

Hydro Speed Regulators

The hydro speed regulator is an oil-operated feed speed control unit. The feed speed of the air cylinder is controlled to a desired one. The regulator is available in two different types, to suit the control patterns. Select a type from the spring return type and air return type.

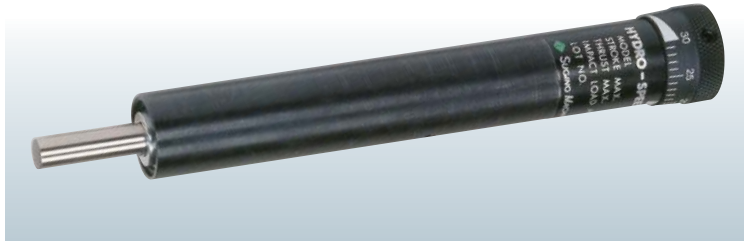
Hydro speed regulator with skip motion model is optimal for machining the piping materials.

RB type Spring return type

In the hydro speed regulator RB type, the piston rod is automatically returned to its original position by the built-in spring when the piston rod is no longer loaded.

Features

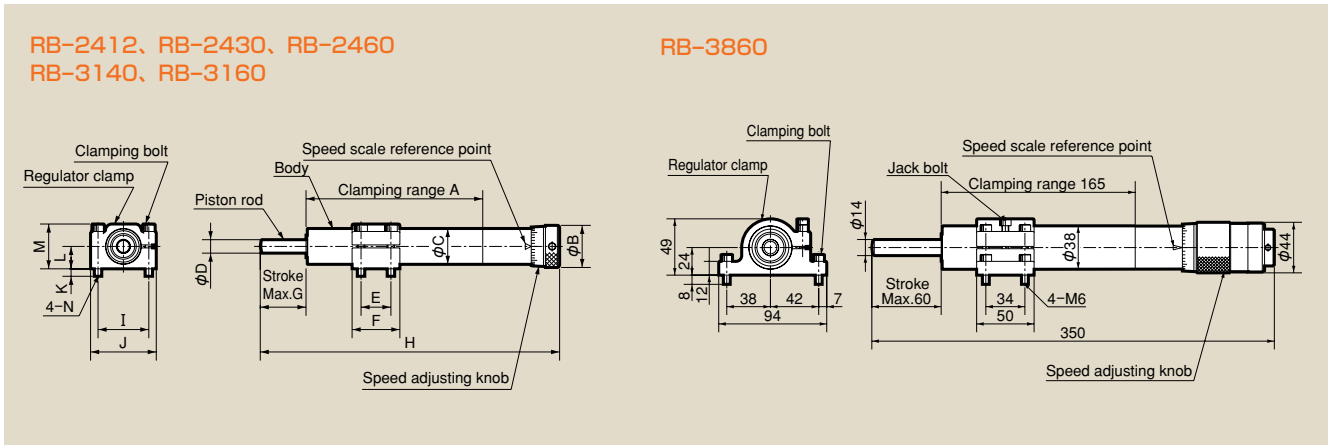
1. Compact and handy size realize free direction of installation.
2. The completely sealed structure eliminates the need for resupplying the unit with operating oil and realizes stable speed control over a long time.
3. Stable feed speed is obtained as variation of the controlled speed is very little against sudden load changes.
4. Feed is controlled with ease by the speed adjusting knob.



Specifications

Model	Max. Stroke	Load Range	Range of Speed Control for Each Thrust	Permissible impact Load	Wgt (Main Body Only)
	mm		N		
RB-2412	12	98~ 490	F= 98N 0.2~20 F= 290N 0.3~30 F= 490N 0.4~35	1.47	0.35
RB-2430	30	200~1,500	F= 200N 0.1~ 5 F= 490N 0.2~25 F= 980N 0.3~40	2.45	0.41
RB-2460	60		F= 1,500N 0.4~50		
RB-3140	40	490~2,900	F= 490N 0.1~10 F= 1,500N 0.2~25 F= 2,200N 0.3~35	3.92	0.95
RB-3160	60		F= 2,900N 0.5~40		
RB-3860	60	2,200~5,400	F= 2,200N 0.2~15 F= 3,700N 0.3~25 F= 5,400N 0.4~30	5.88	1.80

Notes 1. Special models other than those in the above table are also available upon request.
2. The regulator clamp is an optional item.



