



Pressure



Temperature



Level



Level & Temperature




The Controller Family

PressureController SCPSD

With its compact integration of pressure switch, pressure sensor and display, the **PressureController** offers a perfect solution for monitoring and control of pressure in hydraulic and pneumatic systems, particularly series production.

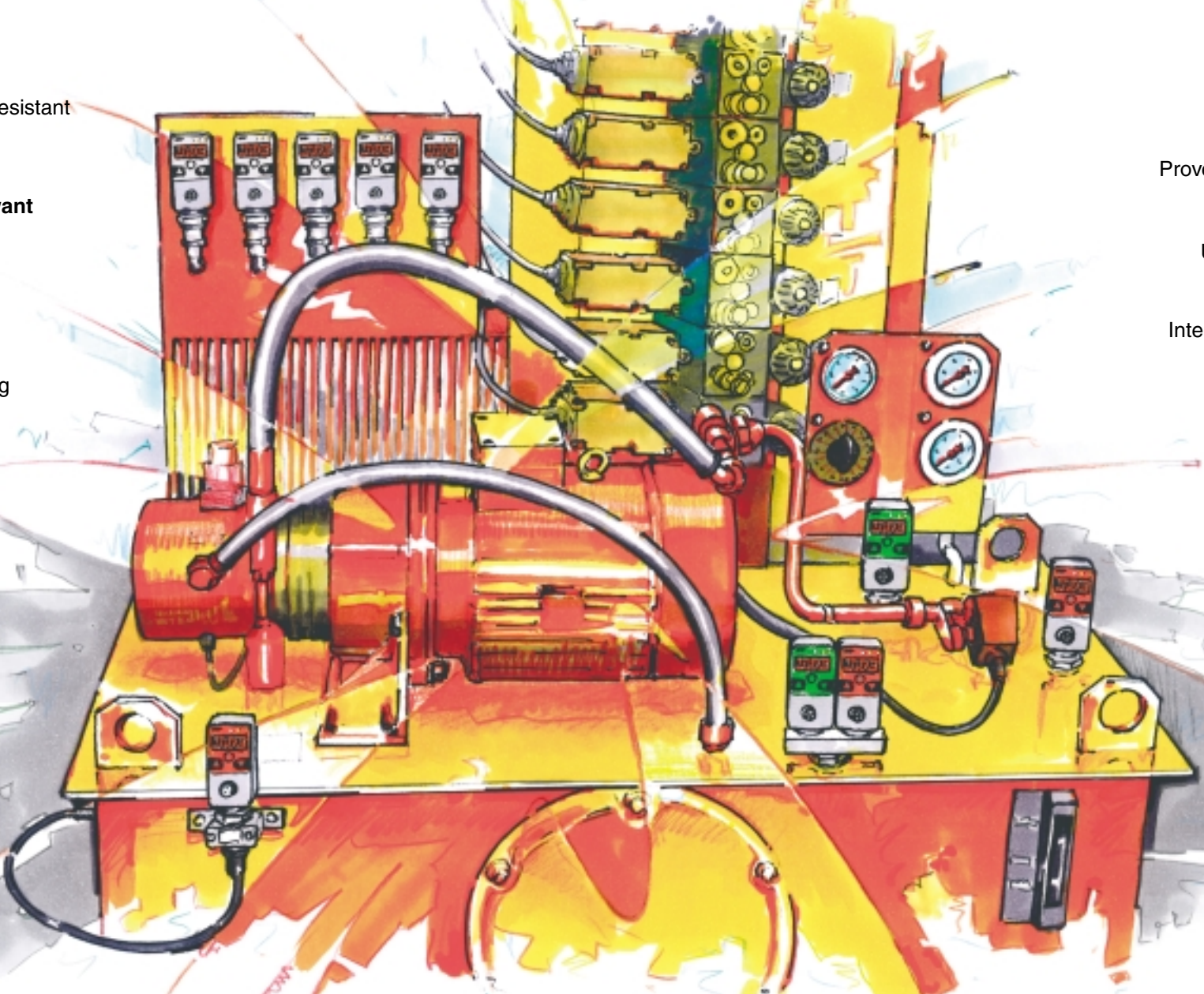


- Switch condition display**
 - ✓ Optical interface
- Everything at a glance**
 - ✓ Angled display
 - ✓ Large digital display
 - ✓ PSI / bar / MPa
- Easy to operate**
 - ✓ 3 large keys
- Any connection you want**
 - ✓ 2 switch outputs
 - ✓ Scalable analogue output
 - ✓ 0..20 or 4..20mA
 - ✓ M 12 plug
 - ✓ DIN 43650 plug
 - ✓ DESINA 
- Robust**
 - ✓ Metallic housing
 - ✓ Waterproof
 - ✓ Highly interference resistant
 - ✓ Vibration proof
 - ✓ Shockproof
- Any installation you want**
 - ✓ Compact
 - ✓ Female thread
 - ✓ Male thread
- Reliable**
 - ✓ Stainless steel
 - ✓ Long term measuring cell stability
 - ✓ Wide media compatibility

- ✓ **Various assembly choices**
- ✓ **Easy operation**
- ✓ **Rotatable**
- ✓ **Compact design**
- ✓ **Many versions**
- ✓ **High protection class**
- ✓ **Robust**

- ✓ **One sensor**
- ✓ **One input bore**
- ✓ **Rotatable**
- Level**
 - ✓ **Level display**
 - ✓ **Settings menu-driven**
 - ✓ **Switch output**
 - ✓ **Analogue output**
- Temperature**
 - ✓ **Temperature display**
 - ✓ **Settings menu-driven**
 - ✓ **Switch output**
 - ✓ **Analogue output**

Directionally adjustable 290°




LevelTempController SCLTSD

Now the **LevelTempController** makes it possible to set and display temperature and level separately on a common platform. It is in tank monitoring that the integration of level and temperature reveals its possibilities in such a unique way.

