

E-Rated Medium Voltage Fuses For Transformer and Feeder Protection 15.5 kV

MV155



CATALOG SYMBOL: MV155

E-RATED MEDIUM VOLTAGE FUSES:

Meets E requirements per ANSI C37.46

Meets Full Range requirements per ANSI C37.40

FOR TRANSFORMER AND FEEDER PROTECTION

VOLTAGE RATING: 15.5 kV

INTERRUPTING RATING: 50 kA Maximum Sym.

CURRENT LIMITING

CONSTRUCTION: Silver ribbon element surrounded by silica filler housed in a fiberglass tube and plated endcaps.

An epoxy paint protects the fuse tube from the surrounding environment.

FEATURES:

• **Standard Clip Center Lengths and Barrel Diameters.**

The new line of Bussmann 15.5 kV medium voltage fuses have standard clip center distances of 15 or 18 inches and barrel diameters of 2 or 3 inches which allow fuses to retrofit existing hardware.

• **Blown Fuse Indication with Indicator.**

• **100% Tested for Reliability.** All medium voltage fuses are pulsed twice with 90% of their minimum melt I²t to guarantee undamaged elements. This test does not affect undamaged elements. A damaged element completely opens when subjected to 90% of the minimum melt I²t, allowing it to be detected by a resistance check.

• **Full Range Fuses.** Bussmann medium voltage fuses provide full range protection and are capable of interrupting fault currents of 50,000A sym.

• **Time Current Curves and Dimensional Data:**

MV155F1CB series, see page 2;

MV155F1DB and MV155F1DC series, see page 3.

• **Peak Arc Voltage Curves and Peak Let-Through Data,** see page 4.

• **Fuse Clips,** see page 4.

Electrical Characteristics

Part Numbers†	Ampere Rating	Min/ Melt I ² t	Max. Clear I ² t	Physical Size (Inches)			
				Length	Dia.	Clip Center	Barrels
MV155F1CBX5E	5A	180	2900	18.75	2	15	1
MV155F1CBX7E	7A	850	8000				
MV155F1CBX10E	10A	850	8000				
MV155F1CBX15E	15A	2070	12000				
MV155F1CBX20E	20A	2370	23000				
MV155F1CBX25E	25A	4650	31000				
MV155F1CBX30E	30A	9490	45000				
MV155F1DBX10E	10A	850	8000	18.75	3	15	1
MV155F1DBX15E	15A	2070	12000				
MV155F1DBX20E	20A	2370	23000				
MV155F1DBX25E	25A	4650	31000				
MV155F1DBX30E	30A	9490	45000				
MV155F1DBX40E	40A	9490	45000				
MV155F1DBX50E	50A	13600	90000				
MV155F1DBX65E	65A	30700	181000				
MV155F1DBX80E	80A	54600	270000				
MV155F1DBX100E	100A	116200	600000				
MV155F2DBX125E	125A	123000	677000	18.75	3	15	2
MV155F2DBX150E	150A	218700	1287000				
MV155F2DBX175E	175A	314700	1689000				
MV155F2DBX200E	200A	465100	2405000				
MV155F1DCX65E	65A	30700	181000	21.75	3	18	1
MV155F1DCX80E	80A	54600	270000				
MV155F1DCX100E	100A	116200	600000				
MV155F2DCX125E	125A	123000	677000	21.75	3	18	2
MV155F2DCX150E	150A	218700	1287000				
MV155F2DCX175E	175A	314700	1689000				
MV155F2DCX200E	200A	465100	2405000				

† To order with the optional striker pin, see Part Number Construction chart below.

