Palm Oil Industy Chains

FSCM
Mfg Indonesia

2A

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STRONG & SAFE

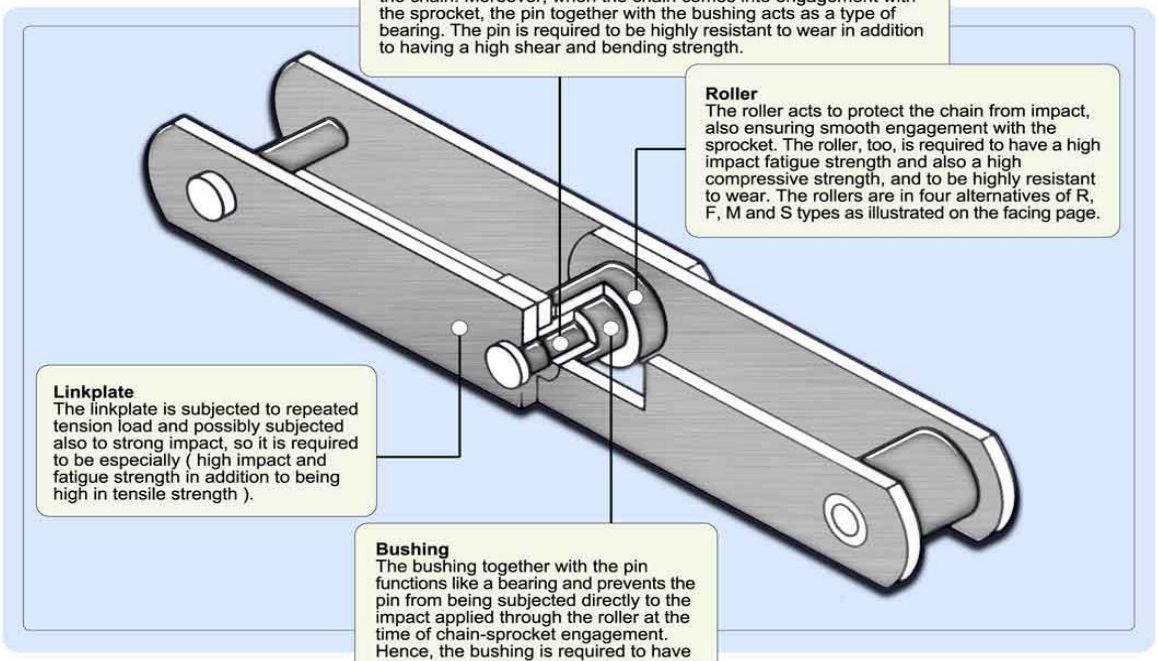
FSCM CONVEYOR CHAINS ARE REMARKABLY STRONG AND SAFE IN THEIR CAREFUL

FACILITIES UNDER STRICTEST QUALITY CONTROL

FSCM CONVEYOR CHAINS ARE UTILIZED IN A WIDE VARIETY OF APPLICATIONS, CONDITIONS, VERY ECONOMICAL THEY ARE ALSO AND SAFE TO OPERATE.

