



Series 1400 - Ø40 - Ø63

The SKIP and STOP valves are pneumatically actuated 2 ways poppet valves.

The SKIP valve (accelerating device) is normally open and is equipped with a supplementary regulator for maximum speed control; it must be activated to obtain speed regulation.

The STOP valve can be normally closed or normally open.

Construction characteristics

Bore	40 mm and 63 mm diameter
Barrel	bright painted drawn steel
Regulators group	brass
Waterproof seals	NBR rubber
Piston seals	FPM
Rod seal	PUR
Circuit oil	hydraulic with viscosity 2.9° E at 50°C (viscosity index minimum 118)
Pistons	aluminium
Piston rod	C43 chromed steel
End caps	black anodised aluminium
Tie rods	zinc plated steel
SKIP and STOP valves	black anodised aluminium

Operational characteristics

Max connecting load	600 kg (Ø40) -1200 Kg (Ø63)
Working temperature	-5 °C ... +70 °C
Min. and max. speed	60 ... 10000 mm/min.
Minimum pressure for the actuation of SKIP and STOP valves	4 bar

Attention: air must be dried for applications with lower temperature.

Standard strokes

50 - 75 - 100 - 150 - 200 - 250 - 300 - 350 - 400 - 450 - 500 mm

For minimum strokes see different types.

On request are available strokes up to: 1300 mm

Operation instructions

Important: If the hydraulic regulator is mounted parallelly with a pneumatic actuator, to avoid the bending moment on the rod generated when the stroke is adjusted or when the stop is engaged, it is recommended to guide and support the load to be moved.

The limit pressure is indicated below, based on the size of the pneumatic actuator, above which it is recommended to guide and support the load:

Cylinder	Limit pressure (bar)
Ø40 and Ø50	10
Ø63	5
Ø80	2
Over Ø100	always guide and support the load

Maintenance

The speed control check is a closed system and there are no external factors that can adversely affect its function.

Care however, has to be exercised not to allow the hydraulic fluid level to drop below the minimum indicated on the auxiliary tank. Should this occur, cavitation, or worse, an air pocket would result causing erratic control.

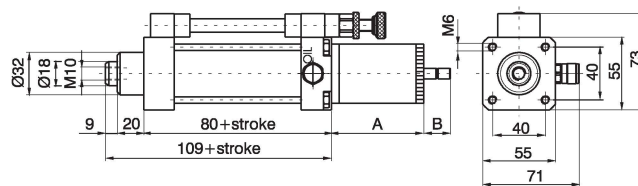
Additional fluid should be put in exclusively through a unidirectional valve by means of an appropriate syringe (such as our code number 1400.99.01). Excess fluid will be expelled through a vent into an appropriate container. It is necessary to completely disassemble the regulator and be sure to bleed the system to eliminate air pockets.

We suggest that you create a vacuum before beginning to refill.

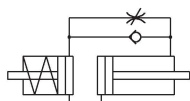
This can be done with a small unidirectional valve turned up and repeatedly loaded with a syringe. The rod must be manually actuated successively releasing air through the valve using a small and pointed instrument.

Regulation on the outward stroke - Tank in line

Coding: 1400.40.stroke.01.1



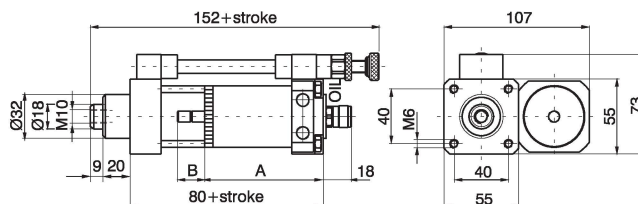
Weight
1450 g + 300 g every 50 mm stroke



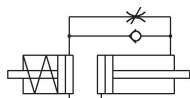
Strokes	A	B max.
< 75	78	30
75...<150	102	45
150...<250	127	60
250...<350	187	90
350...<500	202	120

