

In-line 3/2, 5/2 and 5/3 Spool Valves Manually and Mechanically Actuated G¹/₈ and G¹/₄

- Wide range of operators
- Suitable for multi-directional flow and dual supply applications
- High flow capacity
- Lightweight corrosion resistant materials



Technical Data

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Spool Valve, directly and indirectly actuated

Mounting:

Through-holes in valve body

Port Size:

G¹/₈ & G¹/₄

Operating Pressure:

Maximum 10 bar. For details see overleaf

Flow Characteristics:

Size	Function	'C'	'b'	'A'	l/min	Cv	Kv
G ¹ / ₈	3/2, 5/2 & 5/3	1,4	0,441	5,5	335	0,34	0,295
G ¹ / ₄	3/2, 5/2 & 5/3	4,0	0,434	16	965	0,98	0,351

Operating Temperature:

0°C* to +70°C

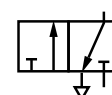
* Consult our Technical Service for use below +2°C.

Materials:

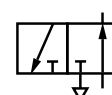
Diecast aluminium alloy body, aluminium end cover, nitrile rubber seals

Ordering Information

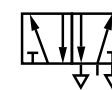
To order, quote number from tables overleaf, e.g. 03 0402 02 for a Roller Actuated, Spring Return Model.



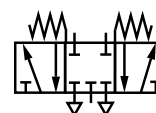
3/2 Normally closed



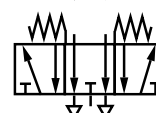
3/2 Normally open



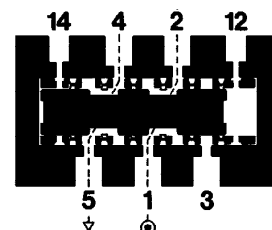
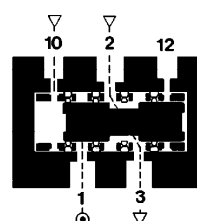
5/2



5/3
All ports blocked mid position



5/3
Centre open exhaust mid position



For Technical Data on Super X Solenoid and Pilot Valves see section 5.4.151

**G¹/₈ 3/2 Mechanical Valves**

Symbol	Model	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	03 0400 02	Plunger	Spring	2 - 10	0,140	03 8408 02	8
	03 0417 02	Plunger	Pilot	2 - 10	0,200	03 8408 02	8
	03 0402 02	Roller	Spring	2 - 10	0,140	03 8408 02	8
	03 0411 02	Roller Lever	Spring	2 - 10	0,210	03 8408 02	8
	03 0293 02	Roller Lever (Heavy Duty)	Spring	2 - 10	0,210	03 8408 02	9
	03 0423 02	Sensitive Roller Lever	Spring	2 - 10	0,250	N/A	9
	03 0409 02	Roller	Pilot	2 - 10	0,180	03 8408 02	9
	03 0427 02	Roller Lever	Pilot	2 - 10	0,250	03 8408 02	9
	03 0410 02	One-way Trip	Spring	2 - 10	0,210	03 8408 02	10
	03 0294 02	One-way trip (Heavy Duty)	Spring	2 - 10	0,210	03 8408 02	10
	03 0432 02	Antenna	Spring	2 - 10	0,210	N/A	10

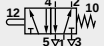
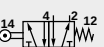
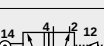
G¹/₈ 5/2 Mechanical Valves

Symbol	Model	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	X3 0440 02	Plunger	Spring	2 - 10	0,250	03 8408 02	11
	X3 0457 02	Plunger	Pilot	2 - 10	0,310	03 8408 02	11
	X3 0442 02	Roller	Spring	2 - 10	0,250	03 8408 02	11
	X3 0451 02	Roller Lever	Spring	2 - 10	0,320	03 8408 02	11
	X3 0393 02	Roller Lever (Heavy Duty)	Spring	2 - 10	0,290	03 8408 02	12
	X3 0463 02	Sensitive Roller Lever	Spring	2 - 10	0,360	N/A	12
	X3 0449 02	Roller	Pilot	2 - 10	0,290	03 8408 02	12
	X3 0467 02	Roller Lever	Pilot	2 - 10	0,360	03 8408 02	12
	X3 0450 02	One-way Trip	Spring	2 - 10	0,320	03 8408 02	13
	X3 0394 02	One Way Trip (Heavy Duty)	Spring	2 - 10	0,290	03 8408 02	13
	X3 0472 02	Antenna	Spring	2 - 10	0,300	N/A	13

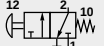
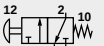
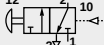
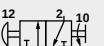
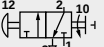
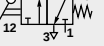
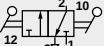
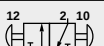
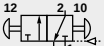
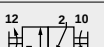
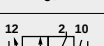
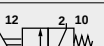
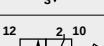
G¹/₄ 3/2 Mechanical Valves

Symbol	Model	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	03 0600 02	Plunger	Spring	2 - 10	0,340	03 8602 02	14
	03 0602 02	Roller	Spring	2 - 10	0,340	03 8602 02	14
	03 0611 02	Roller Lever	Spring	2 - 10	0,410	03 8602 02	14
	03 0609 02	Roller	Pilot	2 - 10	0,390	03 8612 02	14
	03 0624 02	Roller Lever	Pilot	2 - 10	0,450	03 8612 02	15

G¹/₄ 5/2 Mechanical Valves

Symbol	Model	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	X3 0640 02	Plunger	Spring	2 - 10	0,460	03 8602 02	16
	X3 0642 02	Roller	Spring	2 - 10	0,460	03 8602 02	16
	X3 0651 02	Roller Lever	Spring	2 - 10	0,530	03 8602 02	16
	X3 0649 02	Roller	Pilot	2 - 10	0,500	03 8612 02	16
	X3 0664 02	Roller Lever	Pilot	2 - 10	0,570	03 8612 02	17

G¹/₈ 3/2 Manual Valves

Symbol	Model	Colour	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	03 0404 02	Black	Button (Palm)	Spring	2 - 10	0,150	03 8408 02	18
	03 0405 02	Green						
	03 0406 02	Red						
	03 0366 02	Red	Button, (Palm)	Spring	2 - 10	0,290	03 8408 02	18
	03 0367 02	Green						
	03 0414 02	Black	Button, (Shrouded)	Spring	2 - 10	0,210	03 8408 02	18
	03 0415 02	Green						
	03 0416 02	Red						
	03 0408 02	Black	Button (Palm)	Pilot	2 - 10	0,220	03 8408 02	18
	03 0420 02	Green						
	03 0421 02	Red						
	03 0428 02	Red	Emergency Stop	Twist Ring	2 - 10	0,310	03 8473 02	19
	03 0297 02	Red	Emergency Stop	Rotary Knob	2 - 10	0,276	03 8408 02	19
	03 0335 02	Red	Button, Palm	Key	2 - 10	0,370	03 8408 02	19
	03 0438 02	Black	Lever	Spring	2 - 10	0,280	03 8408 02	20
	03 0426 02	Black	Lever	Spring	2 - 10	0,240	03 8408 02	20
	03 0403 02	Black	Lever	Lever	2 - 10	0,160	03 8408 02	20
	03 0437 02	Black	Lever	Lever	2 - 10	0,290	03 8408 02	20
	03 0296 02	Black	Lever	Lever	2 - 10	0,250	03 8048 02	19
	03 0425 02	Black	Knob	Knob	2 - 10	0,170	03 8408 02	20
	03 0424 02	Black	Knob	Knob or Pilot	2 - 10	0,210	03 8408 02	21
	03 0419 02	Black	Rotary Knob	Rotary Knob	2 - 10	0,290	03 8408 02	21
	03 0418 02 801	Chrome	Key	Key	2 - 10	0,360	03 8408 02	21
	03 0481 02	Black	Pedal	Spring	2 - 10	1,030	03 8408 02	21
	03 0483 02	Black	Pedal	Pedal	2 - 10	1,070	03 8408 02	22

**G¹/₈ 3/2 Manual Valves with Electrical Style Operating Heads**

Symbol	Model	Colour	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares Kit	Page no.
	03 0269 02	Red	Button (Palm)	Spring	2 - 10	0,221	03 8408 02	23
	03 0270 02	Green						
	03 0271 02	Black						
	03 0263 02	Red	Button (Mushroom)	Spring	2 - 10	0,221	03 8408 02	22
	03 0264 02	Green						
	03 0265 02	Black						
	03 0266 02	Red	Button (Shrouded)	Spring	2 - 10	0,214	03 8408 02	23
	03 0267 02	Green						
	03 0268 02	Black						
	03 0272 02	Red	Button	Key	2 - 10	0,242	03 8408 02	23
	03 0273 02	-	Switch	Switch	2 - 10	0,250	03 8408 02	23
	03 0261 02	Black	Rotary knob	Rotary knob	2 - 10	0,229	03 8408 02	22
	03 0262 02	-	Key	Key	2 - 10	0,300	03 8408 02	22

G¹/₈ 3/2 Adapter valve

Symbol	Model	Colour	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares Kit	Page no.
	03 0295 02	-	Adapter	Spring	2 - 10	2,21	03 8408 02	24

G¹/₈ 5/2 & 5/3 Manual Valves

Symbol	Model	Colour	Operator	Mid-position	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	X3 0444 02	Black	Button (Palm)	-	Spring	2 - 10	0,260	03 8408 02	25
	X3 0445 02	Green							
	X3 0446 02	Red							
	X3 0386 02	Red	Button (Palm)	-	Spring	2 - 10	0,400	03 8408 02	25
	X3 0387 02	Green							
	X3 0388 02	Black	Button (Shrouded)	-	Spring	2 - 10	0,320	03 8408 02	25
	X3 0454 02	Black							
	X3 0455 02	Green							
	X3 0456 02	Red	Button (Palm)	-	Pilot	2 - 10	0,340	03 8408 02	25
	X3 0448 02	Black							
	X3 0460 02	Green							
	X3 0461 02	Red	Knob (push)	-	Knob, Pull	2 - 10	0,280	03 8408 02	28
	X3 0297 02	Red							
	X3 0465 02	Black	Emergency Stop	-	Spring	2 - 10	0,337	03 8408 02	26
	X3 0468 02	Red	Emergency Stop	-	Twist Ring	2 - 10	0,540	03 8473 02	26
	X3 0375 02	Red	Palm Button, push	-	Key	2 - 10	0,480	03 8408 02	26
	X3 0478 02	Black	Lever	-	Spring	2 - 10	0,400	03 8408 02	27
	X3 0466 02	Black	Lever	-	Spring	2 - 10	0,350	03 8408 02	27
	X3 0443 02	Black	Lever	-	Lever	2 - 10	0,270	03 8408 02	27
	X3 0477 02	Black	Lever	-	Lever	2 - 10	0,400	03 8408 02	27
	X3 0296 02	Black	Lever	-	Lever	2 - 10	0,360	03 8408 02	26
	X3 3438 02	Black	Lever	APB	Lever	2 - 10	0,850	03 8408 02	27
	X3 3478 02	Black	Lever	COE	Lever	2 - 10	0,850	03 8408 02	27
	X3 3437 02	Black	Lever	APB	Lever	2 - 10	0,440	03 8408 02	27
	X3 3477 02	Black	Lever	COE	Lever	2 - 10	0,440	03 8408 02	27
	X3 0464 02	Black	Knob (push)	-	Knob (pull) or Pilot	2 - 10	0,320	03 8408 02	28
	X3 0459 02	Black	Rotary Knob	-	Rotary Knob	2 - 10	0,400	03 8408 02	28
	X3 0458 02 801	Chrome	Key	-	Key	2 - 10	0,470	03 8408 02	28
	X3 0482 02	Black	Pedal	-	Spring	2 - 10	1,120	03 8408 02	29
	X3 0484 02	Black	Pedal	-	Pedal	2 - 10	1,180	03 8408 02	29

APB = All Ports Blocked, COE = Centre Open Exhaust.

**G¹/₈ 5/2 Manual Valves with Electrical Style Operating Heads**

Symbol	Model	Colour	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares Kit	Page no.
	X3 0269 02	Red	Button (Palm)	Spring	2 - 10	0,308	03 8408 02	30
	X3 0270 02	Green						
	X3 0271 02	Black						
	X3 0263 02	Red	Button (Mushroom)	Spring	2 - 10	0,308	03 8408 02	30
	X3 0264 02	Green						
	X3 0265 02	Black						
	X3 0266 02	Red	Button (Shrouded)	Spring	2 - 10	0,301	03 8408 02	30
	X3 0267 02	Green						
	X3 0268 02	Black						
	X0 0272 02	Red	Button	Key	2 - 10	0,329	03 8408 02	30
	X3 0273 02	-	Switch	Switch	2 - 10	0,340	03 8408 02	31
	X3 0261 02	Black	Rotary knob	Rotary knob	2 - 10	0,316	03 8408 02	29
	X3 0262 02	-	Key	Key	2 - 10	0,386	03 8408 02	29

G¹/₈ 5/2 Adapter valve

Symbol	Model	Colour	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares Kit	Page no.
	X3 0395 02	-	Adapter	Spring	2 - 10	2,21	03 8408 02	31

G¹/₄ 3/2 Manual Valves

Symbol	Model	Colour	Operator	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	03 0604 02	Black	Button	Spring	2 - 10	0,350	03 8602 02	32
	03 0608 02	Black	Button	Pilot	2 - 10	0,420	03 8612 02	32
	03 0638 02	Black	Lever	Spring	2 - 10	0,480	03 8602 02	32
	03 0637 02	Black	Lever	Lever	2 - 10	0,490	03 8602 02	32
	03 0625 02	Black	Knob	Knob	2 - 10	0,370	03 8602 02	32
	03 0627 02	Black	Knob	Knob or Pilot	2 - 10	0,410	03 8612 02	33
	03 0681 02	Black	Pedal	Spring	2 - 10	1,230	03 8602 02	33
	03 0683 02	Black	Pedal	Pedal	2 - 10	1,270	03 8602 02	33



G¹/₄ 5/2 & 5/3 Manual Valves

Symbol	Model	Colour	Operator	Mid-position	Return	Operating Pressure (bar)	Weight (kg)	Spares kit	Page no.
	X3 0644 02	Black	Button	-	Spring	2 - 10	0,470	03 8602 02	34
	X3 0648 02	Black	Button	-	Pilot	2 - 10	0,540	03 8612 02	34
	X3 0678 02	Black	Lever	-	Spring	2 - 10	0,600	03 8602 02	34
	X3 0677 02	Black	Lever	-	Lever	2 - 10	0,610	03 8602 02	34
	X3 3638 02	Black	Lever	APB	Lever	2 - 10	1,060	03 8602 02	34
	X3 3678 02	Black	Lever	COE	Lever	2 - 10	1,060	03 8602 02	34
	X3 3637 02	Black	Lever	APB	Lever	2 - 10	0,650	03 8602 02	34
	X3 3677 02	Black	Lever	COE	Lever	2 - 10	0,650	03 8602 02	34
	X3 0665 02	Black	Knob	-	Knob	2 - 10	0,490	03 8602 02	35
	X3 0682 02	Black	Pedal	-	Spring	2 - 10	1,330	03 8602 02	35
	X3 0684 02	Black	Pedal	-	Pedal	2 - 10	1,390	03 8602 02	35

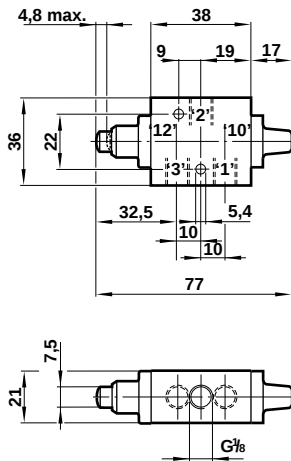
APB = All Ports Blocked, COE = Centre Open Exhaust.

