

ORIGA SYSTEM PLUS – INNOVATION FROM A PROVEN DESIGN

A completely new generation of linear drives which can be simply and neatly integrated into any machine layout.

A NEW MODULAR LINEAR DRIVE SYSTEM

With this second generation linear drive Parker Origa offers design engineers complete flexibility. The well known ORIGA cylinder has been further developed into a combined linear actuator, guidance and control package. It forms the basis for the new, versatile ORIGA SYSTEM PLUS linear drive system.

All additional functions are designed into modular system components which replace the previous series of cylinders.

MOUNTING RAILS ON 3 SIDES

Mounting rails on 3 sides of the cylinder enable modular components such as linear guides, brakes, valves, magnetic switches etc. to be fitted to the cylinder itself. This solves many installation problems, especially where space is limited.

The modular system concept forms an ideal basis for additional customer-specific functions.

Magnetic piston as standard - for contactless position sensing on three sides of the cylinder.

Corrosion resistant steel outer sealing band and robust wiper system on the carrier for use in aggressive environments.

Proven corrosion resistant steel inner sealing band for optimum sealing and extremely low friction.

Combined clamping for inner and outer sealing band with dust cover.

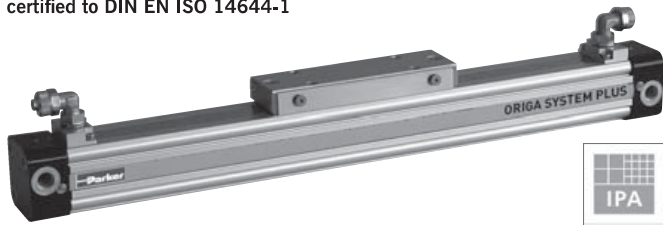
Stainless steel screws optional.

Low friction piston seals for optimized running characteristics

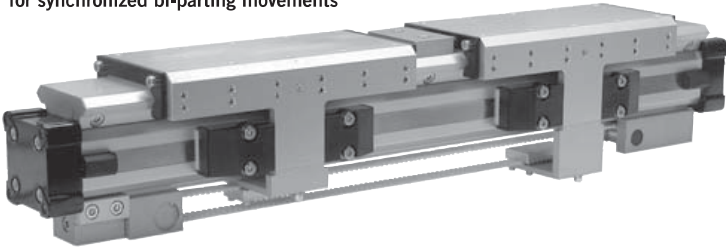
Optimized cylinder profile for maximum stiffness and minimum weight. Integral air passages enable both air connections to be positioned at one end, if desired.

End cap can be rotated to any one of the four positions (before or after delivery) so that the air connection can be in any desired position.

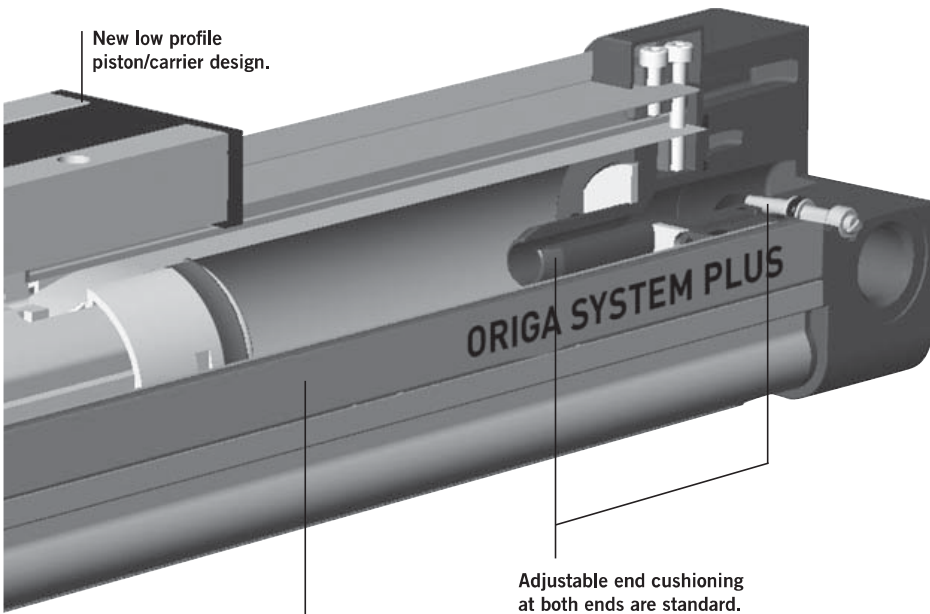
Clean Room Version
certified to DIN EN ISO 14644-1



Rodless Cylinder
for synchronized bi-parting movements



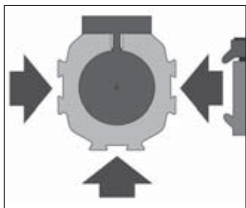
New low profile
piston/carrier design.



