

Test-action
TER shrink collet



The bilz logo consists of the word "bilz" in a white, lowercase, sans-serif font, centered within a solid blue square.

ThermoGrip[®] Collets

COLLETS TO DIN 6499

A PERFECT FIT

With the development of the patented TER shrink collet, we have been able to revolutionize the use of collets and collet chucks in the production process.

USING TER MEANS PROFITING FROM THE ADVANTAGES OF COLLET SHRINKING

- Run-out < 3 μm at 3 x D (diameter)
- Maximum holding forces
- Rigidity
- Low-wear monoblock properties without the need to replace existing collet chucks or spindles.

The short and extremely stable tool clamping with TER achieves a run-out of < 3μm. Tool life is considerably improved due to the precise guidance of the tool and ultra-precise change accuracy. Your length adjustment is maintained even after many cycles—with optimum results.



VIEW THE WEBSITE

Using high efficiency to reduce production costs—
TER to DIN 6499 makes it possible!

INCREASE PRODUCTIVITY IN A SHORT PERIOD OF TIME

High-speed machining

- High transmittable torque
- Stable clamping
- Maximum holding forces
- Ultra-precise, quick tool changes (< 30s)

MACHINE LONGER DUE TO LESS WEAR

Increase of tool life for cutting tools up to 300%

- High stability of the system
- Minimum load from axial forces
- Precise clamping means less damage
- Resistant to debris (sealed monoblock)

HIGH QUALITY MACHINING FOR TOP RESULTS

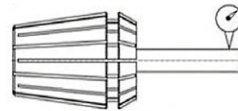
High precision and process-secure

- Excellent run-out properties (< 3 µm)
- High repeatability due to precise clamping

IMPROVE MANUFACTURING WITHOUT CHANGING PRODUCTION PROCESSES

No need to retool . . .

- Existing collet chucks can still be used
- Universal toolholder for all sizes
- Sealing disc is no longer required—
cost and logistics saving



> 10 µm



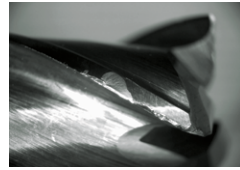
< 3 µm

HIGHEST POSSIBLE RUN-OUT AND REPEATABILITY ACCURACY.

When shrunk in, cutting tool and shrink fit collet form a unit (monoblock) as measured from the face of the collet at 3 x D (diameter of tool shank).

RESULT:

A very high transmittable torque, best possible run-out properties and highest possible stability

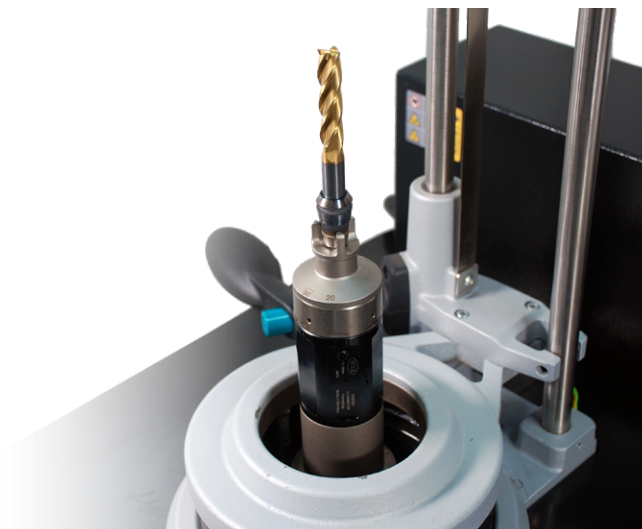


INCREASE OF TOOL LIFE FOR CUTTING TOOLS UP TO 300 %

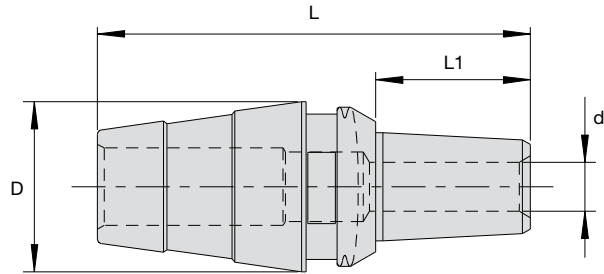
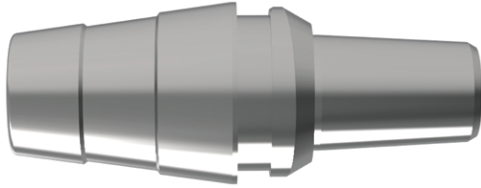
Due to the precise clamping of the tool with the TER shrink collets, all cutters enter the workpiece simultaneously, avoiding “knocking” of the cutting edge.

