EHRZ SERIES

Roll taps for Extra Hard materials (≤40 HRC)



EHRZ
EHRZ CH



Z-PRO
Ultimate Machining Taps

Think threads with YAMAWA

EHRZ / EHRZ CH



EHRZ

DIN | HSS-Co | COATING | 4P THCHT | 2P THCHT



EHRZ CH

DIN | HSS-Co | COATING | 2P THCHT

Roll tap for steel ~40 HRC and stainless steel

- The combination of a unique thread relief and a coating that maximizes the benefits of surface treatments ensure torque reduction and improved welding-resistance.
- Wider flutes allow for greater lubricant supply, resulting in improved lubricity and cooling abilities.
- Thanks to optimized substrate material in combination with a special coating, EHRZ shows extraordinary performances on medium-hard steels up to 40 HRC as well as stainless steels.

Product features

Recommended tapping conditions

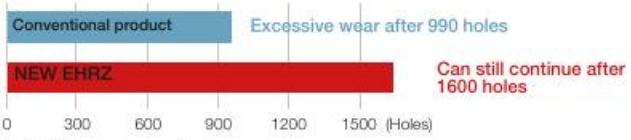
Workpiece materials		Vc (m/min)
P2	Carbon and low alloy steel	10÷40
P3	Medium alloy steel	10÷40
P4	High alloy steel	10÷35
P3-P4	Heat treated steel <40 HRC	10÷25

Workpiece materials		Vc (m/min)
P7	Ferritic - Martensitic stainless steel	10÷15
M	Austenitic stainless steel (good machinability)	10÷15

Process data

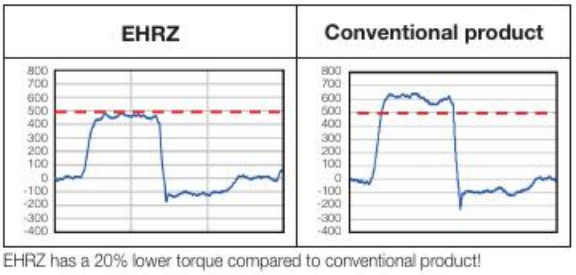
Tapping conditions: EHRZ ISO2X(6HX) M6x1 2P

Workpiece materials	42CrMo4 (40 HRC)
Bored length	5.55 mm
Tapping length	12 mm
Tapping speed	20 m/min
Machine	Vertical Machining Center
Tapping fluid	Water soluble tapping fluid (1:20 solution)
Feed	Fully synchronized feed



Initial torque data

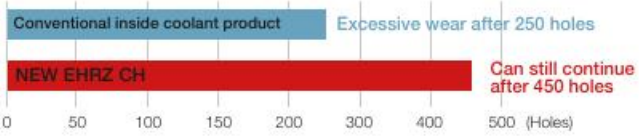
(N·cm)



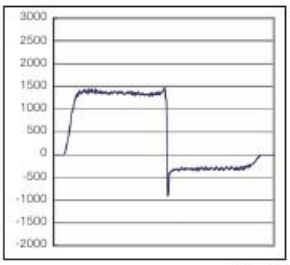
EHRZ has a 20% lower torque compared to conventional product!

Tapping conditions: EHRZ CH ISO2X(6HX) M12x1 .25 2P

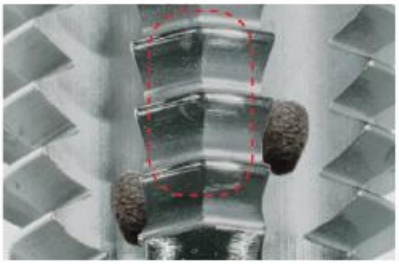
Workpiece materials	42CrMo4 (40 HRC)
Bored hole size	Ø 11.4 mm
Tapping length	24 mm
Tapping speed	26 m/min
Machine	Vertical Machining Center
Tapping fluid	Water soluble tapping fluid (1:20 solution)
Feed	Fully synchronized feed



Torque data and wear after 450 holes tapped



(N·cm)



