

iLink Order Types

This topic illustrates how an order will behave once accepted for each order type available on CME Globex.

When an order is accepted by CME Globex, that order will execute according to the behavior defined in the New Order (tag 35-MsgType=D) message. Specifically, the order type defined in tag 40-OrdType and the [order qualifier](#) defined in tag 59-TimeInForce.

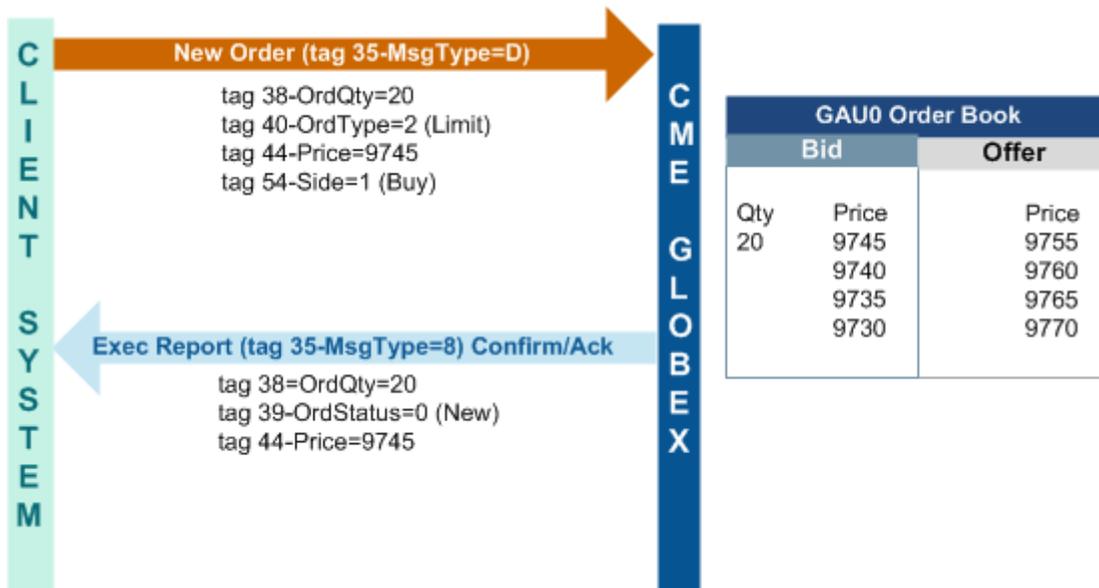
Available order types include:

- [Limit Order](#)
- [Market-Limit Order \(Bid\) with Market](#)
- [Market-Limit Order \(Bid\) with No Market](#)
- [Market Order with Protection](#)
- [Stop-Limit Order](#)
 - [Stop-Limit Order Triggered but not Filled Example](#)
- [Stop Order](#)
 - [Stop Order with Protection Bid](#)

Limit Order

A [Limit order](#), tag 40-OrdType=2, defines the upper price limit at which to buy an instrument and lower price limit at which to sell an instrument. The price limit is defined in tag 44-Price. If the price is not immediately available, the Limit order will rest until filled or cancelled.

The following diagram illustrates a Limit order that will rest on the book.



