



CHAINS FOR ASPHALT PRODUCTION

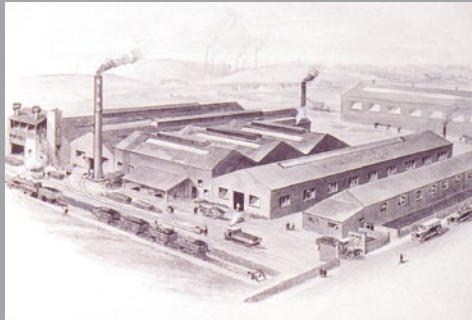


CLIMAX
Linking you to EXCELLENCE since 1926

JOHN KING



JOHN KING & COMPANY



Climax Works 1930's



Chain Assembly 1960's



New Climax Works 2000's

Company History and Qualifications

The John King Company was established in Leeds, England in 1926. Early success was achieved in the manufacture of mechanical handling equipment for the rapid mechanisation of the coal industry. In these early days conveyor chain was generally of cast link construction. The Company therefore has unrivalled experience in the production of highest quality cast link chains in ductile irons and steel under the "Climax Quality Brand". JOHN KING are undoubtedly the world leaders in this range of conveying chains.

Although cast link chains remain an important part of the JOHN KING programme, the company has progressively expanded the product range to encompass chains of other constructions and manufacturing techniques including Welded steel chains, engineered steel chains, forged fork link chains and Engineering plastic chains. Today JOHN KING offer the widest range of conveyor chains of any manufacturer which makes them unique in being able to offer an infinite number of chain types in a variety of materials and constructions for a multiplicity of industry mechanical handling applications.

In recent years it has been JOHN KING's strategy to develop the Company into a global business. This has seen the establishment, in addition to the United Kingdom, of a chain production plant in the US. John King USA Inc from their plant in East Peoria (IL) are well equipped with the manufacturing equipment for component production and assembly processes for high quality chain production serving North and South America. To provide best service in export markets the companies has warehousing and distribution worldwide and maintain ambition plans to expand the network further in the future.

All products are manufactured within the dictates of the Company's quality management according to ISO 9000 establishing consistent and high quality products and ensuring performance reliability and extended service life.

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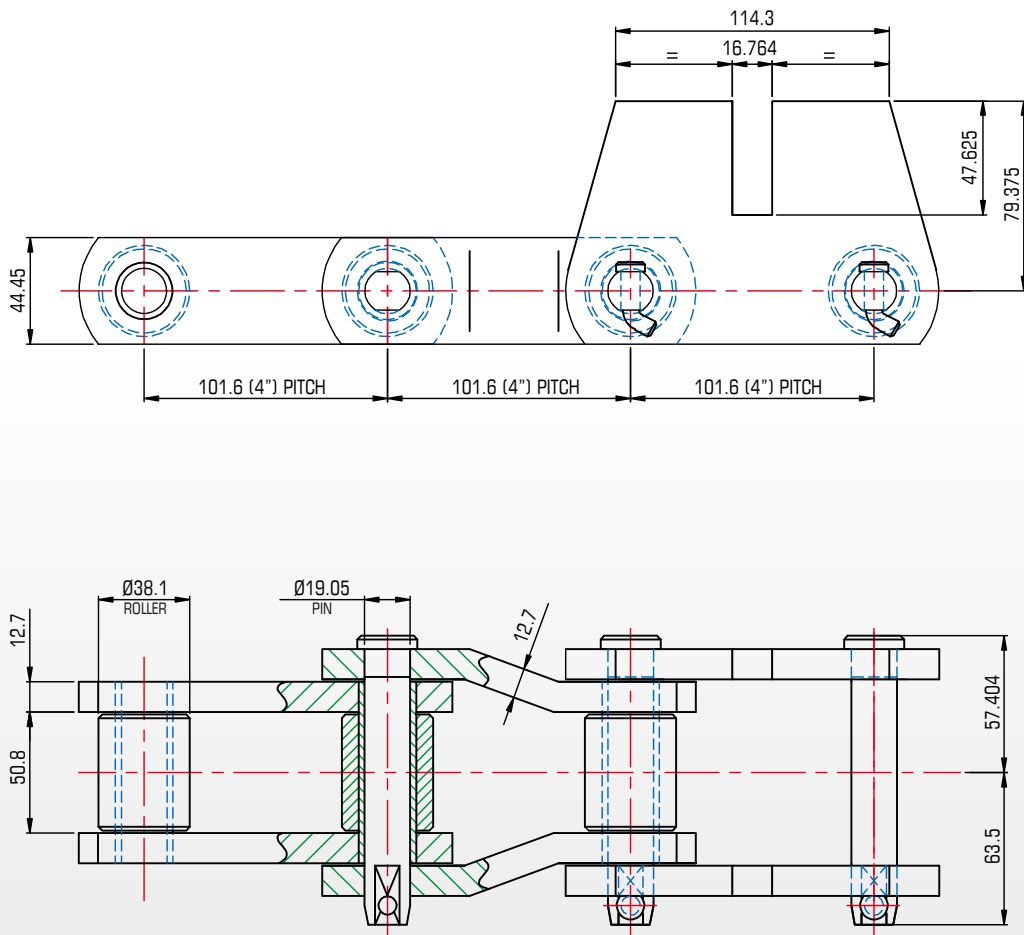


Drag Slat Chains

John King Chains produce numerous types of conveyor and elevator chain for construction equipment and Asphalt plant manufacturers. This has become a specialist market where various types of Drag slat, Conveyor and Elevator chains can be produced to customers specific requirements. Always however John King Chains will employ superior and well proven specifications for components.

