

Supporting ideal lifting work with outstanding quality

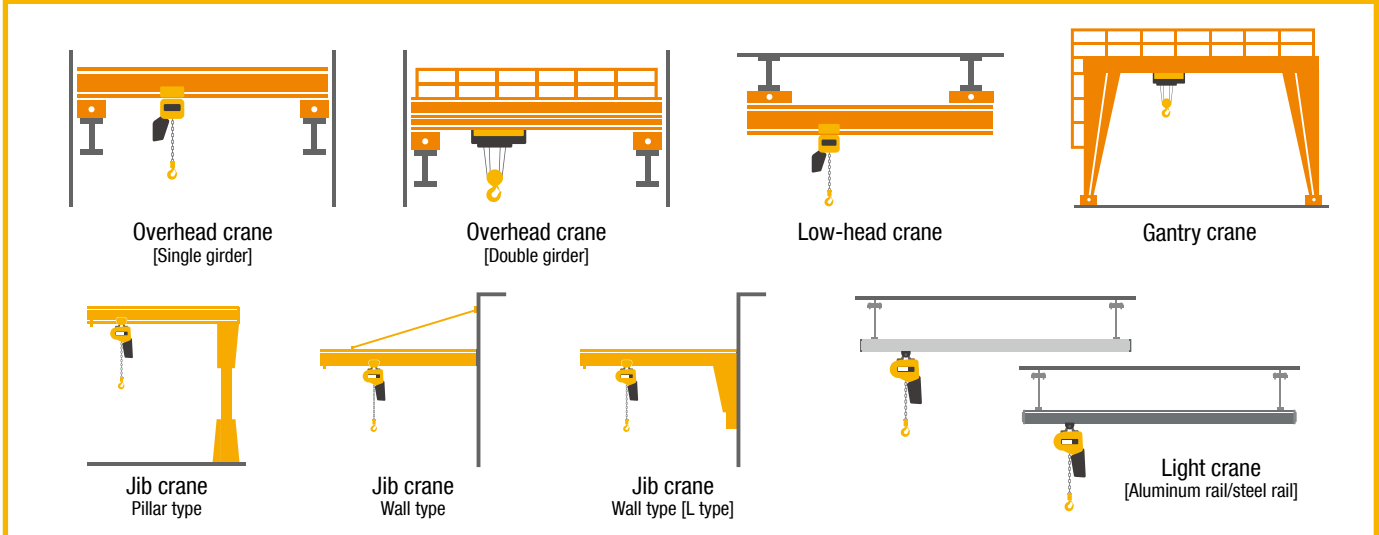
KITO CHAIN SLING 100 ***S5 Series***



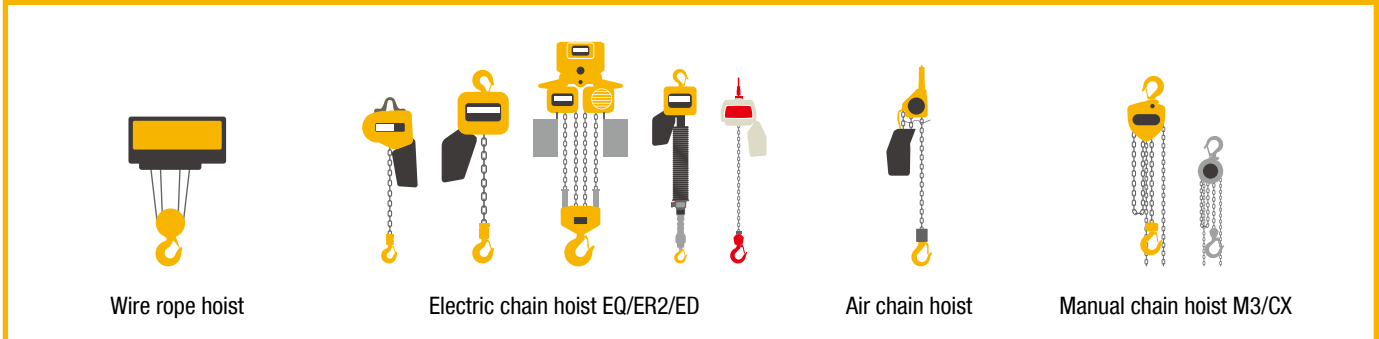
KITO provide all equipment from crane to below the hook devices.

KITO provide total crane system combining various crane & hoist, and manufacture custom-made design according to customers demanding.

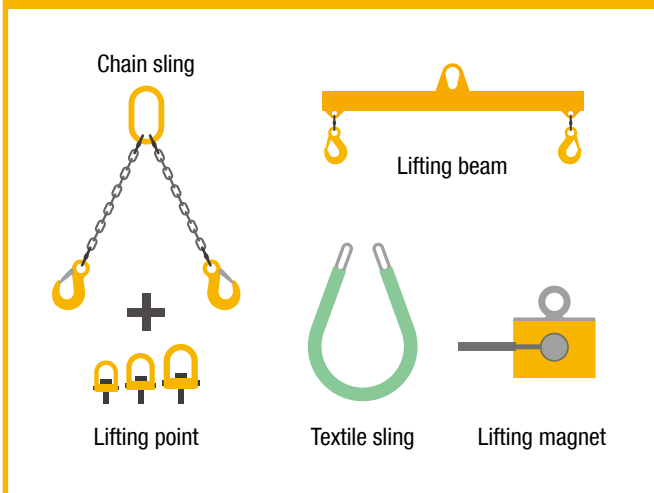
Each Type of Crane



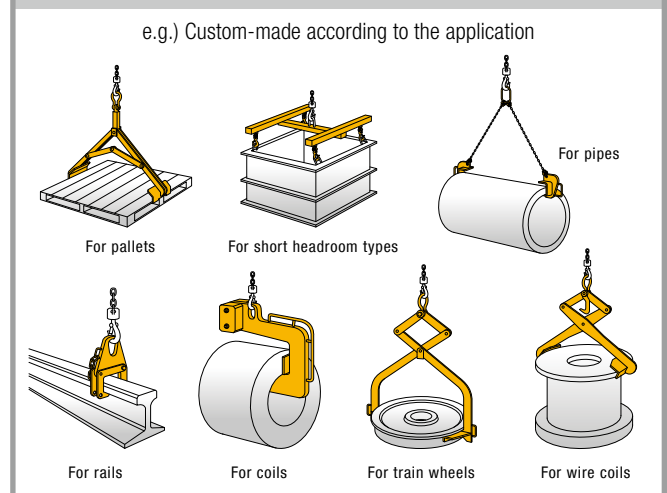
Each Type of Hoist



Variety of Sling and Device



Custom Lifting





INDEX

KITO Chain Sling 100 [S5 Series]

Applications	4
Features of the KITO Chain Sling 100 [S5 Series]	6
Link Chain Specification Table	6
KITO Sling Tag	7
Table of Lifting and Working Load Limits	8
How to select of slings	9

Fittings Components

Examples of Fittings Embossed Marking	10
Selection Table of Kit of Pin for Clevis Hook	11
Clevis Type [Fittings Components]	12
Eye Type [Fittings Components]	14

Assembled

How to Understand Each Code

Clevis Type [Assembled]	18
•Single Leg Sling •Double Leg Sling	19
•Triple Leg Sling •Quadruple Leg Sling	
Eye Type [Assembled]	20
•Single Leg Sling •Double Leg Sling	21
•Triple Leg Sling •Quadruple Leg Sling	
Eye Type (HMF) [Assembled]	22
•Triple Leg Sling •Quadruple Leg Sling	

Examples of Components

[Clevis Type/Eye Type] •The case of $\phi 7$ mm chains

KITO Large Master Link HMG/HMH

Large Master Link HMG/HMH Specification Table	25
Combinations of Hi-coupling for Use with the Large Master Link HMG/HMH	25
Eye Type (HMG/HMH) [Assembled]	
•Single Leg Sling •Double Leg Sling	26
•Triple Leg Sling •Quadruple Leg Sling	27

Precautions for Use/ Recommendations for Correct Equipment Administration	Back Cover
--	------------



Since one of the most trustworthy companies for hoist and crane in this industry, KITO can realize the following qualities

**KITO's Sling Chain is high quality
as same as load chain used with Hoists.**



Grade 10

**Comply with
JIS standard**

**Safety
factor 5:1**

**Original
durability
testing**

**Strict
external
appearance
standards**



Features of the KITO Chain Sling 100 [S5 Series]

Advanced chain manufacturing technologies realize outstanding link chains

[Ultimate Elongation]

KITO link chains have both a high breaking stress and toughness due to the advanced chain manufacturing technologies that are utilized. This is verified by the numerical value of 20% or more achieved for the ultimate elongation based on the JIS standards requirements.

[Bending capacity]

Concerning the strength in the link bending direction, the use of advanced welding technologies gives the links sufficient absorbability as shown by the photograph (right) of the result of bending test, and no breakage or cracking occurs. (However, this does not indicate that the product should be used until it reaches the condition shown in the photograph.)

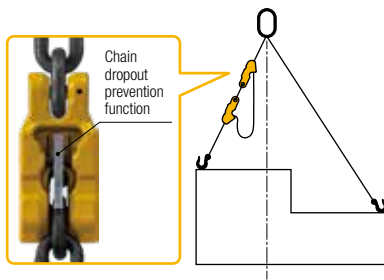


"Adjustment of length" can be made, which is not possible when using wires

Chain slings can have their lengths adjusted in single link units to conduct load tilt adjustment or quickly change the sling length, which is not possible when using wires. Depending on the application, the shortening clutch (VWW) should be used.

Shortening Clutch (VWW)

When using with workload with different heights on the left and right, the Shortening Clutch can be used to shorten the chain on one side, enabling well-balanced work. Also, the Shortening Clutch has a chain dropout prevention function so that the chain will not drop out unexpectedly. Once the length has been set, work can be conducted repeatedly.



Wide range of variations allow selection of the optimum combination for any application

Standard link chains are provided in various diameters from $\varnothing 6.0\text{mm}$ to $\varnothing 20.0\text{mm}$ to support work lifting heavy and large-sized objects. The link chain and fitting combinations offer clevis-type products with exclusive retaining pins, and eye-type products which use Hi-couplings. Since a wide range of fittings are also available, it is possible to freely select from among single leg, double leg, triple leg, quadruple leg, and endless types to match the usage purpose.



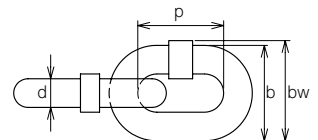
Allows use even in severe working environments.

The KITO Chain Sling 100 [S5 Series] is actively utilized even in severe working environments. Nickel-plated chain specifications, which are resistant to rusting, are recommended for environments that are greatly affected by rainwater, seawater, steam and chemicals. Please consult KITO when you intend to use products for special applications such as in acid or alkaline solutions.

* Please contact KITO for chain slings other than standard products.

Link Chain Specification Table

Chain Diameter d (mm)	Code	Working Load Limit (t)	Pitch p (mm)	Outside Width b (mm)	Maximum Outside Width bw (mm)	Breaking Force (kN)	Mass (Weight) per Meter (kg)
$\varnothing 6.0$	SV2060	1.1	18.0	21.8	22.2	56.5	0.83
$\varnothing 7.0$	SV2070	1.5	21.0	25.4	25.9	77	1.15
$\varnothing 8.0$	SV2080	2.0	24.0	29.0	29.6	101	1.43
$\varnothing 10.0$	SV2100	3.2	30.0	36.2	37.0	160	2.23
$\varnothing 13.0$	SV2130	5.2	39.0	45.5	48.1	268	3.78
$\varnothing 16.0$	SV2160	8.0	48.0	56.0	59.2	402	5.85
$\varnothing 20.0$	SV2200	12.5	60.0	70.0	74.0	630	9.5



•Comply with JIS standard.

KITO Sling Tag

Every KITO CHAIN SLING 100 [S5 Series] product has a KITO Sling Tag attached. The KITO Sling Tag is an important item for carrying out safe work, so be sure to confirm that the tag is attached to the product before starting work.

