CSGE2009-04

KITO

Supporting ideal lifting work with outstanding quality

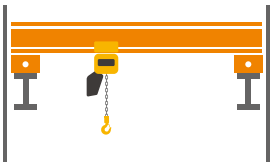
KITO CHAIN SLING 100

S5 Series

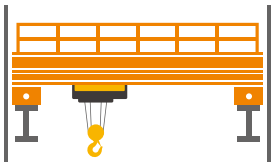
KITO provide all equipment from crane to below the hook devises.

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

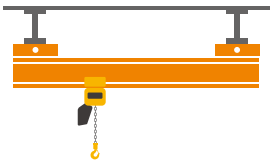
Each Type of Crane



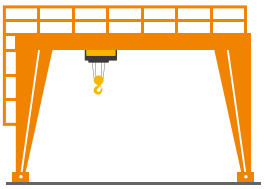
Overhead crane
[Single girder]



Overhead crane
[Double girder]

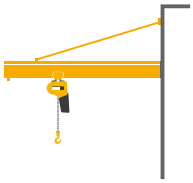


Low-head crane

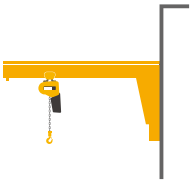


Gantry crane

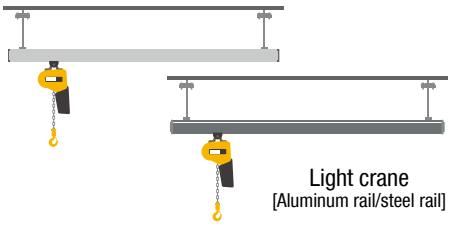
Jib crane
Pillar type



Jib crane
Wall type



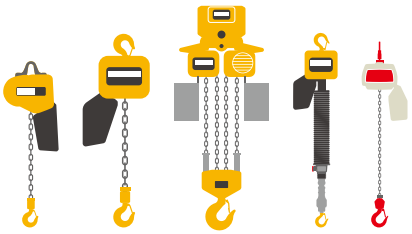
Jib crane
Wall type [L type]



Light crane
[Aluminum rail/steel rail]

Each Type of Hoist

Wire rope hoist



Electric chain hoist EQ/ER2/ED

Air chain hoist

Manual chain hoist M3/CX

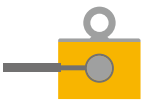
Variety of Sling and Device

Chain sling

Lifting point

Lifting beam

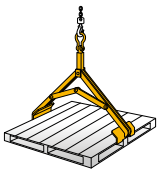
Textile sling



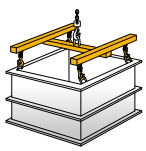
Lifting magnet

Custom Lifting

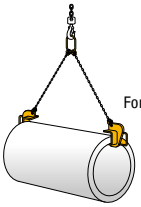
e.g.) Custom-made according to the application



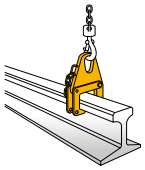
For pallets



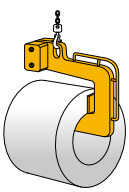
For short headroom types



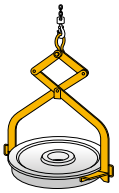
For pipes



For rails



For coils



For train wheels

For wire coils

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[Clevis Type/Eye Type] •The case of ø7mm chains

KITO Large Master Link HMG/HMH

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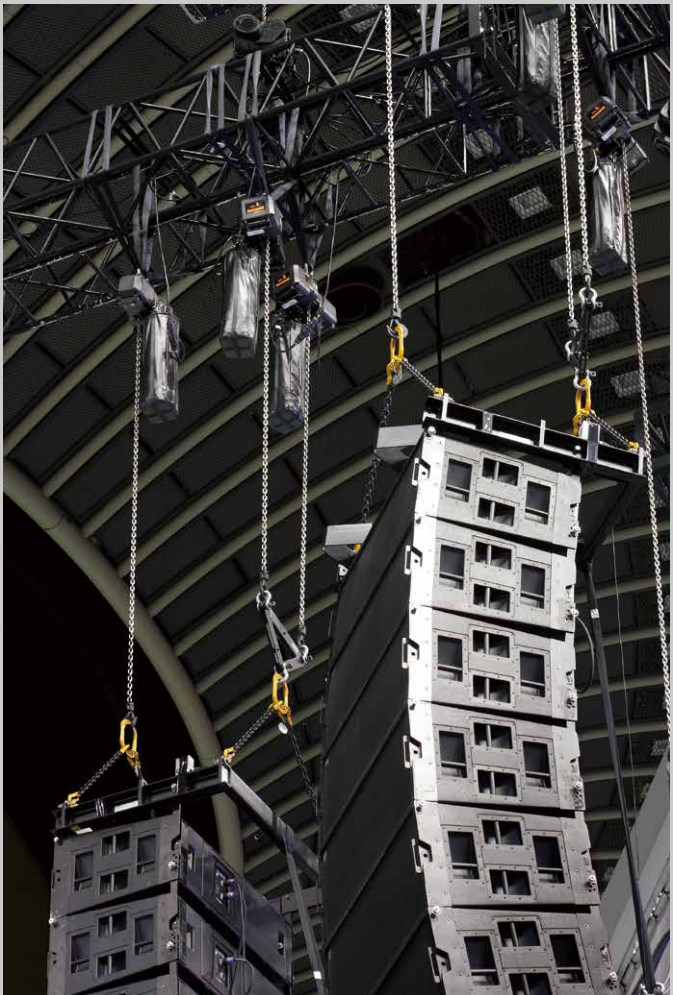
Since one of the most trustworthy companies for hoist and crane in this industry, KITO can realize the following qualities

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

KITO



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]

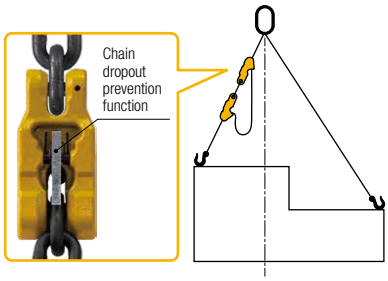
Concerning the strength in the link bending direction, the use of advanced welding technologies gives the links sufficient absorbability as shown by the photograph (right) of the result of bending test, and no breakage or cracking occurs. (However, this does not indicate that the product should be used 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 ø6.0mm to ø20.0mm 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.

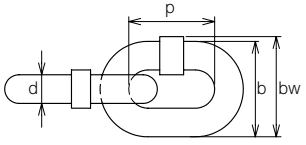
Allows use even in severe working environments.

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)
Ø6.0	SV2060	1.1	18.0	21.8	22.2	56.5	0.83
Ø7.0	SV2070	1.5	21.0	25.4	25.9	77	1.15
Ø8.0	SV2080	2.0	24.0	29.0	29.6	101	1.43
Ø10.0	SV2100	3.2	30.0	36.2	37.0	160	2.23
Ø13.0	SV2130	5.2	39.0	45.5	48.1	268	3.78
Ø16.0	SV2160	8.0	48.0	56.0	59.2	402	5.85
Ø20.0	SV2200	12.5	60.0	70.0	74.0	630	9.5



•Comply with JIS standard.

KITO Sling Tag

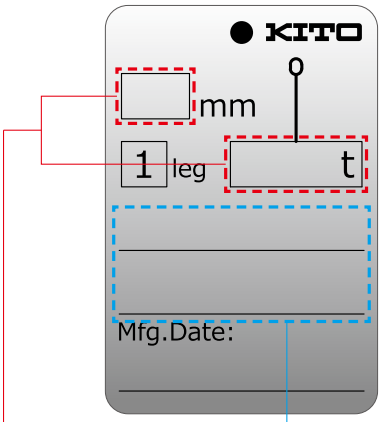
Every KITO CHAIN SLING 100 [S5 Series] product has a KITO Sling Tag attached. The KITO Sling Tag is an important item for carrying out safe work, so be sure to confirm that the tag is attached to the product before starting work.

