

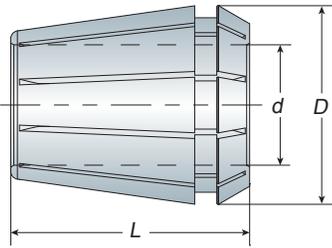
Spring Collet

彈性筒夾

ER

BT / NT series

- DIN6499 ISO15488 Collet must be assembled into the clamping nut before inserting into the chuck



Metric Size

Model No.	D	L	d	Weight (kg)
ER08	8.5	13.5	1,1.5,2,2.5,3,3.5,4,4.5,5	0.01
ER11	11.5	18	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7	0.01
ER16	17	27	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9,9.5,10	0.03
ER20	21	31	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9,9.5,10,10.5,11,11.5,12,12.5,13	0.04
ER25	26	35	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16	0.07
ER32	33	40	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	0.15
ER40	41	46	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	0.27
ER50	52	60	12,14,16,18,20,22,24,26,28,30,32,34	0.45

Unit: mm

Inch Size

Model No.	D	L	d	Weight (kg)
ER11	11.5	18	1/8,5/32,3/16,7/32,1/4	0.01
ER16	17	27	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8	0.03
ER20	21	31	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8,13/32,7/16,1/2	0.04
ER25	26	35	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8,7/16,15/32,1/2,9/16,19/32,5/8	0.07
ER32	33	40	1/8,5/32,3/16,7/32,1/4,5/16,11/32,3/8,7/16,15/32,1/2,17/32,9/16,5/8,21/32,11/16,3/4,25/32	0.15
ER40	41	46	1/8,5/32,3/16,1/4,9/32,5/16,3/8,7/16,15/32,1/2,9/16,5/8,19/32,11/16,23/32,3/4,25/32,13/16,27/32,7/8,15/16,31/32,1	0.27

