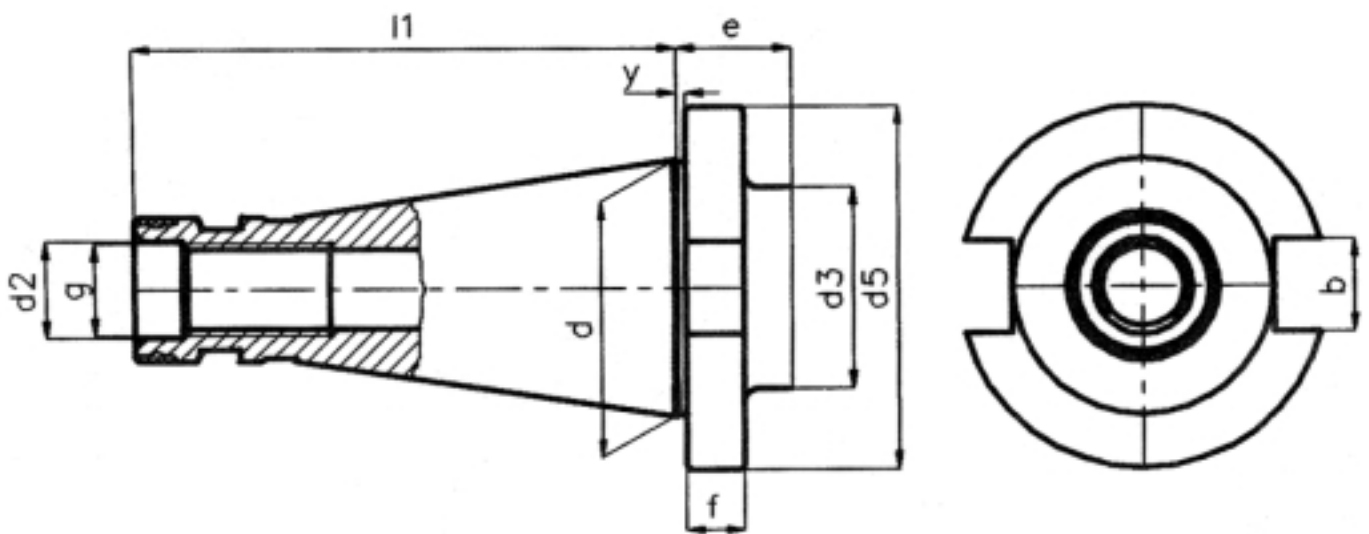




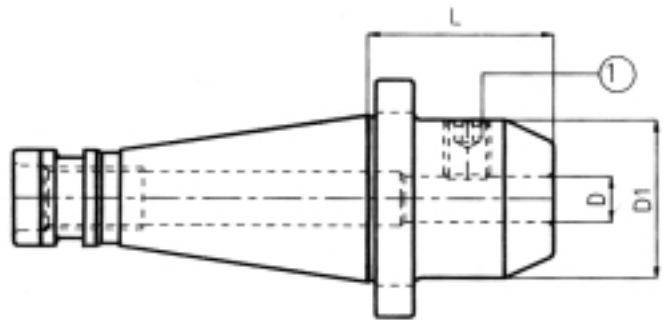
DIN 2080



ISO	d	l1	d2	g	y	d5	f	d3	e	b
30	31,75	68,4	13	M12	1,6	50	8	36	18,6	16,1
40	44,45	93,4	17	M16	1,6	63	10	50	22,6	16,1
50	69,85	126,8	26	M24	3,2	97,5	12	78	31,2	25,7