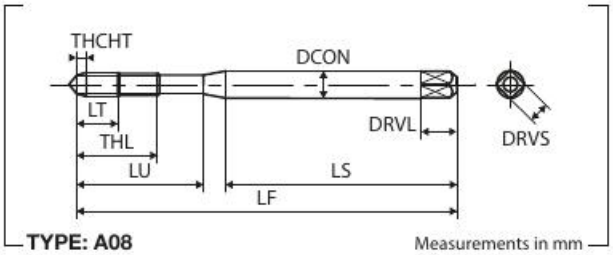
Dimensions and sizes

EHRZ

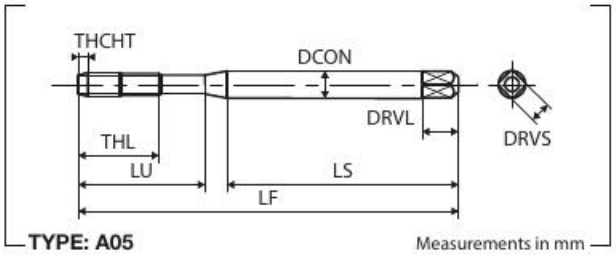
Z-PRO SERIES



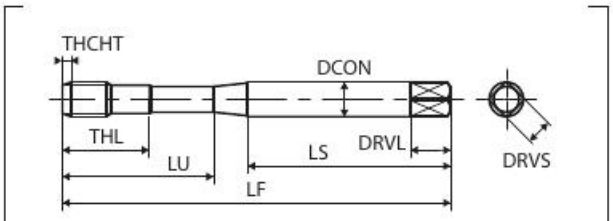
DIN | HSS-Co | COATING | 4P THCHT



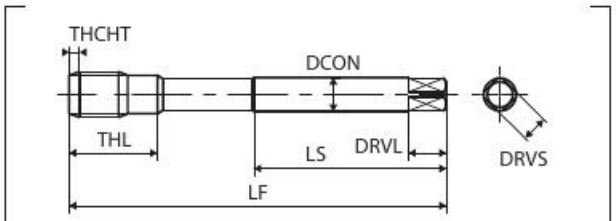
TYPE: A08 Measurements in mm



TYPE: A05 Measurements in mm



TYPE: A18 Measurements in mm



TYPE: A25 Measurements in mm

● stock standard, ◘ check stock, ◉ non-stock standard (no MOQ), ○ non-stock standard (MOQ), ▲ upcoming product, ▽ stock exhaustion

M	TCTR (tolerance)	Bored Hole Ø (mm) Max	Bored Hole Ø (mm) Min	Code	THCHT	LF	THL	LU	LS	DCON	DRVS	DRVL	NOF	Type	Stock
DIN 371															
M3x0.5	ISO2X(6HX)	2.83	2.76	3120101035	4P	56	5	18	34	3.5	2.7	6	5(5)	A08	●
	ISO2X(6HX)	2.83	2.76	3121101035	2P	56	5	18	34	3.5	2.7	6	5(5)	A05	●
M4x0.7	ISO2X(6HX)	3.75	3.66	3120101042	4P	63	7	21	38	4.5	3.4	6	5(5)	A08	●
	ISO2X(6HX)	3.75	3.66	3121101042	2P	63	7	21	38	4.5	3.4	6	5(5)	A05	●
M5x0.8	ISO2X(6HX)	4.7	4.6	3120101049	4P	70	9	25	39	6	4.9	8	5(5)	A08	●
	ISO2X(6HX)	4.7	4.6	3121101049	2P	70	9	25	39	6	4.9	8	5(5)	A05	●
M6x1	ISO2X(6HX)	5.61	5.5	3120101055	4P	80	11	30	45	6	4.9	8	5(5)	A08	●
	ISO2X(6HX)	5.61	5.5	3121101055	2P	80	11	30	45	6	4.9	8	5(5)	A05	●
M8x1.25	ISO2X(6HX)	7.52	7.38	3120101064	4P	90	12	35	47	8	6.2	9	6(6)	A18	●
	ISO2X(6HX)	7.52	7.38	3121101064	2P	90	12	35	47	8	6.2	9	6(6)	A18	●
M10x1.5	ISO2X(6HX)	9.41	9.26	3120101078	4P	100	13	39	52	10	8	11	8(8)	A18	●
	ISO2X(6HX)	9.41	9.26	3121101078	2P	100	13	39	52	10	8	11	8(8)	A18	●

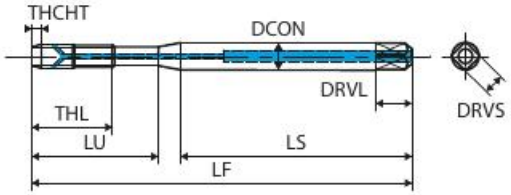
M	TCTR (tolerance)	Bored Hole Ø (mm) Max	Bored Hole Ø (mm) Min	Code	THCHT	LF	THL	LU	LS	DCON	DRVS	DRVL	NOF	Type	Stock
DIN 376															
M12x1.75	ISO2X(6HX)	11.3	11.13	3120101088	4P	110	15	-	56	9	7	10	8(8)	A25	●
	ISO2X(6HX)	11.3	11.13	3121101088	2P	110	15	-	56	9	7	10	8(8)	A25	●
M14x2	ISO2X(6HX)	13.19	13	3120101100	4P	110	18	-	56	11	9	12	8(8)	A25	○
	ISO2X(6HX)	13.19	13	3121101100	2P	110	18	-	56	11	9	12	8(8)	A25	●
M16x2	ISO2X(6HX)	15.19	15.15	3120101114	4P	110	18	-	56	12	9	12	8(8)	A25	○
	ISO2X(6HX)	15.19	15.15	3121101114	2P	110	18	-	56	12	9	12	8(8)	A25	●

