



OFFICINE MECCANICHE
MORARI

ACCESSORI DI PRECISIONE
PER MACCHINE UTENSILI

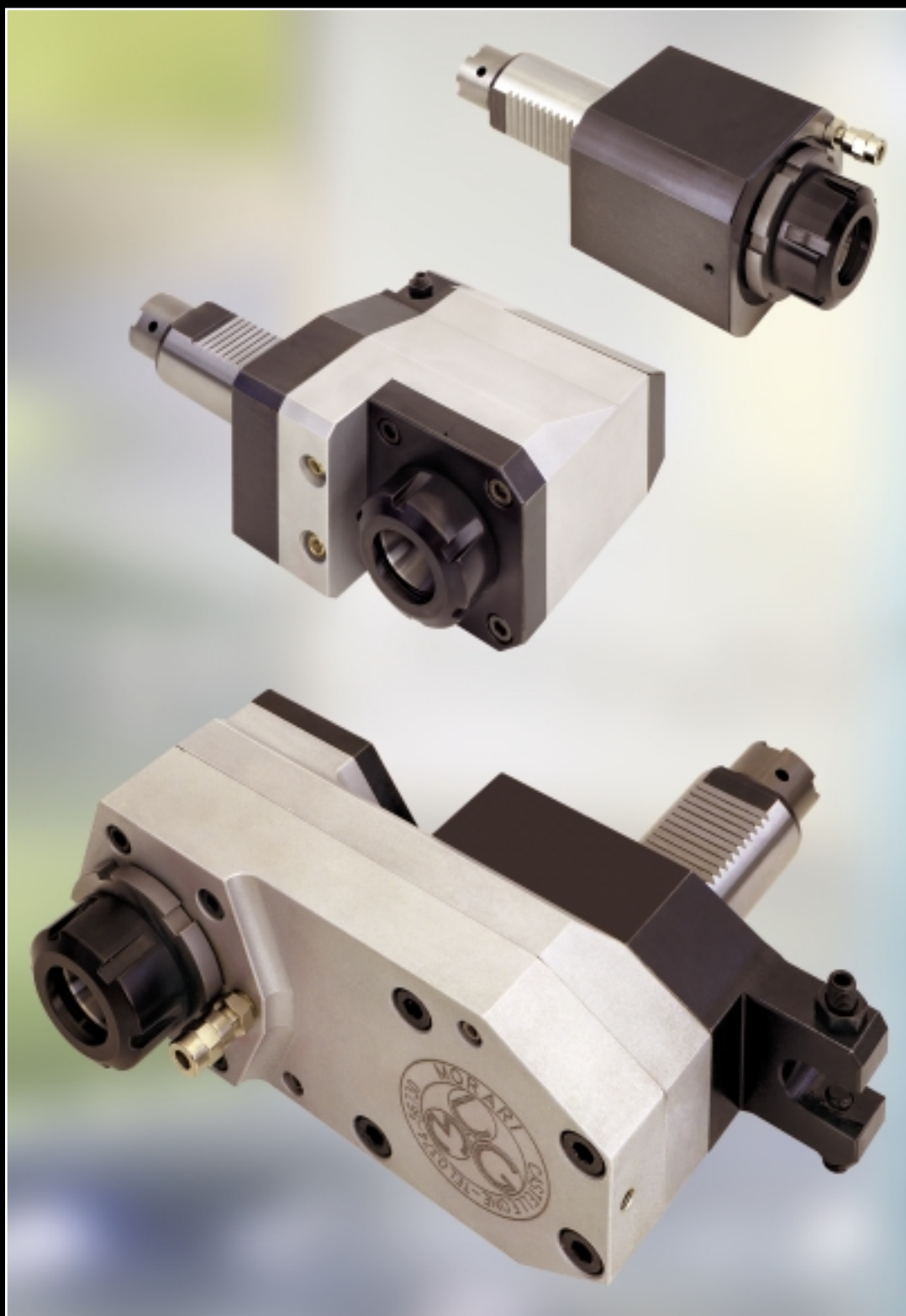
PORTAUTENSILI
MODULI ROTANTI
per TORNI OKUMA

Esecuzioni speciali
a richiesta

TOOL HOLDER
DRIVEN TOOLS
for OKUMA LATHE

Special type tools
on request

EDIZIONE 2003





OFFICINE MECCANICHE
MORARI

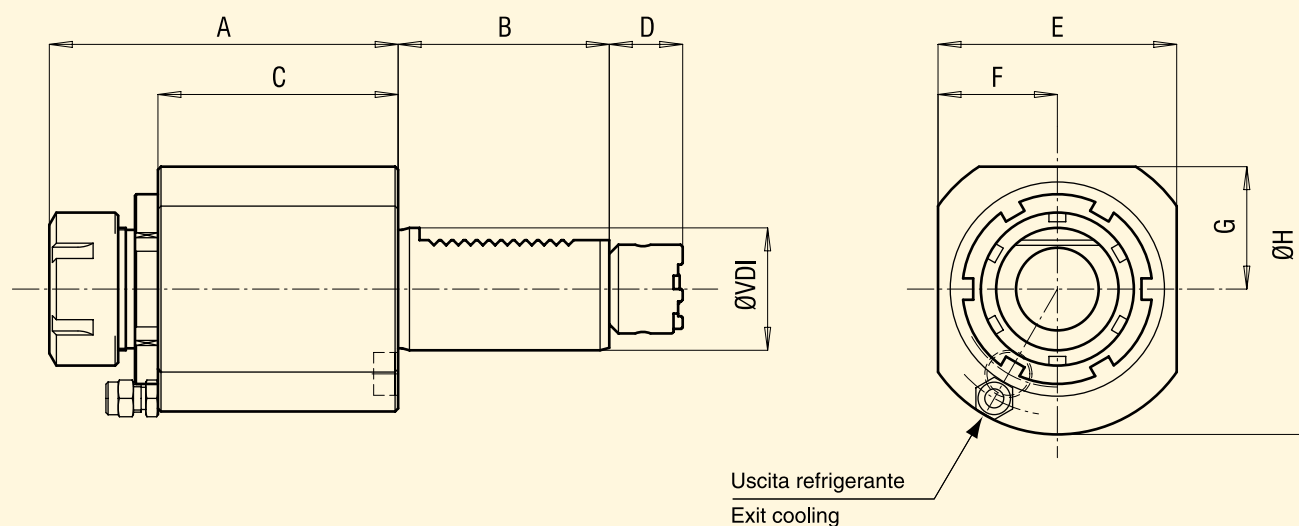


L'esperienza aquisita dalla ditta MORARI
nella realizzazione di moduli rotanti,
ci ha permesso di sviluppare una linea personalizzata
per macchine Okuma molto apprezzata
in italia ed all'estero.
Oltre alla linea standard siamo in grado di progettare
applicazioni speciali per ogni esigenza.

*With MORARI advanced Know-How as driven tools
constructor we had build this line only for Okuma Lathes,
that is increasingly demanded in italy ad abroad.
We can also project special applications,
according to the customer requests.*

