

Small Conveyor Chains / Joint Links

With Attachments

Feature: Conventional chains with attachments. Suitable for a short distance conveyance.

Small Conveyor Chains – Attachment

RoHS10

Attachment on One Side Type

CHEL_A
(Attachment on All Links)

CHEL_B
(Attachment on Every Two Links)

CHEL_C
(Attachment on Every Four Links)

Attachment on Both Sides Type

CHET_A
(Attachment on All Links)

CHET_B
(Attachment on Every Two Links)

CHET_C
(Attachment on Every Four Links)

*The last link is the Joint Link. Ⓢ Only No.80 is split pin shape. **Material: Steel**

See P.1514–1518 for Sprockets and P.1525–1528 for Idlers.

Type	Part Number		*No. of Links	Pitch	Pins		Plate	Attachment					Max. Allowable Tension kN (kgf)
	No.	Nominal			L ₁	L ₂		t	C	X	Y	N	
One Side Type CHEL	40	A (All Links)	4+	12.7	8.07	9.48	1.5	8.5	12.7	17.4	9.5	3.6	2.75 (280)
	50		4+	15.875	10.17	11.63	2	10.5	15.9	22.3	12.7	5.2	4.41 (450)
Both Sides Type CHET	60	B (Every Two Links)	4+	19.05	12.7	14.2	2.4	12.2	19.05	27.2	15.9	5.2	6.28 (640)
	80	C (Every Four Links)	4+	25.4	16.15	19.25	3.2	15.88	25.4	35.2	19.1	6.8	10.69 (1090)

*Use 2's multiples for "attachment on every link" and "attachment on every 2 links". Use 4's multiples for "attachment on every 4 links".

Number of Links per Unit

Type	Part Number	No.	Number of Links per Unit
CHEL CHET	40	240	(Circumference Length 3,048mm)
	50	192	(Circumference Length 3,048mm)
	60	160	(Circumference Length 3,048mm)
	80	120	(Circumference Length 3,048mm)

Ⓢ A roller chain longer than the unit length (unit number of links) is divided into separate packages per unit.
Ex. 1) For CHEL50A-300, it contains two separate packages of 192 Links (Joint Links Included) + 108 Links (Joint Links Included).

Joint Links

RoHS10

JNT-L
JNT-T

Material: Steel

Type	Part Number	No.
JNT-L (One Side Type)	JNT-L	40
JNT-T (Both Sides Type)	JNT-T	50
	JNT-T	60
	JNT-T	80

Sprocket for Double Speed Chains / Double Speed Chains

Sprocket for Double Speed Chains

RoHS10

WESP

Shaft Bore Specs. H (Round Bore) Shaft Bore Specs. N (New JIS Key-Tap)

Shaft Bore Dia. D	Keyway Hole D ₂ x L ₂	Set Screw M
15	5 x 2.3	6
20	6 x 2.8	6
25,30	8 x 3.3	8

Ⓢ For Nominal 3–9 teeth, Set Screw is M5.
Material: 1045 Carbon Steel or Equivalent
Accessories: Set Screw (Only for shaft bore specification N)

*Shaft Bore Specifications do not include tap holes and set screws. H

Part Number	Type	No. of Teeth	Shaft Bore Dia.		D _p	D _o	T	H	L	ℓ	A
			H Specification D _{H7}	N Specification D _{H7}							
Sprocket WESP	3	9	15 20	15 20	55.70	63	3	33	22	4	15.3
	4	10	15 20	15 20	61.65	68	3	37	25	5	15.3
	5	10	20 25	20 25	82.20	93	4	52	40	8	21.5

Part Number Example Part Number - No. of Teeth - Shaft Bore Specifications, Inner Diameter
WESP3 - 10 - H15

Application Example

Labels: Pallet, WCF, WCHE, RNG, WESP

Features: Mixed structure of Small and Large Diameter Roller enables work to be conveyed approx. 2.5 times faster than the chain speed. Suitable for Free Flow Conveyors.

Double Speed Chains

RoHS10

WCHE

(Drawing: 4 Links)

Ⓢ The final links are attached as the joint links.

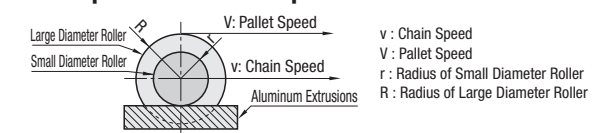
Material: Plate, Pin: Steel
Roller: Engineered Plastic
Operating Temperature: -10–80°C

Ⓢ For Double Speed Chains selection information materials, refer to P.3968.

Part Number	Type	Nominal	Number of Links (Specify Even Number)	Pitch P	Roller				Plate		Pin		Max. Allowable Tension (kN)	Speed Multiplier	Unit Number of Links
					R ₁	R ₂	W ₁	W ₂	a	g	f	h			
Chain WCHE	3	4–550	19.05	11.91	18.3	7.0	4.1	8.8	1.2	3.28	11.2	12.95	0.55	2.54	160 (Circumference Length 3,048 mm)
	4	4–410	25.40	15.88	24.6	9.0	6.0	11.7	1.5	3.97	15.2	16.75	0.88	2.55	120 (Circumference Length 3,048 mm)
	5	4–350	31.75	19.05	30.0	11.4	7.0	14.6	2.0	5.08	19.45	20.90	1.37	2.57	96 (Circumference Length 3,048 mm)

Part Number Example Part Number - Number of Links
WCHE3 - 200

Principle of the Double Speed Chain



The Package of Chain

A roller chain longer than the unit length (unit number of links) is divided into separate packages per unit.
Ex. 1) WCHE3-280, 2 separate packages: 160 links + 120 links
Ex. 2) WCHE5-260, 3 separate packages: 96 links x 2 + 68 links

When a chain runs at v speed, circumferential velocity of the small diameter roller is v. At this time circumferential velocity of the large diameter roller becomes (R/r)·v due to ratio of radius. Therefore, Pallet speed V becomes a value that chain speed V and (R/r)·v are combined.
V=(R/r)·v+v
=(R/r+1)·v
for ratio of radius of the large diameter roller and the small diameter roller is approximately 1.5:1.
V=(1.5+1)·v
=2.5v