Stopper Cylinder

Series RSA

ø50, ø63, ø80

How to Order

RSA **50** — **30** **D** **L** — [ ] — **Z73** [ ]

Bore size

50	50mm
63	63mm
80	80mm

Cylinder stroke

50, 63	30mm
80	40mm

Action

D	Double acting
B	Double acting with spring
T	Single acting, Spring extend

Roller material

L	Resin
M	Rolled steel

Option ∗1

Nil	Without option
D	With lock mechanism
C	With cancel cap

∗ 1 Options can be combined. However, indicate in the order of D C.

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ For the applicable auto switch model, refer to the table below.

Number of auto switches

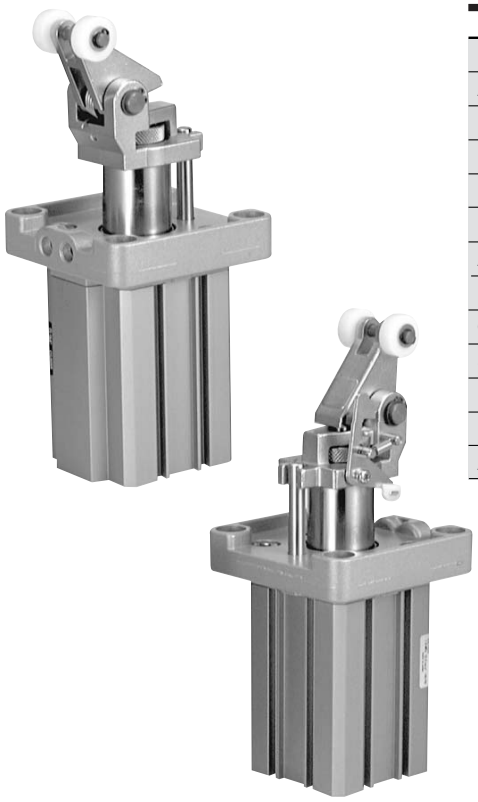
Nil	2 pcs.
S	1 pc.

Applicable Auto Switch/Refer to page 10-20-1 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage			Auto switch model		Lead wire length* (m)			Applicable load	
					DC		AC	Electrical entry direction		0.5 (Nil)	3 (L)	5 (Z)		
								Perpendicular	In-line					
Reed switch	—	Grommet	Yes	3-wire	—	5V	—	—	**Z76**	●	●	—	IC circuit	—
			No	2-wire	24V	12V	100V	—	**Z73**	●	●	●	—	Relay, PLC
						5V, 12V	100V or less	—	**Z80**	●	●	—	IC circuit	
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24V	5V	—	**Y69A**	**Y59A**	●	●	○	IC circuit	Relay, PLC
				3-wire (PNP)		12V		**Y7PV**	**Y7P**	●	●	○		
				2-wire		12V		**Y69B**	**Y59B**	●	●	○	—	
	Diagnostic indication (2 color indication)			3-wire (NPN)		5V		**Y7NWV**	**Y7NW**	●	●	○	IC circuit	
				3-wire (PNP)		12V		**Y7PWV**	**Y7PW**	●	●	○		
				2-wire		12V		**Y7BWV**	**Y7BW**	●	●	○	—	
	Water resistant (2 color indication)							—	**Y7BA**	—	●	○		

∗ Lead wire length symbols: 0.5 m ····· Nil (Example) Y69B
3 m ····· L (Example) Y69BL
5 m ····· Z (Example) Y69BZ

∗∗ Solid state switches marked with a "○" symbol are produced upon receipt of order.
∗∗∗ Types D-A7□, D-A8□, D-F7□ and D-J7□ can be mounted with options.



