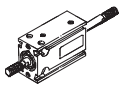
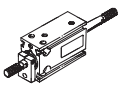
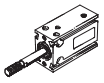
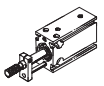
Compact cylinders DMM/EMM, Multimount

FESTO

- Compact cylinders with multifunctional mounting options
- Small, light and reliable
- Ideal for direct mounting

Compact cylinders DMM/EMM, Multimount

Product range overview

Function	Version	Type	Piston ∅ [mm]	Stroke [mm]	Position sensing
Double-acting	**Basic version**				
		**DMM** Piston rod at one end	10	5, 10, 15, 20, 25, 30	■
			16	5, 10, 15, 20, 25, 30, 40	
			20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50	
		**DMM-...-S2** Through piston rod	10	5, 10, 15, 20, 25, 30	■
			16	5, 10, 15, 20, 25, 30, 40	
			20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50	
	Non-rotating version				
		**DMML** Piston rod at one end	10	5, 10, 15, 20, 25, 30	■
			16	5, 10, 15, 20, 25, 30, 40	
			20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50	
		**DMML-...-S2** Through piston rod	10	5, 10, 15, 20, 25, 30	■
			16	5, 10, 15, 20, 25, 30, 40	
			20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50	
Single-acting	**Basic version**				
		**EMM** Piston rod at one end, pushing	10, 16, 20, 25, 32	5, 10, 15	■
		**EMMZ** Piston rod at one end, pulling	10, 16, 20, 25, 32	5, 10, 15	■
	Non-rotating version				
		**EMML** Piston rod at one end, pushing	10, 16, 20, 25, 32	5, 10, 15	■
		**EMMLZ** Piston rod at one end, pulling	10, 16, 20, 25, 32	5, 10, 15	■

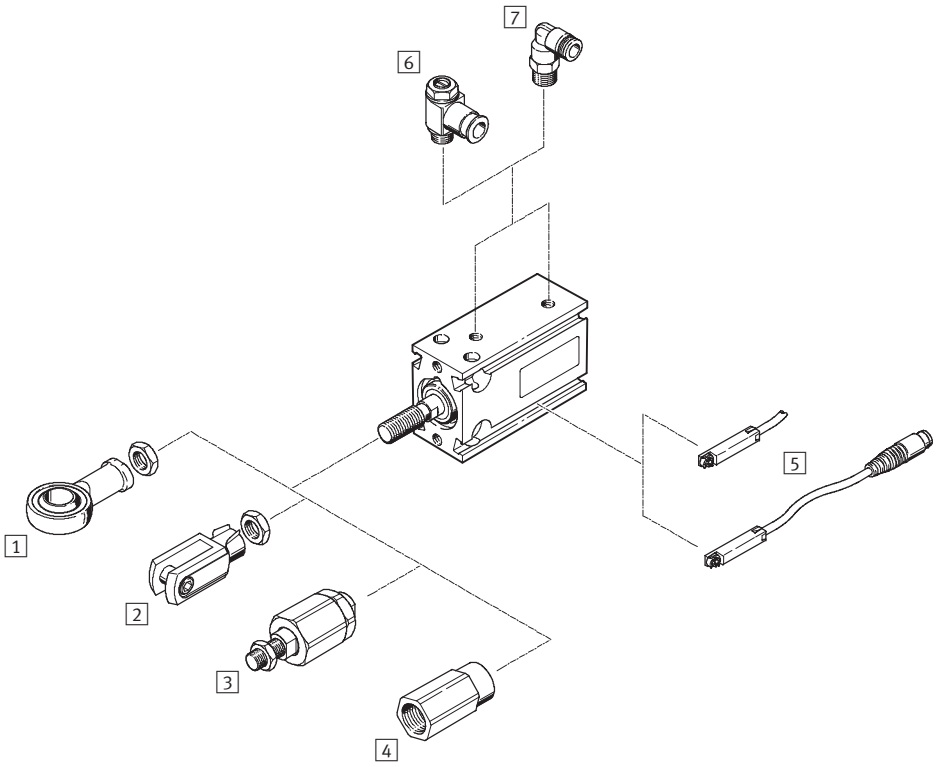
Compact cylinders DMM/EMM, Multimount

Product range overview

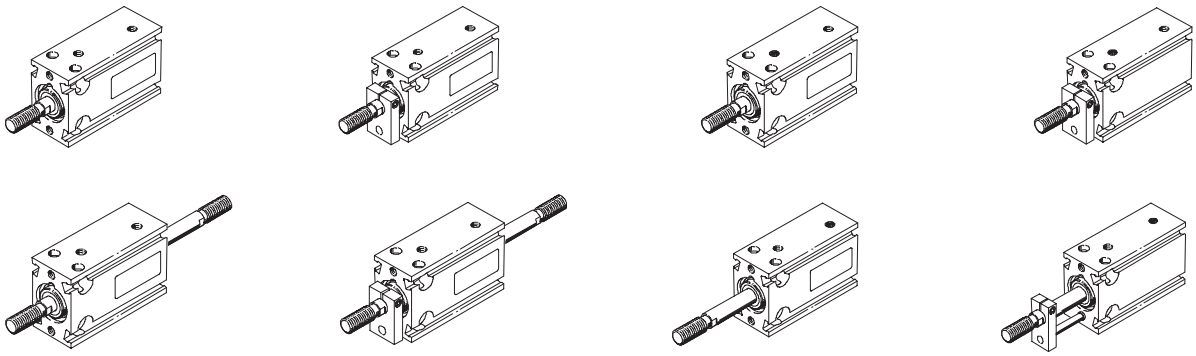
Type	Piston rod with male thread	S20 Hollow piston rod	S6 Heat resistant up to 120 °C	→ Page
Basic version				
DMM Piston rod at one end	■	–	■	1 / 2.5-13
DMM-...-S2 Through piston rod	■	■ ∅ 16 ... 32	–	1 / 2.5-13
Non-rotating version				
DMML Piston rod at one end	■	–	■	1 / 2.5-13
DMML-...-S2 Through piston rod	■	■ ∅ 16 ... 32	–	1 / 2.5-13
Basic version				
EMM Piston rod at one end, pushing	■	–	■	1 / 2.5-19
EMMZ Piston rod at one end, pulling	■	–	■	1 / 2.5-19
Non-rotating version				
EMML Piston rod at one end, pushing	■	–	■	1 / 2.5-19
EMMLZ Piston rod at one end, pulling	■	–	■	1 / 2.5-19

