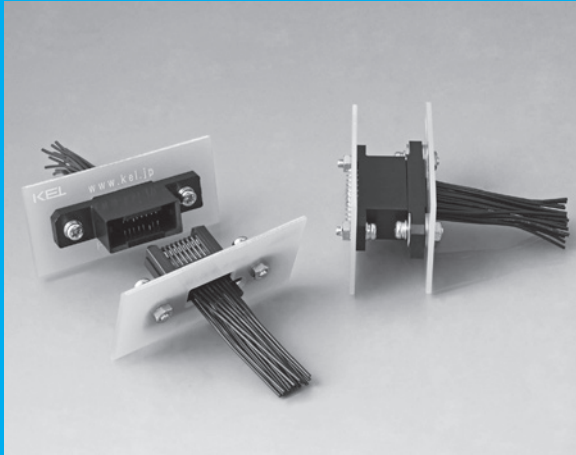


FAS SERIES

1.5mm PITCH DRAWER CONNECTOR

RoHS
Compliant



FEATURES

- ▶ Receptacle (FAS01: Cable side connector), Plug (FAS11: PCB side connector) and Cable plug (FAS12: Cable side connector for cable to cable) are available and can accommodate a wide range of usage.
- ▶ Downsized by more than 30% compared to FA Series.
- ▶ Absorbs $\pm 3\text{mm}$ gap in X and Y directions when mating.
- ▶ Floating structure of the screwed area enables $\pm 1.4\text{mm}$ displacement in X and Y directions in mated condition.
- ▶ Highly reliable design with effective mating length of 3.4mm (0.134").
- ▶ Twin leaf pinching 2 points structure ensures reliability with stable contact force and prevents contact buckling.
- ▶ Option applicable to hot swap.
- ▶ 3 levels of hot swap can be applied for FAS12 series.

ORDER CODE

FAS01-

① ②

*Please order in multiples of the quantity per package.

① **[Type] FAS01 :** Receptacle (Cable side connector)

② **[Number of contacts]** 004 : 4pin 006 : 6pin 008 : 8pin 010 : 10pin 012 : 12pin 014 : 14pin 016 : 16pin 018 : 18pin 020 : 20pin
022 : 22pin 024 : 24pin 026 : 26pin 028 : 28pin 030 : 30pin 032 : 32pin 034 : 34pin 036 : 36pin 038 : 38pin 040 : 40pin

*Above order code FAS01-□□□ is for the housing only, contact terminals are sold separately. About contact order code, Please refer next page.

ORDER CODE

FAS11-

① ②

*Please order in multiples of the quantity per package.

① **[Type] FAS11 :** Plug (PCB side connector)

② **[Number of contacts]** 004 : 4 pin 016 : 16 pin 026 : 26 pin 028 : 28 pin 036 : 36 pin 038 : 38 pin 040 : 40 pin

ORDER CODE

FAS12-

① ②

*Please order in multiples of the quantity per package.

① **[Type] FAS12 :** Plug (Cable plug)

② **[Number of contacts]** 004 : 4pin 006 : 6pin 008 : 8pin 010 : 10pin 012 : 12pin 014 : 14pin 016 : 16pin 018 : 18pin 020 : 20pin
022 : 22pin 024 : 24pin 026 : 26pin 028 : 28pin 030 : 30pin 032 : 32pin 034 : 34pin 036 : 36pin 038 : 38pin 040 : 40pin

*Above order code FAS12-□□□ is for the housing only, contact terminals are sold separately. About contact order code, Please refer next page.

SPECIFICATIONS

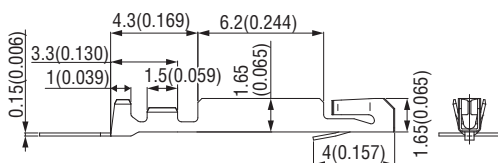
Material and plating		Electrical Characteristics	
Insulator material	Glass-filled PBT(UL94V-0), Black	Current rating	[FAS01/FAS11] AWG#24:3.0A MAX. per contact AWG#26:2.5A MAX. per contact (3A is applicable for 20 pin and under.) AWG#28:2.5A MAX. per contact (3A is applicable for 10 pin and under.)
Contact material	[FAS01/12]Copper alloy [FAS11]Brass		[FAS01/FAS12] AWG#24:2.5A MAX. per contact (3A is applicable for 20 pin and under.) AWG#26:2.0A MAX. per contact (3A is applicable for 10 pin and under.) AWG#28:1.5A MAX. per contact (3A is applicable for 8 pin and under.)
Contact plating	[FAS01/12] (Contact area) Gold over Nickel (Crimping area) Tin over Nickel [FAS11] Gold over Nickel	Contact resistance	30mΩ max.
		Dielectric withstanding voltage	650V AC for 1 minute
		Insulation resistance	1000MΩ min. at 500V DC
		Operating temperature	-40°C to +85°C
Washer / Rivet material	Stainless steel	Durability of insertion and withdrawal	2,000 times
		Recommended cable	#24/26/28 AWG Discrete wire cables (outer diameter of cable coating : $\Phi 0.88$ to $\Phi 1.11\text{mm}$)

