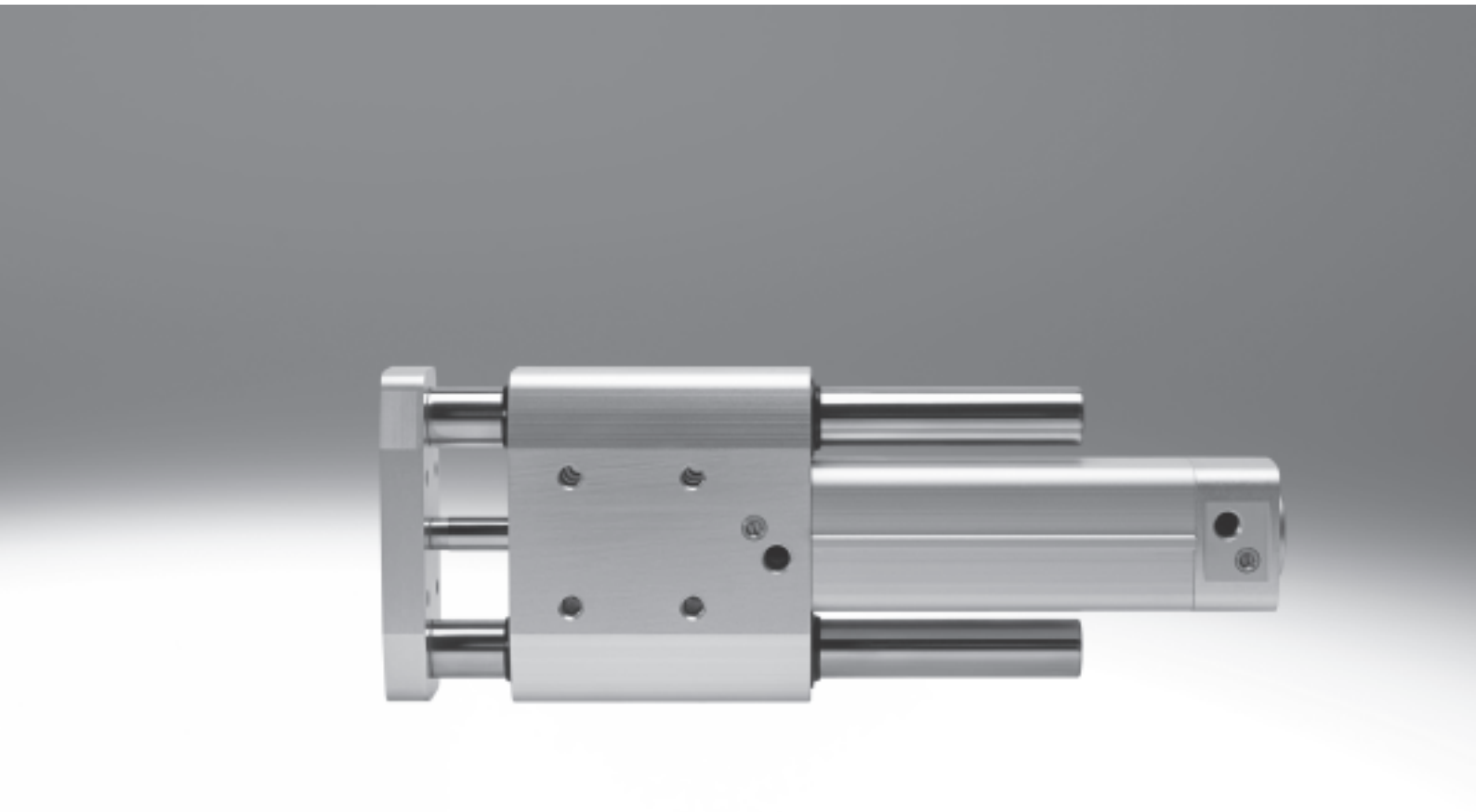
Guided drives DGRF-C, Clean Design

FESTO



Guided drives DGRF-C, Clean Design

Key features and product range overview

At a glance

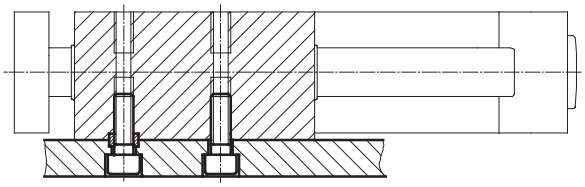
- The guided drive is used wherever hygiene, ease of cleaning and resistance are important, predominantly in dry and splash zones in the food and packaging industry
- Corrosion-resistant in harsh ambient conditions
- Easy-to-clean design
- FDA-compliant
- Suitable for unlubricated operation
- Resistant to conventional cleaning agents
- For hygiene reasons, the threads on the end caps should be sealed with cover plates
- Variant (A3): special piston rod seal and guide rod wiper seal increase the service life of the drive

Areas of application:

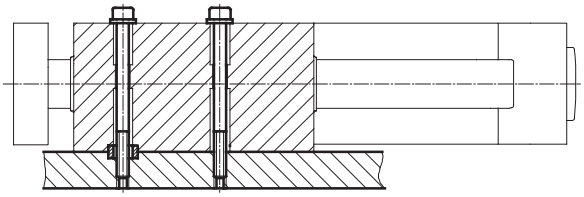
- Bottling systems in the beverage industry
  - Labelling and palletising machines
- Milk processing
  - Filling ice cream and yoghurt containers, etc.
- Meat processing
- Confectionery production
- Bakery production
- Packaging industry
  - Foodstuffs, pharmaceuticals, cosmetics, chemicals, beverages and tobacco

