COUPLING

NITTO KOHKI Made in Japan

NITTO KOHKI

COUPLING

AIR COUPLING ข้อต่อลม

Hi Cupla A5
Hi Cupla 200 ..... A6
Nut Cupla / Nut Cupla 200 ..... A7
Purge Hi Cupla A8
Hi Cupla Ace A9
Rotary Plug A10
Micro Cupla A11
Super Cupla A13

LINE COUPLING ข้อต่อหลายทาง

Rotary Line Cupla A15
Line Cupla A16

COOLING WATER COUPLING ข้อต่องานหล่อเย็น

Mold Cupla A17
Flow Meter A18
Flow Monitor A18
TSP Cupla A19
SP Cupla Type A A21
Zerospill Cupla A22

COUPLING FOR HOME APPLIANCE ข้อต่องานเครื่องใช้ไฟฟ้า

PCV Pipe Cupla A23
SP-V Cupla A24

HYDRAULIC COUPLING ข้อต่องานไฮดรอลิก

HSP Cupla A25
HSP-DC Cupla A26
210 Cupla A26
280 Cupla A27
350 Cupla A27
Flat Face Cupla F35 / FF A28
450B Cupla A29
700R Cupla A29

WELDING COUPLING ข้อต่องานเชื่อม

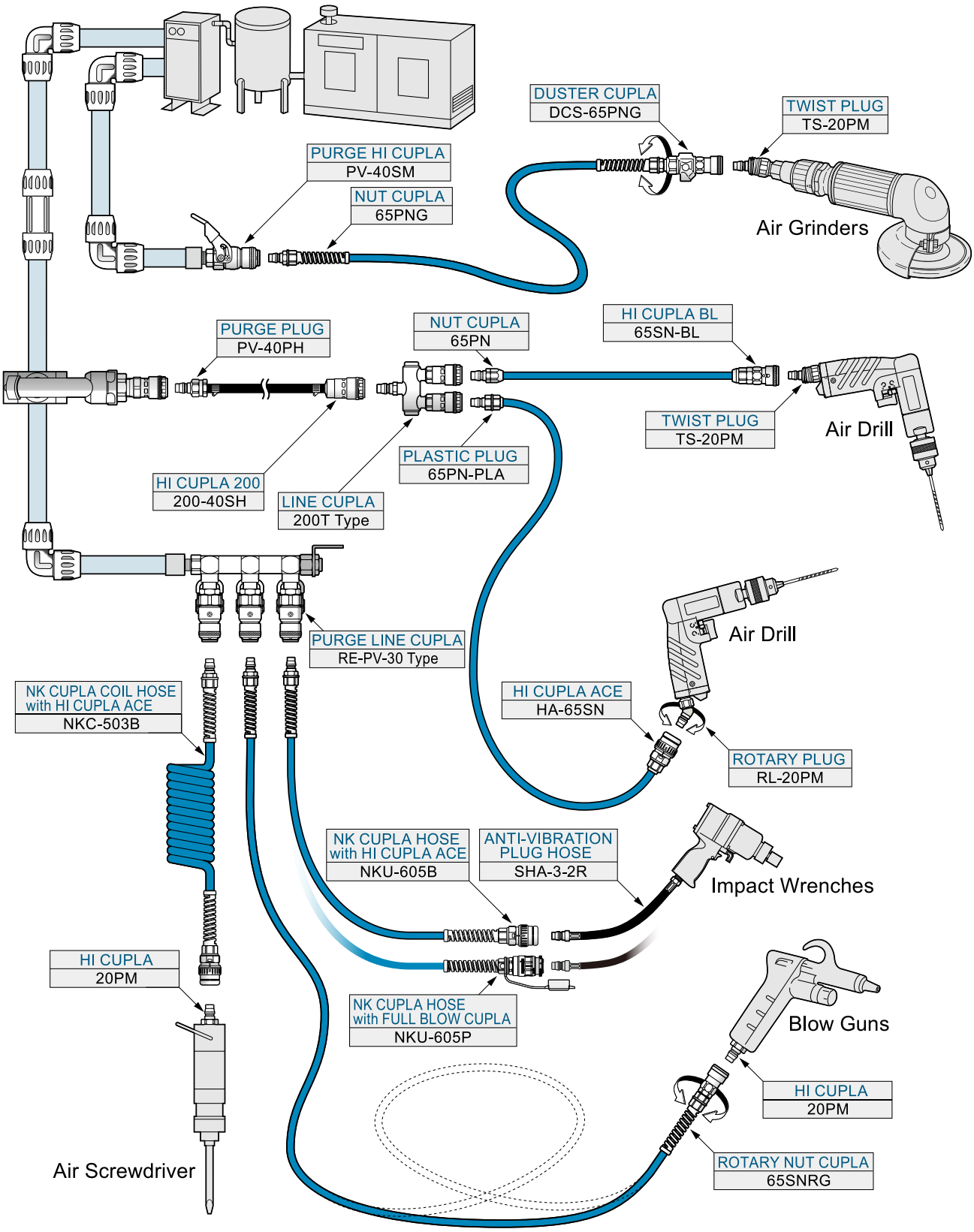
Mini Cupla A30

MULTI COUPLING ข้อต่อหลายพอร์ต

Multi Cupla MAM Type A31
Multi Cupla MAM-A / MAM-B A32

OTHER COUPLING

Lever Lock Cupla A33


DUSTER CUPLA
DCS-65PNG
TWIST PLUG
TS-20PM
PURGE HI CUPLA
PV-40SM
NUT CUPLA
65PNG
Air Grinders
PURGE PLUG
PV-40PH
NUT CUPLA
65PN
HI CUPLA BL
65SN-BL
TWIST PLUG
TS-20PM
Air Drill
PLASTIC PLUG
65PN-PLA
HI CUPLA 200
200-40SH
LINE CUPLA
200T Type
PURGE LINE CUPLA
RE-PV-30 Type
Air Drill
NK CUPLA COIL HOSE
with HI CUPLA ACE
NKC-503B
HI CUPLA ACE
HA-65SN
ROTARY PLUG
RL-20PM
NK CUPLA HOSE
with HI CUPLA ACE
NKU-605B
ANTI-VIBRATION
PLUG HOSE
SHA-3-2R
Impact Wrenches
HI CUPLA
20PM
NK CUPLA HOSE
with FULL BLOW CUPLA
NKU-605P
Blow Guns
HI CUPLA
20PM
ROTARY NUT CUPLA
65SNRG
Air Screwdriver

Following plugs and sockets can be connected with each other

Plug		
Type	**Model**	
HI CUPLA	17PH, 20PH, 30PH,40PH	
	10PM,20PM,30PM,40PM	
	20PF,30PF,40PF	
	20PFF	
	60PC,80PC,100C	
	90PN-BH	
NUT CUPLA	50PN,(10PAH), 60PN (20PAH), 65PN	
	80PN (30PAH), 85PN, 110PN (40PAH)	
	50PNG, 65PNG, 85PNG	
HI CUPLA ACE	20PH-PLA, 30PH-PLA	
	20PM-PLA, 30PM-PLA	
	50PN-PLA, 60PN-PLA, 65PN-PLA, 80PN-PLA, 85PN-PLA	
	20PFF-PLA	
	50PNG-PLA, 65PNG-PLA, 85PNG-PLA	
ROTARY PLUG	RL-20PM, RL-30PM	
	RL-20PFF	
TWIST PLUG	TS-10PM, TS-20PM, TS-30PM	
	TS-20PFF	
PURGE PLUG	PV-20PH, PV-30PH, PV-40PH	
	PV-65PN, PV-85PN	
ANTI-VIBRATION PLUG HOSE	SHA-3-2R, SHA-3-3R	
NK CUPLA HOSE with HI CUPLA ACE	NKU-605B, NKU-610B, NKU-620B	(65PNG)
	NKU-810B, NKU-820B	(85PNG)
NK CUPLA HOSE with FULL BLOW CUPLA	NKU-605P, NKU-610P	(65PNG)
	NKU-810P	(85PNG)
NK CUPLA COIL HOSE with HI CUPLA ACE	NKC-503B, NKC-505B	(50PNG)
	NKC-603B, NKC-605B	(65PNG)
ROTARY LINE CUPLA	RT Type (Inlet Port)	
LINE CUPLA 200	200T Type (Inlet Port)	
ROTARY FULL BLOW LINE CUPLA	FBH-RT Type (Inlet Port)	
HI CUPLA ACE T Type	HA-T Type (Inlet Port)	
ACCESSORIES FOR AIR LINES	DC-30PF, PG-10P	
SUPER CUPLA	02S20P (End Configuration)	

Can be connected with each other

Socket		
Model		**Type**
17SH, 20SH, 30SH, 40SH		HI CUPLA
10SM, 20SM, 30SM, 40SM		
20SF, 30SF, 40SF		
90SN-BH		
20SH-BL, 30SH-BL, 40SH-BL		HI CUPLA BL
20SM-BL, 30SM-BL, 40SM-BL		
20SF-BL, 30SF-BL, 40SF-BL		
65SN-BL, 80SN-BL, 85SN-BL		
TW2OSH, TW30SH, TW40SH		HI CUPLA TW TYPE
TW20SM, TW30SM, TW40SM		
TW20SF, TW30SF, TW40SF		
200-17SH, 200-20SH, 200-30SH, 200-40SH		HI CUPLA 200
200-20SM, 200-30SM, 200-40SM		
200-20SF, 200-30SF, 200-40SF		
200-60SC, 200-80SC, 200-100SC		
FBH-20SH, FBH-30SH, FBH-40SH		FULL BLOW CUPLA
FBH-20SM, FBH-30SM, FBH-40SM		
FBH-20SF, FBH-30SF, FBH-40SF		
FBH-65SN, FBH-80SN, FBH-85SN, FBH-110SN		
50SN (10SAH), 60SN (20SAH), 65SN		NUT CUPLA
80SN (30SAH), 85SN, 110SN(40SAH)		
200-50SN, 200-60SN, 200-65SN, 200-80SN		NUT CUPLA 200
200-85SN, 200-110SN		
200-50SNG, 200-65SNG, 200-85SNG		
65SNR, 85SNR		ROTARY NUT CUPLA
65SNRG, 85SNRG		
DCS-20PH, DCS-30PH, DCS-40PH		DUSTER CUPLA
DCS-65PNG, DCS-85PNG		
L200-20SH, L200-30SH, L200-40SH		LOCK CUPLA 200
L200-20SM, L200-30SM, L200-40SM		
L200-20SF, L200-30SF, L200-40SF		
L200-65SNRG, L200-85SNRG		
PV-20SM, PV-30SM, PV-40SM		PURGE HI CUPLA
RE-PV-30 Type (Outlet Port)		PURGE LINE CUPLA
RT Type (Outlet Port), RE Type (Outlet Port)		ROTARY LINE CUPLA
200T Type (Outlet Port), 200L Type (Outlet Port)		LINE CUPLA 200
200S Type (Outlet Port)		
FBH-RE Type (Outlet Port), FBH-RT Type (Outlet Port)		ROTARY FULL BLOW LINE CUPLA
HA-20SH, HA-30SH		HI CUPLA ACE
HA-20SM, HA-30SM, HA-50SN, HA-60SN		
HA-65SN, HA-80SN, HA-85SN		
HA-T Type (Outlet Port)		
HA-50SNG, HA-65SNG, HA-85SNG		
NKU-605B, NKU-610B, NKU-620B	(HA-65SNG)	NK CUPLA HOSE with HI CUPLA ACE
NKU-810B, NKU-820B	(HA-85SNG)	
NKU-605P, NKU-610P	(FBH-65SNG)	NK CUPLA HOSE with FULL BLOW CUPLA
NKU-810P	(FBH-85SNG)	
NKC-503B, NKC-505B	(HA-50SNG)	NK CUPLA COIL HOSE with HI CUPLA ACE
NKC-603B, NKC-605B	(HA-65SNG)	

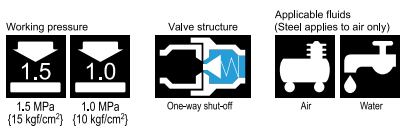
Not interchangeable

Plug	
Type	**Model**
HI CUPLA	400PH, 600PH, 800PH
	400PM, 600PM, 800PM
	400PF, 600PF, 800PF
LINE CUPLA 200	200L Type (Inlet Port)
	200S Type (Inlet Port)

Can be connected with each other

Socket	
Model	**Type**
400SH, 600SH, 800SH	HI CUPLA
400SM, 600SM, 800SM	
400SF, 600SF, 800SF	
PV-400SM, PV-600SM	PURGE HI CUPLA
PVR-400SH, PVR-600SH, PVR-800SH	PURGE HI CUPLA PVR Type
PVR-400SM, PVR-600SM, PVR-800SM	
PVR-400SF, PVR-600SF, PVR-800SF	

HI CUPLA

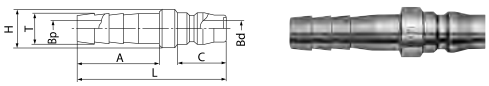


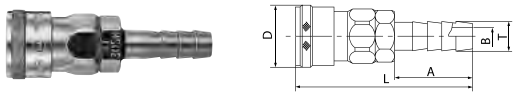
- วัสดุให้เลือก : เหล็ก ทองเหลือง และสแตนเลส
- สามารถใช้ได้ในทุกงานอุตสาหกรรม
- ข้อต่อสวมเร็วที่เป็นเหล็ก ผลิตด้วยกรรมวิธี Heat-treated เพิ่มความแข็งแรงและทนทาน สามารถใช้งานได้ยาวนาน

- Above specifications apply only to CUPLA. Maximum working pressure and working temperature range may vary depending on tube materials you use with and the working temperature.
*1: When connecting an extremely soft tube such as soft polyurethane or soft nylon,attach the insert ring specified by the tube manufacturer to the inner diameter of the tube to be connected.
*2: The operable temperature range depends on the operating conditions.

Body material		Steel (Chrome plated)	Brass	Stainless steel (SUS 304)
Size	Thread and hose barb	Thread and hose barb 1/8" to 1", 1/4" to 1" hose		
	Tube barb (Tube fitter) *1	Polyurethane tube : Outer dia. ø6 ± 0.1, ø8 ± 0.15, ø10 ± 0.15 Polyamide tube : Outer dia. ø6 $^{+0.05}_{-0.08}$, ø8 $^{+0.05}_{-0.1}$, ø10 $^{+0.05}_{-0.1}$ Fluorine contained resin tube : Outer dia. ø6 ± 0.07, ø8 ± 0.07, ø10 ± 0.07		
Working pressure	MPa	1.5	1.0	1.5
	kgf/cm²	15	10	15
	bar	15	10	15
	PSI	218	145	218

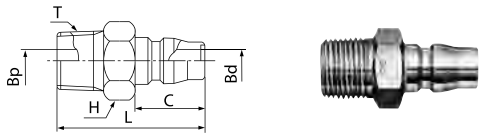
Seal material Working temperature range*2	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	

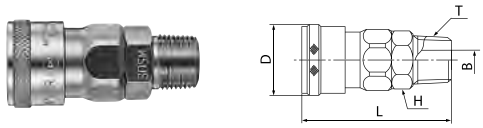




Plug	PH type (Hose barb)										
Model	Application (Hose)	Body material • Mass (g)			Dimensions (mm)						
		Steel	Brass	Stainless steel	L	ØH	A	C	ØT	ØBp	ØBd
17PH	1/4"	24	-	-	54	16	27	20	7.2	4.5	7.5
20PH	1/4"	28	31	27	57	16	30	20	9	5	7.5
30PH	3/8"	32	34	33	61	16	34	20	11.3	7.5	7.5
40PH	1/2"	59	64	60	63	20	36	20	15	9	7.5
400PH	1/2"	65	71	66	66	22	36	23	15	9	13
600PH	3/4"	123	130	124	77	30	45	23	21	13	13
800PH	1"	151	161	151	85	34	54	23	27	20	13

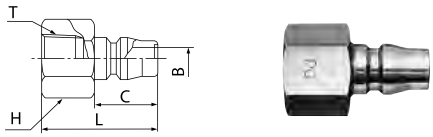
Socket	SH type (Hose barb)								
Model	Application (Hose)	Body material • Mass (g)			Dimensions (mm)				
		Steel	Brass	Stainless steel	L	ØD	A	ØT	ØB
17SH	1/4"	99	-	-	(69.5)	(26.5)	27	7.2	4.5
20SH	1/4"	99	105	97	(72.5)	(26.5) *1	30	9	5
30SH	3/8"	102	107	100	(76.5)	(26.5) *1	34	11.3	7.5
40SH	1/2"	115	122	113	(78.5)	(26.5) *1	36	15	9
400SH	1/2"	220	235	230	(83)	35	36	15	9
600SH	3/4"	243	262	242	(92)	35	45	21	14
800SH	1"	327	350	325	(102)	35	55	27	16

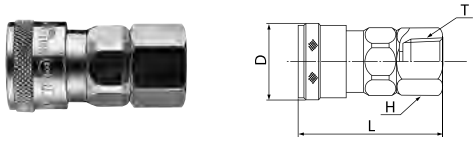




Plug	PM type (Male thread)									
Model	Application (Thread)	Body material • Mass (g)			Dimensions (mm)					
		Steel	Brass	Stainless steel	L	H(WAF)	C	T	ØBp	ØBd
10PM	Rc 1/8	22	24	-	37	Hex.14	20	R 1/8	4	7.5
20PM	Rc 1/4	25	27	26	41	Hex.14	20	R 1/4	7.5	7.5
30PM	Rc 3/8	40	43	41	42	Hex.19 *3	20	R 3/8	7.5	7.5
40PM	Rc 1/2	60	65	60	46	Hex.22	20	R 1/2	12	7.5
400PM	Rc 1/2	70	73	69	50	Hex.22	23	R 1/2	13	13
600PM	Rc 3/4	113	121	114	55	Hex.32	23	R 3/4	19	13
800PM	Rc 1	182	196	183	63	Hex.35	23	R 1	22	13

Socket	SM type (Male thread)								
Model	Application (Thread)	Body material • Mass (g)			Dimensions (mm)				
		Steel	Brass	Stainless steel	L	ØD	H(WAF)	T	ØB
10SM	Rc 1/8	97	-	-	(52.5)	(26.5)	Hex.19	R 1/8	5
20SM	Rc 1/4	97	103	96	(55.5)	(26.5) *1	Hex.19	R 1/4	7
30SM	Rc 3/8	104	108	100	(56.5)	(26.5) *1	Hex.19	R 3/8	8 *4
40SM	Rc 1/2	127	135	126	(59.5)	(26.5) *1	Hex.23 *2	R 1/2	9
400SM	Rc 1/2	210	224	212	(63)	35	Hex.29	R 1/2	13
600SM	Rc 3/4	242	259	243	(67)	35	Hex.32	R 3/4	16
800SM	Rc 1	329	353	328	(72)	35	Hex.36	R 1	16





Plug	PF type (Female thread)							
Model	Application (Thread)	Body material • Mass (g)			Dimensions (mm)			
		Steel	Brass	Stainless steel	L	H(WAF)	C	T	ØB
20PF	R 1/4	28	31	29	36	Hex.17	20	Rc 1/4	7.5
30PF	R 3/8	35	41	38	37	Hex.21	20	Rc 3/8	7.5
40PF	R 1/2	69	76	70	38	Hex.29	20	Rc 1/2	7.5
400PF	R 1/2	82	86	81	41	Hex.29	23	Rc 1/2	13
600PF	R 3/4	115	124	115	45	Hex.35	23	Rc 3/4	13
800PF	R 1	189	207	190	54	Hex.41	23	Rc 1	13

Socket	SF type (Female thread)							
Model	Application (Thread)	Body material • Mass (g)			Dimensions (mm)			
		Steel	Brass	Stainless steel	L	ØD	H(WAF)	T
20SF	R 1/4	97	101	94	(49.5)	(26.5) *1	Hex.19	Rc 1/4
30SF	R 3/8	98	103	95	(50.5)	(26.5) *1	Hex.21	Rc 3/8
40SF	R 1/2	136	146	138	(52.5)	(26.5) *1	Hex.29	Rc 1/2
400SF	R 1/2	216	233	215	(57)	35	Hex.29	Rc 1/2
600SF	R 3/4	259	277	257	(61)	35	Hex.35	Rc 3/4
800SF	R 1	327	361	327	(68)	35	Hex.41	Rc 1

*Above pictures are plugs and sockets of steel 20, 30 and 40 models.
*1 : D = 25.4 for brass and stainless steel models.
*2 : H = Hex. 22 for brass and stainless steel models.
*3 : H = Hex. 17 for brass and stainless steel models.
*4 : B = 9 for brass and stainless steel models.

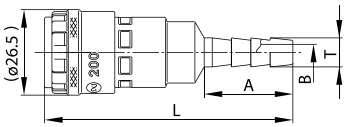
HI CUPLA 200

Working pressure: 1.5 MPa {15 kgf/cm²}
Valve structure: One-way shut-off
Applicable fluids: Air

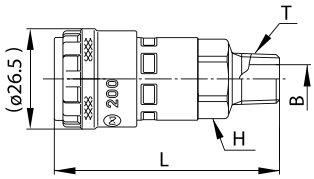
- วัสดุเหล็ก
- สามารถใช้ได้ในทุกอุตสาหกรรมงานลม (Pneumatic)
- สวมต่อจังหวะเดียว (One Touch) เชื่อมต่อง่าย และรวดเร็ว
- ลดการสูญเสียแรงดัน และเพิ่มอัตราการไหลสูงขึ้น 15% เมื่อเทียบกับข้อต่อทั่วไป
- ซีลป้องกันการรั่วซึมแบบปิดผนึกด้านหน้าขณะสวมต่อ ช่วยป้องกันการรั่วซึม และลดความเสียหายของโอริง ได้ดีกว่าการซีลด้านข้าง

- Above specifications apply only to CUPLA. Maximum working pressure and working temperature range may vary depending on tube materials you use with and the working temperature.
*1: When connecting an extremely soft tube such as soft polyurethane or soft nylon, attach the insert ring specified by the tube manufacturer to the inner diameter of the tube to be connected.
*2: The operable temperature range depends on the operating conditions.

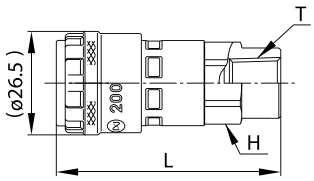
Body material		Steel (Chrome plated)			
Size	Thread and hose barb	1/4", 3/8", 1/2"			
	Tube barb (Tube fitter) *1	Polyurethane tube : Outer Dia. Ø6±0.1, Ø8±0.15, Ø10±0.15 Polyamide tube : Outer Dia. Ø6 $^{+0.05}_{-0.08}$, Ø8 $^{+0.05}_{-0.1}$, Ø10 $^{+0.05}_{-0.1}$ Fluorine contained resin tube : Outer Dia. Ø6±0.07, Ø8±0.07, Ø10±0.07			
Working pressure	MPa	1.5			
	kgf/cm²	15			
	bar	15			
	PSI	218			
Seal material Working temperature range *2	Seal material	Mark	Working temperature range	Remarks	
	Nitrile rubber	NBR	-20°C to +60°C	Standard material	



Socket	SH type (Hose barb)					
Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			L	A	ØT	ØB
200-17SH	1/4"	86	(77)	27	7.2	4.5
200-20SH	1/4"	90	(77)	27.5	9	5
200-30SH	3/8"	92	(79)	32	11.3	7.5
200-40SH	1/2"	104	(79.5)	32	15	10

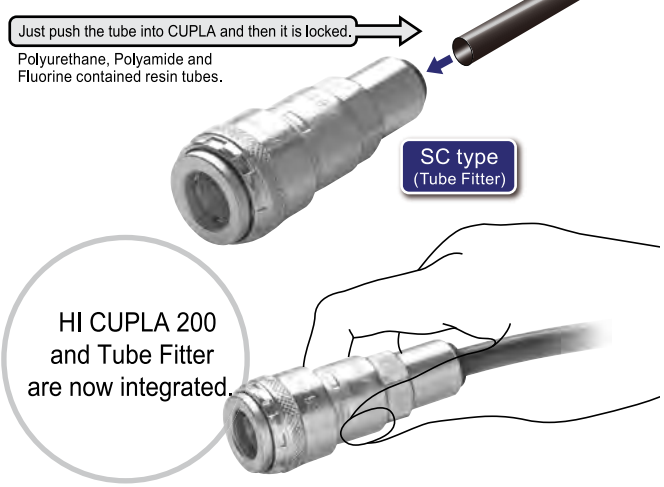


Socket	SM type (Male thread)					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	H(WAF)	T	ØB
200-20SM	Rc 1/4	89	(60)	Hex.19	R 1/4	7.5
200-30SM	Rc 3/8	91	(60.5)	Hex.19	R 3/8	10
200-40SM	Rc 1/2	102	(56)	Hex.24	R 1/2	13



Socket	SF type (Female thread)				
Model	Application (Thread)	Mass (g)	Dimensions (mm)		
			L	H(WAF)	T
200-20SF	R 1/4	94	(57.5)	Hex.19	Rc 1/4
200-30SF	R 3/8	103	(55.5)	Hex.22	Rc 3/8
200-40SF	R 1/2	138	(57.5)	Hex.29	Rc 1/2

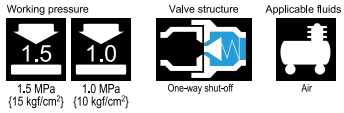
Socket and tube can be connected in one push-to-connect operation.



Major applications: miniature pneumatic equipment, automatic control equipment, physicochemical equipment and medical devices.

Just push in for quick connection.

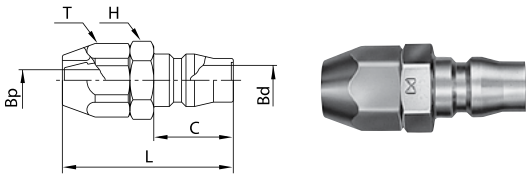
NUT CUPLA / NUT CUPLA 200

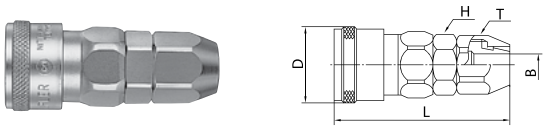


- วัสดุเหล็ก
- สามารถเชื่อมต่อกับสายลมโดยไม่ต้องใช้เข็มขัดรัดสาย
- มีคอยล์สปริงพลาสติกหุ้มในจุดที่เชื่อมต่อกับสาย เพื่อป้องกันการหักงอของสายขณะใช้งาน
- สามารถสวมต่อกับรุ่น Hi cupla Hi cupla 200 และ Rotary

Body material	Steel (Chrome plated), Stainless Steel (SUS304)			
Urethane hose size	For Ø5 mm x Ø8 mm, Ø6 mm x Ø9 mm hose For Ø6.5 mm x Ø10 mm, Ø8 mm x Ø12 mm hose For Ø8.5 mm x Ø12.5 mm, Ø11 mm x Ø16 mm hose			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	1.5	15	15	218
Seal material Working temperature range*1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +60°C	Standard material

*1: The operable temperature range depends on the operating conditions.



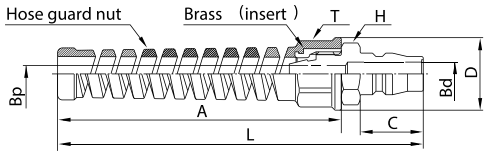


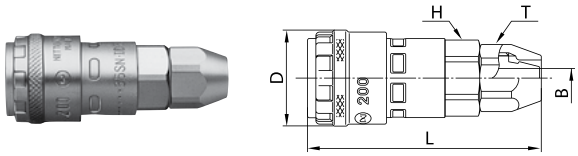
Grease is applied to the threaded part of stainless steel nut to prevent galling.

Plug	PN type (NUT CUPLA for urethane hose connection)								
Model	Application (Hose)	Body material • Mass (g)		Dimensions (mm)					
		Steel	Stainless steel	L	C	ØBp	ØBd	H(WAF)	T(WAF)
50PN	Ø5 x Ø8	30	-	(43)	20	4.5	7.5	Hex.17	Hex.17
60PN	Ø6 x Ø9	40	-	(43)	20	5.3	7.5	Hex.17	Hex.17
65PN	Ø6.5 x Ø10	42	43	(43)	20	5.3	7.5	Hex.17	Hex.17
80PN	Ø8 x Ø12	50	52	(45)	20	7.5	7.5	Hex.19	Hex.19
85PN	Ø8.5 x Ø12.5	52	53	(45)	20	7.5	7.5	Hex.19	Hex.19
110PN	Ø11 x Ø16	75	-	(52)	20	7.5	7.5	Hex.23	Hex.24

Grease is applied to the threaded part of stainless steel nut to prevent galling.

Socket	SN type (NUT CUPLA for urethane hose connection)							
Model	Application (Hose)	Body material •Mass (g)		Dimensions (mm)				
		Steel	Stainless steel	L	ØD	ØB	H(WAF)	T(WAF)
50SN	Ø5 x Ø8	117	-	(60)	(26.5)	4.5	Hex.19	Hex.17
60SN	Ø6 x Ø9	115	-	(59.5)	(26.5)	5.3	Hex.19	Hex.17
65SN	Ø6.5 x Ø10	115	110	(59.5)	(26.5) *3	5.3	Hex.19	Hex.17
80SN	Ø8 x Ø12	120	114	(61.5)	(26.5) *3	7.5	Hex.19	Hex.19
85SN	Ø8.5 x Ø12.5	120	115	(61.5)	(26.5) *3	7.5	Hex.19	Hex.19
110SN	Ø11 x Ø16	153	-	(64.5)	(26.5)	10	Hex.23	Hex.24

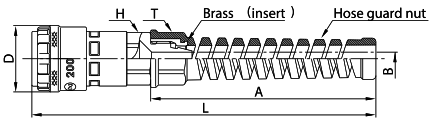




Plug	PNG type (For urethane hose with hose guard nut connection)									
Model	Application (Hose)	Mass (g)	Dimensions (mm)							
			L	C	A	ØD	ØBp	ØBd	H(WAF)	T(WAF)
50PNG*4	Ø5 x Ø8	41	(116)	20	90	23	4.5	7.5	Hex.17	Hex.19
65PNG	Ø6.5 x Ø10	43	(116)	20	90	23	5.3	7.5	Hex.17	Hex.19
85PNG	Ø8.5 x Ø12.5	55	(116)	20	90	26	7.5	7.5	Hex.19	Hex.22

The pictures of HI CUPLA for connection to braided hoses and PN type and SN type of NUT CUPLA show steel bodies.
*1 Braided hoses for HI CUPLA for Connection to Braided Hoses should be made of soft PVC and woven by reinforcement thread.
*3: Stainless steel: øD=25.4
*4: Made-to-order item

Socket	SN type (NUT CUPLA 200 for urethane hose connection)						
Model	Application (Hose)	Mass (g)	Dimensions (mm)				
			L	ØD	ØB	H(WAF)	T(WAF)
200-50SN	Ø5 x Ø8	105	(64.5)	(26.5)	4.5	Hex.19	Hex.17
200-60SN	Ø6 x Ø9	105	(64.5)	(26.5)	5.3	Hex.19	Hex.17
200-65SN	Ø6.5 x Ø10	106	(64.5)	(26.5)	5.3	Hex.19	Hex.17
200-80SN	Ø8 x Ø12	112	(66.5)	(26.5)	7.5	Hex.19	Hex.19
200-85SN	Ø8.5 x Ø12.5	113	(66.5)	(26.5)	7.5	Hex.19	Hex.19
200-110SN	Ø11 x Ø16	127	(62)	(26.5)	10	Hex.23	Hex.24



Socket	SNG type (For urethane hose with hose guard nut connection							
Model	Application (Hose)	Mass (g)	Dimensions (mm)					
			L	A	ØD	ØB	H(WAF)	T(WAF)
200-50SNG*4	Ø5 x Ø8	105	(137.5)	90	(26.5)	4.5	Hex.19	Hex.19
200-65SNG	Ø6.5 x Ø10	107	(137.5)	90	(26.5)	5.3	Hex.19	Hex.19
200-85SNG	Ø8.5 x Ø12.5	116	(137.5)	90	(26.5)	7.5	Hex.19	Hex.22

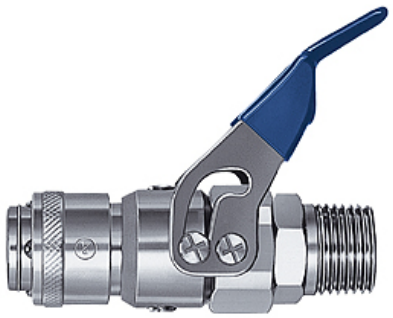
PURGE HI CUPLA

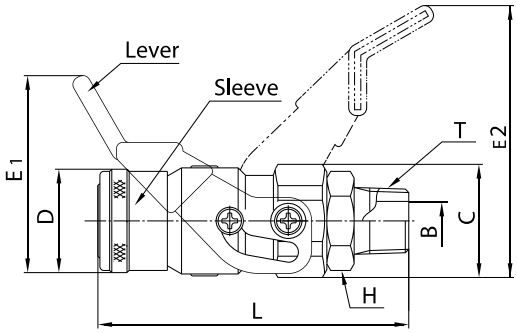
Working pressure: 1.0 MPa {10 kgf/cm²}
Valve structure: One-way shut-off
Applicable fluid: Air

- มีระบบ Push-to-Connect เพื่อลดแรงดันที่ค้างอยู่ภายในจึงง่ายต่อการสวมต่อ และไม่เกิดแรงสะบัดเมื่อถอดข้อต่อ
- สามารถควบคุมการเปิด – ปิดวาล์วด้วยคันโยกแม้ขณะข้อต่อกำลังถูกใช้งาน
- ตัววาล์วและคันโยกจะไม่ทำงานหากไม่ได้สวมต่อเข้ากับ Plug เพื่อความปลอดภัยในการใช้งาน

Body material	Brass (Chorme plated)			
Size (Thread)	1/4", 3/8", 1/2", 3/4"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	1.0	10	10	145
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +60°C	Standard material

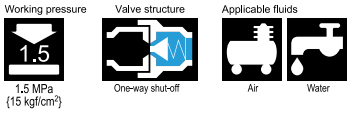
*1: The operable temperature range depends on the operating conditions.





Socket	PURGE HI CUPLA									
Model	Application (Thread)	Mass (g)	Dimensions (mm)							
			L	ØD	E1	E2	H(WAF)	ØC	T	ØB
PV-20SM	Rc 1/4	225	(79)	26.5	(50.5)	(70)	Hex.22	29	R 1/4	7
PV-30SM	Rc 3/8	229	(80)	26.5	(50.5)	(70)	Hex.22	29	R 3/8	10
PV-40SM	Rc 1/2	235	(82)	26.5	(50.5)	(70)	Hex.22	29	R 1/2	14
PV-400SM	Rc 1/2	411	(94)	35	(61.5)	(82)	Hex.30	37.5	R 1/2	13
PV-600SM	Rc 3/4	424	(97)	35	(61.5)	(82)	Hex.30	37.5	R 3/4	18

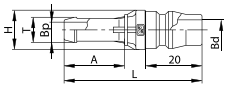
HI CUPLA ACE

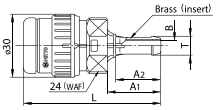


- วัสดุ Engineering Plastic ป้องกันการเกิดรอยจากการกระแทกกับชิ้นงาน
- สวมต่อจังหวะเดียว (One Touch) เชื่อมต่อง่าย และรวดเร็ว
- มีระบบ Sleeve Lock เพิ่มความปลอดภัย ป้องกันปัญหาข้อต่อหลุดขณะใช้งาน
- น้ำหนักเบาเพียง 1 ใน 4 และทนต่อแรงดันได้ดีเทียบเท่ากับข้อต่อสวมเร็วที่เป็นเหล็ก
- Plug และ Socket มีคอยล์สปริงพลาสติกหุ้มในจุดที่เชื่อมต่อกับสาย เพื่อป้องกันการหักงอของสายขณะใช้งาน
- สามารถใช้ได้ทั้งงานลม และงานน้ำ

Body material		Engineering plastics (PBT, POM)			
Size	Thread and hose barb	1/4" , 3/8", 1/4" 3/8"			
	PN type, SN type (PNG type, SNG type)	For Ø5 mm x Ø8mm, Ø6 mm x Ø9 mm, Ø6.5mm x Ø10 mm,Ø8 mm x Ø12 mm, Ø8.5 mm x Ø12.5 mm polyurethane hose			
	T type	HA-T type • Inlet : 20P-PLA •Outlet : HA-65S			
Working pressure	MPa	1.5	1.0 for plastic plug and Model HA-T		
	kgf/cm²	15	10 for plastic plug and Model HA-T		
	bar	15	10 for plastic plug and Model HA-T		
	PSI	218	145 for plastic plug and Model HA-T		
Seal material Working temperature range*1	Seal material	Mark	Working temperature range	Remarks	
	Nitrile rubber	NBR	-20°C to +60°C	Standard material	

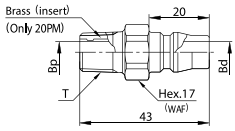
*1: The operable temperature range depends on the operating conditions

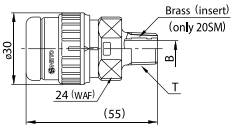




Plug	PH type (Plastic plug / Hose barb)							
Model	Application (Hose)	Mass (g)	Dimensions (mm)					
			L	ØH	A	ØT	ØBp	ØBd
20PH-PLA	1/4"	3	49	14	21.5	9	5.5	7
30PH-PLA	3/8"	4	52	16	23.5	11.5	7.5	7

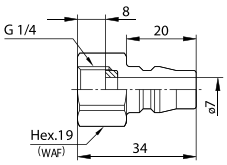
Socket	SH type (Hose barb)						
Model	Application (Hose)	Mass (g)	Dimensions (mm)				
			L	A1	A2	ØT	ØB
HA-20SH	1/4"	26	(65.5)	25.5	21.5	9	5
HA-30SH	3/8"	28	(68)	28	23.5	11.5	7



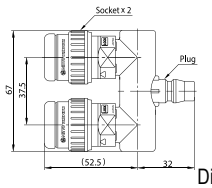


Plug	PM type (Plastic plug / Male thread)				
Model	Application (Thread)	Mass (g)	Dimensions (mm)		
			T	ØBp	ØBd
20PM-PLA	R 1/4	8	R 1/4	7.1	7.4
30PM-PLA	R 3/8	6	R 3/8	10	7.4

Socket	SM type (Male thread)			
Model	Application (Thread)	Mass (g)	Dimensions (mm)	
			T	ØB
HA-20SM	Rc 1/4	27	R 1/4	7.1
HA-30SM	Rc 3/8	26	R 3/8	8



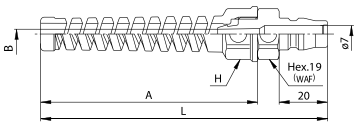
Dimensions (mm)

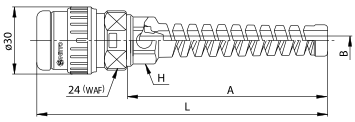


Dimensions (mm)

Plug	PFF type (Plastic plug / Parallel female thread)	
Model	Application (Thread)	Mass (g)
20PFF-PLA	G 1/4	6

Socket	T type (For two branch lines)	
Model	Inlet / Outlet	Mass (g)
HA-T	20P-PLA / HA-65S (2 pcs.)	73





Plug	PNG type (Plastic plug / For hose with hose guard nut connection)					
Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			L	H(WAF)	A	ØB
50PNG-PLA	Ø5 mm x Ø8 mm	14	(119)	Hex.19	(90)	4
65PNG-PLA	Ø6.5 mm x Ø10 mm	15	(119)	Hex.19	(90)	5.3
85PNG-PLA	Ø8.5 mm x Ø12.5 mm	17	(119)	Hex.22	(90)	7

Socket	SNG type (For hose with hose guard nut connection)					
Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			L	H(WAF)	A	ØB
HA-50SNG	Ø5 mm x Ø8 mm	31	(130)	Hex.19	(90)	4
HA-65SNG	Ø6.5 mm x Ø10 mm	33	(130)	Hex.19	(90)	5.3
HA-85SNG	Ø8.5 mm x Ø12.5 mm	35	(130)	Hex.22	(90)	7

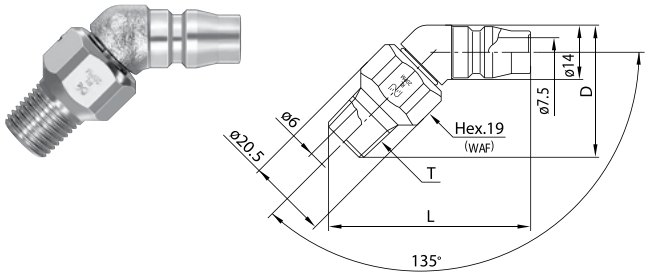
ROTARY PLUG

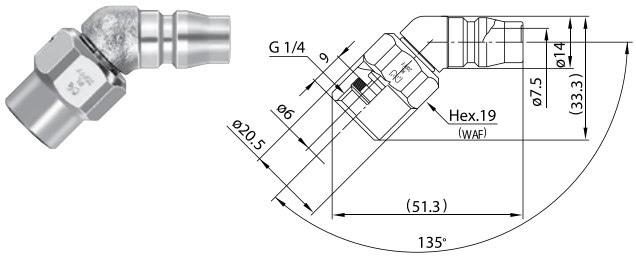
Working pressure: 1.5 MPa {15 kgf/cm²}
Valve structure: One-way shut-off
Applicable fluid: Air

- วัสดุเหล็ก
- ตัวข้อต่อหมุนได้ 360 องศา เพิ่มความคล่องตัวขณะใช้งาน
- ปลายข้อต่อทำมุม 45 องศา ลดปัญหาสายลมพันกันเมื่อสวมต่อกับเครื่องมือลม
- ขนาดกะทัดรัด มีน้ำหนักเบา และป้องกันฝุ่นละออง
- เหมาะสำหรับเครื่องมือลมประเภทต่างๆ เช่น เครื่องยิงลวด เครื่องยิงตะปู บล็อกลม เป็นต้น

Body material	Steel (Nickel plated)			
Size (Thread)	1/4", 3/8"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	1.5	15	15	218
Seal material Working temperature range*1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material

*1: The operable temperature range depends on the operating conditions.

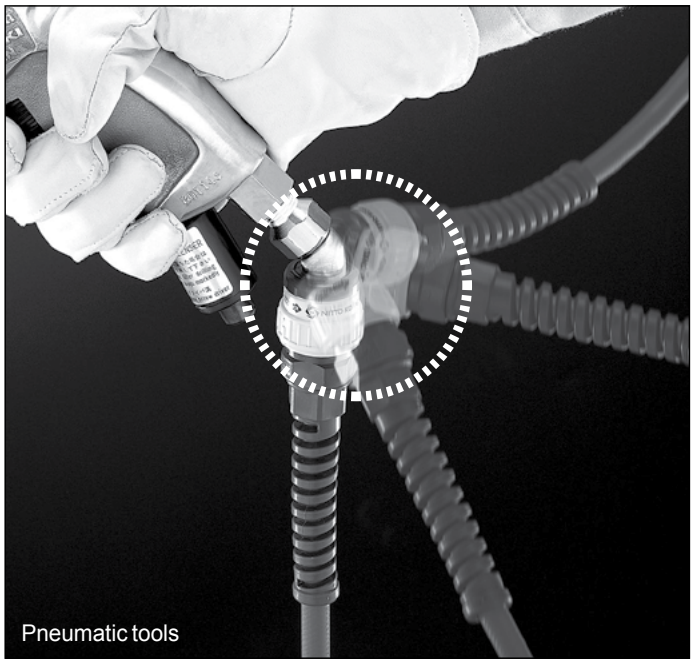


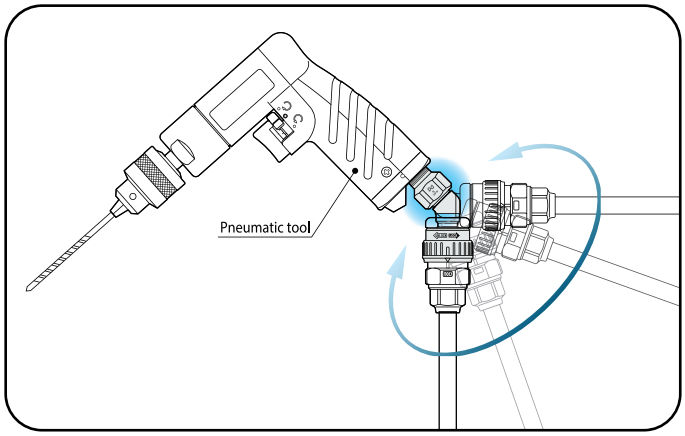


Dimensions (mm)

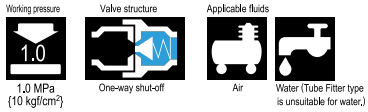
Plug	PM type (Male thread)				
Model	Application (Thread)	Mass (g)	Dimensions (mm)		
			L	D	T
RL-20PM	Rc 1/4	52	(52.1)	(34.1)	R 1/4
RL-30PM	Rc 3/8	73	(50.8)	(32.8)	R 3/8

Plug	Model RL-20PFF type (Female thread)
• Application (Thread) : G1/4 • Mass : 57 g	


Pneumatic tools



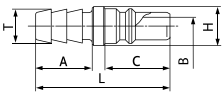
MICRO CUPLA



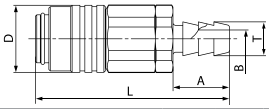
- วัสดุทองเหลือง
- ขนาดกะทัดรัด น้ำหนักเบา เส้นผ่านศูนย์กลางเพียง 9.5 มม. เหมาะสำหรับใช้งานในพื้นที่จำกัด
- สวมต่อจังหวะเดียว (One Touch) เชื่อมต่อง่าย และรวดเร็ว

- Above specifications apply only to CUPLA. Maximum working pressure and working temperature range may vary depending on tube materials you use with and the working temperature.
CUPLA with Tube Fitter has NBR packing material only.
*1: When connecting an extremely soft tube such as soft polyurethane or soft nylon, attach the insert ring specified by the tube manufacturer to the inner diameter of the tube to be connected.
*2: The operable temperature range depends on the operating conditions.

