

10. EROUET

11. PCM

12. DC SWISS

13. Manigley

14. NS

15. LOUIS

16. REGO FIX

17. DAIYAK

18. GRIP



# HYDRO-SWISS TURN

GRIP Hydro-Line



## HYDRO-SWISS TURN (유압척)

- **스트레이트 타입 샹크** - 가분수 타입으로 인한 불편함 개선.
- **편리한 셋팅** - 볼트타입 체결 방식으로 누구나 쉽게 체결 가능.
- **높은 정밀도**  
ER타입은(슬리브, ER콜렛, 너트) 3가지 타입이 조립되어 정밀도 떨어짐.  
유압척은 조립타입이 아닌 다이렉트로 장착되어 높은 정밀도 및 반복 정밀도 보장.
- **밀림방지**  
내경 Ø 에 따라 stopper 및 pin 타입 적용. (상황에 따라 탈부착 가능)
- **TOOL LIFE 개선**  
유압으로 인해 공구의 진동을 완화시키고 COOLANT를 적용할 수 있어 공구 수명 개선.



# HYDRO-SWISS TURN

for CITIZEN, STAR, TSUGAMI, HANHWA, NOMURA, NEXTURN

# HYDRO-SWISS TURN

Swiss turn

CITIZEN

## Citizen

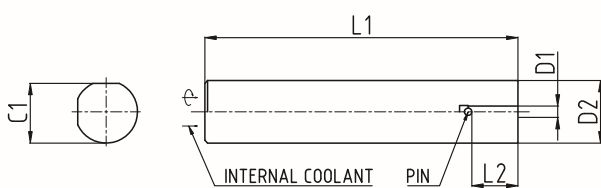
Dimensions[mm]

Type		D1	D2	D3	D4	L1	L2	L3	L4	L5	C1	TYPE
<b>ST19.05</b>												
ST19.05/GST3/110	●	3	19.05	-	-	110	15.5	-	-	-	18	A
ST19.05/GST4/110	●	4	19.05	-	-	110	15.5	-	-	-	18	A
ST19.05/GST5/110	●	5	19.05	-	-	110	18.5	-	-	-	18	A
ST19.05/GST6/110	●	6	19.05	-	-	110	21.5	-	-	-	18	B
ST19.05/GST8/110	●	8	19.05	-	-	110	21.5	-	-	-	18	B
ST19.05/GST10/110	●	10	19.05	-	-	110	24	-	-	-	18	B

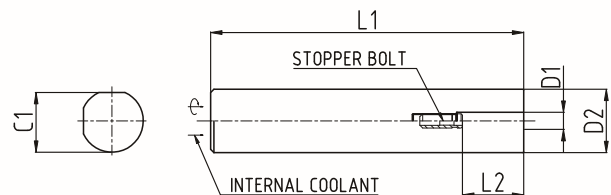
<b>ST19.05</b>												
ST19.05/GST3/60	●	3	19.05	-	-	60	15.5	-	-	-	18	A
ST19.05/GST4/60	●	4	19.05	-	-	60	15.5	-	-	-	18	A
ST19.05/GST5/60	●	5	19.05	-	-	60	18.5	-	-	-	18	A
ST19.05/GST6/60	●	6	19.05	-	-	60	21.5	-	-	-	18	A
ST19.05/GST8/60	●	8	19.05	-	-	60	21.5	-	-	-	18	A
ST19.05/GST10/60	●	10	19.05	-	-	60	24	-	-	-	18	A

**Availability:** ● stock ▲ short lead time ○ on request

- » Tool shank quality h6
- » T-wrench is ordered separately
- » Hydro-sleeve is ordered separately
- » Center through coolant system
- » Additional sizes and special designs available on request