Modulo assiale per utensili rotanti tipo RA 100 per torni OKUMA

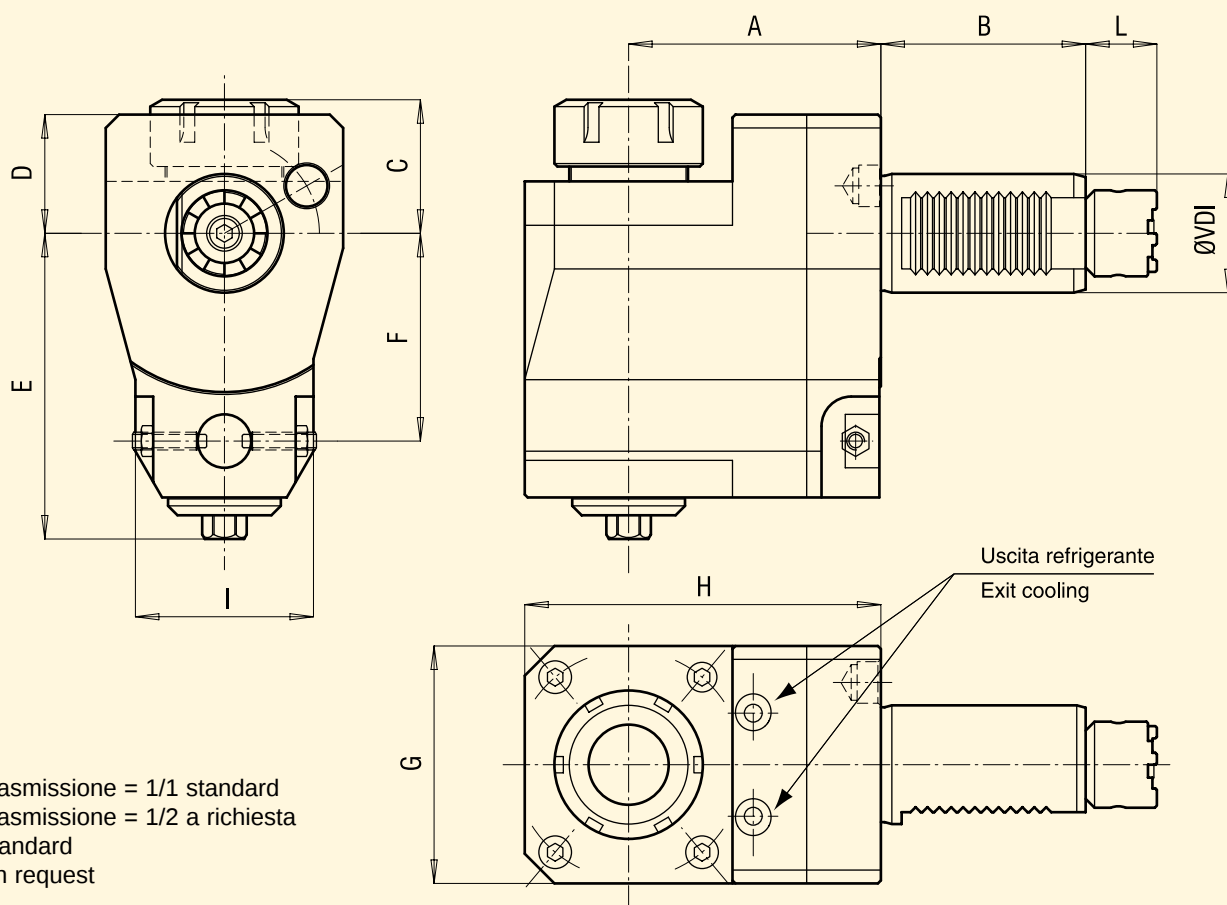
Axial tool head RA 100 for OKUMA lathes



Ø VDI	A	B	C	D	E	F	G	H	n. max	M Nm	Tipo pinza Collet type	Tipo Type	Codice Item
30	98,5	55	67	14	68	34	34	78	6000	20	ER 20 Ø2-Ø13	LB 10 IIM	381103
												LB 200	381103
30	76	55	47	14	64	32	32	75	6000	20	ER 20 Ø2-Ø13	LT 10 M	331200
40	114	69	78,5	24	78	39	40	96	5000	60	ER 20 Ø2-Ø20	LB 15 IIM	31203B
												LB 300	65-19632
												LVT 300	65-19632
40	114	69	78,5	32	78	39	40	96	5000	60	ER 32 Ø2-Ø20	LB 25 IIM	31203D
												LB 400	31203D
40	116	69	78,5	32	78	39	40	96	5000	60	ER 40 Ø3-Ø30	LB 25 IIM	328900
40	116	69	78,5	32	78	39	40	96	5000	60	ER 40 Ø3-Ø30	LVT 400	333900
40	78	69	45	24	80	40	40	96	5000	60	ER 32 Ø2-Ø20	LT 15 MY	318800
40	78	61	42,5	32	104	52	52	-	5000	60	ER 32 Ø2-Ø20	LT 25M	65-21420
50	117,5	78	71,5	40	84	42	47	98	4000	100	ER 40 Ø3-Ø30	LB 35 IIM	3107305
60	155	89	101	40	98	49	49	122	3000	150	ER 50 Ø7-Ø34	LB 45 IIM	321700

Modulo radiale per utensili rotanti RR 200 per torni OKUMA

Radial tool head RR 200 for OKUMA lathes

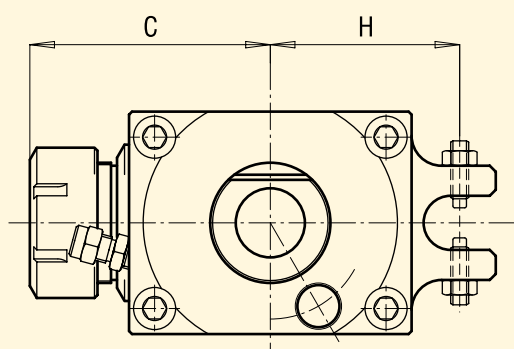


Rapporto di trasmissione = 1/1 standard
 Rapporto di trasmissione = 1/2 a richiesta
 Ratio = 1/1 Standard
 Ratio = 1/2 On request

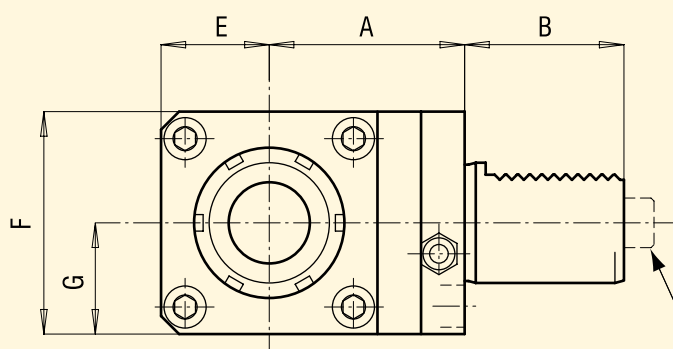
Ø VDI	A	B	C	D	E	F	G	H	I	L	n. max	M Nm	Tipo pinza Collet type	Tipo Type	Codice Item
30	65	45	30	30,5	81,5	63	68	91	50	14	4000	20	ER 20 ø2-ø13	LB 10 IIM	382103
														LB 200	382103
30	65	45	45	30,5	81,5	63	68	91	50	14	4000	20	ER 25 ø2-ø16	LB 10 IIM	318600
														LB 200	318600
40	85	69	45	40	103	70	80	120	60	24	3000	45	ER 32 ø2-ø20	LB 15 IIM	341203B
														LB 300	65-19581
40	85	69	45	40	103	70	80	120	60	32	3000	45	ER 32 ø2-ø20	LB 25 IIM	341203B
														LB 400	341203C
40	85	69	53	40	103	70	80	120	60	32	3000	45	ER 40 ø3-ø26	LB 25 IIM	329000
50	85	78	43	47	103	90	96	125	63	40	3000	65	ER 40 ø3-ø26	LB 35 IIM	3108305
60	120	94	74	50	145,5	90	106	170	106	40	2500	80	ER 50 ø7-ø34	LB 45 IIM	-