ZYLINDERSCHAFTAUFNAHME WELDON
 END MILL HOLDERS WELDON
 MANDRINS POUR OUTIL TYPE WELDON
 MANDRINI PORTAFRESE TIPO WELDON

DIN 1835 B

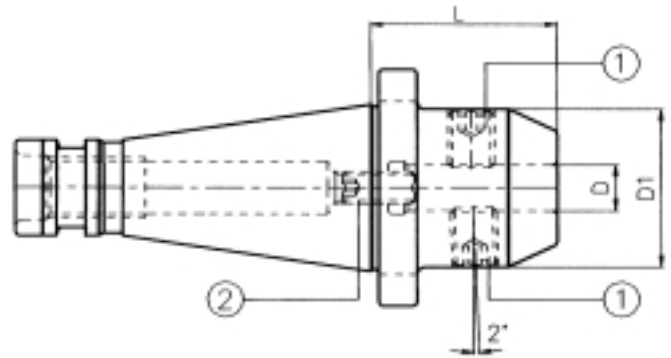


Code N.	Description	ISO	D	L	D1
213-11102	ISO40H50WE06	40	6	50	25
213-11103	ISO40H50WE08	40	8	50	28
213-11104	ISO40H50WE10	40	10	50	35
213-11105	ISO40H50WE12	40	12	50	42
213-11107	ISO40H63WE16	40	16	63	48
213-11109	ISO40H63WE20	40	20	63	52
213-11110	ISO40H90WE25	40	25	90	65
213-11111	ISO40H90WE32	40	32	90	72
213-11112	ISO50H50WE06	50	6	50	25
213-11113	ISO50H50WE08	50	8	50	28
213-11114	ISO50H63WE10	50	10	63	35
213-11115	ISO50H63WE12	50	12	63	42
213-11117	ISO50H63WE16	50	16	63	48
213-11119	ISO50H63WE20	50	20	63	52
213-11120	ISO50H80WE25	50	25	80	65
213-11121	ISO50H85WE32	50	32	85	72
213-11122	ISO50H95WE40	50	40	95	78

Ersatzteile / Parts / Pieces detachees / Componenti

D	Locking screw	Quantity
		
6	811-106001	1
8	811-106002	1
10	811-106004	1
12	811-106005	1
16	811-106006	1
20	811-106007	1
25	811-106008	2
32	811-106009	2
40	811-106009	2

KOMBI-ZYLINDERSCHAFTAUFNAHME WELDON+WHISTLE NOTCH
COMBI END MILL HOLDERS WELDON AND WHISTLE NOTCH
MANDRINS PORTE-FRAISE DOUBLE USAGE WELDON ET WHISTLE NOTCH
MANDRINI PORTAFRESE COMBINATI WELDON+WHISTLE NOTCH DIN 1835 B/E



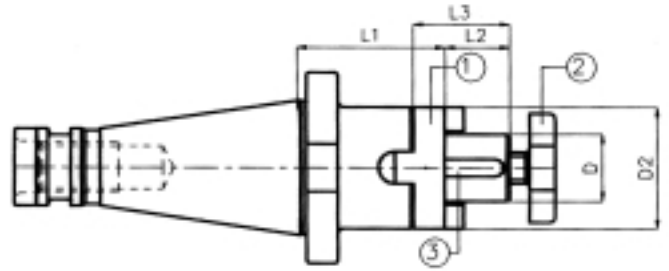
Code N.	Description	ISO	D	L	D1
213-41122	ISO40H50WE+WN06	40	6	50	25
213-41101	ISO40H50WE+WN08	40	8	50	28
213-41102	ISO40H50WE+WN10	40	10	50	35
213-41103	ISO40H50WE+WN12	40	12	50	42
213-41104	ISO40H63WE+WN16	40	16	63	48
213-41105	ISO40H63WE+WN20	40	20	63	50
213-41106	ISO40H90WE+WN25	40	25	90	65
213-41107	ISO40H90WE+WN32	40	32	90	72
213-41123	ISO50H50WE+WN06	50	6	50	25
213-41124	ISO50H50WE+WN08	50	8	50	28
213-41108	ISO50H63WE+WN10	50	10	63	35
213-41109	ISO50H63WE+WN12	50	12	63	42
213-41110	ISO50H63WE+WN16	50	16	63	48
213-41111	ISO50H63WE+WN20	50	20	63	52
213-41112	ISO50H80WE+WN25	50	25	80	65
213-41113	ISO50H85WE+WN32	50	32	85	72
213-41114	ISO50H95WE+WN40	50	40	95	78

Ersatzteile / Parts / Pieces detachees / Componenti

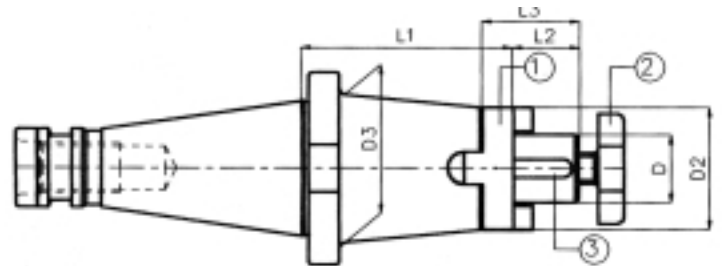
D	Locking screw	Quantity	Stop screw	Quantity
				
