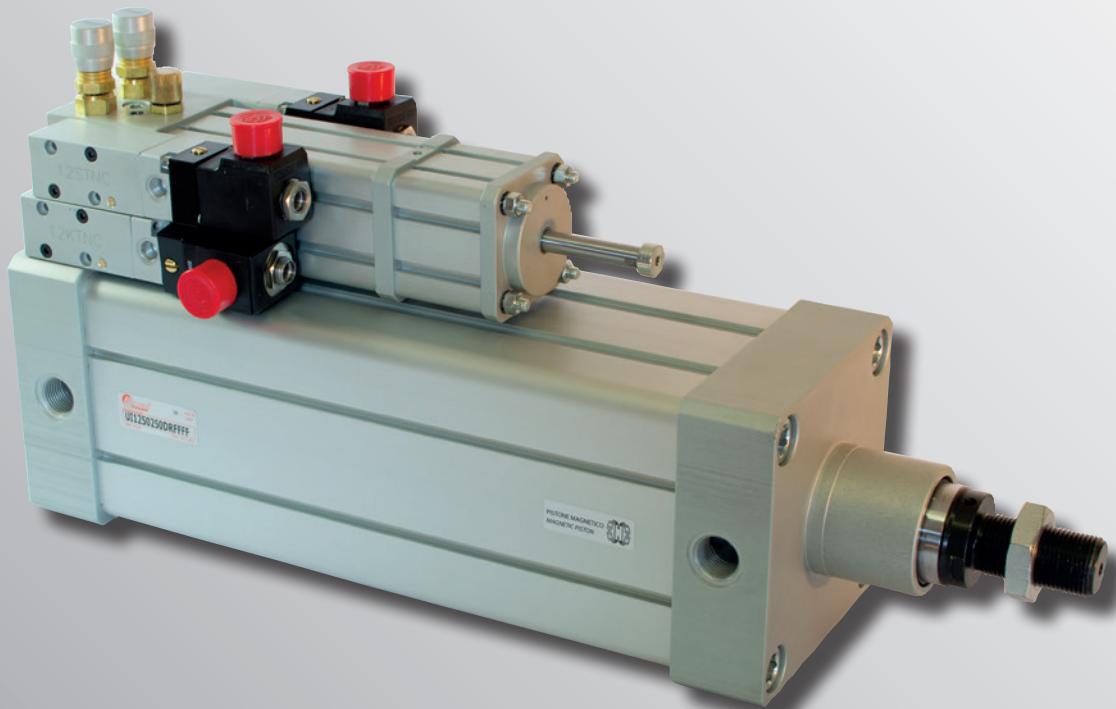


# *UI Series*

Pneumo-hydraulic cylinders

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*Mounting dimensions  
according to ISO 15552*

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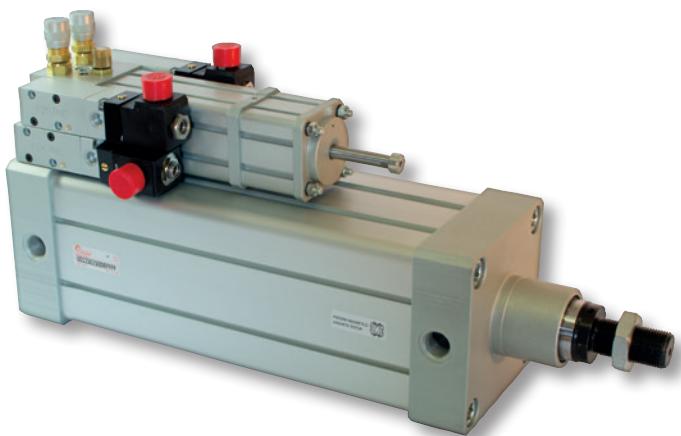


# Pneumo-hydraulic cylinders with mounting dimensions according to ISO 15552 standards

## Series UI

Bores Ø : 50 - 63 - 80 - 100 - 125 mm.

### SERIES UI



Pneumatic cylinder with dimensions according to ISO 15552 standards

Adjustment of the sliding speed and stop of the piston rod

SKIP and STOP valves 2/2 or 2/2 with regulator Solenoid or pneumatic actuated, NC/NÖ

Available the option of level sensor on the oil tank

End stroke hydraulic cushionings

Caps in aluminium alloy neuter anodized

Profiled tube in anodized aluminium, internally gauged

Piston rod in steel E355, grounded and hard chromium plated

Piston in aluminium with magnetic ring

"T" grooves for sensors, on the side

Sensors and mounting accessories

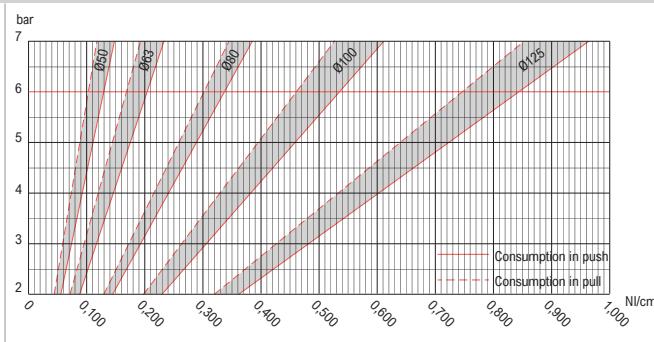
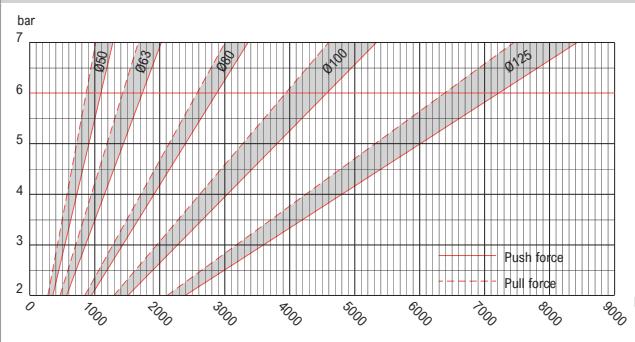
### TECHNICAL FEATURES

<b>Construction</b>	Caps fixed on profiled tube by bolts, hydraulic cushioning integrated
<b>Function</b>	Double acting
<b>Standard materials</b>	Caps in aluminium alloy neuter anodized, piston rod in steel E355 grounded and hard chromium plated, profiled tube in anodized aluminium, internally gauged, piston in aluminium, seals in NBR - PU.
<b>Note about the materials</b>	According to Directive REACH (1907/2006/CE and s.a.s.)
<b>Bores</b>	Ø 50, 63, 80, 100, 125 mm
<b>Standard strokes at stock</b>	100, 150, 200, 250, 300, 400, 500 mm
<b>Standard strokes available on request</b>	50 ÷ 1100 mm
<b>Special strokes</b>	To be agreed with the Commercial Department
<b>Working temperature</b>	0 ÷ 50°C (-10°C with dry air in order to avoid ice formation)
<b>Working pressure</b>	2 ÷ 7 bar
<b>Operating pressure of the valves</b>	Minimum 3,5 bar
<b>Fluid of the pneumatic circuit</b>	Filtered air, without lubrication, according to ISO 8573-1:2010 [7:4:4]
<b>Fluid of the hydraulic circuit</b>	Hydraulic oil ISO 46
<b>Speed</b>	See the theoretical diagram of the speeds (page 2.1.05.5)

### TECHNICAL DATA

Bore Ø (mm)	50	63	80	100	125
Ports	1/4"	3/8"	3/8"	1/2"	1/2"
Piston rod Ø (mm)	25	30	30	40	45
Thread of the piston rod	M16 x 1,5	M16 x 1,5	M20 x 1,5	M20 x 1,5	M27 x 2
Theoretical push force at 6 bar (N)	1110	1750	2895	4592	7242
Theoretical pull force at 6 bar (N)	884	1446	2592	3958	6409
Air consumption at 6 bar in push (NI/cm)	0,130	0,204	0,338	0,536	0,845
Air consumption at 6 bar in pull (NI/cm)	0,103	0,169	0,302	0,462	0,748
Theoretical speed at 6 bar in push (mm/sec)	530	560	650	250	220
Theoretical speed at 6 bar in pull (mm/sec)	160	170	215	150	175

### THEORETICAL DIAGRAM OF THE FORCES AND OF THE AIR CONSUMPTIONS



## PNEUMO-HYDRAULIC UNITS SERIES UI

## The widest range of pneumo-hydraulic units on the market

With the new series UI of pneumo-hydraulic units **BONESI PNEUMATIK** enlarges its range of hydraulic control units, developed and completely produced at its Italian headquarters, for the applications where an accurate handling of the working stroke is required.

The design features of such new series represent the summary of two applied techniques:

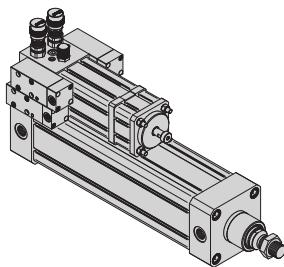
- The compressed air as driving power;
- The hydraulic system as control fluid.

The system offers several functions on the working strokes:

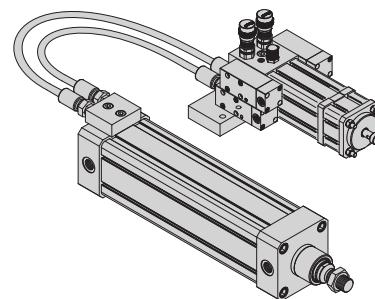
- Governed and steady speeds with changing workloads and inlet air pressure;
- Gradual end-stroke hydraulic cushionings to dissipate the dynamic mass energy;
- Functions of quick stroke (SKIP), regulated stroke and STOP on the forward and return strokes, manageable using electric or pneumatic impulses

**UI version**

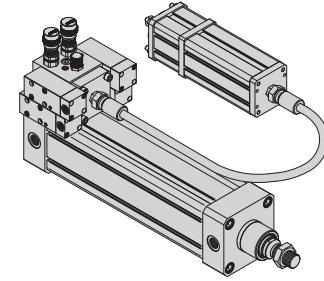
Pneumatic cylinder with coaxial hydraulic control  
Standard, magnetic, manifold group and tank mounted  
on the rear cap

**UT version**

Pneumatic cylinder with coaxial hydraulic control  
Standard, magnetic, manifold group and tank remote

**UB version**

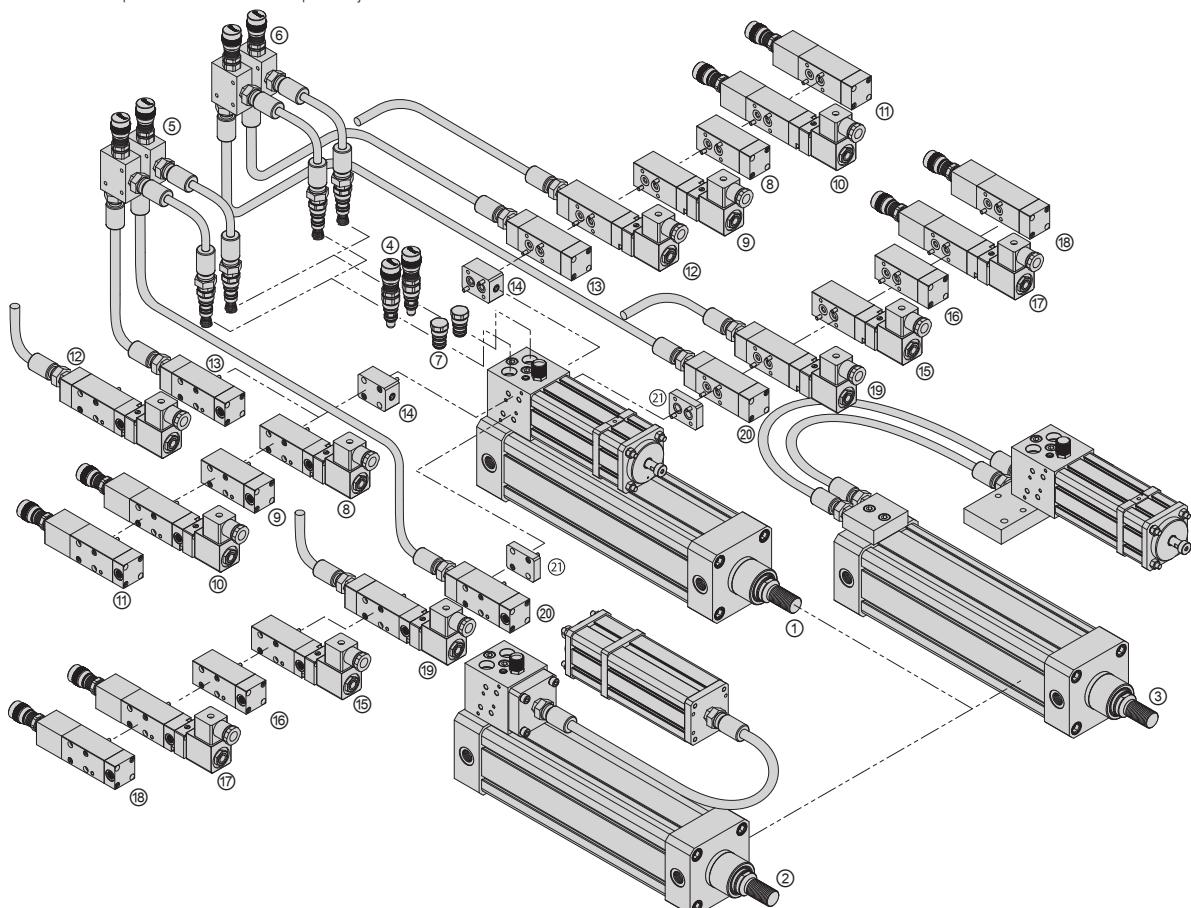
Pneumatic cylinder with coaxial hydraulic control  
Standard, magnetic, manifold group mounted on the  
rear cap, tank remote

**POS DESCRIPTION**

- ① Units series UI
- ② Units series UT
- ③ Units series UB
- ④ Speed regulator
- ⑤ Speed regulator remoted on STOP valve
- ⑥ Speed regulator remoted on SKIP valve
- ⑦ Without speed regulators
- ⑧ STOP valve solenoid actuated
- ⑨ STOP valve pneumatic actuated
- ⑩ DOUBLE SKIP valve solenoid actuated with speed adjustment
- ⑪ DOUBLE SKIP valve pneumatic actuated with speed adjustment

**POS DESCRIPTION**

- ⑫ DOUBLE SKIP valve solenoid actuated with remoted speed adjustment
- ⑬ DOUBLE SKIP valve pneumatic actuated with remoted speed adjustment
- ⑭ Without STOP valves
- ⑮ SKIP valve solenoid actuated
- ⑯ SKIP valve pneumatic actuated
- ⑰ SKIP valve solenoid actuated with speed adjustment
- ⑱ SKIP valve pneumatic actuated with speed adjustment
- ⑲ SKIP valve solenoid actuated with remoted speed adjustment
- ⑳ SKIP valve pneumatic actuated with remoted speed adjustment
- ㉑ Without SKIP valves



## PRINCIPLES OF OPERATION OF THE SKIP AND STOP CONTROL VALVES

### Wide possibility of configurations as standard

The new pneumo-hydraulic units series UI, proposed by **BONESI PNEUMATIK**, have a wide range of SKIP and STOP control valves that allow to customize the functions of the unit and to regulate the speed and the position of the piston rod during all the working stroke.