FSCM STANDARD CONVEYOR CHAINS ARE AVAILABLE IN A WIDE RANGE OF APPLICATION WITH HIGH DEGREE WEAR RESISTANCE

CONSTRUCTION



CLASSIFICATION BY TYPES OF CHAINS

HOLLOW BEARING PIN CHAIN

HOLLOW PIN FEATURE OFFERS THE FACILITY FOR FIX ATTACHMENTS :
IN HIGH TEMPERATURE APPLICATION
IN CLEAN AND DRY CONDITIONS

SOLID BEARING PIN CHAIN

RECOMMENDED FOR USE IN HIGH IMPACT LOADING APPLICATIONS :
IN CORROSIVE ENVIRONMENT
IN LONG CONVEYORS

DEEP LINK CHAIN

THIS CHAIN PROVIDES A CONTINUOUS CARRYING EDGE ABOVE THE ROLLER PERIPHERY

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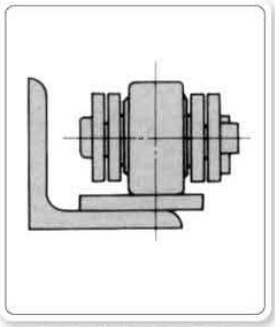
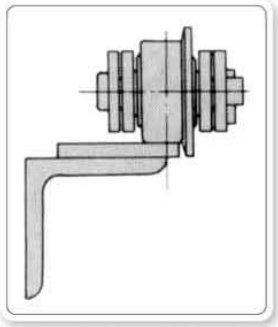
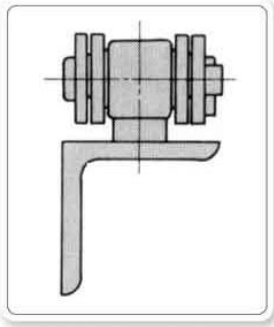
CLASSIFICATION BY TYPES OF ROLLER



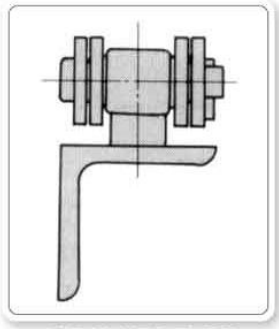
R -ROLLER TYPE



F-ROLLER TYPE



M-ROLLER TYPE



S-ROLLER TYPE

STANDARD ATTACHMENT

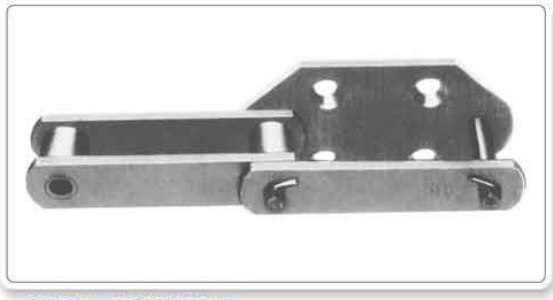
A ATTACHMENT

K ATTACHMENT

SA ATTACHMENT

SK ATTACHMENT

G2 ATTACHMENT



G4 ATTACHMENT

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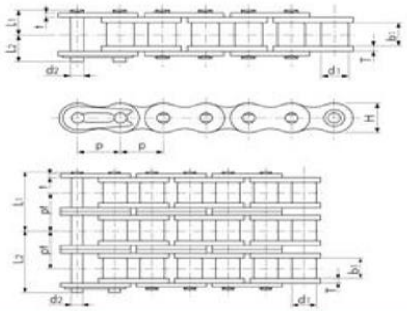
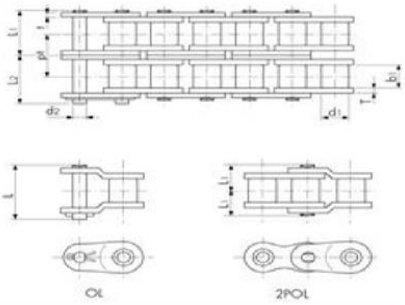
Roller Chain / Transmission Chain