Market-Limit Order (Bid) with Market

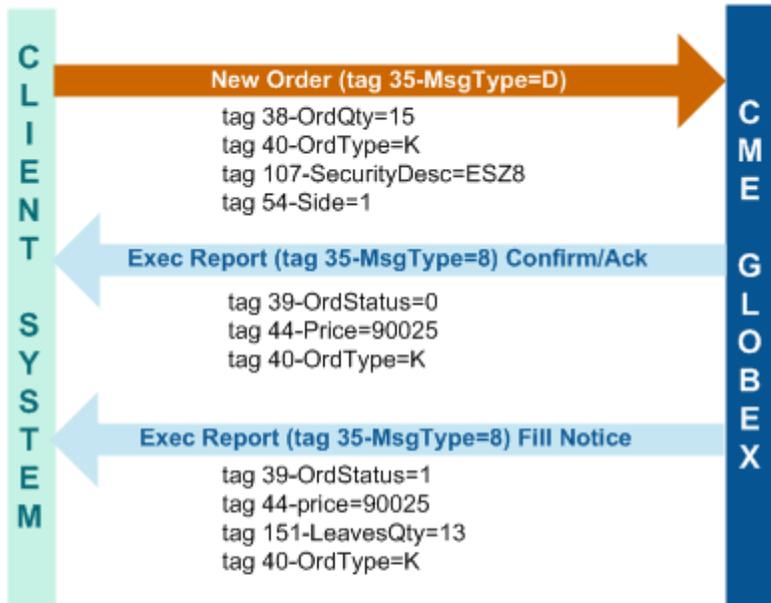
1. The client sends a [iLink 2 New Order](#) message to the CME Group, Bid, ESZ8, Market-Limit, quantity of 15.
2. CME Globex responds with an [Execution Report - Confirmation/Acknowledgment \(tag 35-MsgType=8\)](#).
3. The Market-Limit order becomes a Limit order at the best available market price (90025).
4. CME Globex sends an [Execution Report - Fill Notice \(tag 35-MsgType=8\)](#) for a partial fill 2-Lot @ 90025.
5. The remaining quantity rests on the book at 90025.



Market-Limit Orders will be rejected anytime:

- an opposing bid/offer is not working in the market
- during any market state except Open.
- A designated limit is farther than price bands from current [Last Best Price](#).

The following diagram illustrates this example.



Order book prior to customer order.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
10	90000	2	90025
5	89975	3	90050
15	89950	3	90075
20	89925	10	90100

Order is Partially Filled at Best Market Price of 90025.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
10	90000	3	90050
5	89975	3	90075
15	89950	10	90100
20	89925		

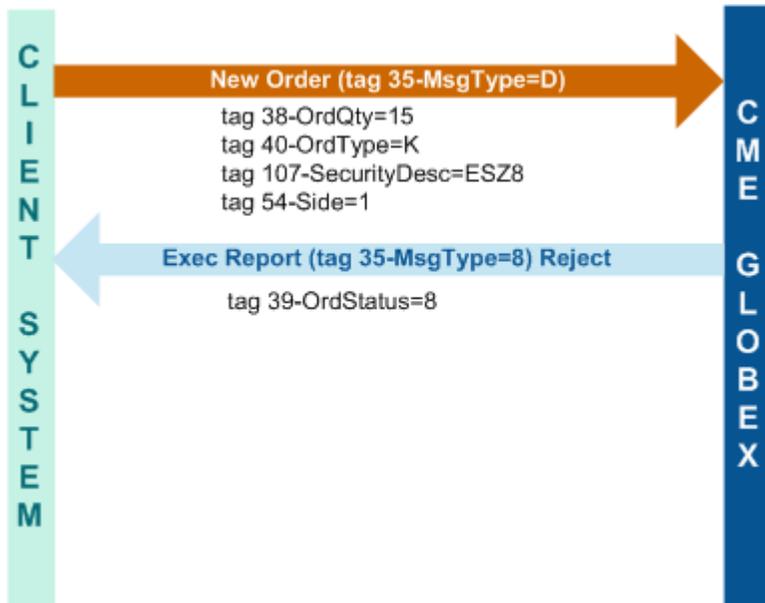
Remaining Quantity Rests on Order Book as Limit Order with the Previously-Executed Price.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
<u>13</u>	<u>90025</u>	3	90050
10	90000	3	90075
5	89975	10	90100
15	89950		
20	89925		

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Market-Limit Order (Bid) with No Market

The following diagram displays CME Globex actions when a market-limit order (bid) is placed with no market.



CME Globex returns a [Execution Report - Reject \(tag 35-MsgType=8\)](#) message.

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Market Order with Protection

The following example illustrates [Market order with protection](#) interaction with the CME Globex platform . In the example the [Protection Points](#) are 600.