Compact cylinders DMM/EMM, Multimount

Peripherals overview



Variants			
DMM	DMML	EMM	EMML
DMM-...-S2, DMM-...-S20	DMML-...-S2, DMML-...-S20	EMMZ	EMMLZ



Compact cylinders DMM/EMM, Multimount

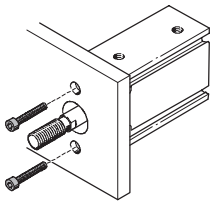
Peripherals overview

Accessories

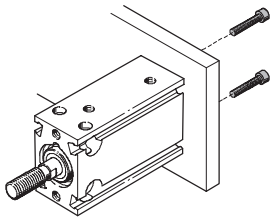
	Brief description	DMM DMM-...-S2 DMM-...-S20	DMML DMML-...-S2 DMML-...-S20	EMM EMMZ	EMML EMMLZ	→ Page
1 Rod eye SGS	With spherical bearing	■	■	■	■	1 / 2.5-24
2 Rod clevis SG	Permits a swivelling movement of the cylinder in one plane	■	■	■	■	1 / 2.5-24
3 Self-aligning rod coupler FK	For compensating radial and angular deviations	■	■	■	■	1 / 2.5-24
4 Adapter AD	For vacuum generator	■ S20	■ S20	–	–	1 / 2.5-24
5 Proximity sensor SME/SMT-8	Can be integrated in the cylinder profile barrel	■	■	■	■	1 / 2.5-24
6 One-way flow control valve GRLA/GRLZ	For speed regulation	■	■	■	■	1 / 2.5-25
7 Push-in connector QS	For connecting compressed air tubing with standard O.D.	■	■	■	■	Volume 3

Mounting options

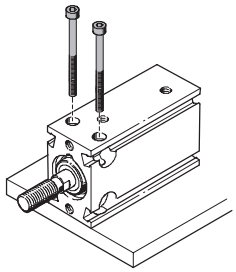
Mounting at front



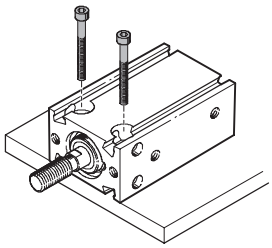
Mounting at rear



Vertical mounting



Horizontal mounting



Compact cylinders DMM/EMM, Multimount

Type code

Type	
Double-acting	
DMM	Basic version
DMML	Non-rotating version
Single-acting	
EMM	Basic version
EMMZ	Basic version, pulling
EMML	Non-rotating version
EMMLZ	Non-rotating version, pulling

Piston ∅ [mm]

Stroke [mm]

Cushioning	
P	Flexible cushioning rings/plates at both ends

Position sensing	
A	For proximity sensing

Variant	
S2	Through piston rod
S6	Heat resistant up to 120 °C
S20	Through, hollow piston rod

Compact cylinders DMM, Multimount

Technical data

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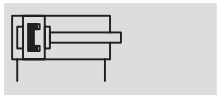
Function



Diameter
10 ... 32 mm

Stroke length
5 ... 50 mm

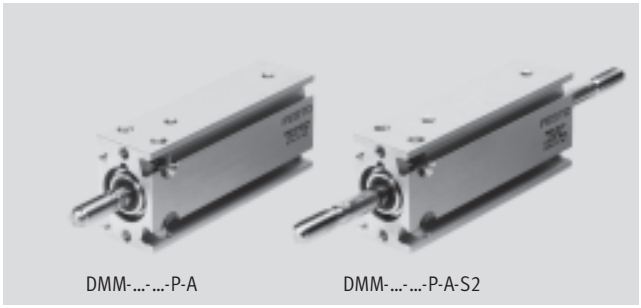
www.festo.com/en/
Spare_parts_service

Variants

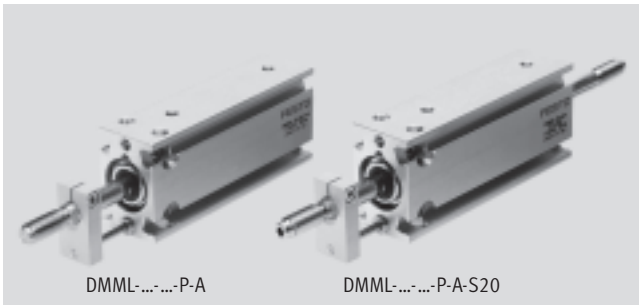
S2

S6

S20



DMM-...-...-P-A DMM-...-...-P-A-S2



DMML-...-...-P-A DMML-...-...-P-A-S20

General technical data						
Piston ∅		10	16	20	25	32
Pneumatic connection		M3	M5	M5	M5	G1⁄8
End of piston rod	Male thread	M4	M6	M8	M10x1.25	M10x1.25
Operating medium		Compressed air, filtered, lubricated or unlubricated				
Max. operating pressure	[bar]	10				
Constructional design		Piston				
		Piston rod				
Cushioning		Flexible cushioning rings/plates at both ends				
Position sensing		For proximity sensing				
Type of mounting		Via through holes				
		Via female thread				
Mounting position		Any				

Ambient conditions			
Variant		Basic version	S6
Ambient temperature[1)]	[°C]	–20 ... +80	0 ... +120

1) Note operating range of proximity sensors

Compact cylinders DMM, Multimount

Technical data

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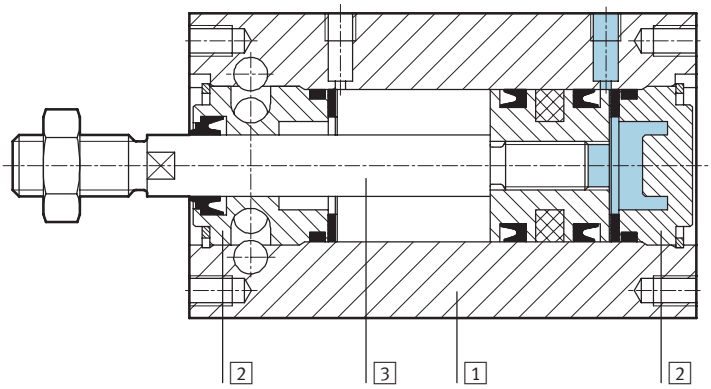
Forces [N] and impact energy [J]						
Piston ∅		10	16	20	25	32
Theoretical force at 6 bar, advancing		47	121	188	295	483
	S2/S20	40	104	158	247	415
Theoretical force at 6 bar, retracting		40	104	158	247	415
	S2/S20	40	104	158	247	415
Max. impact energy at end positions		0.1	0.2	0.3	0.6	0.6

Technical data – Protection against rotation						
Piston ∅		10	16	20	25	32
Max. torque at the piston rod[1)]	[Nm]	0.02	0.01	0.01	0.015	0.02

1) The max. torque must not be exceeded even when fitting attachments.