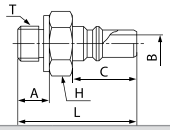
Body material		Cupla : Brass (Plated) Tube Fitter Part : Brass (Plated) , Plastic			
Size	Thread	1/8", M5 x 0.8			
	Tube barb (Tube fitter)*1	Tube ID Ø3, Ø4 Polyurethane tube : Outside Dia. Ø4±0.1. Ø6±0.1 Polyamide tube : Outside Dia. Ø4$^{+0.05}_{-0.08}$, Ø6 $^{+0.05}_{-0.08}$ Fluorine contained resin tube : Outside Dia. Ø4 ± 0.05, Ø6 ± 0.07			
Pressure unit		MPa	Kgf/cm²	bar	PSI
Working pressure		1.0	10	10	145
Seal material Working temperature range*2		Seal material	Mark	Working temperature range	Remarks
		Nitrile rubber	NBR	-20°C to +80°C	Standard material
		Fluoro rubber	FKM	-20°C to +180°C	Made-to-order item(s)



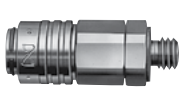
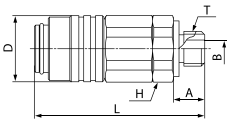
Plug	PH type (Tube barb)							
Model	Application (Tube)	Body material • Mass (g)	Dimensions (mm)					
		Brass	L	C	A	ØH	ØT	ØB
MC-03PH	3 mm ID	1.2	19	9.2	8	5.5	3.5	1.2
MC-04PH	4 mm ID	1.4	19	9.2	8	5.5	4.8	2.5



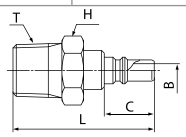
Socket	SH type (Tube barb)					
Model	Application (Tube)	Body material • Mass (g)	Dimensions (mm)			
		Brass	L	ØD	A	ØT	ØB
MC-03SH	3 mm ID	7	(27.5)	9.5	8	3.5	1.2
MC-04SH	4 mm ID	7.3	(27.5)	9.5	8	4.8	2.5



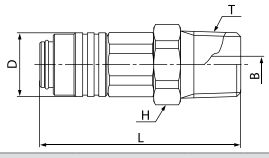
Plug	PM type (Male thread)							
Model	Application (Thread)	Body material • Mass (g)	Dimensions (mm)					
		Brass	L	C	A	H(WAF)	T	ØB
MC-05PM	M5 x 0.8	1.9	17	9.2	4.5	Hex.7	M5 x 0.8	2.5

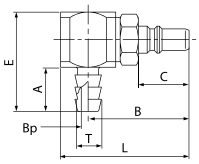
Socket	SM type (Male thread)							
Model	Application (Thread)	Body material • Mass (g)	Dimensions (mm)					
		Brass	L	ØD	A	T	H(WAF)	ØB
MC-05SM	M5 x 0.8	7.4	(24.5)	9.5	4.5	M5 x 0.8	Hex.9	2.5

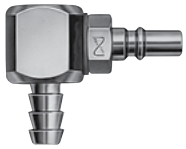


Plug	PM type (Male thread)						
Model	Application (Thread)	Body material • Mass (g)	Dimensions (mm)				
		Brass	L	C	H(WAF)	T	ØB
MC-10PM	Rc 1/8	9	26	9.2	Hex.11	R 1/8	2.5

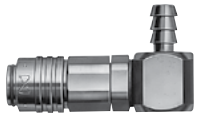
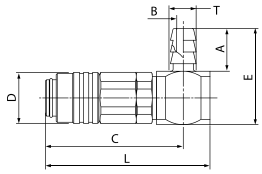


Socket	SM type (Male thread)						
Model	Application (Thread)	Body material • Mass (g)	Dimensions (mm)				
		Brass	L	ØD	T	H(WAF)	ØB
MC-10SM	Rc 1/8	13.1	(30)	9.5	R 1/8	Hex.11	3

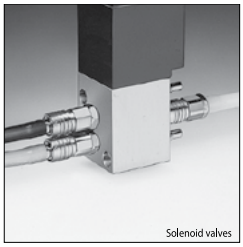




Plug	PHL type (Tube barb)								
Model	Application (Tube)	Body material • Mass (g)	Dimensions (mm)						
		Brass	L	C	A	B	E	ØT	ØBp
MC-04PHL	4 mm ID	9.4	(23.3)	9.2	8	(18.3)	18	4.8	2.5

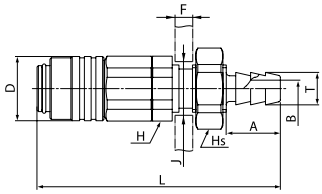



Socket	SHL type (Tube barb)								
Model	Application (Tube)	Body material • Mass (g)	Dimensions (mm)						
		Brass	L	C	E	A	ØD	ØT	ØB
MC-04SHL	4 mm ID	14.8	(30.8)	(25.8)	18	8	9.5	4.8	2.5

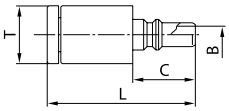


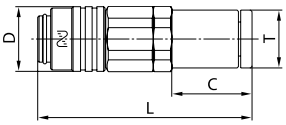
Always fix tubes with hose clamps when using hose barb types.

- F and ØJ are dimension of panel.



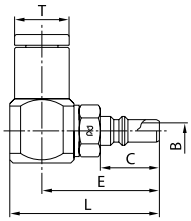
Socket	SHB type (For panel mounting)										
Model	Application (Tube)	Body material • Mass (g)	Dimensions (mm)								
		Brass	L	A	ØD	ØT	ØB	Hs(WAF)	ØJ	H(WAF)	F
MC-04SHB	4 mm ID	11.5	(36)	8	9.5	4.8	2.5	Hex.11	7.1 $^{+0.3}_{0}$	Hex.9	1.2 to 3.5

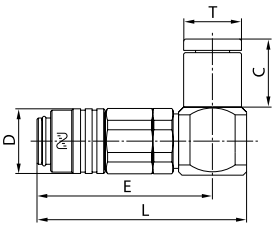




Plug	PC type (With Tube Fitter)					
Model	Application (Tube)	Mass (g)	Dimensions (mm)			
			L	C	ØT	ØB
MC-04PC	4 mm OD	3	(21.7)	9.2	8	2.5
MC-06PC	6 mm OD	5	(25)	9.2	9.8	2.5

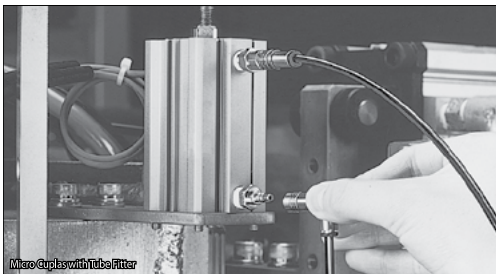
Socket	SC type (With Tube Fitter)					
Model	Application (Tube)	Mass (g)	Dimensions (mm)			
			L	ØD	C	ØT
MC-04SC	4 mm OD	9	(31.5)	9.5	(12)	8
MC-06SC	6 mm OD	11.5	(33.5)	9.5	(13)	9.8

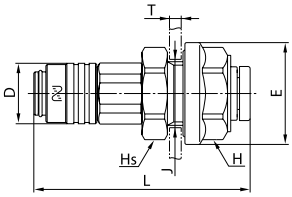




Plug	PCL type (With L-shaped Tube Fitter)						
Model	Application (Tube)	Mass (g)	Dimensions (mm)				
			L	C	E	ØT	ØB
MC-04PCL	4 mm OD	10	(23.3)	9.2	(18.3)	8	2.5
MC-06PCL	6 mm OD	13.5	(24.3)	9.2	(18.8)	9.8	2.5

Socket	SCL type (With L-shaped Tube Fitter)						
Model	Application (Tube)	Mass (g)	Dimensions (mm)				
			L	E	ØD	C	ØT
MC-04SCL	4 mm OD	16	(30.8)	(25.8)	9.5	(10)	8
MC-06SCL	6 mm OD	19	(31.8)	(26.3)	9.5	(12.5)	9.8



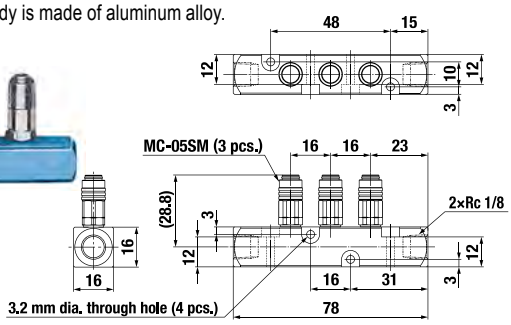


• T and øJ are dimensions of panel.

Socket	SCB type (With Tube Fitter for panel mounting)								
Model	Application (Tube)	Mass (g)	Dimensions (mm)						
			L	ØD	ØE	Hs(WAF)	H(WAF)	T	ØJ
MC-04SCB	4 mm OD	15	(34)	9.5	16	Hex.13	Hex.13	3.5 or less	$10.5^{+0.3}_{0}$
MC-06SCB	6 mm OD	18.5	(36)	9.5	18	Hex.15	Hex.15	3.5 or less	$12.5^{+0.3}_{0}$

Socket | **MC-03 type (MICRO LINE CUPLA with three branch ports)**

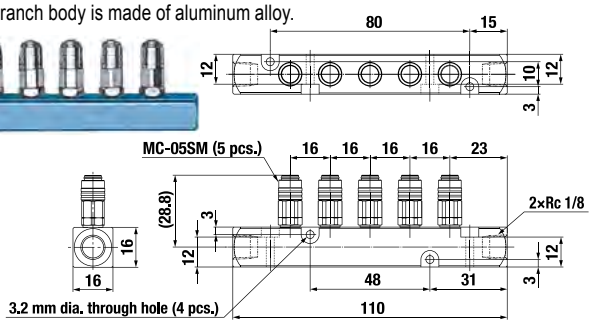
Mass: 65 g
• The branch body is made of aluminum alloy.



Dimensions (mm)

Socket | **MC-03 type (MICRO LINE CUPLA with three branch ports)**

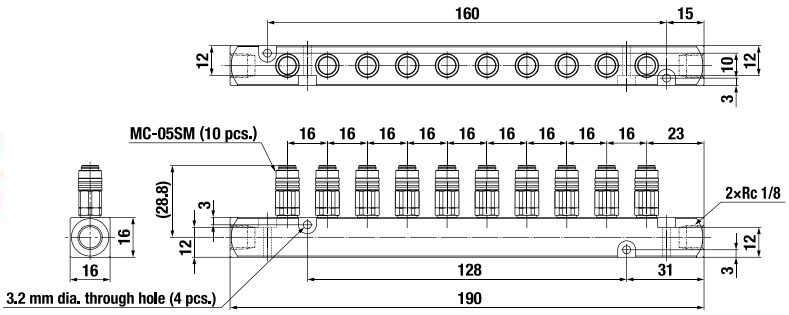
Mass: 101 g
• The branch body is made of aluminum alloy.



Dimensions (mm)

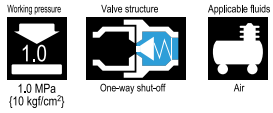
Socket | **MC-10 type (MICRO LINE CUPLA with 10 branch ports)**

Mass: 187 g
• The branch body is made of aluminum alloy.



Dimensions (mm)

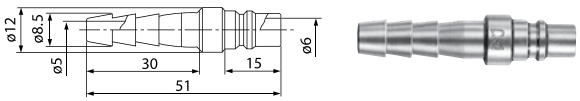
SUPER CUPLA



- วัสดุเหล็ก
- เหมาะสำหรับการเชื่อมต่อเข้ากับเครื่องมือลมที่มีน้ำหนักมาก
- ตัวข้อต่อน้ำหนักเบากว่าข้อต่อสวมเร็วรุ่นทั่วไป
- สวมต่อจังหวะเดียว(One Touch)เชื่อมต่อง่าย และรวดเร็ว

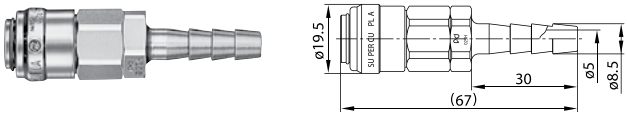
- Above specifications apply only to CUPLA. Maximum working pressure and working temperature range may vary depending on tube materials you use with and the working temperature.
*1: When connecting an extremely soft tube such as soft polyurethane or soft nylon, attach the insert ring specified by the tube manufacturer to the inner diameter of the tube to be connected.
*2: Aluminum alloy is used for the body of 01SN, 02SN, 02SMF, 02SC-6, 02SC-8, 02SCL-6, 02SCL-8, 02SCB-6, 02SCB-8.
*3: The operable temperature range depends on the operating conditions.

Body Material	Cupla Tube Fitter type	: Steel (Chrome plated), Aluminum alloy *2 : Brass (Nickel plated) , Plastic		
Size	Thread	1/8", 1/4"		
	Hose barb	1/4", Urethane hose : Ø5 x Ø8, Ø6.5 x Ø10		
	Tube barb (Tube Fitter)*1	Polyurethane tube : Outside Dia. Ø6± 0.1, Ø8 ± 0.15 Polyamide tube : Outside Dia. $Ø6^{+0.05}_{-0.08}$, $Ø8^{+0.05}_{-0.1}$ Fluorine contained resin tube : Outside Dia. Ø6 ± 0.07, Ø8 ± 0.07		
Perssure unit	MPa	Kgf/cm²	bar	PSI
Working pressure	1.0	10	10	145
Seal material Working temperature range*3	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material



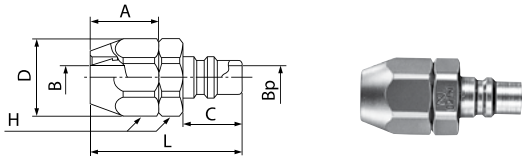
Dimensions (mm)

Plug	02PH type (Hose barb)	
Model	Application (Hose)	Mass (g)
02PH	1/4"	16

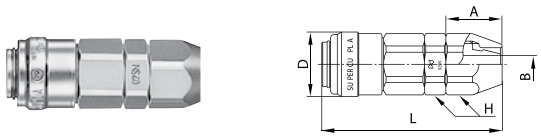


Dimensions (mm)

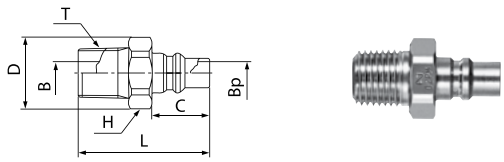
Socket	02SH type (Hose barb)	
Model	Application (Hose)	Mass (g)
02SH	1/4"	56



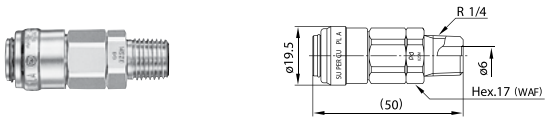
Plug	PN type (For connection to urethane hose)								
Model	Application (Hose)	Mass (g)	Dimension (mm)						
			L	C	ØD	A	H(WAF)	ØBp	ØB
01PN	Ø5 mm x Ø8 mm	35.9	(38.5)	15	18.5	17	Hex.17	6	3.8
02PN	Ø6.5 mm x Ø10 mm	35.3	(38.5)	15	18.5	17	Hex.17	6	5.3



Socket	SN type (For Connetion to urethane hose)						
Model	Application (Hose)	Mass (g)	Dimension (mm)				
			L	A	ØD	H(WAF)	ØB
01SN	Ø5 mm x Ø8 mm	45.8	(54.5)	17	19.5	Hex.17	3.8
02SN	Ø6.5 mm x Ø10 mm	44.4	(54.5)	17	19.5	Hex.17	5.3

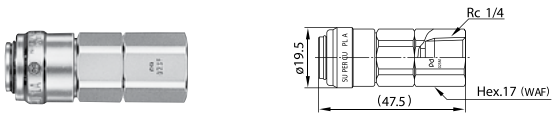


Plug	PM type (Male thread)								
Model	Application (Thread)	Mass (g)	Dimension (mm)						
			L	C	ØD	H(WAF)	T	ØBp	ØB
01PM	Rc 1/8	12	31	15	-	Hex.12	R 1/8	6	5
02PM	Rc 1/4	22.7	34	15	18.5	Hex.17	R 1/4	6	6



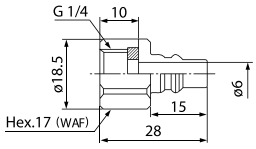
Dimensions (mm)

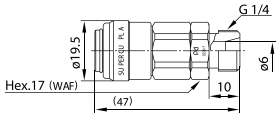
Socket	SM type (Male thread)	
Model	Application (Thread)	Mass (g)
02SM	Rc 1/4	57



Dimensions (mm)

Socket	02SF type (Female thread)	
Model	Application (Thread)	Mass (g)
02SF	R 1/4	56.4



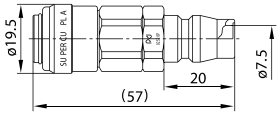


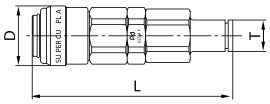
Dimensions (mm)

Plug	02PFF type (Parallel female thread)	
Model	Application (Thread)	Mass (g)
02PFF	G 1/4	17.7

Dimensions (mm)

Socket	02SMF type (Parallel male thread)	
Model	Application (Thread)	Mass (g)
02SMF	G 1/4	27

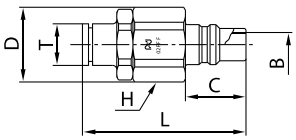


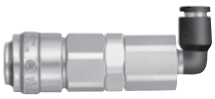


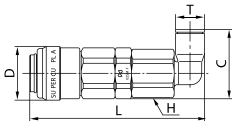
Dimensions (mm)

Plug / Socket	Model 02S20P type (Conversion model to connect Hi CUPLA socket)	
Model	Application	Mass (g)
02S20P	Hi Cupla (Socket)	58

Socket	SC type (with Tube Fitter)				
Model	Application (Tube)	Mass (g)	Dimension (mm)		
			L	ØD	ØT
02SC-6	6 mm OD	46	(65.5)	19.5	10.5
02SC-8	8 mm OD	50.5	(70)	19.5	13.5

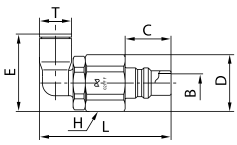


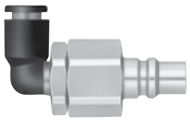


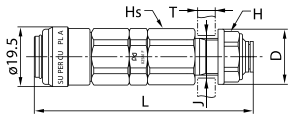


Plug	PC type (With Tube Fitter)								
Model	Application (Tube)	Mass (g)	Dimension (mm)						
			L	C	ØD	E	H(WAF)	ØT	ØB
02PC-6	6 mm OD	28.5	(40.5)	15	18.5	18.5	Hex.17	10.3	6
02PC-8	8 mm OD	33	(47.5)	15	18.5	18.5	Hex.17	13.5	6

Socket	SCL type (With L-shaped Tube Fitter)						
Model	Application (Tube)	Mass (g)	Dimension (mm)				
			L	ØD	H(WAF)	C	ØT
02SCL-6	6 mm OD	47.5	(63.5)	19.5	Hex.16	(25.7)	10.3
02SCL-8	8 mm OD	49.5	(67.7)	19.5	Hex.16	(32.8)	13.5







• T and øJ are dimensions of panel.

Plug	PCL type (With L-shaped Tube Fitter)								
Model	Application (Tube)	Mass (g)	Dimension (mm)						
			L	C	ØD	E	H(WAF)	ØT	ØB
02PCL-6	6 mm OD	29.5	(43)	15	18.5	(25.3)	Hex.17	10.5	6
02PCL-8	8 mm OD	34.5	(46.5)	15	18.5	(32.3)	Hex.17	13.5	6

Socket	SCB type (With Tube Fitter for panel mounting)							
Model	Application (Tube)	Mass (g)	Dimension (mm)					
			L	ØD	Hs(WAF)	H(WAF)	T	ØJ
02SCB-6	6 mm OD	58.5	(71.5)	18	Hex.17	Hex.15	7 or less	$12.5^{+0.3}_{0}$
02SCB-8	8 mm OD	60.4	(72)	21	Hex.17	Hex.18	8 or less	$15.5^{+0.3}_{0}$

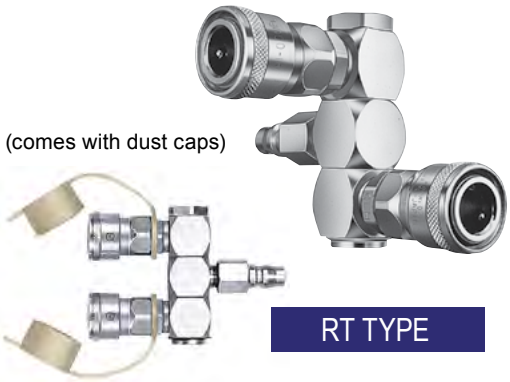
ROTARY LINE CUPLA

Working pressure: 1.5 MPa {15 kgf/cm²}
Valve structure: One-way shut-off
Applicable fluid: Air

- สามารถแยกจุดใช้งานได้หลายทิศทางจากท่อลมหลักเพียงจุดเดียว
- หมุนได้ 360 องศา เพื่อความสะดวกในการใช้งานและป้องกันปัญหาสายลมพันกัน
- รุ่น RT แยกจุดใช้งานได้ 2 ทาง
- รุ่น RE แยกจุดใช้งานได้ 3 ทาง

Body material	Body : Brass (Chrome plated), Cupla : Steel (Chrome plated)			
Model	RT Type (for two branch lines)		RE Type (for three branch lines)	
Size	Inlet	Hi Cupla Plug 20PF	Inlet	R 1/2
	Outlet	2 sockets for Hi Cupla Socket Model 20	Outlet	3 socket for Hi Cupla Socket Model 20
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	1.5	15	15	218
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +60°C	Standard material

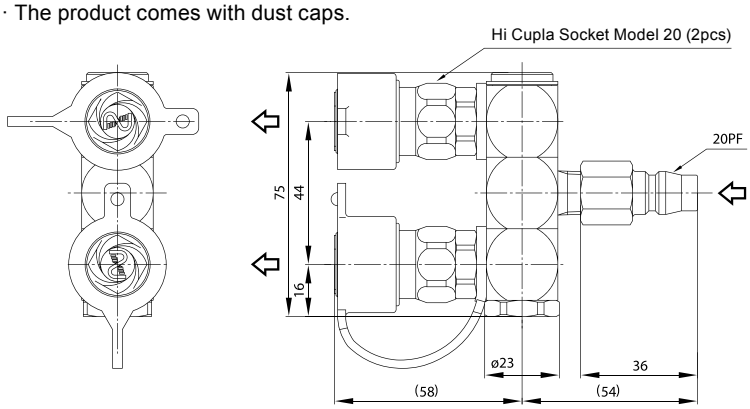
- The products come with dustproof caps.
*1: The operable temperature range depends on the operating conditions.



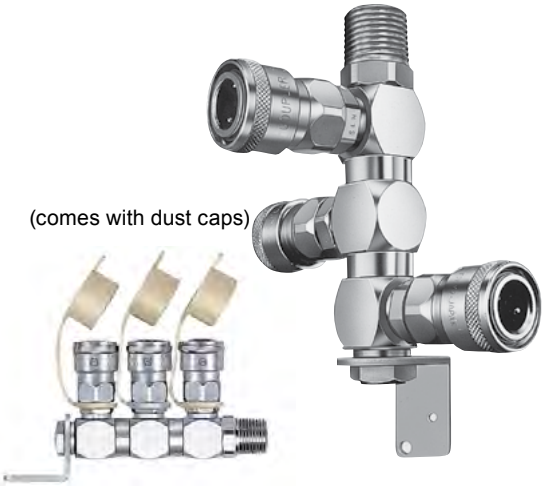
RT TYPE

Socket — **RT type (For two outlets)**

Mass : 490 g
· Fluid must run in the direction of the arrow.
· The product comes with dust caps.



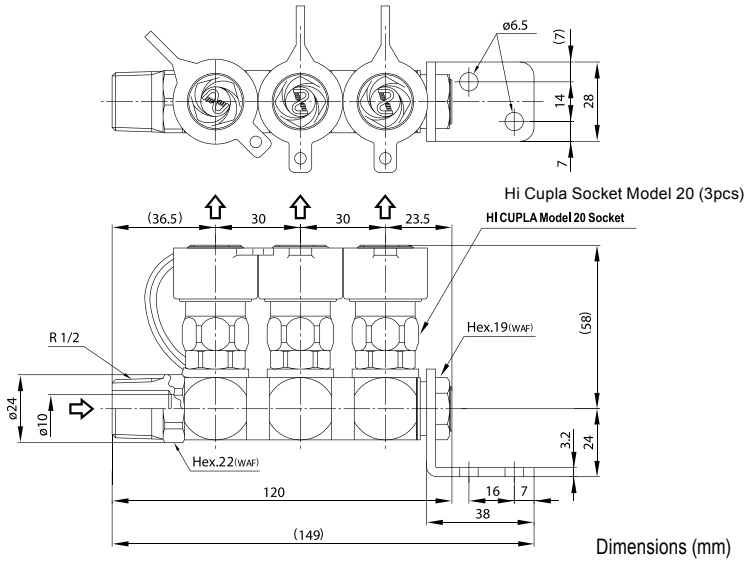
Dimensions (mm)



RE TYPE

Socket — **RE type (For three outlets)**

Mass : 660 g
· Fluid must run in the direction of the arrow.
· The product comes with dust caps.



Dimensions (mm)

LINE CUPLA

Working pressure: 1.5 MPa {15 kgf/cm²}
Valve structure: One-way shut-off
Applicable fluid: Air

- สวมต่อจังหวะเดียว (One Touch) เชื่อมต่อง่าย และรวดเร็ว
- สามารถแยกจุดใช้ได้หลายพอร์ตจากท่อลมหลักเพียงจุดเดียว
- ลักษณะการแยกจุดใช้งาน
  - รุ่น 200T แยกจุดใช้งานได้ 2 พอร์ต
  - รุ่น 200L แยกจุดใช้งานได้ 5 พอร์ต
  - รุ่น 200S แยกจุดใช้งานได้ 5 พอร์ตแบบดาวกระจาย

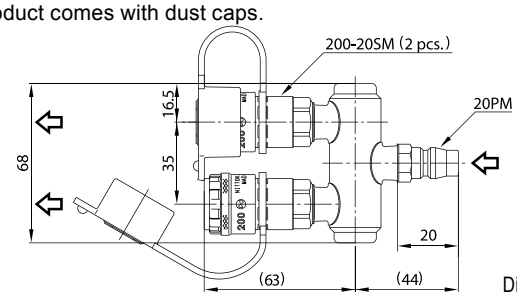
Body material	Body : Aluminum alloy, Cupla : Steel (Chrome plated)			
Size	Inlet	200T Type : 20 PM 200L Type / 200S Type : 400PM		
	Outlet	200T Type : 200-20SM 200L Type / 200S Type : 200-20SM, 200-40SM		
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	1.5	15	15	218
Seal material Working temperature range*1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +60°C	Standard material

- The products come with dustproof caps.
*1: The operable temperature range depends on the operating conditions.

200T TYPE
(comes with dust caps)

Socket — **200T type (For two outlets)**

Mass : 272 g
· Fluid must run in the direction of the arrow.
· The product comes with dust caps.

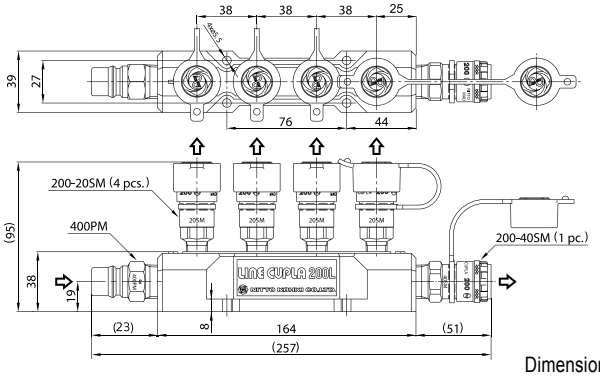


Dimensions (mm)

200L TYPE
(comes with an accessory 400SH and dust caps)

Socket — **200L type (For five outlets,in-line type)**

Mass : 890 g
· Fluid must run in the direction of the arrow.
· The product comes with dust caps.
· Accessory : 400SH

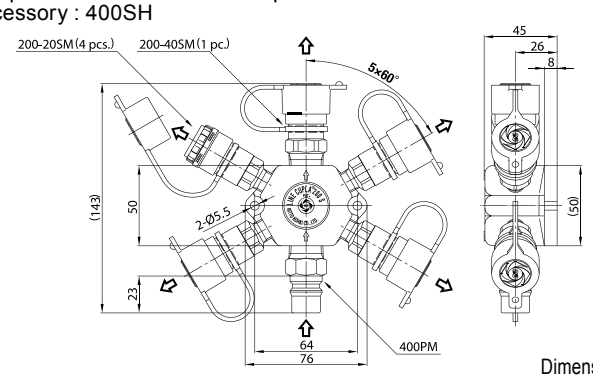


Dimensions (mm)

200S TYPE
(comes with an accessory 400SH and dust caps)

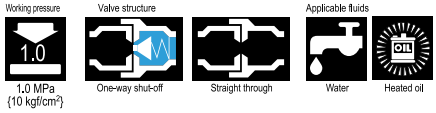
Socket — **200S type (For five outlets,star type)**

Mass : 769 g
· Fluid must run in the direction of the arrow.
· The product comes with dust caps.
· Accessory : 400SH



Dimensions (mm)

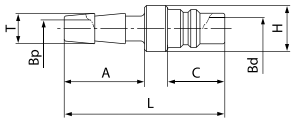
MOLD CUPLA

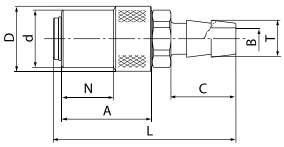


- วัสดุทองเหลือง
- ออกแบบมาเพื่อใช้สำหรับงานแม่พิมพ์โดยเฉพาะ ด้วยขนาดที่เล็กกะทัดรัดจึงประหยัดพื้นที่ติดตั้งในระบบหล่อเย็นแม่พิมพ์
- ตัว Sleeve ที่ Socket มีรูปทรงยาวเป็นพิเศษ สะดวกในการสวม-ถอดเข้าออก
- สามารถเชื่อมต่อเข้ากับข้อต่อสวมเร็ว Super cupla ได้ (ยกเว้น Mold cupla ประเภท K3 และ K4)
- วาล์วมีให้เลือกทั้งแบบมีวาล์ว และไม่มีวาล์ว

Body material		Brass		
Size	Thead	1/8", 1/4", 3/8"		
	Hose (barb)	Hose : 1/4", 3/8" / Braided Hose Ø9 mm x Ø15 mm		
Pressure unit	MPa	kgf/cm²	bar	PSI
Working Pressure	1.0	10	10	145
Seal material Working temperature range*1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	Available on request

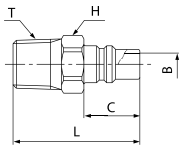
- Maximum working pressure and working temperature range of CUPLA for braided hoses depend upon the specifications of braided hoses to be used.
*1 : The operable temperature range depends on the operating conditions.

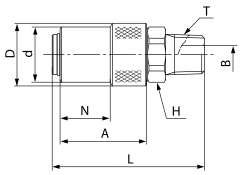




Plug	PH type (Hose barb)								
Model	Application (Hose)	Mass (g)	Dimensions (mm)						
			L	A	C	ØH	ØT	ØBp	ØBd
K-02PH	1/4"	17	42	21	15	12	8	4.5	6
K-03PH	3/8"	19	42	21	15	15	12	7	6

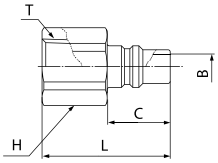
Socket	SH type (Hose barb)									
Model	Application (Hose)	Mass (g)	Dimensions (mm)							
			L	ØD	Ød	N	A	C	ØT	ØB
K-02SH	1/4	52	(67)	(21)	18.5	16.8	29	29	8	5
K-02TSH *1	1/4	52	(67)	(21)	18.5	16.8	29	29	8	5
K-03SH	3/8	60	(59)	(21)	18.5	16.8	29	21	12	7
K-03TSH *1	3/8	60	(59)	(21)	18.5	16.8	29	21	12	7

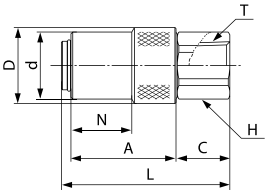




Plug	PM type (Male thread)						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	H(WAF)	C	T	ØB
K-01PM	Rc 1/8	14	31	Hex. 12	15	R 1/8	5.5
K-02PM	Rc 1/4	20	34	Hex. 14	15	R 1/4	6
K-03PM	Rc 3/8	35	35	Hex. 17	15	R 3/8	6

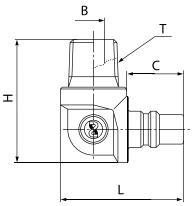
Socket	SM type (Male thread)									
Model	Application (Thread)	Mass (g)	Dimensions (mm)							
			L	ØD	Ød	N	A	H(WAF)	T	ØB
K-02SM	Rc 1/4	70	(51)	(21)	18.5	16.8	29	Hex. 17	R 1/4	6
K-02TSM *1	Rc 1/4	70	(51)	(21)	18.5	16.8	29	Hex. 17	R 1/4	6
K-03SM	Rc 3/8	82	(52)	(21)	18.5	16.8	29	Hex. 19	R 3/8	6
K-03TSM *1	Rc 3/8	82	(52)	(21)	18.5	16.8	29	Hex. 19	R 3/8	6

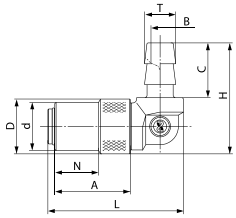




Plug	PF type (Female thread)						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	H(WAF)	C	T	ØB
K-01PF	R 1/8	16	28	Hex. 14	15	R 1/8	6
K-02PF	R 1/4	22	30.5	Hex. 17	15	R 1/4	6
K-03PF	R 3/8	35	32	Hex. 21	15	R 3/8	6

Socket	SF type (Female thread)									
Model	Application (Thread)	Mass (g)	Dimensions (mm)							
			L	ØD	Ød	N	A	C	T	H(WAF)
K-02SF	R 1/4	57	(46.5)	(21)	18.5	16.8	29	14.5	Rc 1/4	Hex.17
K-02TSF *1	R 1/4	57	(46.5)	(21)	18.5	16.8	29	14.5	Rc 1/4	Hex.17





Plug	PML type (Male thread)						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	C	H	T	ØB
K-01PML	Rc 1/8	43	33.5	15	30.5	Rc 1/8	5
K-02PML	Rc 1/4	53	33.5	15	33.5	Rc 1/4	6
K-03PML	Rc 3/8	71	33.5	15	33.5	Rc 3/8	6

Socket	SHL type (Hose barb)										
Model	Application (Hose)	Mass (g)	Dimensions (mm)								
			L	ØD	Ød	N	A	C	ØT	H	ØB
K-02SHL	1/4	79	(52)	(21)	18.5	16.8	29	21	8	(42.5)	4.5
K-03SHL	3/8	87	(52)	(21)	18.5	16.8	29	21	12	(42.5)	7
K-03TSHL *1	3/8	87	(52)	(21)	18.5	16.8	29	21	12	(42.5)	7

*1 : Also available without socket valve (Made-to- order item), indentified by product code IS (e.g k-03SH without valve is K-03TSH Also available are sockets with sleeve stopper (Made-to-made item).

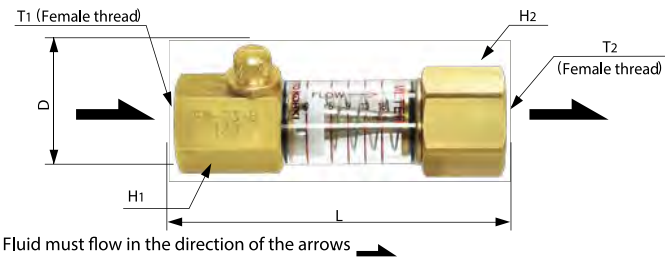
FLOW METER

Working pressure: 0.5 MPa {5 kgf/cm²}
Applicable fluids: Water

- วัสดุทองเหลือง
- ใช้สำหรับตรวจสอบอัตราการไหลของระบบน้ำหล่อเย็น
- สามารถปรับอัตราการไหลให้เหมาะกับแม่พิมพ์ของแต่ละเครื่อง โดยการหมุนปุ่มปรับที่อยู่บนตัวข้อต่อ
- เกลียวด้านหนึ่งเป็นแบบโรตารีสามารถหมุนได้รอบตัว จึงขันเกลียวได้แน่น และได้ตำแหน่งที่ต้องการ

Body material	Body : Brass Graduated tube : Polycarbonate			
Size (Thread)	Both ends Rc 3/8 female thread			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	0.5	5	5	72.5
Max.flow rate	18 L/min (5 to 18 L/min adjustable)			
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	+10°C to +60°C	Standard material

*1: The operable temperature range depends on the operating conditions.



Model	Mass (g)	Dimensions (mm)					
		L	D	H1(WAF)	H2(WAF)	T1	T2
FM-03-B	190	(89)	(33)	Hex. 23	Hex. 26	Rc 3/8	Rc 3/8

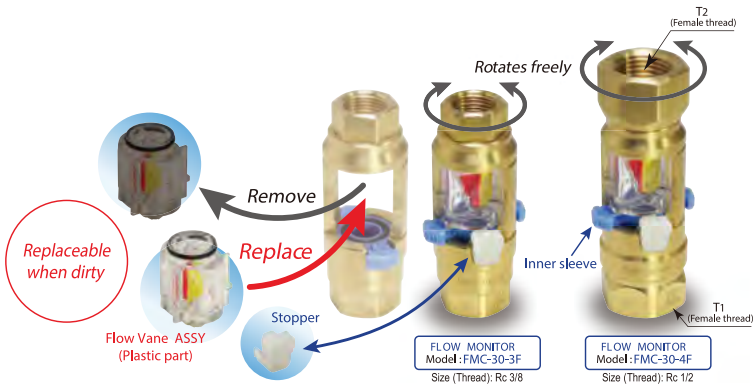
FLOW MONITOR

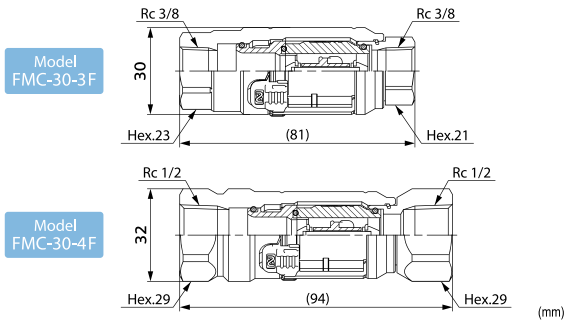
Working pressure: 1.0 MPa {10 kgf/cm²}
Applicable fluids: Water

- วัสดุทองเหลือง
- ใช้สำหรับงานที่ต้องตรวจสอบอัตราการไหลของน้ำอยู่เสมอ โดยตรวจสอบได้อย่างง่ายดายจากการสังเกตการหมุนของใบพัด
- สามารถถอดเฉพาะชุดใบพัดออกมาทำความสะอาด โดยไม่จำเป็นต้องถอดข้อต่อออกจากระบบทั้งหมด
- ข้อต่อมีตัวกั้น (Stopper) เพื่อป้องกันการถอดออกจากท่อโดยไม่ได้ตั้งใจ
- การติดตั้งหรือถอดเปลี่ยนทำได้ง่ายเนื่องจากสกรูของด้าน T2 (Female Thread) หมุนได้อย่างอิสระ
- อัตราการไหลของน้ำ 2 ลิตร/นาที

Model		FMC-30-3F	FMC-30-4F
Size (Thread)		Rc 3/8	Rc 1/2
Body material		Brass	
Flow Vane ASSY material (Plastic part)	Outer cylinder	Polycarbonate	
	Impeller	Polypropylene	
	Inner sleeve, Stopper	Polyamide	
Working Pressure*1		1.0 MPa, 10 kgf/cm², 10 bar, 14.5 PSI	
Working flow range		2 to 20 L/min	
Seal material (Mark)		Fluoro rubber (FKM)	
Working temperature range*2		+10°C to +80°C	
Mass		167 g	256 g

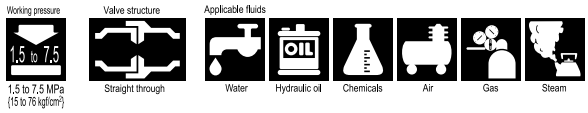
*1: The normal allowable fluid pressure under continuous use.
Continuously exceeding the working pressure may cause leakage or damage.
*2: The working temperature range depends upon the operating conditions.





TSP CUPLA

- วัสดุให้เลือก : ทองเหลือง และสแตนเลส
- โครงสร้างแบบไม่มีวาล์ว ช่วยลดการสูญเสียแรงดัน และเพิ่มอัตราการไหลของวัตถุที่ไหลผ่านภายใน
- เหมาะสำหรับของเหลวที่มีความหนืดสูง เช่น จาระบี ขี้ผึ้ง และน้ำมันหล่อลื่น เป็นต้น
- มีทั้งรุ่นสวมต่อเข้าสายโดยไม่ต้องใช้เข็มขัดรัดสาย จึงง่ายต่อการเชื่อมต่อ อีกทั้งยังป้องกันการรั่วซึม และเพิ่มความแน่นหนาในการสวมต่อได้ดี



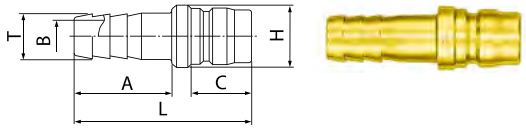
Note: Depending on the temperature of steam / hot water, the heat may damage seal materials.

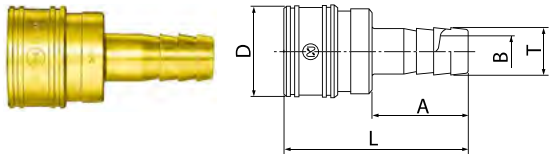
Body material		Brass				Stainless steel (SUS304), Steel (Nickel plated)			
Size (Thread and hose)		1/8", 1/4" 3/8", 1/2"	3/4" 1"	1 1/4" 1 1/2"	2"	1/8", 1/4" 3/8", 1/2"	3/4" 1"	1 1/4" 1 1/2"	2"
Working pressure	MPa	5.0	3.0	2.0	1.5	7.5	4.5	3.0	2.0
	kgf/cm²	51	31	20	15	76	46	31	20
	bar	50	30	20	15	75	45	30	20
	PSI	725	435	290	218	1090	653	435	290

Seal material *1 Working temperature range *2	Seal material	Mark	Working temperature rang	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	
	Ethylene-propylene rubber	EPDM	-40°C to +150°C	

- SUS316 is available as option.
- Maximum working pressure and working temperature range of TSP CUPLA for braided hoses depend upon the specifications of braided hoses to be used.

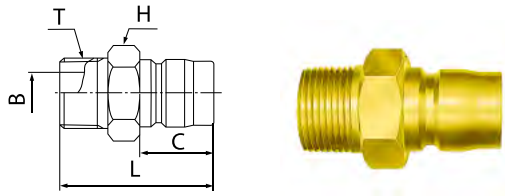
*1: Seal material available for braided hoses is nitrile rubber only.
*1: Seal material available for steel body is nitrile rubber only.
*2: The operable temperature range depends on the operating conditions.

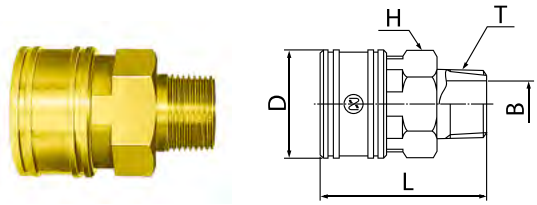




Plug	TPH type (Hose barb)									
Model	Application (Hose)	Mass (g)			Dimensions (mm)					
		Steel	Brass	Stainless steel	L	ØH	A	C	ØT	ØB
1TPH	1/8"	12 *1	13	12	41	12	20	15.5	6.5	3
2TPH	1/4"	21	23	21	53	14	29	18	8	5
3TPH	3/8"	38	41	38	60	18	32	21	11	7
4TPH	1/2"	71	77	71	70	22	39	24	15	10
6TPH	3/4"	134	146	135	84	28	48	28	21	15
8TPH	1"	327	356	329	105	40	57	36	27	19
10TPH	1 1/4"	495	530	500	121	48	70	39	34.5	26
12TPH	1 1/2"	665	715	660	132	55	75	45	41	32
16TPH	2"	1,330	1,430	1,345	142	70	80	51	54	40

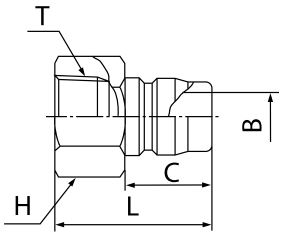
Socket	TSH type (Hose barb)									
Model	Application	Mass (g)			Dimensions (mm)					
		Steel	Brass	Stainless steel	L	ØD	A	ØT	ØB	
1TSH	1/8"	24 *1	26	24	40	17.5	20	6.5	3	
2TSH	1/4"	63	69	64	55	24	29	8	5	
3TSH	3/8"	95	104	96	62	28	32	11	7	
4TSH	1/2"	176	192	177	74	35	39	15	10	
6TSH	3/4"	348	379	350	90	45	48	21	15	
8TSH	1"	570	605	570	102	58	57	27	19	
10TSH	1 1/4"	840	910	850	117	69	70	34.5	26	
12TSH	1 1/2"	1,060	1,140	1,070	128	75	75	41	32	
16TSH	2"	2,095	2,251	2,100	141	98	80	54	40	

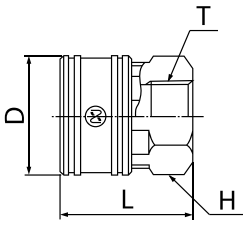




Plug	TPM type (Male thread)								
Model	Application (Thread)	Mass (g)			Dimensions (mm)				
		Steel	Brass	Stainless steel	L	H(WAF)	C	T	ØB
1TPM	Rc 1/8	16 *1	17	17	32	Hex. 12	15.5	R 1/8	4.5
2TPM	Rc 1/4	30	33	30	38	Hex. 17	18	R 1/4	6.5
3TPM	Rc 3/8	38	42	38	43	Hex. 17	21	R 3/8	10
4TPM	Rc 1/2	81	88	81	52	Hex. 22	24	R 1/2	13
6TPM	Rc 3/4	164	179	165	59	Hex. 32	28	R 3/4	17
8TPM	Rc 1	273	297	274	73	Hex. 41	36	R 1	25
10TPM	Rc 1 1/4	520	560	530	83	Hex. 50	39	R 1 1/4	32
12TPM	Rc 1 1/2	665	705	665	93	Hex. 54*2	45	R 1 1/2	38
16TPM	Rc 2	1,240	1,345	1,250	102	75 x Ø80	51	R 2	50

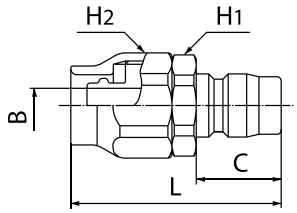
Socket	TSM type (Male thread)								
Model	Application (Thread)	Mass (g)			Dimensions (mm)				
		Steel	Brass	Stainless steel	L	ØD	H(WAF)	T	ØB
1TSM	Rc 1/8	25 *1	27	26	30	17.5	Hex. 14	R 1/8	4.5
2TSM	Rc 1/4	66	72	67	42	24	Hex. 19	R 1/4	6.5
3TSM	Rc 3/8	99	108	100	46	28	Hex. 23	R 3/8	10
4TSM	Rc 1/2	178	194	179	56	35	Hex. 29	R 1/2	13
6TSM	Rc 3/4	343	374	346	65	45	Hex. 38	R 3/4	18
8TSM	Rc 1	629	665	633	76	58	Hex. 50	R 1	24
10TSM	Rc 1 1/4	950	1,010	955	86	69	54 x Ø64	R 1 1/4	32
12TSM	Rc 1 1/2	1,180	1,275	1,190	95	75	58 x Ø70	R 1 1/2	38
16TSM	Rc 2	2,040	2,190	2,060	108	98	77 x Ø82	R 2	49

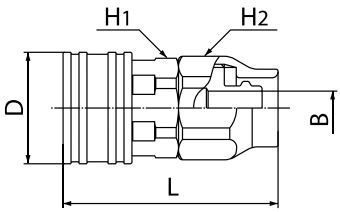




Plug	TPF type (Female thread)								
Model	Application (Thread)	Mass (g)			Dimensions (mm)				
		Steel	Brass	Stainless steel	L	H(WAF)	C	T	ØB
1TPF	R 1/8	14 *1	15	14	26	Hex. 14	15.5	Rc 1/8	4.5
2TPF	R 1/4	28	31	29	34	Hex. 17	18	Rc 1/4	6.5
3TPF	R 3/8	43	47	43	38	Hex. 21	21	Rc 3/8	10
4TPF	R 1/2	103	113	104	45	Hex. 29	24	Rc 1/2	13
6TPF	R 3/4	166	181	167	51	Hex. 35	28	Rc 3/4	17
8TPF	R 1	321	350	323	60	Hex. 41	36	Rc 1	26
10TPF	R 1 1/4	567	615	573	64	Hex. 54 *3	39	Rc 1 1/4	32
12TPF	R 1 1/2	703	763	630	75	Hex. 58 *4	45	Rc 1 1/2	38
16TPF	R 2	1,226	1,374	1,190	83	77 x Ø82	51	Rc 2	50

Socket	TSF type (Female thread)							
Model	Application (Thread)	Mass (g)			Dimensions (mm)			
		Steel	Brass	Stainless steel	L	ØD	H(WAF)	T
1TSF	R 1/8	25 *1	27	25	27	17.5	Hex. 14	Rc 1/8
2TSF	R 1/4	57	62	57	32	24	Hex. 19	Rc 1/4
3TSF	R 3/8	83	90	83	35	28	Hex. 23	Rc 3/8
4TSF	R 1/2	153	167	154	42	35	Hex. 29	Rc 1/2
6TSF	R 3/4	288	314	289	48	45	Hex. 38	Rc 3/4
8TSF	R 1	575	607	575	59	58	Hex. 50	Rc 1
10TSF	R 1 1/4	821	888	825	64	69	54 x Ø64	Rc 1 1/4
12TSF	R 1 1/2	1,003	1,064	1,005	71	75	58 x Ø70	Rc 1 1/2
16TSF	R 2	1,765	1,880	1,770	80	98	77 x Ø82	Rc 2



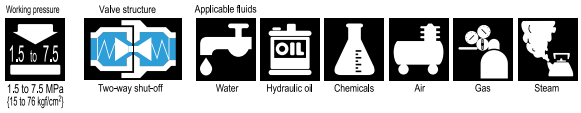


Plug	TPN type (For braided hose connection)								
Model	Application (Hose) *5		Mass (g)		Dimensions (mm)				
	Size (mm)	Hose wall thickness (mm)	Brass	Stainless steel	L	H1(WAF)	H2(WAF)	C	ØB
2TPN-60	Ø6 x Ø11	2.5 ± 0.25	60	55	(47)	Hex. 19	Hex. 19	18	5.5
3TPN-90	Ø9 x Ø15	3 ± 0.3	93	87	(52)	Hex. 23	Hex. 24	21	8.5
4TPN-120	Ø12 x Ø18		140	130	(60)	Hex. 27	Hex. 27	24	11
4TPN-150	Ø15 x Ø22	3.5 ± 0.35	182	170	(68)	Hex. 30	Hex. 30	24	13
6TPN-190	Ø19 x Ø26		261	245	(76)	Hex. 35	Hex. 35	28	17
8TPN-250	Ø25 x Ø33	4 ± 0.4	461	427	(96)	Hex. 41	Hex. 41	36	23

Socket	TSN type (For braided hose connection)								
Model	Application (Hose) *5		Mass (g)		Dimensions (mm)				
	Size (mm)	Hose wall thickness (mm)	Brass	Stainless steel	L	ØD	H1(WAF)	H2(WAF)	ØB
2TSN-60	Ø6 x Ø11	2.5 ± 0.25	91	84	(49)	24	Hex. 19	Hex. 19	5.5
3TSN-90	Ø9 x Ø15	3 ± 0.3	139	129	(54)	28	Hex. 23	Hex. 24	8.5
4TSN-120	Ø12 x Ø18		222	206	(62)	35	Hex. 29	Hex. 27	11
4TSN-150	Ø15 x Ø22	3.5 ± 0.35	255	237	(70)	35	Hex. 30	Hex. 30	13
6TSN-190	Ø19 x Ø26		435	408	(81)	45	Hex. 38	Hex. 35	17
8TSN-250	Ø25 x Ø33	4 ± 0.4	677	633	(93)	58	Hex. 50	Hex. 41	23

*1 : 1TSP steel is a made-to-order item.
*2 : Stainless steel : 54 x Ø60
*3 : Stainless steel : 54 x Ø59
*4 : Stainless steel : 58 x Ø65
*5 : Braided hoses for TPN type and TSN type should be made of soft PVC and woven by reinforcement thread.
·Hydrocarbon type grease is applied to the threaded part of stainless steel nut for TPN type and TSN type to prevent galling

SP CUPLA TYPE A



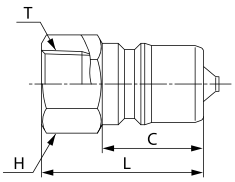
Note: Depending on the temperature of steam / hot water the heat may damage seal materials.

