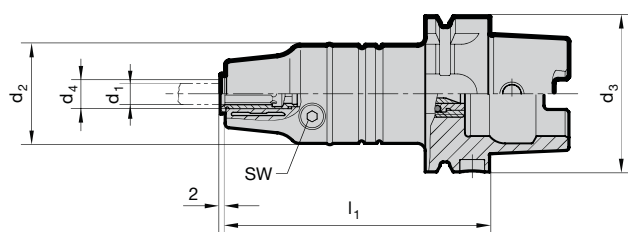


- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation $\pm 0,3$ mm in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Gühring MQL identifiable by green colored ring

- incl. hexagon clamping key Series no. 4912
- incl. MQL coolant supply set
for manual tool change (filler) Series no. 4513
- incl. adjustment key for MQL adjustment
screws

- order MQL adjustment screw Series no. 4305
separately
- order reduction bushes Series no. 4605 or 4606
separately



GÜHROSync

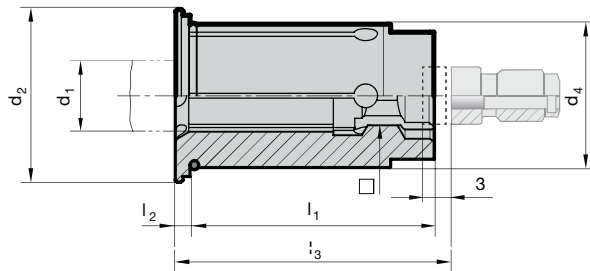
GM 300 **GUHRING** 141

Product information

- for clamping taps with square shank in GÜHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw "face" Series no. 4364 separately
- order MQL setting screws Series no. 4305 separately



Tapping chucks

Series no. 4605

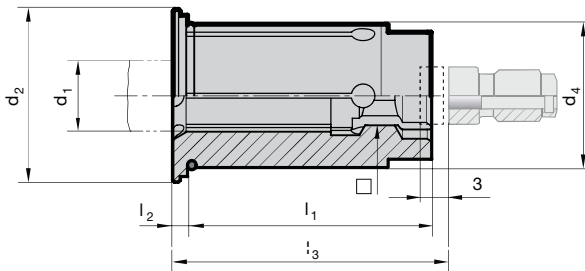
d ₃ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	for adjustment screw	for thread	Code no.	EDP Number
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2/M2.2/M2.5 / M4	2.812	9046050028120
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3.512	9046050035120
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3 / M3.5	4.012	9046050040120
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M6	4.512	9046050045120
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	26.00	4364 5.020	10-24 & 10-32	4.912	9046050049120
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M4.5 / M5	5.012	9046050050120
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M5	5.512	9046050055120
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	26.00	4364 5.020	12-24 & 12-28	15.512	9046050155120
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M6	16.012	9046050160120
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	4364 6.020	M4.5/M5/M6/M7/M8	6.012	9046050060120
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M7 / M8	6.212	9046050062120
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	4364 6.020	1/4-20 & 1/4-28	6.412	9046050064120
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	4364 7.020	M7 / M9 / M10	7.012	9046050070120
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	4364 8.020	1/16-27 / 1/8-27	7.912	9046050079120
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	4364 8.020	M8 / M11	8.012	9046050080120
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M11	18.012	9046050180120
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	4364 8.020	5/16-18 & 5/16-24	28.012	9046050280120
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	4364 8.020	7/16-14 & 7/16-20	8.212	9046050082120
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M12	8.512	9046050085120
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	4364 9.020	M9 / M12	9.012	9046050090120
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	4364 9.020	1/2-13 & 1/2-20	9.312	9046050093120
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	4364 9.020	3/8-16 & 3/8-24	9.612	9046050096120
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	4364 10.020	M10	10.012	9046050100120

Product information

- for clamping taps with square shank in GÜHROSynchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw "face" Series no. 4364 separately
- order MQL setting screws Series no. 4305 separately

