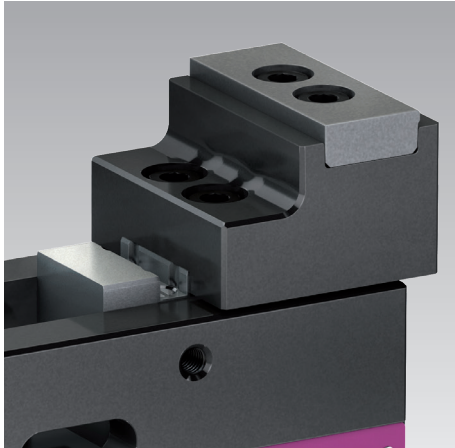


Accessories for Workholding Systems MC-P

Clamping jaws and jaw inserts, accessories for mounting, positioning and operation

Clamping jaws / jaw inserts

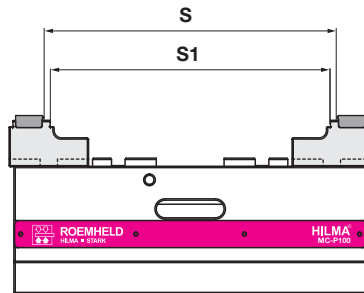
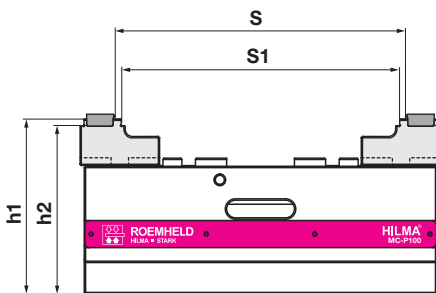


Scope of delivery - clamping jaws

All clamping jaws are supplied with fixing screws.
Reversible step jaws are always delivered without jaw inserts.
They are to be ordered separately as accessories (see page 3).

Important notes

- By the use of clamping jaws with grip jaw inserts, the jaw opening is reduced by approx. 4 mm.
- Technical information and application recommendations for jaw inserts see page 3
- All MC-P workholding systems are delivered without clamping jaws.
 1. Selection: clamping jaws
 2. Selection: jaw inserts (see page 3)
- Reversible step jaws for jaw inserts can only be used in combination with the appropriate jaw inserts.

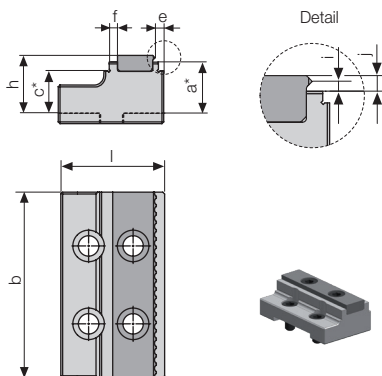


S: Clamping range
step at the jaw insert

S1: Clamping range
step at the jaw body

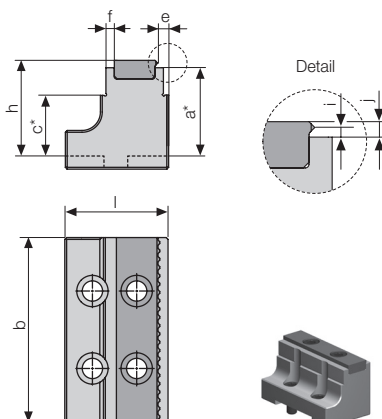
h1: Height of support
step at the jaw insert

h2: Height of support
step at the reversible step jaw



Reversible step jaws, flat for 1 jaw insert hardened and ground

Type	Part no.	Dimensions									Clamping range		Height of support	
		l	b	h	a	c	e	f	i	j	S	S1	h1	h2
MC-P 60	945836901	56	60	22	18	-	4.5	6	2.5	4	12-126	-	88	-
MC-P 60 ZH	945836901	56	60	22	18	-	4.5	6	2.5	4	12-126	-	98	-
MC-P 100	945856901	59	100	29	25	15	4.5	6	2.5	4	18-204	6-192	125	115
MC-P 125	945866901	91	125	34	30	20	4.5	6	2.5	4	18-400	6-388	160	150
MC-P 125 Compact	945866901	91	125	34	30	20	4.5	6	2.5	4	18-215	6-203	160	150