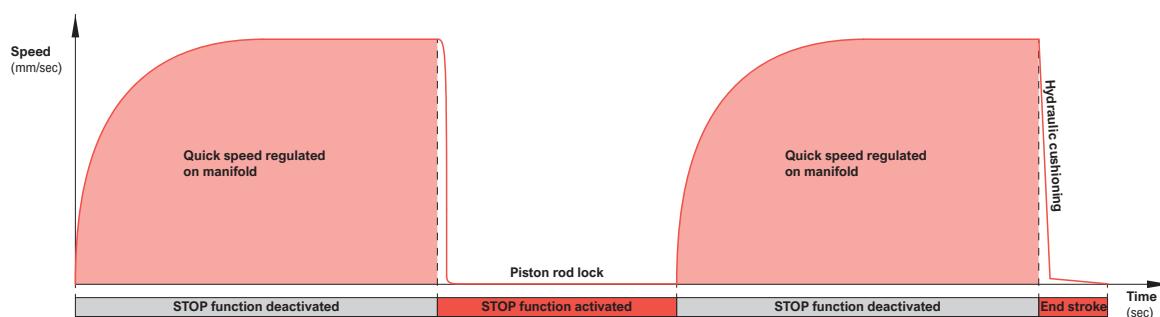
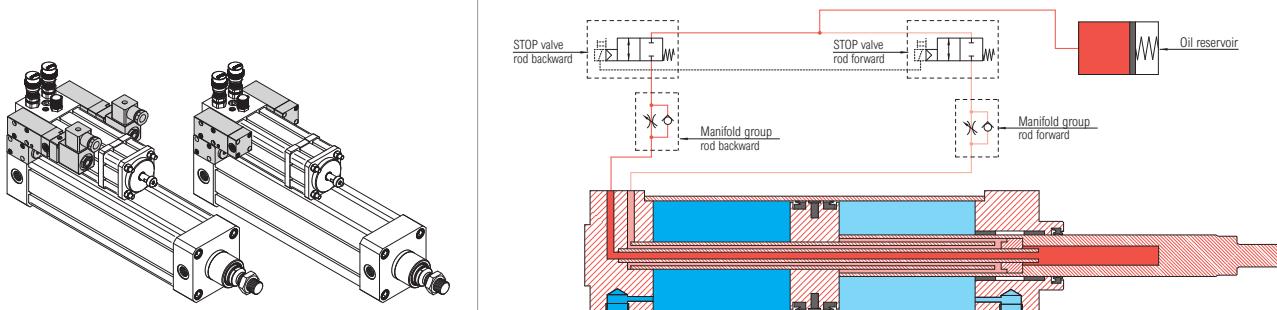
Thanks to an accurate technical design the functions of the pneumo-hydraulic unit can be customized by the customer placing the order and the consequent combining in the mounting of the SKIP and STOP control valves and of the speed regulators.

This allows an higher flexibility in the configurations, customizing the needs, still using components of standard production.

Here following some of the most common functions proposed by **BONESI PNEUMATIK**. For different needs, please, contact our technical-commercial staff.

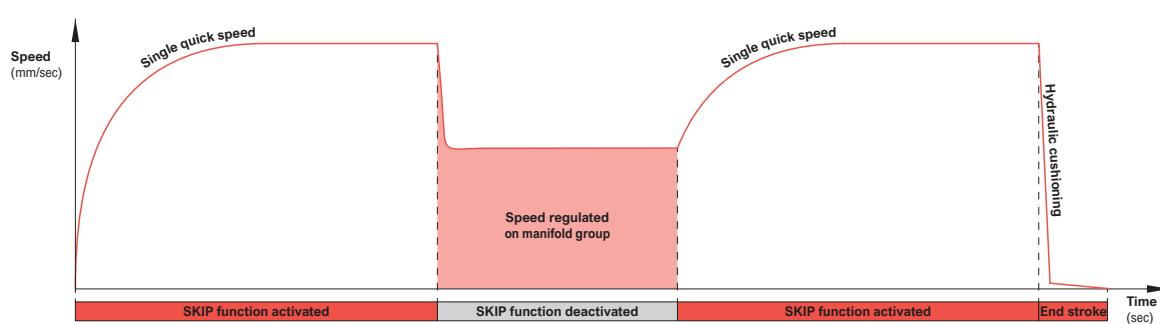
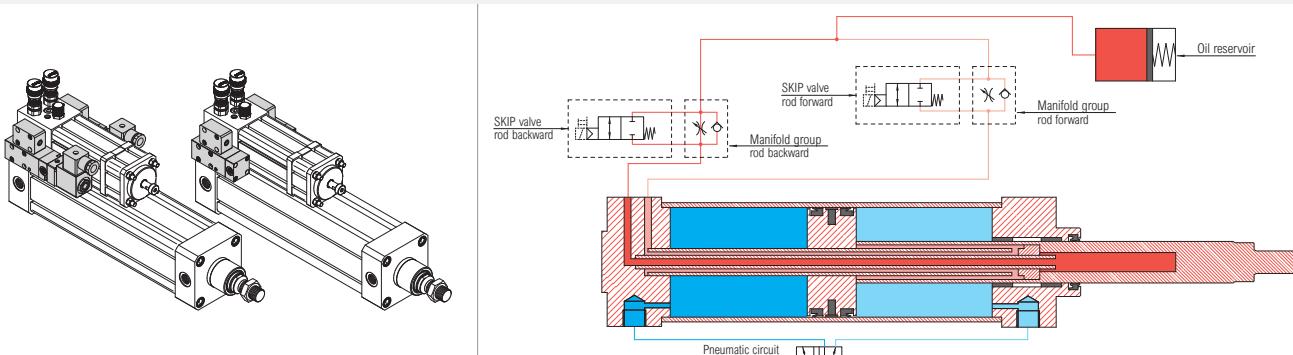
#### UNIT WITH STOP FUNCTION VALVES

Hydraulic speed regulation separated in forward and return strokes. STOP function. Solenoid or pneumatic actuators.



#### UNIT WITH STOP FUNCTION VALVES

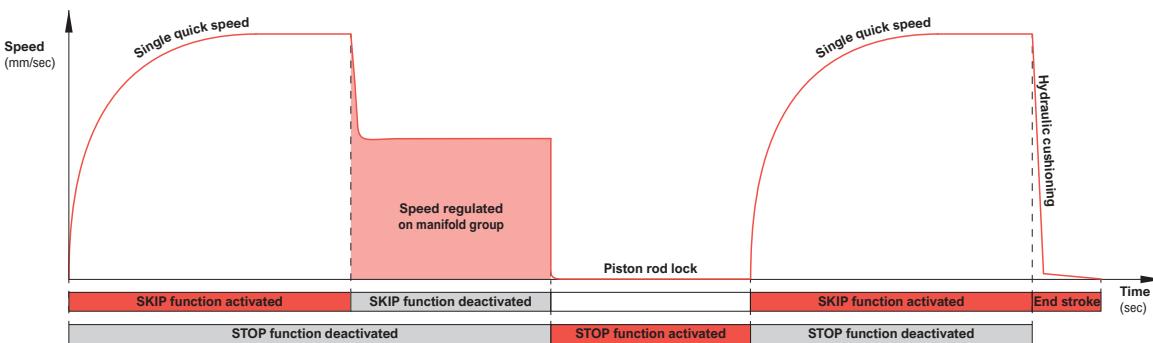
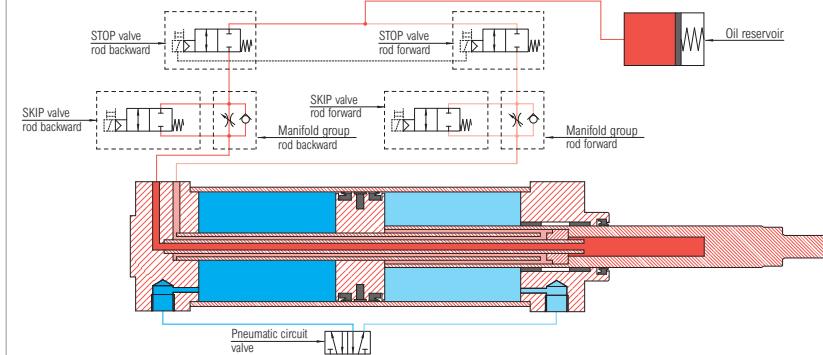
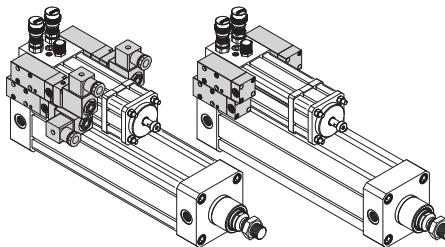
Quick speed in forward and return strokes. SKIP function with hydraulic regulation of the speed separated in forward and return strokes. Solenoid or pneumatic actuators.



## PRINCIPLES OF OPERATION OF THE SKIP AND STOP CONTROL VALVES

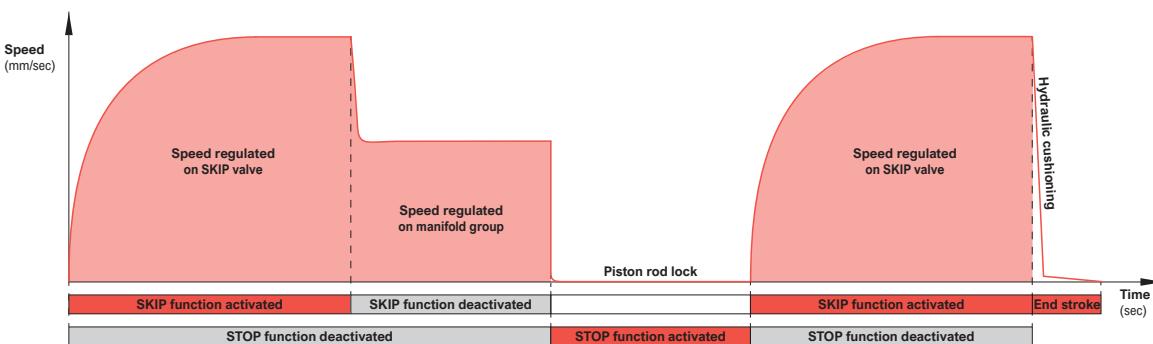
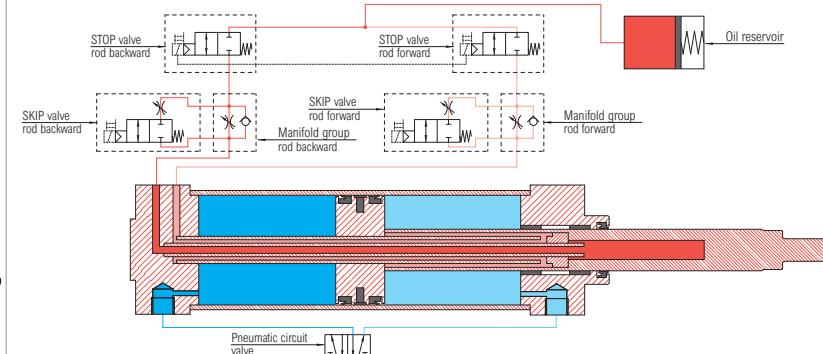
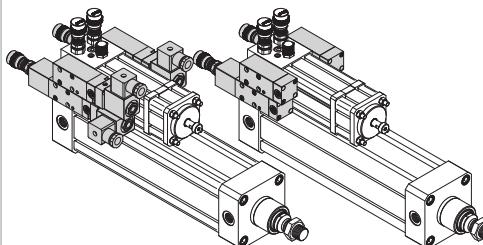
## UNIT WITH SKIP AND STOP FUNCTION VALVES

Quick speed in forward and return strokes. SKIP function with hydraulic regulation of the speed separated in forward and return strokes. STOP function. Solenoid or pneumatic actuators.



## UNIT WITH ADJUSTABLE SKIP AND STOP FUNCTION VALVES

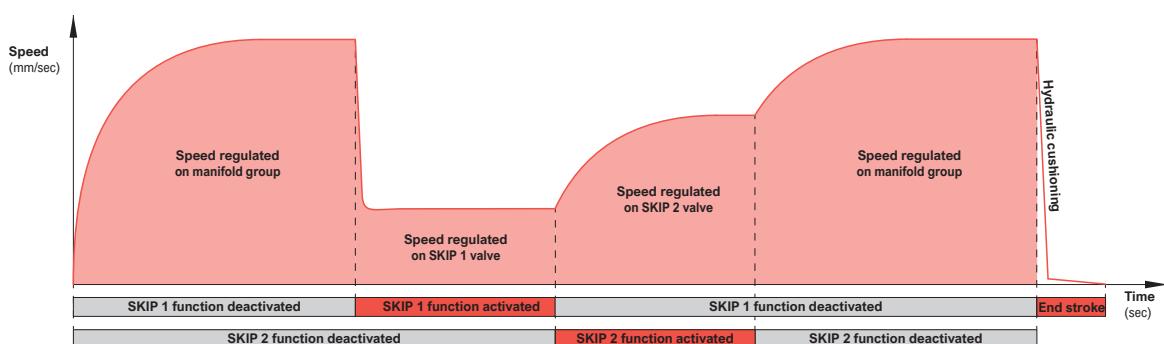
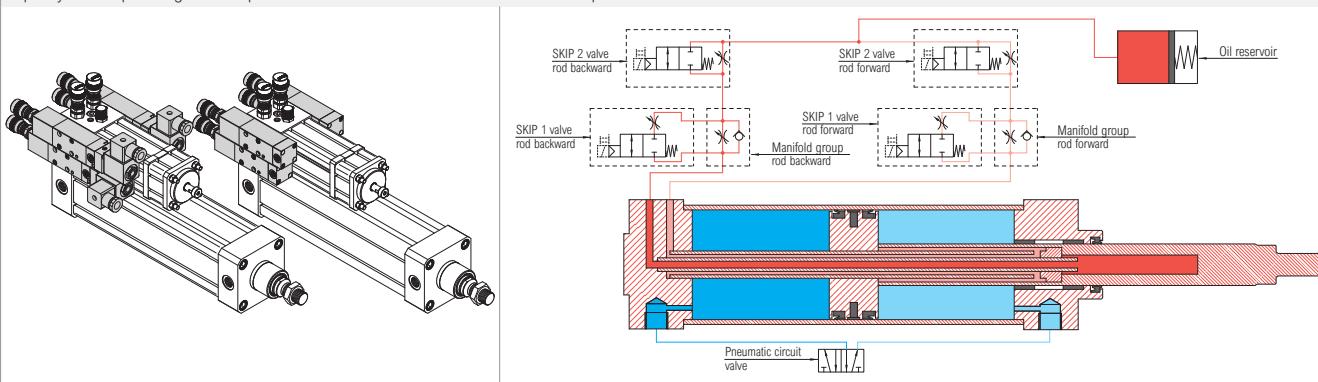
Double hydraulic speed regulation separated in forward and return strokes. STOP function. Solenoid or pneumatic actuators.



## PRINCIPLES OF OPERATION OF THE SKIP AND STOP CONTROL VALVES

### UNIT WITH DOUBLE ADJUSTABLE SKIP FUNCTION VALVES

Triple hydraulic speed regulation separated in forward and return strokes. Solenoid or pneumatic actuators.



## SPEED AND PRECISION OF POSITIONING

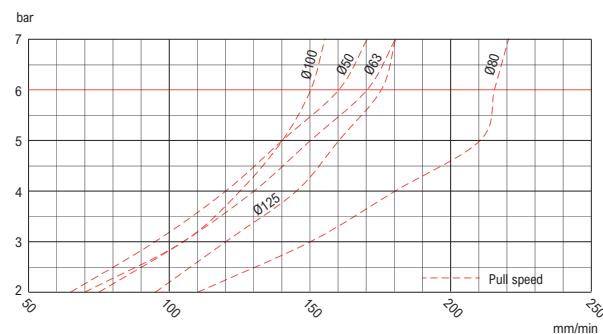
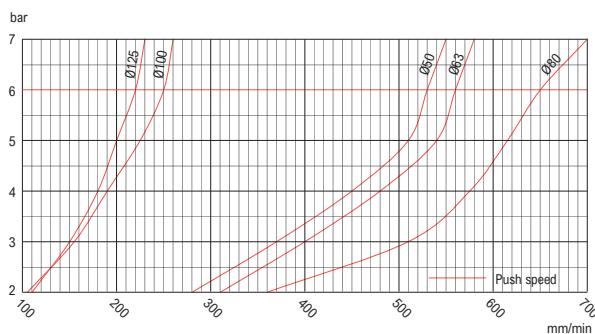
The average figures mentioned on the following diagrams give indications about the speed and stop stroke in function of the bore and the inlet pressure of the unit, at the ambient temperature of 20°C, with pneumatic inlet valves with nominal flow capacity equal to the connection on the caps of the unit.

Different ambient working conditions or particular pneumatic circuitings can produce values different from those mentioned on the diagrams.

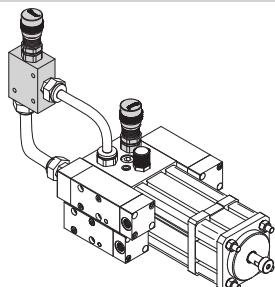
It is suggested to use the STOP valve with a SKIP valve in order to reduce the speed near the stop position.  
This guarantees a constant stop position equal to  $\pm 0,3$  mm with SKIP valve setted to 10 mm/sec.