Series no. **4605**

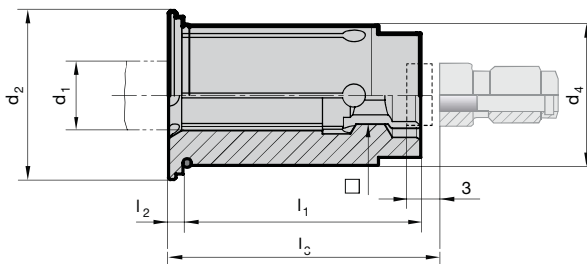
d ₃ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	for adjustment screw	for thread	Code no.	EDP Number
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M6	26.020	9046050260200
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	4364 6.032	M4.5/M5/M6/M7/M8	6.020	9046050060200
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M7 / M8	6.220	9046050062200
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	4364 6.032	1/4-20 & 1/4-28	6.420	9046050064200
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	4364 7.032	M7 / M9 / M10	7.020	9046050070200
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	4364 8.032	1/16-27 / 1/8-27	7.920	9046050079200
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	4364 8.032	M8 / M11	8.020	9046050080200
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M11	18.020	9046050180200
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	4364 8.032	5/16-18 & 5/16-24	28.020	9046050280200
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	4364 8.032	7/16-14 & 7/16-20	8.220	9046050082200
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M12	8.520	9046050085200
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	4364 9.032	M9 / M12	9.020	9046050090200
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	4364 9.032	1/2-13 & 1/2-20	9.320	9046050093200
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	4364 9.032	3/8-16 & 3/8-24	9.620	9046050096200
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	4364 10.032	M10	10.020	9046050100200
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	4364 10.032	M14	10.520	9046050105200
20.00	10.897	8.179	ANSI	0.429	0.322	24.10	34.00	2.00	35.00	4364 10.032	9/16-12 & 9/16-18	10.820	9046050108200
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M14	11.020	9046050110200
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M16	12.020	9046050120200
20.00	12.192	9.144	ANSI	0.480	0.360	24.10	34.00	2.00	36.00	4364 11.032	5/8-11 & 5/8-18	12.120	9046050121200
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M16	12.520	9046050125200
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M17	13.020	9046050130200
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	4364 14.032	M18	14.020	9046050140200
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	4364 14.032	1/4-18	14.220	9046050142200
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	4364 14.032	3/4-10 & 3/4-16	14.920	9046050149200
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	4364 16.032	M20	15.020	9046050150200
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	4364 16.032	M20	16.020	9046050160200

Product information

- for clamping taps with square shank in GÜHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Gührosynch synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order MQL setting screws Series no. 4305 separately
- order setting screw "face" Series no. 4364 separately



GÜHROJET

Tapping chucks

Series no. 4606

d ₃ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	for adjustment screw	for thread	Code no.	EDP Number
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2/M2.2/M2.5/M4	2.812	9046060028120
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3.512	9046060035120
12.00	3.581	2.794	ANSI	0.141	0.110	16.50	29.00	2.00	-	-	2-56, 4-40, & 6-32	3.612	9046060036120
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3 / M3.5	4.012	9046060040120
12.00	4.267	3.327	ANSI	0.168	0.131	16.50	29.00	2.00	-	-	8-32 & 8-36	4.312	9046060043120
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M6	4.512	9046060045120
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	26.00	4364 5.020	10-24 & 10-32	4.912	9046060049120
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M4.5 / M5	5.012	9046060050120
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M5	5.512	9046060055120
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	26.00	4364 5.020	12-24 & 12-28	15.512	9046060155120
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M6	16.012	9046060160120
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	4364 6.020	M4.5/M5/M6/M7/M8	6.012	9046060060120
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M7 / M8	6.212	9046060062120
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	4364 6.020	1/4-20 & 1/4-28	6.412	9046060064120
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	4364 7.020	M7 / M9 / M10	7.012	9046060070120
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	4364 8.020	1/16-27 / 1/8-27	7.912	9046060079120
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	4364 8.020	M8 / M11	8.012	9046060080120
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M11	18.012	9046060180120
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	4364 8.020	5/16-18 & 5/16-24	28.012	9046060280120
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	4364 8.020	7/16-14 & 7/16-20	8.212	9046060082120
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M12	8.512	9046060085120
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	4364 9.020	M9 / M12	9.012	9046060090120
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	4364 9.020	1/2-13 & 1/2-20	9.312	9046060093120
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	4364 9.020	3/8-16 & 3/8-24	9.612	9046060096120
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	4364 10.020	M10	10.012	9046060100120

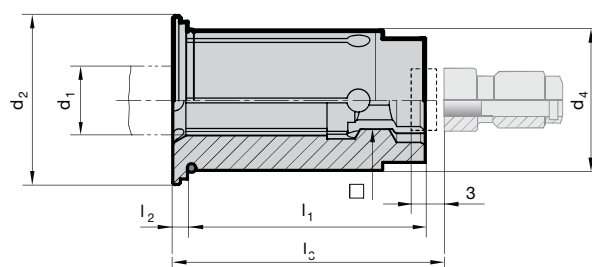
Product information

- for clamping taps with square shank in GÜHROSynC synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Gührosync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order MQL setting screws Series no. 4305 separately
- order setting screw "face" Series no. 4364 separately

