

MATERIALS HANDLING

Conveying the world



Parsons Chain



Parsons Chain

At the forefront of materials handling chain manufacture since 1948

Founded in 1903, Parsons Chain Company has long been established as a world leader in the manufacture of chains and components for the materials handling industry.

In that time we have developed a reputation for innovation and development of new materials, manufacturing techniques and heat treatment methods. As a result our products last longer, are highly reliable and offer great cost-effectiveness.

Because of our high volume production, we can purchase materials in cast quantities, this enables us to obtain material with precisely specified and strictly controlled alloying elements necessary to ensure our chains and components withstand the most demanding conditions.

With our continuous methods of manufacture, our chains have improved dimensional and mechanical consistency, offering conveyor manufacturers greater compatibility, reliability and performance.

Our facilities are fully accredited under recognised national and international quality management schemes and Parsons Chain Company was the first manufacturer of welded link chain in the world to receive BS EN ISO 9001: 2000 accreditation.





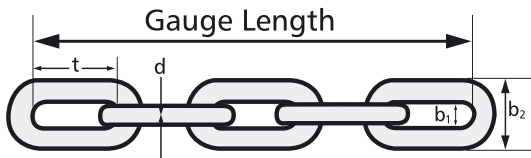
Round Link Materials Handling Chain

Parsons' range of mechanical handling chain and components has been specially developed to withstand the arduous and demanding conditions associated with heavy-duty bulk materials handling. The range is in alloy steel, heat-treated to produce the optimum combination of high strength and wear resistance. This equipment can be relied upon to operate for long periods on bulk handling installations with minimum maintenance, even in the most abrasive, corrosive or wet conditions. It has major advantages in terms of cost and long service over fabricated-type chain and is especially designed for maximum resistance to interlink wear even when handling the most difficult materials.

DIN 22252:2001 - Round link steel chains
Calibrated and tested for conveyors, haulage systems

Nominal size d x t	Diameter		Pitch		Width		Gauge Length	
	d	Tolerance	t	Tolerance	Inside b ₁ min	Outside b ₂ max	5 x t	Tolerance
14 x 50	14	± 0.4	50	± 0.5	17	48	250	± 1
18 x 64	18	± 0.5	64	± 0.6	21	60	320	± 1
19 x 64.5	19	± 0.6	64.5	± 0.6	22	63	322.5	± 1
22 x 86	22	± 0.7	86	± 0.9	26	73	430	± 1
26 x 92	26	± 0.8	92	± 0.9	30	85	460	± 1
30 x 108	30	± 0.9	108	± 1.1	34	97	540	± 1.2

All dimensions in mm



Nominal size d x t	Reference number	Test force min. kN	Breaking force min. kN	Bend test deflection min. mm	Weight kg/m
14 x 50	14050 RDR	185	246	14	4
18 x 64	18064 RDR	305	407	18	6.6
19 x 64.5	19064 RDR	340	454	19	7.6
22 x 86	22086 RDR	456	608	22	9.5
26 x 92	26092 RDR	637	850	26	13.7
30 x 108	30108 RDR	848	1130	30	18

Elongation at test force 1.6% max
Total elongation at fracture 14% min.
Fatigue test 70,000 cycles min.

N.B. Chain sizes 14mm and 18mm are dual heat treated.
Chain sizes 19mm to 130mm are through hardened.



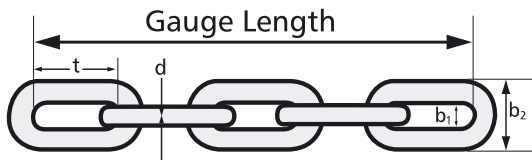
Round Link Deep Case Hardened Chain

For use with abrasive material, or where excessive friction occurs and may increase operational life by up to five times that of standard chain.

