

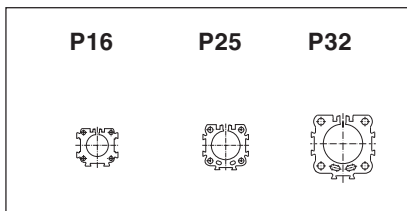
Characteristics		Pressure quoted as gauge pressure	
Characteristics	Symbol	Unit	Description
General Features			
Type			Rodless Cylinder
Series			OSP-P
System			Double-acting, with cushioning, position sensing capability
Mounting			see drawings
Air connection			Threaded
Ambient and medium temperature range	ϑ_{\min} ϑ_{\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

Cylinder 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

OSP
— ORIGA
— SYSTEM
— PLUS

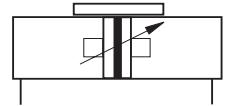
Standard Versions:

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

Special Versions:

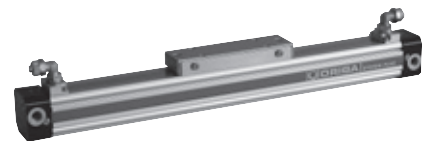
- Slow speed lubrication
- Viton® seals

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



HOERBIGER
ORIGA

For **magnetic switches** see 1.45.100E, 1.45.004E, 1.45.005E
For **mountings and accessories** see 1.45.001E to 009E

Based on the HOERBIGER-ORIGA rodless cylinder, proven in world wide markets, HOERBIGER-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.

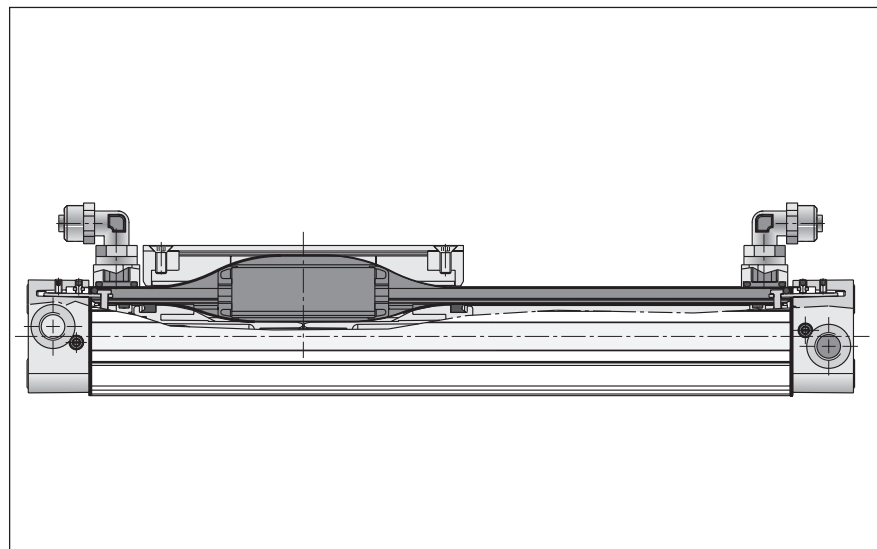


Fraunhofer
TESTED[®]
DEVICE
 Linearantrieb OSP-P25
 Report No. HO 0305-291

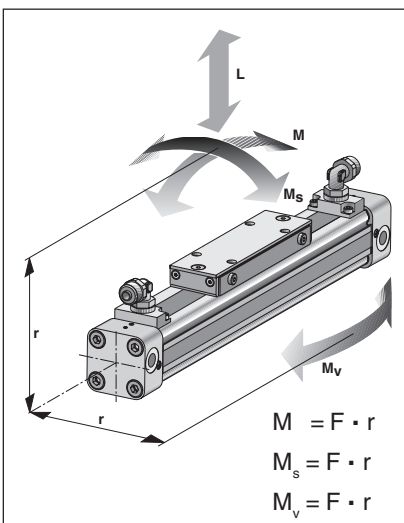


Function:

The clean room cylinders of the ORIGA SYSTEM PLUS (OSP-P) combines the efficiency of the HOERBIGER-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 m³/h is required.