A TYPE



B TYPE

# HYDRO-SWISS TURN

Swiss turn

STAR

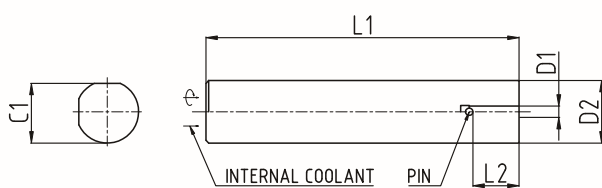


Dimensions[mm]

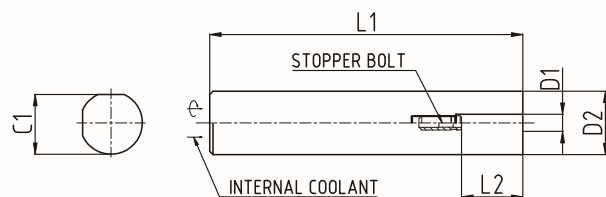
Type		D1	D2	D3	D4	L1	L2	L3	L4	L5	C1	TYPE
<b>ST16</b>												
ST16/GST3/90	●	3	16	-	-	90	15.5	-	-	-	15	A
ST16/GST4/90	●	4	16	-	-	90	15.5	-	-	-	15	A
ST16/GST5/90	●	5	16	-	-	90	18.5	-	-	-	15	A
ST16/GST6/90	●	6	16	-	-	90	21.5	-	-	-	15	B
<b>ST22</b>												
ST22/GST3/110	●	3	22	-	-	110	15.5	-	-	-	21	A
ST22/GST4/110	●	4	22	-	-	110	15.5	-	-	-	21	A
ST22/GST5/110	●	5	22	-	-	110	18.5	-	-	-	21	A
ST22/GST6/110	●	6	22	-	-	110	21.5	-	-	-	21	B
ST22/GST8/110	●	8	22	-	-	110	21.5	-	-	-	21	B
ST22/GST10/110	●	10	22	-	-	110	31.5	-	-	-	21	B
<b>ST32</b>												
ST32/GST4/120	●	4	32	-	-	120	15.5	-	-	-	30	A
ST32/GST6/120	●	6	32	-	-	120	21.5	-	-	-	30	B
ST32/GST8/120	●	8	32	-	-	120	21.5	-	-	-	30	B
ST32/GST10/120	●	10	32	-	-	120	31.5	-	-	-	30	B
ST32/GST12/120	●	12	32	-	-	120	31.5	-	-	-	30	B

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A TYPE



B TYPE

# HYDRO-SWISS TURN

Swiss turn

TSUGAMI



## Dimensions[mm]

Type		D1	D2	D3	D4	L1	L2	L3	L4	L5	C1	TYPE
<b>ST16</b>												
ST16/GST3/60	●	3	16	-	-	60	15.5	-	-	-	15	A
ST16/GST4/60	●	4	16	-	-	60	15.5	-	-	-	15	A
<b>ST20</b>												
ST20/GST3/110	●	3	20	-	-	110	15.5	-	-	-	19	A
ST20/GST4/110	●	4	20	-	-	110	15.5	-	-	-	19	A
ST20/GST5/110	●	5	20	-	-	110	18.5	-	-	-	19	A
ST20/GST6/110	●	6	20	-	-	110	21.5	-	-	-	19	B
ST20/GST8/110	●	8	20	-	-	110	21.5	-	-	-	19	B
ST20/GST10/110	●	10	20	-	-	110	31.5	-	-	-	19	B
<b>ST22</b>												
ST22/GST3/110	●	3	22	-	-	110	15.5	-	-	-	21	A
ST22/GST4/110	●	4	22	-	-	110	15.5	-	-	-	21	A
ST22/GST5/110	●	5	22	-	-	110	18.5	-	-	-	21	A
ST22/GST6/110	●	6	22	-	-	110	21.5	-	-	-	21	B
ST22/GST8/110	●	8	22	-	-	110	21.5	-	-	-	21	B
ST22/GST10/110	●	10	22	-	-	110	31.5	-	-	-	21	B
<b>ST25</b>												
ST25/GST3/110	●	3	25	-	-	110	15.5	-	-	-	24	A
ST25/GST4/110	●	4	25	-	-	110	15.5	-	-	-	24	A
ST25/GST5/110	●	5	25	-	-	110	18.5	-	-	-	24	A
ST25/GST6/110	●	6	25	-	-	110	21.5	-	-	-	24	B
ST25/GST8/110	●	8	25	-	-	110	21.5	-	-	-	24	B
ST25/GST10/110	●	10	25	-	-	110	31.5	-	-	-	24	B
<b>ST32</b>												
ST32/GST4/120	●	4	32	-	-	120	15.5	-	-	-	30	A
ST32/GST6/120	●	6	32	-	-	120	21.5	-	-	-	30	B
ST32/GST8/120	●	8	32	-	-	120	21.5	-	-	-	30	B
ST32/GST10/120	●	10	32	-	-	120	31.5	-	-	-	30	B
ST32/GST12/120	●	12	32	-	-	120	31.5	-	-	-	30	B

