

RPGLE & Db2 for i Data Types (7.4)

Fixed	Free	Storage	Valid Values	Db2 Equivalent	SQLTYPE	DDS (PF)	DSPF	PRTF
B	<u>BINDEC(p:s)</u> {p ∈ ℤ 1 ≤ p ≤ 4} {p ∈ ℤ 5 ≤ p ≤ 9} {s ∈ ℤ 0 ≤ s ≤ p}	2 bytes 4 bytes	-9999 to 9999 -999999999 to 999999999	<u>SMALLINT</u> <u>INTEGER</u>	500/501 496/497	B		
F	<u>FLOAT(4)</u>	4 bytes	-3.4028235E+38 to -1.1754944E-38 0.0E+0 +1.1754944E-38 to +3.4028235E+38	<u>FLOAT</u>	480/481	F FLTPCN(*SINGLE)		F
F	<u>FLOAT(8)</u>	8 bytes	-1.797693134862315E+308 to -2.225073858507201E-308 0.0E+0 +2.225073858507201E-308 to +1.797693134862315E+308	<u>FLOAT</u>	480/481	F FLTPCN(*DOUBLE)		F
I	<u>INT(3)</u> <u>INT(5)</u> <u>INT(10)</u> <u>INT(20)</u>	1 byte 2 bytes 4 bytes 8 bytes	-128 to 127 -32,768 to 32,767 -2,147,483,648 to 2,147,483,647 -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807	N/A <u>SMALLINT</u> <u>INTEGER</u> <u>BIGINT</u>	N/A 500/501 496/497 492/493			
P	<u>PACKED(p:s)</u> {p ∈ ℤ 1 ≤ p ≤ 63} {s ∈ ℤ 0 ≤ s ≤ p}	1 ≤ ⌈p/2⌉ ≤ 32 bytes	-1 × 10 ⁶³ - 1 to 1 × 10 ⁶³ - 1	<u>DECIMAL(p,s)</u>	484/485	P		
U	<u>UNS(3)</u> <u>UNS(5)</u> <u>UNS(10)</u> <u>UNS(20)</u>	1 byte 2 bytes 4 bytes 8 bytes	0 to 255 0 to 65,535 0 to 4,294,967,295 0 to 18,446,744,073,709,551,615	N/A				
S	<u>ZONED(p:s)</u> {p ∈ ℤ 1 ≤ p ≤ 63} {s ∈ ℤ 0 ≤ s ≤ p}	1 ≤ p ≤ 63 bytes	-1 × 10 ⁶³ - 1 to 1 × 10 ⁶³ - 1	<u>NUMERIC(p,s)</u>	488/489	S	Yes	S
A	<u>CHAR(n)</u> {n ∈ ℤ 1 ≤ n ≤ 16,773,104}	n bytes		<u>CHAR(n)</u> (n ≤ 32,765) or CLOB (n > 32,765)	452/453 408/409	A	Yes	A
A	<u>VARCHAR(n:b)</u> {n ∈ ℤ 1 ≤ n ≤ 65,535} b ∈ {2,4} (optional)	n+2 bytes		<u>VARCHAR(n)</u> (n ≤ 32,739) or CLOB (n > 32,739)	448/449 408/409	A VARLEN(n)		
A	<u>VARCHAR(n:b)</u> {n ∈ ℤ 65,536 ≤ n ≤ 16,773,100} b ∈ {4} (optional)	n+4 bytes		<u>VARCHAR(n)</u> (n ≤ 32,739) or CLOB (n > 32,739)	448/449 408/409	A VARLEN(n)		

Fixed	Free	Storage	Valid Values	Db2 Equivalent	SQLTYPE	DDS (PF)	DSPF	PRTF
T	TIME {{format{separator}}}	8 bytes		TIME	388/389	T	Yes	T
D	DATE {{format{separator}}}	10 bytes		DATE	384/385	L	Yes	L
Z	TIMESTAMP (n) {n ∈ Z 0 ≤ n ≤ 12}	n=0: 19 bytes n>1: 20 + n bytes		TIMESTAMP (n)	392/393	Z	Yes	Z
G C	GRAPH (n) UCS2 (n) {n ∈ Z 1 ≤ n ≤ 8,386,552}	2n bytes		GRAPHIC (n) (n ≤ 16,382) or DBCLOB (n > 16,382)	468/469 412/413	G		
G C	VARGRAPH (n:b) VARUCS2 (n:b) {n ∈ Z 1 ≤ n ≤ 65,535} b ∈ {2,4} (optional)	2n+2 bytes		VARGRAPHIC (n) (n ≤ 16,369) or DBCLOB (n > 16,369)	464/465 412/413	G VARLEN(n)		
G C	VARGRAPH (n:b) VARUCS2 (n:b) {n ∈ Z 65,536 ≤ n ≤ 8,386,548} b ∈ {4} (optional)	2n+4 bytes		VARGRAPHIC (n) (n ≤ 16,382) or DBCLOB (n > 16,382)	464/465 412/413	G VARLEN(n)		
N	IND	1 byte	*ON or *OFF	CHAR(1)	452/453			
*	POINTER {{*PROC}}	16 bytes		N/A				
O	OBJECT			N/A				
		1 to 32,765 bytes		BINARY	912/913			
		1 to 2,147,483,647 bytes		BLOB	404/405			
		1 to 2,147,483,647 bytes		CLOB	408/409			
	n = 1 to 1,073,741,823 characters	2n bytes		DBCLOB	412/413			
		1 to 32,718 bytes		DATALINK	396/397			
		40 bytes		ROWID	904/905			
		1 to 32,739 bytes		VARBINARY	908/909			
		1 to 2,147,483,647 bytes		XML	988/989			
		8 bytes		Result Set Locator	972			