Materials

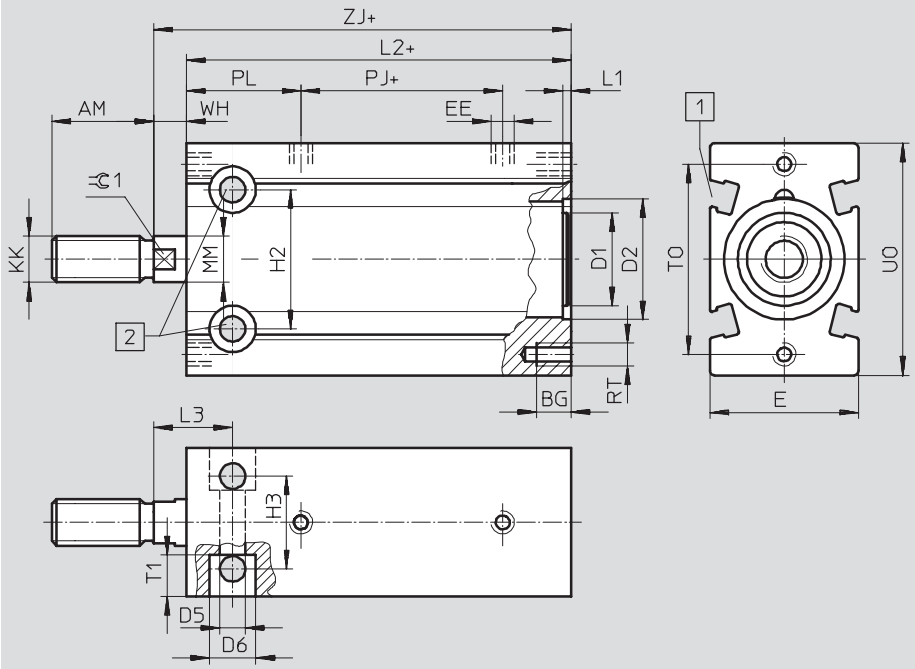
Sectional view



Compact cylinder		Basic version	S6
1	Housing	Wrought aluminium alloy	Wrought aluminium alloy
2	Plug cap	Brass	Brass
3	Piston rod	High-alloy stainless steel	High-alloy stainless steel
–	Seals	Polyurethane	Fluorocarbon rubber

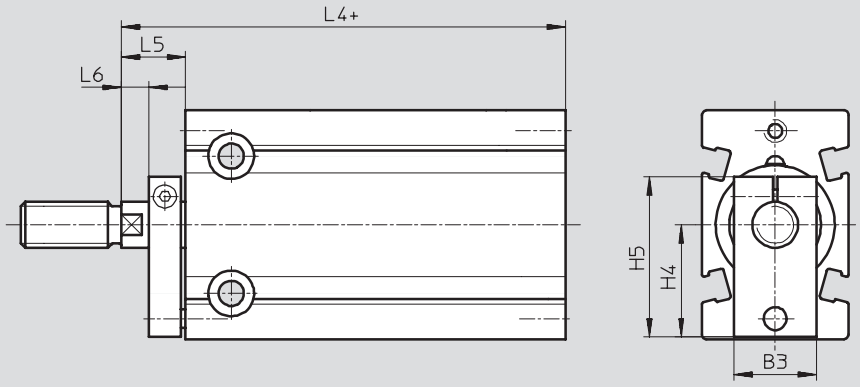
Dimensions – Basic cylinder Download CAD data ➔ **www.festo.com/en/engineering**

Basic version DMM



1 Sensor slot for proximity sensor SME/SMT-8
2 Max. tightening torque
\+ = plus stroke length

Non-rotating version DMML



\+ = plus stroke length

∅ [mm]	AM	B3	BG +0.5	D1 ∅	D2 ∅ H7	D5 ∅ +0.2	D6 ∅ +0.3	E	EE	H2	H3	H4	H5	KK	L1	L2
10	12	14	5	–	10.8	3.4	6	15	M3	13	9	11	19.5	M4	0.9	48
16	16	15	6	12.9	17	4.3	7.5	20	M5	19	13	15.5	24	M6	0.9	52
20	20	15	7.5	16	21	5.5	10	26	M5	24	16	19.5	29	M8	1.9	55
25	22	18	7.5	20	26	5.5	10	32	M5	30	20	24.5	36	M10x1.25	1.9	58
32	22	20	9	26	33	6.6	11	40	G1⁄8	40	24	30.5	45	M10x1.25	1.9	62

∅ [mm]	L3	L4	L5	L6	MM ∅	PJ	PL	RT	T1	UO	TO	WH	ZJ	⌀C1 h13	Max. tightening torque [Nm] +10%
10	11	57	9	–	4	12	24	M3	5	25	19	2	50	–	1
16	13.5	64	12	3	6	16.5	22	M4	5.5	32	27	5	57	5	2.5
20	16	68	13	4	8	16.8	25.7	M5	8	40	33	6	61	7	3
25	17	72	14	5	10	18.5	24.7	M5	9	50	41	7	65	9	8
32	19	77	15	6	12	19	26	M6	11.5	62	52	8	70	10	9

Compact cylinders DMM, Multimount

Technical data

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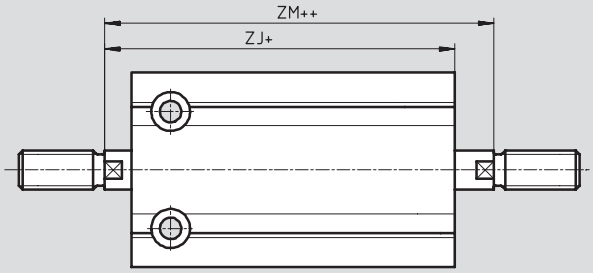
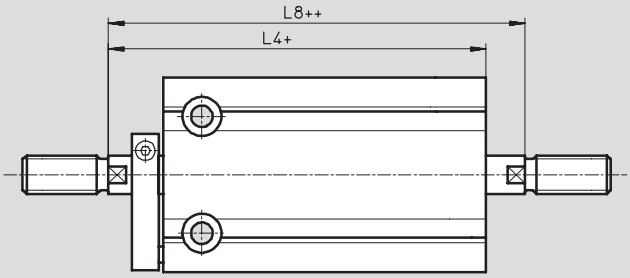
Dimensions – Variants Download CAD data ➔ **www.festo.com/en/engineering**

