

HIGH PRECISION CONVEYOR CHAINS AND SPROCKETS



DIN 8165 FV

DIN 8167 M

SMS 1698

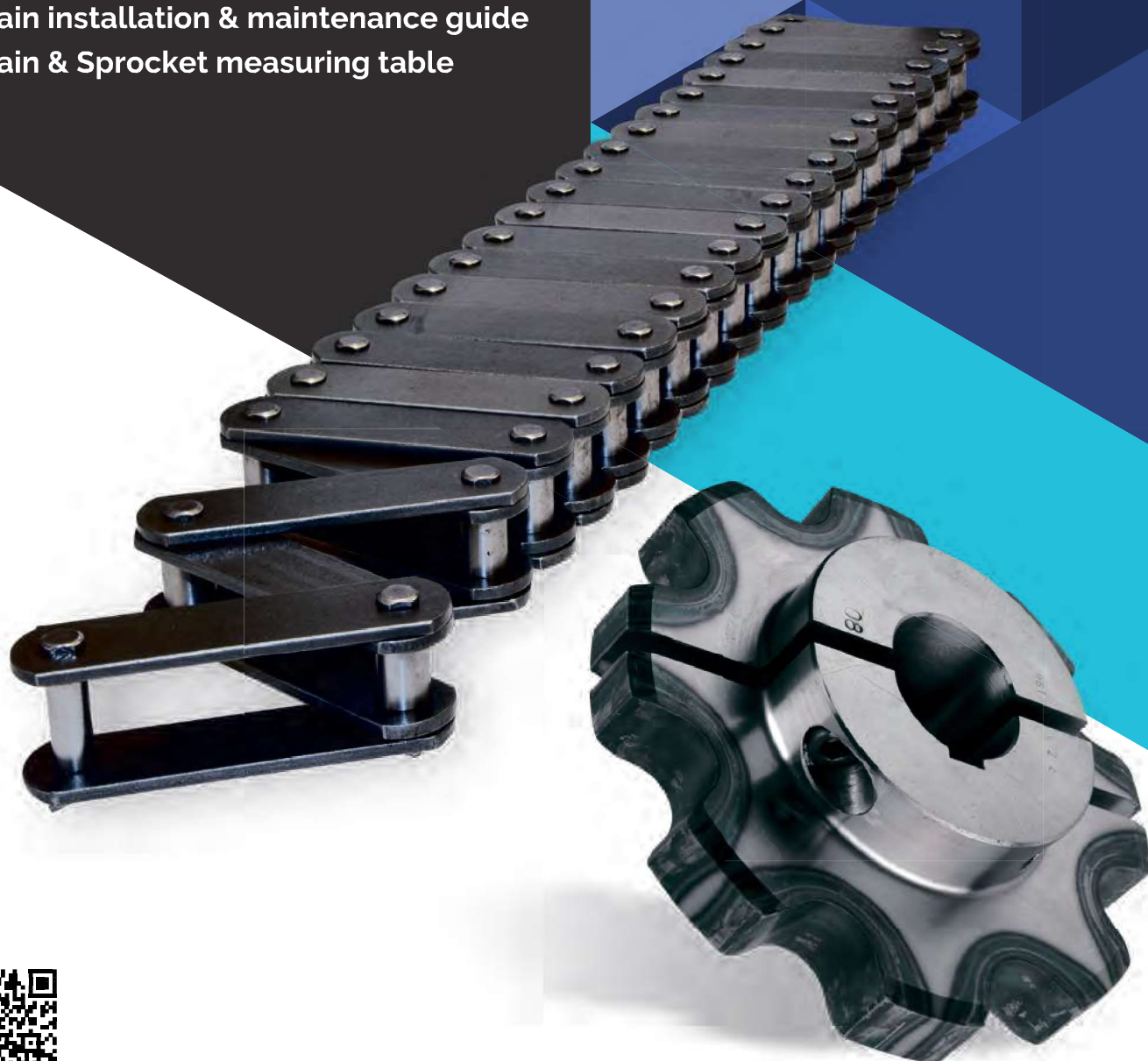
Transmission chains

Sprocket

Special & Engineered chains

Chain installation & maintenance guide

Chain & Sprocket measuring table



scanchain.net



About ScanChain

Most providers of industrial chains in the Nordic market sees chains as a commodity where there is more focus on trade than on the advice when choosing the correct product.

The philosophy behind ScanChain is that we believe it is important to challenge our customers with new solutions in addition to the solutions that they are accustomed to. In this way, our customers always have best options to get the right solution for each project.

The people behind the ScanChain has solid experience from the transmission and bulk industry. ScanChain produces a large variety of conveyor chain products, and with their own workshop we can provide a chain solution to suit specific customer requirements and wishes. Combined with contracts with the best suppliers in the market, all of which use the latest technology in manufacturing of chains, we have the conditions to live up to this philosophy.

Kaare Söderberg

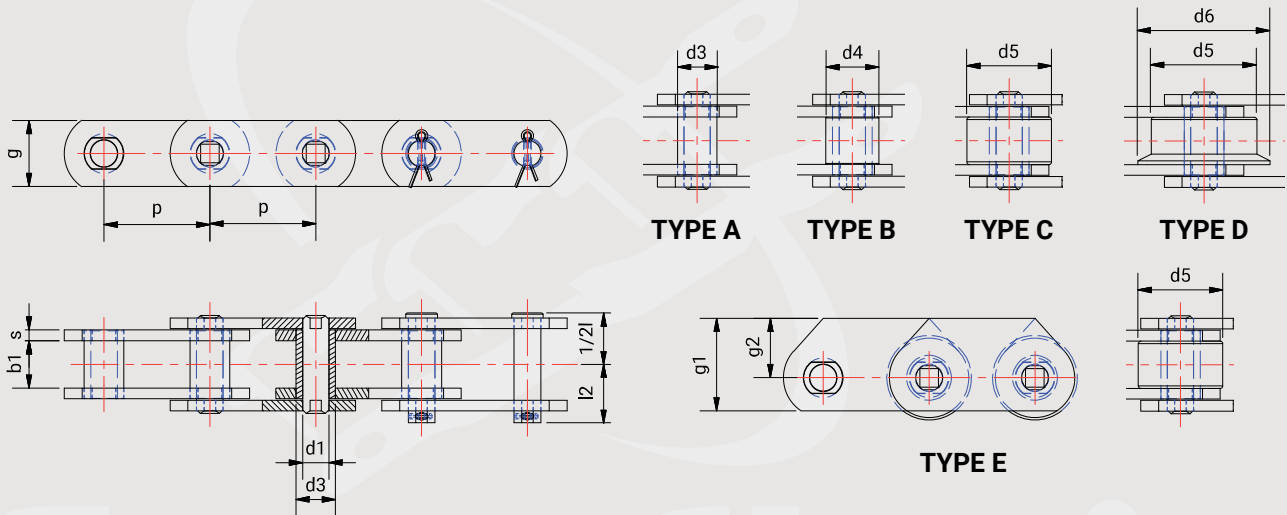
Sales Director, Owner

At ScanChain we go far for quality. We are actually so sure that our conveyor chains are the best that we dare explain why.

Not just a single item must be present to ensure a high and uniform quality.

**What makes
a ScanChain.**

Chains DIN 8165 FV

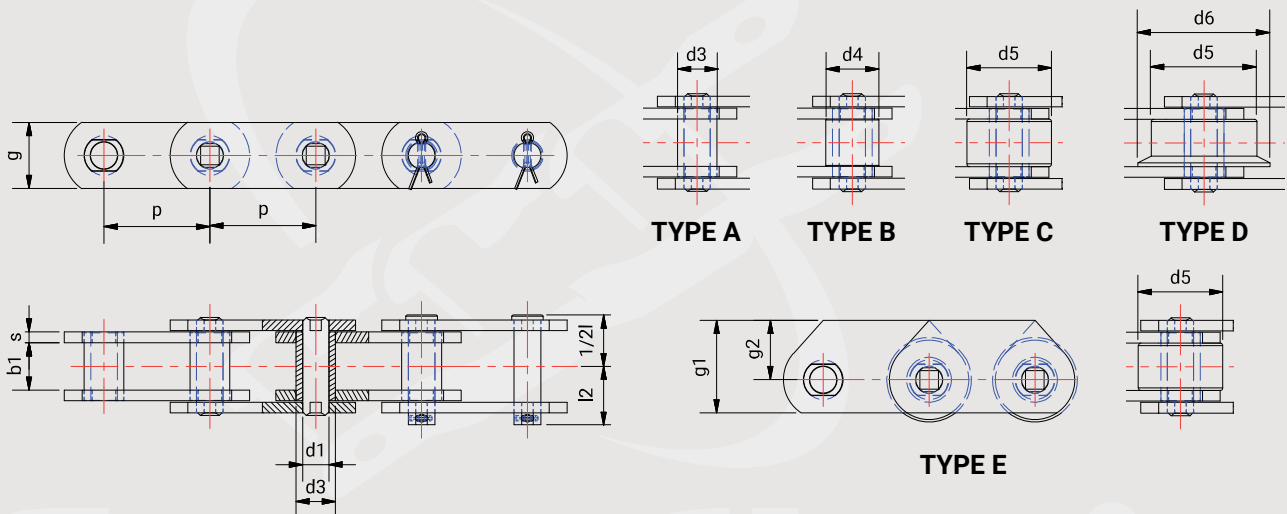
DIN 8165 **A style**DIN 8165 **B style**DIN 8165 **C style**DIN 8165 **D style**DIN 8165 **E style**

Chain No.	Pitch p [mm]	Breaking load [kN]	Breaking load* [kN]	Average weight (bush type) [kg/m]	Over-All pin & cotter l [mm]	Over-All pin & cotter l2 [mm]	Small roller d4 [mm]	Large roller d5 [mm]	Flange roller d5 [mm]	Flange roller d6 [mm]	Flange roller thickness t [mm]	Bushings diameter d3 [mm]	Between sidebars b1 [mm]	Sideplate thickness s [mm]	Sideplate height g [mm]	Sideplate height g1 [mm]	Sideplate height g2 [mm]	Pin d1 [mm]
FV40	50	42	47	2.24	36	21	20	32	40	50	4	15	18	3	25	35	22	10
FV40	63	42	47	2.08	36	21	20	32	40	50	4	15	18	3	25	35	22	10
FV40	80	42	47	1.92	36	21	20	32	40	50	4	15	18	3	25	35	22	10
FV40	100	42	47	1.76	36	21	20	32	40	50	4	15	18	3	25	35	22	10
FV40	125	42	47	1.60	36	21	20	32	40	50	4	15	18	3	25	35	22	10
FV63	63	64	75	3.46	45	26	26	40	50	63	5	18	22	4	30	40	25	12
FV63	80	64	75	3.73	45	26	26	40	50	63	5	18	22	4	30	40	25	12
FV63	100	64	75	2.92	45	26	26	40	50	63	5	18	22	4	30	40	25	12
FV63	125	64	75	2.67	45	26	26	40	50	63	5	18	22	4	30	40	25	12
FV63	260	64	75	2.45	45	26	26	40	50	63	5	18	22	4	30	40	25	12
FV90	63	100	115	5.72	53	30	30	48	63	78	6.5	20	25	5	35	45	27,5	14
FV90	80	100	115	5.20	53	30	30	48	63	78	6.5	20	25	5	35	45	27,5	14
FV90	100	100	115	4.67	53	30	30	48	63	78	6.5	20	25	5	35	45	27,5	14
FV90	125	100	115	4.35	53	30	30	48	63	78	6.5	20	25	5	35	45	27,5	14
FV90	160	100	115	3.87	53	30	30	48	63	78	6.5	20	25	5	35	45	27,5	14
FV90	200	100	115	3.50	53	30	30	48	63	78	6.5	20	25	5	35	45	27,5	14
FV90	250	100	115	3.41	53	30	30	48	63	78	6.5	20	25	5	35	45	27,5	14
FV112	100	120	170	6.11	62	35	32	55	72	90	7.5	22	30	6	40	60	30	16
FV112	125	120	170	5.85	62	35	32	55	72	90	7.5	22	30	6	40	60	30	16
FV112	160	120	170	5.26	62	35	32	55	72	90	7.5	22	30	6	40	60	30	16
FV112	200	120	170	5.00	62	35	32	55	72	90	7.5	22	30	6	40	60	30	16
FV112	250	120	170	4.72	62	35	32	55	72	90	7.5	22	30	6	40	60	30	16
FV140	100	145	180	7.38	67	38	36	60	80	100	9.5	26	35	6	45	60	37,5	18
FV140	125	145	180	6.78	67	38	36	60	80	100	9.5	26	35	6	45	60	37,5	18
FV140	160	145	180	6.56	67	38	36	60	80	100	9.5	26	35	6	45	60	37,5	18
FV140	200	145	180	5.82	67	38	36	60	80	100	9.5	26	35	6	45	60	37,5	18
FV140	250	145	180	5.48	67	38	36	60	80	100	9.5	26	35	6	45	60	37,5	18
FV180	125	190	250	10.70	86	49	42	70	100	125	13	30	45	8	50	70	45	20
FV180	160	190	250	9.72	86	49	42	70	100	125	13	30	45	8	50	70	45	20
FV180	200	190	250	9.12	86	49	42	70	100	125	13	30	45	8	50	70	45	20
FV180	250	190	250	8.51	86	49	42	70	100	125	13	30	45	8	50	70	45	20
FV180	315	190	250	8.20	86	49	42	70	100	125	13	30	45	8	50	70	45	20
FV250	160	275	300	13.00	97	55	50	80	125	155	15	36	55	8	60	80	50	26
FV250	200	275	300	11.80	97	55	50	80	125	155	15	36	55	8	60	80	50	26
FV250	250	275	300	10.80	97	55	50	80	125	155	15	36	55	8	60	80	50	26
FV250	315	275	300	10.00	97	55	50	80	125	155	15	36	55	8	60	80	50	26
FV315	160	370	480	20.04	113	70	60	90	140	175	18	42	65	10	70	90	55	30
FV315	200	370	480	18.24	113	70	60	90	140	175	18	42	65	10	70	90	55	30
FV315	250	370	480	16.79	113	70	60	90	140	175	18	42	65	10	70	90	55	30
FV315	315	370	480	15.53	113	70	60	90	140	175	18	42	65	10	70	90	55	30
FV315	400	370	480	14.56	113	70	60	90	140	175	18	42	65	10	70	90	55	30

* Breaking Load With heat treated Plates.

