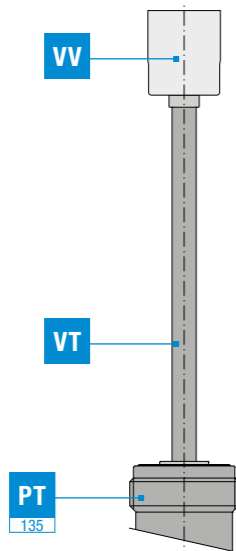
ES Tubo Válvula Vacuumjet DE Vacuumjet Ventilrohr
IT Tubo Valvola Vacuumje PT Tubo Válvula Vacuumjet FR Tube soupape Vacuumjet



Ref.	L
VT.043209	209
VT.043500	500

Installation Guidelines

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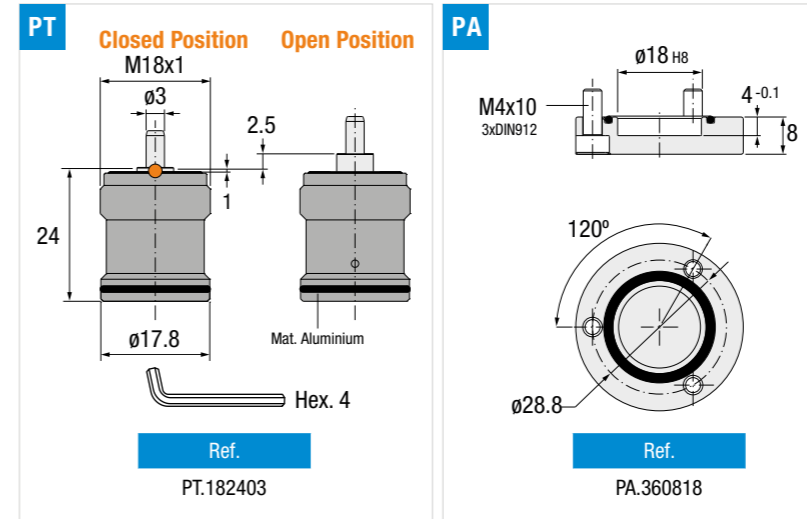


Patented

PNEUMATIC PISTON

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

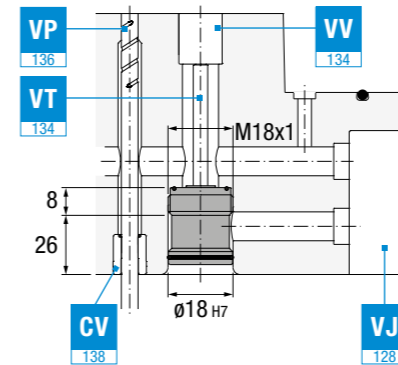
● Cad Insertion Point



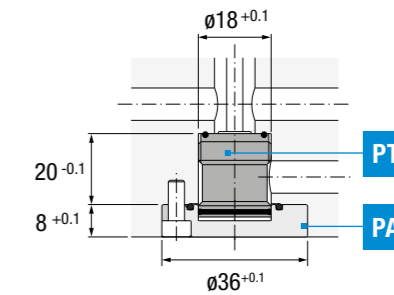
Installation Guidelines

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Option PT



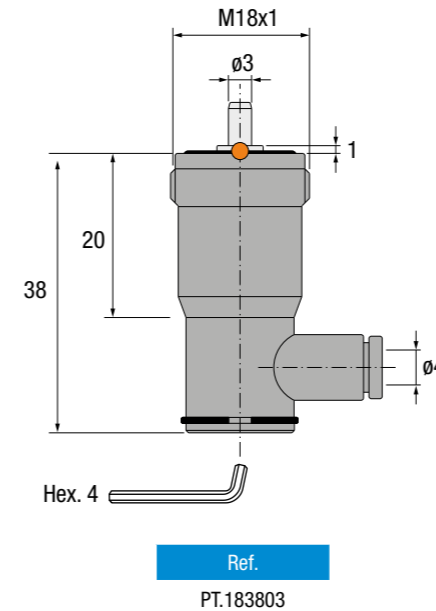
Option PT+PA



PNEUMATIC PISTON

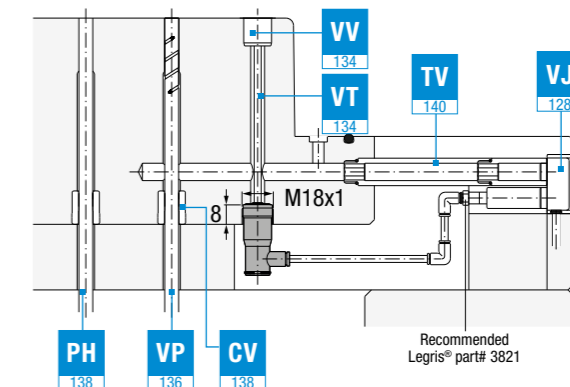
ES Pistón Neumático DE Pneumatikkolben
IT Pistone Pneumatico PT Pistom Pneumático FR Piston Pneumatique

● Cad Insertion Point



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PT

Patented

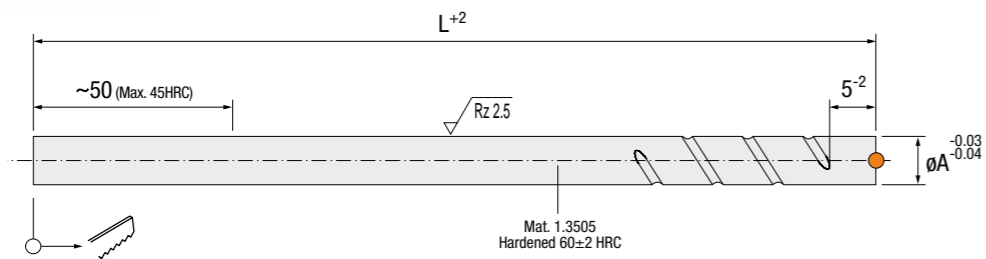


VP

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.

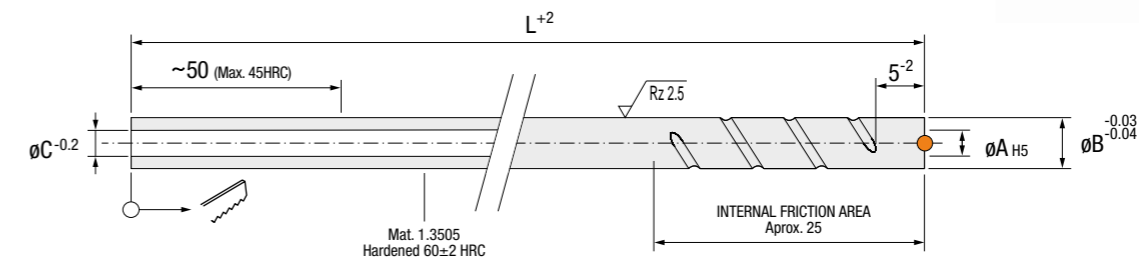
Patented

VS

SPIRAL SLEEVE

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

● Cad Insertion Point



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

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.

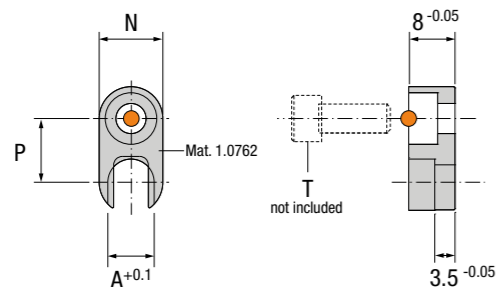
Patented

NP

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

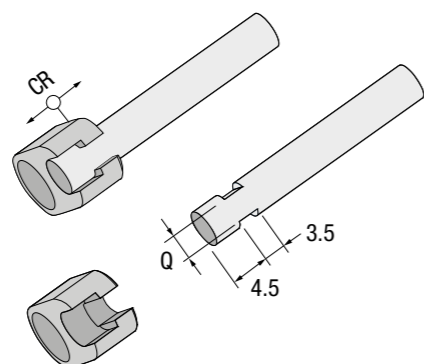
● Cad Insertion Point



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

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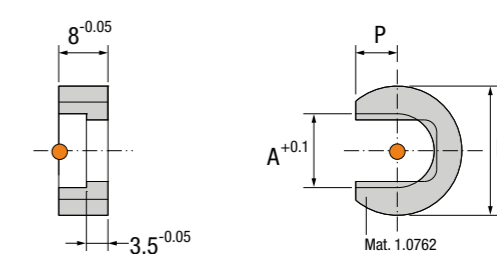
NR

