

Live tooling for Swiss type lathes

CITIZEN - STAR

MADAULA
creative solutions



“Perfect work requires passion, precision
and well designed and reliable tools.
Madaula’s focus
is to supply these tools to world-wide industry”



Tradition in precision

Since 1956 **Madaula** has stood for the highest quality and the best reliability of its products.

We have more than 55 years of experience in design, development and manufacture all kind of accessories for the machine tool industry.



Depuis 1956, **Madaula** est synonyme de la plus haute qualité et de la meilleur fiabilité pour ses produits.

Nous avons plus de 55 ans d'expérience dans la conception, le développement et la fabrication de tous types de accessoires pour l'industrie de la machine-outil.

Dal 1956 Madaula è sinonimo di massima qualità e di grande affidabilità.

Abbiamo più di 55 anni di esperienza nella progettazione, sviluppo e produzione di tutti i tipi di accessori per il settore delle machine utensili.



Innovation and reliability

We're focused on our ability to create products adapted to our customer's needs, reduce their manufacturing cost, thereby improving their competitive edge in the market.

We work to ensure optimally designed, precise, robust and durable products.

We love challenges.

Our goal is to turn your vision into reality and thereby increase your productivity.

Nous nous sommes consacrés sur notre capacité à créer des produits adaptés aux besoins des clients, à réduire leurs coûts de fabrication et ainsi améliorer leur avantage compétitive sur le marché.

Nous travaillons pour créer des produits de conception optimale, durables, robustes et précis.

Nous aimons les défis.

Notre objectif est d'augmenter votre productivité.

Siamo concentrati sulla nostra capacità di creare prodotti adatti alle esigenze dei nostri clienti, ridurre i loro costi di produzione, migliorando in tal modo il loro vantaggio competitivo nel mercato.

Lavoriamo costantemente per progettare in modo ottimale i nostri prodotti per renderli precisi, robusti e durevoli.

Noi amiamo le sfide. Il nostro obiettivo è quello di trasformare la vostra richiesta in realtà e di conseguenza aumentare la vostra produttività.

All over the world

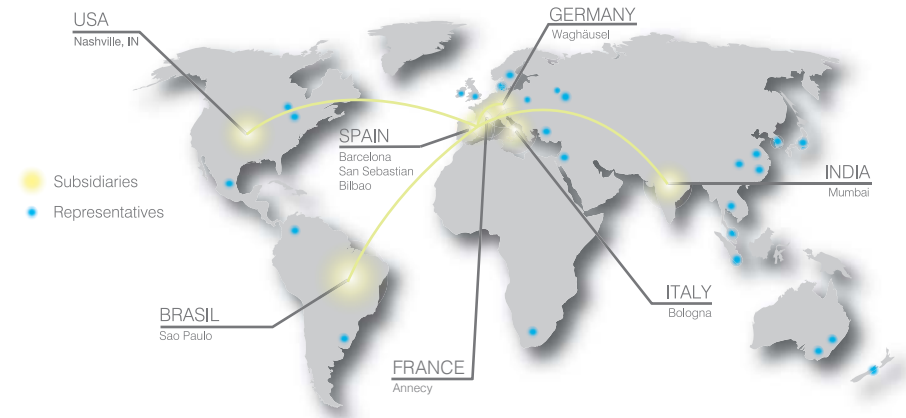


Our head office and factory are located in Barcelona, recognized city throughout the world by the creativity and constant innovation of its industries.

We sell all over the world with subsidiaries in Germany, USA, Italy, France, Brazil and India, with representatives all over the world. We export the 80% of our production.

Notre siège social et l'usine sont situés à Barcelone, ville reconnue mondialement par sa la créativité et constante innovation. Nous vendons partout dans le globe avec des filiales en Allemagne, USA, Italie, France, Brésil et l'Inde, et avec des représentations dans le monde entier. Nous exportons le 80% de notre production.

La nostra sede principale e lo stabilimento si trova a Barcellona, città riconosciuta in tutto il mondo per la creatività e l'innovazione costante delle sue industrie. Vendiamo in tutto il mondo con filiali in Germania, Stati Uniti, Italia, Francia, Brasile e India con i rappresentanti di tutto il mondo. Esportiamo l'80% della nostra produzione.



Manufacturing facilities

We welcome you to our facilities. Madaula has a continuous improvement policy, we invest to improve our technical production, assembly and quality departments.

Soyez les bienvenus dans nos nouvelles installations. Madaula investit constamment afin d'accroître sa capacité de production. Nous avons développé nos départements usinage et montage mais aussi qualité.

Abbiamo il piacere di informarvi a riguardo i nostri nuovi servizi. Madaula investe per migliorare la propria capacità di produzione di utensili. Ampliamo i nostri reparti di assemblaggio e di qualità.



Passion for precision

Precise and rigid manufacture
Adaptable to all types of machines
100% Checked and tested
High speed rotation
Longer tool life

Adjustable coolant nozzle.

Buse orientable pour l'arrosage.
Ugello refrigerante regolabile.

Improved sealing design combining a labyrinth and optimized friction seals to get hermetically sealed spindles.

Amélioration de la conception de l'étanchéité en combinant un labyrinthe et joints à friction optimisée pour obtenir une parfaite étanchéité.

Design migliorato che combina labirinti e guarnizioni di tenuta, ottimizzati per ottenere mandrini ermetici.

Multiple output options.

Multiples options de sortie.
Diverse opzioni di uscita.

Primary labyrinth seal.

Joint à labyrinthe primaire.
Tenuta primaria a labirinto.



5 CITIZEN

- 5 A20
- 7 A32
- 9 K12 / K16
- 11 L12
- 13 L16 / L20 Type VII-VIII-IX-X-XII & L20E Type VIII-X-XII
- 19 L25 / L32 Type IV-VI
- 20 L32 Type VIII-IX-X-XII
- 23 M12 / M16 Type III-V & C16 / C32
- 24 M12 / M16 Type V-VII-VIII
- 26 M12 / M16 Type III-V-VII-VIII Turret tooling
- 27 M20 / M32 Type III-V
- 28 M20 / M32 Type V-VII-VIII
- 29 M20 / M32 Type III-V-VII-VIII Turret tooling

Current Models

Discontinued Models

32 STAR

Ø34 Gang Tooling

- 32 SB-12R, SB-20R
- 32 SR-20J/JN, SR-20JII, SR-32J/JN, SR-32JII, SR-20RIV
- 32 SW-20, SX-38
- 32 ECAS-12/20, ECAS-32T, SB-16, SR-20RII, SV-12/20/32, SV-32JII

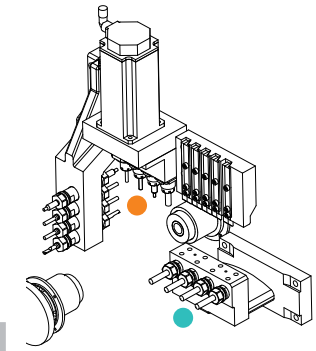
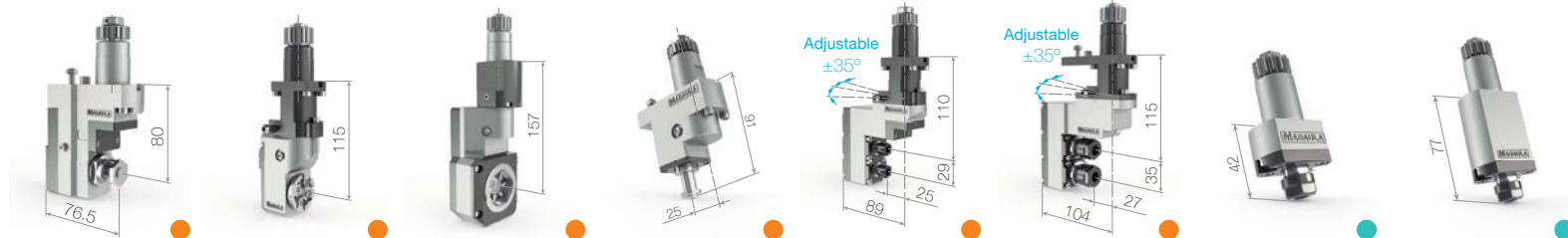
Ø22 Back End Tooling

- 35 SB-12R, SB-20R, SR-10J, SR-20J/JN, SR-32J/JN, SW-12RII
- 35 ECAS-12/20, SB-16, SR-20RII
- 37 SR-20JII, SR-32JII, SR-20RIV, SR-38, SR-38J, SV-20R, SW-12RII, SW-20

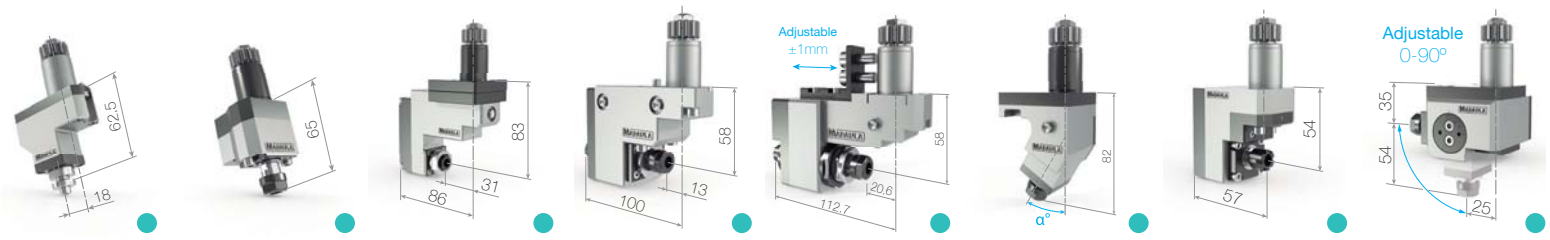


Turret Tooling

- 37 ST-20, SV-20R
- 37 ECAS-20T, KNC-16/20, SV-12/20, SV-32JII
- 40 ST-38, SV-38R
- 40 ECAS-32T, KNC-32, SV-32



Type	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°	Axial Saw-Mill	Radial "Y" Axis ±35° 2 Outputs	Radial "Y" Axis ±35° 2 Outputs	Axial Back Rotary Tool	Axial Long Back Rotary Tool
Code	CZ.034.A20	CZ.035.A20-15	CZ.035.A20-30	CZ.038.A20	CZ.051.A20-ER11	CZ.051.A20-ER16	CZ.000.A20-BE GSE3510 / MSC507/ GSE3307	CZ.000.A20-BE-L GSE3407
Citizen Ref.	BSP509 / BSP512	BSW215	-	-	-	-	-	-
	Cyl-Shaft	Cutting head	Cutting head	Cyl-Shaft	ER-11M	ER-16	ER-11	ER-11
	8.000	8.000	8.000	8.000	8.000	8.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1

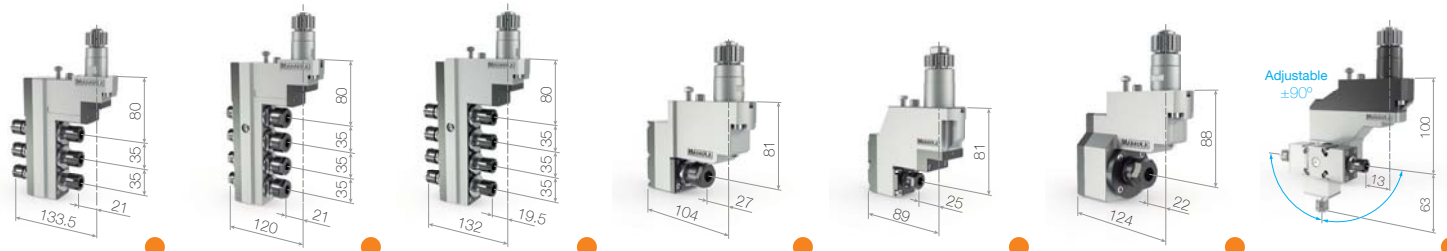


Type	Axial Offset Back Rotary Tool	Axial Speeder Back Rotary Tool	Radial Set-back Back Rotary Tool	Radial Set-back tool length adjust.	Radial Set-back Cartridge adjust.	Fixed Angle Back Rotary Tool	Radial Speeder Back Rotary Tool	Radial Adjust. Back Rotary Tool
Code	CZ.001.A20-BE	CZ.002.A20-BE	CZ.011.A20-BE	CZ.011.A20-BE-TA	CZ.012.A20-BE-CA	CZ.012.A20-BE	CZ.013.A20-BE	CZ.021.A20-BE
Citizen Ref.	-	BSC510	-	GSS1530	-	-	-	-
	Cyl-Shaft	ER-11	ER-11A	ER-11	ER-11	ER-11	ER-11	ER-11M
	5.000	15.000	5.000	5.000	5.000	5.000	15.000	5.000
	1:1	1:3	1:1	1:1	1:1	1:1	1:3	1:1

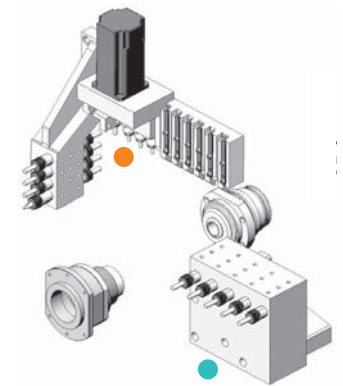
- Symbology
- Internal coolant
 - High frequency
 - Speeder
 - Reducer / Higher torque



Type	Axial	Axial	Axial Speeder	Radial Double Output	Radial 2+2 Outputs	Radial 2+2 Outputs	Radial 3+3 Outputs
Code	CZ.000.A32-ER16	CZ.000.A32-ER20	CZ.002.A32	CZ.008.A32	CZ.008.A32-4ER16/11	CZ.008.A32-4ER16	CZ.008.A32-6ER16/11
Citizen Ref.	GSC1110/GSC1310	-	BSC610	-	-	BSE3207	-
	ER-16	ER-20	ER-11	ER-16/ER11	ER-16/ER11	ER-16M	ER-16/ER11
RPM Max	5.000	5.000	15.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:3	1:1	1:1	1:1	1:1

