techhose
QUALITY CONNECTIONS

Pneumatic & Vacuum

Air Preparation

AIR PREPARATION

FT PRO

Working Temperature:
-5°C to +60°C

**Maximum Working Pressure:**
10 bar

40 Micron fitted as standard
Auto or semi-auto drain fitted as standard
Guarded bowl protection on Series 300, 400 and 600

All FT Pro Regulators can now be adapted to use either a 40mm or 50mm round face gauge with the new FT Pro Gauge Adaptor. See page 646

2 Year Warranty

200 Series Filter + Regulator + Lubricator Combination Units
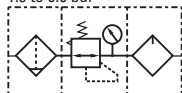
Operating Pressure
1.5 to 9.0 bar
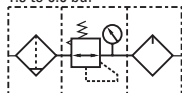
Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KCS200-06-F-3	1/8"	3000
KCS200-08-F-3	1/4"	3000
Tech Sheet 3060		

300 Series Filter + Regulator + Lubricator Combination Units

Operating Pressure
1.5 to 9.0 bar

Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KCS300-08-A-F-3	1/4"	4000
KCS300-10-A-F-3	3/8"	4000
KCS300-15-A-F-3	1/2"	4000
Tech Sheet 3060		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KCS300-08-F-3	1/4"	4000
KCS300-10-F-3	3/8"	4000
KCS300-15-F-3	1/2"	4000
Tech Sheet 3060		

400 Series Filter + Regulator + Lubricator Combination Units

Operating Pressure
1.5 to 9.0 bar
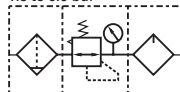
Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KCS400-10-A-F-3	3/8"	6000
KCS400-15-A-F-3	1/2"	6000
Tech Sheet 3060		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KCS400-10-F-3	3/8"	6000
KCS400-15-F-3	1/2"	6000
Tech Sheet 3060		

600 Series Filter + Regulator + Lubricator Combination Units

Operating Pressure
1.5 to 9.0 bar
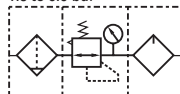
Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KCS600-20-A-F-3	3/4"	9000
KCS600-25-A-F-3	1"	9000
Tech Sheet 3060		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KCS600-20-F-3	3/4"	9000
KCS600-25-F-3	1"	9000
Tech Sheet 3060		

AIR PREPARATION

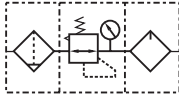FT PRO®

Working Temperature:
-5ºC to +60ºC

Maximum Working Pressure:
10 bar

40 Micron fitted as standard
Auto or semi-auto drain fitted as standard
Guarded bowl protection on Series 300, 400 and 600

2 Year Warranty

200 Series Filter/Regulator + Lubricator Combination Units
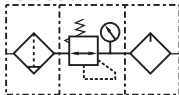
Operating Pressure
1.5 to 9.0 bar

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFCS200-06-F-3	1/8"	3000
KFCS200-08-F-3	1/4"	3000
Tech Sheet 3061		

300 Series Filter/Regulator + Lubricator Combination Units

Operating Pressure
1.5 to 9.0 bar

Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFCS300-08-A-F-3	1/4"	4000
KFCS300-10-A-F-3	3/8"	4000
KFCS300-15-A-F-3	1/2"	4000
Tech Sheet 3061		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFCS300-08-F-3	1/4"	4000
KFCS300-10-F-3	3/8"	4000
KFCS300-15-F-3	1/2"	4000
Tech Sheet 3061		

400 Series Filter/Regulator + Lubricator Combination Units

Operating Pressure
1.5 to 9.0 bar
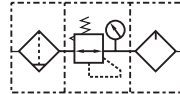
Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFCS400-10-A-F-3	3/8"	6000
KFCS400-15-A-F-3	1/2"	6000
Tech Sheet 3061		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFCS400-10-F-3	3/8"	6000
KFCS400-15-F-3	1/2"	6000
Tech Sheet 3061		

600 Series Filter/Regulator + Lubricator Combination Units

Operating Pressure
1.5 to 9.0 bar
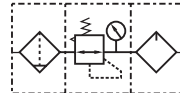
Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFCS600-20-A-F-3	3/4"	9000
KFCS600-25-A-F-3	1"	9000
Tech Sheet 3061		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFCS600-20-F-3	3/4"	9000
KFCS600-25-F-3	1"	9000
Tech Sheet 3061		

AIR PREPARATION

FT PRO

2 Year Warranty

Working Temperature:
-5°C to +60°C

Maximum Working Pressure:
10 bar

40 Micron fitted as standard
Auto or semi-auto drain fitted as standard
Guarded bowl protection on Series 300, 400 and 600

200 Series Filter/Regulators

Operating Pressure
1.5 to 9.0 bar
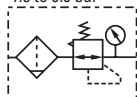
Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFRS200-06-F-3	1/8"	3000
KFRS200-08-F-3	1/4"	3000
Tech Sheet 3062		

300 Series Filter/Regulators

Operating Pressure
1.5 to 9.0 bar
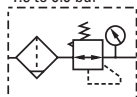
Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFRS300-08-A-F-3	1/4"	4000
KFRS300-10-A-F-3	3/8"	4000
KFRS300-15-A-F-3	1/2"	4000
Tech Sheet 3062		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFRS300-08-F-3	1/4"	4000
KFRS300-10-F-3	3/8"	4000
KFRS300-15-F-3	1/2"	4000
Tech Sheet 3062		

400 Series Filter/Regulators

Operating Pressure
1.5 to 9.0 bar

Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFRS400-10-A-F-3	3/8"	6000
KFRS400-15-A-F-3	1/2"	6000
Tech Sheet 3062		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFRS400-10-F-3	3/8"	6000
KFRS400-15-F-3	1/2"	6000
Tech Sheet 3062		

600 Series Filter/Regulators

Operating Pressure
1.5 to 9.0 bar

Auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFRS600-20-A-F-3	3/4"	9000
KFRS600-25-A-F-3	1"	9000
Tech Sheet 3062		

Semi-auto Drain, supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KFRS600-20-F-3	3/4"	9000
KFRS600-25-F-3	1"	9000
Tech Sheet 3062		

AIR PREPARATION

FT PRO®

Working Temperature: -5°C to +60°C

Maximum Working Pressure: 10 bar

40 Micron fitted as standard
Auto or semi-auto drain fitted as standard
Guarded bowl protection on Series 300, 400 and 600

All FT Pro Regulators can now be adapted to use either a 40mm or 50mm round face gauge with the new FT Pro Gauge Adaptor. See page 646

2 Year Warranty

Mini Regulators

Max inlet pressure 10 bar
Operating pressure 0.5 to 9.0 bar
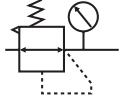
Supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread
KRS200-06	1/8"
KRS200-08	1/4"
Tech Sheet 3066	

200 Series Regulators

Operating pressure 1.5 to 9.0 bar
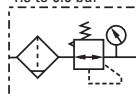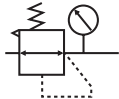
Supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KRS200-06-F-3	1/8"	3000
KRS200-08-F-3	1/4"	3000
Tech Sheet 3064		

300 Series Regulators

Operating pressure 1.5 to 9.0 bar
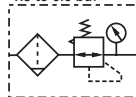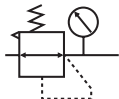
Supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KRS300-08-F-3	1/4"	5000
KRS300-10-F-3	3/8"	5000
KRS300-15-F-3	1/2"	5000
Tech Sheet 3064		

400 Series Regulators

Operating pressure 1.5 to 9.0 bar
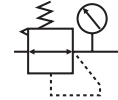
Supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KRS400-10-F-3	3/8"	7500
KRS400-15-F-3	1/2"	7500
Tech Sheet 3064		

600 Series Regulators

Operating pressure 1.5 to 9.0 bar
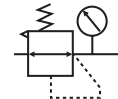
Supplied with Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread	LPM
KRS600-20-F-3	3/4"	9500
KRS600-25-F-3	1"	9500
Tech Sheet 3064		

FT PRO®

Working Temperature: -5ºC to +60ºC

Maximum Working Pressure: 10 bar

Guarded bowl protection on Series 300, 400 and 600

2 Year Warranty

200 Series Lubricators

Supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KLS200-06	1/8"	3000
KLS200-08	1/4"	3000
Tech Sheet 3065		

400 Series Lubricators

Supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KLS400-10	3/8"	7500
KLS400-15	1/2"	7500
Tech Sheet 3065		

300 Series Lubricators

Supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KLS300-08	1/4"	5000
KLS300-10	3/8"	5000
KLS300-15	1/2"	5000
Tech Sheet 3065		

600 Series Lubricators

Supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KLS600-20	3/4"	9000
KLS600-25	1"	9000
Tech Sheet 3065		

AIR PREPARATION

FT PRO®

**Working Temperature:** -5ºC to +60ºC

Maximum Working Pressure: 10 bar

40 Micron fitted as standard
Auto or semi-auto drain fitted as standard
Guarded bowl protection on Series 300, 400 and 600

2 Year Warranty

200 Series Filters
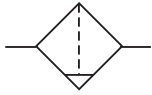
Semi-auto Drain, supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KFS200-06	1/8"	3000
KFS200-08	1/4"	3000
Tech Sheet 3063		

300 Series Filters
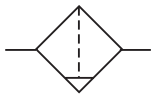
Auto Drain, supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KFS300-08-A	1/4"	5000
KFS300-10-A	3/8"	5000
KFS300-15-A	1/2"	5000
Tech Sheet 3063		

Semi-auto Drain, supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KFS300-08	1/4"	5000
KFS300-10	3/8"	5000
KFS300-15	1/2"	5000
Tech Sheet 3063		

400 Series Filters
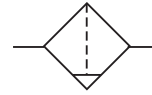
Auto Drain, supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KFS400-10-A	3/8"	7500
KFS400-15-A	1/2"	7500
Tech Sheet 3063		

Semi-auto Drain, supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KFS400-10	3/8"	7500
KFS400-15	1/2"	7500
Tech Sheet 3063		

600 Series Filters
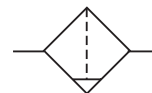
Auto Drain, supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KFS600-20-A	3/4"	10000
KFS600-25-A	1"	10000
Tech Sheet 3063		

Semi-auto Drain, supplied with Mounting Bracket, BSPP

0338	Thread	LPM
KFS600-20	3/4"	10000
KFS600-25	1"	10000
Tech Sheet 3063		

AIR PREPARATION

FT PRO®

🌡 **Working Temperature:** -5°C to +60°C

⏲ **Maximum Working Pressure:** 10 bar

FT Pro Air Service Units come complete with: Filter/regulator, lubricator, 3/2 shut-off valve, mounting bracket and 10 bar pressure gauge.

Available in both auto drain and semi-auto drain.

The units are also available on a floor stand for use with mobile compressors for use on site.

All FT Pro Regulators can now be adapted to use either a 40mm or 50mm round face gauge with the new FT Pro Gauge Adaptor. See page 646

2 Year Warranty

300 Series Air Service Unit, Wall Mount

Operating Pressure
1.5 to 9.0 bar
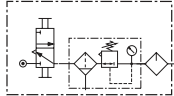
Auto Drain, supplied with Shut Off Valve & 10 bar Gauge, BSPP

0338	Thread	LPM
KCAS300-15-A-F-3	1/2″	4000
	Tech Sheet 10286	

Operating Pressure
1.5 to 9.0 bar
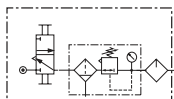
Semi-auto Drain, supplied with Shut Off Valve & 10 bar Gauge, BSPP

0338	Thread	LPM
KCAS300-15-F-3	1/2″	4000
	Tech Sheet 10286	

400 Series Air Service Unit, Wall Mount

Operating Pressure
1.5 to 9.0 bar
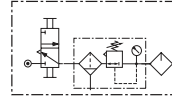
Auto Drain, supplied with Shut Off Valve & 10 bar Gauge, BSPP

0338	Thread	LPM
KCAS400-15-A-F-3	1/2″	6000
	Tech Sheet 10286	

Operating Pressure
1.5 to 9.0 bar
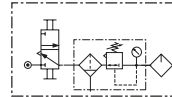
Semi-auto Drain, supplied with Shut Off Valve & 10 bar Gauge, BSPP

0338	Thread	LPM
KCAS400-15-F-3	1/2″	6000
	Tech Sheet 10286	

AIR PREPARATION

FT PRO®

Working Temperature: -20°C to +70°C

Maximum Working Pressure: 9 bar

Soft Start Valves are increasingly being used where safety is key in the start up of systems and machines in helping protect the operators and the equipment.

The valves allow the pressure to gradually increase to the full flow required on start up of the system.

OSHA approved.

These units can be used in conjunction with FT Pro Air Preparation with the addition of brackets style 'U' or 'L', or as a stand alone in-line unit.

All FT Pro Regulators can now be adapted to use either a 40mm or 50mm round face gauge with the new FT Pro Gauge Adaptor. See page 646

2 Year Warranty

200 Series Soft Start Valves, Solenoid
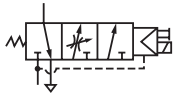
24V DC, supplied with Coil, DIN Plug, Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread
KC200-06	1/8"
KC200-08	1/4"
Tech Sheet 3067	

300 Series Soft Start Valves, Solenoid
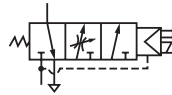
24V DC, supplied with Coil, DIN Plug, Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread
KC300-08	1/4"
KC300-10	3/8"
KC300-15	1/2"
Tech Sheet 3067	

400 Series Soft Start Valves, Solenoid
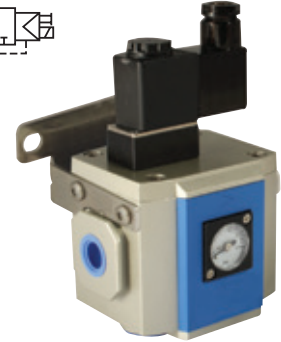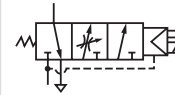
24V DC, supplied with Coil, DIN Plug, Mounting Bracket & 10 bar Gauge, BSPP

0338	Thread
KC400-10	3/8"
KC400-15	1/2"
Tech Sheet 3067	

Working Temperature: -20°C to +70°C

Maximum Working Pressure: 9 bar

Lockable shut off valves prevent accidental start ups when maintenance or service work is being carried out on the machines.

Padlock supplied.

These units can be used in conjunction with FT Pro Air Preparation with the addition of brackets style 'U' or 'L', or as a stand alone 3/2 exhausting ball valve.

2 Year Warranty

200 Series 3/2 Shut Off Valves, Lockable

Supplied with Padlock & Mounting Bracket, BSPP

0338	Thread
KZ200-06	1/8"
KZ200-08	1/4"
Tech Sheet 3068	

300 Series 3/2 Shut Off Valves, Lockable
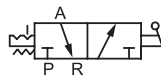
Supplied with Padlock & Mounting Bracket, BSPP

0338	Thread
KZ300-08	1/4"
KZ300-10	3/8"
KZ300-15	1/2"
Tech Sheet 3068	

Supplied with Padlock & Mounting Bracket, BSPP

0338	Thread
KZ400-10	3/8"
KZ400-15	1/2"
Tech Sheet 3068	

AIR PREPARATION

FT PRO®

Working Temperature:
-5ºC to +60ºC

Maximum Working Pressure:
10 bar

Can be fitted to any combination units, fitted before the lubricator it can be used to port off a non-lubricated air supply that might be required for your system.

These units are to be used in conjunction with FT Pro Air Preparation, or as a stand alone BSPP manifold block. When using with existing FT Pro Air Preparation, you will also require additional fixing brackets.

2 Year Warranty

200 Series Porting Blocks

BSPP

0338	Thread
KA200-06	1/8"
KA200-08	1/4"
Tech Sheet 3069	

400 Series Porting Blocks

BSPP

0338	Thread
KA400-10	3/8"
KA400-15	1/2"
Tech Sheet 3069	

300 Series Porting Blocks

BSPP

0338	Thread
KA300-08	1/4"
KA300-10	3/8"
Tech Sheet 3069	

600 Series Porting Blocks

BSPP

0338	Thread
KA600-20	3/4"
KA600-25	1"
Tech Sheet 3069	

Fixing Brackets

U Style Brackets

0338	To Suit Series
KA200U-P1	200
KA300U-P1	300
KA400U-P1	400
KA600U-P1	600
Tech Sheet 3069	

L Style Brackets

0338	To Suit Series
KA201-P1	200
KA301-P1	300
KA401-P1	400
KA601-P1	600
Tech Sheet 3069	

AIR PREPARATION

FT PRO®

All FT Pro Regulators can now be adapted to use either a 40mm or 50mm round face gauge with the new FT Pro Gauge Adaptor. See below

Accessories

Drain Bowl & Auto Drain

0338	To Suit Series
KF300-P6	300
KF400-P10	400
KF600-P1	600
Tech Sheet 20382	

Filter Elements 40 Micron

0338	To Suit Series
KF200-004-1	200
KF300-004-1	300
KF400-004-1	400
KF600-004-1	600
Tech Sheet 20379	

Filter Elements 5 Micron

0338	To Suit Series
KF200-004-2	200
KF300-004-2	300
KF400-004-2	400
KF600-004-2	600
Tech Sheet 20379	

Drain Bowl & Semi-auto Drain

0338	To Suit Series
KF200-P3	200
KF300-P5	300
KF400-P9	400
KF600-P2	600
Tech Sheet 20896	

Micro Gauge

0338
K-PR010B-P1
Tech Sheet 20381

All FT Pro regulators can be fitted with a 40mm or 50mm round faced gauge, by using the FT Pro gauge adaptor

Complete with
2 x screws.

Gauge Adaptor

0338	Thread	To Suit Series
KGA-1/8	1/8"	200 & 300
KGA-1/4	1/4"	400 & 600
Tech Sheet 20381		

Drain Bowl & Manual Drain

0338	To Suit Series
KF200-P6	200
KF300-P4	300
KF400-P11	400
KF600-P3	600
Tech Sheet 20380	

1/8" BSPT, Steel Case Centre Back Connection

0338	Gauge Diameter mm	Pressure Range PSI	Pressure Range Bar
KG40-10R	40	0-160	0-10
KG50-10R	50	0-160	0-10
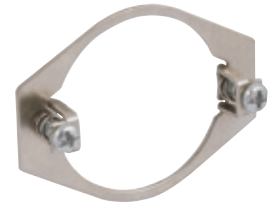
Panel Mount Brackets, to suit Steel Dry Gauges

0338	To Suit mm
KPMB40R	40
KPMB50R	50

AIR PREPARATION

FT PRO®

The manufacturers strive to maintain quality and are continually improving products to suit the industry.

Due to the success of the Professional FRL's, The Professional Range has been revamped with improved structure and sensitivity.

200 and 300 series now come with larger, stronger drip cups, extending the products in use life cycle.

Advancements to the construction of the regulators mechanism, has given extra sensitivity on the control this helps to ensure the system is working to the optimum pressure.

- Heavy-duty
- 20 micron filtration as standard
- Metal construction
- Modular compact design
- Semi-auto drain as standard
- Guard bowl protection only on FM3000, FM4000 and FM5000 units
- Micro gauge also available

Working Temperature: -10°C to +60°C

Maximum Working Pressure: 10 bar

Filter + Regulator + Lubricator

Operating Pressure: 1.5 bar to 8.5 bar

Supplied with Mounting Bracket & Gauge, BSPP

0132	Thread	LPM
FM2-20-01-C	1/8"	500
FM2-30-02-C	1/4"	2000
FM2-40-03-C	3/8"	4000
FM2-40-04-C	1/2"	4000
FM2-50-06-C	3/4"	5000
FM2-50-10-C	1"	5000
Tech Sheet 60527		

Filter

BSPP

0132	Thread	LPM
FM2-20-01-F	1/8"	500
FM2-30-02-F	1/4"	1700
FM2-40-03-F	3/8"	3000
FM2-40-04-F	1/2"	3000
FM2-50-06-F	3/4"	5000
FM2-50-10-F	1"	5000
Tech Sheet 60530		

Filter Regulator + Lubricator

Operating Pressure: 1.5 bar to 8.5 bar

Supplied with Mounting Bracket & Gauge, BSPP

0132	Thread	LPM
FM2-21-01-C	1/8"	500
FM2-31-02-C	1/4"	2000
FM2-41-03-C	3/8"	4000
FM2-41-04-C	1/2"	4000
FM2-51-06-C	3/4"	5000
FM2-51-10-C	1"	5000
Tech Sheet 60528		

Regulator

Operating Pressure: 1.5 bar to 8.5 bar

Supplied with Mounting Bracket & Gauge, BSPP

0132	Thread	LPM
FM2-20-01-R	1/8"	500
FM2-30-02-R	1/4"	1700
FM2-40-03-R	3/8"	3000
FM2-40-04-R	1/2"	3000
FM2-50-06-R	3/4"	5000
FM2-50-10-R	1"	5000
Tech Sheet 60531		

Filter Regulator

Operating Pressure: 1.5 bar to 8.5 bar

Supplied with Mounting Bracket & Gauge, BSPP

0132	Thread	LPM
FM2-20-01-W	1/8"	500
FM2-30-02-W	1/4"	1700
FM2-40-03-W	3/8"	3000
FM2-40-04-W	1/2"	3000
FM2-50-06-W	3/4"	5000
FM2-50-10-W	1"	5000
Tech Sheet 60529		

Lubricator

BSPP

0132	Thread	LPM
FM2-20-01-L	1/8"	500
FM2-30-02-L	1/4"	1700
FM2-40-03-L	3/8"	3000
FM2-40-04-L	1/2"	3000
FM2-50-06-L	3/4"	5000
FM2-50-10-L	1"	5000
Tech Sheet 60532		

AIR PREPARATION

FT PRO®

As with the original Professional Range, the MKII air preparation range comes fully assembled.