The three chains featured highlight some of the "variations on a theme" for example both Engineering Roller conveyor (JKR) and bush class chains (JKB) are employed for the same function. Periodical crank links are popular to allow odd numbered attachment spacings to occur consistency on outer links, this being a technical preference. Attachment holes can be punched round or square, the latter to accommodate square necked fixing bolts.

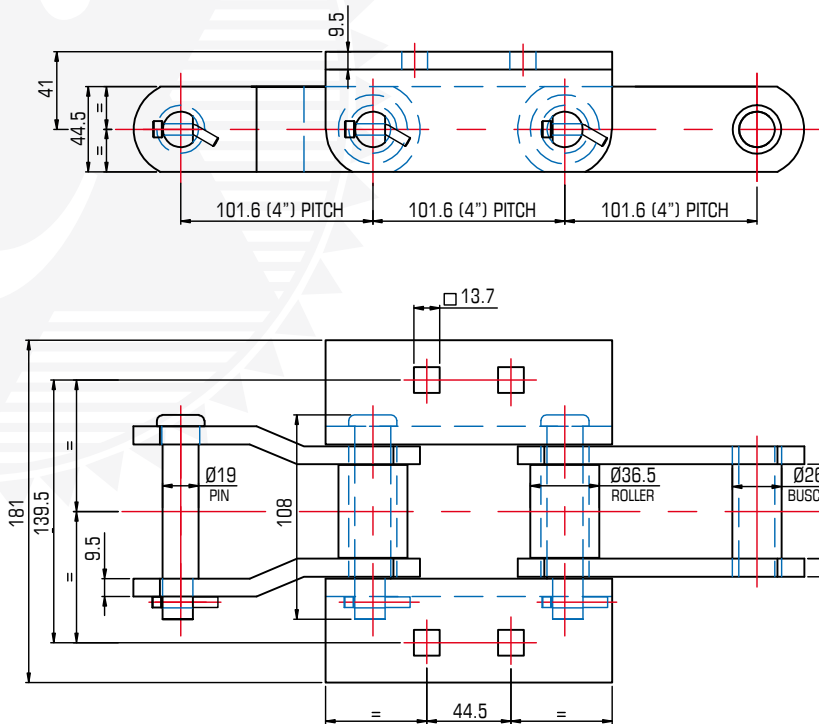
JKR2870/MIX3



Breaking load 57,000 lbs (254 kN)

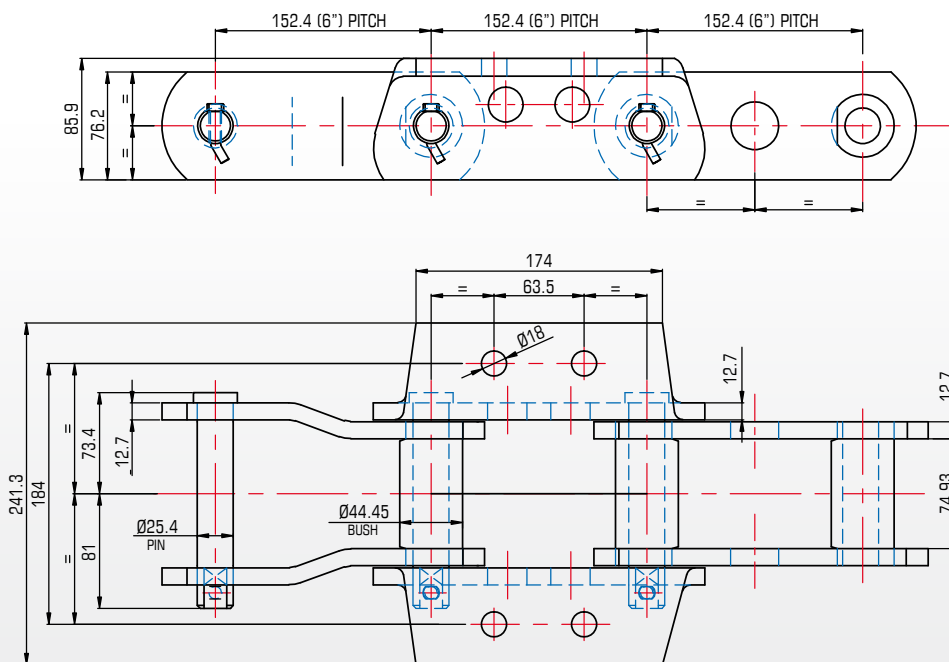
Chains for Asphalt Production

JKR2868/K2X3/CR



Breaking load 57,000 lbs (253 kN)

JKB856/K24X3

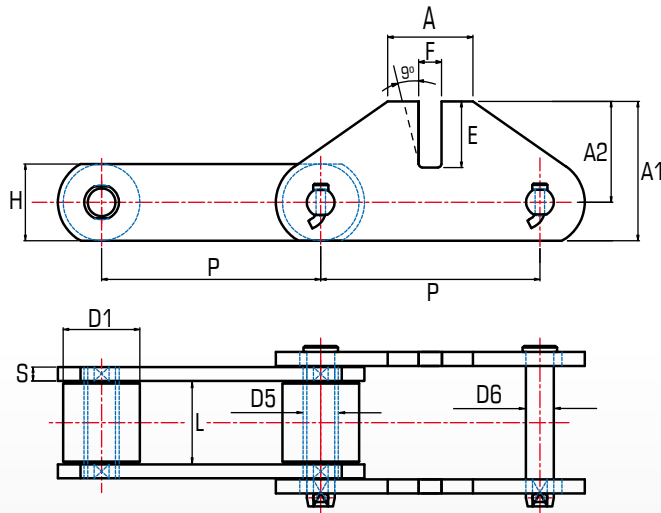


Breaking load 145,000 lbs (645 kN)



JKR Series with M Style attachments

The preference in most North American Asphalt production equipment is for material to be premixed and then transported in its finished condition with inclined drag slats and delivered to heated storage bins for ongoing distribution. The Engineering Roller Drag chains (JKR) highlighted are the most commonly encountered types, with M attachments. In either single or double strand format, the flights are generally welded into position. As they are in direct contact with the material they are normally produced from a pre-hardened steel plate. In the case of twin strand operation it is recommended chains are requested in calibrated and matched strands to ensure the strands operate in unison.