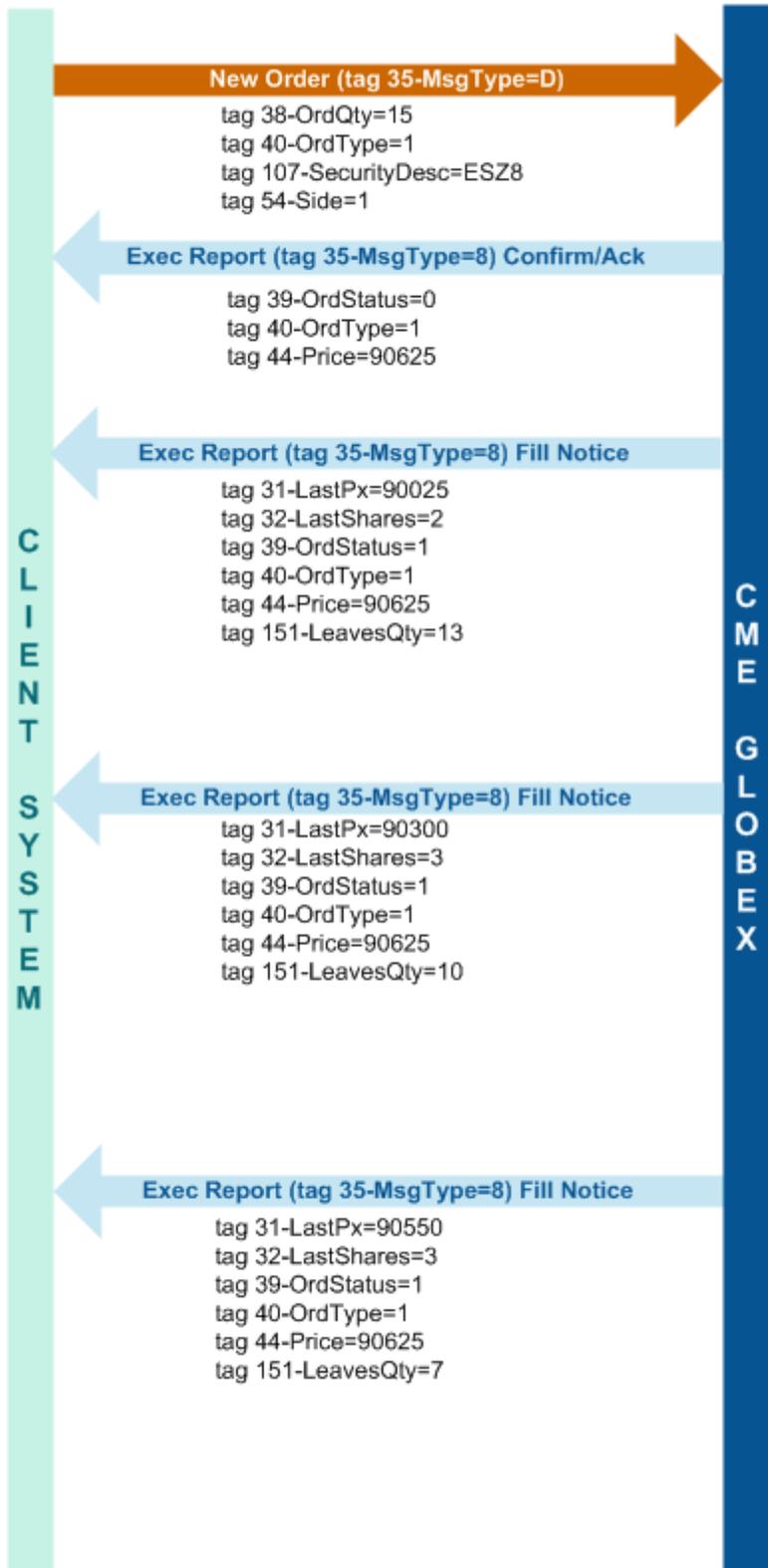
1. The client sends a [New Order \(tag 35-MsgType=D\)](#) message, Bid, ESZ8, Market order (with protection), quantity 15.
2. CME Globex responds with an [Execution Report - Confirmation/Acknowledgment \(tag 35-MsgType=8\)](#) message.
3. At this point, Best Offer = 90025 and Protection Points = 600.
4. Protection Price Limit = 90025 + 600 = 90625.
5. CME Globex sends an [Execution Report - Fill Notice \(tag 35-MsgType=8\)](#) for a partial fill for 2-Lot @ 90025.
6. CME Globex sends an Execution Report – Fill Notice for a partial fill for 3-Lot @ 90300
7. CME Globex sends an Execution Report – Fill Notice for a partial fill for 3-Lot @ 90550
8. Next Best Offer = 90675. This value exceeds the Protection Price Limit. CME Group places the remaining quantity on the order book at a Protection Price Limit of 90625.