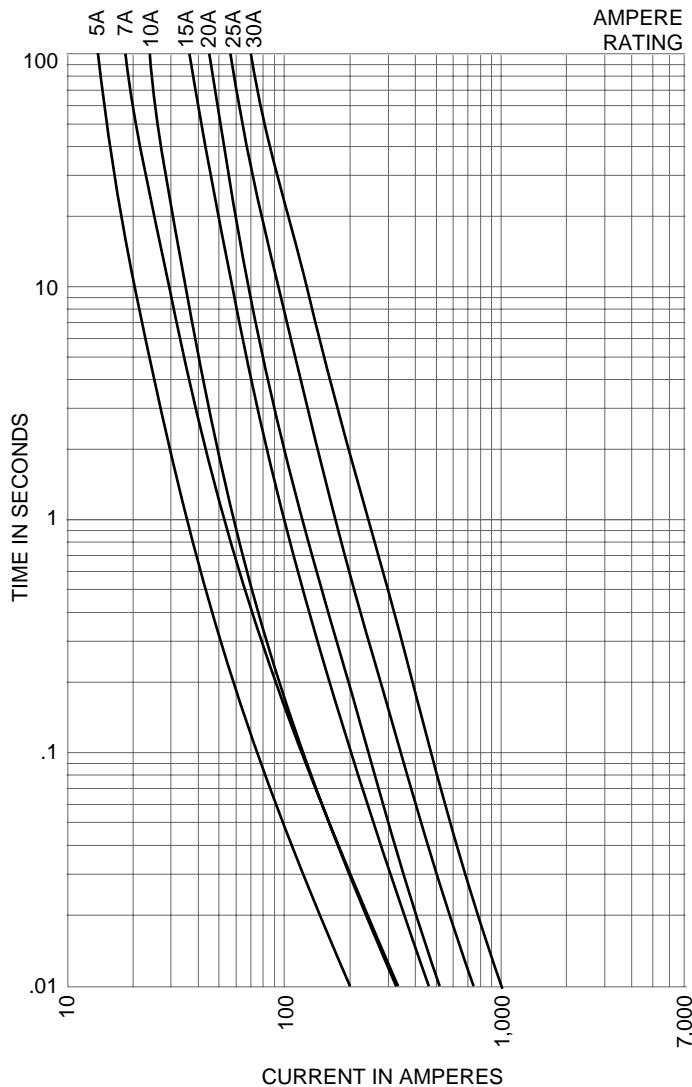
Part Number Construction

	Medium Voltage	Voltage Rating		Number of Barrels	Barrel Diameter	Clip Center Distance	Indication Type	Ampere Rating
Example	MV	155	F	1	C	B	X	5E
		055 = 5.5 kV	F = Full Range	1	C = 2 inches	A = 12 inches	X = Indicator only	
		155 = 15.5 kV		2	D = 3 inches	B = 15 inches	S = Striker Pin	
						C = 18 inches		

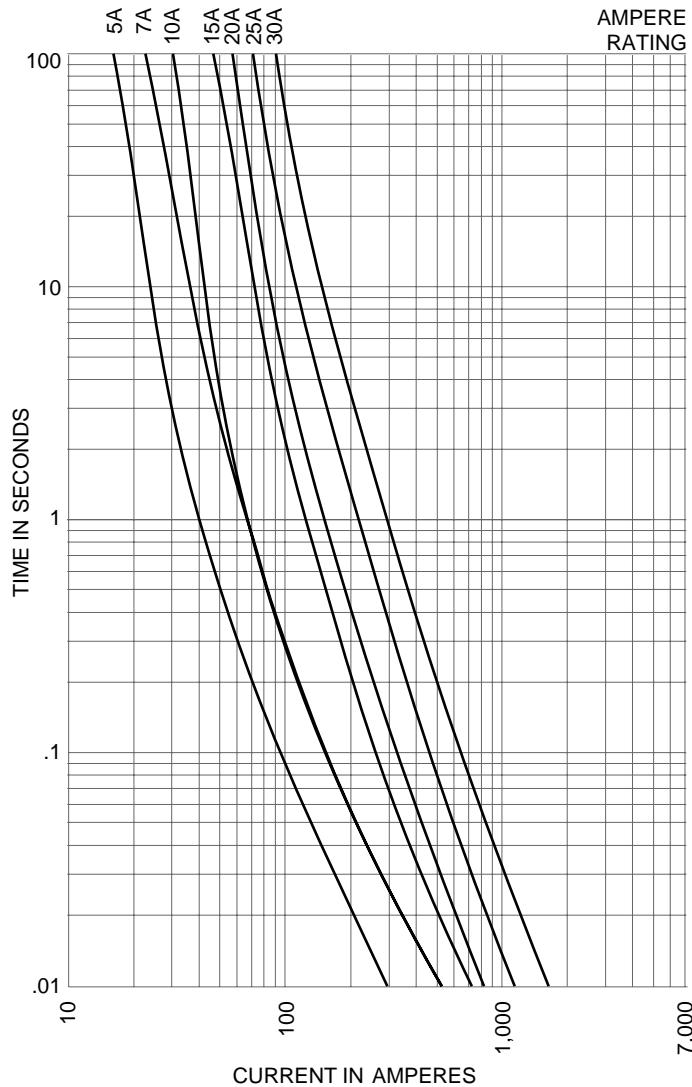
E-Rated Medium Voltage Fuses For Transformer and Feeder Protection 15.5 kV - MV155F1CB Series