Regulation on the outward stroke - Lateral tank

Coding: 1400.40.stroke.01.2



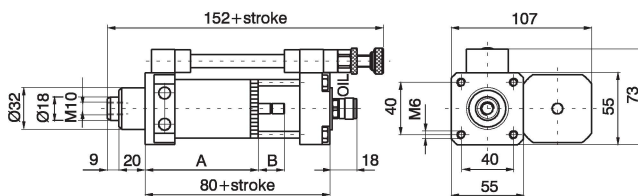
Weight
1530 g + 300 g every 50 mm stroke



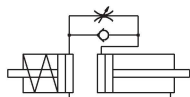
Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350...<500	218	120

Regulation on the inward stroke

Coding: 1400.40.stroke.02.2



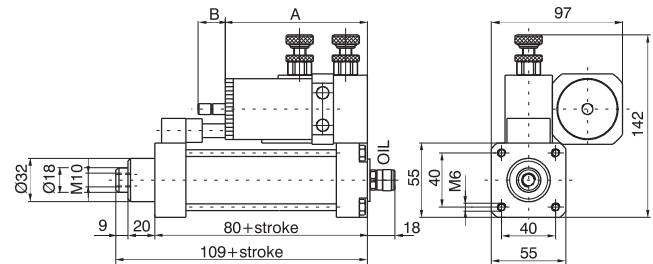
Weight
1530 g + 300 g every 50 mm stroke



Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350...<500	218	120

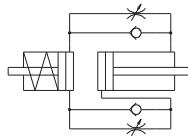
Regulation in both directions

Coding: 1400.40.stroke.03.2



Weight
1870 g + 300 g every 50 mm stroke

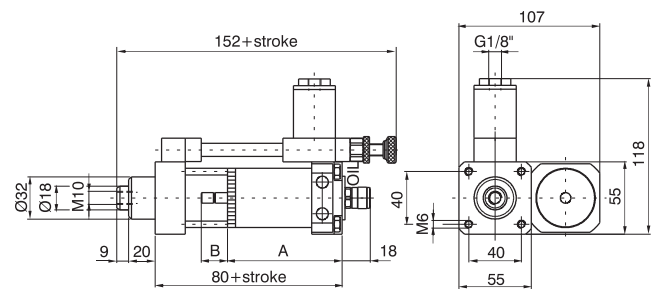
Attention: minimum stroke=150 mm when fitted in tandem (parallel or in-line) with 1319-1320-1321 cylinders series.



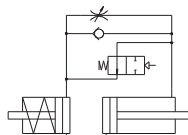
Strokes	A	B max.
< 75	110	30
75...<150	135	45
150...<250	160	60
250...<350	200	90
350...<500	235	120

Regulation on the outward stroke with skip (acceleration valve)

Coding: 1400.40.stroke.01.04



Weight
1670 g + 300 g every 50 mm stroke

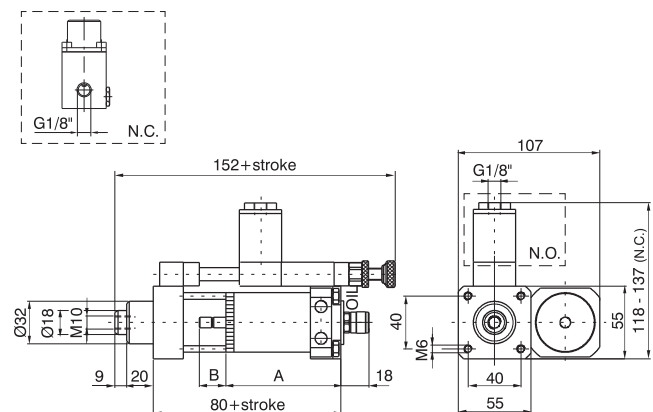


Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350...<500	218	120

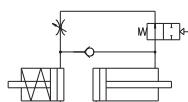
Regulation on the outward stroke with STOP (STOP valve)

Coding: 1400.40.stroke.01.00

VERSION
5 = STOP N.O.
7 = STOP N.C.