RESULT:

Better surface finishes & improved accuracy



TERV ThermoGrip® Collets



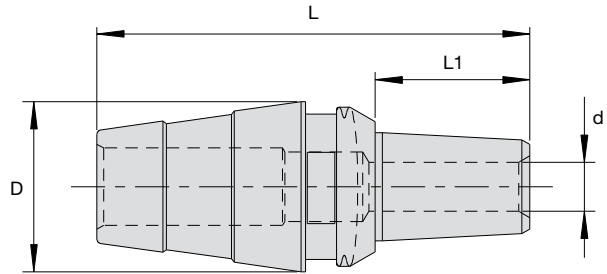
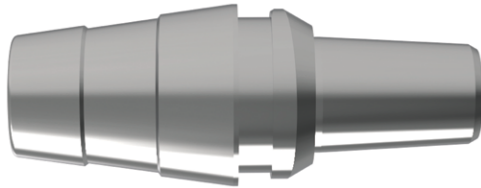
TERV – Inch					
SAP No.	Designation	Dimensions			
		d (inch)	L1 (mm)	L (mm)	D (mm)
ER11					
5168510	TERV0318-10-ER11	1/8"	10	28.0	11
5168511	TERV0318-20-ER11	1/8"	20	38.0	11
5168512	TERV0476-10-ER11	3/16"	10	28.0	11
ER16					
5168513	TERV0318-10-ER16	1/8"	10	37.5	16
5168514	TERV0318-25-ER16	1/8"	25	52.5	16
5168515	TERV0476-10-ER16	3/16"	10	37.5	16
5168516	TERV0476-25-ER16	3/16"	25	52.5	16
5168518	TERV0635-10-ER16	1/4"	10	37.5	16
5168519	TERV0635-20-ER16	1/4"	20	47.5	16
5168520	TERV0635-30-ER16	1/4"	30	57.5	16
ER20					
5168521	TERV0318-10-ER20	1/8"	10	41.5	20
5168522	TERV0318-25-ER20	1/8"	25	56.5	20
5168523	TERV0476-10-ER20	3/16"	10	41.5	20
5168524	TERV0476-25-ER20	3/16"	25	56.5	20
5168525	TERV0635-10-ER20	1/4"	10	41.5	20
5168526	TERV0635-20-ER20	1/4"	20	51.5	20
5168527	TERV0635-30-ER20	1/4"	30	61.5	20
5168530	TERV0794-20-ER20	5/16"	20	51.5	20
5168531	TERV0794-30-ER20	5/16"	30	61.5	20

Shank tolerance: Ø 3, 4 = h4 / Ø 5 = h5 / Ø ≥ 6 = h6

TERV – Inch					
SAP No.	Designation	Dimensions			
		d (inch)	L1 (mm)	L (mm)	D (mm)
ER25					
5168532	TERV0318-10-ER25	1/8"	10	44.0	25
5168533	TERV0318-20-ER25	1/8"	20	54.0	25
5168534	TERV0476-10-ER25	3/16"	10	44.0	25
5168535	TERV0476-25-ER25	3/16"	25	59.0	25
5168536	TERV0635-10-ER25	1/4"	10	44.0	25
5168537	TERV0635-20-ER25	1/4"	20	54.0	25
5168538	TERV0635-30-ER25	1/4"	30	64.0	25
5168539	TERV0794-20-ER25	5/16"	20	54.0	25
5168540	TERV0794-30-ER25	5/16"	30	64.0	25
5168541	TERV0953-10-ER25	3/8"	10	44.0	25
5168542	TERV1270-10-ER25	1/2"	10	44.0	25
ER32					
5168543	TERV0318-20-ER32	1/8"	20	60.0	32
5168544	TERV0476-20-ER32	3/16"	20	60.0	32
5168545	TERV0635-20-ER32	1/4"	20	60.0	32
5168546	TERV0635-30-ER32	1/4"	30	70.0	32
5168547	TERV0794-20-ER32	5/16"	20	60.0	32
5168548	TERV0794-30-ER32	5/16"	30	70.0	32
5168549	TERV0953-20-ER32	3/8"	20	60.0	32
5168550	TERV1270-20-ER32	1/2"	20	60.0	32
5168551	TERV1270-30-ER32	1/2"	30	70.0	32
5168552	TERV1588-20-ER32	5/8"	20	60.0	32