Tipe Rantai	ISO BS/DIN No.	Pitch	Dia. Roller	Inner Width	Jarak Antara Inner Plate	Pin				Link Plate		Average Breaking Loads kgf.
		P	R	b1	W	D	L1	L2	L	T	H	
SINGLE STRAND												
F - 00406 S	RS25-1	6.35	3.30	3.30	3.18	2.31	3.80	4.50	-	0.74	5.84	418
F - 00909 S	RS35-1	9.53	5.08	5.08	4.78	3.59	5.85	6.85	13.50	1.25	9.00	999
F - 00812 S	RS37-1	12.70	7.80	7.80	3.40	3.63	5.10	5.90	12.45	1.00	9.80	826
F - 00812 S	RS38-1	12.70	7.80	7.80	4.80	3.63	6.00	7.10	14.10	1.10	9.80	826
F - 01012 S	RS41-1	12.70	7.77	7.77	6.38	3.59	6.75	7.95	15.10	1.25	9.80	1,050
F - 02012 S	RS40-1	12.70	7.92	7.92	7.95	3.97	8.25	9.95	17.90	1.50	12.00	1,805
F - 02015 S	RS50-1	15.88	10.16	10.16	9.53	5.09	10.30	11.90	22.50	2.00	15.00	2,896
F - 04019 S	RS60-1	19.05	11.91	11.91	12.70	5.96	12.85	14.75	28.20	2.40	18.10	4,099
F - 07025 S	RS80-1	25.40	15.88	15.88	15.88	7.94	16.25	19.25	36.60	3.20	24.10	7,301
F - 10031 S	RS100-1	31.75	19.05	19.05	19.05	9.54	19.75	22.85	43.70	4.00	30.10	10,911
F - 15038 S	RS120-1	38.10	22.23	22.23	25.40	11.11	24.90	28.90	55.00	4.80	36.20	15,092
F - 19044 S	RS140-1	44.45	25.40	25.40	25.40	12.71	26.90	31.70	59.50	5.60	42.20	19,681
F - 26050 S	RS160-1	50.80	28.58	28.58	31.75	14.29	31.85	36.85	70.20	6.40	48.20	26,003
F - 34057 S	RS180-1	57.15	35.71	35.71	35.72	17.46	35.65	42.45	80.60	7.15	54.20	34,262
F - 43063 S	RS200-1	63.50	39.68	39.68	38.10	19.85	39.00	44.80	87.30	8.00	60.30	43,542
F - 63076 S	RS240-1	76.20	47.63	47.63	47.63	23.81	47.90	55.50	106.70	9.50	72.40	63,528
DOUBLE STRAND												
F - 00806 S-2	RS25-2	6.35	3.30	3.30	3.18	2.31	6.95	7.75	-	0.74	5.84	836
F - 00209 S-2	RS35-2	9.53	5.08	5.08	4.78	3.59	10.90	11.90	24.50	1.25	9.00	1,999
F - 00312 S-2	RS40-2	12.70	7.92	7.92	7.95	3.97	15.45	17.15	33.50	1.50	12.00	3,600
F - 00612 S-2	RS50-2	15.88	10.16	10.16	9.53	5.09	19.35	21.15	41.80	2.00	15.00	5,802
F - 00819 S-2	RS60-2	19.05	11.91	11.91	12.70	5.96	24.25	26.25	52.60	2.40	18.10	8,199
F - 14025 S-2	RS80-2	25.40	15.88	15.88	15.88	7.94	30.90	33.90	67.50	3.20	24.10	14,582
F - 21031 S-2	RS100-2	31.75	19.05	19.05	19.05	9.54	37.70	40.80	81.50	4.00	30.10	21,822
F - 38030 S-2	RS120-2	38.10	22.23	22.23	25.40	11.11	47.60	51.60	103.20	4.80	36.20	30,184
F - 39044 S-2	RS140-2	44.45	25.40	25.40	25.40	12.71	51.35	56.15	112.30	5.60	42.20	39,361
F - 52050 S-2	RS160-2	50.80	28.58	28.58	31.75	14.29	61.15	66.15	132.20	6.40	48.20	52,006
F - 68057 S-2	RS180-2	57.15	35.71	35.71	35.72	17.46	68.75	75.35	151.10	7.15	54.20	68,627
F - 86063 S-2	RS200-2	63.50	39.68	39.68	38.10	19.85	74.85	80.65	161.20	8.00	60.30	86,982
F - 127076 S-2	RS240-2	76.20	47.63	47.63	47.63	23.81	91.90	99.40	198.40	9.50	72.40	127,465
TRIPPLE STRAND												
F - 00106 S-3	RS25-3	6.35	3.30	3.30	3.18	2.31	10.15	10.95	-	0.74	5.84	1,264
F - 00309 S-3	RS35-3	9.53	5.08	5.08	4.78	3.59	16.00	16.90	34.60	1.25	9.00	2,998
F - 00512 S-3	RS40-3	12.70	7.92	7.92	7.95	3.97	22.65	24.15	47.90	1.50	12.00	5,404
F - 00816 S-3	RS50-3	15.88	10.16	10.16	9.53	5.09	28.40	30.20	59.90	2.00	15.00	8,698
F - 01219 S-3	RS60-3	19.05	11.91	11.91	12.70	5.96	35.65	38.15	75.50	2.40	18.10	12,339
F - 02225 S-3	RS80-3	25.40	15.88	15.88	15.88	7.94	45.60	48.50	96.90	3.20	24.10	21,924
F - 32031 S-3	RS100-3	31.75	19.05	19.05	19.05	9.54	55.65	58.75	117.30	4.00	30.10	32,733
F - 45038 S-3	RS120-3	38.10	22.23	22.23	25.40	11.11	70.40	74.40	148.60	4.80	36.20	45,275
F - 59044 S-3	RS140-3	44.45	25.40	25.40	25.40	12.71	75.85	80.75	161.30	5.60	42.20	59,144
F - 78050 S-3	RS160-3	50.80	28.58	28.58	31.75	14.29	90.45	95.45	190.70	6.40	48.20	78,008
F - 102057 S-3	RS180-3	57.15	35.71	35.71	35.72	17.46	101.70	108.50	216.90	7.15	54.20	102,991
F - 130063 S-3	RS200-3	63.50	39.68	39.68	38.10	19.85	110.75	116.45	233.00	8.00	60.30	130,524

