

Vacuum Check Valve VT-1H with COAX®



Vacuum Check Valve VT-1H with COAX®



FUNCTION ATTACHMENT

- Two-stage COAX® cartridge MINI Pi12-2 integrated.
- Check valve that traps vacuum in sealed applications for safe operation.
- Built-in blow off check valve for fast release of object.
- Available in lock pin 16, 19 or ball joint mountings, industry standard.
- Available with level compensator to compensate for differences in level of object.
- Recommend using 4mm (5/32") tubing and no more than 80 psi for blow off.
- Recommend using 6mm (1/4") tubing and no more than 80 psi for vacuum.
- Equal line lengths from common manifold should be used for both blow-off and vacuum.
- Maximum of (12) units per tool.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.55
Feed pressure, min. breakaway blow-off	MPa	0.25
Noise level	dBa	66-68
Material		PP, PA, Al, SS, CuZn, NBR, Ceramic, Steel
Temperature range	°C	-10-80
Weight	g	355-399
Weight with level compensator	g	943-987
Volume, internal, level compensator	cm ³	13.8
Max. load, vertical	N	700
Max,. load, radial	N	700
Action range, stroke	mm	50
Angular adjustability	°	0-360
Vacuum flow, max.	NI/s	0.68
Spring force, max.	N	66.7

Operational lifetime: 10,000,000 cycles at max. load

Vacuum flow

Feed pressure* MPa	Air consumption NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)										Max vacuum -kPa
		0	10	20	30	40	50	60	70	80		
0.17	0.29	0.57	0.40	0.22	0.15	0.070	—	—	—	—	—	49
0.22	0.34	0.64	0.48	0.29	0.20	0.14	0.080	0.020	—	—	—	64
0.314	0.44	0.68	0.60	0.44	0.27	0.19	0.14	0.10	0.060	0.030	—	90
0.40	0.53	0.66	0.60	0.52	0.39	0.24	0.12	0.10	0.060	0.020	—	84

*Feed pressure tolerance, +/- 0.01 MPa

Evacuation time

Feed pressure* MPa	Air consumption NI/s	Evacuation time (s/l) to reach different vacuum levels (-kPa)								Max vacuum -kPa
		10	20	30	40	50	60	70	80	
0.17	0.29	0.28	0.56	1.13	2.13	—	—	—	—	49
0.22	0.34	0.20	0.42	0.85	1.5	2.3	3.0	—	—	64
0.314	0.44	0.17	0.32	0.58	1.1	1.8	2.7	4.0	6.4	90
0.40	0.53	0.18	0.33	0.54	0.85	1.5	2.5	3.8	7.1	84

*Feed pressure tolerance, +/- 0.01 MPa

Ordering information, Vacuum Check Valve VT-1H COAX® with PMAT connection

Vacuum Check Valve VT-1H COAX® - G threads	Art. No. - Left hand connection			Art. No. - Right hand connection		
	Lock pin 16	Lock pin 19	Ball joint	Lock pin 16	Lock pin 19	Ball joint
Vacuum Check Valve VT-1H COAX®	0109276	0111147	0110435	0121007	0119573	0121018
Vacuum Check Valve VT-1H COAX® with LCS*	0109278	0120991	0120990	0121010	0121015	0121021

Vacuum Check Valve VT-1H COAX® NPT threads

	Left hand connection			Right hand connection		
	Lock pin 16	Lock pin 19	Ball joint	Lock pin 16	Lock pin 19	Ball joint
	Art. No. PMAT No.	Art. No. PMAT No.	Art. No. PMAT No.	Art. No. PMAT No.	Art. No. PMAT No.	Art. No. PMAT No.
Vacuum Check Valve VT-1H COAX®	0121026	0121038	0121056	0121025	0121039	0121057
	1050	1046	1045	1050RH	1046RH	1045RH
Vacuum Check Valve VT-1H COAX® with LCS*	0121032	0121044	0121062	0121031	0121045	0121063
	6016	6022	6019	6016RH	6022RH	6019RH

*With level compensator LCS.

Ordering information

1. Rod extension PMAT Code

Rod Extension 50 length	AA
Rod Extension 100 length	AB
Rod Extension 150 length	AC

2. Bar mounting style PMAT Code

Bar clamp, clamp-on 25 mm	00
Bar clamp, slide-on 25 mm	01
Bar clamp, slide-on 1", pin 16	02
Bar clamp, slide-on 1", pin 19	14
Bar clamp, slide-on 1", ball joint	04

3. Swivel style PMAT Code

Pin 16	P
Pin 19	C
Ball joint	I

4. Function attachment PMAT Code

Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, G conn., left hand	XAA
Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, G conn., right hand	XAARH
Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, NPT conn., left hand	AA
Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, NPT conn., right hand	AARH
Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, G, left hand w/ level comp. LCS200	XAL
Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, G, right hand with level comp. LCS200	XALRH
Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, NPT, left hand w/ level comp. LCS200	AL
Vacuum Check Valve VT-1H, COAX® cartridge MINI Pi12-2, NPT, right hand w/ level comp. LCS200	ALRH

Example Ordering number

PMAT with rod extension 50, bar clamp, slide-on 25 mm, pin 16 swivel style, Vacuum Check Valve VT-1H COAX® cartridge MINI Pi12-2, non-return valve, G conn., left hand	PMAT AA 01 P XAA
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