MANDRINI E ACCESSORI

CHUCKS AND ACCESSORIES / AUFNAHMEN UND ZUBEHÖR
MANDRINS ET ACCESSOIRES / CONOS Y ACCESORIOS

SAU
QUALITY TOOLS ENGINEERING

MANDRINI E ACCESSORI
CHUCKS AND ACCESSORIES
AUFNAHMEN UND ZUBEHÖR
MANDRINS ET ACCESSOIRES
CONOS Y ACCESORIOS

HSK-DIN 69893

Pag. 895

DIN 69871

Pag. 916

MAS 403 BT

Pag. 938

ISO 26623-1

Pag. 960

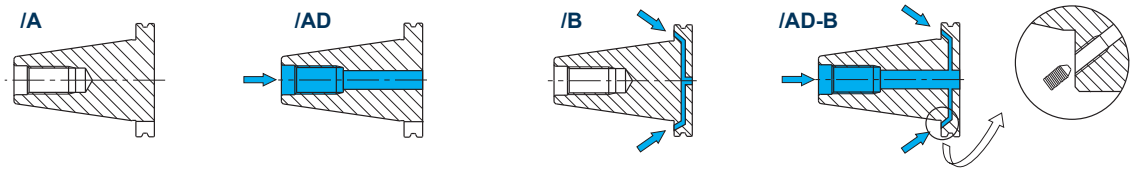
ACCESSORI
ACCESSORIES
ZUBEHÖR
ACCESSOIRES
ACCESORIOS

Pag. 972

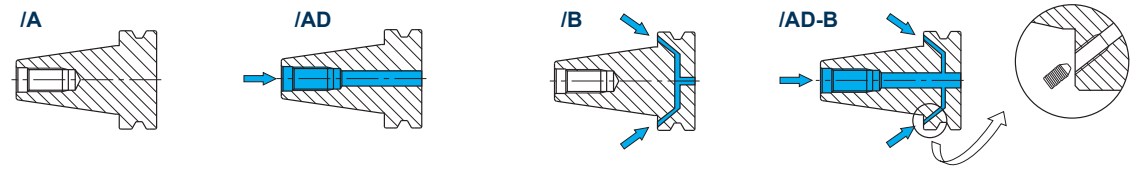
ADDUZIONE REFRIGERANTE
KÜHLMITTELZUFUHR
COOLANT FEED
ABDUCTION DU RÉFRIGÉRANTE

HSK-DIN 69893
PAG. 1104 / 1105

DIN 69871/...



JIS B 6339 - MAS 403 BT/...

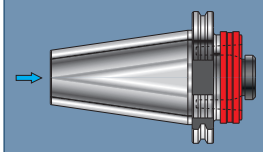


SIMBOLI	*CONCENTRICITÀ*	*EQUILIBRATURA*	*TOLLERANZA FORO*	*ANTIVIBRANTE*
SYMBOLS	*CONCENTRICITY*	*BALANCING*	*BORE TOLERANCE*	*VIBRATION-DAMPING*
SYMBOLE	*RUNDLAUF*	*AUSWUCHTUNG*	*BOHRUNGSTOLERANZ*	*SCHWINGUNGSDÄMPFEND*
SYMBOLES	*CONCENTRICITÈ*	*ÉQUILIBRAGE*	*TOLERANCE TROUS*	*ANTI-VIBRATIONS*

HSK - DIN 69893-A

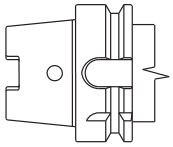
ADATTATORE BASE
- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

ISO.A50.HSK ...



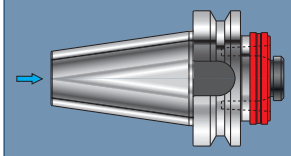
DIN 69871

PAG 900



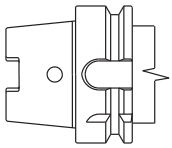
ADATTATORE BASE
- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

MAS.A50.HSK ...



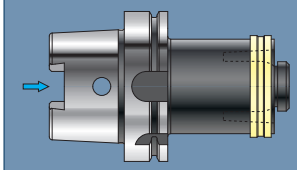
MAS-403-BT

PAG 900



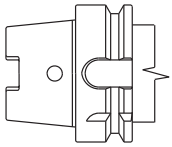
RIDUZIONE
- REDUCTION
- REDUZIERUNGEN
- RÉDUCTION

HSK.100.RDU ...



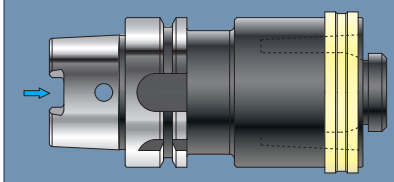
DIN 69893-A HSK

PAG 901



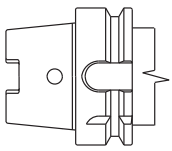
PROLUNGA
- EXTENSION
- VERLAENGERUNGEN
- RALLONGE

HSK.063.PRL ...



DIN 69893-A HSK

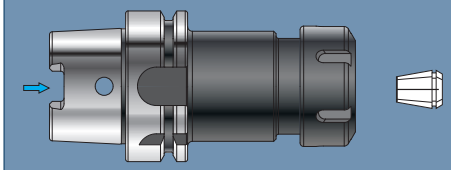
PAG 901



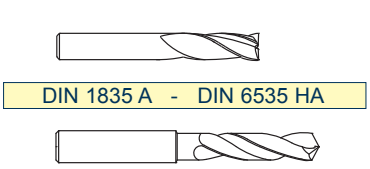
PORTAPINZA DI PRECISIONE
- PRECISION COLLET HOLDER
- PRÄZISIONSSPANNFUTTER
- MANDRIN PORTE-PINCE DE PRÉCISION

HSK..ER..

ER-DIN 6499



PAG 902

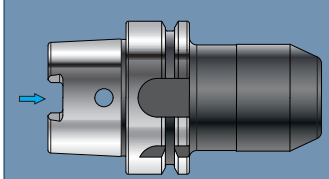


DIN 1835 A - DIN 6535 HA

MANDRINO PER ATTACCHI TIPO WELDON
- END MILL HOLDER FOR WELDON CONNECTION
- WERKZEUGAUFNAHME FÜR WELDON-TYPE
- MANDRIN POUR ATTACHEMENT WELDON

HSK..WEH..

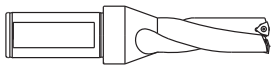
DIN 6359 B



PAG 903

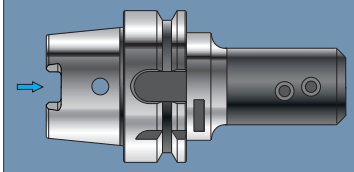
WELDON - DIN1835B - DIN6535HB

ISO 9766



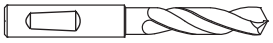
PORTAPUNTA UNIVERSALE
- UNIVERSAL ADAPTER FOR DRILLING TOOLS
- WELDON-AUFNAHME FÜR VOLLBOHRER
- PORTE-FORET UNIVERSEL

HSK...PU..

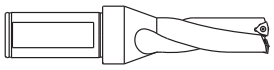


PAG 904

WHISTLE-NOTCH - DIN1835E - DIN6535HE



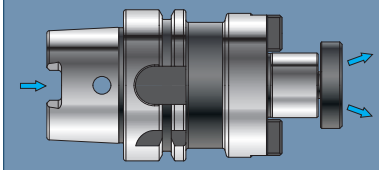
ISO 9766



PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

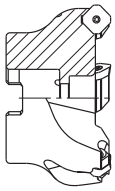
HSK..FSW..

ISO 3937



PAG 905

ISO 6462

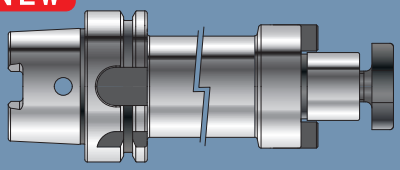


PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
- VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
- SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

HSK..FSV..

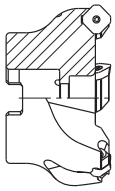
ISO 3937

NEW



PAG 906

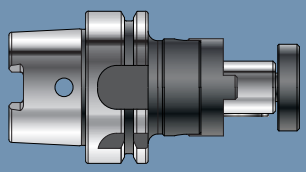
ISO 6462



PORTAFRESA A TRASCINAMENTO COMBINATO PER FRESE A MANICOTTO E A DISCO
- COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS
- FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER
- MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÈ POUR FRAISES À MANCHON ET DE DISQUE

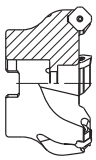
HSK..FC..

DIN 6358 B



PAG 907

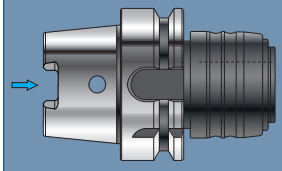
ISO 6462



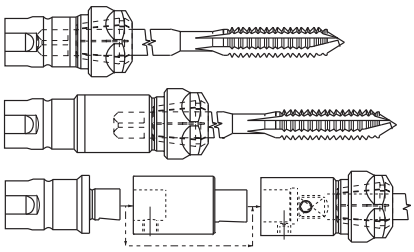
DIN 138

PORTAMASCHIO A CAMBIO RAPIDO PER MASCHIATURA SINCRONIZZATA
- QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
- APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

HSK..MS..

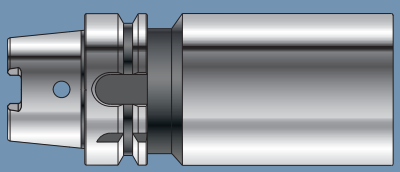


PAG 908

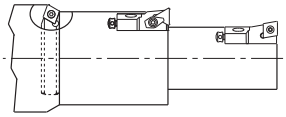


BARRA CON CONO FINITO E STELO TENERO
- BORING BARS WITH FINISHED TAPER AND BLANK SHAFT
- ROHLINGE
- BARRE AVEC CONE FINI ET BOUT DOUX

HSK..SF..

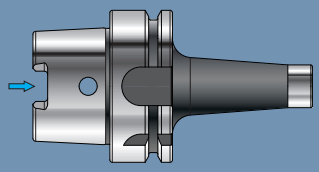


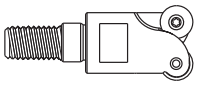
PAG 909



PORTAFRESA CON ATTACCO MODULARE FILETTATO
- CUTTER-HOLDER WITH MODULAR THREA DED CONNECTION
- FRASERAUFNAHME MIT MODULAR-GEWINDE AUFNAHME
- MANDRIN PORTE-FRAISE AVEC ATTACHE MENT MODULAIRE FILETÉ

HSK.063.MD...



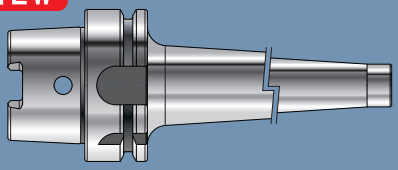


PAG 910

PORTAFRESA ANTIVIBRANTE CON ATTACCO MODULARE FILETTATO
- VIBRATION-DAMPED CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
- SCHWINGUNGSGEDÄMPFTE FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE AVEC ATTACHEMENT MODULAIRE FILETÉ

HSK...MDV...

NEW

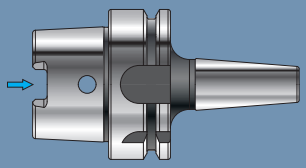


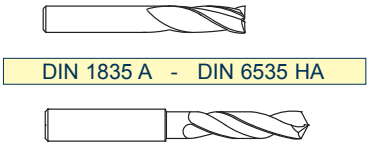
PAG 911

MANDRINO A CALETTAMENTO TERMICO
- SHRINKING-ON TAPER SHANKS
- WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
- MANDRIN À EMBOÎTEMENT THERMIQUE

HSK..CTN..

DIN 69882-8



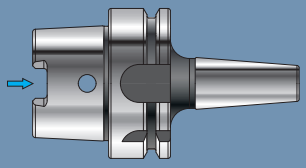


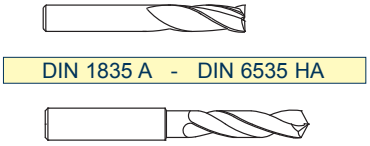
DIN 1835 A - DIN 6535 HA

PAG 912

MANDRINO A CALETTAMENTO TERMICO PROLUNGABILE
- EXTENSIBLE SHRINK FIT
- VERLÄNGERBARES SCHRUMPFFUTTER
- MANDRIN PROLONGEABLE À EMBOÎTEMENT THERMIQUE.

HSK..CTPN..





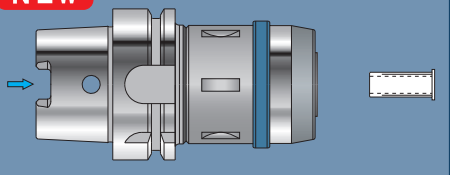
DIN 1835 A - DIN 6535 HA

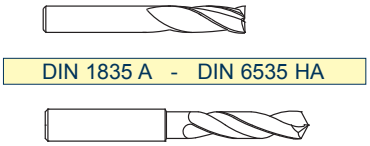
PAG 913

MANDRINO A FORTE SERRAGGIO
- HIGH CLAMPING CHUCKS
- KRAFTSPANNFUTTER
- MANDRIN À FORT SERRAGE

HSK..MFSN..

NEW

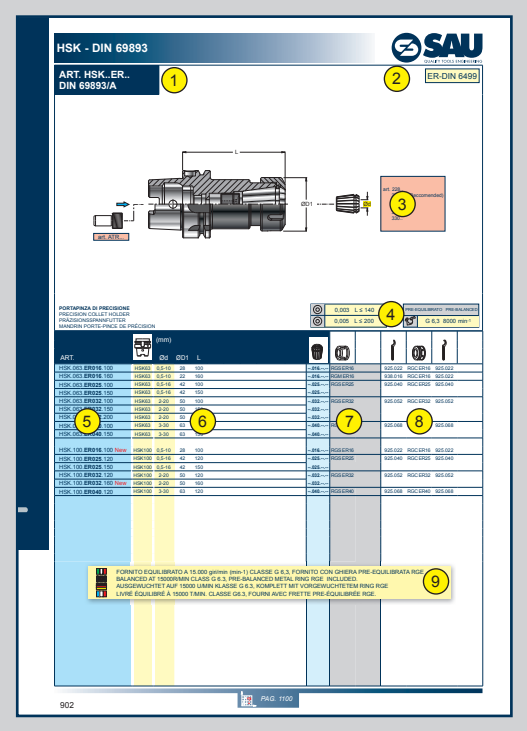




DIN 1835 A - DIN 6535 HA

PAG 914

HSK - DIN 69893



1 = NORMA ATTACCO
2 = NORMA PARTE ANTERIORE
3 = ACCESSORI OPZIONALI A RICHIESTA
4 = CARATTERISTICHE TECNICHE
5 = ARTICOLO
6 = MISURE,DATI,INDICAZIONI
7 = ACCESSORI E RICAMBI IN DOTAZIONE
8 = ACCESSORI E RICAMBI OPZIONALI A RICHIESTA
9 = NOTE E AVVERTIMENTI

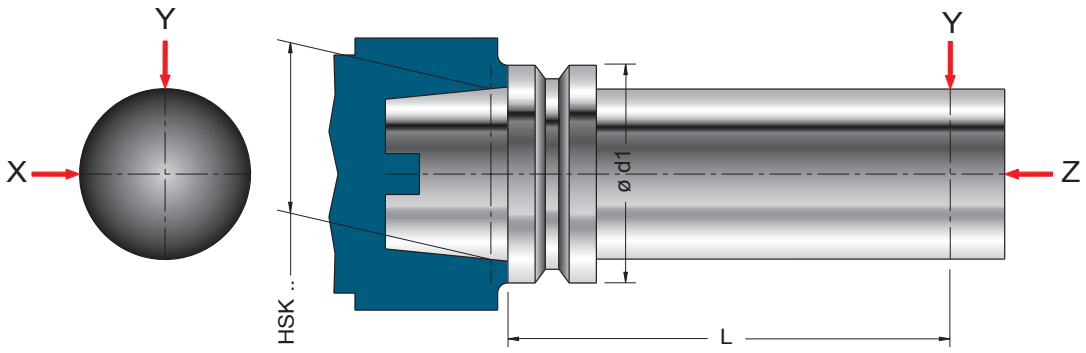
1 = SHANK STANDARD
2 = TOOL-HOLDER STANDARD
3 = OPTIONAL ACCESSORIES ON REQUEST.
4 = TECHNICAL FEATURES
5 = ITEM
6 = MEASURES,DATA,INDICATIONS
7 = ACCESORIES AND SPARE PARTS EQUIPMENT
8 = OPTIONAL ACCESORIES AND SPARE PARTS ON REQUEST
9 = NOTES AND WARNINGS

1 = KEGEL-NORM
2 = AUFNAHME-NORM
3 = OPTIONALZUBEHÖR AUF ANFRAGE
4 = TECHNISCHE HAUPTMERKMALE
5 = ARTKEL
6 = ABMESSUNGEN,DATEN,HINWEISE
7 = ZUBEHÖR UND ERSATZTEILAUSSTATTUNG
8 = OPTIONALZUBEHÖR UND -ERSATZTEILE AUF ANFRAGE
9 = ANMERKUNGEN UND HINWEISE

1 = NORMES POUR ATTACHEMENT
2 = NORME POUR MANDRIN
3 = ACCESSOIRES OPTIONNELS SUR DEMANDE
4 = CARACTERISTIQUES TECHNIQUES
5 = ARTICLE
6 = DIMENSIONES,DONNÉES,INDICATIONS
7 = ACCESSOIRES ET RECHANGE EN DOTATION
8 = ACCESOIRES ET RECHANGES OPTIONNELS SUR DEMANDE
9 = NOTES ET AVVERTISSEMENTS

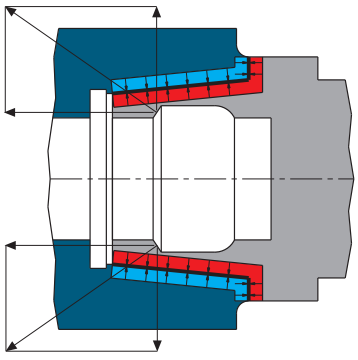
HSK - DIN 69893

PRECISIONE ELEVATA DI RIPETIBILITÀ
GREAT PRECISION IN TERMS OF REPEATIBILITY
HOHE GENAUIGKEIT HINSICHTLICH DER WIEDERHOLBARKEIT
PRÉCISION DE POSSIBILITÉ RÉPÉTITIVE ÉLEVÉE



HSK	d1	L	X	Y	Z
32	32	50	0,002	0,002	0,002
40	40	60	0,002	0,002	0,002
50	50	75	0,002	0,002	0,002
63	63	100	0,002	0,002	0,002
100	100	150	0,002	0,002	0,002

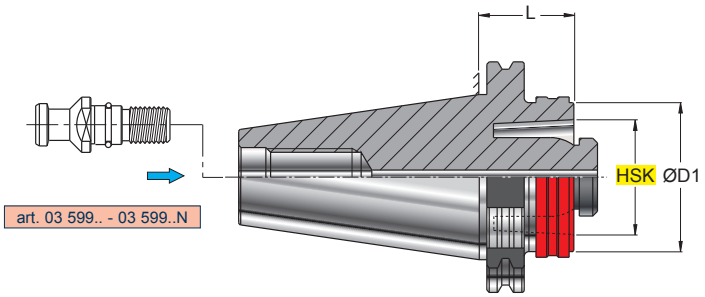
ELEVATA RESISTENZA ALLA FLESSIONE
GREAT BENDING STRENGTH
OPTIMALE KRAFTÜBERTRAGUNG
ÉLÉVÉE RÉSISTANCE À LA FLEXION



PARTICOLARMENTE ADATTO PER LE ALTE VELOCITÀ(HSC)
PARTICULARLY SUITABLE FOR HIGH SPEEDS(HSC)
BESONDERS FÜR HOCHGESCHWINDIGKEIT GEEIGNET(HSC)
PARTICULIÉREMENT INDIQUÉ POUR LES HAUTES VITESSES(HSC)

BREVI TEMPI DI CAMBIO UTENSILE E MIGLIORE MANIPOLAZIONE
SHORT TOOL-CHANGE TIME AND BETTER HANDLING
KURZE WERKZEUGWECHSELZEIT UND BESSERE HANDHABUNG
TEMPS BREFS DE CHANGEMENT OUTIL ET UNE MEILLEURE MANIPULATION

ART. ISO.A50.HSK..
DIN 69871/AD

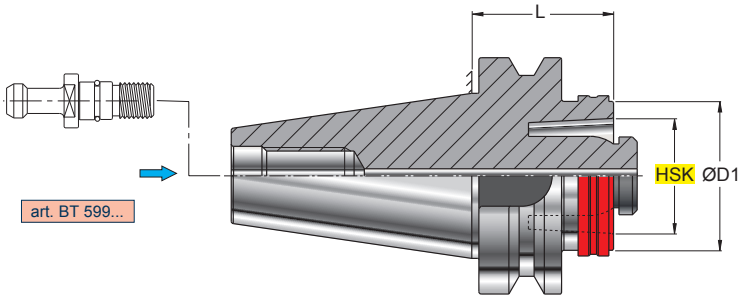


ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) HSK	ØD1	L
ISO.A50.HSK063.040	ISO50	HSK63	63	40

ART. MAS.A50.HSK..
MAS 403 BT/AD



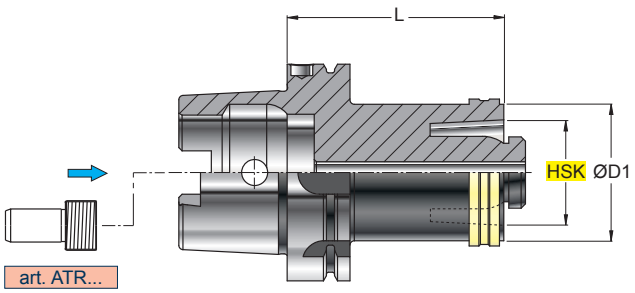
ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) HSK	ØD1	L
MAS.A50.HSK063.060	ISO50	HSK63	63	60

PAG. 1101-1102

ART. HSK.100.RDU..
DIN 69893/A

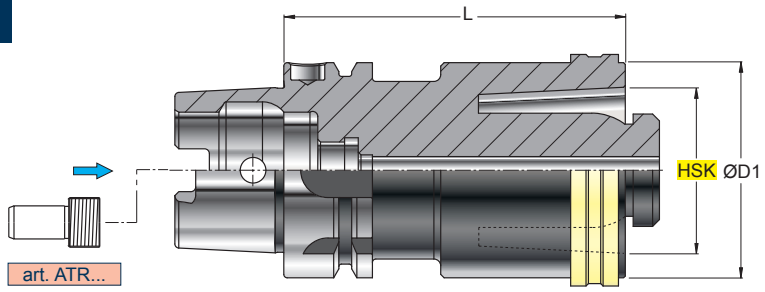


RIDUZIONE
REDUCTION
REDUZIERUNGEN
RÉDUCTION

PRE-EQUILIBRATO	PRE-BALANCED
G 6,3	8000 min-1

ART.	(mm) HSK	ØD1	L
HSK.100.RDU063.100	HSK100 HSK63	63	100

ART. HSK.063.PRL..
DIN 69893/A



PROLUNGA
EXTENSION
VERLÄNGERUNG
RALLONGE

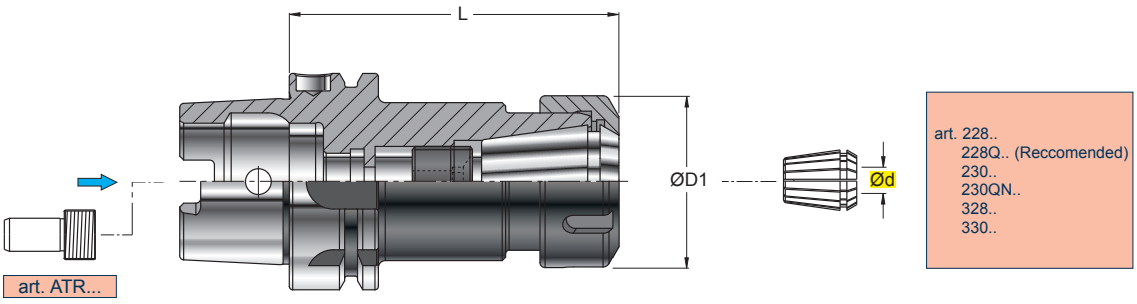
PRE-EQUILIBRATO	PRE-BALANCED
G 6,3	8000 min-1

ART.	(mm) HSK	ØD1	L
HSK.063.PRL063.100	HSK63 HSK63	63	100

PAG. 1100

ART. HSK..ER.. DIN 69893/A

ER-DIN 6499



PORTAPINZA DI PRECISIONE
PRECISION COLLET HOLDER
PRÄZISIONSSPANNFUTTER
MANDRIN PORTE-PINCE DE PRÉCISION

◎	0,003 L ≤ 140
◎	0,005 L ≤ 200

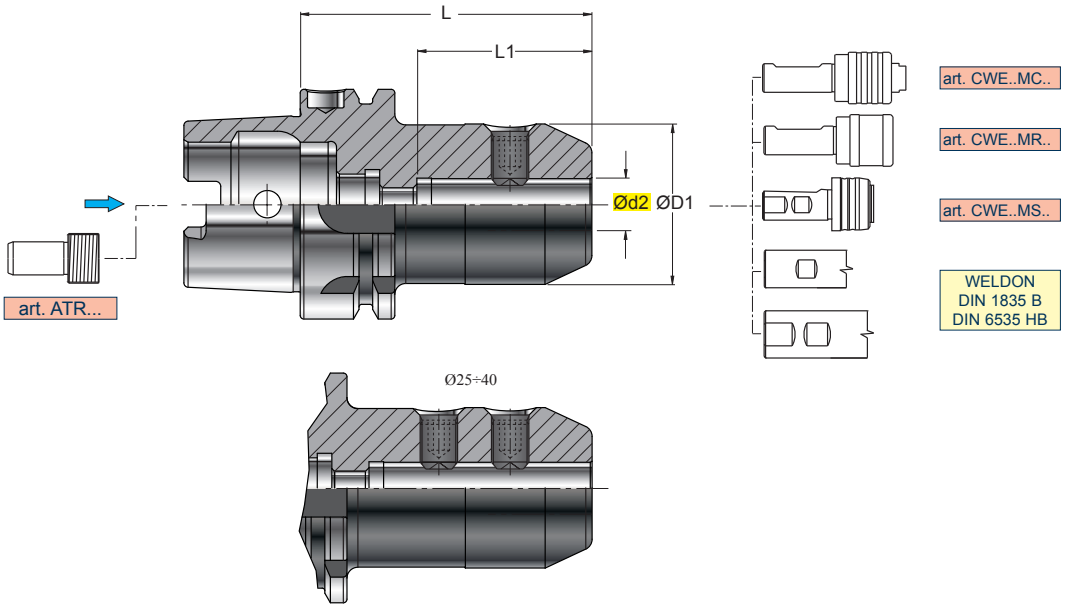
PRE-EQUILIBRATO PRE-BALANCED	
	G 6,3 8000 min^{-1}

ART.	(mm) Ød	ØD1	L						
HSK.063.**ER016**.100	HSK63	0,5-10	28	100	--.016.--.--	RGS ER16	925.022	RGC ER16	925.022
HSK.063.**ER016**.160	HSK63	0,5-10	22	160	--.016.--.--	RGM ER16	938.016	RGC ER16	925.022
HSK.063.**ER025**.100	HSK63	0,5-16	42	100	--.025.--.--	RGS ER25	925.040	RGC ER25	925.040
HSK.063.**ER025**.150	HSK63	0,5-16	42	150	--.025.--.--				
HSK.063.**ER032**.100	HSK63	2-20	50	100	--.032.--.--	RGS ER32	925.052	RGC ER32	925.052
HSK.063.**ER032**.150	HSK63	2-20	50	150	--.032.--.--				
HSK.063.**ER032**.200	HSK63	2-20	50	200	--.032.--.--				
HSK.063.**ER040**.100	HSK63	3-30	63	100	--.040.--.--	RGS ER40	925.068	RGC ER40	925.068
HSK.063.**ER040**.150	HSK63	3-30	63	150	--.040.--.--				
HSK.100.**ER016**.100 New	HSK100	0,5-10	28	100	--.016.--.--	RGS ER16	925.022	RGC ER16	925.022
HSK.100.**ER025**.120	HSK100	0,5-16	42	120	--.025.--.--	RGS ER25	925.040	RGC ER25	925.040
HSK.100.**ER025**.150	HSK100	0,5-16	42	150	--.025.--.--				
HSK.100.**ER032**.120	HSK100	2-20	50	120	--.032.--.--	RGS ER32	925.052	RGC ER32	925.052
HSK.100.**ER032**.160 New	HSK100	2-20	50	160	--.032.--.--				
HSK.100.**ER040**.120	HSK100	3-30	63	120	--.040.--.--	RGS ER40	925.068	RGC ER40	925.068

PAG. 1100

ART. HSK..WEH.. DIN 69893/A

DIN 6359 B



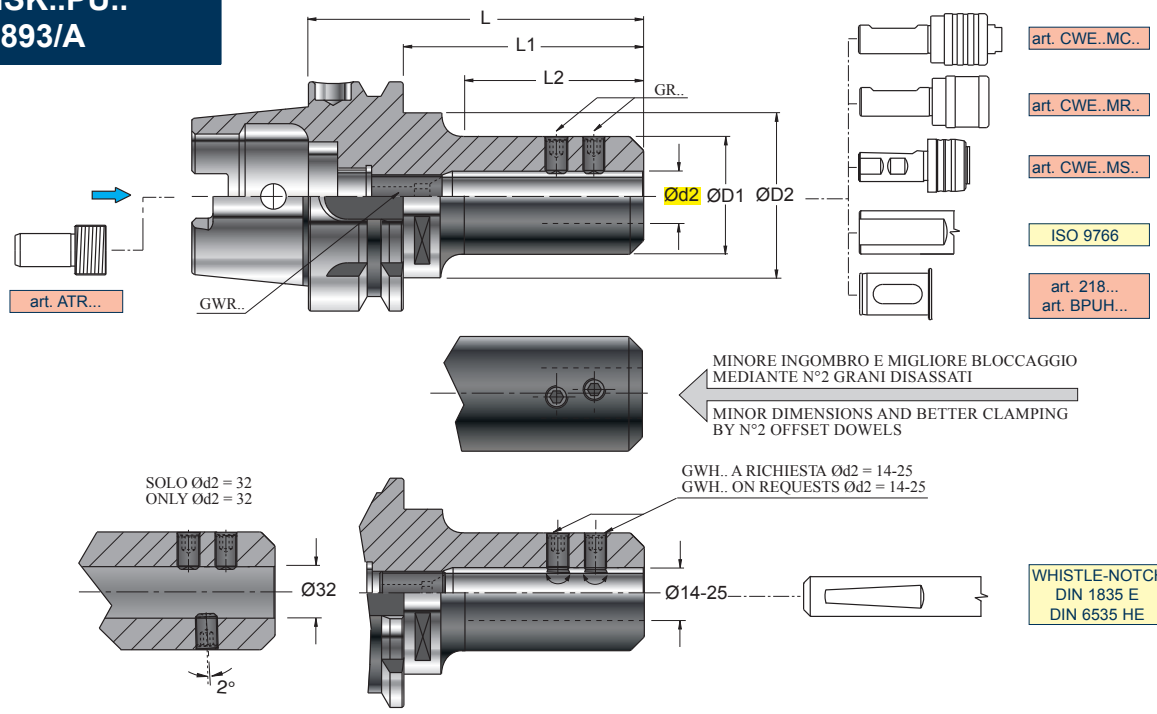
MANDRINO PER ATTACCHI TIPO WELDON
END MILL HOLDER FOR WELDON CONNECTION
WERKZEUGAUFNAHME FÜR WELDON-TYPE
MANDRIN POUR ATTACHEMENT WELDON

Ød2 H5 | 0,005 | PRE-EQUILIBRATO PRE-BALANCED | G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	L	L1			
HSK.063.WEH006.065	HSK63	6	25	65	38	GR06		5003
HSK.063.WEH006.150	HSK63	6	25	150	38			
HSK.063.WEH008.065	HSK63	8	28	65	38	GR08		5004
HSK.063.WEH008.150	HSK63	8	28	150	38			
HSK.063.WEH010.075	HSK63	10	35	75	45	GR10		5005
HSK.063.WEH010.150	HSK63	10	35	150	45			
HSK.063.WEH012.080	HSK63	12	42	80	48	GR1215		5006
HSK.063.WEH012.150	HSK63	12	42	150	50			
HSK.063.WEH014.080	HSK63	14	44	80	48			
HSK.063.WEH014.150	HSK63	14	44	150	50			
HSK.063.WEH016.080	HSK63	16	48	80	50	GR1415		5006
HSK.063.WEH016.150	HSK63	16	48	150	50			
HSK.063.WEH018.080	HSK63	18	50	80	50			
HSK.063.WEH020.080	HSK63	20	52	80	50	GR1615		5008
HSK.063.WEH020.150	HSK63	20	52	150	55			
HSK.063.WEH025.110	HSK63	25	65	110	65	GR1815		5008
HSK.063.WEH032.110	HSK63	32	72	110	65	GR2015		5010
HSK.100.WEH006.080	HSK100	6	25	80	38	GR06		5003
HSK.100.WEH006.150	HSK100	6	25	150	38			
HSK.100.WEH008.080	HSK100	8	28	80	38	GR08		5004
HSK.100.WEH008.150	HSK100	8	28	150	38			
HSK.100.WEH010.085	HSK100	10	35	85	45	GR10		5005
HSK.100.WEH010.150	HSK100	10	35	150	45			
HSK.100.WEH012.090	HSK100	12	42	90	50	GR1215		5006
HSK.100.WEH012.150	HSK100	12	42	150	50			
HSK.100.WEH014.090	HSK100	14	44	90	50			
HSK.100.WEH014.150	HSK100	14	44	150	50			
HSK.100.WEH016.100	HSK100	16	48	100	55	GR1415		5006
HSK.100.WEH016.150	HSK100	16	48	150	50			
HSK.100.WEH018.100	HSK100	18	50	100	55			
HSK.100.WEH020.100	HSK100	20	52	100	55	GR1615		5008
HSK.100.WEH020.150	HSK100	20	52	150	55			
HSK.100.WEH025.100	HSK100	25	65	100	60	GR1815		5010
HSK.100.WEH025.150	HSK100	25	65	150	60			
HSK.100.WEH032.110	HSK100	32	72	110	65	GR2015		5010
HSK.100.WEH032.150	HSK100	32	72	150	65			
HSK.100.WEH040.120	HSK100	40	80	120	75			
HSK.100.WEH040.150	HSK100	40	80	150	75			

PAG. 1100

ART. HSK..PU..
DIN 69893/A



PORTAPUNTA UNIVERSALE
UNIVERSAL ADAPTER FOR DRILLING TOOLS
WELDON-AUFNAHME FÜR VOLLBOHRER
PORTE-FORET UNIVERSEL

Ød2 H5

0,003

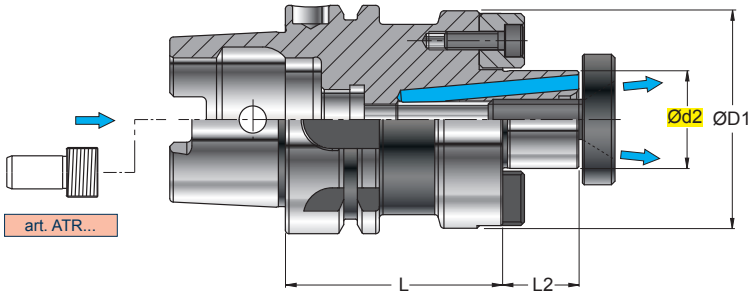
PRE-EQUILIBRATO PRE-BALANCED
HSK63 = G6,3 10000 min-1
HSK100 = G6,3 8000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2						
HSK.063.PU016.100	HSK63	16	38	52,5	100	74	52	n°2 GR10	GWR12	5005	5006	GWH10	5005
HSK.063.PU020.100	HSK63	20	42	52,5	100	74	52	n°2 GR10	GWR16	5005	5008	GWH10	5005
HSK.063.PU025.090	HSK63	25	48	52,5	90	64	46	n°2 GR10	–	5005	–	GWH10	5005
HSK.063.PU032.090	HSK63	32	58	52,5	90	64	–	n°3 GR14	–	5006	–	–	–
HSK.063.PU040.100	HSK63	40	64	52,5	100	74	–						
HSK.100.PU016.140	HSK100	16	38	84,5	140	111	50	n°2 GR10	GWR12	5005	5006	GWH10	5005
HSK.100.PU020.140	HSK100	20	42	84,5	140	111	50	n°2 GR10	GWR16	5005	5008	GWH10	5005
HSK.100.PU025.130	HSK100	25	48	84,5	130	101	55	n°2 GR10	GWR20	5005	5010	GWH10	5005
HSK.100.PU032.130	HSK100	32	58	84,5	130	101	60	n°3 GR14	–	5006	–	–	–
HSK.100.PU040.130	HSK100	40	68	84,5	130	101	70	n°2 GR16	–	5008	–	–	–

PAG. 1100

ART. HSK..FSW..
DIN 69893/A

ISO 3937



PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
SHELL END-MILL HOLDERS WITH TENON
FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

0,01

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

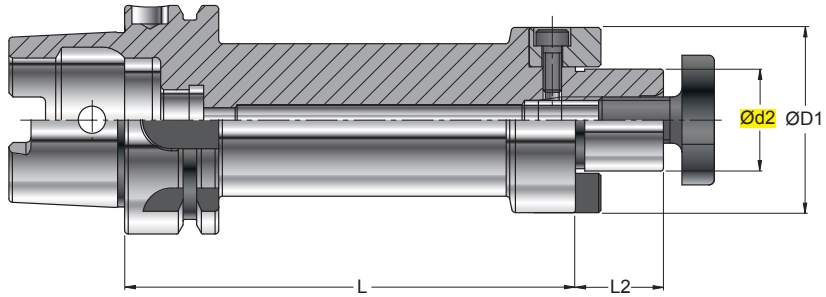
ART.		(mm) Ød2	ØD1	L	L2						
HSK.063.FSW016.050	HSK63	16	40	50	17	RS16	VBS08	TSFS16	VB 02	CTE05	5025
HSK.063.FSW022.050	HSK63	22	50	50	19	RS22	VBS10	TSFS22	VB 04	CTE06	5003
HSK.063.FSW027.060	HSK63	27	60	60	21	RS27	VBS12	TSFS27	VB 05	CTE08	5004
HSK.063.FSW032.060	HSK63	32	68	60	24	RS32	VBS16	TSFS32	VB 05	CTE10	5004
HSK.063.FSW040.060 New	HSK63	40	82	60	27	RS40	VBS20	TSFS40	VB 06	CTE12	5005
HSK.100.FSW022.050	HSK100	22	50	50	19	RS22	VBS10	TSFS22	VB 04	CTE06	5003
HSK.100.FSW027.050	HSK100	27	60	50	21	RS27	VBS12	TSFS27	VB 05	CTE08	5004
HSK.100.FSW032.050	HSK100	32	68	50	24	RS32	VBS16	TSFS32	VB 05	CTE10	5004
HSK.100.FSW040.060	HSK100	40	82	60	27	RS40	VBS20	TSFS40	VB 06	CTE12	5005

PAG. 1100

ART. HSK..FSV..
DIN 69893/A

ISO 3937

NEW



PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

0,015

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

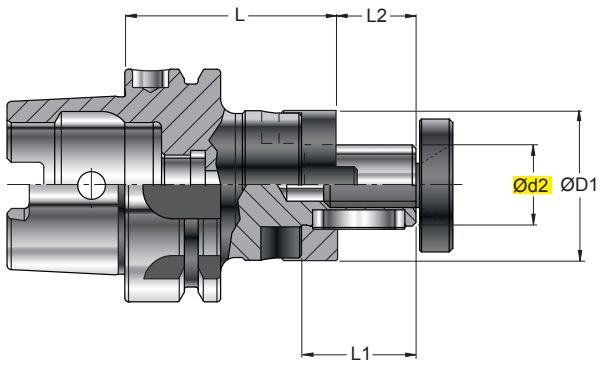
ART.		(mm) Ød2	ØD1	L	L2	kg						
HSK.063.FSV016.200	HSK63	16	38	200	17	2,30	CHF16V	VB 02	422.016..		5025	423.016..
HSK.063.FSV016.300	HSK63	16	38	300	17	3,60						
HSK.063.FSV022.200	HSK63	22	48	200	19	2,80	CHF22V	VB 04	422.022..		5003	423.022..
HSK.063.FSV022.300	HSK63	22	48	300	19	4,10						
HSK.063.FSV027.200	HSK63	27	58	200	21	3,10	CHF27V	905.005. 080.012	422.027..		5004	423.027..
HSK.100.FSV016.200	HSK100	16	38	200	17	5,40	CHF16V	VB 02	422.016..		5025	423.016..
HSK.100.FSV016.300	HSK100	16	38	300	17	6,20						
HSK.100.FSV022.200	HSK100	22	48	200	19	5,10	CHF22V	VB 04	422.022..		5003	423.022..
HSK.100.FSV022.300	HSK100	22	48	300	19	6,50						
HSK.100.FSV027.200	HSK100	27	58	200	21	5,80	CHF27V	905.005. 080.012	422.027..		5004	423.027..
HSK.100.FSV027.300	HSK100	27	78	300	21	7,80						
HSK.100.FSV032.300	HSK100	32	78	300	24	8,10	CHF32V	905.005. 080.012	422.032..		5004	423.032..

PAG. 1100

SAU QUALITY TOOLS ENGINEERING

ART. HSK..FC..
DIN 69893/A

DIN 6358 B



PORTAFRESA A TRASCINAMENTO COMBINATO PER FRESE A MANICOTO E A DISCO
COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS.
FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER
MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÉ POUR FRAISES À MANCHON ET DE DISQUE

0,015

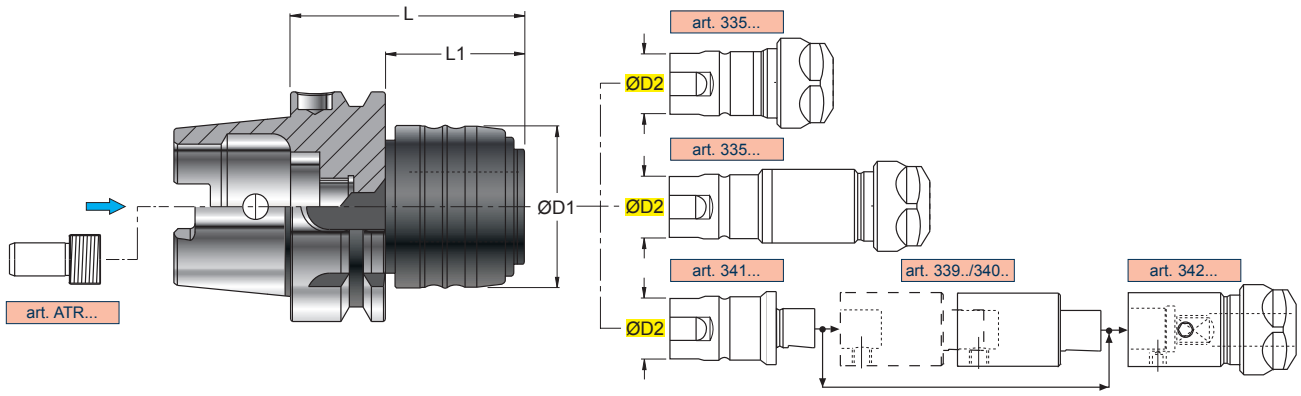
PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	L	L1	L2					
HSK.063.FC016.060	HSK63	16	32	60	27	17	RS 16	VBS08	CT0420	08.3501.016.AT	CTE05
HSK.063.FC016.100	HSK63	16	32	100	27	17	RS 16	VBS08	CT0420	08.3501.016.AT	CTE05
HSK.063.FC022.060	HSK63	22	40	60	31	19	RS 22	VBS10	CT0625	08.3502.022.AT	CTE06
HSK.063.FC022.100	HSK63	22	40	100	31	19	RS 22	VBS10	CT0625	08.3502.022.AT	CTE06
HSK.063.FC027.060	HSK63	27	48	60	33	21	RS 27	VBS12	CT0725	08.3503.027.AT	CTE08
HSK.063.FC027.100	HSK63	27	48	100	33	21	RS 27	VBS12	CT0725	08.3503.027.AT	CTE08
HSK.063.FC032.065	HSK63	32	58	65	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
HSK.063.FC032.100	HSK63	32	58	100	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
HSK.063.FC040.077	HSK63	40	70	77	41	27	RS 40	VBS20	CT1032	08.3505.040.AT	CTE12
HSK.063.FC040.100	HSK63	40	70	100	41	27	RS 40	VBS20	CT1032	08.3505.040.AT	CTE12
HSK.100.FC016.063	HSK100	16	32	63	27	17	RS 16	VBS08	CT0420	08.3501.016.AT	CTE05
HSK.100.FC022.060	HSK100	22	40	60	31	19	RS 22	VBS10	CT0625	08.3502.022.AT	CTE06
HSK.100.FC027.060	HSK100	27	48	60	33	21	RS 27	VBS12	CT0725	08.3503.027.AT	CTE08
HSK.100.FC032.065	HSK100	32	58	65	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
HSK.100.FC032.090	HSK100	32	58	90	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
HSK.100.FC040.073	HSK100	40	70	73	41	27	RS 40	VBS20	CT1032	08.3505.040.AT	CTE12

PER IL MONTAGGIO DELLE FRESE A DISCO OCCORRE L'ANELLO DISTANZIATORE **195..** , PAG 1021
FOR THE INSTALLATION OF THE DISC MILLING CUTTERS THE DISTANCE RING **195..** (PAGE 1021) IS REQUIRED.
ZUM EINBAU DER SCHEIBENFRÄSER WIRD DER DISTANZRING **195..** (SEITE 1021) BENÖTIGT.
EN CAS DE MONTAGE DES FRAISES-DISQUES LA BAGUE D'ENTRETOISE **195**.. , PAGE 1021 S'IMPOSE

PAG. 1100

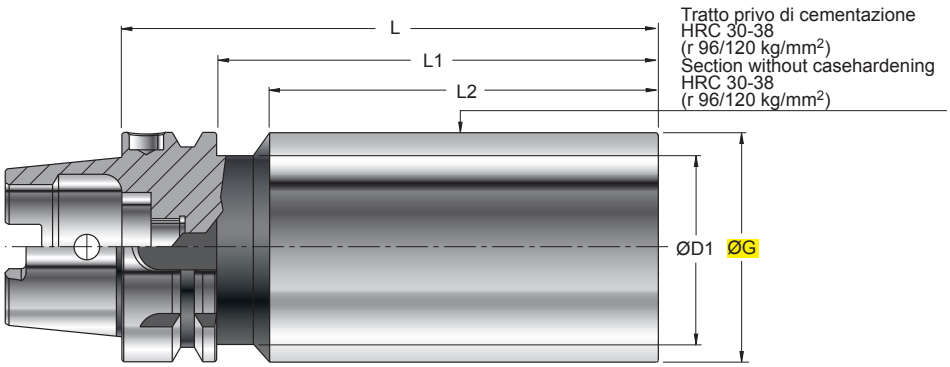
ART. HSK..MS.. DIN 69893/A



PORTA MASCHIO A CAMBIO RAPIDO PER MASCHIATURA SINCRONIZZATA
QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

ART.		(mm) ØD1	ØD2	L	L1	Campo di maschiatura Tap range
HSK.063.**MS020**.064	HSK63	43	20	64	38	M3-M12
HSK.063.**MS032**.097	HSK63	60	32	97	71	M6-M20
HSK.100.**MS020**.070	HSK100	43	20	70	41	M3-M12
HSK.100.**MS032**.091	HSK100	60	32	91	62	M6-M20
HSK.100.**MS050**.115	HSK100	87	50	115	86	M14-M33

ART. HSK..SF..
DIN 69893/A

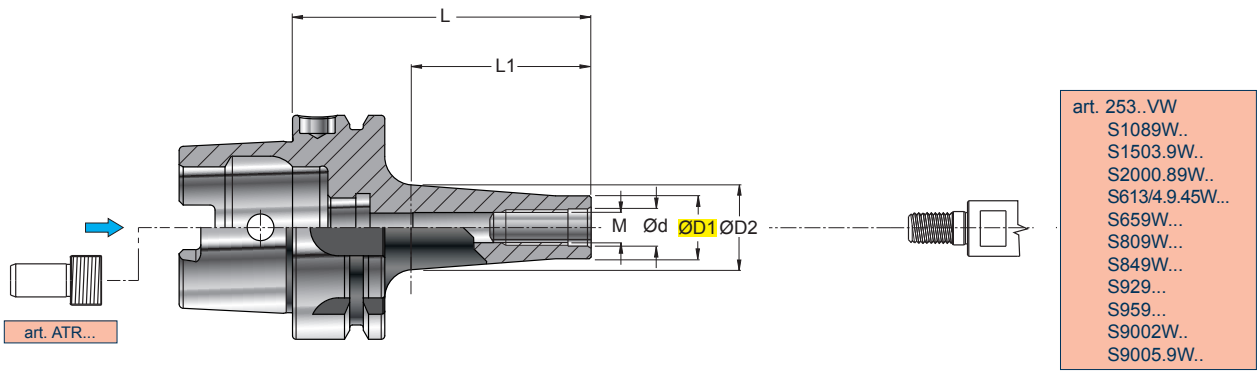


BARRA CON CONO FINITO E STELO TENERO
BORING BARS WITH FINISHED TAPER AND BLANK SHAFT
ROHLINGE
BARRE AVEC CONE FINI ET BOUT DOUX

ART.		(mm) ØG	ØD1	L	L1	L2
HSK.063.SF063.226	HSK63	63	52,5	226	200	184
HSK.063.SF063.326	HSK63	63	52,5	326	300	284
HSK.063.SF098.250	HSK63	98	52,5	250	225	209
HSK.100.SF100.279	HSK100	100	84,5	279	250	234

PAG. 1100

ART. HSK.063.MD..
DIN 69893/A



art. 253..VW
S1089W..
S1503.9W..
S2000.89W..
S613/4.9.45W...
S659W...
S809W...
S849W...
S929...
S959...
S9002W..
S9005.9W..

PORTAFRESA CON ATTACCO MODULARE-FILETTATO
CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
MANDRIN PORTE-FRAISE AVEC ATTACHEMENT MODULAIRE FILETÉ

0,005

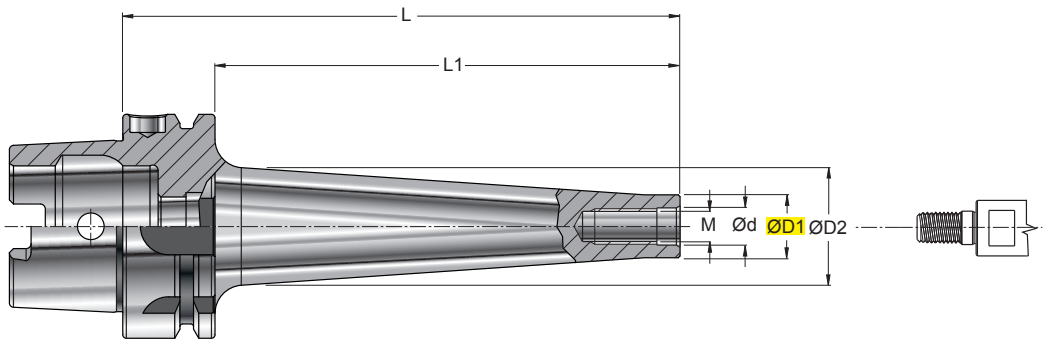
EQUILIBRATO
BALANCED
G 6,3 15000 min-1

ART.		(mm) M	Ød	ØD1	ØD2	L	L1
HSK.063.MD008.059	HSK63	8	8,5	12,7	15	59	25
HSK.063.MD008.084	HSK63	8	8,5	12,7	23	84	50
HSK.063.MD008.109	HSK63	8	8,5	12,7	23	109	75
HSK.063.MD008.134	HSK63	8	8,5	12,7	25	134	100
HSK.063.MD010.059	HSK63	10	10,5	17,7	20	59	25
HSK.063.MD010.084	HSK63	10	10,5	17,7	25	84	50
HSK.063.MD010.109	HSK63	10	10,5	17,7	28	109	75
HSK.063.MD010.134	HSK63	10	10,5	17,7	30	134	100
HSK.063.MD012.059	HSK63	12	12,5	20,7	24	59	25
HSK.063.MD012.084	HSK63	12	12,5	20,7	24	84	50
HSK.063.MD012.109	HSK63	12	12,5	20,7	31	109	75
HSK.063.MD012.134	HSK63	12	12,5	20,7	31	134	100
HSK.063.MD016.059	HSK63	16	17	28,7	34	59	25
HSK.063.MD016.084	HSK63	16	17	28,7	34	84	50
HSK.063.MD016.109	HSK63	16	17	28,7	34	109	75
HSK.063.MD016.134	HSK63	16	17	28,7	39	134	100

PAG. 1100

ART. HSK. ..MDV..
DIN 69893/A

NEW



art. 253..VW
S1089W..
S1503.9W..
S2000.89W..
S613/4.9.45W...
S659W...
S809W...
S849W...
S929...
S959...
S9002W..
S9005.9W..