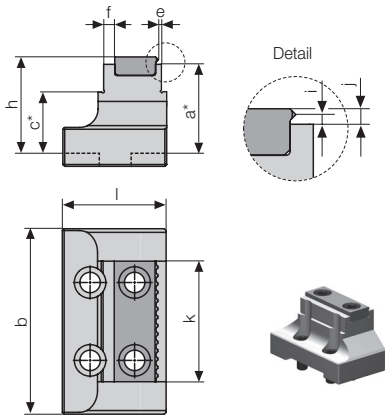


Reversible step jaws for 1 jaw insert hardened and ground

Type	Part no.	Dimensions									Clamping range		Height of support	
		l	b	h	a	c	e	f	i	j	S	S1	h1	h2
MC-P 60	945836902	56	60	34	30	-	4.5	6	2.5	4	12-126	-	100	-
MC-P 60 ZH	945836902	56	60	34	30	-	4.5	6	2.5	4	12-126	-	110	-
MC-P 100	945856902	59	100	54	50	35	4.5	6	2.5	4	18-204	6-192	150	135
MC-P 125	945866902	91	125	66	62	42	4.5	6	2.5	4	18-400	6-388	192	172
MC-P 125 Compact	945866902	91	125	66	62	42	4.5	6	2.5	4	18-215	6-203	192	172

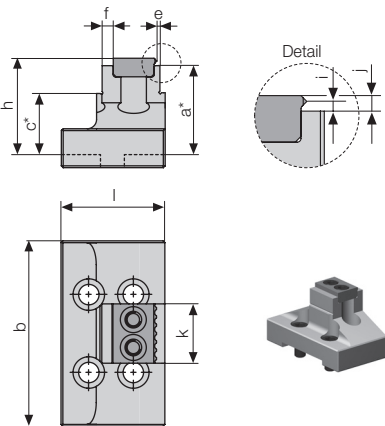
All dimensions in [mm]

Accessories Clamping jaws



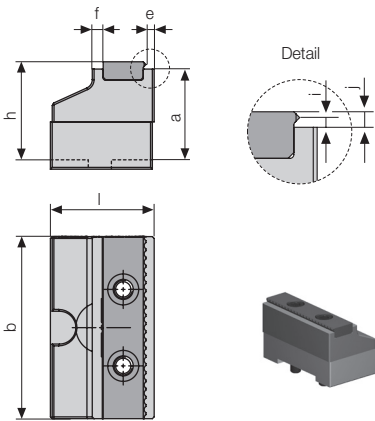
Reversible step jaws for 1 jaw insert hardened and ground, various widths

Type	Part no.	Dimensions										Clamping range		Height of support	
		l	b	h	a	c	e	f	i	j	k	S	S1	h1	h2
MC-P 60	945836903	56	60	34	30	-	4.5	6	2.5	4	35	12-126	-	100	-
MC-P 60 ZH	945836903	56	60	34	30	-	4.5	6	2.5	4	35	12-126	-	110	-
MC-P 100	945856903	59	100	54	50	35	4.5	6	2.5	4	65	18-204	6-192	150	135
MC-P 125	945866903	91	125	66	62	42	4.5	6	2.5	4	80	18-400	6-388	192	172
MC-P 125 Compact	945866903	91	125	66	62	42	4.5	6	2.5	4	80	18-215	6-203	192	172



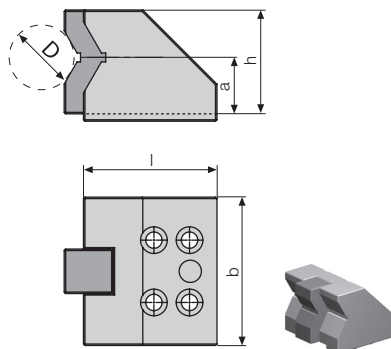
Reversible step jaw for 1 jaw insert hardened and ground, various widths

Type	Part no.	Dimensions										Clamping range		Height of support	
		l	b	h	a	c	e	f	i	j	k	S	S1	h1	h2
MC-P 100	945856904	59	100	54	50	35	4.5	6	2.5	4	32	18-204	6-192	150	135