Weight
1710 g + 300 g every 50 mm stroke

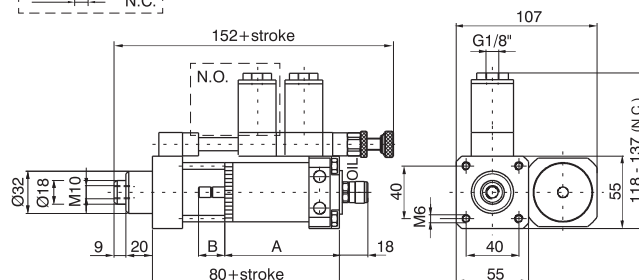
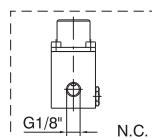


Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350...<500	218	120

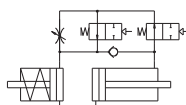
Regulation on the outward stroke with SKIP and STOP (acceleration and STOP valves)

Coding: 1400.40.stroke.01.0V

V	VERSION
	6 = STOP N.O.
	8 = STOP N.C



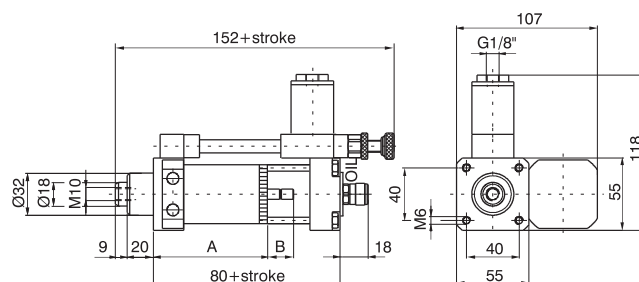
Weight
1830 g + 300 g every 50 mm stroke



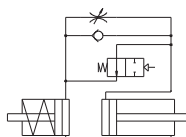
Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350 < 500	218	120

Regulation on the inward stroke with SKIP (acceleration valve)

Coding: 1400.40.stroke.02.04



Weight
1670 g + 300 g every 50 mm stroke

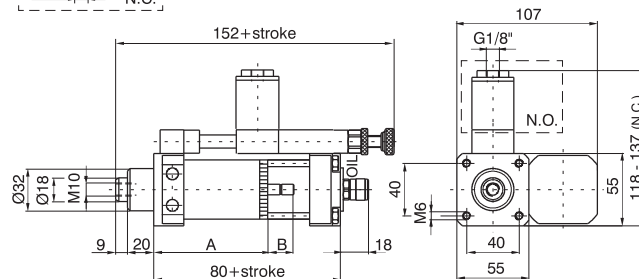
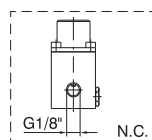


Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350...<500	218	120

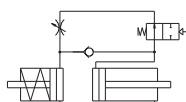
Regulation on the inward stroke with stop (stop valve)

Coding: 1400.40.stroke.02.0V

V	VERSION
	5 = STOP N.O.
	7 = STOP N.C



Weight
1710 g + 300 g every 50 mm stroke

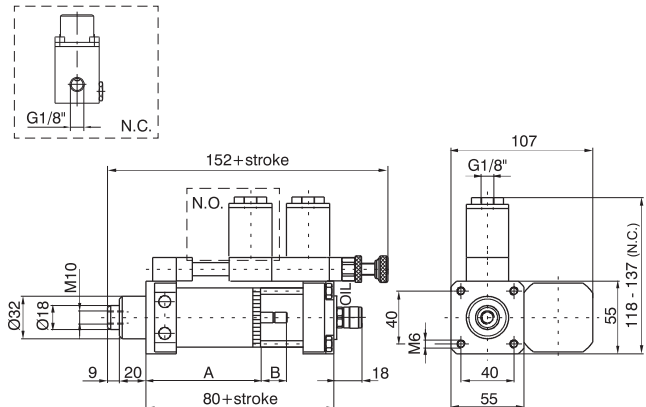


Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350...<500	218	120

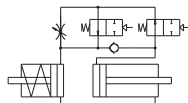
Regulation on the inward stroke with skip and stop (acceleration and stop valves)

Coding: 1400.40.stroke.02.0V

VERSION
6 = STOP N.O.
8 = STOP N.C.