Specifications

Bore size (mm)	50	63	80
Action	Double acting, Single acting spring extend, Double acting with spring		
Rod end configuration	Lever type with built-in shock absorber		
Fluid	Air		
Proof pressure	1.5MPa		
Maximum operating pressure	1.0MPa		
Ambient and fluid temperature	–10 to 60°C (with no freezing)		
Lubrication	Not required (non-lube)		
Cushion	Rubber bumper		
Stroke length tolerance	$^{+1.4}_{0}$		
Mounting	Flange		
Port size	Rc 1/8	Rc 1/4	Rc 1/4
Auto switch	Mountable		

Operating Range

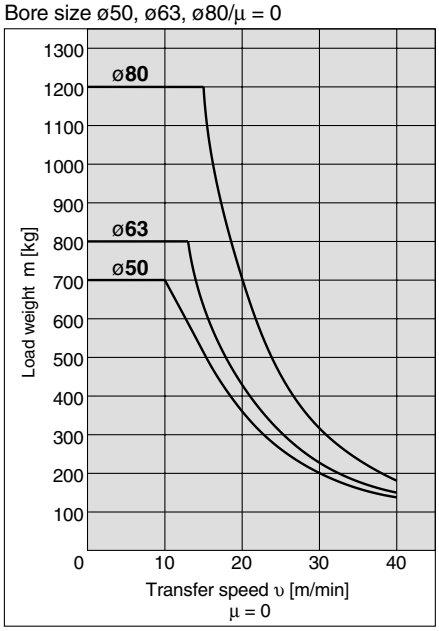
(Example) Load weight 300kg, Transfer speed 20m/min, Coefficient of friction μ = 0.1

(Viewing the graphs)

From Graph (2), find the intersection of load weight 300kg on the vertical axis and transfer speed 20m/min. on the horizontal axis. Select bore size ø63 from within the cylinder operating range.

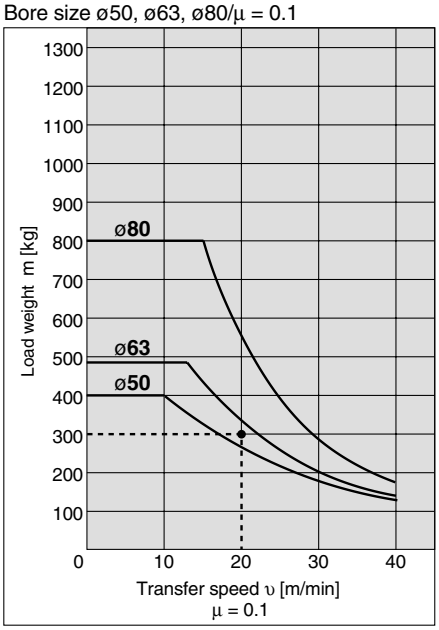
Graph (1)

Bore size ø50, ø63, ø80/μ = 0



Graph (2)

