

Warning, Offer of Sale

**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 including consequences of any failure, 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.

Offer of Sale

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Parker Hannifin Corporation
Parker-Origa
Glendale Heights, Illinois
www.parkeroriga.com

Conversion Table*ELECTRIC ACTUATOR*

**2D & 3D
CAD Drawings
can be downloaded
from website
www.parkeroriga.com**

ATTENTION!

Contact PARKER-ORIGA for sizing software
and/or technical assistance

630-871-8300

Application Sheet on Page 104

All dimensions are in European-Standard.
Please convert all in US-Standard.

Conversion Table

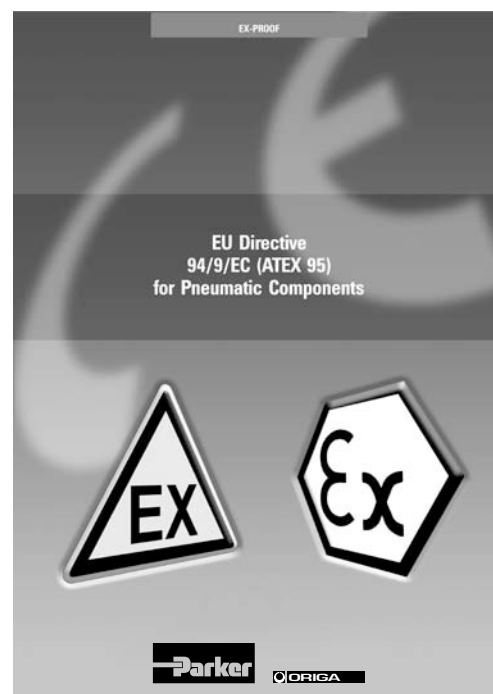
Multiply	By	To Obtain
Millimeters	.03937	Inches
Newtons	.2248	Lbs.(F)
Newton-Meters	8.8512	In-Lbs
Kilograms	2.205	Lbs.
Inches	25.4	Millimeters
Lbs.(F)	4.448	Newtons
In-Lbs	.113	Newtons-Meters
Lbs.	.45359	Kilograms

Notes

PARKER-ORIGA rodless pneumatic cylinders are the first rodless cylinders that have been approved for use in potentially explosive atmospheres in Equipment Group II, Category 2 GD

The Cylinders are to the ATEX Certification 94/9/EG (ATEX 95) for Pneumatic Components.

For the different classifications and details please see pages 27 and 92.



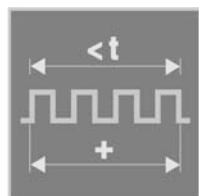
for use in Ex-Areas



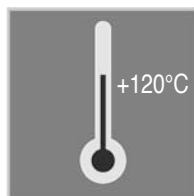
for Clean Room Applications
certified to
DIN EN ISO 14644-1



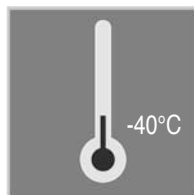
Stainless steel version
for special applications



with special pneumatic
cushioning system for cycle
time optimization,
for Ø 16 to 50 mm
– on request



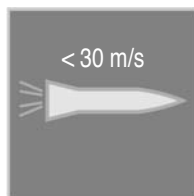
High Temperature Version
for temperatures up to +120°C



Low Temperature Version
for temperatures up to
-40°C



Slow Speed Version
 $v = 0.005 - 0.2 \text{ m/s}$



High Speed Version
 $v_{\text{max.}} = 30 \text{ m/s}$



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Based on the ORIGA rodless cylinder, proven in world wide markets, PARKER-ORIGA now offers the complete solution for linear drive systems. Designed for absolute reliability, high performance, ease of use and optimized engineering the ORIGA SYSTEM PLUS satisfies even the most demanding applications.

ORIGA SYSTEM PLUS

is a totally modular concept which offers the choice of pneumatic or electric actuation, with guidance and control modules to suit the exact needs of individual installations.

