

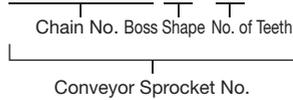
Expanded Series

Conveyor Sprocket for R Rollers



Order No. Example

K5100R B 6



Applicable Conveyor Chain Dimensions

Chain No.	Chain Pitch	Roller Diameter	Roller Link Inner Width
K3075R	75	31.8	16.1
K3100R	100		
K5100R	100	40	22
K5150R	150		
K10100R	100	50.8	30
K10150R	150		

The beautiful exterior is a special feature with a full crosscut finish.

Special sizes other than those below can also be produced.

The teeth can also be hardened using high frequency. Since the material is equivalent to S45C, please specify oil quenching and tempering as the hardening method.



Precautions

Chain No.	No. of Teeth	Basic Dimensions/Shape				Common Basic Specification Dimensions					
		Pitch Circle Diameter Dp	Outer Diameter Do	Tooth Width T	Tooth Section Shape	Prepared Hole Diameter d	Shaft Diameter Range d (MAX)	Boss Diameter DH	Total Width DL	Center Distance L (CW-type)	Mass kg
K3075R	6	150	158	12	S1	20	50	73	57	28.5	3.0
	8	196	209			20	55	83	62	31	4.8
	10	242.7	259			20	60	93	67	33.5	7.1
	12	289.8	308			20	60	93	67	33.5	9.0
K3100R	6	200	206	12	S2	20	55	83	62	31	4.9
	8	261.3	272		S2	20	60	93	67	33.5	7.8
	10	323.6	336		S1	20	65	98	72	36	11.1
	12	386.4	401		S1	20	65	98	72	36	14.4
K5100R	6	200	205	18	S1	26	75	107	86	43	8.8
	8	261.3	272			26	75	107	86	43	12.0
	10	323.6	340			26	80	117	94	47	17.4
	12	386.4	405			26	85	127	104	52	24.4
K5150R	6	300	304	18	S2	26	80	117	94	47	15.8
	8	392	402			26	85	127	104	52	24.9
	10	485.4	500			26	95	137	116	58	36.7
	12	579.6	596			26	95	137	116	58	47.8
K10100R	6	200	214	22	S1	30	75	107	90	45	9.8
	8	261.3	282			30	85	127	108	54	17.1
	10	323.6	349			30	95	137	120	60	24.7
	12	386.4	414			30	100	147	123	61.5	32.6
K10150R	6	300	309	22	S2	30	95	137	120	60	22.7
	8	392	408		S2	30	100	147	123	61.5	33.2
	10	485.4	506		S2	30	110	157	133	66.5	47.6
	12	579.6	601		S1	30	115	167	144	72	65.2



Order Method

Conveyor Sprocket No. and Quantity



Postage

● Same-day shipping ○ 5-day shipping

* Single order system available

Semi-F Series Supported Product: Shipping in 5 working days

30kg

Weight limit for single product packaging

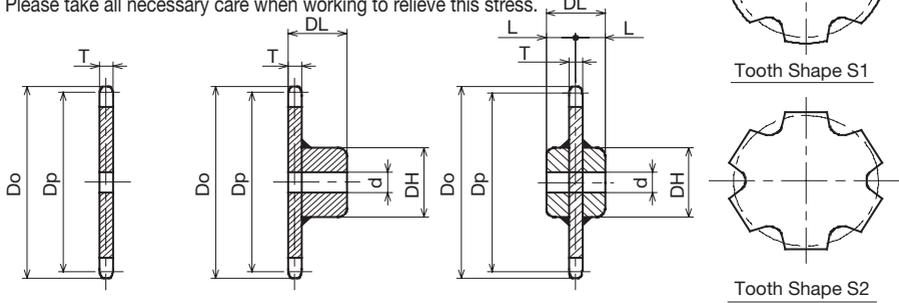
* Please refer to P24 to P33 for the Semi-F Series <Complete Product> order method.

Conveyor Sprocket for R Rollers <A/BW/CW-type>



Precautions

When welding an A-type boss, please use S20C, or less, for the boss material. Please use a low-hydrogen type electrode or wire for welding, preheating the sprocket and cooling it slowly after welding is complete. Distortion may occur in the sprocket due to the welding, in which case it may warp into an umbrella shape. Please take all necessary care when working to relieve this stress.