** Chains are delivered in strands, including 1 connecting link with one sided cotter.

Chains DIN 8167 M

DIN 8167 **A style**DIN 8167 **B style**DIN 8167 **C style**DIN 8167 **D style**DIN 8167 **E style**

Chain No.	Pitch p [mm]	Breaking load [kN]	Breaking load* [kN]	Average weight (bush type) [kg/m]	Over-All pin & cotter l [mm]	Over-All pin & cotter l2 [mm]	Small roller d4 [mm]	Large roller d5 [mm]	Flange roller d6 [mm]	Flange roller thickness t [mm]	Bushings diameter d3 [mm]	Between sidebars b1 [mm]	Sideplate thickness s [mm]	Sideplate height g [mm]	Sideplate height g1 [mm]	Sideplate height g2 [mm]	Pin d1 [mm]
M20	40	20	32	1.30	33	18	12.5	25	32	3.5	9	16	2.5	18	25	16	6
M20	50	20	32	1.18	33	18	12.5	25	32	3.5	9	16	2.5	18	25	16	6
M20	63	20	32	1.10	33	18	12.5	25	32	3.5	9	16	2.5	18	25	16	6
M20	80	20	32	1.00	33	18	12.5	25	32	3.5	9	16	2.5	18	25	16	6
M28	50	28	42	1.50	36	20	15	30	36	4	10	18	3	20	30	20	7
M28	63	28	42	1.43	36	20	15	30	36	4	10	18	3	20	30	20	7
M28	80	28	42	1.32	36	20	15	30	36	4	10	18	3	20	30	20	7
M28	100	28	42	1.24	36	20	15	30	36	4	10	18	3	20	30	20	7
M40	63	40	60	1.29	40.5	23	18	36	45	4.5	11	20	4	25	35	22.5	8
M40	80	40	60	2.11	40.5	23	18	36	45	4.5	11	20	4	25	35	22.5	8
M40	100	40	60	1.97	40.5	23	18	36	45	4.5	11	20	4	25	35	22.5	8
M40	125	40	60	1.86	40.5	23	18	36	45	4.5	11	20	4	25	35	22.5	8
M56	63	50	85	3.50	45	26	21	42	50	7	15	24	4	30	45	30	10
M56	80	50	85	3.20	45	26	21	42	50	7	15	24	4	30	45	30	10
M56	100	50	85	2.40	45	26	21	42	50	7	15	24	4	30	45	30	10
M56	125	50	85	2.70	45	26	21	42	50	7	15	24	4	30	45	30	10
M56	160	50	85	2.50	45	26	21	42	50	7	15	24	4	30	45	30	10
M80	80	80	125	4.51	54.5	31	25	50	60	7	18	28	5	35	50	32.5	12
M80	100	80	125	4.13	54.5	31	25	50	60	7	18	28	5	35	50	32.5	12
M80	125	80	125	3.83	54.5	31	25	50	60	7	18	28	5	35	50	32.5	12
M80	160	80	125	3.57	54.5	31	25	50	60	7	18	28	5	35	50	32.5	12
M80	200	80	125	3.38	54.5	31	25	50	60	7	18	28	5	35	50	32.5	12
M112	80	112	175	6.30	63	36	30	60	75	7.5	21	32	6	40	60	40	15
M112	100	112	175	5.60	63	36	30	60	75	7.5	21	32	6	40	60	40	15
M112	125	112	175	5.80	63	36	30	60	75	7.5	21	32	6	40	60	40	15
M112	160	112	175	5.37	63	36	30	60	75	7.5	21	32	6	40	60	40	15
M112	200	112	175	4.63	63	36	30	60	75	7.5	21	32	6	40	60	40	15
M160	100	160	260	9.80	72	41	36	70	90	8.5	25	37	7	50	70	45	18
M160	125	160	260	8.50	72	41	36	70	90	8.5	25	37	7	50	70	45	18
M160	160	160	260	7.80	72	41	36	70	90	8.5	25	37	7	50	70	45	18
M160	200	160	260	7.30	72	41	36	70	90	8.5	25	37	7	50	70	45	18
M160	250	160	260	6.90	72	41	36	70	90	8.5	25	37	7	50	70	45	18
M224	125	224	340	12.30	84	47	42	85	105	10	30	43	8	60	90	60	21
M224	160	224	340	11.10	84	47	42	85	105	10	30	43	8	60	90	60	21
M224	200	224	340	10.20	84	47	42	85	105	10	30	43	8	60	90	60	21
M224	250	224	340	6.90	84	47	42	85	105	10	30	43	8	60	90	60	21
M224	315	224	340	8.98	84	47	42	85	105	10	30	43	8	60	90	60	21
M315	160	315	520	19.20	97	57	50	100	124	10.5	36	48	10	70	100	65	25
M315	200	315	520	16.70	97	57	50	100	124	10.5	36	48	10	70	100	65	25
M135	250	315	520	15.60	97	57	50	100	124	10.5	36	48	10	70	100	65	25
M315	315	315	520	14.70	97	57	50	100	124	10.5	36	48	10	70	100	65	25
M315	400	315	520	13.80	97	57	50	100	124	10.5	36	48	10	70	100	65	25
M450	200	450	700	23.90	114	70	60	120	149	11.5	42	56	12	80	120	80	30
M450	250	450	700	22.12	114	70	60	120	149	11.5	42	56	12	80	120	80	30
M450	315	450	700	20.65	114	70	60	120	149	11.5	42	56	12	80	120	80	30
M450	400	450	700	19.45	114	70	60	120	149	11.5	42	56	12	80	120	80	30
M630	250	630	900	35.28	137	75	70	140	170	15	50	67	14	100	140	90	36
M630	315	630	900	32.53	137	75	70	140	170	15	50	67	14	100	140	90	36
M630	400	630	900	30.30	137	75	70	140	170	15	50	67	14	100	140	90	36
M630	500	630	900	28.64	137	75	70	140	170	15	50	67	14	100	140	90	36
M900	250	900	1250	53.20	153	83	85	170	210	17	60	78	16	120	180	120	44
M900	315	900	1250	48.20	153	83	85	170	210	17	60	78	16	120	180	120	44
M900	400	900	1250	44.50	153	83	85	170	210	17	60	78	16	120	180	120	44
M900	500	900	1250	41.60	153	83	85	170	210	17	60	78	16	120	180	120	44
M900	600	900	1250	39.20	153	83	85	170	210	17	60	78	16	120	180	120	44

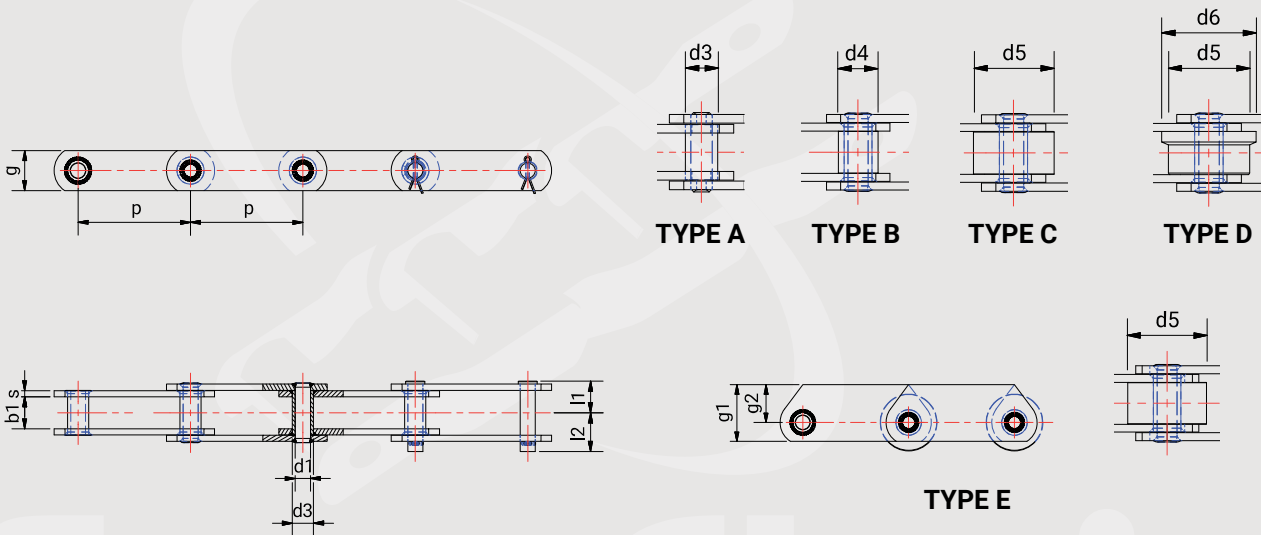
* Breaking Load With heat treated Plates.

** Chains are delivered in strands, including 1 connecting link with one sided cotter.



Chains DIN 8167 M

Welded chain

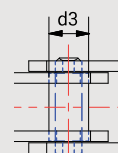
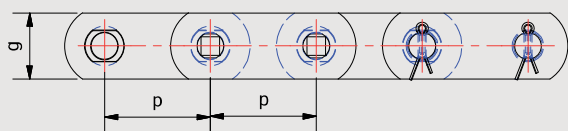
DIN 8167 welded chain **A style**DIN 8167 welded chain **B style**DIN 8167 welded chain **C style**DIN 8167 welded chain **D style**DIN 8167 welded chain **E style**

Chain No.	Pitch p [mm]	Inner width b1 [mm]	Pin d1 [mm]	Bushings diameter d3 [mm]	Small roller d4 [mm]	Large roller d5 [mm]	Flange roller d6 [mm]	Flange roller thickness t1 [mm]	Over-All pin & cotter l1 [mm]	Over-All pin & cotter l2 [mm]	Sideplate thickness s [mm]	Sideplate height g [mm]	Sideplate height g1 [mm]	Sideplate height g2 [mm]	Breaking load [kN]	Allowed load [kN]
M 80	80	28	12	18	25	50	60	20	28	32	5	35	50	32,5	80	11,4
M 80	100	28	12	18	25	50	60	20	28	32	5	35	50	32,5	80	11,4
M 80	125	28	12	18	25	50	60	20	28	32	5	35	50	32,5	80	11,4
M 80	160	28	12	18	25	50	60	20	28	32	5	35	50	32,5	80	11,4
M 80	200	28	12	18	25	50	60	20	28	32	5	35	50	32,5	80	11,4
M 112	80	32	15	21	30	60	70	22	33	35	6	40	60	40	112	16
M 112	100	32	15	21	30	60	70	22	33	35	6	40	60	40	112	16
M 112	125	32	15	21	30	60	70	22	33	35	6	40	60	40	112	16
M 112	160	32	15	21	30	60	70	22	33	35	6	40	60	40	112	16
M 112	200	32	15	21	30	60	70	22	33	35	6	40	60	40	112	16
M 160	100	37	18	25	36	70	85	25,5	38	43	7	50	70	45	160	22,8
M 160	125	37	18	25	36	70	85	25,5	38	43	7	50	70	45	160	22,8
M 160	160	37	18	25	36	70	85	25,5	38	43	7	50	70	45	160	22,8
M 160	200	37	18	25	36	70	85	25,5	38	43	7	50	70	45	160	22,8
M 160	250	37	18	25	36	70	85	25,5	38	43	7	50	70	45	160	22,8
M 224	125	43	21	30	42	85	100	30	44	47	8	60	90	60	224	32
M 224	160	43	21	30	42	85	100	30	44	47	8	60	90	60	224	32
M 224	200	43	21	30	42	85	100	30	44	47	8	60	90	60	224	32
M 224	250	43	21	30	42	85	100	30	44	47	8	60	90	60	224	32
M 224	315	43	21	30	42	85	100	30	44	47	8	60	90	60	224	32
M 315	160	48	25	36	50	100	120	33	51	55	10	70	100	65	315	45
M 315	200	48	25	36	50	100	120	33	51	55	10	70	100	65	315	45
M 315	250	48	25	36	50	100	120	33	51	55	10	70	100	65	315	45
M 315	315	48	25	36	50	100	120	33	51	55	10	70	100	65	315	45
M 315	400	48	25	36	50	100	120	33	51	55	10	70	100	65	315	45
M 450	200	56	30	42	60	120	140	37	59	66	12	80	120	80	450	64
M 450	250	56	30	42	60	120	140	37	59	66	12	80	120	80	450	64
M 450	315	56	30	42	60	120	140	37	59	66	12	80	120	80	450	64
M 450	400	56	30	42	60	120	140	37	59	66	12	80	120	80	450	64
M 450	500	56	30	42	60	120	140	37	59	66	12	80	120	80	450	64
M 630	250	66	36	50	70	140	170	45	69	74	14	100	140	90	630	90
M 630	315	66	36	50	70	140	170	45	69	74	14	100	140	90	630	90
M 630	400	66	36	50	70	140	170	45	69	74	14	100	140	90	630	90
M 630	500	66	36	50	70	140	170	45	69	74	14	100	140	90	630	90
M 900	250	78	44	60	85	170	210	52	79	89	16	120	180	120	900	128
M 900	315	78	44	60	85	170	210	52	79	89	16	120	180	120	900	128
M 900	400	78	44	60	85	170	210	52	79	89	16	120	180	120	900	128
M 900	500	78	44	60	85	170	210	52	79	89	16	120	180	120	900	128

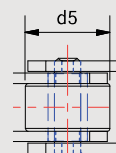
* Welded conveyor chains offers higher breaking load compared to DIN Norm. Please contact us for additional info.