KITO gives its primary consideration to safety.

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

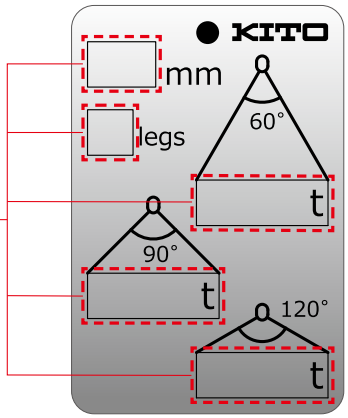
Method of Lifting and Working Load Limits	Manufacture Date	Chain Diameter	Management Number (Optional)

For Single Leg Sling

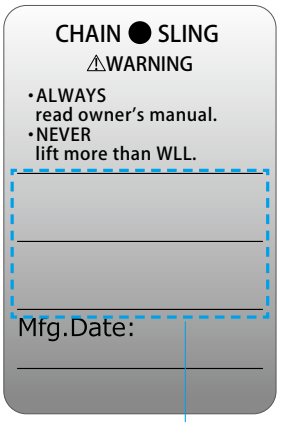


For Double/ Triple/ Quardruple Leg Sling

Front



Back



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																
									Endless												Choke Hitch				
		*	*			*			*						*										
		Single Leg	Double Legs			Triple and Quadruple Legs			Double 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.

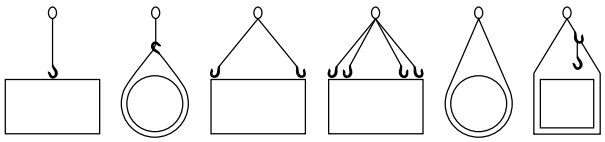
•The yellow-colored numerical values in the tables are exclusive values for "When Using the Large Master Link HMG/HMH" and "When Using the Master Link HMF with Sub Links" respectively.

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

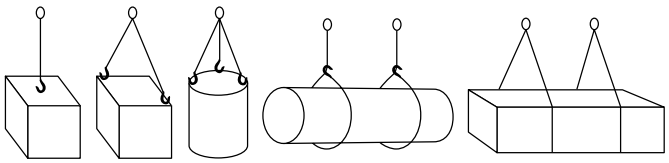
(Refer to the page at left)

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.

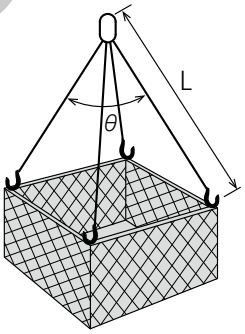
Determination of the reach

(Calculation of the angle of loading θ)

Determination of the chain diameter



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 θ = 90° for 6mm

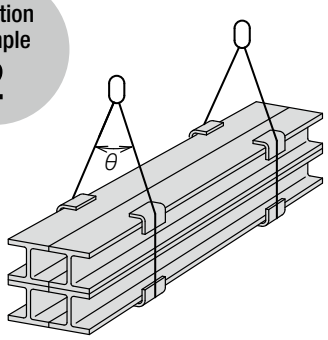
Regarding the set product codes, refer to ***"KITO Assembled [How to Understand Each Codes]"*** on page 17.

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 θ =50° 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.

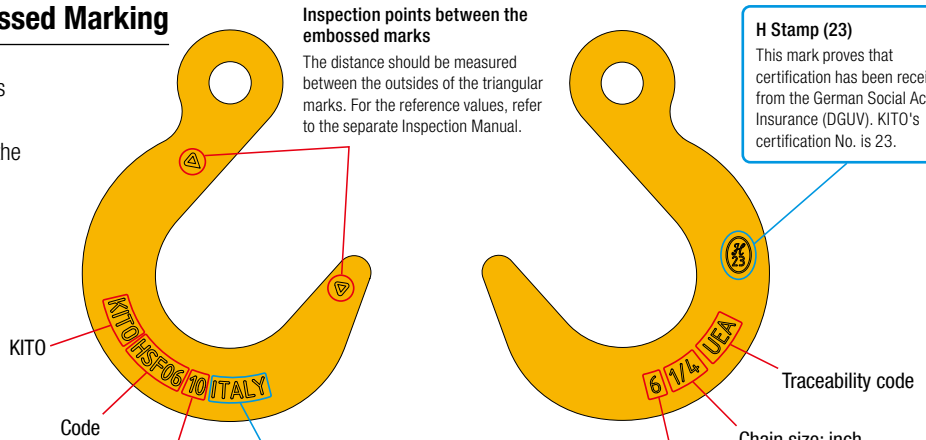
KITO CHAIN SLING 100 [S5 Series]

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.

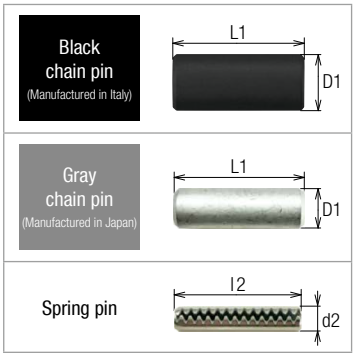
Selection Table of Kit of Pin for Clevis Hook

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	
A	Black	Black	VGG20, VSR06
B	Gray	Gray	VA, VB, VC, VD, VE, VN, VR, VSL4, VSL2
C	Black or Gray	Black	Other than VGG20, VSF
D	Gray	Black	VWW



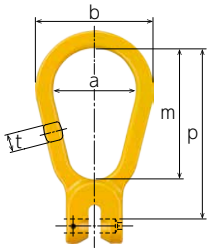
Chain Diameter (mm)	Code	Chain Pin D1 x L1 (mm)	Spring Pin d2 x l2 (mm)	Applicable Fittings							
ø6.0	VPA06	ø7.5x17.5	ø2.5x16	VSF06	VGG06	VWW06	VSR06				
	VP2060K		ø3x20	VE2060	VD206	VSL4060	VN2060	VA2060	VB2060	VC2060	VR2060
ø7.0	VPA07	ø9x22.5	ø3x22	VSF07	VGG007	VWW07					
	VP2070K		ø3x25	VE2070	VD20706	VSL4070	VN2070	VA2070	VB2070	VC2070	VR2070
	VP2070		ø3x20	VSL2070							
ø8.0	VPA08	ø10x22.5	ø3x22	VSF08	VGG08	VWW08					
	VP2080K		ø3x25	VE2080	VD20807	VSL4080	VN2080	VA2080	VB2080	VC2080	VR2080
ø10.0	VPA10	ø13x31.5	ø3.5x28	VSF10	VGG10	VWW10					
	VP2100K		ø4x32	VE2100	VD21008	VSL4100	VN2100	VA2100	VB2100	VC2100	VR2100
	VP2100B	ø13x29.5	ø3x26	VSL2100							
ø13.0	VPA13	ø16x42	ø4x35	VSF13	VGG13	VWW13					
	VP2130K		ø5x40	VE2130	VD21310	VSL4130	VN2130	VA2130	VB2130	VC2130	VR2130
	VP2130B	ø16x37	ø4x36	VSL2130							
ø16.0	VPA16	ø21x51.5	ø4.5x40	VSF16	VGG16	VWW16					
	VP2160K		ø5x50	VE2160	VD21613	VSL4160	VN2160	VA2160	VB2160	VC2160	VR2160
	VP2160B	ø20x52	ø4.5x40	VSL2160							
ø20.0	VPA20	ø25x73	ø5x50	VGG20							
	VP2200K	ø24x73	ø6x63	VE2200	VD22016	VSL4200	VN2200	VA2200	VB2200	VC2200	VR2200
(ø20.0)	VP2250	ø32x95	ø10x70	VD20020							

