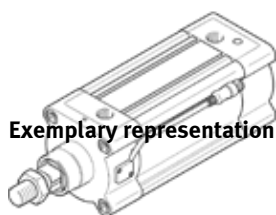


# Standards-based cylinder DDPC-...-80- -

Part number: 1677705

FESTO

With contactless displacement encoder.



## Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Stroke	10 ... 2,000 mm
Stroke servopneumatic positioning	50 ... 750 mm
Stroke Soft Stop	50 ... 750 mm
Stroke shortening in the end-positions	≥ 15 mm
Smallest positioning stroke	3% of max. stroke However, no more than 10 mm
Piston diameter	80 mm
Based on the standard	ISO 15552 (previously also VDMA 24652, ISO 6431, NF E49 003.1, UNI 10290)
Cushioning	P: Flexible cushioning rings/plates at both ends
Mounting position, positioning	Any
Mounting position, soft stop	Any
Measuring method: displacement encoder	Digital
Design structure	Piston Piston rod Profile barrel
Position detection	For proximity sensor With integrated displacement encoder
Variants	Clamping unit attached Extended piston rod Single-ended piston rod
Protection against torque/guide	Guide rod with yoke Square piston rod
Operating pressure MPa	≤ 1.2 MPa
Working pressure	≤ 12 bar
Operating pressure	≤ 174 psi
Working pressure, positioning / soft stop	4 ... 8 bar
Max. travel speed	1 m/s
Min. travel speed	0.05 m/s
Typical short stroke positioning time, horizontal	0,77/0,95 s
Typical long stroke positioning time, horizontal	0,88/1,02 s
Mode of operation	double-acting
Nominal operating voltage DC	5 V
Authorization	RCM Mark
CE symbol (see declaration of conformity)	according to EU-EMV guideline in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Operating medium	Compressed air in accordance with ISO8573-1:2010 [6:4:4]
Note on operating and pilot medium	Pressure dew point 10°C below ambient temperature/temperature of medium
Continuous shock resistance per DIN/IEC 68, parts 2 - 82	Tested in accordance with severity level 2

<b>Feature</b>	<b>Value</b>
Corrosion resistance classification CRC	1 - Low corrosion stress
PWIS conformity	VDMA24364-B1/B2-L
Max. magnetic interference field	10KA/m at a distance of 100 mm
Protection class	IP65 to IEC 60529
Vibration resistance per DIN/IEC 68, parts 2 - 6	Tested in accordance with severity level 2
Ambient temperature	-20 ... 80 °C
Impact energy in end positions	1.8 Nm
Max. torque for protection against rotation	≤ 3 Nm
Max. load, horizontal	300 kg
Max. load, vertical	100 kg
Min. load, horizontal	20 kg
Min. load, vertical	20 kg
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	2,721 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance	3,016 N
Moving mass with 0 mm stroke	804 g
Additional mass factor per 10 mm of stroke	31 g
Basic weight for 0 mm stroke	3,053 g
Additional weight per 10 mm stroke	87 g
Output signal	Analog
Repetition accuracy in ± mm	0.5 mm
Max. controllable force during advance	2,714 N
Max. controllable force during return	2,449 N
Typical friction force	140 N
Repetition accuracy, soft stop intermediate position	+/- 2 mm
Electrical connection, displacement encoder	8-pin
Cable length	1.5 m
Mounting type	with accessories
Pneumatic connection	G3/8
Materials note	Conforms to RoHS
Material cover	Wrought Aluminum alloy
Material seals	FPM NBR TPE-U(PU)
Material cable sheath	TPE-U(PUR)
Material piston rod	High alloy steel
Material screws	Steel
Material sensor cover	Aluminum
Material sensor head	POM
Material connector housing	PBT
Material cylinder barrel	Wrought Aluminum alloy