Unit: mm

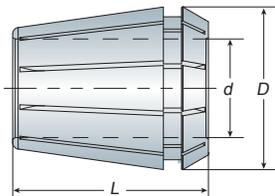
ER08		ER11		ER16		ER20		ER25		ER32		ER40		ER50	
No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range
ER08-01	1.0	ER11-01	1.0	ER16-01	1.0~0.5	ER20-01	1.0~0.5	ER25-02	2.0~1.0	ER32-02	2.0~1.0	ER40-03	3.0~2.0	ER50-12	12~10
ER08-1.5	1.5	ER11-1.5	1.5	ER16-1.5	1.5~1.0	ER20-1.5	1.5~1.0	ER25-03	3.0~2.0	ER32-03	3.0~2.0	ER40-04	4.0~3.0	ER50-14	14~12
ER08-02	2.0~1.5	ER11-02	2.0~1.5	ER16-02	2.0~1.0	ER20-02	2.0~1.0	ER25-04	4.0~3.0	ER32-04	4.0~3.0	ER40-05	5.0~4.0	ER50-16	16~14
ER08-2.5	2.5~2.0	ER11-2.5	2.5~2.0	ER16-2.5	2.5~2.0	ER20-2.5	2.5~2.0	ER25-05	5.0~4.0	ER32-05	5.0~4.0	ER40-06	6.0~5.0	ER50-18	18~16
ER08-03	3.0~2.5	ER11-03	3.0~2.5	ER16-03	3.0~2.0	ER20-03	3.0~2.0	ER25-06	6.0~5.0	ER32-06	6.0~5.0	ER40-07	7.0~6.0	ER50-20	20~18
ER08-3.5	3.5~3.0	ER11-3.5	3.5~3.0	ER16-3.5	3.5~3.0	ER20-3.5	3.5~3.0	ER25-07	7.0~6.0	ER32-07	7.0~6.0	ER40-08	8.0~7.0	ER50-22	22~20
ER08-04	4.0~3.5	ER11-04	4.0~3.5	ER16-04	4.0~3.0	ER20-04	4.0~3.0	ER25-08	8.0~7.0	ER32-08	8.0~7.0	ER40-09	9.0~8.0	ER50-24	24~22
ER08-4.5	4.5~4.0	ER11-4.5	4.5~4.0	ER16-4.5	4.5~4.0	ER20-4.5	4.5~4.0	ER25-09	9.0~8.0	ER32-09	9.0~8.0	ER40-10	10~9.0	ER50-26	26~24
ER08-05	5.0~4.5	ER11-05	5.0~4.5	ER16-05	5.0~4.0	ER20-05	5.0~4.0	ER25-10	10~9.0	ER32-10	10~9.0	ER40-11	11~10	ER50-28	28~26
		ER11-5.5	5.5~5.0	ER16-5.5	5.5~5.0	ER20-5.5	5.5~5.0	ER25-11	11~10	ER32-11	11~10	ER40-12	12~11	ER50-30	30~28
		ER11-06	6.0~5.5	ER16-06	6.0~5.0	ER20-06	6.0~5.0	ER25-12	12~11	ER32-12	12~11	ER40-13	13~12	ER50-32	32~30
		ER11-6.5	6.5~6.0	ER16-6.5	6.5~6.0	ER20-6.5	6.5~6.0	ER25-13	13~12	ER32-13	13~12	ER40-14	14~13	ER50-34	34~32
		ER11-07	7.0~6.5	ER16-07	7.0~6.0	ER20-07	7.0~6.0	ER25-14	14~13	ER32-14	14~13	ER40-15	15~14		
				ER16-7.5	7.5~7.0	ER20-7.5	7.5~7.0	ER25-15	15~14	ER32-15	15~14	ER40-16	16~15		
				ER16-08	8.0~7.0	ER20-08	8.0~7.0	ER25-16	16~15	ER32-16	16~15	ER40-17	17~16		
				ER16-8.5	8.5~8.0	ER20-8.5	8.5~8.0			ER32-17	17~16	ER40-18	18~17		
				ER16-09	9.0~8.0	ER20-09	9.0~8.0			ER32-18	18~17	ER40-19	19~18		
				ER16-9.5	9.5~9.0	ER20-9.5	9.5~9.0			ER32-19	19~18	ER40-20	20~19		
				ER16-10	10~9.0	ER20-10	10~9.0			ER32-20	20~19	ER40-21	21~20		
						ER20-10.5	10.5~10					ER40-22	22~21		
						ER20-11	11~10					ER40-23	23~22		
						ER20-11.5	11.5~11					ER40-24	24~23		
						ER20-12	12~11					ER40-25	25~24		
						ER20-12.5	12.5~12					ER40-26	26~25		
						ER20-13	13~12								

- ER08 ~ ER20 建議夾持範圍皆為 0.5mm (Suggested clamping range should be 0.5mm)

ER

Collet - Coolant Type

止水型筒夾



- Maximum water pressure: 21kgf/cm²
- 最大水壓可達 21kgf/cm²

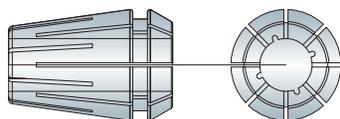
Model No.	D	L	d	Weight (kg)
ER16-CL	17	27	4,5,6,7,8,9,10	0.03
ER20-CL	21	31	4,5,6,7,8,9,10,11,12,13	0.04
ER25-CL	26	35	4,5,6,7,8,9,10,11,12,13,14,15,16	0.07
ER32-CL	33	40	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	0.15
ER40-CL	41	46	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	0.27

Unit: mm

ER-JCL

Collet - Jet Coolant Type

噴射型筒夾



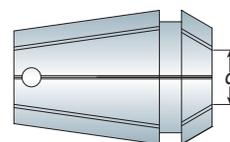
- Maximum water pressure: 21kgf/cm²
- 最大水壓可達 21kgf/cm²