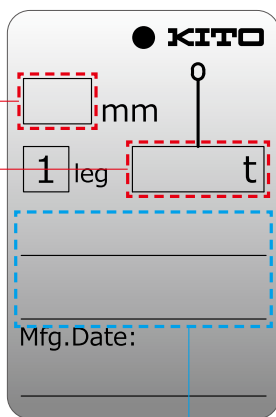
KITO gives its primary consideration to safety.



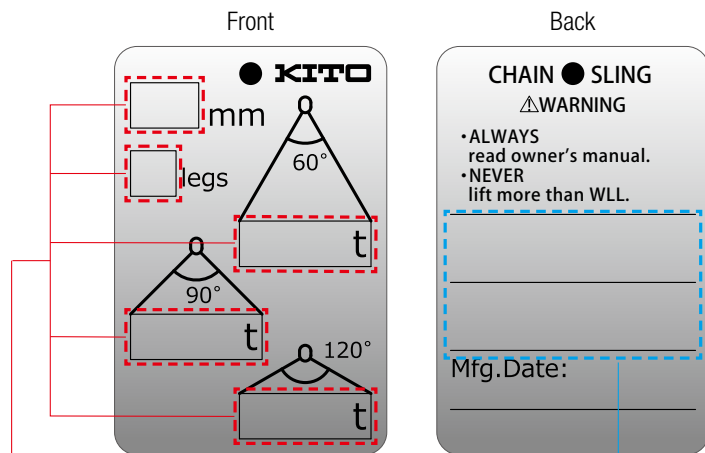
The following important information is described on the Kito Sling Tag.

Method of Lifting and Working Load Limits	Manufacture Date	Chain Diameter	Management Number (Optional)
---	------------------	----------------	------------------------------

For Single Leg Sling



For Double/ Triple/ Quadruple Leg Sling



Be certain to use the sling within the range of the working load limits that are indicated on the tag. The working load limits and angles of loading are inscribed based on the "Method of Lifting and working Load Limits" on page 8.

Because a space is prepared on the tag so that customers can write an optional administration number, please use this for your product safety administration.

Table of Lifting and Working Load Limits

•KITO CHAIN SLING 100 [S5 Series] •Large Master Link HMG/HMH and Master Link with Sub Links HMF

Note

Note that in the case of using the Large Master Link HMG/HMH or the Master Link HMF with Sub Links, the “Slinging Methods and W.L.L. (Working Load Limits)” will be different. Please refer to the appropriate tables and use the product within the range of the working load limits.

Reductions in the Working Load Limits

In order to use products safely over a long period, when using products under the conditions described on the right, the working load limits should be reduced to 80% and the appropriate slings should be selected.

- 1** Work that is carried out with high frequency or when the working load is applied continuously
- 2** Work in which vibration is applied continuously
- 3** Usage by incorporation in an automatic line

(Unit: t)

Slinging Method	Slinging with Fittings			Slinging with Fittings																					
	*			*						*						*						Choke Hitch			
	Single Leg	Double Legs		Triple and Quadruple Legs			Double Legs			Double Legs			Quadruple Legs			Quadruple Legs			Single Leg	Double Legs		Double Choke Hitch			
Angle of Loading θ	—	60°	90°	120°	60°	90°	120°	60°	90°	120°	60°	90°	120°	60°	90°	120°	60°	90°	120°	—	60°	90°	120°	—	
Chain Diameter (mm)	ø6.0	1.1	1.7	1.5	1.1	2.4	2.1	1.5	1.7	1.5	1.1	1.2	1.1	0.7	2.4	2.1	1.5	1.8	1.5	1.1	0.7	1.2	1.1	0.7	1.1
	ø7.0	1.5	2.4	2.1	1.5	3.2	2.8	2.0	2.4	2.1	1.5	1.6	1.5	1.0	3.2	2.8	2.0	2.5	2.1	1.5	1.0	1.6	1.5	1.0	1.5
	ø8.0	2.0	3.2	2.8	2.0	5.0	4.0	2.8	3.2	2.8	2.0	2.2	2.0	1.4	5.0	4.0	2.8	3.6	2.8	2.0	1.4	2.2	2.0	1.4	2.0
	ø10.0	3.2	5.1	4.5	3.2	8.0	6.4	4.5	5.1	4.5	3.2	3.6	3.2	2.2	8.0	6.4	4.5	5.6	4.5	3.2	2.2	3.6	3.2	2.2	3.2
	ø13.0	5.2	8.0	7.3	5.2	12.5	10.4	7.3	8.0	7.3	5.2	5.7	5.2	3.6	12.5	10.4	7.3	9.0	7.3	5.2	3.6	5.7	5.2	3.6	5.2
	ø16.0	8.0	12.5	11.2	8.0	20.0	16.0	11.2	12.5	11.2	8.0	9.0	8.0	5.6	20.0	16.0	11.2	14.0	11.2	8.0	5.6	9.0	8.0	5.6	8.0
	ø20.0	12.5	20.0	18.0	12.5	32.0	25.0	18.0	20.0	18.0	12.5	14.0	12.5	9.0	32.0	25.0	18.0	22.4	18.0	12.5	9.0	14.0	12.5	9.0	12.5

When Using the Large Master Link HMG/HMH	ø6.0	1.1	1.7	1.5	1.1	2.0	2.0	1.5	1.7	1.5	1.1	1.2	1.1	0.7	2.0	2.0	1.5	1.8	1.5	1.1	0.7	1.2	1.1	0.7	1.1
	ø7.0	1.5	2.0	2.0	1.5	3.2	2.8	2.0	2.0	2.0	1.5	1.6	1.5	1.0	3.2	2.8	2.0	2.5	2.1	1.5	1.0	1.6	1.5	1.0	1.5
	ø8.0	2.0	3.2	2.8	2.0	5.0	4.0	2.8	3.2	2.8	2.0	2.2	2.0	1.4	5.0	4.0	2.8	3.6	2.8	2.0	1.4	2.2	2.0	1.4	2.0
	ø10.0	3.2	5.0	4.5	3.2	8.0	6.4	4.5	5.0	4.5	3.2	3.6	3.2	2.2	8.0	6.4	4.5	5.6	4.5	3.2	2.2	3.6	3.2	2.2	3.2
	ø13.0	5.0	8.0	7.3	5.2	11.5	10.4	7.3	8.0	7.3	5.2	5.7	5.2	3.6	11.5	10.4	7.3	9.0	7.3	5.2	3.6	5.7	5.2	3.6	5.2
	ø16.0	8.0	11.5	11.2	8.0	—	—	—	11.5	11.2	8.0	9.0	8.0	5.6	—	—	—	—	—	—	5.6	9.0	8.0	5.6	8.0
	ø20.0	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0	—	—	—	—

When Using the Master Link with Sub Links HMF	ø6.0					2.8	2.2	1.5							2.8	2.2	1.5	1.9	1.5	1.1					
	ø7.0					3.8	3.0	2.1							3.8	3.0	2.1	2.6	2.1	1.5					
	ø8.0					5.0	4.0	2.8							5.0	4.0	2.8	3.5	2.8	2.0					
	ø10.0	—	—	—	—	8.0	6.4	4.5	—	—	—	—	—	—	8.0	6.4	4.5	5.6	4.5	3.2	—	—	—	—	—
	ø13.0					13.0	10.4	7.3							13.0	10.4	7.3	9.1	7.3	5.2					
	ø16.0					20.0	16.0	11.2							20.0	16.0	11.2	14.0	11.2	8.0					
	ø20.0					32.0	25.0	18.0							32.0	25.0	18.0	22.4	18.0	12.5					

•For slinging methods that have a “*” mark, in situations where the chain is used by hooking on a grab hook (in order to adjust the length, etc.) the working load limits will become 70% of the values shown in the above table. For slinging methods that do not have a “*” mark, no load reduction will be required.

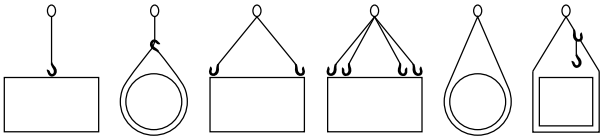
•The yellow-colored numerical values in the tables are exclusive values for “When Using the Large Master Link HMG/HMH” and “When Using the Master Link HMF with Sub Links” respectively.

How to select of slings

What is the **form** of the suspended load?

► Sling type selection

Number of legs, fittings, slinging methods
Clevis type or eye type



What is the **weight** of the suspended load?

► Confirmation of the working load limits according to the slinging method

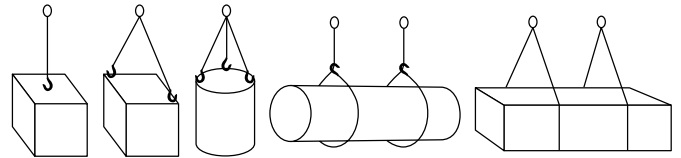
(Refer to the page at left)



► Determination of the reach

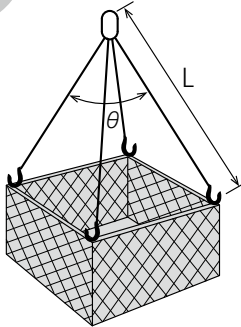
(Calculation of the angle of loading θ)

► Determination of the chain diameter



In case two-set slinging is necessary, calculation should be carried out assuming that half of the suspended load weight when using one set will be applied to each chain sling. In this situation, it will be important to take care that equal loading is applied to the two sets.

Selection Example 1



Load form = Box pallet

- Clevis type
- Quadruple leg slings with sling hooks (with hook latches)

Weight = 2t

- Reach: L 1m
- The W.L.L. is 2.1t at $\theta = 90^\circ$ for 6mm

Regarding the set product codes, refer to "KITO Assembled [How to Understand Each Codes]" on page 17.

1 set

Q-VD-VSL4 · 6.0mm-1.0m

Set product classification

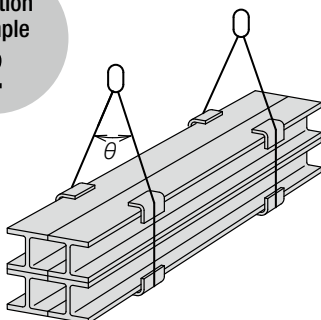
Top fitting type

Bottom fitting type

Chain diameter

Dimension L

Selection Example 2



Load form = H-beams (400 x 400)

- Lifting of 4 beams together
- Eye type
 - Endless sling 2 sets

Total weight = 7t

- Weight that can be supported by one sling set: 3.5t
- Reach: L 2.7m
 - The W.L.L. is 4.0t (5.7t x 0.7) at $\theta = 50^\circ$ for 13mm
 - 0.7 is the reduction due to the use of square H-beams.

2 set

D-HMM-00 · 13mm-2.7m

In the case of the selection example 2, both slings must be loaded equally.

In endless slinging, because the angle of loading will change according to the dimensions of the load, before use be certain to confirm the angle of loading and use the products within the range of the working load limits.



KITO CHAIN SLING 100 [S5 Series]

Fittings Components

Clevis-type and eye-type fittings components are available for KITO CHAIN SLING 100 products. Selection can be made from among a wide range of types to match the usage purposes.