6	811-106001	2	811-104008	1
8	811-106002	2	811-104014	1
10	811-106004	2	811-104022	1
12	811-106005	2	811-104030	1
16	811-106006	2	811-104037	1
20	811-106007	2	811-104037	1
25	811-106008	4	811-104046	1
32	811-106009	4	811-104046	1
40	811-106009	4	811-104046	1

KOMBI-AUFSTECKFRÄSDORNE
COMBI-SHELL MILL ADAPTORS
MANDRINS PORTE-FRAISES A DOUBLE USAGE
MANDRINI PORTAFRESE COMBINATI

DIN 6358



	Code N.	Description	ISO	D	L1	L2	L3	D2
STANDARD	216-11101	ISO40H52D16C	40	16	52	17	27	32
	216-11102	ISO40H52D22C	40	22	52	19	31	40
	216-11103	ISO40H52D27C	40	27	52	21	33	48
	216-11104	ISO40H52D32C	40	32	52	24	38	58
	216-11105	ISO40H52D40C	40	40	52	27	41	70
	216-11106	ISO50H55D16C	50	16	55	17	27	32
	216-11107	ISO50H55D22C	50	22	55	19	31	40
	216-11108	ISO50H55D27C	50	27	55	21	33	48
	216-11109	ISO50H55D32C	50	32	55	24	38	58
	216-11110	ISO50H55D40C	50	40	55	27	41	70



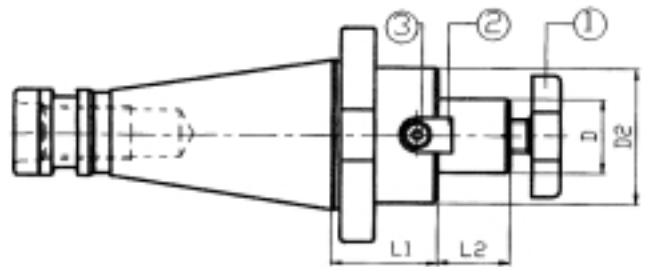
	Code N.	Description	ISO	D	L1	L2	L3	D2	D3
EXTENDED	216-11120	ISO40H90D16C	40	16	90	17	27	32	40
	216-11121	ISO40H90D22C	40	22	90	19	31	40	44
	216-11122	ISO40H90D27C	40	27	90	21	33	48	-
	216-11123	ISO40H100D32C	40	32	100	24	38	58	-
	216-11125	ISO50H100D16C	50	16	100	17	27	32	50
	216-11126	ISO50H100D22C	50	22	100	19	31	40	60
	216-11127	ISO50H100D27C	50	27	100	21	33	48	60
	216-11128	ISO50H100D32C	50	32	100	24	38	58	-
	216-11129	ISO50H100D40C	50	40	100	27	41	70	-

Ersatzteile / Parts / Pièces détachées / Componenti

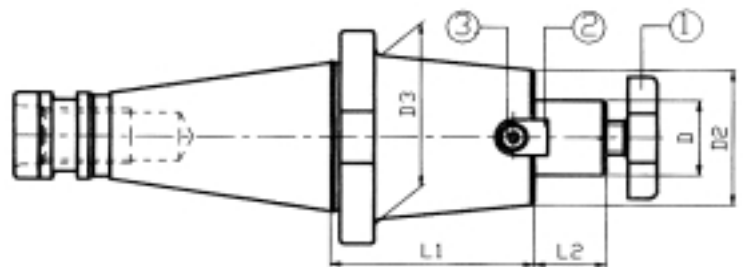
D	Ring	Screw	Key
16	814-30001	811-107003	814-201010
22	814-30002	811-107004	814-201020
27	814-30003	811-107005	814-201030
32	814-30004	811-107006	814-201040
40	814-30005	811-107007	814-201050

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
FACE MILL HOLDERS-TENONS DRIVE
MANDRINS PORTE-FRAISE-ENTRAINEMENT PAR TENONS
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO

ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	
STANDARD	216-71105	ISO40H45D16F	40	16	45	17	32
	216-71106	ISO40H45D22F	40	22	45	19	40
	216-71107	ISO40H45D27F	40	27	45	21	48
	216-71108	ISO40H50D32F	40	32	50	24	58
	216-71109	ISO40H55D40F	40	40	55	27	70
	216-71115	ISO50H45D16F	50	16	45	17	32
	216-71116	ISO50H45D22F	50	22	45	19	40
	216-71117	ISO50H45D27F	50	27	45	21	48
	216-71118	ISO50H50D32F	50	32	50	24	58
	216-71119	ISO50H50D40F	50	40	50	27	70



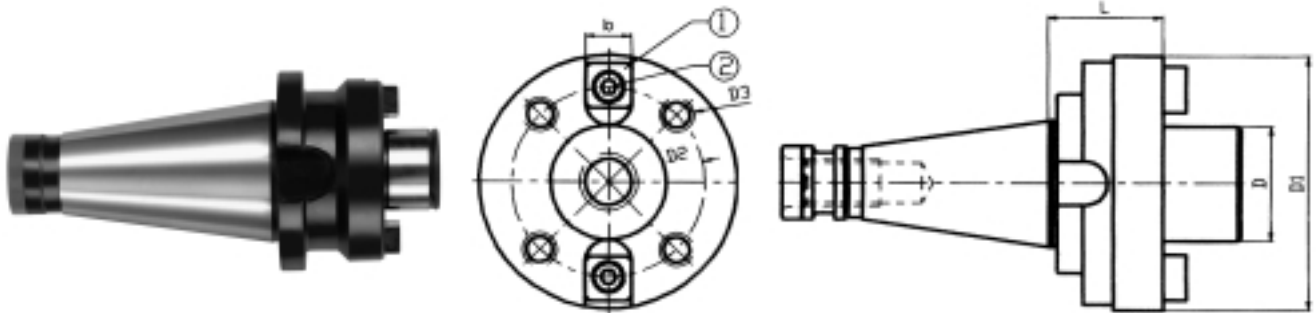
Code N.	Description	ISO	D	L1	L2	D2	D3	
EXTENDED	216-71141	ISO40H120D16F	40	16	120	17	32	39
	216-71142	ISO40H120D22F	40	22	120	19	40	49
	216-71143	ISO40H120D27F	40	27	120	21	48	60
	216-71144	ISO40H120D32F	40	32	120	24	58	62
	216-71145	ISO50H150D16F	50	16	150	17	32	39
	216-71146	ISO50H150D22F	50	22	150	19	40	49
	216-71147	ISO50H150D27F	50	27	150	21	48	75
	216-71148	ISO50H150D32F	50	32	150	24	58	80
	216-71149	ISO50H150D40F	50	40	150	27	70	90

Ersatzteile / Parts / Pieces detachees / Componenti

D	Screw	Tenon	Screw
	①	②	③
16	811-107003	814-20214	811-101003
22	811-107004	814-20215	811-101010
27	811-107005	814-20216	811-101017
32	811-107006	814-20217	811-101027
40	811-107007	814-20218	811-101028



AUFSTECKFRÄSERDORNE FÜR MESSERKÖPFE
FACE MILL HOLDER FOR FACE MILLING CUTTERS
MANDRINS PORTE-FRAISE POUR FRAISES A SURFAGER
MANDRINI PORTAFRESE PER FRESE A SPIANARE