JKR Series with M Style attachments

Chain Number	P	L	D1	D5	H	S	A	A1	A2	D6	E	F	Breaking load lbs	Attachment reference
JKR2102	4.00	2.20	1.50	0.625	1.50	0.375	4.015	4.00	3.25	0.500	2.37	0.56	56,500	M-1
JKR2860	6.00	3.00	2.75	1.00	2.50	0.50	6.75	6.00	3.62	0.625	2.75	0.81	143,000	M-1
JKR2866	6.00	3.00	2.75	1.00	2.75	0.50	3.062	5.00	3.62	1.000	2.37	0.81	149,000	M-1
JKR2866	6.00	3.00	2.75	1.00	2.75	0.50	3.062	5.00	3.62	1.000	2.37	0.81	149,000	M-9

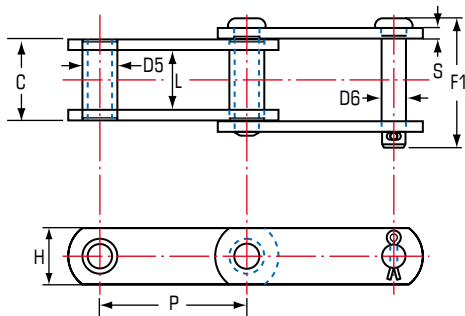
Chains for Asphalt Production



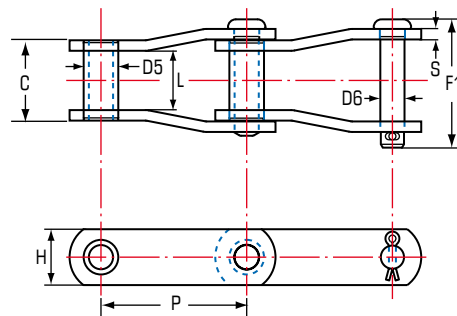
American Standard without Rollers ANSI BS29-12

The smooth and stable flow of material through a process depends on the performance of the conveyor chain installed within the equipment. Bush class chains or steel knuckle chains (JKB) are of the same construction as roller conveyor chains (JKR), but with the roller excluded. This series, with a reduced number of components, has proved to be particularly successful in high duty, high abrasion applications where lubrication is not possible. For many years KING steel bush chains have been proving performance in hotstone elevators.

Our own preference is for single strand high duty centrifugal discharge elevators. Experience has seen improved performance with a central chain system. Twin strand, although commonplace, does demand extra considerations on material infeed position, equilibrium in chain loading and strand matching accuracy.



STYLE I



STYLE V

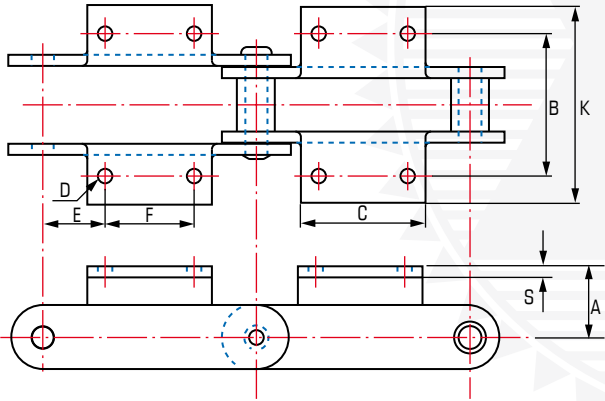
American Standard – Engineered Steel – without Rollers ANSI BS29-12

Chain Number	Style	P	Breaking Load	Average Weight	Over-All Pin & Cotter	Sidebars			Bushings			Pins	
						Thickness	Height	H T C	Length	Outside Diameter	Between Sidebars	Diameter	HTC
						inches			inches			D6	
JKB110	I	6.000	36,000	6.30	4.37	0.38	1.50	T	2.89	1.25	2.13	0.63	C
JKB844	V	6.000	52,000	10.40	5.31	0.50	2.00	T	3.50	1.19	2.50	0.75	C
JKB856	I	6.000	82,000	16.50	5.99	0.50	2.50	T	4.00	1.75	3.00	1.00	I
JKB956	I	6.000	97,000	16.60	5.99	0.50	3.00	T	4.00	1.75	2.95	1.00	I
JKB857	I	6.000	91,000	21.00	5.99	0.50	3.25	T	4.00	1.75	3.00	1.00	I
JKB958	I	6.000	97,000	21.00	6.07	0.56	3.25	T	4.13	2.00	3.00	1.13	I
JKB859	I	6.000	155,000	34.00	7.62	0.63	4.00	T	5.00	2.38	3.75	1.25	I
JKB6150	I	6.050	124,000	17.20	6.36	0.50	2.50	T	4.35	1.75	3.34	1.00	C
JKB864	I	6.050	155,000	33.00	7.62	0.63	4.00	T	5.00	2.38	3.75	1.25	I
JKB984	I	7.000	155,000	33.00	7.35	0.62	4.00	T	5.00	2.50	3.75	1.38	I

Heat Treatment code (HTC)

- T – Hardened and Tempered
- C – Case Hardened
- I – Induction Hardened

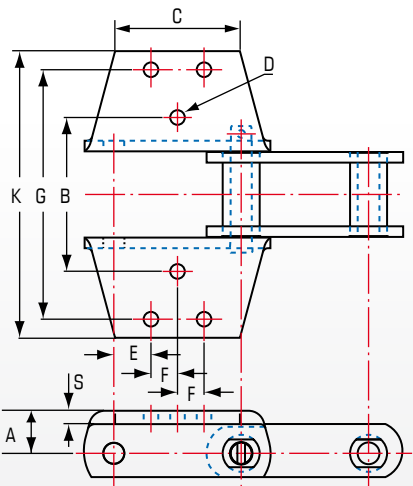
American Standard without Rollers with K2 attachment