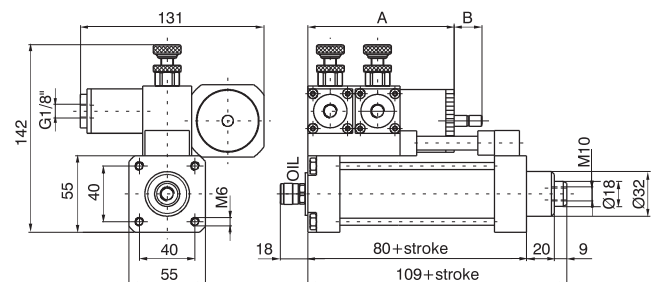
Weight
1830 g + 300 g every 50 mm stroke



Strokes	A	B max.
< 75	93	30
75...<150	118	45
150...<250	143	60
250...<350	183	90
350...<500	218	120

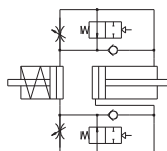
Regulation in both directions with skip (acceleration valves in both directions)

Coding: 1400.40.stroke.03.04



Weight
2110 g + 300 g every 50 mm stroke

Attention: minimum stroke=150 mm when fitted in tandem (parallel or in-line) with 1319-1320-1321 cylinders series.

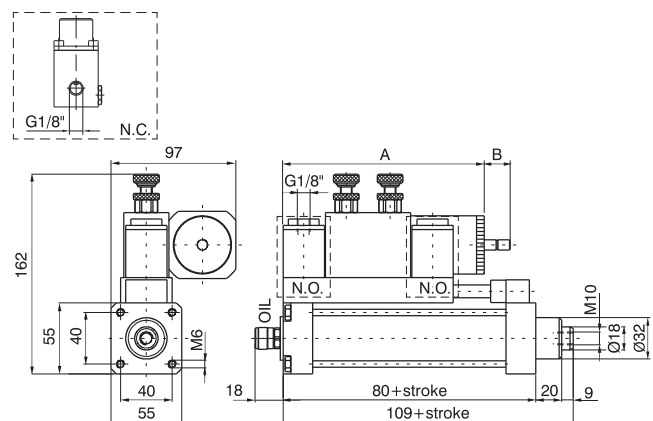


Strokes	A	B max.
< 75	110	30
75...<150	135	45
150...<250	160	60
250...<350	200	90
350...<500	235	120

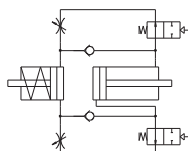
Regulation in both directions with STOP (STOP valves in both directions)

Coding: 1400.40.stroke.03.0V

VERSION
5 = STOP N.O.
7 = STOP N.C.



Min. stroke 150 mm
Weight
2390 g + 300 g every 50 mm stroke



Strokes	A	B max.
150...<250	197	60
250...<350	237	90
350...<500	272	120

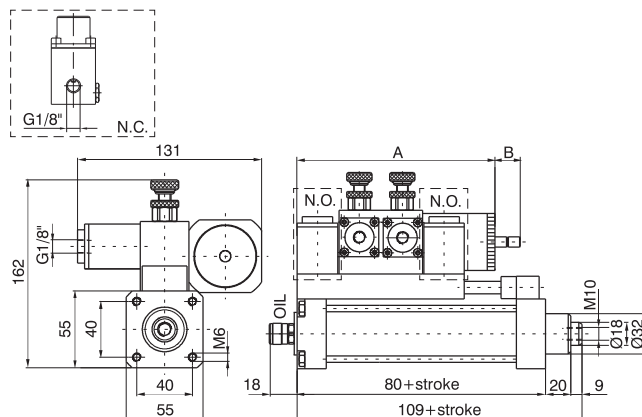
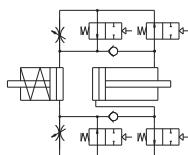
► Regulation in both directions with SKIP and STOP (acceleration and STOP valves in both directions)

Coding: 1400.40.stroke.03.0V

V	VERSION
	6 = STOP N.O.
	8 = STOP N.C.