Mounting options

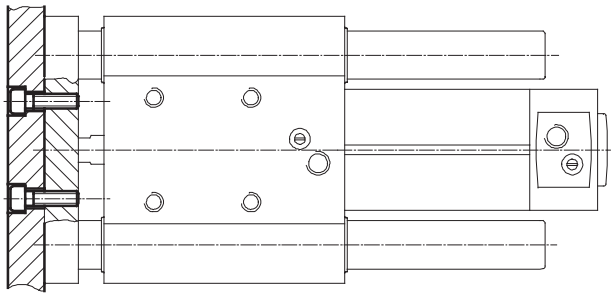
From underneath



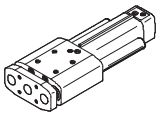
From above



On the yoke plate



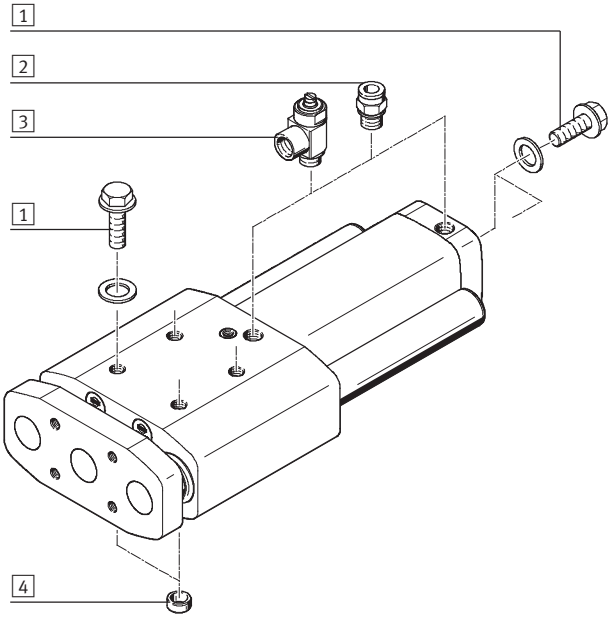
Product range overview

Function	Type	Piston ∅	Stroke	Cushioning		Position sensing	Mounting rail	Unlubricated operation
				P	PPV	A	R	A3
Double-acting	DGRF-C-GF							
		20, 25	10 … 400	■	–	–	–	■
		32	10 … 400	■	■	■	■	■
		40, 50, 63	10 … 400	–	■	■	■	■