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

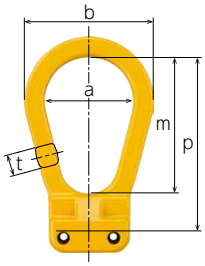
▶For single leg slings



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					
3.2	ø10	VE2100	146	71	105	110	17	1.1
5.2	ø13	VE2130	169.5	80	122	125	21	2.2
8.0	ø16	VE2160	199	90	142	145	26	4.3
12.5	ø20	VE2200	250	112	176	180	32	8.5

Clevis Master Link
VD

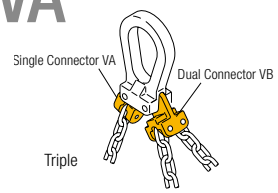
▶For double leg slings
▶For triple and quadruple leg slings
(Using Single Connector VA or Dual Connector VB)

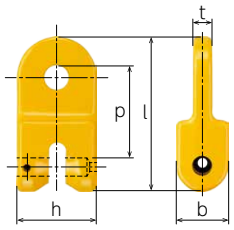


Working Load Limit (t)	Chain Diamete (mm)		Code	Dimensions (mm)					Mass (Weight) (kg)
	D	T,Q		p	a	b	m	t	
1.7	ø6	—	VD206	125	63	91	100	14	0.75
2.4	ø7	ø6	VD20706	140	71	105	110	17	1.2
3.2	ø8	ø7	VD20807	139.5					
5.1	ø10	ø8	VD21008	159	80	122	125	21	2.2
8.0	ø13	ø10	VD21310	179.5	90	142	140	26	4.1
12.5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

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

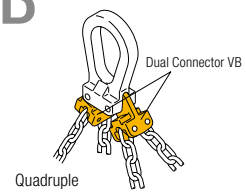
Single Connector
VA

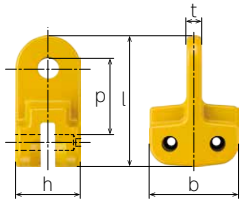




Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	h	b	l	t	
1.1	ø6	VA2060	39.5	38	22	69	7	0.23
1.5	ø7	VA2070	43		27	75.5	8	0.31
2.0	ø8	VA2080	50	44		84.5	10	0.39
3.2	ø10	VA2100	59	54	34	102	12.5	0.72
5.2	ø13	VA2130	80	66	42	132	16	1.5
8.0	ø16	VA2160	99	84	54	167	20	3.0
12.5	ø20	VA2200	119.5	102	68	201	25	5.3

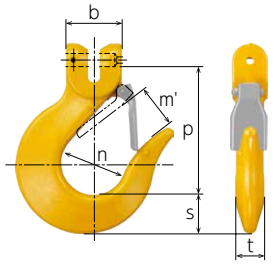
Single Connector
VB





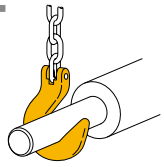
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	h	b	l	t	
1.7	ø6	VB2060	39.5	38	48	70	7	0.34
2.4	ø7	VB2070	43	38	57	77	8	0.47
3.2	ø8	VB2080	50	44		86	10	0.62
5.1	ø10	VB2100	59	54	72	104	12.5	1.2
8.0	ø13	VB2130	80	66	90	134	16	2.3
12.5	ø16	VB2160	99	84	114	170	20	4.9
20.0	ø20	VB2200	119.5	102	142	205	25	8.6

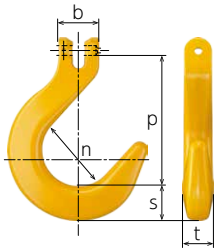
Sling Hook
VSL (VSL4)



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						
3.2	ø10	VSL4100	119	54	56	39	37.5	27.2	1.7
5.2	ø13	VSL4130	140	66	63	46	47.5	34.5	3.5
8.0	ø16	VSL4160	168.5	84	75	53	60	45	7.0
12.5	ø20	VSL4200	209	102	95	68	75	56	11.8

Foundry Hook
VSF



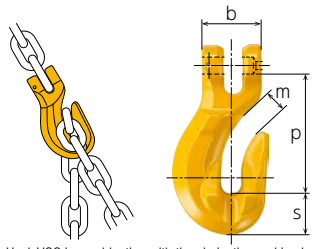


Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	b	n	s	t	
1.1	ø6	VSF06	92	27	53	26	21.5	0.68
1.5	ø7	VSF07	115.5	36.5	64	31	26	1.4
2.0	ø8	VSF08	115					
3.2	ø10	VSF10	137	42.5	78	36	32	2.3
5.2	ø13	VSF13	163	55	89	43	39	4.2
8.0	ø16	VSF16	195	70	101	50.5	45	6.7

Clevis Type [Fittings Components]

[Clevis type] **Assembled**	Single Leg Sling/Double Leg Sling	P22 ▶
	Triple Leg Sling/Quadruple Leg Sling	P23 ▶

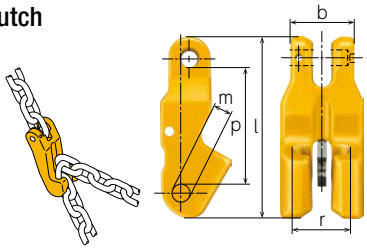
Grab Hook
VGG



•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.

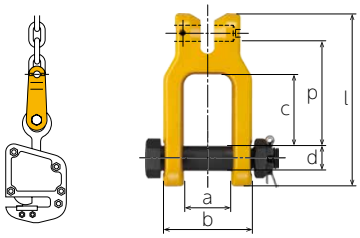
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)				Mass (Weight) (kg)
			p	b	m	s	
1.1	ø6	VGG06	50.5	27	8.5	17.6	0.24
1.5	ø7	VGG07	65.9	36.8	9.9	23.5	0.63
2.0	ø8	VGG08	64.9				
3.2	ø10	VGG10	83.1	42	14.2	29.4	1.1
5.2	ø13	VGG13	106.1	54	16.7	39.2	2.2
8.0	ø16	VGG16	128.9	67	21.9	45.8	4.0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

Shortening Clutch
VWW



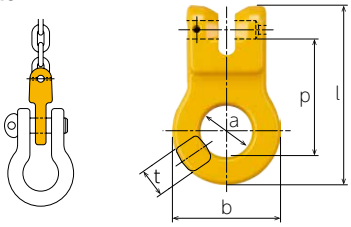
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	b	m	r	l	
1.1	ø6	VWW06	47	27	7.5	24	76	0.27
1.5	ø7	VWW07	63	36.5	8.8	27.5	99.5	0.6
2.0	ø8	VWW08	62		10	31		
3.2	ø10	VWW10	78	44	12.5	39	125	1.2
5.2	ø13	VWW13	102	57	16.5	50	163	2.7
8.0	ø16	VWW16	125	70	20	62.5	200	4.7

Shackle
VN



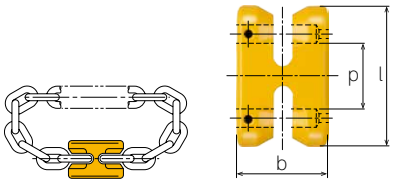
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)
			p	a	b	c	d	l	
1.1	ø6	VN2060	65	26.5	50	43	14	103	0.53
1.5	ø7	VN2070	70.5	30.5	60	47.5	17	116	0.89
2.0	ø8	VN2080	70						
3.2	ø10	VN2100	79.5	34	68	53	20	135.5	1.5
5.2	ø13	VN2130	99.5	43	85	67	25	169	2.7
8.0	ø16	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