MF	TCTR (tolerance)	Bored Hole Ø (mm) Max	Min	Code	THCHT	LF	THL	LU	LS	DCON	DRVS	DRVL	NOF	Type	Stock
DIN 374															
M8x1	ISO2X(6HX)	7.61	7.49	3120101065	4P	90	12	-	46	6	4.9	8	6(6)	A25	○
	ISO2X(6HX)	7.61	7.49	3121101065	2P	90	12	-	46	6	4.9	8	6(6)	A25	●
M10x1.25	ISO2X(6HX)	9.51	9.38	3120101079	4P	100	13	-	51	7	5.5	8	8(8)	A25	○
	ISO2X(6HX)	9.51	9.38	3121101079	2P	100	13	-	51	7	5.5	8	8(8)	A25	●
M10x1	ISO2X(6HX)	9.61	9.55	3120101080	4P	90	13	-	46	7	5.5	8	8(8)	A25	○
	ISO2X(6HX)	9.61	9.55	3121101080	2P	90	13	-	46	7	5.5	8	8(8)	A25	●
M12x1.5	ISO2X(6HX)	11.39	11.24	3120101089	4P	100	15	-	51	9	7	10	8(8)	A25	○
	ISO2X(6HX)	11.39	11.24	3121101089	2P	100	15	-	51	9	7	10	8(8)	A25	●
M12x1.25	ISO2X(6HX)	11.51	11.38	3120101090	4P	100	15	-	51	9	7	10	8(8)	A25	○
	ISO2X(6HX)	11.51	11.38	3121101090	2P	100	15	-	51	9	7	10	8(8)	A25	●
M12x1	ISO2X(6HX)	11.62	11.5	3120101091	4P	100	15	-	51	9	7	10	8(8)	A25	○
	ISO2X(6HX)	11.62	11.5	3121101091	2P	100	15	-	51	9	7	10	8(8)	A25	●
M14x1.5	ISO2X(6HX)	13.39	13.24	3120101102	4P	100	18	-	51	11	9	12	8(8)	A25	○
	ISO2X(6HX)	13.39	13.24	3121101102	2P	100	18	-	51	11	9	12	8(8)	A25	●
M14x1.25	ISO2X(6HX)	13.51	13.38	3120101103	4P	100	18	-	51	11	9	12	8(8)	A25	○
	ISO2X(6HX)	13.51	13.38	3121101103	2P	100	18	-	51	11	9	12	8(8)	A25	●
M16x1.5	ISO2X(6HX)	15.38	15.23	3120101116	4P	100	18	-	51	12	9	12	8(8)	A25	○
	ISO2X(6HX)	15.38	15.23	3121101116	2P	100	18	-	51	12	9	12	8(8)	A25	●

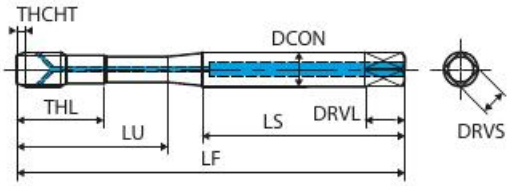
EHRZ CH



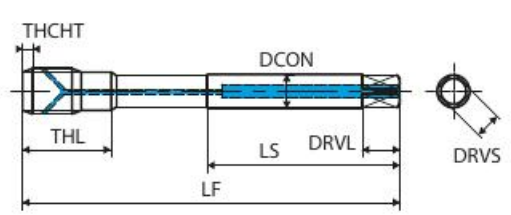
DIN | HSS-Co | COATING | 2P THCHT



TYPE: A29 — Measurements in mm



TYPE: A30 — Measurements in mm



TYPE: A31 — Measurements in mm

Oversized ● stock standard, ○ check stock, ◉ non-stock standard (no MOQ), ○ non-stock standard (MOQ), ▲ upcoming product, ▽ stock exhaustion