We offer users the ability to assemble their own bespoke units with the use of connectors and wall mounting kits.

Applications:
- Construction
- Agriculture
- Mining
- OEM machine building
- Automotive
- Rail
- Industrial

Professional Range MKII Accessories

Neck Brackets

0132	To Suit
FM2-20-N	1/8″
FM2-30-N	1/4″
FM2-40-N	3/8″-1″
Tech Sheet 60537	

Filter Elements

0132	To Suit
FM2-20-20UM	200 Filter Series
FM2-30-20UM	300 Filter Series
FM2-40-20UM	400 Filter Series
FM2-50-20UM	500 Filter Series

Connector & Wall Brackets

0132	To Suit
FM2-20-MB	1/8″
FM2-30-MB	1/4″
FM2-40-MB	3/8″-1/2″
FM2-50-MB	3/4″-1″
Tech Sheet 60537	

Micro Gauge

0132	To Suit
GM-27	All Series

Steel Case Centre Back Connection

0132	Thread	Gauge Diameter mm	Pressure Range PSI	Pressure Range Bar
GS-40	1/8″	40	0-145	0-10
GS-50	1/8″	50	0-145	0-10

Drip Leg Drain

BSPP

0132	To Suit
FM-402-04-S	1/2″
Tech Sheet 1998	

FT PRO®

A Series Regulators

AR2 Series Regulator 1/8"G - 1/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min
AR2000-01	1/8"	1/8"	550

AR3 Series Regulator 1/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min
AR3000-02	1/4"	1/8"	2500

AR4 Series Regulator 1/2"G - 3/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min
AR4000-04	1/2"	1/4"	6000
AR4000-06	3/4"	1/4"	6000

AR5 Series Regulators 3/4"G - 1"G

0600	Port Size G	Gauge Thread G	Max Flow L/min
AR5000-06	3/4"	1/4"	8000
AR5000-10	1"	1/4"	8000

A Series Filter Regulators

AW2 Series Filter Regulator 1/8"G - 1/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AW2000-01	1/8"	1/8"	550	Manual
AW2000-02	1/4"	1/8"	550	Manual
AW2000-02D	1/4"	1/8"	550	Auto Drain

AW3 Series Filter Regulator 1/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AW3000-02	1/4"	1/8"	2000	Manual
AW3000-02D	1/4"	1/8"	2000	Auto Drain

AW4 Series Filter Regulator 1/2"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AW4000-04	1/2"	1/4"	4000-4500	Manual
AW4000-04D	1/2"	1/4"	4000-4500	Auto Drain

AW5 Series Filter Regulators 3/4"G - 1"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AW5000-06D	3/4"	1/4"	5500	Auto Drain
AW5000-10D	1"	1/4"	5500	Auto Drain

A SERIES AIR PREPARATION

FT PRO

A Series Combi Sets

AC2 Series Filter Regulator & Lube Combi Sets 1/8"G - 1/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AC2010-01	1/8"	1/8"	500	Manual
AC2010-02	1/4"	1/8"	500	Manual
AC2010-02D	1/4"	1/8"	500	Auto Drain

AC3 Series Filter Regulator & Lube Combi Sets 1/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AC3010-02	1/4"	1/4"	1700	Manual
AC3010-02D	1/4"	1/4"	1700	Auto Drain

AC4 Series Filter Regulator & Lube Combi Sets 1/2"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AC4010-04	1/2"	1/4"	3000	Manual
AC4010-04D	1/2"	1/4"	3000	Auto Drain

AC5 Series Filter Regulator & Lube Combi Sets 3/4"G - 1"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AC5010-06D	3/4"	1/4"	4000	Auto Drain
AC5010-10D	1"	1/4"	4000	Auto Drain

A Series Filters

AF2 Series Filter 1/8"G - 1/4"G

0600	Port Size G	Max Flow L/min	Drain
AF2000-01	1/8"	750	Manual
AF2000-02	1/4"	750	Manual

AF3 Series Filter 1/4"G

0600	Port Size G	Max Flow L/min	Drain
AF3000-02	1/4"	1500	Manual
AF3000-02D	1/4"	1500	Auto Drain

AF4 Series Filter 1/2"G - 3/4"G

0600	Port Size G	Max Flow L/min	Drain
AF4000-04	1/2"	4000-6000	Manual
AF4000-04D	1/2"	4000-6000	Auto Drain
AF4000-06D	3/4"	4000-6000	Auto Drain

AF5 Series Filter 3/4"G - 1"G

0600	Port Size G	Max Flow L/min	Drain
AF5000-06D	3/4"	7000	Auto Drain
AF5000-10D	1"	7000	Auto Drain

FT PRO

A Series Lubricators

AL2 Series Lubricator 1/8"G - 1/4"G

0600	Port Size G	Max Flow L/min
AL2000-02	1/4"	800

AL3 Series Lubricator 1/4"G

0600	Port Size G	Max Flow L/min
AL3000-02	1/4"	1700

AL4 Series Lubricator 1/2"G

0600	Port Size G	Max Flow L/min
AL4000-04	1/2"	5000-6300

A Series Mounting Brackets

A2 Series Mounting Bracket

0600	Description
A2000-BRKT	Mounting Bracket

A3 Series Mounting Bracket

0600	Description
A3000-BRKT	Mounting Bracket

A4 Series Mounting Bracket

0600	Description
A4000-BRKT	Mounting Bracket

A5 Series Mounting Bracket

0600	Description
A5000-BRKT	Mounting Bracket

A4 Series Mounting Bracket

0600	Description
A400T	Mounting Bracket

D SERIES AIR PREPARATION

FT PRO®

D Series Regulators

DR2 Series Regulator 1/8"G - 3/8"G

0600	Port Size G	Gauge Thread G	Max Flow L/min
DR200-01	1/8"	1/8"	1700
DR200-02	1/4"	1/8"	1700
DR200-03	3/8"	1/8"	1700

DR4 Series Regulator 3/8"G - 1/2"G

0600	Port Size G	Gauge Thread G	Max Flow L/min
DR400-03	3/8"	1/4"	3500
DR400-04	1/2"	1/4"	3500

DR6 Series Regulator 3/4"G - 1"G

0600	Port Size G	Gauge Thread G	Max Flow L/min
DR600-06	3/4"	1/4"	11500
DR600-08	1"	1/4"	11500

D Series Filter Regulators

DC2 Series Filter Regulator 1/8"G - 3/8"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
DFR200-01	1/8"	1/8"	1700	Manual
DFR200-02	1/4"	1/8"	1700	Manual
DFR200-02D	1/4"	1/8"	1700	Auto Drain
DFR200-03D	3/8"	1/8"	1700	Auto Drain

DC4 Series Filter Regulator 3/8"G - 3/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
DFR400-03D	3/8"	1/4"	3500	Auto Drain
DFR400-04	1/2"	1/4"	3500	Manual
DFR400-04D	1/2"	1/4"	3500	Auto Drain
DFR400-06	3/4"	1/4"	3500	Manual
DFR400-06D	3/4"	1/4"	3500	Auto Drain

DC6 Series Filter Regulator 3/4"G - 1"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
DFR600-06	3/4"	1/4"	11500	Manual
DFR600-08D	1"	1/4"	11500	Auto Drain

D SERIES AIR PREPARATION

FT PRO®

D Series Combi Sets

DC2 Series Filter Regulator & Lube Combi Sets 1/8"G - 3/8"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
DC201-01	1/8"	1/8"	1700	Manual
DC201-02	1/4"	1/8"	1700	Manual
DC201-02D	1/4"	1/8"	1700	Auto Drain
DC201-03D	3/8"	1/8"	1700	Auto Drain

DC4 Series Filter Regulator & Lube Combi Sets 3/8"G - 3/4"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
DC401-01	3/8"	1/4"	3500	Manual
DC401-02	1/2"	1/4"	3500	Manual
DC401-02D	1/2"	1/4"	3500	Auto Drain
DC401-03D	3/4"	1/4"	3500	Auto Drain

DC6 Series Filter Regulator & Lube Combi Sets 3/4"G - 1"G

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
DC601-06	3/4"	1/4"	11500	Manual
DC601-08D	1"	1/4"	11500	Auto Drain

D Series Filters

DF2 Series Filter 1/8"G - 3/8"G

0600	Port Size G	Max Flow L/min	Drain
DF200-02	1/4"	2000	Manual
DF200-02D	1/4"	2000	Auto Drain
DF200-03D	1/4"	2000	Auto Drain

DF4 Series Filter 3/8"G - 3/4"G

0600	Port Size G	Max Flow L/min	Drain
DF400-03D	3/8"	4000	Auto Drain
DF400-04	1/2"	4000	Manual
DF400-04D	1/2"	4000	Auto Drain
DF400-06	3/4"	4000	Manual

DF6 Series Filter 3/4"G - 1"G

0600	Port Size G	Max Flow L/min	Drain
DF600-06	3/4"	11500	Manual
DF600-08	1"	11500	Manual
DF600-08D	1"	11500	Auto Drain

D SERIES AIR PREPARATION

FT PRO®

D Series Lubricators

DL1 Series Lubricator M5 - 1/8"G

0600	Port Size G	Max Flow L/min
DL100-M5	M5	500

DL2 Series Lubricator 1/8"G - 3/8"G

0600	Port Size G	Max Flow L/min
DL200-01	1/8"	2000
DL200-02	1/4"	2000
DL200-03	3/8"	2000

DL4 Series Lubricator 3/8"G - 1/2"G

0600	Port Size G	Max Flow L/min
DL400-03	3/8"	4000
DL400-04	1/2"	4000

D Series Accessories

Port Block Sets

0600	Series	Size
D400LB-04	400	1/2"

Filter to Regulator to Lube Joiner Kits

0600	Series
DC400JK	400

Wall Mounting Brackets

0600	Series
MB-D200	200
MB-D400	400
MB-D600	600

A9 SERIES AIR PREPARATION

FT PRO®

A9 Series Air Preparation

AC9 Series Filter Regulator & Lube Combi Sets 1.1/2″ - 2″

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AC901-15D	1.1/2″	1/4″	17500	Auto Drain
AC901-20D	2″	1/4″	17500	Auto Drain

AFR9 Series Filter Regulators 1.1/2″ - 2″

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AFR900-15D	1.1/2″	1/4″	17500	Auto Drain
AFR900-20D	2″	1/4″	17500	Auto Drain

AR9 Series Regulators 1.1/2″ - 2″

0600	Port Size G	Gauge Thread G	Max Flow L/min	Drain
AR900-15	1.1/2″	1/4″	17500	Auto Drain
AR900-20	2″	1/4″	17500	Auto Drain

AF9 Series Filters 1.1/2″ - 2″

0600	Port Size G	Max Flow L/min	Drain
AF900-15D	1.1/2″	17500	Auto Drain
AF900-20D	2″	17500	Auto Drain

AF9 Series Lubricators 1.1/2″ - 2″

0600	Port Size G	Max Flow L/min
AL900-15	1.1/2″	17500
AL900-20	2″	17500

PR SERIES AIR PREPARATION

FT PRO®

PR Series Air Preparation

PR100 Series 1/8″ Precision Regulators

0600	Range MPA	Max Flow L/min
PR101-01	0.01-0.4	4.4 (ANR)
PR102-01	0.01-0.8	4.4 (ANR)

PR200 Series 1/4″ Precision Regulators

0600	Range MPA	Max Flow L/min
PR200-02	0.005-0.2	4.4 (ANR)
PR201-02	0.01-0.4	4.4 (ANR)

PR300 Series 1/2″ Precision Regulator

0600	Range MPA	Max Flow L/min
PR302-04	0.01-0.8	11.5 (ANR)

WORKFORCE RANGE

FT PRO®

In-line Filter Aluminium

Prevents dirt entering the air line

Working Temperature:
0°C to +70°C

Maxium Working Pressure:
10 bar

Male x Female Thread, BSPP

0043	Thread
ILF-14	1/4"
ILF-38	3/8"
Tech Sheet 824	

Flow: 400 L/min

Working Temperature:
0°C to +45°C

Maximum Working Pressure:
9 bar

Male x Female Thread, BSPP

0043	Thread
IF-14	1/4"
Tech Sheet 20383	

In-line Brass Flow Regulator

Working Temperature:
0°C to +70°C

Maximum Working Pressure:
10 bar

Male x Female Thread, BSPP

0043	Thread
ILR-14	1/4"
Tech Sheet 20384	

Mini In-line Oiler

Working Temperature:
0°C to +45°C

Maximum Working Pressure:
9 bar

Male x Female Thread, BSPP

0043	Thread
MO-14	1/4"
Tech Sheet 20385	

FESTO

new product

For **FESTO Flow Regulators**
see pages **814-815**

AIR PREPARATION

AIR PREPARATION MS SERIES

Features

Robust design, perfect for harsh environments

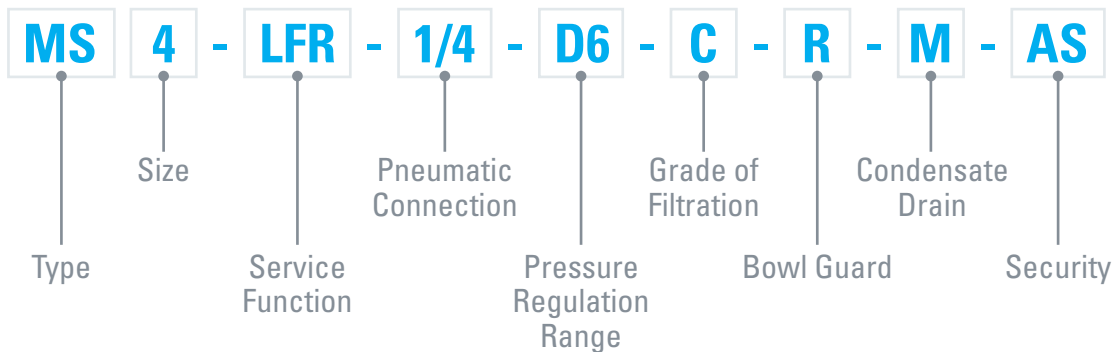Good regulation characteristics with minimal pressure

High flow rate and highly efficient in removing contaminants

Available in both manual and auto-drain options

Product Description

| MS | 4 | - | LFR | - | 1/4 | - | D6 | - | C | - | R | - | M | - | AS |

Type

Size

Service Function

Pneumatic Connection

Pressure Regulation Range

Grade of Filtration

Bowl Guard

Condensate Drain

Security

AIR PREPARATION MS SERIES

FESTO

Filter Regulator, Manual Shut-off Valve & Pressure Gauge

Ambient Temperature:
-10°C to +60°C

- For filtered and unlubricated compressed ai
- Supply pressure can be opened and closed

- Output pressure is indefinitely adjustable within the pressure regulation rang
- Manual rotary condensate drain

Working Pressure:
0.8 to 14 bar

Working Pressure:
0.8 to 10 bar

Manual Drain Filter Regulator with Manual Shut-Off Valve

0009	Thread	LPM	Micron	Pressure Regulation Range Bar	Manufacturer's Code
8025354	1/4"	1700	40	0.5 to 12	MSB4-1/4:C3:J1-WP
8025355	1/2"	5100	40	0.5 to 12	MSB6-1/2:C3:J1-WP
Tech Sheet 71003					

Manual Drain Filter Regulator with Manual Shut-Off Valve, Solenoid Valve & Pressure Sensor

0009	Thread	LPM	Micron	Pressure Regulation Range Bar	Manufacturer's Code
8025358	1/4"	1400	40	0.5 to 10	MSB4-1/4:C3:J1:D14-WP
8025359	1/2"	4000	40	0.5 to 10	MSB6-1/2:C3:J1:D14-WP
Tech Sheet 71011					

Working Pressure:
0.8 to 14 bar

Working Pressure:
1.5 to 20 bar

Manual Drain Filter Regulator with Manual Shut-Off & Pressure Sensor

0009	Thread	LPM	Micron	Pressure Regulation Range Bar	Manufacturer's Code
8025356	1/4"	1600	40	0.5 to 10	MSB4-1/4:C3:J1:F12-WP
8025357	1/2"	4500	40	0.5 to 10	MSB6-1/2:C3:J1:F12-WP
Tech Sheet 71007					

Manual Rotary Filter Regulator with Pressure Gauge, Rotary Knob with Detent & Lubricator

0009	Thread	LPM	Micron	Bowl Type	Pressure Regulation Range Bar	Manufacturer's Code
530244	1/4"	850	40	Plastic	+0.5 to +12	MSB6-1/2-FRC5:J1M1
531117	1/2"	3700	40	Plastic	+0.5 to +12	MSB4-1/4-FRC5:J1M1
Tech Sheet 71014						

AIR PREPARATION MS SERIES

FESTO

Pressure Regulators

- Maintains a constant working pressure independent of pressure fluctuations and air consumption
- High flow rate with minimal pressure drop
- Connection G1/4, G1/2
- Selected types in accordance with ATEX directive for potentially explosive atmospheres
- Lockable via accessories

Ambient Temperature:
-10°C to +60°C

Working Pressure:
1/4 BSPP 0.8 to 14 bar
1/2 BSPP 0.8 to 20 bar

Integrated Pressure Gauge, BSPP

0009	Thread	LPM	Pressure Regulation Range Bar	Manufacturer's Code
529415	1/4″	2100	0.3 to 4	MS4-LR-1/4-D5-AS
529417	1/4″	1800	0.3 to 7	MS4-LR-1/4-D6-AS
529419	1/4″	1700	0.5 to 12	MS4-LR-1/4-D7-AS
529989	1/2″	7500	0.3 to 4	MS6-LR-1/2-D5-AS
529991	1/2″	6500	0.3 to 7	MS6-LR-1/2-D6-AS
529993	1/2″	5500	0.5 to 12	MS6-LR-1/2-D7-AS
Tech Sheet 71440				

Air Preparation Units MS-LFR-B Series

- Grid dimension 25, 40, 62mm
- Competitively priced basic component focused on the most important technical functions
- Lightweight and sturdy thanks to modern polymer materials
- Compatible with the MS series for the ideal combination of low-cost basic functionality and high-end functional requirements
- Stabile control response
- With or without pressure gauge
- Rotary knob with latch
- MS2: Directly operated diaphragm regulator
- MS4, MS6: directly actuated piston regulator
- With integrated secondary exhausting and primary exhausting with return flow function

Integrated Pressure Gauge, BSPP

0009	Thread	LPM	Micron	Bowl Type	Pressure Regulation Range Bar	Type
8098257	1/4"	1500	5	Polymer	1 bar to 10 bar	MS4-LFR-1/4-D6-C-P-M-AG-BAR-B
8098265	1/4"	1500	5	Polymer	1 bar to 10 bar	MS4-LFR-1/4-D6-C-P-M-AG-MPA-B
8098259	1/4"	1500	5	Polymer	2 bar to 10 bar	MS4-LFR-1/4-D6-C-P-VC-AG-BAR-B
8098266	1/4"	1500	5	Polymer	2 bar to 10 bar	MS4-LFR-1/4-D6-C-P-VC-AG-MPA-B
8098258	1/4"	1700	40	Polymer	1 bar to 10 bar	MS4-LFR-1/4-D6-E-P-M-AG-BAR-B
8098254	1/4"	1700	40	Polymer	1 bar to 10 bar	MS4-LFR-1/4-D6-E-P-M-AG-MPA-B
8098264	1/4"	1700	40	Polymer	2 bar to 10 bar	MS4-LFR-1/4-D6-E-P-VC-AG-BAR-B
8098256	1/4"	1700	40	Polymer	2 bar to 10 bar	MS4-LFR-1/4-D6-E-P-VC-AG-MPA-B
8098300	1/2"	4750	5	Polymer	1 bar to 10 bar	MS6-LFR-1/2-D6-C-P-M-AG-BAR-B
8098310	1/2"	4750	5	Polymer	1 bar to 10 bar	MS6-LFR-1/2-D6-C-P-M-AG-MPA-B
8098309	1/2"	4750	5	Polymer	2 bar to 10 bar	MS6-LFR-1/2-D6-C-P-VC-AG-BAR-B
8098302	1/2"	4750	5	Polymer	2 bar to 10 bar	MS6-LFR-1/2-D6-C-P-VC-AG-MPA-B
8098304	1/2"	5300	40	Polymer	1 bar to 10 bar	MS6-LFR-1/2-D6-E-P-M-AG-BAR-B
8098307	1/2"	5300	40	Polymer	1 bar to 10 bar	MS6-LFR-1/2-D6-E-P-M-AG-MPA-B
8098312	1/2"	5300	40	Polymer	2 bar to 10 bar	MS6-LFR-1/2-D6-E-P-VC-AG-BAR-B
8098305	1/2"	5300	40	Polymer	2 bar to 10 bar	MS6-LFR-1/2-D6-E-P-VC-AG-MPA-B
More variants available online						

Filter Regulators

- Filter and pressure regulator in a single unit
- Good regulation characteristics with minimal hysteresis and primary pressure compensation
- Good particle and condensate separation

Ambient Temperature:
-10°C to +60°C

Working Pressure:
1/4 BSPP 0.8 to 14 bar
1/2 BSPP 0.8 to 20 bar

Manual Drain, BSPP

0009	Thread	LPM	Micron	Bowl Type	Pressure Regulation Range Bar	Manufacturer's Code
529144	1/4″	1500	5	Plastic	0.3 to 7	MS4-LFR-1/4-D6-CRM-AS
529148	1/4″	1700	40	Plastic	0.3 to 7	MS4-LFR-1/4-D6-ERM-AS
529152	1/4″	1700	5	Plastic	0.5 to 12	MS4-LFR-1/4-D7-CRM-AS
529156	1/4″	1500	40	Plastic	0.5 to 12	MS4-LFR-1/4-D7-ERM-AS
535724	1/4″	1500	40	Metal	0.5 to 12	MS4-LFR-1/4-D7-EUM-AS
529176	1/2″	5600	5	Plastic	0.3 to 7	MS6-LFR-1/2-D6-CRM-AS
529180	1/2″	5600	40	Plastic	0.3 to 7	MS6-LFR-1/2-D6-ERM-AS
529184	1/2″	4000	5	Plastic	0.5 to 12	MS6-LFR-1/2-D7-CRM-AS
529188	1/2″	4500	40	Plastic	0.5 to 12	MS6-LFR-1/2-D7-ERM-AS
530338	1/2″	4000	5	Metal	0.5 to 12	MS6-LFR-1/2-D7-CUM-AS
529192	1/2″	4500	40	Metal	0.5 to 12	MS6-LFR-1/2-D7-EUM-AS
Tech Sheet 71120						

Working Pressure:
2 to 12 bar

Automatic Drain, BSPP

0009	Thread	LPM	Micron	Bowl Type	Pressure Regulation Range Bar	Manufacturer's Code
529146	1/4″	1500	5	Plastic	0.3 to 7	MS4-LFR-1/4-D6-CRV-AS
529150	1/4″	1700	40	Plastic	0.3 to 7	MS4-LFR-1/4-D6-ERV-AS
529158	1/4″	1200	40	Plastic	0.5 to 12	MS4-LFR-1/4-D7-ERV-AS
535720	1/4″	1200	5	Metal	0.5 to 12	MS4-LFR-1/4-D7-CUV-AS
535722	1/4″	1200	40	Metal	0.5 to 12	MS4-LFR-1/4-D7-EUV-AS
529178	1/2″	5600	5	Plastic	0.3 to 7	MS6-LFR-1/2-D6-CRV-AS
529182	1/2″	6200	40	Plastic	0.3 to 7	MS6-LFR-1/2-D6-ERV-AS
529190	1/2″	4500	40	Plastic	0.5 to 12	MS6-LFR-1/2-D7-ERV-AS
530340	1/2″	4000	5	Metal	0.5 to 12	MS6-LFR-1/2-D7-CUV-AS
529194	1/2″	4500	40	Metal	0.5 to 12	MS6-LFR-1/2-D7-EUV-AS
Tech Sheet 71122						

FESTO

For **FESTO Actuation** see page 1020

AIR PREPARATION MS SERIES

FESTO

Energy Efficiency Module MSE6-E2M

- MSE6-E2M constantly monitors the compressed air consumption, blocks the compressed air after waiting a specific period once production has stopped and reduces the system pressure to 0 bar. It can be integrated directly into PROFIBUS, PROFINET, EtherCAT or Ethernet/IP via fieldbus.
- Grid dimension 62mm
- Intelligent service unit component for optimising the use of compressed air as an energy medium in industrial automation technology
- Combination of stop valve, flow sensor, pressure sensor and fieldbus node
- Identification of production downtime and leakages
- User-controlled shut-off and pressurisation
- Equipped with measurement, control and diagnostic functions
- Fieldbus connection (PROFIBUS DP, PROFINET IO, EtherNet/IP or EtherCAT®) via integrated fieldbus nodes enables connection to a higher-level controller
- Sustainable operation with active air shut-off and pressure reduction

Service Unit Combination MSE6-E2M

0009	Thread	Electrical Actuation	Type
2465321	1/2"	Fieldbus node for PROFIBUS DP	MSE6-E2M-5000-FB13-AGD
3990296	1/2"	Fieldbus node for Ethernet/IP	MSE6-E2M-5000-FB36-AGD
3992150	1/2"	Fieldbus node for EtherCAT®	MSE6-E2M-5000-FB37-AGD
8157910	1/2"	Bus node for PROFINET IO with M12 connection	MSE6-E2M-5000-FB43-AGD
8157911	1/2"	Bus node for PROFINET IO with RJ45 connection	MSE6-E2M-5000-FB44-AGD
		More variants available online	

Air Preparation Units MS-LFR-B Series

Filter MS2-LF-B

- Very compact and extremely lightweight series for use close to the process directly in the machine
- Lightweight and sturdy thanks to modern polymer materials
- Compatible with the MS series for the ideal combination of low-cost basic functionality and high-end functional requirements
- With manual condensate drain, rotating
- Grid dimension 25mm
- Variants recommended for production systems for manufacturing lithium-ion batteries

Filter Regulator MS-LFR-B

0009	Thread	LPM	Micron	Bowl Type	Pressure Regulation Range Bar	Type
8086643	M5	140	5	Polymer	0.5 bar to 7 bar	MS2-LFR-M5-D6-A8-C-M-B
8086641	M5	140	5	Polymer	0.5 bar to 7 bar	MS2-LFR-M5-D6-AR-BAR-C-M-B
8086642	M5	140	5	Polymer	0.5 bar to 7 bar	MS2-LFR-M5-D6-AR-MPA-C-M-B
8086646	QS-6	310	5	Polymer	0.5 bar to 7 bar	MS2-LFR-QS6-D6-A8-C-M-B
8086644	QS-6	310	5	Polymer	0.5 bar to 7 bar	MS2-LFR-QS6-D6-AR-BAR-C-M-B
8086645	QS-6	310	5	Polymer	0.5 bar to 7 bar	MS2-LFR-QS6-D6-AR-MPA-C-M-B
					More variants available online	

FESTO

For **FESTO QS Standard Push-in Fittings** see pages **808-811**

AIR PREPARATION MS SERIES

FESTO

Standard Modular Valves

🌡 **Ambient Temperature:**
-10°C to +60°C

• For pressurising and exhausting pneumatic systems

⏲ **Working Pressure:**
0 to 14 bar

⏲ **Working Pressure:**
4 to 18 bar

Manual On/Off Valve, BSPP

0009	Thread	Manufacturer's Code
541258	1/4"	MS4-EM1-1/4
541267	1/2"	MS6-EM1-1/2
	Tech Sheet 71132	

⏲ **Working Pressure:**
0 to 18 bar

Solenoid Actuated On/Off Valve with Silencer, BSPP

0009	Thread	Voltage	Manufacturer's Code
542598	1/4"	24V DC	MS4-EE-1/4-10V24-S
542602	1/2"	24V DC	MS6-EE-3/8-10V24-S
		Tech Sheet 71137	

⏲ **Working Pressure:**
4 to 18 bar

Manual On/Off Valve with Silencer, BSPP

0009	Thread	Manufacturer's Code
541259	1/4"	MS4-EM1-1/4-S
541272	1/4"	MS6-EM1-1/4-S
541268	1/2"	MS6-EM1-1/2-S
	Tech Sheet 71133	

Solenoid Actuated On/Off Valve, BSPP

0009	Thread	Voltage	Manufacturer's Code
542578	1/4"	24V DC	MS4-EE-1/4-10V24
542582	1/2"	24V DC	MS6-EE-1/2-10V24
		Tech Sheet 71136	

⏲ **Working Pressure:**
3 to 10 bar

• For slowly pressurising and exhausting pneumatic installations (for use with on/off valves EM1 and EE)

⏲ **Working Pressure:**
4 to 18 bar

Soft-start & Quick Exhaust Valves

0009	Thread	Manufacturer's Code
8001469	1/2"	MS6-SV-1/2-C-10V24-S
	Tech Sheet 71587	

Pneumatically Operated Soft-Start Valve, BSPP

0009	Thread	Manufacturer's Code
529531	1/4"	MS4-DL-1/4
529817	1/2"	MS6-DL-1/2
	Tech Sheet 71145	

AIR PREPARATION MS SERIES

FESTO

Brackets & Connection Accessories

Connector for MS module

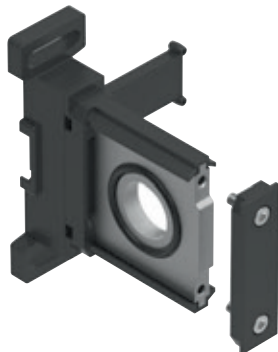| 0009	To Suit Series	Manufacturer's Code
8119201	MS4	MS4-MV1
8119204	MS6	MS6-MV1
552950	MS9	MS9-MV
Tech Sheet 71257		
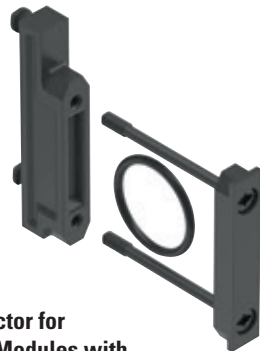
Module Connector for Installation of Modules with Regulating Knob Pointing Downwards

0009	To Suit Series	Manufacturer's Code
532800	MS4	MS4-MVM
532801	MS6	MS6-MVM
Tech Sheet 71261		

Mouting Bracket with Distancing Piece

0009	To Suit Series	Manufacturer's Code
526073	M6	MS6-WPM-D
Tech Sheet 71268		

Wall Mounting Bracket

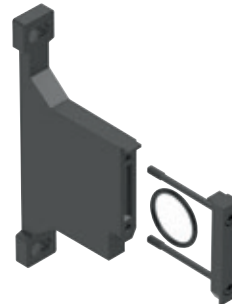| 0009	To Suit Series	Manufacturer's Code
526064	MS4	MS4-WR
526075	MS6	MS6-WR
Tech Sheet 71270		

- Can be used as an intermediate distributor for varying air qualities
- Outlet at top and bottom

Branching Module

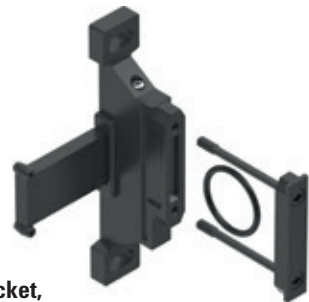| 0009	To Suit Series	Thread	Manufacturer's Code
529853	MS6	G1/2"	MS6-FRM-1/2
Tech Sheet 71267			

Wall Bracket

0009	To Suit Series	Manufacturer's Code
526063	MS4	MS4-WPB
526074	MS6	MS6-WPB
Tech Sheet 71266		

Wall Bracket, WPM with Distancing Piece

0009	To Suit Series	Manufacturer's Code
526060	MS4	MS4-WPM-D
532186	MS6	MS6-WPM-2D
Tech Sheet 71586		
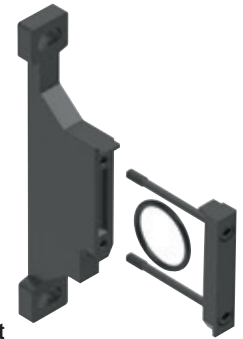
Mounting Bracket

0009	To Suit Series	Manufacturer's Code
532184	MS4	MS4-WP
532195	MS6	MS6-WP
Tech Sheet 71269		

Wall Mounting Bracket

0009	To Suit Series	Manufacturer's Code
532185	MS4	MS4-WB
532196	MS6	MS6-WB
Tech Sheet 71585		

- Adaptor for pneumatic connection
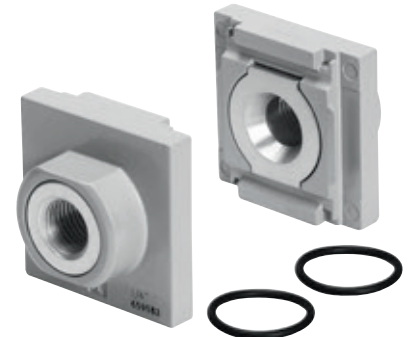
Connecting Plate Set

0009	To Suit Series	Thread	Manufacturer's Code
526069	MS4	G1/4"	MS4-AGB
526082	MS6	G1/2"	MS6-AGD
526083	MS6	G3/4"	MS6-AGE
Tech Sheet 71271			

MINIATURE FRLS, 'BIT'

METAL WORK PNEUMATIC

Miniature Filter

- Flow rate at 6 bar ΔP 0.5 bar: 860 NI/min
- Fluid: compressed air
- Weight: 40g
- Mounting position: vertical
- Condensate drain: manual/semi-auto
- Bowl capacity: 16cm³
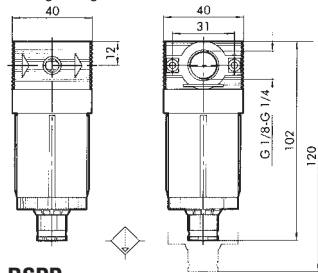
🌡 **Maximum Temperature at 10 bar:** +50°C

⏲ **Maximum Inlet Pressure:** 13 bar

BSPP

9154	Thread BSPP	Micron µm
5101002	1/8"	20
5101001	1/8"	5
5201002	1/4"	20
5201001	1/4"	5

Miniature Lubricator

- Type of lubrication: oil mist
- Bowl capacity: 26.5cm³
- Flow rate at 6 bar ΔP 0.5 bar: 400 NI/min
- Fluid: compressed air
- Weight: 40g

🌡 **Maximum Temperature at 1MPa, 10 bar (145 psi):** +50°C

BSPP

9154	Thread BSPP
5103001	1/8"
5203001	1/4"

Miniature Pressure Regulator

- Flow rate at 6 bar ΔP 0.5 bar: 340 NI/min
- Fluid: filtered, lubricated or non-lubricated compressed ai
- Weight: 80g
- Mounting position: any
- Gauge port: G1/8"

🌡 **Maximum Temperature at 10 bar:** +50°C

⏲ **Maximum Inlet Pressure:** 13 bar

BSPP

9154	Thread BSPP	Pressure Range bar
5107003	1/8"	0 to 8
5107004	1/8"	0 to 12
5207003	1/4"	0 to 8
5207004	1/4"	0 to 12

Miniature Pressure Regulator, Padlockable

BSPP

9154	Thread BSPP	Pressure Range bar
5110003	1/8"	0 to 8
5110004	1/8"	0 to 12
5210003	1/4"	0 to 8
5210004	1/4"	0 to 12

Miniature Filter Regulator

- Flow rate at 6 bar ΔP 0.5 bar: 290 NI/min
- Fluid: compressed air
- Weight: 110g
- Mounting position: vertical
- Gauge port: G1/8"
- Bowl capacity: 16cm³
- Condensate drain: manual/semi-auto
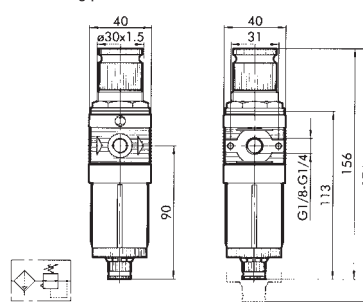
🌡 **Maximum Temperature at 10 bar:** +50°C

⏲ **Maximum Inlet Pressure:** 13 bar

BSPP

9154	Thread BSPP	Micron µm	Pressure Range bar
5105008	1/8"	20	0 to 8
5105011	1/8"	20	0 to 12
5205008	1/4"	20	0 to 8
5205011	1/4"	20	0 to 12

Miniature Filter + Regulator + Lubricator Set

- Flow rate at 6 bar ΔP 0.5 bar: 150 NI/min
- Fluid: compressed air
- Weight: 160g
- Mounting position: any
- Gauge port: G1/8"

🌡 **Maximum Temperature at 1MPa, 10 bar (145 psi):** +50°C

⏲ **Maximum Inlet Pressure:** 13 bar
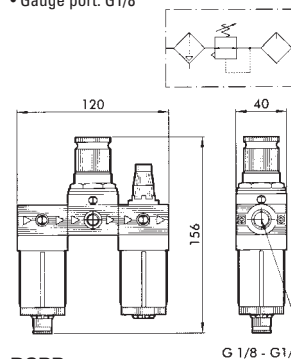
BSPP

9154	Thread BSPP	Micron µm	Pressure Range bar
5104008	1/8"	20	0 to 8
5104011	1/8"	20	0 to 12
5204008	1/4"	20	0 to 8

MINIATURE FRLS, 'BIT'

METAL WORK PNEUMATIC

Miniature Oil Removal Filter

- Degree of filtration: 99.97% 0.01μm
- Flow rate at 6 bar ΔP 0.5 bar: 700 Nl/min
- Fluid: compressed air
- Weight: 65g
- Mounting position: vertical
- Condensate drain: manual/semi-auto
- Bowl capacity: 16cm³

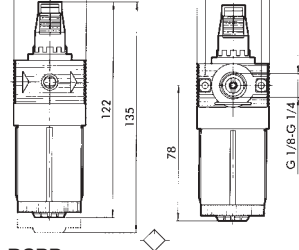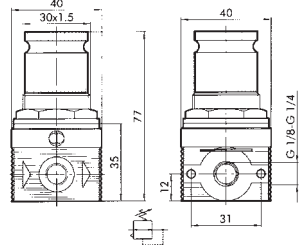**Maximum Temperature at 10 bar:**
+50°C

Maximum Inlet Pressure:
13 bar

NB: it is advisable to mount a 5μm filter upstream acting as a rough filter.
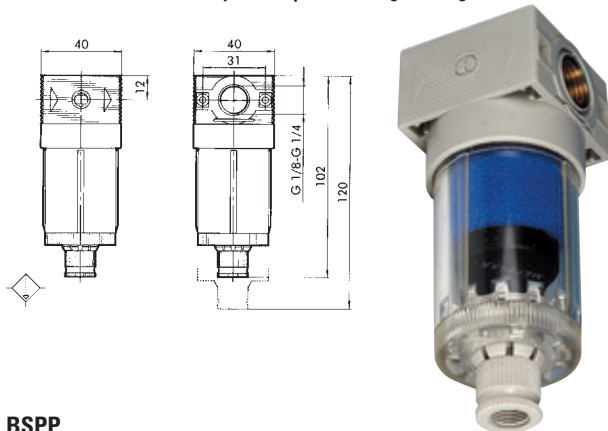
BSPP

9154	Thread BSPP
5212001	1/4"

Miniature Filter Regulator + Lubricator Set

- Flow rate at 6 bar ΔP 0.5 bar: 140 Nl/min
- Flow rate at 6 bar ΔP 1 bar: 260 Nl/min
- Fluid: compressed air
- Weight: 170g
- Mounting: vertical
- Gauge port: G1/8"

Maximum Inlet Pressure:
13 bar
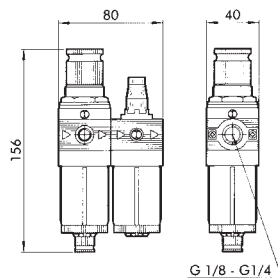
BSPP

9154	Thread BSPP	Micron μm	Pressure Range bar
5106008	1/8"	20	0 to 8
5106011	1/8"	20	0 to 12
5206008	1/4"	20	0 to 8
5206011	1/4"	20	0 to 12

Mounting Hardware
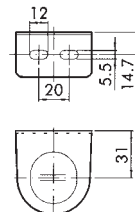
Bit Regulator Bracket

9154	Description
9200701	Mounting Bracket
9170301	Wall Mounting Kit

Automatic Drain

To suit Miniature Filters

9154	Description
9000803	For Miniature Filters

Filter Elements

Spare

9154	Micron μm
9251708	5
9251709	20
9251712	For Coalescing Filter, 0.001

FT PRO

For **Gauges**
see page **409**

FILTER REGULATOR FOR WATER, 'BIT' SERIES F

- Filtering and/or water pressure regulation units, characterised by the use of materials certified to specific standards on products for use in contact with foodstuff or drinking water.
- Declarations of conformity and release test reports are available on request for those who need them to certify our product incorporated in their own systems.
- The white colour surface finish of the body was chosen to enhance the highly hygienic properties of the product.
- If the pressure regulator works with incompressible fluids (water) and there is a valve leak, the downstream pressure could rise up to reach the inlet pressure and then it re-stabilises with water consumption.
- If necessary, consider the possibility of installing a safety valve that relieves any excess pressure.
- Fluid: water, air and fluids compatible with materials used

- Flow rate at 6.3 bar ΔP 1 bar: 6 up to 14.5 l/min dependant on model (refer to sales department)
- Gauge port: regulator, filter regulator, 1/8" BSPP
- Mounting: fixing plates 9170301, regulator bracket 9200701

Certifications
- European Regulation (EU) 10/2011, KTW, W270, WRAS, ACS, NSF61
- Approved for compliance with the UBA list, NSF/ANSI 372
- European Regulation (EU) 10/2011, KTW, W270, WRAS, NSF61, DM174/04, KTW, W270, WRAS, ACS, NSF61
- Approved for compliance with the UBA list, DM174/04, KTW, W270, WRAS, ACS, NSF61

Maximum Temperature at 10 bar: +50°C

Maximum Inlet Pressure: 13 bar

Filter for Water
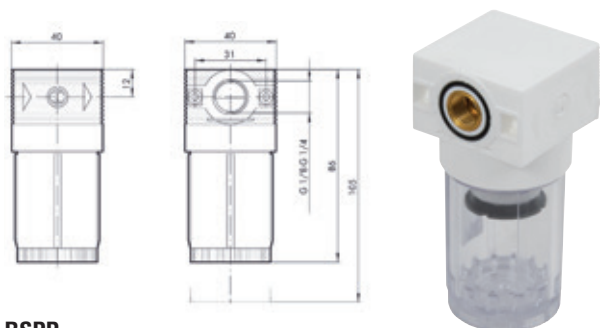
BSPP

9154	Thread BSPP	Micron µm
5101002F	1/8"	20
5201002F	1/4"	20

Regulator for Water

Brass Ports, BSPP

9154	Thread BSPP	Pressure Range bar
5108001F	1/8"	0 to 2
5108002F	1/8"	0 to 4
5108003F	1/8"	0 to 8
5108004F	1/8"	0 to 12
5208001F	1/4"	0 to 2
5208002F	1/4"	0 to 4
5208003F	1/4"	0 to 8
5208004F	1/4"	0 to 12

Regulator for Water
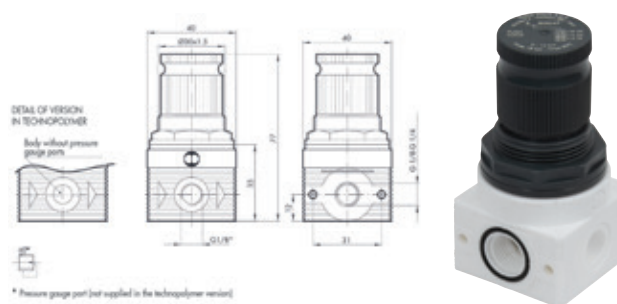
Technopolymer Ports (No Gauge Port), BSPP

9154	Thread BSPP	Pressure Range bar
5228001F	1/4"	0 to 2
5228002F	1/4"	0 to 4
5228003F	1/4"	0 to 8
5228004F	1/4"	0 to 12

Filter Regulator for Water
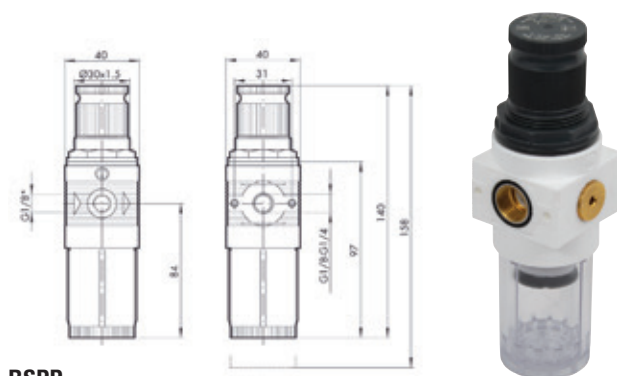
BSPP

9154	Thread BSPP	Micron µm	Pressure Range bar
5105111F	1/8"	20	0 to 12
5205102F	1/4"	20	0 to 2
5205105F	1/4"	20	0 to 4
5205111F	1/4"	20	0 to 12

STANDARD SERIES FRLS, 'SYNTESI'

SYNTESI® METAL WORK PNEUMATIC

Syntesi® is an important milestone achieved by Metal Work, the result of thirty years' experience producing air treatment units. Syntesi® obtains the best possible performance in a reduced space and with limited weight. The capacity is much higher than that of other units of the same size. These modular units feature a very simple yet effective system that requires no brackets, stay bolts or yoke for assembling the elements.

The basic version of Syntesi® incorporates numerous functions that are not provided or are only optional with traditional units:

• Padlockable knobs
• Additional pneumatic ports on the front and back
• Flow options from left to right or vice versa
• Regulators with compensation system which are accurate even when the upstream pressure changes, with rapid downstream pressure relief
• Full indelible marking
• Automatic condensate drain even in size 1
• 360º visual inspection of oil and condensate levels

The basic materials – technopolymer and nickel-plated brass – have excellent corrosion resistance. An anti-corrosion version is available with stainless steel components (screws and plates) or Geomet® related ones (regulator springs).

Technical Specifications

• Padlockable knob: the knobs of the regulators, filter regulators and standard sectioning valves can all be padlocked
• Fluid: compressed air or other inert gases

Body Size	Threaded Port BSP	Maximum Input Pressure bar	Temperature Range at 1 MPa, 10 bar (145 psi)
1	1/8"	15	-10ºC to +50ºC
	1/4"		
	3/8"		
2	3/8"	13	-10ºC to +50ºC
	1/2"		
	3/4"		
	1"		

Technical Data	Body Size 1			Body Size 2		
Maximum Input Pressure bar	15			13		
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	1300	1650	1750	4500	5200	5200
Weight g	178	173	164	488	461	457	445
Condensate Bowl Capacity cm3	30			70		
Mounting Position	Vertical			Vertical		
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws		

Standard Filter, Body Size 1

Manual Drain, BSPP

9154	Thread BSPP	Micron µm
5611F201	1/8"	20
5612F202	1/4"	20
5613F203	3/8"	20

Standard Filter, Body Size 2

Manual Drain, BSPP

9154	Thread BSPP	Micron µm
5623F203	3/8"	20
5624F204	1/2"	20
5625F205	3/4"	20
5626F206	1"	20

Standard Filter, Body Size 1

Auto Drain, BSPP

9154	Thread BSPP	Micron µm
5611F501	1/8"	20
5612F502	1/4"	20
5613F503	3/8"	20

Standard Filter, Body Size 2

Auto Drain, BSPP

9154	Thread BSPP	Micron µm
5623F503	3/8"	20
5624F504	1/2"	20
5625F505	3/4"	20
5626F506	1"	20

STANDARD SERIES FRLS, 'SYNTESI'

SYNTESi®   METAL WORK PNEUMATIC

Oil Removal Filter, Body Size 1

Oil Removal Filter, Body Size 2

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Suggested Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi)	460			620			
Weight g	194	189	180	483	456	452	440
Bowl Capacity cm3	15			40			
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			

Manual Drain, BSPP

9154	Thread BSPP	Micron µm
5611D101	1/8"	0.01
5612D102	1/4"	0.01
5613D103	3/8"	0.01

Manual Drain, BSPP

9154	Thread BSPP	Micron µm
5623D103	3/8"	0.01
5624D104	1/2"	0.01
5625D105	3/4"	0.01
5626D106	1"	0.01

Active Carbon Filter, Body Size 1

Active Carbon Filter, Body Size 2

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Suggested Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi)	350			800			
Weight g	195	190	181	483	456	452	440
Inlet Fluid	0.01 πm filtred and depurated air			0.01 πm filtred and depurated air			
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			

Manual Drain, BSPP

9154	Thread BSPP	Micron µm
5611C101	1/8"	0.003
5612C102	1/4"	0.003
5613C103	3/8"	0.003

Manual Drain, BSPP

9154	Thread BSPP	Micron µm
5623C103	3/8"	0.003
5624C104	1/2"	0.003
5625C105	3/4"	0.003

aircom PIPINGSYSTEM

For **Piping Systems** see pages 1068-1080

STANDARD SERIES FRLS, 'SYNTESI'

SYNTESi®   METAL WORK PNEUMATIC

Pressure Regulator

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	570	1650	2900	3000	4300	4700	
Weight g	193	188	179	546	519	515	503
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8" BSP			1/4" BSP			

Body Size 1, Relieving, BSPP

9185	Thread BSPP	Pressure Range bar
5611R141	1/8"	0 to 8
5611R161	1/8"	0 to 12
5612R142	1/4"	0 to 8
5612R162	1/4"	0 to 12
5613R143	3/8"	0 to 8
5613R163	3/8"	0 to 12

Body Size 2, Relieving, BSPP

9185	Thread BSPP	Pressure Range bar
5623R143	3/8"	0 to 8
5623R163	3/8"	0 to 12
5624R144	1/2"	0 to 8
5624R164	1/2"	0 to 12
5625R145	3/4"	0 to 8
5625R165	3/4"	0 to 12
5626R146	1"	0 to 8
5626R166	1"	0 to 12

In-series Regulator

The in-series regulator is used to take air at a set pressure from the ports on the front and back of the body, while the pneumatic inlet and outlet ports are connected directly.

It is possible to assemble several regulators side by side, all supplied at the same pressure, and obtain different regulated pressures, regardless of the pressure of the previous module.

The in-series regulator uses the same construction principles as the standard regulator, so the advantages are the same, such as compensation for upstream pressure changes, relief valve, rapid relief of the downstream pressure and a padlockable push-lock knob.

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	500			1000			
Weight g	193	188	179	546	519	515	503
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8" BSP			1/4" BSP			

1. Technopolymer adjusting knob
2. Technopolymer bell
3. Steel adjusting spring (with Geomet. treatment for anti-corrosion version)
4. Technopolymer flang
5. Rolling diaphragm
6. IN/OUT bushing made of OT58 nickel-plated brass or passivated aluminium for 3/4" - 1"
7. Technopolymer body
8. OT58 brass valve, with NBR vulcanized gasket
9. Stainless steel valve spring
10. Galvanised steel plate for knob locking (stainless steel for anti-corrosion version)
11. OT58 brass adjusting screw
12. Technopolymer ring nut
13. Technopolymer plate
14. Technopolymer rod
15. NBR o-ring gaskets
16. Technopolymer plug

Body Size 1, Relieving, BSPP

9185	Thread BSPP	Pressure Range bar
5611R241	1/8"	0 to 8
5611R261	1/8"	0 to 12
5612R242	1/4"	0 to 8
5612R262	1/4"	0 to 12
5613R243	3/8"	0 to 8
5613R263	3/8"	0 to 12

Body Size 2, Relieving, BSPP

9185	Thread BSPP	Pressure Range bar
5623R243	3/8"	0 to 8
5623R263	3/8"	0 to 12
5624R244	1/2"	0 to 8
5624R264	1/2"	0 to 12
5625R245	3/4"	0 to 8
5625R265	3/4"	0 to 12
5626R246	1"	0 to 8
5626R266	1"	0 to 12
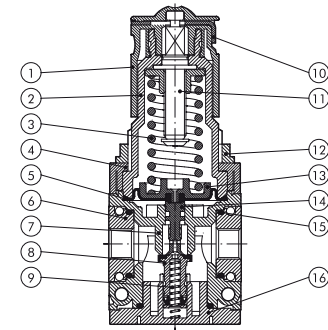
STANDARD SERIES FRLS, 'SYNTESI'

SYNTESI®

METAL WORK PNEUMATIC

Standard Filter Regulator

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	500	800	2200	3200	4300	5200	
Weight g	244	239	230	623	596	592	580
Bowl Capacity cm3	30			70			
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8" BSP			1/4" BSP			

Standard Filter Regulator, Body Size 1, Relieving Manual Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5611B241	1/8"	20	0 to 8
5611B261	1/8"	20	0 to 12
5612B242	1/4"	20	0 to 8
5612B262	1/4"	20	0 to 12
5613B243	3/8"	20	0 to 8
5613B263	3/8"	20	0 to 12

Standard Filter Regulator, Body Size 1, Relieving Auto Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5611B541	1/8"	20	0 to 8
5611B561	1/8"	20	0 to 12
5612B542	1/4"	20	0 to 8
5612B562	1/4"	20	0 to 12
5613B543	3/8"	20	0 to 8
5613B563	3/8"	20	0 to 12

Standard Filter Regulator, Body Size 2, Relieving Manual Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5623B243	3/8"	20	0 to 8
5623B263	3/8"	20	0 to 12
5624B244	1/2"	20	0 to 8
5624B264	1/2"	20	0 to 12
5625B245	3/4"	20	0 to 8
5625B265	3/4"	20	0 to 12
5626B246	1"	20	0 to 8
5626B266	1"	20	0 to 12

Standard Filter Regulator, Body Size 2, Relieving Auto Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5623B543	3/8"	20	0 to 8
5623B563	3/8"	20	0 to 12
5624B544	1/2"	20	0 to 8
5624B564	1/2"	20	0 to 12
5625B545	3/4"	20	0 to 8
5625B565	3/4"	20	0 to 12
5626B546	1"	20	0 to 8
5626B566	1"	20	0 to 12

Standard Lubricator

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	1300	1700	2200	2300	3900	3900	
Weight g	185	180	171	480	453	449	437
Quantity of Fitted Oil cm3	60			130			
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			

Body Size 1, BSPP

9154	Thread BSPP
5611L101	1/8"
5612L102	1/4"
5613L103	3/8"

Body Size 2, BSPP

9185	Thread BSPP
5623L103	3/8"
5624L104	1/2"
5625L105	3/4"
5626L106	1"

STANDARD SERIES FRLS, 'SYNTESI'

SYNTESi®   **METAL WORK** PNEUMATIC

Shut Off Valve

Technical Data	Body Size 1			Body Size 2		
Maximum Input Pressure bar	15			13		
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 0.5 bar (0.05 MPa, 7 psi)	800	1000	1100	2800	3000	3000
Weight g	197	192	183	476	449	445	433
Mounting Position	Any			Any		
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws		

Body Size 1, Manual, BSPP

9185	Thread BSPP
5611V101	1/8"
5612V102	1/4"
5613V103	3/8"

Body Size 1, Pneumatic, BSPP

9185	Thread BSPP
5611V201	1/8"
5612V202	1/4"
5613V203	3/8"

S Body Size 1, Solenoid, BSPP

9185	Thread BSPP
5611V701	1/8"
5612V702	1/4"
5613V703	3/8"

Body Size 2, Manual, BSPP

9185	Thread BSPP
5623V103	3/8"
5624V104	1/2"
5625V105	3/4"
5626V106	1"

Body Size 2, Pneumatic, BSPP

9185	Thread BSPP
5623V203	3/8"
5624V204	1/2"
5625V205	3/4"
5626V206	1"

Body Size 2, Solenoid, BSPP

9185	Thread BSPP
5623V703	3/8"
5624V704	1/2"
5625V705	3/4"
5626V706	1"

FT PRO®

For **FT Pro One Touch All Metal Push-in Fittings**
see pages **843-847**

STANDARD SERIES FRLS, 'SYNTESI'

SYNTESI®

METAL WORK PNEUMATIC

Progressive Starter

Technical Data	Body Size 1			Body Size 2		
Input Pressure Range bar	3 to 10			3 to 10		
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 0.5 bar (0.05 MPa, 7 psi)	900	1000	1100	2800	3600	3600
Weight g	203	198	189	503	476	472	460
Mounting Position	Any			Any		
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws		

Body Size 1, BSPP

9185	Thread BSPP
5611A701	G1/8″
5612A702	G1/4″
5613A703	G3/8″

Body Size 2, BSPP

9185	Thread BSPP
5623A703	G3/8″
5624A704	G1/2″
5625A705	G3/4″
5626A706	G1″

Pressure Switch

Technical Data	Body Size 1	Body Size 2
Maximum Pressure bar	15	13
Maximum Current A	2	2
Maximum Voltage V	250	250
Cable OD mm	4.9	4.9
Fluid	Filtered lubricated or non-lubricated compressed air. Lubrication, if used, must be continuous	
Mounting Position	Any	Any
Wall Fixing Screws	No. 2 M4 Screws	No. 2 M5 Screws

Body Size 1, M8 Connector, BSPP

9185	Thread BSPP
5611S201	G1/8″
5612S202	G1/4″
5613S203	G3/8″

Body Size 2, M8 Connector, BSPP

9185	Thread BSPP
5623S203	G3/8″
5624S204	G1/2″
5625S205	G3/4″
5626S206	G1″

Filter Regulator + Lubricator Set

Technical Data	Body Size 1			Body Size 2			
Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 0.5 bar (0.05 MPa, 7 psi)	350			1200			
Weight g	414	409	400	1074	1074	1043	1031
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8″ BSP			1/4″ BSP			

Body Size 1, Manual Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5611B24L101	G1/8″	20	0 to 8
5612B24L102	G1/4″	20	0 to 8
5613B24L103	G3/8″	20	0 to 8

Body Size 2, Manual Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5623B24L103	G3/8″	20	0 to 8
5624B24L104	G1/2″	20	0 to 8
5625B24L105	G3/4″	20	0 to 8
5626B24L106	G1″	20	0 to 8

Body Size 1, Auto Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5611B54L101	G1/8″	20	0 to 8
5612B54L102	G1/4″	20	0 to 8
5613B54L103	G3/8″	20	0 to 8

Body Size 2, Auto Drain, BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
5623B54L103	G3/8″	20	0 to 8
5624B54L104	G1/2″	20	0 to 8
5625B54L105	G3/4″	20	0 to 8
5626B54L106	G1″	20	0 to 8

ACCESSORIES, 'SYNTESI'

SYNTESI® METAL WORK PNEUMATIC

Connecting Nipple Kit

Body Size 1

9185
9210000

Connecting Nipple Kit

Body Size 2

9185
9210010

Threaded Port Kit

Body Size 1

9185	Thread BSPP
9210001	G1/8"
9210002	G1/4"
9210003	G3/8"

Threaded Port Kit

Body Size 2

9185	Thread BSPP
9210011	G3/8"
9210012	G1/2"
9210013	G3/4"
9210014	G1"

Automatic Drain

⊙ **Maximum Inlet Pressure:** 10 bar

To suit Body Sizes 1 & 2

9185
9000802

Replacement Elements

Spare, Body Size 1

9185	Micron μm
9210150	5
9210151	20

Replacement Elements

Spare, Body Size 2

9185	Micron μm
9210155	5
9210156	20

Replacement Elements

Oil Removal, Body Size 1

9185
9210160

Replacement Elements

Oil Removal, Body Size 2

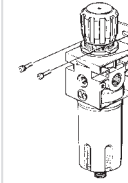| 9185 |
|---|
| 9210165 |

Replacement Elements

Active Carbon, Body Size 1

9185
9210161

Replacement Elements

Active Carbon, Body Size 2

9185
9210166

Mountings

Bracket for Regulators

9154	To	Sizes
9200701		Body size 1
9400701		Body size 2

Square Dial Pressure Gauge

• A compact pressure gauge with a square dial suitable for air treatment units.
• Suitable for use with Metal Work Bit, Syntesi, New Deal and Skillair ranges.
• A PTFE ring seal mounted on the 1/8" thread of the fiting ensures a perfect pneumatic seal.
• To mount it, screw the gauge in as far as it will go, then loosen enough to align the dial. A sealant is not required.
• The pressure gauge has a neck to dampen pressure vibration and absorb water hammer. This improves overall reliability and guarantees longer life.
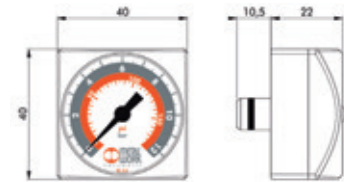
G1/8" Thread

9154	Pressure Range (bar)
9700109	0 to 4
9700110	0 to 12

STANDARD SERIES FRLS, 'NEW DEAL'

Standard Filter

Technical Specification
- Fluid: compressed air
- Mounting position: vertical
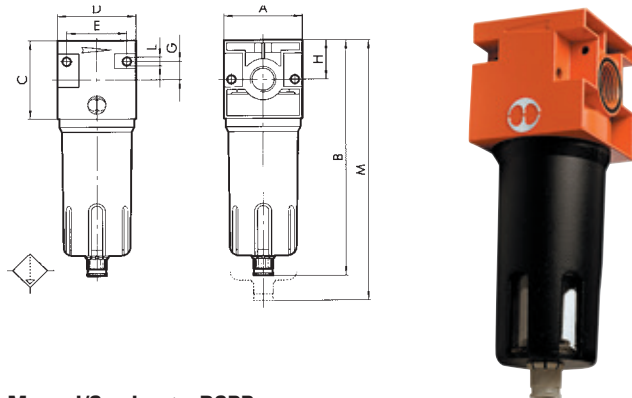- Condensate drain: manual/semi-auto

Maximum Temperature at 10 bar:
+50°C

Maximum Inlet Pressure:
18 bar

Dimensions

Thread BSP	A	B	C	D	E	G	H	L (Hole)	M	kg
G1/4"	42	142	42	42	32	10	21	M4	185	0.4
G3/8"	60	180	60	60	46	14	30	M4	230	0.9
G1/2"	60	180	60	60	46	14	30	M4	230	0.9
G3/4"	80	235	80	80	66	22	40	M6	325	1.9
G1"	80	235	80	80	66	22	40	M6	325	1.9

Manual/Semi-auto, BSPP

9154	Thread BSPP	Micron µm
1221006	G1/4"	20
1321006	G3/8"	20
1421006	G1/2"	20
1521006	G3/4"	20
1621006	G1"	20

Technical Specification
- Fluid: filtered, lubricated or non-lubricated compressed air
*Lubrication, if used, must be continuous.

Dimensions

Thread BSP	A	B	C	D	E	F	G	H	I	L (Hole)	M	N	kg
G1/4"	42	142	42	42	32	30 x 1.5	10	21	25	M4	185	G1/8"	0.3
G3/8"	60	180	60	60	46	38 x 2	14	30	35	M4	230	G1/8"	0.8
G1/2"	60	180	60	60	46	38 x 2	14	30	35	M4	230	G1/8"	0.8
G3/4"	80	235	80	80	66	55 x 2	22	40	47	M6	325	G1/4"	2.2
G1"	80	235	80	80	66	55 x 2	22	40	47	M6	325	G1/4"	2.2

Oil Removal Filter

Technical Specification
- Degree of filtration: 99.97% 0.01µ
- Flow rate at 6 bar ΔP 1 bar: 1600 Nl/min
- Fluid: filtered 4µm compressed ai
- Weight: 0.9kg
- Mounting position: vertical
- Bowl capacity: 45cm³

NB: It is advisable to mount a 4µ filter upstream acting as a rough filt .

Maximum Temperature at 10 bar:
+50°C

Maximum Inlet Pressure:
18 bar

Dimensions

Thread BSP	A	B	C	D	E	G	H	L (Hole)	M
G1/2"	60	180	60	60	46	14	30	M4	230
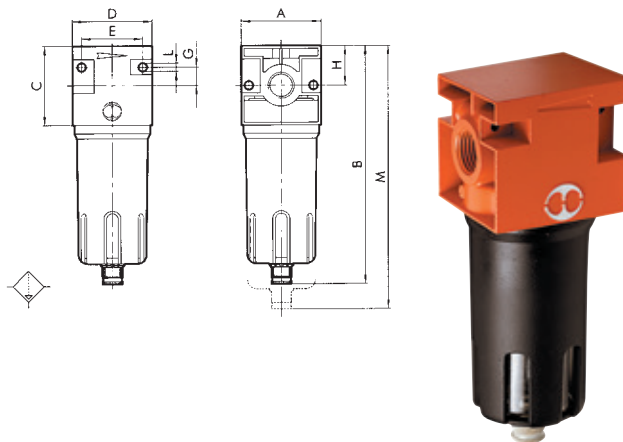
BSPP

9154	Thread BSPP
1422002	G1/2"

Maximum Temperature at 10 bar:
+50°C

Maximum Inlet Pressure:
18 bar

Security Knob

NOTE: pull outwards to remove the knob from the pressure switch on the unit. Insert the security knob and regulate the pressure switch. Then press the handle firmly to lock it in position. If the pressure switch needs to be reset, remove the security knob by forcing it laterally with a screwdriver.

To suit 9000401 & 9000402

9149
9200703

STANDARD SERIES FRLS, 'NEW DEAL'

Pressure Regulator
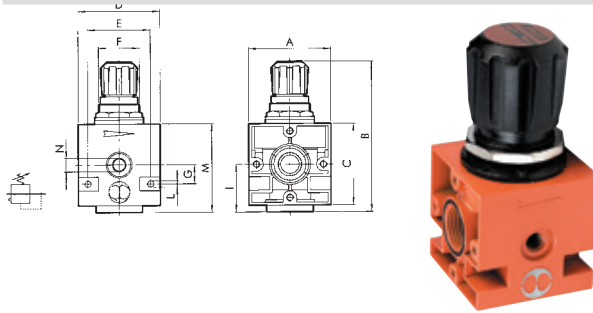
BSPP

9154	Thread BSPP	Pressure Range bar
1202002	G1/4"	0 to 8
1202003	G1/4"	0 to 12
1302002	G3/8"	0 to 8
1302003	G3/8"	0 to 12
1402002	G1/2"	0 to 8
1402003	G1/2"	0 to 12
1502003	G3/4"	0 to 12
1602003	G1"	0 to 12

Pressure Regulator, Padlockable

BSPP

9154	Thread BSPP	Pressure Range bar
1210013	G1/4"	0 to 8
1210014	G1/4"	0 to 12
1310013	G3/8"	0 to 8
1310014	G3/8"	0 to 12
1410013	G1/2"	0 to 8
1410014	G1/2"	0 to 12

Filter Regulator

Technical Specification
• Mounting position: vertical
NB: the regulator pressure must always be set upwards.

Maximum Temperature at 10 bar: +50°C

Maximum Inlet Pressure: 18 bar

Dimensions

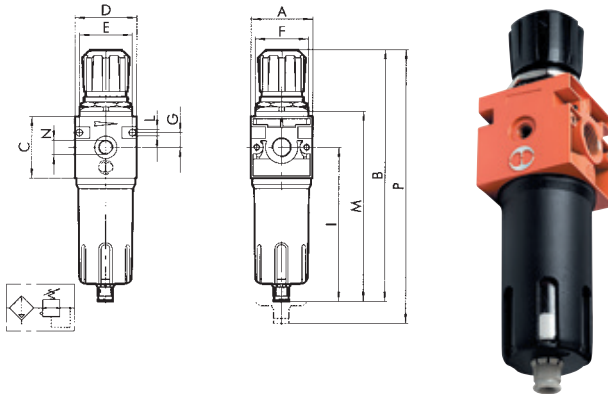| Thread BSP	A	B	C	D	E	F	G	I	L (Hole)	M	N	P	kg
G1/4"	42	190	42	42	36	30 x 1.5	10	121	M4	145	G1/8"	233	0.5
G3/8"	60	245	60	60	52	30 x 1.5	14	150	M4	185	G1/8"	295	1
G1/2"	60	245	60	60	52	30 x 1.5	14	150	M4	185	G1/8"	295	1

BSPP

9185	Thread BSPP	Micron μm	Pressure Range bar
1225030	G1/4"	20	0 to 8
1225054	G1/4"	20	0 to 12
1325030	G3/8"	20	0 to 8
1325054	G3/8"	20	0 to 12
1425030	G1/2"	20	0 to 8
1425054	G1/2"	20	0 to 12

Lubricator

Technical Specification
• Fluid: filtered compressed air
• Mounting position: vertical

Notes
• Use the screw provided to set the drip rate to drop every 300-600ml.
• Fit the lubricator as close as possible to the point of use

• Fill the bowl with oil before pressurising the system
• Do not use cleaning oil, brake fluid or solvents in general

• Recommended lubricants: ISO and UNI FD22, e.g. Energol HLP 22(BP), Spinesso 22 (Esso), Mobil, Tellus Oil 22 (Shell)
• Automatic filling lubricato and minimum level lubricator

Maximum Temperature at 10 bar: +50°C

Maximum Inlet Pressure: 18 bar

Dimensions

Thread BSP	A	B	C	D	E	G	I	L (Hole)	M	kg
G1/4"	42	156	42	42	32	10	121	M4	176	0.4
G3/8"	60	195	60	60	46	14	136	M4	220	0.9
G1/2"	80	195	80	80	66	22	182	M4	290	0.9
G3/4"	80	260	80	80	66	22	182	M6	290	1.8
G1"	80	260	80	80	66	22	182	M6	290	1.8
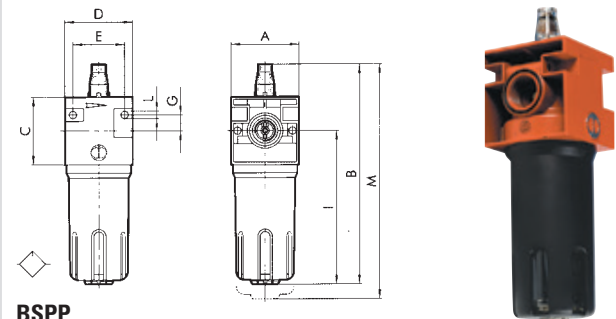
BSPP

9154	Thread BSPP
1223001	G1/4"
1323001	G3/8"
1423001	G1/2"
1523001	G3/4"
1623001	G1"

STANDARD SERIES FRLS, 'NEW DEAL'
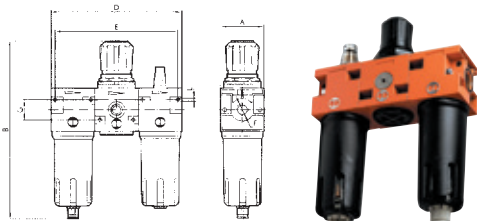
Filter + Regulator + Lubricator Set

Technical Specification
• Fluid: compressed air

Maximum Temperature at 10 bar: +50°C

Maximum Inlet Pressure: 18 bar

Notes
• Highly reliable, heavy duty, piston operated
• FRL unit
• Stability of the set pressure as the upstream pressure varies
• Metal bowl with external sight glass
• Semi-automatic and automatic condensate drain
• Lubrication proportional to flow rat
• Micrometric lubrication regulation
• Activation guaranteed with low flow rate

Dimensions

Thread BSPP	A	B	D	E	G	L (Hole)	kg
G1/4"	42	190	126	116	20	M4	1
G3/8"	60	245	180	166	28	M4	2.5
G1/2"	60	245	180	166	28	M4	2.5
G3/4"	80	332	240	226	44	M6	5.8
G1"	80	332	240	226	44	M6	5.8

BSPP

9185	Thread BSPP	Micron µm	Pressure Range bar
1224030	G1/4"	20	0 to 8
1224054	G1/4"	20	0 to 12
1324030	G3/8"	20	0 to 8
1324054	G3/8"	20	0 to 12
1424030	G1/2"	20	0 to 8
1424054	G1/2"	20	0 to 12
1524030	G3/4"	20	0 to 12
1624030	G1"	20	0 to 12

Filter Regulator + Lubricator Sets

Technical Specification
• Fluid: compressed air

Maximum Temperature at 10 bar: +50°C

Maximum Inlet Pressure: 18 bar

Dimensions

Thread BSPP	A	B	D	E	G	L (Hole)	kg
G1/4"	42	190	84	76	10	M4	0.9
G3/8"	60	240	120	109	14	M4	2
G1/2"	60	240	120	109	14	M6	2
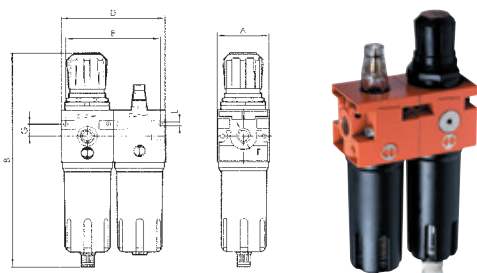
BSPP

9185	Thread BSPP	Micro µm	Pressure Range bar
1226030	G1/4"	20	0 to 8
1226054	G1/4"	20	0 to 12
1326030	G3/8"	20	0 to 8
1326054	G3/8"	20	0 to 12
1426030	G1/2"	20	0 to 8
1426054	G1/2"	20	0 to 12

Shut Off Valve

Technical Specification
• Fluid: filtered, lubricated or non lubricated compressed air*
* Lubrication, if used, must be continuous.
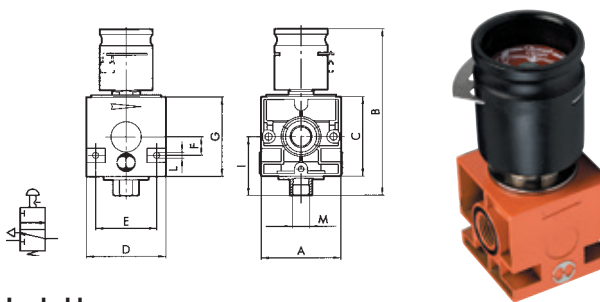
Maximum Temperature at 10 bar: +50°C

Inlet Pressure: 18 bar

Dimensions

Thread BSPP	A	B	C	D	E	F	G	I	L (Hole)	kg
G1/4"	42	105	42	42	32	10	42	32	M4	0.35
G3/8"	60	126	60	60	46	14	60	43	M4	0.8
G1/2"	60	126	60	60	46	14	60	43	M4	0.8

Lockable

9154	Thread BSPP
1270001	G1/4"
1370001	G3/8"
1470001	G1/2"

Distribution Block

Maximum Working Temperature at 10 bar: +50°C

Maximum admissible Pressure: 18 bar

Dimensions

Thread BSPP	A	B	C	D	E	F	G	H (No2 pos)	L (Hole)
G1/4"	42	42	15	34	34	8.5	8.5	21	M4
G3/8"	60	60	20	49	49	14	14	30	M4
G1/2"	60	60	20	49	49	14	14	30	M4
G3/4"	80	80	30	64	64	16	16	40	M6
G1"	80	80	30	64	64	16	16	40	M6
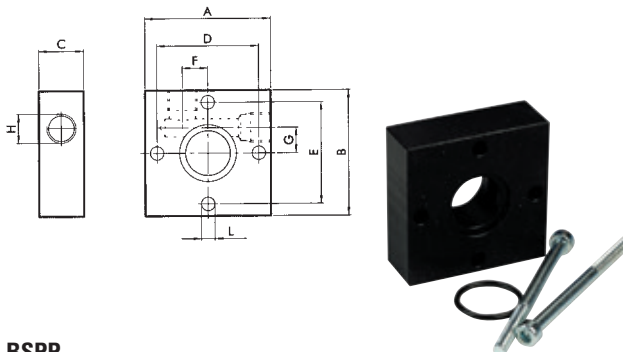
BSPP

9154	To Suit
9200401	G1/8" for G1/4
9400401	G1/4" for G3/8 to G1/2
9600401	G1/2" for G3/4 to G1

STANDARD SERIES FRLS, 'NEW DEAL' ACCESSORIES

METAL WORK PNEUMATIC

Drip Leg Drain

Technical Specifications
• Threaded port: G1/2"
• Wall fixing screws: M6 x 75

System supply condensate drain:
• All-round condensate level viewing
• Automatic drain from inside the bowl
• Axial coupling

Maximum Working Temperature at 10 bar: +50°C

Maximum admissible Pressure: 18 bar

BSPP

9154	Thread BSPP
4589003	G1/2"

Mountings

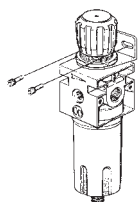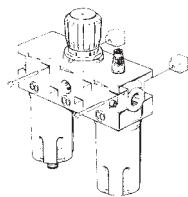### Bracket for Regulators

9154	To Suit Sizes
9200701	G1/4"
9400701	G3/8" to G1/2"

Mountings

Spacers for Wall Mount FRLs

9154	To Suit Sizes
9200601	G1/4"
9400601	G3/8" to G1/2"
9600601	G3/4"

Filter Element

Spare

9154	To Suit Sizes	Micron µm
9250103	G1/4"	4
9250102	G1/4"	20
9450103	G3/8" to G1/2"	4
9450102	G3/8" to G1/2"	20
9650103	G3/4" to G1"	4
9650102	G3/4" to G1"	20
9450105	G3/8" to G1/2"	0.01

Shut Off Valve Adaptor

Brass

9154	To Suit Sizes
9201001	G1/4"
9401001	G3/8"
9401002	G1/2"

Automatic Drains

Maximum Inlet Pressure: 10 bar

Fully Automatic

9185	To Suit Sizes
9000802	G3/8" to G1"

Automatic Drains

Semi-automatic

9154	To Suit Sizes
9000803	G1/4" to G1/2"

Automatic Drains

Metal Bowl for use with Semi-auto & Auto Drains

9154	To Suit Sizes
9255201	G1/4"
9455201	G3/8" to G1/2"

Square Dial Pressure Gauge

• A compact pressure gauge with a square dial suitable for air treatment units.
• Suitable for use with Metal Work Bit, Syntesi, New Deal and Skillair ranges.
• A PTFE ring seal mounted on the 1/8" thread of the fitting ensures a perfect pneumatic seal.

• To mount it, screw the gauge in as far as it will go, the loosen enough to align the dial. A sealant is not required.
• The pressure gauge has a neck to dampen pressure vibration and absorb water hammer. This improves overall reliability and guarantees longer life.

G1/8" Thread

9154	Pressure Range (bar)
9700109	0 to 4
9700110	0 to 12

STANDARD SERIES FRLS, 'NEW DEAL' BREATHE AIR SET

METAL WORK PNEUMATIC

Breathe Air Set

Breathe provides high quality, clean air, essential for paint spraying and breathing air applications. Designed for self-contained operations, it will filter compressed air directly from most types of compressor and ring main systems.

Breathe will supply sufficient breathable air for up to two men on constant demand and will provide breathing quality air to a higher standard than specified in BS4275: 1974

Technical Specification
- Element grade: XA and AC
- Threaded port: 1/2" BSP
- Particle removal: 0.01 microns
- Maximum oil carry over @ +20°C: 0.005 mg/cu m
- Pressure loss, clean and dry: 150 mbar
- Pressure loss, saturated: 350 mbar
- Pressure loss, change element: 400 mbar

Maximum Recommended Temperature:
+25°C

Maximum Working Pressure:
16 bar
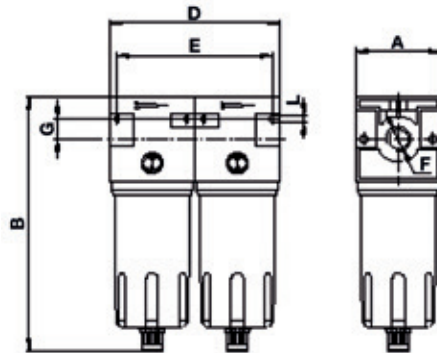
Dimensions

A	60mm	E	121mm
B	180mm	G	14mm
D	135mm	L	4mm Hole

BSP

9154	Element Grade	Thread Size BSP	Micron µm	Pressure Range Bar
Z29100BREATHE	XA & SC	1/2"	0.01	0 to 16

FT PRO

For **FT Pro Pneumatic Hose** see pages **895-904**

FRLS, 'SKILLAIR'

Filter, 200 Series

Technical Specification
- Degree of filtration: 20μ
- Flow rate at 6.3 bar: 2400 Nl/min
- Fluid: compressed air
- Weight: 0.7kg

Maximum Temperature at 10 bar:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
3480002	1/4"
3580002	3/8"
3680002	1/2"

Filter, 300 Series

Technical Specification
- Degree of filtration: 20μ
- Flow rate at 6.3 bar: 3800 Nl/min
- ΔP 0.5 bar (0.005 MPa, 7 psi): 135 scfm
- Fluid: compressed air
- Weight: 1.4 kg

Maximum Temperature at 10 bar:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
4480002	1/2"
4580002	3/4"
4680002	1"

Filter, 400 Series

Technical Specification
- Degree of filtration: 20μ
- Flow rate at 6.3 bar:
  - 16500 (G11/2") Nl/min, 20000 (G2") Nl/min
- Fluid: compressed air
- Weight: 1.4kg

Maximum Temperature at 10 bar:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
6380002	1.1/2"
6480002	2"

Regulator, 200 Series

Technical Specification
- Setting range: 0 to 8 bar
- Flow rate at 6.3 bar: 25000 Nl/min
- Weight: 0.7kg
- Mounting: any position
- Pressure gauge port: G1/8"

Maximum Temperature at 10 bar:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
3402003	1/4"
3502003	3/8"
3602003	1/2"

Regulator, 300 Series

Technical Specification
- Setting range: 0 to 8 bar
- Flow rate at 6.3 bar: 35000 Nl/min
- Weight: 1.4kg

Maximum Temperature at 10 bar:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
4402002	1/2"
4502002	3/4"
4602002	1"

Regulator, 400 Series

Technical Specification
- Setting range: dependent on pilot operating regulator
- Flow rate at 6.3 bar:
  18000 (G1.1/2") Nl/min, 20000 (G2") Nl/min
- Weight: 4.8kg (G1.1/2"), 5.6kg (G2")
- Mounting: any position
- Pressure gauge port: G1/4"
- Requires pilot regulator

Maximum Temperature at 10 bar:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
6302001	1.1/2'
6402001	2"

FRLS, 'SKILLAIR'

Pilot Regulator, 400 Series

Technical Specification
- Flow rate at 6.3 bar ΔP 0.5 bar: 120 Nl/min
- Weight: 0.6kg
- Pressure gauge port: G1/8"

Maximum Temperature at 10 bar:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP	Pressure Range bar
3206001	1/4"	2
3206002	1/4"	4
3206003	1/4"	8
3206004	1/4"	12

Filter Regulator, 200 Series

Technical Specification
- Setting range: 0 to 8 bar
- Degree of filtration: 20µ
- Flow rate at 6.3 bar ΔP 0.5 bar: 1600 Nl/min
- Weight: 1kg
- Pressure gauge port: G1/8"

Maximum Temperature:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
3483008	1/4"
3583008	3/8"
3683008	1/2"

Filter Regulator, 300 Series

Technical Specification
- Setting range: 0 to 8 bar
- Degree of filtration: 20µ
- Flow rate at 6.3 bar: 3500 Nl/min
- ΔP 0.5 bar: 57 scfm
- Weight: 1.8kg
- Pressure gauge port: G1/8"

Maximum Temperature:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
4483005	1/2"
4583005	3/4"
4683005	1"

Lubricator, 200 Series

Technical Specification
- Bowl capacity: 95
- Flow rate at 6.3 bar: 2200 Nl/min
- Weight: 0.7kg

Maximum Temperature:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
3481001	1/4"
3581001	3/8"
3681001	1/2"

Lubricator, 300 Series

Technical Specification
- Bowl capacity: 160
- Flow rate at 6.3 bar: 3500 Nl/min
- Weight: 1.4kg

Maximum Temperature:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
4481001	1/2"
4581001	3/4"
4681001	1"

Lubricator, 400 Series

Technical Specification
- Type of lubrication: mist
- Bowl capacity: 800
- Flow rate at 6.3 bar:
  18.000 (G1.1/2") Nl/min, 21.000 (G2") Nl/min
- Weight: 4.9kg (G1.1/2"), 5.7kg (G2")

Maximum Temperature:
+50°C

Maximum Input Pressure:
13 bar

BSPP

9193	Thread BSPP
6381001	1.1/2"
6481001	2"

FRLS, 'SKILLAIR'

Manual Shut Off Valve, 200 Series

Technical Specification
• Flow rate at 6.3 bar: 24000 Nl/min
• Weight: 0.8kg

Maximum Temperature at 1 MPa, 10 bar (145 psi):
+50°C

Maximum Inlet Pressure (solenoid version:
3 bar
Maximum Inlet Pressure:
13 bar

BSPP

9193	Thread BSPP
3470001	1/4"
3570001	3/8"
3670001	1/2"

Manual Shut Off Valve, 300 Series

Technical Specification
• Flow rate at 6.3 bar: 32000 Nl/min
• Weight: 1.2kg

Maximum Temperature at 1 MPa, 10 bar (145 psi):
+50°C

Maximum Inlet Pressure (solenoid version:
2 bar
Maximum Inlet Pressure:
13 bar

BSPP

9193	Thread BSPP
4470001	1/2"
4570001	3/4"
4670001	1"

Filter + Regulator + Lubricator, 200 Series

Technical Specification
• Setting range: 0 to 8 bar
• Degree of filtration: 20μ
• Flow rate at 6.3 bar: 1300 Nl/min
• Weight: 1.5kg

Maximum Temperature:
+50°C

Maximum Inlet Pressure:
13 bar

BSPP

9193	Thread BSPP
3482008	1/4"
3582008	3/8"
3682008	1/2"

Filter + Regulator + Lubricator, 300 Series

Technical Specification
• Setting range: 0 to 8 bar
• Degree of filtration: 20μ
• Flow rate at 6.3 bar: 2500 Nl/min
• Weight: 2.9kg

Maximum Temperature:
+50°C

Maximum Inlet Pressure:
13 bar

BSPP

9193	Thread BSPP
4482005	1/2"
4582005	3/4"
4682005	1"

FRLS, 'SKILLAIR'

Filter Regulator + Lubricator, 200 Series

Technical Specification
- Setting range: 0 to 8 bar
- Degree of filtration: 20μ
- Flow rate at 6.3 bar: 1200 Nl/min
- Weight: 1.35kg

Maximum Temperature:
+50°C

Maximum Inlet Pressure:
13 bar

BSPP

9193	Thread BSPP
3484008	1/4"
3584008	3/8"
3684008	1/2"

Filter Regulator + Lubricator, 300 Series

Technical Specification
- Setting range: 0 to 8 bar
- Degree of filtration: 20μ
- Flow rate at 6.3 bar: 2300 Nl/min
- Weight: 2.7kg

Maximum Temperature:
+50°C

Maximum Inlet Pressure:
13 bar

BSPP

9193	Thread BSPP
4484005	1/2"
4584005	3/4"
4684005	1"

Solenoid Coil, 200 Series

Form B/Industrial, 22mm Coil

9149	Voltage
W0215000101	24V DC 2W
W0215000111	24V AC
W0215000121	110V AC
W0215000131	230V AC

M1NS2000: Socket Connector, Form B.

Solenoid Coil, 300 Series

Form B/Industrial, 30mm Coil

9182	Voltage
W0210010100	24V DC 2W
W0210011100	24V AC
W0210012100	110V AC
W0210013100	230V AC

G1NU2000: Socket Connector, Form A.

Mounting Bracket

To suit 200 & 300 Series

9154	To Suit Series
9400701	200
9400702	300

FRLS, 'ONE' AIR TREATMENT UNIT

'ONE' Integrated Compressed Air Treatment Unit

In the world of pneumatics, which is considered mature, it is rare to encounter completely new and different products.

ONE is a compressed air treatment unit with a high degree of integration, that encompassed numerous pneumatic functions.

In fact, it contains so many innovations that a single patent is not enough to safeguard it against imitation – three separate patent applications have been registered with a total of 39 claims.

This unit is so innovative that it won the international novelty award at Fluidtrons Compomac.

ONE has a single high-performance valve on the main row that handles all the functions from regulation to relief. It is controlled by a high-precision pilot regulator with controlled relief, in series with the manual on-off valve, the electric valve and the progressive actuator. Unification of the valve has led to a significant reduction in overall dimensions, enhanced capacity, precision and response speed.

The **ONE** single unit houses the threaded ports, filter, condensate drain, pressure regulator, shut-off valve, soft start valve, pressure switch and three supplementary air intakes.

The single unit houses the threaded ports, filter, condensate drain, pressure regulator, shut-off valve, soft start valve, pressure switch and three supplementary air intakes.

Other versions and further technical information available on request
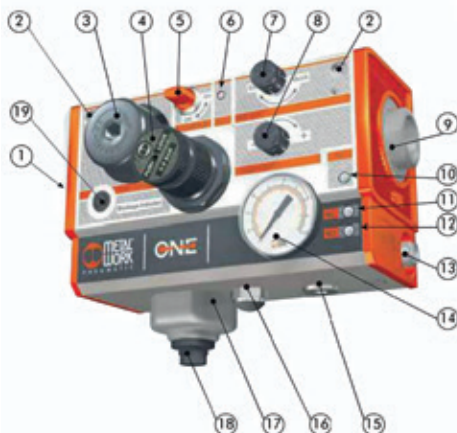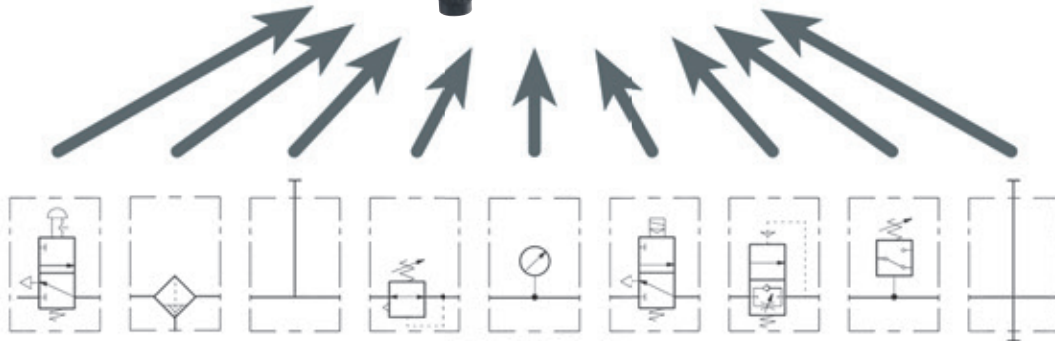
1. Air intake, with swivel threaded port
2. Fixing hole
3. Access to filter cartridge
4. Pressure regulation
5. Shut-off Valve (manual)
6. Manual override (shut-off valve, electrical)
7. Soft start valve regulation
8. Switching pressure regulation
9. Air outlet with swivel threaded port
10. LED signalling unit, ON
11. LED signalling pressure below the value set on pressure switch
12. LED signalling pressure over the value set on pressure switch
13. 5-pin M12x1 electrical connector
14. Pressure gauge
15. 1/4" air intake; another regulated air intake and a filtered non-regulated air intake are situated on the top
16. Air exhaust with a G1/4" silencer
17. Condensate tank
18. Condensate drain
19. Clogged filter signal

BSPP

9193	Version	Air Inlet/Outlet BSPP	Micron µm	Clogged Filter Signal	Condensate Drain	Pressure Range Bar	Valves	Pressure Switch
543211881300	Electric*	1/2"	20	Yes	Automatic	0.5 to 8	Padlock and APR	Yes

OLYMPIAN PLUS PLUG-IN SYSTEM

NORGREN.

Olympian Plus is the new generation FRL system from Norgren, world leaders in air line equipment. The unique Olympian plug-in design has been updated to set new standards for ease of use and system flexibilit .

1. QUICK CONNECT YOKE SYSTEM
Simple, speedy assembly of accessories and combination units.

2. PLUG IN UNITS
Rapid installation and maintenance. Quarter turn clamp ring graphite impregnated for easy operation. Detent action prevents removal under pressure.

3. BAYONET BOWLS
Easy removal for routine maintenance. Detent action to prevent removal under pressure.

4. UNIQUE PRISMATIC SIGHT GLASS
High visibility of liquid level. Colour change service indication on filters and filter regulators

• Complete air processing units pre-assembled, ready to install

• Filter-regulator and micro-fog lubricator combinations

5. CAPTIVE O-RINGS
Easy to assemble with no loose parts.

6. TAMPER RESISTANT COVER
Simple accessory to prevent unauthorised adjustment of regulated pressure.

7. PORTING BLOCK MOUNTED PRESSURE SWITCH
Adjustable pressure switch for feedback to monitoring systems.

8. SOFT START/DUMP VALVE
Provides controlled increase in pressure on system start-up. High exhaust flow capacity.

9. 3/2 SHUT OFF VALVE
Slide valve with lockable blade. Threaded exhaust port.

• Filter and micro-fog lubricator combinations
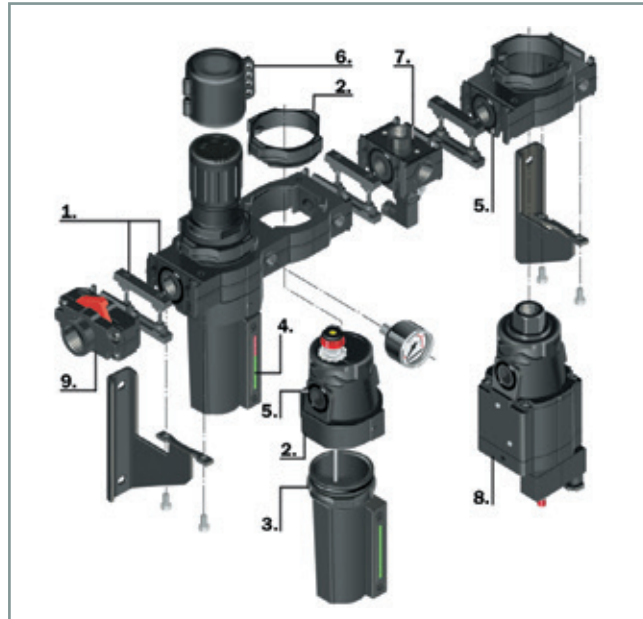
Working Temperature:
-20°C to +66°C

Medium: Compressed air only
Body and Yoke: Zinc alloy
Bowl: Aluminium

Element: Sintered plastic
Elastomers: Synthetic rubber units assembled for left to right flo

Inlet Pressure:
0-17 bar

Boxed Sets

BSPP

0037	Thread	Micron	Bowl	Pressure Range Bar	Operation	Drain Type
BL64-401	1/2"	40	Metal	0.3-10	Relieving	Auto
BL64-421	1/2"	40	Metal	0.3-10	Relieving	Manual
Tech Sheet 20160						

Filter & Lubricator Combinations

BSPP

0037	Thread	Micron	Bowl	Drain Type
FL64-608	3/4"	40	Metal	Auto
FL64-628	3/4"	40	Metal	Manual
Tech Sheet 20160				

Filter/Regulator & Lubricator Combinations

BSPP

0037	Thread	Micron	Bowl	Pressure Range Bar	Operation	Drain Type
BL64-408	1/2"	40	Metal	0.3-10	Relieving	Auto
BL64-428	1/2"	40	Metal	0.3-10	Relieving	Manual
BL64-608	3/4"	40	Metal	0.3-10	Relieving	Manual
Tech Sheet 20160						

Gauge

50mm, Centre Back Connection

0037	Thread	Pressure Range Bar
18-013-013	1/8"	0-10
Tech Sheet 20160		

OLYMPIAN PLUS PLUG-IN SYSTEM

NORGREN

General Purpose Filters

- Effective liquid removal and positive solid filtratio
- Large filter element area for minimum pressure dro
- Standard options include element service indicator, manual drain and alternative filter element
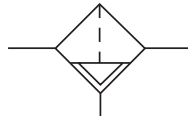
F64G Series:
Body: Zinc alloy
Bowl: Aluminium
Yoke: Zinc alloy
Filter Element: Sintered plastic
Elastomers: Synthetic rubber

F15 Series:
Body: Aluminium
Bowl: Aluminium
Yoke: Zinc alloy
Filter Element: Sintered bronze
Elastomers: Synthetic rubber
Medium: Compressed air only

Medium: Compressed air only

Working Pressure:
0-17 bar (Metal Bowl)

F64G & F68G

0037	Flow dm³/s	Micron	Bowl	Drain Type
F64G-NNN-AD3	75	40	Metal	Auto
F64G-NNN-MD3	75	40	Metal	Manual
F68G-NNN-AR3	160	40	Metal	Auto
F68G-NNN-MR3	160	40	Metal	Manual

This unit is to be used in conjunction with a Ported Yoke

Pressure Regulators

- Diaphragm and balanced valve design ensure good regulation characteristics
- Non-rising adjusting knob has snap-action lock
- Standard options include non-relieving models and alternative pressure ranges

R64G Series:
Body: Zinc alloy
Bonnet: Aluminium
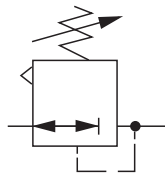**Yoke:** Zinc alloy
Elastomers: Synthetic rubber

R15 Series:
Body, Bonnet and Yoke: Aluminium
Adjusting Knob: Acetal resin
Optional T-bar Adjusting Screw: Steel
Elastomers: Synthetic rubber

Medium: Compressed air only
Gauge Ports: G1/8

Working Temperature:
-20°C to +80°C

Working Pressure:
0-17 bar (R64G)
0-20 bar (R68G)

R64G & R68G

0037	Thread	Flow dm³/s	Pressure Range Bar	Operation
R64G-NNK-RMN	-	120	0.3-10	Relieving
R64G-4GK-RMN	1/2"	120	0.3-10	Relieving
R68G-NNK-RLN	-	150	0.4-8	Relieving
Tech Sheet 20161				

This unit is to be used in conjunction with a ported yoke

Filter Regulators

- High efficiency water remova
- Good regulation characteristics
- Non-rising adjusting knob has snap-action lock
- Standard options include non-relieving models, manual drain and alternative pressure ranges

B64G Series:
Body: Zinc alloy
Bonnet and Bowl: Aluminium
Yoke: Zinc alloy
Filter Element: Sintered plastic
Elastomers: Synthetic rubber

B15 Series:
Body: Aluminium
Bonnet and Bowl: Aluminium
Yoke: Aluminium
Filter Element: Sintered bronze
Elastomers: Synthetic rubber
Adjusting Knob: Acetal resin

Medium: Compressed air only
Gauge Ports: G1/8
Operation: Relieving

Ambient Temperature:
-20°C to +80°C (Metal bowl)
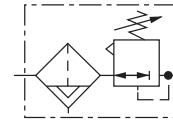
B64G & B68G

0037	Flow dm³/s	Micron	Bowl	Pressure Range Bar	Drain Type
B64G-NNK-AD3-RMN	106	40	Metal	0.3-10	Auto
B64G-NNK-MD3-RMN	106	40	Metal	0.3-10	Manual
B68G-NNK-AR3-RLN	230	40	Metal	0.4-8	Auto
Tech Sheet 20162					

This unit is to be used in conjunction with a ported yoke

High Efficiency Oil Removal Filter

F64H & F68H

0037	Thread	Flow dm³/s	Bowl	Drain Type
F64H-3GD-MD0	3/8"	28	Metal	Auto
F64H-4GD-MD0	1/2"	28	Metal	Auto
F68H-8GD-MU0	1"	60	Metal	Auto
Tech Sheet 20163				

This unit is to be used in conjunction with a ported yoke

Lubricators

L64M & L68M

0037	Thread	Bowl
L64M-2GP-EDN	1/4"	Metal
L64M-3GP-EDN	3/8"	Metal
L64M-4GP-EDN	1/2"	Metal
L64M-6GP-EDN	3/4"	Metal
L68M-NNP-ERN	-	Metal
Tech Sheet 20164		

This unit is to be used in conjunction with a ported yoke

OLYMPIAN PLUS PLUG-IN SYSTEM

Relief & Soft Start Valves

Olympian relief valves protect compressed air systems from over-pressurisation.
High relief capacity, sensitive and accurate.
Yoke must be ordered separately.
Medium: Compressed air only
Gauge port: G1/8
Relief Port:
V64 Series - G1/2
V68 Series - G1

Materials 64 Series:
Body, bonnet: zinc alloy
Bottom Plug: Aluminium
Adjusting Screw: Steel
Elastomers: Synthetic rubber
Materials 68 Series:
Intermediate body, bonnet
and bottom plug: aluminium
Adjusting Screw: Steel
Elastomers: Synthetic rubber

Working Temperature:
-20°C to +80°C

V64

V68

V64H, V68H Pressure Relief Valves

0037	Port Size
V64H-NND-RMN	1/4"-3/4"
V68H-NND-RMN	3/4"-1.1/2"
Tech Sheet 20165	

This unit is to be used in conjunction with a ported yoke

Assists machine designers in complying with the European Machineries Directive.
Can help existing machinery to comply with PUWER (Provision and Use of Work Equipment Regulations).
Controlled increase of downstream pressure on start up.
Solenoid, air pilot or manual operator.
High forward flow capacit .
High flow dump facilit .

Medium: Compressed air
Material:
Body and yoke:
Zinc alloy (yoke sold separately)
Intermediate Body and Top Plate:
Aluminium
Elastomers: Synthetic materials
Filter Discs: Sintered plastic
Internal Components:
Brass and steel

Working Temperature:
+5°C to +50°C

P64F Soft Start/Dump Valve

0037	Port Size	Flow dm³/s	Pressure Range Bar
P64F-NNC-PZN	1/4"-3/4"	57	3-10
Tech Sheet 20165			

This unit is to be used in conjunction with a ported yoke

Yokes

- When installed, enables Olympian basic units to be 'plugged in' or removed without disturbing connecting pipework

Single Unit

0037	Thread
Y64A-4GA-N1N	1/2"
Y68A-6GN-N1N	3/4"
Y68A-8GN-N1N	1"
Y68A-BGN-N1N	1.1/2"
Tech Sheet 20166	

Double Unit

0037	Thread
Y64A-4GA-N2N	1/2"
Y68A-6GN-N2N	3/4"
Y68A-BGN-N2N	1.1/2"
Tech Sheet 20166	

Shut Off Valves

- 3 port/2 position
- Easy to operate
- Lockable in the 'closed' position

PRODUCTS FOR SAFE SYSTEMS

BSPP

0037	Thread
T64T-4GB-P1N	1/2"
T68C-6GB-B2N	3/4"
Tech Sheet 20166	

Coalescing Exhaust Silencers

BSPP

0037	Thread
CS13-364-10GG	1/4"
CS13-664-10GG	1/2"
Tech Sheet 20166	

EXCELON® PLUS MODULAR AIR PREPARATION

NORGREN

Filters/Regulators & Lubricators - Box Sets

- Unique Quikclamp connection system offers full modularity
- 40µm particle and high efficiency water removal
- Double safety lock on bowl
- Integrated gauge
- Shut off valve, regulator and filter regulator with tamper resistance feature
- Light weight polycarbonate bowl

Materials:
Body: Die cast aluminum
Body covers: ABS
Transparent Bowl: Polycarbonate with polypropylene guard
Filter element: Sintered PP
Bowl 'O'- ring: Chloroprene
Elastomers: NBR
Port: BSPP
Element: (µm) 40
Lubricator: Micro-fog®
Bowl: Guarded/Polycarbonate

- Easy to read flush mounted integrated pressure gauge as standard
- All round (360°) visibility of sightdome for ease of drip rate setting
- High corrosion resistance: Body and metal bowl with electrophoretic paint finis

🌡 **Working Temperature:**
-10°C to +60°C

⏲ **Maximum Working Pressure:**
10 bar

Medium: Compressed air only
Operation: Relieving

Boxed sets including shut-off valve, gauge and mounting bracket

0037	Thread	Drain Model
BL82-201G	1/4"	Auto
BL82-221G	1/4"	Manual
BL84-301G	3/8"	Auto
BL84-321G	3/8"	Manual
BL84-401G	1/2"	Auto
BL84-421G	1/2"	Manual
Tech Sheet 71736		

Filters/Regulators

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- 5 or 40µm particle and high efficiency water removal
- Double safety lock bowl
- Push to lock adjusting knob with built in tamper resistant feature
- Light weight polycarbonate bowl with guard

Materials:
Body covers: ABS
Transparent Bowl: Polycarbonate with Polypropylene Guard
Filter Element: Synthetic fibre & PE foam
Bowl 'O'- ring: Chloroprene
Elastomers: NBR
Port: BSPP
Element: (µm) 40
Flow: (dm3/s) 100

- Easy to read flush mounted integrated pressure gauge
- Air purity classes in accordance to ISO8573-1:2010: 7:8:4 (40µm), 6:8:4 (5µm)
- High Corrosion resistance: Body and metal bowl with electrophoretic paint finish
- DoC in accordance with 2014/34/EU/ATEX

🌡 **Working Temperature:**
-10°C to +60°C

⏲ **Maximum Working Pressure:**
10 bar

Medium: Compressed air only
Operation: Relieving

B82G & B84G series

0037	Thread	Bar
B82G-2GK-AP3-RMG	1/4"	03 to 10
B82G-2GK-QP3-RMG	1/4"	03 to 10
B84G-3GK-AP3-RMG	3/8"	03 to 10
B84G-3GK-QP3-RMG	3/8"	03 to 10
B84G-4GK-AP3-RMG	1/2"	03 to 10
B84G-4GK-QP3-RMG	1/2"	03 to 10
Tech Sheet 71734		

Micro-Fog Lubricators

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- Flow sensor provides a nearly constant oil/air ratio over a wide range of flow
- Double safety lock bowl
- Light weight polycarbonate bowl

Materials:
Transparent Bowl: Polycarbonate with Polypropylene Guard
Body: Die cast zinc
Body cover: ABS
Sightdome: Transparent PA
Bowl 'O'- ring: Chloroprene
Elastomers: NBR

Medium: Compressed air only
Operation: Relieving

- All round (360°) visibility of sightdome for ease of drip rate setting
- Choice of two oil delivery systems
- High Corrosion resistance: Body and metal bowl with electrophoretic paint finis

🌡 **Working Temperature:**
-10°C to +60°C

⏲ **Maximum Working Pressure:**
10 bar

L82C, L82M & L84C, L84M series

0037	Thread	Flow (dm³/s)
L82M-2GP-EPN	1/4"	22
L84M-3GP-EPN	3/8"	73
L84M-4GP-EPN	1/2"	73
Tech Sheet 71743		

NORGREN

For **Norgren Non-return Valves**
see page **864**

EXCELON® PLUS MODULAR SYSTEM

General Purpose Filters

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- 5 or 40µm particle and high efficiency water removal (> 98%)
- Double safety lock bowl
- Light weight polycarbonate bowl

Materials:
Body: Die cast aluminum
Body covers: ABS
Bonnet: Acetal Valve: PP
Transparent Bowl: Polycarbonate with polypropylene guard
Filter element: Sintered PP
Bowl 'O'- ring: Chloroprene
Elastomers: NBR

Port: BSPP
Element: (µm) 40
Bowl: Guarded/Polycarbonate

- Air purity classes in accordance to ISO8573-1:2010: 7:8:4 (40µm), 6:8:4 (5µm)
- High Corrosion resistance: Body and metal bowl with electrophoretic paint finish
- DoC in accordance with 2014/34/EU/ATEX

Working Temperature:
-10°C to +60°C

Maximum Working Pressure:
10 bar

Medium: Compressed air only
Operation: Relieving

F82G & F84G series

0037	Thread	Flow (dm³/s)
F82G-2GN-AP3	1/4"	23
F82G-2GN-QP3	1/4"	23
F84G-3GN-AP3	3/8"	78
F84G-3GN-QP3	3/8"	78
F84G-4GN-AP3	1/2"	78
F84G-4GN-QP3	1/2"	78
Tech Sheet 71741		

'Puraire'® High Efficiency Oil Removal Filter

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- High efficiency oil and particle removal
- Double safety lock bowl
- Light weight polycarbonate bowl
- Service indicator standard
- Air purity class in accordance with ISO8573-1:2010: 1:7:1* *Tested in

Materials:
Body: Die cast aluminum
Body covers: ABS
Bonnet: Acetal Valve: PP
Transparent Bowl: Polycarbonate with polypropylene guard
Filter element: Synthetic fibre & PE foam
Bowl 'O'- ring: Chloroprene
Elastomers: NBR

Port: BSPP
Element: (µm) 40
Bowl: Guarded/Polycarbonate

accordance with the methods laid out in ISO 12500-1 using an inlet oil aerosol concentration of 4mg/m³

- High Corrosion resistance: Body and metal bowl with electrophoretic paint finish
- DoC in accordance with 2014/34/EU/ATEX

Working Temperature:
-10°C to +60°C

Maximum Working Pressure:
10 bar

Medium: Compressed air only
Operation: Relieving

F82C & F84C series

0037	Thread	Flow (dm³/s)
F82C-2GD-AP0	1/4"	5.5
F82C-2GD-QP0	1/4"	5.5
F84C-3GD-AP0	3/8"	25
F84C-3GD-QP0	3/8"	25
F84C-4GD-AP0	1/2"	25
F84C-4GD-QP0	1/2"	25
Tech Sheet 71739		

Pressure Regulators

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- Push to lock adjusting knob with built in tamper resistant feature
- Easy to read flush mounted integrated pressure gauge as standard

Materials:
Body: Die cast aluminium
Body covers: ABS
Bonnet: POM/Aluminium
Valve: PP
Elastomers: NBR

Port: BSPP
Bar: 03 - 10

Medium: Compressed air only
Operation: Relieving

- High Corrosion resistance: Body bowl with electrophoretic paint finish
- EX DoC in accordance with 2014/34/EU/ATEX

Working Temperature:
-10°C to +60°C

Maximum Working Pressure:
10 bar

R82G & R84G Series

0037	Thread	Flow (dm3 /s)
R82G-2GK-RMG	1/4"	125
R84G-3GK-RMG	3/8"	125
R84G-4GK-RMG	1/2"	125
Tech Sheet 71745		

3/2 Shut Off Valves

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- 3/2 way function
- Threaded exhaust port
- Lockable in closed position with padlock

T82T & T84T Series

0037	Port Size	Exhaust Port
T82T-2GA-B1N	1/4"	1/4"
T84T-3GA-B1N	3/8"	1/4"
T84T-4GA-B1N	1/2"	1/4"
Tech Sheet 71747		

EXCELON® PLUS MODULAR AIR PREPARATION

Wall Mounting Bracket

• Provides secure wall mounting for individual Excelon® Plus products

0037	Series
820024-50KIT	82
840024-50KIT	84
Tech Sheet 71736	

Quickclamp

• Allows easy connection of one Excelon® Plus unit to another
• Uniquely, connected products can be rotated in 90° increments

0037	Series
820014-51KIT	82
840014-51KIT	84
Tech Sheet 71736	

NORGREN®

For **Norgren Pneufi ®** Push-In Fittings
see page **862**

Neck Mounting Bracket and Panel Nut

• Provides secure wall mounting for individual pressure regulators, filte -regulators and pressure relief valves
• Includes panel nut

0037	Series
820068-51KIT	82
840068-51KIT	84
Tech Sheet 71736	

Quickclamps and Wall Brackets

• Allows easy connection of one Excelon® Plus unit to another
• Uniquely, connected products can be rotated in 90° increments
• Secure mounting to a wall, panel or machine surface

0037	Series
820014-52KIT	82
840014-52KIT	84
Tech Sheet 71736	

Panel Mounting Ring

• Allows bonnets with panel mounting thread to be directly mounted

0037	Series
820048-89KIT	82
840048-01KIT	84
Tech Sheet 71736	

PORTED FILTERS & REGULATORS

Filter Regulator & Lubricator Box Set

- Miniature boxed sets offer rapid set up and installation.
- Boxed sets are pre-assembled and ready to install.

Medium: Compressed air only
Body: Zinc alloy
Bowls: Polycarbonate
Filter Element: Polypropylene
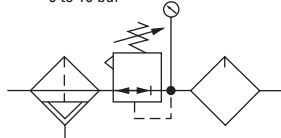**Elastomers:** Nitrile

Working Temperature:
-20°C to +50°C
Consult our Technical Service for use below +2°C

Inlet Pressure:
0 to 10 bar

- Set consists of a filter/regulato , lubricator, shut-off valve, mounting bracket and pressure gauge.

Box Set 07, BSPP

0037	Thread
BL07-201	1/4"
Tech Sheet 20746	

Ported Pureaire Oil Removal Filters

- High efficiency coalescing oil-removal filter
- Air quality to ISO 8573-1: Class 1.7.2.

Medium: Compressed air only
Remaining Oil content at +21°C:
0,01 ppm maximum
0,5 ppm maximum (high flow units
Particle Removal: 0,01 µm, 1 µm (high flow units
Bowl: Polycarbonate to BS 6005, Zinc alloy (optional)

- Maximum remaining oil content 0,01 ppm, particle removal to 0,01 µm
- Automatic drain fitted as standar

Body: Zinc alloy
Filter Element:
Synthetic fibre and polypropylene foa
Elastomers: Neoprene and nitrile

Working Temperature:
-20°C to +50°C
(Transparent Bowl)

Inlet Pressure:
0 to 10 bar (Transparent bowl)

F39, BSPP

0037	Thread	Flow dm³/s	Drain Type	Bowl
F39-100-A0TG	1/8"	2.8	Auto	Transparent
F39-200-M0MG	1/4"	3	Manual	Metal
F39-200-M0TG	1/4"	3	Manual	Transparent
Tech Sheet 20747				

Ported Pressure Regulators
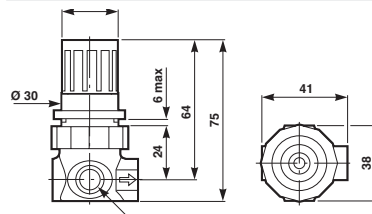
R07, BSPP

0037	Thread	Flow dm³/s	Pressure Range Bar	Operation
R07-100-RNKG	1/8"	7.5	0.3-7	Relieving
R07-200-RNKG	1/4"	7	0.3-7	Relieving
Tech Sheet 10637				

R18, Pilot Operated, BSPP

0037	Thread	Flow dm³/s	Pressure Range Bar
R18-B00-RNXD	1.1/2"	1000	0.16-17
R18-C00-RNXD	2"	1000	0.16-17
Tech Sheet 10636			
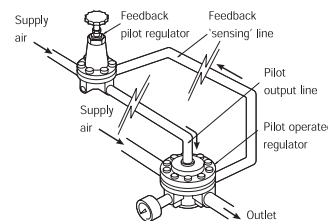
11-808 & 11-204, Pilot Operated, BSPP

0037	Thread	Flow dm³/s	Pressure Range Bar	Operation
11-808-960	3/4"	180	0.16-17	Relieving
11-204-004	1/4"	N/A	0.16-17	Relieving
11-204-006	1/4"	N/A	4-17	Relieving
Tech Sheet 10636				

General Use, BSPP

0037	Thread	Flow dm³/s	Pressure Range Bar
20AG-X4G-PH100	1/2"	60	0.2-8
20AG-X4G-PJ100	1/2"	60	7-16
Tech Sheet 10637			

PORTED FILTERS & REGULATORS

NORGREN

Drip Leg Drain

17-816, BSPP

0037	Thread	Bowl
17-816-999	G1/2"	Transparent
17-816-998	G1/2"	Metal
Tech Sheet 10635		

Ported Lubricator

- Transparent bowl
- Bowl capacity 31ml
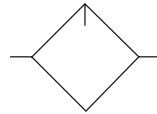
L07, BSPP

0037	Thread	Flow dm³/s	Start Point dm³/s
L07-100-MPQG	G1/8"	5	0.24
Tech Sheet 10634			

Ported Pressure Relief Valve
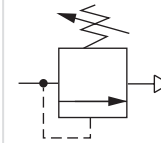
V07, Diaphragm Type, BSPP

0037	Thread	Pressure Range Bar
V07-200-NNLG	G1/4"	0.3-9
Tech Sheet 10633		

Ported Precision Pressure Regulators

- 11-818† compact, high precision regulators for air gauging, laboratory use and precise pilot control.
- † Not recommended for dead end use, consult our technical service for details.

Working Temperature:
-20°C to +80°C
Consult our Technical Service for use below +2°C

Inlet Pressure:
0 to 14 bar (11-818-110)
0 to 8 bar (11-818-999)

11-818, BSPP

0037	Thread	Accuracy Bar	Pressure Range Bar	Operation
11-818-999	G1/4"	0.01	0.02-0.5	Relieving
11-818-100	G1/4"	0.03	0.07-4	Relieving
11-818-110	G1/4"	0.05	0.4-10	Relieving
Tech Sheet 1362				

Pressure Gauges

18-013, BSPT

0037	Thread	Pressure Range Bar	Gauge Diameter mm	Type
18-013-990	R1/8"	0-4	40	Centre Back
18-013-989	R1/8"	0-10	40	Centre Back

General Purpose Filter

- High flow miniature uni
- Direct ported filters with high water removal efficien
- Automatic drains supplied as standard

Medium: Compressed air only
Filter element: 40µm

Materials:
Body: Zinc alloy
Bowls: Plastic or zinc alloy
Filter Element: Polypropylene
Elastomers: Nitrile

Working Temperature:
-34°C to +50°C

Inlet Pressure:
0 to 10 bar

F07 Series

0037	Manual Drain	Thread
F07-100-A3TG	F07-100-M3TG	G1/8"
F07-200-A3TG	F07-200-M3TG	G1/4"
Tech Sheet 71738		

Pre-Set Regulator

- Factory pre-set and sealed to give a regulated pressure of 2 bar
- Tamper resistant
- Compact

Medium: Compressed air only
Filter element: 40µm

Materials:
Body: Zinc alloy
Bonnet: Aluminium alloy
Valve: Brass
Seals: NBR

Working Temperature:
-20°C to +80°C

Inlet Pressure:
0 to 28 bar

R16 Series

0037	Thread
R16-200-R30G	G1/4"
Tech Sheet 71750	

AIR PREPARATION

MX is the new series of air treatment components, characterised by a modern, linear and compact design. The perfect integration between metal alloys and technopolymers allows a reliable product that is light and strong at the same time.

Series MX offers a multi-sector solution that guarantees saving in terms of installation time, space and cost.

Other options available, please contact our Business Development Team.

Series MX, Filter Regulator Lubricator Kits

Complete filter regulator set with bracket and integrated gauge.
- Fully modular and compact
- Lightweight
- Durable
- Improved flow rate performance
- Locking cap

Filter Regulator Kit MX2, Semi-auto Drain, 25 Micron, 0.5-10 bar

0158	Thread
FR-MX2-3/8-KIT	G3/8"
FR-MX2-1/2-KIT	G1/2"
FR-MX2-3/4-KIT	G3/4"
	Tech Sheet 20120

Filter Regulator Kit MX3, Semi-auto Drain, 25 Micron, 0.5-10 bar

0158	Thread
FR-MX3-3/4-KIT	G3/4"
FR-MX3-1-KIT	G1"
	Tech Sheet 20120

Filter Regulator Lubricator Kit MX2, Semi-auto Drain, 25 Micron, 0.5-10 bar

0158	Thread
FRL-MX2-3/8-KIT	G3/8"
FRL-MX2-1/2-KIT	G1/2"
FRL-MX2-3/4-KIT	G3/4"
	Tech Sheet 20120

Filter Regulator Lubricator Kit MX3, Semi-auto Drain, 25 Micron, 0.5-10 bar

0158	Thread
FRL-MX3-3/4-KIT	G3/4"
FRL-MX3-1-KIT	G1"
	Tech Sheet 20120

Series MX, Modular Pressure Regulators

Working Temperature: -5ºC to +50ºC

Maximum Working Pressure: 16 bar

Series MX2, Pressure Regulators, Self-relieving with Gauge

0158	Thread	Pressure Range Bar
MX2-3/8-R004	G3/8"	0.5-10
MX2-1/2-R004	G1/2"	0.5-10
MX2-3/4-R004	G3/4"	0.5-10
	Tech Sheet 68728	

Series MX3, Pressure Regulators, Self-relieving with Gauge

0158	Thread	Pressure Range Bar
MX3-3/4-R004	G3/4"	0.5-10
MX3-1-R004	G1"	0.5-10
	Tech Sheet 68728	

Series MX2, Pressure Regulators, Non-relieving with Gauge

0158	Thread	Pressure Range Bar
MX2-3/8-R014	G3/8"	0.5-10
MX2-1/2-R014	G1/2"	0.5-10
MX2-3/4-R014	G1"	0.5-10
	Tech Sheet 68728	

Series MX3, Pressure Regulators, Non-relieving with Gauge

0158	Thread	Pressure Range Bar
MX3-3/4-R014	G3/4"	0.5-10
MX3-1-R014	G1"	0.5-10
	Tech Sheet 68728	

AIR PREPARATION

Ex   **CAMOZZI**
Automation

MX is the new series of air treatment components, characterised by a modern, linear and compact design. The perfect integration between metal alloys and technopolymers allows a reliable product that is light and strong at the same time.

Series MX offers a multi-sector solution that guarantees saving in terms of installation time, space and cost.

Other options available, please contact our Business Development Team.

Working Temperature:
-5ºC to +50ºC

Maximum Working Pressure:
16 bar

Series MX, Modular Filters

Series MX2, Semi-auto Drain Filters, No Indicator

0158	Thread	Micron
MX2-3/8-F00	G3/8"	25
MX2-1/2-F00	G1/2"	25
MX2-3/4-F00	G3/4"	25
	Tech Sheet 68728	

Series MX3, Semi-auto Drain Filters, No Indicator

0158	Thread	Micron
MX3-3/4-F00	G3/4"	25
MX3-1-F00	G1"	25
	Tech Sheet 68728	

Series MX2, Auto Drain Filters, No Indicator

0158	Thread	Micron
MX2-3/8-F03	G3/8"	25
MX2-1/2-F03	G1/2"	25
MX2-3/4-F03	G3/4"	25
	Tech Sheet 68728	

Series MX3, Auto Drain Filters, No Indicator

0158	Thread	Micron
MX3-3/4-F03	G3/4"	25
MX3-1-F03	G1"	25
	Tech Sheet 68728	

Series MX2, Semi-auto Drain Coalescing Filters

0158	Thread	Micron
MX2-3/8-FC00	G3/8"	0.01
MX2-1/2-FC00	G1/2"	0.01
MX2-3/4-FC00	G3/4"	0.01
	Tech Sheet 68728	

Series MX3, Semi-auto Drain Coalescing Filters

0158	Thread	Micron
MX3-3/4-FC00	G3/4"	0.01
MX3-1-FC00	G1"	0.01
	Tech Sheet 68728	

Series MX2, Auto Drain Coalescing Filters

0158	Thread	Micron
MX2-3/8-FC03	G3/8"	0.01
MX2-1/2-FC03	G1/2"	0.01
MX2-3/4-FC03	G3/4"	0.01
	Tech Sheet 68728	

Series MX3, Auto Drain Coalescing Filters

0158	Thread	Micron
MX3-3/4-FC03	G3/4"	0.01
MX3-1-FC03	G1"	0.01
	Tech Sheet 68728	

AIR PREPARATION

MX is the new series of air treatment components, characterised by a modern, linear and compact design. The perfect integration between metal alloys and technopolymers allows a reliable product that is light and strong at the same time.

Series MX offers a multi-sector solution that guarantees saving in terms of installation time, space and cost.

Other options available, please contact our Business Development Team.

Working Temperature:
-5°C to +50°C

Maximum Working Pressure:
16 bar

Series MX, Modular Filters

Series MX2, Activated Carbon Filters, No Indicator

0158	Thread
MX2-3/8-FCA	G3/8"
MX2-1/2-FCA	G1/2"
MX2-3/4-FCA	G3/4"
Tech Sheet 68728	

Series MX3, Activated Carbon Filters, No Indicator

0158	Thread
MX3-3/4-FCA	G3/4"
MX3-1-FCA	G1"
Tech Sheet 68728	

Series MX, Modular Lubricators

Series MX2, Lockable Manual Valves

0158	Thread
MX2-3/8-V01	G3/8"
MX2-1/2-V01	G1/2"
MX2-3/4-V01	G1"
Tech Sheet 68728	

Series MX3, Lockable Manual Valves

0158	Thread
MX3-3/4-V01	G3/4"
MX3-1-V01	G1"
Tech Sheet 68728	

Series MX, Modular Valves

Series MX2, Lubricators

0158	Thread
MX2-3/8-L00	G3/8"
MX2-1/2-L00	G1/2"
MX2-3/4-L00	G3/4"
Tech Sheet 68728	

Series MX3, Lubricators

0158	Thread
MX3-3/4-L00	G3/4"
MX3-1-L00	G1"
Tech Sheet 68728	

Series MX2, 3/2 Lockable Electro-pneumatic Isolation Valves

0158	Thread
MX2-3/8-V16	G3/8"
MX2-1/2-V16	G1/2"
MX2-3/4-V16	G3/4"
Tech Sheet 68728	

Series MX3, 3/2 Lockable Electro-pneumatic Isolation Valves

0158	Thread
MX3-3/4-V16	G3/4"
MX3-1-V16	G1"
Tech Sheet 68728	

AIR PREPARATION

MX is the new series of air treatment components, characterised by a modern, linear and compact design. The perfect integration between metal alloys and technopolymers allows a reliable product that is light and strong at the same time.

Series MX offers a multi-sector solution that guarantees saving in terms of installation time, space and cost.

Other options available, please contact our Business Development Team.

Working Temperature:
-5°C to +50°C

Maximum Working Pressure:
16 bar

Series MX, Modular Valves

Series MX2, 3/2 Lockable Pneumatic Isolation Valves

0158	Thread
MX2-3/8-V36	G3/8"
MX2-1/2-V36	G1/2"
MX2-3/4-V36	G3/4"
Tech Sheet 68728	

Series MX3, 3/2 Lockable Pneumatic Isolation Valves

0158	Thread
MX3-3/4-V36	G3/4"
MX3-1-V36	G1"
Tech Sheet 68728	

Series MX2, Soft Start Valves

0158	Thread
MX2-3/8-AV	G3/8"
MX2-1/2-AV	G1/2"
MX2-3/4-AV	G3/4"
Tech Sheet 68728	

Series MX3, Soft Start Valves

0158	Thread
MX3-3/4-AV	G3/4"
MX3-1-AV	G1"
Tech Sheet 68728	

Series MX, Modular Take-off Blocks

Series MX2, Block, 4 Outlets, BSPP

0158	Outlet
MX2-1/2-B00	G1/2"
Tech Sheet 68728	

Series MX3, Block, 4 Outlets, BSPP

0158	Outlet
MX3-1-B00	G1"
Tech Sheet 68728	

Series MX, Accessories
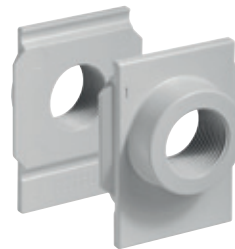
Series MX2, Terminal Flanges

0158	Thread
MX2-3/8-FL	G3/8"
MX2-1/2-FL	G1/2"
MX2-3/4-FL	G3/4"
Tech Sheet 68728	

Series MX3, Terminal Flanges

0158	Thread
MX3-3/4-FL	G3/4"
MX3-1-FL	G1"
Tech Sheet 68728	

Series MX2, Fixing Bracket for Regulators

0158
MX2-S
Tech Sheet 68728

Series MX3, Fixing Bracket for Regulators

0158
MX3-S
Tech Sheet 68728

AIR PREPARATION

Ex   **CAMOZZI** Automation

> **MX is the new series of air treatment components,** characterised by a modern, linear and compact design. The perfect integration between metal alloys and technopolymers allows a reliable product that is light and strong at the same time.
>
> Series MX offers a multi-sector solution that guarantees saving in terms of installation time, space and cost.
>
> **Other options available, please contact our Business Development Team.**

Working Temperature:
-5°C to +50°C

Maximum Working Pressure:
16 bar

Series MX, Accessories

Series MX2, Rapid Clamp

0158
MX2-X
Tech Sheet 68728

Series MX3, Rapid Clamp

0158
MX3-X
Tech Sheet 68728

Series MX2, Rapid Clamp with Wall Bracket

0158
MX2-Y
Tech Sheet 68728

Series MX3, Rapid Clamp with Wall Bracket

0158
MX3-Y
Tech Sheet 68728

Precision Regulators

Series PR precision pressure regulators work on a three diaphragm force-balance principle which allows them to react even to the smallest changes in pressure that can occur during operation.