American Standard without Rollers with K2 attachment

Chain Number	B	E	D	F	K	A	C	S
			Bolt Hole					
inches								
SS188	3.63	0.69	0.34	1.25	5.13	0.81	2.13	0.25
SS131	4.13	0.78	0.56	1.50	5.59	1.13	6.91	0.50
SS102B	5.31	1.13	0.56	1.75	6.94	1.13	4.25	0.38
JKB110	5.31	2.13	0.41	1.75	6.44	1.13	6.91	0.50
JKB5239	6.25	2.16	0.62	2.32	8.25	1.50	4.33	0.37

American Standard without Rollers with K35 attachment

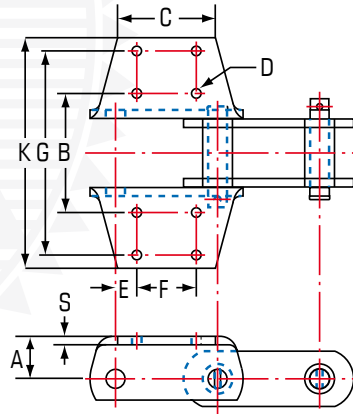


American Standard without Rollers with K35 attachment

Chain Number	B	E	D	F	K	A	G	C	S
			Bolt Hole						
inches									
JKB856	7.25	1.75	0.69	1.25	13.56	1.88	11.75	5.84	0.50

Chains for Asphalt Production

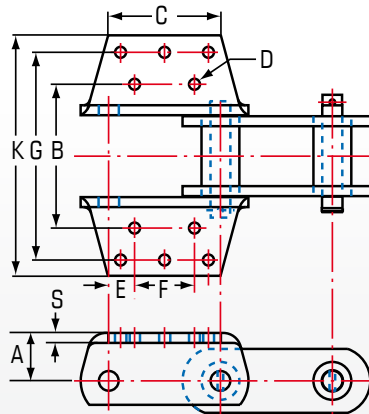
American Standard without Rollers with K44 attachment



American Standard without Rollers with K44 attachment

Chain Number	B	E	D	F	K	A	G	C	S	Weight
			Bolt Hole Dia							
inches										
JKB857	7.00	1.25	0.56	3.50	14.00	2.50	12.00	5.50	0.50	38.00
JKB859	9.00	1.63	0.69	2.75	15.00	3.00	13.00	5.92	0.63	39.00
JKB958	7.00	1.25	0.56	3.50	13.68	2.50	12.00	5.75	0.50	40.00

American Standard without Rollers with K443 attachment



American Standard without Rollers with K443 attachment

Chain Number	B	E	D	F	K	A	G	C	S	Weight
			Bolt Hole Dia							
inches										
JKB984	9.00	1.62	0.69	3.75	15.00	3.00	13.00	7.00	0.63	55.00
JKB864	9.00	1.63	0.69	3.75	14.88	3.00	13.00	7.32	0.62	58.00

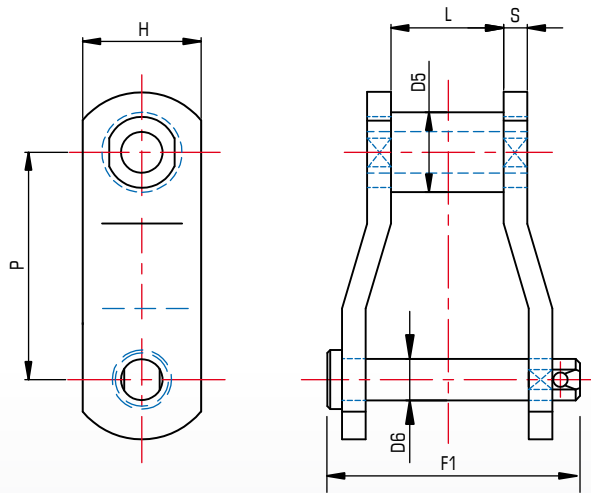
Chains for Asphalt Production



Maxi Chains – King Works Standard

This John Kings works standard includes a range of crank link steel bush chains that offer maximum versatility either in conveying or elevating applications. This series was originally developed to offer an all steel direct replacement for the Cast Bush and Pintle chains. Materials employed, with case hardened alloy steel pin and bush ensure reliable performance.

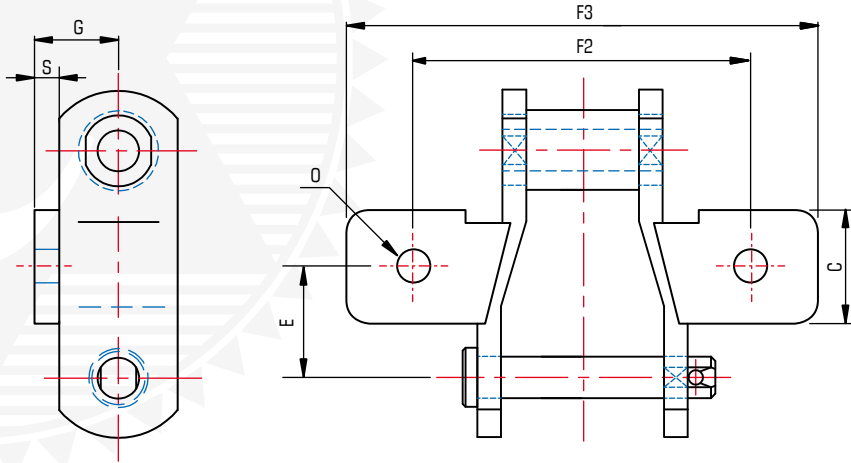
The crank link construction is a more convenient and effective style. One link can be added or removed if chain length is altered. Any variety of attachments can be fabricated and welded to the base chain. This is generally K style but other styles of attachments can also be provided.