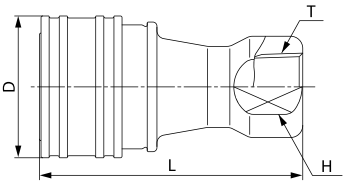
- วัสดุให้เลือก : เหล็ก ทองเหลือง และสแตนเลส
- เหมาะสำหรับงานแรงดันระดับกลางโดยมีระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) เพื่อป้องกันการรั่วไหลของของเหลวที่ไหลผ่าน
- มีให้เลือกหลากหลายรูปแบบเพื่อให้เหมาะกับการใช้งาน

Body material		Brass				Stainless steel (SUS304), Steel (Nickel plated)			
Size (Thread)		1/8" 1/4" 3/8"	1/2", 3/4" 1"	1 1/4" 1 1/2"	2"	1/8" 1/4" 3/8"	1/2", 3/4" 1"	1 1/4" 1 1/2"	2"
Working pressure	MPa	5.0	3.0	2.0	1.5	7.5	4.5	3.0	2.0
	kgf/cm²	51	31	20	15	76	46	31	20
	bar	50	30	20	15	75	45	30	20
	PSI	725	435	290	218	1090	653	435	290

Seal material *1 Working temperature range *2	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	
	Ethylene-propylene rubber	EPDM	-40°C to +150°C	

*1: Plugs with male thread with nitrile rubber or ethylene-propylene rubber are made-to-order items.
*1: Seal material available for steel body is nitrile and fluoro rubber.
*2: The operable temperature range depends on the operating conditions.

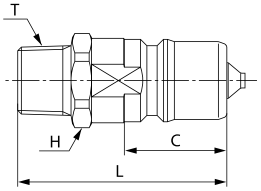




Plug Model	Application (Thread)	Mass (g) Steel	Brass	Stainless steel	Dimensions (mm) L	C	H(WAF)	T
	Female thread							
1P-A	R 1/8	17 *1	19	17	29	19	Hex. 14	Rc 1/8
2P-A	R 1/4	32	34	32	36	22	Hex. 17	Rc 1/4
3P-A	R 3/8	56	61	56	40	25	Hex. 21	Rc 3/8
4P-A	R 1/2	112	121	112	44	28	Hex. 29	Rc 1/2
6P-A	R 3/4	190	205	190	52	36	Hex. 35	Rc 3/4
8P-A	R 1	311	333	310	62	40	Hex. 41	Rc 1
10P-A	R 1 1/4	590	630	620	70	45	Hex. 52 *2	Rc 1 1/4
12P-A	R 1 1/2	870	920	880	75	49	Hex. 63 *3	Rc 1 1/2
16P-A	R 2	1540	1640	1560	80	52	77 x Ø84	Rc 2

Socket Model	Application (Thread)	Mass (g) Steel	Brass	Stainless steel	Dimensions (mm) L	ØD	H(WAF)	T
	Female thread							
1S-A	R 1/8	73 *1	79	75	48	24	14	Rc 1/8
2S-A	R 1/4	119	128	130	58	28	19	Rc 1/4
3S-A	R 3/8	187	202	193	65	35	21	Rc 3/8
4S-A	R 1/2	368	397	391	72	45	29	Rc 1/2
6S-A	R 3/4	639	686	645	88	55	35	Rc 3/4
8S-A	R 1	951	1024	962	102	65	41	Rc 1
10S-A	R 1 1/4	1430	1520	1440	115	77	54	Rc 1 1/4
12S-A	R 1 1/2	2130	2270	2150	124	88	63	Rc 1 1/2
16S-A	R 2	3280	3510	3310	132	108	77	Rc 2

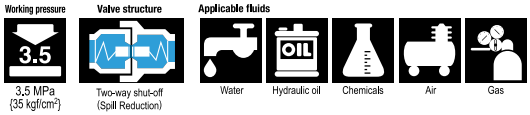
*1 1P-A (Steel) and 1S-A (Steel) are made-to-order items. *2 Stainless steel: 54×ø59 *3 Stainless steel: 63×ø67



Plug Model	Application (Thread)	Mass (g) Brass	Dimensions (mm) L	C	H(WAF)	T
	Male thread					
1P-M-A	Rc 1/8	24	(40)	19	Hex. 14	R 1/8
2P-M-A	Rc 1/4	41	(44)	22	Hex. 17	R 1/4
3P-M-A	Rc 3/8	71	(51)	25	Hex. 21	R 3/8
4P-M-A	Rc 1/2	149	(62)	28	Hex. 27	R 1/2
6P-M-A	Rc 3/4	295	(75)	36	Hex. 35	R 3/4
8P-M-A	Rc 1	406	(83)	40 *4	Hex. 41	R 1

*4 Model 8P-M-A indicates an approximate insertion length because there is no difference in level on the body.

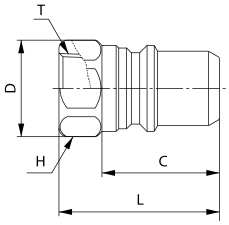
ZEROSPILL CUPLA

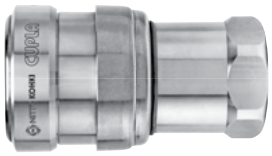


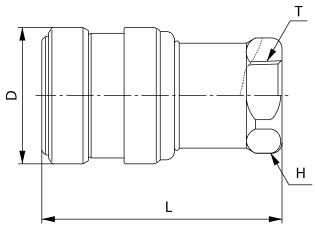
- วัสดุให้เลือก : ทองเหลือง และสแตนเลส
- ระบบวาล์วถูกออกแบบมาให้มีหน้าสัมผัสแบนเรียบ เพื่อช่วยลดแรงเสียดสีขณะสวมต่อ
- สวมต่อจังหวะเดียว (One Touch) เชื่อมต่อง่ายและรวดเร็ว
- ระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) เพื่อลดปริมาณการหยดของวัสดุที่ไหลผ่านขณะถอด

Body material	Brass		Stainless steel (SUS 304)	
Size (Thread)	1/4", 3/8", 1/2", 3/4, 1"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	3.5	36	36	508
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	Standard material
	Ethylene-propylene rubber	EPDM	-40°C to +150°C	Standard material

*1: The operable temperature range depends on the operating conditions.





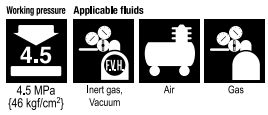


Plug	Female thread							
Model	Application (Thread)	Mass (g)		Dimension (mm)				
		Brass	Stainless steel	L	C	ØD	H(WAF)	T
ZEL-2P	R 1/4	34	32	39	26.1	19	Hex. 17	Rc 1/4
ZEL-3P	R 3/8	67	63	44.5	32	25	Hex. 23	Rc 3/8
ZEL-4P	R 1/2	117	109	52.5	36.8	32	Hex. 29	Rc 1/2
ZEL-6P	R 3/4	264	248	68.5	48	39.5	Hex. 36	Rc 3/4
ZEL-8P	R 1	359	339	76.5	56	46	Hex. 42	Rc 1

Socket	Female thread							
Model	Application (Thread)	Mass (g)		Dimension (mm)				
		Brass	Stainless steel	L	ØD	H(WAF)	T	
ZEL-2S	R 1/4	133	125	(56)	28	Hex. 21	Rc 1/4	
ZEL-3S	R 3/8	255	239	(66)	35	Hex. 27	Rc 3/8	
ZEL-4S	R 1/2	404	382	(76)	42	Hex. 32	Rc 1/2	
ZEL-6S	R 3/4	829	784	(95.5)	55	Hex. 42	Rc 3/4	
ZEL-8S	R 1	1406	1326	(114.5)	65	Hex. 50	Rc1	

• The photos above show stainless steel model ZEL-8P and ZEL-8S.
The profiles of brass couplings are the same as those of the stainless steel couplings.

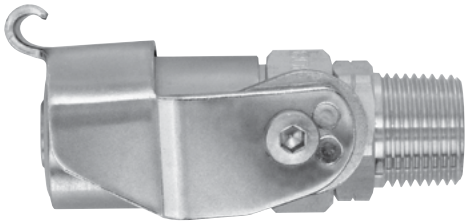
PCV PIPE CUPLA

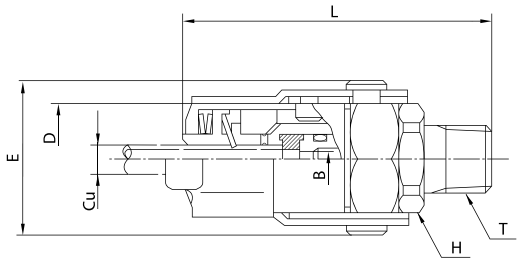


- วัสดุทองเหลือง
- ข้อต่องานจับท่อทองแดงแบบท่อตรง ทนต่อแรงดูดได้ถึง 1.3 x 10^{-1} Pa. (เมื่อเชื่อมต่อ)
- เหมาะสำหรับงานทดสอบการรั่วไหล งานดูดสูญญากาศ และงานเติมสารทำความเย็น
- มีซีลยางมาตรฐานให้เลือก 3 ชนิด เพื่อให้เหมาะสมกับของเหลวที่ไหลผ่าน

Model	PCV400	PCV470	PCV500	PCV600	PCV630	PCV800	PCV950	PCV1000	PCV1270	PCV1590
Copper pipe OD (mm)	Ø4.0	4.76 (3/16")	Ø5.0	Ø6.0	Ø6.35 (1/4")	Ø8.0 (5/16")	Ø9.52 (3/8")	Ø10.0	Ø12.7 (1/2")	Ø15.88 (5/8")
Body material	Brass									
Pressure unit	MPa			kgf/cm²			bar		PSI	
Working pressure	4.5			46			45		653	
Seal material Working temperature range *1	Seal material			Mark			Working Temperature range		Remarks	
	Chloroprene rubber			CR			-20°C to +80°C		Standard material	
	Fluoro rubber			FKM			-20°C to +180°C		Standard material	
	Hydrogenated nitrile rubber			HNBR *2			-20°C to +120°C		Standard material	

*1: The operable temperature range depends on the operating conditions.
*2: Hydrogenated nitrile rubber (HNBR) is colored in blue for easy recognition.
*2: HNBR which can be used for refrigeration oil and refrigerant applications such as HFC-134a is adopted.

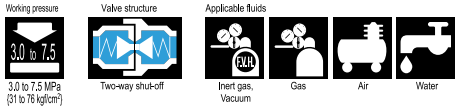




Product Group	Copper Pipe OD (mm)	Model	Application (Thread)	Mass (g)	Dimensions (mm)					
					L	ØD	H(WAF)	ØB	E	T
PVC400*	Ø4.0	PCV400-2	Rc 1/4	155	(59)	22.2	Hex. 17	2.2	(32.5)	R 1/4
		PCV400-3	Rc 3/8	155	(60)		Hex. 19			R 3/8
PVC470	Ø4.76 (3/16)	PCV470-2	Rc 1/4	155	(60)	22.2	Hex. 17	2.2	(32.5)	R 1/4
		PCV470-3	Rc 3/8	160	(61)		Hex. 19			R 3/8
		PCV470-0	Blind plug	160	(47)		-	-		-
PVC500*	Ø5.0	PCV500-2	Rc 1/4	155	(59)	22.2	Hex. 17	2.2	(32.5)	R 1/4
		PCV500-3	Rc 3/8	155	(60)		Hex. 19			R 3/8
PVC600	Ø6.0	PCV600-2	Rc 1/4	150	(60)	22.2	Hex. 17	3.4	(32.5)	R 1/4
		PCV600-3	Rc 3/8	155	(61)		Hex. 19			R 3/8
		PCV600-0	Blind plug	155	(47)		-	-		-
PVC630	Ø6.35 (1/4)	PCV630-2	Rc 1/4	145	(60)	22.2	Hex. 17	3.4	(32.5)	R 1/4
		PCV630-3	Rc 3/8	150	(61)		Hex. 19			R 3/8
		PCV630-0	Blind plug	150	(47)		-	-		-
PVC800	Ø8.0 (5/16)	PCV800-2	Rc 1/4	175	(62)	24.8	Hex. 17	4.6	(35.5)	R 1/4
		PCV800-3	Rc 3/8	180	(63)		Hex. 19			R 3/8
		PCV800-0	Blind plug	185	(50)		-	-		-
PVC950	Ø9.52 (3/8)	PCV950-2	Rc 1/4	175	(62)	24.8	Hex. 17	4.6	(35.5)	R 1/4
		PCV950-3	Rc 3/8	180	(63)		Hex. 19			R 3/8
		PCV950-0	Blind plug	180	(50)		-	-		-
PVC1000*	Ø10.0	PCV1000-2	Rc 1/4	155	(62)	24.8	Hex. 17	4.6	(35.5)	R 1/4
		PCV1000-3	Rc 3/8	155	(63)		Hex. 19			R 3/8
PVC1270	Ø12.7 (1/2)	PCV1270-2	Rc 1/4	470	(80)	34.8	Hex. 24	8.0	(45.0)	R 1/4
		PCV1270-3	Rc 3/8	465	(81)		Hex. 24	9.7		R 3/8
		PCV1270-0	Blind plug	475	(68)		-	-		-
PVC1590	Ø15.88 (5/8)	PCV1590-2	Rc 1/4	424	(80)	34.8	Hex. 24	8.0	(45.0)	R 1/4
		PCV1590-3	Rc 3/8	435	(81)		Hex. 24	10.0		R 3/8
		PCV1590-0	Blind plug	445	(68)		-	-		-

• For mass with a plug, add (brass body) 2P-V : 39 g, 3P-V : 67 g, (stainless steel body) 2P-V : 34 g, or 3P-V : 59 g * Available on request

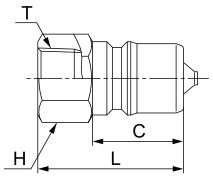
SP-V CUPLA TYPE A

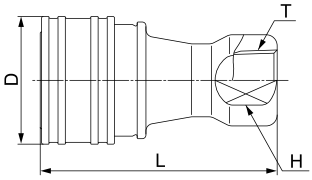


- วัสดุให้เลือก : ทองเหลือง และสแตนเลส
- ระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) เหมาะสำหรับงานทดสอบการรั่วไหล งานดูดสูญญากาศ และงานเติมสารทำความเย็น
- มีซีลยางมาตรฐานให้เลือก 3 ชนิด เพื่อให้เหมาะสมกับของเหลวที่ไหลผ่าน
- รองรับการใช้งานระบบสูญญากาศได้สูงถึง 1.3×10^{-1}Pa

Body material		Brass (Standard material)		Stainless steel (Standard material)	Stainless steel (Made-to-order item)
Size (Thread)		1/4", 3/8"	1/2", 3/4"	1/4", 3/8"	1/2", 3/4"
Working pressure	MPa	5.0	3.0	7.5	4.5
	kgf/cm²	51	31	76	46
	bar	50	30	75	45
	PSI	725	435	1090	653
Seal material Working temperature range *1		Seal material	Mark	Working temperature range	Remarks
		Chloroprene rubber	CR	-20°C to +80°C	Standard material
		Fluoro rubber	FKM	-20°C to +180°C	
		Hydrogenated nitrile rubber	HNBR*2	-20°C to +120°C	

*1: The operable temperature range depends on the operating conditions.
*2: HNBR which can be used for refrigeration oil and refrigerant applications such as HFC-134a is adopted.
*2: No grease is applied to the O-ring of the socket for HNBR seal material products when shipping. Be sure to apply refrigerating machine oil before use.



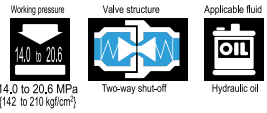


Plug	Female thread						
Model	Application (Thread)	Mass (g)		Dimensions (mm)			
		Brass	Stainless steel	L	C	H(WAF)	T
2P-V-A	R 1/4	37	32	36	22	Hex. 17	Rc 1/4
3P-V-A	R 3/8	63	56	40	25	Hex. 21	Rc 3/8
4P-V-A*	R 1/2	118	109	44	28	Hex. 29	Rc 1/2
6P-V-A*	R 3/4	201	189	52	36	Hex. 35	Rc 3/4

Socket	Female thread						
Model	Application (Thread)	Mass (g)		Dimensions (mm)			
		Brass	Stainless steel	L	ØD	H(WAF)	T
2S-V-A	R 1/4	130	129	58	28	19	Rc 1/4
3S-V-A	R 3/8	202	192	65	35	21	Rc 3/8
4S-V-A*	R 1/2	396	388	72	45	29	Rc 1/2
6S-V-A*	R 3/4	680	644	88	55	35	Rc 3/4

*4P-V-A , 6P-V-A, 4S-V-A and 6S-V-A in Stainless Steel material are made-to-order items.

HSP CUPLA

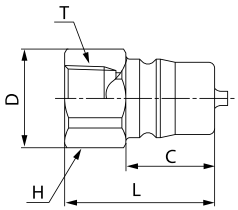


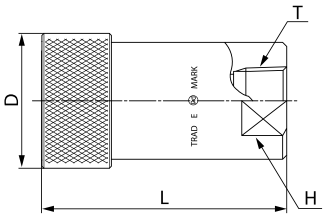
- เหมาะสำหรับงานระบบไฮดรอลิก
- ผลิตจากวัสดุเหล็กเกรดพิเศษ ทนต่อแรงสั่นสะเทือน และรองรับแรงกระแทกขณะใช้งาน
- ระบบวาล์วเปิด-ปิด อัตโนมัติ (Plug และ Socket) เพื่อป้องกันการรั่วไหลของวัสดุที่ไหลผ่าน

Body material		Special steel (Nickel plated)		
Size (Thread)		1/4", 3/8", 1/2", 3/4", 1"	1 1/4", 1 1/2"	2"
Working pressure	MPa	20.6	18.0	14.0
	kgf/cm²	210	183	142
	bar	206	180	140
	PSI	2990	2610	2030

Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	Available on request

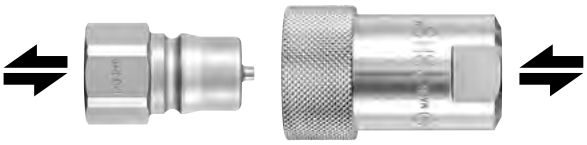
*1: The operable temperature range depends on the operating conditions.



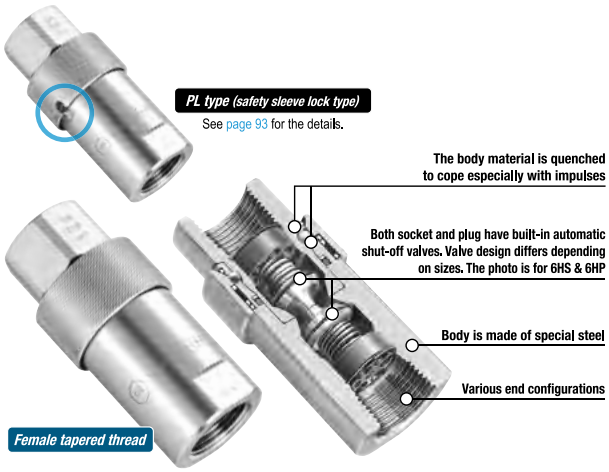


Plug	HP type (Female tapered thread)						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	ØD	C	H(WAF)	T
2HP	R 1/4	40	32	20.5	17.5	Hex. 19	Rc 1/4
3HP	R 3/8	68	38	25	22.5	Hex. 23	Rc 3/8
4HP	R 1/2	124	44	32	27.5	Hex. 29	Rc 1/2
6HP	R 3/4	148	50	35	27.5	Hex. 32	Rc 3/4
66HP	R 3/4	232	51	40	28	35	Rc 3/4
8HP	R 1	361	61	47	36	41	Rc 1
10HP	R 1 1/4	886	80	64	58	58	Rc 1 1/4
12HP	R 1 1/2	810	80	64	58	58	Rc 1 1/2
16HP	R 2	3,307	115	100	83	90	Rc 2

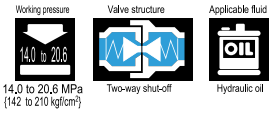
Socket	HS type (Female tapered thread)					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H(WAF)	T
2HS	R 1/4	134	49	(27.5)	19	Rc 1/4
3HS	R 3/8	226	60	(33)	23	Rc 3/8
4HS	R 1/2	485	(72)	(43)	35	Rc 1/2
6HS	R 3/4	460	(72)	(43)	35	Rc 3/4
66HS	R 3/4	569	78.5	(47)	35	Rc 3/4
8HS	R 1	1,042	93	(58)	46	Rc 1
10HS	R 1 1/4	2,586	138	87	58	Rc 1 1/4
12HS	R 1 1/2	2,510	138	87	58	Rc 1 1/2
16HS	R 2	7,286	198	123	80	Rc 2



Fluid flow can be bi-directional when socket and

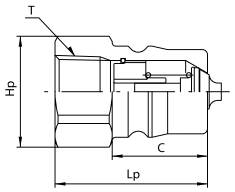


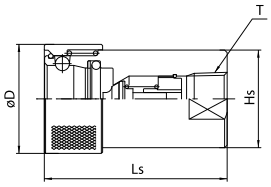
HSP-DC CUPLA



- วัสดุเหล็ก
- ข้อต่อไฮดรอลิกเหมาะสำหรับงานน้ำมันไฮดรอลิก ประเภท Water-Glycol และเครื่องฉีดอลูมิเนียมที่มีแรงดันสูง
- วัสดุภายนอกเคลือบด้วย Nickel-Phosphorus ป้องกันการกัดกร่อนของสารเคมี
- ข้อต่อสวมเร็ว HSP cupla และ HSP-DC cupla สามารถเชื่อมต่อกันได้ในขนาดเดียวกัน

Body material	Steel (With Auto catalytic Nickel-Phosphorus coating)		
Size (Thread)	1/4", 3/8", 1/2", 3/4", 1"		
Working pressure	20.6 MPa {210 kgf/cm²}		
Pressure resistance	31.0 MPa {316 kgf/cm²}		
Seal material Working temperature range	Seal material	Mark	Working Temperature range
	Nitrile rubber	NBR	-5°C to +80°C



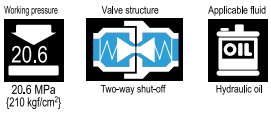


Plug	Female thread					
Model	Application	Mass (g)	Dimensions (mm)			
			Lp	C	Hp	T
2HP-DC	R 1/4	39	32	17.5	Hex. 19 x Ø20.5	Rc 1/4
3HP-DC	R 3/8	68	38	22.5	Hex. 23 x Ø25	Rc 3/8
4HP-DC	R 1/2	126	44	27.5	Hex. 29 x Ø32.5	Rc 1/2
6HP-DC	R 3/4	146	50	27.5	Hex. 32 x Ø35	Rc 3/4
66HP-DC	R 3/4	240	51	28	Flat 35 x Ø39.5	Rc 3/4
8HP-DC	R 1	363	61	36	Flat 41 x Ø47	Rc 1

*4HSP and 6HSP are interchangeable

Socket	Female thread					
Model	Application	Mass (g)	Dimensions (mm)			
			Ls	ØD	Hs	T
2HS-DC	R 1/4	132	49	27.5	Flat 19 x Ø23.9	Rc 1/4
3HS-DC	R 3/8	223	60	33	Flat 23 x Ø28.6	Rc 3/8
4HS-DC	R 1/2	482	72	43	Flat 35 x Ø38.5	Rc 1/2
6HS-DC	R 3/4	455	72	43	Flat 35 x Ø38.5	Rc 3/4
66HS-DC	R 3/4	570	78.5	47	Flat 35 x Ø41.3	Rc 3/4
8HS-DC	R 1	1043	93	58	Flat 46 x Ø52.2	Rc 1

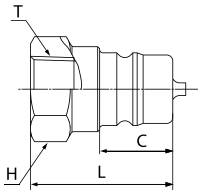
210 CUPLA

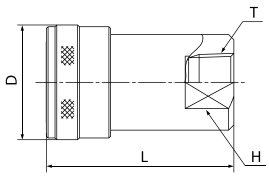


- วัสดุเหล็กเกรดพิเศษ
- เหมาะสำหรับงานระบบไฮดรอลิกที่ต้องการอัตราการไหลสูง
- ระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) เพื่อป้องกันการรั่วไหลของวัสดุไหลผ่าน
- รองรับแรงดันสูงสุด 20.6 MPa (210 kgf/ cm²)

Body material	Special steel (Nickel plated)			
Size (Thread)	1/4", 3/8", 1/2", 3/4", 1"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	20.6	210	206	2990
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	Available on request

*1: The operable temperature range depends on the operating conditions.

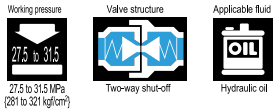




Plug	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	C	H (WAF)	T
210-2P	R 1/4	39	33	18	Hex. 19	Rc 1/4
210-3P	R 3/8	57	36	18.5	Hex. 23	Rc 3/8
210-4P	R 1/2	90	42.5	24	Hex. 27	Rc 1/2
210-6P	R 3/4	195	51	28	Hex. 35	Rc 3/4
210-8P	R 1	293	61	35	Hex. 41	Rc 1

Socket	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H (WAF)	T
210-2S	R 1/4	158	50.5	(30)	22	Rc 1/4
210-3S	R 3/8	193	54	(33)	23	Rc 3/8
210-4S	R 1/2	330	65	(39)	29	Rc 1/2
210-6S	R 3/4	566	78.5	(48)	35	Rc 3/4
210-8S	R 1	861	95	(55)	41	Rc 1

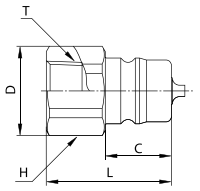
280 CUPLA

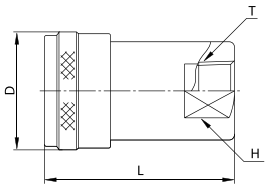


- วัสดุเหล็กเกรดพิเศษ
- เหมาะสำหรับงานระบบไฮดรอลิกที่ต้องการอัตราการไหลสูง
- เป็นไปตามมาตรฐานสากล ISO 7241-1A
- ระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) เพื่อป้องกันการรั่วไหลของวัสดุไหลผ่าน
- รองรับแรงดันสูงสุด 27.5 ถึง 31.5 MPa (281 ถึง 321 kgf/cm²)

Body material	Special steel (Bright chromate conversion coating : silver color)			
Size (Thread)	1/4", 3/8"		1/2", 3/4", 1	
Working pressure	MPa	31.5	27.5	
	kgf/cm²	321	281	
	bar	315	275	
	PSI	4570	3990	
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material

*1: The operable temperature range depends on the operating conditions.



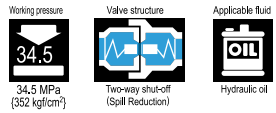


Plug	Female thread						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	ØD	C	H(WAF)	T
280-2P	R 1/4	35	31.5	20.5	15	Hex. 19	Rc 1/4
280-3P	R 3/8	59	35	25	18.5	Hex. 23	Rc 3/8
280-4P	R 1/2	115	44	32	24.5	Hex. 29	Rc 1/2
280-6P	R 3/4	178	52.5	35	28	Hex. 32	Rc 3/4
280-8P	R 1	331	63.5	44	35	41	Rc 1

Socket	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H(WAF)	T
280-2S	R 1/4	110	(46)	(27)	19	Rc 1/4
280-3S	R 3/8	185	(53)	(33)	23	Rc 3/8
280-4S	R 1/2	335	66.5	(39)	29	Rc 1/2
280-6S	R 3/4	571	(81)	(48)	35	Rc 3/4
280-8S	R 1	871	98	(55)	41	Rc 1

* Internal structural design of 280-6S and 280-8S is partly different from the above drawing.

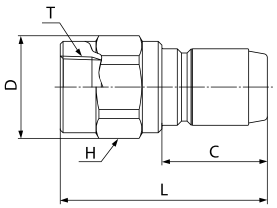
350 CUPLA

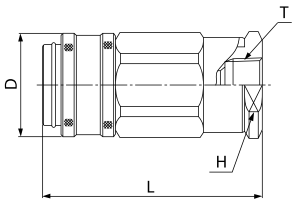


- วัสดุเหล็กเกรดพิเศษ
- เหมาะสำหรับงานระบบไฮดรอลิกที่มีแรงดันสูง
- มีระบบ Airless valve shut-off ช่วยป้องกันอากาศภายนอกเข้าสู่ภายในค่าแรงดันในระบบจึงคงที่
- สวมต่อปลอดภัยด้วยระบบ Sleeve-lock ป้องกันการหลุดของข้อต่อขณะใช้งาน แม้มีแรงสั่นสะเทือนสูง
- ระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) เพื่อป้องกันการรั่วไหลของวัสดุไหลผ่าน

Body material	Special steel (Nickel plated)			
Size (Thread)	1/4", 3/8", 1/2", 3/4", 1 1/4", 1 1/2"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	34.5	352	345	5000
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Fluoro rubber	FKM	-20°C to +180°C	Standard material

*1: The operable temperature range depends on the operating conditions.





*The above picture and external dimensions are the appearance of 350-8P. Product appearance may vary by size.

Plug	Female thread						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	C	ØD	H(WAF)	T
350-2P	R 1/4	170	(72)	36	29	Hex. 27	Rc 1/4
350-3P	R 3/8	167	(72)	36	29	Hex. 27	Rc 3/8
350-4P	R 1/2	245	85	40.5	30	Hex. 27	Rc 1/2
350-6P	R 3/4	415	87	44.5	40	Hex. 36	Rc 3/4
350-8P	R 1	950	111	56.5	55	Hex. 50	Rc 1
350-10P	R 1 1/4	2,700	(144)	75	78	Hex. 70	Rc 1 1/4
350-12P	R 1 1/2	2,600	(144)	75	78	Hex. 70	Rc 1 1/2

- G thread is available on request.

Socket	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H(WAF)	T
350-2S	R 1/4	360	(82)	(34)	Hex. 30	Rc 1/4
350-3S	R 3/8	353	(82)	(34)	Hex. 30	Rc 3/8
350-4S	R 1/2	545	(93.5)	(41)	Hex. 36	Rc 1/2
350-6S	R 3/4	976	(105.5)	(49)	46 x Ø52	Rc 3/4
350-8S	R 1	1,740	(129)	(63)	55 x Ø62	Rc 1
350-10S	R 1 1/4	5,600	(180)	89	Hex. 80 x Ø90	Rc 1 1/4
350-12S	R 1 1/2	5,500	(180)	89	Hex. 80 x Ø90	Rc 1 1/2

- G thread is available on request.

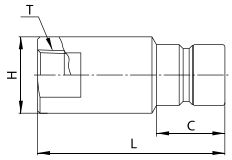
FLAT FACE CUPLA F35

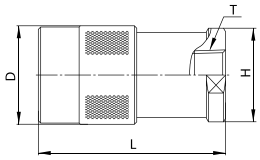
Working pressure: 35.0 MPa {357 kgf/cm²} | Valve structure: Two-way shut-off (Spill Reduction) | Applicable fluid: Hydraulic oil

- วัสดุเหล็กเกรดพิเศษ
- เหมาะสำหรับงานไฮดรอลิกที่ต้องใช้อัตราการไหลสูง
- ชุดวาล์วออกแบบมาให้หน้าสัมผัสแบนเรียบจึงง่ายต่อการทำความสะอาด และช่วยลดการสูญเสียแรงดันในระบบ
- เชื่อมต่อง่ายด้วยการสวมต่อจังหวะเดียว (One Touch)
- สวมต่อปลอดภัยด้วยระบบ Sleeve-lock ป้องกันการหลุดของข้อต่อขณะใช้งานแม้มีแรงสั่นสะเทือนสูง
- ระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) เพื่อป้องกันการรั่วไหลของวัสดุไหลผ่าน

Body material	Special steel (Nickel plated)			
Size (Thread)	1/4", 3/8", 1/2", 3/4", 1"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	35.0	357	350	5080
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Fluoro rubber	FKM	-20°C to +180°C	Standard material

*1: The operable temperature range depends on the operating conditions.





Plug	Female thread						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	C	ØD	H(WAF)	T
F35-2P	R 1/4	106	58	18.8	21.5	19	Rc 1/4
F35-3P	R 3/8	190	67.5	24	27	24	Rc 3/8
F35-4P	R 1/2	290	78	28.5	31.7	27	Rc 1/2
F35-6P	R 3/4	460	84.5	31	40	36	Rc 3/4
F35-8P	R 1	1000	108	39	50	46	Rc 1

Socket	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H(WAF)	T
F35-2S	R 1/4	182	(57.5)	(28)	26 x Ø28.5	Rc 1/4
F35-3S	R 3/8	320	(70)	(34)	30	Rc 3/8
F35-4S	R 1/2	490	(78)	(41)	36	Rc 1/2
F35-6S	R 3/4	815	(85)	(49)	46 x Ø50	Rc 3/4
F35-8S	R 1	1520	(104)	(63)	55	Rc 1

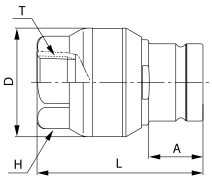
FLAT FACE CUPLA FF

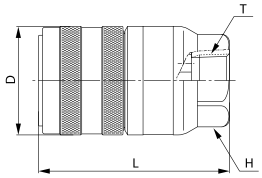
Working pressure: 35.0 MPa {357 kgf/cm²} | Valve structure: Two-way shut-off (Spill Reduction) | Applicable fluid: Hydraulic oil

- วัสดุเหล็กเกรดพิเศษ
- ชุดวาล์วออกแบบมาให้หน้าสัมผัสแบนเรียบ จึงง่ายต่อการทำความสะอาด และช่วยลดการสูญเสียแรงดันในระบบ
- เหมาะสำหรับงานไฮดรอลิกที่ต้องใช้อัตราการไหลสูงกว่ารุ่น FLAT FACE CUPLA F35
- สวมต่อปลอดภัยด้วยระบบ Sleeve-lock ป้องกันการหลุดของข้อต่อขณะใช้งานแม้มีแรงสั่นสะเทือนสูง
- ขนาด Rc 3/8, Rc 1/2, Rc 3/4, และ Rc 1 (Plug และ Socket) สามารถเชื่อมต่อในขนาดเดียวกันเท่านั้น

Body material	Special steel (Nickel plated)			
Size (Thread)	3/8 ", 1/2", 3/4", 1"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	35.0	357	350	5080
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material

*1: The operable temperature range depends on the operating conditions.





Plug	Female thread						
Model	Application (Thread)	Mass (g)	Dimension (mm)				
			L	ØD	A	H(WAF)	T
FF-3P	R 3/8	252	(66)	34	20.5	Hex. 29	Rc 3/8
FF-4P	R 1/2	409	(74)	42	22.8	Hex. 32	Rc 1/2
FF-6P	R 3/4	709	(82.5)	54	27	Hex. 41	Rc 3/4
FF-8P	R 1	1314	(96.5)	66	29.5	Hex. 54	Rc 1

Socket	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H(WAF)	T
FF-3S	R 3/8	345	(71)	(35.5)	Hex. 29	Rc 3/8
FF-4S	R 1/2	608	(84)	(44)	Hex. 32	Rc 1/2
FF-6S	R 3/4	1053	(95)	(54)	Hex. 41	Rc 3/4
FF-8S	R 1	1865	(109.5)	(66)	Hex. 54	Rc 1

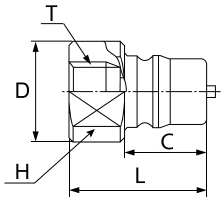
450B CUPLA

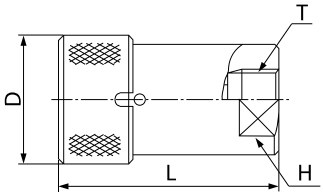
Working pressure: 44.1 MPa {450 kgf/cm²} | Valve structure: Two-way shut-off | Applicable fluid: Hydraulic oil

- วัสดุเหล็กเกรดพิเศษ
- รองรับแรงดันสูงถึง 44.1 MPa {450 kgf/ cm²}
- สวมต่อปลอดภัยด้วยระบบ Sleeve-lock ป้องกันการหลุดของข้อต่อขณะใช้งาน แม้มีแรงสั่นสะเทือนสูง
- ระบบวาล์วเปิด-ปิดอัตโนมัติ (Plug และ Socket) ป้องกันการรั่วไหลของวัสดุไหลผ่าน

Body material	Special steel (Nickel plated)			
Size (Thread)	3/8"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	44.1	450	441	6400
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	Made-to-order item
Stand-alone leakage rate on either socket or plug	0.1 mL/min at 0.3 MPa {3 kgf/cm²}			

*1: The operable temperature range depends on the operating conditions.





Plug	Female thread						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	C	ØD	H(WAF)	T
450B-3P	R 3/8	95	37.5	22.5	28	24	Rc 3/8

Socket	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H(WAF)	T
450B-3S	R 3/8	285	59.5	(36)	24	Rc 3/8

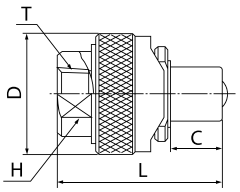
700R CUPLA

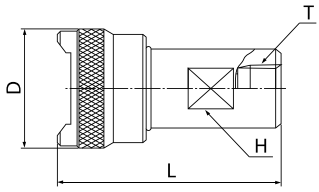
Working pressure: 68.6 MPa {700 kgf/cm²} | Valve structure: Two-way shut-off | Applicable fluid: Hydraulic oil

- วัสดุเหล็กเกรดพิเศษ
- ทนแรงดันได้สูงถึง 68.6 MPa (700 kgf/cm²)
- ระบบวาล์ว Metal-touch ปราศจากซีลยางจึงทนทานและรองรับการใช้งานระบบไฮดรอลิกแรงดันสูง
- ระบบวาล์วเปิด - ปิดอัตโนมัติ (Plug และ Socket) ป้องกันการรั่วไหลของวัสดุไหลผ่าน

Body material	Special steel (Nickel plated)			
Size (Thread)	3/8", 1/2"			
Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	68.6	700	686	9950
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR	-20°C to +80°C	Standard material
	Fluoro rubber	FKM	-20°C to +180°C	Made-to-order item
Stand-alone leakage rate on either socket or plug	For 700R-3SP, 0.05 mL/min at 0.2 MPa {2 kgf/cm²} For 700R-4SP, 0.05 mL/min at 0.3 MPa {3 kgf/cm²}			

- Do not use in an environment where there is impulse pressure.
*1: The operable temperature range depends on the operating conditions.

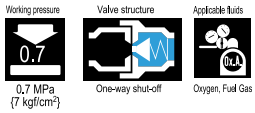




Plug	Female thread						
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	C	ØD	H(WAF)	T
700R-3P	R 3/8	210	54	18	(39.5)	24	Rc 3/8
700R-4P	R 1/2	418	70	22	(50)	27	Rc 1/2

Socket	Female thread					
Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	ØD	H(WAF)	T
700R-3S	R 3/8	270	(73)	(39.5)	22	Rc 3/8
700R-4S	R 1/2	562	(91)	(50)	27	Rc 1/2

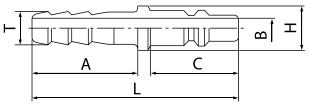
MINI CUPLA

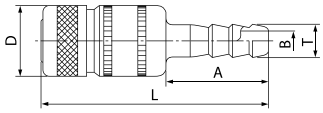


- วัสดุทองเหลือง
- เหมาะสำหรับใช้ร่วมกับอุปกรณ์หัวเชื่อม และอุปกรณ์ตัดโลหะด้วยก๊าซ (อ๊อกซิเจน และอะเซทิลีน)
- มีระบบซีลป้องกันการรั่วซึม 2 ชั้น เพิ่มความปลอดภัยในการใช้งาน
- ขนาดของข้อต่อสวมเร็วที่ใช้กับออกซิเจนและก๊าซ จะมีขนาดที่แตกต่างกัน เพื่อป้องกันความผิดพลาดในการเชื่อมต่อ
- ออกแบบมาให้เกิดการสูญเสียแรงดันต่ำ เพื่อช่วยเพิ่มอัตราการไหล

Body material		Brass			
Size	Thead	1/8", 1/4", 3/8" / M16, W12.5-20			
	Hose barb	1/4", 5/16", 3/8"			
Pressure unit		MPa	kgf/cm²	bar	PSI
Working Pressure		0.7	7	7	102
Seal material Working temperature range *1		Seal material	Mark	Working temperature range	Remarks
		Nitrile rubber	NBR	-20°C to +80°C	Standard material

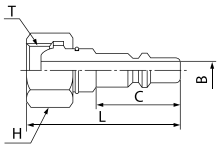
*1: The operable temperature range depends on the operating conditions.