A Type

BW Type

CW Type

Carbon Structural Steel

	¥		Semi-F ¥		No. of Teeth	Chain No.
	● A-type	○ BW-type	○ CW-type	○ BW-type		
					6	K3075R
					8	
					10	
					12	
					6	K3100R
					8	
					10	
					12	
					6	K5100R
					8	
					10	
					12	
					6	K5150R
					8	
					10	
					12	
					6	K10100R
					8	
					10	
					12	
					6	K10150R
					8	
					10	
					12	



Guide

The DH and DL dimensions above are given as an example. We can machine dimensions to meet your needs. Please allow us to make a separate estimate for other than those given above. (Please contact each individual sales office.)



Precautions

1. The diameter d represents general situations. Please determine the shaft hole and key surface according to general mechanical design.
2. For a sprocket mass exceeding 30kg, it may be necessary to put a hanging hole in the tooth section.

Keyless Sprockets

35B, 40B Series

Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

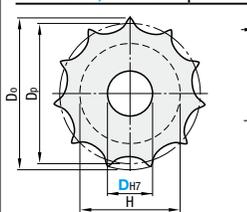
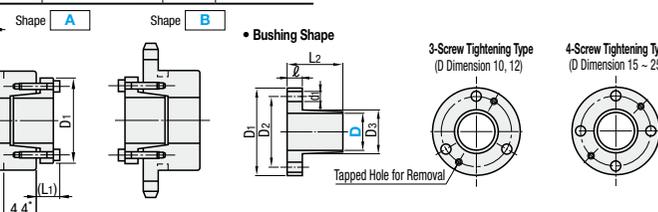
[S Type Roller] Double Pitch Chains, Sprockets, Joint Links

2040B, 2050B Series

Features: The strength of shafts is not deteriorated as machining to shafts is not required. Positioning is easy.



Type	Sprockets		Bushings	
	Material	Surface Treatment	Material	Operating Temp.
LFSP35B, LFSP40B BLFSP35B, BLFSP40B	S45C Equivalent (Induction Hardened Teeth Tip)	Black Oxide	S45C	-20~80°C

• Bushing Shape

3-Screw Tightening Type (D Dimension 10, 12)

4-Screw Tightening Type (D Dimension 15 ~ 25)

Tapped Hole for Removal

RoHS

35B Series For Chains, see P.1535.

Part Number Type	Number of Teeth	Shaft Bore Dia. D _{H7}	Shape	D _p	D _o	H	L	t	Unit Price	
									LFSP35B	BLFSP35B
LFSP35B BLFSP35B	12	10	A	36.80	41	30.5	20	4.3		
	13	10		39.80	44	32				
	14	10 12		42.81	47	32				
	15	10 12		45.81	51	35				
	B	16	10 12 15 16	48.82	54	37				
		18	12 15 16 17	54.85	60	44				
		20	12 15 16 17 18 20 22	60.89	66	50				

For sprockets with 12 teeth, A Shape only. Sprockets marked with * have grooves on hub O.D.

40B Series For Chains, see P.1535.

Part Number Type	Number of Teeth	Shaft Bore Dia. D _{H7}	Shape	D _p	D _o	H	L	t	Unit Price	
									LFSP40B	BLFSP40B
LFSP40B BLFSP40B	12	12 15 16 17	A	49.07	55	40	22	7.2		
	13	12 15 16		53.07	59	37				
	14	12 15 16 17		57.07	63	42				
	15	12 15 16 17 18 20		61.08	67	46				
	16	15 16 17 18 20 22		65.10	71	50				
	B	17	15 16 17 18 20 22	69.12	76	54				
		18	15 16 17 18 20 22 25	73.14	80	57				
		19	15 16 17 18 20 22 25	77.16	84	62				
		20	15 16 17 18 20 22 25	81.18	88	67				

Sprockets marked with * have grooves on hub O.D.

Bushing Dimension/Performance Table

Shaft Bore Dia. D	D ₁	D ₂	D ₃	d ₁	(L-1)	L ₂	ℓ	Maximum Allowable Torque N·m (kgf·m)	Allowable Thrust Load kN (kgf)	Screws Qty.	Size	Screw Tightening Torque N·m (kgf·m)	Tapped Hole for Removal
10	30	22	12		10.5	16.5	5	39 (4.0)	5.34 (545)	3	M4x16	4.0 (0.41)	M4x2
12	32	24	14	4.5				48 (4.9)					
15	36	28	17.6	12	22	6		78 (7.95)					
16	37	29	18.6					83 (8.5)					
17	38	30	19.6	13	23			88 (9.0)					
18	43	33	20.6				154 (15.7)	8.74 (895)	4	M5x20	8.3 (0.85)	M5x2	
20	46	36	23.4	5.5	14	7	171 (17.4)						
22	48	38	24.6				186 (19.16)						
25	52	42	28.4				216 (21.8)						

Shaft tolerance g6 and shaft surface roughness Ra6.3 are standard.