Maxi Chains – King Works Standard

Chain Number	Pitch	Over-all Pin & Cotter	Pin Diameter	Bushing Outside Dia.	Between Sidebars	Sidebars		Average Ultimate Strength	Average Weight
	P	F1	D6	D5	L	Thickness	Height		
	mm								
MX603	76.2	88	14	22.5	38	8	40	20,000	11.02
MX503	76.7	86	14	22.7	38	8	40	20,000	9.25
MX604	101.6	79	16	25	57	10	50	27,500	14.92
MX704	101.6	70	16	30	50	10	50	35,000	22.63
MX504	103.7	147.6	16	33	50	10	50	27,500	12.66
MX600	153.4	110	18	28.6	50	10	50	30,000	15.51
MX500	153.5	92	16	38	50	10	50	25,000	8.95

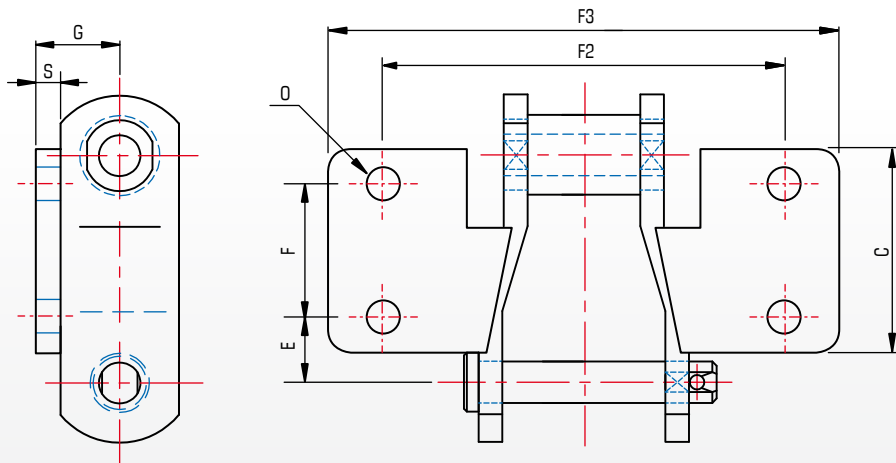
Maxi Series 5 K1 attachments



Maxi Series 5 K1 attachments

Chain number	F2	F3	E	G	O	C	S
	mm						
MX503	112.8	144.5	38.1	22.35	11.2	38	6.35
MX504	152.4	184	50.8	24	12.7	42	9.65

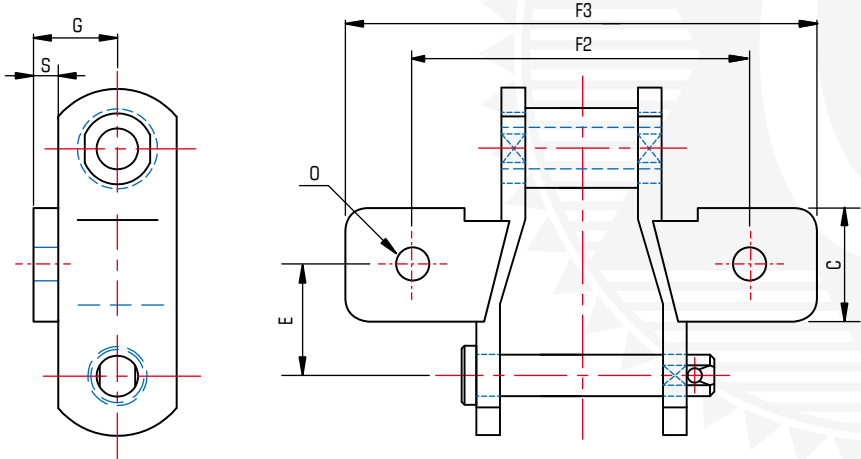
Maxi Series 5 K2 attachments



Maxi Series 5 K2 attachments

Chain number	F2	F3	E	G	O	C	F	S
	mm							
MX503	136.7	178	22.35	22.35	11.2	73.2	43	6.35
MX504	147.6	171	33.3	22.35	12.7	63.5	38.1	9.65

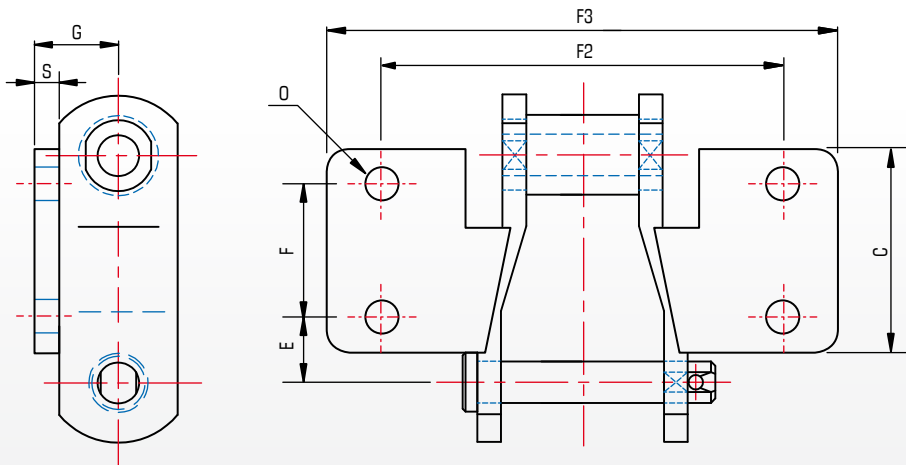
Maxi Series 6 K1 attachments



Maxi Series 6 K1 attachments

Chain number	F2	F3	E	G	O	C	S
	mm						
MX603	114.3	140	36.6	25.4	11.2	41.4	6.35
MX604	144.5	178	50.8	30.2	12.7	66.8	9.6
MX600	152.4	190	76.2	26.9	16	44.5	12.7

