HEAVY DUTY END RETAINER SETS FOR HIGH-TENSILE STEEL

—FOR NC MACHINING・PUNCHES FOR HEAVY LOAD—

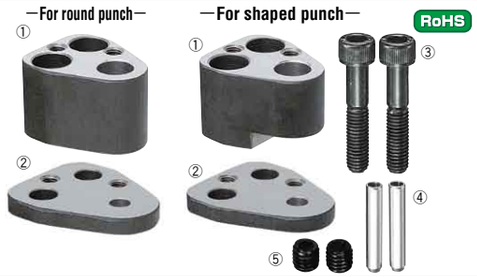
For round punch Ⓐ

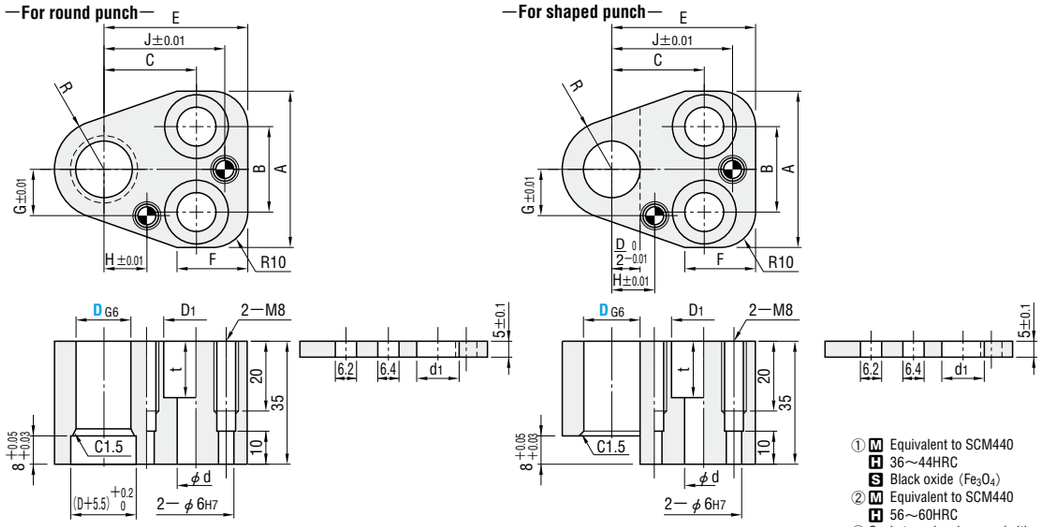
Catalog No.	Retainer No.	Components ①	②	③	④	⑤
HAP—AP	JA1	○	○	○	○	○
HAPAR	JA2	○		○	○	○
BPC	—		○			
HAP—AN	JA3	○				

For shaped punch D R E G

Catalog No.	Retainer No.	Components ①	②	③	④	⑤
HAP—FP	JF1	○	○	○	○	○
HAPFR	JF2	○		○	○	○
BPC	—		○			
HAP—FN	JF3	○				

RoHS





① M Equivalent to SCM440
H 36～44HRC
S Black oxide (Fe_3O_4)
② M Equivalent to SCM440
H 56～60HRC
③ Socket cap head screw (with loosening prevention treatment)

Catalog No. Type		D	D_{G6}	A	B	C	E	F	G	H	J	R	D_1	d	d_1	t	Ⓐ ③④⑤
—For round punch—	—For shaped punch—	10	+0.014 +0.005	37	20	21	35	20	10	9	29	9.5	14	9	10	15	③ M8—40 ④ MSTM6—30 ⑤ MSW8
HAP—AP (①②③④⑤)	HAP—FP (①②③④⑤)	13	+0.017 +0.006	43	26	23	38		13	11	32	12					
HAPAR (①③④⑤)	HAPFR (①③④⑤)	16		44	24	26	40			12	34	14	17	11	12	19	③ M10—40 ④ MSTM6—30 ⑤ MSW8
BPC (②)	BPC (②)	20	+0.020 +0.007	48	28	27	42		16	14	36	17					
HAP—AN (①)	HAP—FN (①)	25		50	30	30	46		18	17	39	19.5					