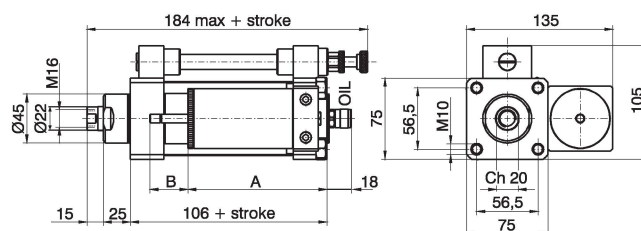
Min. stroke 150 mm
Weight
2630 g + 300 g every 50 mm stroke



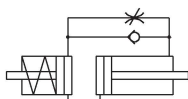
Strokes	A	B max.
150 - < 250	197	60
250 - < 350	237	90
350 - < 500	272	120

Regulation on the outward stroke – Lateral tank

Coding: 1400.63.stroke.01.2



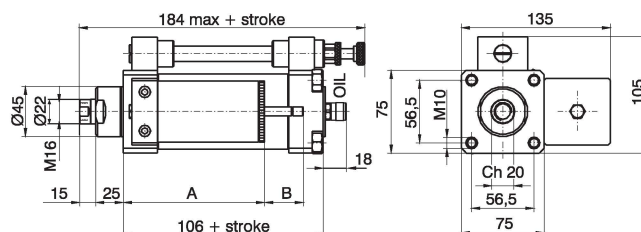
Min. stroke 75 mm
Weight
2950 g + 850 g every 50 mm stroke



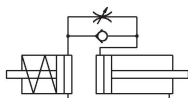
Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

Regulation on the inward stroke

Coding: 1400.63.stroke.02.2



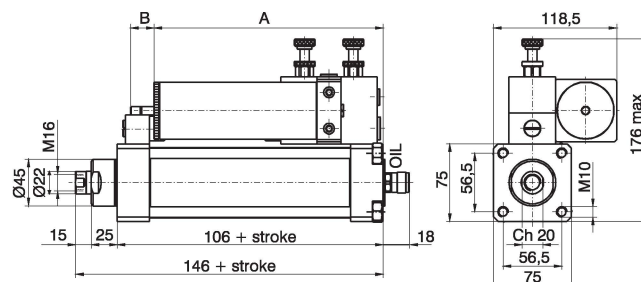
Min. stroke 75 mm
Weight
2950 g + 850 g every 50 mm stroke



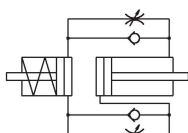
Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

Regulation in both directions

Coding: 1400.63.stroke.03.2



Min. stroke 100 mm
Weight
3600 g + 850 g every 50 mm stroke



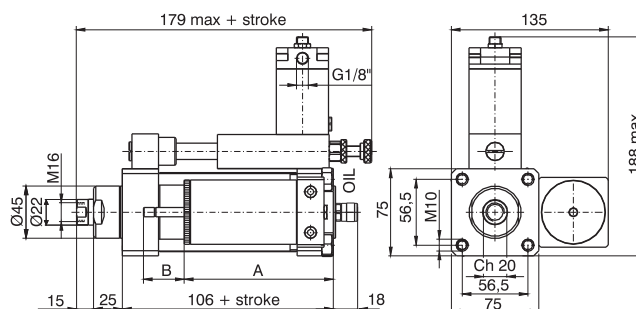
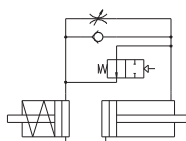
Strokes	A	B max.
≥100 ... <150	160	50
≥150 ... <250	220	80
≥250 ... <350	270	100
≥350 ... <450	330	130
≥450 ... <600	390	160
≥600 ... <700	450	190