Maxi Series 6 K2 attachments A Style

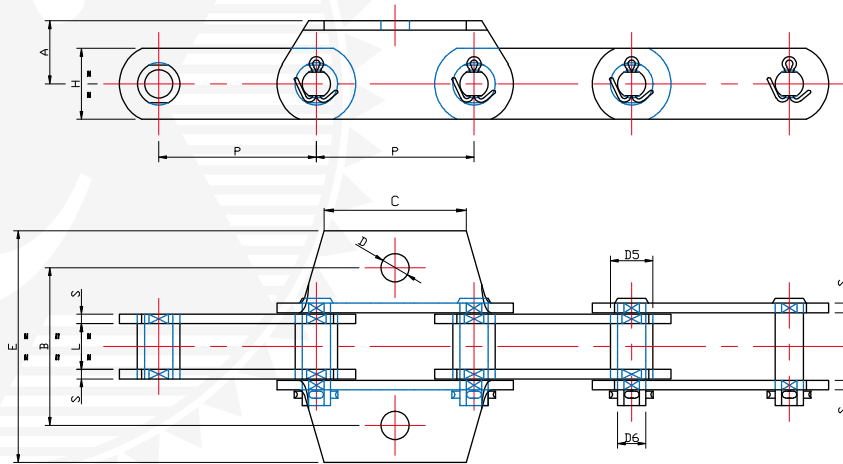


Maxi Series 6 K2 attachments A Style

Chain number	F2	F3	E	G	O	C	F	S
	mm							
MX603	149.35	178	20.5	25.4	11.2	77.7	44.5	8
MX604	146	175	27	31.75	12.7	65	38.1	11

Chains for Asphalt Production

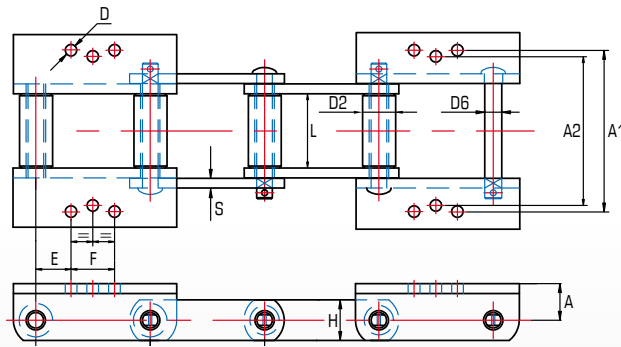
BH Metric Series Hot Elevator Chain



BH Metric Series Hot Elevator Chain

Chain Number	P	L	D5	D6	H	S	A	B	C	D	E	UTS
	mm											
BH3808	100	29	27	18	45	6	40	100	90	18	150	180
BH5041	100	38	30	18	50	8	45	125	90	18	160	200
BH5029	100	43	30	20	60	8	45	160	90	18	160	250
BH5042	100	46	40	25	65	10	45	160	90	18	210	420

JKR Series with K2/K3 Style attachments



JKR Series with K2/K3 Style attachments

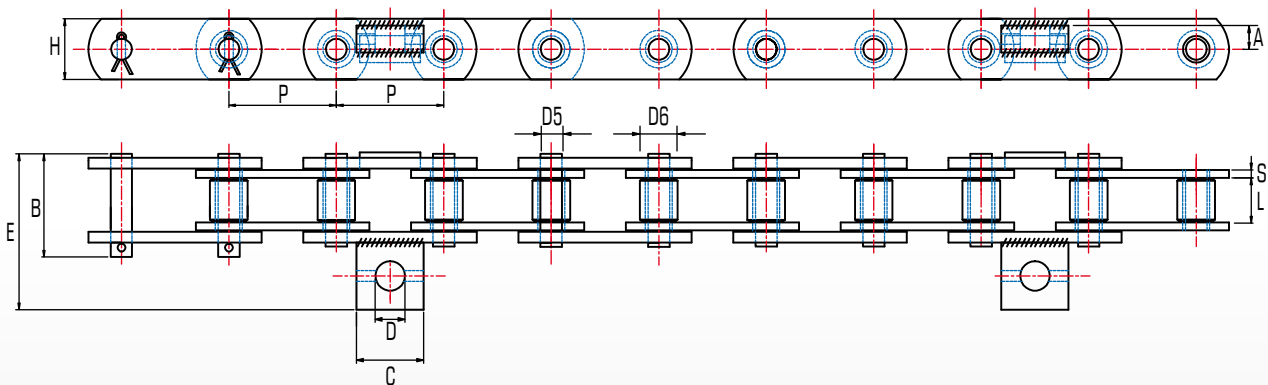
Chain Number	P	L	D2	D6	H	S	A	A1	A2	D	E	F	Breaking load	Attachment reference
	inches												lbs	
JKR 2102	4.00	2.20	1.50	0.625	1.50	0.375	1.12	5.31	-	0.50	1.125	1.175	56,500	K-2
JKR 3945	4.00	2.00	1.25	0.625	1.50	0.32	1.37	5.32	-	0.50	1.125	1.75	45,000	K-2
JKR 3945	4.00	2.00	1.25	0.625	1.50	0.32	1.37	5.312	4.75	0.375	1.125	1.75	45,000	K-3
JKR 3952	4.00	2.00	1.43	0.75	1.75	0.375	1.62	5.312	-	0.375	1.125	1.75	62,000	K-2
JKR 3952	4.00	2.00	1.43	0.75	1.75	0.375	1.62	5.25	-	0.375	1.032	1.937	62,000	K-2
JKR 3952	4.00	2.00	1.43	0.75	1.75	0.375	1.62	5.312	4.75	0.375	1.125	1.75	62,000	K-3
JKR 3952	4.00	2.00	1.43	0.75	1.75	0.375	1.62	5.05	-	0.50sq	1.125	1.75	62,000	K-2
JKR 3950	4.03	2.80	1.375	0.625	1.50	0.32	1.37	5.312	4.75	0.375	1.140	1.75	45,000	K-3
JKR 2268	4.08	2.00	1.625	0.75	2.25	0.375	2.00	5.25	-	0.50	1.16	1.75	100,000	K-2
JKR 4604	4.60	2.00	1.375	0.62	1.50	0.32	1.37	5.312	4.75	0.375	1.43	1.75	45,000	K-3
JKR 2856	6.00	3.00	2.75	1.00	2.50	0.50	1.87	7.25	-	0.625	1.75	2.5	143,000	K-2
JKR 2860	6.00	3.00	2.75	1.00	2.50	0.50	1.87	7.25	4.75	0.625	1.75	2.5	143,000	K-24