Market Orders with Protection will be rejected:

- when an opposing bid/offer is not working in the market
- during any market state except Open.

The following diagram illustrates this example.



Order book prior to customer order (Protection Points = 600).

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
10	90000	2	90025
5	89975	3	90300
15	89950	3	90550
20	89925	10	90675
Protection Points = 600			

Order partially filled at Best Market Price of 90025 (Protection Limit is set to 90625).

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
10	90000	3	90300
5	89975	3	90550
15	89950	10	90675
20	89925		

Next Best Market Price of 90300 is Less than Protection Limit; order partially filled at 90300.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
10	90000	3	90550
5	89975	10	90675
15	89950		
20	89925		

Next Best Market Price of 90550 is Less than Protection Limit; order partially filled at 90550.

Next Best Market Price of 90675 Exceeds the Protection Limit; remaining quantity rests on order book at the Protection Price Limit.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
<u>7</u>	<u>90625</u>	10	90675
10	90000		
5	89975		
15	89950		
20	89925		

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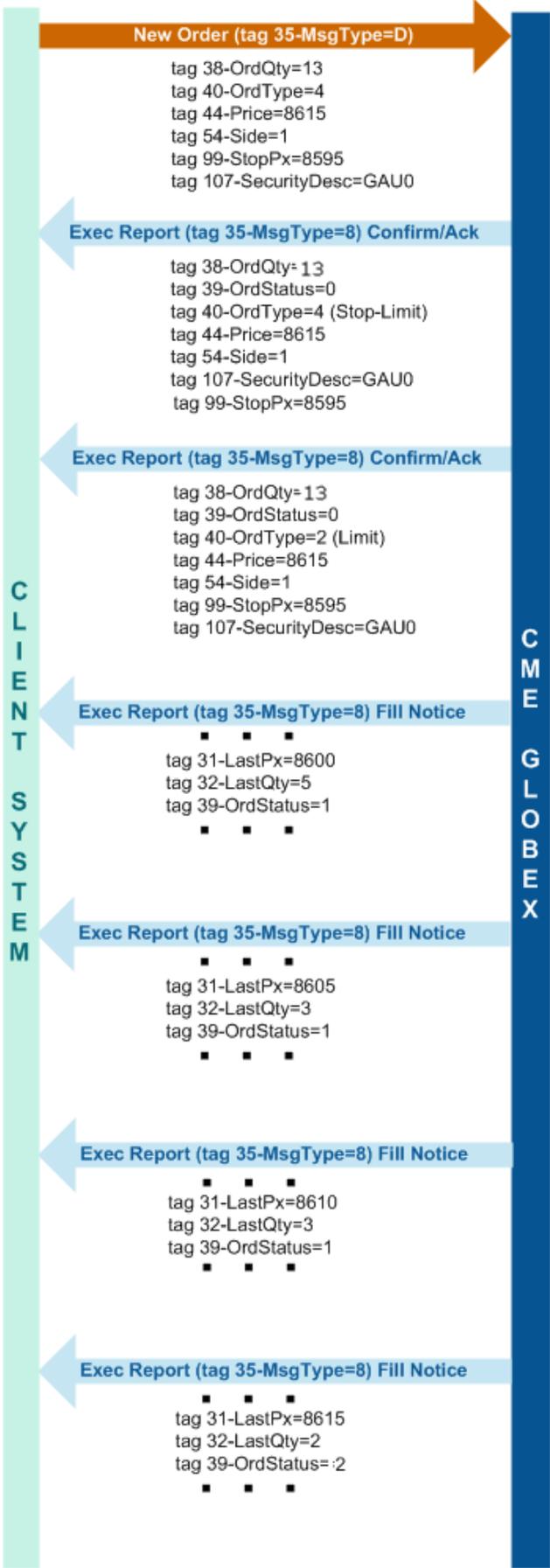
Stop-Limit Order

