

Standard Wrench 普通扳手	Model No.	FIG.	A	d	L	Suit For	Weight (kg)
	WER11	1	29	17	140	CN11	0.08
WER16	1	45	25	142	CN16	0.12	
WER20	1	54	30	162	CN20	0.17	
WER25	2	65	37	206	CN25	0.22	
WER32	2	75	46.5	253	CN32	0.30	
WER40	2	90	58	289	CN40	0.36	
WER50	2	110	-	350	CN50	0.70	

M Type Wrench M 型扳手	Model No.	FIG.	A	d	L	Suit For	Weight (kg)
	WM08	3	13	-	75	CNM08	0.02
WM11	3	17	8.5	95	CNM11	0.03	
WM16	3	22.5	12.5	117	CNM16	0.05	
WM20	3	28.5	15.5	127	CNM20	0.07	

C Type Wrench (for power ball bearing nut) C 型扳手 (強力型鋼珠螺帽用)	Model No.	FIG.	d	L	Suit For	Weight (kg)
	WER16B	4	32	205	CN16-B	0.16
WER20B	4	36	220	CN20-B	0.18	
WER25B	4	43	235	CN25-B	0.21	
WER32B	4	51	255	CN32-B	0.22	
WER40B	4	63	260	CN40-B	0.25	

Bearing Wrench (for high speed bearing nut) 軸承扳手 (高速鋼珠螺帽用)	Model No.	FIG.	d	L	Suit For	Weight (kg)
	WER16G	5	30	-	CN16-G	0.60
WER20G	5	35	-	CN20-G	0.65	
WER25G	5	40	-	CN25-G	0.80	
WER32G	5	50	-	CN32-G	0.83	

Unit: mm

Torque Control Type

扭力型

Spigot Interchangeable Digital Torque Wrench

數位顯示扭力扳手

Model No.	d	L	Nm	lbf-ft	lbf-in	Weight (kg)
WDG-252	16	373	10~135	7.4~99.6	89~1195	0.80
WDG-253	16	548	20~200	14.8~147	178~1780	1.05
WDG-254	16	748	34~340	25~250.9	301~3010	1.35

Unit: mm

Wrench Spigot for WDG Torque Wrench

扭力扳手轉接頭

Model No.	Type	d	D	Suit For	Weight(kg)
ER16TC	ER16	25	16	CN16	0.20
ER20TC	ER20	30	16	CN20	0.30
ER25TC	ER25	37	16	CN25	0.14
ER32TC	ER32	46.5	16	CN32	0.15
ER40TC	ER40	58	16	CN40	0.20

Unit: mm

Torque Wrench 扭力扳手

Model No.	d	L	Nm	lbf-ft	lbf-in	Weight (kg)
OP-1710AKB	16	405	20~100	14.8~74	178~890	1.15
OP-1718AK	16	500	40~200	29.6~148	356~1780	1.38
OP-1720AK	16	575	60~320	44.4~236.8	534~2848	1.50

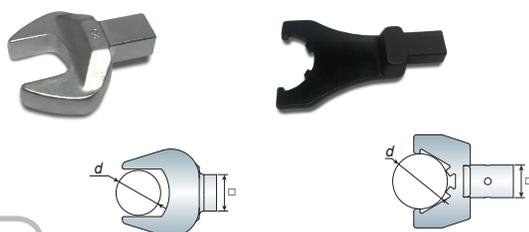
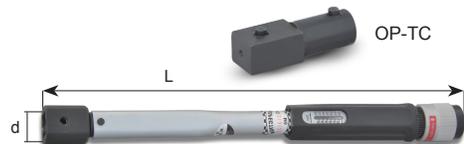
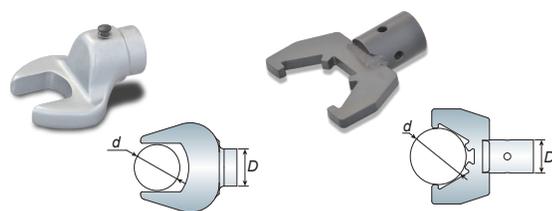
Unit: mm

Wrench Spigot for OP Torque Wrench

扭力扳手轉接頭

Model No.	Type	d	□	Suit For	Weight(kg)
OP-ER11TC	ER11	17	14 x 18	CN11	0.20
OP-ER16TC	ER16	25	14 x 18	CN16	0.20
OP-ER20TC	ER20	30	14 x 18	CN20	0.30
OP-ER25TC	ER25	37	14 x 18	CN25	0.14
OP-ER32TC	ER32	46.5	14 x 18	CN32	0.15
OP-ER40TC	ER40	58	14 x 18	CN40	0.20

Unit: mm



Clamping Nut

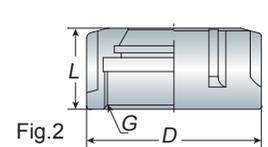
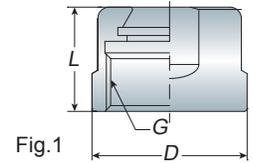
螺帽