PORTAFRESA ANTIVIBRANTE CON ATTACCO MODULARE-FILETTATO
VIBRATION-DAMPED CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
SCHWINGUNGSGEDÄMPFTE FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE AVEC ATTACHEMENT MODULAIRE FILETÉ

0,015

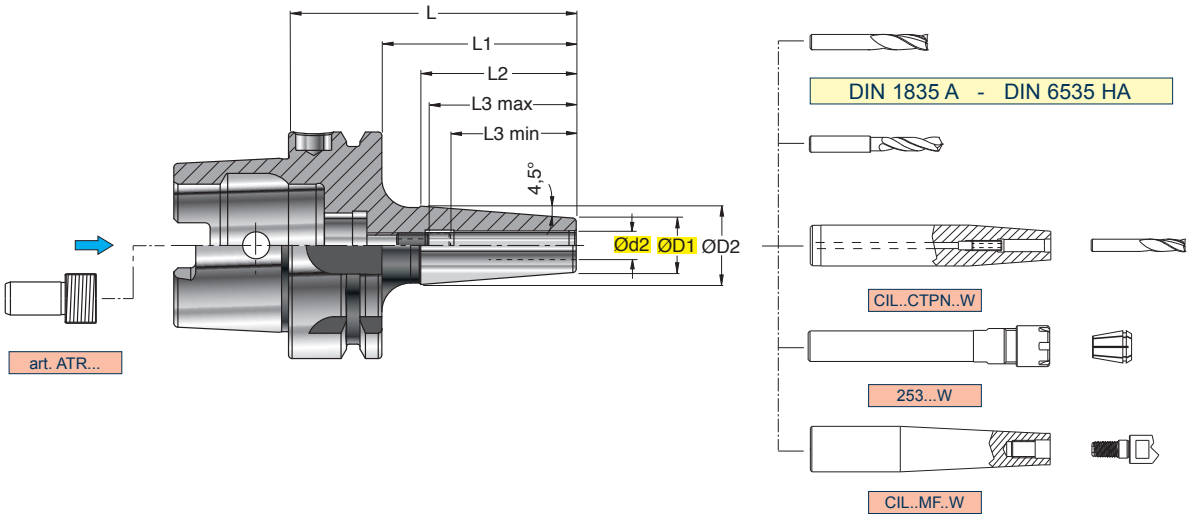
PRE-EQUILIBRATO PRE-BALANCED
HSK63 = G6,3 15000 min^{-1}
HSK100 = G6,3 10000 min^{-1}

ART.		(mm) M	Ød	ØD1	ØD2	L	L1	kg
HSK.063.MDV010.200	HSK63	10	10,5	18	38	200	174	1,30
HSK.063.MDV010.250	HSK63	10	10,5	18	38	250	224	1,50
HSK.063.MDV012.200	HSK63	12	12,5	21	38	200	174	1,30
HSK.063.MDV012.250	HSK63	12	12,5	21	38	250	224	1,50
HSK.063.MDV016.250	HSK63	16	17,0	29	46	250	224	2,10
HSK.100.MDV012.300	HSK100	12	12,5	21	50	300	271	3,60
HSK.100.MDV016.300	HSK100	16	17,0	29	56	300	271	4,40

PAG. 1100

ART. HSK..CTN.. DIN 69893/A

DIN 69882-8



MANDRINO A CALETTAMENTO TERMICO
SHRINKING-ON TAPER SHANKS
WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
MANDRIN À EMBOÎTEMENT THERMIQUE

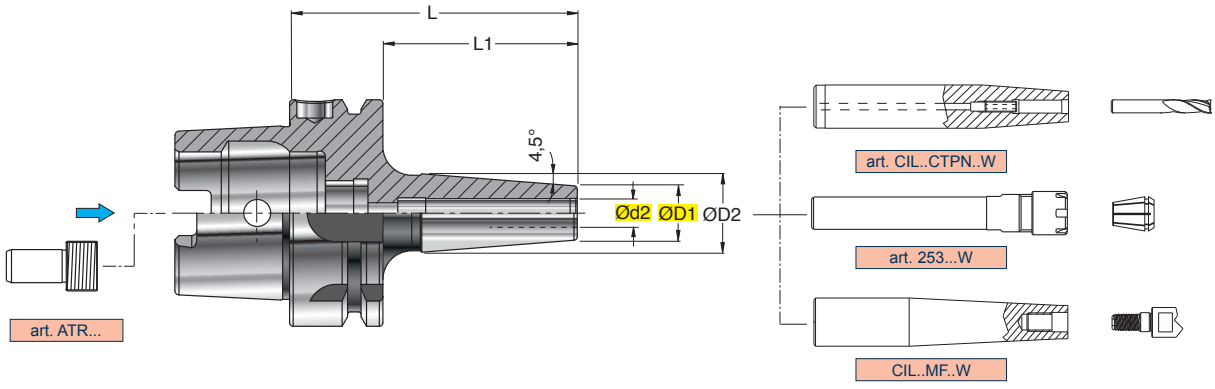
0,003

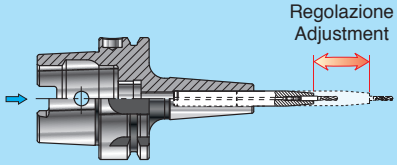
EQUILIBRATO BALANCED
G 2,5 25000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2	L3 min	L3 max		
HSK.063.CTN006.080	HSK63	6	21	27	80	54	–	26	36	GWR 05L	5025
HSK.063.CTN006.120	HSK63	6	21	27	120	94	–	26	36		
HSK.063.CTN006.160	HSK63	6	21	27	160	134	100	26	36		
HSK.063.CTN008.080	HSK63	8	21	27	80	54	–	26	36	GWR 06L	5003
HSK.063.CTN008.120	HSK63	8	21	27	120	94	–	26	36		
HSK.063.CTN008.160	HSK63	8	21	27	160	134	100	26	36		
HSK.063.CTN010.085	HSK63	10	24	32	85	59	–	34	41	GWR 08CTD	5004
HSK.063.CTN010.120	HSK63	10	24	32	120	94	–	34	41		
HSK.063.CTN010.160	HSK63	10	24	32	160	134	100	34	41		
HSK.063.CTN012.090	HSK63	12	24	32	90	64	–	36	46	GWR 10CTD	5005
HSK.063.CTN012.120	HSK63	12	24	32	120	94	–	36	46		
HSK.063.CTN012.160	HSK63	12	24	32	160	134	100	36	46		
HSK.063.CTN014.090	HSK63	14	27	34	90	64	–	36	46		
HSK.063.CTN014.120	HSK63	14	27	34	120	94	–	36	46		
HSK.063.CTN014.160	HSK63	14	27	34	160	134	100	36	46		
HSK.063.CTN016.095	HSK63	16	27	34	95	69	–	39	49	GWR 12CTD	5006
HSK.063.CTN016.120	HSK63	16	27	34	120	94	–	39	49		
HSK.063.CTN016.160	HSK63	16	27	34	160	134	100	39	49		
HSK.063.CTN018.095	HSK63	18	33	42	95	69	–	39	49		
HSK.063.CTN018.120	HSK63	18	33	42	120	94	–	39	49		
HSK.063.CTN018.160	HSK63	18	33	42	160	134	100	39	49		
HSK.063.CTN020.100	HSK63	20	33	42	100	74	–	41	51	GWR 16CTD	5008
HSK.063.CTN020.120	HSK63	20	33	42	120	94	–	41	51		
HSK.063.CTN020.160	HSK63	20	33	42	160	134	100	41	51		
HSK.063.CTN025.120	HSK63	25	44	53	120	94	–	47	57		
HSK.063.CTN025.160	HSK63	25	44	53	160	134	–	47	57		
HSK.100.CTN006.085	HSK100	6	21	27	85	56	–	26	36	GWR 05L	5025
HSK.100.CTN006.120	HSK100	6	21	27	120	91	–	26	36		
HSK.100.CTN006.160	HSK100	6	21	27	160	131	100	26	36		
HSK.100.CTN008.085	HSK100	8	21	27	85	56	–	26	36	GWR 06L	5003
HSK.100.CTN008.120	HSK100	8	21	27	120	91	–	26	36		
HSK.100.CTN008.160	HSK100	8	21	27	160	131	100	26	36		
HSK.100.CTN010.090	HSK100	10	24	32	90	61	–	31	41	GWR 08CTD	5004
HSK.100.CTN010.120	HSK100	10	24	32	120	91	–	31	41		
HSK.100.CTN010.160	HSK100	10	24	32	160	131	100	31	41		
HSK.100.CTN012.095	HSK100	12	24	32	95	66	–	36	46	GWR 10CTD	5005
HSK.100.CTN012.120	HSK100	12	24	32	120	91	–	36	46		
HSK.100.CTN012.160	HSK100	12	24	32	160	134	100	36	46		
HSK.100.CTN014.095	HSK100	14	27	34	95	66	–	36	46		
HSK.100.CTN014.120	HSK100	14	27	34	120	91	–	36	46		
HSK.100.CTN014.160	HSK100	14	27	34	160	131	100	36	46		
HSK.100.CTN016.100	HSK100	16	27	34	100	71	–	39	49	GWR 12CTD	5006
HSK.100.CTN016.120	HSK100	16	27	34	120	91	–	39	49		
HSK.100.CTN016.160	HSK100	16	27	34	160	131	100	39	49		
HSK.100.CTN018.100	HSK100	18	33	42	100	71	–	39	49		
HSK.100.CTN018.120	HSK100	18	33	42	120	91	–	39	49		
HSK.100.CTN018.160	HSK100	18	33	42	160	131	100	39	49		
HSK.100.CTN020.120	HSK100	20	33	42	120	91	–	41	51	GWR 16CTD	5008
HSK.100.CTN020.160	HSK100	20	33	42	160	131	100	41	51		
HSK.100.CTN025.120	HSK100	25	44	53	120	91	–	47	57		
HSK.100.CTN025.160	HSK100	25	44	53	160	131	100	47	57		
HSK.100.CTN032.120	HSK100	32	44	53	120	91	–	51	61		
HSK.100.CTN032.160	HSK100	32	44	53	160	131	100	51	61		

PAG. 1100-1108

ART. HSK..CTPN..
DIN 69893/A





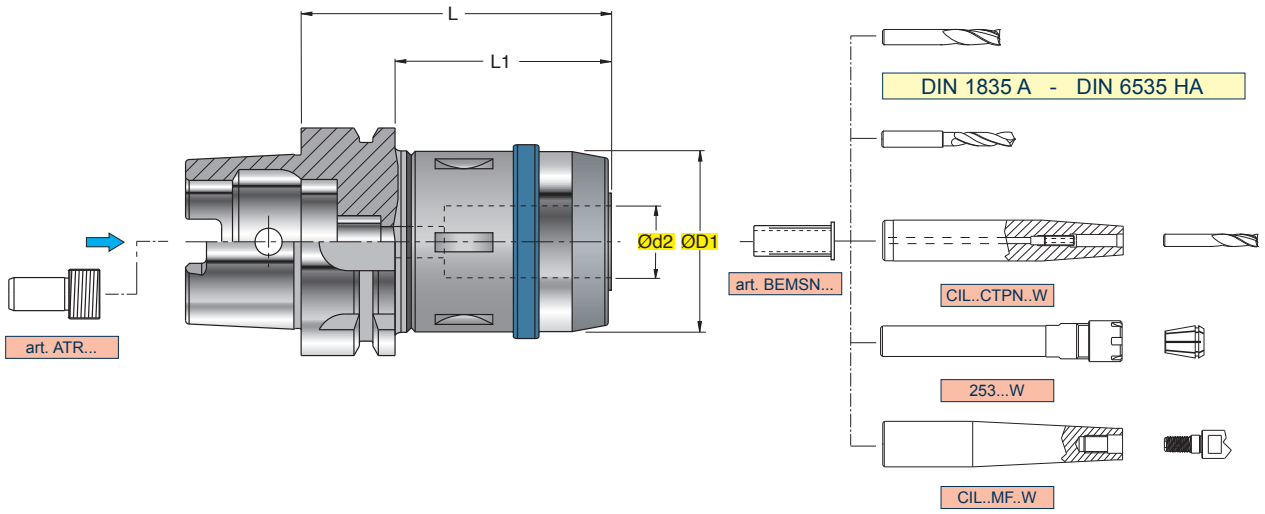
MANDRINO A CALETTAMENTO TERMICO
SHRINKING-ON TAPER SHANKS
WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
MANDRIN À EMBOÎTEMENT THERMIQUE

ART.		(mm) Ød2	ØD1	ØD2	L	L1
HSK.063.CTPN016.130	HSK63	16	27	34	130	104
HSK.063.CTPN025.130	HSK63	25	44	52	130	104
HSK.100.CTPN016.130	HSK100	16	27	34	130	101
HSK.100.CTPN025.130	HSK100	25	44	53	130	101
HSK.100.CTPN032.130	HSK100	32	44	53	130	101

PAG. 1100-1108

ART. HSK..MFSN..
DIN 69893/A

NEW



MANDRINO A FORTE SERRAGGIO
HIGH CLAMPING CHUCKS
KRAFTSPANNFUTTER
MANDRIN À FORT SERRAGE

	0,003 2,5 x Ø
	0,004 2,5 x Ø

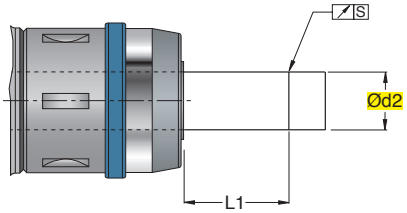
EQUILIBRATO BALANCED	
	G 2,5 20000 min-1

ART.		(mm) Ød2	ØD1	L	L1					
HSK.063.MFSN020.086	HSK63	20	50	86	60	BEMS.20..			925.052	ESMS.010
HSK.063.MFSN032.108	HSK63	32	67	108	82	BEMS.32..			925.068	ESMS.010
HSK.100.MFSN020.105	HSK100	20	50	105	76	BEMS.20..			925.052	ESMS.010
HSK.100.MFSN032.105	HSK100	32	67	105	76	BEMS.32..			925.068	ESMS.010

CARATTERISTICHE TECNICHE - TECHNICAL CHARACTERISTICS

1. Ridotte dimensioni di ingombro (lunghezza e diametro esterno) che consentono una migliore equilibratura (G 2,5 fino a 20000 rpm)
2. Aumento della rigidità del mandrino per una resa migliore in lavorazione
3. Perfetta centratura dell'utensile (0,003/0,004 mm a 2,5xØ) che determinano un incremento della durata degli inserti fino a raddoppiare la durata
4. Aumento della potenza di serraggio Max 1750 Nm
5. Adatto anche per frese con attacco cilindrico, weldon, whistle notch e punte in metallo duro
6. Passaggio del lubrificante attraverso l'utensile fino a 100 bar
7. Serraggio ottimale garantito dall'alineamento delle tacche (ghiera mandrino)

1. Reduced dimensions (length and external diameter) for a better balancing (G 2,5 till to 20000 rpm)
2. High rigidity of the chuck for a better performance
3. Perfect concentricity (0,003/0,004 mm 2,5xØ) for an increase in toollife
4. Increase of tightening force Max 1750 Nm
5. Suitable for endmills tools with cylindrical, weldon and whistle notch shank and for carbide drills
6. Coolant through the tool till 100 bar
7. Best clamping assured by alignment of notches (fixin ring nut/arbor)

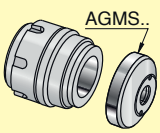


Ød2 (mm)	L1 (mm)	Concentricità "S" Concentricity "S" (mm)	Forza di serraggio Clamping force (Nm)
20	50	0,003	1000
32	80	0,004	1750

PER AVERE UNA TENUTA DEL LUBRIFICANTE FINO A 100 bar BISOGNA ACQUISTARE IL MANDRINO CON ANELLO DI TENUTA. PER ORDINARE TALE MANDRINO, BISOGNA AGGIUNGERE AL CODICE DEL MANDRINO SCELTO UNA "F" FINALE E SPECIFICARLO AL MOMENTO DELL' ORDINE. UTILIZZANDO LE PINZE DI RIDUZIONE CILINDRICHE BISOGNA SOSTITUIRE L'ANELLO DI TENUTA DEL DIAMETRO DELL'UTENSILE PRESCELTO. IL MANDRINO GARANTISCE IL PASSAGGIO DEL LUBRIFICANTE (max 100 bar), SIA CON UTENSILI CALETTATI DIRETTAMENTE SIA CON PINZE DI RIDUZIONE CILINDRICHE BEMS.. INTERPOSTE.

TO OBTAIN A COOLANT FLOW UP TO 100 bar YOU MUST PURCHASE THE CHUCK WITH SEALING RING. TO ORDER THIS CHUCK YOU MUST ADD A FINAL "F" TO THE SELECTED CHUCK CODE AND SPECIFY IT WHEN PLACING THE ORDER. FOR THE USE OF THE CYLINDRICAL REDUCTION SLEEVES THE SEALING RING MUST BE REPLACED WITH ONE OF THE SAME DIAMETER AS THE TOOL CHOSEN. THE HIGH CLAMPING CHUCK IS SUITABLE FOR A COOLANT FLOW (UP TO 100 bar) BOTH WITH DIRECTLY SHRUNK-ON TOOLS AND WITH BEMS CYLINDRICAL REDUCTION SLEEVES.

PAG 1014



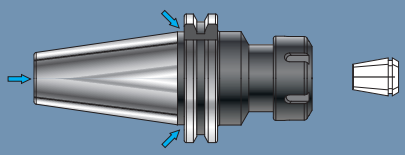
PAG. 1100

NOTE - NOTES

PORTAPINZA STANDARD
- COLLET HOLDER STANDARD
- SPANNFUTTER STANDARD
- MANDRIN PORTE-PINCE STANDARD

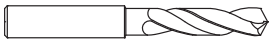
ISO.B..ER..
... /AD - B

ER-DIN 6499



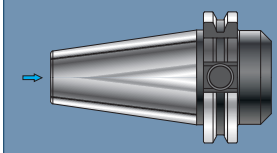
PAG 920

DIN 1835 A - DIN 6535 HA



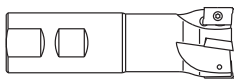
MANDRINO CORTO PER ATTACCHI TIPO WELDON
- END-MILL HOLDER FOR WELDON CONNECTION SHORT-TYPE
- AUFNAHME FÜR WELDON-TYPE,KURZE AUSFÜHRUNG
- MANDRIN POUR ATTACHEMENT WELDON,SERIE COURTE

ISO.A..WEC..
... /AD



PAG 921

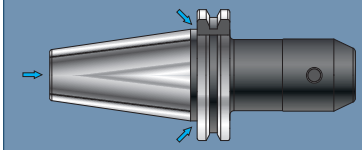
WELDON - DIN1835B - DIN6535HB



MANDRINO PER ATTACCHI TIPO WELDON
- END MILL HOLDER FOR WELDON CONNECTION
- WERKZEUGAUFNAHME FÜR WELDON-TYPE
- MANDRIN POUR ATTACHEMENT WELDON

ISO.B..WE..
... /AD - B

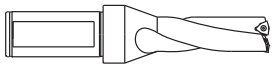
DIN 6359 B



PAG 922-923

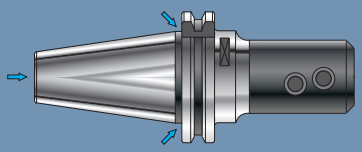
WELDON - DIN1835B - DIN6535HB

ISO 9766



PORTAPUNTA UNIVERSALE
- UNIVERSAL ADAPTER FOR DRILLING TOOLS
- WELDON-AUFNAHME FÜR VOLLBOHRER
- PORTE-FORET UNIVERSEL

ISO.B..PUH..
... /AD - B



PAG 924

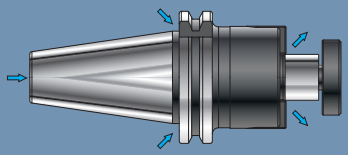
WHISTLE-NOTCH - DIN1835E - DIN6535HE

ISO 9766

PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

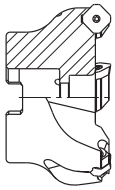
ISO.B..FSW..
... /AD - B

ISO 3937



PAG 925

ISO 6462

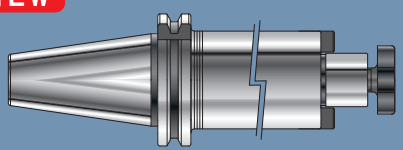


PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
- VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
- SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

ISO.A..FSV..
... /A

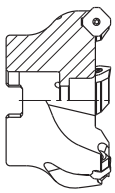
NEW

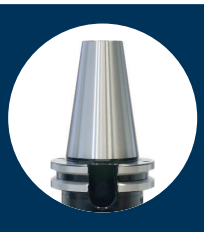
ISO 3937



PAG 926

ISO 6462



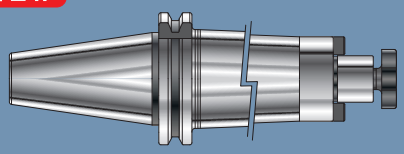


PORTAFRESA ANTIVIBRANTE
A TRASCINAMENTO FRONTALE CON TENONE
- VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
- SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

ISO.A..FSCV..
... /A

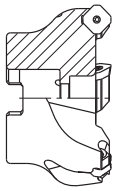
ISO 6462

NEW



PAG 927

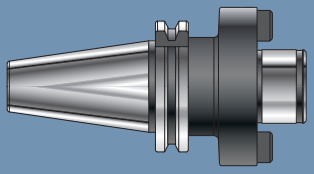
ISO 6462



PORTAFRESA A TRASCINAMENTO
FRONTALE CON TENONE
- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

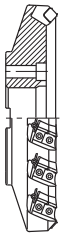
ISO.A..FF..
... /A

DIN 6357 B



PAG 928

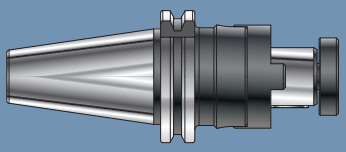
DIN 8030 C



PORTAFRESA A TRASCINAMENTO
COMBINATO PER FRESE A MANICOTTO
E A DISCO
- COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS
- FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER
- MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÈ POUR FRAISES À MANCHON ET DE DISQUE

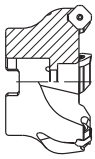
ISO.A..FC..
... /A

DIN 6358 B



PAG 929

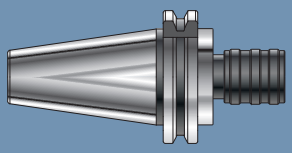
ISO 6462



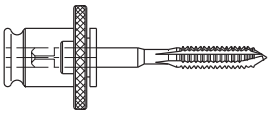
DIN 138

PORTAMASCHIO A CAMBIO RAPIDO
CON DOPPIA COMPENSAZIONE
- QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
- MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION

ISO.A..MC..
... /A

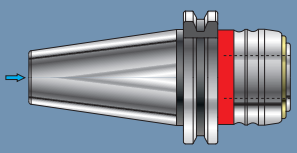


PAG 930

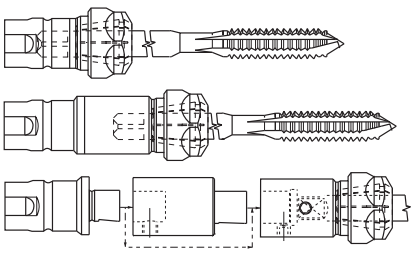


PORTAMASCHIO A CAMBIO RAPIDO
PER MASCHIATURA SINCRONIZZATA
- QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
- APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

ISO.A..MS..
... /AD

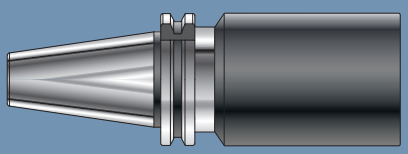


PAG 931

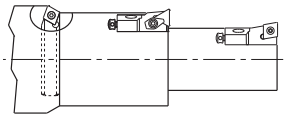


BARRA CON CONO FINITO E STELO TENERO
- BORING BARS WITH FINISHED TAPER AND BLANK SHAFT
- ROHLINGE
- BARRE AVEC CONE FINI ET BOUT DOUX

ISO.A..SF..
... /A

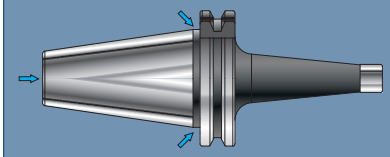


PAG 932

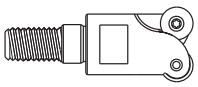


PORTAFRESA CON ATTACCO MODULARE FILETTATO
- CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
- FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
- MANDRIN PORTE-FRAISE AVEC ATTACHEMENT MODULAIRE FILETÉ

ISO.B40.MD..
... /AD - B



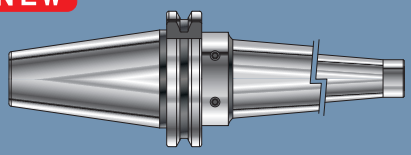
PAG 933



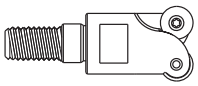
PORTAFRESA ANTIVIBRANTE CON ATTACCO MODULARE FILETTATO
- VIBRATION-DAMPED CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
- SCHWINGUNGSGEDÄMPFTE FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE AVEC ATTACHEMENT MODULAIRE FILETÉ

ISO.A..MDV..
... /A

NEW



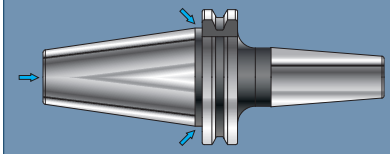
PAG 934



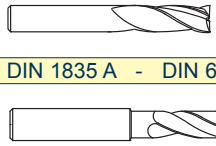
MANDRINO A CALETTAMENTO TERMICO
- SHRINKING-ON TAPER SHANKS
- WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
- MANDRIN À EMBOÎTEMENT THERMIQUE

ISO.B..CTN..
... /AD - B

DIN 69882-8



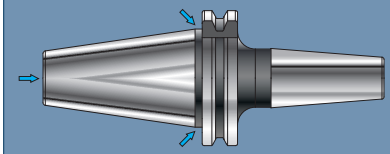
PAG 935



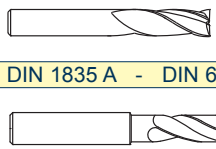
DIN 1835 A - DIN 6535 HA

MANDRINO A CALETTAMENTO TERMICO PROLUNGABILE
- EXTENSIBLE SHRINK FIT
- VERLÄNGERBARES SCHRUMPFFUTTER
- MANDRIN PROLONGEABLE À EMBOÎTEMENT THERMIQUE.

ISO.B..CTPN..
... /AD - B



PAG 936

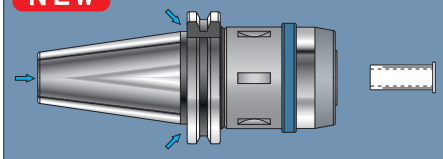


DIN 1835 A - DIN 6535 HA

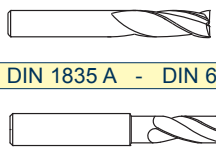
MANDRINO A FORTE SERRAGGIO
- HIGH CLAMPING CHUCKS
- KRAFTSPANNFUTTER
- MANDRIN À FORT SERRAGE

ISO.B..MFSN..
... /AD - B

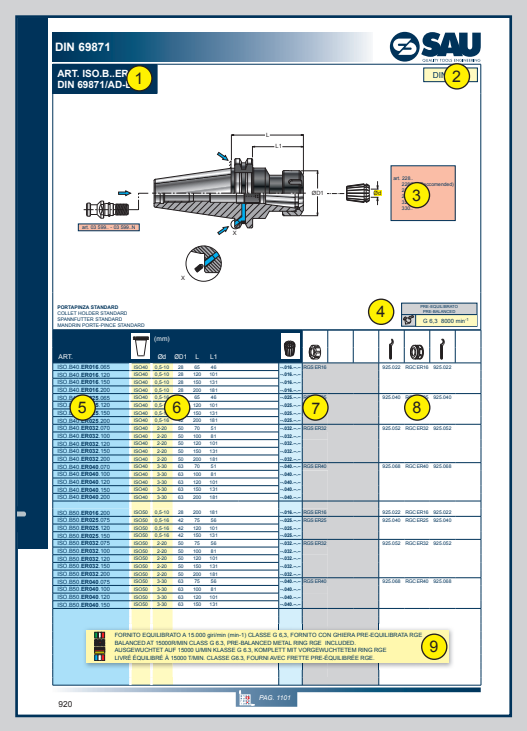
NEW



PAG 937



DIN 1835 A - DIN 6535 HA



1 = NORMA ATTACCO
2 = NORMA PARTE ANTERIORE
3 = ACCESSORI OPZIONALI A RICHIESTA
4 = CARATTERISTICHE TECNICHE
5 = ARTICOLO
6 = MISURE,DATI,INDICAZIONI
7 = ACCESSORI E RICAMBI IN DOTAZIONE
8 = ACCESSORI E RICAMBI OPZIONALI A RICHIESTA
9 = NOTE E AVVERTIMENTI

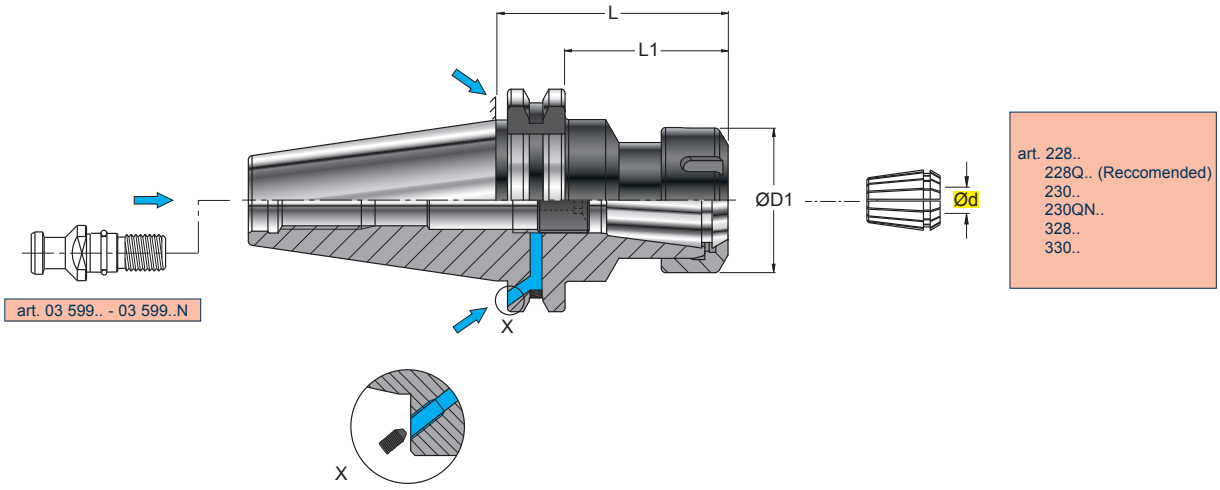
1 = SHANK STANDARD
2 = TOOL-HOLDER STANDARD
3 = OPTIONAL ACCESSORIES ON REQUEST.
4 = TECHNICAL FEATURES
5 = ITEM
6 = MEASURES,DATA,INDICATIONS
7 = ACCESORIES AND SPARE PARTS EQUIPMENT
8 = OPTIONAL ACCESORIES AND SPARE PARTS ON REQUEST
9 = NOTES AND WARNINGS

1 = KEGEL-NORM
2 = AUFNAHME-NORM
3 = OPTIONALZUBEHÖR AUF ANFRAGE
4 = TECHNISCHE HAUPTMERKMALE
5 = ARTKEL
6 = ABMESSUNGEN,DATEN,HINWEISE
7 = ZUBEHÖR UND ERSATZTEILAUSSTATTUNG
8 = OPTIONALZUBEHÖR UND -ERSATZTEILE AUF ANFRAGE
9 = ANMERKUNGEN UND HINWEISE

1 = NORMES POUR ATTACHEMENT
2 = NORME POUR MANDRIN
3 = ACCESSOIRES OPTIONNELS SUR DEMANDE
4 = CARACTERISTIQUES TECHNIQUES
5 = ARTICLE
6 = DIMENSIONES,DONNÉES,INDICATIONS
7 = ACCESSOIRES ET RECHANGE EN DOTATION
8 = ACCESOIRES ET RECHANGES OPTIONNELS SUR DEMANDE
9 = NOTES ET AVVERTISSEMENTS

ART. ISO.B..ER..
DIN 69871/AD-B

DIN 6499



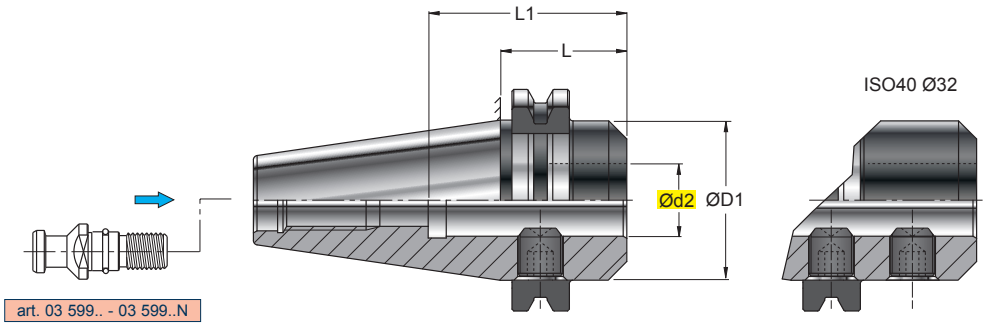
PORTAPINZA STANDARD
COLLET HOLDER STANDARD
SPANNFUTTER STANDARD
MANDRIN PORTE-PINCE STANDARD

PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) Ød	ØD1	L	L1						
ISO.B40.**ER016**.065	ISO40	0,5-10	28	65	46	--.016.--.--	RGS ER16		925.022	RGC ER16	925.022
ISO.B40.**ER016**.120	ISO40	0,5-10	28	120	101	--.016.--.--					
ISO.B40.**ER016**.150	ISO40	0,5-10	28	150	131	--.016.--.--					
ISO.B40.**ER016**.200	ISO40	0,5-10	28	200	181	--.016.--.--					
ISO.B40.**ER025**.065	ISO40	0,5-16	42	65	46	--.025.--.--	RGS ER25		925.040	RGC ER25	925.040
ISO.B40.**ER025**.120	ISO40	0,5-16	42	120	101	--.025.--.--					
ISO.B40.**ER025**.150	ISO40	0,5-16	42	150	131	--.025.--.--					
ISO.B40.**ER025**.200	ISO40	0,5-16	42	200	181	--.025.--.--					
ISO.B40.**ER032**.070	ISO40	2-20	50	70	51	--.032.--.--	RGS ER32		925.052	RGC ER32	925.052
ISO.B40.**ER032**.100	ISO40	2-20	50	100	81	--.032.--.--					
ISO.B40.**ER032**.120	ISO40	2-20	50	120	101	--.032.--.--					
ISO.B40.**ER032**.150	ISO40	2-20	50	150	131	--.032.--.--					
ISO.B40.**ER032**.200	ISO40	2-20	50	200	181	--.032.--.--					
ISO.B40.**ER040**.070	ISO40	3-30	63	70	51	--.040.--.--	RGS ER40		925.068	RGC ER40	925.068
ISO.B40.**ER040**.100	ISO40	3-30	63	100	81	--.040.--.--					
ISO.B40.**ER040**.120	ISO40	3-30	63	120	101	--.040.--.--					
ISO.B40.**ER040**.150	ISO40	3-30	63	150	131	--.040.--.--					
ISO.B40.**ER040**.200	ISO40	3-30	63	200	181	--.040.--.--					
ISO.B50.**ER016**.200	ISO50	0,5-10	28	200	181	--.016.--.--	RGS ER16		925.022	RGC ER16	925.022
ISO.B50.**ER025**.075	ISO50	0,5-16	42	75	56	--.025.--.--	RGS ER25		925.040	RGC ER25	925.040
ISO.B50.**ER025**.120	ISO50	0,5-16	42	120	101	--.025.--.--					
ISO.B50.**ER025**.150	ISO50	0,5-16	42	150	131	--.025.--.--					
ISO.B50.**ER032**.075	ISO50	2-20	50	75	56	--.032.--.--	RGS ER32		925.052	RGC ER32	925.052
ISO.B50.**ER032**.100	ISO50	2-20	50	100	81	--.032.--.--					
ISO.B50.**ER032**.120	ISO50	2-20	50	120	101	--.032.--.--					
ISO.B50.**ER032**.150	ISO50	2-20	50	150	131	--.032.--.--					
ISO.B50.**ER032**.200	ISO50	2-20	50	200	181	--.032.--.--					
ISO.B50.**ER040**.075	ISO50	3-30	63	75	56	--.040.--.--	RGS ER40		925.068	RGC ER40	925.068
ISO.B50.**ER040**.100	ISO50	3-30	63	100	81	--.040.--.--					
ISO.B50.**ER040**.120	ISO50	3-30	63	120	101	--.040.--.--					
ISO.B50.**ER040**.150	ISO50	3-30	63	150	131	--.040.--.--					

PAG. 1101

ART. ISO.A..WEC..
DIN 69871/AD



MANDRINO CORTO PER ATTACCHI TIPO WELDON
END-MILL HOLDER FOR WELDON CONNECTION-SHORT TYPE
AUFNAHME FÜR WELDON-TYPE, KURZE AUSFÜHRUNG
MANDRIN POUR ATTACHEMENT WELDON, SERIE COURTE

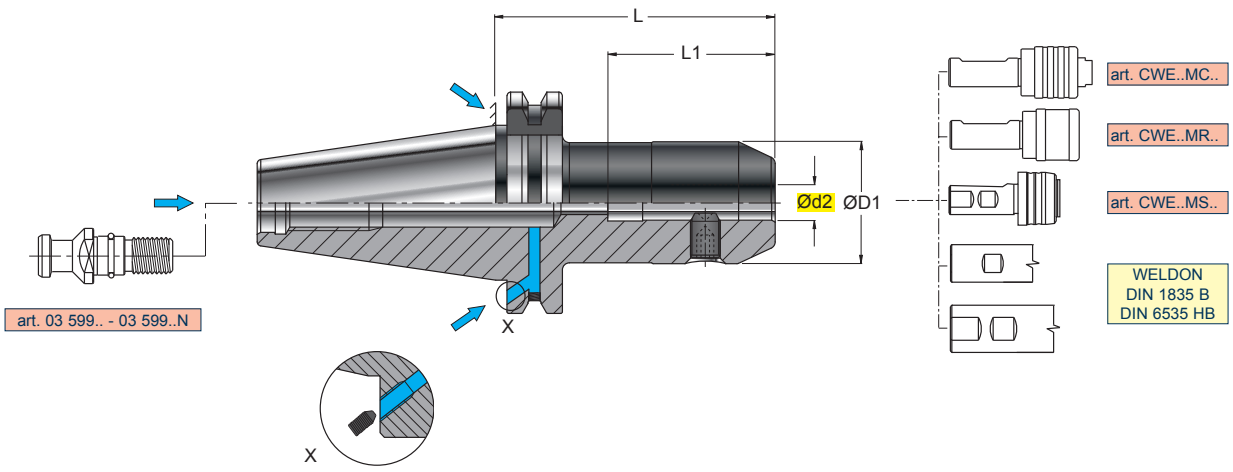
Ød2 H5 | 0,005 | PRE-EQUILIBRATO / PRE-BALANCED: G 6,3 8000 min-1

ART.	(mm) Ød2	ØD1	L	L1						
ISO.A40.WEC016.035	ISO40	16	44	35	45	GR1415	–	5006	–	
ISO.A40.WEC020.035	ISO40	20	44	35	45					
ISO.A40.WEC025.035	ISO40	25	44	35	55					
ISO.A40.WEC032.070	ISO40	32	65	70	60	GR1610	GR2015	5008	5010	
ISO.A50.WEC016.035	ISO50	16	70	35	45	GR1415	–	5006	–	
ISO.A50.WEC020.035	ISO50	20	70	35	45	GR1615	–	5008	–	
ISO.A50.WEC025.035	ISO50	25	70	35	55	GR1815	–	5008	–	
ISO.A50.WEC032.035	ISO50	32	70	35	60	GR2015	–	5010	–	
ISO.A50.WEC040.052	ISO50	40	74	52	75	GR2016	–	5010	–	

PAG. 1101

ART. ISO.B40.WE..
DIN 69871/AD-B

DIN 6359 B



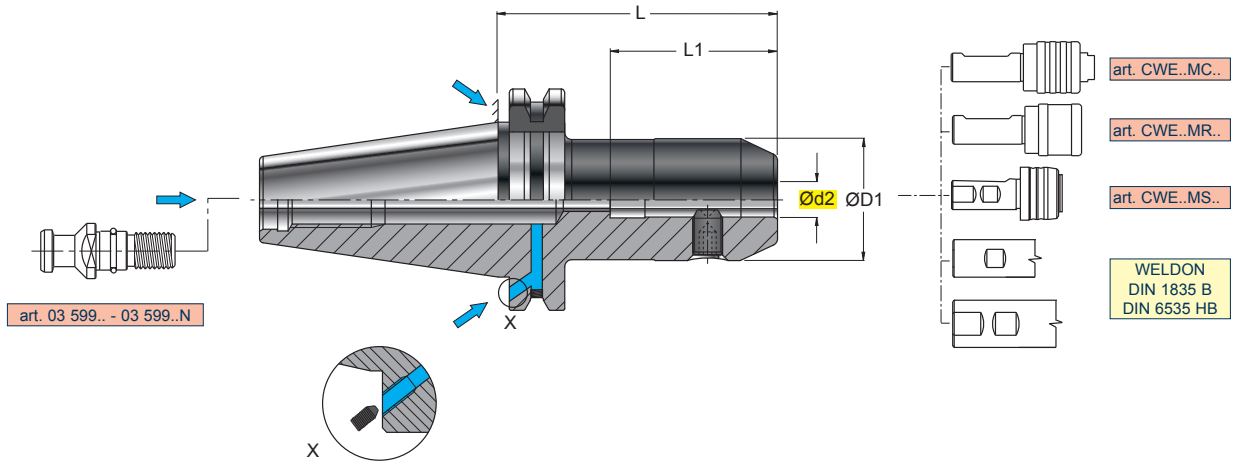
MANDRINO PER ATTACCHI TIPO WELDON
END MILL HOLDER FOR WELDON CONNECTION
WERKZEUGAUFNAHME FÜR WELDON-TYPE
MANDRIN POUR ATTACHEMENT WELDON

Ød2 H5 | 0,005 | PRE-EQUILIBRATO PRE-BALANCED: G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	L	L1		
ISO.B40.WE006.050	ISO40	6	25	50	35	GR06	5003
ISO.B40.WE006.100	ISO40	6	25	100	35		
ISO.B40.WE006.150	ISO40	6	25	150	35		
ISO.B40.WE008.050	ISO40	8	28	50	35	GR08	5004
ISO.B40.WE008.100	ISO40	8	28	100	35		
ISO.B40.WE008.150	ISO40	8	28	150	35		
ISO.B40.WE010.050	ISO40	10	35	50	39	GR10	5005
ISO.B40.WE010.100	ISO40	10	35	100	39		
ISO.B40.WE010.150	ISO40	10	35	150	39		
ISO.B40.WE012.050	ISO40	12	42	50	44	GR1215	5006
ISO.B40.WE012.100	ISO40	12	42	100	44		
ISO.B40.WE012.150	ISO40	12	42	150	44		
ISO.B40.WE014.063	ISO40	14	44	63	44	GR1215	5006
ISO.B40.WE014.100	ISO40	14	44	100	44		
ISO.B40.WE014.150	ISO40	14	44	150	44		
ISO.B40.WE016.063	ISO40	16	48	63	47	GR1415	5006
ISO.B40.WE016.100	ISO40	16	48	100	47		
ISO.B40.WE016.150	ISO40	16	48	150	47		
ISO.B40.WE018.063	ISO40	18	50	63	47		
ISO.B40.WE018.100	ISO40	18	50	100	47		
ISO.B40.WE018.150	ISO40	18	50	150	47		
ISO.B40.WE020.063	ISO40	20	52	63	49	GR1615	5008
ISO.B40.WE020.100	ISO40	20	52	100	49		
ISO.B40.WE020.150	ISO40	20	52	150	49		
ISO.B40.WE025.085	ISO40	25	65	85	54	GR1815	5008
ISO.B40.WE025.150	ISO40	25	65	150	54		
ISO.B40.WE032.085	ISO40	32	72	85	58	GR2015	5010
ISO.B40.WE032.150	ISO40	32	72	150	58		
ISO.B40.WE040.115	ISO40	40	80	115	68		

ART. ISO.B50.WE..
DIN 69871/AD-B

DIN 6359 B

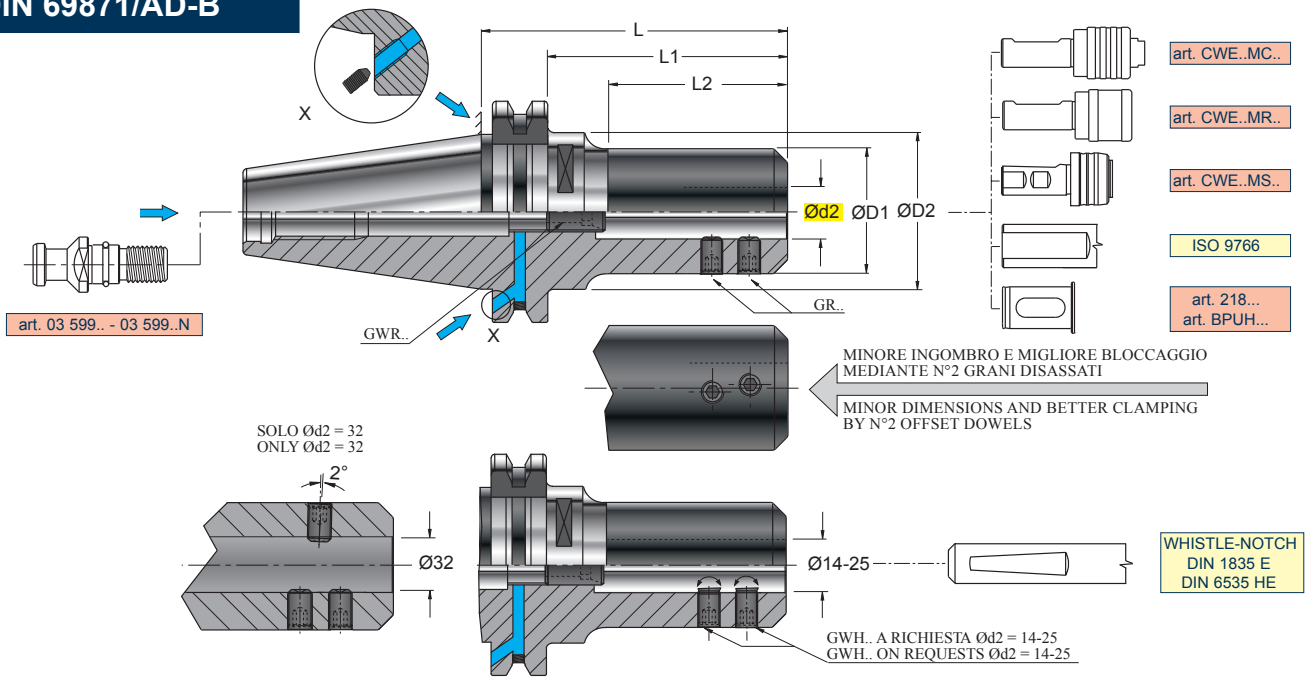


MANDRINO PER ATTACCHI TIPO WELDON
END MILL HOLDER FOR WELDON CONNECTION
WERKZEUGAUFNAHME FÜR WELDON-TYPE
MANDRIN POUR ATTACHEMENT WELDON

Ød2 H5 | 0,005 | PRE-EQUILIBRATO / PRE-BALANCED: G 6,3 8000 min-1

ART.	(mm) ISO50	Ød2	ØD1	L	L1		
ISO.B50.WE006.063	ISO50	6	25	63	35	GR06	5003
ISO.B50.WE006.100	ISO50	6	25	100	35		
ISO.B50.WE006.150	ISO50	6	25	150	35		
ISO.B50.WE008.063	ISO50	8	28	63	35	GR08	5004
ISO.B50.WE008.100	ISO50	8	28	100	35		
ISO.B50.WE008.150	ISO50	8	28	150	35		
ISO.B50.WE010.063	ISO50	10	35	63	39	GR10	5005
ISO.B50.WE010.100	ISO50	10	35	100	39		
ISO.B50.WE010.150	ISO50	10	35	150	39		
ISO.B50.WE012.063	ISO50	12	42	63	44	GR1215	5006
ISO.B50.WE012.100	ISO50	12	42	100	44		
ISO.B50.WE012.150	ISO50	12	42	150	44		
ISO.B50.WE014.063	ISO50	14	44	63	44	GR1215	5006
ISO.B50.WE014.100	ISO50	14	44	100	44		
ISO.B50.WE014.150	ISO50	14	44	150	44		
ISO.B50.WE016.063	ISO50	16	48	63	47	GR1415	5006
ISO.B50.WE016.100	ISO50	16	48	100	47		
ISO.B50.WE016.150	ISO50	16	48	150	47		
ISO.B50.WE018.063	ISO50	18	50	63	47		
ISO.B50.WE018.100	ISO50	18	50	100	47		
ISO.B50.WE018.150	ISO50	18	50	150	47		
ISO.B50.WE020.063	ISO50	20	52	63	49	GR1615	5008
ISO.B50.WE020.100	ISO50	20	52	100	49		
ISO.B50.WE020.150	ISO50	20	52	150	49		
ISO.B50.WE025.080 New	ISO50	25	65	80	54	GR1815	5010
ISO.B50.WE025.100	ISO50	25	65	100	54		
ISO.B50.WE025.150	ISO50	25	65	150	54		
ISO.B50.WE032.100 New	ISO50	32	72	100	58	GR2015	5010
ISO.B50.WE032.150	ISO50	32	72	150	58		
ISO.B50.WE040.100	ISO50	40	80	100	68		
ISO.B50.WE040.150	ISO50	40	80	150	68		
ISO.B50.WE050.105	ISO50	50	90	105	78	GR2420	5017

ART. ISO.B..PUH..
DIN 69871/AD-B



PORTAPUNTA UNIVERSALE
UNIVERSAL ADAPTER FOR DRILLING TOOLS
WELDON-AUFNAHME FÜR VOLLBOHRER
PORTE-FORET UNIVERSEL

Ød2 H5

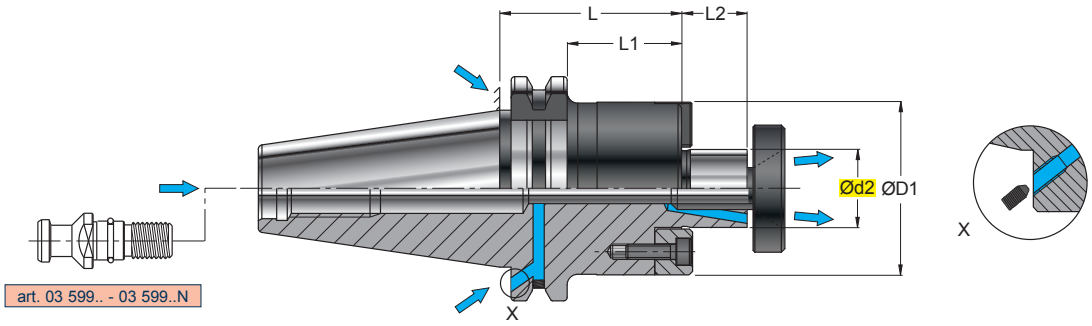
0,003 L ≤ 140
0,005 L ≤ 200

PRE-EQUILIBRATO PRE-BALANCED
SK40 = G6,3 8000 min^{-1}
SK50 = G6,3 6000 min^{-1}

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2						
ISO.B40.PUH016.100	ISO40	16	38	44,7	100	81	–	n°2 GR10	GWR12	5005	5006	GWH10	5005
ISO.B40.PUH020.100	ISO40	20	42	44,7	100	81	–	n°2 GR10	GWR16	5005	5008	GWH10	5005
ISO.B40.PUH025.100	ISO40	25	48	50	100	81	–	n°2 GR10	GWR20	5005	5010	GWH10	5005
ISO.B40.PUH032.080	ISO40	32	58	50	80	61	–	n°3 GR14	–	5006	–	–	–
ISO.B40.PUH040.085	ISO40	40	68	50	85	66	–	n°2 GR14	–	5006	–	–	–
ISO.B50.PUH014.140	ISO50	14	36	70	140	121	80	n°2 GR10	GWR12	5005	5006	GWH10	5005
ISO.B50.PUH014.200	ISO50	14	36	70	200	181	130						
ISO.B50.PUH016.140	ISO50	16	38	70	140	121	80						
ISO.B50.PUH016.200	ISO50	16	38	70	200	181	130						
ISO.B50.PUH018.140	ISO50	18	40	70	140	121	80	n°2 GR10	GWR16	5005	5008	GWH10	5005
ISO.B50.PUH018.200	ISO50	18	40	70	200	181	130						
ISO.B50.PUH020.140	ISO50	20	42	70	140	121	80						
ISO.B50.PUH025.140	ISO50	25	48	70	140	121	90	n°2 GR10	GWR20	5005	5010	GWH10	5005
ISO.B50.PUH032.080	ISO50	32	58	70	80	61	40	n°3 GR14	–	5006	–	–	–
ISO.B50.PUH032.140	ISO50	32	58	70	140	121	95						
ISO.B50.PUH040.090	ISO50	40	68	80	90	71	–	n°2 GR16	–	5008	–	–	–
ISO.B50.PUH040.140	ISO50	40	68	80	140	121	–						
ISO.B50.PUH050.090	ISO50	50	76	80	90	71	–						

ART. ISO.B..FSW..
DIN 69871/AD-B

ISO 3937



PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
SHELL END-MILL HOLDERS WITH TENON
FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

PRE-EQUILIBRATO PRE-BALANCED
SK40 = G6,3 8000 min^{-1}
SK50 = G6,3 6000 min^{-1}

ART.		(mm) Ød2	ØD1	L	L1	L2							
ISO.B40.FSW016.050	ISO40	16	40	50	31	17	RS 16	VBS08	TSFS16	VB02		CTE05	5015
ISO.B40.FSW016.090	ISO40	16	40	90	71	17							
ISO.B40.FSW022.035	ISO40	22	50	35	16	19	RS 22	VBS10	TSFS22	VB04		CTE06	5003
ISO.B40.FSW022.050	ISO40	22	49	50	31	19							
ISO.B40.FSW022.100 New	ISO40	22	49	100	71	19							
ISO.B40.FSW027.060	ISO40	27	60	60	41	21	RS 27	VBS12	TSFS27	VB05		CTE08	5005
ISO.B40.FSW027.090	ISO40	27	60	90	71	21							
ISO.B40.FSW032.060	ISO40	32	65	60	41	24	RS 32	VBS16	TSFS32	VB05		CTE10	5004
ISO.B40.FSW032.090	ISO40	32	65	90	71	24							
ISO.B40.FSW040.060	ISO40	40	75	60	41	27	RS 40	VBS20	TSFS40	VB06		CTE12	5005
ISO.B40.FSW040.090	ISO40	40	75	90	71	27							
ISO.B50.FSW016.063	ISO50	16	40	63	44	17	RS16	VBS08	TSFS16	VB02		CTE05	5015
ISO.B50.FSW016.100	ISO50	16	40	100	81	17							
ISO.B50.FSW022.035	ISO50	22	50	35	16	19	RS 22	VBS10	TSFS22	VB04		CTE06	5003
ISO.B50.FSW022.063	ISO50	22	49	63	44	19							
ISO.B50.FSW022.100	ISO50	22	50	100	81	19							
ISO.B50.FSW022.169	ISO50	22	49	169	150	19							
ISO.B50.FSW022.219	ISO50	22	49	219	200	19							
ISO.B50.FSW027.035	ISO50	27	60	35	16	21	RS 27	VBS12	TSFS27	VB05		CTE08	5005
ISO.B50.FSW027.063	ISO50	27	60	63	44	21							
ISO.B50.FSW027.100	ISO50	27	60	100	81	21							
ISO.B50.FSW027.169	ISO50	27	60	169	150	21							
ISO.B50.FSW027.219	ISO50	27	60	219	200	21							
ISO.B50.FSW032.035	ISO50	32	75	35	16	24	RS 32	VBS16	TSFS32	VB05		CTE10	5004
ISO.B50.FSW032.063	ISO50	32	75	63	44	24							
ISO.B50.FSW032.100	ISO50	32	75	100	81	24							
ISO.B50.FSW040.063	ISO50	40	85	63	44	27	RS 40	VBS20	TSFS40	VB06		CTE12	5005
ISO.B50.FSW040.100	ISO50	40	85	100	81	27							

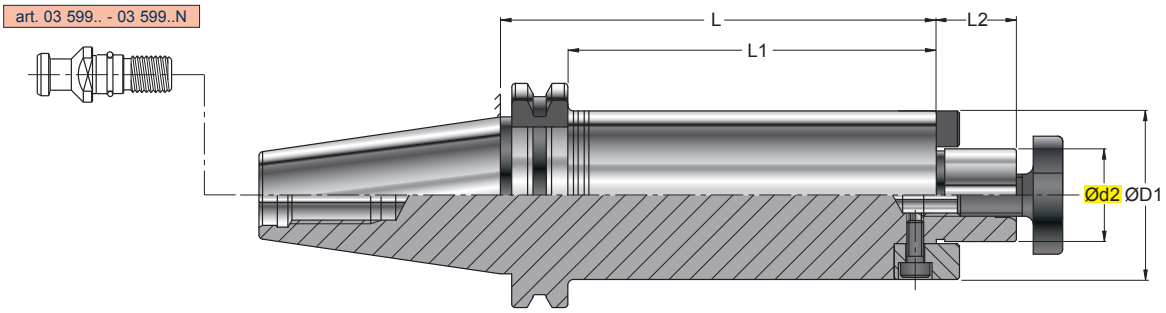
PAG. 1101

SAU QUALITY TOOLS ENGINEERING

ART. ISO.A.. FSV..
DIN 69871/A

ISO 3937

NEW



PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

0,015

PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min^{-1}

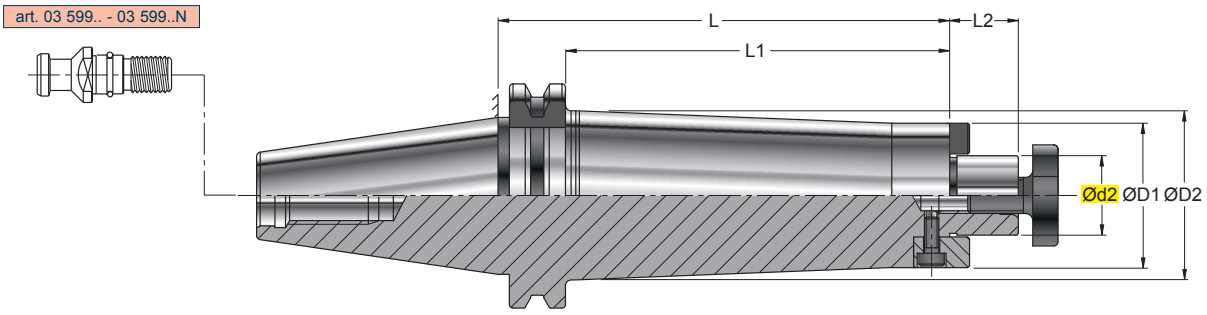
ART.		(mm) Ød2	ØD1	L	L1	L2	kg						
ISO.A40.FSV016.150	ISO40	16	38	150	131	17	2,10	CHF16V	VB 02	422.016..		5025	423.016..
ISO.A40.FSV016.200	ISO40	16	38	200	181	17	2,50						
ISO.A40.FSV016.250	ISO40	16	38	250	231	17	3,10						
ISO.A40.FSV016.300	ISO40	16	38	300	281	17	3,90						
ISO.A40.FSV022.150	ISO40	22	48	150	131	19	2,50	CHF22V	VB 04	422.022..		5003	423.022..
ISO.A40.FSV022.200	ISO40	22	48	200	181	19	3,10						
ISO.A40.FSV022.250	ISO40	22	48	250	231	19	3,90						
ISO.A40.FSV022.300	ISO40	22	48	300	281	19	4,50						
ISO.A40.FSV027.150	ISO40	27	54	150	131	21	2,60	CHF27V	905.005.080.012	422.027..		5004	423.027..
ISO.A40.FSV027.200	ISO40	27	54	200	181	21	3,30						
ISO.A40.FSV027.250	ISO40	27	54	250	231	21	4,10						
ISO.A40.FSV027.300	ISO40	27	54	300	281	21	4,70						
ISO.A50.FSV016.150	ISO50	16	38	150	131	17	5,20	CHF16V	VB 02	422.016..		5025	423.016..
ISO.A50.FSV016.200	ISO50	16	38	200	181	17	5,80						
ISO.A50.FSV016.250	ISO50	16	38	250	231	17	6,50						
ISO.A50.FSV016.300	ISO50	16	38	300	281	17	7,30						
ISO.A50.FSV016.400	ISO50	16	38	400	381	17	11,00						
ISO.A50.FSV022.200	ISO50	22	48	200	181	19	5,50	CHF22V	VB 04	422.022..		5003	423.022..
ISO.A50.FSV022.250	ISO50	22	48	250	231	19	6,10						
ISO.A50.FSV022.300	ISO50	22	48	300	281	19	6,80						
ISO.A50.FSV022.350	ISO50	22	48	350	331	19	7,10						
ISO.A50.FSV022.400	ISO50	22	48	400	381	19	7,50						
ISO.A50.FSV022.500	ISO50	22	48	500	481	19	11,30						
ISO.A50.FSV022.200B	ISO50	22	60	200	181	19	5,80						
ISO.A50.FSV022.250B	ISO50	22	60	250	231	19	6,40						
ISO.A50.FSV022.300B	ISO50	22	60	300	281	19	7,10						
ISO.A50.FSV022.350B	ISO50	22	60	350	331	19	7,40						
ISO.A50.FSV022.400B	ISO50	22	60	400	381	19	7,80						
ISO.A50.FSV022.500B	ISO50	22	60	500	481	19	11,50						
ISO.A50.FSV027.200	ISO50	27	60	200	181	21	6,10	CHF27V	905.005.080.012	422.027..		5004	423.027..
ISO.A50.FSV027.250	ISO50	27	60	250	231	21	7,10						
ISO.A50.FSV027.300	ISO50	27	60	300	281	21	8,10						
ISO.A50.FSV027.400	ISO50	27	60	400	381	21	11,10						
ISO.A50.FSV027.500	ISO50	27	60	500	481	21	12,50						
ISO.A50.FSV032.200	ISO50	32	76	200	181	24	6,30	CHF32V	905.005.080.012	422.032..		5004	423.032..
ISO.A50.FSV032.250	ISO50	32	76	250	231	24	7,40						
ISO.A50.FSV032.300	ISO50	32	76	300	281	24	8,50						
ISO.A50.FSV032.350	ISO50	32	76	350	331	24	10,00						
ISO.A50.FSV032.400	ISO50	32	76	400	381	24	11,50						
ISO.A50.FSV032.500	ISO50	32	76	500	481	24	12,90						

PAG. 1101

ART. ISO.A.. FSCV..
DIN 69871/A

ISO 3937

NEW



PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

0,015

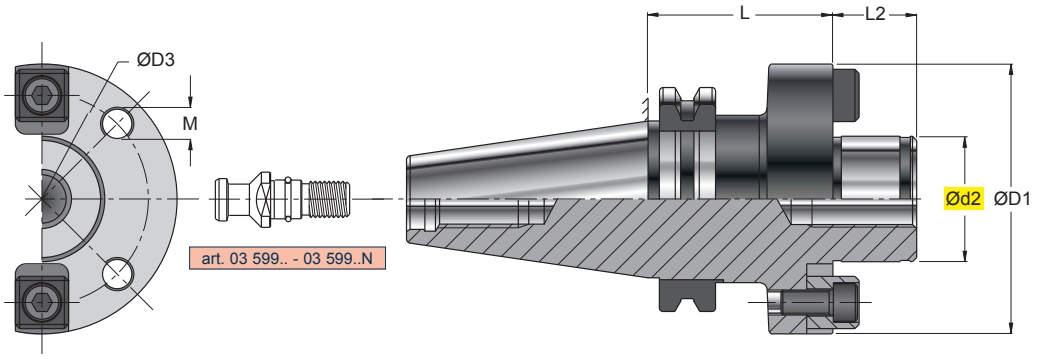
PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2	kg					
ISO.A40.FSCV016.150	ISO40	16	38	50	150	131	17	2,30	CHF16V	VB 02	422.016..	5025	423.016..
ISO.A40.FSCV016.200	ISO40	16	38	50	200	181	17	2,80					
ISO.A40.FSCV016.250	ISO40	16	38	50	250	231	17	3,30					
ISO.A40.FSCV016.300	ISO40	16	38	50	300	281	17	4,10					
ISO.A40.FSCV022.150	ISO40	22	44	50	150	131	19	2,70	CHF22V	VB 04	422.022..	5003	423.022..
ISO.A40.FSCV022.200	ISO40	22	44	50	200	181	19	3,40					
ISO.A40.FSCV022.250	ISO40	22	44	50	250	231	19	4,10					
ISO.A40.FSCV022.300	ISO40	22	44	50	300	281	19	4,80					
ISO.A50.FSCV016.150	ISO50	16	38	80	150	131	17	5,40	CHF16V	VB 02	422.016..	5025	423.016..
ISO.A50.FSCV016.200	ISO50	16	38	80	200	181	17	6,10					
ISO.A50.FSCV016.250	ISO50	16	38	80	250	231	17	6,80					
ISO.A50.FSCV016.300	ISO50	16	38	80	300	281	17	7,60					
ISO.A50.FSCV016.400	ISO50	16	38	80	400	381	17	11,30					
ISO.A50.FSCV022.200	ISO50	22	48	80	200	181	19	6,30	CHF22V	VB 04	422.022..	5003	423.022..
ISO.A50.FSCV022.250	ISO50	22	48	80	250	231	19	7,40					
ISO.A50.FSCV022.300	ISO50	22	48	80	300	281	19	8,00					
ISO.A50.FSCV022.400	ISO50	22	48	80	400	381	19	9,80					
ISO.A50.FSCV022.500	ISO50	22	48	80	500	481	19	12,30					
ISO.A50.FSCV027.200	ISO50	27	60	80	200	181	21	7,30	CHF27V	905.005.080.012	422.027..	5004	423.027..
ISO.A50.FSCV027.250	ISO50	27	60	80	250	231	21	8,30					
ISO.A50.FSCV027.300	ISO50	27	60	80	300	281	21	9,30					
ISO.A50.FSCV027.400	ISO50	27	60	80	400	381	21	11,50					
ISO.A50.FSCV027.500	ISO50	27	60	80	500	481	21	14,40					

