

## Push-in fittings QBM/QB, hybrid series

**FESTO**



## Technical data

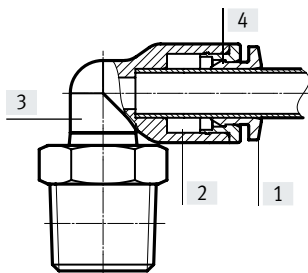
General technical data		
Connecting thread	M thread	R thread
Size	Mini	
	Standard	
Design	Push-pull principle	
Mounting position	Any	
Type of seal on the screwed trunnion	Sealing ring	Coating
Nominal tightening torque [Nm]	0.5 ±10%	–
Operating and environmental conditions		
Operating pressure for entire 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	
Maritime classification	See certificate <sup>2)</sup>	

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

2) More information: [www.festo.com/catalogue/qb](http://www.festo.com/catalogue/qb) → Support/Downloads.


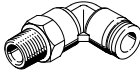
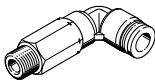
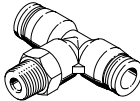
## Materials

### Sectional view



QBM/QB		
[1]	Releasing ring	POM (colour: grey)
[2]	Thread seal	NBR
[3]	Housing	PBT
[4]	Tube clamping segment	High-alloy stainless steel
Note on materials		RoHS-compliant
LABS (PWIS) conformity		VDMA24364 zone III

## Product range overview

Design	Version	Type	Connection D1		Connection D2	→ Page	
			M thread	R thread	Tubing O.D. [inch]		
Straight shape		QBML/QBL	Push-in fitting – Male thread with internal/external hex				4
			M5	–	1/8, 5/32, 3/16, 1/4		
			–	1/8	1/8, 5/32, 3/16, 1/4, 5/16		
			–	1/4	3/16, 1/4, 5/16, 3/8		
			–	3/8	1/4, 5/16, 3/8, 1/2		
–	1/2	3/8, 1/2					
L-shape		QBML/QBL	Push-in L-fitting – Male thread with external hex				5
			M5	–	1/8, 5/32, 3/16, 1/4		
			–	1/8	1/8, 5/32, 3/16, 1/4, 5/16, 3/8		
			–	1/4	3/16, 1/4, 5/16, 3/8		
			–	3/8	1/4, 5/16, 3/8, 1/2		
	–	1/2	3/8, 1/2				
		QBMLL/QBL	Push-in L-fitting, long – Male thread with external hex				6
			M5	–	1/8, 5/32		
			–	1/8	1/4, 5/16		
			–	1/4	1/4, 5/16, 3/8		
–			–	–			
T-shape		QBMT/QBT	Push-in T-fitting – Male thread with external hex				7
			M5	–	1/8, 5/32, 3/16, 1/4		
			–	1/8	1/8, 5/32, 3/16, 1/4, 5/16, 3/8		
			–	1/4	3/16, 1/4, 5/16, 3/8		
			–	3/8	1/4, 5/16, 3/8, 1/2		
–	1/2	3/8, 1/2					

