

Handling Products

Comprising an innovative range of pneumatic Grippers, Rotary Tables and Slide Tables



Motion control

Parker is about motion control engineering, manufacturing, application expertise and unparalleled customer service.

Parker automation products are found just about everywhere — from laboratories, cleanrooms and factory floors, to mines, foundries and satellites in space — our products are used anywhere machines, processes and people depend on reliable high-performance motion control.

Today's industrial automation applications demand the best in quality and productivity. Likewise, high-technology automation applications demand performance in quality, throughput and precision.



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Product Features:

Grippers

- Available with comprehensive range of bore sizes 12 - 32 mm
- Highly accurate air driven devices for work piece holding
- Magnetic piston as standard
- Simple mounting of sensors

Rotary Tables

- Twin rack and pinion fitted movement
- Adjustment from 0° to 190°
- Magnetic piston as standard
- Simple mounting of sensors

Slide Tables

- High precision combination of cylinder and linear rail
- Exceptional rigidity
- Magnetic piston as standard
- Simple mounting of sensors via flush fitting sensor groove



ENGINEERING YOUR SUCCESS.

Grippers

Sizes 10, 12, 16, 20, 25 and 32 mm



These modern lightweight grippers offer high performance with a choice of options, used for material handling and precision assembly, up to 6 sizes are available and can be used in a variety of applications.

One or two magnetic sensors can be mounted on all sizes to provide a signal to monitor gripper opening and closing.

Bore Size Ø	P5GA/P5GB	12	16	20	25	32
	P5GD/P5GL	10	16	20	25	-
Port Size	P5GA P5GB/P5GD	M3 x 0.5	M5 x 0.8			
	P5GL	M5 x 0.8				-
Acting Type		Double Acting				
Medium		Air				
Operating Pressure Range		1.5 - 7 bar				
Temperature Range		-5° to +60° C (no freezing)				
Lubrication	Piston	Not Required				
	Gripper	Grease				
Sensor	P5GA P5GB/P5GD	P8S-E				
	P5GL	P8S-H				

Design Variants

P5GD / P5GB - Parallel double acting, square jaw carriers



- Highly accurate air driven device for work-piece holding
- Magnetic as standard
- Lever Open/Close Stroke 6...16 mm

P5GA - Angular double acting, square jaw carriers



- Highly accurate air driven device for work-piece holding
- Magnetic as standard
- Clamp / Release Angle -10° to +30°

P5GL - Radial double acting, square jaw carriers



- Integral linear guide used for high rigidity and high precision
- Stainless steel fingers
- Grooves on the body for sensors switch to be inserted into
- Magnetic as standard
- Clamp/Release Angle -3° to 182°

Sensors (P8S)

Check on opening and closing of gripper by means of sensors.

Rotary Tables

Sizes 16, 20, 25 and 32 mm



The P5RS units provide precise control from 0° - 190° even under heavy loads, with specially designed load fixing and centring capabilities.

End stroke cushioning using an adjusting bolt or shock absorber offers dependable linear cushioning enabling objects to be carried and positioned safely and securely.

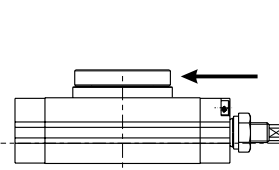
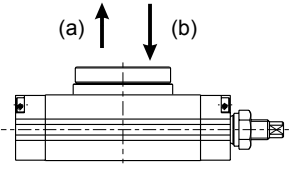
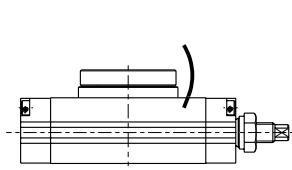
Bore Size Ø	16	20	25	32
Port Size	G 1/8			
Acting Type	Double Acting			
Medium	Air			
Operating Pressure Range	1 - 10 bar *			
Temperature Range	-5° to +60° C (no freezing)			
Angle Adjustment Range	0° to 190° (max.)			
Sensor	P8S-F			

* The maximum operating pressure of the actuator is restricted by the maximum allowable thrust of the shock absorber.

Theoretical torque [Nm]

Bore Ø	Operating pressure [bar]						
	1	2	3	4	5	6	7
16	0.24	0.48	0.72	0.96	1.21	1.45	1.69
20	0.50	1.01	1.51	2.01	2.51	3.02	3.52
25	0.98	1.96	2.95	3.93	4.91	5.89	6.87
32	1.94	3.86	5.80	7.72	9.86	11.58	13.52

Allowable Loads and Moments

				
Bore Ø	Allowable radial load [N]	Allowable thrust load [N]		Allowable moment [Nm]
		(a)	(b)	
16	78	74	78	2.4
20	147	137	137	4.0
25	196	197	363	5.3
32	314	296	451	9.7

Loads in the above table are limited by the max. absorption of kinetic energy at the end of the angular movement. (Values outside of limitations will cause excessive play, deteriorate accuracy, and shorten service life.)

Slide Tables

High Precision Combination of Cylinder and Linear Rail.

Sizes 6, 8, 12, 16, 20 and 25 mm



The Precision Slide Table P5SS is a pneumatic actuator, operated by 2 cylinders mounted in parallel for moving loads fitted on its mobile carriage or on its front plate quickly and accurately. Each end of stroke is precisely adjustable even when the Precision Slide Table is pressurised. Additionally, the front stop can be moved in steps providing an extra adjustment. Optional Mounting kits provide the possibility to fix the Precision Slide Table on 3 sides and to assemble the Precision Slide Tables in combinations.

Bore Size Ø	6	8	12	16	20	25
Port Size	M3 x 0.5	M5 x 0.8			G 1/8	
Acting Type	Double Acting					
Medium	Air					
Operating Pressure Range	1.5 - 7 bar					
Ambient Temperature	-5° to +60° C (no freezing)					
Lubrication	Not Required					
Cushion	Rubber Bumper (Standard)					
	Shock Absorber (Option)					
Sensor	P8S-E					

Table for standard stroke [mm]

Bore size	Stroke
Ø 6	10, 20, 30, 40, 50
Ø 8	10, 20, 30, 40, 50, 75
Ø 12	10, 20, 30, 40, 50, 75, 100
Ø 16	10, 20, 30, 40, 50, 75, 100
Ø 20, 25	10, 20, 30, 40, 50, 75, 100, 125, 150

Theoretical force [N]

Stroke	Piston rod [mm]	Operating direction	Piston area [mm²]	Operating pressure [bar]						
				2	3	4	5	6	7	
6	3	Out	57	11	17	23	29	34	40	
		In	42	8	13	17	21	25	29	
8	4	Out	101	20	30	40	51	61	71	
		In	75	15	23	30	38	45	53	
12	6	Out	226	45	68	90	113	136	158	
		In	170	34	51	68	85	102	119	
16	8	Out	402	80	121	161	201	241	281	
		In	302	60	91	121	151	181	211	
20	10	Out	628	126	188	251	314	377	400	
		In	471	94	141	188	236	283	330	
25	12	Out	982	196	295	393	491	589	687	
		In	756	151	227	302	378	454	529	

Accessoires

Magnetic Field Sensors

Series P8S	M8 - Snap in	FL - Flying lead
		
	0.165 m PUR cable with M8 connector	2 m PUR cable
PNP, NO	P8S-EPSUS	P8S-EPFXS
NPN, NO	P8S-ENSUS	P8S-ENFXS
Reed, NO	P8S-ERSUS	P8S-ERFXS
Reed, NO	P8S-FRSUS	P8S-FRFXS
Reed, NO	P8S-HRSUS	P8S-HRFXS