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

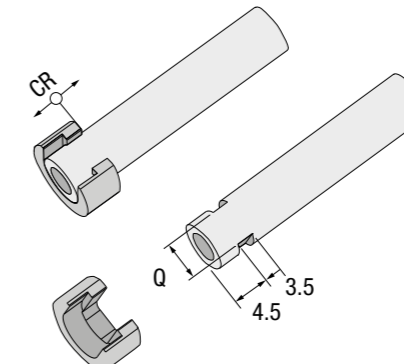
● Cad Insertion Point

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

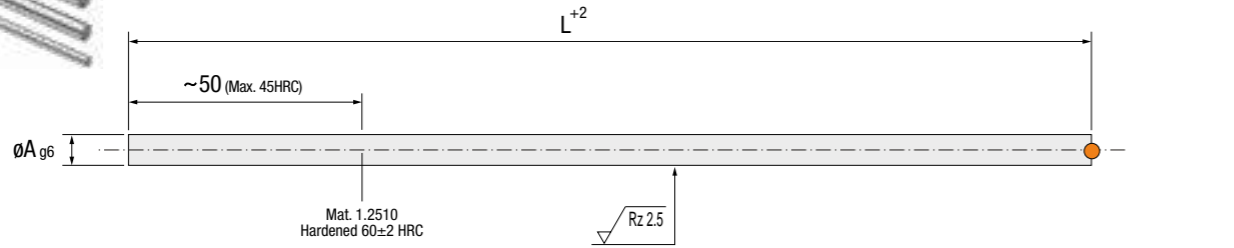
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



PH

EJECTORS

ES Expulsores DE Auswerfer
IT Espulsores PT Extractores FR Ejecteurs



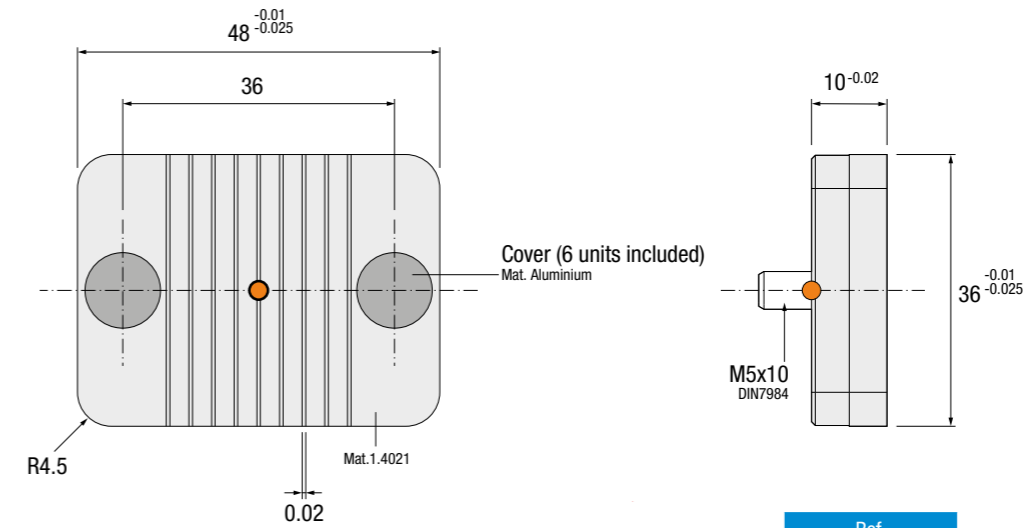
Ref.	A	L
PH.130000-...	3	250 330 500
PH.150000-...	5	250 330 500
PH.160000-...	6	250 330 500
PH.180000-...	8	250 330 500

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.

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



Ref.
LV.483610



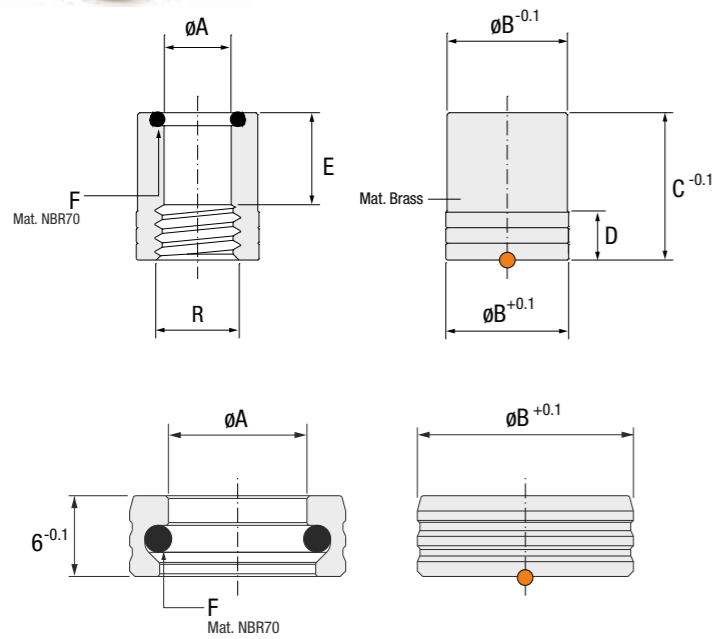
LV

CV

VACUUMJET PLUG

ES Casquillo Vacuumjet DE Vacuumjet Dichtstopfen
IT Bussola Vacuumjet PT Casquilho Vacuumjet FR Bague Vacuumjet

● Cad Insertion Point

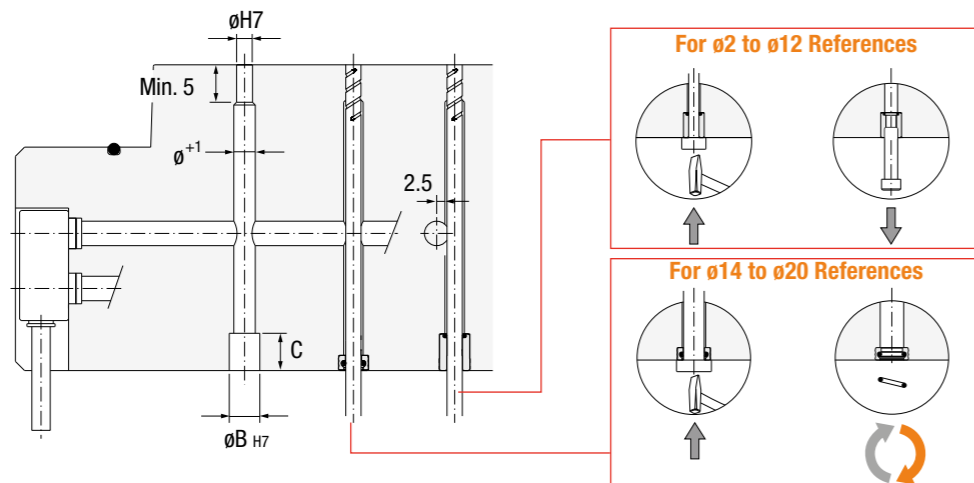


Ref.	A	B	C	D	E	F	R
CV.020812	2	8	12	4.5	8	2x1.5	M3
CV.030812	3	8	12	4.5	8	3x1.5	M4
CV.041012	4	10	12	4.5	8	4x1.5	M5
CV.051012	5	10	12	4.5	8	5x1.5	M6
CV.061212	6	12	12	4.5	8	6x1.5	M8
CV.081416	8	14	16	7	10	8x2	M10
CV.101616	10	16	16	7	10	10x2	M12
CV.121816	12	18	16	7	10	12x2	1/4 GAS

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

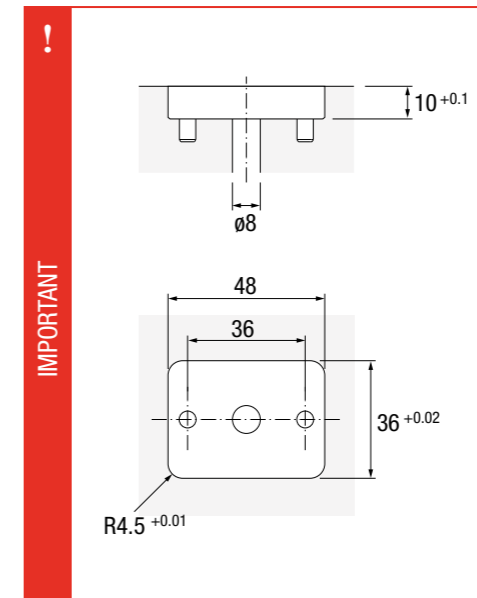
Installation Guidelines

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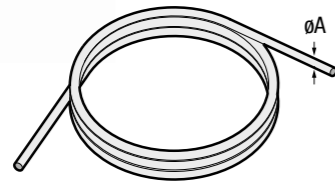


JV

VACUUMJET SEAL

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

● Cad Insertion Point

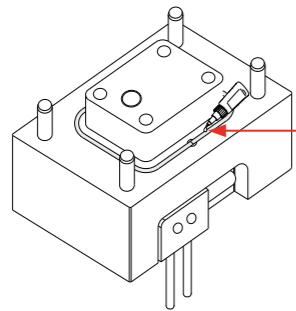


Ref.	A	B	C	mm
JV.030200	3	2.2	2.7	2.000
JV.050200	5	3.8	4.2	2.000

Installation Guidelines

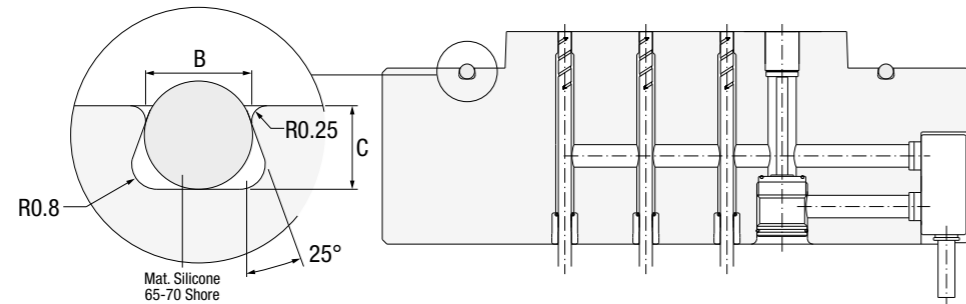
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation

Patented



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.