MV155

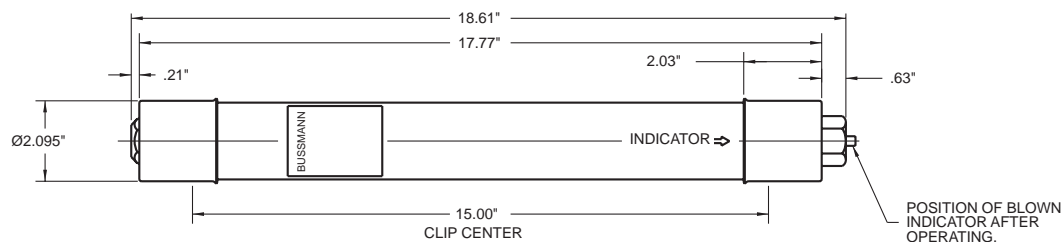
**Time-Current Characteristics
Minimum Melt**



**Time-Current Characteristics
Total Clearing**



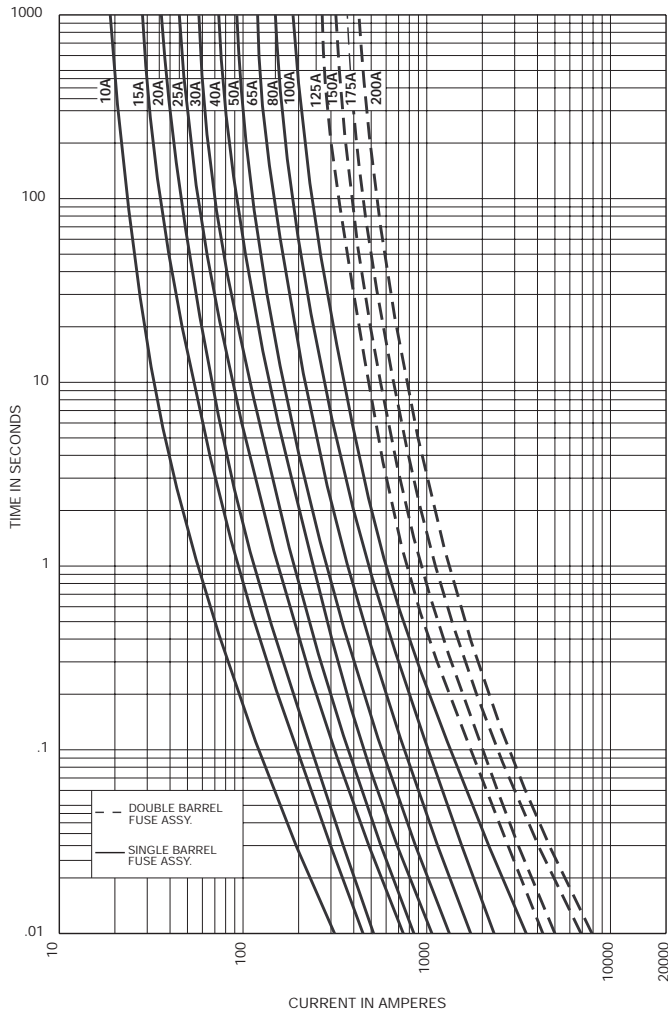
MV155F1CBX



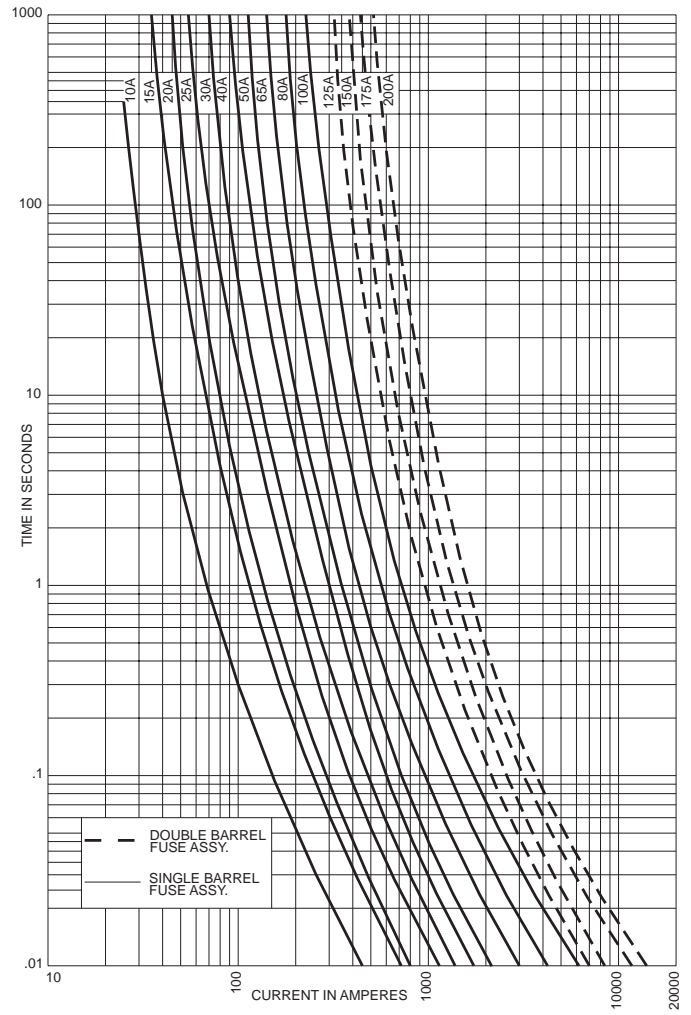
E-Rated Medium Voltage Fuses For Transformer and Feeder Protection 15.5 kV - MV155F1DB & MV155F1DC Series

MV155

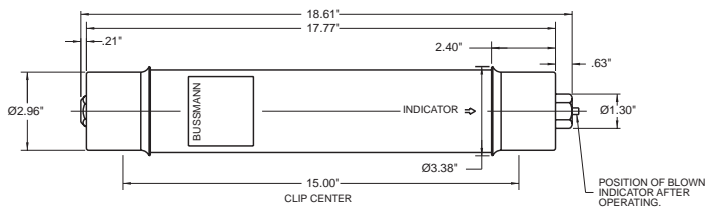
**Time-Current Characteristics
Minimum Melt**



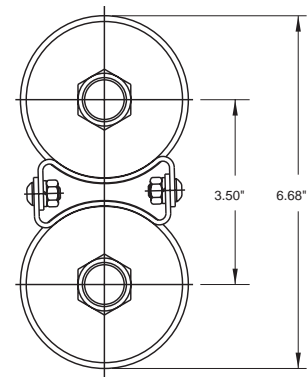
**Time-Current Characteristics
Total Clearing**