S2 – Through piston rod

Basic version DMM



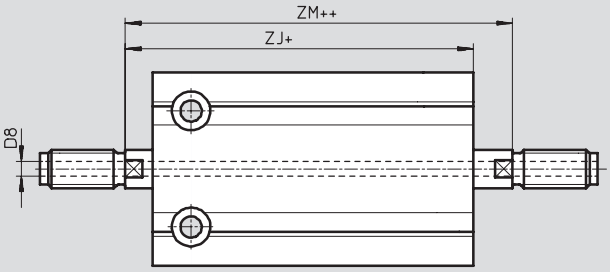
Non-rotating version DMML



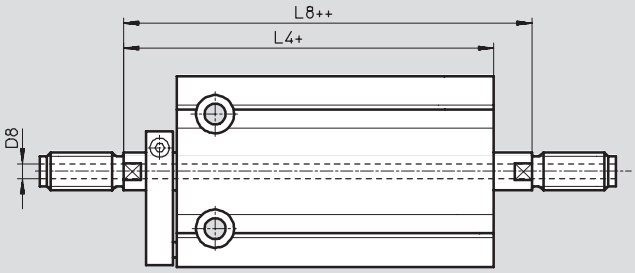
\+ = plus stroke length
++ = plus 2x stroke length

S20 – Through, hollow piston rod

Basic version DMM



Non-rotating version DMML



\+ = plus stroke length
++ = plus 2x stroke length

∅ [mm]	D8 ∅	L4	L8	ZJ	ZM
10	–	57	59	50	52
16	2.3	64	69	57	62
20	3.2	68	74	61	67
25	3.8	72	79	65	72
32	4.5	77	85	70	78

Compact cylinders DMM, Multimount

Technical data

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Ordering data – Basic cylinder						
Type	Piston ∅ [mm]	Stroke[1] [mm]	Basic version DMM Part No.	Type	Non-rotating version DMML Part No.	Type
	10	5	158 502	DMM-10-5-P-A	158 557	DMML-10-5-P-A
		10	158 503	DMM-10-10-P-A	158 558	DMML-10-10-P-A
		15	158 504	DMM-10-15-P-A	158 559	DMML-10-15-P-A
		20	158 505	DMM-10-20-P-A	158 560	DMML-10-20-P-A
		25	158 506	DMM-10-25-P-A	158 561	DMML-10-25-P-A
		30	158 507	DMM-10-30-P-A	158 562	DMML-10-30-P-A
	16	5	158 511	DMM-16-5-P-A	158 566	DMML-16-5-P-A
		10	158 512	DMM-16-10-P-A	158 567	DMML-16-10-P-A
		15	158 513	DMM-16-15-P-A	158 568	DMML-16-15-P-A
		20	158 514	DMM-16-20-P-A	158 569	DMML-16-20-P-A
		25	158 515	DMM-16-25-P-A	158 570	DMML-16-25-P-A
		30	158 516	DMM-16-30-P-A	158 571	DMML-16-30-P-A
		40	178 210	DMM-16-40-P-A	178 328	DMML-16-40-P-A
	20	5	158 521	DMM-20-5-P-A	158 576	DMML-20-5-P-A
		10	158 522	DMM-20-10-P-A	158 577	DMML-20-10-P-A
		15	158 523	DMM-20-15-P-A	158 578	DMML-20-15-P-A
		20	158 524	DMM-20-20-P-A	158 579	DMML-20-20-P-A
		25	158 525	DMM-20-25-P-A	158 580	DMML-20-25-P-A
		30	158 526	DMM-20-30-P-A	158 581	DMML-20-30-P-A
		40	158 527	DMM-20-40-P-A	158 582	DMML-20-40-P-A
		50	158 528	DMM-20-50-P-A	158 583	DMML-20-50-P-A
	25	5	158 533	DMM-25-5-P-A[2]	158 588	DMML-25-5-P-A[2]
		10	158 534	DMM-25-10-P-A[2]	158 589	DMML-25-10-P-A[2]
		15	158 535	DMM-25-15-P-A[2]	158 590	DMML-25-15-P-A[2]
		20	158 536	DMM-25-20-P-A[2]	158 591	DMML-25-20-P-A[2]
		25	158 537	DMM-25-25-P-A[2]	158 592	DMML-25-25-P-A[2]
		30	158 538	DMM-25-30-P-A[2]	158 593	DMML-25-30-P-A[2]
		40	158 539	DMM-25-40-P-A[2]	158 594	DMML-25-40-P-A[2]
		50	158 540	DMM-25-50-P-A[2]	158 595	DMML-25-50-P-A[2]
	32	5	158 545	DMM-32-5-P-A[2]	158 600	DMML-32-5-P-A[2]
		10	158 546	DMM-32-10-P-A[2]	158 601	DMML-32-10-P-A[2]
		15	158 547	DMM-32-15-P-A[2]	158 602	DMML-32-15-P-A[2]
		20	158 548	DMM-32-20-P-A[2]	158 603	DMML-32-20-P-A[2]
		25	158 549	DMM-32-25-P-A[2]	158 604	DMML-32-25-P-A[2]
		30	158 550	DMM-32-30-P-A[2]	158 605	DMML-32-30-P-A[2]
		40	158 551	DMM-32-40-P-A[2]	158 606	DMML-32-40-P-A[2]
		50	158 552	DMM-32-50-P-A[2]	158 607	DMML-32-50-P-A[2]

1) Additional stroke lengths upon request
2) The scope of delivery includes a hexagonal nut for the piston rod thread