Our technical staff is available for further explanations or to develop solutions more useful to the customer.

### THEORETICAL DIAGRAM OF THE SPEEDS



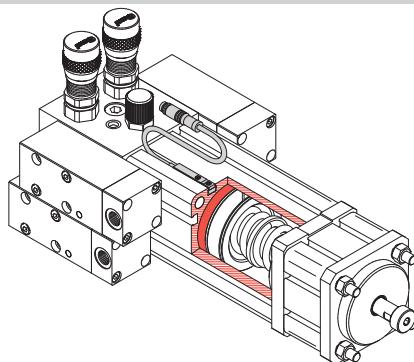
### REGULATION OF THE SPEED STANDARD AND PRECISE



The pneumatic-hydraulic **UI** units are equipped with hydraulicspeed regulators on the manifold group or remoted to allow the regulation on panel or in case the pneumatic-hydraulic unit is located in difficult position.

Both types can be supplied with on higher regulation precision without changing the dimension of the regulator.

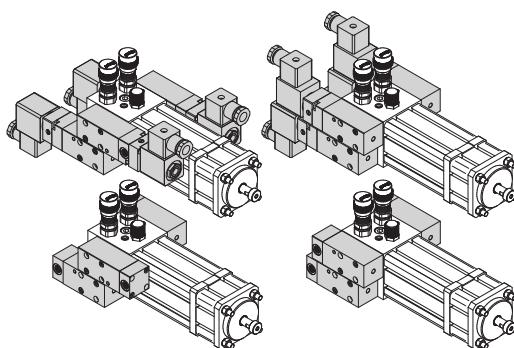
## OPTIONS



## Control of oil level

All the **UI** pneumo-hydraulic units are equipped, as standard, of a level indicator at the end side of the tank that allows the quick control of the quantity of the oil in the tank.

The new **UI** pneumo-hydraulic units give the possibility to mount a magnetic ring on the piston located inside the tank and by a sensor to send an electrical impulse to a controller of the oil level in the unit.



## Customization in mounting the control valves

Advantage of the new **UI** series of pneumo-hydraulic units of **BONESI PNEUMATIK** is the possibility to customize the mounting of the SKIP and STOP valves, located on the side of the manifold group, in order to help the needs of the customer.

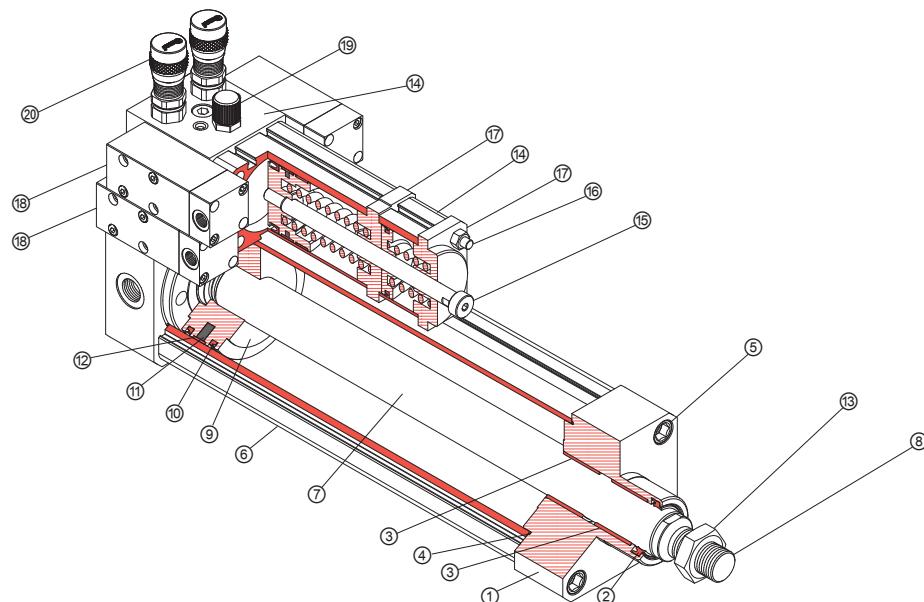
Unless different instructions placing the order the control and the regulation valves will be assembled reducing the dimension of the unit.

On the contrary : in agreement with the Commercial Department placing the order it is possible to specify a different assembling.

(On the side : some examples of assembling)

## STANDARD MATERIALS

POS	DESCRIPTION	MATERIAL	POS	DESCRIPTION	MATERIAL
①	Caps	Aluminium alloy neuter anodized	⑫	Guide slidingig	Carbographite
②	Piston rod seal	Nitril rubber (NBR)	⑬	Piston rod nut	Zinc plated steel
③	Guide bushing	Steel + PTFE	⑭	Manifold group	Aluminium alloy neuter anodized
④	Cap seal	Nitril rubber (NBR)	⑮	Tank rod	C45 steel chromium plated 20 µm
⑤	Cap fixing bolt	Zinc plated steel	⑯	Tank nuts and tie-rods	Zinc plated steel
⑥	Actuator profiled tube	Extruded aluminium EN AW-6060 T6, gauged and anodized	⑰	Tank caps	Aluminium alloy neuter anodized
⑦	Piston rod	Chromium plated steel E355	⑱	SKIP and STOP valves	Aluminium alloy neuter anodized
⑧	End part of the piston rod	Manganese phosphatized steel	⑲	Plug	Brass EN 12164
⑨	Piston	Aluminium alloy	⑳	Regulation group	Brass EN 12164 + Aluminium alloy neuter anodized
⑩	Piston seal	Poliurethane (PU)	㉑	Magnet for control oil level	Plastoferrite
㉒	Magnet	Plastoferrite	㉓	Spring	Spring steel





## ORDERING CODE

(Example of code)

UI	050	0100	D	R	C	C	N	N			
----	-----	------	---	---	---	---	---	---	--	--	--

**SERIES**

UI = Manifold group and tank mounted on the rear cap

UT = Manifold group and tank remoted \*

UB = Manifold group mounted on the rear cap, tank remoted \*

**BORE**

050 = Ø 50 mm

063 = Ø 63 mm

080 = Ø 80 mm

100 = Ø 100 mm

125 = Ø 125 mm

**PISTON ROD STROKE**

See table "Standard strokes"; other strokes on request

**FUNCTION**

D = Double acting cylinder with double cushioning

U = Double acting cylinder with cushioning only on piston rod in forward

R = Double acting cylinder with cushioning only on piston rod in return

N = Double acting cylinder without cushionings

**SPEED REGULATION**

R = Double hydraulic regulation (on manifold group)

S = Single hydraulic regulation, in forward (on manifold group)

T = Single hydraulic regulation, in return (on manifold group)

F = Double precise hydraulic regulation (on manifold group)

G = Single precise hydraulic regulation in forward (on manifold group)

H = Single precise hydraulic regulation in return (on manifold group)

A = Double hydraulic regulation (remoted) \*\*

B = Single hydraulic regulation, in forward (remoted) \*\*

C = Single hydraulic regulation, in return (remoted) \*\*

I = Double precise hydraulic regulation (remoted) \*\*

L = Single precise hydraulic regulation, in forward (remoted) \*\*

M = Single precise hydraulic regulation, in return (remoted) \*\*

N = Without regulation

**CONTROL VALVES SKIP / STOP**

A = Pneumatic operated valve N.O.

B = Pneumatic operated valve N.C.

C = Solenoid operated valve N.O. 12Vdc

D = Solenoid operated valve N.C. 12Vdc

E = Solenoid operated valve N.O. 24Vdc

F = Solenoid operated valve N.C. 24Vdc

G = Solenoid operated valve N.O. 48Vdc

H = Solenoid operated valve N.C. 48Vdc

I = Solenoid operated valve N.O. 110Vdc

J = Solenoid operated valve N.C. 110Vdc

K = Solenoid operated valve N.O. 24Vac

L = Solenoid operated valve N.C. 24Vac

M = Solenoid operated valve N.O. 48Vac

P = Solenoid operated valve N.C. 48Vac

Q = Solenoid operated valve N.O. 110Vac

R = Solenoid operated valve N.C. 110Vac

S = Solenoid operated valve N.O. 220Vac

T = Solenoid operated valve N.C. 220Vac

N = Without control valve

Electrical features: see page 2.1.05.28

**ACTUATOR PNEUMATIC PORTS**

NULL = Standard (on the left side)

D = Optional (on the right side)

**OPTIONS**

NULL = Standard

P = Customized (to be agreed with the commercial department):

- Oil tank with magnetic piston for mounting the level sensor
- Customized mounting of the control valves

CONTROL VALVE  
STOP - IN FORWARDCONTROL VALVE  
STOP - IN RETURNCONTROL VALVE  
SKIP - IN FORWARDCONTROL VALVE  
SKIP - IN RETURN

\* Standard length of the remote tubings: 500 mm. Different lengths must be specified placing the order.

\*\* Standard length of the remote tubings: 1000 mm. Different lengths must be specified placing the order.

Unless different instructions placing the order : the control and the regulation valves will be assembled reducing the dimension of the unit.

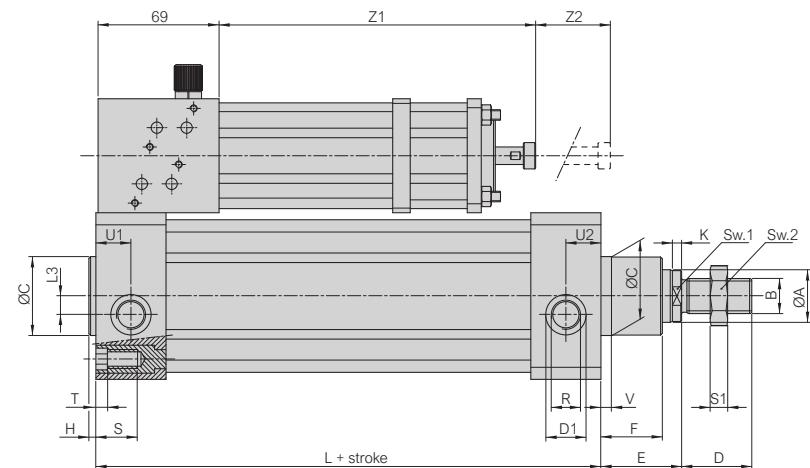
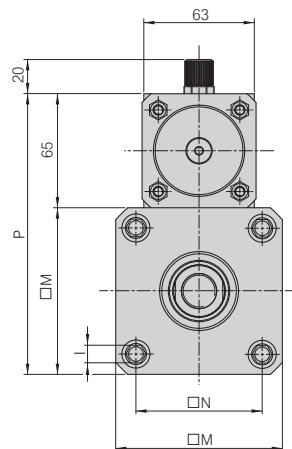


UI...



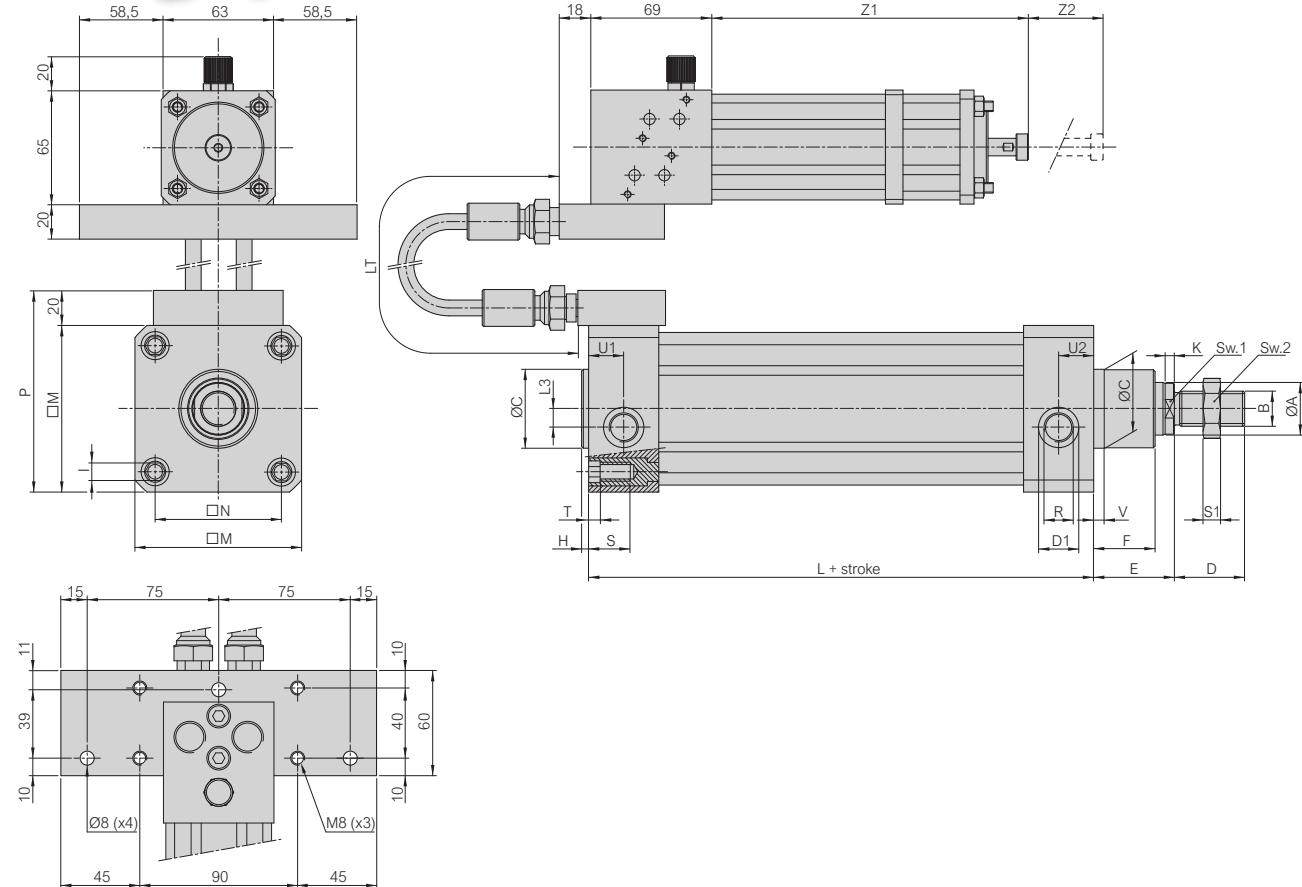
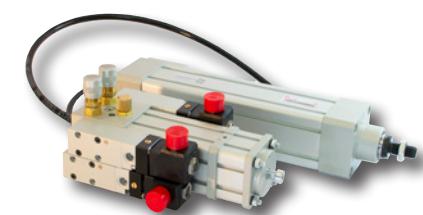
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PNEUMO-HYDRAULIC ACTUATORS



Bore	$\varnothing A$	B	$\varnothing C$	D	D1	E	F	H	I	K	L+	L3	$\square M$	$\square N$	P	R	S	S1	SW1	SW2	T	U1	U2	V			
mm	f7		d11	0 -2														Min	Ch	Ch							
50	25	M16 x 1,5	40	32	19	37	$\pm 1,4$	26	4	M8	5	106	$\pm 0,7$	8	65	46,5	$\pm 0,6$	130	Gas 1/4"	20	8	23	23	5,5	26	20	10
63	30	M16 x 1,5	45	32	23	37		26	4	M8	5	121	$\pm 0,8$	11	75	56,5		140	Gas 3/8"	22	8	27	23	8	22	23	4
80	30	M20 x 1,5	45	40	23	46	$\pm 1,8$	35	4	M10	5	128		0	95	72	$\pm 0,7$	160	Gas 3/8"	20	10	27	26	6	20	20	6
100	40	M20 x 1,5	55	40	27	51		38	4	M10	6	138	$\pm 1$	0	110	89		175	Gas 1/2"	23	10	36	28	9	21,5	21,5	5
125	45	M27 x 2	60	54	27	65	$\pm 2,2$	50	6	M12	6	160		0	140	110	$\pm 1,1$	205	Gas 1/2"	28	13,5	41	41	10	25	25	8
Bore	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2			
mm	Stroke 50 $\div$ 170	Stroke 171 $\div$ 420	Stroke 421 $\div$ 590	Stroke 591 $\div$ 745	Stroke 746 $\div$ 900	Stroke 901 $\div$ 1130																					
50	130	10	180	26	220	36	243	46	290	55	322	70															
Bore	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2			
mm	Stroke 50 $\div$ 170	Stroke 171 $\div$ 220	Stroke 221 $\div$ 320	Stroke 321 $\div$ 410	Stroke 411 $\div$ 510	Stroke 511 $\div$ 640	Stroke 641 $\div$ 800	Stroke 801 $\div$ 950	Stroke 951 $\div$ 1100																		
63 $\div$ 125	130	10	180	26	220	36	243	46	290	55	322	70	366	85	432	100	520	115									

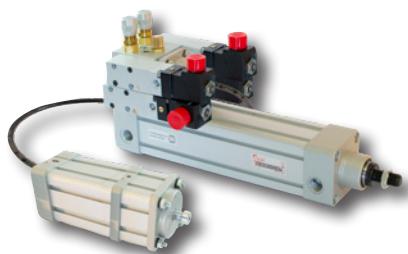
UT...