When there is keyway machining or D cut on the installed shaft, transmitting torque is reduced by approximately 15% or more.

In the event that transmissible torque exceeds values in the above table, shaft could slip, resulting in serious danger. Make sure that it is used within the allowable torque range.



Note on Installation

- Tighten the bushing screws after inserting the shaft. (Bushing may deform if the screws are tightened before inserting the shaft.)
- Use torque wrench to tighten screws.
- Do not use tightening screws other than included.



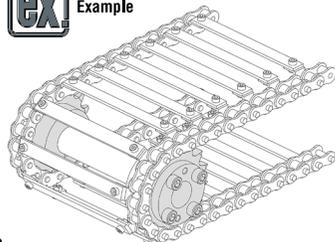
Ordering Example: Part Number - Number of Teeth - d
LFSP35B16 - 15 - A

Features

- When a keyway is added to a shaft, the position of teeth / keys is fixed. On such a shaft, however, by using Keyless Sprockets, the position of teeth can be adjusted freely and, thereby, phase matching is facilitated.



Example



Installation

- Wipe off the shaft surface and lightly apply oil or grease. (Do not use any oil or grease containing molybdenum type anti-friction agent.)
- Please completely wipe off sprockets and bushing contact surfaces also before lubricating with oil or grease. Please lubricate screw and seating surfaces in the same manner.
- Sub-assemble Sprockets and bushing before the shaft is inserted. (Do not tighten the screws on the bushing before inserting into shaft.)
- After locating, tighten the lock screws using a torque wrench in the diagonal line order, beginning lightly (approx. 1/4 of the predetermined tightening torque).
- Tighten the screws further to an increased torque (approximately 1/2 specified torque).
- Tighten with the predetermined tightening torque.
- Finally, tighten the screws to the listed torque values in a circumferential order.

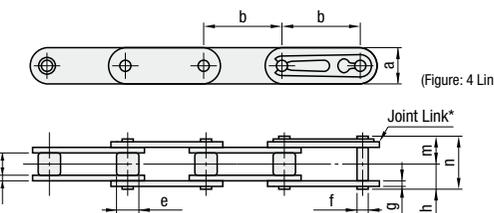
Removal

- Be sure the system is completely shut down before starting work.
- Loosen the tightening screws in circumferential order.
- Insert a screw in a screw hole for removal and tighten evenly.
- Repeat "Installation" process for re-installation.

Features: Flat plate allows workpiece to be put directly on plate for conveyance.



Type	Material
CHEW40 CHEW50	Steel



(Figure: 4 Links)

* The last link is the Joint Link.

Part Number	Number of Links (Specify Even Number)	Max. Allowable Tension (kN)	1 Unit (Number of Links)	Unit Price	Cutting Charge
CHEW40	4~	2.75	120 (Circumference Length 3,048mm)		
CHEW50	4~	4.41	96 (Circumference Length 3,048mm)		

- Specify links by even numbers. The last link is the Joint Link.
- When the ordered number of links exceeds the given number of links per unit, the qty. of links per unit and the extra qty. of links are packaged separately. Ex.) For CHEW40-300, 3 separate packages: 120 links x 2 units + 60 links

Detailed Chain Dimension

Type	a	b	c	d	e	f	g	h	m	n
CHEW40	11.7	25.4	1.5	7.95	7.95	3.97	1.5	8.02	9.53	17.55
CHEW50	14.6	31.75	2	9.53	10.16	5.09	2	10.15	11.6	21.75

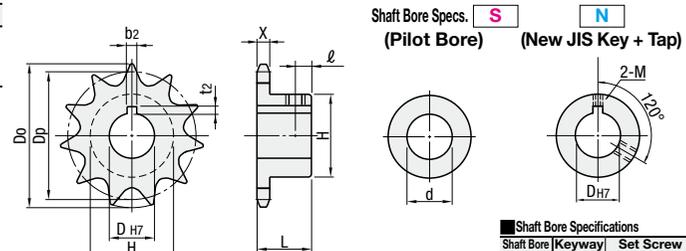
Ordering Example: Part Number - Number of Links
CHEW40 - 200

Double Pitch S Type Dedicated Sprocket



Type	Material
SP2040B SP2050B	S45C Equivalent (Induction Hardened Teeth Tip)

Accessory: Set Screw (Only for shaft bore specifications [N])



Shaft Bore Specs. (Pilot Bore) (New JIS Key + Tap)

Offset between tooth tip and keyway is ±0.5mm.