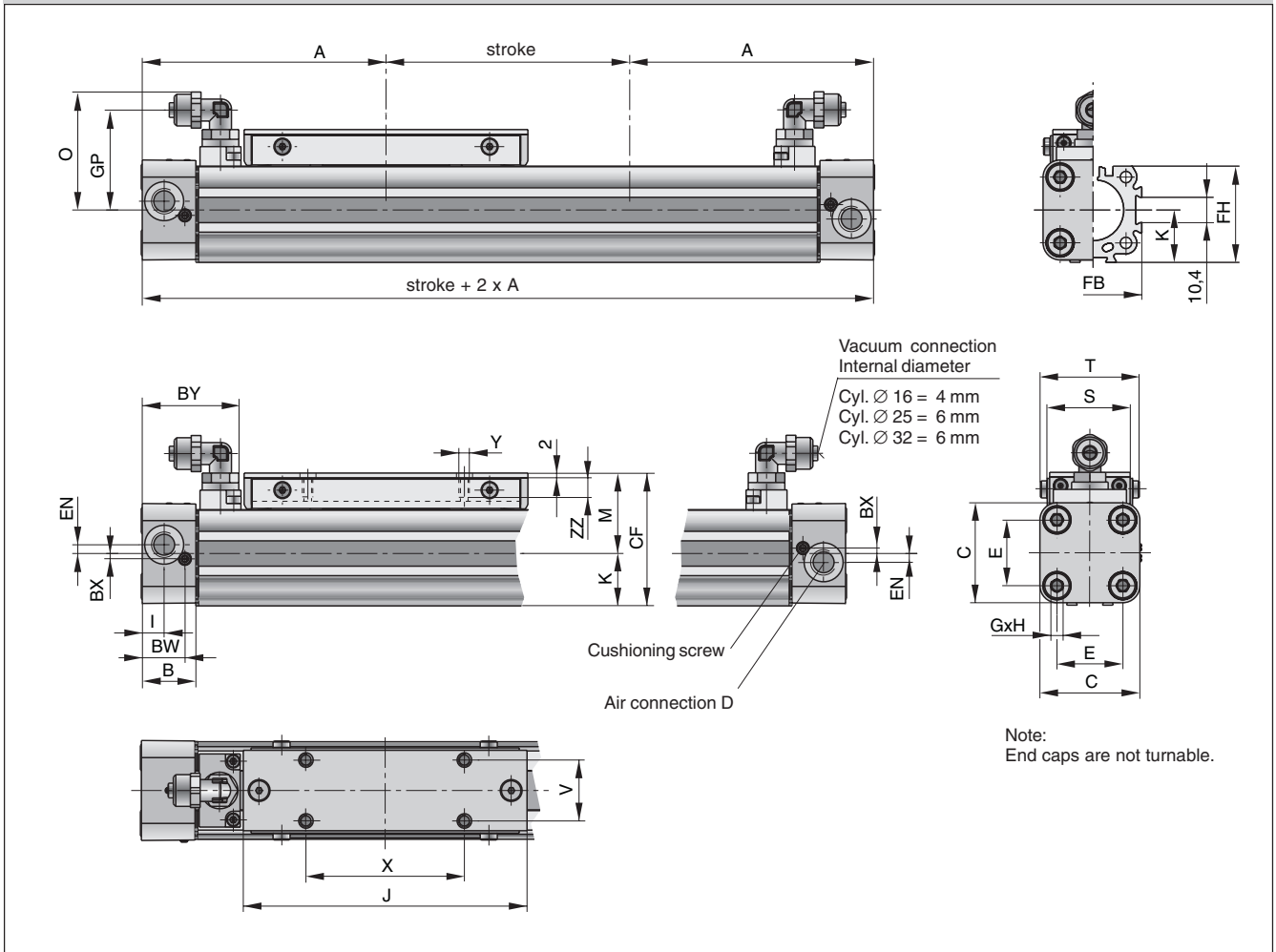
Loads, Forces and Moments



Cylinder Series [mmØ]	Force at 6 bar [N]	Cushion length [mm]	max. allowed Load L [N]	max. allowed Bending Moment M [Nm]	M _s [Nm]	M _v [Nm]
OSP-P16	78	11	120	4	0.45	0.5
OSP-P25	250	17	300	15	1.5	3.0
OSP-P32	420	20	450	30	3.0	5.0