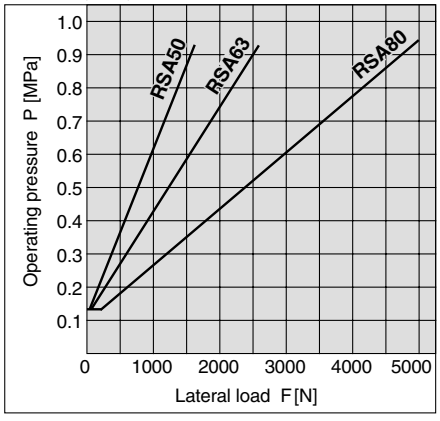
Bore size ø50, ø63, ø80/μ = 0.1



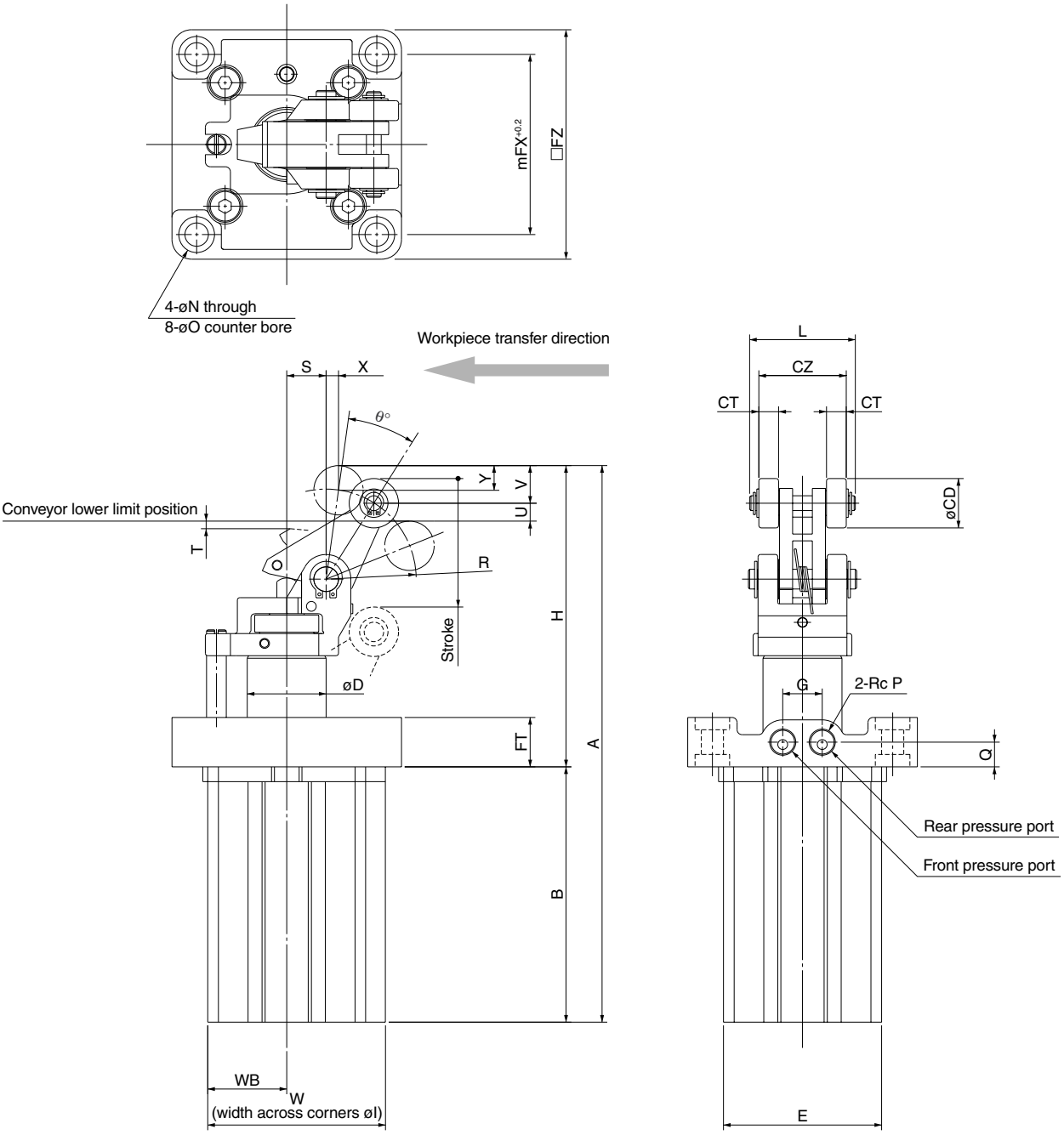
Lateral Load and Operating Pressure

The larger the lateral load, the higher the pressure required to operate the stopper cylinder. Set the operating pressure using the graph below as a guide.

RSA50, 63, 80



Dimensions



(mm)

Bore size (mm)	Stroke	A	B	CD	CT	CZ	D	E	FT	FX	FZ	G	H	I	L	N	O	P	Q	R
50	30	225.5	103.5	20	8	35.5	32	64	20	73	93	16	122	85	44	9	14 depth 5	1/8	10	36
63	30	246	106	20	10	44.5	40	77	25	90	114	24	140	103	53	11	18 depth 6	1/4	12.5	43
80	40	299.5	135	25	10	44.5	50	98	25	110	138	28	164.5	132	54	13	20 depth 6	1/4	12.5	49

Bore size (mm)	S	T	U	V	W	WB	X	Y	θ°
50	16	3.1	7.2	15.5	72	32	5	10	24°
63	18.5	3	8.8	16	87.5	38.5	5	10	24.5°
80	21	3.7	9	19	109	49	5	12.5	24.5°