** Chains are delivered in strands, including 1 connecting link prepared for welding.

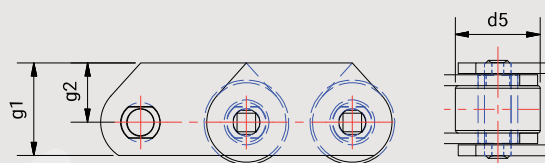
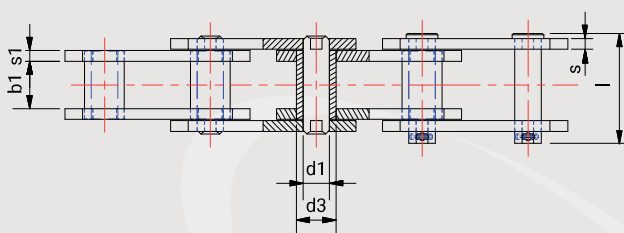
Chains SMS 1698



TYPE A



TYPE B



TYPE E



SMS 1698 A style



SMS 1698 B style



SMS 1698 E style

Chain No.	Pitch p [mm]	Between sidebars b1 [mm]	Pin d1 [mm]	Bushings diameter d3 [mm]	Roller d5 [mm]	Over-All pin l [mm]	Outer sideplate thickness s [mm]	Inner sideplate thickness s1 [mm]	Sideplate height g [mm]	Sideplate height g1 [mm]	Sideplate height g2 [mm]	Breaking load [kN]
8,5	63	25	14	20	50	65	5	6	35	50	32,5	85
8,5	80	25	14	20	50	65	5	6	35	50	32,5	85
8,5	100	25	14	20	50	65	5	6	35	50	32,5	85
8,5	150	25	14	20	50	65	5	6	35	50	32,5	85
8,5 heavy	63	25	14	20	50	65	8	6	35	50	32,5	85
8,5 heavy	80	25	14	20	50	65	8	6	35	50	32,5	85
8,5 heavy	100	25	14	20	50	65	8	6	35	50	32,5	85
8,5 heavy	150	25	14	20	50	65	8	6	35	50	32,5	85
12,5	100	35	18	26/25*	60	81	6	8	40	60	40	125
12,5	150	35	18	26/25*	60	81	6	8	40	60	40	125
12,5	200	35	18	26/25*	60	81	6	8	40	60	40	125
12,5 heavy	100	35	18	26/25*	60	81	8	8	40	60	40	125
12,5 heavy	150	35	18	26/25*	60	81	8	8	40	60	40	125
12,5 heavy	200	35	18	26/25*	60	81	8	8	40	60	40	125
18	100	45	20	30	70	96	6	10	50	78	45	180
18	150	45	20	30	70	96	6	10	50	78	45	180
18	200	45	20	30	70	96	6	10	50	78	45	180
18	250	45	20	30	70	96	6	10	50	78	45	180
18 heavy	100	45	20	30	70	96	10	10	50	78	45	180
18 heavy	150	45	20	30	70	96	10	10	50	78	45	180
18 heavy	200	45	20	30	70	96	10	10	50	78	45	180
18 heavy	250	45	20	30	70	96	10	10	50	78	45	180
24	100	55	26	36	80	116	8	12	60	80	50	240
24	150	55	26	36	80	116	8	12	60	80	50	240
24	200	55	26	36	80	116	8	12	60	80	50	240
24	250	55	26	36	80	116	8	12	60	80	50	240
24 heavy	100	55	26	36	80	116	12	12	60	80	50	240
24 heavy	150	55	26	36	80	116	12	12	60	80	50	240
24 heavy	200	55	26	36	80	116	12	12	60	80	50	240
24 heavy	250	55	26	36	80	116	12	12	60	80	50	240
30	150	65	30	42	90	128	8	12	70	90	55	300
30	200	65	30	42	90	128	8	12	70	90	55	300
30	250	65	30	42	90	128	8	12	70	90	55	300
30 heavy	150	65	30	42	90	128	12	12	70	90	55	300
30 heavy	200	65	30	42	90	128	12	12	70	90	55	300
30 heavy	250	65	30	42	90	128	12	12	70	90	55	300
**40	150	80	36	50	110	148	10	12	80	110	70	400
**40	200	80	36	50	110	148	10	12	80	110	70	400
**40	250	80	36	50	110	148	10	12	80	110	70	400
**65	150	80	36	50	110	158		15	90	120	75	650
**65	200	80	36	50	110	158		15	90	120	75	650
**65	250	80	36	50	110	158		15	90	120	75	650

* 26 mm Jf. SMS 1698 / 25 mm Jf. secondary industry std.

** Only available in Heavy execution.

*** Welded conveyor chains offers higher breaking load compared to normal SMS1698 Norm. Please contact us for additional info.

**** Chains are delivered in strands, including 1 connecting link prepared for welding.



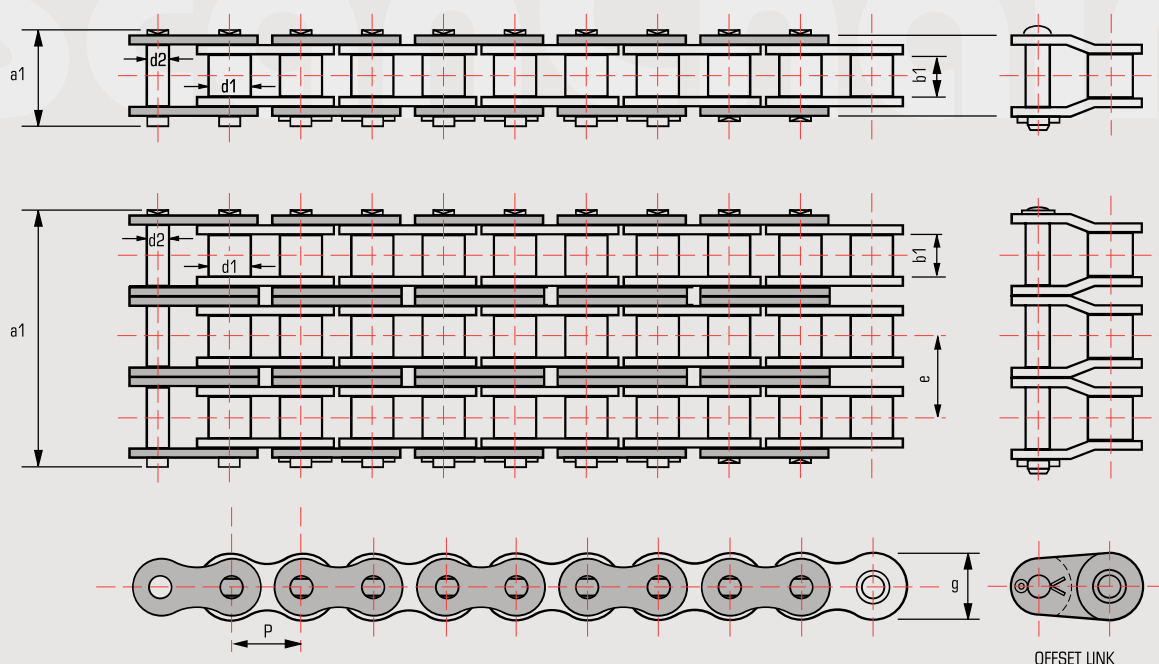
Transmission chains

American Standard Roller Chains



ScanChain sells and distributes transmission chains in British and American standard.

Please contact your local representative to learn more about the transmission chain programme.



Chain No.	Pitch P [mm]	Roller width b1 [mm]	Roller diameter d1 [mm]	Pin diameter d2 [mm]	Side plates height g [mm]	Over-All pin & cotter a1 [mm]	Transverse pitch e [mm]	Weight [Kg/m]	Tensile strength [N]
25-1*	0.250	0.125	0.130	0.090	0.236	0.370	–	0.13	3,892
25-2*	0.250	0.125	0.130	0.090	0.236	0.630	0.252	0.24	7,784
35-1*	0.375	0.188	0.200	0.141	0.354	0.560	–	0.31	9,341
35-2*	0.375	0.188	0.200	0.141	0.354	0.960	0.399	0.67	18,683
35-3*	0.375	0.188	0.200	0.141	0.354	1.360	0.399	1.01	28,024
40-1	0.500	0.313	0.312	0.156	0.472	0.720	–	0.61	17,792
40-2	0.500	0.313	0.312	0.156	0.472	1.290	0.566	1.19	35,584
40-3	0.500	0.313	0.312	0.156	0.472	1.850	0.566	1.79	56,376
41-1	0.500	0.250	0.306	0.141	0.390	0.650	–	0.39	10,675
50-1	0.625	0.375	0.400	0.200	0.594	0.890	–	1.01	29,356
50-2	0.625	0.375	0.400	0.200	0.594	1.600	0.713	1.96	58,713
50-3	0.625	0.375	0.400	0.200	0.594	2.310	0.713	2.95	88,070
50-4	0.625	0.375	0.400	0.200	0.594	3.030	0.713	3.93	117,427
60-1	0.750	0.500	0.469	0.234	0.709	1.110	–	1.47	37,808
60-2	0.750	0.500	0.469	0.234	0.709	2.010	0.897	2.9	75,616
60-3	0.750	0.500	0.469	0.234	0.709	2.910	0.897	4.29	113,424
60-4	0.750	0.500	0.469	0.234	0.709	3.810	0.897	5.8	151,232
80-1	1.000	0.625	0.625	0.312	0.945	1.440	–	2.57	64,446
80-2	1.000	0.625	0.625	0.312	0.945	2.590	1.153	5.04	128,992
80-3	1.000	0.625	0.625	0.312	0.945	3.740	1.153	7.47	193,488
100-1	1.250	0.750	0.750	0.375	1.181	1.730	–	3.73	106,752
100-2	1.250	0.750	0.750	0.375	1.181	3.140	1.408	7.31	213,504
100-3	1.250	0.750	0.750	0.375	1.181	4.560	1.408	11.01	320,256
120-1	1.500	1.000	0.875	0.437	1.406	2.140	–	5.49	151,232
120-2	1.500	1.000	0.875	0.437	1.406	3.930	1.789	10.94	302,464
120-3	1.500	1.000	0.875	0.437	1.406	5.720	1.789	16.52	453,696
140-1	1.750	1.000	1.000	0.500	1.663	2.310	–	7.450	172,400
140-2	1.750	1.000	1.000	0.500	1.663	4.240	1.924	14.390	344,800
140-3	1.750	1.000	1.000	0.500	1.663	6.160	1.924	21.320	517,200
160-1	2.000	1.250	1.125	0.562	1.899	2.730	–	9.740	226,800
160-2	2.000	1.250	1.125	0.562	1.899	5.040	2.305	19.120	453,600
160-3	2.000	1.250	1.125	0.562	1.899	7.350	2.305	28.370	680,400
180-1	2.250	1.406	1.406	0.687	2.132	3.150	–	13.510	280,200
180-2	2.250	1.406	1.406	0.687	2.132	5.750	2.592	26.340	560,500
200-1	2.500	1.500	1.562	0.781	2.312	3.440	–	15.880	353,800
200-2	2.500	1.500	1.562	0.781	2.312	6.260	2.817	32.050	707,600

* Bush chain



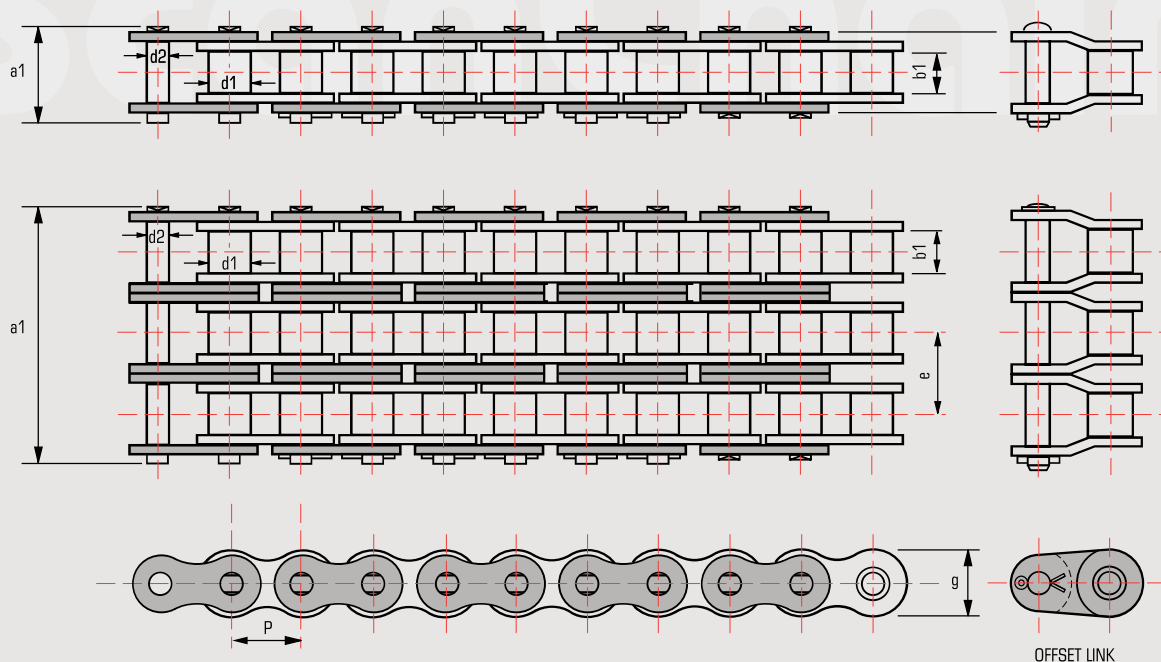
Transmission chains

British Standard Roller Chains



ScanChain sells and distributes transmission chains in British and American standard.