G¹/₈ 5/2 and 3/2 Adapter Valve Heads

Model No.	Operator	Type	Colour
M/P 34840/R	Button (Palm)/Spring	Momentary Action	Red
M/P 34840/G			Green
M/P 34840/N			Black
M/P 34841/R	Button (Shrouded)/Spring	Momentary Action	Red
M/P 34841/G			Green
M/P 34841/N			Black
M/P 34842/R	Button (Mushroom)/Spring	Momentary Action	Red
M/P 34842/G			Green
M/P 34842/N			Black
M/P 34862	Emergency Stop Button/Key	Maintained Action	Red
M/P 34846	Switch/Switch	Maintained Action	-
M/P 34843	Rotary Knob/Rotary Knob	Maintained Action	-
M/P 34845	Key/Key	Maintained Action	-



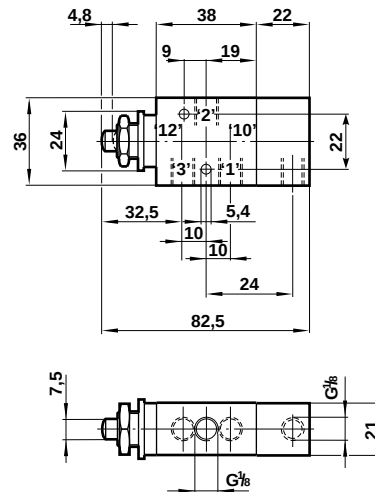
03 0400 02

G¹/₈ 3/2 Plunger Actuated Spring Return Valve

Operating Force: 31N

The plunger on this valve is designed for axial loading only.

03 0417 02

G¹/₈ 3/2 Plunger Actuated Pilot Return Valve

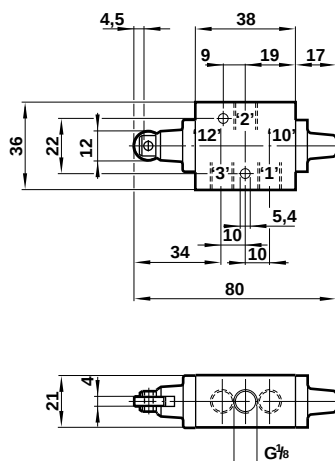
Operating Force: 18N, '10' at zero bar

Reset Pressure: 2 bar minimum; Full Movement: 4,8mm

The plunger on this valve is designed for axial loading only. This valve can be panel mounted.

Panel Cut-out: Ø15; Panel thickness: 5mm

03 0402 02

G¹/₈ 3/2 Roller Actuated Spring Return Valve

Operating Force: 31N

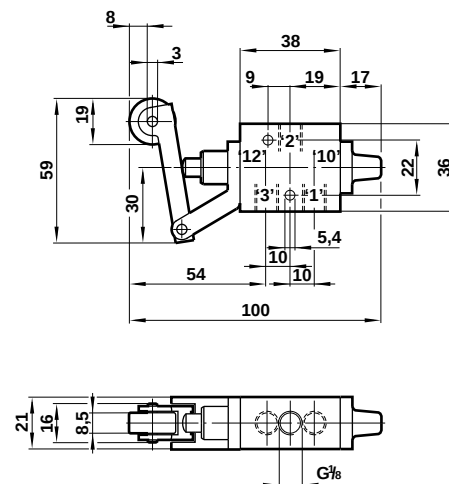
Maximum Recommended Cam Rise: 4,5 mm

Cam Angle of Approach: 30° maximum

Cam Speed: 8 m/min. maximum

Operating Speed: 300 cpm

03 0411 02

G¹/₈ 3/2 Roller Lever Actuated Spring Return Valve

Operating Force: 18N; Operating Travel: 8 mm

Over-travel: 3mm

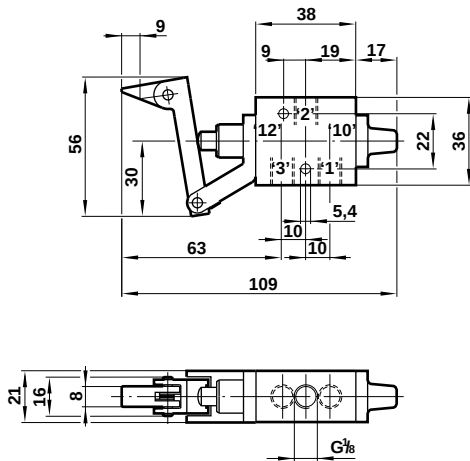
Cam Angle of Approach: 45° maximum

Cam Speed: 8 m/min. maximum

Operating Speed: 300 cpm

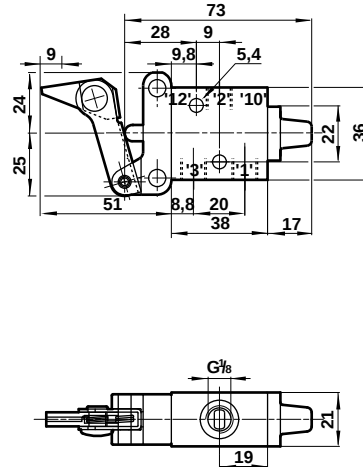


03 0410 02

G¹/₈ 3/2 One-way Trip Actuated Spring Return Valve

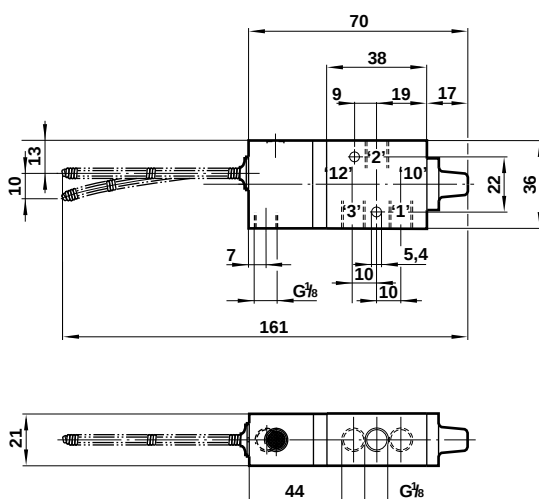
Operating Force: 31N
Cam Rise: 9 mm
Cam Angle of Approach: 90° maximum
Cam Speed: 2 m/min. maximum
Operating Speed: 120 cpm

03 0294 02

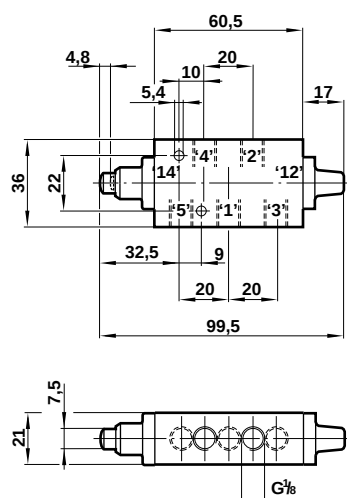
G¹/₈ 3/2 Heavy Duty One Way Trip Actuated Spring Return Valve

Operating Force: 31N
Cam Rise: 9 mm
Cam Angle of Approach: 90° maximum
Cam Speed: 2 m/min. maximum
Operating Speed: 120 cpm

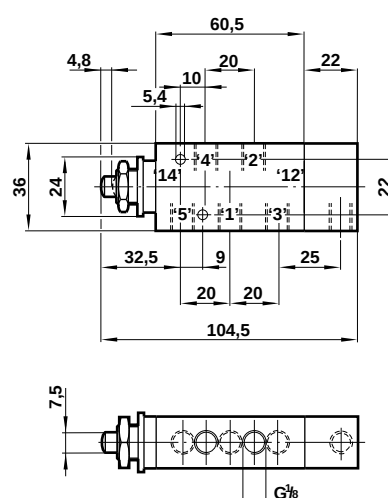
03 0432 02

G¹/₈ 3/2 Antenna Actuated Spring Return Valve

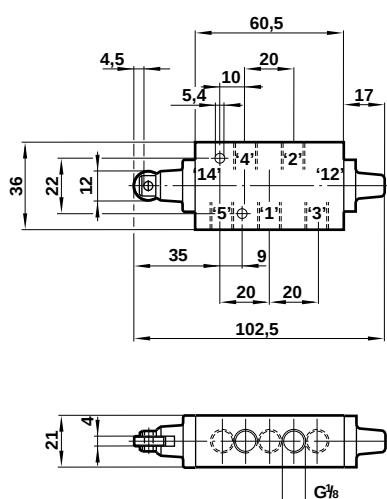
Operating Force: 0,3N at tip
Constant Pilot Supply: 2 bar minimum
Operating Movement: 10 mm minimum in any direction.

**X3 0440 02****G¹/₈ 5/2 Plunger Actuated Spring Return Valve**

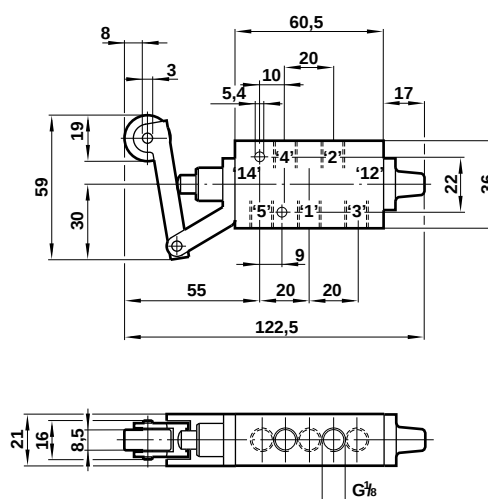
Operating Force: 54N
Full Movement: 4,8 mm
The plunger on this valve is designed for axial loading only.

X3 0457 02**G¹/₈ 5/2 Plunger Actuated Pilot Return Valve**

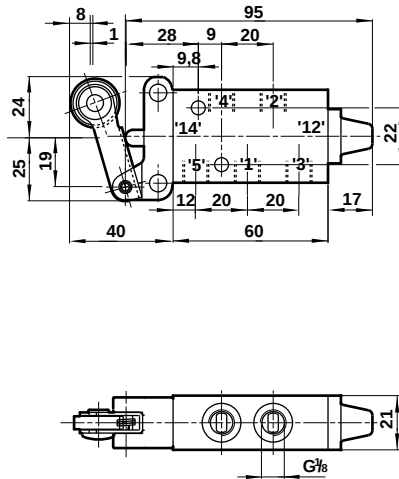
Operating Force: 22N, '12' at zero bar
Reset Pressure: 2 bar minimum; Full Movement: 4,8 mm
The plunger on this valve is designed for axial mounting only. This valve can be panel mounted.
Panel Cut-out: Ø15 mm; Maximum Panel Thickness: 5 mm

X3 0442 02**G¹/₈ 5/2 Plunger Actuated Pilot Return Valve**

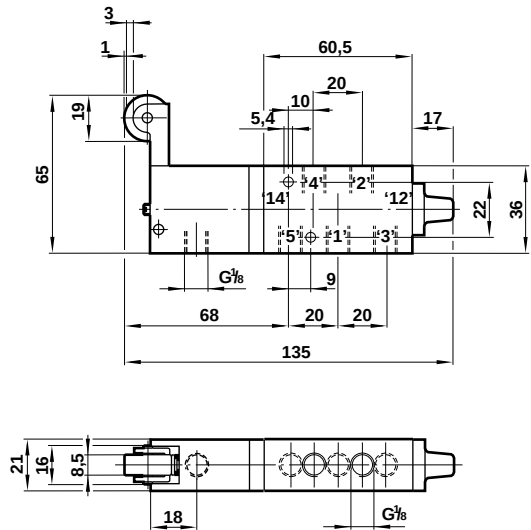
Operating Force: 54N
Maximum Recommended Can Rise: 4,5 mm
Cam Angle of Approach: 30° maximum
Cam Speed: 8 m/min. maximum
Operating Speed: 300 cpm

X3 0451 02**G¹/₈ 5/2 Roller Lever Actuated Spring Return Valve**

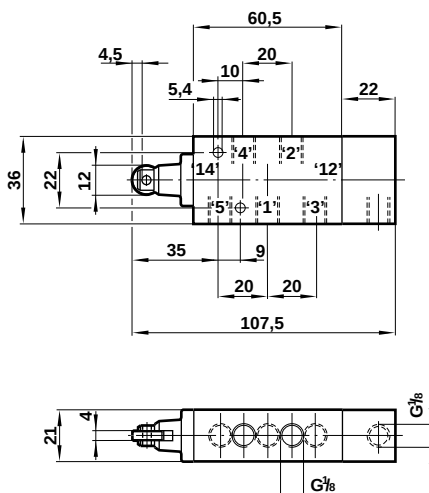
Operating Force: 31N; Operating Travel: 8 mm
Over-travel: 3mm
Cam Angle of Approach: 45° maximum
Cam Speed: 8 m/min. maximum
Operating Speed: 300 cpm

**X3 0393 02****G^{1/8} 5/2 Heavy Duty Roller Lever Actuated Spring Return Valve**

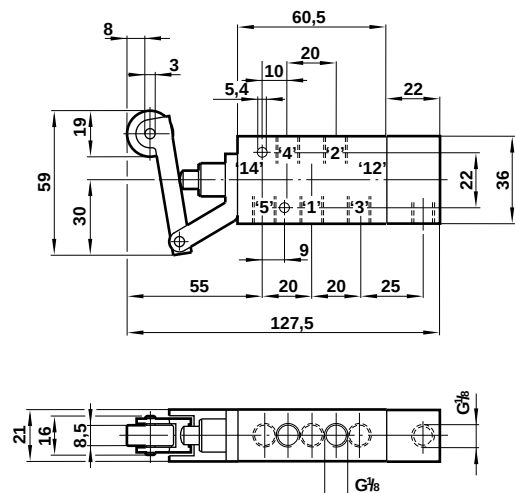
Operating Force: 31N; Operating Travel: 8 mm
 Over-travel: 1mm
 Cam Angle of Approach: 45° maximum
 Cam Speed: 8 m/min. maximum
 Operating Speed: 300 cpm

X3 0463 02**G^{1/8} 5/2 Sensitive Roller Lever Actuated Spring Return Valve**

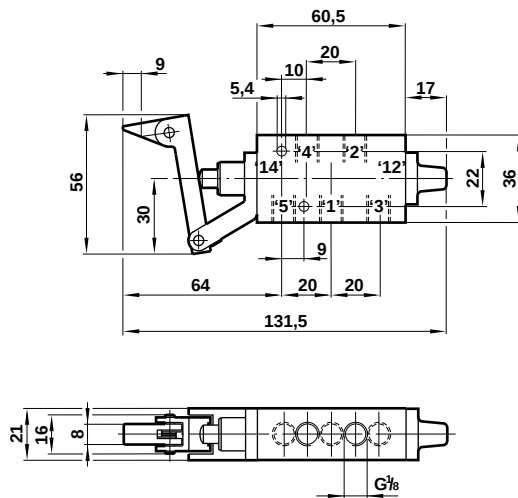
Operating Force: 1N
 Constant Pilot Supply: 3 bar minimum
 Pre-travel: 1 mm; Over-travel: 3mm
 Cam Angle of Approach: 45° maximum
 Cam Speed: 6,5 m/min. maximum