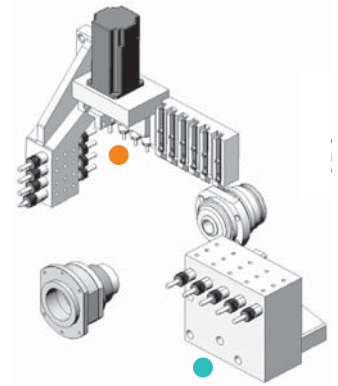


Type	Radial 3+3 Outputs	Radial 4+4 Outputs	Radial 4+4 Outputs	Radial Set-Back	Radial Set-Back Speeder	Radial Set-Back Reducer	Radial Adjustable ±90°
Code	CZ.008.A32-6ER16	CZ.008.A32-8ER16/11	CZ.008.A32-8ER16	CZ.011.A32	CZ.013.A32	CZ.014.A32	CZ.021.A32
Citizen Ref.	GSE1710	-	BSE3208	-	-	-	-
	ER-16M	ER-16/ER11	ER-16M	ER-16	ER-11	ER-20	ER-11M
RPM Max	5.000	5.000	5.000	5.000	15.000	2.500	5.000
	1:1	1:1	1:1	1:1	1:3	2:1	1:1



Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



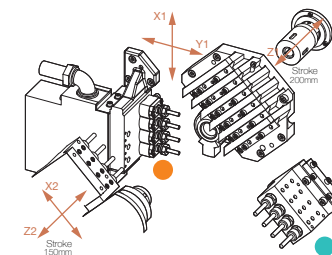
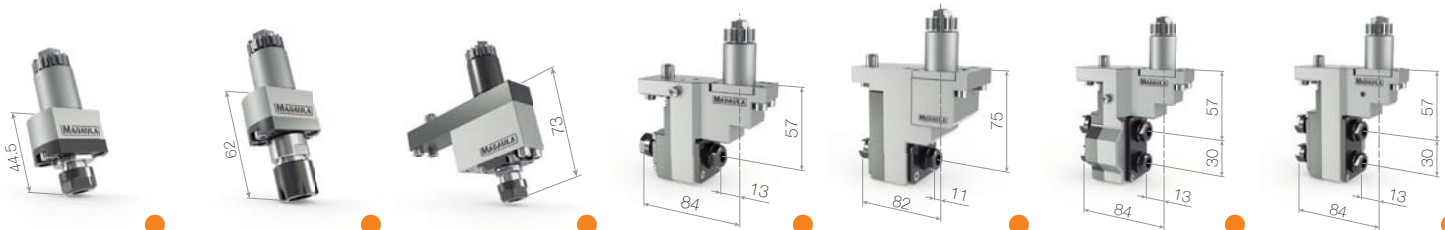
Type	Radial Adjust. ±90° Slim	Radial 3 Outputs	Radial 3 Outputs (Same Rotation Sense)	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°	Axial Saw-Mill
Code	CZ.021.A32-S	CZ.029.A32-3	CZ.029.A32-3SRS	CZ.034.A32	CZ.035.A32-15 BSW315	CZ.035.A32-30	CZ.038.A32
Citizen Ref.	-	-	-	-	-	-	-
ER	ER-11M	ER-16	ER-16	Cyl-Shaft	Cutting head	Cutting head	Cyl-Shaft
RPM Max	5.000	5.000	5.000	5.000	5.000	5.000	5.000
Gear	1:1	1:1	1:1	1:1	1:1	1:1	1:1



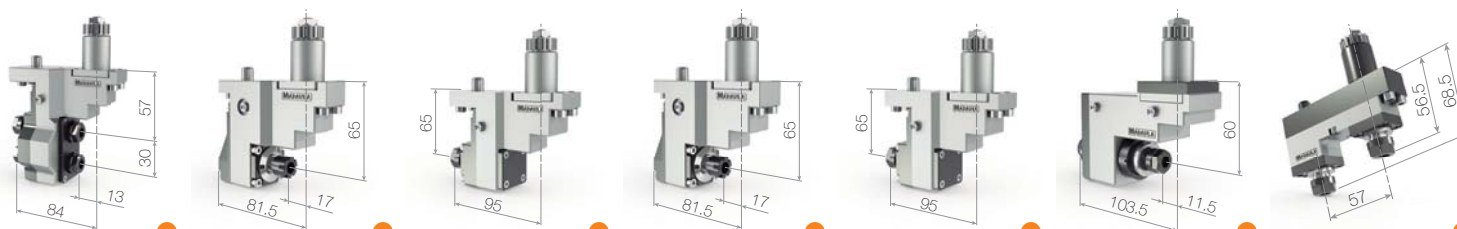
Type	Radial "Y" Axis ±35° 2 Outputs	Axial Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Set-Back Back Rotary Tool	Fixed Angle Back Rotary Tool	Radial Reducer Back Rotary Tool	Tool Holder with Fine "Y" Axis Adjust. ±0.1
Code	CZ.051.A32	CZ.000.A32-BE	CZ.011.A32-BE	CZ.011.A32-BE-TA	CZ.012.A32-BE	CZ.014.A32-BE	CZ.025.A32-BE
Citizen Ref.	-	GSC1110/GSC1310	-	GSS1110	-	-	-
ER	ER-16	ER-16	ER-16	ER-16	ER-11A	ER-20	ER-16M
RPM Max	5.000	5.000	5.000	5.000	15.000	2.500	-
Gear	1:1	1:1	1:1	1:1	1:3	2:1	-

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



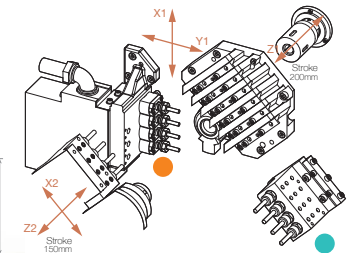
Type	Axial	Axial	Axial Speeder	Radial Double Output	Radial Double Output Speeder	Radial Left 2+2 Outputs	Radial Right 2+2 Outputs
Code	CZ.000.K12/K16-ER11	CZ.000.K12/K16-ER16	CZ.002.K12/K16	CZ.008.K12/K16	CZ.008.K12/K16-S	CZ.008.K12/K16-4L	CZ.008.K12/K16-4R
Citizen Ref.	GSC807/GS1107	-	-	GSE2307/GSE2807	-	GSE2007/GSE2507	GSE2407
	ER-11	ER-16M	ER-11	ER-11	ER-11	ER-11	ER-11
RPM Max	6.000	6.000	18.000	6.000	18.000	6.000	6.000
	1:1	1:1	1:3	1:1	1:3	1:1	1:1



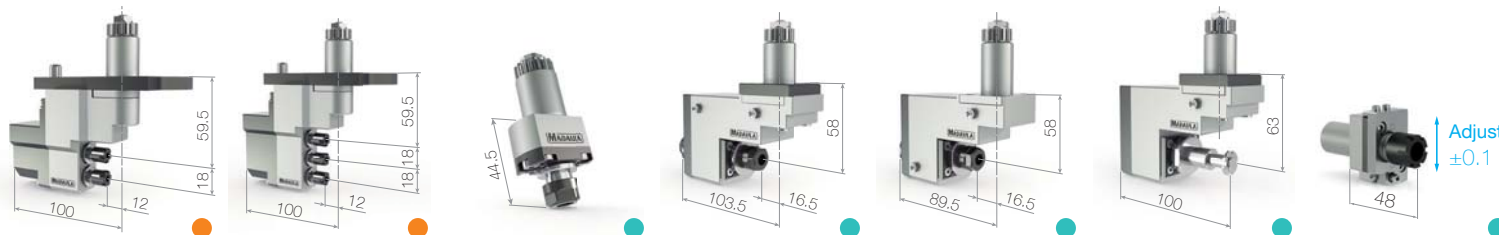
Type	Radial 2+2 Outputs Speeder	Radial Set-Back	Radial Set-Back Subspindle	Radial Set-Back Speeder	Radial Set-Back Speeder Subspindle	Radial Set-Back Reducer	Axial Double Output
Code	CZ.008.K12/K16-4S	CZ.011.K12/K16	CZ.011.K12/K16-SUB	CZ.013.K12/K16	CZ.013.K12/K16-SUB	CZ.014.K12/K16	CZ.023.K12/K16
Citizen Ref.	-	GSE2107/GSE2607	GSE2207/GSE2707	-	-	-	GSC860
	ER-11	ER-11M	ER-11	ER-11M	ER-11	ER-11	ER-11
RPM Max	18.000	6.000	6.000	18.000	18.000	4.500	6.000
	1:3	1:1	1:1	1:3	1:3	1.5:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



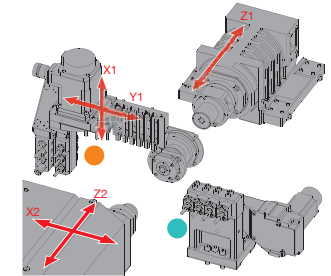
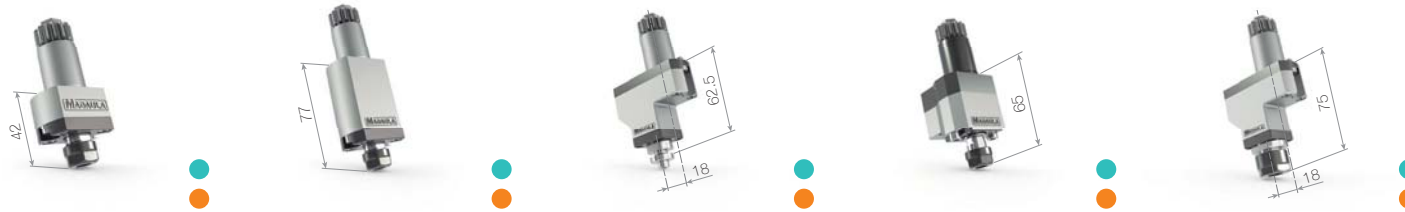
Type	Axial Double Output Speeder	Polygon Maker Reducer	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing ±30°	Axial Saw-Mill Reducer	Radial "Y" Axis 0-95°
Code	CZ.023.K12/K16-S	CZ.034.K12/K16	CZ.035.K12/K16-15	CZ.035.K12/K16-30	CZ.036.K12/K16	CZ.038.K12/K16	CZ.051.K12/K16
Citizen Ref.	-	-	GSW101	-	-	GSS350/450/750 GSS850/950/1050	-
	ER-11	Cyl-Shaft	Cutting Head	Cutting Head	Cyl-Shaft	Cyl-Shaft	ER-11
	6.000 / 18.000	2.000	6.000	6.000	6.000	3.000	6.000
	1:1 / 1:3	3:1	1:1	1:1	1:1	2:1	1:1



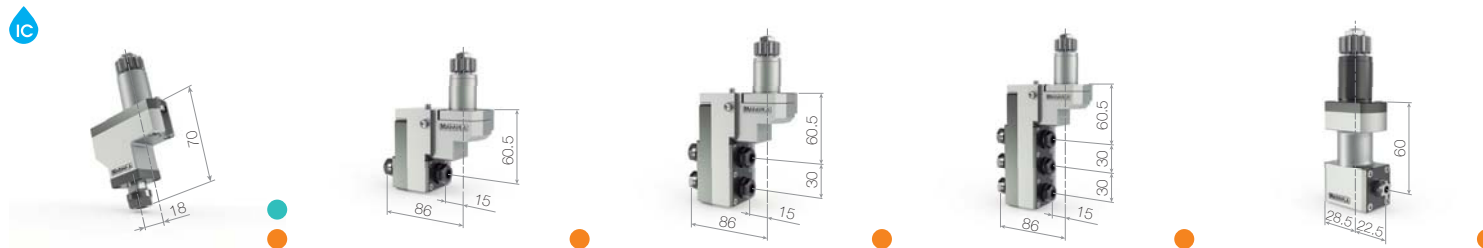
Type	Radial "Y" Axis 0-95° / 2 Outputs	Radial "Y" Axis 0-95° / 3 Outputs	Axial Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Saw-Mill Back Rotary Tool	Tool Holder with Fine "Y" Axis Adjust. ±0.1
Code	CZ.051.K12/K16-2	CZ.051.K12/K16-3	CZ.000.K12-BE	CZ.011.K12-BE	CZ.013.K12-BE	CZ.030.K12-BE	CZ.025.K12-BE
Citizen Ref.	-	-	GSC1107	GSS1430	-	-	-
	ER-8M	ER-8M	ER-11	ER-11	ER-11	Cyl-Shaft	ER-11M
	6.000	6.000	6.000	6.000	18.000	6.000	-
	1:1	1:1	1:1	1:1	1:3	1:1	-

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



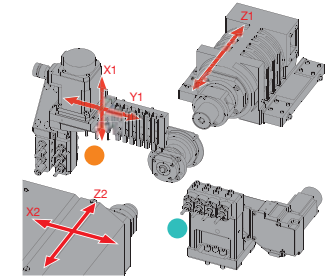
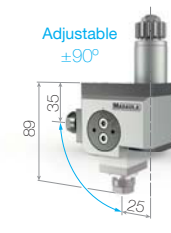
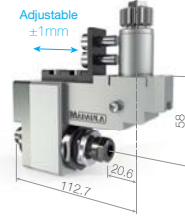
Type	Axial	Axial Long	Axial Offset	Axial Speeder	Axial Offset Reducer
Code	CZ.000.L12	CZ.000.L12-L	CZ.001.L12	CZ.002.L12	CZ.003.L12
Citizen Ref.	MSC507 / GSE3507 / GSE3307	GSE3407	-	BSC510	-
Chuck	ER-11	ER-11	Oyl-Shaft	ER-11	ER-16
RPM Max	8.000	8.000	8.000	24.000	4.000
Gear	1:1	1:1	1:1	1:3	2:1



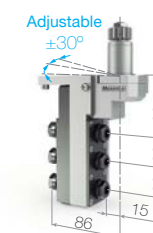
Type	Axial Offset IC 15 bar	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial
Code	CZ.006.L12	CZ.008.L12	CZ.008.L12-4	CZ.008.L12-6	CZ.010.L12
Citizen Ref.	-	-	-	-	-
Chuck	ER-11	ER-11	ER-11	ER-11	ER-8M
RPM Max	8.000	8.000	8.000	8.000	8.000
Gear	1:1	1:1	1:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



Type	Radial Set-Back	Radial Set-Back with tool length adjustment	Radial Set-Back Cartridge adjustment	Radial Set-Back Speeder	Radial Adjustable 0-90°
Code Citizen Ref.	CZ.011.L12 GSC1507	CZ.011.L12-TA GSS1530 / GSS1330	CZ.011.L12-CA -	CZ.013.L12 -	CZ.021.L12 -
Chuck	ER-11A	ER-11	ER-11	ER-11	ER-11
RPM Max	8.000	8.000	8.000	24.000	8.000
Gear Ratio	1:1	1:1	1:1	1:3	1:1

