

Type	RoHS	Catalog No.	Shape
—Headed—	RoHS	V40 (HIP) 87~88HRA SR-VAHD	
		Super fine grain (HIP) 90~92HRA SR-VXAH	
—Straight—	RoHS	V40 (HIP) 87~88HRA SR-VASD	
		Super fine grain (HIP) 90~92HRA SR-VXASD	

Type	D	L	0.001mm increments min. P max.	MT (workpiece material thickness) 0.01mm increments	C (clearance) 0.001mm increments	H	T	Base unit price 1 ~ 4 pieces			
								SV-VAHD	SV-VXAH	SV-VASD	SV-VXASD
Headed	3	13	0.800 ~ 1.000	MT ≥ 0.10 Select a workpiece material thickness of 0.10mm or more.	C ≥ 0.005 Select a clearance of 0.005mm or more.	4	3				
Straight	4	16	0.800 ~ 1.500			5					
	5	20	0.800 ~ 2.500			6					
	6	22	1.000 ~ 3.000			9					
	8	22	1.000 ~ 4.000			11					
	10	25	2.000 ~ 6.000			13					

Can be used only for workpiece materials with tensile strengths up to 1177 N/mm² (120kgf/mm²).
Workpiece material thickness and clearance are used as machining data for the scrap retention. Specify the shaped hole dimension (P) when selecting the button die finishing dimensions.

Order **Catalog No.** - **L** - **P** - **MT** - **C**
SR-VAHD 6 - 20 - P2.500 - MT1.50 - C0.105

Price **Quotation**

Days to Ship **Quotation**

Alterations **Catalog No.** - **L(LC)** - **P** - **MT** - **C** - (BC·HC·TC, etc.)
SR-VAHD 6 - LC18.5 - P2.500 - MT1.50 - C0.105 - LKC

Alteration	Code	Spec.	1Code
Shaped hole	BC	Shaped hole depth change 1 ≤ BC < 2 0.1mm increments	
Alterations to full length	LC	Full length change for headed types 10 ≤ LC < L 0.1mm increments (If combined with LKC, 0.01mm increments can be selected.) Full length change for straight types 8 ≤ LC < L 0.1mm increments (If combined with LKC, 0.01mm increments can be selected.)	Quotation
	LKC	Full length tolerance change L +0.1 → +0.01 Cannot be used for L < 16.	
	KC WKC	Addition of single key flat to head Cannot be used for straight types. Cannot be combined with KFC. Addition of double key flats in parallel Cannot be used for straight types. Cannot be combined with KFC.	
Alterations to head	KFC	Double key flats at 0° and a selected angle 1° increments Cannot be combined with KC-WKC. Cannot be used for L < 16. Cannot be used for straight types.	
	HC	Head diameter change D ≤ HC < H 0.1mm increments. Cannot be used for straight types.	

Alteration	Code	Spec.	1Code
Head	TC	Head thickness change 2 ≤ TC < T 0.1mm increments Full length is shortened by (T-TC). If combined with LC, full length is equal to LC. Cannot be used for straight types.	
Alterations to shank	ANF	Angular angle change 0.4 ≤ ANF ≤ 1.2 0.2° increments d ≤ d max. d = P + 2 (L - B) × tanANF P - B tanANF ≥ 0.6 P < 1.00 Cannot be used for D < 4. Cannot be combined with KM.	Quotation
	KM	Addition of key groove to prevent lifting Cannot be used for D < 6. Cannot be used for headed types. D h 6 1 5 ≤ ℓ < L 8 1.5 0.1mm increments 10 1.5	

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		Super fine grain (HIP) 90~92HRA SV-VXASD	

Type	D	L	0.001mm increments min. P max.	V	G	H	T	Base unit price 1 ~ 4 pieces					
								SV-VAHD	SV-VXAH	SV-VASD	SV-VXASD		
Headed	3	13	0.500 ~ 1.000	0.4	0.2	4	3						
Straight	4	16	0.500 ~ 1.500					5					
	5	20	0.500 ~ 2.500					6					
	6	22	1.000 ~ 3.000					9					
	8	22	1.000 ~ 4.000					11					
	10	25	2.000 ~ 6.000					13					

Quotation

Order **Catalog No.** - **L** - **P**
SV-VAHD 6 - 20 - P2.500

Price **Quotation**

Days to Ship **Quotation**

Alterations **Catalog No.** - **L(LC)** - **P** - (BC·HC·TC, etc.)
SV-VASD 6 - LC18 - P2.500 - LKC

Features
These non-clogging button dies are intended to be used in combination with a vacuum device such as a vacuum pump. A scrap vacuum unit (P.299) can be used as the vacuum device.
When the vacuum device is operating, the air inlet hole near the shaped hole creates an airflow inside the button die. As a result, the scrap removal effect is higher than in button dies without air inlet holes.
Non-clogging button dies [Products Data] P.1621

Alteration	Code	Spec.	1Code
Shaped hole	BC	Shaped hole depth change 1 ≤ BC < 2 0.1mm increments	
Alterations to full length	LC	Full length change for headed types 13 ≤ LC < L 0.1mm increments (If combined with LKC, 0.01mm increments can be selected.) Full length change for straight types 8 ≤ LC < L 0.1mm increments (If combined with LKC, 0.01mm increments can be selected.)	Quotation
	LKC	Full length tolerance change L +0.1 → +0.01 Cannot be used for L < 16.	
	KC WKC	Addition of single key flat to head Cannot be used for straight types. Cannot be combined with KFC. Addition of double key flats in parallel Cannot be used for straight types. Cannot be combined with KFC.	
Alterations to head	KFC	Double key flats at 0° and a selected angle 1° increments Cannot be combined with KC-WKC. Cannot be used for L < 16. Cannot be used for straight types.	
	HC	Head diameter change D ≤ HC < H 0.1mm increments. Cannot be used for straight types.	

Alteration	Code	Spec.	1Code
Head	HC	Head diameter change D ≤ HC < H 0.1mm increments	
	TC	Head thickness change 2 ≤ TC < T 0.1mm increments Full length is shortened by (T-TC). If combined with LC, full length is equal to LC.	
Alterations to shank	ANF	Angular angle change 0.2 ≤ ANF ≤ 1.2 0.2° increments d ≤ d max. d = P + 2 (L - B) × tanANF P - B tanANF ≥ 0.6 P < 1.00 Cannot be used for D < 4. Cannot be combined with KM.	Quotation
	KM	Addition of key groove to prevent lifting Cannot be used for D < 6. Cannot be used for headed types. D h 6 1 5 ≤ ℓ < L 8 1.5 0.1mm increments 10 1.5 KM is machined in a position symmetrically opposite to the air inlet. Cannot be combined with ANF.	