Bore	Ø A	B	Ø C	D	D1	E	F	H	I	K	L+	L3	Ø M	Ø N	P	R	S	S1	SW1	SW2	T	U1	U2	V			
mm	f7		d11	-2																	Min	Ch	Ch				
50	25	M16 x 1,5	40	32	19	37	±1,4	26	4	M8	5	106	±0,7	8	65	46,5	±0,6	85	Gas 1/4"	20	8	23	23	5,5	26	20	10
63	30	M16 x 1,5	45	32	23	37		26	4	M8	5	121	±0,8	11	75	56,5		95	Gas 3/8"	22	8	27	23	8	22	23	4
80	30	M20 x 1,5	45	40	23	46	±1,8	35	4	M10	5	128		0	95	72	±0,7	115	Gas 3/8"	20	10	27	26	6	20	20	6
100	40	M20 x 1,5	55	40	27	51		38	4	M10	6	138	±1	0	110	89		130	Gas 1/2"	23	10	36	28	9	21,5	21,5	5
125	45	M27 x 2	60	54	27	65	±2,2	50	6	M12	6	160	±1	0	140	110	±1,1	160	Gas 1/2"	28	13,5	41	41	10	25	25	8
Bore	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2			
mm	Stroke 50 ÷ 170		Stroke 171 ÷ 420		Stroke 421 ÷ 590		Stroke 591 ÷ 745		Stroke 746 ÷ 900		Stroke 901 ÷ 1130																
50	130	10	180	26	220	36	243	46	290	55	322	70															
Bore	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2			
mm	Stroke 50 ÷ 170		Stroke 171 ÷ 220		Stroke 221 ÷ 320		Stroke 321 ÷ 410		Stroke 411 ÷ 510		Stroke 511 ÷ 640		Stroke 641 ÷ 800		Stroke 801 ÷ 950		Stroke 951 ÷ 1100										
63 ÷ 125	130	10	180	26	220	36	243	46	290	55	322	70	366	85	432	100	520	115									
Bore	LT																										
mm	Standard																										
50 ÷ 125	500 (x2)	Different lengths must be specified placing the order.																									

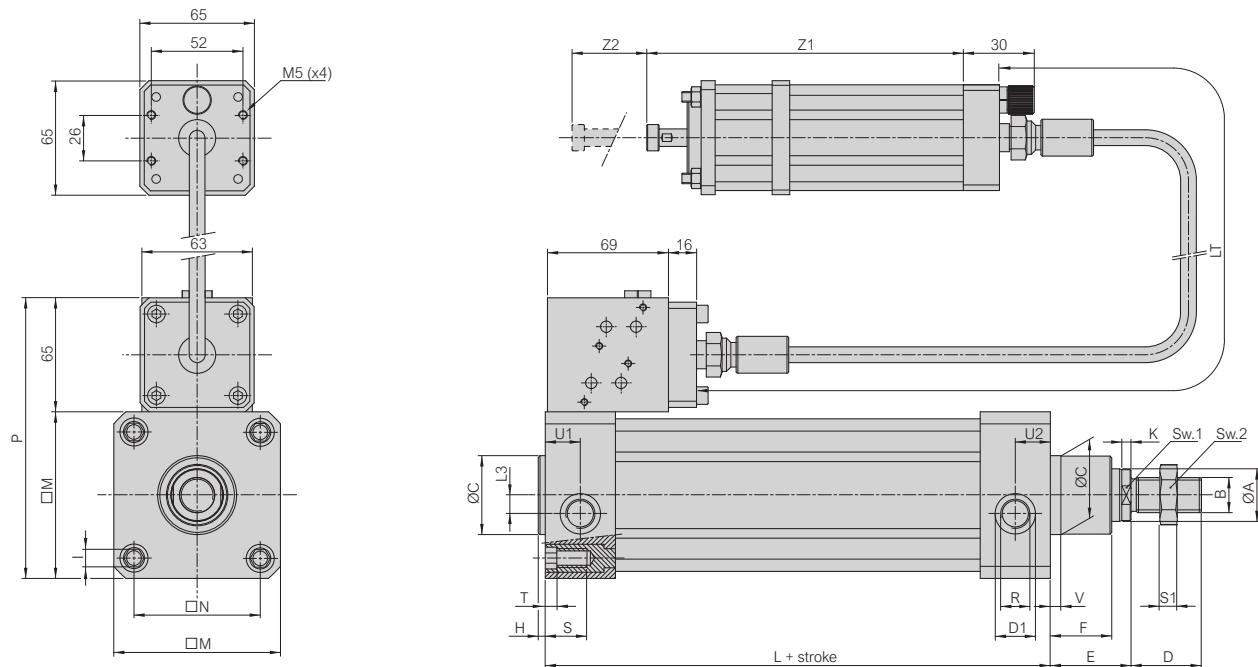


UB...



2

PNEUMO-HYDRAULIC ACTUATORS



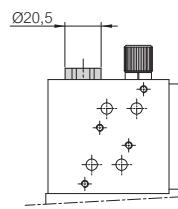
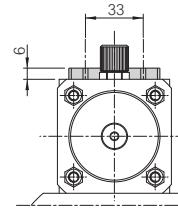
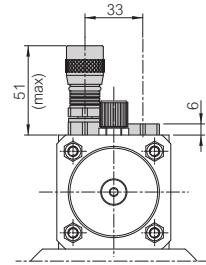
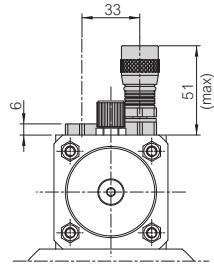
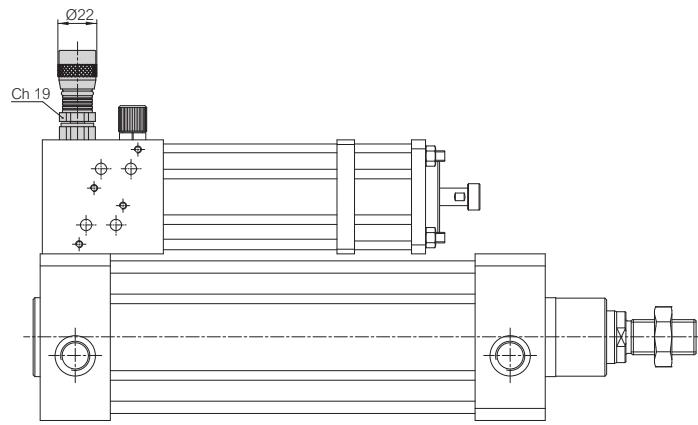
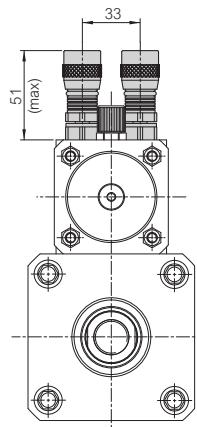
Bore	Ø A	B	Ø C	D	D1	E	F	H	I	K	L+	L3	□ M	□ N	P	R	S	S1	SW1	SW2	T	U1	U2	V			
mm	f7		d11	0 -2														Min	Ch	Ch							
50	25	M16 x 1,5	40	32	19	37	±1,4	26	4	M8	5	106	±0,7	8	65	46,5	±0,6	130	Gas 1/4"	20	8	23	23	5,5	26	20	10
63	30	M16 x 1,5	45	32	23	37		26	4	M8	5	121	±0,8	11	75	56,5		140	Gas 3/8"	22	8	27	23	8	22	23	4
80	30	M20 x 1,5	45	40	23	46	±1,8	35	4	M10	5	128		0	95	72	±0,7	160	Gas 3/8"	20	10	27	26	6	20	20	6
100	40	M20 x 1,5	55	40	27	51		38	4	M10	6	138	±1	0	110	89		175	Gas 1/2"	23	10	36	28	9	21,5	21,5	5
125	45	M27 x 2	60	54	27	65	±2,2	50	6	M12	6	160		0	140	110	±1,1	205	Gas 1/2"	28	13,5	41	41	10	25	25	8
Bore	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2			
mm	Stroke 50 ÷ 170		Stroke 171 ÷ 420		Stroke 421 ÷ 590		Stroke 591 ÷ 745		Stroke 746 ÷ 900		Stroke 901 ÷ 1130																
50	130	10	180	26	220	36	243	46	290	55	322	70															
Bore	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2	Z1	Z2			
mm	Stroke 50 ÷ 170		Stroke 171 ÷ 220		Stroke 221 ÷ 320		Stroke 321 ÷ 410		Stroke 411 ÷ 510		Stroke 511 ÷ 640		Stroke 641 ÷ 800		Stroke 801 ÷ 950		Stroke 951 ÷ 1100										
63 ÷ 125	130	10	180	26	220	36	243	46	290	55	322	70	366	85	432	100	520	115									
Bore	LT																										
mm	Standard																										
50 ÷ 125	500 (x1) Different lengths must be specified placing the order.																										

2.1.05.10

Standard sales conditions available on [www.bonesipneumatik.it](http://www.bonesipneumatik.it)

## SPEED REGULATORS

### Speed regulators on manifold group standard / precise

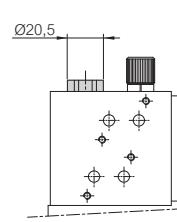
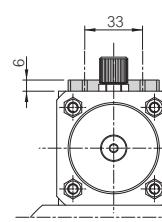
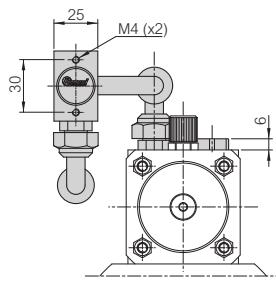
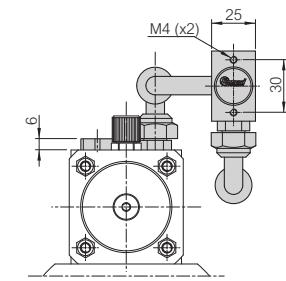
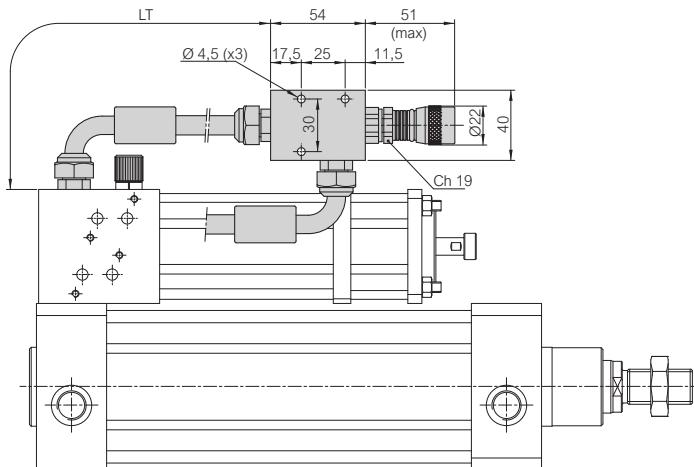
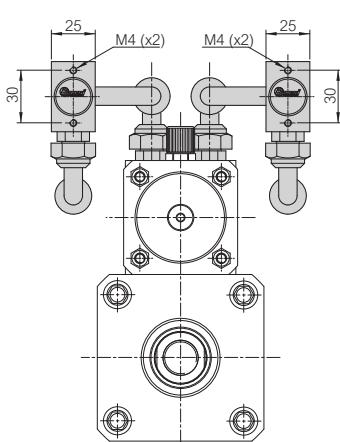


Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

WITHOUT hydraulic regulation

### Speed regulators remoted standard / precise



Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

WITHOUT hydraulic regulation

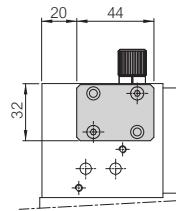
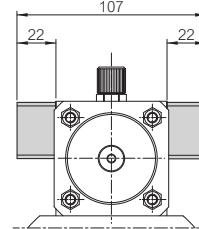
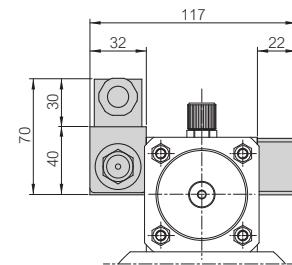
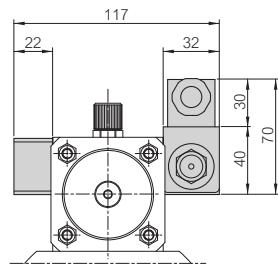
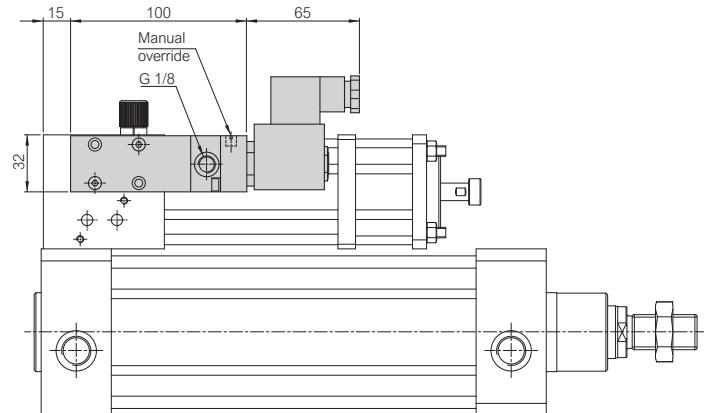
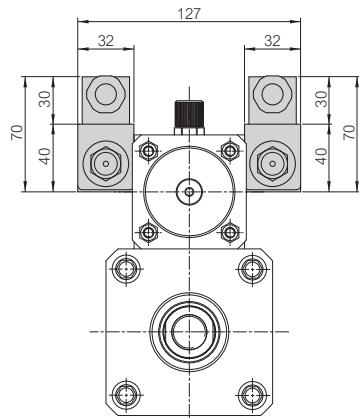
Bore	LT
mm	Standard

50 ÷ 125 | 1000 (x4 - x2) Different lengths must be specified placing the order.