X3 0449 02**G^{1/8} 5/2 Roller Actuated Pilot Return Valve**

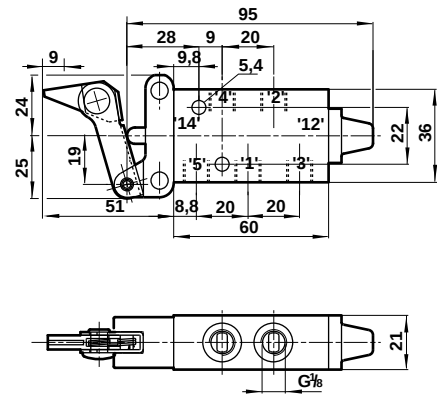
Operating Force: 22N, '12' at zero bar
 Reset Pressure: 2 bar minimum
 Maximum Recommended Cam Rise: 4,5 mm
 Cam Angle of Approach: 30° maximum
 Cam Speed: 8 m/min. maximum
 Operating Speed: 300 cpm

X3 0467 02**G^{1/8} 5/2 Roller Lever Actuated Pilot Return Valve**

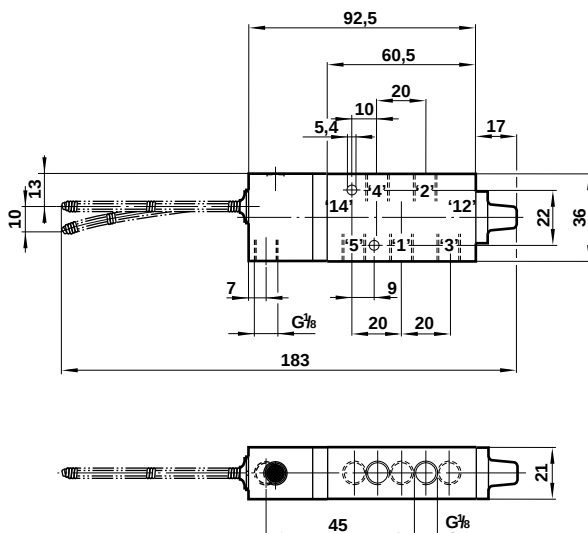
Operating Force: 9N, '12' at zero bar
 Reset Pressure: 2 bar minimum
 Operating Travel: 8 mm; Over-travel: 3mm
 Cam Angle of Approach: 45° maximum
 Cam Speed: 8 m/min. maximum
 Operating Speed: 300 cpm

**X3 0450 02****G¹/₈ 5/2 One-way Trip Actuated Spring Return Valve**

Operating Force: 31N
 Cam Rise: 9mm
 Cam Angle of Approach: 90° maximum
 Cam Speed: 2 m/min. maximum
 Operating Speed: 120 cpm

X3 0394 02**G¹/₈ 5/2 Heavy Duty One Way Trip Actuated Spring Valve**

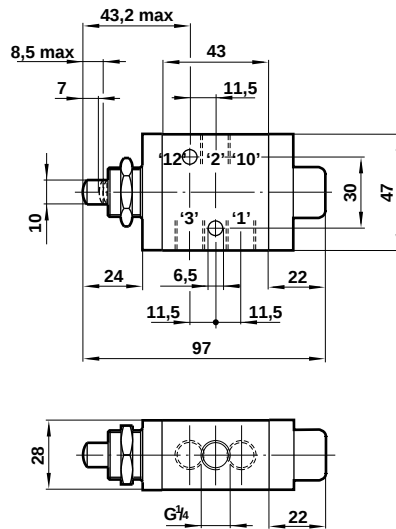
Operating Force: 31N
 Cam Rise: 9mm
 Cam Angle of Approach: 90° maximum
 Cam Speed: 2 m/min. maximum
 Operating Speed: 120 cpm

X3 0472 02**G¹/₈ 5/2 Antenna Actuated Spring Return Valve**

Operating Force: 0,3N at tip
 Constant Pilot Supply: 3 bar minimum
 Operating Movement: 10 mm minimum in any direction

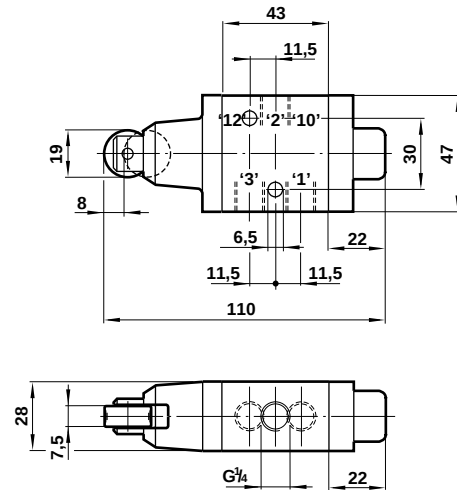


03 0600 02

G¹/₄ 3/2 Plunger Actuated Spring Return Valve

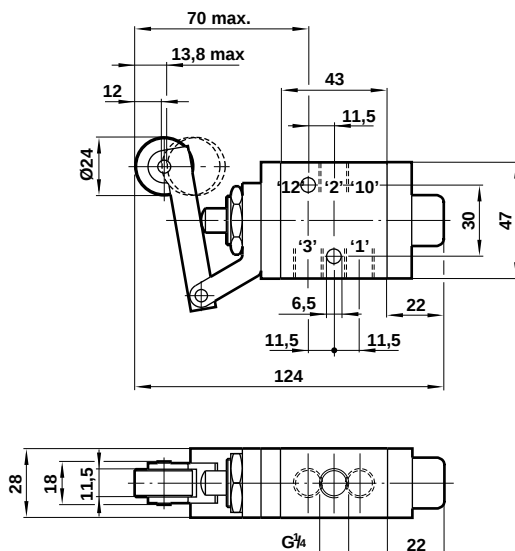
Operating Force: 53N
The plunger on this valve is designed for axial loading only.

03 0602 02

G¹/₄ 3/2 Roller Actuated Spring Return Valve

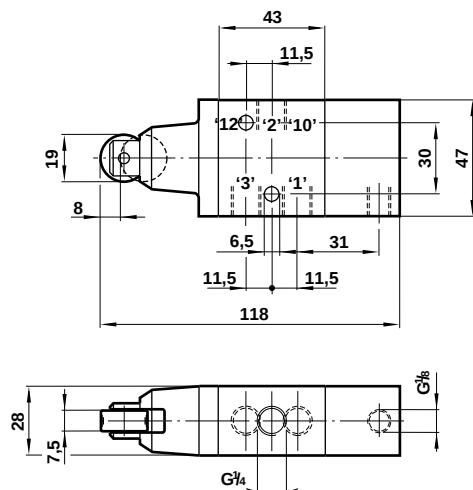
Operating Force: 61N
Cam Angle of Approach: 45° maximum
Cam Speed: 6 m/min. maximum
Operating Speed: 200 cpm

03 0611 02

G¹/₄ 3/2 Roller Lever Actuated Spring Return Valve

Operating Force: 45N
Cam Angle of Approach: 45° maximum
Cam Speed: 5 m/min. maximum
Operating Speed: 150 cpm

03 0609 02

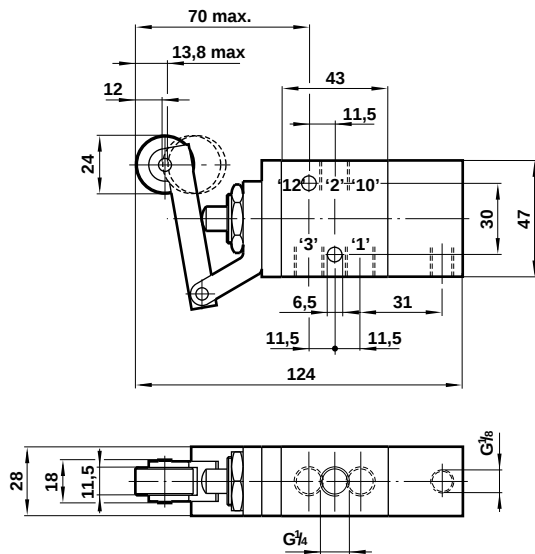
G¹/₄ 3/2 Roller Actuated Pilot Return Valve

Operating Force: 13N, '10' at zero bar
Reset Pressure: 2 bar minimum
Cam Angle of Approach: 45° maximum
Cam Speed: 6 m/min. maximum
Operating Speed: 200 cpm

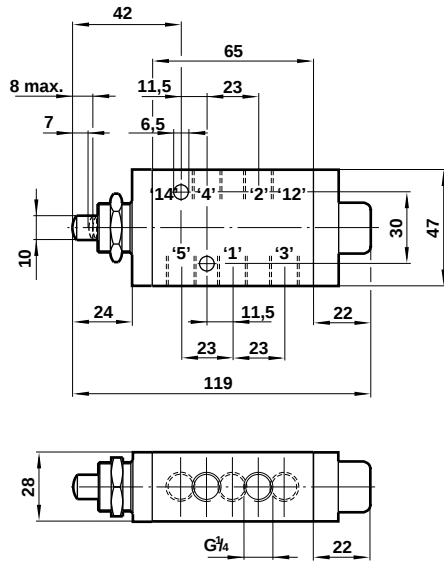


03 0624 02

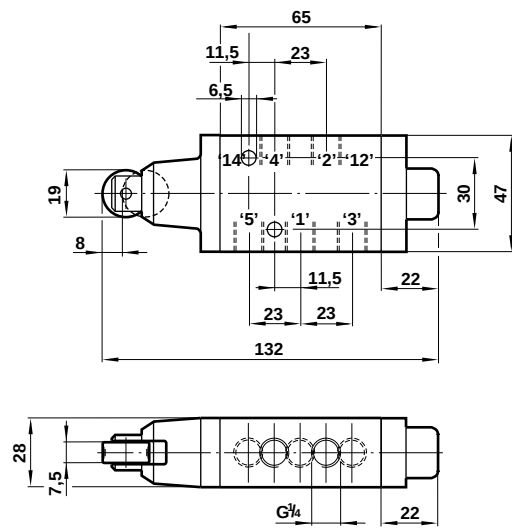
G^{1/4} 3/2 Roller Lever Actuated Pilot Return Valve



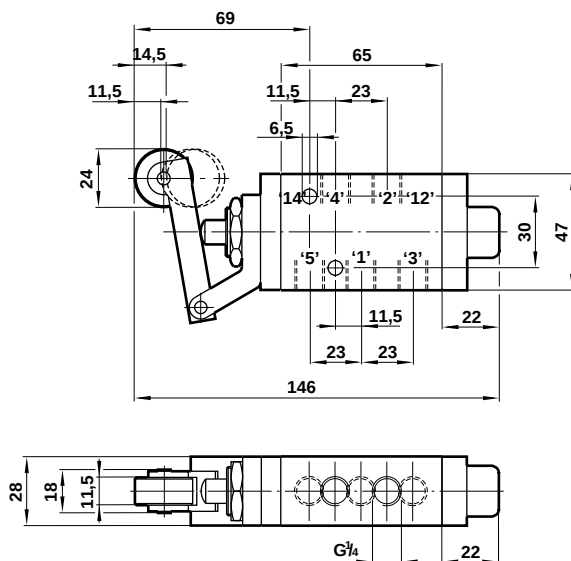
Operating Force: 9N, '10' at zero bar
Reset Pressure: 2 bar minimum
Cam Angle of Approach: 45° maximum
Cam Speed: 5 m/min. maximum
Operating Speed: 150 cpm

**X3 0640 02****G¹/₄ 5/2 Plunger Actuated Spring Return Valve**

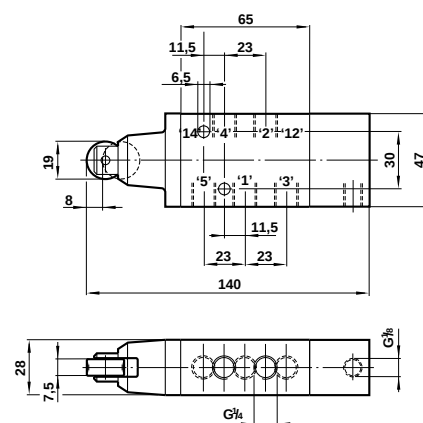
Operating Force: 62N
The plunger on this valve is designed for axial loading only.

X3 0642 02**G¹/₄ 5/2 Roller Actuated Spring Return Valve**

Operating Force: 67N
Cam Angle of Approach: 45° maximum
Cam Speed: 6 m/min. maximum
Operating Speed: 200 cpm

X3 0651 02**G¹/₄ 5/2 Roller Lever Actuated Spring Return Valve**

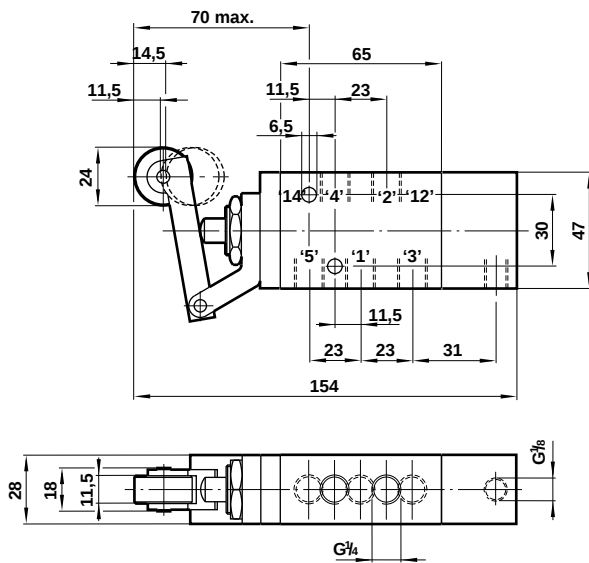
Operating Force: 45N
Cam Angle of Approach: 45° maximum
Cam Speed: 5 m/min. maximum
Operating Speed: 150 cpm

X3 0649 02**G¹/₄ 5/2 Roller Actuated Pilot Return Valve**

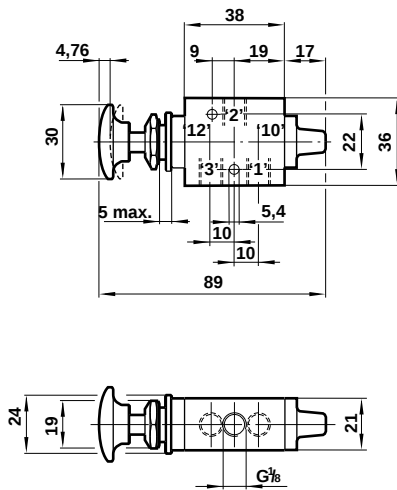
Operating Force: 13N, '12' at zero bar
Reset Pressure: 2 bar minimum
Cam Angle of Approach: 45° maximum
Cam Speed: 6 m/min. maximum
Operating Speed: 200 cpm



X3 0664 02

G^{1/4} 5/2 Roller Lever Actuated Pilot Return Valve

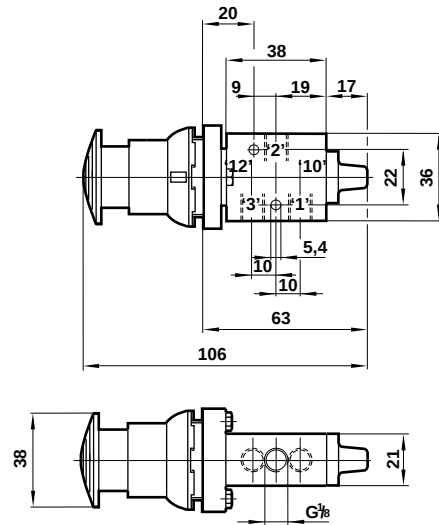
Operating Force: 9N, '12' at zero bar
 Reset Pressure: 2 bar minimum
 Cam Angle of Approach: 45° maximum
 Cam Speed: 5 m/min. maximum
 Operating Speed: 150 cpm Man G1/8-5/2

**03 0404 02, 03 0405 02, 03 0406 02 Models**
G¹/₈ 3/2 Button Operated Spring Return Valves

Operating Force: 31N

These valves are suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00; a shrouded panel mounting kit is also available, reference 03 0429 00.

