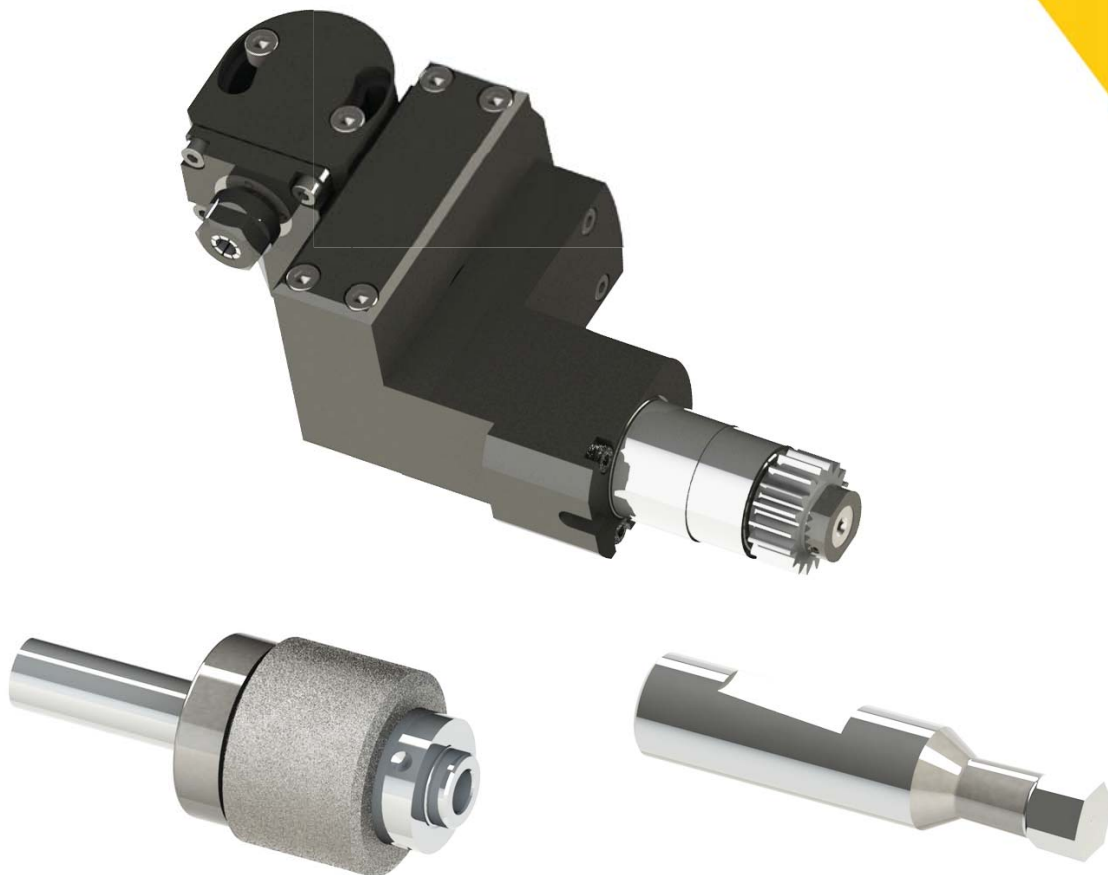


# 8 PCM Attachm. & broaching

8.3 Broaching tools and broaches

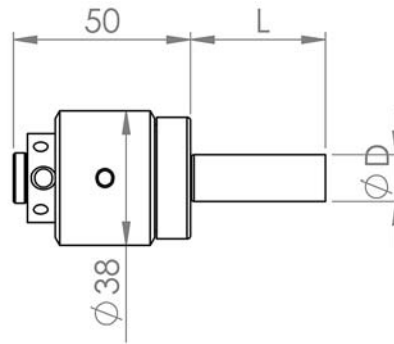
8.19 PCM Attachments





# Broaching tools and broaches

## Broaching tool holder type 2100



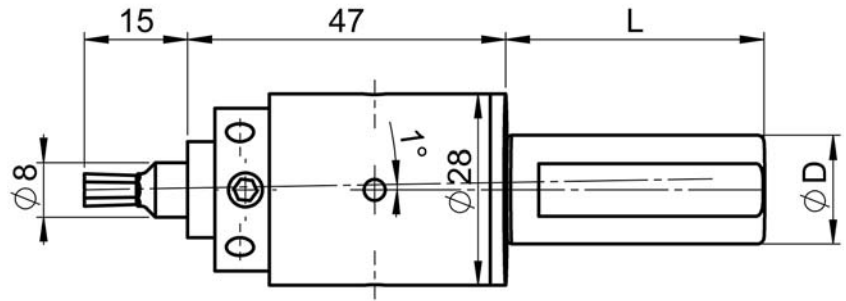
- to hold  $\varnothing 8$  mm shank broaches
- max pushing force 400 daN



Item No	D	L
PCM2100-58	15.87	38.00
PCM2100-16	16.00	38.00
PCM2102	19.05	38.00
PCM2101	20.00	38.00
PCM2103	25.00	50.00
PCM2104	25.40	50.00
PCM2100-22-75	22.00	75.00

# Broaching tools and broaches

## Broaching tool holder type 2160



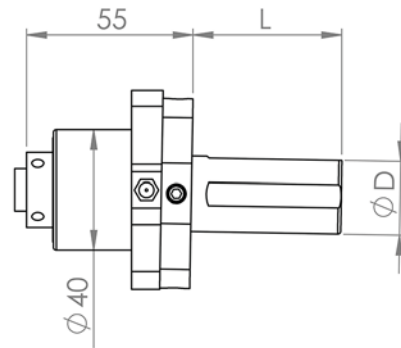
- to hold  $\varnothing$  8 mm shank broaches
- max pushing force 1000 daN
- It's possible to cut the length L for every types in length 100 and 120



Item No	D	L
PCM2160-080-038	8.00	38.00
PCM2160-100-038	10.00	38.00
PCM2160-120-038	12.00	38.00
PCM2160-140-038	14.00	38.00
PCM2160-158-038	15.875	38.00
PCM2160-160-038	16.00	38.00
PCM2160-190-100	19.05	100.00
PCM2160-200-100	20.00	100.00
PCM2160-220-100	22.00	100.00
PCM2160-230-100	23.00	100.00
PCM2160-250-120	25.00	120.00
PCM2160-254-120	25.40	120.00
PCM2160-280-100	28.00	100.00

# Broaching tools and broaches

## Broaching tool holder type 6180



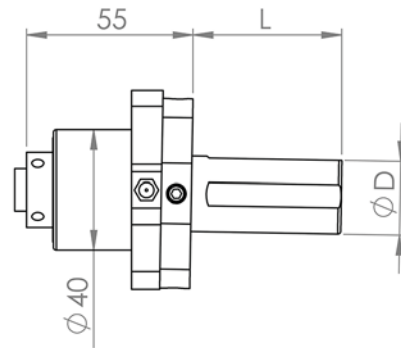
- to hold  $\varnothing 8$  mm shank broaches
- max pushing force 1200 daN
- cylindrical body without flat
- adjustment gauge 6189-280 L28



Item No	D	L
PCM6180-120	12.00	40.00
PCM6180-127	12.70	40.00
PCM6180-158	15.87	40.00
PCM6180-160	16.00	40.00
PCM6180-190	19.05	40.00
PCM6180-200	20.00	40.00
PCM6180-250	25.00	50.00
PCM6180-254	25.40	50.00
PCM6180-300	30.00	60.00
PCM6180-317	31.75	60.00
PCM6180-320	32.00	60.00

# Broaching tools and broaches

## Broaching tool holder type 6181



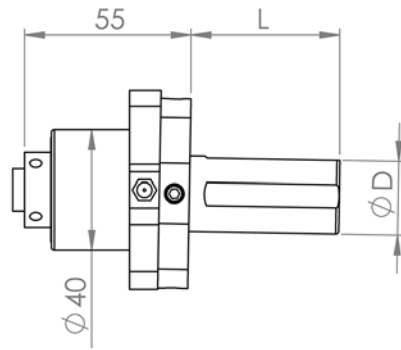
- to hold  $\varnothing$  8 mm shank broaches
- max pushing force 1200 daN
- cylindrical body with 2 flats
- adjustment gauge 6189-280 L28



Item No	D	L
PCM6181-158	15.87	40.00
PCM6181-160	16.00	40.00
PCM6181-190	19.05	40.00
PCM6181-200	20.00	40.00
PCM6181-220	22.00	40.00
PCM6181-220-60	22.00	60.00
PCM6181-250	25.00	50.00
PCM6181-254	25.40	50.00
PCM6181-300	30.00	60.00
PCM6181-317	31.75	60.00
PCM6181-320	32.00	60.00

# Broaching tools and broaches

## Broaching tool holder type 26200



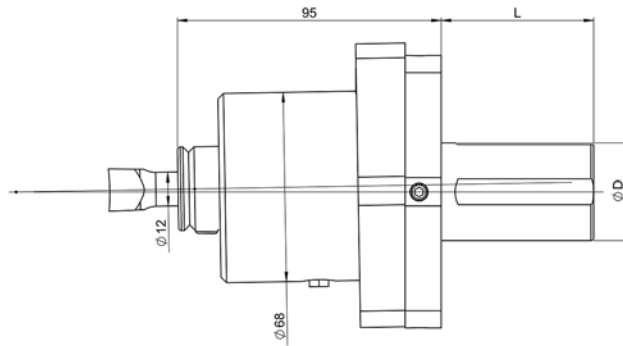
- to hold  $\varnothing 8$  mm shank broaches
- max pushing force 1200 daN
- body VDI 3425-2 / DIN 69880
- adjustment gauge 6189-280 L28



Item No	VDI
PCM26200-16	16
PCM26201	20

# Broaching tools and broaches

## Broaching tool holder type 6190



- to hold  $\varnothing$  12 mm shank broaches
- max pushing force 4000 daN
- cylindrical body without flat
- adjustment gauge 6199-550 L55

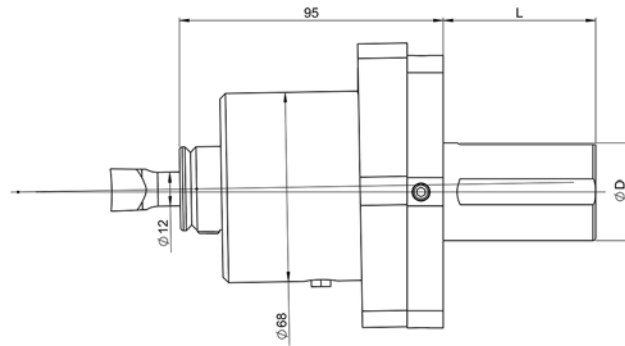


Item No	D	L
PCM6190-200	20.00	55.00
PCM6190-250	25.00	55.00
PCM6190-254	25.40	55.00
PCM6190-300	30.00	55.00
PCM6190-317	31.75	55.00
PCM6190-320	32.00	55.00



# Broaching tools and broaches

## Broaching tool holder type 6191



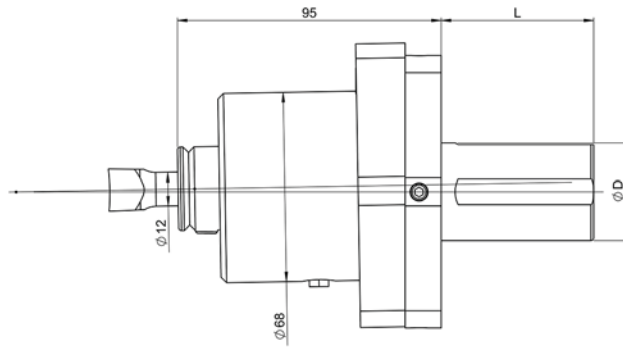
- to hold  $\varnothing$  12 mm shank broaches
- max pushing force 4000 daN
- cylindrical body with 2 flats
- adjustment gauge 6199-550 L55



Item No	D	L
PCM6191-250	25.00	55.00
PCM6191-254	25.40	55.00
PCM6191-300	30.00	55.00
PCM6191-317	31.75	55.00
PCM6191-320	32.00	55.00
PCM6191-350	35.00	55.00
PCM6191-381	38.10	55.00
PCM6191-400	40.00	55.00
PCM6191-444	44.45	68.00
PCM6191-450	45.00	68.00
PCM6191-500	50.00	68.00
PCM6191-508	50.80	68.00

# Broaching tools and broaches

## Broaching tool holder type 26300



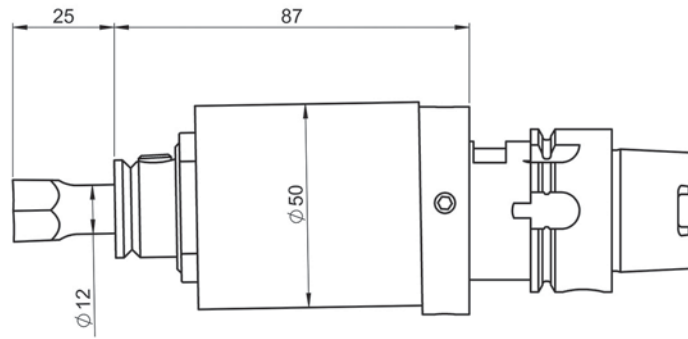
- to hold  $\varnothing$  12 mm shank broaches
- max pushing force 4000 daN
- body VDI 3425-2/DIN 69880
- adjustment gauge 6199-550 L55



Item No	VDI
PCM26303	30
PCM26304	40

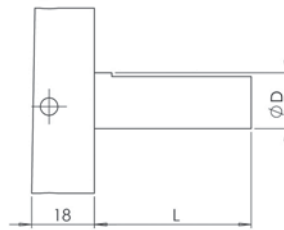
# Broaching tools and broaches

## Broaching tool holder type 6162

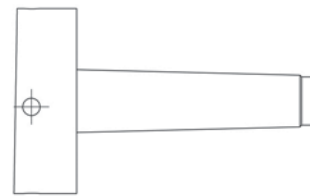


- to hold  $\varnothing$  12 mm shank broaches
- max pushing force 1200 daN
- Available bodies : cylindrical with flats or HSK-C or MK

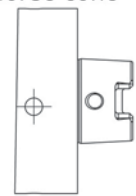
cylindrique  
zylindrisch  
cylindrical



HSK-C



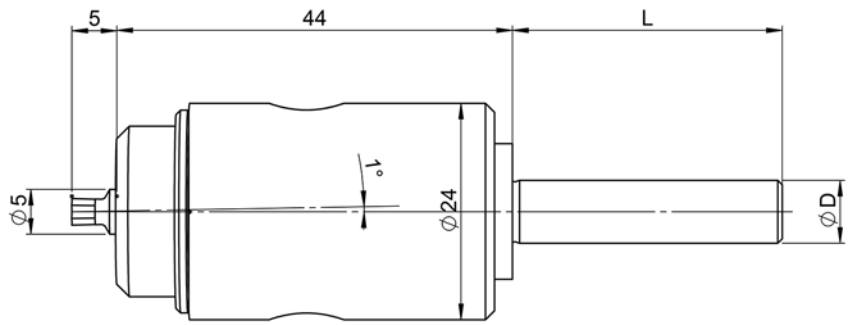
cône Morse  
Morse Konus  
Morse cone



Item No	D	L	HSK-C	MK
PCM6162-12-160	16.00	45.00		
PCM6162-12-190	19.05	45.00		
PCM6162-12-200	20.00	45.00		
PCM6162-12-250	25.00	45.00		
PCM6162-12-254	25.40	45.00		
PCM6162-12-320	32.00	45.00		
PCM6162-12-400	40.00	45.00		
PCM6162-12-HSK32			32.00	
PCM6162-12-HSK40			40.00	
PCM6162-12-CM2				2.00
PCM6162-12-CM3				3.00

# Broaching tools and broaches

## Broaching tool holder type 2150



- to hold  $\varnothing$  5 mm shank broaches
- max pushing force 50 daN
- cylindrical body



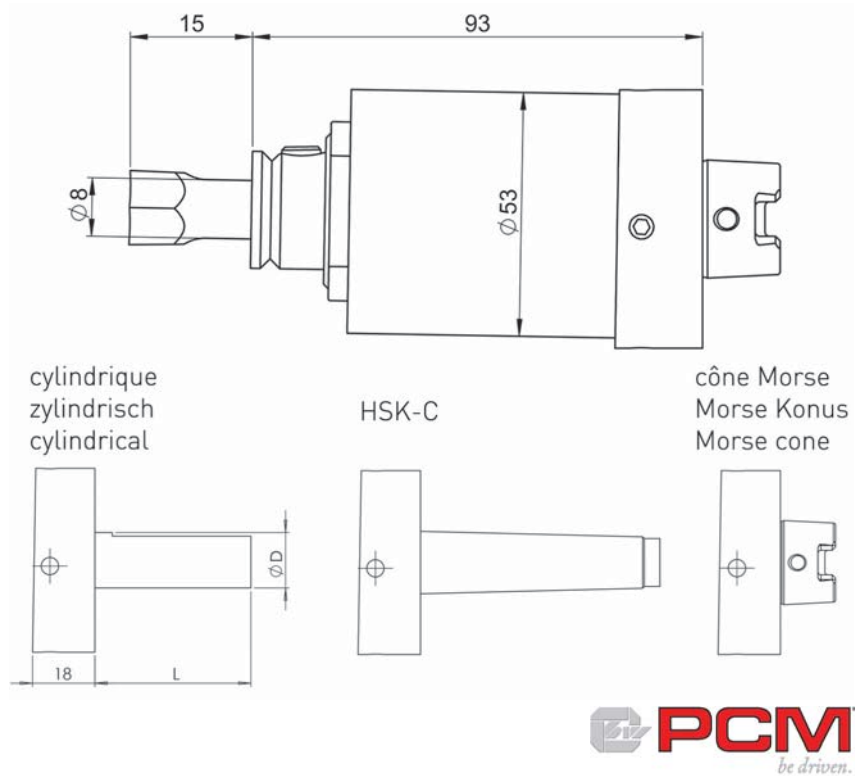
Item No	D	L
PCM2150-070	7.00	30.00
PCM2150-080	8.00	30.00
PCM2150-100	10.00	38.00
PCM2150-120	12.00	38.00
PCM2150-130	13.00	38.00
PCM2150-140	14.00	38.00
PCM2150-150	15.00	38.00
PCM2150-160	16.00	38.00
PCM2150-190	19.05	38.00
PCM2150-200	20.00	38.00
PCM2150-220-75	22.00	75.00

# Broaching tools and broaches

## Broaching tool holder type 6165



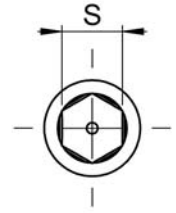
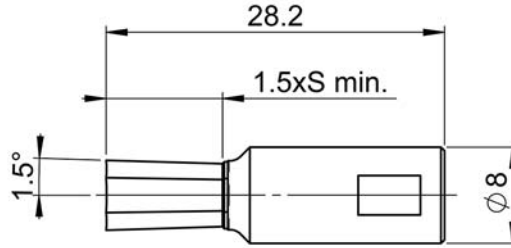
- to hold  $\varnothing 8$  mm shank broaches
- max pushing force 1200 daN
- Available bodies : cylindrical with flats or HSK-C or MK



Item No	D	L	HSK-C	MK
PCM6165-05-160	16.00	45.00		
PCM6165-05-190	19.05	45.00		
PCM6165-05-200	20.00	45.00		
PCM6165-05-250	25.00	45.00		
PCM6165-05-254	25.40	45.00		
PCM6165-05-320	32.00	45.00		
PCM6165-05-400	40.00	45.00		
PCM6165-HSK32			32.00	
PCM6165-HSK40			40.00	
PCM6165-CM2				2.00
PCM6165-CM3				3.00

# Broaching tools and broaches

## Broaches type 2110



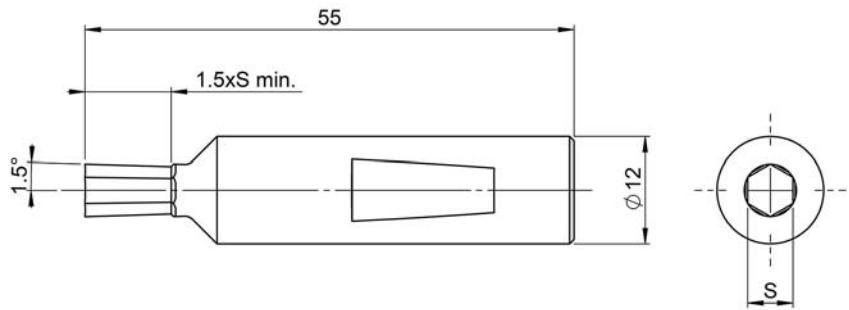
- hex. profil standard
- other profiles on request



Item No	Hex.	S mm
PCM2110-1.50H	1.50 D9	1.538+/-0.007
PCM2112H	2.00 D9	2.038+/-0.007
PCM2112-5H	2.50 D10	2.553+/-0.007
PCM2113H	3.00 E11	3.071+/-0.009
PCM2114H	4.00 E11	4.086+/-0.009
PCM2115H	5.00 E11	5.086+/-0.009
PCM2116H	6.00 E11	6.084+/-0.011
PCM2117H	7.00 E11	7.104+/-0.011
PCM2118H	8.00 E11	8.104+/-0.011
PCM2119H	9.00 E11	9.104+/-0.011
PCM2110-10H	10.00 E11	10.102+/-0.013
PCM2110-11H	11.00 E11	11.129+/-0.013
PCM2110-12H	12.00 E11	12.129+/-0.013
PCM2110-13H	13.00 E11	13.129+/-0.013
PCM2110-14H	14.00 E11	14.129+/-0.013
PCM2110-159H	1/16" D9	1.625+/-0.007
PCM2110-198H	5/64" D9	2.022+/-0.007
PCM2110-238H	3/32" D10	2.434+/-0.007
PCM2110-278H	7/64" D11	2.851+/-0.007
PCM2110-317H	1/8" E11	3.261+/-0.009
PCM2110-397H	5/32" E11	4.054+/-0.009
PCM2110-476H	3/16" E11	4.848+/-0.009
PCM2110-556H	7/32" E11	5.642+/-0.009
PCM2110-635H	1/4" E11	6.454+/-0.011
PCM2110-794H	5/16" E11	8.041+/-0.011
PCM2110-952H	3/8" E11	9.629+/-0.011

# Broaching tools and broaches

## Broaches type 6150



- hex. profil standard
- other profil on request

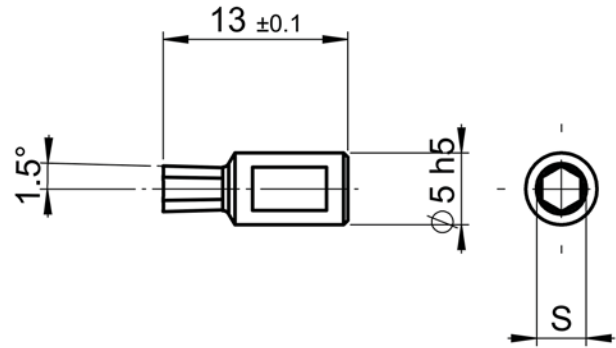


Item No	Hex.	S mm
PCM6150-03H	3.00 E11	3.071 +/-0.009
PCM6150-04H	4.00 E11	4.086 +/-0.009
PCM6150-05H	5.00 E11	5.086 +/-0.009
PCM6150-06H	6.00 E11	6.084 +/-0.011
PCM6150-07H	7.00 E11	7.104 +/-0.011
PCM6150-08H	8.00 E11	8.104 +/-0.011
PCM6150-09H	9.00 E11	9.104 +/-0.011
PCM6150-10H	10.00 E11	10.102 +/-0.013
PCM6150-11H	11.00 E11	11.129 +/-0.013
PCM6150-12H	12.00 E11	12.129 +/-0.013
PCM6150-13H	13.00 E11	13.129 +/-0.013
PCM6150-14H	14.00 E11	14.129 +/-0.013
PCM6150-16H	16.00 D12	16.217 +/-0.013
PCM6150-17H	17.00 D12	17.217 +/-0.013
PCM6150-18H	18.00 D12	18.214 +/-0.016
PCM6150-19H	19.00 D12	19.259 +/-0.016
PCM6150-317H	1/8" E11	3.261 +/-0.009
PCM6150-397H	5/32" E11	4.054 +/-0.009
PCM6150-476H	3/16" E11	4.848 +/-0.009
PCM6150-556H	7/32" E11	5.642 +/-0.009
PCM6150-635H	1/4" E11	6.454 +/-0.011
PCM6150-794H	5/16" E11	8.041 +/-0.011
PCM6150-952H	3/8" E11	9.629 +/-0.011
PCM6150-127H	1/2" E11	12.829 +/-0.013
PCM6150-142H	9/16" D12	15.504 +/-0.013
PCM6150-158H	5/8" D12	16.092 +/-0.013



# Broaching tools and broaches

## Broaches type 2151



- hex. profil standard
- other profiles on request

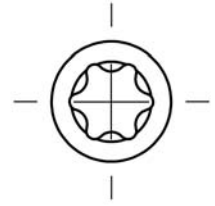
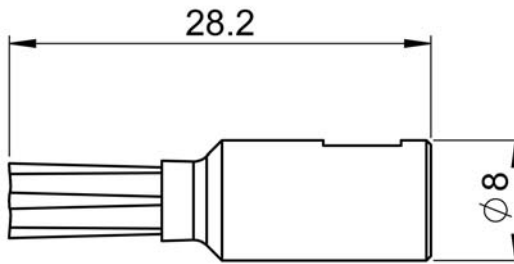


Item No	Hex.	S mm
PCM2151-01.50H	1.50 D9	1.538 +/-0.007
PCM2151-02.00H	2.00 D9	2.038 +/-0.007
PCM2151-02.50H	2.50 D10	2.553 +/-0.007
PCM2151-03.00H	3.00 E11	3.071 +/-0.009
PCM2151-03.50H	3.50 E11	3.586 +/-0.009
PCM2151-04.00H	4.00 E11	4.086 +/-0.009



# Broaching tools and broaches

## Broaches type 2122 TORX



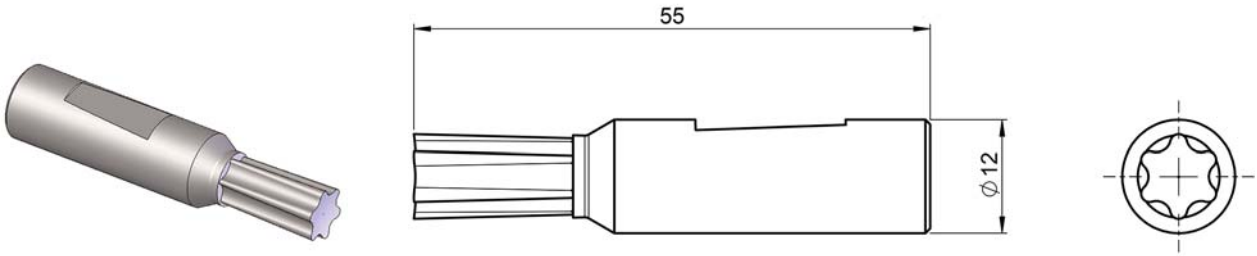
- form TORX ISO 10664 standard



Item No	TORX ISO 10664
PCM2122-T06	6
PCM2122-T07	7
PCM2122-T08	8
PCM2122-T09	9
PCM2122-T10	10
PCM2122-T15	15
PCM2122-T20	20
PCM2122-T25	25
PCM2122-T30	30
PCM2122-T40	40
PCM2122-T45	45
PCM2122-T50	50
PCM2122-T55	55

# Broaching tools and broaches

## Broaches type 6173 TORX



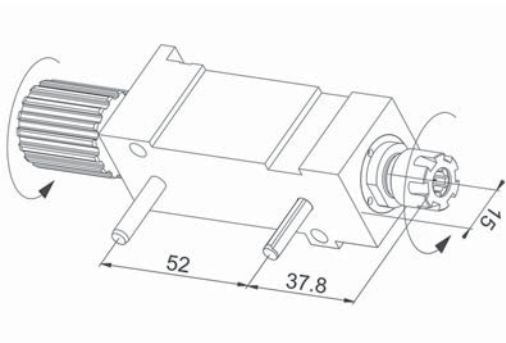
- form TORX ISO 10664 standard



Item No	TORX ISO 10664
PCM6173-T10	10
PCM6173-T20	20
PCM6173-T25	25
PCM6173-T30	30
PCM6173-T40	40
PCM6173-T45	45
PCM6173-T50	50
PCM6173-T55	55
PCM6173-T60	60

# TORNOS DECO-10

## DE10-0001

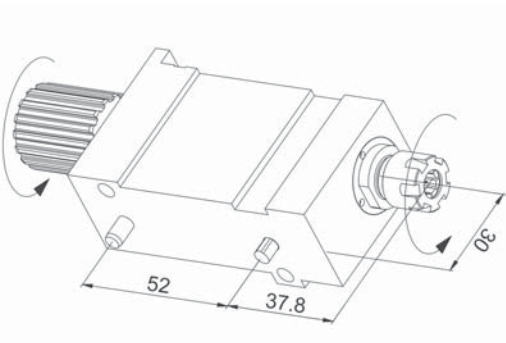


Item No	Collet	Ratio	rpm max.
DE10-0001	ER11	1:1	12'000

Milling / drilling unit



## DE10-0002

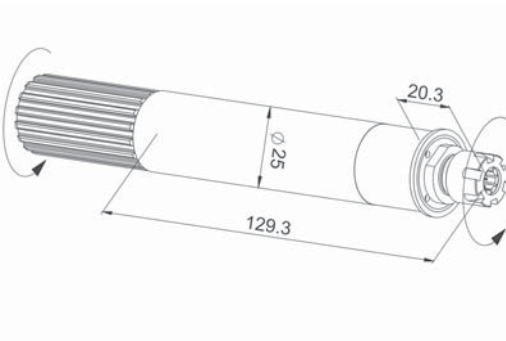


Item No	Collet	Ratio	rpm max.
DE10-0002	ER11	1:1	12'000

Milling / drilling unit



## DE10-0003

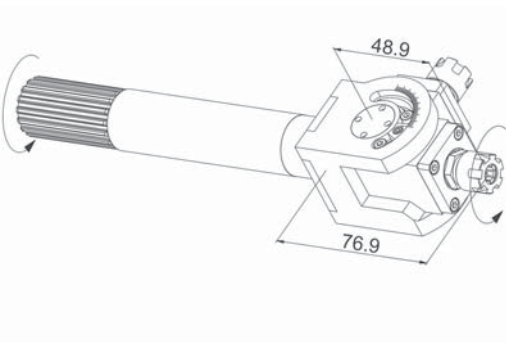


Item No	Collet	Ratio	rpm max.
DE10-0003	ER11	1:1	12'000

Milling / drilling unit



## DE10-0004



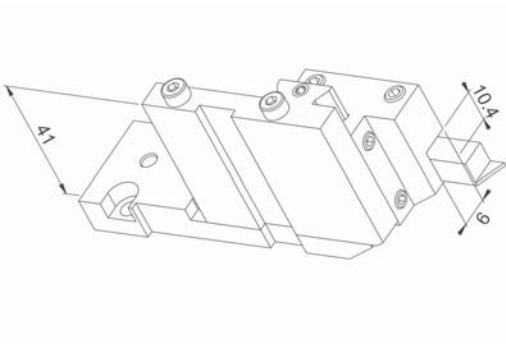
Item No	Collet	Ratio	rpm max.
DE10-0004	ER11	1:1	12'000

Milling / drilling unit, adjustable 0°90°, Ø 25.00



# TORNOS DECO-10

## DE10-0006

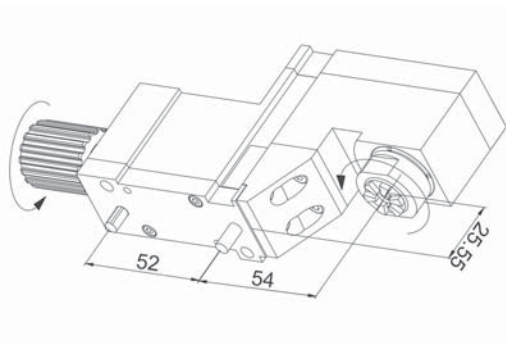


Item No	Tool	High
DE10-0006	9x10	13.80

Tool holder 9 x 10, adjustable on 38.20 mm



## DE10-0011

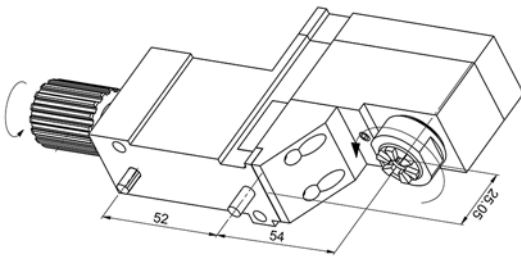


Item No	Collet	Ratio	rpm max.
DE10-0011	ER11	1:1	12'000

Milling / drilling unit 90°



## DE10-0011-II

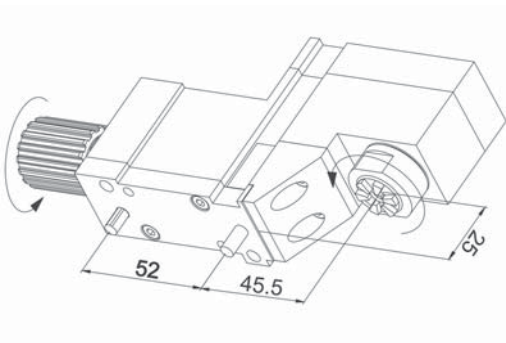


Item No	Collet	Ratio	rpm max.
DE10-0011-II	ER11	1:1	12'000

Milling / drilling unit 90°



## DE10-0011-DEC



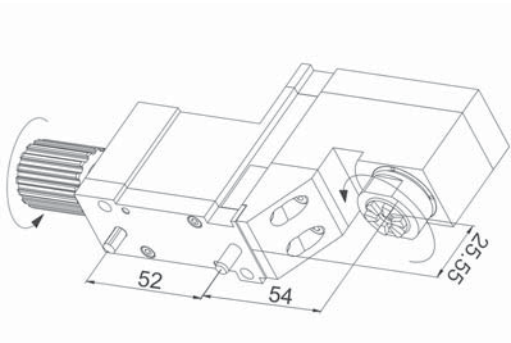
Item No	Collet	Ratio	rpm max.
DE10-0011-DEC	ER11	1:1	12'000