Ordering data – Variants

Type	Piston ∅ [mm]	Stroke[1] [mm]	Basic version DMM Part No.	Basic version DMM Type	Non-rotating version DMML Part No.	Non-rotating version DMML Type
S2 – Through piston rod						
	10	5, 10, 20, 25, 30	**158 508**	**DMM-10-...-P-A-S2**	**158 563**	**DMML-10-...-P-A-S2**
	16	5, 10, 15, 20, 25, 30, 40	**158 517**	**DMM-16-...-P-A-S2**	**158 572**	**DMML-16-...-P-A-S2**
	20	5, 10, 15, 20, 25, 30, 40, 50	**158 529**	**DMM-20-...-P-A-S2**	**158 584**	**DMML-20-...-P-A-S2**
	25	5, 10, 15, 20, 25, 30, 40, 50	**158 541**	**DMM-25-...-P-A-S2**[2]	**158 596**	**DMML-25-...-P-A-S2**[2]
	32	5, 10, 15, 20, 25, 30, 40, 50	**158 553**	**DMM-32-...-P-A-S2**[2]	**158 608**	**DMML-32-...-P-A-S2**[2]
	10	5, 10, 15, 20, 25, 30	**158 509**	**DMM-10-...-P-A-S6**	**158 564**	**DMML-10-...-P-A-S6**
	16	5, 10, 15, 20, 25, 30, 40	**158 518**	**DMM-16-...-P-A-S6**	**158 573**	**DMML-16-...-P-A-S6**
	20	5, 10, 15, 20, 25, 30, 40, 50	**158 530**	**DMM-20-...-P-A-S6**	**158 585**	**DMML-20-...-P-A-S6**
	25	5, 10, 15, 20, 25, 30, 40, 50	**158 542**	**DMM-25-...-P-A-S6**[2]	**158 597**	**DMML-25-...-P-A-S6**[2]
	32	5, 10, 15, 20, 25, 30, 40, 50	**158 554**	**DMM-32-...-P-A-S6**[2]	**158 609**	**DMML-32-...-P-A-S6**[2]
	16	5, 10, 15, 20, 25, 30, 40	**158 519**	**DMM-16-...-P-A-S20**	**158 574**	**DMML-16-...-P-A-S20**
	20	5, 10, 15, 20, 25, 30, 40, 50	**158 531**	**DMM-20-...-P-A-S20**	**158 586**	**DMML-20-...-P-A-S20**
	25	5, 10, 15, 20, 25, 30, 40, 50	**158 543**	**DMM-25-...-P-A-S20**[2]	**158 598**	**DMML-25-...-P-A-S20**[2]
	32	5, 10, 15, 20, 25, 30, 40, 50	**158 555**	**DMM-32-...-P-A-S20**[2]	**158 610**	**DMML-32-...-P-A-S20**[2]

1) Additional stroke lengths upon request
2) The scope of delivery includes a hexagonal nut for the piston rod thread

Compact cylinders EMM, Multimount

Technical data

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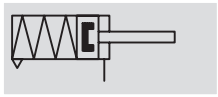
Function

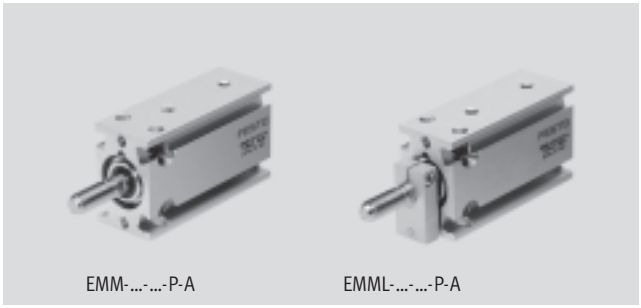
EMM, EMML

EMMZ, EMMLZ

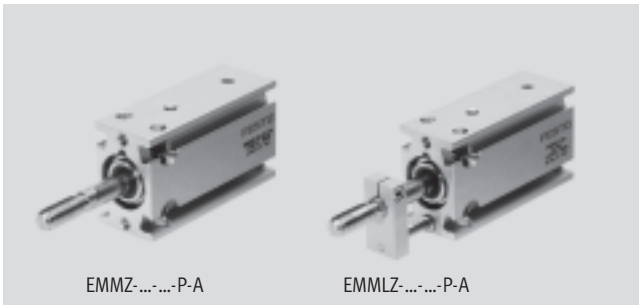


Variants

S6



EMM-...-...-P-A EMML-...-...-P-A



EMMZ-...-...-P-A EMMLZ-...-...-P-A

- Ø - Diameter
  10 ... 32 mm
- | - Stroke length
  5 ... 15 mm
- - www.festo.com/en/
  Spare_parts_service

General technical data						
Piston ∅		10	16	20	25	32
Pneumatic connection		M3	M5	M5	M5	G1⁄8
End of piston rod	Male thread	M4	M6	M8	M10x1.25	M10x1.25
Operating medium		Compressed air, filtered, lubricated or unlubricated				
Max. operating pressure	[bar]	10				
Max. applied load[1)]	[g]	40	120	160	260	320
Constructional design		Piston				
		Piston rod				
Cushioning		Flexible cushioning rings/plates at both ends				
Position sensing		For proximity sensing				
Type of mounting		Via through holes				
		Via female thread				
Mounting position		Any				

1) At 6 bar. For other values see graph "Maximum permissible impact velocity v as a function of the applied load m" ➔ 1 / 2.5-20

Ambient conditions			
Variant		Basic version	S6
Ambient temperature[1)]	[°C]	–20 ... +80	0 ... +120

1) Note operating range of proximity sensors

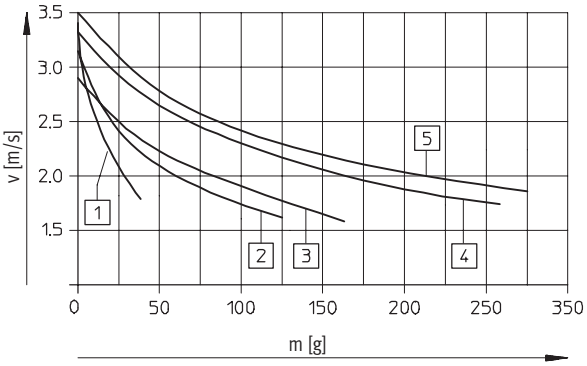
Compact cylinders EMM, Multimount

Technical data

FESTO

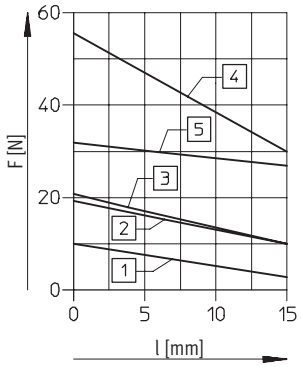
Forces [N] and impact energy [J]						
Piston ∅		10	16	20	25	32
Theoretical force at 6 bar, advancing	EMM/ EMML	37	101	165	227	456
	EMMZ/ EMMLZ	30	84	135	179	388
Max. impact energy at end positions		0.1	0.2	0.3	0.6	0.6

Maximum permissible impact velocity v as a function of the applied load m



1 ∅ 10 mm
2 ∅ 16 mm
3 ∅ 20 mm
4 ∅ 25 mm

Minimum spring return force F as a function of the stroke l



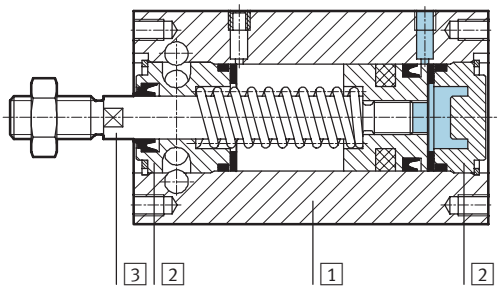
5 ∅ 32 mm

Technical data – Protection against rotation						
Piston ∅		10	16	20	25	32
Max. torque at the piston rod[1)]	[Nm]	0.02	0.01	0.01	0.015	0.02