PAG. 1101

ART. ISO.A..FF..
DIN 69871/A

DIN 6357 B



PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
SHELL END-MILL HOLDERS WITH TENON
FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

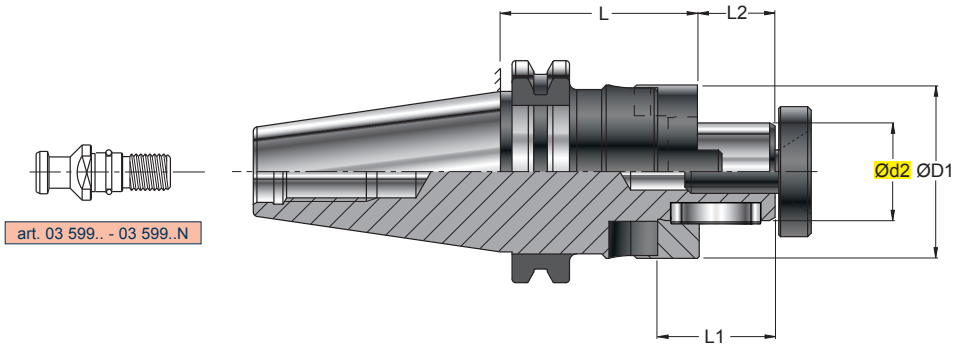
0,01

ART.		(mm) Ød2	M	ØD1	ØD3	L	L2						
ISO.A50.FF040.070 New	ISO50	40	M12	89	66,7	70	25	TSFF40	VB06	5005	RS 40	VBS20	CTE12
ISO.A50.FF060.070 New	ISO50	60	M16	129	101,6	70	40	TSFF60	VB12C	5010	RS 60	VBS24	CTE14

PAG. 1101

ART. ISO.A..FC..
DIN 69871/A

DIN 6358 B



PORTAFRESA A TRASCINAMENTO COMBINATO PER FRESE A MANICOTTO E A DISCO
COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS
FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER
MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÉ POUR FRAISES À MANCHON ET DE DISQUE

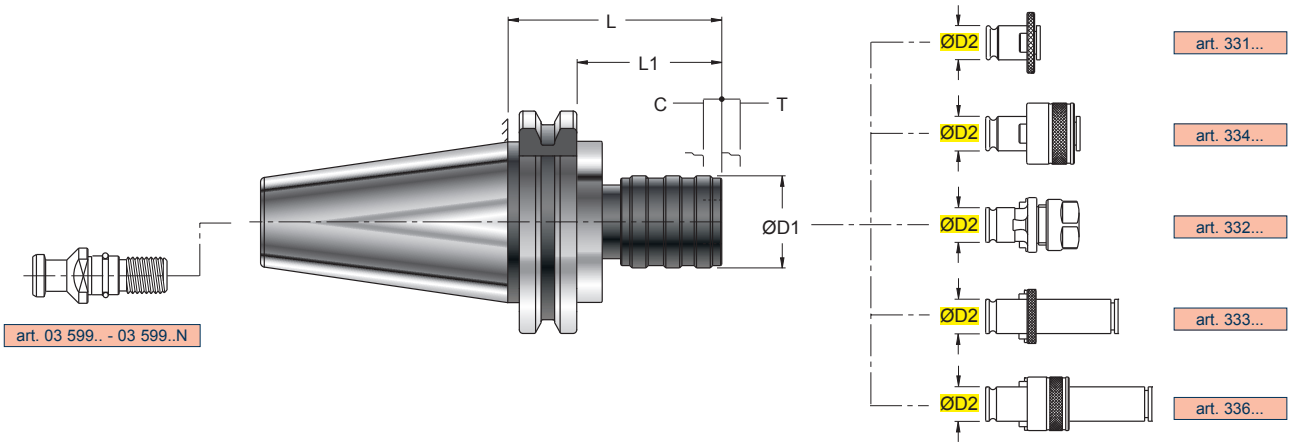
0,01

PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	L	L1	L2					
ISO.A40.FC016.055	ISO40	16	32	55	27	17	RS 16	VBS08	CT0420	08.3501.016.AT	CTE05
ISO.A40.FC016.090	ISO40	16	32	90	27	17					
ISO.A40.FC022.055	ISO40	22	40	55	31	19	RS 22	VBS10	CT0625	08.3502.022.AT	CTE06
ISO.A40.FC022.090	ISO40	22	40	90	31	19					
ISO.A40.FC027.055	ISO40	27	48	55	33	21	RS 27	VBS12	CT0725	08.3503.027.AT	CTE08
ISO.A40.FC027.090	ISO40	27	48	90	33	21					
ISO.A40.FC032.063	ISO40	32	58	63	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
ISO.A40.FC032.090	ISO40	32	58	90	38	24					
ISO.A40.FC040.063	ISO40	40	70	63	41	27	RS 40	VBS20	CT1032	08.3505.040.AT	CTE12
ISO.A40.FC040.090	ISO40	40	70	90	41	27					
ISO.A50.FC016.063	ISO50	16	32	63	27	17	RS 16	VBS08	CT0420	08.3501.016.AT	CTE05
ISO.A50.FC016.090	ISO50	16	32	90	27	17					
ISO.A50.FC022.063	ISO50	22	40	63	31	19	RS 22	VBS10	CT0625	08.3502.022.AT	CTE06
ISO.A50.FC022.090	ISO50	22	40	90	31	19					
ISO.A50.FC027.063	ISO50	27	48	63	33	21	RS 27	VBS12	CT0725	08.3503.027.AT	CTE08
ISO.A50.FC027.090	ISO50	27	48	90	33	21					
ISO.A50.FC032.063	ISO50	32	58	63	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
ISO.A50.FC032.090	ISO50	32	58	90	38	24					
ISO.A50.FC040.063	ISO50	40	70	63	41	27	RS 40	VBS20	CT1032	08.3505.040.AT	CTE12
ISO.A50.FC040.100	ISO50	40	70	100	41	27					
ISO.A50.FC050.075	ISO50	50	90	75	46	30	RS 50	VBS24	CT1236	08.3506.050.AT	CTE14
ISO.A50.FC050.100	ISO50	50	90	100	46	30					

PER IL MONTAGGIO DELLE FRESE A DISCO OCCORRE L'ANELLO DISTANZIATORE **195..** , PAG 1021
FOR THE INSTALLATION OF THE DISC MILLING CUTTERS THE DISTANCE RING **195..** (PAGE 1021) IS REQUIRED.
ZUM EINBAU DER SCHEIBENFRÄSER WIRD DER DISTANZRING **195..** (SEITE 1021) BENÖTIGT.
EN CAS DE MONTAGE DES FRAISES-DISQUES LA BAGUE D'ENTRETOISE **195**.. , PAGE 1021 S'IMPOSE

ART. ISO.A..MC..
DIN 69871/A

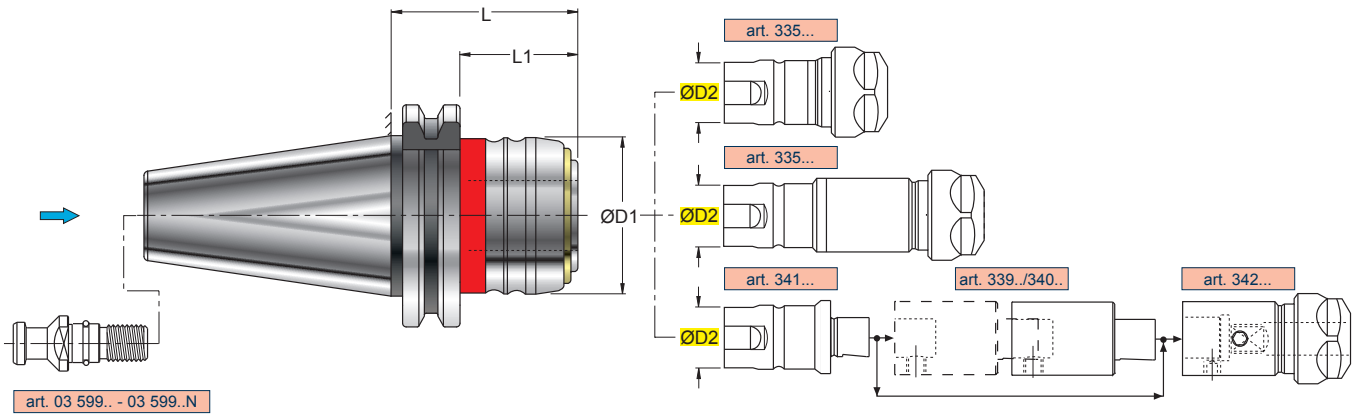


PORTA MASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE
QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION
GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION

ART.		(mm) ØD1	ØD2	L	L1	C	T	Campo di maschiatura Tap range
ISO.A40.MC019.060	ISO40	38	19	60	41	7,5	7,5	M3-M12
ISO.A40.MC031.100	ISO40	55	31	100	81	12,5	12,5	M8-M24
ISO.A50.MC019.062	ISO50	38	19	62	43	7,5	7,5	M3-M12
ISO.A50.MC031.083	ISO50	55	31	83	64	12,5	12,5	M8-M24
ISO.A50.MC048.133	ISO50	79	48	133	114	20,5	20,5	M16-M36

PAG. 1101

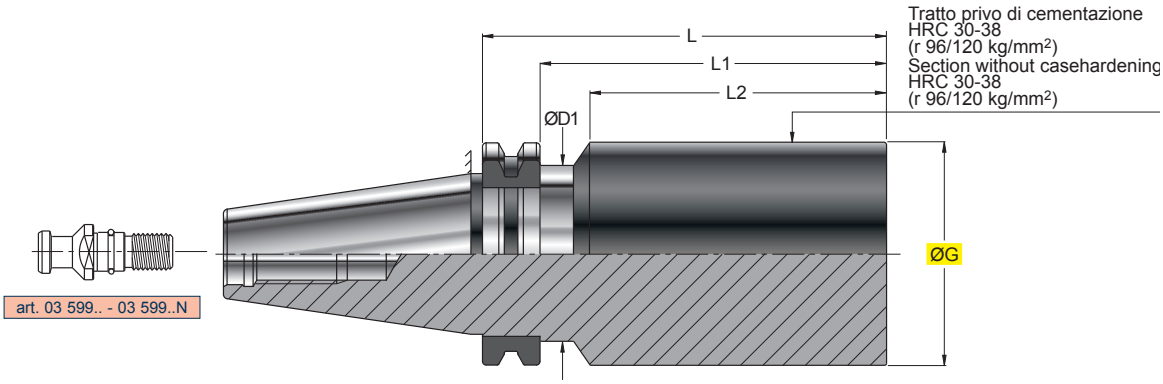
ART. ISO.A..MS..
DIN 69871/AD



PORTA MASCHIO A CAMBIO RAPIDO PER MASCHIATURA SINCRONIZZATA
QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

ART.		(mm) ØD1	ØD2	L	L1	Campo di maschiatura Tap range
ISO.A40.MS020.053	ISO40	43	20	53	34	M3-M12
ISO.A40.MS032.090	ISO40	60	32	90	71	M6-M20
ISO.A50.MS020.053	ISO50	43	20	53	34	M3-M12
ISO.A50.MS032.074	ISO50	60	32	74	55	M6-M20

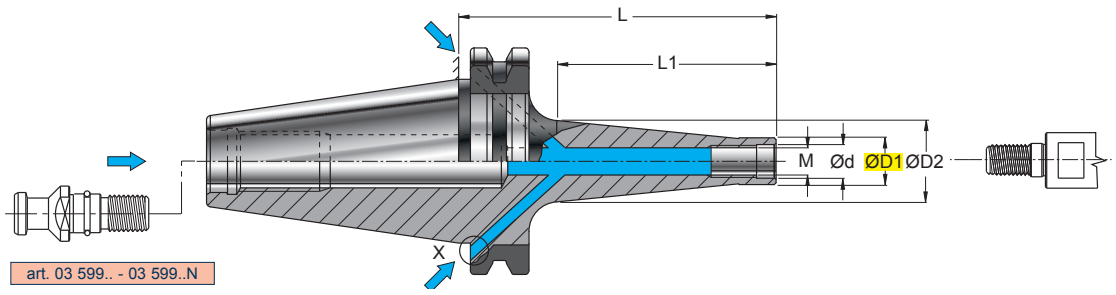
ART. ISO.A..SF..
DIN 69871/A



BARRA CON CONO FINITO E STELO TENERO
BORING BARS WITH FINISHED TAPER AND BLANK SCHAFT
ROHLINGE
BARRE AVEC CONE FINI ET BOUT DOUX

ART.		(mm) ØG	ØD1	L	L1	L2
ISO.A40.SF040.189	ISO40	40	_	189	170	_
ISO.A40.SF040.269	ISO40	40	_	269	250	_
ISO.A40.SF063.169	ISO40	63	49,5	169	150	134
ISO.A40.SF063.269	ISO40	63	49,5	269	250	234
ISO.A50.SF063.269	ISO50	63	_	269	250	_
ISO.A50.SF063.419	ISO50	63	_	419	400	_
ISO.A50.SF097.269	ISO50	97	79,5	269	250	234
ISO.A50.SF097.419	ISO50	97	79,5	419	400	384

ART. ISO.B40.MD..
DIN 69871/AD-B



art. 253..VW
S1089W..
S1503.9W..
S2000.89W..
S613/4.9.45W...
S659W...
S809W...
S849W...
S929...
S959...
S9002W..
S9005.9W..

PORTAFRESA CON ATTACCO MODULARE- FILETTATO
CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
FRÄSERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
MANDRIN PORTE-FRAISE AVEC ATTACHEMENT MODULAIRE FILETÉ

0,005

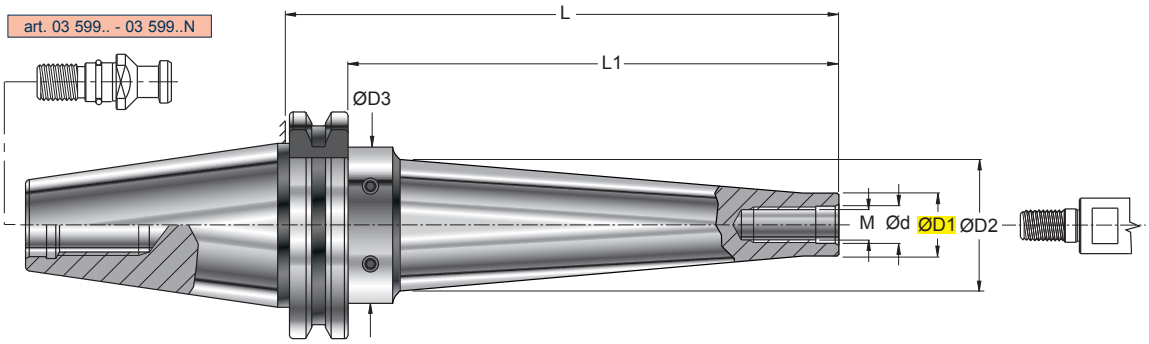
EQUILIBRATO BALANCED
G6,3 15000 min^{-1}

ART.		(mm) M	Ød	ØD1	ØD2	L	L1
ISO.B40.MD010.058	ISO40	10	10,5	17,7	20	58	30
ISO.B40.MD010.078	ISO40	10	10,5	17,7	25	78	50
ISO.B40.MD010.098	ISO40	10	10,5	17,7	28	98	70
ISO.B40.MD010.118	ISO40	10	10,5	17,7	28	118	90
ISO.B40.MD012.058	ISO40	12	12,5	20,7	24	58	30
ISO.B40.MD012.078	ISO40	12	12,5	20,7	24	78	50
ISO.B40.MD012.098	ISO40	12	12,5	20,7	31	98	70
ISO.B40.MD012.118	ISO40	12	12,5	20,7	31	118	90
ISO.B40.MD016.058	ISO40	16	17	28,7	29	58	30
ISO.B40.MD016.078	ISO40	16	17	28,7	34	78	50
ISO.B40.MD016.098	ISO40	16	17	28,7	34	98	70
ISO.B40.MD016.118	ISO40	16	17	28,7	34	118	90

PER UNA PERFETTA TENUTA SULL'ASSE DEL MANDRINO SI CONSIGLIA DI AVERE UN TIRANTE CON ANELLO DI TENUTA.
WE RECOMMEND THE APPLICATION OF A RETENTION KNOB WITH AN O-RING FOR A PERFECT STABILITY ON THE TAPER SHANK AXIS
FÜR EINE GUTE ABDICHTUNG AUF DER ACHSE DER AUFNAHME EMPFEHLEN WIR EINEN ANZUGSBOLZEN MIT DICHTUNGSRING
POUR UNE PARFAITE TENUE SUR L'AX DU MANDRIN IL EST CONSEILLÉ D'AVOIR UN TIRANT AVEC UNE BAGUE DE TENUE

ART. ISO.A..MDV..
DIN 69871/A

NEW



PORTAFRESA ANTIVIBRANTE CON ATTACCO MODULARE-FILETTATO
VIBRATION-DAMPED CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
SCHWINGUNGSGEDÄMPFTE FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE AVEC ATTACHEMENT MODULAIRE FILETÉ

0,015

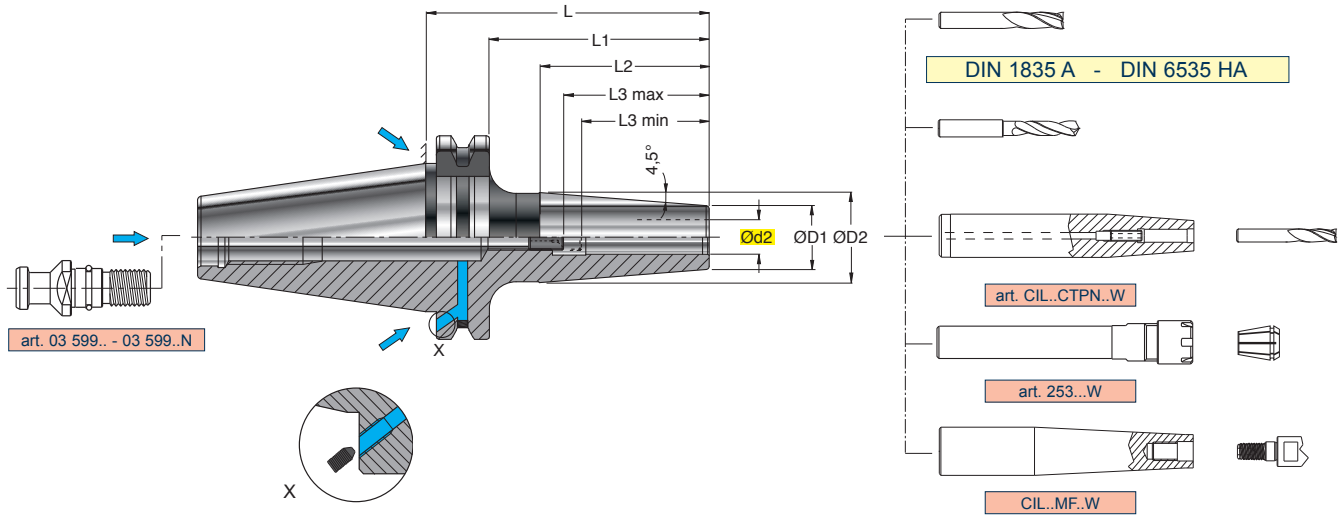
PRE-EQUILIBRATO PRE-BALANCED
SK40 = G6,3 15000 min-1
SK50 = G6,3 10000 min-1

ART.		(mm) M	Ød	ØD1	ØD2	ØD3	L	L1	kg
ISO.A40.MDV010.200	ISO40	10	10,5	18	35	50	200	165	1,70
ISO.A40.MDV010.250	ISO40	10	10,5	18	41	50	250	215	2,20
ISO.A40.MDV010.300	ISO40	10	10,5	18	46	50	300	265	2,70
ISO.A40.MDV012.200	ISO40	12	12,5	21	38	50	200	165	2,10
ISO.A40.MDV012.250	ISO40	12	12,5	21	44	50	250	215	2,40
ISO.A40.MDV012.300	ISO40	12	12,5	21	49	50	300	265	3,10
ISO.A40.MDV016.200	ISO40	16	17,0	29	46	50	200	165	2,30
ISO.A40.MDV016.250	ISO40	16	17,0	29	48	50	250	215	2,70
ISO.A40.MDV016.300	ISO40	16	17,0	29	50	50	300	265	3,40
ISO.A50.MDV012.250	ISO50	12	12,5	21	44	80	250	215	4,80
ISO.A50.MDV012.300	ISO50	12	12,5	21	49	80	300	265	5,10
ISO.A50.MDV012.400	ISO50	12	12,5	21	60	80	400	365	6,90
ISO.A50.MDV016.250	ISO50	16	17,0	29	52	80	250	215	5,50
ISO.A50.MDV016.300	ISO50	16	17,0	29	57	80	300	265	6,20
ISO.A50.MDV016.400	ISO50	16	17,0	29	68	80	400	365	8,90
ISO.A50.MDV016.500	ISO50	16	17,0	29	78	80	500	465	11,50

PAG. 1101

ART. ISO.B..CTN..
DIN 69871/AD-B

DIN 69882-8



MANDRINO A CALETTAMENTO TERMICO
SHRINKING-ON TAPER SHANKS
WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
MANDRIN À EMBOÎTEMENT TERMIQUE

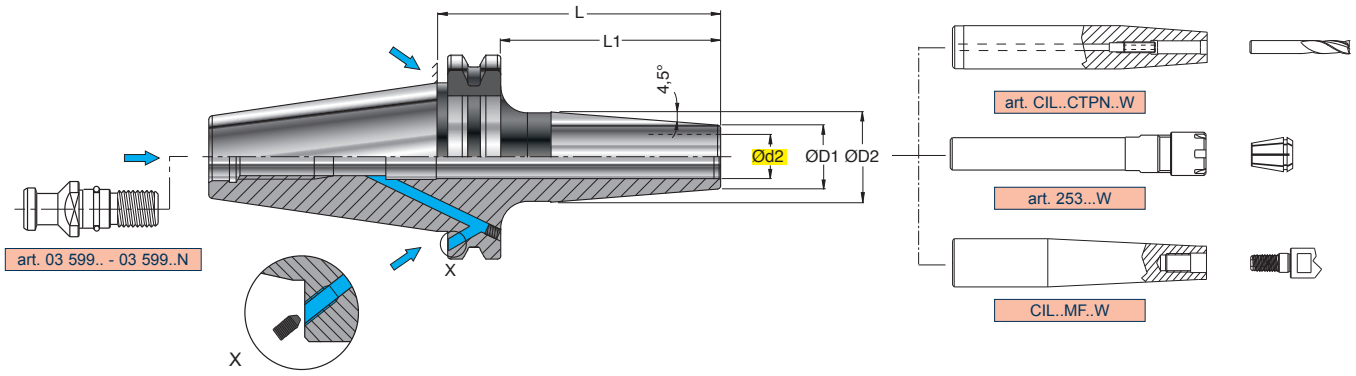
0,003

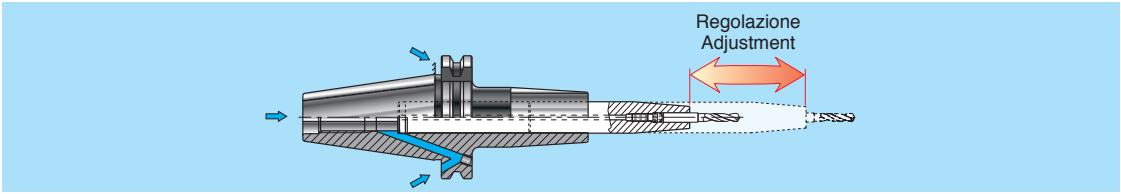
EQUILIBRATO
BALANCED
G 2,5 25000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2	L3 min	L3 max			
ISO.B40.CTN006.080	ISO40	6	21	27	80	61	–	26	36	GWR 05L		5025
ISO.B40.CTN006.120	ISO40	6	21	27	120	101	–	26	36			
ISO.B40.CTN006.160	ISO40	6	21	27	160	141	100	26	36			
ISO.B40.CTN008.080	ISO40	8	21	27	80	61	–	26	36	GWR 06L		5003
ISO.B40.CTN008.120	ISO40	8	21	27	120	101	–	26	36			
ISO.B40.CTN008.160	ISO40	8	21	27	160	141	100	26	36			
ISO.B40.CTN010.080	ISO40	10	24	32	80	61	–	31	41	GWR 08CTD		5004
ISO.B40.CTN010.120	ISO40	10	24	32	120	101	–	31	41			
ISO.B40.CTN010.160	ISO40	10	24	32	160	141	100	31	41			
ISO.B40.CTN012.080	ISO40	12	24	32	80	61	–	36	46	GWR 10CTD		5005
ISO.B40.CTN012.120	ISO40	12	24	32	120	101	–	36	46			
ISO.B40.CTN012.160	ISO40	12	24	32	160	141	100	36	46			
ISO.B40.CTN014.080	ISO40	14	27	34	80	61	–	36	46			
ISO.B40.CTN014.120	ISO40	14	27	34	120	101	–	36	46			
ISO.B40.CTN014.160	ISO40	14	27	34	160	141	100	36	46			
ISO.B40.CTN016.080	ISO40	16	27	34	80	61	–	39	49	GWR 12CTD		5006
ISO.B40.CTN016.120	ISO40	16	27	34	120	101	–	39	49			
ISO.B40.CTN016.160	ISO40	16	27	34	160	141	100	39	49			
ISO.B40.CTN018.080	ISO40	18	33	42	80	61	–	39	49			
ISO.B40.CTN018.120	ISO40	18	33	42	120	101	–	39	49			
ISO.B40.CTN018.160	ISO40	18	33	42	160	141	100	39	49			
ISO.B40.CTN020.080	ISO40	20	33	42	80	61	–	41	51	GWR 16CTD		5008
ISO.B40.CTN020.120	ISO40	20	33	42	120	101	–	41	51			
ISO.B40.CTN020.160	ISO40	20	33	42	160	141	100	41	51			
ISO.B40.CTN025.100	ISO40	25	44	53	100	81	–	47	57			
ISO.B50.CTN006.080	ISO50	6	21	27	80	61	–	26	36	GWR 05L		5025
ISO.B50.CTN006.120	ISO50	6	21	27	120	101	–	26	36			
ISO.B50.CTN006.160	ISO50	6	21	27	160	141	100	26	36			
ISO.B50.CTN008.080	ISO50	8	21	27	80	61	–	26	36	GWR 06L		5003
ISO.B50.CTN008.120	ISO50	8	21	27	120	101	–	26	36			
ISO.B50.CTN008.160	ISO50	8	21	27	160	141	100	26	36			
ISO.B50.CTN010.080	ISO50	10	24	32	80	61	–	31	41	GWR 08CTD		5004
ISO.B50.CTN010.120	ISO50	10	24	32	120	101	–	31	41			
ISO.B50.CTN010.160	ISO50	10	24	32	160	141	100	31	41			
ISO.B50.CTN012.080	ISO50	12	24	32	80	61	–	36	46	GWR 10CTD		5005
ISO.B50.CTN012.120	ISO50	12	24	32	120	101	–	36	46			
ISO.B50.CTN012.160	ISO50	12	24	32	160	141	100	36	46			
ISO.B50.CTN014.080	ISO50	14	27	34	80	61	–	36	46			
ISO.B50.CTN014.120	ISO50	14	27	34	120	101	–	36	46			
ISO.B50.CTN014.160	ISO50	14	27	34	160	141	100	36	46			
ISO.B50.CTN016.080	ISO50	16	27	34	80	61	–	39	49	GWR 12CTD		5006
ISO.B50.CTN016.120	ISO50	16	27	34	120	101	–	39	49			
ISO.B50.CTN016.160	ISO50	16	27	34	160	141	100	39	49			
ISO.B50.CTN018.080	ISO50	18	33	42	80	61	–	39	49			
ISO.B50.CTN018.120	ISO50	18	33	42	120	101	–	39	49			
ISO.B50.CTN018.160	ISO50	18	33	42	160	141	100	39	49			
ISO.B50.CTN020.080	ISO50	20	33	42	80	61	–	41	51	GWR 16CTD		5008
ISO.B50.CTN020.120	ISO50	20	33	42	120	101	–	41	51			
ISO.B50.CTN020.160	ISO50	20	33	42	160	141	100	41	51			
ISO.B50.CTN025.120	ISO50	25	44	53	120	101	–	47	57			
ISO.B50.CTN025.160	ISO50	25	44	53	160	141	100	47	57			
ISO.B50.CTN032.120	ISO50	32	44	53	120	101	–	51	61			
ISO.B50.CTN032.160	ISO50	32	44	53	160	141	100	51	61			

PAG. 1101-1108

ART. ISO.B..CTPN..
DIN 69871/AD-B





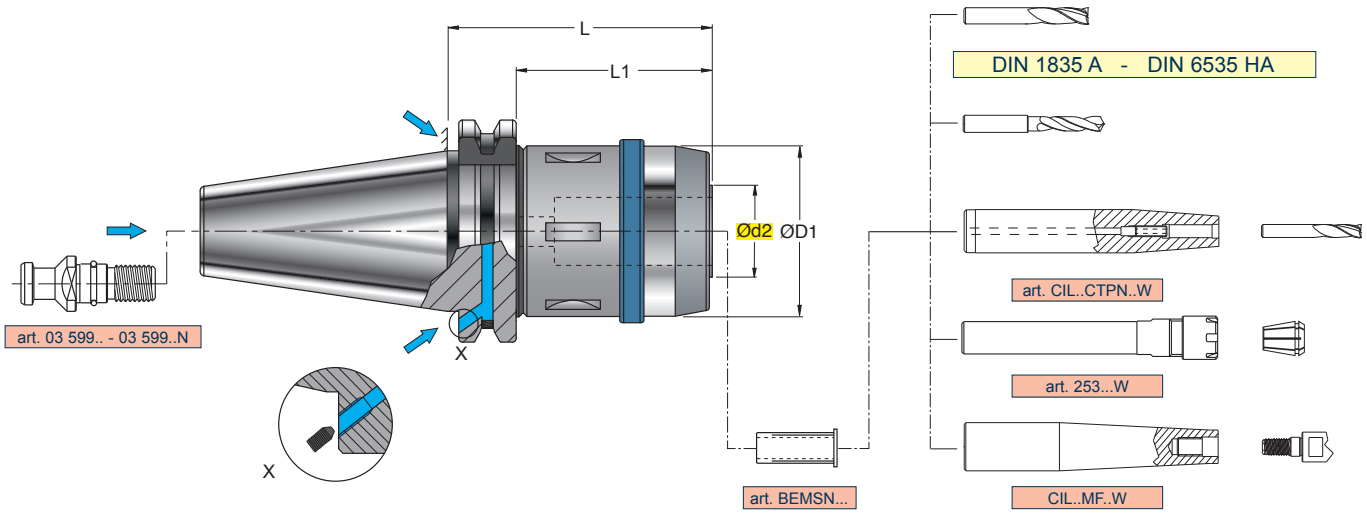
MANDRINO A CALETTAMENTO TERMICO PROLUNGABILE
EXTENSIBLE SHRINK FIT
VERLÄNGERBARES SCHRUMPFFUTTER
MANDRIN PROLONGEABLE À EMBOÎTEMENT THERMIQUE.

ART.		(mm) Ød2	ØD1	ØD2	L	L1
ISO.B40.CTPN016.080	ISO40	16	27	34	80	61
ISO.B40.CTPN025.090	ISO40	25	44	50	90	71
ISO.B50.CTPN016.130	ISO50	16	27	34	130	111
ISO.B50.CTPN025.130	ISO50	25	44	53	130	111
ISO.B50.CTPN032.130	ISO50	32	44	53	130	111

PAG. 1101-1108

ART. ISO.B..MFSN..
DIN 69871/AD-B

NEW



MANDRINO A FORTE SERRAGGIO
HIGH CLAMPING CHUCKS
KRAFTSPANNFUTTER
MANDRIN À FORT SERRAGE

	0,003 2,5 x Ø
	0,004 2,5 x Ø

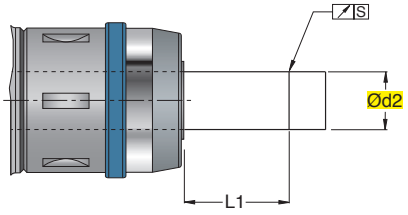
EQUILIBRATO BALANCED	
	G 2,5 20000 min-1

ART.		(mm) Ød2	ØD1	L	L1				
ISO.B40.MFSN020.075	ISO40	20	50	75	55,9	BEMS.20..			925.052 ESMS.010
ISO.B40.MFSN032.100	ISO40	32	67	100	80,9	BEMS.32..			925.068 ESMS.010
ISO.B50.MFSN020.080	ISO50	20	50	80	60,9	BEMS.20..			925.052 ESMS.010
ISO.B50.MFSN032.084	ISO50	32	67	84	64,9	BEMS.32..			925.068 ESMS.010

CARATTERISTICHE TECNICHE - TECHNICAL CHARACTERISTICS

1. Ridotte dimensioni di ingombro (lunghezza e diametro esterno) che consentono una migliore equilibratura (G 2,5 fino a 20000 rpm)
2. Aumento della rigidità del mandrino per una resa migliore in lavorazione
3. Perfetta centratura dell'utensile (0,003/0,004 mm a 2,5xØ) che determinano un incremento della durata degli inserti fino a raddoppiare la durata
4. Aumento della potenza di serraggio Max 1750 Nm
5. Adatto anche per frese con attacco cilindrico, weldon, whistle notch e punte in metallo duro
6. Passaggio del lubrificante attraverso l'utensile fino a 100 bar
7. Serraggio ottimale garantito dall'alineamento delle tacche (ghiera mandrino)

1. Reduced dimensions (length and external diameter) for a better balancing (G 2,5 till to 20000 rpm)
2. High rigidity of the chuck for a better performance
3. Perfect concentricity (0,003/0,004 mm 2,5xØ) for an increase in toollife
4. Increase of tightening force Max 1750 Nm
5. Suitable for endmills tools with cylindrical, weldon and whistle notch shank and for carbide drills
6. Coolant through the tool till 100 bar
7. Best clamping assured by alignment of notches (fixin ring nut/arbor)

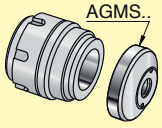


Ød2 (mm)	L1 (mm)	Concentricità "S" Concentricity "S" (mm)	Forza di serraggio Clamping force (Nm)
20	50	0,003	1000
32	80	0,004	1750

PER AVERE UNA TENUTA DEL LUBRIFICANTE FINO A 100 bar BISOGNA ACQUISTARE IL MANDRINO CON ANELLO DI TENUTA. PER ORDINARE TALE MANDRINO, BISOGNA AGGIUNGERE AL CODICE DEL MANDRINO SCELTO UNA "F" FINALE E SPECIFICARLO AL MOMENTO DELL' ORDINE. UTILIZZANDO LE PINZE DI RIDUZIONE CILINDRICHE BISOGNA SOSTITUIRE L'ANELLO DI TENUTA DEL DIAMETRO DELL'UTENSILE PRESCELTO. IL MANDRINO GARANTISCE IL PASSAGGIO DEL LUBRIFICANTE (max 100 bar), SIA CON UTENSILI CALETTATI DIRETTAMENTE SIA CON PINZE DI RIDUZIONE CILINDRICHE BEMS.. INTERPOSTE.

PAG 1014

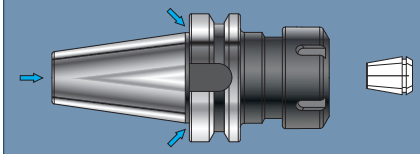
TO OBTAIN A COOLANT FLOW UP TO 100 bar YOU MUST PURCHASE THE CHUCK WITH SEALING RING. TO ORDER THIS CHUCK YOU MUST ADD A FINAL "F" TO THE SELECTED CHUCK CODE AND SPECIFY IT WHEN PLACING THE ORDER. FOR THE USE OF THE CYLINDRICAL REDUCTION SLEEVES THE SEALING RING MUST BE REPLACED WITH ONE OF THE SAME DIAMETER AS THE TOOL CHOSEN. THE HIGH CLAMPING CHUCK IS SUITABLE FOR A COOLANT FLOW (UP TO 100 bar) BOTH WITH DIRECTLY SHRUNK-ON TOOLS AND WITH BEMS CYLINDRICAL REDUCTION SLEEVES.



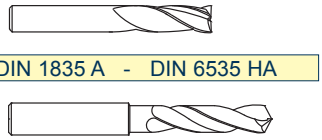
PORTAPINZA STANDARD
- COLLET HOLDER STANDARD
- SPANNFUTTER STANDARD
- MANDRIN PORTE-PINCE STANDARD

MAS.B..ER..
... /AD - B

ER-DIN 6499

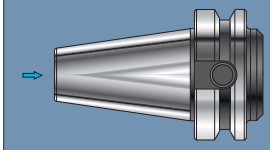


PAG 942

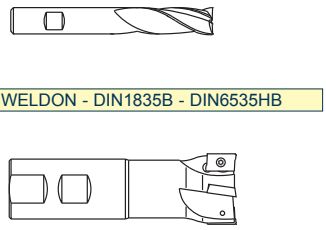


MANDRINO CORTO PER ATTACCHI TIPO WELDON
- END-MILL HOLDER FOR WELDON CONNECTION SHORT-TYPE
- AUFNAHME FÜR WELDON-TYPE,KURZE AUSFÜHRUNG
- MANDRIN POUR ATTACHEMENT WELDON,SERIE COURTE

MAS.A..WEC..
... /AD



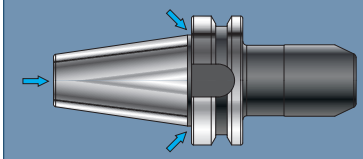
PAG 943



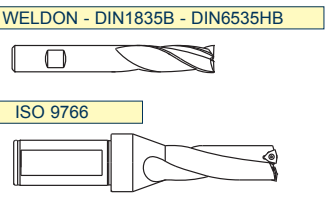
MANDRINO PER ATTACCHI TIPO WELDON
- END MILL HOLDER FOR WELDON CONNECTION
- WERKZEUGAUFNAHME FÜR WELDON-TYPE
- MANDRIN POUR ATTACHEMENT WELDON

MAS.B..WE..
... /AD - B

DIN 6359 B

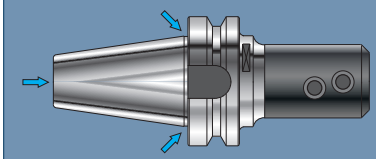


PAG 944-945

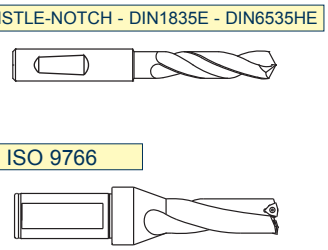


PORTAPUNTA UNIVERSALE
- UNIVERSAL ADAPTER FOR DRILLING TOOLS
- WELDON-AUFNAHME FÜR VOLLBOHRER
- PORTE-FORET UNIVERSEL

MAS.B..PUH..
... /AD - B



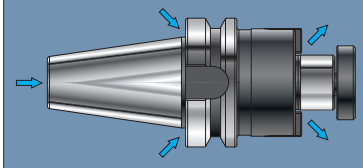
PAG 946



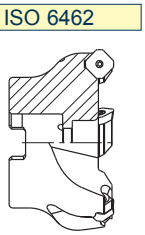
PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

MAS.B.. FSW..
... /AD - B

ISO 3937



PAG 947

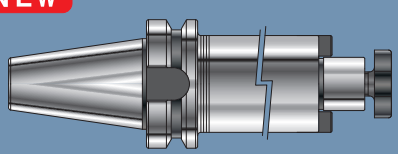


PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
- VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
- SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

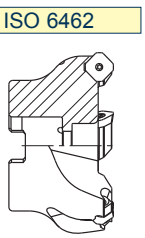
MAS.A.. FSV..
... /AD

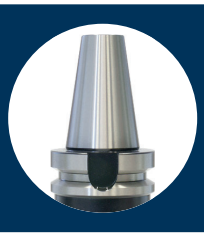
ISO 3937

NEW



PAG 948



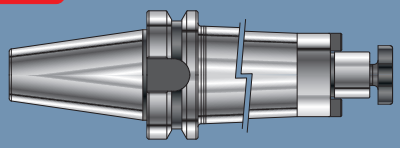


PORTAFRESA ANTIVIBRANTE
A TRASCINAMENTO FRONTALE CON TENONE
- VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
- SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

MAS.A.. FSCV..
... /AD

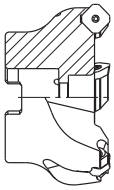
ISO 3937

NEW



PAG 949

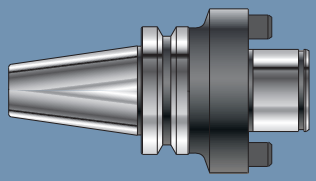
ISO 6462



PORTAFRESA A TRASCINAMENTO
FRONTALE CON TENONE
- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

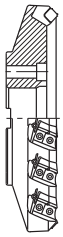
MAS.A..FF..
... /A

DIN 6357 B



PAG 950

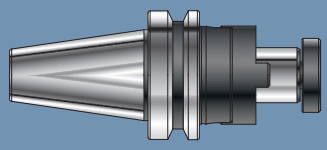
DIN 8030 C



PORTAFRESA A TRASCINAMENTO
COMBINATO PER FRESE A MANICOTTO
E A DISCO
- COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS
- FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER
- MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÈ POUR FRAISES À MANCHON ET DE DISQUE

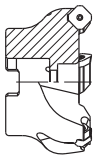
MAS.A..FC..
... /A

DIN 6358 B



PAG 951

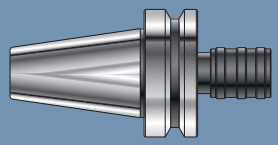
ISO 6462



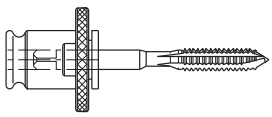
DIN 138

PORTAMASCHIO A CAMBIO RAPIDO
CON DOPPIA COMPENSAZIONE
- QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
- MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION

MAS.A..MC..
... /A

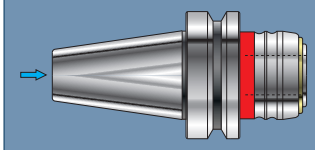


PAG 952

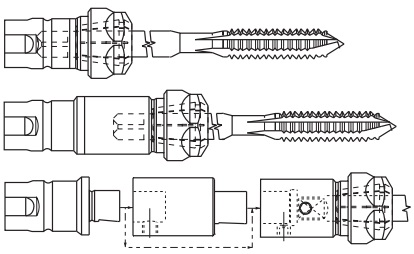


PORTAMASCHIO A CAMBIO RAPIDO
PER MASCHIATURA SINCRONIZZATA
- QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
- APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

MAS.A..MS..
... /AD

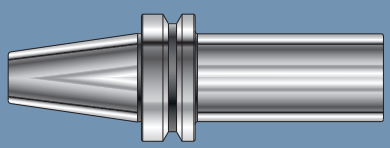


PAG 953

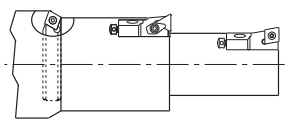


BARRA CON CONO FINITO E STELO TENERO
- BORING BARS WITH FINISHED TAPER AND BLANK SHAFT
- ROHLINGE
- BARRE AVEC CONE FINI ET BOUT DOUX

MAS.A..SF..
... /A



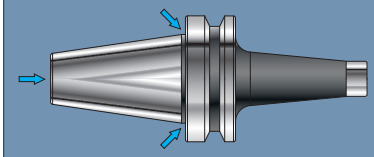
PAG 954

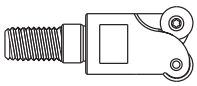


MAS 403 BT-A-B

PORTAFRESA CON ATTACCO MODULARE FILETTATO
- CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
- FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
- MANDRIN PORTE-FRAISE AVEC ATTACHEMENT MODULAIRE FILETÉ

MAS.B40.MD..
... /AD - B



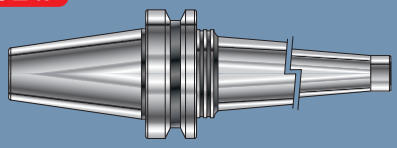


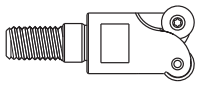
PAG 955

PORTAFRESA ANTIVIBRANTE CON ATTACCO MODULARE FILETTATO
- VIBRATION-DAMPED CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
- SCHWINGUNGSGEDÄMPFTE FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
- MANDRIN PORTE-FRAISE ANTIVIBRATOIRE AVEC ATTACHEMENT MODULAIRE FILETÉ

MAS.A..MDV..
... /A

NEW



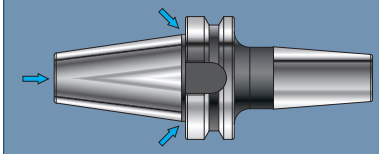


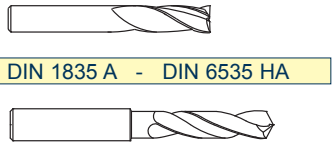
PAG 956

MANDRINO A CALETTAMENTO TERMICO
- SHRINKING-ON TAPER SHANKS
- WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
- MANDRIN À EMBOÎTEMENT THERMIQUE

MAS.B..CTN..
... /AD - B

DIN 69882-8

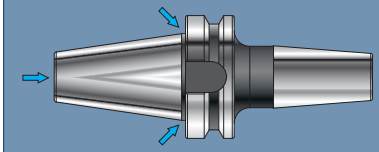


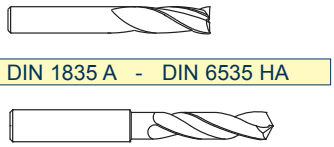


PAG 957

MANDRINO A CALETTAMENTO TERMICO PROLUNGABILE
- EXTENSIBLE SHRINK FIT
- VERLÄNGERBARES SCHRUMPFFUTTER
- MANDRIN PROLONGEABLE À EMBOÎTEMENT THERMIQUE.

MAS.B..CTPN..
... /AD - B



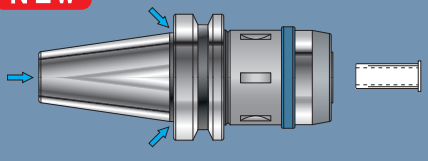


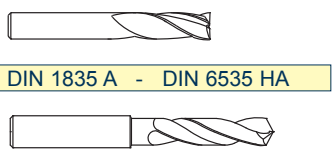
PAG 958

MANDRINO A FORTE SERRAGGIO
- HIGH CLAMPING CHUCKS
- KRAFTSPANNFUTTER
- MANDRIN À FORT SERRAGE

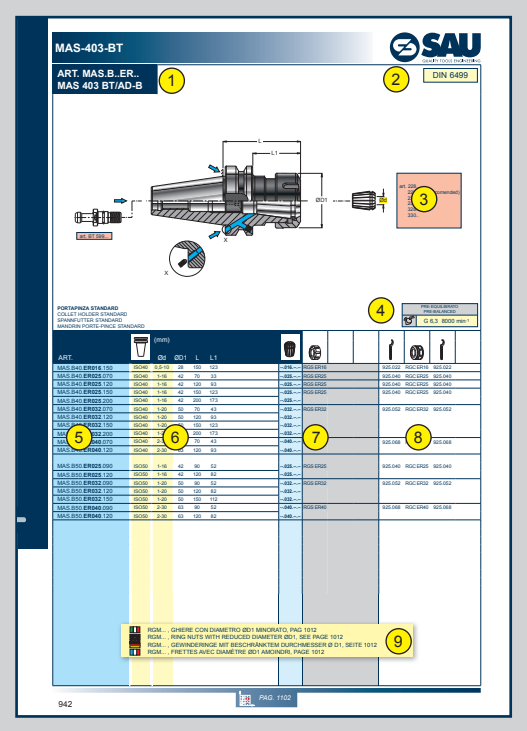
MAS.B..MFSN..
... /AD - B

NEW





PAG 959



1 = NORMA ATTACCO
2 = NORMA PARTE ANTERIORE
3 = ACCESSORI OPZIONALI A RICHIESTA
4 = CARATTERISTICHE TECNICHE
5 = ARTICOLO
6 = MISURE,DATI,INDICAZIONI
7 = ACCESSORI E RICAMBI IN DOTAZIONE
8 = ACCESSORI E RICAMBI OPZIONALI A RICHIESTA
9 = NOTE E AVVERTIMENTI

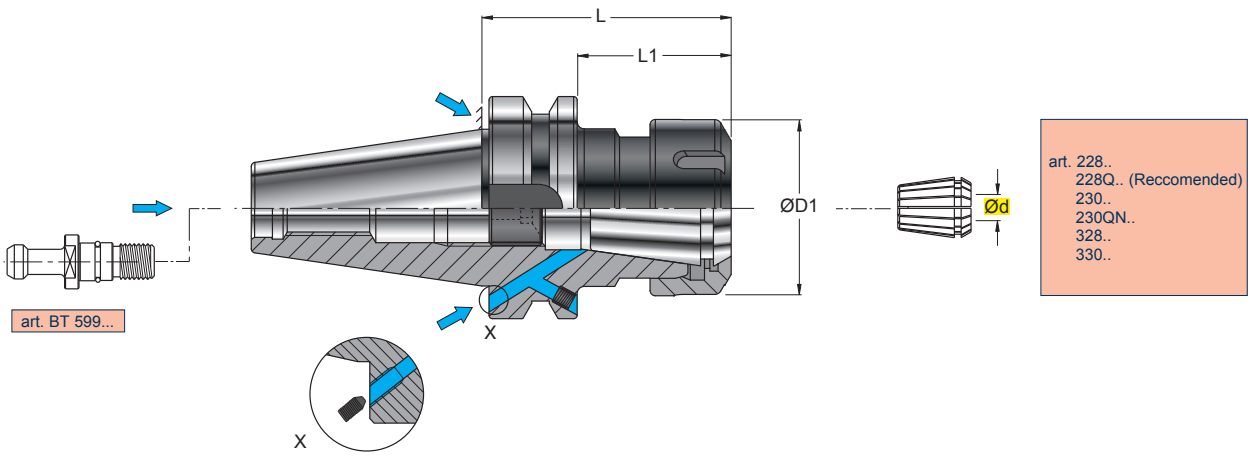
1 = SHANK STANDARD
2 = TOOL-HOLDER STANDARD
3 = OPTIONAL ACCESSORIES ON REQUEST.
4 = TECHNICAL FEATURES
5 = ITEM
6 = MEASURES,DATA,INDICATIONS
7 = ACCESORIES AND SPARE PARTS EQUIPMENT
8 = OPTIONAL ACCESORIES AND SPARE PARTS ON REQUEST
9 = NOTES AND WARNINGS

1 = KEGEL-NORM
2 = AUFNAHME-NORM
3 = OPTIONALZUBEHÖR AUF ANFRAGE
4 = TECHNISCHE HAUPTMERKMALE
5 = ARTKEL
6 = ABMESSUNGEN,DATEN,HINWEISE
7 = ZUBEHÖR UND ERSATZTEILAUSSTATTUNG
8 = OPTIONALZUBEHÖR UND -ERSATZTEILE AUF ANFRAGE
9 = ANMERKUNGEN UND HINWEISE

1 = NORMES POUR ATTACHEMENT
2 = NORME POUR MANDRIN
3 = ACCESSOIRES OPTIONNELS SUR DEMANDE
4 = CARACTERISTIQUES TECHNIQUES
5 = ARTICLE
6 = DIMENSIONES,DONNÉES,INDICATIONS
7 = ACCESSOIRES ET RECHANGE EN DOTATION
8 = ACCESOIRES ET RECHANGES OPTIONNELS SUR DEMANDE
9 = NOTES ET AVVERTISSEMENTS

ART. MAS.B..ER..
MAS 403 BT/AD-B

DIN 6499



PORTAPINZA STANDARD
COLLET HOLDER STANDARD
SPANNFUTTER STANDARD
MANDRIN PORTE-PINCE STANDARD

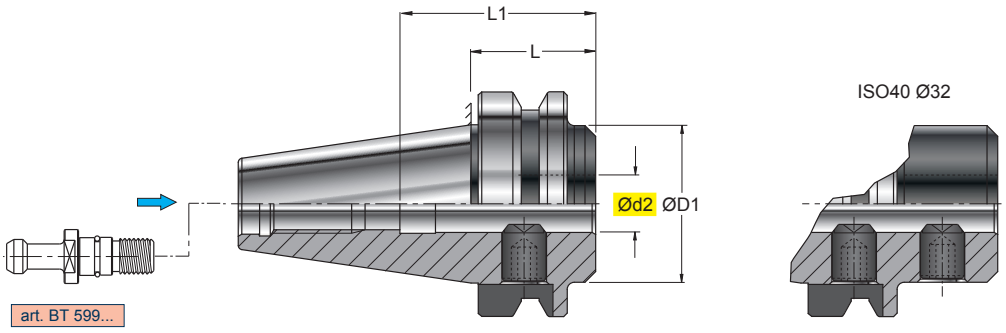
PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) Ød	ØD1	L	L1							
MAS.B40.**ER016**.150	ISO40	0,5-10	28	150	123	--.016.--.--	RGS ER16			925.022	RGC ER16	925.022
MAS.B40.**ER025**.070	ISO40	1-16	42	70	33	--.025.--.--	RGS ER25			925.040	RGC ER25	925.040
MAS.B40.**ER025**.120	ISO40	1-16	42	120	93	--.025.--.--	RGS ER25			925.040	RGC ER25	925.040
MAS.B40.**ER025**.150	ISO40	1-16	42	150	123	--.025.--.--	RGS ER25			925.040	RGC ER25	925.040
MAS.B40.**ER025**.200	ISO40	1-16	42	200	173	--.025.--.--						
MAS.B40.**ER032**.070	ISO40	1-20	50	70	43	--.032.--.--	RGS ER32			925.052	RGC ER32	925.052
MAS.B40.**ER032**.120	ISO40	1-20	50	120	93	--.032.--.--						
MAS.B40.**ER032**.150	ISO40	1-20	50	150	123	--.032.--.--						
MAS.B40.**ER032**.200	ISO40	1-20	50	200	173	--.032.--.--						
MAS.B40.**ER040**.070	ISO40	2-30	63	70	43	--.040.--.--	RGS ER40			925.068	RGC ER40	925.068
MAS.B40.**ER040**.120	ISO40	2-30	63	120	93	--.040.--.--						
MAS.B50.**ER025**.090	ISO50	1-16	42	90	52	--.025.--.--	RGS ER25			925.040	RGC ER25	925.040
MAS.B50.**ER025**.120	ISO50	1-16	42	120	82	--.025.--.--						
MAS.B50.**ER032**.090	ISO50	1-20	50	90	52	--.032.--.--	RGS ER32			925.052	RGC ER32	925.052
MAS.B50.**ER032**.120	ISO50	1-20	50	120	82	--.032.--.--						
MAS.B50.**ER032**.150	ISO50	1-20	50	150	112	--.032.--.--						
MAS.B50.**ER040**.090	ISO50	2-30	63	90	52	--.040.--.--	RGS ER40			925.068	RGC ER40	925.068
MAS.B50.**ER040**.120	ISO50	2-30	63	120	82	--.040.--.--						

PAG. 1102

SAU QUALITY TOOLS ENGINEERING

ART. MAS.A..WEC..
MAS 403 BT/AD



MANDRINO CORTO PER ATTACCHI TIPO WELDON
END-MILL HOLDER FOR WELDON CONNECTION-SHORT TYPE
AUFNAHME FÜR WELDON-TYPE, KURZE AUSFÜHRUNG
MANDRIN POUR ATTACHEMENT WELDON, SERIE COURTE

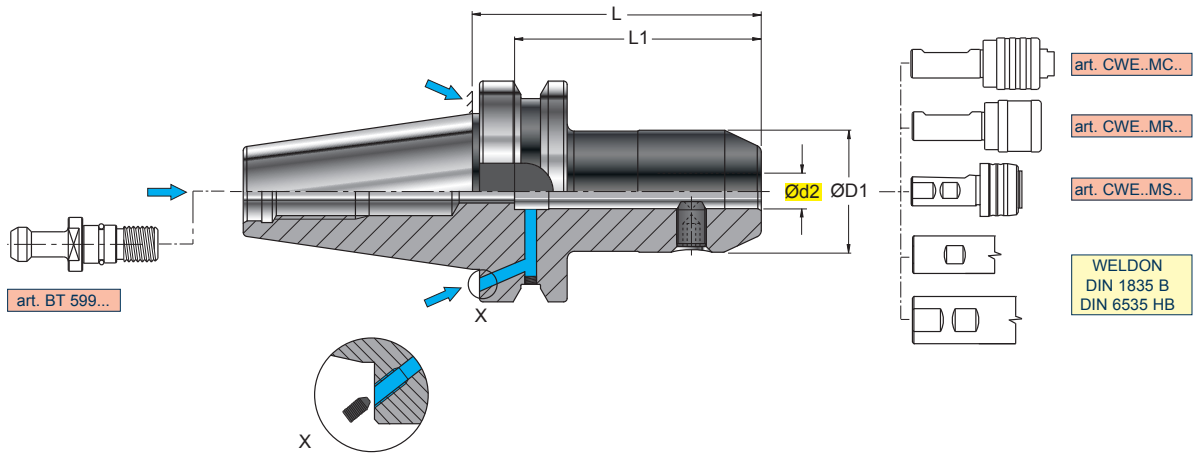
Ød2 H5 | 0,005 | PRE-EQUILIBRATO / PRE-BALANCED: G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	L	L1						
MAS.A40.WEC016.035	ISO40	16	44	35	45	GR1415	–	5006	–		
MAS.A40.WEC020.035	ISO40	20	44	35	45						
MAS.A40.WEC025.035	ISO40	25	44	35	55						
MAS.A40.WEC032.070	ISO40	32	72	70	60	GR1610	GR2015	5008	5010		
MAS.A50.WEC016.045	ISO50	16	70	45	45	GR1415	–	5006	–		
MAS.A50.WEC020.045	ISO50	20	70	45	45	GR1615	–	5008	–		
MAS.A50.WEC025.045	ISO50	25	70	45	55	GR1815	–	5008	–		
MAS.A50.WEC032.045	ISO50	32	70	45	60	GR2015	–	5010	–		

PAG. 1102

ART. MAS.B40.WE..
MAS 403 BT/AD-B

DIN 6359 B



MANDRINO PER ATTACCHI TIPO WELDON
END MILL HOLDER FOR WELDON CONNECTION
WERKZEUGAUFNAHME FÜR WELDON-TYPE
MANDRIN POUR ATTACHEMENT WELDON