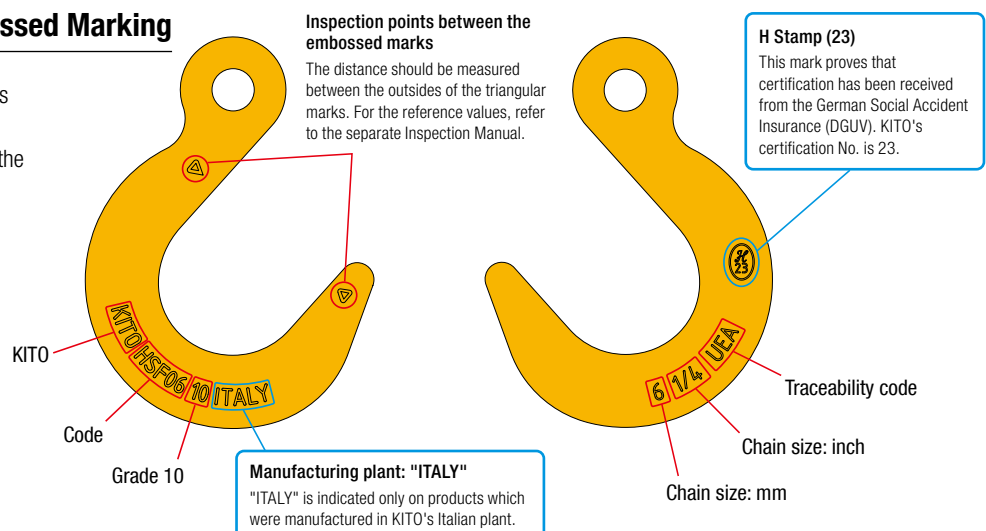


Examples of Fittings Embossed Marking

All fittings have the embossed markings shown at right.

The markings indicate items including the inspection points, code and chain size, which will be useful during inspections before work and for confirmation.

* The markings shown inside the blue boxes (the H Stamp and the manufacturing plant: "ITALY") are only embossed on products which were manufactured in Italy.



Selection Table of Kit of Pin for Clevis Hook

There are two colors of chain pins, gray and black. For more details, refer to the description below.

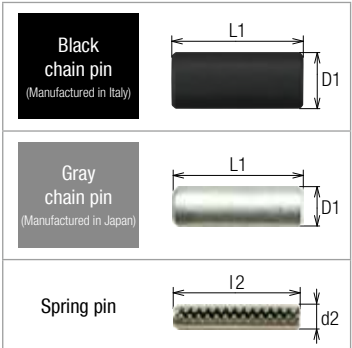
Before starting chain pin replacement work, it will be necessary to certainly confirm that the fitting code is appropriate by checking the label of the kit of pin.

Note: If mistaken work is conducted by inserting spring pins into fitting holes which do not match the spring pin diameter, it is possible that the spring pins and chain pins may drop out.

All clevis-type fittings have chain pins and spring pins packed together with them.

When purchasing as spares, the color of these pins may differ from the colors of the chain pins that were packaged together with the product when it was purchased. However, it has no problem in practical use.

Case	Chain pin		Fittings to apply										
	Packed with product	Purchased as spares	VGG20	VSR06	VA	VB	VC	VD	VE	VN	VR	VSL4	VSL2
A	Black	Black											
B	Gray	Gray											
C	Black or Gray	Black	Other than VGG20 	VSF 									
D	Gray	Black	VWW 										



Chain Diameter (mm)	Code	Chain Pin D1 x L1 (mm)	Spring Pin d2 x l2 (mm)	Applicable Fittings										
				VSF	VGG	VWW	VSR	VA	VB	VC	VR	VSL		
ø6.0	VPA06	ø7.5x17.5	ø2.5x16											
	VP2060K		ø3x20											
ø7.0	VPA07	ø9x22.5	ø3x22											
	VP2070K		ø3x25											
	VP2070		ø3x20											
ø8.0	VPA08	ø10x22.5	ø3x22											
	VP2080K		ø3x25											
ø10.0	VPA10	ø13x31.5	ø3.5x28											
	VP2100K		ø4x32											
	VP2100B	ø13x29.5	ø3x26											
ø13.0	VPA13	ø16x42	ø4x35											
	VP2130K		ø5x40											
	VP2130B	ø16x37	ø4x36											
ø16.0	VPA16	ø21x51.5	ø4.5x40											
	VP2160K		ø5x50											
	VP2160B	ø20x52	ø4.5x40											
ø20.0	VPA20	ø25x73	ø5x50											
	VP2200K	ø24x73	ø6x63											
(ø20.0)	VP2250	ø32x95	ø10x70											

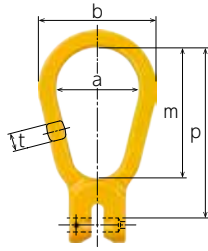
Clevis Type [Fittings Components]

- When assembling the fittings components, assemble them correctly according to the separate "Assembly Manual".
- The specifications of clevis-type fittings components are shown in the tables below. For the link chain specification table, refer to page 6.
- Each fitting has the chain pins and spring pins attached.
- The weight of each fitting includes the weights of the chain pins and spring pins.

Clevis Master Link

VE

►For single leg slings

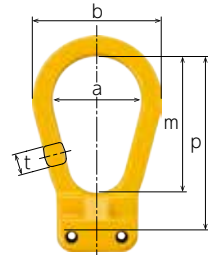


Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	a	b	m	t	
1.1	ø6	VE2060	115	56	79	90	11.5	0.38
1.5	ø7	VE2070	131	63	91	100	14	0.65
2.0	ø8	VE2080	130.5	71	105	110	17	1.1
3.2	ø10	VE2100	146	80	122	125	21	2.2
5.2	ø13	VE2130	169.5	90	142	145	26	4.3
8.0	ø16	VE2160	199	112	176	180	32	8.5
12.5	ø20	VE2200	250	140	220	225	40	14.9

Clevis Master Link

VD

►For double leg slings
►For triple and quadruple leg slings
(Using Single Connector VA or Dual Connector VB)

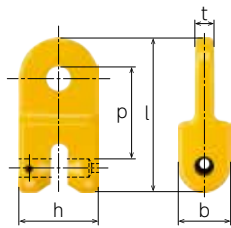
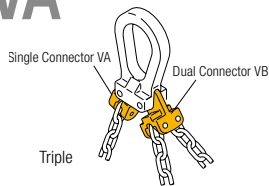


Working Load Limit (t)	Chain Diameter (mm)		Code	Dimensions (mm)					Mass (Weight) (kg)
	D	T,Q		p	a	b	m	t	
1.7	ø6	—	VD206	125	63	91	100	14	0.75
2.4	ø7	ø6	VD20706	140	71	105	110	17	1.2
3.2	ø8	ø7	VD20807	139.5	80	122	125	21	2.2
5.1	ø10	ø8	VD21008	159	90	142	140	26	4.1
8.0	ø13	ø10	VD21310	179.5	112	176	180	32	8.0
12.5	ø16	ø13	VD21613	224	140	220	225	40	14.9
20.0	ø20	ø16	VD22016	279	180	280	280	50	30.2
32.0	—	ø20	VD20020	359	220	320	320	60	45.0

•The chain diameters D and TQ show the number of sling legs. D: Double leg slings, TQ: Triple and quadruple leg slings

Single Connector

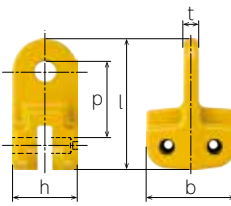
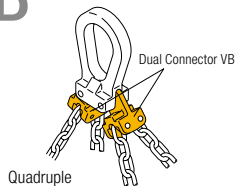
VA



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	h	b	l	t	
1.1	ø6	VA2060	39.5	38	22	69	7	0.23
1.5	ø7	VA2070	43	44	27	75.5	8	0.31
2.0	ø8	VA2080	50	54	34	102	12.5	0.72
3.2	ø10	VA2100	59	66	42	132	16	1.5
5.2	ø13	VA2130	80	84	54	167	20	3.0
8.0	ø16	VA2160	99	102	68	201	25	5.3
12.5	ø20	VA2200	119.5	125	80	245	30	9.0

Single Connector

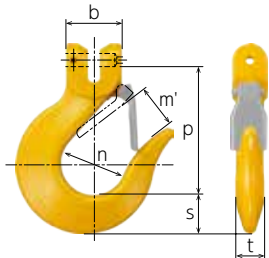
VB



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	h	b	l	t	
1.7	ø6	VB2060	39.5	38	48	70	7	0.34
2.4	ø7	VB2070	43	44	57	77	8	0.47
3.2	ø8	VB2080	50	54	72	104	12.5	1.2
5.1	ø10	VB2100	59	66	90	134	16	2.3
8.0	ø13	VB2130	80	84	114	170	20	4.9
12.5	ø16	VB2160	99	102	142	205	25	8.6
20.0	ø20	VB2200	119.5	125	160	245	30	13.5

Sling Hook

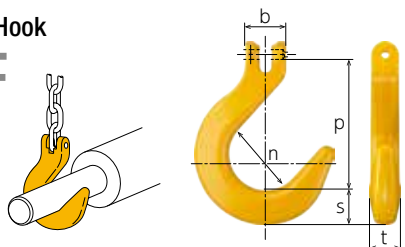
VSL (VSL4)



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)	
			p	b	n	m'	s		t
1.1	ø6	VSL4060	85	38	45	26	24.5	18	0.55
1.5	ø7	VSL4070	100	44	50	31	30	21.8	0.94
2.0	ø8	VSL4080	99.5	54	56	39	37.5	27.2	1.7
3.2	ø10	VSL4100	119	66	63	46	47.5	34.5	3.5
5.2	ø13	VSL4130	140	84	75	53	60	45	7.0
8.0	ø16	VSL4160	168.5	102	95	68	75	56	11.8
12.5	ø20	VSL4200	209	125	110	80	90	65	19.0

Foundry Hook

VSF



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	b	n	s	t	
1.1	ø6	VSF06	92	27	53	26	21.5	0.68
1.5	ø7	VSF07	115.5	36.5	64	31	26	1.4
2.0	ø8	VSF08	115	42.5	78	36	32	2.3
3.2	ø10	VSF10	137	55	89	43	39	4.2
5.2	ø13	VSF13	163	70	101	50.5	45	6.7
8.0	ø16	VSF16	195	85	115	60	50	10.0

Clevis Type [Fittings Components]

[Clevis type]
Assembled

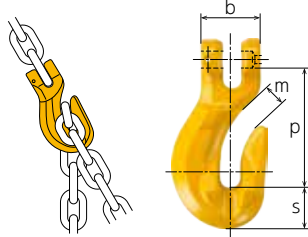
Single Leg Sling/Double Leg Sling

P22 ▶

Triple Leg Sling/Quadruple Leg Sling

P23 ▶

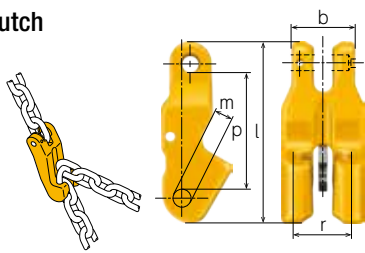
Grab Hook VGG



•In the case of using the Grab Hook VGG in combination with the chain, the working load limits will become 70% of the values in the table at right.