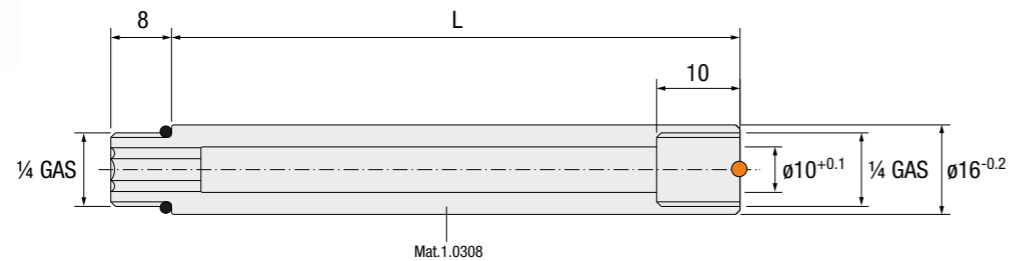
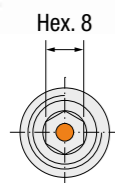


TV

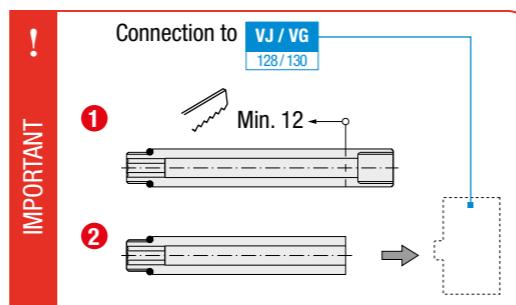
CONNECTION TUBE

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

● Cad Insertion Point



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



IMPORTANT













6

ACCESSORIES

ACCESSORIES INDEX

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INDICE ACCESSORI / ÍNDICE ACESSÓRIOS / INDEX ACCESSOIRES

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<p>147/</p> <p>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</p> 	<p>148/</p> <p>Double Valve Válvula Doble Ventil, Doppelt Wirkend Valvola Doppia Válvula Dupla Double Valve</p> 	
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<p>151/</p> <p>Extension Tube Tubo Hembra Verlängerungsrohr Tubo Prolunga Tubo de Extensão Tube à Version</p> 	<p>151/</p> <p>Water Plug for Insert Faces Tapón Obturador Verschlussstopfen Tappo Otturatore Tampão para Zonas Moldantes Bouchon Obturateur</p> 	

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<p>154/</p> <p>Seal Bearing Junta Rotativa Dichtscheibe Guarnizione Rotativa Junta Rotativa Joint Rotatif</p> 	<p>155/</p> <p>Seal Bearing Tube Tubo Junta Rotativa Dichtscheibenrohr Tubo Alimentatore Rotativo Rotativo Tubo Alimentatore Rotativo Tube Joint Rotatif</p> 	<p>155/</p> <p>Brass Pipe Tubo Laminado Messingrohr Tubo Laminato Tubo Laminado Tube Standard</p> 
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<p>158/</p> <p>Cable Retainer Sujeta Cables Kabelhalter Piastrina di Cablaggio Retensor de Cabos Plaque Blocage Cable</p> 	<p>158/</p> <p>Hose Retainer Sujeta Tubos Schlauchhalter Ferma Cavi Retensor de Mangueira Retenu de Tuyau</p> 	

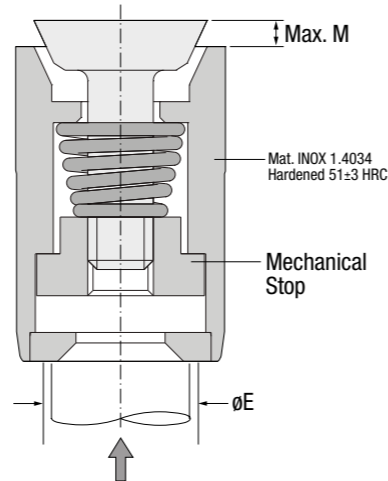
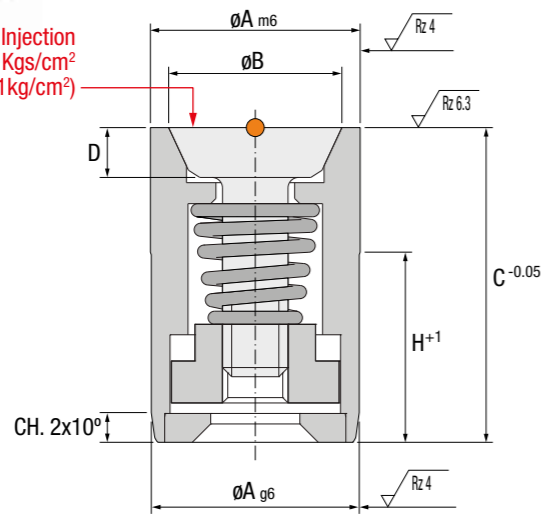
VA

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)



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.

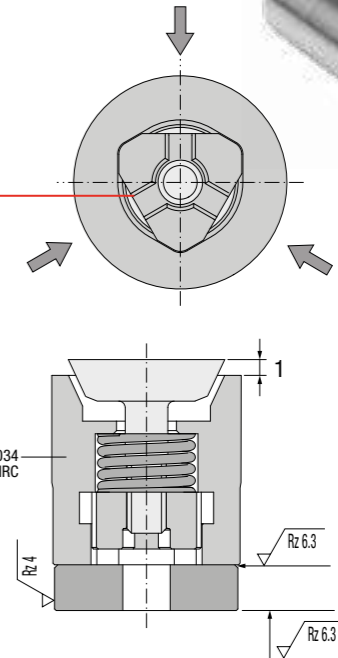
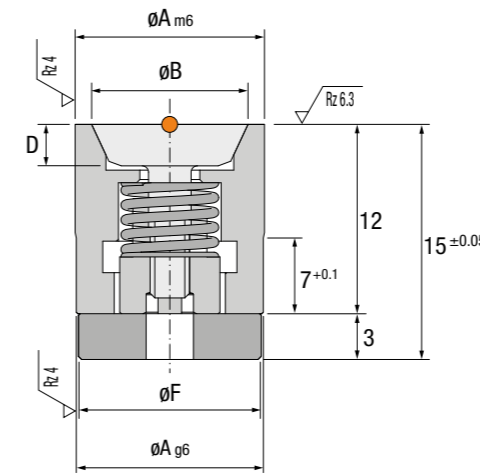
Ref.	A	B	C	D	E	H	M
VA.050412	5	3.4	12	2.1	4	7	2.5
VA.065212	6	5.2	12	1.8	4	7	0.95
VA.086512	8	6.6	12	1.9	4	7	0.95
VA.100812	10	8.2	12	2.7	8	7	0.95
VA.121012	12	9.7	12	2.7	10	7	0.95
VA.161320	16	12.6	20	4	12	12	1.55
VA.201720	20	16.9	20	4	16	12	1.55

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.

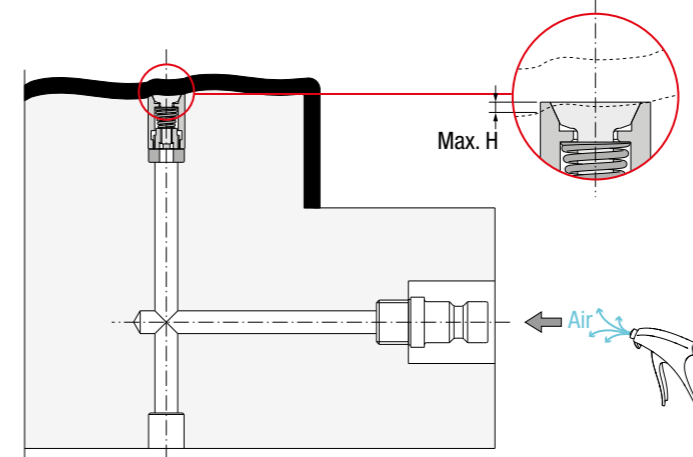
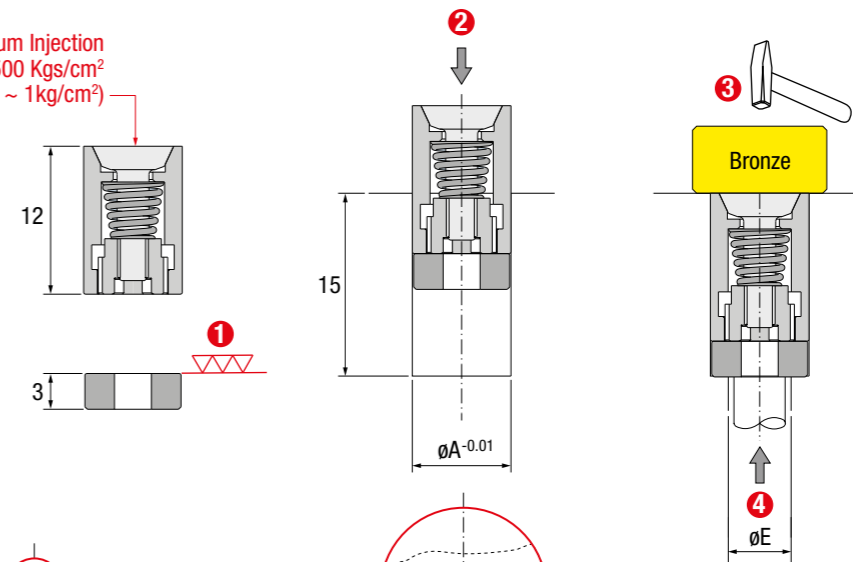


Ref.	A	B	D	E	F	H
VH.065215	6	5.4	1.9	4	5.8	0.25
VH.086515	8	6.7	2	5	7.8	0.75
VH.121015	12	9.7	2.7	5	11.8	1

Installation Guidelines

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

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.

