

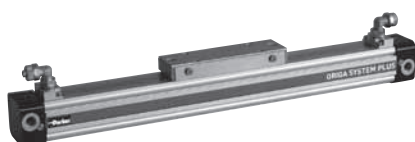
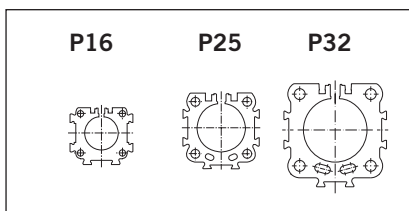
Characteristics		Pressure quoted as gauge pressure	
Characteristics	Symbol	Unit	Description
<b>General Features</b>			
Type			Rodless Cylinder
Series			OSP-P
System			Double-acting, with cushioning, position sensing capability
Mounting			see drawings
Air connection			Threaded
Ambient and medium temperature range	$T_{min}$ $T_{max}$	°C °C	-10 – other temperature ranges +80 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
	Sealing bands		Corrosion resistant steel
	Seals		NBR (Option: Viton®)
	Screws		Stainless steel
	Covers		Anodized aluminium
	Guide plate		Plastic
Max. operating pressure*	$p_{max}$	bar	8

\* Pressure quoted as gauge pressure

#### Weight (mass) kg

Series (basic cylinder)	Weight (mass) kg	
	at 0 mm stroke	per 100 mm stroke
OSP-P16	0.22	0.1
OSP-P25	0.65	0.197
OSP-P32	1.44	0.354

#### Size Comparison



# Clean Room Cylinder

## Ø 16 – 32 mm

### Rodless Cylinder

certified to  
**DIN EN ISO 14644-1**



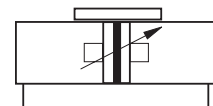
#### Standard Versions:

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

#### Special Versions:

- Slow speed lubrication
- Viton® seals

#### Series OSP-P.



#### Features:

- Clean room classification  
ISO Class 4 at  $v_m = 0.14$  m/s  
ISO Class 5 at  $v_m = 0.5$  m/s
- suitable for smooth slow speed operation up to  $v_{min} = 0.005$  m/s
- optional stroke length up to 1200 mm (longer strokes on request)
- Low maintenance
- Compact design with equal force and velocity in both directions
- Aluminium piston with bearing rings to support high direct and cantilever loads

# ARA®

## PNEUMATIK

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## Certification

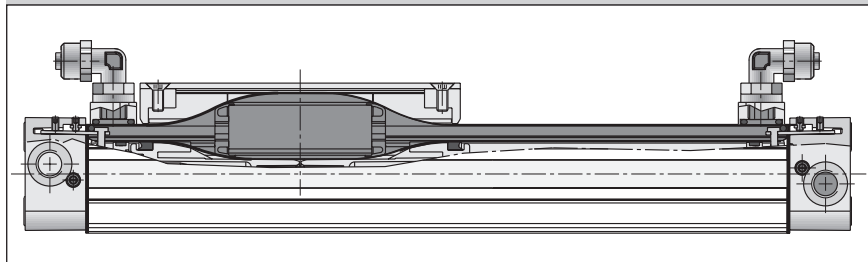
Based on the Parker Origa rodless cylinder, proven in world wide markets, Parker Origa now offers the only rodless cylinder on the market with a certification from IPA Institute for the cleanroom specification according to DIN EN ISO 14644-1.



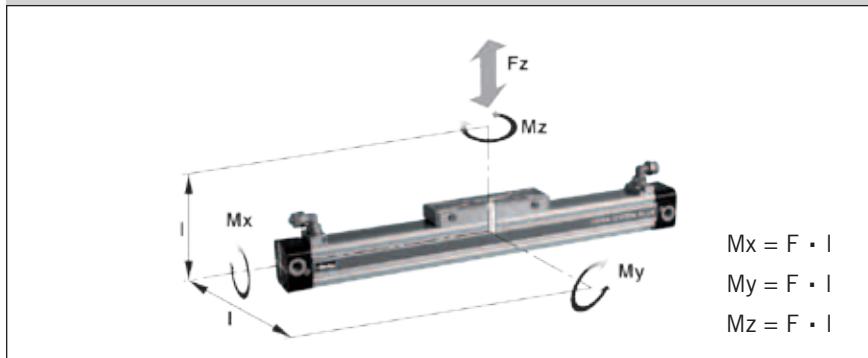
## Function:

The clean room cylinders of the ORIGA SYSTEM PLUS (OSP-P) combines the efficiency of the Parker Origa slot seal system with vacuum protection against progressive wear and contamination from the sliding components. A partial vacuum drawn between inner and outer sealing bands prevents emission into the clean room. To achieve the necessary vacuum a suction flow of ca. 4 m<sup>3</sup>/h is required.

## Function Diagram



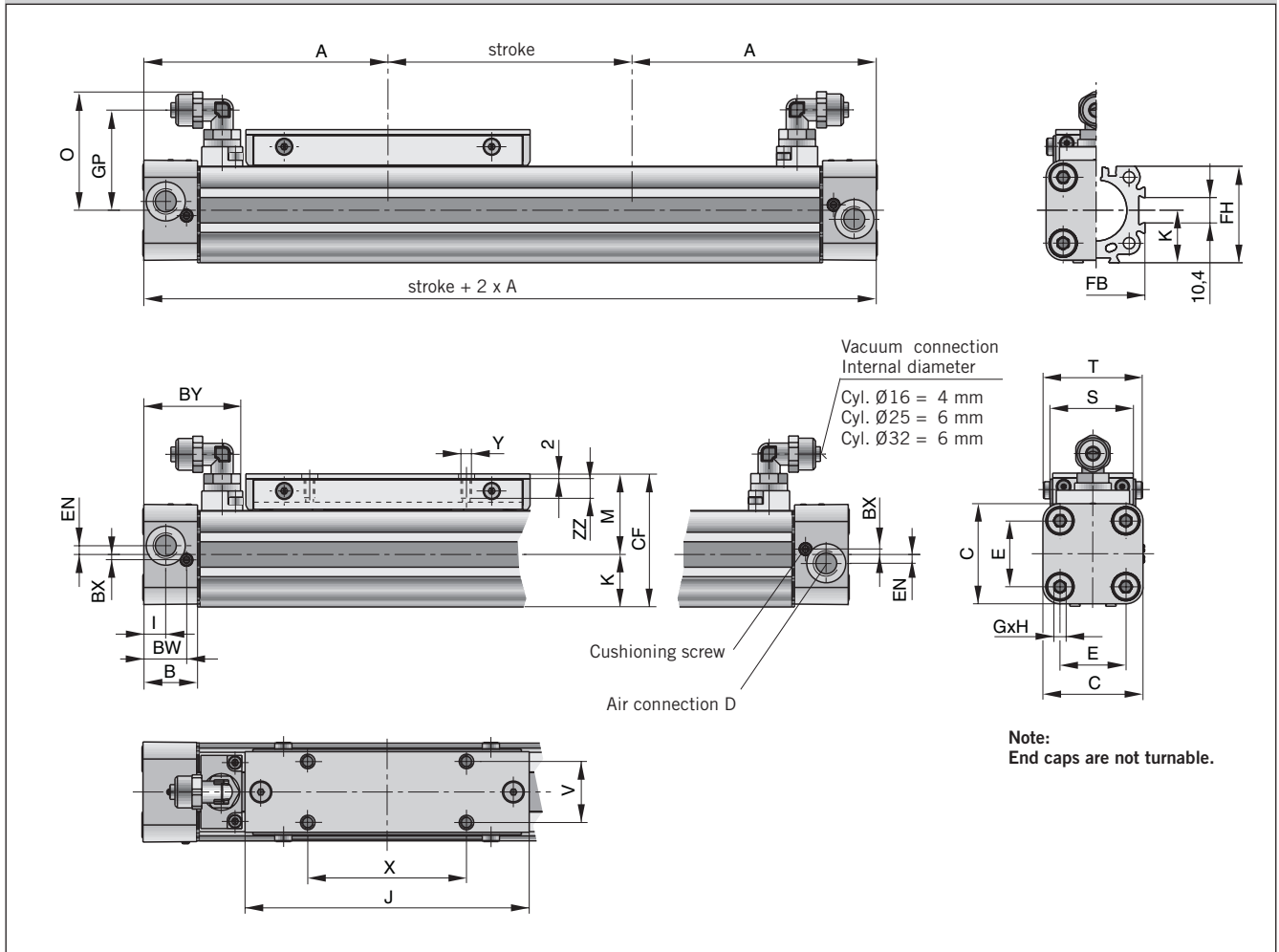
## Loads, Forces and Moments



Series	Effective Force at 6 bar [N]	Max. Moment			Max. Load Fz [N]	Cushion Length [mm]
		Mx [Nm]	My [Nm]	Mz [Nm]		
OSP-P16	78	0.45	4	0.5	120	11
OSP-P25	250	1.5	15	3.0	300	17
OSP-P32	420	3.0	30	5.0	450	20

Load and moment data are based on speeds  $v \leq 0.2$  m/s. The adjacent table shows the maximum values for light, shock-free operation which must not be exceeded even in dynamic operation.

## Dimensions (mm)



Dimension Table (mm)

Series	A	B	C	D	E	G	H	I	J	K	M	O	S
<b>OSP-P16</b>	65	14	30	M5	18	M3	9	5.5	69	15	25	31	24
<b>OSP-P25</b>	100	22	41	G1/8	27	M5	15	9	117	21.5	33	48.5	35
<b>OSP-P32</b>	125	25.5	52	G1/4	36	M6	15	11.5	152	28.5	40	53.6	38

Series	T	V	X	Y	BW	BX	BY	CF	EN	FB	FH	GP	ZZ
<b>OSP-P16</b>	29.6	16.5	36	M4	10.8	1.8	28.5	40	3	30	27.2	25.7	7
<b>OSP-P25</b>	40.6	25	65	M5	17.5	2.2	40.5	54.5	3.6	40	39.5	41	8
