



FAQ • 01/2015

Article Numbers for Pre-Assembled Encoder Cables

Incremental Encoders (RS422/HTL) and SSI Encoders

<http://support.automation.siemens.com/WW/view/en/12663106>

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1 Article Numbers for Pre-Assembled Encoder Cables

Note

You can insert the figure 5, 7 or 8 for the wildcard character "■".

With connector and open end

The following article numbers cover pre-assembled cables with a connector at one end and an open end.

Type of encoder		Incremental encoder (RS422)		24V incremental encoder (HTL)	SSI encoder
Encoder article numbers		6FX2001-2C... 2E... 2G... 2M... 2P... 2R...	6FX2001-2D... 2F... 2H... 2N... 2Q... 2S...	6FX2001-4....	6FX2001-5.S..
Encoder power supply		5V	24V	24V	24V
S7-1500					
	TM Count 2x24V	-	-	6FX■002-2CA12-1...	-
	TM PosInput 2	6FX■002-2CA12-1...	6FX■002-2CA12-1...	-	6FX5002-2CC12-1...
	TM Timer DIDQ 16x24V	-	-	6FX■002-2CA12-1...	-
ET200SP modules					
	TM Count 1x24V	-	-	6FX■002-2CA12-1...	-
	TM PosInput 1	-	6FX■002-2CA12-1...	-	6FX5002-2CC12-1...-
	TM Timer DIDQ 10x24V	-	-	6FX■002-2CA12-1...	-
S7-300/400 FMs					
	FM 350-1	6FX■002-2CA12-1...	6FX■002-2CA12-1...	6FX■002-2CA12-1...	-
	FM 350-2		-	6FX■002-2CA12-1...	-
	FM 352-5	6FX■002-2CA12-1...	6FX■002-2CA12-1...	6FX■002-2CA12-1...	6FX5002-2CC12-1...
	SM 338		-	-	6FX5002-2CC12-1...
	FM 452	6FX■002-2CA12-1...	6FX■002-2CA12-1...	6FX■002-2CA12-1...	6FX5002-2CC12-1...

1 Article Numbers for Pre-Assembled Encoder Cables

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Encoder power supply		5V	24V	24V	24V
S7-300C					
	CPU 312C	-	-	6FX■002-2CA12-1...	-
	CPU 313C	-	-	6FX■002-2CA12-1...	-
	CPU 313C-2DP	-	-	6FX■002-2CA12-1...	-
	CPU 313C -2PTP	-	-	6FX■002-2CA12-1...	-
	CPU 314C-2DP	-	-	6FX■002-2CA12-1...	-
	CPU 314C - 2PTP	-	-	6FX■002-2CA12-1...	-
ET200S modules					
	1POS U	-	6FX■002-2CA12-1...	-6FX■002-2CA12-1...	6FX5002-2CC12-1...-
	1SSI	-	-	-	6FX5002-2CC12-1...
	1COUNT 24V	-	-	6FX■002-2CA12-1...	-
	1COUNT 5V	-	6FX■002-2CA12-1...	-	-

With connectors at both ends

The following article numbers cover pre-assembled cables with a connector at each end.

Type of encoder		Incremental encoder (RS422)		24V incremental encoder (HTL)	SSI encoder
Encoder article numbers		6FX2001-2C... 2E... 2G... 2M... 2P... 2R...	6FX2001-2D... 2F... 2H... 2N... 2Q... 2S...	6FX2001-4....	6FX2001-5.S..
Encoder power supply		5V	24V	24V	24V
S7-300/400 FMs					
	FM 351	6FX■002-2CR00-....	6FX■002-2CD24-....	6FX■002-2AL00-....	6FX■002-2CC11-....
	FM 451	6FX■002-2CR00-....	6FX■002-2CD24-....	6FX■002-2AL00-....	6FX■002-2CC11-....
	FM 352	6FX■002-2CR00-....	6FX■002-2CD24-....	6FX■002-2AL00-....	6FX■002-2CC11-....
	FM 354	6FX■002-2CR00-....	6FX■002-2CD24-....	-	6FX■002-2CC11-....
	FM 357	6FX■002-2CR00-....	6FX■002-2CD24-....	-	6FX■002-2CC11-....
	FM 453	6FX■002-2CR00-....	6FX■002-2CD24-....	-	6FX■002-2CC11-....
IM					
	IM 174	6FX■002-2CR00-....	6FX■002-2CD24-...	-	6FX■002-2CC11-....
SIMOTION					
	SMC 30	6FX■002-2CR00-....	6FX■002-2CD24-...	-	6FX■002-2CC11-....
	C 240	6FX■002-2CR00-....	6FX■002-2CD24-...	-	6FX■002-2CC11-....

2 Length Codes for Pre-Assembled Encoder Cables

Overview

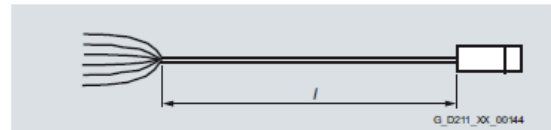
Data position of the Order No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MOTION-CONNECT 500	6	F	X	5	0	0	8	-	1	B	.	.	.	.	.	.
MOTION-CONNECT 800PLUS	6	F	X	8	0	0	8	-	1	B	.	.	.	.	.	.
Power cable without brake cores, sold by the meter											B					
Power cable with brake cores, sold by the meter											A					
No. of cores and cross-sections																
Length code																
Units of 10 cm (3.94 in) or 1 meter (3.28 ft) or in fixed lengths																

Overview

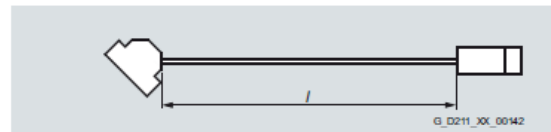
Description	Order No. supplement
Length code for pre-assembled cables	
	6FX.0.2-.....- ■ ■ ■ ■ ■
0 m	1
100 m (328 ft)	2
200 m (656 ft)	3
0 m	A
10 m (32.8 ft)	B
20 m (65.6 ft)	C
30 m (98.4 ft)	D
40 m (131 ft)	E
50 m (164 ft)	F
60 m (197 ft)	G
70 m (230 ft)	H
80 m (262 ft)	J
90 m (295 ft)	K
0 m	A
1 m (3.28 ft)	B
2 m (6.56 ft)	C
3 m (9.84 ft)	D
4 m (13.1 ft)	E
5 m (16.4 ft)	F
6 m (19.7 ft)	G
7 m (22.9 ft)	H
8 m (26.3 ft)	J
9 m (29.5 ft)	K
0 m	0
0.1 m (3.94 in)	1
0.2 m (7.87 in)	2
0.3 m (11.81 in)	3
0.4 m (15.75 in)	4
0.5 m (19.96 in)	5
0.6 m (23.62 in)	6
0.7 m (27.56 in)	7
0.8 m (31.5 in)	8
Examples:	1.0 m (3.28 ft): 1 A B 0
	2.2 m (7.22 ft): 1 A C 2
	8.0 m (26.3 ft): 1 A J 0
	299.0 m (981 ft): 3 K K 0

More information

Definition of lengths for pre-assembled cables



Cable with exposed core ends and pre-assembled connector



Cable with pre-assembled connectors at both ends

Tolerances:

- Cable lengths up to 10 m (32.8 ft): ± 2 %
- Cable lengths of 10 m (32.8 ft) and longer: ± 1 %

Description	Order No. supplement
Length code for power and signal cables, sold by the meter¹⁾	
	6FX.008-.....- ■ ■ ■ A 0
50 m (164 ft)	1 F
100 m (328 ft)	2 A
200 m (656 ft)	3 A
500 m (1640 ft)	6 A

3 Version

Version	Date	Change
V1.0	02/2003	First edition
V1.1	05/2012	Addition
V1.2	01/2015	Addition of 6FX8, S7-1500 and ET 200SP