Service Automation Pneumatics

Mobile Hydraulics



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Product Bulletin - Flexible Assembly Conveyors

New TSplus Flat-Top Chain & Roller Chain Drives

Effective today, the current AS2C/M, AS2C/S, AS2C/M-H, and AS2C/S-H flat top chain drives, along with the AS2R/M, AS2R/S, AS2R/M-H, and AS2R/S-H roller chain drives have been replaced with a new drive design.

These new drives, which are functionally equivalent to the current design, do offer some distinctive features and benefits.

Feature	Benefit
Overall H = 240mm	Reduces the minimum conveyor height for low clearance applications
Belt driven roller	Provides increased pallet surface contact in end-to-end configurations
Visual chain tensioner indicator	Allows for visual inspection of chain elongation
Proximity bracket & prox bracket mounting provision	Provides an electrical means for sensing chain wear
Chain tensioner lockout device & removable bottom panel	Simplifies chain installation and maintenace
Debris chute	Allows debris to simply fall to the floor and not infiltrate drive casting

The following eight pages are designed to serve as replacements to pages 4-2 to 4-5 and 5-2 to 5-5 in the TSplus catalog (version 3.0).

NOTE: Service parts for current style drives will still be available.



Flat-Top Chain Drive Module

Model AS2/C

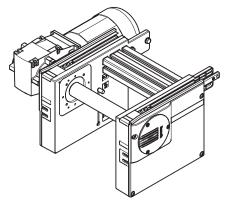
This drive module in conjunction with a return module pulls flat top chain along straight or curved conveyor sections, and provides the flexibility to create rectangular, serpentine or in-line curved configurations. The AS2/C is available with either an outboard-mounted or mid-mounted gearmotor. The outboard-mounted option (left or right side) is available in widths from 160mm to 1040mm, while the mid-mounted option is available in widths from 320mm to 1040mm. Both styles include automatic chain tensioners.

Select the mid-mounted option when space prohibits a side mounted configuration. The side mount, however, is generally preffered for accessibility particularly for lines with multiple conveyor sections end-to-end.

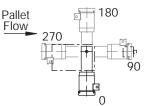
Ordering parameters allow you to specify the motor voltage, frequency, conveyor speed, and motor mounting angle (outboard-mounted drives only). Outboard-mounted drive units are delivered with the motor in the customer-specified orientation, but can be rotated to any of the four positions as shown. All gearmotors include CE compliant wiring terminals.

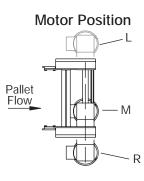
The AS2/C drive module includes hardware required to mount it to a chain conveyor section, as well as fasteners to connect drives and returns end-to-end. For non-standard widths, speed, or voltages, please contact our applications engineering department.

Note: In addition to a visual inspection of chain stretch via the tensioner indicator, chain stretch can also be sensed electrically. An SH2/UV proximity switch bracket and 12mm barrel proximity switch can be mounted to the drive castings.



Outboard Mounted Motor Orientation





Two proximity switches and two brackets are required per drive. See Section 16 in the TSplus catalog for proximity switch ordering information.

Ordering Information for Drive unit AS2/C

Option	Choices	AS2/C 3842 998 038
Drive Unit Width (B)*	160, 240, 320, 400, 480, 640, 800, 1040	mm
Nominal Speed**	9, 12, 15, 18	M/min
Motor Voltage/Frequency	See Table 1	VHz
Motor Position	L, M, or R	mm
Motor Orientation † (outboard mount only)	0°, 90°, 180°, 270°	

^{* 160 &}amp; 240 (B) only available with L or R motor positions

^{**} Full load conveyor speeds vary depending on motor frequency. See Table 1

^{† 90°, 180°, &}amp; 270° motor orientations are only available with L or R motor positions

Flat-Top Chain Drive Module

Technical data for AS2/C drive

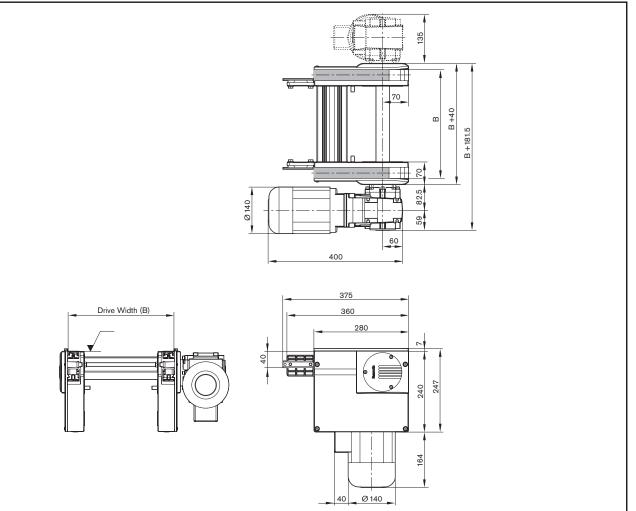
Nominal conveyor speed	=	See Table 1
Permissible loading weight	=	300 kg
Maximum conveyor unit length	=	30 m (100 ft)
Motor RPM @ 50 Hz	=	900-1410
Motor RPM @ 60 Hz	=	1080-1692
Motor electrical specifications	=	See Table 1

Electrical data for AS2/C drives

Nom. Actual Speed Full Loa							ull Load A	Amps/H	HP @						
	M/min	50 Hz	60 Hz	208	/60	240)/60	380	/50	415	/50	480	/60	575	6/60
				AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP
	9	7.9	9.5	1.6	3/8	1.6	3/8	0.8	3/8	0.8	3/8	0.8	3/8	0.7	3/8
	12	9.91	11.9	2.4	1/2	2.4	1/2	1.2	1/2	1.2	1/2	1.2	5/8	1.0	5/8
	15	12.6	15.1	2.4	1/2	2.4	1/2	1.2	1/2	1.2	1/2	1.2	5/8	1.0	5/8
	18	16.4	19.7	3.2	3/4	3.2	3/4	1.6	3/4	1.7	3/4	1.7	7/8	1.0	3/4

Note: Electrical Data for reference only. Refer to motor name plate for actual amperage ratings. Table 1

Dimensional Data for AS2/C Drives



Nort Kansh - 350 meles Max Load - 300 0 kg

Heavy Duty Flat-Top Chain Drive Module

Model AS2/C-H

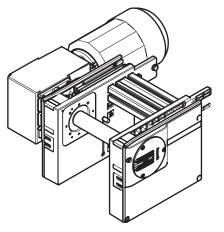
This drive module uses a larger gearbox and motor in conjunction with a return unit to pull the flat-top chain along straight or curved conveyor sections giving you the flexibility to create rectangular, serpentine or in-line curved configurations. The AS2/C-H is available with either an outboard-mounted or midmounted gearbox and motor. The outboard-mounted option (left or right side) is available in widths from 160mm to 1040mm, while the mid-mounted option is available in widths from 320mm to 1040mm.. Both styles include automatic chain tensioners.

Select the mid-mounted option when space prohibits a side mounted configuration. The side mount, however, is generally preferred for accessibility particularly for lines with multiple conveyor sections end-to-end.

Ordering parameters allow you to specify the motor voltage, frequency, conveyor speed, and motor mounting angle (outboard-mounted drives only). Outoard-mounted drive units are delivered with the motor in the customerspecified orientation, but can be rotated to any of the four locations, as shown. All motors include CE compliant wiring terminals.

Drives ordered without motors are equipped with an IEC or NEMA motor mounting flange based on the frequency selction of 50Hz or 60Hz. The AS2/C-H drive module includes all of the required mounting hardware. For non-standard widths, speed, or voltages please contact our applications engineering department.

Note: In addition to a visual inspection of chain stretch via the tensioner indicator, chain stretch can also be sensed electrically. An SH2/UV proximity switch



bracket and 12mm barrel proximity switch can be mounted to the drive castings. Two proximity switches and two brackets are required per drive. See Section 16 in the TSplus catalog for proximity switch ordering information.

Ordering Information for Drive unit AS2/C-H

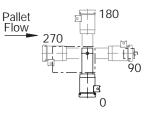
Option	Choices	AS2/C-H 3842 998 039
Drive Unit Width (B)*	160, 240, 320, 400, 480, 640, 800, 1040	mm
Nominal Speed**	9, 12, 15, 18	M/min
Motor Voltage/Frequency	See Table 2	VHz
Motor Position	L, M, or R	mm
Motor Orientation † (outboard mount only)	0°, 90°, 180°, 270°	

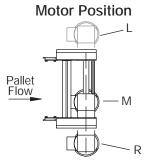
* 160 & 240 (B) only available with L or R motor positions

** Full load conveyor speeds vary depending on motor frequency. See Table 2

† 90°, 180°, & 270° motor orientations are only available with L or R motor positions

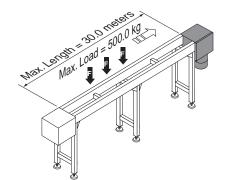
Outboard Mounted Motor Orientation





Technical data for AS2/C-H drive

Nominal conveyor speed	=	See Table 2
Permissible loading weight	=	500 kg
Maximum conveyor unit length	=	30 m (100 ft)
Motor RPM @ 50 Hz	=	1390-1410
Motor RPM @ 60 Hz	=	1660-1700
Motor electrical specifications	=	See Table 2
		1660-1700

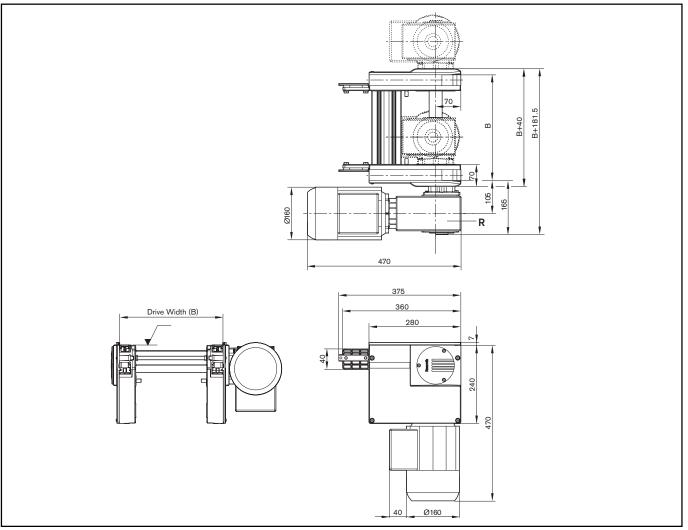


Electrical data for AS2/C-H drives

Nom. Actual Speed Full Load Amps/HF								HP @						
M/min	50 Hz	60 Hz	208	/60	240)/60	380)/50	415	/50	480	/60	575	5/60
			AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP
9	9.7	8.1	1.9	1/2	1.8	1/2	1.6	3/4	1.6	3/4	0.82	1/2	0.71	3/4
12	11.76	11.59	3.0	3/4	3.0	3/4	1.6	3/4	1.6	3/4	1.6	3/4	1.2	1/2
15	14.07	14.3	3.8	1.0	3.8	1.0	2.2	1.0	2.2	1.0	2.2	1.0	1.7	1.0
18	16.97	16.86	3.8	1.0	3.8	1.0	2.2	1.0	2.2	1.0	2.2	1.0	1.7	1.0

Note: Electrical Data for reference only. Refer to motor name plate for actual amperage ratings. Table 2

Dimension Data for AS2/C-H drives



Roller Chain Drive Components

Roller Chain Drive Module

Model AS2/R

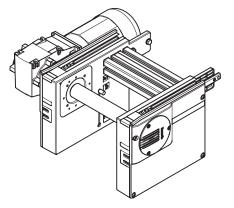
This drive module in conjunction with a return module pulls roller chain along straight conveyor sections giving you the flexibility to create rectangular, in-line, parallel or over/under configurations. The AS2/R is available with either an outboard-mounted or mid-mounted gearmotor. The outboard-mounted option (left or right side) is available in widths from 160mm to 1040mm, while the mid-mounted option is available in widths from 320mm to 1040mm. Both styles include automatic chain tensioners.

Select the mid-mounted option when space prohibits a side mounted configuration. The side mount, however, is generally preffered for accessibility particularly for lines with multiple conveyor sections end-to-end.

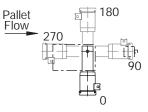
Ordering parameters allow you to specify the motor voltage, frequency, conveyor speed, and motor mounting angle (outboard-mounted drives only). Outboard-mounted drive units are delivered with the motor in the customer-specified orientation, but can be rotated to any of the four locations, as shown. All gearmotors include CE compliant wiring terminals.

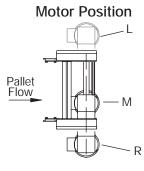
The AS2/R drive module includes hardware required to mount it to a chain conveyor section, as well as fasteners to connect drives and returns end-to-end. For non-standard widths, speed, or voltages, please contact our applications engineering department.

Note: In addition to a visual inspection of chain stretch via the tensioner indicator, chain stretch can also be sensed electrically. An SH2/UV proximity switch bracket and 12mm barrel proximity switch can be mounted to the drive castings.



Outboard Mounted Motor Orientation





Two proximity switches and two brackets are required per drive. See Section 16 in the TSplus catalog for proximity switch ordering information.

Ordering Information for Drive unit AS2/R

Option	Choices	AS2/R			
option		3842 998 040			
Drive Unit Width (B)*	160, 240, 320, 400, 480, 640, 800, 1040	mm			
Nominal Speed**	9, 12, 15, 18	M/min			
Motor Voltage/Frequency	See Table 3	VHz			
Motor Position	L, M, or R	mm			
Motor Orientation † (outboard mount only)	0°, 90°, 180°, 270°				

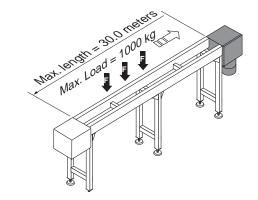
* 160 & 240 (B) only available with L or R motor positions

^{**} Full load conveyor speeds vary depending on motor frequency. See Table 3

^{† 90°, 180°, &}amp; 270° motor orientations are only available with L or R motor positions

Technical data for AS2/R drive

Nominal conveyor speed	=	See Table 3
Permissible loading weight	=	1000 kg
Maximum conveyor unit length	=	30 m (100 ft)
Motor RPM @ 50 Hz	=	900-1410
Motor RPM @ 60 Hz	=	1080-1692
Motor electrical specifications	=	See Table 3

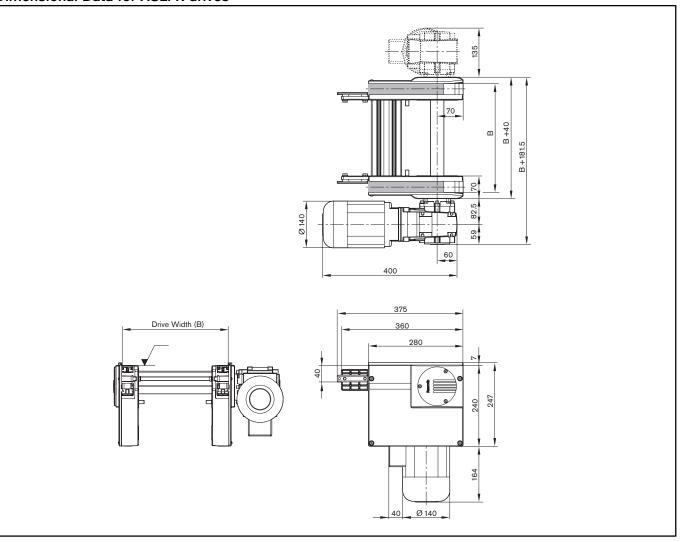


Electrical data for AS2/R Drives

Nom. Actual Speed Full Load Am								Amps/H	HP@	_					
	M/min	50 Hz	60 Hz	208	/60	240	/60	380	/50	415	/50	480	/60	575	/60
				AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP
	9	8.2	9.83	1.6	3/8	1.6	3/8	0.8	3/8	0.8	3/8	0.8	3/8	0.7	3/8
	12	10.3	12.5	2.4	1/2	2.4	1/2	1.2	1/2	1.2	1/2	1.2	5/8	1.0	5/8
	15	13.3	15.9	2.4	1/2	2.4	1/2	1.2	1/2	1.2	1/2	1.2	5/8	1.0	5/8
	18	17	20.4	3.2	3/4	3.2	3/4	1.6	3/4	1.7	3/4	1.7	7/8	1.0	3/4

Note: Electrical Data for reference only. Refer to motor name plate for actual amperage ratings. Table 3

Dimensional Data for AS2/R drives



Roller Chain Drive Components

Heavy Duty Roller Chain Drive module



Model AS2/R-H

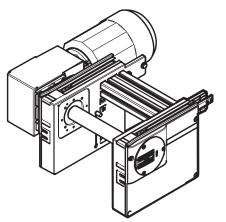
This drive module uses a larger gearbox and motor in conjunction with a return unit to pull the roller chain along straight conveyor sections giving you the flexibility to create rectangular, in-line, parallel or over/under configurations. The AS2/R-H is available with either an outboard-mounted or mid-mounted gearbox and motor. The outboardmounted option (left or right side) is available in widths from 160mm to 1040mm, while the mid-mounted option is available in widths from 320mm to 1040mm. Both styles include automatic chain tensioners.

Select the mid-mounted option when space prohibits a side mounted configuration. The side mount, however, is generally preferred for accessibility particularly for lines with multiple conveyor sections end-to-end.

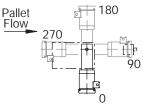
Ordering parameters allow you to specify the motor voltage, frequency, conveyor speed, and motor mounting angle (outboard-mounted drives only). Outoard-mounted drive units are delivered with the motor in the customerspecified orientation, but can be rotated to any of the four locations, as shown. All motors include CE compliant wiring terminals.

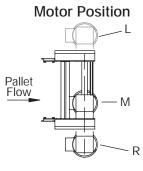
Drives ordered without motors are equipped with an IEC or NEMA motor mounting flange based on the frequency selection of 50Hz or 60Hz. The AS2/R-H drive module includes all of the required mounting hardware. For nonstandard widths, speed, or voltages please contact our applications engineering department.

Note: In addition to a visual inspection of chain stretch via the tensioner indicator, chain stretch can also be sensed electrically. An SH2/UV proximity switch bracket and 12mm barrel proximity switch









can be mounted to the drive castings. Two proximity switches and two brackets are required per drive. See Section 16 in the TSplus catalog for proximity switch ordering information.

Ordering Information for Drive unit AS2/R-H

Option	Choices	AS2/R-H			
		3842 998 041			
Drive Unit Width (B)*	160, 240, 320, 400, 480, 640, 800, 1040	mm			
Nominal Speed**	9, 12, 15, 18	M/min			
Motor Voltage/Frequency	See Table 4	VHz			
Motor Position	L, M, or R	mm			
Motor Orientation † (outboard mount only)	0°, 90°, 180°, 270°				

* 160 & 240 (B) only available with L or R motor positions

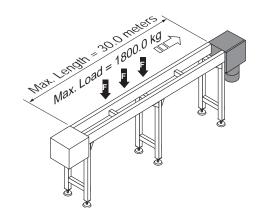
** Full load conveyor speeds vary depending on motor frequency. See Table 4

† 90°, 180°, & 270° motor orientations are only available with L or R motor positions

Roller Chain Drive Components

Technical data for AS2/R-H drive

Nominal conveyor speed	=	See Table 4
Permissible loading weight	=	1800 kg
Maximum conveyor unit length	=	30 m (100 ft)
Motor RPM @ 50 Hz	=	1390-1410
Motor RPM @ 60 Hz	=	1660-1700
Motor electrical specifications	=	See Table 4



Electrical data for AS2/R-H Drives

Nom.	Actual Speed		Full Load Amps/HP @											
M/min	50 Hz	60 Hz	208/60		240/60		380/50		415/50		480/60		575/60	
			AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP
9	10.06	8.4	1.9	1/2	1.8	1/2	1.6	3/4	1.6	3/4	0.82	1/2	0.71	3/4
12	12.19	12.01	3.0	3/4	3.0	3/4	1.6	3/4	1.6	3/4	1.6	3/4	1.2	1/2
15	15.59	14.83	3.8	1.0	3.8	1.0	2.2	1.0	2.2	1.0	2.2	1.0	1.7	1.0
18	17.59	17.48	3.8	1.0	3.8	1.0	2.2	1.0	2.2	1.0	2.2	1.0	1.7	1.0

Note: Electrical Data for reference only. Refer to motor name plate for actual amperage ratings. Table 4

Dimensional Data for AS2/R-H drives