A [Stop-Limit](#) order is activated when the trigger price of the order is traded in the market. The Stop-Limit order is then executed at all price levels between the trigger price and the limit price.

For buy orders, the trigger price is lower than the limit price. For sell orders, the trigger price is higher than the limit price.

- The trigger price is submitted in tag 99-StopPx.
- The limit price is submitted in tag 44-Price.

The following diagram illustrates a Stop-Limit order that is triggered and filled.



New Order (tag 35-MsgType=D)

tag 38-OrdQty=13
tag 40-OrdType=4
tag 44-Price=8615
tag 54-Side=1
tag 99-StopPx=8595
tag 107-SecurityDesc=GAU0

Exec Report (tag 35-MsgType=8) Confirm/Ack

tag 38-OrdQty=13
tag 39-OrdStatus=0
tag 40-OrdType=4 (Stop-Limit)
tag 44-Price=8615
tag 54-Side=1
tag 107-SecurityDesc=GAU0
tag 99-StopPx=8595

Exec Report (tag 35-MsgType=8) Confirm/Ack

tag 38-OrdQty=13
tag 39-OrdStatus=0
tag 40-OrdType=2 (Limit)
tag 44-Price=8615
tag 54-Side=1
tag 99-StopPx=8595
tag 107-SecurityDesc=GAU0

Exec Report (tag 35-MsgType=8) Fill Notice

tag 31-LastPx=8600
tag 32-LastQty=5
tag 39-OrdStatus=1

Exec Report (tag 35-MsgType=8) Fill Notice

tag 31-LastPx=8605
tag 32-LastQty=3
tag 39-OrdStatus=1

Exec Report (tag 35-MsgType=8) Fill Notice

tag 31-LastPx=8610
tag 32-LastQty=3
tag 39-OrdStatus=1

Exec Report (tag 35-MsgType=8) Fill Notice

tag 31-LastPx=8615
tag 32-LastQty=2
tag 39-OrdStatus=:2

Stop-Limit Order accepted

GAU0 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
	8575	5	8600
	8570	3	8605
	8565	3	8610
	8560	2	8615
	8555		8620

Limit ordered triggered

GAU0 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
	8575	1	8595
	8570	5	8600
	8565	3	8605
	8560	3	8610
	8555	2	8615

If the trade occurs in the market at the StopPx level of 8595, the order will execute through all price levels to the limit price of 8615.

Trade price is returned in tag 31-LastPx.

GAU0 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
	8575	5	8600
	8570	3	8605
	8565	3	8610
	8560	2	8615
	8555		

GAU0 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
	8575	3	8610
	8570	2	8615
	8565		
	8560		
	8555		

