

General

Modern industrial applications constantly require more sophisticated and better performing pneumatic components . Flexibility and adaptability are key factor when designing a machine. The possibility to change the application parameter during operation such as for example the speed of a cylinder or the force generated by a rotary actuator are beneficial to the designer. In the past it was necessary to design complicated pneumatic circuits based on pneumatic logic elements which required a lot of space and complicated set up, today, thanks to the electronic proportional regulators such operations are extremely easy to achieve and offer even more flexibility.

Pneumax miniaturized proportional regulators series integrates all the main features of the 521 series with the exclusion of the display and analogue/digital output.

High precision in pressure regulation, fast response speed, assembling options and reduced dimensions are the main advantages.

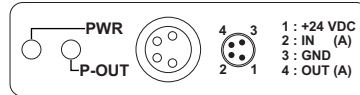
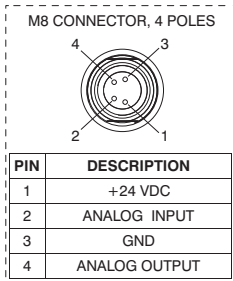
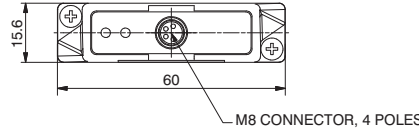
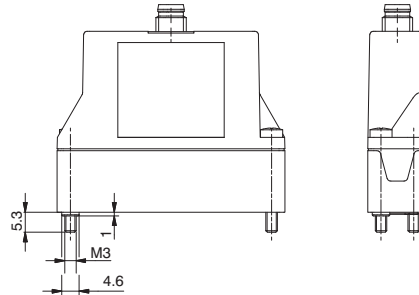
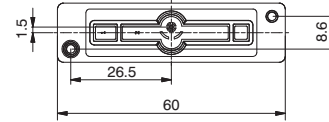
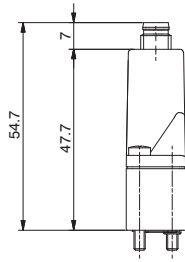
Features

Pneumatic	Fluid	Air filtered at 5 micron and dehumidified		
	Minimum inlet pressure	Desired outlet pressure + 1 bar		
	Maximum inlet pressure	10 bar		
	Outlet pressure	Ordering code	009	
		Pressure value	0 - 9 bar	
	Nominal flowrate from 1 to 2 (6 bar Δp 1 bar)	7 NI /min		
	Discharge flowrate (at 6 bar with 1 bar overpressure)	7 NI /min		
	Air consumption	M5 / Ø4		
	Operating connection	M5 / Ø4		
	Exhaust connection	M5 / Ø4		
Maximum fitting tightening	3 Nm			
Electric	Supply voltage	24VDC ± 10% (stabilised with ripple <1%)		
	Standby current consumption	55 mA		
	Current consumption with solenoid valves on	145 mA		
	Reference signal	Voltage*	0 - 10 V	
		Current*	4 - 20 mA	
	Input impedance	Voltage	10 KΩ	
		Current	250 Ω	
Analog outputs voltage	0,2 - 10 V (10 V to 9 bar)			
Connector	M8 4 poles			
Functional	Linearity	< ± 0,3 % F.S.		
	Hysteresis	<0,3 % F.S.		
	Repeatability	< ± 0,5 % F.S.		
	Sensitivity	< ± 0,5 % F.S.		
	Assembly position	Indifferent		
	Protection grade	IP65 (with casing fitted)		
	Ambient temperature	-5° - 50°C / 23° - 122°F		
Constructional	Body	Technopolymer		
	Seals	NBR		
	Cover for electrical part	Technopolymer		
	Weight	60 gr.		

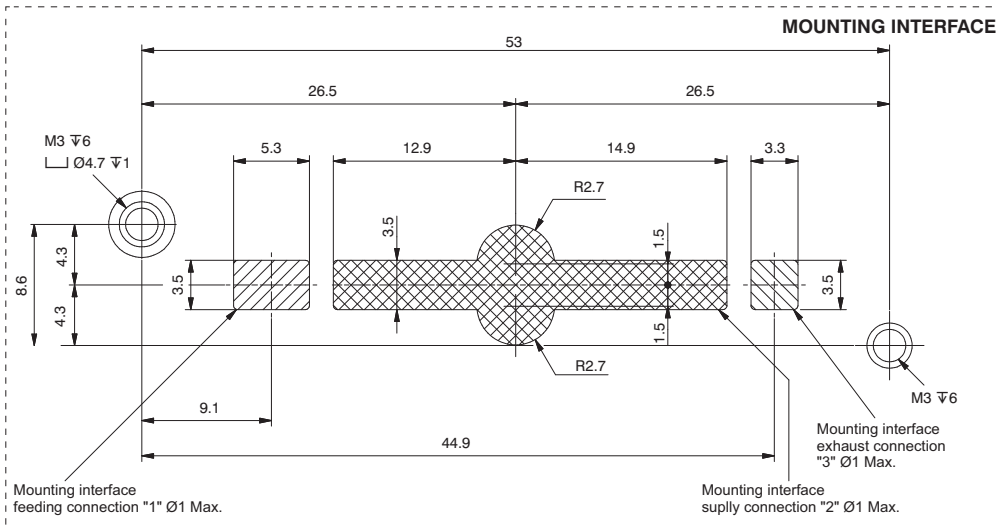
* Request during ordering process



Proportional pressure regulator



PWR	Green Led: The regulator is properly powered
P-OUT	Green Led: lights up when the outlet pressure is higher than the desired pressure minus 0.2 bar and less than the desired pressure more 0.2 bar

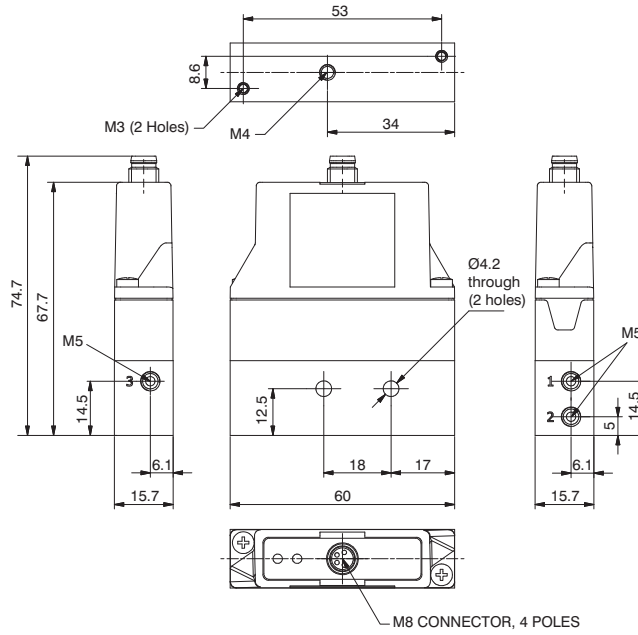


Ordering code

1700EM.V.M.Ⓞ

P	PROTECTION
0	Parameter 18 active
2	Parameter 18 not active
V	VERSION
C	Current signal
G	PRESSURE RANGE
001	Range 0 - 1 bar
005	Range 0 - 5 bar
009	Range 0 - 9 bar

