



HİDROÇEK ÜNİTELER

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SEMAK[®]MATIC
PNEUMATIC EQUIPMENTS

HYDRAULIC SPEED CONTROLLERS



HYDRAULIC SPEED CONTROLLER

Closed hydraulic circuit without it's own power source .
Tie rod construction with " in – parallel " compensation tank .
It consists in a cylinder filled with oil , rod with it's own piston , setting valve and compansation tank filled with hydraulic oil

Adjustable speed , (depends upon the temperature of the oil)

without valve min. 70 mm / min. and max. 10.000 mm / min.
With valve min. 0 mm / min. and max. 6.000 mm. / min.

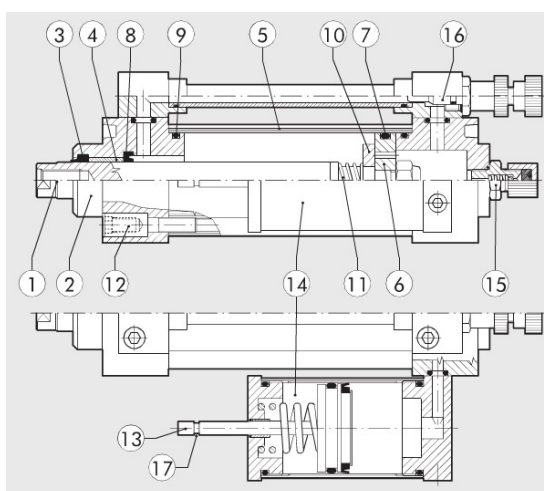
Functioning ,

When the rod of the speed controller , coupled with an external moving organ (ex. iso 15552 cylinder) , the piston moves closing a one – way valve .
The oil is forced through the tansfer pipe towards the regulation valve where encounters an external adjustable restriction , to determine the speed .

When the oil flows in to the other chamber sperated by the piston , douring return the oneway valve opens and oil passes freely to enable a quick return. The in – parallel tank compensates for rod movements and min. blow – by .
The dip – stick indicates the oil level .

IMPORTANT FUTURES

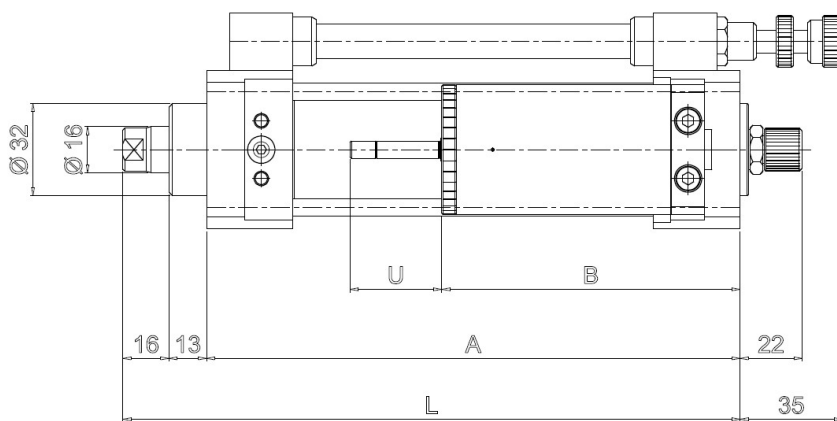
- * There are 11 different type of hydraulic speed controller in the SEMAKMATIC product range
- * Standart product dia is 40 mm.
- * Min. stroke is 50 mm
- * Max. stroke is 400 mm
- * Oil level shuld be controlled periodically
- * For perfect result no bending of the rod permitted
- * ISO 15552 serie actuators recomended
- * Depending upon the temperature of the oil speed control can be slightly variable .
- * Suitable diameters of the actuator is 32 / 40 / 50 / 63 / 80 / 100 mm
- * Min. / Max. working pressure of the SKIP & STOP valve is 4 / 8 bar



1. PISTON ROD
2. HEADS
3. PISTON GASKET
4. GUIDE BUSHING
5. BODY
6. PISTON
7. PISTON GASKETS
8. OIL SEALS
9. O – RINGS
10. PLASTIC DISK
11. SPRING
12. TIE ROD SCREW
13. OIL LEVEL INDICATOR
14. OIL EXPANTION TANK
15. OIL FILLING VALVE
16. FLOW REGULATOR NEEDLE
17. MINIMUM OIL LEVEL INDICATOR

