

Hand Lever Valves VHER

# Hand Lever Valves VHER - Metric Series

## FESTO



Hand lever valves VHER are used to manually control the motion of cylinders within the stroke range.

- 4/3-way valve
   mid-position closed
  - mid-position exhausted
- Flow rate: 170 ... 4,300 l/min
- Operating pressure: -0.95 ... +10 bar
- Pneumatic connection: M5, G<sup>1</sup>/8, G<sup>1</sup>/4, G<sup>1</sup>/2
- Available with rugged metal lever or lockable polymer lever

Product Range Overview				
Valve function	Pneumatic connection		Nominal diameter	Flow rate
	Position	Size	[mm]	[l/min]
Actuation with metal lever				
4/3-way valve, mid-position	underneath	G1⁄8	6	800
closed or exhausted		G1/4	8	1,500
		G1/2	12	4,300
	at side	G1⁄/8	6	600
		G1⁄4	8	1,150
		G1/2	12	3,500
Actuation with lockable polym	er lever	•		
4/3-way valve, mid-position	underneath	M5	4	260
closed or exhausted		G1⁄/8	6	800
		G1⁄4	8	1,500
		G1/2	12	4,300
	at side	M5	4	170
		G1/8	6	600
		G1⁄4	8	1,150
		G1/2	12	3,500

### Features Versatile

### Practical

- 4/3-way valve: mid-position closed mid-position exhausted
- Pneumatic connection M5, G<sup>1</sup>/8, G<sup>1</sup>/4, G<sup>1</sup>/2
- 3/3-way valve: The hand lever valves VHER can be used as 3/3-way valves by sealing port 2
- With these valves it is possible to stop single-acting cylinders (3/3-way valve) or double-acting cylinders (4/3-way valve) within the stroke range.
- In mid-position closed, the drive piston moves until the forces are balanced.
- In mid-position exhausted the piston can be moved manually; only the frictional forces have to be overcome.

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→ www.festo.com/catalog/vher

# **Order Code**

Hand Lever Valves VHER – Metric Series



### Order example:

VHER-AH-M04C-G18-LD

### **FESTO**

# **Technical Data**

Hand Lever Valves VHER – Metric Series

ISO Symbol



Mid-position closed



Mid-position exhausted



General Technical Data											
Actuating lever			Metal (VH	ER-AH)		Polymer (	Polymer (VHER-BH)				
Pneumatic connection 1,2,3,4	Pneumatic connection 1,2,3,4				G1⁄2	M5	G1⁄8	G1⁄4	G1⁄2		
Actuator lock			-		-	Lockable	with accessorie	25			
Valve function	4/3-way,	closed or exhau	sted								
Design	Rotary sli	de valve									
Sealing principle	Sliding di	sk									
Type of mounting	Option of front panel mounting or through-holes										
Pilot control mode			Direct								
Actuation type			Manual								
Switching position display			Via accessories								
Assembly position			Any								
Direction of flow			Reversible	Reversible							
Overlapping			No								
Standard nominal flow rate	Ports underneath	[l/min]	800	1,500	4,300	260	800	1,500	4,300		
	Ports at side	[l/min]	600	1,150	3,500	170	600	1,150	3,500		
Nominal diameter		[mm]	6	8	12	4	6	8	12		
Actuating torque at 10 bar		[Nm]	1.1	2.8	5	0.6	1.1	2.8	5		

### **Operating and Environmental Conditions**

- F			
Operating medium		Filtered compressed air and inert gases, lubricated or unlubricated	
Filtration grade	[µm]	40	
Operating pressure	[bar]	-0.95 +10	
Ambient temperature	[°C]	-20 +80	
Corrosion resistance class CRC <sup>1)</sup>		2	

Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

# **Technical Data**

Hand Lever Valves VHER – Metric Series

### **FESTO**



Materials	
1 Housing	Die-cast aluminum
– Seals	Nitrile rubber
-	Contains PWIS (paint wetting impairment substances)
-	Free of copper and PTFE

### Sectional View – Polymer Lever

Ports underneath



Ports at side



Materials									
Pneumatic connection 1,2,3,4	M5, G <sup>1</sup> ⁄8	G1/4, G1/2							
1 Housing	Reinforced Polyamide	Die-cast aluminum							
– Seals	Nitrile rubber								
-	Contains PWIS (paint wetting impairment substances)								
-	Free of copper and PTFE								