Shaft Bore Dia. D	Keyway b x t x z	Set Screw M
20	6x2.8	6
25, 30	8x3.3	8
35	10x3.3	8

For double pitch chain idlers, see P.1552.

Part Number Type	Allocated Number of Teeth	Shaft Bore Specs.	S Specification (D _{H7})	Shaft Bore Dia.				Number of Operating Teeth	D _p	D _o	Hub			ℓ	Mass (kg)	Unit Price		
				20*	25*	30	35				H	L	X			S Specification	N Spec. (In Stock)	N Spec. (Other than In Stock)
SP2040B	19	S	14	20*	25*	30	35	9	1/2	78.23	84	60	25	7.2	7	0.64		
	21		14	20	25	30	35	10	1/2	86.17	92	69				0.93		
	23		14	20	25	30	35	11	1/2	94.15	100	77				0.99		
	25		14	20*	25	30	35	12	1/2	102.14	108	83				1.06		
SP2050B	19	S	14	20	25*	30	35	9	1/2	97.78	105	73	28	8.7	8	1.1		
	21		14	20	25	30	35	10	1/2	107.72	115					1.62		
	23		16	20	25	30	35	11	1/2	117.68	125					1.74		
	25		16	25	30	35	12	1/2	127.67	135	1.87							

Ordering Example: Part Number - Shaft Bore Dia. - Shaft Bore Dia.
SP2040B21 - N - 20

Double Pitch S Type Dedicated Joint Link



JNTWC

RoHS

Material: Steel

Part Number	Unit Price	Volume Discount Rate
JNTWC (Steel)	40	1 ~ 20 Link(s) 21 ~ 50 Links



Ordering Example: Part Number
JNTWC40

For orders larger than indicated quantity, please request a quotation.

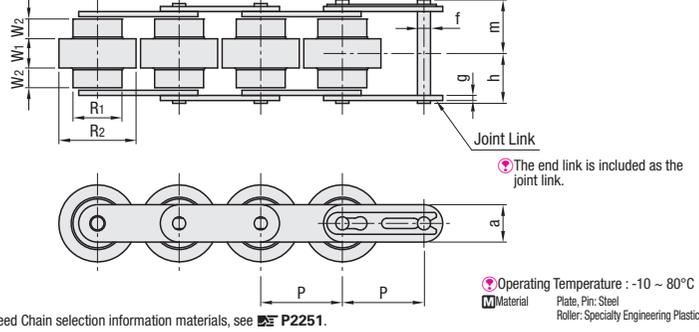
Double Speed Chains & Sprockets / Aluminum Extrusions / Return Guides

■ **Features:** Mixed structure of Small and Large Diameter Rollers enables a workpiece to be conveyed approx. 2.5 times faster than the chain speed. Suitable for free flow conveyors.

Double Speed Chains

WCHE

(Figure : 4 Links)



RoHS

Ⓢ For Double Speed Chain selection information materials, see P2251.

Ⓢ Operating Temperature : -10 ~ 80°C

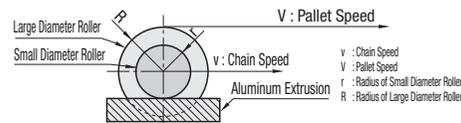
Part Number Type	Nominal	Number of Links Specification (Specify Even Number)	Pitch		Roller		Plate		Pins			Max. Allowable Tension (kN)	Speed Multiplier	Approx. Mass kg/m	Unit Number of Links	
			P	R1	R2	W1	W2	a	g	f	h					m
(Chain) WCHE	3	4~550	19.05	11.91	18.3	7.0	4.1	8.8	1.2	3.28	11.2	12.95	0.55	2.54	0.4	160 (Circumference Length 3,048mm)
	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	0.8	120 (Circumference Length 3,048mm)
	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	1.3	96 (Circumference Length 3,048mm)

Part Number Type	Nominal	Unit Price 1 ~ 2 pc(s).		Cutting Charge (+ Unit Price)
		Number of Links less than 1 Unit	Number of Links 1 Unit or More	
(Chain) WCHE	3	120 x Number of Links	100 x Number of Links	
	4	120 x Number of Links	100 x Number of Links	
	5	150 x Number of Links	130 x Number of Links	

Ⓢ No cutting charge when placing orders by Unit Number of Links.