*High mating cycle endurance types (FAS01/12 : 7,000 times min. / FAS01/11 : 5,000 times min.) are also available. (Please contact your local KEL sales office.)

Contact Terminal

Unit : mm(inch)

◆ Contact terminal for FAS01-□□□ receptacle (Cable side connector)



Product Table		Packaging style
		Tape&Reel
Part Number	Number of packaging	
#597□-□	10,000	

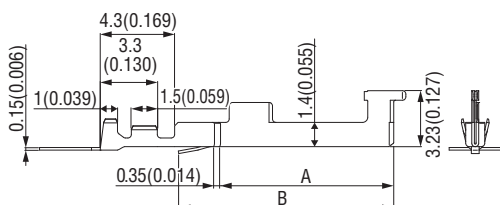
ORDER CODE **#597** □ - □

① ② ③

*Please order in multiples of the quantity per package.

- ① **[Contact] #597**: Crimping type contact for FAS01
- ② **[Gold plating thickness] Omit**: 0.05μm min. **D**: 0.25μm min.
- ③ **[Recommended cable] Omit**: #26 AWG and #28 AWG
(Outer diameter of cable coating: φ 0.88 to φ 1.00mm)
1: #24 AWG (Outer diameter of cable coating: φ 1.08 to φ 1.11mm)

◆ Contact terminal for FAS12-□□□ plug (Cable plug)



Product Table				Packaging style
				Tape&Reel
Part Number	A	B	Number of packaging	
#615,#615-1	10.0 (0.394)	12.41 (0.489)	5,000	
#615-2,3	11.0 (0.433)	13.41 (0.528)	5,000	
#615-4,5	9.0 (0.354)	11.41 (0.449)	5,000	

ORDER CODE **#615** - □

① ②

*Please order in multiples of the quantity per package.

- ① **[Contact] #615**: Crimping type contact for FAS12
- ② **[Recommended cable]**
Standard terminal
Omit: #26 AWG and #28AWG (Cable diameter: φ 0.88mm to φ 1.00mm)
1: #24 AWG (Cable diameter: φ 1.08mm to φ 1.11mm)
Long terminal
2: #26 AWG and #28AWG (Cable diameter: φ 0.88mm to φ 1.00mm)
3: #24 AWG (Cable diameter: φ 1.08mm to φ 1.11mm)
Short terminal
4: #26 AWG and #28AWG (Cable diameter: φ 0.88mm to φ 1.00mm)
5: #24 AWG (Cable diameter: φ 1.08mm to φ 1.11mm)

Assembly Tool

▶ Hand Tool

Part Number	CH-05	CH-10	CH-11
Series Name	FAS01		FAS12
Mating Cable	#26 AWG, #28 AWG	#24 AWG	#26 AWG, #28 AWG
Mating Contact	#597□	#597□-1	#615,#615-2,4

▶ Crimping Machine

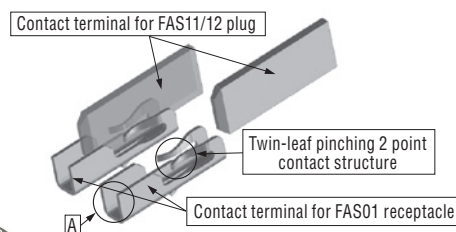
Mating Contact	#597□	#597□-1	#615,#615-2,4	#615-1,3,5
Manufacturer	JAPAN AUTOMATIC MACHINE CO., LTD			
Crimping Machine	LPC220S			
Applicator	EFS857400	EFS866100	EFS876700K	EFS876600K

A crimping machine and applicator can be purchased from Japan Automatic Machine Co., Ltd.