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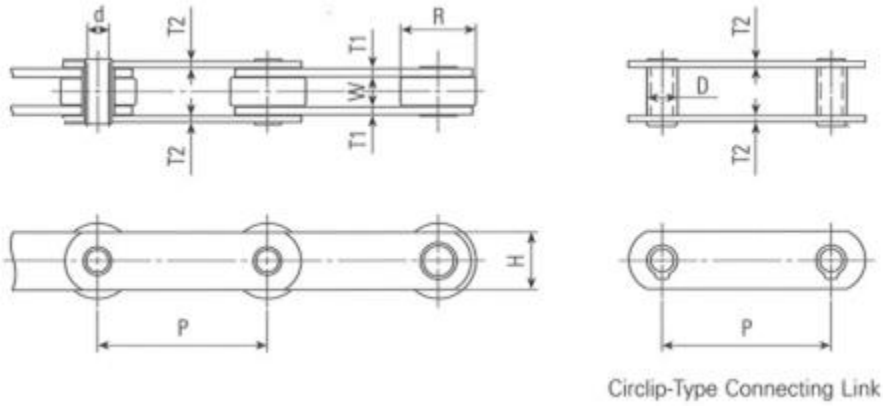
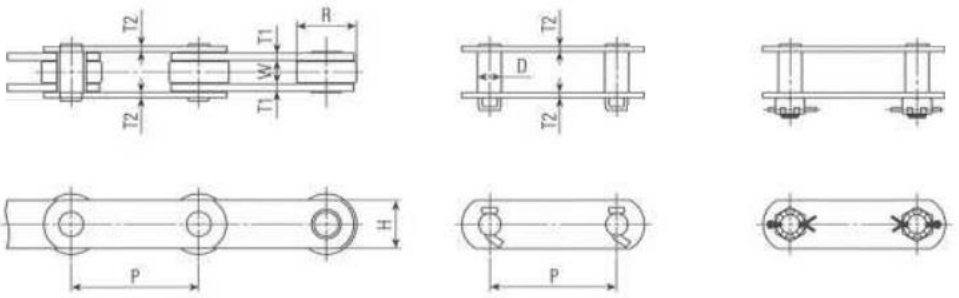
Hollow Pin Chain



Circlip-Type Connecting Link

Chain Type	Chain Equivalent	Average Tensile Strength	Pitch	Roller Diameter	Inner Width	Hollow Pin Bore Dia.	Pin Dia.	Inner Plate Thickness	Outer Plate Thickness	Plate Height
		lbf	P	R	W	d	D	T1	T2	H
			mm	mm	mm	mm	mm	mm	mm	mm
FH-09101 R	4 x 18.000 HP	18,000	101.6	47.6	19.1	13.2	19.1	6.3	5.1	38.1
FH-16152 R	6 x 36.000 HP	36,000	152.4	66.7	25.4	19.4	27	7.1	5.1	50.8
FH-22152 R	6 x 50.000 HP	50,000	152.4	88.9	38.1	23.1	31.8	9.5	8	61