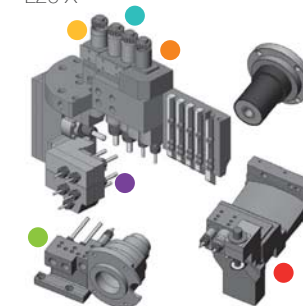
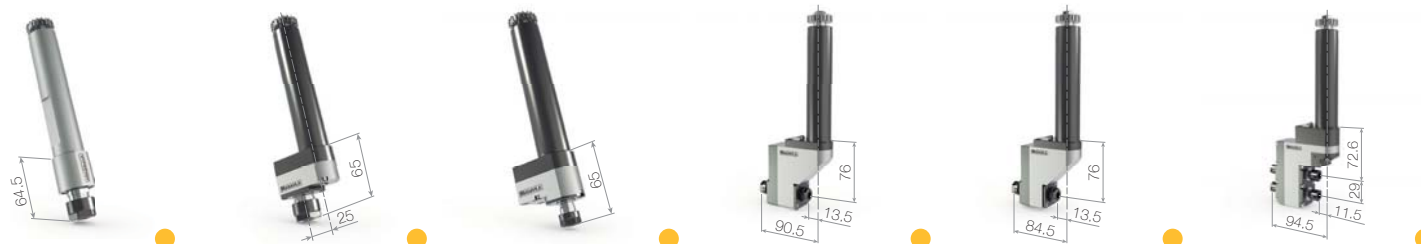


Type	Radial 2 Outputs	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±30° 3 Outputs
Code Citizen Ref.	CZ.029.L12-2 -	CZ.029.L12-3 -	CZ.035.L12-15 -	CZ.035.L12-30 -	CZ.051.L12 GSE3607
Chuck	ER-11	ER-11	Cutting Head	Cutting Head	ER-11
RPM Max	8.000	8.000	8.000	8.000	8.000
Gear Ratio	1:1	1:1	1:1	1:1	1:1

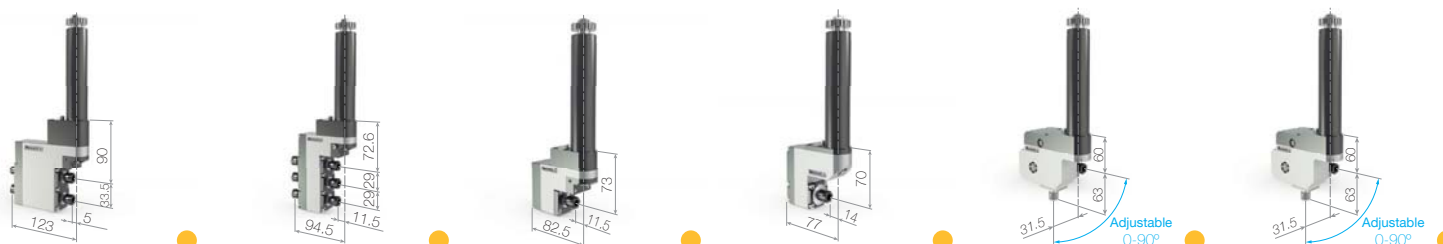
Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

L20 X



Type	Axial	Axial Offset	Axial Speeder	Radial Double Output	Radial Double Output Speeder	Radial 2+2 Outputs
Code	CZ.000.L16/L20	CZ.001.L16/L20	CZ.002.L16/L20	CZ.008.L16/L20	CZ.008.L16/L20-S	CZ.008.L16/L20-4
Citizen Ref.	GSC510 / GSC1010	-	-	-	-	-
	ER-16	ER-16	ER-11	ER-11	ER-11	ER-11M
RPM Max	5.000	5.000	15.000	5.000	15.000	5.000
	1:1	1:1	1:3	1:1	1:3	1:1
Compatible with	All versions	All versions	All versions	All versions	All versions	All versions



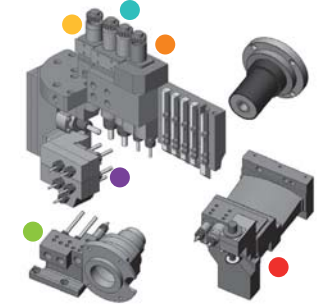
Type	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-back	Radial Set-back Speeder	Radial Adjustable 0-90°	Radial Adjustable 0-90° Speeder
Code	CZ.008.L16/L20-4T10	CZ.008.L16/L20-6	CZ.011.L16/L20	CZ.013.L16/L20	CZ.021.L16/L20	CZ.021.L16/L20-S
Citizen Ref.	-	GSE1307	GSE306	-	-	-
	ER-11M	ER-11M	ER-11M	ER-11M	ER-11M	ER-11M
RPM Max	5.000	5.000	5.000	15.000	5.000	15.000
	1:1	1:1	1:1	1:3	1:1	1:3
Compatible with	All versions	All versions	All versions	All versions	All versions	All versions

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



L20 X



Type	Axial Offset Reducer	Radial 2 Outputs	Radial 2 Outputs Speeder	Radial 3 Outputs	Radial 3 Outputs	Thread Whirling ±15°
Code	CZ.027.L16/L20	CZ.029.L16/L20	CZ.029.L16/L20-S	CZ.029.L16/L20-3ER11	CZ.029.L16/L20-3ER16	CZ.035.L16/L20-15
Citizen Ref.	-	-	-	GSE910	GSE1110	-
Cutting Head	ER-16	ER-11M	ER-11	ER-11M	ER-16	Cutting Head
RPM Max	3.750	5.000	15.000	5.000	5.000	5.000
Gear Ratio	1:0.75	1:1	1:3	1:1	1:1	1:1
Compatible with	All versions	All versions	All versions	All versions	All versions	All versions



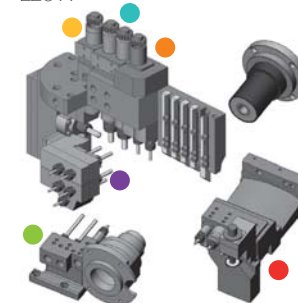
Type	Thread Whirling ±25°	Thread Whirling ±30°	Axial Saw-mill	Radial "Y" Axis ±15°	Radial "Y" Axis ±15° 2 Outputs	Axial
Code	CZ.035.L16/L20-25	CZ.035.L16/L20-30	CZ.038.L16/L20	CZ.051.L16/L20	CZ.051.L16/L20-2	CZ.000.L20-S
Citizen Ref.	-	-	-	-	-	GSC907
Cutting Head	Cutting Head	Cutting Head	Cyl-Shaft	ER-11M	ER-11M	ER-11
RPM Max	5.000	5.000	5.000	5.000	5.000	5.000
Gear Ratio	1:1	1:1	1:1	1:1	1:1	1:1
Compatible with	All versions	All versions	All versions	All versions	All versions	L20 VIII-IX-X-XII / E VIII-IX-X

Symbology

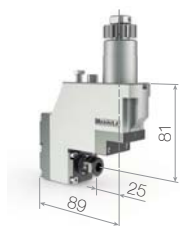
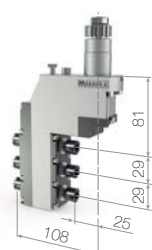
- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



L20 X



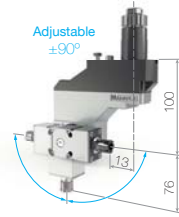
Type	Axial	Axial	Axial Speeder	Axial Reducer	Radial Double Output
Code	CZ.000.L20C-ER16	CZ.000.L20C-ER20	CZ.002.L20C	CZ.003.L20C	CZ.008.L20C
Citizen Ref.	GSC1310	-	-	-	-
	ER-16	ER-20	ER-11	ER-20	ER-11
RPM Max	6.000	6.000	18.000	2.000	6.000
	1:1	1:1	1:3	3:1	1:1
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII



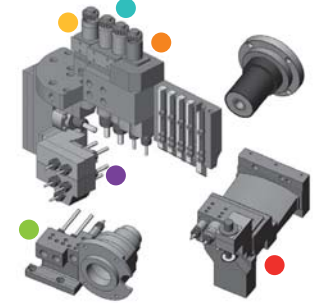
Type	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back	Radial Set-Back	Radial Set-Back Speeder
Code	CZ.008.L20C-4	CZ.008.L20C-6	CZ.011.L20C-ER11	CZ.011.L20C-ER16	CZ.013.L20C
Citizen Ref.	-	BSE707	-	-	-
	ER-11M	ER-11M	ER-11	ER-16	ER-11
RPM Max	6.000	6.000	6.000	6.000	18.000
	1:1	1:1	1:1	1:1	1:3
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII

Symbology

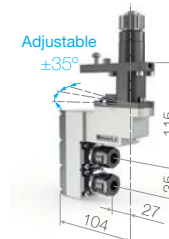
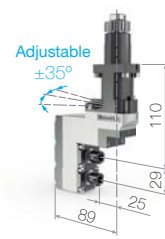
- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



L20 X



Type	Radial Set-Back Reducer	Radial Adjustable ±90°	Radial 2 Outputs	Radial 3 Outputs	Polygon Maker
Code	CZ.014.L20C	CZ.021.L20C	CZ.029.L20C	CZ.029.L20C-3	CZ.034.L20C
Citizen Ref.	-	-	-	BSE607	-
	ER-20	ER-11M	ER-11M	ER-11	Cyl-Shaft
RPM Max	↓ 2.000	6.000	6.000	6.000	6.000
	3:1	1:1	1:1	1:1	1:1
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII



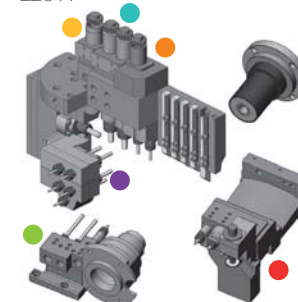
Type	Thread Whirling ±15°	Thread Whirling ±30°	Axial Saw-Mill	Radial "Y" Axis ±35° 2 Outputs	Radial "Y" Axis ±35° 2 Outputs
Code	CZ.035.L20C-15	CZ.035.L20C-30	CZ.038.L20C	CZ.051.L20C-ER11	CZ.051.L20C-ER16
Citizen Ref.	-	-	-	-	-
	Cutting head	Cutting head	Cyl-Shaft	ER-11M	ER-16
RPM Max	6.000	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:1
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII

Symbology

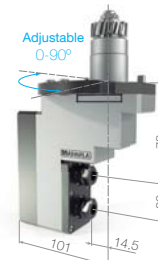
- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



L20 X



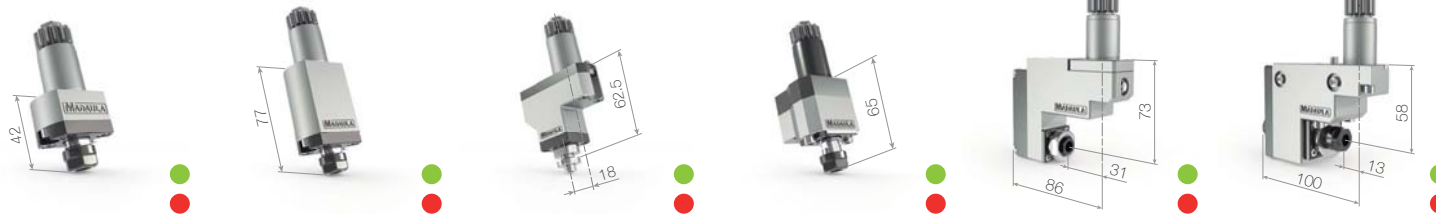
Type	End Face Drilling (Without Rotatory Tool)	Axial	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back
Code	CZ.031.L20N-T	CZ.000.L20N	CZ.008.L20N	CZ.008.L20N-4	CZ.008.L20N-6	CZ.011.L20N
Citizen Ref.	GSE3010/GSE3110	GSC1210	-	GSE3107	GSE3207	-
	-	ER-16	ER-11	ER-11	ER-11	ER-11
RPM Max	5.000	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1
Compatible with	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII



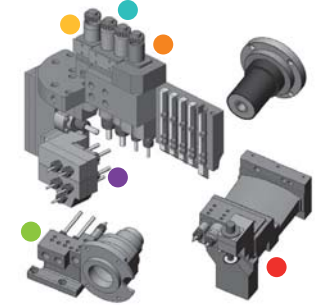
Type	Axial Double Output	Polygon Maker Reducer	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis Double Output	Radial "Y" Axis 2 Outputs
Code	CZ.023.L20N	CZ.034.L20N	CZ.035.L20N-15	CZ.035.L20N-30	CZ.051.L20N	CZ.051.L20N-2
Citizen Ref.	GSC1307 / GSC1607	-	-	-	-	-
	ER-11	Cyl-Shaft	Cutting Head	Cutting Head	ER-11	ER-11
RPM Max	5.000	1.600	5.000	5.000	5.000	5.000
	1:1	3:1	1:1	1:1	1:1	1:1
Compatible with	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII

Symbology

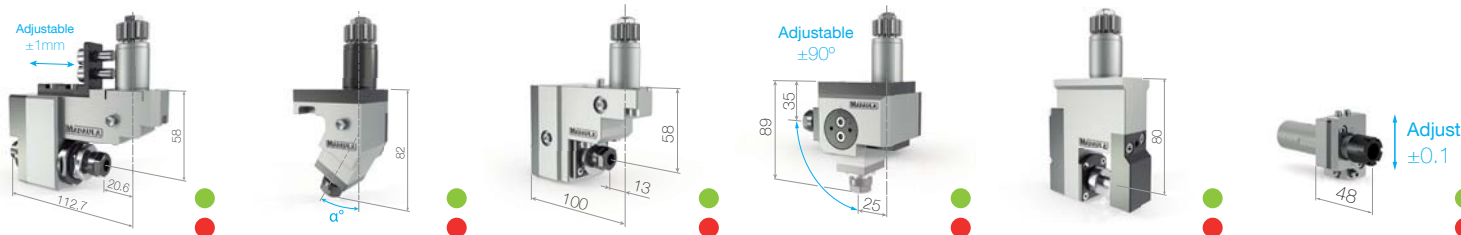
- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



L20 X



Type	Axial	Axial Long	Axial Offset	Axial Speeder	Radial Set-Back	Radial Set-Back with tool length adjustment
Code	CZ.000.L20-BE	CZ.000.L20-BE-L	CZ.001.L20-BE	CZ.002.L20-BE	CZ.011.L20-BE	CZ.011.L20-BE-TA
Citizen Ref.	MSC507/GSE3307/GSE3507	GSE3407	-	-	GSC1507	GSS1330 / GSS1530
	ER-11	ER-11	Cyl-Shaft	ER-11	ER-11A	ER-11
RPM Max	5.000	5.000	5.000	15.000	5.000	5.000
	1:1	1:1	1:1	1:3	1:1	1:1
Compatible with	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII



Type	Radial Set-Back with Cartridge adjustment	Fixed Angle (Any Angle)	Radial Set-Back Speeder	Radial Adjustable 0-90°	Saw-Mill	Tool Holder with Fine "Y" Axis Adjust. ±0.1
Code	CZ.011.L20-BE-CA	CZ.012.L20-BE	CZ.013.L20-BE	CZ.021.L20-BE	CZ.030.L20-BE	CZ.025.L20-BE
Citizen Ref.	-	-	-	-	-	-
	ER-11	ER-11	ER-11	ER-11	Cyl-Shaft	ER-11M
RPM Max	5.000	5.000	15.000	5.000	5.000	-
	1:1	1:1	1:3	1:1	1:1	-
Compatible with	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII	L20 IX-X-XII/E VIII-X-XII

Symbology

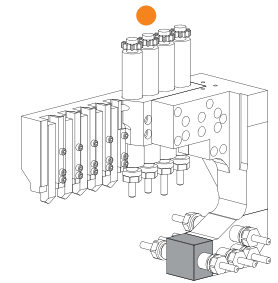
- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



Type	Axial	Axial Offset	Axial Speeder	Axial Reducer	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs
Code Citizen Ref.	CZ.000.L25/L32 GSE310	CZ.001.L25/L32 -	CZ.002.L25/L32 -	CZ.003.L25/L32 -	CZ.008.L25/L32 GSX510	CZ.008.L25/L32-4 -	CZ.008.L25/L32-6 -
	ER-16	ER-16	ER-11M	ER-16A	ER-11M	ER-11M	ER-11M
RPM Max	6.000	6.000	18.000	3.000	6.000 / 18.000	6.000	6.000
	1:1	1:1	1:3	2:1	1:1 / 1:3	1:1	1:1

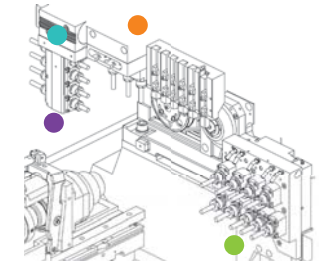


Type	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable 0-90°	Thread Whirling ±15°	Thread Whirling ±25°	Axial Saw-Mill	Radial "Y" Axis ±15°
Code Citizen Ref.	CZ.011.L25/L32 GSE306	CZ.013.L25/L32 -	CZ.021.L25/L32 -	CZ.035.L25/L32-15 -	CZ.035.L25/L32-25 LSW101	CZ.038.L25/L32 -	CZ.051.L25/L32 GSA107
	ER-11M	ER-11M	ER-11M	Cutting Head	Cutting Head	Cyl-Shaft	ER-11M
RPM Max	6.000	18.000	6.000 / 18.000	6.000	6.000	6.000	6.000
	1:1	1:3	1:1 / 1:3	1:1	1:1	1:1	1:1

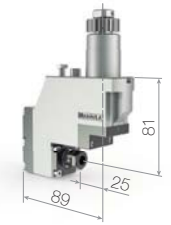
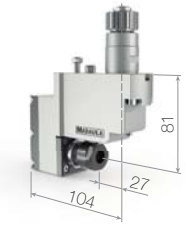
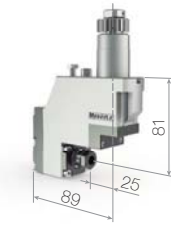
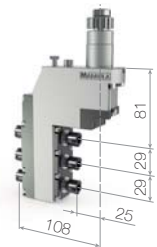


Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



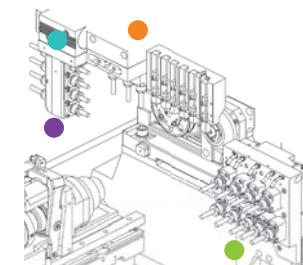
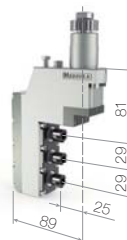
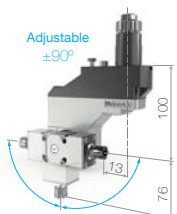
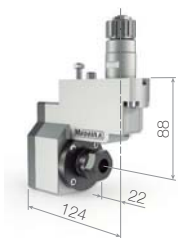
Type	Axial	Axial	Axial Speeder	Radial Double Output	Radial 2+2 Outputs
Code Citizen Ref.	CZ.000.L32-ER16 GSC1310	CZ.002.L32-ER20 -	CZ.002.L32 -	CZ.008.L32 -	CZ.008.L32-4 -
Chuck	ER-16	ER-20	ER-11	ER-11	ER-11M
RPM Max	6.000	6.000	18.000	6.000	6.000
Gear Ratio	1:1	1:1	1:3	1:1	1:1



Type	Radial 3+3 Outputs	Radial 4+4 Outputs	Radial Set-Back	Radial Set-Back	Radial Set-Back Speeder
Code Citizen Ref.	CZ.008.L32-6 BSE707	CZ.008.L32-8 -	CZ.011.L32-ER11 -	CZ.011.L32-ER16 GSE1910	CZ.013.L32 -
Chuck	ER-11M	ER-11M	ER-11	ER-16	ER-11
RPM Max	6.000	6.000	6.000	6.000	18.000
Gear Ratio	1:1	1:1	1:1	1:1	1:3

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



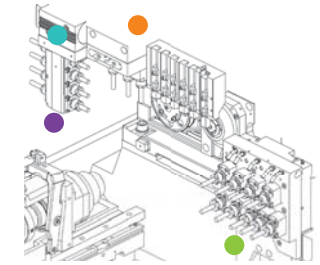
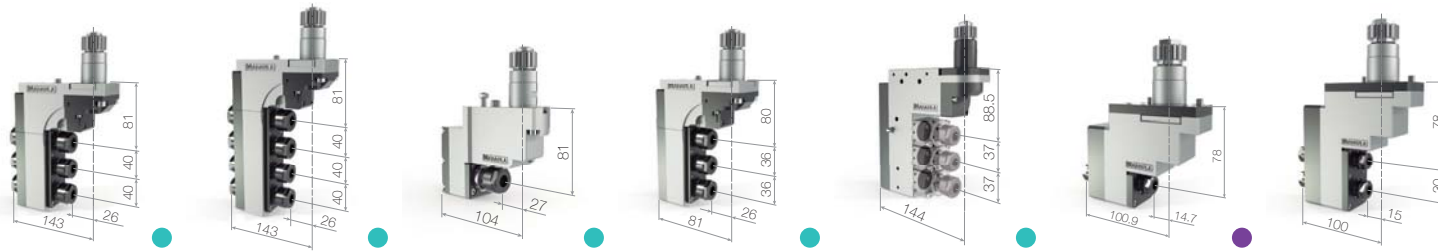
Type	Radial Set-Back Reducer	Radial Adjustable ±90°	Radial 2 Outputs	Radial 3 Outputs	Radial 4 Outputs
Code	CZ.014.L32	CZ.021.L32	CZ.029.L32	CZ.029.L32-3	CZ.029.L32-4
Citizen Ref.	-	-	-	BSE607	-
Shaft	ER-20	ER-11	ER-11M	ER-11M	ER-11M
RPM Max	2.000	6.000	6.000	6.000	6.000
Gear Ratio	3:1	1:1	1:1	1:1	1:1



Type	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing ±32°	Axial Saw-Mill
Code	CZ.034.L32	CZ.035.L32-15	CZ.035.L32-30	CZ.036.L32	CZ.038.L32
Citizen Ref.	-	-	-	-	-
Shaft	Cyl-Shaft	Cutting head	Cutting head	Cyl-Shaft	Cyl-Shaft
RPM Max	6.000	6.000	6.000	6.000	6.000
Gear Ratio	1:1	1:1	1:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



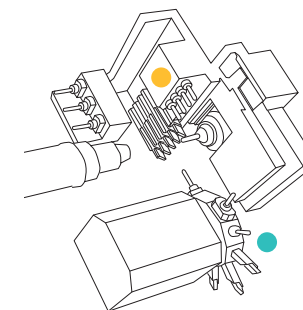
Type	Radial 3+3 Outputs	Radial 4+4 Outputs	Radial Set-Back	Radial 3 Outputs	End Face Drilling (Without Rotatory Tool)	Radial Double Output	Radial 2+2 Outputs
Code Citizen Ref.	CZ.008.L32T-6 GSE1810	CZ.008.L32T-8 GSE2010	CZ.011.L32T -	CZ.029.L32T-3 GSE1610	CZ.031.L32T GSE3210	CZ.008.L32N -	CZ.008.L32N-4 GSE3707
	ER-16	ER-16	ER-16	ER-16	-	ER-11	ER-11
RPM Max	6.000	6.000	6.000	6.000	6.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1



Type	Radial 3+3 Outputs	Radial Set-Back	Axial Double Output	Polygon Maker Reducer	Thread Whirling ±15°	Radial "Y" Axis Double Output	Radial "Y" Axis 2 Outputs
Code Citizen Ref.	CZ.008.L32N-6 GSE3807	CZ.011.L32N -	CZ.023.L32N GSC1307/GSC1607	CZ.034.L32N -	CZ.035.L32N-15 -	CZ.051.L32N -	CZ.051.L32N-2 -
	ER-11	ER-16	ER-11	Oyl-Shaft	Cutting Head	ER-11	ER-11
RPM Max	6.000	6.000	6.000	1.600	5.000	5.000	5.000
	1:1	1:1	1:1	3:1	1:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



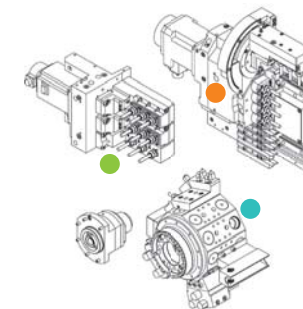
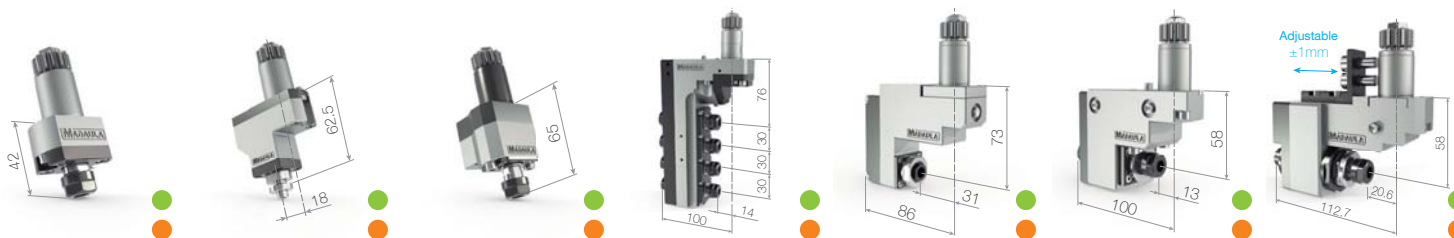
Type	Axial	Axial	Axial Offset	Axial Speeder	Radial Double Output	Radial Double Output	Radial Set-Back
Code Citizen Ref.	CZ.000.M12/M16-ER11 GSC607 / GSC507	CZ.000.M12/M16-ER16 GSC510	CZ.001.M12/M16-ER16 -	CZ.002.M12/M16 -	CZ.008.M12/M16 -	CZ.008.M12/M16-ER11 CZ.008.M12/M16-ER11S	CZ.011.M12/M16-13 GSE507
Holder	ER-11	ER-16M	ER-16M	ER-11	ER-8M / ER-11	ER-11M	ER-11
RPM Max	8.000	8.000	8.000	24.000	8.000	8.000 / 24.000	8.000
Gear Ratio	1:1	1:1	1:1	1:3	1:1	1:1 / 1:3	1:1



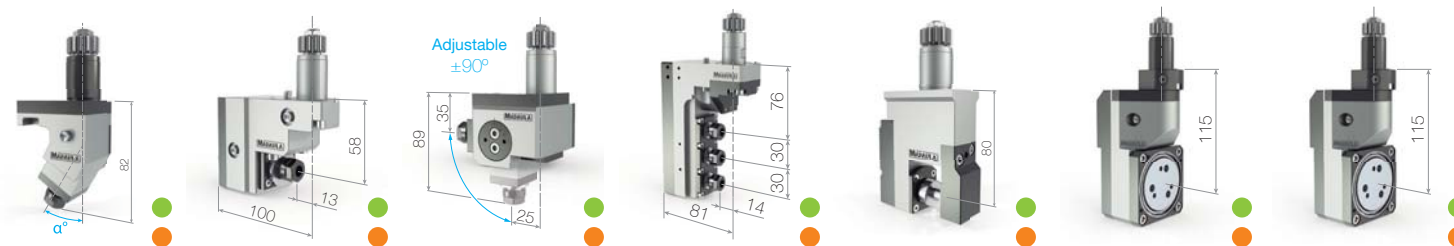
Type	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable 0-90°	Thread Whirling ±15°	Thread Whirling ±30°	Axial Saw-Mill	Radial "Y" Axis ±15°
Code Citizen Ref.	CZ.011.M12/M16-20 GSE508	CZ.013.M12/M16 -	CZ.021.M12/M16 GSA507/GSA407	CZ.035.M12/M16-15 LSW424	CZ.035.M12/M16-30 -	CZ.038.M12/M16 GSS250/550/650	CZ.051.M12/M16 -
Holder	ER-11	ER-11	ER-11M	Cutting Head	Cutting Head	Cyl-Shaft	ER-11M
RPM Max	8.000	16.000	6.000 / 24.000	8.000	8.000	8.000	8.000
Gear Ratio	1:1	1:2	1:1 / 1:3	1:1	1:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



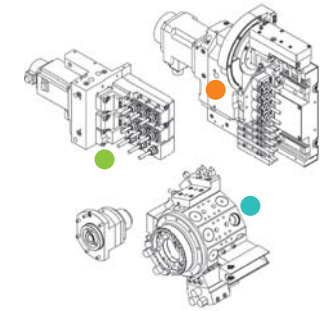
Type	Axial	Axial Offset	Axial Speeder	Radial 4+4 Outputs	Radial Set-Back	Radial Set-Back tool length adjust.	Radial Set-Back Cartridge Adjust.
Code Citizen Ref.	CZ.000.M16 MSC507	CZ.001.M16 -	CZ.002.M16 -	CZ.008.M16-8 MSE707	CZ.011.M16 -	CZ.011.M16-TA -	CZ.011.M16-CA -
ER-11	ER-11	Cyl-Shaft	ER-11	ER-11	ER-11A	ER-11	ER-11
RPM Max	8.000	8.000	24.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:3	1:1	1:1	1:1	1:1



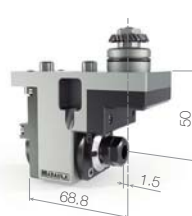
Type	Fixed Angle (Any Angle)	Radial Set-Back Speeder	Radial Adjustable 0-90°	Radial 3 Outputs	Saw-Mill	Thread Whirling ±15°	Thread Whirling ±30°
Code Citizen Ref.	CZ.012.M16 -	CZ.013.M16 -	CZ.021.M16 -	CZ.029.M16-3 MSE607	CZ.030.M16 -	CZ.035.M16-15 -	CZ.035.M16-30 -
ER-11	ER-11	ER-11	ER-11	ER-11	Cyl-Shaft	Cutting Head	Cutting Head
RPM Max	8.000	24.000	8.000	8.000	8.000	8.000	8.000
	1:1	1:3	1:1	1:1	1:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

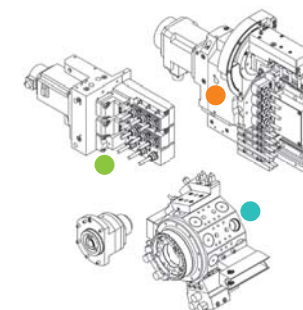
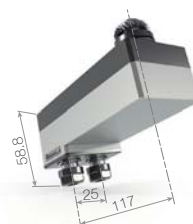
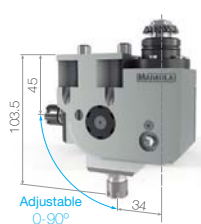


Type	Axial	Axial	Axial Speeder	Radial Double Output	Radial 2+2 Outputs
Code	CZ.000.M12/M16T-ER11	CZ.000.M12/M16T-ER16	CZ.002.M12/M16T	CZ.008.M12/M16T	CZ.008.M12/M16T-4
Citizen Ref.	MSC106/MS107BT	MSC410	-	-	-
	ER-11M	ER-16M	ER-11	ER-11	ER-11M
RPM Max	6.500	6.500	19.500	6.500	6.500
	1:1	1:1	1:3	1:1	1:1



Type	Radial Set-back	Radial Set-back	Radial Set-back Speeder	Radial Set-back IC 15bar	Radial Adjustable 0-30°
Code	CZ.011.M12/M16T	CZ.011.M12/M16T-SUB	CZ.013.M12/M16T	CZ.017.M12/M16T	CZ.021.M12/M16T-ER8
Citizen Ref.	MSE106	-	-	-	-
	ER-11	ER-11	ER-11	ER-11	ER-8M
RPM Max	6.500	6.500	19.500	6.500	6.500
	1:1	1:1	1:3	1:1	1:1

- Symbology
- Internal coolant
 - High frequency
 - Speeder
 - Reducer / Higher torque



Type	Radial Adjustable 0-90°	Radial Adjustable 0-30° Speeder	Radial Adjustable 0-30° Speeder	Axial Double Output	Polygon Maker
Code Citizen Ref.	CZ.021.M12/M16T-ER11 MSA103/MSA203/MSA303	CZ.021.M12/M16T-2S -	CZ.021.M12/M16T-3S -	CZ.023.M12/M16T MSC407	CZ.034.M12/M16T MSP160/MSP260
	ER-11M	ER-8M	ER-8M	ER-11	Cyl-Shaft
RPM Max	6.500	19.500	19.500	6.500	6.500
	1:1	1:3	1:3	1:1	1:1



Type	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing ±10°	Axial "Y" Axis ±3mm	Radial "Y" Axis
Code Citizen Ref.	CZ.035.M12/M16T-15 MSW101	CZ.035.M12/M16T-30 -	CZ.036.M12/M16T MSH132/MSH232	CZ.050.M12/M16T MSC206/MSC303	CZ.051.M12/M16T MSM106
	Cutting Head	Cutting Head	Cyl-Shaft	ER-11M	ER-11
RPM Max	3.250	3.250	2.000	6.500	6.500
	2:1	2:1	3:1	1:1	1:1

Symbology

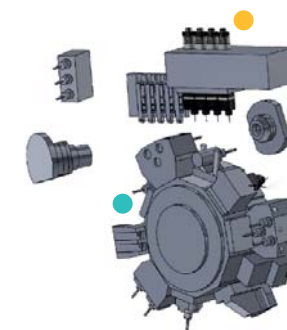
- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



Type	Axial	Axial Offset	Axial Speeder	Axial Reducer	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs
Code Citizen Ref.	CZ.000.M20/M32 GSC507	CZ.001.M20/M32 -	CZ.002.M20/M32 -	CZ.003.M20/M32 -	CZ.008.M20/M32 GSE306	CZ.008.M20/M32-4 -	CZ.008.M20/M32-6 -
	ER-16	ER-16	ER-11M	ER-16A	ER-11M	ER-11M	ER-11M
RPM Max	5.000	5.000	15.000	1.600	5.000	5.000	5.000
	1:1	1:1	1:3	3:1	1:1	1:1	1:1

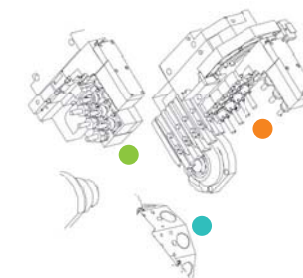
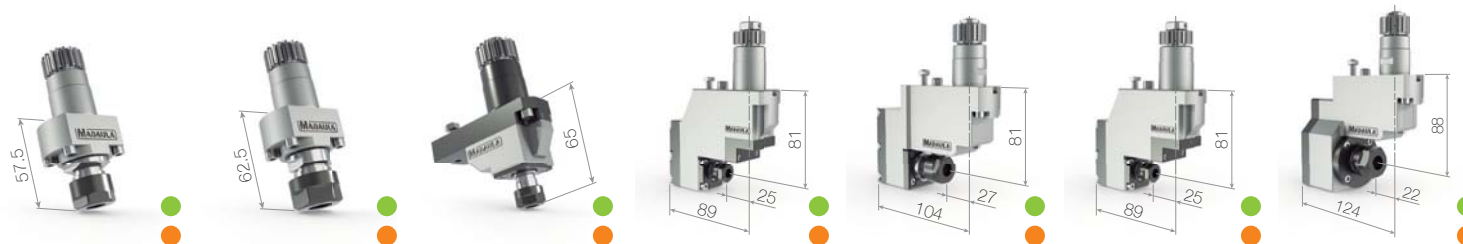


Type	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable 0-90°	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±90°
Code Citizen Ref.	CZ.011.M20/M32 GSE607	CZ.013.M20/M32 GSE508	CZ.021.M20/M32 -	CZ.029.M20/M32-3 -	CZ.035.M20/M32-15 LSW215	CZ.035.M20/M32-30 -	CZ.051.M20/M32-3 -
	ER-11M	ER-11M	ER-11M	ER-11M	Cutting Head	Cutting Head	ER-11M
RPM Max	5.000	15.000	5.000	5.000	5.000	5.000	5.000
	1:1	1:3	1:1	1:1	1:1	1:1	1:1



Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



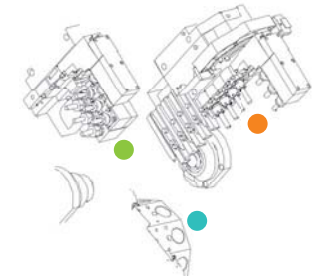
Type	Axial	Axial	Axial Speeder	Radial Set-Back	Radial Set-Back	Radial Set-Back Speeder	Radial Set-Back Reducer
Code	CZ.000.M32-ER16	CZ.000.M32-ER20	CZ.002.M32	CZ.011.M32-ER11	CZ.011.M32-ER16	CZ.013.M32	CZ.014.M32
Citizen Ref.	GSC1110/GSC1310	-	-	-	-	-	-
	ER-16	ER-20	ER-11	ER-11	ER-16	ER-11	ER-20
RPM Max	6.000	6.000	18.000	6.000	6.000	18.000	2.000
	1:1	1:1	1:3	1:1	1:1	1:3	2:1



Type	Radial Adjustable ±90°	Radial 3 Outputs	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing ±32°	Axial Saw-Mill
Code	CZ.021.M32	CZ.029.M32-3	CZ.034.M32	CZ.035.M32-15	CZ.035.M32-30	CZ.036.M32	CZ.038.M32
Citizen Ref.	-	GSE1510	-	-	-	-	-
	ER-11M	ER-16	Cyl-Shaft	Cutting head	Cutting head	Cyl-Shaft	Cyl-Shaft
RPM Max	6.000	6.000	6.000	2.000	2.000	6.000	6.000
	1:1	1:1	1:1	3:1	3:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



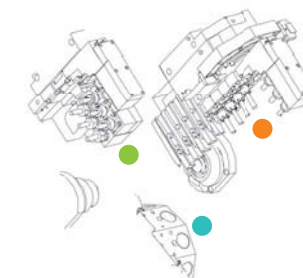
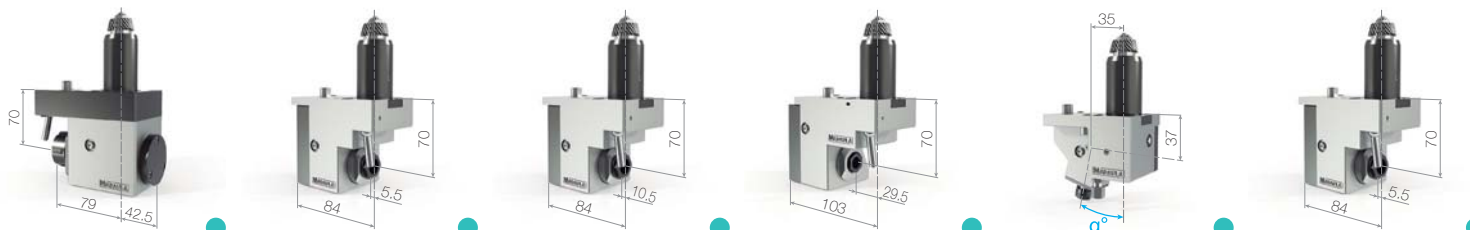
Type	Axial	Axial	Axial	Axial Offset	Axial Offset	Axial Speeder	Axial Speeder
Code Citizen Ref.	CZ.000.M20/M32T-ER16 KSC110 / KSC910	CZ.000.M20/M32T-ER20	CZ.000.M20/M32T-ER25	CZ.001.M20/M32T-O145	CZ.001.M20/M32T-O110	CZ.002.M20/M32T-2	CZ.002.M20/M32T-3
	ER-16	ER-20	ER-25M	ER-16	ER-16	ER-11	ER-11
RPM Max	5.000	5.000	5.000	5.000	5.000	10.000	15.000
	1:1	1:1	1:1	1:1	1:1	1:2	1:3



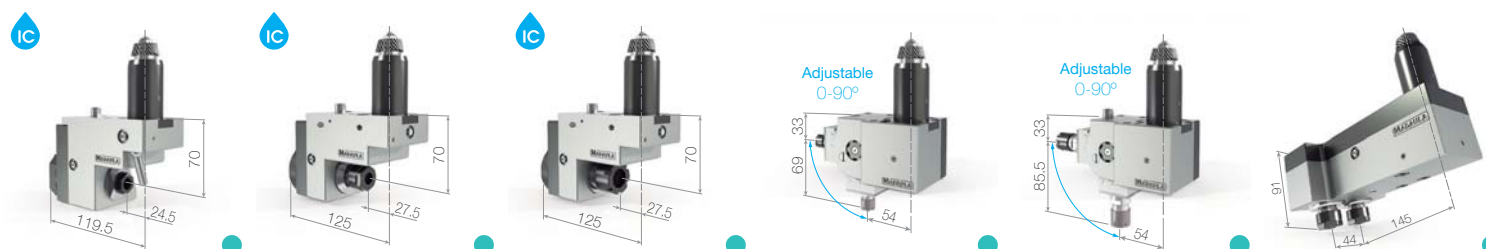
Type	Axial Offset Reducer	Axial IC 15 bar	Axial Offset IC 15 bar	Axial Offset Speeder IC 15bar	Radial Double Output	Radial Double Output	Radial 2+2 Outputs
Code Citizen Ref.	CZ.003.M20/M32T	CZ.005.M20/M32T KSC110BT	CZ.006.M20/M32T	CZ.007.M20/M32T	CZ.008.M20/M32T-ER11	CZ.008.M20/M32T-ER16	CZ.008.M20/M32T-4
	ER-16	ER-20	ER-16	ER-11	ER-11M	ER-16M / ER16A	ER-11M
RPM Max	2.500	5.000	5.000	15.000	5.000	5.000	5.000
	2:1	1:1	1:1	1:3	1:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



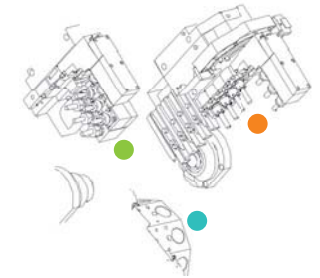
Type	Radial	Radial Set-back	Radial Set-back	Radial Set-back	Fixed Angle (Any Angle)	Radial Set-back Speeder
Code	CZ.010.M20/M32T	CZ.011.M20/M32T-ER20	CZ.011.M20/M32T-ER16/O10	CZ.011.M20/M32T-ER16/O29	CZ.012.M20/M32T	CZ.013.M20/M32T
Citizen Ref.	-	-	-	KSE110	-	-
	ER-25	ER-20A	ER-16A	ER-16A	ER-11	ER-16A
RPM Max	5.000	5.000	5.000	5.000	5.000	15.000
	1:1	1:1	1:1	1:1	1:1	1:3



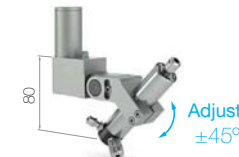
Type	Radial Set-back IC 15 bar	Radial Set-back IC 15 bar	Radial Set-back IC 15 bar	Radial Adjustable 0-90°	Radial Adjustable 0-90°	Axial Double Output
Code	CZ.017.M20/M32T-ER16A	CZ.017.M20/M32T-ER16	CZ.017.M20/M32T-ER25	CZ.021.M20/M32T-ER11	CZ.021.M20/M32T-ER16	CZ.023.M20/M32T
Citizen Ref.	-	-	-	KSA107/107BT/207	-	KSC510
	ER-16A	ER-16	ER-25M	ER-11M	ER-16M	ER-16
RPM Max	5.000	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



