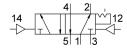
## Pneumatic valve VUWS-LT20-B52-N18

**FESTO** 

Part number: 577535





General operating condition

## **Data sheet**

Actuation type  Actuation type  Valve size  21 mm  Standard nominal flow rate  500 l/min  Pheumatic  Actual control pressure  Operating pressure  Operating pressure  Operating pressure  1.5 bar 10 bar  Structural design  Plate seat  Cut us - Recognized (OL)  Nominal width  5 mm  Exhaust air function  Sealing principle  Soft  Mounting position  Any  Manual override  None  Type of control  Direct  Pilot air supply port  Flow direction  Non-reversible  Symbol  Operating pressure  1.5 bar 10 bar  Changeover time  Explosion prevention and protection  Observe the information on the certificate  Zone 1 (ATEX)  Zone 22 (ATEX)  Zone 23 (ATEX)  Zone 23 (ATEX)  Zone 24 (ATEX)  Zone 25 (ATEX)  Zone 25 (ATEX)  Zone 25 (ATEX)  Zone 26 (ATEX)  Zone 27 (ATEX)  Zon	Feature	Value
Valve size 21 mm  Standard nominal flow rate  500 l /min  Pherumatic working port 1/8 NPT  Operating pressure 0.15 MPa 1 MPa  Operating pressure 1.5 bar 10 bar  Structural design Plate seat  Certification cUL us - Recognized (OL)  Nominal width 5 mm  Exhaust air function With flow control option  Sealing principle Soft  Mounting position Any  Manual override None  Type of control Direct  Pilot air supply port Internal  Flow direction Non-reversible  Symbol Underlap  Pilot pressure MPa 0.15 MPa 1 MPa  Pilot pressure MPa  Pilot pressure MPa  Lange Underlap  Pilot pressure WPa  Lange Underlap  Pilot pressure WPa  Lange Underlap  Pilot pressure WPa  Lange Underlap  Pilot pressure MPa  Lange Underlap  Pilot pressure Underlap  Pilot pressure MPa  Lange Underlap  Pilot pressure Underlap  Pilot pressure Underlap  Pilot pressure Underlap  Darric MPa  Lange Underlap	Valve function	5/2, bistable
Standard nominal flow rate 500 l/min Pneumatic working port 1/8 NPT Operating pressure 0.15 MPa 1 MPa Operating pressure 1.5 bar 10 bar Structural design Plate seat Certification c UL us - Recognized (OL) Nominal width 5 mm Exhaust air function With flow control option Sealing principle Soft Mounting position Any Manual override None Symbol Direct Pilot air supply port Internal Flow direction Non-reversible Symbol 0995840 Lap Underlap Pilot pressure MPa 0.15 MPa 1 MPa Pilot pressure MPa 0.15 MPa 1 MPa Pilot pressure MPa 0.15 MPa 1 MPa Pilot pressure 1.5 bar 10 bar Changeover time 4 ms Explosion prevention and protection Observe the information on the certificate Zone 1 (ATEX) Zone 2	Actuation type	Pneumatic
Pneumatic working port  Operating pressure  0.15 MPa 1 MPa  Operating pressure  1.5 bar 10 bar  Structural design  Plate seat  Certification  c UL us - Recognized (OL)  Nominal width  5 mm  Exhaust air function  Soft  Mounting position  Any  Manual override  None  Mounting position  Any  Manual override  None  Pilot air supply port  Internal  Flow direction  Operating MPa  Pilot pressure MPa  Explosion prevention and protection  Observe the information on the certificate  Zone 1 (ATEX)  Zone 2 (ATEX)  Z	Valve size	21 mm
Operating pressure Operating pressure 1.5 bar 10 bar Structural design Plate seat Certification C UL us - Recognized (OL) Nominal width 5 mm Exhaust air function With flow control option Sealing principle Soft Mounting position Manual override None Type of control Direct Pliot air supply port Internal Flow direction O0995840 Lap Pliot pressure Underlap Pliot pressure 1.5 bar 10 bar Changeover time A ms Explosion prevention and protection Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Information esistance Transport application tests with severity level 2 as per FN 942017-4 and EN 60068-2-6 Change (Pilot medium VDMA24364-81/B2-L Temperature of medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Standard nominal flow rate	500 l/min
Deprating pressure  1.5 bar 10 bar  Structural design Plate seat Certification Cut. us - Recognized (OL) Nominal width 5 mm Exhaust air function Sealing principle Soft Mounting position Manual override None Direct Pilot air supply port Internal Flow direction Non-reversible Symbol Lap Underlap Pilot pressure Underlap Pilot pressure Direct Pilot pressure 1.5 bar 10 bar  Changeover time Explosion prevention and protection Observe the information on the certificate Zone 2 (ATEX) Sone 2 (ATEX) Son	Pneumatic working port	1/8 NPT
Structural design Plate seat  Certification CUL us - Recognized (OL)  Nominal width 5 mm  Exhaust air function Soft Mounting position Any Manual override None Type of control Direct Plot air supply port Internal Flow direction Non-reversible Symbol 0995840  Llap Underlap Pilot pressure MPa Pilot pressure MPa Pilot pressure 1.5 bar 10 bar Changeover time 4 ms Explosion prevention and protection Observe the information on the certificate Zone 1 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) COperating medium Coperating and pilot media Operation with oil lubrication possible (required for further use) Pilot presistance Shock resistance Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 Shock resistance Shock resistance Shock sets with severity level 2 as per FN 942017-5 and EN 60068-2-27 Corrosion resistance class (CRC) 2 - Moderate corrosion stress VDAM24364-B1/B2-L Temperature of medium - 10 °C 60 °C Compressed air as per ISO 8573-1:2010 [7:4:4] Temperature of medium - 10 °C 60 °C Compressed air as per ISO 8573-1:2010 [7:4:4] Temperature of medium - 10 °C 60 °C Compressed air as per ISO 8573-1:2010 [7:4:4]	Operating pressure	0.15 MPa 1 MPa