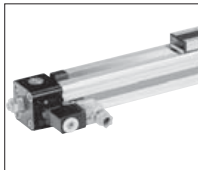
Adjustable end cushioning
at both ends are standard.

Integral dovetail rails on three sides
provide many adaptation possibilities
(linear guides, magnetic switches, etc.).

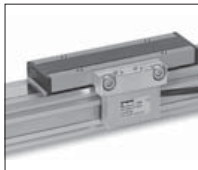
Modular system components
are simply clamped on.



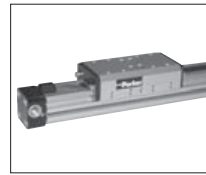
**INTEGRATED
VOE VALVES**
The complete compact
solution for optimal
cylinder control.



**SENSOFLEX
SFI-plus**
incremental
measuring system
with 0.1 (1.0) mm
resolution.



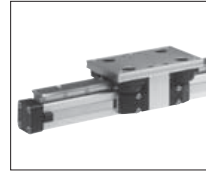
BASIC GUIDE
Compact, robust plain
bearing guide for
medium loads.



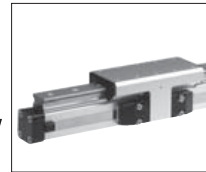
SLIDELINE
Guide system
for moderate loads.
Optional with
Active- / Passive-
Brake.



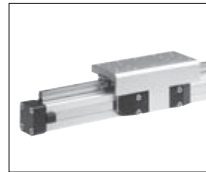
POWERSLIDE
Roller guide
for high loads
and rough
conditions.



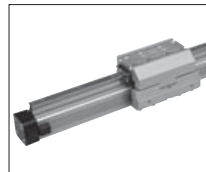
PROLINE
The compact alu-
minium roller guide
for high loads and
velocities.
Optional with Active- /
Passive- Brake.



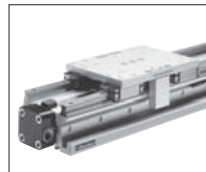
STARLINE
Recirculating ball
bearing guide for
very high loads and
precision.



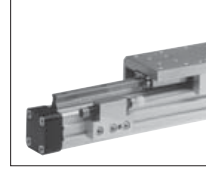
KF GUIDE
Recirculating ball
bearing guide – the
mounting dimen-
sions correspond to
FESTO Type:
DGPL-KF



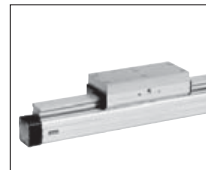
**HEAVY DUTY
GUIDE HD**
for heavy duty
applications.



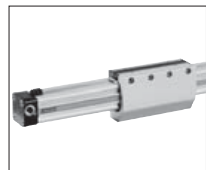
**VARIABLE STOP
VS**
The variable stop
provides simple
stroke limitation.



PASSIVE BRAKE
reacts automatically
to pressure failure.



ACTIVE BRAKE
pneumatic brake
for secure, positive
stopping at any
position.

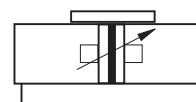


Rodless Pneumatic Cylinder

∅ 10-80 mm



Series OSP-P..



Standard Versions:

- Double-acting with adjustable end cushioning
- With magnetic piston for position sensing

Long-Stroke Cylinders for stroke lengths up to 41 m

(see page 25-29)

Special Versions:

- with special pneumatic cushioning system (on request)
- Clean room cylinders (see page 31-34)
- ATEX-Version (Ex) (see page 35-36)
- Stainless steel screws
- Slow speed lubrication
- Viton® seals
- Both air connections on one end
- Air connection on the end-face
- Integrated Valves



- End cap can be rotated 4 x 90° to position air connection as desired
- Free choice of stroke length up to 6000 mm, Long-Stroke version (∅50-80mm) for stroke