The actuators at the core of the system all have a common aluminium extruded profile, with double dovetail mounting rails on three sides, these

are the principle building blocks of the system to which all modular options are directly attached.

**SYSTEM MODULARITY**

- **Pneumatic Drive**

- For all round versatility and convenience, combining ease of control and broad performance capability. Ideally suited for point-to point operations, reciprocating movements and simple traverse / transfer applications.

- **Electric Screw Drive**

- For high force capability and accurate path and position control.












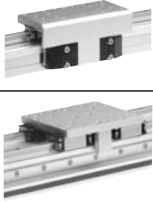

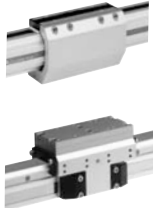
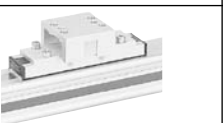





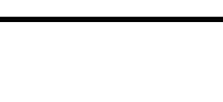

- **Electric Belt Drive**

- For high speed applications, accurate path and position control and longer strokes.



For additional information on electric linear actuators, please contact factory for OSP-E literature.

- Different guidance options provide the necessary level of precision, performance and duty for various applications.
- Compact solutions, which are simple to install and can be easily retrofitted.
- Valves and control options can be directly mounted to the actuator system.
- Diverse mounting options to provide total installation flexibility.

* For information on Electric Linear Drives, contact factory for literature

Basic Linear Drive Standard Version <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E* Belt drive Belt drive with integrated Guides Vertical belt drive with recirculating ball bearing guide ● Series OSP-E* Screw drive (Ball Screw, Trapezoidal Screw) 		Duplex Connection <ul style="list-style-type: none"> ● Series OSP-P 	
Air Connection on the End-face or both at One End <ul style="list-style-type: none"> ● Series OSP-P 		Multiplex Connection <ul style="list-style-type: none"> ● Series OSP-P 	
Clean Room Cylinder certified to DIN EN ISO 146644-1 <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E...SB 		Linear Guides – SLIDELINE <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Screw drive* 	
Products for ATEX Areas <ul style="list-style-type: none"> ● Series OSP-P Rodless Cylinders 		Linear Guides – POWERSLIDE <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Belt drive* ● Series OSP-E Screw drive* 	
Products for ATEX Areas <ul style="list-style-type: none"> ● Series OSP-P Rodless Cylinders with Linear Guide SLIDELINE 		Linear Guides – PROLINE <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Belt drive* ● Series OSP-E Screw drive* 	
Linear Guides – STARLINE <ul style="list-style-type: none"> ● Series OSP-P 		Heavy Duty Linear Guides – HD <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Screw drive* 	
Bi-parting Version <ul style="list-style-type: none"> ● Series OSP-P 		Brakes <ul style="list-style-type: none"> ● Active Brakes ● Passive Brakes 	
Magnetic Switches <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Belt drive* ● Series OSP-E Screw drive* 		SENSOFLEX-Measuring System <ul style="list-style-type: none"> ● Series SFI-plus 	
End Cap Mounting <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Belt drive* ● Series OSP-E Screw drive* 		Variable Stop VS <ul style="list-style-type: none"> ● Series OSP-P with Linear Guide STL, HD 	
Integrated 3/2 Way Valves <ul style="list-style-type: none"> ● Series OSP-P 			
Clevis Mounting <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Belt drive* ● Series OSP-E Screw drive* 			
Mid-Section Support <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Belt drive* ● Series OSP-E Screw drive* 			
Inversion Mounting <ul style="list-style-type: none"> ● Series OSP-P ● Series OSP-E Belt drive* ● Series OSP-E Screw drive* 			