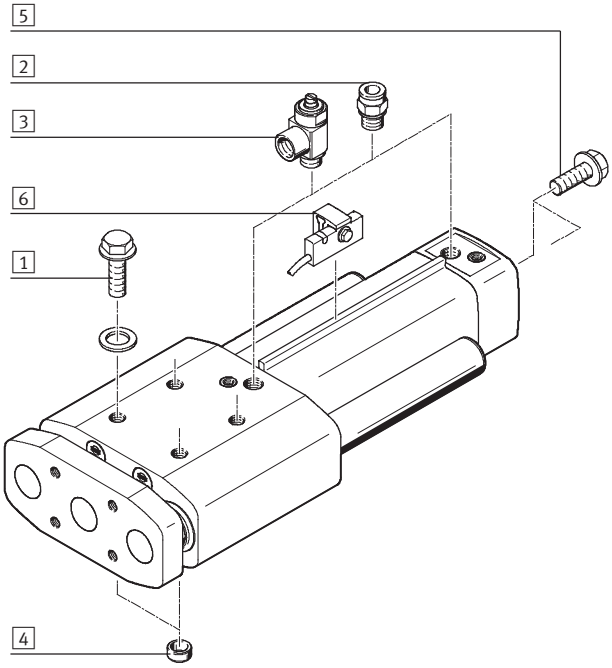
Guided drives DGRF-C, Clean Design

Peripherals overview

Piston ∅ 20, 25



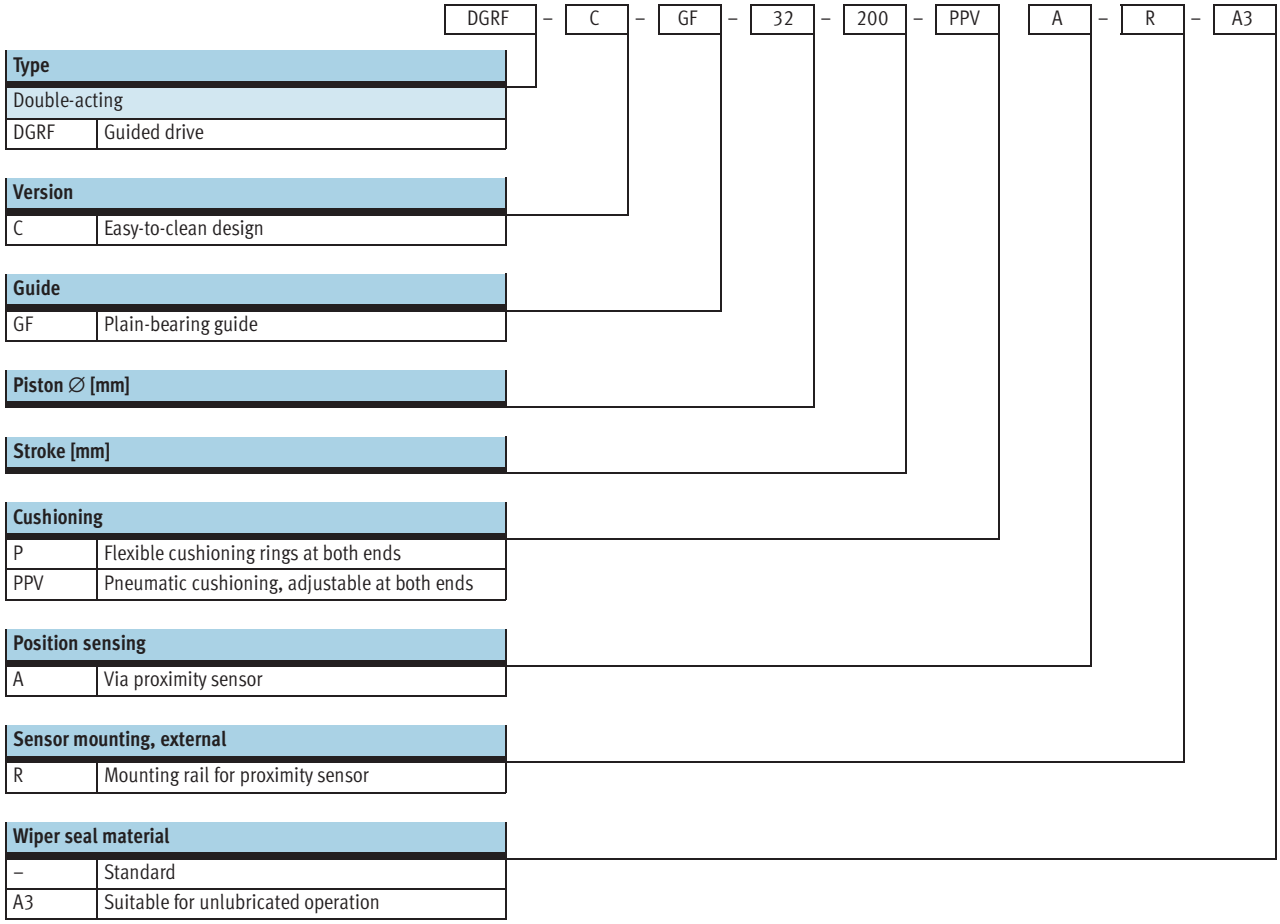
Piston ∅ 32, 40, 50, 63



Accessories			
		Brief description	**→ Page/Internet**
1	Cover plate DAMD	• For sealing unused mounting threads • The cover disc is included with the screw • The screws are not included with the drive	13
2	Push-in fitting QS-F/QSL-F/CRQS/CRQSL/NPQP	For connecting compressed air tubing with standard O.D.	11
3	One-way flow control valve CRGRLA/GRLA-F	For regulating speed	13
4	Centring sleeve ZBH	• For centring the guided drive • Two centring sleeves included in the scope of delivery	13
5	Cover plate CR	• For sealing unused mounting threads • The screws are not included with the drive	13
6	Proximity sensor SMT-C1	• For sensing the position • Proximity sensor is mounted on the sensor mounting rail	11

Guided drives DGRF-C, Clean Design

Type codes



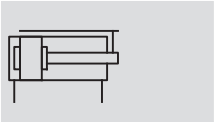
Guided drives DGRF-C, Clean Design

Technical data

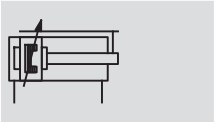
FESTO

Function

Piston ∅ 20, 25



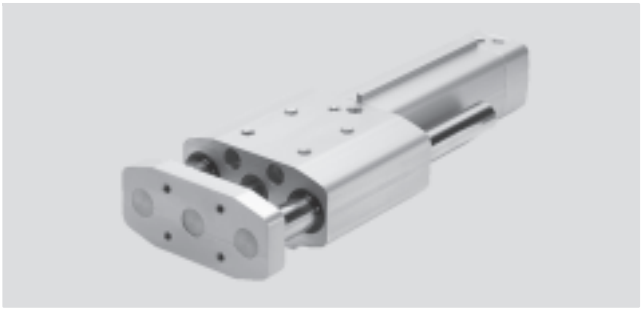
Piston ∅ 32, 40, 50, 63



-N- Diameter
20 ... 63 mm

-T- Stroke length
10 ... 400 mm

www.festo.com/en/
Spare_parts_service



General technical data							
Piston ∅		20	25	32	40	50	63
Pneumatic connection		M5	M5	G1⁄8	G1⁄4	G1⁄4	G3⁄8
Mode of operation		Double-acting					
Design		Guide					
		Guide rods with yoke					
Guide		Plain-bearing guide					
Cushioning	P	Flexible cushioning rings at both ends			–		
	PPV	–		Pneumatic cushioning, adjustable at both ends			
Cushioning length	[mm]	–		20	20	22	22
Position sensing		–		Via proximity sensor			
Type of mounting		Via through-hole					
		Via female thread					
Mounting position		Any					
Torsional backlash[1]	[°]	0.13	0.11	0.10	0.09	0.07	0.06

1) Retracted state, without load

Operating and environmental conditions								
Piston ∅		20	25	32		40	50	63
Variant				P	PPV			
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]						
Note on operating/pilot medium		Operation with lubricated medium possible (in which case lubricated operation will always be required)						
Operating pressure	[bar]	2.5 ... 10		2 ... 10	2 ... 12	2 ... 12		1.5 ... 12
A3	[bar]	2 ... 10			2 ... 12	1.5 ... 12		
Ambient temperature	[°C]	–20 ... +80						
Suitability for use in the food industry		As per manufacturer's declaration (➔ Support / Downloads)						
Corrosion resistance class CRC[1]		3						

1) Corrosion resistance class 3 according to Festo standard 940 070
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

Force [N] and impact energy [J]						
Piston ∅	20	25	32	40	50	63
Theoretical force at 6 bar, advancing	189	295	483	754	1,178	1,870
Theoretical force at 6 bar, retracting	141	247	415	633	990	1,682
Max. impact energy in the end positions with P cushioning	0.2	0.3	0.4	–	–	–

Permissible impact velocity:

$$v_{perm.} = \sqrt{\frac{2 \times E_{perm.}}{m_{dead} + m_{load}}}$$

Maximum permissible load:

$$m_{load} = \frac{2 \times E_{perm.}}{v^2} - m_{dead}$$

$v_{perm.}$ Permissible impact velocity
$E_{perm.}$ Max. impact energy
$m_{Intrinsic}$ Moving load (drive)
m_{Load} Moving effective load

Note

This data represents the maximum values that can be achieved. The maximum permissible impact energy must be observed.