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
RB-2412	93	28	24	9	20	32	12	160	34	44	5	15	30	M5
RB-2430	115						30	200						
RB-2460	196	36	31	12	24	40	60	311	42	58	7	20	40	M6
RB-3140	150						40	270						
RB-3160	190						60	331						

R-A type

Air return type

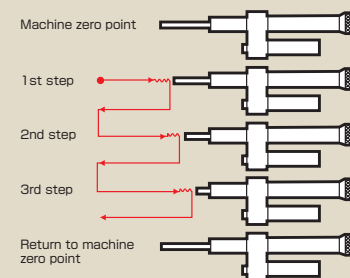
In the hydro speed regulator R-A type, the position of the piston rod is maintained even if it is no longer loaded and the piston rod is returned to its original position by supplying external compressed air. Effective for step feed motion.

Features

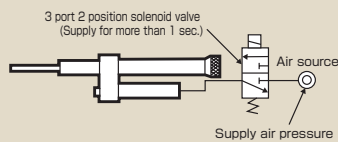
1. With the position of the piston rod maintained along the stroke as desired, efficient step feeding is possible.
2. Some models feature a long stroke for expanded application purposes.



Step Feeding Example



Air Piping Example for Piston Rod Return

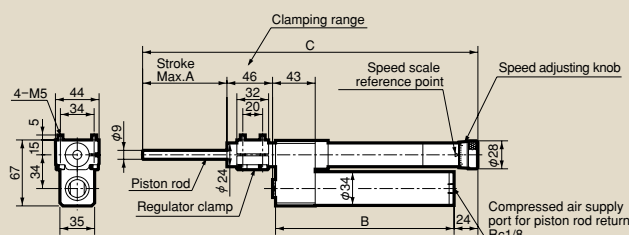


Specifications

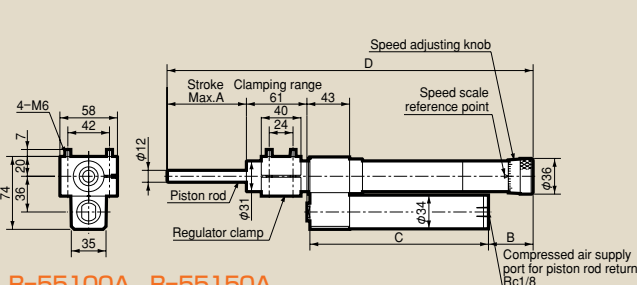
Model	Max. Stroke	Load Range	Range of Speed Control for Each Thrust		Permissible impact Load	Wgt (Main Body Only)
	mm		N	mm/sec		
R-2442A	40	200~1,500	F= 200N	0.3~ 5	2.45	1.3
R-2462A	60		F= 980N	0.5~25		1.4
R-2482A	80		F=1,500N	0.8~30		1.5
R-3182A	80	490~2,900	F= 490N	0.3~12	3.92	2.2
R-31132A	130		F=2,200N	0.5~25		2.8
			F=2,900N	0.8~30		
R-38100AC	100	2,200~5,400	F=2,200N	0.3~15	5.88	4.2
			F=3,700N	0.5~25		
			F=5,400N	0.8~30		
R-55100A	100	3,900~9,800	F=3,900N	0.2~15	9.8	7.3
R-55150A	150		F=9,800N	0.6~35		8.1

Notes 1. A regulator clamp is provided as a standard part with the R-38100AC. The clamp cannot be removed from the mechanism.
2. Special models other than those in the above table upon request.

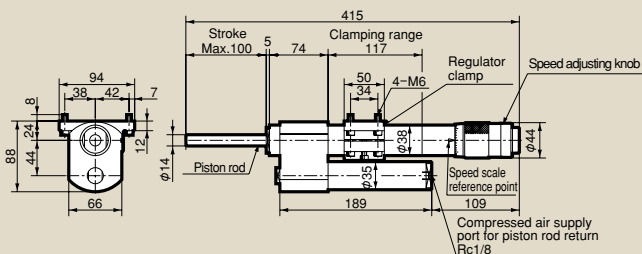
R-2442A, R-2462A, R-2482A



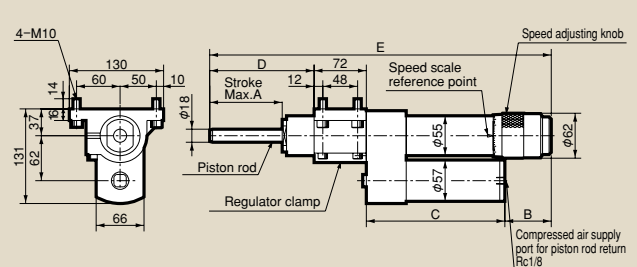
R-3182A, R-31132A



R-38100AC



R-55100A, R-55150A



Model	A	B	C
R-2442A	40	127	240
R-2462A	60		260
R-2482A	80	180	333

Model	A	B	C	D
R-3182A	80	39	180	363
R-31132A	130	34	255	483

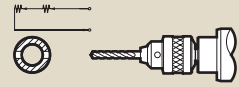
Model	A	B	C	D	E
R-55100A	100	64	191	148	476
R-55150A	150	81	216	198	568