Regulation on the outward stroke with skip (acceleration valve)

Coding: 1400.63.stroke.01.04



Min. stroke 75 mm
Weight
3450 g + 850 g every 50 mm stroke



Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

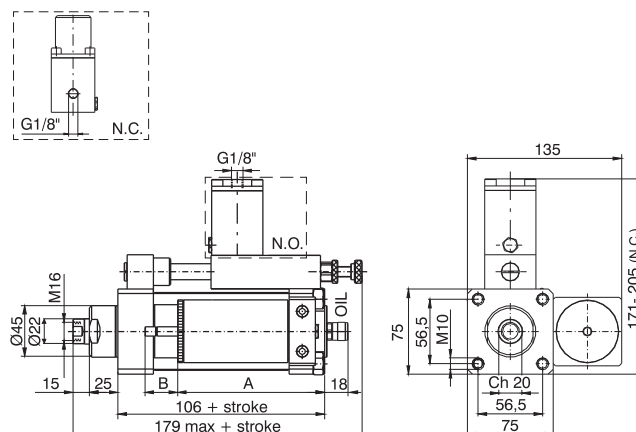
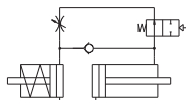
Regulation on the outward stroke with STOP (STOP valve)

Coding: 1400.63.stroke.01.0V

VERSION
5 = STOP N.O.
7 = STOP N.C.



Min. stroke 75 mm
Weight
3450 g + 850 g every 50 mm stroke



Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

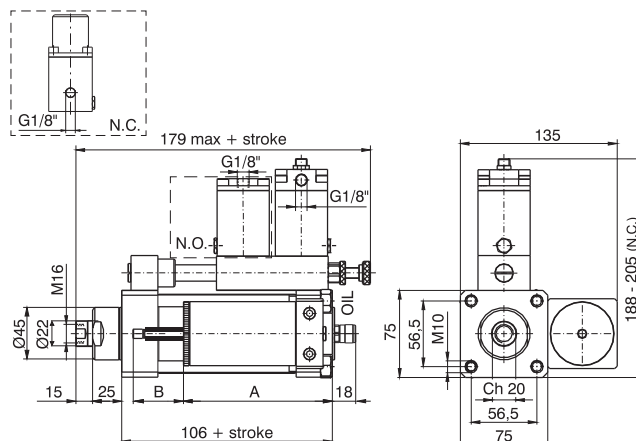
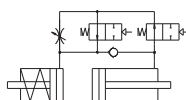
Regulation on the outward stroke with SKIP and STOP (acceleration and STOP valves)

Coding: 1400.63.stroke.01.0V

VERSION
6 = STOP N.O.
8 = STOP N.C.



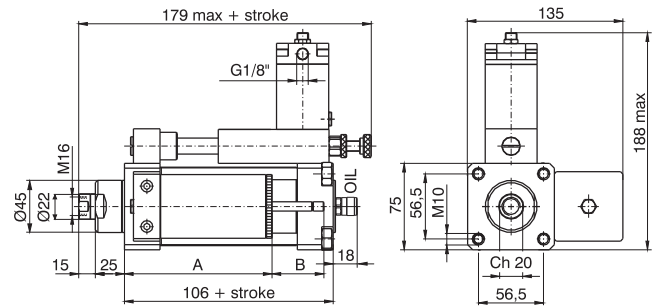
Min. stroke 75 mm
Weight
3700 g + 850 g every 50 mm stroke



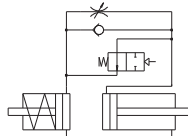
Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

Regulation on the inward stroke with SKIP (acceleration valve)