Linear Drives	OSP-P10	OSP-P16	OSP-P25	OSP-P32	OSP-P40	OSP-P50	OSP-P63	OSP-P80
Theoretical force at 6bar [N]	47	120	295	483	754	1178	1870	3010
Effective force at 6bar [N]	32	78	250	420	640	1000	1550	2600
Velocity v [m/s]	> 0.005	> 0.005	> 0.005	> 0.005	> 0.005	> 0.005	> 0.005	> 0.005
Magnetic piston (three sides)	X	□	□	□	□	□	□	□
Lubrication - Prelubricated	□	□	□	□	□	□	□	□
Multiple air ports (4 x 90°)	X	□	□	□	□	□	□	□
Both Air Connections at End-face	X	○	○	○	○	○	○	○
Air Connection on the End-face	X	○	○	○	○	○	○	○
Cushioning	□	□	□	□	□	□	□	□
Cushioning length[mm]	2,50	11	17	20	27	30	32	39
Stroke length [mm] ▲	1 - 6000	1 - 6000	1 - 6000	1 - 6000	1 - 6000	1 - 6000	1 - 6000	1 - 6000
Pressure range pmax [bar]	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Temperature range [°C] *	-10 – + 80	-10 – + 80	-10 – + 80	-10 – + 80	-10 – + 80	-10 – + 80	-10 – + 80	-10 – + 80
Viton / chemical resistance	○	○	○	○	○	○	○	○
Stainless steel parts	○	○	○	○	○	○	○	○
Clevis Mounting	○	○	○	○	○	○	○	○
Slow speed lubrication	○	○	○	○	○	○	○	○
Duplex Connection / Multiplex Connection	X	on request	○	○	○	○	on request	on request
Tandem piston	○	○	○	○	○	○	○	○
Basic Cylinder								
F [N]	20	120	300	450	750	1200	1650	2400
Mx [Nm]	0.2	0.45	1.5	3	6	10	12	24
My [Nm]	1	4	15	30	60	115	200	360
Mz [Nm]	0.3	0.5	3	5	8	15	24	48
Slideline								
F [N]	X	325	675	925	1500	2000	2500	2500
Mx [Nm]	X	6	14	29	50	77	120	120
My [Nm]	X	11	34	60	110	180	260	260
Mz [Nm]	X	11	34	60	110	180	260	260
Proline								
F [N]	X	542	857	1171	2074	3111	X	X
Mx [Nm]	X	8	16	29	57	111	X	X
My [Nm]	X	12	39	73	158	249	X	X
Mz [Nm]	X	12	39	73	158	249	X	X
Powerslide								
F [N]	X	1400	1400 - 3000	1400 - 3000	3000	3000 - 4000	X	X
Mx [Nm]	X	14	14 - 65	20 - 65	65 - 90	90 - 140	X	X
My [Nm]	X	45	63 - 175	70 - 175	175 - 250	250 - 350	X	X
Mz [Nm]	X	45	63 - 175	70 - 175	175 - 250	250 - 350	X	X
Starline								
F [N]	X	1000	3100	3100	4000-7500	4000-7500	X	X
Mx [Nm]	X	15	50	62	150	210	X	X
My [Nm]	X	30	110	160	400	580	X	X
Mz [Nm]	X	30	110	160	400	580	X	X
- variable Stop	X	○	○	○	○	○	X	X