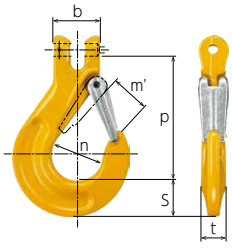
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)					Mass (Weight) (kg)
			p	a	b	l	t	
1.1	ø6	VC2060	50	18.5	45	77.5	13.5	0.28
1.5	ø7	VC2070	65	26.5	60	99.5	17	0.51
2.0	ø8	VC2080	64.5					
3.2	ø10	VC2100	79	32.5	74	123	21.5	1.0
5.2	ø13	VC2130	99.5	42	94	154	26.5	2.0
8.0	ø16	VC2160	124	54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

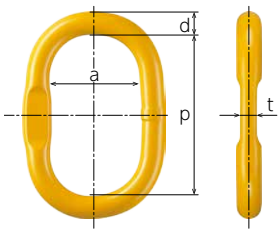


Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)						Mass (Weight) (kg)
			p	b	n	m'	s	t	
1.1	ø6	VSR06	69	26.5	30	19	21	16.5	0.28
1.5	ø7	VSL2070	95	36	39	25	28	19	0.55
3.2	ø10	VSL2100	110	44.5	47	29	33	25	1.0
5.2	ø13	VSL2130	136	51	58	37	41	30	1.7
8.0	ø16	VSL2160	155	67	64	43	49	37.5	3.2

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.

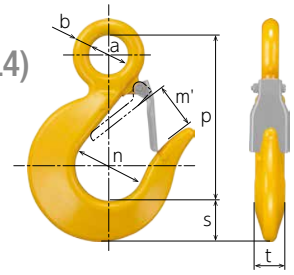
Master Link
HMM



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

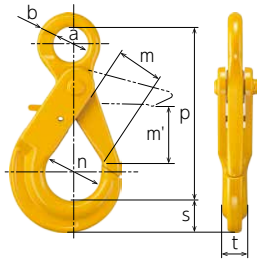
- The chain diameters S, D and TQ show the number of sling legs. S: Single leg slings, D: Double leg slings, TQ: Triple and quadruple leg slings

Sling Hook
HTL (HTL4)



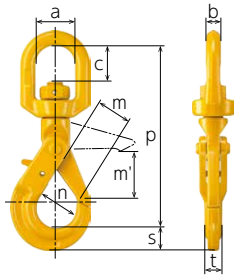
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)							Mass (Weight) (kg)
			p	a	b	n	m'	s	t	
1.1	ø6	HTL4060	100	23	11	45	26	24.5	18	0.49
1.5	ø7	HTL4080	120	27	13.5	50	31	30	21.8	0.84
2.0	ø8									
3.2	ø10	HTL4100	140	32.5	17	56	39	37.5	27.2	1.6
5.2	ø13	HTL4130	171	38	21.5	63	46	47.5	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



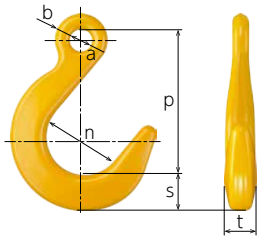
Working Load Limit (t)	Chain Diameter (mm)	Code	Dimensions (mm)								Mass (Weight) (kg)
			p	a	b	n	m	m'	s	t	
1.1	ø6	HJJ06	110	21	12	35	28	28	20.5	16	0.56
1.5	ø7	HJJ08	136	27	12	43.5	34	34	26	20	1.0
2.0	ø8										
3.2	ø10	HJJ10	168.5	34.5	15	56	45	45	30	24.5	1.7
5.2	ø13	HJJ13	205	40	20	69	51.5	51.5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

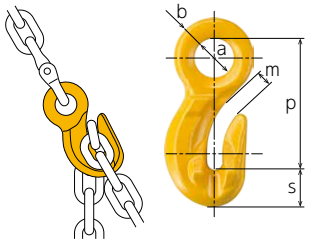
Eye Type [Fittings Components]

[Eye Type] Assembled

Single Leg Sling/Double Leg Sling P22 ▶

Triple Leg Sling/Quadruple Leg Sling P23 ▶

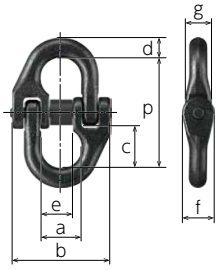
Grab Hook
HGG



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	ø8							
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

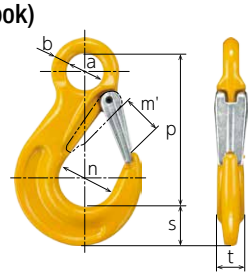
•In the case of using the Grab Hook HGG in combination with the chain, the working load limits will become 70% of the values in the table at right.

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



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

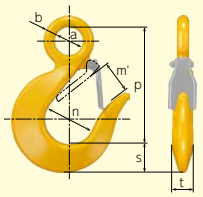
The Master Link with Sub Links is a master link that has sub links attached. It should be used with triple leg slings or quadruple leg slings.
Because the working load limits are different from those of the Master Link HMM (page 14), it has exclusive “Slinging Methods and W.L.L. (Working Load Limits)”.
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	ø7								
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

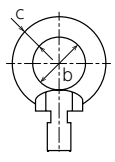
Sling Hook
HTL005



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

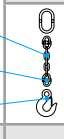
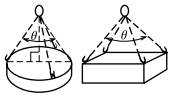
The HTL005 and HSR06 allow combination with smaller-sized eye bolts than the HTL4060.

Working Load Limit (t)	Code	JIS Eye Bolts	M8	M10	M12	M16	M20	M24	M30
		Thickness c (mm)	6.3	8	10	12.5	16	20	25
		Internal Diameter b (mm)	20	25	30	35	40	50	60
		Working Load Limit (kg)	80	150	220	450	630	950	1.5t
0.5	HTL005	Combination	–	○	○	○	–	–	–
1.1	HSR06		–	–	○	○	○	–	–
	HTL4060		–	–	–	○	○	○	○



JIS Eye Bolts

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		
S	Single leg sling	Single chain suspension
D	Double leg sling	Double chain suspension
T	Triple leg sling	Triple chain suspension
Q	Quadruple leg sling	Quadruple chain suspension

•This shows the basic system of Assembled.

2 Top Fitting	
VE	Clevis Master Link VE
VD	Clevis Master Link VD
HMM	Master Link HMM
HMG	Master Link HMG
HMH	Master Link HMH
HMF	Master Link with Sub Links HMF
VSL4	Sling Hook VSL (VSL4)
VSR	Sling Hook VSR06
VSL2	Sling Hook VSL (VSL2)
HTL4	Sling Hook HTL (HTL4)
HSR	Sling Hook HSR06
VWW	Shortening Clutch VWW

3 Bottom Fitting	
HGG	Grab Hook HGG
HJJ	Self Locking Hook HJJ
HJK	Swivel Hook HJK
HMM	Master Link HMM
HMG	Master Link HMG
HMH	Master Link HMH
HSF	Foundry Hook HSF
HTL4	Sling Hook HTL (HTL4)
HSR	Sling Hook HSR06
VC	Single Connector VC
VE	Clevis Master Link VE
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
OO	Endless