Modulo radiale per utensili rotanti RR 300 per torni OKUMA

Radial tool head RR 300 for OKUMA lathes

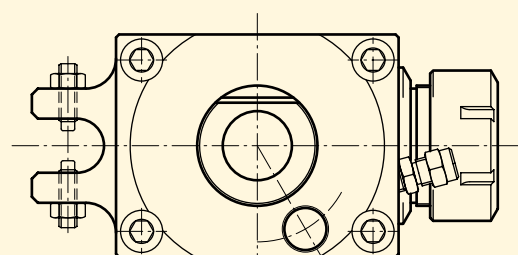


Versione DX
Righth-Hand type

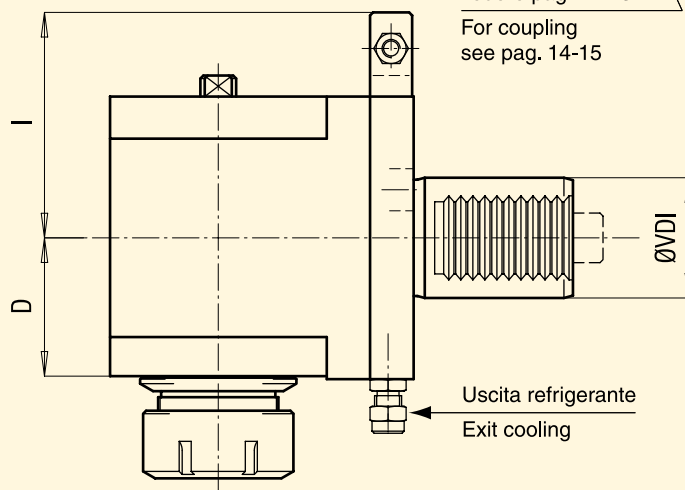


Per la presa di moto
vedere pag. 14-15

For coupling
see pag. 14-15



Versione SX
Left-Hand type

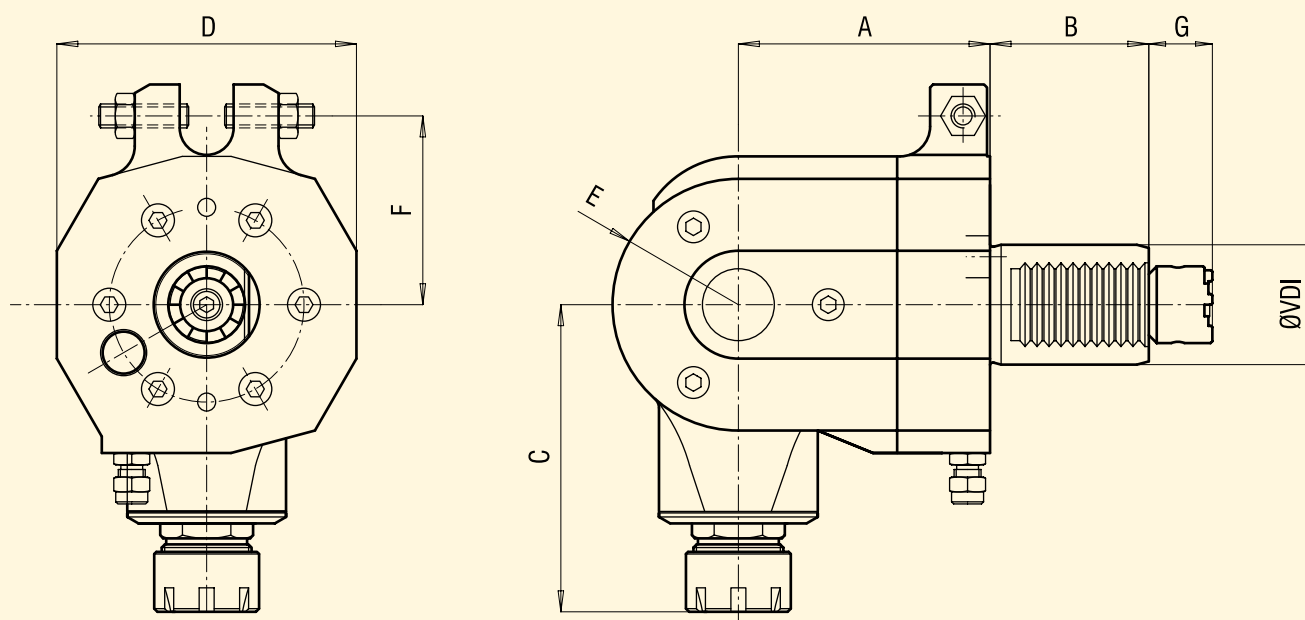


Uscita refrigerante
Exit cooling

Ø VDI	A	B	C	D	E	F	G	H	I	n. max	M Nm	Tipo pinza Collet type	Tipo Type	Codice Item
30	85	55	62	14	34,5	64	55,5	45,5	28	6000	20	ER 20 ø2-ø13	LT 10	331300
30	54	55	62	14	34,5	64	55,5	63	28	6000	20	ER 20 ø2-ø13	LB 10 IIM	-
													LB 200	-
40	65	69	80	24	47	74	78	70	36	4000	45	ER 32 ø2-ø20	LB 15 IIM	313600
													LB 300	313600
40	65	69	80	32	47	74	78	70	36	4000	45	ER 32 ø2-ø20	LB 25 IIM	-
													LB 400	-
40	90	69	80	24	47	74	63	54	36	4000	45	ER 32 ø2-ø20	LT 15 MY	318700
40	65	69	80	24	47	74	98	90	36	4000	45	ER 32 ø2-ø20	LVT 300 M	333800
40	75	69	99	32	60	88	98	90	38	4000	50	ER 40 ø2-ø30	LVT 400 M	334000
50	85	78	99	28	60	88	102	90	38	4000	65	ER 40 ø2-ø30	LB 35 IIM	332800
60	120	89	130	40	85	106	108	90	50	2500	80	ER 50 ø7-ø34	LB 45 IIM	-

Modulo rotante orientabile RO 700 per torni OKUMA

Heads with swivelling spindle RO 700 for OKUMA lathes



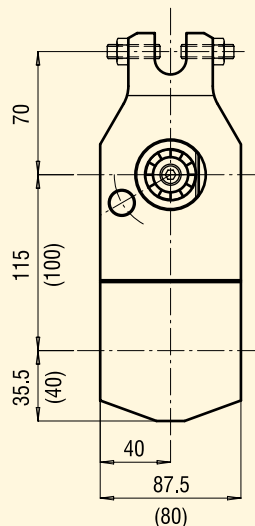
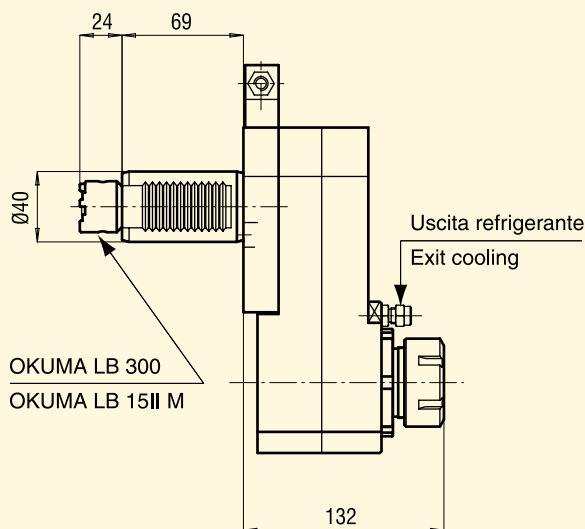
Ø VDI	A	B	C	D	E	F	G	Tipo pinza Collet type	I	Tipo Type	Codice Item
30	63	55	81	91	38	63	14	ER 25 Ø2-Ø16	1/1	LB 10 IIM	333500
										LB 200	333500
30	63	55	81	91	38	46	14	ER 25 Ø2-Ø16	1/1	LT 10 M	336000
40	84	69	102,5	100	42	70	24	ER 25 Ø2-Ø16	1/1	LB 15 IIM	37203
										LB 300	37203
40	84	69	102,5	100	42	70	32	ER 25 Ø2-Ø16	1/1	LB 25 IIM	315600
										LB 400	315600
40	84	69	102,5	100	42	50	24	ER 25 Ø2-Ø16	1/1	LT 15 MY	316500
50	84	78	102,5	100	42	90	28	ER 25 Ø2-Ø16	1/1	LB 35 IIM	37303B
60	84	89	102,5	100	42	90	40	ER 25 Ø2-Ø16	1/1	LB 45 IIM	-

Modulo assiale disassato per utensili rotanti RAS 101 40

Off-centre axial head for rotating tools RAS 101 40

Codice per LB 15 II M: 65 -19633 (dimensioni tra parentesi vedi figura) - (Dimension in bracket see draw)

Codice per LB 300: 335200



Nr. Giri max = 3000 min.-1
Coppia max = 54 Nm
Rapporto di trasmissione = 1 : 1
Pinze ER 32
Capacità $\varnothing 2 - \varnothing 20$