Shank tolerance: Ø 3, 4 = h4 / Ø 5 = h5 / Ø ≥ 6 = h6

TERV ThermoGrip® Collets

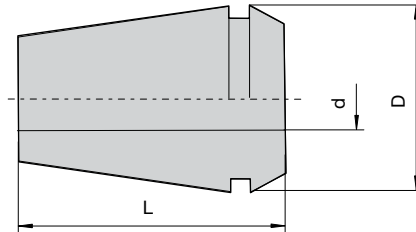


TERV – Metric					
SAP No.	Designation	Dimensions			
		d (mm)	L1 (mm)	L (mm)	D (mm)
ER11					
5170806	TERV0300-10-ER11	3	10	28.0	11
5170807	TERV0300-20-ER11	3	20	38.0	11
5170808	TERV0400-10-ER11	4	10	28.0	11
ER16					
5170809	TERV0300-10-ER16	3	10	37.5	16
5170810	TERV0300-25-ER16	3	25	52.5	16
5170811	TERV0400-10-ER16	4	10	37.5	16
5170812	TERV0400-25-ER16	4	25	52.5	16
5170813	TERV0500-10-ER16	5	10	37.5	16
5170814	TERV0500-25-ER16	5	25	52.5	16
5168473	TERV0600-10-ER16	6	10	37.5	16
5168474	TERV0600-20-ER16	6	20	47.5	16
5168475	TERV0600-30-ER16	6	30	57.5	16
ER20					
5170815	TERV0300-10-ER20	3	10	41.5	20
5170816	TERV0300-25-ER20	3	25	56.5	20
5170817	TERV0400-10-ER20	4	10	41.5	20
5170818	TERV0400-25-ER20	4	25	56.5	20
5170819	TERV0500-10-ER20	5	10	41.5	20
5168481	TERV0600-10-ER20	6	10	41.5	20
5168482	TERV0600-20-ER20	6	20	51.5	20
5168483	TERV0600-30-ER20	6	30	61.5	20
5168484	TERV0800-20-ER20	8	20	51.5	20
5168485	TERV0800-30-ER20	8	30	61.5	20

Shank tolerance: $\varnothing 3, 4 = h4 / \varnothing 5 = h5 / \varnothing \geq 6 = h6$

TERV – Metric					
SAP No.	Designation	Dimensions			
		d (mm)	L1 (mm)	L (mm)	D (mm)
ER25					
5170820	TERV0300-10-ER25	3	10	44.0	25
5170821	TERV0300-20-ER25	3	20	54.0	25
5170822	TERV0400-10-ER25	4	10	44.0	25
5170823	TERV0400-25-ER25	4	25	59.0	25
5170824	TERV0500-10-ER25	5	10	44.0	25
5168491	TERV0600-10-ER25	6	10	44.0	25
5168492	TERV0600-20-ER25	6	20	54.0	25
5168493	TERV0600-30-ER25	6	30	64.0	25
5168494	TERV0800-20-ER25	8	20	54.0	25
5168495	TERV0800-30-ER25	8	30	64.0	25
5168496	TERV1000-20-ER25	10	20	54.0	25
5168497	TERV1200-20-ER25	12	20	54.0	25
ER32					
5170825	TERV0300-20-ER32	3	20	60.0	32
5170826	TERV0400-20-ER32	4	20	60.0	32
5168501	TERV0600-20-ER32	6	20	60.0	32
5168502	TERV0600-30-ER32	6	30	70.0	32
5168503	TERV0800-20-ER32	8	20	60.0	32
5168504	TERV0800-30-ER32	8	30	70.0	32
5168505	TERV1000-20-ER32	10	20	60.0	32
5168506	TERV1200-20-ER32	12	20	60.0	32
5168507	TERV1200-30-ER32	12	30	70.0	32
5168508	TERV1400-20-ER32	14	20	60.0	32
5168509	TERV1600-20-ER32	16	20	60.0	32

