

## Push-in fittings QBM, mini series, NPT

**FESTO**



## Technical data

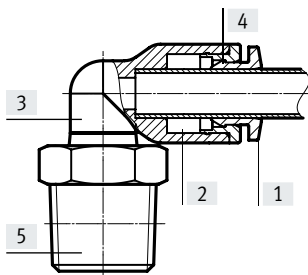
General technical data			
Connecting thread	UNF10-32	NPT1/8-27	NPT1/4-18
Size	Mini		
Design	Push-pull principle		
Mounting position	Any		
Type of seal on the screwed trunion	Sealing ring	Coating	
Max. tightening torque [ft-lbf]	1.106	5.163	8.851

Operating and environmental conditions			
Operating pressure for entire temperature range	[MPa]	0.095 ... 1	
	[bar]	0.95 ... 10	
	[psi]	13.775 ... 145	
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]		
Note on the operating/pilot medium	Lubricated operation possible		
Ambient temperature	[°C]	0 ... 60	
	[°F]	32 ... 140	
Corrosion resistance class CRC <sup>1)</sup>	1 - Low corrosion stress		

1) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)






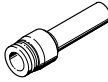

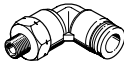
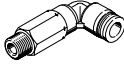
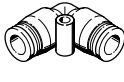
## Materials

### Sectional view









Push-in fitting QBM/QBMF/QBML/QBMLL/QBMT/QBMTL			
[1]	Releasing ring	POM (colour: grey)	
[2]	Tubing seal	NBR	
[3]	Housing	QBM/QBMF	Nickel-plated brass
		QBML/QBMLL/QBMT/QBMTL	PBT
[4]	Tube clamping segment	High-alloy stainless steel	
[5]	Screwed plug	QBML/QBMLL/QBMT/QBMTL	Nickel-plated brass
	Thread seal (NPT thread only)		PTFE
Note on materials		RoHS-compliant	
LABS (PWIS) conformity		VDMA24364 zone III	
Push-in connector QBM/QBML/QBMT/QBMY			
[1]	Releasing ring	POM (colour: grey)	
[2]	Tubing seal	NBR	
[3]	Housing	PBT	
[4]	Tube clamping segment	High-alloy stainless steel	
Note on materials		RoHS-compliant	
LABS (PWIS) conformity		VDMA24364 zone III	
Blanking plug QBMC			
[3]	Housing	PBT	
Note on materials		RoHS-compliant	
LABS (PWIS) conformity		VDMA24364 zone III	

Product range overview

Design	Version	Type	Connection D1				Connection D2		→ Page
			UNF thread	NPT thread	Tubing O.D.	Push-in sleeve ø	Tubing O.D.	Push-in sleeve ø	
Straight shape	<b>Push-in fitting – Male thread with external hex</b>								
		QBM	10-32	–	–	–	1/8, 5/32, 1/4	–	5
			–	1/8			1/8, 5/32, 1/4		
				1/4			1/8, 1/4		
	<b>Push-in fitting – Male thread with internal hex</b>								
		QBM-...I	10-32	–	–	–	1/8, 5/32, 1/4	–	5
			–	1/8			1/4		
	<b>Push-in fitting – Female thread with external hex</b>								
		QBMF	10-32	–	–	–	1/8, 5/32, 1/4	–	6
	<b>Push-in connector</b>								
		QBM-...T	–	–	1/8	–	–	–	7
					5/32				
				1/4					
	QBM-...T Reducing	–	–	5/32	–	1/8	–		
				3/16		1/8			
				1/4		5/32			
<b>Push-in connector with push-in sleeve</b>									
	QBM-...H	–	–	–	5/32	1/8	–	7	
<b>Blanking plug</b>									
	QBMC-...H	–	–	–	1/8	–	–	8	
L-shape	<b>Push-in L-fitting – Male thread with external hex</b>								
		QBML	10-32	–	–	–	1/8, 5/32, 1/4	–	9
			–	1/8			1/8, 1/4		
				1/4			1/8, 1/4		
	<b>Push-in L-fitting, long – Male thread with external hex</b>								
		QBMLL	10-32	–	–	–	1/8, 1/4	–	9
			–	1/8			1/8, 1/4		
	<b>Push-in L-connector</b>								
		QBML-...T	–	–	1/8	–	–	–	10
					5/32				
				1/4					