Based on DIN 22252:2001 Round link steel chains
Additionally Proof Loaded and Tested

Nominal size d x t	Diameter		Pitch		Width		Gauge Length	
	d	Tolerance	t	Tolerance	Inside b ₁ min	Outside b ₂ max	5 x t	Tolerance
14 x 50	14	± 0.4	50	± 0.5	17	48	250	± 1
18 x 64	18	± 0.5	64	± 0.6	21	60	320	± 1
19 x 64.5	19	± 0.6	64.5	± 0.6	22	63	322.5	± 1
22 x 86	22	± 0.7	86	± 0.9	26	73	430	± 1
26 x 92	26	± 0.8	92	± 0.9	30	85	460	± 1
30 x 108	30	± 0.9	108	± 1.1	34	97	540	± 1.2

All dimensions in mm

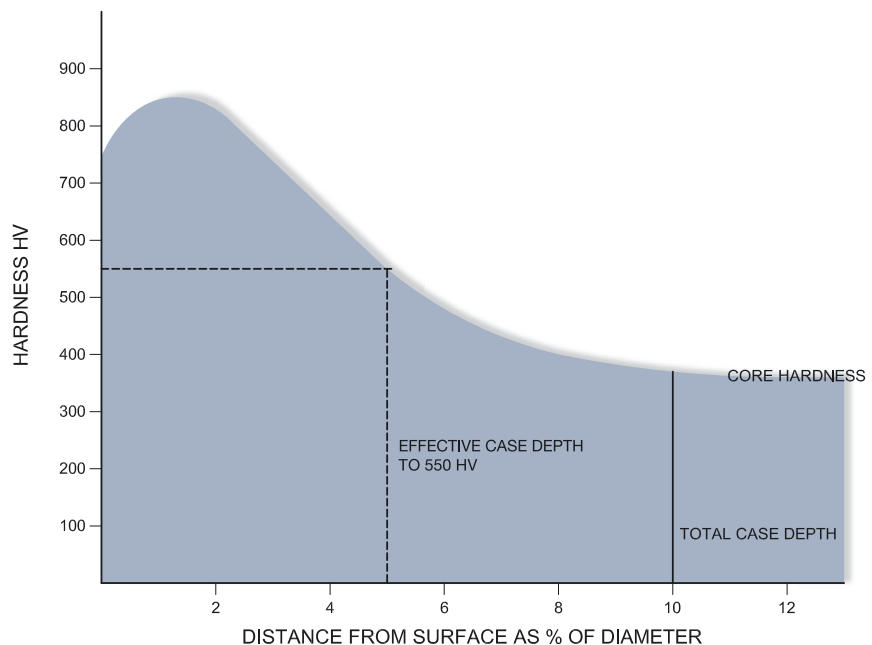


Nominal size d x t	Reference number	Test Force	Breaking force min.	Total Case Depth	Effective Case Depth 550 HV min.	Weight
mm		kN	kN	mm	mm	kg/m
14 x 50	14050 RCH	75	125	1.4	0.7	4
18 x 64	18064 RCH	123	205	1.8	0.9	6.6
19 x 64.5	19064 RCH	136	227	1.9	1	7.6
22 x 86	22086 RCH	182	304	2.2	1.1	9.5
26 x 92	26092 RCH	255	425	2.6	1.3	13.7
30 x 108	30108 RCH	339	565	3	1.5	18

Test Force Stress 240 N/mm².

Breaking Force Stress 400 N/mm².

Surface Hardness 750 HV min.

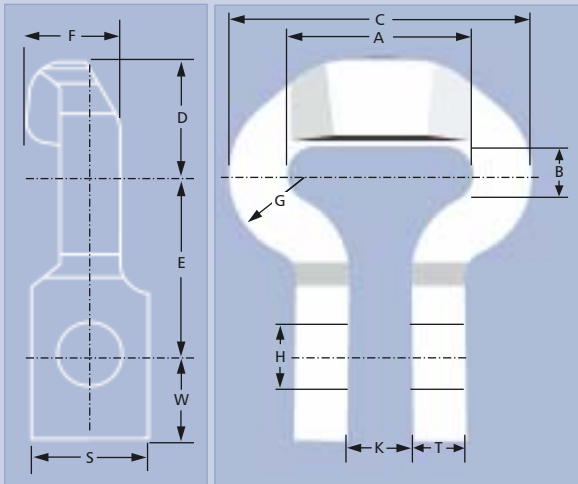




Twin Outboard Chain Systems

Shackle Type Connectors

There is also a range of suitable nuts, bolts and flight bars available.
Further details can be obtained on request.