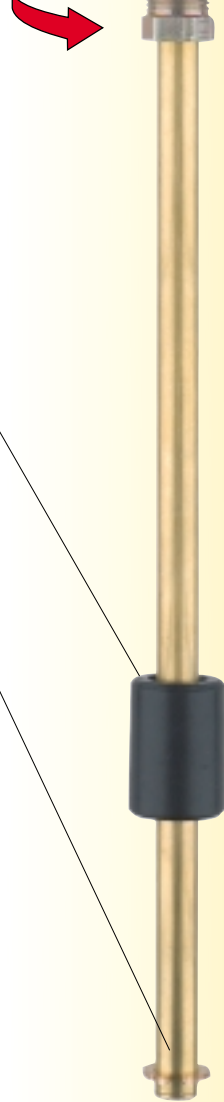
Twin-Concept
✓ 2 in 1



- Everything in view**
 - Temperature ✓
 - Level ✓
- Any kind of connection**
 - M 12 plug ✓
 - DESINA  ✓
- Robust**
 - Metal housing ✓
 - Waterproof ✓
 - Highly interference resistant ✓
 - Vibration proof ✓
 - Shockproof ✓
- Any kind of installation**
 - One connection bore ✓
 - Compact ✓
 - Rotatable ✓
 - G3/4" ✓
 - Flange for DIN ✓
- Level**
 - Proven measuring system ✓
 - High float dynamics ✓
 - Small construction ✓
 - Universally applicable ✓
- Temperature sensor**
 - Integrated into probe end ✓




Directionally adjustable 290°



LevelController SCLSD

With its measuring system well-established in hydraulics, the **LevelController** offers the best solution for monitoring tank levels. With its menu-driven setting of the level switching point, a wide variety of applications can be comfortably accommodated. Percentage display can be dialed in so that levels are uniformly represented for the operator independently of the tank design.

- PC-Programming**
 - ✓ Optical interface
- Everything in view**
 - ✓ Angled display
 - ✓ Large digit display
 - ✓ mm / inch / %
 - ✓ High & Low display
 - ✓ Switch status display
- Easy to operate**
 - ✓ 3 large buttons
- Any kind of connection**
 - ✓ 2 switch outputs
 - ✓ scaleable analogue output
 - ✓ 0..20 or 4..20mA
 - ✓ M 12 plug
 - ✓ DESINA 
- Robust**
 - ✓ Metal housing
 - ✓ Waterproof
 - ✓ Highly interference resistant
 - ✓ Vibration proof
 - ✓ Shockproof
- Any kind of installation**
 - ✓ Compact
 - ✓ Rotatable
 - ✓ G3/4"
 - ✓ Flange for DIN
- Proven measuring system**
 - ✓ High float dynamics
 - ✓ Small design
 - ✓ Universally applicable

