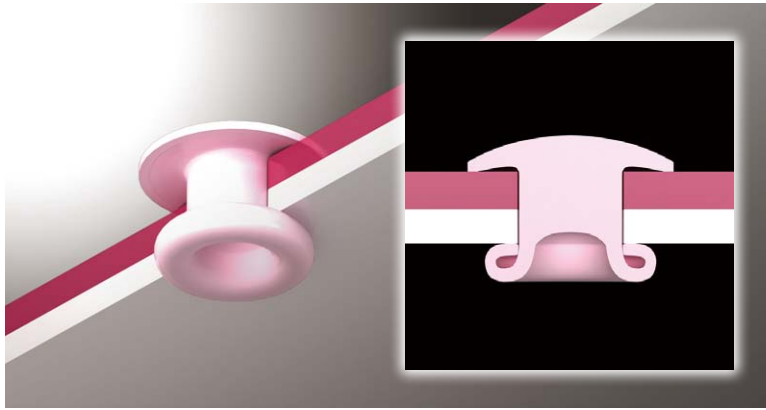
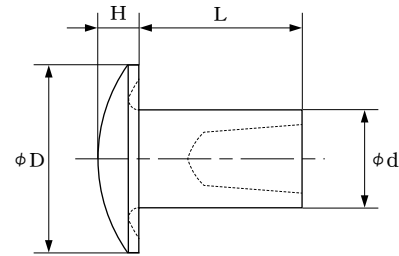


# Roll-Up Rivet

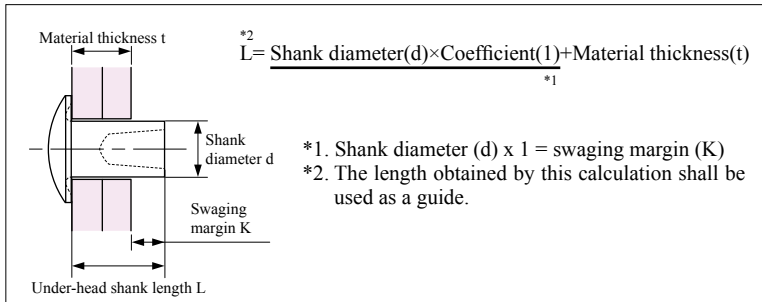


[MOVIE] <http://www.byora.co.jp/index/products/movies/rollup.html>

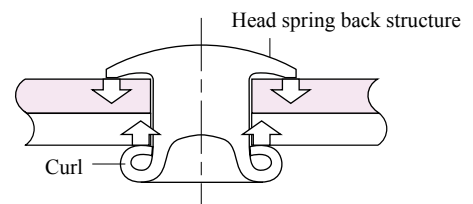
## Shape and symbols of standard dimensions



## Calculation of under-head shank length



## Fastening using spring back



The spring back structures of both the head and the curl prevent loosening of a fastened rivet. (PAT 3029862)

## Specification table

Unit (mm)

Nominal diameter	d		D		H		L			Recommended work hole diameter		Strength (kN)	
	Standard	Tolerance	Standard	Tolerance	Standard	Tolerance	Min	Max	Tolerance	Standard	Tolerance	Tensile	Shear
3.5	3.5	± 0.1	8.0	± 0.2	1.3	± 0.1	5	15.0	± 0.2	3.7	+0.1 0	0.11	0.31
4	4		7.6		1.7		6			4.2		0.16	0.42
4.5	4.5		8.6		1.9		7			4.7		0.20	0.46
5	5		9.6		2.1		7	5.3		0.26		0.61	
6	6		11.5		2.5		8	6.3		0.40		0.90	

Remarks) A selection of materials, such as POM, PP and PA, are available to suit various purposes.

Note) The strength may be reduced when the rivet is fastened with a low ambient temperature or when it is used for some purposes. Please ask us. (Testing ambient temperature: 23°C)

## Chemical properties of polyacetal (POM)

### (1) Combustibility

	Flash point	Autoignition point	Ignition time	Burning speed	Burning rate	Smoke	CO <sub>2</sub>	CO	O <sub>2</sub>
POM	320°C	400°C	11 sec	3.5 g/min	98.9%	0.005m <sup>2</sup>	0.191 Vol%	0.001 Vol%	0.258 Vol%

Remarks) POM is plastic made up of carbon (C), hydrogen (H) and oxygen (O). The composition ratio stands at C:40%, H:5.7% and O:53.3%.

### (2) Chemical resistance

Compatibility ○ : Fully compatible ○ : With reservations, △ : Only at normal temperature with no stress, × : Not compatible

	Methanol	Ethanol	Toluene	Gasoline	Gas oil	EG oil	Acetic acid 1%	Sulfuric acid 1%	Hydrochloric acid 10%
POM	○	○	○	○	○	○	○	○	△

Remarks) The rivet has high resistance to chemicals except for strong acids, such as hydrochloric acid and sulfuric acid.