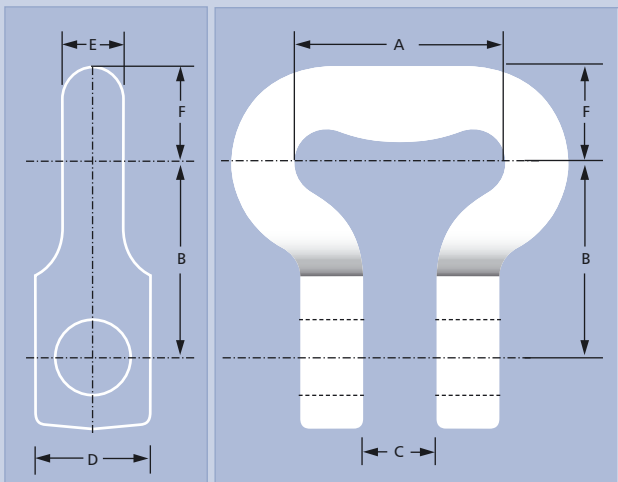


Mechanical Properties

To suit nominal chain size	Ref. no.	Test force min.	Elongation at Test force	Breaking force min.	Elongation at Break
mm		kN	% max	kN	% min
14 x 50	C 1575	180	2	225	8
18 x 64	C 1519	300	2	370	8
19 x 64.5	C 2569	325	2	405	8
22 x 86	C 2571	440	2	550	8
26 x 92	C 2573	580	2	725	8

To suit nominal chain size	Part number	A	B	C	D	E	F	G	H	K	S	T	W	Weight
				max										kg/m
14 x 50	C 1575	50	15	81	29	48	30	23	17	18	30	13	18	0.5
18 x 64	C 2569	64.5	20	105	44	55	40	31	21	19.5	43	19	40	1.38
19 x 64.5	C 2569	64.5	20	105	44	55	40	31	21	19.5	43	19	40	1.38
22 x 86	C 2571	86	24	134	58.5	75	46	37	25	24	52	22	44	2.58
26 x 92	C 2573	92	28	148	60.5	85	53	43	28	30.5	58	26	46	3.32

Padless Connector



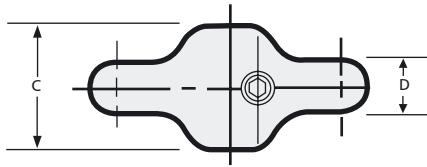
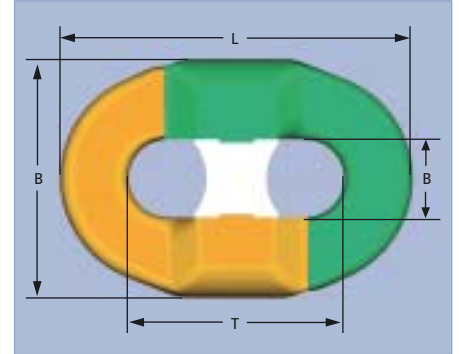
To suit nominal chain size	Ref. no.	A	B	C	D	E	F	Weight
				max				kg
14 x 50	C 1981	50	47.5	17	28	15	23	0.46
18 x 64	C 1980	64	55	22	38	19	30	1
22 x 86	C 2903	86	75	31	50	23	38	1.60
30 x 108	C 2258	108	96	34	64	31	50	4