Please contact your local representative to learn more about the transmission chain programme.



Chain No.	Pitch P [mm]	Roller width b1 [mm]	Roller diameter d1 [mm]	Pin diameter d2 [mm]	Side plates height g [mm]	Over-All pin & cotter a1 [mm]	Transverse pitch e [mm]	Weight [Kg/m]	Tensile strength [N]
04B-1	6.00	2.80	4.00	1.85	5.00	10.30	–	0.12	3,000
05B-1	8.00	3.00	5.00	2.31	7.10	11.70	–	0.10	5,000
06B-1*	9.53	5.72	6.35	3.26	8.26	16.78	–	0.45	8,940
06B-2*	9.53	5.72	6.35	3.26	8.26	27.10	10.24	0.80	16,946
06B-3*	9.53	5.72	6.35	3.26	8.26	37.31	10.24	1.18	24,908
08B-1	12.70	7.75	8.51	4.45	11.80	20.90	–	0.68	17,836
08B-2	12.70	7.75	8.51	4.45	11.80	34.90	13.92	1.31	31,180
08B-3	12.70	7.75	8.51	4.45	11.80	47.80	13.92	1.94	44,524
81-1	12.70	3.30	7.75	3.64	9.91	11.70	–	0.28	8,000
83-1	12.70	4.88	7.75	3.64	9.91	13.10	–	0.38	8,000
10B-1	15.87	9.65	10.20	5.08	14.70	23.70	–	0.95	22,240
10B-2	15.87	9.65	10.20	5.08	14.70	40.30	16.60	1.87	44,524
10B-3	15.87	9.65	10.20	5.08	14.70	56.90	16.60	2.80	66,764
12B-1	19.05	11.68	12.07	5.72	16.10	27.31	–	1.19	28,912
12B-2	19.05	11.68	12.07	5.72	16.10	46.31	19.50	2.34	57,868
12B-3	19.05	11.68	12.07	5.72	16.10	66.29	19.50	3.47	86,780
16B-1	25.40	17.02	15.88	8.28	21.10	41.50	–	2.72	56,889
16B-2	25.40	17.02	15.88	8.28	21.10	73.41	31.88	5.37	113,735
16B-3	25.40	17.02	15.88	8.28	21.10	105.30	31.88	8.02	170,625
20B-1	31.75	19.56	19.05	10.19	26.42	49.30	–	3.88	93,141
20B-2	31.75	19.56	19.05	10.19	26.42	85.80	36.45	7.66	176,496
20B-3	31.75	19.56	19.05	10.19	26.42	122.20	36.45	11.44	264,744
24B-1	38.10	25.40	25.40	14.60	33.40	59.99	–	6.85	166,711
24B-2	38.10	25.40	25.40	14.60	33.40	108.40	48.36	13.87	317,721
24B-3	38.10	25.40	25.40	14.60	33.40	156.80	48.36	20.89	475,580
28B-1	44.45	30.99	27.94	15.90	37.00	65.10	–	8.56	200,000
28B-2	44.45	30.99	27.94	15.90	37.00	124.70	59.56	16.96	360,000
28B-3	44.45	30.99	27.94	15.90	37.00	184.30	59.56	25.38	536,000
32B-1	50.80	30.99	29.21	17.80	42.20	67.40	–	9.49	250,000
32B-2	50.80	30.99	29.21	17.80	42.20	126.00	58.55	18.74	443,896
32B-3	50.80	30.99	29.21	17.80	42.20	184.50	58.55	28.04	670,000
40B-1	63.50	38.10	39.37	22.89	52.90	92.50	–	15.53	352,299
40B-2	63.50	38.10	39.37	22.89	52.90	151.21	72.29	30.72	630,000
40B-3	63.50	38.10	39.37	22.89	52.90	223.80	72.29	45.97	950,000
48B-1	76.20	45.72	48.26	29.24	64.00	98.88	–	24.45	560,000
48B-2	76.20	45.72	48.26	29.24	64.00	200.00	91.21	48.54	1,096,041
48B-3	76.20	45.72	48.26	29.24	64.00	291.00	91.21	72.67	1,500,000

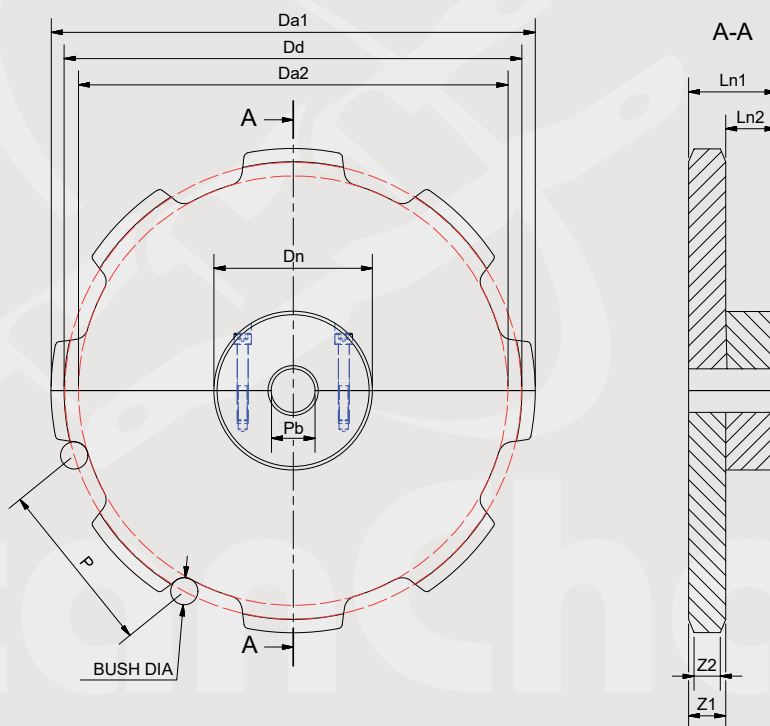
* Bush chain

Sprockets

for metric conveyor chains DIN 8165 FV



* Sprockets are configured as mono type. Split version only by request.



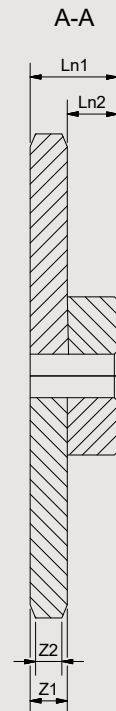
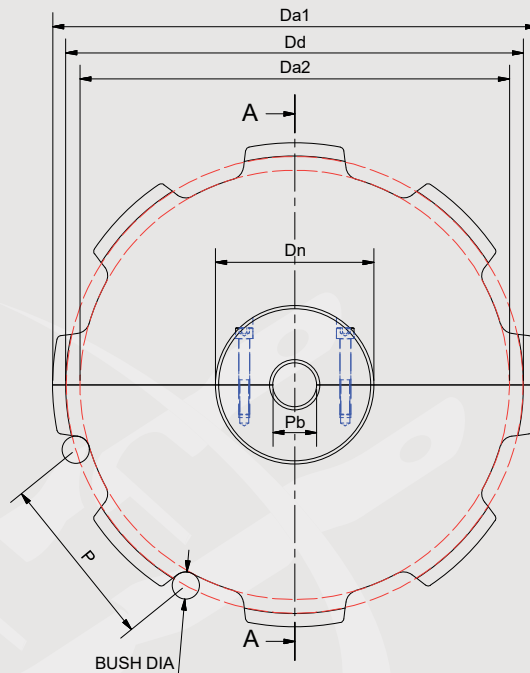
ISO Nr	P Chain Pitch [mm]	z No. of teeth [pieces]	Dd [mm]	Da1 Outside [mm]	Da2 Tooth bottom dia [mm]	Bush dia [mm]	Dn Hub dia [mm]	Ln1 Total width [mm]	Ln2 Hub width [mm]	Z1 Plate thickness [mm]	Z2 Tooth peak width [mm]	Pb Pre bore [mm]
FV63	63	10	203,87	221,87	185,87	18	"	110	90	20	14	30
FV63	100	8	261,31	279,31	243,31	18	190	120	100	20	14	30
FV63	100	10	323,61	341,61	305,61	18	255	125	105	20	14	30
FV63	125	8	326,64	344,64	308,64	18	255	125	105	20	14	40
FV63	125	10	404,51	422,51	386,51	18	335	135	115	20	14	40
FV63	125	12	482,96	500,96	464,96	18	410	135	115	20	14	40
FV63	160	8	418,1	436,1	400,1	18	350	135	115	20	14	40
FV63	160	10	517,78	535,78	499,78	18	448	145	125	20	14	40
FV63	160	12	618,19	636,19	600,19	18	550	155	135	20	14	40
FV90	63	10	203,87	223,87	183,87	20	"	120	99	21	14	30
FV90	100	7	230,48	250,48	210,48	20	140	125	104	21	17	30
FV90	100	8	261,31	281,31	241,31	20	175	125	104	21	17	30
FV90	100	10	323,61	343,61	303,61	20	240	135	114	21	17	30

ISO Nr	P Chain Pitch [mm]	z No. of teeth [pieces]	Dd [mm]	Da1 Outside [mm]	Da2 Tooth bottom dia [mm]	Bush dia [mm]	Dn Hub dia [mm]	Ln1 Total width [mm]	Ln2 Hub width [mm]	Z1 Plate thickness [mm]	Z2 Tooth peak width [mm]	Pb Pre bore [mm]
FV90	125	8	326,64	346,64	306,64	20	240	135	114	21	17	30
FV90	125	10	404,51	424,51	384,51	20	320	145	124	21	17	30
FV90	125	12	482,96	502,96	462,96	20	400	145	124	21	17	40
FV90	160	8	418,1	438,1	398,1	20	330	145	124	21	17	40
FV90	160	10	517,78	537,78	497,78	20	430	155	134	21	17	40
FV90	160	12	618,19	638,19	598,19	20	530	165	144	21	17	50
FV90	200	8	522,62	542,62	502,62	20	438	155	134	21	17	40
FV90	200	10	647,22	667,22	627,22	20	560	160	139	21	17	40
FV90	200	12	772,74	792,74	752,74	20	685	170	149	21	17	50
FV90	250	8	653,28	673,28	633,28	20	570	165	144	21	17	40
FV90	250	10	809,03	829,03	789,03	20	725	170	149	21	17	50
FV90	250	12	965,93	985,93	945,93	20	880	170	149	21	17	50
FV112	100	8	261,31	283,31	239,31	22	165	125	98	27	21	30
FV112	100	10	323,61	345,61	301,61	22	225	145	118	27	21	30
FV112	125	8	326,64	348,64	304,64	22	230	145	118	27	21	30
FV112	125	10	404,51	426,51	382,51	22	310	155	128	27	21	30
FV112	125	12	482,96	504,96	460,96	22	385	155	128	27	21	40
FV112	160	8	418,1	440,1	396,1	22	320	155	128	27	21	40
FV112	160	10	517,78	539,78	495,78	22	420	165	138	27	21	40
FV112	160	12	618,19	640,19	596,19	22	520	170	143	27	21	40
FV112	200	8	522,62	544,62	500,62	22	425	165	138	27	21	40
FV112	200	10	647,22	669,22	625,22	22	550	170	143	27	21	40
FV112	200	12	772,74	794,74	750,74	22	675	170	143	27	21	50
FV140	100	8	261,31	287,31	235,31	26	"	125	93	32	21	30
FV140	100	10	323,61	349,61	297,61	26	"	155	123	32	21	30
FV140	125	8	326,64	352,64	300,64	26	220	155	123	32	24	30
FV140	125	10	404,51	430,51	378,51	26	295	165	133	32	24	30
FV140	125	12	482,96	508,96	456,96	26	375	165	133	32	24	40
FV140	160	8	41,1	67,1	15,1	26	310	165	133	32	24	40
FV140	160	10	517,78	543,78	491,78	26	410	170	138	32	24	40
FV140	160	12	618,19	644,19	592,19	26	510	180	148	32	24	40
FV140	200	8	522,62	548,62	496,62	26	410	170	138	32	24	40
FV140	200	10	647,22	673,22	621,22	26	540	180	148	32	24	50
FV140	200	12	772,74	798,74	746,74	26	660	180	148	32	24	50
FV140	250	8	653,28	679,28	627,28	26	540	180	148	32	24	50
FV140	250	10	809,03	835,03	783,03	26	700	190	158	32	24	50
FV140	250	12	965,93	991,93	939,93	26	860	200	168	32	24	50
FV180	125	8	326,64	356,64	296,64	30	"	165	124	41	24	30
FV180	125	10	404,51	434,51	374,51	30	"	170	129	41	24	30
FV180	125	12	482,96	512,96	452,96	30	"	170	129	41	24	40
FV180	160	8	418,1	448,1	388,1	30	285	165	124	41	33	40
FV180	160	10	517,78	547,78	487,78	30	385	170	129	41	33	40
FV180	160	12	618,19	648,19	588,19	30	485	180	139	41	33	40
FV180	200	8	522,62	552,62	492,62	30	390	180	139	41	33	40
FV180	200	10	647,22	677,22	617,22	30	515	190	149	41	33	40
FV180	200	12	772,74	802,74	742,74	30	640	190	149	41	33	50
FV180	250	8	653,28	683,28	623,28	30	520	190	149	41	33	60
FV180	250	10	809,03	839,03	779,03	30	675	200	159	41	33	60
FV180	250	12	965,93	995,93	935,93	30	835	210	169	41	33	60
FV250	125	8	326,64	362,64	290,64	36	"	120	70	50	33	30
FV250	125	10	404,51	440,51	368,51	36	"	190	140	50	33	30
FV250	125	12	482,96	518,96	446,96	36	"	200	150	50	33	40
FV250	160	8	418,1	454,1	382,1	36	245	190	140	50	39	40
FV250	160	10	517,78	553,78	481,78	36	355	200	150	50	39	40
FV250	160	12	618,19	654,19	582,19	36	455	210	160	50	39	40
FV250	200	8	522,62	558,62	486,62	36	360	200	150	50	39	60
FV250	200	10	647,22	683,22	611,22	36	485	210	160	50	39	60
FV250	200	12	772,74	808,74	736,74	36	610	210	160	50	39	60
FV250	250	8	653,28	689,28	617,28	36	490	210	160	50	39	60
FV250	250	10	809,03	845,03	773,03	36	645	215	165	50	39	60
FV250	250	12	865,93	901,93	829,93	36	800	225	175	50	39	60

Sprockets

for metric conveyor chains DIN 8167 M

* Sprockets are configured as mono type. Split version only by request.



ISO Nr	P Chain Pitch [mm]	z No. of teeth [pieces]	Dd [mm]	Da1 Outside [mm]	Da2 Tooth bottom dia [mm]	Bush dia [mm]	Dn Hub dia [mm]	Ln1 Total width [mm]	Ln2 Hub width [mm]	Z1 Plate thickness [mm]	Z2 Tooth peak width [mm]	Pb Pre bore [mm]
M40	100	8	261,31	273,81	248,81	12,5	110	60	42	18	12	30
M40	100	10	323,61	336,11	311,11	12,5	125	65	47	18	12	40
M40	100	12	386,37	398,87	373,87	12,5	125	70	52	18	12	40
M40	125	8	326,63	339,13	314,13	12,5	125	65	47	18	12	40
M40	125	10	404,51	417,01	392,01	12,5	145	75	57	18	12	40
M40	125	12	482,96	495,46	470,46	12,5	145	75	57	18	12	40
M40	160	8	418,09	430,59	405,59	12,5	145	75	57	18	12	40
M40	160	12	618,19	630,69	605,69	12,5	165	85	67	18	12	40
M56	63	10	203,87	218,87	188,87	15	90	50	28	22	16	30
M56	80	8	209,05	224,05	194,05	15	90	50	28	22	16	30
M56	80	10	258,89	273,89	243,89	15	110	60	38	22	16	30
M56	100	8	261,31	276,31	246,31	15	100	60	38	22	16	30
M56	100	10	323,61	338,61	308,61	15	125	65	43	22	16	40
M56	100	12	386,37	401,37	371,37	15	135	70	48	22	16	40
M56	125	8	326,63	341,63	311,63	15	125	65	43	22	16	40
M56	125	10	404,51	419,51	389,51	15	145	80	58	22	16	40
M56	125	12	482,96	497,96	467,96	15	145	75	53	22	16	40
M56	160	8	418,09	433,09	403,09	15	145	80	58	22	16	40
M56	160	10	517,77	532,77	502,77	15	155	85	63	22	16	40
M56	160	12	618,19	633,19	603,19	15	165	90	68	22	16	40
M80	80	8	209,05	227,05	191,05	18	90	50	25	25	18	30
M80	80	10	258,89	276,89	240,89	18	110	60	35	25	18	30
M80	100	8	261,31	279,31	243,31	18	110	60	35	25	18	30

ISO Nr	P Chain Pitch [mm]	z No. of teeth [pieces]	Dd [mm]	Da1 Outside [mm]	Da2 Tooth bottom dia [mm]	Bush dia [mm]	Dn Hub dia [mm]	Ln1 Total width [mm]	Ln2 Hub width [mm]	Z1 Plate thickness [mm]	Z2 Tooth peak width [mm]	Pb Pre bore [mm]
M80	100	10	323,61	341,61	305,61	18	125	65	40	25	18	40
M80	100	12	386,37	404,37	368,37	18	135	70	45	25	18	40
M80	125	8	326,63	344,63	308,63	18	125	65	40	25	18	40
M80	125	10	404,51	422,51	386,51	18	145	80	55	25	18	40
M80	125	12	482,96	500,96	464,96	18	145	75	50	25	18	40
M80	160	8	418,09	436,09	400,09	18	145	80	55	25	18	40
M80	160	10	517,77	535,77	499,77	18	155	85	60	25	18	40
M80	160	12	618,19	636,19	600,19	18	165	90	65	25	18	40
M80	200	8	522,62	540,62	504,62	18	155	85	60	25	18	40
M80	200	10	647,22	665,22	629,22	18	165	90	65	25	18	40
M80	200	12	772,74	790,74	754,74	18	180	100	75	25	18	50
M112	80	8	209,05	230,05	188,05	21	90	50	21	29	21	30
M112	80	10	258,59	279,59	237,59	21	110	60	31	29	21	30
M112	100	8	261,31	282,31	240,31	21	110	60	31	29	21	40
M112	100	10	323,61	344,61	302,61	21	125	70	41	29	21	40
M112	100	12	386,37	407,37	365,37	21	135	75	46	29	21	40
M112	125	8	326,63	347,63	305,63	21	125	70	41	29	21	40
M112	125	10	404,51	425,51	383,51	21	140	75	46	29	21	40
M112	125	12	482,96	503,96	461,96	21	140	80	51	29	21	40
M112	160	8	418,09	439,09	397,09	21	145	75	46	29	21	40
M112	160	10	517,77	538,77	496,77	21	155	80	51	29	21	40
M112	160	12	618,19	639,19	597,19	21	165	85	56	29	21	40
M112	200	8	522,62	543,62	501,62	21	155	80	51	29	21	40
M112	200	10	647,22	668,22	626,22	21	165	85	56	29	21	40
M112	200	12	772,74	793,74	751,74	21	180	95	66	29	21	50
M160	100	8	261,31	286,31	236,31	25	110	60	26	34	24	40
M160	100	10	326,61	351,61	301,61	25	120	65	31	34	24	40
M160	100	12	386,37	411,37	361,37	25	130	70	36	34	24	40
M160	125	8	326,63	351,63	301,63	25	120	65	31	34	24	40
M160	125	10	404,51	429,51	379,51	25	130	70	36	34	24	40
M160	125	12	482,96	507,96	457,96	25	140	80	46	34	24	40
M160	160	8	418,09	443,09	393,09	25	145	80	46	34	24	40
M160	160	10	517,77	542,77	492,77	25	155	85	51	34	24	40
M160	160	12	618,19	643,19	593,19	25	165	90	56	34	24	40
M160	200	8	522,62	547,62	497,62	25	155	85	51	34	24	40
M160	200	10	647,22	672,22	622,22	25	165	90	56	34	24	40
M160	200	12	772,74	797,74	747,74	25	180	100	66	34	24	50
M160	250	8	653,27	678,27	628,27	25	165	90	56	34	24	40
M160	250	10	809,02	834,02	784,02	25	190	105	71	34	24	50
M160	250	12	965,92	990,92	940,92	25	215	120	86	34	24	50
M224	125	8	326,63	356,63	296,63	30	120	65	26	39	28	40
M224	125	10	404,51	434,51	374,51	30	130	70	31	39	28	40
M224	125	12	482,96	512,96	452,96	30	140	80	41	39	28	40
M224	160	8	418,09	448,09	388,09	30	145	80	41	39	28	40
M224	160	10	517,77	547,77	487,77	30	155	85	46	39	28	40
M224	160	12	618,19	648,19	588,19	30	165	90	51	39	28	40
M224	200	8	522,62	552,62	492,62	30	155	85	46	39	28	40
M224	200	10	647,22	677,22	617,22	30	165	90	51	39	28	40
M224	200	12	772,74	802,74	742,74	30	180	100	61	39	28	50
M224	250	8	653,27	683,27	623,27	30	165	90	51	39	28	40
M224	250	10	809,02	839,02	779,02	30	190	105	66	39	28	50
M224	250	12	965,92	995,92	935,92	30	215	120	81	39	28	50
M315	160	8	418,09	454,09	382,09	36	200	115	71	44	31	50
M315	160	10	517,77	553,77	481,77	36	200	115	71	44	31	60
M315	160	12	618,19	654,19	582,19	36	210	115	71	44	31	60
M315	200	8	522,62	558,62	486,62	36	200	115	71	44	31	50
M315	200	10	647,22	683,22	611,22	36	200	115	71	44	31	60
M315	200	12	772,74	808,74	736,74	36	210	115	71	44	31	60
M315	250	8	653,27	689,27	617,27	36	210	115	71	44	31	60
M315	250	10	809,02	845,02	773,02	36	210	115	71	44	31	60
M315	250	12	965,92	1001,92	929,92	36	225	125	81	44	31	60



Material selection for sprockets

Choosing the correct material for sprockets are equally important as the design of the sprocket.

There are many material options but depending on the application, environment and other factors below table offers the best mix of price, wear resistance, corrosion resistance and match with the chain material.

On selected materials each individual tooth profile is induction hardened. This is done to avoid the risk of tooth breaking and add flexibility to the tooth.

Material S355 / 1.0577

Pros	Easy to weld, Low price
Cons	Unable to harden, Low wear resistance
Hardening method	N/A
Hardening depth	N/A
Hardness	N/A

Material C45 / 1.0503

Pros	Can be hardened, High wear resistance, High strength
Cons	Limited weldability
Hardening method	Induction hardening
Hardening depth	3-5mm
Hardness	54 +2 HRC

Material 42CrMo4 / 1.7225

Pros	Tough material, High strength, High Carbon content, Higher hardness.
Cons	Limited/low weldability, Difficult to harden, Expensive
Hardening method	Induction hardening
Hardening depth	3-5mm
Hardness	58 +2 HRC

Material Stainless steel

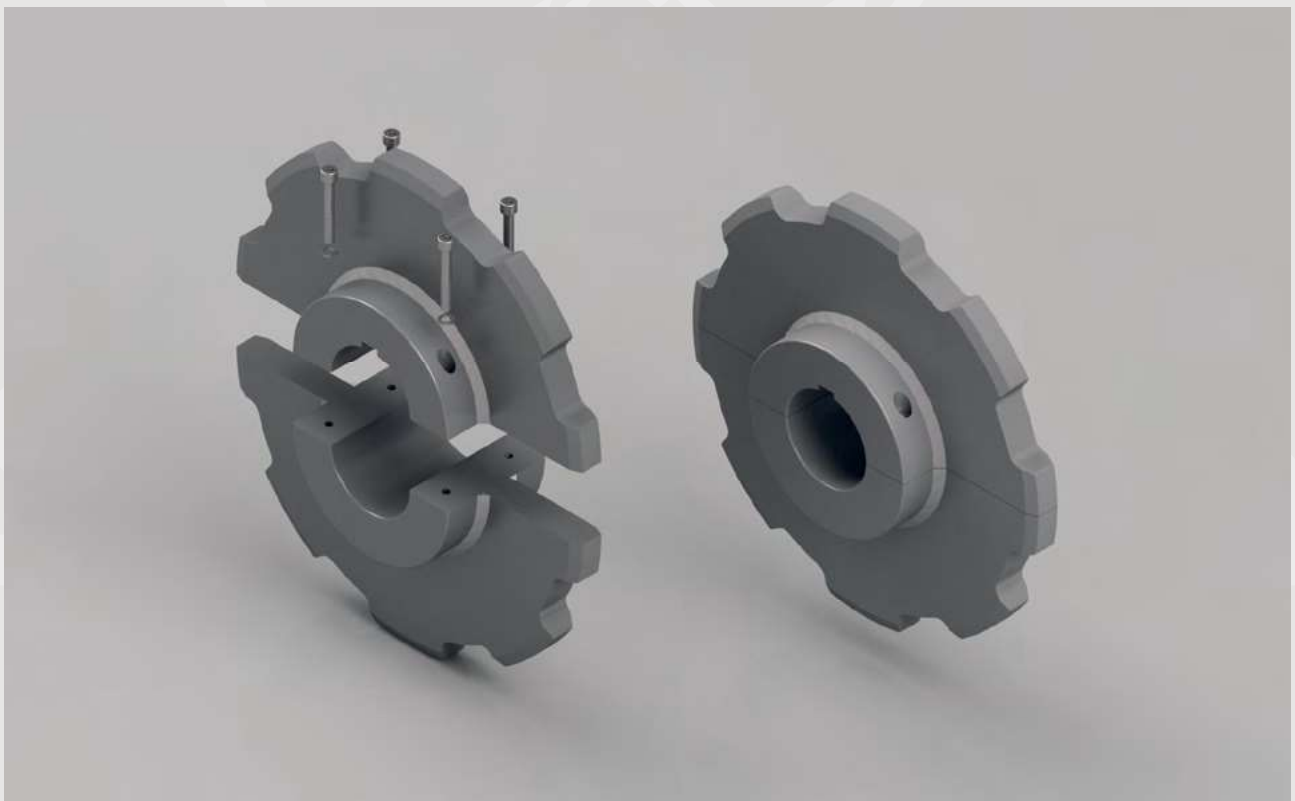
Pros	Used in Abrasive/Corrosive environment, High corrosion resistance
Cons	Expensive, Difficult to machine
Available E.N number	1.4301 / 1.4571 / 1.4122 etc.