### **FESTO**



## FESTO



Pneumatic connection D1	B1	B2	B3	B4	D2	D3 Ø	D4 Ø	H1	H2	H5	L1	L2	L3	L4	L5	L6	T1
G1⁄4	56	42	33	42	M5	5.5	40	130	49	43.5	157	60	42	7.2	33	11.4	12
G1⁄2	80	60	50	60	M6	6.4	50	137	55.8	49.8	169	85	60	10	50	15	13

### **FESTO**



## **FESTO**



Pneumatic connection D1	B1	B2	B3	D2 Ø	H1	H2	H3	H4	L1	L2	L3	L4
G1⁄4	66	57.5	37.5	4.5	136	56	20.5	10.3	165	77	69.2	4
G1/2	95	85	57	5.5	149	68	29	14.5	180	108.5	97.3	5.5

### **FESTO**



## **FESTO**



49.8

169

84.8

60

10

50

15

16

1)	Dimensions are in millimeters, unless otherwise noted.

80

50

60

60

M6

6.5

51

137

55.8

G1⁄2

## **FESTO**



## **FESTO**



Pneumatic connection D1	B1	B2	B3	D2 Ø	H1	H2	H3	H4	L1	L2	L3	L4
G1⁄4	66	57.5	37.5	4.3	136	55.5	20.5	10.25	166	77	69.2	4
G1⁄2	96	85	57	5.3	148	67.8	29	14.5	180	108.5	97.3	5.5

# Ordering Data – Pre-configured Products Hand Lever Valves VHER – Metric Series

**FESTO** 

Ordering Data					-	L
Valve function	Pneumatic connection		Weight	Part No.	Туре	LT
	Position	Size	[g]			
Actuation with metal lever						
Mid-position closed	Underneath	G1⁄8	220	538179	VHER-AH-M04C-G18-UD	1W
		G1⁄4	510	538181	VHER-AH-M04C-G14-UD	1W
		G1⁄2	860	538183	VHER-AH-M04C-G12-UD	1W
Mid-position exhausted	Underneath	G1⁄8	220	538185	VHER-AH-M04E-G18-UD	1W
		G1⁄4	510	538187	VHER-AH-M04E-G14-UD	1W
		G1/2	860	538189	VHER-AH-M04E-G12-UD	1W
Mid-position closed	Side	G1⁄8	260	538178	VHER-AH-M04C-G18-LD	1W
		G1⁄4	560	538180	VHER-AH-M04C-G14-LD	1W
		G1/2	1,010	538182	VHER-AH-M04C-G12-LD	1W
Mid-position exhausted	Side	G1⁄8	260	538184	VHER-AH-M04E-G18-LD	1W
		G1⁄4	560	538186	VHER-AH-M04E-G14-LD	1W
		G1/2	1,010	538188	VHER-AH-M04E-G12-LD	1W
Actuation with polymer lever Mid-position closed	Underneath	M5	80	538191	VHER-BH-M04C-M05-UD	1W
Mid-position closed	Underneath	-	80	538191	VHER-BH-M04C-M05-UD	1W
		G1/8	125	538193	VHER-BH-M04C-G18-UD	1W
		G1/4	375	538195	VHER-BH-M04C-G14-UD	1W
AA*1 */* 1 / 1		G1/2	740	538197	VHER-BH-M04C-G12-UD	1W
Mid-position exhausted	Underneath	M5	80	538199	VHER-BH-M04E-M05-UD	1W
		G1/8	125	538201	VHER-BH-M04E-G18-UD	1W
		G1/4	375	538203	VHER-BH-M04E-G14-UD	1W
		G1⁄2	740	538205	VHER-BH-M04E-G12-UD	1W
Mid-position closed	Side	M5	95	538190	VHER-BH-M04C-M05-LD	1W
		G1/8	165	538192	VHER-BH-M04C-G18-LD	1W
		G1⁄4	435	538194	VHER-BH-M04C-G14-LD	1W
		G1/2	900	538196	VHER-BH-M04C-G12-LD	1W
Mid-position exhausted	Side	M5	95	538198	VHER-BH-M04E-M05-LD	1W
		G1⁄8	165	538200	VHER-BH-M04E-G18-LD	1W
		G1⁄4	435	538202 538204	VHER-BH-M04E-G14-LD	1W
		G1/2			VHER-BH-M04E-G12-LD	1W

LT = Lead time

**1D** typically ships same day/next day

1W typically ships within 1 week

**Q** request a quote for lead time

Hand Lever Valves VHER – Metric Series

### Assembled Valves with Accessories

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Component parts and access	sories Brief description	Brief description						
1 Hand lever valves VHE	R Connection size	G1⁄8 with metal lever		3				
2 Hand lever valves VHE	R Connection size	$G^{1/4}$ and $G^{1/2}$ with metal lever		3				
3 Hand lever valves VHE	R Connection size	M5 and G1⁄8 with polymer lever		3				
4 Hand lever valves VHE	R Connection size	G¼ and G¼ with polymer lever		3				
5 Padlock	Not included in	scope of delivery		-				
6 Proximity sensors SME		scope of delivery		15				
<ul> <li>Connecting cables</li> </ul>	Not included in	scope of delivery		15				
Blanking plugs	For use of hand	lever valves VHER as 3/3-way valves; plug	s not included in scope of delivery	16				
Push-in fittings QS	Not included in	scope of delivery		16				
Silencers	Not included in	scope of delivery		16				

1) For valves with pneumatic connection at side, only proximity sensors SME-10... with lateral connection direction are permissible.

Hand Lever Valves VHER – Metric

Ordering Data	- Proximity Switches for C-	slot, Magnetic	Reed		Technica	l data → www.festo.com/catalog/sm
	Type of mounting	Switch output	Electrical connection, connection direction <sup>1)</sup>	Cable length [m]	Part No.	Туре
N/O contact						
	Insertable in the slot from	Contacting	Plug M8x1, 3-pin, in-line	0,3	525914	SME-10F-DS-24V-K0,3L-M8D
O P	above		Cable, 3-wire, in-line	2,5	525913	SME-10F-DS-24V-K2,5L-OE
Å	Insertable in the slot from above	Contacting	Plug M8x1, 3-pin, lateral	0,3	526671	SME-10F-DS-24V-K0,3Q-M8D
of the second se			Cable, 3-wire, lateral	2,5	526670	SME-10F-DS-24V-K2,5Q-OE
N	Insertable in the slot	Contacting	Plug M8x1, 3-pin, in-line	0,3	173212	SME-10-SL-LED-24
Contract of the second	lengthwise		Cable, 3-wire, in-line	2,5	173210	SME-10-KL-LED-24
6	Insertable in the slot lengthwise	Contacting	Plug M8x1, 3-pin, lateral	0,3	173213	SME-10-SQ-LED-24
			Cable, 3-wire, lateral	2,5	173211	SME-10-KQ-LED-24

1) For valves with pneumatic connection at side, only proximity sensors SME-10... with lateral connection direction are permissible.

Ordering Data	- Connecting Cables			Technical data 🗲 www.festo.com/catalog/nebu				
	Electrical connection, left	Electrical connection, right	Cable length	Part No.	Туре			
			[m]					
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541333	NEBU-M8G3-K-2.5-LE3			
(CE)			5.0	541334	NEBU-M8G3-K-5-LE3			
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541338	NEBU-M8W3-K-2.5-LE3			
			5.0	541341	NEBU-M8W3-K-5-LE3			

## FESTO

Hand Lever Valves VHER – Metric Series

## Ordering Data – Blanking Plugs<sup>1)</sup>

Orderin	ng Data –	Blanking Pl	ugs-/						
		M5		G1⁄8		G1⁄4		G1⁄2	
		Part No.	Туре	Part No.	Туре	Part No.	Туре	Part No.	Туре
OD	0	3843	B-M5	3568	B-1/8	3569	B-1/4	3571	B-1/2

1) Scope of delivery 10 pieces

### Ordering Data – Permissible Push-in Fittings QS<sup>1)</sup>

ordering bata -	1 CHIII33101	e rusii-iii rittiigs Q5 /						
	M5		G1⁄8		G1⁄4		G1⁄2	
	Part No.	Туре	Part No.	Туре	Part No.	Туре	Part No.	Туре
Pneumatic conn	ection unde	rneath						
	153302	QSM-M5-3	186264	QSM-G <sup>1</sup> /8-4	186097	QS-G1⁄4-6	186104	QS-G1/2-12
A LA	153304	QSM-M5-4	186265	QSM-G <sup>1</sup> /8-6	186099	QS-G1⁄4-8	186105	QS-G <sup>1</sup> /2-16
	153306	QSM-M5-6	186266	QSM-G <sup>1</sup> /8-4-I	186101	QS-G <sup>1</sup> /4-10	186115	QS-G1/2-12-I
C State	153313	QSM-M5-3-I	186267	QSM-G1⁄8-6-I	186108	QS-G1⁄4-6-I		
	153315	QSM-M5-4-I	186095	QS-G <sup>1</sup> /8-4	186110	QS-G1⁄4-8-I	1	
	153317	QSM-M5-6-I	186096	QS-G <sup>1</sup> /8-6	186112	QS-G1⁄4-10-I	1	
			186098	QS-G <sup>1</sup> /8-8			1	
			186106	QS-G1⁄8-4-I				
			186107	QS-G1⁄8-6-I				
			186109	QS-G1⁄8-8-I				
Pneumatic conn	ection at sic	le						
	153313	QSM-M5-3-I	186266	QSM-G <sup>1</sup> /8-4-I	186108	QS-G1⁄4-6-I	186115	QS-G1⁄2-12-I
	153315	QSM-M5-4-I	186267	QSM-G1⁄8-6-I	186110	QS-G1⁄4-8-I		
			186106	QS-G1⁄8-4-I	186112	QS-G1⁄4-10-I	]	
			186107	QS-G1⁄8-6-I			]	
			186109	QS-G1⁄8-8-I				

1) Scope of delivery 10 pieces

### Ordering Data – Permissible Silencers

0.00.00								
	M5		G1⁄8		G1⁄4		G1⁄2	
	Part No.	Туре	Part No.	Туре	Part No.	Туре	Part No.	Туре
Pneumatic conne	ection under	rneath						
	4645	U-M5	6841	U-1/8-B	6842	U-1⁄4-B	6844	U-1/2-B
a farmed	165003	UC-M5	161419	UC-1/8	165004	UC-1/4		
			2307	U-1⁄8	2316	U-1⁄4		
Pneumatic conn	ection at sid	e						
	4645	U-M5	161419	UC-1⁄8	165004	UC-1⁄4	6844	U-1⁄2-B
	165003	UC-M5						

### FESTO

1

# Hand Lever Valves VHER - Inch Series

## FESTO



Hand lever valves VHER are used to manually control the motion of cylinders within the stroke range.

- 4/3-way valve
   mid-position closed
  - mid-position exhausted
- Flow rate: 21.2 ... 151.8 scfm
- Operating pressure: -14.0 ... +150 psi
- Pneumatic connection: 1/8 NPT, 1/4 NPT, 1/2 NPT

Product Range Overview				
Valve function	Pneumatic connection		Nominal diameter	Flow rate
	Position Size [in]		[in]	[scfm]
Actuation with metal lever				
4/3-way valve, mid-position	underneath	1⁄8 NPT	0.24	28.2
closed or exhausted		1/4 NPT	0.31	53.0
		1⁄2 NPT	0.47	151.8
	at side	1⁄8 NPT	0.24	21.2
		1⁄4 NPT	0.31	40.6
		1⁄2 NPT	0.47	123.6

### Features

Versatile

- 4/3-way valve: mid-position closed mid-position exhausted
- Pneumatic connection 1/8 NPT, 1/4 NPT, 1/2 NPT
- 3/3-way valve: The hand lever valves VHER can be used as 3/3-way valves by sealing port 2

### Practical

- With these valves it is possible to stop single-acting cylinders (3/3-way valve) or double-acting cylinders (4/3-way valve) within the stroke range.
- In mid-position closed, the drive piston moves until the forces are balanced.
- In mid-position exhausted the piston can be moved manually; only the frictional forces have to be overcome.

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→ www.festo.com/catalog/vher

# **Order Code**

Hand Lever Valves VHER – Inch Series



Order example:

VHER-AH-M04C-N18-LD

# **Technical Data**

Hand Lever Valves VHER – Inch Series

ISO Symbol



Mid-position closed



1

Mid-position exhausted

. . .



General Technical Data					
Pneumatic connection 1,2,3,4			1⁄8 NPT	1⁄4 NPT	1⁄2 NPT
Valve function			4/3-way, closed or ex	hausted	
Design			Rotary slide valve		
Sealing principle			Sliding disk		
Type of mounting			Option of front panel	mounting or through-holes	
Pilot control mode			Direct		
Actuation type			Manual		
Actuating lever			Metal		
Switching position display			Via accessories		
Assembly position			Any		
Direction of flow			Reversible		
Overlapping			No		
Standard nominal flow rate	Ports underneath	[scfm]	28.2	53.0	151.8
	Ports at side	[scfm]	21.2	40.6	123.6
Nominal diameter		[in]	0.24	0.31	0.47
Actuating torque at 10 bar		[lbf-in]	9.74	24.78	44.25

### **Operating and Environmental Conditions**

- F		
Operating medium		Filtered compressed air and inert gases, lubricated or unlubricated
Filtration grade	[µm]	40
Operating pressure	[psi]	-14 +150
Ambient temperature	[°F]	-4 +176
Corrosion resistance class CRC <sup>1)</sup>		2

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

# **Technical Data**

Hand Lever Valves VHER – Inch Series

### FESTO



Materials	
1 Housing	Die-cast aluminum
– Seals	Nitrile rubber
-	Contains PWIS (paint wetting impairment substances)
-	Free of copper and PTFE

## **FESTO**



1) Dimensions are in inches, unless otherwise noted.

### Dimensions – Ports Underneath<sup>1)</sup>

1⁄4 NPT, 1⁄2 NPT



1 Sensor slot for SME-10-...

Pneumatic connection D1	B1	B2	B3	B4	D2	D3 Ø	D4 Ø	H1	H2	H5	L1	L2	L3	L4	L5	L6	T1
1⁄4 NPT	2.20	1.65	1.30	1.65	M5	0.22	1.57	5.12	1.93	1.71	6.18	2.36	1.65	0.28	1.30	0.45	0.47
1⁄2 NPT	3.15	2.36	1.97	2.36	M6	0.25	1.97	5.39	2.20	1.96	6.65	3.35	2.36	0.39	1.97	0.59	0.51

1) Dimensions are in inches, unless otherwise noted.

Download CAD data → www.festo.com/us/cad

## **FESTO**



1) Dimensions are in inches, unless otherwise noted.

## **FESTO**



Pneumatic connection D1	B1	B2	B3	D2 Ø	H1	H2	H3	H4	L1	L2	L3	L4
1⁄4 NPT	2.60	2.26	1.48	0.18	5.35	2.20	0.81	0.41	6.50	3.03	2.72	0.16
1⁄2 NPT	3.74	3.35	2.24	0.22	5.87	2.68	1.14	0.57	7.09	4.27	3.83	0.22

1) Dimensions are in inches, unless otherwise noted.

# Ordering Data – Pre-configured Products Hand Lever Valves VHER – Inch Series

Ordering Data						
Valve function	Pneumatic connection		Weight	Part No.	Туре	LT
	Position	Size	[lb]			
Actuation with metal lever						
Mid-position closed	Underneath	1⁄8 NPT	0.44	545261	VHER-AH-M04C-N18-UD	1W
		1/4 NPT	1.02	545265	VHER-AH-M04C-N14-UD	1W
		1/2 NPT	1.72	545269	VHER-AH-M04C-N12-UD	1W
Mid-position exhausted	Underneath	1/8 NPT	0.44	545263	VHER-AH-M04E-N18-UD	1W
		1/4 NPT	1.02	545267	VHER-AH-M04E-N14-UD	1W
		1/2 NPT	1.72	545271	VHER-AH-M04E-N12-UD	1W
Mid-position closed	Side	1⁄8 NPT	0.52	545260	VHER-AH-M04C-N18-LD	1W
		1/4 NPT	1.12	545264	VHER-AH-M04C-N14-LD	1W
		1/2 NPT	2.02	545268	VHER-AH-M04C-N12-LD	1W
Mid-position exhausted	Side	1⁄8 NPT	0.52	545262	VHER-AH-M04E-N18-LD	1W
		1/4 NPT	1.12	545266	VHER-AH-M04E-N14-LD	1W
		1⁄2 NPT	2.02	545270	VHER-AH-M04E-N12-LD	1W

**LT** = Lead time

**1D** typically ships same day/next day

1W typically ships within 1 week

**Q** request a quote for lead time

Hand Lever Valves VHER with Metal Lever – Inch Series

### Assembled Valves with Accessories





Component parts and accessories		Brief description	→ Page
1	Hand lever valves VHER	Connection size 1/8 NPT with metal lever	19
2	Hand lever valves VHER	Connection size 1/4 NPT and 1/2 NPT with metal lever	19
-	Proximity sensors SME-10 <sup>1)</sup>	Not included in scope of delivery	27
	Connecting cables	Not included in scope of delivery	27
	Blanking plugs	For use of hand lever valves VHER as 3/3-way valves; plugs not included in scope of delivery	28
	Push-in fittings QS	Not included in scope of delivery	28
	Silencers	Not included in scope of delivery	28

1) For valves with pneumatic connection at side, only proximity sensors SME-10... with lateral connection direction are permissible.