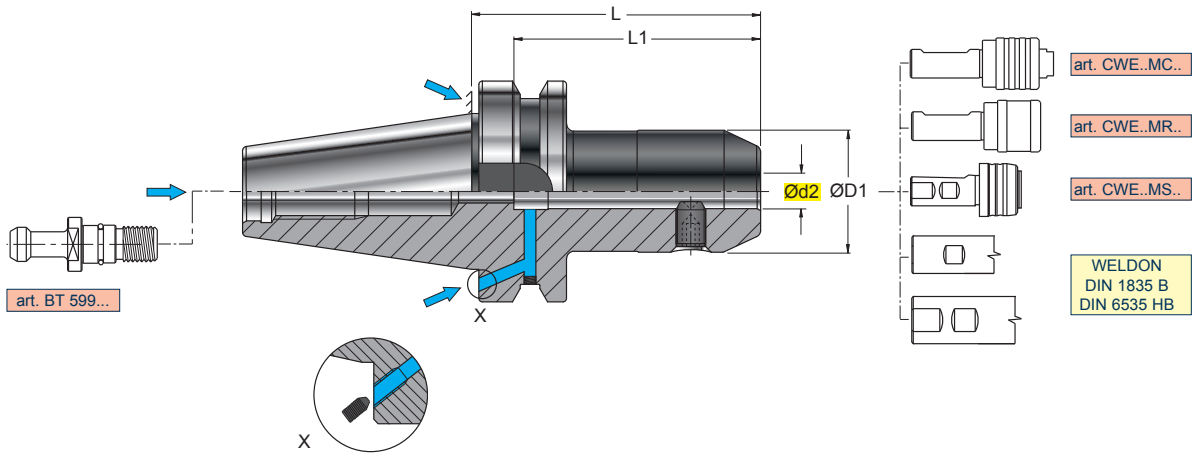
Ød2 H5 | 0,005 | PRE-EQUILIBRATO / PRE-BALANCED: G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	L	L1		
MAS.B40.WE006.065	ISO40	6	25	65	35	GR06	5003
MAS.B40.WE006.100	ISO40	6	25	100	35		
MAS.B40.WE006.150	ISO40	6	25	150	35		
MAS.B40.WE008.065	ISO40	8	28	65	35	GR08	5004
MAS.B40.WE008.100	ISO40	8	28	100	35		
MAS.B40.WE008.150	ISO40	8	28	150	35		
MAS.B40.WE010.065	ISO40	10	35	65	39	GR10	5005
MAS.B40.WE010.100	ISO40	10	35	100	39		
MAS.B40.WE010.150	ISO40	10	35	150	39		
MAS.B40.WE012.065	ISO40	12	42	65	44	GR1215	5006
MAS.B40.WE012.100	ISO40	12	42	100	44		
MAS.B40.WE012.150	ISO40	12	42	150	44		
MAS.B40.WE014.065	ISO40	14	44	65	44	GR1215	5006
MAS.B40.WE014.100	ISO40	14	44	100	44		
MAS.B40.WE014.150	ISO40	14	44	150	44		
MAS.B40.WE016.065	ISO40	16	48	65	47	GR1415	5006
MAS.B40.WE016.100	ISO40	16	48	100	47		
MAS.B40.WE016.150	ISO40	16	48	150	47		
MAS.B40.WE018.065	ISO40	18	50	65	47		
MAS.B40.WE018.100	ISO40	18	50	100	47		
MAS.B40.WE018.150	ISO40	18	50	150	47		
MAS.B40.WE020.065	ISO40	20	52	65	49	GR1615	5008
MAS.B40.WE020.100	ISO40	20	52	100	49		
MAS.B40.WE020.150	ISO40	20	52	150	49		
MAS.B40.WE025.090	ISO40	25	65	90	54	GR1815	5008
MAS.B40.WE032.090	ISO40	32	72	90	58	GR2015	5010
MAS.B40.WE032.150	ISO40	32	72	150	58		
MAS.B40.WE040.105	ISO40	40	80	105	68		

PAG. 1102

ART. MAS.B50.WE..
MAS 403 BT/AD-B

DIN 6359 B



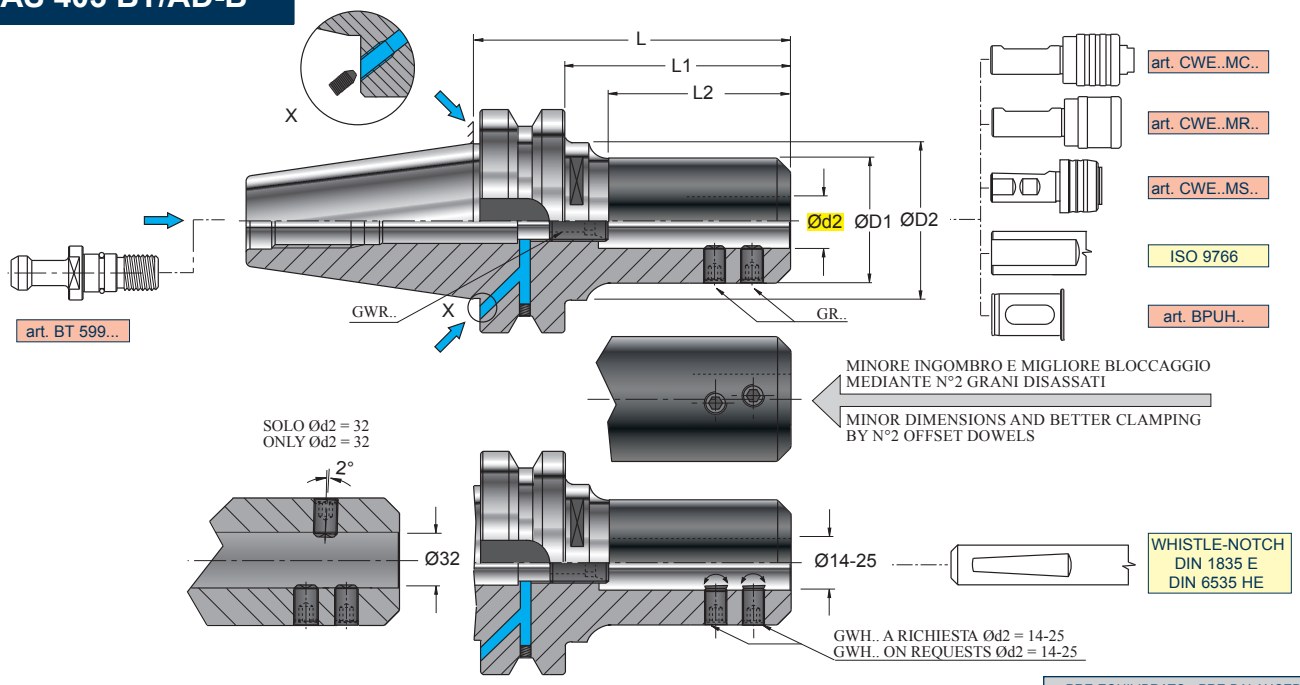
MANDRINO PER ATTACCHI TIPO WELDON
END MILL HOLDER FOR WELDON CONNECTION
WERKZEUGAUFNAHME FÜR WELDON-TYPE
MANDRIN POUR ATTACHEMENT WELDON

Ød2 H5 | 0,005 | PRE-EQUILIBRATO / PRE-BALANCED: G 6,3 8000 min-1

ART.	(mm)	Ød2	ØD1	L	L1		
MAS.B50.WE006.080	ISO50	6	25	80	35	GR06	5003
MAS.B50.WE006.100	ISO50	6	25	100	35		
MAS.B50.WE006.150	ISO50	6	25	150	35		
MAS.B50.WE008.080	ISO50	8	28	80	35	GR08	5004
MAS.B50.WE008.100	ISO50	8	28	100	35		
MAS.B50.WE008.150	ISO50	8	28	150	35		
MAS.B50.WE010.080	ISO50	10	35	80	39	GR10	5005
MAS.B50.WE010.100	ISO50	10	35	100	39		
MAS.B50.WE010.150	ISO50	10	35	150	39		
MAS.B50.WE012.080	ISO50	12	42	80	44	GR1215	5006
MAS.B50.WE012.100	ISO50	12	42	100	44		
MAS.B50.WE012.150	ISO50	12	42	150	44		
MAS.B50.WE016.080	ISO50	16	48	80	47	GR1415	5006
MAS.B50.WE016.100	ISO50	16	48	100	47		
MAS.B50.WE016.150	ISO50	16	48	150	47		
MAS.B50.WE018.080	ISO50	18	50	80	47		
MAS.B50.WE018.100	ISO50	18	50	100	47		
MAS.B50.WE018.150	ISO50	18	50	150	47		
MAS.B50.WE020.080	ISO50	20	52	80	49	GR1615	5008
MAS.B50.WE020.100	ISO50	20	52	100	49		
MAS.B50.WE020.150	ISO50	20	52	150	49		
MAS.B50.WE025.100	ISO50	25	65	100	54	GR1815	5010
MAS.B50.WE025.150	ISO50	25	65	150	54		
MAS.B50.WE032.100	ISO50	32	72	100	58	GR2015	5010
MAS.B50.WE032.150	ISO50	32	72	150	58		
MAS.B50.WE040.115	ISO50	40	80	115	68		
MAS.B50.WE040.150	ISO50	40	80	150	68		
MAS.B50.WE050.115	ISO50	50	90	115	78	GR2420	5017

PAG. 1102

ART. MAS.B..PUH..
MAS 403 BT/AD-B



PORTAPUNTA UNIVERSALE
UNIVERSAL ADAPTER FOR DRILLING TOOLS
WELDON-AUFNAHME FÜR VOLLBOHRER
PORTE-FORET UNIVERSEL

Ød2 H5

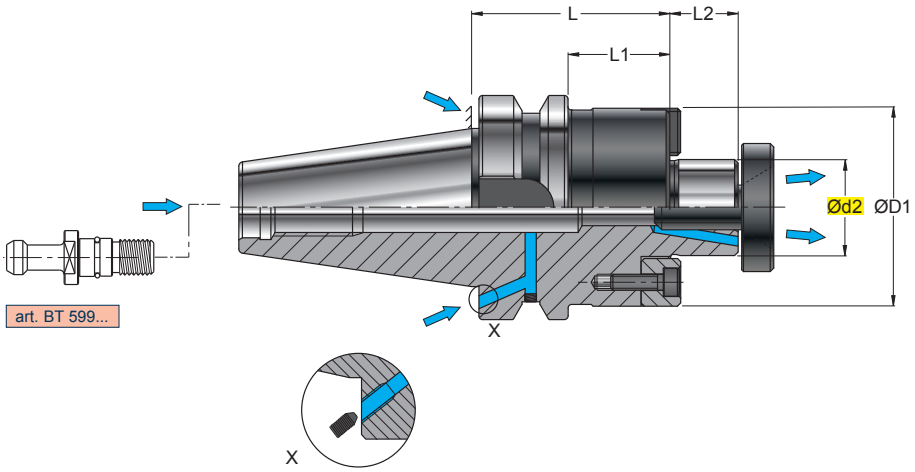
0,003

PRE-EQUILIBRATO PRE-BALANCED
BT40 = G6,3 8000 min^{-1}
BT50 = G6,3 6000 min^{-1}

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2						
MAS.B40.PUH014.100	ISO40	14	36	44,7	100	73	45	n°2 GR10	GWR12	5005	5006	GWH10	5005
MAS.B40.PUH016.100	ISO40	16	38	44,7	100	73	45						
MAS.B40.PUH018.100	ISO40	18	40	44,7	100	73	48						
MAS.B40.PUH020.100	ISO40	20	42	50	100	73	48	n°2 GR10	GWR16	5005	5008	GWH10	5005
MAS.B40.PUH025.100	ISO40	25	48	55	100	73	48	n°2 GR10	GWR20	5005	5010	GWH10	5005
MAS.B40.PUH032.080	ISO40	32	58	–	80	53	–	n°2 GR10	–	5005	–	GWH10	5005
MAS.B40.PUH040.080	ISO40	40	68	–	80	53	–	n°3 GR14	–	5006	–	–	–

ART. MAS.B..FSW..
MAS 403 BT/AD-B

ISO 3937



PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
SHELL END-MILL HOLDERS WITH TENON
FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

PRE-EQUILIBRATO PRE-BALANCED
BT40 = G6,3 8000 min^{-1}
BT50 = G6,3 6000 min^{-1}

ART.		(mm) Ød2	ØD1	L	L1	L2							
MAS.B40.FSW016.060	ISO40	16	40	60	33	17	RS 16	VBS08	TSFS16	VB02		CTE05	5025
MAS.B40.FSW016.100	ISO40	16	40	100	73	17							
MAS.B40.FSW022.060 New	ISO40	22	50	60	33	19	RS 22	VBS10	TSFS22	VB04		CTE06	5003
MAS.B40.FSW022.100	ISO40	22	50	100	73	19							
MAS.B40.FSW027.045	ISO40	27	60	45	18	21	RS 27	VBS12	TSFS27	VB05		CTE08	5004
MAS.B40.FSW027.100	ISO40	27	60	100	73	21							
MAS.B40.FSW032.060	ISO40	32	65	60	33	24	RS 32	VBS16	TSFS32	VB05		CTE10	5004
MAS.B40.FSW040.100	ISO40	40	75	100	33	27	RS 40	VBS20	TSFS40	VB06		CTE12	5005
MAS.B50.FSW016.075	ISO50	16	40	75	37	17	RS 16	VBS08	TSFS16	VB02		CTE05	5025
MAS.B50.FSW022.075	ISO50	22	50	75	37	19	RS 22	VBS10	TSFS22	VB04		CTE06	5003
MAS.B50.FSW022.100	ISO50	22	50	100	62	19							
MAS.B50.FSW027.060	ISO50	27	60	60	22	21	RS 27	VBS12	TSFS27	VB05		CTE08	5004
MAS.B50.FSW027.100	ISO50	27	60	100	62	21							
MAS.B50.FSW032.075	ISO50	32	75	75	37	24	RS 32	VBS16	TSFS32	VB05		CTE10	5004
MAS.B50.FSW032.100	ISO50	32	75	100	62	24							

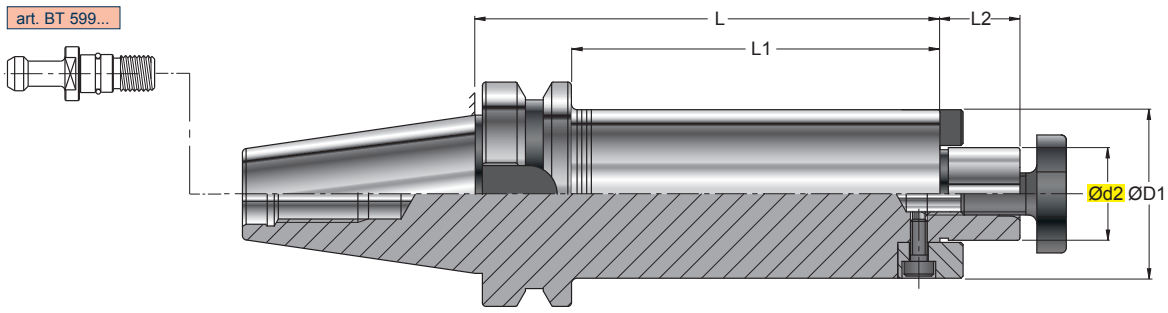
PAG. 1102

SAU QUALITY TOOLS ENGINEERING

ART. MAS.A..FSV..
MAS 403 BT/A

ISO 3937

NEW



PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

0,015

PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min-1

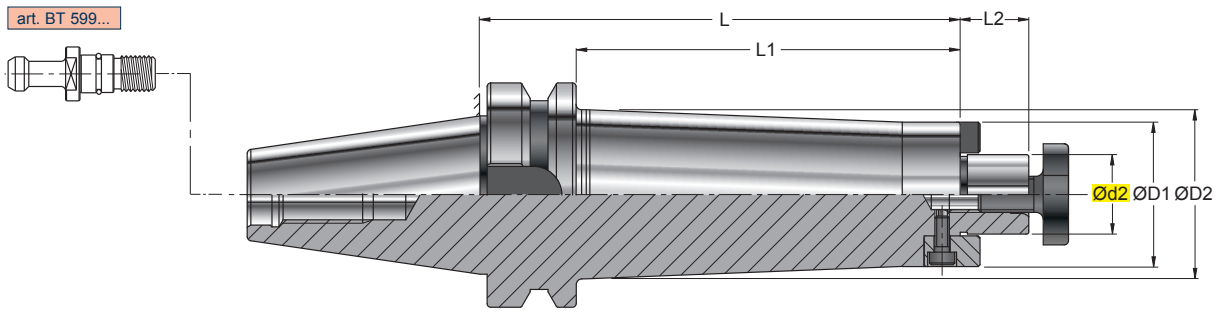
ART.		(mm) Ød2	ØD1	L	L1	L2	kg						
MAS.A40.FSV016.150	ISO40	16	38	150	123	17	2,10	CHF16V	VB 02	422.016..		5025	423.016..
MAS.A40.FSV016.200	ISO40	16	38	200	173	17	2,50						
MAS.A40.FSV016.250	ISO40	16	38	250	223	17	3,10						
MAS.A40.FSV016.300	ISO40	16	38	300	273	17	3,90						
MAS.A40.FSV022.150	ISO40	22	48	150	123	19	2,50	CHF22V	VB 04	422.022..		5003	423.022..
MAS.A40.FSV022.200	ISO40	22	48	200	173	19	3,10						
MAS.A40.FSV022.250	ISO40	22	48	250	223	19	3,90						
MAS.A40.FSV022.300	ISO40	22	48	300	273	19	4,50						
MAS.A40.FSV027.150	ISO40	27	54	150	123	21	2,60	CHF27V	905.005.080.012	422.027..		5004	423.027..
MAS.A40.FSV027.200	ISO40	27	54	200	173	21	3,30						
MAS.A40.FSV027.250	ISO40	27	54	250	223	21	4,10						
MAS.A40.FSV027.300	ISO40	27	54	300	273	21	4,70						
MAS.A50.FSV016.150	ISO50	16	38	150	112	17	5,20	CHF16V	VB 02	422.016..		5025	423.016..
MAS.A50.FSV016.200	ISO50	16	38	200	162	17	5,80						
MAS.A50.FSV016.250	ISO50	16	38	250	212	17	6,50						
MAS.A50.FSV016.300	ISO50	16	38	300	262	17	7,30						
MAS.A50.FSV016.400	ISO50	16	38	400	362	17	11,00						
MAS.A50.FSV022.200	ISO50	22	48	200	162	19	5,50	CHF22V	VB 04	422.022..		5003	423.022..
MAS.A50.FSV022.250	ISO50	22	48	250	212	19	6,10						
MAS.A50.FSV022.300	ISO50	22	48	300	262	19	6,80						
MAS.A50.FSV022.400	ISO50	22	48	400	362	19	7,50						
MAS.A50.FSV022.500	ISO50	22	48	500	462	19	11,30						
MAS.A50.FSV022.200B	ISO50	22	60	200	162	19	5,80						
MAS.A50.FSV022.250B	ISO50	22	60	250	212	19	6,40						
MAS.A50.FSV022.300B	ISO50	22	60	300	262	19	7,10						
MAS.A50.FSV022.400B	ISO50	22	60	400	362	19	7,80						
MAS.A50.FSV022.500B	ISO50	22	60	500	462	19	11,50						
MAS.A50.FSV027.200	ISO50	27	60	200	162	21	6,10	CHF27V	905.005.080.012	422.027..		5004	423.027..
MAS.A50.FSV027.250	ISO50	27	60	250	212	21	7,10						
MAS.A50.FSV027.300	ISO50	27	60	300	262	21	8,10						
MAS.A50.FSV027.400	ISO50	27	60	400	362	21	11,10						
MAS.A50.FSV027.500	ISO50	27	60	500	462	21	12,50						
MAS.A50.FSV032.200	ISO50	32	76	200	162	24	6,30	CHF32V	905.005.080.012	422.032..		5004	423.032..
MAS.A50.FSV032.250	ISO50	32	76	250	212	24	7,40						
MAS.A50.FSV032.300	ISO50	32	76	300	262	24	8,50						
MAS.A50.FSV032.400	ISO50	32	76	400	362	24	11,50						
MAS.A50.FSV032.500	ISO50	32	76	500	462	24	12,90						

PAG. 1102

ART. MAS.A..FSCV..
MAS 403 BT/A

ISO 3937

NEW



PORTAFRESA ANTIVIBRANTE A TRASCINAMENTO FRONTALE CON TENONE
VIBRATION-DAMPED SHELL END-MILL HOLDERS WITH TENON
SCHWINGUNGSGEDÄMPFTE FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE A ENTRAINEMENT FRONTAL AVEC TENON

0,015

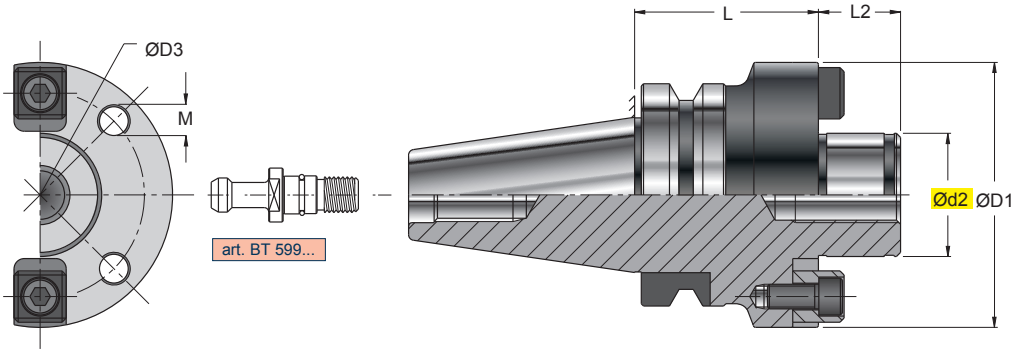
PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2	kg					
MAS.A40.FSCV016.150	ISO40	16	38	50	150	123	17	2,30	CHF16V	VB 02	422.016..	5025	423.016..
MAS.A40.FSCV016.200	ISO40	16	38	50	200	173	17	2,80					
MAS.A40.FSCV016.250	ISO40	16	38	50	250	223	17	3,30					
MAS.A40.FSCV016.300	ISO40	16	38	50	300	273	17	4,10					
MAS.A40.FSCV022.150	ISO40	22	44	50	150	123	19	2,70	CHF22V	VB 04	422.022..	5003	423.022..
MAS.A40.FSCV022.200	ISO40	22	44	50	200	173	19	3,40					
MAS.A40.FSCV022.250	ISO40	22	44	50	250	223	19	4,10					
MAS.A40.FSCV022.300	ISO40	22	44	50	300	273	19	4,80					
MAS.A50.FSCV016.150	ISO50	16	38	80	150	112	17	5,40	CHF16V	VB 02	422.016..	5025	423.016..
MAS.A50.FSCV016.200	ISO50	16	38	80	200	162	17	6,10					
MAS.A50.FSCV016.250	ISO50	16	38	80	250	212	17	6,80					
MAS.A50.FSCV016.300	ISO50	16	38	80	300	262	17	7,60					
MAS.A50.FSCV016.400	ISO50	16	38	80	400	362	17	11,30					
MAS.A50.FSCV022.200	ISO50	22	48	80	200	162	19	6,30	CHF22V	VB 04	422.022..	5003	423.022..
MAS.A50.FSCV022.250	ISO50	22	48	80	250	212	19	7,40					
MAS.A50.FSCV022.300	ISO50	22	48	80	300	262	19	8,00					
MAS.A50.FSCV022.350	ISO50	22	48	80	350	312	19	8,90					
MAS.A50.FSCV022.400	ISO50	22	48	80	400	362	19	9,80					
MAS.A50.FSCV022.500	ISO50	22	48	80	500	462	19	12,30					
MAS.A50.FSCV027.200	ISO50	27	60	80	200	162	21	7,30	CHF27V	905.005.080.012	422.027..	5004	423.027..
MAS.A50.FSCV027.250	ISO50	27	60	80	250	212	21	8,30					
MAS.A50.FSCV027.300	ISO50	27	60	80	300	262	21	9,30					
MAS.A50.FSCV027.400	ISO50	27	60	80	400	362	21	11,50					
MAS.A50.FSCV027.500	ISO50	27	60	80	500	462	21	14,40					

PAG. 1102

ART. MAS.A..FF..
MAS 403 BT/A

DIN 6357 B



PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
SHELL END-MILL HOLDERS WITH TENON
FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

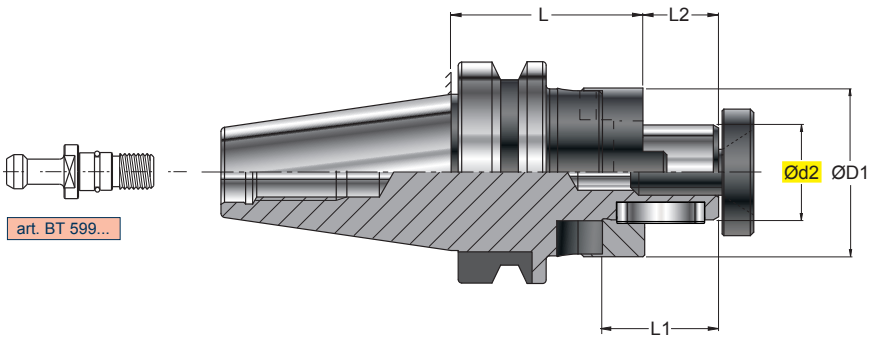
0,003

ART.		(mm) Ød2	ØD1	ØD3	L	L2	M					5005	RS 40	VBS20	CTE12
MAS.A50.FF040.050 New	ISO50	40	89	66,7	50	25	12	TSFF40	VB06			5005	RS 40	VBS20	CTE12
MAS.A50.FF060.088	ISO50	60	129	101,6	88	40	16	TSFF60	VB12C			5010	RS 60	VBS24	CTE14

SAU QUALITY TOOLS ENGINEERING

ART. MAS.A..FC..
MAS 403 BT/A

DIN 6358 B



PORTAFRESA A TRASCINAMENTO COMBINATO PER FRESE A MANICOTTO E A DISCO
COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS
FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER
MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÉ POUR FRAISES À MANCHON ET DE DISQUE

0,01

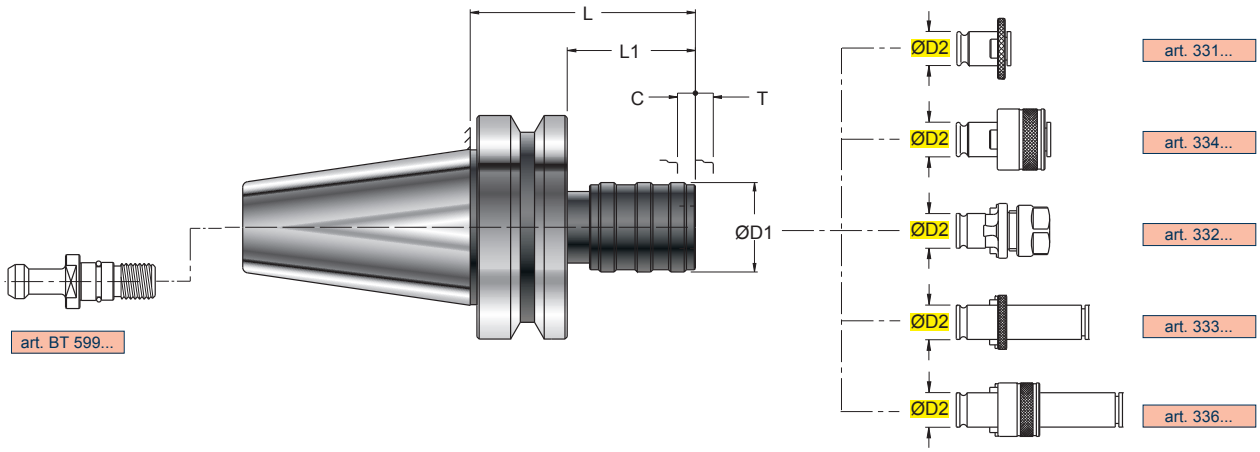
PRE-EQUILIBRATO
PRE-BALANCED
G 6,3 8000 min-1

ART.	(mm)	Ød2	ØD1	L	L1	L2					
MAS.A40.FC016.050	ISO40	16	32	50	27	17	RS 16	VBS08	CT0420	08.3501.016.AT	CTE05
MAS.A40.FC016.090	ISO40	16	32	90	27	17					
MAS.A40.FC022.055	ISO40	22	40	55	31	19	RS 22	VBS10	CT0625	08.3502.022.AT	CTE06
MAS.A40.FC022.090	ISO40	22	40	90	31	19					
MAS.A40.FC027.055	ISO40	27	48	55	33	21	RS 27	VBS12	CT0725	08.3503.027.AT	CTE08
MAS.A40.FC027.090	ISO40	27	48	90	33	21					
MAS.A40.FC032.060	ISO40	32	58	60	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
MAS.A40.FC032.090	ISO40	32	58	90	38	24					
MAS.A40.FC040.060	ISO40	40	70	60	41	27	RS 40	VBS20	CT1032	08.3505.040.AT	CTE12
MAS.A40.FC040.090	ISO40	40	70	90	41	27					
MAS.A50.FC016.065	ISO50	16	32	65	27	17	RS 16	VBS08	CT0420	08.3501.016.AT	CTE05
MAS.A50.FC016.120	ISO50	16	32	120	27	17					
MAS.A50.FC022.065	ISO50	22	40	65	31	19	RS 22	VBS10	CT0625	08.3502.022.AT	CTE06
MAS.A50.FC027.120	ISO50	27	48	120	33	21	RS 27	VBS12	CT0725	08.3503.027.AT	CTE08
MAS.A50.FC032.070	ISO50	32	58	70	38	24	RS 32	VBS16	CT0828	08.3504.032.AT	CTE10
MAS.A50.FC032.120	ISO50	32	58	120	38	24					
MAS.A50.FC040.075	ISO50	40	70	75	41	27	RS 40	VBS20	CT1032	08.3505.040.AT	CTE12
MAS.A50.FC040.120	ISO50	40	70	120	41	27					

PER IL MONTAGGIO DELLE FRESE A DISCO OCCORRE L'ANELLO DISTANZIATORE **195..** , PAG 1021
FOR THE INSTALLATION OF THE DISC MILLING CUTTERS THE DISTANCE RING **195..** (PAGE 1021) IS REQUIRED.
ZUM EINBAU DER SCHEIBENFRÄSER WIRD DER DISTANZRING **195..** (SEITE 1021) BENÖTIGT.
EN CAS DE MONTAGE DES FRAISES-DISQUES LA BAGUE D'ENTRETOISE **195**.. , PAGE 1021 S'IMPOSE

PAG. 1102

ART. MAS.A..MC..
MAS 403 BT/A

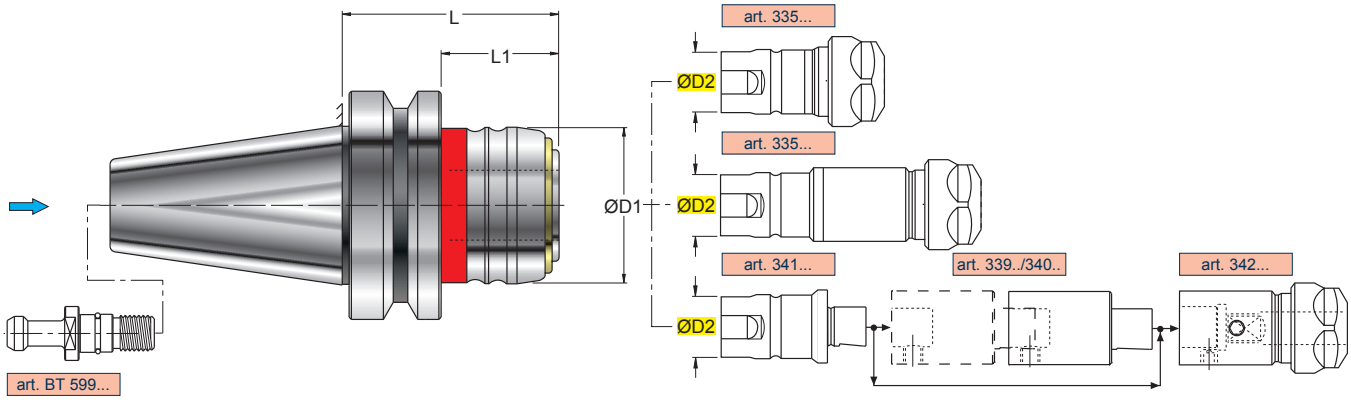


PORTA MASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE
QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION
GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION

ART.		(mm) ØD1	ØD2	L	L1	C	T	Campo di maschiatura Tap range
MAS.A40.MC019.068	ISO40	38	19	68	41	9	9	M3-M12
MAS.A40.MC031.093	ISO40	55	31	93	66	15	15	M8-M24
MAS.A50.MC019.080	ISO50	38	19	80	42	9	9	M3-M12
MAS.A50.MC031.102	ISO50	55	31	102	64	15	15	M8-M24
MAS.A50.MC048.135	ISO50	79	48	135	97	24	24	M16-M36

PAG. 1102

ART. MAS.A..MS..
MAS 403 BT/AD

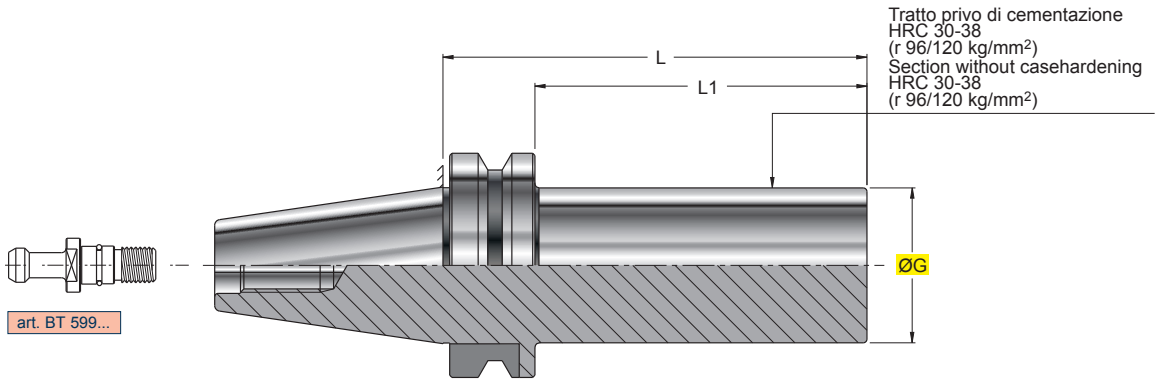


PORTA MASCHIO A CAMBIO RAPIDO PER MASCHIATURA SINCRONIZZATA
QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

ART.		(mm) ØD1	ØD2	L	L1	Campo di maschiatura Tap range
MAS.A40.MS020.061	ISO40	43	20	61	34	M3-M12
MAS.A40.MS032.082	ISO40	60	32	82	55	M6-M20
MAS.A50.MS020.072	ISO50	43	20	72	34	M3-M12
MAS.A50.MS032.093	ISO50	60	32	93	55	M6-M20

PAG. 1102

ART. MAS.A..SF..
MAS 403 BT/A

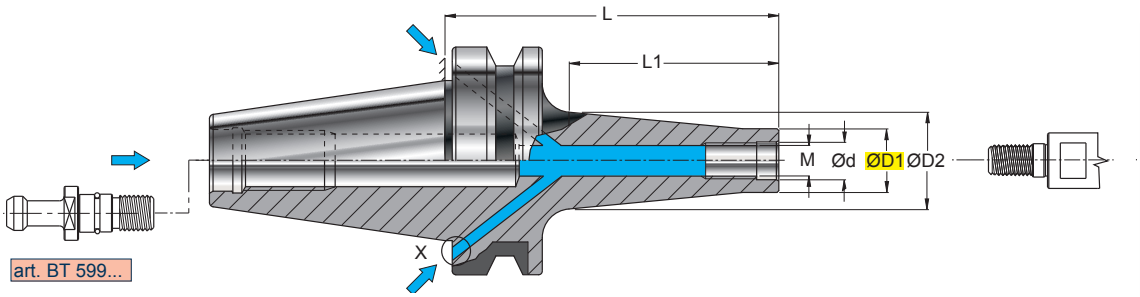


BARRA CON CONO FINITO E STELO TENERO
BORING BARS WITH FINISHED TAPER AND BLANK SCHAFT
ROHLINGE
BARRE AVEC CONE FINI ET BOUT DOUX

ART.		(mm) ØG	L	L1
MAS.A40.SF063.177	ISO40	63	177	150
MAS.A40.SF063.277	ISO40	63	277	250
MAS.A50.SF100.288	ISO50	100	288	250

SAU QUALITY TOOLS ENGINEERING

ART. MAS.B40.MD..
MAS 403 BT/AD-B



art. 253..VW
S1089W..
S1503.9W..
S2000.89W..
S613/4.9.45W...
S659W...
S809W...
S849W...
S929...
S959...
S9002W..
S9005.9W..

PORTAFRESA CON ATTACCO MODULARE- FILETTATO
CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
FRÄSERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
MANDRIN PORTE-FRAISE AVEC ATTACHEMENT MODULAIRE FILETÉ

0,005

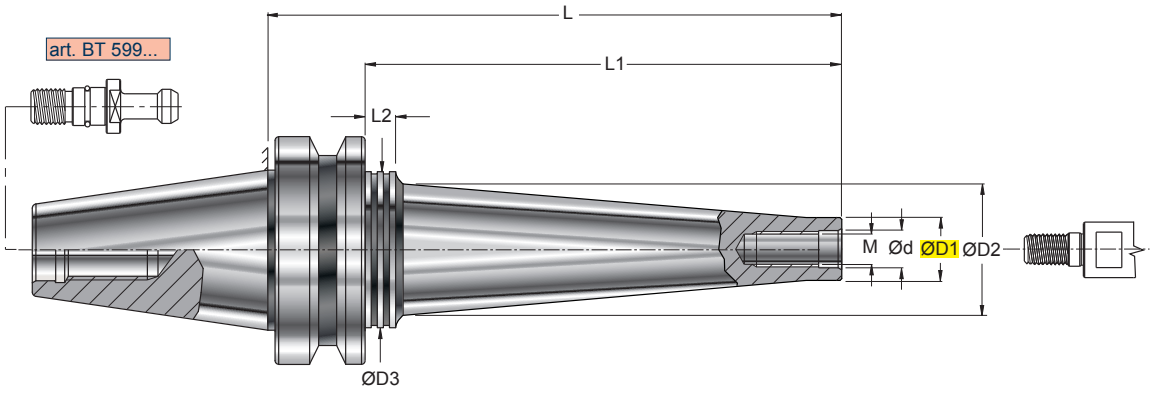
EQUILIBRATO BALANCED
G6,3 15000 min^{-1}

ART.		(mm) M	Ød	ØD1	ØD2	L	L1
MAS.B40.MD010.066	ISO40	10	10,5	17,7	20	66	31
MAS.B40.MD010.086	ISO40	10	10,5	17,7	25	86	51
MAS.B40.MD010.106	ISO40	10	10,5	17,7	28	106	71
MAS.B40.MD010.126	ISO40	10	10,5	17,7	28	126	91
MAS.B40.MD012.066	ISO40	12	12,5	20,7	24	66	31
MAS.B40.MD012.086	ISO40	12	12,5	20,7	24	86	51
MAS.B40.MD012.106	ISO40	12	12,5	20,7	31	106	71
MAS.B40.MD012.126	ISO40	12	12,5	20,7	31	126	91
MAS.B40.MD016.066	ISO40	16	17	28,7	34	66	31
MAS.B40.MD016.086	ISO40	16	17	28,7	34	86	51
MAS.B40.MD016.106	ISO40	16	17	28,7	34	106	71
MAS.B40.MD016.126	ISO40	16	17	28,7	34	126	91
MAS.B40.MD016.185	ISO40	16	17	28,7	34	185	150

PAG. 1102

ART. MAS.A.. MDV..
MAS 403 BT/A

NEW



art. 253..VW
S1089W..
S1503.9W..
S2000.89W..
S613/4.9.45W...
S659W...
S809W...
S849W...
S929...
S959...
S9002W..
S9005.9W..

PORTAFRESA ANTIVIBRANTE CON ATTACCO MODULARE-FILETTATO
VIBRATION-DAMPED CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
SCHWINGUNGSGEDÄMPFTE FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
MANDRIN PORTE-FRAISE ANTIVIBRATOIRE AVEC ATTACHEMENT MODULAIRE FILETÉ

0,015

PRE-EQUILIBRATO PRE-BALANCED
BT40 = G6,3 15000 min^{-1}
BT50 = G6,3 10000 min^{-1}

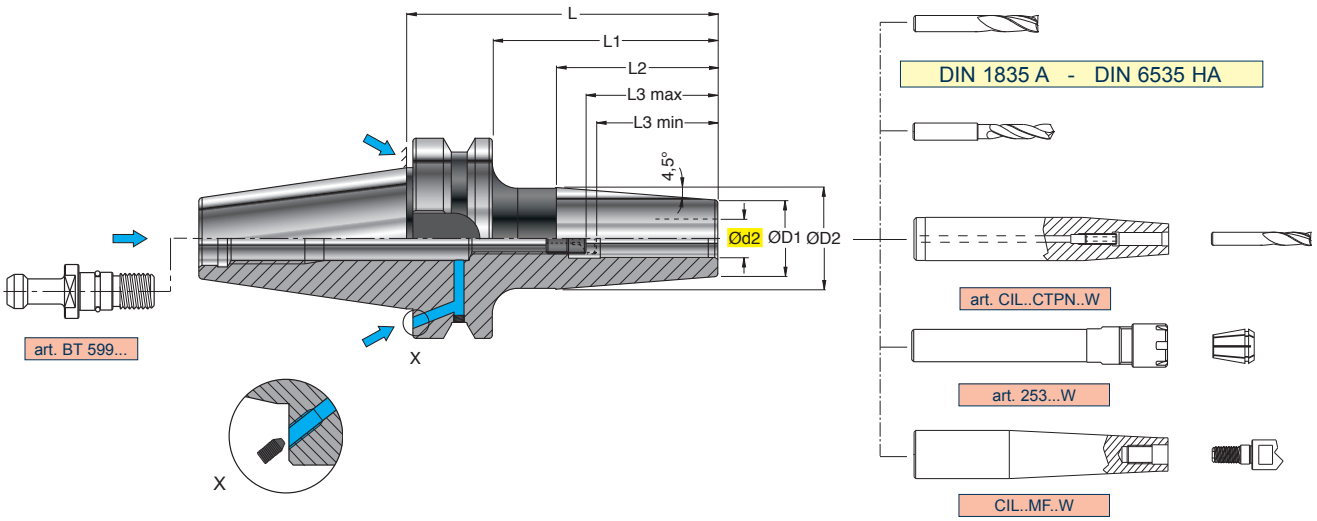
ART.		(mm) M	Ød	ØD1	ØD2	ØD3	L	L1	L2	kg
MAS.A40.MDV010.200	ISO40	10	10,5	18	35	50	200	158	15	1,90
MAS.A40.MDV010.250	ISO40	10	10,5	18	40	50	250	208	15	2,20
MAS.A40.MDV010.300	ISO40	10	10,5	18	45	50	300	258	15	2,80
MAS.A40.MDV012.200	ISO40	12	12,5	21	38	50	200	158	15	2,10
MAS.A40.MDV012.250	ISO40	12	12,5	21	43	50	250	208	15	2,50
MAS.A40.MDV012.300	ISO40	12	12,5	21	44	50	300	258	15	3,10
MAS.A40.MDV016.200	ISO40	16	17,0	29	43	50	200	158	15	2,50
MAS.A40.MDV016.250	ISO40	16	17,0	29	44	50	250	208	15	2,80
MAS.A40.MDV016.300	ISO40	16	17,0	29	47	50	300	258	15	3,50
MAS.A50.MDV012.250	ISO50	12	12,5	21	42	80	250	197	15	5,10
MAS.A50.MDV012.300	ISO50	12	12,5	21	47	80	300	247	15	5,90
MAS.A50.MDV012.400	ISO50	12	12,5	21	57	80	400	347	15	7,50
MAS.A50.MDV016.300	ISO50	16	17,0	29	55	80	300	247	15	6,80
MAS.A50.MDV016.400	ISO50	16	17,0	29	65	80	400	347	15	9,10
MAS.A50.MDV016.500	ISO50	16	17,0	29	76	80	500	447	15	12,10

PAG. 1102

SAU QUALITY TOOLS ENGINEERING

ART. MAS.B..CTN..
MAS 403 BT/AD-B

DIN 69882-8



MANDRINO A CALETTAMENTO TERMICO
SHRINKING-ON TAPER SHANKS
WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
MANDRIN À EMBOÎTEMENT TERMIQUE

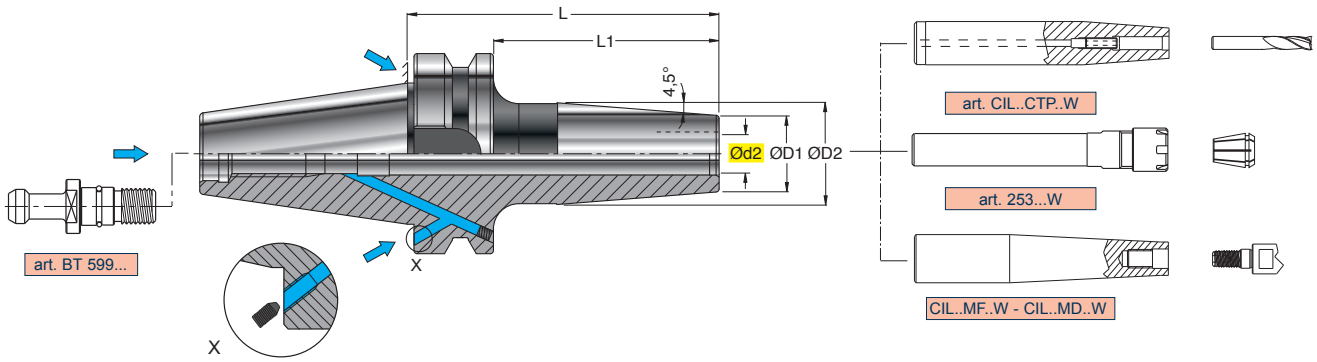
0,003

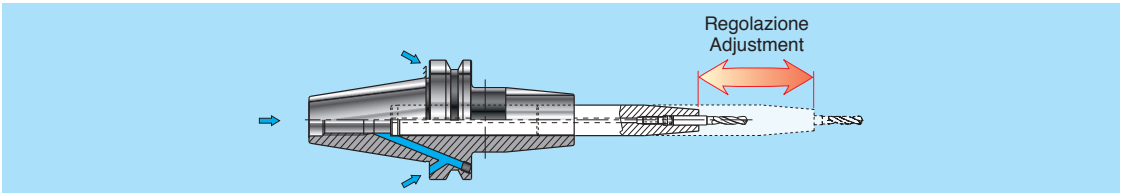
EQUILIBRATO
BALANCED
G 2,5 25000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2	L3 min	L3 max		
MAS.B40.CTN006.090	ISO40	6	21	27	90	63	–	26	36	GWR 05L	5025
MAS.B40.CTN006.120	ISO40	6	21	27	120	93	–	26	36		
MAS.B40.CTN006.160	ISO40	6	21	27	160	133	100	26	36		
MAS.B40.CTN008.090	ISO40	8	21	27	90	63	–	26	36	GWR 06L	5003
MAS.B40.CTN008.120	ISO40	8	21	27	120	93	–	26	36		
MAS.B40.CTN008.160	ISO40	8	21	27	160	133	100	26	36		
MAS.B40.CTN010.090	ISO40	10	24	32	90	63	–	31	41	GWR 08CTD	5004
MAS.B40.CTN010.120	ISO40	10	24	32	120	93	–	31	41		
MAS.B40.CTN010.160	ISO40	10	24	32	160	133	100	31	41		
MAS.B40.CTN012.090	ISO40	12	24	32	90	63	–	36	46	GWR 10CTD	5005
MAS.B40.CTN012.120	ISO40	12	24	32	120	93	–	36	46		
MAS.B40.CTN012.160	ISO40	12	24	32	160	133	100	36	46		
MAS.B40.CTN014.090	ISO40	14	27	34	90	63	–	36	46		
MAS.B40.CTN014.120	ISO40	14	27	34	120	93	–	36	46		
MAS.B40.CTN014.160	ISO40	14	27	34	160	133	100	36	46		
MAS.B40.CTN016.090	ISO40	16	27	34	90	63	–	39	49	GWR 12CTD	5006
MAS.B40.CTN016.120	ISO40	16	27	34	120	93	–	39	49		
MAS.B40.CTN016.160	ISO40	16	27	34	160	133	100	39	49		
MAS.B40.CTN018.090	ISO40	18	33	42	90	63	–	39	49		
MAS.B40.CTN018.120	ISO40	18	33	42	120	93	–	39	49		
MAS.B40.CTN018.160	ISO40	18	33	42	160	133	100	39	49		
MAS.B40.CTN020.090	ISO40	20	33	42	90	63	–	41	51	GWR 16CTD	5008
MAS.B40.CTN020.120	ISO40	20	33	42	120	93	–	41	51		
MAS.B40.CTN020.160	ISO40	20	33	42	160	133	100	41	51		
MAS.B40.CTN025.100	ISO40	25	44	53	100	73	–	47	57		
MAS.B50.CTN006.100	ISO50	6	21	27	100	62	–	26	36	GWR 05L	5025
MAS.B50.CTN006.160	ISO50	6	21	27	160	122	100	26	36		
MAS.B50.CTN008.100	ISO50	8	21	27	100	62	–	26	36	GWR 06L	5003
MAS.B50.CTN008.160	ISO50	8	21	27	160	122	100	26	36		
MAS.B50.CTN010.100	ISO50	10	24	32	100	62	–	31	41	GWR 08CTD	5004
MAS.B50.CTN010.160	ISO50	10	24	32	160	122	100	31	41		
MAS.B50.CTN012.100	ISO50	12	24	32	100	62	–	36	46	GWR 10CTD	5005
MAS.B50.CTN012.160	ISO50	12	24	32	160	122	100	36	46		
MAS.B50.CTN014.100	ISO50	14	27	34	100	62	–	36	46		
MAS.B50.CTN014.160	ISO50	14	27	34	160	122	100	36	46		
MAS.B50.CTN016.100	ISO50	16	27	34	100	62	–	39	49	GWR 12CTD	5006
MAS.B50.CTN016.160	ISO50	16	27	34	160	122	100	39	49		
MAS.B50.CTN018.100	ISO50	18	33	42	100	62	–	39	49		
MAS.B50.CTN018.160	ISO50	18	33	42	160	122	100	39	49		
MAS.B50.CTN020.120	ISO50	20	33	42	120	82	–	41	51	GWR 16CTD	5008
MAS.B50.CTN020.160	ISO50	20	33	42	160	122	100	41	51		
MAS.B50.CTN025.120	ISO50	25	44	53	120	82	–	47	57		
MAS.B50.CTN025.160	ISO50	25	44	53	160	122	100	47	57		
MAS.B50.CTN032.120	ISO50	32	44	53	120	82	–	51	61		
MAS.B50.CTN032.160	ISO50	32	44	53	160	122	100	51	61		

PAG. 1102-1108

ART. MAS.B..CTPN..
MAS 403 BT/AD-B





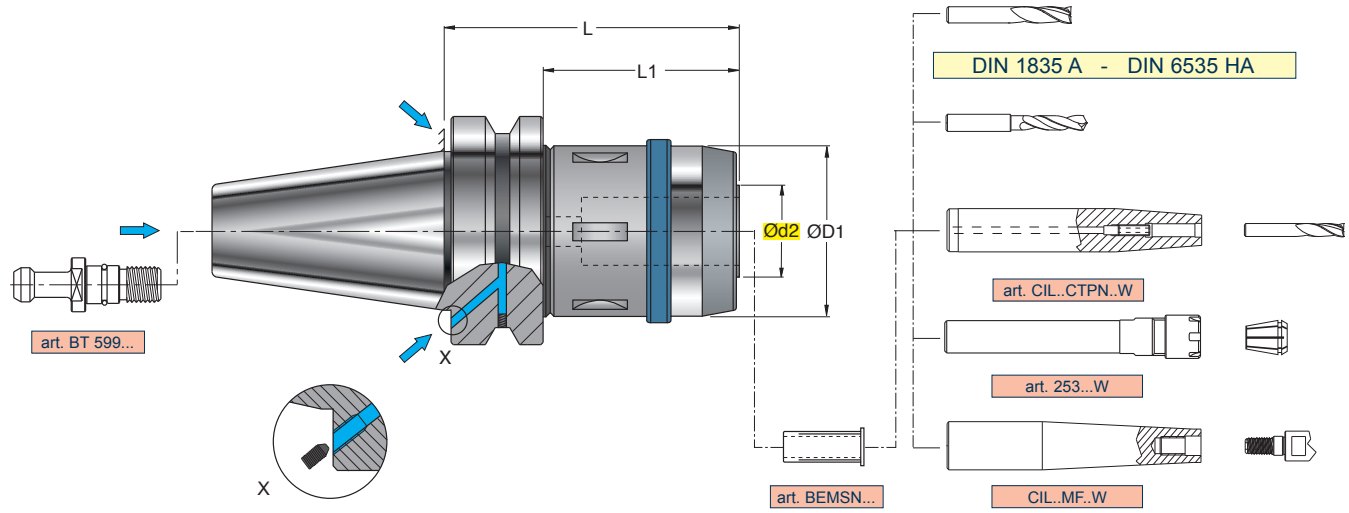
MANDRINO A CALETTAMENTO TERMICO PROLUNGABILE
EXTENSIBLE SHRINK FIT
VERLÄNGERBARES SCHRUMPFFUTTER
MANDRIN PROLONGEABLE À EMBOÎTEMENT THERMIQUE.

ART.		(mm) Ød2	ØD1	ØD2	L	L1
MAS.B40.CTPN016.090	ISO40	16	27	34	90	63
MAS.B40.CTPN025.100	ISO40	25	44	53	100	73
MAS.B50.CTPN016.130	ISO50	16	27	34	130	92
MAS.B50.CTPN025.130	ISO50	25	44	53	130	92
MAS.B50.CTPN032.130	ISO50	32	44	53	130	92

PAG. 1102-1108

ART. MAS.B..MFSN..
MAS 403 BT/AD-B

NEW



MANDRINO A FORTE SERRAGGIO
HIGH CLAMPING CHUCKS
KRAFTSPANNFUTTER
MANDRIN À FORT SERRAGE

	0,003 2,5 x Ø
	0,004 2,5 x Ø

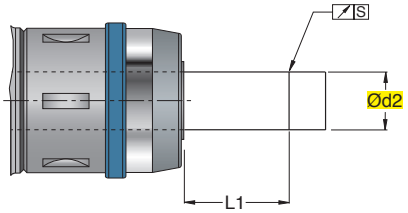
EQUILIBRATO BALANCED	
	G 2,5 20000 min-1

ART.		(mm) Ød2	ØD1	L	L1				
MAS.B40.MFSN020.093	ISO40	20	50	93	66	BEMS.20..			925.052 ESMS.010
MAS.B40.MFSN032.092	ISO40	32	67	92	65	BEMS.32..			925.068 ESMS.010
MAS.B50.MFSN020.094	ISO50	20	50	94	56	BEMS.20..			925.052 ESMS.010
MAS.B50.MFSN032.103	ISO50	32	67	103	65	BEMS.32..			925.068 ESMS.010

CARATTERISTICHE TECNICHE - TECHNICAL CHARACTERISTICS

1. Ridotte dimensioni di ingombro (lunghezza e diametro esterno) che consentono una migliore equilibratura (G 2,5 fino a 20000 rpm)
2. Aumento della rigidità del mandrino per una resa migliore in lavorazione
3. Perfetta centratura dell'utensile (0,003/0,004 mm a 2,5xØ) che determinano un incremento della durata degli inserti fino a raddoppiare la durata
4. Aumento della potenza di serraggio Max 1750 Nm
5. Adatto anche per frese con attacco cilindrico, weldon, whistle notch e punte in metallo duro
6. Passaggio del lubrificante attraverso l'utensile fino a 100 bar
7. Serraggio ottimale garantito dall'alineamento delle tacche (ghiera mandrino)

1. Reduced dimensions (length and external diameter) for a better balancing (G 2,5 till to 20000 rpm)
2. High rigidity of the chuck for a better performance
3. Perfect concentricity (0,003/0,004 mm 2,5xØ) for an increase in toollife
4. Increase of tightening force Max 1750 Nm
5. Suitable for endmills tools with cylindrical, weldon and whistle notch shank and for carbide drills
6. Coolant through the tool till 100 bar
7. Best clamping assured by alignment of notches (fixin ring nut/arbor)

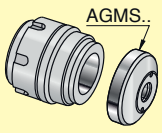


Ød2 (mm)	L1 (mm)	Concentricità "S" Concentricity "S" (mm)	Forza di serraggio Clamping force (Nm)
20	50	0,003	1000
32	80	0,004	1750

PER AVERE UNA TENUTA DEL LUBRIFICANTE FINO A 100 bar BISOGNA ACQUISTARE IL MANDRINO CON ANELLO DI TENUTA. PER ORDINARE TALE MANDRINO, BISOGNA AGGIUNGERE AL CODICE DEL MANDRINO SCELTO UNA "F" FINALE E SPECIFICARLO AL MOMENTO DELL' ORDINE. UTILIZZANDO LE PINZE DI RIDUZIONE CILINDRICHE BISOGNA SOSTITUIRE L'ANELLO DI TENUTA DEL DIAMETRO DELL'UTENSILE PRESCELTO. IL MANDRINO GARANTISCE IL PASSAGGIO DEL LUBRIFICANTE (max 100 bar), SIA CON UTENSILI CALETTATI DIRETTAMENTE SIA CON PINZE DI RIDUZIONE CILINDRICHE BEMS.. INTERPOSTE.

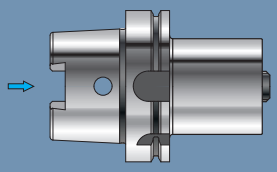
TO OBTAIN A COOLANT FLOW UP TO 100 bar YOU MUST PURCHASE THE CHUCK WITH SEALING RING. TO ORDER THIS CHUCK YOU MUST ADD A FINAL "F" TO THE SELECTED CHUCK CODE AND SPECIFY IT WHEN PLACING THE ORDER. FOR THE USE OF THE CYLINDRICAL REDUCTION SLEEVES THE SEALING RING MUST BE REPLACED WITH ONE OF THE SAME DIAMETER AS THE TOOL CHOSEN. THE HIGH CLAMPING CHUCK IS SUITABLE FOR A COOLANT FLOW (UP TO 100 bar) BOTH WITH DIRECTLY SHRUNK-ON TOOLS AND WITH BEMS CYLINDRICAL REDUCTION SLEEVES.