Coding: 1400.63.stroke.02.04



Min. stroke 75 mm
Weight
3450 g + 850 g every 50 mm stroke

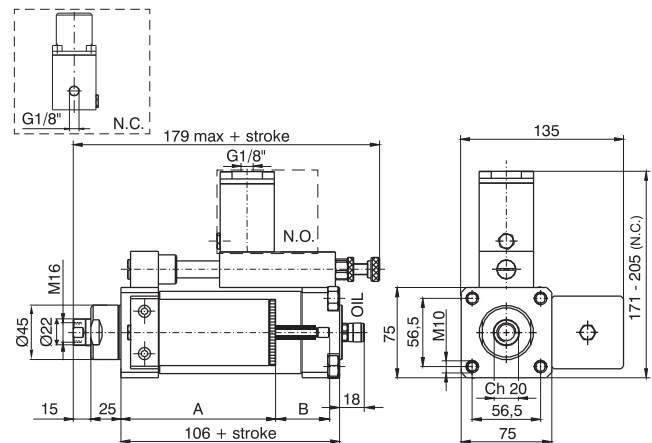


Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

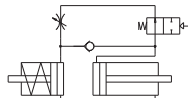
Regulation on the inward stroke with stop (stop valve)

Coding: 1400.63.stroke.02.0V

VERSION
V 5 = STOP N.O.
7 = STOP N.C.



Min. stroke 75 mm
Weight
3450 g + 850 g every 50 mm stroke

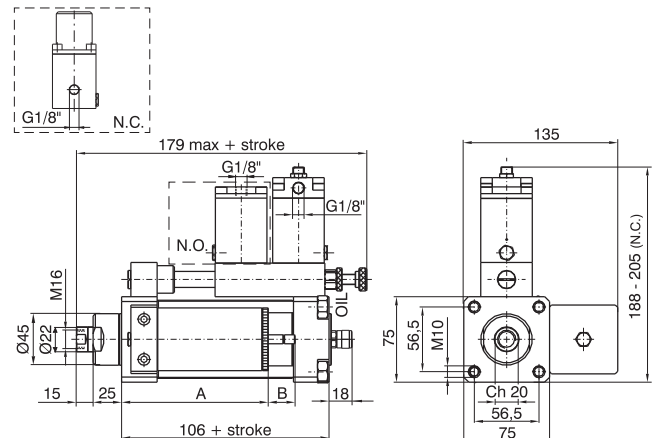


Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

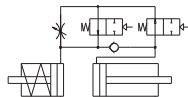
Regulation on the inward stroke with skip and stop (acceleration and stop valves)

Coding: 1400.63.stroke.0V

VERSION
V 6 = STOP N.O.
8 = STOP N.C.



Min. stroke 75 mm
Weight
3700 g + 850 g every 50 mm stroke



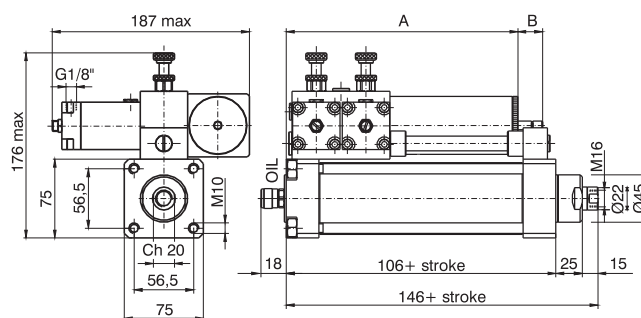
Strokes	A	B max.
≥75 ... <150	128	50
≥150 ... <250	188	80
≥250 ... <350	238	100
≥350 ... <450	298	130
≥450 ... <600	358	160

3

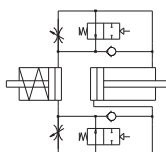
PNEUMATIC ACTUATION

► Regulation in both directions with skip (acceleration valves in both directions)