Split sprockets

Ever considered the amount of service hours used for changing the sprocket?

ScanChain offers split sprockets as a perfect alternative to normal mono sprockets. Changing Mono block sprockets requires des-assembly of the shaft, bearing houses and motor/gear. Using split sprockets this work can be minimized significantly and the total downtime of your production equipment reduced by 80%

By use of special manufacturing procedure, the sprockets are split seamless. This results in a perfect aligned sprocket with a bore that matches the shaft, keyway and/or bush to which the sprocket shall be mounted. The design and welding of hub and plate are made to avoid the potential risk of plate release from the hub by extreme force.



Assembly instructions:

Only use calibrated Torque Wrench when tightening set bolt screws. Ruling DIN norm applicable.
I.e. Hex Cap screws DIN931/ISO 4014 or Unbrako Cap screws DIN912/ISO 4792
Apply copper grease to bolt thread prior to final installment.

Special and Engineered chains

Cast Link chains



Cast link drag chain 300 mm

ScanChain produces cast link chains in high grade Manganese steel.

Cast link chains comes in many shapes and types.

Please do not hesitate to **call us** if you have request for Cast link chain or questions to our products.



Cast link drag chain 250 mm



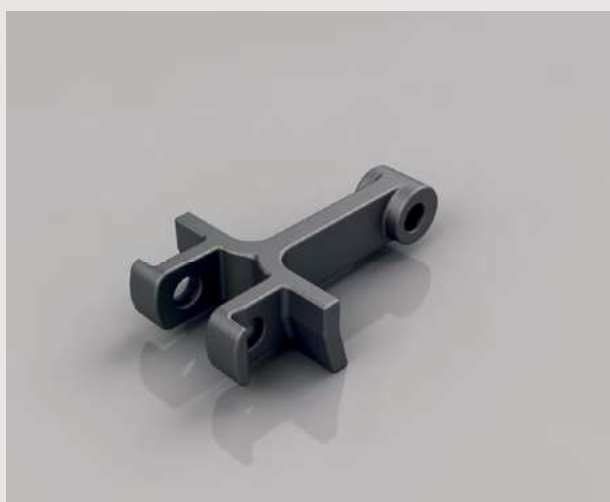
Cast link drag chain 400 mm



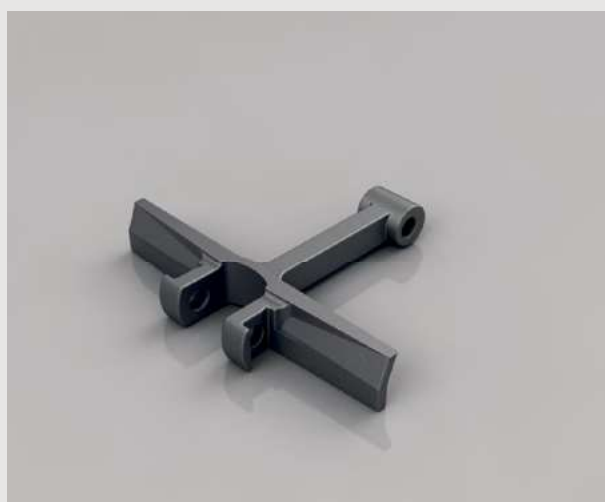
Cast link drag chain 600 mm



Cast link drag chain 800 mm



Dust drag chain 125 mm



Dust drag chain 300 mm



Special and Engineered chains



Special chain – pitch 6"



P125 chain



P250 chain



P75 Sharp Top chain



RS16 (16B-F12T1) chain



FB111-K2-3L chain



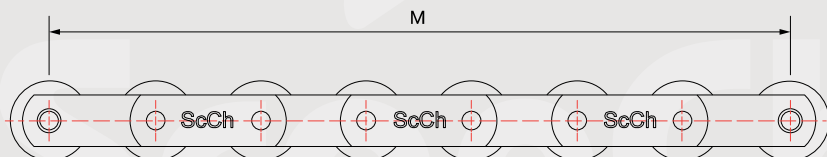
Chain Installation and Maintenance

Inspection of chain should not be left until a major breakdown has occurred. This may result in expensive replacement of major parts and long downtime if the required new parts are not readily available. On drive chain the major factor determining chain life is extension due to wear between the bearing pin and bush. However, on a conveyor chain the life may be determined by wear on other components, depending on the environment in which the chain is used. Where accessible, the chain should be checked for wear as follows:

Extension of Chain Pitch

A direct measure of chain wear is the extension in chain pitch due to the wear between bearing pin and bush. This is caused by the chain articulating under tension around the drive sprockets and can usually be obtained by direct measurement as follows:

Measure a length of chain over as many pitches as possible. The chain must be on a straight section of track and under tension. This measured length "M" can then be applied to the following formula to obtain the percentage extension.



$$\text{Percentage extension} = \frac{[M - (X \times P)] \times 100}{X \times P}$$

Where:

M = Measuring length (mm), **X** = Number of pitches measured,

P = Chain pitch (mm)

The maximum allowable percentage extension is shown in the following tables for the relevant series of chains. When the chain extension has reached this figure, the chain is due for replacement. If regular measurements are taken and results recorded, it is possible to predict how long the chain would last and when replacement will be required. The necessary steps can then be taken to ensure the chain is available and avoid any sudden panic.

BS Chains

Chain Series	Allowable % Extension
3000lb (13KN)	$\frac{40.6}{P}$
4500lb (20KN)	$\frac{40.6}{P}$
6000/7500lb (27KN/33KN)	$\frac{50.8}{P}$
12000/15000lb (54KN/67KN)	$\frac{76.2}{P}$
24000/30000lb (107KN/134KN)	$\frac{102}{P}$
36000/45000lb (160KN/200KN)	$\frac{102}{P}$
60000lb (267KN)	$\frac{127}{P}$
90000lb (400KN)	$\frac{127}{P}$

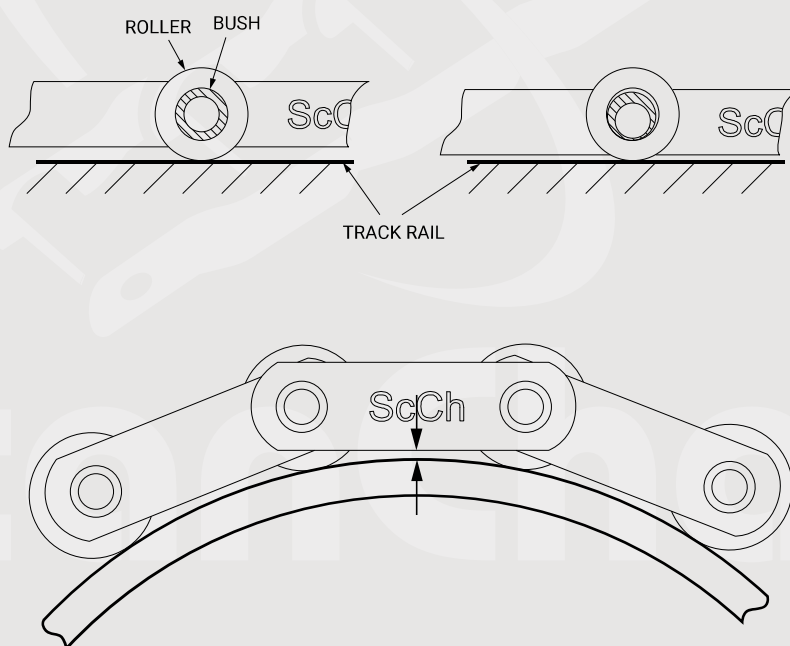
ISO Chains

Chain Series	Allowable % Extension
M40	$\frac{76}{P}$
M56	$\frac{88}{P}$
MC56	$\frac{71}{P}$
M80	$\frac{102}{P}$
M112	$\frac{97}{P}$
MC112	$\frac{97}{P}$
MC224	$\frac{128}{P}$
M315	$\frac{168}{P}$
M450	$\frac{180}{P}$
M630	$\frac{203}{P}$
M900	$\frac{230}{P}$

Roller Wear

On long centered conveyors for example where the load is carried by the chain rollers running along a track, the rollers are continually turning under load against the bushes. The pin and bush only turn against each other four times per circuit of the conveyor (only one of these is under full load). Under these circumstances' roller wear can be the limiting factor in chain life.

An idea of the amount of roller wear can be obtained by measuring the clearance between the bottom of the link plates and the track surface and comparing the result with that obtained on a new piece of chain. If the rollers have worn to the point where the link plates are near to or are rubbing on the tracks, then replacement is necessary. If standard chain is fitted it is not possible to replace just the rollers, therefore the complete chain should be replaced. If out board rollers are fitted, then it may be possible to replace the rollers only. Where bends occur in the tracks, extra care should be taken with roller wear assessment as less wear is allowable be for the link plate edges contact the tracks.

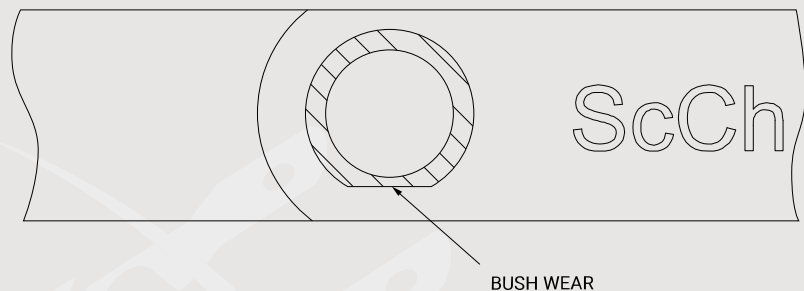




Bush Wear

Unless the conveyor uses a bush chain (i.e. chain without rollers), it is not usually possible to detect bush wear or damage without dismantling a piece of chain into its component parts. If a bush chain is used, checks should be made for wear on the outside of the bush. This wear could be due to either the bush sliding along the tracks or the bush gearing with the chain sprockets. If the bush is worn through so that the bearing pin is exposed, then the chain should be replaced. In certain circumstances it may be possible to turn the chain over and wear the opposite face of the bush to extend the chain life. (In this case, advice from ScanChain should be sought).

Should any cracked or broken bushes be found, then the cause should be identified and rectified, then depending on the extent of the damage, either links or the complete chain should be replaced.



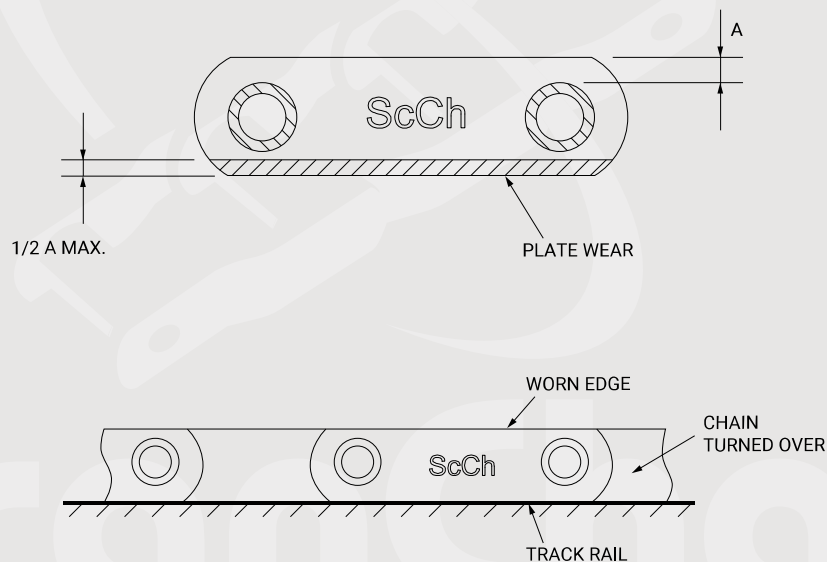
Bearing Pin Wear

Normal bearing pin wear shows up as pitch extension and can be detected as stated on in first part of this guide. Wear of the bearing pin heads can be caused by either insufficient clearance between the chain and side guides, tracks not level across the conveyor causing the chain to run over to the lower level, chain twisted due to abuse, or bad chain guidance. The cause should be identified and rectified. If the bearing pinheads have worn down level with the chain plates, then the rivet will be ineffective and either the bad links or the complete chain should be replaced.