PAG 1014



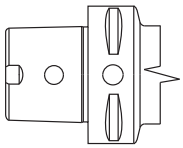
ADATTATORE BASE
- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

HSK..C..
... /AD



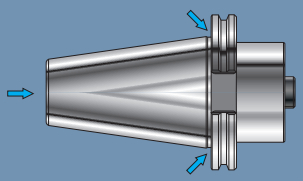
DIN 69893-A HSK

PAG 964



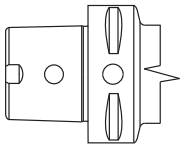
ADATTATORE BASE
- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

370.3..C..
... /AD-B



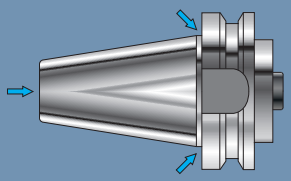
DIN 69871

PAG 964



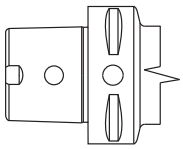
ADATTATORE BASE
- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

370.9..C..
... /AD-B



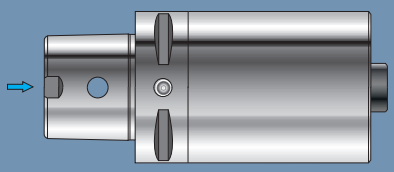
MAS-403-BT

PAG 964

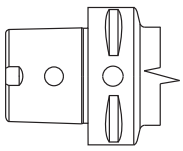


PROLUNGA
- EXTENSION
- VERLÄNGERUNG
- RALLONGE

PSC.C..PRL..
... /A

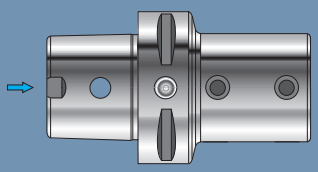


PAG 965



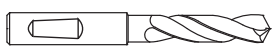
PORTAPUNTA UNIVERSALE
- UNIVERSAL ADAPTER FOR DRILLING TOOLS
- WELDON-AUFNAHME FÜR VOLLBOHRER
- PORTE-FORET UNIVERSEL

PSC.C63.PU..
... /A

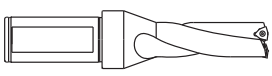


PAG 965

WHISTLE-NOTCH - DIN1835E - DIN6535HE

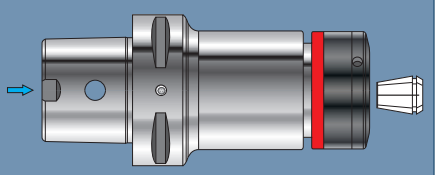


ISO 9766



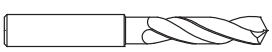
PORTAPINZA STANDARD
- COLLET HOLDER STANDARD
- SPANNFUTTER STANDARD
- MANDRIN PORTE-PINCE STANDARD

PSC.C..ER..
... /A



PAG 966

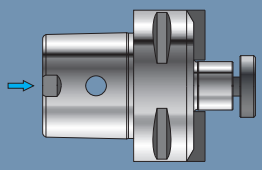
DIN 1835 A - DIN 6535 HA



PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

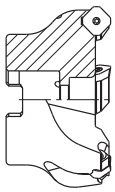
PSC.C..FSW.. ... /A

ISO 3937



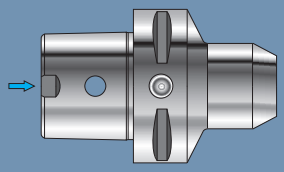
PAG 966

ISO 6462



MANDRINO PER ATTACCHI TIPO WELDON
- END MILL HOLDER FOR WELDON CONNECTIONS
- WELDON-WERKZEUGAUFNAHME
- MANDRIN POUR ATTACHES TYPE WELDON

PSC.C..WE.. ... /A



PAG 967

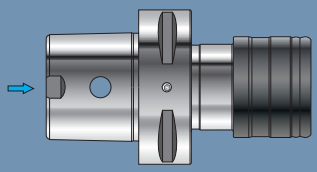
WELDON - DIN1835B - DIN6535HB

ISO 9766

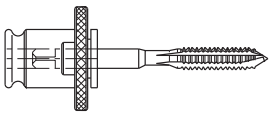
MASCHIATORI A CAMBIO RAPIDO CON COMPENSAZIONE ASSIALE
- TAPPING CHUCK WITH AXIAL COMPENSATION
- GEWINDESCHNEIDFUTTER MIT DOPPEL LÄNGENAUSGLEICH
- APPAREILS À TARAUDER AVEC COMPENSATION AXIALE

PSC.C..MC.. ... /A

DIN 1835/B



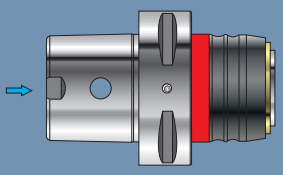
PAG 967



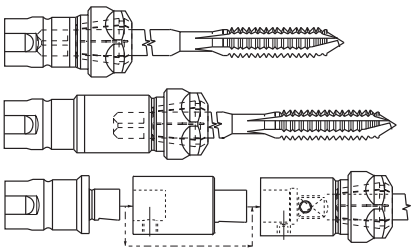
MASCHIATORI PER MASCHIATURA SINCRONIZZATA
- TAPPING CHUCKS FOR SYNCRONIZED TAPPING
- GEWINDESCHNEIDER FÜR STARRES GEWINDESCHNEIDEN
- APPAREIL À TARAUDER POUR TARAUDAGE SYNCHRONISÉ

PSC.C..MS.. ... /A

DIN 1835/B

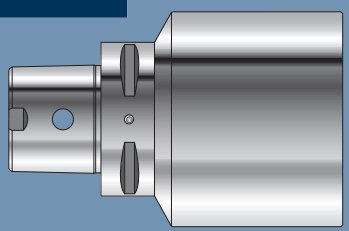


PAG 968

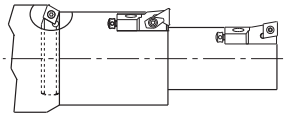


BARRA CON CONO FINITO E STELO TENERO
- BORING BARS WITH FINISHED TAPER AND BLANK SHAFT
- ROHLINGE
- BARRE AVEC CONE FINI ET BOUT DOUX

PSC.C..SF.. ... /A

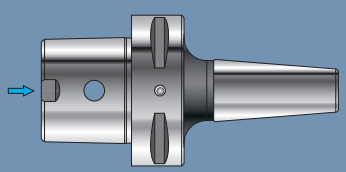


PAG 968



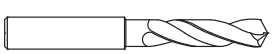
MANDRINO A CALETTAMENTO TERMICO
- SHRINKING-ON TAPER SHANKS
- WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
- MANDRIN À EMBOÎTEMENT THERMIQUE

PSC.C..CTN.. ... /A



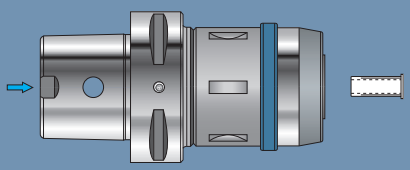
PAG 969

DIN 1835 A - DIN 6535 HA



MANDRINO A FORTE SERRAGGIO
- HIGH CLAMPING CHUCK
- KRAFTSPANNFUTTER
- MANDRIN À SERRAGE FORT

PSC.C63.MFSV..
... /A

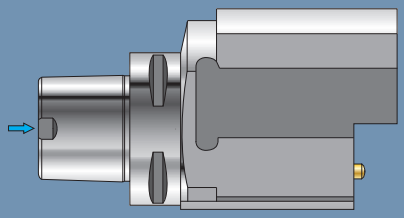


PAG 970

DIN 1835 A - DIN 6535 HA

ADATTATORE PER UTENSILI A STELO QUADRO
- ADAPTOR FOR SHANK TOOL
- ADAPTER FÜR SCHAFT WERKZEUGE
- ADAPTATEUR POUR OUTIL À MANCHE

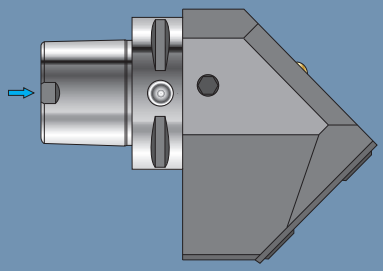
PSC.C63.1PAR/L..
... /A



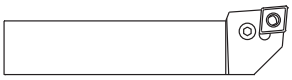
PAG 971

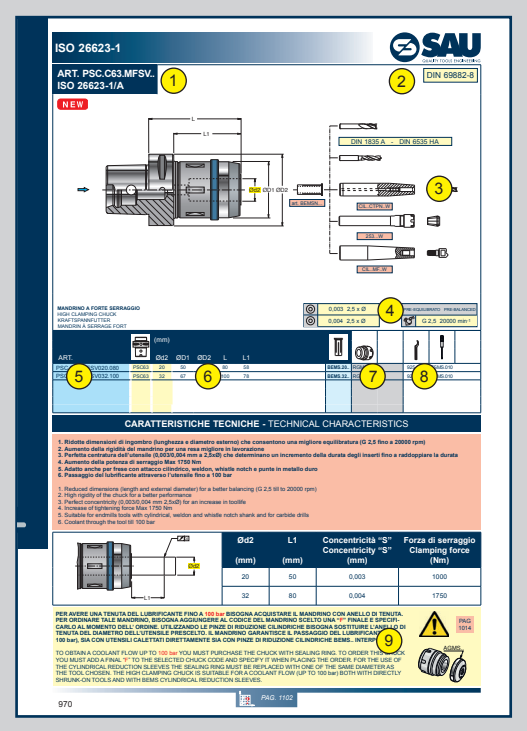
ADATTATORE PER UTENSILI A STELO QUADRO A 45°
- ADAPTOR FOR SHANK TOOL 45°
- ADAPTER FÜR SCHAFT WERKZEUGE 45°
- ADAPTATEUR POUR OUTIL À MANCHE 45°

PSC.C63.U45..
... /A



PAG 971





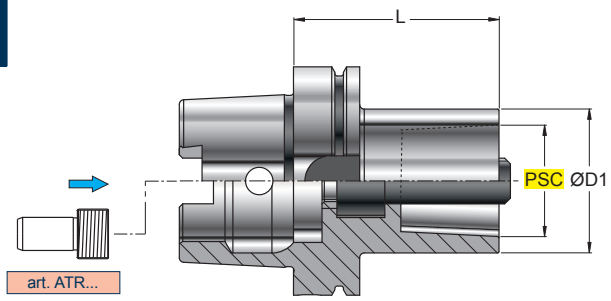
1 = NORMA ATTACCO
2 = NORMA PARTE ANTERIORE
3 = ACCESSORI OPZIONALI A RICHIESTA
4 = CARATTERISTICHE TECNICHE
5 = ARTICOLO
6 = MISURE,DATI,INDICAZIONI
7 = ACCESSORI E RICAMBI IN DOTAZIONE
8 = ACCESSORI E RICAMBI OPZIONALI A RICHIESTA
9 = NOTE E AVVERTIMENTI

1 = SHANK STANDARD
2 = TOOL-HOLDER STANDARD
3 = OPTIONAL ACCESSORIES ON REQUEST.
4 = TECHNICAL FEATURES
5 = ITEM
6 = MEASURES,DATA,INDICATIONS
7 = ACCESORIES AND SPARE PARTS EQUIPMENT
8 = OPTIONAL ACCESORIES AND SPARE PARTS ON REQUEST
9 = NOTES AND WARNINGS

1 = KEGEL-NORM
2 = AUFNAHME-NORM
3 = OPTIONALZUBEHÖR AUF ANFRAGE
4 = TECHNISCHE HAUPTMERKMALE
5 = ARTKEL
6 = ABMESSUNGEN,DATEN,HINWEISE
7 = ZUBEHÖR UND ERSATZTEILAUSSTATTUNG
8 = OPTIONALZUBEHÖR UND -ERSATZTEILE AUF ANFRAGE
9 = ANMERKUNGEN UND HINWEISE

1 = NORMES POUR ATTACHEMENT
2 = NORME POUR MANDRIN
3 = ACCESSOIRES OPTIONNELS SUR DEMANDE
4 = CARACTERISTIQUES TECHNIQUES
5 = ARTICLE
6 = DIMENSIONES,DONNÉES,INDICATIONS
7 = ACCESSOIRES ET RECHANGE EN DOTATION
8 = ACCESOIRES ET RECHANGES OPTIONNELS SUR DEMANDE
9 = NOTES ET AVVERTISSEMENTS

ART. HSK..C..
HSK - AD (DIN 69893)

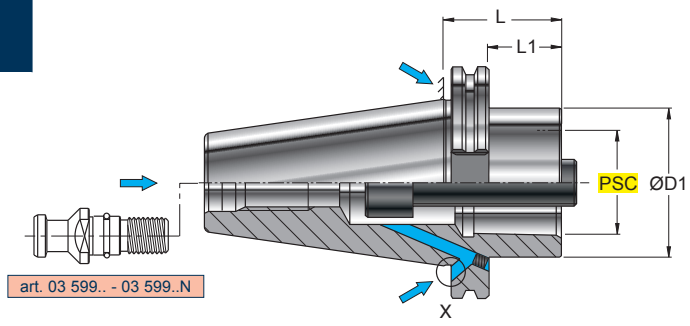


ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) PSC	ØD1	L
HSK.063.C63.110	HSK63	PSC63	63	110
HSK.100.C63.090	HSK100	PSC63	63	090
HSK.100.C63.150	HSK100	PSC63	63	150

ART. 370.3..C..
DIN 69871/AD-B

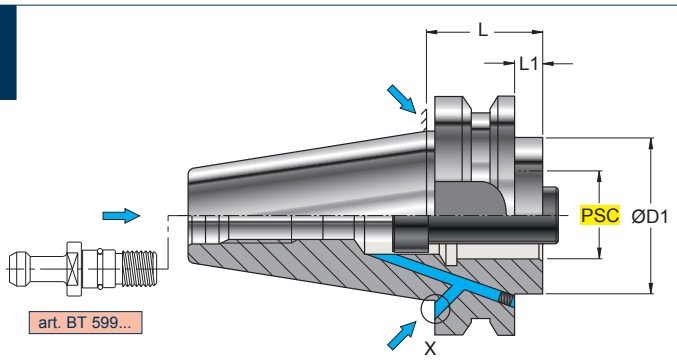


ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) PSC	ØD1	L	L1
370.340.C40.030	ISO40	PSC40	40	30	10,9
370.350.C40.030	ISO50	PSC40	40	30	10,9
370.350.C50.030	ISO50	PSC50	50	30	10,9
370.350.C63.050	ISO50	PSC63	63	50	31
370.350.C63.080	ISO50	PSC63	63	80	61

ART. 370.9..C..
MAS 403 BT/A-AD



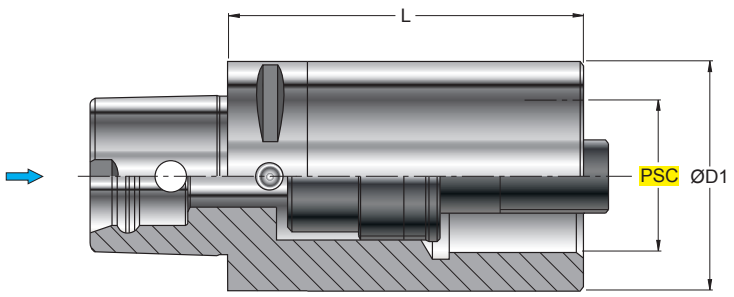
ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) PSC	ØD1	L	L1
370.940.C40.030	ISO40	PSC40	40	30	3
370.950.C50.040	ISO50	PSC50	50	40	2
370.950.C63.050	ISO50	PSC63	63	50	12
370.950.C63.090	ISO50	PSC63	63	90	52

PAG. 1100-1101-1102

ART. PSC.C..PRL..
ISO 26623-1/A

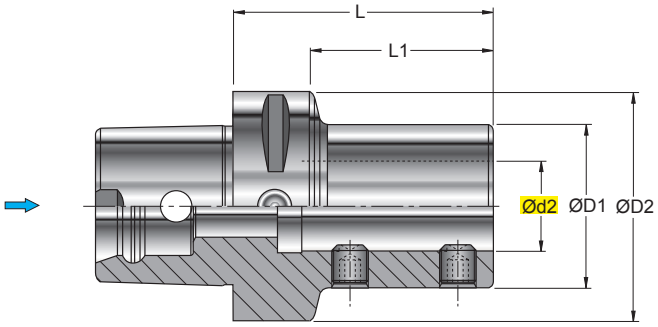


PROLUNGA
EXTENSION
VERLÄNGERUNG
RALLONGE

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.	PSC	(mm) ØD1	L
PSC.C40.PRL40.060	PSC40	40	60
PSC.C40.PRL40.080	PSC40	40	80
PSC.C50.PRL50.080	PSC50	50	80
PSC.C63.PRL63.100	PSC63	63	100
PSC.C63.PRL63.140	PSC63	63	140

ART. PSC.C63.PU..
ISO 26623-1/A



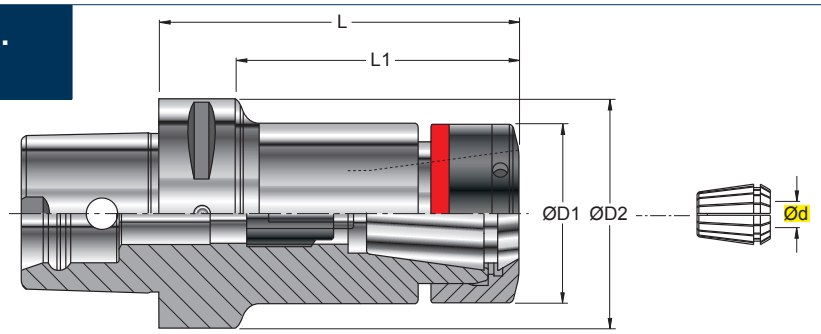
PORTAPUNTA UNIVERSALE
UNIVERSAL ADAPTER FOR DRILLING TOOLS
WELDON-AUFNAHME FÜR VOLLBOHRER
PORTE-FORET UNIVERSEL

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.	(mm) Ød2	ØD1	ØD2	L	L1
PSC.C63.PU016.070	16	36	63	70	41
PSC.C63.PU020.070	20	40	63	70	42
PSC.C63.PU025.072	25	45	63	72	48
PSC.C63.PU032.075	32	52	63	75	50

PAG. 1102

ART. PSC.C..ER..
ISO 26623-1/A



art. 228..
228Q.. (Reccomended)
230..
230QN..
328..
330..

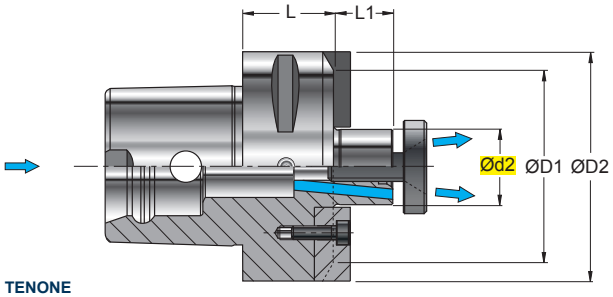
PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

PORTAPINZA STANDARD
COLLET HOLDER STANDARD
SPANNFUTTER STANDARD
MANDRIN PORTE-PINCE STANDARD

ART.		(mm) Ød	ØD1	ØD2	L	L1						
PSC.C40.**ER016**.070	PSC40	0,5-10	28	40	70	44	--.016.--.--	RGC ER16	925.022			
PSC.C40.**ER025**.052	PSC40	0,5-16	40	40	52	52	--.025.--.--	RGC ER25	925.040			
PSC.C50.**ER016**.100	PSC50	0,5-10	28	50	100	60	--.016.--.--	RGC ER16	925.022			
PSC.C50.**ER025**.055	PSC50	0,5-16	40	50	55	33	--.025.--.--	RGC ER25	925.040			
PSC.C50.**ER032**.057	PSC50	2,5-20	50	50	57	57	--.032.--.--	RGC ER32	925.052			
PSC.C63.**ER016**.100	PSC63	0,5-10	28	63	100	60	--.016.--.--	RGC ER16	925.022			
PSC.C63.**ER025**.060	PSC63	0,5-16	40	63	60	33	--.025.--.--	RGC ER25	925.040			
PSC.C63.**ER025**.100	PSC63	0,5-16	40	63	100	75	--.025.--.--					
PSC.C63.**ER032**.060	PSC63	2,5-20	50	63	60	35	--.032.--.--	RGC ER32	925.052			
PSC.C63.**ER032**.100	PSC63	2,5-20	50	63	100	75	--.032.--.--					
PSC.C63.**ER040**.065	PSC63	3-30	63	63	65	65	--.040.--.--	RGC ER40	925.068			
PSC.C63.**ER040**.130	PSC63	3-30	63	63	130	130	--.040.--.--					

ART. PSC.C..FSW..
ISO 26623-1/A

ISO 3937



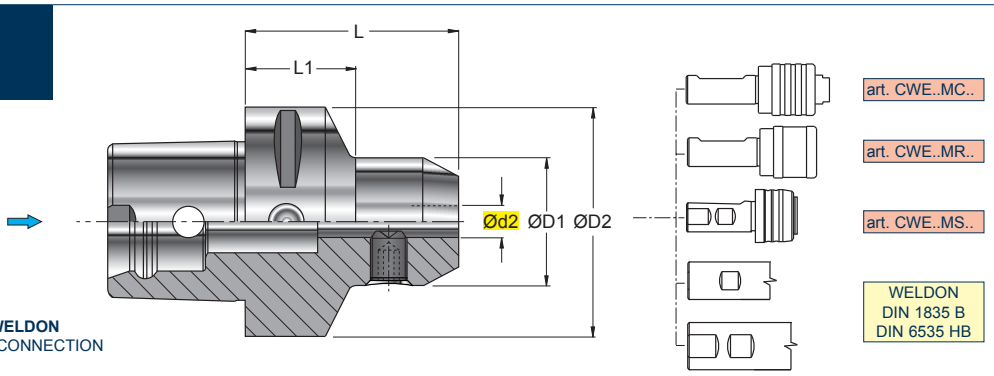
PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE
SHELL END-MILL HOLDERS WITH TENON
FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
PORTE-FRAISE A ENTRAINEMENT FRONTAL AVEC TENON

PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1
PSC.C40.FSW016.032	PSC40	16	32	40	32	11
PSC.C40.FSW022.025	PSC40	22	40	40	25	16
PSC.C50.FSW016.035	PSC50	16	32	50	35	11
PSC.C50.FSW022.025	PSC50	22	50	50	25	16
PSC.C50.FSW027.025	PSC50	27	56	50	25	18
PSC.C50.FSW032.040	PSC50	32	63	50	40	20
PSC.C63.FSW016.040	PSC63	16	32	63	40	11
PSC.C63.FSW022.025	PSC63	22	55	63	25	16
PSC.C63.FSW027.025	PSC63	27	63	63	25	18
PSC.C63.FSW032.025	PSC63	32	63	63	25	20

PAG. 1102

ART. PSC.C..WE..
ISO 26623-1/A

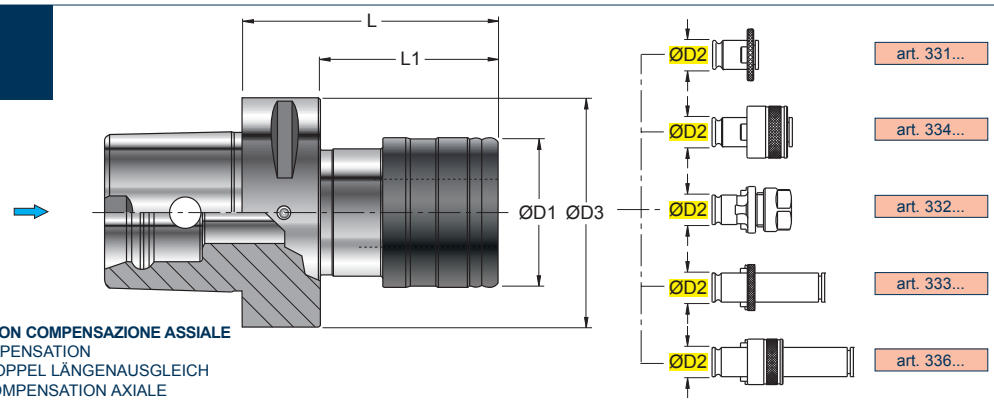


PRE-EQUILIBRATO PRE-BALANCED
G 6,3 8000 min-1

MANDRINO PER ATTACCHI TIPO WELDON
END MILL HOLDER FOR WELDON CONNECTION
WELDON-WERKZEUGAUFNAHME
MANDRIN POUR ATTACHES TYPE WELDON

ART.		(mm) Ød2	ØD1	ØD2	L	L1
PSC.C40.WE006.050	PSC40	6	25	40	50	25
PSC.C40.WE008.050	PSC40	8	28	40	50	26
PSC.C40.WE010.051	PSC40	10	35	40	51	29
PSC.C40.WE012.056	PSC40	12	42	40	56	36
PSC.C40.WE016.055	PSC40	16	48	40	55	35
PSC.C50.WE006.050	PSC50	6	25	50	50	25,5
PSC.C50.WE008.050	PSC50	8	28	50	50	26
PSC.C50.WE010.055	PSC50	10	35	50	55	27,5
PSC.C50.WE012.060	PSC50	12	42	50	60	36
PSC.C50.WE016.060	PSC50	16	48	50	60	39
PSC.C50.WE020.060	PSC50	20	52	50	60	40
PSC.C50.WE025.080	PSC50	25	64	50	80	60
PSC.C63.WE006.055	PSC63	6	25	63	55	25
PSC.C63.WE008.055	PSC63	8	28	63	55	26
PSC.C63.WE010.060	PSC63	10	35	63	60	30
PSC.C63.WE012.060	PSC63	12	42	63	60	33
PSC.C63.WE014.060	PSC63	14	44	63	60	33,5
PSC.C63.WE016.065	PSC63	16	48	63	65	35,5
PSC.C63.WE020.065	PSC63	20	52	63	65	37,5
PSC.C63.WE025.080	PSC63	25	64	63	80	80
PSC.C63.WE032.090	PSC63	32	72	63	90	90

ART. PSC.C..MC..
ISO 26623-1/A

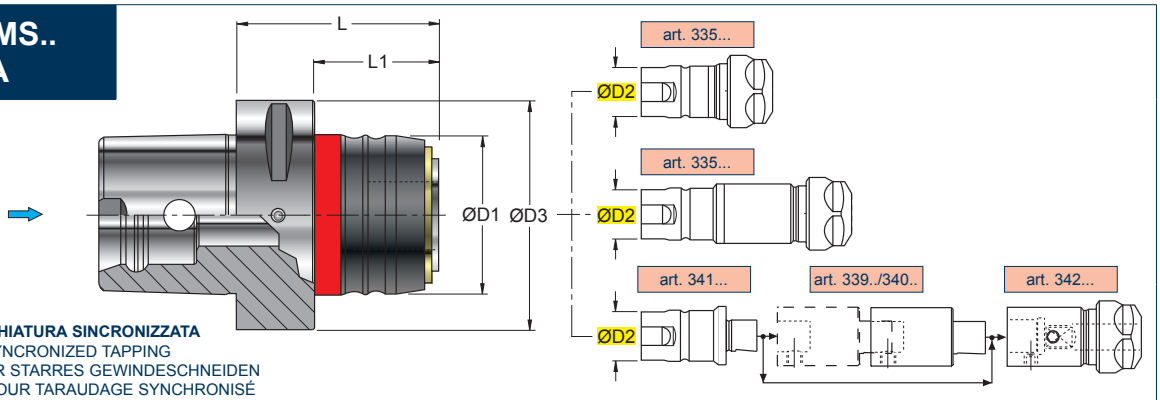


MASCHIATORI A CAMBIO RAPIDO CON COMPENSAZIONE ASSIALE
TAPPING CHUCK WITH AXIAL COMPENSATION
GEWINDESCHNEIDFUTTER MIT DOPPEL LÄNGENAUSGLEICH
APPAREILS À TARAUDER AVEC COMPENSATION AXIALE

ART.		(mm) ØD1	ØD2	ØD3	L	L1	Campo di maschiatura Tap range
PSC.C40.MC019.068	PSC40	41	19	40	68	48	M3-M12
PSC.C40.MC031.091	PSC40	60	31	40	91	71	M8-M24
PSC.C50.MC019.068	PSC50	41	19	50	68	48	M3-M12
PSC.C50.MC031.091	PSC50	60	31	50	91	71	M8-M24
PSC.C63.MC019.073	PSC63	41	19	63	73	51	M3-M12
PSC.C63.MC031.097	PSC63	60	31	63	97	75	M8-M24

PAG. 1102

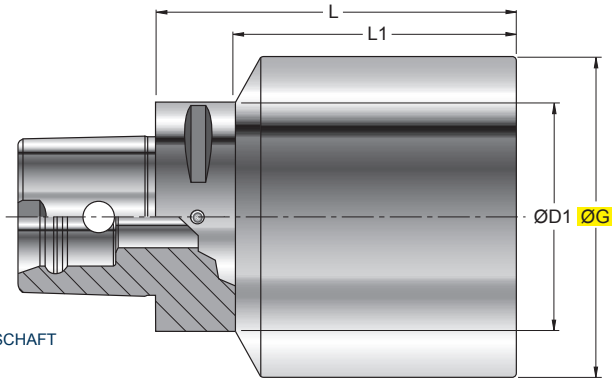
ART. PSC.C..MS..
ISO 26623-1/A



MASCHIATORI PER MASCHIATURA SINCRONIZZATA
TAPPING CHUCKS FOR SYNCRONIZED TAPPING
GEWINDESCHNEIDER FÜR STARRES GEWINDESCHNEIDEN
APPAREIL À TARAUDER POUR TARAUDAGE SYNCHRONISÉ

ART.		(mm) ØD1	ØD2	ØD3	L	L1	Campo di maschiatura Tap range
PSC.C40.MS020.055	PSC40	43	20	40	55	35	M3-M12
PSC.C40.MS032.075	PSC40	60	32	40	75	55	M6-M20
PSC.C50.MS020.055	PSC50	43	20	50	55	35	M3-M12
PSC.C50.MS032.075	PSC50	60	32	50	75	55	M6-M20
PSC.C63.MS020.057	PSC63	43	20	63	57	35	M3-M12
PSC.C63.MS032.077	PSC63	60	32	63	77	55	M6-M20

ART. PSC.C..SF..
ISO 26623-1/A



BARRA CON CONO FINITO E STELO TENERO
BORING BARS WITH FINISHED TAPER AND BLANK SCHAFT
ROHLINGE
BARRE AVEC CONE FINI ET BOUT DOUX

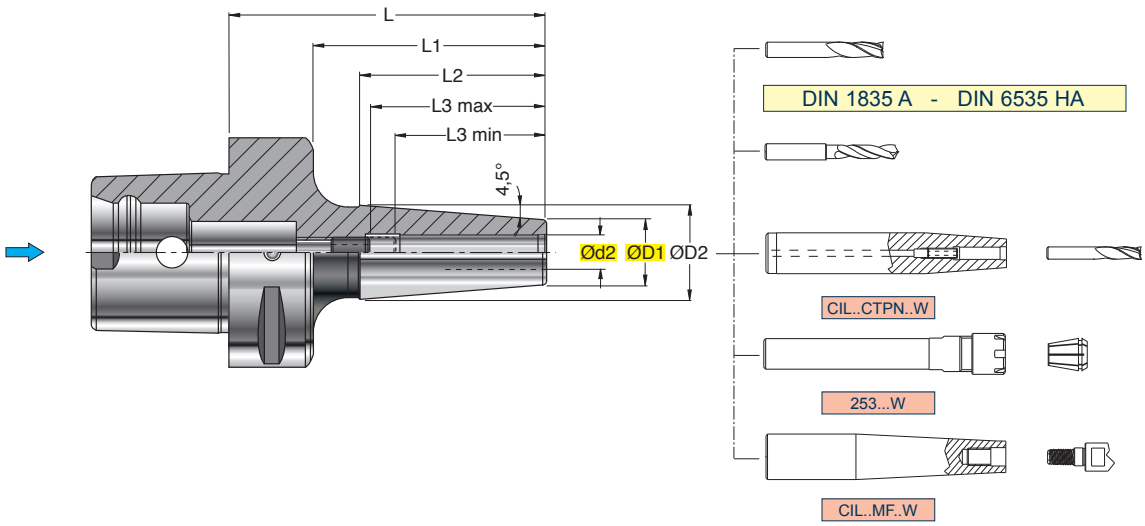
ART.		(mm) ØG	ØD1	L	L1
PSC.C40.SF063.165	PSC40	63	40	165	145
PSC.C50.SF050.150	PSC50	50	50	150	130
PSC.C50.SF091.150	PSC50	91	50	150	130
PSC.C63.SF063.180	PSC63	63	63	180	158
PSC.C63.SF091.075	PSC63	91	63	75	53
PSC.C63.SF115.100	PSC63	115	63	100	78

PAG. 1102

SAU QUALITY TOOLS ENGINEERING

ART. PSC.C..CTN..
ISO 26623-1/A

DIN 69882-8



MANDRINO A CALETTAMENTO TERMICO
SHRINKING-ON TAPER SHANKS
WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
MANDRIN À EMBOÎTEMENT THERMIQUE

0,003

EQUILIBRATO BALANCED
G 2,5 25000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1	L2	L3 min	L3 max			
PSC.C63.CTN006.080	PSC63	6	21	27	80	55	–	26	36	GWR 05L		5025
PSC.C63.CTN006.120	PSC63	6	21	27	120	95	–	26	36			
PSC.C63.CTN006.160	PSC63	6	21	27	160	135	100	26	36			
PSC.C63.CTN008.080	PSC63	8	21	27	80	55	–	26	36	GWR 06L		5003
PSC.C63.CTN008.120	PSC63	8	21	27	120	95	–	26	36			
PSC.C63.CTN008.160	PSC63	8	21	27	160	135	100	26	36			
PSC.C63.CTN010.080	PSC63	10	24	32	80	55	–	31	41	GWR 08CTD		5004
PSC.C63.CTN010.120	PSC63	10	24	32	120	95	–	31	41			
PSC.C63.CTN010.160	PSC63	10	24	32	160	135	100	31	41			
PSC.C63.CTN012.085	PSC63	12	24	32	85	60	–	36	46	GWR 10CTD		5005
PSC.C63.CTN012.120	PSC63	12	24	32	120	95	–	36	46			
PSC.C63.CTN012.160	PSC63	12	24	32	160	135	100	36	46			
PSC.C63.CTN014.085	PSC63	14	27	34	85	60	–	36	46			
PSC.C63.CTN014.120	PSC63	14	27	34	120	95	–	36	46			
PSC.C63.CTN014.160	PSC63	14	27	34	160	135	100	36	46			
PSC.C63.CTN016.085	PSC63	16	27	34	85	60	–	39	49	GWR 12CTD		5006
PSC.C63.CTN016.120	PSC63	16	27	34	120	95	–	39	49			
PSC.C63.CTN016.160	PSC63	16	27	34	160	135	100	39	49			
PSC.C63.CTN018.090	PSC63	18	33	42	90	65	–	39	49			
PSC.C63.CTN018.120	PSC63	18	33	42	120	95	–	39	49			
PSC.C63.CTN018.160	PSC63	18	33	42	160	135	100	39	49			
PSC.C63.CTN020.090	PSC63	20	33	42	90	65	–	41	51	GWR 16CTD		5008
PSC.C63.CTN020.120	PSC63	20	33	42	120	95	–	41	51			
PSC.C63.CTN020.160	PSC63	20	33	42	160	135	100	41	51			
PSC.C63.CTN025.120	PSC63	25	44	53	120	95	–	47	57			
PSC.C63.CTN025.160	PSC63	25	44	53	160	135	–	47	57			
PSC.C80.CTN006.080	PSC80	6	21	27	80	50	–	26	36	GWR 05L		5025
PSC.C80.CTN006.120	PSC80	6	21	27	120	90	–	26	36			
PSC.C80.CTN006.160	PSC80	6	21	27	160	130	100	26	36			
PSC.C80.CTN008.080	PSC80	8	21	27	80	50	–	26	36	GWR 06L		5003
PSC.C80.CTN008.120	PSC80	8	21	27	120	90	–	26	36			
PSC.C80.CTN008.160	PSC80	8	21	27	160	130	100	26	36			
PSC.C80.CTN010.090	PSC80	10	24	32	90	60	–	31	41	GWR 08CTD		5004
PSC.C80.CTN010.120	PSC80	10	24	32	120	90	–	31	41			
PSC.C80.CTN010.160	PSC80	10	24	32	160	130	100	31	41			
PSC.C80.CTN012.090	PSC80	12	24	32	90	60	–	36	46	GWR 10CTD		5005
PSC.C80.CTN012.120	PSC80	12	24	32	120	90	–	36	46			
PSC.C80.CTN012.160	PSC80	12	24	32	160	130	100	36	46			
PSC.C80.CTN014.090	PSC80	14	27	34	90	60	–	36	46			
PSC.C80.CTN014.120	PSC80	14	27	34	120	90	–	36	46			
PSC.C80.CTN014.160	PSC80	14	27	34	160	130	100	36	46			
PSC.C80.CTN016.090	PSC80	16	27	34	90	60	–	39	49	GWR 12CTD		5006
PSC.C80.CTN016.120	PSC80	16	27	34	120	90	–	39	49			
PSC.C80.CTN016.160	PSC80	16	27	34	160	130	100	39	49			
PSC.C80.CTN018.095	PSC80	18	33	42	95	65	–	39	49			
PSC.C80.CTN018.120	PSC80	18	33	42	120	90	–	39	49			
PSC.C80.CTN018.160	PSC80	18	33	42	160	130	100	39	49			
PSC.C80.CTN020.095	PSC80	20	33	42	95	65	–	41	51	GWR 16CTD		5008
PSC.C80.CTN020.120	PSC80	20	33	42	120	90	–	41	51			
PSC.C80.CTN020.160	PSC80	20	33	42	160	130	100	41	51			
PSC.C80.CTN025.120	PSC80	25	44	53	120	90	–	47	57			
PSC.C80.CTN025.160	PSC80	25	44	53	160	130	100	47	57			
PSC.C80.CTN032.120	PSC80	32	44	53	120	90	–	51	61			
PSC.C80.CTN032.160	PSC80	32	44	53	160	130	100	51	61			

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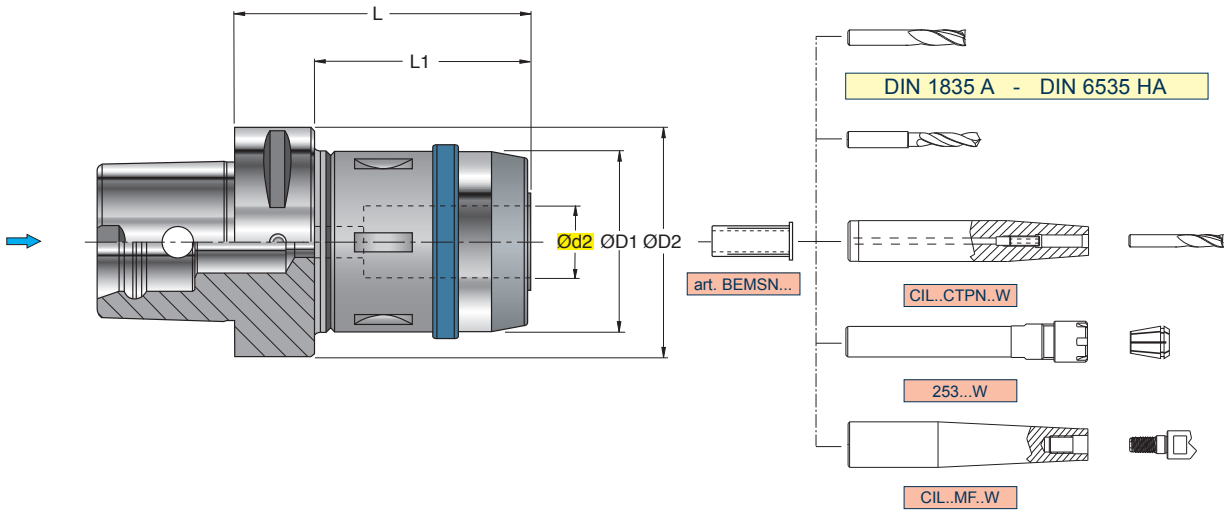
ART. PSC.C63.MFSV..
ISO 26623-1/A

NEW



MANDRINO A FORTE SERRAGGIO
HIGH CLAMPING CHUCK
KRAFTSPANNFUTTER
MANDRIN À SERRAGE FORT

0,003	2,5 x Ø
0,004	2,5 x Ø

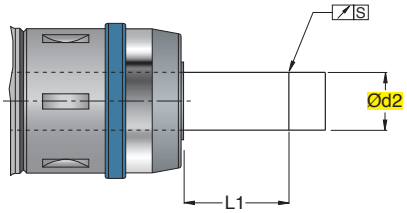
PRE-EQUILIBRATO	PRE-BALANCED
G 2,5	20000 min-1

ART.		(mm) Ød2	ØD1	ØD2	L	L1				
PSC.C63.MFSV020.080	PSC63	20	50	63	80	58	BEMS.20..		925.052	ESMS.010
PSC.C63.MFSV032.100	PSC63	32	67	63	100	78	BEMS.32..		925.068	ESMS.010

CARATTERISTICHE TECNICHE - TECHNICAL CHARACTERISTICS

1. Ridotte dimensioni di ingombro (lunghezza e diametro esterno) che consentono una migliore equilibratura (G 2,5 fino a 20000 rpm)
2. Aumento della rigidità del mandrino per una resa migliore in lavorazione
3. Perfetta centratura dell'utensile (0,003/0,004 mm a 2,5xØ) che determinano un incremento della durata degli inserti fino a raddoppiare la durata
4. Aumento della potenza di serraggio Max 1750 Nm
5. Adatto anche per frese con attacco cilindrico, weldon, whistle notch e punte in metallo duro
6. Passaggio del lubrificante attraverso l'utensile fino a 100 bar
7. Serraggio ottimale garantito dall'alineamento delle tacche (ghiera mandrino)

1. Reduced dimensions (length and external diameter) for a better balancing (G 2,5 till to 20000 rpm)
2. High rigidity of the chuck for a better performance
3. Perfect concentricity (0,003/0,004 mm 2,5xØ) for an increase in toollife
4. Increase of tightening force Max 1750 Nm
5. Suitable for endmills tools with cylindrical, weldon and whistle notch shank and for carbide drills
6. Coolant through the tool till 100 bar
7. Best clamping assured by alignment of notches (fixin ring nut/arbor)



Ød2 (mm)	L1 (mm)	Concentricità "S" Concentricity "S" (mm)	Forza di serraggio Clamping force (Nm)
20	50	0,003	1000
32	80	0,004	1750

PER AVERE UNA TENUTA DEL LUBRIFICANTE FINO A 100 bar BISOGNA ACQUISTARE IL MANDRINO CON ANELLO DI TENUTA. PER ORDINARE TALE MANDRINO, BISOGNA AGGIUNGERE AL CODICE DEL MANDRINO SCELTO UNA "F" FINALE E SPECIFICARLO AL MOMENTO DELL' ORDINE. UTILIZZANDO LE PINZE DI RIDUZIONE CILINDRICHE BISOGNA SOSTITUIRE L'ANELLO DI TENUTA DEL DIAMETRO DELL'UTENSILE PRESCELTO. IL MANDRINO GARANTISCE IL PASSAGGIO DEL LUBRIFICANTE (max 100 bar), SIA CON UTENSILI CALETTATI DIRETTAMENTE SIA CON PINZE DI RIDUZIONE CILINDRICHE BEMS.. INTERPOSTE.

TO OBTAIN A COOLANT FLOW UP TO 100 bar YOU MUST PURCHASE THE CHUCK WITH SEALING RING. TO ORDER THIS CHUCK YOU MUST ADD A FINAL "F" TO THE SELECTED CHUCK CODE AND SPECIFY IT WHEN PLACING THE ORDER. FOR THE USE OF THE CYLINDRICAL REDUCTION SLEEVES THE SEALING RING MUST BE REPLACED WITH ONE OF THE SAME DIAMETER AS THE TOOL CHOSEN. THE HIGH CLAMPING CHUCK IS SUITABLE FOR A COOLANT FLOW (UP TO 100 bar) BOTH WITH DIRECTLY SHRUNK-ON TOOLS AND WITH BEMS CYLINDRICAL REDUCTION SLEEVES.

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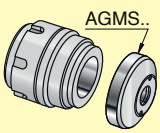
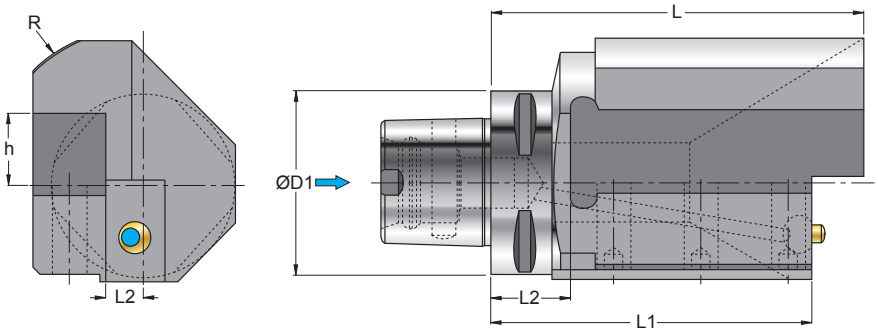


PAG. 1102

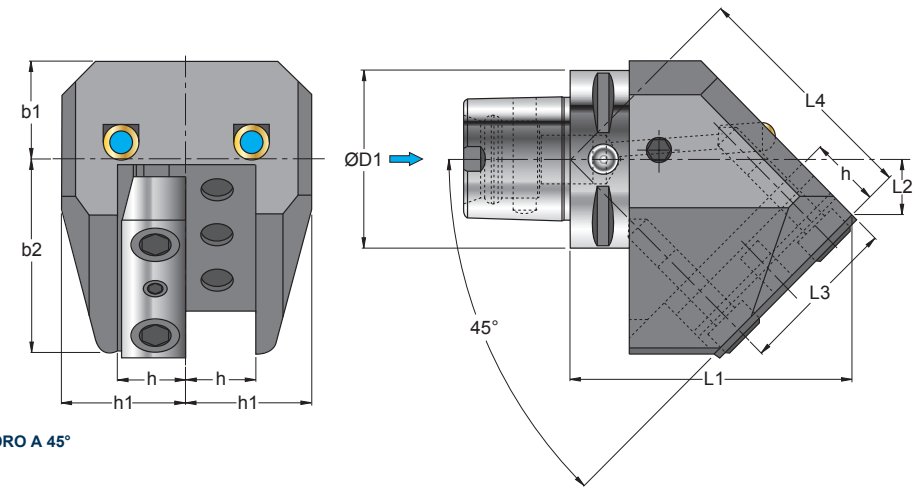
ART. PSC.C63.1PA..
ISO 26623-1/A



ADATTATORE PER UTENSILI A STELO QUADRO
ADAPTOR FOR SHANK TOOL
ADAPTER FÜR SCHAFT WERKZEUGE
ADAPTATEUR POUR OUTIL À MANCHE

ART.		(mm) ØD1	L	L1	L2	R	f	h
PSC.C63.1PAL.20.100	PSC63	63	100	90	25	45	10	20
PSC.C63.1PAR.20.100	PSC63	63	100	90	25	45	10	20
PSC.C63.1PAL.25.163	PSC63	63	130	112	28	55	13	25
PSC.C63.1PAR.25.163	PSC63	63	130	112	28	55	13	25

ART. PSC.C63.U45..
ISO 26623-1/A



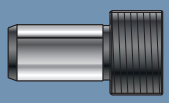
ADATTATORE PER UTENSILI A STELO QUADRO A 45°
ADAPTOR FOR SHANK TOOL 45°
ADAPTER FÜR SCHAFT WERKZEUGE 45°
ADAPTATEUR POUR OUTIL À MANCHE 45°

ART.		(mm) ØD1	b1	b2	h	h1	L1	L2	L3	L4
PSC.C63.U45.25102	PSC63	63	35	70	25	45	102	20	58	86

PAG. 1102

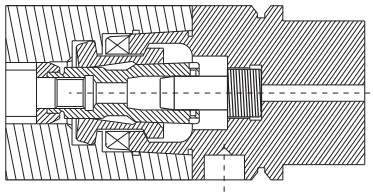
ADUTTORE REFRIGERANTE PER MANDRINI HSK
- COOLANT FEED FOR HSK CHUCK
- KÜHLMITTELZUFHUR FÜR HSK-AUFNAHME
- ABDUCTEUR DU RÈFRIGÈRANTE POUR MANDRINS HSK

ATR..



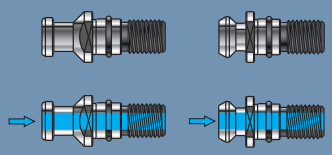
PAG 982

DIN 69893 - HSK



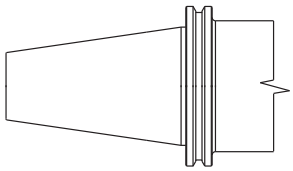
TIRANTE CON GUARNIZIONE
- TENSION ROD WITH PACKING
- ANZUGSBOLZEN MIT DICHTUNG
- TIRANT AVEC GARNITURE

03 599../03 599.N



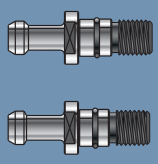
PAG 982

DIN 69871



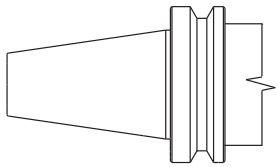
TIRANTE CON GUARNIZIONE
- TENSION ROD WITH PACKING
- ANZUGSBOLZEN MIT DICHTUNG
- TIRANT AVEC GARNITURE

BT 599..



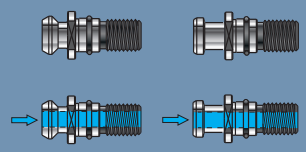
PAG 983

MAS 403 BT



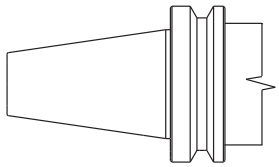
TIRANTE DA DIN69871 A MANDRINO MAS 403 BT
- DIN69871 A CHUCK RETENTION KNOB MAS 403 BT
- ANZUGSBOLZEN NACH DIN69871 MIT AUFNAHME MAS 403 BT
- TIRANT DE DIN69871 À BROCHE MAS 403 BT

03 599..MAZAK
03 599..JIS



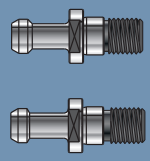
PAG 983

MAS 403 BT



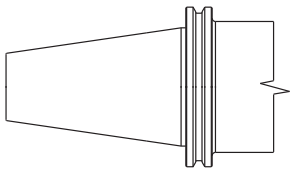
TIRANTE DA MAS 403 BT A MANDRINO DIN69871
- MAS 403 BT A CHUCK RETENTION KNOB DIN69871
- ANZUGSBOLZEN NACH MAS 403 BT MIT AUFNAHME DIN69871
- TIRANT DE MAS 403 BT À BROCHE DIN69871

BT 599..XDIN69871



PAG 983

DIN 69871



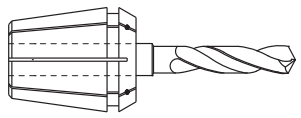
PORTAPINZA DIN 6499
- COLLET HOLDER DIN 6499
- FRÄSERSPANFUTTER DIN 6499
- MANDRINS A PINCES DIN 6499

253..W

ER-DIN 6499

PAG 984

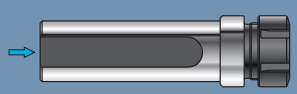
ER-DIN 6499 A-B



PORTAPINZA DIN 6499
- COLLET HOLDER DIN 6499
- FRÄSERSPANFUTTER DIN 6499
- MANDRINS A PINCES DIN 6499

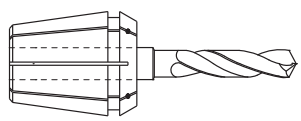
253..NCW

ER-DIN 6499



PAG 984

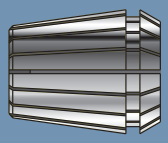
ER-DIN 6499 A-B



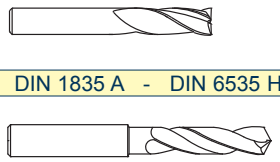
PINZA AUTOESTRAIBILE DIN 6499
- AUTO-CENTERING COLLET DIN 6499
- SELBSTZENTRIER-SPANNZANGEN DIN 6499
- PINCE AUTO-EXTRACTIBLE DIN 6499

228.. STANDARD
228Q.. PRECISION

ER-DIN 6499



DIN 1835 A - DIN 6535 HA



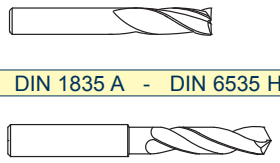
PAG 985
PAG 987

KIT PINZA AUTOESTRAIBILE DIN 6499
- AUTO-CENTERING COLLET SET DIN 6499
- SELBSTZENTRIER-SPANNZANGEN-SATZ DIN 6499
- JEU PINCE AUTO-EXTRACTIBLE DIN 6499

SET 228-ER..

NEW

DIN 1835 A - DIN 6535 HA

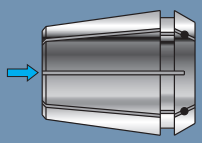


PAG 986

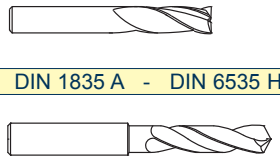
PINZA AUTOESTRAIBILE CON GOMMA DI TENUTA DIN 6499
- AUTO-CENTERING COLLET WITH RETAINING RUBBER DIN 6499
- SELBSTZENTRIER-SPANNZANGEN MIT DICHTGUMMI DIN 6499
- PINCE AUTO-EXTRACTIBLE AVEC JOINT D'ETANCHÉITÉ DIN 6499

230.. STANDARD
230QN.. PRECISION

ER-DIN 6499



DIN 1835 A - DIN 6535 HA

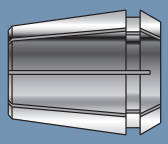


PAG 988
PAG 989

PINZA AUTOESTRAIBILE PORTAMASCHI DIN 6499-AZ
- AUTO-CENTERING COLLET TAP HOLDERS DIN 6499-AZ
- SELBSTZENTRIER-SPANNZANGEN GEWINDEBOHRERAUFNAHME DIN 6499-AZ
- PINCE AUTO-EXTRACTIBLE PORTE TARAUDS DIN 6499-AZ

328..

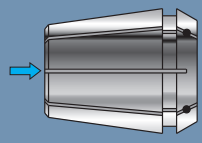
ER-DIN 6499 B



PAG 990

PINZA AUTOESTRAIBILE PORTAMASCHI CON GOMMA DI TENUTA
- AUTO-CENTERING COLLET WITH RETAINING RUBBER
- SELBSTZENTRIER-SPANNZANGEN MIT DICHTGUMMI
- PINCE AUTO-EXTRACTIBLE PORTE-MALES AVEC CAOUTCHOUC D'ETANCHEITE

330..

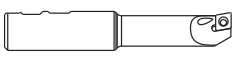


PAG 991

BOCCOLA DI RIDUZIONE PER UTENSILI PER MINIALESATURA
- COLLET ADAPTERS FOR MINI BOHRING TOOL
- REDUKTION FÜR MINI BOHRSTANGE
- DOUILLE DE RÉDUCTION POUR OUTIL À ALÉSER MINIATURE

216..

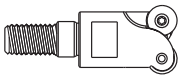
ART.603



PAG 992

PROLUNGA IN ACCIAIO CON ATTACCO CILINDRICO PER MODULARE FILETTATO
- STEEL EXTENSION WITH CYLINDRICAL CONNECTION FOR THREADED MODULAR TOOL SYSTEM
- STAHLVERLÄNGERUNG MIT ZYLINDRAUFNHAME FÜR GEWINDE-MODULARWERKZEUGSYSTEM
- RALLONGE EN ACIER AVEC ATTACHEMENT CYLINDRIQUE PAR LE SYSTEME MODULAIRE FILETÉ

CIL..MF..W



PAG 992

SAU
QUALITY TOOLS ENGINEERING

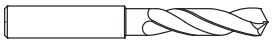
ACCESSORI
ACCESSORIES
ZUBEHÖR
ACCESSOIRES
ACCESORIOS

PROLUNGA IN ACCIAIO CON ATTACCO A CALETTAMENTO TERMICO CON GRANO DI REGOLAZIONE
- STEEL SHRINK-FIT EXTENSION WITH ADJUSTMENT DOWEL.
- STAHL VERLÄNGERUNG MIT SCHRUMPFVERBINDUNG MIT EINSTELLSTIFT
- RALLONGE EN ACIER AVEC ATTACHEMENT À EMBOÎTEMENT THERMIQUE AVEC GRAIN DE REGULATION

CIL..CTPN..W

PAG 993

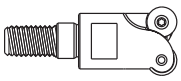
DIN 1835 A - DIN 6535 HA



PROLUNGA ANTIVIBRANTE IN METALLO DURO CON ATTACCO CILINDRICO PER MODULARE FILETTATO
- DAMPED SOLID CARBIDE EXTENSION WITH CYLINDRICAL SHANK FOR THREADED MODULAR SYSTEM
- SCHWINGUNGSGEDÄMPFTE VOLLHARTMETALLVERLÄNGERUNG MIT ZYLINDERAUFNAHME FÜR MODULARSYSTEM
- RALLONGE ANTIVIBRATOIRE EN CARBURE AVEC QUEUE CYLINDRIQUE POUR SYSTEME MODULAIRE FILETE

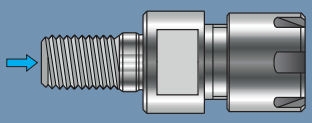
CIL..MFV..W **NEW**

PAG 994



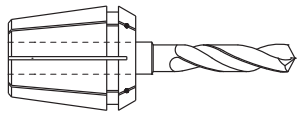
ADATTATORE ANTIVIBRANTE PORTAPINZA CON ATTACCO FILETTATO
- DAMPED COLLET CHUCK ADAPTER WITH THREADED CONNECTION
- SCHWINGUNGSGEDÄMPFTER SPANNZANGENFUTTER-ADAPTER MIT GEWINDEAUFNAHME
- ADAPTATEUR ANTIVIBRATOIRE PORTE-PINCE AVEC RACCORD FILETE

253..VW **NEW**



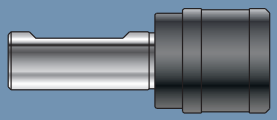
PAG 994

ER-DIN 6499 A-B

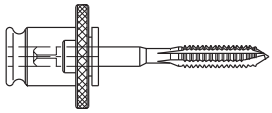


PORTAMASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE ASSIALE
- QUICK-CHANGE TAP HOLDER WITH DOUBLE AXIAL COMPENSATION
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
- MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION AXIALE

CWE..MC..



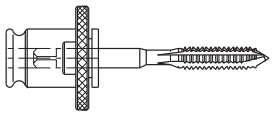
PAG 995



PORTAMASCHIO A CAMBIO RAPIDO SENZA COMPENSAZIONE ASSIALE
- QUICK-CHANGE TAPPING CHUCK WITHOUT AXIAL COMPENSATION
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER OHNE AUSGLEICH
- MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE SANS COMPENSATION AXIALE

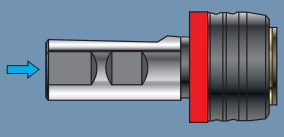
CWE..MR..

PAG 995

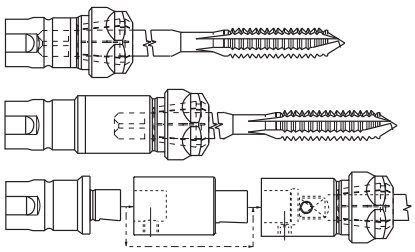


PORTAMASCHIO PER MASCHIATURA SINCRONIZZATA
- TAP HOLDERS FOR SYNCHRONIZED TEPPING
- GEWINDEBOHRERHALTER FÜR SYNCHRON STEUERUNG
- MANDRINS DE TARAUDAGE POUR TARAUDAGE SYNCHRONISÉ

CWE..MS..

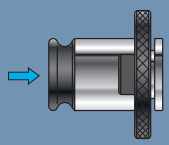


PAG 995



BUSSOLA PORTAMASCHI
- TAP-COLLET
- GEWINDEBOHRER-AUFNAHME
- DOUILLE PORTE-TARAUDS

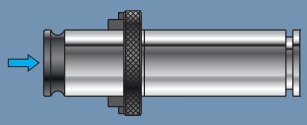
331..



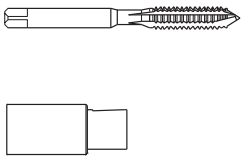
PAG 997

BUSSOLA PORTAMASCHI MODULARE PROLUNGATA
- EXTENDED MODULAR TAP-COLLET LONG TYPE
- VERLÄNGERTE MODULARE GEWINDEBOHRERAUFNAHME
- DOUILLE PORTE-TARAUDS MODULAIRE SERIE LONGUE

333..

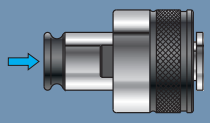


PAG 998



BUSSOLA PORTAMASCHI CON FRIZIONE
- TAP-COLLET WITH OVERLOAD CLUTCH
- GEWINDEBOHRER-AUFNAHME MIT DREHMOMENTBEGRENZUNG
- DOUILLE PORTE-TARAUDS AVEC EMBRAYAGE

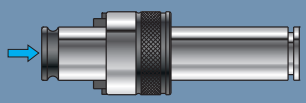
334..



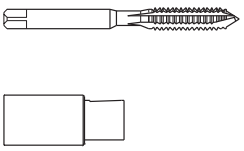
PAG 999

BUSSOLA PORTAMASCHI MODULARE PROLUNGATA CON FRIZIONE
- EXTENDED MODULAR TAP-COLLET WITH OVERLOAD CLUTCH
- VERLÄNGERTE MODULARE GEWINDEBOHRERAUFNAHME MIT DREHMOMENTBEGRENZUNG
- DOUILLE PORTE-TARAUDS MODULAIRE PROLONGÉ AVEC EMBRAYAGE

336..

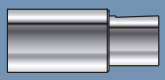


PAG 1000

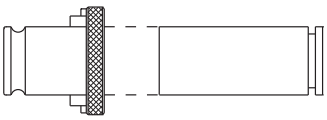


PROLUNGA PER BUSSOLA PORTAMASCHI MODULARE
- EXTESION FOR MODULAR TAP-COLLET
- VERLÄNGERUNG FÜR MODULARE GEWINDEBOHRERAUFNAHME
- RALLONGE POUR DOUILLE PORTE-TARAUDS MODULAIRE

339../340..