[Example] Clevis Type

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

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

[Example] Eye Type

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

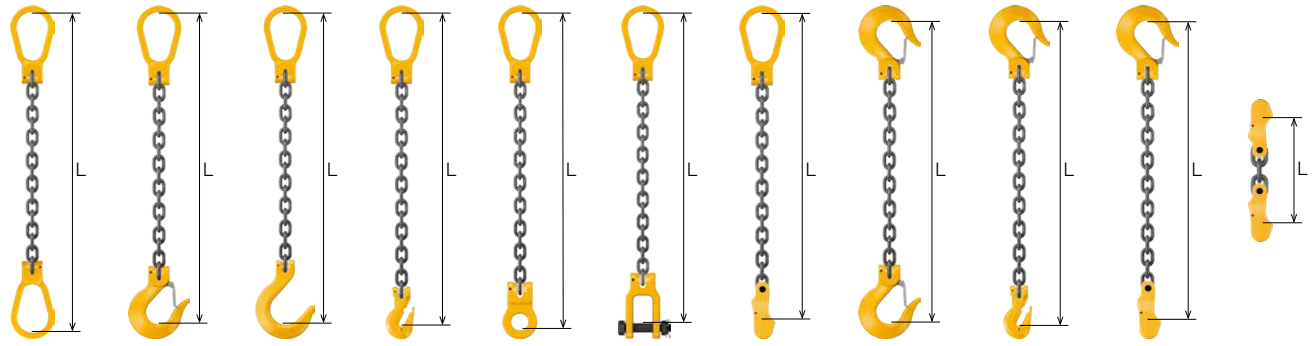
•A combination of an eye type of top fitting and a clevis type of bottom fitting is also available.

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.

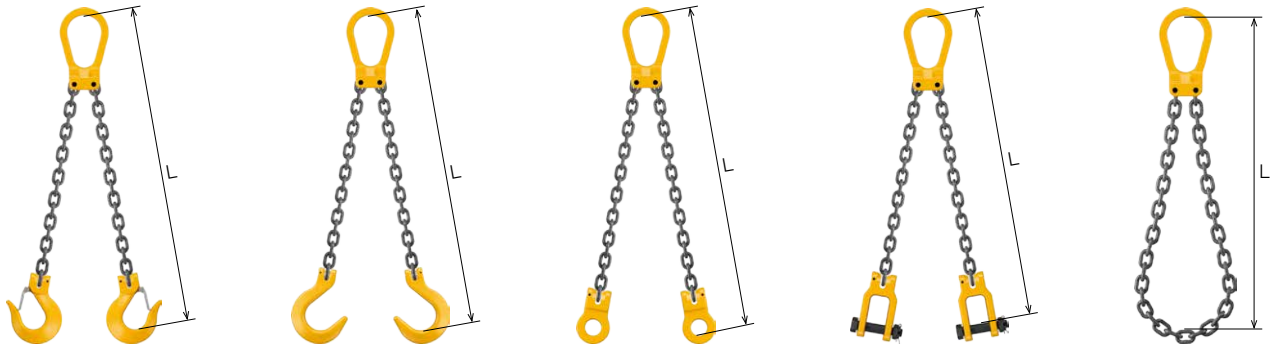
Clevis Type Single Leg Sling



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	0.14
		Mass (Weight) of Kit	1.8	2.0	2.2	1.8	1.8	2.0	1.8	2.2	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	0.17
		Mass (Weight) of Kit	2.7	3.0	3.5	2.8	2.7	3.0	2.8	3.4	3.1	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	0.18
		Mass (Weight) of Kit	3.1	3.4	3.9	3.2	3.1	3.4	3.2	3.8	3.5	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	0.24
		Mass (Weight) of Kit	5.0	5.7	6.2	5.3	5.0	5.5	5.3	6.3	6.0	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	0.29
		Mass (Weight) of Kit	10.8	12.4	12.8	11.1	10.9	11.6	11.8	13.7	12.4	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	0.35
		Mass (Weight) of Kit	21.3	24.0	23.7	21.5	21.7	23.3	22.0	27.2	20.2	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

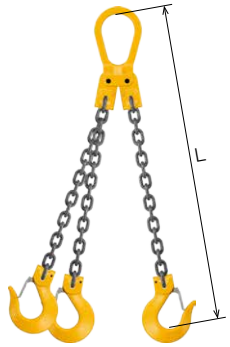


D-VD-VSL4 | D-VD-VSF | D-VD-VC | D-VD-VN | D-VD-OO

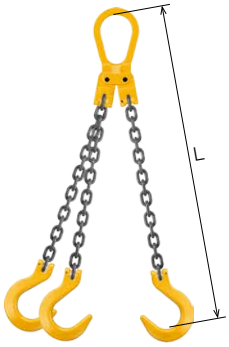
Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			D-VD-VSL4	D-VD-VSF	D-VD-VC	D-VD-VN	D-VD-OO
1.7	ø6(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	4.0	4.2	3.5	4.0	3.0
2.4	ø7(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of 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

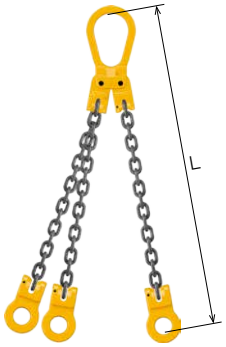
Clevis Type Triple Leg Sling



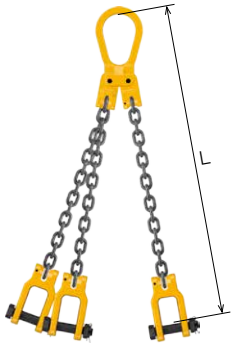
T-VD-VSL4



T-VD-VSF



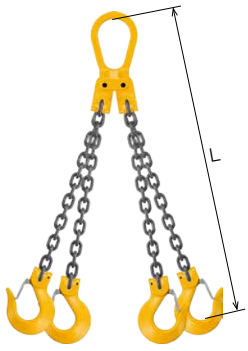
T-VD-VC



T-VD-VN

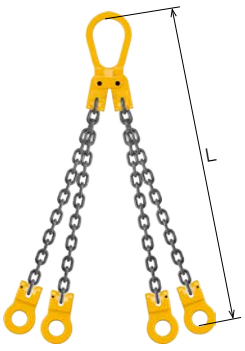
Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code			
			T-VD-VSL4	T-VD-VSF	T-VD-VC	T-VD-VN
2.4	ø6(x3)	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	6.5	6.8	5.7	6.5
3.2	ø7(x3)	Reach: L	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	8.9	10.3	7.8	8.9
5.0	ø8(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	ø10(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	ø13(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	ø16(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	ø20(x3)	Reach: L	3.0	—	3.0	3.0
		Mass (Weight) of Kit	146.2	—	139.2	148.5