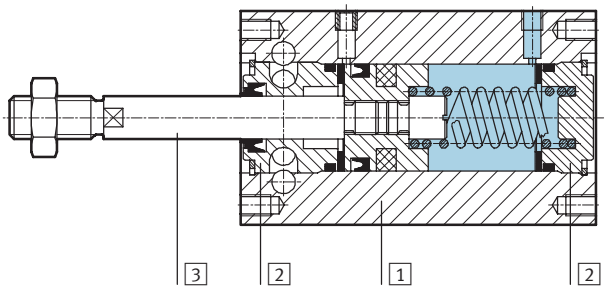
1) The max. torque must not be exceeded even when fitting attachments

Materials

Sectional view EMM(L) – Pushing



Sectional view EMM(L)Z – Pulling



Compact cylinder		Basic version	S6
1	Housing	Wrought aluminium alloy	Wrought aluminium alloy
2	Plug cap	Brass	Brass
3	Piston rod	High-alloy stainless steel	High-alloy stainless steel
–	Seals	Polyurethane	Fluorocarbon rubber

Compact cylinders EMM, Multimount

Technical data

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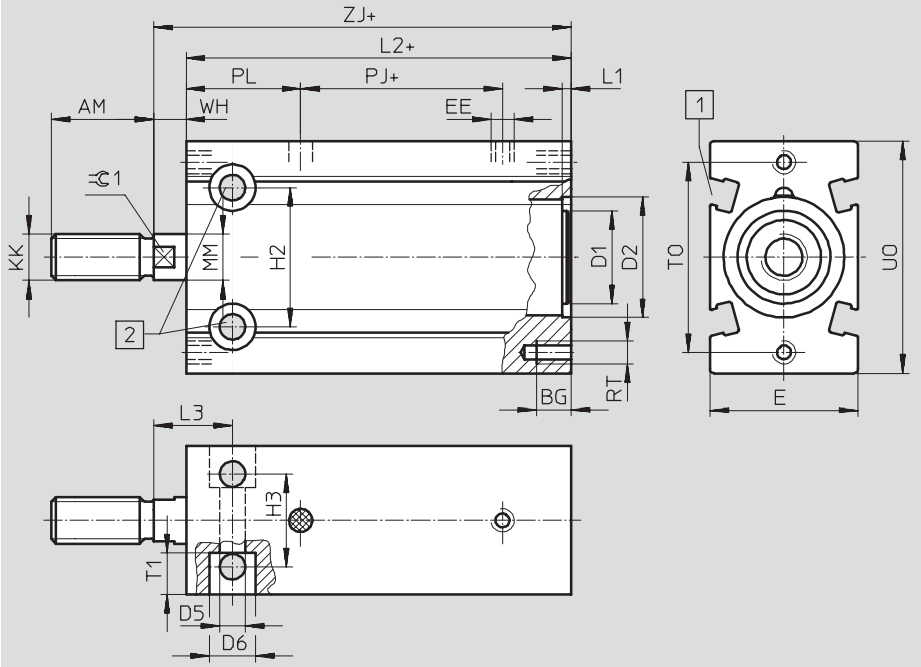
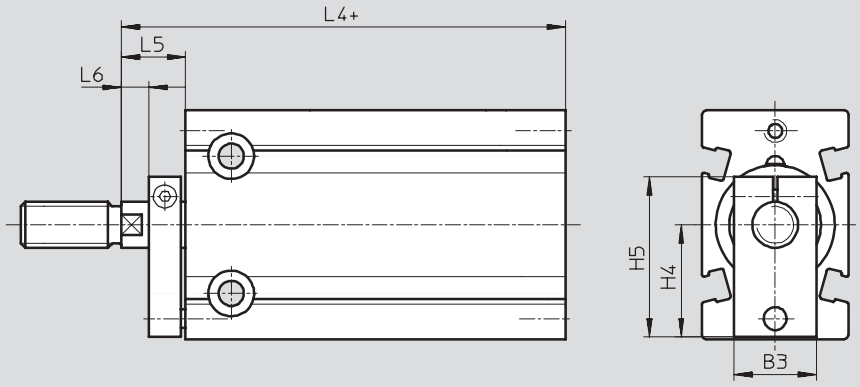
Dimensions Download CAD data ➔ **www.festo.com/en/engineering**

Basic version EMM – Pushing



1 Sensor slot for proximity sensor SME/SMT-8
2 Max. tightening torque
+ = plus stroke length

Non-rotating version EMML – Pushing



+ = plus stroke length

∅ [mm]	AM	B3	BG +0.5	D1 ∅	D2 ∅ H7	D5 ∅ +0.2	D6 ∅ +0.3	E	EE	H2	H3	H4	H5	KK	L1	L2
10	12	14	5	–	10.8	3.4	6	15	M3	13	9	11	19.5	M4	0.9	48
16	16	15	6	12.9	17	4.3	7.5	20	M5	19	13	15.5	24	M6	0.9	52
20	20	15	7.5	16	21	5.5	10	26	M5	24	16	19.5	29	M8	1.9	55
25	22	18	7.5	20	26	5.5	10	32	M5	30	20	24.5	36	M10x1.25	1.9	58
32	22	20	9	26	33	6.6	11	40	G1⁄8	40	24	30.5	45	M10x1.25	1.9	62

∅ [mm]	L3	L4	L5	L6	MM ∅	PJ	PL	RT	T1	UO	TO	WH	ZJ	⫧1 h13	Max. tightening torque [Nm] +10%
10	11	57	9	–	4	12	24	M3	5	25	19	2	50	–	1
16	13.5	64	12	3	6	16.5	22	M4	5.5	32	27	5	57	5	2.5
20	16	68	13	4	8	16.8	25.7	M5	8	40	33	6	61	7	3
25	17	72	14	5	10	18.5	24.7	M5	9	50	41	7	65	9	8
32	19	77	15	6	12	19	26	M6	11.5	62	52	8	70	10	9