Order — Catalog No. HAP—AP 10

Price — Quotation

Days to Ship — Quotation

HEAVY DUTY SQUARE RETAINER SETS FOR HIGH-TENSILE STEEL

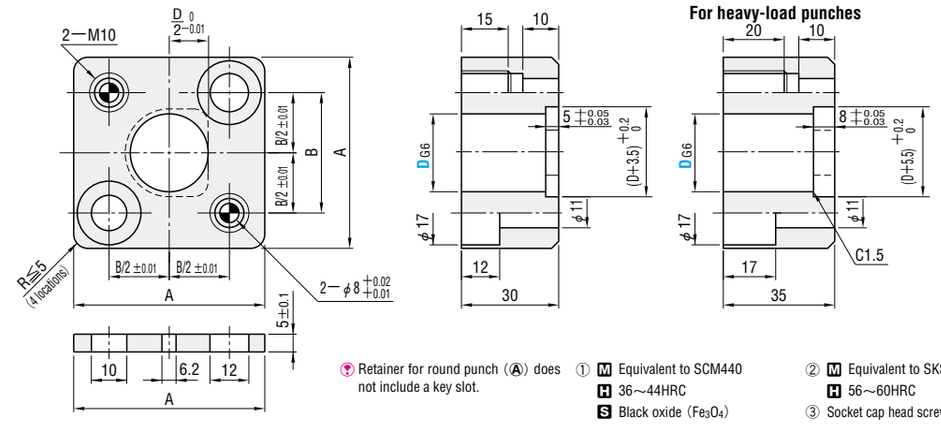
Ⓐ D R E G

Type	Catalog No.	Retainer No.	Components ①	②	③	④	⑤
Ⓐ	HSR—AP	MA1	○	○	○	○	○
	HMPSR	MA2	○		○	○	○
	＊MPSPH	—		○			
	HSR—AN	MA3	○				
D R E G	HSR—FP	MF1	○	○	○	○	○
	HMPDR	MF2	○		○	○	○
	＊MPSPH	—		○			
	HSR—FN	MF3	○				

—For heavy-load punches— Ⓐ D R E G

Type	Catalog No.	Retainer No.	Components ①	②	③	④	⑤
Ⓐ	HSA—AP	LA1	○	○	○	○	○
	HASAR	LA2	○		○	○	○
	＊MPSPH	—		○			
	HSA—AN	LA3	○				
D R E G	HSA—FP	LF1	○	○	○	○	○
	HASFR	LF2	○		○	○	○
	＊MPSPH	—		○			
	HSA—FN	LF3	○				

RoHS



Retainer for round punch (Ⓐ) does not include a key slot.

① M Equivalent to SCM440
H 36～44HRC
S Black oxide (Fe_3O_4)
② M Equivalent to SKS3
H 56～60HRC
③ Socket cap head screw (with loosening prevention treatment)

Catalog No. Type		D	D_{G6}	A	B	Ⓐ ③④⑤
	—For heavy load—					
HSR—AP (①②③④⑤)	HSA—AP (①②③④⑤)	10	+0.014 +0.005	45	23	③ M10—40 ④ MSTM8—30 ⑤ MSW10
HSR—FP (①②③④⑤)	HSA—FP (①②③④⑤)	13	+0.017 +0.006			
HMPSR (①③④⑤)	HASAR (①③④⑤)	16		52	30	
HMPDR (①③④⑤)	HASFR (①③④⑤)					
＊MPSPH (②)	＊MPSPH (②)	20	+0.020 +0.007			
HSR—AN (①)	HSA—AN (①)					
HSR—FN (①)	HSA—FN (①)	25		56	34	

＊MPSPH is the successor product of MPSP was published in the previous catalog.

Order — Catalog No. HSR—AP 25

Days to Ship — Quotation

Price — Quotation

RETAINERS