<b>OSP-P32</b>	45	27	90	M6	20.5	2.5	47.1	68.5	5.5	52	51.7	46.2	10

### Order Instructions – Clean Room Cylinders

1-4	5+6	7	8	9	10	11	12-16	17	18	19	20	21	22	23	24	25
<b>OSPP</b>	25	4	7	0	0	1	01100	0	0	0	0	0	0	0	0	0

<b>Piston-Ø</b>	
16	
25	
32	

<b>Stroke Length</b>	
in mm (5 digits) <sup>2)</sup>	

<b>Piston Mounting</b>	
0 without	

<b>add. Guide Carriage</b>	
0 without	

<b>Measuring system</b>	
0 without	

<b>Screws</b>	
1 Stainless	

<b>Cushioning</b>	
0 Standard	

<b>Version / Piston</b>	
4 Clean room	

<b>Lubrication</b>	
0 Standard	
1 Slow speed <sup>1)</sup>	

<b>End cap position</b>	
0 L+R 0° = in front	

<b>Guides/ Brakes/ Inversion</b>	
0 without	

<b>Cover / Cable Channel</b>	
0 Standard	
1 Cable channel	
2 Cable channel two-sided	
X without Cover rail	

<b>Air Connection</b>	
7 End cap Clean room	

<b>Seals</b>	
0 Standard (NBR)	
1 Viton®	

<sup>1)</sup> The combination „Slow speed lubrication“ and „Viton® sealings“ are available on request.

<sup>2)</sup> max. stroke lengths 1200 mm, longer strokes on request.

### Accessories – please order separately

Description	Further information see
End Cap Mountings	Page 105
Mid-Section Support	Page 106
Adaptor Profile	Page 118
T-Slot Profile	Page 119
Connection Profile	Page 120
Magnetic Switches	Page 123-130

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