DIN 6357



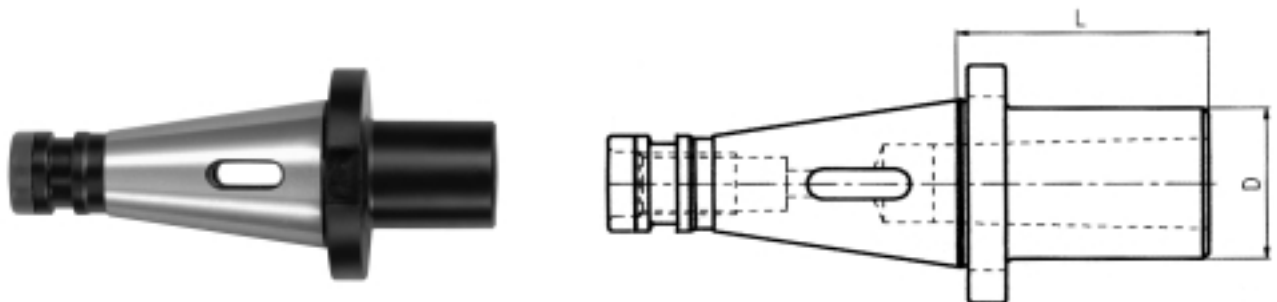
Code N.	Description	ISO	D	L	D1	D2	D3	b
216-21101	ISO40H46.6D40	40	40	46.6	89	66.7	M12	15.9
216-21102	ISO50H53.2D40	50	40	53.2	89	66.7	M12	15.9
216-21103	ISO50H70.2D50	50	50	70.2	129	101.6	M16	25.4
216-21104	ISO50H70.2D60	50	60	70.2	129	101.6	M16	25.4

Ersatzteile / Parts / Pieces detachees / Componenti

D	Tenon	Screw
		
40	814-202080	811-101028
50	814-202120	811-101063
60	814-202120	811-101063

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN
MORSE TAPER ADAPTORS FOR DRILLS
DOUILLES POUR CONE MORSE A TENON
MANDRINI PORTAPUNTE ATTACCO GONO MORSE

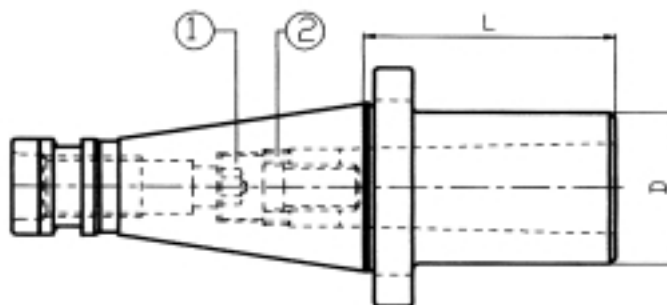
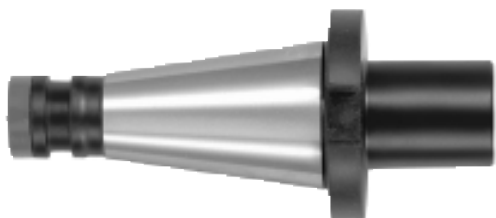
DIN 228-2 FORM D



Code N.	Description	ISO	MORSE	D	L
212-41101	ISO40H50CM1P	40	1	25	50
212-41102	ISO40H50CM2P	40	2	32	50
212-41103	ISO40H65CM3P	40	3	40	65
212-41104	ISO40H95CM4P	40	4	48	95
212-41111	ISO50H45CM1F	50	1	25	45
212-41105	ISO50H60CM2P	50	2	32	60
212-41106	ISO50H65CM3P	50	3	40	65
212-41107	ISO50H70CM4P	50	4	48	70
212-41108	ISO50H105CM5P	50	5	63	105

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH TREAD
DOULLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTAGGO CONO MORSE

DIN 228-2 FORM C



Code N.	Description	ISO	MORSE	D	L
212-21101	ISO40H50CM1F	40	1	25	50
212-21102	ISO40H50CM2F	40	2	32	50
212-21103	ISO40H65CM3F	40	3	40	65
212-21104	ISO40H95CM4F	40	4	48	95
212-21111	ISO50H45CM1F	50	1	25	45
212-21105	ISO50H60CM2F	40	2	32	60
212-21106	ISO50H65CM3F	50	3	40	65
212-21107	ISO50H65CM4F	50	4	48	65
212-21108	ISO50H120CM5F	50	5	63	120

Ersatzteile / Parts / Pieces detachees / Componenti

ISO/MORSE	Screw	Ring
		
40/1	811-101029	811-302030
40/2	811-111007	811-302031
40/3	811-101065	811-302032
40/4	811-111005	811-302036
50/1	811-101029	811-302030
50/2	811-101054	811-302032
50/3	811-101065	811-302032
50/4	811-401037	811-302036
50/5	811-101092	811-302034