## STOP CONTROL VALVES

## STOP control valves solenoid actuated

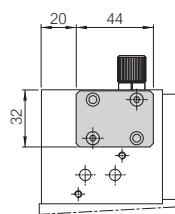
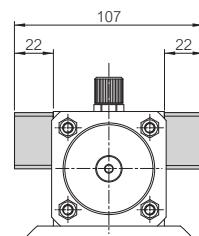
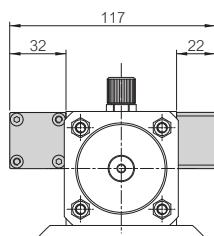
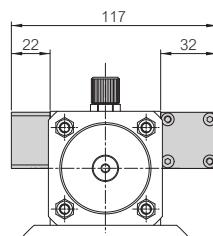
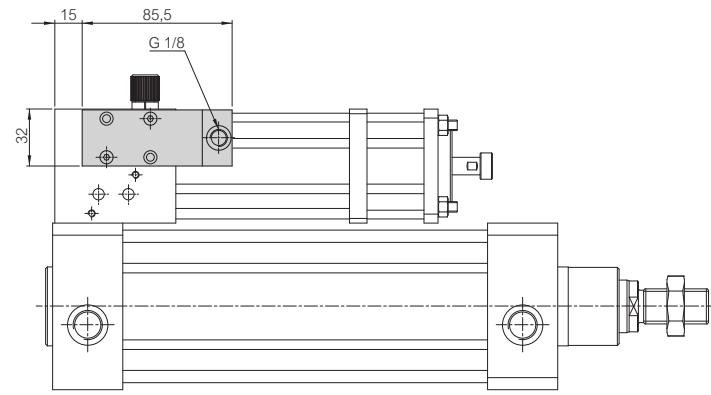
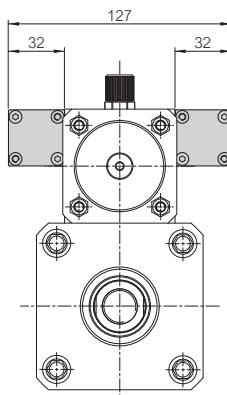


Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

WITHOUT hydraulic regulation

## STOP control valves pneumatic actuated



Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

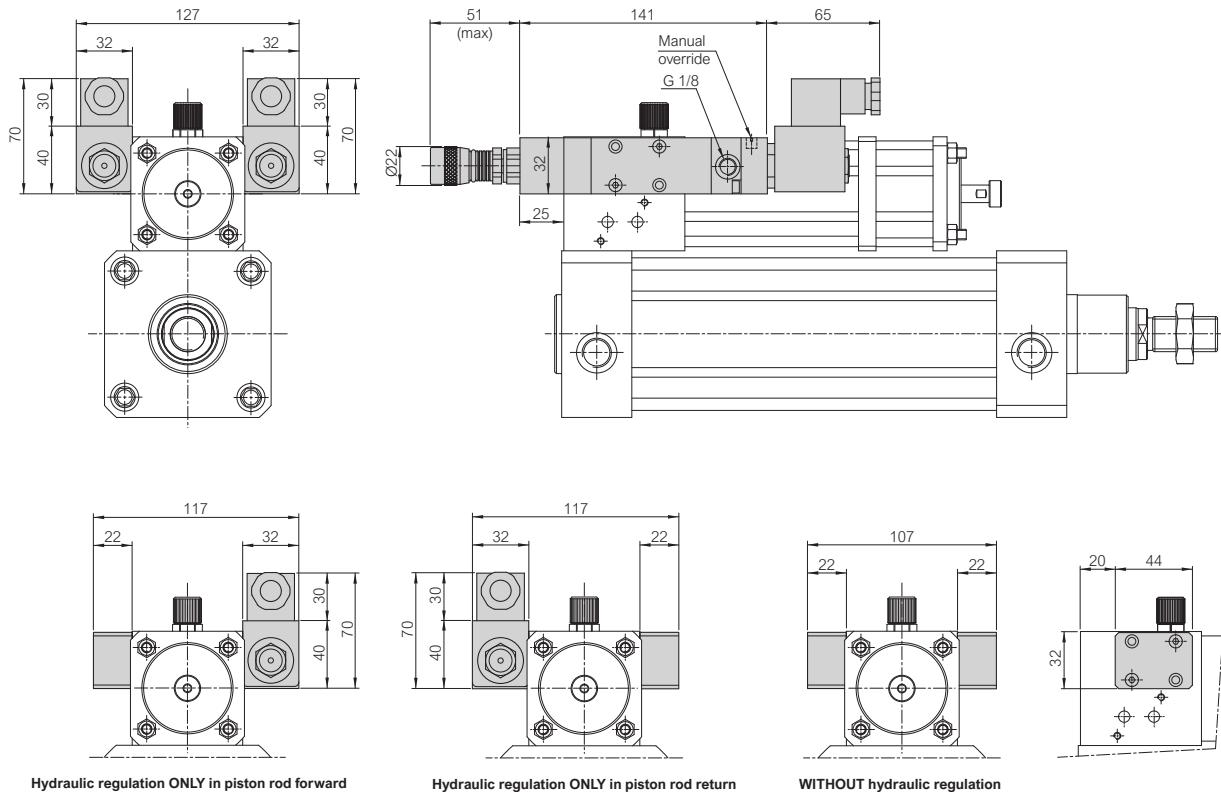
WITHOUT hydraulic regulation

Unless different instructions placing the order : the control and the regulation valves will be assembled reducing the dimension of the unit.

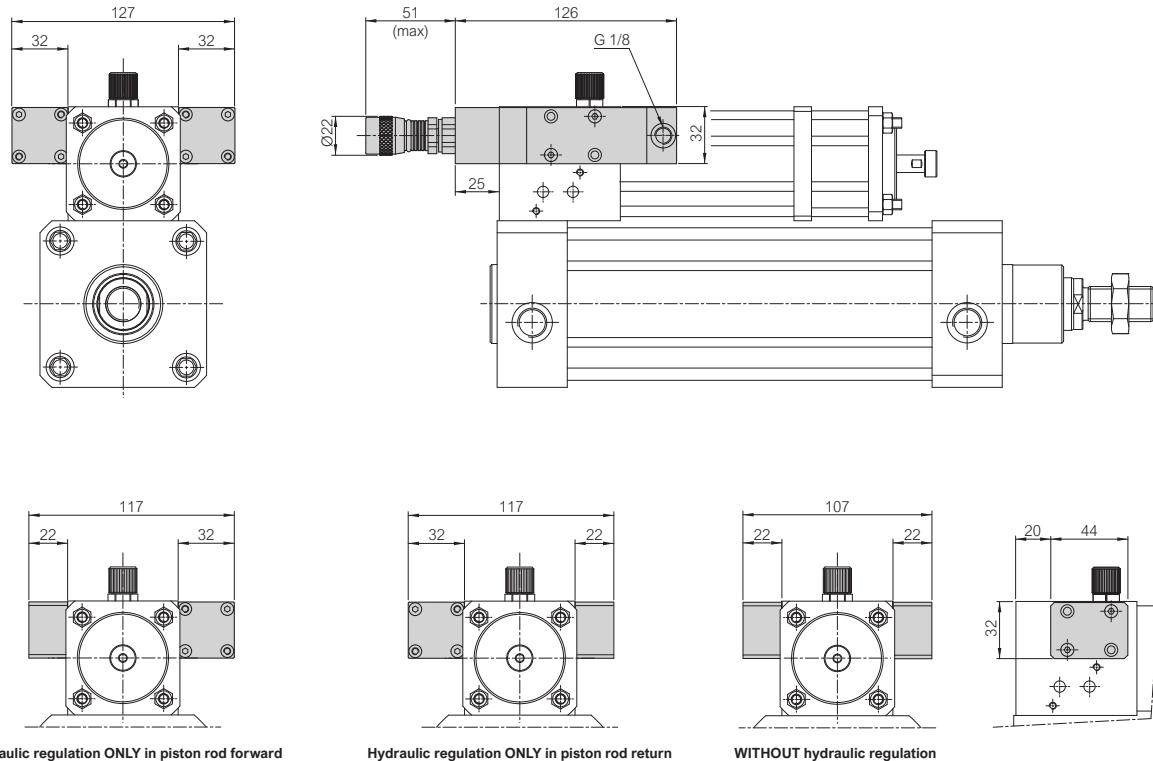


## STOP CONTROL VALVES

STOP control valves solenoid actuated with speed adjustment



STOP control valves pneumatic actuated with speed adjustment

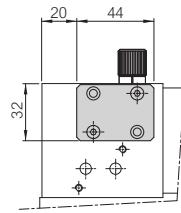
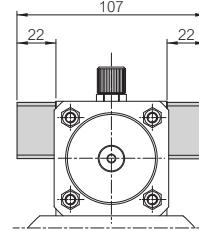
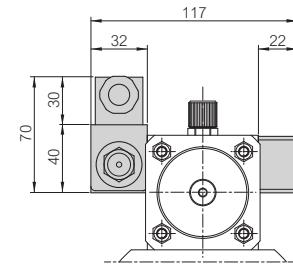
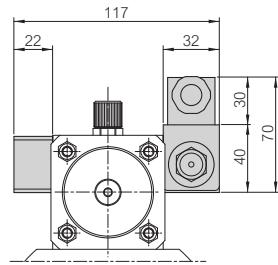
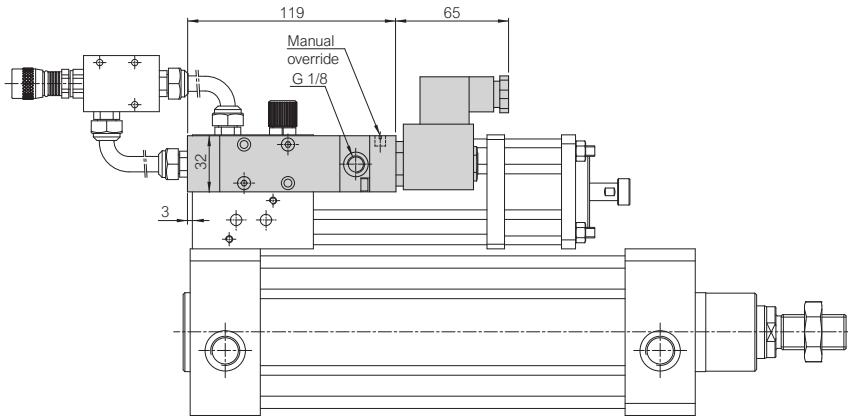
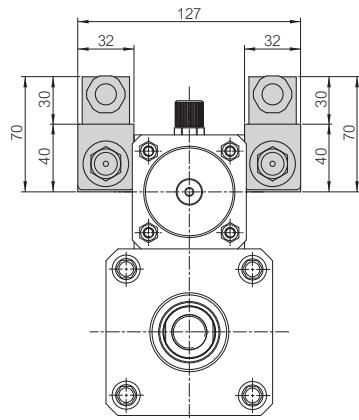


Unless different instructions placing the order : the control and the regulation valves will be assembled reducing the dimension of the unit.



## STOP CONTROL VALVES

STOP control valves solenoid actuated with remoted speed adjustment

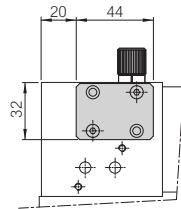
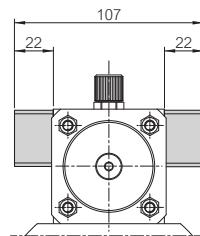
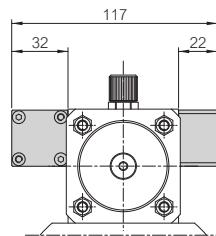
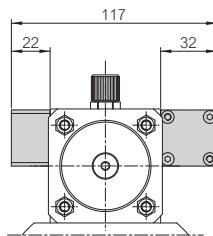
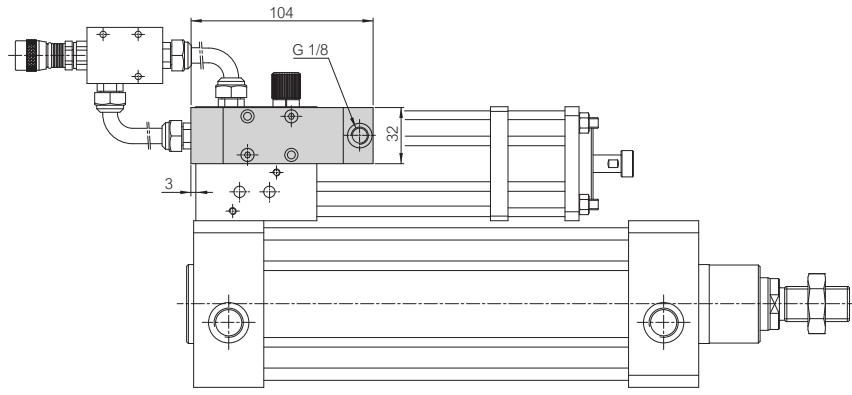
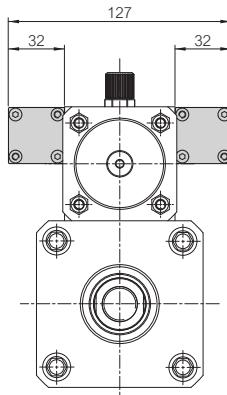


Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

WITHOUT hydraulic regulation

STOP control valves pneumatic actuated with remoted speed adjustment



Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

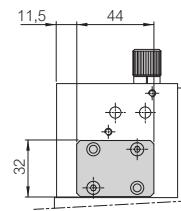
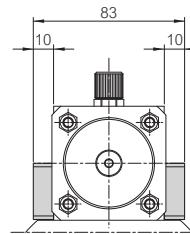
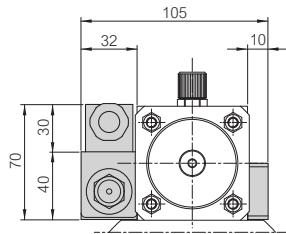
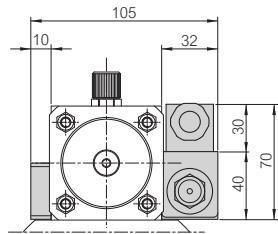
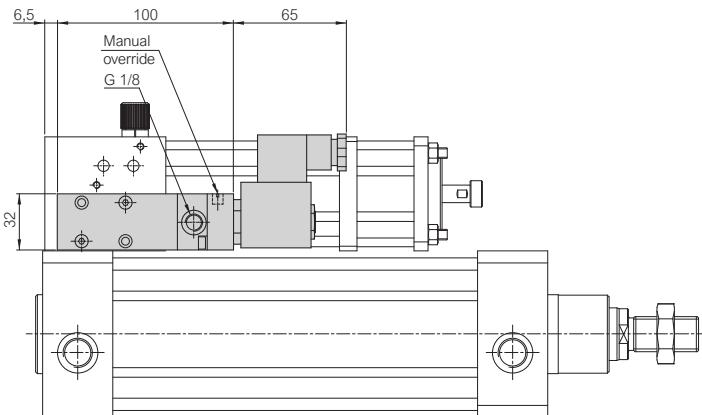
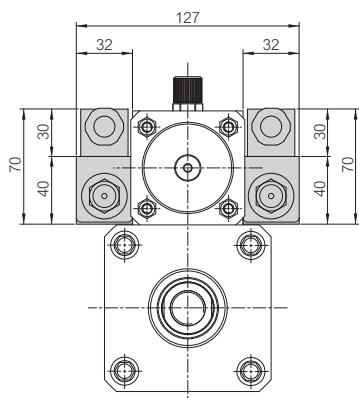
WITHOUT hydraulic regulation

Unless different instructions placing the order : the control and the regulation valves will be assembled reducing the dimension of the unit.