Milling / drilling unit 90°



# TORNOS DECO-10

## DE10-0012

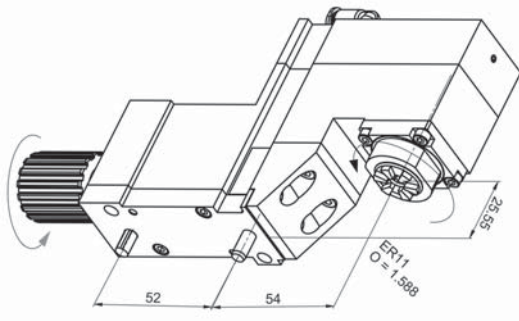


Item No	Collet	Ratio	rpm max.
DE10-0012	ER11	1:1.588	19'059

Milling / drilling unit 90°, high speed



## DE10-0012-II

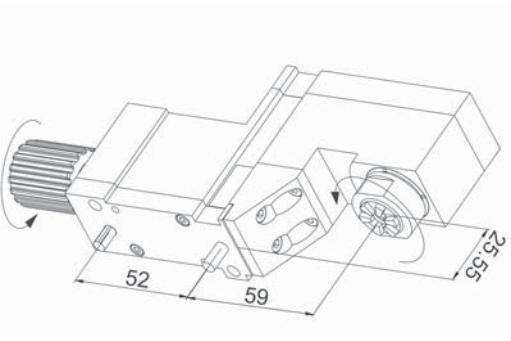


Item No	Collet	Ratio	rpm max.
DE10-0012-II	ER11	1:1.588	19'059

Milling / drilling unit 90°, high speed with air/oil cooling



## DE10-0013

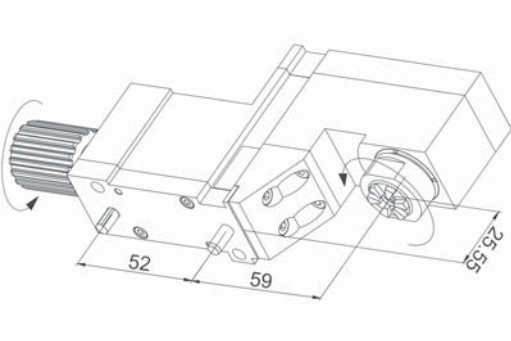


Item No	Collet	Ratio	rpm max.
DE10-0013	ER11	1:1	12'000

Milling / drilling unit 90°



## DE10-0014



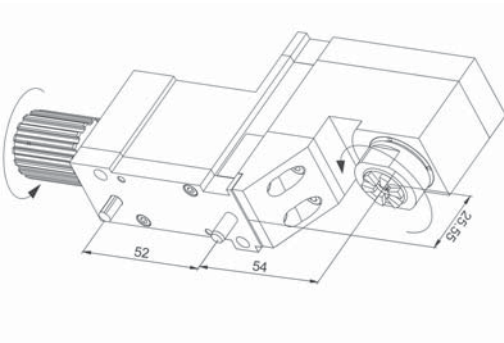
Item No	Collet	Ratio	rpm max.
DE10-0014	ER11	1:1.588	19'059

Milling / drilling unit 90°, high speed



# TORNOS DECO-10

## DE10-0015



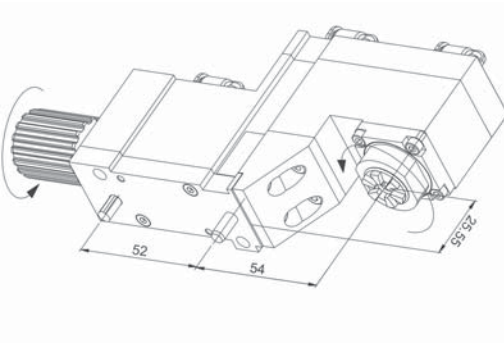
Item No	Collet	Ratio	rpm max.
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DE10-0015	ER11	1:1.588	19'056
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Milling / drilling unit 90°, high speed, 0 mm offset, usable for back operation



## DE10-0015-II



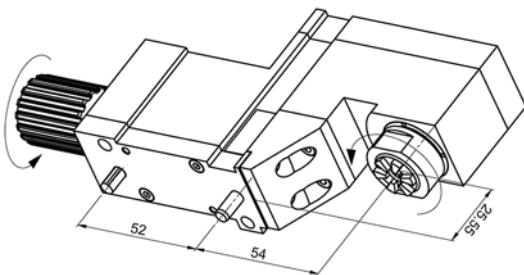
Item No	Collet	Ratio	rpm max.
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DE10-0015-II	ER11	1:1.588	19'056
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Milling / drilling unit 90°, high speed with air/oil cooling



## DE10-0016



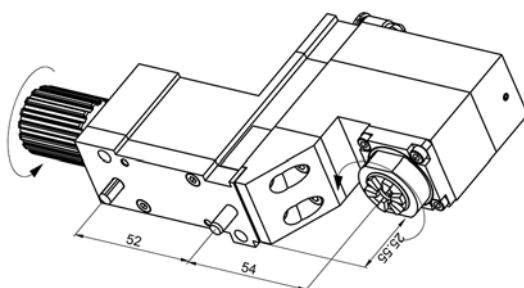
Item No	Collet	Ratio
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DE10-0016	ER11	1:1
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Milling / drilling unit 90°



## DE10-0016-II



Item No	Collet	Ratio
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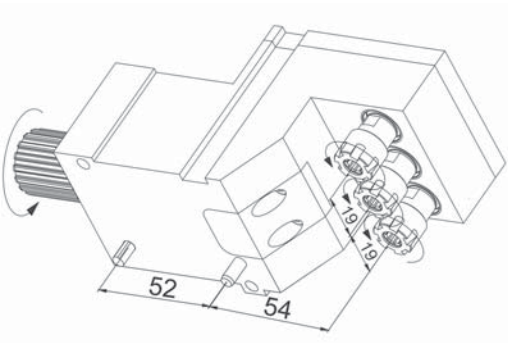
DE10-0016-II	ER11	1:1
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Milling / drilling unit 90° with air/oil cooling



# TORNOS DECO-10

## DE10-0031

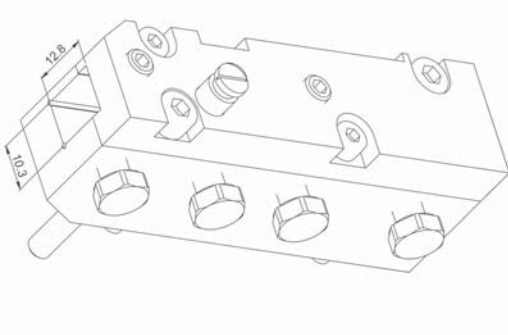


Item No	Collet	Ratio	rpm max.
DE10-0031	3x ER11	1:1	12'000

Milling / drilling unit 90° 3x



## DE10-GTF-010

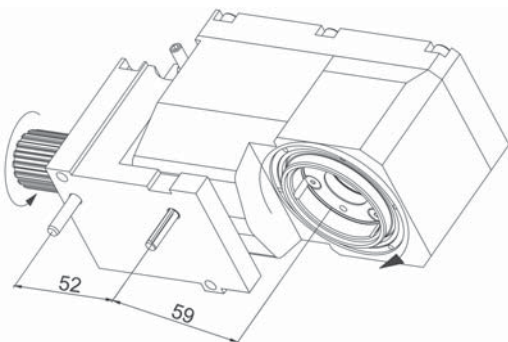


Item No	Tool	High
DE10-GTF-010	10x10	15.00

Tool holder 10 x 10



## DE10-W15

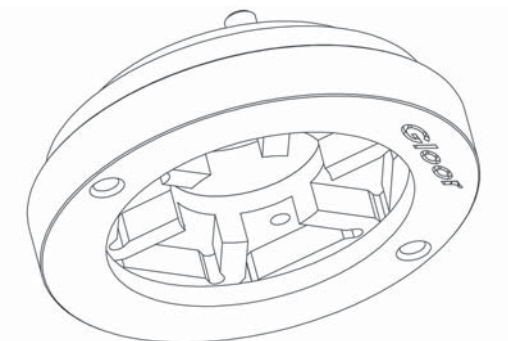


Item No	Ratio	rpm max.
DE10-W15	1:1	8'000

Thread whirling attachment 15°, without head, without inserts



## 501 0022 (Gloor)



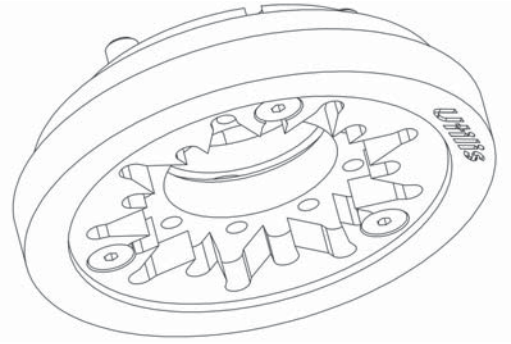
Item No	Inserts	Ø maxi
501-0022	6	7.00

Thread whirling head type Gloor without inserts



# TORNOS DECO-10

## MWT06 164 4242 115 07 (Utilis)

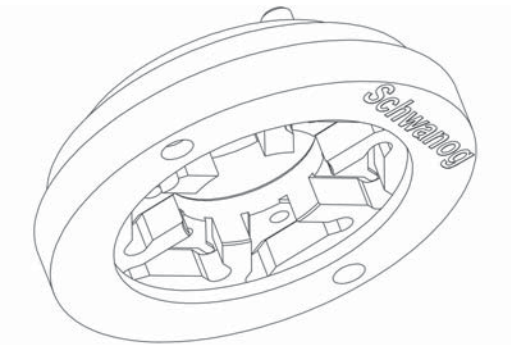


Item No	Inserts	Ø maxi
MWT06 164 4242 115 07	7	6.00

Thread whirling head type Utilis without inserts



## SWG-193556 (Schwanog)



Item No	Inserts	Insert	Ø maxi
SWG-193556	6	5	
SWG-197489	6		10.00
SWG-197451		5	8.00
SWG-195144		5	6.00
SWG-222375	6		7.00

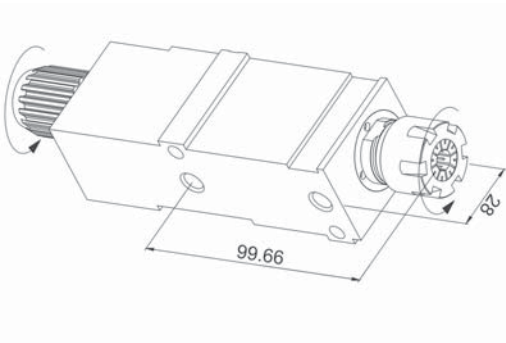
Thread whirling head type Schwanog without inserts





# TORNOS DECO 13a+e

## DE13-0001

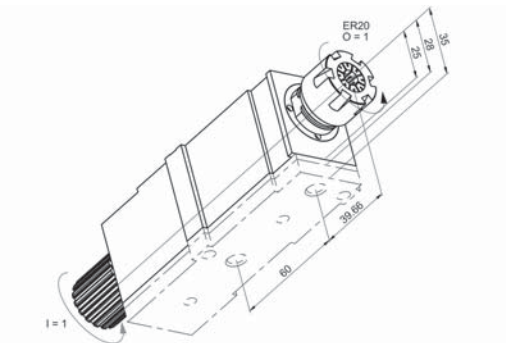


Item No	Collet	Ratio	rpm max.
DE13-001	ER20	1:1	8'000

Milling / drilling unit



## DE13-0001-H

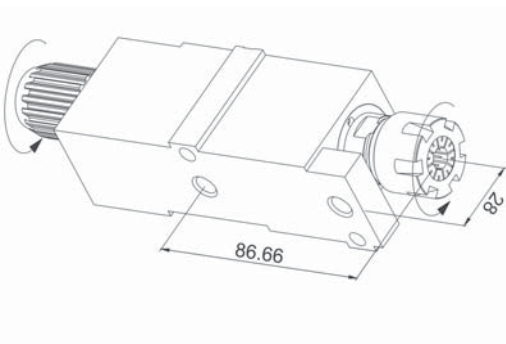


Item No	Collet	Ratio	rpm max.
DE-13-0001-H	ER20	1:1	8'000

Milling / drilling unit, with intermediate plate 3/10 mm



## DE13-0002

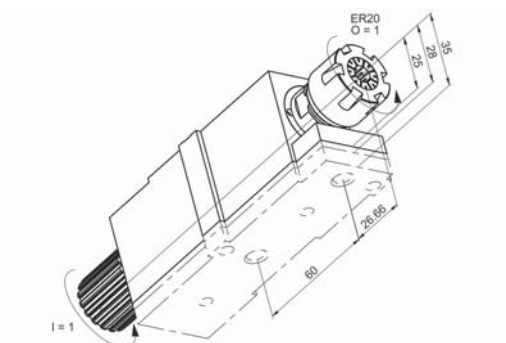


Item No	Collet	Ratio	rpm max.
DE-13-0002	ER20	1:1	8'000

Milling / drilling unit



## DE13-0002-H



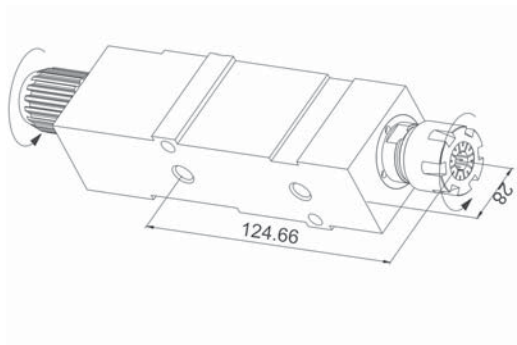
Item No	Collet	Ratio	rpm max.
DE13-0002-H	ER20	1:1	8'000

Milling / drilling unit, with intermediate plate 3/10 mm



# TORNOS DECO 13a+e

## DE13-0003



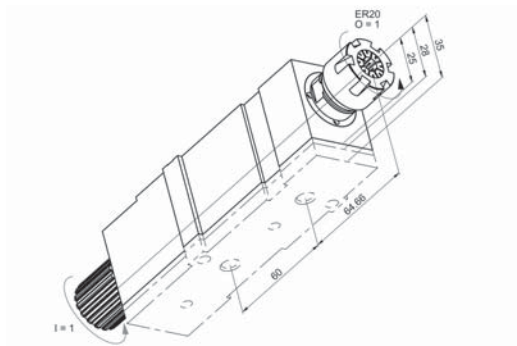
Item No	Collet	Ratio	rpm max.
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DE13-0003	ER20	1:1	8'000
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Milling / drilling unit



## DE13-0003-H



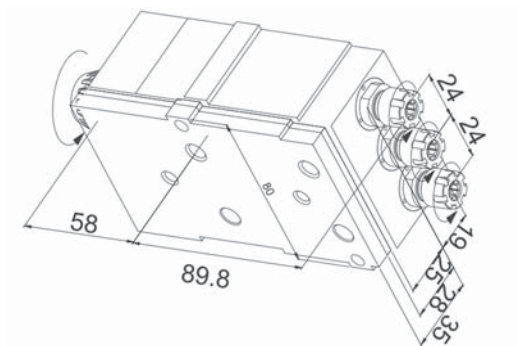
Item No	Collet	Ratio	rpm max.
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DE13-0003-H	ER20	1:1	8'000
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Milling / drilling unit, with intermediate plate 3/10 mm



## DE13-0010



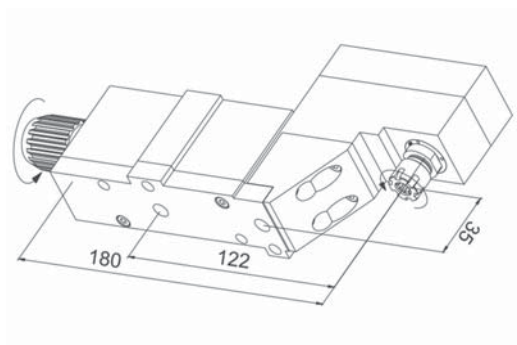
Item No	Collet	Ratio	rpm max.
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DE13-0010	3x ER11	1:1	8'000
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Milling / drilling unit, with intermediate plate 3/10 mm



## DE13-0011



Item No	Collet	Ratio	rpm max.
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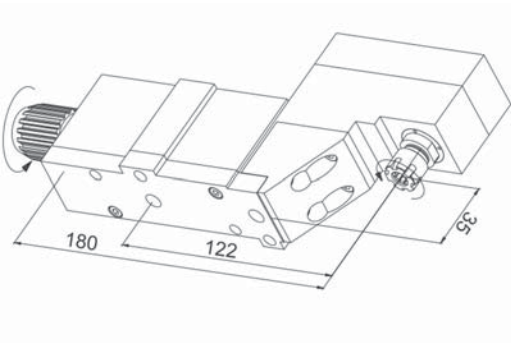
DE13-0011	ER11	1:1	8'000
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Milling / drilling unit 90°



# TORNOS DECO 13a+e

## DE13-0012

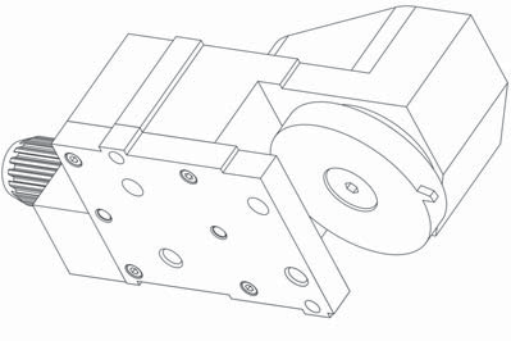


Item No	Collet	Ratio	rpm max.
DE13-0012	ER11	1:1.5	12'000

Milling / drilling unit 90°, high speed



## DE13-0015

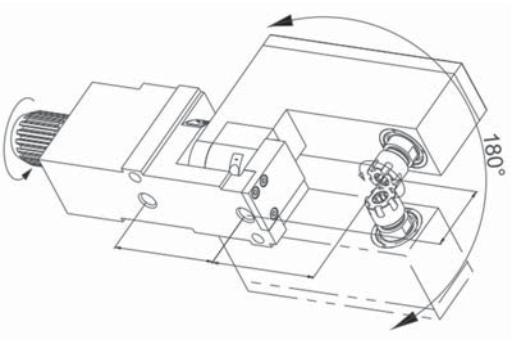


Item No	Ratio	rpm max.	Ø maxi
DE13-0015	1:1	8'000	80.00

Polygon attachment



## DE13-0020

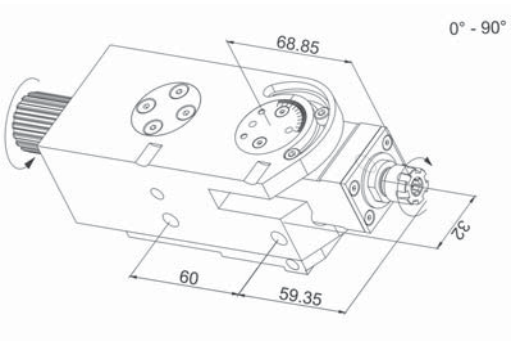


Item No	Collet	Ratio	rpm max.
DE13-0020	ER11	1:1	8'000

Milling / drilling unit adjustable 0°-180°



## DE13-0041



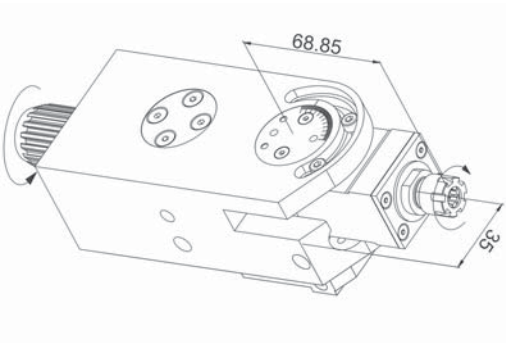
Item No	Collet	Ratio	rpm max.
DE13-0041	ER11	1:1	8'000

Milling / drilling unit adjustable 0°-90°



# TORNOS DECO 13a+e

## DE13-0042

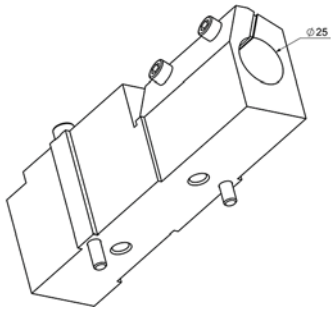


Item No	Collet	Ratio	rpm max.
DE13-0042	ER11	1:1	8'000

Milling / drilling unit adjustable -13°+90°



## DE13-0060

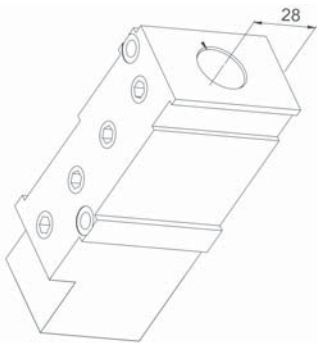


Item No	Ø maxi	High
DE13-0060	25.00	28.00

High frequency tool holder Ø 25.00



## DE13-OF-030

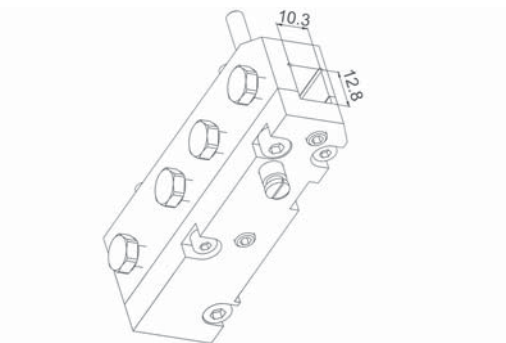


Item No	High
DE13-OF-030	28.00

Tool holder Ø 20.00



## DE13-GTF-010



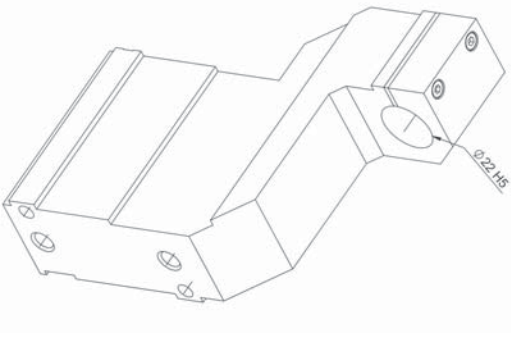
Item No	Tool
DE13-GTF-010	10x12

Tool holder 10x12



# TORNOS DECO 13a+e

## DE13-HF-220

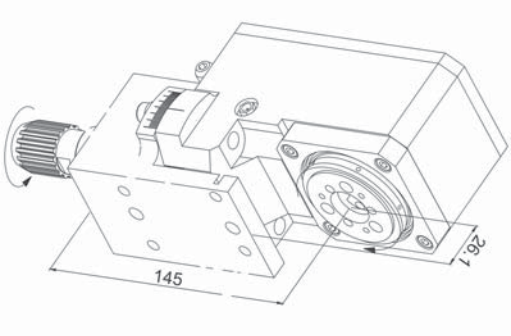


Item No	Spindle Ø
DE13-HF-220	22.00

High frequency tool holder Ø 22.00



## DE13-W15

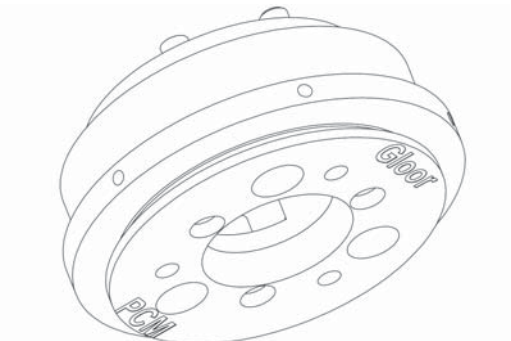


Item No	Ratio	rpm max.
DE13-W15	1:1	8'000

Thread whirling head 15°, type Gloor / Utilis / PCM, without inserts



## DE13-W15-FPGLO (Gloor)

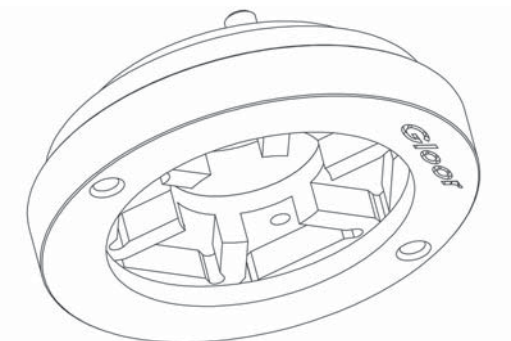


Item No	Mark	Inserts	Ø maxi
DE13-W15-FPGLO	Gloor	3	12.00

Thread whirling head for circular cutters type gloor for DE13-W15 and DE20-W15



## 501-0007 (Gloor)



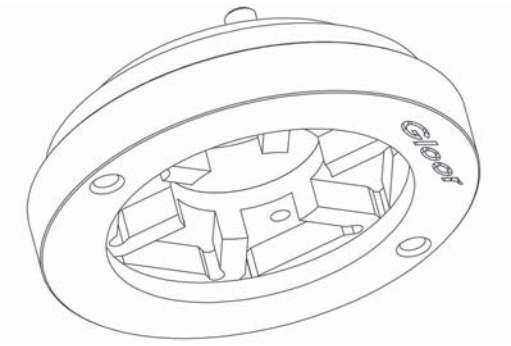
Item No	Mark	Inserts	Ø maxi
501-0007	Gloor	6	10.00

Thread whirling head type Gloor without inserts



# TORNOS DECO 13a+e

## 501-0004 (Gloor)

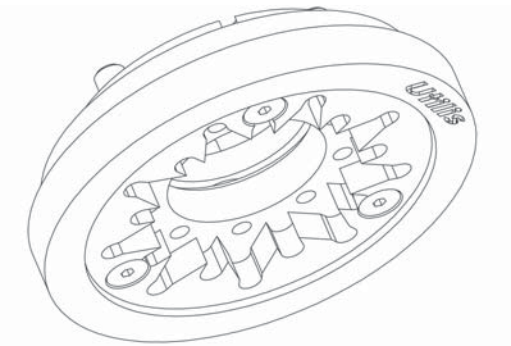


Item No	Mark	Inserts	Ø maxi
501-0004	Gloor	6	12.00

Thread whirling head type Gloor without inserts



## 139822 (Utilis)

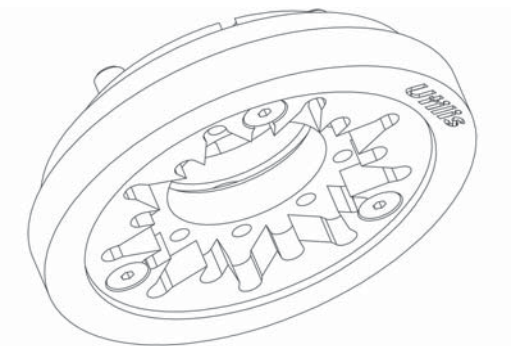


Item No	Mark	Inserts	Ø maxi
139822	Utilis	12	12.00

Thread whirling head type Utilis without inserts



## 139823 (Utilis)

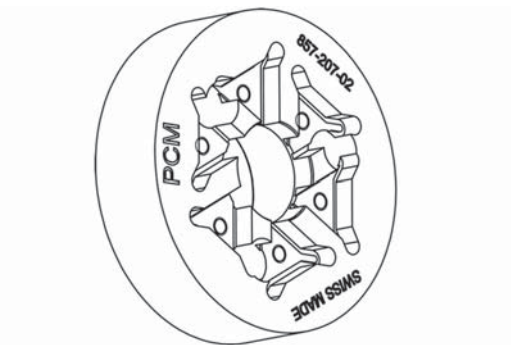


Item No	Mark	Inserts	Ø maxi
139823	Utilis	9	12.00

Thread whirling head type Utilis without inserts



## 857-207-02 (PCM)



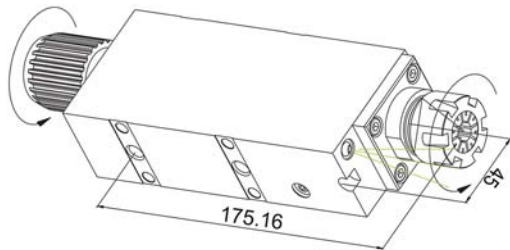
Item No	Mark	Inserts	Ø maxi
857-207-02	PCM	6	12.00

Thread whirling head type PCM without inserts



# TORNOS DECO 20a+e/26a+e

## DE20-0001

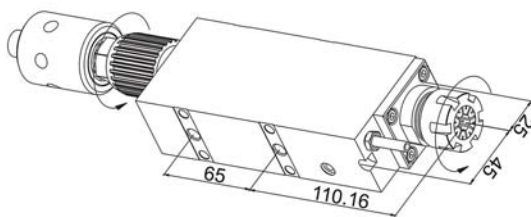


Item No	Collet	Ratio	rpm max.
DE20-0001	ER25	1:1	8'000

Milling / drilling unit



## DE20-0001-HP

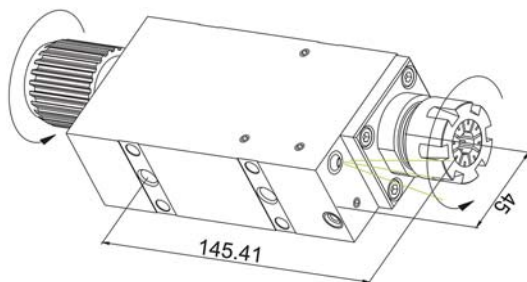


Item No	Collet	Ratio	rpm max.
DE20-0001-HP	ER25	1:1	8'000

Milling / drilling unit with cooling



## DE20-0002

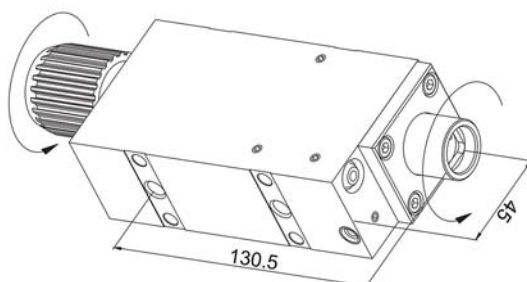


Item No	Collet	Ratio	rpm max.
DE20-0002	ER25	1:1	8'000

Milling / drilling unit



## DE20-0002-CR



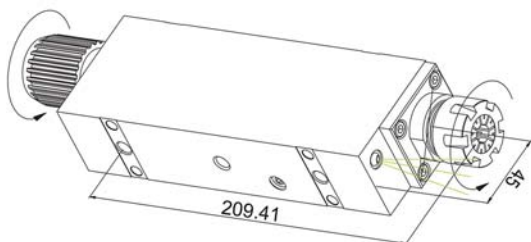
Item No	Ratio	rpm max.
DE20-0002-CR	1:1	8'000

Milling / drilling unit with quick change system



# TORNOS DECO 20a+e/26a+e

## DE20-0002-HP

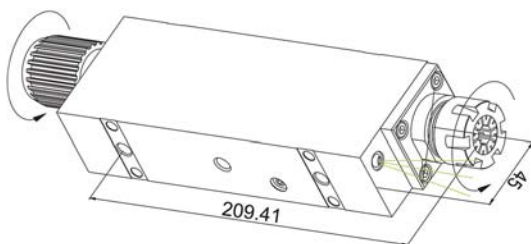


Item No	Collet	Ratio	rpm max.
DE20-0002-HP	ER25	1:1	8'000

Milling / drilling unit with high pressure cooling



## DE20-0003

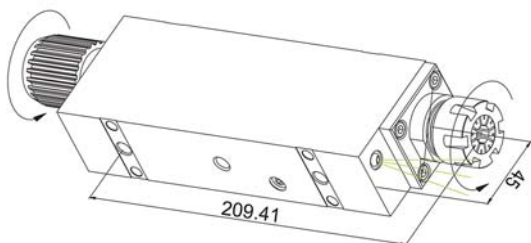


Item No	Collet	Ratio	rpm max.
DE20-0003	ER25	1:1	8'000

Milling / drilling unit



## DE20-0003-IK

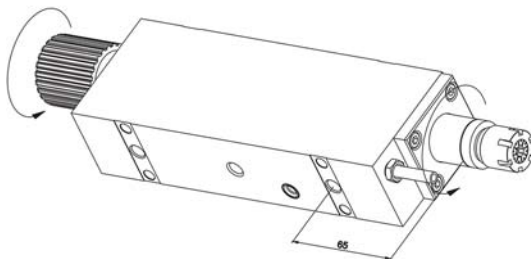


Item No	Collet	Ratio	rpm max.
DE20-0003-IK	ER25	1:1	8'000

Milling / drilling unit with cooling 60 bar



## DE20-0003-CR



Item No	Collet	Ratio	rpm max.
DE20-0003-CR	ER25	1:1	8'000

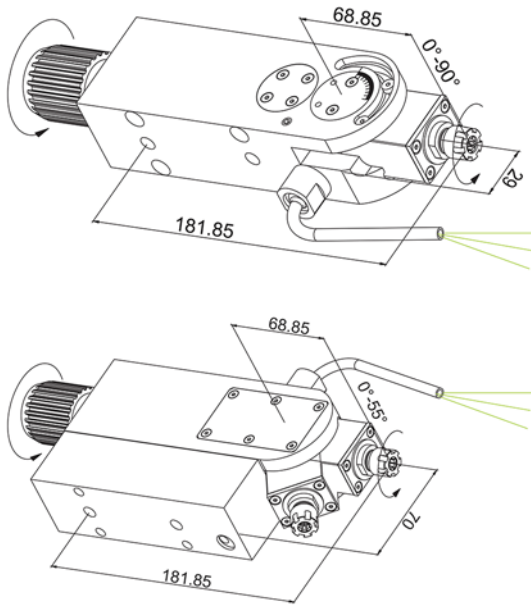
Milling / drilling unit quick change





# TORNOS DECO 20a+e/26a+e

## DE20-0004

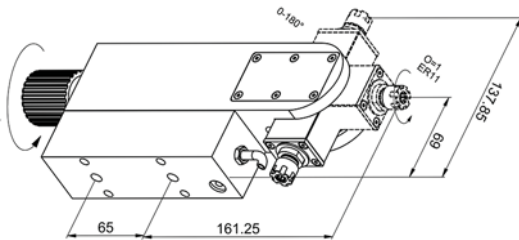


Item No	Collet	Ratio	rpm max.
DE20-0004	ER11	1:1	8'000

Milling / drilling unit adjustable 0°-90°



## DE20-0005

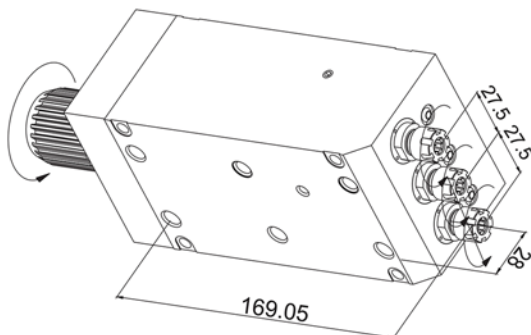


Item No	Collet	Ratio	rpm max.
DE20-0005	ER11	1:1	8'000

Milling / drilling unit adjustable 0-180°, max. 1600Nmm



## DE20-0010



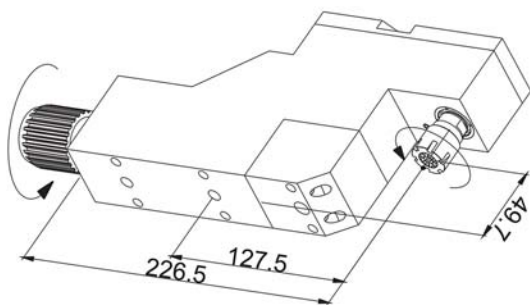
Item No	Collet	Ratio	rpm max.
DE20-0010	3x ER11	1:1	8'000