Model No.	D	L	d	Weight (kg)
ER16-JCL	17	27	4,5,6,7,8,9,10	0.03
ER20-JCL	21	31	4,5,6,7,8,9,10,11,12,13	0.04
ER25-JCL	26	35	4,5,6,7,8,9,10,11,12,13,14,15,16	0.07
ER32-JCL	33	40	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	0.15

Unit: mm

Collet for End Mill

立銑刀專用筒夾



ER16E (approx. 0.03kgs/pc)

Model No.	d
ER16E-03	3
ER16E-04	4
ER16E-05	5
ER16E-06	6
ER16E-08	8
ER16E-10	10

Unit:mm

ER20E (approx. 0.04kgs/pc)

Model No.	d
ER20E-03	3
ER20E-04	4
ER20E-05	5
ER20E-06	6
ER20E-08	8
ER20E-10	10
ER20E-12	12

Unit:mm

ER25E (approx. 0.07kgs/pc)

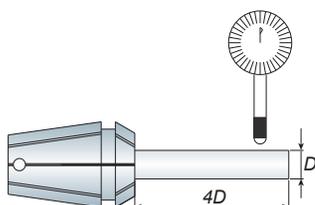
Model No.	d
ER25E-03	3
ER25E-04	4
ER25E-05	5
ER25E-06	6
ER25E-08	8
ER25E-10	10
ER25E-12	12
ER25E-14	14
ER25E-16	16

Unit:mm

ER32E (approx. 0.15kgs/pc)

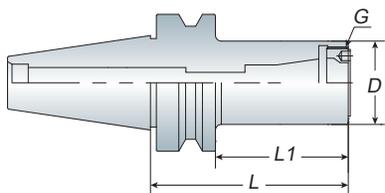
Model No.	d
ER32E-03	3
ER32E-04	4
ER32E-05	5
ER32E-06	6
ER32E-08	8
ER32E-10	10
ER32E-12	12
ER32E-14	14
ER32E-16	16
ER32E-18	18
ER32E-20	20

Unit:mm



- When ordering, please specify the collet grade with A or AA.
- 請於訂購時註明 A 級或 AA 級
- For example / 例 :ER16E-06 A or ER16E-06AA

筒夾等級 Collet Grade	跳動精度 / Runout - Max μ 4 倍直徑前 - 4xD
A 級	$\leq 10\mu$
AA 級	$\leq 5\mu$



High Speed Collet Chuck

高速彈性筒夾本體

ERA

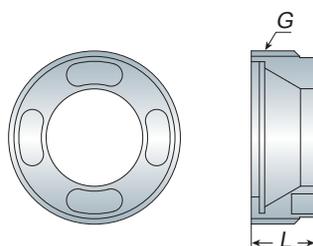
BT / NT series



Model No.	D	L1	L	G	Weight (kg)
BT30 ERA11-055	22	33	55	M18x1.0P	0.55
ERA16-065	28	43	65	M24x1.0P	0.65
ERA20-065	32	43	65	M28x1.5P	0.70
ERA25-060	38	38	60	M32x1.5P	0.70
BT40 ERA11-070	22	43	70	M18x1.0P	1.20
-100	22	73	100	M18x1.0P	1.20
ERA16-070	28	43	70	M24x1.0P	1.30
-100	28	73	100	M24x1.0P	1.30
ERA20-080	32	53	80	M28x1.5P	1.40
-100	32	73	100	M28x1.5P	1.50
ERA25-080	38	53	80	M32x1.5P	1.40
-100	38	73	100	M32x1.5P	1.50
ERA32-080	46	53	80	M40x1.5P	1.50
-100	46	73	100	M40x1.5P	1.80
BT50 ERA11-080	22	42	80	M18x1.0P	3.90
-110	22	72	110	M18x1.0P	4.00
ERA16-080	28	42	80	M24x1.0P	4.00
-110	28	72	110	M24x1.0P	4.10
ERA20-090	32	52	90	M28x1.5P	4.10
-110	32	72	110	M28x1.5P	4.20
ERA25-090	38	52	90	M32x1.5P	4.10
-110	38	72	110	M32x1.5P	4.30
ERA32-090	46	52	90	M40x1.5P	4.20
-110	46	72	110	M40x1.5P	4.50