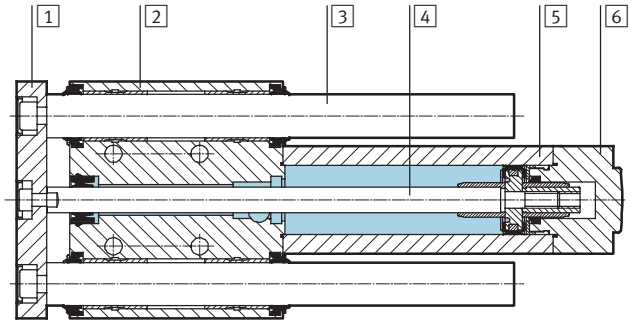
Guided drives DGRF-C, Clean Design

Technical data

Weight [g]							
Piston ∅	20	25	32		40	50	63
Variant			P	PPV			
Product weight with 0 mm stroke	900	1,200	2,100	2,300	2,950	4,700	6,100
Additional weight per 10 mm stroke	52	55	80	83	92	142	147
Moving load with 0 mm stroke	420	490	900	910	1,100	1,800	2,100
Additional load per 10 mm stroke	38	38	58	58	65	102	102

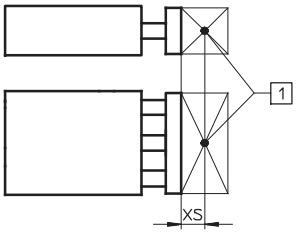
Materials

Sectional view



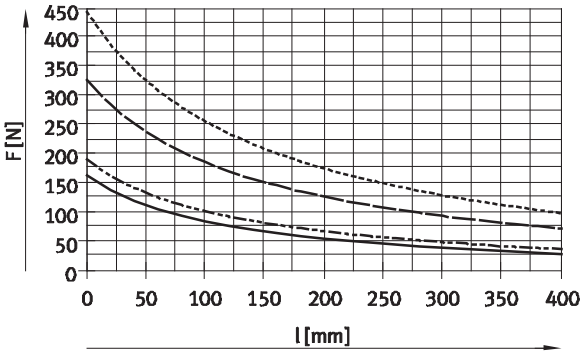
Guided drive		Standard	A3
1	Yoke plate	Wrought aluminium alloy	
2	Housing	Wrought aluminium alloy	
3	Guide rod	High-alloy stainless steel	
4	Piston rod	High-alloy stainless steel	
5	Cylinder barrel	Wrought aluminium alloy	
6	End cap	Wrought aluminium alloy	
–	Seal	Polyurethane elastomer	Polyethylene
–	Note on materials	RoHS-compliant	

Max. effective load F as a function of stroke l

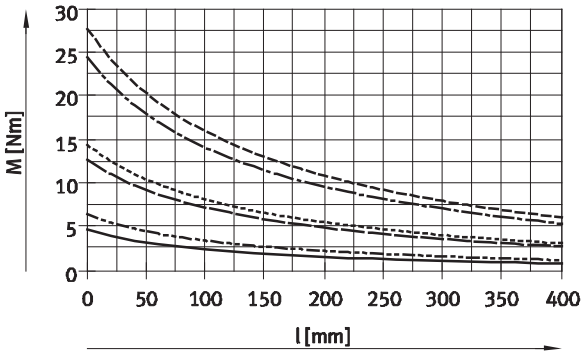


1 Centre of gravity of effective load

- Load data are based on a distance from the centre of gravity of XS = 50 mm
- Load data can be requested for larger distances



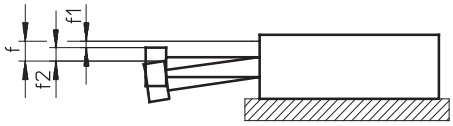
Max. torque load M as a function of stroke l



- ∅ 20
- ∅ 25
- ∅ 32
- ∅ 40
- ∅ 50
- ∅ 63

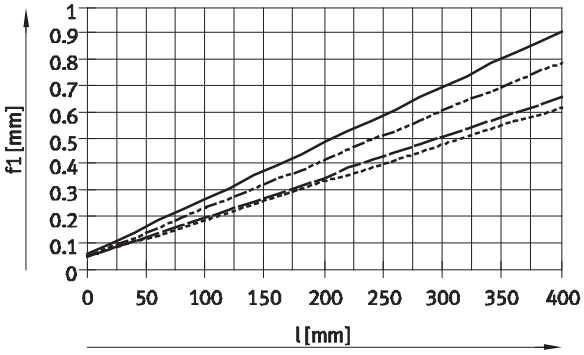
Deflection of piston rod

Deflection f1 due to bearing backlash as a function of stroke l



f = f1 + f2
f = Total deflection of piston rod
f1 = Deflection due to bearing backlash
f2 = Deflection due to lateral force

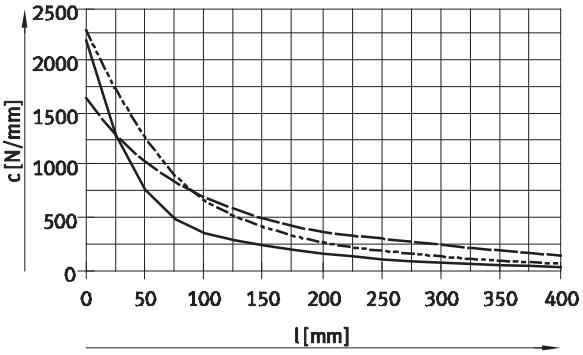
Deflection f1,
due to bearing backlash as a function of stroke l



- ∅ 20
- ∅ 25
- ∅ 32/40
- ∅ 50/63

Deflection f2,
due to effective load F and rigidity c as a function of stroke l

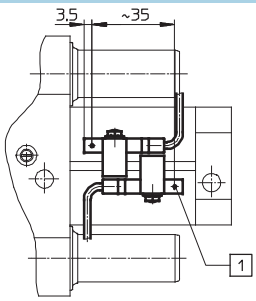
$$f2 = \frac{F}{c}$$



- ∅ 20/25
- ∅ 32/40
- ∅ 50/63

End-position sensing

A minimum stroke is required to be able to sense both end positions at the cylinder.