Proportional Pressure Regulator c/w M5 In-Line Single Base



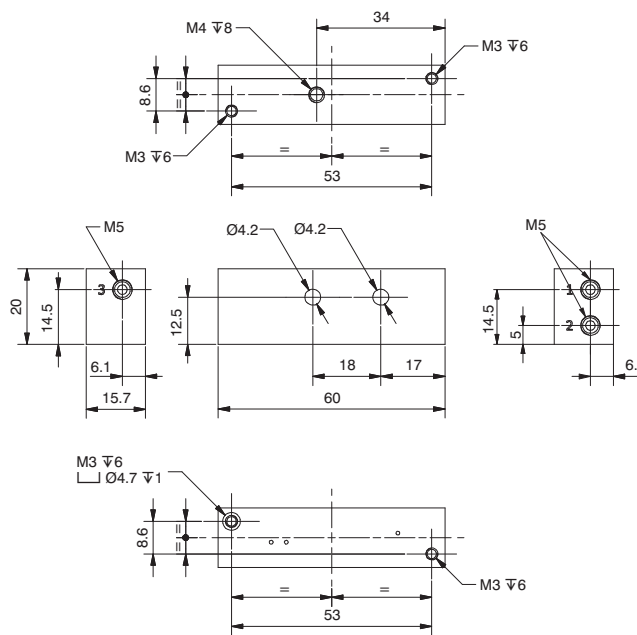
Ordering code

170E2M.V.M.G.FO

- P** PROTECTION
0 = Parameter 18 active
2 = Parameter 18 not active
- V** VERSION
T = Voltage signal
C = Current signal
- G** PRESSURE RANGE
001 = Range 0 - 1 bar
005 = Range 0 - 5 bar
009 = Range 0 - 9 bar

Weight: 110 gr.

M5 In-Line Single Base



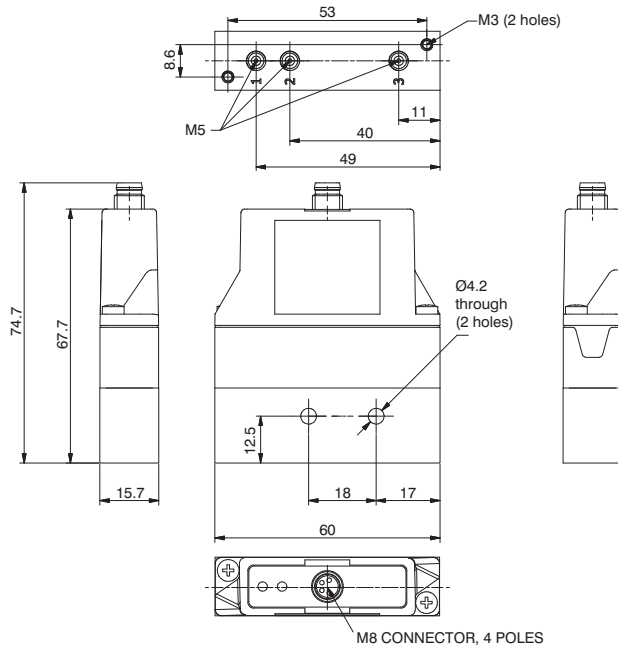
Ordering code

170M1.FO

Weight: 50 gr.

3

Proportional Pressure Regulator c/w M5 Bottom Entry Base



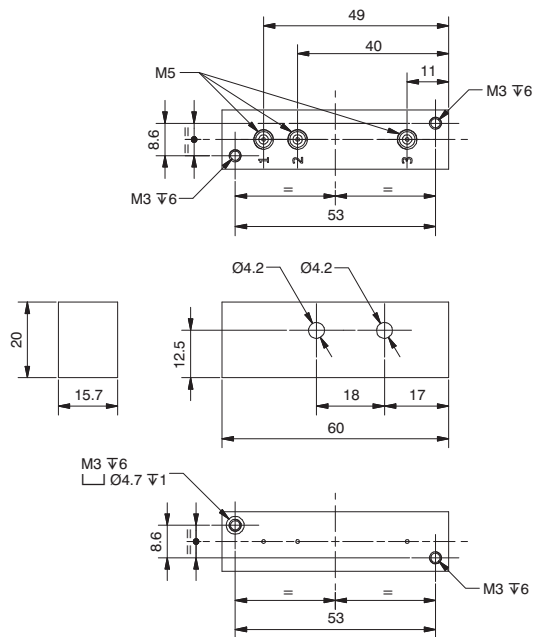
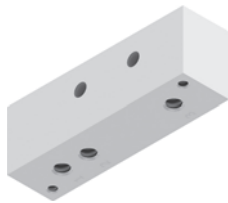
Ordering code

170EPM.V.M.G.FV

	PROTECTION
P	0 = Parameter 18 active 2 = Parameter 18 not active
	VERSION
V	T = Voltage signal C = Current signal
	PRESSURE RANGE
G	001 = Range 0 - 1 bar 005 = Range 0 - 5 bar 009 = Range 0 - 9 bar

Weight: 110 gr.

M5 Bottom Entry Single Base

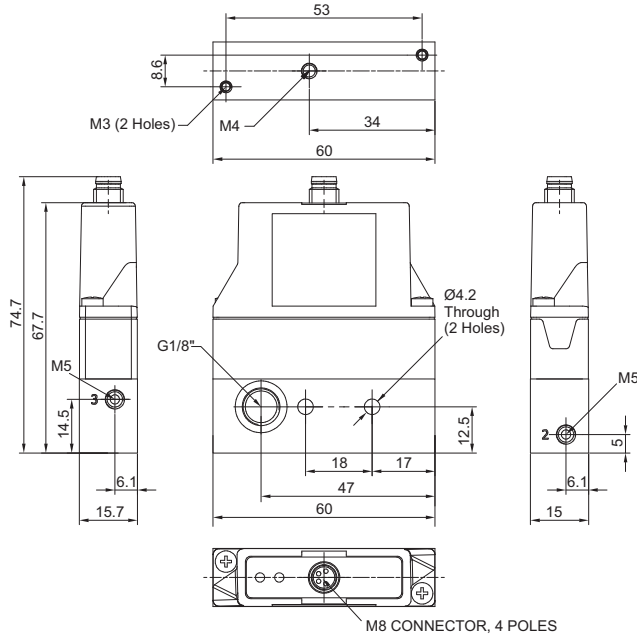


Ordering code

170M1.FV

Weight: 50 gr.