Twin-Leaf Pinching 2 Point Contact Structure

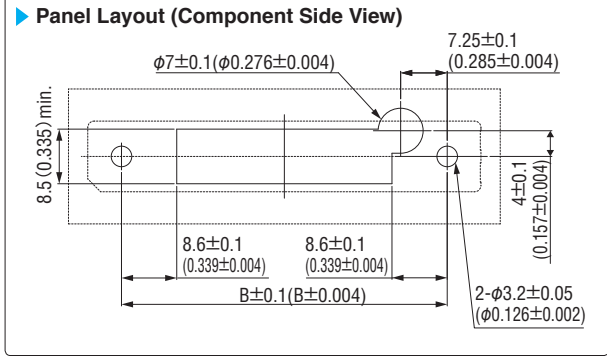
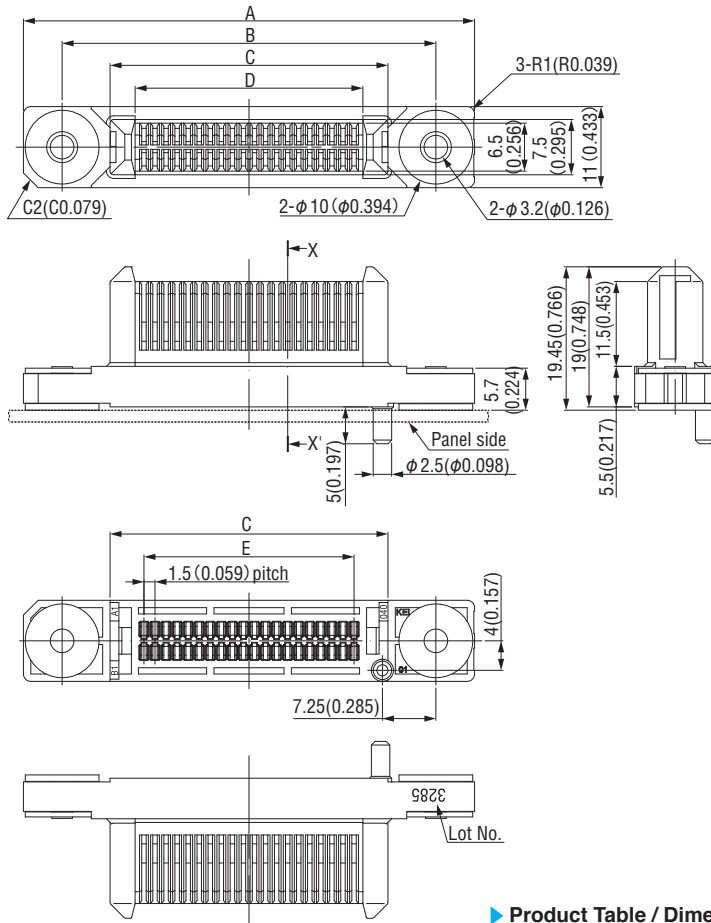
With the KEL original twin-leaf pinching 2 point contact structure, the flat plate type contact of plug connector is inserted into the contact of receptacle connector (A part of the figure shown on the right) for electrical contact.

The flat plate shaped contact of plug connector is tolerant of buckling compared to pin header type contact, and the stable contact force of the pinching structure of receptacle connector assures high reliability of electrical contact.

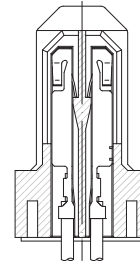


FAS01-□□□□ (Receptacle, Cable side connector, Housing)

Unit : mm (inch)



X-X' Cross Section (Contact Inserted)