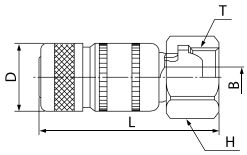




Plug	PH type (Hose barb)								
Usage	Model	Application (Hose)	Mass (g)	Dimensions (mm)					
				L	C	A	ØH	ØT	ØB
For Oxygen	22PH	1/4"	16	55	23.5	28	11	7.8	5
	25PH	5/16"	19					9	
For Fuel Gas	33PH	3/8"	22	57	25.5	28	14	10.5	7.5
	35PH	5/16"	20					9	6

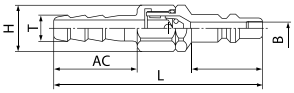
Socket	SH type (Hose barb)								
Usage	Model	Application (Hose)	Mass (g)	Dimensions (mm)					
				L	ØD	A	ØT	ØB	
For Oxygen	22SH	1/4"	52	(64)	(19.8)	29	7.8	5	
	25SH	5/16"	55				9		
For Fuel Gas	33SH	3/8"	69	(65)	(22.6)	29	10.5	7.5	
	35SH	5/16"	67				9	6	

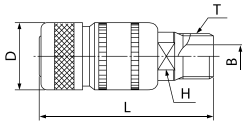




Plug	PF type (Female thread for torch connection							
Usage	Model	Application	Mass (g)	Dimensions (mm)				
				L	C	H(WAF)	T	ØB
For Oxygen	22PF	For Oxygen torch side	31	(43)	23.5	Hex.19	M16x1.5	5
	22PFF		29	(43.5)		Hex.17	G1/4	
	25PF		26				W12.5-20	
For Fuel Gas	33PF	For fuel gas torch side	36	(44.5)	25.5	Hex.19	M16x1.5 left-hand thread	7.5

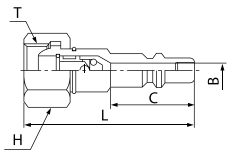
Socket	SF type (Female thread for cylinder connection)							
Usage	Model	Application (Thread)	Mass (g)	Dimensions (mm)				
				L	ØD	T	ØB	H(WAF)
For Oxygen	22SF	For Oxygen gauge side	80	(52)	(19.8)	M16x1.5	5	Hex.19
For Fuel Gas	33SF	For fuel gas gauge side	96	(54)	(22.6)	M16x1.5 left-hand thread	5	Hex.19





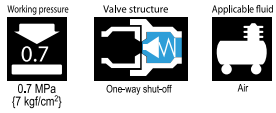
Plug	PHB type (Hose barb with backflow stop valve)								
Usage	Model	Application (Hose)	Mass (g)	Dimensions (mm)					
				L	C	A	ØH	ØT	ØB
For Oxygen	22PHB	1/4"	31	(69.6)	23.5	28	15.5	7.8	4.5
	25PHB	5/16"	34					9	
For Fuel Gas	33PHB	3/8"	41	(70.6)	25.5	28	15.5	10.5	4.5
	35PHB	5/16"	39					9	

Socket	SM type (Male thread)							
Usage	Model	Application (Thread)	Mass (g)	Dimensions (mm)				
				L	ØD	H(WAF)	T	ØB
For Oxygen	22SM	Rc 1/4	51	(52)	(19.8)	12	R 1/4	7.5
For Fuel Gas	33SM	Rc 3/8	77	(55)	(22.6)	14	R 3/8	10



Plug	PFB type (Female thread with backflow stop valve for torch connection)							
Usage	Model	Application (Thread)	Mass (g)	Dimensions (mm)				
				L	C	H(WAF)	T	ØB
For Oxygen	22PFB	For Oxygen torch side	36	(48.5)	23.5	Hex.19	M16x1.5	4.5
For Fuel Gas	33PFB	For fuel gas torch side	41	(49)	25.5	Hex.19	M16x1.5 left-hand thread	4.5

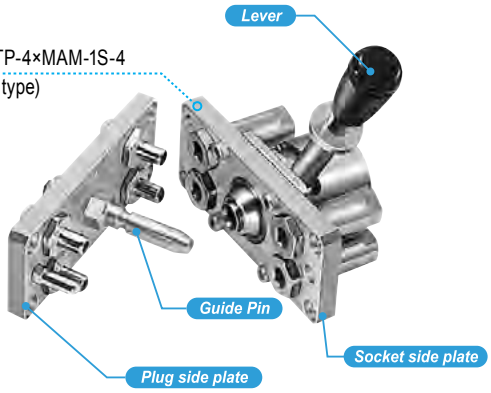
MULTI CUPLA



- สามารถเชื่อมต่อข้อต่อหลายพอร์ทด้วยการสวมต่อเพียงครั้งเดียว ช่วยลดเวลาและลดความผิดพลาดในการสวมต่อสลับด้าน
- ปลอดภัยด้วยระบบล็อกที่ช่วยป้องกันอุบัติเหตุจากการสวมต่อข้อต่อ
- ระบบวาล์วเปิด - ปิดอัตโนมัติอยู่ด้าน Socket ป้องกันการรั่วไหลของวัสดุไหลผ่าน

Made in Japan

MAM-1TP-4×MAM-1S-4
(4 ports type)

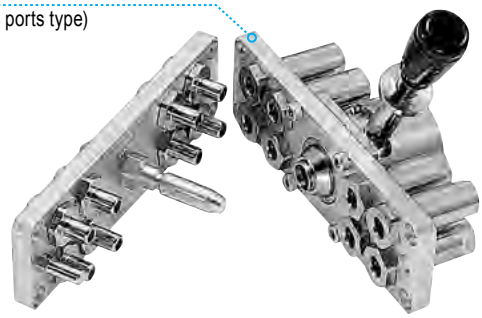


MAM TYPE

Model	Plug	MAM-1TP-4	MAM-1TP-8	MAM-1TP-12	MAM-1TP-16
	Socket	MAM-1S-4	MAM-1S-8	MAM-1S-12	MAM-1S-16
Number of parts		4	8	12	16
Size (Thread)		Rc 1/8			
Body material		Cupla : Brass (Chrome-plated) Plate : Aluminum alloy (4, 8, 12 ports) / Plate : Steel (16 ports) Locking unit : Steel and others			

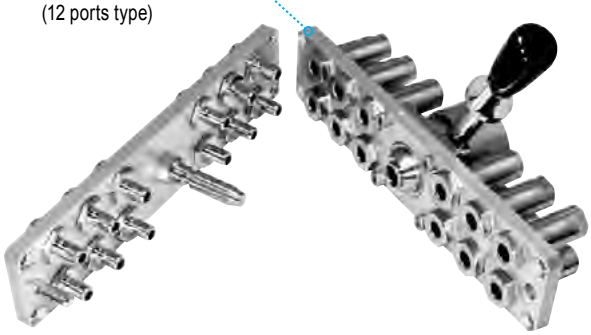
*1: The operable temperature range depends on the operating conditions.

MAM-1TP-8×MAM-1S-8
(8 ports type)

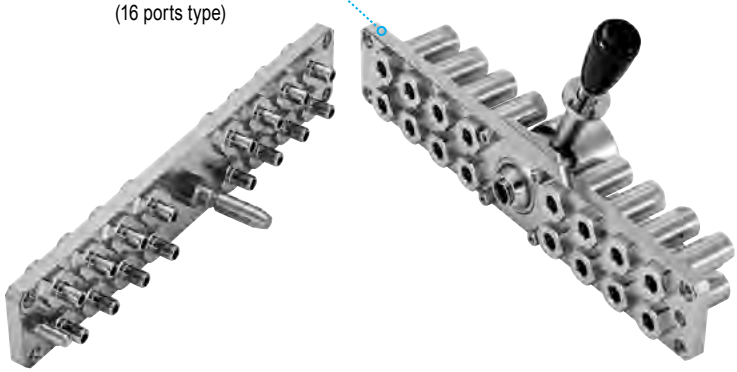


Pressure unit	MPa	kgf/cm²	bar	PSI
Working pressure	0.7	7	7	102
Seal material Working temperature range *1	Seal material	Mark	Working temperature range	
	Nitrile rubber	NBR	-20°C to +60°C	

MAM-1TP-12×MAM-1S-12
(12 ports type)



MAM-1TP-16×MAM-1S-16
(16 ports type)

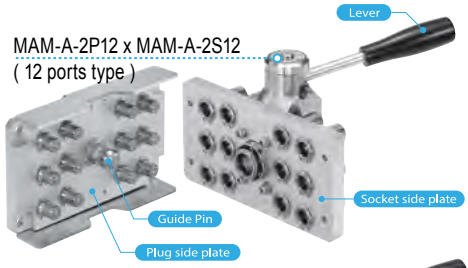


MULTI CUPLA

Working pressure: 1.0 MPa {10 kgf/cm²}
Valve structure: Two-way shut-off
Applicable fluids: Air, Water

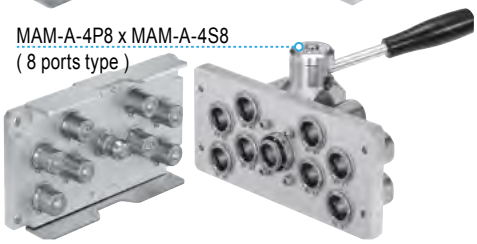
- สามารถเชื่อมต่อข้อต่อหลายพอร์ทด้วยการสวมต่อเพียงครั้งเดียว จึงช่วยลดเวลาและลดความผิดพลาดในการสวมต่อสลับด้าน
- ปลอดภัยด้วยระบบล็อก (กลไกคันโยก 2 จังหวะ) ที่ช่วยป้องกันอุบัติเหตุจากการสวมต่อข้อต่อ
- อัตราการไหลเทียบเท่าข้อต่อสวมเร็วรุ่น SP-A
- แผ่นเพลทที่เป็นส่วนประกอบของ Plug และ Socket ผลิตจากอลูมิเนียมจึงมีน้ำหนักเบาง่ายต่อการสวมต่อ
- ระบบวาล์วเปิด - ปิดอัตโนมัติ (Plug และ Socket) เพื่อป้องกันการรั่วไหลของวัสดุไหลผ่าน

MAM-A-2P12 x MAM-A-2S12
(12 ports type)



MAM-A-3P12 x MAM-A-3S12
(12 ports type)

MAM-A-4P8 x MAM-A-4S8
(8 ports type)



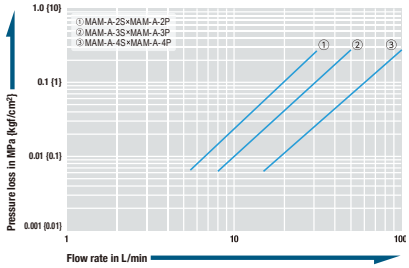
MAM-A TYPE

Model	Plug	MAM-A-2P12		MAM-A-3P6	MAM-A-3P12	MAM-A-4P4	MAM-A-4P8
	Socket	MAM-A-2S12		MAM-A-3S6	MAM-A-3S12	MAM-A-4S4	MAM-A-4S8
Number of ports		12		6	12	4	8
Size (Thread)		1/4"		3/8"		1/2"	
Body material		Cupla : Brass (Nickel plated) Plate : Aluminum alloy Locking unit : Steel (Nickel plated)					
Pressure unit		MPa	kgf/cm²	bar		PSI	
Working pressure		1.0	10	10		145	
Ambient temperature rang		0°C to + 60°C					
Seal material Working temperature range*1		Seal material	Mark	Working temperature range		Remarks	
		Fluoro rubber	FKM	-20°C to +180°C		Standard material	

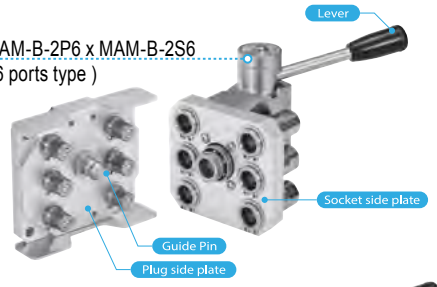
*1: The operable temperature range depends on the operating conditions.

Flow Rate - Pressure Loss Characteristics — **Per port of CUPLA**

(Test conditions)
- Fluid : Water
- Temperature : 23°C ±5°

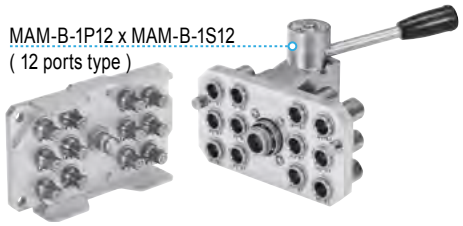


MAM-B-2P6 x MAM-B-2S6
(6 ports type)



MAM-B-1P8 x MAM-B-1S8
(8 ports type)

MAM-B-1P12 x MAM-B-1S12
(12 ports type)



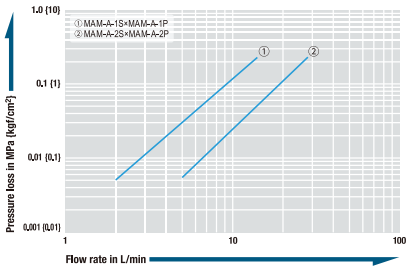
MAM-B TYPE

Model	Plug	MAM-B-1P8	MAM-B-1P12	MAM-B-2P6	MAM-B2P8
	Socket	MAM-B-1S8	MAM-B-1S12	MAM-B-2S6	MAM-B2S8
Number of ports		8	12	6	8
Size (Thread)		1/8"		1/4"	
Body material		Cupla : Brass (Nickel plated) Plate : Aluminum alloy Locking unit : Steel (Nickel plated)			
Pressure unit		MPa	kgf/cm²	bar	PSI
Working pressure		1.0	10	10	145
Ambient temperature range		0°C to + 60°C			
Seal material Working temperature range*1		Seal material	Mark	Working temperature range	Remark
		Fluoro rubber	FKM	-20°C to +180°C	Standard material

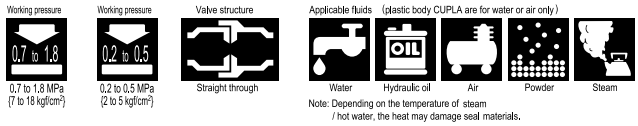
*1: The operable temperature range depends on the operating conditions.

Flow Rate - Pressure Loss Characteristics — **Per port of CUPLA**

(Test conditions)
- Fluid : Water
- Temperature : 23°C ±5°



LEVER LOCK CUPLA



- วัสดุให้เลือก : อลูมิเนียม ทองแดง และสแตนเลส
- รูปแบบก้านล็อก ช่วยให้การเชื่อมต่อสมบูรณ์ และปลอดภัย เหมาะสำหรับงานลำเลียงของเหลวหรือแก๊ส
- มีระบบซีลป้องกันการรั่ว และลดแรงกระแทกจึงทำงานได้อย่างราบรื่นไม่สะดุด
- วัสดุซีลมีให้เลือกหลายชนิดเพื่อให้เหมาะกับการใช้งาน
- ผ่านมาตรฐานการผลิตของ US Military MIL-A-A-59326

Made in Japan

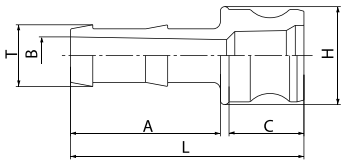
Metal body (Aluminum alloy, Copper alloy, and Stainless steel) | Plastic body

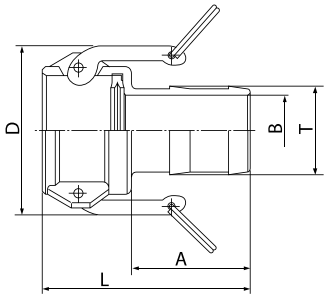
Body material (Material symbol)		Aluminum alloy (AL), Copper alloy (BR)				Stainless steel (SUS)		
Size (Thread and hose)		3/4" to 2"	2 1/2"	3"	4"	3/4" to 2"	2 1/2" to 3"	4"
Working pressure*1	MPa	1.8	1.1	0.9	0.7	1.8	1.6	1.1
	kgf/cm²	18	11	9	7	18	16	11
	bar	18	11	9	7	18	16	11
	PSI	261	160	131	102	261	232	160

Seal material Working temperature range	Seal material	Mark	Working temperature range
	Nitrile rubber	NBR	-20°C to +80°C

Optional seal material Working temperature range	Seal material	Mark	Working temperature range
	Silicone rubber	SI	-40°C to +150°C
	Fluoro rubber	FKM	-20°C to +180°C
	Ethylene-propylene rubber	EPDM	-40°C to +150°C
	FEP-covered silicone rubber *2	-	+5°C to +50°C
	FEP-covered fluoro rubber *2	-	+5°C to +50°C

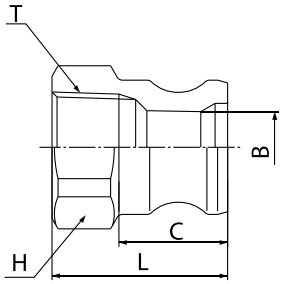
*1: The operable temperature range depends on the operating conditions.
*2: Made-to-order item (Working pressure : 0.2 MPa {2kgf/cm²})

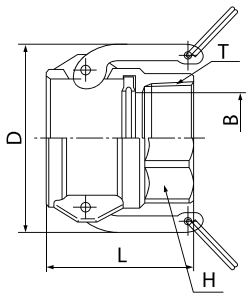




Plug	LE type (Hose barb)								
Material	Model	Application (Hose)	Mass (g)	Dimensions (mm)					
				L	A	C	ØH	ØT	ØB
Aluminum alloy	LE-6TPH	3/4”	65	81	52	26	34	21.4	11
	LE-8TPH	1”	100	95	58	34	40	27.4	17.5
	LE-10TPH	1 1/4”	140	102	58	40	48	34.1	23.5
	LE-12TPH	1 1/2”	190	107	61	42	58	40.5	29
	LE-16TPH	2”	290	122	70	48	69	53.2	40
	LE-20TPH	2 1/2”	390	134.5	80	50	81	66.7	50
	LE-24TPH	3”	545	167	101	49.4	97	79	68
	LE-32TPH	4”	850	176	106	51.8	133	105	93
Copper alloy	LE-6TPH	3/4”	215	90.5	52.5	26	39	21.5	12.5
	LE-8TPH	1”	305	107	60	34.5	41	27.5	20
	LE-10TPH	1 1/4”	440	102	58	40	48	34.1	25.5
	LE-12TPH	1 1/2”	560	107	61	42	58	40.5	31.5
	LE-16TPH	2”	865	131	73	44	70.5	53.5	44.5
	LE-20TPH	2 1/2”	1180	149	84	48	91	67	57
	LE-24TPH	3”	1800	171	104	50	102	79	70
	LE-32TPH	4”	3500	176	109	52	129	105	93
Stainless steel	LE-6TPH	3/4”	170	90	52	27	35	21	15
	LE-8TPH	1”	265	107	60	35	42	27	20
	LE-10TPH	1 1/4”	430	111	61	40	48	34	25.5
	LE-12TPH	1 1/2”	530	114	61	40	60	40	33
	LE-16TPH	2”	790	131	73	45	70	53	44
	LE-20TPH	2 1/2”	1195	137	80.5	42.7	83	67	56
	LE-24TPH	3”	1755	162	99.5	49.2	102	78	68
	LE-32TPH	4”	2595	174	109	50	130	105	94

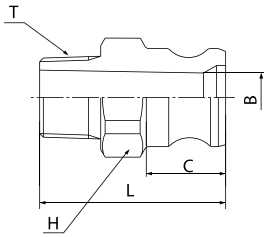
Socket	LC type (Hose barb)							
Material	Model	Application (Hose)	Mass (g)	Dimensions (mm)				
				L	A	D	ØT	ØB
Aluminum alloy	LC-6TSH	3/4”	140	85	52	(60.5)	21.4	(11)
	LC-8TSH	1”	190	99	58	(61)	27.4	(17)
	LC-10TSH	1 1/4”	320	104	58	(82)	34.1	(23)
	LC-12TSH	1 1/2”	350	108.5	61	(90)	40.5	(29)
	LC-16TSH	2”	430	122.5	70	(100)	53.2	(41.5)
	LC-20TSH	2 1/2”	560	136.5	80	(112)	66.7	(54)
	LC-24TSH	3”	915	175	100	(139)	79	68
	LC-32TSH	4”	1190	180	104	(165)	104	93
Copper alloy	LC-6TSH	3/4”	320	85	52	(60.5)	21.4	13
	LC-8TSH	1”	420	99	58	(61)	27.4	19.5
	LC-10TSH	1 1/4”	700	104	58	(82)	34.1	25.5
	LC-12TSH	1 1/2”	720	110	62	(91)	41	33
	LC-16TSH	2”	870	121	70	(100)	53	44
	LC-20TSH	2 1/2”	1530	137	83	(113)	67	57
	LC-24TSH	3”	1795	160	105	(139)	79	68
	LC-32TSH	4”	3100	163	107	(168)	104	92
Stainless steel	LC-6TSH	3/4”	230	86	52	(55)	21	15
	LC-8TSH	1”	340	99	60	(63)	27	20
	LC-10TSH	1 1/4”	615	107	61	(85)	34	25.5
	LC-12TSH	1 1/2”	645	108	61	(91)	40	33
	LC-16TSH	2”	1000	129	73	(101)	53	44
	LC-20TSH	2 1/2”	1270	134	81	(113)	67	57
	LC-24TSH	3”	2065	158	100	(139)	79	67
	LC-32TSH	4”	3020	165	107	(167)	105	94

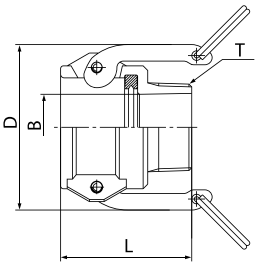




Plug	LA type (Female thread)							
Material	Model	Application (Thread)	Mass (g)	Dimensions (mm) Oct. stands for octagon. Dod.stands for dodecagon.				
				L	C	H(WAF)	ØB	T
Aluminum alloy	LA-6TPF	3/4”	45	42	26	Hex. 36	17	Rc 3/4
	LA-8TPF	1”	65	52	34	Hex. 41	22.5	Rc 1
	LA-10TPF	1 1/4”	110	59	40	Hex. 50	27.5	Rc 1 1/4
	LA-12TPF	1 1/2”	130	58	42	Hex. 60	34.5	Rc 1 1/2
	LA-16TPF	2”	170	63.5	48	Oct. 70	44.5	Rc 2
	LA-20TPF	2 1/2”	320	85	50	Oct. 85	55.5	Rc 2 1/2
	LA-24TPF	3”	370	79	52.5	Dod. 99	73.5	Rc 3
	LA-32TPF	4”	640	82	54	Dod. 130	100	Rc 4
Copper alloy	LA-6TPF	3/4”	145	42	27	Oct. 34	20	Rc 3/4
	LA-8TPF	1”	190	46	32	Oct. 41	24	Rc 1
	LA-10TPF	1 1/4”	390	59	40	Hex. 50	28	Rc 1 1/4
	LA-12TPF	1 1/2”	420	58	42	Oct. 60	36	Rc 1 1/2
	LA-16TPF	2”	560	63.5	48	Oct. 70	45	Rc 2
	LA-20TPF	2 1/2”	950	79	50	Dod. 84	56	Rc 2 1/2
	LA-24TPF	3”	1210	71	50	Dod. 101	70	Rc 3
	LA-32TPF	4”	1620	79	53	Dod. 127	101	Rc 4
Stainless steel	LA-6TPF	3/4”	120	39	27	Oct. 33	19	Rc 3/4
	LA-8TPF	1”	170	47	33	Oct. 41	24	Rc 1
	LA-10TPF	1 1/4”	270	53.5	41	Oct. 50	28	Rc 1 1/4
	LA-12TPF	1 1/2”	375	55	40	Oct. 58	35.5	Rc 1 1/2
	LA-16TPF	2”	505	62	47	Oct. 69	45	Rc 2
	LA-20TPF	2 1/2”	825	77	49	Dod. 83	56	Rc 2 1/2
	LA-24TPF	3”	875	72	51	Dod. 96	73	Rc 3
	LA-32TPF	4”	1470	79	53	Dod. 124	100	Rc 4

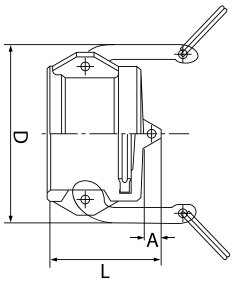
Socket	LD type (Female thread)							
Material	Model	Application (Thread)	Mass (g)	Dimensions (mm) Oct. stands for octagon. Dod.stands for dodecagon.				
				L	C	H(WAF)	ØB	T
Aluminum alloy	LD-6TSF	3/4”	130	53	(62.4)	Hex. 36	21	Rc 3/4
	LD-8TSF	1”	190	64.5	(61)	Hex. 41	26	Rc 1
	LD-10TSF	1 1/4”	330	72.5	(82)	Hex. 50	34	Rc 1 1/4
	LD-12TSF	1 1/2”	360	70.5	(90)	Oct. 60	39	Rc 1 1/2
	LD-16TSF	2”	420	79.5	(100)	Oct. 70	49	Rc 2
	LD-20TSF	2 1/2”	550	88.5	(112)	Oct. 85	59	Rc 2 1/2
	LD-24TSF	3”	800	89	(140)	Dod. 99	75	Rc 3
	LD-32TSF	4”	1140	93	(165)	Dod. 131	94	Rc 4
Copper alloy	LD-6TSF	3/4”	310	53	(60.5)	Hex. 36	21	Rc 3/4
	LD-8TSF	1”	430	64.5	(61)	Hex. 41	26	Rc 1
	LD-10TSF	1 1/4”	730	72.5	(82)	Hex. 50	34	Rc 1 1/4
	LD-12TSF	1 1/2”	770	70.5	(90)	Oct. 60	39	Rc 1 1/2
	LD-16TSF	2”	990	79.5	(100)	Oct. 70	49	Rc 2
	LD-20TSF	2 1/2”	1290	81.5	(113)	Dod. 84	61	Rc 2 1/2
	LD-24TSF	3”	1560	87	(139)	Oct. 96	77	Rc 3
	LD-32TSF	4”	3590	91	(165)	Dod. 126	96	Rc 4
Stainless steel	LD-6TSF	3/4”	225	52	(55)	Oct. 32	19	Rc 3/4
	LD-8TSF	1”	350	60	(63)	Oct. 41	24	Rc 1
	LD-10TSF	1 1/4”	600	68	(85)	Oct. 50	30	Rc 1 1/4
	LD-12TSF	1 1/2”	715	72	(87)	Oct. 58	37.5	Rc 1 1/2
	LD-16TSF	2”	940	78.5	(100)	Oct. 69	50	Rc 2
	LD-20TSF	2 1/2”	1050	82	(113)	Dod. 83	61	Rc 2 1/2
	LD-24TSF	3”	1605	84	(140)	Dod. 97	77	Rc 3
	LD-32TSF	4”	2575	94	(167)	Dod. 125	97	Rc 4

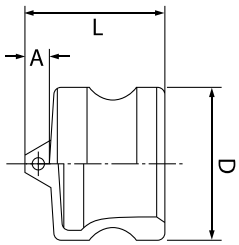




Plug	LF type (Male thread)							
Material	Model	Application (Thread)	Mass (g)	Dimensions (mm)				
				L	C	H(WAF)	ØB	T
Aluminum alloy	LF-6TPM	3/4”	70	61	26	Hex. 36	16	R 3/4
	LF-8TPM	1”	90	73	34	Hex. 41	22	R 1
	LF-10TPM	1 1/4”	140	81	40	Hex. 50	28	R 1 1/4
	LF-12TPM	1 1/2”	150	80.5	42	Oct. 55	34.5	R 1 1/2
	LF-16TPM	2”	220	89.5	48	Oct. 65	44.5	R 2
	LF-20TPM	2 1/2”	370	101	50	Oct. 80	56	R 2 1/2
	LF-24TPM	3”	470	106	52	Dod. 99	73	R 3
	LF-32TPM	4”	875	116	54	Dod. 130	100	R 4
Copper alloy	LF-6TPM	3/4”	185	59	27	Oct. 34	20	R 3/4
	LF-8TPM	1”	280	69	32	Oct. 41	24	R 1
	LF-10TPM	1 1/4”	460	81	40	Hex. 50	28	R 1 1/4
	LF-12TPM	1 1/2”	500	80.5	42	Oct. 55	36	R 1 1/2
	LF-16TPM	2”	750	89.5	48	Oct. 65	45	R 2
	LF-20TPM	2 1/2”	1290	98	50	Dod. 83	56	R 2 1/2
	LF-24TPM	3”	1480	103	50.8	Dod. 96	73	R 3
	LF-32TPM	4”	3155	113	53	Dod. 126	100	R 4
Stainless steel	LF-6TPM	3/4”	175	59	27	Oct. 33	19	R 3/4
	LF-8TPM	1”	255	69	33	Oct. 41	24	R 1
	LF-10TPM	1 1/4”	415	80	42	Oct. 50	29.5	R 1 1/4
	LF-12TPM	1 1/2”	575	80	40	Oct. 58	36.5	R 1 1/2
	LF-16TPM	2”	680	90	46.5	Oct. 69	46	R 2
	LF-20TPM	2 1/2”	1020	99	49	Dod. 83	56	R 2 1/2
	LF-24TPM	3”	1415	103	51	Dod. 96	73	R 3
	LF-32TPM	4”	2275	112	53	Dod. 124	100	R 4

Socket	LB type (Male thread)						
Material	Model	Application (Thread)	Mass (g)	Dimensions (mm)			
				L	D	ØB	T
Aluminum alloy	LB-6TSM	3/4”	110	53	(60.5)	(17)	R 3/4
	LB-8TSM	1”	170	65	(61)	(235)	R 1
	LB-10TSM	1 1/4”	310	72	(82)	29.5	R 1 1/4
	LB-12TSM	1 1/2”	340	71.5	(90)	36	R 1 1/2
	LB-16TSM	2”	400	79.5	(100)	46	R 2
	LB-20TSM	2 1/2”	530	88.5	(112)	(57.5)	R 2 1/2
	LB-24TSM	3”	715	90	(139)	76	R 3
	LB-32TSM	4”	920	92	(165)	99	R 4
Copper alloy (Made to order item)	LB-6TSM	3/4”	260	52	(53)	19.5	R 3/4
	LB-8TSM	1”	355	63	(62)	26	R 1
	LB-10TSM	1 1/4”	620	71	(84)	28	R 1 1/4
	LB-12TSM	1 1/2”	700	71	(91)	36	R 1 1/2
	LB-16TSM	2”	950	81	(100)	51	R 2
	LB-20TSM	2 1/2”	1250	86	(113)	63	R 2 1/2
	LB-24TSM	3”	1780	92	(139)	78	R 3
	LB-32TSM	4”	2540	98	(168)	101	R 4
Stainless steel (Available on reguest)	LB-6TSM	3/4”	210	52.5	(55)	20	R 3/4
	LB-8TSM	1”	300	63	(63)	25.5	R 1
	LB-10TSM	1 1/4”	520	70.5	(85)	34	R 1 1/4
	LB-12TSM	1 1/2”	580	71.5	(87)	38	R 1 1/2
	LB-16TSM	2”	780	78.5	(101)	50.5	R 2
	LB-20TSM	2 1/2”	980	84	(113)	66	R 2 1/2
	LB-24TSM	3”	1490	92	(139)	78.5	R 3
	LB-32TSM	4”	2080	92	(167)	103.5	R 4





Plug	L-PD type (Plug cap)					
Material	Model	Size	Mass (g)	Dimensions (mm)		
				L	A	D
Aluminum alloy	L-6PD	3/4”	100	46	12	(54)
	L-8PD	1”	145	54	11.5	(62)
	L-10PD	1 1/4”	230	60	13	(83)
	L-12PD	1 1/2”	295	68	17	(91)
	L-16PD	2”	360	68	11	(100)
	L-20PD	2 1/2”	435	72	15	(113)
	L-24PD	3”	690	72	10	(139)
	L-32PD	4”	870	76	15	(167)
Copper alloy	L-6PD	3/4”	220	45	11	(53)
	L-8PD	1”	315	53	12	(62)
	L-10PD	1 1/4”	610	61	13	(84)
	L-12PD	1 1/2”	645	69	17.5	(91)
	L-16PD	2”	830	68	11	(100)
	L-20PD	2 1/2”	980	71	14	(113)
	L-24PD	3”	1380	81	20	(139)
	L-32PD	4”	2700	90	26	(168)
Stainless steel	L-6PD	3/4”	180	45	12	(55)
	L-8PD	1”	265	52	11	(63)
	L-10PD	1 1/4”	475	60	11	(85)
	L-12PD	1 1/2”	545	63	15	(87)
	L-16PD	2”	720	65	11	(101)
	L-20PD	2 1/2”	945	71	15	(113)
	L-24PD	3”	1420	72	12	(139)
	L-32PD	4”	2055	77	14	(167)

Socket	L-SD type (Socket cap)					
Material	Model	Size	Mass (g)	Dimensions (mm)		
				L	A	ØD
Aluminum alloy	L-6SD	3/4”	35	32	8	32
	L-8SD	1”	45	44	10	36.7
	L-10SD	1 1/4”	70	57	14	45.5
	L-12SD	1 1/2”	90	54	15	53.4
	L-16SD	2”	140	62	13	63
	L-20SD	2 1/2”	210	69	20	75.8
	L-24SD	3”	290	71	15	91.5
	L-32SD	4”	960	74	16	119.4
Copper alloy	L-6SD	3/4”	160	34	8	32.1
	L-8SD	1”	150	44	10	36.7
	L-10SD	1 1/4”	210	55	12	45.5
	L-12SD	1 1/2”	290	54	15	53.4
	L-16SD	2”	420	61	12	63
	L-20SD	2 1/2”	630	69	19	75.7
	L-24SD	3”	860	71	15	91.5
	L-32SD	4”	1780	74.5	16	119.4
Stainless steel	L-6SD	3/4”	95	39	12	32
	L-8SD	1”	145	45	12	37
	L-10SD	1 1/4”	250	51	10	45
	L-12SD	1 1/2”	300	54	14	53
	L-16SD	2”	490	59.5	12.5	63
	L-20SD	2 1/2”	710	64	14	76
	L-24SD	3”	930	68	14	92
	L-32SD	4”	1275	68	14	120

The following terms are used in detailed information pages of each CUPLA.
Refer to these terms when checking CUPLA specifications.

International System of Units (SI Units)

Units stated in this catalog are based on SI Units. The old units, which are non-SI Units, are also written within parentheses side by side with SI Units for reference only.

Glossary

The Meaning of Each Letter in the Model Name

The model name of CUPLA indicates its size, whether plug or socket, and the end configuration. Rated pressure is also shown for some hydraulic couplings. Check the following tables to understand the model name implication before making your selection.

200 - 20 S H Model name (in case of HI CUPLA 200)

Series name

End configuration *2

Symbol	H	M	F
Meaning	Hose barb	Male thread	Female thread

Plug or Socket

Symbol	P	S
Meaning	Plug	Socket

Size *1

Symbol	1	2	3	4	6	8	10	12	16	20	24	32
Nominal diameter	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"

*1: The digit numbers of models for some products differs from those of symbols. For example, in case of HI CUPLA 20SH, not "20" but only "2" of the "20" corresponds to "2" of the symbol and indicates the nominal diameter of 1/4".
*2: For a product with only one type of end configuration, this symbol is omitted. For example, 210 CUPLA have only female threaded end so the model indicates only the size and plug or socket identification.

Body Material

This indicates the material that is used for the plug body or socket body that forms the flow path of fluid through CUPLA. Some products have internal components of a different material. Please check with us for details.

Body Material		Major applicable fluid
Common name	Mark	
Brass	BRASS	Air, Water, Oil
Iron, Steel	STEEL	Air, Oil
Stainless steel	SUS	Air, Water, Oil

Please refer to Page 172 for body material selection table.

Size

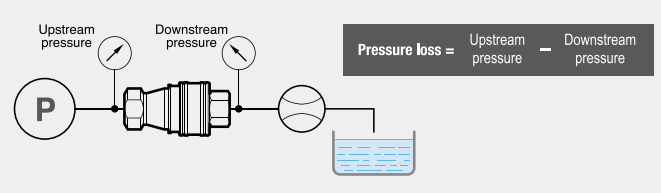
This indicates the nominal size of the pipe thread connection or of the hose to be used.

Working Pressure

The normal allowable fluid pressure under continuous use.
Exceeding the working pressure may cause damage and leakage.

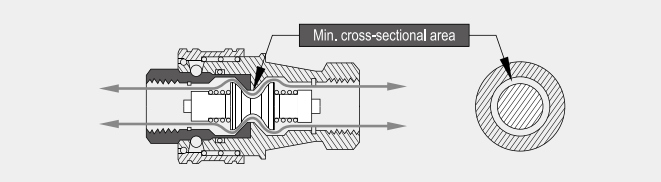
Pressure Loss

This shows the loss of pressure when fluid runs through the coupling set.
They are measured values at our testing facilities. May differ according to the installation/piping method and operating conditions.



Minimum Cross-Sectional Area

This shows the minimum cross-sectional area of the fluid path when CUPLA is connected. The position is different in some products.



Seal Material

This shows the material used to seal CUPLA, usually an O-ring. The standard material is nitrile butadiene rubber. For materials other than those shown below, please specify such as silicone (SI), butyl (IIR), Kalrez (KL) or rubber for food, depending on your application.

Properties of rubbers used for O-rings

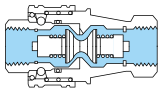
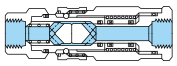
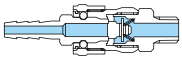
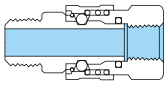
Seal material		Working Temperature Range	Features
Common name	Nitto Kohki symbol		
Nitrile rubber	NBR	-20˚C to +80˚C	Standard seal with excellent oil resistance.
Hydrogenated nitrile rubber	HNBR	-20˚C to +120˚C	Compared with the standard nitrile rubber, the seal material is more heat and weather resistant.
Fluoro rubber	FKM	-20˚C to +180˚C	Excellent for heat, weather, and oil resistance. Applicable to wide range of applications.
Chloroprene rubber	CR	-20˚C to +80˚C	Excellent weather resistance. In addition, the seal material can also be used for refrigeration oil and refrigerant applications such as HFC-134a.
Ethylene-propylene rubber	EPDM	-40˚C to +150˚C	Excellent resistance to steam and hot water, also excellent resistance to weather and ozone.
Perfluoroelastomer	P	0˚C to +50˚C	Excellent resistance to chemical and solvents.

Note: Even among rubber materials of the same category, the working temperature range differs depending upon the design of CUPLA. For details, see the specifications of each CUPLA series. As for the Nitto Kohki symbol for rubber material, fluoro rubber is designated as "FKM" for example. The above are general features, but the seal resistance depends on fluid temperature, fluid concentration, and additives contained in the fluid.

Working Temperature Range

This shows the minimum and maximum working temperature range of the seal material used in the product.
Continuous use at the minimum or maximum temperature is not recommended. Please contact us for consultation.
The operable temperature range depends on the operating conditions.

Valve Structure

Two-way shut-off		Automatic shut-off valves are mounted in both plug and socket. The valves prevent spill out of fluid from the lines on disconnection.	
Two-way shut-off (Spill Reduction)		"Two-way shut-off" with spill reduction design allows extremely little admixture of air on connection and minimizes fluid spill out on disconnection.	
One-way shut-off		This design prevents fluid outflow only from the socket side on disconnection. Also available are plugs with an automatic shut-off valve.	
Straight through		Shut-off valve is equipped neither in plug nor in socket. Fluid flows out from either side on disconnection.	

Suitability for Vacuum

Indicates if it has necessary performance required for vacuum applications. (Note that the performance in connected state differs from that of disconnected state.)

Interchangeability

Indicates whether the plug or socket of different series, types or models can be connected with each other.

Maximum Tightening Torque, Tightening Torque Range

Indicates suitable torque value or range considering of the balance between leakage by loose fit and damage by structural stress when installing CUPLA.

Flow Direction

The design of some couplings may restrict the fluid flow direction to one way only. Check the suggested direction before installing.

POWER TOOL &
MACHINE TOOLS

Made in Japan

NITTO KOHKI

MACHINE TOOLS

ELECTRIC SCREWDRIVER

POWER TOOLS

POWER TOOL เครื่องมือลม

CHAMFERING เครื่องลบมุม

Mini Beveler A39
Circuit Beveler A40

SCALING เครื่องสกัด

Air Chipper A41
Auto Chisel A42
Super Kelen A43
Jet Chisel A44

GRINDING & SANDING เครื่องเจียรลม และเครื่องขัด

Myton A45
Belton / Baby Belton A46
Compact Multi Sander A47
Free Sander / Line Sander A48
Orbital Sander / Palm Orbital Sander A49
Air Sonic A50

FILING AND DEBURRING ตะไบลม และเครื่องลบคม

Super Hand / Super Hand Light / Micro Air Hand A51
Burr Cutter A52

CUTTING AND DRILLING เลื่อยลม และสว่านลม

Super Saw A52
Air Drill A53

MACHINE TOOL เครื่องมือกล

Atra Ace Manual Feed ARA-100A A59
Atra Ace Manual Feed LO-3550 ..... A60
Atra Ace Auto Feed WA-3500 / WA-5000 ..... A61
Atra Ace Manual Feed WOJ-3200 / AO-5575A A62
Atra Ace Quick Auto QA-4000/ QA-6500 ..... A63
Atra Master M-250B / M320 ..... A63
Jetbroach Cutter & Hi-Broach Cutter A64
Selfer Ace HS11-1624 / HS07-1624 / HS06-1322 ..... A66
Hydraulic Pump For Selfer Ace HPD-05 ..... A66
Handy Selfer E25-0615 / E55-0619 ..... A67
Punches & Dies for Selfer Puncher A68

MINI BEVELER

เครื่องลบมุม

Double insulation

MB-03A

3C
3R
Mild Steel

- ขนาดเครื่องกะทัดรัด น้ำหนักเบา เหมาะสำหรับงานที่ต้องการความเร็ว และความคล่องตัว
- สามารถลบมุมเหล็กที่ความกว้างสูงสุด 3 มม. (ที่มุม 45°)
- สามารถลบมุมเหล็กที่รัศมีมากกว่า 170 มม. ด้วยอุปกรณ์เสริม R-part

Model		MB-03A
Power Source (Single Phase)		230 V AC, 50/60 Hz
Rated Power Consumption	W	430
Rated Current	A	2
Duty Cycle	min	30
No-load Speed	min^{-1}(rpm)	11000
Chamfering Capacity (Mild Steel)		Up to 3 mm Chamfer or 2 mm and 3 mm Radius
Chamfer Angle		45°
Power Cord Length	m	2.5
Mass (Weight)	kg	2.5

Chamfer Angle,Width and Radius

Mild Steel (mm)		Chamfer		Mild Steel (mm)	Radius
X	Y	X, Y, 45°, Straigth	Radius	2,3	Radius, Round
3	3				

Accessories Included	
• Indexable Insert 9.525 R2 (Installed)	• Spanner T-9F
• Indexable Insert 9.525	• Hex. Nut
• 3 mm Hex. Socket Screw Key	• 2 pieces of Hex. Socket Set Screw 8 x 25
• 4 mm Hex. Socket Screw Key	

MINI BEVELER

เครื่องลบมุม

AMB-0307

• Ring switch type

7C
4R
Mild Steel

3C
4R
Stainless Steel

- เหมาะสำหรับงานลบมุมสแตนเลส และเหล็กกล้าคาร์บอน
- สามารถลบมุมชิ้นงานที่รัศมีความโค้งแคบสุดถึง 300 มม.
- ตั้งค่าการลบมุมได้ตั้งแต่ 15° - 45° ที่ความกว้างสูงสุด 7 มม. (ที่มุม 45°)
- ใช้ใบมีดทังสเตนคาร์ไบด์แบบถอดเปลี่ยนได้และมีคุณสมบัติทนความร้อน

Model		AMB-0307
Air Pressure	MPa (kgf/cm^2)	0.6 (6)
Air Consumption (No-load)	m^3/min	0.9
Free Speed	min^{-1}(rpm)	14000
Chamfering Capacity	Mild Steel	Up to 7 mm Chamfer or 2,3,4 mm Radius
	Stainless Steel	Up to 3 mm Chamfer or 2,3,4 mm Radius
Chamfer Angle		15° - 45°
Inlet Size		Rc 3/8
Mass (Weight)	kg	2.9

Accessories Included	
• Indexable Insert with Hole 12.7 (Installed)	• 2 pieces of Hex. Nut M8
• Indexable Insert Set Screw 4 x 7 (Installed)	• 3 mm Hex. Socket Screw Key
• Indexable Insert with Hole 12.7	• 4 mm Hex. Socket Screw Key
• Indexable Insert Set Screw 4 x 7	• Spanner T - 15F
• Knob	• Bushing R 3/8 x NPT 3/8
• 2 pieces of Hex. Socket Set Screw 8 x 25	

Chamfer Angle, Width and Radius

Chamfer Angle α	Mild Steel (mm)			Stainless Steel (mm)		
	X	Y	Z	X	Y	Z
45°	7	7	9.9	3	3	4.2
30°	4	7	8.1	2.2	3.8	4.4
15°	2.2	8	8.3	1	3.8	3.9

Chamfer, X, α, Y, Z, Straight

	Mild Steel (mm)	Stainless Steel (mm)
Radius	2, 3, 4	2, 3, 4

Radius, Round

CIRCUIT BEVELER

เครื่องลบมุม

CB-01 CE

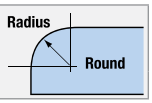
- เหมาะสำหรับงานลบมุมชิ้นส่วนแม่พิมพ์
- ใช้เส้นผ่านศูนย์กลางรูเหล็กขนาดเพียง 6.8 มม.ในการลบมุม
- มาพร้อมใบมีดแบบถอดเปลี่ยนได้ 3 ด้าน จำนวน 2 ชิ้น ช่วยประหยัดต้นทุน และได้ผิวงานที่เรียบลื่นไม่มีสะดุด
- สามารถใช้กับวัสดุอลูมิเนียม และ สแตนเลสด้วยใบมีดเสริม (optional indexable insert)

Model		CB-01
Air Pressure	MPa (kgf/cm²)	0.6 (6)
Air Consumption (No-load)	m³/min	0.15
Free Speed	min⁻¹(rpm)	28000
Chamfering Capacity	Mild Steel	Up to 1 mm Chamfer or 1 mm Radius
	Stainless Steel*	Up to 0.5 mm Chamfer
	Aluminum*	Up to 1 mm Chamfer
Chamfer Angle		45°
Minimum Workpiece Thickness	mm	1.5 (0.5 mm Chamfer)
Inlet Size		Rc 1/4
Mass (Weight)	kg	0.5

*Optional indexable insert is required.

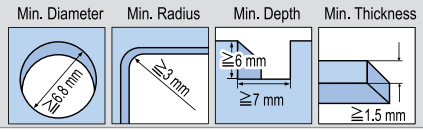
Accessories Included
• 2 pieces of Indexable Insert 8.4 (Installed)
• 2 pieces of Indexable Insert Set Screw (Installed)
• 2 pieces of Indexable Insert Set Screw
• 2 mm Hex. Socket Screw Key for Chamfering Adjustments
• Spanner T-6F for Replacement of Indexable Insert
• Bushing R 1/4 x NPT 1/4

	Mild Steel (mm)
Radius	1

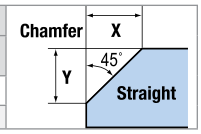


1C Aluminum* | 1C 1R Mild Steel | 0.5C Stainless Steel*

Chamfering range of operation



Chamfer Angle and Width					
Mild Steel (mm)		Stainless Steel (mm)		Aluminum (mm)	
X	Y	X	Y	X	Y
1	1	0.5	0.5	1	1



CIRCUIT BEVELER

เครื่องลบมุม

CB-02 CE

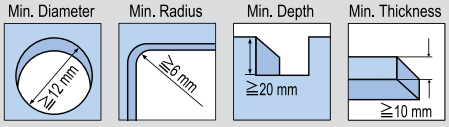
2C 2R Mild Steel

- เหมาะสำหรับงานลบมุมทรงกลม วงรี และแนวเส้นตรง
- ลบมุมได้ทั้งขอบด้านใน และด้านนอก
- มีเกจวัดความลึกเพื่อกำหนดความกว้างการลบมุมได้อย่างแม่นยำ

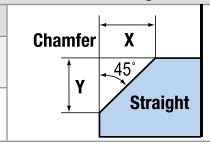
Specifications		
Model		CB-02
Air Pressure	MPa (kgf/cm²)	0.6 (6)
Air Consumption (No-load)	m³/min	0.4
Free Speed	min⁻¹(rpm)	15000
Chamfering Capacity		Up to 2 mm Chamfer or 2 mm Radius
Chamfer Angle		45°
Inlet Size		Rc 1/4
Mass (Weight)	kg	1.8

Accessories Included
• Indexable Insert 9.525 (Installed)
• Indexable Insert 9.525
• Adjustment Gauge
• Spanner T-9F
• Protective Cap
• Hook Spanner 58-65
• Bushing R 1/4 x NPT 1/4

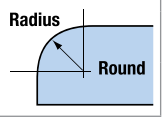
Chamfering range of operation



Chamfer Angle, Width and Radius	
Mild Steel (mm)	
X	Y
2	2



	Mild Steel (mm)
Radius	2



AIR CHIPPER

เครื่องสกัด

ACH-16 CE

CH-24 CE

- เหมาะกับงานสกัดเศษรอยเชื่อม หรืองานสกัดเศษบริเวณชิ้นงาน
- การถอดเปลี่ยนดอกสกัดสามารถทำได้ง่าย โดยไม่ต้องใช้เครื่องมือใดๆ
- มีระบบป้องกันการเปิดเครื่องโดยไม่ได้ตั้งใจ

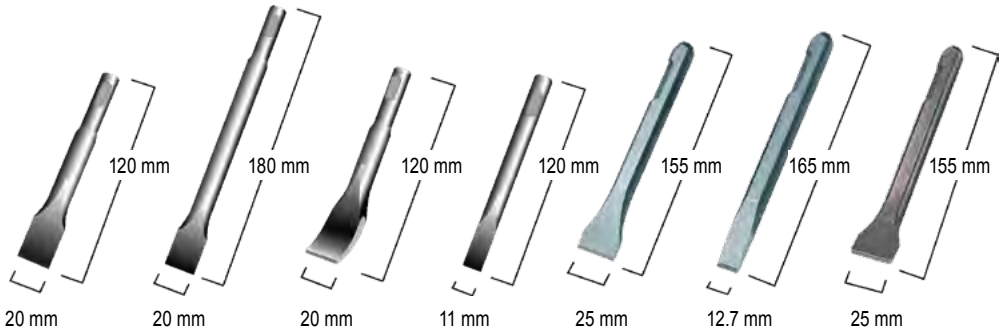
Specifications		
Model	ACH-16	CH-24
Air Pressure MPa (kgf/cm^2)	0.6 (6)	
Air Consumption (No-load) m^3/min	0.15	0.2
Strokes per Minute min^{-1}	6000	4000
Shank Size mm	10.5 Round	12.7 Square
Inlet Size	Rc 3/8	
Mass (Weight) kg	0.9	1.7
Accessories Included	• TQ03431 Flat Chisel (Installed) • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8	• TP15166 Curved Flat Chisel (Installed) • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8

Optional Chisels for Air Chipper ACH-16

Ref. No.	PN	Description	Sales Unit
1	TQ03431	Flat Chisel 20 x 120	1 piece
2	TQ03452	Flat Chisel 20 x 180	
3	TQ03453	Curved Flat Chisel 20 x 120	
4	TQ03549	Flat Chisel 11 x 120	

Optional Chisels for Air Chipper CH-24

Ref. No.	PN	Description	Sales Unit
5	TP15233	Flat Chisel 25 x 155	1 piece
6	TP15234	Straight Flat Chisel 12.7 x 165	
7	TP15166	Curved Flat Chisel 25 x 155	



unit : mm

AUTO CHISEL

เครื่องสกัด

A-300 CE

(ราคา A-300 ไม่รวมดอกสกัด)

- เหมาะสำหรับงานซ่อมแซม หรือกระบวนการขึ้นรูปโลหะแผ่น
- สามารถใช้สกัดในพื้นที่แคบได้ดี
- ถอดเปลี่ยนดอกสกัดได้ง่าย ช่วยประหยัดเวลาในการทำงาน

Specifications		
Model		A-300
Air Pressure	MPa (kgf/cm^2)	0.6 (6)
Air Consumption (No-load)	m^3/min	0.3
Strokes per Minute	min^{-1}	2600
Shank Size	mm	10
Inlet Size		Rc 1/4
Mass (Weight)	kg	1.7
Accessories Included		• Bushing R 1/4 x NPT 1/4 • Hose Nipple R 1/4 x 1/4

*Chisels are not included as standard.

