

Guided cylinder Double acting/ Single rod

STS/STL- MSeries

Bore size: ø8/ø12/ø16/ø20/ø25/ø32 ø40/ø50/ø63/ø80/ø100

JIS symbol







Specifications

- F											
Item		STS-M/B STL-M/B									
Bore size mm	ø8	ø12	ø16	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
Actuation		Double acting									
Working fluid		Compressed air									
Max. working pressure MPa		1.0									
Min. working pressure MPa		0.15									
Proof pressure MPa		1.6									
Ambient temperature °C		-10 to 60 (no freezing)									
Port size		M5 Rc1/8 Rc1/4 Rc3/8							3/8		
Stroke tolerance mm		+2.0									
Stroke tolerance min		0									
Working piston speed mm/s				50 to	500					50 to 300	
Cushion					With	rubber cus	shion				
Lubrication					N	lot availabl	е				
Allowable absorbed energy J	0.029	0.056	0.088	0.157	0.157	0.401	0.627	0.980	1.560	2.510	3.92

Stroke

Short Stroke STS

Bore size	Standard Stroke (mm)	Max. Stroke (mm)	Min. Stroke (mm)	Min. stroke with switch (mm)
ø8	10,20,30			
ø12	40,50			
ø16				
ø20				5
ø25	25,50	50		5
ø32			5	With one or two
ø40				switches
ø50				Switches
ø63				
ø80	25,50,75,100	100		
ø100	25,50,75,100	100		

Long Stroke STL

Bore size	Standard Stroke (mm)	Max. Stroke (mm)	Min. Stroke (mm)	Min. stroke with switch (mm)	
ø8	50,75,100			50	
ø12	125,150	200	50	With one or two	
ø16	175,200			switches	
ø20	50,75,100				
ø25	1 ' '			30	
ø32	125,150,175		20		
ø40	200,225,250		30	With one or two	
ø50	275,300,325	400		switches	
ø63	350,375,400				
	75,100,125,150,175			55	
ø80	200,225,250,275,300		- F	With one or two	
	325,350,375,400		55	switches	
ø100	75,100,125,150,175,200	200			

Note: The custom stroke is available in 5 mm increments. However, the total length is the same as that of the next longer standard stroke.

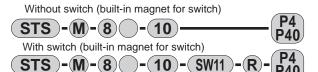
Compatibility table by variation

Applicable bore size		Double acting/ single rod	Double acting/ position locking	Double acting/air cushioned	Double acting/ rubber scraper
	\		Q	С	G
ø8 to 100	P4	•	A	A	A
	P40	•	A	A	A
	P42	A	A	A	

●: Applicable models : Semi-applicable models : Contact CKD for details. : Not applicable

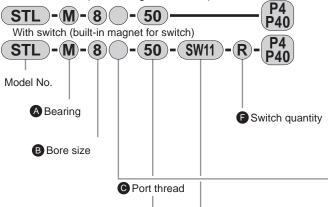
How to order

Short Stroke



Long stroke

Without switch (built-in magnet for switch)



Code	Description
A Beari	ng
M	Metal bush bearing
В	Ball bearing

B Bore	size (mm)						
8	ø8						
12	ø12						
16	ø16						
20	ø20						
25	ø25						
32	ø32						
40	ø40						
50	ø50						
63	ø63						
80	ø80						
100	ø100 (made to order)						
© Port thread							

	NN	NPT thread (ø32 and over) (made to order)								
	GN	G thread (ø32 and over) (made to order)								
_	Stroke (mm)									

Blank

Refer to the Stroke table on the following page.

Rc thread (ø32 to ø100)

M5 (ø8 to ø25)

E Switch model No.

Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.

Blank 1 m (standard)	* Lead wire length						
	rd)	1 m (standard)	Blank				
3 3 m (option)		3 m (option)	3				
5 5 m (option)		5 m (option)	5				

	(=)						
Switch quantity							
R	1 on rod side						
Н	1 on head side						
D	2						
Т	3						

Stroke ■ Custom Stroke Available in 5 mm increments. However, the total length is the same as that of the next longer standard Stroke.

Switch model

For the 2-color display, T1H/V, T8H/V and strong magnetic field proof switches for ø40 and over, insert "L1" with "-" between Items

A and B. For Ø80, Ø100, the 2-color display, T1H/V, T8H/V and AC magnetic field proof switches cannot be retrofitted on a previously purchased standard product. In this case, order the model No. with "L1" inserted between Items (A) and (B)

Example)STS-M-L1-80-50-P4

Precautions for model No. selection

*1: Switches are shipped with the product. Contact CKD if assembling before shipment is necessary.

Stroke

Carias	` '		Applicable bore size										
Series			ø8	ø12	ø16	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
		10											
		20											
		25											
	Standard	30											
STS	Stroke	40											
လ		50											
		75										•	
		100											
	Min. Stroke						5						
	Custom Stroke	*1,*2				In	5 mn	n incr	emer	ıts			
		50											
		75											
		100											
		125											
		150											
		175								•			
	Standard	200					•	•	•	•	•		
١.,	Stroke	225											
STL	Stroke	250											
"		275					•	•	•	•	•		
		300											
		325					•	•	•	•	•	•	
		350					•	•	•	•	•		
		375											
		400					•	•	•	•	•	•	
	Min. Stroke	*1		50				3				5	5
	Custom Stroke	*1, *2				In	5 mn	n incr	emer	its			

- *1: The total dimensions are the same as the longer standard Stroke.
 *2: Special total length for custom Stroke can be provided when a custom Stroke is used. (Made to order)

Related products

Speed controller											
Model No.	Appearance	Port size (Rc or R)				Compatible tube O.D.					Page
		M5	1/8	1/4	3/8	4(ø4)	6(ø6)	8(ø8)	10(ø10)	12(ø12)	
SC3W-M5- *-P4		•				•	•				
SC3W-6- *-P4	O THE		•			•	•	•			530
SC3W-8- *-P4				•			•	•	•		530
SC3W-10- *-P4					•			•	•	•	

Specify the compatible tube O.D. code for * .