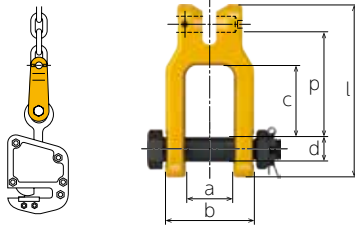
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)				Mass (Weight) (kg)
			p	b	m	s	
1.1	ø6	VGG06	50.5	27	8.5	17.6	0.24
1.5	ø7	VGG07	65.9	36.8	9.9	23.5	0.63
2.0	ø8	VGG08	64.9				
3.2	ø10	VGG10	83.1	42	14.2	29.4	1.1
5.2	ø13	VGG13	106.1	54	16.7	39.2	2.2
8.0	ø16	VGG16	128.9	67	21.9	45.8	4.0
12.5	ø20	VGG20	162.1	91	27.4	57.4	7.7

Shortening Clutch VWW



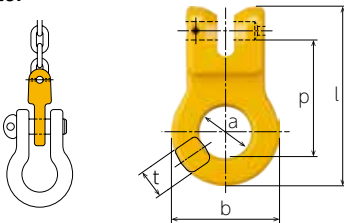
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	b	m	r	l	
1.1	ø6	VWW06	47	27	7.5	24	76	0.27
1.5	ø7	VWW07	63	36.5	8.8	27.5	99.5	0.6
2.0	ø8	VWW08	62					
3.2	ø10	VWW10	78	44	12.5	39	125	1.2
5.2	ø13	VWW13	102	57	16.5	50	163	2.7
8.0	ø16	VWW16	125	70	20	62.5	200	4.7

Shackle VN



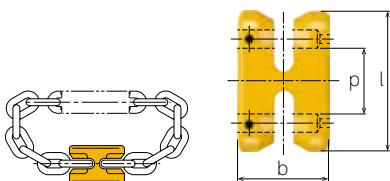
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)
			p	a	b	c	d	l	
1.1	ø6	VN2060	65	26.5	50	43	14	103	0.53
1.5	ø7	VN2070	70.5	30.5	60	47.5	17	116	0.89
2.0	ø8	VN2080	70						
3.2	ø10	VN2100	79.5	34	68	53	20	135.5	1.5
5.2	ø13	VN2130	99.5	43	85	67	25	169	2.7
8.0	ø16	VN2160	124.5	54	106	84	32	214	5.8
12.5	ø20	VN2200	160.5	68.5	135	105	40	271.5	11.4

Single Connector VC



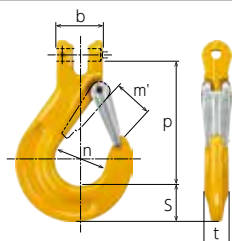
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	a	b	l	t	
1.1	ø6	VC2060	50	18.5	45	77.5	13.5	0.28
1.5	ø7	VC2070	65	26.5	60	99.5	17	0.51
2.0	ø8	VC2080	64.5					
3.2	ø10	VC2100	79	32.5	74	123	21.5	1.0
5.2	ø13	VC2130	99.5	42	94	154	26.5	2.0
8.0	ø16	VC2160	124	54	120	194	33.5	4.2
12.5	ø20	VC2200	159	67.5	150	246	42	8.3

Endless Connector VR



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)			Mass (Weight) (kg)
			p	b	l	
1.1	ø6	VR2060	25.5	38	55	0.24
1.5	ø7	VR2070	31	44	67	0.41
2.0	ø8	VR2080	30			0.42
3.2	ø10	VR2100	39	54	86	0.83
5.2	ø13	VR2130	50	66	108	1.6
8.0	ø16	VR2160	64	84	139	3.5
12.5	ø20	VR2200	80	102	172	6.4

Sling Hook (Small Hook) VSR VSL (VSL2)

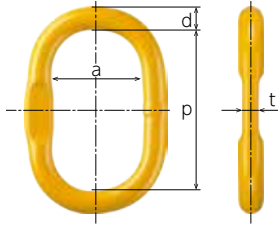


Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)
			p	b	n	m'	s	t	
1.1	ø6	VSR06	69	26.5	30	19	21	16.5	0.28
1.5	ø7	VSL2070	95	36	39	25	28	19	0.55
3.2	ø10	VSL2100	110	44.5	47	29	33	25	1.0
5.2	ø13	VSL2130	136	51	58	37	41	30	1.7
8.0	ø16	VSL2160	155	67	64	43	49	37.5	3.2

Eye Type [Fittings Components]

- When assembling the fittings components, assemble them correctly according to the separate "Assembly Manual".
- The specifications of eye-type fittings components are shown in the tables below. For the link chain specification table, refer to page 6.
- In addition to using the eye-type components by assembling them as KITO CHAIN SLING 100 products, they can also be used for many other purposes.
- Each fitting is not provided with a Hi-coupling HC. This should be ordered at the same time when placing the order for the fitting.

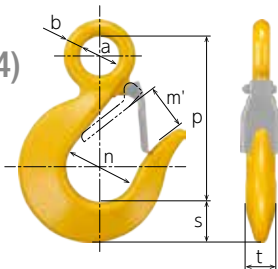
Master Link HMM



Working Load Limit (t)	Chain Diamete (mm)			Code	Dimensions (mm)				Mass (Weight) (kg)
	S	D	T,Q		p	a	d	t	
1.1	ø6	—	—	HMM0706	110	60	13.5	12	0.34
1.7	ø7	ø6	—						
2.4	ø8	ø7	ø6	HMM0807			16	13.5	0.53
3.2	ø10	ø8	ø7	HMM1008	135	75	19	15.5	0.92
5.2	ø13	ø10	ø8	HMM1310	160	90	23	19.5	1.6
8.0	ø16	ø13	ø10	HMM1613	180	100	27	21.5	2.5
12.5	ø20	ø16	ø13	HMM2016	200	110	33	27.5	4.2
20.0	—	ø20	ø16	HMM2220	275	150	38	31.5	7.5

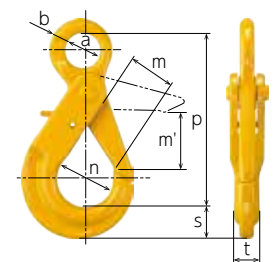
•The chain diameters S, D and TQ show the number of sling legs. S: Single leg slings, D: Double leg slings, TQ: Triple and quadruple leg slings

Sling Hook HTL (HTL4)



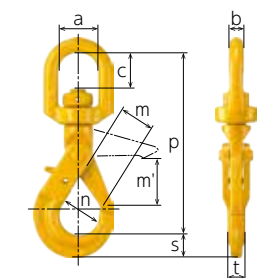
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)							Mass (Weight) (kg)
			p	a	b	n	m'	s	t	
1.1	ø6	HTL4060	100	23	11	45	26	24.5	18	0.49
1.5	ø7	HTL4080	120	27	13.5	50	31	30	21.8	0.84
2.0	ø8									
3.2	ø10	HTL4100	140	32.5	17	56	39	37.5	27.2	1.6
5.2	ø13	HTL4130	171	38	21.5	63	46	47.5	34.5	3.0
8.0	ø16	HTL4160	200	46	26.5	75	53	60	45	5.7
12.5	ø20	HTL4200	250	54	34	95	68	75	56	10.4

Self Locking Hook HJJ



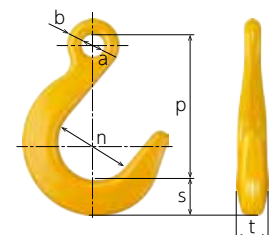
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)								Mass (Weight) (kg)
			p	a	b	n	m	m'	s	t	
1.1	ø6	HJJ06	110	21	12	35	28	28	20.5	16	0.56
1.5	ø7	HJJ08	136	27	12	43.5	34	34	26	20	1.0
2.0	ø8										
3.2	ø10	HJJ10	168.5	34.5	15	56	45	45	30	24.5	1.7
5.2	ø13	HJJ13	205	40	20	69	51.5	51.5	40	34.5	3.4
8.0	ø16	HJJ16	251.5	50	27	80	60	60	50	36.5	6.4

Swivel Hook HJK



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)								Mass (Weight) (kg)	
			p	a	b	c	n	m	m'	s		t
1.1	ø6	HJK06	160	35	13	32	35	28	28	20.5	16	0.84
1.5	ø7	HJK08	181	35	13	32	43.5	34	34	26	20	1.2
2.0	ø8											
3.2	ø10	HJK10	218.5	42	16	39	56	45	45	30	24.5	2.1
5.2	ø13	HJK13	267.5	50	20.5	45.5	69	51.5	51.5	40	34.5	4.2

Foundry Hook HSF

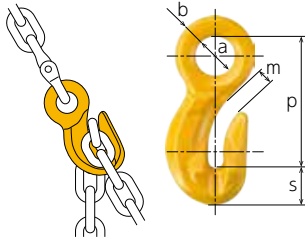


Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)
			p	a	b	n	s	t	
1.1	ø6	HSF06	102	15	11	53	26	21.5	0.65
1.5	ø7	HSF08	123	18	13.5	63	31	26	1.2
2.0	ø8								
3.2	ø10	HSF10	149	22	16	77	36	32	2.1
5.2	ø13	HSF13	173.5	27	19	88	43	39	3.5
8.0	ø16	HSF16	205	32	24	100	50	45	5.6
12.5	ø20	HSF20	237	38	27	115	61	51	8.1

Eye Type [Fittings Components]

[Eye Type] Assembled	Single Leg Sling/Double Leg Sling	P22 ▶
	Triple Leg Sling/Quadruple Leg Sling	P23 ▶

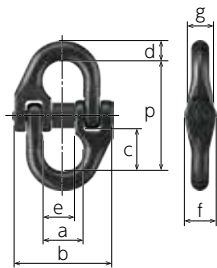
Grab Hook HGG



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	a	b	m	s	
1.1	ø6	HGG06	64	18	10.3	8.5	17.6	0.24
1.5	ø7	HGG08	83.1	24	13.6	9.5	24.4	0.57
2.0								
3.2	ø10	HGG10	106.1	31	16	14.2	29.4	1.1
5.2	ø13	HGG13	132	38	20	16.7	39.2	2.3
8.0	ø16	HGG16	166.5	48	27.1	21.9	46	4.2
12.5	ø20	HGG20	207.5	60	33	27.4	57.4	8.0

•In the case of using the Grab Hook HGG in combination with the chain, the working load limits will become 70% of the values in the table at right.

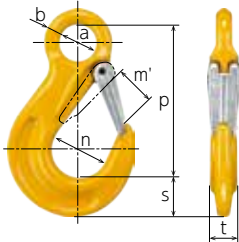
Hi-coupling HC



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)							Mass (Weight) (kg)	
			p	a	b	c	d	e	f		g
1.1	ø6	HC3060	48	16.8	45	17.5	8	14	14	11.2	0.1
1.5	ø7	HC3070	55	19.4	51	19	9.4	16.8	16	13.1	0.18
2.0	ø8	HC3080	63	22	57	23	10.6	17.5	18	15	0.21
3.2	ø10	HC3100	75	26.5	70	27	13.1	22.3	22	18.7	0.42
5.2	ø13	HC3130	96	34	89	36	16.8	28.8	30	24.3	0.86
8.0	ø16	HC3160	118	41.5	110	45	20	36	36	30	1.7
12.5	ø20	HC3200	142	52.5	136	53	25	45	45	37.5	3.2

Sling Hook (Small Hook)

HSR HTL (HTL2)

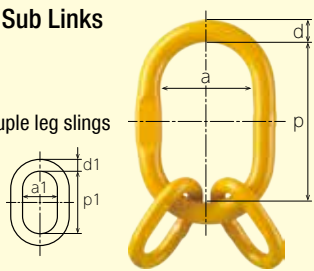


Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)	
			p	a	b	n	m'	s		t
1.1	ø6	HSR06	84.5	20	10	30	19	21	16.5	0.36
1.5	ø7	HTL2080	101	23.5	11	39	25	27	19	0.5
2.0										
3.2	ø10	HTL2100	131	32.5	16	47	29	33	26	0.97
5.2	ø13	HTL2130	159	41.5	19	58	37	43	33	1.9
8.0	ø16	HTL2160	183	48	24.5	64.5	43	48.5	40	3.3
12.5	ø20	HTL2200	203	52.5	27	76	52.5	53	51	4.5

The Master Link with Sub Links is a master link that has sub links attached. It should be used with triple leg slings or quadruple leg slings. Because the working load limits are different from those of the Master Link HMM (page 14), it has exclusive "Slinging Methods and W.L.L. (Working Load Limits)". Please refer to "When Using the Master Link with Sub Links HMF" described on page 8.

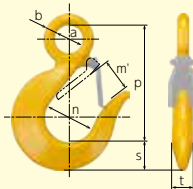
Master Link with Sub Links HMF

▶For triple and quadruple leg slings



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)
			p	a	d	p1	a1	d1	
2.8	ø6	HMF07	135	75	19	60	38	13.5	1.4
3.8									
5.0	ø8	HMF08	160	90	23	70	34	16	2.4
8.0	ø10	HMF10	180	100	27	85	40	20	3.9
13.0	ø13	HMF13	200	110	33	115	50	23	6.6
20.0	ø16	HMF16	275	150	38	140	65	27	11.5
32.0	ø20	HMF20	350	190	50	150	70	33	23.0

Sling Hook HTL005



Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)	
			p	a	b	n	m'	s		t
0.5	ø6	HTL005	84	19	8	35.5	22	17	12.1	0.20

The HTL005 and HSR06 allow combination with smaller-sized eye bolts than the HTL4060.