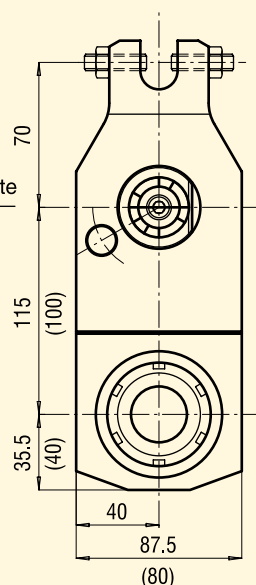
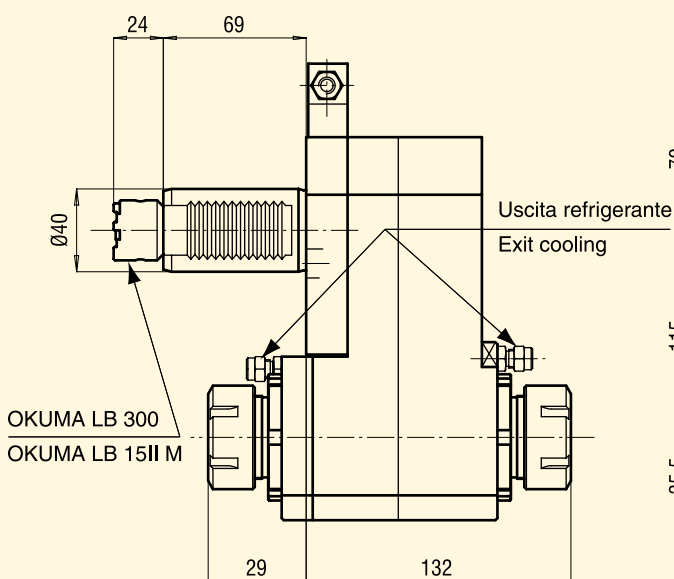
Max revolution = 3000 min. -1
Couple max = 54 Nm
Ratio = 1:1
Collets ER 32
Capacity $\varnothing 2 - \varnothing 20$

Modulo assiale disassato per utensili rotanti RAS 101 40 2U

Off-centre axial head for rotating tools RAS 101 40 2U

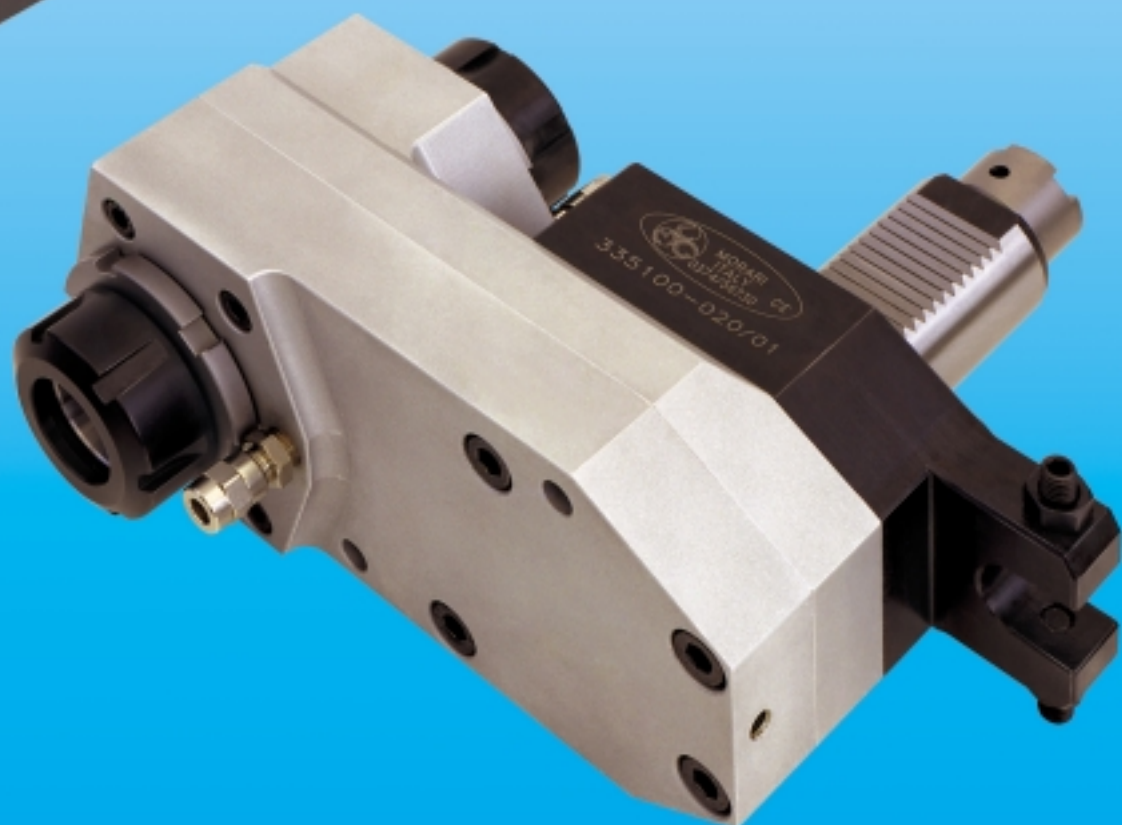
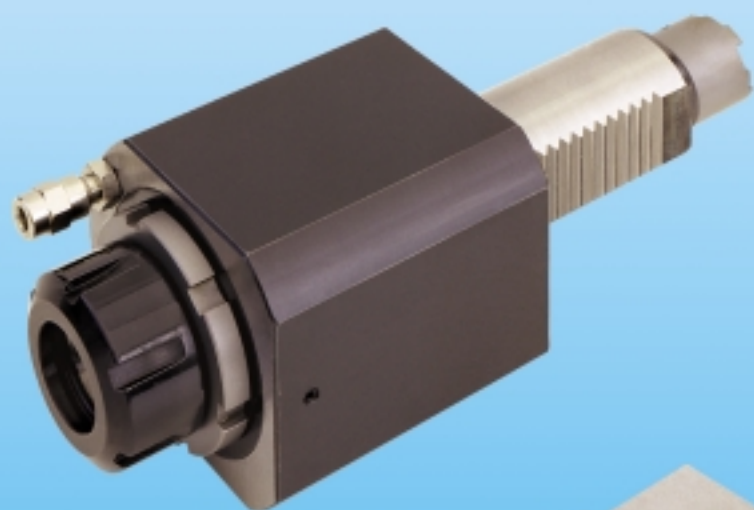
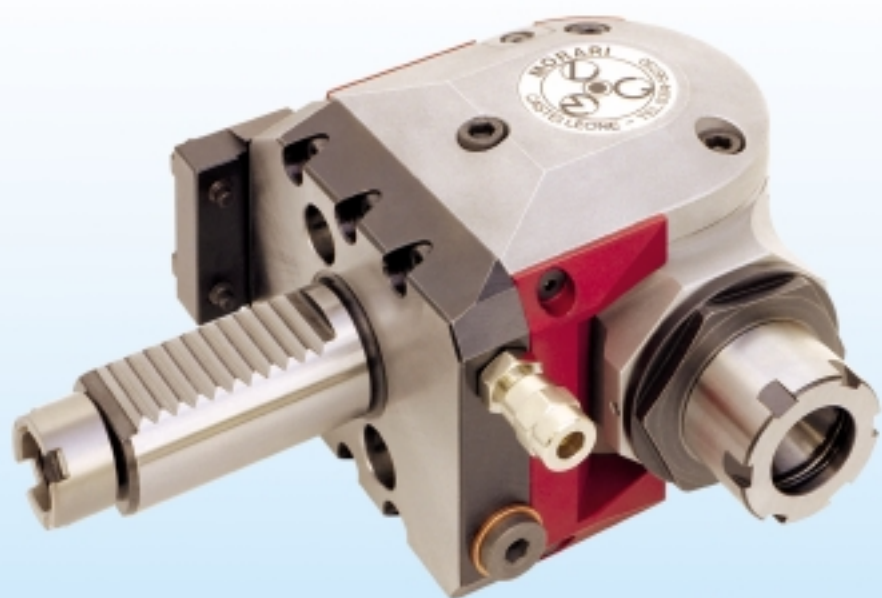
Codice per LB 15 II M: 65 -19940 (dimensioni tra parentesi vedi figura) - (Dimension in bracket see draw)

Codice per LB 300: 335100



Nr. Giri max = 3000 min.-1
Coppia max = 54 Nm
Rapporto di trasmissione = 1 : 1
Pinze ER 32
Capacità $\varnothing 2 - \varnothing 20$

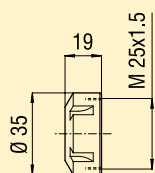
Max revolution = 3000 min. -1
Couple max = 54 Nm
Ratio = 1:1
Collets ER 32
Capacity $\varnothing 2 - \varnothing 20$



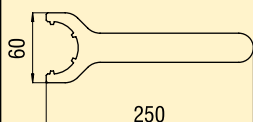


Accessori per moduli rotanti con pinza ER 20 - Tool head equipment with collet ER 20