RB-SK type, R-ASK type
Skip Motion type

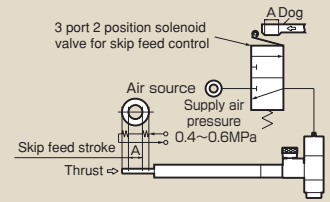
Hydro Speed Regulator, RB-SK type and R-ASK can change the controlling speed high from to low as well as low to high by air signal.



Example of feed controlling



Example of air pipe configuration for skip feed control

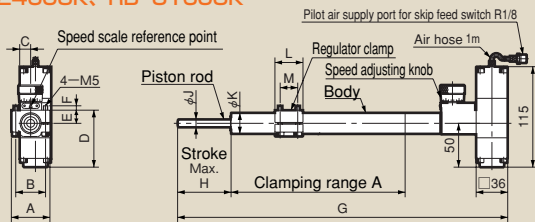


Specifications

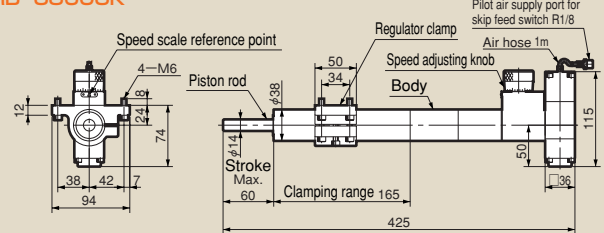
Model	Piston rod return type	Max. Stroke mm	Skip feed stroke	Load Range		Permissible impact Load J	Wgt (Main Body Only) kg				
				N	mm/sec						
RB-2460SK	Spring return type	60	Range:0 or 10mm more within Max. stroke range	200~1,500	F= 200N 0.3~ 5 F= 490N 0.3~25 F= 980N 0.5~40 F=1,500N 0.8~50	2.45	1.2				
RB-3160SK					F= 490N 0.3~10 F=1,500N 0.3~25 F=2,200N 0.5~35 F=2,900N 0.8~40			3.92	1.8		
RB-3860SK					F=2,200N 0.3~15 F=3,700N 0.5~25 F=5,400N 0.8~30					5.88	2.6
R-2462ASK	Air return type	60	Range:0 or 10mm more within Max. stroke range	200~1,500	F= 200N 0.3~ 5 F= 980N 0.5~25 F=1,500N 0.8~30	2.45	1.9				
R-3182ASK					80			490~2,900	F= 490N 0.3~12 F=2,200N 0.5~25 F=2,900N 0.8~30	3.92	2.5
R-38100ASKC									100		

Note: 1. The speed at the high speed feed (skip feed) varies to the thrust. The speed is corresponding to the maximum level for each thrust shown in the above table.
2. A regulator clamp is provided as a standard part with the R-38100ASKC. The clamp cannot be removed from the mechanism.

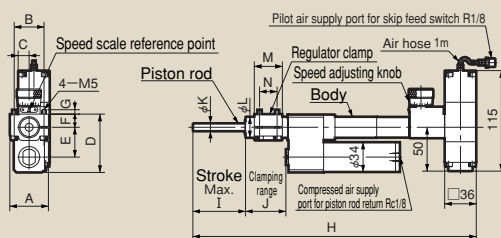
RB-2460SK, RB-3160SK



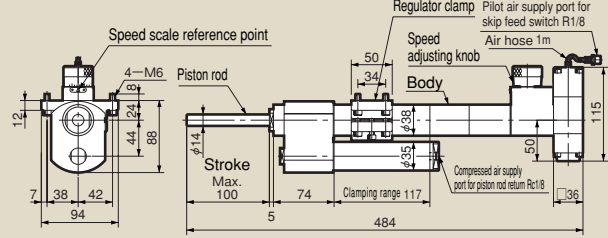
RB-3860SK



R-2462ASK, R-3182ASK



R-38100ASKC



Model	A	B	C	D	E	F	G	H	I	J	K	L	M
RB-2460SK	44	34	12.5	65	15	5	377	60	196	9	24	32	20
RB-3160SK	58	42	0	70	20	7	398	60	190	12	31	40	24

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
R-2462ASK	44	34	12.5	67	34	15	5	323	60	46	9	24	32	20
R-3182ASK	58	42	0	74	36	20	7	424	80	61	12	31	40	24