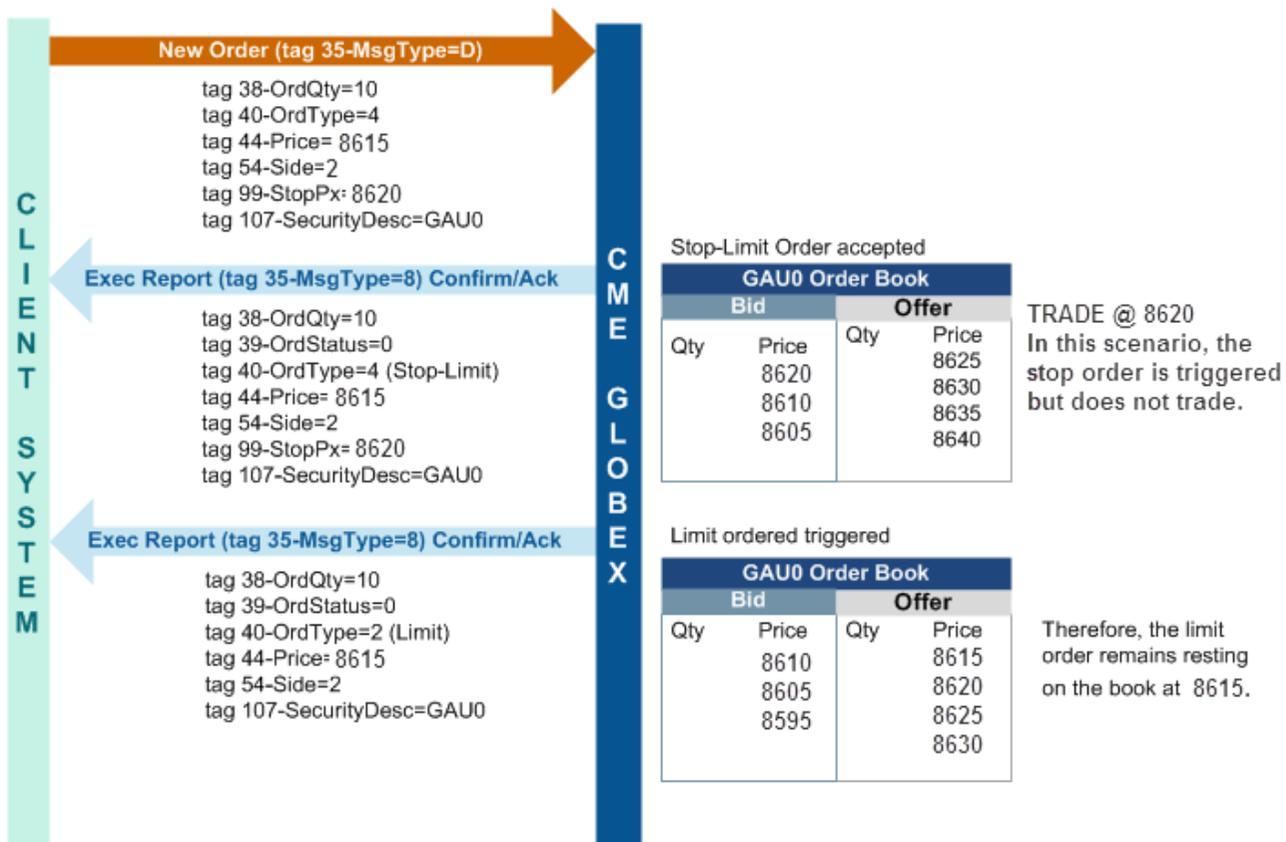
GAU0 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
	8575	2	8615
	8570		
	8565		
	8560		
	8555		

GAU0 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
	8575		
	8570		
	8565		
	8560		
	8555		

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Stop-Limit Order Triggered but not Filled Example

The following figure illustrates a Stop-Limit order triggered but not filled.



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Stop Order

When Stop orders (with protection) are sent, customers should be aware of the response:

- Customer submits a New Order (tag 35-MsgType=D) message with tag 40-OrdType=3 (Stop order with protection) with a trigger price in tag 99-StopPx.
- When a Stop order (with protection) order is accepted, an Execution Report – Confirmation/Acknowledgment (tag 35-MsgType=8) message is returned with tag 40-OrdType=4 (Stop-Limit order).
- When the Stop order (with protection) is triggered, an Execution Report – Confirmation/Acknowledgment message is returned with tag 40-OrdType=2 (Limit order).
- All subsequent Execution Report messages contain tag 40-OrdType=2 (Limit order).

i Stop orders should not be submitted with tag 44-Price. CME Globex will reject a New Order message with a Stop Order submitted with tag 44-Price.

i Stop orders will be rejected during any market state except Open.