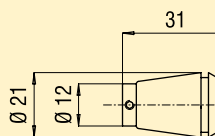
Ghiera G 20 S cd 140G20S
Nut G20 S item 140GG20S



Chiave CH20 S cd
250CH20S
Key CH20 S item
250CH20S

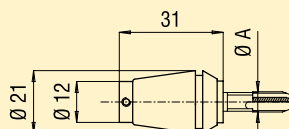


Pinza ER 20 DIN 6499
Collet ER 20 DIN 6499



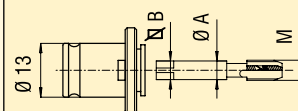
Ø A	Codice
1	2100052
1,5	2100053
2	2100054
2,5	2100055
3	2100056
4	2100057
5	2100058
6	2100059
7	2100060
8	2100061
9	2100062
10	2100063
11	2100064
12	2100065
13	2100066

Pinze portamaschio
con compensazione in trazione
ERC 20 TP



M	Ø A	≠ B	Codice
M 1	2,5	2,1	2100100
M 2	2,8	2,1	2100101
M 2,5	2,8	2,1	2100101
M 3	3,5	2,7	2100103
M 3,5	4	3	2100105
M 4	4,5	3,4	2100107
M 5	6	4,9	2100109
M 6	6	4,9	2100109
M 8	6	4,9	2100109
M 10	7	5,5	2100111

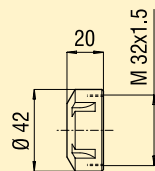
Bussola portamaschi



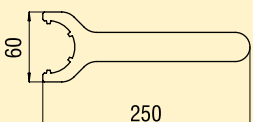
M	Ø A	≠ B	Codice
M 1	2,5	2,1	389100
M 2	2,8	2,1	389101
M 2,5	2,8	2,1	389101
M 3	3,5	2,7	389103
M 3,5	4	3	389105
M 4	4,5	3,4	389107
M 5	6	4,9	389109
M 6	6	4,9	389109
M 8	6	4,9	389109
M 8	8	6,3	607828
M 10	7	5,5	389111

Accessori per moduli rotanti con pinza ER 25 - Tool head equipment with collet ER 25

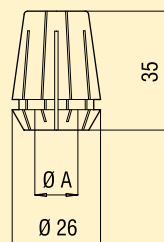
Ghiera G 25 S cd 140G25S
Nut G25 S item 140GG25S



Chiave CH25 S cd
250CH25S
Key CH25 S item
250CH25S

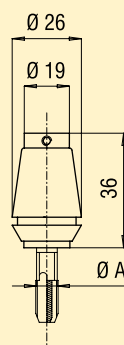


Pinza ER 25 DIN 6499
Collet ER 25 DIN 6499



Ø A	Codice
1,5	2000050
2	2000051
2,5	2000052
3	2000053
4	2000054
5	2000055
6	2000056
7	2000057
8	2000058
9	2000059
10	2000060
11	2000061
12	2000062
13	2000063
14	2000064
15	2000065
16	2000066

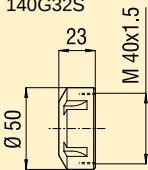
Pinze portamaschio
con compensazione
in trazione



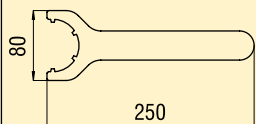
M	Ø A	≠ B	Codice
M 3,5	4	3	2000100
M 4	4,5	3,4	2000101
M 5	6	4,9	2000102
M 6	6	4,9	2000102
M 8	6	4,9	2000102
M 10	7	5,5	2000103
M 8	8	6,3	2000104
M 10	10	8	2000105
M 12*	9	7,1	2000106

Accessori per moduli rotanti con pinza ER 32 - Tool head equipment with collet ER 32

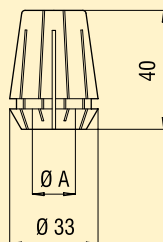
Ghiera G32 S
cd 140G32S
Nut G32 S
item 140G32S



Chiave CH 32 S
cd 250CH32S
Key CH 32 S
item 250CH32S

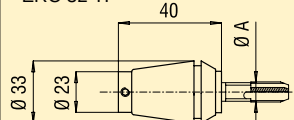


Pinza ER 32 DIN 6499
Collet ER 32 DIN 6499



Ø A	Codice
2	2200052
3	2200053
4	2200054
5	2200055
6	2200056
7	2200057
8	2200058
9	2200059
10	2200060
11	2200061
12	2200062
13	2200063
14	2200064
15	2200065
16	2200066
17	22000627
18	2200068
19	2200069
20	2200070

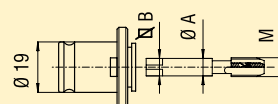
Pinze portamaschio
con compensazione in trazione
ERC 32 TP



M	Ø A	≠ B	Codice
M 4	4,5	3,4	2200100
M 5	6	4,9	2200101
M 6	6	4,9	2200101
M 8	6	4,9	2200101
M 8	8	6,3	2200102
M 10	7	5,5	2200103
M 10	10	8	2200104
M 12	9	7,1	2200105
M 14	11	9	2200106
M 16*	12	9	2200107

* solo per materiali a bassa resistenza

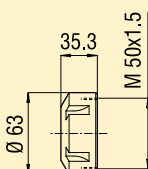
Bussola portamaschi



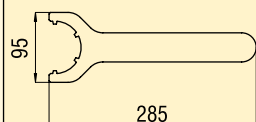
M	Ø A	≠ B	Codice
M 3	3,5	2,7	389115
M 3,5	4	3	389117
M 4	4,5	3,4	389119
M 5	6	4,9	389121
M 6	6	4,9	389121
M 8	6	4,9	389121
M 8	8	6,3	389124
M 10	7	5,5	389123
M 10	10	8	389126
M 12	9	7,1	389125

Accessori per moduli rotanti con pinza ER 40 - Tool head equipment with collet ER 40

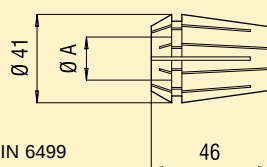
Ghiera G40 S
cd 140G40S
Nut G40 S
item 140G40S



Chiave CH40 S
cd 250CH40S
Key CH40 S
item 250CH40S

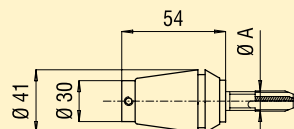


Pinza ER 40 DIN 6499
Collet ER 40 DIN 6499



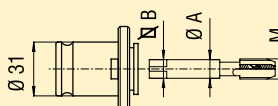
Ø A	Codice	Ø A	Codice
3	2300052	17	2300066
4	2300053	18	2300067
5	2300054	19	2300068
6	2300055	20	2300069
7	2300056	21	2300070
8	2300057	22	2300071
9	2300058	23	2300072
10	2300059	24	2300073
11	2300060	25	2300074
12	2300061	26	2300075
13	2300062	27	2300076
14	2300063	28	2300077
15	2300064	29	2300078
16	2300065	30	2300079

Pinze portamaschio
con compensazione in trazione
ERC 40 TP



M	Ø A	≠ B	Codice
M 5	6	4,9	2300101
M 6	6	4,9	2300101
M 8	6	4,9	2300101
M 8	8	6,2	2300102
M 10	7	5,5	2300103
M 10	10	8	2300104
M 12	9	7	2300105
M 14	11	9	2300106
M 16	12	9	2300107
M 18*	14	11	2300108
M 20*	16	12	2300109

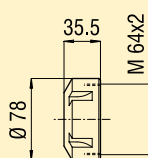
Bussola portamaschi



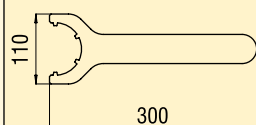
M	Ø A	≠ B	Codice
M 5	3,5	4,9	389127
M 6	3,5	4,9	389127
M 8	3,5	4,9	389127
M 8	8	6,3	389130
M 10	7	5,5	389129
M 10	10	8	189132
M 12	9	7,1	389131
M 14	11	9	389133
M 16	12	9	389135
M 18	14	11	389137
M 20	16	12	389139

Accessori per moduli rotanti con pinza ER 50 - Tool head equipment with collet ER 50

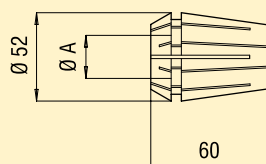
Ghiera G50 S cd 140G50S
Nut G50 S item 140G50S