## SKIP CONTROL VALVES

### SKIP control valves solenoid actuated

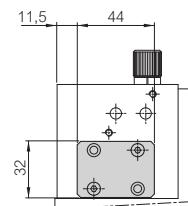
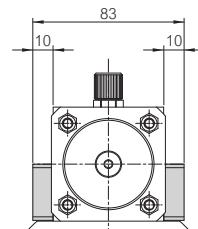
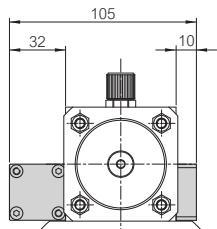
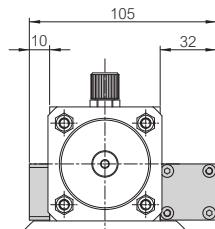
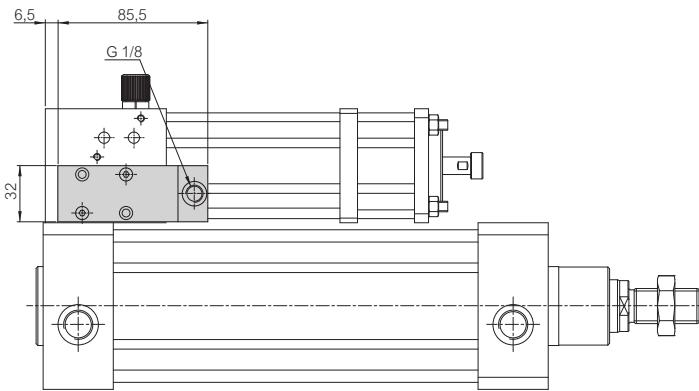
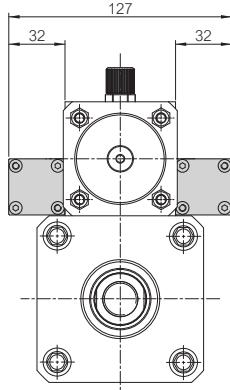


Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

WITHOUT hydraulic regulation

### SKIP control valves pneumatic actuated



Hydraulic regulation ONLY in piston rod forward

Hydraulic regulation ONLY in piston rod return

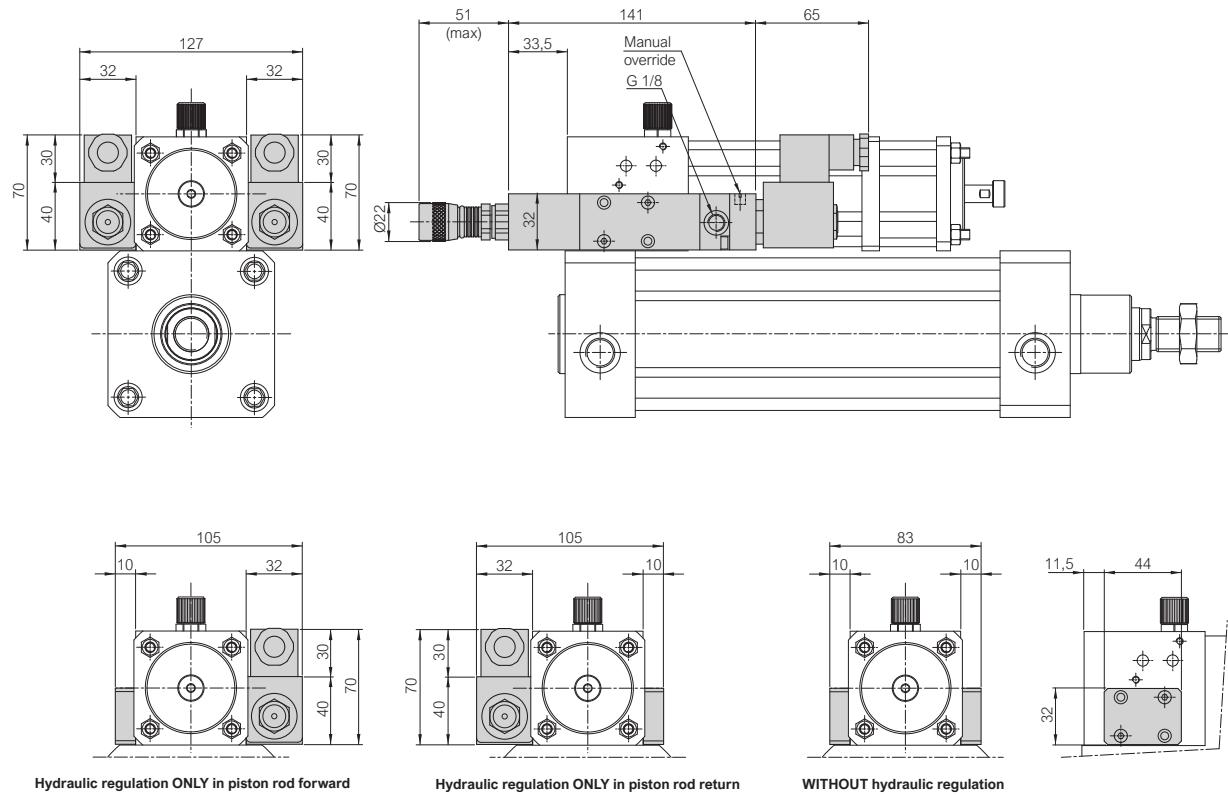
WITHOUT hydraulic regulation

Unless different instructions placing the order : the control and the regulation valves will be assembled reducing the dimension of the unit.

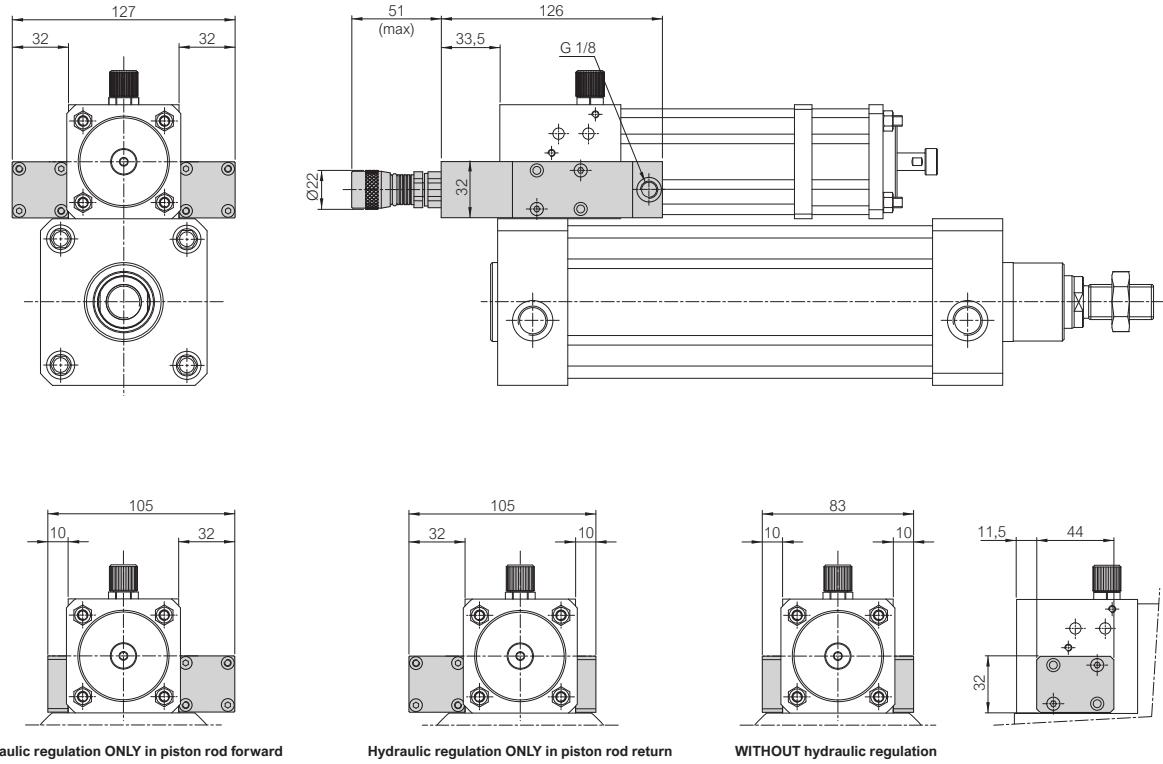


## SKIP CONTROL VALVES

SKIP control valves solenoid actuated with speed adjustment



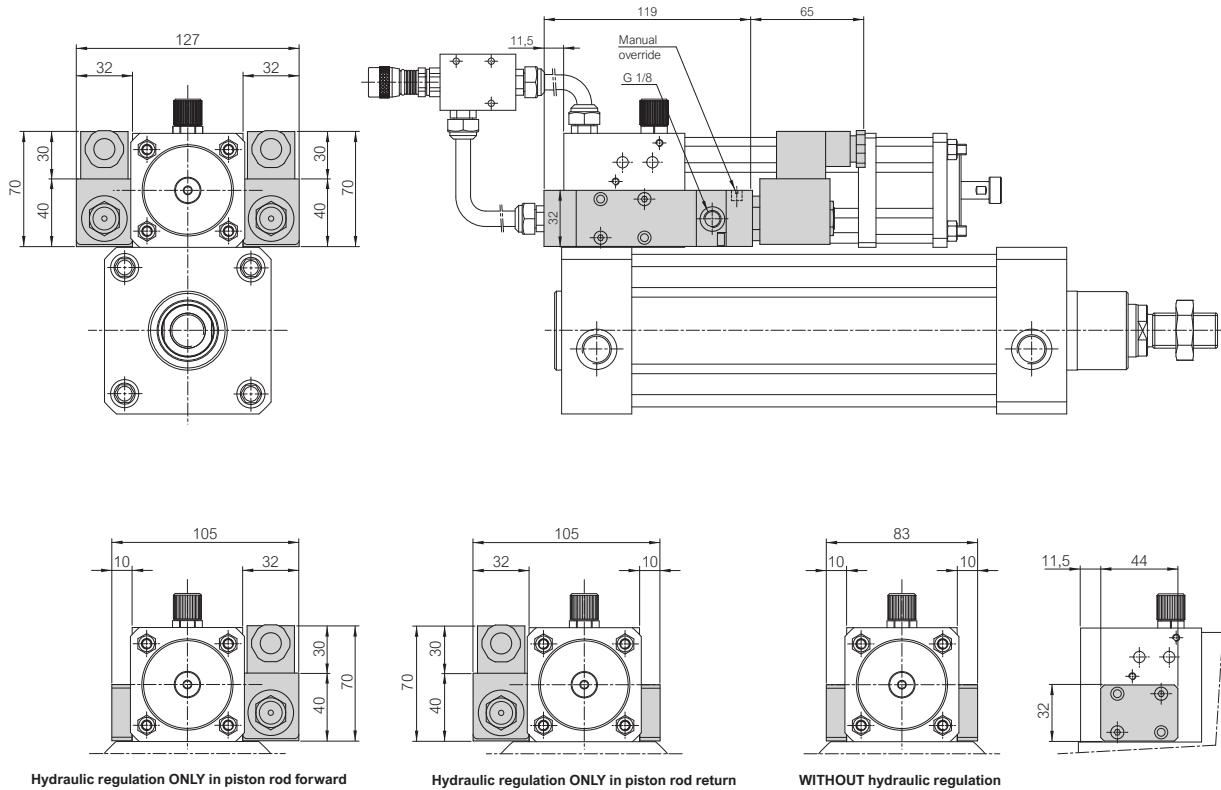
SKIP control valves pneumatic actuated with speed adjustment



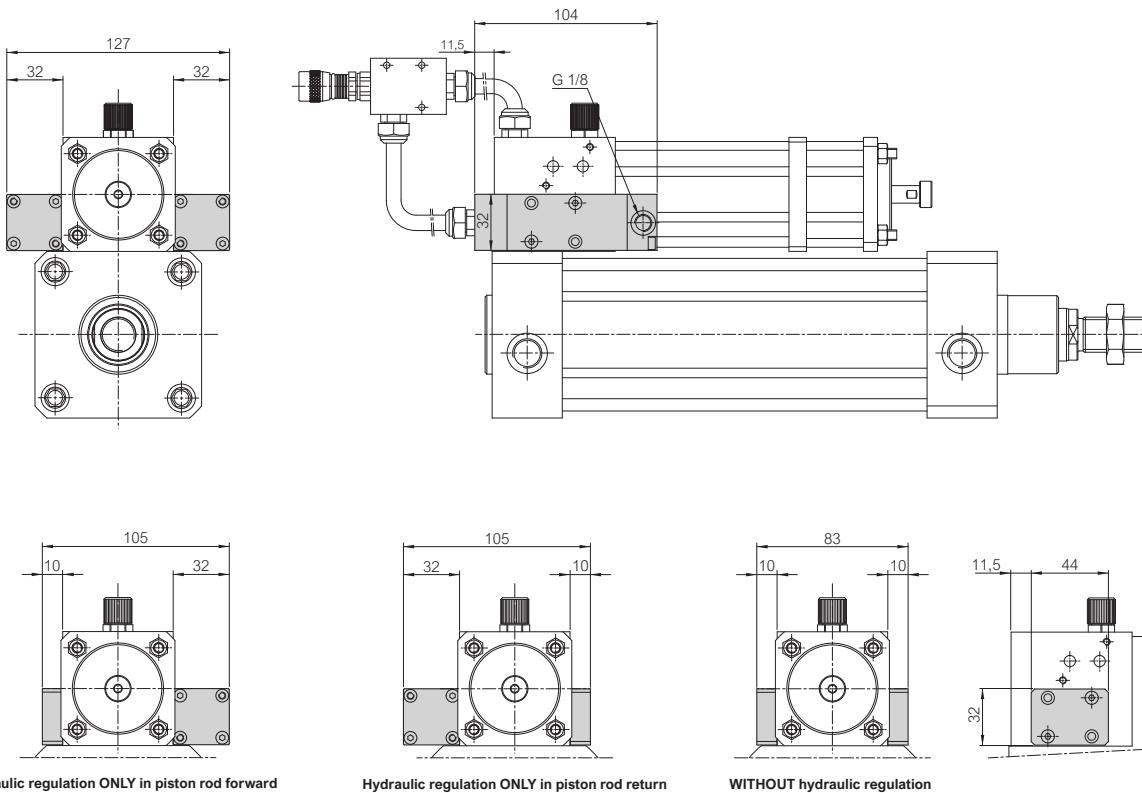
Unless different instructions placing the order : the control and the regulation valves will be assembled reducing the dimension of the unit.

## SKIP CONTROL VALVES

**SKIP** control valves solenoid actuated with remoted speed adjustment



**SKIP** control valves pneumatic actuated with remoted speed adjustment



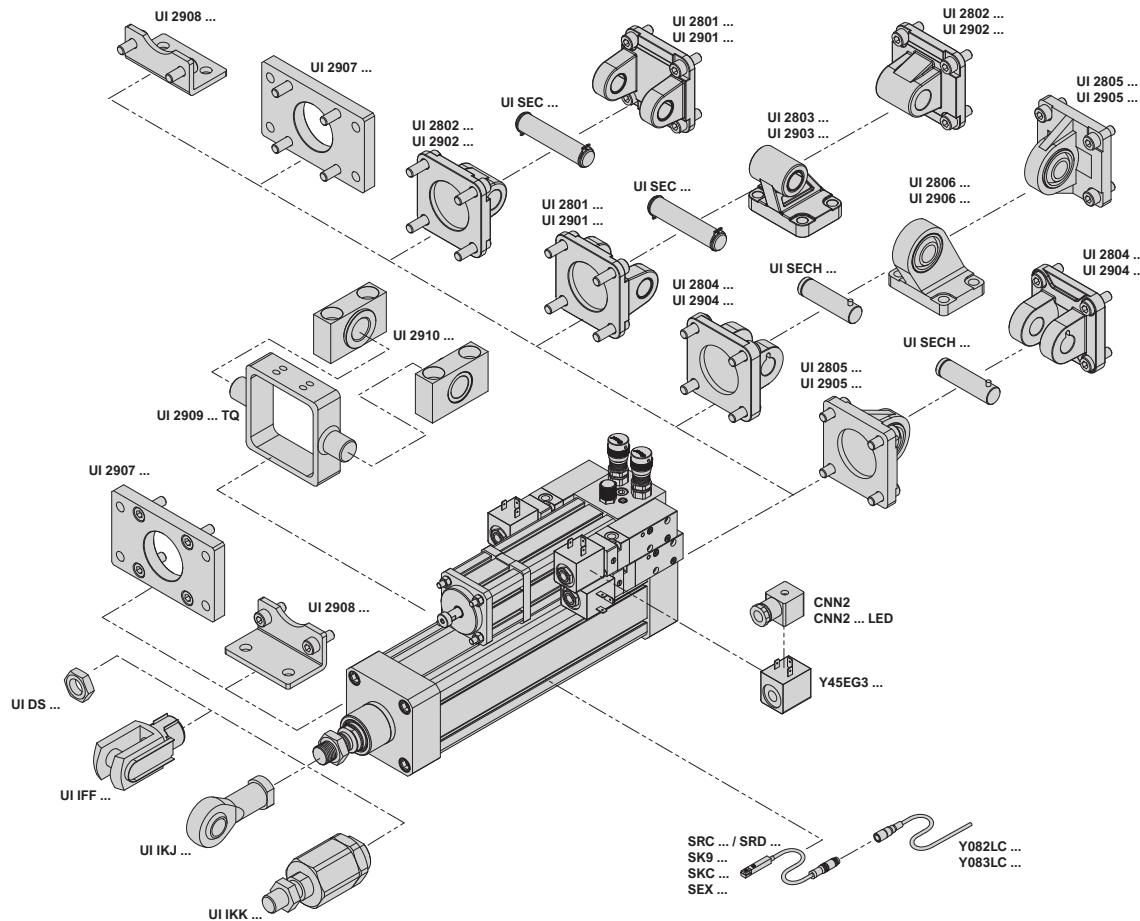
Unless different instructions placing the order : the control and the regulation valves will be assembled reducing the dimension of the unit.