Certification c UL us - Recognized (OL)  Nominal width 5 mm  Exhaust air function With flow control option  Sealing principle Soft  Mounting position Any  Manual override None  Type of control Direct  Pilot air supply port Internal  Flow direction Non-reversible  Symbol 0995840  Lap Underlap  Pilot pressure MPa 0.15 MPa 1 MPa  Pilot pressure MPa  Pilot pressure 1.5 bar 10 bar  Changeover time 4 ms  Explosion prevention and protection Observe the information on the certificate Zone 1 (ATEX) Zone 22 (ATEX) Zone 25 (ATEX) Zone 25 (ATEX) Zone 25 (ATEX) Zone 26 (ATEX) Zone 26 (ATEX) Zone 27 (ATEX) Zone 27 (ATEX) Zone 27 (ATEX) Zone 28 (ATEX) Zone 28 (ATEX) Zone 29 (ATEX) Zone 29 (ATEX) Zone 20 (ATEX	Operating pressure	1.5 bar 10 bar
Nominal width 5 mm  Exhaust air function With flow control option  Sealing principle Soft  Mounting position Any  Manual override None  Type of control Direct  Pilot air supply port Internal  Flow direction Non-reversible  Symbol 00995840  Lap Underlap  Pilot pressure MPa  Pilot pressure 1.5 bar 10 bar  Changeover time 4 ms  Explosion prevention and protection Observe the information on the certificate Zone 1 (ATEX) Zone 21 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX)  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media Operation et sit his severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance Shock resistance Corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L  Temperature of medium - 10°C 60°C  Pilot medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Structural design	Plate seat
Exhaust air function  Sealing principle  Soft  Mounting position  Any  Manual override  None  Type of control  Direct  Flow direction  Non-reversible  Symbol  Lap  Underlap  Pilot pressure MPa  Pilot pressure  1.5 bar 10 bar  Changeover time  Explosion prevention and protection  Observe the information on the certificate Zone 2 (ATEX) Sone 2 (ATEX) Sone 2 (ATEX) Sone 2 (ATEX) Sone 2 (SATEX)  Corporating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  VDMA24364-B1/B2-L  Temperature of medium  10 °C 60 °C  Pilot medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Temperature of medium  10 °C 60 °C  Compressed air as per ISO 8573-1:2010 [7:4:4]	Certification	c UL us - Recognized (OL)
Sealing principle  Soft  Mounting position  Any  Manual override  Type of control  Pilot air supply port  Internal  Flow direction  Non-reversible  Symbol  Lap  Underlap  Pilot pressure MPa  Direct  1.5 bar 10 bar  Changeover time  Explosion prevention and protection  Observe the information on the certificate  Zone 2 (ATEX)  Zone 21 (ATEX)  Zone 22 (ATEX)  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Iransport application test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance  Shock resistance class (CRC)  2 Moderate corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Nominal width	5 mm
Mounting position  Manual override  None Type of control  Direct  Internal  Flow direction  Non-reversible  Symbol  Lap  Underlap  Pilot pressure MPa  Pilot pressure  Changeover time  Explosion prevention and protection  Operating medium  Operating medium  Operating nedium  Operatino resistance  Shock resistance  Shock resistance  Compressed air as per ISO 8573-1:2010 [7:4:4]  Temperature of medium  Any  None  None  None  Non-reversible  Operation  Non-reversible	Exhaust air function	With flow control option
Manual override Type of control Direct Pilot air supply port Internal Flow direction Non-reversible Symbol O0995840 Lap Underlap Pilot pressure MPa Dist pressure 1.5 bar 1 MPa Pilot pressure 1.5 bar 1 0 bar Changeover time 4 ms Explosion prevention and protection Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 2 (ATEX) Zone 22 (ATEX) Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Operation with severity level 2 as per FN 942017-4 and EN 60068-2-27 Corrosion resistance Shock resistance Shock resistance Shock resistance (LASC) Compressed air as per ISO 8573-1:2010 [7:4:4] Temperature of medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Sealing principle	Soft
Type of control Pilot air supply port Internal Flow direction Non-reversible Symbol O0995840 Lap Underlap Pilot pressure MPa Pilot pressure 1.5 bar 1 0 bar Changeover time 4 ms Explosion prevention and protection Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Very 2 (ATEX) Very 2 (ATEX) Very 3 (ATEX) Very 3 (ATEX) Very 4 (ATEX) Very 5 (ATEX) Very 6 (ATEX) Very 6 (ATEX) Very 7 (ATEX) Very 7 (ATEX) Very 8 (ATEX) Very 9 (ATEX) Very	Mounting position	Any