Product range overview

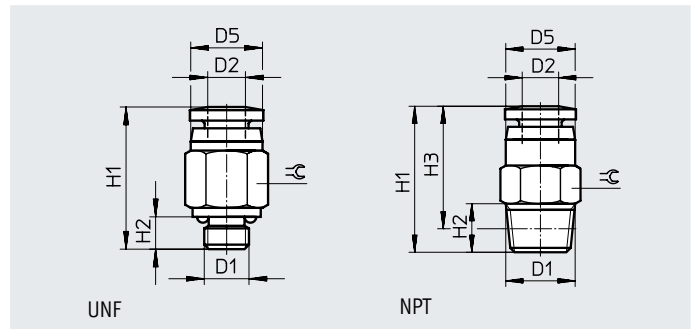
Design	Version	Type	Connection D1				Connection D2		→ Page
			UNF thread	NPT thread	Tubing O.D.	Push-in sleeve ø	Tubing O.D.	Push-in sleeve ø	
T-shape	<b>Push-in T-fitting – Male thread with external hex</b>								
		QBMT	10-32	–	–	–	1/8, 5/32, 1/4	–	11
			–	1/8			1/8, 1/4		
				1/4			1/4		
	<b>Push-in T-connector</b>								
		QBMT...T	–	–	1/8	–	–	–	12
					5/32				
					1/4				
		QBMT...T Reducing	–	–	5/32	–	1/8	–	
					1/4		5/32		
<b>Push-in T-fitting – Male thread with external hex</b>									
	QBMTL	10-32	–	–	–	1/8, 5/32, 1/4	–	13	
		–	1/8			1/8, 1/4			
			1/4			1/8			
Y-shape	<b>Push-in Y-connector</b>								
		QBM...T	–	–	1/8	–	–	–	14
					5/32				
					1/4				
	QBM...T Reducing	–	–	5/32	–	1/8	–		
				1/4		5/32			

## Datasheet

### Push-in fitting QBM

Male thread  
with external hex

Design:  
Straight shape



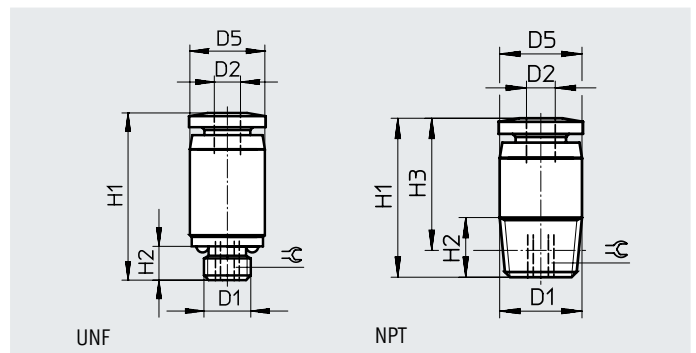
Dimensions and ordering data											
Pneumatic connection		Nominal size	Dimensions [inch]					Weight/piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5	L1	L2	L3	⌀				
D1	D2	[inch]	∅					[oz]			
<b>UNF thread</b>											
UNF10-32	1/8	0.079	0.283	0.646	0.142	0.504	5/16	0.071	533266	QBM-10-32-UNF-1/8-U	10
	5/32	0.098	0.315	0.665	0.142	0.524	5/16	0.106	572303	QBM-10-32-UNF-5/32-U	10
	1/4	0.098	0.413	0.744	0.142	0.602	7/16	0.353	573050	QBM-10-32-UNF-1/4-U	10
<b>NPT thread</b>											
NPT1/8-27	1/8	0.098	0.283	0.689	0.335	0.528	7/16	0.212	533270	QBM-1/8-1/8-U	10
	5/32	0.118	0.315	0.705	0.335	0.543	7/16	0.317	572305	QBM-1/8-5/32-U	10
	1/4	0.197	0.413	0.768	0.335	0.606	7/16	0.635	573051	QBM-1/8-1/4-U	10
NPT1/4-18	1/8	0.098	0.283	0.846	0.413	0.618	9/16	0.529	572306	QBM-1/4-1/8-U	10
	1/4	0.197	0.413	0.878	0.413	0.650	9/16	1.023	573052	QBM-1/4-1/4-U	10

1) Packaging unit

### Push-in fitting QBM-...-I

Male thread  
with internal hex

Design:  
Straight shape



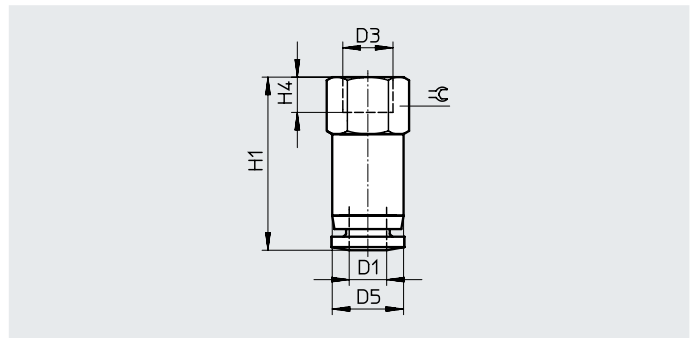
Dimensions and ordering data											
Pneumatic connection		Nominal width	Dimensions [inch]					Weight/piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5	L1	L2	L3	⌀				
D1	D2	[inch]	∅					[oz]			
<b>UNF thread</b>											
UNF10-32	1/8	0.094	0.276	0.646	0.142	-	3/32	0.071	572311	QBM-10-32-UNF-1/8-I-U	10
	5/32	0.094	0.315	0.669	0.142	-	3/32	0.106	572312	QBM-10-32-UNF-5/32-I-U	10
	1/4	0.094	0.413	0.748	0.142	-	3/32	0.423	573054	QBM-10-32-UNF-1/4-I-U	10
<b>NPT thread</b>											
NPT1/8-27	1/4	0.157	0.413	0.768	0.335	0.606	3/32	0.635	573055	QBM-1/8-1/4-I-U	10

1) Packaging unit

## Datasheet

### Push-in fitting QBMF

Design:  
Straight shape



#### Dimensions and ordering data

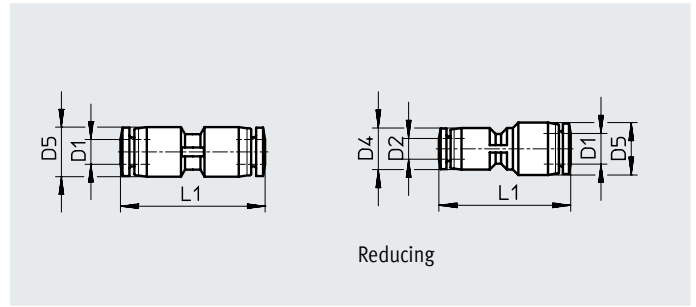
Pneumatic connection		Nominal size	Dimensions [inch]				≅	Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Female thread	For tubing O.D.		D5 ∅	L1	L2						
D1	D2	[inch]					[oz]				
<b>UNF thread</b>											
UNF10-32	1/8	0.098	0.295	0.740	0.236	5/16	0.071	572282	QBMF-10-32-UNF-1/8-U	10	
	5/32	0.118	0.315	0.756	0.236	5/16	0.176	572283	QBMF-10-32-UNF-5/32-U	10	
	1/4	0.118	0.413	0.807	0.236	7/16	0.212	573066	QBMF-10-32-UNF-1/4-U	10	

1) Packaging unit

## Datasheet

### Push-in connector QBM-...T

Design:  
Straight shape



Reducing

#### Dimensions and ordering data

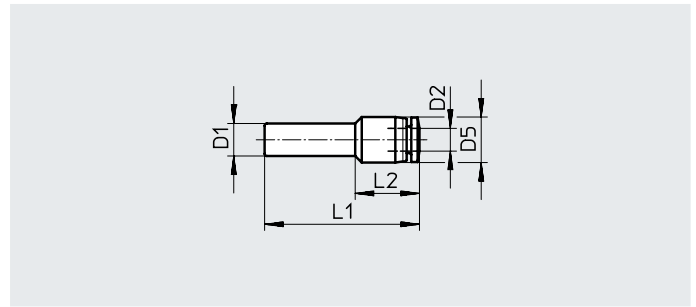
Pneumatic connection		Nominal size [inch]	Dimensions [inch]		L1	Weight/ piece [oz]	Part no.	Type	PU <sup>1)</sup>
For tubing O.D. D1	For tubing O.D. D2		D4 ∅	D5 ∅					
1/8	–	0.094	–	0.295	0.929	0.035	572277	QBM-1/8T-U	10
5/32	–	0.118	–	0.331	0.965	0.071	572278	QBM-5/32T-U	10
1/4	–	0.197	–	0.441	1.126	0.106	573056	QBM-1/4T-U	10
Reducing									
5/32	1/8	0.094	0.295	0.331	0.949	0.071	572279	QBM-5/32T-1/8-U	10
3/16	–	0.098	0.295	0.453	1.130	0.106	573057	QBM-3/16T-1/8-U	10
1/4	5/32	0.138	0.346	0.441	1.106	0.106	573058	QBM-1/4T-5/32-U	10

1) Packaging unit

### Push-in connector QBM-...H

With push-in sleeve

Design:  
Straight shape



#### Dimensions and ordering data

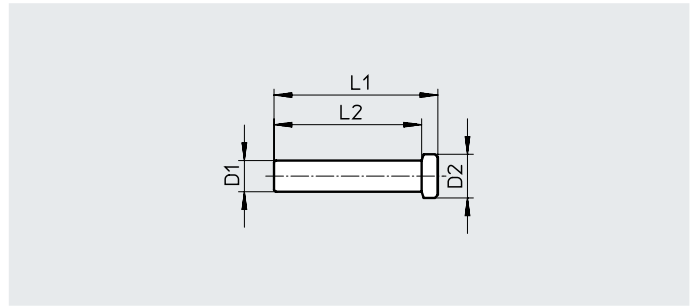
Pneumatic connection		Nominal size [inch]	Dimensions [inch]		L2	Weight/ piece [oz]	Part no.	Type	PU <sup>1)</sup>
Push-in sleeve ∅ D1	For tubing O.D. D2		D5 ∅	L1					
5/32	1/8	0.094	0.299	1.197	0.488	0.035	572280	QBM-5/32H-1/8-U	10

1) Packaging unit

## Datasheet

### Blanking plug QBMC-...H

Design:  
Blanking plug



#### Dimensions and ordering data

Pneumatic connection	Dimensions [inch]			Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Push-in sleeve $\varnothing$	D2 $\varnothing$	L1	L2				
D1				[oz]			
1/8	0.197	0.787	0.709	0.035	572281	QBMC-1/8H-U	10

1) Packaging unit

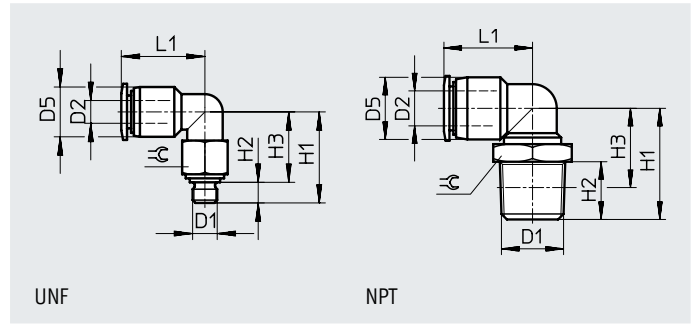


## Datasheet

### Push-in L-fitting QBML

Male thread  
with external hex

Design:  
L-shape



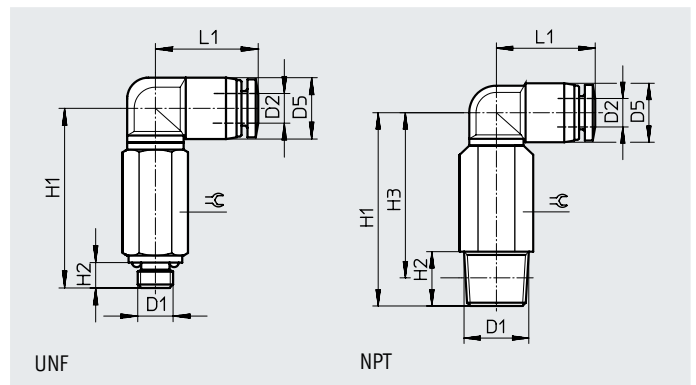
Dimensions and ordering data												
Pneumatic connection		Nominal size [inch]	Dimensions [inch]						Weight/ piece [oz]	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5 ∅	H1	H2	H3	L1	⌀				
D1	D2	[inch]										
<b>UNF thread</b>												
UNF10-32	1/8	0.098	0.299	0.602	0.142	–	0.531	5/16	0.071	533285	QBML-10-32-UNF-1/8-U	10
	5/32	0.098	0.343	0.626	0.142	–	0.575	5/16	0.176	572308	QBML-10-32-UNF-5/32-U	10
	1/4	0.098	0.445	0.677	0.142	–	0.634	5/16	0.353	573059	QBML-10-32-UNF-1/4-U	10
<b>NPT thread</b>												
NPT1/8-27	1/8	0.098	0.299	0.622	0.335	0.461	0.531	7/16	0.176	533289	QBML-1/8-1/8-U	10
	1/4	0.118	0.445	0.697	0.335	0.535	0.634	7/16	0.564	573060	QBML-1/8-1/4-U	10
NPT1/4-18	1/8	0.098	0.299	0.720	0.413	0.492	0.531	9/16	0.282	572310	QBML-1/4-1/8-U	10
	1/4	0.118	0.445	0.795	0.413	0.567	0.634	9/16	0.811	573061	QBML-1/4-1/4-U	10

1) Packaging unit

### Push-in L-fitting, long QBMLL

Male thread  
with external hex

Design:  
L-shape, long



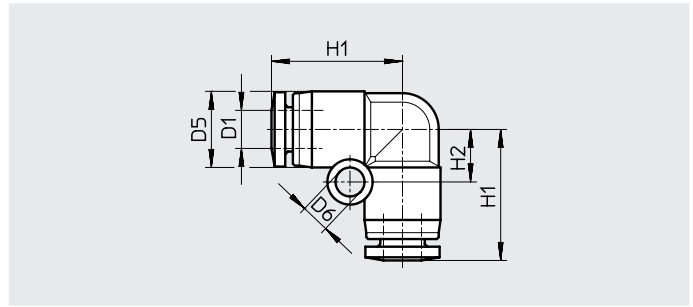
Dimensions and ordering data												
Pneumatic connection		Nominal size [inch]	Dimensions [inch]						Weight/ piece [oz]	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5 ∅	H1	H2	H3	L1	⌀				
D1	D2	[inch]										
<b>UNF thread</b>												
UNF10-32	1/8	0.098	0.299	0.941	0.142	–	0.531	5/16	0.282	572286	QBMLL-10-32-UNF-1/8-U	10
	1/4	0.098	0.445	1.130	0.142	–	0.634	5/16	0.317	573064	QBMLL-10-32-UNF-1/4-U	10
<b>NPT thread</b>												
NPT1/8-27	1/8	0.098	0.299	0.961	0.335	0.799	0.531	7/16	0.388	572287	QBMLL-1/8-1/8-U	10
	1/4	0.118	0.445	1.287	0.335	1.126	0.634	7/16	0.494	573065	QBMLL-1/8-1/4-U	10

1) Packaging unit

## Datasheet

### Push-in L-connector QBML-...T

Design:  
L-shape



#### Dimensions and ordering data

Pneumatic connection For tubing O.D.	Nominal size	Dimensions [inch]				Weight/ piece	Part no.	Type	PU <sup>1)</sup>
		D5 ∅	D6 ∅	H1	H2				
D1	[inch]					[oz]			
1/8	0.094	0.295	0.126	0.531	0.213	0.071	572284	QBML-1/8T-U	10
5/32	0.118	0.331	0.126	0.571	0.228	0.106	572285	QBML-5/32T-U	10
1/4	0.197	0.441	0.130	0.693	0.276	0.176	573063	QBML-1/4T-U	10

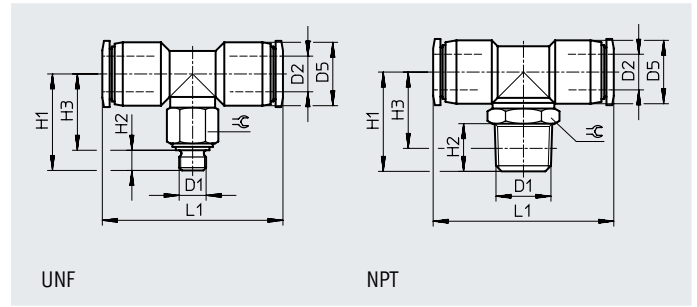
1) Packaging unit

## Datasheet

### Push-in T-fitting QBMT

Male thread  
with external hex

Design:  
T-shape



#### Dimensions and ordering data

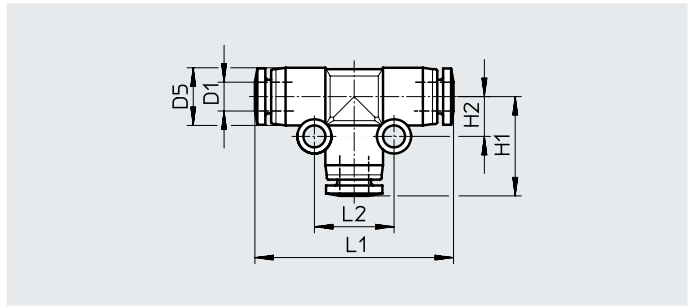
Pneumatic connection		Nominal size [inch]	Dimensions [inch]						Weight/ piece [oz]	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5 ∅	H1	H2	H3	L1	⌀				
D1	D2											
<b>UNF thread</b>												
UNF10-32	1/8	0.098	0.299	0.602	0.142	–	1.142	5/16	0.071	533304	QBMT-10-32-UNF-1/8-U	10
	5/32	0.098	0.343	0.626	0.142	–	1.189	5/16	0.088	572289	QBMT-10-32-UNF-5/32-U	10
	1/4	0.098	0.445	0.677	0.142	–	1.268	5/16	0.353	573067	QBMT-10-32-UNF-1/4-U	10
<b>NPT thread</b>												
NPT1/8-27	1/8	0.098	0.299	0.622	0.335	0.461	1.142	7/16	0.176	533308	QBMT-1/8-1/8-U	10
	1/4	0.138	0.445	0.697	0.335	0.535	1.268	7/16	0.564	573068	QBMT-1/8-1/4-U	10
NPT1/4-18	1/8	0.098	0.299	0.720	0.413	0.492	1.142	9/16	0.423	572291	QBMT-1/4-1/8-U	10

1) Packaging unit

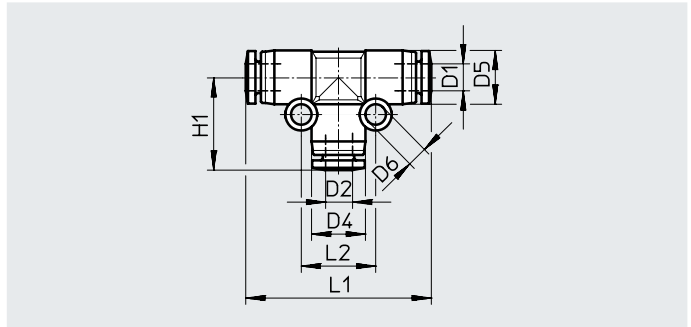
## Datasheet

### Push-in T-connector QBMT...T

Design:  
T-shape



Reducing



#### Dimensions and ordering data

Pneumatic connection		Nominal size [inch]	Dimensions [inch]						Weight/ piece [oz]	Part no.	Type	PU <sup>1)</sup>
For tubing O.D. D1	For tubing O.D. D2		D4 ∅	D5 ∅	D6 ∅	H1	L1	L2				
1/8	–	0.094	–	0.295	0.126	0.531	1.063	0.425	0.106	572293	QBMT-1/8T-U	10
5/32	–	0.118	–	0.331	0.126	0.571	1.142	0.457	0.141	572294	QBMT-5/32T-U	10
1/4	–	0.197	–	0.441	0.130	0.693	1.386	0.551	0.212	573069	QBMT-1/4T-U	10
<b>Reducing</b>												
5/32	1/8	0.094	0.331	0.331	0.126	0.567	1.142	0.457	0.141	572292	QBMT-5/32T-1/8-U	10
1/4	5/32	0.118	0.441	0.441	0.130	0.693	1.386	0.551	0.176	573070	QBMT-1/4T-5/32-U	10

1) Packaging unit

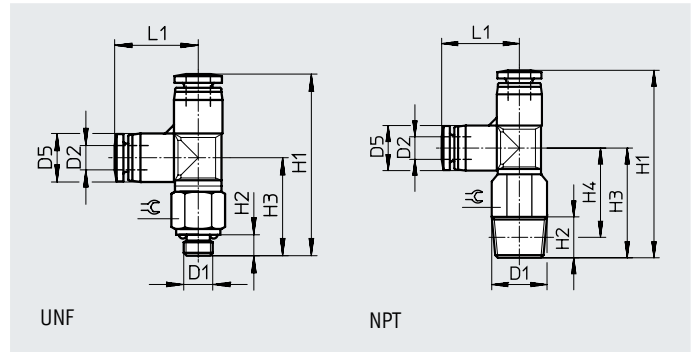
## Datasheet

### Push-in T-fitting QBMTL

Male thread  
with external hex

Design:

L-shape, additional push-in connector,  
lengthwise



#### Dimensions and ordering data

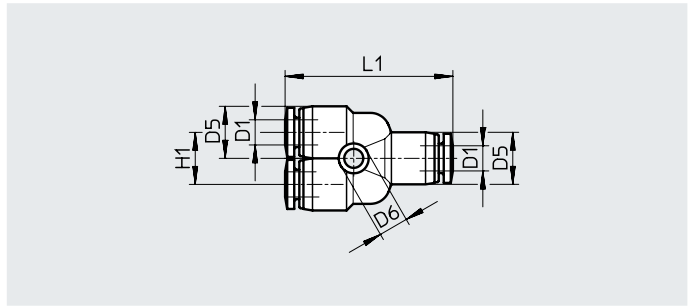
Pneumatic connection		Nominal size	Dimensions [inch]							Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5 ∅	H1	H2	H3	H4	L1	⌀				
D1	D2	[inch]							[oz]				
<b>UNF thread</b>													
UNF10-32	1/8	0.098	0.299	1.138	0.142	0.602	–	0.535	5/16	0.071	572295	QBMTL-10-32-UNF-1/8-U	10
	5/32	0.098	0.343	1.197	0.142	0.626	–	0.571	5/16	0.176	572296	QBMTL-10-32-UNF-5/32-U	10
	1/4	0.098	0.441	1.378	0.142	0.673	–	0.705	5/16	0.353	573071	QBMTL-10-32-UNF-1/4-U	10
<b>NPT thread</b>													
NPT1/8-27	1/8	0.098	0.299	1.157	0.335	0.622	0.461	0.535	7/16	0.176	572297	QBMTL-1/8-1/8-U	10
	1/4	0.118	0.441	1.398	0.335	0.693	0.531	0.705	7/16	0.564	573072	QBMTL-1/8-1/4-U	10
NPT1/4-18	1/8	0.098	0.299	1.256	0.413	0.720	0.492	0.535	9/16	0.423	572298	QBMTL-1/4-1/8-U	10

1) Packaging unit

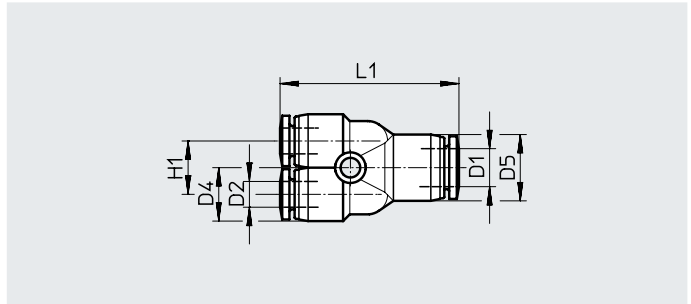
## Datasheet

### Push-in Y-connector QBMV-...T

Design:  
Y-shape



Reducing



#### Dimensions and ordering data

Pneumatic connection		Nominal size	Dimensions [inch]					Weight/piece	Part no.	Type	PU <sup>1)</sup>
For tubing O.D.	For tubing O.D.		D4 ∅	D5 ∅	D6 ∅	H1	L1				
D1	D2	[inch]						[oz]			
1/8	–	0.094	–	0.299	0.126	0.299	1.055	0.141	572299	QBMV-1/8T-U	10
5/32	–	0.118	–	0.343	0.126	0.343	1.102	0.106	572300	QBMV-5/32T-U	10
1/4	–	0.197	–	0.445	0.126	0.445	1.283	0.176	573073	QBMV-1/4T-U	10
<b>Reducing</b>											
5/32	1/8	0.094	0.299	0.343	0.126	0.299	1.083	0.141	572301	QBMV-5/32T-1/8-U	10
1/4	5/32	0.118	0.343	0.445	0.126	0.343	1.173	0.176	573074	QBMV-1/4T-5/32-U	10

1) Packaging unit