Tapping chucks



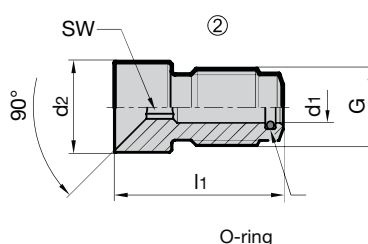
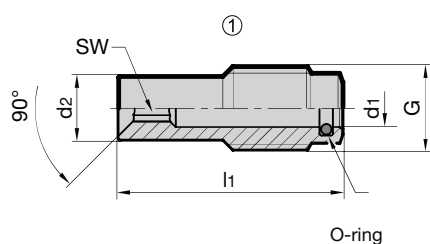
GÜHROJET

Series no. **4606**

d ₃ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	for adjustment screw	for thread	Code no.	EDP Number
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M6	26.020	9046060260200
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	4364 6.032	M4.5/M5/M6/M7/M8	6.020	9046060060200
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M7 / M8	6.220	9046060062200
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	4364 6.032	1/4-20 & 1/4-28	6.420	9046060064200
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	4364 7.032	M7 / M9 / M10	7.020	9046060070200
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	4364 8.032	1/16-27/ 1/8-27	7.920	9046060079200
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	4364 8.032	M8 / M11	8.020	9046060080200
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M11	18.020	9046060180200
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	4364 8.032	5/16-18 & 5/16-24	28.020	9046060280200
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	4364 8.032	7/16-14 & 7/16-20	8.220	9046060082200
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M12	8.520	9046060085200
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	4364 9.032	M9 / M12	9.020	9046060090200
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	4364 9.032	1/2-13 & 1/2-20	9.320	9046060093200
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	4364 9.032	3/8-16 & 3/8-24	9.620	9046060096200
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	4364 10.032	M10	10.020	9046060100200
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	4364 10.032	M14	10.520	9046060105200
20.00	10.897	8.179	ANSI	0.429	0.322	24.10	34.00	2.00	35.00	4364 10.032	9/16-12 & 9/16-18	10.820	9046060108200
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M14	11.020	9046060110200
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M16	12.020	9046060120200
20.00	12.192	9.144	ANSI	0.480	0.360	24.10	34.00	2.00	36.00	4364 11.032	5/8-11 & 5/8-18	12.120	9046060121200
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M16	12.520	9046060125200
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M17	13.020	9046060130200
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	4364 14.032	M18	14.020	9046060140200
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	4364 14.032	1/4-18	14.220	9046060142200
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	4364 14.032	3/4-10 & 3/4-16	14.920	9046060149200
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	4364 16.032	M20	15.020	9046060150200
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	4364 16.032	M20	16.020	9046060160200

- MQL setting screws with internal cone
- for MQL single and double channel systems
- for MQL taps with external cone
- for MQL hydrosynchro tapping chucks
Series no. 4602, 4603 4604 und 4524
- for MQL synchro tapping chucks
Series no. 4298, 4330 und 4341
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment
with hexagon chuck key Series no. 4912, type „B“

- with O-ring for secure seal

146 **GUHRING** GM 300

MQL

BY GÜHRING



1 MQL

BY GÜHRING

Our products for the MQL 1-channel technology are identified by this symbol.

**Visual feature
of the 1-channel system**
is the gold colored MQL
length setting screw.



2 MQL

BY GÜHRING

Our products for the MQL 2-channel technology are identified by this symbol.

**Visual feature
of the 2-channel system**
is the black colored MQL
length setting screw.



MQL shrink fit chucks
HSK-A
auto. tool change

4741 

4614 

man. tool change

4735 

4613 

MQL hydraulic tapping chucks
HSK-A
auto. tool change

4210 

4612 

man. tool change

4209 

4611 

4508

 **MQL**

MQL coolant supply set
for single channel
HSK-A



4511

 **MQL**

MQL coolant supply set
for 2 channel systems
HSK-A



4513

 **MQL**

MQL coolant supply set
HSK-A (filler)



MQL HSK-A hydraulic
synchro tapping chucks for
single channel
auto. tool change

4602 

MQL HSK-A hydraulic
synchro tapping chucks for
2 channel systems
auto. tool change