- ✓ Tried and tested float measuring system
- ✓ Rotatable
- ✓ Level display in mm/inch %
- ✓ High & Low display
- ✓ Analogue output
- ✓ Switch outputs

- ✓ Always easy to see
- ✓ Easy setting
- ✓ Rotatable
- ✓ Robust
- Temperature sensor**
 - ✓ Level adjustable
 - ✓ Broad media toleration
 - ✓ Immersion tube
- Installation choices**
 - ✓ Direct on sensor separately on control panel
 - ✓ Rigid connection to Controller by cable to Controller

Directionally adjustable 290°




TemperatureController SCTSD

The great strengths of the **TemperatureController's** performance are especially apparent in tank monitoring:

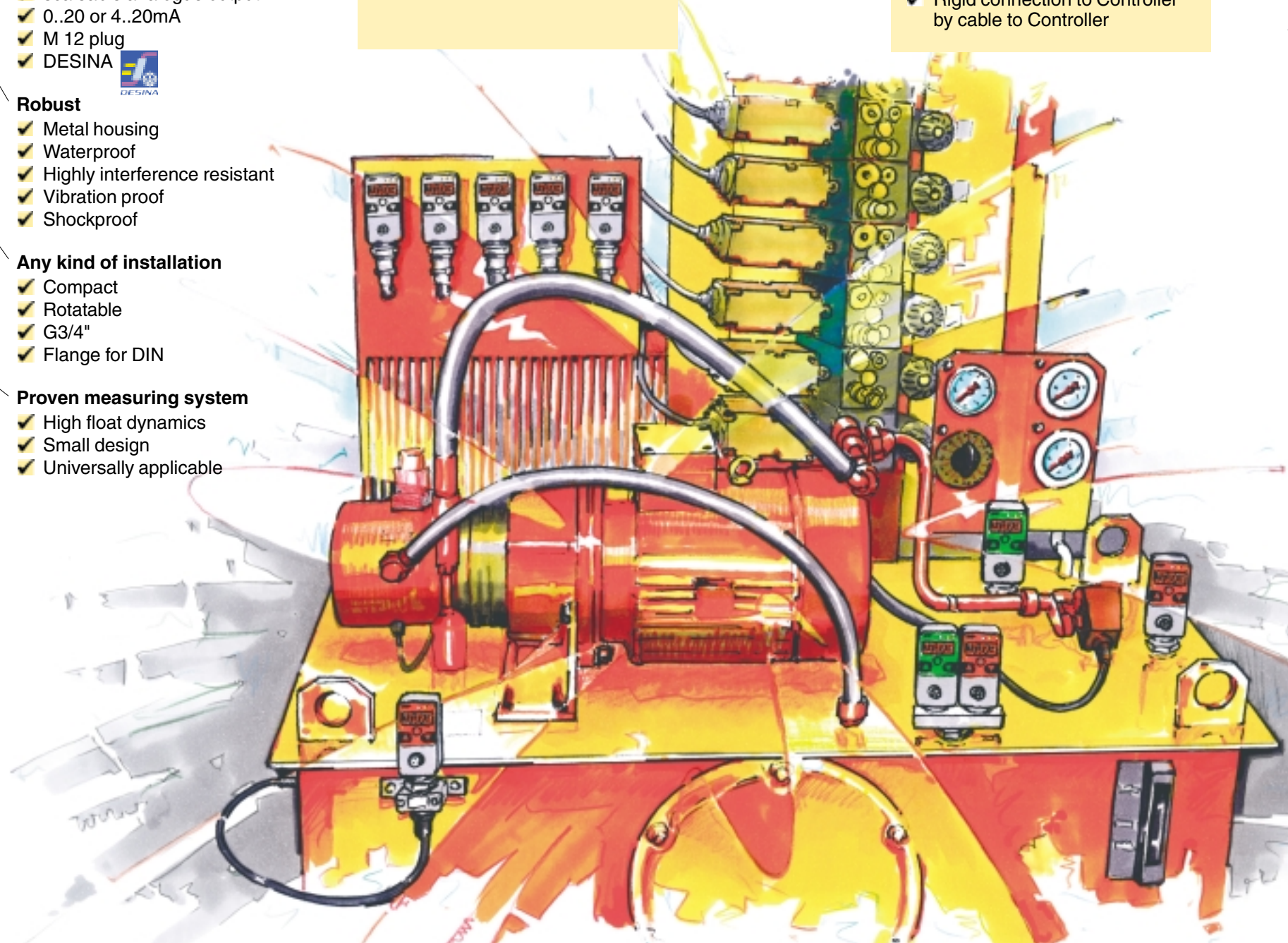
- exact temperature monitoring
- easily adjustable limiting values (e.g. alarm / cooling)
- any way of mounting

 The adjustable temperature level sensor can be connected by means of a cable or direct. So the **Controller** can be installed anywhere and the temperature will always be easy to see, even in demanding installation conditions.

