



CAT Steep Taper Toolholders

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ANSI B5.50

ER SYSTEM

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- 5.02 Information
- 5.05 CAT/ER and CAT/ERA Zero-Z®

powRgrip SYSTEM

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Features Benefits

Swiss Quality

Made in Switzerland to ISO 9001/ISO 14001.

1 Marking

Type and part number (reduces selection errors).

2 Traceability

Lot numbers are marked on all products for traceability throughout the entire manufacturing process.

3 Original REGO-FIX®

Our extensive experience results in a well-engineered system. Original only with the REGO-FIX® quality symbol \triangle . Guarantees the best quality.

T.I.R. < 0.0001" (3 μm)

I.D. to O.D.

Taper Accuracy AT3

Better spindle-to-holder fit and accuracy.

Surface Finish max. Ra 0.25

Higher clamping force and higher transferable torque.

Q+® Balancing

100% balanced to G 2.5 @ 22'000 min-1.

Hi-Q[®] Balancing System

Ready to accept Hi-Q® balancing rings which will allow for the offset of the imbalance introduced by the cutting tool up to 80'000 min⁻¹.

Hi-Q[®] Clamping Nut Included

Guarantees highest clamping force and best balancing by design.

Vibration Dampening

For best machining results.





CAT/ER Toolholder

Applications

These toolholders are designed for use on CNC machining centers with an automatic tool changer. They are universally suitable for drilling, machining, reaming, tapping and grinding. The vibration dampening of these systems reduce spindle wear and extend tool life.

Balancing

REGO-FIX® Q+® System CAT/ER toolholders are balanced by design to G 2.5 @ 22'000 min-1. Type H toolholders are ready to accept Hi-Q® balancing rings which allow precision balancing of the system up to 80'000 min⁻¹ depending on the balancing rings used.

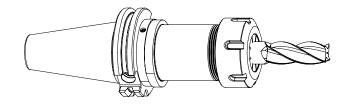
Special Applications

When additional clamping force is needed, e.g. when tapping with ER-GB or milling we recommend the use our friction bearing clamping nuts, Hi-Q®/ERB and Hi-Q®/ERBC.

Matched Tooling System for Best Fit

For highest precision and best results the whole system counts. For that reason REGO-FIX® components are carefully matched for optimum fit and accuracy. This guarantees the best run-out and balance.

For the influence of run-out on tool life see the graph page 2.03



CAT/Zero-Z Toolholder

Applications

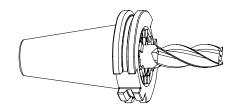
These toolholders are specially designed for mill-turning machines, multitasking machines and small vertical machining centers. They have the well known REGO-FIX® surface finish, precision and due to their short projection and superior rigidity, Zero-Z® toolholders have the shortest possible projection to increase the Z-axis travel of the machine and to allow larger work-pieces to be machined.

Balancing

REGO-FIX® Q+® System CAT/Zero-Z toolholders are balanced by design to G 2.5 @ 22'000 min-1.

Special Features

The use of the Hi-Q/ERAX clamping nut offers the highest transferable torque. This clamping nut has been specially designed for applications where space is at a premium. Slippage of the wrench is prevented by a patented locking design.





We recommend tightening the clamping nuts with a torque wrench. The maximum torque should not be more than 25% above the recommended tightening torque.





Features Benefits

PGU or PGC required for toolholder assembly. See page 13.07 for machine details.



Made in Switzerland to ISO 9001/ISO 14001.

Marking

Type and part number (reduces selection errors).

Traceability

Lot numbers are marked on all products for traceability throughout the entire manufacturing process.

Original REGO-FIX®

Original only with the REGO-FIX® quality symbol \triangle . Guarantees the best quality.

T.I.R. of the Whole System < 0.0001" (3 μ m) Highest clamping force and lowest runout.

Taper Accuracy AT3

Better spindle-to-holder fit and accuracy.

Surface Finish max. Ra 0.25

Higher clamping force and higher transferable torque.

Q+® Balancing

100% balanced to G 2.5 @ 22'000 min-1. Ideal for High Speed Cutting (HSC) and High Performance Cutting (HPC).

Hi-Q[®] Balancing System

Ready to accept Hi-Q® balancing rings which will allow for the offset of the imbalance introduced by the cutting tool up to 80'000 min-1.

Minimal Outside Dimensions

Slim design provides more processing flexibility.

Fast

Tool clamping with hydraulic press in less than 10 seconds.

Excellent at Small Diameters

Clamping of small diameter tools from Ø 0.2 mm and higher.

Presetable Tooling System

Repeatability < 0.0004" (10 µm)



REGO-FIX®

Information

CAT/PG Toolholder

Applications

These toolholders are designed for use on CNC machining centers with automatic tool changers. They are especially suited for High Speed Cutting (HSC) and High Performance Cutting (HPC) operations where processing reaches the machine limits. The vibration dampening of these systems reduce spindle wear and extend tool life.