Clevis Type Quadruple Leg Sling

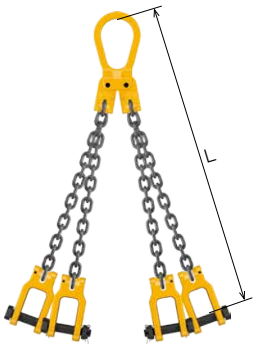


Q-VD-VSL4

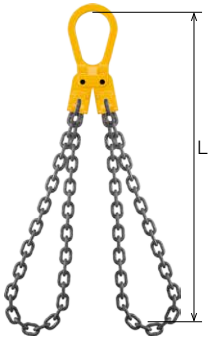
Q-VD-VSF



Q-VD-VC



Q-VD-VN



Q-VD-OO

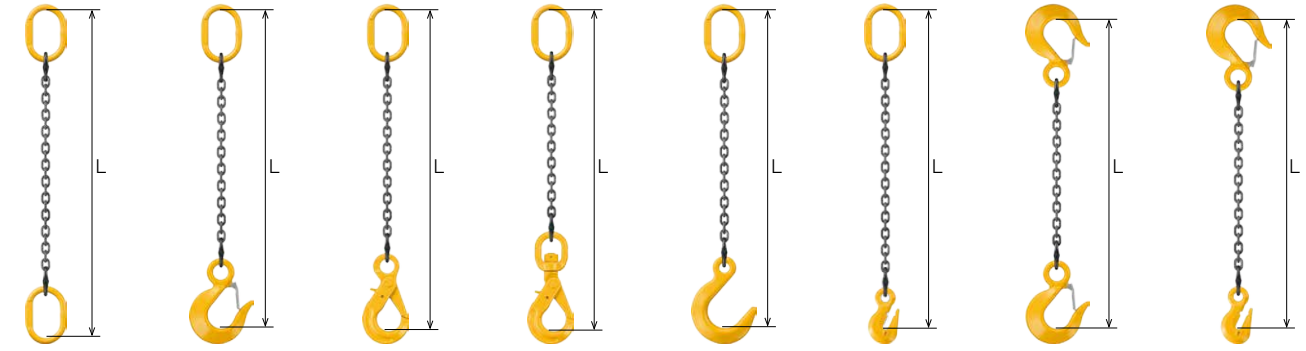
Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			Q-VD-VSL4	Q-VD-VSF	Q-VD-VC	Q-VD-VN	Q-VD-OO
2.4	ø6(x4)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	8.1	8.6	7.1	8.1	6.2
3.2	ø7(x4)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.4	13.2	9.9	11.4	8.1
5.0	ø8(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	ø10(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	ø13(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	ø16(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	ø20(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.

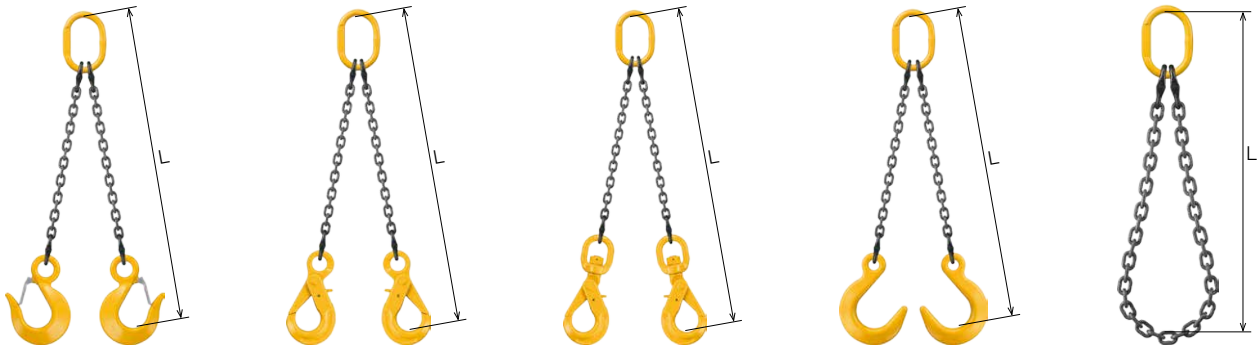
Eye Type Single Leg Sling



S-HMM-HMM | S-HMM-HTL4 | S-HMM-HJJ | S-HMM-HJK | S-HMM-HSF | S-HMM-HGG* | S-HTL4-HTL4 | S-HTL4-HGG*

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
		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
		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
		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
		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
		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

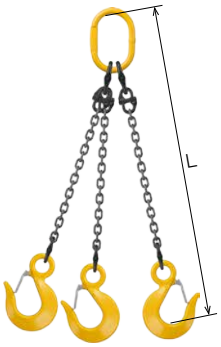
Eye Type Double Leg Sling



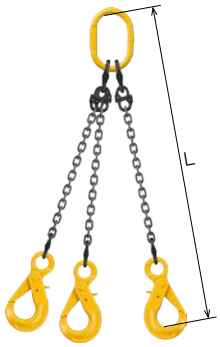
D-HMM-HTL4 | D-HMM-HJJ | D-HMM-HJK | D-HMM-HSF | D-HMM-00

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

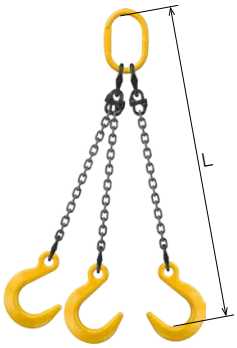


T-HMM-HTL4



T-HMM-HJJ

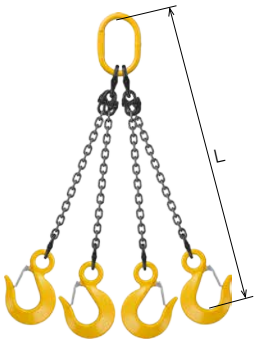
T-HMM-HJK



T-HMM-HSF

Working Load Limit (t) θ=60°	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	ø6(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	ø7(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	ø8(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	ø10(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	ø13(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	ø16(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-OO

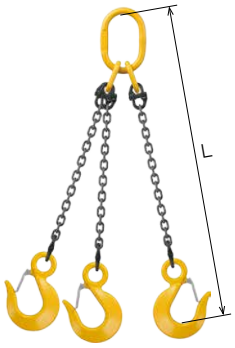
Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			Q-HMM-HTL4	Q-HMM-HJJ	Q-HMM-HJK	Q-HMM-HSF	Q-HMM-OO
2.4	ø6(x4)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	7.4	7.7	8.6	8.0	5.5
3.2	ø7(x4)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	11.0	11.6	12.2	12.4	7.6
5.0	ø8(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	ø10(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	ø13(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	ø16(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) θ=60°	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	ø6(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	ø7(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	ø8(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	ø10(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	ø13(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	ø16(x3)	Reach: L	2.5	2.5	—	2.5
		Mass (Weight) of Kit	69.2	69.6	—	68.9
32.0	ø20(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

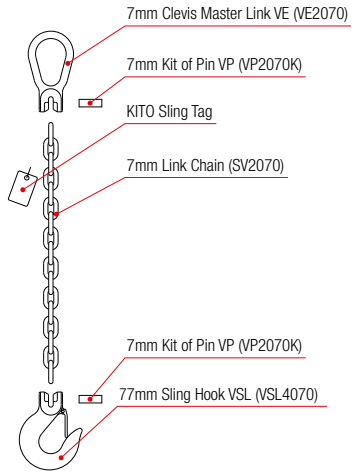
Q-HMF-HSF

Working Load Limit (t) θ=60°	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	ø6(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	ø7(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	ø8(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	ø10(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	ø13(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	ø16(x4)	Reach: L	2.5	2.5	—	2.5
		Mass (Weight) of Kit	88.4	88.9	—	88.0
32.0	ø20(x4)	Reach: L	3.0	—	—	3.0
		Mass (Weight) of Kit	167.8	—	—	158.6

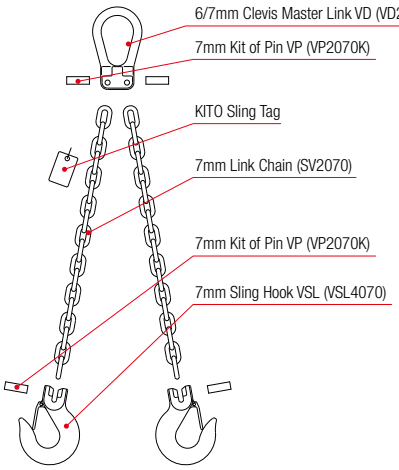
Examples of Components [Clevis Type/Eye Type] •The case of ø7mm chains

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

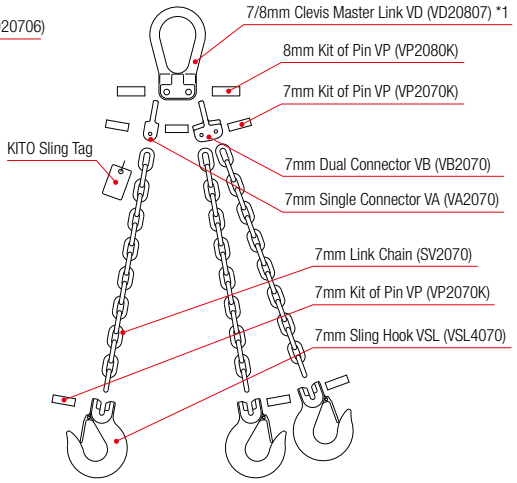
Single Leg Sling
[S-VE-VSL4]



