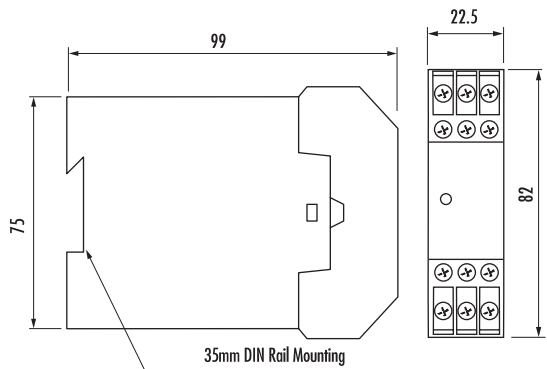
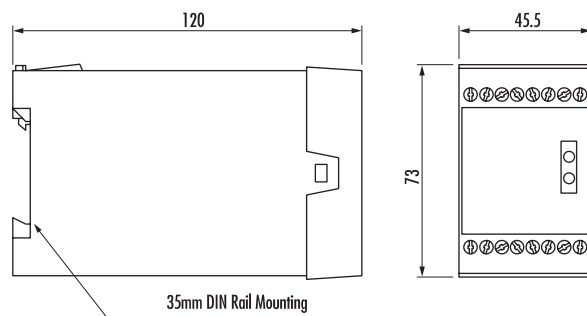


Sipha

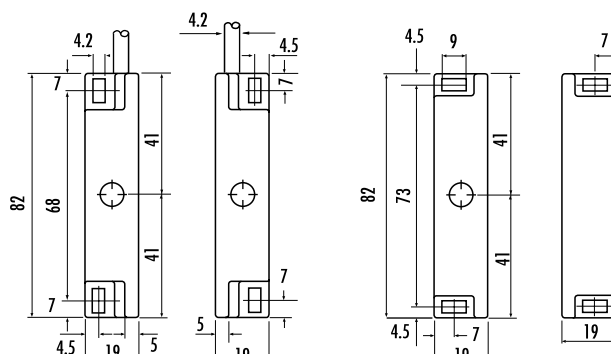
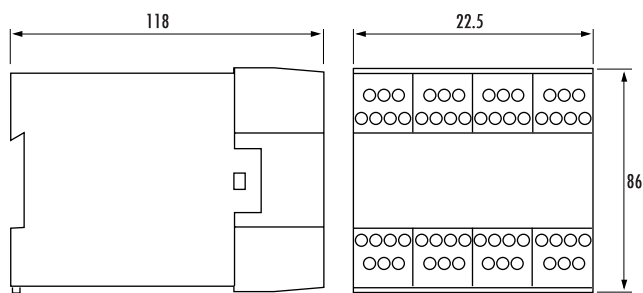
SIPHA 1 CONTROL UNIT



SIPHA 2 & 3 CONTROL UNIT

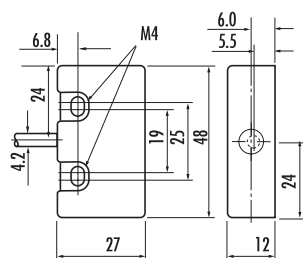


SIPHA 6 CONTROL UNIT

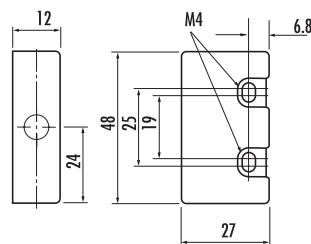


SENSOR S21, S22 & S23

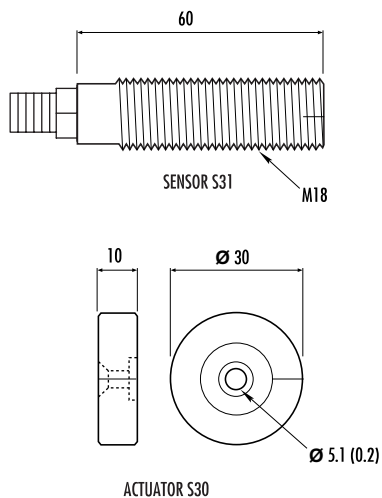
ACTUATOR S20



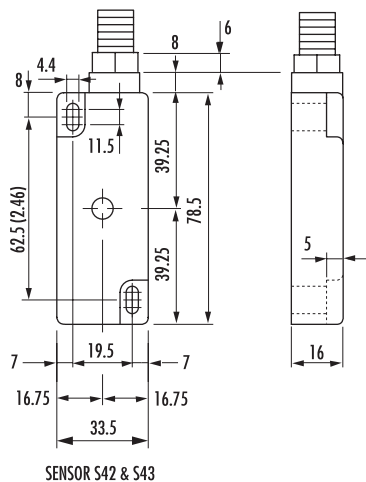
SENSOR - S11, S12, S13



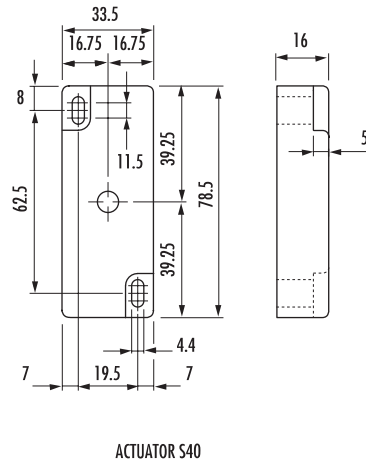
ACTUATOR - S10



ACTUATOR S30



SENSOR S42 & S43



ACTUATOR S40

specifications

Standards (for control unit and sensor)	EN 1088, EN 954-1 Cat 3, EN 60204-1 EN 60947-5-3 PDF-S VDE 0660 pt.209, EN 50081, EN 50082,
Approvals	CE marked for all applicable directives, cULus and TÜV
Power Supply (Control unit 1 & 3) (Control unit 2)	24 V AC/DC (<2 VA) 24 V AC/DC, 110/230 V AC selectable (<4 VA)
Safety Inputs	1 N/O + 1 N/C
Max input resistance	Red/blue - 200Ω, green/yellow - 150Ω
Max. safety switching distance (typical)	Sensor S11, 12, 13 - make 5 mm, break 11 mm. Sensor S21, 22, 23 - make 9 mm, break 12 mm. Sensor S31 - make 5 mm, break 12 mm Sensor S42, 43 - make 10 mm, break 13 mm
Minimum Approach Speed	17mm/s
Safety relay output (Control unit 1) (Control unit 2) (Control unit 3) (Control unit 6)	1 N/O TUV approved 2 N/O TUV approved 3 N/O TUV approved 2 N/O + 1 N/O delay, TUV approved
Max switched AC current/voltage	4 A/250 V AC/1000 VA at COSφ=1
Max switched DC current/voltage	2 A/30 V DC/60 W.
Min switched current/voltage	10 mA/10 V AC/DC
Max output fuse	5 A quick acting on AC, 3 A quick acting on DC
Auxiliary output (Control unit 1) (Control unit 2, 3 & 6)	1 N/C Phot MOS, (not for safety use), on resistance typically 36 Ω 1 N/C (not for safety use)
Max. aux. switched current/voltage (Control unit 1) (Control unit 2 & 3)	100 mA/230 V AC, 100 mA/24 V DC 2 A/230 V AC, 2 A/24 V DC
Aux.contacts (S12, S22, S42 only) (S13, S23, S43 only)	1 N/C (not for safety use) 1 N/O (not for safety use)
Indication	LED 1 Green = Output closed LED 2 Red = Power on
Max. drop-out time	25 ms
Impulse withstand voltage	2500 V
Operating temperature (S42 & S43 only)	-10°C to +55°C -25°C to +125°C

Degree of enclosure protection	Control unit: IP40/terminal isolation: IP20. Sensor/actuator: IP67 Sensor/actuator (S42, S43, S40 only): IP68
Material (Control unit) (Sensor/actuator)	Red polycarbonate S10, 11, 12, 13, 20, 21, 22, 23 - moulded ABS. S30 - Polyester S31 - Nylon (Trogamid) S40, 42, 43 - Stainless steel
Installation group	C in accordance with VDE 0110.
Mechanical life	1 x 10 ⁶
Torque settings	1.0Nm (terminal screws & fixing bolts)
Shock	IEC 68-2-27, 30gms 11ms
Vibration	IEC 68-2-6, 10-55Hz & UL991 Class C 10-150Hz

***Note:** The safety contacts of the Guardmaster switches are described as normally closed (N/C), i.e. with the guard closed, actuator in place (where relevant) and the machine able to be started