Proportional Pressure Regulator c/w Modular In-Line Base



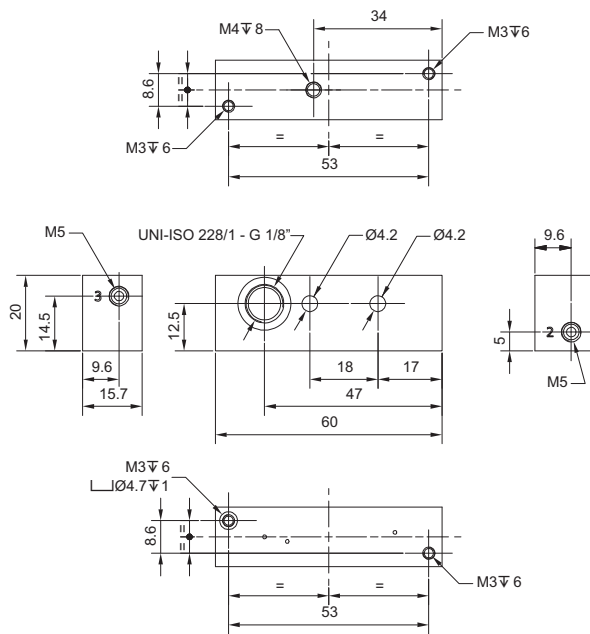
Ordering code

170E2M.V.M.G.FP

- PROTECTION
P 0 = Parameter 18 active
 2 = Parameter 18 not active
 VERSION
V T = Voltage signal
 C = Current signal
 PRESSURE RANGE
G 001 = Range 0 - 1 bar
 005 = Range 0 - 5 bar
 009 = Range 0 - 9 bar

Weight: 110 gr.

Single Modular In-Line Base



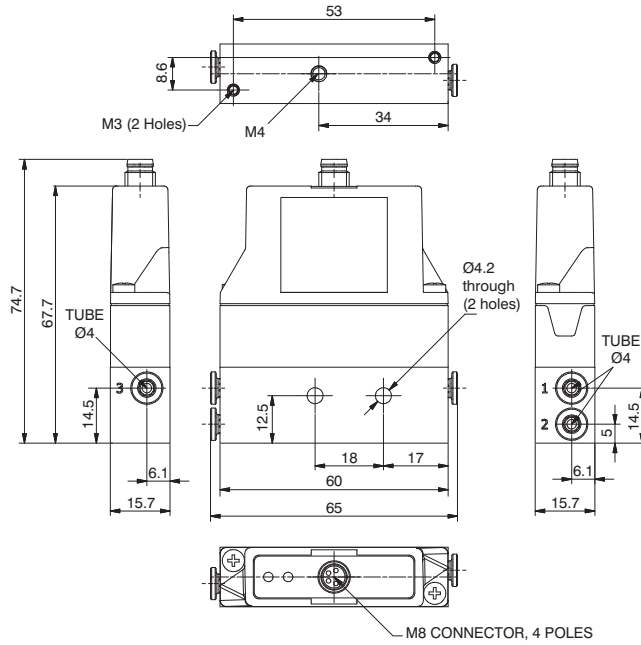
Ordering code

170M1.FP

Weight: 50 gr.

3

Proportional Pressure Regulator c/w 4mm In-Line Single base



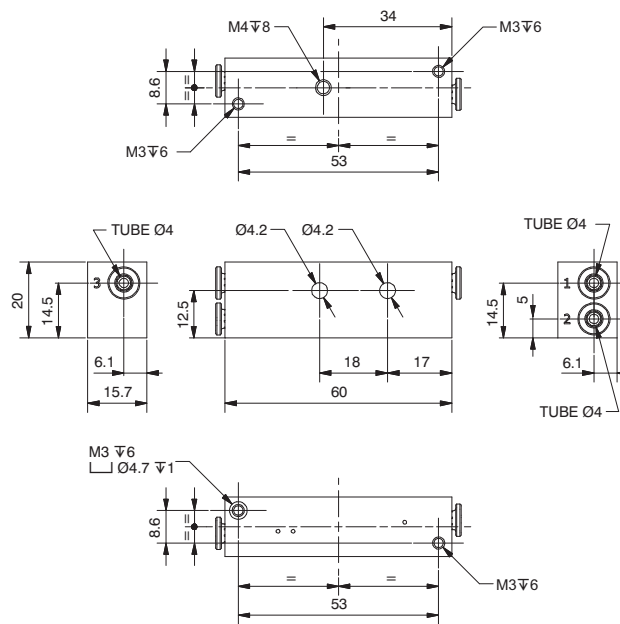
Ordering code

170EM.V.M.0.T0

PROTECTION	
P	0 = Parameter 18 active 2 = Parameter 18 not active
VERSION	
V	T = Voltage signal C = Current signal
PRESSURE RANGE	
G	001 = Range 0 - 1 bar 005 = Range 0 - 5 bar 009 = Range 0 - 9 bar

Weight: 110 gr.

Single 4mm In-Line Base

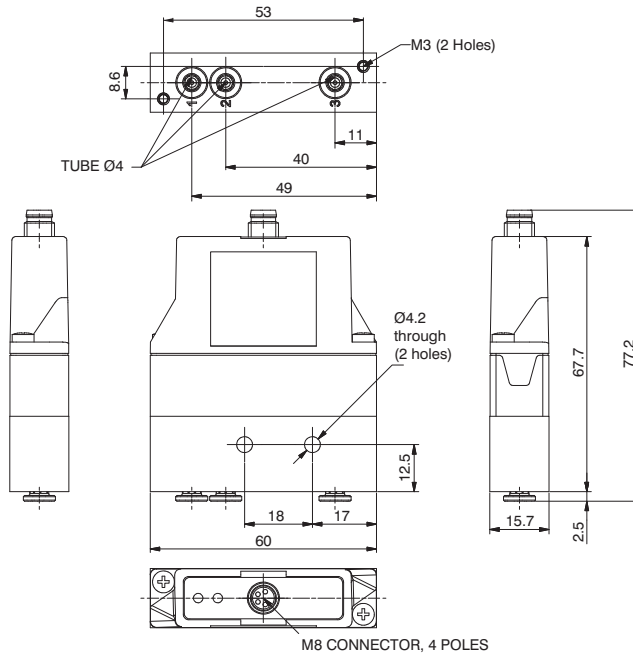
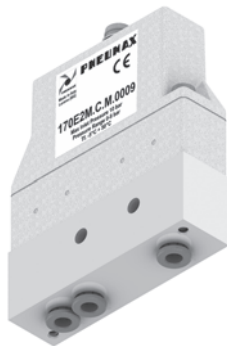


Ordering code

170M1.T0

Weight: 50 gr.