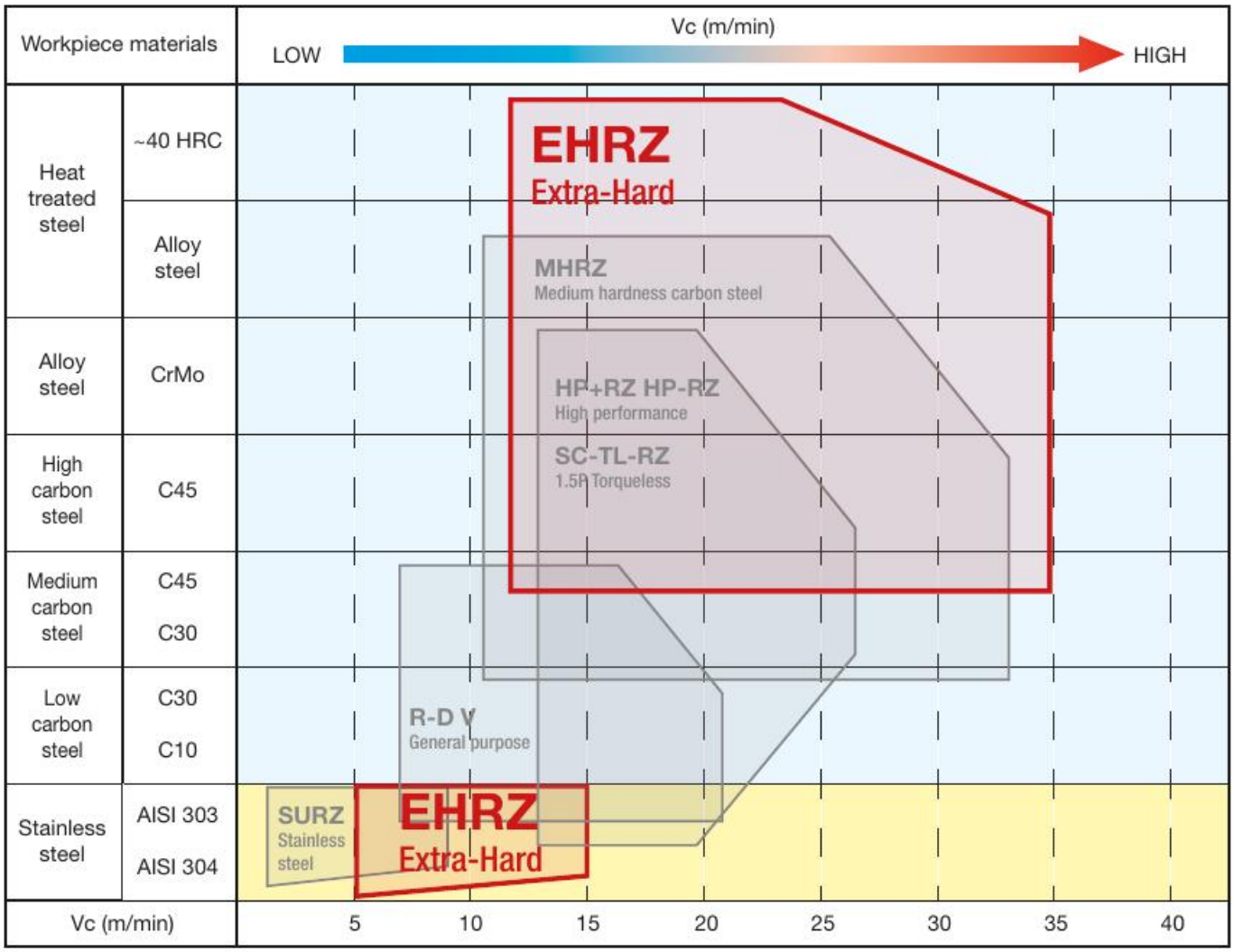
M	TCTR (tolerance)	Bored Hole Ø (mm) Max	Min	Code	THCHT	LF	THL	LU	LS	DCON	DRVS	DRVL	NOF	Type	Stock
DIN 371															
M5x0.8	ISO2X(6HX)	4.7	4.6	3221101049	2P	70	9	25	39	6	4.9	8	5(5)	A29	●
	ISO3X(6GX)	4.7	4.6	3221201049	2P	70	9	25	39	6	4.9	8	5(5)	A29	●
M6x1	ISO2X(6HX)	5.61	5.5	3221101055	2P	80	11	30	45	6	4.9	8	5(5)	A29	●
	ISO3X(6GX)	5.61	5.5	3221201055	2P	80	11	30	45	6	4.9	8	5(5)	A29	●
M8x1.25	ISO2X(6HX)	7.52	7.38	3221101064	2P	90	12	35	47	8	6.2	9	6(6)	A30	●
	ISO3X(6GX)	7.52	7.38	3221201064	2P	90	12	35	47	8	6.2	9	6(6)	A30	●
M10x1.5	ISO2X(6HX)	9.41	9.26	3221101078	2P	100	13	39	52	10	8	11	8(8)	A30	●
	ISO3X(6GX)	9.41	9.26	3221201078	2P	100	13	39	52	10	8	11	8(8)	A30	●