4603 

MQL HSK-A hydraulic
synchro tapping chucks
man. tool change

4604  



4524

 **MQL** 

MQL Hydro-Ø 12/Ø 20
synchro tapping chucks with internal cooling Ø 20

4305

MQL setting screws with internal cone
for MQL synchro tapping chucks



4605

Reduction bushes, sealed

4606

GÜHROJET reduction bushes



Threading tool with MQL shank:
shank diameter x square



MQL

TECHNOLOGY AND
ADVANTAGES

- ⇒ Cost reduction due to reduced cleaning
- ⇒ Environment & health protection
- ⇒ Less cooling lubrication requirement – high coolant effect
- ⇒ Low process temperatures
- ⇒ Lower working temperature at tool point
- ⇒ Uninterrupted cooling lubricant supply
- ⇒ Direct response without losses
- ⇒ High compatibility

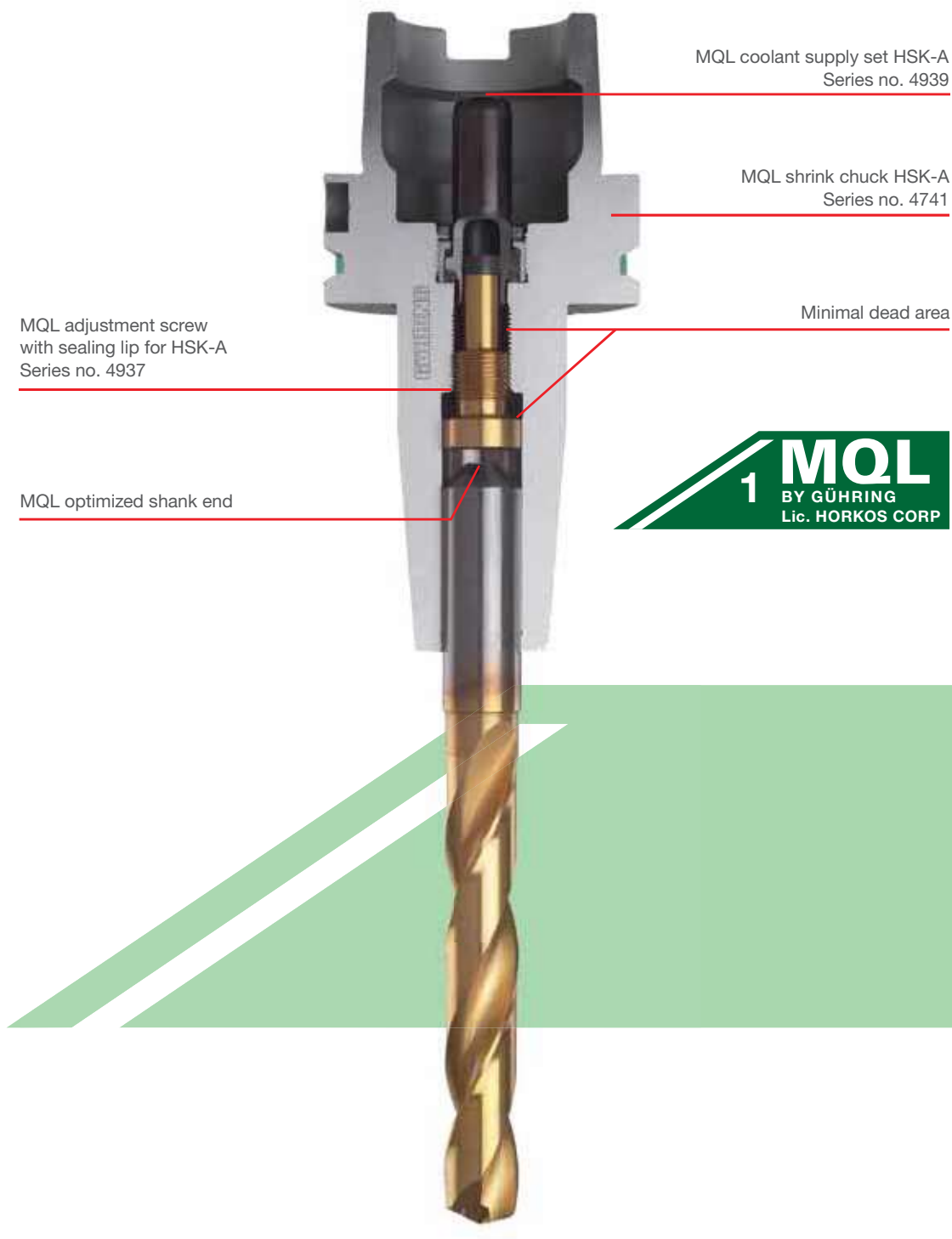
MQL

BY GUHRING



Our products for the MQL 1-channel technology are identified by this symbol.

Visual feature of the 1-channel system is the gold colored MQL length setting screw.