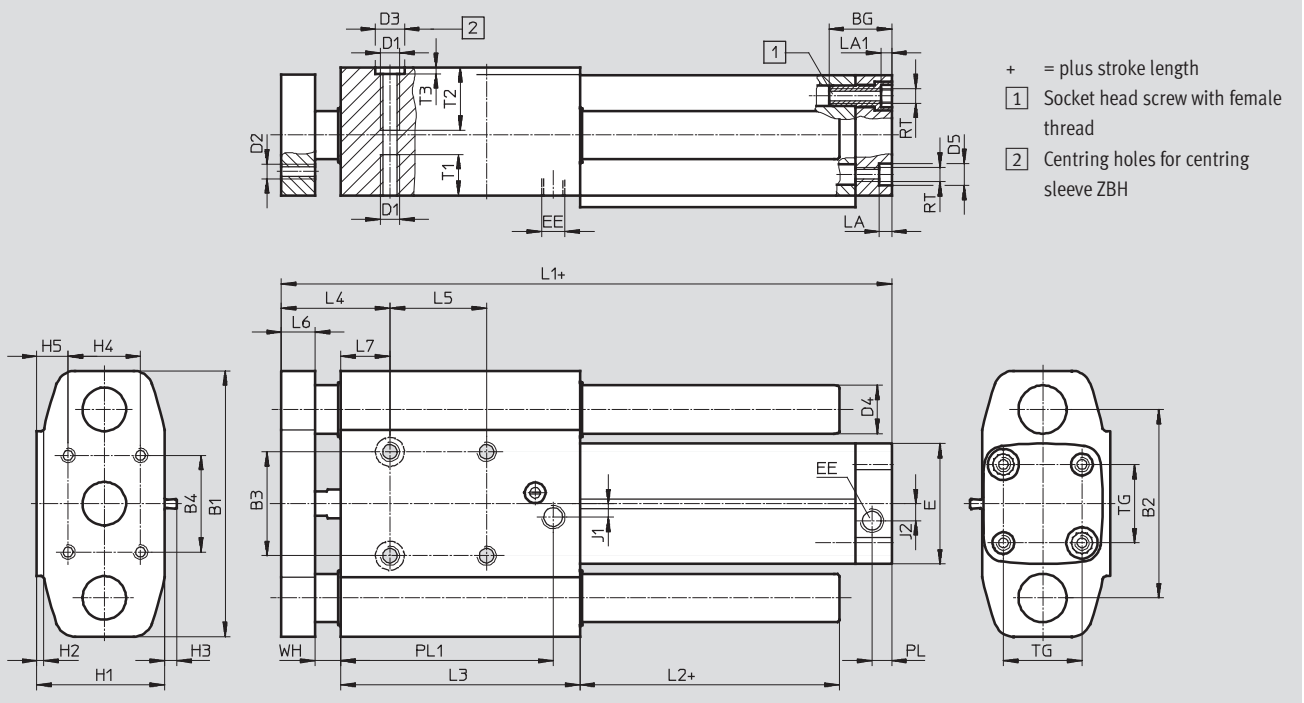


1 Position of the proximity sensor within the housing

Piston ∅		32	40	50	63
Minimum stroke	[mm]	35	35	35	30

Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

DGRF-...-P-... – Flexible cushioning rings at both ends



\+ = plus stroke length

1 Socket head screw with female thread

2 Centring holes for centring sleeve ZBH

∅ [mm]	BG	B1	B2	B3[2]	B4	D1	D2	D3[3] ∅ H7	D4 ∅	D5 ∅ F9	E	EE
20	19.5	83	58	30	30	M6	M5	9	16	9	37	M5
25	19.5	95	68	35	40	M6	M6	9	16	9	42	M5
32	26	110	78	43	40	M8	M6	12	20	9	50	G1/8

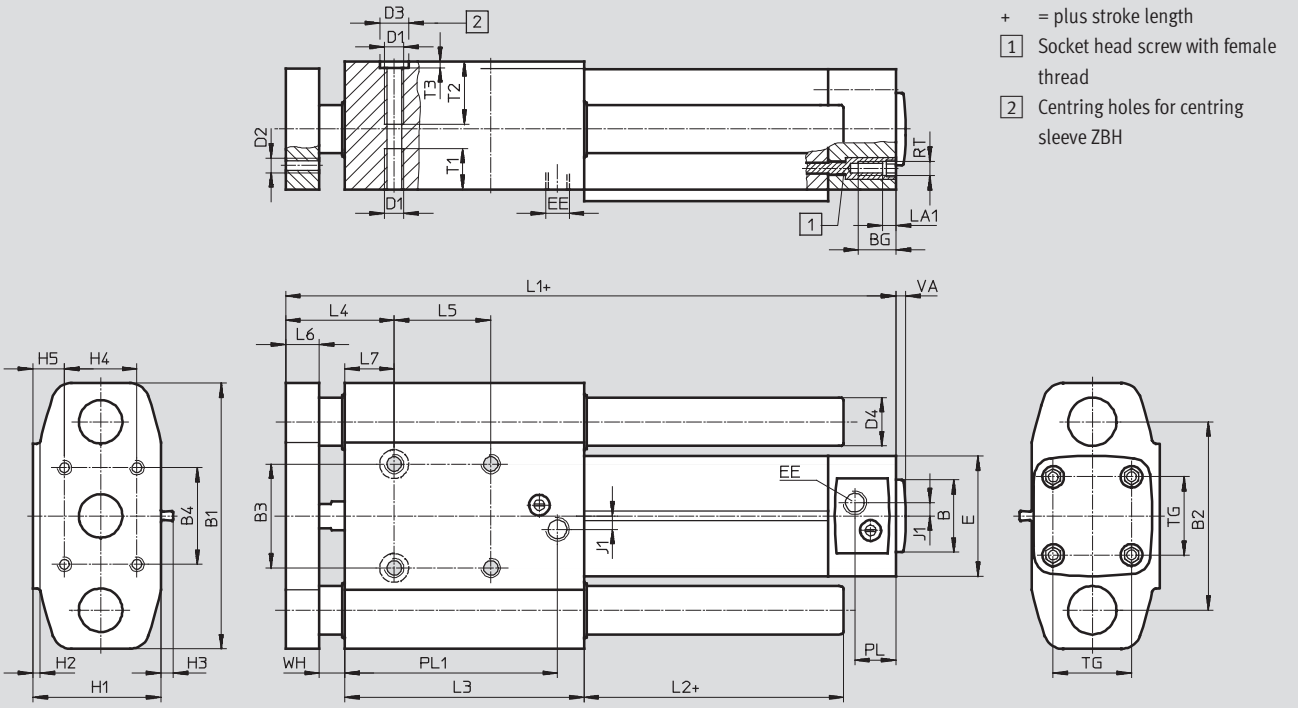
∅ [mm]	H1	H2	H3[1]	H4	H5	J1	J2	L1	L2	L3	L4	L5
20	39	2	–	20	10.5	0	0	115 +1.4/–0.8	7	68	40 +1/–0.9	30
25	44	2	–	20	13	0	0	126 +1.4/–0.8	7	77	40+1/–0.9	40
32	53	3	5	30	13	5.5	7	152.8 ±1.1	7.4	99	45+0.9/–1	40