Link Plate Wear

Wear on link plates can appear in various ways, due to a number of different causes and in some cases can mean premature chain replacement. On scraper conveyors or conveyors where the chain runs on its link plate edges, wearing away of the plate edges can occur, which will reduce the plate depth and thus the tensile strength of the chain.

This wear should not exceed more than half the original plate depth above the bush, otherwise a chain breakage could occur. When wear has occurred to this extent the chain should be replaced. In some cases, to extend chain life it may be possible to turn the chain over so that the unworn edge of the chain becomes the wearing surface. This will depend on the type of chain, fixtures on the chain and the make-up of the chain.





Assembly instruction for welded connecting links

ScanChain Welded type chains are made of low-carbon, weldable carbonising steel. The welding of the pin is possible without pre-heating by using welding rod OK 48.00 or with shielding gas welding Autorod 12.51 (or similar AWS A/SFA 5.18:ER70S-6, DIN 8559:SG2 and SFS 3382:GS2).

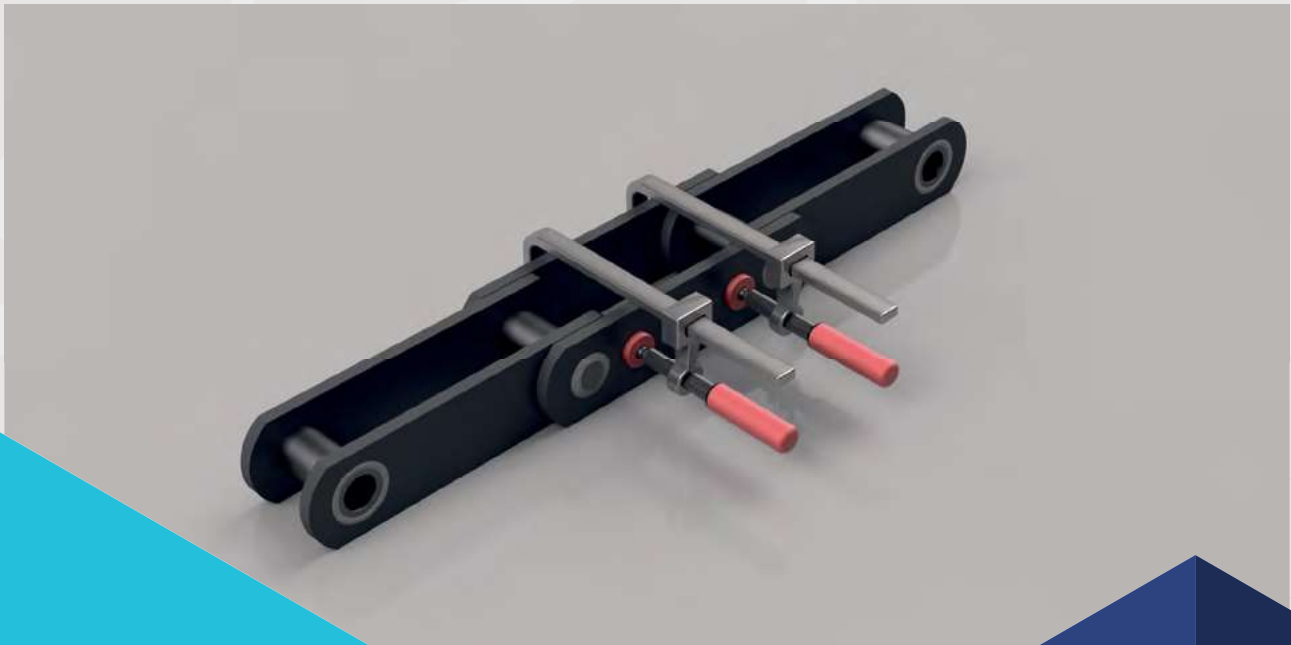
To guarantee the best possible welding result, the pin ends should be preheated to +200 Degrees Celcius. ScanChain weldable connecting links are straight links with weldable pins.

The loose sideplate of the link must be pressed against the shoulder on the pin. If the pins are not in same line as the loose sideplate, it is NOT allowed to adjust using a hammer on the pin ends that are made ready for welding.

Check that the chamfering for the welding is outside the sideplate top before welding.

NOTE: BEFORE WELDING

1. Press the sideplate of the connecting link against the shoulder on the pin. E.G. with screw presses
2. Preheat the pin to +200 Degrees Celcius



Conveyor chain calculation

Pattern for split circle diameter

$$D = Z * \frac{P}{\pi}$$

D split circle diameter [mm]

P pitch [mm]

Z number of teeth

Chain speed

$$v = \frac{Z * P * n}{60.000}$$

v chain speed [$\frac{m}{s}$]

Z number of teeth

P chain pitch [mm]

n rotations per minute [$\frac{rev}{min}$]

Capacity

$$Q = A * v * 3.600$$

Q capacity [$\frac{m^3}{h}$]

A trough width x layer height [m²]

v chain speed [$\frac{m}{s}$]

Material weight on the chain

$$Mass_1 = \frac{E * S}{v * 3,6}$$

$Mass_1$ material weight [kg]

E efficiency [$\frac{t}{h}$]

S length of conveyor [m]

v chain speed [$\frac{m}{s}$]

Power

$$P = \frac{(v * Mass_1 * \mu_1 + Mass_2 * \mu_2) * 9,81}{1.000}$$

P power [Kw]

v chain speed [$\frac{m}{s}$]

$Mass_1$ material weight [kg]

$Mass_2$ total chain weight [kg]

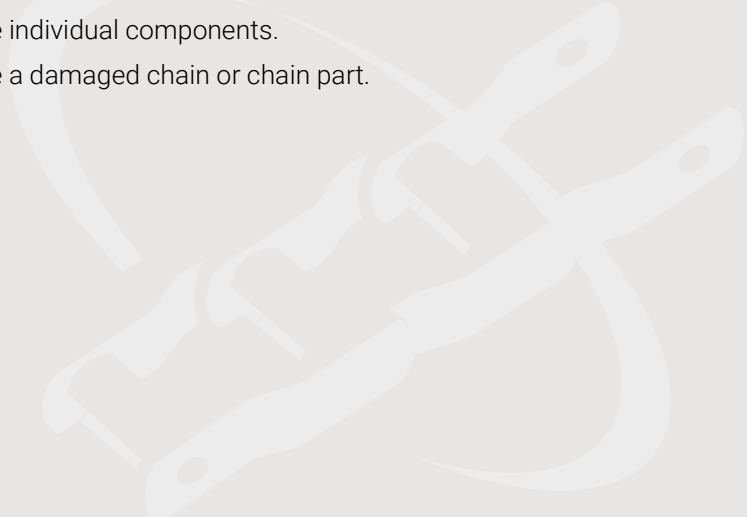
μ_1 friction between steel and the chain
(for a smooth-running product ca. 1,15)

μ_2 friction between steel and the chain
(for steel pushers approx. 0,25 and for plastic pushers approx. 0,15)

Safety Warning

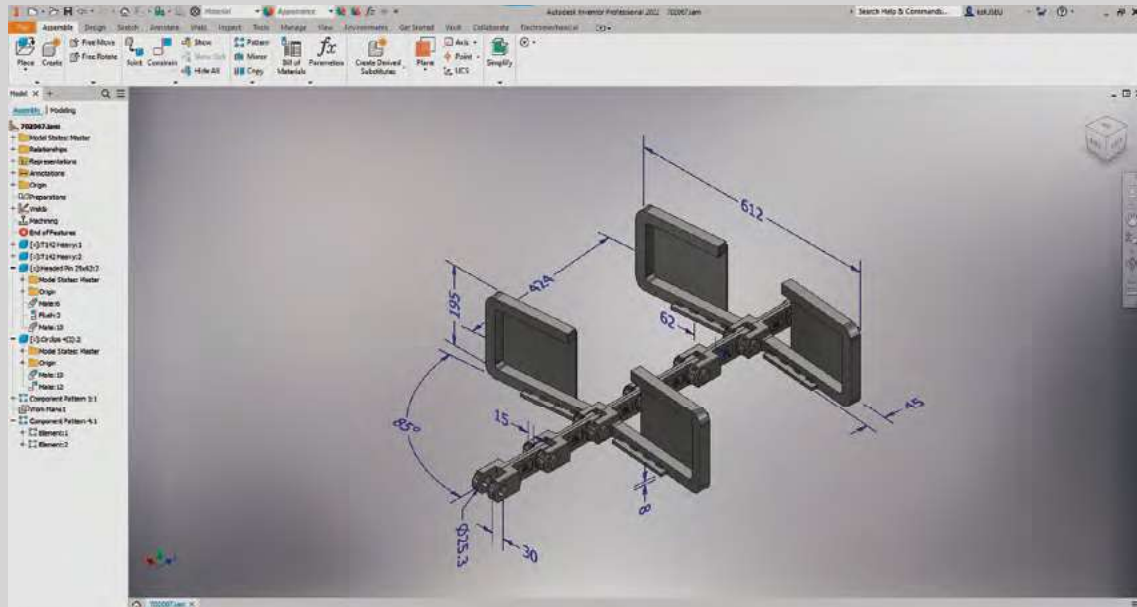
HEALTH AND SAFETY WARNING:

1. Always isolate the power source from the drive or equipment.
2. Always wear safety glasses.
3. Always wear appropriate protective clothing, hats, gloves and safety shoes as warranted by the circumstances.
4. Always ensure tools are in good working condition and used in the proper manner.
5. Always loosen tensioning devices.
6. Always support the chain to avoid sudden unexpected movement of chain or components.
7. Never attempt to disconnect or reconnect a chain unless the chain construction is fully understood.
8. Always ensure that directions for the correct use of any tools are followed.
9. Never reuse individual components.
10. Never reuse a damaged chain or chain part.

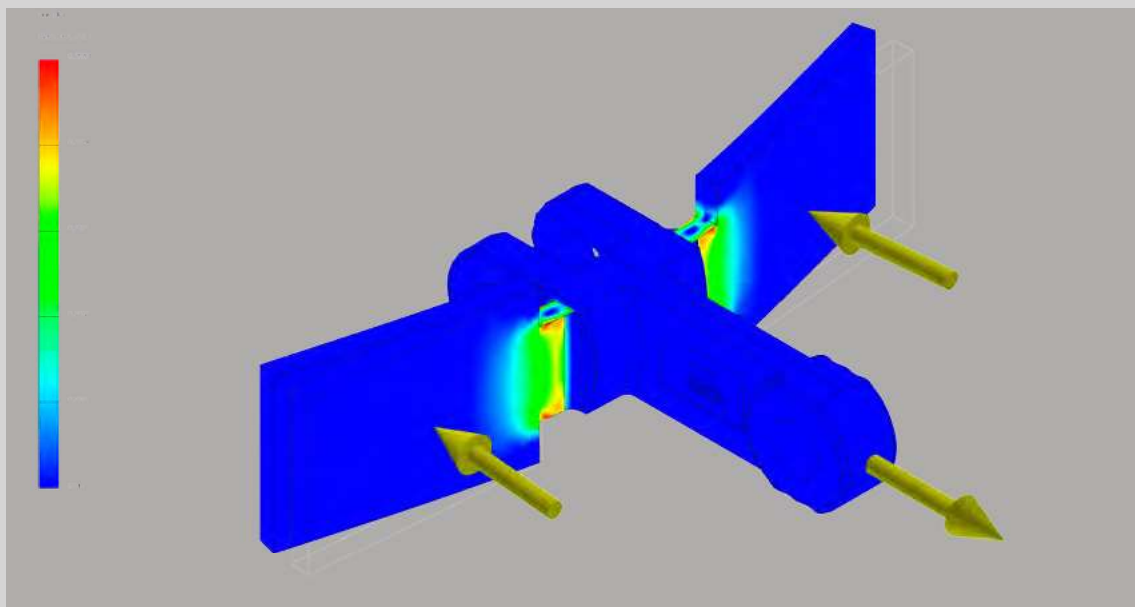


ScanChain

Simulation and technical assistance



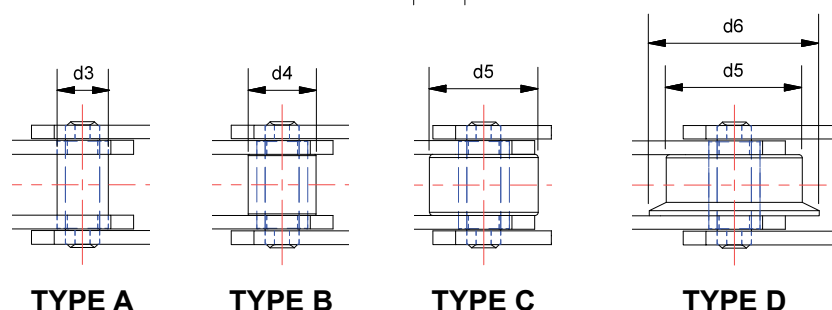
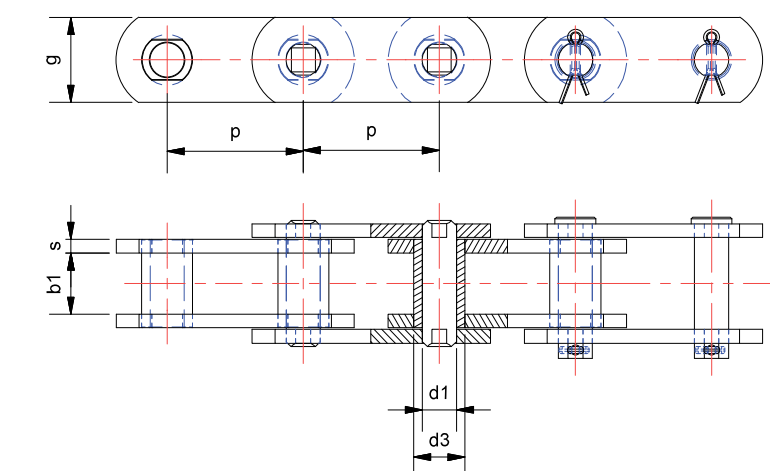
Our engineers and drawing department provides design, support and technical assistance for the preparation, execution and delivery of your projects.