M	TCTR (tolerance)	Bored Hole Ø (mm) Max	Min	Code	THCHT	LF	THL	LU	LS	DCON	DRVS	DRVL	NOF	Type	Stock
DIN 376															
M12x1.75	ISO2X(6HX)	11.3	11.13	3221101088	2P	110	15	-	56	9	7	10	8(8)	A31	●
	ISO3X(6GX)	11.3	11.13	3221201088	2P	110	15	-	56	9	7	10	8(8)	A31	●
M14x2	ISO2X(6HX)	13.19	13	3221101100	2P	110	18	-	56	11	9	12	8(8)	A31	●
	ISO3X(6GX)	13.19	13	3221201100	2P	110	18	-	56	11	9	12	8(8)	A31	●
M16x2	ISO2X(6HX)	15.19	15.15	3221101114	2P	110	18	-	56	12	9	12	8(8)	A31	●
	ISO3X(6GX)	15.19	15.15	3221201114	2P	110	18	-	56	12	9	12	8(8)	A31	●

MF	TCTR (tolerance)	Bored Hole Ø (mm) Max	Min	Code	THCHT	LF	THL	LU	LS	DCON	DRVS	DRVL	NOF	Type	Stock
DIN 374															
M8x1	ISO2X(6HX)	7.61	7.49	3221101065	2P	90	12	-	46	6	4.9	8	6(6)	A31	●
	ISO3X(6GX)	7.61	7.49	3221201065	2P	90	12	-	46	6	4.9	8	6(6)	A31	●
M10x1.25	ISO2X(6HX)	9.51	9.38	3221101079	2P	100	13	-	51	7	5.5	8	8(8)	A31	●
	ISO3X(6GX)	9.51	9.38	3221201079	2P	100	13	-	51	7	5.5	8	8(8)	A31	●

MF	TCTR (tolerance)	Bored Hole Ø (mm) Max	Bored Hole Ø (mm) Min	Code	THCHT	LF	THL	LU	LS	DCON	DRVS	DRVL	NOF	Type	Stock
DIN 374															
M10x1	ISO2X(6HX)	9.61	9.55	3221101080	2P	90	13	-	46	7	5.5	8	8(8)	A31	●
	ISO3X(6GX)	9.61	9.55	3221201080	2P	90	13	-	46	7	5.5	8	8(8)	A31	●
M12x1.5	ISO2X(6HX)	11.39	11.24	3221101089	2P	100	15	-	51	9	7	10	8(8)	A31	●
	ISO3X(6GX)	11.39	11.24	3221201089	2P	100	15	-	51	9	7	10	8(8)	A31	●
M12x1.25	ISO2X(6HX)	11.51	11.38	3221101090	2P	100	15	-	51	9	7	10	8(8)	A31	●
	ISO3X(6GX)	11.51	11.38	3221201090	2P	100	15	-	51	9	7	10	8(8)	A31	●
M12x1	ISO2X(6HX)	11.62	11.5	3221101091	2P	100	15	-	51	9	7	10	8(8)	A31	●
	ISO3X(6GX)	11.62	11.5	3221201091	2P	100	15	-	51	9	7	10	8(8)	A31	○
M14x1.5	ISO2X(6HX)	13.39	13.24	3221101102	2P	100	18	-	51	11	9	12	8(8)	A31	●
	ISO3X(6GX)	13.39	13.24	3221201102	2P	100	18	-	51	11	9	12	8(8)	A31	●
M14x1.25	ISO2X(6HX)	13.51	13.38	3221101103	2P	100	18	-	51	11	9	12	8(8)	A31	●
	ISO3X(6GX)	13.51	13.38	3221201103	2P	100	18	-	51	11	9	12	8(8)	A31	○
M16x1.5	ISO2X(6HX)	15.38	15.23	3221101116	2P	100	18	-	51	12	9	12	8(8)	A31	●
	ISO3X(6GX)	15.38	15.23	3221201116	2P	100	18	-	51	12	9	12	8(8)	A31	●

Roll Taps system chart



Watch the EHRZ video

Dowmload the Yamawa's Catalogue

Dowmload the Yamawa's APP

9/2026

$YEHRZ

Think threads with YAMAWA

ISO 9001 JQA-QMA14664

ISO 14001 JQA-EM3465

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