3x Milling / drilling unit



# TORNOS DECO 20a+e/26a+e

## DE20-0011



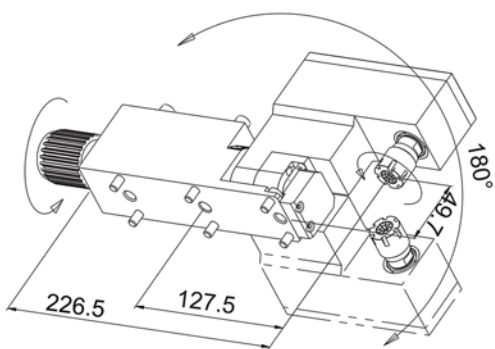
Item No	Collet	Ratio	rpm max.
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DE20-0011	ER16	1:1	8'000
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Milling / drilling unit 90°



## DE20-0020



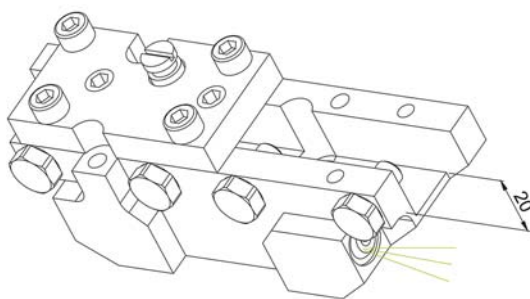
Item No	Collet	Ratio	rpm max.
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DE20-0020	ER16	1:1	8'000
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Milling / drilling unit 90°, adjustable 0°-180°



## DE20-OF-010



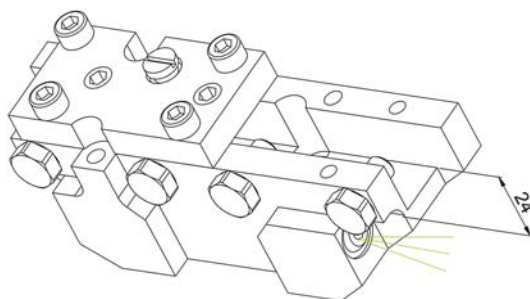
Item No	Tool	High
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DE20-OF010	16x16	20.00
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Tool holder 16x16



## DE20-OF-020



Item No	Tool	High
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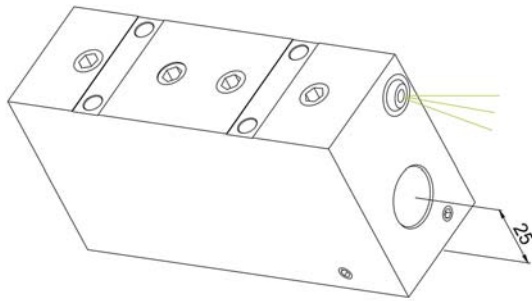
DE20-OF-020	16x16	24.00
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Tool holder 16x16



# TORNOS DECO 20a+e/26a+e

## DE20-OF-030

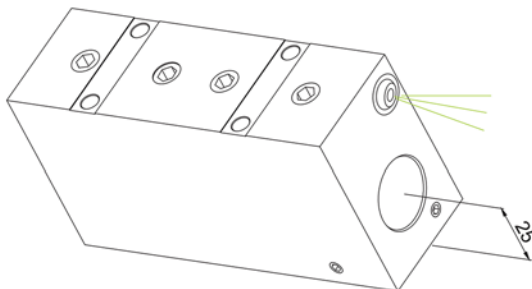


Item No	High	Tool Ø
DE20-OF-030	25.00	20.00

Tool holder Ø 20.00



## DE20-OF-040

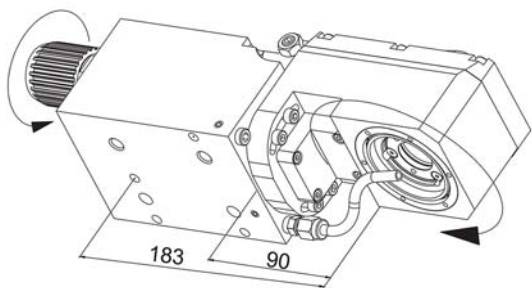


Item No	High	Tool Ø
DE20-OF-040	25.00	25.00

Tool holder Ø 25.00



## DE20-W15

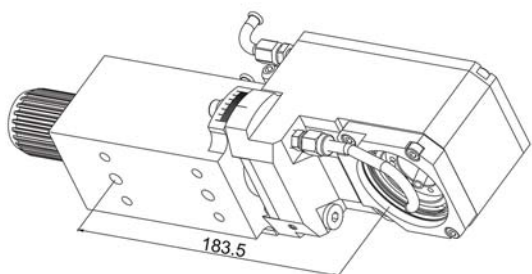


Item No	Ratio	rpm max.
DE20-W15	1:1	8'000

Thread whirling head 15° type Gloor / Utilis, without inserts



## DE20-W15-II



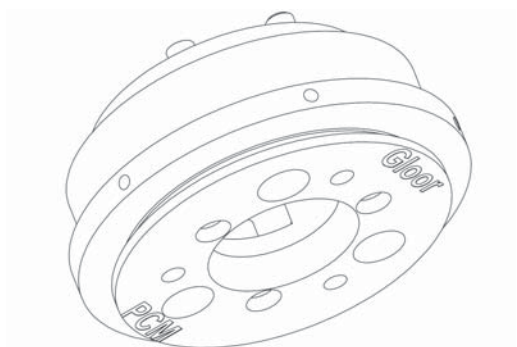
Item No	Ratio	rpm max.
DE20-W15-II	1:1	8'000

Thread whirling head 15° type Gloor / Utilis, without inserts



# TORNOS DECO 20a+e/26a+e

## DE13-W15-FPGLO (Gloor)

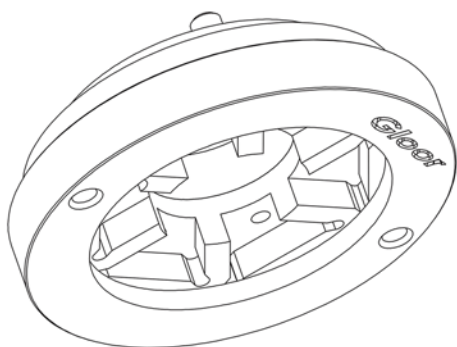


Item No	Mark	Inserts	Ø maxi
DE13-W15-FPGLO	Gloor	3	12.00

Thread whirling head for circular cutters type Gloor for DE13-W15 and DE20-W15



## 501-0007 (Gloor)

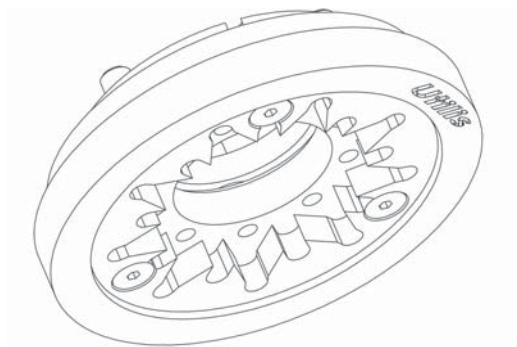


Item No	Mark	Inserts	Ø maxi
501-0007	Gloor	6	10.00

Thread whirling head type Gloor, without inserts



## MWT12 164 4057 105 09 (Utilis)



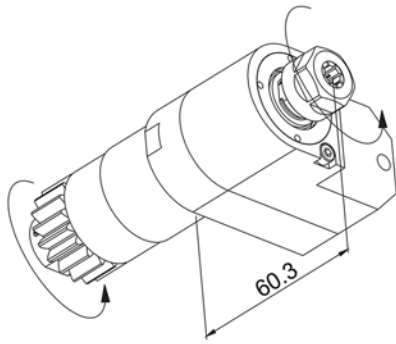
Item No	Mark	Inserts	Ø maxi
MWT12-164-4057-105-09	Utilis	9	12.00

Thread whirling head type Utilis, without inserts



# CITIZEN A20-VII

## BSC-510-3X

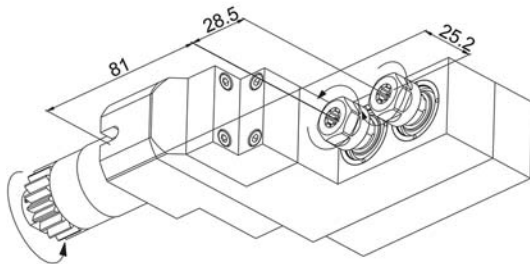


Item No	Collet	Ratio	rpm max.
BSC-510-3X	ER11	1:3	24'000

Milling / drilling unit high speed



## BSE-207

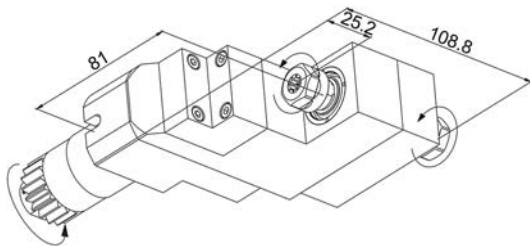


Item No	Collet	Ratio	rpm max.
BSE-207	2x ER11	1:1	8'000

2x milling / drilling unit 90°



## BSE-1007

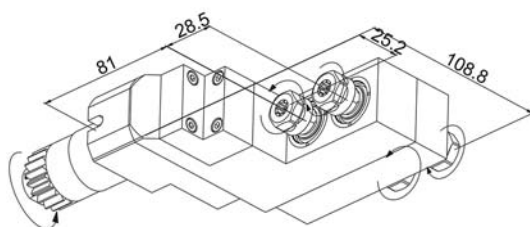


Item No	Collet	Ratio	rpm max.
BSE-1007	2x ER11	1:1	8'000

Milling / drilling unit 90°, front/back



## BSE-2007



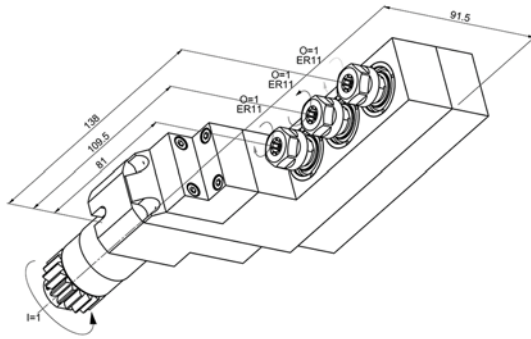
Item No	Collet	Ratio	rpm max.
BSE-2007	4x ER11	1:1	8'000

2x milling / drilling unit high 90°, front/back



# CITIZEN A20-VII

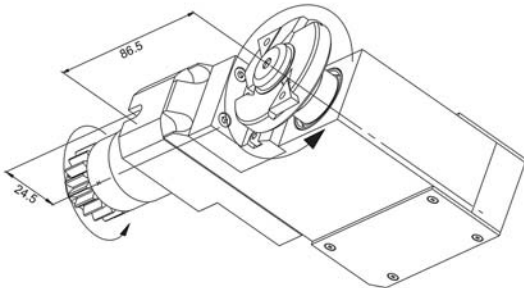
## BSE-3107



Item No	Collet	Ratio	rpm max.
BSE-3107	3x ER11	1:1	8'000



## BSP-509

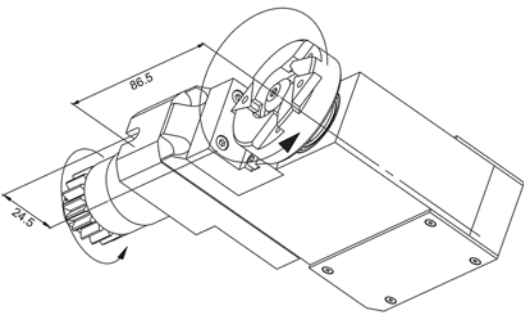


Item No	Ratio	rpm max.	Arbor Ø
BSP-509	1:1	8'000	13.00

Polygon attachment Ø ext. max. 60.00



## BSP-512

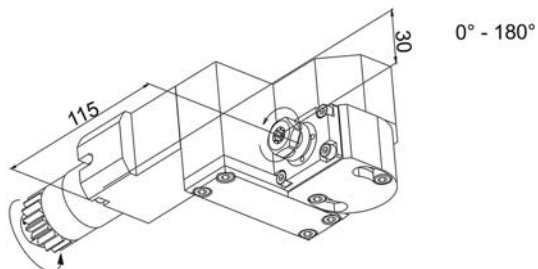


Item No	Ratio	rpm max.	Arbor Ø
BSP-512	1:1	8'000	10.00

Polygon attachment Ø ext. max. 60.00



## BSA-107



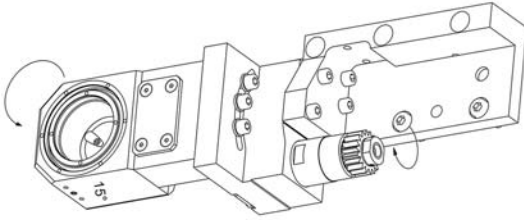
Item No	Collet	Ratio	rpm max.
BSA-107	ER11	1:1	8'000

Milling / drilling adjustable 0°-180°



# CITIZEN A20-VII

## BSW-215

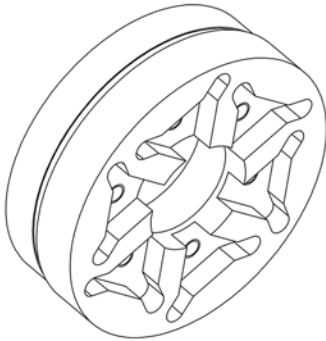


Item No	Ratio	rpm max.	Mark
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BSW-215                      1:1                      8'000                      Schwanog  
 Thread whirling attachment 15°, type Schwanog / Utilis, without head, without inserts



## SWG-197591 (Schwanog)

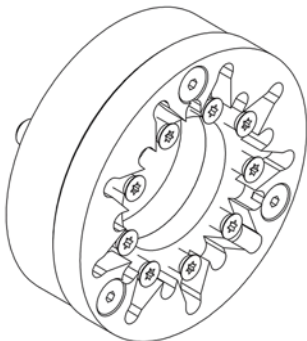


Item No	Inserts	Ø maxi
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SWG-197591                      6                      12.00  
 Thread whirling head type Schwanog



## MWT12 164 4046 130 09 (Utilis)

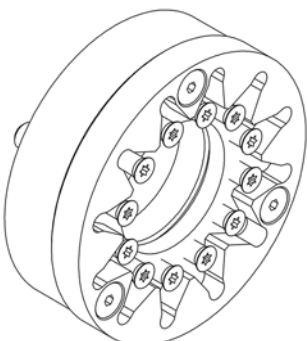


Item No	Inserts	Ø maxi
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MWT12-164-4046-130-09                      9                      12.00  
 Thread whirling head type Utilis



## MWT12 164 4046 130 12 (Utilis)



Item No	Inserts	Ø maxi
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MWT12-164-4046-130-12                      6                      12.00  
 Thread whirling head type Utilis

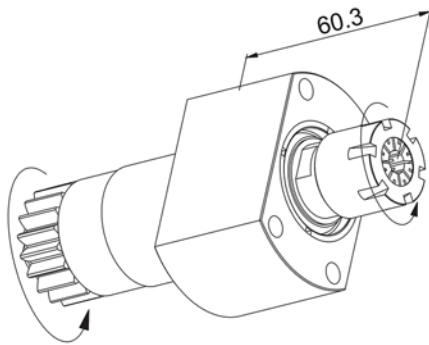






# CITIZEN A32

## GSC-1110

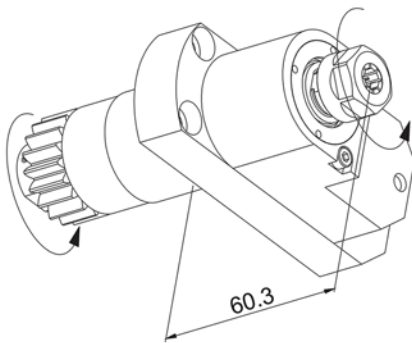


Item No	Collet	Ratio	rpm max.
GSE-1110	ER16	1:1	5'000

Milling / drilling unit



## BSC-610-3X

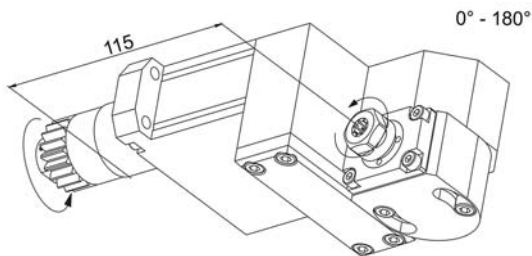


Item No	Collet	Ratio	rpm max.
BSC-610-3X	ER11	1:3	15'000

Milling / drilling unit high speed



## BSA-3107

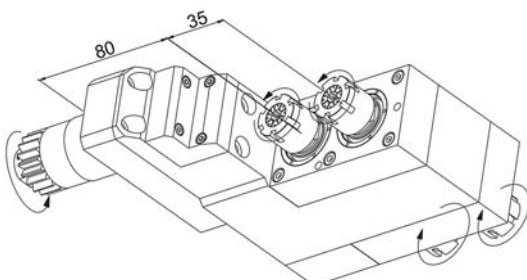


Item No	Collet	Ratio	rpm max.
BSA-3107	ER11	1:1	5'000

Milling / drilling unit, adjustable 0°-180°



## BSE-3207



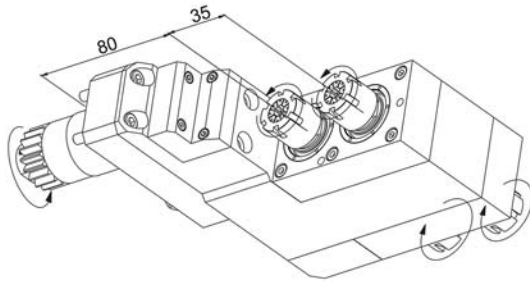
Item No	Collet	Ratio	rpm max.
BSE-3207	4x ER16	1:1	5'000

2x Milling / drilling unit 90°, front/back



# CITIZEN A32

## BSE-3207-II



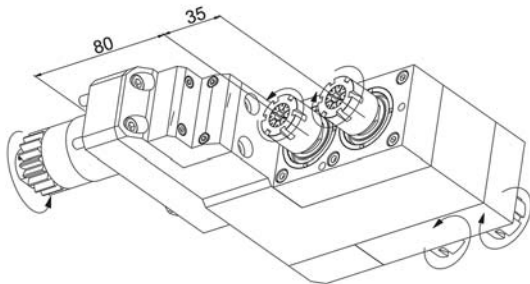
Item No	Collet	Ratio	rpm max.
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BSE-3207-II 4x ER16 1:1 5'000

2x Milling / drilling unit 90°, front/back



## BSE-3207-III



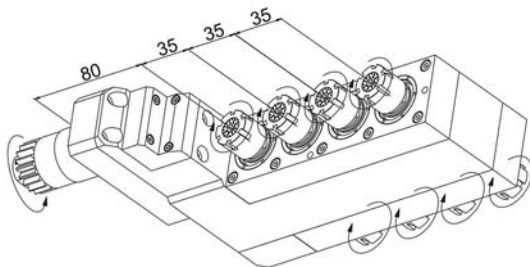
Item No	Collet	Ratio	rpm max.
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BSE-3207-III 4x ER16 1:1 5'000

2x Milling / drilling unit 90°, front/back, rotation L/R



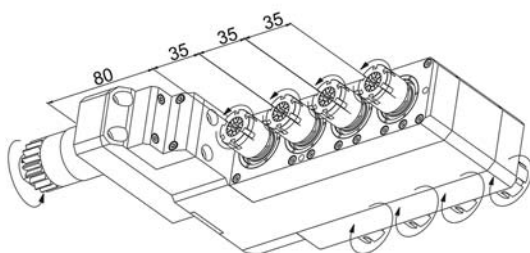
## BSE-3208



Item No	Collet	Ratio	rpm max.
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BSE-3208 8x ER16 1:1 5'000

4x milling / drilling unit 90°, front/back



Item No	Collet	Ratio	rpm max.
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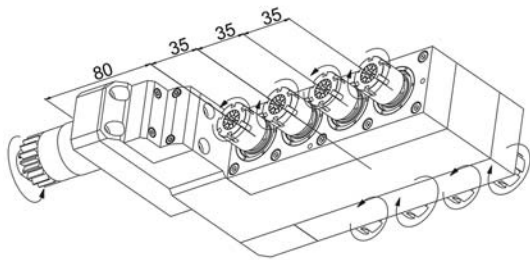
BSE-3208-II 8x ER16 1:1 5'000

4x milling / drilling unit 90°, front/back, rotation L/R



# CITIZEN A32

## BSE-3208-III



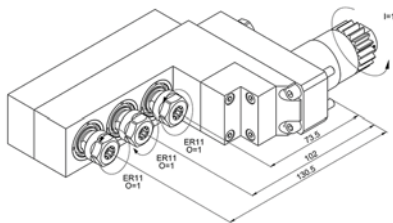
Item No	Collet	Ratio	rpm max.
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BSE-3208-III 8x ER16 1:1 5'000

4x millng / drilling unit 90°, front/back



## BSE-3106



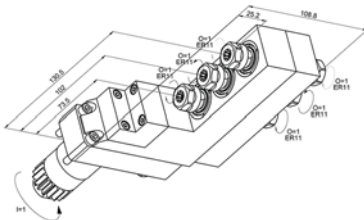
Item No	Collet	Ratio	rpm max.
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BSE-3106 3x ER11 1:1 5'000

3x millng / drilling unit 90°



## BSE-3205



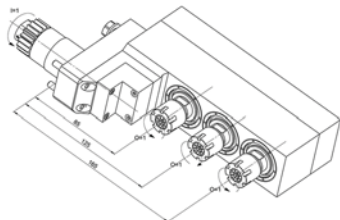
Item No	Collet	Ratio	rpm max.
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BSE-3205 6x ER11 1:1 5'000

3x millng / drilling unit 90°, front/back



## BSE-3209



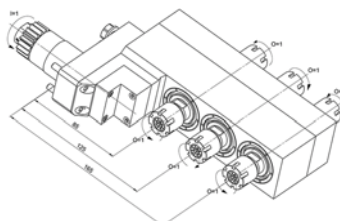
Item No	Collet	Ratio	rpm max.
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BSE-3209 3x ER16 1:1 5'000

3x millng / drilling unit 90°



## BSE-3210



Item No	Collet	Ratio	rpm max.
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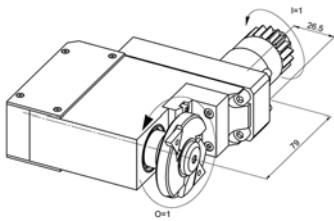
BSE-3210 6x ER16 1:1 5'000

3x millng / drilling unit 90°, front/back



# CITIZEN A32

## BSP-510

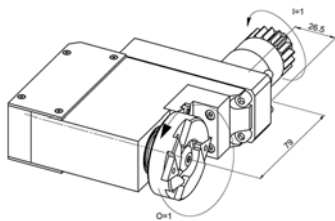


Item No	Ratio	rpm max.	Arbor Ø
BSP-510	1:1	5'000	13.00

Polygon attachment max. Ø = 55.00



## BSP-511

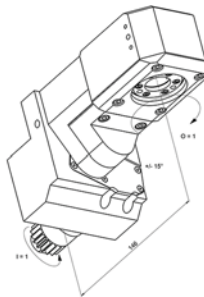


Item No	Ratio	rpm max.	Arbor Ø
BSP-511	1:1	5'000	10.00

Polygon attachment max. Ø = 55.00



## BSW-315

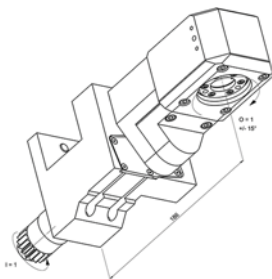


Item No	Ratio	rpm max.	Inserts
BSW-315	1:1	5'000	6

Thread whirling attachment +/-15°  
(requires remove the block of 4 fixed tool holder)



## BSW-315-II



Item No	Ratio	rpm max.	Inserts
BSW-315-II	1:1	5'000	6

Thread whirling attachment +/-15°  
Pos. T07 unusable



## SWG-197591



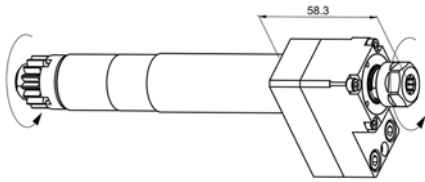
Item No	Inserts	Ø maxi
SWG-197591	6	12.00

Thread whirling head type Schwanog



# CITIZEN C16-VII C16IX

## GSC-607-2X



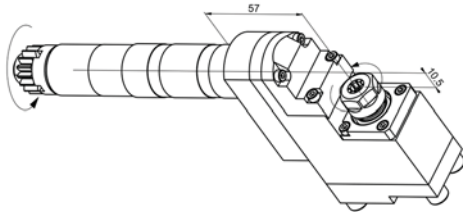
Item No	Collet	Ratio	rpm max.
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GSC-607-2X	ER11	1:2	16'000
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Milling / drilling unit high speed, usable for M12/16



## GSE-507



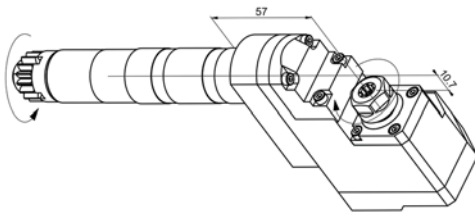
Item No	Collet	Ratio	rpm max.
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GSE-507	ER11	1:1	8'000
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Milling / drilling unit 90°, usable for M12/16



## GSE-507-2X



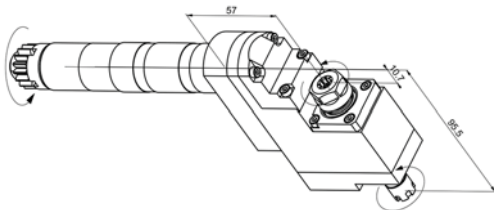
Item No	Collet	Ratio	rpm max.
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GSE-507-2X	ER11	1:2	16'000
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Milling / drilling unit 90° high speed, usable for M12/16



## GSE-507-DE



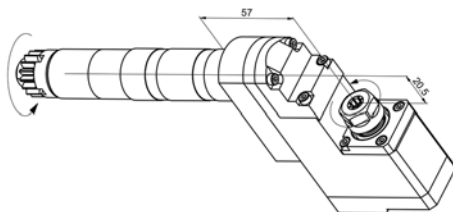
Item No	Collet	Ratio	rpm max.
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GSE-507-DE	ER11/ER8	1:1	8'000
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Milling / drilling unit 90°, front/back, usable for M12/16



## GSE-508



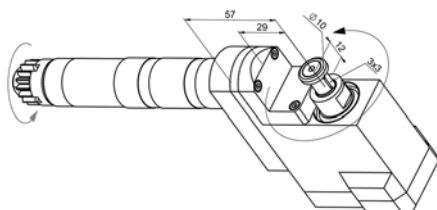
Item No	Collet	Ratio	rpm max.
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GSE-508	ER11	1:1	8'000
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Milling / drilling unit 90°, usable for M12/16



## GSE-509



Item No	Ratio	rpm max.	Arbor Ø
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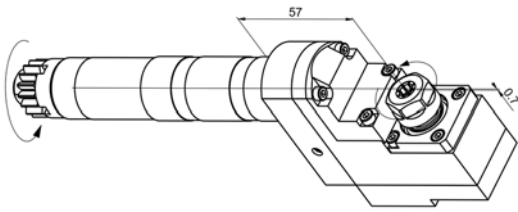
GSE-509	1,6:1	5'000	10.00
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Polygon attachment 90°, Ø max. 56.00, low speed, usable for M12/16



# CITIZEN C16-VII C16IX

## GSE-707

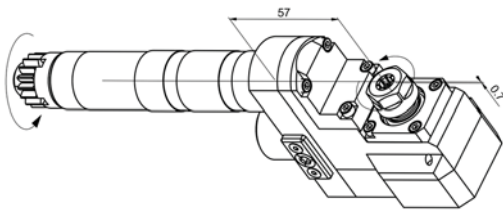


Item No	Collet	Ratio	rpm max.
GSE-707	ER11	1:1	8'000

Milling / drilling unit 90°, usable for M12/16



## GSE-708

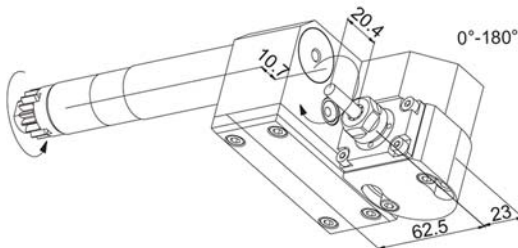


Item No	Collet	Ratio	rpm max.
GSE-708	ER11	1.65:1	4848

Milling / drilling unit 90°, low speed, usable for M12/16



## GSA-407

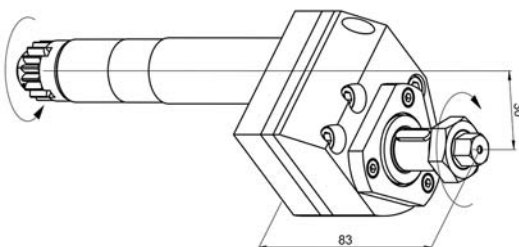


Item No	Collet	Ratio	rpm max.
GSA-407	ER11	1:2.5	20'000

Milling / drilling unit 90°, adjustable 0°-180°, high speed, usable for M12/16



## GSS-250



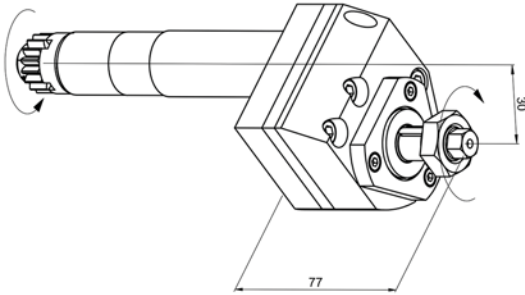
Item No	Ratio	rpm max.	Arbor Ø
GSS-250	2:1	4'000	16.00

Milling / drilling unit max Ø 50.00, low speed, usable for M12/16



# CITIZEN C16-VII C16IX

## GSS-250-13

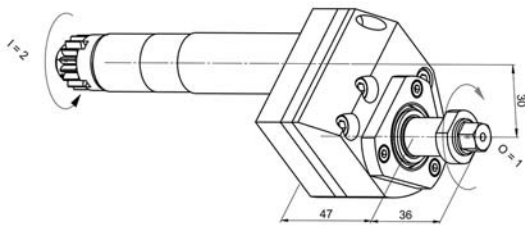


Item No	Ratio	rpm max.	Arbor Ø
GSS-250-13	2:1	4'000	13.00

Milling / drilling unit max Ø 50.00, low speed, usable for M12/16



## GSS-250-15

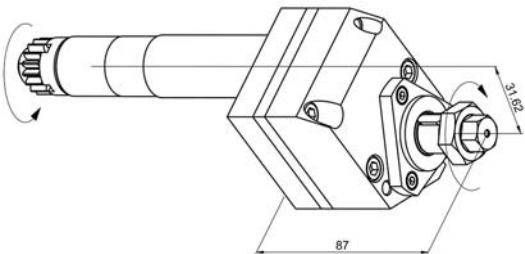


Item No	Ratio	rpm max.	Arbor Ø
GSS-250-15	2:1	4'000	15.875

Milling / drilling unit max Ø 50.00, low speed, usable for M12/16



## GSS-450

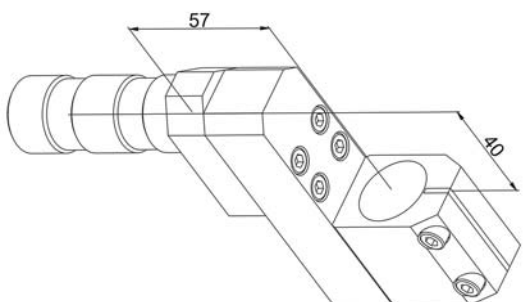


Item No	Ratio	rpm max.	Arbor Ø
GSS-450	4:1	2'000	16.00

Milling / drilling unit, offset, low speed, usable for M12/16



## GDF-901



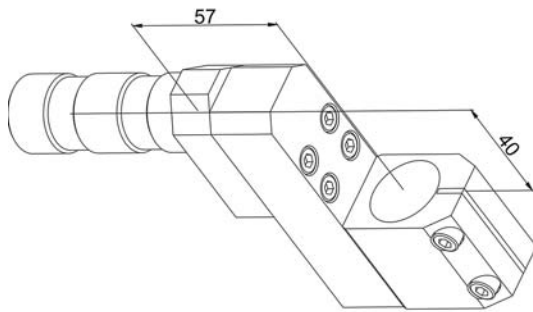
Item No	High	Spindle Ø
GDF-901	57.00	19.05

