

# Simple Specials: XA1/2/6/7/11/17/18: Change of Rod End Shape

The following changes are dealt with through the Simple Specials System.  
Please contact your local sales representative for more details.

Symbol

## 3 CQS/CQ2/RQ/CLQ (ø12 to ø25): Change of Rod End Shape

**-XA1/2/6/7/11/17/18**

### Applicable Series

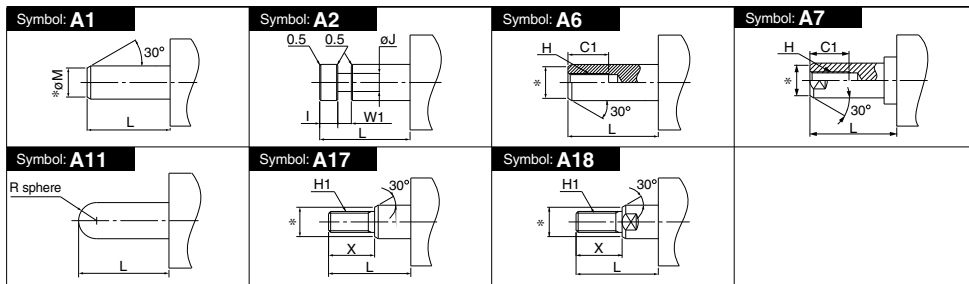
Series		Action	Symbol for change of rod end shape
CQS	Standard type	CQS Double acting, Single rod Spring acting (Spring return) <sup>(Note)</sup>	XA1/XA2/XA6
		CQSW Double acting, Double rod	XA7/XA11
	Long stroke	CQS Double acting, Single rod	XA17/XA18
	Anti-lateral load	CQS-S Double acting, Single rod	
		CQSK Double acting, Single rod	XA1/XA2 XA6/XA11
	Non-rotating rod type	CQSKW Double acting, Double rod (Non-rotating side)	XA1/XA2/XA6/XA7 XA11/XA17/XA18
Longer life cylinder	CQS-XB24 Double acting, Single rod	XA6/XA7/XA17/XA18	

(Note) Single acting, spring extend type is available as a special order.

### ⚠ Precautions

- SMC will make appropriate arrangements if no dimension, tolerance, or finish instructions are given in the diagram.
- Standard dimensions marked with "\*" will be as follows to the rod diameter (D). Enter any special dimension you desire.  
ø12, ø16 → D - 1 mm ø20, ø25 → D - 2 mm
- In the case of double rod, fill in the dimension when the rod is retracted.
- It is impossible to manufacture when XA17 and XA18 are the same male thread diameter as the piston rod external diameter.
- Please contact SMC separately for the piston rod end pattern part numbers other than the table above and the cases other than the manufacturing conditions.
- For the CQS-XB24 and CQ2-XB24, the L dimension should be made smaller than that of the standard product.

Series		Action	Symbol for change of rod end shape
CQ2 (ø12 to ø25)	Standard type	CQ2-Z Double acting, Single rod Spring acting (Spring return)	XA1/XA2/XA6 XA7/XA11 XA17/XA18
		CQ2W-Z Double acting, Double rod	
	Axial piping type (Centralized piping type)	CQP2 Double acting, Single rod Single acting (Spring return)	
		CQ2K-Z Double acting, Single rod	XA1/XA2/XA6 XA11/XA17
	Non-rotating rod type	CQ2KW-Z Double acting, Double rod (Non-rotating side)	XA1/XA2/XA6/XA7 XA11/XA17/XA18
		CQ2KW-Z Double acting, Double rod (Round rod side)	XA1/XA2/XA6/XA7 XA11/XA17/XA18
Longer life cylinder	CQ2-XB24 Double acting, Single rod	XA6/XA7 XA17/XA18	
RQ	Standard type	RQ Double acting, Single rod	XA1/XA2/XA6/XA7 XA11/XA17/XA18
CLQ (ø20 to ø25)	With lock	CLQ Double acting, Single rod	XA1/XA2/XA6/XA7 XA11/XA17/XA18



### Conditions of Manufacture

Change of rod end shape/Symbol	Single rod type	Double rod type
XA1	For ø12: øM: 3 mm or more 5 mm or less	øM: ø5 mm or less
	ø16: øM: 3 mm or more 7 mm or less	øM: ø7 mm or less
	ø20: øM: 4 mm or more 8 mm or less	øM: ø8 mm or less
	ø25: øM: 4 mm or more 10 mm or less	øM: ø10 mm or less
	For ø12: øL: 4 mm or more, W1: 6 mm or less	øL: 3 mm or more, W1: 6 mm or less
XA2	ø16: øL: 4 mm or more, W1: 6 mm or less	øL: 4 mm or more, W1: 6 mm or less
	ø20: øL: 5 mm or more, W1: 11 mm or less	øL: 5 mm or more, W1: 11 mm or less
	ø25: øL: 6 mm or more, W1: 13 mm or less	øL: 6 mm or more, W1: 13 mm or less
	For ø12: H: M4 or less	H: M4 or less
XA6	ø16: H: M6 or less	H: M6 or less
	ø20: H: M6 or less	H: M6 or less
	ø25: H: M8 or less	H: M8 or less
	For ø12: H: M4 or less	H: M4 or less
XA7	ø16: H: M5 or less	H: M5 or less
	ø20: H: M6 or less	H: M6 or less
	ø25: H: M8 or less	H: M8 or less

Change of rod end shape/Symbol	Single rod type	Double rod type
XA11	For ø12: SR3 mm only	SR3 mm or more
	ø16: SR4 mm only	SR4 mm or more
	ø20: SR5 mm only	SR5 mm or more
	ø25: SR6 mm only	SR6 mm or more
	For ø12: H: M5 or more, X: 20 mm or less	H: M5 or less
XA17	ø16: H: M6 or more, X: 22.5 mm or less	H: M6 or less
	ø20: H: M8 or more, X: 26.5 mm or less	H: M8 or less
	ø25: H: M10 or more, X: 33 mm or less	H: M10 or less
	For ø12: H: M5 or more, X: 20 mm or less	H: M5 or less
XA18	ø16: H: M6 or more, X: 22.5 mm or less	H: M6 or less
	ø20: H: M8 or more, X: 26.5 mm or less	H: M8 or less
	ø25: H: M10 or more, X: 33 mm or less	H: M10 or less