- Switch condition display**
 - Optical interface ✓
- Everything at a glance**
 - Angled display ✓
 - Large-figure temperature display ✓
 - C° / °F ✓
- Easy to operate**
 - 3 large keys ✓
- Any connection you want**
 - 2 switch outputs ✓
 - 4 limiting values ✓
 - Analogue temperature signal ✓
 - 0..20 or 4..20mA ✓
 - M 12 plug ✓
 - DIN 43650 plug ✓
 - DESINA 
- Robust**
 - Metallic housing ✓
 - Waterproof ✓
 - Highly interference resistant ✓
 - Vibration proof ✓
 - Shockproof ✓

Directionally adjustable 290°

- Any kind of installation you want**
 - ✓ Compact
 - ✓ Male thread
- Temperature sensor** SCTT-10-XXX-07
 - ✓ Stainless steel
 - ✓ Wide media compatibility
 - ✓ Various lengths
- Adjustable for height**
 - Clamp fitting SCA-TT-10-1/2
- Connection adaptor** SCA-TT-10-SD
- Cable** SCK-410-03-45-45
- Tube clamp** SCSD-S27



The Controller Family

PressureController SCPSD



LevelTempController SCLTSD



LevelController SCLSD



TemperatureController SCTSD



General technical data

Electrical connection	
Supply voltage	15..30VDC nominal 24VDC protection class 3
Electrical connection	M12x1; 4-pole.; 5-pole.; with gold-plated contacts equipment plug DIN43650 4-pole.
Short circuit-proof	yes
Incorrect polarity protection	yes
Overload protection	yes
Power consumption	< 100mA

Housing	
Material	Directionally adjustable up to 290°
Foil material	Zinc pressure die casting Z 410; painted Polyester
Display	4 position, 7 segment; red, figure height 9mm
Type of protection	IP67 EN60529 (with DIN43650 plug IP 65)

Ambient conditions	
Ambient temperature range	-20°C to +85°C
Storage temperature range	-40°C to +100°C
EM tolerance	Interference emission to EN 50081-1 Interference resistance to EN 61000-6-2
Vibration resistance	20g 10...500Hz IEC60068-2-6*
Shock resistance	50g 11ms IEC60068-2-29*

* not valid for DIN43650 version

Outputs	
Switch outputs	2 Mosfet high side switches (PNP)
Contact functions	Closer/opener, window, hysteresis Function freely adjustable
Switch voltage	Supply voltage - 1.5VDC
Switch current max.	1A; with two switched outputs 0.5 A per switch
Short circuit current	2.4 A per switch
Analogue output	0/4..20mA, programmable, freely scaleable RL ≤ (supply voltage - 8 V) / 20mA (≤ 500 Ω)

* higher switch current available on request

Accessories

Cable		SCK-400 - XX - X X	
Cable length	2m	02	↑
	5m	05	↑
	10m	10	↑
Plug connect	straight	4	↑
	angled 90°	5	↑
	M12	5	↑
	DIN 43650 *	6	↑

*only in angled version

PC programmer kit	SCSD-PRG-KIT
Fixing clamps	SCSD-S27

Subject to alteration

Technical data

Input dimensions		Pressure range							
Measuring range	bar	Low pressure			High pressure				
		-1..4	-1..10	-1..16	0..60	0..100	0..250	0..400	0..600
Overload pressure	bar	10	20	40	120	200	500	800	1200
Burst pressure	bar	12	25	50	550	800	1200	1700	2200
Measuring element		ceramic				thin film			
Switching cycles		≥ 100 Mio.							
Connecting thread		G1/4 (BSPP); ED-soft seal NBR* (DIN 3852 T2, Form X); ED(DIN3852 T11, Form E)							
Tightening torque		35Nm							
Media-contacting parts		Low pressure: stainless steel 1.4404; ceramic AL ₂ O ₃ ; NBR High pressure: stainless steel 1.4404; 1.4542							
Medium temperature range		-20°C to +85°C							
Weight		approx. 300g							

* other seal materials (FPM, EPDM etc...) on request

Output dimensions	
Accuracy	± 0.5 % FS typ. ± 1 % FS max.
Temperature drift	± 0.02 % FS/°K typ. (at -20...+85°C) ± 0.03 % FS/°K max.
Long-term stability	± 0.2 % FS/a
Repeatability	± 0.25% FS
Switching point accuracy	± 0.5 % FS typ. ± 1 % FS max.
Display accuracy	± 0.5 % FS typ. ± 1 Digit ± 1 % FS max. ± 1 Digit

Response speed	
Switch output	≤ 10 ms
Analogue output	≤ 10 ms

Ordering codes

Pressure range	004 010 016 060 100 250 400 600
1 switch output, without analogue output DIN 43650 connector plug	SCPSD- XXX -04- X 6
2 switch outputs, without analogue output M12 connector plug 4 pin	SCPSD- XXX -04- X 7
1 switch output, with analogue output M12 connector plug 4 pin	SCPSD- XXX -14- X 7
2 switch outputs, with analogue output M12 connector plug 5 pin	SCPSD- XXX -14- X 5
Types	1 = G1/4 BSPP external thread 2 = G1/4 BSPP internal thread

Ordering codes

Installation length	250 370 520 mm
Level 2 switch outputs without analogue output M12 4 pin	SCLTSD- XXX -00-07
Temperature 2 switch outputs without analogue output M12 4 pin	SCLTSD- XXX -10-07
Level 1 switch outputs with analogue output M12 4 pin	SCLTSD- XXX -10-07
Temperature 1 switch outputs with analogue output M12 4 pin	SCLTSD- XXX -10-07

Technical data

Input dimensions	
Sensor length	250mm 370mm 520mm
Setting range	40..210mm 40..330mm 40..480m
Measuring element	Resistance reed chain with float
Connecting thread	G3/4 ; nickel-plated brass; ED-soft seal NBR*
Media-contacting parts	Brass, nickel-platet brass; NBR*
Medium temperature range	-20°C to +80°C
Media compatibility	Water, lubrication oil, hydraulic oil, acids, alkalis

Float	
Material	NBR
Dimensions	Ø 18mm, length 35mm

Protector tube	
Material	Brass
Dimensions	Ø 8mm
Working pressure	1bar

* other seal materials (FPM, EPDM etc...) on request

Output dimensions	
Switching point accuracy	± 1 % FS at 25°C
Display accuracy	± 1 % FS ± 1 Digit at 25°C
Response accuracy	≤ 700ms
Resolution	7.5 mm

Ordering codes

Installation length	250 370 520 mm
2 switching outputs without analogue output M12 plug connector 4 pin	SCLSD- XXX -00-07
1 switching output with analogue output M12 plug connector 4 pin	SCLSD- XXX -10-07

Technical data

Input dimensions	
Display range	-50°C...+150°C -58°F...+302°F
Sensor input	PT1000
Sensor connection	M12x1; 4-pole
Weight	280g

Output dimensions	
Switching point accuracy	± 0.35 % FS at 25°C
Display accuracy	± 0.35 % FS ± 1 Digit at 25°C
Response speed	≤ 300ms
Accuracy	± 1 % FS

Temperature sensor	
Measuring element	PT1000 / DIN EN 60751, class B
Measuring range	-40...+125°C -40°F...257°F
Response time	T0.5 = 6sec / T0.9 = 25sec
Accuracy	+ - 0.3K + 0.005*t
Material	Stainless steel 1.4571
Nominal pressure	10 bar (max)
Media temperature	-40...+125°C
Ambient temperature	-25...+80°C (for the plug range)
Storage temperature	-25...+85°C

Media connection	
Direct mounting adaptor	1/2 BSPP (SCA-TT-10-SD)
Clamping fitting	1/2 BSPP (SCA-TT-10-1/2)