∅ [mm]	L6	L7	LA	LA1	PL	PL1	RT	T1	T2	T3	TG	WH
20	12	18	4.9	4.6	6	62	M5	13	20	2.1	22	10 +0.5/–0.7
25	12	18	4.9	4.6	6	71	M5	13	25	2.1	26	10 +0.5/–0.7
32	14	20.4	5.1	4.6	8.2	88	M6	17	26	2.6	32.5	10.7 +0.3/–0.9

1) Only in combination with sensor mounting rail (DGRF-...-R)
2) Tolerance between centring holes ±0.02 mm
3) Two centring sleeves included in the scope of delivery

Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

DGRF-...-PPV-... – Pneumatic cushioning, adjustable at both ends



\+ = plus stroke length

1 Socket head screw with female thread

2 Centring holes for centring sleeve ZBH

∅ [mm]	B ∅ d11	BG	B1	B2	B3 2)	B4	D1	D2	D3 3) ∅ H7	D4 ∅	E	EE
32	30	16	110	78	43	40	M8	M6	12	20	50	G1⁄8
40	35	16	120	88	51	50	M8	M6	12	20	58	G1⁄4
50	40	17	148	110	64	60	M8	M8	12	25	70	G1⁄4
63	45	17	162	125	80	80	M10	M8	12	25	81	G3⁄8

∅ [mm]	H1	H2	H3 1)	H4	H5	J1	L1	L2	L3	L4	L5
32	53	3	5	30	13	5.5	177.6 +1.9/–1.2	7.4	99	45 +1.5/–1.1	40
40	61	3	5	30	17	6.5	183.5 +1.9/–1.3	7.5	99	45 +1.5/–1.1	40
50	73	3	5	40	18	8.5	193.5 +1.7/–1.3	7.7	105	50 +1.3/–1.2	40
63	84	3	5	40	23.5	11	207.3 +1.7/–1.3	7.5	105	50 +1.3/–1.2	40

∅ [mm]	L6	L7	LA1	PL	PL1	RT	T1	T2	T3	TG	VA	WH
32	14	20.4	5.6	17	88	M6	17	26	2.6	32.5	4	10.6 +1/–0.9
40	14	20.5	5.6	19	83	M6	17	26	2.6	38	4	10.5 ±1
50	16	22.7	6.1	20	89	M8	17	20	2.6	46.5	4	11.3 +0.8/–1
63	20	18.5	6.1	25	79.5	M8	17	24	2.6	56.5	4	11.5 +0.8/–1

1) Only in combination with sensor mounting rail (DGRF-...-R)
2) Tolerance between centring holes ±0.02 mm
3) Two centring sleeves included in the scope of delivery

Guided drives DGRF-C, Clean Design

Ordering data – Modular products

Ordering table

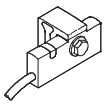
Size		20	25	32	40	50	63	Conditions	Code		Enter code
M	Module No.	**562216**	**562217**	**563366**	**562219**	**562220**	**562221**				
	Function	Guided drive							**DGRF**		DGRF
	Product design	Easy-to-clean design							**-C**		-C
	Guide	Plain-bearing guide							**-GF**		-GF
	Piston ∅	20	25	32	40	50	63		**-...**		
	Stroke [mm]	10 ... 400							**-...**		
	Cushioning	Flexible cushioning rings at both ends							**-P**		
				Pneumatic cushioning, adjustable at both ends					**-PPV**		
	Position sensing			Via proximity sensor				1	**A**		
	Sensor mounting, external			Mounting rail for proximity sensor				1	**-R**		
O	Wiper seal variant	Standard									
		For unlubricated operation							**-A3**		

1 **A, R** Always present with piston ∅ 32 ... 63.