Shank tolerance: $\varnothing 3, 4 = h4 / \varnothing 5 = h5 / \varnothing \geq 6 = h6$



TER – Inch				
SAP No.	Designation	Dimensions (inch)		
		d	D	L
TER11				
5116441	TER0318/11	0.125	0.43	0.71
5116443	TER0476/11	0.187	0.43	0.71
5116444	TER0635/11	0.250	0.43	0.71
TER16				
5059311	TER0318/16	0.125	0.67	1.22
5089047	TER0397/16	0.156	0.67	1.22
5068405	TER0476/16	0.187	0.67	1.22
5059313	TER0635/16	0.250	0.67	1.22
5089048	TER0794/16	0.312	0.67	1.22
5098365	TER0953/16	0.375	0.67	1.22
TER20				
5068413	TER0318/20	0.125	0.83	1.22
5089049	TER0397/20	0.156	0.83	1.22
5068414	TER0476/20	0.187	0.83	1.22
5059315	TER0635/20	0.250	0.83	1.22
5089050	TER0794/20	0.312	0.83	1.22
5059316	TER0953/20	0.375	0.83	1.22
5098366	TER1270/20	0.500	0.83	1.22
TER25				
5068416	TER0318/25	0.125	1.02	1.38
5068417	TER0476/25	0.187	1.02	1.38
5068419	TER0635/25	0.250	1.02	1.38
5089052	TER0794/25	0.312	1.02	1.38
5068420	TER0953/25	0.375	1.02	1.38
5089055	TER1111/25	0.437	1.02	1.38
5060472	TER1270/25	0.500	1.02	1.38
5068421	TER1588/25	0.625	1.02	1.38
TER32				
5059317	TER0635/32	0.250	1.30	1.57
5059318	TER0953/32	0.375	1.30	1.57
5059319	TER1270/32	0.500	1.30	1.57
5060473	TER1588/32	0.625	1.30	1.57
5068422	TER1905/32	0.750	1.30	1.57

Shank tolerance: Ø 3, 4 = h4 / Ø 5 = h5 / Ø ≥ 6 = h6

TER – Metric				
SAP No.	Designation	Dimensions (inch)		
		d	D	L
TER11				
5076671	TER0300/11	3	11	18
5076673	TER0400/11	4	11	18
5076674	TER0600/11	6	11	18
TER16				
5004694	TER0300/16	3	17	31
5004696	TER0400/16	4	17	31
5004697	TER0600/16	6	17	31
5004698	TER0800/16	8	17	31
TER20				
5107187	TER0300/20	3	21	31
5113697	TER0400/20	4	21	31
5089051	TER0500/20	5	21	31
5004699	TER0600/20	6	21	31
5004700	TER0800/20	8	21	31
5004701	TER1000/20	10	21	31
TER25				
5004702	TER0300/25	3	26	35
5004703	TER0400/25	4	26	35
5004705	TER0600/25	6	26	35
5004706	TER0800/25	8	26	35
5004707	TER1000/25	10	26	35
5004708	TER1200/25	12	26	35
5004709	TER1400/25	14	26	35
5004710	TER1600/25	16	26	35
TER32				
5004711	TER0600/32	6	33	40
5004712	TER0800/32	8	33	40
5004713	TER1000/32	10	33	40
5994714	TER1200/32	12	33	40
5004715	TER1400/32	14	33	40
5004716	TER1500/32	15	33	40
5004717	TER1600/32	16	33	40
5004718	TER1800/32	18	33	40
5004719	TER2000/32	20	33	40

Shank tolerance: Ø 3, 4 = h4 / Ø 5 = h5 / Ø ≥ 6 = h6

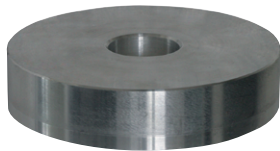
TER Accessories ThermoGrip® Collets



Basic Adaptor TER with Length Adjustment



T3-WWK/TER



T3-W/TER

Variable, mechanical length adjustment, precise, adjustable to the required tool length. For all clamping sizes with suitable shrink adaptor. For water cooled shrink units ISG... TWK and ISG... WK only the basic adaptor T...-WWK/TER is needed. An additional reduction in combination with the basic holder T...-WWK/TER is required for the table shrink machines ISG1000 and ISG... TLK.