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

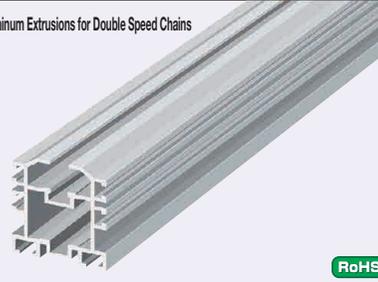
Principle of the Double Speed Chains



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.
 $V = (R/r) \cdot v + v$
 $= (R/r + 1) \cdot v$
 Since the ratio of radius of the large diameter roller and the small diameter roller is approximately 1.5:1
 $V = (1.5 + 1) \cdot v$
 $= 2.5v$

Aluminum Extrusions for Double Speed Chains

WCF

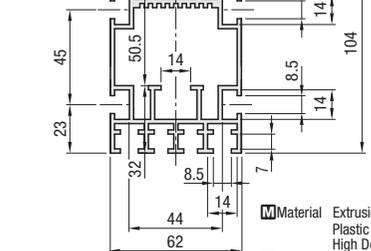
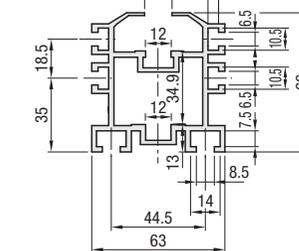
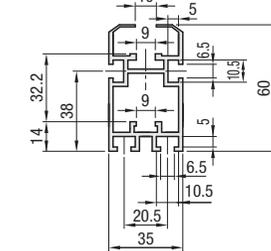


(Details of dimensions are shown below)

WCF3

WCF4

WCF5



Ⓢ General purpose hex nut is applicable.

Part Number Type	Nominal	L 10mm Increment	Approx. Mass kg/m	Unit Price /m
WCF	4		2.49	
	5		3.17	

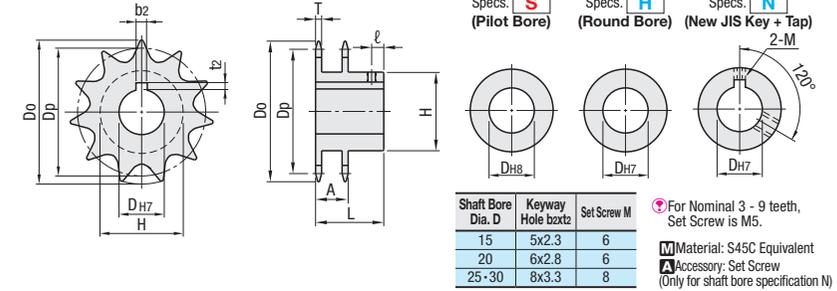
Ordering Example: Part Number - L
WCF3 - 1000

Alterations: Part Number - L - (FLC, FRC, YA, YB, ZA, ZB)
WCF3 - 1000 - FLC

Alterations Code	Extrusion Cut		Counterbore on the Side Slots																	
	FLC·FRC	YA, YB, ZA, ZB																		
Spec.	The extrusion ends are cut.	<table border="1"> <thead> <tr> <th>Nominal</th> <th>X</th> <th>Y</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>210</td> <td>80</td> <td>25</td> </tr> <tr> <td>4</td> <td>300</td> <td>100</td> <td>25</td> </tr> <tr> <td>5</td> <td>340</td> <td>120</td> <td>45</td> </tr> </tbody> </table>	Nominal	X	Y	S	3	210	80	25	4	300	100	25	5	340	120	45	Adds counterbored holes for nuts on desired positions of the side slots. Use YA or YB as the code intended to specify the distance from the left end (on Plane Y) and ZA or ZB as the code intended to specify the distance from the right end (on Plane Z). Part Number: Machine Applicable Mat. (US Class 1) WCF3 Ø12 M6 or M5 WCF4 Ø12 M6 or M5 WCF5 Ø16 M8	
	Nominal	X	Y	S																
3	210	80	25																	
4	300	100	25																	
5	340	120	45																	
<table border="1"> <thead> <tr> <th>Ordering Code</th> <th>FLC, FRC</th> </tr> </thead> <tbody> <tr> <td>Ⓢ L-X-Y≥10</td> <td></td> </tr> </tbody> </table>	Ordering Code	FLC, FRC	Ⓢ L-X-Y≥10		<table border="1"> <thead> <tr> <th>Ordering Example</th> <th>1mm Increment</th> </tr> </thead> <tbody> <tr> <td>ZA50-ZB200</td> <td></td> </tr> <tr> <td>(Ordering Code) ZA150</td> <td></td> </tr> <tr> <td></td> <td>ZA100-ZB250</td> </tr> </tbody> </table>	Ordering Example	1mm Increment	ZA50-ZB200		(Ordering Code) ZA150			ZA100-ZB250	Ⓢ YA, ZA≥10 Ⓢ L-YA, L-ZA≥10 Ⓢ L-YB, L-ZB≥10 Ⓢ YB-YA, ZB-ZA≥10						
Ordering Code	FLC, FRC																			
Ⓢ L-X-Y≥10																				
Ordering Example	1mm Increment																			
ZA50-ZB200																				
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	ZA100-ZB250																			