ER

BT / NT
series

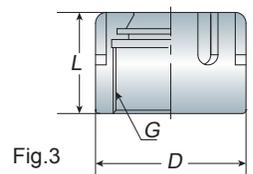
Standard Nut 普通螺帽	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	CN11	1	19	13	30	M14x0.75P	ER11	0.01
	CN16	1	28	18.5	70	M22x1.5P	ER16	0.04
	CN20	1	34	21	100	M25x1.5P	ER20	0.07
	CN25	2	42	21.5	130	M32x1.5P	ER25	0.11
	CN32	2	50	24	170	M40x1.5P	ER32	0.15
	CN40	2	63	26	220	M50x1.5P	ER40	0.30
	CN50	2	78	35		M64x2.0P	ER50	0.50

Unit: mm



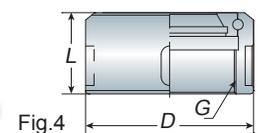
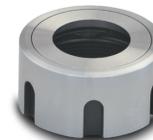
M Type Nut M 型螺帽	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	CNM08	3	12	10.8	10	M10x0.75P	ER08	0.01
	CNM11	3	16	12	30	M13x0.75P	ER11	0.01
	CNM16	3	22	17	70	M19x1.0P	ER16	0.02
	CNM20	3	28	19.2	100	M24x1.0P	ER20	0.03

Unit: mm



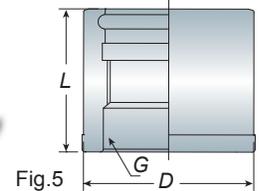
Power Ball Bearing Nut 強力型鋼珠螺帽	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	CN16-B	4	30	19	70	M22x1.5P	ER16	0.07
	CN20-B	4	35	21	100	M25x1.5P	ER20	0.09
	CN25-B	4	43	22	130	M32x1.5P	ER25	0.13
	CN32-B	4	51	24	170	M40x1.5P	ER32	0.16
	CN40-B	4	63	28	220	M50x1.5P	ER40	0.31

Unit: mm



High Speed Bearing Nut 高速鋼珠螺帽	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	CN-GER16	5	30	19	70	M22x1.5P	ER16	0.08
	CN-GER20	5	35	21	100	M25x1.5P	ER20	0.10
	CN-GER25	5	40	22	130	M32x1.5P	ER25	0.13
	CN-GER32	5	50	25	170	M40x1.5P	ER32	0.15

Unit: mm



Tap Collet

攻牙筒夾

ER-GB

BT / NT

series



- Please check shank diameter (Ød) and square size (SQ/□) when ordering.
- 請於訂購時確認攻牙筒夾的柄徑 (Ød) 和四角孔 (SQ/□)

Ød (mm)	□ (mm)	ER16GB (approx. 0.03kgs/pc)				ER20GB (approx. 0.04kgs/pc)				ER25GB (approx. 0.07kgs/pc)			
		JIS	ISO	DIN371	DIN376	JIS	ISO	DIN371	DIN376	JIS	ISO	DIN371	DIN376
4	3			M3.5			M3.5						
4	3.2	M3				M3							
4.5	3.4			M4	M6			M4	M6			M4	M6
5	4	M4	M5			M4	M5			M4	M5		
5.5	4.5	M5				M5				M5			
6	4.5	M6, W1/4				M6, W1/4				M6, W1/4			
6	4.9			M5, M6	M8			M5, M6	M8			M5, M6	M8
6.1	5	W5/16				W5/16				W5/16			
6.2	5	M8				M8				M8			
7	5.5	M10, W3/8		M7	M10	M10, W3/8		M7	M10	M10, W3/8		M7	M10
8	6	W7/16, PT1/8											
8	6.2			M8	M11			M8	M11			M8	M11
8.5	6.5	M12				M12				M12			
9	7.1						M12				M12		
10	8						M10	M10			M10	M10	
10.5	8									M14			
11	9												M14
12	9									W5/8			M16
12.5	10									M16	M16		

Ød (mm)	□ (mm)	ER32GB (approx. 0.15kgs/pc)				ER40GB (approx. 0.27kgs/pc)			
		JIS	ISO	DIN371	DIN376	JIS	ISO	DIN371	DIN376
4.5	3.4			M4	M6				
5	4	M4	M5						
5.5	4.5	M5							
6	4.5	M6, W1/4				M6, W1/4			
6	4.9			M5, M6				M5, M6	
6.1	5	W5/16				W5/16			
6.2	5	M8				M8			
7	5.5	M10, W3/8		M7	M10	M10, W3/8		M7	M10
8	6								
8	6.2			M8	M11			M8	M11
8.5	6.5	M12				M12			
9	7.1		M12				M12		
10	8		M10	M10			M10	M10	
10.5	8	M14				M14			
11	9				M14				M14
12	9	W5/8			M16	W5/8			M16
12.5	10	M16	M16			M16	M16		
14	11	M18, W3/4, PT3/8			M18	M18, W3/4, PT3/8			M18
15	12	M20				M20			
16	12				M20				M20
17	13	M22, W7/8				M22, W7/8			
18	14.5								M22, M24
19	15					M24			
20	15					M27, W1, PT5/8			
20	16						M27, M30		M27
22	18								M30