Double Leg Sling
[D-VD-VSL4]



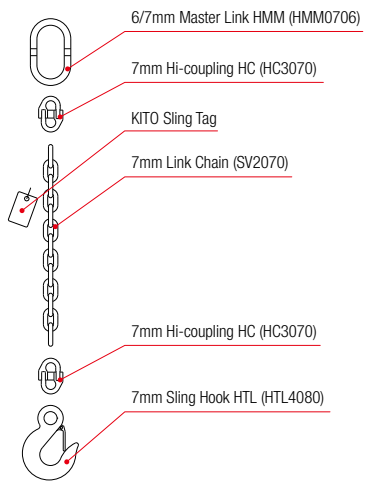
Triple Leg Sling/Quadruple Leg Sling
[T-VD-VSL4/Q-VD-VSL4]



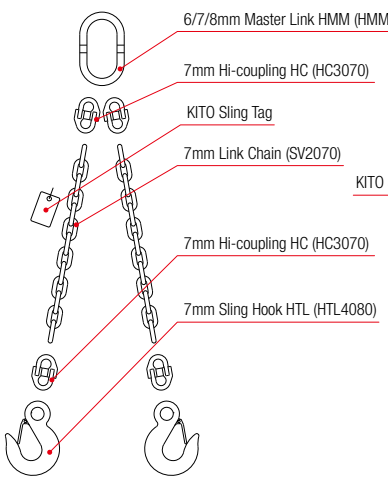
•For single and double leg slings, use components that are appropriate for the chain size that is used.
•*1: For triple (and quadruple) slings, use Clevis Master Link VD (together with Chain Pins) for chain diameters that are one size higher.

Eye Type Constituent Components

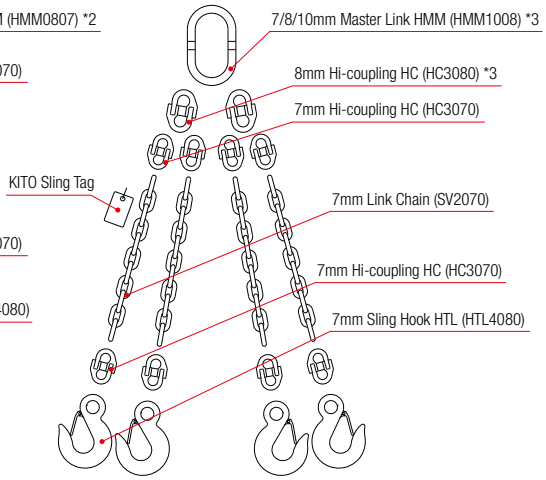
Single Leg Sling
[S-HMM-HTL4]



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

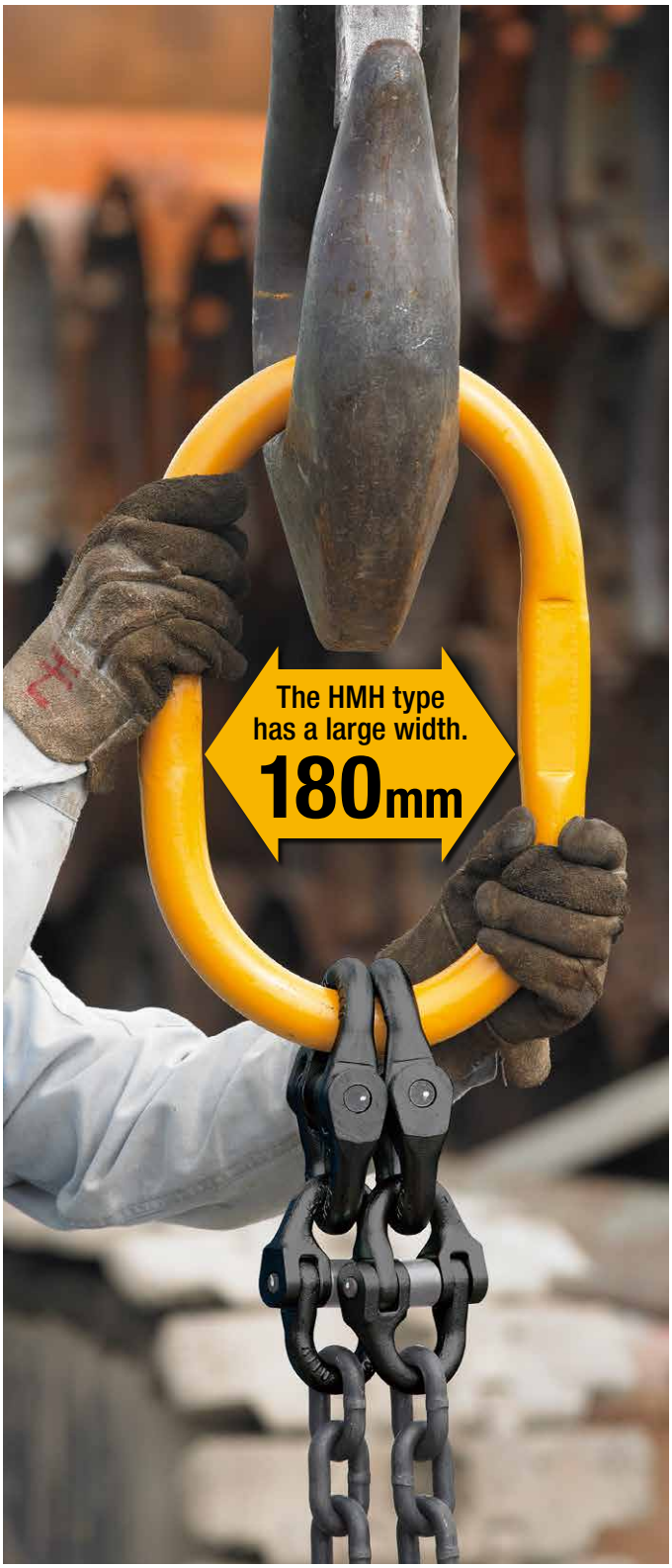
Working Load Limit

1.1t HMG0807

11.5t HMH2016

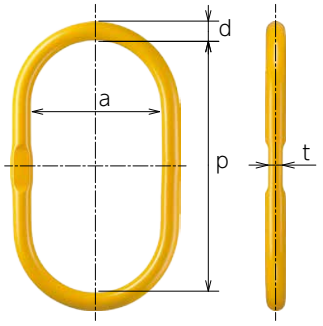
Large Master Link for Use on Work Sites with Large Cranes!

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						
3.2	ø10	ø8	ø7	HMG1008			20	17	1.6
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			40	34.5	10.1



•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

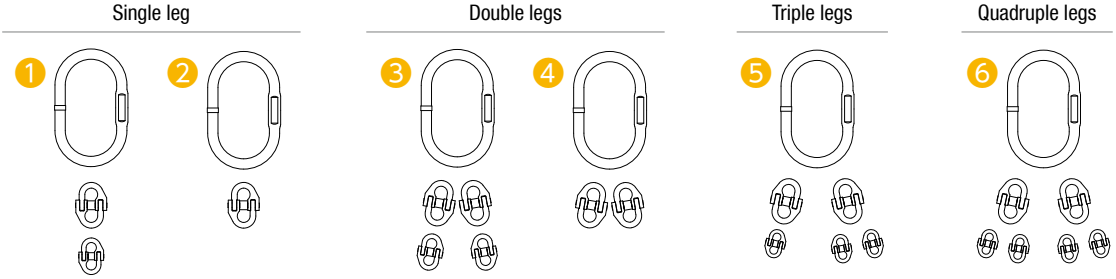
Combinations of Hi-coupling for Use with the Large Master Link HMG/HMH

Slinging 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.