REGO-FIX® Q+® System CAT/PG toolholders are balanced by design to G 2.5 @ 22'000 min⁻¹. Type H toolholders are ready to accept Hi-Q® balancing rings which allow precision balancing of the system up to 80'000 min⁻¹ depending on the balancing rings used.

Coolant Through

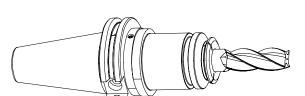
For use with coolant through tools.

Peripheral Cooling

PG-CF collets for peripheral cooling with non-coolant through tools.

Matched Tooling System for Best Fit

For highest precision and best results the whole system counts. For that reason REGO-FIX® components are carefully matched to fit together. This guarantees the lowest run-out and balancing.

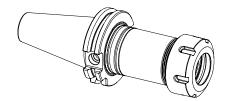


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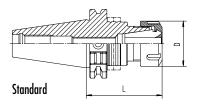


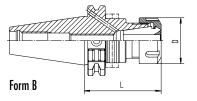
ER Toolholders

Туре	Standard Part No.	Form B Part No.	D [mm]	L [inch]	Balancing Rings	Wrench
CAT 30 / ER 16 x 3"*	2330.11631	N/A	28	3	N/A	7112.16010
CAT 30 / ER 16 x 4"*	2330.11651	N/A	28	4	N/A	7112.16010
CAT 30 / ER 25 x 060 mm*	2330.12520	N/A	42	60mm	N/A	7111.25000
CAT 30 / ER 32 x 060 mm*	2330.13220	N/A	50	60mm	N/A	7111.32000
CAT 30 / ER 32 x 3"*	2330.13231	N/A	50	3	N/A	7111.32000
CAT 30 / ER 20 x 3" H	4330.12031	N/A	34	3	FWR 285	7112.20010
CAT 40 / ER 11 x 3" H	4340.11131	4340.11134	19	3	FWR 325	7112.11010
CAT 40 / ER 11 x 6" H	4340.11171	4340.11174	19	6	FWR 325	7112.11010
CAT 40 / ER 16 x 3" H	4340.11631	4340.11634	28	3	FWR 325	7112.16010
CAT 40 / ER 16 x 4" H	4340.11651	4340.11654	28	4	FWR 285	7112.16010
CAT 40 / ER 16 x 6" H	4340.11671	4340.11674	28	6	FWR 325/225	7112.16010
CAT 40 / ER 20 x 3" H	4340.12031	4340.12034	34	3	FWR 285	7112.20010
CAT 40 / ER 20 x 4" H	4340.12051	4340.12054	34	4	FWR 325	7112.20010
CAT 40 / ER 20 x 6" H	4340.12071	4340.12074	34	6	FWR 405/285	7112.20010
CAT 40 / ER 25 x 4" H	4340.12551	4340.12554	42	4	FWR 325	7111.25000
CAT 40 / ER 25 x 6" H	4340.12571	4340.12574	42	6	FWR 405/325	7111.25000
CAT 40 / ER 32 x 3" H	4340.13231	4340.13234	50	3	FWR 405	7111.32000
CAT 40 / ER 32 x 5" H	4340.13261	4340.13264	50	5	FWR 405	7111.32000
CAT 40 / ER 40 x 3.5" H	4340.14041	4340.14044	63	3.5	FWR 505	7111.40000
CAT 40 / ER 40 x 6" H	4340.14071	4340.14074	63	6	FWR 505/505	7111.40000
Zero-Z CAT 40 / ER 32 x 019 mm *	2340.13200	N/A	35	19mm	N/A	7117.32000



^{*}Not for use with balancing rings.



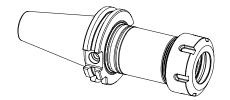




Related Items	
Collets (Std & UP)	See Section 2.00
Collets (Tapping)	See Section 3.00
Nuts	See Section 4.00
Torque Wrench	See Section 13.00

For drawings with detailed dimensions see:

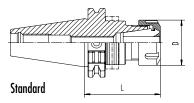


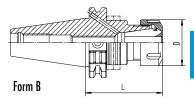




ER Toolholders

Туре	Standard Part No.	Form B Part No.	D [mm]	L [inch]	Balancing Rings	Wrench
CAT 45 / ER 16 x 3"*	2345.11631	N/A	28	3	N/A	7112.16010
CAT 45 / ER 16M x 3"*	2345.11635	N/A	22	3	N/A	7113.16000
CAT 45 / ER 16 x 4"*	2345.11651	N/A	28	4	N/A	7112.16010
CAT 45 / ER 16 x 6"*	2345.11671	N/A	28	6	N/A	7112.16010
CAT 45 / ER 20M x 3"*	2345.12035	N/A	28	3	N/A	7113.20000
CAT 45 / ER 20M x 4"*	2345.12055	N/A	28	4	N/A	7113.20000
CAT 45 / ER 20M x 6"*	2345.12075	N/A	28	6	N/A	7113.20000
CAT 45 / ER 25M x 3"*	2345.12535	N/A	35	3	N/A	7113.25000
CAT 45 / ER 25M x 4"*	2345.12555	N/A	35	4	N/A	7113.25000
CAT 45 / ER 25M x 6"*	2345.12575	N/A	35	6	N/A	7113.25000
CAT 45 / ER 32 x 3"*	2345.13231	N/A	50	3	N/A	7111.32000
CAT 45 / ER 32 x 4"*	2345.13251	N/A	50	4	N/A	7111.32000
CAT 45 / ER 32 x 6"*	2345.13271	N/A	50	6	N/A	7111.32000
CAT 50 / ER 16 x 4" H	4350.11651	4350.11654	28	4	FWR 505	7112.16010
CAT 50 / ER 16 x 6" H	4350.11671	4350.11674	28	6	FWR 505/225	7112.16010
CAT 50 / ER 20 x 4" H	4350.12051	4350.12054	34	4	FWR 505	7112.20010
CAT 50 / ER 20 x 6" H	4350.12071	4350.12074	34	6	FWR 505/285	7112.20010
CAT 50 / ER 25 x 4" H	4350.12551	4350.12554	42	4	FWR 505	7111.25000
CAT 50 / ER 25 x 6" H	4350.12571	4350.12574	42	6	FWR 505/325	7111.25000
CAT 50 / ER 32 x 4" H	4350.13251	4350.13254	50	4	FWR 505	7111.32000
CAT 50 / ER 32 x 6" H	4350.13271	4350.13274	50	6	FWR 505/405	7111.32000
CAT 50 / ER 40 x 4" H	4350.14051	4350.14054	63	4	FWR 505	7111.40000
CAT 50 / ER 40 x 6" H	4350.14071	4350.14074	63	6	FWR 505/505	7111.40000
Zero-Z CAT 50 / ERA 40 x 019 mm *	2350.14007	N/A	44	19mm	N/A	7117.40000





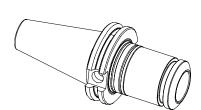


Related Items	
Collets (Std & UP)	See Section 2.00
Collets (Tapping)	See Section 3.00
Nuts	See Section 4.00
Torque Wrench	See Section 13.00

Supplied with: clamping nut and back-up screw

*Not for use with balancing rings.

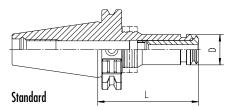
For drawings with detailed dimensions see:

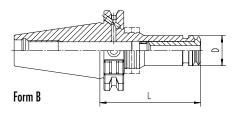




powRgrip® Toolholders

Туре	Standard Part No.	Form B Part No.	D [mm]	L [inch]	Balancing Rings
CAT 40 / PG 10 x 3.5" H	4340.71001	4340.71004	16	3.5	FWR 285
CAT 40 / PG 10 x 6" H	4340.71071	4340.71074	16	6	FWR 285
CAT 40 / PG 15 x 3.15" H	4340.71541	4340.71544	24	3	FWR 285
CAT 40 / PG 15 x 4" H	4340.71551	4340.71554	24	4	FWR 285
CAT 40 / PG 15 x 6" H	4340.71571	4340.71574	24	6	FWR 325/285
CAT 40 / PG 25 x 3.15" H	4340.72541	4340.72544	40	3	FWR 405
CAT 40 / PG 25 x 4" H	4340.72551	4340.72554	40	4	FWR 405
CAT 40 / PG 25 x 6" H	4340.72571	4340.72574	40	6	FWR 405/405
CAT 40 / PG 32 x 4.3" H	4340.73251	4340.73254	50	4.3	FWR 505
CAT 40 / PG 32 x 6" H	4340.73271	4340.73274	50	6	FWR 505/505

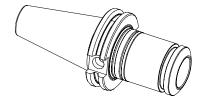




Related Items	
Collets (Std & CF)	See Section 2.00
Collets (Tapping)	See Section 3.00
Extensions (PG)	See Section 10.00
Accessories	See Section 13.00

For drawinas with detailed dimensions see:

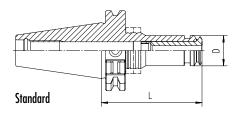


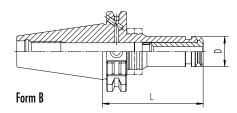




powRgrip® Toolholders

Туре	Standard Part No.	Form B Part No.	D [mm]	L [inch]	Balancing Rings
CAT 50 / PG 25 x 4" H	4350.72551	4350.72554	40	4.0	FWR 505
CAT 50 / PG 25 x 6" H	4350.72571	4350.72574	40	6.0	FWR 505/405
CAT 50 / PG 32 x 4.3" H	4350.73251	4350.73254	50	4.3	FWR 505
CAT 50 / PG 32 x 6" H	4350.73271	4350.73274	50	6	FWR 505/505





Related Items	
Collets (Std & CF)	See Section 2.00
Collets (Tapping)	See Section 3.00
Extensions (PG)	See Section 10.00
Accessories	See Section 13.00