Working Load Limit (t)	Code	JIS Eye Bolts							JIS Eye Bolts	
		M8	M10	M12	M16	M20	M24	M30		
0.5	HTL005	Thickness c (mm)	6.3	8	10	12.5	16	20	25	
		Internal Diameter b (mm)	20	25	30	35	40	50	60	
1.1	HTL4060	Working Load Limit (kg)	80	150	220	450	630	950	1.5t	
		Combination	—	○	○	○	○	○	○	

The HTL005 should be used in combination with ø6mm chains and fittings components.

Slinging Method	Single Leg	Double Legs	Triple and Quadruple Legs		
6mm chain					
Hi-coupling HC3060					
Sling hook HTL005					
Angle of Loading θ	—	60°	90°	120°	60° 90° 120°
Working Load Limit (t)	0.5	0.8	0.71	0.5	1.25 1.0 0.71



KITO CHAIN SLING 100 [S5 Series]

Assembled

Clevis-type and eye-type fittings components are available for KITO CHAIN SLING 100 products.
Selection can be made from among a wide range of types to match the usage purposes.







Assembled [how to understand each codes]

The codes of the KITO Assembly Sets are configured from the three types described below.

1 Set Product Classification		2 Top Fitting	3 Bottom Fitting
S	Single leg sling Single chain suspension	VE Clevis Master Link VE VD Clevis Master Link VD	HGG Grab Hook HGG HJJ Self Locking Hook HJJ
D	Double leg sling Double chain suspension	HMM Master Link HMM HMG Master Link HMG	HJK Swivel Hook HJK HMM Master Link HMM
T	Triple leg sling Triple chain suspension	HMH Master Link HMH HMF Master Link with Sub Links HMF	HMG Master Link HMG HMH Master Link HMH
Q	Quadruple leg sling Quadruple chain suspension	VSL4 Sling Hook VSL (VSL4) VSR Sling Hook VSR06	HSF Foundry Hook HSF HTL4 Sling Hook HTL (HTL4)
		VSL2 Sling Hook VSL (VSL2) HTL4 Sling Hook HTL (HTL4)	HSR Sling Hook HSR06 HTL2 Sling Hook HTL (HTL2)
		HSR Sling Hook HSR06 HTL2 Sling Hook HTL (HTL2)	VC Single Connector VC VE Clevis Master Link VE
		VWW Shortening Clutch VWW	VSF Foundry Hook VSF VGG Grab Hook VGG
			VN Shackle VN VSL4 Sling Hook VSL (VSL4)
			VSR Sling Hook VSR06 VSL2 Sling Hook VSL (VSL2)
			VWW Shortening Clutch VWW 00 Endless





•This shows the basic system of Assembled.

[Example] Clevis Type

Single leg sling	1 S	2 VE	3 VSF	
Double leg sling	1 D	2 VD	3 VC	
Triple leg sling	1 T	2 VD	3 VN	
Quadruple leg sling	1 Q	2 VD	3 VSL4	

•A combination of a clevis type of top fitting and an eye type of bottom fitting is also available.

[Example] Eye Type

Single leg sling	1 S	2 HMM	3 HTL4	
Double leg sling	1 D	2 HMM	3 HSF	
Triple leg sling	1 T	2 HMM	3 HJK	
Quadruple leg sling	1 Q	2 HMM	3 HJJ	

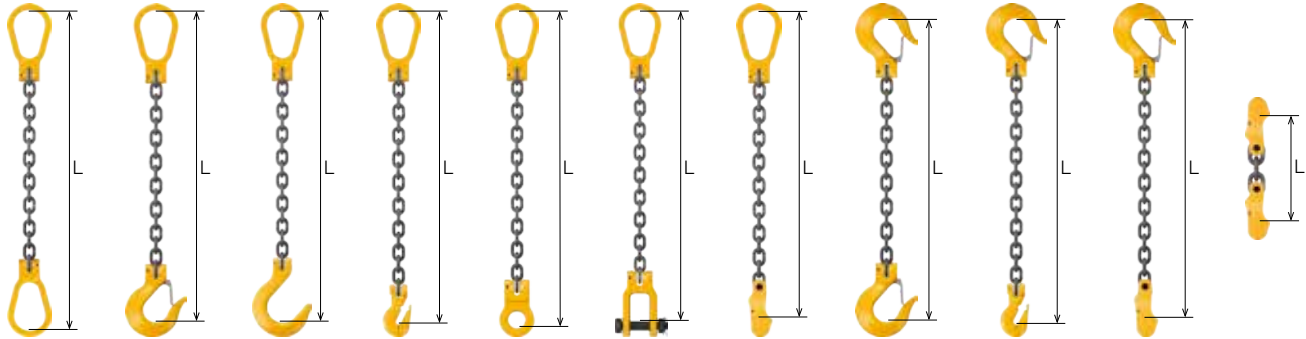
•A combination of an eye type of top fitting and a clevis type of bottom fitting is also available.

Clevis Type [Assembled] • Single Leg Sling • Double Leg Sling

The KITO Chain Sling 100 offers a wide range of types of Assembled, from single leg slings to quadruple leg slings, to realize selections that match the usage purposes. Further, since the assembly is extremely simple to carry out, link chains and fittings can be prepared as components in factories and workplaces so that they can be assembled for use whenever necessary to match the usage purpose.

- For slinging methods that have a "*" mark, in situations where the chain is used by hooking on a grab hook (in order to adjust the length, etc.) the working load limits will become 70% of the values shown in the table below. For more details, refer to "Table of Lifting and Working Load Limits" on page 8.
- Reaches (dimensions L) other than the values described in the table can also be supported, so please contact KITO for more information.
- The photographs of the Assembled show images of the combinations. The actual number of chain links will differ according to the dimension L, so contact KITO for more information.

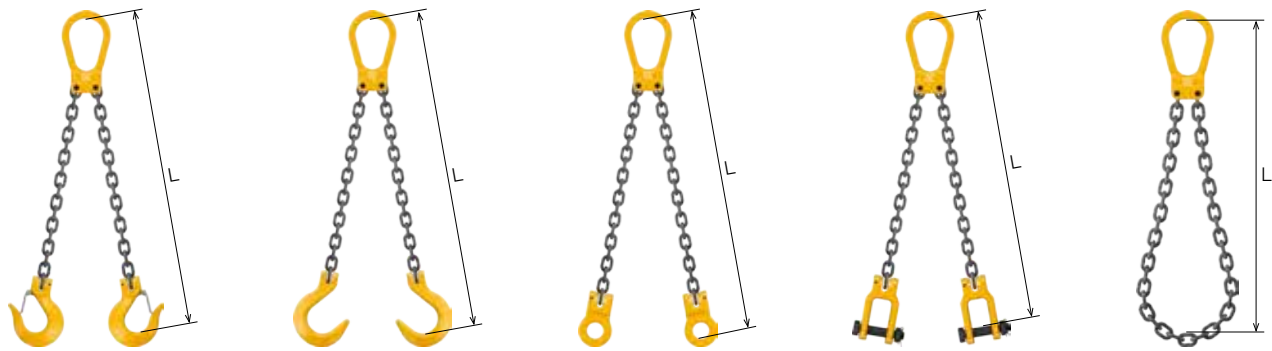
Clevis Type Single Leg Sling



S-VE-VE S-VE-VSL4 S-VE-VSF S-VE-VGG* S-VE-VC S-VE-VN S-VE-VWW S-VSL4-VSL4 S-VSL4-VGG* S-VSL4-VWW S-VWW-VWW

Working Load Limit (t)	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code												
			S-VE-VE	S-VE-VSL4	S-VE-VSF	S-VE-VGG*	S-VE-VC	S-VE-VN	S-VE-VWW	S-VSL4-VSL4	S-VSL4-VGG*	S-VSL4-VWW	S-VWW-VWW		
1.1	ø6(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.14
		Mass (Weight) of Kit	1.8	2.0	2.2	1.8	1.8	2.0	1.8	2.0	2.2	2.0	2.0	2.0	0.6
1.5	ø7(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.17
		Mass (Weight) of Kit	2.7	3.0	3.5	2.8	2.7	3.0	2.8	3.4	3.4	3.1	3.2	3.2	1.3
2.0	ø8(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.18
		Mass (Weight) of Kit	3.1	3.4	3.9	3.2	3.1	3.4	3.2	3.8	3.8	3.5	3.6	3.6	1.4
3.2	ø10(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.24
		Mass (Weight) of Kit	5.0	5.7	6.2	5.3	5.0	5.5	5.3	6.3	6.3	6.0	6.1	6.1	2.6
5.2	ø13(x1)	Reach: L	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.29
		Mass (Weight) of Kit	10.8	12.4	12.8	11.1	10.9	11.6	11.8	13.7	13.7	12.4	13.4	13.4	5.9
8.0	ø16(x1)	Reach: L	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.35
		Mass (Weight) of Kit	21.3	24.0	23.7	21.5	21.7	23.3	22.0	27.2	27.2	20.2	25.8	25.8	10.3
12.5	ø20(x1)	Reach: L	3.0	3.0	—	3.0	3.0	3.0	—	3.0	—	3.0	—	—	—
		Mass (Weight) of Kit	41.6	44.9	—	41.9	42.5	45.6	—	49.3	—	38.5	—	—	—

Clevis Type Double Leg Sling

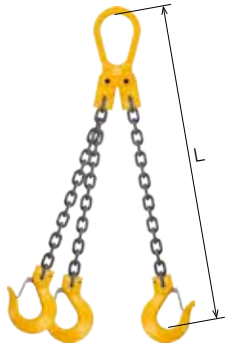


D-VD-VSL4 D-VD-VSF D-VD-VC D-VD-VN D-VD-00

Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			D-VD-VSL4	D-VD-VSF	D-VD-VC	D-VD-VN	D-VD-00
1.7	ø6(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	4.0	4.2	3.5	4.0	3.0
2.4	ø7(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	5.9	6.8	5.1	5.9	4.3
3.2	ø8(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.8	7.5	5.9	6.7	5.1
5.1	ø10(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.2	12.4	10.1	11.1	8.3
8.0	ø13(x2)	Reach: L	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	24.2	25.6	21.8	23.2	18.2
12.5	ø16(x2)	Reach: L	2.5	2.5	2.5	2.5	2.5
		Mass (Weight) of Kit	46.8	46.2	42.3	45.5	34.7
20.0	ø20(x2)	Reach: L	3.0	—	3.0	3.0	3.0
		Mass (Weight) of Kit	86.4	—	81.7	87.9	66.8

Clevis Type [Assembled] • Triple Leg Sling • Quadruple Leg Sling

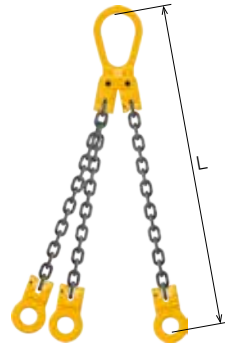
Clevis Type Triple Leg Sling



T-VD-VSL4



T-VD-VSF



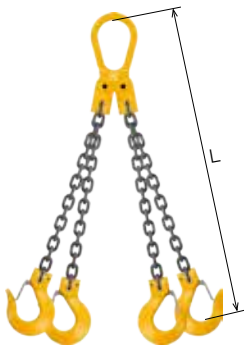
T-VD-VC



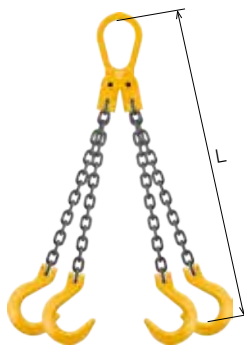
T-VD-VN

Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code			
			T-VD-VSL4	T-VD-VSF	T-VD-VC	T-VD-VN
2.4	$\phi 6(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.5	6.8	5.7	6.5
3.2	$\phi 7(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	8.9	10.3	7.8	8.9
5.0	$\phi 8(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.2	12.4	10.1	11.1
8.0	$\phi 10(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	18.9	20.7	17.2	18.7
12.5	$\phi 13(x3)$	Reach: L	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	40.6	42.7	36.1	38.2
20.0	$\phi 16(x3)$	Reach: L	2.5	2.5	2.5	2.5
		Mass (Weight) of Kit	77.5	76.6	70.8	75.6
32.0	$\phi 20(x3)$	Reach: L	3.0	—	3.0	3.0
		Mass (Weight) of Kit	146.2	—	139.2	148.5