Linear Drives	OSP-P10	OSP-P16	OSP-P25	OSP-P32	OSP-P40	OSP-P50	OSP-P63	OSP-P80
HD Heavy Duty Guide								
F [N]	×	×	6000	6000	15000	18000	×	×
Mx [Nm]	×	×	260	285	800	1100	×	×
My [Nm]	×	×	320	475	1100	1400	×	×
Mz [Nm]	×	×	320	475	1100	1400	×	×
– variable Stop	×	×	○	○	○	○	×	×
Active Brake								
Braking force at 6 bar (brake surface dry) [N]	×	×	350	590	900	1400	2170	4000
Slideline SL / Proline PL with Brakes								
Active Brake								
SL Braking force at 6 bar (brake surface dry) [N]	×	×	325	545	835	1200	×	×
PL Braking force at 6 bar (brake surface dry) [N]	×	×	on request	on request	on request	on request	×	×
Passive Brake Multibrake								
SL Braking force at 6 bar (brake surface dry) [N]	×	×	470	790	1200	1870	2900	2900
PL Braking force at 6 bar (brake surface dry) [N]	×	×	315	490	715	1100	–	–
Magnetic Switches								
Standard Version	○	○	○	○	○	○	○	○
T-Nut Version	○	○	○	○	○	○	○	○
ATEX Version for EX- Areas 	○	○	○	○	○	○	○	○
Displacement measuring systems								
SFI-plus incremental	×	×	○	○	○	○	○	○
Integrated valves 3/2 WV NO VOE	×	×	○	○	○	○	on request	on request
Mountings								
End Cap Mounting / Mid-Section Support	○	○	○	○	○	○	○	○
Inversion Mounting	×	○	○	○	○	○	○	○
Shock absorber for intermediate positioning	×	×	on request	on request	on request	on request	×	×
Adaptor Profile / T-Nut Profile	×	○	○	○	○	○	×	×
Special Cylinders								
Special Pneumactical Cushioning System	×	on request	on request	on request	on request	on request	×	×
Clean Room Cylinders to DIN EN ISO 14644-1	×	○	○	○	×	×	×	×
ATEX Version for EX-Areas 	○	○	○	○	○	○	○	○
Bi-parting Version	×	×	×	×	○	×	×	×
High-Speed up to 30 m/s	×	on request	on request	on request	×	×	×	×

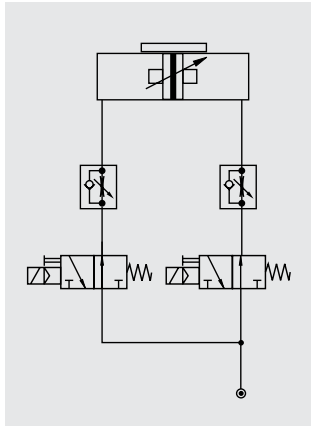
□ = Standard version

▲ = longer strokes on request

* = other temperature ranges on request

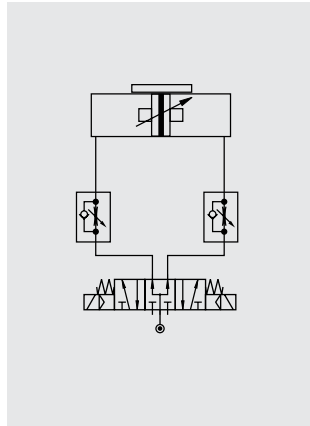
○ = Option

× = not applicable



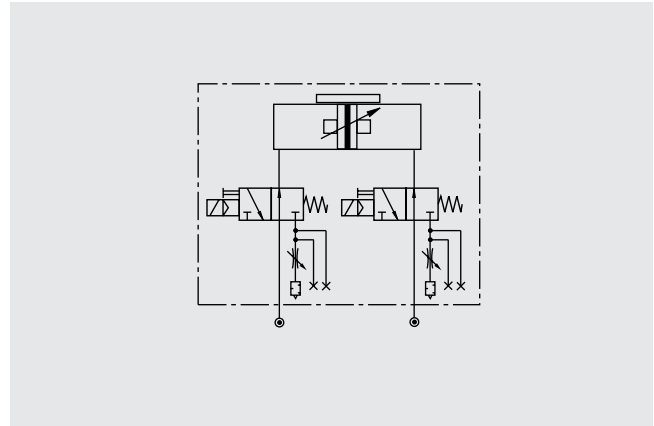
Circuit diagram for end of stroke application. Intermediate positioning is also possible.

The cylinder is controlled by two 3/2-way valves (normally open). The speed can be adjusted independently for both directions.