Chain Connecting Systems

Chainlock Connectors

For nominal chain size	Recommended Torque		Securing screw Reference number
	mm	Nm	
22 X 86	50-75	40-55	C 271901
26 X 92	100-120	74-88	C 271902
30 X 108	100-120	74-88	C 271903



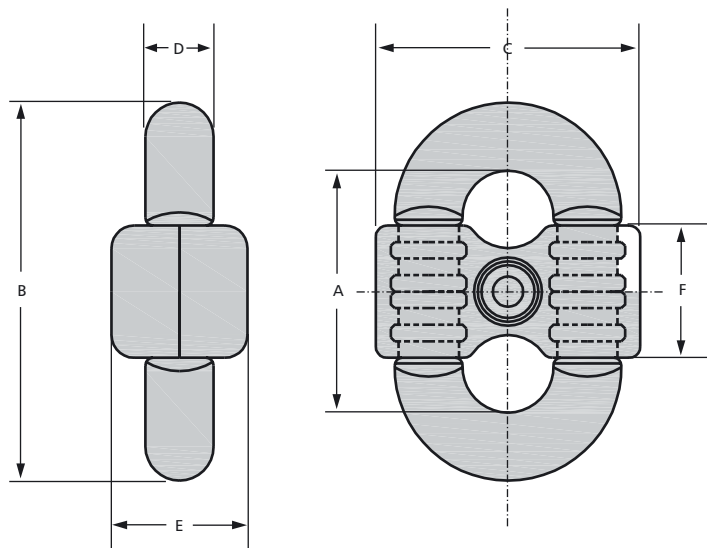
For nominal chain size	Reference number	Dimension mm						Test force min.	Elongation at test force	Breaking force min.	Weight
		A	B	C	D	E	T				
22 x 86	C 2532	28	85	55	23	132	86	525	1.2	750	1.8
26 x 92	C 2537	30	95	65	27	148	92	735	1.2	1050	2.6
30 x 108	C 2546	35	109	75	30	170	108	990	1.2	1400	4

Chainlock Connectors have been designed specifically for joining together conveyor chains. This performance has been achieved through careful choice of materials and heat treatment whilst keeping the dimensional properties of the mechanical joint within DIN 22258 Part 2 2003. This will ensure that the Chainlock Connectors - **which must be installed in the horizontal plane of the chain only** - will safely negotiate sprockets that have been designed with this specification and requirements in mind.

Padlock Type Connector

PADLOCK CONNECTORS MUST BE INSTALLED IN THE HORIZONTAL PLANE ONLY.

It is essential that the grooves and faces are clean and the location marks are correctly matched before assembly