Transfer order code

	DGRF	–	C	–	GF	–		–		–			–		–	

Ordering data – Proximity sensors for T-slot, magneto-resistive — Technical data ➔ Internet: smt

	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Is mounted on the mounting rail	PNP	Cable, 3-wire	5.0	**571339**	**SMT-C1-PS-24V-K-5,0-OE**
			Plug M8x1, 3-pin	0.3	**571342**	**SMT-C1-PS-24V-K-0,3-M8D**
			Plug M12x1, 3-pin	0.3	**571341**	**SMT-C1-PS-24V-K-0,3-M12**

Ordering data – Connecting cables for SMT-C1-... — Technical data ➔ Internet: nebu

	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	**541333**	**NEBU-M8G3-K-2.5-LE3**
			5	**541334**	**NEBU-M8G3-K-5-LE3**
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	**541363**	**NEBU-M12G5-K-2.5-LE3**
			5	**541364**	**NEBU-M12G5-K-5-LE3**
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	**541338**	**NEBU-M8W3-K-2.5-LE3**
			5	**541341**	**NEBU-M8W3-K-5-LE3**
	Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	**541367**	**NEBU-M12W5-K-2.5-LE3**
			5	**541370**	**NEBU-M12W5-K-5-LE3**

Ordering data – Push-in fittings — Technical data ➔ Internet: quick star

	Connection		Material	Part No.	Type	PU[2]
	Thread	Tubing O.D.				
With external hexagon						
	M5	4	Brass, nickel and chrome-plated	**533844**	**QS-F-M5-4[1]**	10
		6		**533845**	**QS-F-M5-6[1]**	
	G1⁄8	4		**193408**	**QS-F-G1⁄8-4[1]**	
		6		**193409**	**QS-F-G1⁄8-6[1]**	
		8		**193410**	**QS-F-G1⁄8-8[1]**	
	G1⁄4	6		**193411**	**QS-F-G1⁄4-6[1]**	
		8		**193412**	**QS-F-G1⁄4-8[1]**	
		10		**193413**	**QS-F-G1⁄4-10[1]**	
	G3⁄8	8		**193414**	**QS-F-G3⁄8-8[1]**	
		10		**193415**	**QS-F-G3⁄8-10[1]**	
		12		**193487**	**QS-F-G3⁄8-12[1]**	
	M5	4	Stainless steel	**162860**	**CRQS-M5-4[1]**	1
		6		**162861**	**CRQS-M5-6[1]**	
	R1⁄8	4		**132643**	**CRQS-1⁄8-4**	
		6		**162862**	**CRQS-1⁄8-6**	
		8		**162863**	**CRQS-1⁄8-8**	
	R1⁄4	6		**132644**	**CRQS-1⁄4-6**	
		8		**162864**	**CRQS-1⁄4-8**	
		10		**162865**	**CRQS-1⁄4-10**	
	R3⁄8	10		**162866**	**CRQS-3⁄8-10**	
		12		**162867**	**CRQS-3⁄8-12**	
	R1⁄8	4	Polypropylene	**133041**	**NPQP-D-R18-Q4-FD-P10**	10
		6		**133043**	**NPQP-D-R18-Q6-FD-P10**	
		8		**133045**	**NPQP-D-R18-Q8-FD-P10**	
	R1⁄4	6		**133044**	**NPQP-D-R14-Q6-FD-P10**	
		8		**133046**	**NPQP-D-R14-Q8-FD-P10**	
		10		**133047**	**NPQP-D-R14-Q10-FD-P10**	
	R3⁄8	10		**133048**	**NPQP-D-R38-Q10-FD-P10**	
		12		**133049**	**NPQP-D-R38-Q12-FD-P10**	

1) With sealing ring
2) Packaging unit

Ordering data – Push-in fittings — Technical data ➔ Internet: quick star

	Connection		Material	Part No.	Type	PU[2]
	Thread	Tubing O.D.				
With internal hexagon						
	M5	4	Brass, nickel and chrome-plated	533924	QS-F-M5-4-I[1]	10
		6		537014	QS-F-M5-6-I[1]	
	G1/8	4		533927	QS-F-G1/8-4-I[1]	
		6		533928	QS-F-G1/8-6-I[1]	
		8		533929	QS-F-G1/8-8-I[1]	
	G1/4	8		533930	QS-F-G1/4-8-I[1]	
		10		533931	QS-F-G1/4-10-I[1]	
	G3/8	12		8002796	QS-F-G3/8-12-I-B[1]	
	M5	4	Stainless steel	132328	CRQS-M5-4-I[1]	1
		6		132329	CRQS-M5-6-I[1]	
	R1/8	6		132330	CRQS-1/8-6-I	
		8		132331	CRQS-1/8-8-I	
	R1/4	8		132332	CRQS-1/4-8-I	
		10		132333	CRQS-1/4-10-I	
	R3/8	10		132334	CRQS-3/8-10-I	

1) With sealing ring
2) Packaging unit

Ordering data – Push-in L-fittings — Technical data ➔ Internet: crqsl

	Connection		Material	Part No.	Type	PU[2]
	Thread	Tubing O.D.				
With external hexagon						
	M5	4	Brass, nickel and chrome-plated	533849	QSL-F-M5-4[1]	10
		6		533850	QSL-F-M5-6[1]	
	G1/8	4		193418	QSL-F-G1/8-4[1]	
		6		193419	QSL-F-G1/8-6[1]	
		8		193420	QSL-F-G1/8-8[1]	
	G1/4	6		193421	QSL-F-G1/4-6[1]	
		8		193422	QSL-F-G1/4-8[1]	
		10		193423	QSL-F-G1/4-10[1]	
		12		533853	QSL-F-G1/4-12[1]	
	G3/8	8		193424	QSL-F-G3/8-8[1]	
		10		193425	QSL-F-G3/8-10[1]	
		12		197486	QSL-F-G3/8-12[1]	
	M5	4	Stainless steel	162870	CRQSL-M5-4[1]	1
		6		162871	CRQSL-M5-6[1]	
	R1/8	4		132598	CRQSL-1/8-4	
		6		162872	CRQSL-1/8-6	
		8		162873	CRQSL-1/8-8	
	R1/4	6		132599	CRQSL-1/4-6	
		8		162874	CRQSL-1/4-8	
		10		162875	CRQSL-1/4-10	
	R3/8	10		162876	CRQSL-3/8-10	
		12		162877	CRQSL-3/8-12	
	R1/8	4	Polypropylene	133051	NPQP-L-R18-Q4-FD-P10	10
		6		133053	NPQP-L-R18-Q6-FD-P10	
		8		133055	NPQP-L-R18-Q8-FD-P10	
	R1/4	6		133054	NPQP-L-R14-Q6-FD-P10	
		8		133056	NPQP-L-R14-Q8-FD-P10	
		10		133057	NPQP-L-R14-Q10-FD-P10	
	R3/8	10		133058	NPQP-L-R38-Q10-FD-P10	
		12		133059	NPQP-L-R38-Q12-FD-P10	