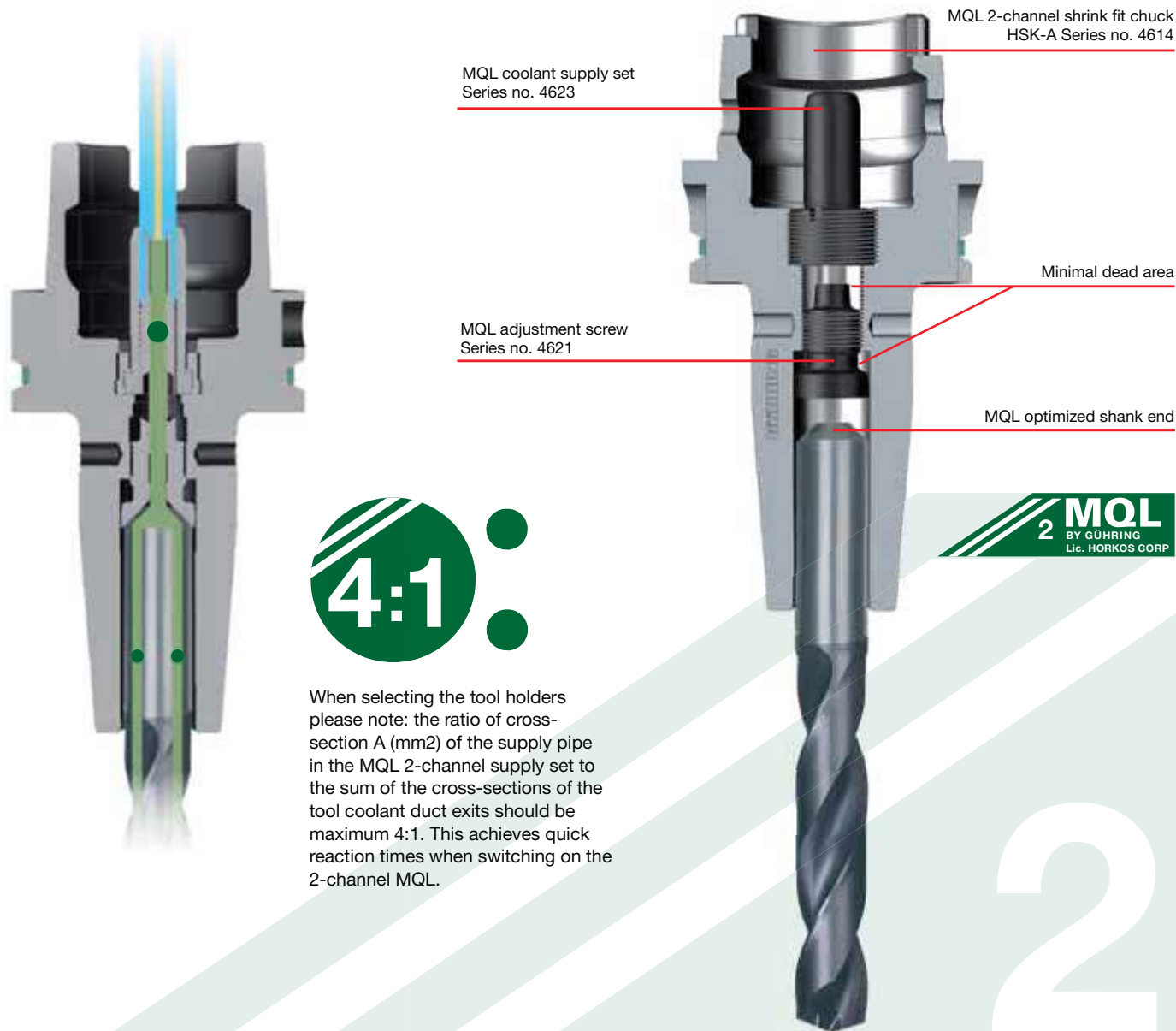




Our products for the MQL 2-channel technology are identified by this symbol.

Visual feature of the 2-channel system is the black colored MQL length setting screw.

MQL 2-channel



When selecting the tool holders please note: the ratio of cross-section A (mm²) of the supply pipe in the MQL 2-channel supply set to the sum of the cross-sections of the tool coolant duct exits should be maximum 4:1. This achieves quick reaction times when switching on the 2-channel MQL.

GÜHROSYNC

THE EASY WAY
TO THE PERFECT THREAD

Metalic spring for axial suspension

Torsional damper

Hydraulic chuck

Polymer ring for axial damping

Reduction sleeve

Intelligent design:

as well as the suspension and damping elements in the slender GÜHROSync chucks (for the reduction of axial and radial forces during the tapping process) there is also room for the supply set for MQL or conventional cooling lubrication and the length setting screw.