Optional Chisels

PN: TP00572
Blank Chisel
No.1001

For a variety of sheet metal work, bending, and rivet closing jobs

PN: TP00573
Flat Chisel
No.1002

Puts increased efficiency into scraping, peeling spot welds, and cutting off bolts and pins

PN: TP04606
Sheet Metal Chisel A
No.1003

Cuts shapes in sheet metal fast

PN: TP00575
Sheet Metal Chisel B
No.1004

Just the chisel for cutting off sheet metal body panel

PN: TP00576
Silencer Cutting Chisel
No.1005

A quick cut-off chisel for muffler piping

PN: TP00577
Rubber Bushing Remover
No.1006

Helps you remove idle arm sleeves and bushings in record time

PN: TP00578
Spot Weld Booster
No.1007

Ideal for peeling off spot welded points and cutting off pins

PN: TP00579
Bushing Tool
No.1008

Puts speed and ease into the job of bushing insertion

PN: TP00580
Punch
No.1009

For driving out pins and rivets, and fitting and removing bearings and races

PN: TP00581
Bushing Removing Tool
No.1010

A faster servicing aid in removing bushings

PN: TP00582
Sheet Metal Punch
No.1011

Opens holes for bolts and rivets

PN: TP00583
20 mm Bending Chisel
No.1012

Help you in peening and removing slag around welds

PN: TP00584 *
Fork Chisel 24
No.1013

Disconnecting tie rod ends and ball joints

PN: TP00586 *
Fork Chisel 35
No.1016

Disconnecting tie rod ends and ball joints

PN: TP00585 *
Fork Chisel 15
No.1017

Disconnecting tie rod ends and ball joints

PN: TP00589
38 mm Scraper
No.1018

Peeling paint & removing must from iron plate

PN: TP00590
60 mm Scraper
No.1019

Peeling paint & removing rust from iron plate

PN: TP00591
60 mm Concave Scraper
No.1020

Removing incrustation from pipe

PN: TP04995
Sheet Metal Chisel C
No.1023

Cuts shapes in sheet metal fast

PN: TP05244
Moilpoint Chisel
No.1024

Breaking-up concrete, removing sand from castings

*An order is available from one piece.

PN: TP05775
Rivet Removing Punch
No.1025

Removing rivets from brake lining of heavy duty cars

PN: TP05801
Rivet Caulking Chisel
No.1026

Caulking brake lining of heavy duty cars

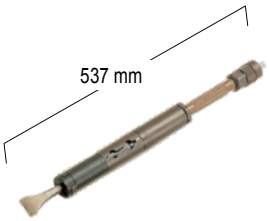
PN: TQ02662
Fork Chisel Spring

Mount this part when using Fork Chisel 24, Fork Chisel 35 or Fork Chisel 15.

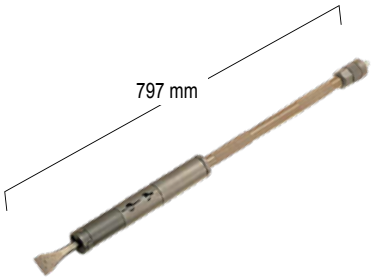
*Fork Chisel Spring must be mounted in order to use Fork Chisel 24, Fork Chisel 35 or Fork Chisel 15.

SUPER KELEN

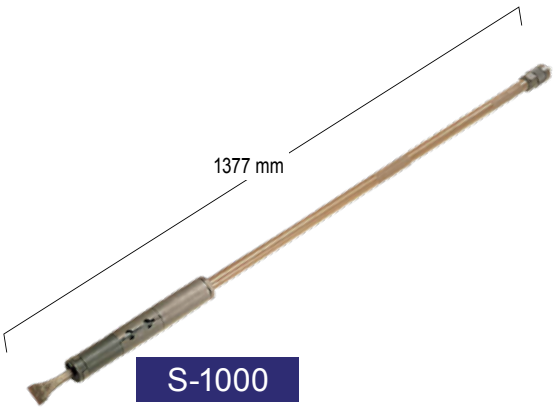
เครื่องสกัด



S-250



S-500

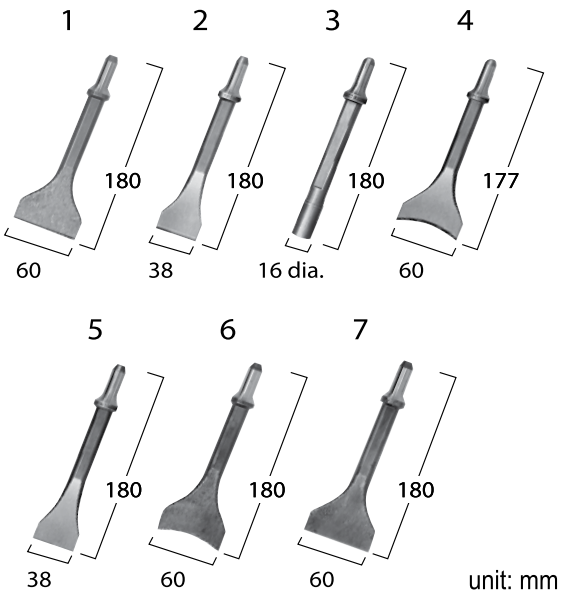


S-1000

- เหมาะสำหรับงานขจัดคราบตะกรันในกลุ่มอุตสาหกรรมเดินเรือ
- สามารถกำจัดสนิมคราบตะกรัน สีน้ำมัน และคอนกรีตได้อย่างรวดเร็ว และมีประสิทธิภาพ
- มีระบบ Idle Protection ป้องกันการทำงานโดยไม่ตั้งใจ โดยเครื่องจะเริ่มทำงานเมื่อดอกสกัดสัมผัสพื้นผิวชิ้นงาน
- รุ่น S-1000 ยาว 1.3 เมตร เหมาะสำหรับงานสกัดในพื้นที่เข้าถึงยาก
- ถอดเปลี่ยนดอกสกัดได้ง่าย โดยไม่ต้องใช้เครื่องมือช่วย

Model		S-250	S-500	S-1000
Air Pressure	MPa (kgf/cm²)	0.6 (6)		
Air Consumption (No-load)	m³/min	0.27		
Strokes per Minute	min⁻¹	2500		
Shank Size	mm	12.7		
Inlet Size		Rc 1/4		
Mass (Weight)	kg	4.1	4.7	6.1
Accessories Included		• No.2005 38 mm Bend Scraper (Installed) • Hose Lock Nut M16 • Hose Nipple 3/8		

Optional Chisels			
Ref. No.	PN	Description	Sales Unit
1	TP03645	No.2001 60 mm Scraper	1 piece
2	TP03646	No.2002 38 mm Scraper	
3	TP03647	No.2003 Blank Chisel	
4	TP04010	No.2004 60 mm Concave Scraper	
5	TP04552	No.2005 38 mm Bend Scraper	
6	TP04553	No.2006 60 mm Concave Bend Scraper	
7	TP04554	No.2007 60 mm Bend Scraper	

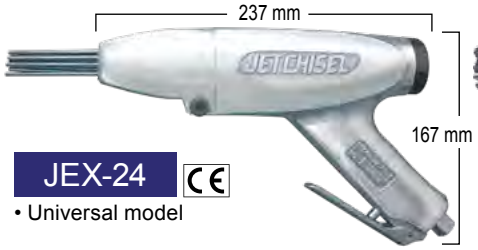


JET CHISEL

เครื่องเคาะรอยเชื่อม

- เหมาะสำหรับทำความสะอาดและขจัดตะกรัน เหล็ก งานสะพาน งานหล่อ อิฐ หิน และวัสดุอื่นๆ
- สามารถใช้ในงานสกัดรอยเชื่อม สนิมพื้นเรือ และคราบตะกรันเหล็ก เป็นต้น

JC-16 CE
• Lightweight model



JEX-24 CE
• Universal model

JEX-28 CE
• Heavy-duty model

Model	JC-16	JEX-24	JEX-28
Air Pressure MPa (kgf/cm²)	0.6 (6)		
Air Consumption (No-load) m³/min	0.15	0.27	0.35
Strokes per Minute min⁻¹	4000	4000	4500
Inlet Size	Rc 3/8		
Mass (Weight) kg	1.4	2.7	3.5
Accessories Included	• 29 pieces of 2 mm x 150 mm Needles (Installed) • 29 pieces of 2 mm x 150 mm Needles • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8	• 23 pieces of 3 mm x 180 mm Needles (Installed) • 6 mm Hex. Socket ScrewKey • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8	• 28 pieces of 3 mm x 180 mm Needles (Installed) • 14 pieces of 4 mm x 180 mm Needles • Needle supporter 4 mm • 6 mm Hex. Socket Screw Key • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8

JT-16 CE
• Small and lightweight model

JT-20 CE
• Medium duty model

JEX-20 CE
• Reduced vibration model

Model	JT-16	JT-20	JEX-20
Air Pressure MPa (kgf/cm²)	0.6 (6)		
Air Consumption (No-load) m³/min	0.16	0.2	0.2
Strokes per Minute min⁻¹	6000	4000	4000
Inlet Size	Rc 3/8		
Mass (Weight) kg	0.8	2.4	2.75
Accessories Included	• 6 pieces of 3 mm x 180 mm Needles (Installed) • 6 pieces of 3 mm x 180 mm Needles • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8	• 12 pieces of 3 mm x 180 mm Needles (Installed) • 12 pieces of 3 mm x 180 mm Needles • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8	• 12 pieces of 3 mm x 180 mm Needles (Installed) • 12 pieces of 3 mm x 180 mm Needles • Bushing R 3/8 x NPT 3/8 • Hose Nipple R 3/8 x 3/8

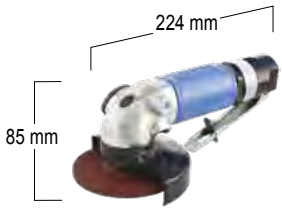
MYTON

เครื่องเจียร

- เครื่องเจียรสำหรับงานหนัก
- มีระบบระบายลมด้านข้าง เพื่อลดเสียงรบกวนขณะใช้งาน

MYG-25L CE

- For Grinding Wheel 58 mm
- Compact and lightweight type



MYG-40L CE

- For Grinding Wheel 100 mm
- Powerful type

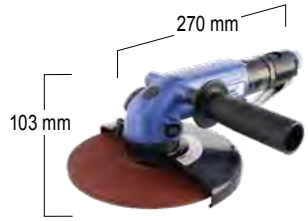
MG-40 CE

- Lever switch type
- Depressed center wheel 100 mm

MG-40

- Ring switch type
- Depressed center wheel 100 mm

Model	MYG-25L	MYG-40L	MG-40 Lever Type	MG-40 Ring Type
Air Pressure MPa (kgf/cm²)	0.6 (6)			
Air Consumption m³/min	0.39 (No-load)	0.54 (No-load) 0.75(Load)	0.50 (No-load)	
Free Speed min⁻¹(rpm)	19000	13000		
Depressed Center Grinding Wheel mm	58	100		
Inlet Size	Rc 1/4	Rc 3/8		Rc 1/4
Mass (Weight) kg	0.6	1.55	1.6	1.4
Accessories Included	• 5 mm Hex. Socket Screw Key • Spanner 19 • Grinding Wheel GS #80 x 58 • Bushing R 1/4 x NPT 1/4	• 5 mm Hex. Socket Screw Key • 6 mm Hex. Socket Screw Key • Bushing R 3/8 x NPT 3/8	• 5 mm Hex. Socket Screw Key • 6 mm Hex. Socket Screw Key • Spanner 19 • Bushing R 3/8 x NPT 3/8	• 5 mm Hex. Socket Screw Key • 6 mm Hex. Socket Screw Key • Spanner 19 • Bushing R 1/4 x NPT 3/8



MYG-70 CE

- Lever switch type
- For Grinding wheel 180 mm
- Heavy grinding type

MYG-70

- Ring switch type
- For Grinding wheel 180 mm
- Heavy grinding type

Model	MYG-70 Lever Type	MYG-70 Ring Type
Air Pressure MPa (kgf/cm²)	0.6 (6)	
Air Consumption m³/min	0.70 (No-load) 0.95 (Load)	
Free Speed min⁻¹(rpm)	7600	
Depressed Center Grinding Wheel mm	180	
Inlet Size	Rc 3/8	
Mass (Weight) kg	2.5 (with handle)	2.4 (with handle)
Accessories Included	• Handle • 6 mm Hex. Socket Screw Key • 10 mm Hex. Socket Screw Key • Bushing R 3/8 x NPT 3/8	

เครื่องขัด

- เหมาะสำหรับงานขัด และขัดขึ้นเงาโลหะ อลูมิเนียม ไม้ พลาสติก และวัสดุอื่นๆ
- มีระบบระบายลมด้านข้าง เพื่อลดเสียงรบกวนขณะใช้งาน

MYS-20L CE

- For Abrasive disks 1", 1 - 1/2" & 2"
- Compact and lightweight type

MYS-40 CE

- For Abrasive disk 100 mm
- Light sanding type

MYS-70

- Ring switch type
- For Abrasive disk 180 mm
- Medium sanding type
- Japanese model

Model	MYS-20L		MYS-40	MYS-70
Air Pressure MPa (kgf/cm²)	0.6 (6)			
Air Consumption (No-load) m³/min	0.42		0.45	0.9
Free Speed min⁻¹(rpm)	19000		13700	7600
Abrasive Disc	1", 1 - 1/2" and 2"		100 mm	180 mm
Inlet Size	Rc 1/4			Rc 3/8
Mass (Weight) kg	0.6		1.1	2.4
Accessories Included	• 2 pieces of 14 mm Single Ended Spanner • Bushing R 1/4 x NPT 1/4 • 1" Disc Sanding Pad • 1-1/2" Disc Sanding Pad • 2" Disc Sanding Pad	• Assortment of Sample Abrasive Disc Contains: 2 each of #60, #80, #100 and #120 1" Abrasive Disc 2 each of #60, #80, #100 and #120 1-1/12" Abrasive Disc 2 each of #60, #80, #100 and #120 2" Abrasive Disc	• 5 mm Hex. Socket Screw Key • 6 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4	• Handle • 41 mm Single Ended Spanner • 10 mm Hex. Socket Screw Key

(ดูรายละเอียดเพิ่มเติมที่หน้า A54)

BELTON

เครื่องขัดกระดาษทรายสายพาน

- เหมาะสำหรับงานขัด และเจียรในพื้นที่แคบ พื้นที่จำกัด และบนพื้นผิวโค้ง
- ถอดเปลี่ยนสายพานได้ง่าย และรวดเร็ว
- มีระบบระบายลมด้านหลัง เพื่อลดเสียงรบกวนขณะใช้งาน

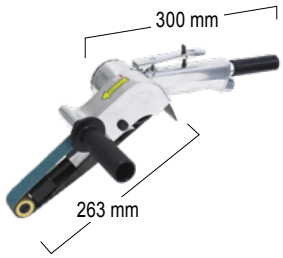
B-10CL CE
- Belt size 10 mm (W)

B-20CL CE
- Belt size 20 mm (W)

The Idle Pulley for B-20CL is supported on one side only.

B-20CL-A CE
- Belt size 20 mm (W)

The Idle Pulley for B-20CL-A is supported on both sides.



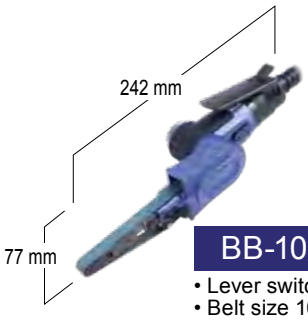
B-30CL CE
- Belt size 30 mm (W)

Model		B-10CL	B-20CL	B-20CL-A	B-30CL
Air Pressure	MPa (kgf/cm²)	0.6 (6)			
Air Consumption (No-load)	m³/min	0.4	0.48		0.82
Free Speed	min⁻¹(rpm)	17000	18000		15000
Belt Speed	m/min	1120	2770		2310
Belt Size	mm	10 x 330	20 x 520		30 x 540
Inlet Size		Rc 1/4			
Mass (Weight)	kg	0.9	1.6	1.5	2.4
Accessories Included		• 2 pieces of of Abrasive Belt Z#60 x 10 mm (1 piece installed) • Abrasive Belt Z#80 x 10 mm • Abrasive Belt Z#100 x 10 mm • Abrasive Belt Z#120 x 10 mm • 1.5 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4	• 2 pieces of of Abrasive Belt Z#60 x 20 mm (1 piece installed) • Abrasive Belt Z#80 x 20 mm • Abrasive Belt Z#100 x 20 mm • Abrasive Belt Z#120 x 20 mm • 2.5 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4 • Convex Shoe		• 2 pieces of of Abrasive Belt Z#60 x 30 mm (1 piece installed) • Abrasive Belt Z#80 x 30 mm • Abrasive Belt Z#100 x 30 mm • 5 mm Hex. Socket Screw Key • Handle Assy • Bushing R 1/4 x NPT 1/4

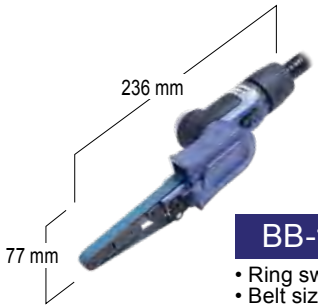
(ดูรายละเอียดเพิ่มเติมที่หน้า A55)

BABY BELTON

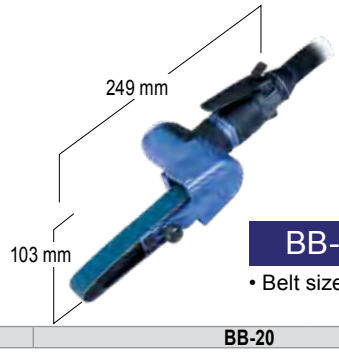
- ตัวเครื่องมีน้ำหนักเบา ขนาดกะทัดรัด แต่ให้กำลังขัดดีเยี่ยม
- สามารถปรับทิศทางการหมุนของสายพานเดินหน้า-ถอยหลังได้
- ด้ามจับออกแบบมาให้เหมาะกับทั้งผู้ที่ถนัดซ้ายและขวา จึงคล่องตัวและสะดวกในการใช้งาน



BB-10B CE
- Lever switch type
- Belt size 10 mm (W)



BB-10B
- Ring switch type
- Belt size 10 mm (W)



BB-20 CE
- Belt size 20 mm (W)

Model		BB-10B Lever Type	BB-10B Ring Type	BB-20	
Air Pressure	MPa (kgf/cm²)	0.6 (6)			
Air Consumption (No-load)	m³/min	0.2		0.43	
Free Speed	min⁻¹(rpm)	17000		16000	
Belt Speed	m/min	1120		1100	
Belt Size	mm	10 x 330		20 x 330	
Inlet Size		Rc 1/4			
Mass (Weight)	kg	0.55	0.5	0.8	
Accessories Included		• Abrasive Belt Z#100 x 10 mm (Installed) • Abrasive Belt Z#120 x 10 mm • Abrasive Belt Z#180 x 10 mm • Abrasive Belt Z#240 x 10 mm • 1.5 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4 • Offset Bracket Ass'y	• Abrasive Belt Z#100 x 10 mm (Installed) • Abrasive Belt Z#120 x 10 mm • Abrasive Belt Z#180 x 10 mm • Abrasive Belt Z#240 x 10 mm • 1.5 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4 • Offset Bracket Ass'y	• Abrasive Belt Z#60 x 20 mm (Installed) • Abrasive Belt Z#120 x 20 mm • Abrasive Belt Z#240 x 20 mm • 2.5 mm Hex. Socket Screw Key • 3 mm Hex. Socket Screw Key	• Shoe • Dust Cover • Bushing R 1/4 x NPT 1/4

(ดูรายละเอียดเพิ่มเติมที่หน้า A56)

COMPACT MULTI SANDER

เครื่องขัดกระดาษทราย

With Rectangular Pad

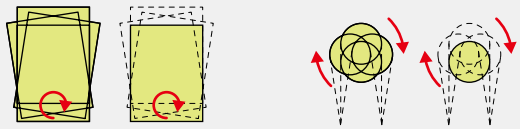
With 2" Round Pad

With Finger Pad

CMX-20 CE

- สามารถเปลี่ยนชุดแผ่นขัดได้ทั้งแบบ Round Pad / Finger Pad และ Rectangular ในเครื่องเดียว
- สามารถขัดแต่งชิ้นงานที่มีขนาดเล็กพิเศษ ด้วยชุดขัด Finger Pad
- ตัวเครื่องมีน้ำหนักเบา และขนาดกะทัดรัด เหมาะสำหรับงานขัดแต่งพื้นที่แคบ หรืองานพื้นที่จำกัด

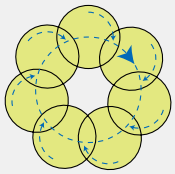
Orbital Movement (Rectangular Pad, Finger Pad)



Orbit of Rectangular Pad *Orbit of Finger Pad*

Offset rotation makes above orbit

Dual Action Movement (2" Round Pad)



Offset rotation and self rotation makes orbit as shown on the left.

Speed Adjustment

Turn the adjust valve to limit the tools speed. Adjust the speed according to the workpiece material, grit of sand paper, and the desired surface finish.

Pad Replacement

Pad replacement can easily be made with the included spanner 10 and 4 mm hex. socket screw key.
In case of 2" round pad, only the spanner 10 is used. Use a suitable pad in accordance with the work area or area to be sanded.

Specifications

Model		CMX-20
Air Pressure	MPa	0.6
Air Consumption (No load)	m^3/min	0.15
Orbit Diameter	mm	2
Mass (Weight)	kg	0.53 (without pad)

The rectangular pad comes mounted to the tool.

Accessories Included

• 2 pieces of 2" Velcro Abrasive Disc #80	• 2" Round Pad
• 2 pieces of 2" Velcro Abrasive Disc #120	• 16 mm Finger Pad
• 2 pieces of 2" Velcro Abrasive Disc #180	• 4 mm Hex. Socket Screw Key
• 2 pieces of 26 x 50 mm Velcro Abrasive Sheet #80	• Bushing R 1/4 x NPT 1/4
• 2 pieces of 26 x 50 mm Velcro Abrasive Sheet #120	• Ultra-thin Wrench SNT1012
• 2 pieces of 26 x 50 mm Velcro Abrasive Sheet #180	• Tool Box
• 5 pieces of 16 mm Self Adhesive Abrasive Disc #80	
• 5 pieces of 16 mm Self Adhesive Abrasive Disc #120	
• 5 pieces of 16 mm Self Adhesive Abrasive Disc #180	

Accessories Sanding Pad

Type of Pad		Rectangular Pad	2" Round Pad	16 mm Finger Pad
Free Speed	min^{-1}	13000	14500	13000
Paper Size	mm	26 x 50	50 dia.	16 dia.

Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB11010	26 x 50 mm Velcro Abrasive Paper #80	100 pcs. /set
	TB11011	26 x 50 mm Velcro Abrasive Paper #120	
	TB11012	26 x 50 mm Velcro Abrasive Paper #180	
2	TB11049	26 x 50 mm Velcro Non-woven Abrasive Paper #320	50 pcs. /set
3	TB11013	2" Velcro Abrasive Paper #80	100 pcs. / set
	TB11014	2" Velcro Abrasive Paper #120	
	TB11015	2" Velcro Abrasive Paper #180	
4	TB11016	16 mm Self Adhesive Abrasive Paper #80	
	TB11017	16 mm Self Adhesive Abrasive Paper #120	
	TB11018	18 mm Self Adhesive Abrasive Paper #180	

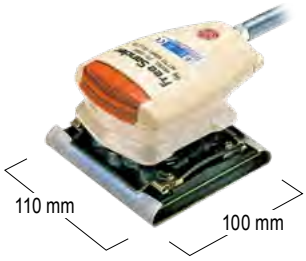
1 2 3 4

For Rectangular Pad For Rectangular Pad For 2" Round Pad For 16 mm Finger Pad

FREE SANDER

เครื่องขัดกระดาษทรายระบบสั่น

FS-50A CE



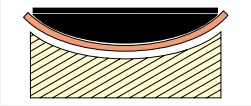
FS-100C CE

- เหมาะสำหรับงานขัดแต่งพื้นผิวโลหะ งานไม้ งานพลาสติก และวัสดุอื่นๆ
- ตัวเครื่องมีน้ำหนักเบา และแรงสั่นสะเทือนต่ำ ช่วยลดความเมื่อยล้า จึงสามารถใช้งานได้ยาวนานขึ้น
- ขัดแต่งชิ้นงานได้รวดเร็ว และช่วยประหยัดพลังงานลม
- ไม่ใช้น้ำมันหล่อลื่นในระบบ จึงง่าย และประหยัดเวลาในการบำรุงรักษา

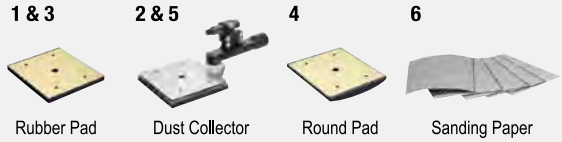
Model		FS-50A	FS-100C
Air Pressure	MPa (kgf/cm²)	0.6 (6)	
Air Consumption (No-load)	m³/min	0.14	0.2
Free Speed	min⁻¹(rpm)	15000	20000
Orbit Diameter	mm	1.2	1.5
Pad Size	mm	75 x 82	110 x 100
Paper Size	mm	70 x 114	114 x 140
Intel Size		Rc 1/8	
Mass (Weight)	kg	0.5	
Accessories Included		• Air Hose H Ass'y • 5 pieces of Sanding Paper #180 • 5pieces of Sanding Paper #240 • Bushing R 1/4 x NPT 1/4	

Optional Accessories				
Ref. No.	PN	Description	Sales Unit	Model
1	TA99828	Rubber Pad	1 piece	FS-50A
2	TB02240	Dust Collector		
3	TA9A367	Rubber Pad	1 piece	FS-100C
4	TA91474	Round Pad		
5	TB02235	Dust Collector		
6	TA9A265	Sanding Paper #100	200 pcs./set	
	TA9A266	Sanding Paper #120		
	TA9A267	Sanding Paper #150		
	TA9A268	Sanding Paper #180		
	TA9A269	Sanding Paper #240		
	TA9A270	Sanding Paper #280		
	TA9A271	Sanding Paper #320		

Round-Pad for FS-100C



The pad is made of sponge rubber and conforms easily to the shape being worked. Double-stick tape is used with round pad.



LINE SANDER

เครื่องขัดกระดาษทรายระบบเดินหน้า-ถอยหลัง

LS-10 CE

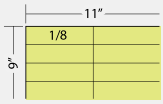
- เหมาะสำหรับงานขัดแต่งพื้นผิวโลหะ งานไม้ งานพลาสติกและวัสดุอื่นๆ
- ตัวเครื่องมีน้ำหนักเบาเพียง 750 กรัม
- เครื่องทำงานเงียบ และแรงสั่นสะเทือนต่ำ

Model		LS-10
Air Pressure	MPa (kgf/cm²)	0.6 (6)
Air Consumption (No-load)	m³/min	0.11
Free Speed	min⁻¹	4000
Stroke Length	mm	4
Pad Size	mm	55 x 103
Paper Size	mm	57 x 140
Intel Size		RC 1/8
Mass (Weight)	kg	0.75
Accessories Included		• Air Hose E Ass'y • Block Rubber Pad • Base Plate A Ass'y • 5 pieces of Sanding Paper #240 • 5 pieces of Sanding Paper #320 • Bushing R 1/4 x NPT 1/4

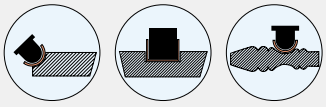
Optional Accessories			
Ref. No.	PN	Description	Sales Unit
1	TB02244	Dust Collector	1 piece
2	TA96665	Rubber Pad	
3	TA96739	Block Rubber Pad	

Abrasive Paper

Cut standard size paper (9"x11") into 8 pieces, as shown below. for dry sanding, use an open coat abrasive paper with silicon carbide or aluminium oxide abrasive grains to prevent clogging, improve grinding efficiency, and prolong the life of the paper.



Special Sanding Pad



The Block Rubber Pad Assembly can be easily trimmed to conform to the shape being worked and is available as an accessory

ORBITAL SANDER

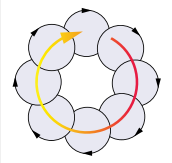
เครื่องขัดกระดาษทรายระบบขัดวน

OSV-60A CE

- เหมาะสำหรับงานขัดแต่งพื้นผิวโลหะ งานไม้ งานพลาสติก และวัสดุอื่นๆ
- มีระบบดูดฝุ่นที่เกิดจากการขัดภายในตัวเครื่อง จึงช่วยลดปริมาณฝุ่นฟุ้งกระจายขณะทำงาน
- โครงสร้างทำจากอะลูมิเนียม จึงมีน้ำหนักเบา แข็งแรงทนทาน

Model		OSV-60A
Air pressure	MPa (kgf/cm^2)	0.6 (6)
Air Consumption (No-load)	m^3/min	0.68
Free Speed	min^{-1} (rpm)	8500
Orbit Diameter	mm	10
Paper Size	mm	150 (6")
Pad Type		PSA with 6 holes
Inlet Size		Rc 1/4
Mass (Weight)	kg	2
Accessories Included		• Dust Collection Assy with Dust Bag • Single Ended Spanner 17 • Bushing R 1/4 x NPT 1/4 • Brush

Random orbital action creates a professional finish



By offsetting the sanding pad shaft, fast aggressive sanding is achieved while dramatically reducing swirl patterns.
Speed adjustment allow for the best speed for the best job.

PALM ORBITAL SANDER

เครื่องขัดกระดาษทรายระบบขัดวน

APS-125 CE

APS-150 CE

- เครื่องมีน้ำหนักเบาเพียง 690 กรัม
- ตัวเครื่องจับถนัดมือ จึงใช้งานคล่องตัว และสามารถควบคุมทิศทางการทำงานได้ง่าย
- เครื่องทำงานด้วยความเร็วรอบสูงถึง 10,000 รอบ / นาที
- ใช้ได้กับแผ่นขัดขนาด 125 มม. (5") และขนาด 150 มม (6")
- สามารถปรับความเร็วรอบของเครื่องได้ตามลักษณะการใช้งาน

Model		APS-125	APS-150
Air pressure	MPa (kgf/cm^2)	0.6 (6)	
Air Consumption (No-load)	m^3/min	0.45	
Free Speed	min^{-1} (rpm)	10000	
Orbit Diameter	mm	5	
Paper Size	mm	125 (5")	150 (6")
Pad Type		Leather or Velcro with 5 holes	Velcro with 6 holes
Inlet Size		Rc 1/4	
Mass (Weight)	kg	0.69	0.72
Accessories Included		• 17 mm Single Ended Spanner • Bushing R 1/4 x NPT 1/4	

For Self Vacuum & Cental Vacuum

The non-vacuum model is available from stock and can easily be modified to self-vacuum or central vacuum type.

Self Vacuum

Central Vacuum

AIR SONIC

เครื่องเจียรแกน 6 มม.

L-25B CE

• For all grinding, deburring and finishing jobs.

L-25R

• For all grinding, deburring and finishing jobs.

L-35C CE

• Spacial design for rotary burrs

L-35RA

• Special design for rotary burrs

- สำหรับงานเจียร และงานขัดแต่งผิวชิ้นงาน
- ตัวเครื่องมีระบบระบายลมออกด้านหลัง เพื่อลดเสียงรบกวนขณะใช้งาน
- ด้ามกดของเครื่องมีระบบล็อค ป้องกันเครื่องทำงานโดยไม่ได้ตั้งใจ
- สามารถใช้ได้กับหัวเจียรแบบคาร์ไบด์ และแบบหินเจียรขนาดแกนจับ 6 มม.

Model	L-25B Lever Type	L-25R Ring Type	L-35C Lever Type	L-35RA Ring Type
Air pressure MPa (kgf/cm²)	0.6 (6)			
Air Consumption (No-load) m³/min	0.4		0.35	
Free Speed min⁻¹ (rpm)	27000		37500	
Chuck Size mm	6			
Inlet Size	RC 1/4			
Mass (Weight) kg	0.6 (without hose)		0.45 (without hose)	
Accessories Included	• 14 mm Single Ended Spanner • Mounted Wheel No.2 (16 x 32 mm) • Mounted Wheel No.3 (19 x 20 mm) • Chuck Pin • Bushing R 1/4 x NPT 1/4	• 14 mm Single Ended Spanner • Mounted Wheel No.2 (16 x 32 mm) • Mounted Wheel No.3 (19 x 20 mm) • Chuck Pin • Hi Cupla 200-30SH	• 2 Pieces of 14 mm Single Ended Spanner • Mounted Wheel 13 x13 x 6 x 38 • Bushing R 1/4 x NPT 1/4	• 2 Pieces of 14 mm Single Ended Spanner • Mounted Wheel 13 x13 x 6 x 38 • Hi-Cupla 200-30SH

(ดูรายละเอียดเพิ่มเติมที่หน้า A57)

AIR SONIC

เครื่องเจียรแกน 3 มม.

AL-55A CE

- ความเร็วรอบสูง แรงสั่นสะเทือนต่ำ เหมาะกับงานที่ต้องการความละเอียดสูง
- สามารถตั้งค่าความเร็วรอบได้ตั้งแต่ 0 – 56,500 รอบ/นาที ตามลักษณะการใช้งาน
- ตัวเครื่องมีระบบระบายลมออกด้านหลัง และระบบลดเสียงรบกวนขณะใช้งาน
- เครื่องเจียรด้ามจับสามเหลี่ยม จับถนัดมือตามหลักสรีรศาสตร์
- ด้ามจับหุ้มด้วยพลาสติกชนิดพิเศษ ป้องกันความเย็นจากการสัมผัส และลดแรงสั่นสะเทือน

Model	AL-55A
Air pressure MPa (kgf/cm²)	0.6 (6)
Air Consumption (No-load) m³/min	0.17
Free Speed min⁻¹ (rpm)	56500
Chuck Size mm	3
Inlet Size	G 1/4
Mass (Weight) kg	0.27
Accessories Included	• 7 x 9 mm Spanner • Lock Wrench • Mounted Wheel 5 x 13 x 3 • Bushing R 1/4 x NPT 1/4

(ดูรายละเอียดเพิ่มเติมที่หน้า A57)

SUPER HAND

เครื่องตะไบลมช่วงชัก 9 มม.

SH-100A CE

• Rugged construction for reliable performance.

ASH-900 CE

• Weight reduced by half for comfortable operation over long period of time.

- เหมาะสำหรับงานตะไบเหล็ก อลูมิเนียม ทองเหลือง งานไม้ และงานวัสดุต่างๆ
- ตัวเครื่องมีน้ำหนักเบา และแรงสั่นสะเทือนต่ำ ช่วยลดความเมื่อยล้า จึงสามารถใช้งานได้ยาวนานขึ้น
- มีระบบระบายลมบริเวณด้านหลังของเครื่อง

Model		SH-100A	ASH-900
Air pressure	MPa (kgf/cm²)	0.6 (6)	
Air Consumption (No-load)	m³/min	0.24	0.13
Stroke Speed	min⁻¹	3700	6300
Stroke Length	mm	9	
File shank Size	mm	6.3	5.0
Inlet Size		Rc 1/4	
Mass (Weight)	kg	1.1	0.5
Accessories Included		• Rat Tail File SF-10 • Triangular Taper File SF-11 • Half Round File SF-12 • Flat File SF-13 • 3 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4 • Air Hose E Ass'y	• Rat Tail File SF-10 • Triangular Taper File SF-11 • Half Round File SF-12 • Flat File SF-13 • 2.5 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4

(ดูรายละเอียดเพิ่มเติมที่หน้า A58)

SUPER HAND LIGHT

เครื่องตะไบลมช่วงชัก 4 มม.

SHL-40A CE

- เหมาะสำหรับงานตะไบแต่งผิวอลูมิเนียม และชิ้นส่วนโลหะต่างๆ
- ตัวเครื่องมีน้ำหนักเบา และแรงสั่นสะเทือนต่ำ ช่วยลดความเมื่อยล้า จึงสามารถใช้งานได้ยาวนานขึ้น

Model		SHL-40
Air pressure	MPa (kgf/cm²)	0.6 (6)
Air Consumption (No-load)	m³/min	0.07
Stroke Speed	min⁻¹	9000
Stroke Length	mm	4
File shank Size	mm	3.0
Inlet Size		RC 1/4
Mass (Weight)	kg	0.4
Accessories Included		• Flat File LF-13 • 2 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4

(ดูรายละเอียดเพิ่มเติมที่หน้า A58)

MICRO AIR HAND

เครื่องตะไบลมช่วงชัก 0.5 และ 2.2 มม.

MAH-05 CE

MAH-16 CE

- เหมาะสำหรับงานขัดแต่งชิ้นงานที่ต้องการความละเอียดสูง
- ตัวเครื่องมีน้ำหนักเบา และแรงสั่นสะเทือนต่ำเป็นพิเศษ ช่วยลดความเมื่อยล้าจึงสามารถใช้งานได้ยาวนานขึ้น

Model		MAH-05	MAH-16
Air pressure	MPa (kgf/cm²)	0.6 (6)	
Air Consumption (No-load)	m³/min	0.07	
Stroke Speed	min⁻¹	22000	11000
Stroke Length	mm	0.5	2.2
File shank Size	mm	3	
Inlet Size		RC 1/4	
Mass (Weight)	kg	0.37	
Accessories Included		• Flat End Diamond File • Round End Diamond File • 2 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4	

(ดูรายละเอียดเพิ่มเติมที่หน้า A58)

BURR CUTTER

เครื่องลบคมรูโลหะ

BC-005 CE

- สามารถปรับความเร็วรอบในการทำงานได้ตามการใช้งาน
- ระบบการทำงานของเครื่องจะเริ่มเมื่อกดปลายดอกไปยังตำแหน่งที่จะลบคมรูโลหะ (Push-to-engage) ช่วยให้ชิ้นงานไม่เสียหาย และไม่คลาดเคลื่อน
- การถอดเปลี่ยนดอกเจาะทำได้ง่าย และรวดเร็ว ด้วยชุดหัวจับดอกถึง 3 ขนาด

Model		BC-005
Air pressure	MPa (kgf/cm^2)	0.6 (6)
Air Consumption (No-load)	m^3/min	0.22
Free Speed	min^{-1}(rpm)	420
Deburring Hole diameter	mm	3 to 34
Countersink Shank Size	mm	6, 8, 10, 12*
Inlet Size		Rc 1/8
Mass (Weight)	kg	0.75
Accessories Included		• Chuck 6 mm • Chuck 8 mm • Chuck 10 mm (Installed) • Suspension Bail • 2.5 mm Hex. Socket Screw Key • Bushing R 1/8 x NPT 1/4

*Chuck 12 mm is optional. (PN: TB09876)
Countersinks are not provided with the tool. Please purchase them locally.

(ดูรายละเอียดเพิ่มเติมที่หน้า A58)

SUPER SAW

เครื่องเลื่อยลม

SSW-110 CE

- เหมาะสำหรับงานเลื่อย และตัดแต่งแผ่นโลหะ อลูมิเนียม พลาสติก และวัสดุอื่นๆ
- ตัวเครื่องมีน้ำหนักเบาพิเศษ และแรงสั่นสะเทือนต่ำ ช่วยลดความเมื่อยล้าจึงสามารถใช้งานได้ยาวนานขึ้น
- สามารถปรับความเร็วรอบได้ตามลักษณะการใช้งานด้ามกดของเครื่อง มีระบบล็อคป้องกันเครื่องทำงานโดยไม่ได้ตั้งใจ

Model		SSW-110
Air pressure	MPa (kgf/cm^2)	0.6 (6)
Air Consumption (No-load)	m^3/min	0.29
Stroke Speed	min^{-1}	7000
Stroke Length	min^{-1}	11
Capacity (Max.plate thickness)	mm	3
Inlet Size		Rc 1/4
Mass (Weight)	kg	0.62
Accessories Included		• 2 pieces of 32 TPI Saw Blade • 3 mm Hex. Socket Screw Key • Bushing R 1/4 x NPT 1/4

(ดูรายละเอียดเพิ่มเติมที่หน้า A58)

AIR DRILL

เครื่องสว่านลม

Made in Japan

ADR-65 CE

ADR-100 CE

- เครื่องให้กำลังเจาะสูง จึงทำงานได้ง่าย และรวดเร็วยิ่งขึ้น
- ตัวเครื่องออกแบบมาเป็นพิเศษ ช่วยลดความเมื่อยล้า และสามารถใช้งานต่อเนื่องยาวนานมากขึ้น
- สามารถปรับความเร็วรอบของเครื่องได้ตามลักษณะการใช้งาน
- สามารถปรับหมุนการเจาะได้ทั้งซ้าย - ขวา

Model		ADR-65	ADR-100
Air pressure	MPa (kgf/cm²)	0.6 (6)	
Air Consumption (No-load)	m³/min	0.55	0.67
Free Speed	min⁻¹(rpm)	2900	2000
Max. drilling Capacity	mm	6.5	10
Inlet Size		RC 1/4	
Mass (Weight)	kg	0.8	1.1
Accessories Included		• Drill chuck (Installed) • Chuck Handle • Bushing R 1/4 x NPT 1/4 • Cupla 30SH	

Reversible

Change rotation direction by turning the valve as indicated.

Optional Accessory		
PN	Description	Sales Unit
TQ10969	Hanger	1 piece

MYTON

(ดูสินค้าจากหน้า A45)

Grinding Wheels for MYTON MYG-25L

PN	Description	Sales Unit	Appearance
TB11078	GS#46 x 58 mm	5 pcs./set	
TB11079	GS#60 x 58 mm		
TB11077	GS#80 x 58 mm	10 pcs./set	
TB11080	GS#100 x 58 mm	5 pcs./set	
TB11081	GS#120 x 58 mm		

Flap Discs for MYTON MYG-25L

PN	Description	Sales Unit	Appearance
TB11229	Myton Disc Z Z#40 x58	5 pcs./set	
TB11230	Myton Disc Z Z#60 x58		
TB11231	Myton Disc Z Z#80 x58		
TB11232	Myton Disc Z Z#100 x58		
TB11233	Myton Disc Z Z#120 x58		
TB11234	Myton Disc SA A#40 x 58	5 pcs./set	Designed for curve sanding.
TB11235	Myton Disc SA A#60 x 58		
TB11236	Myton Disc SA A#80 x 58		
TB11237	Myton Disc SA A#100 x 58		
TB11238	Myton Disc SA A#120 x 58		

*Please use commercially available consumables for MYG-40L/MYG-70.

Abrasive Discs and Disc Pads for MYTON MYS-20L

PN	Description	Sales Unit	Abrasive Disc	Disc Pad	Sales Unit
TB10986	Abrasive Disc 1" x #40	25 pcs./set		TQ14384 1" Disc Sanding	1 piece
TB10987	Abrasive Disc 1" x #60				
TB10988	Abrasive Disc 1" x #80				
TB10989	Abrasive Disc 1" x #100				
TB10990	Abrasive Disc 1" x #120				
TB10991	Abrasive Disc 1" x #180				
TB10992	Abrasive Disc 1" x #240				
TB10993	Abrasive Disc 1" x #320				
TB10994	Abrasive Disc 1-1/2" x #40	25 pcs./set		TQ14383 1-1/2" Disc Sanding Pad	1 piece
TB10995	Abrasive Disc 1-1/2" x #60				
TB10996	Abrasive Disc 1-1/2" x #80				
TB10997	Abrasive Disc 1-1/2" x #100				
TB10998	Abrasive Disc 1-1/2" x #120				
TB10999	Abrasive Disc 1-1/2" x #180				
TB11000	Abrasive Disc 1-1/2" x #240				
TB11001	Abrasive Disc 1-1/2" x #320				
TB11002	Abrasive Disc 2" x #40	25 pcs./set		TQ14382 2" Disc Sanding Pad	1 piece
TB11003	Abrasive Disc 2" x #60				
TB11004	Abrasive Disc 2" x #80				
TB11005	Abrasive Disc 2" x #100				
TB11006	Abrasive Disc 2" x #120				
TB11007	Abrasive Disc 2" x #180				
TB11008	Abrasive Disc 2" x #240				
TB11009	Abrasive Disc 2" x #320				

*Please use commercially available consumables for MYS-40/MYS-70.

Optional Accessories

Ref. No.	PN	Description	Sales Unit	Remarks
1 *	TB08265	Handle Ass'y	1 set	Standard accessory of MYG-70
2 *	TB09680	Side Handle Ass'y (anit-vibration type)	1 set	Standard accessory of MYG-50
3	TA90078	Rubber Pad Ass'y	1 piece	For MYS-40

1 2 3

*Handle Ass'y and Side Handle Ass'y can be used on MYG-40L,MG-40 and MYG-70.