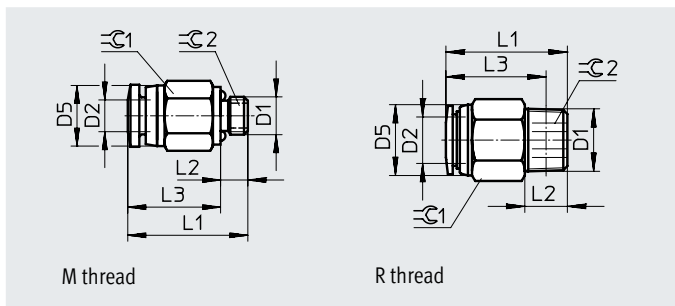
## Datasheet

### Push-in fitting QBM/QB

Male thread with internal/external hex

M/R thread with tubing connection in inches

Design:  
Straight shape



Dimensions and ordering data												
Pneumatic connection		Nominal size	Dimensions [inch]				[mm]		Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5	L1	L2	L3	≈G 1	≈G 2				
D1	D2 [inch]	[inch]	∅						[oz]			
<b>M thread</b>												
M5	1/8	0.079	0.283	0.634	0.142	0.492	8	–	0.141	533209	QBM-M5-1/8-U-M	10
	5/32	0.098	0.394	0.819	0.157	0.661	10	–	0.247	533210	QB-M5-5/32-U-M	10
	3/16	0.098	0.441	0.862	0.157	0.705	12	–	0.275	533211	QB-M5-3/16-U-M	10
	1/4	0.098	0.500	0.941	0.157	0.783	13	–	0.310	533212	QB-M5-1/4-U-M	10
<b>R thread</b>												
R1/8	1/8	0.079	0.283	0.665	0.315	0.508	10	–	0.176	533213	QBM-1/8-1/8-U-M	10
	5/32	0.118	0.394	0.862	0.315	0.705	10	3	0.317	533214	QB-1/8-5/32-U-M	10
	3/16	0.118	0.441	0.886	0.315	0.728	12	3	0.522	533215	QB-1/8-3/16-U-M	10
	1/4	0.197	0.500	0.925	0.315	0.768	13	5	0.310	533216	QB-1/8-1/4-U-M	10
	5/16	0.236	0.551	1.118	0.315	0.961	14	5	0.519	533217	QB-1/8-5/16-U-M	10
R1/4	3/16	0.118	0.441	0.886	0.394	0.650	14	3	0.875	533218	QB-1/4-3/16-U-M	10
	1/4	0.197	0.500	0.902	0.394	0.665	14	5	0.452	533219	QB-1/4-1/4-U-M	10
	5/16	0.276	0.551	1.039	0.394	0.803	14	6	0.660	533220	QB-1/4-5/16-U-M	10
	3/8	0.236	0.657	1.217	0.394	0.980	17	6	0.896	533221	QB-1/4-3/8-U-M	10
R3/8	1/4	0.197	0.500	0.941	0.433	0.689	17	5	0.840	533222	QB-3/8-1/4-U-M	10
	5/16	0.276	0.551	0.941	0.433	0.689	17	6	0.765	533223	QB-3/8-5/16-U-M	10
	3/8	0.315	0.657	1.071	0.433	0.819	17	8	0.720	533224	QB-3/8-3/8-U-M	5
	1/2	0.394	0.819	1.252	0.433	1.000	21	10	1.273	533225	QB-3/8-1/2-U-M	5
R1/2	3/8	0.315	0.657	1.067	0.551	0.744	21	8	1.778	533226	QB-1/2-3/8-U-M	5
	1/2	0.394	0.819	1.213	0.551	0.890	21	10	1.626	533227	QB-1/2-1/2-U-M	5