2.1.05.17

## ACCESSORIES

2

PNEUMO-HYDRAULIC ACTUATORS



All mounting accessories are supplied complete with screws for fixing to cylinder

UI IFF ... Female clevis	UI IKJ ... Self-lubricating oscillating joint	UI IKK ... Self-aligning joint angular and radial	UI DS ... Rod nut	UI 2801 ... Female hinge (MP2)	UI 2901 ... Female hinge (MP2)	UI 2802 ... Male hinge (MP4)	UI 2902 ... Male hinge (MP4)	UI 2803 ... Square joint at 90° (AB7)	UI 2903 ... Square joint at 90° (AB7)
Ø 50 63 80 100 125	Page 2.1.05.20 UI IFF 050 UI IFF 063 UI IFF 080 UI IFF 100 UI IFF 125	Page 2.1.05.20 UI IKJ 050 UI IKJ 063 UI IKJ 080 UI IKJ 100 UI IKJ 125	Page 2.1.05.20 UI IKK 050 UI IKK 063 UI IKK 080 UI IKK 100 UI IKK 125	Page 2.1.05.20 UI DS 050 UI DS 063 UI DS 080 UI DS 100 UI DS 125	Page 2.1.05.21 UI 2801 050 UI 2801 063 UI 2801 080 UI 2801 100 UI 2801 125	Page 2.1.05.21 UI 2901 050 UI 2901 063 UI 2901 080 UI 2901 100 UI 2901 125	Page 2.1.05.21 UI 2802 050 UI 2802 063 UI 2802 080 UI 2802 100 UI 2802 125	Page 2.1.05.21 UI 2902 050 UI 2902 063 UI 2902 080 UI 2902 100 UI 2902 125	Page 2.1.05.21 UI 2803 050 UI 2803 063 UI 2803 080 UI 2803 100 UI 2803 125
Clevis and lockable pins in galvanized steel	Joint in galvanized steel, bush in sinterized bronze	Joint and nut in galvanized steel, Pin in blacked steel	Rod nut in galvanized steel	Light alloy	Painted steel black cataphoresis	Light alloy	Painted steel black cataphoresis	Light alloy	Painted steel black cataphoresis
UI 2804 ... Narrow female hinge (AB6)	UI 2904 ... Narrow female hinge (AB6)	UI 2805 ... Narrow male hinge with articulated head (MP6)	UI 2905 ... Narrow male hinge with articulated head (MP6)	UI 2806 ... Square joint at 90° with articulated head	UI 2906 ... Square joint at 90° with articulated head	UI 2907 ... Front and rear flange (MF1-MF2)	UI 2908 ... Low foot pedestal (MS1)	UI 2909 ... TQ Adjustable intermediate hinge (MT4)	UI 2910 ... Support for intermediate hinge (AT4)
Ø 50 63 80 100 125	Page 2.1.05.21 UI 2804 050 UI 2804 063 UI 2804 080 UI 2804 100 UI 2804 125	Page 2.1.05.21 UI 2904 050 UI 2904 063 UI 2904 080 UI 2904 100 UI 2904 125	Page 2.1.05.22 UI 2805 050 UI 2805 063 UI 2805 080 UI 2805 100 UI 2805 125	Page 2.1.05.22 UI 2905 050 UI 2905 063 UI 2905 080 UI 2905 100 UI 2905 125	Page 2.1.05.22 UI 2806 050 UI 2806 063 UI 2806 080 UI 2806 100 UI 2806 125	Page 2.1.05.22 UI 2906 050 UI 2906 063 UI 2906 080 UI 2906 100 UI 2906 125	Page 2.1.05.22 UI 2907 050 UI 2907 063 UI 2907 080 UI 2907 100 UI 2907 125	Page 2.1.05.22 UI 2908 050 UI 2908 063 UI 2908 080 UI 2908 100 UI 2908 125	Page 2.1.05.23 UI 2910 050 UI 2910 063 UI 2910 080 UI 2910 100 UI 2910 125
Light alloy	Painted steel black cataphoresis	Light alloy	Painted steel black cataphoresis	Light alloy	Painted steel black cataphoresis	White zinc coating steel	White zinc coating steel	White zinc coating steel	White zinc coating steel Bush in sinterized bronze



## ACCESSORIES

<b>UI SEC ...</b> Pin for female hinge MP2 (AA4)	<b>UI SECH ...</b> Pin for female hinge MP6 (AA6)		<b>SUPERMATIC46</b> Fluid for hydraulic circuit	<b>UI SG ...</b> Standard seals kit
<b>Ø</b> Page 2.1.05.24	Page 2.1.05.24			
<b>50</b> UI SEC 050	UI SECH 050			UI SG 050
<b>63</b> UI SEC 063	UI SECH 063			UI SG 063
<b>80</b> UI SEC 080	UI SECH 080			UI SG 080
<b>100</b> UI SEC 100	UI SECH 100			UI SG 100
<b>125</b> UI SEC 125	UI SECH 125			UI SG 125
White zinc coating steel	White zinc coating steel			Oil DEXRON II Pakage: 1 lt Rod seals: Polyurethane Other seals: NBR
<b>SR ...</b> NC sensors REED / HALL	<b>SK9 ...</b> IP69K sensor PNP	<b>SKC ...</b> Precise position sensor PNP		<b>Y082LC / Y083LC</b> Straight connectors
Page 2.1.05.25	Page 2.1.05.26	Page 2.1.05.26		Page 2.1.05.27
Sensor: PA6 Cable: PUR	Sensor: PA12 Cable: PUR	Sensor: PA Cable: PUR		Connector: PVC Contacts: Gilded brass Cable: PVC
<b>Y45EG3 ...</b> Coils in direct current	<b>Y45EG3 ...</b> Coils in alternate current	<b>CNN2 ...</b> Connectors for coils	<b>CNN2 ... LED</b> Connectors for coils	
Page 2.1.05.28	Page 2.1.05.28	Page 2.1.05.28	Page 2.1.05.28	
Encapsulated PA 6.6 + GLASS FIBER	Encapsulated PA 6.6 + GLASS FIBER	PA6 GF	PA6 GF - PA12	



## PISTON ROD ACCESSORIES

UI IFF ... Female clevis	Bore	Code	AA	AB	Ø AC	AD	AE	AF	AG	AH	AL	
	mm			h11	+0,30 -0,16	±0,5	±0,5	±0,4	±0,2			
	50	UI IFF 050	16	+0,70 +0,15	M16 x 1,5	16	32	32	83	64	36	6
	63	UI IFF 063	16		M16 x 1,5	16	32	32	83	64	36	6
	80	UI IFF 080	20		M20 x 1,5	20	40	40	105	80	44	5
	100	UI IFF 100	20		M20 x 1,5	20	40	40	105	80	44	5
	125	UI IFF 125	30		M27 x 2	30	55	54	148	110	65	-

Clevis and clip in galvanized steel / 1 piece each package

UI IKJ ... Self-lubricating oscillating joint	Bore	Code	AB	Ø AC	AM	AN	AO	AP	AQ	Ø AR	Ø AS	Ø AT	AU	AV	AZ
	mm		H7		Ch										
	50	UI IKJ 050	M16 x 1,5	16	28	22	42	21	15	19,3	22	27	8	64	85
	63	UI IKJ 063	M16 x 1,5	16	28	22	42	21	15	19,3	22	27	8	64	85
	80	UI IKJ 080	M20 x 1,5	20	33	30	50	25	18	24,3	27,5	34	10	77	102
	100	UI IKJ 100	M20 x 1,5	20	33	30	50	25	18	24,3	27,5	34	10	77	102
	125	UI IKJ 125	M27 x 2	30	51	41	70	37	25	34,8	40	50	15	110	145

Joint in galvanized steel, bush in sintered bronze, ring in hardened bearing steel / 1 piece each package

UI IKK ... Self-aligning joint angular and radial	Bore	Code	A	B	C	D	E	Ø F	Ø G	Ø H	L	M	Ch1	Ch2	Ch3	°β	Static load daN
	mm																
	50	UI IKK 050	M16 x 1,5	104	32	10	53	22	32	45	2	30	20	27	41	6	1000
	63	UI IKK 063	M16 x 1,5	104	32	10	53	22	32	45	2	30	20	27	41	6	1000
	80	UI IKK 080	M20 x 1,5	119	40	10	53	22	32	45	2	37	20	27	41	6	1000
	100	UI IKK 100	M20 x 1,5	119	40	10	53	22	32	45	2	37	20	27	41	6	1000
	125	UI IKK 125	M27 x 2	147	54	10	60	32	57	70	2	48	24	54	65	8	3000

Joint and nut in galvanized steel, pin in burnished steel / 1 piece each package

UI DS ... Rod nut	Bore	Code	B				S1				Sw.2	
	mm										Ch	
	50	UI DS 050	M16 x 1,5				8				23	
	63	UI DS 063	M16 x 1,5				8				23	
	80	UI DS080	M20 x 1,5				10				26	
	100	UI DS100	M20 x 1,5				10				28	
	125	UI DS125	M27 x 2				13,5				41	

Rod nut in galvanized steel / 1 piece each package



## MOUNTING ACCESSORIES

UI 2801 ... / UI 2901 ... Female hinge (MP2)	Bore	Code	A+	B	C	D	E	F	M	H	Fixing screw	
	mm		$\pm 0,2$	H9	H14	h14					ISO 4762	
	50	UI 2801 050 UI 2901 050	170	$\pm 1,25$	16	27	12	32	60	65	12	M8 x 25
	63	UI 2801 063 UI 2901 063	190		21	32	16	40	70	75	16	M8 x 25
	80	UI 2801 080 UI 2901 080	210	$\pm 1,6$	22	36	16	50	90	95	16	M10 x 30
	100	UI 2801 100 UI 2901 100	230		27	41	20	60	110	115	20	M10 x 30
	125	UI 2801 125 UI 2901 125	275	$\pm 2$	30	50	25	70	130	140	25	M12 x 35

UI 2801 ... Light alloy / UI 2901 ... Painted steel black cataphoresis / 1 piece each package + 4 screws for fixing to cylinder

UI 2802 ... / UI 2902 ... Male hinge (MP4)	Bore	Code	A+	B	C	D	E	M	H	Fixing screw		
	mm		$\pm 0,2$	H9						ISO 4762		
	50	UI 2802 050 UI 2902 050	170	$\pm 1,25$	16	27	12	32		M8 x 25		
	63	UI 2802 063 UI 2902 063	190		21	32	16	40		M8 x 25		
	80	UI 2802 080 UI 2902 080	210	$\pm 1,6$	22	36	16	50		M10 x 30		
	100	UI 2802 100 UI 2902 100	230		27	41	20	60		M10 x 30		
	125	UI 2802 125 UI 2902 125	275	$\pm 2$	30	50	25	70	-0,5 -1,2	140	25	M12 x 35

UI 2802 ... Light alloy / UI 2902 ... Painted steel black cataphoresis / 1 piece each package + 4 screws for fixing to cylinder

UI 2803 ... / UI 2903 ... Square joint at 90° (AB7)	Bore	Code	A+	E	N	P	Q	R	S	T	Ø U1	V		
	mm		$\pm 1,25$	32	JS15	JS14	JS14		JS14	H13				
	50	UI 2803 050 UI 2903 050	170	$\pm 1,25$	32		45	33	30	45	65	50	9	10,4
	63	UI 2803 063 UI 2903 063	190		40	-0,2 -0,6	50	37	35	50	67	52	9	12,4
	80	UI 2803 080 UI 2903 080	210	$\pm 1,6$	50		63	47	40	60	86	66	11	11,5
	100	UI 2803 100 UI 2903 100	230		60		71	55	50	70	96	76	11	14,5
	125	UI 2803 125 UI 2903 125	275	$\pm 2$	70	-0,5 -1,2	90	70	60	90	124	94	14	16,8

UI 2803 ... Light alloy / UI 2903 ... Painted steel black cataphoresis / 1 piece each package

UI 2804 ... / UI 2904 ... Narrow female hinge (AB6)	Bore	Code	A+	B1	C	D1	E1	F1	H1	M	Fixing screw	
	mm		$\pm 0,2$	F7	H14	d12					ISO 4762	
	50	UI 2804 050 UI 2904 050	170	$\pm 1,25$	16	27	16	21	45	14	65	M8 x 20
	63	UI 2804 063 UI 2904 063	190		21	32	16	21	51	18	75	M8 x 20
	80	UI 2804 080 UI 2904 080	210	$\pm 1,6$	22	36	20	25	65	20	95	M10 x 25
	100	UI 2804 100 UI 2904 100	230		27	41	20	25	75	22	115	M10 x 25
	125	UI 2804 125 UI 2904 125	275	$\pm 2$	30	50	30	37	97	25	140	M12 x 35

UI 2804 ... Light alloy / UI 2904 ... Painted steel black cataphoresis / 1 piece each package + 4 screws for fixing to cylinder



## MOUNTING ACCESSORIES

UI 2805 ... / UI 2905 ... Narrow male hinge with articulated head (MP6)	Bore	Code	A+	AQ	B1	C	D	E1	M	H2	Fixing screw
	mm				±0,2	H9	±0,2				ISO 4762
	50	UI 2805 050 UI 2905 050	170	±1,25	15	16	27	12	21	65	21
	63	UI 2805 063 UI 2905 063	190		15	21	32	16	21	75	24
	80	UI 2805 080 UI 2905 080	210	±1,6	18	22	36	16	25	95	28,5
	100	UI 2805 100 UI 2905 100	230		18	27	41	20	25	115	30
	125	UI 2805 125 UI 2905 125	275	±2	25	30	50	25	37	140	40

UI 2806 ... / UI 2906 ... Square joint at 90°with articulated head	Bore	Code	A+	AQ	E1	N	P	Q	R	S	T	Ø U	V
	mm				0 -0,1	JS15	JS15	JS14		JS14	H13	+0,5 0	
	50	UI 2806 050 UI 2906 050	170	±1,25	15	21	45	33	30	45	65	50	9
	63	UI 2806 063 UI 2906 063	190		15	21	50	37	35	50	67	52	9
	80	UI 2806 080 UI 2906 080	210	±1,6	18	25	63	47	40	60	86	66	11
	100	UI 2806 100 UI 2906 100	230		18	25	71	55	50	70	96	76	11
	125	UI 2806 125 UI 2906 125	275	±2	25	37	90	70	60	90	124	94	13,5

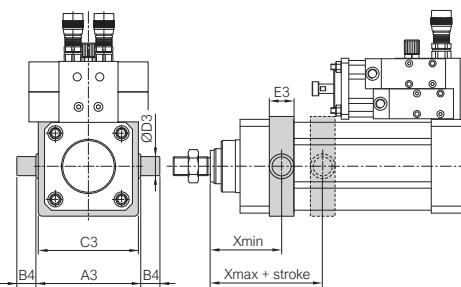
UI 2907 ... Front and rear flange ISO (MF1-MF2)	Bore	Code	A1+	B2	C1	D2	E2	F2	G	M	Fixing screw
	mm			±0,2	JS14	JS14	H13				ISO 4762
	50	UI 2907 050	155	±1,25	12	110	90	45	9	25	±1,6
	63	UI 2907 063	170		12	120	100	50	9	25	
	80	UI 2907 080	190	±1,6	16	150	126	63	12	30	±2
	100	UI 2907 100	205		16	170	150	75	14	35	
	125	UI 2907 125	245	±2	20	205	180	90	16	45	±2,5

UI 2908 ... Low foot pedestal (MS1)	Bore	Code	A2+	B3	C2	E2	Ø G1	M	N	Q1+	Q2	V1	Fixing screw
	mm			±0,2	JS14	H14		JS16			±0,5		ISO 4762
	50	UI 2908 050	175	±1,25	32	47	45	9	65	45	170	±1,6	5
	63	UI 2908 063	190		32	45	50	9	75	50	185		5
	80	UI 2908 080	215	±1,6	41	55	63	12	95	63	210	±2	5
	100	UI 2908 100	230		41	57	75	14	115	71	220		6
	125	UI 2908 125	270	±2	45	70	90	16	140	90	250	±2,5	20



## MOUNTING ACCESSORIES

UI 2909 ... TQ (series UI) Adjustable intermediate hinge (MT4)	Bore	Code	A3	B4	C3	$\emptyset$ D3	E3	Xmin
	mm		h14	h14		e9		
	50	UI 2909 050 TQ	75	16	71	16	20	81
	63	UI 2909 063 TQ	90	20	84	20	26	89
	80	UI 2909 080 TQ	110	20	105	20	26	99
	100	UI 2909 100 TQ	132	25	129	25	32	108,5
	125	UI 2909 125 TQ	160	25	154	25	33	126,5



