

P8 385

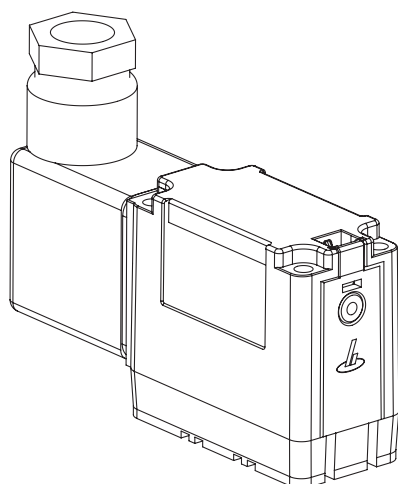
Piezo-controlled pneumatic valve
for intrinsically safe applications

Technical Data

EN MET



HOERBIGER



HOERBIGER
Flow Control GmbH
D - 86972 Altenstadt, Sudb. Rheinland 15
Type: P8 385RF - NG - SPN61 - B
F - No: P811049 - 6118
30° 20' 00" 00"
Pneumax: 1,6bar / 8bar
Temmax: 25°C / 60°C

GENERAL AND PNEUMATIC PROPERTIES

P8 385

GENERAL PROPERTIES

P8 385

Type	P8 385
Function	Switching, 3/2-way, normally closed, overlapping
Actuation type	Piezoelectric pilot
Constructive structure	Seat valve
Connection type	Flange ¹⁾
Weight	0.08 kg
Installation position	Any
Protection type	IP65 (DIN EN 60529 A1: 2000) ²⁾
Storage temperature	-40°C to +80°C
Ambient temperature	-25 to +60°C
Medium temperature	-25 to +60°C
Material	Anodized aluminium, brass, spring steel, plastic, elastomer, NBR, ARCAP
Behavior in case of energy failure	Port 2 venting
RoHS-Conformity	RoHS 2011/65/EU
Approval	Acc. to EU Type test certificate
Category, ignition type protection	Gas: II 1G Ex ia IIC T4/T5/T6 Ga

Media ³⁾	Compressed air and neutral gases
Media quality	According to ISO 8573-1:2010 (7:3:4)
Flow direction on	From 1 to 2
Flow direction off	From 2 to 3

¹⁾ Base plates for threaded connection see accessories

²⁾ With mounted connector plug and tight pneumatic connections

PNEUMATIC PROPERTIES

P8 385

Nominal pressure (p_N)	6 bar
Input pressure min ($p_{1_{min}}$)	1.5 bar
Input pressure max ($p_{1_{max}}$)	8 bar
Nominal flow rate 1 to 2 (Q_N)	> 50 l/min

ELECTRICAL PROPERTIES

P8 385

ELECTRICAL PROPERTIES

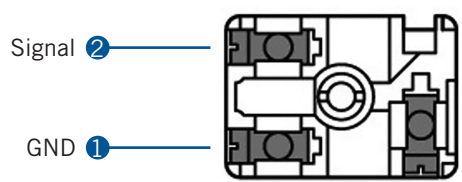
ELECTRONIC TYPE	PT63	PM64	PN61	PN65	PT67
Rel. duty cycle	100% within maximal duty time of 6000 h permanent operation				
Electrical connection	DIN EN 175301-803-B				
Nominal voltage (U _N)	9 V DC	16 V DC	30 V DC	30 V DC	9 V DC
Switching voltage ON (U _{on})	5.5 to 9 V DC	6 to 16 V DC	7 to 30 V DC	11 to 30 V DC	4.5 to 9 V DC
Switching voltage OFF (U _{off})	1 V DC				
Holding current ON (I _{on})	1 to 19 mA	1.7 to 23 mA	2 to 19 mA	2 to 6.6 mA	1 to 19 mA
Holding current OFF (I _{off})	0.05 mA	0.1 mA	0.22 mA	0.1 mA	0.05 mA
Power consumption min (P _{min})	5.5 mW	10 mW	14 mW	22 mW	4.5 mW
Power consumption max (P _{max})	171 mW	368 mW	571 mW	198 mW	171 mW
Voltage (U _i)	9	16	30	30	9
Current (I _i)	Not relevant				
External capacitance (C _i)	12				
External inductance (L _i)	Negligible				
Safety data according to EU type test certificate					

