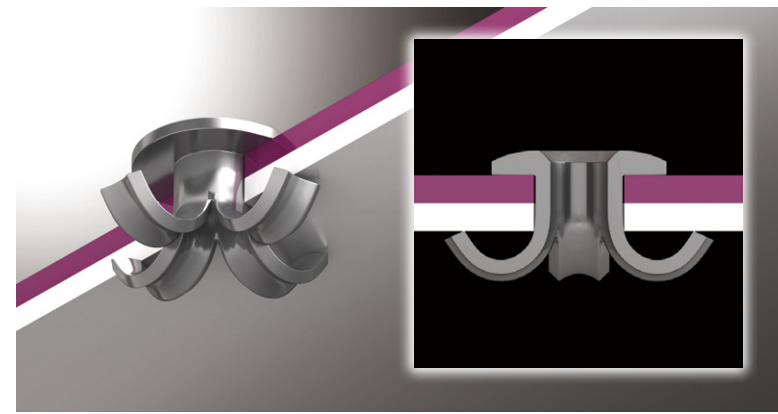


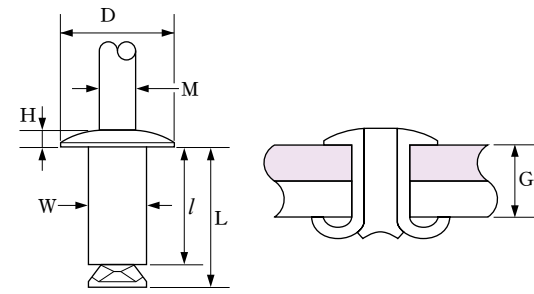
## PL Type / For soft materials

The sleeve spreads widely in four petal-like parts that fasten the materials together. It is mainly used to fasten soft materials, such as plywood and plastic.

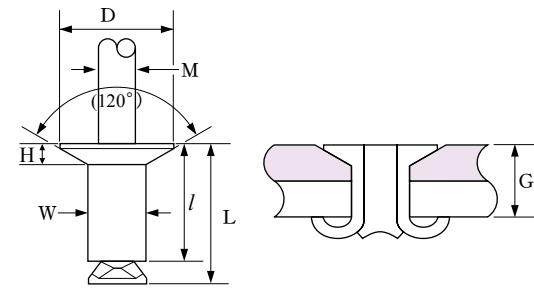


[MOVIE] [http://www.byora.co.jp/index/products/movies/blind\\_pl.html](http://www.byora.co.jp/index/products/movies/blind_pl.html)

### Symbols of standard dimensions and installation diagram



(Round head or large flange)



(Countersunk)

### Product code

**D AS 53 PL**

- ① Flange shape code (D: Round head, K: Countersunk and LF: Large flange)  
 ② Material code (AS \* See the specification table.)  
 ③ Size code (\* See the specification table.)  
 ④ Rivet type (PL)

### AS specification table

AS (Sleeve: Aluminum A5154 / fabric, Mandrel: Hard steel wire / zinc plating)

Sleeve diameter W(mm)	Mating hole diameter (mm)	Size code	Recommended fastening range G (mm)	l	L <sup>*2</sup>	Round head (mm)		Countersunk <sup>*1</sup> (mm)		Large flange <sup>*1</sup> (mm)		M (mm)	Strength <sup>*3</sup> (kN)	
						D	H	D	H	D	H		Tensile	Shear
3.2	3.4	43	<sup>*4</sup> 1.0 ~ 4.5	8.1	10.1	6.4	1.0	6.4	1.1	8.0	1.0	1.85	0.8	0.8
		44	4.5 ~ 6.0	9.7	11.7									
		46	6.0 ~ 9.2	12.9	14.9									
		48	9.2 ~ 12.4	16.8	18.8									
4.0	4.2	52	<sup>*5</sup> 1.0 ~ 2.6	7.3	9.7	8.0	1.2	8.0	1.4	10.0	1.3	2.25	1.3	1.3
		53	<sup>*5</sup> 1.2 ~ 4.5	8.9	11.3									
		54	4.5 ~ 6.1	10.5	12.9									
		56	6.1 ~ 9.3	13.7	16.1									
		58	9.3 ~ 12.5	16.9	19.3									
4.8	5.0	63	<sup>*5</sup> 1.5 ~ 4.6	9.7	12.4	9.5	1.5	9.5	1.6	12.0	1.7	2.65	2.0	2.1
		64	4.6 ~ 6.1	11.3	14.0									
		66	6.1 ~ 9.2	14.5	17.2									
		68	9.2 ~ 12.3	17.7	20.4									
		610	12.3 ~ 15.5	20.9	23.6									