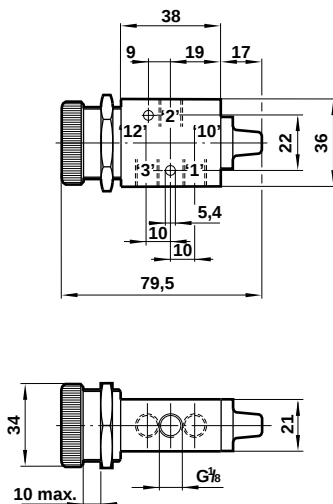
Panel Hole: Ø15 mm; Panel Thickness: 5 mm maximum

03 0366 02, 03 0367 02, 03 0368 02 Models
G¹/₈ 3/2 Button (Palm) Operated Spring Return Valves

Operating Force: 31N

These valves are suitable for panel mounting.

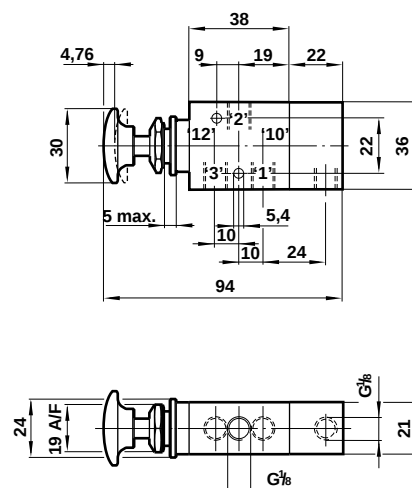
Panel Hole: Ø32,1 mm; Panel Thickness: 6 mm maximum

03 0414 02, 03 0415 02, 03 0416 02 Models
G¹/₈ 3/2 Button (Shrouded) Operated Spring Return Valves

Operating Force: 31N

These valves are suitable for panel mounting.

Panel Hole: Ø31 mm; Panel Thickness: 10mm maximum

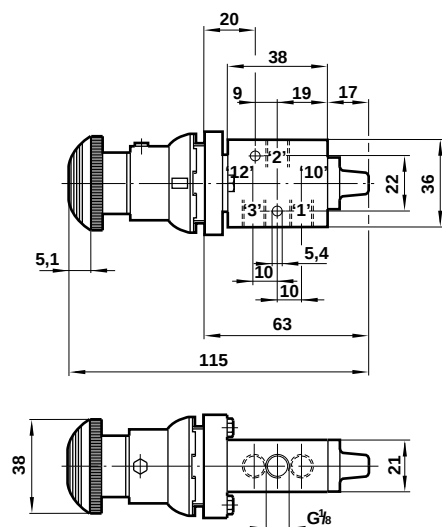
03 0408 02, 03 0420 02, 03 0421 02 Models
G¹/₈ 3/2 Button Operated Pilot Return Valve

Operating Force: 18N, pilot port '10' at zero bar

Reset Pressure: 2 bar minimum

These valves are suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00; a shrouded panel mounting kit is also available, reference 03 0429 00.

Panel Hole: Ø15 mm; Panel Thickness: 5 mm maximum

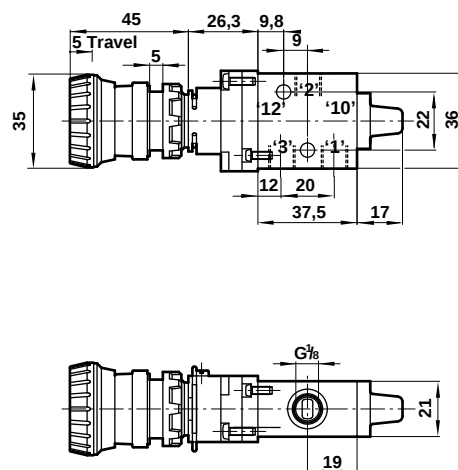
**03 0428 02****G¹/₈ 3/2 Palm Button Operated, Twist Return Valve (Emergency Stop)**

Operating Force: 18N

Valve latches when button is depressed and returns when the locking ring is rotated anti-clockwise.

This valve is suitable for panel mounting.

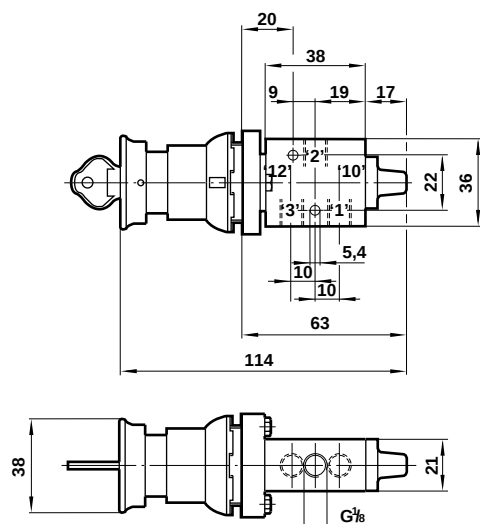
Panel Hole: 32,1 mm; Panel Thickness: 8 mm maximum

03 0297 02**G¹/₈ 3/2 Button (Palm) Operated Spring Return Valve**

Operating Force: 70N (Return Torque: 6,8Nm)

This valve is suitable for panel mounting.

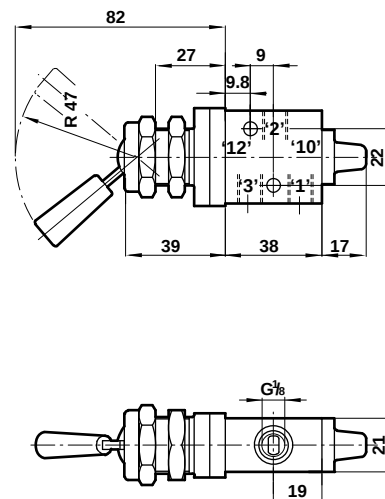
Panel Hole: 22,5 mm; Panel Thickness: 8 mm maximum

03 0335 02**G¹/₈ 3/2 Button (Palm) Operated Key Return Valve**

Operating Force: 31N

Valve latches when button is depressed. To reset, turn key. This valve is suitable for panel mounting.

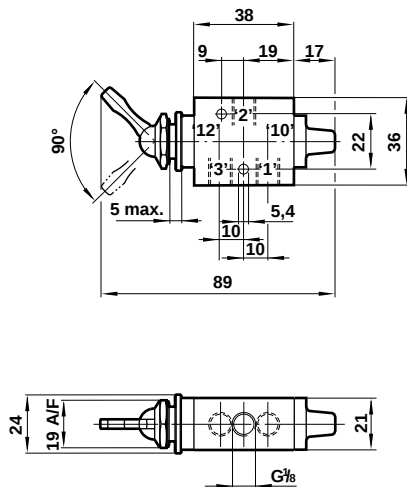
Panel Hole: 32,1; Panel Thickness: 6mm maximum

03 0296 02**G¹/₈ 3/2 Lever Operated Lever Return Valve**

Operating Force: 13N

This valve is suitable for panel mounting.

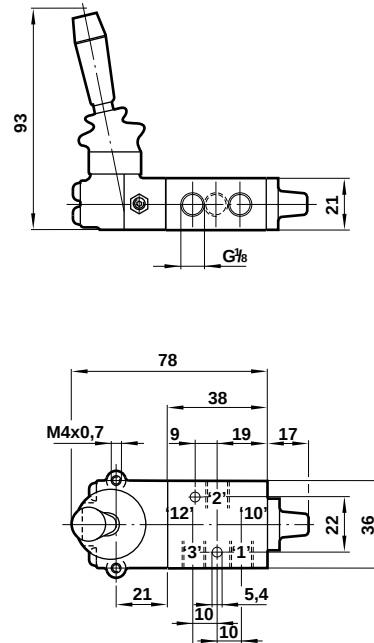
Panel Hole: 22,5 mm; Panel Thickness: 6 mm maximum

**03 0403 02****G¹/₈ 3/2 Lever Operated Spring Return Valve**

Operating Force: 28N

This valve is suitable for panel mounting. A fingertip extension is available for this valve, reference 07 0033 01.

Panel Hole: Ø15 mm; Panel Thickness: 5 mm maximum

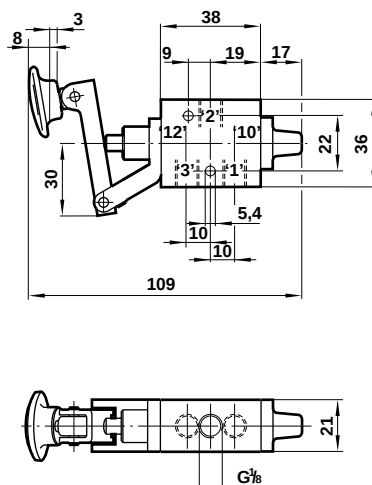
03 0438 02 & 03 0437 02 Models**G¹/₈ 3/2 Lever Operated Spring Return Valves**

Operating Force: 9N

Model 03 0437 02 features a positive detent in each position and is suitable for panel mounting by means of a bezel kit, reference 03 3437 64.

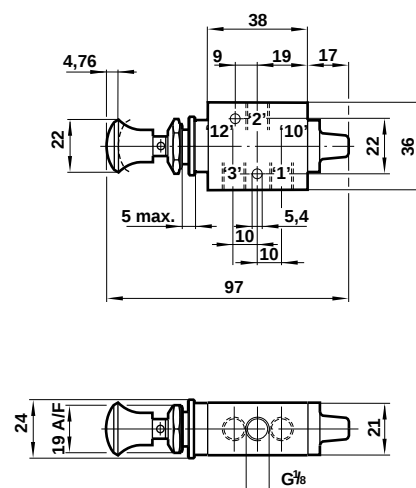
Panel Hole: Ø24 mm

Panel Thickness: 8 mm maximum

03 0426 02**G¹/₈ 3/2 Lever Operated Spring Return Valve**

Operating Force: 18N

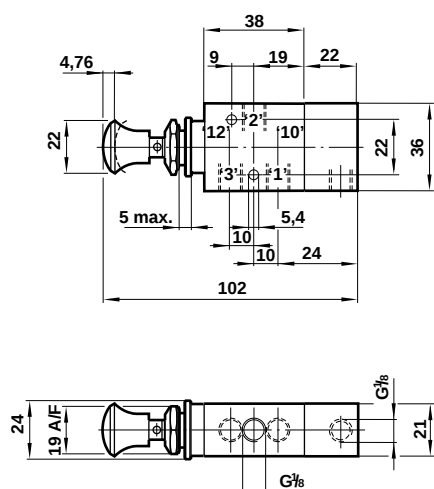
Panel Hole: Ø24 mm; Panel Thickness: 8 mm maximum

03 0425 02**G¹/₈ 3/2 Knob Operated Knob Return Valve**

Operating Force: 18N

This valve is suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00.

Panel Hole: Ø15 mm; Panel Thickness: 5 mm maximum

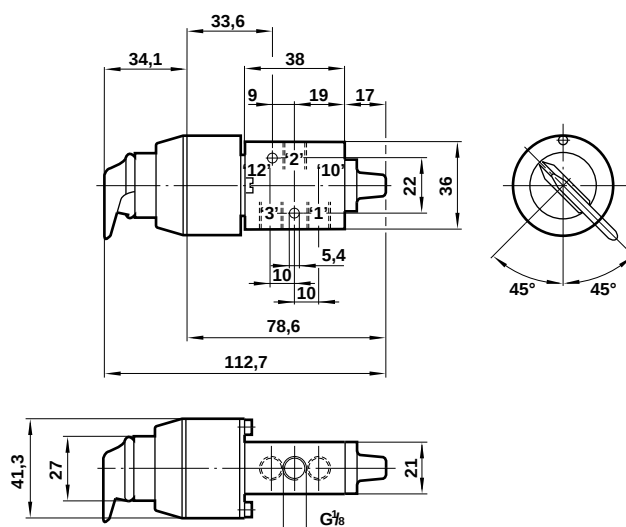
**03 0424 02****G¹/₈ 3/2 Knob Operated, Knob or Pilot Return Valve**

Operating Force: 18N

Reset Pressure: 2 bar minimum

This valve is suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00.

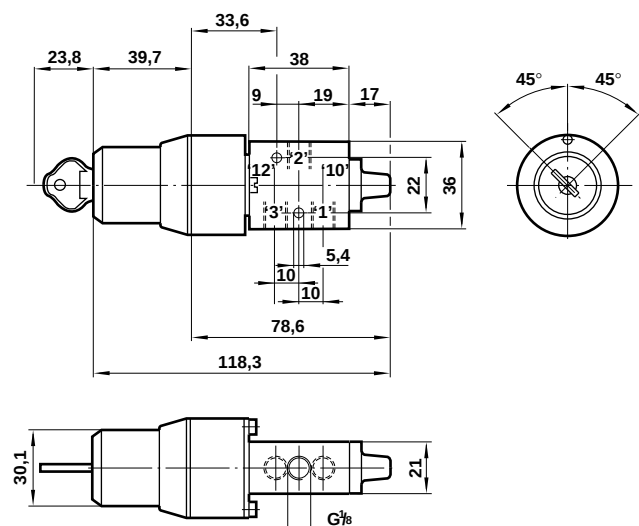
Panel Hole: Ø15 mm; Panel Thickness: 5 mm maximum

03 0419 02**G¹/₈ 3/2 Rotary Knob Operated Rotary Knob Return Valve**

Switch shown in non-operated position

This valve is suitable for panel mounting.

Panel Hole: Ø32,1; Panel Thickness: 6mm maximum

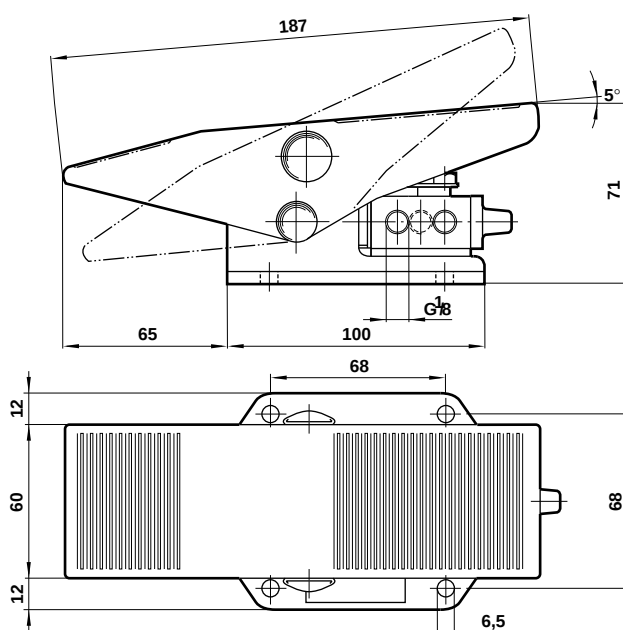
03 0418 02 801**G¹/₈ 3/2 Key Operated Key Return Valve**

The key is removable in both positions. Key slot shown in non-operated position. Two keys are supplied.

This valve is suitable for panel mounting.

