

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) ^(Note)	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)	
		CQSKW Double acting, Double rod (Round rod 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.
- 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)	
		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

Symbol: A1 	Symbol: A2 	Symbol: A6 	Symbol: A7
Symbol: A11 	Symbol: A17 	Symbol: A18 	

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
		øM: 4 mm or more, W: 6 mm or less	øJ: 3 mm or more, W: 6 mm or less
XA2	For ø12	øJ: 4 mm or more, W: 6 mm or less	øJ: 4 mm or more, W: 6 mm or less
	ø16	øJ: 5 mm or more, W: 11 mm or less	øJ: 5 mm or more, W: 11 mm or less
	ø20	øJ: 6 mm or more, W: 13 mm or less	øJ: 6 mm or more, W: 13 mm or less
	ø25	øJ: 6 mm or more, W: 13 mm or less	øJ: 6 mm or more, W: 13 mm or less
		H: M4 or less	H: M4 or less
XA6	For ø12	H: M4 or less	H: M4 or less
	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
		H: M4 or less	H: M4 or less
XA7	For ø12	H: M4 or less	H: M4 or less
	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
		H: M4 or less	H: M4 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
		H: M5 or more, X: 20 mm or less	H: M5 or less
XA17	For ø12	H: M6 or more, X: 22.5 mm or less	H: M6 or less
	ø16	H: M8 or more, X: 26.5 mm or less	H: M8 or less
	ø20	H: M10 or more, X: 33 mm or less	H: M10 or less
	ø25	H: M10 or more, X: 33 mm or less	H: M10 or less
		H: M5 or more, X: 20 mm or less	H: M5 or less
XA18	For ø12	H: M6 or more, X: 22.5 mm or less	H: M6 or less
	ø16	H: M8 or more, X: 26.5 mm or less	H: M8 or less
	ø20	H: M10 or more, X: 33 mm or less	H: M10 or less
	ø25	H: M10 or more, X: 33 mm or less	H: M10 or less
		H: M5 or more, X: 20 mm or less	H: M5 or less