Coding: 1400.63.stroke.03.04



Min. stroke 100 mm
Weight
4100 g + 850 g every 50 mm stroke

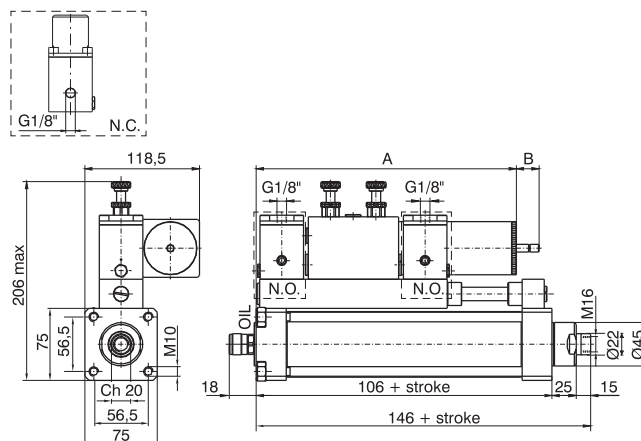


Strokes	A	B max.
≥100 ... <150	160	50
≥150 ... <250	220	80
≥250 ... <350	270	100
≥350 ... <450	330	130
≥450 ... <600	390	160
≥600 ... <700	450	190

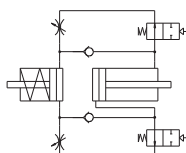
► Regulation in both directions with STOP (STOP valves in both directions)

Coding: 1400.63.stroke.03.0V

	VERSION
⑤	5 = STOP N.O.
	7 = STOP N.C.



Min. stroke 200 mm
Weight
4850 g + 850 g every 50 mm stroke

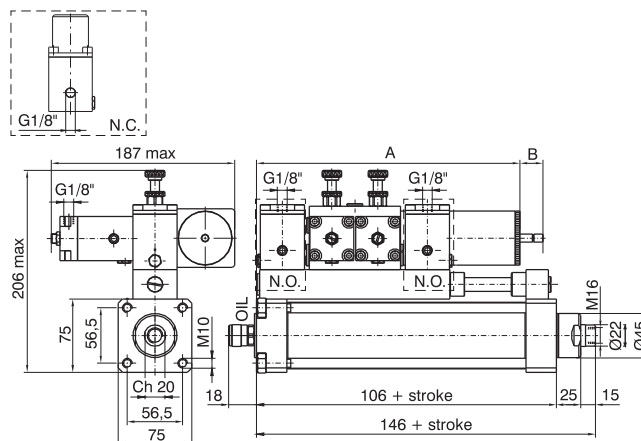


Strokes	A	B max.
≥200 ... <250	270	50
≥250 ... <350	320	100
≥350 ... <450	380	130
≥450 ... <600	440	160
≥600 ... <700	500	190

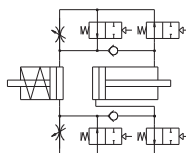
► Regulation in both directions with SKIP and STOP (acceleration and STOP valves in both directions)

Coding: 1400.63.stroke.03.0V

V	VERSION
	6 = STOP N.O.
	8 = STOP N.C



Min. stroke 200 mm
Weight
5400 g + 850 g every 50 mm stroke



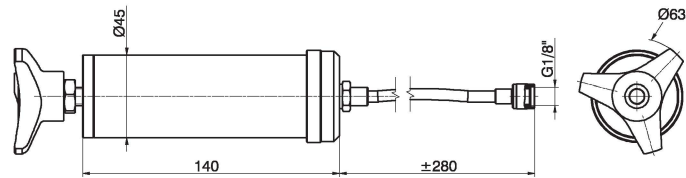
Strokes	A	B max.
≥200 ... <250	270	50
≥250 ... <350	320	100
≥350 ... <450	380	130
≥450 ... <600	440	160
≥600 ... <700	500	190

► Hydraulic fluid refill syringe

Coding: 1400.99.02



Weight 420 g



► Oil for hydraulic and pneumatic circuits

Coding: PNEUM.OIL01



1 L bottle.

This oil is suitable to lubricate pneumatic circuits and also to refill hydraulic speed control tanks. It is completely compatible with our seals.