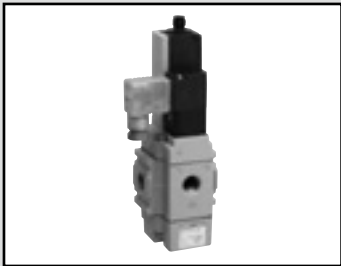


F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac-
remove Filtr
Film
Resist FR
Oil-Prohr
Med
Press FR
No Cu/
PTFE FRL
Outdrs FRL
Adapter
Joiner
Press
Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneur
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRtSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending



3-port solenoid valve with spool position detection

SNP Series

● Port size: Rc3/8 to Rc3/4



Specifications

Model		SNP		
Port size		Rc3/8	Rc1/2	Rc3/4
Actuation		NC (normally closed) type		
Fluid pressure supply port		P-port		
Working fluid		Compressed air		
Proof pressure MPa		1.05 (≈150 psi, 10.5 bar)		
Working pressure range MPa		0.2 (≈29 psi, 2 bar) to 0.7 (≈100 psi, 7 bar)		
Fluid temperature °C		5 (41°F) to 60 (140°F)		
Ambient temperature °C		-5 (23°F) to 60 (140°F)		
Weight kg		0.8(1.7) *1		1.8(3.7) *1
Orifice size mm		14.8 or equiv.		25.4 or equiv.
Valve seat leakage		1 or less (at pneumatic pressure 0.2 to 0.7 MPa)		
Valve structure		Internal pilot balance poppet structure		
Mounting orientation		Unrestricted		

*1: Values in () are the weight for modules

Electrical specifications		
Rated voltage (*2)		100 VAC (50/60 Hz) / 110 VAC (60 Hz), 200 VAC (50/60 Hz) / 220 V (60 Hz), 24 VDC
Apparent power (VA)	When holding	3.6 (50 Hz), 2.8 (60 Hz)
	When starting	11 (50 Hz), 9 (60 Hz)
Power consumption (W)	AC	1.9 (50 Hz), 1.5 (60 Hz)
	DC	2.0
Thermal class		B
Degree of protection (IEC Standard 529)		DIN terminal box (Pg 9)
		DIN terminal box (M12-4P connector)
		IPX5

*2: The voltage range must be within ±10% of the rated voltage.

*3: Contact CKD for details on reliability data (B10).

Limit switch specifications

Limit switch specifications		
Manufacturer Model		D4N-1B31
Terminal		Pg13.5
Contact resistance		D4N-9B31
		M12-4P connector
Contact resistance		25 mΩ or less
Minimum applicable load		5VDC 1 mA resistance load
Rated insulation voltage V		300
Insulation resistance MΩ		100
Electric shock protection class		Class II
Pollution degree (working environment)		3 (EN60947-5-1)
Conditional short-circuit current A		100

* Refer to the manufacturer's catalog for details.

Flow characteristics

Model No.		P→A		A→R	
		C[dm³/(s/bar)]	S(mm²)	C[dm³/(s/bar)]	S(mm²)
Single unit	SNP-10A	13	64	14	70
	SNP-15A	15	76	16	80
	SNP-20A	34	170	36	180
2 stations	SNP-10A	10	50	14	70
	SNP-15A	12	59	16	80
	SNP-20A	26	130	36	180

How to order

SNP - 1R - 15A - 0 2HS L B3 S1 - 1

A Station No.

B Port size

C Sealant

D Coil option

E Limit switch

F Bracket

G Silencer

H Voltage

⚠ Precautions for model No. selection

*1: The bracket can be selected when station No. **A** is "2".

*2: Silencer is attached to the product

[Example of model No.]

SNP-1R-15A-02HSLB3S1-1

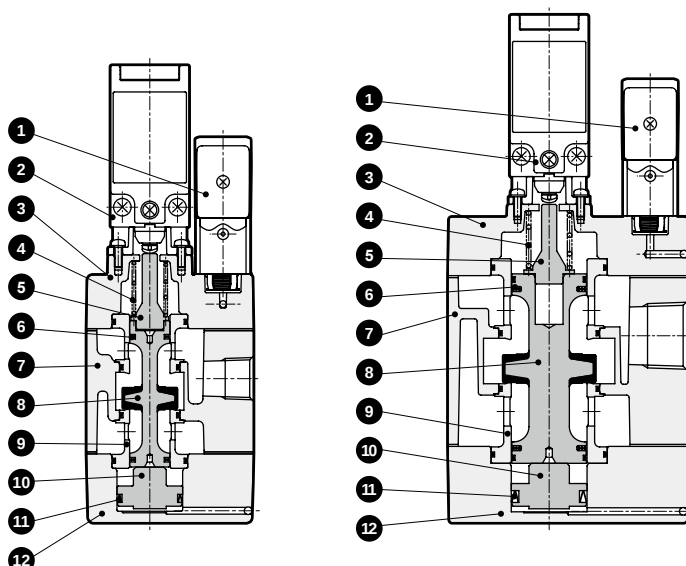
- A** Station No. : Single unit (terminal box right-facing)
- B** Port size : Rc1/2
- C** Sealant : NBR
- D** Coil option : DIN terminal box with light/surge suppressor
- E** Limit switch : Pg13.5
- F** Bracket : With bracket
- G** Silencer : Sintered metal
- H** Voltage : 100 VAC 50 Hz/60 Hz