Unit: mm

- The clamping nuts for ERA are special designed to be fitted internally into the holder. The special design could provide better cutting conditions and reducing cutting vibrations.
- Wrench and Stop screw must be ordered separately
- Balancing: 30,000 r.p.m G2.5
- BT-ERA is produced by order
- 特殊內藏式螺帽設計：可降低及減少切削時所產生的阻力與振動，並提升加工品質及穩定性
- ERA 扳手及止付螺絲為另購品
- 動平衡：30,000 r.p.m G2.5
- BT-ERA 為訂單生產



Nut & Wrench

螺帽與扳手

Model No.	L	G	Collet Type	Weight (kg)
ERA11-NUT	6	M18x1.0P	ER11	0.01
ERA16-NUT	8	M24x1.0P	ER16	0.02
ERA20-NUT	11	M28x1.5P	ER20	0.02
ERA25-NUT	12.5	M32x1.5P	ER25	0.03
ERA32-NUT	14	M40x1.5P	ER32	0.06

Unit: mm

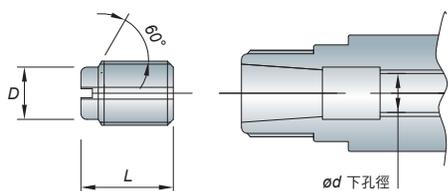
Model No.	Weight (kg)
WERA11	0.03
WERA16	0.07
WERA20	0.07
WERA25	0.13
WERA32	0.17

ERA



Stop Screw

止付螺絲



Model No.	Suit for	D	L	d (下孔徑)
M6xP1.0x10	ER08	6	10	5.1
M8xP1.0x15	ER11 / ASK06 / AVC06	6	15	7.1
M11xP1.0x16	ER16 / ASK10 / AVC10	9	16	10.2
M14xP1.0x20	ER20 / AVC12	11	20	13.1
M18xP1.5x22	ER25 / ASK16	14	22	16.6
M22xP1.5x24	ASK20	19	24	20.6
M24xP1.5x25	ER32	20	25	22.6
M28xP1.5x25	ER40 / ASK25	25	25	26.6
M16xP2.0x23	ASK13	23	23	14

Unit: mm

Torque wrench

扭力扳手



Model No.	Nm	in-lb	Magnetic Bit Holder 磁性扳手本體	Torque Adaptor 扭力轉接頭	Star Bits 星型扳手頭
TX6-0.6Nm	0.6	5.3	HW410484DG	HW-DG/0.6	SB-T6
TX7-0.9Nm	0.9	8.0	HW410484DG	HW-DG/0.9	SB-T7
TX8-1.2Nm	1.2	10.6	HW410484DG	HW-DG/1.2	SB-T8
TX9-1.5Nm	1.5	13.2	HW410484DG	HW-DG/1.5	SB-T9
TX10-2.0Nm	2.0	17.7	HW410484DG	HW-DG/2.0	SB-T10
TX15-3.0Nm	3.0	26.6	HW410484DG	HW-DG/3.0	SB-T15
TX20-5.0Nm	5.0	44.25	HW410484DG	HW-DG/5.0	SB-T20

Spindle Force Dynamometer

主軸拉力計 - 油壓式

- Hydraulic mechanical structure, high stability
- When ordering, please specify the degree of pull suddd
- Force: 1 kg/cm² = 10kg = 100 N
- Using the German WIKA oil pressure gauge
- 油壓機械式結構，高穩定性
- 訂購時請確認拉頭度數
- 拉力計壓力設計：1 kg/cm² = 10kg = 100 N
- 使用德國 WIKA 油壓表



Model No.	Range
BT30 CFG	0~150kg/cm ²
BT40 CFG	0~150kg/cm ²
BT50 CFG	0~350kg/cm ²