SAP No.				Designation
ISG1000	ISG...TLK	ISG...TWK	ISG...WK	
		5020330		T3-WWK/TER
5020330	5020330			T3-WWK/TER
+	+	-	-	+
5020992	5020992			T3-W/TER

Adaptors for Shrink Fit Collets TER



For safe holding of the TER shrink fit collet. Suitable for basic adaptor T...-WWK/TER

SAP No.	Designation
5111889	TER 11-2
5111890	TER16-2
5111891	TER20-2
5111892	TER25-2
5111893	TER32-2

Pole Disc for Shrink Fit Collets TER



For optimal shielding of the magnetic field between coil and tool shank.

Clamping- Ø	TER size	For ISG2400 Series		For ISG3400 Series	
		SAP No.	Designation	SAP No.	Designation
3-6	ER11	5065479	ISGS2201 TER11/1	5095918	ISGS3201-TER11-1
3-4	ER16	5065474	ISGS2201 TER16/1	5087772	ISGS3201 TER16/1
6-8	ER16	5065477	ISGS2201 TER16/2	5087773	ISGS3201 TER16/2
3-10	ER20	5065473	ISGS2201 TER20/1	5087774	ISGS3201 TER20/1
3-4	ER25	5065468	ISGS2201 TER25/1	5087777	ISGS3201 TER25/1
6-8	ER25	5065470	ISGS2201 TER25/2	5087778	ISGS3201 TER25/2
10-16	ER25	5065472	ISGS2201 TER25/3	5087779	ISGS3201 TER25/3
6-14	ER32	5065466	ISGS2201 TER32/1	5087780	ISGS3201 TER32/1
16-20	ER32	5065467	ISGS2201 TER32/2	5087781	ISGS3201 TER32/2

Also available from Bilz:

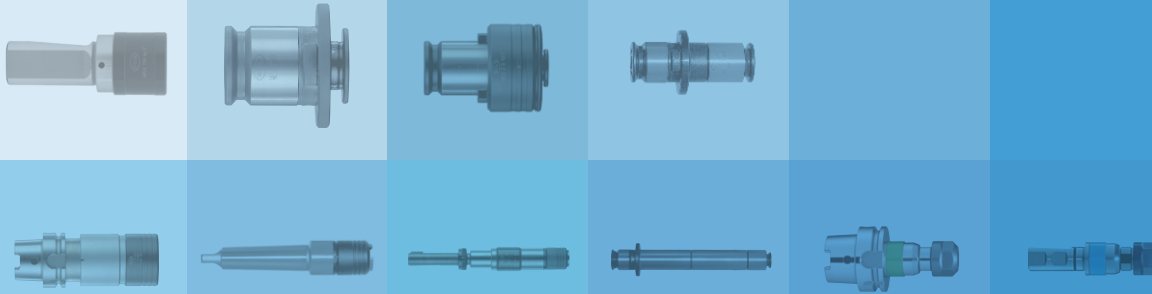
TAPPING PRODUCTS

Quick Change Chucks

Adapters

Synchro Chucks

Tapping Attachments



SHRINK PRODUCTS

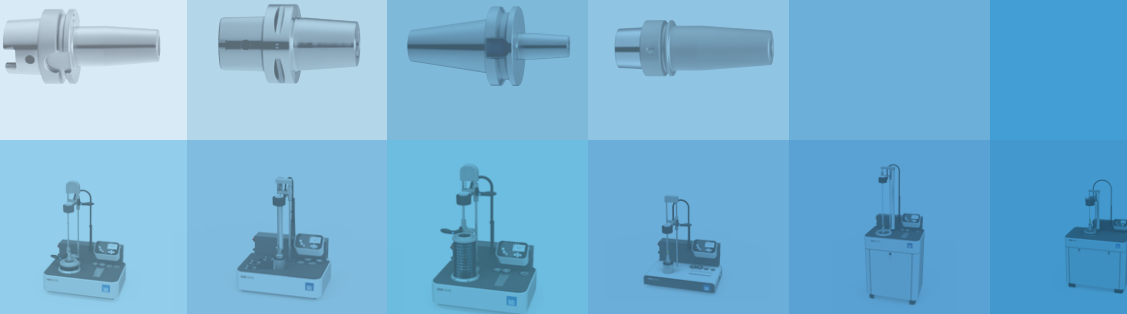
Standard Chucks

Slim Chucks

Heavy Duty Chucks

Machines

Automation



bilz

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