Pendulum jaws for 1 jaw insert hardened and ground

Type	Part no.	Dimensions							Clamping range S	Height of support h1	
		l	b	h	a	e	f	i			j
MC-P 100	945856905	56	100	54	50	4.5	6	2.5	4	12-204	150
MC-P 125	945866905	88	125	66	62	4.5	6	2.5	4	12-400	192
MC-P 125 Compact	945866905	88	125	66	62	4.5	6	2.5	4	12-215	192



Vee jaws with horizontal prism with interchangeable insert, hardened

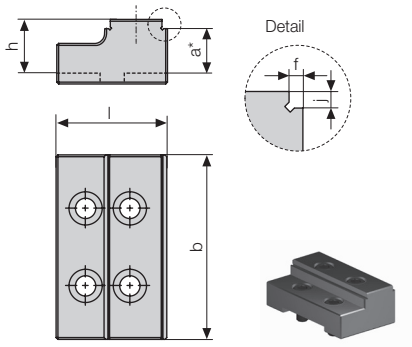
Type	Part no.	Dimensions				Clamping range D	Clamping centre h1
		l	b	h	a		
MC-P 60	945836921	60	60	70	40	D 10-76	110
MC-P 60 ZH	945836921	60	60	70	40	D 10-76	120
MC-P 100	945856921	90	100	70	38	D 12-80	138

Vee jaws with vertical prism on request

* Tolerance ±0.01
All dimensions in [mm]

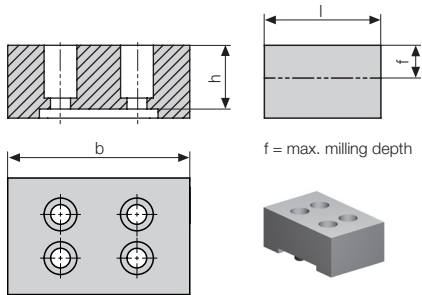
Accessories

Clamping jaws / jaw inserts



Reversible jaws with step hardened

Type	Part no.	Dimensions						Clamping range S	Height of support h1
		l	b	h	a	f	j		
MC-P 40	94581 6931	36	40	15	12	3	3	6-79	64
MC-P 60	94583 6931	49	60	23	18	3	5	6-150	88
MC-P 60 ZH	94583 6931	49	60	23	18	3	5	6-150	98
MC-P 100	94585 6931	60	100	30	25	3	5	6-204	125
MC-P 125	94586 6931	80	125	35	30	5	5	6-400	160
MC-P 125 Compact	94586 6931	80	125	35	30	5	5	6-215	160



Block jaws, soft for milling workpiece contours

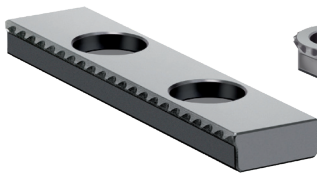
Type	Part no.	l	Dimensions		
			b	h	f
MC-P 40	94581 6932	36	40	16	6
MC-P 60	94583 6932	42	60	25	8
MC-P 100	94585 6932	64	100	35	18
MC-P 125	94586 6932	88	125	55	32
MC-P 125 Compact	94586 6932	88	125	55	32

* Tolerance ±0.01
All dimensions in [mm]

Interchangeable jaw inserts

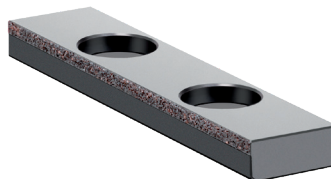
see also: data sheet WS 12-SE Technical information "Jaw inserts for clamping jaws"

Jaw inserts grip serrated

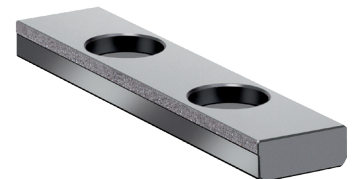


Grip/smooth

Jaw inserts with coatings



Hard metal coarse/smooth
Hardness 58 HRC
Grain size 0.3 – 0.5 mm



TUC/smooth
Hardness 80 HRC
Coarseness RA 10

Recommendation for jaw inserts to increase the retention forces

Workpiece material	Workpiece surface	Workpiece surface				
		rolled / cast / forged	drawn	sawn	milled	ground
Steel, e.g. C45, 20MnCr5, 31CrMoV9		HM coarse, Grip	TUC	HM coarse, Grip	TUC	TUC
Heat-treated steel e.g. C45 induction-hardened, 20 Mn Cr 5 case-hardened, 31 Cr Mo V9 nitrided					TUC	TUC
Cast e.g. GG, red bronze		HM coarse, Grip			TUC	TUC
Titanium			TUC		TUC	TUC
Aluminium		HM coarse, Grip		Grip		TUC
Non-ferrous metals				Grip		TUC