Spring Collet Set

彈性筒夾組



ER11

Model No.	Specification	PCS/SET	Weight (kg)
ER11-07PCS	1,2,3,4,5,6,7	7PCS/SET	0.30
ER11-13PCS	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7	13PCS/SET	0.40

Unit: mm

ER16

Model No.	Specification	PCS/SET	Weight (kg)
ER16-08PCS	3,4,5,6,7,8,9,10	8PCS/SET	0.50
ER16-10PCS	1,2,3,4,5,6,7,8,9,10	10PCS/SET	0.70
ER16-CL-07PCS	4,5,6,7,8,9,10	7PCS/SET	0.50

Unit: mm

ER20

Model No.	Specification	PCS/SET	Weight (kg)
ER20-10PCS	4,5,6,7,8,9,10,11,12,13	10PCS/SET	0.70
ER20-12PCS	2,3,4,5,6,7,8,9,10,11,12,13	12PCS/SET	0.80
ER20-CL-10PCS	4,5,6,7,8,9,10,11,12,13	10PCS/SET	0.70

Unit: mm

ER25

Model No.	Specification	PCS/SET	Weight (kg)
ER25-07PCS	4,6,8,10,12,14,16	7PCS/SET	1.20
ER25-15PCS	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16	15PCS/SET	1.70
ER25-CL-13PCS	4,5,6,7,8,9,10,11,12,13,14,15,16	13PCS/SET	1.70

Unit: mm



ER32

Model No.	Specification	PCS/SET	Weight (kg)
ER32-06PCS	6,8,10,12,16,20	6PCS/SET	1.60
ER32-11PCS	4,5,6,8,10,12,13,15,16,18,20	11PCS/SET	2.20
ER32-18PCS	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	18PCS/SET	3.10
ER32-CL-17PCS	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	17PCS/SET	3.00

Unit: mm

ER40

Model No.	Specification	PCS/SET	Weight (kg)
ER40-07PCS	6,8,10,12,16,20,25	7PCS/SET	2.50
ER40-15PCS	4,5,6,8,10,12,13,15,16,18,20,21,22,25,26	15PCS/SET	4.30
ER40-23PCS	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	23PCS/SET	6.20
ER40-CL-23PCS	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	23PCS/SET	6.20

Unit: mm

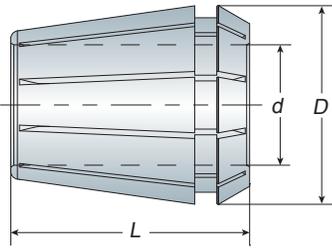
Spring Collet

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

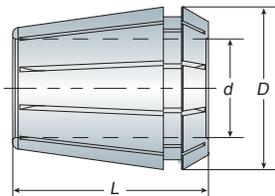
ER08		ER11		ER16		ER20		ER25		ER32		ER40		ER50	
No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range
ER08-01	1.0	ER11-01	1.0	ER16-01	1.0~0.5	ER20-01	1.0~0.5	ER25-02	2.0~1.0	ER32-02	2.0~1.0	ER40-03	3.0~2.0	ER50-12	12~10
ER08-1.5	1.5	ER11-1.5	1.5	ER16-1.5	1.5~1.0	ER20-1.5	1.5~1.0	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

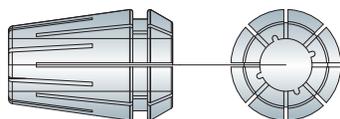
Model No.	D	L	d	Weight (kg)
ER16-CL	17	27	4,5,6,7,8,9,10	0.03
ER20-CL	21	31	4,5,6,7,8,9,10,11,12,13	0.04
ER25-CL	26	35	4,5,6,7,8,9,10,11,12,13,14,15,16	0.07
ER32-CL	33	40	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	0.15
ER40-CL	41	46	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	0.27

Unit: mm

ER-JCL

Collet - Jet Coolant Type

噴射型筒夾



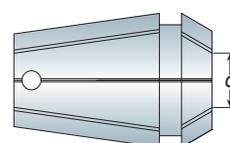
- Maximum water pressure: 21kgf/cm²
- 最大水壓可達 21kgf/cm²

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)

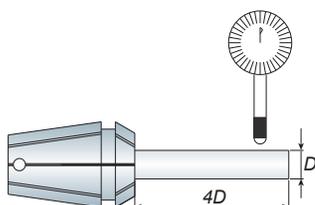
Model No.	d
ER25E-03	3
ER25E-04	4
ER25E-05	5
ER25E-06	6
ER25E-08	8
ER25E-10	10
ER25E-12	12
ER25E-14	14
ER25E-16	16

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	≤ 10μ
AA 級	≤ 5μ