BELTON

(ดูสินค้าจากหน้า A46)

Abrasive Belt for BELTON-10		
Belt Size : 6 mm x 330 mm (W x L)		
Grit	PN	
	Zirconnia (Z)	Alumina (AA)
#40	-	-
#60	TB10924	-
#80	TB10925	-
#100	TB10926	-
#120	TB10927	-
#180	TB10928	-
#240	TB10929	-
#400	-	TB10941
Sales Unit 50 pcs./set		

Abrasive Belt for BELTON-10			
Belt Size : 10 mm x 330 mm (W x L)			
Grit	PN		
	Zirconnia (Z)	Alumina (AA)	Ceramic (CE)
#40	-	-	TB10943
#60	TB10904	-	TB10944
#80	TB10905	-	TB10945
#100	TB10906	-	TB10946
#120	TB10907	-	TB10947
#180	TB10908	-	-
#240	TB10909	-	-
#400	-	TB10936	-
Sales Unit 50 pcs./set			

When using the belt, optional Bracket 6 Ass'y and Shoe 6 are required. (Ref. No.5,6)

Abrasive Belt for BELTON-20			
Belt Size : 20 mm x 520 mm (W x L)			
Grit	PN		
	Zirconnia (Z)	Alumina (AA)	Ceramic (CE)
#40	TB10910	-	TB10948
#60	TB10911	-	TB10949
#80	TB10912	-	TB10950
#100	TB10913	-	TB10951
#120	TB10914	-	TB10952
#180	TB10915	-	-
#240	TB10916	-	-
#320	-	TB10937	-
#400	-	TB10938	-
Sales Unit 20 pcs./set			

Abrasive Belt for BELTON-30			
Belt Size : 30 mm x 540 mm (W x L)			
Grit	PN		
	Zirconnia (Z)	Alumina (AA)	Ceramic (CE)
#40	TB10917	-	TB10953
#60	TB10918	-	TB10954
#80	TB10919	-	TB10955
#100	TB10920	-	TB10956
#120	TB10921	-	TB10957
#180	TB10922	-	-
#240	TB10923	-	-
#320	-	TB10939	-
#400	-	TB10940	-
Sales Unit 20 pcs./set			

Optional Parts							
Ref. No.	PN	Description	Sales Unit	Applicable Model			
				B-10CL		B-20CL B-20CL-A	B-30CL
				6 mm	10 mm		
1	TB09997	Offset Bracket 10 Ass'y	1 set		●		
2	TB10192	Offset Bracket 20 Ass'y	1 set			●	
3	TB08150	Offset Bracket 30 Ass'y	1 set				●
4	TB09938	Finger Pad Ass'y	1 set			●	
5	TB09996	Bracket 6 Ass'y	1 set	●			
6	TP14770	Shoe 6	1 piece	●			
7	TB10160	Idle Pully Bracket Ass'y	1 set			●	
8	TB10191	Convex Shoe	1 piece			●	
-	TB08337	Idle Pully Ass'y (Steel) for B-20CL-A	1 set			●	
-	TB08387	Idle Pully Ass'y (Steel) for B-20CL	1 set			●	

* for Abrasive belt width 6 mm

BABY BELTON

(ดูสินค้าจากหน้า A46)

Optional Parts				
Ref. No.	PN	Description	Sales Unit	Model
1	TB10549	Offset Bracket Ass'y	1 set	BB-10B
2	TB07109	Offset Bracket 20 Ass'y	1 set	BB-20
3	TB07224	Tension Bar 520 Ass'y	1 set	
4	TQ10701	Shoe 520*	1 piece	
5	TB07227	Finger Pad Ass'y 520	1 set	

1 2 3 4 5

*TB07224 and TQ10701 are used together.

Abrasive Belt for BABY BELTON-10			
Belt Size : 10 mm x 330 mm (W x L)			
Grit	PN		
	Zirconia (Z)	Alumina (AA)	Ceramic (CE)
#40	-	-	TB10943
#60	TB10904	-	TB10944
#80	TB10905	-	TB10945
#100	TB10906	-	TB10946
#120	TB10907	-	TB10947
#180	TB10908	-	-
#240	TB10909	-	-
#400	-	TB10936	-
Sales Unit 50 pcs./set			

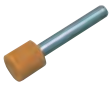
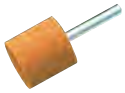
Abrasive Belt for BABY BELTON-20				
Belt Size : 20 mm x 330 mm (W x L)				
Grit	PN			
	Zirconia (Z)	Alumina (AA)	Ceramic (CE)	Non-woven
#40	-	-	-	-
#60	TB10930	-	TB10958	-
#80	TB10931	-	TB10959	-
#100	TB10932	-	TB10960	-
#120	TB10933	-	TB10961	-
#180	TB10934	-	-	TB11047 A-M Equivalent to #180
#240	TB10935	-	-	
#320	-	-	-	TB11046 A-VF Equivalent to #320
#400	-	TB10942	-	TB11048 S-SF Equivalent to #400
Sales Unit	20 pcs./set	20 pcs./set	20 pcs./set	5 pcs./set

AIR SONIC

(ดูสินค้าจากหน้า A50)

Optional Accessories		
PN	**Description**	**Sales Unit**
TP02806	Chuck Sleeve 6 x 3 mm	1 piece

A mounted wheel or rotary burr with
3 mm shaft can be installed
on L-25B and L-35C by using
the chuck sleeve 6 x 3.

Optional Accessories							
Mounted Wheel for AIR SONIC L-25B (Sales Unit: 5 pcs./set) *All items Grit #60				**Rotary Burr for AIR SONIC L-35C (Sales Unit: 1 piece)**			
No.1: 16 x 32	No.2: 16 x 32	No.3: 19 x 20	No.4: 25 x 25	No.1: CB1C-106	No.2: CB2C-105	No.3: CB3C-103	No.4: CB4C-103
							
PN: TB11082	PN: TB11083	PN: TB11084	PN: TB11085	PN: TB11198	PN: TB11199	PN: TB11200	PN: TB11201
NO.5: 19 X 28	NO.6: 25 X 13	NO.7: 32 X 10	NO.8: 16 BALL	NO.5: CB5C-104	NO.6: CB6C-102	NO.7: CB7C-103	NO.8: CB8C-105
PN: TB11086	PN: TB11087	PN: TB11088	PN: TB11089	PN: TB11202	PN: TB11203	PN: TB11204	PN: TB11205

AIR SONIC

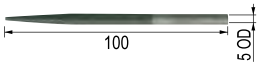
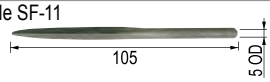
(ดูสินค้าจากหน้า A50)

Optional Accessories		
PN	**Description**	**Sales Unit**
TB11090	Mounted Wheel 5 x13 x 3	10 pcs./ set

*for AIR SONIC AL-55A

SUPER HAND

(ดูสินค้าจากหน้า A51)

Optional Accessories
Sales Unit: 5 pcs./set
Rat Tail File SF-10  PN: TB11095
Triangular Taper File SF-11  PN: TB11096
Half Round File SF-12 PN: TB11097
Flat File SF-13 PN: TB11098

Optional Accessories			
Ref. No.	PN	Description	Sales Unit
1	TA91752	Rubber Pad Ass'y for SH-100A	1 set
2	TA94625	Supporter Ass'y for SH-100A (use with TA91752)	
3	TB04319	Sanding Pad Ass'y for ASH-900	

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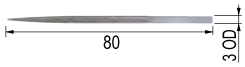
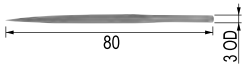
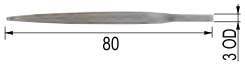
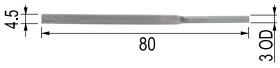
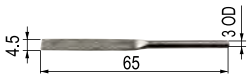
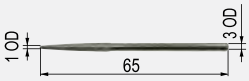
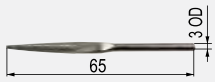
SUPER HAND LIGHT

(ดูสินค้าจากหน้า A51)

Optional Accessories
Sales Unit: 3 pcs./set
Rat Tail File LF-10  PN: TB11092
Triangular Taper File LF-11  PN: TB11094
Half Round File LF-12  PN: TB11093
Flat File LF-13  PN: TB11091

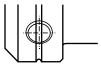
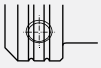
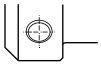
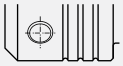
MICRO AIR HAND

(ดูสินค้าจากหน้า A51)

Optional Accessories		
PN	Description	Sales Unit
TB11105	Flat End Diamond File 	5 pcs./set
TB11106	Round End Diamond File 	5 pcs./set
TB11107	Triangular End Diamond File	5 pcs./set
TB11108	Half-round End Diamond File 	5 pcs./set
TB07506	Vice Holder*	1 set

BURR CUTTER

(ดูสินค้าจากหน้า A52)

Compatibility table between chuck and countersink shank diameter			
Chuck	Appearance*	Countersink Shank Diameter (mm)	Overall Length of Chucl (mm)
Chuck 6		6	49.5
Chuck 8		8	49.5
Chuck 10		10	49.5
Chuck 12		12	60

*indicates outer appearances of the chucks around the hex. Socket head set screw.

SUPER SAW

(ดูสินค้าจากหน้า A52)

Optional Accessories			
Ref. No.	PN	Description	Sales Unit
1	TB11099	9 TPI Saw Blade for Gypsum-bord	10 pcs./set
2	TB11100	12 TPI Saw Blade for Plywood Panel	
3	TB11101	14 TPI Saw Blade for Plastic	
4	TB11102	18 TPI Saw Blade for Plastic	
5	TB11103	24 TPI Saw Blade for Mild Steel	
6	TB11104	32 TPI Saw Blade for Mild Steel	

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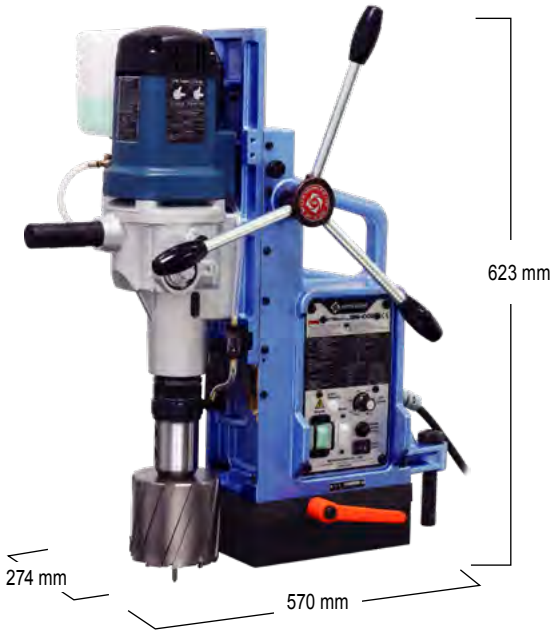
ATRA ACE MANUAL FEED

เครื่องสว่านฐานแม่เหล็กไฟฟ้า



ARA-100A CE

• Max. 100mm dia. x 75 mm deep

- สามารถใช้กับดอกเจาะทั้งแบบ Twist-Drill HI-BROACH และ JETBROACH
- ระบบ Automation Restart เพิ่มความปลอดภัยในการทำงาน
- ระบบสัญญานไฟ LED Load Detector แสดงสถานะการทำงานของตัวเครื่องขณะใช้งาน
- สามารถสลับใช้คันโยกได้ทั้งซ้าย-ขวา ตามความถนัดของผู้ใช้งาน
- สามารถปรับตั้งความเร็วรอบให้เหมาะกับขนาดของดอกสว่าน

Model			ARA-100A	
Power Source (Single Phase)			220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	W	1800	
	Rated Current	A	8.2	
	No-load Speed	min^{-1} (rpm)	110 - 210 / 330 - 660	
	Morse Taper No.		MT3	
	Rated Duty	min	30	
Magnet Power Consumption		W	80	
Hole Capacity (mm)	Cutter		Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 35L		17.5 to 40	13 to 35
	One-touch Type JETBROACH 50L		17.5 to 50	13 to 50
	One-touch Type JETBROACH 75L		17.5 to 50	13 to 75
	JETBROACH 75L		50 to 100	13 to 75
	One-touch Type HI-BROACH 25L		17.5 to 35	13 to 25
	One-touch Type HI-BROACH 50L		18 to 35	13 to 50
	Twist Drill		Max. 32 mm dia.	
Max. Stroke		mm	296	
Magnet Holding Power		N (kgf)	17000 (1733)	
Magnet Dimensions		mm	110 x 220	
Cutter Position Adjustment	Straight Front to Back	mm	20	
	Swivel angle		30°	
Power Cord Length		m	5	
Mass (Weight)		kg	30	

Accessories Included	
• Plitot Pin 12075	• 7 x 8 mm spanner
• Side Handle	• Safety Chain
• 2.5 mm Hex. Socket Screw Key	• Guard
• 5 mm Hex. Socket Screw Key	• Oil Tank
• 6 mm Hex. Socket Screw Key	• Oil Tank Bracket
• 8 mm Hex. Socket Screw Key	• 3 pieces of Rod Handle
• Drill Drift	• Holder MT03075 Side Lock

Optional Accessories			
Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TB04374	Supporting Magnet Ass'y	
3	TB09727	Holder MT03075 One-Touch	

ATRA ACE MANUAL FEED

เครื่องสว่านฐานแม่เหล็กไฟฟ้า

LO-3550 CE

• Max. 35 mm dia. x 50 mm deep

- ตัวเครื่องมีขนาดกะทัดรัด น้ำหนักเบา เคลื่อนย้ายง่าย และสะดวก
- สามารถเจาะเหล็กที่มีหน้ากว้างขนาดตั้งแต่ 100 มม.ขึ้นไป (wide flange beam)
- เหมาะสำหรับงานเจาะบนผนัง พื้นที่จำกัด หรือพื้นที่สูง
- ปรับตำแหน่งดอกเจาะได้สูงสุด 10 มม. โดยการเลื่อนไปด้านหน้า-หลัง และด้านข้างซ้าย-ขวา
- สามารถสลับใช้คันโยกได้ทั้งซ้าย-ขวา ตามความถนัดของผู้ใช้งาน

Accessories Included	
• Carry Case	• Hex. Socket Bolt 5 x 12
• Cutting Oil 0.5L	• Hex. Socket Head Set Screw 8 x 28
• Feed Handle	• 4 mm Hex. Socket Screw Key
• Sub Handle	• 5 mm Hex. Socket Screw Key
• Pilot Pin 08035	• Spanner 7 x 8
• Spanner 17	• Guard
• Blade	• Safety Strap

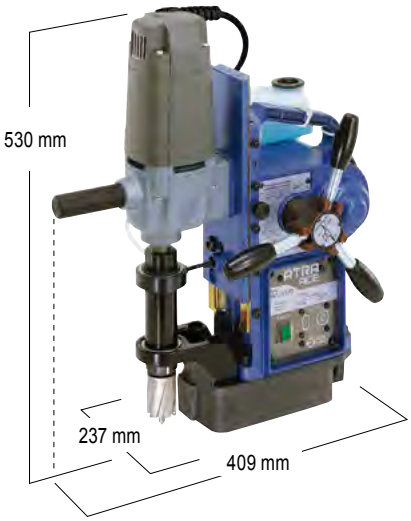
Optional Accessories			
Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TQ10581	Oiler No.3013	
3	TB01098	Tube 4 x 7 x 300 Ass'y	
4	TB07306	Labrication Adapter Ass'y	
5	TB04374	Supporting Magnet Ass'y	
6	TB07696	Pipe Attachment Ass'y	
*50L for Stacked plates		One-touch Type JETBROACH 25L, 35L, 50L	

Model			LO-3550	
Power Source (Single Phase)			220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	W	800	
	Rated Current	A	3.3	
	No-load Speed	min^{-1} (rpm)	950	
Hole Capacity (mm)	Cutter		Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L		12 to 17	6 to 25
	One-touch Type JETBROACH 35L		17.5 to 35	6 to 35
	One-touch Type JETBROACH 50L		12 to 35	6 to 50
Magnet Holding Power		N (kgf)	5500 (561)	
Magnet Dimensions		mm	65 x 145	
Cutter Position Adjustment	Pivot Side to Side	mm	10	
	Straight Front to Back	mm	10	
Power Cord Length		m	3	
Mass (Weight)		kg	8.7*	

*Excluding power cord and sub handle

ATRA ACE AUTO

เครื่องสว่านฐานแม่เหล็กไฟฟ้า



WA-3500 CE

• Max. 35 mm dia. x 50 mm deep

WA-5000 CE

• Max. 50 mm dia. x 75 mm deep

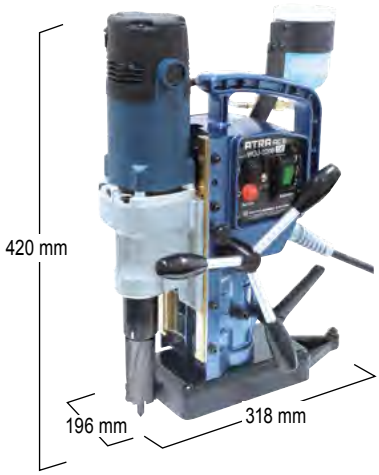
- ตัวเครื่องควบคุมการทำงานด้วยระบบอัตโนมัติ
- มีระบบเซนเซอร์ตรวจจับการใช้แรงเจาะ Load Sensor เพื่อช่วยยืดอายุการใช้งานของดอกเจาะ และเครื่องทำงานได้อย่างมีประสิทธิภาพ
- การสวมต่อดอกเจาะแบบจังหวะเดียว (One Touch) ถอดเปลี่ยนง่ายและประหยัดเวลา

Model			WA-3500		WA-5000	
Power Source (Single Phase)			110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz
Electric Drill	Rated Power Consumption	W	1100		1150	
	Rated Current	A	10.2	5.1	10.8	5.4
	No-load Speed	min^{-1} (rpm)	950		350 / 650	
Magnet Power Consumption		W	34		75	
Hole Capacity (mm)	Cutter		Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L		-	-	12 to 17	9 to 25
	One-touch Type JETBROACH 35L		17.5 to 35	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L		17.5 to 35	9 to 50	12 to 50	9 to 50
	One-touch Type JETBROACH 75L		-	-	17.5 to 50	9 to 75
	One-touch Type HI-BROACH 25L		14 to 35	9 to 25	14 to 50	9 to 25
	One-touch Type HI-BROACH 50L		-	-	14 to 50	9 to 50
Max. Stroke		mm	83		107	
Magnet Holding Power		N (kgf)	7056 (720)		9800 (1000)	
Magnet Dimensions		mm	92 x 213		101 x 201	
Power Cord Length		m	3		3	
Mass (Weight)		kg	20		23	
Accessories Included			• Carry Case • 3 mm Hex.Socket Screw Key • Cutting Oil 0.5L • 8 x 10 mm Spanner • Pilot Pin 08035 • Guard • Side Hadle • Chain		• Carry Case • 4 mm Hex.Socket Screw Key • Cutting Oil 0.5L • 8 x 10 mm Spanner • Pilot Pin 08050 • Guard • Side Hadle • Chain • 3 mm Hex.Socket Screw Key • Chip Breaker	

Optional Aeccessories					
Ref. No.	PN	Description	Sales Unit	Applicable Model	
				WA-3500	WA-5000
1	TB05186	Chip Breaker Ass'y	1 piece	•	
2	TB01507	Cutting Oil 2L	1 piece	•	•
3	TB04374	Supporting Magnet Ass'y	1 piece	•	•
4	TB02536	Sleeve 6.5 for Triangle Shank Drill Bit	1 piece	•	•
5	TB07696	Pipe Attachment Ass'y	1 piece	•	
		One-touch Type JETBROACH 25L	1 piece		•
		One-touch Type JETBROACH 35L	1 piece	•	•
		One-touch Type JETBROACH 50L	1 piece	•	•
		One-touch Type JETBROACH 75L	1 piece		•
		One-touch Type HI-BROACH 25L	1 piece	•	•
		One-touch Type HI-BROACH 50L	1 piece		•

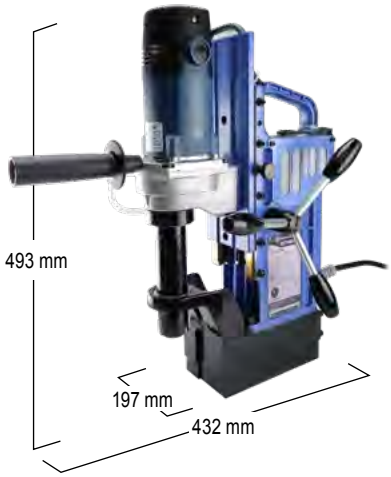
ATRA ACE MANUAL FEED

เครื่องสว่านฐานแม่เหล็กไฟฟ้า



WOJ-3200 CE

• Max. 32 mm dia. x 50 mm deep



AO-5575A CE

• Max. 55 mm dia. x 75 mm deep

- รุ่น WOJ-3200 ใช้กับดอกเจาะ Twist-Drill และ JETBROACH
- รุ่น AO-5575A ใช้กับดอกเจาะ HI-BROACH และ JETBROACH
- สวมต่อดอกเจาะแบบจังหวะเดียว (One Touch) ถอดเปลี่ยนง่ายและรวดเร็ว
- รุ่น WOJ-3200 ปรับระดับความสูงของเครื่องสูงสุด 60 มม.
- มีระบบ Smart Stop & Rapid Start เพิ่มความปลอดภัยในการทำงาน
- มีระบบสัญญานไฟ LED Load Detector แสดงสถานะการทำงานของตัวเครื่องขณะใช้งาน
- สามารถสลับใช้คันโยกได้ทั้งซ้าย-ขวา ตามความถนัดของผู้ใช้งาน

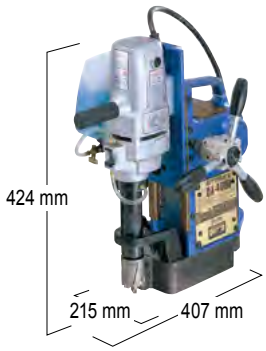
Model		WOJ-3200		AO-5575A	
Power Source (Single Phase)		110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption W	950		950	
	Rated Current A	8.6	4.3	4.3	
	No-load Speed min^{-1}(rpm)	870		520	
Magnet Power Consumption W		38	30	50	
Hole Capacity (mm)	Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L	12 to 17	9 to 25	12 to 17	9 to 25
	One-touch Type JETBROACH 35L	17.5 to 32	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L	12 to 32	9 to 50	12 to 55	9 to 50
	One-touch Type JETBROACH 75L	-	-	17.5 to 55	9 to 75
	One-touch Type HI-BROACH 25L	-	-	12 to 50	9 to 25
	One-touch Type HI-BROACH 50L	-	-	12 to 50	9 to 50
	Twist Drill	Max. 13 mm dia.		-	
Max. Stroke mm		130		105	
Magnet Holding Power N (kgf)		9000 (918)		10000 (1020)	
Magnet Dimensions mm		99 x 177		86 x 170	
Power Cord Length m		3		3	
Mass (Weight) kg		13		17.5	
Accessories Included		• Carry Case • Oil Tank • Pilot Pin 08035 • Sub Handle • 2 pieces of Hex. Socket Head Bolt 5 x 10 mm • 3 pieces of Rod Handle • 3 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • 6 mm. Hex. Socket Screw Key • 8 x 10 mm Spanner • Guard • Safety Strap		• Carry Case • Cutting Oil 0.5L • Pilot Pin 08050 • Side Handle • 3 mm Hex. Socket Screw Key • 5 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Guard • Chain	

Optional Accessories

Ref. No.	PN	Description	Sales Unit	Applicable Model WOJ-3200	Applicable Model AO-5575A
1	TB17691	Chip Breaker Ass'y	1 piece	•	
2	TB07474	Chip Breaker Ass'y	1 piece		•
3	TQ10581	Jet Oiler No.3013	1 piece	•	
4	TB01098	Tube 4 x 7 x 3000 Ass'y	1 piece	•	•
5	TB01507	Cutting Oil 2 L	1 piece	•	•
6	TB07696	Pipe Attachment Ass'y	1 piece	•	
7	TB04374	Supporting Manet Ass'y	1 piece	•	•
8	TB07690	One-touch Drill Adapter	1 piece	•	
9	TB02536	Sleeve 6.5 for Triangle Shank Drill Bit	1 piece		•
*50L for stacked plates		One-touch Type JETBROACH 25L	1 piece	•	•
		One-touch Type JETBROACH 35L	1 piece	•	•
		One-touch Type JETBROACH 50L	1 piece	•	•
		One-touch Type JETBROACH 75L	1 piece		•
		One-touch Type HI-BROACH 25L	1 piece		•
		One-touch Type HI-BROACH 50L	1 piece		•

ATRA ACE QUICK AUTO

เครื่องสว่านฐานแม่เหล็กไฟฟ้า



QA-4000

• Max. 40 mm dia. x 35 mm deep

QA-6500

• Max. 65 mm dia. x 50 mm deep

- ทำงานด้วยระบบ Fully Automation
- มีระบบสัญญานไฟ Load Detector แสดงสถานะการทำงาน
- การสวมต่อดอกเจาะแบบจังหวะเดียว (One Touch) ถอดเปลี่ยนง่ายและประหยัดเวลา

Model			QA-4000		QA-6500	
Power Source (Single Phase)			110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	W	680		1010	
	Rated Current	A	6.1	3.0	4.5	
	No-load Speed	min^{-1}(rpm)	750		400 / 750	
Magnet Power Consumption		W	50		75	
Hole Capacity (mm)	Cutter		Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 35L		17.5 to 40	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L		-	-	17.5 to 65	9 to 50
	One-touch Type HI-BROACH 25L		14 to 15	9 to 12	18 to 35	9 to 25
			16 to 18	9 to 25		
Max. Stroke		mm	75		88	
Magnet Holding Power		N (kgf)	6664 (680)		9800 (1000)	
Magnet Dimensions		mm	82 x 172		100 x 200	
Power Cord Length		m	4	5	5	
Mass (Weight)		kg	18.5		26	
Accessories Included			• Oil Tank • Cutting Oil 0.5L • Pilot Pin 08035 • Side Handle • 3 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Chain • Tool Box		• Oil Tank • Cutting Oil 0.5L • Pilot Pin 08050 • Side Handle • 3 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Chip Stopper • Chain • Tool Box	

Optional Accessories

Ref. No.	PN	Description	Sales Unit	Applicable Model QA-4000	Applicable Model QA-6500
1	TB01507	Cutting Oil 2L	1 piece	•	•
2	TB04374	Supporting Magnet Ass'y	1 piece	•	•
3	TB07696	Pipe Attachment Ass'y	1 piece	•	
		One-touch Type JETBROACH 35L	1 piece	•	•
		One-touch Type JETBROACH 50L	1 piece		•
		One-touch Type HI-BROACH 12L	1 piece	•	
		One-touch Type HI-BROACH 25L	1 piece	•	•

1

2

3

ATRA MASTER

แท่นจับสว่านฐานแม่เหล็กไฟฟ้า

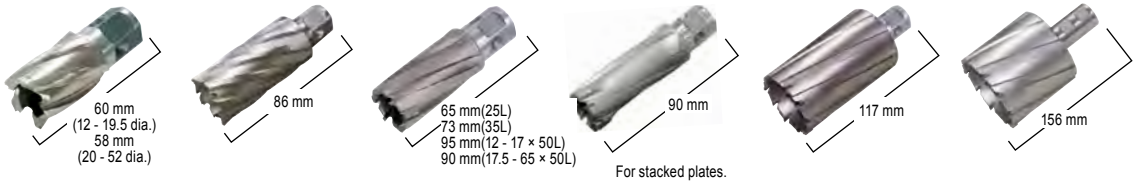
M-250B

M-320

- สามารถจับดอกสว่านให้อยู่ในแนวตั้งฉากกับแผ่นเหล็ก ทุกตำแหน่งการเจาะ
- ใช้เป็นฐานแม่เหล็กสำหรับจับยึดสว่านไฟฟ้า

Model	M-250B	M-320
Power Source (Single Phase)	220~240 V AC 50/60 Hz	220~240 V AC 50/60 Hz
Rated Power Consumption	80 W	80 W
Max. Drilling Capacity	25mm dia.	32 mm dia.
Magnetic Holding Power	1,500 kgf	1,800 kgf
Maximum Stroke	230 mm	280 mm
Magnet Dimension	110 x 243 mm	124 x 244 mm
Height	529 mm	525 mm
Mass (weight)	25.5 kg	29 kg

JETBROACH CUTTERS & HI-BROACH CUTTERS



Specification		HI-BROACH One-touch Type / 25L	HI-BROACH One-touch Type / 50L	JETBROACH One-touch Type / 25,35,50L	JETBROACH One-touch Type / 50L(W)	JETBROACH One-touch Type / 75L	JETBROACH Side lock Type / 75L
Hole Capacity (mm)	Hole Diameter	25L : 12 - 52 dia.	-	25L : 12 - 17 dia.	-	-	-
		-	-	35L : 17.5 - 40 dia.	-	-	-
		-	50L : 12 -52 dia.	50L : 12 - 65 dia.	50L(W): 18, 22, 24 - 26.5, 28, 32, and 35 dia.	-	-
		-	-	-		75L : 17.5 - 55 dia.	75L : 50 - 100 dia.
	Plate Thickness	25L : 25	-	25L : 25	-	-	-
		-	-	35L : 35	-	-	-
		-	50L : 50	50L : 50	50L(W) : 50	-	-
		-	-	-	-	75L : 75	75L : 75
Feed Speed mm/rev		0.02 - 0.1					
Circumferential Speed m/min		15 - 35 (mild steel)		35 - 50 (mild steel)			

HI-BROACH One-touch Type										
Depth	mm dia.	PN	AO-5575A	WA-3500	WA-5000	QA-4000	QA-6500	CLA-2720	ARA-100A	Pilot Pin
25 mm	12	TK00698	●					●		06025
	13	TK00699	●					●		
	14	TK00700	●	●	●	●		●		
	15	TK00701	●	●	●	●		●		
	16	TK00702	●	●	●	●		●		
	17	TK00703	●	●	●	●		●		
	17.5	TK01391	●	●	●	●		●	●	08025
	18	TK01392	●	●	●	●	●	●	●	
	19	TK01393	●	●	●		●	●	●	
	19.5	TK01394	●	●	●		●	●	●	
	20	TK01395	●	●	●		●	●	●	
	21	TK01396	●	●	●		●	●	●	
	21.5	TK01397	●	●	●		●	●	●	
	22	TK01398	●	●	●		●	●	●	
	22.5	TK01399	●	●	●		●	●	●	
	23	TK01400	●	●	●		●	●	●	
	23.5	TK01401	●	●	●		●	●	●	
	24	TK01402	●	●	●		●	●	●	
	24.5	TK01403	●	●	●		●	●	●	
	25	TK01404	●	●	●		●	●	●	
	26	TK01405	●	●	●		●	●	●	
	27	TK01407	●	●	●		●	●	●	
	28	TK01408	●	●	●		●		●	
	29	TK01409	●	●	●		●		●	
	30	TK01410	●	●	●		●		●	
	31	TK01411	●	●	●		●		●	
	32	TK01412	●	●	●		●		●	
	33	TK01413	●	●	●		●		●	
	34	TK01414	●	●	●		●		●	
	35	TK01415	●	●	●		●		●	
	36	TK01416	●		●					
	37	TK01417	●		●					
	38	TK01418	●		●					
	39	TK01419	●		●					
	40	TK01420	●		●					
	41	TK01421	●		●					
	42	TK01422	●		●					
	43	TK01423	●		●					
	44	TK01424	●		●					
	45	TK01425	●		●					
	46	TK01426	●		●					
	47	TK01427	●		●					
	48	TK01428	●		●					
	49	TK01429	●		●					
	50	TK01430	●		●					
	51	TK01431								
	52	TK01432								

HI-BROACH One-touch Type						
Depth	mm dia.	PN	AO-5575A	WA-5000	ARA-100A	Pilot Pin
50 mm	12	TK00721	●			06050
	13	TK00722	●			
	14	TK00723	●	●		
	15	TK00724	●	●		
	16	TK00725	●	●		
	17	TK00726	●	●		
	18	TK00727	●	●	●	
	19	TK00728	●	●	●	08050
	20	TK00729	●	●	●	
	21	TK00730	●	●	●	
	22	TK00731	●	●	●	
	23	TK00732	●	●	●	
	24	TK00733	●	●	●	
	25	TK00734	●	●	●	
	26	TK00735	●	●	●	
	27	TK00736	●	●	●	
	28	TK00737	●	●	●	
	29	TK00738	●	●	●	
	30	TK00739	●	●	●	
	31	TK00740	●	●	●	
	32	TK00741	●	●	●	
	33	TK00742	●	●	●	
	34	TK00743	●	●	●	
	35	TK00744	●	●	●	
	36	TK00745	●	●		
	37	TK00746	●	●		
	38	TK00747	●	●		
	39	TK00748	●	●		
	40	TK00749	●	●		
	41	TK00750	●	●		
	42	TK00751	●	●		
	43	TK00752	●	●		
	44	TK00753	●	●		
	45	TK00754	●	●		
	46	TK00755	●	●		
	47	TK00756	●	●		
	48	TK00757	●	●		
	49	TK00758	●	●		
	50	TK00759	●	●		
	51	TK00760				
	52	TK00761				

JETBROACH One-touch Type												
Depth	mm dia.	PN	LO-3550	WOJ-3200	AO-5575A	WA-3500	WA-5000	QA-4000	QA-6500	CLA-2720	ARA-100A	Pilot Pin
25 mm	12	TK01148	●	●	●		●			●		06025
	13	TK01149	●	●	●		●			●		
	14	TK01150	●	●	●		●			●		
	15	TK01151	●	●	●		●			●		
	16	TK01152	●	●	●		●			●		
	17	TK01153	●	●	●		●			●		
35mm	17.5	TK01249	●	●	●	●	●	●	●	●	●	08035
	18	TK01250	●	●	●	●	●	●	●	●	●	
	18.5	TK01251	●	●	●	●	●	●	●	●	●	
	19	TK01252	●	●	●	●	●	●	●	●	●	
	19.5	TK01253	●	●	●	●	●	●	●	●	●	
	20	TK01254	●	●	●	●	●	●	●	●	●	
	20.5	TK01255	●	●	●	●	●	●	●	●	●	
	21	TK01256	●	●	●	●	●	●	●	●	●	
	21.5	TK01257	●	●	●	●	●	●	●	●	●	
	22	TK01258	●	●	●	●	●	●	●	●	●	
	22.5	TK01259	●	●	●	●	●	●	●	●	●	
	23	TK01260	●	●	●	●	●	●	●	●	●	
	23.5	TK01261	●	●	●	●	●	●	●	●	●	
	24	TK01262	●	●	●	●	●	●	●	●	●	
	24.5	TK01263	●	●	●	●	●	●	●	●	●	
	25	TK01264	●	●	●	●	●	●	●	●	●	
	25.5	TK01265	●	●	●	●	●	●	●	●	●	
	26	TK01266	●	●	●	●	●	●	●	●	●	
	26.5	TK01267	●	●	●	●	●	●	●	●	●	
	27	TK01268	●	●	●	●	●	●	●	●	●	
	28	TK01269	●	●	●	●	●	●	●		●	
	29	TK01270	●	●	●	●	●	●	●		●	
	30	TK01271	●	●	●	●	●	●	●		●	
	31	TK01272	●	●	●	●	●	●	●		●	
	32	TK01273	●	●	●	●	●	●	●		●	
	33	TK01274	●		●	●	●	●	●		●	
	34	TK01275	●		●	●	●	●	●		●	
	35	TK01276	●		●	●	●	●	●		●	
	36	TK01277			●		●	●	●		●	
	37	TK01278			●		●	●	●		●	
	38	TK01279			●		●	●	●		●	
	39	TK01280			●		●	●	●		●	
	40	TK01281			●		●	●	●		●	

Sales Unit : 1 Piece

JETBROACH One-touch type			LO-3550	WOJ-3200	AO-5575A	WA-3500	WA-5000	QA-6500	ARA-100	Pilot Pin
Depth	mm dia.	PN								
50 mm	12	TK01154	●	●	●		●			06050
	13	TK01155	●	●	●		●			
	14	TK01156	●	●	●		●			
	15	TK01157	●	●	●		●			
	16	TK01158	●	●	●		●			
	17	TK01159	●	●	●		●			
	17.5	TK01282	●	●	●	●	●	●	●	08050
	18	TK01283	●	●	●	●	●	●	●	
	19	TK01284	●	●	●	●	●	●	●	
	19.5	TK01285	●	●	●	●	●	●	●	
	20	TK01286	●	●	●	●	●	●	●	
	20.5	TK01287	●	●	●	●	●	●	●	
	21	TK01288	●	●	●	●	●	●	●	
	21.5	TK01289	●	●	●	●	●	●	●	
	22	TK01290	●	●	●	●	●	●	●	
	22.5	TK01291	●	●	●	●	●	●	●	
	23	TK01292	●	●	●	●	●	●	●	
	23.5	TK01293	●	●	●	●	●	●	●	
	24	TK01294	●	●	●	●	●	●	●	
	24.5	TK01295	●	●	●	●	●	●	●	
	25	TK01296	●	●	●	●	●	●	●	
	25.5	TK01297	●	●	●	●	●	●	●	
	26	TK01298	●	●	●	●	●	●	●	
	26.5	TK01299	●	●	●	●	●	●	●	
	27	TK01300	●	●	●	●	●	●	●	
	28	TK01301	●	●	●	●	●	●	●	
	29	TK01302	●	●	●	●	●	●	●	
	30	TK01303	●	●	●	●	●	●	●	
	31	TK01304	●	●	●	●	●	●	●	
	32	TK01305	●	●	●	●	●	●	●	
	33	TK01306	●		●	●	●	●	●	
	34	TK01307	●		●	●	●	●	●	
	35	TK01308	●		●	●	●	●	●	
	36	TK01309			●		●	●	●	
	37	TK01310			●		●	●	●	
	38	TK01311			●		●	●	●	
	39	TK01312			●		●	●	●	
	40	TK01313			●		●	●	●	
	41	TK01314			●		●	●	●	
	42	TK01315			●		●	●	●	
	43	TK01316			●		●	●	●	
	44	TK01317			●		●	●	●	
	45	TK01318			●		●	●	●	
	46	TK01319			●		●	●	●	
	47	TK01320			●		●	●	●	
	48	TK01321			●		●	●	●	
	49	TK01322			●		●	●	●	
	50	TK01323			●		●	●	●	
	51	TK01324			●			●		
	52	TK01325			●			●		
	53	TK01326			●			●		
	54	TK01327			●			●		
	55	TK01328						●		
	56	TK01329						●		
	57	TK01330						●		
	58	TK01331						●		
	59	TK01332						●		
	60	TK01333						●		
	61	TK01334						●		
	62	TK01335						●		
	63	TK01336						●		
	64	TK01337						●		
	65	TK01338						●		

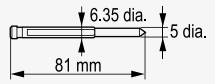
JETBROACH One-touch type 50(W) for stacked plates			LO-3550	WOJ-3200	AO-5575A	ARA-100A	Pilot Pin
Depth	mm dia.	PN					
50 mm	18	TK01068	●	●	●	●	08050
	22	TK00622	●	●	●	●	
	24	TK00623	●	●	●	●	
	24.5	TK00631	●	●	●	●	
	25	TK00624	●	●	●	●	
	26	TK00625	●	●	●	●	
	26.5	TK00632	●	●	●	●	
	28	TK00626	●	●	●	●	
	32	TK00627	●	●	●	●	
	35	TK00628	●		●	●	

JETBROACH One-touch type			AO-5575A	WA-5000	ARA-100A	Pilot Pin
Depth	mm dia.	PN				
75 mm	17.5	TK01350	●	●	●	08075
	18	TK01351	●	●	●	
	19	TK01352	●	●	●	
	20	TK01353	●	●	●	
	21	TK01354	●	●	●	
	22	TK01355	●	●	●	
	23	TK01356	●	●	●	
	24	TK01357	●	●	●	
	24.5	TK01358	●	●	●	
	25	TK01359	●	●	●	
	26	TK01360	●	●	●	
	26.5	TK01361	●	●	●	
	27	TK01362	●	●	●	
	28	TK01363	●	●	●	
	29	TK01364	●	●	●	
	30	TK01365	●	●	●	
	31	TK01366	●	●	●	
	32	TK01367	●	●	●	
	33	TK01368	●	●	●	
	34	TK01369	●	●	●	
	35	TK01370	●	●	●	
	36	TK01371	●	●	●	
	37	TK01372	●	●	●	
	38	TK01373	●	●	●	
	39	TK01374	●	●	●	
	40	TK01375	●	●	●	
	41	TK01376	●	●	●	
	42	TK01377	●	●	●	
	43	TK01378	●	●	●	
	44	TK01379	●	●	●	
	45	TK01380	●	●	●	
	46	TK01381	●	●	●	
	47	TK01382	●	●	●	
	48	TK01383	●	●	●	
	49	TK01384	●	●	●	
	50	TK01385	●	●	●	
	51	TK01386	●			
	52	TK01387	●			
	53	TK01388	●			
	54	TK01389	●			
	55	TK01390	●			

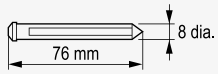
JETBROACH Side-lock Type			ARA-100	Pilot Pin
Depth	mm dia.	PN		
75 mm	50	TK01433	●	12075
	51	TK01434	●	
	52	TK01435	●	
	53	TK01436	●	
	54	TK01437	●	
	55	TK01438	●	
	56	TK01439	●	
	57	TK01440	●	
	58	TK01441	●	
	59	TK01442	●	
	60	TK01443	●	
	61	TK01444	●	
	62	TK01445	●	
	63	TK01446	●	
	64	TK01447	●	
	65	TK01448	●	
	66	TK01449	●	
	67	TK01450	●	
	68	TK01451	●	
	69	TK01452	●	
	70	TK01453	●	
	71	TK01454	●	
	72	TK01455	●	
	73	TK01456	●	
	74	TK01457	●	
	75	TK01458	●	
	76	TK01459	●	
	77	TK01460	●	
	78	TK01461	●	
	79	TK01462	●	
	80	TK01463	●	
	81	TK01464	●	
	82	TK01465	●	
	83	TK01466	●	
	84	TK01467	●	
	85	TK01468	●	
	86	TK01469	●	
	87	TK01470	●	
	88	TK01471	●	
	89	TK01472	●	
	90	TK01473	●	
	91	TK01474	●	
	92	TK01475	●	
	93	TK01476	●	
	94	TK01477	●	
	95	TK01478	●	
	96	TK01479	●	
	97	TK01480	●	
	98	TK01481	●	
	99	TK01482	●	
	100	TK01483	●	

Pilot Pin

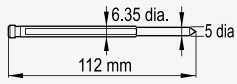
06025 PN : TK01167



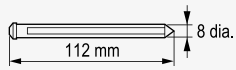
08025 PN : TK01486



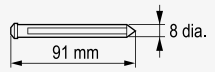
06050 PN : TK01166



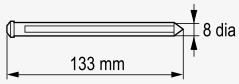
08050 PN : TK01488



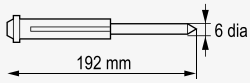
08035 PN : TK01487



08075 PN : TJ17436



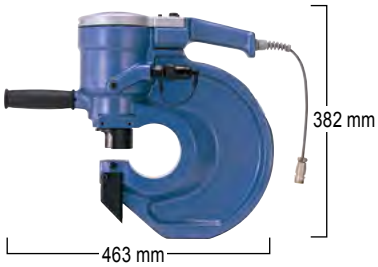
12075 PN : TA9A207



Sales Unit : 1 Piece

SELFER ACE

เครื่องเจาะรูเหล็กระบบไฮดรอลิก

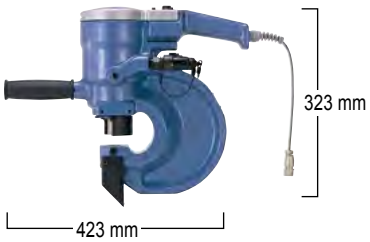


HS11-1624 Non-CE/ CE *

- Max. punching thickness: 16 mm
- Max. punching diameter: 24 mm
- Max. throat depth: 110 mm

HS07-1624 Non-CE/ CE *

- Max. punching thickness: 16 mm
- Max. punching diameter: 24 mm
- Max. throat depth: 70 mm



HS06-1322 Non-CE/ CE *

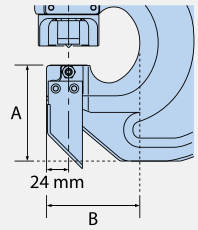
- Max. punching thickness: 13 mm
- Max. punching diameter: 22 mm
- Max. throat depth: 60 mm

- เหมาะสำหรับงานเจาะเหล็กและสแตนเลส
- เจาะด้วยระบบไฮดรอลิก ควบคุมการทำงานได้ 2 ระบบ แบบอัตโนมัติ และแบบกดด้วยมือ Manual mode

Model			HS11-1624		HS07-1624		HS06-1322	
Max. Throat Depth		mm	110		70		60	
Punching Capacity	Material		Mild Steel	Stainless Steel	Mild Steel	Stainless Steel	Mild Steel	Stainless Steel
	Max. Punching Thickness*	mm	16	6	16	6	13	6
	Max. Punching Diameter	mm	24				22	
Hole Making time	Punching Time	sec.	11.8				7.9	
	Returning Time	sec.	5.7				3.4	
Allowable Max. Pressure		MPa (kgf/cm²)	68.68 (700)					
Max. Output		kN (tf)	464 (47)				367 (37)	
Ram Stroke		mm	25				21	
Mass (Weight)		kg	30		25.5		20.5	
Accessories Included			• D Punch 22 (Installed) • D Die 22 (Installed) • Sub Handle • Ultra-high Pressure Hose		• Hose Cord Ass'y • Chip Guard Ass'y • Spanner • 12 mm Spanner		• 4 mm Hex. Socket Screw Key • 5 mm Hex. Socket Screw Key • Tool Box	

*Mild steel: Maximum punching thickness must be calculated by the equation 0.8 x punching diameter.
*Stainless steel: Maximum punching thickness must be calculated by the equation 0.5 x punching diameter.
For the details see the instruction manual.