Clevis Type Quadruple Leg Sling



Q-VD-VSL4



Q-VD-VSF



Q-VD-VC



Q-VD-VN



Q-VD-00

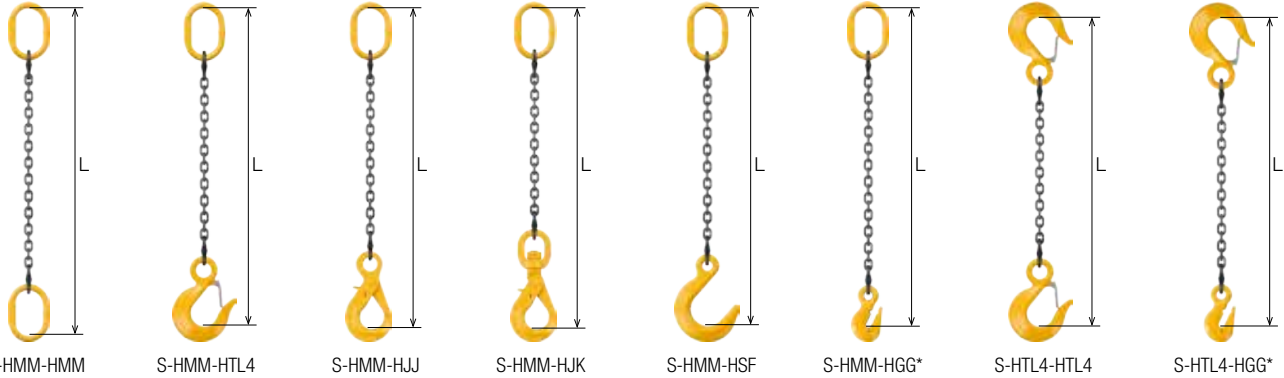
Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			Q-VD-VSL4	Q-VD-VSF	Q-VD-VC	Q-VD-VN	Q-VD-00
2.4	$\phi 6(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	8.1	8.6	7.1	8.1	6.2
3.2	$\phi 7(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.4	13.2	9.9	11.4	8.1
5.0	$\phi 8(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	14.1	15.7	12.7	13.9	10.8
8.0	$\phi 10(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	23.6	26.0	21.4	23.4	17.8
12.5	$\phi 13(x4)$	Reach: L	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	51.0	53.8	45.0	47.8	38.4
20.0	$\phi 16(x4)$	Reach: L	2.5	2.5	2.5	2.5	2.5
		Mass (Weight) of Kit	97.0	95.8	88.0	94.4	72.9
32.0	$\phi 20(x4)$	Reach: L	3.0	—	3.0	3.0	3.0
		Mass (Weight) of Kit	183.6	—	174.1	186.5	144.3

Eye Type [Assembled] • Single Leg Sling • Double Leg Sling

The KITO Chain Sling 100 offers a wide range of types of Assembled, from single leg slings to quadruple leg slings, to realize selections that match the usage purposes. Further, since the assembly is extremely simple to carry out, link chains and fittings can be prepared as components in factories and work places so that they can be assembled for use whenever necessary to match the usage purpose.

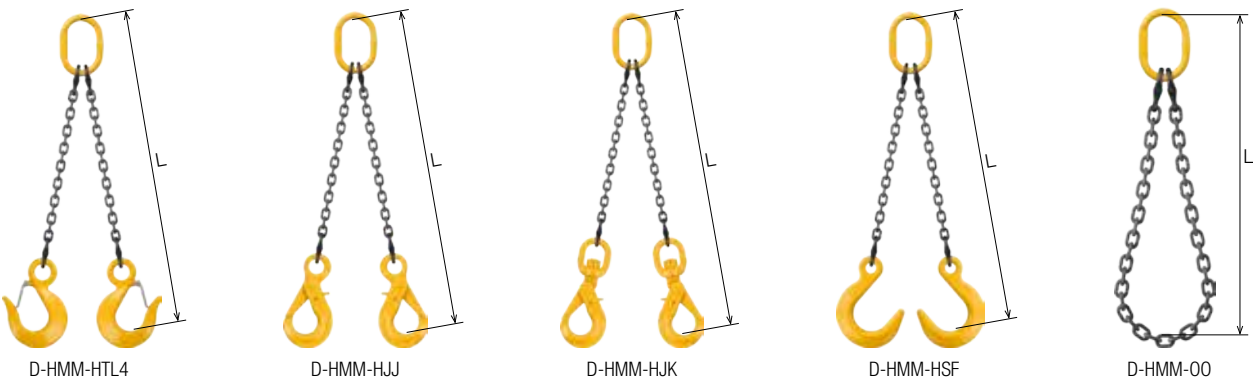
- For slinging methods that have a "*" mark, in situations where the chain is used by hooking on a grab hook (in order to adjust the length, etc.) the working load limits will become 70% of the values shown in the table below. For more details, refer to "Table of Lifting and Working Load Limits" on page 8.
- Reaches (dimensions L) other than the values described in the table can also be supported, so please contact KITO for more information.
- The photographs of the Assembled show images of the combinations. The actual number of chain links will differ according to the dimension L, so contact KITO for more information.

Eye Type Single Leg Sling



Working Load Limit (t)	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code								
			S-HMM-HMM	S-HMM-HTL4	S-HMM-HJJ	S-HMM-HJK	S-HMM-HSF	S-HMM-HGG*	S-HTL4-HTL4	S-HTL4-HGG*	
1.1	ø6(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	1.9	2.0	2.1	2.3	2.2	1.8	2.2	2.0	
1.5	ø7(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	2.4	2.9	3.0	3.2	3.3	2.6	3.4	3.1	
2.0	ø8(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	3.2	3.5	3.6	3.8	3.8	3.3	3.8	3.5	
3.2	ø10(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	5.2	5.9	5.8	6.2	6.4	5.4	6.5	6.0	
5.2	ø13(x1)	Reach: L	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	10.7	12.1	12.3	13.1	12.6	11.4	13.5	12.8	
8.0	ø16(x1)	Reach: L	2.5	2.5	2.5	—	2.5	2.5	2.5	2.5	
		Mass (Weight) of Kit	20.0	23.2	23.3	—	23.1	22.2	25.8	25.4	
12.5	ø20(x1)	Reach: L	3.0	3.0	—	—	3.0	3.0	3.0	3.0	
		Mass (Weight) of Kit	37.1	43.2	—	—	42.0	39.9	48.3	46.1	

Eye Type Double Leg Sling

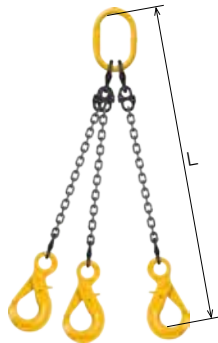


Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			D-HMM-HTL4	D-HMM-HJJ	D-HMM-HJK	D-HMM-HSF	D-HMM-00
1.7	ø6(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	3.7	3.8	4.3	4.0	3.0
2.4	ø7(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	5.6	5.8	6.1	6.3	4.3
3.2	ø8(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.6	7.0	7.2	7.4	5.5
5.1	ø10(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.1	11.3	11.9	12.1	8.9
8.0	ø13(x2)	Reach: L	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	23.5	23.8	24.8	24.5	19.2
12.5	ø16(x2)	Reach: L	2.5	2.5	—	2.5	2.5
		Mass (Weight) of Kit	44.4	45.8	—	44.2	36.6
20.0	ø20(x2)	Reach: L	3.0	—	—	3.0	3.0
		Mass (Weight) of Kit	83.3	—	—	78.7	69.9

Eye Type Triple Leg Sling



T-HMM-HTL4



T-HMM-HJJ



T-HMM-HJK



T-HMM-HSF

Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code			
			T-HMM-HTL4	T-HMM-HJJ	T-HMM-HJK	T-HMM-HSF
2.4	$\phi 6(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	5.8	6.0	6.7	6.3
3.2	$\phi 7(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	8.6	9.1	9.5	9.7
5.0	$\phi 8(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	10.7	11.0	11.4	11.8
8.0	$\phi 10(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	17.9	18.2	19.0	19.4
12.5	$\phi 13(x3)$	Reach: L	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	36.9	38.1	39.6	38.4
20.0	$\phi 16(x3)$	Reach: L	2.5	2.5	—	2.5
		Mass (Weight) of Kit	71.6	72.0	—	71.3

Eye Type Quadruple Leg Sling



Q-HMM-HTL4



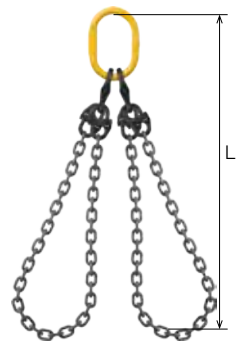
Q-HMM-HJJ



Q-HMM-HJK



Q-HMM-HSF



Q-HMM-00

Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			Q-HMM-HTL4	Q-HMM-HJJ	Q-HMM-HJK	Q-HMM-HSF	Q-HMM-00
2.4	$\phi 6(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	7.4	7.7	8.6	8.0	5.5
3.2	$\phi 7(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.0	11.6	12.2	12.4	7.6
5.0	$\phi 8(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	13.4	13.8	14.3	14.9	10.1
8.0	$\phi 10(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	22.5	22.9	23.9	24.5	16.1
12.5	$\phi 13(x4)$	Reach: L	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	46.7	48.3	50.3	48.7	35.7
20.0	$\phi 16(x4)$	Reach: L	2.5	2.5	—	2.5	2.5
		Mass (Weight) of Kit	90.8	91.3	—	90.4	67.4

Eye Type (HMF) [Assembled] • Triple Leg Sling • Quadruple Leg Sling

Master Link with Sub Links HMF

- Reaches (dimensions L) other than the values described in the table can also be supported, so please contact KITO for more information.
- The photographs of the Assembled show images of the combinations.
The actual number of chain links will differ according to the dimension L, so contact KITO for more information.