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)

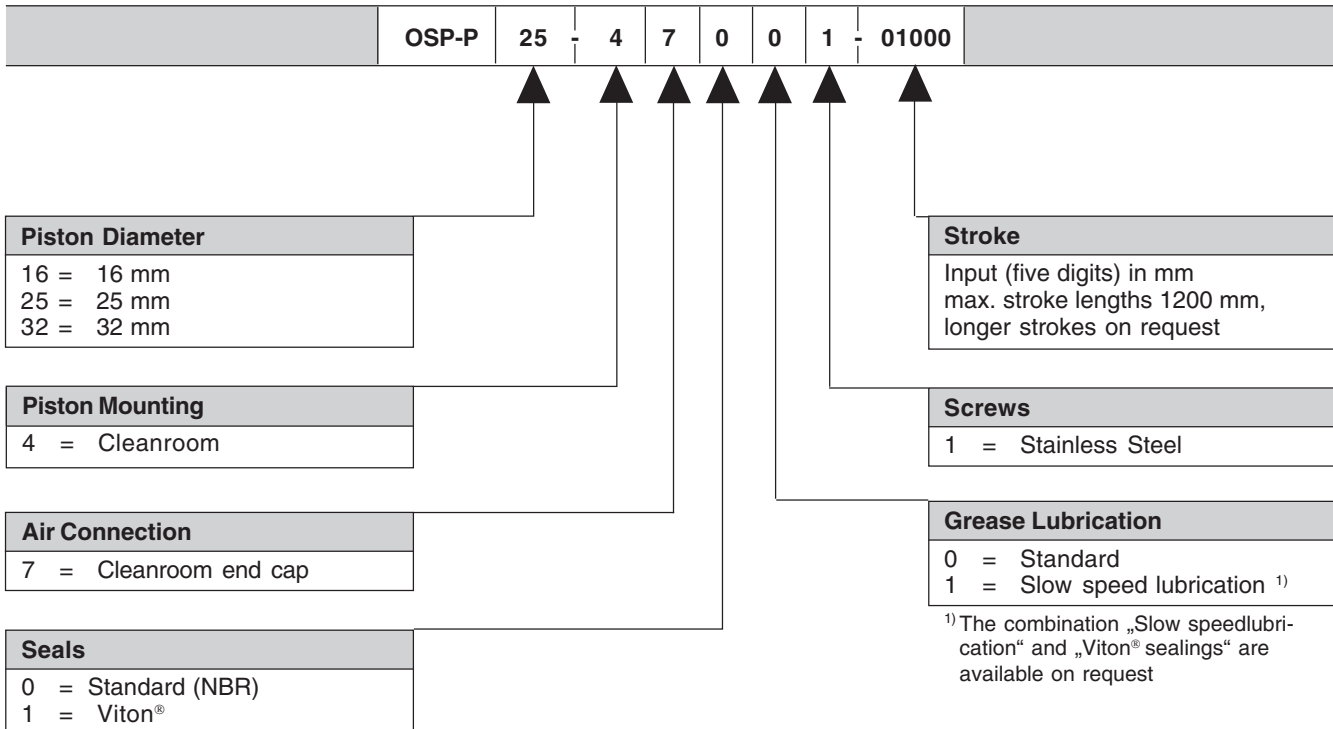


Dimension Table (mm)

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

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

Order Instructions Basic Cylinders – Clean Room Cylinders



Accessories – please order separately

Benennung	Further information see Data sheet No.
End Cap Mountings	1.45.003E
Mid-Section Support	1.45.004E
Adaptor Profile	1.45.007E
T-Nut Profile	1.45.008E
Connection Profile	1.45.009E
Magnetic Switches	1.45.100E, 1.45.104E, 1.45.105E
Cable Cover	1.45.102E