### **FESTO**

Hand Lever Valves VHER with Metal Lever – Inch Series

Ordering Data	Ordering Data – Proximity Switches for C-slot, Magnetic Reed					l data → www.festo.com/catalog/sm
	Type of mounting	Switch	Electrical connection,	Cable length	Part No.	Туре
		output	connection direction <sup>1)</sup>	[ft]		
N/O contact						
	Insertable in the slot from	Contacting	Plug M8x1, 3-pin, in-line	1.0	525914	SME-10F-DS-24V-K0,3L-M8D
Q P	above		Cable, 3-wire, in-line	8.2	525913	SME-10F-DS-24V-K2,5L-OE
	Insertable in the slot from above	Contacting	Plug M8x1, 3-pin, lateral	1.0	526671	SME-10F-DS-24V-K0,3Q-M8D
			Cable, 3-wire, lateral	8.2	526670	SME-10F-DS-24V-K2,5Q-OE
A	Insertable in the slot	Contacting	Plug M8x1, 3-pin, in-line	1.0	173212	SME-10-SL-LED-24
Contraction of the second seco	lengthwise		Cable, 3-wire, in-line	8.2	173210	SME-10-KL-LED-24
6	Insertable in the slot lengthwise	Contacting	Plug M8x1, 3-pin, lateral	1.0	173213	SME-10-SQ-LED-24
			Cable, 3-wire, lateral	8.2	173211	SME-10-KQ-LED-24

1) For valves with pneumatic connection at side, only proximity sensors SME-10... with lateral connection direction are permissible.

Ordering Data	- Connecting Cables	Technical d	ata → www.festo.com/catalog/nebu		
	Electrical connection, left	Electrical connection, right	Cable length	Part No.	Туре
			[ft]		
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	8.2	541333	NEBU-M8G3-K-2.5-LE3
<b>E</b>			16.4	541334	NEBU-M8G3-K-5-LE3
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	8.2	541338	NEBU-M8W3-K-2.5-LE3
			16.4	541341	NEBU-M8W3-K-5-LE3

### FESTO

Hand Lever Valves VHER with Metal Lever – Inch Series

Ordering Data – Blanking Plugs <sup>1)</sup>						
	1⁄8 NPT	1/4 NPT	1⁄2 NPT			
	Part No. Type	Part No. Type	Part No. Type			
OP O	173985 B-1⁄8-NPT	174165 B-¼-NPT	31785 B-1/2-NPT			

1) Scope of delivery 10 pieces

	1⁄8 NPT		1⁄4 NPT	1/4 NPT		
	Part No.	Туре	Part No.	Туре	Part No.	Туре
Pneumatic con	nection unde	erneath				
	153601	QS-1⁄8-5/32-U	153606	QS-1⁄4-1/4-U	153613	QS-1/2-3/8-U
A La	153608	QS-1⁄8-5/16-U	153611	QS-1⁄4-3/8-U	153615	QS-1/2-1/2-U
	190688	QS-1⁄8-5/32-I-U	190692	QS-1/4-1/4-I-U	183747	QS-1/2-3/8-I-U-M
<b>Solution</b>	190691	QS-1⁄8-5/16-I-U	190694	QS-1⁄4-3/8-I-U	190698	QS-1/2-1/2-I-U
Pneumatic con	nection at si	de			· · ·	
	190688	QS-1⁄8-5/32-I-U	190692	QS-1/4-1/4-I-U	183747	QS-1⁄2-3/8-I-U-M
	190691	QS-1/8-5/16-I-U	190694	QS-1⁄4-3/8-I-U	190698	QS-1/2-1/2-I-U

1) Scope of delivery 10 pieces

Ordering Data – Permissible Silencers					
	1⁄8 NPT	1/4 NPT :	1⁄2 NPT		
	Part No. Type	Part No. Type	Part No. Type		
Pneumatic conne	ection underneath				
<b>S</b>	12638 U-1⁄8-B-NPT	12639 U-1/4-B-NPT :	12741 U-½-B-NPT		
Pneumatic connection at side					
	12638 U-¼8-B-NPT	12639 U-1/4-B-NPT :	12741 U-½-B-NPT		

# **Product Range and Company Overview**

### A Complete Suite of Automation Services

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



**Custom Automation Components** Complete custom engineered solutions



**Custom Control Cabinets** Comprehensive engineering support and on-site services



**Complete Systems** Shipment, stocking and storage services

### **The Broadest Range of Automation Components**

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



Electromechanical Electromechanical actuators, motors, controllers & drives



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



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

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

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

### Quality Assurance, ISO 9001 and ISO 14001 Certifications

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





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