Engineering Steel Paver Chains

John King have extensive experience in the manufacture and application of Paver chains for use as drag bars assemblies in these road surfacing machines. The chains are used in twin strand format with the strands made common with flight bars. Used either as a single or double pair the chains are installed within the delivery hopper of the machine.

John King Chains produce paver chains as a principal series to original equipment and replacement applications. A multiplicity of chain types are encountered, but all following the same general format. Some of the more popular types encountered are highlighted in this section, but this is by no means exhaustive and for those chains required that are not detailed please contact our sales department.

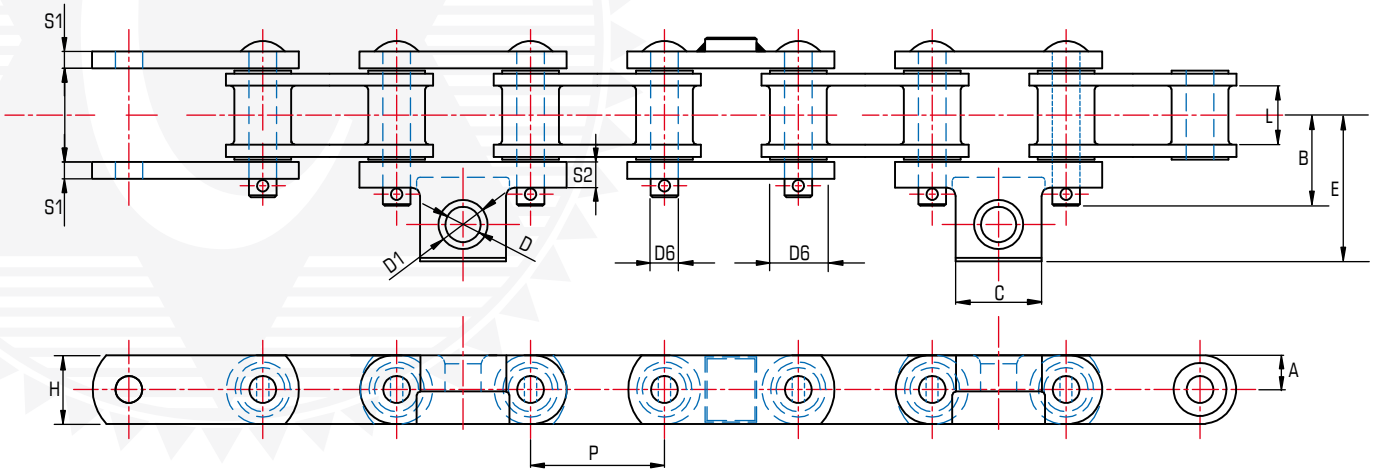


Engineering Steel Paver Chains

Chain Number	P	L	D5	D6	H	S	A	B	C	D	E	Attachment position	Breaking Load kN
	mm												
JK3266	75.00	18.50	15.00	10.00	25	4	15	32	25	13.80	41	4	90
JK3493	80.00	25.00	20.00	15.00	35	5	20	43	40	19.80	59	4	178