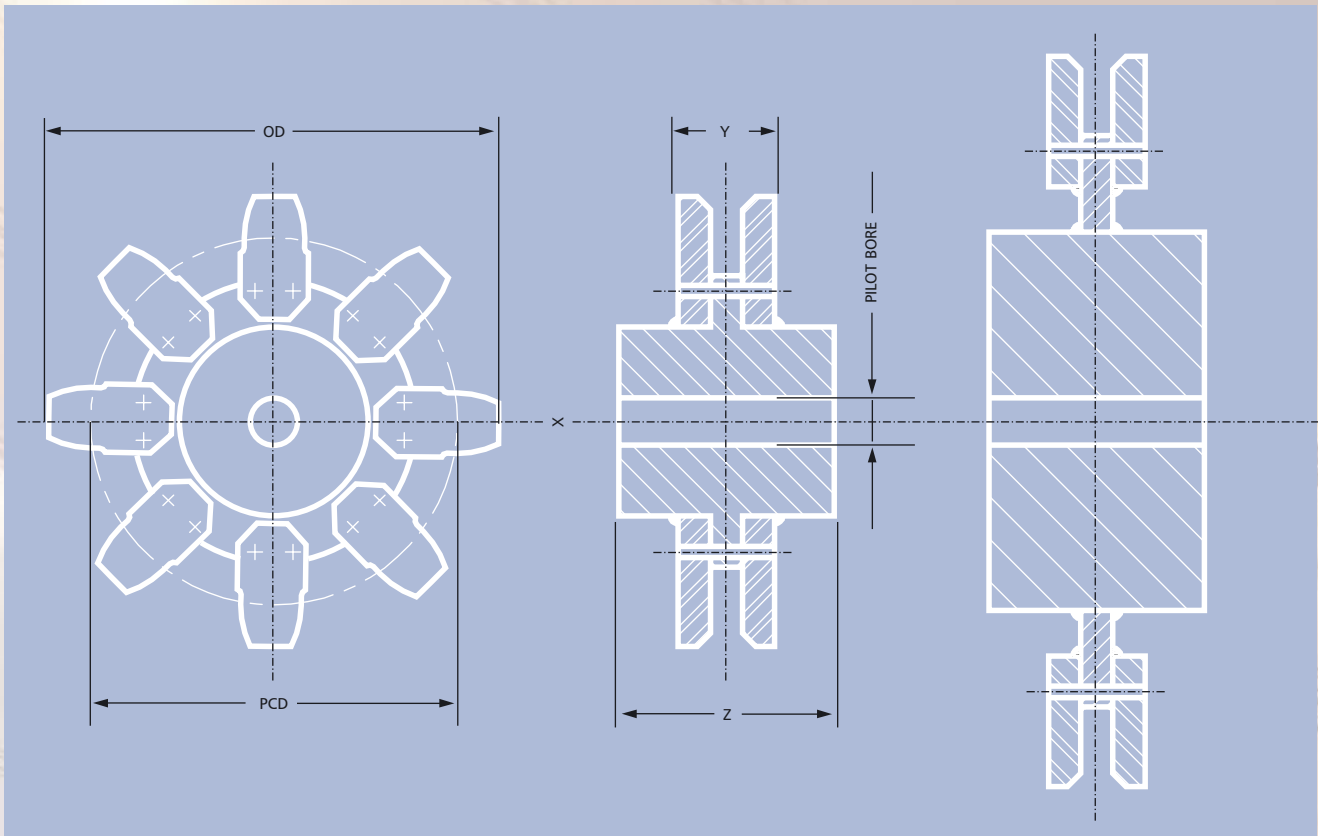


For nominal chain size	Reference number	Reference						Test force min.	Breaking force min.	Weight
		A	B	C	D	E	F			
18 x 64	C 10206	64	100	70	18	36	35	330	410	0.8



Standard Fabricated Sprockets

Sprockets available bored and keyed – details on request.



Chain Size mm	Part Number	No. of Teeth	X	Y	Z	PCD	OD	Standard Pilot Bored	Estimated Weight
									kg
14 x 50	1074000	6	100	51	114	194	238	25	12
	1074300	8	113	51	120	256	300	25	18
	1074400	10	176	51	128	319	364	25	35
	1074500	11	210	51	128	352	396	40	43
	1074600	13	178	51	120	415	460	40	44
18 x 64	1074700	6	125	59	114	247	308	25	20
	1074800	8	146	59	152	328	390	25	36
	1074900	10	230	59	152	409	470	40	69
	1075000	11	270	59	152	450	510	45	90
	1075100	13	280	59	202	531	592	45	129
22 x 86	1075300	6	170	96	152	335	420	25	54
	1073944	8	278	96	172	442	526	25	118
	1075200	10	305	96	178	550	634	45	165
26 x 92	1090900	6	180	101	160	354	434	32	55
	1091000	8	262	101	180	471	551	40	99
	1155400	10	380	101	180	588	668	40	187
30 x 108	1105400	6	230	117	200	416	517	50	122
	1086800	8	326	117	200	554	655	100	215
	1086900	11	400	117	200	759	860	100	355



Designed & Produced by Red Square Design & Advertising Ltd. Tel: +44 (0)1386 793600



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