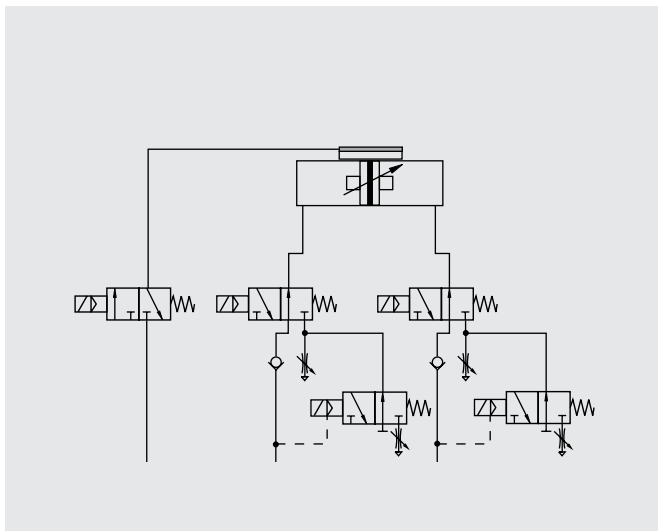
Circuit diagram for end of stroke application. Intermediate positioning is also possible.

The cylinder is controlled by a 5/3-way valve (middle position pressurized). The speed can be adjusted independently for both directions.



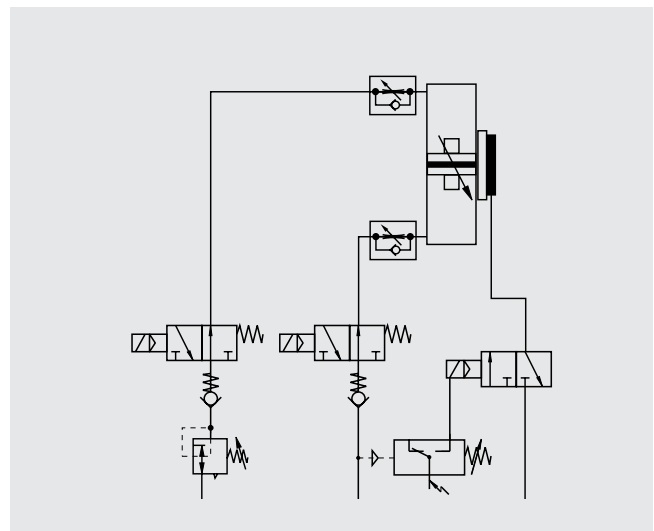
The optional integrated VOE Valves offer optimal control, and allow accurate

positioning of intermediate positions and the lowest possible speeds.



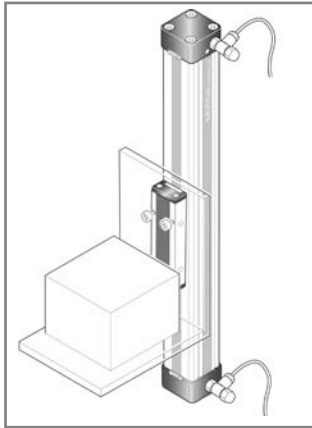
Fast/Slow speed cycle control with pneumatic brake for accurate positioning at high velocities. Additional 3/2-way valves with adjustable throttle valves at the exhaust of the standard directional control valves for two displacement

speeds in each direction of the piston's travel. The valve controlling the brake is activated after the slow speed cycle is activated

