The 6990-Series 2½-inch pitch heavy-duty MatTop chain is designed for the automotive industry, to be used in long and wide conveyors, without the requirement for tensioning. The 6990 technology is suitable for minimizing the overall conveyor height construction avoiding deep pit constructions. The high load capability of these belts allow the handling of people and cars in assembly lines, water and leak testing and car wash applications. The 6990-series is available in full plastic and in the so called hybrid versions which raise the performance level of plastic modular chains. Conveyors with lengths up to 656 ft (200m) and beyond are realized. The belts are standard supplied in high-performance Acetal with a closed surface or with a (non-skid) safety top surface.

#### **Features**

- High load capacity up to 50,000 N/m with standard pins and over 70,000 N/M with PBT Pins.
- · Equally divided hinge eyes for higher chain stiffness.
- · Long life chain design due to large pin diameter, optimum hinge eye width and proven wear resistant design of the chain underside.
- Easy installation and maintenance in combination with Twist-Lock® pin retention at both sides, which are easy to operate with just a screwdriver and prevent the loss of plugs; self-closing under influence of chain weight.
- · Standard available in BSM Acetal and in BYSM with yellow sides for clear moving belt edge safety indication; upon request also available with red sides.
- · Superior drive technology also under high loading, due to specific belt pocket and drive sprocket design.
- · High strength indented pushers available for car wash and automotive applications,

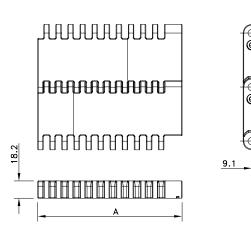
FEATURES			ord 6990 Series latTop Chain	Rexnord 6990 Series Hybrid MatTop Chain			
High load capacity			up to 50,000 N/m with standard er 70,000 N/m with PBT Pins.	Raised performance level for high loads, frequent load variation(people movers). Load distribution over N/m through steel tensions plates and steel pins.			
Higher chain stiffness	Robu	ust design with eq	ually divided hinge eyes.	Integrated steel structure that creates high stiffness and strength. Smooth running chain eliminating slip-stick or pulsation. Realizing conveyors over 656 ft (200m) in applications moving people, vehicles or combinations.			
Long life chain design			timized hinge eye width and design of the chain underside.	Steel pin and wear plates guarantee extreme wear resistance,			
Easy installation and maintenance	plug		ion clips prevent the loss of ler influence of chain weight and st a screwdriver.	No greasing or tensioning of the chain. Twist-Lock <sup>®</sup> in metal prevent the loss of the steel pins. Self-closing under influence of chain weight and easy to operate with just a screwdriver.			
Safety		belt tact zone indic	clear moving belt edge safety cation. Available in flame retardant	Yellow or red sides for clear moving belt edge safety and belt tact zone indication. The ESD standard has the lowest surface resistivity of all competitive plastic modular chains (< 10 <sup>1</sup> Ohms/m², NEN-EN-IEC 61340-4-5). Available in flame retardant material.			
Superior drive technology			cific belt pocket and drive under high loading.	H-Style drive sprocket where sprocket tooth are located left and right of the steel Hybrid structure. Limited temperature expansion (only 10% of a plastic equivalent).			
High strength indented pushers		dard available for o	car wash and automotive	Standard available for car wash and automotive applications.			
			Prograr	nme			
6995 Solid Top		Closed surface; s	uitable for automotive and people r	noving applications			
6999 Safety Top		Closed non-skid	surface; prevents slipping in humid	, greasy or wet environments			
6990 Hybrid H4 or H8 de	esign	, ,	H4) or eight (H8) tension plates per module. The H4 is designed to run on UHMWPE sheets in ESD or Denirug <sup>®</sup> roller The H8 is designed for extreme applications (high loads, increased chain stiffness) that require operation excellence.				
Module materials		BSM	Acetal				
		FR/FRESD	Flame retarded, meeting DIN 4	4102-B1			
Belt accessories			· · · · · · · · · · · · · · · · · · ·	These pushers meet the requirements of the DIN24446 standard. Pushers can ards are available exclusively through selected industry channels.			
Sprockets  The machined sprockets can be supplied in many s Hybrid sprockets (9 up to 20 teeth).; contact engir				zes in plastic or stainless steel; 6990 -9 sprockets up to 14 teeth and 6990 eering.			
Wear plate material		MCC 2500	Surface resistivity < 104 Ohm/so	q (DIN 53482)			
		MCC 2800	Flame retarded combined with F	R and FRESD chain (UL94 V0 and DIN 4102-1 B1)			
		MCC 3000	Surface resistivity < 104 Ohm/so	q (DIN 53482)			





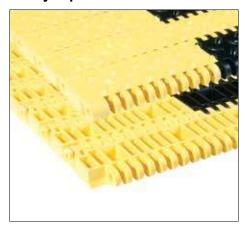


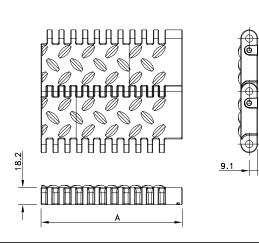
Dual lane exterior car washing on 6990-series with t1 pushers



Assembly	Belt Type	Code Number*	Temperatur	e range °C	Working Load (max.)	Weight	Backflex Radius (min.)			
			Dry	Wet	N/m (21°C)	kg/m²	mm			
	BSM-Acetal With Polypropylene Pins									
Standard	BSM 6995	I6995BSMKxx	4 to +80	4 to +65	51000	14.65	63.5			
		BYSM-Acetal Wi	th Polypropyle	ne Pins						
Standard	BYSM 6995	I6995BYSMKxx	4 to +80	4 to +65	51000	14.65	63.5			

## Safety Top 6999







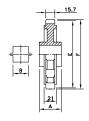
Assembly	Belt Type	Code Number*	Temperatu	re range °C	Working Load (max.)	Weight	Backflex Radius (min.)			
			Dry	Wet	N/m (21°C)	kg/m²	mm			
	BSM-Acetal With Polypropylene Pins									
Standard	BSM 6999	I6999BSMKxx	4 to +80	4 to +65	51000	14.65	63.5			
	BYSM-Acetal with Polypropylene Pins									
Standard	BYSM 6999	I6999BYSMKxx	4 to +80	4 to +65	51000	14.65	63.5			

<sup>\*</sup> In code numbers xx corresponds with the belt width (A). Standard widths of these belts begin at 9" with 6" increments up to 190"; special widths begin at 5" with ½" increments. See also page 208.

# **Split Sprockets**



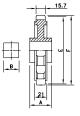










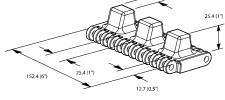


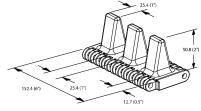
Sprocket Type	Code Number	Number of Teeth	Bore B mm/inch	Pitch Diameter E	Outside Diameter F mm	Hub Width A
		Split Sprockets	IIIII/IIICII	"""	111111	111111
		Square Bores				
NS 5996 T09 S90	614-91-2	9	90	167.1	164.1	
NS 5996 T12 S90	614-97-2	12	90	220.8	221.0	40
NS 5996 T14 S90	614-89-2	14	90	250.0	256.5	48
NS 5996 T14 S120	614-128-1	14	120	256.8		
		Classic Sprockets				
		Square Bores				
N 5996 T07 S40	114-821-11	7	40	131.7	125.5	
N 5996 T09 S40 HS	114-2238-1	9	40			
N 5996 T09 S50 HS	114-3278-1	9	50	167.1	164.1	
N 5996 T09 S65 HS	114-1599-16	9	65			
N 5996 T14 S40 HS	114-2239-1	14	40			48
N 5996 T14 S50 HS	114-2239-2	14	50	250.0	256.5	
N 5996 T14 S65 HS	114-1101-2	14	65	256.8	256.5	
N 5996 T14 S90 HS	114-1032-2	14	90			

HS suitable for hot and humid applications.

# Accessory:





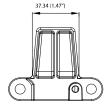


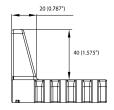
DIN Style Pusher 6990

T1 Dimensions

T2 Dimensions





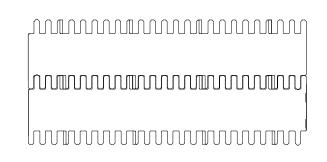


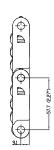
DIN Style Sideguard 6990

H40 Dimensions

### Solid Top 6995 Hybrid











Chain Type	Code Number	Working Load (max)	Weight	Backfl ex Radius (min)	Certification					
		lbs/ft / N/m	Lbs/ft2 / kg/m2	in / mm						
	BSM									
BSM6995H4	I6995H4BSMKxx	6.850 / 100.000	5.1 / 25	1.75 / 45	NEN-EN-IEC 61340-4-5					
	FR-PA									
FR-PA6995H4	I6999H4FRKxx	6.850 / 100.000	4.7 / 23.2	1.75 / 45	NEN-EN-IEC 61340-4-5 DIN4102-B1 (Bfl -s1)					

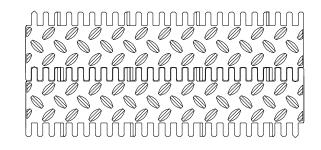
Kxx indicated the chain width (K12, K14,.....K228). BSM Chain width available starting at 12-inches (306 mm) up to 234,9 inch (5967 mm) actual width with increments of 3 inches (76,5 mm).

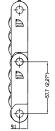
Kxx indicated the chain width (K12, K14,.... K228). FR-PA Chain width available starting at 12,1- inches (308 mm) up to 236,5 inch (6006 mm)

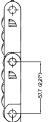
actual width with increments of 3,1 inches (77 mm).

#### Safety Top 6999 Hybrid







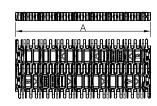




Chain Type	Code Number	Working Load (max)		Weight		Backflex Radius (min)		Certification	
		lbs/ft	N/m	Lbs/ft2	kg/m2	in	mm		
	BSM								
BSM6999H4	I6999H4BSMKxx	6.850	100.000	5.2	25.4	1.75	45	NEN-EN-IEC 61340-4-5	
	FR-PA								
FR-PA6999H4	I6999H4FRKxx	6.850	100.000	4.7	23.6	1.75	45	NEN-EN-IEC 61340-4-5 DIN4102-B1 (Bfl-s1)	

Kxx indicated the chain width (K12, K14,.....K228). BSM Chain width available starting at 12-inches (306 mm) up to 234,9 inch (5967 mm) actual width with increments of 3 inches (76,5 mm).

Kxx indicated the chain width (K12, K14,.... K228). FR-PA Chain width available starting at 12,1- inches (308 mm) up to 236,5 inch (6006 mm) actual width with increments of 3,1 inches (77 mm).



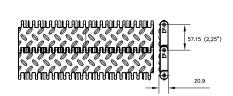
Chain Type	Code Number	Working Load (max)	Weight	Backflex Radius (min)	Certification				
		lbs/ft / N/m Lbs/ft2 / kg/		in / mm					
	BSM								
BSM6995H8	I6995H8BSMKxx	11.645 / 170.000	6.2 / 30.2	1.75 / 45	NEN-EN-IEC 61340-4-5				
	FR-PA								
FR-PA6995H8	I6999H8FRKxx	11.645 / 170.000	5.8 / 28.2	1.75 / 45	NEN-EN-IEC 61340-4-5 DIN4102-B1 (Bfl -s1)				

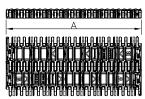
Kxx indicated the chain width (K12, K14,.....K228). BSM Chain width available starting at 12-inches (306 mm) up to 234,9 inch (5967 mm) actual width with increments of 3 inches (76,5 mm).

Kxx indicated the chain width (K12, K14,..... K228). FR-PA Chain width available starting at 12,1- inches (308 mm) up to 236,5 inch (6006 mm) actual width with increments of 3,1 inches (77 mm).

#### Safety Top 6999 Hybrid









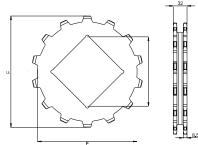
Chain Type	Code Number	Working Load (max)		Weight		Backflex Radius (min)		Certification	
		lbs/ft	N/m	Lbs/ft2	kg/m2	in	mm		
	BSM								
BSM6999H8	I6999H8BSMKxx	11.645	170.000	6.3	30.6	1.75	45	NEN-EN-IEC 61340-4-5	
	FR-PA								
FR-PA6999H8	I6999H8FRKxx	11.645	170.000	5.9	28.8	1.75	45	NEN-EN-IEC 61340-4-5 DIN4102-B1 (Bfl-s1)	

Kxx indicated the chain width (K12, K14,.....K228). BSM Chain width available starting at 12-inches (306 mm) up to 234,9 inch (5967 mm). actual width with increments of 3 inches (76,5 mm).

Kxx indicated the chain width (K12, K14,..... K228). FR-PA Chain width available starting at 12,1- inches (308 mm) up to 236,5 inch (6006 mm) actual width with increments of 3,1 inches (77 mm).

#### KU6990 Hybrid





Cuusahat Daassintias	Normalis on Of To adh	Pitch Circle Diameter	Maximum Square Bore Size	Hub Width inch / mm	
Sprocket Description	Number Of Teeth	inch / mm	inch / mm		
		Solid			
KU6990 Hybrid T09	9	6.579 / 167.1	3.5 / 90	1.22 / 31	
KU6990 Hybrid T12	12	8.693 / 220.8	4.3 / 110	1.22 / 31	
KU6990 Hybrid T14	14	10.111 / 256.8	4.5 / 120	1,22 / 31	
KU6990 Hybrid T17	17	12.245 / 311.1	6.0 / 150	1,22 / 31	
		Split			
KUS6990 Hybrid T09	9	6.579 / 167.1	3.5 / 90	1.22 / 31	
KUS6990 Hybrid T12	12	8.693 / 220.8	4.3 / 110	1.22 / 31	
KUS6990 Hybrid T14	14	10.111 / 256.8	4.5 / 120	1.22 / 31	
KUS6990 Hybrid T17	17	12.245 / 311.1	6.0 / 150	1.22 / 31	

Other bore sizes, teeth and round bores are available on request. Please consult our technical support department for more information.