It can result in high costs for repair and replacement of equipment if an intended solution is not tested. Costs that can be avoided by running a simulation of the technical solution before full implementation in the conveyor system. Our trained engineers can simulate, track and document weaknesses in the chain's construction and installation in the conveyor and thus ensure that our customers get the most optimal conditions for their further process.

Metric conveyor chains measuring table

Chain type: **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐

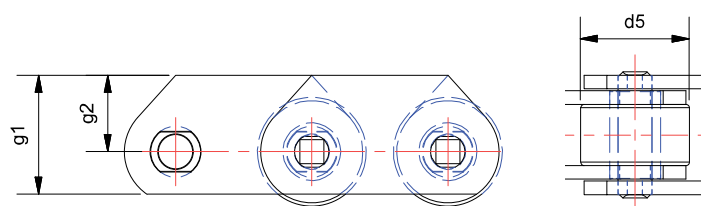


TYPE A

TYPE B

TYPE C

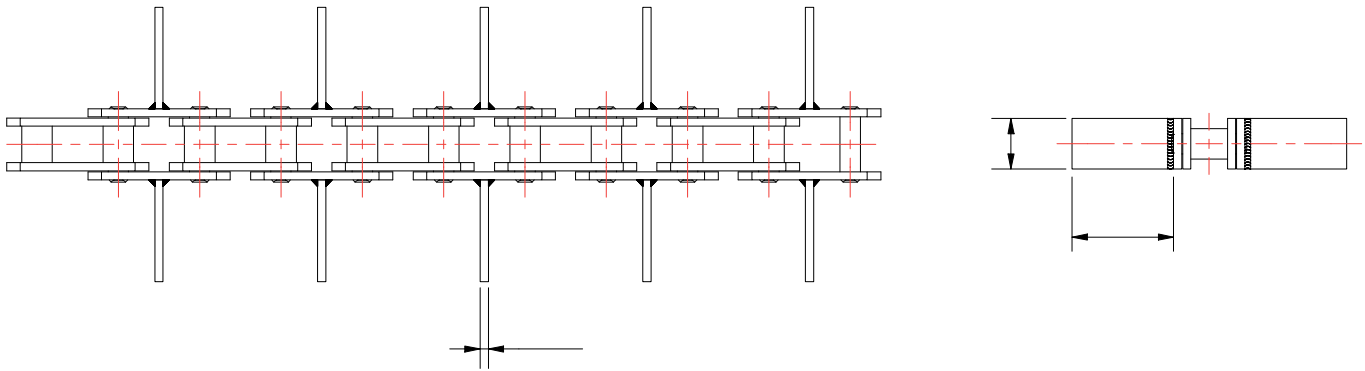
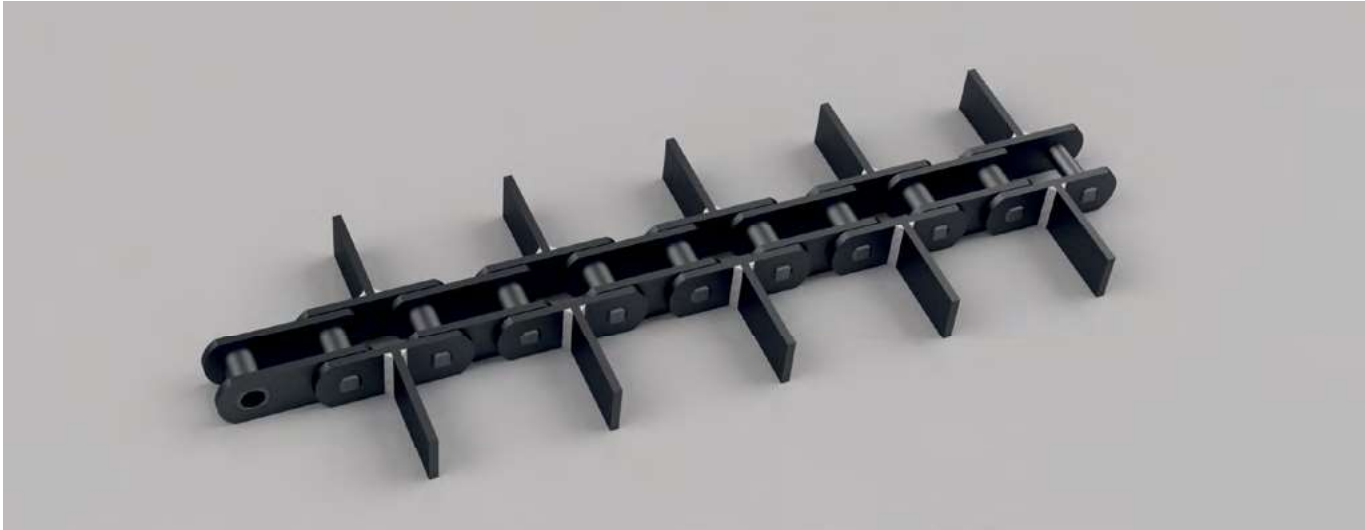
TYPE D



TYPE E

Pitch p [mm]	Sideplate thickness s [mm]	Sideplate height g [mm]
Sideplate height g_1 [mm]	Sideplate height g_2 [mm]	Between Sidebars b_1 [mm]
Pin diameter d_1 [mm]	Bushings diameter d_3 [mm]	Small roller d_4 [mm]
Large roller d_5 [mm]	Flange roller d_5 [mm]	Flange roller d_6 [mm]

All specifications apply to **DIN8165 (FV series)**, **DIN8167 (M series)** & **SMS1698 (A series)**.



Main draft



Inner link Outer link Inner link Outer link Inner link Outer link Inner link Outer link Inner link Outer link

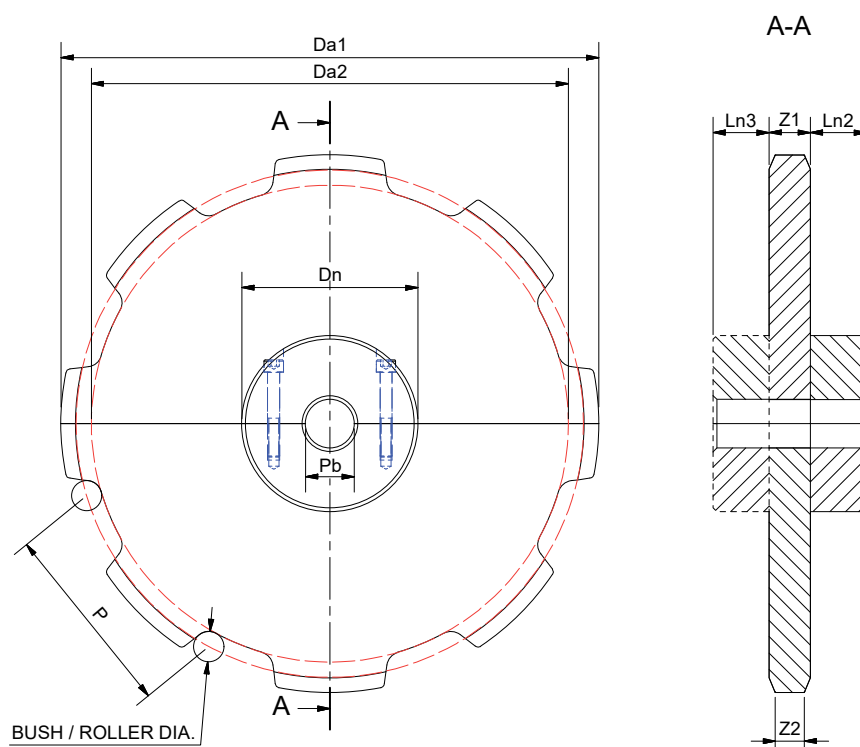
The chain is normally delivered in 5 meter sections.



Sprockets for metric conveyor chains measuring table

Chain number:

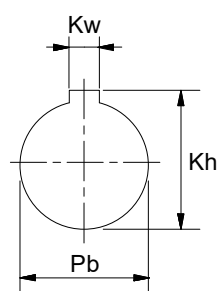
Chain type: Bush ☐ Roller ☐



Chain Pitch p [mm]	No. of teeth z [pieces]	Bush / Roller diameter [mm]
Outside $Da1$ [mm]	Tooth bottom diameter $Da2$ [mm]	Hub diameter Dn [mm]
Hub width $Ln2$ [mm]	Hub width $Ln3$ [mm]	Plate thickness $Z1$ [mm]
Tooth peak width $Z2$ [mm]	Pre bore Pb [mm]	Key width Kw [mm]
Key height Kh [mm]		

☐ **Mono type** ☐ **Split version**
☐ **One sided hub** ☐ **Two sided hub**

☐ **Keyway**





Notes

[illegible]

Notes

[illegible]

ScanChain PLUS.



At ScanChain we always try to refine what's already working.

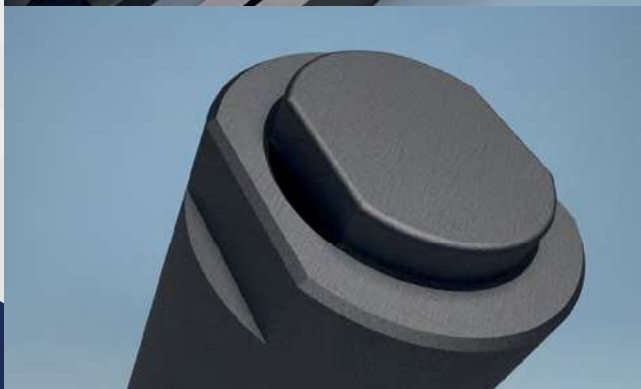
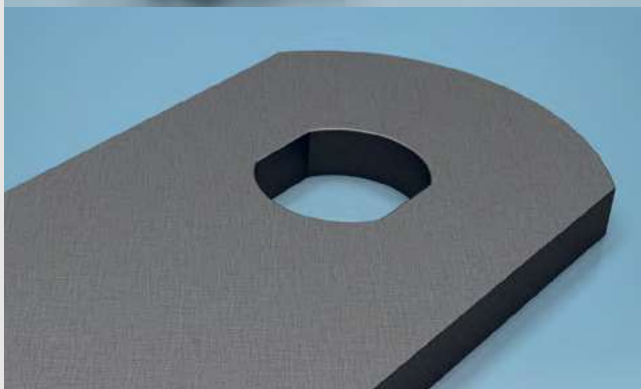
The constant search for the best product does not exist only with our customers, but is also rooted in **ScanChain's DNA**.

For many years, **ScanChain's** conveyor chains have been considered as **market leaders in quality and durability**. This includes DIN8165 and DIN8167, also known as the **FV and M series conveyor chains**.

Therefore, it is with great pleasure we present **PLUS**.

PLUS conveyor chains are **refined in every detail**. PLUS Conveyor chains have **longer service life, higher tensile strength and less elongation**, measured over the chain's load and lifetime.

STANDARD DEPTH OF HARDENING
PLUS DEPTH OF HARDENING



To achieve these results, **special materials and hardening methods for the pin and bush are used**, just as the pin is made soft before round riveting. This reduces the risk of breakage of the pin when it is rivetted. **The pin is round rivetted**, ensuring a complete and uniform attachment to the side plate.

The special hardening process of both pin and bush results in **higher hardening depth and softer core hardness** thus resulting in a higher wear resistance on pin and bush and **higher flexibility** in the pin versus normal pins that easily breaks due to brittleness

Both the pin and the bush have **anti-rotation flatness**, which ensures that neither the pin nor the bush can rotate in the side plate. The match between the pin and the bush in the side plate is also improved by **press-fit**.

When the side plate is cut, it can bend a little bit. To ensure **100% parallelism** in the side plates, they are cut from tempered steel then flatten before mounting of the pin and the bush.

PLUS Conveyor chains are available in DIN8165 (FV) and DIN8167 (M).

Call us at
+45 78 77 95 96

and hear more about
PLUS conveyor chains.

You are also welcome to send us an email at
info@scanchain.dk



Official distributor



Get in touch.

Company address:

ScanChain

Hjortevaenget 6, DK-4130 Viby Sjælland
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