Chiave CH50 S cd
250CH50S
Key CH50 S item
250CH50S

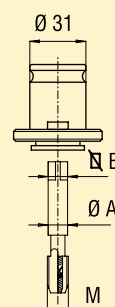


Pinza ER 50 DIN 6499
Collet ER 50 DIN 6499



Ø A	Codice	Ø A	Codice	Ø A	Codice
7	3400007	17	3400017	27	3400027
8	3400008	18	3400018	28	3400028
9	3400009	19	3400019	29	3400029
10	3400010	20	3400020	30	3400030
11	3400011	21	3400021	31	3400031
12	3400012	22	3400022	32	3400032
13	3400013	23	3400023	33	3400033
14	3400014	24	3400024	34	3400034
15	3400015	25	3400025		
16	3400016	26	3400026		

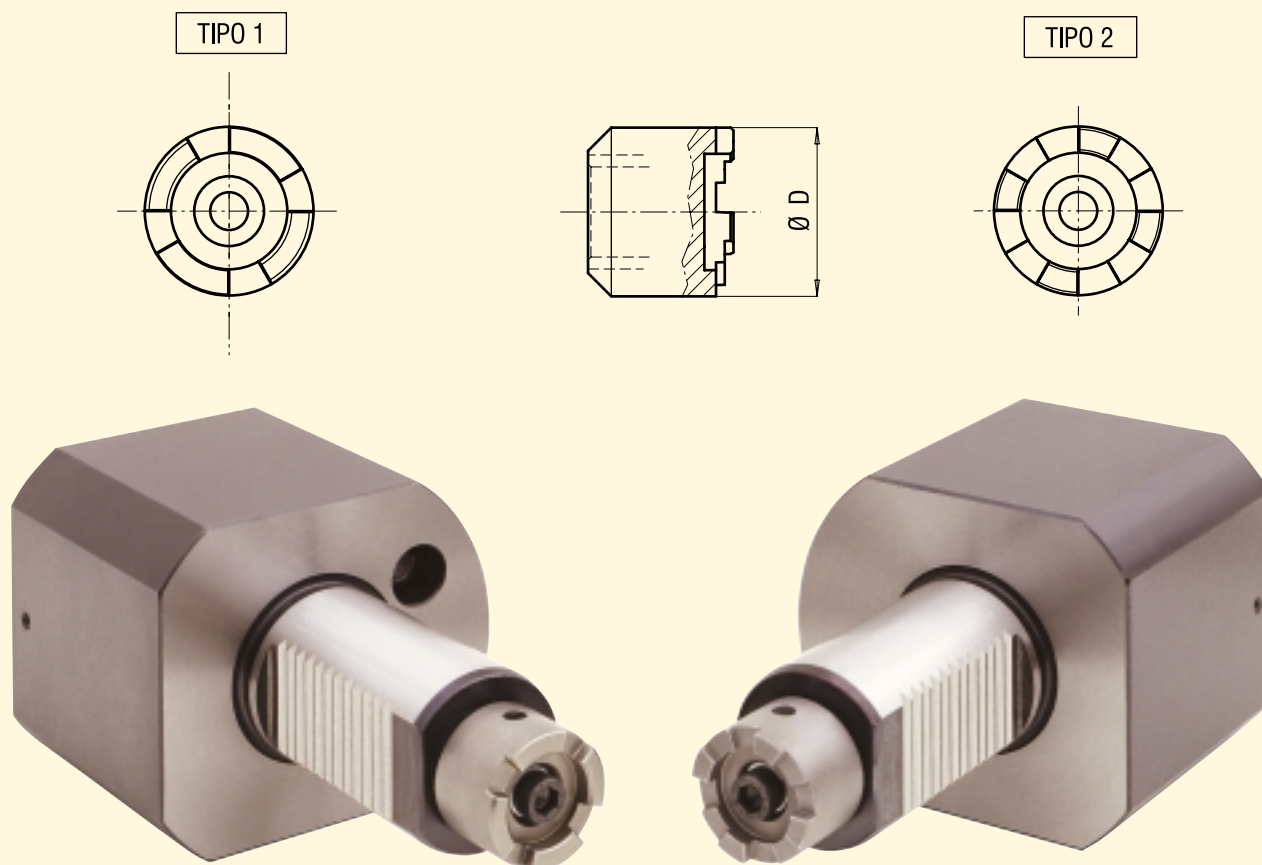
Bussola portamaschi



M	Ø A	≠ B	Codice
M 5	3,5	4,9	389127
M 6	3,5	4,9	389127
M 8	3,5	4,9	389127
M 8	8	6,3	389130
M 10	7	5,5	389129
M 10	10	8	189132
M 12	9	7,1	389131
M 14	11	9	389133
M 16	12	9	389135
M 18	14	11	389137
M 20	16	12	389139

Presa di moto per torni OKUMA

Coupling for CNC OKUMA

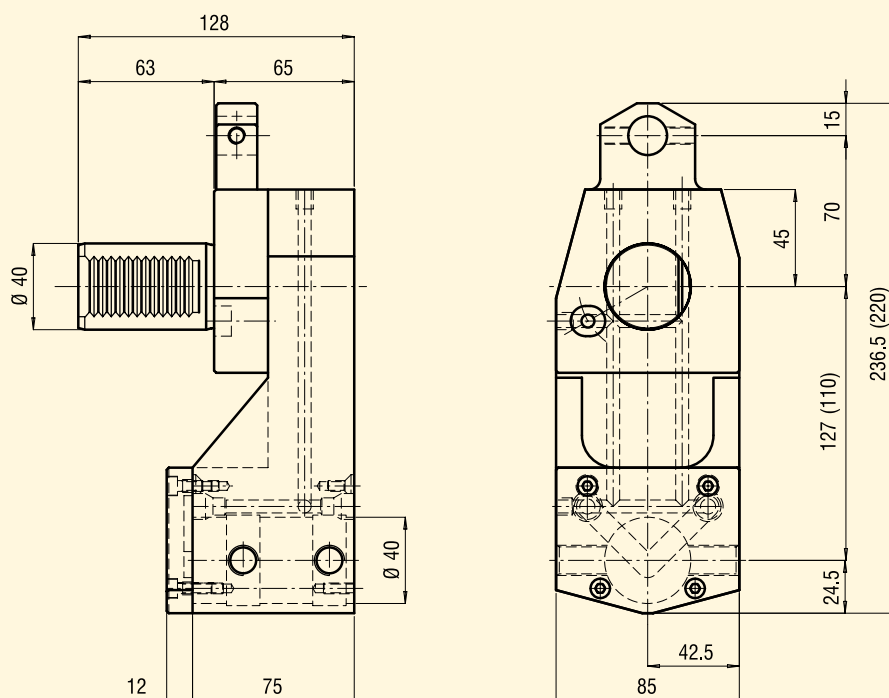


MACCHINA	TIPO	$\varnothing D$	CODICE
LB 10 IIM	TIPO 1	24	0374114
LB 200			
LT 10 M			
LB 15 IIM	TIPO 1	29	0341240-2
LB 300			
LT 15 MY			
LVT 300 M	TIPO 1	35	0341260
LB 25 IIM			
LB 400			
LT 25 M			
LVT 400 M	TIPO 1	42	031380
LB 35 IIM			
LB 45 IIM	TIPO 1	45	0312103



