

BALL-LOCK RETAINERS

— LIGHT LOAD TYPE (TRIANGLE) —

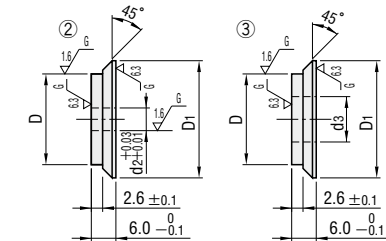
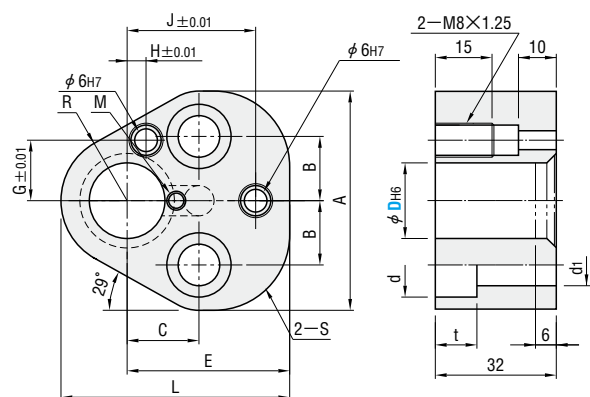
Refer to Notes on P.770.

Application	Catalog No.	①	②	③	④	⑤	⑥	⑦	D
For punch	CRN-P	○	○	○	○	○	○	○	10 ~ 32
For die	CRN-D	○	○	○	○	○	○	○	13 ~ 38
Retainer body for punch+plug	CRN-PP	○	○	○	○	○	○	○	10 ~ 32
Retainer body for die+plug	CRN-DN	○	○	○	○	○	○	○	13 ~ 38

RoHS



Use these retainers for light-load type punches. They cannot be used for heavy load type punches.



- ① M Equivalent to SCM440
- H 55 ~ 58HRC (Depth 1mm)
- S Black oxide (Fe₃O₄)
- ②③ M SK4
- H 56 ~ 60HRC
- ④ Hexagon socket head cap screw (with loosening prevention treatment)

Catalog No.		D	D _{H6}	A	B	C	E	G	H	J	L	R	S	D ₁	d	d ₁	t	d ₂	d ₃	M	A	
Type	D																					
(For punch)	10	+0.009 0	43.7	11.12	19.05	35.0	9.0	7.5	26.925	44.5	9.5	12.0	16	14	9	9	6	4	—	4 M8-40 5 MSTM6-30 6 MSW8 7 MS6-20	—	
①②④⑤⑥⑦	13	+0.011 0	50.0	14.27		38.1	12.0	6.5	29.970	50.8	12.7	15.2	19									6.2
①②	16	53.2	15.87	39.7		13.5	6.0	31.750	54.0	14.3	16.8	22	9									
	20	59.5	17.47	42.8		16.5	5.0	33.530	60.3	17.5	20.0	26	12									4 M10-40 6 MSW8 5 MSTM6-30 7 MS6-20
(For die)	25	+0.013 0	69.1	19.84	23.82	47.7	22.0	7.0	40.640	69.9	22.2	24.7	17	19	13	14	—	—	4 M12-40 5 MSTM6-30 6 MSW8 7 MS6-20	4		
①③④⑤⑥⑦	32	+0.016 0	76.6	24.00	27.00	51.4	26.0	10.0	43.993	77.4	26.0	28.5	21									
①③	38	76.6	24.00	27.00	51.4	26.0	10.0	43.993	77.4	26.0	28.5	27										

D10 can be used for punches only. D38 can be used for dies only.

Order Catalog No. CRN-P 16

Days to Ship Quotation

Price Quotation

BALL-LOCK RETAINERS

— HEAVY LOAD TYPE (TRIANGLE) —

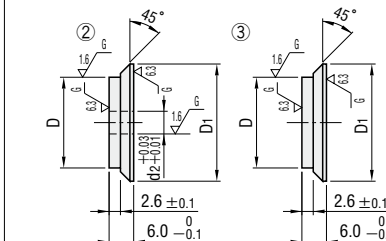
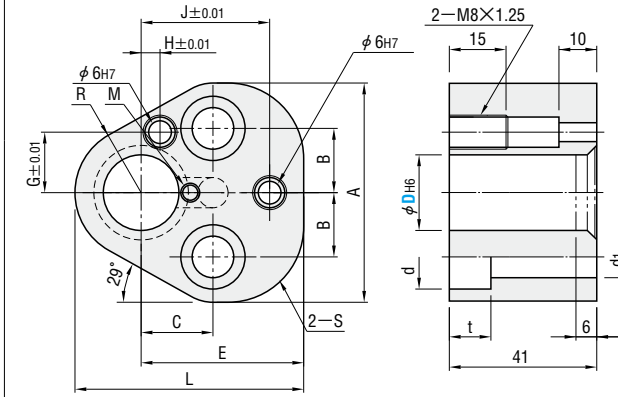
Refer to Notes on P.770.

Application	Catalog No.	①	②	③	④	⑤	⑥	⑦	D
For punch	BRN-P	○	○	○	○	○	○	○	10 ~ 32
Retainer body for punch+plug	BRN-PP	○	○	○	○	○	○	○	
Retainer body for die+plug	BRN-DN	○	○	○	○	○	○	○	
	BRN-PNP	○	○	○	○	○	○	○	

RoHS



Use these retainers for heavy-load type punches. They cannot be used for light load type punches.



- ① M Equivalent to SCM440
- H 55 ~ 58HRC (Depth 1mm)
- S Black oxide (Fe₃O₄)
- ②③ M SK4
- H 56 ~ 60HRC
- ④ Hexagon socket head cap screw (with loosening prevention treatment)

Catalog No.		D	D _{H6}	A	B	C	E	G	H	J	L	R	S	D ₁	d	d ₁	t	d ₂	M	A		
Type	D																					
(For punch)	10	+0.009 0	43.7	11.12	19.05	35.0	9.0	7.5	26.925	44.5	9.5	12.0	16	14	9	9	6	4	—	4 M8-45 5 MSTM6-30 6 MSW8 7 MS6-20	—	
①②④⑤⑥⑦	13	+0.011 0	50.0	14.27		38.1	12.0	6.5	29.970	50.8	12.7	15.2	19									6.2
①②	16	53.2	15.87	39.7		13.5	6.0	31.750	54.0	14.3	16.8	22	9									
	20	59.5	17.47	42.8		16.5	5.0	33.530	60.3	17.5	20.0	26	12									4 M10-50 6 MSW8 5 MSTM6-30 7 MS6-20
(For die)	25	+0.013 0	69.1	19.84	23.82	47.7	22.0	7.0	40.640	69.9	22.2	24.7	17	19	13	14	—	—	4 M12-50 5 MSTM6-30 6 MSW8 7 MS6-20	4		
①③④⑤⑥⑦	32	+0.016 0	76.6	24.00	27.00	51.4	26.0	10.0	43.993	77.4	26.0	28.5	21									
①③	38	76.6	24.00	27.00	51.4	26.0	10.0	43.993	77.4	26.0	28.5	27										

Order Catalog No. BRN-P 20

Days to Ship Quotation

Price Quotation