Eye Type Triple Leg Sling



T-HMF-HTL4



T-HMF-HJJ



T-HMF-HJK



T-HMF-HSF

Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code			
			T-HMF-HTL4	T-HMF-HJJ	T-HMF-HJK	T-HMF-HSF
2.8	$\phi 6(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.2	6.4	7.2	6.7
3.8	$\phi 7(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	8.7	9.1	9.6	9.7
5.0	$\phi 8(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	10.7	10.9	11.5	11.7
8.0	$\phi 10(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	17.6	17.9	18.7	19.1
13.0	$\phi 13(x3)$	Reach: L	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	35.9	37.1	38.6	37.4
20.0	$\phi 16(x3)$	Reach: L	2.5	2.5	—	2.5
		Mass (Weight) of Kit	69.2	69.6	—	68.9
32.0	$\phi 20(x3)$	Reach: L	3.0	—	—	3.0
		Mass (Weight) of Kit	131.6	—	—	124.7

Eye Type Quadruple Leg Sling



Q-HMF-HTL4



Q-HMF-HJJ



Q-HMF-HJK



Q-HMF-HSF

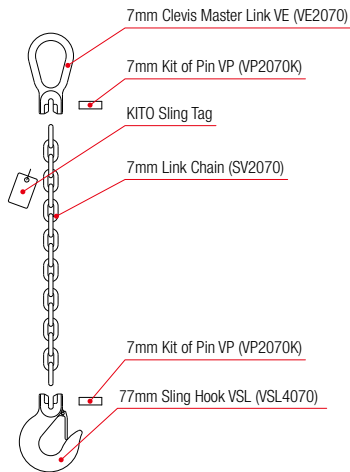
Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code			
			Q-HMF-HTL4	Q-HMF-HJJ	Q-HMF-HJK	Q-HMF-HSF
2.8	$\phi 6(x4)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	7.8	8.1	9.1	8.4
3.8	$\phi 7(x4)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.1	11.7	12.3	12.5
5.0	$\phi 8(x4)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	13.4	13.8	14.6	14.8
8.0	$\phi 10(x4)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	22.2	22.6	23.6	24.2
13.0	$\phi 13(x4)$	Reach: L	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	45.7	47.3	49.3	47.7
20.0	$\phi 16(x4)$	Reach: L	2.5	2.5	—	2.5
		Mass (Weight) of Kit	88.4	88.9	—	88.0
32.0	$\phi 20(x4)$	Reach: L	3.0	—	—	3.0
		Mass (Weight) of Kit	167.8	—	—	158.6

Examples of Components [Clevis Type/Eye Type] •The case of $\phi 7$ mm chains

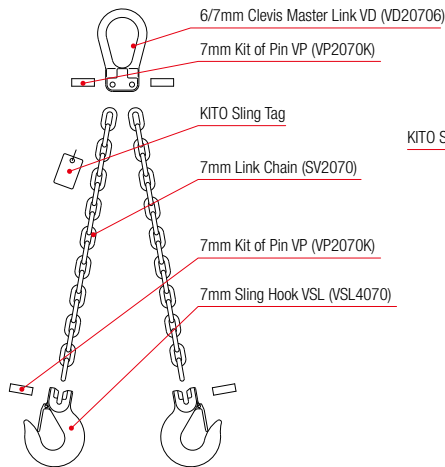
Clevis Type

Constituent Components [Kits of Pin are packed together with all the fittings]

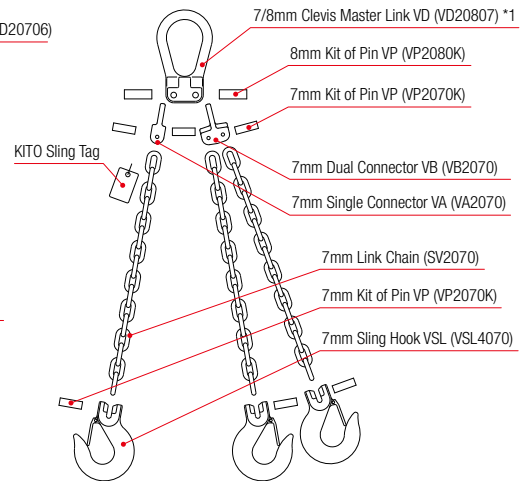
Single Leg Sling
[S-VE-VSL4]



Double Leg Sling
[D-VD-VSL4]



Triple Leg Sling/Quadruple Leg Sling
[T-VD-VSL4/Q-VD-VSL4]

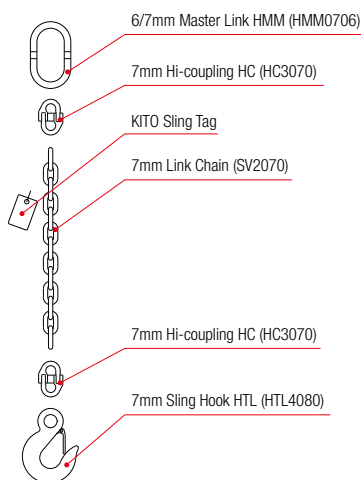


- For single and double leg slings, use components that are appropriate for the chain size that is used.
- *1: For triple (and quadruple) slings, use Clevis Master Link VD (together with Chain Pins) for chain diameters that are one size higher.

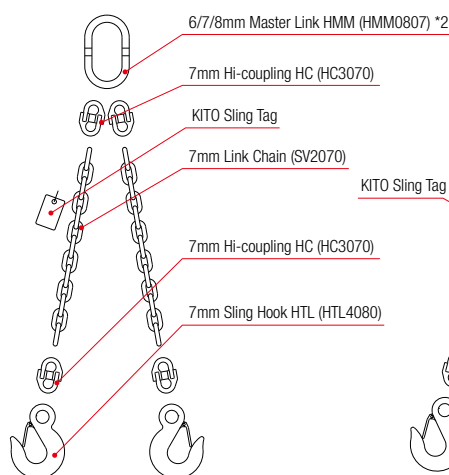
Eye Type

Constituent Components

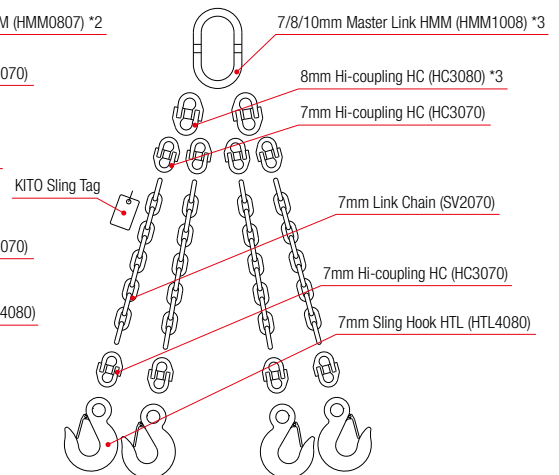
Single Leg Sling
[S-HMM-HTL4]



Double Leg Sling
[D-HMM-HTL4]



Triple Leg Sling/Quadruple Leg Sling
[T-HMM-HTL4/Q-HMM-HTL4]



- For single leg slings, use components that are appropriate for the W.L.L. (Working Load Limit) of the link chain that is used.
- *2: For double leg slings, only the Master Links should use components for working load limits that are one level higher.
- *3: For quadruple (and triple) leg slings, use Master Links for working load limits that are two levels higher, and use Hi-couplings (for the Sub Links) for working load limits that are one level higher.
- In the case of using Large Master Link, refer to "Hi-coupling Combinations for Use with the Large Master Link HMG/HMH" on page 25.
- In the case of using Master Link with Sub Links HMF, because the constituent components will be different, contact KITO for more details.

KITO Large Master Link HMG/HMH

- Large Master Link HMG/HMH Specification Table
- Combinations of Hi-coupling for Use with the Large Master Link HMG/HMH

Working Load Limit

1.1t HMG0807

11.5t HMH2016

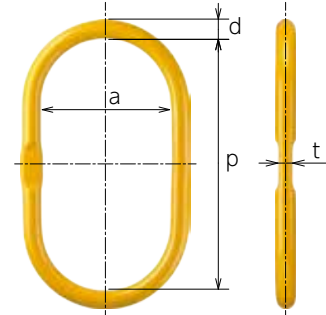
Large Master Link for Use on Work Sites with Large Cranes!

The link's large width makes it suitable for use with various types of large-sized cranes, tower cranes, and wire rope hoists.



Large Master Link HMG/HMH Specification Table

Working Load Limit (t)	Chain Diameter (mm)			Code	Dimensions (mm)				Mass (Weight) (kg)
	S	D	T,Q		p	a	d	t	
1.1	ø6	—	—	HMG0807	225	112	17	14	1.2
1.5	ø7	—	—						
1.7	—	ø6	—						
2.0	ø8	ø7	ø6	HMG1008			20	17	1.6
3.2	ø10	ø8	ø7						
5.0	ø13	ø10	ø8	HMG1310			23	20	2.2
8.0	ø16	ø13	ø10	HMH1613	340	180	36	29.5	8.1
11.5	ø20	ø16	ø13	HMH2016					



•The chain diameters S, D and TQ show the number of sling legs. S: Single leg slings, D: Double leg slings, TQ: Triple and quadruple leg slings

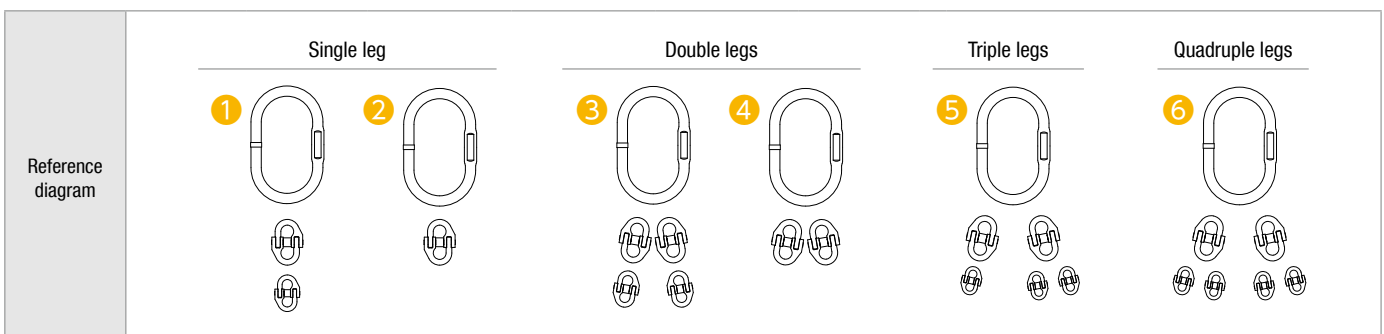
Combinations of Hi-coupling for Use with the Large Master Link HMG/HMH

Slings Method	Working Load Limit (t)	Chain Diameter (mm)	Master Link	Hi-coupling		Reference diagram
Single leg	1.1	ø6	HMG0807	HC3080	HC3060	①
	1.5	ø7	HMG0807	HC3080	HC3070	
	2.0	ø8	HMG0807	HC3080	—	②
	3.2	ø10	HMG1008	HC3100	—	
	5.0	ø13	HMG1310	HC3130	—	
	8.0	ø16	HMH1613	HC3160	—	
	11.5	ø20	HMH2016	HC3200	—	
Double legs	1.7	ø6	HMG0807	HC3080x2	HC3060x2	③
	2.0	ø7	HMG0807	HC3080x2	HC3070x2	
	3.2	ø8	HMG1008	HC3080x2	—	④
	5.0	ø10	HMG1310	HC3100x2	—	
	8.0	ø13	HMH1613	HC3160x2	HC3130x2	③
	11.5	ø16	HMH2016	HC3200x2	HC3160x2	
Triple legs	2.0	ø6	HMG0807	HC3080x2	HC3060x3	⑤
	3.2	ø7	HMG1008	HC3080x2	HC3070x3	
	5.0	ø8	HMG1310	HC3100x2	HC3080x3	
	8.0	ø10	HMH1613	HC3160x2	HC3100x3	
	11.5	ø13	HMH2016	HC3200x2	HC3130x3	
Quadruple legs	2.0	ø6	HMG0807	HC3080x2	HC3060x4	⑥
	3.2	ø7	HMG1008	HC3080x2	HC3070x4	
	5.0	ø8	HMG1310	HC3100x2	HC3080x4	
	8.0	ø10	HMH1613	HC3160x2	HC3100x4	
	11.5	ø13	HMH2016	HC3200x2	HC3130x4	

Reference example of hi-coupling combinations



In the case of assembling set products using the Large Master Link HMG/HMH, use in combination with hi-couplings as described in the contents of the table at left.