Code	Description
A Station No.	
1R	Single unit (terminal box right-facing)
1L	Single unit (terminal box left-facing)
2	2 (2 modules)
B Port size	
10A	Rc3/8
15A	Rc1/2
20A	Rc3/4
C Sealant	
0	NBR
D Coil option	
2G	DIN terminal box
2HS	DIN terminal box with light/surge suppressor
2J	DIN terminal box (M12-4P connector)
2KS	DIN terminal box with light/surge suppressor (M12-4P connector)
E Limit switch	
L	Pg13.5 (D4N-1B31: OMRON)
M	M12-4P connector (D4N-9B31: OMRON)
F Bracket	
	*1
Blank	No option
B3	With bracket (2000 Series, 3000 Series)
B4	With bracket (4000 Series)
B8	With bracket (8000 series)
G Silencer	
	*2
Blank	No option
S1	Sintered metal
S2	Resin
H Voltage	
1	100 VAC 50 Hz/60 Hz/110 VAC 60 Hz
2	200 VAC 50 Hz/60 Hz/220 VAC 60 Hz
3	24 VDC

Internal structure and parts list

● SNP-1*-10A/15A

● SNP-1*-20A



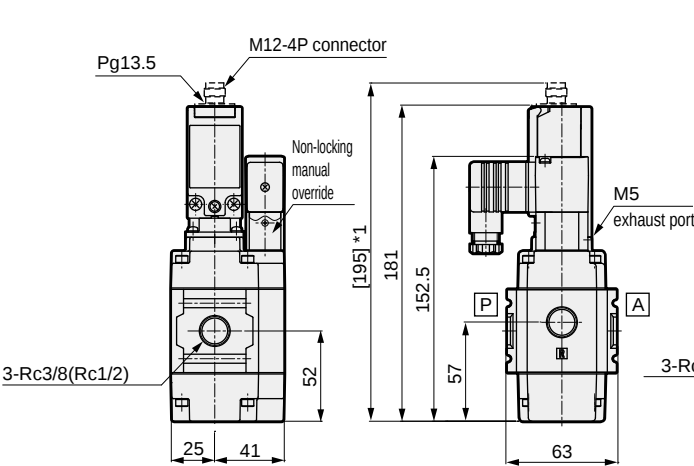
No.	Part name	Material
1	Pilot solenoid valve	-
2	Limit switch	-
3	Body	ADC12 Aluminum die-casting
4	Spring	SWP Piano wire
5	Indicator	A2017 Aluminum
6	PSD packing	NBR Nitrile rubber
7	Body	ADC12 Aluminum die-casting
8	Valve stem	NBR,A2017 Nitrile rubber, aluminum
9	Valve seat	A5056 Aluminum
10	Piston	A2017 Aluminum
11	MY packing	NBR Nitrile rubber
12	Cap	ADC12 Aluminum die-casting

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac-
remove Filtr
Film
Resist FR
Oil-ProhR
Med
Press FR
No Cu/
PTFE FRL
Outdrs FRL
Adpater
Joiner
Press
Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRiSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending

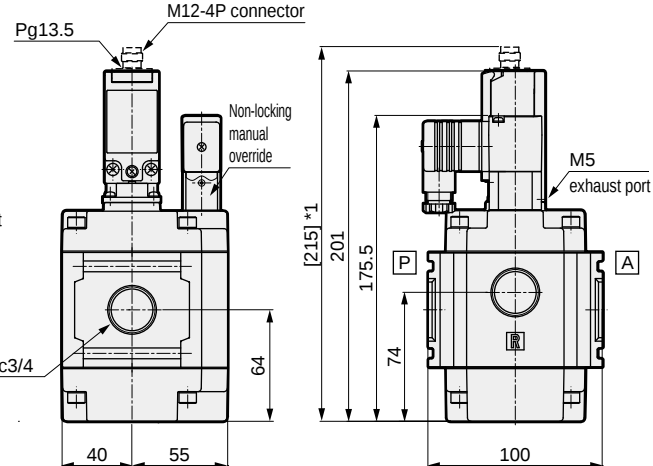
F.R.L. Dimensions

- F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-
remove Filtr
Film Resist FR
Oil-Prohr
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

● SNP-1L-10A/15A (single unit)

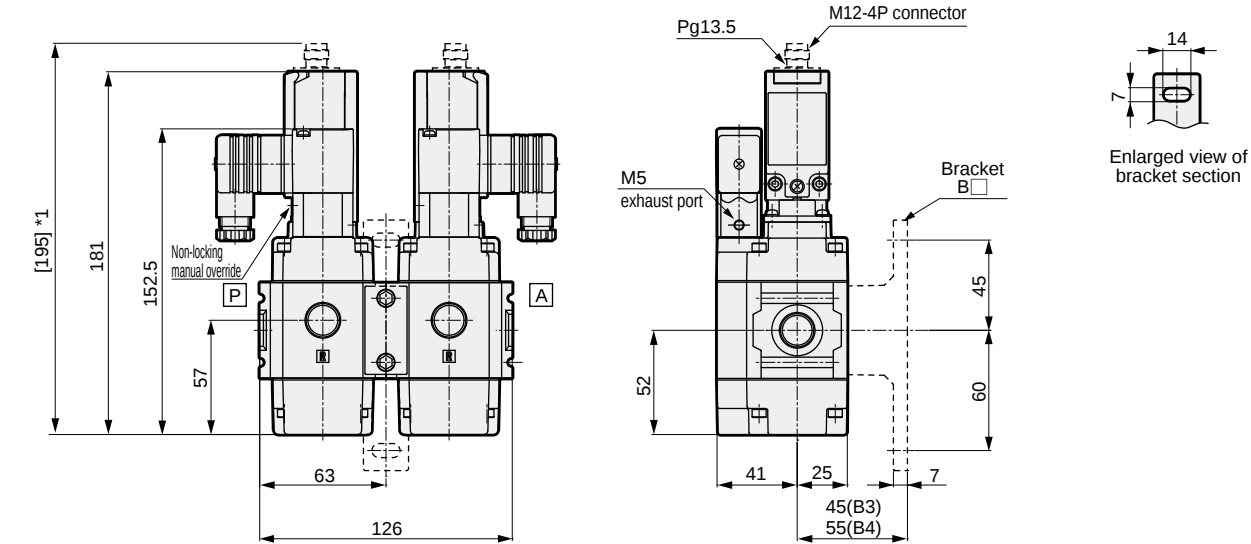


● SNP-1L-20A (single unit)



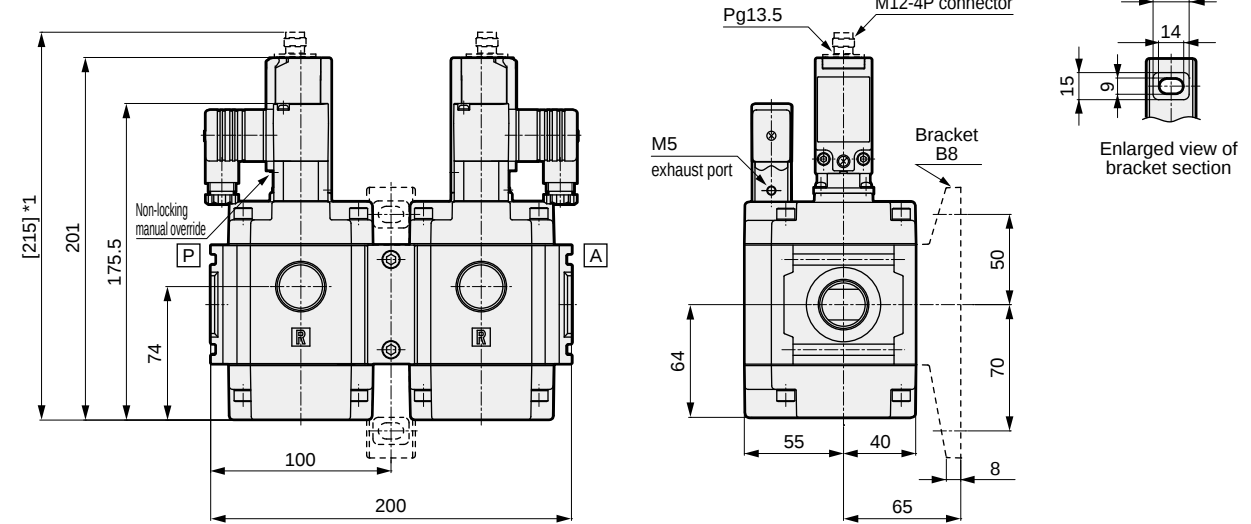
*1: [] shows dimensions when M12-4P connector (M) is selected
*2: For 1R, the wiring of the terminal box and limit switch is positioned to the right.

● SNP-2-10A/15A (2 stations)



*1: [] shows dimensions when M12-4P connector (M) is selected

● SNP-2-20A (2 stations)

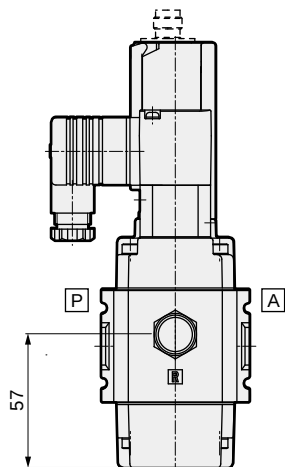
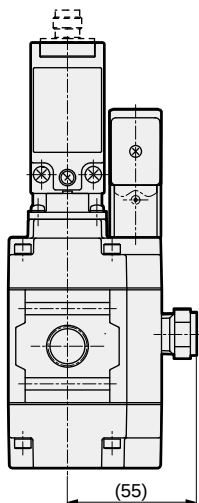


*1: [] shows dimensions when M12-4P connector (M) is selected

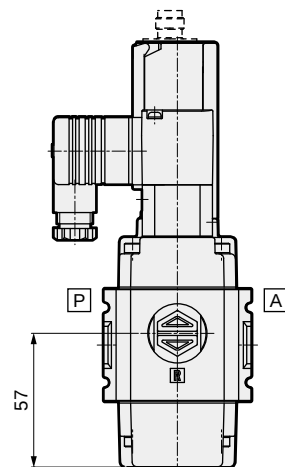
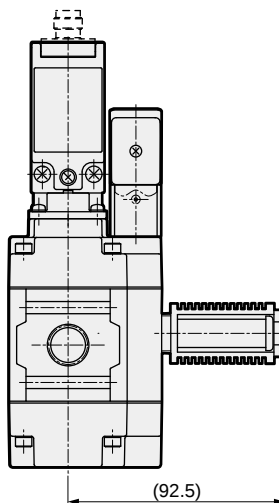
Option dimensions with silencer

* Silencer is provided with the product.

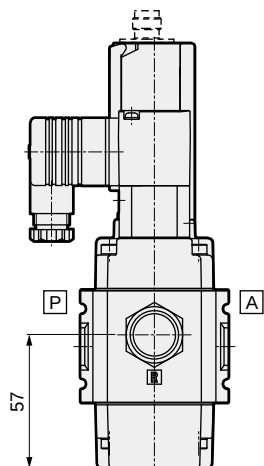
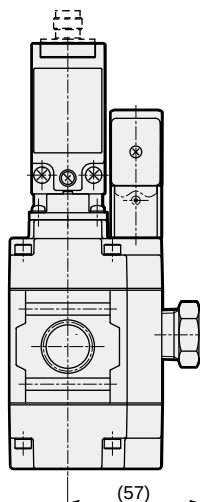
● SNP-1L-10A-*S1



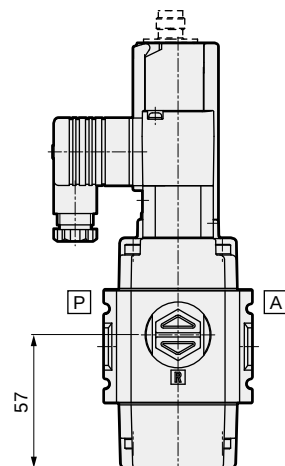
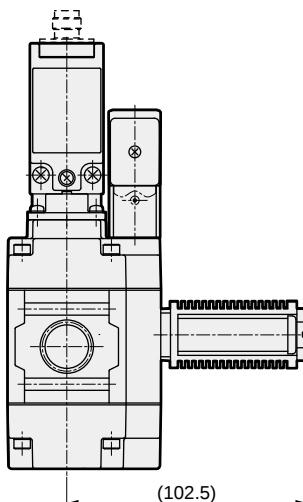
● SNP-1L-10A-*S2



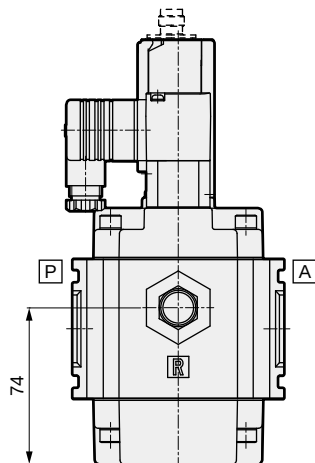
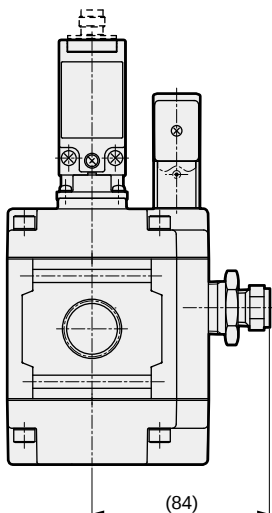
● SNP-1L-15A-*S1



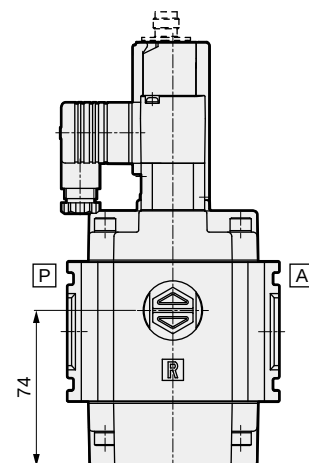
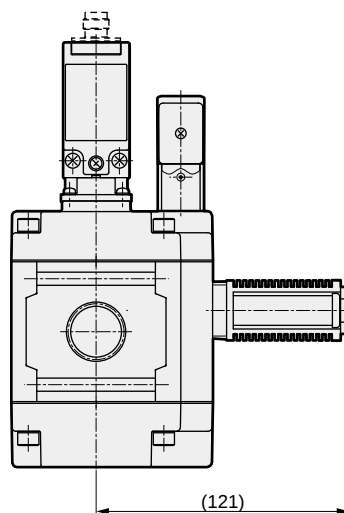
● SNP-1L-15A-*S2



● SNP-1L-20A-*S1



● SNP-1L-20A-*S2

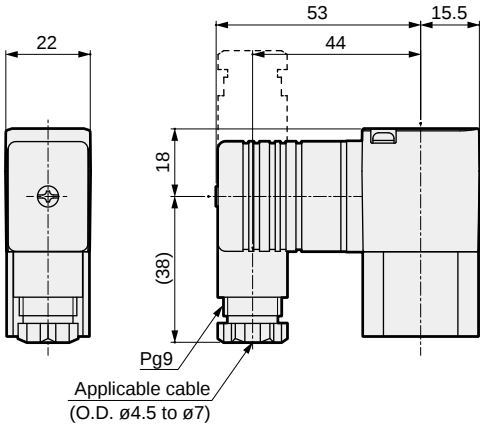


F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac-
remove Filtr
Film
Resist FR
Oil-ProhR
Med
Press FR
No Cu/
PTFE FRL
Outdris FRL
Adapter
Joiner
Press
Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRiSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending

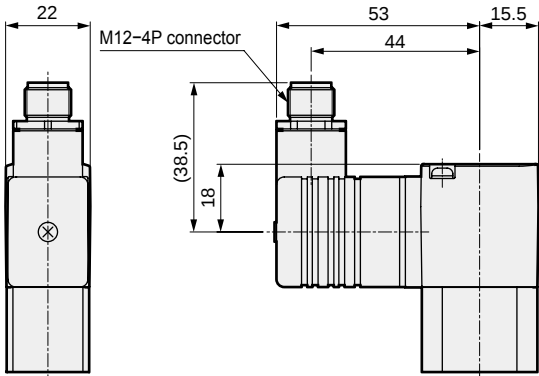
F.R.L. Coil option dimensions

- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filt
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

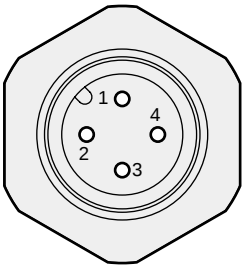
- DIN terminal box (Pg9)
- DIN terminal box with lamp/surge suppressor (Pg9)
- SNP-* 2G 2HS



- DIN terminal box (M12-4P connector)
- DIN terminal box with lamp/surge suppressor (M12-4P connector)
- SNP-* 2J 2KS



Connector pin array



PIN No.	Applications
1PIN	Ground
2PIN	(Not used)
3PIN	Power supply -
4PIN	Power supply +

* As it is a screw-in, the connector pin positions may not be the same as those shown above.