Solid Pin Chain



T Pin Type Connecting Link

Bolt Type Connecting Link

Chain Type	Chain Equivalent	Average Tensile Strength	Pitch	Roller Diameter	Inner Width	Pin Dia.	Inner Plate Thickness	Outer Plate Thickness	Plate Height
		lbf	P	R	W	D	T1	T2	H
			mm	mm	mm	mm	mm	mm	mm
F -09101 R	4 x 20.000	20,000	101.6	47.6	19.1	19.1	6.3	5.1	38.1
F -16152 R	6 X 36.000	36,000	152.4	66.7	25.4	26.9	7.1	5.1	50.8
F -29152 R	6 X 65.000	65,000	152.5	66.7	25.4	26.9	7.1	5.1	54
F -29152H R	6 X 65.000H	65,000	152.5	66.7	25.4	26.9	8	7.1	54
F -45203 R	8 X 100.000	100,000	203.2	88.9	40.5	29.8	9.5	8	65

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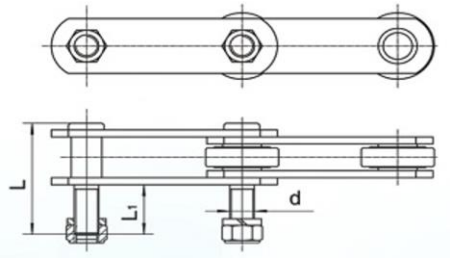
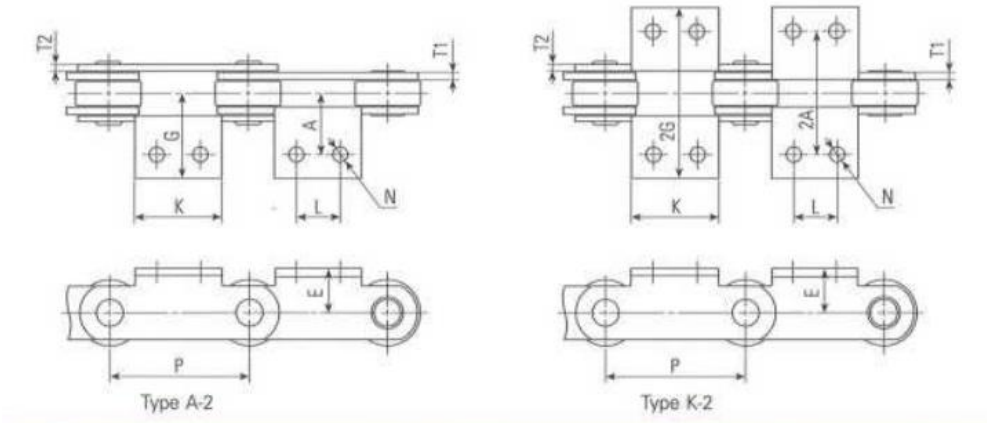
Solid Extended Pin



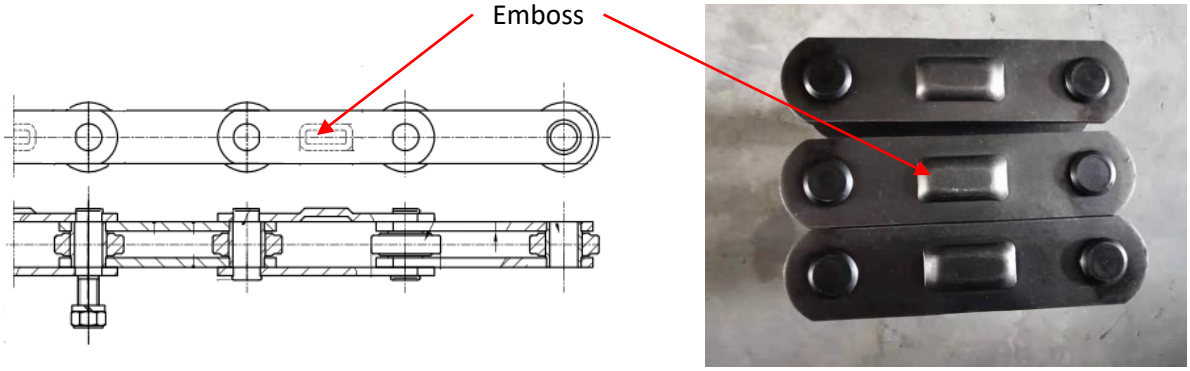
Chain Type	Chain Equivalent	L	L1	d
		mm	mm	mm
FH-09101 R	4 x 18.000 HP	98.6	50	M18
F -09101 R	4 x 20.000	98.6	50	M18
F -16152 R	6 X 36.000	106.5	50	M18
FH-16152 R	6 X 65.000 HP	106.5	50	M18
F -29152 R	6 X 65.000H	106.5	50	M24
F -29152H R	8 X 100.000	114.1	50	M24
F -45203 R	8 X 100.000	155.3	50	M24