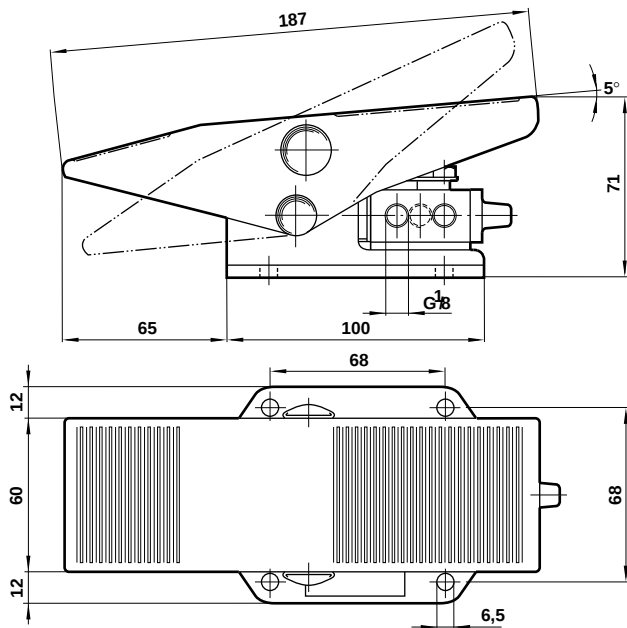
Panel Hole: Ø32,1 mm

Panel Thickness: 6 mm maximum

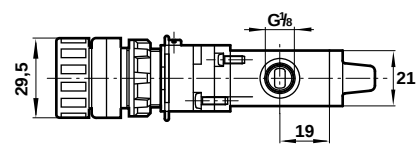
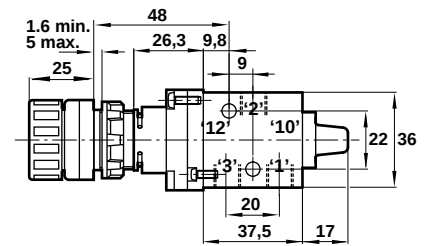
03 0481 02**G¹/₈ 3/2 Pedal Operated Spring Return Valve**

Operating Force: 22N

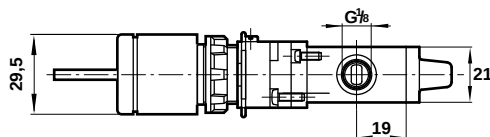
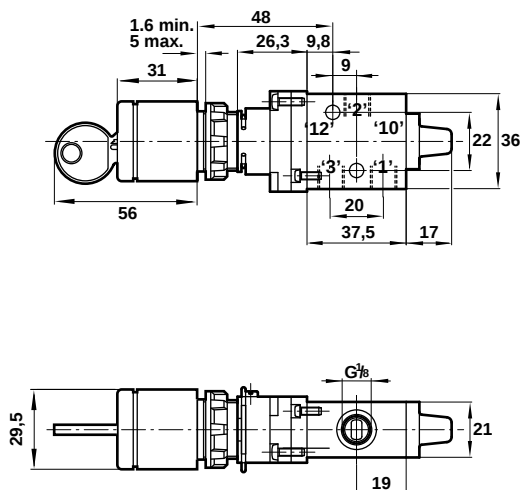
A foot guard is available for this valve, reference 03 0480 60.

**03 0483 02****G¹/₈ 3/2 Pedal Operated Pedal Return Valve**

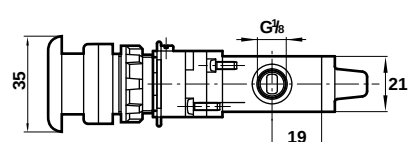
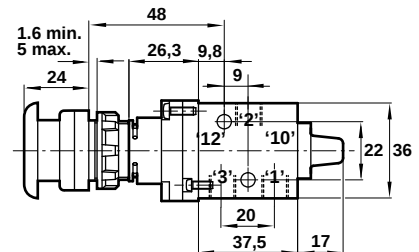
Operating Force: 22N
A foot guard is available for this valve,
reference 03 0480 60.

03 0261 02**G¹/₈ 3/2 Electrical Style Rotary Knob Operator,
Rotary Knob Return Valve**

Operating Torque: 6,8Nm
Panel Hole: Ø 22,5 mm
Panel Thickness: 5 mm maximum

03 0262 02**G¹/₈ 3/2 Electrical Style Key Operator,
Key Return Valve**

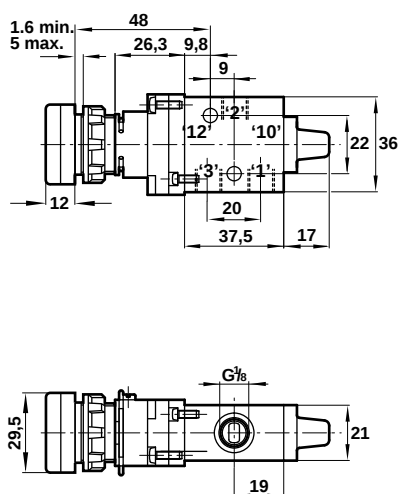
Operating Force: 6,8Nm
Panel Hole: Ø 22,5 mm
Panel Thickness: 5 mm maximum

03 0263 02, 03 0264 02, 03 0265 02**G¹/₈ 3/2 Electrical Style Push Button (Mushroom)
Operator Spring Return Valve**

Operating Force: 50N
Panel Hole: Ø 22,5 mm
Panel Thickness: 5 mm maximum

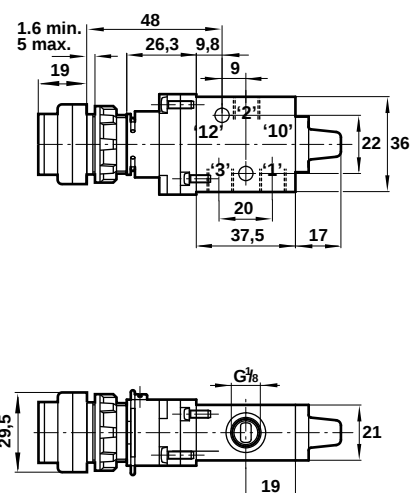


03 0266 02, 03 0267 02, 03 0268 02
G¹/₈ 3/2 Electrical Style Push Button (Shrouded)
Operator, Spring Return Valve



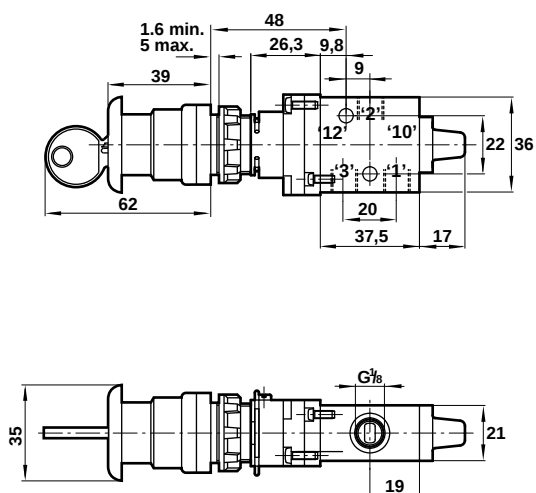
Operating Force: 50N
 Panel Hole: Ø 22,5 mm
 Panel Thickness: 5 mm maximum

03 0269 02, 03 0270 02, 03 0271 02
G¹/₈ 3/2 Electrical Style Push Button (Extended)
Operator, Spring Return Valve



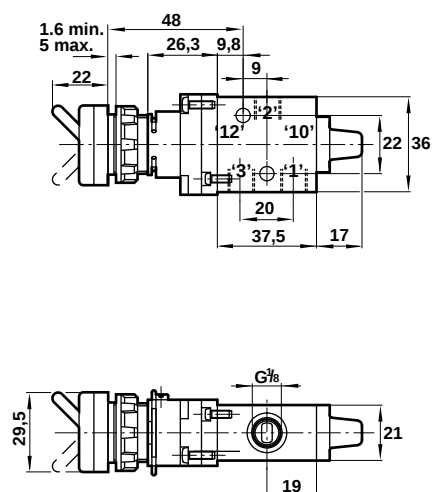
Operating Force: 50N
 Panel Hole: Ø 22,5 mm
 Panel Thickness: 5 mm maximum

03 0272 02
G¹/₈ 3/2 Electrical Style Push Button Operator,
Key Reset Valve



Operating Force: 50N
 Panel Hole: Ø 22,5 mm
 Panel Thickness: 5 mm maximum

03 0273 02
G¹/₈ 3/2 Electrical Style Switch Operator,
Switch Return Valve

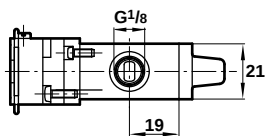
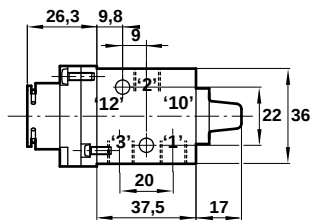


Operating Force: 40N
 Panel Hole: Ø 22,5 mm
 Panel Thickness: 5 mm maximum



03 0295 02

G^{1/8} 3/2 Adapter Valve



This valve is for use with standard electrical style Operating heads.

For details see page 36.

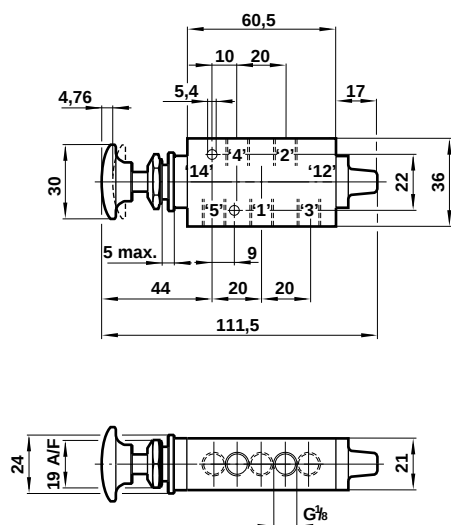
Operating Force (including Operator): see page xx

Panel Hole: Ø22,5 mm

Panel Thickness: 5 mm maximum



X3 0444 02, X3 0445 02, X3 0446 02
G¹/₈ 5/2 Button (Palm) Operated Spring Return
Valves

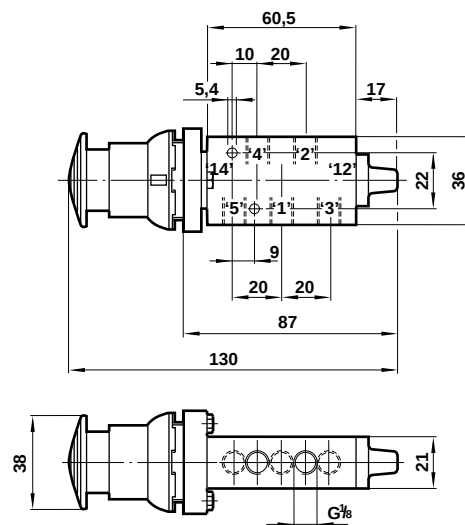


Operating Force: 54N

These valves are suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00; a shrouded panel mounting kit is also available, reference 03 0429 00.

Panel Hole: Ø15 mm; Panel Thickness: 5mm maximum

X3 0386 02, X3 0387 02, X3 0388 02
G¹/₈ 5/2 Button (Palm) Operated Spring Return
Valves



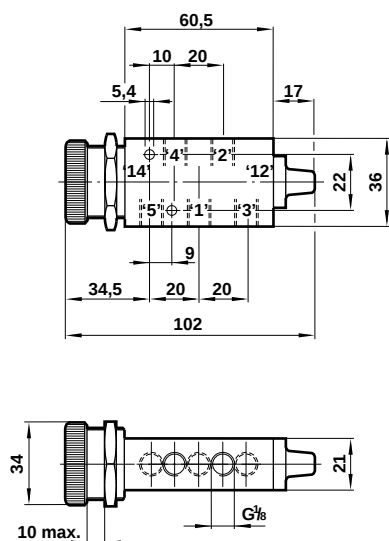
Operating Force: 31N

These valves are suitable for panel mounting.

Panel Hole: Ø32,1 mm

Panel Thickness: 6 mm maximum

X3 0454 02, X3 0455 02, X3 0456 02
G¹/₈ 5/2 Button (Shrouded) Operated Spring
Return Valves



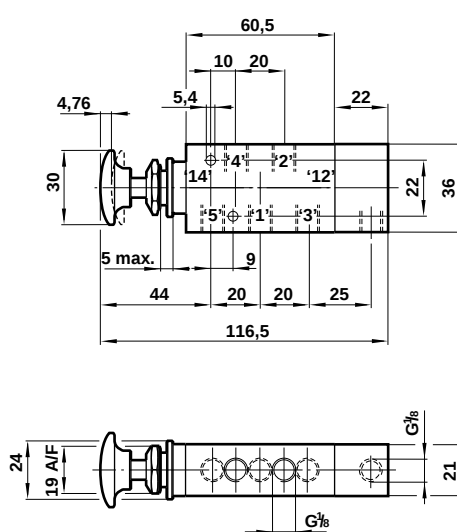
Operating Force: 54N

These valves are suitable for panel mounting.

Panel Hole: Ø31 mm

Panel Thickness: 10 mm maximum

X3 0448 02, X3 0460 02, X3 0461 02
G¹/₈ 5/2 Button (Palm) Operated Pilot Return
Valves

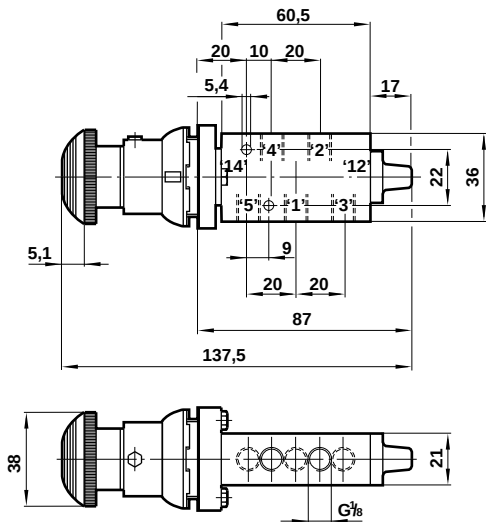


Operating Force: 22N, pilot port '12' at zero bar

Reset Pressure: 2 bar minimum

These valves are suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00; a shrouded panel mounting kit is also available, reference 03 0429 00.

Panel Hole: Ø15 mm; Panel Thickness: 5 mm maximum

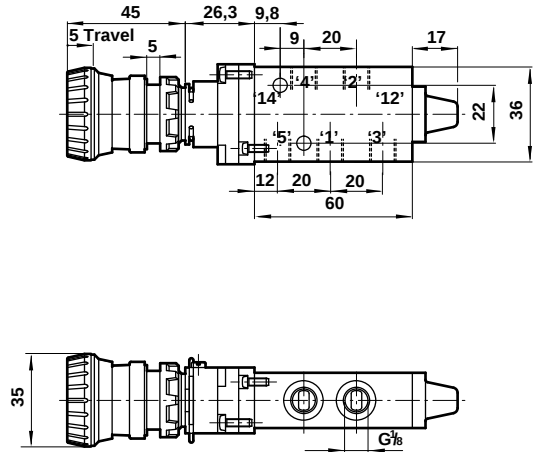
**X3 0468 02****G¹/₈ 5/2 Button (Palm) Operated Twist Return Valve (Emergency Stop)**

Operating Force: 18N

Valve latches when button is depressed and returns when the locking ring is rotated anti-clockwise.

This valve is suitable for panel mounting.