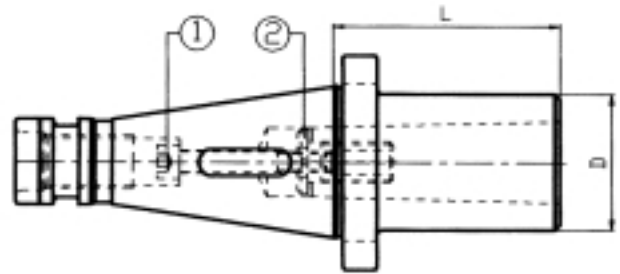
ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBLAPPEN ODER ANZUGSGEWINDE

MORSE TAPER ADAPTORS FOR DRILLS AND MILLS

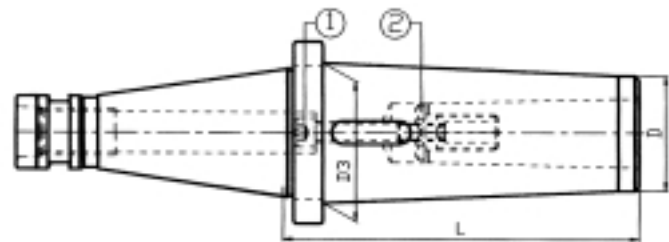
DOUILLES POUR CONE MORSE A TENON ET AVEC TARAUDAGE

MANDRINI PORTAPUNTE-PORTAFRESE ATTACCO CONO MORSE

DIN 228-2 FORM C/D



Code N.	Description	ISO	MORSE	D	L	
STANDARD	212-61101	ISO40H50CM1P/F	40	1	25	50
	212-61102	ISO40H50CM2P/F	40	2	32	50
	212-61103	ISO40H65CM3P/F	40	3	40	65
	212-61105	ISO50H45CM1P/F	50	1	25	45
	212-61106	ISO50H60CM2P/F	40	2	30	60
	212-61107	ISO50H65CM3P/F	50	3	36	65
	212-61108	ISO50H65CM4P/F	50	4	48	65
	212-61109	ISO50H100CM5P/F	50	5	63	100

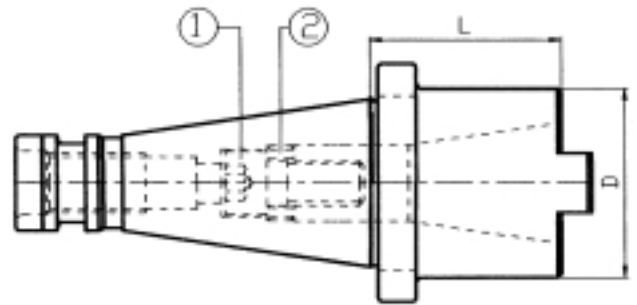


Code N.	Description	ISO	MORSE	D	D3	L	
EXTENDED	212-61114	ISO40H115CM1P/F	40	1	18	25	115
	212-61115	ISO40H125CM2P/F	40	2	25	32	125
	212-61116	ISO40H140CM3P/F	40	3	33	40	140
	212-61117	ISO50H120CM1P/F	50	1	18	25	120
	212-61118	ISO50H140CM2P/F	40	2	25	32	140
	212-61119	ISO50H150CM3P/F	50	3	33	40	150
	212-61120	ISO50H180CM4P/F	50	4	40	48	180
	212-61121	ISO50H220CM5P/F	50	5	55	63	220

Ersatzteile / Parts / Pieces detachees / Componenti



ISO/MORSE	Screw	Ring
	① 	② 
40/1	811-101033	-
40/2	811-401018	-
40/3	811-101034	811-302006
50/1	811-101033	-
50/2	811-101058	-
50/3	811-101069	-
50/4	811-401016	-
50/5	811-101071	811-302008

ZWISCHENHÜLSEN SK X SK
ISO TAPER ADAPTORS
DOUILLES INTERMEDIAIRES SA X SA
MANDRINI A RIDUZIONE DA ISO A ISO



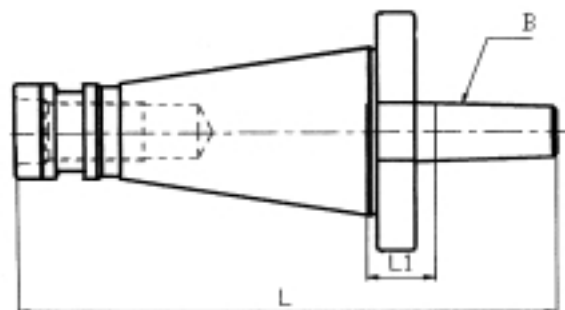
Code N.	Description	ISO	ISO	D	L
212-11102	ISO40H50ISO30	40	30	50	50
212-11101	ISO50H63ISO40	50	40	78	63