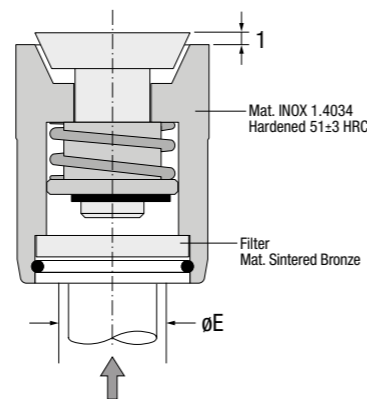
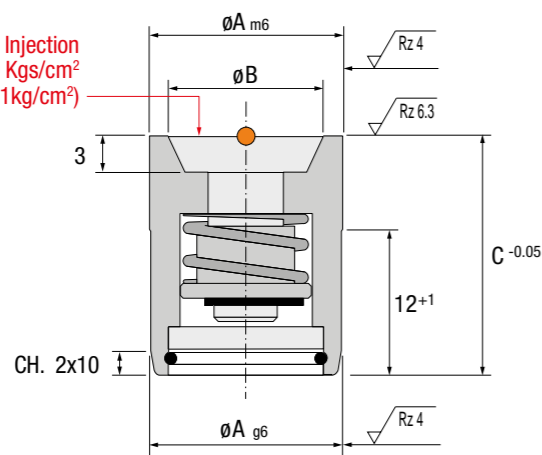
FV

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

VH

Max. 150°C

Min. 2 BARS
Max. 10 BARS

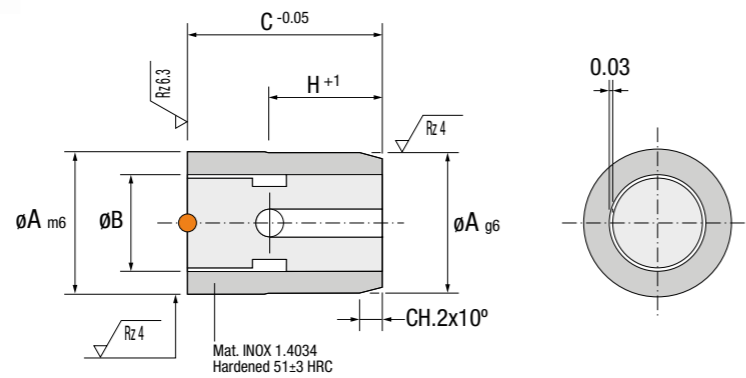
VD



DOUBLE VALVE

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

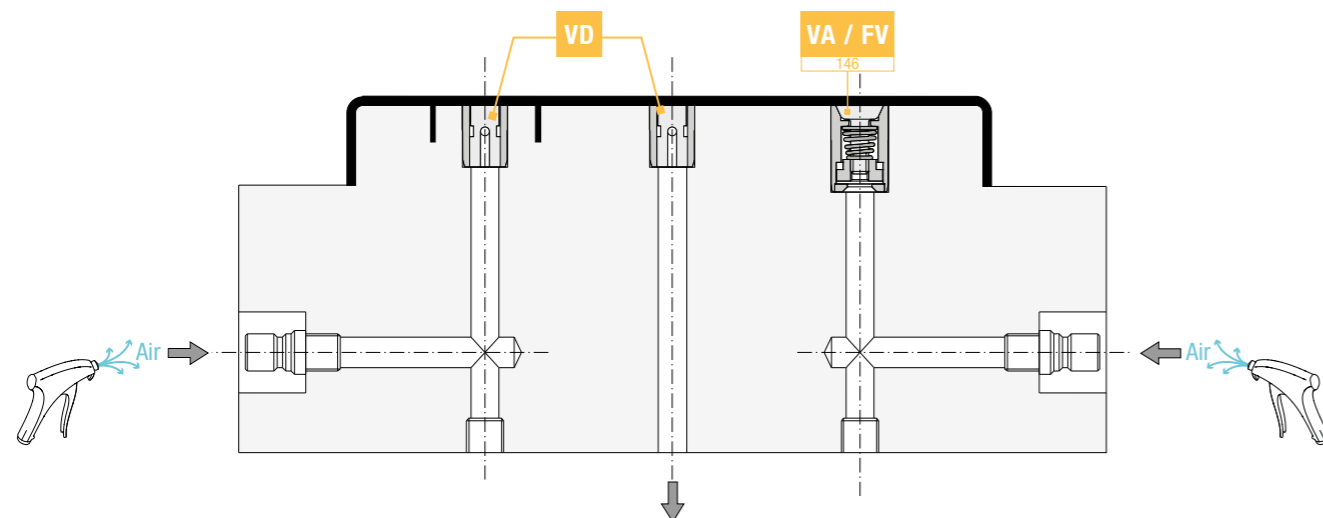
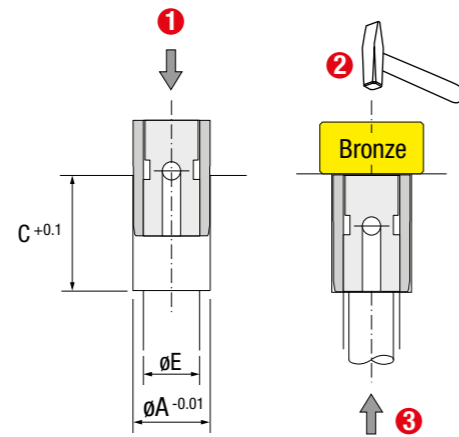
● Cad Insertion Point



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

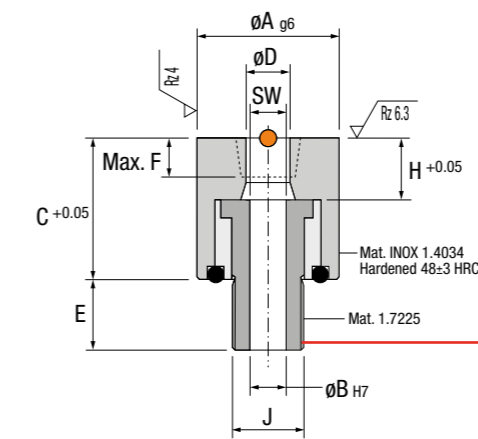
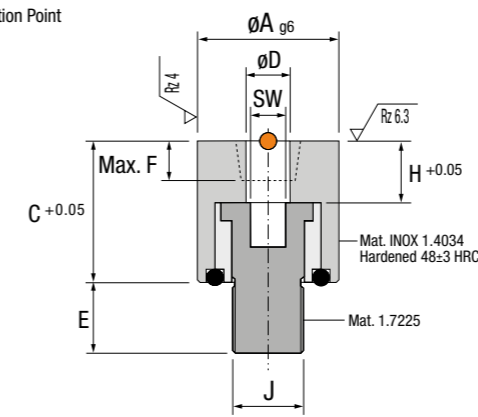
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



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

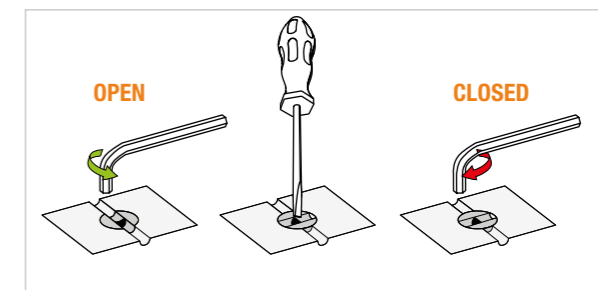
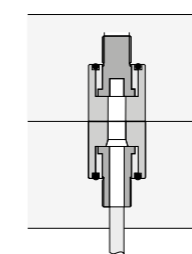
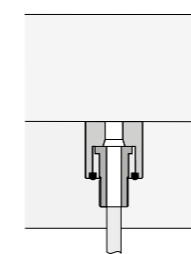
Ref.	A	B	C	D	E	F	H	J	SW
SA.120314	12	3	14	4.1	6	3	5	M6	3
SA.160416	16	4	16	5.1	8	5	7	M8	4
SA.200518	20	5	18	6.1	10	6	9	M10	5
SA.240822	24	8	22	9.5	12	10	14.5	M14	8

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

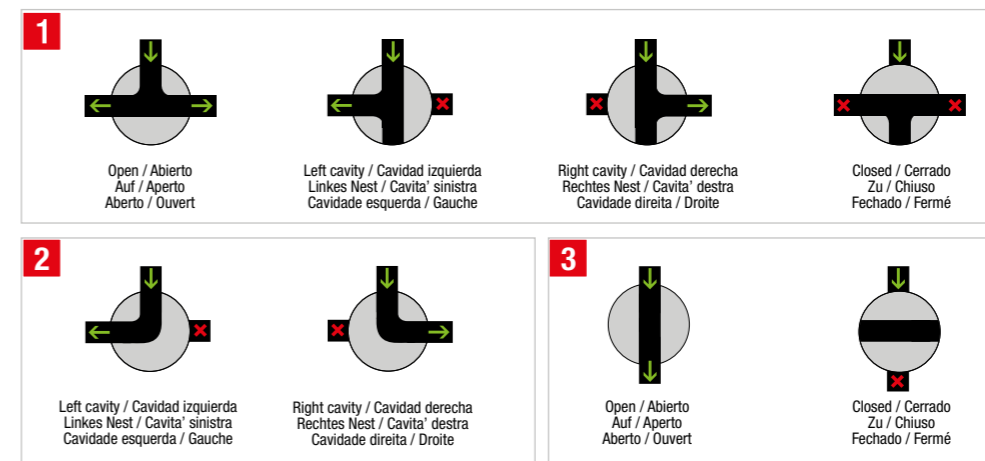
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Trapezoidal runner Full round runner



Possible configurations

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



Patented

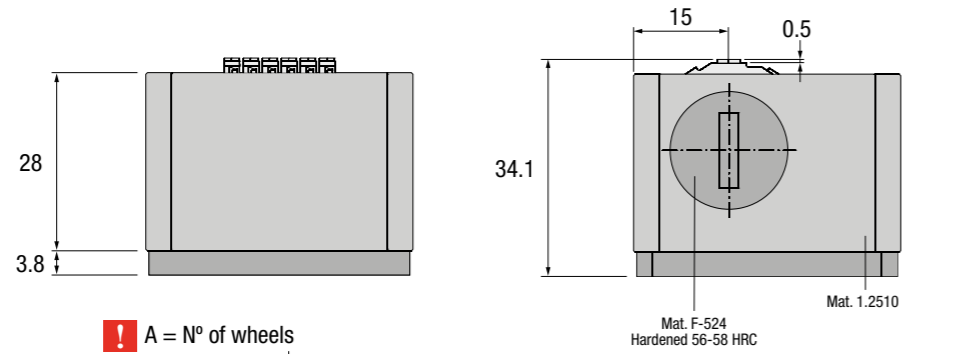
Max. 100°C

UM

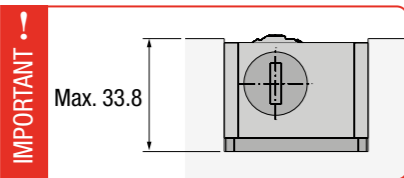
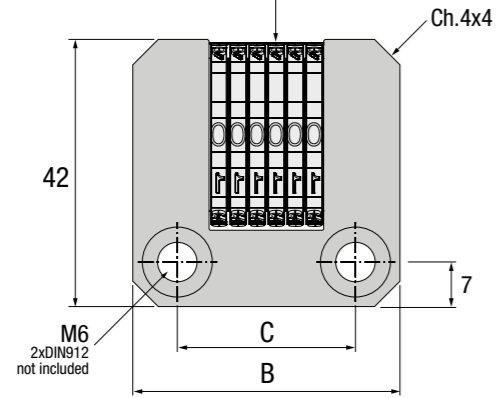


MARKING UNIT

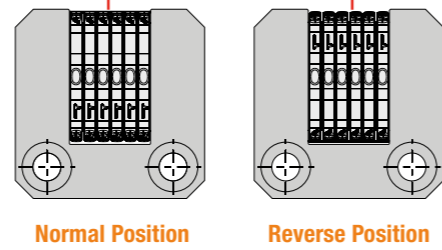
ES Unidad de Marcado DE Prägestempel
IT Unità di Marcatura PT Unidade de Marcação FR Unité de Marquage



! A = N° of wheels



Ref.	A	B	C
UM.043642 UM.0436RV	4	36	22
UM.064242 UM.0642RV	6	42	28

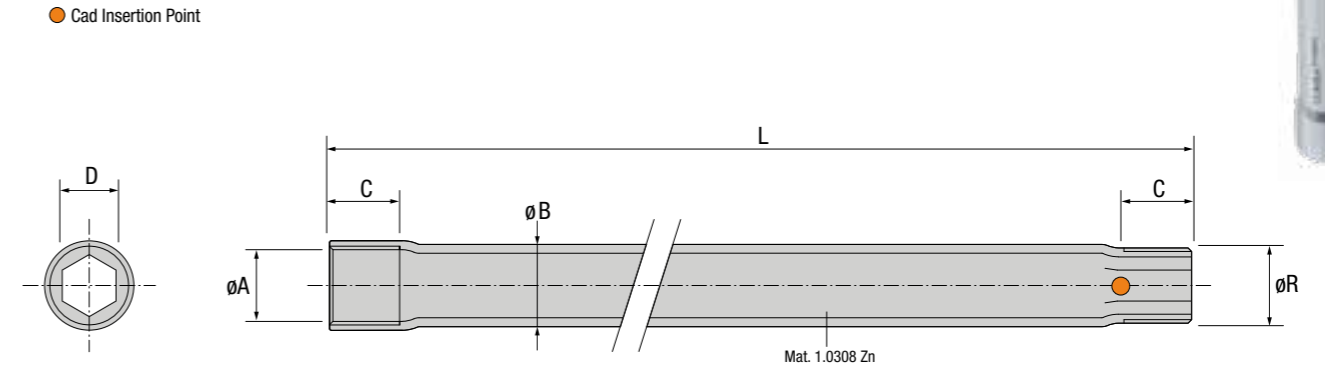


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EXTENSION TUBE

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

TH



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.

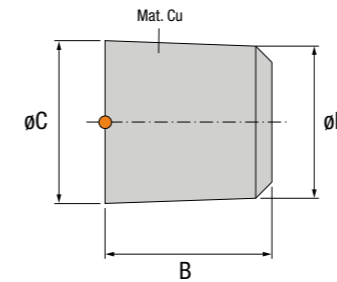
Ref.	A	B	C	D	R	L				
TH.181005-...	1/8"	10	9.5	5	1/8"	50	75	100	125	-
TH.141408-...	1/4"	14	11.5	8	1/4"	50	75	100	125	150

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

T0

RR

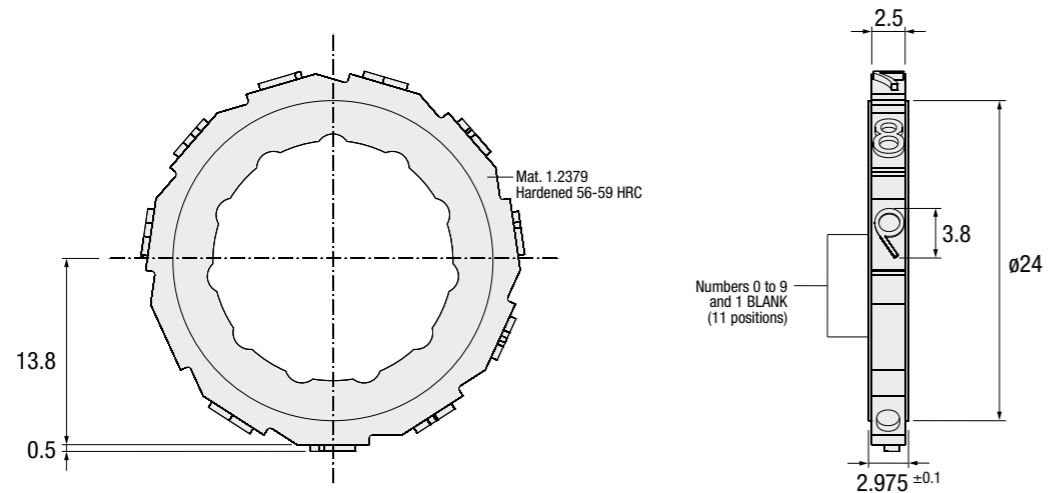


INTERCHANGEABLE WHEEL

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

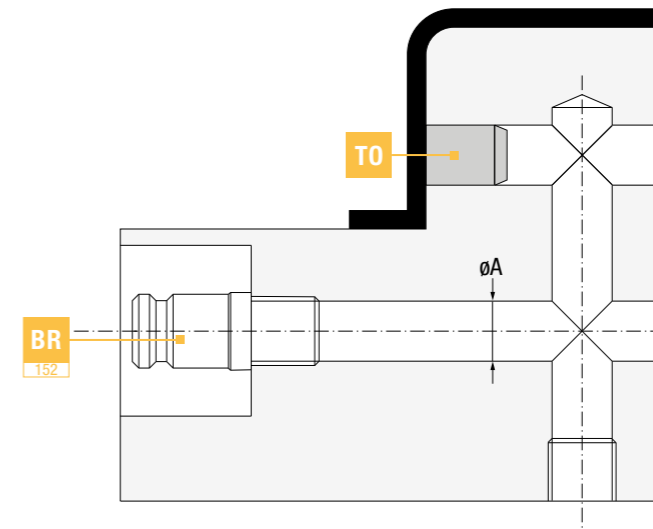
Patented

Ref.
RR.180311



Installation Guidelines

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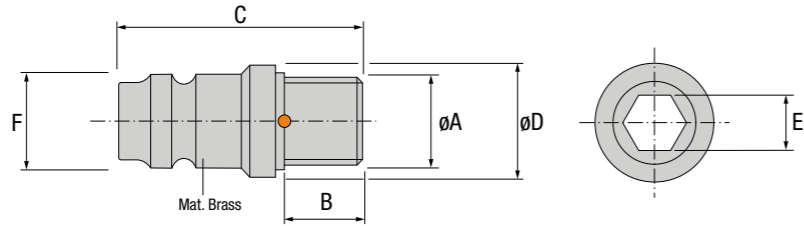
BR



WATER CONNECTOR

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

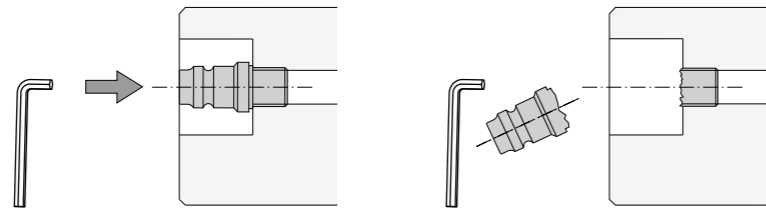
● Cad Insertion Point



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

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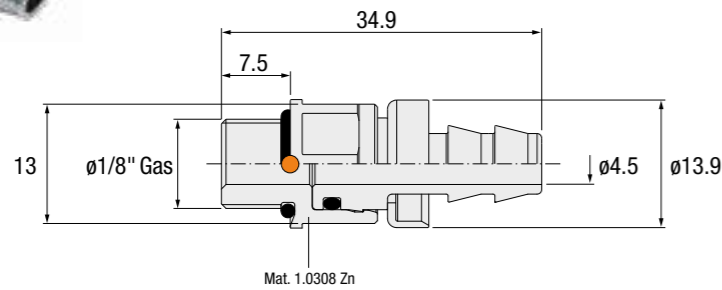


RL



COOLING CONNECTOR

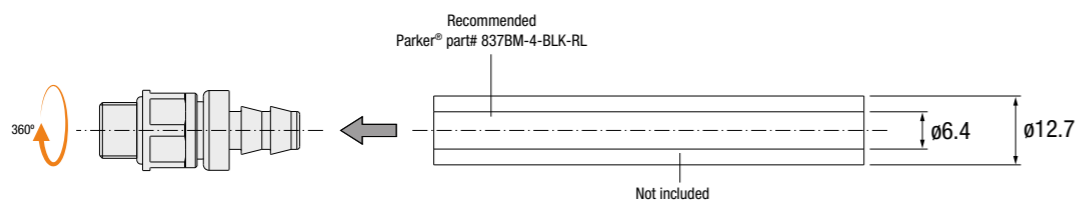
ES Conector Refrigeración DE Kühlung Kupplungsstück
IT Attacco Refrigerazione PT Conector de Refrigeração FR Connexion de Refroidissement



Ref.
RL.181235

Installation Guidelines

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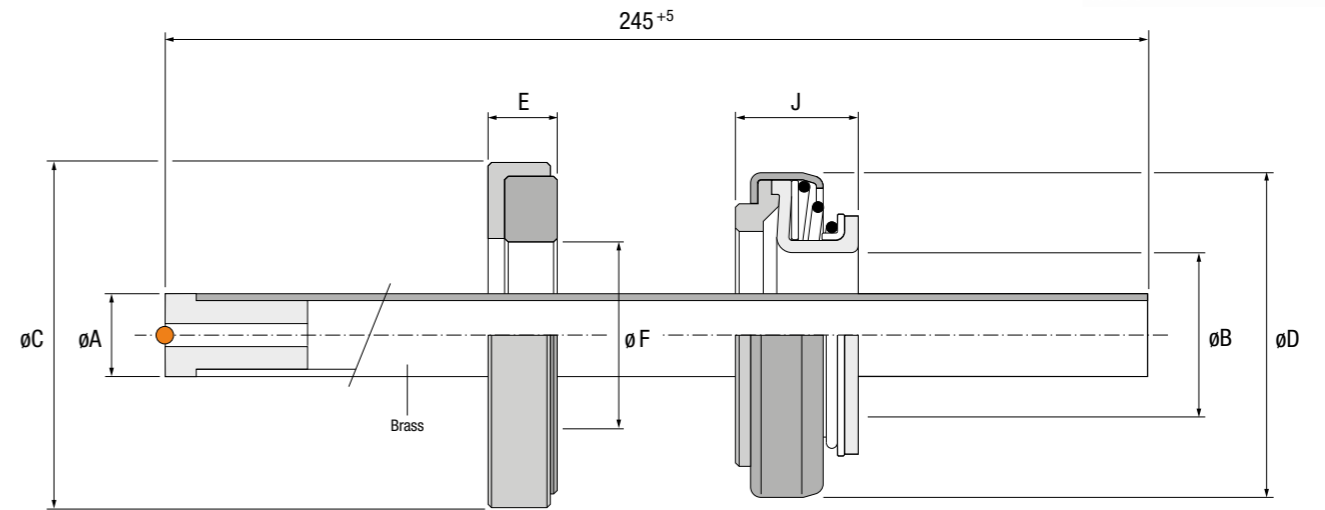
SEAL BEARING

ES Junta Rotativa DE Dichtring
IT Alimentatore Rotativa PT Junta Rotativa FR Fontaine Rotative

● Cad Insertion Point



JR



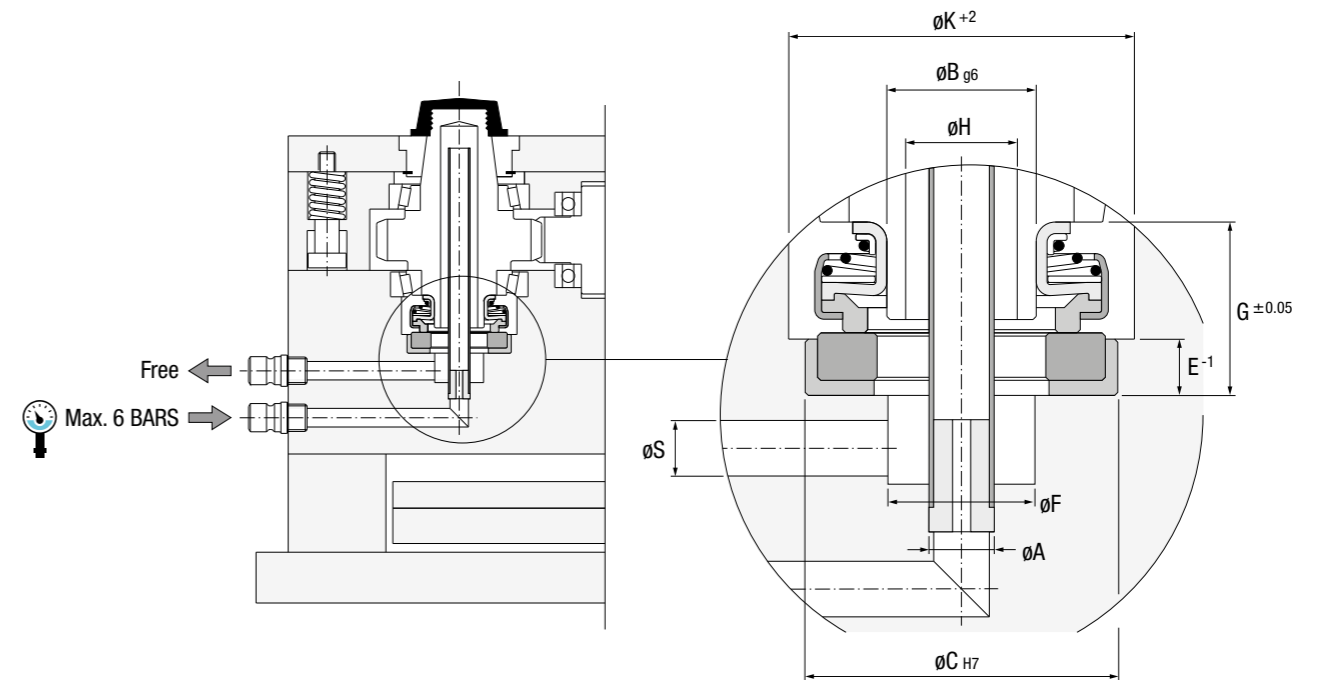
Ref.	A	B	C	D	E	F	G	H	J	K	S
JR.061226	6	12	26	24	8	13	21	8.5	13	26	5
JR.081529	8	15	29.5	32	8	17	21	10.5	13	35	7
JR.101942	10	19	42	39	8	21	21	14	13	41	9
JR.122245	12	22	45	42	10	26	23	17	13	45	11
JR.162550	16	25	50	47	10	27	24	22	14	50	15

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 Dichtung 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

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

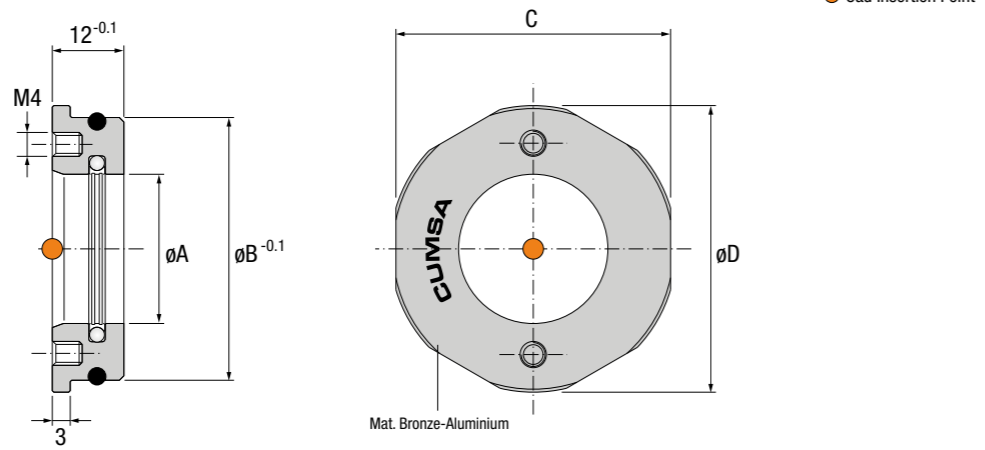


SB



SEAL BEARING

ES Junta Rotativa DE Dichtscheibe
IT Guarnizione Rotativa PT Junta Rotativa FR Joint Rotatif

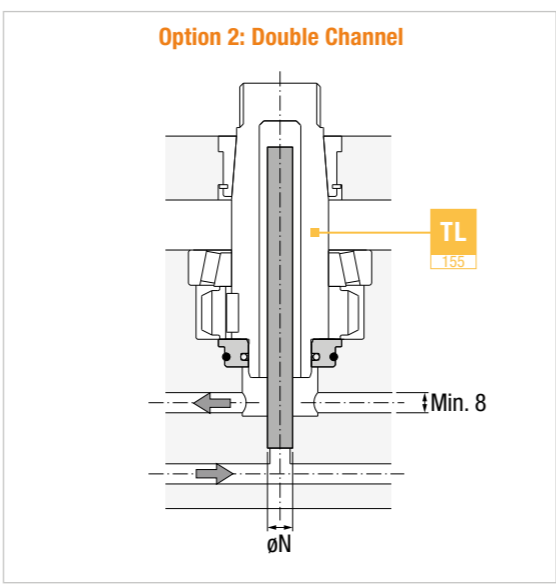
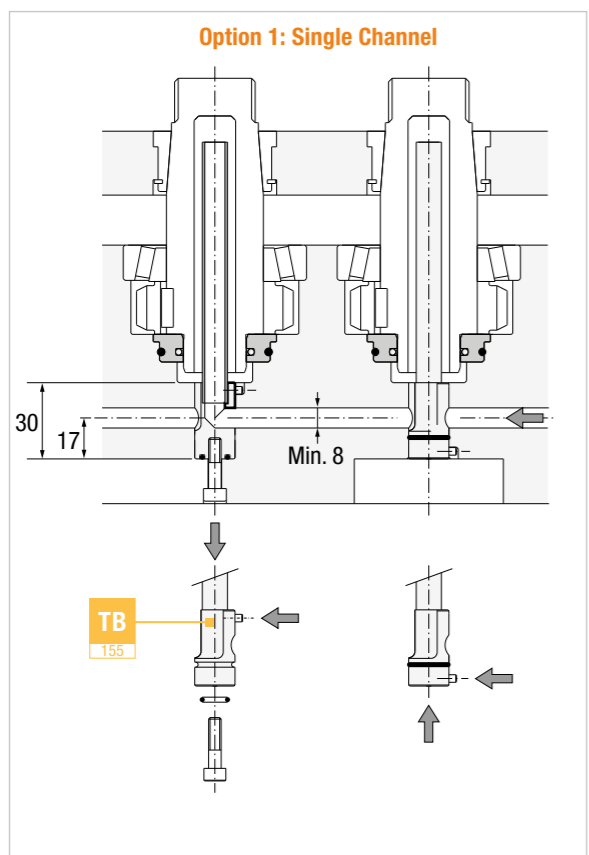


● Cad Insertion Point

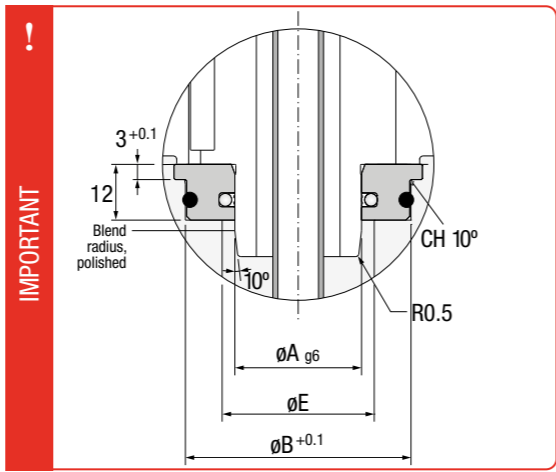
Ref.	A	B	C	D	E
SB.143234	14	32	34	36	18
SB.183638	18	36	38	40	22
SB.254446	25	44	46	48	30
SB.325254	32	52	54	56	36

Installation Guidelines

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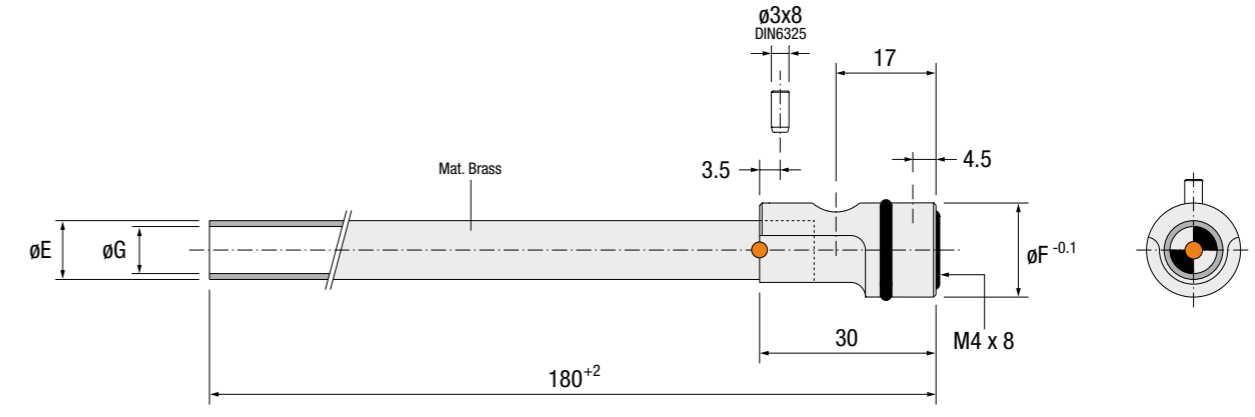
IMPORTANT
Use only grease or oil without solid additives.
Usar solamente aceites o grasas sin aditivos sólidos.
Verwenden Sie nur Fett oder Öl ohne Beimischung von Feststoffen.
Usare esclusivamente olii o grassi senza additivi solidi.
Usar apenas lubrificantes sem aditivos sólidos.
Seulement utiliser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



SEAL BEARING TUBE

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

TB



● Cad Insertion Point

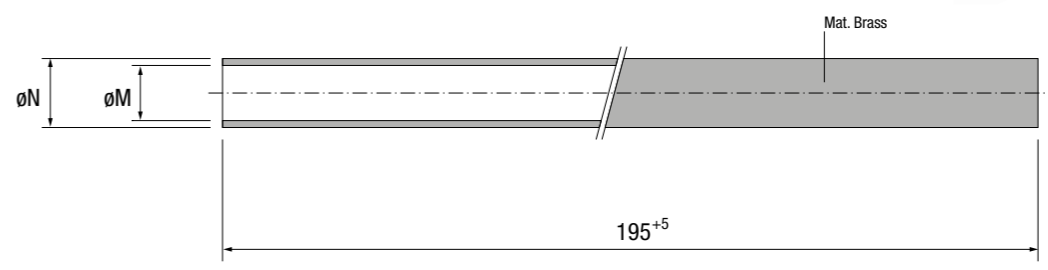
Ref.	E	F	G
TB.061230	6	12	4
TB.081430	8	14	6
TB.101630	10	16	8
TB.122030	12	20	10

Patented

BRASS PIPE

ES Tubo Laminado DE Messingrohr
IT Tubo Laminato PT Tubo Laminado FR Tube Standard

TL

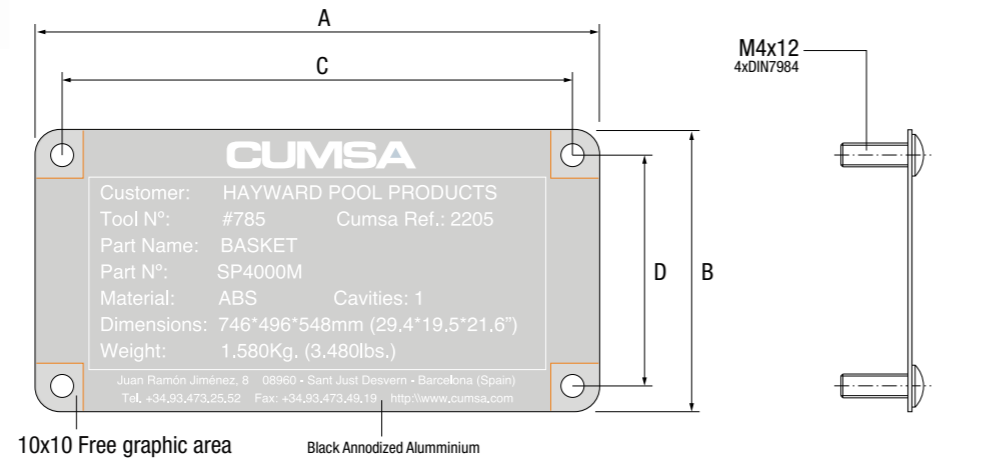


Ref.	M	N
TL.040620	4	6
TL.060820	6	8
TL.081020	8	10
TL.101220	10	12

PI

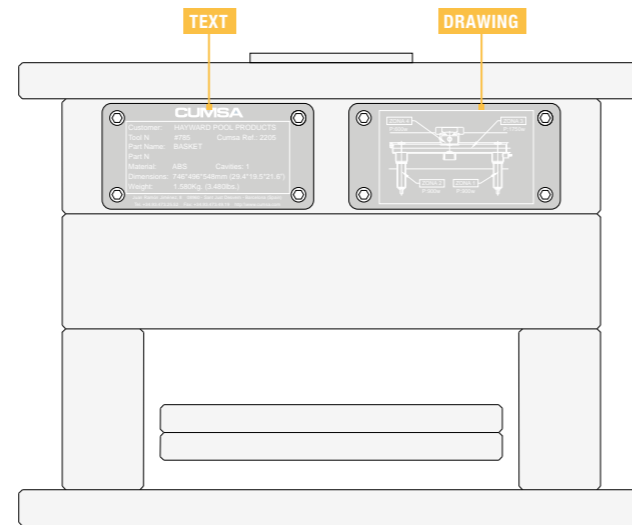
IDENTIFICATION PLATE

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



10x10 Free graphic area

Black Anodized Aluminium



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. Inviatoci via e-mail un archivo in formato DXF/PDF che contenga il 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.

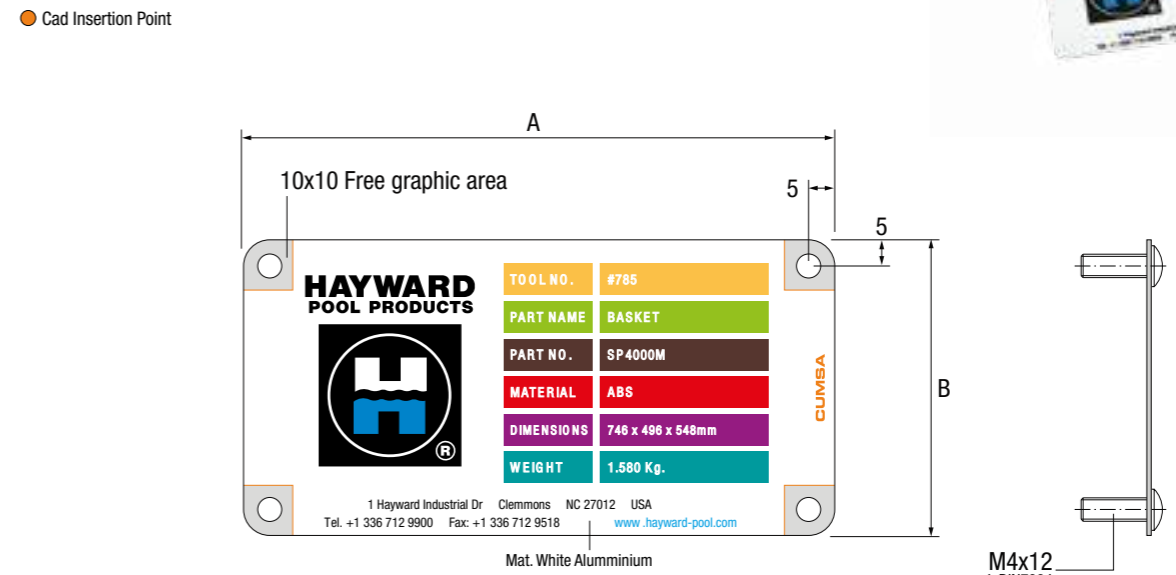
- DELIVERY: Unless otherwise advised, the model "TEXT" plates will be finished in 48 hours and the model "DRAWING" in 72 hours, both cases upon customer order confirmation.**
ES REALIZACION: Salvo indicación contraria, las placas del modelo "TEXT" (Texto) estarán finalizadas en 48 horas y las del modelo "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

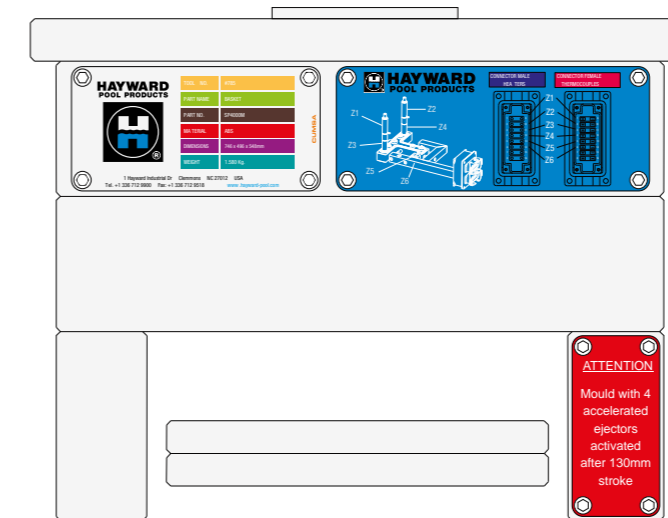


CP



10x10 Free graphic area

Mat. White Aluminium



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 avviso 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.

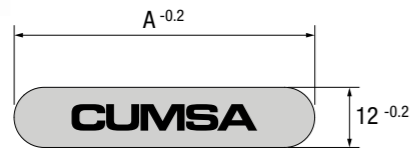
IMPORTANT !
The PDF file, must contain the plate in a 1:1 scale. Do not draw the holes and the rounded angles in your design. El archivo PDF debe tener la placa en escala 1:1. No dibujen los agujeros ni las esquinas redondas en su fichero. Bitte die Zeichnung in PDF und soll auf 1:1 skaliert sein. Zeichnen 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

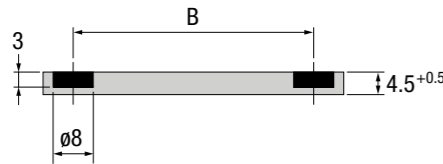
SC

CABLE RETAINER

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



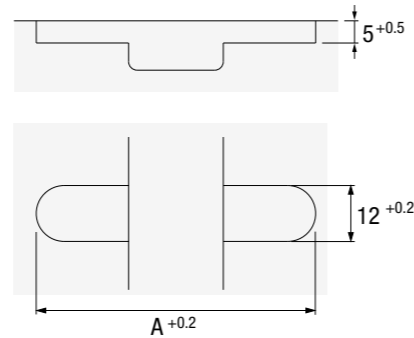
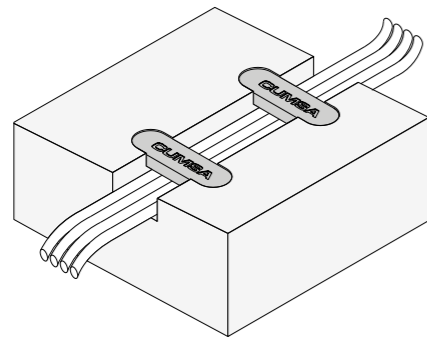
Ref.	A	B	Material	Max. Temp.
SC.401245	40	28	Nylon	80°C
SC.401245H	40	28	PA+30% Glass Fiber	150°C
SC.601245	60	48	Nylon	80°C
SC.601245H	60	48	PA+30% Glass Fiber	150°C



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

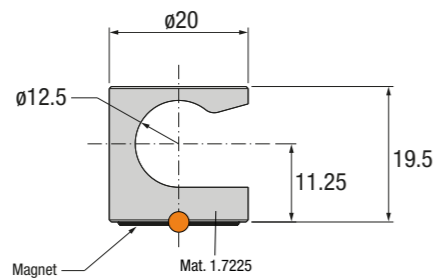
Consejos de Instalación · Richtlinien zur Installation · Consigli di Installazione · Instruções de Instalação · Mode d'Installation



HOSE RETAINER

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

SM

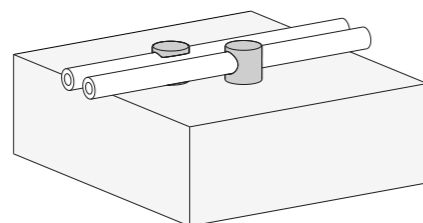


● Cad Insertion Point

Ref.
SM.122020

Installation Guidelines

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Max.
80°C

**THE
FUTURE
IS
HERE**