Double Speed Sprockets

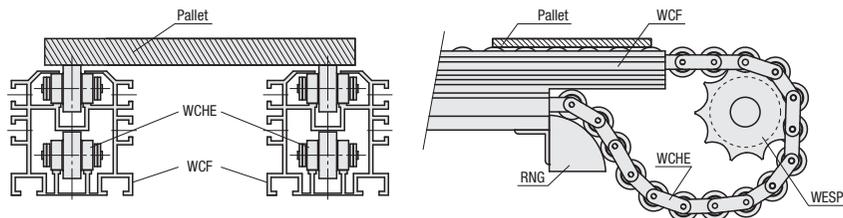
WESP



Part Number Type	Nominal	Number of Teeth	Shaft Bore Dia.			Dp	Do	T	H	L	l	A	Unit Price 1 ~ 10 pc(s).		
			S Specification (Dh8)	H Specification (Dh7)	N Specification (Dh7)								Shaft Bore Spec. S	Shaft Bore Spec. H	Shaft Bore Spec. N
(Sprocket) WESP	3	9	14	15 20	15 20	55.70	63	3	33	22	4	15.3			
	4	10	14	15 20	15 20	61.65	68	3	37	25	5	15.3			
	5	10	19	20 25	20 25	82.20	93	4	52	40	8	21.5			

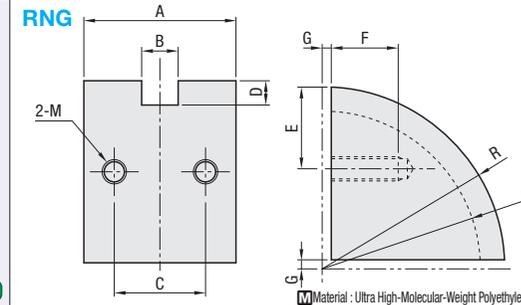
Ordering Example: Part Number - Number of Teeth - Shaft Bore Specifications, ID.
WESP3 - 10 - H15

Example



Return Guides

RNG



Part Number Type	Nominal	A	B	C	D	E	M	r	R	F	G	Unit Price
RNG	4	50	12	30	8	30	M8	52	60	25	3	
	5	44	14	20	10	52	M8	54	64	25	3	

Ordering Example: Part Number
RNG3

Alterations: Part Number - (SET)
RNG3 - SET

Alterations Code	Bracket Set																																									
	SET																																									
Spec.	Bracket set is shipped with Return Guide. (Ordering Code) SET																																									
	<p>Ⓢ Screws are not included. Ⓢ Material: A6063T5</p>																																									
	<table border="1"> <thead> <tr> <th>Nominal</th> <th>L</th> <th>F</th> <th>G</th> <th>d1</th> <th>d2</th> <th>S</th> <th>P</th> <th>Q</th> <th>t</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>34</td> <td>6.75</td> <td>6</td> <td>6.5</td> <td>6.5</td> <td>25</td> <td>18</td> <td>17</td> <td>3</td> </tr> <tr> <td>4</td> <td>60</td> <td>7.75</td> <td>15</td> <td>8.5</td> <td>8.5</td> <td>30</td> <td>20</td> <td>17</td> <td>3</td> </tr> <tr> <td>5</td> <td>62</td> <td>9</td> <td>21</td> <td>8.5</td> <td>8.5</td> <td>35</td> <td>24</td> <td>20</td> <td>4</td> </tr> </tbody> </table>	Nominal	L	F	G	d1	d2	S	P	Q	t	3	34	6.75	6	6.5	6.5	25	18	17	3	4	60	7.75	15	8.5	8.5	30	20	17	3	5	62	9	21	8.5	8.5	35	24	20	4	
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