High frequency tool holder Ø 19.05, usable for M12/16



# CITIZEN C16-VII C16IX

## GDF-901-HF

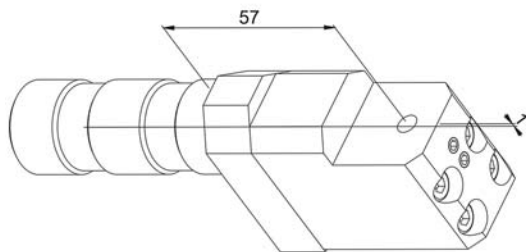


Item No	Mark	High	Spindle Ø
GDF-901-HF	IBAG/Meyrat	57.00	25.00

High frequency tool holder Ø 25.00, usable for M12/16



## GDF-901-S1X6

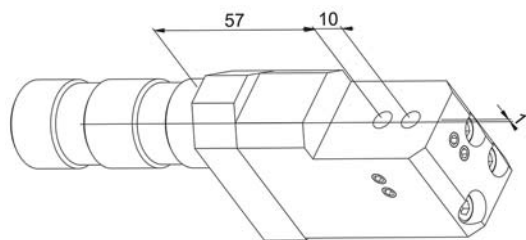


Item No	High	Tool Ø
GDF-901-S1X6	57.00	6.00

Tool holder Ø 6.00, usable for M12/16



## GDF-901-S2X6

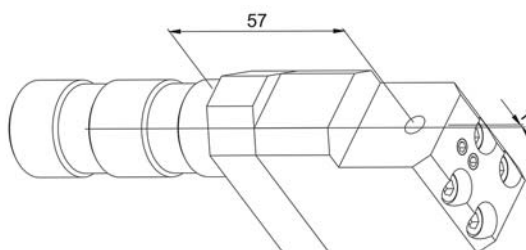


Item No	High	Tool Ø
GDF-901-S2X6	57.00 / 67.00	2x Ø 6.00

2x tool holder Ø 6.00, usable for M12/16



## GDF-901-S1X4



Item No	High	Tool Ø
GDF-901-S1X4	57.00	4.00

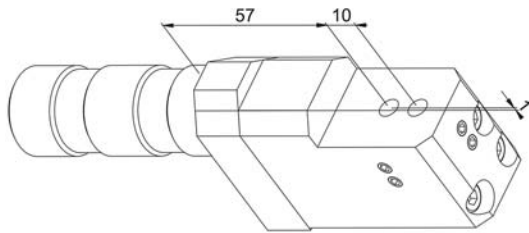
Tool holder Ø 4.00, usable for M12/16





# CITIZEN C16-VII C16IX

## GDF-901-S2X4

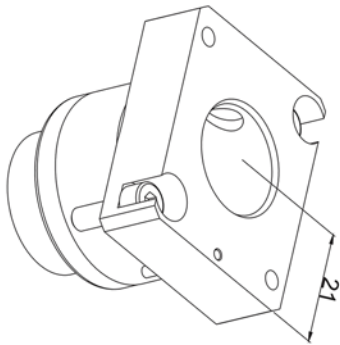


Item No	High	Tool Ø
GDF-901-S2X4	57.00/67.00	2x Ø 4.00

2x tool holder Ø 4.00, usable for M12/16



## SAU-319

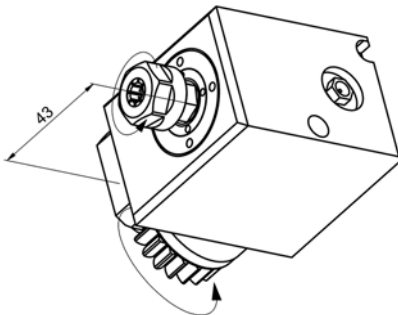


Item No	Tool Ø
SAU-319	19.05

Tool holder Ø 19.05, usable for M12/16



## GSC-707

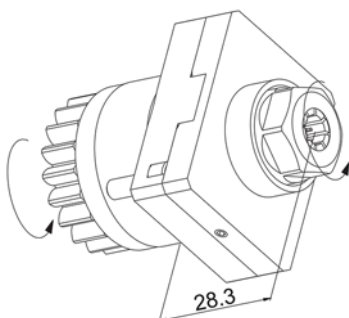


Item No	Collet	Ratio	rpm max.
GSC-707	ER11	1:1	8'000

Milling / drilling unit 90°



## GSE-807



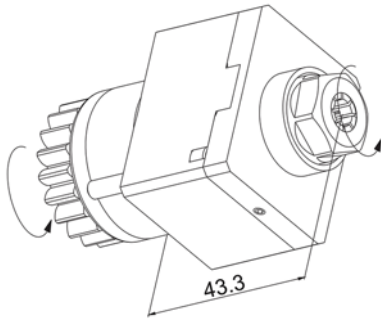
Item No	Collet	Ratio	rpm max.
GSE-807	ER11	1:1	8'000

Milling / drilling unit



# CITIZEN C16-VII C16IX

## GSE-808

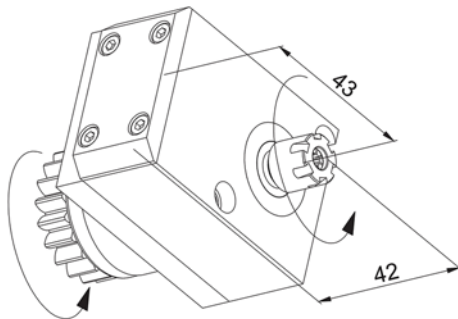


Item No	Collet	Ratio	rpm max.
GSE-808	ER11	1:1	8'000

Milling / drilling unit



## GSE-8-3X

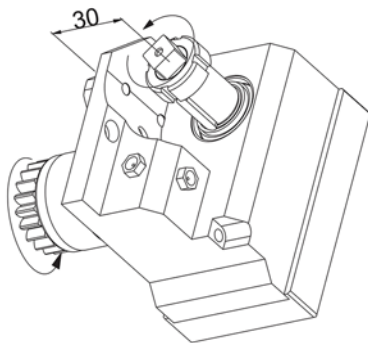


Item No	Collet	Ratio	rpm max.
GSE-8-3X	ER08	1:3	24'000

Milling / drilling unit high speed



## GSF-130

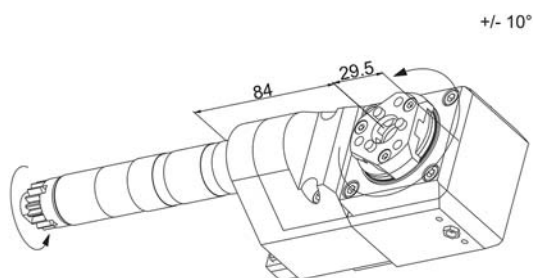


Item No	Ratio	rpm max.	Arbor Ø
GSF-130	1:1	8'000	16.00

Milling attachment 90°, max. Ø 50.00, usable for U121B



## LSW-424



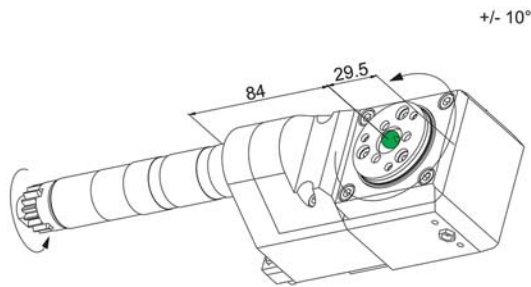
Item No	Ratio	rpm max.
LSW-424	1:1	8'000

Thread whirling attachment +/- 10°, without head, without inserts, usable for M12/16



# CITIZEN C16-VII C16IX

## LSW-424-000

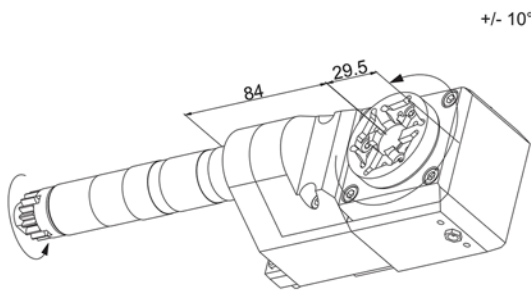


Item No	Ratio	rpm max.
LSW-424-000	1:1	8'000

Thread whirling attachment +/-10°, without head, without inserts, usable for M12/16



## LSW-424-SWG (Schwanog)

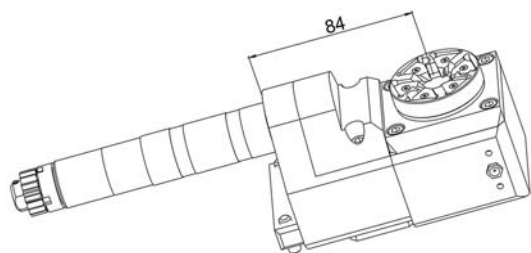


Item No	Ratio	rpm max.
LSW-424-SWG	1:1	8'000

Thread whirling attachment +/-10°, without head, without inserts, usable for M12/16



## LSW-424-HO (Horn)

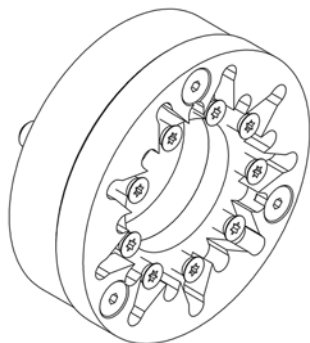


Item No	Ratio	rpm max.
LSW-424-HO	1:1	8'000

Thread whirling attachment +/-10°, without head, without inserts, usable for M12/16



## MWT12-164-3546-169-09 (Utilis)



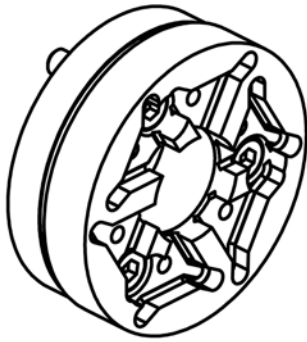
Item No	Inserts	Ø maxi
MWT12-164-3546-169-09	9	12.00

Thread whirling head, type Utilis, without inserts



# CITIZEN C16-VII C16IX

## LSW-424-FPSWG (Schwanog)



Item No	Inserts	Ø maxi
LSW-424-FPSWG	6	12.00

Thread whirling head, type Schwanog, without inserts



## LSW-424-FPGLO (Gloor)



Item No	Inserts	Ø maxi
LSW-424-FPGLO	3	6.00

Thread whirling head, type Gloor, without inserts



## LSW-424-FPHO (Horn)



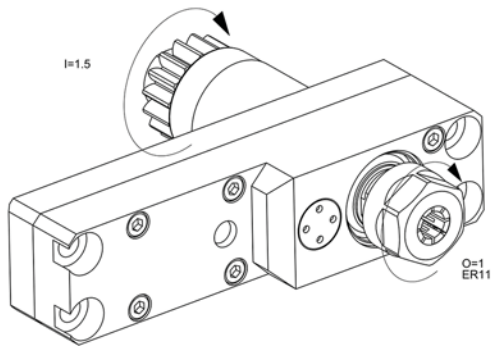
Item No	Inserts	Ø maxi
LSW-424-HP0		

Thread whirling head, type horn, without inserts



# CITIZEN K12-K16

## GSC-815

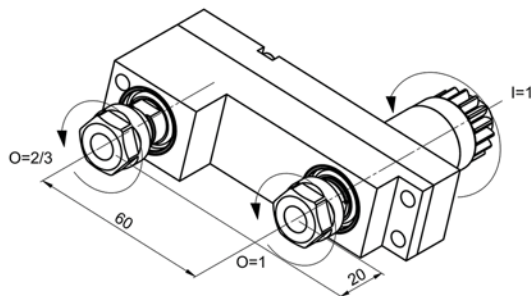


Item No	Collet	Ratio	rpm max.
GSC-815	ER11	3:2	4'000

Milling / drilling unit high speed



## GSC-816

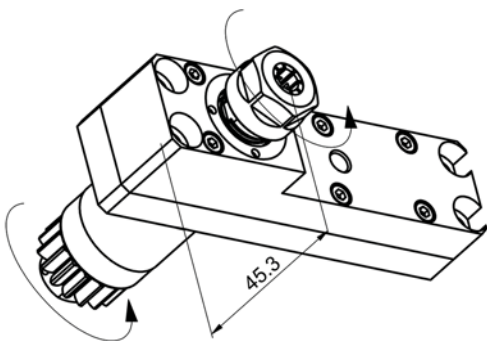


Item No	Collet	Ratio	rpm max.
GSC-816	2x ER11	1:1-1:0.666	4'000/6'000

2x milling / drilling unit, 1x low speed, 1x normal



## GSC-850-2X

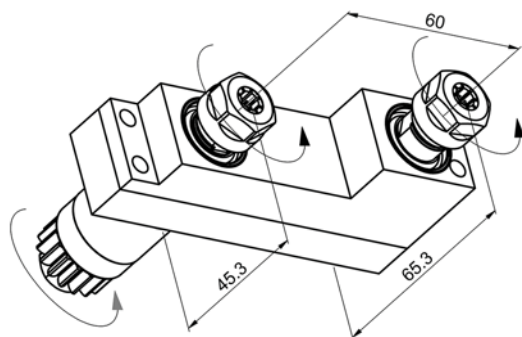


Item No	Collet	Ratio	rpm max.
GSC-850-2X	ER11	1:2	12'000

Milling / drilling unit high speed



## GSC-860



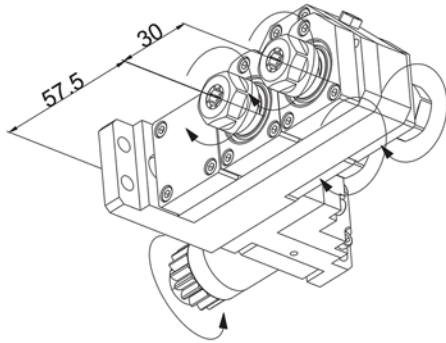
Item No	Collet	Ratio	rpm max.
GSC-860	2x ER11	1:1	6'000

2x milling / drilling unit



# CITIZEN K12-K16

## GSE-2007

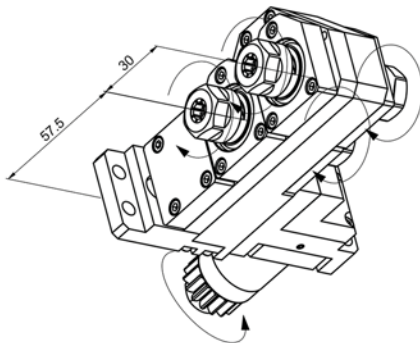


Item No	Collet	Ratio	rpm max.
GSE-2007	4x ER11	1:1	12'000

2x Milling / drilling unit 90°, front/back



## GSE-2007-2X

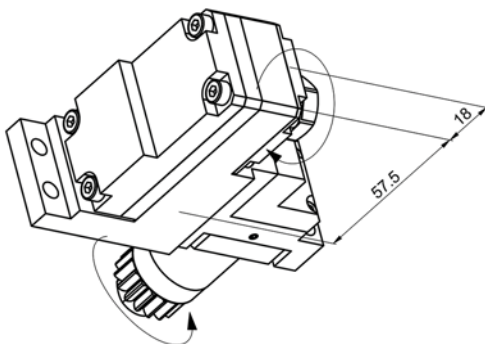


Item No	Collet	Ratio	rpm max.
GSE-2007-2X	4x ER11	1:2.086	12'000

2x milling / drilling unit 90°, front/back



## GSE-2107

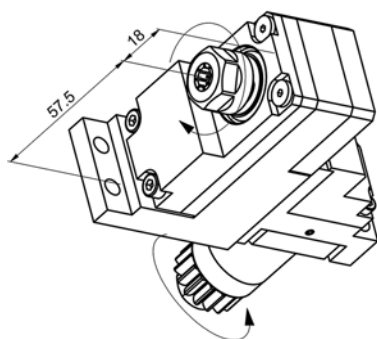


Item No	Collet	Ratio	rpm max.
GSE-2107	ER11	1:1	6'000

Milling / drilling unit 90°



## GSE-2207



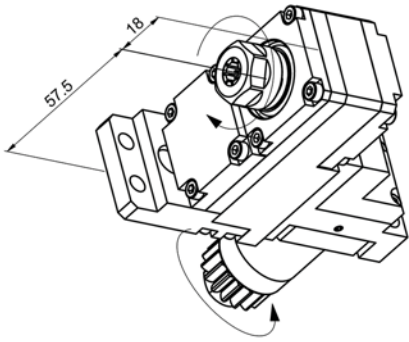
Item No	Collet	Ratio	rpm max.
GSE-2207	ER11	1:1	6'000

Milling / drilling unit 90°



# CITIZEN K12-K16

## GSE-2207-2X

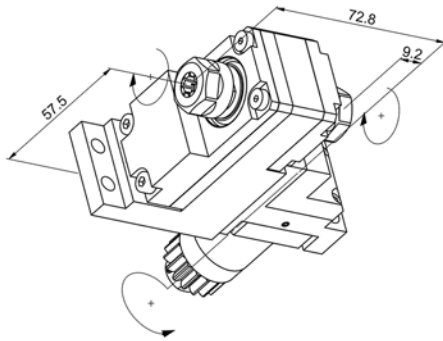


Item No	Collet	Ratio	rpm max.
GSE-2207-2X	ER11	1:2.086	12'000

Milling / drilling unit 90° high speed



## GSE-2307

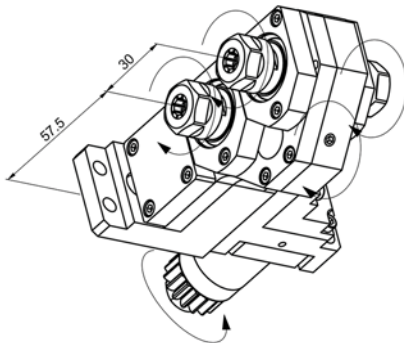


Item No	Collet	Ratio	rpm max.
GSE-2307	2x ER11	1:1	6'000

Milling / drilling unit 90°, front/back



## GSE-2407

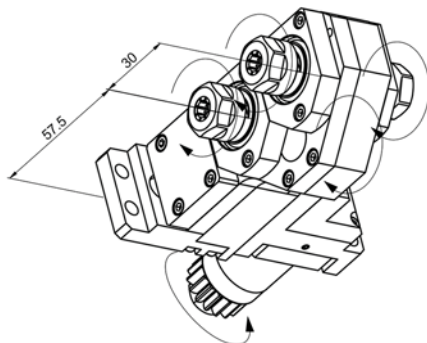


Item No	Collet	Ratio	rpm max.
GSE-2407	4x ER11	1:1	6'000

2x milling / drilling unit 90°, front/back



## GSE-2407-2X



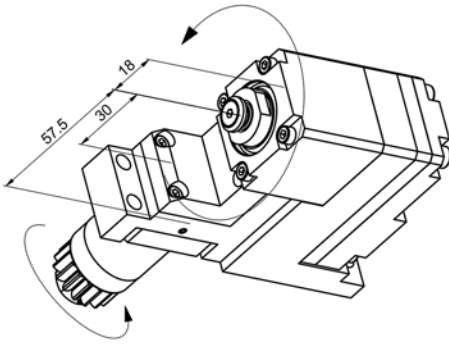
Item No	Collet	Ratio	rpm max.
GSE-2407-2X	4x ER11	1:2.086	12'000

2x milling / drilling unit 90°, front/back, high speed



# CITIZEN K12-K16

## GSS-2145

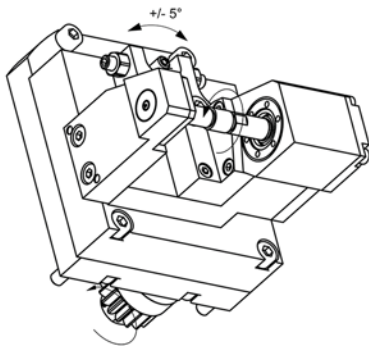


Item No	Ratio	rpm max.	Arbor Ø
GSS-2145	1:1	6'000	8.00

Milling attachment 90°, max. 56.00



## GSH-035

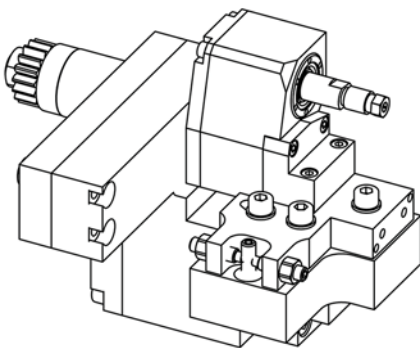


Item No	Ratio	rpm max.	Arbor Ø
GSH-035	1.5:1	4'000	3.50

Milling attachment Ø 3.50



## GSH-036

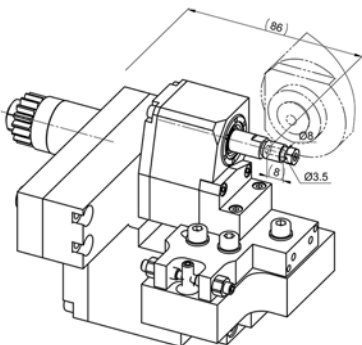


Item No	Ratio	rpm max.	Arbor Ø
GSH-036	1.5:1	4'000	3.50

Gearhobbing attachment 5.00 mm offset



## GSH-037



Item No	Ratio	rpm max.	Arbor Ø
GSH-037	1.5:1	4'000	3.50

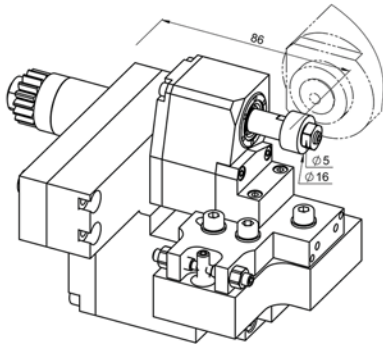
Gearhobbing attachment 15.00 mm offset





# CITIZEN K12-K16

## GSH-038

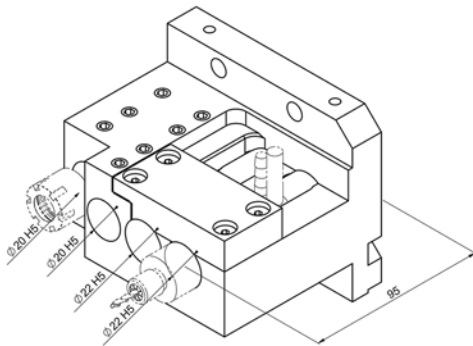


Item No	Ratio	rpm max.	Arbor Ø
GSH-038	1.5:1	4'000	5.00

Gearhobbing attachment 15.00 mm offset



## U15HF-MHF

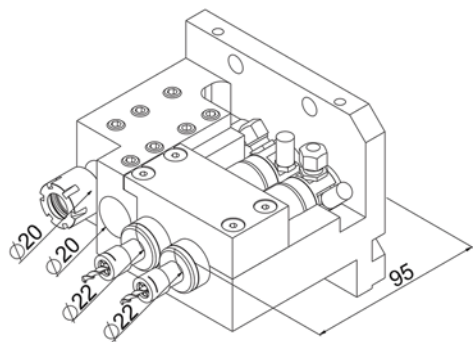


Item No	Spindle Ø
U15HF-MHF	2x 20.00 + 2x 22.00

High frequency tool holder for Meyrat



## U15HF-IBAG

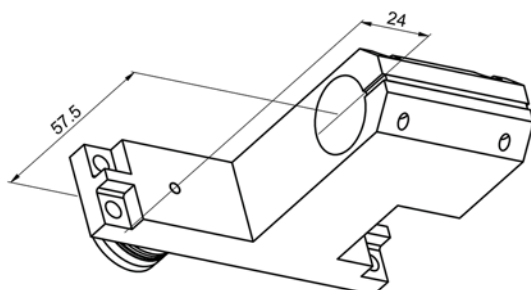


Item No	Spindle Ø
U15HF-IBAG	2 x 20.00 + 2x 22.00

High frequency tool holder for IBAG



## BDF-101-HF



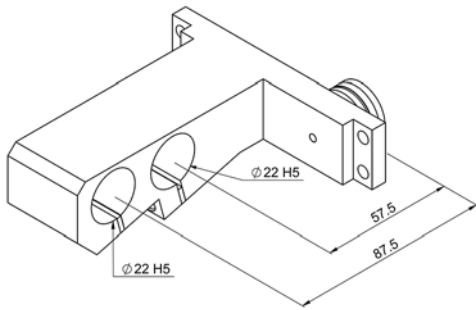
Item No	High	Spindle Ø
BDF-101-HF	57.50	22.00

High frequency tool holder



# CITIZEN K12-K16

## BDF-102HF

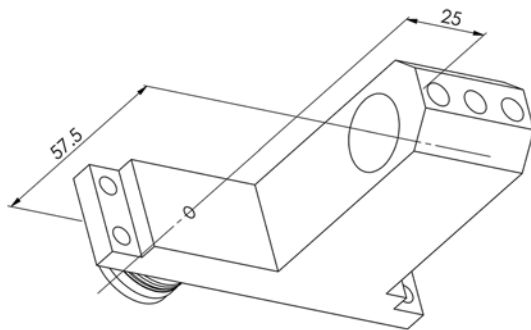


Item No	High	Spindle $\phi$
BDF-102-HF	57.50/87.50	2x 22.00

High frequency tool holder (2x)



## BDF-104

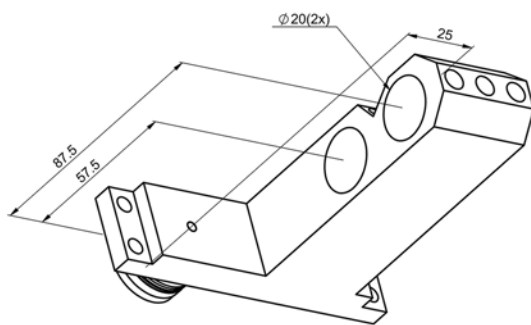


Item No	High	Tool $\phi$
BDF-104	57.50	20.00

Tool holder  $\phi 20.00$



## BDF-106

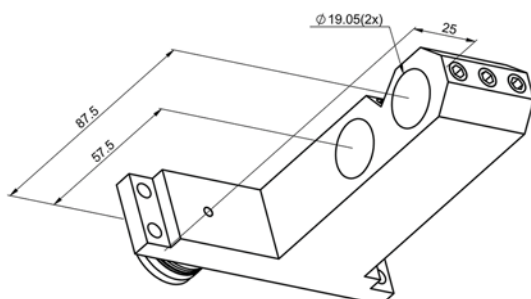


Item No	High	Tool $\phi$
BDF-106	57.50/87.50	2 x 20.00

2x tool holder



## BDF-107



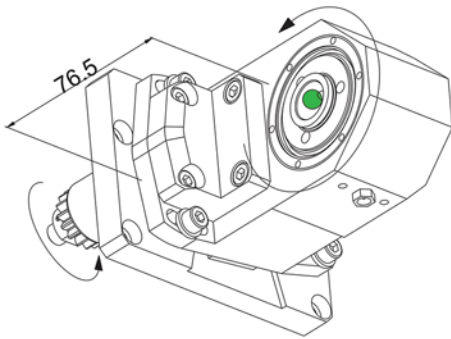
Item No	High	Tool $\phi$
BDF-107	57.50/87.50	2 x 19.05

2x tool holder



# CITIZEN K12-K16

## GSW-101-000

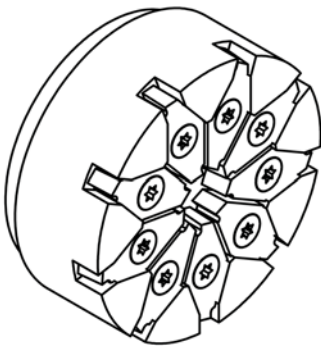


Item No	Ratio	rpm max.
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GSW-101-000 1:1 6'000  
Thread whirling attachment +/-15°, without head, without inserts



## MWT06-164-2035-165-09 (Utilis)



Item No	Inserts	∅ maxi
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MWT06-164-2035-165-09 9 6.00  
Thread whirling head type Utilis, without inserts



## SWG-832-144 (Schwanog)



Item No	Inserts	∅ maxi
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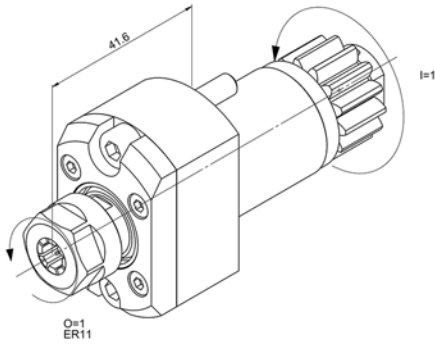
SWG-832-144 5 6.00  
Thread whirling head type Schwanog, without inserts





# CITIZEN L12

## MSC-507

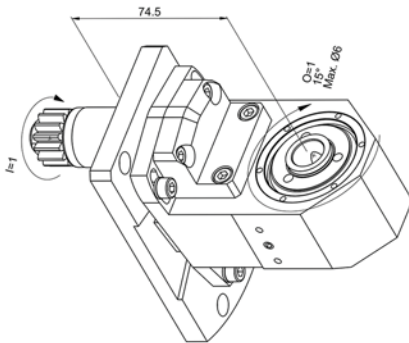


Item No	Collet	Ratio	rpm max.
MSC-507	ER11	1:1	10'000

Milling / drilling unit



## LSW-515-000

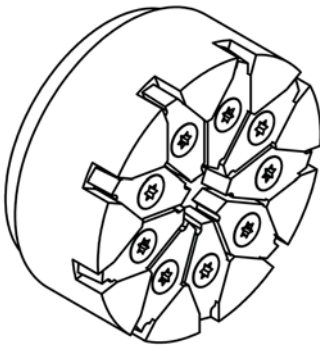


Item No	Ratio	rpm max.
LSW-515-000	1:1	10'000

Thread whirling attachment 15°, without head, without inserts



## MWT06-164-2035-165-09 (Utilis)



Item No	Inserts	Ø maxi
MWT06-164-2035-165-09	9	6.00

Thread whirling head type Utilis, without inserts



## SWG-832-135 (Schwanog)



Item No	Inserts	Ø maxi
SWG-832-144	5	6.00

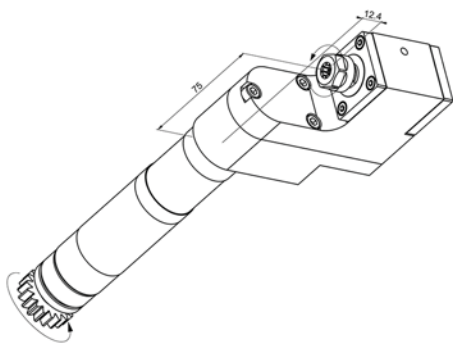
Thread whirling head type Schwanog, without inserts





# CITIZEN L20 - L20E/L20X

## GSE-306-SE312



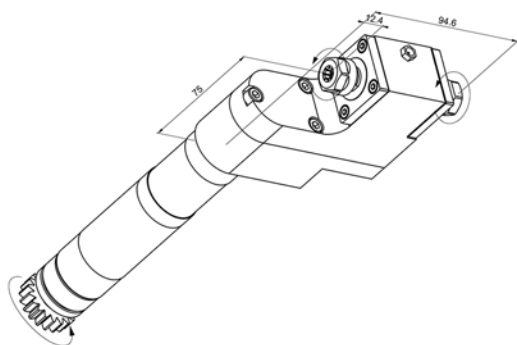
Item No	Collet	Ratio	rpm max.
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GSE-306-SE312	ER11	1:3	15'000
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Milling / drilling unit 90°, high speed, usable for M20/32



## GSE-306-DE312



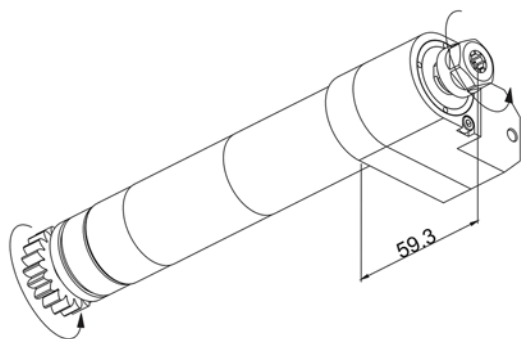
Item No	Collet	Ratio	rpm max.
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GSE-306-DE312	2x ER11	1:3	15'000
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Milling / drilling unit 90°, front/back, high speed, usable for M20/32



## GSC-510-3X



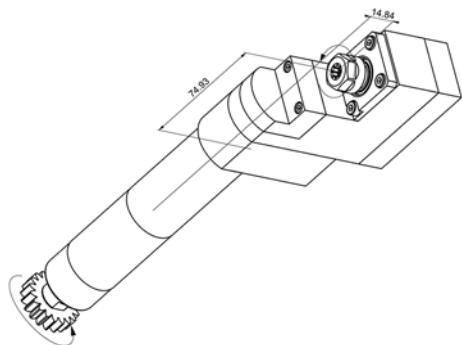
Item No	Collet	Ratio	rpm max.
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GSC-510-3X	ER11	1:3	15'000
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Milling / drilling unit, high speed, usable for M20/32



## GSE-306-L-520



Item No	Collet	Ratio	rpm max.
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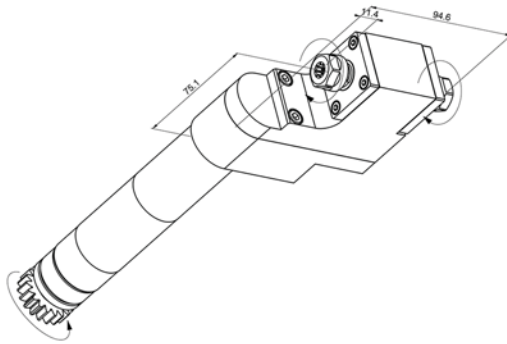
GSE-306-L-520	ER11	1:1	5'000
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Milling / drilling unit 90°, usable for M20/32



# CITIZEN L20 - L20E/L20X

## GSE-306-DE011



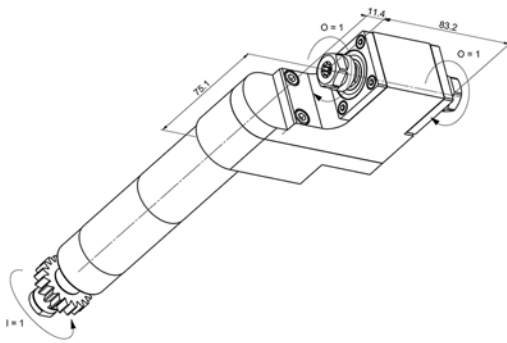
Item No	Collet	Ratio	rpm max.
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GSE-306-DE011	2x ER11	1:1	5'000
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Milling / drilling unit 90°, front/back, usable for M20/32



## GSE-306-DE511



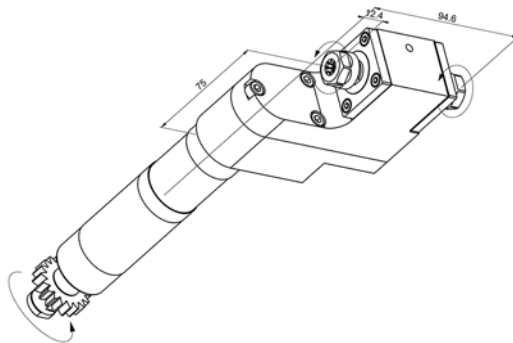
Item No	Collet	Ratio	rpm max.
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GSE-306-DE511	2x ER11	1:1	5'000
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Milling / drilling unit 90°, front/back, usable for M20/32



## GSE-306-DE512



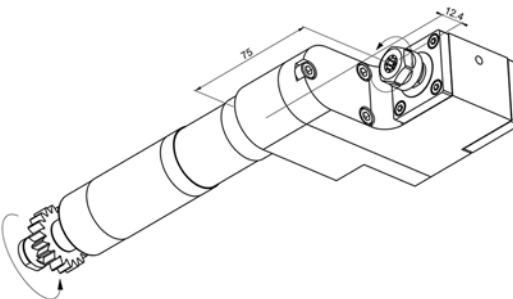
Item No	Collet	Ratio	rpm max.
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GSE-306-DE-512	2x ER11	1:3	15'000
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Milling / drilling unit 90°, front/back, high speed, usable for L25-VII



## GSE-306-SE512



Item No	Collet	Ratio	rpm max.
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GSE-306-SE512	ER11	1:3	15'000
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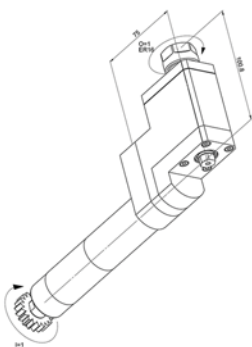
Milling / drilling unit 90°, high speed, usable for L25-VII





# CITIZEN L20 - L20E/L20X

## GSE-316-GS

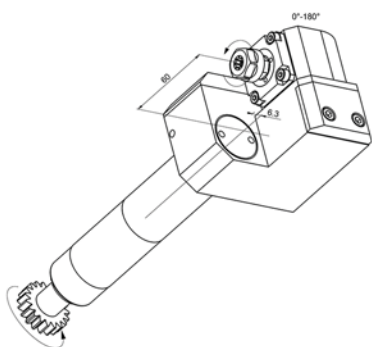


Item No	Collet	Ratio	rpm max.
GSE-316-GS	ER16	1:1	5'000

Milling / drilling unit 90°, usable for M20/32



## GSA-107

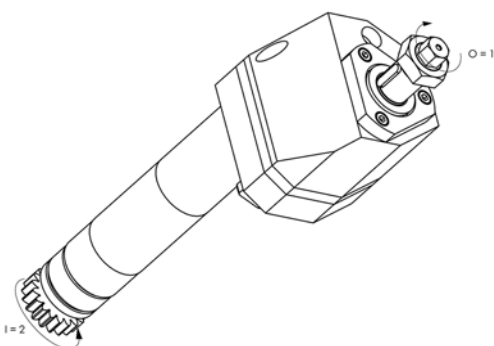


Item No	Collet	Ratio	rpm max.
GSA-107	ER11	1:1	5'000

Milling / drilling unit, adjustable 0°-180°, usable M20/32



## GSS-510

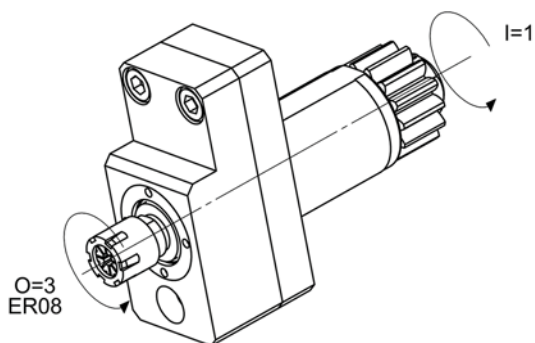


Item No	Ratio	rpm max.	Arbor Ø
GSS-510	2:1	2'500	16.00

Milling attachment Ø 16.00, usable for M20/32



## GSE-3307-3X



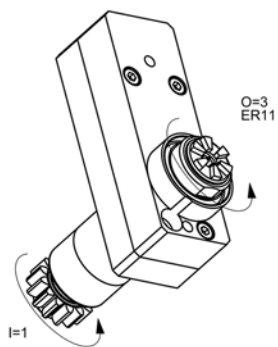
Item No	Collet	Ratio	rpm max.
GSE-3307-3X	ER08	1:3	15'000

Milling / drilling unit high speed



# CITIZEN L20 - L20E/L20X

## GSE-3507-3X

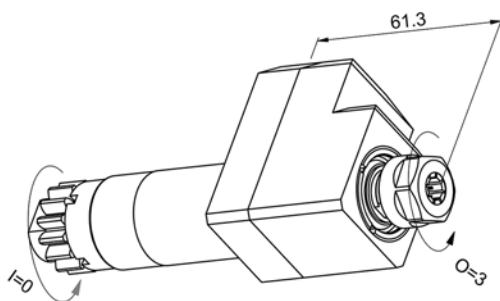


Item No	Collet	Ratio	rpm max.
GSE-3507-3X	ER11	1:3	15'000

Milling / drilling unit high speed, usable for L20x / L20-E or newer model



## GSC-204-3X

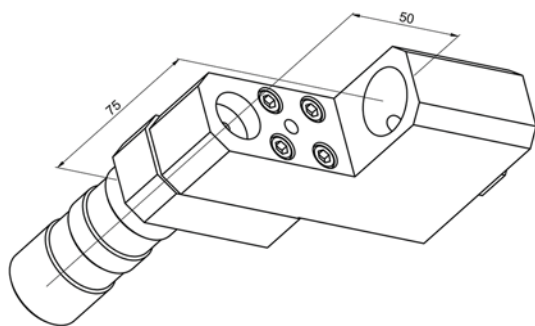


Item No	Collet	Ratio	rpm max.
GSC-204-3X	ER11	1:3	15'000

Milling / drilling unit high speed, usable for L16



## GDF-903

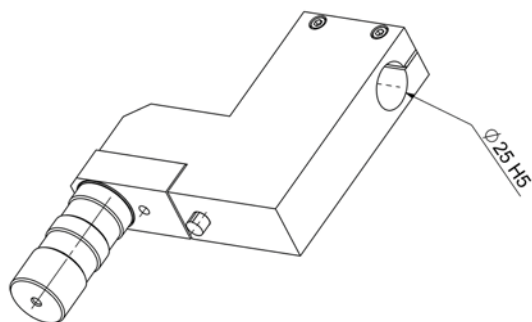


Item No	High	Tool Ø
GDF-903	75.00	25.40

Tool holder Ø 25.40, usable for M20/32 and L32



## 852-354-OF-010



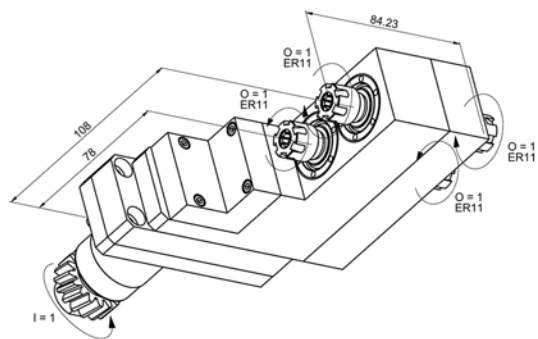
Item No	High	Spindle Ø
852-354-OF-010	105.00	25.00

High frequency tool holder Ø 25.00



# CITIZEN L20 - L20E/L20X

## GSE-3107



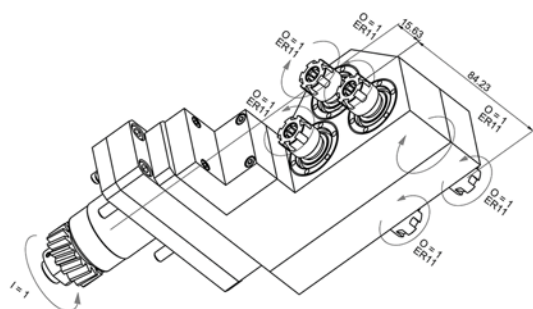
Item No	Collet	Ratio	rpm max.
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GSE-3107 4x ER11 1:1 5'000

2x milling / drilling unit 90°, front/back, usable for L20-E or newer model



## GSE-3207



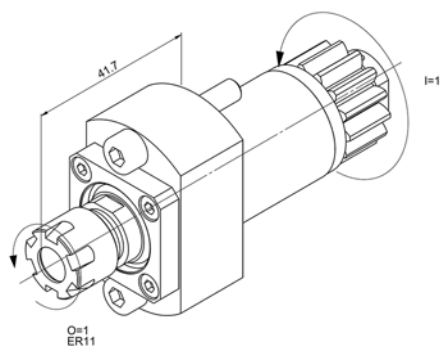
Item No	Collet	Ratio	rpm max.
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GSE-3207 6x ER11 1:1 5'000

3x milling / drilling unit 90°, front/back, usable for L20-E or newer model



## GSE-3307



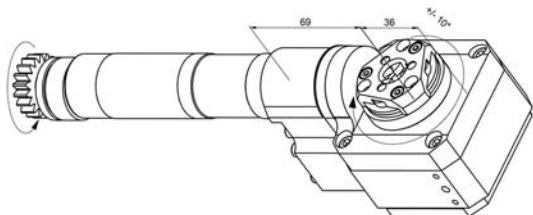
Item No	Collet	Ratio	rpm max.
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GSE-3307 ER11 1:1 5'000

Milling / drilling unit usable for L20-E or newer model



## LSW-101-L20



Item No	Ratio	rpm max.
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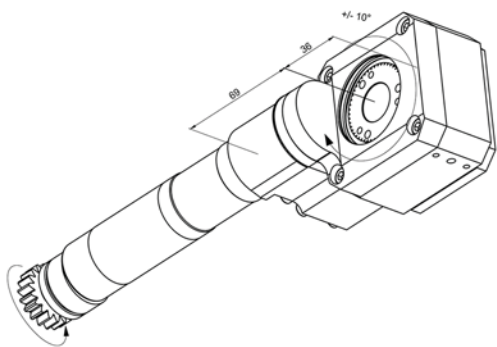
LSW-101-L20 2:1 2'500

Thread whirling attachment 90°, +/-10°, low speed, with head type Gloor



# CITIZEN L20 - L20E/L20X

## LSW-101-L20-000

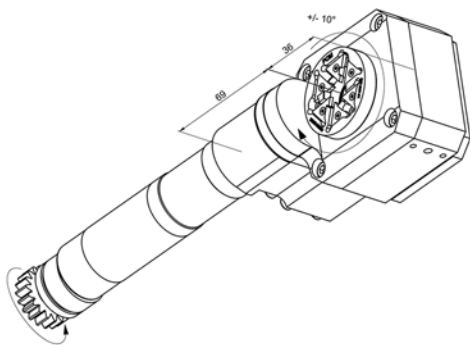


Item No	Ratio	rpm max.
LSW-101-L20-000	2:1	2'500

Thread whirling attachment 90°, +/- 10°, without head, without inserts



## LSW-101-L20-S

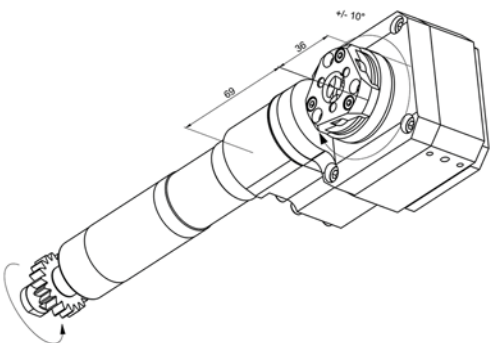


Item No	Ratio	rpm max.
LSW-101-L20-S	2:1	2'500

Thread whirling attachment 90°, +/- 10°, low speed, with head type Schwanog, for Citizen L20



## LSW-101-L25

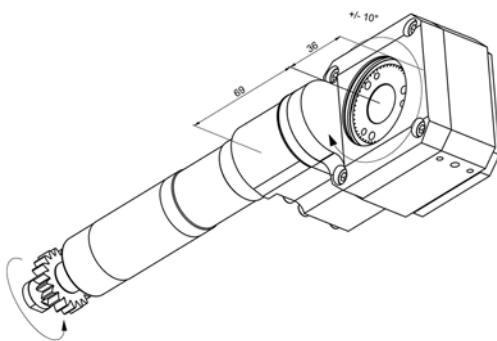


Item No	Ratio	rpm max.
LSW-101-L25	2:1	2'500

Thread whirling attachment 90°, +/- 10°, low speed, with head type Gloor, for Citizen L25



## LSW-101-L25-000



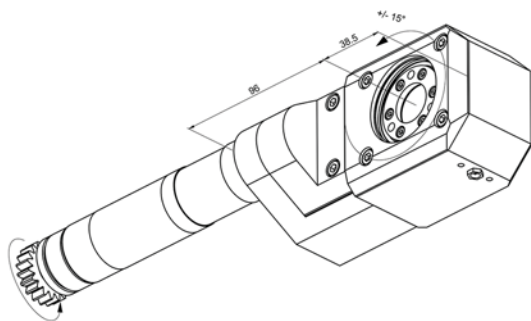
Item No	Ratio	rpm max.
LSW-101-L25-000	2:1	2'500

Thread whirling attachment 90°, +/- 10°, low speed, without head, without inserts



# CITIZEN L20 - L20E/L20X

## LSW-215-000

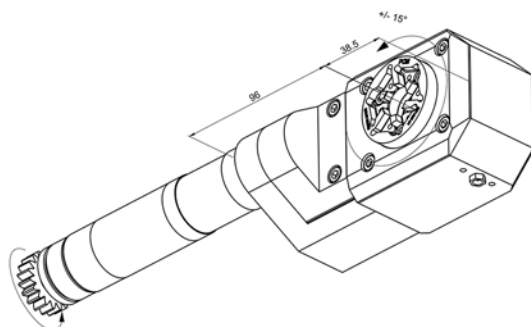


Item No	Ratio	rpm max.
LSW-215-000	1:1	5'000

Thread whirling attachment 90°, +/- 10°, without head, without inserts, usable for M32



## LSW-215-SWG (Schwanog)

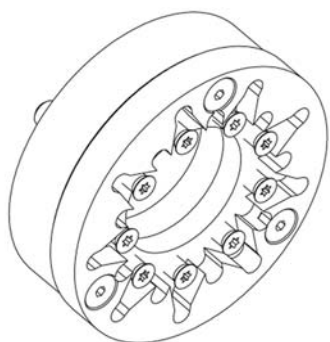


Item No	Ratio	rpm max.
LSW-215-SWG	1:1	5'000

Thread whirling attachment 90°, +/- 10°, without head, without inserts, usable for M32



## MWT12-164-4046-130-09 (Utilis)

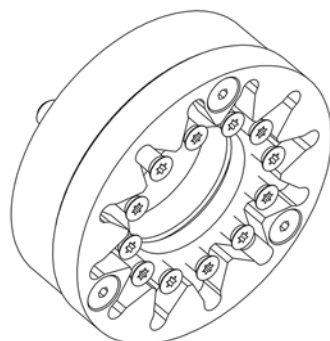


Item No	Inserts	Ø maxi
MWT12-164-4046-130-09	9	12.00

Thread whirling head type Utilis, without inserts



## MWT12-164-4046-130-12 (Utilis)



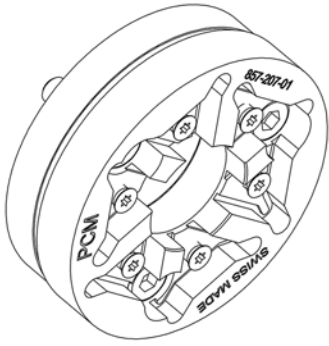
Item No	Inserts	Ø maxi
MWT12-164-4046-130-12	6	12.00

Thread whirling head type Utilis, without inserts



# CITIZEN L20 - L20E/L20X

## MSW-101-FPSWG (Schwanog)

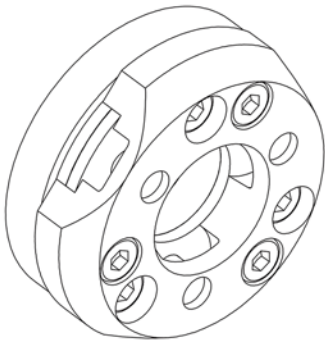


Item No	Inserts	Ø maxi
MSW-101-FPSWG	6	12.00

Thread whirling head type Schwanog, without inserts



## MSW-101-FPGLO (Gloor)



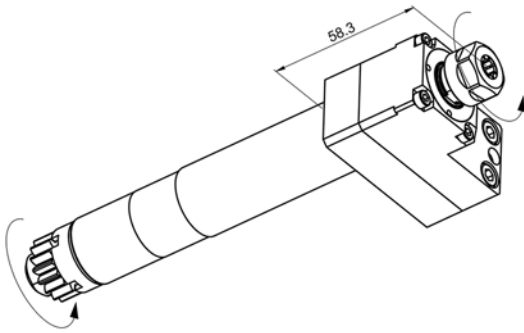
Item No	Inserts	Ø maxi
MSW-101-FPGLO	3	12.00

Thread whirling head type Gloor, without inserts



# CITIZEN M12-M16

## GSC-607-2x

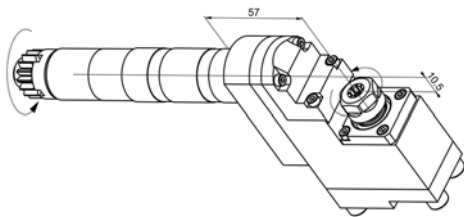


Item No	Collet	Ratio	rpm max.
GSC-607-2X	ER11	1:2	16'000

Milling / drilling unit, high speed, usable for C16-VII / IX



## GSE-507

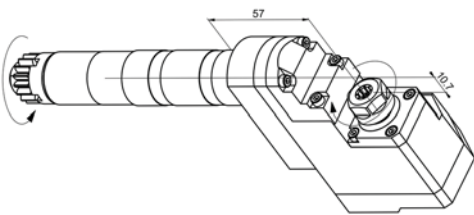


Item No	Collet	Ratio	rpm max.
GSE-507	ER11	1:1	8'000

Milling / drilling unit 90°, usable for C16-VII / IX



## GSE-507-2X

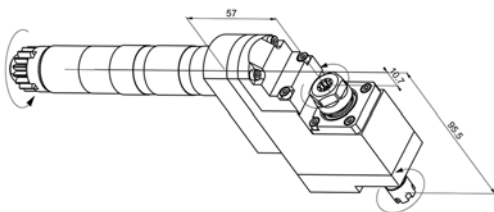


Item No	Collet	Ratio	rpm max.
GSE-507-2X	ER11	1:2	16'000

Milling / drilling unit 90°, high speed, usable for C16-VII / IX



## GSE-507-DE

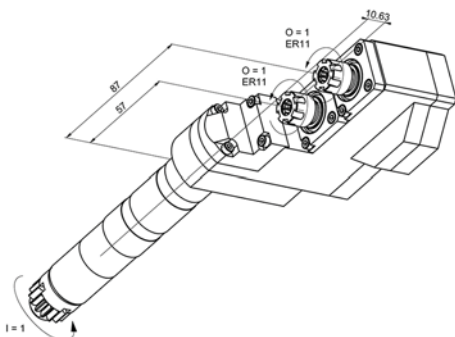


Item No	Collet	Ratio	rpm max.
GSE-507-DE	ER11/ER8	1:1	8'000

Milling / drilling unit 90°, front/back, usable for C16-VII / IX



## GSE-507-DS



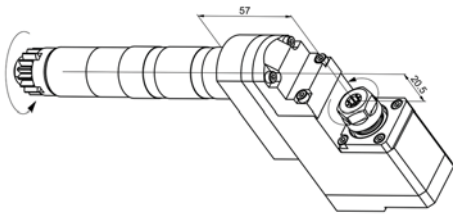
Item No	Collet	Ratio	rpm max.
GSE-507-DS	2x ER11	1:1	8'000

2x milling / drilling unit 90°, usable for C16-VII / IX



# CITIZEN M12-M16

## GSE-508

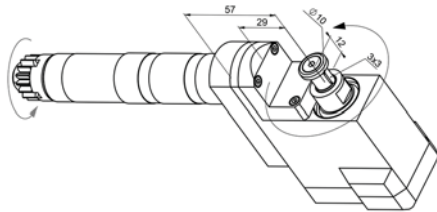


Item No	Collet	Ratio	rpm max.
GSE-508	ER11	1:1	8'000

Milling / drilling unit 90°, usable for C16-VII / IX



## GSE-509

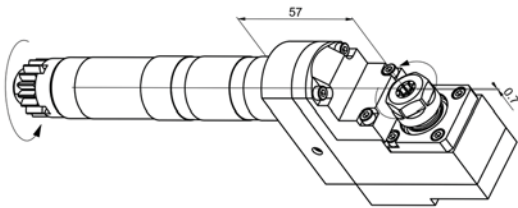


Item No	Ratio	rpm max.	Arbor Ø
GSE-509	1,6:1	5'000	10.00

Polygon attachment 90°, low speed, Ø max. 56.00



## GSE-707

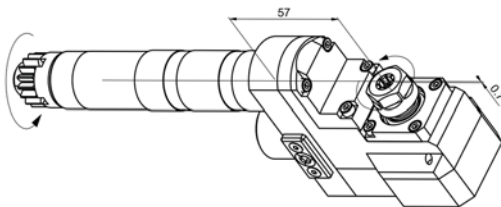


Item No	Collet	Ratio	rpm max.
GSE-707	ER11	1:1	8'000

Milling / drilling unit 90°, usable for C16-VII / IX



## GSE-708

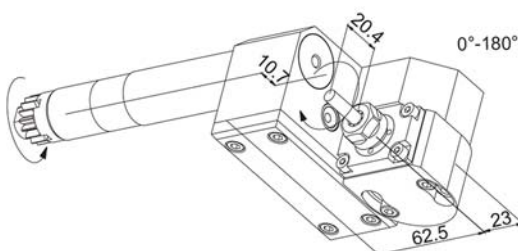


Item No	Collet	Ratio	rpm max.
GSE-708	ER11	1.65:1	4848

Milling / drilling unit 90°, low speed, usable for C16-VII / IX



## GSA-407



Item No	Collet	Ratio	rpm max.
GSA-407	ER11	1:2.5	20'000

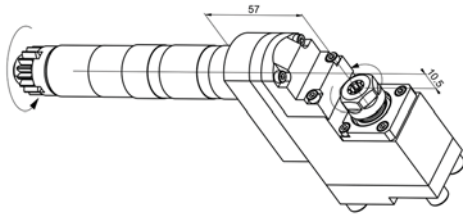
Milling / drilling unit, adjustable 0°-180°, low speed, usable for C16-VII / IX





# CITIZEN M12-M16

## GSA-507

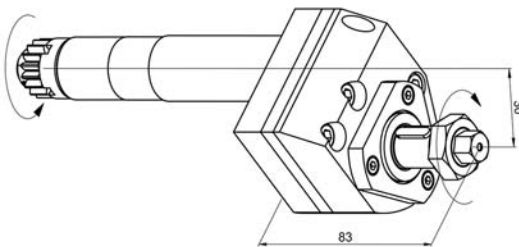


Item No	Collet	Ratio	rpm max.
GSA-507	ER11	1:1	8'000

Milling / drilling unit 90°



## GSS-250

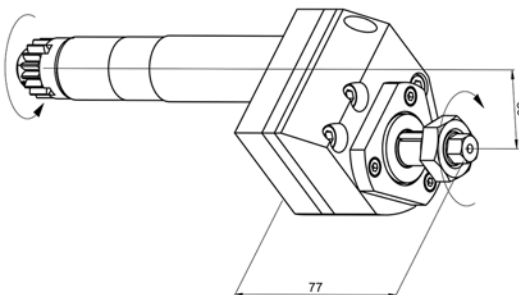


Item No	Ratio	rpm max.	Arbor Ø
GSS-250	2:1	4'000	16.00

Milling attachment max. Ø 50.00, low speed, usable for C16-VII / IX



## GSS-250-13

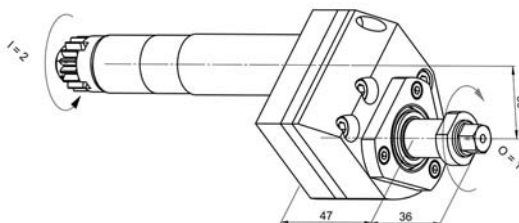


Item No	Ratio	rpm max.	Arbor Ø
GSS-250-13	2:1	4'000	13.00

Milling attachment max. Ø 50.00, low speed, usable for C16-VII / IX



## GSS-250-15



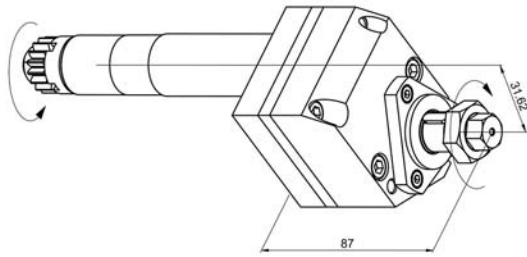
Item No	Ratio	rpm max.	Arbor Ø
GSS-250-15	2:1	4'000	15.875

Milling attachment max. Ø 50.00, low speed, usable for C16-VII / IX



# CITIZEN M12-M16

## GSS-450

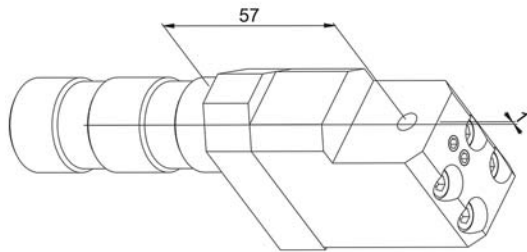


Item No	Ratio	rpm max.	Arbor Ø
GSS-450	4:1	2'000	16.00

Milling attachment, offset, low speed, usable for C16-VII / IX



## GDF-901-S1X6

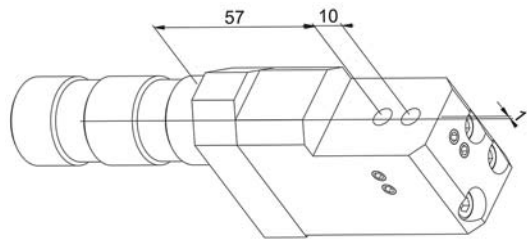


Item No	High	Tool Ø
GDF-901-S1X6	57.00	6.00

Tool holder Ø 6.00, usable for C16-VII / IX



## GDF-901-S2X6

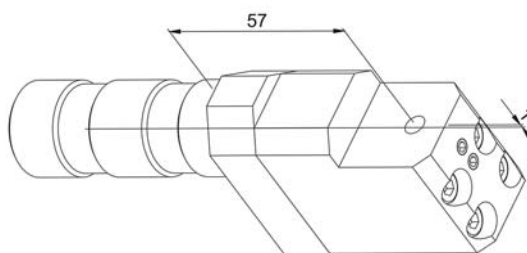


Item No	High	Tool Ø
GDF-901-S2X6	57.00 / 67.00	2x Ø 6.00

2x tool holder Ø 6.00, usable for C16-VII / IX



## GDF-901-S1X4



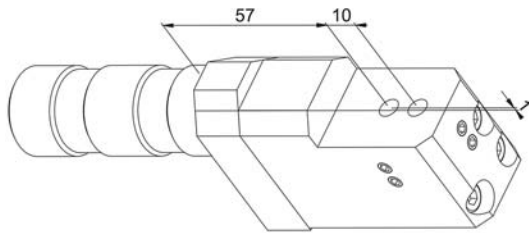
Item No	High	Tool Ø
GDF-901-S1X4	57.00	4.00

Tool holder Ø 4.00, usable for C16-VII / IX



# CITIZEN M12-M16

## GDF-901-S2X4

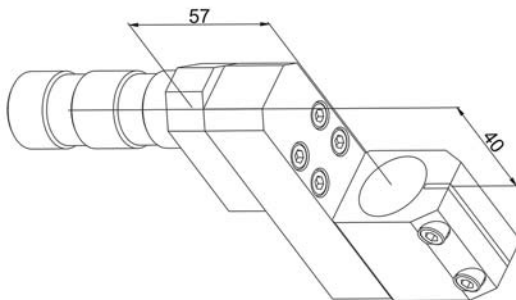


Item No	High	Tool Ø
GDF-901-S2X4	57.00/67.00	2x Ø 4.00

2x tool holder Ø 4.00, usable for C16-VII / IX



## GDF-901

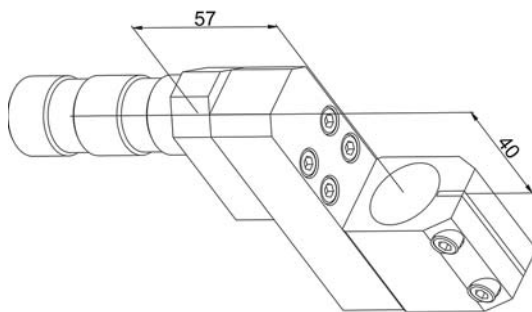


Item No	High	Spindle Ø
GDF-901	57.00	19.05

High frequency tool holder Ø 19.05, usable for C16-VII / IX



## GDF-901-HF

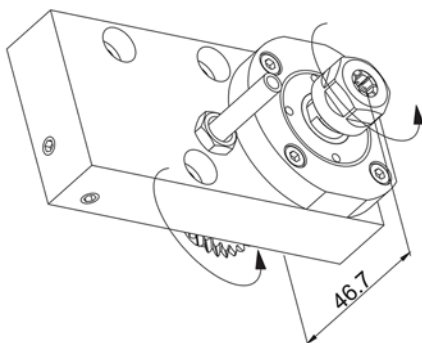


Item No	Mark	High	Spindle Ø
GDF-901-HF	IBAG/Meyrat	57.00	25.00

High frequency tool holder Ø 25.00, usable for C16-VII / IX



## MSC-106-K



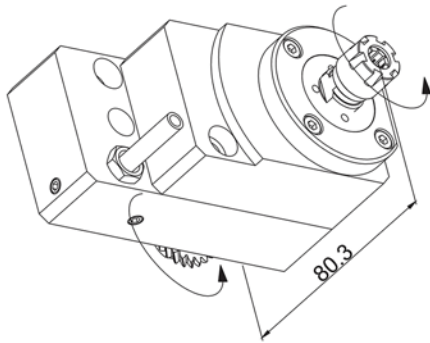
Item No	Collet	Ratio	rpm max.
MSC-106-k	ER11	1:1	6'500

Milling / drilling unit, with cooling



# CITIZEN M12-M16

## MSC-106-2X

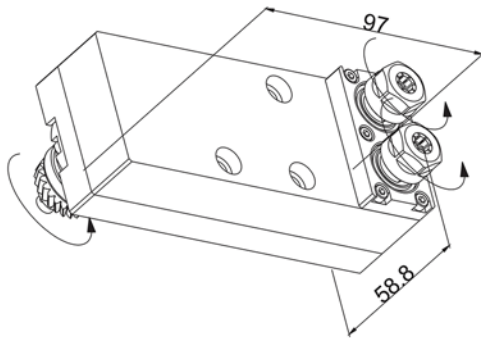


Item No	Collet	Ratio	rpm max.
MSC-106-2X	ER11	1:2	13'000

Milling / drilling unit high speed, with cooling



## MSC-407

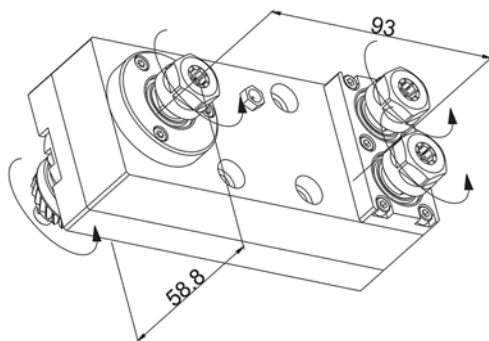


Item No	Collet	Ratio	rpm max.
MSC-407	2x ER11	1:1	6'500

2x milling / drilling unit



## MSC-407-3

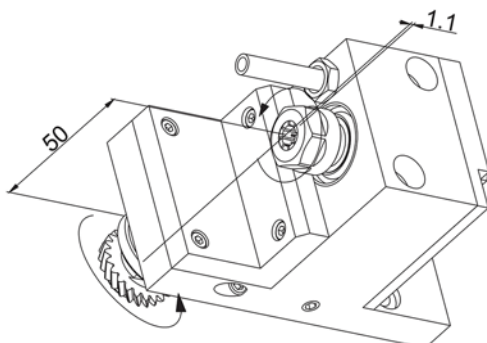


Item No	Collet	Ratio	rpm max.
MSC-407-3	3x ER11	1:1	6'500

3x milling / drilling unit



## MSE-106-K



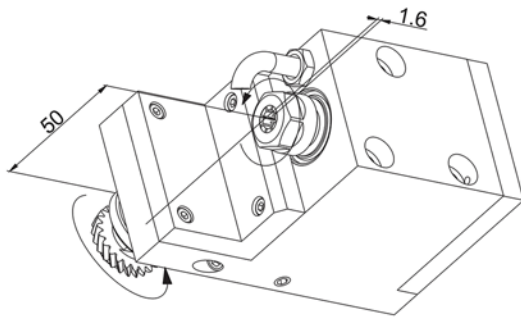
Item No	Collet	Ratio	rpm max.
MSE-106-K	ER11	1:1	6'500

Milling / drilling unit 90°, with cooling



# CITIZEN M12-M16

## MSE-106-KM

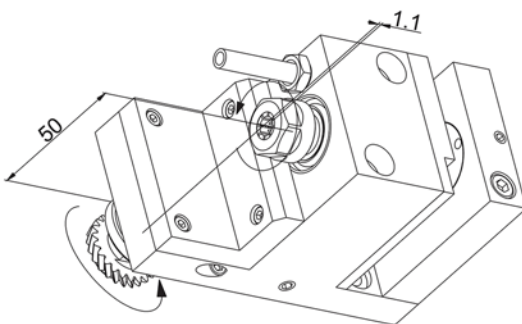


Item No	Collet	Ratio	rpm max.
MSE-106-KM	ER11	1:1	6'500

Milling / drilling unit 90°, with cooling



## MSE-106-KAI

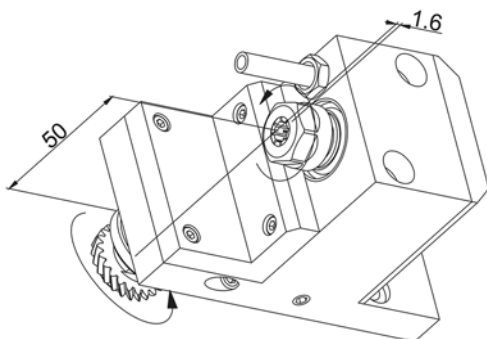


Item No	Collet	Ratio	rpm max.
MSE-106-KAI	ER11	1:1	6'500

Milling / drilling unit 90°, with cooling



## MSE-106-2X

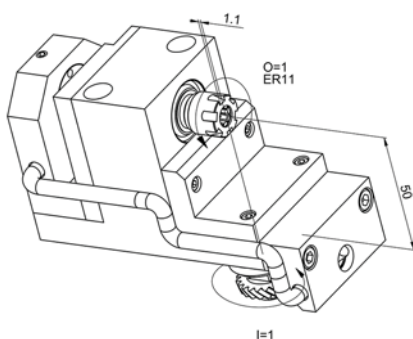


Item No	Collet	Ratio	rpm max.
MSE-106-2X	ER11	1:2	13'000

Milling / drilling unit 90°, high speed, with cooling



## MSE-106-HPA



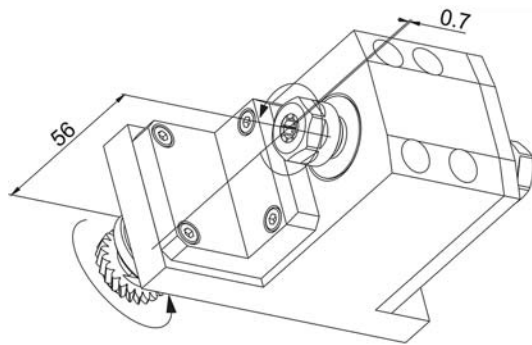
Item No	Collet	Ratio	rpm max.
MSE-106-HPA	ER11	1:1	8'000

Milling / drilling unit 90°, with cooling



# CITIZEN M12-M16

## MSE-106-DS

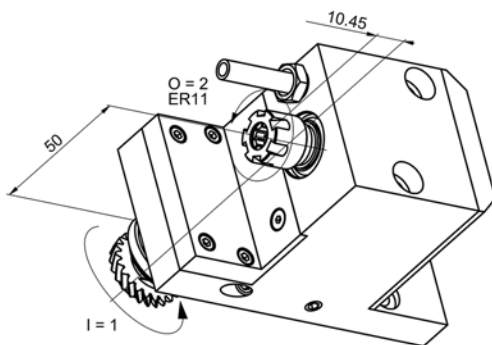


Item No	Collet	Ratio	rpm max.
MSE-106-DS	2x ER11	1:1	6'500

Milling / drilling unit 90°, front/back, with cooling



## MSE-107-2X

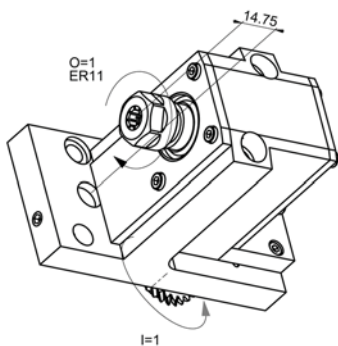


Item No	Collet	Ratio	rpm max.
MSE-107-2X	ER11	1:2	16'000

Milling / drilling unit 90°, high speed, with cooling



## MSE-306-K

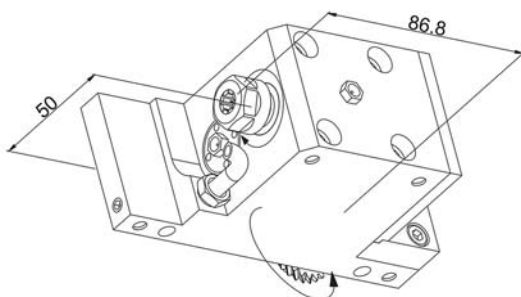


Item No	Collet	Ratio	rpm max.
MSE-306-K	ER11	1:1	6'500

Milling / drilling unit 90°



## MSE-306-KBL

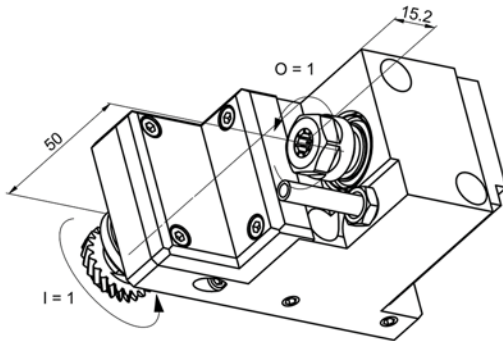


Item No	Collet	Ratio	rpm max.
MSE-306-KBL	ER11	1:1	6'500



# CITIZEN M12-M16

## MSE-403

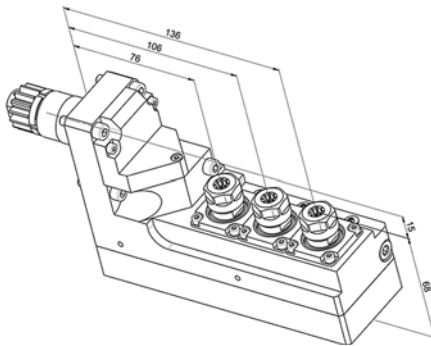


Item No	Collet	Ratio	rpm max.
MSE-403	ER11	1:1	8'000

Milling / drilling unit 90°, with cooling



## MSE-607

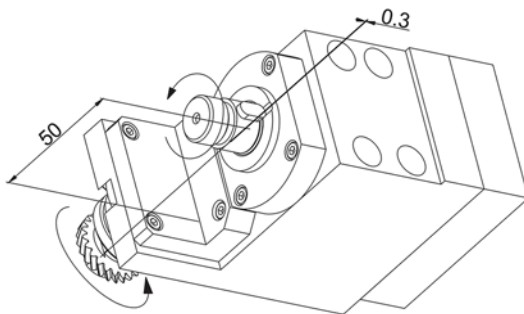


Item No	Collet	Ratio	rpm max.
MSE-607	3x ER11	1:1	8'000

3x Milling / drilling unit 90°, with cooling



## MSP-160

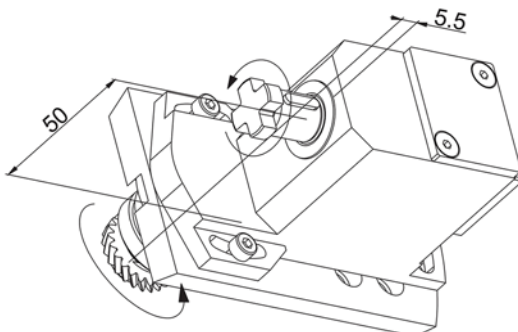


Item No	Ratio	rpm max.	Arbor Ø
MSP-160	3:1	2'166	13.00

Milling attachment 90°, low speed



## MSF-130



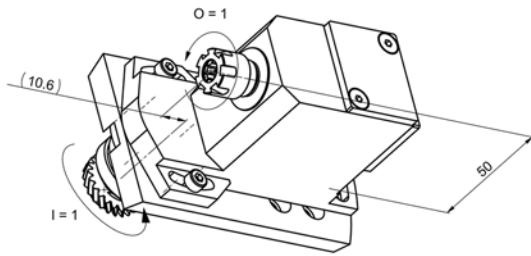
Item No	Ratio	rpm max.	Arbor Ø
MSF-130	1:1	6'500	13.00

Milling attachment, adjustable +/-20°



# CITIZEN M12-M16

## MSF-130-ER

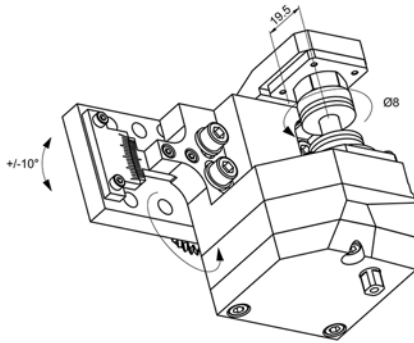


Item No	Collet	Ratio	rpm max.
MSF-130-ER	ER11	1:1	6'500

Milling attachment, adjustable +/-20°



## MSH-132-S-080

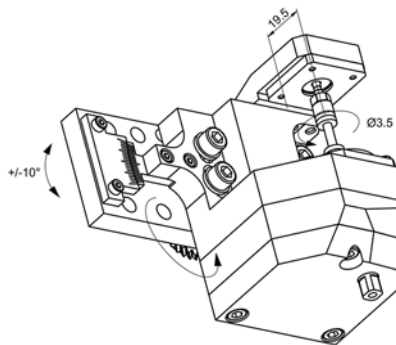


Item No	Ratio	rpm max.	Arbor Ø
MSH-132-S-080	3:1	2'166	8.00

Gearhobbing attachment, adjustable +/-10°, low speed, without cooling



## MSH-132-S-035

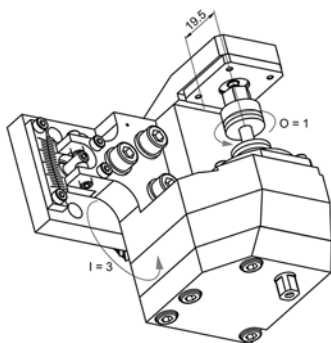


Item No	Ratio	rpm max.	Arbor Ø
MSH-132-S-035	3:1	2'166	3.50

Gearhobbing attachment +/-10°, low speed, without cooling



## MSH-132-05



Item No	Ratio	rpm max.	Arbor Ø
MSH-132-05	3:1	2'666	5.00

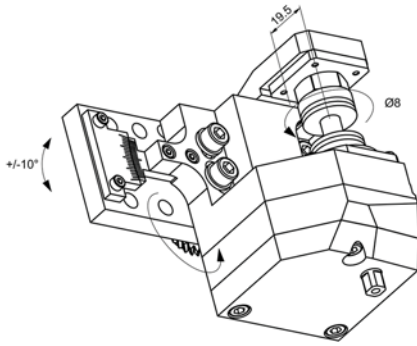
Gearhobbing, adjustable +/-3°, low speed, without cooling





# CITIZEN M12-M16

## MSH-132-08

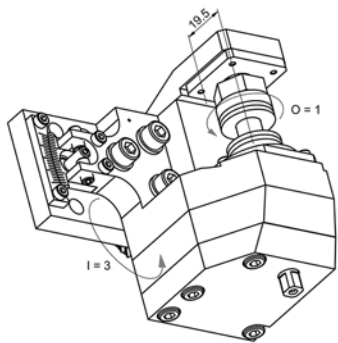


Item No	Ratio	rpm max.	Arbor Ø
MSH-132-08	3:1	2'666	8.00

Gearhobbing, adjustable +/-3°, low speed, without cooling



## MSH-132-10

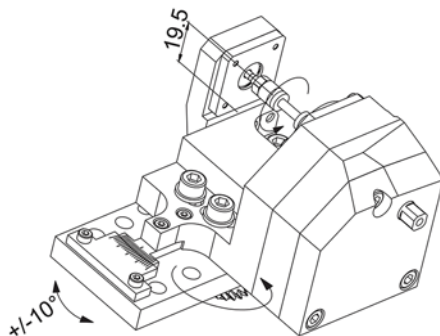


Item No	Ratio	rpm max.	Arbor Ø
MSH-132-10	3:1	2'666	10.00

Gearhobbing, adjustable +/-3°, low speed, without cooling



## MSH-133-035

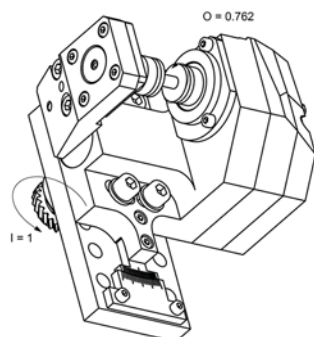


Item No	Ratio	rpm max.	Arbor Ø
MSH-133-035	1:0.762	4'950	3.50

Gearhobbing, adjustable +/-10°, offset 15.00 mm, low speed, without cooling



## MSH-133-050



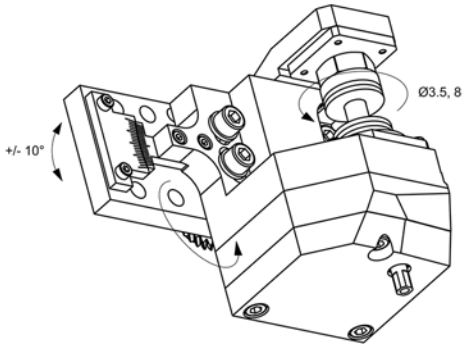
Item No	Ratio	rpm max.	Arbor Ø
MSH-133-050	1:0.762	4'950	5.00

Gearhobbing, adjustable +/-10°, offset 15.00 mm, low speed, without cooling



# CITIZEN M12-M16

## MSH-133-080

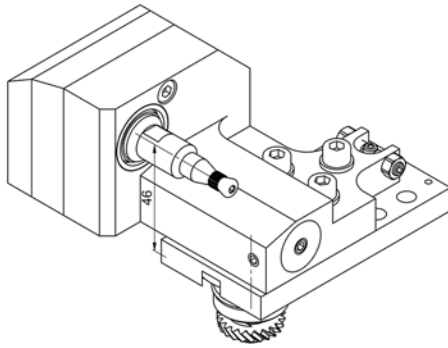


Item No	Ratio	rpm max.	Arbor Ø
MSH-133-080	1:0.762	4'950	8.00

Gearhobbing, adjustable +/-10°, offset 15.00 mm, low speed, without cooling



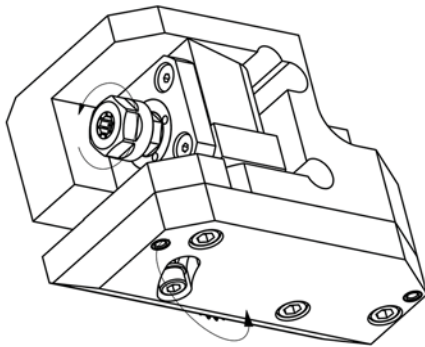
## MSH-432-35



Item No	Ratio	rpm max.	Arbor Ø
MSH-432-35	1:1.12	8'000	3.50



## MSA-103



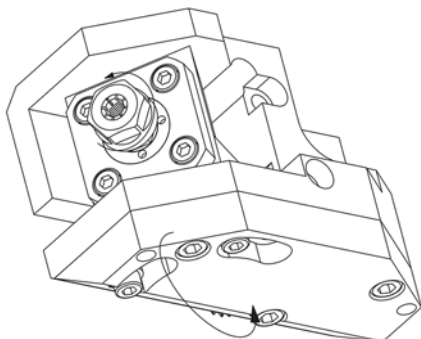
Item No	Collet	Ratio	rpm max.
MSA-103	ER11	1:1	6'500

Milling / drilling unit, adjustable 0-30°, without cooling



## MSA-203

30°-60°



Item No	Collet	Ratio	rpm max.
MSA-203	ER11	1:1	6'500

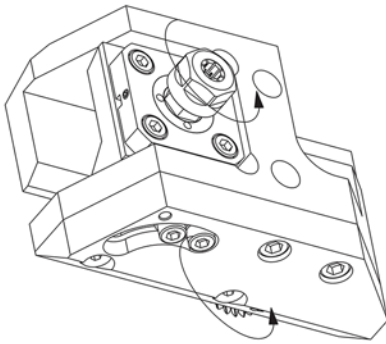
Milling / drilling unit, adjustable 30-60°, without cooling



# CITIZEN M12-M16

## MSA-303

55°-90°

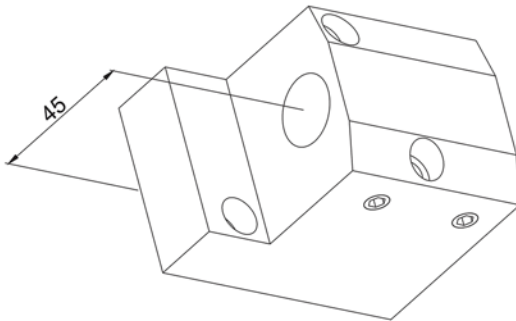


Item No	Collet	Ratio	rpm max.
MSA-303	ER11	1:1	6'500

Milling / drilling unit, adjustable 55-90°, without cooling



## VDF-101

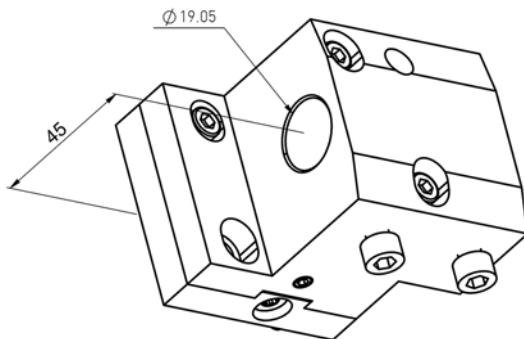


Item No	High	Tool Ø
VDF-101	45.00	19.05

Tool holder Ø 19.05



## VDF-101-R-S

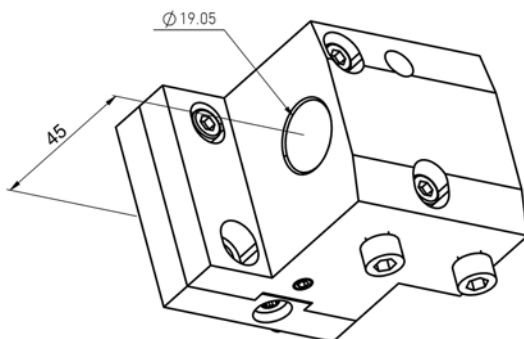


Item No	High	Tool Ø
VDF-101-R-S	45.00	19.05

Adjustable tool holder Ø 19.05



## VDF-101-R-S-HF



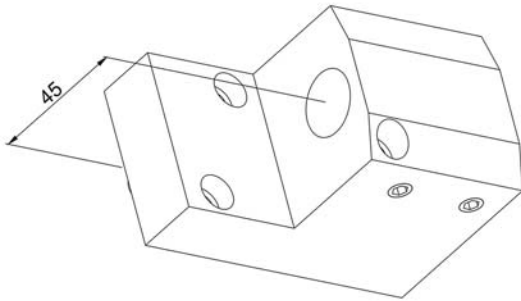
Item No	High	Tool Ø
VDF-101-R-S-HF	45.00	19.05

Adjustable high frequency tool holder Ø 19.05



# CITIZEN M12-M16

## VDF-201

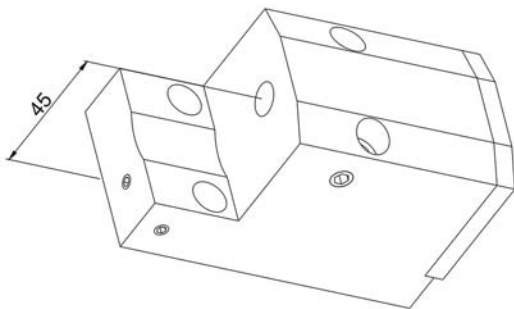


Item No	High	Arbor Ø
VDF-201	45.00	19.05

Tool holder Ø 19.05



## VDF-207

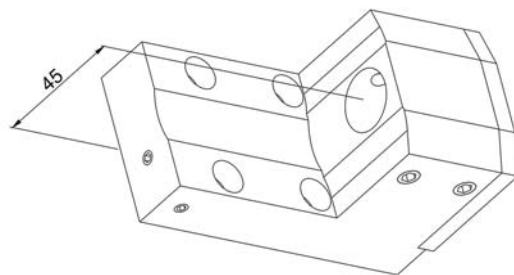


Item No	High	Tool Ø
VDF-207	45.00	10.00

Tool holder Ø 10.00, with cooling



## VDF-205-2

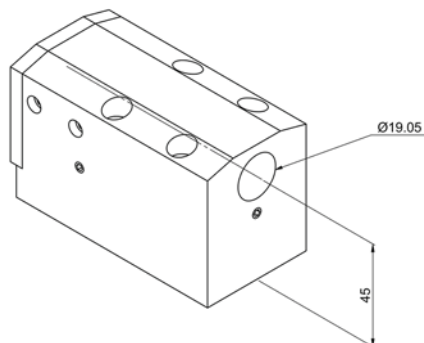


Item No	High	Arbor Ø
VDF-205-2	45.00	19.05

Tool holder Ø 19.05, with cooling



## VDF-205-S-2



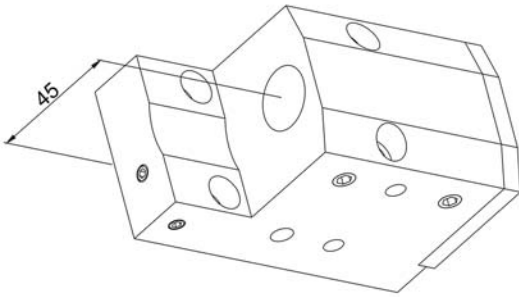
Item No	High	Tool Ø
VDF-205-S-2	45.00	19.05

Tool holder Ø 19.05, with cooling



# CITIZEN M12-M16

## VDF-206-2

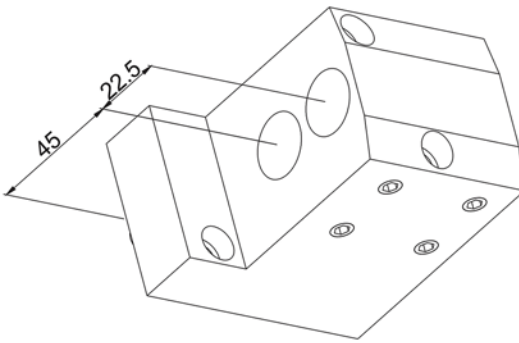


Item No	Arbor Ø	Tool Ø
VDF-206-2		19.05

Tool holder Ø 19.05, with cooling



## VDF-401

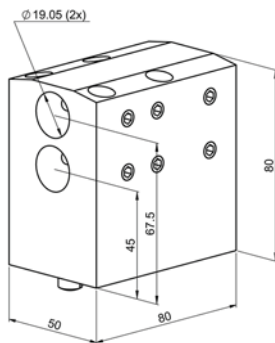


Item No	High	Tool Ø
VDF-401	45.00 / 67.50	19.05

2x tool holder Ø 19.05



## VDF-401-S

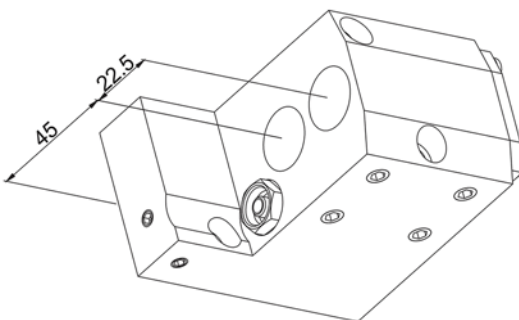


Item No	High	Tool Ø
VDF-401-S	45.00 / 67.50	19.05

2x tool holder Ø 19.05



## VDF-401-AR



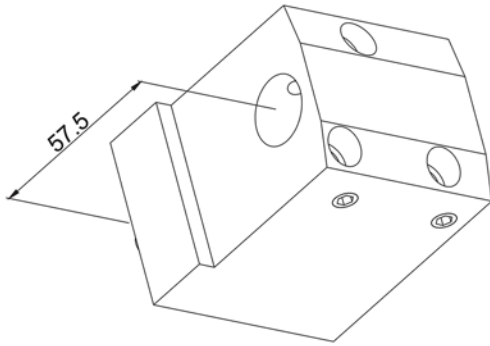
Item No	High	Tool Ø
VDF-401-AR	45.00 / 67.50	2x 19.05

2x tool holder Ø 19.05, with cooling



# CITIZEN M12-M16

## VDF-501

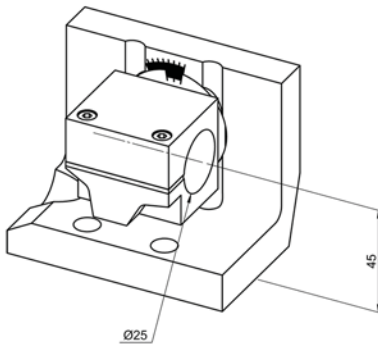


Item No	High	Tool Ø
VDF-501	57.50	19.05

Tool holder Ø 19.05



## VDF-501-HF

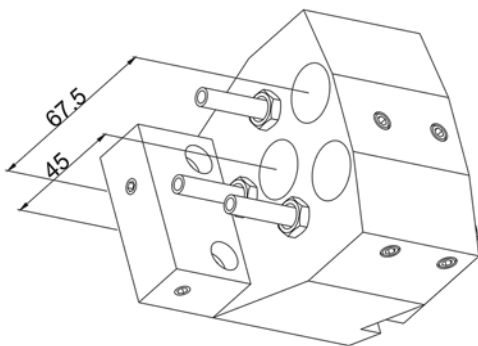


Item No	High	Spindle Ø
VDF-501-HF	45.00	25.00

High frequency tool holder Ø 25.00



## VDF-701-AR

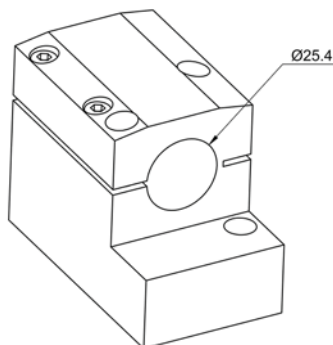


Item No	High	Tool Ø
VDF-701-AR	45.00 / 67.50	3 x 19.05

3x tool holder Ø 19.05, with cooling



## VDF-HF25



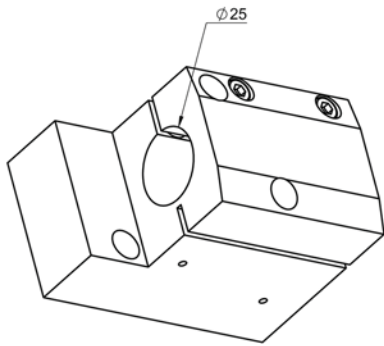
Item No	High	Spindle Ø
VDF-HF25	45.00	25.40

High frequency tool holder Ø 25.40



# CITIZEN M12-M16

## VDF-HF25-1

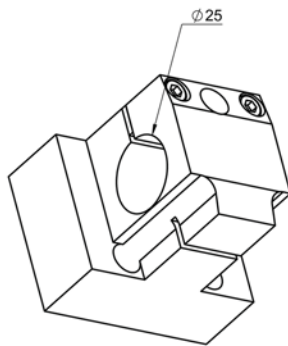


Item No	High	Tool $\varnothing$
VDF-HF25-1	45.00	25.00

High frequency tool holder  $\varnothing$  25.00



## VDF-HF25-2

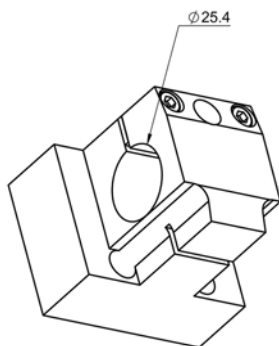


Item No	High	Spindle $\varnothing$
VDF-HF25-2	45.00	25.00

High frequency tool holder  $\varnothing$  25.00



## VDF-HF25-3

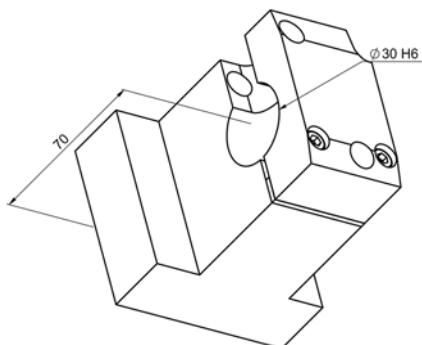


Item No	High	Spindle $\varnothing$
VDF-HF25-3	45.00	25.40

High frequency tool holder  $\varnothing$  25.40



## VDF-HF30



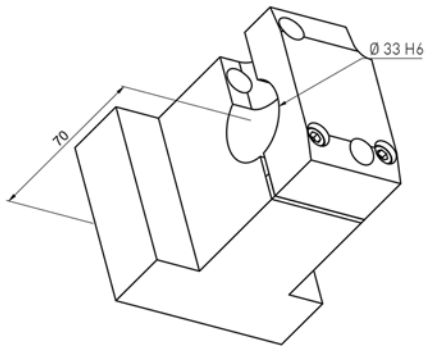
Item No	High	Spindle $\varnothing$
VDF-HF30	70.00	30.00

High frequency tool holder  $\varnothing$  30.00



# CITIZEN M12-M16

## VDF-HF33

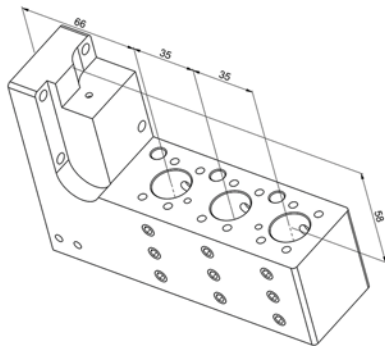


Item No	High	Spindle Ø
VDF-HF33	70.00	33.00

High frequency tool holder Ø 33.00



## MDF-107

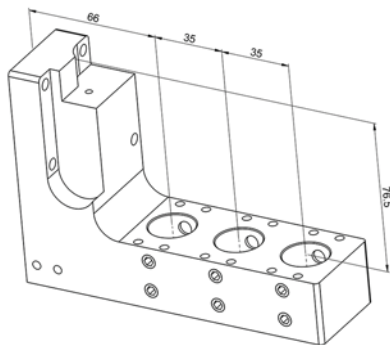


Item No	Spindle Ø
MDF-107	3x 19.00

3x high frequency tool holder Ø 19.00



## MDF-107-HFN

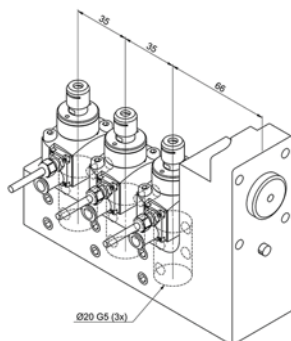


Item No	Spindle Ø
MDF-107-HFN	3x 22.00

3x high frequency tool holder Ø 22.00



## MDF-107-MHF20



Item No	Spindle Ø
MDF-107-MHF20	3x 20.00

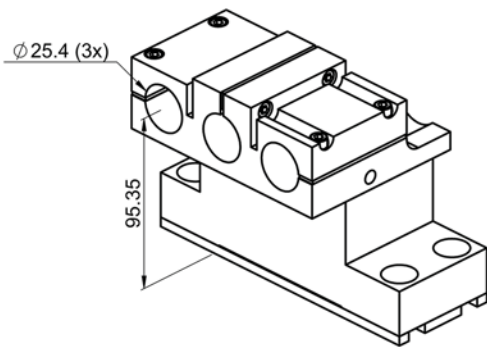
3x high frequency tool holder Ø 20.00 for Meyrat





# CITIZEN M12-M16

## 856-003-OF010

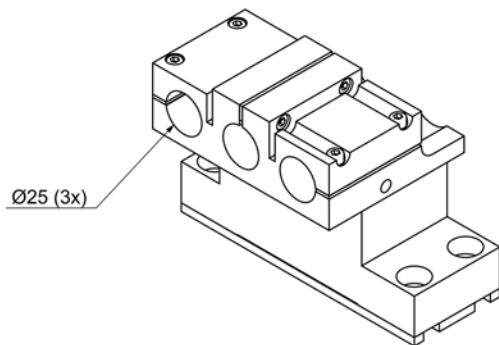


Item No	High	Spindle Ø
856-003-OF010	95.35	3x 25.40

3x high frequency tool holder Ø 25.40



## 856-003-OF015

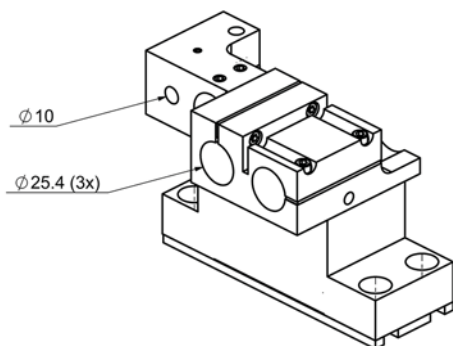


Item No	High	Spindle Ø
856-003-OF015	95.35	3x 25.00

3x tool holder Ø 25.00



## 856-003-OF-020

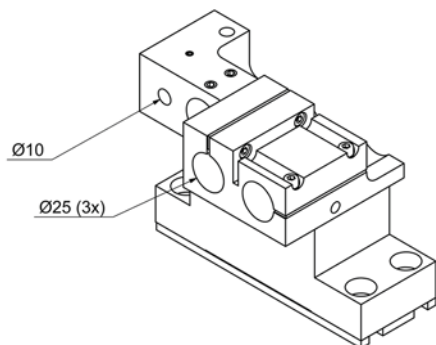


Item No	High	Spindle Ø
856-003-OF-020	95.35	3x 25.40 + 1x 10.00

3x high frequency tool holder, 3x Ø 25.40, 1x Ø 10.00 for cooling



## 856-003-OF-025



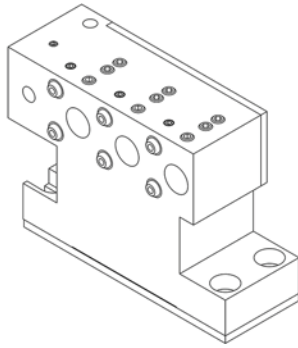
Item No	High	Spindle Ø
856-003-OF-025	95.35	2x 25.00 + 1x 10.00

3x high frequency tool holder, 3x Ø 25.00, 1x Ø 10.00 for cooling



# CITIZEN M12-M16

## 856-003-OF-110

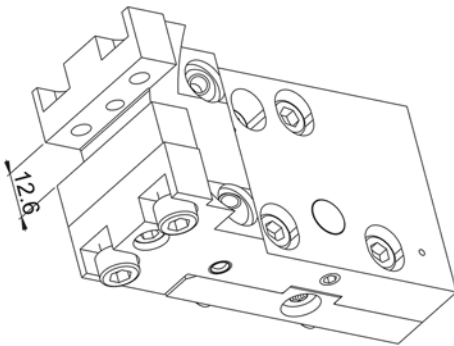


Item No	High	Arbor Ø
856-003-OF-110	95.35	3x 19.05 + 1x 10.00

3x high frequency tool holder, 3x Ø 19.05, 1x Ø 10.00 for cooling



## 792-VTF110-R-AR

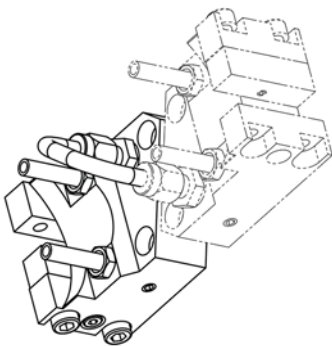


Item No	Tool
792-VTF110-R-AR	12x12

Tool holder 12x12, adjustable, with cooling



## VTF110-AR

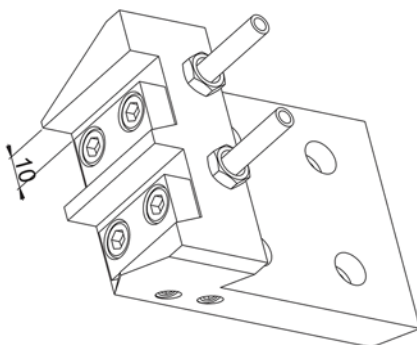


Item No	Tool
VTF110-AR	1x ou 2x 12x12

Tool holder 12x12 with cooling, also possible to fix 2 tool holders on the turret



## VTF1510



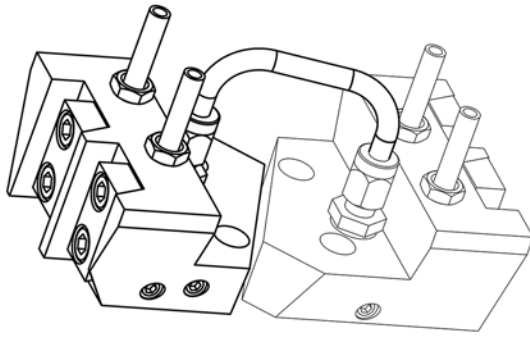
Item No	Tool
VTF1510	2x 10x10

2x tool holder 10x10, with cooling



# CITIZEN M12-M16

## VTF-1510-D

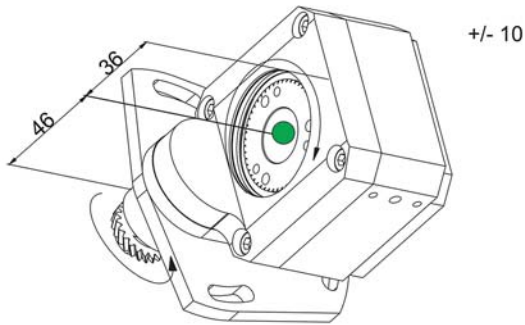


Item No	Tool
VTF-1510-D	2x ou 4x 10x10

2x tool holder 10x10, also possible to fix 2 tool holders on the turret



## MSW-101-000

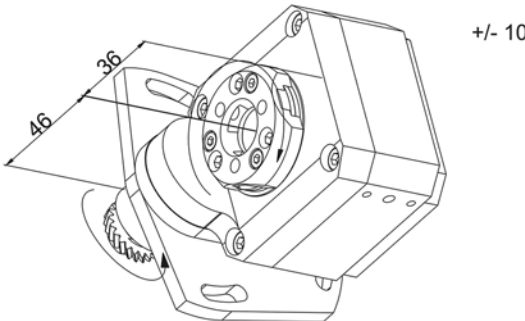


Item No	Ratio	rpm max.
MSW-101-000	2:1	3'250

Thread whirling attachment 90°, +/-10°, low speed, without head, without inserts



## MSW-101 (Gloor)

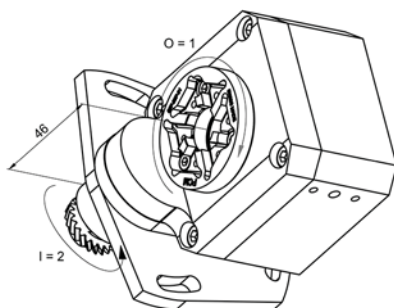


Item No	Ratio	rpm max.
MSW-101	2:1	3'250

Thread whirling attachment 90°, +/-10°, low speed, with head type Gloor, without inserts



## MSW-101-SWG (Schwanog)



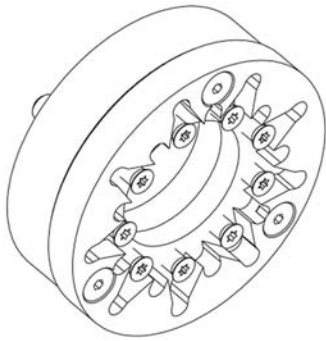
Item No	Ratio	rpm max.
MSW-101-SWG	2:1	3'250

Thread whirling attachment 90°, +/-10°, low speed, with head type Schwanog, without inserts



# CITIZEN M12-M16

## MWT12 164 4046 130 09 (Utilis)

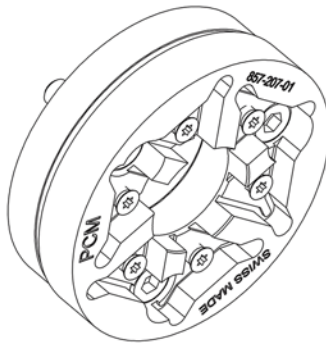


Item No	Insert	Ø maxi
MWT12 164 4046 130 09	9	12.00

Thread whirling head type Utilis, without inserts, usable for MSW-101



## MSW-101-FPSWG (Schwanog)

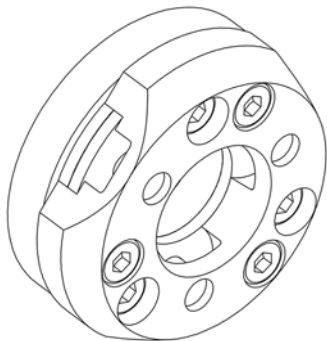


Item No	Inserts	Ø maxi
MSW-101-FPSWG	6	12.00

Thread whirling head type Schwanog, without inserts, usable for MSW-101



## MSW-101-FPGLO (Gloor)

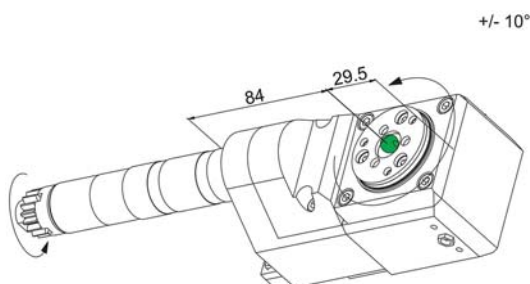


Item No	Inserts	Ø maxi
MSW-101-FPGLO	3	12.00

Thread whirling head type Gloor, without inserts, usable for MSW-101



## LSW-424-000



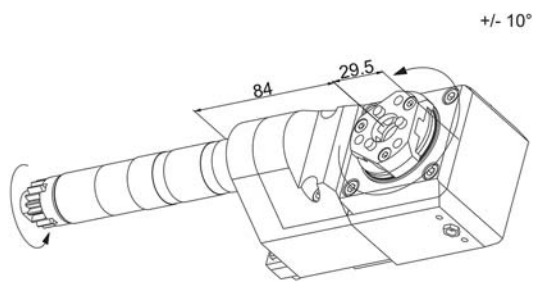
Item No	Ratio	rpm max.
LSW-424-000	1:1	8'000

Thread whirling attachment, +/- 10°, without head, without inserts, usable for C16



# CITIZEN M12-M16

## LSW-424 (Gloor)



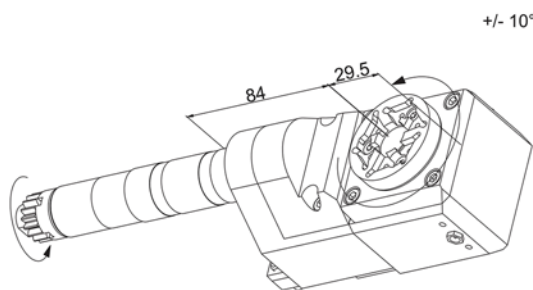
Item No	Ratio	rpm max.
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LSW-424	1:1	8'000
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Thread whirling attachment, +/-10°, with head type Gloor, without inserts, usable for C16



## LSW-424-SWG (Schwanog)



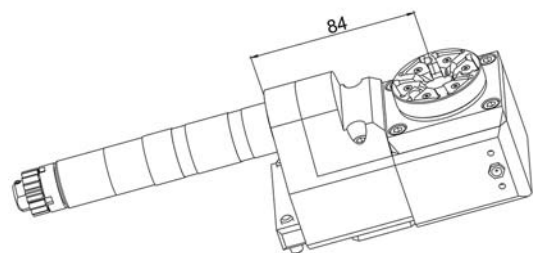
Item No	Ratio	rpm max.
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LSW-424-SWG	1:1	8'000
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Thread whirling attachment, +/-10°, with head type Schwanog, without inserts, usable for C16



## LSW-424-HO (Horn)



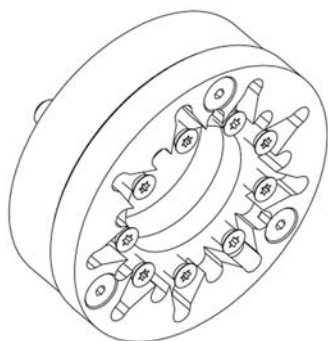
Item No	Ratio	rpm max.
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LSW-124-HO	1:1	8'000
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Thread whirling attachment, +/-10°, with head type Horn, without inserts, usable for C16



## MWT12 164 3546 169 09 (Utilis)



Item No	Inserts	Ø maxi
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MWT12 164 3546 169 09	9	12.00
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Thread whirling head type Utilis, without inserts



# CITIZEN M12-M16

## LSW-424-FPGL0 (Gloor)

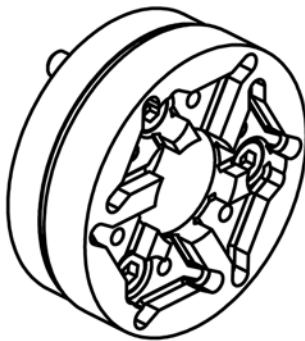


Item No	Inserts	Ø maxi
LSW-424-FPGL0	3	6.00

Thread whirling head type Gloor, without inserts



## LSW-424-FPSWG (Schwanog)

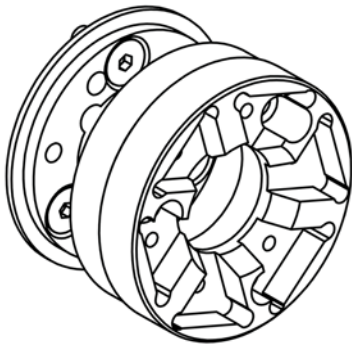


Item No	Inserts	Ø maxi
LSW-424-FPSWG	6	12.00

Thread whirling head type Schwanog, without inserts



## LSW-424-FPH0 (Horn)



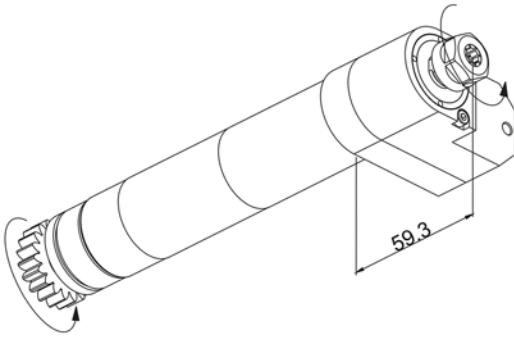
Item No	Inserts	Ø maxi
LSW-424-FPH0	6	12.00

Thread whirling head type Horn, without inserts



# CITIZEN M20-M32

## GSC-510-3X

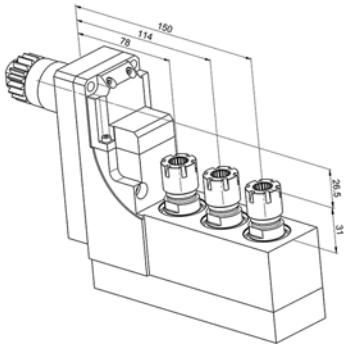


Item No	Collet	Ratio	rpm max.
GSC-510-3X	ER11	1:3	15'000

Milling / drilling unit, high speed, usable for L20-VII



## GSE-1510

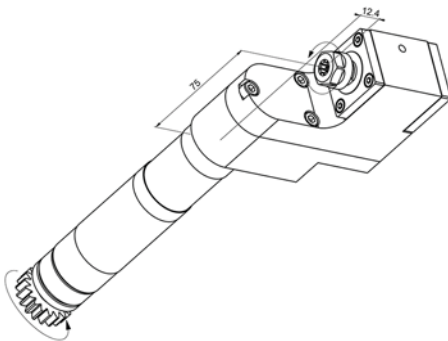


Item No	Collet	Ratio	rpm max.
GSE-1510	3x ER16	1:1	5'000

3x milling / drilling unit 90°, usable for Citizen M432



## GSE-306-SE312

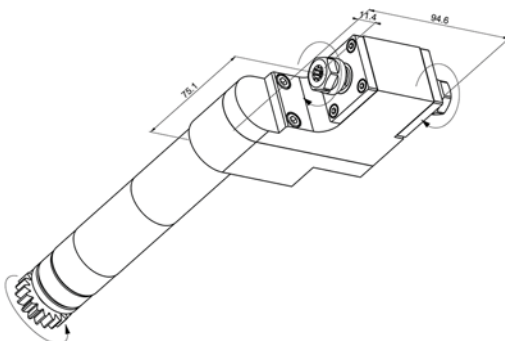


Item No	Collet	Ratio	rpm max.
GSE-306-SE312	ER11	1:3	15'000

Milling / drilling unit 90°, high speed, usable for L20-VII



## GSE-306-DE011

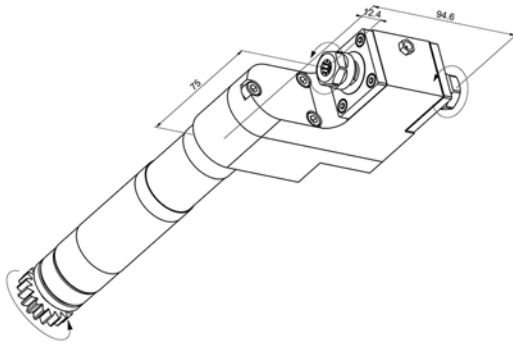


Item No	Collet	Ratio	rpm max.
GSE-306-DE011	2x ER11	1:1	5'000



# CITIZEN M20-M32

## GSE-306-DE312

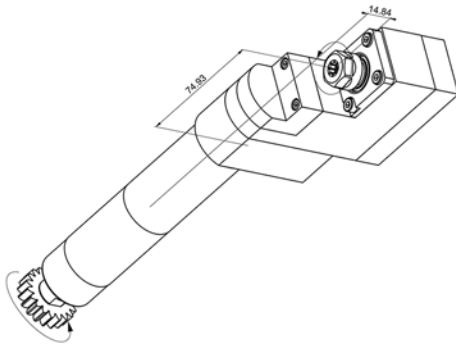


Item No	Collet	Ratio	rpm max.
GSE-306-DE312	2x ER11	1:3	15'000

Milling / drilling unit 90°, high speed, usable for L20-VII



## GSE-306-L-520

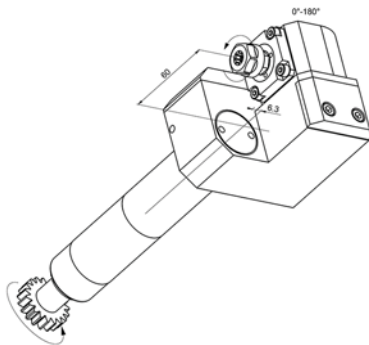


Item No	Collet	Ratio	rpm max.
GSE-306-L-520	ER11	1:1	5'000

Milling / drilling unit 90°, usable for L20-VII



## GSA-107

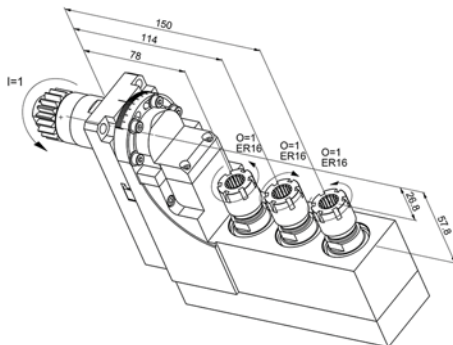


Item No	Collet	Ratio	rpm max.
GSA-107	ER11	1:1	5'000

Milling / drilling unit, adjustable 0°-180°, usable for L20-VII



## GSA-1510



Item No	Collet	Ratio	rpm max.
GSA-1510	3x ER16	1:1	5'000

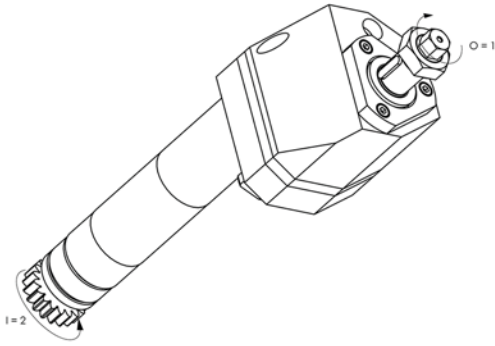
3x milling / drilling unit 90°, adjustable 0°-180°





# CITIZEN M20-M32

## GSS-510

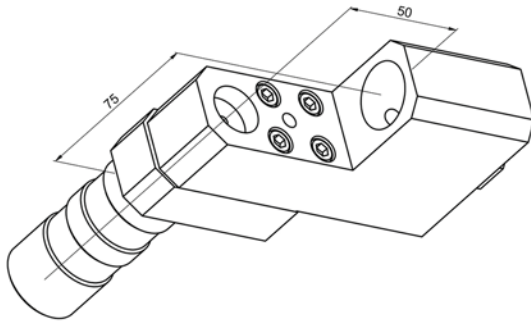


Item No	Ratio	rpm max.	Arbor Ø
GSS-510	2:1	2'500	16.00

Milling attachment Ø 16.00, low speed, usable for L20-VII



## GDF-903

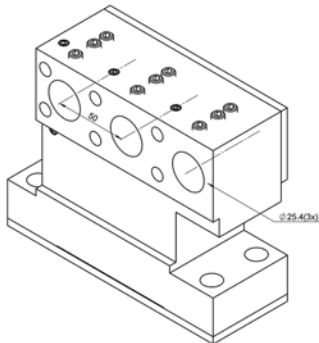


Item No	High	Tool Ø
GDF-903	75.00	25.40

Tool holder Ø 25.40, usable for L32/L20



## 852-258-OF010

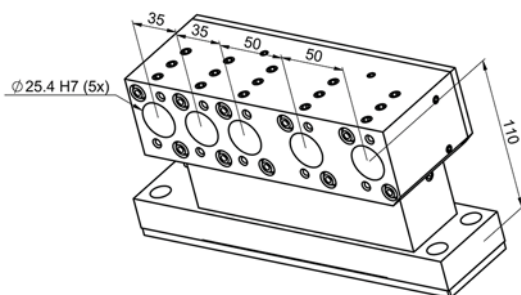


Item No	High	Tool Ø
852-258-OF010	7.00	3x 25.40

3x tool holder Ø 25.40



## 852-349-OF030



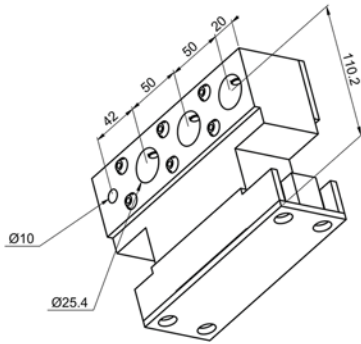
Item No	High	Tool Ø
852-349-OF030	110.00	5x 25.40

5x tool holder Ø 25.40



# CITIZEN M20-M32

## 857-203-OF120

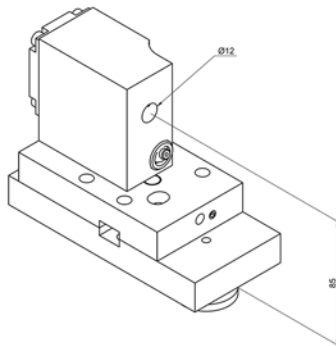


Item No	High	Tool Ø
857-203-OF120	75.00	3x 25.40 + 1x 10.00

3x tool holder, 3x Ø 25.40 with Ø 10.00 cooling



## 856-003-OF105

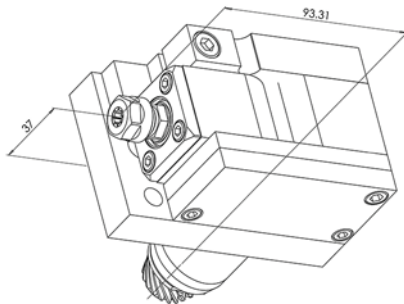


Item No	High	Tool Ø
856-003-OF105	85.00	12.00

Adjustable tool holder Ø 12.00, with cooling



## KSA-107-S

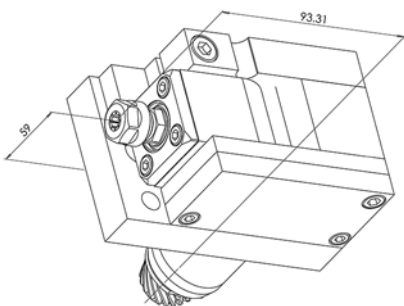


Item No	Collet	Ratio	rpm max.
KSA-107-S	ER11	1:1	5'000

Milling / drilling unit, adjustable 0°-90°



## KSA-107-S-H



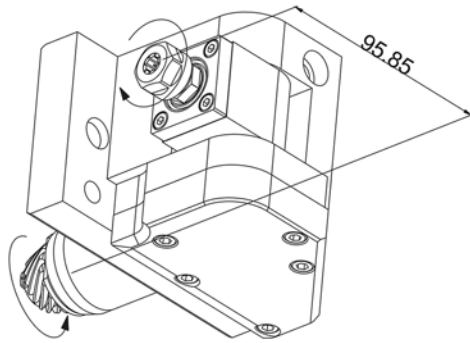
Item No	Collet	Ratio	rpm max.
KSA-107-S-H	ER11	1:1	5'000

Milling / drilling unit, adjustable 0°-90°, with intermediate plate + 40.00 mm



# CITIZEN M20-M32

## KSA-307

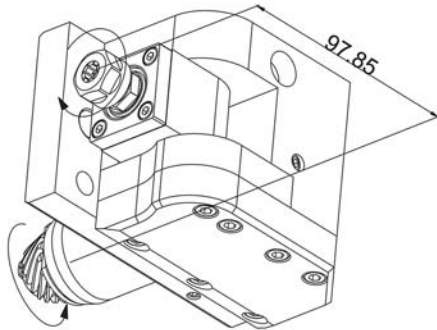


Item No	Collet	Ratio	rpm max.
KSA-307	ER11	1:1	5'000

Milling / drilling unit, adjustable 0°-30°



## KSA-407

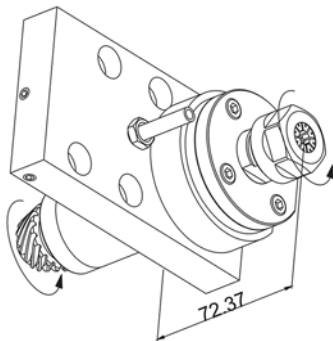


Item No	Collet	Ratio	rpm max.
KSA-407	ER11	1:1	5'000

Milling / drilling unit, adjustable 30°-90°



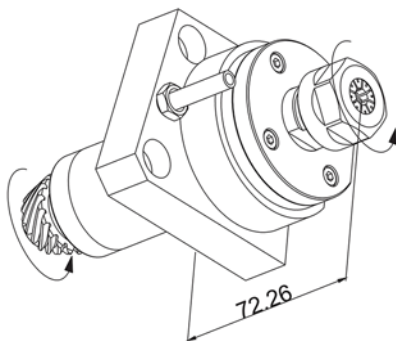
## KSC-110-K



Item No	Collet	Ratio	rpm max.
KSC-110-K	ER11	1:1	5'000



## KSC-110-K-ER



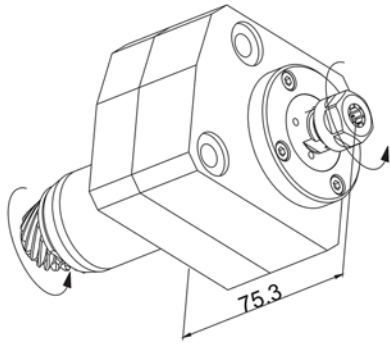
Item No	Collet	Ratio	rpm max.
KSC-110-K-ER	ER16	1:1	5'000

Milling / drilling unit, with cooling, short version, also possible to fix 2 units on position 1



# CITIZEN M20-M32

## KSC110-100ER

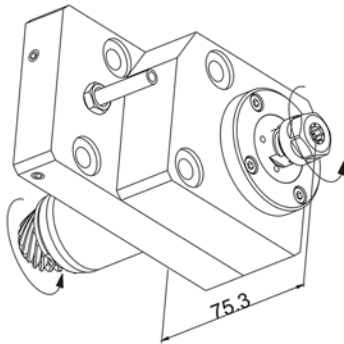


Item No	Collet	Ratio	rpm max.
KSC110-100ER	ER11	1:2	10'000

Milling / drilling unit, high speed, short version



## KSC110-10000K

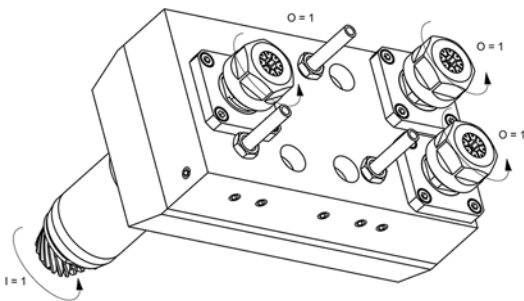


Item No	Collet	Ratio	rpm max.
KSC110-10000K	ER11	1:2	10'000

Milling / drilling unit, high speed, with cooling



## KSC-310-II

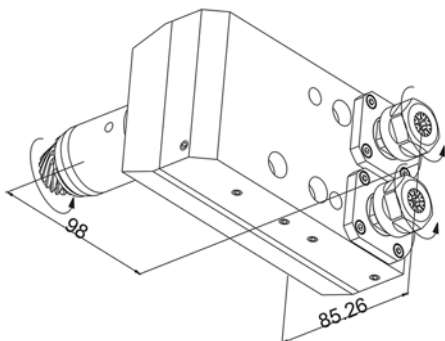


Item No	Collet	Ratio	rpm max.
KSC-310-II	3x ER11	1:1.462	7'310

3x milling / drilling unit, high speed, with cooling



## KSC-510



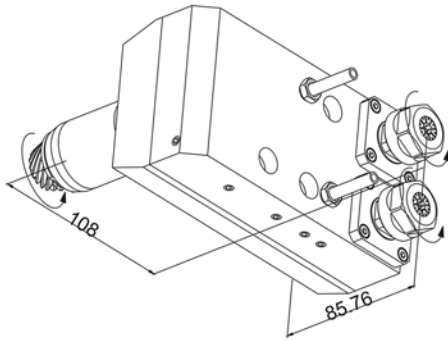
Item No	Collet	Ratio
KSC-510	2x ER16	1:1.462

2x milling / drilling unit, high speed, with cooling



# CITIZEN M20-M32

## KSC-510-10



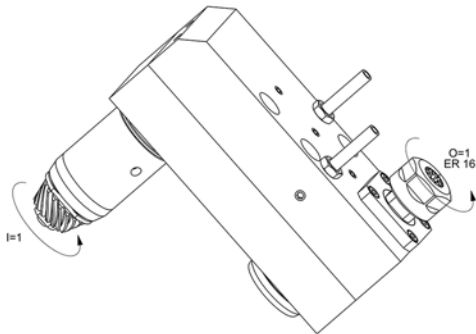
Item No	Collet	Ratio	rpm max.
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KSC-510-10      2x ER16      1:1.462      7'310

2x milling / drilling unit, high speed, offset 10.00 mm, with cooling



## KSC-510-DEC-K



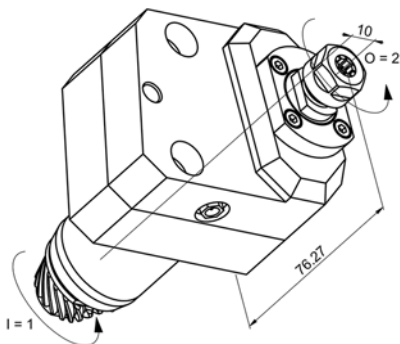
Item No	Collet	Ratio	rpm max.
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KSC-510-DEC-K      1x ER16      1:1      5'000

Milling / drilling unit, with cooling, offset 10.00 mm



## KSC-DEC-10x2-ER



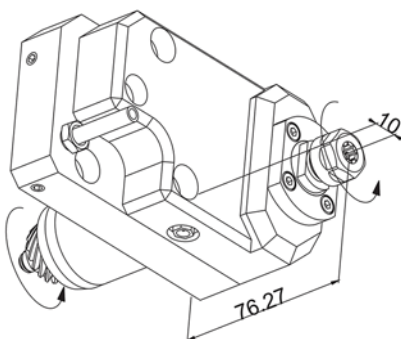
Item No	Collet	Ratio	rpm max.
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KSC-DEC-10x2 ER      ER11      1:2.056      10'280

Milling / drilling unit, high speed, offset 10.00 mm, with coolant



## KSC-DEC-10x3



Item No	Collet	Ratio	rpm max.
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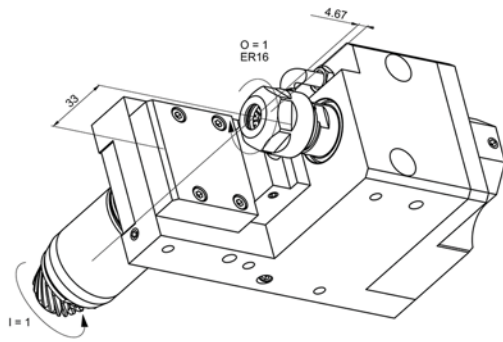
KSC-DEC-10x3      ER11      1:3.012      15'060

Milling / drilling unit, high speed, offset 10.00 mm, with cooling



# CITIZEN M20-M32

## KSE-110-BKK

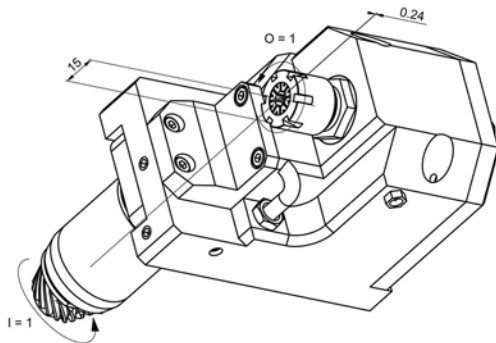


Item No	Collet	Ratio	rpm max.
KSE-110-BKK	ER16	1:1	5'000

Milling / drilling unit 90°, rotational input / output inverted, with cooling



## KSE-110-DE

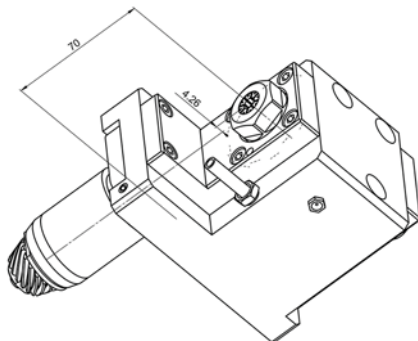


Item No	Collet	Ratio	rpm max.
KSE-110-DE	ER11-ER16	1:1	5'000

Milling / drilling unit 90°, front/back, rotational input / output inverted, with cooling



## KSE-110-US

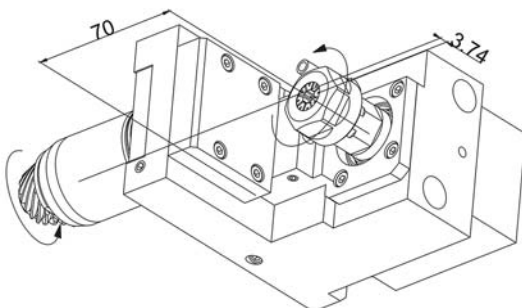


Item No	Collet	Ratio	rpm max.
KSE-110-US	ER16	1:1	5'000

Milling / drilling unit 90°, rotational input / output inverted, with cooling



## KSE-110-K



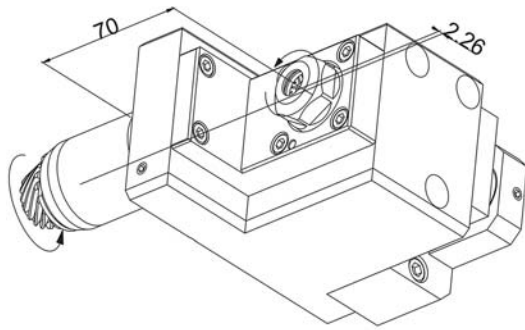
Item No	Collet	Ratio	rpm max.
KSE-110-K	ER16	1:1	5'000

Milling / drilling unit 90°, rotational input / output inverted, with cooling



# CITIZEN M20-M32

## KSE-110-KAI

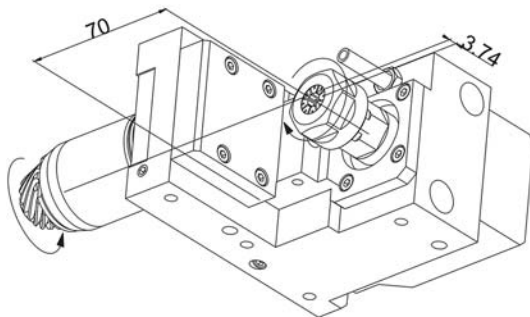


Item No	Collet	Ratio	rpm max.
KSE-110-KAI	ER16	1:1	5'000

Milling / drilling unit 90°, rotational input / output inverted, with cooling



## KSE-110-2X

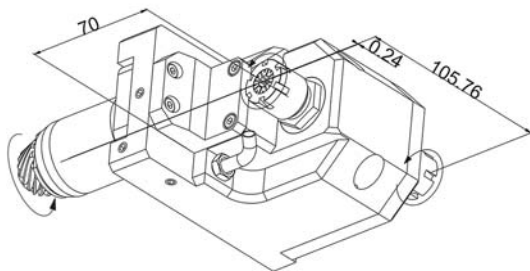


Item No	Collet	Ratio	rpm max.
KSE-110-2X	ER16	1:2	10'000

Milling / drilling unit 90°, high speed, rotational input / output inverted, with cooling



## KSE-110-DE-32

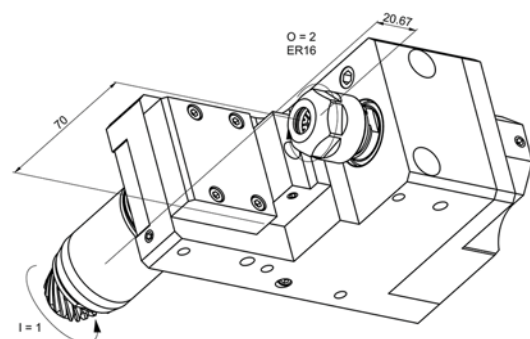


Item No	Collet	Ratio	rpm max.
KSE-110-DE-32	2x ER16	1:1	5'000

Milling / drilling unit 90°, front/back, rotational input / output inverted, with cooling



## KSE-210-IK



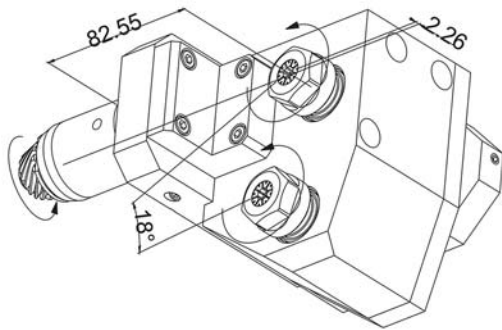
Item No	Collet	Ratio	rpm max.
KSE-210-IK	ER16	1:2	10'000

Milling / drilling unit 90°, low speed, rotational input / output inverted, with cooling



# CITIZEN M20-M32

## KSE-250-KAI-2X



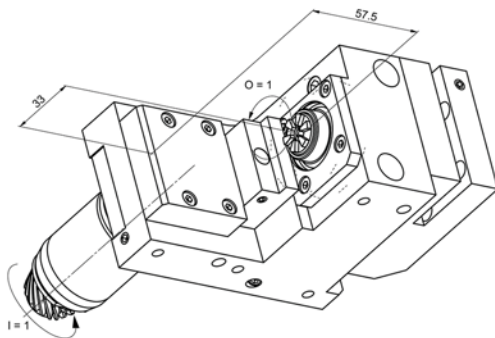
Item No	Collet	Ratio	rpm max.
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KSE-250-KAI-2X	2x ER16	1:2	10'000
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2x milling / drilling unit 90°, high speed, rotational input / output inverted, with cooling



## KSE-307-KAI



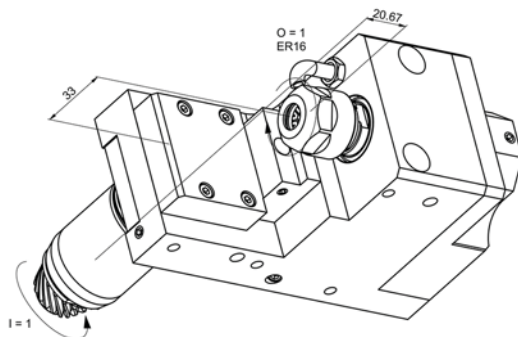
Item No	Collet	Ratio	rpm max.
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KSE-307-KAI	ER11	1:1	5'000
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2x milling / drilling unit 90°, rotational input / output inverted, with cooling



## KSE-310-BKK



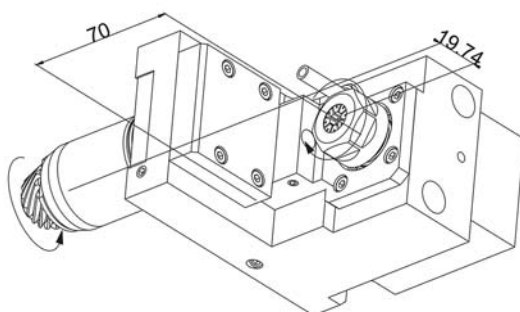
Item No	Collet	Ratio	rpm max.
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KSE-310-BKK	ER16	1:1	5'000
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2x milling / drilling unit 90°, rotational input / output inverted, with cooling



## KSE-310-K



Item No	Collet	Ratio	rpm max.
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KSE-310-K	ER16	1:1	5'000
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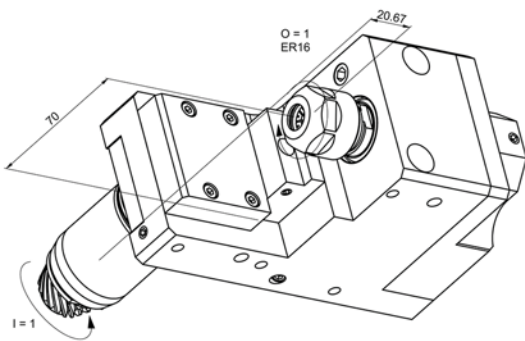
2x milling / drilling unit 90°, rotational input / output inverted, with cooling





# CITIZEN M20-M32

## KSE-310-IK



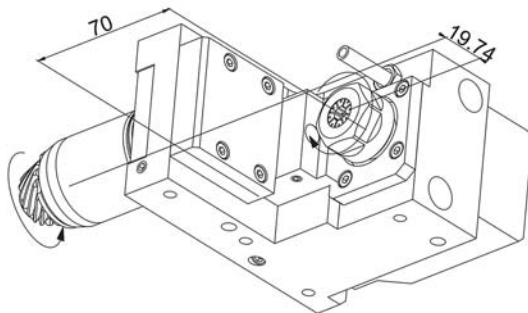
Item No	Collet	Ratio	rpm max.
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KSE-310-IK ER16 1:1 5'000

2x milling / drilling unit 90°, rotational input / output inverted, with cooling



## KSE-310-2X



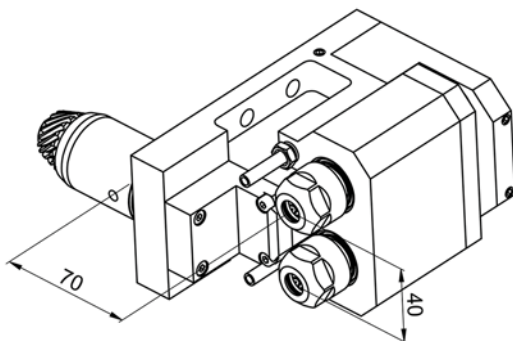
Item No	Collet	Ratio	rpm max.
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KSE-310-2X ER16 1:2 10'000

2x milling / drilling unit 90°, high speed, rotational input / output inverted, with cooling



## KSE-510-KAI



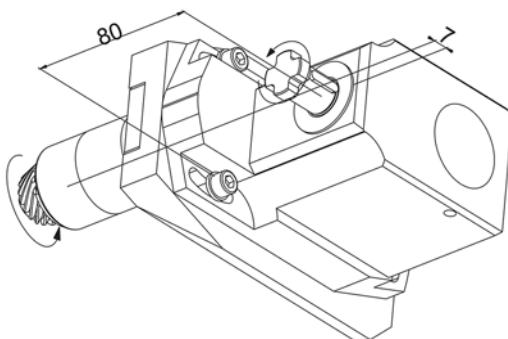
Item No	Collet	Ratio	rpm max.
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KSE-510-KAI 2x ER16 1:1 5'000

2x milling / drilling unit 90°, with cooling



## KSF-130



Item No	Ratio	rpm max.
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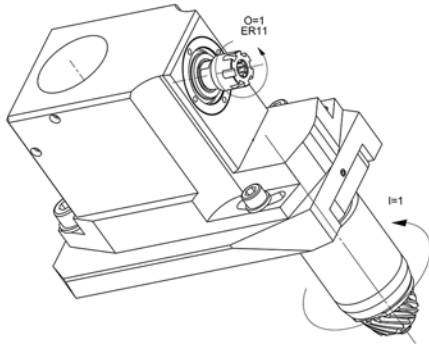
KSF-130 1:1 5'000

Milling attachment Ø max. 60.00, adjustable +/-20°



# CITIZEN M20-M32

## KSF-130-ER

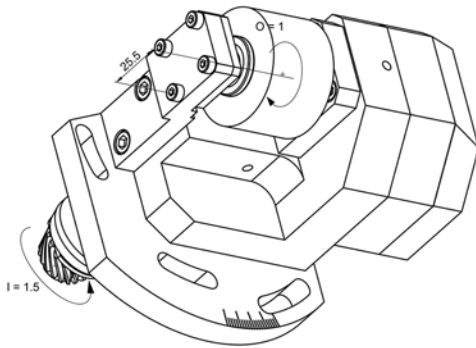


Item No	Collet	Ratio	rpm max.
KSF-130-ER	ER11	1:1	5'000

Milling / drilling unit 90°, adjustable +/- 20°



## KSF-132-27-17

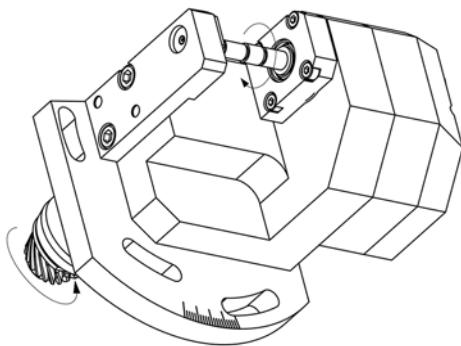


Item No	Ratio	rpm max.	Arbor Ø
KSF-132-27-17	1.588:1	3'148	10.00

Milling attachment Ø 10.00, adjustable 0-20°, low speed, max. Ø 50.00



## KSH-133-035

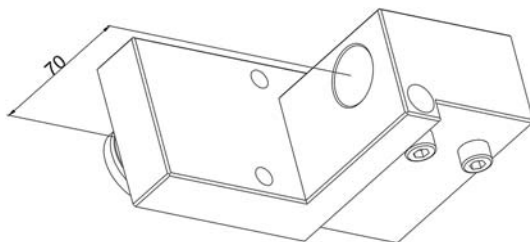


Item No	Ratio	rpm max.	Arbor Ø
KSH-133-035	1.588:1	3'148	3.50

Milling attachment Ø 3.50, adjustable +/- 10°, low speed, Ø 50.00 max.



## CDF-101



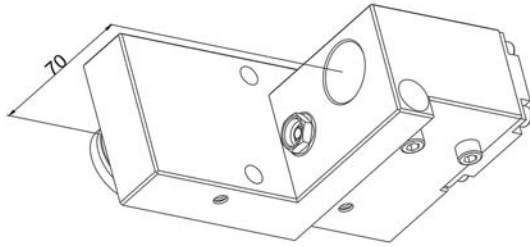
Item No	High	Tool Ø
CDF-101	70.00	25.40

Tool holder Ø 25.40



# CITIZEN M20-M32

## CDF-101-AR-1



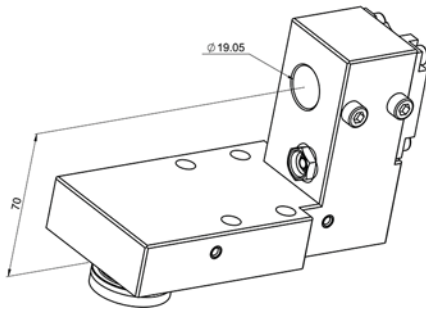
Item No	High	Tool Ø
CDF-101-AR-1	70.00	25.40

CDF-101-AR-1 70.00 25.40

Tool holder Ø 25.40, front machining, with cooling



## CDF-101-AR-2



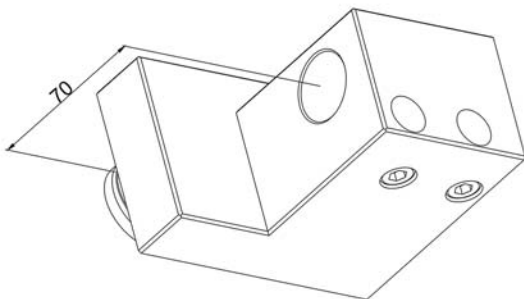
Item No	High	Tool Ø
CDF-101-AR-2	70.00	19.05

CDF-101-AR-2 70.00 19.05

Tool holder Ø 19.05, front machining, with cooling



## CDF-201



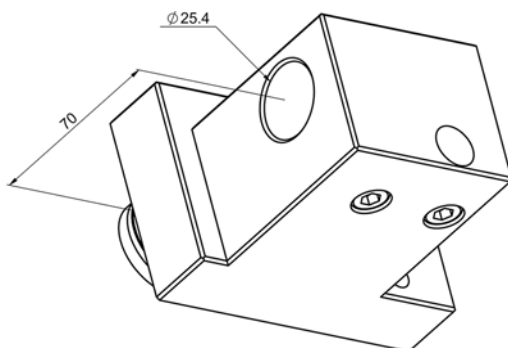
Item No	High	Tool Ø
CDF-201	70.00	25.40

CDF-201 70.00 25.40

Tool holder Ø 25.40, front/back machining



## CDF-301



Item No	High	Tool Ø
CDF-301	70.00	25.40

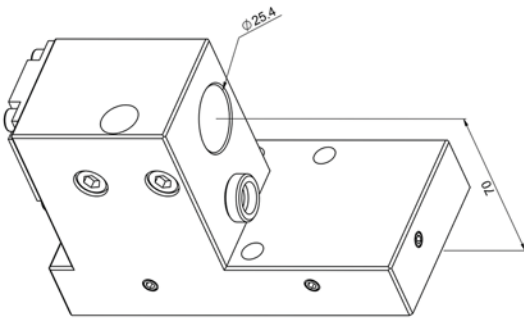
CDF-301 70.00 25.40

Tool holder Ø 25.40, back machining



# CITIZEN M20-M32

## CDF-301-AR

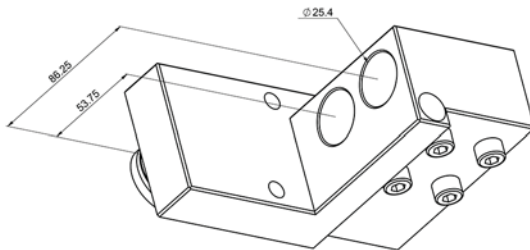


Item No	High	Tool Ø
CDF-301-AR	70.00	25.40

Tool holder Ø 25.40, back machining, with cooling



## CDF-401

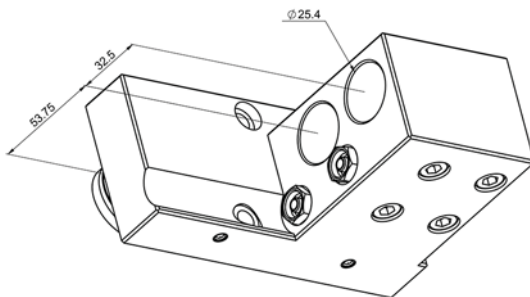


Item No	Tool Ø
CDF-401	2x 25.40

2x tool holder Ø 25.40, front machining, usable for Citizen M220/EM232 except M32-V



## CDF-401-AR

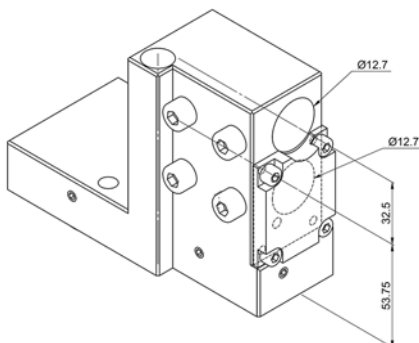


Item No	Tool Ø
CDF-401-AR	2x 25.40

2x tool holder Ø 25.40, front machining, with cooling, usable for Citizen M220/M232 except M32-V



## CDF-401-AR-S\*



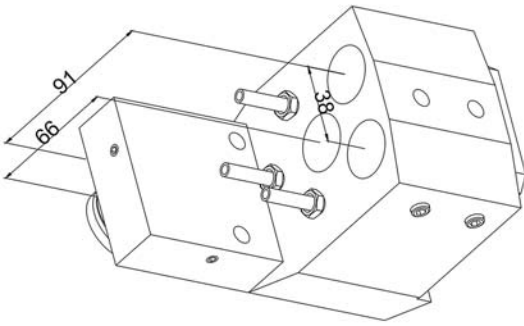
Item No	Tool Ø
CDF-401-AR-S*	2x 12.70

2x tool holder Ø 12.70, front machining, with cooling, usable for M220/M232 except M32-V



# CITIZEN M20-M32

## CDF-901-AR

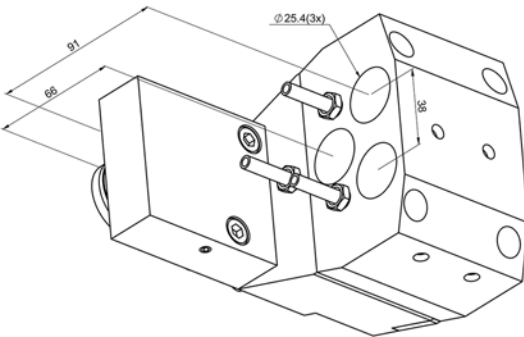


Item No	Tool Ø
CDF-901-AR	3x 25.40

3x tool holder Ø 25.40, not usable for new machine Citizen M32



## CDF-901-IK

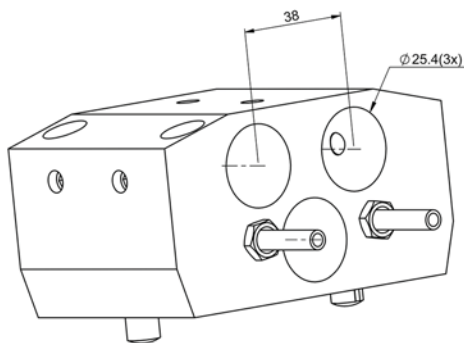


Item No	Tool Ø
CDF-901-IK	3x 25.40

3x tool holder Ø 25.40, with cooling, with interchangeable head



## CDF-901-IK-T

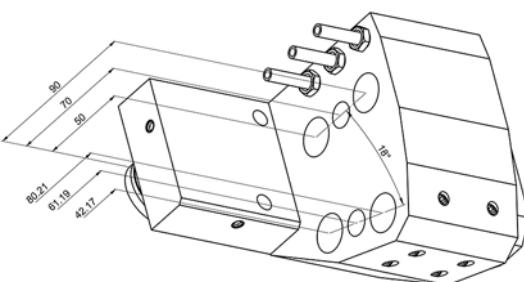


Item No	Tool Ø
CDF-901-IK-T	3x 25.40

3x tool holder, 3x Ø 25.40, with cooling



## CDF-905-AR



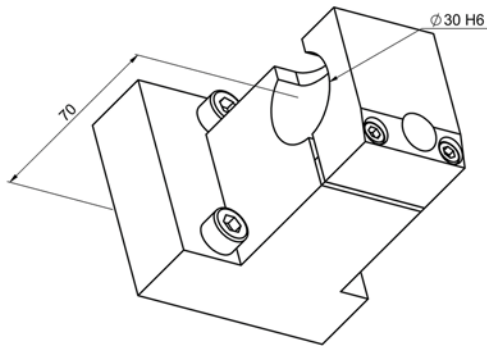
Item No	Tool Ø
CDF-905-AR	4x 19.05 + 2x 12.70

Tool holder with 4x Ø 19.05 and 2x Ø 12.70, with cooling



# CITIZEN M20-M32

## CDF-HF30

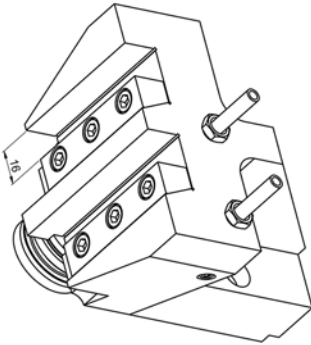


Item No	Spindle Ø
CDF-HF30	30.00

High frequency tool holder Ø 30.00



## CTF-1116

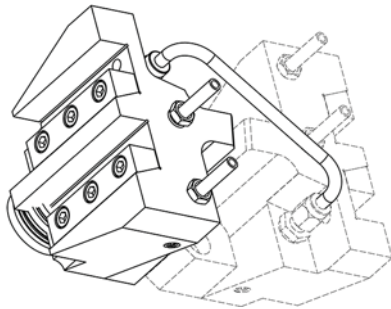


Item No	Tool
CTF-1116	2x 16x16

2x tool holder 16x16



## CTF-1116-D

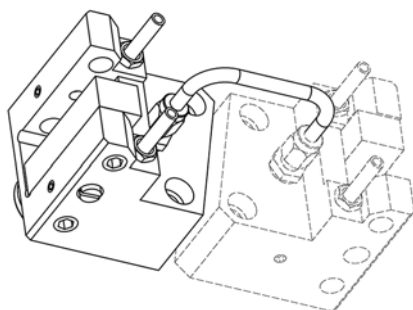


Item No	Tool
CTF-1116-D	2x 16x16 ou 4x 16x16

2x tool holder 16x16, with cooling, also possible to fix 2 tool holder on position 1



## CTF-116-AR



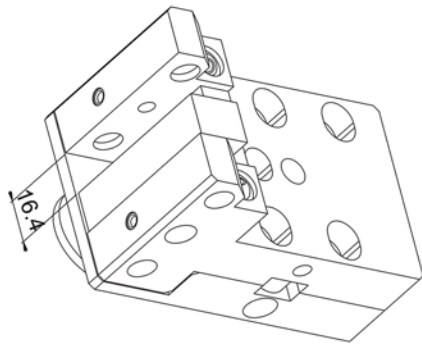
Item No	Tool
CTF-116-AR	1x ou 2x 16x16

Tool holder 16x16, with cooling, also possible to fix 2 holder on position 1



# CITIZEN M20-M32

## 778-CTF-116-R-AR

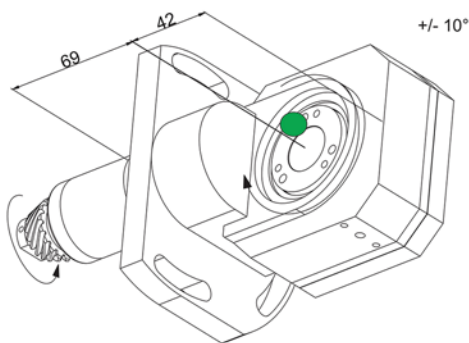


Item No	Tool
778-CTF-116-R-AR	16x16

778-CTF-116-R-AR  
Tool holder 16x16, height adjustable, with cooling



## KSW-101-000

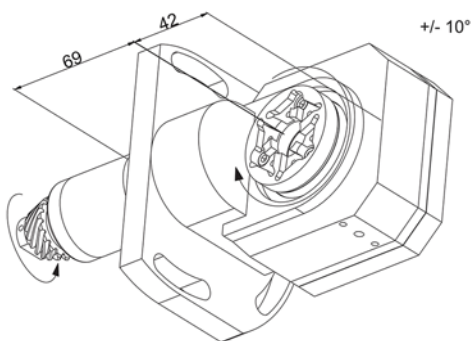


Item No	Ratio	rpm max.
KSW-101-000	2:1	2'500

KSW-101-000  
Thread whirling attachment 90°, +/- 10°, low speed, without head, without inserts



## KSW-101-SWG (Schwanog)

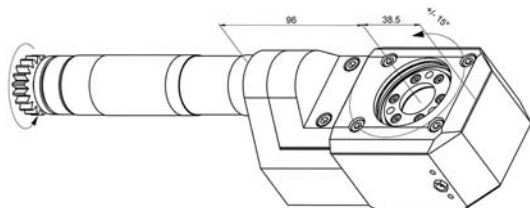


Item No	Ratio	rpm max.
KSW-101-SWG	2:1	2'500

KSW-101-SWG  
Thread whirling attachment 90°, +/- 10°, low speed, with head type Schwanog, without inserts



## LSW-215-000



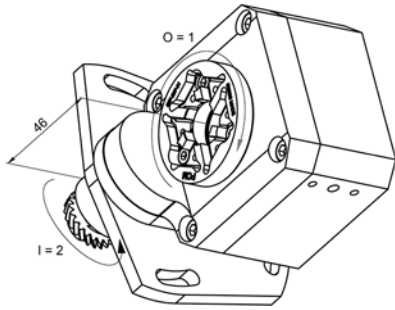
Item No	Ratio	rpm max.
LSW-215-000	1:1	5'000

LSW-215-000  
Thread whirling attachment 90°, +/- 15°, without head, without inserts, usable for L20



# CITIZEN M20-M32

## MSW-101

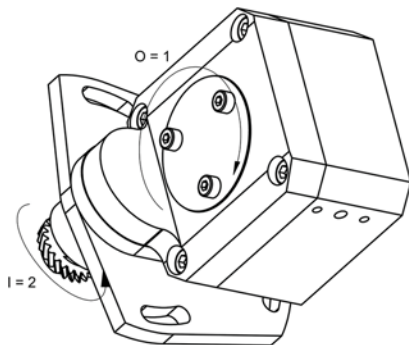


Item No	Ratio	rpm max.
MSW-101	2:1	3'250

Thread whirling attachment 90°, +/-10°, with head type Gloor, without inserts



## MSW-101-000

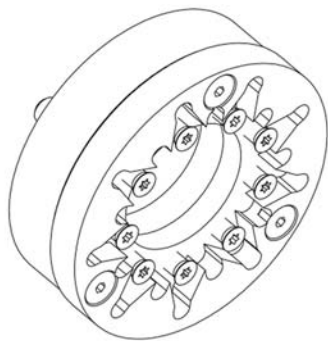


Item No	Ratio	rpm max.
MSW-101-000	2:1	3'250

Thread whirling attachment 90°, +/-10°, without head, without inserts



## MWT12-164-4046-130-09 (Utilis)

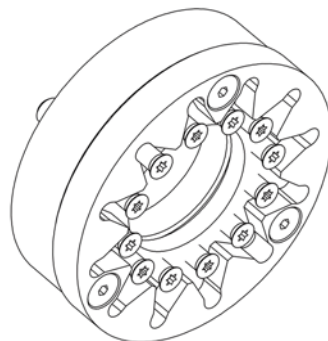


Item No	Inserts	Ø maxi
MWT12-164-4046-130-09	9	12.00

Thread whirling head type Utilis, without inserts



## MWT12-164-4046-130-12 (Utilis)



Item No	Inserts	Ø maxi
MWT12-164-4046-130-12	6	12.00

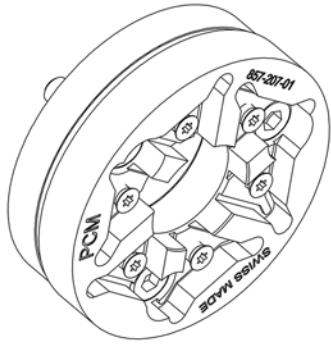
Thread whirling head type Utilis, without inserts





# CITIZEN M20-M32

## MSW-101-FPSWG (Schwanog)

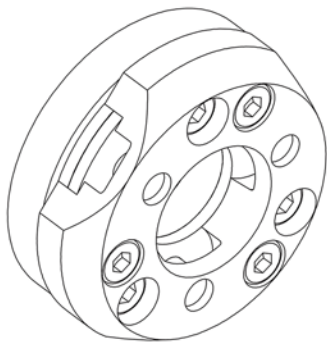


Item No	Inserts	Ø maxi
MSW-101-FPSWG	6	12.00

Thread whirling head type Schwanog, without inserts



## MSW-101-FPGLO (Gloor)

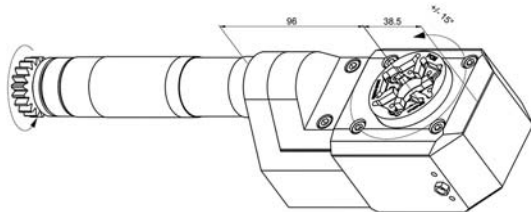


Item No	Inserts	Ø maxi
MSW-101-FPGLO	3	12.00

Thread whirling head type Gloor, without inserts



## LSW-215-SWG (Schwanog)



Item No	Ratio	rpm max.
LSW-215-SWG	1:1	5'000

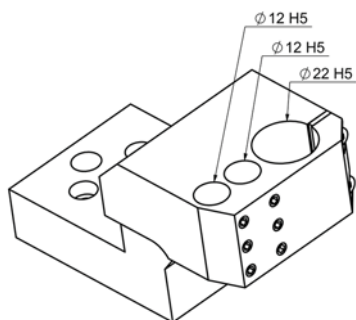
Thread whirling attachment 90°, +/- 15°, with head type Schwanog, without inserts, usable for L20





# CITIZEN R04/07

## QDF-30-HF



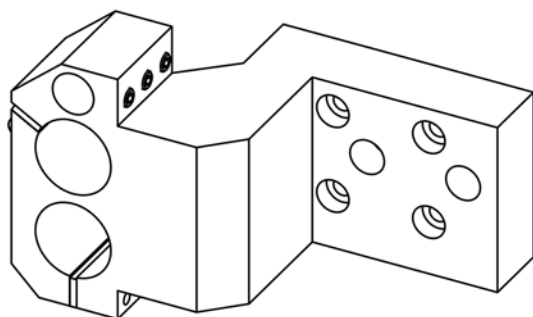
Item No	Spindle Ø
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QDF-30-HF 2x Ø 12.00 + Ø 22.00

High frequency tool holder Ø 22.00 + bores Ø 12.00



## QDF-30-HF-2



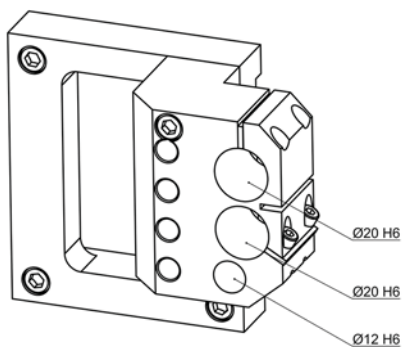
Item No	Spindle Ø
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QDF-30-HF-2 2x Ø 22.00 + Ø 12.00

2x high frequency tool holder Ø 22.00 + bores Ø 12.00



## QDF-30-HF3



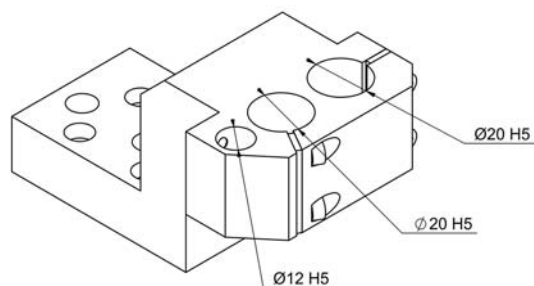
Item No	Spindle Ø
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QDF-30-HF3 2x Ø 20 + Ø 12

2x high frequency tool holder Ø 20.00 + bores Ø 12.00



## QDF-30-HF4



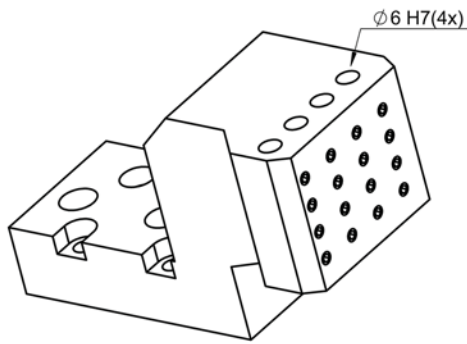
Item No	Spindle Ø
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QDF-30-HF4 2x Ø 20.00 + Ø 12.00



# CITIZEN R04/07

## QDF-3014

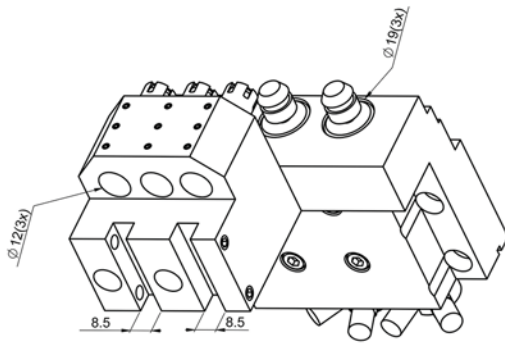


Item No	Spindle $\varnothing$
QDF-3014	4x $\varnothing 6.00H7$

4x tool holder  $\varnothing 6.00H7$



## QDF-3016

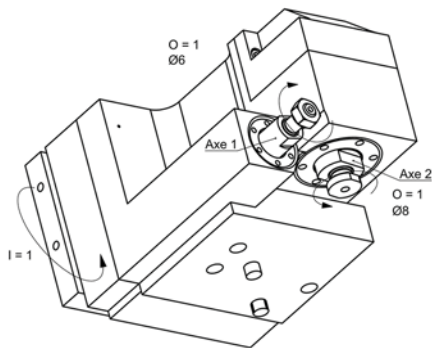


Item No	Spindle $\varnothing$
QDF-3016	3x $\varnothing 19.05$ + 3x $\varnothing 12.00$

Tool holder for 2 tools 8x8, 3 holders  $\varnothing 12.00$ , 3x high frequency tool holder  $\varnothing 19.05$



## U37B-III

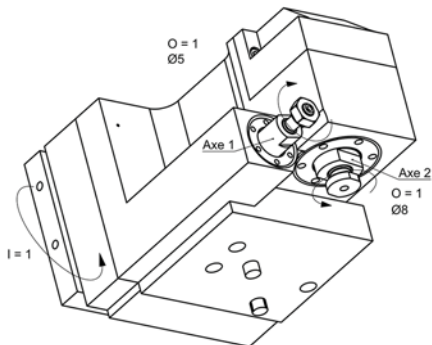


Item No	Ratio	rpm max.	Spindle $\varnothing$
U37B-III	1:1	8'000	$\varnothing 6.00 - \varnothing 8.00$

2x driven tool D1=6.00 / D2=8.00  
A "Servo-Tuning" is required by FANUC



## U37C-III



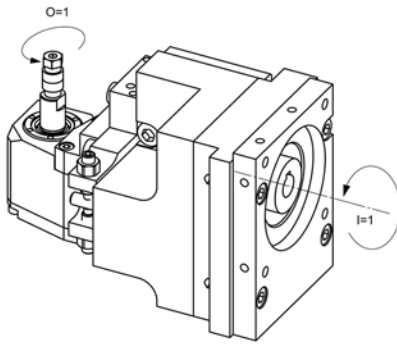
Item No	Ratio	rpm max.	Spindle $\varnothing$
U37C-III	1:1	8'000	$\varnothing 5.00 - \varnothing 8.00$

2x driven tool D1=5.00 / D2=8.00  
A "Servo-Tuning" is required by FANUC



# CITIZEN R04/07

## U38B-SL



Item No	Ratio	rpm max.	Arbor Ø
U38B-SL	1:1	8'000	3.50

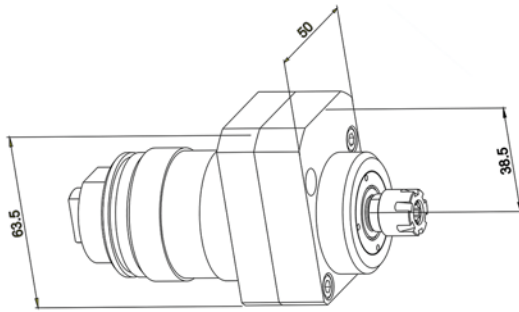
Milling attachment Ø 3.50  
A "Servo-Tuning" is required by FANUC





# TSUGAMI HS20 / HS32 / HS206 / B026

## HS20-510-3X

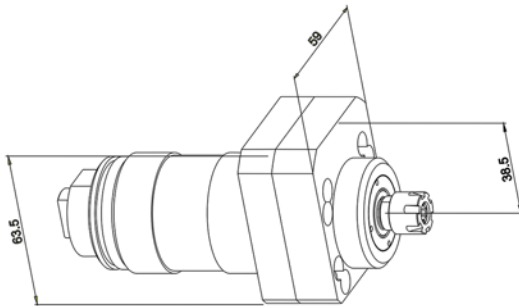


Item No	Collet	Ratio	rpm max.
HS20-510-3X	ER11	1:3	30'000

Milling / drilling unit, high speed, usable for Tsugami HS20/32



## HS20-510L-3X

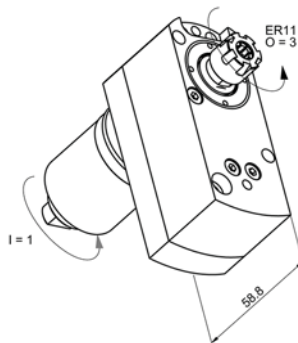


Item No	Collet	Ratio	rpm max.
HS20-510L-3X	ER11	1:3	30'000

Milling / drilling unit, high speed, usable for Tsugami HS20/32



## HS206-RSE-005-3x

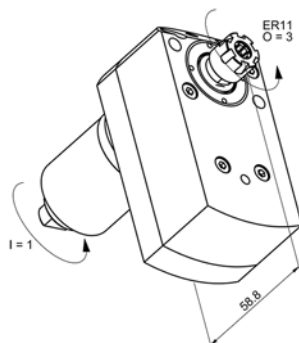


Item No	Collet	Ratio	rpm max.
HS206-RSE-005-3X	ER11	1:3	30'000

Milling / drilling unit, high speed, usable for Tsugami S206



## HS206-RSC-005-3X



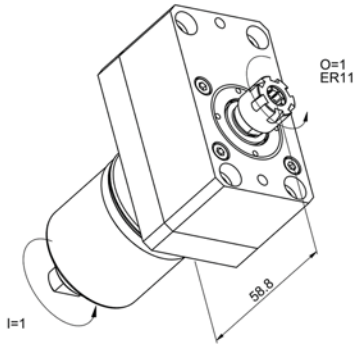
Item No	Collet	Ratio	rpm max.
HS206-RSC-005-3X	ER11	1:3	30'000

Milling / drilling unit, high speed, usable for Tsugami S206



# TSUGAMI HS20 / HS32 / HS206 / B026

B026-510-3x



Item No	Collet	Ratio	rpm max.
B026-510-3x	ER11	1:3	30'000

Milling / drilling unit, high speed, usable for Tsugami S206