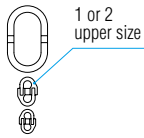
Eye Type (HMG/HMH) [Assembled] • Single Leg Sling • Double Leg Sling

Large Master Link HMG/HMH

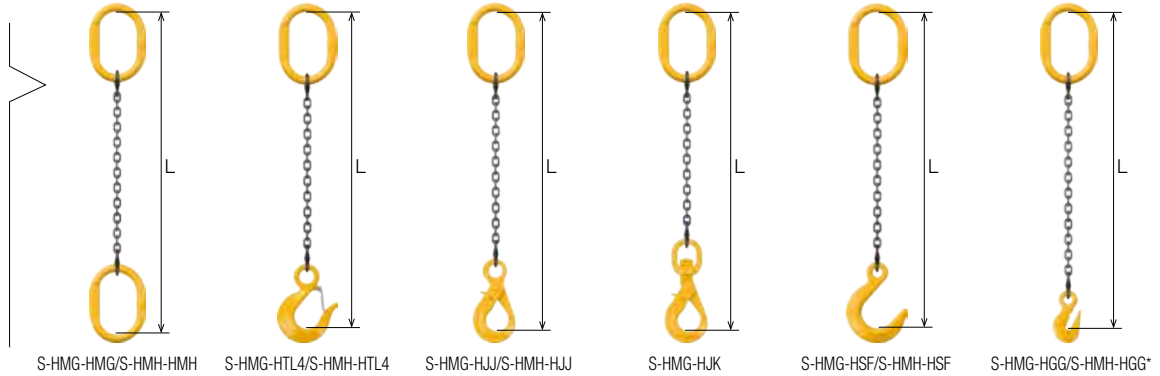
- For slinging methods that have a “*” mark, in situations where the chain is used by hooking on a grab hook (in order to adjust the length, etc.) the working load limits will become 70% of the values shown in the previous page. For more details, refer to “Table of Lifting and Working Load Limits” on page 8.
- Reaches (dimensions L) other than the values described in the table can also be supported, so please contact KITO for more information.
- The photographs of the Assembled show images of the combinations. The actual number of chain links will differ according to the dimension L, so contact KITO for more information.

Eye Type Single Leg Sling

ø6mm and ø7mm chain



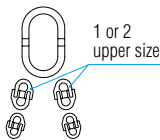
In the case of single leg sling Assembled for the ø6mm or ø7mm chain, there are two Hi-couplings linking the Master Link and the chain.



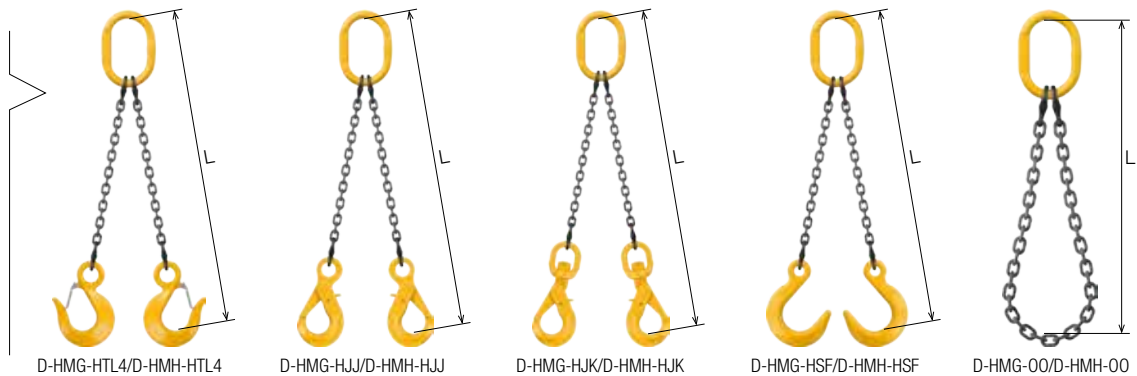
Working Load Limit (t)	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code					
			S-HMG-HMG	S-HMG-HTL4	S-HMG-HJJ	S-HMG-HJK	S-HMG-HSF	S-HMG-HGG *
1.1	ø6(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	3.7	3.0	3.0	3.3	3.1	2.8
1.5	ø7(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	4.1	3.8	3.9	4.0	4.1	3.5
2.0	ø8(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	4.2	4.0	4.1	4.2	4.3	3.8
3.2	ø10(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.1	6.3	6.4	6.6	6.8	5.9
5.0	ø13(x1)	Reach: L	2.0	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	11.4	12.5	12.9	13.4	13.0	12.0
			S-HMH-HMH	S-HMH-HTL4	S-HMH-HJJ	—	S-HMH-HSF	S-HMH-HGG
8.0	ø16(x1)	Reach: L	2.5	2.5	2.5	—	2.5	2.5
		Mass (Weight) of Kit	28.9	27.6	27.8	—	27.5	26.6
11.5	ø20(x1)	Reach: L	3.0	3.0	—	—	3.0	3.0
		Mass (Weight) of Kit	46.6	48.0	—	—	45.7	45.6

Eye Type Double Leg Sling

ø6mm/ø7mm/ø13mm/ø16mm chain



In the case of double leg sling Assembled for ø6mm, ø7mm, ø13mm or ø16mm chain, there are two Hi-couplings linking the Master Link and the chain.



Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			D-HMG-HTL4	D-HMG-HJJ	D-HMG-HJK	D-HMG-HSF	D-HMG-00
1.7	ø6(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	4.7	4.8	5.3	5.0	4.0
2.0	ø7(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.3	6.5	6.8	7.0	5.0
3.2	ø8(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	7.1	7.4	7.6	7.8	5.9
5.0	ø10(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.5	11.7	12.2	12.5	9.3
			D-HMH-HTL4	D-HMH-HJJ	D-HMH-HJK	D-HMH-HSF	D-HMH-00
8.0	ø13(x2)	Reach: L	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	30.4	30.6	31.6	31.4	26.0
11.5	ø16(x2)	Reach: L	2.5	2.5	—	2.5	2.5
		Mass (Weight) of Kit	53.8	54.1	—	53.6	46.1

Eye Type (HMG/HMH) [Assembled] •Triple Leg Sling •Quadruple Leg Sling

Large Master Link HMG/HMH

- Reaches (dimensions L) other than the values described in the table can also be supported, so please contact KITO for more information.
- The photographs of the Assembled show images of the combinations.
- The actual number of chain links will differ according to the dimension L, so contact KITO for more information.

Eye Type Triple Leg Sling



T-HMG-HTL4/T-HMH-HTL4



T-HMG-HJJ/T-HMH-HJJ



T-HMG-HJK/T-HMH-HJK



T-HMG-HSF/T-HMH-HSF

Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code			
			T-HMG-HTL4	T-HMG-HJJ	T-HMG-HJK	T-HMG-HSF
2.0	$\phi 6(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.2	6.4	7.1	6.7
3.2	$\phi 7(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	9.0	9.3	9.8	10.1
5.0	$\phi 8(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	10.9	11.4	11.8	12.0
			T-HMH-HTL4	T-HMH-HJJ	T-HMH-HJK	T-HMH-HSF
8.0	$\phi 10(x3)$	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	24.1	24.4	25.2	25.6
11.5	$\phi 13(x3)$	Reach: L	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	44.0	45.2	46.7	45.5

Eye Type Quadruple Leg Sling



Q-HMG-HTL4/Q-HMH-HTL4



Q-HMG-HJJ/Q-HMH-HJJ



Q-HMG-HJK/Q-HMH-HJK



Q-HMG-HSF/Q-HMH-HSF



Q-HMG-00/Q-HMH-00

Working Load Limit (t) $\theta=60^\circ$	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			Q-HMG-HTL4	Q-HMG-HJJ	Q-HMG-HJK	Q-HMG-HSF	Q-HMG-00
2.0	$\phi 6(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	7.8	7.9	8.9	8.4	5.8
3.2	$\phi 7(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.3	11.8	12.4	12.7	7.9
5.0	$\phi 8(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	13.5	14.1	14.7	14.9	10.3
			Q-HMH-HTL4	Q-HMH-HJJ	Q-HMH-HJK	Q-HMH-HSF	Q-HMH-00
8.0	$\phi 10(x4)$	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	28.3	28.7	29.7	30.3	21.9
11.5	$\phi 13(x4)$	Reach: L	2.0	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	53.1	54.7	56.7	55.1	41.5

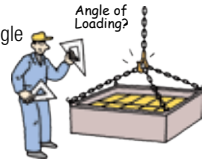
Precautions for Use

1 Strictly Avoid Overloading

KITO CHAIN SLING 100 [S5 series] products have KITO Sling Tags attached. Be sure to use the product within the range of the working load limits displayed on the KITO Sling Tag.

2 Changes in the Working Load Limit according to the Angle of Loading

The working load limits will change according to the angle of loading. Be certain to confirm the actual angle of loading with the angle of loading and working load limits described on the KITO Sling Tag.



3 Minimizing the Impact Loading

Impact loading will lead to unexpected overloading. Take particular care to avoid shock when the loads are lifted off and returned to the ground.



4 Measures when Loads have Sharp Edges

For loads that have sharper edges, an increasingly unreasonable force will be applied to the chain slings, affecting their strength. Apply pads to protect the load and chains, and use chains considering the safety factor margin.



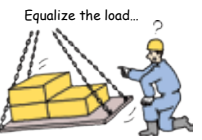
5 Chain Twisting and Tangling

Verify that the chain is not twisted, tangled, or tangled with the sling components prior to use.



6 When the Load is Out of Balance

Suspend loads in such a way that the loading is applied equally to all the chain slings. In cases where the form of the load makes it difficult to suspend with equal loading on each chain, select the slings while considering the chain side that bears the heaviest load as the reference.



7 Apply Loads to the Center of the Hook

Be certain to suspend the load from the center of the hook (deepest part). Avoid suspending loads from the hook tip.

8 Variations in Working Load Limits under High Temperatures

In the case of using chain slings in high temperature environments, or in cases where chain slings are used under normal temperatures after they have been used in high temperature environments, the working load limits should be reduced according to the corresponding temperature in the table below.



Temperature	Working Load Limit Reduction (%)
Over -40°C and 100°C or less	100
Over 100°C and 200°C or less	90
Over 200°C and 300°C or less	75
Over 300°C and 350°C or less	65
Over 350°C and 400°C or less	60
Over 400°C	Usage not allowed

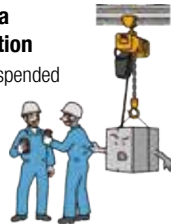
9 Resistance to Chemicals

The extent of the effect will differ according to the type of chemical. Please consult KITO beforehand.



10 Leaving Loads in a Suspended Condition

Do not leave loads in a suspended condition for long periods.



11 Durability

When using under the conditions described below, reduce loads to no more than 80% of the working load limits described in the Working Load Limits Table.

- (1) Work that is carried out with high frequency or when the working load is applied continuously
- (2) Work in which vibration is applied continuously
- (3) Usage by incorporation in an automatic line



12 Chain Sling Usage Limits

Observe the usage limitations due to wear and elongation, and do not use products that have become deformed or cracked.

Recommendations for Correct Equipment Administration

Inspection is the first step of safety. In order to use the equipment safely, carry out the daily inspections, monthly inspections and periodic inspections.

1 Daily and Periodic Inspections

Daily inspections should be implemented by the operator before using the chain slings for work. In addition, periodic inspections should be implemented by the persons determined by the business entity.

2 Chain Sling Storage

Store chain slings in appropriate locations under favorable environments where they will not rust.

3 Chain Sling Record Administration

The administration of inspection records is important for the safe use of chain slings.

KITO has prepared a "Periodic Inspection Standards Manual" which describes the inspection standards and periodic inspection check sheets.

- The functions and performance of the products mentioned in the catalog have been designed according to each usage purpose based on the related regulations and standards. If they are used for other than their intended purposes such as being integrated into your equipment, KITO will not take any responsibility for accidents attributable to their unintended usages as well as guarantee their performance and functions. Never remodel our products.
- In case you intend to use our products for special purposes, consult us in advance.
- Among the products described in this catalog, some are manufactured in Japan and some in Italy.
- In case you intend to export our products, consult us in advance. There are different standards and regulations from one destination to another.
- It is prohibited to reprint, copy or divert all the information in this catalog (photos, designs, texts, illustrations, etc.) without our consent.
- The specifications in this catalog are partly subject to change without prior notice.

KITO

KITO CORPORATION
SHINJUKU NS Bldg. 9F, 2-4-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-0809, Japan
TEL: +81-3-5908-0180
www.kito.co.jp

Distributed by: