Twin cylinder DGTZ

Characteristics

At a glance

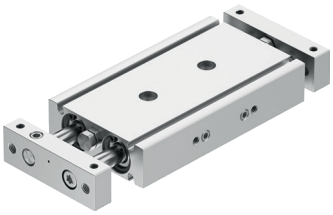
- Minimal space requirement
- Minimal mounting time
- High resistance to torque and lateral forces with plain-bearing guide
- Drive and guide in a single housing
- Wide range of mounting options

Piston rod design

[_]	One end plate

Mechanical connection possible at one end of the cylinder

[J]	Two end plates



Mechanical connection possible at both ends of the cylinder

Piston rod type

[_]	At one end

[T]	Through piston rod

Identical forces in the forward and return stroke

Cushioning

[P]	Elastic cushioning rings/plates on both sides

The drive is fitted with elastic polymer end-position cushioning.
Advantages:

- No adjustment required
- Saves time

Position sensing

[A]	For proximity sensor

By using proximity switches, any position can be detected.

Type code

001	Series	
DGTZ	Twin cylinder	

002	Guide	
GF	Plain bearing	

003	Piston diameter [mm]	
6	6	
10	10	
16	16	
20	20	
25	25	
32	32	

004	Stroke [mm]	
10	10	
20	20	
30	30	
40	40	
50	50	
60	60	
70	70	
80	80	
90	90	
100	100	

005	Stroke range [mm]	
...	51 ... 200	

006	Piston rod design	
	One end plate	
J	Two end plates	

007	Piston rod type	
	At one end	
T	Through piston rod	

008	Cushioning	
P	Elastic cushioning rings/plates on both sides	

009	Position sensing	
A	For proximity sensor	

Datasheet

General technical data						
Piston diameter	6 mm	10 mm	16 mm	20 mm	25 mm	32 mm
Design	Guidance					
Mode of operation	Double-acting					
Guide	Plain-bearing guide					
Pneumatic connection	M5				G1/8	
Stroke	10 mm, 20 mm, 30 mm, 40 mm, 50 mm, 51 mm, 60 mm	10 mm, 20 mm, 30 mm, 40 mm, 50 mm, 51 mm, 60 mm, 70 mm, 80 mm, 81 mm, 150 mm	10 mm, 20 mm, 30 mm, 40 mm, 50 mm, 60 mm, 70 mm, 80 mm, 90 mm, 100 mm, 101 mm, 200 mm			
Adjustable end-position range/length	10 mm					
Cushioning	Elastic cushioning rings/plates at both ends					
Position detection	Via proximity switch					
Mounting position	optional					

Operating and environmental conditions – DGTZ-6/10				
Piston diameter	6 mm		10 mm	
Piston rod design	One end plate	Two end plates	One end plate	Two end plates
Operating pressure	0.2 ... 0.8 MPa		0.15 ... 0.8 MPa	0.2 ... 0.8 MPa
Operating pressure	29 ... 116 psi		21.75 ... 116 psi	29 ... 116 psi
Operating pressure	2 ... 8 bar		1.5 ... 8 bar	2 ... 8 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]			
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature	-10 ... 80°C			
Corrosion resistance class CRC [1]	1 - Low corrosion stress			

1) More information at www.festo.com/x/topic/kbk

Operating and environmental conditions – DGTZ-16/20				
Piston diameter	16 mm		20 mm	
Piston rod design	One end plate	Two end plates	One end plate	Two end plates
Operating pressure	0.1 ... 0.8 MPa	0.12 ... 0.8 MPa	0.1 ... 0.8 MPa	0.12 ... 0.8 MPa
Operating pressure	14.5 ... 116 psi	17.4 ... 116 psi	14.5 ... 116 psi	17.4 ... 116 psi
Operating pressure	1 ... 8 bar	1.2 ... 8 bar	1 ... 8 bar	1.2 ... 8 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]			
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature	-10 ... 80°C			
Corrosion resistance class CRC [1]	1 - Low corrosion stress			

1) More information www.festo.com/x/topic/crc

Operating and environmental conditions – DGTZ-25/32				
Piston diameter	25 mm		32 mm	
Piston rod design	One end plate	Two end plates	One end plate	Two end plates
Operating pressure	0.1 ... 0.8 MPa	0.12 ... 0.8 MPa	0.1 ... 0.8 MPa	0.12 ... 0.8 MPa
Operating pressure	14.5 ... 116 psi	17.4 ... 116 psi	14.5 ... 116 psi	17.4 ... 116 psi
Operating pressure	1 ... 8 bar	1.2 ... 8 bar	1 ... 8 bar	1.2 ... 8 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]			
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature	-10 ... 80°C			
Corrosion resistance class CRC [1]	1 - Low corrosion stress			

1) More information www.festo.com/x/topic/crc

Datasheet

Speeds

To avoid damage to the cylinder, the speed must be throttled. This also applies during operation without additional load.
The maximum speed must not be exceeded.

Specification (min. value / max. value)

DGTZ-GF-6:
One end plate, advancing: 0.06 m/s / 1 m/s
One end plate, retracting: 0.07 m/s / 1 m/s
Two end plates: 0.06 m/s / 0.5 m/s

DGTZ-GF-10:
One end plate; advancing: 0.04 m/s / 1 m/s
One end plate, retracting: 0.05 m/s / 1 m/s
Two end plates: 0.04 m/s / 0.5 m/s

DGTZ-GF-16:
One end plate, advancing: 0.04 m/s / 1 m/s
One end plate, retracting: 0.03 m/s / 1 m/s
Two end plates: 0.03 m/s / 0.5 m/s

DGTZ-GF-20:
One end plate; advancing: 0.02 m/s / 1 m/s
One end plate, retracting: 0.02 m/s / 1 m/s
Two end plates: 0.03 m/s / 0.5 m/s

DGTZ-GF-25:
One end plate, advancing: 0.02 m/s / 1 m/s
One end plate, retracting: 0.02 m/s / 0.8 m/s
Two end plates: 0.02 m/s / 0.5 m/s

DGTZ-GF-32:
One end plate, advancing: 0.02 m/s / 0.7 m/s
One end plate, advancing: 0.02 m/s / 0.6 m/s
Two end plates: 0.01 m/s / 0.5 m/s

Weight – DGTZ-6

Piston diameter	6 mm											
Piston rod design	One end plate						Two end plates					
Stroke	10 mm	51 mm, 60 mm	20 mm	30 mm	40 mm	50 mm	10 mm	51 mm, 60 mm	20 mm	30 mm	40 mm	50 mm
Product weight	82 g	148 g, 164 g	98 g	115 g	131 g	148 g	129 g	210 g, 214 g	146 g	163 g	180 g	197 g

Weight – DGTZ-10- with one end plate

Piston diameter	10 mm								
Piston rod design	One end plate								
Stroke	10 mm	30 mm	40 mm	60 mm	70 mm	81 mm, 150 mm	20 mm	50 mm	80 mm
Product weight	135 g	175 g	195 g	234 g	254 g	277 g, 415 g	155 g	215 g	270 g

Weight – DGTZ-10 - with two end plates and through piston rod

Piston diameter	10 mm					
Piston rod design	Two end plates					
Stroke	51 mm, 150 mm	10 mm	20 mm	30 mm	40 mm	50 mm
Product weight	362 g, 568.5 g	225.5 g	250 g	274.5 g	299 g	323.5 g

Datasheet

Weight – DGTZ-16- with one end plate											
Piston diameter	16 mm										
Piston rod design	One end plate										
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm	80 mm	90 mm	100 mm
Product weight	509 g, 776 g	263 g	290 g	317 g	343 g	370 g	397 g	424 g	451 g	478 g	505 g

Weight – DGTZ-16- with two end plates and through piston rod								
Piston diameter	16 mm							
Piston rod design	Two end plates							
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	80 mm	100 mm
Product weight	767 g, 1,070 g	405 g	440 g	475 g	510 g	545 g	650 g	720 g

Weight – DGTZ-20- with one end plate											
Piston diameter	20 mm										
Piston rod design	One end plate										
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm	80 mm	90 mm	100 mm
Product weight	748 g, 1,114 g	411 g	449 g	486 g	523 g	561 g	598 g	635 g	673 g	710 g	747 g

Weight – DGTZ-20- with two end plates and through piston rod								
Piston diameter	20 mm							
Piston rod design	Two end plates							
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	80 mm	100 mm
Product weight	1,158 g, 1,595 g	645 g	695 g	745 g	795 g	845 g	995 g	1,095 g

Weight – DGTZ-25- with one end plate											
Piston diameter	25 mm										
Piston rod design	One end plate										
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm	80 mm	90 mm	100 mm
Product weight	1,099 g, 1,623 g	616 g	669 g	722 g	775 g	828 g	881 g	934 g	987 g	1,040 g	1,092 g

Weight – DGTZ-25- with two end plates and through piston rod								
Piston diameter	25 mm							
Piston rod design	Two end plates							
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	80 mm	100 mm
Product weight	1,680 g, 2,302 g	953 g	1,024 g	1,095 g	1,166 g	1,237 g	1,450 g	1,592 g

Weight – DGTZ-32- with one end plate											
Piston diameter	32 mm										
Piston rod design	One end plate										
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm	80 mm	90 mm	100 mm
Product weight	1,809 g, 2,636 g	1,049 g	1,133 g	1,217 g	1,300 g	1,384 g	1,468 g	1,551 g	1,635 g	1,719 g	1,802 g

Datasheet

Weight – DGTZ-32- with two end plates and through piston rod

Piston diameter	32 mm							
Piston rod design	Two end plates							
Stroke	101 mm, 200 mm	10 mm	20 mm	30 mm	40 mm	50 mm	80 mm	100 mm
Product weight	2,898 g, 3,908 g	1,742 g	1,856 g	1,970 g	2,084 g	2,198 g	2,540 g	2,768 g

Forces and impact energy

Piston diameter	6 mm		10 mm		16 mm		20 mm		25 mm		32 mm	
Piston rod design	One end plate	Two end plates	One end plate	Two end plates	One end plate	Two end plates	One end plate	Two end plates	One end plate	Two end plates	One end plate	Two end plates
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	34 N	18.6 N	94 N	60 N	242 N	181 N	376 N	283 N	590 N	454 N	966 N	724 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	18.6 N		60 N		181 N		283 N		454 N		724 N	
Impact energy in end positions	0.01 Nm		0.08 Nm		0.15 Nm		0.2 Nm		0.3 Nm		0.4 Nm	

Impact energy

$$V = \sqrt{\frac{2 \cdot E}{m_1 + m_2}}$$

$$m_2 = \frac{2 \cdot E}{v^2} - m_1$$

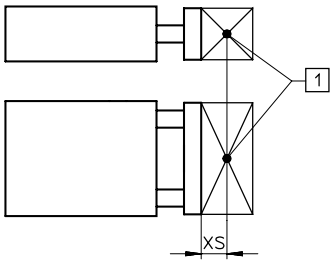
The figures represent the maximum values that can be achieved. The maximum permissible impact energy must be observed.

V = permissible impact velocity
E = max. impact energy
m1 = moving mass (drive)
m2 = moving payload

Materials

Piston diameter	6 mm	10 mm	16 mm	20 mm	25 mm	32 mm
Material cover	Wrought aluminium alloy					
Material piston rod	High-alloy stainless steel					
Material housing	Anodised wrought aluminium alloy					
Material seals	NBR	HNBR, NBR	NBR			
Cleanroom suitability, measured according to ISO 14644-14	Class 5 according to ISO 14644-1					
LABS (PWIS) conformity	VDMA24364-S-L, VDMA24364 zone III		VDMA24364 zone III	VDMA24364-S-L, VDMA24364 zone III		VDMA24364 zone III
Note on materials	RoHS-compliant					

Maximum payload

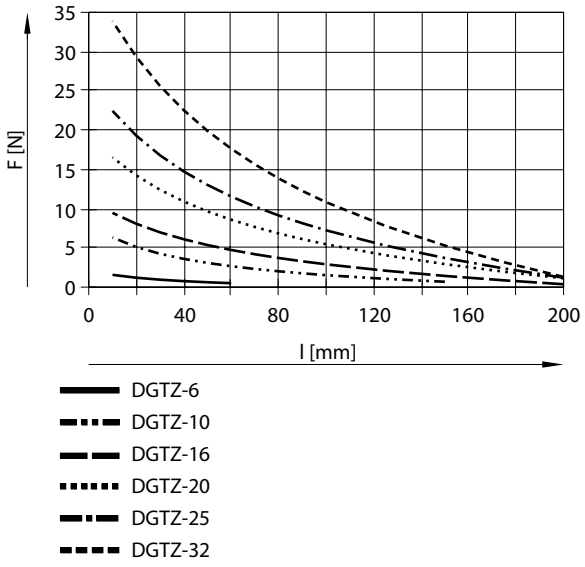


[1] Centre of gravity of payload

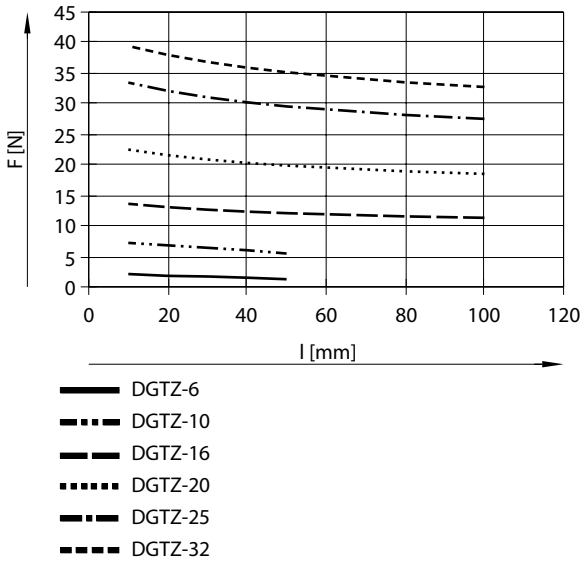
Distance xs:
DGTZ-6 = 5 mm
DGTZ-10 = 5 mm
DGTZ-16 = 20 mm
DGTZ-20 = 20 mm
DGTZ-25 = 20 mm
DGTZ-32 = 20 mm

Datasheet

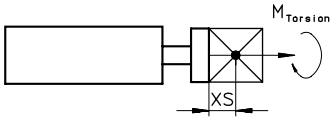
Maximum payload F as a function of stroke l - with one end plate



Maximum payload F as a function of stroke l - with two end plates and continuous piston rod



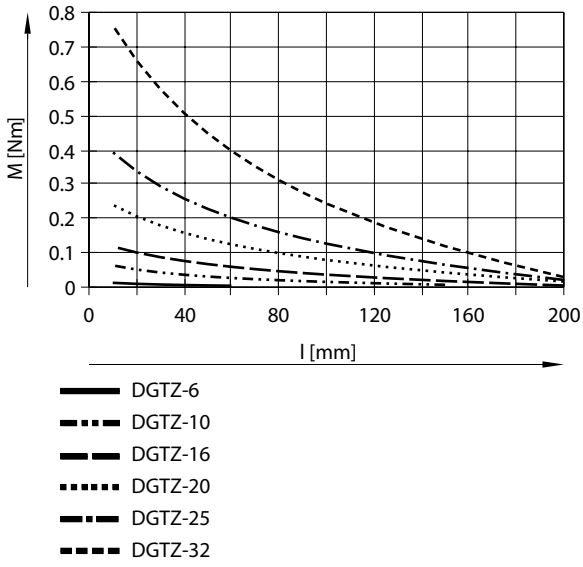
Permissible torque loading



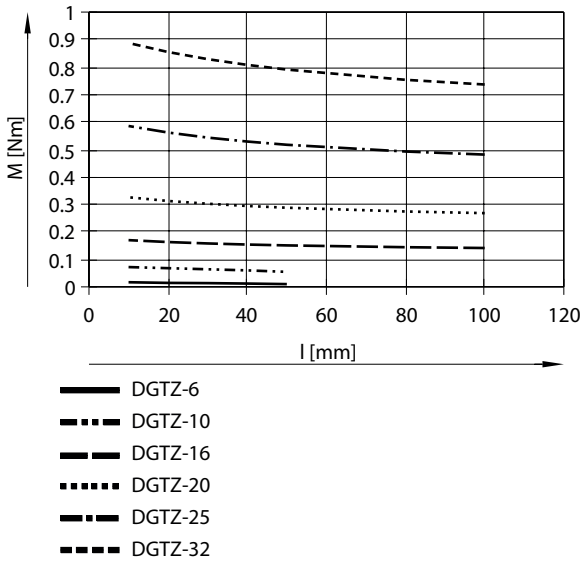
Distance xs:
DGTZ-6 = 5 mm
DGTZ-10 = 5 mm
DGTZ-16 = 20 mm
DGTZ-20 = 20 mm
DGTZ-25 = 20 mm
DGTZ-32 = 20 mm

Datasheet

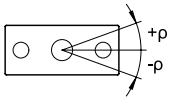
Maximum moment load M as a function of stroke l - with one end plate



Maximum moment load M as a function of stroke l - with two end plates and continuous piston rod

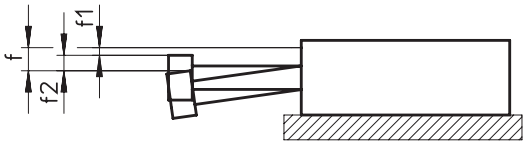


Torsional backlash



Torsional backlash:
DGTZ-...: +/-0,1°

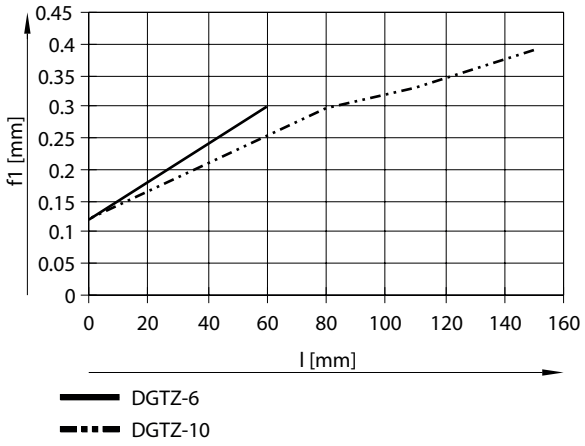
Deflection f1 due to bearing play as a function of stroke l (without load) - with one end plate