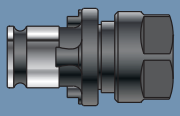


PAG 1001



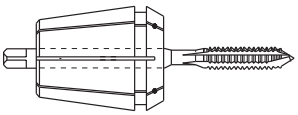
BUSSOLA PORTAMASCHIO CON PINZA AUTOESTRAIBILE
- TAP-COLLET WITH AUTO-CENTERING COLLET
- GEWINDEBOHRERAUFNAHME MIT SELBSTZENTRIERSPANNZANGE
- DOUILLE PORTE-TARAUDS AVEC PINCE AUTO-EXCTRACTIBLE

332..



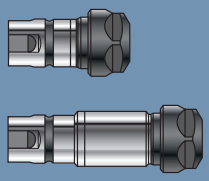
PAG 1001

ER-DIN 6499



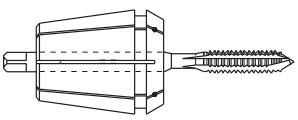
BUSSOLA PORTAMASCHIO PER MASCHIATURE SINCRONIZZATE
- TAP-COLLET FOR SYNCHRONIZED TAPPING
- GEWINDEBOHRER-AUFNAHME FÜR SYNCHRONSTEUERUNG
- DOUILLE PORTE-TARAUD POUR TARAUDAGES SYNCHRONIZEES

335..



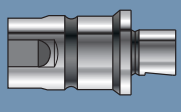
PAG 1002

ER-DIN 6499 B

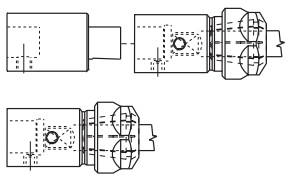


CORPO BUSSOLA PROLUNGATA
- EXTENDED TAP ADAPTER BODY
- EINSATZ MIT LANGE AUSFÜHRUNG
- CORPS DE LA DOUILLE PROLONGÉ

341..

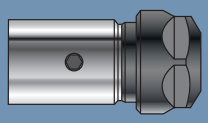


PAG 1002



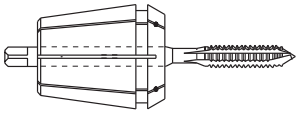
TERMINALE
- TERMINAL
- TERMINAL
- TERMINAL

342..



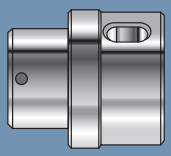
PAG 1003

ER-DIN 6499 B

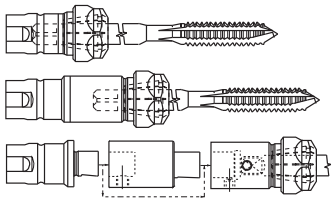


SUPPORTO DI MONTAGGIO
- ASSEMBLY SUPPORT
- MONTAGE BLOCK
- SUPPORT DE MONTAGE

RCDM ...



PAG 1003



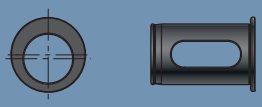
BOCCOLA DI RIDUZIONE
- COLLET ADAPTERS
- REDUKTION
- DOUILLES DE RÉDUCTION

218..

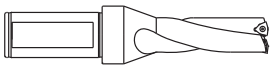
PAG 1004

BOCCOLA DISASSATRICE AD INTERASSE FISSO
- OFFSET COLLETS WITH FIXED CENTER DISTANCE
- ACHSVERSATZ-BÜCHSEN MIT FESTEM ACHSABSTAND
- DOUILLES DESAXANTES AVEC ENTRE-AXES FIXE

BPUH..

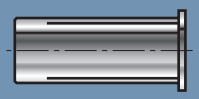


PAG 1004



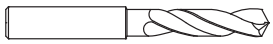
BOCCOLE DI RIDUZIONE CILINDRICHE
- CYLINDRICAL REDUCTION COLLETS
- ZYLINDRISCHE REDUZIERBUCHSEN
- DOUILLES DE RÉDUCTION CYLINDRIQUES

BEMSN..



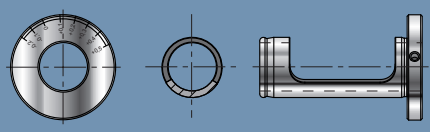
PAG 1005

DIN 1835 A - DIN 6535 HA

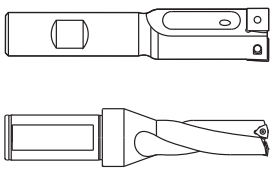


BOCCOLA DISASSATRICE REGOLABILE
- ADJUSTABLE OFFSET COLLETS
- EINSTELLBARE ACHSVERSATZ-BÜCHSEN
- DOUILLES DESAXANTES AVEC REGULATION

BECR..



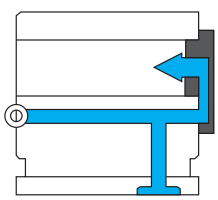
PAG 1006



TAPPO DI CHIUSURA DEL PORTABARENO PER MACCHINE NON DOTATE DI REFRIGERANTE
- PLUG FOR BORING BAR HOLDERS FOR MACHINES WITHOUT INTERNAL COOLING.
- ANSCHLUSSPLATTE FÜR BOHRSTANGENAUFNAHME AM REVOLVER, BEI MASCHINEN OHNE INNENKÜHLUNG
- BOUCHON DE FERMETURE DU PORTE-ALÉSEUSE POUR LES MACHINES PAS DOTÉES DE RÉFRIGÉRANT À L'INTÉRIEUR

CH-...-...

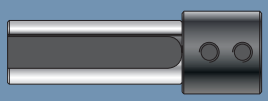
PAG 1008



OCCOLA DI RIDUZIONE PORTA BARENO CON PASSAGGIO DEL REFRIGERANTE
- THROUGH COOLANT BORING BAR REDUCING COUPLING
- BOHRSTANGEN-REDUZIERHÜLSE MIT SCHMIERSTOFFDURCHFLUSS
- DOUILLE DE RÉDUCTION PORTE BARRE D'ALESAGE AVEC PASSAGE DU FLUIDE DE RÉFRIGÉRATION

BKN-...-...

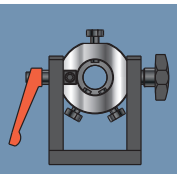
NEW



PAG 1009

ATTREZZO PER IL MONTAGGIO E LO SMONTAGGIO DI MANDRINI
- TOOL FOR THE ASSEMBLY AND DISASSEMBLY OF ARBORS
- MONTAGE HILFE
- OUTIL POUR LE MONTAGE ET LE DEMONTAGE DE MANDRINS

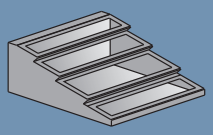
06 36.. .UN



PAG 1011

TELAIO DA BANCO PORTAMANDRINI
- BENCH-MOUNTED STORAGE RACK ARBORS
- AUFNAHMETRAEGER
- BOITE DE COMPTOIR PORTE-MANDRINS

A-140..



PAG 1011

BOCCOLA PORTAMANDRINI
- STORAGE BASE FOR ARBORS
- AUFNAHMEBUCHSE
- RÉDUCTIONS PORTE-MANDRINS

A-1..

PAG 1011

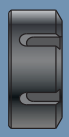
GHIERA DI PRECISIONE
- PRECISION RING NUTS
- PRÄZISIONSRINGE
- FRETTE DE PRECISION

RGC..

PAG 1012

GHIERA STANDARD PER PINZE ER-DIN6499
- STANDARD METAL RING FOR ER-DIN6499 COLLET
- STANDARDRING FÜR ER-DIN6499 SPANNZANGEN
- FRETTE STANDARD POUR PINCES ER-DIN6499

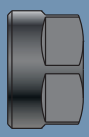
RGS..



PAG 1012

GHIERA ESAGONALE PER PINZE ER-DIN6499
- METAL RING FOR ER-DIN6499 COLLETS
- SECHSECKIGER GEWINDERING FÜR ER-DIN6499 SPANNZANGEN
- FRETTE À SIX PANS POUR PINCES ER-DIN6499

RGSE..



PAG 1012

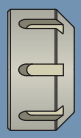
MINI GHIERA PER PINZE ER-DIN6499
- MINI METAL RING FOR ER-DIN6499 COLLET
- MINI-RING FÜR ER-DIN6499 SPANNZANGEN
- MINI FRETTE POUR PINCES ER-DIN6499

RGM..

PAG 1012

GHIERE A TENUTA IDRAULICA
- SEALING RINGS
- DICHTSCHEIBEN
- FRETTE À ÉTANCHÉITÉ HYDRAULIQUE

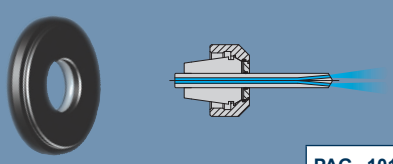
RGSW..



PAG 1012

ANELLI PER ADDUZIONE ATTRAVERSO L'UTENSILE
- RINGS FOR COOLANT THROUGH THE TOOL
- RINGE ZUR KÜHLMITTEL-INNENFÜHRUNG
- BAGUES D'ADDUCTION À TRAVES L'OUTIL

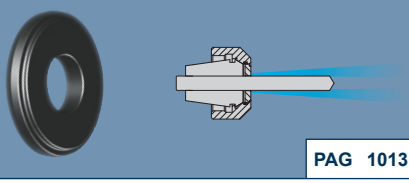
AGT..



PAG 1013

ANELLI PER ADDUZIONE INTORNO ALL'UTENSILE
- RINGS FOR COOLANT AROUND THE TOOL
- RINGE ZUR KÜHLMITTELFÜHRUNG UM DAS WERKZEUG
- BAGUES D'ADDUCTION AUTOUR L'OUTIL

AGW..



PAG 1013

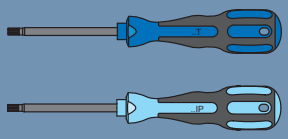
ANELLO DI TENUTA
- SEALING RING
- DICHTRING
- BAGUE D'ÉTANCHÉITÉ

AGMS..

PAG 1014

CACCIAVITE
- SCREWDRIVERS
- SCHRAUBENDREHER
- TOURNEVISSES

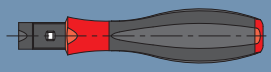
56..



PAG 1015

CACCIAVITE DINAMOMETRICO REGOLABILE
- ADJUSTABLE DYNAMOMETRIC SCREWDRIVER
- EINSTELLBARER DYNAMOMETRISCHER SCHRAUBENDREHER
- TOURNEVIS DYNAMOMÉTRIQUE RÉGLABLE

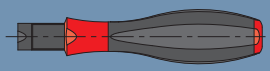
2646..



PAG 1015

CACCIAVITE DINAMOMETRICO CON VALORI DI COPPIA FISSO
- DYNAMOMETRIC SCREWDRIVER WITH FIXED TORQUE VALUES
- DREHMOMENTSCHRAUBENDREHER MIT FASTEN DREHMOMENTWERTEN
- TOURNEVIS DYNAMOMÉTRIQUE AVEC VALEURS DE COUPLE FIXE

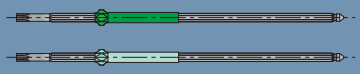
260../261..



PAG 1015

LAME
- BLADES
- MESSERS
- LAME

278../2955.



PAG 1015

KIT DINAPLUS
- DINAPLUS KIT
- DINAPLUS KIT
- KIT DINAPLUS

KITDP00000

PAG 1016

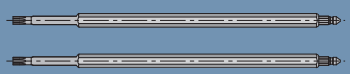
MANICO CACCIAVITE DINAPLUS
- DYNAPLUS SCREWDRIVER HANDLE
- DYNAPLUS SCHRAUBENDREHER-GRIFF
- MANCHE TOURNEVIS DYNAPLUS

26000

PAG 1016

LAME
- BLADES
- MESSERS
- LAME

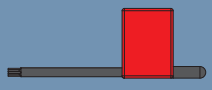
270../290..



PAG 1016

CHIAVE A BANDIERA
- FLAG KEY
- FLAGGE-SCHLÜSSEL
- CLÉ À "PAVILLON"

55..



PAG 1017

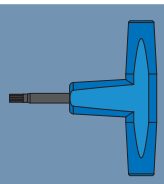
CHIAVE TORX A L
- TORX KEY (L-SHAPED)
- TORX-SCHLÜSSEL (L-FÖRMIG)
- CLÉ TORX À L

54..

PAG 1017

CHIAVE TORX A T
- TORX KEY (T-SHAPED)
- TORX-SCHLÜSSEL (T-FÖRMIG)
- CLÉ TORX À T

CTT..



PAG 1017

CHIAVE A BRUGOLA A T
- T-SETSCREW WRENCH
- T-INBUSSCHLÜSSEL
- CLÉ À 6 PANS À T

CTE..

PAG 1018

CHIAVE A BRUGOLA A L
- L-SETSCREW WRENCH
- L-INBUSSCHLÜSSEL
- CLÉ À 6 PANS À L

50..

PAG 1018

CHIAVE PER ESTRAZIONE INSERTI
- INSERT LIFTING KEY
- AUSZIEHSCHLÜSSEL FÜR WENDEPLATTEN
- CLÉ POUR EXTRACTION PLAQUETTES

SESG-1

PAG 1018

CHIAVE ERGONOMICA MONTAGGIO/ESTRAZIONE INSERTI
- INSERT ASSEMBLY/REMOVAL ERGONOMIC KEY
- ERGONOMISCHER MONTAGE-/AUSZIEHSCHLÜSSEL FÜR WENDEPLATTEN
- CLE A MANCHE ERGONOMIQUE DE MONTAGE/EXTRACTION DES PLAQUETTES

CH-TRL30-40

PAG 1019

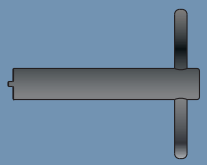
CHIAVE PER UNITÀ MICROREGISTRABILE
- KEY FOR MICRO-BORING UNITS
- SCHLÜSSEL FÜR FEINBOHREINHEITEN
- CLÉ POUR UNITÉS MICROMÉTRIQUES

45.95.6..

PAG 1019

CHIAVE A DENTI PER BOCCOLE BCF
- PIN WRENCH FOR BCF BUSHING
- ZAPFENSCHLÜSSEL FÜR BCF-BUCHSEN
- CLÉ À GIFFES POUR DOUILLE BCF

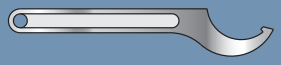
CH-HK..



PAG 1019

CHIAVE A SETTORE CON DENTE PER GHIERE RGS/RGE
- PIN WRENCH FOR RGS/RGE
- ZAPFENSCHLÜSSEL FÜR RGS/RGE RING
- CLÉ À SECTEUR AVEC GRIFFE POUR FRETTES RGS/RGE

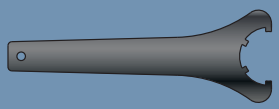
925..



PAG 1020

CHIAVE A SETTORE CON 4 DENTI PER GHIERE RGS/RGE
- PIN WRENCH(4TEETH) FOR RGS/RGE
- ZAPFENSCHLÜSSEL FÜR RGS/RGE (4 ZÄHNE)
- CLÉ À SECTEUR À 4 GRIFFES POUR FRETTES RGS/RGE

927..



PAG 1020

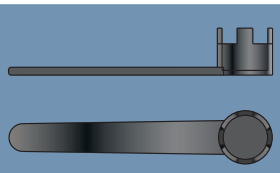
CHIAVE A SETTORI PER GHIERE RGM
- PIN WRENCH FOR RGM
- ZAPFENSCHLÜSSEL FÜR RGM-RINGE
- CLÉ À SECTEUR POUR FRETTES RGM

938..

PAG 1020

CHIAVE PER VITI CON TESTA A CROCE
- CROSS-SLOTTED SCREW WRENCH
- KREUZSCHLÜSSEL
- CLÉ POUR VIS AVEC TÊTE À CROIX

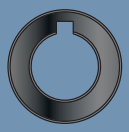
423..



PAG 1021

ANELLO DISTANZIATORE PER PORTAFRESA COMBINATO
- DISTANCE RING FOR COMBI MILL-HOLDER
- DISTANZRING FÜR KOMBI-FRÄSERAUFNAHME
- BAGUE D' ENTRETOISE POUR MANDRIN PORTE-FRAISE COMBINÉ

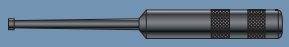
195..



PAG 1021

ESTRATTORE PER PINZE
- EXTRACTOR FOR COLLETS
- ENTFERNER FÜR REDUZIERHULSEN
- EXTRACTEUR POUR PINCES

ESMS..



PAG 1022

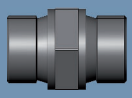
TUBO DRITTO RACCORDATO
- FITTED HOSE STRAIGHT
- GERADE SCHLAUCHLEITUNG
- TUBE DROIT RACCORDE

ATUB..

PAG 1022

RACCORDO DRITTO
- STRAIGHT FITTING
- GERADE VERBINDUNGSSTÜCK
- RACCORD DROIT

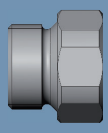
A00MM18..



PAG 1022

RIDUZIONE
- ADAPTER
- REDUZIERUNGEN
- RÉDUCTION

ARIMF14180



PAG 1022

RACCORDO 90°
- 90° FITTING
- 90°-KUPPLUNG
- RACCORD 90°

A90MM18..

PAG 1023

ANELLO DI TENUTA
- SEALING RING
- DICHTRING
- ANNEAU D'ETANCHEITE

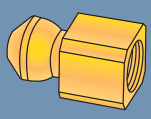
ABS000M100

PAG 1023

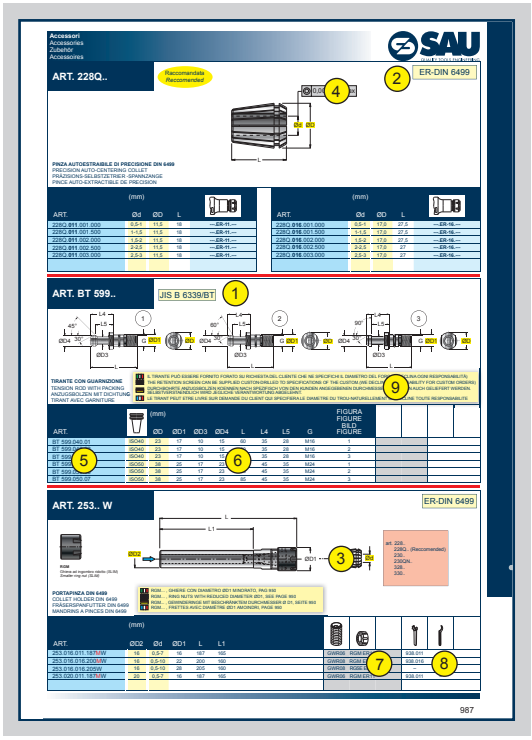
OGIVA LUBROREFRIGERANTE
- COOLING LUBRICANT NOSE CONE
- KÜHLSCHMIERMITTEL-NASENKEGEL
- OGIVE LUBRIFIANTE-RÉFRIGÉRANTE

AOG...F18

NEW



PAG 1023



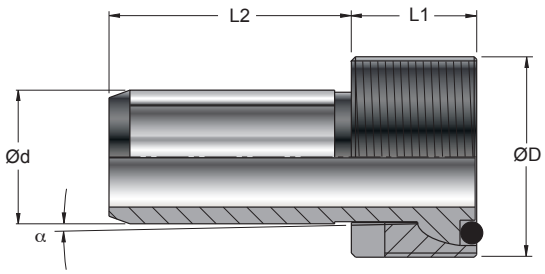
1 = NORMA ATTACCO
2 = NORMA PARTE ANTERIORE
3 = ACCESSORI OPZIONALI A RICHIESTA
4 = CARATTERISTICHE TECNICHE
5 = ARTICOLO
6 = MISURE,DATI,INDICAZIONI
7 = ACCESSORI E RICAMBI IN DOTAZIONE
8 = ACCESSORI E RICAMBI OPZIONALI A RICHIESTA
9 = NOTE E AVVERTIMENTI

1 = SHANK STANDARD
2 = TOOL-HOLDER STANDARD
3 = OPTIONAL ACCESSORIES ON REQUEST.
4 = TECHNICAL FEATURES
5 = ITEM
6 = MEASURES,DATA,INDICATIONS
7 = ACCESORIES AND SPARE PARTS EQUIPMENT
8 = OPTIONAL ACCESORIES AND SPARE PARTS ON REQUEST
9 = NOTES AND WARNINGS

1 = KEGEL-NORM
2 = AUFNAHME-NORM
3 = OPTIONALZUBEHÖR AUF ANFRAGE
4 = TECHNISCHE HAUPTMERKMALE
5 = ARTKEL
6 = ABMESSUNGEN,DATEN,HINWEISE
7 = ZUBEHÖR UND ERSATZTEILAUSSTATTUNG
8 = OPTIONALZUBEHÖR UND -ERSATZTEILE AUF ANFRAGE
9 = ANMERKUNGEN UND HINWEISE

1 = NORMES POUR ATTACHEMENT
2 = NORME POUR MANDRIN
3 = ACCESSOIRES OPTIONNELS SUR DEMANDE
4 = CARACTERISTIQUES TECHNIQUES
5 = ARTICLE
6 = DIMENSIONES,DONNÉES,INDICATIONS
7 = ACCESSOIRES ET RECHANGE EN DOTATION
8 = ACCESOIRES ET RECHANGES OPTIONNELS SUR DEMANDE
9 = NOTES ET AVVERTISSEMENTS

ART. ATR..

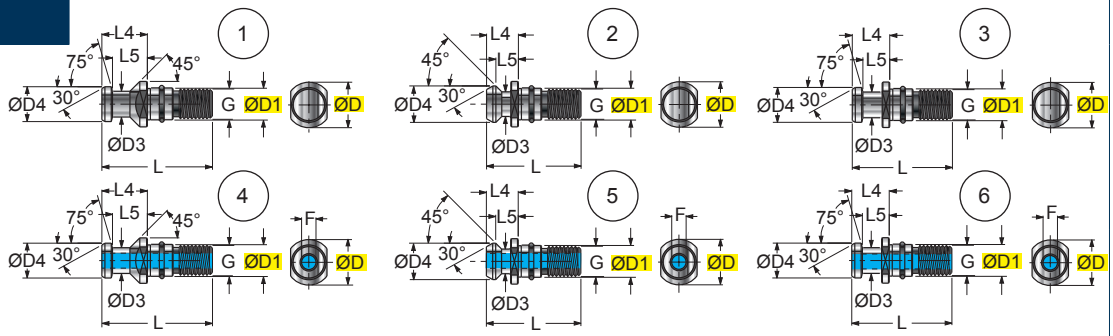


ADDUTTORE REFRIGERANTE PER MANDRINI HSK
COOLANT FEED FOR HSK CHUCK
KÜHLMITTELZUFHUR FÜR HSK-AUFNAHME
ABDUCTEUR DU RÈFRIGÈRANTE POUR MANDRINS HSK

ART.		(mm) ØD	Ød	L1	L2	α			
ATR012 HK40	HSK40	M12x1	8	8	21,5	–	OR-HK040		CH-HK040
ATR016 HK50	HSK50	M16x1	10	10	23	–	OR-HK050		CH-HK050
ATR018 HK63	HSK63	M18x1	12	11,5	36,2	1,3°	OR-HK063		CH-HK063
ATR020 HK80	HSK80	M20x1,5	14	13,5	39,7	1,4°	OR-HK080		CH-HK080
ATR024 HK100	HSK100	M24x1,5	16	15	43,6	1,4°	OR-HK100		CH-HK100

ART. 03 599..
ART. 03 599..N

DIN 69872
ISO 7388/2 A-B

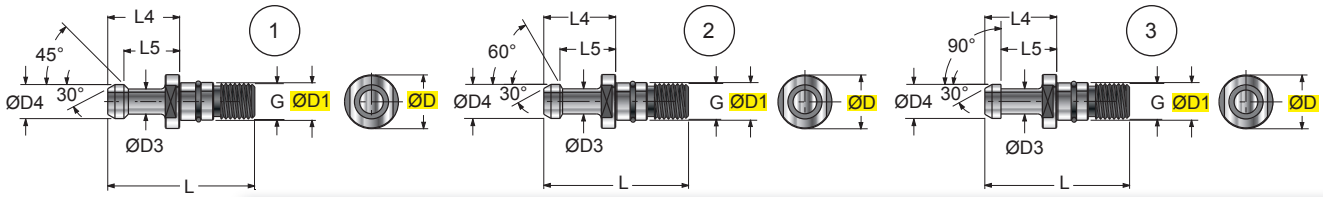


TIRANTE CON GUARNIZIONE
TENSION ROD WITH PACKING
ANZUGSBOLZEN MIT DICHTUNG
TIRANT AVEC GARNITURE

ART.		(mm) ØD	ØD1	ØD3	ØD4	L	L4	L5	G	F	FIGURA FIGURE BILD FIGURE	
03 599.040.01 DIN	ISO40	23,0	17	14,0	19,0	54,0	26,0	20,0	M16	7,0	4	DIN 69872 A
03 599.050.05 DIN	ISO50	36,0	25	21,0	28,0	74,0	34,0	25,0	M24	11,5	4	
03 599.040.01 ISO	ISO40	23,0	17	14,0	19,0	54,0	26,0	20,0	M16	7,0	6	ISO 7388/2 A
03 599.050.05 ISO	ISO50	36,0	25	21,0	28,0	74,0	34,0	25,0	M24	11,5	6	
03 599.040.02	ISO40	22,5	17	12,95	18,95	44,5	16,4	11,15	M16	7,35	5	ISO 7388 A
03 599.050.06	ISO50	37,0	25	19,6	29,1	65,5	25,55	17,95	M24	11,55	5	
03 599.040.01N DIN	ISO40	23,0	17	14,0	19,0	54,0	26,0	20,0	M16	–	1	DIN 69872 B
03 599.050.05N DIN	ISO50	36,0	25	21,0	28,0	74,0	34,0	25,0	M24	–	1	
03 599.040.01N ISO	ISO40	23,0	17	14,0	19,0	54,0	26,0	20,0	M16	–	3	ISO 7388/2 B
03 599.050.05N ISO	ISO50	36,0	25	21,0	28,0	74,0	34,0	25,0	M24	–	3	
03 599.040.02N	ISO40	22,5	17	12,95	18,95	44,5	16,4	11,15	M16	–	2	ISO 7388 B
03 599.050.06N	ISO50	37,0	25	19,6	29,1	65,5	25,55	17,95	M24	–	2	

ART. BT 599..

JIS B 6339/BT



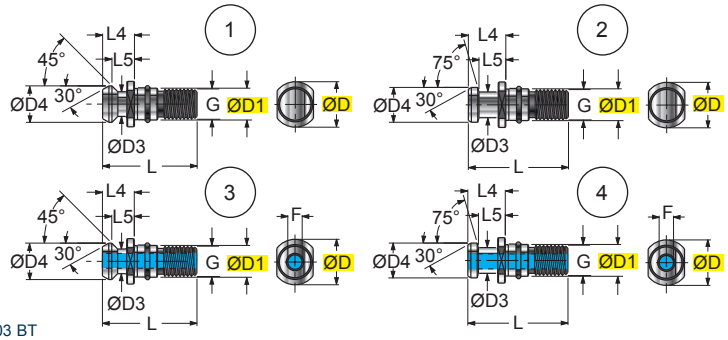
TIRANTE CON GUARNIZIONE
TENSION ROD WITH PACKING
ANZUGSBOLZEN MIT DICHTUNG
TIRANT AVEC GARNITURE

IL TIRANTE PUÒ ESSERE FORNITO FORATO SU RICHIESTA DEL CLIENTE CHE NE SPECIFICHI IL DIAMETRO DEL FORO.(SI DECLINA OGNI RESPONSABILITÀ)
THE RETENTION SCREEN CAN BE SUPPLIED CUSTON-DRILLED TO SPECIFICATIONS OF THE CUSTOM.(WE DECLINE RESPONSABILITY FOR CUSTOM ORDERS)
DURCHBOHRTE ANZUGSBOLZEN KOENNEN NACH SPEZIFISCH VON DEN KUNDEN ANGEGEBENEN DURCHMESSER GROESSEN AUCH GELIEFERT WERDEN. SELBSTVERSTAENDLICH WIRD JEGLICHE VERANTWORTUNG ABGELEHNT.
LE TIRANT PEUT ETRE LIVRE SUR DEMANDE DU CLIENT QUI SPECIFIERA LE DIAMETRE DU TROU-NATURELLEMENT ON DECLINE TOUTE RESPONSABILITE

ART.		(mm) ØD	ØD1	ØD3	ØD4	L	L4	L5	G	FIGURA FIGURE BILD FIGURE
BT 599.040.01	ISO40	23	17	10	15	60	35	28	M16	1
BT 599.040.02	ISO40	23	17	10	15	60	35	28	M16	2
BT 599.040.03	ISO40	23	17	10	15	60	35	28	M16	3
BT 599.050.05	ISO50	38	25	17	23	85	45	35	M24	1
BT 599.050.06	ISO50	38	25	17	23	85	45	35	M24	2
BT 599.050.07	ISO50	38	25	17	23	85	45	35	M24	3

ART. 03 599..MAZAK
ART. 03 599..JIS

ISO 7388/2 B
JIS 6339

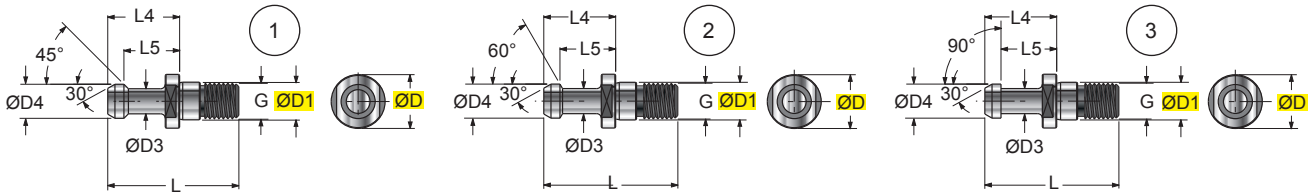


TIRANTE DA DIN69871 A MANDRINO MAS 403 BT
DIN69871 A CHUCK RETENTION KNOB MAS 403 BT
ANZUGSBOLZEN NACH DIN69871 MIT AUFNAHME MAS 403 BT
TIRANT DE DIN69871 À BROCHE MAS 403 BT

ART.		(mm) ØD	ØD1	ØD3	ØD4	L	L4	L5	G	F	FIGURA FIGURE BILD FIGURE		
03 599.040.02NxBT MAZAK*	ISO40	22,5	17	12,95	18,95	44,5	19,1	14,1	M16	–	1	ISO 7388/2 B	*PER MAZAK
03 599.040.02xBT MAZAK*	ISO40	22,5	17	12,95	18,95	44,5	19,1	14,1	M16	7,35	3		*FOR MAZAK
03 599.040.01NxBT JIS	ISO40	23	17	14	19	54	29	23	M16	–	2	JIS 6339	
03 599.040.01xBT JIS	ISO40	23	17	14	19	54	29	23	M16	5,5	4		

ART. BT 599.. xDIN69871

JIS B 6339/BT



TIRANTE DA MAS 403 BT A MANDRINO DIN69871
MAS 403 BT A CHUCK RETENTION KNOB DIN69871
ANZUGSBOLZEN NACH MAS 403 BT MIT AUFNAHME DIN69871
TIRANT DE MAS 403 BT À BROCHE DIN69871

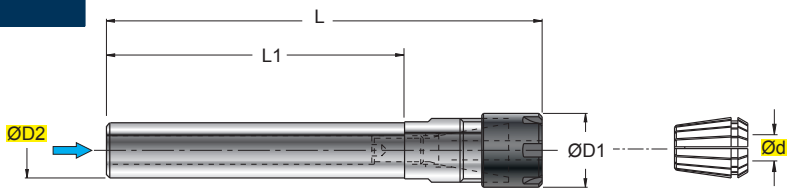
ART.		(mm) ØD	ØD1	ØD3	ØD4	L	L4	L5	G	FIGURA FIGURE BILD FIGURE
BT 599.040.01xDIN69871	ISO40	23	17	10	15	57	32	25	M16	1
BT 599.040.02xDIN69871	ISO40	23	17	10	15	57	32	25	M16	2
BT 599.040.03xDIN69871	ISO40	23	17	10	15	57	32	25	M16	3

SAU QUALITY TOOLS ENGINEERING

ART. 253..W

ER-DIN 6499

RGM
Ghiera ad ingombro ridotto (SLIM)
Smaller ring nut (SLIM)



art. 228..
228Q.. (Reccomended)
230..
230QN..
328..
330..

PORTAPINZA DIN 6499
COLLET HOLDER DIN 6499
FRÄSERSPANFUTTER DIN 6499
MANDRINS A PINCES DIN 6499

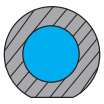
RGM... , GHIERE CON DIAMETRO ØD1 MINORATO, PAG 1012
RGM... , RING NUTS WITH REDUCED DIAMETER ØD1, SEE PAGE 1012
RGM... , GEWINDERINGE MIT BESCHRÄNKTEM DURCHMESSER Ø D1, SEITE 1012
RGM... , FRETTES AVEC DIAMÈTRE ØD1 AMOINDRI, PAGE 1012

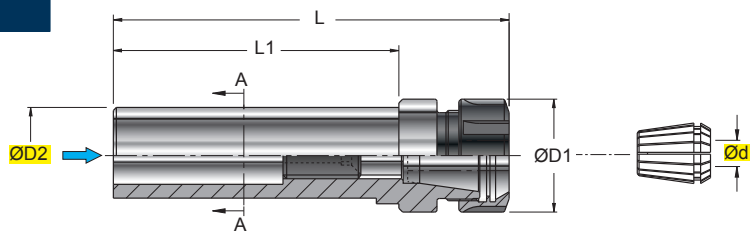
ART.	(mm) ØD2	Ød	ØD1	L	L1				
253.016.011.187MW	16	0,5-7	16	187	165	GWR06	RGM ER11	938.011	–
253.016.016.200MW	16	0,5-10	22	200	160	GWR08	RGM ER16	938.016	–
253.016.016.205W	16	0,5-10	28	205	160	GWR08	RGSE ER16	–	–
253.020.011.187MW	20	0,5-7	16	187	165	GWR06	RGM ER11	938.011	–
253.020.016.200MW	20	0,5-10	22	200	160	GWR10	RGM ER16	938.016	–
253.020.016.205W	20	0,5-10	28	205	160	GWR10	RGSE ER16	–	–
253.020.025.210W	20	0,5-16	42	210	160	GWR10	RGS ER25	–	925.040
253.020.025.210MW	20	0,5-16	35	210	160	GWR10	RGM ER25	938.025	–
253.025.016.205W	25	0,5-10	28	205	160	GWR08	RGSE ER16	–	–
253.025.025.210MW	25	0,5-16	35	210	160	GWR10	RGM ER25	938.025	–
253.025.025.210W	25	0,5-16	42	210	160	GWR10	RGS ER25	–	925.040
253.025.032.213W	25	2-20	50	213	160	GWR10	RGS ER32	–	925.052
253.032.016.205W	32	0,5-10	28	205	160	GWR08	RGSE ER16	–	–
253.032.025.210W	32	0,5-16	42	210	160	GWR10	RGS ER25	–	925.040
253.032.032.210W	32	2-20	50	210	160	GWR10	RGS ER32	–	925.052
253.032.040.140W	32	3-30	63	140	80	GWR14	RGS ER40	–	925.068
253.040.032.210W	40	2-20	50	210	160	GWR10	RGS ER32	–	925.052
253.040.040.140W	40	3-30	63	140	80	GWR14	RGS ER40	–	925.068

ART. 253..NCW

ER-DIN 6499

SEZ A-A





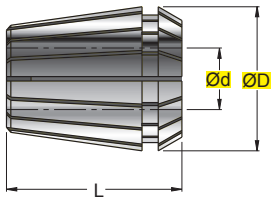
art. 228..
228Q.. (Reccomended)
230..
230QN..
328..
330..

PORTAPINZA PER TORNIO DIN 6499
COLLET HOLDER DIN 6499
FRÄSERSPANFUTTER DIN 6499
MANDRINS A PINCES POUR TOUR DIN 6499

ART.	(mm) ØD2	Ød	ØD1	L	L1			
253.032.032.130NCW	32	2-20	50	128	80	GRF22	RGS ER32	925.052
253.040.032.130NCW	40	2-20	50	128	80	GRF22	RGS ER32	925.052

ART. 228..

ER-DIN 6499



PINZA AUTOESTRAIBILE DIN 6499
AUTO-CENTERING COLLET DIN 6499
SELBSTZENTRIER-SPANNZANGEN DIN 6499
PINCE AUTO-EXTRACTIBLE DIN 6499

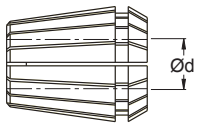
ART.	(mm) Ød	ØD	L	
228.**011**.001.000	0,5-1	11,5	18	---.ER-11.---
228.**011**.001.500	1-1,5	11,5	18	---.ER-11.---
228.**011**.002.000	1,5-2	11,5	18	---.ER-11.---
228.**011**.002.500	2-2,5	11,5	18	---.ER-11.---
228.**011**.003.000	2,5-3	11,5	18	---.ER-11.---
228.**011**.003.500	3-3,5	11,5	18	---.ER-11.---
228.**011**.004.000	3,5-4	11,5	18	---.ER-11.---
228.**011**.004.500	4-4,5	11,5	18	---.ER-11.---
228.**011**.005.000	4,5-5	11,5	18	---.ER-11.---
228.**011**.005.500	5-5,5	11,5	18	---.ER-11.---
228.**011**.006.000	5,5-6	11,5	18	---.ER-11.---
228.**011**.006.500	6-6,5	11,5	18	---.ER-11.---
228.**011**.007.000	6,5-7	11,5	18	---.ER-11.---
228.**016**.001.000	0,5-1	17,0	27	---.ER-16.---
228.**016**.001.500	1-1,5	17,0	27	---.ER-16.---
228.**016**.002.000	1,5-2	17,0	27	---.ER-16.---
228.**016**.002.500	2-2,5	17,0	27	---.ER-16.---
228.**016**.003.000	2,5-3	17,0	27	---.ER-16.---
228.**016**.004.000	3-4	17,0	27	---.ER-16.---
228.**016**.005.000	4-5	17,0	27	---.ER-16.---
228.**016**.006.000	5-6	17,0	27	---.ER-16.---
228.**016**.007.000	6-7	17,0	27	---.ER-16.---
228.**016**.008.000	7-8	17,0	27	---.ER-16.---
228.**016**.009.000	8-9	17,0	27	---.ER-16.---
228.**016**.010.000	9-10	17,0	27	---.ER-16.---
228.**025**.001.000	0,5-1	26,0	35	---.ER-25.---
228.**025**.001.500	1-1,5	26,0	35	---.ER-25.---
228.**025**.002.000	1,5-2	26,0	35	---.ER-25.---
228.**025**.002.500	2-2,5	26,0	35	---.ER-25.---
228.**025**.003.000	2,5-3	26,0	35	---.ER-25.---
228.**025**.004.000	3-4	26,0	35	---.ER-25.---
228.**025**.005.000	4-5	26,0	35	---.ER-25.---
228.**025**.006.000	5-6	26,0	35	---.ER-25.---
228.**025**.007.000	6-7	26,0	35	---.ER-25.---
228.**025**.008.000	7-8	26,0	35	---.ER-25.---
228.**025**.009.000	8-9	26,0	35	---.ER-25.---
228.**025**.010.000	9-10	26,0	35	---.ER-25.---
228.**025**.011.000	10-11	26,0	35	---.ER-25.---
228.**025**.012.000	11-12	26,0	35	---.ER-25.---
228.**025**.013.000	12-13	26,0	35	---.ER-25.---
228.**025**.014.000	13-14	26,0	35	---.ER-25.---
228.**025**.015.000	14-15	26,0	35	---.ER-25.---
228.**025**.016.000	15-16	26,0	35	---.ER-25.---
228.**032**.003.000	2-3	33	40	---.ER-32.---
228.**032**.004.000	3-4	33	40	---.ER-32.---
228.**032**.005.000	4-5	33	40	---.ER-32.---
228.**032**.006.000	5-6	33	40	---.ER-32.---
228.**032**.007.000	6-7	33	40	---.ER-32.---
228.**032**.008.000	7-8	33	40	---.ER-32.---
228.**032**.009.000	8-9	33	40	---.ER-32.---
228.**032**.010.000	9-10	33	40	---.ER-32.---
228.**032**.011.000	10-11	33	40	---.ER-32.---
228.**032**.012.000	11-12	33	40	---.ER-32.---
228.**032**.013.000	12-13	33	40	---.ER-32.---
228.**032**.014.000	13-14	33	40	---.ER-32.---
228.**032**.015.000	14-15	33	40	---.ER-32.---
228.**032**.016.000	15-16	33	40	---.ER-32.---
228.**032**.017.000	16-17	33	40	---.ER-32.---
228.**032**.018.000	17-18	33	40	---.ER-32.---

ART.	(mm) Ød	ØD	L	
228.**032**.019.000	18-19	33	40	---.ER-32.---
228.**032**.020.000	19-20	33	40	---.ER-32.---
228.**040**.004.000	3-4	41	46	---.ER-40.---
228.**040**.005.000	4-5	41	46	---.ER-40.---
228.**040**.006.000	5-6	41	46	---.ER-40.---
228.**040**.007.000	6-7	41	46	---.ER-40.---
228.**040**.008.000	7-8	41	46	---.ER-40.---
228.**040**.009.000	8-9	41	46	---.ER-40.---
228.**040**.010.000	9-10	41	46	---.ER-40.---
228.**040**.011.000	10-11	41	46	---.ER-40.---
228.**040**.012.000	11-12	41	46	---.ER-40.---
228.**040**.013.000	12-13	41	46	---.ER-40.---
228.**040**.014.000	13-14	41	46	---.ER-40.---
228.**040**.015.000	14-15	41	46	---.ER-40.---
228.**040**.016.000	15-16	41	46	---.ER-40.---
228.**040**.017.000	16-17	41	46	---.ER-40.---
228.**040**.018.000	17-18	41	46	---.ER-40.---
228.**040**.019.000	18-19	41	46	---.ER-40.---
228.**040**.020.000	19-20	41	46	---.ER-40.---
228.**040**.021.000	20-21	41	46	---.ER-40.---
228.**040**.022.000	21-22	41	46	---.ER-40.---
228.**040**.023.000	22-23	41	46	---.ER-40.---
228.**040**.024.000	23-24	41	46	---.ER-40.---
228.**040**.025.000	24-25	41	46	---.ER-40.---
228.**040**.026.000	25-26	41	46	---.ER-40.---
228.**040**.027.000	26-27	41	46	---.ER-40.---
228.**040**.028.000	27-28	41	46	---.ER-40.---
228.**040**.029.000	28-29	41	46	---.ER-40.---
228.**040**.030.000	29-30	41	46	---.ER-40.---

SAU QUALITY TOOLS ENGINEERING

ART. SET 228-ER16

NEW



SET PINZA AUTOESTRAIBILE DIN 6499
AUTO-CENTERING COLLET SET DIN 6499
SELBSTZENTRIER-SPANNZANGEN-SATZ DIN 6499
JEU PINCE AUTO-EXTRACTIBLE DIN 6499

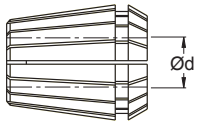
Ød 1÷10mm
n° 10 Pinze - *Collet*

Contenuto del KIT - SET Content

Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød
n°1	228.**016**.001.000	0,5-1	n°1	228.**016**.005.000	4-5	n°1	228.**016**.009.000	8-9
n°1	228.**016**.002.000	1,5-2	n°1	228.**016**.006.000	5-6	n°1	228.**016**.010.000	9-10
n°1	228.**016**.003.000	2,5-3	n°1	228.**016**.007.000	6-7			
n°1	228.**016**.004.000	3-4	n°1	228.**016**.008.000	7-8			

ART. SET 228-ER25

NEW



SET PINZA AUTOESTRAIBILE DIN 6499
AUTO-CENTERING COLLET SET DIN 6499
SELBSTZENTRIER-SPANNZANGEN-SATZ DIN 6499
JEU PINCE AUTO-EXTRACTIBLE DIN 6499

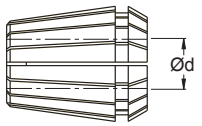
Ød 2÷16mm
n° 15 Pinze - *Collet*

Contenuto del KIT - SET Content

Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød
n°1	228.**025**.002.000	1,5-2	n°1	228.**025**.006.000	5-6	n°1	228.**025**.010.000	9-10	n°1	228.**025**.014.000	13-14
n°1	228.**025**.003.000	2,5-3	n°1	228.**025**.007.000	6-7	n°1	228.**025**.011.000	10-11	n°1	228.**025**.015.000	14-15
n°1	228.**025**.004.000	3-4	n°1	228.**025**.008.000	7-8	n°1	228.**025**.012.000	11-12	n°1	228.**025**.016.000	15-16
n°1	228.**025**.005.000	4-5	n°1	228.**025**.009.000	8-9	n°1	228.**025**.013.000	12-13			

ART. SET 228-ER32

NEW



SET PINZA AUTOESTRAIBILE DIN 6499
AUTO-CENTERING COLLET SET DIN 6499
SELBSTZENTRIER-SPANNZANGEN-SATZ DIN 6499
JEU PINCE AUTO-EXTRACTIBLE DIN 6499

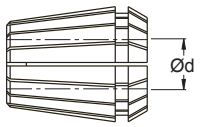
Ød 3÷20mm
n° 18 Pinze - *Collet*

Contenuto del KIT - SET Content

Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød
n°1	228.**032**.003.000	2-3	n°1	228.**032**.007.000	6-7	n°1	228.**032**.011.000	10-11	n°1	228.**032**.015.000	14-15	n°1	228.**032**.019.000	18-19
n°1	228.**032**.004.000	3-4	n°1	228.**032**.008.000	7-8	n°1	228.**032**.012.000	11-12	n°1	228.**032**.016.000	15-16	n°1	228.**032**.020.000	19-20
n°1	228.**032**.005.000	4-5	n°1	228.**032**.009.000	8-9	n°1	228.**032**.013.000	12-13	n°1	228.**032**.017.000	16-17			
n°1	228.**032**.006.000	5-6	n°1	228.**032**.010.000	9-10	n°1	228.**032**.014.000	13-14	n°1	228.**032**.018.000	17-18			

ART. SET 228-ER40

NEW



SET PINZA AUTOESTRAIBILE DIN 6499
AUTO-CENTERING COLLET SET DIN 6499
SELBSTZENTRIER-SPANNZANGEN-SATZ DIN 6499
JEU PINCE AUTO-EXTRACTIBLE DIN 6499

Ød 4÷26mm
n° 23 Pinze - *Collet*

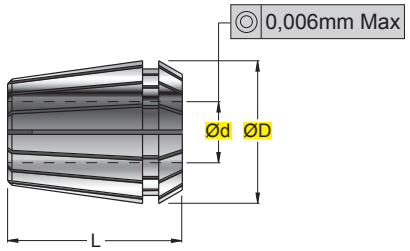
Contenuto del KIT - SET Content

Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød	Q.	ART.	Ød
n°1	228.**040**.004.000	3-4	n°1	228.**040**.008.000	7-8	n°1	228.**040**.012.000	11-12	n°1	228.**040**.016.000	15-16	n°1	228.**040**.020.000	19-20	n°1	228.**040**.024.000	23-24
n°1	228.**040**.005.000	4-5	n°1	228.**040**.009.000	8-9	n°1	228.**040**.013.000	12-13	n°1	228.**040**.017.000	16-17	n°1	228.**040**.021.000	20-21	n°1	228.**040**.025.000	24-25
n°1	228.**040**.006.000	5-6	n°1	228.**040**.010.000	9-10	n°1	228.**040**.014.000	13-14	n°1	228.**040**.018.000	17-18	n°1	228.**040**.022.000	21-22	n°1	228.**040**.026.000	25-26
n°1	228.**040**.007.000	6-7	n°1	228.**040**.011.000	10-11	n°1	228.**040**.015.000	14-15	n°1	228.**040**.019.000	18-19	n°1	228.**040**.023.000	22-23			

ART. 228Q..

Raccomandata
Reccomended

ER-DIN 6499



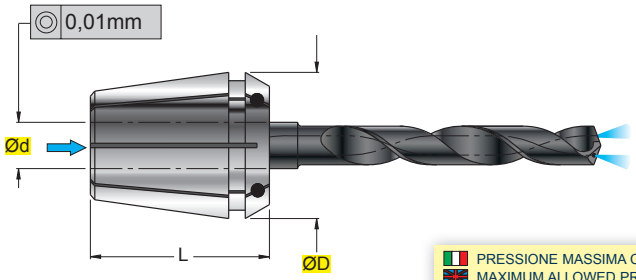
PINZA AUTOESTRAIBILE DI PRECISIONE DIN 6499
PRECISION AUTO-CENTERING COLLET
PRÄZISIONS-SELBSTZETRIER -SPANNZANGE
PINCE AUTO-EXTRACTIBLE DE PRECISION

ART.	(mm) Ød	ØD	L	
228Q.**011**.001.000	0,5-1	11,5	18	---.ER-11.---
228Q.**011**.001.500	1-1,5	11,5	18	---.ER-11.---
228Q.**011**.002.000	1,5-2	11,5	18	---.ER-11.---
228Q.**011**.002.500	2-2,5	11,5	18	---.ER-11.---
228Q.**011**.003.000	2,5-3	11,5	18	---.ER-11.---
228Q.**011**.003.500	3-3,5	11,5	18	---.ER-11.---
228Q.**011**.004.000	3,5-4	11,5	18	---.ER-11.---
228Q.**011**.004.500	4-4,5	11,5	18	---.ER-11.---
228Q.**011**.005.000	4,5-5	11,5	18	---.ER-11.---
228Q.**011**.005.500	5-5,5	11,5	18	---.ER-11.---
228Q.**011**.006.000	5,5-6	11,5	18	---.ER-11.---
228Q.**011**.006.500	6-6,5	11,5	18	---.ER-11.---
228Q.**011**.007.000	6,5-7	11,5	18	---.ER-11.---
228Q.**016**.001.000	0,5-1	17,0	27,5	---.ER-16.---
228Q.**016**.001.500	1-1,5	17,0	27,5	---.ER-16.---
228Q.**016**.002.000	1,5-2	17,0	27,5	---.ER-16.---
228Q.**016**.002.500	2-2,5	17,0	27	---.ER-16.---
228Q.**016**.003.000	2,5-3	17,0	27	---.ER-16.---
228Q.**016**.004.000	3-4	17,0	27,5	---.ER-16.---
228Q.**016**.005.000	4-5	17,0	27	---.ER-16.---
228Q.**016**.006.000	5-6	17,0	27	---.ER-16.---
228Q.**016**.007.000	6-7	17,0	27	---.ER-16.---
228Q.**016**.008.000	7-8	17,0	27,5	---.ER-16.---
228Q.**016**.009.000	8-9	17,0	27	---.ER-16.---
228Q.**016**.010.000	9-10	17,0	27	---.ER-16.---
228Q.**025**.001.000	0,5-1	26,0	35	---.ER-25.---
228Q.**025**.001.500	1-1,5	26,0	35	---.ER-25.---
228Q.**025**.002.000	1,5-2	26,0	35	---.ER-25.---
228Q.**025**.002.500	2-2,5	26,0	34	---.ER-25.---
228Q.**025**.003.000	2,5-3	26,0	35	---.ER-25.---
228Q.**025**.004.000	3-4	26,0	35	---.ER-25.---
228Q.**025**.005.000	4-5	26,0	34	---.ER-25.---
228Q.**025**.006.000	5-6	26,0	35	---.ER-25.---
228Q.**025**.007.000	6-7	26,0	35	---.ER-25.---
228Q.**025**.008.000	7-8	26,0	34	---.ER-25.---
228Q.**025**.009.000	8-9	26,0	35	---.ER-25.---
228Q.**025**.010.000	9-10	26,0	35	---.ER-25.---
228Q.**025**.011.000	10-11	26,0	35	---.ER-25.---
228Q.**025**.012.000	11-12	26,0	35	---.ER-25.---
228Q.**025**.013.000	12-13	26,0	35	---.ER-25.---
228Q.**025**.014.000	13-14	26,0	35	---.ER-25.---
228Q.**025**.015.000	14-15	26,0	35	---.ER-25.---
228Q.**025**.016.000	15-16	26,0	34	---.ER-25.---
228Q.**032**.002.000	1,5-2	33	40	---.ER-32.---
228Q.**032**.002.500	2-2,5	33	40	---.ER-32.---
228Q.**032**.003.000	2,5-3	33	40	---.ER-32.---
228Q.**032**.004.000	3-4	33	40	---.ER-32.---
228Q.**032**.005.000	4-5	33	40	---.ER-32.---
228Q.**032**.006.000	5-6	33	40	---.ER-32.---
228Q.**032**.007.000	6-7	33	40	---.ER-32.---
228Q.**032**.008.000	7-8	33	40	---.ER-32.---
228Q.**032**.009.000	8-9	33	40	---.ER-32.---
228Q.**032**.010.000	9-10	33	40	---.ER-32.---
228Q.**032**.011.000	10-11	33	40	---.ER-32.---
228Q.**032**.012.000	11-12	33	40	---.ER-32.---
228Q.**032**.013.000	12-13	33	40	---.ER-32.---
228Q.**032**.014.000	13-14	33	40	---.ER-32.---
228Q.**032**.015.000	14-15	33	40	---.ER-32.---
228Q.**032**.016.000	15-16	33	40	---.ER-32.---

ART.	(mm) Ød	ØD	L	
228Q.**032**.017.000	16-17	33	40	---.ER-32.---
228Q.**032**.018.000	17-18	33	40	---.ER-32.---
228Q.**032**.019.000	18-19	33	40	---.ER-32.---
228Q.**032**.020.000	19-20	33	40	---.ER-32.---
228Q.**040**.004.000	3-4	41	46	---.ER-40.---
228Q.**040**.005.000	4-5	41	46	---.ER-40.---
228Q.**040**.006.000	5-6	41	46	---.ER-40.---
228Q.**040**.007.000	6-7	41	46	---.ER-40.---
228Q.**040**.008.000	7-8	41	46	---.ER-40.---
228Q.**040**.009.000	8-9	41	46	---.ER-40.---
228Q.**040**.010.000	9-10	41	46	---.ER-40.---
228Q.**040**.011.000	10-11	41	46	---.ER-40.---
228Q.**040**.012.000	11-12	41	46	---.ER-40.---
228Q.**040**.013.000	12-13	41	46	---.ER-40.---
228Q.**040**.014.000	13-14	41	46	---.ER-40.---
228Q.**040**.015.000	14-15	41	46	---.ER-40.---
228Q.**040**.016.000	15-16	41	46	---.ER-40.---
228Q.**040**.017.000	16-17	41	46	---.ER-40.---
228Q.**040**.018.000	17-18	41	46	---.ER-40.---
228Q.**040**.019.000	18-19	41	46	---.ER-40.---
228Q.**040**.020.000	19-20	41	46	---.ER-40.---
228Q.**040**.021.000	20-21	41	46	---.ER-40.---
228Q.**040**.022.000	21-22	41	46	---.ER-40.---
228Q.**040**.023.000	22-23	41	46	---.ER-40.---
228Q.**040**.024.000	23-24	41	46	---.ER-40.---
228Q.**040**.025.000	24-25	41	46	---.ER-40.---
228Q.**040**.026.000	25-26	41	46	---.ER-40.---

ART. 230..

ER-DIN 6499



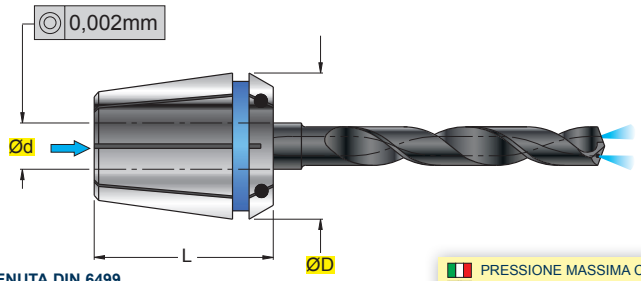
PINZA AUTOESTRAIBILE CON GOMMA DI TENUTA DIN 6499
AUTO-CENTERING COLLET WITH RETAINING RUBBER DIN 6499
SELBSTZENTRIER-SPANNZANGEN MIT DICHTGUMMI DIN 6499
PINCE AUTO-EXTRACTIBLE AVEC JOINT D'ETANCHÉITÉ DIN 6499

PRESSIONE MASSIMA CONSENTITA 25 bar
MAXIMUM ALLOWED PRESSURE 25 BAR
MAXIMAL ZULÄSSIGER DRUCK 25 BAR
PRESSION MAXIMUM AUTORISEE 25 bars

ART.	(mm) Ød	ØD	L	
230.**025**.003.000	3	26	35	---.ER-25.---
230.**025**.004.000	4	26	35	---.ER-25.---
230.**025**.005.000	5	26	35	---.ER-25.---
230.**025**.006.000	6	26	35	---.ER-25.---
230.**025**.007.000	7	26	35	---.ER-25.---
230.**025**.008.000	8	26	35	---.ER-25.---
230.**025**.009.000	9	26	35	---.ER-25.---
230.**025**.010.000	10	26	35	---.ER-25.---
230.**025**.011.000	11	26	35	---.ER-25.---
230.**025**.012.000	12	26	35	---.ER-25.---
230.**025**.013.000	13	26	35	---.ER-25.---
230.**025**.014.000	14	26	35	---.ER-25.---
230.**025**.015.000	15	26	35	---.ER-25.---
230.**025**.016.000	16	26	35	---.ER-25.---
230.**032**.003.000	3	33	40	---.ER-32.---
230.**032**.004.000	4	33	40	---.ER-32.---
230.**032**.005.000	5	33	40	---.ER-32.---
230.**032**.006.000	6	33	40	---.ER-32.---
230.**032**.007.000	7	33	40	---.ER-32.---
230.**032**.008.000	8	33	40	---.ER-32.---
230.**032**.009.000	9	33	40	---.ER-32.---
230.**032**.010.000	10	33	40	---.ER-32.---
230.**032**.011.000	11	33	40	---.ER-32.---
230.**032**.012.000	12	33	40	---.ER-32.---
230.**032**.013.000	13	33	40	---.ER-32.---
230.**032**.014.000	14	33	40	---.ER-32.---
230.**032**.015.000	15	33	40	---.ER-32.---
230.**032**.016.000	16	33	40	---.ER-32.---
230.**032**.017.000	17	33	40	---.ER-32.---
230.**032**.018.000	18	33	40	---.ER-32.---
230.**032**.019.000	19	33	40	---.ER-32.---
230.**032**.020.000	20	33	40	---.ER-32.---
230.**040**.004.000	4	41	46	---.ER-40.---
230.**040**.005.000	5	41	46	---.ER-40.---
230.**040**.006.000	6	41	46	---.ER-40.---
230.**040**.007.000	7	41	46	---.ER-40.---
230.**040**.008.000	8	41	46	---.ER-40.---
230.**040**.009.000	9	41	46	---.ER-40.---
230.**040**.010.000	10	41	46	---.ER-40.---
230.**040**.011.000	11	41	46	---.ER-40.---
230.**040**.012.000	12	41	46	---.ER-40.---
230.**040**.013.000	13	41	46	---.ER-40.---
230.**040**.014.000	14	41	46	---.ER-40.---
230.**040**.015.000	15	41	46	---.ER-40.---
230.**040**.016.000	16	41	46	---.ER-40.---
230.**040**.017.000	17	41	46	---.ER-40.---
230.**040**.018.000	18	41	46	---.ER-40.---
230.**040**.019.000	19	41	46	---.ER-40.---
230.**040**.020.000	20	41	46	---.ER-40.---
230.**040**.021.000	21	41	46	---.ER-40.---
230.**040**.022.000	22	41	46	---.ER-40.---
230.**040**.023.000	23	41	46	---.ER-40.---
230.**040**.024.000	24	41	46	---.ER-40.---
230.**040**.025.000	25	41	46	---.ER-40.---
230.**040**.026.000	26	41	46	---.ER-40.---

ART. 230QN..