Fluid	: Hydraulic oil
	Recomended oil is brake oil
Actuating product	: ISO 15552 serie ACTUATORS
Temperature range	: - 10 ° C / + 50 ° C
Version	: Thrust / Traction speed adjusted , skip valve and/or stop valve integrated
Materials	
Heads	: Painted die cast aluminium
Barrel	: Round anodized aluminium
Seals	: NBR
Bush	: Sintered Bronze
Piston Rod	: C45 Chromed steel
Screws and tie rods	: Steel
Max adjustable force (N.)	: With valves 5 kN.
	Without valves 6 kN.
Standart strokes	: 50 – 100 – 150 – 200 – 250 – 300 – 350 – 400 mm

THRUST ADJUSTED SERIE (with parallel tank)

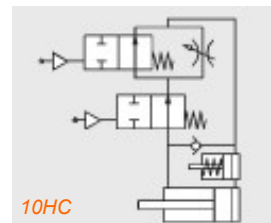
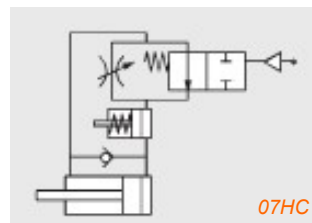
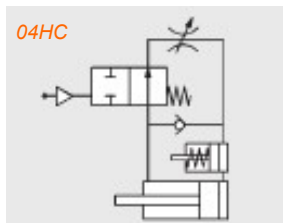
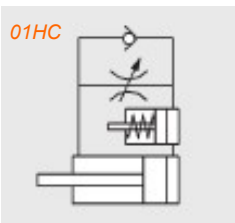


STROKES	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm	350 mm	400 mm
A	136	186	236	286	336	386	436	486
B	105	105	125	125	150	150	170	170
L	165	215	265	315	365	415	465	515
U	32	32	47	47	67	67	86	86

ORDERING CODES

Thrust adjusted : SMS040 . . . 0001HC
 Thrust adjusted + stop valve : SMS040 . . . 0004HC
 Thrust adjusted + skip valve : SMS040 . . . 0007HC
 Thrust adjusted + stop valve + skip valve : SMS040 . . . 0010HC

* Dia 40 mm is standard
 * Standart strokes are
 050 mm , 100 mm , 150 mm , 200 mm
 250 mm , 300 mm , 350 mm , 400 mm



Sample : SMS040 / 150 / 0007HC

Dia. 40 mm / Stroke 150 mm / Thrust speed controlled
 With skip valve

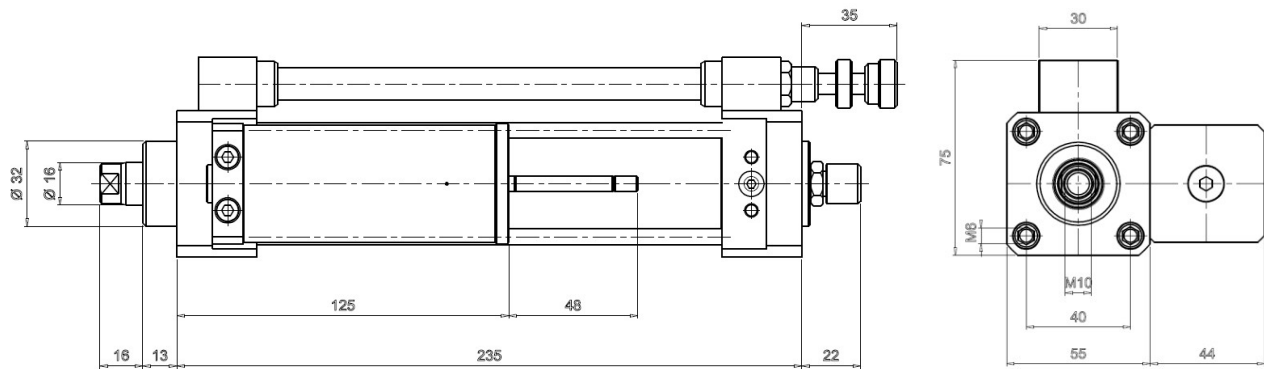


Sample : SMS040 / 400 / 0004HC

Dia. 40 mm / Stroke 400 mm / Thrust speed controlled
 With stop valve

SPEED CONTROLLER *Traction adjusted*

TRACTION ADJUSTED SERIE (with parallel tank)

