

Specification **DELO-DOT D4 and DELO-DRIVERBOX** Art. no. 90 701 41 and 90 701 42

DELO-DOT D4 microdispensing valve

General details

Dimensions W × H × D	86 cm x 17 cm x 52 cm	
Medium	adhesives and adhesive components, liquid polymers and polymer solutions, and many other liquids	
Viscosity	> 5.000 (thixotropic) (to be tested depending on application)	
Minimum dispensing time for complete stroke	160 μs, open and close once	
Maximum dispensing time	∞ (permanent dispensing)	
Maximum pause time	∞ (stop)	
Maximum dispensing frequency	200 Hz, permanent dispensing (max. valve temp. +60 °C)	
Dispensing accuracy	max. 2% with constant pressure / constant temp.	
Maximum operating pressure	75 bar	
Operating temperature	up to +45 °C	
Medium temperature	up to $+75$ °C (at the media inlet when $+100$ °C are set)	
Expected lifetime of actuator	more than 1 billion cycles	
Nozzle ball/plate	self-aligning, made of hard ceramics, removable for cleaning and can be disassembled and replaced individually	
Diameter standard nozzle	50 to 400 µm	
Maintenance / inspection interval of nozzle	> 10,000,000 cycles (depending on medium)	
Wetted materials of DELO-DOT D4	steel grade 1.4305 (AISI grade 303), ceramics, FFKM, PEEK, silicone	
Electrical connection	Molex socket (10-pole)	
Connection line	4.5 m (suitable for drag chains) incl. Molex on ODU circular plug adaptation	
Minimum bending radius of connection line	R 35 mm once R 100 mm moving	
Medium connection	M10 x 1, luer-lock or 4/6 mm* tube (*outer diameter)	
Fastening thread	6 x M4, 6 mm deep, tightening torque 2.5 Nm +0.2	
Degree of protection	IP54	
Explosion protection	no	
Storage temperature	-10°C to +85°C	
Noise emission	85 dB	

DELO-DRIVERBOX

General details

Dimensions	for 19" rack aluminum, black anodized	
	3 RU, 21 HP approx. 18.47 x 106.3 x 181 mm	
Weight (4-channel version)	approx. 1.8 kg	
Nominal operating mode	continuous operation	
Voltage supply	24 V DC ± 10 %	
Power consumption	max. 24 W per channel plus heat output of the valve	
	valve type with max. temp. +100 °C: 35 W (total: max. 60 W per channel)	
Power supply	4-pole connector (Binder series 680) on the rear of the device	

Interfaces

Inputs / outputs per channel	15-pole SUB-D socket per channel on the rear of the device
Valve interface	10-pole ODU connector per valve on the rear of the device
Communication interface for RS485 modbus	8-pole ODU connector

Environmental conditions

Operating temperature up to 150 Hz and continuous operation of valve	+5 °C to +50 °C
Operating temperature from 150 Hz and continuous operation of valve	+5°C to +40°C
Degree of protection	IP30
Storage temperature	-20 to +70 °C
Humidity	not condensing

Spare parts and accessories

ArtNr.	Designation/description	Figure
90 701 41	DELO-DOT D4	DELO-DOT D4 S1102280733 R1.0
90 701 42	DELO-DRIVERBOX	Herrul 2:16 Herrul 2:16 Dec Duringe Swatten Data Barra Bara
90 701 43	Connection line	no figure
00 704 44	DELO-DOT D4 – DELO-DRIVERBOX	
90 701 44	Tool kit for the exchange of the needle insert	
90 701 45	Media supply luer-lock	
90 701 46	Media supply 6 mm for tube connector 6 x 1 mm (outer diamter 8 mm)	
90 701 47	Media supply 4 mm for tube connector 4 x 1 mm (outer diamter 6 mm)	
90 701 48	Cleaning kit	
90 701 49	Nozzle 100 μm type D	
90 701 55	Nozzle 200 µm type D	
90 701 56	Nozzle 300 µm type D	
90 701 57 90 701 58	Nozzle 400 µm type D Needle insert nozzle type D	
90 701 59	DELO-DOT D4 product tube set for universal connection to the DELO-XPRESS 951 pressure tank	
00 000 11	DELO-DOT D4 sealing o-ring 3 x 1 mm for nozzle (PU = 10 pcs.)	
Please refer	to the	

Please refer to the User Manual for further details! CONTACT DELO Industrial Adhesives Headquarters Germany Phone +49 8193 9900-0 info@DELO.de · www.DELO.de 12/15 Adhesives Dispensing Curing Consulting DELO Industrial Adhesives

Refer to the sales documents for the warranty terms. The technical data relate to measurements at the point of time of goods issue within the scope of general quality assurance. The values measured were determined under laboratory conditions and may deviate depending on the conditions of use. It is the user's responsibility to test the suitability of the device for the intended purpose by considering all specific requirements. © DELO – This brochure including any and all parts is protected by copyright. Any use not expressly permitted by the Urheberrechtsgesetz (German Copyright Act) shall require DELO's written consent. This shall apply without limitation to reproductions, duplicationand/or disseminations, adaptations, translations and microfilms as well as to the recording, processing, duplication and/or disseminations.