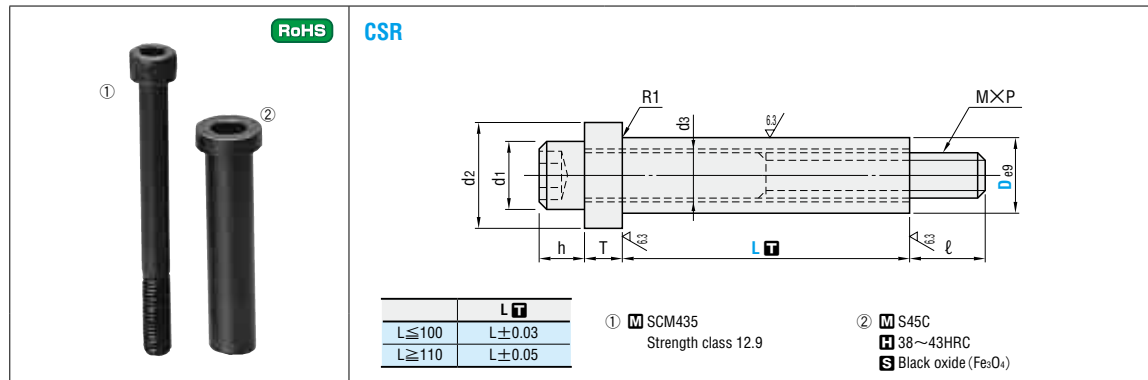


SPOOL RETAINERS

STROKE ADJUSTMENT COLLARS / URETHANE WASHERS FOR SPOOL RETAINERS



D_{e9}	d_1	d_2	d_3	MXP	h	T	l
10	10	15	6.3	6×1.0	6	5	10
13	13	18	8.4	8×1.25	8	5	15
16	16	24	10.6	10×1.5	10	8	22
20	18	28	12.6	12×1.75	12	10	20
25	24	36	16.8	16×2.0	16	13	27
32	30	45	20.8	20×2.5	20	16	34

Catalog No. Type	D	L										Base unit price 1~19 pieces										
		10	15	20	25	30	35	40	45	50												
CSR	10								55	60	65	70	75	80	Quotation							
	13													85		90	100					
	16																110	120				
	20																	130	140	150		
	25																			160	170	180
	32																					170

Order **Catalog No.** - L
CSR 20 - 60

Price **Quotation**

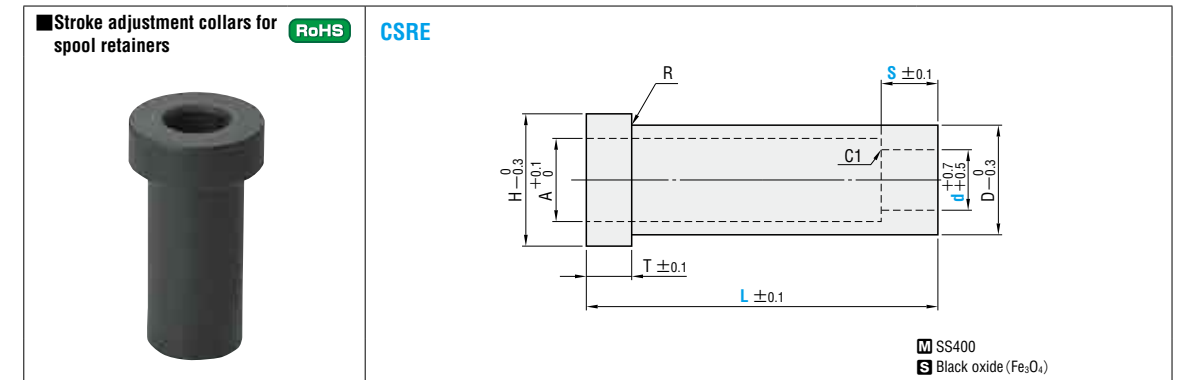
Days to Ship **Quotation**

Example **Page at right**

Alterations **Catalog No.** - L(LC)
CSR 20 - LC57.0

Quotation

Alteration	Code	Spec.	1Code	
	LC	Retainer L dimension change LCmin. ≤ LC < Lmax. L ± 0.03 0.1mm increments Install the bolts so that the l dimension is within the range shown below.	Quotation	
		D		10 13 16 20 25 32
		LCmin.		10.1 10.0 10.0 25.0 30.0 55.0
l	10~14.9 15~24.9 22~31.9 20~29.9 27~36.9 34~43.9			

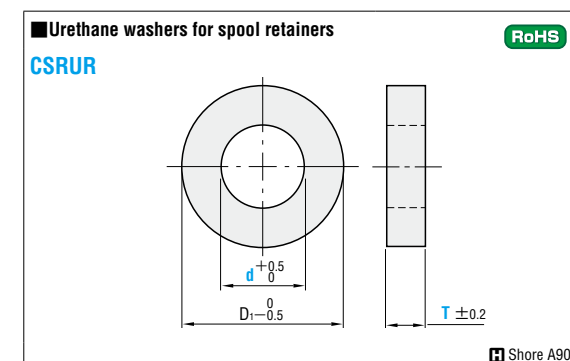


Applicable CSR standard Type	D	H	T	A	D	R	Catalog No.		L 10mm increments	S 5mm increments
							Type	d		
CSR	10	36	5	16	28	1.0	CSRE	10	50~100	10~25
	13	40	5	19	30			13		
	16	46	8	25	36			16		
	20	55	10	29	44			20		
	25	60	13	37	50			25		
	32	70	16	46	60			32		

Order **Catalog No.** - L - S
CSRE 13 - 100 - S25

Price **Quotation**

Days to Ship **Quotation**

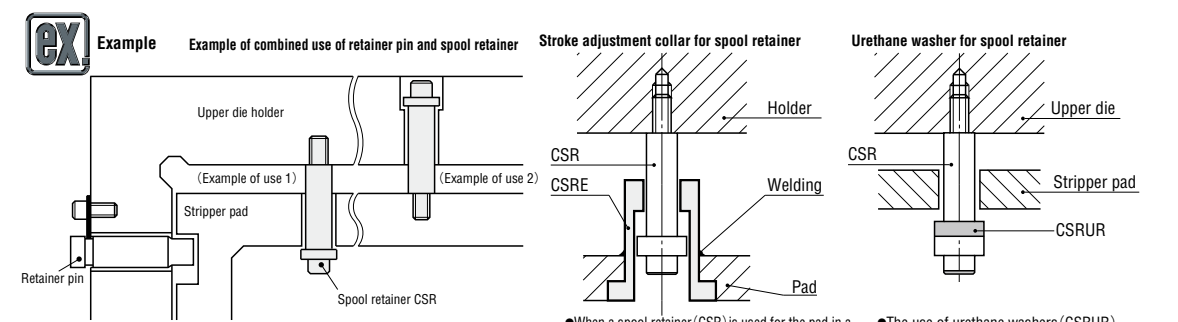


Applicable standard Type	D	D1	d	Catalog No.		T (Selection)	Base unit price 1~19 pieces
				Type	d		
CSR	16	24	16	CSRUR	16	5-10	Quotation
	20	28	20		20		
	25	36	25		25		
	32	45	32		32		

Order **Catalog No.** - T
CSRUR 20 - 10

Days to Ship **Quotation**

Price **Quotation**



When a spool retainer (CSR) is used for the pad in a progressive or transfer die, using a collar (CSRE) will make it possible to extend the stroke length.
The use of urethane washers (CSRUR) is effective for impact absorption, vibration absorption, and noise reduction.