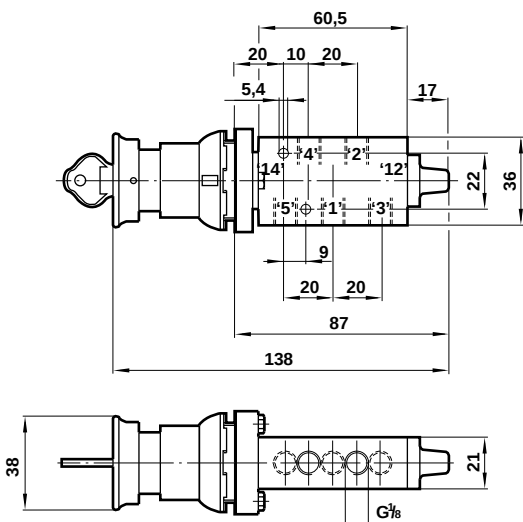
Panel Hole: Ø32,1; Panel thickness: 8mm maximum

X3 0297 02**G¹/₈ 5/2 Button (Palm) Operated Spring Return Valve (Emergency Stop)**

Operating Force: 70N (Return Torque: 6,8Nm)

This valve is suitable for panel mounting.

Panel Hole: 22,5 mm; Panel Thickness: 8 mm maximum

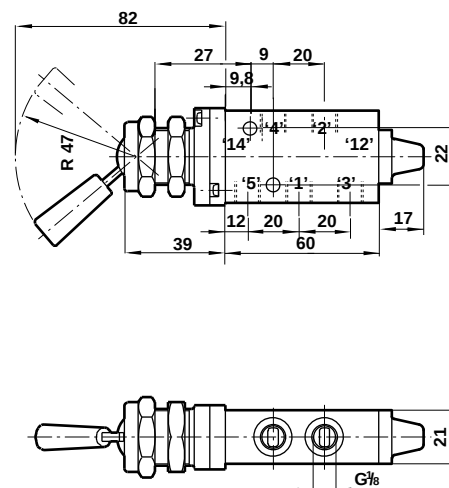
X3 0375 02**G¹/₈ 5/2 Button (Palm) Operated Key Return Valve**

Operating Force: 54N

Valve latches when button is depressed. To reset, turn key. This valve is suitable for panel mounting.

Panel Hole: Ø32,1 mm

Panel Thickness: 6 mm maximum

X3 0296 02**G¹/₈ 5/2 Lever Operated Lever Return Valve**

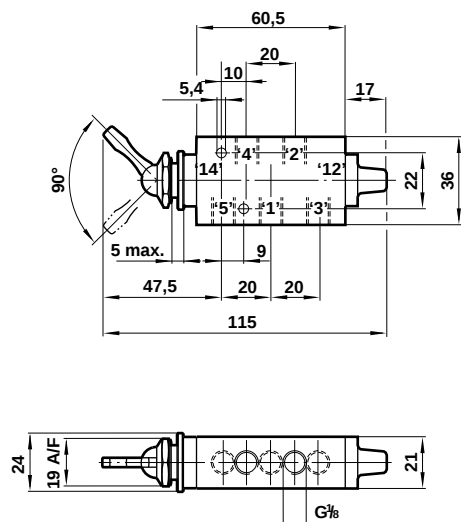
Operating Force: 13N

This valve is suitable for panel mounting.

Panel Hole: 22,5 mm; Panel Thickness: 6 mm maximum



X3 0443 02 G¹/₈ 5/2 Lever Operated Spring Return Valve

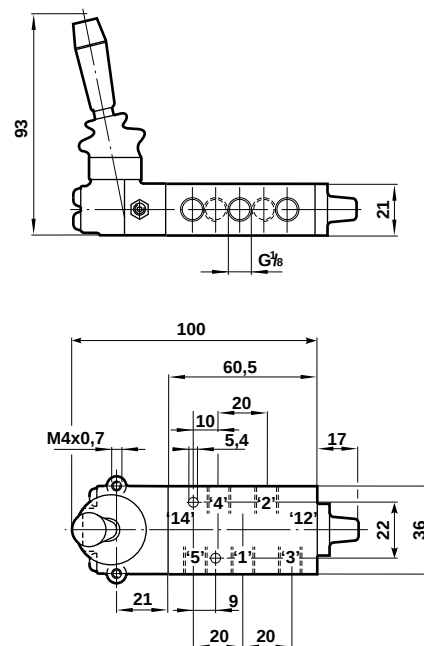


Operating Force: 48N

This valve is suitable for panel mounting. A fingertip extension is available for use on this valve, reference 07 0033 01.

Panel Hole: Ø15 mm; Panel thickness: 5 mm maximum

X3 0478 02, X3 0477 02 G¹/₈ 5/2 Lever Operated Valves



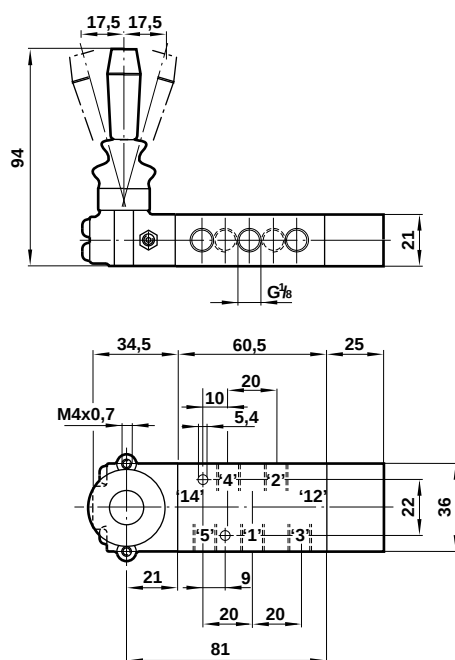
Operating Force: X3 0478 02 = 16N

X3 0477 02 = 13N

Both models are suitable for panel mounting by means of a bezel kit, reference 03 3437 64.

Panel Hole: Ø24 mm; Panel Thickness: 8 mm maximum

X3 3438 02, X3 3478 02, X3 3437 02, X3 3477 02 G¹/₈ 5/2 Three Position Lever Operated Valves



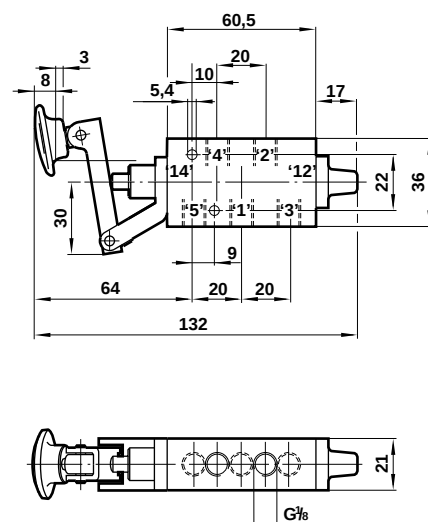
Operating Force: X3 3438 02 and X3 3478 02 = 15N

X3 3437 02 and X3 3477 02 = 12N

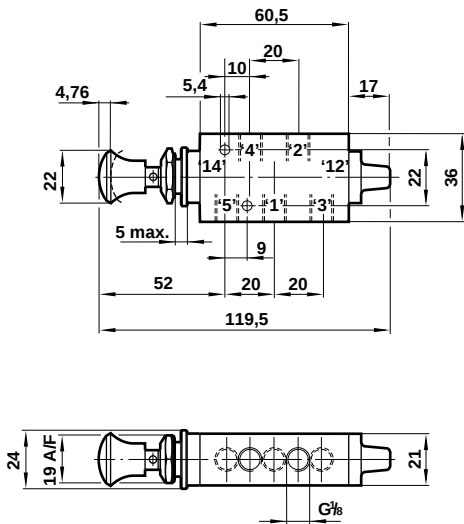
All models are suitable for panel mounting, by means of a bezel kit, reference 03 3437 64.

Panel Hole: Ø24 mm; Panel Thickness: 8mm maximum

X3 0466 02 G¹/₈ 5/2 Lever Operated Spring Return Valve



Operating Force: 31N

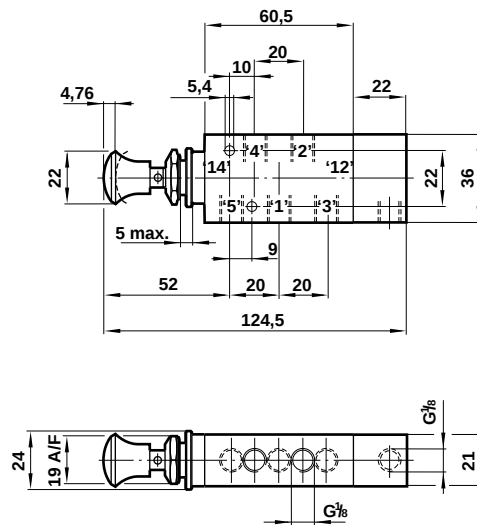
**X3 0465 02****G¹/₈ 5/2 Knob Operated Knob Return Valve**

Operating Force: 22N

This valve is suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00.

Panel Hole: Ø15 mm

Panel thickness: 5mm maximum

X3 0464 02**G¹/₈ 5/2 Knob Operated, Knob or Pilot Return Valve**

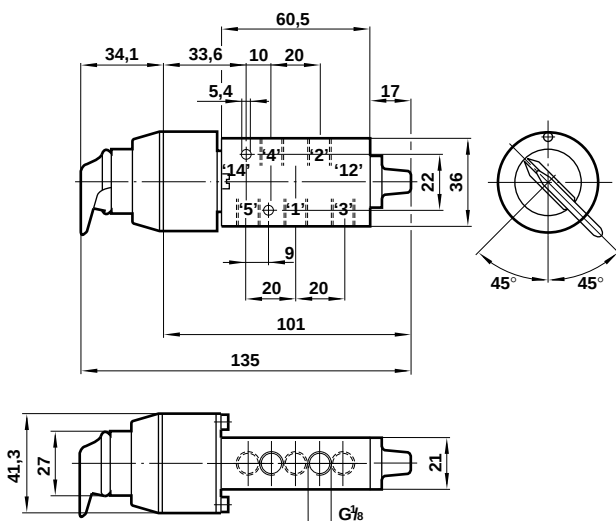
Operating Force: 22N

Reset Pressure: 2 bar minimum

This valve is suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00.

Panel Hole: Ø15 mm

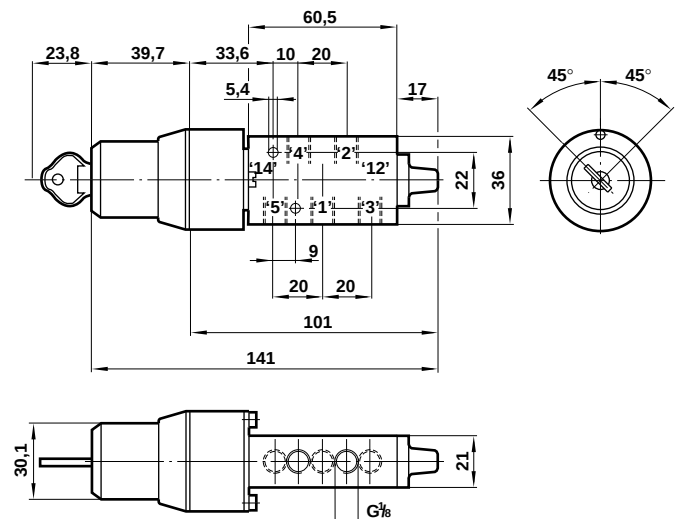
Panel thickness: 5mm maximum

X3 0459 02**G¹/₈ 5/2 Rotary Knob Operated Knob Return Valve**

Switch shown in non-operated position.

This valve is suitable for panel mounting.

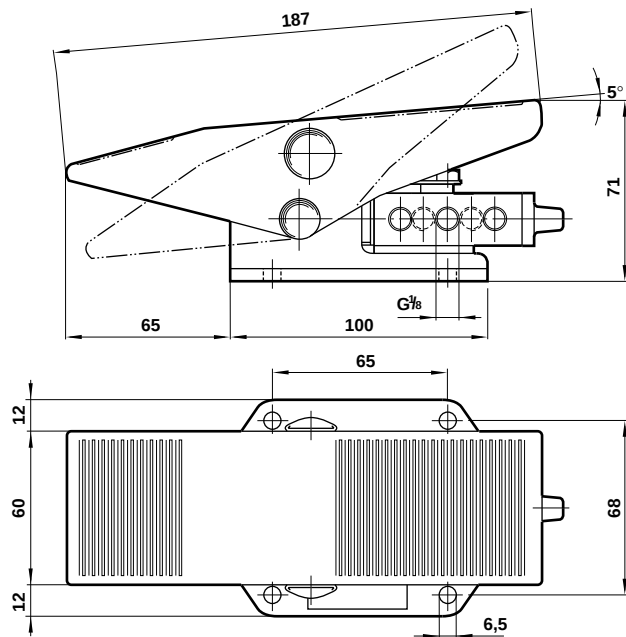
Panel Hole: Ø32 mm; Panel Thickness: 6 mm maximum

03 0458 02 801**G¹/₈ 5/2 Key Operated Key Return Valve**

The key is removable in both positions. Key slot shown in non-operated position. Two keys are supplied.

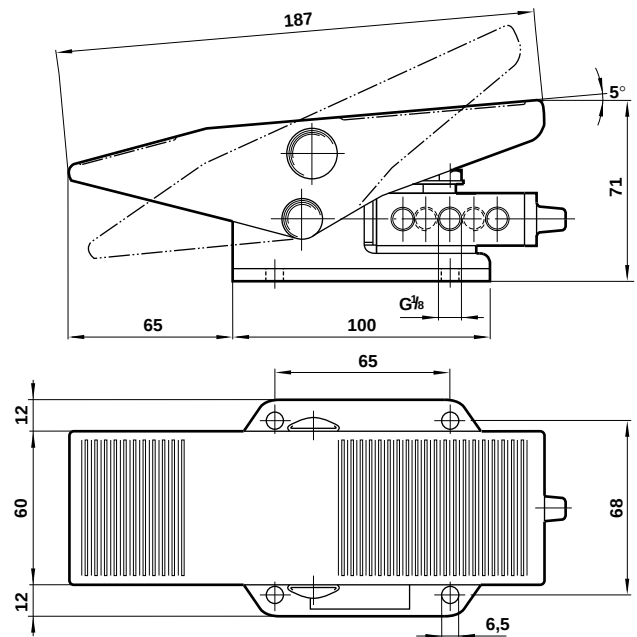
This valve is suitable for panel mounting.

Panel Hole: Ø32 mm; Panel Thickness: 6 mm maximum

**X3 0482 02****G¹/₈ 5/2 Pedal Operated Spring Return Valve**

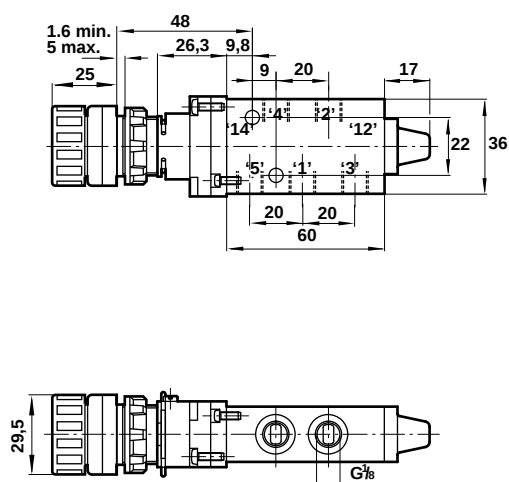
Operating Force: 22N

A foot guard is available for this valve, reference 03 0480 60.