Packaging style
Tray

Product Table / Dimensions

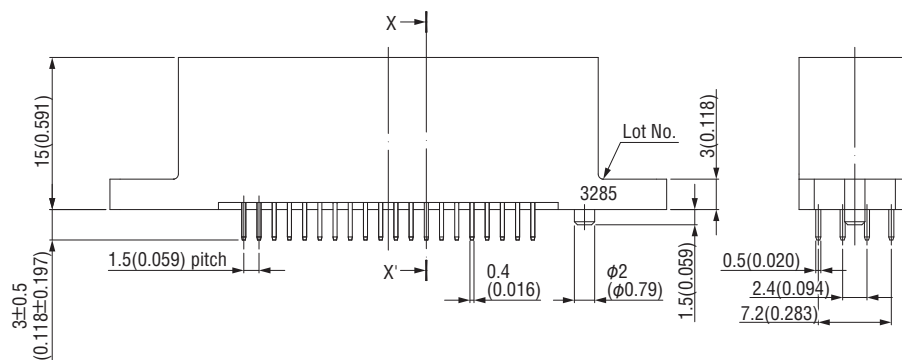
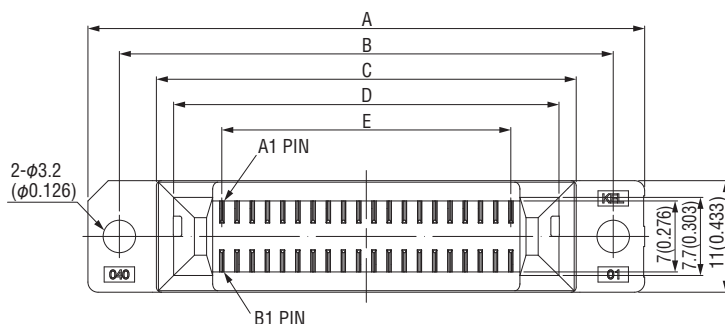
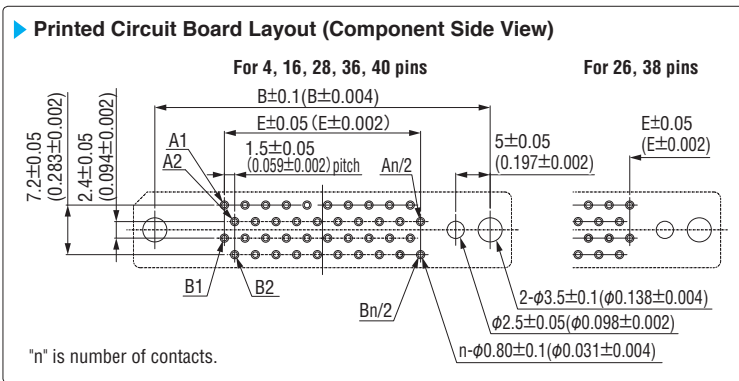
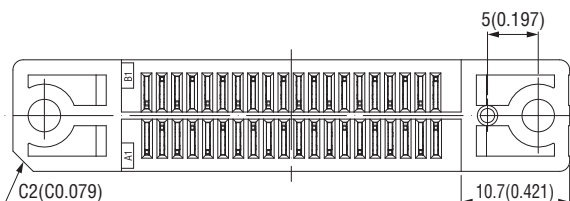
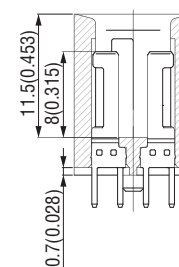
No. of contacts	Part Number	A	B	C	D	E	Number of packaging
4	FAS01-004	34.2 (1.346)	23.7 (0.933)	10.7 (0.421)	3.9 (0.154)	1.5 (0.059)	130
6	FAS01-006	35.7 (1.406)	25.2 (0.992)	12.2 (0.480)	5.4 (0.213)	3.0 (0.118)	130
8	FAS01-008	37.2 (1.465)	26.7 (1.051)	13.7 (0.539)	6.9 (0.272)	4.5 (0.177)	117
10	FAS01-010	38.7 (1.524)	28.2 (1.110)	15.2 (0.598)	8.4 (0.331)	6.0 (0.236)	117
12	FAS01-012	40.2 (1.583)	29.7 (1.169)	16.7 (0.657)	9.9 (0.390)	7.5 (0.295)	104
14	FAS01-014	41.7 (1.642)	31.2 (1.228)	18.2 (0.717)	11.4 (0.449)	9.0 (0.354)	104
16	FAS01-016	43.2 (1.701)	32.7 (1.287)	19.7 (0.776)	12.9 (0.508)	10.5 (0.413)	104
18	FAS01-018	44.7 (1.760)	34.2 (1.346)	21.2 (0.835)	14.4 (0.567)	12.0 (0.472)	104
20	FAS01-020	46.2 (1.819)	35.7 (1.406)	22.7 (0.894)	15.9 (0.626)	13.5 (0.531)	91
22	FAS01-022	47.7 (1.878)	37.2 (1.465)	24.2 (0.953)	17.4 (0.685)	15.0 (0.591)	91
24	FAS01-024	49.2 (1.937)	38.7 (1.524)	25.7 (1.012)	18.9 (0.744)	16.5 (0.650)	91
26	FAS01-026	50.7 (1.996)	40.2 (1.583)	27.2 (1.071)	20.4 (0.823)	18.0 (0.709)	91
28	FAS01-028	52.2 (2.055)	41.7 (1.642)	28.7 (1.130)	21.9 (0.862)	19.5 (0.768)	78
30	FAS01-030	53.7 (2.114)	43.2 (1.701)	30.2 (1.189)	23.4 (0.921)	21.0 (0.827)	78
32	FAS01-032	55.2 (2.173)	44.7 (1.760)	31.7 (1.248)	24.9 (0.980)	22.5 (0.886)	78
34	FAS01-034	56.7 (2.232)	46.2 (1.819)	33.2 (1.307)	26.4 (1.039)	24.0 (0.945)	78
36	FAS01-036	58.2 (2.291)	47.7 (1.878)	34.7 (1.366)	27.9 (1.098)	25.5 (1.004)	78
38	FAS01-038	59.7 (2.350)	49.2 (1.937)	36.2 (1.425)	29.4 (1.157)	27.0 (1.063)	78
40	FAS01-040	61.2 (2.409)	50.7 (1.996)	37.7 (1.484)	30.9 (1.217)	28.5 (1.122)	65