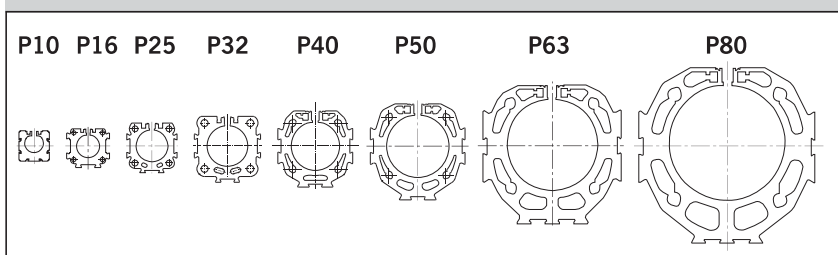
lengths up to 41 m

Characteristics		Pressures quoted as gauge pressure		
Characteristics	Symbol	Unit	Description	
General Features				
Type			Rodless cylinder	
Series			OSP-P	
System			Double-acting, with cushioning, position sensing capability	
Mounting			See drawings	
Air Connection			Threaded	
Ambient temperature range	T _{min} T _{max}	°C °C	-10 +80	Other temperature ranges on request
Weight (mass)		kg	See table below	
Installation			In any position	
Medium			Filtered, unlubricated compressed air (other media on request)	
Lubrication			Permanent grease lubrication (additional oil mist lubrication not required) Option: special slow speed grease	
Material	Cylinder Profile		Anodized aluminium	
	Carrier (piston)		Anodized aluminium	
	End caps		Aluminium, lacquered / Plastic (P10)	
	Sealing bands		Corrosion resistant steel	
	Seals		NBR (Option: Viton®)	
	Screws		Galvanized steel Option: stainless steel	
	Dust covers, wipers		Plastic	
Max. operating pressure	p _{max}	bar	8	

Weight (mass) [kg]

Series (Basic cylinder)	Weight (mass) [kg]	
	At 0 mm stroke	per 100 mm stroke
OSP-P10	0.087	0.052
OSP-P16	0.22	0.1
OSP-P25	0.65	0.197
OSP-P32	1.44	0.354
OSP-P40	1.95	0.415
OSP-P50	3.53	0.566
OSP-P63	6.41	0.925
OSP-P80	12.46	1.262

Size Comparison



Origa OSP-P Rodless Cylinders

Order Instructions – Basic Cylinder																
1-4	5+6	7	8	9	10	11	12-16	17	18	19	20	21	22	23	24	25
OSPP	25	0	0	0	0	0	01100	0	0	0	0	0	0	0	0	0

Piston-Ø
10
16
25
32
40
50
63
80

Stroke Length
In mm (5 digits)

Piston Mounting
0 without
1 clevis mounting

add. Guide Carriage
0 without

Measuring system
0 without
X SFI 0,1 mm
Y SFI 1 mm

Screws
0 standard
1 Stainless

Cushioning
0 standard
1 max. length ³⁾

Version / Piston
0 standard
1 Tandem

Lubrication
0 standard
1 slow speed ²⁾³⁾

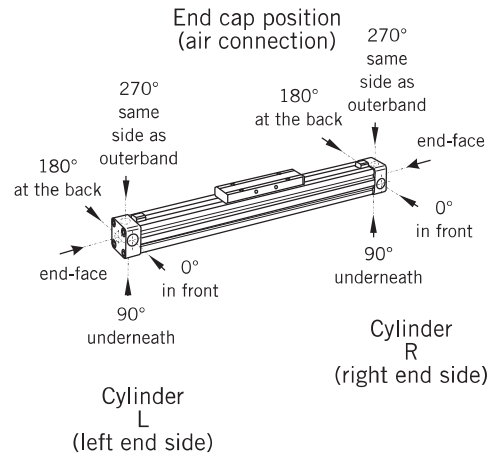
End cap position
0 I+r 0° = in front
1 I+r 90° = underneath
2 I+r 180° = at the back
3 I+r 270° = same side as outerband
4 I 90° = underneath; r 0° = in front
5 I 180° = at the back; r 0° = in front
6 I 270° = same side as outerband; r 0° = in front
7 I 0° = in front; r 90° = underneath
8 I 180° = at the back; r 90° = underneath
9 I 270° = same side as outerband; r 90° = underneath
A I 0° = in front; r 180° = at the back
B I 90° = underneath; r 180° = at the back
C I 270° = same side as outerband; r 180° = at the back
D I 0° = in front; r 270° = same side as outerband
E I 90° = underneath; r 270° = same side as outerband
F I 180° = at the back; r 270° = same side as outerband

Guides/ Brakes/ Inversion
0 without
A Activebrake AB Ø 25-80
M Inversion Ø 16-80
N Duplex Ø 25,32,40,50

Cover / Cable Channel
0 standard
1 Cable channel
2 Cable channel two-sided
X without cover rail

Air Connection
0 standard
1 end face
2 both at one end (not turnable)
3 left stand, right end face
4 right stand, left end face
A 3/2 Way valve VOE 24 V = Ø 25,32,40,50
B 3/2 Way valve VOE 230 V~ / 110V = Ø 25,32,40,50
C 3/2 Way valve VOE 48 V = Ø 25,32,40,50
E 3/2 Way valve VOE 110 V~ Ø 25,32,40,50

Seals
0 standard (NBR)
1 Viton ^{® 1)}



¹⁾ Viton with VOE not available.

²⁾ Slow speed lubrication in combination with Viton® seals on demand

³⁾ „Lubrication slow speed“ in combination with „max. cushioning length“ not possible.