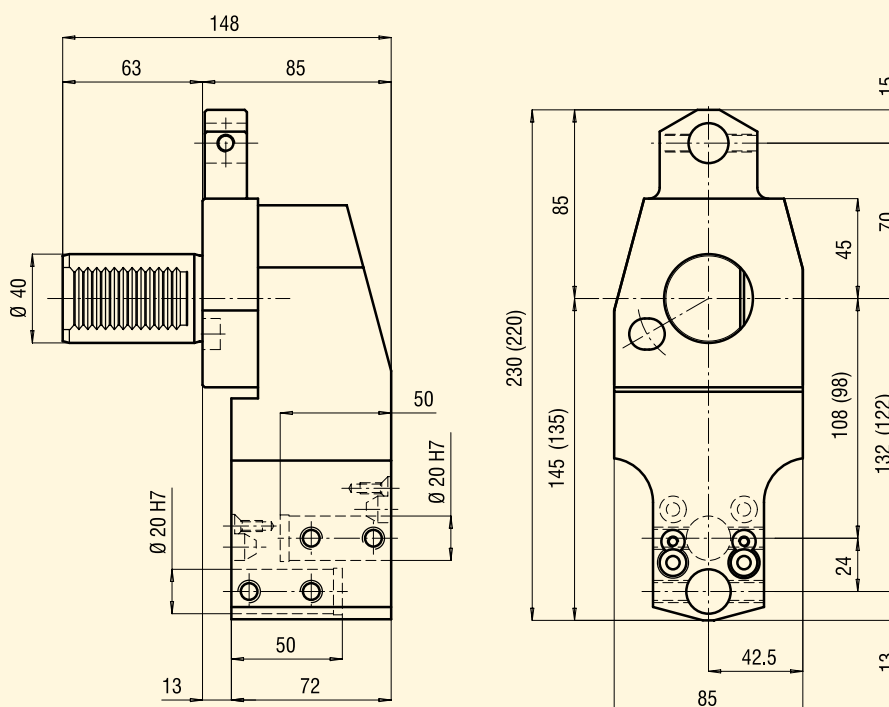
Portabareno spiazzato con refrigerazione interna/esterna *Off-centre boring bar holder with internal/external coolant*

Codice per LB15 - IIM 65-20432 (dimensioni tra parentesi vedi figura) - (Dimention in bracket see draw)
Codice per LB300 MW 65-25991



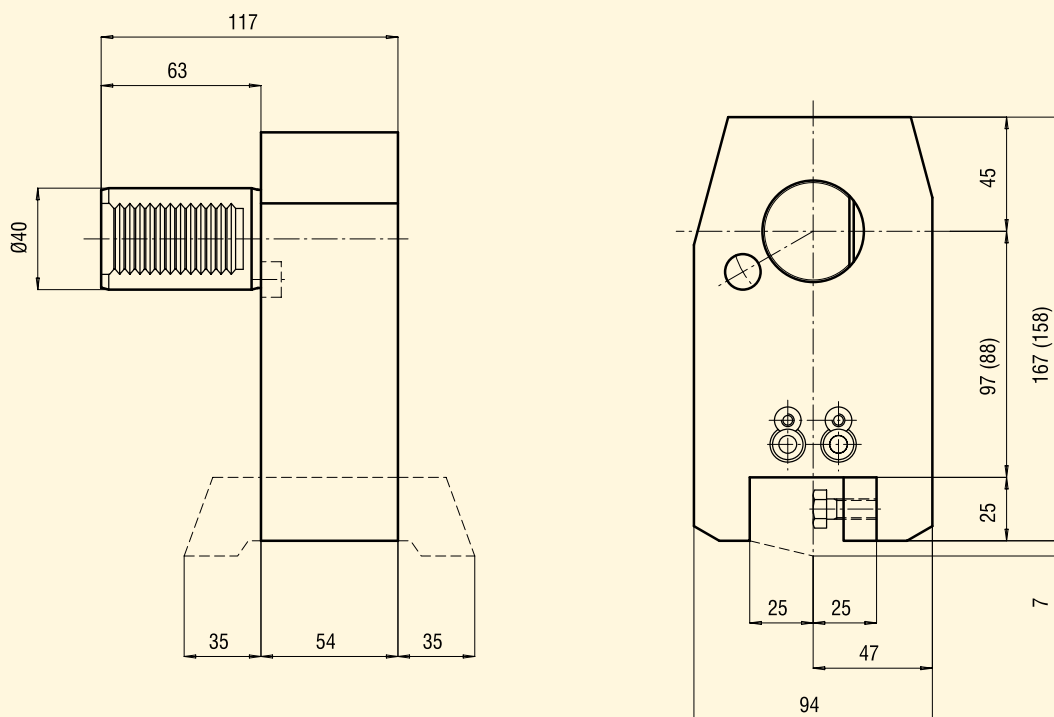
Portabareno spiazzato a doppio interasse *Off-centre boring bar holder with double tools*

Codice per LB15 - IIM 65-20433 (dimensioni tra parentesi vedi figura) - (Dimention in bracket see draw)
Codice per LB300 MW 65-25996



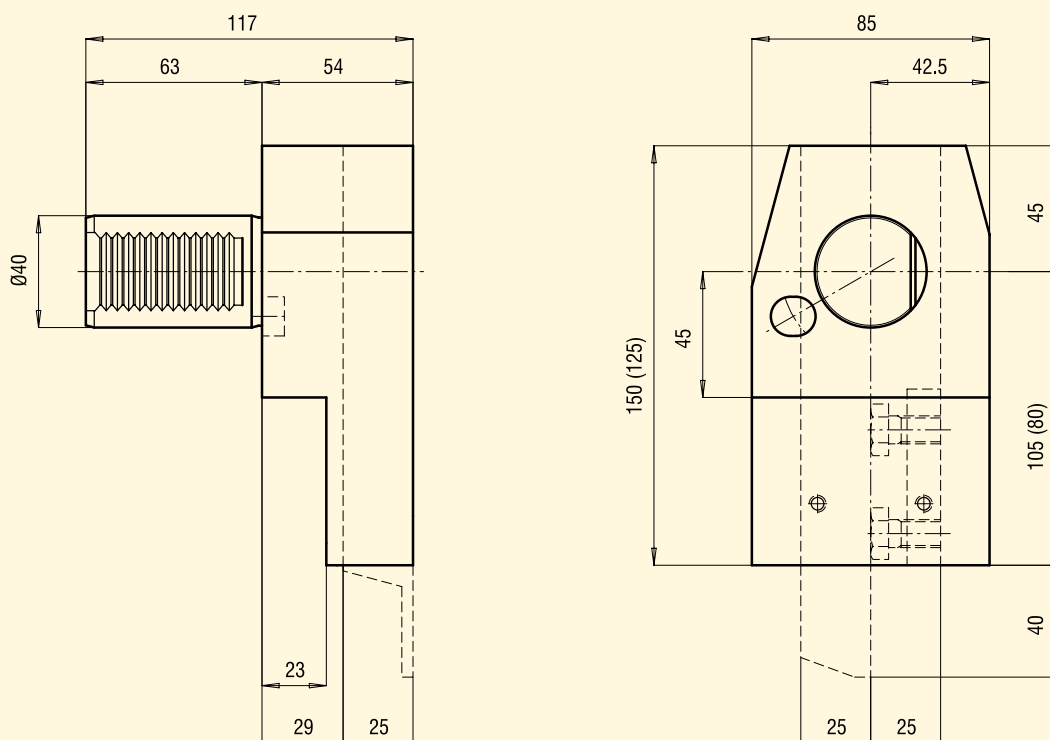
Portautensile per esterni/interni prolungato *Inside/outside extended tool holder*

Codice per LB15 - IIM 65 - 20436 (dimensioni tra parentesi vedi figura) - (Dimention in bracket see draw)
Codice LB300 MW 65 - 25992



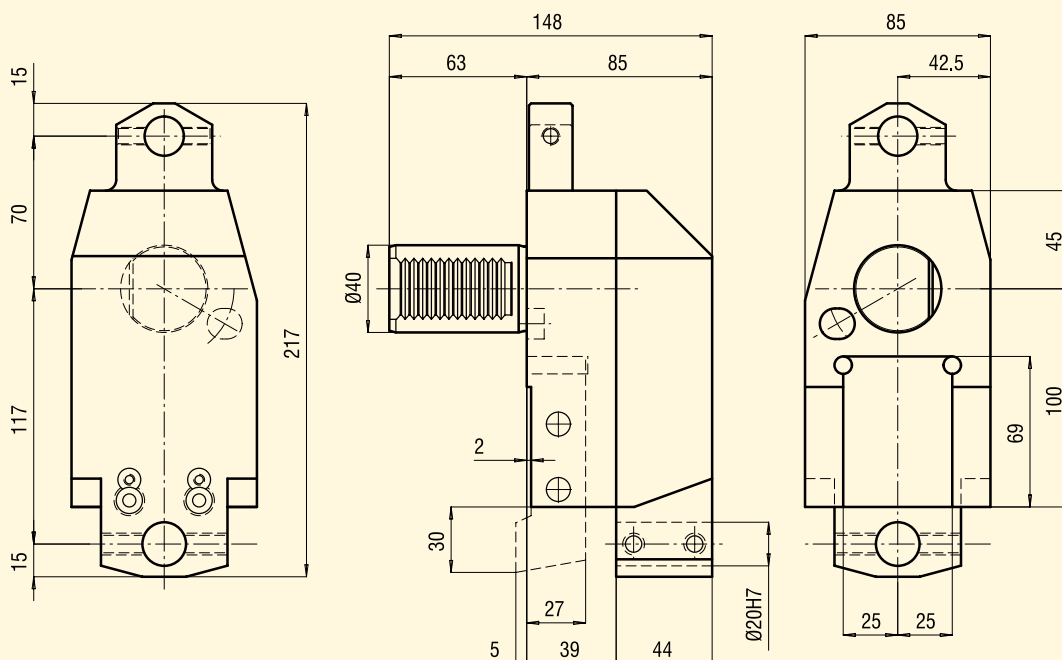
Portautensile per troncatore *Tool holder for cut of tool*