X3 0484 02**G¹/₈ 5/2 Pedal Operated Pedal Return Valve**

Operating Force: 22N

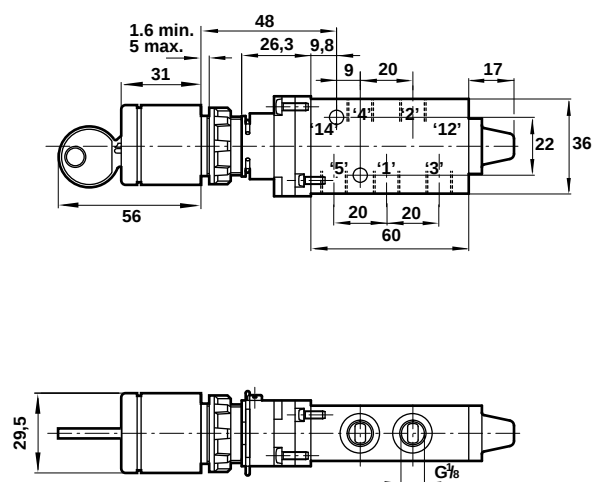
A foot guard is available for this valve, reference 03 0480 60.

X3 0261 02**G¹/₈ 5/2 Electrical Style Rotary Knob Operator, Rotary Knob Return Valve**

Operating Torque: 6,8Nm

Panel Hole: Ø22,5 mm

Panel Thickness: 5 mm maximum

X3 0262 02**G¹/₈ 5/2 Electrical Style Rotary Key Operator, Key Return Valve**

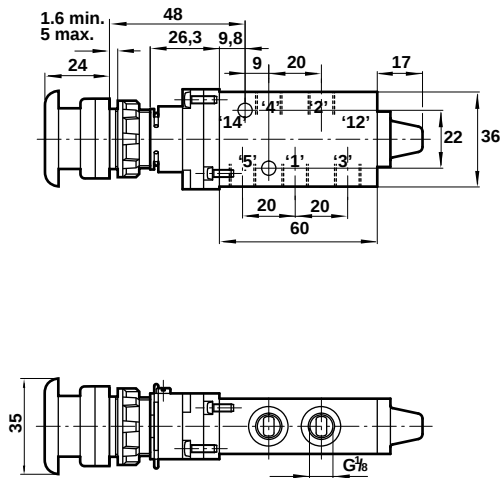
Operating Torque: 6,8Nm

Panel Hole: Ø22,5 mm

Panel Thickness: 5 mm maximum

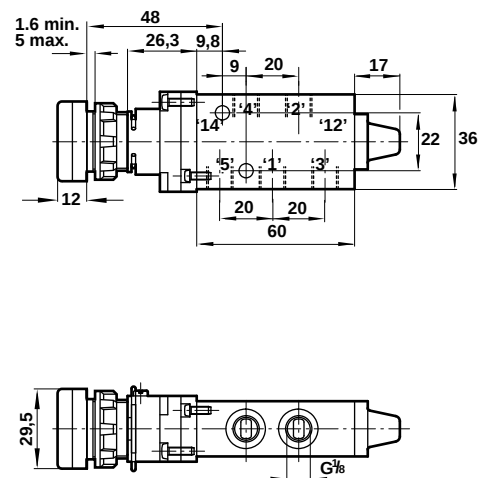


X3 0263 02, X3 0264 02, X3 0265 02
G¹/₈ 5/2 Electrical Style Push Button (Mushroom)
Operator Spring Return Valve



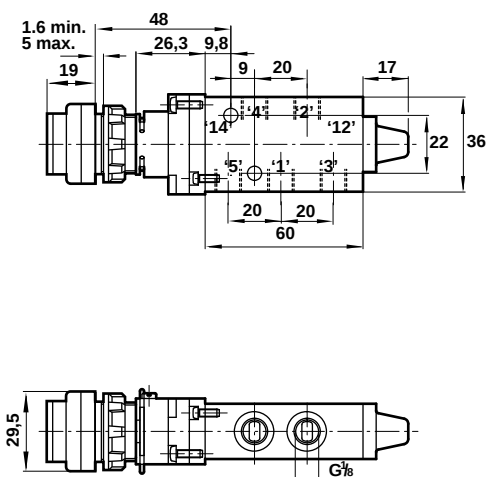
Operating Force: 50N
Panel Hole: Ø22,5 mm
Panel Thickness: 5 mm maximum

X3 0266 02, X3 0267 02, X3 0268 02
G¹/₈ 5/2 Electrical Style Push Button (Shrouded)
Operator Spring Return Valve



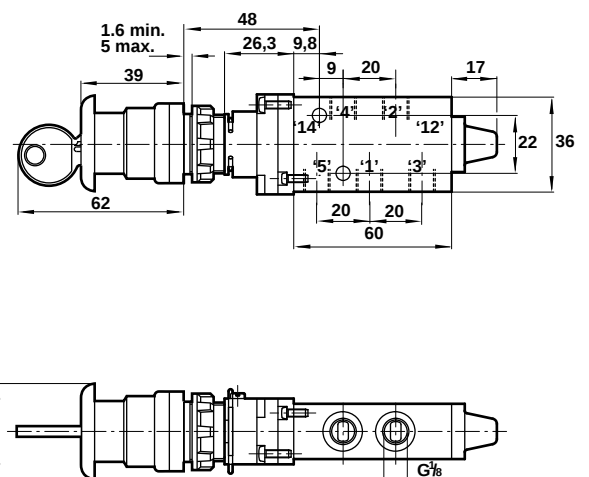
Operating Force: 50N
Panel Hole: Ø22,5 mm
Panel Thickness: 5 mm maximum

X3 0269 02, X3 0270 02, X3 0271 02
G¹/₈ 5/2 Electrical Style Push Button (Extended)
Spring Return Valve



Operating Force: 50N
Panel Hole: Ø22,5 mm
Panel Thickness: 5 mm maximum

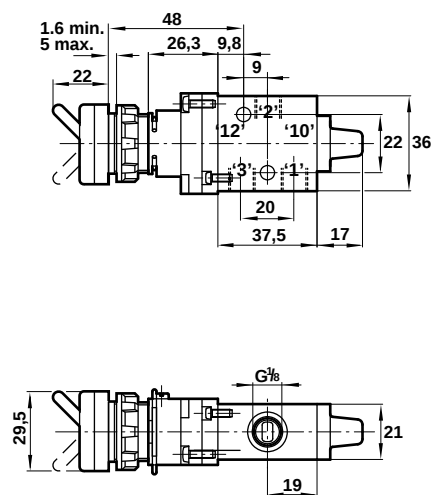
X0 0272 02
G¹/₈ 5/2 Electrical Style
Button Operator Key Reset Valve



Operating Force: 50N
Panel Hole: Ø22,5 mm
Panel Thickness: 5 mm maximum

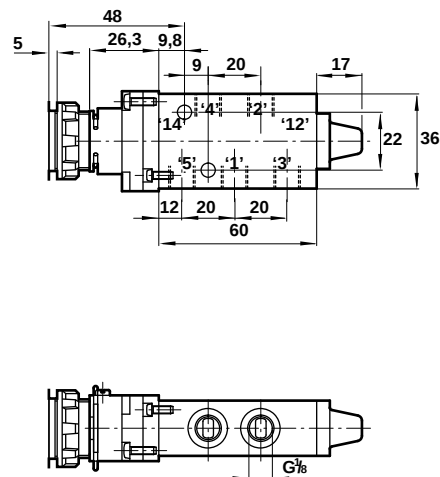


X3 0273 02
G¹/₈ 5/2 Electrical Style
Switch Operator Switch Return Valve



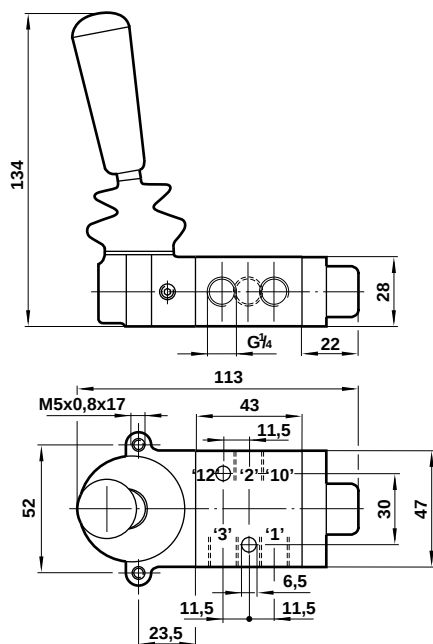
Operating Force: 40N
 Panel Hole: Ø22,5 mm
 Panel Thickness: 5 mm maximum

X3 0395 02
G¹/₈ 5/2 Adapter Valve



This valve is for use with standard Operating Heads. For details see page 5.4.081.28.
 Operating Force (Including Operator): see page 5.4.081.28.
 Panel Hole: Ø22,5 mm; Panel thickness: 5 mm maximum

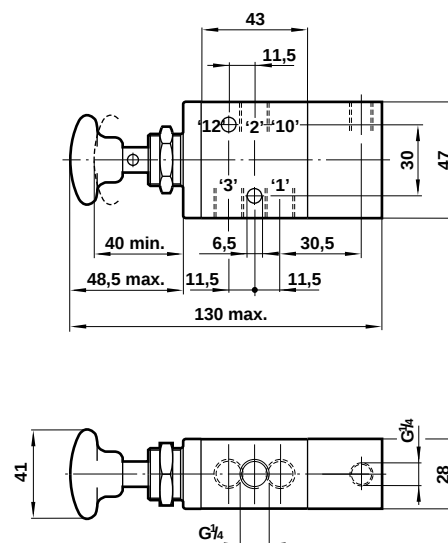
03 0638 02, 03 0637 02
G^{1/4} 3/2 Lever Operated Valves



Operating Force: 03 0638 02 = 15N
03 0637 02 = 13N

Model 03 0637 02 features a positive detent in each position.
Both Models are suitable for panel mounting by means of a bezel kit,
reference 03 3637 64.
Panel Hole: Ø31 mm;
Panel Thickness: 8 mm maximum

03 0608 02
G^{1/4} 3/2 Button Operated Pilot Return Valve

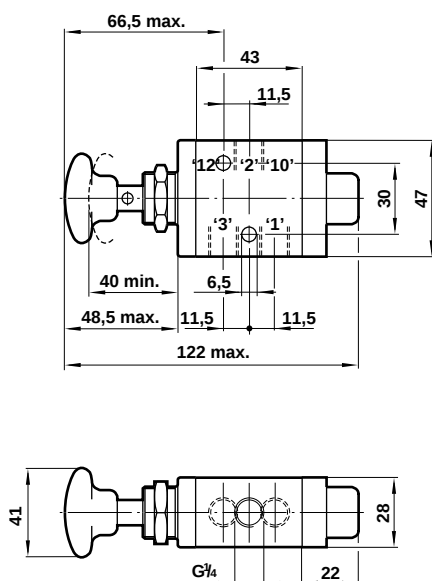


Operating Force: 13N, pilot port '10' at zero bar

Reset Pressure: 2 bar minimum

This valve is suitable for panel mounting and includes a nut and washer.
Panel Hole: Ø21 mm; Panel thickness: 8mm maximum

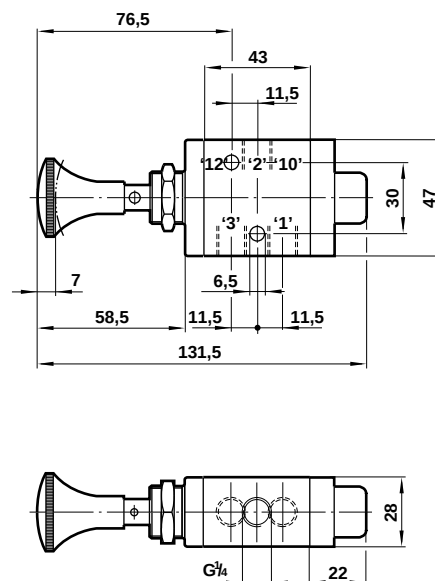
03 0604 02
G^{1/4} 3/2 Button Operated Spring Return Valve



Operating Force: 53N

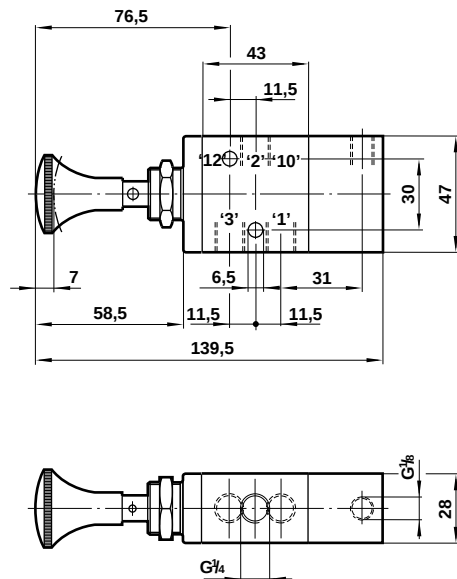
This valve is suitable for panel mounting and includes a nut and washer.
Panel Hole: Ø21 mm; Panel Thickness: 8 mm maximum

03 0625 02
G^{1/4} 3/2 Knob Operated Knob Return Valve



Operating Force: 13N

This valve is suitable for panel mounting and includes a nut and washer.
Panel Hole: Ø21 mm; Panel Thickness: 8 mm maximum

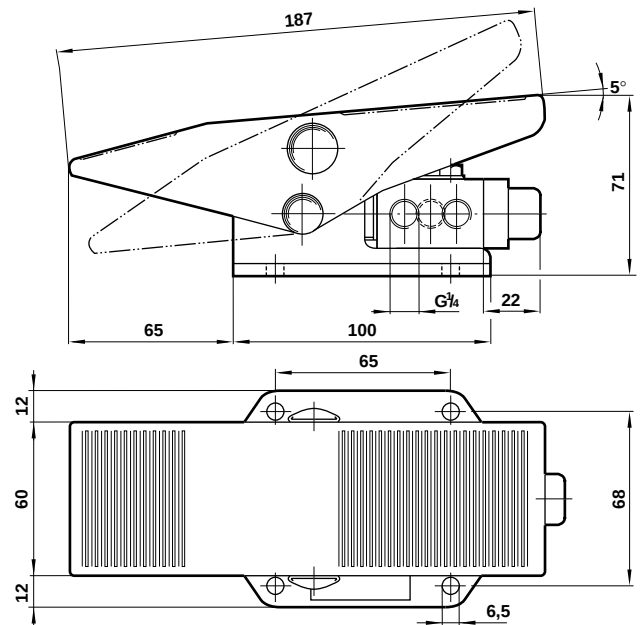
**03 0627 02****G¹/₄ 3/2 Knob Operated, Knob or Pilot Return Valve**

Operating Force: 13N

Reset Pressure: 4 bar minimum

This valve is suitable for panel mounting and includes a nut and washer.