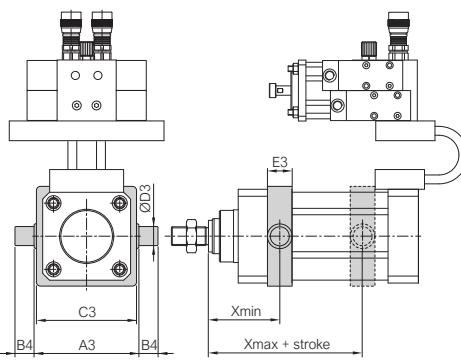
UI 2909 ... White zinc plated steel / 1 piece each package + 8 set head screws for fixing to cylinder

Bore	Xmax					
mm	Stroke 50 ÷ 170	Stroke 171 ÷ 420	Stroke 421 ÷ 590	Stroke 591 ÷ 745	Stroke 746 ÷ 900	Stroke 901 ÷ 1130
50	Stroke - 57	Stroke - 107	Stroke - 147	Stroke - 170	Stroke - 217	Stroke - 249

Bore	Xmax									
mm	Stroke 50 ÷ 170	Stroke 171 ÷ 220	Stroke 221 ÷ 320	Stroke 321 ÷ 410	Stroke 411 ÷ 510	Stroke 511 ÷ 640	Stroke 641 ÷ 800	Stroke 801 ÷ 950	Stroke 951 ÷ 1100	
63	Stroke - 42	Stroke - 92	Stroke - 132	Stroke - 155	Stroke - 202	Stroke - 234	Stroke - 278	Stroke - 344	Stroke - 432	
80	Stroke - 26	Stroke - 76	Stroke - 116	Stroke - 139	Stroke - 186	Stroke - 218	Stroke - 262	Stroke - 328	Stroke - 416	
100	Stroke - 11	Stroke - 61	Stroke - 101	Stroke - 124	Stroke - 171	Stroke - 203	Stroke - 247	Stroke - 313	Stroke - 401	
125	Stroke + 25	Stroke - 25	Stroke - 65	Stroke - 88	Stroke - 135	Stroke - 167	Stroke - 211	Stroke - 277	Stroke - 365	

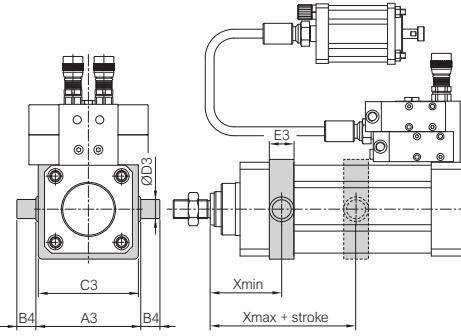
If the obtained value of "Xmax" is less than the corresponding value of "Xmin": the adjustable intermediate hinge can not be mounted.

UI 2909 ... TQ (series UT) Adjustable intermediate hinge (MT4)	Bore	Code	A3	B4	C3	$\emptyset$ D3	E3	Xmin	Xmax +
	mm		h14	h14		e9			
	50	UI 2909 050 TQ	75	16	71	16	20	81	84
	63	UI 2909 063 TQ	90	20	84	20	26	89	96
	80	UI 2909 080 TQ	110	20	105	20	26	99	109
	100	UI 2909 100 TQ	132	25	129	25	32	108,5	124
	125	UI 2909 125 TQ	160	25	154	25	33	126,5	159,5



UI 2909 ... White zinc plated steel / 1 piece each package + 8 set head screws for fixing to cylinder

UI 2909 ... TQ (series UB) Adjustable intermediate hinge (MT4)	Bore	Code	A3	B4	C3	$\emptyset$ D3	E3	Xmin	Xmax +
	mm		h14	h14		e9			
	50	UI 2909 050 TQ	75	16	71	16	20	81	40
	63	UI 2909 063 TQ	90	20	84	20	26	89	52
	80	UI 2909 080 TQ	110	20	105	20	26	99	65
	100	UI 2909 100 TQ	132	25	129	25	32	108,5	80
	125	UI 2909 125 TQ	160	25	154	25	33	126,5	115,5



UI 2909 ... White zinc plated steel / 1 piece each package + 8 set head screws for fixing to cylinder



## MOUNTING ACCESSORIES

UI 2910 ... Support for intermediate hinge (AT4)	Bore	Code	A3	A4	B5	C4	$\emptyset$ D3	E4	F3	$\emptyset$ G2	$\emptyset$ G3	M1	N1
	mm		h14				F7	$\pm 0,2$	$\pm 0,5$	H13	H13		$\pm 0,1$
	50	UI 2910 050	75	55	99	117	16	36	9	9	15	36	18
	63	UI 2910 063	90	65	116	136	20	42	11	11	18	40	20
	80	UI 2910 080	110	65	136	156	20	42	11	11	18	40	20
	100	UI 2910 100	132	75	164	189	25	50	13	14	20	50	25
	125	UI 2910 125	160	75	192	217	25	50	13	14	20	50	25

UI 2910 ... White zinc plated steel / 1 piece each package + 8 set head screws for fixing to cylinder

UI SEC ... Pin for female hinge MP2 (AA4)	Bore	Code	$\emptyset$ EK	EL		L
	mm		e8		$^{+0,3}_0$	
	50	UI SEC 050	12		61	68
	63	UI SEC 063	16		71	78
	80	UI SEC 080	16		91	98
	100	UI SEC 100	20		111	118
	125	UI SEC 125	25		132	139

UI SEC ... White zinc plated steel / 1 piece each package + 2 retaining rings DIN 471

UI SECH ... Pin for female hinge MP6 (AA6)	Bore	Code	B	$\emptyset$ EK	EL1	H	L1	$\emptyset$ P	
	mm		f7	$^{+0,5}_{-0,3}$	$^{+0,5}_{-0,3}$	$^0_{-0,5}$		h12	
	50	UI SECH 050	6	0 -1	16	43	20	54	4
	63	UI SECH 063	6		16	49	20	60	4
	80	UI SECH 080	6		20	63	24	75	4
	100	UI SECH 100	6		20	73	24	85	4
	125	UI SECH 125	9		30	94	36	110	6

UI SECH ... White zinc plated steel / 1 piece each package + 1 retaining ring DIN 471

## END OF STROKE SENSORS TYPE SR

SRC-61, SRC-21, SRC-27 End of stroke sensor REED - 2 poles N.O.		Technical features		
		<b>Code</b>	SRC-61	SRC-21
		<b>Version</b>	Cable 2 x 0,14 mm <sup>2</sup>	Cable 2 x 0,14 mm <sup>2</sup>
		<b>Sensor</b>	REED	
		<b>Output</b>	Pure contact, normally open	
		<b>Operating voltage</b>	5 ÷ 230 Vac / Vdc	5 ÷ 130 Vac / Vdc
		<b>Switching current (max.)</b>	200 mA	200 mA
		<b>Contact rating (max.)</b>	10 W	6 W
		<b>Voltage drop (max.)</b>	3 V	3 V
		<b>Visual indicator</b>	LED yellow diode	
		<b>Operating frequency</b>	1000 Hz	
		<b>Temperature range</b>	-15 ÷ +70 °C	
		<b>Enclosure classification (IEC 60529)</b>	IP67	
		<b>Protection circuit</b>	Power source reverse polarity	
		<b>Mounting</b>	Screw for "T" groove - Torque max. 0,15 Nm	
SRC-61, SRC-21, SRC-27 / Sensor in PA6, cable in PUR - 1 piece each package				

SRD-21, SRD-27 End of stroke sensor REED - 3 poles N.O.		Technical features		
		<b>Code</b>	SRD-21	SRD-27
		<b>Version</b>	Cable 3 x 0,14 mm <sup>2</sup>	Connector M8 x 1 - 3 pin
		<b>Sensor</b>	REED	
		<b>Output</b>	PNP, normally open	
		<b>Operating voltage</b>	5 ÷ 30 Vac / Vdc	
		<b>Switching current (max.)</b>	200 mA	
		<b>Contact rating (max.)</b>	6 W	
		<b>Voltage drop (max.)</b>	0,7 V	
		<b>Visual indicator</b>	LED yellow diode	
		<b>Operating frequency</b>	1000 Hz	
		<b>Temperature range</b>	-15 ÷ +70 °C	
		<b>Enclosure classification (IEC 60529)</b>	IP67	
		<b>Protection circuit</b>	Power source reverse polarity	
		<b>Mounting</b>	Screw for "T" groove - Torque max. 0,15 Nm	
SRD-21, SRD-27 / Sensor in PA6, cable in PUR - 1 piece each package				

SRN-21, SRN-27 End of stroke sensor HALL PNP - 3 poles N.O.		Technical features		
		<b>Code</b>	SRN-21	SRN-27
		<b>Version</b>	Cable 3 x 0,14 mm <sup>2</sup>	Connector M8 x 1 - 3 pin
		<b>Sensor</b>	HALL	
		<b>Output</b>	PNP, normally open	
		<b>Operating voltage</b>	10 ÷ 30 Vdc	
		<b>Switching current (max.)</b>	200 mA	
		<b>Contact rating (max.)</b>	4 W	
		<b>Voltage drop (max.)</b>	0,7 V	
		<b>Visual indicator</b>	LED yellow diode	
		<b>Operating frequency</b>	1000 Hz	
		<b>Temperature range</b>	-15 ÷ +70 °C	
		<b>Enclosure classification (IEC 60529)</b>	IP67	
		<b>Protection circuit</b>	Power source reverse polarity	
		<b>Mounting</b>	Screw for "T" groove - Torque max. 0,15 Nm	
SRN-21, SRN-27 / Sensor in PA6, cable in PUR - 1 piece each package				


**END OF STROKE SENSORS TYPE SK9 with enclosure classification IP69K**

SK9-21	Technical features
End of stroke sensor HALL PNP - 3 poles N.O.	
	<p><b>Code</b> SK9-21  <b>Version</b> Cable 3 x 0,14 mm<sup>2</sup>  <b>Sensor</b> HALL  <b>Output</b> PNP, normally open  <b>Operating voltage</b> 10 ÷ 30 Vdc  <b>Switching current (max.)</b> 200 mA  <b>Contact rating (max.)</b> 6 W  <b>Current consumption</b> 10 mA (without load)  <b>Voltage drop (max.)</b> 2,2 V  <b>Visual indicator</b> LED yellow diode: flashing (instable position) permanently light (stable position)</p>
	<p><b>Operating frequency</b> 1000 Hz  <b>Temperature range</b> -30 ÷ +80 °C  <b>Enclosure classification (DIN 40050)</b> IP69K  <b>Protection circuit</b> Short-circuit, power source reverse polarity, power-up pulse  <b>Mounting</b> Screw for "T" groove - Torque max. 0,3 Nm</p> <p>SK9-21 / Sensor in PA12, cable in PUR - 1 piece each package</p>

**END OF STROKE SENSORS TYPE SKC with precise positioning sistem**

SKC-27	Technical features
End of stroke sensor HALL PNP - 3 poles N.O.	
	<p><b>Code</b> SKC-27  <b>Version</b> Connector M8 x 1 - 3 pin  <b>Sensor</b> HALL  <b>Output</b> PNP, normally open  <b>Operating voltage</b> 10 ÷ 28 Vdc  <b>Switching current (max.)</b> 80 mA  <b>Contact rating (max.)</b> 2 W  <b>Current consumption</b> 10 mA (24 Vdc)  <b>Voltage drop (max.)</b> 1,5 V  <b>Leakage current (max.)</b> 0,05 mA  <b>Visual indicator</b> Two colors LED diode: red (instable position) green (stable position)</p>
	<p><b>Operating frequency</b> 1000 Hz  <b>Temperature range</b> -10 ÷ +60 °C  <b>Enclosure classification (IEC 60529)</b> IP67  <b>Protection circuit</b> Short-circuit, power source reverse polarity, power-up pulse  <b>Mounting</b> Screw for "T" groove - Torque max. 0,3 Nm</p> <p>SKC-27 / Sensor in PA, cable in PUR - 1 piece each package</p>

## THREADED CONNECTORS TYPE Y082LC

Y082LC ...		Technical features	
Threaded connectors - 2 poles		Code	Y082LC250C
		Threaded connectors	M8 x 1
		Cable	2 x 0,14 mm <sup>2</sup>
		Cable length	2500 mm
		Operating voltage (max.)	50 Vac / 60 Vdc
		Corrente (max.)	3000 mA
		Temperature range	-25 ÷ +75 °C
		Enclosure classification (IEC 60529)	IP67
Y082LC ... / Connector in PVC, contacts in gilded brass, cable in PVC - 1 piece each package			

## THREADED CONNECTORS TYPE Y083LC

Y083LC ...		Technical features	
Threaded connectors - 3 poles		Code	Y083LC250D
		Threaded connectors	M8 x 1
		Cable	3 x 0,14 mm <sup>2</sup>
		Cable length	2500 mm
		Operating voltage (max.)	50 Vac / 60 Vdc
		Corrente (max.)	3000 mA
		Temperature range	-25 ÷ +75 °C
		Enclosure classification (IEC 60529)	IP67
Y083LC ... / Connector in PVC, contacts in gilded brass, cable in PVC - 1 piece each package			

## COILS

Y45EG3 ... Direct current coils		Technical features			
Code	Y45EG3 001	Y45EG3 002	Y45EG3 003	Y45EG3 004	
Operating voltage	12 VDC	24 VDC	48 VDC	110 VDC	
Power consumption (max.)	10 W				
Voltage tolerance	-10% ÷ +15% (of the nominal voltage)				
Encapsulation class	155°C (F)				
Wire insulation class	180°C (H)				
Energising duration	100% (a 20°C)				
Temperature range	-10 ÷ +50 °C				
Electrical connection	EN 175301-803 form A (ex. DIN 43650/A)				
Protection class	IP65 (with connector)				
Y45EG3... / Encapsulation material in NYLON - 1 piece each package					

Y45EG3 ... Alternate current coils		Technical features			
Code	Y45EG3 005	Y45EG3 006	Y45EG3 007	Y45EG3 008	
Operating voltage	24 VAC	48 VAC	110 VAC	220 VAC	
Power consumption (max.)	13,5 VA				
Voltage tolerance	-10% ÷ +15% (of the nominal voltage)				
Encapsulation class	155°C (F)				
Wire insulation class	180°C (H)				
Energising duration	100% (a 20°C)				
Temperature range	-10 ÷ +50 °C				
Electrical connection	EN 175301-803 form A (ex. DIN 43650/A)				
Protection class	IP65 (with connector)				
Y45EG3... / Encapsulation material in NYLON - 1 piece each package					

## CONNECTORS

CNN2... Connectors for coils		Technical features			
Code	CNN2	CNN 2 LED	CNN 3 LED	CNN 4 LED	
Operating voltage (max.)	0 ÷ 250 VDC / VAC	12/24 VDC / VAC	115 VDC / VAC	230 VDC / VAC	
Power consumption (max.)	10 A	5 A	5 A	5 A	
Contact resistance (max.)	15 mΩ				
Oversupply category	III				
Conductor size (max.)	1,5 mm² (without terminals)				
Cable gland	PG9				
Temperature range	-40 ÷ +100 °C	-20 ÷ +80 °C	-20 ÷ +80 °C	-20 ÷ +80 °C	
Electrical connection	EN175301-803 type A				
Protection class	IP65 (correctly assembled)				
CNN2... / Contact holder, housing, seal and mounting screw - 1 piece each package					
CNN2	CNN2...LED	Materials	PA6 GF - PA6 GF	PA6 GF - PA12	PA6 GF - PA12
1 → 1	1 → 1	Visual indicator	None	LED yellow diode	LED yellow diode
2 → 2	2 → 2	Color	Black	Transparent	Transparent
④ → ④	④ → ④	Protection circuit	None	VDR circuit	VDR circuit
CNN2... / Contact holder, housing, seal and mounting screw - 1 piece each package					



**BONESI PNEUMATIK** manufactures all its own products in Italy



**BONESI PNEUMATIK s.r.l.**

Via A. Robino n. 117  
20025 Legnano (MI) Italy  
P.I. / C.F. 10396340159  
R.E.A. 1373315

[www.bonesipneumatik.it](http://www.bonesipneumatik.it)  
[info@bonesipneumatik.it](mailto:info@bonesipneumatik.it)  
Phone +39 0331 448000  
Telefax +39 0331 448070