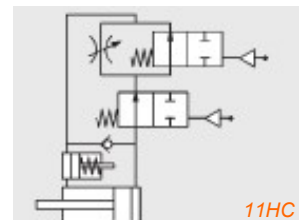
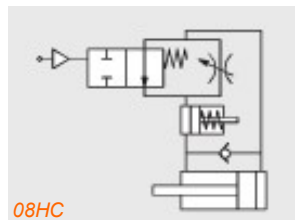
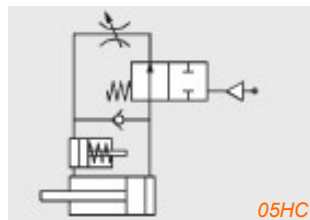
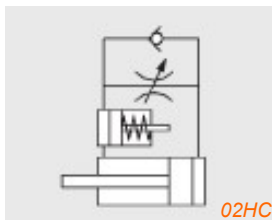


STROKES	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm	350 mm	400 mm
A	136	186	236	286	336	386	436	486
B	105	105	125	125	150	150	170	170
L	165	215	265	315	365	415	465	515
U	32	32	47	47	67	67	86	86

ORDERING CODES

Traction adjusted : SMS040 . . . 0002HC
 Traction adjusted + stop valve : SMS040 . . . 0005HC
 Traction adjusted + skip valve : SMS040 . . . 0008HC
 Traction adjusted + stop valve + skip valve : SMS040 . . . 0011HC

* Dia 40 mm is standard
 * Standart strokes are
 050 mm , 100 mm , 150 mm , 200 mm
 250 mm , 300 mm , 350 mm , 400 mm



Sample : SMS040 / 150 / 0002HC

Dia. 40 mm / Stroke 150 mm / Traction speed controlled

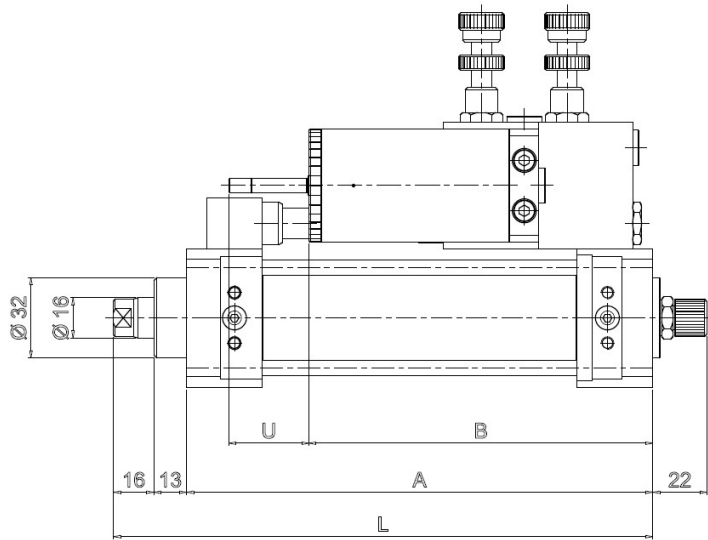


Sample : SMS040 / 050 / 0008HC

Dia. 40 mm / Stroke 50 mm / Traction speed controlled
With skip valve

Thrust & Traction adjusted SPEED CONTROLLER

Thrust & Traction adjusted serie (with parallel tank)