Part numbers

Type	Part no.	Part no.	Part no.
MC-P 60	Jaw width 60	Jaw width 35	
Jaw inserts Grip/smooth	550500543	550500545	
Jaw inserts HM coarse/smooth	550500635	550500740	
Jaw inserts TUC/smooth	550500743	550500744	
MC-P 100	Jaw width 100	Jaw width 65	Jaw width 32
Jaw inserts Grip/smooth	550500542	550500471	550500470
Jaw inserts HM coarse/smooth	550500523	550500723	550500741
Jaw inserts TUC/smooth	550500586	550500745	550500746
Jaw inserts Grip round with fixing screw	932856001		
MC-P 125	Jaw width 125	Jaw width 80	
Jaw inserts Grip/smooth	550500509	550500547	
Jaw inserts HM coarse/smooth	550500660	550500742	
Jaw inserts TUC/smooth	550500747	550500748	
Jaw inserts Grip round with fixing screw	932856003		

Accessories for mounting, positioning and operation

Mounting and positioning

Centring bolts

for hub centring on machine table



Type	Part no.	Ø [mm]	L [mm]
Quintus 1/2/3	961535001	D30 g6	15/38
	961535002	D32 g6	15/38
	961535003	D50 g6	25/48
	961535009	D50 g6	18/41

Retractable nipples

for mounting at the clamping system



Type	Part no.	Quantity
Quintus 1 / MC-P 60	939202021	1 off
Quintus 2 / MC-P 100	939202022	1 set = 2 off
Quintus 3 / MC-P 125	939202023	1 set = 3 off

Positioning pins

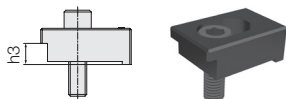
stepped for grid plate, set of 2 off



Type	Part no.	Ø [mm]
MC-P 60	939200101	10/12
MC-P 100 / MC-P 125	939200103	25/12

Clamping claws

i1 set = 4 off, incl. screws



Type	Part no.	Thread	h3 [mm]
MC-P 40	937772021	M8	9
MC-P 60	937772031	M10	12
MC-P 60	937772041	M12	12
MC-P 100	937772011	M12	24
MC-P 100 ZH	937772061	M12	14
MC-P 125	937773011	M12	27
MC-P 125	937773021	M16	27

Key block

with screw for Quintus 1,2,3



Part no.		Slot [mm]
961535004	DIN 6322, 1 off	14

T-nut

with screw for Quintus 1,2,3



Part no.		Slot [mm]
961535005	DIN 508, 4 off	14

Operation

Torque wrenches



Type	Part no.	Torque [Nm]
MC-P 40 / MC-P 60	937926600	5 – 60
MC-P 100	937926610	20 – 120
MC-P 125	937926620	40 – 200

Sockets

for torque wrenches



Type	Part no.	SW
MC-P 40	131240114	7
MC-P 60	131240021	12
MC-P 100	131240020	14
MC-P 125	131240017	17

Allen wrenches

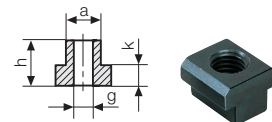
for fixing screws and jaw inserts



Type	Part no.	SW
MC-P 40	169110101	4
MC-P 60	169110002	6
MC-P 100	169110003	8
MC-P 125	169110005	10

T-nuts

DIN 508, 1 set = 4 off

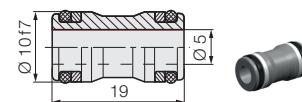


Type	Part no.	Thread	Width a
MC-P 40	937773001	M8	10
MC-P 60	937773002	M10	12
MC-P 60	937773003	M10	14
MC-P 60 / MC-P 100	937773004	M12	18
MC-P 125	937773231	M12	18
MC-P 125	937773311	M16	18

Hydraulic connection

Plug-in connector

for hydraulic connection from below including seals, 1 off



Part no.	for bore hole
805300023	Ø 10 H7 x 10 mm deep