Availability: ● stock ▲ short lead time ○ on request

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» Center through coolant system

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# HYDRO-SWISS TURN

Swiss turn

HANWHA

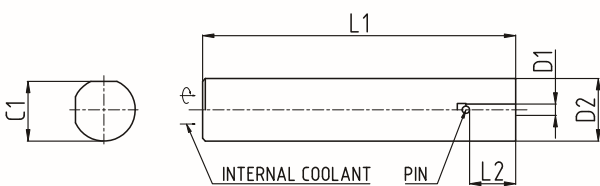


Dimensions[mm]

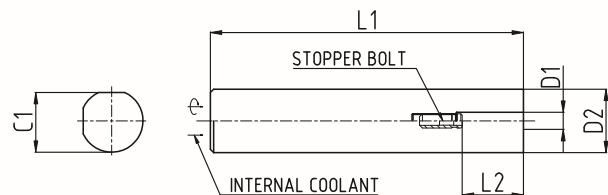
Type		D1	D2	D3	D4	L1	L2	L3	L4	L5	C1	TYPE
<b>ST25</b>												
ST25/GST3/110	●	3	25	-	-	110	15.5	-	-	-	24	A
ST25/GST4/110	●	4	25	-	-	110	15.5	-	-	-	24	A
ST25/GST5/110	●	5	25	-	-	110	18.5	-	-	-	24	A
ST25/GST6/110	●	6	25	-	-	110	21.5	-	-	-	24	B
ST25/GST8/110	●	8	25	-	-	110	21.5	-	-	-	24	B
ST25/GST10/110	●	10	25	-	-	110	31.5	-	-	-	24	B
<b>ST32</b>												
ST32/GST4/120	●	4	32	-	-	120	15.5	-	-	-	30	A
ST32/GST6/120	●	6	32	-	-	120	21.5	-	-	-	30	B
ST32/GST8/120	●	8	32	-	-	120	21.5	-	-	-	30	B
ST32/GST10/120	●	10	32	-	-	120	26.5	-	-	-	30	B
ST32/GST12/120	●	12	32	-	-	120	31.5	-	-	-	30	B

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A TYPE



B TYPE

# HYDRO-SWISS TURN

Swiss turn

TORNOS

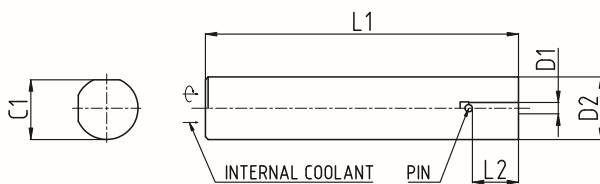
## TORNOS

Dimensions[mm]