Ersatzteile / Parts / Pieces detachees / Componenti

ISO/ISO	Screw	Ring
		
40/30	811-401042	811-302032
50/40	811-401037	811-302036

BOHRFUTTERAUFNAHMEN
ABORS FOR DRILL CHUCKS
ARBRES POUR MANDRINS DE PERÇAGE
ATTACCO PER MANDRINI PORTAPUNTE

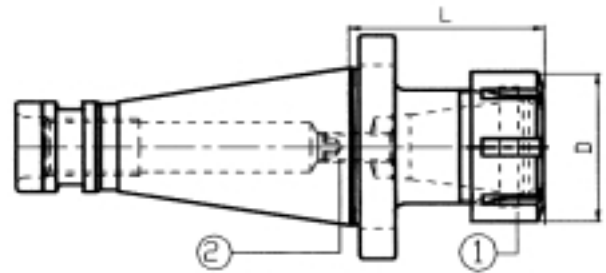
DIN 238



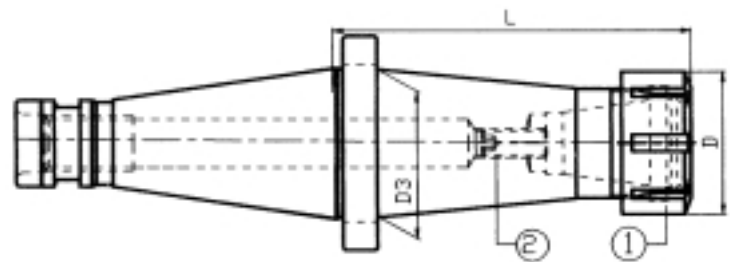
Code N.	Description	ISO	B	L	L1
216-31102	ISO40H17B16	40	16	134.4	17
216-31103	ISO40H17B18	40	18	142.4	17
216-31104	ISO50H20B16	50	16	170.8	20
216-31105	ISO50H20B18	50	18	178.8	20

SPANNZANGENFUTTER ER TYP
ER COLLET CHUCKS
MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER

DIN 6499





	Code N.	Description	ISO	ER	D	L
STANDARD	214-31105	ISO30H42ER16	30	16	28	42
	214-31106	ISO30H42ER25	30	25	45	42
	214-31107	ISO30H50ER32	30	32	50	50
	214-31101	ISO40H53ER25	40	25	45	53
	214-31102	ISO40H68ER32	40	32	50	68
	214-31114	ISO40H80ER40	40	40	63	80
	214-31137	ISO50H65ER25	50	25	45	65
	214-31103	ISO50H68ER32	50	32	50	68
	214-31104	ISO50H76ER40	50	40	63	76

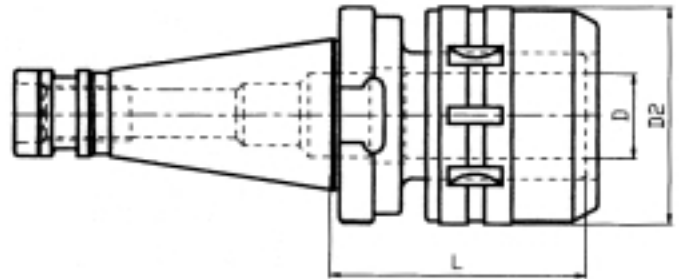


	Code N.	Description	ISO	ER	D	D3	L
EXTENDED	214-31108	ISO40H110ER25	40	25	45	44	110
	214-31109	ISO40H110ER32	40	32	50	44	110
	214-31138	ISO50H140ER25	50	25	45	44	140
	214-31110	ISO50H140ER32	50	32	50	50	140
	214-31111	ISO50H140ER40	50	40	63	60	140

Ersatzteile / Parts / Pieces detachees / Componenti

ER	Nut	Stop screw
		
16	812-203005	811-303001
25	812-203001	811-303001
32	812-203002	811-303001
40	812-203003	811-303014