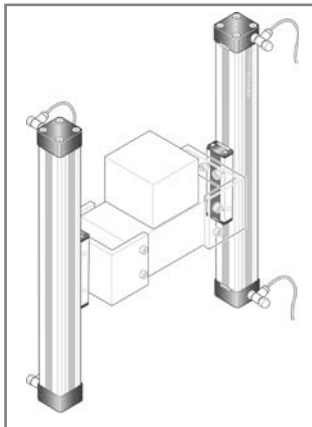
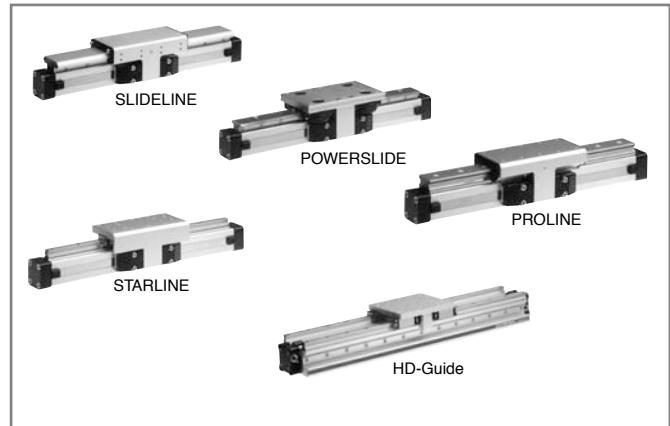


The combination of an OSP-cylinder with the passive MULTIBRAKE as shown here, allows accurate positioning and safety in case of loss of pneumatic air pressure.

ORIGA SYSTEM PLUS – rodless linear drives offer maximum flexibility for any application.



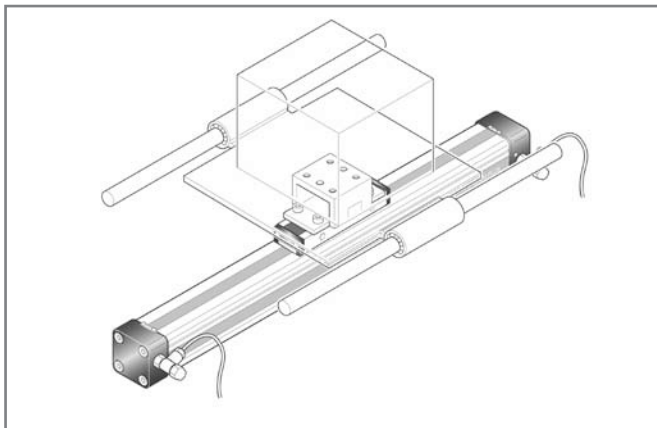
The high load capacity of the piston can cope with high bending moments without additional guides.



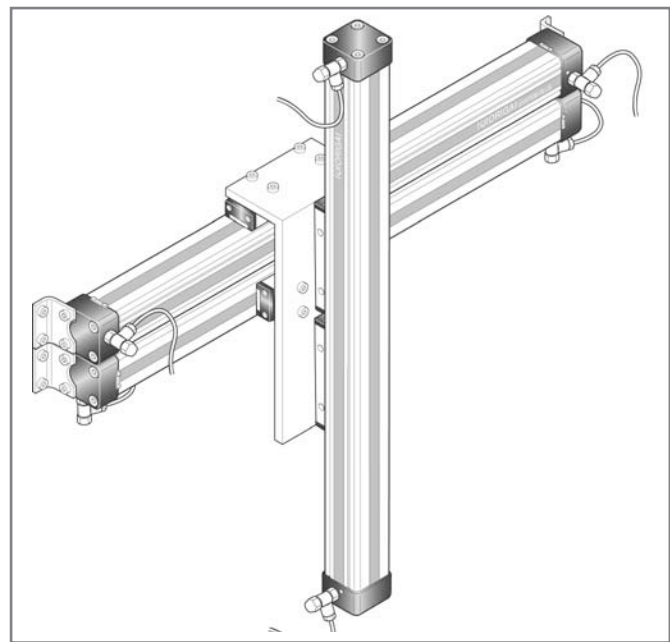
The mechanical design of the OSP-P allows synchronized movement of two cylinders.

Integrated guides offer optimal guidance for applications requiring high performance, easy assembly and maintenance free operation.

Optimal system performance by combining multi-axis cylinder combinations.



When using external guides, the clevis mounting is used to compensate for deviations in parallelism.



For further information and assembly instructions, please contact your local PARKER-ORIGA dealer.

Notes