Chains for Asphalt Production

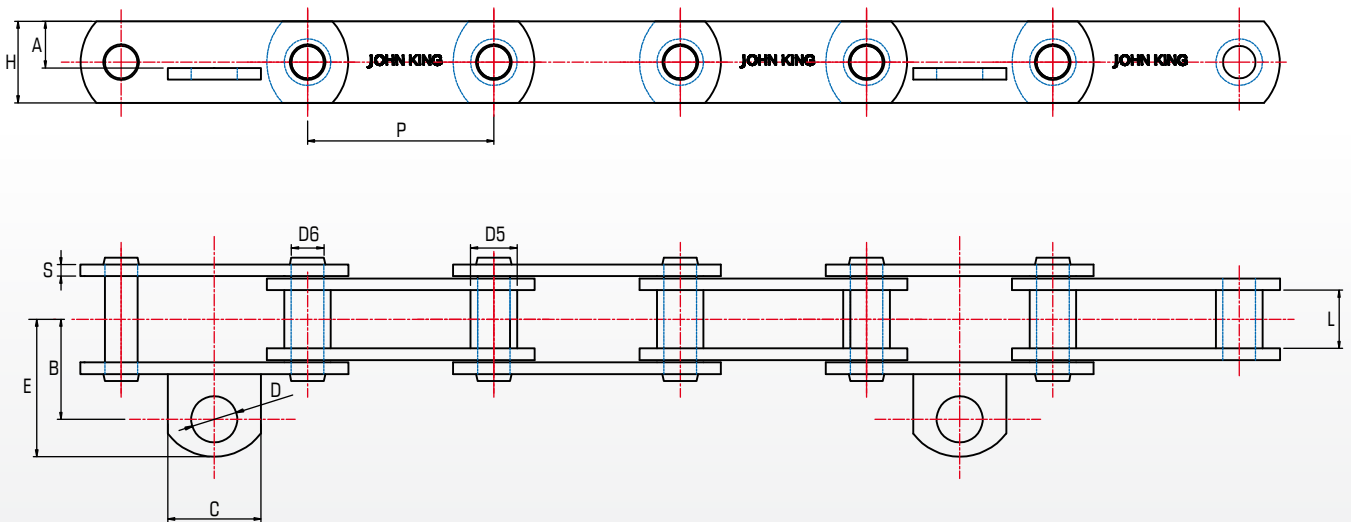
Cast Combination Paver Chains



Cast Combination Paver Chains

Chain Number	P	L	D5	D6	H	S1	S2	A	B	C	D	D1	E	Attachment position	Breaking Load lbs
	mm														
C131	78.10	29	31.80	15.88	40	10	15	20	62.60	50.00	21	29	80	4	24,000
C188	66.26	22	22.20	12.70	30	6	8	15	80.00	22.20	21	29	56	4	14,000

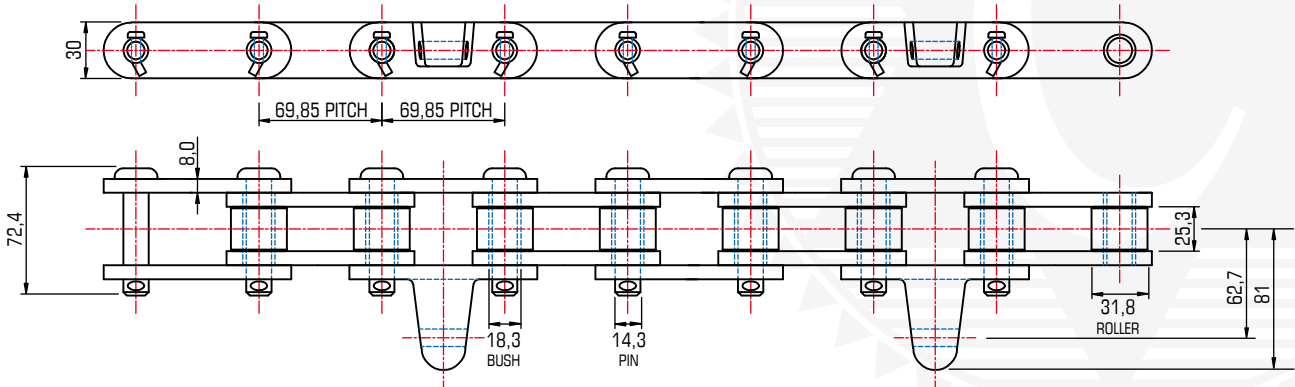
Engineering Steel Paver Chains



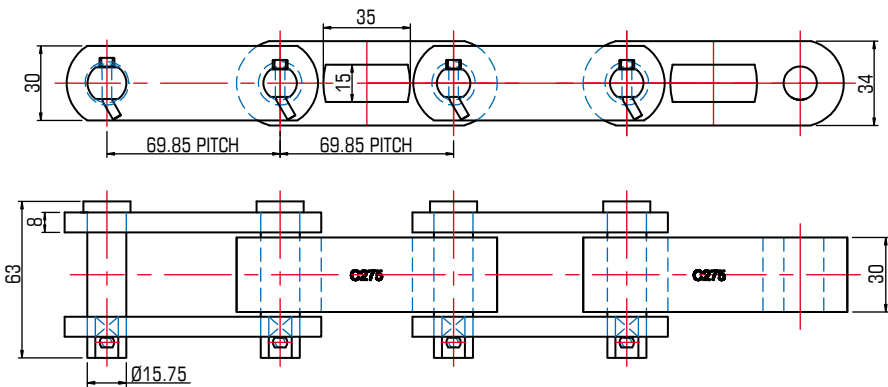
Engineering Steel Paver Chains

Chain Number	P	L	D5	D6	H	S	A	B	C	D	E	Attachment position	Breaking Load kN
	mm												
JK3266	75.00	18.50	15.00	10.00	25	4	15	32	25	13.80	41	4	90
JK3493	80.00	25.00	20.00	15.00	35	5	20	43	40	19.80	59	4	178

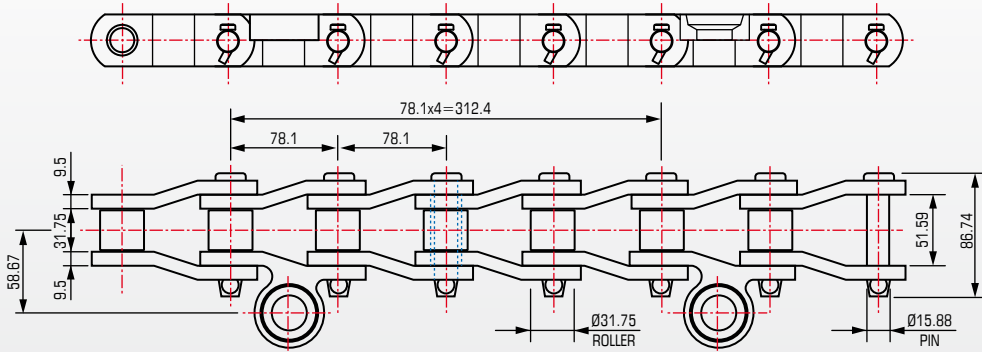
JK1594/G19X4 alternatively JK1594/G19X6



JKC275



JKR40SL





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