1) With sealing ring
2) Packaging unit

Ordering data – One-way flow control valves — Technical data ➔ Internet: crgrla

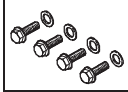
	Connection		Material	Part No.	Type	PU[1]
	Thread	For push-in fitting				
	M5	CRQS/CRQSL/CRQST, Quick Star	Electropolished special steel casting	**161403**	**CRGRLA-M5-B**	1
	G1⁄8			**161404**	**CRGRLA-1⁄8-B**	
	G1⁄4			**161405**	**CRGRLA-1⁄4-B**	
	G3⁄8			**161406**	**CRGRLA-3⁄8-B**	
	G1⁄8	Push-in connector is integrated	Chrome-plated metal	**195597**	**GRLA-F-1⁄8-QS-4-D**	1
				195598	**GRLA-F-1⁄8-QS-6-D**	
				195599	**GRLA-F-1⁄8-QS-8-D**	
	G1⁄4			**195600**	**GRLA-F-1⁄4-QS-6-D**	
				195601	**GRLA-F-1⁄4-QS-8-D**	

1) Packaging unit

Ordering data – Plastic tubing, standard O.D. — Technical data ➔ Internet: tubing

		Type
	Approved for use in the food industry and resistant to hydrolysis	**PUN-H**
	Good resistance to chemicals and hydrolysis	**PLN**
	Pneumatic tubing with resistance to high temperatures and chemicals	**PFAN**

Ordering data – Cover plates, corrosion-resistant

	For ∅	Description	Part No.	Type	PU[1]
For mounting thread on the guide					
	20, 25	With cover disc	**543715**	**DAMD-P-M6-12-R1**	4
	32, 40, 50		**543716**	**DAMD-P-M8-16-R1**	
	63		**543717**	**DAMD-P-M10-16-R1**	
For mounting thread on the end cap					
	20, 25	With cover disc	**543714**	**DAMD-P-M5-10-R1**	4
	32[2]		**543715**	**DAMD-P-M6-12-R1**	
	32[3], 40	–	**650120**	**CR-M6x12-A2-70:6KT**	
	50, 63		**650121**	**CR-M8x16-A2-70:6KT**	

1) Packaging unit
2) For drive with P cushioning
3) For drive with PPV cushioning

Ordering data – Centring sleeves — Technical data ➔ Internet: zbh

	For ∅	Part No.	Type	PU[1]
	20, 25	**150927**	**ZBH-9**	10
	32, 40, 50, 63	**189653**	**ZBH-12**	

1) Packaging unit

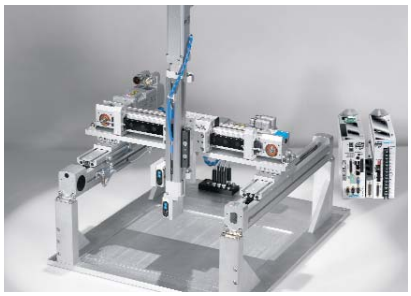
Product Range and Company Overview

A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.

Custom Automation Components
Complete custom engineered solutions

Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.

Electromechanical
Electromechanical actuators, motors, controllers & drives

Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply

PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.

FSC Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

Festo North America

Festo Regional Contact Center

5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Canada

USA Customers:

For ordering assistance,
Call: 1.800.99.FESTO (1.800.993.3786)
Fax: 1.800.96.FESTO (1.800.963.3786)
Email: customer.service@us.festo.com

For technical support,
Call: 1.866.GO.FESTO (1.866.463.3786)
Fax: 1.800.96.FESTO (1.800.963.3786)
Email: product.support@us.festo.com

Canadian Customers:

Call: 1.877.GO.FESTO (1.877.463.3786)
Fax: 1.877.FX.FESTO (1.877.393.3786)
Email: festo.canada@ca.festo.com

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
www.festo.com/us

USA Sales Offices

Appleton
North 922 Tower View Drive, Suite N
Greenville, WI 54942, USA

Boston
120 Presidential Way, Suite 330
Woburn, MA 01801, USA

Chicago
1441 East Business Center Drive
Mt. Prospect, IL 60056, USA

Dallas
1825 Lakeway Drive, Suite 600
Lewisville, TX 75057, USA

Detroit – Automotive Engineering Center
2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326, USA

New York
395 Moreland Road
Hauppauge, NY 11788, USA

Silicon Valley
4935 Southfront Road, Suite F
Livermore, CA 94550, USA

United States

USA Headquarters, East: Festo Corp., 395 Moreland Road, Hauppauge, NY 11788
Phone: 1.631.435.0800; Fax: 1.631.435.8026;
Email: info@festo-usa.com **www.festo.com/us**

Canada

Headquarters: Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4
Phone: 1.905.624.9000; Fax: 1.905.624.9001;
Email: festo.canada@ca.festo.com **www.festo.ca**

Mexico

Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquinahuac,
54020 Tlalnepantla, Edo. de México
Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;
Email: festo.mexico@mx.festo.com **www.festo.com/mx**

Central USA
Festo Corporation
1441 East Business
Center Drive
Mt. Prospect, IL 60056, USA
Phone: 1.847.759.2600
Fax: 1.847.768.9480

Western USA
Festo Corporation
4935 Southfront Road,
Suite F
Livermore, CA 94550, USA
Phone: 1.925.371.1099
Fax: 1.925.245.1286

Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan Latvia Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com