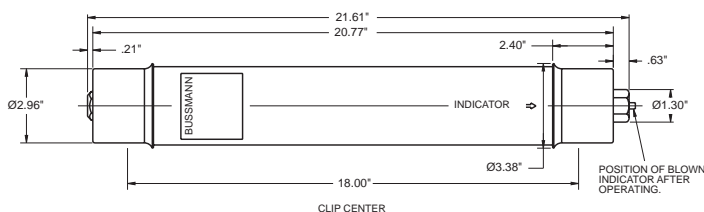
MV155F1DBX



**Double Barrel
Dimensions**



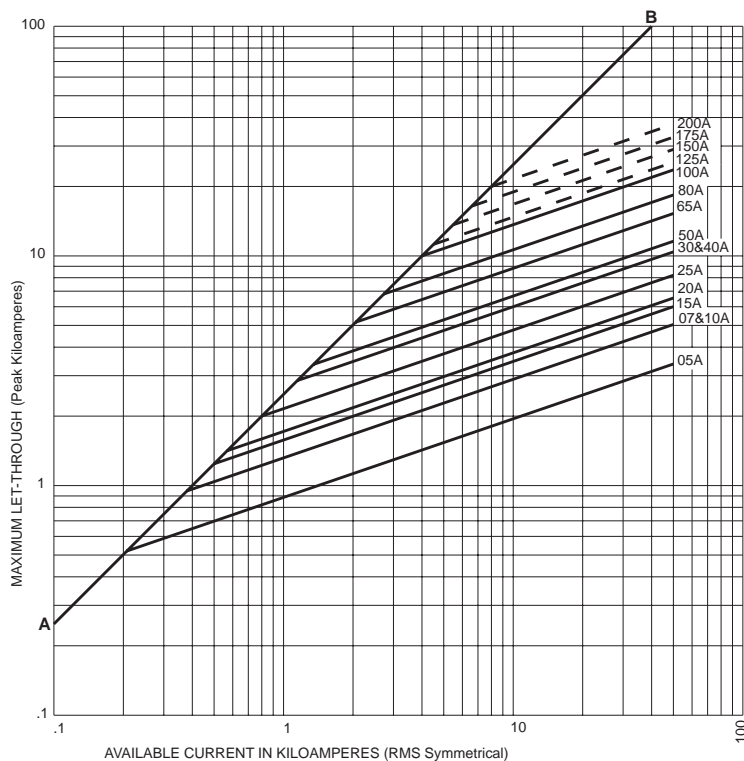
MV155F1DCX



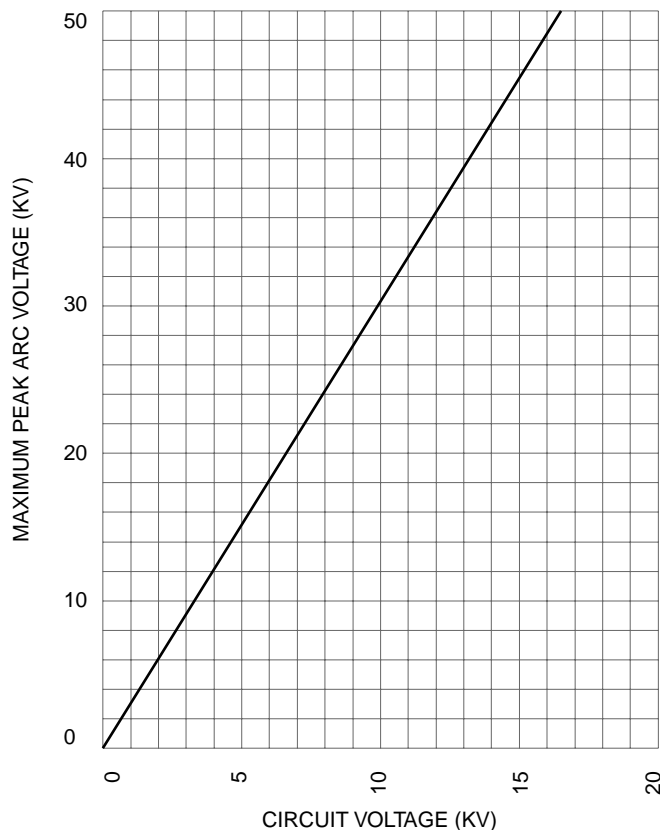
E-Rated Medium Voltage Fuses For Transformer and Feeder Protection 15.5 kV - Peak Arc Voltage & Peak Let-Through Data

MV155

Max. Peak Let-Through Current Curves



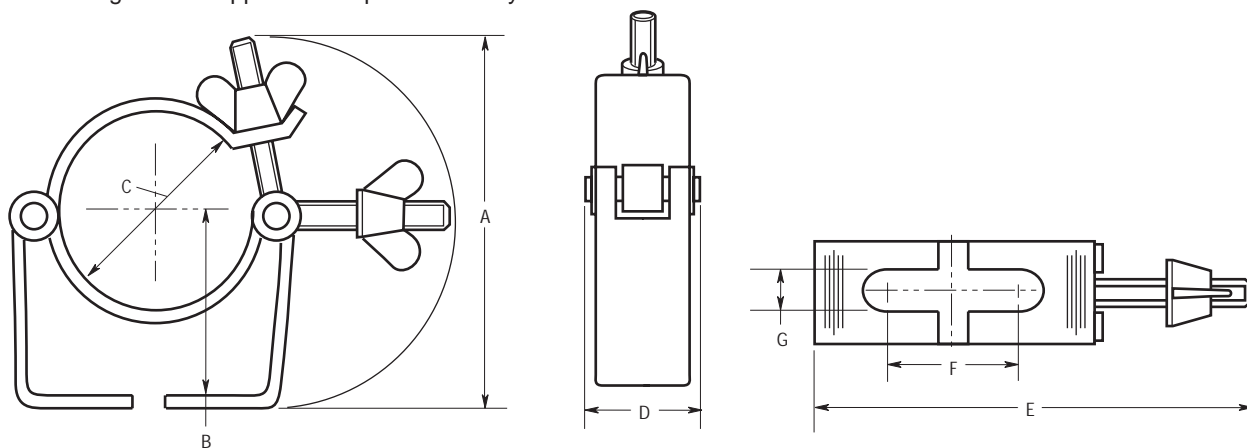
MAXIMUM PEAK ARC VOLTAGE FOR
"E" RATED FULL RANGE POWER FUSE
(BUSSMANN)



