

## MySQL data types

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maximum row size 65.535 bytes	Maximum length of bytes.	assimilato a stringa		
varchar	65.535	SI	64KB	MySQL does <u>not implicitly pad space</u> when storing the VARCHAR values  NON memorizza gli spazi finali, ma li considera nella lunghezza occupata dal campo
	< 255 B		length prefix : 1 byte	
	=> 255 B		length prefix : 2 byte	
int	4		da -2.147.483.648	a +2.147.483.647
smallint	2		da -32.768	a +32.767
decimal	DECIMAL(P,D)		monetary data in financial system	range of P is 1 to 65 range of D is 0 and 30. MySQL requires that D is less than or equal to (<=) P
date	3	SI	'YYYY-MM-DD'	MySQL uses 3 bytes to store a DATE value. The DATE values range from <b>1000-01-01</b> to <b>9999-12-31</b> .
text	65.535	SI	64KB	<b>TEXT</b> data is not stored in the database server's memory.  when you query TEXT data, MySQL has to read from it from the disk, which is much slower in comparison with CHAR and VARCHAR  MySQL does not remove or pad spaces when retrieving or inserting text data like CHAR and VARCHAR
mediumblob	16.777.215	file	16MB	<b>BLOB : binary large object</b> INSERT INTO images (title,image_data) immagini, audio, video, etc      VALUES ('MySQL tutorial', LOAD_FILE('path....logo.png'));
mediumtext	16.777.215	SI	16MB	

char	255	SI		MySQL pads its value with spaces to the length that you declared
longtext	4.294.967.295	SI	4GB	

datetime	5	SI	'YYYY-MM-DD HH:MM:SS'	MySQL uses 5 bytes to store a DATETIME value.  DATETIME values range from 1000-01-01 00:00:00 to 9999-12-31 23:59:59.
timestamp	4	SI		TIMESTAMP values range from <b>1970-01-01 00:00:01</b> UTC to <b>2038-01-19 03:14:07 UTC</b>

DECIMAL esempio: DECIMAL(19,9)	5		DECIMAL(10,0)  4 (dec) + 5 (int: 10=19-9 cifre )	Precision Scale  It packs 9 digits into 4 bytes e 1 byte ogni 2 cifre
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