

# Type B - Expanded

L e n g t h	F r o m	To	D a t a t y p e	F o r m a t	Description and Comments
2	1	2	AN	X (2)	Record ID - "B "
3	3	5	AN	X (3)	Exchange Acronym
10	6	15	AN	X (10)	Commodity Code
3	16	18	AN	X (3)	Product Type Code
6	19	24	N	9 (6)	Futures Contract Month as CCYYMM
2	25	26	AN	X (2)	Futures Contract Day or Week Code
1	27	27	-	-	Filler
6	28	33	N	9 (6)	Option Contract Month as CCYYMM
2	34	35	AN	X (2)	Option Contract Day or Week Code
1	36	36	-	-	Filler
8	37	44	N	9 (2) V9 (6)	Base Volatility (as a decimal fraction)
8	45	52	N	9 (2) V9 (6)	Volatility Scan Range (as a decimal fraction)
5	53	57	N	9 (5)	Futures Price Scan Range
5	58	62	N	9 (2) V9 (3)	Extreme Move Multiplier
5	63	67	N	9V 9 (4)	Extreme Move Covered Fraction
5	68	72	N	9V 9 (4)	Interest Rate (as a decimal fraction)
7	73	79	N	9V 9 (6)	Time to Expiration (in years)
6	80	85	N	V9 (6)	Lookahead Time (in years)
6	86	91	N	9 (2) V9 (4)	Delta Scaling Factor
8	92	99	N	9 (8)	Expiration (Settlement) Date as CCYYMMDD
10	1 00	1 09	AN	X (10)	Underlying Commodity Code
2	1 10	1 11	AN	X (2)	Pricing Model
8	1 12	1 19	N	9 (2) V9 (6)	Coupon or Dividend Yield, as a decimal fraction
1	1 20	1 20	AN	X (1)	Option Expiration Reference Price Flag -- see note below

7	1	1	N	9	Option Expiration Reference Price
	21	27		(7)	
1	1	1	AN	X	Option Expiration Reference Price Sign (+ or -)
	28	28		(1)	
14	1	1	N	9	Swap Value Factor (for interest-rate swaps) or
	29	42		(7) V9 (7)	<b>Contract-Specific Contract Value Factor</b> (for normal futures and options)
2	1	1	N	9	Swap Value Factor Exponent
	43	44		(2)	
1	1	1	AN	X	Sign for Swap Value Factor Exponent (blank, "+" or "-")
	45	45			
2	1	1	N	9	Base Volatility Exponent
	46	47		(2)	
1	1	1	AN	X	Sign for Base Volatility Exponent (blank, "+" or "-")
	48	48			
2	1	1	N	9	Volatility Scan Range Exponent
	49	50		(2)	
1	1	1	AN	X	Sign for Volatility Scan Range Exponent (blank, "+" or "-")
	51	51			
12	1	1	N	9	Discount Factor (for discounting back to present value)
	52	63		(2) V9 (10)	
1	1	1	AN	X	Volatility Scan Range Quotation Method -- blank or <b>A</b> means that the volatility scan range is provided as an absolute value, and <b>P</b> means that it is provided as percentage of the implied volatility.
	64	64			
1	1	1	AN	X	Price Scan Range Quotation Method -- blank or <b>A</b> means that the price scan range is provided as an absolute value, and <b>P</b> means that is provided as a percentage of the contract value
	65	65			
2	1	1	N	9	Futures Price Scan Range Exponent
	66	67		(2)	
1	1	1	AN	X	Sign for Futures Price Scan Range Exponent (blank, "+" or "-")
	68	68			
5	1	1	AN	X	Delivery Margin Method
	69	73			
8	1	1	N	9	Margin Removal Date (as CCYYMMDD) – if present, positions in this contract no longer contribute to the margin requirement, beginning at the specified cycle on this date, and subsequently
	74	81		(8)	
1	1	1	AN	X	Margin Removal Cycle – either <b>S</b> for end of day, or <b>I</b> for intraday. If the margin removal date is provided but the cycle value is not, a value of <b>S</b> for end of day cycle is defaulted.
	82	82			
1	1	1	AN	X	Interest Rate Sign. A minus sign means the interest rate is negative, and blank, null, + or any other value means it is positive.
	83	83			
1	1	1	AN	X	Coupon or Dividend Yield Sign. A minus sign means the coupon or dividend yield is negative, and blank, null, + or any other value means it is positive.
	84	84			
14	1	1	N	9	High Precision Option Expiration Reference Price
	85	98		(14)	
1	1	1	AN	X	High Precision Option Expiration Reference Price Sign – blank, + or -. Any value other than a minus sign indicates that the value is positive.
	99	99			
1	2	2	AN	X	High Precision Option Expiration Reference Price Flag. N means that the high-precision option expiration reference price field is populated, but that the price can be read from either the regular precision field or the high-precision field. Y means that the value can only be read from the high-precision field.
	00	00			