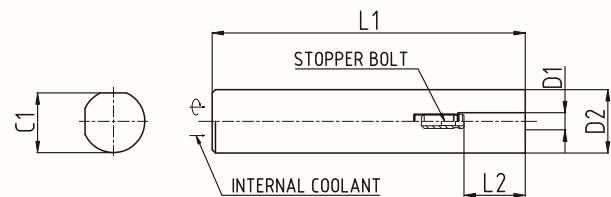
Type		D1	D2	D3	D4	L1	L2	L3	L4	L5	C1	TYPE
<b>ST16</b>												
ST16/GST3/60	●	3	16	-	-	60	15.5	-	-	-	15	A
ST16/GST4/60	●	4	16	-	-	60	15.5	-	-	-	15	A
<b>ST20</b>												
ST20/GST3/110	●	3	20	-	-	110	15.5	-	-	-	19	A
ST20/GST4/110	●	4	20	-	-	110	15.5	-	-	-	19	A
ST20/GST5/110	●	5	20	-	-	110	18.5	-	-	-	19	A
ST20/GST6/110	●	6	20	-	-	110	21.5	-	-	-	19	B
ST20/GST8/110	●	8	20	-	-	110	21.5	-	-	-	19	B
ST20/GST10/110	●	10	20	-	-	110	24	-	-	-	19	B
<b>ST25</b>												
ST25/GST3/110	●	3	25	-	-	110	15.5	-	-	-	24	A
ST25/GST4/110	●	4	25	-	-	110	15.5	-	-	-	24	A
ST25/GST5/110	●	5	25	-	-	110	18.5	-	-	-	24	A
ST25/GST6/110	●	6	25	-	-	110	21.5	-	-	-	24	B
ST25/GST8/110	●	8	25	-	-	110	21.5	-	-	-	24	B
ST25/GST10/110	●	10	25	-	-	110	31.5	-	-	-	24	B

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A TYPE



B TYPE

# HYDRO-SWISS TURN

Swiss turn  
NOMURA

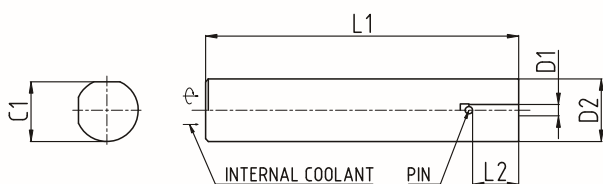


Dimensions[mm]

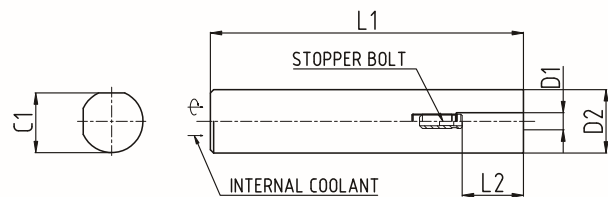
Type		D1	D2	D3	D4	L1	L2	L3	L4	L5	C1	TYPE
<b>ST22</b>												
ST22/GST3/110	●	3	22	-	-	110	15.5	-	-	-	21	A
ST22/GST4/110	●	4	22	-	-	110	15.5	-	-	-	21	A
ST22/GST5/110	●	5	22	-	-	110	18.5	-	-	-	21	A
ST22/GST6/110	●	6	22	-	-	110	21.5	-	-	-	21	B
ST22/GST8/110	●	8	22	-	-	110	21.5	-	-	-	21	B
ST22/GST10/110	●	10	22	-	-	110	31.5	-	-	-	21	B
<b>ST32</b>												
ST32/GST4/120	●	4	32	-	-	120	15.5	-	-	-	30	A
ST32/GST6/120	●	6	32	-	-	120	21.5	-	-	-	30	B
ST32/GST8/120	●	8	32	-	-	120	21.5	-	-	-	30	B
ST32/GST10/120	●	10	32	-	-	120	31.5	-	-	-	30	B
ST32/GST12/120	●	12	32	-	-	120	31.5	-	-	-	30	B

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