Proportional Pressure Regulator c/w 4mm Bottom Entry Single Base



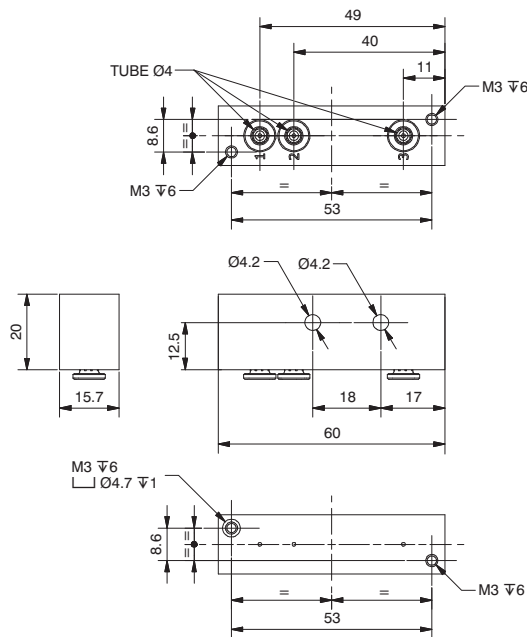
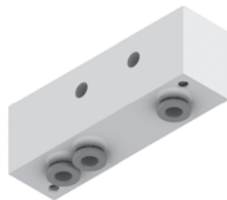
Ordering code

170EPM.V.M.G.TV

- P** PROTECTION
- 0 = Parameter 18 active
- 2 = Parameter 18 not active
- V** VERSION
- T = Voltage signal
- C = Current signal
- G** PRESSURE RANGE
- 001 = Range 0 - 1 bar
- 005 = Range 0 - 5 bar
- 009 = Range 0 - 9 bar

Weight: 110 gr.

Single 4mm Bottom Entry Base



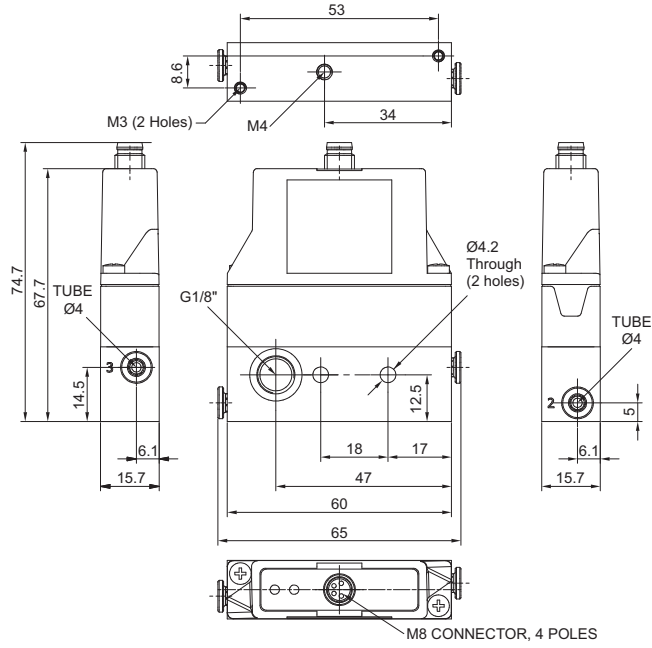
Ordering code

170M1.TV

Weight: 50 gr.

3

Proportional Pressure Regulator c/w 4mm In-Line Modular Base



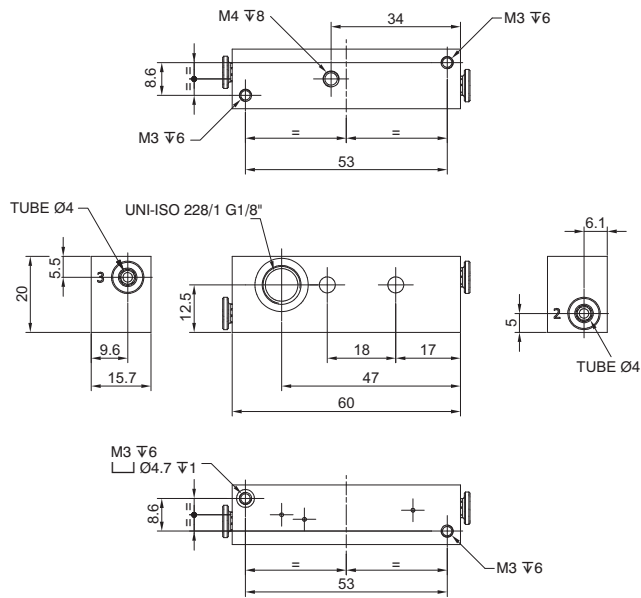
Ordering code

170EPM.V.M.G.TP

P	PROTECTION
0	= Parameter 18 active
2	= Parameter 18 not active
V	VERSION
T	= Voltage signal
C	= Current signal
G	PRESSURE RANGE
001	= Range 0 - 1 bar
005	= Range 0 - 5 bar
009	= Range 0 - 9 bar

Weight: 110 gr.

Single 4mm In-Line Modular Base

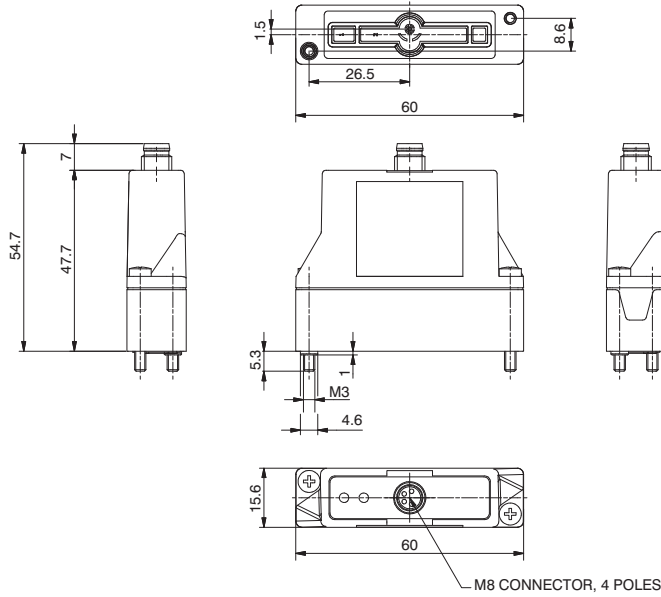


Ordering code

170M1.TP

Weight: 50 gr.

Proportional pressure regulator with external feedback

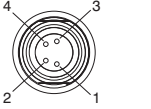


Ordering code

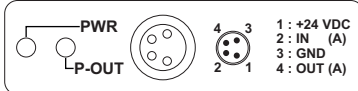
170EPM.V.M.G.E

- PROTECTION**
P 0 = Parameter 18 active
 2 = Parameter 18 not active
VERSION
V T = Voltage signal
 C = Current signal
PRESSURE RANGE
G 001 = Range 0 - 1 bar
 005 = Range 0 - 5 bar
 009 = Range 0 - 9 bar

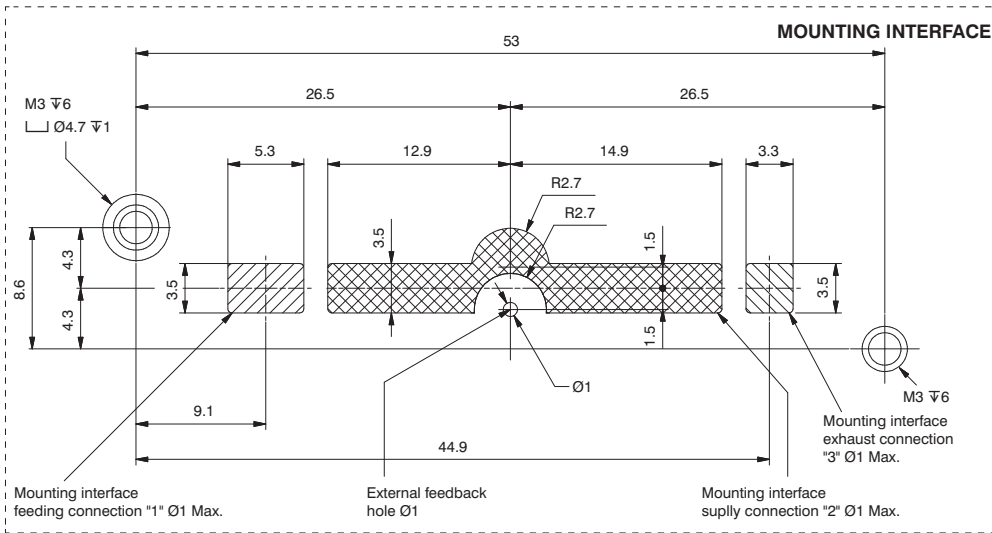
M8 CONNECTOR, 4 POLES



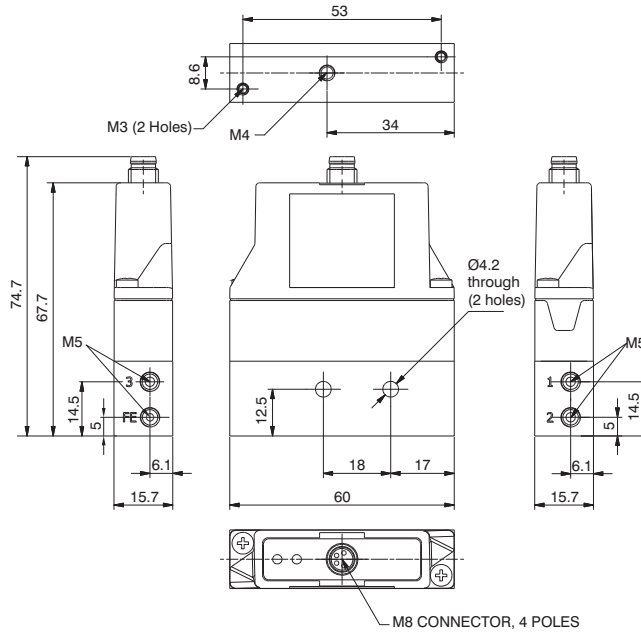
PIN	DESCRIPTION
1	+24 VDC
2	ANALOG INPUT
3	GND
4	ANALOG OUTPUT



PWR	Green Led: The regulator is properly powered
P-OUT	Green Led: lights up when the outlet pressure is higher than the desired pressure minus 0.2 bar and less than the desired pressure more 0.2 bar



Proportional Pressure Regulator c/w M5 In-Line Single Base with External Feedback



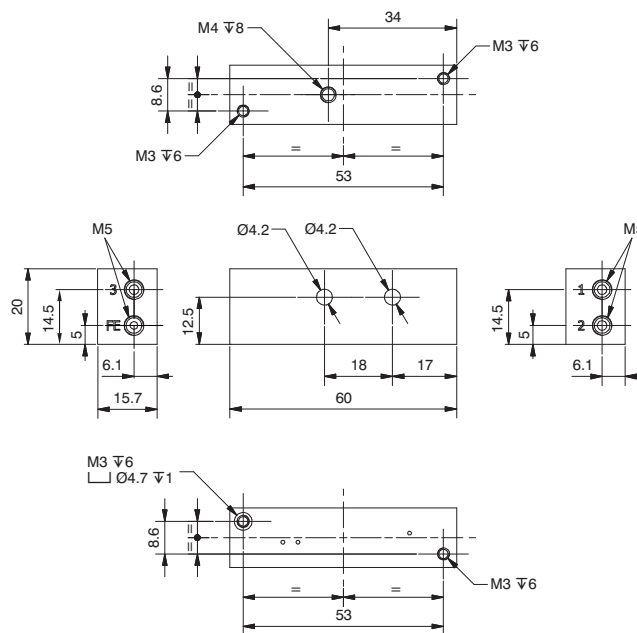
Ordering code

170E0M.V.M.G.EFO

P	PROTECTION
0	= Parameter 18 active
2	= Parameter 18 not active
V	VERSION
T	= Voltage signal
C	= Current signal
G	PRESSURE RANGE
001	= Range 0 - 1 bar
005	= Range 0 - 5 bar
009	= Range 0 - 9 bar

Weight: 110 gr.

Single M5 In-Line Base with External Feedback

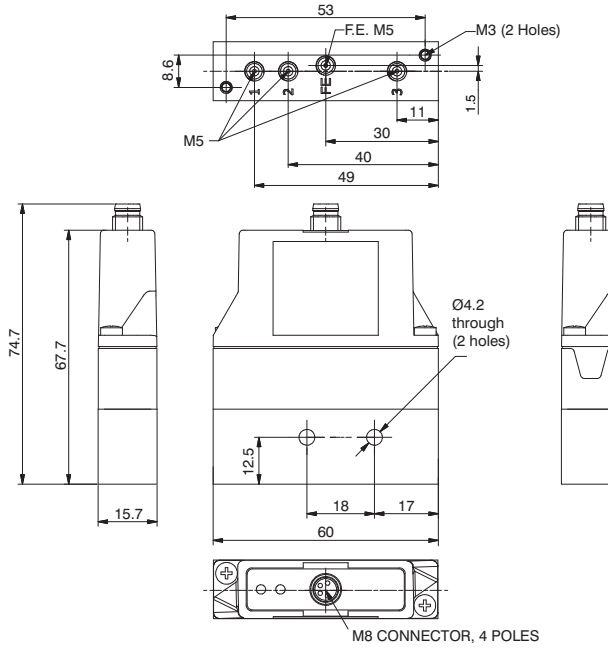


Ordering code

170M1.EFO

Weight: 50 gr.

Proportional Pressure Regulator c/w M5 Bottom Entry Base with External Feedback



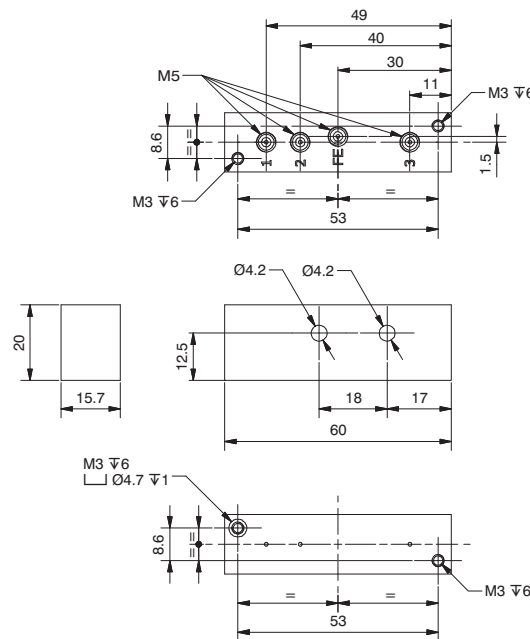
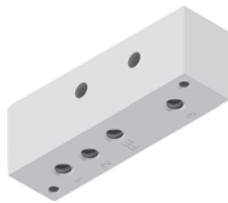
Ordering code

170EPM.V.M.C.EFV

- PROTECTION
 P 0 = Parameter 18 active
 2 = Parameter 18 not active
 VERSION
 V T = Voltage signal
 C = Current signal
 PRESSURE RANGE
 G 001 = Range 0 - 1 bar
 005 = Range 0 - 5 bar
 009 = Range 0 - 9 bar

Weight: 110 gr.

Single M5 Bottom Entry Base with External Feedback



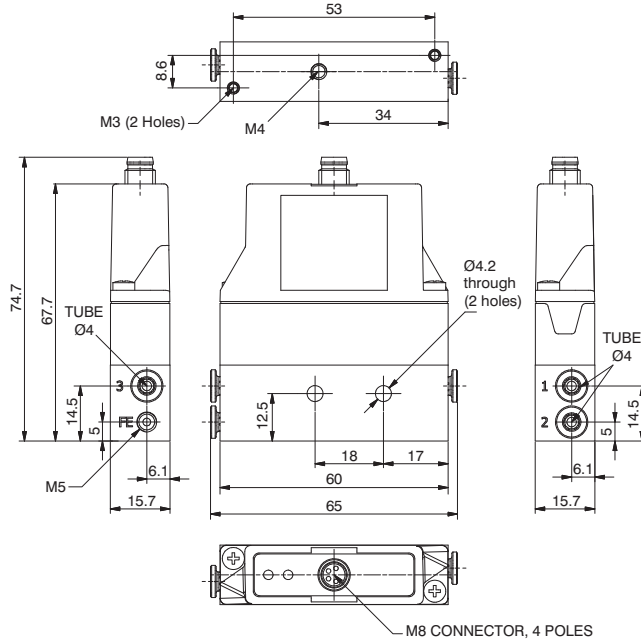
Ordering code

170M1.EFV

Weight: 50 gr.

3

Proportional Pressure Regulator c/w 4mm In-Line Single Base with External Feedback



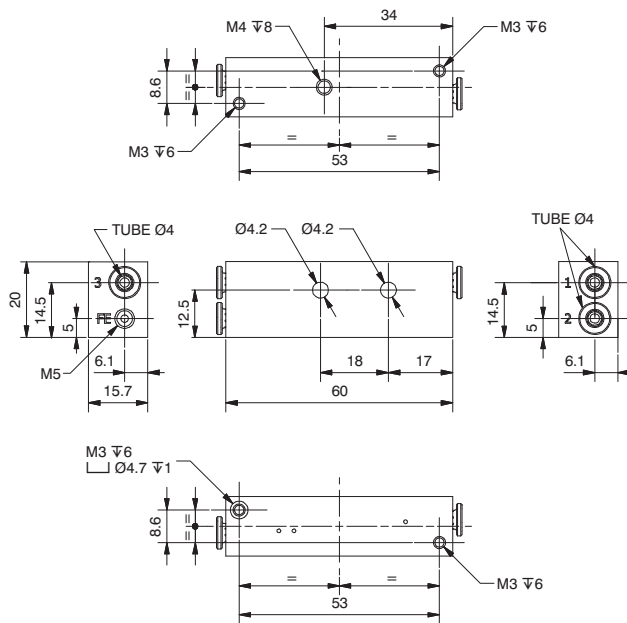
Ordering code

170E01M.0.M.G.ETO

PROTECTION	
P	0 = Parameter 18 active
	2 = Parameter 18 not active
VERSION	
V	T = Voltage signal
	C = Current signal
PRESSURE RANGE	
G	001 = Range 0 - 1 bar
	005 = Range 0 - 5 bar
	009 = Range 0 - 9 bar

Weight: 110 gr.

Single 4mm In-Line Base with External Feedback

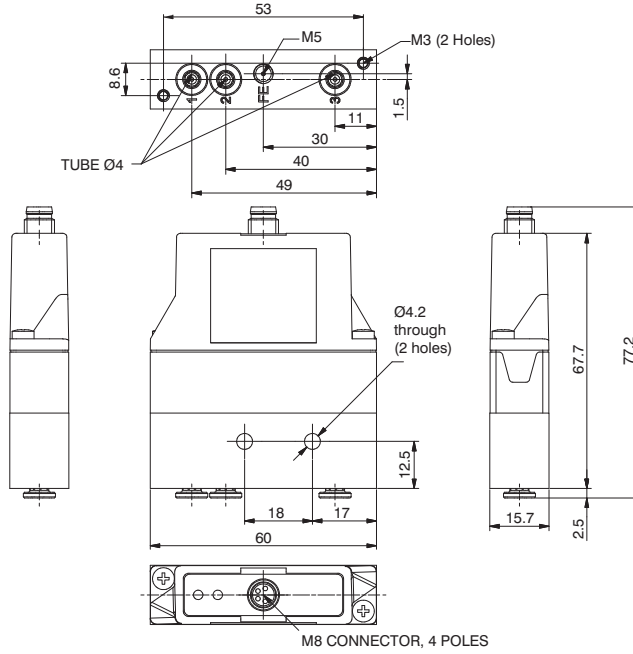


Ordering code

170M1.ETO

Weight: 50 gr.

Proportional Pressure Regulator c/w 4mm Bottom Entry Single Base with External Feedback



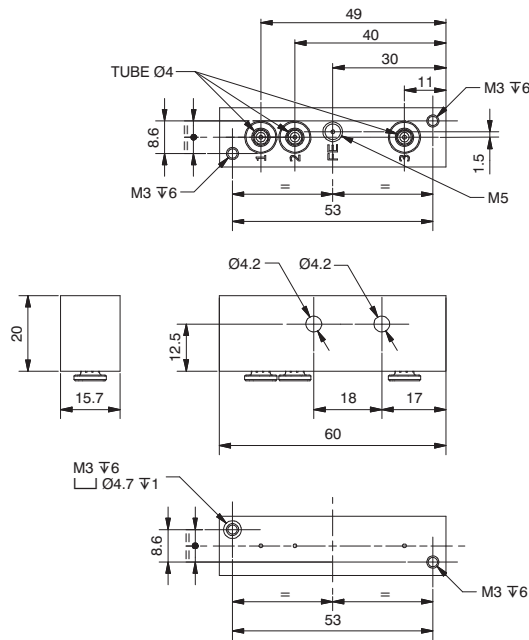
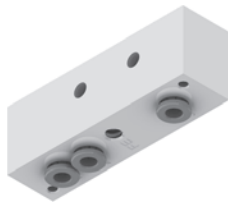
Ordering code

1700PM.V.M.C.ETV

- PROTECTION
 P 0 = Parameter 18 active
 2 = Parameter 18 not active
 VERSION
 V T = Voltage signal
 C = Current signal
 PRESSURE RANGE
 G 001 = Range 0 - 1 bar
 005 = Range 0 - 5 bar
 009 = Range 0 - 9 bar

Weight: 110 gr.

Single 4mm Bottom Entry Base with External Feedback



Ordering code

170M1.ETV

Weight: 50 gr.

3

Coding For Proportional Pressure Regulator Modular Manifold

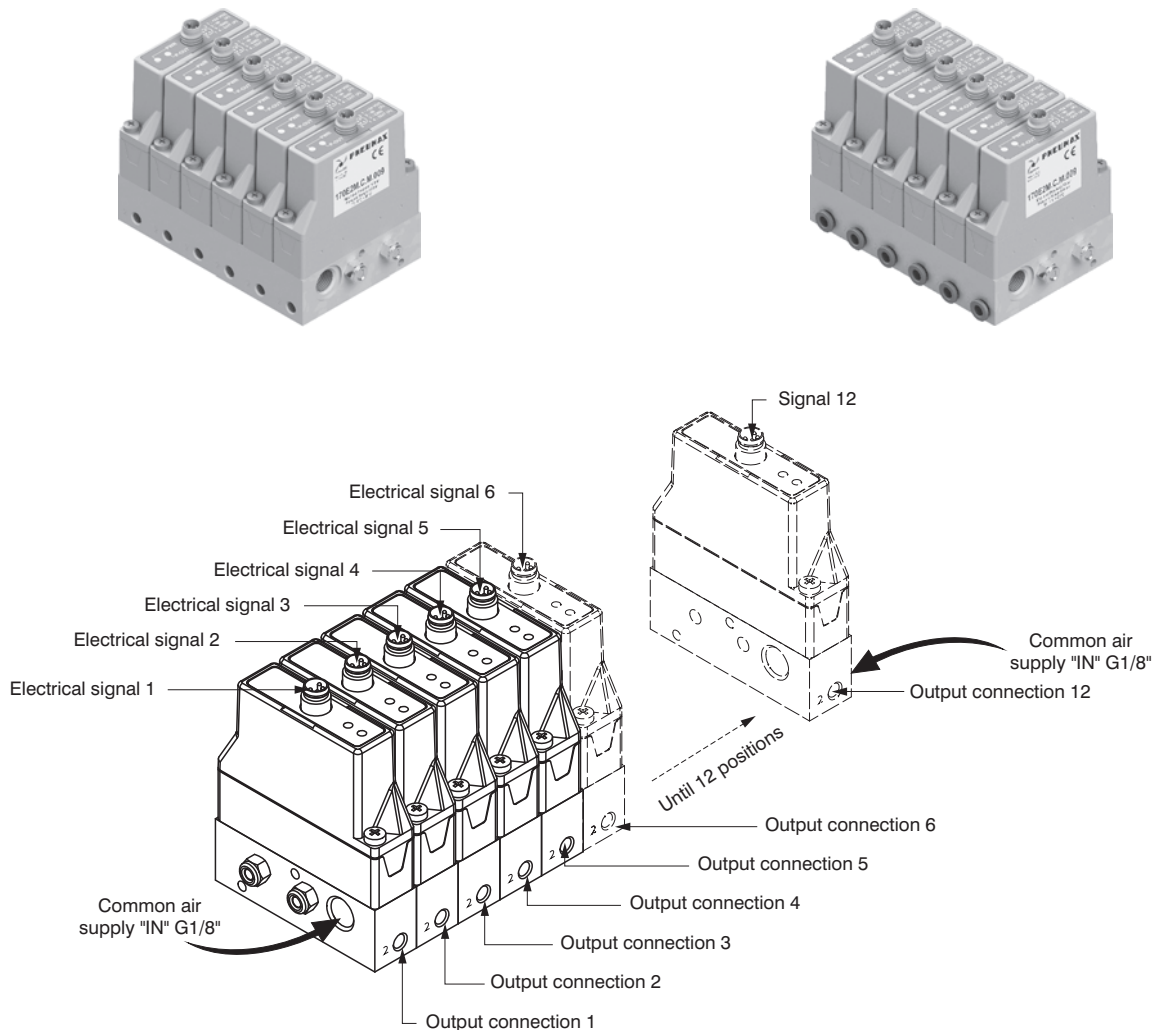
It is possible to assemble a manifold of Miniature Proportional Regulators to a maximum of 12 Regulators. For the coding of the Manifold, refer to the configuration Table below.

The Regulators are fed by a single supply pressure via the G1/8" connection. In the Manifold, the Pressure Regulators operate independently, the output pressure is supplied via the M5 or 4mm output connection depending on the model requested. The electrical signal is controlled via the M8 connector.

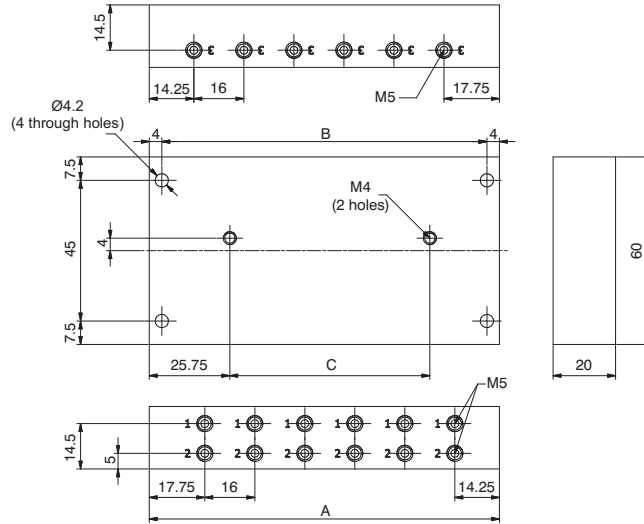
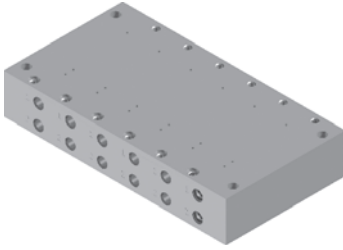
There are also configured single bases up to a maximum of 12 positions with power supplies and independent consumptions (See following pages).

G	1	7	0	-	-	-	M	-	-	-	P	-
Group	Series	Size	Parameter 18	N. Places	Control Type	Electrical connection	Pressure range	Connection	Version	Options		
			0=Eco P18 On	A=02	T=Voltage		001=0 - 1 bar	T=Tube Ø4		= Standard *		
			2=Eco P18 Off	B=03	C=Current		005=0 - 5 bar	F=M5 Thread		E= External feedback		
				C=04			009=0 - 9 bar			* no additional letter required		
				D=05								
				E=06								
				F=07								
				G=08								
				H=09								
				I=10								
				L=11								
				M=12								

Example	
Code	G1700ITM009FP
Description	10 Position Miniature Proportional Pressure Regulator, Voltage controlled with M5 Outputs



Multiple M5 In-Line Base



N° PLACES									
DIMEN.	2 PLA.	3 PLA.	4 PLA.	5 PLA.	6 PLA.	7 PLA.	8 PLA.	9 PLA.	10 PLA.
A	48	64	80	96	112	128	144	160	176
B	40	56	72	88	104	120	136	152	168
C	0	16	32	48	64	80	96	112	128

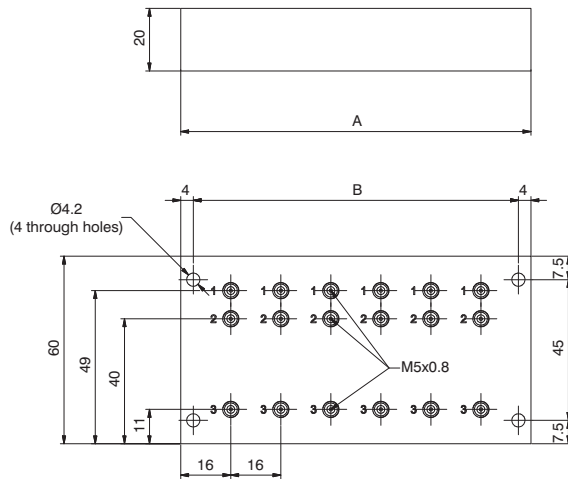
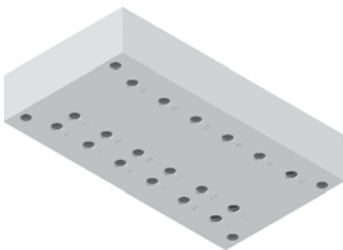
Ordering code

170M^N.FO

N. PLACES

- 2=2 places (weight gr.100)
- 3=3 places (weight gr.150)
- 4=4 places (weight gr.200)
- 5=5 places (weight gr.250)
- N** 6=6 places (weight gr.300)
- 7=7 places (weight gr.350)
- 8=8 places (weight gr.400)
- 9=9 places (weight gr.450)
- 10=10 places (weight gr. 500)

Multiple M5 Bottom Entry Base



N° PLACES									
DIMEN.	2 PLA.	3 PLA.	4 PLA.	5 PLA.	6 PLA.	7 PLA.	8 PLA.	9 PLA.	10 PLA.
A	48	64	80	96	112	128	144	160	176
B	40	56	72	88	104	120	136	152	168

Ordering code

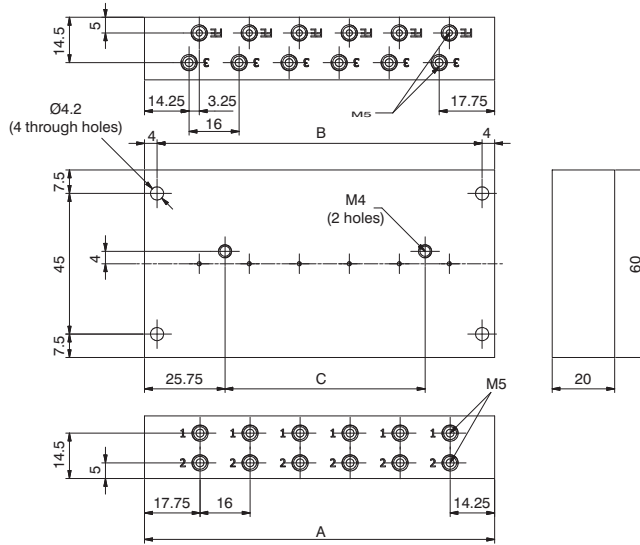
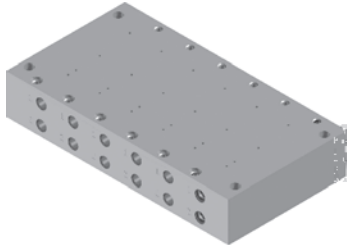
170M^N.FV

N. PLACES

- 2=2 places (weight gr.100)
- 3=3 places (weight gr.150)
- 4=4 places (weight gr.200)
- 5=5 places (weight gr.250)
- N** 6=6 places (weight gr.300)
- 7=7 places (weight gr.350)
- 8=8 places (weight gr.400)
- 9=9 places (weight gr.450)
- 10=10 places (weight gr. 500)

3

Multiple M5 In-Line Base with External Feedback



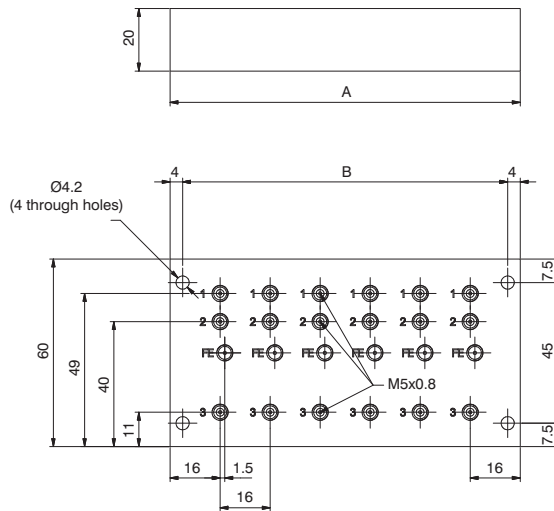
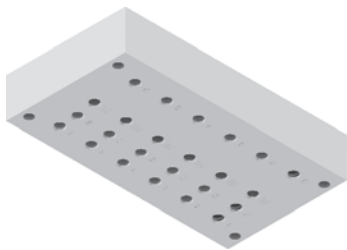
DIMEN.	N° PLACES									
	2 PLA.	3 PLA.	4 PLA.	5 PLA.	6 PLA.	7 PLA.	8 PLA.	9 PLA.	10 PLA.	
A	48	64	80	96	112	128	144	160	176	
B	40	56	72	88	104	120	136	152	168	
C	0	16	32	48	64	80	96	112	128	

Ordering code

170M^N.EFO

- N. PLACES
- 2=2 places (weight gr.100)
 - 3=3 places (weight gr.150)
 - 4=4 places (weight gr.200)
 - 5=5 places (weight gr.250)
 - 6=6 places (weight gr.300)
 - 7=7 places (weight gr.350)
 - 8=8 places (weight gr.400)
 - 9=9 places (weight gr.450)
 - 10=10 places (weight gr. 500)

Multiple M5 Bottom Entry Base with External Feedback



DIMEN.	N° PLACES									
	2 PLA.	3 PLA.	4 PLA.	5 PLA.	6 PLA.	7 PLA.	8 PLA.	9 PLA.	10 PLA.	
A	48	64	80	96	112	128	144	160	176	
B	40	56	72	88	104	120	136	152	168	

Ordering code

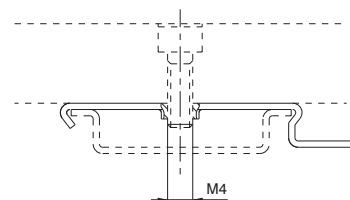
170M^N.EFV

- N. PLACES
- 2=2 places (weight gr.100)
 - 3=3 places (weight gr.150)
 - 4=4 places (weight gr.200)
 - 5=5 places (weight gr.250)
 - 6=6 places (weight gr.300)
 - 7=7 places (weight gr.350)
 - 8=8 places (weight gr.400)
 - 9=9 places (weight gr.450)
 - 10=10 places (weight gr. 500)

Clip

Ordering code

800.00



Weight gr. 5