**Notes:**

- "B" records provide delta-scaling factors as well as risk array calculation parameters for either a particular futures contract, or for a particular option series - ie, for all options which are identical except for their put/call code and their strike.
- Except for the delta-scaling factors, parameters contained on "B" records are not needed for the SPAN performance bond calculation itself.** If "B" records are not provided for a particular future or option series, the delta-scaling factor for that future or that series should be defaulted to 1.00.
- If "B" records are provided, then the "B" records for all products in a combined commodity are typically located in the SPAN file after the "4" record for that combined commodity.
- "B" records for a futures contract will contain either zeros or spaces in the Option Contract Month and Option Contract Day fields.
- The Option Contract Day or Week Code field is used to distinguish option series which expire at different times than the standard monthly options. For standard monthly options, this field will contain zeros or blanks. For other options, this field will typically contain "W1", "W2", etc. - for weekly options expiring in week 1 of the month, week 2 of the month, etc. - or a two-digit day of the month, for flex options or other options for which the exact expiration day is specified. The Futures Contract Day or Week Code is intended to be used analogously to distinguish futures which expire at different times than standard monthly futures.

6. The Price Scan Range parameter on the "B" record is in the performance bond currency for the combined commodity and must be multiplied by ten raised to the Risk Exponent power for that combined commodity. The Risk Exponent is taken from the "2" record.
7. The Expiration (Settlement) Date for a future is the date on which its final marking price is determined. The Expiration (Settlement) Date for an option series is the last date on which holders of options in that series can elect to exercise those options. Time to Expiration is determined by taking the number of calendar days between the Expiration Date and the business date of this SPAN file, and dividing by 365, with zero as a minimum value.
8. Currently supported values for the Pricing Model code are: **B** for Black (European futures options), **BS** for Black-Scholes (European physical options with no dividends), **M** for the generic Merton European option model, **WB** for "Whaley Black" (the Adesi-Whaley model for American futures options), **WS** for "Whaley Scholes" (the Adesi-Whaley model for American physical options with no dividends), **WI** for "Whaley for Indices" (the generic Adesi-Whaley model), and **I** for Intrinsic.
9. Product type codes are **PHY** for **Physical**, **FUT** for **Future**, **CMB** for **Combination**, **OOP** for **Option on Physical**, **OOF** for **Option on Future**, **OO** for **Option on Combination**.
10. The **Option Expiration Reference Price** and **Price Flag** are optional fields which may be provided for "B" records for option series. These fields provide a means of identifying whether the final price of the underlying for determining automatic exercise of in-the-money options is available, and if so, what that price is. A value **N** for this flag means either that the expiration day for this option series has not yet arrived, or it has arrived but that the reference price is not yet available. A value of **Y** for the flag means that the expiration day has arrived, that the price is available, and that the price is actually the settlement price for the underlying on that day. A value of **S** means that the expiration day has arrived and that the reference price is available, but that this is a special reference price, different from the settlement price of the underlying on that day. Note that this price will be formatted according to the decimal locator and alignment code for the underlying, not for the option series.
11. The **Discount Factor** field in bytes 152-163 provides the value used for discounting mark-to-market values back to present value, for example for forwards. The numeric format of 9(2)V9(10) is for discount factors as a decimal value. For example, a discount factor of 98.1234 percent, or 0.981234 as a decimal value, will appear in the field as **009812340000**. Hence the field supports discount factors out to eight decimal places of a percent.
12. The **Delivery Margin Method** provides data to drive the margin calculation for positions in physically-deliverable futures or forwards that have gone into the delivery process. Allowable values are **PID**, meaning that all positions in this contract are in delivery today, and hence naked delivery margins are assessed for all; **PIDP**, meaning that some positions in this contract may be in the delivery process today, and for these only, naked margins are assessed; **LFV**, meaning that naked margins are assessed for short positions and full contract value margins for long positions; and **FV**, meaning that full value margins are assessed for both long and short positions. A blank or null value means that delivery margins are not applicable to this contract at this time.