Standard Attachment



Chain Type	Chain Equivalent	P	T1	T2	K	N	L	A	E	G
		mm	mm	mm	mm	mm	mm	mm	mm	mm
F -18101 R	4 x 18.000	101.6	6.3	5.1	63.5	10.7	31.8	44.5	31.8	61.7
F -16152 R	6 X 36.000	152.4	7.1	5.1	106.7	12.3	57.2	54	38.1	73
F -29152 R	6 X 65.000	152.5	7.1	5.1	106.7	12.3	57.2	54	38.1	73
F -29152H R	6 X 65.000H	152.5	8	7.1	106.7	12.3	57.2	54	38.1	73

Optional Feature (Embossed Plate)



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Product Test (Breaking Load Test)

BPPT B2TKS

BADAN PENGKAJIAN DAN PENERAPAN TEKNOLOGI
BALAI BESAR TEKNOLOGI KEKUATAN STRUKTUR
KAWASAN PUSPITEK Gd. 220 CISAUK – TANGERANG 15314
Telp. (021) 7560563/7560930, Fax. (021) 7560903

LAPORAN
REPORT

UJI TARIK STATIS

INDUSTRIAL CHAIN

6 x 36000 Hollow
6 x 65000 Solid

PT. FSCM MFG INDONESIA
JL. PULOGADUNG NO.30 KAWASAN INDUSTRI PULOGADUNG
JAKARTA TIMUR 13930

Nomor : 2019/B2TKS/1002
Tanggal : 24 April 2019

Dikerjakan oleh Prepared by	Tanggal Date	Diperiksa oleh Checked by	Tanggal Date	Disetujui oleh Approved by	Tanggal Date
Nur Alif Hakim, ST Arman, ST., MT.	23/7 '19	an. Tri Handayani, ST., M.Eng.	23/7 '19	Ogi Ivano, M.Eng.	24/7 2019

(Benda uji 3)

(Benda uji 4)

Gambar 3: Set Up Uji Tarik Statis Industrial Chain tipe 6 x 65000 Solid

VI. HASIL PENGUJIAN

Hasil uji tarik statis industrila chain disajikan pada tabel 1, gambar 4, gambar 5, gambar 6 dan gambar 7 berikut ini :

Tabel 1: Hasil Uji Tarik Statis.

No	Benda Uji	Gaya Maksimum (kN)	Gaya Maksimum (lb)	Langkah mesin (mm)	Keterangan
1	Industrial Chain 6 x 36000 Hollow	257,50	57888,29	27	Rusak di Outter Link Plate
2	Industrial Chain 6 x 36000 Hollow	270,00	60698,40	30,05	Rusak di Inner Link Plate
3	Industrial Chain 6 x 65000 Solid	320,00	71938,85	27	Rusak di Outter Link Plate
4	Industrial Chain 6 x 65000 Solid	322,50	72500,87	35	Rusak di Outter Link Plate