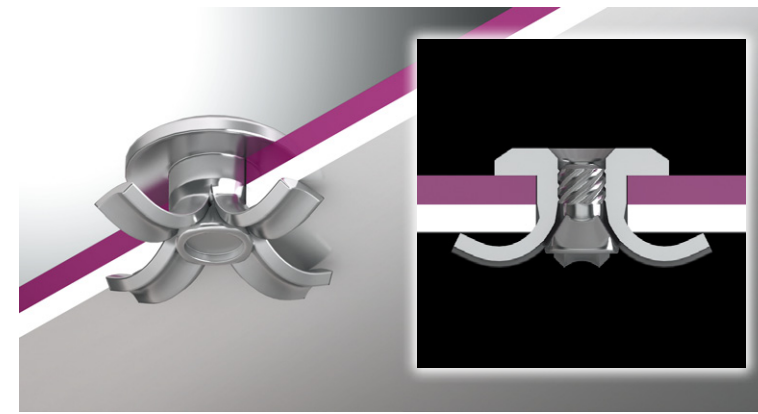
\*1. Countersunk and large flange rivets are made to order. \*2. The L lengths are given as guidelines. \*3. The strength values are obtained through our own testing.  
 \*4. In the case of countersunk rivets, the range is between 1.6 and 4.5. \*5. In the case of countersunk rivets, the range is from 2.0.

Remarks (1) The mandrel is plated with zinc. (Zinc plating is recommended because of the capability of PL rivets.)  
 (2) The standard dimensions are subject to change without notice.  
 (3) Please ask us when the required fastening range exceeds the recommended range or when it is around the lower limit.

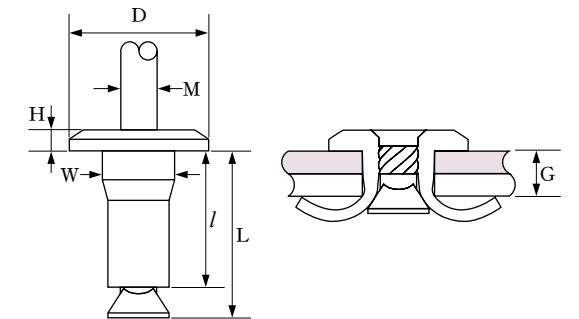
**Warning** Do not point the rivet setter at another person while riveting. (The mandrel may be broken and the head may fly out.)

## PLX Type / Mandrel head fixed type

Fastening the fixed mandrel head will reduce abnormal noise and stop running water.



### Symbols of standard dimensions and installation diagram (PAT 5643122)



### Product code

**D AS 64 PLX**

- ① Flange shape code (D: Round head)  
 ② Material code (AS \* See the specification table.)  
 ③ Size code (\* See the specification table.)  
 ④ Rivet type (PLX)

### AS specification table

AS (Sleeve: Aluminum A5154 / fabric, Mandrel: Hard steel wire / zinc plating)

Sleeve diameter W(mm)	Mating hole diameter (mm)	Size code	Recommended fastening range G (mm)	l	L <sup>*1</sup>	Round head (mm)		M (mm)	Strength <sup>*2</sup> (kN)	
						D	H		Tensile	Shear
4.8	5.1	64	2.5 ~ 5.0	12.2	14.6	9.5	2.6	2.65	2.1	2.5

\*1. The L lengths are given as guidelines. \*2. The strength values are obtained through our own testing.

Remarks (1) The mandrel is plated with zinc.  
 (2) The standard dimensions are subject to change without notice.  
 (3) Specification of the rivet will be designed based on work material, thickness, and diameter of mating hole. Please inquire us for details.