ER-DIN 6499



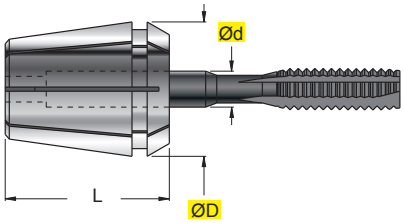
PINZA AUTOESTRAIBILE DI PRECISIONE CON GOMMA DI TENUTA DIN 6499
PRECISION AUTO-CENTERING COLLET WITH RETAINING RUBBER DIN 6499
PRÄZISIONS-SELBSTZENTRIER-SPANNZANGEN MIT DICHTGUMMI DIN 6499
PINCE AUTO-EXTRACTIBLE DE PRECISION AVEC JOINT D'ETANCHÉITÉ DIN 6499

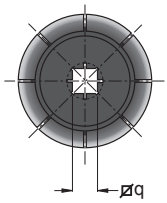
PRESSIONE MASSIMA CONSENTITA 25 bar
MAXIMUM ALLOWED PRESSURE 25 BAR
MAXIMAL ZULÄSSIGER DRUCK 25 BAR
PRESSION MAXIMUM AUTORISEE 25 bars

ART.	(mm) Ød	ØD	L	
230QN.**025**.006.000	6	25,7	34	---.ER-25.---
230QN.**025**.007.000	7	25,7	34	---.ER-25.---
230QN.**025**.008.000	8	25,7	34	---.ER-25.---
230QN.**025**.009.000	9	25,7	34	---.ER-25.---
230QN.**025**.010.000	10	25,7	34	---.ER-25.---
230QN.**025**.011.000	11	25,7	34	---.ER-25.---
230QN.**025**.012.000	12	25,7	34	---.ER-25.---
230QN.**025**.013.000	13	25,7	34	---.ER-25.---
230QN.**025**.014.000	14	25,7	34	---.ER-25.---
230QN.**025**.015.000	15	25,7	34	---.ER-25.---
230QN.**025**.016.000	16	25,7	34	---.ER-25.---
230QN.**032**.006.000	6	32,7	40	---.ER-32.---
230QN.**032**.007.000	7	32,7	40	---.ER-32.---
230QN.**032**.008.000	8	32,7	40	---.ER-32.---
230QN.**032**.009.000	9	32,7	40	---.ER-32.---
230QN.**032**.010.000	10	32,7	40	---.ER-32.---
230QN.**032**.011.000	11	32,7	40	---.ER-32.---
230QN.**032**.012.000	12	32,7	40	---.ER-32.---
230QN.**032**.013.000	13	32,7	40	---.ER-32.---
230QN.**032**.014.000	14	32,7	40	---.ER-32.---
230QN.**032**.015.000	15	32,7	40	---.ER-32.---
230QN.**032**.016.000	16	32,7	40	---.ER-32.---
230QN.**032**.017.000	17	32,7	40	---.ER-32.---
230QN.**032**.018.000	18	32,7	40	---.ER-32.---
230QN.**040**.006.000	6	40,7	46	---.ER-40.---
230QN.**040**.008.000	8	40,7	46	---.ER-40.---
230QN.**040**.010.000	10	40,7	46	---.ER-40.---
230QN.**040**.012.000	12	40,7	46	---.ER-40.---
230QN.**040**.014.000	14	40,7	46	---.ER-40.---
230QN.**040**.016.000	16	40,7	46	---.ER-40.---
230QN.**040**.018.000	18	40,7	46	---.ER-40.---

ART. 328..

ER-DIN 6499 B





PINZA AUTOESTRAIBILE PORTA MASCHI DIN 6499-AZ
AUTO-CENTERING COLLET TAP HOLDERS DIN 6499-AZ
SELBSTZENTRIER-SPANNZANGEN GEWINDEBOHREAUFNAHME DIN 6499-AZ
PINCE AUTO-EXTRACTIBLE PORTE TAURAUDS DIN 6499-AZ

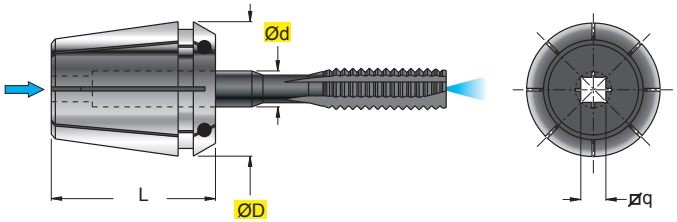
(mm)

ART.	Ød	ØD	L	øq	
328.**016**.035.027	3,5	17	27,5	2,7	---.ER-16.---
328.**016**.040.030	4,0	17	27,5	3,0	---.ER-16.---
328.**016**.045.034	4,5	17	27,5	3,4	---.ER-16.---
328.**016**.050.040	5,0	17	27,5	4,0	---.ER-16.---
328.**016**.055.043	5,5	17	27,5	4,3	---.ER-16.---
328.**016**.060.049	6,0	17	27,5	4,9	---.ER-16.---
328.**016**.063.050	6,3	17	27,5	5,0	---.ER-16.---
328.**016**.070.055	7,0	17	27,5	5,5	---.ER-16.---
328.**016**.080.062	8,0	17	27,5	6,2	---.ER-16.---
328.**016**.090.070	9,0	17	27,5	7,0	---.ER-16.---
328.**016**.100.080	10,0	17	27,5	8,0	---.ER-16.---
328.**025**.045.034	4,5	26	34	3,4	---.ER-25.---
328.**025**.055.043	5,5	26	34	4,3	---.ER-25.---
328.**025**.060.049	6,0	26	34	4,9	---.ER-25.---
328.**025**.070.055	7,0	26	34	5,5	---.ER-25.---
328.**025**.080.062	8,0	26	34	6,2	---.ER-25.---
328.**025**.090.070	9,0	26	34	7,0	---.ER-25.---
328.**025**.100.080	10,0	26	34	8,0	---.ER-25.---
328.**025**.110.090	11,0	26	34	9,0	---.ER-25.---
328.**025**.120.090	12,0	26	34	9,0	---.ER-25.---
328.**032**.045.034	4,5	33	40	3,4	---.ER-32.---
328.**032**.055.043	5,5	33	40	4,3	---.ER-32.---
328.**032**.060.049	6,0	33	40	4,9	---.ER-32.---
328.**032**.070.055	7,0	33	40	5,5	---.ER-32.---
328.**032**.080.062	8,0	33	40	6,2	---.ER-32.---
328.**032**.090.070	9,0	33	40	7,0	---.ER-32.---
328.**032**.100.080	10,0	33	40	8,0	---.ER-32.---
328.**032**.110.090	11,0	33	40	9,0	---.ER-32.---
328.**032**.120.090	12,0	33	40	9,0	---.ER-32.---
328.**032**.140.110	14,0	33	40	11,0	---.ER-32.---
328.**032**.160.120	16,0	33	40	12,0	---.ER-32.---
328.**040**.070.055	7,0	41	46	5,5	---.ER-40.---
328.**040**.080.062	8,0	41	46	6,2	---.ER-40.---
328.**040**.090.070	9,0	41	46	7,0	---.ER-40.---
328.**040**.100.080	10,0	41	46	8,0	---.ER-40.---
328.**040**.110.090	11,0	41	46	9,0	---.ER-40.---
328.**040**.120.090	12,0	41	46	9,0	---.ER-40.---
328.**040**.140.110	14,0	41	46	11,0	---.ER-40.---
328.**040**.160.120	16,0	41	46	12,0	---.ER-40.---
328.**040**.180.145	18,0	41	46	14,5	---.ER-40.---
328.**040**.200.160	20,0	41	46	16,0	---.ER-40.---

SAU QUALITY TOOLS ENGINEERING

ART. 330..

ER-DIN 6499 B

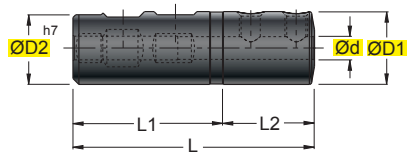


PINZA AUTOESTRAIBILE PORTA MASCHI CON GOMMA DI TENUTA
AUTO-CENTERING COLLET WITH RETAINING RUBBER
SELBSTZENTRIER-SPANNZANGEN MIT DICHTGUMMI
PINCE AUTO-EXTRACTIBLE PORTE-MALES AVEC CAOUTCHOUC D'ETANCHEITE

PRESSIONE MASSIMA CONSENTITA 25 bar
MAXIMUM ALLOWED PRESSURE 25 BAR
MAXIMAL ZULÄSSIGER DRUCK 25 BAR
PRESSION MAXIMUM AUTORISEE 25 bars

ART.	(mm) Ød	ØD	L	øq	
330.**016**.040.030	4,0	17	27,5	3,0	---.ER-16.---
330.**016**.045.034	4,5	17	27,5	3,4	---.ER-16.---
330.**016**.050.040	5,0	17	27,5	4,0	---.ER-16.---
330.**016**.055.043	5,5	17	27,5	4,3	---.ER-16.---
330.**016**.060.049	6,0	17	27,5	4,9	---.ER-16.---
330.**016**.070.055	7,0	17	27,5	5,5	---.ER-16.---
330.**016**.080.062	8,0	17	27,5	6,2	---.ER-16.---
330.**025**.040.030	4,0	26	34	3,0	---.ER-25.---
330.**025**.045.034	4,5	26	34	3,4	---.ER-25.---
330.**025**.050.040	5,0	26	34	4,0	---.ER-25.---
330.**025**.055.043	5,5	26	34	4,3	---.ER-25.---
330.**025**.060.049	6,0	26	34	4,9	---.ER-25.---
330.**025**.070.055	7,0	26	34	5,5	---.ER-25.---
330.**025**.080.062	8,0	26	34	6,2	---.ER-25.---
330.**025**.090.070	9,0	26	34	7,0	---.ER-25.---
330.**025**.100.080	10,0	26	34	8,0	---.ER-25.---
330.**025**.110.090	11,0	26	34	9,0	---.ER-25.---
330.**025**.120.090	12,0	26	34	9,0	---.ER-25.---
330.**032**.045.034	4,5	33	40	3,4	---.ER-32.---
330.**032**.050.040	5,0	33	40	4,0	---.ER-32.---
330.**032**.055.043	5,5	33	40	4,3	---.ER-32.---
330.**032**.060.049	6,0	33	40	4,9	---.ER-32.---
330.**032**.070.055	7,0	33	40	5,5	---.ER-32.---
330.**032**.080.062	8,0	33	40	6,2	---.ER-32.---
330.**032**.090.070	9,0	33	40	7,0	---.ER-32.---
330.**032**.100.080	10,0	33	40	8,0	---.ER-32.---
330.**032**.110.090	11,0	33	40	9,0	---.ER-32.---
330.**032**.120.090	12,0	33	40	9,0	---.ER-32.---
330.**032**.140.110	14,0	33	40	11,0	---.ER-32.---
330.**032**.160.120	16,0	33	40	12,0	---.ER-32.---
330.**040**.060.049	6,0	41	46	4,9	---.ER-40.---
330.**040**.070.055	7,0	41	46	5,5	---.ER-40.---
330.**040**.080.062	8,0	41	46	6,2	---.ER-40.---
330.**040**.090.070	9,0	41	46	7,0	---.ER-40.---
330.**040**.100.080	10,0	41	46	8,0	---.ER-40.---
330.**040**.110.090	11,0	41	46	9,0	---.ER-40.---
330.**040**.120.090	12,0	41	46	9,0	---.ER-40.---
330.**040**.140.110	14,0	41	46	11,0	---.ER-40.---
330.**040**.160.120	16,0	41	46	12,0	---.ER-40.---
330.**040**.180.145	18,0	41	46	14,5	---.ER-40.---
330.**040**.200.160	20,0	41	46	16,0	---.ER-40.---

ART. 216..



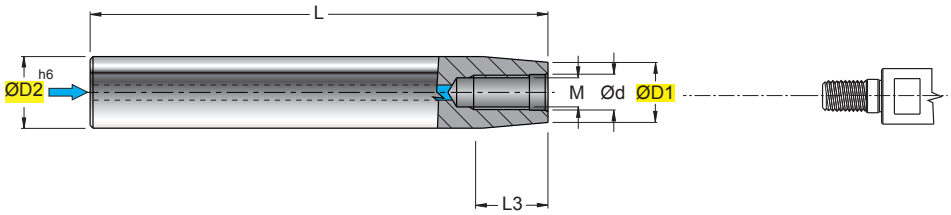
BOCCOLA DI RIDUZIONE PER UTENSILE PER MINIALESATURA
COLLET ADAPTERS FOR MINI BOHRING TOOL
REDUKTION FÜR MINI BOHRSTANGE
DOUILLE DE RÉDUCTION POUR OUTIL À ALÉSER MINIATURE

0,005

(mm)

ART.	ØD2 h7	Ød H7	ØD1	L	L1	L2		
216.016.005.016	16	5	16	53	33	20	GR505	5025
216.016.006.016	16	6	16	55	33	22		
216.016.008.020	16	8	20	60	33	27	GR606	5003
216.016.010.022	16	10	22	60	33	27		
216.016.012.024	16	12	24	65	33	32		

ART. CIL.. MF..W



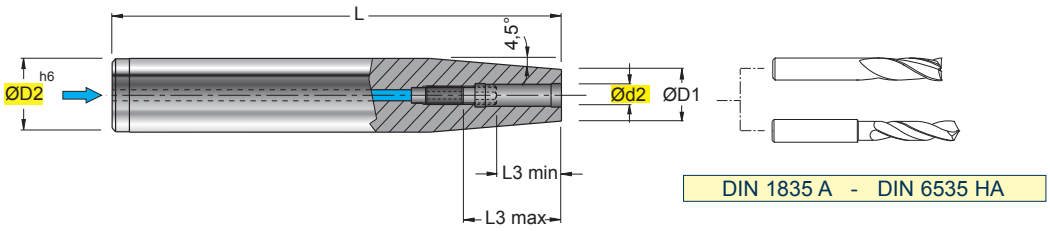
art. 253..VW
S1089W..
S1503.9W..
S2000.89W..
S613/4.9.45W...
S659W...
S809W...
S849W...
S929...
S959...
S9002W..
S9005.9W..

PROLUNGA IN ACCIAIO CON ATTACCO CILINDRICO PER MODULARE FILETTATO
STEEL EXTENSION WITH CYLINDRICAL CONNECTION FOR THREADED MODULAR TOOL SYSTEM
STAHLVERLÄNGERUNG MIT ZYLINDRAUFNAHME FÜR GEWINDE-MODULARWERKZEUGSYSTEM
RALLONGE EN ACIER AVEC ATTACHEMENT CILYNDRIQUE POUR LE SISTEME MODULAIR FILETÉ

(mm)

ART.	M	Ød	ØD1	ØD2 h6	L	L3
CIL.012.MF005.115W	5	5,5	8	12	115	14
CIL.012.MF006.115W	6	6,5	10	12	115	14
CIL.016.MF008.127W	8	8,5	13	16	127	15
CIL.020.MF010.140W	10	10,5	18	20	140	15
CIL.025.MF012.160W	12	12,5	21	25	160	20
CIL.032.MF016.187W	16	17,0	29	32	187	20

ART. CIL..CTPN..W



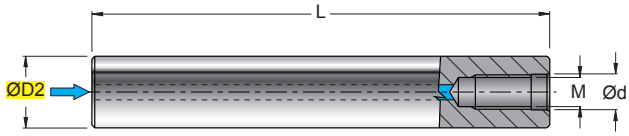
DIN 1835 A - DIN 6535 HA

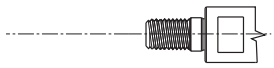
PROLUNGA IN ACCIAIO CON ATTACCO A CALETTAMENTO TERMICO CON GRANO DI REGOLAZIONE
STEEL SHRINK-FIT EXTENSION WITH ADJUSTMENT DOWEL.
STAHLVERLÄNGERUNG MIT SCHRUMPFVERBINDUNG MIT EINSTELLSTIFT
RALLONGE EN ACIER AVEC ATTACHEMENT À EMBOÎTEMENT TERMIQUE AVEC GRAIN DE REGULATION

ART.	(mm) Ød2	ØD1	ØD2 h6	L	L3max	L3min		
CIL.012.CTPN003.160W	3	8	12	160	9,0	–	–	–
CIL.012.CTPN004.160W	4	8	12	160	12,0	–		
CIL.016.CTPN003.160W	3	10	16	160	9,0	–		
CIL.016.CTPN004.160W	4	10	16	160	12,0	–		
CIL.016.CTPN005.160W	5	10	16	160	15,0	–		
CIL.016.CTPN006.160W	6	10	16	160	36,0	26,0	GWR 05L	5025
CIL.020.CTPN006.160W	6	14	20	160	36,0	26,0		
CIL.020.CTPN008.160W	8	14	20	160	36,0	26,0	GWR 06L	5003
CIL.025.CTPN008.160W	8	19	25	160	36,0	26,0		
CIL.025.CTPN008.200W	8	19	25	200	36,0	26,0		
CIL.025.CTPN010.160W	10	20	25	160	41,0	31,0	GWR 08CTD	5004
CIL.025.CTPN010.200W	10	20	25	200	41,0	31,0		
CIL.025.CTPN012.160W	12	20	25	160	46,0	36,0	GWR 10CTD	5005
CIL.025.CTPN012.200W	12	20	25	200	46,0	36,0		
CIL.025.CTPN014.160W	14	22	25	160	46,0	36,0		
CIL.025.CTPN016.160W	16	22	25	160	49,0	39,0	GWR 12CTD	5006
CIL.025.CTPN016.200W	16	22	25	200	49,0	39,0		
CIL.032.CTPN016.160W	16	27	32	160	49,0	39,0		
CIL.032.CTPN016.200W	16	27	32	200	49,0	39,0		
CIL.032.CTPN018.160W	18	27	32	160	49,0	39,0		
CIL.032.CTPN020.160W	20	27	32	160	51,0	41,0	GWR 16CTD	5008
CIL.032.CTPN020.200W	20	27	32	200	51,0	41,0		

ART. CIL.. MFV..W

NEW





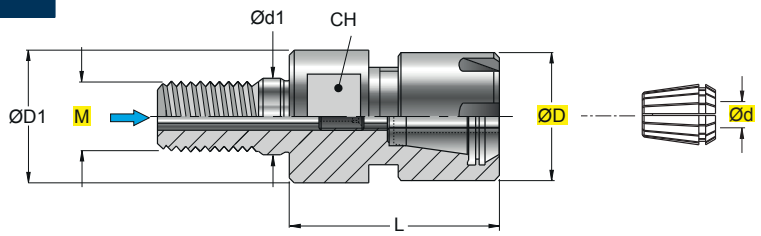
art. 253..VW
S1089W..
S1503.9W..
S2000.89W..
S613/4.9.45W...
S659W...
S809W...
S849W...
S929...
S959...
S9002W..
S9005.9W..

PROLUNGA ANTIVIBRANTE IN METALLO DURO CON ATTACCO CILINDRICO PER MODULARE FILETTATO
DAMPED SOLID CARBIDE EXTENSION WITH CYLINDRICAL SHANK FOR THREADED MODULAR SYSTEM
SCHWINGUNGSGEDÄMPFTE VOLLHARTMETALLVERLÄNGERUNG MIT ZYLINDERAUFNAHME FÜR MODULARSYSTEM
RALLONGE ANTIVIBRATOIRE EN CARBURE AVEC QUEUE CYLINDRIQUE POUR SYSTEME MODULAIRE FILETE

ART.	(mm) M	Ød	ØD2	L	kg
CIL.010.MFV005.075W	5	5,5	10	75	0,07
CIL.010.MFV005.100W	5	5,5	10	100	0,10
CIL.010.MFV005.150W	5	5,5	10	150	0,15
CIL.012.MFV006.075W	6	6,5	12	75	0,11
CIL.012.MFV006.100W	6	6,5	12	100	0,14
CIL.012.MFV006.150W	6	6,5	12	150	0,22
CIL.014.MFV008.100W	8	8,5	14	100	0,16
CIL.014.MFV008.150W	8	8,5	14	150	0,30
CIL.014.MFV008.200W	8	8,5	14	200	0,41
CIL.016.MFV008.100W	8	8,5	16	100	0,26
CIL.016.MFV008.150W	8	8,5	16	150	0,38
CIL.016.MFV008.200W	8	8,5	16	200	0,52
CIL.020.MFV010.150W	10	10,5	20	150	0,59
CIL.020.MFV010.200W	10	10,5	20	200	0,80
CIL.020.MFV010.250W	10	10,5	20	250	1,01
CIL.025.MFV012.150W	12	12,5	25	150	0,93
CIL.025.MFV012.200W	12	12,5	25	200	1,26
CIL.025.MFV012.250W	12	12,5	25	250	1,58
CIL.025.MFV012.300W	12	12,5	25	300	1,91
CIL.032.MFV016.150W	16	17,0	32	150	1,50
CIL.032.MFV016.200W	16	17,0	32	200	2,05
CIL.032.MFV016.250W	16	17,0	32	250	2,59
CIL.032.MFV016.300W	16	17,0	32	300	3,15

ART. 253..VW

NEW

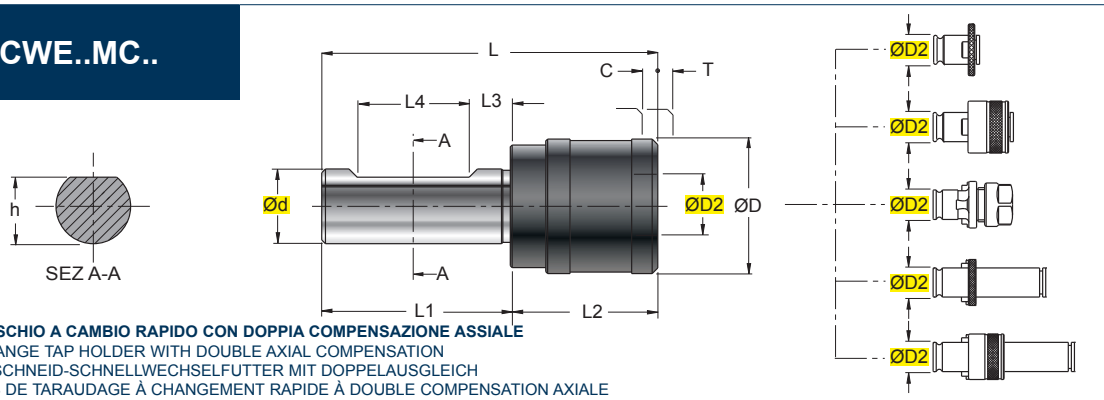


art. 228..
228Q.. (Reccomended)
230..
230QN..
328..
330..

ADATTATORE ANTIVIBRANTE PORTAPINZA CON ATTACCO FILETTATO
DAMPED COLLET CHUCK ADAPTER WITH THREADED CONNECTION
SCHWINGUNGSGEDÄMPFTER SPANNZANGENFUTTER-ADAPTER MIT GEWINDEAUFNAHME
ADAPTATEUR ANTIVIBRATOIRE PORTE-PINCE AVEC RACCORD FILETE

ART.	(mm) M	Ød	Ød1	ØD	ØD1	L	CH		
253.012.022.050VW	12	0,5-10	12,5	22	21	50	16	RGM ER16	938.016
253.016.022.050VW	16	0,5-10	17,0	22	29	50	16	RGM ER16	938.016
253.016.035.045VW	16	0,5-16	17,0	35	29	45	25	RGM ER25	938.025

ART. CWE..MC..

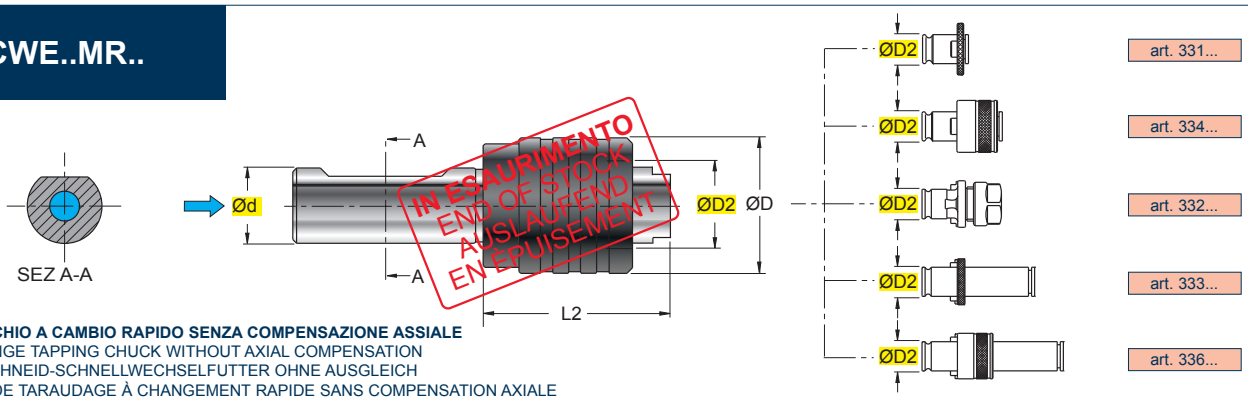


PORTAMASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE ASSIALE
QUICK-CHANGE TAP HOLDER WITH DOUBLE AXIAL COMPENSATION
GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION AXIALE

(mm)

ART.	ØD	Ød	ØD2	L	L1	L2	L3	L4	h	C	T
CWE.020.MC019.041	38	20	19	90	50	40	10,5	30	18	7,5	7,5
CWE.025.MC031.063	55	25	31	120	56	64	10,5	30	23	12,5	12,5
CWE.032.MC048.109	79	32	48	169	60	109	6,0	37	30	24	24

ART. CWE..MR..

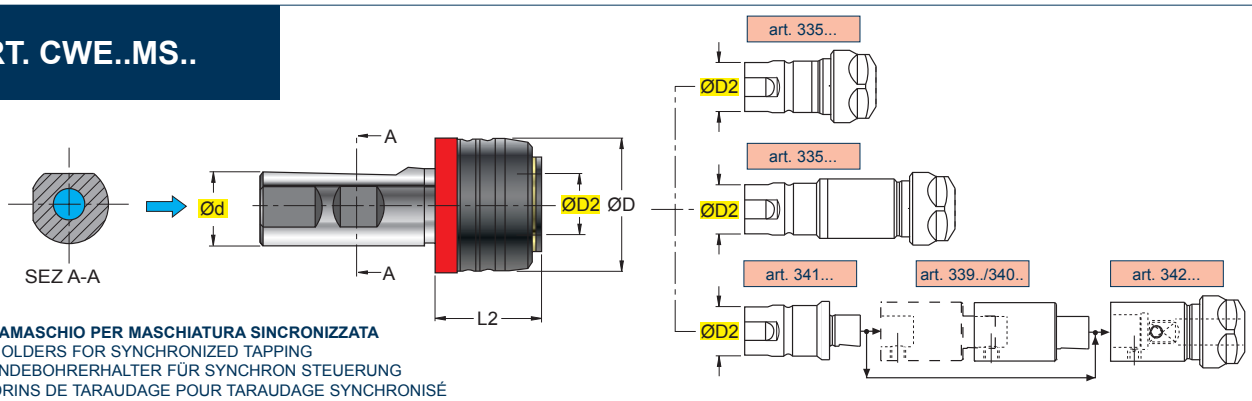


PORTAMASCHIO A CAMBIO RAPIDO SENZA COMPENSAZIONE ASSIALE
QUICK-CHANGE TAPPING CHUCK WITHOUT AXIAL COMPENSATION
GEWINDESCHNEID-SCHNELLWECHSELFUTTER OHNE AUSGLEICH
MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE SANS COMPENSATION AXIALE

(mm)

ART.	ØD	Ød	ØD2	L2
CWE.020.MR019.041	38	20	19	41
CWE.025.MR019.040	33	25	19	40
CWE.025.MR031.063	55	25	31	63
CWE.032.MR031.063	50	32	31	63
CWE.040.MR048.087	72	40	48	87

ART. CWE..MS..



PORTAMASCHIO PER MASCHIATURA SINCRONIZZATA
TAP HOLDERS FOR SYNCHRONIZED TAPPING
GEWINDEBOHRERHALTER FÜR SYNCHRON STEUERUNG
MANDRINS DE TARAUDAGE POUR TARAUDAGE SYNCHRONISÉ

(mm)

ART.	ØD	Ød	ØD2	L2
CWE.025.MS016.034	43	25	20	34
CWE.025.MS020.056	60	25	32	56
CWE.040.MS033.080	87	40	50	80

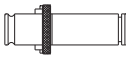
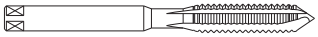
CARATTERISTICHE TECNICHE - TECHNICAL CHARACTERISTICS

1. Perfetto allineamento maschio-foro: 0,003 mm
2. Durata del maschio tripla rispetto ad un sistema di maschiatura tradizionale
3. Cambio rapido del maschio e della bussola
4. Adatto per maschiatura rigida sincronizzata con compensazione in sfilamento (1mm) ed in rientro (0,2mm)
5. Predisposto per il passaggio della lubrificazione fino a 50 bar
6. Ingombro ridotto

1. Perfect line up tap-hole: 0,003mm
2. Triple life of tap in comparison to a traditional tapping system
3. Quick change of the tap and of the adapter
4. Suitable for rigid tapping with a micro compensation in extension (1mm) and (0,2mm) in compression
5. Possible coolant flow till 50bar
6. Reduced dimensions

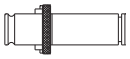
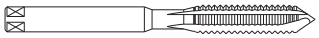
SAU QUALITY TOOLS ENGINEERING

BUSSOLE SENZA FRIZIONE
TAP ADAPTERS WITHOUT OVERLOAD CLUTCH.
GEWINDEBOHRERAUFNAHME OHNE DREHMOMENTBEGRENZUNG
DOUILLES SANS EMBRAYAGE.

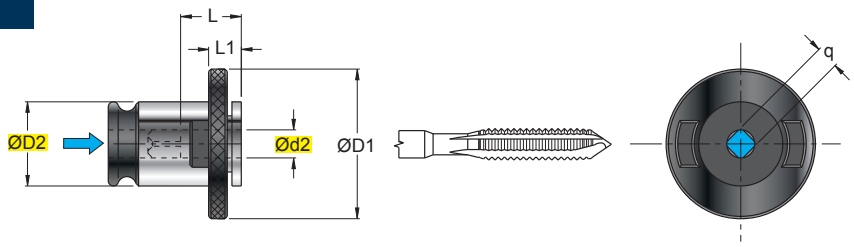
		DIN371	DIN376-374	DIN353	DIN2182	DIN2183
331.019.028.021		M2-M2,5				
331.019.035.027	333.019.035.027	M3	M5		1/8”	
331.019.040.030		M3,5				
331.019.045.034	333.019.045.034	M4	M6		5/32”	1/4”
331.019.060.049	333.019.060.049	M5-M6	M8		7/32”	
331.019.070.055	333.019.070.055		M10	R1/8”	1/4”	3/8”
331.019.080.062	333.019.080.062	M8			5/16”	7/16”
331.019.090.070	333.019.090.070		M12		3/8”	1/2”
331.019.100.080	333.019.100.080	M10				
331.019.110.090			M14	R1/4”		9/16”
	333.031.060.049	M5-M6	M8		7/32”	
	333.031.070.055		M10	R1/8”	1/4”	3/8”
331.031.080.062	333.031.080.062	M8			5/16”	7/16”
331.031.090.070	333.031.090.070		M12		3/8”	1/2”
331.031.100.080	333.031.100.080	M10				
331.031.110.090	333.031.110.090		M14	R1/4”		9/16”
331.031.120.090	333.031.120.090		M16	R3/8”		5/8”
331.031.140.110	333.031.140.110		M18			11/16”
331.031.160.120	333.031.160.120		M20	R1/2”		13/16”
331.031.180.145			M22-M24	R5/8”		7/8-15/16”
331.031.200.160			M27	R3/4”		1”
331.031.220.180			M30			
331.048.120.090			M16	R3/8”		5/8”
331.048.140.110			M18			11/16”
331.048.160.120			M20	R1/2”		13/16”
331.048.180.145			M22-M24	R5/8”		7/8-15/16”
331.048.200.160			M27	R3/4”		1”
331.048.220.180			M30	R7/8”		1,1/8”
331.048.250.200			M33	R1”		1,1/4”
331.048.280.220			M36	R1,1/8”		1,3/8”
331.048.320.240			M42	R1,1/4”		1,1/2-1,5/8”
331.048.360.290			M48	R1,2/2”		1,3/4-1,7/8”

BUSSOLE CON FRIZIONE
(*) PRETARATE (**) DA TARARE
TAP ADAPTERS WITH OVERLOAD CLUTCH.
(*) PRE-CALIBRATED (**) UNCALIBRATED
GEWINDEBOHRERAUFNAHME MIT DREHMOMENTBEGRENZUNG
(*) VORKALIBRIERT (**) UNKALIBRIERT
DOUILLES SANS EMBRAYAGE
(*) PRE-CALIBRÉES (**) À CALIBRER

		(*) DIN371	(*) DIN376	(**) DIN376-374	(**) DIN353	(**) DIN2182	(**) DIN2183
334.019.028.021		M2-M2,5					
334.019.035.027	336.019.035.027	M3		M5		1/8”	
334.019.040.030		M3,5					
334.019.045.034	336.019.045.034	M4		M6		5/32”	1/4”
334.019.060.049	336.019.060.049.5 336.019.060.049.6	M5 M6		M8		7/32”	
334.019.070.055	336.019.070.055		M10		R1/8”	1/4”	3/8”
334.019.080.062	336.019.080.062	M8				5/16”	7/16”
334.019.090.070	336.019.090.070		M12			3/8”	1/2”
334.019.100.080	336.019.100.080	M10					
	336.031.060.049	M6				5/16”	7/16”
	336.031.070.055		M10				
334.031.080.062	336.031.080.062	M8					
334.031.090.070	336.031.090.070		M12			3/8”	1/2”
334.031.100.080	336.031.100.080	M10					
334.031.110.090	336.031.110.090		M14		R1/4”		9/16”
334.031.120.090	336.031.120.090		M16		R3/8”		5/8”
334.031.140.110	336.031.140.110		M18				11/16”
334.031.160.120	336.031.160.120		M20		R1/2”		13/16”
334.031.180.145			M22-M24		R5/8”		7/8-15/16”
334.048.120.090			M16		R3/8”		5/8”
334.048.140.110			M18				11/16”
334.048.160.120			M20		R1/2”		13/16”
334.048.180.145			M22-M24		R5/8”		7/8-15/16”
334.048.200.160			M27		R3/4”		1”
334.048.220.180			M30		R7/8”		1,1/8”
334.048.250.200			M33		R1”		1,1/4”
334.048.280.220			M36		R1,1/8”		1,3/8”

ART. 331..

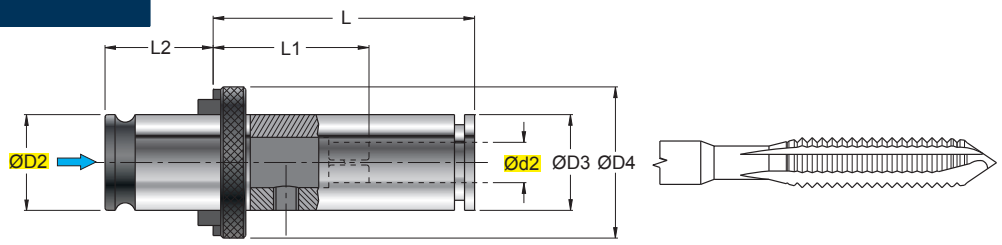


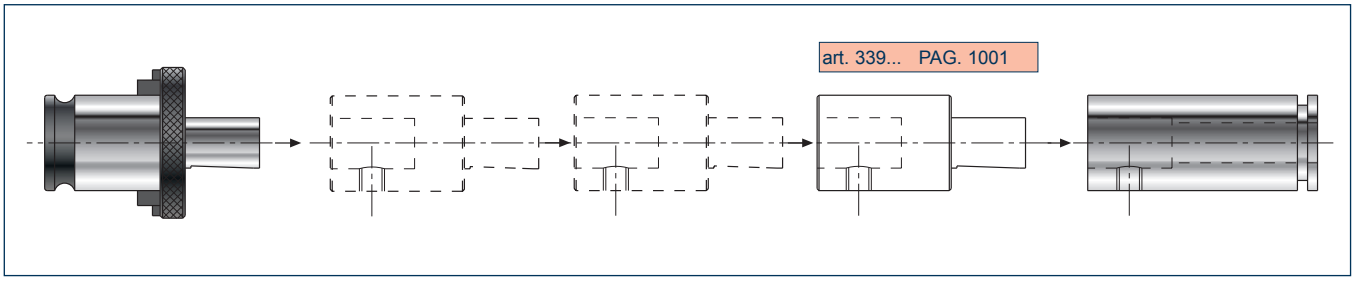
BUSSOLA PORTA MASCHI
TAP-COLLET
GEWINDEBOHRER-AUFNAHME
DOUILLE PORTE-TARAUDS

ART.	(mm) Ød2	ØD2	ØD1	L	L1	q
331.019.028.021	2,8	19	30	17	7	2,1
331.019.035.027	3,5	19	30	17	7	2,7
331.019.040.030	4,0	19	30	17	7	3,0
331.019.045.034	4,5	19	30	17	7	3,4
331.019.060.049	6,0	19	30	17	7	4,9
331.019.070.055	7,0	19	30	17	7	5,5
331.019.080.062	8,0	19	30	17	7	6,2
331.019.090.070	9,0	19	30	17	7	7,0
331.019.100.080	10,0	19	30	17	7	8,0
331.019.110.090	11,0	19	30	17	7	9,0
331.031.080.062	8,0	31	48	30	11	6,2
331.031.090.070	9,0	31	48	30	11	7,0
331.031.100.080	10,0	31	48	30	11	8,0
331.031.110.090	11,0	31	48	30	11	9,0
331.031.120.090	12,0	31	48	30	11	9,0
331.031.140.110	14,0	31	48	30	11	11,0
331.031.160.120	16,0	31	48	30	11	12,0
331.031.180.145	18,0	31	48	30	11	14,5
331.031.200.160(*)	20,0	31	48	30	11	16,0
331.031.220.180(*)	22,0	31	48	30	11	18,0
331.048.120.090	12,0	48	70	44	14	9,0
331.048.140.110	14,0	48	70	44	14	11,0
331.048.160.120	16,0	48	70	44	14	12,0
331.048.180.145	18,0	48	70	44	14	14,5
331.048.200.160	20,0	48	70	44	14	16,0
331.048.220.180	22,0	48	70	44	14	18,0
331.048.250.200	25,0	48	70	44	14	20,0
331.048.280.220	28,0	48	70	44	14	22,0
331.048.320.240(*)	32,0	48	70	44	14	24,0
331.048.360.290(*)	36,0	48	70	44	14	29,0

(*) = PER LAVORAZIONI LEGGERE
SUITABLE FOR LIGHT MACHINING
FÜR LEICHTMETALLBEARBEITUNG
APTE POUR USINAGE LÉGER

ART. 333..

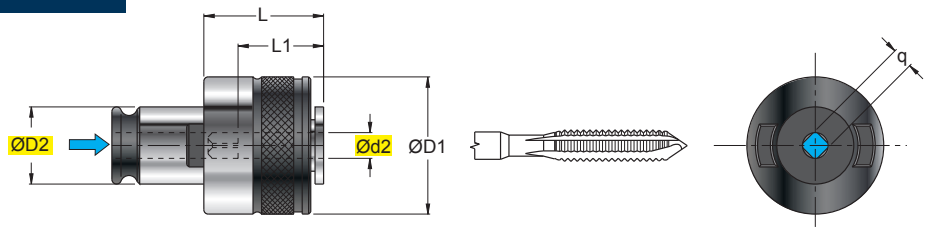




BUSSOLA PORTA MASCHI MODULARE PROLUNGATA
EXTENDED MODULAR TAP-COLLET LONGTYPE
VERLÄNGERTE MODULARE GEWINDEBOHRERAUFNAHME
DOUILLE PORTE -TARAUDS MODULAIRE SERIE LONGUE

ART.	(mm) Ød2	ØD2	ØD3	ØD4	L	L1	L2					
333.019.035.027	3,5	19	23	30	52	33	21,5	GR606			5003	339.019.019.025 339.019.019.050
333.019.045.034	4,5	19	23	30	52	33	21,5	GR606			5003	339.019.019.025 339.019.019.050
333.019.060.049	6,0	19	23	30	52	33	21,5	GR606			5003	339.019.019.025 339.019.019.050
333.019.070.055	7,0	19	23	30	52	33	21,5	GR606			5003	339.019.019.025 339.019.019.050
333.019.080.062	8,0	19	23	30	52	33	21,5	GR606			5003	339.019.019.025 339.019.019.050
333.019.090.070	9,0	19	23	30	52	33	21,5	GR606			5003	339.019.019.025 339.019.019.050
333.019.100.080	10,0	19	23	30	52	33	21,5	GR606			5003	339.019.019.025 339.019.019.050
333.031.060.049	6,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.070.055	7,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.080.062	8,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.090.070	9,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.100.080	10,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.110.090	11,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.120.090	12,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.140.110	14,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100
333.031.160.120	16,0	31	34,5	46	74	44	35	GR1008			5005	339.031.031.050 339.031.031.100

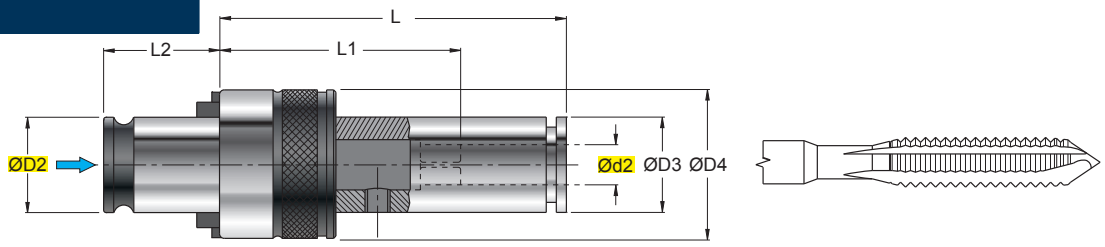
ART. 334..

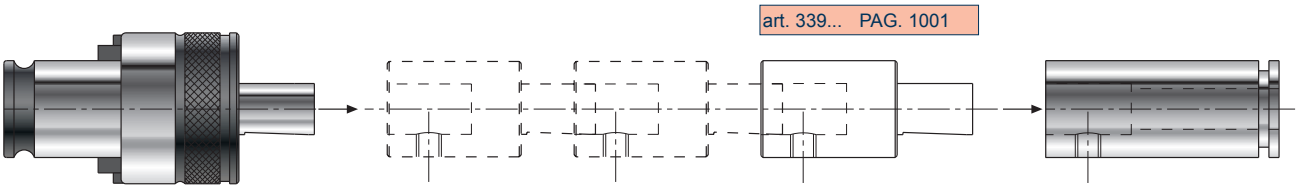


BUSSOLA PORTA MASCHI CON FRIZIONE
TAP-COLLET WITH OVERLOAD CLUTCH
GEWINDEBOHRER-AUFNAHME MIT DREHMOMENTBEGRENZUNG
DOUILLE PORTE-TARAUDS AVEC EMBRAYAGE

ART.	(mm) Ød2	ØD2	ØD1	L	L1	q
334.019.028.021	2,8	19	32	25	17	2,1
334.019.035.027	3,5	19	32	25	17	2,7
334.019.040.030	4,0	19	32	25	17	3,0
334.019.045.034	4,5	19	32	25	17	3,4
334.019.060.049	6,0	19	32	25	17	4,9
334.019.070.055	7,0	19	32	25	17	5,5
334.019.080.062	8,0	19	32	25	17	6,2
334.019.090.070	9,0	19	32	25	17	7,0
334.019.100.080	10,0	19	32	25	17	8,0
334.031.060.049	6,0	31	50	34	30	4,9
334.031.070.055	7,0	31	50	34	30	5,5
334.031.080.062	8,0	31	50	34	30	6,2
334.031.090.070	9,0	31	50	34	30	7,0
334.031.100.080	10,0	31	50	34	30	8,0
334.031.110.090	11,0	31	50	34	30	9,0
334.031.120.090	12,0	31	50	34	30	9,0
334.031.140.110	14,0	31	50	34	30	11,0
334.031.160.120	16,0	31	50	34	30	12,0
334.031.180.145	18,0	31	50	34	30	14,5
334.048.120.090	12,0	48	72	45	44	9,0
334.048.140.110	14,0	48	72	45	44	11,0
334.048.160.120	16,0	48	72	45	44	12,0
334.048.180.145	18,0	48	72	45	44	14,5
334.048.200.160	20,0	48	72	45	44	16,0
334.048.220.180	22,0	48	72	45	44	18,0
334.048.250.200	25,0	48	72	45	44	20,0
334.048.280.220	28,0	48	72	45	44	22,0

ART. 336..

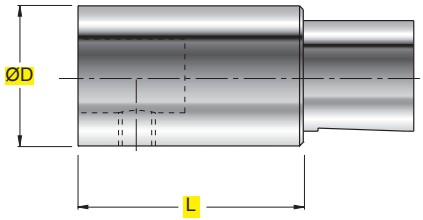




BUSSOLA PORTA MASCHI MODULARE PROLUNGATA CON FRIZIONE
EXTENDED MODULAR TAP-COLLET WITH OVERLOAD CLUTCH
VERLÄNGERTE MODULARE GEWINDEBOHRERAUFNAHME MIT DREHMOMENTBEGRENZUNG
DOUILLE PORTE -TARAUDS MODULAIRE PROLONGÉ AVEC EMBRAYAGE

ART.	(mm) Ød2	ØD2	ØD3	ØD4	L	L1	L2					
336.019.035.027	3,5	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.019.045.034	4,5	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.019.060.049.5	6,0	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.019.060.049.6	6,0	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.019.070.055	7,0	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.019.080.062	8,0	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.019.090.070	9,0	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.019.100.080	10,0	19	23	32	70	51	21,5	GR606			5003	339.019.019.025 339.019.019.050
336.031.060.049	6,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.070.055	7,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.080.062	8,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.090.070	9,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.100.080	10,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.110.090	11,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.120.090	12,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.140.110	14,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100
336.031.160.120	16,0	31	34,5	50	96	66	35	GR1008			5003	339.031.031.050 339.031.031.100

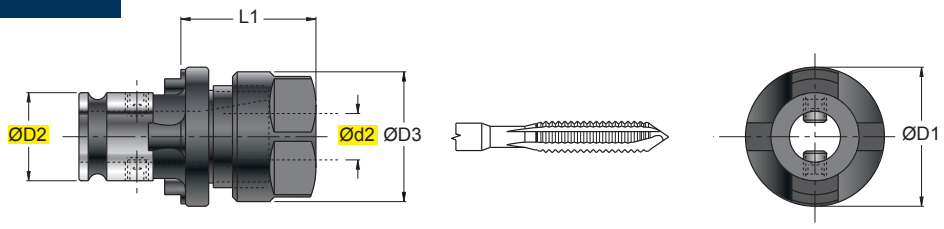
ART. 339..
340..



PROLUNGA PER BUSSOLA PORTAMASCHI MODULARE
EXTESION FOR MODULAR TAP-COLLET
VERLÄNGERUNG FÜR MODULARE GEWINDEBOHRERAUFNAHME
RALLONGE POUR DOUILLE PORTE-TARAUDS MODULAIRE

ART.	(mm) ØD	L		
339.019.019.025	23	25	GR 606	5003
339.019.019.050	23	50		
339.031.031.050	35	50	GR 1008	5005
339.031.031.100	35	100		
340.048.048.050	48	50	GR 808	5004
340.048.048.100	48	100		

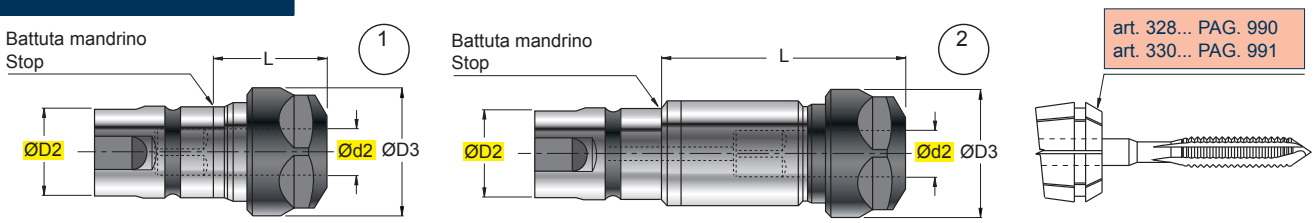
ART. 332..



BUSSOLA PORTA MASCHIO CON PINZA AUTOESTRAIBILE
TAP-COLLET WITH AUTO-CENTERING COLLET
GEWINDEBOHRERAUFNAHME MIT SELBSTZENTRIERSPANNZANGE
DOUILLE PORTE-TARAUDS AVEC PINCE AUTO-EXTRACTIBLE

ART.	(mm) Ød2	ØD2	ØD3	ØD1	L1						
332.019.016.000	M3-M12	19	28	32	34	RGS ER16	GR505	–	925.022	5025	–
332.031.032.000	M6-M27	31	50	50	62	RGS ER32	GR816	–	925.052	5004	–

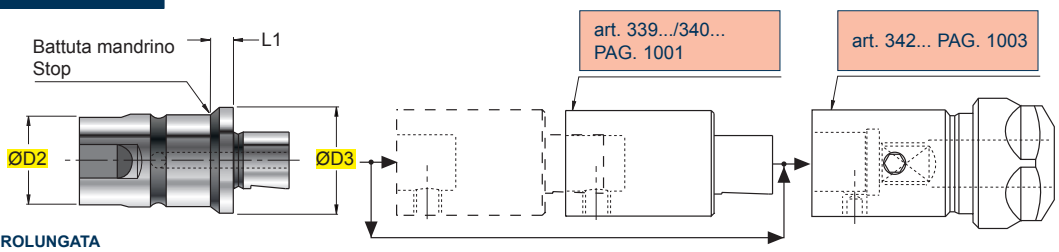
ART. 335..



BUSSOLE PORTA MASCHIO PER MASCHIATURE SINCRONIZZATE
TAP-COLLET FOR SYNCHRONIZED TAPPING
GEWINDEBOHRER-AUFNAHME FÜR SYNCHRONSTEUERUNG
DOUILLE PORTE-TARAUD POUR TARAUDAGES SYNCHRONIZEES

ART.	(mm) Ød2	ØD2	ØD3	L	FIGURA FIGURE BILD FIGURE	
335.020.**ER016**.024	2-10	20	28	24	1	--.016.--.--
335.032.**ER025**.028	2-16	32	42	28	1	--.025.--.--
335.040.**ER040**.032	6-26	50	63	32	1	--.040.--.--
335.020.**ER016**.055	2-10	20	28	55	2	--.016.--.--
335.032.**ER025**.086	2-16	32	42	86	2	--.025.--.--
335.040.**ER040**.095	6-26	50	63	95	2	--.040.--.--

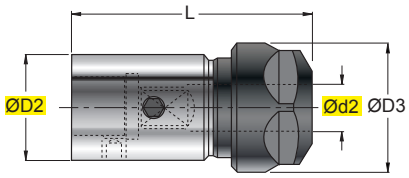
ART. 341..

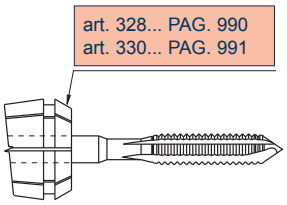


CORPO BUSSOLA PROLUNGATA
EXTENDED TAP ADAPTER BODY
EINSATZ MIT LANGE AUSFÜHRUNG
CORPS DE LA DOUILLE PROLONGÉ

ART.	ØD2	ØD3	L1	
341.023.020.005	20	23	5	--.016.--.--
341.035.032.007	32	35	7	--.025.--.--
341.050.050.002	50	50	2	--.040.--.--

ART. 342..

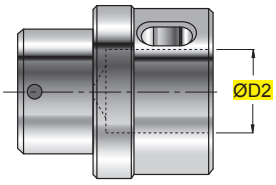


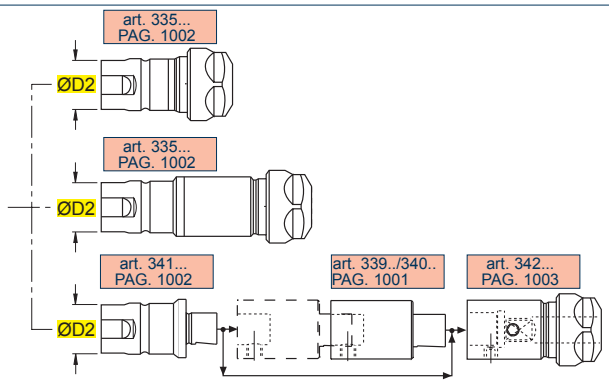


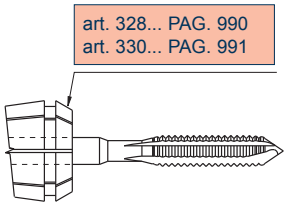
TERMINALE
TERMINAL
TERMINAL
TERMINAL

ART.	Ød2	ØD2	ØD3	L	
342.023.**ER016**.050	2-10	23	28	50	**--.016.--.--**
342.035.**ER025**.079	2-16	35	42	79	**--.025.--.--**
342.048.**ER040**.093	6-26	48	63	93	**--.040.--.--**

ART. RCDM..



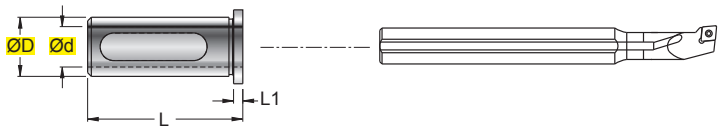




SUPPORTO DI MONTAGGIO
ASSEMBLY SUPPORT
MONTAGE BLOCK
SUPPORT DE MONTAGE

ART.	ØD2	
RCDM 20	20	**--.016.--.--**
RCDM 32	32	**--.025.--.--**
RCDM 50	50	**--.040.--.--**

ART. 218..

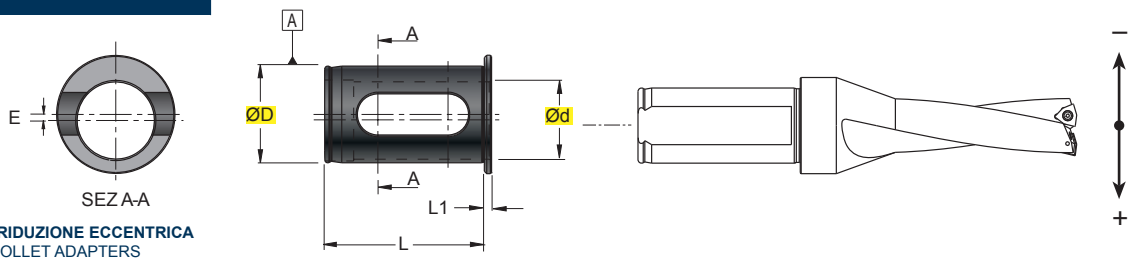


BOCCOLA DI RIDUZIONE
COLLET ADAPTERS
REDUKTION
DOUILLES DE RÉDUCTION

ART.	(mm) ØD	Ød H7	L	L1
218.025.016.000	25	16	54	2
218.025.020.000	25	20	54	2
218.032.016.000	32	16	58	2
218.032.020.000	32	20	58	2
218.032.025.000	32	25	58	2

ART.	(mm) ØD	Ød H7	L	L1
218.040.016.000	40	16	68	2
218.040.020.000	40	20	68	2
218.040.025.000	40	25	68	2
218.040.032.000	40	32	68	2

ART. BPUH..



BOCCOLA DI RIDUZIONE ECCENTRICA
ECCENTRIC COLLET ADAPTERS
EXZENTERREDUZIERHÜLSE
DOUILLES DE RÉDUCTION EXECENTRIQUE

ART.	(mm) 0/-0,01 ØD	+0,01/0 Ød	E	L	L1
BPUH.3225.010	32	25	+/-0,1	56	3
BPUH.3225.030	32	25	+0,3	56	3
BPUH.4032.010	40	32	+/-0,1	66	3
BPUH.4032.030	40	32	+0,3	66	3

ART.	(mm) 0/-0,01 ØD	+0,01/0 Ød	E	L	L1
BPUH.5040.010	50	40	+/-0,1	76	3
BPUH.5040.030	50	40	+0,3	76	3

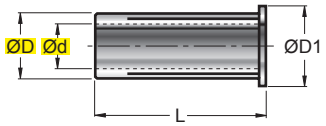
LE PUNTE **TDC**, **SDQ** SI POSSONO USARE SU MACCHINE CON PUNTA ROTANTE E PEZZO FERMO, CON BOCCOLE PER DISASSAMENTO. LE PUNTE POSSONO ESSERE DISASSATE DA -0,1 A +0,3 mm.
DA USARE SOLO CON MANDRINI TIPO **PU..**

TDC, AND **SDQ** DRILL BITS CAN BE USED ON MACHINES WITH ROTATING DRILL AND STATIONARY WORKPIECE, WITH OFFSET BUSHINGS. THE DRILL CAN BE OFFSET BY -0,1 TO +0,3 mm. ONLY FOR USE WITH **PU..** CHUCKS

DIE BOHRER **TDC SDQ** KÖNNEN AN MASCHINEN MIT DREHENDEM BOHRER UND UNBEWEGLICHEM WERKSTÜCK VERWENDET WERDEN, MIT LAGERN ZUR ACHSVERSETZUNG. DIE BOHRER KÖNNEN VON -0,1 BIS +0,3 mm AUS DER ACHSLINIE VERSETZT WERDEN. NUR ZUM EINSATZ MIT **PU..**-AUFNAHMEN

ON PEUT UTILIZER LES FORETS **TDC SDQ** SUR MACHINES AVEC FORET ROTATIVE ET PIÉCE QUE NE BOUGE PAS, AVEC DOUILLES POUR DÉSAXÈMENT. LES FORETS PEUVENT ÊTRE DÉSAXÉES DEPUIS -0,1 JUSQU'À +0,3 mm . À UTILISER SEULEMENT AVEC MANDRINS DU TYPE **PU..**

ART. BEMSN..



