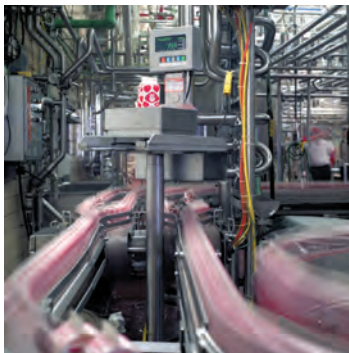




aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



P3Z Series Air preparation system

1 1/2" & 2" Ported

Catalogue no. PDE2641TCUK - January 2014



ENGINEERING YOUR SUCCESS.



PDE2641TCUK
Table of Contents

Filter / Dust Filter	4 - 5
Coalescing Filter / Adsorber Filter	6 - 7
Regulator / Pilot Regulator	8 - 9
Lubricator	10 - 11
Modular Manifold	12
Connection Flange Kits	12
Accessories	13



WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met. The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

SALE CONDITIONS

The items described in this document are available for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any sale contract entered into by Parker will be governed by the provisions stated in Parker's standard terms and conditions of sale (copy available upon request).



PDE2641TCUK

P3Z series modular air preparation system

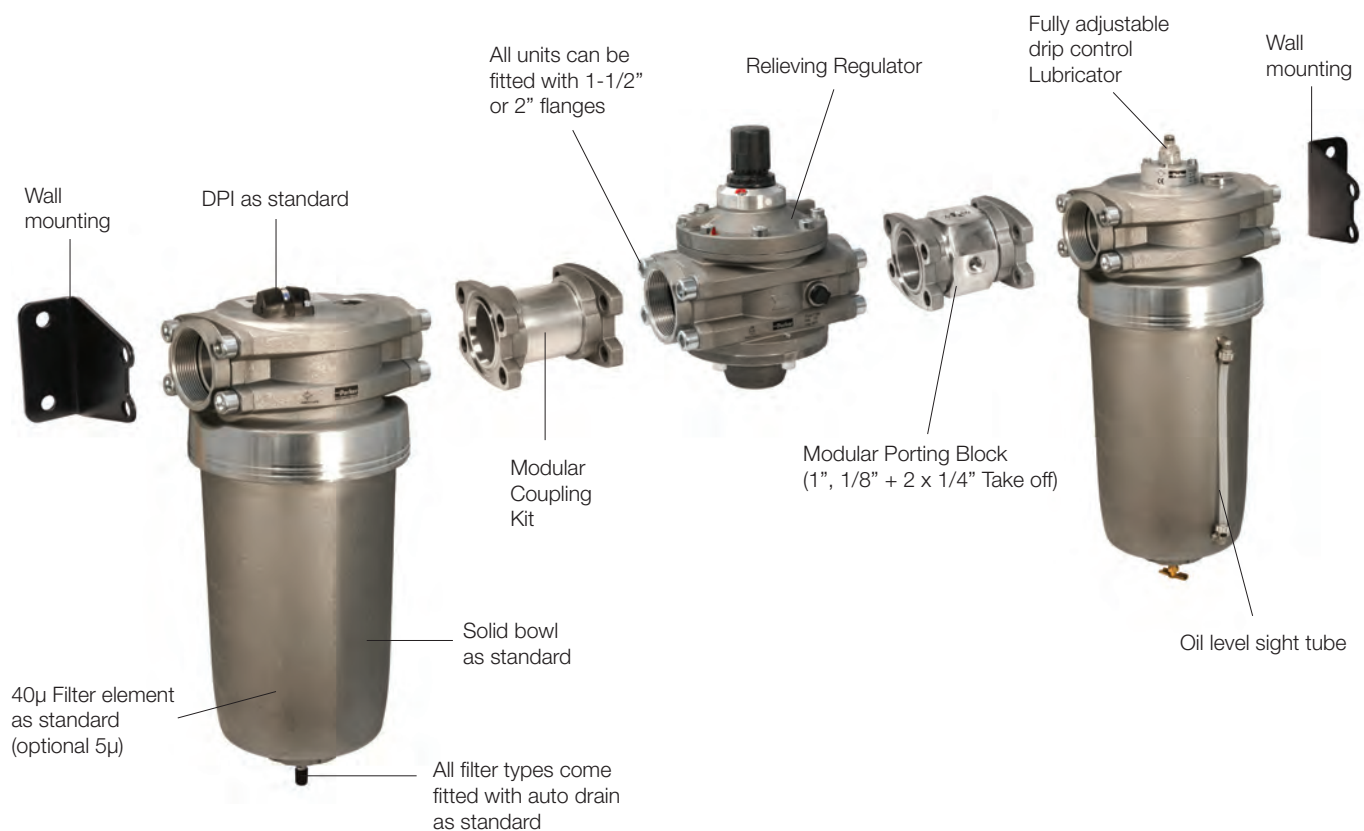
The System

The all metal P3Z system allows units to be connected to most medium sized ring main installations by the use of either 1-1/2" or 2" flanges.

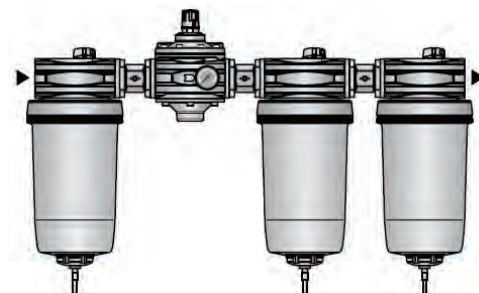
The P3Z Filters are specially designed to efficiently filter out rust, dirt, moisture and other impurities from compressed air lines. Operation is fully automatic with a minimum of pressure drop. Coalescing filters and adsorber filters for high purity air are also included in the P3Z series.

The P3Z Regulators are designed to provide quick response and accurate pressure regulation for the most demanding hi-flow industrial applications. The rolling diaphragm was designed for long trouble-free operation and will not rupture or tear under high cycle or other demanding applications.

The P3Z mist lubricators are designed to provide lubrication for many general purpose applications in a pneumatic system.



Filter-Regulator - Dust Filter-Adsorber





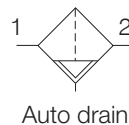
PDE2641TCUK
P3Z Series air preparation system

Filters / Dust Filter

Filter / Dust Filter



Symbols



Auto drain

- Flanged 1-1/2" or 2" (BSPP & NPT)
- High efficiency particulate element as standard
- Excellent water removal efficiency
- Robust die-cast aluminium construction
- Standard DPI for monitoring (0.5 - 0.8 bar)

Note: To optimise the life of the dust 1µm element, it is advisable to install a P3ZFA pre-filter with a 5 micron element upstream of the coalescing filter.

Options:

P 3 Z F A												
SAE Mtg - No thread	0	None	0	40 Micron Element + DPI Standard	H	Auto Drain	MA					
BSPP flange	1	1-1/2"	B	5 Micron Element + DPI Optional	F							
NPT flange	9	2"	C	1 Micron Element + DPI	M							

Port size	Description	Order Code	Flow dm ³ /s *	Max bar	Min temp °C	Max temp °C	Bowl capacity cm ³	Height mm	Width mm	Depth mm	Weight kg
-	40 micron, auto drain	P3ZFA00HMAN	>666	17.5	0	60	600	445	200	182	6.3
1-1/2"	40 micron, auto drain	P3ZFA1BHMAN	>666	17.5	0	60	600	445	200	182	6.3
2"	40 micron, auto drain	P3ZFA1CHMAN	>666	17.5	0	60	600	445	200	182	6.3
-	1 micron, auto drain	P3ZFA00MMAN	>666	17.5	0	60	600	445	200	182	6.3
1-1/2"	1 micron, auto drain	P3ZFA1BMMAN	>666	17.5	0	60	600	445	200	182	6.3
2"	1 micron, auto drain	P3ZFA1CMMAN	>666	17.5	0	60	600	445	200	182	6.3

* flow with 6,3 bar inlet pressure and 0,5 pressure drop.





PDE2641TCUK
P3Z Series air preparation system

Filter / Dust Filter

Technical Information

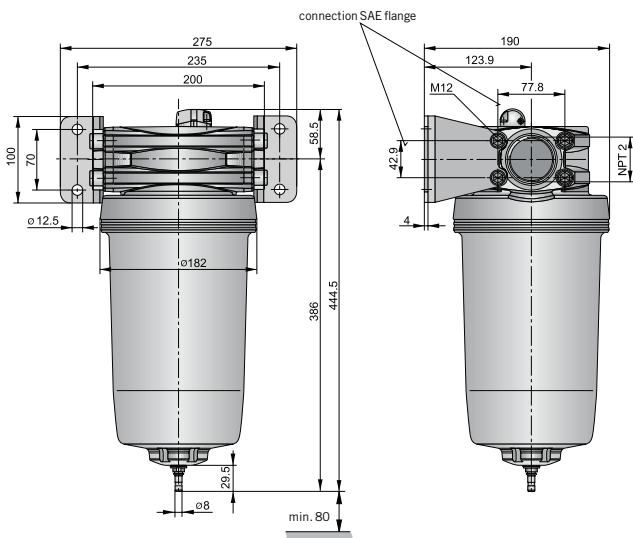
Fluid:	Compressed air
Maximum inlet pressure*:	17.5 bar
Temperature range*:	0°C to +60°C
Particle removal:	40 & 5 micron
Air quality:	Within ISO 8573-1 : 1991 Class 3 and 5 (particulates) Within ISO 8573-1 : 2001 Class 6 and 7 (particulates)
Typical flow with 40µm element 6,3 bar inlet pressure and 0.5 bar pressure drop:	666 dm³/s
Auto drain: bowl pressure to close drain Operating range manual override facility (depress pin)	0.8 bar 0.8 to 17.5 bar Ø 10mm brass connection
Bowl sump capacity:	600 cm³

* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Material Specification

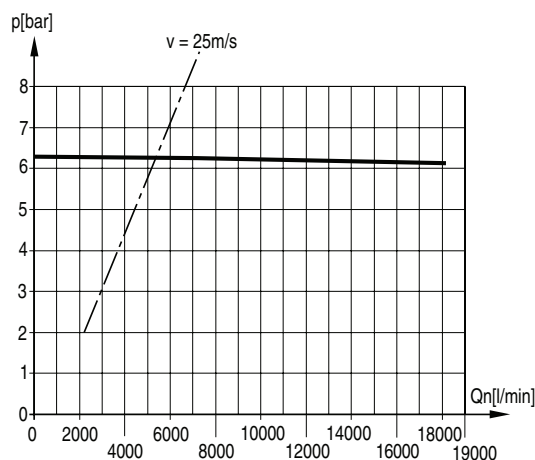
Body:	Aluminium
Element:	Sintered P.E.
Seals:	Nitrile NBR
Drains: Automatic:	PA / Brass connection
Differential pressure indicator materials:	
Body:	Acetal
Internal parts:	Acetal
Spring:	Stainless steel
Seals:	Nitrile NBR
Support plate	ABS
Screws	Steel / zinc plated

Dimensions (mm)



Flow characteristics

(2") 40 Micron Filter



Service kits

Description	Order code
5 micron element kit	P3ZKA00ESE
40 micron element kit	P3ZKA00ESG
1 micron element kit	P3ZKA00ES9





PDE2641TCUK
P3Z Series air preparation system

Coalescing Filters / Adsorber Filters

Coalescing Filter / Adsorber Filter



- Extended high efficiency filter element provides greater filtration surface area.
- Flanged 1-1/2" or 2" (BSPP & NPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control

Note: To optimise the life of the coalescing element, it is advisable to install a P3ZFA pre-filter with a 5µm filter upstream of the coalescing filter.

Note: To optimise the life of the adsorber element, it is advisable to install a P3ZFA coalescing 0.01µm filter upstream of the adsorber filter.

Options:

P 3 Z F A					M A		N
SAE Mtg - No thread	0	None	0	0.01 µm Coalescing element + DPI	D	Auto Drain	MA
BSPP flange	1	1-1/2"	B	Adsorber element	B		
NPT flange	9	2"	C				

Port size	Description	Order Code	Flow dm ³ /s *	Max bar	Min temp °C	Max temp °C	Bowl capacity cm ³	Height mm	Width mm	Depth mm	Weight kg
-	Coalescing filter 0.01 µm auto drain	P3ZFA00DMAN	>167	17.5	0	60	600	445	200	182	6.4
1-1/2"	Coalescing filter 0.01 µm auto drain	P3ZFA1BDMAN	>167	17.5	0	60	600	445	200	182	6.4
2"	Coalescing filter 0.01 µm auto drain	P3ZFA1CDMAN	>167	17.5	0	60	600	445	200	182	6.4
-	Adsorber filter	P3ZFA00BMAN	>167	17.5	0	60	600	445	200	182	6.4
1-1/2"	Adsorber filter	P3ZFA1BBMAN	>167	17.5	0	60	600	445	200	182	6.4
2"	Adsorber filter	P3ZFA1CBMAN	>167	17.5	0	60	600	445	200	182	6.4

* flow with 6,3 bar inlet pressure and 0,5 pressure drop.



PDE2641TCUK

P3Z Series air preparation system

Coalescing Filters / Adsorber Filters

Technical Information

Fluid:	Compressed air
Maximum inlet pressure*:	17.5 bar
Temperature range*:	0°C to +60°C
Media specifications:	
Coalescing efficiency	(0.3 to 0.6 micron particles): 99.97%
Max. oil carryover (PPM w/w):	0.008 mg/m ³
Typical flow element @ 6,3 bar inlet pressure and 0.2 bar pressure drop:	Dry element 0.01µm @ dm ³ /s
Auto drain:	
bowl pressure to close drain	0.8 bar
Operating range	0.8 to 17.5 bar
manual override facility (depress pin)	Ø 10mm brass connection
Bowl sump capacity:	600 cm ³

* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

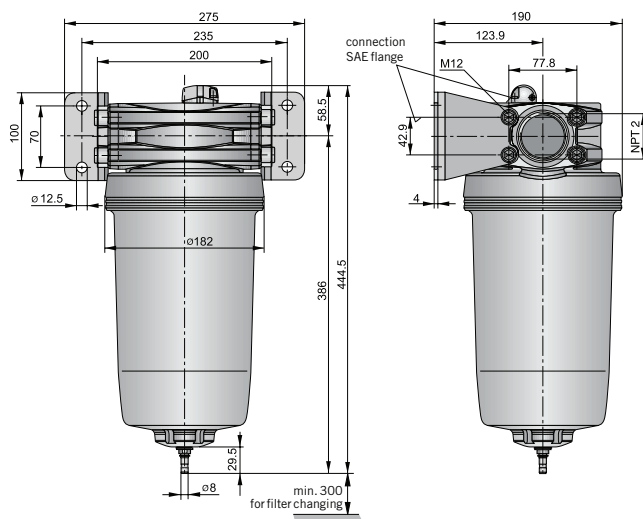
Material Specification

Body:	Aluminium
Filter cover:	ABS
Coalescing element:	Borosilicate & Nano fibres
Top & bottom end cap:	Aluminium
Support cylinders:	Grade 430 stainless steel
Support media:	Polypropylene
Anti re-entrainment barrier:	Polyester
Encapsulate:	Epoxy resin / Hardener
Seals:	Nitrile NBR
Drains:	Automatic: PA / Brass connection

Differential pressure indicator materials:

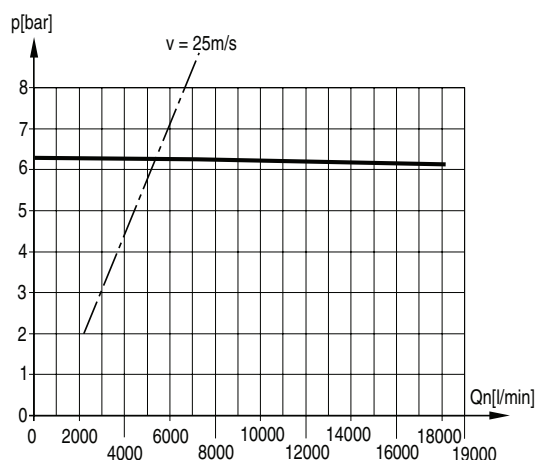
Body:	Acetal
Internal parts:	Acetal
Spring:	Stainless steel
Seals:	Nitrile NBR
Support plate	ABS
Screws	Steel / zinc plated

Dimensions (mm)



Flow characteristics

(2'') 0.01µm Coalescing Filter Saturated



Service kits

Description	Order code
0.01 micron coalescing element kit	P3ZKA00ESC
Adsorber element kit	P3ZKA00ESA
Differential pressure indicator kit	P3ZKA00RQ



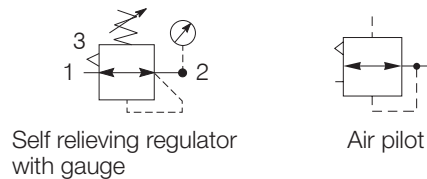
PDE2641TCUK
P3Z Series air preparation system

Regulators / Pilot Regulators

Regulator / Pilot Regulator



Symbols



- Flanged 1-1/2" or 2" ports (BSPP & NPT)
- Robust die-cast aluminium construction
- Secondary pressure ranges 8 & 16 bar
- Rolling diaphragm for extended life
- Secondary aspiration plus rolling diaphragm provides quick response and accurate pressure regulation
- Air pilot regulator permanent bleed

Options:

P 3 Z R A				B	N		N
SAE Mtg - No thread	0	None	0	Relieving	B	0 - 8 bar No Gauge	N
BSPP flange	1	1-1/2"	B			0 - 16 bar No Gauge	H
NPT flange	9	2"	C			0 - 8 bar Gauge	G
						0 - 16 bar Gauge	J
P 3 Z R A			B P P N				
For Air Pilot Regulator option							

Port size	Description	Order Code	Flow dm ³ /s *	Max bar	Min temp °C	Max temp °C	Height mm	Width mm	Depth mm	Weight kg
-	8 bar relieving + gauge	P3ZRA00BNGN	>666	17.5	0	60	230	180	132	3.5
-	8 bar relieving	P3ZRA00BNNN	>666	17.5	0	60	230	180	132	3.5
1-1/2"	8 bar relieving + gauge	P3ZRA1BBNGN	>666	17.5	0	60	230	180	132	3.5
1-1/2"	8 bar relieving	P3ZRA1BBNNN	>666	17.5	0	60	230	180	132	3.5
2"	8 bar relieving + gauge	P3ZRA1CBNGN	>666	17.5	0	60	230	180	132	3.5
2"	8 bar relieving	P3ZRA1CBNNN	>666	17.5	0	60	230	180	132	3.5
-	16 bar relieving + gauge	P3ZRA00BNJN	>666	17.5	0	60	230	180	132	3.5
-	16 bar relieving	P3ZRA00BNHN	>666	17.5	0	60	230	180	132	3.5
1-1/2"	16 bar relieving + gauge	P3ZRA1BBNJN	>666	17.5	0	60	230	180	132	3.5
1-1/2"	16 bar relieving	P3ZRA1BBNHN	>666	17.5	0	60	230	180	132	3.5
2"	16 bar relieving + gauge	P3ZRA1CBNJN	>666	17.5	0	60	230	180	132	3.5
2"	16 bar relieving	P3ZRA1CBNHN	>666	17.5	0	60	230	180	132	3.5
-	Pilot Regulator	P3ZRA00BPPN	>666	17.5	0	60	182	180	132	3.4
1-1/2"	Pilot Regulator	P3ZRA1BBPPN	>666	17.5	0	60	182	180	132	3.4
2"	Pilot Regulator	P3ZRA1CBPPN	>666	17.5	0	60	182	180	132	3.4

* flow with 10 bar inlet 6,3 bar set pressure and 1 bar pressure drop.





PDE2641TCUK
P3Z Series air preparation system

Regulators / Pilot Regulators

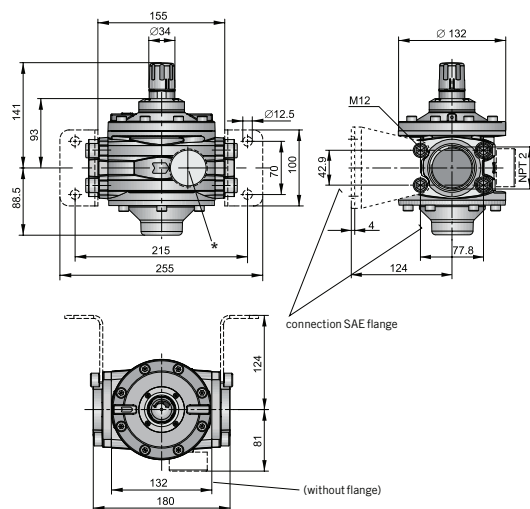
Technical Information

Fluid:	Compressed air
Maximum inlet pressure*:	17.5 bar
Temperature range*:	0°C to +60°C
Typical flow with 10 bar inlet pressure, 8 bar set pressure and 1 bar pressure drop:	2" size >666 dm ³ /s
Gauge port (x 2):	1/4"

* Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Dimensions (mm)

Pressure regulating valve, pilot operated with integrated pilot pressure regulating valve

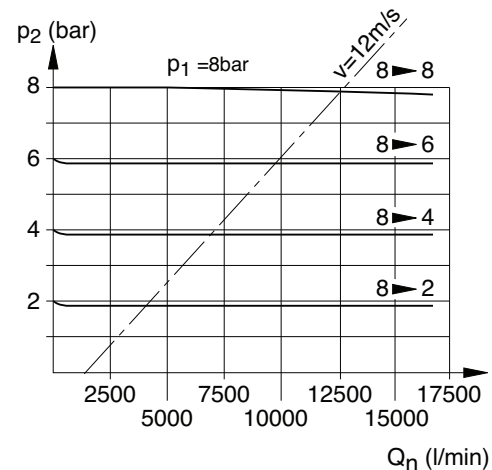


Material Specification

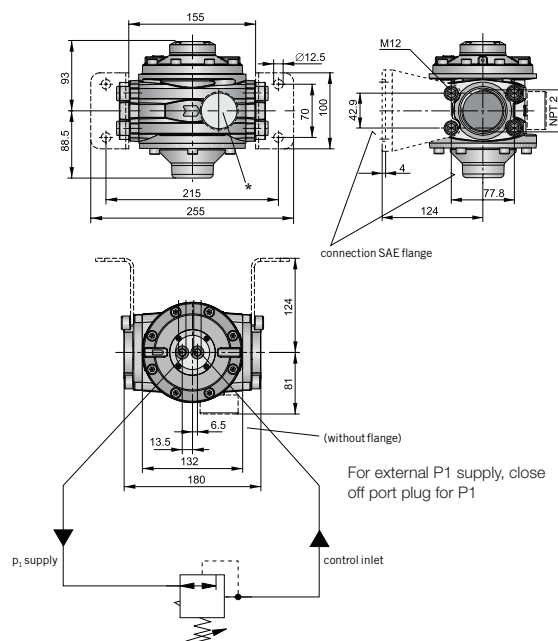
Body:	Aluminium
Bonnet:	Glass filled polyamide
Control Knob:	Glass filled polyamide
Valve:	Brass / NBR
Seals:	Nitrile NBR
Screws:	Steel / zinc plated

Flow characteristics

Pressure regulating valve characteristics - (2") Pilot operated



Pressure regulating valve, pilot operated



Service kits

Description	Order code
Diaphragm kit (relieving type)	P3ZKA00RR





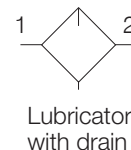
PDE2641TCUK
P3Z Series air preparation system

Lubricators

Lubricator



Symbols



- Flanged 1-1/2" or 2" ports (BSPP & NPT)
- Robust die-cast aluminium construction
- Proportional oil delivery over a wide range of air flows.
- Large oil reservoir

Options:

P 3 Z L A				L S M N	
SAE Mtg - No thread	0	None	0		
BSPP flange	1	1-1/2"	B		
NPT flange	9	2"	C		

Port size	Description	Order Code	Flow dm ³ /s *	Max bar	Min temp °C	Max temp °C	Bowl capacity cm ³	Height mm	Width mm	Depth mm	Weight kg
-	Lubricator	P3ZLA00LSMN	>666	17.5	0	60	600	460	200	182	6.5
1-1/2"	Lubricator	P3ZLA1BLSMN	>666	17.5	0	60	600	460	200	182	6.5
2"	Lubricator	P3ZLA1CLSMN	>666	17.5	0	60	600	460	200	182	6.5
2"	Central airline lubricator with electrical oil level control	P3ZLA1CEMMW	>666	10	5	60	5000	608	250	237	18
2"	Central airline lubricator with aluminium bowl	P3ZLA1CMMMW	>666	10	5	60	5000	608	250	237	18

* flow with 6,3 bar inlet pressure and 0,5 bar pressure drop.





PDE2641TCUK
P3Z Series air preparation system

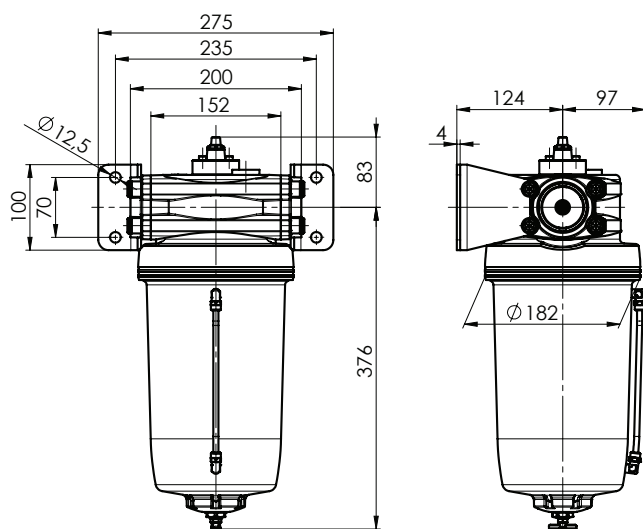
Lubricators

Technical Information

Fluid:	Compressed air
Maximum inlet pressure*:	10 bar
Temperature range*:	5°C to +60°C

* Air supply must be dry enough to avoid ice formation at temperatures below +2° C
Low flow start point (lubrication pick-up): at 6.3bar inlet pressure 0.5 dm³/s
Typical flow with 6.3bar inlet pressure and 0.7 bar pressure drop: 184 dm³/s

Dimensions (mm)

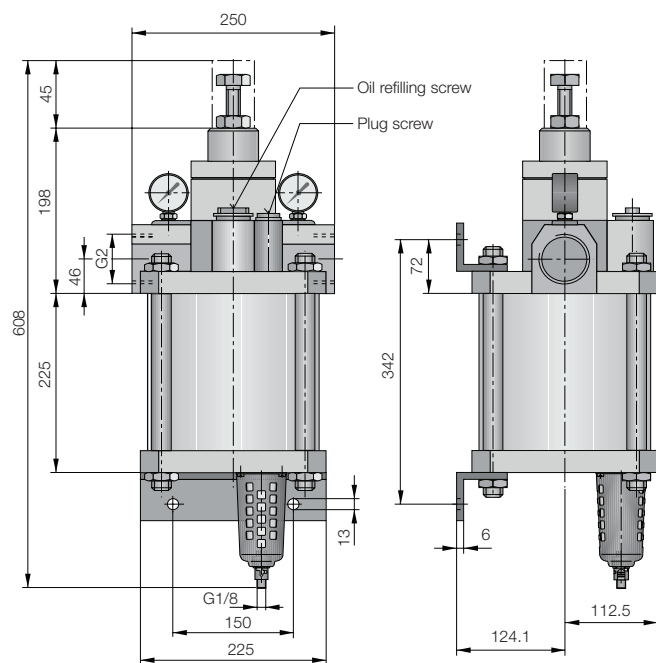
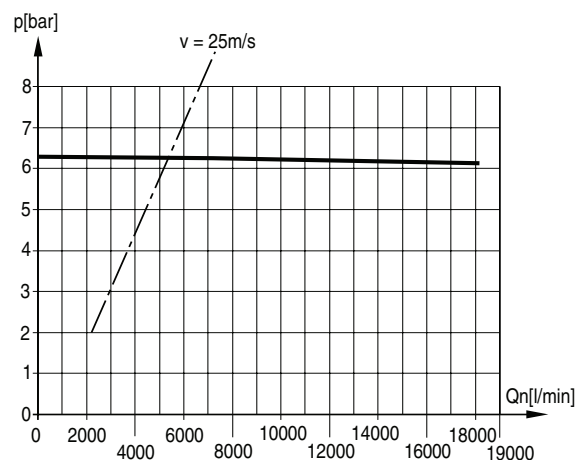


Material Specification

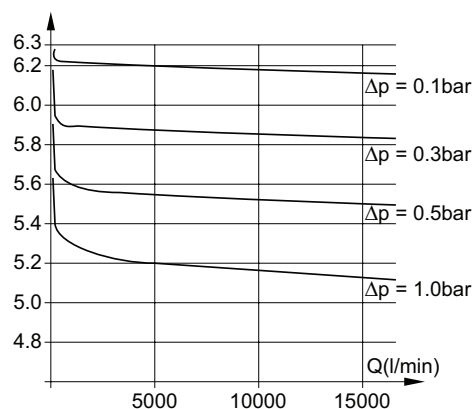
Body:	Aluminium
Sight dome:	Polyamide
Seals:	Nitrile NBR

Flow characteristics

(2") Lubricator



(2") Central Airline Lubricator



Service kits

Description	Order code
Drip control housing	P3ZKA00PG





PDE2641TCUK
P3Z Series air preparation system

Accessories

Modular Manifold



P3Z Series Manifolds, provide up to 4 extra outlet ports, they may be assembled at any position in a combination e.g. before the lubricator to provide oil free take off or at the end of a combination to provide extra outlet ports.

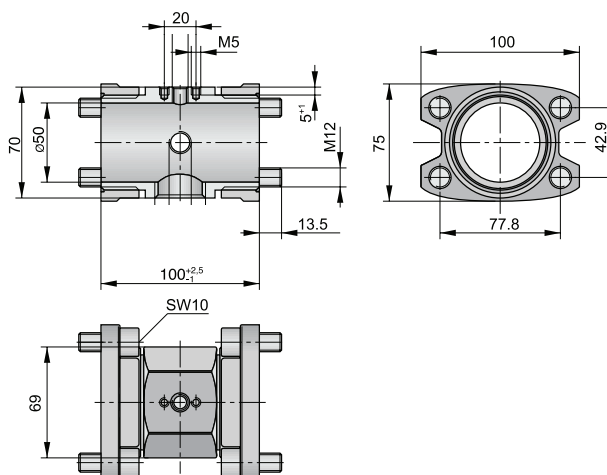
Thread type	Order code
BSPP	P3ZMA1V0N
NPT	P3ZMA9V0N

Dimensions (mm)

Inlet port	Top	Bottom	Front and Back
-	1/8"	1"	1/4"

Material specification:

Body:	Aluminium
Weight (kg):	1.1



Connection Flange Kits



- To change port sizes connection flange kits are available, they are attached to any unit utilising the connecting kit.
- Allows assemblies to be removed from a hard piped system.

Options:

P 3 Z K A			C P
BSPP (G)	1	1 1/2"	B
NPT	9	2"	C

Material specification:

Body:	Aluminium
Weight (kg):	0.6





PDE2641TCUK
P3Z Series air preparation system

Accessories

Accessories

Description		Connection	Weight (kg)	Order code	
Modular wall mounting kit			0.2	P3ZKA00MW	
Modular coupling kit			0.8	P3ZKA00CB	
Pressure gauge	0 to 10 bar	1/4"	0.06	KG8012-00	
	0 to 16 bar	1/4"	0.06	KG8013-00	
Lubricator Oil	VG32 - 1 litre		0.92	P3YKA00PPBB	
Modular coupling 'O' ring kit	Qty: 5			P3ZKA0CCY	



PDE2641TCUK
P3Z Series air preparation system





PDE2641TCUK

P3Z Series air preparation system





Parker Worldwide

Europe, Middle East, Africa

AE – United Arab Emirates, Dubai

Tel: +971 4 8127100
parker.me@parker.com

AT – Austria, Wiener Neustadt

Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt

Tel: +43 (0)2622 23501 900
parker.easteurope@parker.com

AZ – Azerbaijan, Baku

Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles

Tel: +32 (0)67 280 900
parker.belgium@parker.com

BY – Belarus, Minsk

Tel: +375 17 209 9399
parker.belarus@parker.com

CH – Switzerland, Etoy

Tel: +41 (0)21 821 87 00
parker.switzerland@parker.com

CZ – Czech Republic, Klecany

Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst

Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup

Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid

Tel: +34 902 330 001
parker.spain@parker.com

FI – Finland, Vantaa

Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve

Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens

Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budapest

Tel: +36 1 220 4155
parker.hungary@parker.com

IE – Ireland, Dublin

Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IT – Italy, Corsico (MI)

Tel: +39 02 45 19 21
parker.italy@parker.com

KZ – Kazakhstan, Almaty

Tel: +7 7272 505 800
parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal

Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Asker

Tel: +47 66 75 34 00
parker.norway@parker.com

PL – Poland, Warsaw

Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira

Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest

Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow

Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga

Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SK – Slovakia, Banská Bystrica

Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto

Tel: +386 7 337 6650
parker.slovenia@parker.com

TR – Turkey, Istanbul

Tel: +90 216 4997081
parker.turkey@parker.com

UA – Ukraine, Kiev

Tel: +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick

Tel: +44 (0)1926 317 878
parker.uk@parker.com

ZA – South Africa, Kempton Park

Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

North America

CA – Canada, Milton, Ontario

Tel: +1 905 693 3000

US – USA, Cleveland

Tel: +1 216 896 3000

Asia Pacific

AU – Australia, Castle Hill

Tel: +61 (0)2-9634 7777

CN – China, Shanghai

Tel: +86 21 2899 5000

HK – Hong Kong

Tel: +852 2428 8008

IN – India, Mumbai

Tel: +91 22 6513 7081-85

JP – Japan, Tokyo

Tel: +81 (0)3 6408 3901

KR – South Korea, Seoul

Tel: +82 2 559 0400

MY – Malaysia, Shah Alam

Tel: +60 3 7849 0800

NZ – New Zealand, Mt Wellington

Tel: +64 9 574 1744

SG – Singapore

Tel: +65 6887 6300

TH – Thailand, Bangkok

Tel: +662 186 7000-99

TW – Taiwan, Taipei

Tel: +886 2 2298 8987

South America

AR – Argentina, Buenos Aires

Tel: +54 3327 44 4129

BR – Brazil, Sao Jose dos Campos

Tel: +55 800 727 5374

CL – Chile, Santiago

Tel: +56 2 623 1216

MX – Mexico, Apodaca

Tel: +52 81 8156 6000

European Product Information Centre

Free phone: 00 800 27 27 5374

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)



Parker Hannifin Ltd.

Tachbrook Park Drive
Tachbrook Park,
Warwick, CV34 6TU
United Kingdom
Tel.: +44 (0) 1926 317 878
Fax: +44 (0) 1926 317 855
parker.uk@parker.com
www.parker.com