Ordering codes

1 switch output without analogue output DIN 43650 plug connection	SCTSD-150-00-06
2 switch outputs without analogue output M12 plug connection 4 pin	SCTSD-150-00-07
1 switch output with analogue output M12 plug connection 4 pin	SCTSD-150-10-07
2 switch outputs with analogue output M12 plug connection 5 pin	SCTSD-150-10-05
100 150 250 mm long	
Temperature sensor Immersion tube 1/2 BSPP	SCTT-10- XXX -07 SCA-TT-10-XXX
Direct mounting Direct mounting adapter (SCTSD-SCTT)	SCA-TT-10-SD
Control panel mounting Sensor cable 3m (SCTSD-SCTT)	SCK-410-03-45-45
Clamping fitting 1/2 BSPP	SCA-TT-10-1/2
Fixing clamp	SCSD-S27

FluidConnectors Europe Sales Offices

Parker Hannifin GmbH
A-2700 Wiener Neustadt
Tel: +43 2622 23501
Fax: +43 2622 66212

Parker Hannifin Corporation
AZPAR
AZ-370 000 Baku
Tel: +994 12983966
Fax: +994 12983966

Parker Hannifin S.A.-N.V.
B-1400 Nivelles
Tel: +32 67280900
Fax: +32 67280999

Parker Hannifin s.r.o.
CZ-184 00 Prague 8
Tel: +420 2 83085221
Fax: +420 2 83085360

Parker Hannifin GmbH
FluidConnectors Group
D-33659 Bielefeld
Tel: +49 521 4048-0
Fax: +49 521 4048-4280

Parker Hannifin Danmark A/S
DK-2750 Ballerup
Tel: +45 43560400
Fax: +45 43733107

Parker Hannifin España S.A
E-28850 Torrejón de Ardoz
(Madrid)
Tel: +34 91 6757300
Fax: +34 91 6757711

Parker Hannifin France SAS
F-74130 Contamine-sur-Arve
Tel: +33 450258025
Fax: +33 450978660

Parker Hannifin Oy
FIN-01510 Vantaa
Tel: +358 9 476731
Fax: +358 9 47673200

Parker Hannifin plc
GB-Derby DE24 8JH
Tel: +44 1332 365631
Fax: +44 1332 292146

Parker Hannifin Corporation
GR-171 21 Athens
Tel: +30 21 0933-6450
Fax: +30 21 0933-6451

Parker Hannifin Corporation
HU-1149 Budapest
Tel: +36 1 220-4155
Fax: +36 1 422-1525

Parker Hannifin S.p.A.
I-20094 Corsico (MI)
Tel: +39 02 451921
Fax: +39 02 4479340

Parker Sales Ireland Ltd
IE-Blackrock, Co. Dublin
Tel: +353 1 293 9999
Fax: +353 1 293 9900

Parker Hannifin Corporation
Gateway Ventures Ca Ltd.
KZ-480100 Almaty
Tel: +7 327 2 543 081
Fax: +7 327 2 541 100

Parker Hannifin A/S
N-1402 Ski
Tel: +47 64 91 10 00
Fax: +47 64 91 10 90

Parker Hannifin B.V.
NL-7570 AH Oldenzaal
Tel: +31 541 585000
Fax: +31 541 585459

Parker Hannifin Sp.z.o.o.
PL-02-445 Warszawa
Tel: +48 22 8634942
Fax: +48 22 8634944

Parker Hannifin Portugal Lda
PT-4450-625 Leça da Palmeira
Tel: +351 22 9997360
Fax: +351 22 9961527

Parker Hannifin Corporation
Hidro Consulting Impex Srl
RO-00001 Bucharest
Tel: +40 21 252-1382
Fax: +40 21 252-3381

Parker Hannifin Corporation
RU-123001 Moscow
Tel: +7 095 2340054
Fax: +7 095 2340528

Parker Hannifin Corporation
RU-693000 Yuzhno-Sakhalinsk
Tel: +7 4242 727242
Fax: +7 4242 727242

Parker Hannifin AB
S-16308 Spånga-Stockholm
Tel: +46 8 59795000
Fax: +46 8 59795120

Parker Hannifin Corporation
SI-8000 Novo Mesto
Tel: +386 7 337-6650
Fax: +386 7 337-6651

Parker Hannifin Africa
ZA-Kempton Park
Tel: +27 11 961-0700
Fax: +27 11 392-7213

Parker Hannifin Corporation
UA-01004 Kiev
Tel: +380 44 2207432
Fax: +380 44 2206534

Internet: <http://www.parker.com>

For further information on other Parker Products, call the European Product Information Centre free of charge on 00800 2727 5374.



BUL/4088-2/UK
© 2004 Parker Hannifin
PlantijnCasparie 0304