FORMULA TO CALCULATE THE ELECTRIC CURRENT

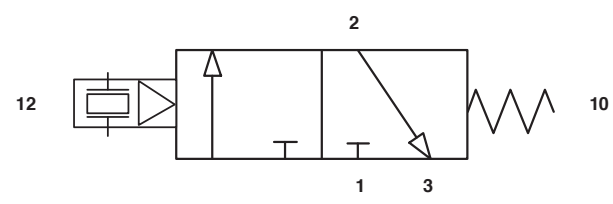
PT63	PM64	PN61	PN65	PT67
$I = (U \times 5.14) - 27.27$	$I = (U \times 2.13) - 11.08$	$I = (U \times 0.74) - 3.17$	$I = (U \times 0.245) - 0.75$	$I = (U \times 4) - 17$

CLAMPS/CONNECTION BLOCK

Connector	Plug connector to industrial form B; electrical connections 1=GND; 2=signal
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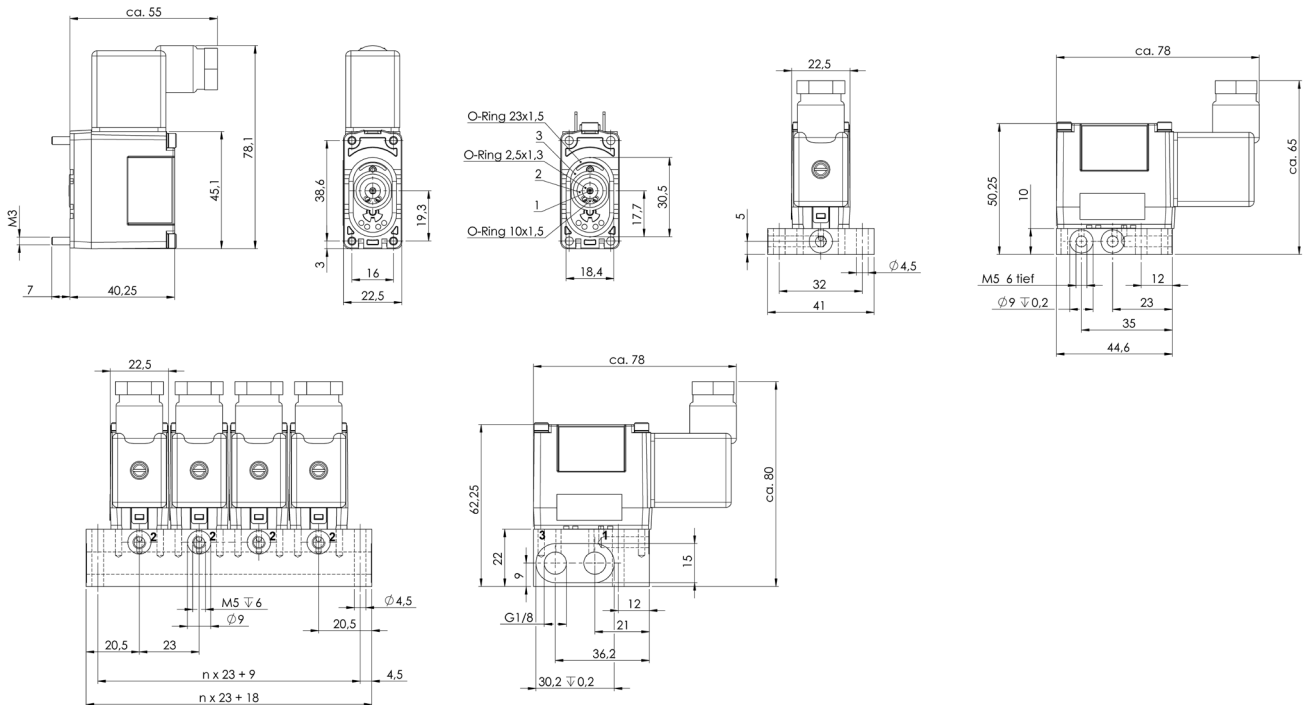
CIRCUIT SYMBOL