B.C.E. s.r.l.

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www.bce.it - E-mail: bce@bce.it


X-X' Cross Section


Packaging style

Pipe

 ▶ **Product Table / Dimensions**

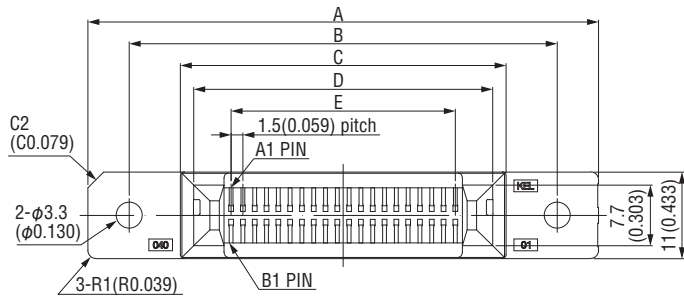
No. of contacts	Part Number	A	B	C	D	E	Number of packaging
4	FAS11-004	27.9 (1.098)	21.7 (0.854)	14.4 (0.567)	11.0 (0.433)	1.5 (0.059)	18
16	FAS11-016	36.9 (1.453)	30.7 (1.209)	23.4 (0.921)	20.0 (0.787)	10.5 (0.413)	13
26	FAS11-026	44.4 (1.748)	38.2 (1.504)	30.9 (1.217)	27.5 (1.083)	18.0 (0.709)	11
28	FAS11-028	45.9 (1.807)	39.7 (1.563)	32.4 (1.276)	29.0 (1.142)	19.5 (0.768)	11
36	FAS11-036	51.9 (2.043)	45.7 (1.799)	45.7 (1.812)	35.0 (1.378)	25.5 (1.004)	9
38	FAS11-038	53.4 (2.102)	47.2 (1.858)	39.9 (1.571)	36.5 (1.437)	27.0 (1.063)	9
40	FAS11-040	54.9 (2.161)	48.7 (1.917)	41.4 (1.630)	38.0 (1.496)	28.5 (1.122)	9

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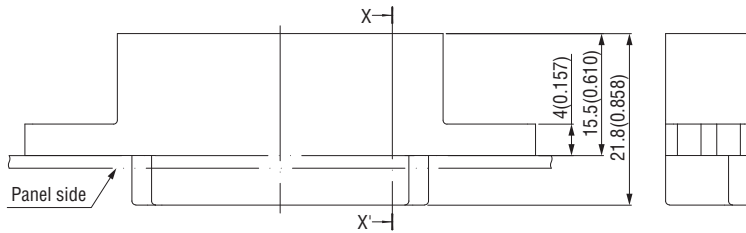
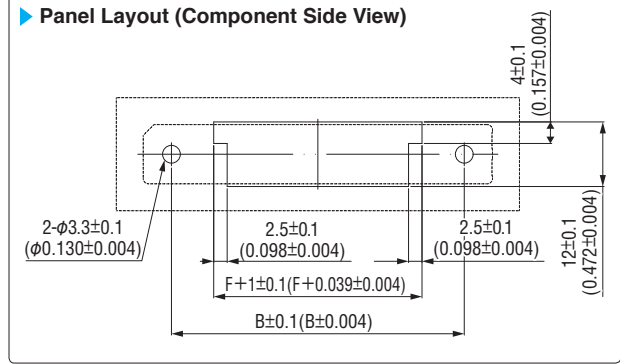
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FAS12-□□□ (Cable plug, Housing)