- High precision
- Triple diaphragm construction
- Compact dimensions
- Adjustable lock
- Removable adjustment knob
- Three ranges of pressure

Working Temperature:
0°C to +50°C

Series PR, Manual Override

0158	Thread	Pressure Range Bar
PR104-M02	G1/4"	0.05 to 2
PR104-M04	G1/4"	0.05 to 4
PR104-M07	G1/4"	0.05 to 7
Tech Sheet 20464		

Digital Gauges

Series PG digital pressure gauges meet the needs of an even more precise pressure adjustment, above all in proportional control.

Thanks to the IP65 protection class these pressure gauges are particularly suitable for applications where the highest environmental protection is required.

Pressure, BSPP

0158	Thread	Pressure Range Bar
PG010-PB-1/8	G1/8"	0 to 10
PG010-PB-1/4	G1/4"	0 to 10
Tech Sheet 20465		

Vacuum, BSPP

0158	Thread	Pressure Range Bar
PG001-VB-1/8	G1/8"	0.01 to -1
PG001-VB-1/4	G1/4"	0.01 to -1
Tech Sheet 20465		

AIR PREPARATION

CAMOZZI
Automation

Series MD air preparation product line has been designed to meet the numerous demands of a market requiring light and compact modular products which are characterised by high performance, flexible connection and orientation.

The different functions are connected to each other by means of intermediate joining cartridges.

Thanks to the solution adopted for the pneumatic connection, it is possible to equip the same element with interchangeable cartridges that are available in different sizes and can either be threaded or integrated with a super rapid push-in fitting.

Working Temperature:
-5°C to +50°C

Maximum Working Pressure:
16 bar

Series MD, Modular Filter + Regulator + Lubricator Combination Units

Semi-auto Drain, 25 Micron, supplied with Mounting Bracket & Gauge, BSPP

0158	Thread
MD1-000014-1/8	G1/8"
MD1-000014-1/4	G1/4"
MD1-000014-3/8	G3/8"
Tech Sheet 60158	

Semi-auto Drain, 25 Micron, supplied with Mounting Bracket & Gauge, Tube

0158	OD mm
MD1-000014-6	6
MD1-000014-8	8
MD1-000014-10	10
Tech Sheet 60159	

Series MD, Modular Filter/ Regulator + Lubricator Combination Units

Semi-auto Drain, 25 Micron, supplied with Mounting Bracket & Gauge, BSPP

0158	Thread
MD1-000015-1/8	G1/8"
MD1-000015-1/4	G1/4"
MD1-000015-3/8	G3/8"
Tech Sheet 60160	

Semi-auto Drain, 25 Micron, supplied with Mounting Bracket & Gauge, Tube

0158	OD mm
MD1-000015-6	6
MD1-000015-8	8
MD1-000015-10	10
Tech Sheet 60161	

Series MD, Modular Lockable Isolation Filter/Regulator + Lubricator Combination Units

Semi-auto Drain, 25 Micron, supplied with Mounting Bracket & Gauge, BSPP

0158	Thread
MD1-000016-1/8	G1/8"
MD1-000016-1/4	G1/4"
MD1-000016-3/8	G3/8"
Tech Sheet 60162	

Semi-auto Drain, 25 Micron, supplied with Mounting Bracket & Gauge, Tube

0158	OD mm
MD1-000016-6	6
MD1-000016-8	8
MD1-000016-10	10
Tech Sheet 60163	

AIR PREPARATION

Ex **CAMOZZI** Automation

Working Temperature:
-5ºC to +50ºC

Maximum Working Pressure:
16 bar

Series MD, Modular Pressure Regulators

Series MD modular products are listed with blank ports. This enables versatility with the product and can be fitted with either threaded or tube fitting cartridges.

Pressure Regulators, Self-relieving

0158	Pressure Range Bar
MD1-R000	0.5-10
MD1-R200	0-2
MD1-R400	0-4
MD1-R700	0.5-7
Tech Sheet 60168	

Pressure Regulators, Non-relieving

0158	Pressure Range Bar
MD1-R010	0.5-10
MD1-R210	0-2
MD1-R410	0-4
MD1-R710	0.5-7
Tech Sheet 60168	

Series MD, Modular Filter Regulators

0.5-10 bar, 25 Micron

0158	Description
MD1-FR0000	Semi-auto Drain
MD1-FR0500	Auto Drain
MD1-FR0800	Without Drain
Tech Sheet 60170	

Series MD, Modular Filters

Semi-auto Drain

0158	Description	Micron
MD1-F000	No Indicator	25
MD1-F100	No Indicator	5
MD1-F001	With Indicator	25
MD1-F101	With Indicator	5
Tech Sheet 60164		

Auto Drain Filters

0158	Description	Micron
MD1-F050	No Indicator	25
MD1-F150	No Indicator	5
MD1-F051	With Indicator	25
MD1-F151	With Indicator	5
Tech Sheet 60165		

Activated Carbon Filters

0158	Description
MD1-FCA0	No Indicator
MD1-FCA1	With Indicator
Tech Sheet 60166	

Semi-auto Drain Coalescing Filters

0158	Description	Micron
MD1-FC000	No Indicator	0.01
MD1-FC100	No Indicator	1
MD1-FC001	With Indicator	0.01
MD1-FC101	With Indicator	1
Tech Sheet 60167		

Auto Drain Coalescing Filters

0158	Description	Micron
MD1-FC050	No Indicator	0.01
MD1-FC150	No Indicator	1
MD1-FC051	With Indicator	0.01
MD1-FC151	With Indicator	1
Tech Sheet 60167		

AIR PREPARATION

CAMOZZI
Automation

Series MD, Modular Lubricator

🌡 **Working Temperature:**
-5ºC to +50ºC

⏲ **Maximum Working Pressure:**
16 bar

Lubricator

0158
MD1-L00
Tech Sheet 60169

Series MD, Modular Valves

3/2 Lockable Isolation Valves

0158	Description
MD1-V36	Pneumatic Control
MD1-V01	Lockable Manual Control
Tech Sheet 60171	

Soft Start Valve

0158
MD1-AV
Tech Sheet 60172

Series MD modular products are listed with blank ports. This enables versatility with the product and can be fitted with either threaded or tube fitting cartridges.

Series MD, Modular Take-off Blocks

Block, 4 Outlets, BSPP

0158	Outlet
MD1-B00	1/8"
Tech Sheet 60173	

Cartridge, 2 Outlets, BSPP

0158	Outlet
MD1-B	1/8"
Tech Sheet 60174	

Series MD, Porting Cartridges

Porting cartridges can be used on all Series MD module equipment, offering versatility.

Joining Cartridge

0158
MD1-C
Tech Sheet 60175

Threaded, BSPP

0158	Thread
MD1-A-1/8	1/8"
MD1-A-1/4	1/4"
MD1-A-3/8	3/8"
Tech Sheet 60175	

Push Fit

0158	OD mm
MD1-A-6	6
MD1-A-8	8
MD1-A-10	10
Tech Sheet 60175	

Series MD, Mounting Bracket

Other mounting types available.

Rear Mounting Bracket

0158
MD1-ST/1
Tech Sheet 60176

AIR PREPARATION EQUIPMENT

Parker

Filter Regulator + Lubricator

Parker's P3L Lite combination kit is a configure two-piece unit consisting of a filter regulator and mist-style lubricator.

The P3L combination kit provides accurate pressure regulation, high moisture removal efficienc , and proportional oil delivery over a wide range of air flows

Working Temperature:
0°C to +50°C

Maximum Working Pressure: 10 bar

P3L Lite FRL Combination Kit

0677	Thread	Drain Type
P3LCA12PESNGLNW	1/4"	Semi-auto
Tech Sheet 68749		

Filter Regulator

P3L Lite Particulate Filter Regulator

0677	Thread	Drain Type
P3LEA12EPSBNNP	1/4"	Semi-auto
Tech Sheet 68749		

Regulator

Parker's P3LR is a lightweight pressure regulator with an unbalanced poppet design, offering good response and accurate pressure regulation. For low flow an space-restricted applications, this product can provide a solution that does not sacrifice performance. The P3LR can also be mounted using a modular connector, limited to two other P3L air preparation product units. The various options available, such as pressure gauge, relieving and non-relieving, pressure range, preset pressures and tamper-proof options, make this series easy to design to your application. Flow rates up to 12.8dm³/s.

P3L Lite Regulator

0677	Thread	Material
P3LRA12BNNP	1/4"	Polymer
P3LRX12BNNP	1/4"	Brass
Tech Sheet 68748		

Filter

Parker's P3LF is a lightweight particulate filter tha delivers high moisture removal in a compact package. The P3LF is used for the removal of solid particle contaminants down to 5 micron and the separation of bulk liquids.

This type of filter is generally used in industrial applications where liquid water, oil, and harmful dirt particles must be removed from the compressed air system.

For specific flow and space restricte applications, this product can provide a solution that does not sacrifice performance

Maximum Working Pressure: 150 bar

P3L Lite Particulate Filter

0677	Thread	Drain Type
P3LFA12EPSN	1/4"	Pulse
Tech Sheet 68750		

Coalescing Filter

Parker's P3LF, a lightweight coalescing filte , is designed to remove liquid aerosols, water, oil and sub-micron particulate matter from your pneumatic system. These filters will provide oil-free air for severa demanding applications.

The P3LF is specifically designed fo the removal of solid particles, water and oil aerosols down to 0.01 micron.

P3L Lite Coalescing Filter

0677	Thread	Drain Type
P3LFA12CPPN	1/4"	Manual
Tech Sheet 68751		

Adsorber Filter

P3L Lite Adsorber Filter

0677	Thread	Drain Type
P3LFA12APPN	1/4"	Manual
Tech Sheet 68752		

Lubricator

The P3LL is a lightweight lubricator that injects a mist of oil into the flowing air stream to automatically provide the correct amount of internal lubrication for air tools and other pneumatic devices.

This type of lubricator can be precisely adjusted to a very low oil flow rate because only a portion of the oil drops seen in the sight dome travels downstream. Proportional oil is delivered over a wide range of air flows and a precision needle valve assures repeatable oil delivery. A slight adjustment can provide a desired mist rate.

This unit is ideal for low and high flow applications that demand uniform lubrication in a robust package. ISO/ASTM VG32 oil is suggested for lubrication and will allow the product to perform at peak performance. Do not use oils with additives, compounded oils containing solvents, graphite, detergents or synthetic oils.

P3L Lite Lubricator

0677	Thread
P3LLA12LPNN	1/4"
Tech Sheet 68753	

Accessories

P3L Lite Accessories

0677	Description
P3LKA00MR	Neck Mounting Bracket
P3LKA00MW	Mounting Bracket for P3LFA or P3LLA
P3LKA00MP	Plastic Panel Mount Nut
P3LKA00MM	Aluminium Panel Mount Nut
P3LMA12020C	Manifold Block
P3LKA00CB1	Connector Kit, FR or R to F or L
P3LKA00CB2	Connector Kit, FR or R to M to F or L
P3LKA00CB3	Connector Kit, FR or R to F to F
P3LKA00CB4	Connector Kit, F to F or L

AIR PREPARATION

PNEUMAX

Airplus Service Units

**Size 1 FRL
Air Service Units,
BSPP**

0110	Thread	Range
GT171BHH	1/4"	0-12

**Size 3 FRL
Air Service Units,
BSPP**

0110	Thread	Drain
GT173BHH	1/2"	Semi
GT173BHHS	1/2"	Auto

**Size 2 FRL
Air Service Units,
BSPP**

0110	Thread	Drain
GN172AHHS	1/4"	Semi
GT172BHH	3/8"	Semi
GT172BHHS	3/8"	Auto

**Size 4 FRL
Air Service Units,
BSPP**

0110	Thread	Drain
GN174BHHS	1"	Auto

Airplus Filter/Regulators

Size 1 Filter/Regulator, BSPP

0110	Thread	Pressure Range Bar
N171AEBD	1/8"	0-12
T171BEBD	1/4"	0-12

Size 2 Filter/Regulator

0110	Thread	Pressure Range Bar
T172BEBD	3/8"	0-12

Size 3 Filter/Regulator

0110	Thread	Pressure Range Bar
T173BEBD	1/2"	0-12

Size 4 Filter/Regulator

0110	Thread	Pressure Range Bar
N174BEBD	1"	0-12

Airplus Filter/Regulators Complete with Pressure Gauge

Size 1 Filter/Regulator

0110	Thread	Pressure Range Bar
N171AEMBD	1/8"	0-12
T171BEMBD	1/4"	0-12

Size 2 Filter/Regulator

0110	Thread	Pressure Range Bar
T172BEMBB	3/8"	0-4
T172BEMBD	3/8"	0-12

Size 3 Filter/Regulator

0110	Thread	Pressure Range Bar
T173BEMBD	1/2"	0-12

Size 4 Filter Regulator

0110	Thread	Pressure Range Bar
N174BEMBD	1"	0-12

AIR PREPARATION

Airplus Filter/Regulators Complete with Pressure Switch

Size 1 Filter/Regulator

0110	Thread	Pressure Range Bar
N171AEPBDA	1/8"	0-12

Size 2 Filter/Regulator

0110	Thread	Pressure Range Bar
T172BEPBDA	3/8"	0-12

Size 3 Filter/Regulator

0110	Thread	Pressure Range Bar
T173BEPBDA	1/2"	0-12

Size 4 Filter/Regulator

0110	Thread	Pressure Range Bar
N174BEPBDA	1"	0-12

Accessories

Pressure Switch Connecting Cables

0110	Description
MCH1	M8 Cable 3 Wires, 2.5 Metres

Airplus Regulators Complete with Pressure Gauge

Size 1 Regulator, BSPP

0110	Thread	Pressure Range Bar
T171BRMA	1/4"	0-2
T171BRMB	1/4"	0-4
T171BRMC	1/4"	0-8
T171BRMD	1/4"	0-12

Size 2 Regulator, BSPP

0110	Thread	Pressure Range Bar
T172BRMA	3/8"	0-2
T172BRMB	3/8"	0-4
T172BRMC	3/8"	0-8
T172BRMD	3/8"	0-12

Size 3 Regulator, BSPP

0110	Thread	Pressure Range Bar
T173BRMA	1/2"	0-2
T173BRMC	1/2"	0-8
T173BRMD	1/2"	0-12

Size 4 Regulator, BSPP

0110	Thread	Pressure Range Bar
N174BRMA	1"	0-2
N174BRMD	1"	0-12

Airplus Lubricators

Size 1 Lubricator, BSPP

0110	Thread
T171BL	1/4"

Size 2 Lubricator, BSPP

0110	Thread
T172BL	3/8"

Size 3 Lubricator, BSPP

0110	Thread
T173BL	1/2"

Size 4 Lubricator, BSPP

0110	Thread
N174BL	1"

AIR PREPARATION

PNEUMAX

Airplus Filters

Size 1 Filter, BSPP

0110	Thread
T171BFB	1/4"

Size 2 Filter, BSPP

0110	Thread
T172BFB	3/8"

Size 3 Filter, BSPP

0110	Thread
T173BFB	1/2"

Airplus Valves

Manual Shut-off Valves, BSPP

0110	Thread	Size
T171BVL	1/4"	1
T172BVL	3/8"	2
T173BVL	1/2"	3

High/Low Pressure Devices

High/Low Solenoid Pressure Device - 1/8"

0110	Description
900.18.8E	Solenoid Hi-Lo Pressure Device

Airplus Valves

Electric Sol Shut Off Valves, BSPP

0110	Thread	Size
T171BVEB2	1/4"	1
T172BVEB2	3/8"	2
T173BVEB2	1/2"	3

Soft Start Valves, BSPP

0110	Thread	Size
T172BAP	3/8"	2

Manifolds, BSPP

0110	Thread	Size
T171BPA	1/4"	1

Pressure Switches, BSPP

0110	Thread	Size
T171BPP	1/4"	1

Airplus Accessories

Airplus X Coupling Flange Size 1-4

0110	Size
T171X	1
T172X	2

Airplus Y Coupling Flange Range Size 1-4

0110	Size
T171Y	1
T173Y	3

Airplus Fixing Bracket Size 1-3

0110	Size
T17150	1
T17250	2 & 3

MB Type 22mm Coils

0110	Voltage
MB4	12V DC
MB5	24V DC
MB9	24V DC (2 watt)
MB56	24V AC
MB57	110V AC
MB58	220V DC

305 22mm Coil Caps

0110	Voltage
305.11.00	No LED
305.11.01L	24V DC LED
305.11.02L	110V AC LED
305.11.03L	240V AC LED

AIR SERVICE UNITS

Filter/Regulator + Lubricator

PCL's FRL range includes combination units with 1/4" and 1/2" inlet ports. Adding a PCL Air Treatment unit into an air line efficiently filters to 10 microns. Products featur polycarbonate bowls, allowing the user to easily monitor the element's condition and the collected liquid's level. The bowl is surrounded with protective metal as a safety measure to protect the user in case of excessive pressures, temperatures, or aggressive chemicals.

Features
• Selectable manual/semi-automatic drain
• Polycarbonate bowl
• Locking device
• 10 micron filte
• Complete with wall bracket and pressure gauge

Regulators

7000	Port Thread (BSPP)	Regulating Pressure	Max Inlet (bar)	Flow @ 6 (bar)
ATR6	1/4"	0-10	12	1,700 l/min
ATR12	1/2"	0-12	16	6,000 l/min

Filters

7000	Drain	Port Thread (BSPP)	Filtration Micron	Max Inlet (bar)	Flow@ 6 (bar)
ATF6	Manual/Semi-automatic	1/4"	10	12	2,100 l/min
ATF12	Manual/Semi-automatic	1/2"	10	16	6,000 l/min

Lubricators

7000	Port Thread (BSPP)	Max Inlet (bar)	Flow @ 6 (bar)
ATL6	1/4"	12	2,200 l/min
ATL12	1/2"	16	6,000 l/min

Filter/Regulator, BSPP

7000	Thread (BSPP)	Max Inlet (bar)	Flow @ 6 (bar)
ATC6	1/4"	12	1,800 l/min
ATC12	1/2"	16	5,000 l/min
Tech Sheet 60545			

Filter/Regulator + Lubricator, BSPP

7000	Thread (BSPP)	Max Inlet (bar)	Flow @ 6 (bar)
ATCFRL6	1/4"	12	1,800 l/min
ATCFRL12	1/2"	16	5,000 l/min
Tech Sheet 60545			

5

MINIATURE, HIGH PRECISION REGULATORS

impulse
Automatic

Universal Pressure Control Valves

Relieving, BSPP

0113	Thread	Pressure Range Bar
48.250.00.10.00	1/8"	0-1
48.250.00.50.00	1/8"	0-5
	Tech Sheet 172	

Non Relieving, BSPP

0113	Thread	Pressure Range Bar
48.250.00.10.10	1/8"	0-1
48.250.00.50.10	1/8"	0-5
	Tech Sheet 172	

Panel Mount Pressure Regulators

Relieving, BSPP

0113	Thread	Pressure Range Bar
50.780.00.10.00	1/8"	0-1
50.780.00.25.00	1/8"	0-2.5
50.780.00.80.00	1/8"	0-8
	Tech Sheet 173	

Non Relieving, BSPP

0113	Thread	Pressure Range Bar
50.780.00.10.10	1/8"	0-1
	Tech Sheet 173	

Miniature Pressure Regulators

• Panel mountable

Relieving, Metric

0113	Thread	Pressure Range Bar
50.880.00.40.00	M5	0-4
	Tech Sheet 174	

REGULATORS

PROTECT AIR
a brand of tri-matic

SaveAir Regulator

1/4" BSPP

0093	Set Pressure Bar
231A0210	1
231A0220	2
231A0230	3
231A0240	4
231A0250	5
231A0260	6
231A0270	7
231A0280	8
	Tech Sheet 1347

ToolReg

Male/Female

Female/Female

1/4" BSPP

0093	Inlet	Outlet	Set Pressure Bar
232A0220	Female	Female	2
232F0220	Male	Female	2
232A0230	Female	Female	3
232F0230	Male	Female	3
232A0240	Female	Female	4
232F0240	Male	Female	4
232A0260	Female	Female	6
232F0260	Male	Female	6
232A0270	Female	Female	7
232A0280	Female	Female	8
232F0280	Male	Female	8
	Tech Sheet 1349		

3/8" BSPP

0093	Inlet	Outlet	Set Pressure Bar
232A0340	Female	Female	4
232A0360	Female	Female	6
232A0380	Female	Female	8
	Tech Sheet 1349		