1) Packaging unit

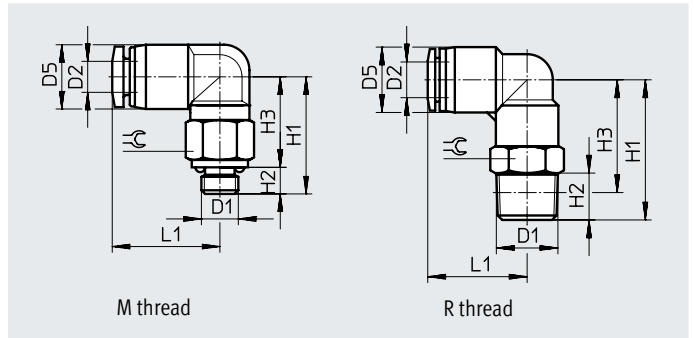
# Datasheet

## Push-in L-fitting QBML/QBL

Male thread with external hex

M/R thread with tubing connection in inches

Design:  
L-shape



Dimensions and ordering data												
Pneumatic connection		Nominal size	Dimensions [inch]					[mm]	Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5	H1	H2	H3	L1	⌀				
D1	D2 [inch]	[inch]	∅									
<b>M thread</b>												
M5	1/8	0.098	0.303	0.669	0.157	0.512	0.528	8	0.145	533228	QBML-M5-1/8-U-M	10
	5/32	0.098	0.413	0.843	0.157	0.685	0.732	10	0.286	533229	QBL-M5-5/32-U-M	10
	3/16	0.118	0.453	0.921	0.157	0.764	0.752	10	0.310	533230	QBL-M5-3/16-U-M	10
	1/4	0.098	0.512	1.020	0.157	0.862	0.803	12	0.476	533231	QBL-M5-1/4-U-M	10
<b>R thread</b>												
R1/8	1/8	0.098	0.303	0.760	0.315	0.602	0.528	10	0.254	533232	QBML-1/8-1/8-U-M	10
	5/32	0.118	0.413	0.965	0.315	0.807	0.732	10	0.332	533233	QBL-1/8-5/32-U-M	10
	3/16	0.118	0.453	0.965	0.315	0.807	0.752	10	0.356	533234	QBL-1/8-3/16-U-M	10
	1/4	0.177	0.512	1.055	0.315	0.898	0.803	12	0.519	533235	QBL-1/8-1/4-U-M	10
	5/16	0.236	0.571	1.098	0.315	0.941	0.878	14	0.603	533236	QBL-1/8-5/16-U-M	10
	3/8	0.236	0.689	1.120	0.315	0.963	0.961	17	0.889	562578	QBL-1/8-3/8-U-M	5
R1/4	3/16	0.118	0.453	1.043	0.394	0.807	0.752	14	0.557	533237	QBL-1/4-3/16-U-M	10
	1/4	0.177	0.512	1.181	0.394	0.945	0.803	14	0.681	533238	QBL-1/4-1/4-U-M	10
	5/16	0.236	0.571	1.217	0.394	0.980	0.878	14	0.723	533239	QBL-1/4-5/16-U-M	10
	3/8	0.315	0.689	1.240	0.394	1.004	0.941	17	1.086	533240	QBL-1/4-3/8-U-M	5
R3/8	1/4	0.177	0.512	1.220	0.433	0.969	0.803	17	0.945	533241	QBL-3/8-1/4-U-M	5
	5/16	0.236	0.571	1.256	0.433	1.004	0.878	17	0.998	533242	QBL-3/8-5/16-U-M	5
	3/8	0.315	0.689	1.280	0.433	1.028	0.941	17	1.210	533243	QBL-3/8-3/8-U-M	5
	1/2	0.394	0.827	1.417	0.433	1.165	1.122	19	1.475	533244	QBL-3/8-1/2-U-M	5
R1/2	3/8	0.315	0.689	1.398	0.551	1.075	0.941	22	1.848	533245	QBL-1/2-3/8-U-M	5
	1/2	0.394	0.827	1.535	0.551	1.213	1.122	22	1.873	533246	QBL-1/2-1/2-U-M	5

1) Packaging unit

## Datasheet

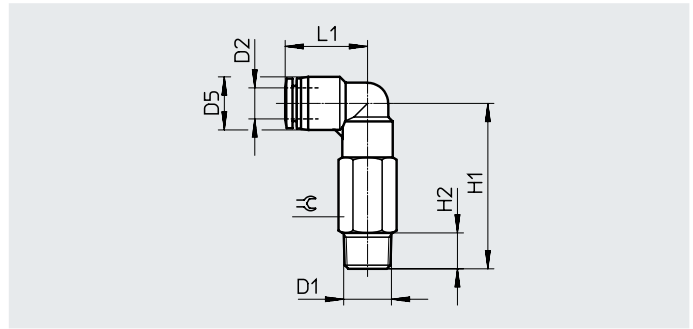
### Push-in L-fitting, long QBMLL/QBLL

Male thread with external hex

M/R thread with tubing connection in inches

Design:

L-shape, long



#### Dimensions and ordering data

Pneumatic connection		Nominal size	Dimensions [inch]				[mm]	Weight/ piece	Part no.	Type	PU <sup>1)</sup>
Male thread	For tubing O.D.		D5	H1	H2	L1	⌀				
D1	D2 [inch]	[inch]	∅					[oz]			
<b>M thread</b>											
M5	1/8	0.098	0.299	0.941	0.142	0.531	8	0.282	574302	QBMLL-M5-1/8-U-M	1
	5/32	0.098	0.343	1.002	0.142	0.575	8	0.282	574303	QBMLL-M5-5/32-U-M	1
<b>R thread</b>											
R1/8	1/4	0.157	0.512	1.594	0.315	0.807	12	1.012	576049	QBLL-1/8-1/4-U-M	10
	5/16	0.236	0.583	1.732	0.315	0.906	14	1.259	576050	QBLL-1/8-5/16-U-M	10
R1/4	1/4	0.157	0.512	1.673	0.394	0.807	14	1.224	576051	QBLL-1/4-1/4-U-M	10
	5/16	0.236	0.583	1.811	0.394	0.906	14	1.400	576052	QBLL-1/4-5/16-U-M	10
	3/8	0.315	0.689	1.957	0.394	0.969	17	2.265	576053	QBLL-1/4-3/8-U-M	10

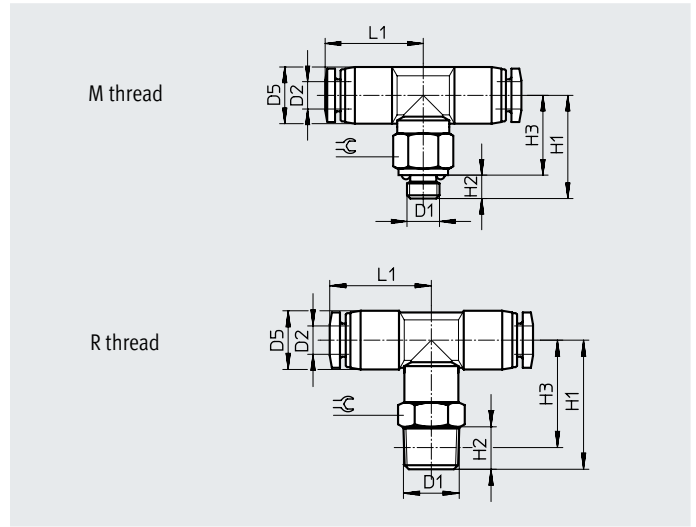
1) Packaging unit

# Datasheet

## Push-in T-fitting QBMT/QBT Male thread with external hex

M/R thread with tubing connection in inches

Design:  
T-shape



Dimensions and ordering data												
Pneumatic connection		Nominal size [inch]	Dimensions [inch]					[mm]	Weight/ piece [oz]	Part no.	Type	PU <sup>1)</sup>
Male thread D1	For tubing O.D. D2 [inch]		D5 ∅	H1	H2	H3	L1	⌀				
<b>M thread</b>												
M5	1/8	0.098	0.303	0.669	0.157	0.512	0.527	8	0.173	533247	QBMT-M5-1/8-U-M	10
	5/32	0.098	0.413	0.843	0.157	0.685	0.734	10	0.363	533248	QBT-M5-5/32-U-M	10
	3/16	0.118	0.453	0.921	0.157	0.764	0.752	10	0.420	533249	QBT-M5-3/16-U-M	10
	1/4	0.098	0.512	1.020	0.157	0.862	0.803	12	0.579	533250	QBT-M5-1/4-U-M	10
<b>R thread</b>												
R1/8	1/8	0.098	0.303	0.760	0.315	0.602	0.527	10	0.289	533251	QBMT-1/8-1/8-U-M	10
	5/32	0.118	0.413	0.965	0.315	0.807	0.734	10	0.399	533252	QBT-1/8-5/32-U-M	10
	3/16	0.118	0.453	0.965	0.315	0.807	0.752	10	0.452	533253	QBT-1/8-3/16-U-M	10
	1/4	0.177	0.512	1.055	0.315	0.898	0.803	12	0.635	533254	QBT-1/8-1/4-U-M	10
	5/16	0.236	0.571	1.098	0.315	0.941	0.878	14	0.723	533255	QBT-1/8-5/16-U-M	5
	3/8	0.236	0.689	1.120	0.315	0.963	0.933	17	1.104	562579	QBT-1/8-3/8-U-M	5
R1/4	3/16	0.118	0.453	1.043	0.394	0.807	0.752	14	0.646	533256	QBT-1/4-3/16-U-M	10
	1/4	0.177	0.512	1.181	0.394	0.945	0.803	14	0.794	533257	QBT-1/4-1/4-U-M	5
	5/16	0.236	0.571	1.217	0.394	0.980	0.878	14	0.843	533258	QBT-1/4-5/16-U-M	5
	3/8	0.315	0.689	1.240	0.394	1.004	0.939	17	1.302	533259	QBT-1/4-3/8-U-M	5
R3/8	1/4	0.177	0.512	1.220	0.433	0.969	0.803	17	1.062	533260	QBT-3/8-1/4-U-M	5
	5/16	0.236	0.571	1.256	0.433	1.004	0.878	17	1.122	533261	QBT-3/8-5/16-U-M	5
	3/8	0.315	0.689	1.280	0.433	1.028	0.939	17	1.422	533262	QBT-3/8-3/8-U-M	5
	1/2	0.394	0.827	1.417	0.433	1.165	1.112	19	1.781	533263	QBT-3/8-1/2-U-M	1
R1/2	3/8	0.315	0.689	1.398	0.551	1.075	0.939	22	2.060	533264	QBT-1/2-3/8-U-M	5
	1/2	0.394	0.827	1.535	0.551	1.213	1.112	22	2.184	533265	QBT-1/2-1/2-U-M	1

1) Packaging unit