Keterangan : 1 kN = 101,971621 kgf

Dikerjakan oleh Prepared by	Diperiksa oleh Checked by

BPPT B2TKS

BADAN PENGKAJIAN DAN PENERAPAN TEKNOLOGI
BALAI BESAR TEKNOLOGI KEKUATAN STRUKTUR
KAWASAN PUSPIPTEK Gd. 220 SETU – TANGERANG SELATAN 15314
Telp. (021) 7560565/7560930, Fax. (021) 7560903

LAPORAN
REPORT

UJI TARIK STATIS

RANTAI INDUSTRI

PT. FSCM MANUFACTURING INDONESIA

Jl. Pulogadung No. 30 Kawasan Industri Pulogadung
Jakarta - Indonesia

Nomor : 2019/B2TKS/1809
Tanggal : 8 Agustus 2019

Dikerjakan oleh Prepared by	Tanggal Date	Diperiksa oleh Checked by	Tanggal Date	Disetujui oleh Approved by	Tanggal Date
Nur Azimah Salehah, ST.	9/8 '19	Tri Handayani, ST., M.Eng.	08/8 '19	Ogi Ivano, M.Eng.	8/2019

6. HASIL PENGUJIAN

Hasil pengujian ditampilkan pada **Tabel 2**, dan grafik beban tarik vs langkah mesin disajikan pada **Gambar 3** sampai dengan **Gambar 4**.

Tabel 2. Hasil Pengujian Tarik Statis Rantai Industri.

No.	Benda Uji	Beban Tarik Aktual Maksimum (kN)	Langkah Mesin Maksimum (mm)	Keterangan
1.	Rantai Industri chain 8x100000 Spesimen 1	485	47	Benda uji mengalami kerusakan pada *inner plate* akibat gaya tarik maksimum (**Gambar 8**).
2.	Rantai Industri chain 8x100000 Spesimen 2	470	41	Benda uji mengalami kerusakan pada *inner plate*, akibat gaya tarik maksimum (**Gambar 9**).
	Rata Rata	477,5	44	

Keterangan : 1 kN = 101,971621 kgf

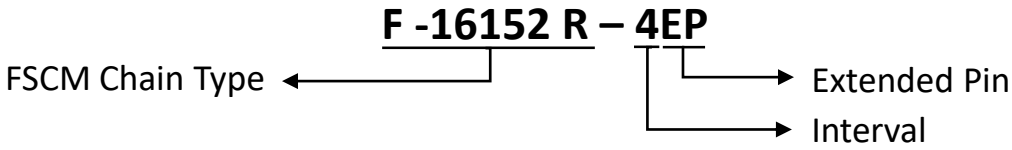
Dikerjakan oleh Prepared by	Diperiksa oleh Checked by

How To Define Chain Type

Extended Pin Chain (EP)

Example 1

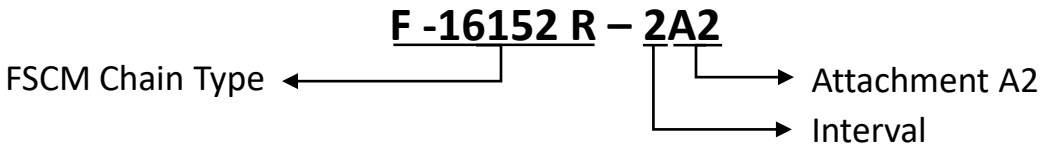
Chain Pitch 6 inch (152.4 mm)
Average Tensile Strenght 36,000 lbf
Extended Pin Every every 4 links



Standard Attachment Chain (attachmtent A2 or K2)

Example 2

Chain Pitch 6 inch (152.4 mm)
Average Tensile Strenght 36,000 lbf
Attachment A2 Every every 2 links



Example 3

Chain Pitch 6 inch (152.4 mm)
Average Tensile Strenght 36,000 lbf
Attachment K2 Every every 2 links

PT. FSCM MANUFACTURING INDONESIA

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Fax : (+62-21) 460 3688, 460 3689
Email : fscm@component.astra.co.id,
sales@fscm.co.id

Office and Plant III
Jl. Raya Narogong Km. 15 Pangkalan VI, Cileungsi
Bogor, Jawa Barat, Indonesia
Tel. : (+62-21) 823 0760
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