Dimension from Edge to Punch Center



	A	B
HS11-1624	127	134
HS07-1624	105	94
HS06-1322	84	85

Optional Accessories		
PN	Description	Sales Unit
TB02506	Hose Kit Ass'y	1 piece
TP05184	Ultra-high Pressure Hose 5 m	
TB02390	Switch Cord Ass'y 5 m	
TP05777	Ultra-high Pressure Hose 10 m	
TB02545	Switch Cord Ass'y 10 m	
TB02141	Foot Switch Ass'y	
TA92729	4L Oil Can	
TB02142	Hook Clamp Ass'y	
TA99037	Lock Nut Ass'y for 25 mm Punch	
TQ01279	Hex. Socket Head Screw 8 x 14 for Securing Oblong Hole D Dies	

HYDRAULIC PUMP FOR SELFER ACE

HPD-05 Non-CE/ CE *

- Double-acting

Model		HPD-05	
Power Source (Single Phase)		115 V / 230 V AC	
Max. Output Pressure	MPa (kgf/cm²)	68.65 (700)	
Output		50 Hz	60 Hz
At No-load	L/min	1.20	1.44
At 68.65 MPa	L/min	0.55	0.66
Motor		0.4 kW 4P	
Reservoir Capacity	L	4.0	
Discharge Port		Rc 3/8	
Electro-Magnetic Valve		4 way 3 position valve	
Mass (Weight)	kg	32.5	

*CE mode is available without auto-return function

HANDY SELFER

เครื่องเจาะรูเหล็กระบบไฮดรอลิก

E25-0615

- Double insulation
- E punch and E die
- Max. punching thickness : 6 mm
- Max. punching diameter : 15 mm
- Max. throat depth: 25 mm

E55-0619

- EL punch and EL die
- Max. punching thickness : 6 mm
- Max. punching diameter : 19 mm
- Max. throat depth: 55 mm

- เหมาะสำหรับงานเจาะเหล็กแบน เหล็กฉาก เหล็กราง (เหล็กตัว C)
- เจาะด้วยระบบไฮดรอลิก

Model			E25-0615	E55-0619	
Power Source (Single Phase)			220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz
Max. Throat Depth		mm	25	55	
Motor	Rated Power Consumption	W	305	670	
	Rated Current	A	1.4	6.0	3.0
Punching Capacity	Material		Mild Steel		
	Max. Punching Diameter	mm	15	19	
	Max. Punching Thickness	mm	6	6	
Punching time		sec (single pass)	4	2	
Power Cord Length		m	2.4	2.4	
Mass (Weight)		kg	7.0	14	
Accessories Included			• E Punch 15 (Installed) • E Die 15A • E Die 15B (Installed) • Sub Handle • 2.5 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • 10 x 12 mm Spanner • Auxiliary Oil 40 cc • Tool Box • Spanner 8	• EL Punch 18 (Installed) • EL Die 18A • EL Die 18B (Installed) • Sub Handle • 3 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • 5 mm Hex. Socket Screw Key • 10 x 12 mm Spanner • Stand Ass'y • Auxiliary Oil 40 cc • Tool Box	

Optional Accessories (E25-0615)

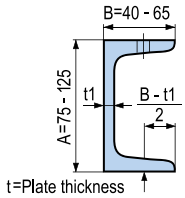
PN	Description	Sales Unit
TB00800	Stand Ass'y	1 piece

Die Selection

E Die and EL Die	Punching Thickness (mm)		Model
	Mild Steel	Stainless Steel	
Round Hole E Die A (for Thin Sheets)	2 to 3.2	Max. 3	E25-0615
Round Hole E Die B (for Thick Sheets)	4 to 6	Max. 4	
Round Hole EL Die A (for Thin Sheets)	2 to 3.2	Max. 3	E55-0619
Round Hole EL Die B (for Thick Sheets)	4 to 6	Max. 4	
Round Hole EL Die C (for Channel Iron)	7 to 8	-	

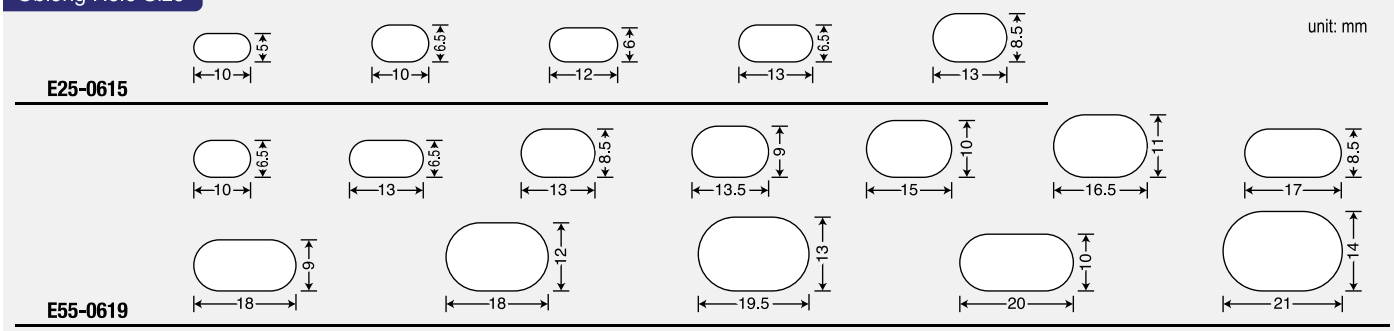
Punching Capacity in Channel Iron (E55-0619)

Punching Dia. / Size	10 OD	11 OD	12 OD	13 OD	14 OD	15 OD	16 OD
75 x 40 t7	O	O	O	O	O	O	O
100 x 50 t7.5	O	O	O	O	O	O	-
125 x 65 t8	O	O	O	O	O	-	-



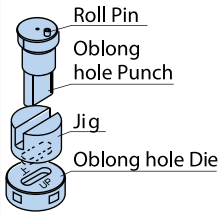
Oblong Hole Size

unit: mm



PUNCHES & DIES FOR SELFER PUNCHER

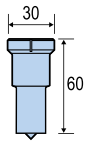
FOR HS06-1322/HS07-1624/HS11-1624/HA06-1322/HA07-1624/HA11-1624					
Oblong hole D Punch		Oblong hole D Die		Oblong hole Jig	
PN	Size	PN	Size	PN	Size
TK01512	D Punch 16 x 8	TK01544	D Die 16 x 8	TK01694	Jig 16 x 8
TK01513	D Punch 18 x 9	TK01545	D Die 18 x 9	TK01695	Jig 18 x 9
TK01514	D Punch 20 x 10	TK01546	D Die 20 x 10	TK01696	Jig 20 x 10
TK01515	D Punch 22 x11	TK01547	D Die 22 x 11	TK01697	Jig 22 x 11
TK01516	D Punch 24 x 12	TK01548	D Die 24 x 12	TK01698	Jig 24 x 12
TK01517	D Punch 25 x 9*	TK01549	D Die 25 x 9	TK01699	Jig 25 x 9
TK01518	D Punch 25 x 12*	TK01550	D Die 25 x 12	TK01700	Jig 25 x 12
TK01519	D Punch 25 x 14*	TK01551	D Die 25 x 14	TK01701	Jig 25 x 14
TK01520	D Punch 25 x 18*	TK01552	D Die 25 x 18	TK01702	Jig 25 x 18



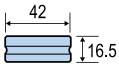
* TA99037 Lock Nut Ass'y is required for oblong hole D Punch 25 x 9 /12 /14 /18

Optional Accessories		
PN	Description	Sales Unit
TQ01279	Hex. Set Screw 8 x 14 for Securing Oblong Hole Dies	1piece
TA99037	Lock Nut Ass'y for D Punch 25	1 set

FOR HS06-1322/HS07-1624/HS11-1624/HA06-1322/HA07-1624/HA11-1624			
Round hole D Punch		Round hole D Die	
PN	Size	PN	Size
TK01489	D Punch 8	TK01521	D Die 8
TK01490	D Punch 9	TK01522	D Die 9
TK01491	D Punch 10	TK01523	D Die 10
TK01492	D Punch 11	TK01524	D Die 11
TK01493	D Punch 12	TK01525	D Die 12
TK01494	D Punch 13	TK01526	D Die 13
TK01495	D Punch 14	TK01527	D Die 14
TK01496	D Punch 14.5	TK01528	D Die 14.5
TK01497	D Punch 15	TK01529	D Die 15
TK01498	D Punch 16	TK01530	D Die 16
TK01499	D Punch 17	TK01531	D Die 17
TK01500	D Punch 17.5	TK01532	D Die 17.5
TK01501	D Punch 18	TK01533	D Die 18
TK01502	D Punch 19	TK01534	D Die 19
TK01503	D Punch 20	TK01535	D Die 20
TK01504	D Punch 20.5	TK01536	D Die 20.5
TK01505	D Punch 21	TK01537	D Die 21
TK01506	D Punch 21.5	TK01538	D Die 21.5
TK01507	D Punch 22	TK01539	D Die 22
TK01508	D Punch 23	TK01540	D Die 23
TK01509	D Punch 23.5	TK01541	D Die 23.5
TK01510	D Punch 24	TK01542	D Die 24
TK01511	D Punch 25	TK01543	D Die 25



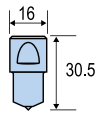
D Punches



D Dies

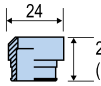
• TA99037 Lock Nut Ass'y is required for D Punch 25

FOR E25-0615					
Round hole E Punch		Round hole E Die (Type A for thin sheets)		Round hole E Die (Type B for thick sheets)	
PN	Size	PN	Size	PN	Size
TK01553	E Punch 4	TK01571	E Die 4A	-	-
TK01554	E Punch 5	TK01572	E Die 5A	TK01584	E Die 5B
TK01555	E Punch 5.5	TK01573	E Die 5.5A	TK01585	E Die 5.5B
TK01556	E Punch 6	TK01574	E Die 6A	TK01586	E Die 6B
TK01557	E Punch 6.5	TK01575	E Die 6.5A	TK01587	E Die 6.5B
TK01558	E Punch 8	TK01576	E Die 8A	TK01588	E Die 8B
TK01559	E Punch 8.5	TK01577	E Die 8.5A	TK01589	E Die 8.5B
TK01560	E Punch 10	TK01578	E Die 10A	TK01590	E Die 10B
TK01561	E Punch 11	TK01579	E Die 11A	TK01591	E Die 11B
TK01562	E Punch 12	TK01580	E Die 12A	TK01592	E Die 12B
TK01563	E Punch 13	TK01581	E Die 13A	TK01593	E Die 13B
TK01564	E Punch 14	TK01582	E Die 14A	TK01594	E Die 14B
TK01565	E Punch 15	TK01583	E Die 15A	TK01595	E Die 15B
Oblong hole E Punch		Oblong hole E Die (Type A for thin Sheets)		Oblong hole E Die (Type B for thick sheets)	
PN	Size	PN	Size	PN	Size
TK01566	E Punch 10 x 5	TK01596	E Die 10 x A5	TK01601	E Die 10 x 5B
TK01567	E Punch 10 x 6.5	TK01597	E Die 10 x 6.5A	TK01602	E Die 10 x 6.5B
TK01568	E Punch 12 x 6	TK01598	E Die 12 x 6A	TK01603	E Die 12 x 6B
TK01569	E Punch 13 x 6.5	TK01599	E Die 13 x 6.5A	TK01604	E Die 13 x 6.5B
TK01570	E Punch 13 x 8.5	TK01600	E Die 13 x 8.5A	TK01605	E Die 13 x 8.5B



E Punches

Front view of E Dies TypeA



21: over or equal 8 dia (19: under 8 dia.)

Side face of E Dies TypeA

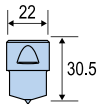
Front view of E Dies TypeB

21: over or equal 8 dia. (19: under 8 dia.)

Side face of E Dies TypeB

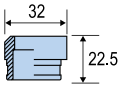
For E55-0619					
Oblong hole EL Punch		Oblong hole EL Die (Type A for thin Sheets)		Oblong hole EL Die (Type B for thick sheets)	
PN	Size	PN	Size	PN	Size
TK01621	EL Punch 10 x 6.5	TK01670	EL Die 10 x 6.5A	TK01682	EL Die 10 x 6.5B
TK01622	EL Punch 13 x 6.5	TK01671	EL Die 13 x 6.5A	TK01683	EL Die 13 x 6.5B
TK01623	EL Punch 13 x 8.5	TK01672	EL Die 13 x 8.5A	TK01684	EL Die 13 x 8.5B
TK01624	EL Punch 13.5 x 9	TK01673	EL Die 13.5 x 9A	TK01685	EL Die 13.5 x 9B
TK01625	EL Punch 15 x 10	TK01674	EL Die 15 x 10A	TK01686	EL Die 15 x 10B
TK01626	EL Punch 16.5 x 11	TK01675	EL Die 16.5 x 11A	TK01687	EL Die 16.5 x 11B
TK01627	EL Punch 17 x 8.5	TK01676	EL Die 17 x 8.5A	TK01688	EL Die 17 x 8.5B
TK01628	EL Punch 18 x 9	TK01677	EL Die 18 x 9A	TK01689	EL Die 18 x 9B
TK01629	EL Punch 18 x 12	TK01678	EL Die 18 x 12A	TK01690	EL Die 18 x 12B
TK01630	EL Punch 19.5 x 13	TK01679	EL Die 19.5 x 13A	TK01691	EL Die 19.5 x 13B
TK01631	EL Punch 20 x 10	TK01680	EL Die 20 x 10A	TK01692	EL Die 20 x 10B
TK01632	EL Punch 21 x 14	TK01681	EL Die 21 x 14A	TK01693	EL Die 21 x 14B

Round hole EL Punch		Round hole EL Die (Type A for thin sheets)		Round hole EL Die (Type B for thick sheets)		Round hole EL Die (Type C for channel iron)	
PN	Size	PN	Size	PN	Size	PN	Size
TK01606	EL Punch 6	TK01633	EL Die 6A	TK01648	EL Die 6B	-	-
TK01607	EL Punch 6.5	TK01634	EL Die 6.5A	TK01649	EL Die 6.5B	-	-
TK01608	EL Punch 8	TK01635	EL Die 8A	TK01650	EL Die 8B	-	-
TK01609	EL Punch 8.5	TK01636	EL Die 8.5A	TK01651	EL Die 8.5B	-	-
TK01610	EL Punch 10	TK01637	EL Die 10A	TK01652	EL Die 10B	TK01663	EL Die 10C
TK01611	EL Punch 11	TK01638	EL Die 11A	TK01653	EL Die 11B	TK01664	EL Die 11C
TK01612	EL Punch 12	TK01639	EL Die 12A	TK01654	EL Die 12B	TK01665	EL Die 12C
TK01613	EL Punch 13	TK01640	EL Die 13A	TK01655	EL Die 13B	TK01666	EL Die 13C
TK01614	EL Punch 14	TK01641	EL Die 14A	TK01656	EL Die 14B	TK01667	EL Die 14C
TK01615	EL Punch 15	TK01642	EL Die 15A	TK01657	EL Die 15B	TK01668	EL Die 15C
TK01616	EL Punch 16	TK01643	EL Die 16A	TK01658	EL Die 16B	TK01669	EL Die 16C
TK01617	EL Punch 17	TK01644	EL Die 17A	TK01659	EL Die 17B	-	-
TK01618	EL Punch 18	TK01645	EL Die 18A	TK01660	EL Die 18B	-	-
TK01619	EL Punch 18.5	TK01646	EL Die 18.5A	TK01661	EL Die 18.5B	-	-
TK01620	EL Punch 19	TK01647	EL Die 19A	TK01662	EL Die 19B	-	-



EL Punches

Front view of EL Dies Type A, B & C



Side face of EL Dies Type A, B & C

NITTO KOHKI Made in Japan

ELECTRIC SCREWDRIVER ไขควงไฟฟ้า

BRUSHLESS MOTOR

C series (Current control type) Model DLV45C A70
C series (Current control type) Model DLV04C / 10 C A71
S series (Variable speed type) Model DLV30S / 45S / 70S A72
DLV02 / 12 / 16 series A76
A Series (Transformerless type) Model DLV30A / 45A / 70A-AB A75
A Series (For Automation) Model DLV30A / 45A / 70A A73

BRUSH MOTOR

DLV7400A series A77
DLV5700 series A78
DLV7300 series A79
DLV7300 - BME / BKE series A80
DLV7104/8104/8204 Series A81
DLV3100/3300 series (For Automation) A74

SCREW FASTENING COUNTER

Screwdriver Design For DLV5640-WN A82
Screw Fastening Counter - DLV5640-WN A83
Screw Fastening Counter - DLR5040A-WE A84
Dedicated Screwdriver For DLR5040A-WE A85

TORQUE CHECKER เครื่องวัดค่าทอร์ค

DLT1173A / 1673A / 1973A series A86

Quick Reference Symbols

Current Control Type
Since the torque is determined by the current value, multiple torque settings are possible.

Clutch Type
The torque is determined mechanically.

LED Equipped
Shows the channel in use and working status with seven color indication LED.

Lever Start
Operates when the lever is pressed.

Push to Start
Operates when the screwdriver is pressed.

Transformerless
A dedicated controller is not required. Operates by commercial power supply.

Low Voltage
Connect to dedicated controller. Operates at electric voltage under 42V.

Brushless Motor
Maintenance free, no brush replacement required. Realizes high durability.

Grounded Bit
Prevents electrostatic breakdown when the bit contacts the workpiece.

ESD Protection
Prevents electrostatic charging and saves the workpiece from electrostatic breakdown.

Low Shock
Softens the shock at the end of tightening and lowers the load to the workpiece.

Clean room adaption
Adapts to assembly in class 5 clean rooms

Soft Stop
Gradually reduces the rotation speed to improve the screw tightening quality.

Variable Speed
Can be adjusted to a suitable tightening speed.

Soft Start
Gradually increases the rotation speed to prevent damage to the screw head.

delvo BRUSHLESS MOTOR - DC POWER SUPPLY

C Series (Current control type)

DLV45C CE

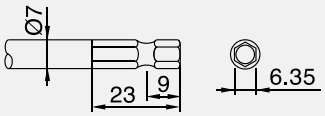
DLV45C12L DLV45C12P

DCC0241X-AZ

- ควบคุมค่าแรงบิดด้วยระบบกระแสไฟ (Current Controlled Torque)
- มีฟังก์ชันการนับจำนวนสกรูที่ตัวไขควง และที่ชุดควบคุม ช่วยป้องกันความผิดพลาด
- ไขควงไฟฟ้า 1 ชุดตั้งค่าแรงบิดได้สูงสุดถึง 30 ค่า
- ปรับความเร็วได้ 9 ระดับ และควบคุมความเร็วได้ 3 ระดับ
- สัญญาณไฟ LED แสดงสถานะการทำงาน 7 สี
- มีพอร์ตเชื่อมต่อสัญญาณ I/O 2 พอร์ต (NPN ↔ PNP สลับได้)
- สามารถใช้ได้ทั้งแบบมือจับ หรือติดตั้งเข้ากับเครื่องจักรอัตโนมัติ
- ตัวเครื่องมีระบบป้องกันไฟฟ้าสถิต
- สามารถกำหนดการตั้งค่าผ่านระบบ PC / PLC (ดาวน์โหลดโปรแกรมได้ในเว็บไซต์ NITTO KOHKI)

Low Voltage (DC) | Brush motor | Brushless motor

3.0 - 6.0 mm | Miniature screw | Precision screw | Machine screw

Electric Screwdriver	Specifications						
	Model		Bit	DLV45C12L-AY	K	DLC45C12P-AY	K
	Starting Method			Lever Start		Push to Start	
	Power Source			From dedicated controller			
	Torque Adjustment			From 1 to 100% in 1% increments			
	Torque		(Nm [lbf·in])	0.6 to 4.5 [5.3 to 39.8]			
	Free speed	SOFT fastening setting	(min^{-1})	400 to 1200			
			Speed Level	Level 1 to 9			
		HARD fastening setting	(min^{-1})	100 to 700			
			Speed Level	Automatically set by torque setting			
	Power Consumption		(W)	44			
	Screw Size	Machine Screw	(mm)	3.0 to 6.0			
		Tapping Screw	(mm)	2.5 to 5.0			
	Bit Type		(mm)				
	Mass		(g [lbs])	630 [1.39]			
	Rated Operation			ON: 0.5 seconds / OFF: 3.5 seconds			
	Bit Grounding			Equipped as standard			
	Standard Accessories			Bit NK35 (No.2x7x75): 1 pc. Connection Cord 2 m (DLW9078): 1 pc. Suspension Bail: 1pc.			

Controller	Model	DCC0241X-AZ
	Power Source	100 - 240 V AC, 50/60 Hz
	Out Voltage	40 V DC
	Input Signal Method	Photocoupler input (24 V DC drive (5 mA/1 input), NPN/PNP switchable)
	Output Signal Method	Photocoupler output (30 V DC or less, 80 mA/1 output or less,NPN/PNP switchable)
	Service Power Source	24 V DC (Maximum capacity 200 mA)
	Serial Signal Method	RS-232C
	ESD (Electrostatic Discharge) Protection	Adopted (IEC61340-5-1 compliant)
	Mass (g [lbf])	1800 [3.97]
	Power Cord 2 m (Optional)*	DLW9220 / DLW9240 / DLW9250

Caution
*Speed and torque differs depending on the temperature.
(Use within the range of +10 to +40°C)
*Do not retighten screws that are already tightened.
The torque will become larger than the set torque.

About optional accessories
*The power cord for the controller (DCC0241X-AZ) is sold separately.
Ask us for the required power cord when ordering.
*For torque measurements, please use Nitto Kohki's Torque Checker and Soft Joint / Hard Joint (sold separately).

delvo BRUSHLESS MOTOR - DC POWER SUPPLY

C Series (Current control type)

DLV04C / 10C CE

DCC0101X-AZ | DLV04C10L | DLV010C10L

- ควบคุมค่าแรงบิดด้วยระบบกระแสไฟ (Current Controlled Torque)
- มีฟังก์ชันการนับจำนวนสกรูที่ชุดควบคุมช่วยป้องกันความผิดพลาด
- ไขควงไฟฟ้า 1 ชุดตั้งค่าแรงบิดได้สูงสุด 4 ค่า
- ปรับความเร็วรอบได้ 3 ระดับ เพื่อป้องกันชิ้นงานเสียหาย
- ตั้งค่าแรงบิดได้ง่ายที่ชุดคอนโทรล
- สามารถใช้ได้ทั้งแบบมือจับ หรือติดตั้งเข้ากับเครื่องจักรอัตโนมัติ
- โครงสร้างเครื่องเป็นระบบป้องกันการเกิดไฟฟ้าสถิต เหมาะกับงานขันอิเลคทรอนิกส์

Low Voltage (DC) | Brush motor | Brushless motor

1.2 - 4.0 mm | Miniature screw | Precision screw | Machine screw

Specifications					
Electric Screwdriver	Model	Bit	DLV04C10L-AY	K	DLV10C10L-AY	K
	Starting Method		Lever start		
	Power Source		From dedicated controller		
	Torque Adjustment		Adjustment from 1 to 100% in 1% increments		
	Torque (Nm [lbf·in])	SOFT fastening setting (1000 min^{-1} setting)	0.05 - 0.4 [0.4 - 3.5]		0.2 - 1.0 [1.8 - 8.9]
		SOFT fastening setting (600 min^{-1} setting)	0.05 - 0.35 [0.4 - 3.1]		0.2 - 0.45 [1.8 - 4.0]
		HARD fastening setting	0.05 - 0.4 [0.4 - 3.5]		0.2 - 1.0 [1.8 - 8.9]
	Free Speed (min^{-1})	SOFT fastening setting	600 - 1000		
		HARD fastening setting	100 - 1000		
	Power Consumption	(w)	30		
	Screw Size (mm)	Machine screw	1.2 - 3.0		1.8 - 4.0
		Tapping screw	1.1 - 2.5		1.6 - 3.5
	Bit Type		NK35 (OD6.35 mm [1/4"] Hex.Shank)		
	Mass		370 g [0.82 lbs]		
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds		
	Bit Grounding		Equipped as standard		
	Standard Accessories		• Bit NK35 (No.0 x 4 x75): 1 pc. • Bit NK35 (No.1 x 4 x75): 1 pc. • Bit NK35 (No.2 x 4 x75): 1 pc. • Connection Cord 2 m (DLW9075): 1 pc. • Supension Bail: 1 pc.		• Bit NK35 (No.1 x 4 x75): 1 pc. • Bit NK35 (No.2 x 4 x75): 1 pc. • Connection Cord 2 m (DLW9075): 1 pc. • Supension Bail: 1 pc.

Please contact us for 4 mm bit type ("M" Bit).

Controller	Model	DCC0101X-AZ	P *1
	Power Source	100 - 240 V AC, 50/60 Hz	
	Operation Channel Function	Torque and speed setting in 4-channel memory Can switch to any operation channel	
	Count Function	Tracks screws fastened Workpiece detector can be incorporated	
	External Start up Control Function	Start up control can be enabled by external input signal	
	Output Voltage	24 V DC	
	Input Signal Method	Photocoupler input (24 V DC drive (5 mA/1 input), respond to PNP output)	
	Output Signal Method	Photocoupler output (30 V DC less, 30 mA/1 output or less, PNP output method)	
	Service Power Source	24 V DC (Maximum capacity 200 mA)	
	Power Consumption	When on standby: 20 W During electric screwdriver rotation (rated): 30 W	
	Mass	1100 g [2.4 lbs]	
	ESD (Electrostatic Discharge) Protection	Adopted (IEC61340-5-1 compliant)	
	Power cord 2 m (Optional)*2	DLW9220 / DLW9240 / DLW9250	

*1) DCC0101X-AZNwith NPN output also available
*2) Thepower cord is sold separately. Ask us for the required power cord when ordering.

delvo BRUSHLESS MOTOR - DC POWER SUPPLY

S Series (Variable speed type)

DLV30S / 45S / 70S CE

DLV30S06P

DLV30S20L

DLV30S12P

- ปรับความเร็วรอบได้ 3 ระดับ เพื่อป้องกันชิ้นงานเสียหาย
- มีฟังก์ชันการนับจำนวนสกรูที่ตัวไขควงช่วยป้องกันความผิดพลาด
- โครงสร้างเครื่องเป็นระบบป้องกันการเกิดไฟฟ้าสถิต เหมาะกับงานขันอิเลคทรอนิกส์
- มีพอร์ตเชื่อมต่อสัญญาณ I/O

Low Voltage (DC) | **Brush motor** | **Brushless motor**

2.6 - 8.0 mm | **Miniature screw** | **Precision screw** | **Machine screw**

Lever Start | Push to Start | Low Voltage | Brushless Motor | Grounded Bit | ESD Protection | Soft Stop | Variable Speed | Soft Start | Clutch Type

DEA0151N-AZ / DEA0241N-AZ

Torque range **0.4 - 7.0 Nm** [3.5 - 62.0 lbf·in]

Built-in Automatic Speed Control Function

Low speed starting reduces the problems at start. <Step 1>

High speed feeding at middle improves efficiency and quality of screw fastening work. <Step 2>

Low speed fastening at finish reduces the problems at finish. <Step 3>

Built-in the Functions of Screw Fastening Counter

- screw count setting
- fastening time setting, and fastening time measurement

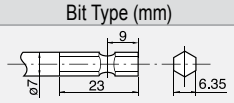
Main LED mounted on the screwdriver

LEDs and Setting Buttons on the Screwdriver

Specifications			Low Speed	Standard	High Speed	Low Speed	Standard	High Speed
Electric Screwdriver	Model Bit	Lever Start	DLV30S06L-AY K	DLV30S12L-AY K	DLV30S20L-AY K	DLV45S06L-AY K	DLV45S12L-AY K	DLV70S06L-AY K
		Push to Start	DLV30S06P-AY K	DLV30S12P-AY K	DLV30S20P-AY K	DLV45S06P-AY K	DLV45S12P-AY K	DLV70S06P-AY K
	Power Source		DEA0151N-AZ or DEA0241N-AZ		DEA0241N-AZ	DEA0151N-AZ or DEA0241N-AZ	DEA0241N-AZ	
	Torque Adjustment		Stepless					
	Torque (Nm [lbf × in])	Low Torque Spring*1	0.4 -1.6 [3.5 - 14.2]			2.0 - 4.5 [17.7 - 39.8]		3.8 - 7.0 [33.6 - 62.0]
		High Torque Spring*2	1.2 -3.0 [10.6 - 26.6]					
	Free Speed (min-1)		For the details, see separate setting range of speed and toque.					
	Speed Level		Lv1(Min. Speed) to Lv9 (Max. Speed)					
	Power Consumption (W)		44					
	Screw Size (mm)	Machine Screw	2.6 - 5.0			4.5 - 6.0		5.0 - 8.0
		Tapping Screw	2.5 - 4.0			4.0 - 5.0		4.5 - 6.0
	Mass (g [lbs])		710 [1.57]			860 [1.90] (with pistol grip)		
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds					
	Bit Grounding		Equipped as standard					
	Standard Accessories*3		• Bit NK35 (No.2 x 7 x 75): 1 pc. • Low Torque Spring: 1 pc. • Suspension Bail: 1 pc. • Connection Cord 1.5 m (DLW9073): 1 pc. • Torque Adjustment Ring Cover (DLW5203)			• Bit NK35 (No.2 x 7 x 75): 1 pc. • Connection Cord 1.5 m(DLW9073): 1 pc. • Suspension Bail: 1 pc. • Pistol Grip (DLW2300ESD):1 pc. • Torque Adjustment Ring Cover (DLW5202)		
	Input/Output Signal Type		PNP					

Power Supply	Model	DEA0151N-AZ	DEA0241N-AZ
	Power Source	100 - 240 V AC, 50/60 Hz, 60 W	
	Output Voltage	40 V DC	
	Maximum Rated Power (W)	150	240
	Mass (g)	0.56	0.9
	Power Cord 2m (Optional)*3	DLW9220 / DLW9240 / DLW9250	

Bit Type (mm)



Please contact us for 5 mm bit type

*1: Standard Accessory
*2: Installed
*3: The power cord is sold separately. Ask us for the required power cord when ordering.

delvo BRUSHLESS MOTOR - FOR AUTOMATION

A Series (For Automation)

DLV30A / 45A / 70A

DLV45A06A-F

The Vacuum Pickup is optional.

DLV45A12A-N

- สามารถใช้ร่วมกับเครื่องจักรอัตโนมัติ (Automation) และเชื่อมต่อกับหุ่นยนต์แกน XY
- เลือกรูปแบบการติดตั้งได้ 3 แบบ คือข้อต่อยึดรุ่นมาตรฐาน ข้อต่อยึดหน้าแปลน และข้อต่อยึดเกลียวซ้าย
- สามารถเชื่อมต่อระบบเพื่อควบคุมการเรียงลำดับขั้นตอน การเริ่มต้นใช้งาน การขันเดินหน้า และการขันถอยหลังอัตโนมัติ
- มีระบบส่งสัญญาณเมื่อได้ค่าแรงบิด (Torque-up Signal)
- มีระบบป้องกันสัญญาณไฟฟ้ารบกวน เพื่อป้องกันการทำงานผิดพลาด
- สัญญาณ input/output ถูกหุ้มด้วยฉนวนจากวงจรภายใน ของไขควงด้วย photocoupler

Transformerless (AC)

2.6-8.0 mm

Brush motor | **Brushless motor**

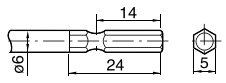
Miniature screw | Precision screw | **Machine screw**

Transformerless | Brushless Motor | Grounded Bit | Clutch Type

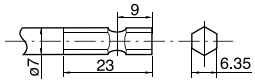
Electric Screwdriver																		
Specifications				Low Speed		Standard		High Speed		Low Speed		Standard		High Speed	
Model	Bit	Standard coupling		DLV30A06A-N(AA)	J	DLV30A12A-N(AA)	J	DLV30A20A-N(AA)	J	DLV45A06A-N(AA)	K	DLV45A12A-N(AA)	K	DLV70A06A-N(AA)	K
		Coupling with flange		DLV30A06A-F(AA)	J	DLV30A12A-F(AA)	J	DLV30A20A-F(AA)	J	DLV45A06A-F(AA)	K	DLV45A12A-F(AA)	K	DLV70A06A-F(AA)	K
		Coupling with M41 screw		DLV30A06A-M(AA)	J	DLV30A12A-M(AA)	J	DLV30A20A-M(AA)	J	DLV45A06A-M(AA)	K	DLV45A12A-M(AA)	K	DLV70A06A-M(AA)	K
Power Source				100 V AC, 50/60 Hz											
Torque Adjustment				Stepless											
Torque (Nm [lbf ×in])		Low Torque Spring*1		0.4 -1.6 [3.5 - 14.2]						2.0 - 4.5 [17.7 - 39.8]				3.8 - 7.0 [33.6 - 62.0]	
		High Torque Spring*2		1.2 -3.0 [10.6 - 26.6]											
Free Speed			(min⁻¹)	650		1200		2000		650		1200		650	
Screw Size (mm)		Machine Screw		2.6 - 5.0						4.5 - 6.0				5.0 - 8.0	
		Tapping Screw		2.5 - 4.0						4.0 - 5.0				4.5 - 6.0	
Mass (g [lbs])		Standard coupling		700 [1.54]						780 [1.72]					
		Coupling with flange		760 [1.68]						840 [1.85]					
		Coupling with M41 screw		740 [1.63]						820 [1.81]					
Power Consumption			(W)	45											
Starting Method				External input signal											
Input Signal (NPN)				Start signal / Forward signal / Reverse signal (5 - 24 V DC)											
Output Signal (NPN)				Torque-up signal (Voltage under 30 V DC and current 20 mA)											
Rated Operation				ON: 0.5 seconds / OFF: 3.5 seconds											
Bit Grounding				Equipped as standard											
Standard Accessories				· Bit NK31 (No. 2 x 6 x 70): 1 pc.		· Low torque spring: 1 pc.				· Bit NK35 (No.2 x 7 x 75): 1 pc.					

Bit Type (mm)

J



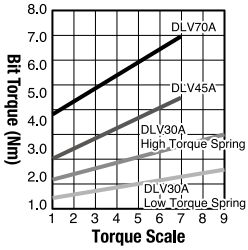
*3 K



*1: Standard Accessory
*2: Installed
*3: DLV30A is available upon request for use with 6.35 mm hex. shank bits.

Optional Accessories			
Sleeve for Vacuum Pickup DLS4000 Series	Vacuum Pickup DLP7401-J	Vacuum Pickup DLP7401-K	Screw Vacuum Pump DLP2530 (100 V AC) DLP2570 (230 V AC)
Select according to the screw shape	For Hex. 5 mm (DLV30A) *DLS3223/DLS3225 included	For Hex. 6.35 mm (DLV45A/DLV70A) *DLS4220/DLS4221 included	Connect the tube to the vacuum pickup port. The vacuum will pick up the screw.

Torque Diagrams (for reference)



delvo BRUSH MOTOR - FOR AUTOMATION

DLV3100/3300 Series (For Automation)

DLV3100 series

DLV3300 series

DLC3310

- สามารถใช้ร่วมกับเครื่องจักรอัตโนมัติ (Automation)
- มีระบบป้องกันการสั่นสะเทือน และกระชาก ช่วยให้ขันสกรูได้อย่างต่อเนื่อง
- มีระบบส่งสัญญาณค่าแรงบิด (Torque-up Signal)
- ค่าความแม่นยำของแรงบิดสูง

NITTO KOHKI Made in Japan

According to Model

1.0 - 6.0 mm

Brush motor | Brushless motor

Miniature screw | Precision screw | Machine screw

Clutch Type | Transformerless DLV3100 Series | Low Voltage DLV3300 Series

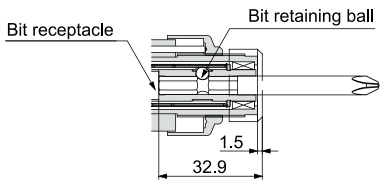
	Specifications		For Precision Screws		For Machine Screws			
Electric Screwdriver	Model		DLV3321-CMN	DLV3331-CMN	DLV3121-EJN*1	DLV3131-EJN*1	DLV3141-EJN*1	DLV3151-EJN*1
	Power Source		DLC3310		-			
	Power Source		36 V DC (supplied from controller)		100 V AC, 50/60 Hz			
	Torque Adjustment		Stepless					
	Torque	(Nm [lbf ×in])	0.05 - 0.5 [0.4 - 4.4]	0.3 - 1.2 [2.7 - 10.6]	0.25 - 0.7 [2.2 - 6.2]	0.5 - 1.5 [4.4 - 13.3]	1.2 - 3.0 [10.6 - 26.6]	2.0 - 4.5 [17.7 - 39.8]
	Free Speed	(min^{-1})	900	600	900		600	450
	Power Consumption	(W)	Approx. 35					Approx. 45
	Screw Size (mm)	Machine Screw	1.0 - 3.0	2.0 - 3.5	2.3 - 2.6	2.6 - 3.5	3.5 - 5.0	4.5 - 6.0
		Tapping Screw	1.2 - 2.6	2.0 - 3.0	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	4.0 - 5.0
	Starting Method		Voltage input					
	Mass	(g [lbs])	400 [0.88]		900 [1.98]			
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds					
	Standard Accessories				· Connection Cord (2 m): 1 pc.		· Spare Carbon Brush: 2 pc.	

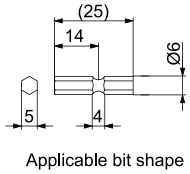
Controller	Model	DLC3310
	Power Source	24 V AC, 50/60 Hz
	Output Voltage	36 V DC
	Mass (g [lbs])	360 [0.79]
	Standard Accessories	Connection Cord (2 m) for DLV3321/DLV3331: 1pc.

*These models have no bit holding function.
If required, please order the models as below. (Made-to-order)
- DLV3121 → DLV3128-EJN
- DLV3131 → DLV3138-EJN
- DLV3141 → DLV3148-EJN
- DLV3151 → DLV3158-EJN

(The bit holding method of the above models is different from the other screwdrivers.)

Bit holding method (For DLV3128/DLV3138/DLV3148/DLV3158)





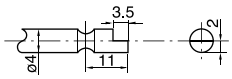
Applicable bit shape

A steel ball to retain the bit is in the bit holder.
The bit is attached just by pushing it in.
Pull the bit with pliers, etc., to remove it.

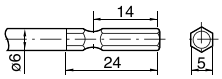
(Unit: mm)

Bit Type (mm)

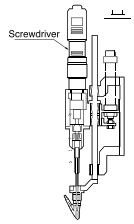
For CMN



For EJN



Installation Example



Optional Accessories

For Vacuum Pickup
Select according to the screw shape

Vacuum Pickup
DLP6500
For screw vacuum pickup
*DLS2124/DLS2127/DLS2130 included

delvo BRUSHLESS MOTOR - AC POWER SUPPLY

A Series (Transformerless Type)

DLV30A-AB / 45A-AB /70A-AB

- ค่าแรงบิดที่ 0.4-7.0 Nm
- ความเร็วรอบ 3 ระดับที่ 650 / 1200 / 2000 รอบ/นาที
- มีให้เลือกใช้งาน 2 ระบบคือ Push to Start หรือ Lever Start
- มาพร้อมฝาครอบพลาสติกป้องกันการปรับค่าแรงบิดโดยไม่ตั้งใจ
- การออกแบบและผลิตเป็นไปตามมาตราฐาน เพื่อสิ่งแวดล้อมของสหภาพยุโรป (RoHS)
- อุปกรณ์เสริม : ด้ามปืนรุ่น DLW2300 สำหรับไขควงไฟฟ้ารุ่น DLV45A และ DLV70A

Transformerless (AC)

2.6 - 8.0 mm

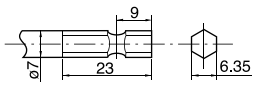
Brush motor | Brushless motor

Miniature screw | Precision screw | Machine screw

Lever Start | Push to Start | Transformerless | Brushless Motor | Grounded Bit | Clutch Type

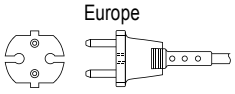
	Specifications			Low Speed		Standard		High Speed		Low Speed		Standard		Low Speed	
Electric Screwdriver	Model (Standard)	Bit	Lever Start	DLV30A06L-AB	K	DLV30A12L-AB	K	DLV30A20L-AB	K	DLV45A06L-AB	K	DLV45A12L-AB	K	DLV70A06L-AB	K
			Push to Start	DLV30A06P-AB	K	DLV30A12P-AB	K	DLV30A20P-AB	K	DLV45A06P-AB	K	DLV45A12P-AB	K	DLV70A06P-AB	K
	Model (Made- to-order)*1	Bit	Lever Start	DLV30A06L-SP(AB)	K	DLV30A12L-SP(AB)	K	DLV30A20L-SP(AB)	K	DLV45A06L-SP(AB)	K	DLV45A12L-SP(AB)	K	DLV70A06L-SP(AB)	K
			Push to Start	DLV30A06P-SP(AB)	K	DLV30A12P-SP(AB)	K	DLV30A20P-SP(AB)	K	DLV45A06P-SP(AB)	K	DLV45A12P-SP(AB)	K	DLV70A06P-SP(AB)	K
	Power Source			230 V AC, 50/60 Hz											
	Torque Adjustment			Stepless											
	Torque (Nm [lbf ×in])	Low Torque Spring*1		0.4 -1.6 [3.5 - 14.2]						2.0 - 4.5 [17.7 - 39.8]				3.8 - 7.0 [33.6 - 62.0]	
		High Torque Spring*2		1.2 -3.0 [10.6 - 26.6]											
	Free Speed		(min-1)	650		1200		2000		650		1200		650	
	Power Consumption		(W)	Approx.45											
	Screw Size (mm)	Machine Screw		2.6 - 5.0						4.5 - 6.0				5.0 - 8.0	
		Tapping Screw		2.5 - 4.0						4.0 - 5.0				4.5 - 6.0	
	Mass		(g [lbs])	700 [1.54]						870 [1.92] (with Pistol Grip)					
	Cord length		(m)	3											
	Rated Operation			ON: 0.5 seconds / OFF: 3.5 seconds											
	Bit Grounding			Equipped as standard											
	Standard Accessories			• Bit NK35 (No. 2 x 7 x 75): 1 pc. • Suspension Bail: 1 pc. • Low Torque Spring: 1 pc. • Torque Adjustment Ring Cover DLW5201						• Bit NK35 (No.2 x 7 x 75): 1 pc. • Suspension Bail: 1 pc. • Pistol Grip (DLW2300) • Torque Adjustment Ring Cover DLW5202					

Bit Type



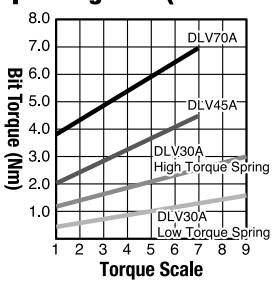
Please contact us for 5 mm bit type.

plug Shape



*1: SP Type (made-to-order) can output torque-up signal
*2: Standard Accessory
*3: Installed

Torque Diagrams (for reference)



delvo BRUSHLESS MOTOR - DC POWER SUPPLY

DLV02 / 12 / 16 Series CE

DLV02/12/16SL -CKE | DLV02/12/16SL -BKE | DLC16S

- ด้ามจับออกแบบตามหลักสรีรศาสตร์ (Ergonomic Grip) จับถนัด และช่วยเพิ่มความคล่องตัวในการทำงาน
- ชุดควบคุมมีฟังก์ชันตรวจจับการทำงาน overload โดยเครื่องจะหยุดทำงานเมื่อใช้งานเกินกำลัง หรือนานเกินไป
- กล่องควบคุมใช้แรงดันไฟฟ้าได้ตั้งแต่ 100 -240 V AC
- เลือกปรับระดับความเร็วได้
- รุ่น DLV02/12/16SL-CKE มาพร้อมฝาครอบพลาสติก ป้องกันการปรับค่าแรงบิดโดยไม่ตั้งใจ
- รุ่น DLV02/12/16SL-BKE มาพร้อมระบบป้องกันไฟฟ้าสถิต

NITTO KOHKI Made in Japan

Low Voltage (DC) | 1.0 - 4.0 mm | Brush motor | **Brushless motor** | Miniature screw | Precision screw | Machine screw

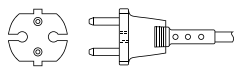
Lever Start | Low Voltage | Brushless Motor | Grounded Bit | Variable Speed | Clutch Type | ESD Protection | BKE Models

	Specifications				
Electric Screwdriver	Model	Standard Type	DLV02SL-CKE	DLV12SL-CKE	DLV16SL-CKE
		ESD Protection Type	DLV02SL-BKE	DLV12SL-BKE	DLV16SL-BKE
	Starting Method		Lever Start		
	Power Source		From dedicated controller DLC16S-WGB		
	Torque Adjustment		Stepless		
	Torque (Nm [lbf·in])		0.03 - 0.2 [0.3 - 1.8]	0.15 - 1.2 [1.3 - 10.6]	0.2 - 1.6 [1.8 - 14.2]
	Free Speed (min^{-1})		700 - 1000		
	Power Consumption (W)		48		
	Screw Size (mm)	Machine Screw	1.0 - 2.2	1.4 - 3.0	2.2 - 4.0
		Tapping Screw	1.0 - 2.0	1.4 - 2.6	2.0 - 3.0
	Mass (g [lbs])		470 [1.04]		
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds		
	Bit Grounding		Equipped as standard		

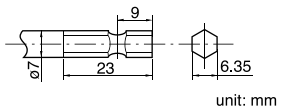
Controller	Model	DLC16S-WGB
	Input Voltage	100 240 V AC, 50/60 Hz
	Power Source	20 - 30 V DC
	Function	Speed Control
	Mass (g[lbs])	380 [0.84]
	Power Cord Length (m)	1.6

Plug Shape

Europe

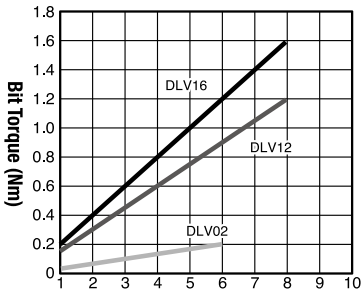


Bit Type



Standard Accessories				
Model		DLV02	DLV12	DLV16
Bit NK36	No. 0 x 3.8 x 50	1	-	-
	No. 1 x 3.8 x 50	1		
	No. 2 x 4.5 x 50	-	1	1
Connection Cord 2.4 m		1		
Suspension Bail		1		

Torque Diagrams (for reference)



delvo BRUSH MOTOR - DC POWER SUPPLY

DLV7400A Series CE

- ขนาดกะทัดรัด น้ำหนักเบาช่วยลดความเมื่อยล้าของผู้ใช้งาน
- รุ่น Clean Room ได้รับการรับรองมาตรฐาน
- โครงสร้างเครื่องเป็นระบบป้องกันการเกิดไฟฟ้าสถิต
- สามารถปรับระดับความเร็วในการขันสกรูที่ชุดควบคุม และสามารถกำหนดความเร็วให้เหมาะกับชิ้นงาน
- ชุดควบคุมมีระบบ Soft Start ช่วยป้องกันความเสียหายของหัวสกรู
- มอเตอร์แบบ Coreless ช่วยลดแรงเฉื่อย
- สามารถใช้งานร่วมกับเครื่องนับการขันสกรู รุ่น DLR5640-WN

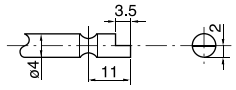
Low Voltage (DC) | **Brush motor** | **Brushless motor**

1.0 - 2.6 mm | **Miniature screw** | **Precision screw** | **Machine screw**

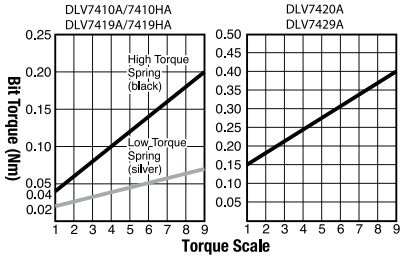
Lever Start | Low Voltage | Grounded Bit | ESD Protection | Low Shock | Variable Speed | Soft Start | Clutch Type | Clean room adaption: DLV7419A, DLV7419HA, DLV7429A

		Specifications		
Electric Screwdriver	Model: Standard Type	DLV7410A-BME	DLV7410HA-BME	DLV7420A-BME
	Model: For Clean Room Use (with built-in vacuum pickup)	DLV7419A-BME	DLV7419HA-BME	DLV7429A-BME
	Starting Method	Lever Start		
	Power Source	From dedicated controller		
	Torque Adjustment	Stepless		
	Torque (Nm [lbf·in])	0.02 - 0.2 [0.2 - 1.8]		0.15 - 0.4 [1.3 - 3.5]
	Free Speed (min^{-1})	500 - 750	700 - 1000	450 - 600
	Power Consumption (W)	Approx.10		
	Screw Size (mm): Machine Screw	1.0 - 2.3		1.6 - 2.6
	Screw Size (mm): Tapping Screw	1.0 - 2.0		1.4 - 2.3
	Mass (g [lbs])	Standard Type 230 [0.51] / Clean Room Type 275 [0.61]		
	Rated Operation	ON: 0.5 seconds / OFF: 3.5 seconds		
	Bit Grounding	Equipped as standard		

Bit Type

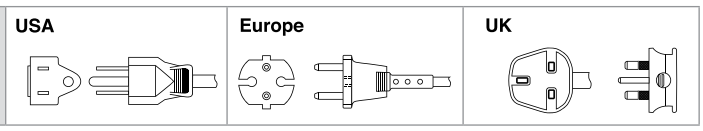


Torque Diagrams (for reference)



Controller	Model	DLC1110-EN	DLC1110-FE	DLC1110-GE	DLC1110-GG	DLC1110-HE	DLC1213A-GGB*1	DLC1213A-HEB*1
	Features	Non-CE			CE			Non-CE
	Power Source	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	220 V AC, 50/60 Hz	230 V AC, 50/60 Hz	240 V AC, 50/60 Hz	230 V AC, 50/60 Hz	240 V AC, 50/60 Hz
	Control Function	Soft Start,Speed Control, ESD Protected						
	Output Voltage	40 V DC						
	Mass (g[lbs])	900 [1.98]					2300 [5.07]	
	Plug Shape	USA	USA	UK	Europe	UK	Europe	UK
	Power Cord Length (m)	2						

Plug Shape



*1: An optional cord DLW9072 is required to connect with this model.
Neither DLC1213A-GG nor DLC1213A-HE can be used with the DLV7400A series.