Reference diagram



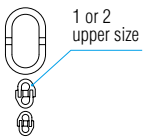
Eye Type (HMG/HMH) [Assembled] •Single Leg Sling •Double Leg Sling

Large Master Link HMG/HMH

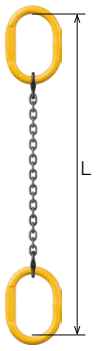
•For slinging methods that have a "*" mark, in situations where the chain is used by hooking on a grab hook (in order to adjust the length, etc.) the working load limits will become 70% of the values shown in the previous page. For more details, refer to "Table of Lifting and Working Load Limits" on 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

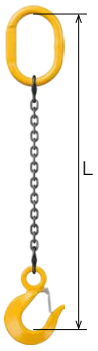
ø6mm and ø7mm chain



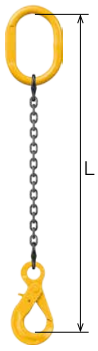
In the case of single leg sling Assembled for the ø6mm or ø7mm chain, there are two Hi-couplings linking the Master Link and the chain.



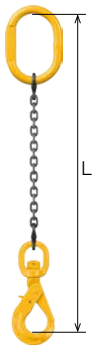
S-HMG-HMG/S-HMH-HMH



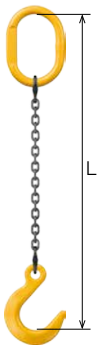
S-HMG-HTL4/S-HMH-HTL4



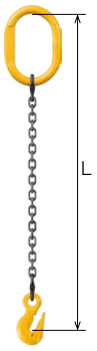
S-HMG-HJJ/S-HMH-HJJ



S-HMG-HJK



S-HMG-HSF/S-HMH-HSF

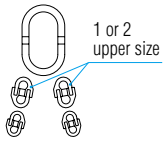


S-HMG-HGG/S-HMH-HGG*

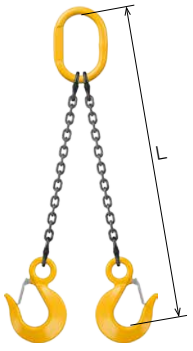
Working Load Limit (t)	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code					
			S-HMG-HMG	S-HMG-HTL4	S-HMG-HJJ	S-HMG-HJK	S-HMG-HSF	S-HMG-HGG *
1.1	ø6(x1)	Reach: L	1.5	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	3.7	3.0	3.0	3.3	3.1	2.8
1.5	ø7(x1)	Reach: L	1.5	1.5	1.5	1.5	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

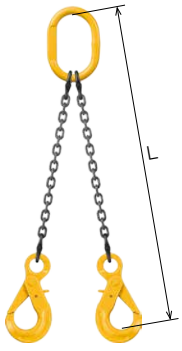
ø6mm/ø7mm/ø13mm/ ø16mm chain



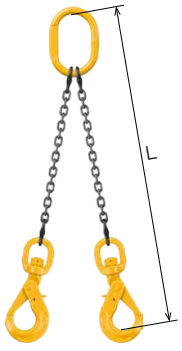
In the case of double leg sling Assembled for ø6mm, ø7mm, ø13mm or ø16mm chain, there are two Hi-couplings linking the Master Link and the chain.



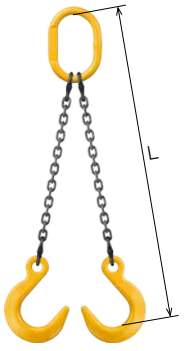
D-HMG-HTL4/D-HMH-HTL4



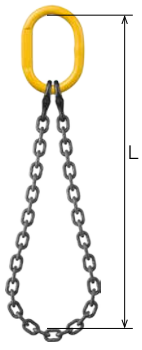
D-HMG-HJJ/D-HMH-HJJ



D-HMG-HJK/D-HMH-HJK



D-HMG-HSF/D-HMH-HSF



D-HMG-OO/D-HMH-OO

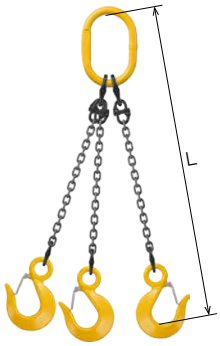
Working Load Limit (t) θ=60°	Chain Diameter (mm) (x Number of Chains)	Dimensions (mm) Mass (Weight) (kg)	Code				
			D-HMG-HTL4	D-HMG-HJJ	D-HMG-HJK	D-HMG-HSF	D-HMG-OO
1.7	ø6(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) of Kit	4.7	4.8	5.3	5.0	4.0
2.0	ø7(x2)	Reach: L	1.5	1.5	1.5	1.5	1.5
		Mass (Weight) 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-OO
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

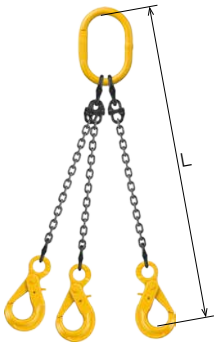
Large Master Link HMG/HMH

•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



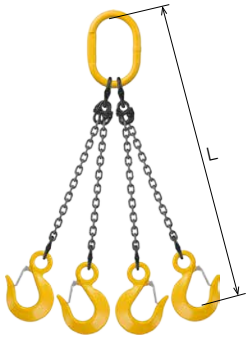
T-HMG-HJJ/T-HMH-HJJ

T-HMG-HJK/T-HMH-HJK

T-HMG-HSF/T-HMH-HSF

Working Load Limit (t) θ=60°	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	ø6(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	ø7(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	ø8(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	ø10(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	ø13(x3)	Reach: L	2.0	2.0	2.0	2.0
		Mass (Weight) of Kit	44.0	45.2	46.7	45.5

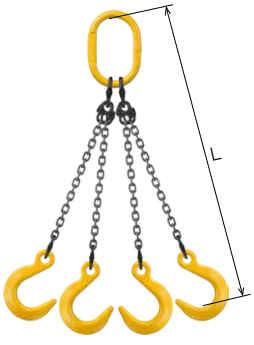
Eye Type Quadruple Leg Sling



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-OO/Q-HMH-OO

Working Load Limit (t) θ=60°	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-OO
2.0	ø6(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	ø7(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	ø8(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-OO
8.0	ø10(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	ø13(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

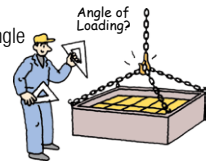
Precautions for Use

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

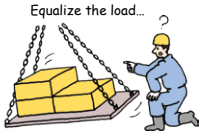
For loads that have sharper edges, an increasingly unreasonable force will be applied to the chain slings, affecting their strength. Apply pads to protect the load and chains, and use chains considering the safety factor margin.

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.

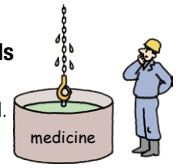
8 Variations in Working Load Limits under High Temperatures

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 -40ºC and 100ºC or less	100
Over 100ºC and 200ºC or less	90
Over 200ºC and 300ºC or less	75
Over 300ºC and 350ºC or less	65
Over 350ºC and 400ºC or less	60
Over 400ºC	Usage not allowed

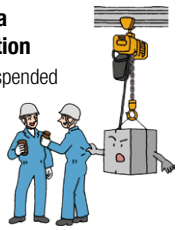
9 Resistance to Chemicals

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

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