Type	Radial 2 Outputs	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±32°	Gear Hobbing ±30° Reducer	Gear Hobbing ±30° Reducer
Code	CZ.029.M20/M32T	CZ.029.M20/M32T-3	CZ.035.M20/M32T-15	CZ.035.M20/M32T-32	CZ.036.M20/M32T-3	CZ.036.M20/M32T-8
Citizen Ref.	-	-	KSW101	-	KSH132	-
	ER-16A	ER-16	Cutting Head	Cutting Head	Cyl-Shaft	Cyl-Shaft
RPM Max	5.000	3.500	5.000	5.000	1.600	626
	1:1	1:1.6	1:1	1:1	3:1	8:1



Type	Axial Saw-Mill	Axial Saw-Mill Offset Reducer	Radial "Y" Axis ±90°	Radial "Y" Axis ±90° Speeder	High Frequency Spindle 90° holder	Adjust. ±45° High Frequency Spindle
Code	CZ.038.M20/M32T	CZ.038.M20/M32T-R	CZ.051.M20/M32T	CZ.051.M20/M32T-S	CZ.010.M20/M32T-HFS	CZ.021.M20/M32T-HFS
Citizen Ref.	-	KSS760/763/860/863	-	-	-	-
	Cyl-Shaft	Cyl-Shaft	ER-16A	ER-16A	ER-8	ER-8
RPM Max	5.000	2.500	5.000	15.000	80.000	80.000
	1:1	2:1	1:1	1:3	*Includes converter + slip ring unit for turret mounting	

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

STAR MODELS:

SB-12/20R, SR-20J/JN, SR-20JII, SR-32J/JN, SR-32JII, SR-20RIV, SW-20, SX-38, ECAS-12/20, SB-16, SR-20RII, SV-12/20/32, SV-32JII

OTHERS MODELS: Ganesh SL-20 Y2, Goodway GTW-1500, SW-20/20II, Nomura DS NN-20UB8
Ø34 Gang Tooling



Type	Axial	Axial	Axial	Axial Long	Axial	Axial Offset	Axial Speeder
Code Star Ref.	ST.000.34-ER8 571-62-00	ST.000.34-ER11 571-63-00	ST.000.34-ER16 331-50-00/7.078.012	ST.000.34-ER16L 571-55-00/7.073.789	ST.000.34-ER20 7.072.950	ST.001.34 -	ST.002.34-2ER8 7.078.122/7.071.600
	ER-8M	ER-11M	ER-16	ER-16	ER-20M	ER-11M	ER-8M
RPM Max	8.000	8.000	8.000	8.000	8.000	8.000	16.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:2



Type	Axial Speeder	Axial Speeder	Axial Reducer	Axial IC 70 bar	Axial IC 70 bar	Radial Double Output Speeder	Radial Double Output
Code Star Ref.	ST.002.34-2ER11 7.074.470	ST.002.34-3 101-76-00	ST.003.34 -	ST.005.34-ER16 -	ST.005.34-ER20 -	ST.008.34-ER11 7.073.830	ST.008.34-ER16 -
	ER-11A	ER-11	ER-16	ER-16	ER-20	ER-11M	ER-16M
RPM Max	16.000	24.000	4.000	8.000	8.000	16.000	8.000
	1:2	1:3	2:1	1:1	1:1	1:2	1:1



Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

STAR MODELS:

SB-12/20R, SR-20J/JN, SR-20JII, SR-32J/JN, SR-32JII, SR-20RIV, SW-20, SX-38, ECAS-12/20, SB-16, SR-20RII, SV-12/20/32, SV-32JII

OTHERS MODELS: Ganesh SL-20 Y2, Goodway GTW-1500, SW-20/20II, Nomura DS NN-20UB8

Ø34 Gang Tooling



Type	Radial 2+2 Outputs	Radial 2+2 Outputs	Radial 3+2 Outputs	Radial 3+3 Outputs	Radial Set-Back	Radial Set-Back	Radial Set-Back
Code Star Ref.	ST.008.34-4ER11 661-59-00	ST.008.34-4ER16 -	ST.008.34-5 7.073.555	ST.008.34-6 671-61-00	ST.011.34-62 571-51-00	ST.011.34-93 581-52-00	ST.011.34-ER20 -
	ER-11M	ER-16	ER-11M / ER16M	ER-11M / ER16M	ER-16	ER-16	ER-20
RPM Max	8.000	8.000	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1



Type	Fixed Angle (Any Angle)	Fixed Angle (Any Angle)	Radial Adjustable $\pm 90^\circ$	Radial Speeder Adjustable $\pm 90^\circ$	Radial 2 Outputs	Radial 2 Outputs Speeder IC 70 bar	Radial 3 Outputs
Code Star Ref.	ST.012.34-ER11 -	ST.012.34-ER16 -	ST.021.34 -	ST.021.34-S -	ST.029.34 541-51-00/7.079.470	ST.029.34-IC 7.078.325	ST.029.34-3 661-51-00
	ER-11	ER-16A	ER-8M	ER-8M	ER-16	ER-16M	ER-16M
RPM Max	8.000	8.000	8.000	24.000	8.000	16.000	8.000
	1:1	1:1	1:1	1:3	1:1	1:2	1:1



Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

STAR MODELS:

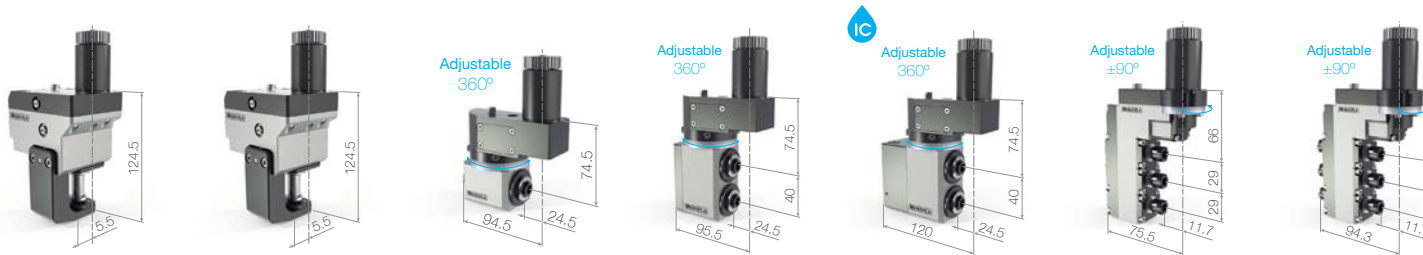
SB-12/20R, SR-20J/JN, SR-20JII, SR-32J/JN, SR-32JII, SR-20RIV, SW-20, SX-38, ECAS-12/20, SB-16, SR-20RII, SV-12/20/32, SV-32JII

OTHERS MODELS: Ganesh SL-20 Y2, Goodway GTW-1500, SW-20/20II, Nomura DS NN-20UB8

Ø34 Gang Tooling



Type	Radial Saw-Mill	Polygon Maker	Polygon Maker Reducer	Thread Whirling ±12.5°	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing ±15°
Code Star Ref.	ST.030.34 -	ST.034.34 OM1-91	ST.034.34-R 541-91-00	ST.035.34-12.5 -	ST.035.34-15 -	ST.035.34-30 -	ST.036.34 7.073.800 / 7.171.760
	Cyl-Shaft	Cyl-Shaft	Cyl-Shaft	Cutting Head	Cutting Head	Cutting Head	Cyl-Shaft
RPM Max	8.000	8.000	4.000	8.000	8.000	8.000	8.000
	1:1	1:1	2:1	1:1	1:1	1:1	1:1



Type	Axial Saw-Mill	Axial Saw-Mill	Radial "Y" Axis 360°	Radial "Y" Axis 360° 2 Outputs	Radial "Y" Axis 360° IC 70 bar	Radial "Y" Axis ±90° 3 Outputs	Radial "Y" Axis ±90° 6 Outputs
Code Star Ref.	ST.038.34-50 7.076.365/7.170.912 541-54-00/7.074.310	ST.038.34-80 7.075.160	ST.051.34 7.073.081	ST.051.34-2 7.073.190	ST.051.34-2IC 7.075.195	ST.051.34-3 -	ST.051.34-6 -
	Cyl-Shaft	Cyl-Shaft	ER-11A	ER-11A	ER-11A	ER-11M	ER-11M
RPM Max	8.000	8.000	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1



Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

STAR MODELS:
 SB-12/20R, SR-10J, SR-20J/JN, SR-32J/JN, SW-12RII,
 ECAS-12/20, SB-16, SR-20RII

OTHERS MODELS: Ganesh SL-20 Y2, Goodway SW-12, SW-20, SW-20III
 Ø22 Back End Tooling



Type	Axial	Axial	Axial	Axial Speeder	Axial "X" Axis 3 Outputs
Code Star Ref.	ST.000.22-ER11 541-61-00	ST.000.22-ER11A 7.075.495	ST.000.22-ER16 571-61-00	ST.002.22 -	ST.004.22 7.075.500
	ER-11M	ER-11A	ER-16	ER-11	ER-11
RPM Max	6.000	6.000	6.000	12.000	6.000
	1:1	1:1	1:1	1:2	1:1



Type	Axial IC 70 bar	Axial IC 70 bar	Radial Set-back	Radial Set-back with tool adjustment	Radial Set-back with tool adjustment
Code Star Ref.	ST.005.22-ER11A -	ST.005.22-ER16 -	ST.011.22-ER11A 7.072.970	ST.011.22-ER11-TA -	ST.011.22-ER16-TA -
	ER-11A	ER-16	ER-11A	ER-11	ER-16A
RPM Max	6.000	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:1

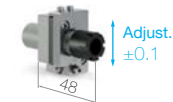
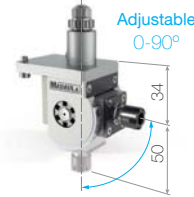
Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

STAR MODELS:
 SB-12/20R, SR-10J, SR-20J/JN, SR-32J/JN, SW-12RII,
 ECAS-12/20, SB-16, SR-20RII

OTHERS MODELS: Ganesh SL-20 Y2, Goodway SW-12, SW-20, SW-20III
 Ø22 Back End Tooling



Type	Fixed Angle (Any Angle)	Fixed Angle Back (Any Angle)	Radial Set-back Reducer	Radial Adjustable 0-90°	Tool Holder with Fine "Y" Axis ±0.1
Code	ST.012.22	ST.012.22-B	ST.014.22	ST.021.22	ST.025.22
Star Ref.	-	-	7.075.655	-	-
ER-11A	ER-11A	ER-11A	ER-11	ER-11	ER16M
RPM Max	6.000	6.000	4.450	6.000	-
	1:1	1:1	1.8:1	1:1	-



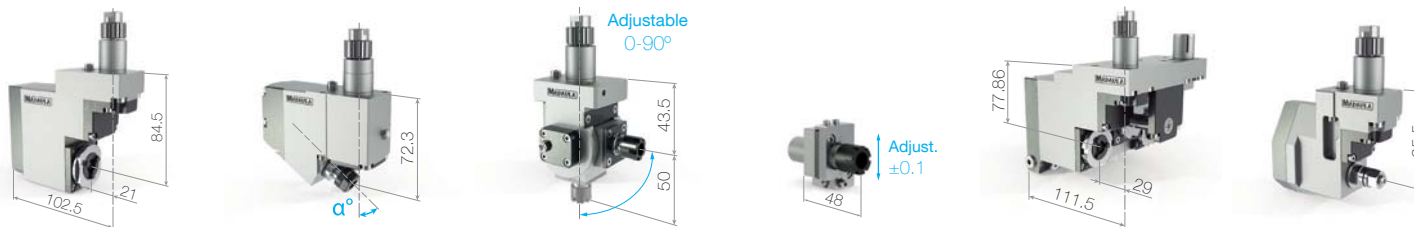
Type	Radial Saw-Mill Reducer	Radial Saw-Mill Reducer	Axial Double Output Speeder IC 70 bar	Gear Hobbing ±90°	Axial Saw-Mill
Code	ST.030.22-10	ST.030.22-13	ST.033.22	ST.036.22	ST.038.22
Star Ref.	7.072.701	7.072.661	-	7.075.395	7.170.942
Cyl-Shaft	Cyl-Shaft	Cyl-Shaft	ER-11A	Cyl-Shaft	Cyl-Shaft
RPM Max	4.450	3.000	12.000	6.000	6.000
	1.8:1	2:1	1:2	1:1	1:1

Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque



Type	Axial	Axial Short	Axial Long	Intermediate Gear	Axial IC 70 bar	Radial Set-back
Code Star Ref.	ST.000.SW20-ER11A 7.078.450	ST.000.SW20-S OR1-61	ST.000.SW20-L 101-81	ST.000.SW20-P 7.076.740	ST.005.SW20 -	ST.011.SW20-ER16 7.076.370/OR1-51/101-79
RPM Max	ER-11A	ER-16M	ER-16M	-	ER-16M	ER-16M
RPM Max	8.000	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1	1:1



Type	Radial Set-back	Fixed Angle (Any Angle)	Radial Adjustable 0-90°	Tool Holder with Fine "Y" Axis ±0.1	Radial 3 Outputs	Radial Saw-Mill
Code Star Ref.	ST.011.SW20-ER16A 7.078.800	ST.012.SW20 -	ST.021.SW20 -	ST.025.SW20 -	ST.029.SW20 7.170.810	ST.030.SW20 7.076.165/7.079.230 7.078.150
RPM Max	ER-16A	ER-11	ER-11M	ER16M	ER-16A / Cyl-Shaft	Cyl-Shaft
RPM Max	8.000	8.000	8.000	-	8.000	4.450
	1:1	1:1	1:1	-	1:1	1.8:1



Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

MODELS
ST-20, SV-20R,
 ECAS-20T, KNC-16/20, SV-12/20, SV-32JII
 Turret Tooling



Type	Axial	Axial	Axial	Axial	Axial IC 70 bar	Axial Offset IC 80 bar	Radial Double Output
Code Star Ref.	ST.000.20-ER11 7.074.038	ST.000.20-ER16 7.073.792/221-50-00	ST.000.20-ER20 -	ST.000.20-ER25 -	ST.005.20 7.073.895	ST.006.20 -	ST.008.20-80 221-56-00
Tool Holder	ER-11M	ER-16	ER-20	ER-25	ER-16	ER-16	ER-11M
RPM Max	6.000	6.000	6.000	6.000	6.000	6.000	6.000
Gear Ratio	1:1	1:1	1:1	1:1	1:1	1:1	1:1



Type	Radial Double Output	Radial Double Output Speeder	Radial 2+2 Outputs	Radial Set-back	Radial Set-back Speeder	Radial Set-back IC 70 bar	Radial Set-back Speeder IC 100 bar
Code Star Ref.	ST.008.20-90 -	ST.008.20-S 7.073.840	ST.008.20-4 421-29-00	ST.011.20 -	ST.013.20 7.073.945	ST.017.20-70 7.073.660	ST.017.20-100 7.075.535
Tool Holder	ER-11M	ER-11M	ER-11M	ER-11M	ER-11M	ER-16A	ER-16A
RPM Max	6.000	18.000	6.000	6.000	18.000	6.000	18.000
Gear Ratio	1:1	1:3	1:1	1:1	1:3	1:1	1:3



Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

MODELS
ST-20, SV-20R,
 ECAS-20T, KNC-16/20, SV-12/20, SV-32JII
 Turret Tooling



Type	Radial Adjustable 0-90°	Radial Adjust. +95°/-110°	Radial Back Adjustable 0-90°	Axial 2 Outputs Speeder	Axial 2 Outputs	Radial 2 Outputs	Radial 2 Outputs IC 70 bar
Code Star Ref.	ST.021.20-ER16A -	ST.021.20-ER16 7.073.560	ST.021.20-ER11 -	ST.023.20-ER11 421-52-00	ST.023.20-ER16 421-51-00	ST.029.20 7.075.070	ST.029.20-IC 7.073.905
	ER-16A	ER-16M	ER-11M	ER-11	ER-16	ER-16M	ER-16M
RPM Max	6.000	6.000	6.000	9.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1.67	1:1	1:1	1:1



Type	Polygon Maker	Polygon Maker Reducer	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±90°	Radial "Y" Axis ±90° Speeder	Radial "Y" Axis ±90° 2 Outputs IC 70 bar
Code Star Ref.	ST.034.20 7.074.060	ST.034.20-R 421-81-00	ST.035.20-15 -	ST.035.20-30 -	ST.051.20 7.074.815	ST.051.20-S -	ST.051.20-2 7.073.915
	Cyl-Shaft	Cyl-Shaft	Cutting Head	Cutting Head	ER-16M	ER-16	ER-16M
RPM Max	6.000	4.000	4.000	3.750	6.000	12.000	6.000
	1:1	1.5:1	1.5:1	1.6:1	1:1	1:2	1:1



Symbology

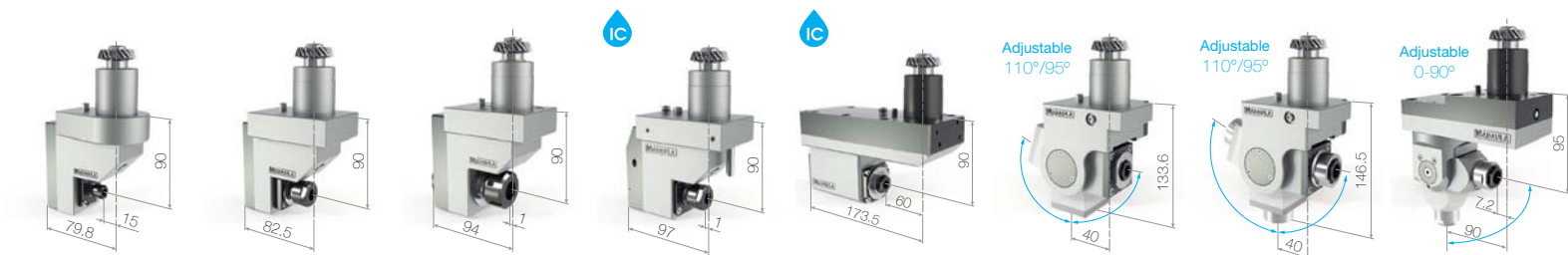
- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

STAR

MODELS
ST-38, SV-38R,
ECAS-32T, KNC-32, SV-32
 Turret Tooling



Type	Axial	Axial	Axial	Axial IC 70 bar	Radial Double Output	Radial Double Output Speeder	Radial Double Output	Radial 2+2 Outputs
Code	ST.000.32-ER16	ST.000.32-ER20	ST.000.32-ER25	ST.005.32	ST.008.32-ER11	ST.008.32-ER11S	ST.008.32-ER16	ST.008.32-4
Star Ref.	201-50/7.073.793	581-51-00	431-61-00	581-51-01	201-56-00	7.075.105	7.073.530	431-59-00
	ER-16	ER-20	ER-25	ER-20	ER-11	ER-11M	ER-16M	ER-11M
RPM Max	6.000	6.000	6.000	6.000	6.000	18.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:1	1:3	1:1	1:1



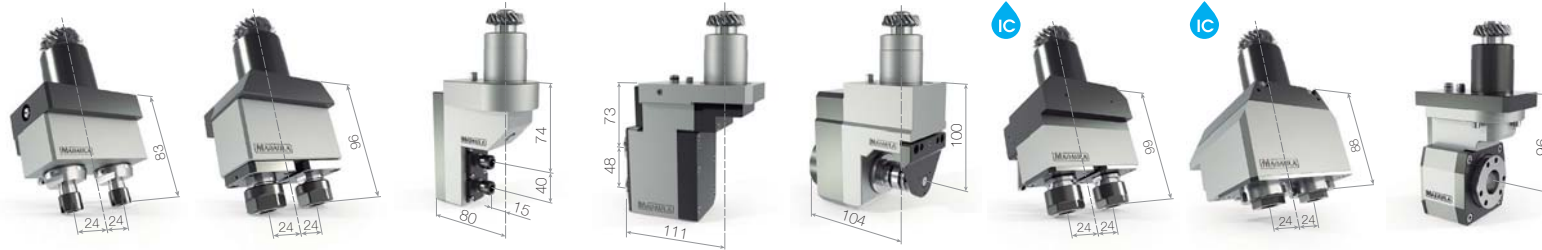
Type	Radial Set-back	Radial Set-back	Radial Set-back	Radial Set-back IC 70 bar	Radial Set-back IC 100 bar	Radial Adjust. +95°/-110°	Radial Adjust. +95°/-110°	Radial Adjust. 0-90° Offset
Code	ST.011.32-ER11	ST.011.32-ER16	ST.011.32-ER25	ST.017.32-70	ST.017.32-100	ST.021.32-ER16	ST.021.32-ER20	ST.021.32-O
Star Ref.	201-52-00	-	-	-	7.075.536	-	-	-
	ER-11M	ER-16	ER-25	ER-16	ER-16A	ER-16A	ER-20A	ER-20A
RPM Max	6.000	6.000	6.000	6.000	18.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:3	1:1	1:1	1:1



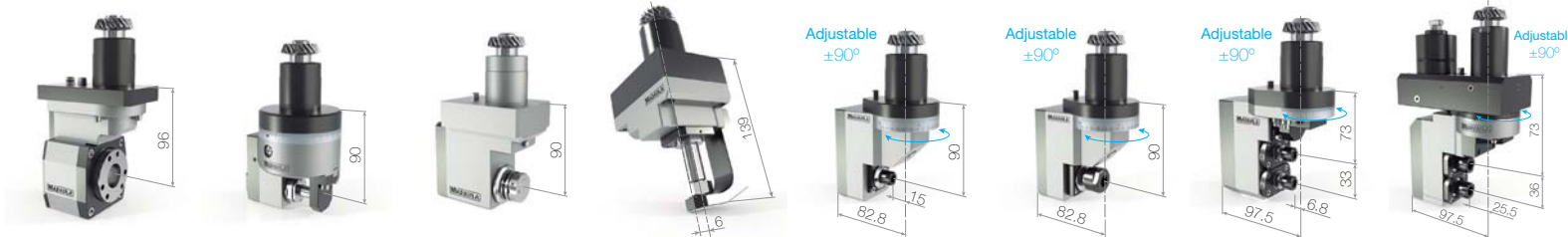
- Symbology
- Internal coolant
 - High frequency
 - Speeder
 - Reducer / Higher torque

STAR

MODELS
ST-38, SV-38R,
 ECAS-32T, KNC-32, SV-32
 Turret Tooling



Type	Axial 2 Outputs	Axial 2 Outputs	Radial 2 Outputs	Radial 2 Outputs Back	Radial Saw-Mill	Axial 2 Outputs IC 70 bar	Axial 2 Outputs IC 70 bar	Thread Whirling ±15°
Code Star Ref.	ST.023.32-ER11 431-52-00	ST.023.32-ER16 431-51/7.073.794	ST.029.32 -	ST.029.32-B 7.075.580/7.075.585	ST.030.32 -	ST.033.32-ER16 -	ST.033.32-ER20 -	ST.035.32-15 -
	ER-11M	ER-16	ER-11M	ER-20A	Cyl-Shaft	ER-16	ER-20A	Cutting Head
RPM Max	18.000	6.000	6.000	6.000	4.000	6.000	6.000	6.000
	1:3	1:1	1:1	1:1	1.5:1	1:1	1:1	1:1



Type	Thread Whirling ±20°	Gear Hobbing ±180°	Radial Saw-Mill Reducer	Axial Saw-Mill	Radial "Y" Axis ±90°	Radial "Y" Axis ±90°	Radial "Y" Axis ±90°	Tilting "B" Axis 2 Outputs ±90°
Code Star Ref.	ST.035.32-20 431-56-00	ST.036.32 7.073.740	ST.037.32 -	ST.038.32 431-54-00	ST.051.32-ER11 -	ST.051.32-ER16 -	ST.051.32-2 581-55/431-63 7.074.890/7.075.020	ST.051.38 Only for SV-38R Type B
	Cutting Head	Cyl-Shaft	Cyl-Shaft	Cyl-Shaft	ER-11M	ER-16	ER-11M	ER-16M
RPM Max	3.000	6.000	4.000	2.000	6.000	6.000	6.000	6.000
	2:1	1:1	1.5:1	3:1	1:1	1:1	1:1	1:1






Symbology

- Internal coolant
- High frequency
- Speeder
- Reducer / Higher torque

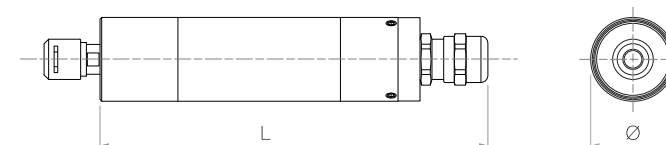
High Frequency Spindles



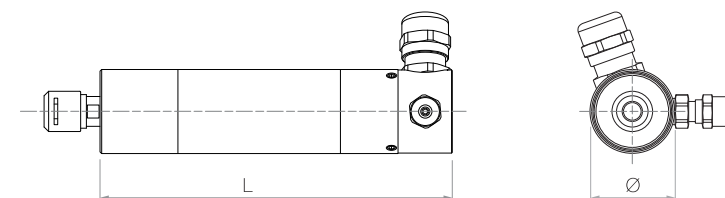
Technical Data

Product	DS-19.05 DS-20 / DS-22		DS-25 / DS-25.4 DS-28 / DS-30 / DS-33		DS-42 DS-45	
Ø mm	19 / 20 / 22		25 / 25.4 / 28 / 30 / 33		42 / 45	
	D6-UP		ER-8UP		ER-11UP	
W S1-100%	165		225		320	
Ncm max	1.5		2.5		4.8	
	Grease	Oil Mist	Grease	Oil Mist	Grease	Oil Mist
RPM - u/min	60.000	80.000	60.000	80.000	35.000	50.000
	Axial	Radial	Axial	Radial	Axial	Radial
L mm	107	90	114.5	104	180	175

Axial dimensions



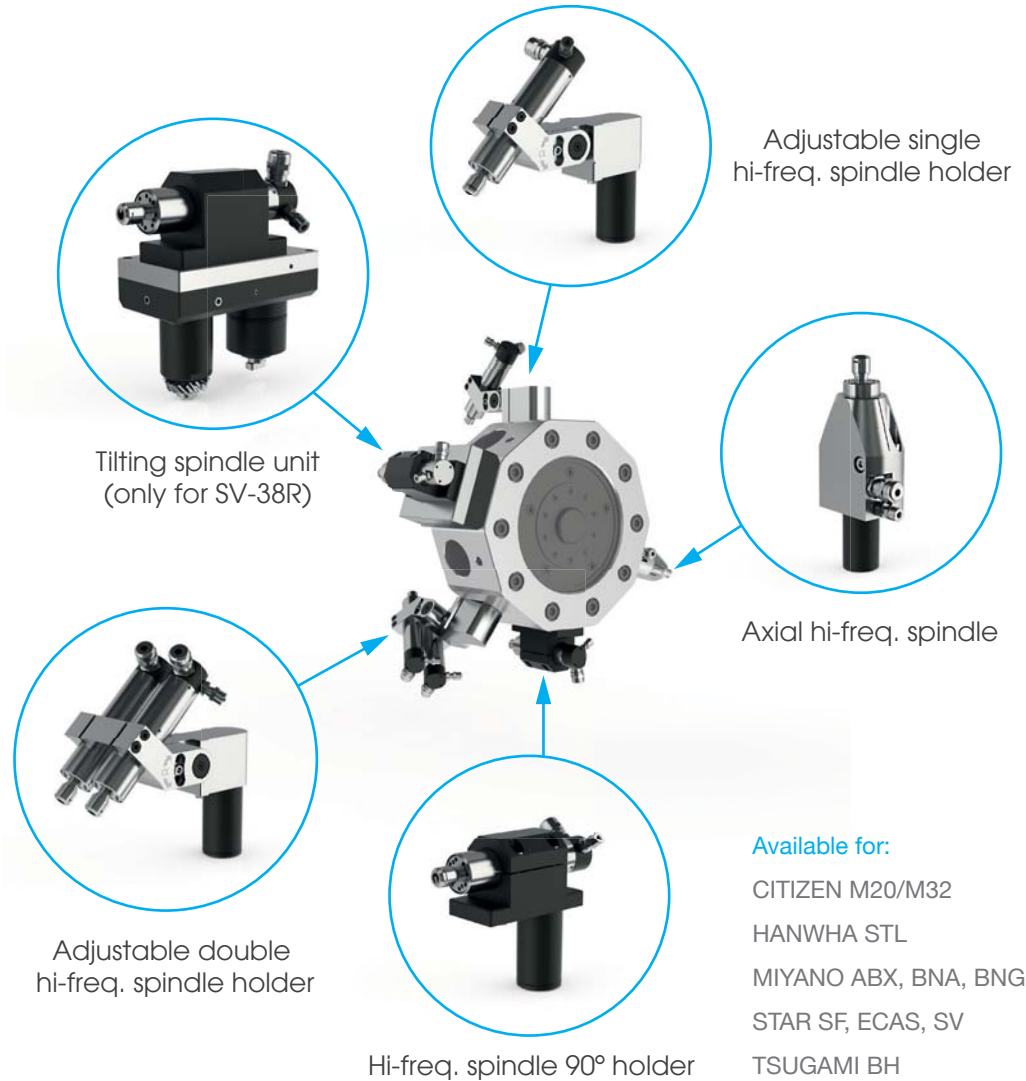
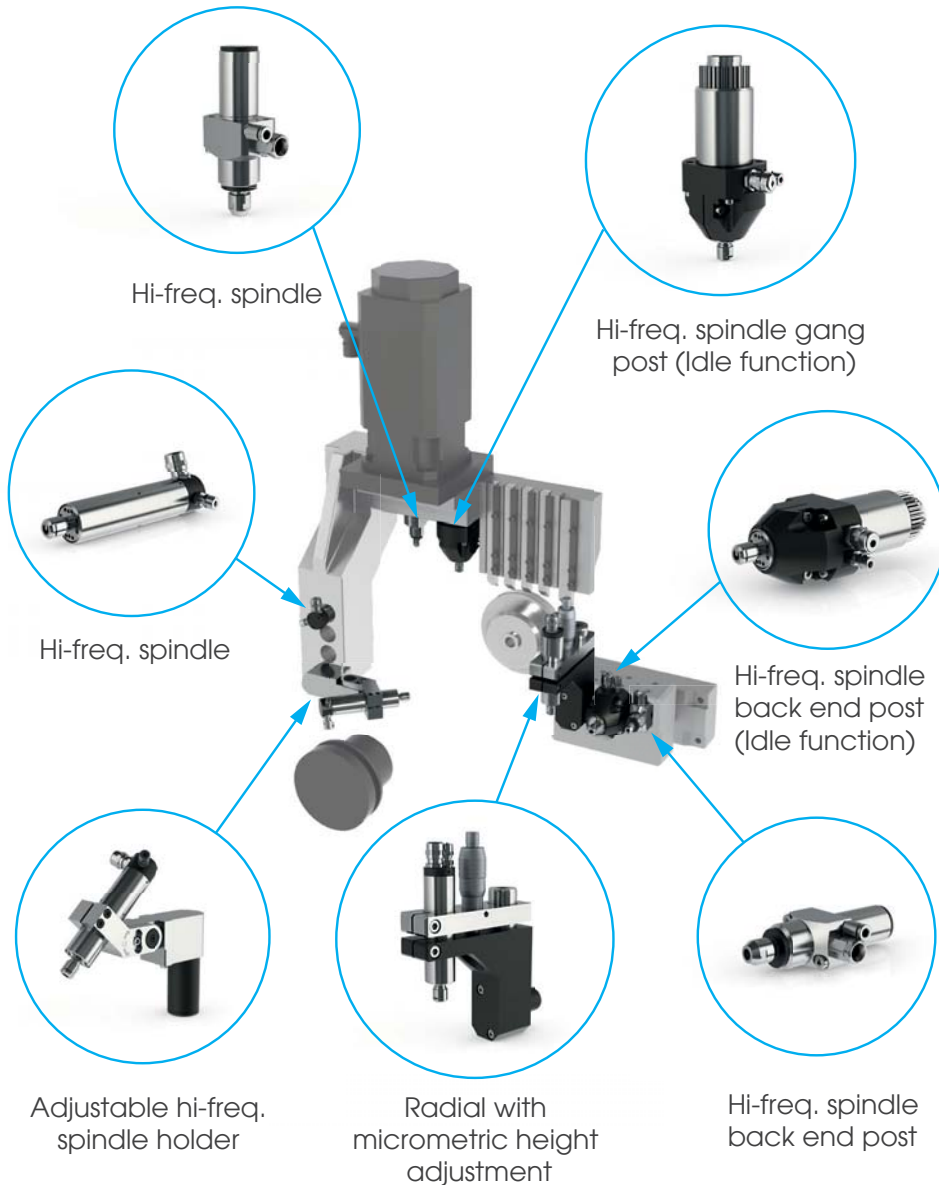
Radial dimensions



High Frequency Spindles & Accessories

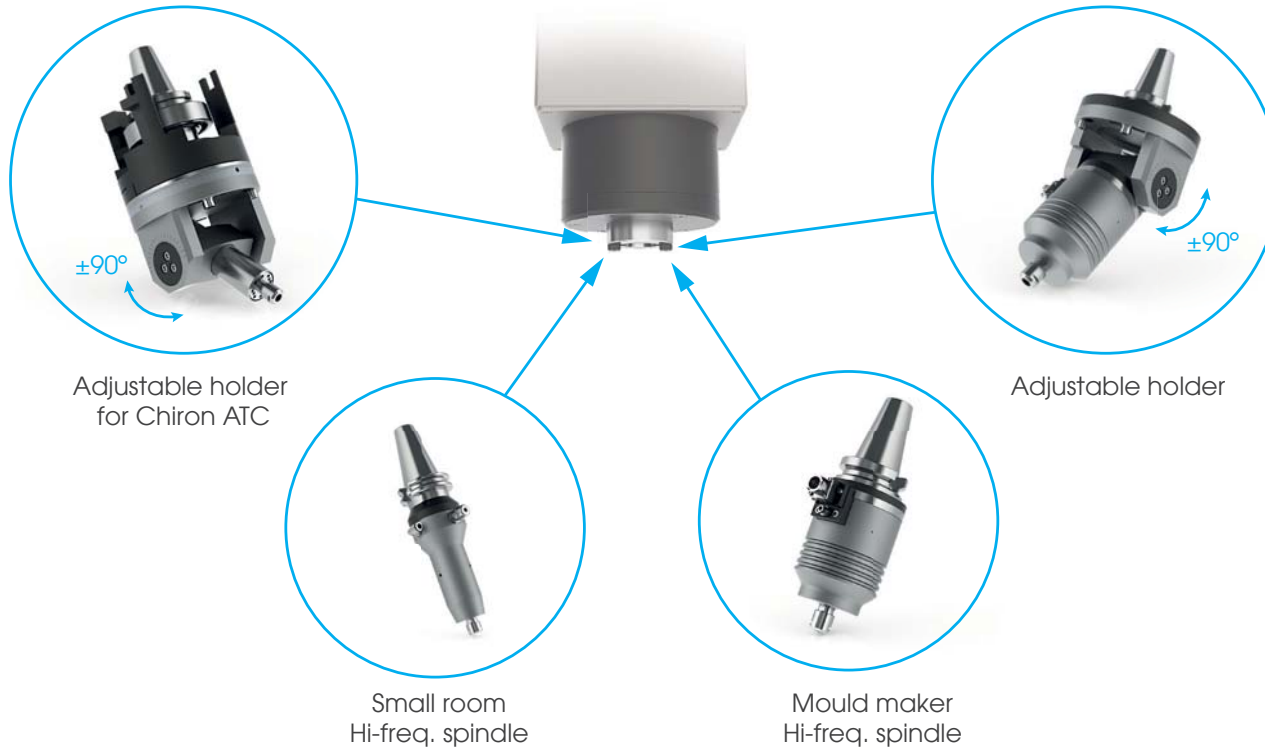
for Gang & Back End Posts

for Turrets

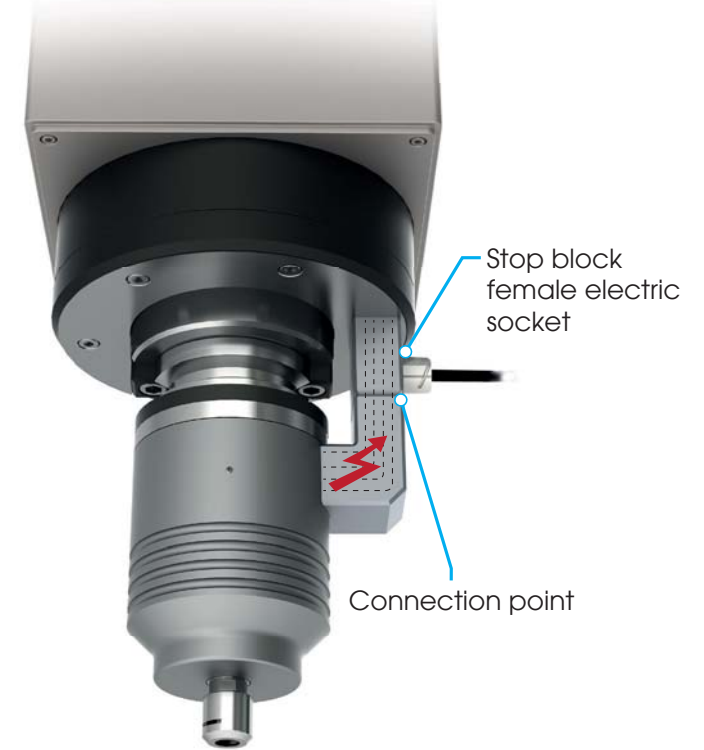


Available for:
CITIZEN M20/M32
HANWHA STL
MIYANO ABX, BNA, BNG
STAR SF, ECAS, SV
TSUGAMI BH

High Frequency Spindles for Machining centers



Automatic change



Equipment



Frequency converter



Power cord



Lubrication unit



UP Collets



Wrenches



Repair Service

Specialized repair team with extensive experience, at your disposal to overhaul all kind of high frequency spindles.

A votre service, une équipe spécialisée, expérimentée dans la remise en état de tous types de broches à hautes fréquences.

Reparto specializzato di assistenza tecnica con grande esperienza, alla vostra disposizione per dare servizio a tutti i tipi di mandrini ad alta frequenza.

Quality procedures

Progressive increasing to full speed

temperature, speed, noise, leakage and vibration control.

Accélération progressive jusqu'à la vitesse maximale, contrôle de température, vitesse, bruit, fuites et vibrations.

Progressivo aumento a tutta velocità:
Controllo di temperatura, velocità, rumorosità, perdite e vibrazioni.

100% Tested: main dimensional control

with Coordinate Measuring Machine for all products.

Contrôle des principales dimensions avec machine à mesurer CNC.
Controllo dimensione su tutti i prodotti con macchina per misure a coordinate.

Quality certificate

on delivery.

Livraison du certificat de qualité.
Certificato di qualità sulla consegna.



Certificate ISO 9001: 2015 since 1999
Certificat ISO 9001: 2015 depuis le 1999
Certificato ISO 9001: 2015 da 1999

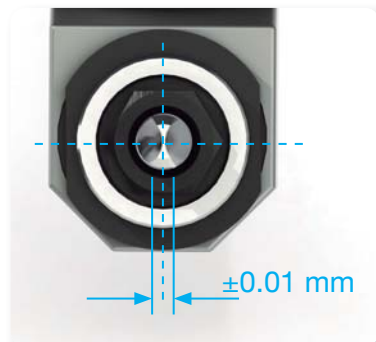


100% Tested

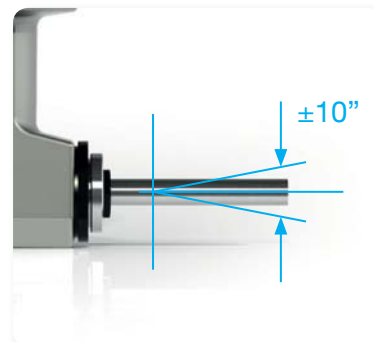


Precision

Maximum misalignment



Angle tolerance



Max. runout inside the spindle



Global services



Specialized technical assistance team with extensive experience at your disposal.

Une équipe spécialisée en assistance technique et avec une vaste expérience est mis à votre disposition.

Servizio de assistenza tecnica con team specializzato con una vasta esperienza a vostra disposizione.



Repair service

We are proud of offering to our customers a repair service for all their products, no matter how old they are.

All products of our fabrication range can be repaired, even if they have not been originally manufactured by Madaula.

Nous assurons pour nos clients un service réparation pour tous nos produits de notre marque ou de nos concurrents et de toutes générations.

Tous les produits de notre gamme de production peuvent être réparés, même s'ils n'ont pas de notre fabrication.

Siamo orgogliosi di offrire ai nostri clienti un servizio di riparazione per tutti i prodotti, anche per i più datati.

Tutti i prodotti della nostra gamma possono essere riparati, anche se non di nostra produzione.



EXPRESS service

Express repair service on demand.
Repair of worn or damaged parts.
Reduction of downtimes.

Réparation express sur demande.
Réparation des éléments abimés ou cassés en minimisant les temps d'arrêt.

servizio di riparazione espresso su richiesta.
Riparazione di parti usurate o danneggiate.
Riduzione dei tempi di fermo macchina.

Preventive maintenance

Process efficiency optimization through our preventive maintenance plan.

Nous optimisons l'efficacité du processus grâce à notre plan de maintenance préventive.

Ottimizzazione dell'efficienza dei processi mediante il nostro piano di manutenzione preventiva.



Everything is possible

Customized products for Innovative solutions: We match the tool to the part and the machine.

Our team of engineers and technicians are working to create new products, which enhance the machine capability and increase the productivity of our customers.

65 years of experience

in the development of special products.

65 ans d'expérience dans le développement de produits spéciaux.
65 anni di esperienza nello sviluppo di prodotti speciali.

Successful technical experience

and market knowledge.

Réussi savoir-faire technique et connaissance du marché.
Esperienza tecnica e successo di mercato.

Engineers and technicians

working together.

Ingénieurs et techniciens qui travaillent ensemble.
Ingenieri e tecnici che lavorano assieme.

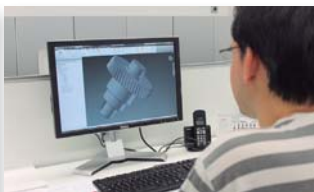
Ingenuity and open mind

to find the best solutions.

Ingéniosité et l'esprit ouvert pour trouver les meilleures solutions.
L'ingegno e la mente aperta per trovare le migliori soluzioni.



Continuous innovation: We ensure close cooperation with our customers worldwide.



Innovation non-stop:

Nous assurons une étroite coopération avec nos clients dans le monde entier.

Innovazione continua:

Garantiamo una stretta collaborazione con i nostri clienti in tutto il mondo.

Live tooling available for:

Citizen, DMG, Doosan, Hanwha, Maier, Manurhin, Miyano, Nexturn, Nomura, Star, Tornos, Tsugami



Axial



Axial offset



Axial speeder



Axial reducer



Axial IC



Axial offset IC



Radial double
output



Radial 90°



Fixed angle



Radial 90°
speeder



Radial 90°
reducer



Radial
set back IC



Radial
adjustable



Axial multiple
spindles



Axial offset
reducer



Radial multiple
outputs



Saw-mill



Axial multiple
spindles IC



Polygon
maker



Thread whirling



Gear hobbing



Axial saw-mill



Radial
"Y" axis