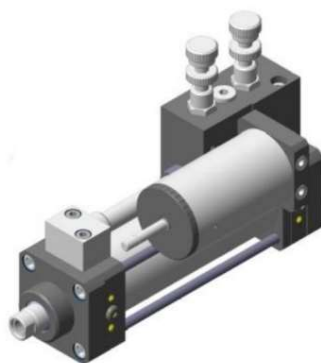
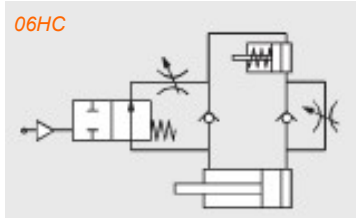
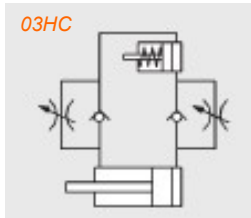
STROKES	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm	350 mm	400 mm
A	136	186	236	286	336	386	436	486
B	138	138	158	158	183	183	203	203
L	165	215	265	315	365	415	465	515
U	32	32	47	47	67	67	86	86

ORDERING CODES

Thrust & Traction adjusted : SMS040 . . . 0003HC
 Thrust & Traction adjusted + stop valve : SMS040 . . . 0006HC
 Thrust & Traction adjusted + skip valve : SMS040 . . . 0009HC

* Dia 40 mm is standard

* Standart strokes are
 050 mm , 100 mm , 150 mm , 200 mm
 250 mm , 300 mm , 350 mm , 400 mm

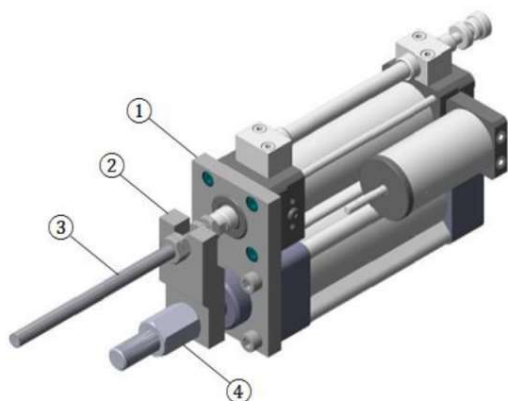


Sample : SMS040 / 100 / 0003HC

Dia. 40 mm / Stroke 100 mm / Thrust speed controlled
 Traction speed controlled

HYDRAULIC SPEED CONTROLLER

SAMPLE ASSEMBLY with ISO 15552 CYLINDER



stop & skip valve

1. MAIN FLANGE
2. MID FLANGE
3. ROD with screw
4. NIPPLE

ACCESSORIES



Main flange



Mid flange



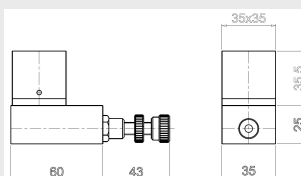
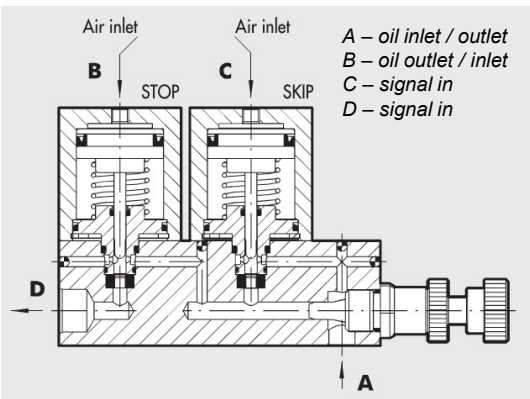
Nipple

Ordering code for MAIN FLANGE
Ordering code for MID FLANGE
Ordering code for NIPPLE

(Ø)
SMS040 . . . 1000HC
SMS040 . . . 2000HC
SMS040 . . . 3000HC

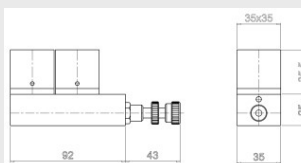
For piston dia. (Ø) 32 mm – 40 mm – 50 mm – 63 mm – 80 mm – 100 mm

SKIP & STOP VALVE (n.c.)



Skip valve (2/2 way N.O)

Without control , the fluid passes freely .
With pneumatic control ,the valve closes
forcing the fluid to pass through the
regulation. They are used when quick
alternating movements are required in a
controlled manner .



Stop valve (2/2 way N.O.)

With a pneumatic control , the valve
stops the oil flow up to the control is
removed . They are used when
immediate and accurate stops are
required .

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