Recommended Fuse Clips for Medium Voltage Fuses

Part No.	Fuse Diameter	Clip Dimensions						
		A	B	C	D	E	F	G
A3354710	2"	3.74"	1.97"	2.00"	1.18"	4.53"	1.50"	.39"
A3354730	3"	4.13"	2.44"	3.00"	1.18"	5.63"	1.50"	.39"

Fuseclips are for single barrel applications up to 200E only.



E-Rated Medium Voltage Fuses For Transformer and Feeder Protection 15.5 kV - Cross Reference Data

MV155

Catalog Number Cross Reference

Bussmann	Gould (New)	Gould (Old)	Westinghouse	General Electric	
MV155F1CBXxxxE	A155F1CORO-xxxE	A1550X-xxxE-1B	----	----	----
MV155F1DBXxxxE	A155F1DORO-xxxE	A1550X-xxxE-1F	15HLE-xxxE	9F62DDDxxx	9F60FMHxxx
MV155F1DCXxxxE	A155F1DORO-xxxE	A1550X-xxxE-1D	----	----	----
MV155F2DCXxxxE	A155F2DORO-xxxE	A1550X-xxxE-1D	----	----	----

Bussmann Medium Voltage Cross Reference

kV	Dia.	Clip Center	Overall Length	Sym. kA	Manufacturer	E Ratings Available																			
						5	7	10	15	20	25	30	40	50	65	80	100	125	150	175	200	250	300	350	400
15.5 kV	2"	15"	18-3/4"	50	Bussmann	S	S	S	S	S	S	S													
			17-3/100"	50	Gould†	S	S	S	S	S	S	S													
15.5 kV	3"	15"	18-3/4"	50	Bussmann			S	S	S	S	S	S	S	S	S	S	S	D	D	D	D			
			18-7/8"	40	Gould†			S	S	S	S	S	S	S	D	D	D								
			18-7/8"	50	Westinghouse†					S	S	S	S	S	S	S	S	S	D	D	D	D			
			18-7/8"	40	General Electric†					S	S	S	S	S	S	S	D	D	D	D					
15.5 kV	3"	18"	21-3/4"	50	Bussmann										S	S	S	S	S	D	D				
			21-3/4"	50	Gould†											S	S	S	D	D	D	D			

† Gould, Westinghouse and General Electric are General Purpose Fuses.

Current-limiting medium voltage fuses are classified into three categories:

Full Range - defined by ANSI as "a fuse capable of interrupting all currents from the maximum rated interrupting current down to the minimum continuous current that causes melting of the fusible element(s), when the fuse is applied at the maximum ambient temperature specified by the manufacturer." It is able to interrupt any normal 60 cycle current that will melt its element.

General Purpose - defined by ANSI C37.40 as "a fuse capable of interrupting all currents from the maximum rated interrupting current down to the current that causes melting of the fusible element in one hour." Not all currents fall within this range. It is possible to receive an overcurrent lower than the value given by the one hour criterion.

Back-up - defined by ANSI C37.40 as "a fuse capable of interrupting all currents from the maximum rated interrupting current down to the rated minimum interrupting current." The minimum rated interrupting current is the lowest current that the fuse will be able to clear properly. This creates a need to place a low current interrupting device in series with the back-up rated fuse.

All Bussmann MV series medium voltage fuses are E-rated and offer Full Range Protection.

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