All Execution Report messages, including order elimination messages, sent in response to Stop orders (with protection) include tag 44-Price populated with the Protection Price Limit (best available price +/- the protection points). If the order is not completely filled, the Protection Price Limit is the price that the remaining Open Quantity rests on the order book.

Example of Protection Price Limits Calculations for Stop Orders (with Protection) Bid and Offer.

Stop Orders with Protection Bid		Stop Orders with Protection Offer	
Trigger Price	90000	Trigger Price	90000

Protection Points	+600	Protection Points	-600
Protection Price Limits	= 90600	Protection Price Limits	= 89400

Stop Order with Protection Bid

The following example illustrates [Stop order \(with protection\)](#) behavior on the CME Globex platform. In this example the Protection Points are 600.

1. The client sends a New Order, Bid, ESZ8, Stop order (with protection), 90000 Trigger Price
2. CME Globex responds with an [Execution Report - Confirmation/Acknowledgment \(tag 35-MsgType=8\)](#) message.
3. A trade occurs at the trigger price of 90000. The client's order is activated as a Limit order and CME Globex responds with an Execution Report – Confirmation/Acknowledgment (notification of the triggering of the order) Trigger Price = 90000, Protection Points = 600.
4. Protection Price Limit = 90000 + 600 = 90600
5. CME Globex sends an [Execution Report - Fill Notice \(tag 35-MsgType=8\)](#) for a partial fill for 2-Lot @ 90025.
6. CME Globex sends an Execution Report – Fill Notice for a partial fill for 3-Lot @ 90300.
7. CME Globex sends an Execution Report – Fill Notice for a partial fill for 3-Lot @ 90550.
8. Next Best Offer = 90675. This value exceeds the Protection Price Limit. CME Globex places remaining quantity on the order book at a Protection Price Limit 90600.

The following diagram illustrates this example.



ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
10	90000	2	90025
5	89975	3	90300
15	89950	3	90550
20	89925	10	90675
Protection Points = 600			

Order Book before customer's Order
(Protection Points = 600)

ESZ8 Order Book			
Bid		Offer	
StopPx	Qty	Price	Qty
	10	90000	2
	5	89975	3
	15	89950	3
	20	89925	10
90000	15	-	

Order becomes a Stop Limit Order with the Protection Limit set to 90600. Order is waiting to be triggered by a trade at the Stop Price (90000).

ESZ8 Order Book			
Bid		Offer	
StopPx	Qty	Price	Qty
	9	90000	2
	5	89975	3
	15	89950	3
	20	89925	10
Triggered	15	90600	

An incoming 1-Lot offer at 90000 matches a resting bid. A trade occurs at the Stop Price and the Stop Order is activated.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
15	90600	2	90025
9	90000	3	90300
5	89975	3	90550
15	89950	10	90675
20	89925		

Order is partially filled at Best Market Price of 90025.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
13	90600	3	90300
9	90000	3	90550
5	89975	10	90675
15	89950		
20	89925		

Next Best Market Price of 90300 is less than the Protection Limit, order is partially filled at 3@90300.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
10	90600	3	90550
9	90000	10	90675
5	89975		
15	89950		
20	89925		

Next Best Market Price of 90550 is less than the Protection Limit, order is partially filled at 3@90550.

ESZ8 Order Book			
Bid		Offer	
Qty	Price	Qty	Price
7	90600	10	90675
9	90000		
5	89975		
15	89950		
20	89925		

Next Best Market Price of 90675 exceeds the Protection Limit, remaining quantity rests on Order Book at the Protection Price Limit 7@ 90600.

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