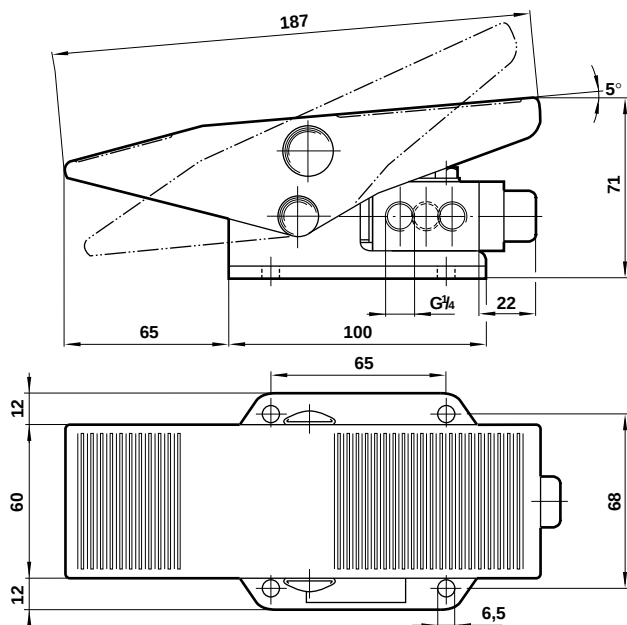
Panel Hole: Ø21 mm; Panel Thickness: 8 mm maximum

03 0681 02**G¹/₄ 3/2 Pedal Operated Spring Return Valve**

Operating Force: 22N

A foot guard is available for this valve, reference

03 0480 60.

03 0683 02**G¹/₄ 3/2 Pedal Operated Pedal Return Valve**

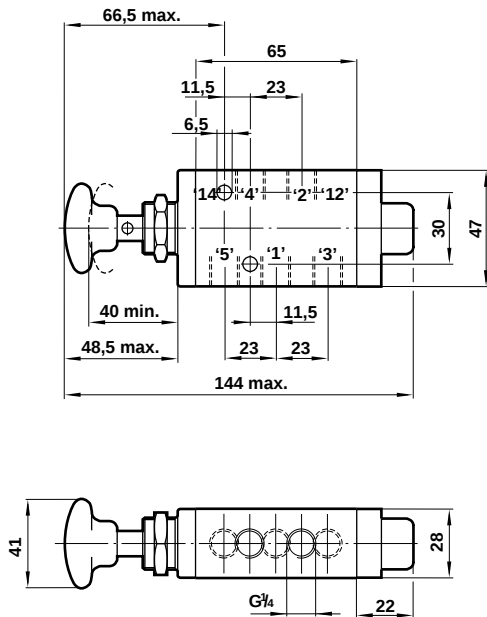
Operating Force: 22N

A foot guard is available for this valve, reference

03 0480 60.

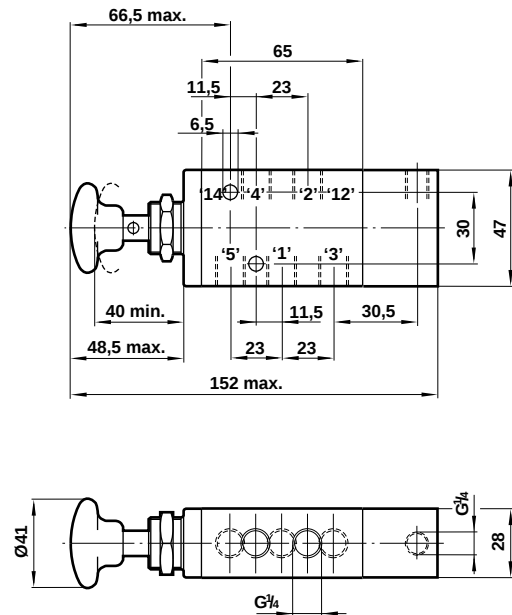


X3 0644 02 G¹/₄ 5/2 Button Operated Spring Return Valve



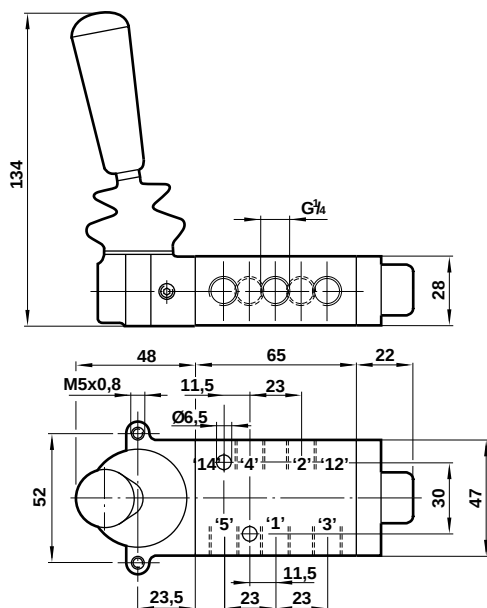
Operating Force: 62N
This valve is suitable for panel mounting and includes a nut and washer.
Panel Hole: Ø21 mm; Panel Thickness: 8 mm maximum

X3 0648 02 G¹/₄ 5/2 Button Operated Pilot Return Valve



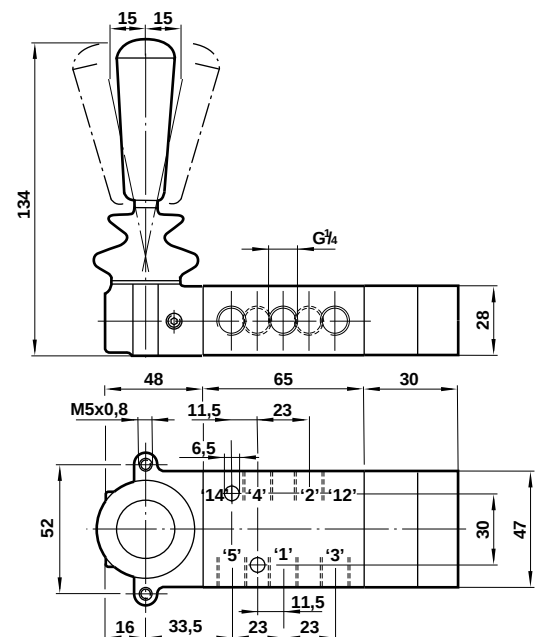
Operating Force: 13N, pilot port '12' at zero bar
Reset Pressure: 2 bar minimum
This valve is suitable for panel mounting and includes a nut and washer.
Panel Hole: Ø21 mm; Panel thickness: 8mm maximum

X3 0678 02, X3 0677 02 G¹/₄ 5/2 Lever Operated Valves

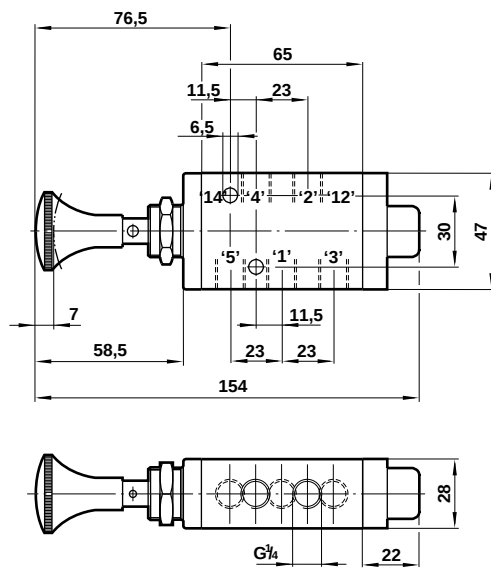


Operating Force: X3 0678 02 = 15N
X3 0677 02 = 13N
Model X3 0677 02 features a positive detent in each position.
Both models are suitable for panel mounting by means of a bezel kit,
reference 03 3637 64.
Panel Hole: Ø31 mm;
Panel Thickness: 8 mm maximum

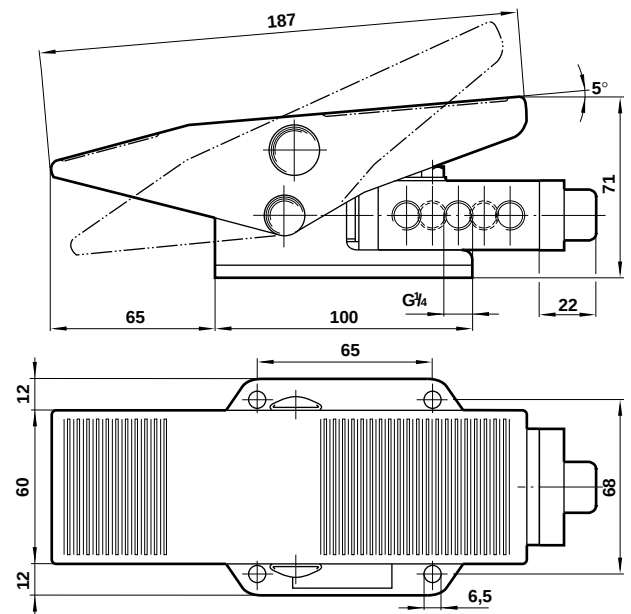
X3 3638 02, X3 3678 02, X3 3637 02, X3 3677 02 G¹/₄ 5/3 Three Position Lever Operated Valves



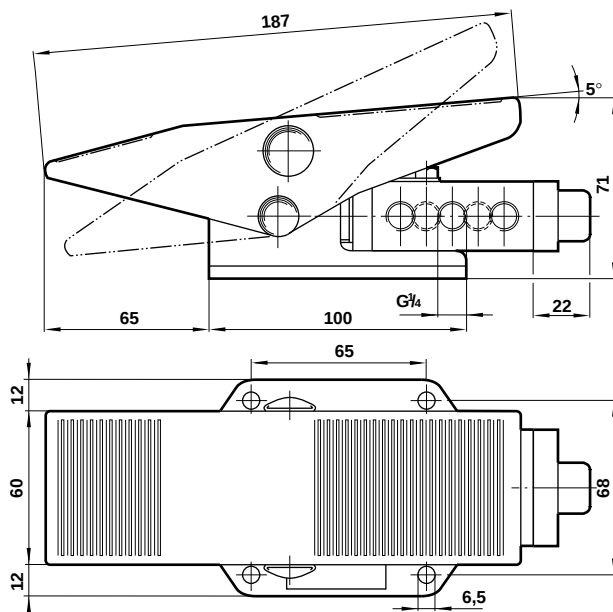
Operating Force: X3 3638 02 & X3 3678 02 models = 15N
X3 3637 02 & X3 3677 02 models = 12N
These valves are suitable for panel mounting by means of a bezel kit,
reference 03 3637 64.
Panel Hole: Ø31 mm
Panel Thickness: 8 mm maximum

**X3 0665 02****G¹/₄ 5/2 Knob Operated Knob Return Valve**

Operating Force: 13N

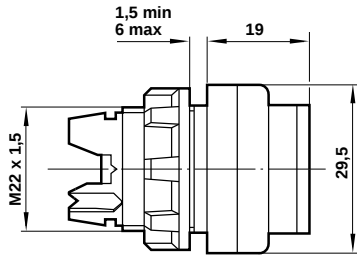
This valve is suitable for panel mounting and includes a nut and washer.
Panel Hole: Ø21 mm; Panel Thickness: 8 mm maximum**X3 0682 02****G¹/₄ 5/2 Pedal Operated Spring Return Valve**

Operating Force: 22N

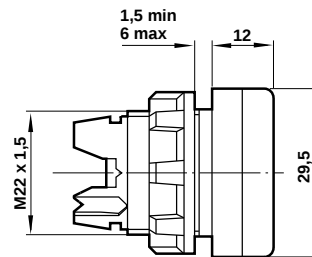
A foot guard is available for this valve, reference
03 0480 60**X3 0684 02****G¹/₄ 5/2 Pedal Operated Pedal Return Valve**

Operating Force: 22N

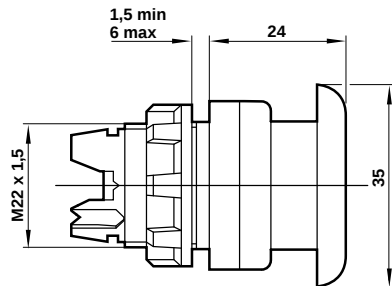
A foot guard is available for this valve, reference
03 0480 60

Operating Heads for use with G¹/₈ 5/2 and 3/2 Adapter Valves**M/P 34840/*****Button (Palm) Operated, Spring Return**

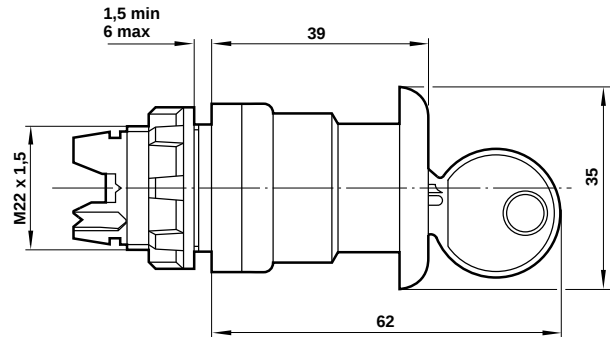
Operating Force: 50N
IP 65 Protection
Panel mounted Ø22,5 mm hole

M/P34841/***Button (Shrouded) Operated, Spring Return**

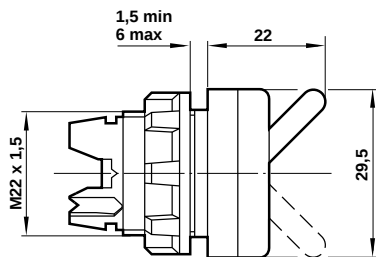
Operating Force: 50N
Panel Hole: Ø22,5 mm
Panel Thickness: 6 mm maximum

M/P 34842/***Button (Mushroom) Operated, Spring Return**

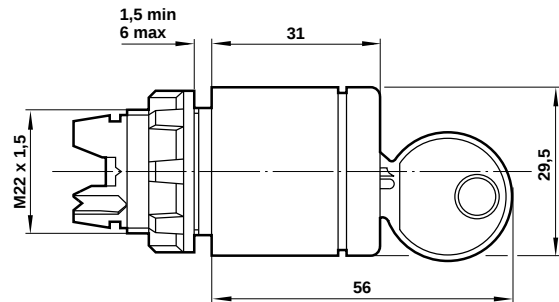
Operating Force: 50N
Panel Hole: Ø22,5 mm
Panel Thickness: 6 mm maximum

M/P 34682**Button Operated, Key Reset (Emergency Stop)**

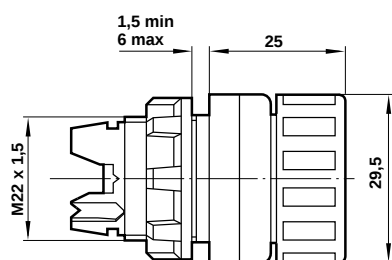
Operating Force: 50N
Panel Hole: Ø22,5 mm
Panel Thickness: 6 mm maximum

M/P 34846**Switch Operated Switch Return**

Operating Force: 40N
Panel Hole: Ø22,5 mm
Panel Thickness: 6 mm maximum

M/P 34845**Key Operated Key Return**

Operating Force: 6,8N
Panel Hole: Ø22,5 mm
Panel Thickness: 6 mm maximum

M/P 34843**Rotary Knob Operated Rotary Knob Return**

Operating Force: 6,8N
Panel Hole: Ø22,5 mm
Panel Thickness: 6 mm maximum

Operator	Type	Colour	Model No.
Button (Palm)/Spring	Momentary Action	Red	M/P 34840/R
		Green	M/P 34840/G
		Black	M/P 34840/N
Button (Shrouded)/Spring	Momentary Action	Red	M/P 34841/R
		Green	M/P 34841/G
		Black	M/P 34841/N
Button (Mushroom)/Spring	Momentary Action	Red	M/P 34842/R
		Green	M/P 34842/G
		Black	M/P 34842/N
Emergency Stop Button/Key	Maintained Action	Red	M/P 34862
Switch/Switch	Maintained Action	-	M/P 34846
Rotary Knob/Rotary Knob	Maintained Action	-	M/P 34843
Key/Key	Maintained Action	-	M/P 34845