Codice per LB15 - IIM 65 - 20472 (dimensioni tra parentesi vedi figura) - (Dimention in bracket see draw)
Codice LB300 MW 65 - 25993



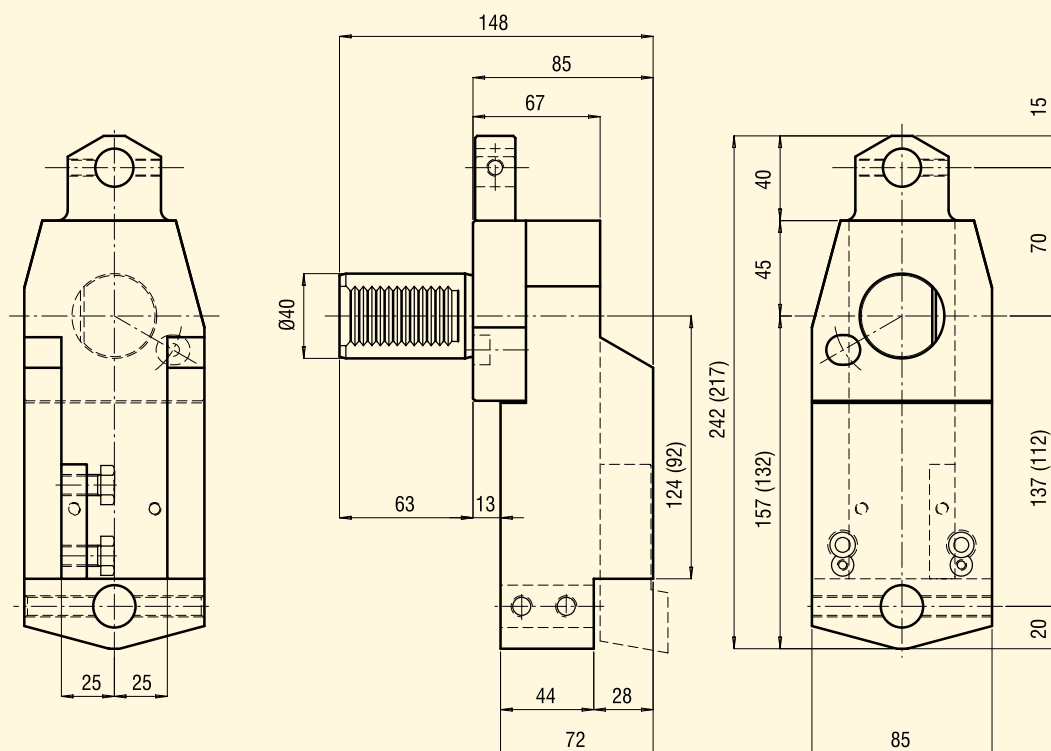
Portautensile per esterni / interni combinato *Inside/outside double tool holder*

Codice per LB15 - IIM - 20473 e LB300 MW 65 - 20434



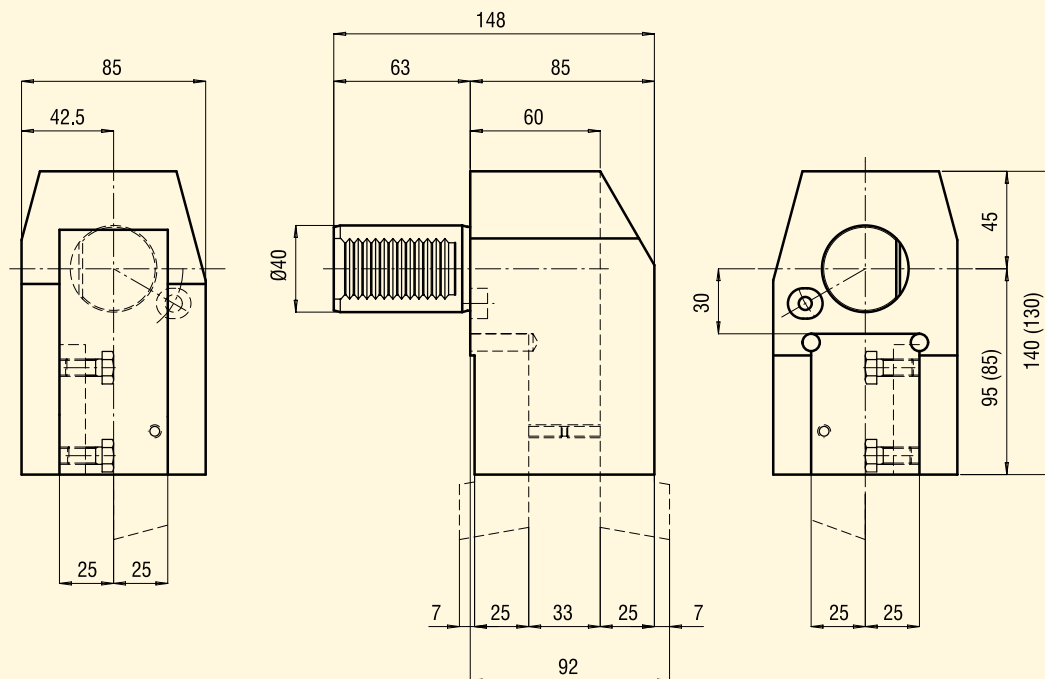
Portautensile per esterni / interni combinato *Inside/outside double tool holder*

Codice per LB15 - IIM - 20473 (dimensioni tra parentesi vedi figura) - (Dimension in bracket see draw)
LB300 MW 65 - 6525995



Portabareno per esterni doppio *Outside double tool holder*

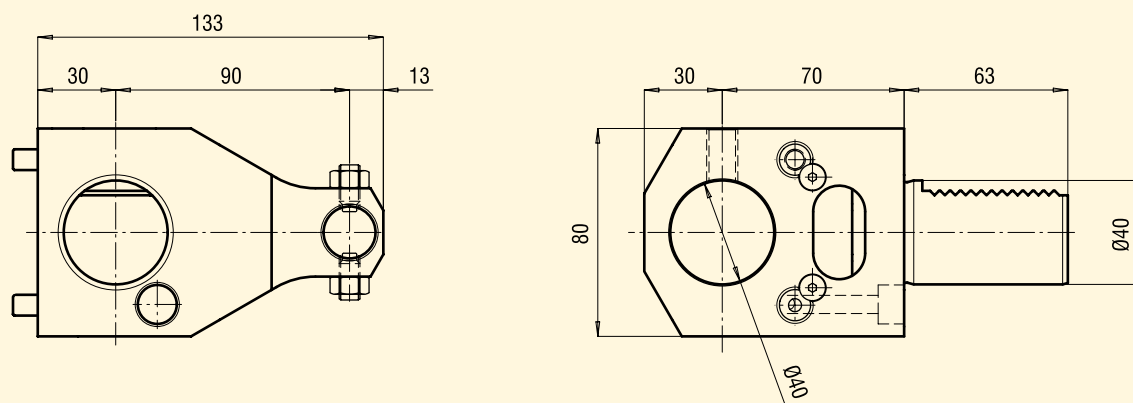
Codice per LB15 -IIM 65-20462 (dimensioni tra parentesi vedi figura) - (Dimension in bracket see draw)
Codice per LB300 MW 65-25994



Portabareno spiazzato con refrigerazione interna/esterna LVT 300/400

Of - centre boring bar holder with internal/external coolant for LVT 300/400

Codice 65 - 26416



Portautensile per esterni doppio per LVT 300/400

Outside double tool holder for LVT 300/400

Codice 65 - 26417