Model DLC1213A-GGB or DLC1213A-HEB + Cord DLW9072

Optional Accessories

Sleeve for Vacuum Pickup DLS2000 Series	Vacuum Pickup DLP5300	Torque Adjustment Ring Cover DLW5700

Standard Accessories

Model		DLV7410A / DLV7410HA	DLV7420A	DLV7419A / DLV7419HA	DLV7429A
Bit NK4D	No. 0 x 1.8 x 44	1	-	1	-
	No. 1 x 2.5 x 44	1	1	1	1
	No. 1 x 4 x 44	-	1	-	1
Connection Cord DLW9070 (1.5m)		1	1	1	1
Low Torque Spring		1	-	1	-
Suspension Bail		1	1	1	1
Vacuum Sleeve	DLS2120	-	-	1	1
	DLS2124	-	-	1	1

delvo BRUSH MOTOR - DC POWER SUPPLY

DLV5700 Series

DLV5720 / DLV5720H / DLV5740

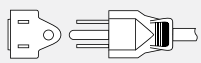
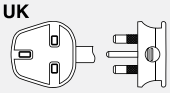
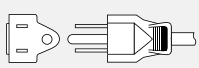
- ด้ามจับออกแบบตามหลักสรีรศาสตร์ (Ergonomic Grip) จับถนัด และช่วยเพิ่มความคล่องตัวในการทำงาน
- เครื่องมาพร้อมระบบต่อสายดิน
- แรงสั่นสะเทือนขณะขันสกูรต่ำกว่ารุ่นทั่วไป 30%
- มีกลไกควบคุมค่าแรงบิด
- โครงสร้างเครื่องเป็นระบบป้องกันการเกิดไฟฟ้าสถิต

DLV5740H / DLV5750

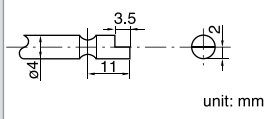
Low Voltage (DC) | Brush motor | Brushless motor

1.0-3.0 mm | Miniature screw | Precision screw | Machine screw

	Specifications					
Electric Screwdriver	Model		DLV5720	DLV5720H	DLV5740	DLV5740H	DLV5750
	Starting Method		Lever Start				
	Power Source		DLC0350			DLC0950	
	Torque Adjustment		Stepless				
	Torque	(Nm [lbf·in])	0.02 - 0.2 [0.2 - 1.8]		0.15 - 0.4 [1.3 - 3.5]		0.1 - 0.55 [0.9 - 4.9]
	Free Speed	(min^{-1})	500 - 750	700 - 1000	450 - 600	1200 - 1800	670 - 1000
	Power Consumption	(W)	Approx.10			Approx.35	
	Screw Size (mm)	Machine Screw	1.0 - 2.3		1.6 - 2.6		1.0 - 3.0
		Tapping Screw	1.0 - 2.0		1.4 - 2.3		1.0 - 2.6
	Mass	(g [lbs])	230 [0.51]			300 [0.66]	
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds				
	Bit Grounding		Equipped as standard				
	Standard Accessories		• Bit NK4D(No.0 x 1.8 x 44): 1 pc. • Bit NK4D(No.0 x 2.5 x 44): 1 pc. • Connection Cord (1.5 m) DLW9081: 1 pc. • Suspension Bail: 1 pc. • Low Torque Spring: 1 pc.		• Bit NK4D(No.0 x 2.5 x 44): 1 pc. • Bit NK4D(No.1 x 4 x 44): 1 pc. • Connection Cord (1.5 m) DLW9081: 1 pc. • Suspension Bail: 1 pc.		

Controller	Model	DLC0350E	DLC0350F	DLC0350G	DLC0950E	DLC0950G
	Power Source	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	230 V AC, 50/60 Hz	100 V AC, 50/60 Hz	230 V AC, 50/60 Hz
	Plug Shape	USA 		UK 	USA 	
	Mass (g[lbs])	900 [1.98]			1800 [3.97]	
	Power Cord Length (m)	2				

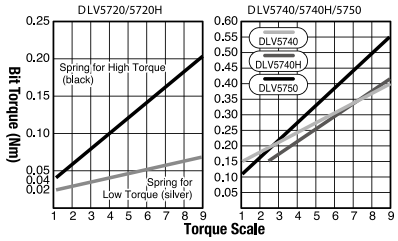
Bit Type



Optional Accessories

			This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set.
Sleeve for Vacuum Pickup DLS2000 Series	Vacuum Pickup DLP5300	Torque Adjustment Ring Cover DLW5700	

Torque Diagrams (for reference)



delvo BRUSH MOTOR - DC POWER SUPPLY

DLV7300 Series CE

DLV7313/7323/7333

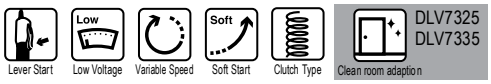
DLV7325/7335

DLC1213A

- ตัวไขควงไฟฟ้าแม่นยำเรื่องของแรงบิด
- สามารถกำหนดความเร็วให้เหมาะกับชิ้นงาน
- ชุดควบคุมให้ความแม่นยำในการขันประกอบสูง
- ชุดควบคุมมีระบบ Soft Start ช่วยป้องกันความเสียหายของหัวสกรู
- รุ่น DLV7325 และ DLV7335 ได้รับการรับรองมาตรฐาน Clean Room

Low Voltage (DC) | Brush motor | Brushless motor

1.0-3.5 mm | Miniature screw | Precision screw | Machine screw



	Specifications		Standard			For Clean Room Use (with built-in vacuum pickup)	
Electric Screwdriver	Model	Bit Shank:Ø4 mm	DLV7313-CME	DLV7323-CME	DLV7333-CME	DLV7325-CME*	DLV7335-CME*
		Bit Shank:Hex.6.35 mm		DLV7323-CKE	DLV7333-CKE	DLV7325-CKE	DLV7335-CKE
	Starting Method		Lever Start				
	Power Source		From dedicated controller				
	Torque Adjustment		Stepless				
	Torque (Nm [lbf·in])		0.03 - 0.15 [0.3 - 1.3]	0.05 - 0.5 [0.4 - 4.4]	0.3 - 1.2 [2.7 - 10.6]	0.05 - 0.5 [0.4 - 4.4]	0.3 - 1.2 [2.7 - 10.6]
	Free Speed (min⁻¹)		700 - 1000		500 - 700	700 - 1000	500 - 700
	Power Consumption (W)		Approx.35				
	Screw Size (mm)	Machine Screw	Up to 2.0	1.0 - 3.0	2.0 - 3.5	1.0 - 3.0	2.0 - 3.5
		Tapping Screw	Up to 1.7	1.2 - 2.6	2.0 - 3.0	1.2 - 2.6	2.0 - 3.0
	Mass (g [lbs])		350 [0.77]			400 [0.88]	
	Cord Length (m)		1.5 (with connector)				
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds				

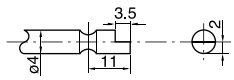
* Vacuum pump for suction of screw is available as option. See page 51 for details of the vacuum pump.

	Model	DLC1213A-EN	DLC1213A-FE*3	DLC1213A-GE	DLC1213A-GG	DLC1213A-GGU	DLC1213A-HE
Controller	Features	Non-CE	Non-CE	Non-CE	CE	CE	Non-CE
	Power Source	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	220 V AC, 50/60 Hz	230 V AC, 50/60 Hz	230 V AC, 50/60 Hz	240 V AC, 50/60 Hz
	Control Function	Soft start, Speed control					
	Plug Shape	Asia	Asia	UK	Europe	UK	Without Plug
	Mass (g [lbs])	2300 [5.07]					
	Power Cord Length (m)	2					

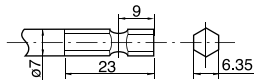
* This model is made-to-order.

Bit Type (mm)

For CME

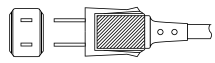


For CKE

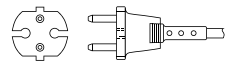


Plug Shape

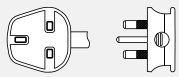
Asia



Europe



UK



Optional Accessories

Torque Adjustment Ring Cover DLW5500

This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set.

Extension Cord 3m Dlw9320

Extends cord length between controller and screwdriver

Vacuum Pickup DLP7100

For DLV7313DLS2122/DLS2124/DLS2127 included

Vacuum Pickup DLP7200

For DLV7323-CME/DLV7333-CME

* DLS2122/DLS2124/DLS2127 included

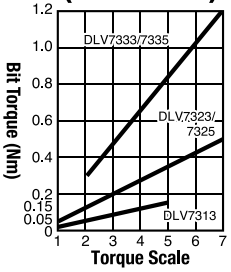
Vacuum Pickup DLP7300

For DLV7323-CKE/DLV7333-CKE

*DLS2135 included

	Standard Accessories							
	Model	DLV7313 -CME	DLV7323 -CME	DLV7333-CME	DLV7323/ DLV7331/ DLV7333-CKE	DLV7325-CME	DLV7335 -CME	DLV7325/35-CKE
Bit	NK4D No.0 x 1.8 x 44	1	-	-	-	-	-	-
	NK4D No.0 x 2.5 x 44	1	1	-	-	1	-	-
	NK4D No.1 x 3 x 44	-	-	1	-	-	1	-
	NK4D No.1 x 4 x 44	-	1	-	-	1	-	-
	NK4D No.1 x 7 x 50	-	-	-	1	-	-	-
	NK4D No.2 x 4 x 44	-	-	1	-	-	1	-
	NK4D No.2 x 4.5 x 50	-	-	-	-	-	-	1
	NK4D No.2 x 7 x 50	-	-	-	1	-	-	-
Vacuum Sleeve	DLS2124	-	-	-	-	1	-	-
	DLS2127	-	-	-	-	1	1	-
	DLS2130	-	-	-	-	1	1	-
	DLS2134	-	-	-	-	-	1	-
	DLS2135	-	-	-	-	-	-	1
Suspension Bail		1						

Torque Diagrams (for reference)



delvo BRUSH MOTOR - DC POWER SUPPLY

DLV7300 - BME / BKE Series CE

DLV7309

DLC1213A

- ไขควงไฟฟ้าที่ช่วยถนอมชิ้นงาน
- มีระบบป้องกันการเกิดไฟฟ้าสถิตเพื่อป้องกันความเสียหายที่อาจเกิดกับชิ้นงาน
- ให้การขันที่นุ่มนวล ช่วยปกป้องชิ้นงานไม่ให้เสียหายและยังคงค่ามาตรฐาน
- โครงสร้างของตัวเครื่องมีระบบป้องกันการเกิดไฟฟ้าสถิต
- ได้รับการรับรองมาตรฐาน Clean Room Class 5

Low Voltage (DC) | Brush motor | Brushless motor

1.0 - 3.5 mm | Miniature screw | Precision screw | Machine screw

Lever Start | Low Voltage | Grounded Bit | ESD Protection | Variable Speed | Soft Start | Clutch Type | Low Shock | Clean room adaption

DLV7319-BME
DLV7329-BME
DLV7339-BME
DLV7349-BME

	Specifications		ESD		ESD / Low Shock / For Clean Room Use (with built-in vacuum pickup)			
Electric Screwdriver	Model	Bit Shank:Ø4 mm	DLV7321-BME*1	DLV7331-BME*1	DLV7319-BME*1	DLV7329-BME*1	DLV7339-BME	DLV7349-BME*1
		Bit Shank:Hex.6.35 mm	DLV7321-BKE	DLV7331-BKE				
	Starting Method		Lever Start					
	Power Source		From dedicated controller					
	Torque Adjustment		Stepless					
	Torque (Nm [lbf·in])		0.05 - 0.05 [0.4 - 4.4]	0.30 - 1.20 [2.7 - 10.6]	0.20 - 0.40 [1.8 - 3.5]	0.25 - 0.55 [2.2 - 4.9]	0.45 - 0.95 [4.0 - 8.4]	0.55 - 1.20 [4.9 - 10.6]
	Free Speed (min^{-1})		700 - 1000	500 - 700	700 - 1000		500 - 700	
	Power Consumption (W)		Approx.35					
	Screw Size (mm)	Machine Screw	1.0 - 3.0	2.0 - 3.5	2.0 - 3.0		3.0 - 3.5	
		Tapping Screw	1.2 to 2.6	2.0 to 3.0	2.0 - 2.6		2.6 - 3.0	
	Mass (g [lbs])		350 [0.77]		400 [0.88]			
	Cord Length (m)		2 (with connector)					
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds					
	Bit Grounding		Equipped as standard					

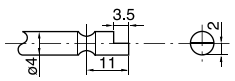
*1: These models are made-to-order.

	Model	DLC1213A-ENB	DLC1213A-FEB*2	DLC1213A-GGB	DLC1213A-HEB
Controller	Features	Non-CE	Non-CE	CE	Non-CE
	Power Source	100 V AC, 50/60 Hz	115 V AC, 50/60 Hz	230 V AC, 50/60 Hz	240 V AC, 50/60 HZ
	Control Function	Grounding, Soft Start, Speed Control			
	Plug Shape	USA	USA	Europe	UK
	Mass (g[lbs])	2300 [5.07]			
	Power Cord Length (m)	2			

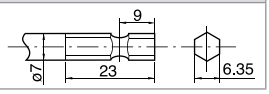
*2. These models are made-to-order

Bit Type (mm)

For BME

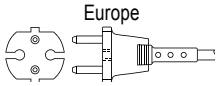


For BKE

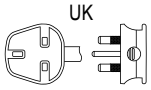


Plug Shape

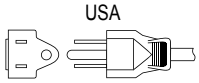
Europe



UK



USA



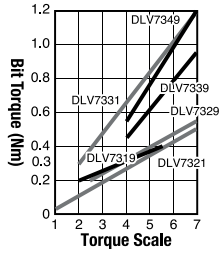
ESD protection measure			
Measurement Point		Conventional Product	DLV7300-B □ E
Handle	Static Electricity (V)	350	5
	Surface Resistance (Ω)	more than 10^{13}	10^{4}
Lever Switch	Static Electricity (V)	350	2
	Surface Resistance (Ω)	more than 10^{13}	10^{4}
Forward / Reverse Switch	Static Electricity (V)	25	2
Power Cable	Static Electricity (V)	110	5
	Surface Resistance (Ω)	more than 10^{13}	10^{10}

Part	Material
Handle Lever Switch	Synthetic resin with carbon fiber
Power Cable	Anti-static material

*Measurement conditions (Temperature: 22°C Humidity: 66%) (1)Static electricity
- Earth the measurement equipment and measuring person.
- Grip the screwdriver five times using Ansel Edmont electronic control glove.
- Turn on the switch of the screwdriver.
- Measure each part of the screwdriver using electronic measurement equipment manufactured by Shishido electrostatic Ltd. (2)Surface resistance
- Measure using Simco Japan surface resistivity measurement equipment.

Standard Accessories						
Model		DLV7319/29-BME	DLV7339/49-BME	DLV7321-BME	DLV7331-BME	DLV7321 / 31-BKE
Bit	NK4D No.0 x 2.5 x 44	1	-	1	-	-
	NK4D No.1 x 3 x 44	-	1	-	1	-
	NK4D No.1 x 4 x 44	1	-	1	-	-
	NK35 No.1 x 7 x 50	-	-	-	-	1
	NK4D No.2 x 4 x 44	-	1	-	1	-
	NK35 No.2 x 7 x 50	-	-	-	-	1
Vacuum Sleeve	DLS2124	1	-	-	-	-
	DLS2127	1	1	-	-	-
	DLS2130	1	1	-	-	-
	DLS2134	-	1	-	-	-
Suspension Bail		1				

Torque Diagrams (for reference)



Made in Japan

delvo BRUSH MOTOR - DC POWER SUPPLY

DLV7104/8104/8204 Series

DLV7104 | DLV8104/8204 | DLV8154

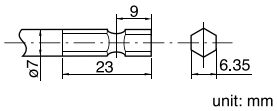
- ดีไซน์ใหม่ที่ได้รับความนิยมมากที่สุด
- ด้ามจับออกแบบตามหลักสรีรศาสตร์ (Ergonomic Grip) จับถนัด และช่วยเพิ่มความคล่องตัวในการทำงาน
- เครื่องมาพร้อมระบบต่อสายดิน
- สามารถปรับทิศทางการหมุนเข้า-ออกได้โดยใช้มือเดียว
- มาพร้อมฝาครอบพลาสติกป้องกันการปรับค่าแรงบิดโดยไม่ตั้งใจ

Tranformerless (AC) | **Brush motor** | Brushless motor

2.6-6.0 mm | Miniature screw | Precision screw | **Machine screw**

	Specifications		Standard						High Torque	High Speed		
Electric Screwdriver	Model	Plug Shape: USA	DLV7124-MKE	DLV7134-MKE	DLV7144-MKE	DLV8124-MKE	DLV8134-MKE	DLV8144-MKE	DLV8154-MKE	DLV8224-MKE	DLV8234-MKE	DLV8244-MKE
		Plug Shape:UK	DLV7124-MKH	DLV7134-MKH	DLV7144-MKH	DLV8124-MKH	DLV8134-MKH	DLV8144-MKH	DLV8154-MKH	DLV8224-MKH	DLV8234-MKH	DLV8244-MKH
	Starting Method		Lever Start			Push to Start						
	Power Source		230 V AC, 50/60 Hz									
	Torque Adjustment		Stepless									
	Torque (Nm [lbf·in])		0.25 - 0.75 [2.2 - 6.6]	0.5 - 1.7 [4.4 - 15.1]	1.2 - 3.0 [10.6 - 26.6]	0.25 - 0.75 [2.2 - 6.6]	0.5 - 1.7 [4.4 - 15.1]	1.2 - 3.0 [10.6 - 26.6]	2.0 - 4.5 [17.7 - 39.8]	0.35 - 0.7 [3.1 - 6.2]	0.5 - 1.7 [4.4 - 15.1]	1.2 - 3.0 [10.6 - 26.6]
	Free Speed (min^{-1})		900		600	900		600	400	2000	1800	1100
	Power Consumption (W)		35						45			
	Screw Size (mm)	Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	4.5 - 6.0	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0
		Tapping Screw	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0	4.5 - 5.0	2.3 - 3.0	2.3 - 3.5	3.0 - 4.0
	Mass (g [lbs])		720 [1.59]			710 [1.57]			910 [2.01]	710 [1.57]		
	Cord Length (m)		3									
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds									
	Bit Grounding		Equipped as standard									

Bit Type



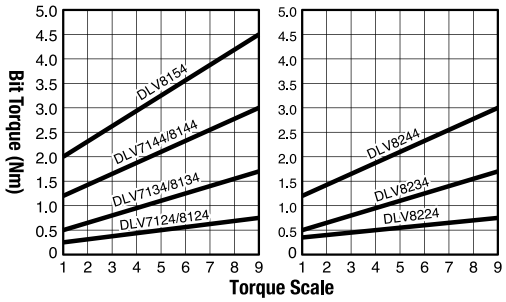
Plug Shape

For MKE	For MKH
USA	UK

Please contact us for 5 mm bit type.

Standard Accessories			
Model		MKE/MKH	8154-MKE/MKH
Bit NK35	No.1 x 7 x 75	1	-
	No.2 x 7 x 75	1	1
	No.3 x 7 x 50	-	1
Pistol Grip		-	1
Spare Carbon Brush		2	
Suspension Bail		1	
Torque Adjustment Ring Cover DLW5201		1	

Torque Diagrams (for reference)



delvo SCREWDRIVERS DESIGNED

For DLR5640-WN

DLV7410A-SPC

DLV7410HA-SPC

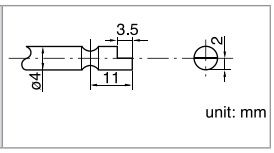
DLV7420A-SPC

DLV7321-SPC
DLV7331-SPC

DLR5640-WN

Specifications						
Electric Screwdriver	Model		DLV7410A-SPC	DLV7410HA-SPC	DLV7420A-SPC	DLV7321-SPC	DLV7331-SPC
	Starting Method		Lever Start				
	Torque Adjustment		Stepless				
	Torque	(Nm [lbf·in])	0.02 - 0.2 [0.2 - 1.8]		0.15 - 0.4 [1.3 - 3.5]	0.1 - 0.5 [1.9 - 4.4]	0.3 - 1.2 [2.7 - 10.6]
	Free Speed	(min^{-1})	500 - 750	700 - 1000	450 - 600	300 - 1000	200 - 700
	Power Consumption	(W)	Approx.10			Approx.35	
	Screw Size (mm)	Machine Screw	1.0 - 2.3		1.6 - 2.6	1.0 - 3.0	2.0 - 3.5
		Tapping Screw	1.0 - 2.0		1.4 - 2.3	1.2 - 2.6	2.0 - 3.0
	Electrostatic Countermeasure		Complied with EN 100015-1				
	Mass	(g [lbs])	230 [0.51]			350 [0.77]	
	Cord Length	(m)	1.5 (with connector)				
	Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds				
	Bit Grounding		Equipped as standard				

Bit Type



Combinations with Electric Screwdrivers		
Screwdriver Model	Connection	Remarks
DLV7410A / 7410HA / 7420A-SPC	The cord comes with screwdriver	Screwdriver for the screw fastening counter only
DLV7321 / 7331-SPC	Direct connection to power source	
DLV7410A / 7410HA / 7420A / 7419A / 7419 HA / 7429A-BMN	Optional conversion cord (TD02925 DLW9072)	General-purpose screwdriver*

*The Count Return Function is not available

Optional Accessories

Optional conversion cord 1.5 m DLW9072

Torque Adjustment Ring Cover DLW5300

For DLV7300-SPC

This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set.

Torque Adjustment Ring Cover DLW5700

For DLV7400-SPC

This minimizes tampering or accidental turning of the torque adjustment ring once the torque is set.

delvo SCREW FASTENING COUNTER

DLR5640-WN

DLR5640-WN

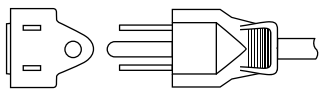
- เหมาะสำหรับงานประกอบยานยนต์ และอุปกรณ์อิเล็กทรอนิกส์ที่ต้องการความแม่นยำสูง
- ชุดควบคุมรับสัญญาณโดยตรงจากไขควงไฟฟ้า
- ฟังก์ชันชุดควบคุม และการนับสกูรรวมอยู่ในเครื่องเดียวกัน
- มีฟังก์ชันการล็อก เพื่อป้องกันการใช้งานไขควงไฟฟ้าโดยไม่ตั้งใจ
- ใช้กับแรงดันไฟฟ้าได้ตั้งแต่ 100 – 240 V AC

Function

- **การนับย้อนหลัง :** เมื่อสกรูคลายออก สัญญาณจะส่งจากไขควงไฟฟ้าไปยังเครื่องให้ทำการนับถอยหลังไปหนึ่งตัว
- **การตั้งเวลา :** ผู้ใช้สามารถปรับตั้งเวลาการขันเองได้ ซึ่งเครื่องจะประเมินเวลาที่ต้องใช้โดยอัตโนมัติ และแสดงผลให้เห็นบนหน้าจอ
- **การนับชิ้นส่วนอื่นนอกเหนือจากสกรู :** เหมาะสำหรับงานประกอบที่มีความหลากหลาย โดยรุ่น DLR5640 สามารถใช้นับสกรูร่วมกับชิ้นส่วนอื่นๆได้
- **การเชื่อมต่อ :** สามารถสร้างระบบการขันสกรูต่อเนื่อง โดยเชื่อมต่อกับชุดควบคุมรุ่น DLR5640

Specifications	
Model	DLR5640-WN
Count	1 - 99
Counting Method	Count-up / Count-down
Count Correction Function	Count normal fastening only
Self Adjustable Timer Setting	0.01 to 0.99 sec.
Work Detection Function	Yes (1 terminal) / No
External Count Input	2 terminals (PARTS A / PARTS B)
Work Installation Timer Setting	0 to 9.5 sec.
OK Output Timer Setting	0 to 9.5 sec.
NG Alarm	ON(1) / ON(2) / OFF
OK Buzzer	ON(1) / ON(2) / NO(3) / OFF
Count Return Function	ON / OFF
NG Judge Timing	WORK SET / DRIVER ON
Automatic / Manual OK Judge	AUTO / MANUAL
Screwdriver Lock Function	ON / OFF
Multiple Link	Up to 10 counters can be connected.
External Inputs on Terminal Block (NPN)	SENSOR / RESET / LINK-IN / PARTS A / PARTS B
External Outputs on Terminal Block (NPN)	OK / NG / LINK-OUT
Parameter Memory	Parameters stored in internal nonvolatile memory
Screwdriver Control	SPEED / LINEAR START
Power Source	100 -240 V AC, 50/60 Hz
Screwdriver Power Supply	33 V DC, 1.5 A
External Dimensions (mm [inch])	W101 x D140 x H57 [W3.98" x D5.51" x H2.24"]
Mass (g [lbs])	800 [1.76]
Accessories	2 m Power cord with 3-prong USA plug Suspension bail (2 pcs.)

Plug Shape



Example of use together with a sensor available in the market

The example of installation

delvo SCREW FASTENING COUNTER

DLR5040A-WE

DLR5040A-WE

- เครื่องนับการขันสกูรที่ช่วยป้องกันความผิดพลาดจากผู้ใช้งาน และช่วยเพิ่มความแม่นยำในการขัน
- เหมาะสำหรับงานประกอบยานยนต์และอุปกรณ์อิเล็กทรอนิกส์ที่ต้องใช้ความแม่นยำสูง
- ชุดควบคุมรับสัญญาณจากไขควงไฟฟ้าช่วยให้สามารถควบคุมการขันสกรูให้ถูกต้องแม่นยำ
- ใช้กับแรงดันไฟฟ้าได้ตั้งแต่ 100 – 240 V AC
- มีขนาดเล็กและน้ำหนักเบา (เทียบกับสินค้ารุ่นปกติขนาดเล็กลง 30% และน้ำหนักเบาขึ้น 38%)
- ไขควงแบบ SPC ที่ใช้กับเครื่องนับรุ่น DLR5040A-WE ถูกออกแบบตามหลักไขควงแบบไร้แปลงถ่าน

Specifications	
Model	DLR5040A-WE
Count	1 - 99
Counting Method	Count-up / Count-down
Count Correction Function	Count normal fastening only
Self Adjustable Timer Setting	0.01 to 0.99 sec.
Work Detection Function	Yes (1 terminal) / No
External Count Input	2 terminals (PARTS A / PARTS B)
Work Installation Timmer Setting	0 to 9.5 sec.
OK Output Timer Setting	0 to 9.5 sec.
NG Alarm	ON(1) / ON(2) / OFF
OK Buzzer	ON(1) / ON(2) / NO(3) / OFF
Count Return Function	ON / OFF
NG Judge Timing	WORK SET / DRIVER ON
Automatic / Manual OK Judge	AUTO / MANUAL
Screwdriver Lock Function	ON / OFF
Multiple Link	Up to 10 counters can be connected.
External Inputs on Terminal Block (NPN)	SENSOR / RESET / LINK-IN / PARTS A / PARTS B
External Outputs on Terminal Block (NPN)	OK / NG / LINK-OUT
Parameter Memory	Parameters stored in internal nonvolatile memory
Power Source	100 - 240 V AC, 50/60 Hz
Output Voltage	Same as Input Voltage
External Dimensions (mm [inch])	W100 x D120 x H60 [W3.94" x D4.72" x H2.36"]
Mass (g [lbs])	470 [1.04]

Accessory: 2 m cord with UL 3-prong plug. This product is for use outside Japan.

Function

- **การนับย้อนกลับ :** เมื่อสกรูคลายออก สัญญาณจะส่งจากไขควงไฟฟ้าเพื่อสั่งให้เครื่องทำการนับถอยหลังไปหนึ่งตัว
- **การตรวจแก้การนับ :** เครื่องจะไม่นับสกรูที่มีการขันซ้ำ
- **การเชื่อมต่อ :** ผู้ใช้งานสามารถสร้างระบบการขันสกรูต่อเนื่องอย่างง่ายได้โดยเชื่อมต่อกับชุดควบคุมการนับและการขันสกรูรุ่น DLR5040A-WE โดยไม่ต้องใช้ชุดควบคุมภายนอกเพิ่มเติม
- **การล็อก :** มีฟังก์ชันการล็อกเพื่อป้องกันการใช้งานไขควงไฟฟ้าโดยไม่ตั้งใจ

Example of use together with a sensor available in the market

delvo DEDICATED SCREWDRIVERS

for DLR5040A-WE and DLR5340-WE

Made in Japan

*Please contact us for other than 100 V AC availabilities.

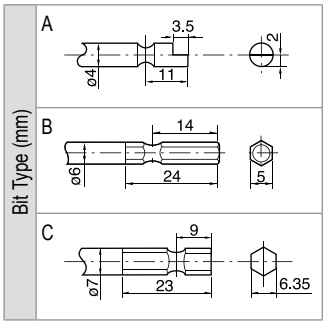
Small

		Miniature Screw (1.0 - 3.5 mm)					
Model	Lever Start	DLV7020-SPC	DLV7030-SPC	DLV7031-SPC	-	-	-
	Push to Start	-	-	-	DLV8020-SPC	DLV8030-SPC	DLV8031-SPC
Power Source		100 V AC, 50/60 Hz From screw counter					
Torque Adjustment		Stepless					
Torque	(Nm [lbf·in])	0.05 - 0.55 [0.4 - 4.9]	0.30 - 1.10 [2.7 - 9.7]	0.30 - 1.00 [2.7 - 8.9]	0.10 - 0.55 [0.9 - 4.9]	0.30 - 1.10 [2.7 - 9.7]	0.30 - 1.00 [2.7 - 8.9]
Free Speed	(min^{-1})	900	650	1200	900	650	1200
Power Consumption	(W)	Approx.25		Approx.30	Approx.25		Approx.30
Screw Size (mm)	Machine Screw	1.0 - 3.0	2.0 - 3.5	2.0 - 3.0	1.0 - 3.0	2.0 - 3.5	2.0 - 3.0
	Tapping Screw	1.2 - 2.6	2.0 - 3.0		1.2 - 2.6	2.0 - 3.0	
Bit Type		A					
Mass	(g [lbs])	380 [0.84]			390 [0.86]		
Cord Length	(m)	3 (with connector)					
Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds					
Bit Grounding		Equipped as standard					

		Machine Screw(2.6 to 8.0 mm)				
Model	Lever Start	DLV7120-SPC	DLV7130-SPC	DLV7140-SPC	DLV7231-SPC	DLV7241-SPC
	Push to Start	DLV8120-SPC	DLV8130-SPC	DLV8140-SPC	DLV8231-SPC	DLV8241-SPC
Power Source		100 V AC, 50/60 Hz From screw counter				
Torque Adjustment		Stepless				
Torque	(Nm [lbf·in])	0.35 - 0.70 [3.10 - 6.20]	0.50 - 1.70 [4.4 - 15.1]	1.20 - 3.00 [10.6 - 26.6]	0.50 - 1.70 [4.4 - 15.1]	1.20 - 3.00 [10.6 - 26.6]
Free Speed	(min^{-1})	1000		700	2000	1200
Power Consumption	(W)	35			45	
Screw Size (mm)	Machine Screw	2.6 - 3.0	2.6 - 4.0	3.5 - 5.0	2.6 - 4.0	3.5 - 5.0
	Tapping Screw	2.3 - 3.0	2.5 - 3.5	3.0 - 4.0	2.5 - 3.5	3.0 - 4.0
Bit Type		B *				
Mass	(g [lbs])	710 [1.57] (7100series) / 670 [1.48] (8100series)			710 [1.57] (7200series) / 670 [1.48] (8200series)	
Cord Length	(m)	3 (with connector)				
Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds				
Bit Grounding		Equipped as standard				

		Machine Screw(2.6 to 8.0 mm)	
Model	Lever Start	-	DLV7251-SPC
	Push to Start	DLV8150-SPC	DLV8251-SPC
Power Source		100 V AC, 50/60 Hz From screw counter	
Torque Adjustment		Stepless	
Torque	(Nm [lbf·in])	2.0 - 4.5 [17.7 - 39.8]	
Free Speed	(min^{-1})	450	700
Power Consumption	(W)	45	
Screw Size (mm)	Machine Screw	4.5 - 6.0	
	Tapping Screw	4.0 - 5.0	
Bit Type		C	
Mass	(g [lbs])	810 [1.79]	
Cord Length	(m)	3 (with connector)	
Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds	
Bit Grounding		Equipped as standard	

Bit Type (mm)



		Machine Screw(2.6 to 8.0 mm)					
Model	Lever Start	DLV30A06L-SPC	DLV30A12L-SPC	DLV30A20L-SPC	DLV45A06L-SPC	DLV45A12L-SPC	DLV70A06L-SPC
	Push to Start	DLV30A06P-SPC	DLV30A12P-SPC	DLV30A20P-SPC	DLV45A06P-SPC	DLV45A12P-SPC	DLV70A06P-SPC
Power Source		100 V AC, 50/60 Hz From screw counter					
Torque Adjustment		Stepless					
Torque	(Nm [lbf·in])	0.4 to 1.6 / 1.2 to 3.0 [3.5 to 14.2 / 10.6 to 26.6]			2.0 - 4.5 [17.7 - 39.8]		3.8 - 7.0 [33.6 - 62.0]
Free Speed	(min^{-1})	650	1200	2000	650	1200	650
Power Consumption	(W)	45					
Screw Size (mm)	Machine Screw	2.6 - 5.0			4.5 - 6.0		5.0 - 8.0
	Tapping Screw	2.5 - 4.0			4.0 - 5.0		4.5 - 6.0
Bit Type		B			C		
Mass	(g [lbs])	700 [1.54]			870 [1.92] with pistol grip		
Cord Length	(m)	3 (with connector)					
Rated Operation		ON: 0.5 seconds / OFF: 3.5 seconds					
Bit Grounding		Equipped as standard					

Big

Screw Size

Optional Accessories

Torque Adjustment Ring Cover DLW5200	Torque Adjustment Ring Cover DLW5300	Torque Adjustment Ring Cover DLW5201	Torque Adjustment Ring Cover DLW5202	Pistol Grip DLW2300ESD	SPC cord 0.5 m DLW9400	SPC Extension Cable 3 m DLW9340
For DLV7100/ DLV7200/DLV8100 DLV8200-SPC	For DLV7000/ DLV8000-SPC	For DLV30A-SPC	For DLV45A/ DLV70A -SPC	**ESD Protection** For DLV7100/ DLV7200/ DLV8100/DLV8200/ DLV30A/DLV45/ DLV70A -SPC For operator fatigue reduction, suitable for horizontal fastening	For commercial power source	Extends cord length between screw fastening counter and screwdriver

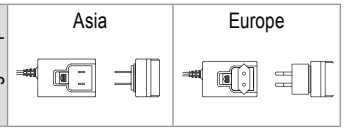
delvo TORQUE CHECKER

DLT1173A / 1673A / 1973A Series CE

- เครื่องวัดค่าแรงบิดที่ช่วยรักษามาตรฐานคุณภาพงานประกอบ
- เครื่องจะจัดเก็บข้อมูลที่วัดค่าเอาไว้แม้ว่าตัวเครื่องจะถูกปิดแล้ว เพื่อป้องกันข้อมูลสูญหาย
- มีฟังก์ชันปิดเครื่องอัตโนมัติหากหยุดใช้งานเกิน 10 นาที เพื่อประหยัดพลังงาน
- สามารถดาวน์โหลดโปรแกรมสำหรับอัพโหลดข้อมูลที่เก็บในเครื่องเช็คค่าแรงบิด “delvo” ลงในคอมพิวเตอร์ได้ฟรีจากเว็บไซต์ของ NITTO KOHKI

Specifications			
Model	DLT1173A	DLT1673A	DLT1973A
Measurement Range (Nm [lbf·in])	0.015 - 1.500 [0.13 - 13.3]	0.015 - 10.00 [13.5 - 88.5]	4.00 - 12.00 [35.4 - 106.2]
Calibration Precision	Within ± 0.5% (Full Scale) For 0.2 Nm [2 lbf • in] or less ± 1 digit	Within ± 0.5% (Full Scale) For 2 Nm [20 lbf • in] or less ± 1 digit	Within ± 0.5% (Full Scale)
Display	4-digit digital display (Single-line) Data sampling: 1000 times/sec. Display rate: 12 times/sec.		
Measuring Unit	kgf • cm, Nm, lbf • in (selectable)		
Data Memory	800 pieces of data		
Measuring Direction	CW and CCW		
Measuring Mode	3 modes: PD-TR-PP		
Auto Power Off	Power off if left untouched for 10 minutes		
External Output	As per USB output Mitsutoyo Digimatic		
Analog Output	Approx. 1.5 V max.	Approx. 1.0 V max.	Approx. 1.1 V max.
	No zero offset; identical waveforms produced in PP , PD , and TR modes		
Continuous Operation Time	20 hours		
External Dimensions (mm) [inch]	W160 x D110 x H47 [W6.3” x D4.33” x H1.85”]		W200 x D112 x H48.5 [W7.9” x D4.41” x H1.89”]
Mass g [lbs]	1100 [2.43]		14000 [3.09]
Rechargeable Battery	Nickel metal hydride battery		
Charger Type	DLE1833A		
Input Voltage for Charger	100 - 240 V AC, 50/60 Hz		
Charging Time	4 hours		
Standard Accessories	• Screw Joint (DLW4430)	• Bit Joint (DLW4360) • Spring for Joint (DLW4660)	• Soft Joint (DLW4000)

Plug Shape



Selection of Torque Checker		
DLV3300*1	DLV7100/DLV7200	DLV70A
DLV5700	DLV8100/DLV8200	DLV70S
DLV5800	DLV7500/DLV8500	DLV70A
DLV7300	DLV3100*2	(For automation)
DLV7000	DLV30A/DLV45A	
DLV8000	DLV30S/DLV45S	
DLV7400A	DLV16	
DLV02	DLV7104	
DLV12	DLV8104/DLV8204	
DLV04C	DLV30A/DLV45A	
DLV10C	(For automation) DLV45C	

*1:A reversible screwdriver is required to loosen the measuring joint.
*2:A reversible screwdriver is required to loosen the measuring joint. Screw joint is required.

Optional Accessories	Model	Part No.	Shape	Torque Range	DLT1173A	DLT1673A	DLT1973A
Bit Joint	DLW4330	TD03305	OD 4 mm [0.16”] type	0.015 - 0.25 Nm [0.13 - 2.2 lbf • in]	O	—	—
	DLW4340	TD03306	OD 4 mm [0.16”] type	0.15 - 1.5 Nm [1.3 - 13.3 lbf • in]	O	O	—
	DLW4350	TD03307	Hex 5 [0.2”] and Hex 6.35 [1/4] types	0.15 - 1.5 Nm [1.3 - 13.3 lbf • in]	O	O	—
	DLW4360	TD03308	Hex 5 [0.2”] and Hex 6.35 [1/4] types	0.15 - 6.5 Nm [1.3 - 57.5 lbf • in]	—	◎	—
Screw Joint	DLW4430	TD03309	screw type (Bit size No.2)	0.015 to 1.5 Nm [0.13 to 13.3 lbf • in]	◎	O	—
	DLW4530*1	TD03310	screw type (Bit size No.2)	0.15 - 5 Nm [1.3 - 44.3 lbf • in]	—	O	—
Soft Joint	DLW4000	TD04123	Hex 13 [0.51”] type (Hex. head bolt)	4.0 to 12.0 Nm [35.4 to 106.2 lbf • in]	—	O*	◎
Hard Joint	DLW4040	TD04124		0.15 to 12.0 Nm [1.3 to 106.2 lbf.in]	—	O*	O
Spring	DLW4660	TD03826	Spring for DLW4340, 4350, 4430	-	O	◎	—

*DLW4000 and DLW4040 must be used at 10 Nm[44.3 lbf-in] or less.

◎: Standard accessories ○: Available as option —: Unsupported

Joint

Bit Joint

DLW4330 DLW4340 DLW4350 DLW4360

Screw Joint

DLW4430 DLW4530

Soft Joint

DLW4000

Hard Joint

DLW4040

Spring

DLW4660 (TV03826)

Example) DLW4550

Screw with hex. spacer ASSY	
DLW4430-M3	DLW4530-M4
Applicable Joint	
DLW4430/DLW4540 DLW4550/DLW4560	DLW4530

*Contains 5 pcs per set.

Screw Joint for “delvo” Brushless Type C series

Screw Joint

DLW4040 DLW4050 DLW4540 DLW4550 DLW4560

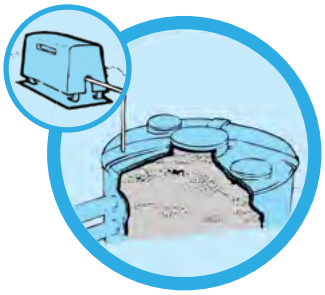
Model	Application	Applicable Screwdriver		
		DLV04C	DLV10C	DLV45C
DLW4040	HARD fastening setting	O	—	O
DLW4050	SOFT fastening setting	—	—	O
DLW4540		O	—	—
DLW4550		—	O	—
DLW4560	HARD fastening setting	O	O	—

AIR BLOWER

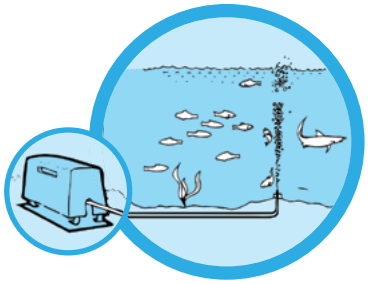
เครื่องเติมอากาศระบบลูกสูบ

ทำหน้าที่เติมอากาศ และกวนน้ำเพื่อช่วยให้จุลินทรีย์ทำหน้าที่ย่อยสลายสารอินทรีย์ในน้ำ ซึ่งเป็นการช่วยลดปัญหาของกลิ่นไม่พึงประสงค์

- เหมาะสำหรับงานบำบัดน้ำเสียระบบเติมอากาศ และงานเพาะเลี้ยงสัตว์น้ำ
- ใช้งานต่อเนื่องยาวนานกว่า 3 ปี
- ซ่อมบำรุงได้ง่ายกว่าระบบอื่น โดยใช้ไขควงเพียงด้ามเดียว ก็สามารถถอดเปลี่ยนไส้กรอง และทำความสะอาดเครื่อง
- เนื่องจากเป็นระบบลูกสูบ เครื่องจึงไม่มีปัญหาเรื่องลมตัดกระทันหัน
- ผ่านการรับรองมาตราฐาน IP55 ยกเว้นรุ่น LA-60B และ LA-80B ได้มาตราฐาน IP54



WASTEWATER TREATMENT

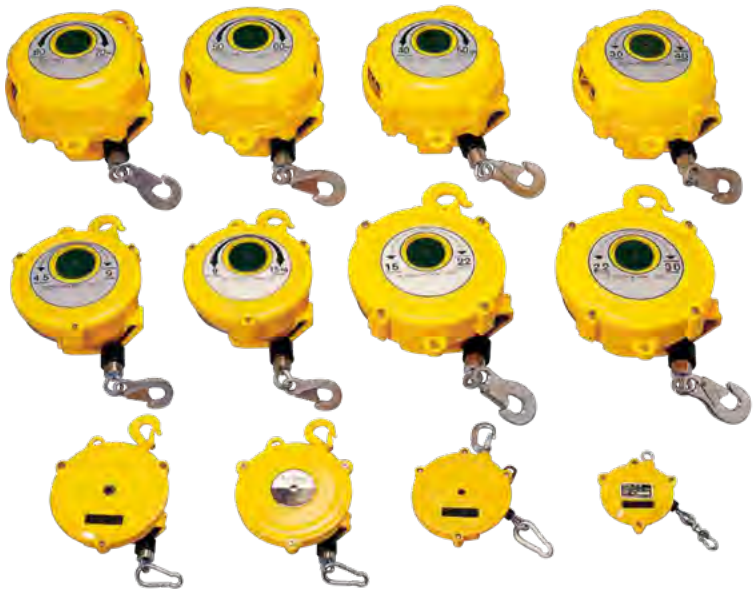


AQUARIUM FISH FARM

Model	LA-45C	LA-60B	LA-80B	LA-100A	LA-120A	LAM-200
Power Supply	120 V, 230 V, 240V AC			230 V, 240 V AC		120 V, 230 V, 240 V AC
Rated Frequency	50 Hz, 60 Hz			50 Hz		50 Hz, 60 Hz
Rated Pressure	0.11 bar (1.56 psig)	0.15 bar (2.13 psig)		0.18 bar (2.56 psig)		0.20 bar (2.84 psig)
Operating Pressure Range	0.05 - 0.2 bar (0.71 - 2.84 psig)			0.05 - 0.3 bar (0.71 - 4.27 psig)		
Rated Airflow	45 L/min	60 L/min	80 L/min	100 L/min	120 L/min	200 L/min
Power Consumption	47 W / 50 Hz	64 W / 50 Hz	86 W / 50 Hz	100 W / 50 Hz	130 W / 50 Hz	215 W / 50 Hz
	45 W / 60 Hz	60 W / 60 Hz	80 W / 60 Hz			215 W / 60 Hz
Weight	3.2 kg (7.1 Lbs)	5.0 kg (11 Lbs)	5.3 kg (11.7 Lbs)	9.7 kg (21.4 Lbs)		12.3 kg (27.1 Lbs)

SPRING BALANCER SERIES

สปริงบาลานเซอร์



- อุปกรณ์ช่วยผ่อนแรงในการยกเครื่องมือ ช่วยลดความเมื่อยล้า และเพิ่มประสิทธิภาพการทำงาน
- ประหยัดเนื้อที่ป้องกันเครื่องมือเสียหาย และเพิ่มความปลอดภัยในการทำงาน
- สามารถรับน้ำหนักเครื่องมือได้ตั้งแต่ 0.5 - 70 กก.
- ขนาดความยาวสายสูงสุด 1.5 เมตร

Model	Capacity (kg)	Stroke (m)	Weight (kg)
TW-00	0.5 - 1.5	0.5	0.2
TW-0	0.5 - 1.5	1.0	0.5
TW-1R	0.5 - 1.5	1.5	0.3
TW-3	1.0 - 3.0	1.3	1.4
TW-5	2.5 - 5.0	1.3	1.5
TW-9	4.5 - 9.0	1.3	3.4
TW-15	9.0 - 15.0	1.3	3.8
TW-22	15.0 - 22.0	1.5	7.2
TW-30	22.0 - 30.0	1.5	7.6
TW-40	30.0 - 40.0	1.5	9.8
TW-50	40.0 - 50.0	1.5	10.4
TW-60	50.0 - 60.0	1.5	11.6
TW-70	60.0 - 70.0	1.5	11.8