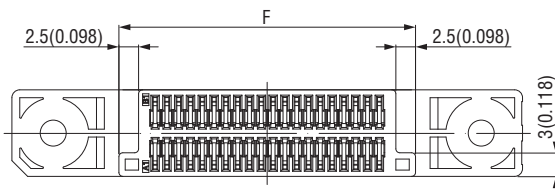
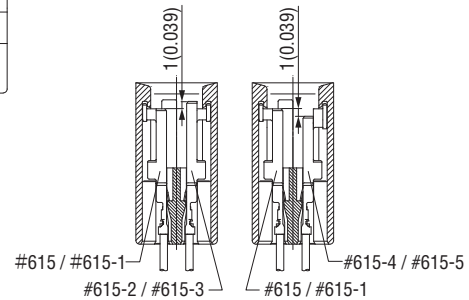
Unit : mm (inch)



Panel Layout (Component Side View)



X-X' Cross Section (Contact Inserted)



Packaging style
Tray

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	Number of packaging
4	FAS12-004	37.9 (1.492)	27.4 (1.079)	14.4 (0.567)	11.0 (0.433)	1.5 (0.059)	10.7 (0.421)	117
6	FAS12-006	39.4 (1.551)	28.9 (1.138)	15.9 (0.626)	12.5 (0.492)	3.0 (0.118)	12.2 (0.480)	117
8	FAS12-008	40.9 (1.610)	30.4 (1.197)	17.4 (0.685)	14.0 (0.551)	4.5 (0.177)	13.7 (0.539)	104
10	FAS12-010	42.4 (1.669)	31.9 (1.256)	18.9 (0.744)	15.5 (0.610)	6.0 (0.236)	15.2 (0.598)	104
12	FAS12-012	43.9 (1.728)	33.4 (1.315)	20.4 (0.823)	17.0 (0.669)	7.5 (0.295)	16.7 (0.657)	104
14	FAS12-014	45.4 (1.787)	34.9 (1.374)	21.9 (0.862)	18.5 (0.728)	9.0 (0.354)	18.2 (0.717)	91
16	FAS12-016	46.9 (1.846)	36.4 (1.433)	23.4 (0.921)	20.0 (0.787)	10.5 (0.413)	19.7 (0.776)	91
18	FAS12-018	48.4 (1.906)	37.9 (1.492)	24.9 (0.980)	21.5 (0.846)	12.0 (0.472)	21.2 (0.835)	91
20	FAS12-020	49.9 (1.965)	39.4 (1.551)	26.4 (1.039)	23.0 (0.906)	13.5 (0.531)	22.7 (0.894)	91
22	FAS12-022	51.4 (2.024)	40.9 (1.610)	27.9 (1.098)	24.5 (0.965)	15.0 (0.591)	24.2 (0.953)	78
24	FAS12-024	52.9 (2.083)	42.4 (1.669)	29.4 (1.157)	26.0 (1.024)	16.5 (0.650)	25.7 (1.012)	78
26	FAS12-026	54.4 (2.142)	43.9 (1.728)	30.9 (1.217)	27.5 (1.083)	18.0 (0.709)	27.2 (1.071)	78
28	FAS12-028	55.9 (2.201)	45.4 (1.787)	32.4 (1.276)	29.0 (1.142)	19.5 (0.768)	28.7 (1.130)	78
30	FAS12-030	57.4 (2.260)	46.9 (1.846)	33.9 (1.335)	30.5 (1.201)	21.0 (0.827)	30.2 (1.189)	78
32	FAS12-032	58.9 (2.319)	48.4 (1.906)	35.4 (1.394)	32.0 (1.260)	22.5 (0.886)	31.7 (1.248)	78
34	FAS12-034	60.4 (2.378)	49.9 (1.965)	36.9 (1.453)	33.5 (1.319)	24.0 (0.945)	33.2 (1.307)	65
36	FAS12-036	61.9 (2.437)	51.4 (2.024)	38.4 (1.512)	35.0 (1.378)	25.5 (1.004)	34.7 (1.366)	65
38	FAS12-038	63.4 (2.496)	52.9 (2.083)	39.9 (1.571)	36.5 (1.437)	27.0 (1.063)	36.2 (1.425)	65
40	FAS12-040	64.9 (2.555)	54.4 (2.142)	41.4 (1.630)	38.0 (1.496)	28.5 (1.122)	37.7 (1.484)	65

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