BOCCOLE DI RIDUZIONE CILINDRICHE
CYLINDRICAL REDUCTION COLLETS
ZYLINDRISCHE REDUZIERBUCHSEN
DOUILLES DE RÉDUCTION CYLINDRIQUES

Nm Max 600 | 0,005

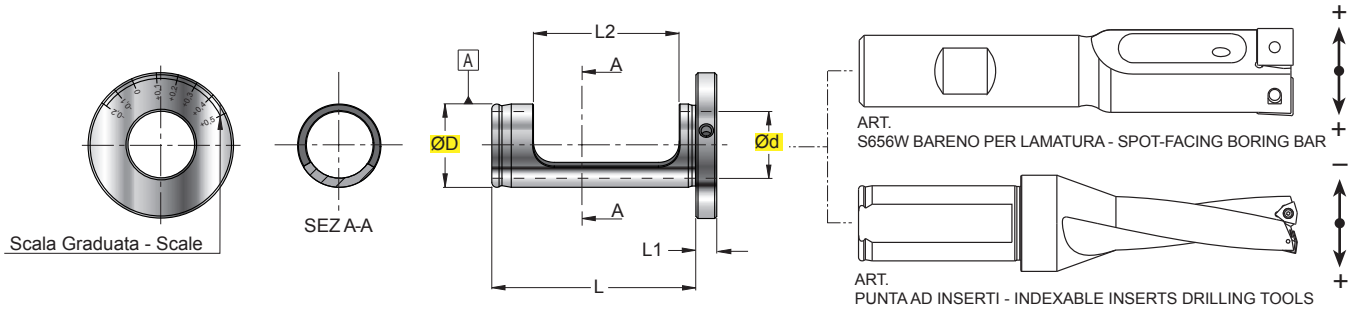
(mm)

ART.	ØD	Ød	ØD1	L
BEMSN.2006	20	6	30	52,5
BEMSN.2008	20	8	30	52,5
BEMSN.2010	20	10	30	52,5
BEMSN.2012	20	12	30	52,5
BEMSN.2016	20	16	30	52,5

(mm)

ART.		ØD	Ød	ØD1	L
BEMSN.3206		32	6	36	63
BEMSN.3208		32	8	36	63
BEMSN.3210		32	10	36	63
BEMSN.3212		32	12	36	63
BEMSN.3216		32	16	36	63
BEMSN.3218	New	32	18	36	63
BEMSN.3220		32	20	36	63

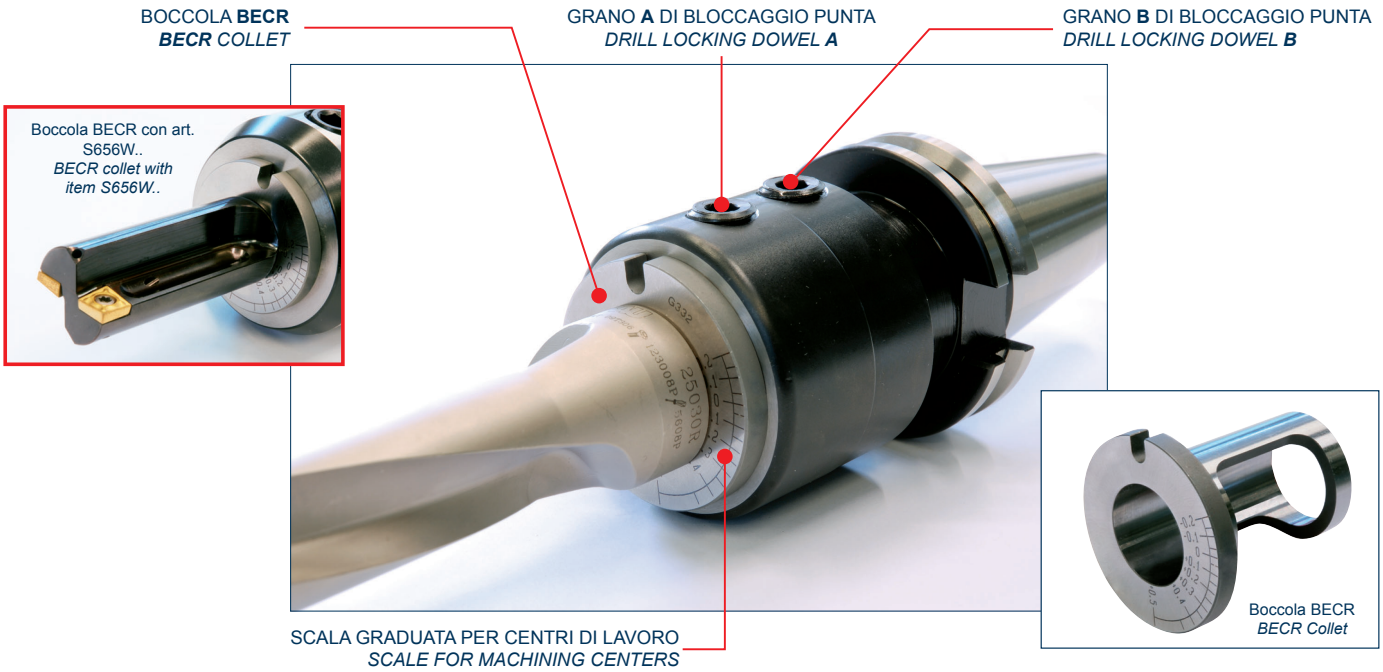
ART. BECR..



BOCCOLE DISASSATRICI REGOLABILI
ADJUSTABLE OFFSET COLLETS
EINSTELLBARE ACHSVERSATZ-BÜCHSEN
DOUILLES DESAXANTES AVEC REGULATION

ART.	(mm) h7 ØD	H7 Ød	L	L1	L2	Campi Reg. Ø Ø Adjustment ranges
BECR.1620	20	16	49	5	35	+0,4/-0,2
BECR.2025	25	20	43	4	30	+0,4/-0,2
BECR.2532	32	25	48	6	33	+0,4/-0,2
BECR.3240	40	32	53	6	35	+0,4/-0,2

MODALITÀ D'IMPIEGO BOCCOLA BECR.. - USE OF COLLET BECR..
ANWENDUNG DER BÜCHSE BECR.. - MODE D'EMPLOI POUR LA DOUILLE BECR..

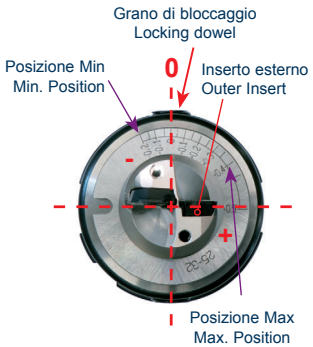


REGOLAZIONE DEL DIAMETRO - PER I CENTRI DI LAVORO - DIAMETER ADJUSTMENT-FOR MACHINING CENTRES
DURCHMESSEREINSTELLUNG-FÜR BEARBEITUNGSZENTREN - REGULATION DU DIAMETRE POUR LE CENTRE DE TRAVAIL

- Per ottenere un diametro maggiore del diametro nominale, ruotare la boccola in ***senso antiorario*** verso il segno **+** , per ottenere un diametro minore, ruotare la boccola in ***senso orario*** verso il segno **-**
- To obtain a diameter larger than the rated diameter, rotate the collet ***counter-clockwise*** towards the symbol **+**, to obtain a smaller diameter, rotate the collet ***clockwise*** towards the symbol **-**
- Um einen Durchmesser größer als den Nenndurchmesser zu erhalten, Büchse ***gegen den Uhrzeigersinn*** zum Symbol **+** drehen, um einem kleineren Durchmesser zu erhalten, Büchse ***im Uhrzeigersinn*** zum Symbol **-** drehen.
- Pour obtenir un diamètre plus grande du diamètre nominale, tourner la douille dans le ***sens antihoraire*** vers le signe **+**, pour obtenir un diamètre plus petit tourner la douille dans le ***sens horaire*** vers le signe **-**

⚠ **POSIZIONE DI REGOLAZIONE** : Punta Destra = Grano di bloccaggio in alto, inserto esterno a destra
Punta Sinistra = Grano di bloccaggio in alto, inserto esterno a sinistra
ADJUSTMENT POSITION : Right Drill = Locking dowel on the top, outer insert on the right
Left Drill = Locking dowel on the top, outer insert on the left

A



Posizione **Neutra**
es. Punta Ø25 mm
0 scala boccola in posizione **0**
Ø Foro = Ø Punta = 25mm

Neutral Position
ex. Drill Ø25 mm
scale collet in **0** position
Bore Ø = Drill Ø = 25mm

B

Posizione **ØMin**
es. Punta Ø25 mm
-0,2 scala boccola in posizione **0**
Ø Foro = Ø Punta - 0,2 = 24,8mm

ØMin Position
ex. Drill Ø25 mm
-0,2 scale collet in **0** position
Bore Ø = Drill Ø - 0,2 = 24,8mm

C

Posizione **ØMax**
es. Punta Ø25 mm
+0,4 scala boccola in posizione **0**
Ø Foro = Ø Punta + 0,4 = 25,4mm

ØMax Position
ex. Drill Ø25 mm
+0,4 scale collet in **0** position
Bore Ø = Drill Ø + 0,4 = 25,4mm

Nelle figure punta destra - Right-hand shown

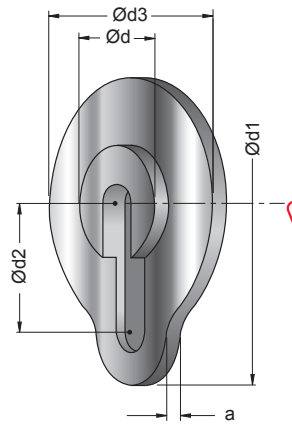
- LA SCALA GRADUATA DELLA BUSSOLA **BECR** É SOLAMENTE INDICATIVA.
- NON DEVE ESSERE ASSOLUTAMENTE USATA COME "GHIERA DIVISORE" DI UN MANDRINO.
- NEL CASO DI LUNGHEZZE SUPERIORI A L/D 4 O DI AMPIE REGOLAZIONI, É NECESSARIO RIDURRE L'AVANZAMENTO.

- THE SCALE ON THE **BECR** COLLET IS PROVIDED JUST AS AN INDICATION.
- ABSOLUTELY NOT TO BE USED AS "DIVIDING RING NUT" FOR AN ARBOR
- IN CASE OF LENGTHS OVER L/D 4 OR LARGE ADJUSTMENTS FEED MUST BE REDUCED

- DIE SKALENEINTEILUNG DER BÜCHSE **BECR** DIENT NUR ALS ANHALTSPUNKT.
- SIE DARF AUF KEINEN FALL ALS "TRENNHÜLSE" EINER SPINDEL ANGESEHEN WERDEN.
- BEI LÄNGEN ÜBER L/D 4 ODER BEI GROSSEN EINSTELLUNGEN MUSS DER VORSCHUB VERKÜRZT WERDEN.

- L'ECHELLE GRADUEE DE LA DOUILLE **BECR** EST UNIQUEMENT A TITRE INDICATIF.
- ELLE NE DOIT ABSOLUMENT PAS ETRE UTILISEE COMME "BAGUE DE SEPARATION" D'UNE BROCHE.
- DANS LE CAS DE LONGUEURS SUPERIEURES A L/D 4 OU D'AMPLES REGLAGES IL Y A LIEU DE REDUIRE L'AVANCE.

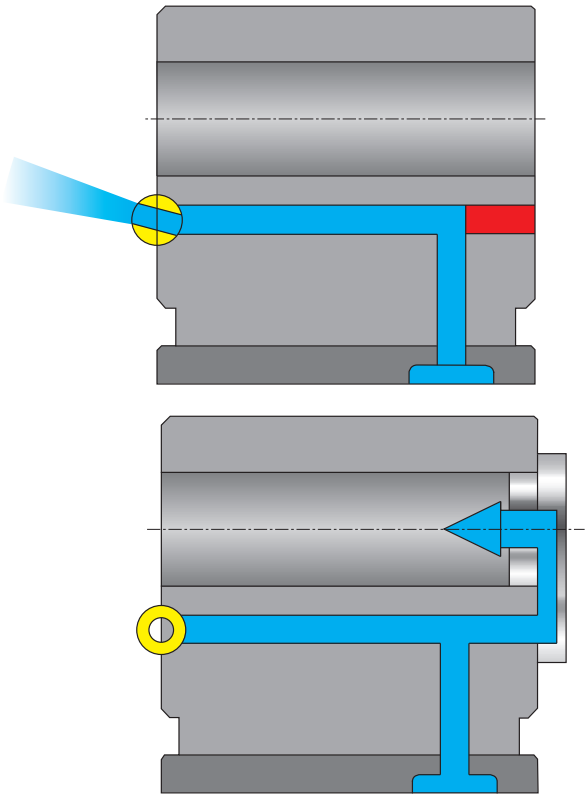
Tappo di chiusura del portabareno per macchine non dotate di refrigerante all'interno.
Plug for boring bar holders for machines without internal cooling.
Anschlussplatte für Bohrstangenaufnahme am Revolver, bei Maschinen ohne Innenkühlung.
Bouchon de fermeture du porte-aléseuse pour les machines pas dotées de réfrigérant à l'intérieur.



IN ESAURIMENTO
END OF STOCK
AUSLAUFEND
EN ÉPUISEMENT

ART.	Ød	Ød1	Ød2	Ød3	a
CH-065-025	25	65	26	40	5
CH-075-025	25	75	30	40	5
CH-085-025	25	85	35	40	5
CH-095-025	25	95	40	40	5
CH-075-032	32	75	30	52	5
CH-085-032	32	85	35	52	5
CH-095-032	32	95	40	52	5
CH-085-040	40	85	36	63	5
CH-095-040	40	95	42	63	5
CH-105-040	40	105	47	63	5
CH-095-050	50	95	42	70	5
CH-105-050	50	105	48	70	5
CH-115-050	50	115	53	70	5

Operazioni da eseguire per portare il liquido refrigerante al centro del bareno.
Operations required to convey the coolant to the centre of the boring bar.
Änderungen für die Kühlmittelzufuhr bei bohrstangen mit IK.
Operations à faire pour acheminer le liquide refrigerant vers le centre de la barre d'alesage.



- Forare il portautensile come evidenziato in rosso.
- Follow the instructions in red for the drilling of the toolholder.
- Die Bohrungen in der Bohrstangenaufnahme neu anbringen wie in der Skizze mit rot gekennzeichnet.
- Percer le porte-outil comme il est mis en évidence en rouge.

- Applicare la chiusura posteriore.
- Fit the back plug.
- Die Kühlmitteldüse verschliessen.
- Appliquer la fermeture postérieure.

BOCCOLA DI RIDUZIONE PORTA BARENO CON PASSAGGIO DEL REFRIGERANTE.
THROUGH COOLANT BORING BAR REDUCING COUPLING.
BOHRSTANGEN-REDUZIERHÜLSE MIT SCHMIERSTOFFDURCHFLUSS.
DOUILLE DE RÉDUCTION PORTE BARRE D'ALESAGE AVEC PASSAGE DU FLUIDE DE RÉFRIGÉRATION.

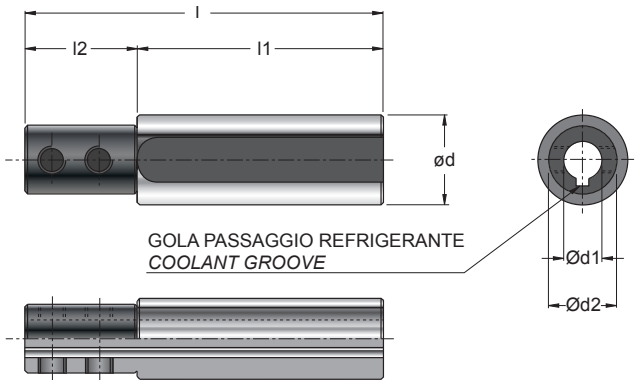
L'uscita del refrigerante avviene attraverso la scanalatura interna della riduzione e l'eventuale foro dell'utensile.
Il truciolo viene espulso tramite il getto forzato del lubrificante.

The coolant is discharged from the internal channel in the reduction or from the hole in the holder.
The chip is discharged through the pressure-jet of the coolant.

Das Kühlmittel tritt seitlich an der Reduzierung aus und auch, soweit vorhanden, an der Kühlmittelbohrung der Bohrstange. Der Span wird durch die Innenkühlung besser aus dem Werkstück gespült.

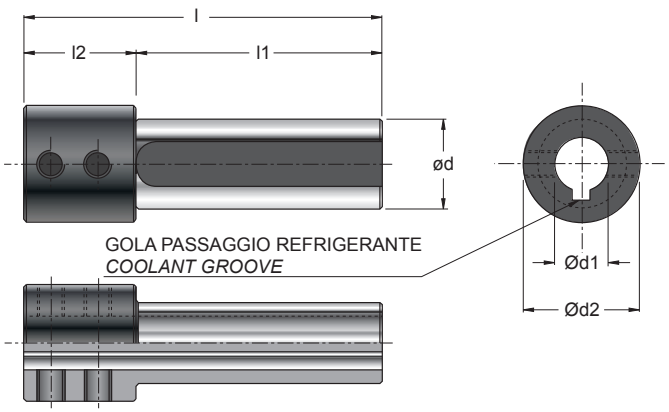
Le réfrigérant sort par la rainure interne de la réduction et l' éventuel trou de l'outil.
Le copeau est expulsé par le jet forcé du lubrifiant.

NEW



F.1

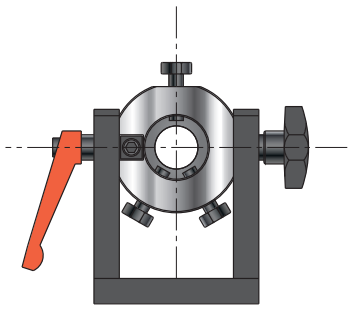
NEW



F.2

ART.	F.	h7 ød	H7 ød1	ød2	l	l1	l2
BKN-025.008	1	25	08	24,5	95	65	30
BKN-025.010	1	25	10	24,5	95	65	30
BKN-025.012	1	25	12	24,5	95	65	30
BKN-025.016	2	25	16	32,0	95	65	30
NEW							
BKN-032.008	1	32	08	28	95	65	30
BKN-032.010	1	32	10	28	95	65	30
BKN-032.012	1	32	12	28	95	65	30
BKN-032.016	1	32	16	28	95	65	30
BKN-032.020	2	32	20	38	95	65	30
BKN-032.025	2	32	25	43	95	65	30
NEW							
BKN-040.008	1	40	08	31,5	95	65	30
BKN-040.010	1	40	10	31,5	95	65	30
BKN-040.012	1	40	12	31,5	95	65	30
BKN-040.016	1	40	16	31,5	95	65	30
BKN-040.020	2	40	20	47,5	95	65	30
BKN-040.025	2	40	25	47,5	95	65	30
BKN-040.032	2	40	32	47,5	95	65	30
NEW							
BKN-050.016	1	50	16	40	95	65	30
BKN-050.020	1	50	20	40	95	65	30
BKN-050.025	1	50	25	40	95	65	30
BKN-050.032	2	50	32	56	95	65	30
BKN-050.040	2	50	40	56	95	65	30
NEW							

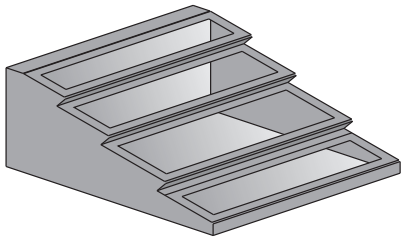
ART. 06 36..UN



ATTREZZO PER IL MONT. E LO SMONT. DI MANDRINI
TOOL FOR THE ASSEMBLY AND DISASSEMBLY OF ARBORS
MONTAGE HILFE
OUTIL POUR LE MONTAGE ET LE DEMONTAGE DE MANDRINS

ART.			
06 3620.40.UN	HSK63	ISO40	ISO40
06 3622.50.UN	HSK100	ISO50	ISO50

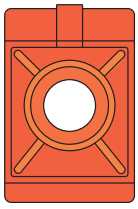
ART. A-140..



TELAIO DA BANCO PORTAMANDRINI
BENCH-MOUNTED STORAGE RACK ARBORS
AUFNAHMETRAEGER
BOITE DE COMPTOIR PORTE-MANDRINS

ART.		N°BOCCOLE
A140	A100	24
	A105	24
	A110	18
	A115	15
	A120	24
	A125	18
	A130	18

ART. A-1..



BOCCOLA PORTAMANDRINI
STORAGE BASE FOR ARBORS
AUFNAHMEBUCHSE
RÉDUCTIONS PORTE-MANDRINS

ART.		DIM
A100	ISO30	65x138x48H
A105	ISO40	65x138x63H
A110	ISO45	83x138x63H
A115	ISO50	102x138x63H
A120	VDI30	65x138x74H
A125	VDI40	83x138x82H
A130	VDI50	83x138x98H

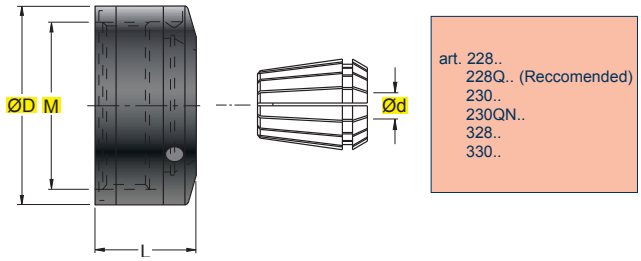
ART. RGC..

CON CUSCINETTO
WITH BEARING
MIT LAGER
AVEC COUSSINET

PRE-EQUILIBRATE
PRE-BALANCED

GHIERE DI PRECISIONE
PRECISION RING NUTS
PRÄZISIONSRINGE
FRETTE DE PRECISION

art. RGC...



art. 228..
228Q.. (Reccomended)
230..
230QN..
328..
330..

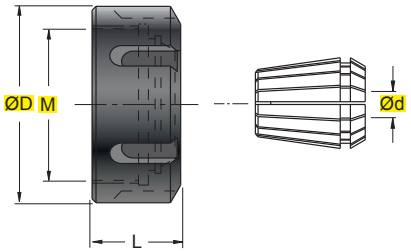
(mm)

ART.	Ød	ØD	M	L							
RGC ER16	0,5-10	30	22x1,5	18	**--.016.--.--**					925.022	
RGC ER25	0,5-16	40	32x1,5	20,5	**--.025.--.--**					925.040	
RGC ER32	2,5-20	50	40x1,5	23,5	**--.032.--.--**					925.052	
RGC ER40	3-30	63	50x1,5	26	**--.040.--.--**					925.068	

ART. RGS..
ART. RGSE..
ART. RGM..

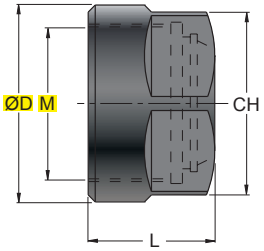
GHIERE
RINGS
RING
FRETTE

art. RGS...

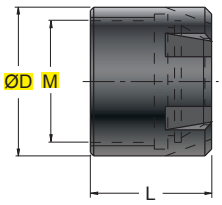


art. 228..
228Q..
230..
230QN..
328..
330..

art. RGSE...



art. RGM...



(mm)

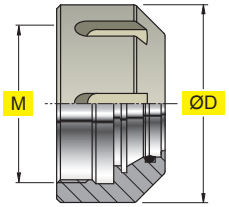
ART.	Ød	ØD	M	CH	L								
RGS ER16	0,5-10	32	22x1,5	–	17	**--.016.--.--**					925.022	–	927.022
RGS ER25	0,5-16	42	32x1,5	–	20	**--.025.--.--**					925.040	–	927.040
RGS ER32	2,5-20	50	40x1,5	–	22	**--.032.--.--**					925.052	–	927.052
RGS ER40	3-30	63	50x1,5	–	26	**--.040.--.--**					925.068	–	927.068
RGSE ER16	0,5-10	28	22x1,5	25	17	**--.016.--.--**					–	–	–
RGM ER11	0,5-7	16	13x0,75	–	12	**--.011.--.--**					–	938.011	–
RGM ER16	0,5-10	22	19x1	–	18	**--.016.--.--**					–	938.016	–
RGM ER25	0,5-16	35	30x1	-	20	**--.025.--.--**					–	938.025	–

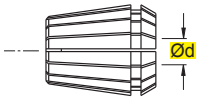
ART. RGSW..

art. AGT...

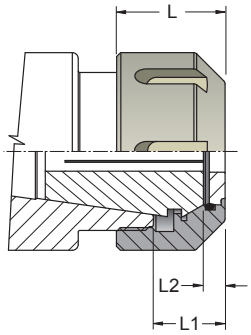
art. AGW...

GHIERE A TENUTA IDRAULICA
SEALING RINGS
DICHTSCHEIBEN
FRETTE À ÉTANCHÉITÉ HYDRAULIQUE





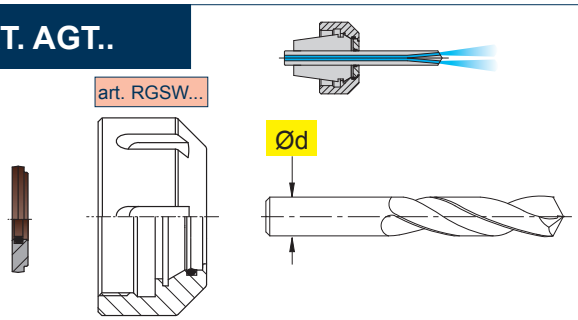
art. 228..
228Q.. (Reccomended)
230..
230QN..
328..
330..



(mm)

ART.	Ød	ØD	M	L	L1	L2	Nm					
RGSW ER25	2-16	42	32x1,5	25	17	5	80÷100	**--.025.--.--**	ORM 0210-20		925.040	927.040
RGSW ER32	2-20	50	40x1,5	27	18	5	90÷110	**--.032.--.--**	OR-0267-178		925.052	927.052

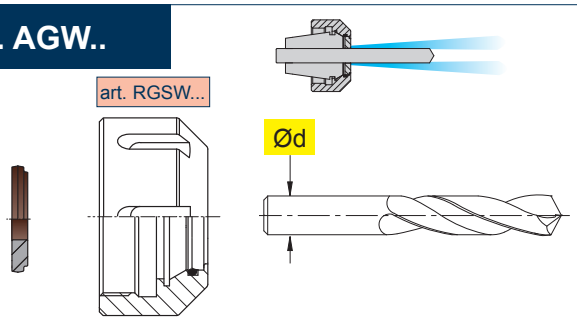
ART. AGT..



ANELLI PER ADDUZIONE ATTRAVERSO L'UTENSILE
RINGS FOR COOLANT THROUGH THE TOOL
RINGE ZUR KÜHLMITTEL-INNENFÜHRUNG
BAGUES D'ADDUCTION À TRAVES L'OUTIL

ART.	(mm) Ød	
AGT 25 4.0	4,0 ÷ 3,5	OR-0035-150
AGT 25 4.5	4,5 ÷ 4,0	OR-0040-150
AGT 25 5.0	5,0 ÷ 4,5	OR-0045-150
AGT 25 5.5	5,5 ÷ 5,0	OR-0050-150
AGT 25 6.0	6,0 ÷ 5,5	OR-0055-150
AGT 25 6.5	6,5 ÷ 6,0	OR-0060-150
AGT 25 7.0	7,0 ÷ 6,5	OR-0065-150
AGT 25 7.5	7,5 ÷ 7,0	OR-0070-150
AGT 25 8.0	8,0 ÷ 7,5	OR-0075-150
AGT 25 8.5	8,5 ÷ 8,0	OR-0080-150
AGT 25 9.0	9,0 ÷ 8,5	OR-0085-150
AGT 25 9.5	9,5 ÷ 9,0	OR-0090-150
AGT 25 10.0	10,0 ÷ 9,5	OR-0095-150
AGT 25 10.5	10,5 ÷ 10,0	OR-0100-150
AGT 25 11.0	11,0 ÷ 10,5	OR-0105-150
AGT 25 11.5	11,5 ÷ 11,0	OR-0110-150
AGT 25 12.0	12,0 ÷ 11,5	OR-0115-150
AGT 25 12.5	12,5 ÷ 12,0	OR-0120-150
AGT 25 13.0	13,0 ÷ 12,5	OR-0125-150
AGT 25 13.5	13,5 ÷ 13,0	OR-0130-150
AGT 25 14.0	14,0 ÷ 13,5	OR-0135-150
AGT 25 14.5	14,5 ÷ 14,0	OR-0140-150
AGT 25 15.0	15,0 ÷ 14,5	OR-0145-150
AGT 25 15.5	15,5 ÷ 15,0	OR-0150-150
AGT 25 16.0	16,0 ÷ 15,5	OR-0155-150
AGT 32 4.0	4,0 ÷ 3,5	OR-0035-150
AGT 32 4.5	4,5 ÷ 4,0	OR-0040-150
AGT 32 5.0	5,0 ÷ 4,5	OR-0045-150
AGT 32 5.5	5,5 ÷ 5,0	OR-0050-150
AGT 32 6.0	6,0 ÷ 5,5	OR-0055-150
AGT 32 6.5	6,5 ÷ 6,0	OR-0060-150
AGT 32 7.0	7,0 ÷ 6,5	OR-0065-150
AGT 32 7.5	7,5 ÷ 7,0	OR-0070-150
AGT 32 8.0	8,0 ÷ 7,5	OR-0075-150
AGT 32 8.5	8,5 ÷ 8,0	OR-0080-150
AGT 32 9.0	9,0 ÷ 8,5	OR-0085-150
AGT 32 9.5	9,5 ÷ 9,0	OR-0090-150
AGT 32 10.0	10,0 ÷ 9,5	OR-0095-150
AGT 32 10.5	10,5 ÷ 10,0	OR-0100-150
AGT 32 11.0	11,0 ÷ 10,5	OR-0105-150
AGT 32 11.5	11,5 ÷ 11,0	OR-0110-150
AGT 32 12.0	12,0 ÷ 11,5	OR-0115-150
AGT 32 12.5	12,5 ÷ 12,0	OR-0120-150
AGT 32 13.0	13,0 ÷ 12,5	OR-0125-150
AGT 32 13.5	13,5 ÷ 13,0	OR-0130-150
AGT 32 14.0	14,0 ÷ 13,5	OR-0135-150
AGT 32 14.5	14,5 ÷ 14,0	OR-0140-150
AGT 32 15.0	15,0 ÷ 14,5	OR-0145-150
AGT 32 15.5	15,5 ÷ 15,0	OR-0150-150
AGT 32 16.0	16,0 ÷ 15,5	OR-0155-150
AGT 32 16.5	16,5 ÷ 16,0	OR-0160-150
AGT 32 17.0	17,0 ÷ 16,5	OR-0165-150
AGT 32 17.5	17,5 ÷ 17,0	OR-0170-150
AGT 32 18.0	18,0 ÷ 17,5	OR-0175-150
AGT 32 18.5	18,5 ÷ 18,0	OR-0180-150
AGT 32 19.0	19,0 ÷ 18,5	OR-0185-150
AGT 32 19.5	19,5 ÷ 19,0	OR-0190-150
AGT 32 20.0	20,0 ÷ 19,5	OR-0195-150

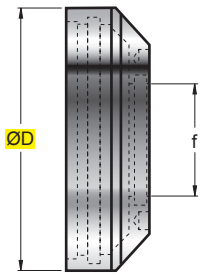
ART. AGW..



ANELLI PER ADDUZIONE INTORNO ALL'UTENSILE
RINGS FOR COOLANT AROUND THE TOOL
RINGE ZUR KÜHLMITTELFÜHRUNG UM DAS WERKZEUG
BAGUES D'ADDUCTION AUTOUR L'OUTIL

ART.	(mm) Ød
AGW 32 4.0	4,0 ÷ 3,5
AGW 32 4.5	4,5 ÷ 4,0
AGW 32 5.0	5,0 ÷ 4,5
AGW 32 5.5	5,5 ÷ 5,0
AGW 32 6.0	6,0 ÷ 5,5
AGW 32 6.5	6,5 ÷ 6,0
AGW 32 7.0	7,0 ÷ 6,5
AGW 32 7.5	7,5 ÷ 7,0
AGW 32 8.0	8,0 ÷ 7,5
AGW 32 8.5	8,5 ÷ 8,0
AGW 32 9.0	9,0 ÷ 8,5
AGW 32 9.5	9,5 ÷ 9,0
AGW 32 10.0	10,0 ÷ 9,5
AGW 32 10.5	10,5 ÷ 10,0
AGW 32 11.0	11,0 ÷ 10,5
AGW 32 11.5	11,5 ÷ 11,0
AGW 32 12.0	12,0 ÷ 11,5
AGW 32 12.5	12,5 ÷ 12,0
AGW 32 13.0	13,0 ÷ 12,5
AGW 32 13.5	13,5 ÷ 13,0
AGW 32 14.0	14,0 ÷ 13,5
AGW 32 14.5	14,5 ÷ 14,0
AGW 32 15.0	15,0 ÷ 14,5
AGW 32 15.5	15,5 ÷ 15,0
AGW 32 16.0	16,0 ÷ 15,5
AGW 32 16.5	16,5 ÷ 16,0
AGW 32 17.0	17,0 ÷ 16,5
AGW 32 17.5	17,5 ÷ 17,0
AGW 32 18.0	18,0 ÷ 17,5
AGW 32 18.5	18,5 ÷ 18,0
AGW 32 19.0	19,0 ÷ 18,5
AGW 32 19.5	19,5 ÷ 19,0
AGW 32 20.0	20,0 ÷ 19,5

ART. AGMS..

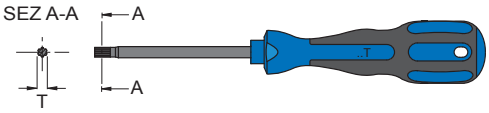


ANELLO DI TENUTA
SEALING RING
DICHTRING
BAGUE D'ÉTANCHÉITÉ

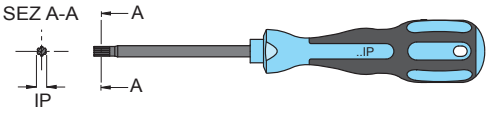
ART.	(mm) ØD	f
AGMS.020.060	47	6÷5,5
AGMS.020.065	47	6,5÷6
AGMS.020.070	47	7÷6,5
AGMS.020.075	47	7,5÷7
AGMS.020.080	47	8÷7,5
AGMS.020.085	47	8,5÷8
AGMS.020.090	47	9÷8,5
AGMS.020.095	47	9,5÷9
AGMS.020.100	47	10÷9,5
AGMS.020.105	47	10,5÷10
AGMS.020.110	47	11÷10,5
AGMS.020.115	47	11,5÷11
AGMS.020.120	47	12÷11,5
AGMS.020.125	47	12,5÷12
AGMS.020.130	47	13÷12,5
AGMS.020.135	47	13,5÷13
AGMS.020.140	47	14÷13,5
AGMS.020.145	47	14,5÷14
AGMS.020.150	47	15÷14,5
AGMS.020.155	47	15,5÷15
AGMS.020.160	47	16÷15,5
AGMS.020.165	47	16,5÷16
AGMS.020.170	47	17÷16,5
AGMS.020.175	47	17,5÷17
AGMS.020.180	47	18÷17,5
AGMS.020.185	47	18,5÷18
AGMS.020.200	47	20÷19,5
AGMS.032.060	68	6÷5,5
AGMS.032.065	68	6,5÷6
AGMS.032.070	68	7÷6,5
AGMS.032.075	68	7,5÷7
AGMS.032.080	68	8÷7,5
AGMS.032.085	68	8,5÷8
AGMS.032.090	68	9÷8,5
AGMS.032.095	68	9,5÷9
AGMS.032.100	68	10÷9,5
AGMS.032.105	68	10,5÷10
AGMS.032.110	68	11÷10,5
AGMS.032.115	68	11,5÷11
AGMS.032.120	68	12÷11,5
AGMS.032.125	68	12,5÷12
AGMS.032.130	68	13÷12,5
AGMS.032.135	68	13,5÷13
AGMS.032.140	68	14÷13,5
AGMS.032.145	68	14,5÷14
AGMS.032.150	68	15÷14,5
AGMS.032.155	68	15,5÷15
AGMS.032.160	68	16÷15,5
AGMS.032.165	68	16,5÷16
AGMS.032.170	68	17÷16,5
AGMS.032.175	68	17,5÷17
AGMS.032.180	68	18÷17,5
AGMS.032.185	68	18,5÷18
AGMS.032.190	68	19÷18,5
AGMS.032.195	68	19,5÷19
AGMS.032.200	68	20÷19,5

ART.	(mm) ØD	f
AGMS.032.205	68	20,5÷20
AGMS.032.210	68	21÷20,5
AGMS.032.215	68	21,5÷21
AGMS.032.220	68	22÷21,5
AGMS.032.225	68	22,5÷22
AGMS.032.230	68	23÷22,5
AGMS.032.235	68	23,5÷23
AGMS.032.240	68	24÷23,5
AGMS.032.245	68	24,5÷24
AGMS.032.250	68	25÷24,5
AGMS.032.255	68	25,5÷25
AGMS.032.260	68	26÷25,5
AGMS.032.265	68	26,5÷26
AGMS.032.270	68	27÷26,5
AGMS.032.275	68	27,5÷27
AGMS.032.280	68	28÷27,5
AGMS.032.285	68	28,5÷28
AGMS.032.290	68	29÷28,5
AGMS.032.295	68	29,5÷29
AGMS.032.300	68	30÷29,5
AGMS.032.305	68	30,5÷30
AGMS.032.310	68	31÷30,5
AGMS.032.315	68	31,5÷30
AGMS.032.320	68	32÷31,5

ART. 56..



TORX



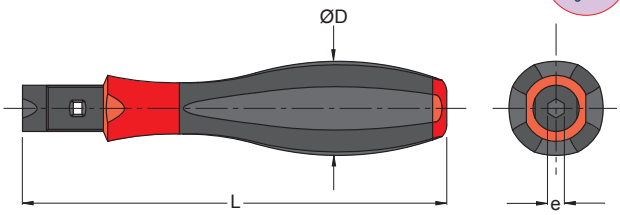
TORX PLUS

CACCIAVITI
SCREWDRIVERS
SCHRAUBENDREHER
TOURNEVISSES

ART.	(mm) Torx	Torx Plus	ART.	(mm) Torx	Torx Plus
5605P	–	5IP	5610P	–	10IP
5606	6	–	5615	15	–
5606P	–	6IP	5615P	–	15IP
5607	7	–	5620	20	–
5607P	–	7IP	5620P	–	20IP
5608	8	–	5625	25	–
5608P	–	8IP			
5609	9	–			
5609P	–	9IP			

ART. 264..

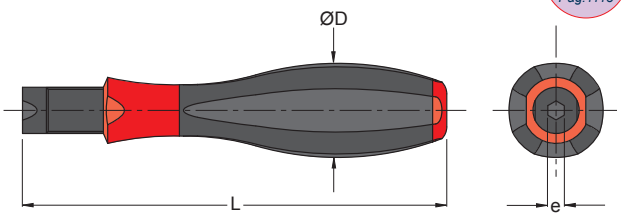
Pag.1113



GIRAVITE DINAMOMETRICO REGOLABILE
ADJUSTABLE DYNAMOMETRIC SCREWDRIVER
EINSTELLBARER DYNAMOMETRISCHER SCHRAUBENDREHER
TOURNEVIS DYNAMOMÉTRIQUE RÉGLABLE

ART. 260.. / 261..

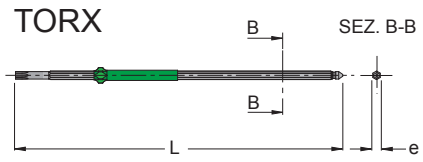
Pag.1113



GIRAVITE DINAMOMETRICO CON VALORI DI COPPIA FISSO
DYNAMOMETRIC SCREWDRIVER WITH FIXED TORQUE VALUES
DREHMOMENTSCHRAUBENDREHER MIT FASTEN DREHMOMENTWERTEN
TOURNEVIS DYNAMOMÉTRIQUE AVEC VALEURS DE COUPLE FIXE

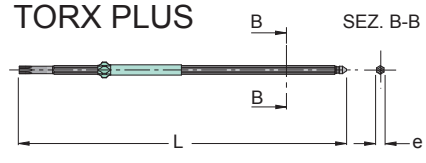
ART.	(mm) e	ØD	L	Nm	Torque Setter	
26461	4	23	122÷127	0,4÷1,0	26864	278../2955..
26462	4	30	126÷131	0,5÷2,0		
26463	4	36	133÷138	0,8÷5,0		
26464	4	41	137÷142	2,0÷7,0		
26127	4	23	112	0,5		
26047	4	23	112	0,6	–	278../2955..
26048	4	23	112	0,9		
26133	4	30	119	1,1		
26051	4	30	119	2,0		
26128	4	30	119	2,5		
26052	4	36	126	3,0		
26129	4	36	126	3,8		
26130	4	41	132	5,5		

ART. 2781.



LAMA INTERCAMBIABILE
INTERCHAGEABLE BLADE
AUSTAUSCHBARES MESSER
LAME INTERCHANGEABLE

ART. 2955.



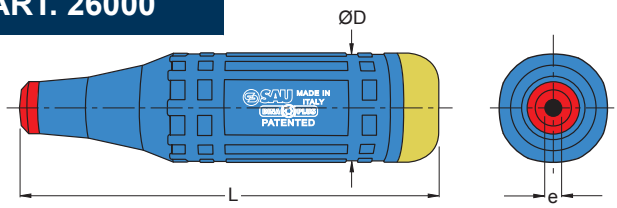
LAMA INTERCAMBIABILE
INTERCHAGEABLE BLADE
AUSTAUSCHBARES MESSER
LAME INTERCHANGEABLE

ART.	(mm) Torx	Torx Plus	e	L	Nm Max	TIPO TYPE
27818	6	–	4	175	0,6	Torx Magic Spring
27812	7	–	4	175	0,9	
27813	8	–	4	175	1,3	
27814	9	–	4	175	2,5	
27815	10	–	4	175	3,8	
27816	15	–	4	175	5,5	
27817	20	–	4	175	8,0	
29553	–	6IP	4	175	0,8	Torx Plus Magic Spring
29554	–	7IP	4	175	1,3	
29555	–	8IP	4	175	2,0	
29556	–	9IP	4	175	3,0	
29557	–	10IP	4	175	4,5	
29558	–	15IP	4	175	6,6	
29559	–	20IP	4	175	8,0	

ART. KITDP00000

KIT DINAPLUS
DYNAPLUS KIT
DYNAPLUS KIT
KIT DINAPLUS

ART. 26000



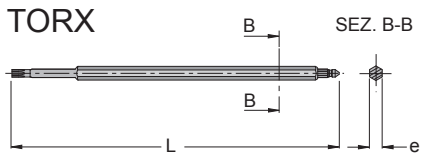
MANICO CACCIAVITE DINAPLUS
DYNAPLUS SCREWDRIVER HANDLE
DYNAPLUS SCHRAUBENDREHER-GRIFF
MANCHE TOURNEVIS DYNAPLUS

Contenuto del kit / *Content of the kit* :

- n°1 cacciavite/*screwdriver* DINAPLUS
- n°1 TORX T6 (Nm0,6)
- n°1 TORX T7 (Nm0,9)
- n°1 TORX T8 (Nm1,2)
- n°1 TORX T9 (Nm1,4)
- n°1 TORX T10 (Nm2,0)
- n°1 TORX T15 (Nm3,0)
- n°1 TORX T20 (Nm5,0)
- n°1 TORX PLUS IP6 (Nm0,6)
- n°1 TORX PLUS IP7 (Nm0,9)
- n°1 TORX PLUS IP8 (Nm1,2)
- n°1 TORX PLUS IP9 (Nm1,4)
- n°1 TORX PLUS IP10 (Nm2,0)
- n°1 TORX PLUS IP15 (Nm3,0)
- n°A1 TORX PLUS IP20 (Nm5,0)

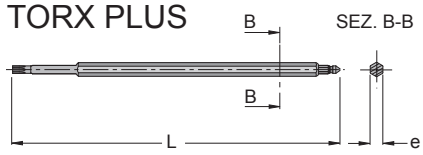
ART.	(mm) e	ØD	L	
26000	7,3	33,2	131,4	270../290..

ART. 270..



LAMA INTERCAMBIABILE
INTERCHAGEABLE BLADE
AUSTAUSCHBARES MESSER
LAME INTERCHANGEABLE

ART. 290..



LAMA INTERCAMBIABILE
INTERCHAGEABLE BLADE
AUSTAUSCHBARES MESSER
LAME INTERCHANGEABLE

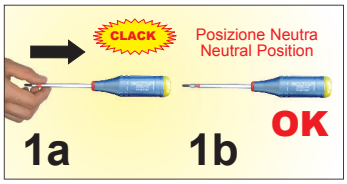
ART.	(mm) Torx	Torx Plus	e	L	Nm Max	TIPO TYPE	COD. KIT
27006	6	–	6,3	175	0,6	Torx	27000
27007	7	–	6,3	175	0,9		
27008	8	–	6,3	175	1,2		
27009	9	–	6,3	175	1,4		
27010	10	–	6,3	175	2,0		
27015	15	–	6,3	175	3,0		
27020	20	–	6,3	175	5,0		
29006	–	6IP	6,3	175	0,6	Torx Plus	29000
29007	–	7IP	6,3	175	0,9		
29008	–	8IP	6,3	175	1,2		
29009	–	9IP	6,3	175	1,4		
29010	–	10IP	6,3	175	2,0		
29015	–	15IP	6,3	175	3,0		
29020	–	20IP	6,3	175	5,0		

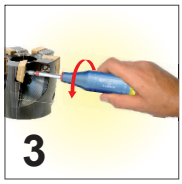
CARATTERISTICHE E VANTAGGI:
- Grazie al sistema DINAPLUS si eviteranno serraggi eccessivi con conseguente grippaggio della vite o rottura inserto, tutto ciò con un sistema automatico, semplice ed intuitivo
- Facilissimo da usare, nessun tipo di regolazione da effettuare, la regolazione avviene automaticamente inserendo la lama nell'impugnatura.
- Ampia gamma di lame utilizzabili (T6÷T20 / IP6÷IP20), facilmente identificabili, inserite in un comodo KIT.
- Nello svitamento la coppia di serraggio è al 100%
- Impugnatura elegante, in alluminio annodizzato

USO:
Inserire nell'impugnatura la lama adatta alla sede torx da utilizzare, dopo essersi assicurati che abbia raggiunto la battuta (udibile con un "clack"), (il numero o il colore presente ne stabilirà la grandezza esatta) **(fig.1a)**, per avvitare, ruotare in senso orario il cacciavite fino a raggiungere lo scatto (udibile con un "clack"), che determina la giusta coppia di serraggio della vite **(fig.2)**, per svitare, ruotare in senso antiorario il cacciavite **(fig.3)**. L'estrazione di una qualsiasi lama dall'impugnatura si può effettuare quando la stessa si trova in posizione neutra **(fig.1b)** e subito dopo il clack di avvitamento di una vite **(fig.2)** operazioni diverse da quelle indicate potrebbero compromettere l'integrità del cacciavite.

FEATURES AND ADVANTAGES:
- The DINAPLUS system avoids overtightening which can seize the screws or break the insert. The system is automatic, simple and user-friendly.
- Very easy to use, no adjustments required, the blade is set automatically in the handle.
- Wide range of blades (T6÷T20 / IP6÷IP20), easily identifiable in a handy KIT.
- 100% unscrewing torque
- Elegant handle in anodised aluminium.

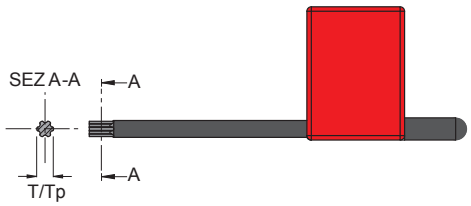
USE:
Insert the blade in the handle suited to the torx head screw to use but before doing so, make sure it has snapped in (you should hear a "click"), (the number or the colour gives the exact size) **(fig.1a)**. To screw down, turn the screwdriver clockwise until you hear the click, which means the tightening torque is right **(fig.2)**, while to unscrew it turn the screwdriver anticlockwise **(fig.3)**. All blades can be taken out of the handle only when the latter is in the neutral position **(fig.1b)** and straight after the tightening click of a screw **(fig.2)**; the screwdriver could be damaged if done any differently.





Viti / Screws TORX		Viti / Screws TORX PLUS		Nm
	T6		IP6	0,6
	T7		IP7	0,9
	T8		IP8	1,2
	T9		IP9	1,4
	T10		IP10	2,0
	T15		IP15	3,0
	T20		IP20	5,0

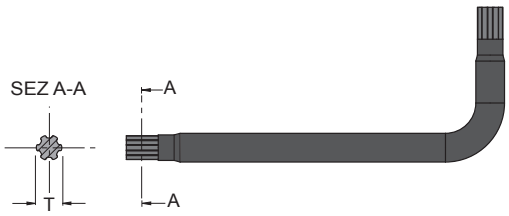
ART. 55..



CHIAVE A BANDIERA
FLAG KEY
FLAGGE-SCHLÜSSEL
CLÉ À "PAVILLON"

ART.	(mm) Torx	Torx Plus	ART.	(mm) Torx	Torx Plus
5506P	–	6IP	5520P	–	20IP
5507P	–	7IP	5525	25	–
5508P	–	8IP			
5509	9	–			
5510	10	–			
5515P	–	15IP			
5520	20	–			

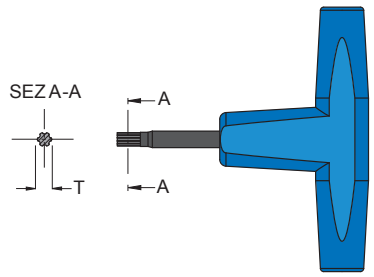
ART. 54..



CHIAVE TORX A L
TORX KEY (L-SHAPED)
TORX-SCHLÜSSEL (L-FÖRMIG)
CLÉ TORX À L

ART.	(mm) Torx	Torx Plus	ART.	(mm) Torx	Torx Plus
5407	7	–	5430	30	–
5408	8	–	5440	40	–
5409	9	–			
5410	10	–			
5415	15	–			
5420	20	–			
5425	25	–			

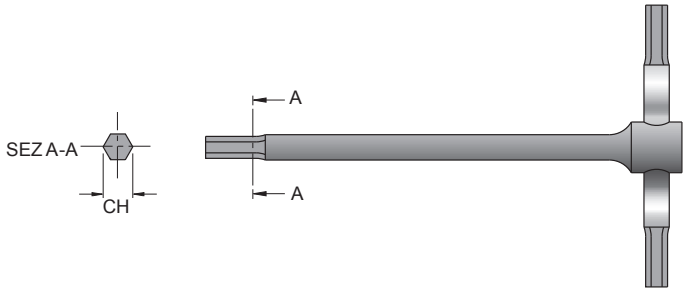
ART. CTT..



CHIAVE TORX A T
TORX KEY (T-SHAPED)
TORX-SCHLÜSSEL (T-FÖRMIG)
CLÉ TORX À T

ART.	(mm) Torx
CTT 20	20
CTT 25	25

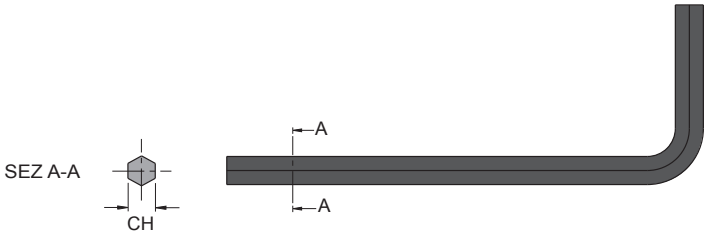
ART. CTE..



CHIAVE A BRUGOLA A T
T-SETSCREW WRENCH
T-INBUSSCHLÜSSEL
CLÉ À 6 PANS À T

ART.	(mm) CH
CTE 05	5,0
CTE 06	6,0
CTE 08	8,0
CTE 10	10,0
CTE 12	12,0
CTE 14	14,0

ART. 50..



CHIAVE A BRUGOLA A L
L-SETSCREW WRENCH
L-INBUSSCHLÜSSEL
CLÉ À 6 PANS À L

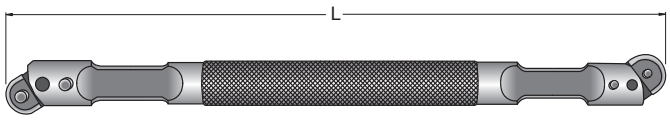
ART.	(mm) CH	ART.	(mm) CH
5015	1,5	5005	5,0
5002	2,0	5006	6,0
5025	2,5	5007	7,0
5003	3,0	5008	8,0
5035	3,5	5010	10,0
5004	4,0	5017	17,0
5045	4,5		

ART. SESG-1

CHIAVE PER ESTRAZIONE INSERTI
INSERT LIFTING KEY
AUSZIEHSCHLÜSSEL FÜR WENDEPLATTEN
CLÉ POUR EXTRACTION PLAQUETTES

ART.	(mm) S2
SESG-1	23

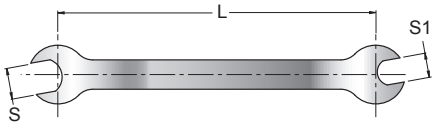
ART. CH-TRL30-40



CHIAVE ERGONOMICA MONTAGGIO/ESTRAZIONE INSERTI
INSERT ASSEMBLY/REMOVAL ERGONOMIC KEY
ERGONOMISCHER MONTAGE-/AUSZIEHSCHLÜSSEL FÜR WENDEPLATTEN
CLE A MANCHE ERGONOMIQUE DE MONTAGE/EXTRACTION DES PLAQUETTES

	(mm)
ART.	L
CH-TRL30-40	220

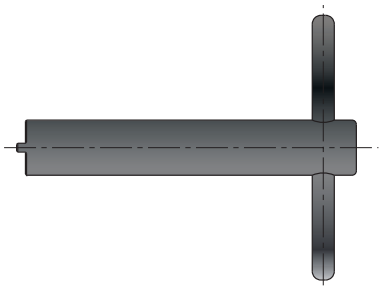
ART. 45.95.6..



CHIAVE PER UNITÀ MICROREGISTRABILI
KEY FOR MICRO-BORING UNITS
SCHLÜSSEL FÜR FEINBOHREINHEITEN
CLÉ POUR UNITÉS MICROMÉTRIQUES

	(mm)		
ART.	L	S	S1
45.95.640	130	13	10
45.95.644	130	22	15

ART. CH-HK..



CHIAVE A DENTI PER BOCCOLE *BCF*
PIN WRENCH FOR BCF BUSHING
ZAPFENSCHLÜSSEL FÜR BCF-BUCHSEN
CLÉ À GIFFES POUR DOUILLE BCF

ART.		ART.	
CH-HK040	ATR012 HK40	CH-HK080	ATR020 HK80
CH-HK050	ATR016 HK50	CH-HK100	ATR024 HK100
CH-HK063	ATR018 HK63		

ART. 925..

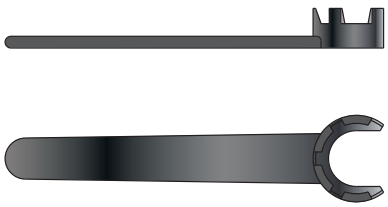
ART.			
925.022		RGC ER16	RGS ER16
925.040		RGC ER25	RGS ER25
925.052		RGC ER32	RGS ER32
925.058		–	–
925.068		RGC ER40	RGS ER40

ART. 927..

CHIAVE A SETTORE CON 4 DENTI PER GHIERE RGS/RGE/RGMS/RGMSB
PIN WRENCH(4TEETH) FOR RGS/RGE/RGMS/RGMSB
ZAPFENSCHLÜSSEL FÜR RGS/RGE/RGMS/RGMSB (4 ZÄHNE)
CLÉ À SECTEUR À 4 GRIFFES POUR FRETTES RGS/RGE/RGMS/RGMSB

ART.			
927.022		RGS ER16	
927.040		RGS ER25	
927.052		RGS ER32	
927.068		RGS ER40	

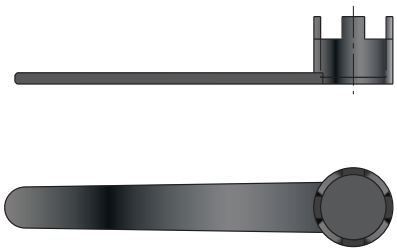
ART. 938..



CHIAVE A SETTORI PER GHIERE RGM
PIN WRENCH FOR RGM
ZAPFENSCHLÜSSEL FÜR RGM-RINGE
CLÉ À SECTEUR POUR FRETTES RGM

ART.			
938.011		RGM ER11	
938.016		RGM ER16	
938.025		RGM ER25	

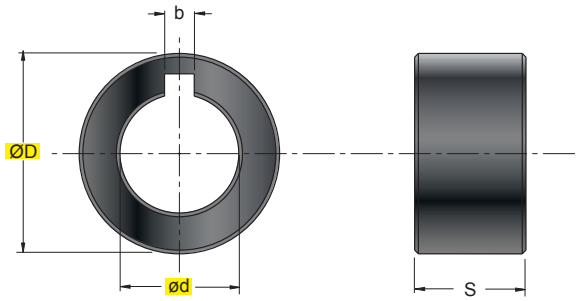
ART. 423..



CHIAVE PER VITI CON TESTA A CROCE
CROSS-SLOTTED SCREW WRENCH
KREUZSCHLÜSSEL
CLÉ POUR VIS AVEC TÊTE À CROIX

ART.		
423.016.000.000		422.016..
423.022.000.000		422.022..
423.027.000.000		422.027..
423.032.000.000		422.032..
423.040.000.000		422.040..
423.050.000.000		422.050..

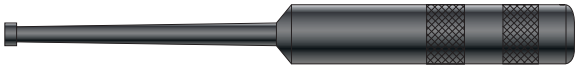
ART. 195..



ANELLO DISTANZIATORE PER PORTAFRESA COMBINATO
DISTANCE RING FOR COMBI MILL-HOLDER
DISTANZRING FÜR KOMBI-FRÄSERAUFNHAME
BAGUE D'ENTRETOISE POUR MANDRIN PORTE-FRAISE COMBINÉ

	(mm)			
ART.	ØD	Ød	b	S
195.016.010	25	16	4	1
195.016.020	27	16	4	2
195.016.030	27	16	4	3
195.016.040	27	16	4	4
195.016.050	27	16	4	5
195.022.010	33	22	6	1
195.022.020	34	22	6	2
195.022.030	34	22	6	3
195.022.040	34	22	6	4
195.022.050	34	22	6	5
195.027.010	39	27	7	1
195.027.020	41	27	7	2
195.027.030	41	27	7	3
195.027.040	41	27	7	4
195.027.050	41	27	7	5
195.032.010	45	32	8	1
195.032.020	47	32	8	2
195.032.030	47	32	8	3
195.032.040	47	32	8	4
195.032.050	47	32	8	5
195.040.010	54	40	10	1
195.040.020	55	40	10	2
195.040.030	55	40	10	3
195.040.040	55	40	10	4
195.040.050	55	40	10	5
195.050.010	67	50	12	1
195.050.020	69	50	12	2
195.050.030	69	50	12	3
195.050.060	69	50	12	6

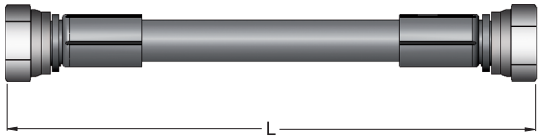
ART. ESMS..



ESTRATTORE PER PINZE
EXTRACTOR FOR COLLETS
ENTFERNER FÜR REDUZIERHULSEN
EXTRACTEUR POUR PINCES

ART.		
ESMS.010		

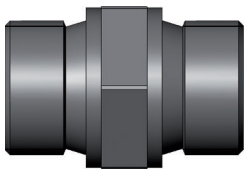
ART. ATUB..



TUBO DRITTO RACCORDATO
FITTED HOSE STRAIGHT
GERADE SCHLAUCHLEITUNG
TUBE DROIT RACCORDE

ART.	(mm) L	
ATUB150TT0	150	3/16"FF 1/8G-1/8G
ATUB225TT0	225	3/16"FF 1/8G-1/8G
ATUB300TT0	300	3/16"FF 1/8G-1/8G

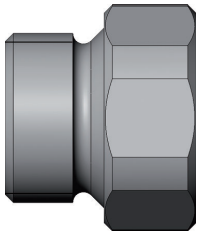
ART. A00MM18..



RACCORDO DRITTO
STRAIGHT FITTING
GERADE VERBINDUNGSSTÜCK
RACCORD DROIT

ART.	
A00MM18180	MM 1/8G-1/8G
A00MM18100	MM 1/8G-M10

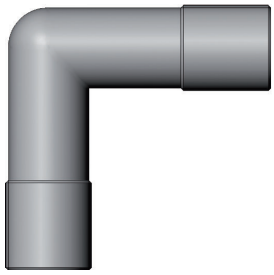
ART. ARIMF14180



RIDUZIONE
ADAPTER
REDUZIERUNGEN
RÉDUCTION

ART.	
ARIMF14180	FM 1/8G-1/4G

ART. A90MM18..



RACCORDO 90°
90° FITTING
90°-KUPPLUNG
RACCORD 90°

ART.	
A90MM18180	MM 1/8G-1/8G
A90MM18100	MM 1/8G-M10

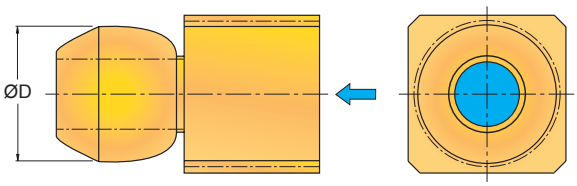
ART. ABS000M100

ANELLO DI TENUTA
SEALING RING
DICHTRING
ANNEAU D'ETANCHEITE

ART.	
ABS000M100	B-SEAL M10

ART. AOG...F18

NEW



OGIVA LUBROREFRIGERANTE
COOLING LUBRICANT NOSE CONE
KÜHLSCHMIERMITTEL-NASENKEGEL
OGIVE LUBRIFIANTE-RÉFRIGÉRANTE

ART.	ØD		ART.	ØD	
AOG100F18	10,0	F 1/8G	AOG150F18	15,0	F 1/8G
AOG120F18	12,0	F 1/8G	AOG159F18	15,9	F 1/8G
AOG127F18	12,7	F 1/8G			

NOTE - NOTES