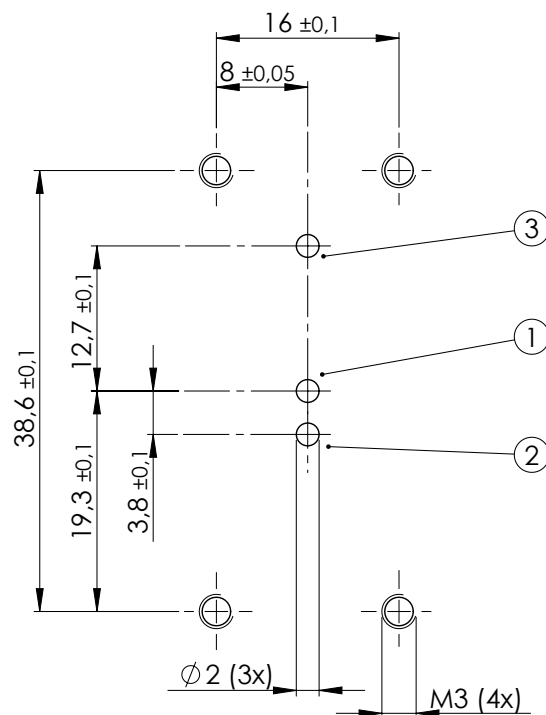
DIMENSIONS

P8 385

DIMENSIONS



DETAIL FLANGE CONNECTION

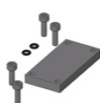
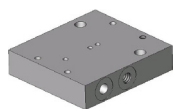


ACCESSORIES

P8 385

ACCESSORIES

ORDER NO.



Base plate, M5, 1-fold, aluminum

PS11702-A-01

Base plate, G1/8\", 2-fold, aluminum

PS11702-A-02

Blind plate complete, aluminum

PS11703-A

Appliance socket EN 175301-803 form B

KY9393-A

Connector with LED not for hazard area

On request

ORDER KEY

P8 385

ID NUMBER KEY

		1		2		3
ID NUMBER	PS 1 1 0	x x	-	x x	0 A	- x x
Example	PS 1 1 0	4 8	-	6 4	0 A	- 0 2

1 Valve type

48	NC
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2 Type of electronic

61	PN61
63	PT63
64	PM64
65	PN65
67	PT67

3 Number of valves*

00	Without base plate
01	With base plate M5
02	Manifold version G1/8" O2-fold

*See accessories

CONVERSION FACTORS

P8 385

CONVERSION FACTORS

VALUE	UNIT	CONVERSION UNIT	FACTOR
Length	mm	in	0.03934
	in	mm	25.4
	m	ft	3.28084
	ft	m	0.3048
Weight	kg	lb	2.204622
	lb	kg	0.453592
Pressure	bar	psi	14.5035
	psi	bar	0.06895
	MPa	psi	145.035
	psi	MPa	0.006895
	bar	MPa	0.1
	MPa	bar	10
Temperature	°C	°F	$1.8 \text{ }^{\circ}\text{C} + 32$
	°F	°C	$0.5556 \text{ }^{\circ}\text{F} - 32$
Torque	Nm	ft/lbs	0.7375
	ft/lbs	Nm	1.3558

ADDITIONAL DOCUMENTATION

P8 385

WWW.HOERBIGER.COM

This data sheet and additional documentation is available in the download area of the company's website.



www.hoerbiger.com

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