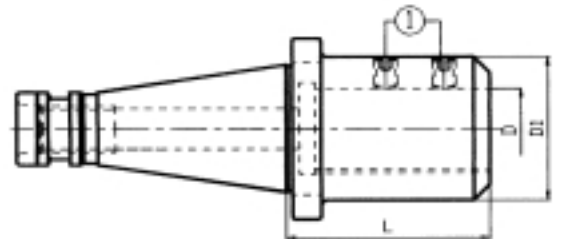
**KRAFTSPANNFUTTER
MILLING CHUCK
MANDRINS A FORT SERRAGE
MANDRINI A FORTE SERRAGGIO**



Code N.	Description	ISO	D	D2	L
214-01101	ISO40H83C32	40	32	72	83
214-01102	ISO50H85C32	50	32	72	85


**STELLHÜSENSAUFNAHMEN
MASTER SHANKS FOR ADJUSTABLE ADAPTORS
MANDRINS POUR DOUILLES DE REGLAGE
MANDRINI PER ASTUCCI REGISTABILI**

DIN 6327

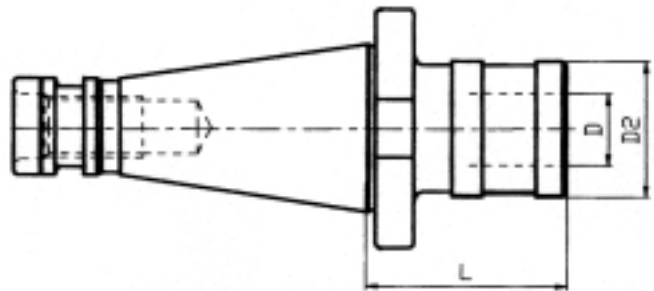


Code N.	Description	ISO	D	D1	L	b
211-11101	ISO40H100D28TR	40	28	50	100	6
211-11102	ISO40H120D36TR	40	36	60	120	8
211-11103	ISO50H100D28TR	50	28	50	100	6
211-11104	ISO50H100D36TR	50	36	60	100	8

Ersatzteile / Parts / Pieces detachees / Componenti

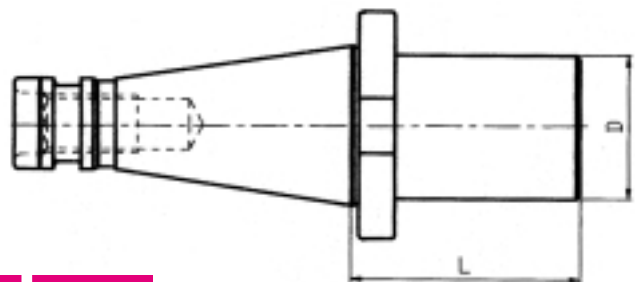
D	Screw
	① 
28	811-102027
36	811-102036

**GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEAD
MANDRINS DE TARAUDAGE A CHANGEMENT RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE**



Code N.	Description	ISO	SIZE	Top range	PRESS.	EXT.	D	D2	L
M-1010	ISO30H50GR1DC	30	1	M3-M12	9	9	19	36	50
M-1020	ISO40H52GR1DC	40	1	M3-M12	9	9	19	36	52
M-1120	ISO40H77GR2DC	40	2	M6-M20	15	15	31	53	77
M-1130	ISO50H79GR2DC	50	2	M6-M20	15	15	31	53	79
M-1220	ISO40H118GR3DC	40	3	M14-M33	24	24	48	78	118
M-1230	ISO50H125GR3DC	50	3	M14-M33	24	24	48	78	125

**ROHLINGE
BLANK TOOLHOLDER
BARRES D'ALEPAGE SEMI-FINIES
MANDRINI SEMILAVORATI A STELO TENERO**



Code N.	Description	ISO	D	L
217-41101	ISO40H160D40.5SM	40	40.5	160
217-41102	ISO40H160D63.5SM	40	63.5	160
217-41103	ISO40H250D63.5SM	40	63.5	250
217-41104	ISO50H160D80SM	50	80	160
217-41105	ISO50H200D80SM	50	80	200
217-41106	ISO50H300D80SM	50	80	300