Compact cylinders EMM, Multimount

Technical data

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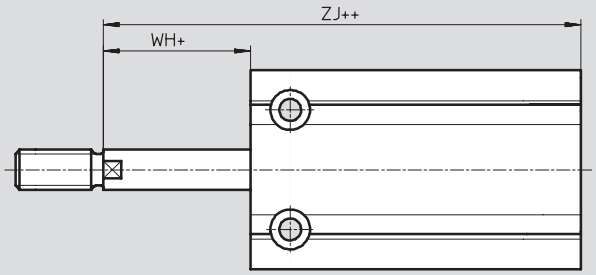
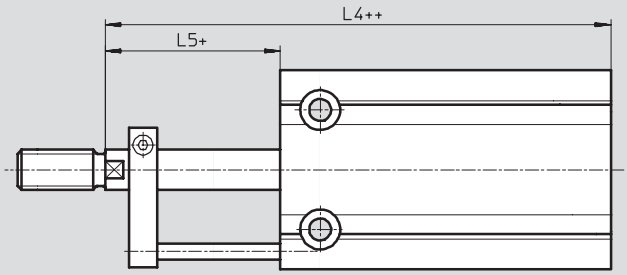
Dimensions Download CAD data ➔ **www.festo.com/en/engineering**

Basic version EMMZ – Pulling



Non-rotating version EMMLZ – Pulling



\+ = plus stroke length
++ = plus 2x stroke length

∅ [mm]	L4	L5	WH	ZJ
10	57	9	2	50
16	64	12	5	57
20	68	13	6	61
25	72	14	7	65
32	77	15	8	70

Ordering data – Basic cylinder, pushing

Type	Piston ∅ [mm]	Stroke[1] [mm]	Basic version EMM Part No.	Type	Non-rotating version EMML Part No.	Type
	10	5	**158 612**	**EMM-10-5-P-A**	**158 637**	**EMML-10-5-P-A**
		10	**158 613**	**EMM-10-10-P-A**	**158 638**	**EMML-10-10-P-A**
		15	**158 614**	**EMM-10-15-P-A**	**158 639**	**EMML-10-15-P-A**
	16	5	**158 617**	**EMM-16-5-P-A**	**158 642**	**EMML-16-5-P-A**
		10	**158 618**	**EMM-16-10-P-A**	**158 643**	**EMML-16-10-P-A**
		15	**158 619**	**EMM-16-15-P-A**	**158 644**	**EMML-16-15-P-A**
	20	5	**158 622**	**EMM-20-5-P-A**	**158 647**	**EMML-20-5-P-A**
		10	**158 623**	**EMM-20-10-P-A**	**158 648**	**EMML-20-10-P-A**
		15	**158 624**	**EMM-20-15-P-A**	**158 649**	**EMML-20-15-P-A**
	25	5	**158 627**	**EMM-25-5-P-A[2]**	**158 652**	**EMML-25-5-P-A[2]**
		10	**158 628**	**EMM-25-10-P-A[2]**	**158 653**	**EMML-25-10-P-A[2]**
		15	**158 629**	**EMM-25-15-P-A[2]**	**158 654**	**EMML-25-15-P-A[2]**
	32	5	**158 632**	**EMM-32-5-P-A[2]**	**158 657**	**EMML-32-5-P-A[2]**
		10	**158 633**	**EMM-32-10-P-A[2]**	**158 658**	**EMML-32-10-P-A[2]**
		15	**158 634**	**EMM-32-15-P-A[2]**	**158 659**	**EMML-32-15-P-A[2]**

1) Additional stroke lengths upon request
2) The scope of delivery includes a hexagonal nut for the piston rod thread

Compact cylinders EMM, Multimount

Technical data

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Ordering data – Basic cylinder, pulling						
Type	Piston ∅ [mm]	Stroke[1] [mm]	Basic version EMMZ Part No.	Type	Non-rotating version EMMLZ Part No.	Type
	10	5	158 662	EMMZ-10-5-P-A	158 687	EMMLZ-10-5-P-A
		10	158 663	EMMZ-10-10-P-A	158 688	EMMLZ-10-10-P-A
		15	158 664	EMMZ-10-15-P-A	158 689	EMMLZ-10-15-P-A
	16	5	158 667	EMMZ-16-5-P-A	158 692	EMMLZ-16-5-P-A
		10	158 668	EMMZ-16-10-P-A	158 693	EMMLZ-16-10-P-A
		15	158 669	EMMZ-16-15-P-A	158 694	EMMLZ-16-15-P-A
	20	5	158 672	EMMZ-20-5-P-A	158 697	EMMLZ-20-5-P-A
		10	158 673	EMMZ-20-10-P-A	158 698	EMMLZ-20-10-P-A
		15	158 674	EMMZ-20-15-P-A	158 699	EMMLZ-20-15-P-A
	25	5	158 677	EMMZ-25-5-P-A[2]	158 702	EMMLZ-25-5-P-A[2]
		10	158 678	EMMZ-25-10-P-A[2]	158 703	EMMLZ-25-10-P-A[2]
		15	158 679	EMMZ-25-15-P-A[2]	158 704	EMMLZ-25-15-P-A[2]
	32	5	158 682	EMMZ-32-5-P-A[2]	158 707	EMMLZ-32-5-P-A[2]
		10	158 683	EMMZ-32-10-P-A[2]	158 708	EMMLZ-32-10-P-A[2]
		15	158 684	EMMZ-32-15-P-A[2]	158 709	EMMLZ-32-15-P-A[2]

1) Additional stroke lengths upon request
2) The scope of delivery includes a hexagonal nut for the piston rod thread

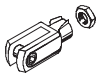
Ordering data – Pushing variants						
Type	Piston ∅ [mm]	Stroke[1] [mm]	Basic version EMM Part No.	Type	Non-rotating version EMML Part No.	Type
S6 – Heat resistant up to 120 °C						
	10	5, 10, 15	158 615	EMM-10-…-P-A-S6	158 640	EMML-10-…-P-A-S6
	16	5, 10, 15	158 620	EMM-16-…-P-A-S6	158 645	EMML-16-…-P-A-S6
	20	5, 10, 15	158 625	EMM-20-…-P-A-S6	158 650	EMML-20-…-P-A-S6
	25	5, 10, 15	158 630	EMM-25-…-P-A-S6[2]	158 655	EMML-25-…-P-A-S6[2]
	32	5, 10, 15	158 635	EMM-32-…-P-A-S6[2]	158 660	EMML-32-…-P-A-S6[2]

1) Additional stroke lengths upon request
2) The scope of delivery includes a hexagonal nut for the piston rod thread