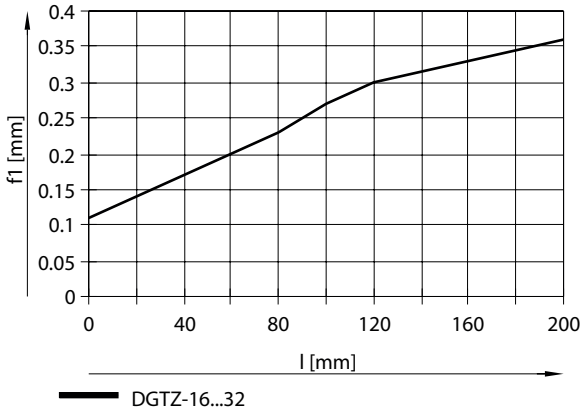
f = f1 + f2
f = total deflection of the end plate
f1 = deflection due to average bearing clearance with production tolerance ±0.01 mm
f2 = deflection due to transverse force

Datasheet

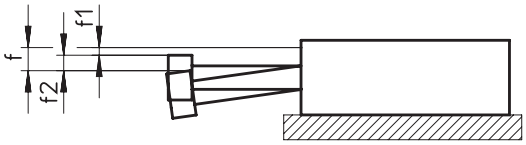
DGTZ-6/10



DGTZ-16 ... 32



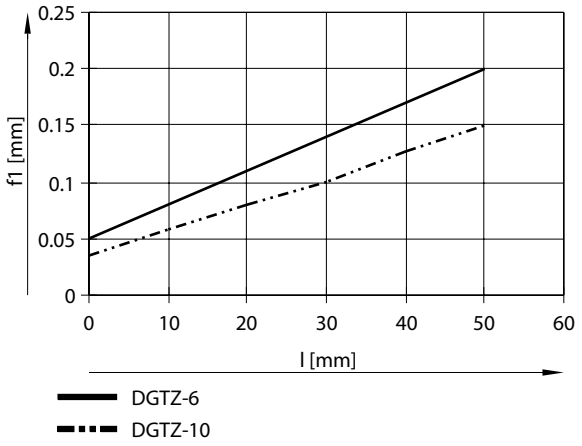
Deflection f1 due to bearing play as a function of stroke l (without load) - with two end plates and continuous piston rod



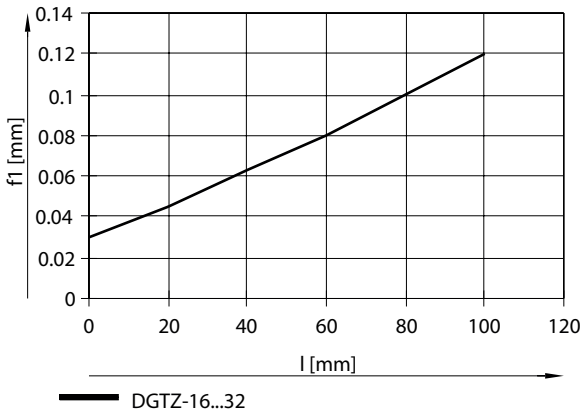
f = f1 + f2
f = total deflection of the end plate
f1 = deflection due to average bearing clearance with production tolerance ±0.01 mm
f2 = deflection due to transverse force

Datasheet

DGTZ-6/10

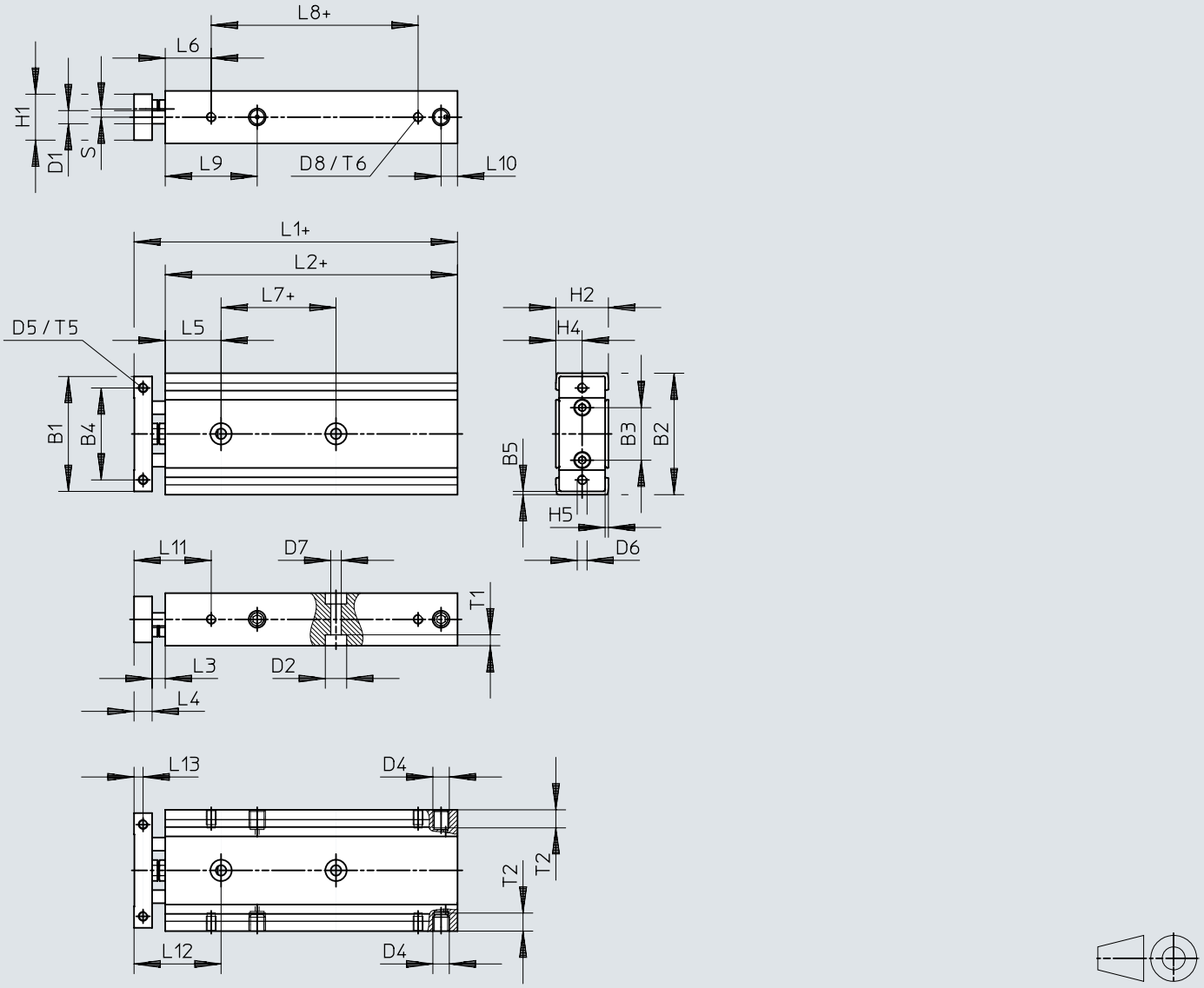


DGTZ-16 ... 32



Dimensions

Dimensions – DGTZ-6 with one end plate Download CAD data www.festo.com



[1] + = plus stroke length

Dimensions

	L[1]	B1	B2	B3	B4	B5	D1 ø	D2 ø	D4	D5	D6	D7 ø
DGTZ-6	10 ... 60	35	37	16	28	1	4	6,5	M5	M3	M3	3,2

	L[1]	D8	H1	H2	H4	H5	L1	L2	L3	L4	L5	L6
DGTZ-6	10 ... 50	M3	14	16	8	1	48,5[2]	39[2]	4	5,5	17	14
	51 ... 60						108,5	99				

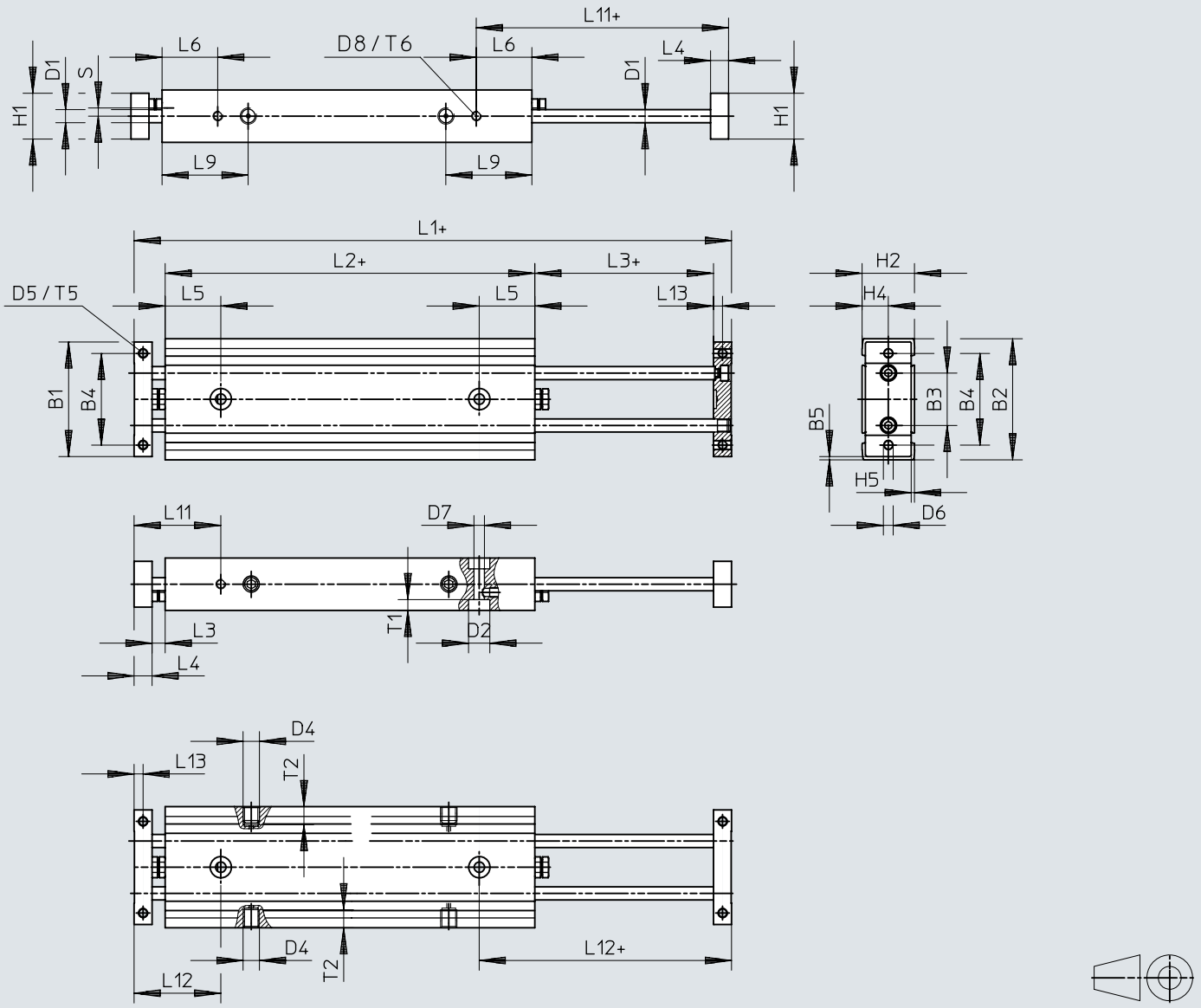
	L[1]	L9	L10	L11	L12	L13	S	T1	T2	T5	T6
DGTZ-6	10 ... 60	28	5	23,5	26,5	2,8	2,5	3,3	5,5	6	4,5

	L[1]	L7	L8
DGTZ-6	10	15	23
	20	20	33
	30	25	43
	40	30	53
	50	35	63
	51 ... 60	35	63

1) Stroke
2) plus stroke length

Dimensions

Dimensions – DGTZ-6 with two end plates and continuous piston rod Download CAD data www.festo.com



[1] + = plus stroke length

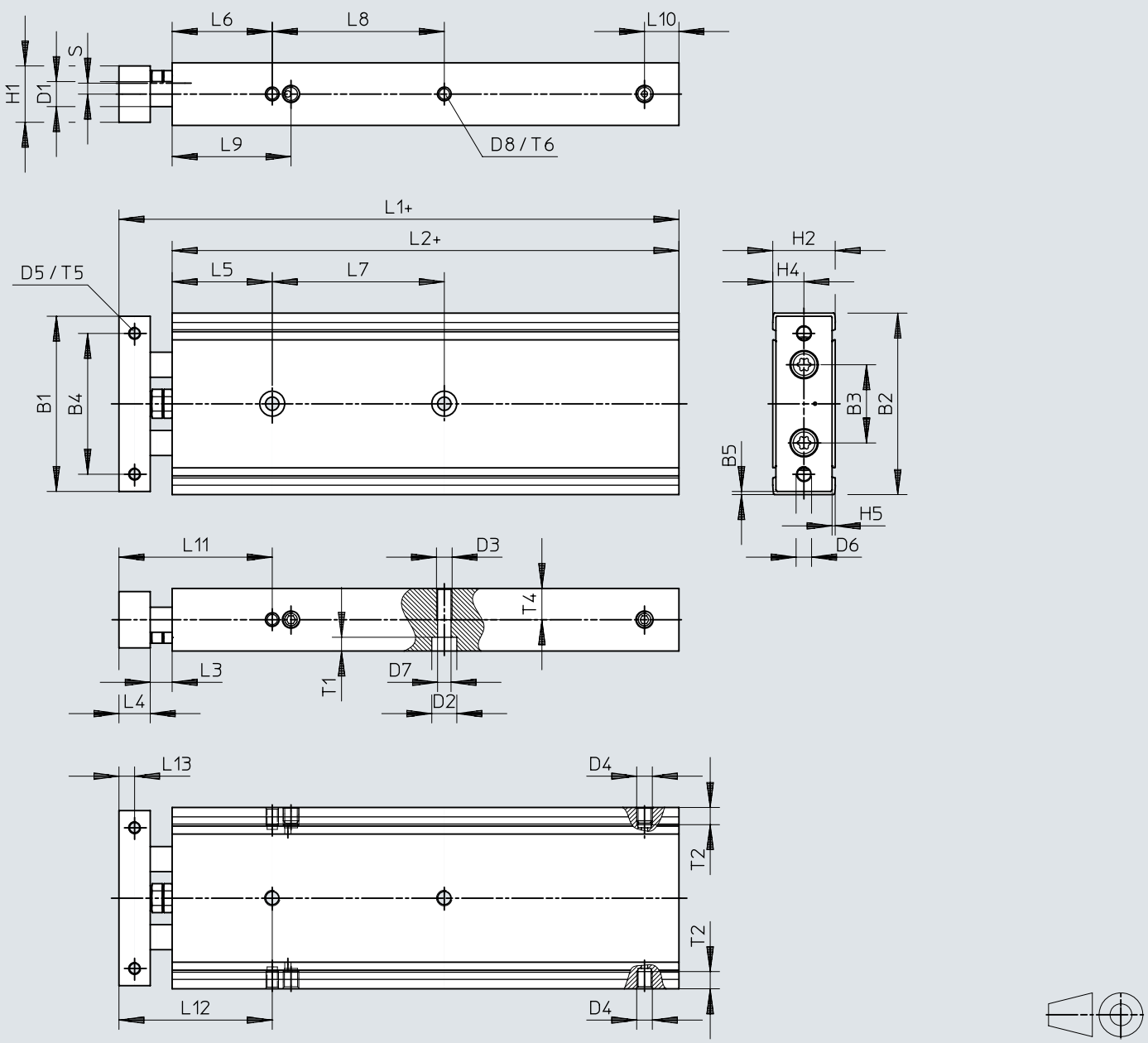
	L[1)]	B1	B2	B3	B4	B5	D1 ø	D2 ø	D4	D5	D6	D7 ø	D8	H1	H2	H4	H5
DGTZ-6	10 ... 60	35	37	16	28	1	4	6,5	M5	M3	M3	3,2	M3	14	16	8	1

	L[1)]	L1	L2	L3	L4	L5	L6	L9	L11	L12	L13	S	T1	T2	T5	T6
DGTZ-6	10	103	73	4	5,5	17	17	27	26,5	26,5	2,75	2,5	3,3	5,5	6	4,5
	20	123	83													
	30	143	93													
	40	163	103													
	50	183	113													
	51 ... 60	143[2)]	123													

1) Stroke
2) plus stroke length

Dimensions

Dimensions – DGTZ-10... 16 with an end plate Download CAD data www.festo.com



[1] + = plus stroke length

Dimensions

	L[1]	B1	B2	B3	B4	B5	D1 Ø	D2 Ø	D3	D4	D5	D6	D7 Ø
DGTZ-10	10 ... 150	44	46	20	35	1	6	6,5	M4	M5	M3	M4	3,4
DGTZ-16	10 ... 200	56	58	25	45	1	8	8	M5	M5	M4	M5	4,3

	L[1]	D8	H1	H2	H4	H5	L1	L2	L3	L4	L5	L6	L9
DGTZ-10	10 ... 80	M3	15	17	8,5	1	60[2]	46[2]	6	8	23	23	34
	81 ... 100						164	150					
	101 ... 125						189	175					
	126 ... 150						214	200					
DGTZ-16	10 ... 100	M4	18	20	10	1	79[2]	62[2]	7	10	32	32	38
	101 ... 125						204	187					
	126 ... 150						229	212					
	151 ... 175						254	237					
	176 ... 200						279	262					

	L[1]	L10	L11	L12	L13	S	T1	T2	T4	T5
DGTZ-10	10 ... 80	5	37	37	4	2,5	3,3	5,5	7	4,5
	81 ... 150	9								
DGTZ-16	10 ... 200	11	49	49	5	3,5	4,4	5,5	9	5,5

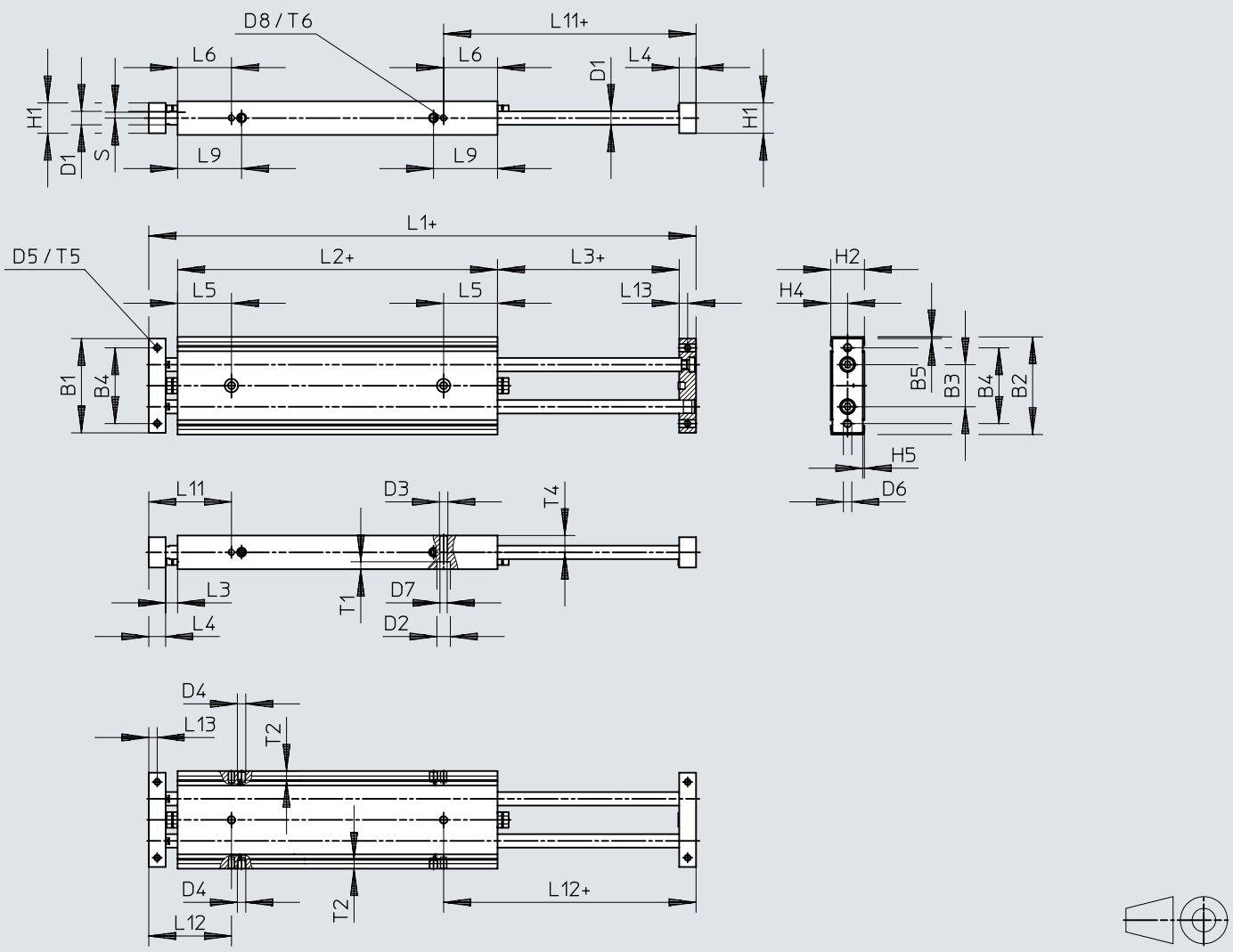
	DGTZ-10			DGTZ-16	
L[1]	L7	L8	L[1]	L7	L8
10	20		10	20	
20	30		20	25	
30	40		30	35	
40	40		40	35	
50	40		50	35	
60	50		60	45	
70	50		70	45	
80	50		80	45	
81 ... 100	60		90	55	
101 ... 125	70		100	55	
126 ... 150	80		101 ... 125	65	
			126 ... 150	75	
			151 ... 175	85	
			176 ... 200	85	

1) Stroke
2) plus stroke length

Dimensions

Dimensions – DGTZ-10... 16 with two end plates and continuous piston rod

Download CAD data www.festo.com



[1] + = plus stroke length

Dimensions

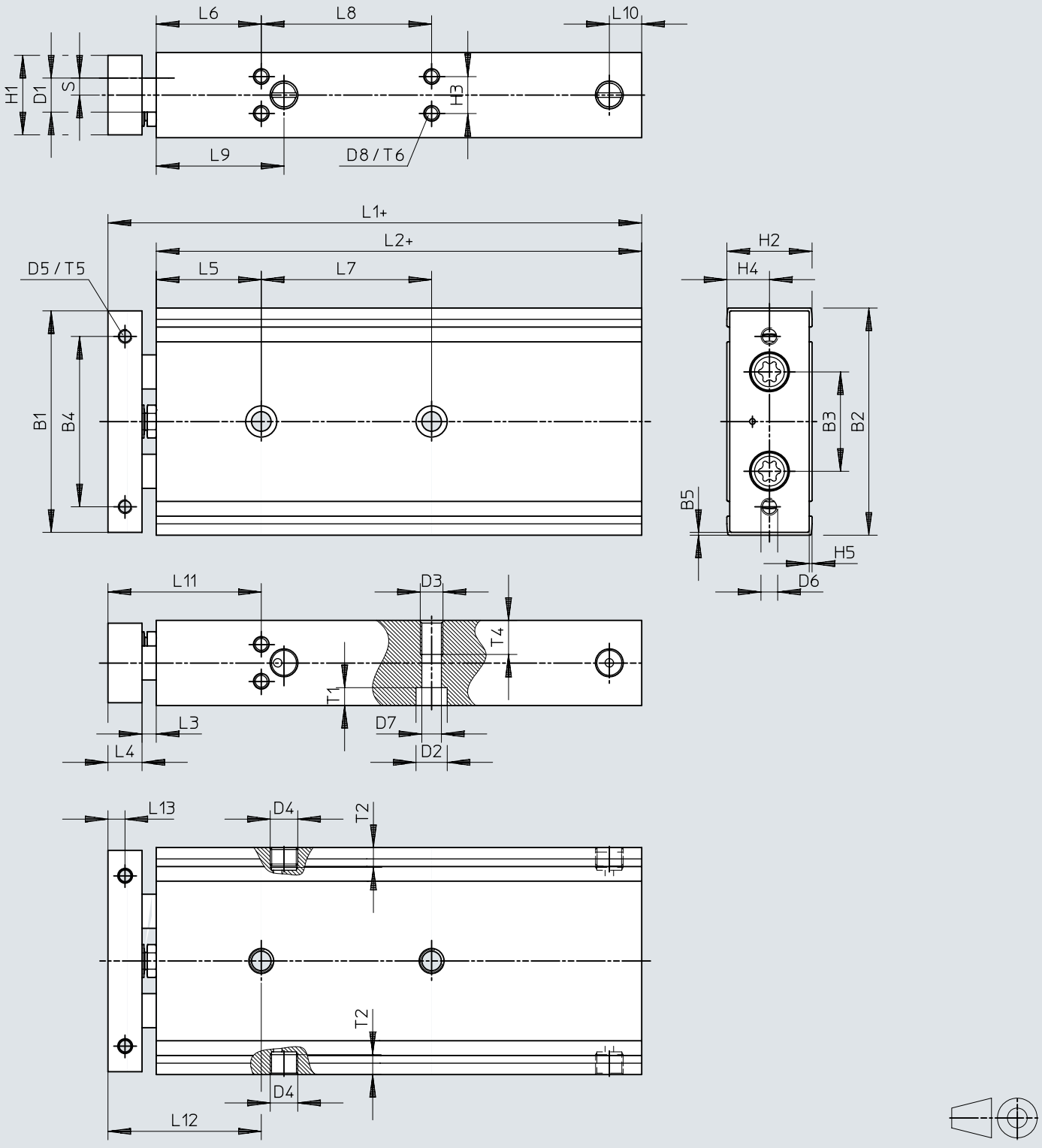
	L[1]	B1	B2	B3	B4	B5	D1 ø	D2 ø	D3	D4	D5	D6	D7 ø	D8	H1	H2	H4	H5
DGTZ-10	10 ... 150	44	46	20	35	1	6	6,5	M4	M5	M3	M4	3,4	M3	15	17	8,5	1
DGTZ-16	10 ... 200	56	58	25	45	1	8	8	M5	M5	M4	M5	4,3	M4	18	20	10	1

	L[1]	L1	L2	L3	L4	L5	L6	L9	L11	L12	L13	S	T1	T2	T4	T5	T6
DGTZ-10	10	125	86	6	8	23	23	34	37	37	4	2,5	3,3	5,5	7	6	4,5
	20	145	96														
	30	165	106														
	40	185	116														
	50	205	126														
	51 ... 75	180[2]	151														
	76 ... 100	205[2]	176														
	101 ... 125	230[2]	201														
	126 ... 150	255[2]	226														
DGTZ-16	10	145	100	7	10	32	32	38	49	49	5	3,5	4,4	5,5	9	7	5,5
	20	165	110														
	30	185	120														
	40	205	130														
	50	225	140														
	80	285	170														
	100	325	190														
	101 ... 125	250[2]	215														
	126 ... 150	275[2]	240														
	151 ... 175	300[2]	265														
	176 ... 200	325[2]	290														

1) Stroke
2) plus stroke length

Dimensions

Dimensions – DGTZ-20... 32 with an end plate Download CAD data www.festo.com



[1] + = plus stroke length

Dimensions

	L[1]	B1	B2	B3	B4	B5	D1 ø	D2 ø	D3	D4	D5	D6	D7 ø
DGTZ-20	10 ... 200	62	64	29	50	1	10	9,5	M6	M5	M4	M5	5,5
DGTZ-25		78	80	35	60	1	12	11	M8	G1/8	M5	M6	6,9
DGTZ-32		94	96	45	75	1	16	11	M8	G1/8	M5	M6	6,9

	L[1]	D8	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5	L6
DGTZ-20	10 ... 100	M4	23	25	9,5	12,5	1	86,5[2]	69,5[2]	5	12	37	37
	101 ... 125							211,5	194,5				
	126 ... 150							236,5	219,5				
	151 ... 175							261,5	244,5				
	176 ... 200							286,5	269,5				
DGTZ-25	10 ... 100	M5	28	30	13	15	1	88[2]	71[2]	5	12	37	37
	101 ... 125							213	196				
	126 ... 150							238	221				
	151 ... 175							263	246				
	176 ... 200							288	271				
DGTZ-32	10 ... 100	M5	36	38	20	19	1	97[2]	76[2]	5	16	39	39
	101 ... 125							222	201				
	126 ... 150							247	226				
	151 ... 175							272	251				
	176 ... 200							297	276				

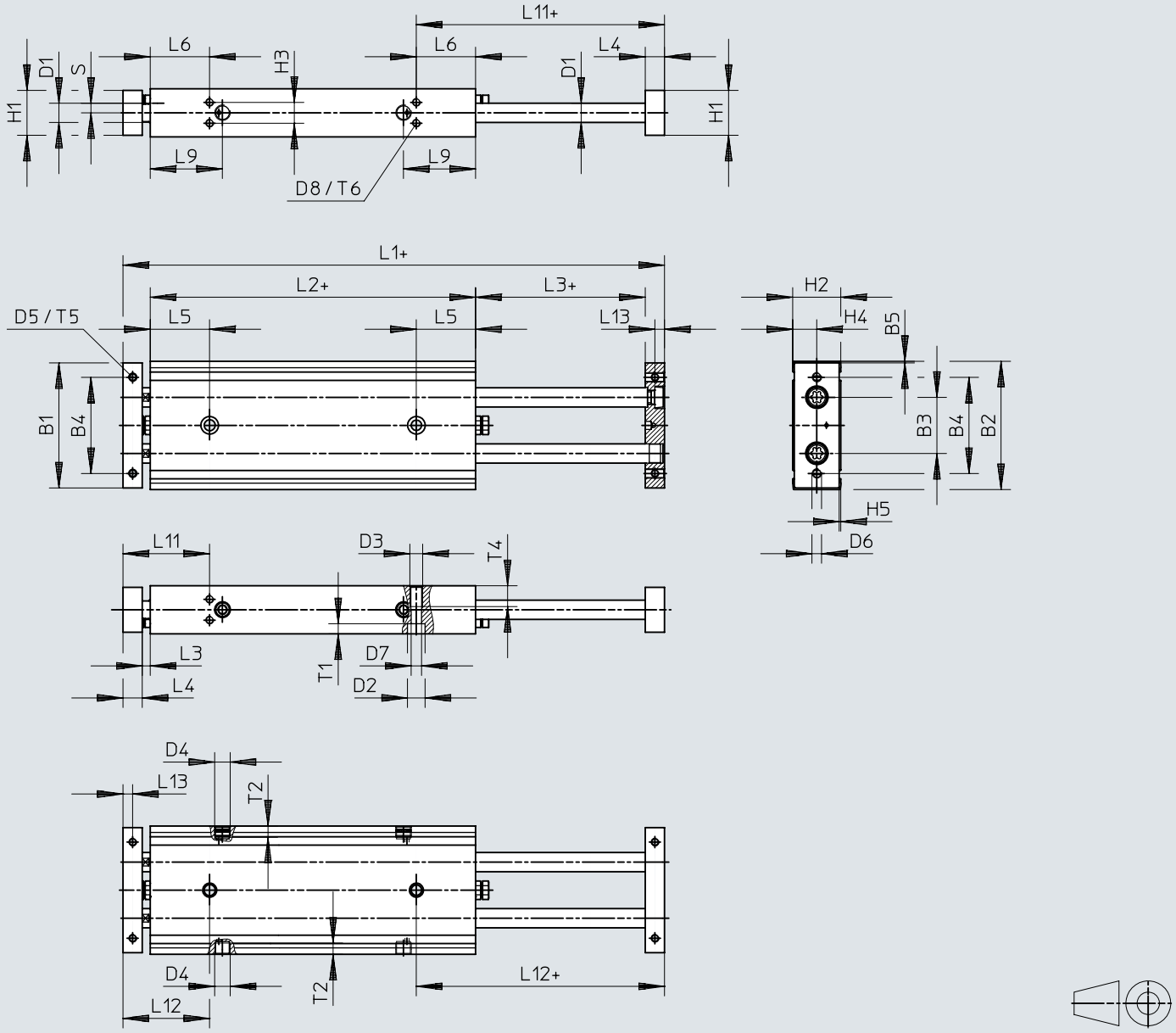
	L[1]	L9	L10	L11	L12	L13	S	T1	T2	T4	T5	T6
DGTZ-20	10 ... 200	42,5	12	54	54	6	6	5,3	5,5	10	8	5,5
DGTZ-25		45	11,4	54	54	6	6	6,3	7	12	9	7,5
DGTZ-32		49,5	11,6	60	60	8	8	6,3	7	12	10	7,5

	DGTZ-20, 25			DGTZ-32	
L[1]	L7	L8	L[1]	L7	L8
10	25		10	30	
20	30		20	40	
30	40		30	50	
40	40		40	50	
50	40		50	50	
60	60		60	70	
70	60		70	70	
80	60		80	70	
90	60		90	70	
100	60		100	70	
101 ... 125	80		101 ... 125	90	
126 ... 150	80		126 ... 150	90	
151 ... 175	100		151 ... 175	110	
176 ... 200	100		176 ... 200	110	

1) Stroke
2) plus stroke length

Dimensions

Dimensions – DGTZ-20... 32 with two end plates and continuous piston rod Download CAD data www.festo.com



[1] + = plus stroke length

Dimensions

	L[1]	B1	B2	B3	B4	B5	D1 ø	D2 ø	D3	D4	D5	D6
DGTZ-20	10 ... 200	62	64	29	50	1	10	9,5	M6	M5	M4	M5
DGTZ-25		78	80	35	60	1	12	11	M8	G1/8	M5	M6
DGTZ-32		94	96	45	75	1	16	11	M8	G1/8	M5	M6

	L[1]	D7 ø	D8	H1	H2	H3	H4	H5	L1	L2	L3	L4
DGTZ-20	10	5,5	M4	23	25	9,5	12,5	1	156	111	5	12
	20								176	121		
	30								196	131		
	40								216	141		
	50								236	151		
	80								296	181		
	100								336	201		
	101 ... 125								261[2]	226		
	126 ... 150								286[2]	251		
	151 ... 175								311[2]	276		
	176 ... 200								336[2]	301		
DGTZ-25	10	6,9	M5	28	30	13	15	1	158	113	5	12
	20								178	123		
	30								198	133		
	40								218	143		
	50								238	153		
	80								298	183		
	100								338	203		
	101 ... 125								263[2]	228		
	126 ... 150								288[2]	253		
	151 ... 175								313[2]	278		
	176 ... 200								338[2]	303		
DGTZ-32	10	6,9	M5	36	38	20	19	1	180	127	5	16
	20								200	137		
	30								220	147		
	40								240	157		
	50								260	167		
	80								320	197		
	100								360	217		
	101 ... 125								285[2]	242		
	126 ... 150								310[2]	267		
	151 ... 175								335[2]	292		
	176 ... 200								360[2]	317		

	L[1]	L5	L6	L9	L11	L12	L13	S	T1	T2	T4	T5	T6
DGTZ-20	10 ... 200	37	37	42,5	54	54	6	6	5,3	5,5	10	8	5,5
DGTZ-25		37	37	45	54	54	6	6	6,3	7	12	9	7,5
DGTZ-32		39	39	49,5	60	60	8	8	6,3	7	12	10	7,5

1) Stroke
2) plus stroke length

Ordering data

DGTZ with one end plate

	Piston diameter	Stroke [1]	Part no.	Type
	6 mm	10 mm	8100542	DGTZ-GF-6-10-P-A
		20 mm	8100543	DGTZ-GF-6-20-P-A
		30 mm	8100544	DGTZ-GF-6-30-P-A
		40 mm	8100545	DGTZ-GF-6-40-P-A
		50 mm	8100546	DGTZ-GF-6-50-P-A
		51 ... 60 mm	8116420	DGTZ-GF-6- -P-A
	10 mm	10 mm	8100554	DGTZ-GF-10-10-P-A
		20 mm	8100555	DGTZ-GF-10-20-P-A
		30 mm	8100556	DGTZ-GF-10-30-P-A
		40 mm	8100557	DGTZ-GF-10-40-P-A
		50 mm	8100558	DGTZ-GF-10-50-P-A
		60 mm	8100559	DGTZ-GF-10-60-P-A
		70 mm	8100560	DGTZ-GF-10-70-P-A
		80 mm	8100561	DGTZ-GF-10-80-P-A
		81 ... 150 mm	8116418	DGTZ-GF-10- -P-A
	16 mm	10 mm	8100570	DGTZ-GF-16-10-P-A
		20 mm	8100571	DGTZ-GF-16-20-P-A
		30 mm	8100572	DGTZ-GF-16-30-P-A
		40 mm	8100573	DGTZ-GF-16-40-P-A
		50 mm	8100574	DGTZ-GF-16-50-P-A
		60 mm	8100575	DGTZ-GF-16-60-P-A
		70 mm	8100576	DGTZ-GF-16-70-P-A
		80 mm	8100577	DGTZ-GF-16-80-P-A
		90 mm	8100578	DGTZ-GF-16-90-P-A
		100 mm	8100579	DGTZ-GF-16-100-P-A
		101 ... 200 mm	8116417	DGTZ-GF-16- -P-A
	20 mm	10 mm	8100607	DGTZ-GF-20-10-P-A
		20 mm	8100608	DGTZ-GF-20-20-P-A
		30 mm	8100609	DGTZ-GF-20-30-P-A
		40 mm	8100610	DGTZ-GF-20-40-P-A
		50 mm	8100611	DGTZ-GF-20-50-P-A
		60 mm	8100612	DGTZ-GF-20-60-P-A
		70 mm	8100613	DGTZ-GF-20-70-P-A
		80 mm	8100614	DGTZ-GF-20-80-P-A
		90 mm	8100615	DGTZ-GF-20-90-P-A
		100 mm	8100616	DGTZ-GF-20-100-P-A
		101 ... 200 mm	8116415	DGTZ-GF-20- -P-A
	25 mm	10 mm	8100637	DGTZ-GF-25-10-P-A
		20 mm	8100638	DGTZ-GF-25-20-P-A
		30 mm	8100639	DGTZ-GF-25-30-P-A
		40 mm	8100640	DGTZ-GF-25-40-P-A
		50 mm	8100641	DGTZ-GF-25-50-P-A
		60 mm	8100642	DGTZ-GF-25-60-P-A
		70 mm	8100643	DGTZ-GF-25-70-P-A
		80 mm	8100644	DGTZ-GF-25-80-P-A
		90 mm	8100645	DGTZ-GF-25-90-P-A
		100 mm	8100646	DGTZ-GF-25-100-P-A
		101 ... 200 mm	8116422	DGTZ-GF-25- -P-A
	32 mm	10 mm	8100657	DGTZ-GF-32-10-P-A
		20 mm	8100658	DGTZ-GF-32-20-P-A
		30 mm	8100659	DGTZ-GF-32-30-P-A
		40 mm	8100660	DGTZ-GF-32-40-P-A
		50 mm	8100661	DGTZ-GF-32-50-P-A
		60 mm	8100662	DGTZ-GF-32-60-P-A
		70 mm	8100663	DGTZ-GF-32-70-P-A
		80 mm	8100664	DGTZ-GF-32-80-P-A
		90 mm	8100665	DGTZ-GF-32-90-P-A

Ordering data

DGTZ with one end plate

	Piston diameter	Stroke [1]	Part no.	Type
	32 mm	100 mm	**8100666**	**DGTZ-GF-32-100-P-A**
		101 ... 200 mm	**8116424**	**DGTZ-GF-32- -P-A**

1) Strokes for DGTZ-GF-... freely selectable in steps of 1 mm

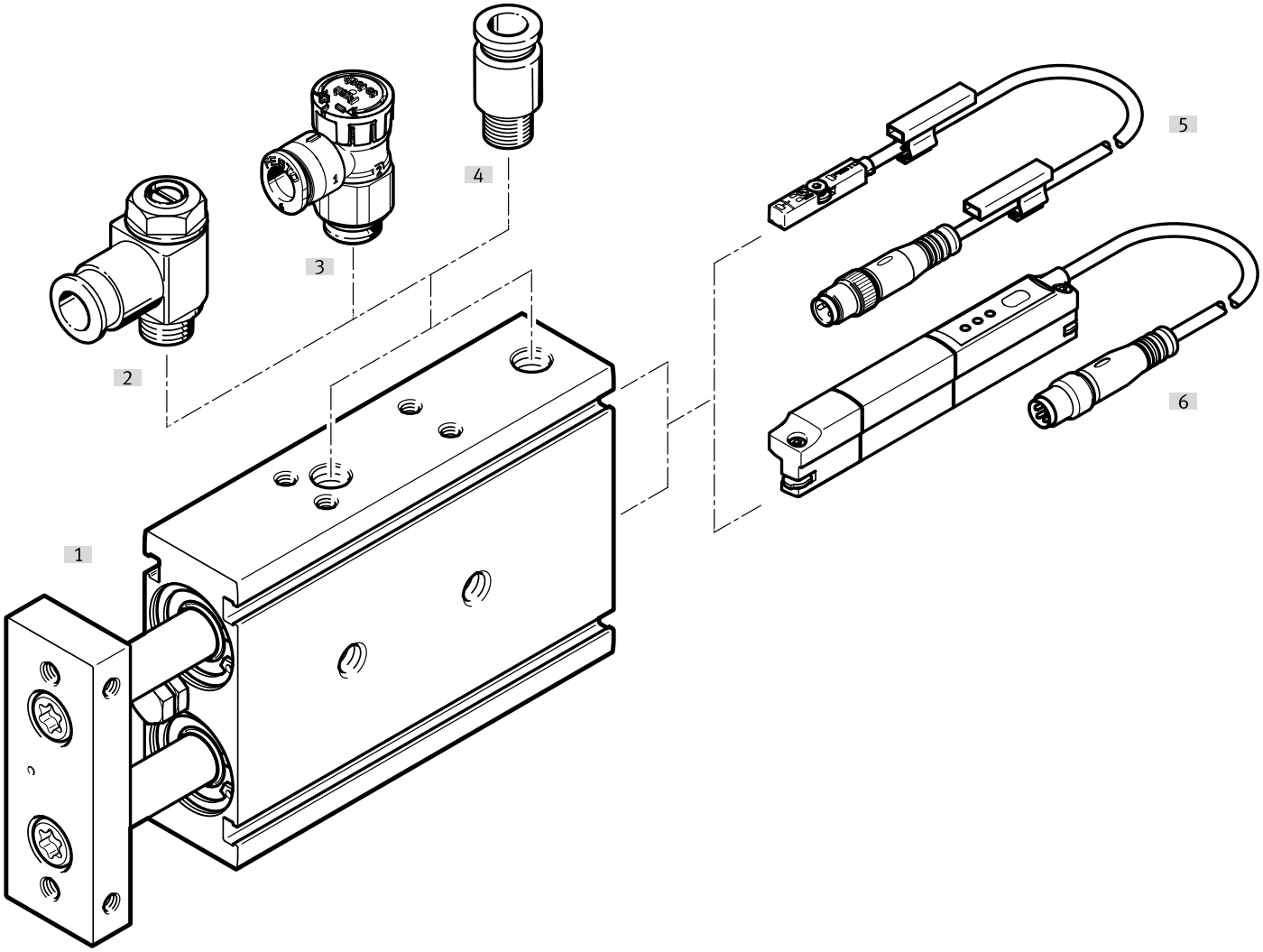
DGTZ with two end plates and through piston rod

	Piston diameter	Stroke [1]	Part no.	Type
	6 mm	10 mm	**8103467**	**DGTZ-GF-6-10-J-T-P-A**
		20 mm	**8103468**	**DGTZ-GF-6-20-J-T-P-A**
		30 mm	**8103469**	**DGTZ-GF-6-30-J-T-P-A**
		40 mm	**8103470**	**DGTZ-GF-6-40-J-T-P-A**
		50 mm	**8103471**	**DGTZ-GF-6-50-J-T-P-A**
		51 ... 60 mm	**8150885**	**DGTZ-GF-6- -J-T-P-A**
	10 mm	10 mm	**8103497**	**DGTZ-GF-10-10-J-T-P-A**
		20 mm	**8103498**	**DGTZ-GF-10-20-J-T-P-A**
		30 mm	**8103499**	**DGTZ-GF-10-30-J-T-P-A**
		40 mm	**8103500**	**DGTZ-GF-10-40-J-T-P-A**
		50 mm	**8103501**	**DGTZ-GF-10-50-J-T-P-A**
		51 ... 150 mm	**8150886**	**DGTZ-GF-10- -J-T-P-A**
	16 mm	10 mm	**8103427**	**DGTZ-GF-16-10-J-T-P-A**
		20 mm	**8103428**	**DGTZ-GF-16-20-J-T-P-A**
		30 mm	**8103429**	**DGTZ-GF-16-30-J-T-P-A**
		40 mm	**8103430**	**DGTZ-GF-16-40-J-T-P-A**
		50 mm	**8103431**	**DGTZ-GF-16-50-J-T-P-A**
		80 mm	**8103432**	**DGTZ-GF-16-80-J-T-P-A**
		100 mm	**8103433**	**DGTZ-GF-16-100-J-T-P-A**
		101 ... 200 mm	**8150887**	**DGTZ-GF-16- -J-T-P-A**
	20 mm	10 mm	**8103487**	**DGTZ-GF-20-10-J-T-P-A**
		20 mm	**8103488**	**DGTZ-GF-20-20-J-T-P-A**
		30 mm	**8103489**	**DGTZ-GF-20-30-J-T-P-A**
		40 mm	**8103490**	**DGTZ-GF-20-40-J-T-P-A**
		50 mm	**8103491**	**DGTZ-GF-20-50-J-T-P-A**
		80 mm	**8103492**	**DGTZ-GF-20-80-J-T-P-A**
		100 mm	**8103493**	**DGTZ-GF-20-100-J-T-P-A**
		101 ... 200 mm	**8150888**	**DGTZ-GF-20- -J-T-P-A**
	25 mm	10 mm	**8103457**	**DGTZ-GF-25-10-J-T-P-A**
		20 mm	**8103458**	**DGTZ-GF-25-20-J-T-P-A**
		30 mm	**8103459**	**DGTZ-GF-25-30-J-T-P-A**
		40 mm	**8103460**	**DGTZ-GF-25-40-J-T-P-A**
		50 mm	**8103461**	**DGTZ-GF-25-50-J-T-P-A**
		80 mm	**8103462**	**DGTZ-GF-25-80-J-T-P-A**
		100 mm	**8103463**	**DGTZ-GF-25-100-J-T-P-A**
		101 ... 200 mm	**8150889**	**DGTZ-GF-25- -J-T-P-A**
	32 mm	10 mm	**8103513**	**DGTZ-GF-32-10-J-T-P-A**
		20 mm	**8103514**	**DGTZ-GF-32-20-J-T-P-A**
		30 mm	**8103515**	**DGTZ-GF-32-30-J-T-P-A**
		40 mm	**8103516**	**DGTZ-GF-32-40-J-T-P-A**
		50 mm	**8103517**	**DGTZ-GF-32-50-J-T-P-A**
		80 mm	**8103518**	**DGTZ-GF-32-80-J-T-P-A**
		100 mm	**8103519**	**DGTZ-GF-32-100-J-T-P-A**
		101 ... 200 mm	**8150890**	**DGTZ-GF-32- -J-T-P-A**

1) Strokes for DGTZ-GF-... freely selectable in steps of 1 mm

Peripherals

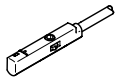
Peripherals overview



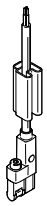
Accessories			→ Link
	Type/order code	Description	
[1]	Twin cylinder DGTZ	Pneumatic drive	dgtz
[2]	One-way flow control valve GRLA	• For regulating speed • For piston Ø 6, 10, 16 ,20, 25, 32	27
[3]	One-way flow control valve VFOE	• For regulating speed • For piston Ø 6, 10, 16 ,20, 25, 32	27
[4]	Push-in fitting QS	• For connecting compressed air tubing with standard O.D. • For piston Ø 6, 10, 16 ,20, 25, 32	qs
[5]	Proximity switch SMT-10	• For position sensing • For piston Ø 6, 10, 16, 20	26
[5]	Proximity switch SME-8	• For position sensing • For piston Ø 25, 32	26
[5]	Proximity switch SMT-8	• For position sensing • For piston Ø 25, 32	26
[6]	Proximity switch SDBC-MSB	• For position sensing • For piston Ø 6, 10, 16, 20	26

Accessories

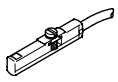
Proximity switch SMT-10M for round slot, magneto-resistive for piston Ø 6, 10, 16 ,20 — Link smt

	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type
	Screw-clamped, Insertable in the slot from above	3-wire PNP N/O contact	Open end	2.5 m	551374	SMT-10M-PS-24V-E-2,5-Q-OE
					551373	SMT-10M-PS-24V-E-2,5-L-OE
			Plug M8, A-coded	0.3 m	551375	SMT-10M-PS-24V-E-0,3-L-M8D
					551376	SMT-10M-PS-24V-E-0,3-Q-M8D

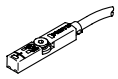
Proximity switch SMT-10G for round slot, magneto-resistive for piston Ø 6, 10, 16 ,20 — Link smt

	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type
	Clamped in C-slot, Insertable in the slot lengthwise	3-wire NPN N/O contact	Open end	2.5 m	8065030	SMT-10G-NS-24V-E-2,5Q-OE
			Plug M8, A-coded	0.3 m	8065029	SMT-10G-NS-24V-E-0,3Q-M8D
		3-wire PNP N/O contact	Open end	2.5 m	547862	SMT-10G-PS-24V-E-2,5Q-OE
			Plug M8, A-coded	0.3 m	547863	SMT-10G-PS-24V-E-0,3Q-M8D

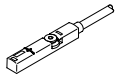
Proximity switch SDBC-MSB for round slot, magneto-resistive for piston Ø 6, 10, 16 ,20 — Link sdbc

	Switching output	Switching element function	Electrical connection	Cable length	Part no.	Type
	NPN	N/O contact	Open end	2 m	8139724	SDBC-MSB-1L-NU-K-2-LE
			Plug M8, A-coded	0.3 m	8139727	SDBC-MSB-1L-NU-K-0.3-M8
	PNP		Open end	2 m	8139723	SDBC-MSB-1L-PU-K-2-LE
			Plug M8, A-coded	0.3 m	8139726	SDBC-MSB-1L-PU-K-0.3-M8
	Non-contacting, 2-wire		Open end	2 m	8139725	SDBC-MSB-1L-ZU-K-2-LE

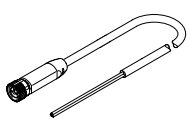
Proximity switch SMT-8M for T-slot, magneto-resistive for piston Ø 25, 32 — Link smt

	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type
	Screw-clamped, Insertable in the slot from above	3-wire NPN N/O contact	Open end	2.5 m	574338	SMT-8M-A-NS-24V-E-2,5-OE
			Plug M8, A-coded	0.3 m	574339	SMT-8M-A-NS-24V-E-0,3-M8D
		3-wire PNP N/C contact	Open end	7.5 m	574340	SMT-8M-A-PO-24V-E-7,5-OE
		3-wire PNP N/O contact		2.5 m	574335	SMT-8M-A-PS-24V-E-2,5-OE
			Plug M8, A-coded	0.3 m	574334	SMT-8M-A-PS-24V-E-0,3-M8D

Proximity switch SME-8M for T-slot, magnetic reed for piston Ø 25, 32 — Link sme

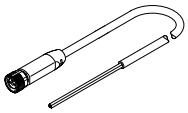
	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type
	Screw-clamped, Insertable in the slot from above	3-wire N/O contact	Open end	2.5 m	543862	SME-8M-DS-24V-K-2,5-OE
				5 m	543863	SME-8M-DS-24V-K-5,0-OE
			Plug M8, A-coded	0.3 m	543861	SME-8M-DS-24V-K-0,3-M8D
		2-wire N/O contact	Open end	2.5 m	543872	SME-8M-ZS-24V-K-2,5-OE

Connecting cables NEBA, straight, M8 connection

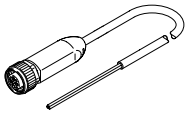
	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/ cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3

Accessories

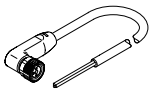
Connecting cables NEBA, straight, M8 connection

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/ cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	5 m	**8078224**	**NEBA-M8G3-U-5-N-LE3**

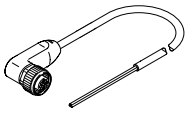
Connecting cables NEBA, straight, M12 connection

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/ cores	Cable length	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	2.5 m	**8078236**	**NEBA-M12G5-U-2.5-N-LE3**
				5 m	**8078237**	**NEBA-M12G5-U-5-N-LE3**

Connecting cables NEBA, angled, M8 connection

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/ cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	**8078230**	**NEBA-M8W3-U-2.5-N-LE3**
				5 m	**8078231**	**NEBA-M8W3-U-5-N-LE3**

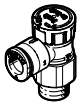
Connecting cables NEBA, angled, M12 connection

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/ cores	Cable length	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	2.5 m	**8078245**	**NEBA-M12W5-U-2.5-N-LE3**
				5 m	**8078246**	**NEBA-M12W5-U-5-N-LE3**

One-way flow control valves GRLA – for exhaust air

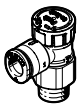
	Pneumatic connection 1	Pneumatic connection, port 2	Part no.	Type
	Same size as pneumatic connection 2	M3	**175038**	**GRLA-M3**
	Push-in connector 3 mm		**175041**	**GRLA-M3-QS-3**
		M5	**193137**	**GRLA-M5-QS-3-D**
	Push-in connector 4 mm		**193138**	**GRLA-M5-QS-4-D**
	Push-in connector 6 mm		**193139**	**GRLA-M5-QS-6-D**

One-way flow control valves VFOE – for exhaust air

	Pneumatic connection 1	Pneumatic connection, port 2	Part no.	Type
	Push-in connector 4 mm	M5	**8068723**	**VFOE-LE-T-M5-Q4**

Accessories

One-way flow control valves VFOE – for exhaust air

	Pneumatic connection 1	Pneumatic connection, port 2	Part no.	Type
	Push-in connector 4 mm	M5	**8095432**	**VFOE-LE-T-M5-Q4-P50**
	Push-in connector 6 mm		**8068724**	**VFOE-LE-T-M5-Q6**