Pilot air supply port  Flow direction  Non-reversible  Symbol  O0995840  Lap  Underlap  Pilot pressure MPa  O.15 MPa 1 MPa  Pilot pressure  Changeover time  Explosion prevention and protection  Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 2 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX)  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Compressed air as per ISO 8573-1:2010 [7:4:4]	Manual override	None
Flow direction  Non-reversible  Symbol  10995840  Underlap  Underlap  Pilot pressure MPa  1.5 bar 1 MPa  Pilot pressure  Changeover time  4 ms  Explosion prevention and protection  Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX)  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Compressed air as per ISO 8573-1:2010 [7:4:4]	Type of control	Direct
Symbol Lap Underlap Underlap Pilot pressure MPa O.15 MPa 1 MPa Pilot pressure One of the pressure MPa O.15 MPa 10 bar  1.5 bar 10 bar	Pilot air supply port	Internal
Lap Underlap O.15 MPa 1 MPa 1.5 bar 10 bar Changeover time Changeover time Explosion prevention and protection Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Operation with oil lubrication possible (required for further use) Vibration resistance Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 Shock resistance Corrosion resistance class (CRC) 2 · Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B1/B2-L Temperature of medium -10 °C 60 °C Compressed air as per ISO 8573-1:2010 [7:4:4]	Flow direction	Non-reversible
Pilot pressure MPa  O.15 MPa 1 MPa  1.5 bar 10 bar  Changeover time  4 ms  Explosion prevention and protection  Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Pilot medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Symbol	00995840
Pilot pressure  Changeover time  4 ms  Explosion prevention and protection  Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 2 (ATEX) Zone 22 (ATEX) Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Operation with oil lubrication possible (required for further use)  Vibration resistance Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC) 2 - Moderate corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L  Temperature of medium -10 °C 60 °C  Pilot medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Lap	Underlap
Changeover time  Explosion prevention and protection  Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Compressed air as per ISO 8573-1:2010 [7:4:4]	Pilot pressure MPa	0.15 MPa 1 MPa
Explosion prevention and protection  Observe the information on the certificate Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Pilot medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Pilot pressure	1.5 bar 10 bar
Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Vibration resistance  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Pilot medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Changeover time	4 ms
Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC) 2 - Moderate corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L  Temperature of medium -10 °C 60 °C  Pilot medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Explosion prevention and protection	Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX)
Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6  Shock resistance Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC) 2 · Moderate corrosion stress  LABS (PWIS) conformity VDMA24364-B1/B2-L  Temperature of medium -10 °C 60 °C  Pilot medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
EN 60068-2-6  Shock resistance  Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  2 - Moderate corrosion stress  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Pilot medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Corrosion resistance class (CRC)  2 - Moderate corrosion stress  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Pilot medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Vibration resistance	' ''
LABS (PWIS) conformity  VDMA24364-B1/B2-L  Temperature of medium  -10 °C 60 °C  Pilot medium  Compressed air as per ISO 8573-1:2010 [7:4:4]	Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Temperature of medium -10 °C 60 °C  Pilot medium Compressed air as per ISO 8573-1:2010 [7:4:4]	Corrosion resistance class (CRC)	2 - Moderate corrosion stress
Pilot medium Compressed air as per ISO 8573-1:2010 [7:4:4]	LABS (PWIS) conformity	VDMA24364-B1/B2-L
1 1 2 2 2 2 2	Temperature of medium	-10 °C 60 °C
Ambient temperature -10 °C 60 °C	Pilot medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
	Ambient temperature	-10 °C 60 °C

Feature	Value
Product weight	192 g
Type of mounting	Optionally: On terminal strip With through-hole
Venting hole connection	Not ducted
Pilot air port 12	10-32 UNF-2B
Pilot air port 14	10-32 UNF-2B
Pneumatic connection 1	1/8 NPT
Pneumatic connection 2	1/8 NPT
Pneumatic connection 3	1/8 NPT
Pneumatic connection 4	1/8 NPT
Pneumatic connection 5	1/8 NPT
Note on materials	RoHS-compliant
Seals material	HNBR NBR TPE-U(PU)
Housing material	Die-cast aluminum Painted
Material of screws	Steel, galvanized