Ordering data – Pulling variants						
Type	Piston ∅ [mm]	Stroke[1] [mm]	Basic version EMMZ Part No.	Type	Non-rotating version EMMLZ Part No.	Type
S6 – Heat resistant up to 120 °C						
	10	5, 10, 15	158 665	EMMZ-10-…-P-A-S6	158 690	EMMLZ-10-…-P-A-S6
	16	5, 10, 15	158 670	EMMZ-16-…-P-A-S6	158 695	EMMLZ-16-…-P-A-S6
	20	5, 10, 15	158 675	EMMZ-20-…-P-A-S6	158 700	EMMLZ-20-…-P-A-S6
	25	5, 10, 15	158 680	EMMZ-25-…-P-A-S6[2]	158 705	EMMLZ-25-…-P-A-S6[2]
	32	5, 10, 15	158 685	EMMZ-32-…-P-A-S6[2]	158 710	EMMLZ-32-…-P-A-S6[2]

1) Additional stroke lengths upon request
2) The scope of delivery includes a hexagonal nut for the piston rod thread

Ordering data – Piston rod attachments Technical data➔ 1 / 10.3-2

Designation	For ∅	Part No.	Type
Rod eye SGS			
	10	**9 253**	**SGS-M4**
	16	**9 254**	**SGS-M6**
	20	**9 255**	**SGS-M8**
	25	**9 261**	**SGS-M10x1,25**
	32		
Rod clevis SG			
	10	**6 532**	**SG-M4**
	16	**3 110**	**SG-M6**
	20	**3 111**	**SG-M8**
	25	**6 144**	**SG-M10x1,25**
	32		

Designation	For ∅	Part No.	Type
Self-aligning rod coupler FK			
	10	**6 528**	**FK-M4**
	16	**2 061**	**FK-M6**
	20	**2 062**	**FK-M8**
	25	**6 140**	**FK-M10x1,25**
	32		
Adapter AD			
	16	**157 328**	**AD-M6-M5**
		157 329	**AD-M6-⅛**
		157 330	**AD-M6-¼**
	20	**157 331**	**AD-M8-⅛**
		157 332	**AD-M8-¼**
	25	**157 333**	**AD-M10x1,25-⅛**
	32	**157 334**	**AD-M10x1,25-¼**

Ordering data – Proximity sensor for T-slot, magneto-resistive Technical data➔ 1 / 10.2-13

	Mounting	Switch output	Electrical connection			Cable length [m]	Part No.	Type
			Cable	Plug M8	Plug M12			
NO contact								
	Insertable from above	PNP	3-wire	–	–	2.5	**525 898**	**SMT-8F-PS-24V-K2,5-OE**
		NPN					**525 909**	**SMT-8F-NS-24V-K2,5-OE**
		–	2-wire	–	–	2.5	**525 908**	**SMT-8F-ZS-24V-K2,5-OE**
		PNP	–	3-pin	–	0.3	**525 899**	**SMT-8F-PS-24V-K0,3-M8D**
		NPN					**525 910**	**SMT-8F-NS-24V-K0,3-M8D**
		PNP	–	–	3-pin	0.3	**525 900**	**SMT-8F-PS-24V-K0,3-M12**
	Insertable from end, flush with the cylinder profile	PNP	3-wire	–	–	2.5	**175 436**	**SMT-8-PS-K-LED-24-B**
			–	3-pin	–	0.3	**175 484**	**SMT-8-PS-S-LED-24-B**
NC contact								
	Insertable from above	PNP	3-wire	–	–	7.5	**525 911**	**SMT-8F-PO-24V-K7,5-OE**

Ordering data – Proximity sensor for T-slot, magnetic reed — Technical data ➔ 1 / 10.2-18

	Mounting	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Plug M8			
NO contact						
	Insertable from above	3-wire	–	2.5	**525 895**	**SME-8F-DS-24V-K2,5-OE**
				5.0	**525 897**	**SME-8F-DS-24V-K5,0-OE**
		2-wire	–	2.5	**525 907**	**SME-8F-ZS-24V-K2,5-OE**
		–	3-pin	0.3	**525 896**	**SME-8F-DS-24V-K0,3-M8D**
	Insertable from end, flush with the cylinder profile	3-wire	–	2.5	**150 855**	**SME-8-K-LED-24**
		–	3-pin	0.3	**150 857**	**SME-8-S-LED-24**
NC contact						
	Insertable from end, flush with the cylinder profile	3-wire	–	7.5	**160 251**	**SME-8-O-K-LED-24**

Ordering data – Plug sockets with cable — Technical data ➔ 1 / 10.2-114

	Mounting	Switch output		Connection	Cable length [m]	Part No.	Type
		PNP	NPN				
Straight socket							
	M8 locknut	■	■	3-pin	2.5	**159 420**	**SIM-M8-3GD-2,5-PU**
					5	**159 421**	**SIM-M8-3GD-5-PU**
	M12 locknut	■	■	3-pin	2.5	**159 428**	**SIM-M12-3GD-2,5-PU**
					5	**159 429**	**SIM-M12-3GD-5-PU**
Angled socket							
	M8 locknut	■	■	3-pin	2.5	**159 422**	**SIM-M8-3WD-2,5-PU**
					5	**159 423**	**SIM-M8-3WD-5-PU**
	M12 locknut	■	■	3-pin	2.5	**159 430**	**SIM-M12-3WD-2,5-PU**
					5	**159 431**	**SIM-M12-3WD-5-PU**

Ordering data – One-way flow control valves — Technical data ➔ Volume 2

	Connection		Material	Part No.	Type
	Thread	For tubing OD			
For exhaust air					
	M3	3	Metal design	**175 041**	**GRLA-M3-QS-3**
	M5	3		**193 137**	**GRLA-M5-QS-3-D**
		4		**193 138**	**GRLA-M5-QS-4-D**
		6		**193 139**	**GRLA-M5-QS-6-D**
	G1/8	3		**193 142**	**GRLA-1/8-QS-3-D**
		4		**193 143**	**GRLA-1/8-QS-4-D**
		6		**193 144**	**GRLA-1/8-QS-6-D**
		8		**193 145**	**GRLA-1/8-QS-8-D**
For supply air					
	M3	3	Metal design	**175 043**	**GRLZ-M3-QS-3**
	M5	3		**193 153**	**GRLZ-M5-QS-3-D**
		4		**193 154**	**GRLZ-M5-QS-4-D**
		6		**193 155**	**GRLZ-M5-QS-6-D**
	G1/8	3		**193 156**	**GRLZ-1/8-QS-3-D**
		4		**193 157**	**GRLZ-1/8-QS-4-D**
		6		**193 158**	**GRLZ-1/8-QS-6-D**
		8		**193 159**	**GRLZ-1/8-QS-8-D**