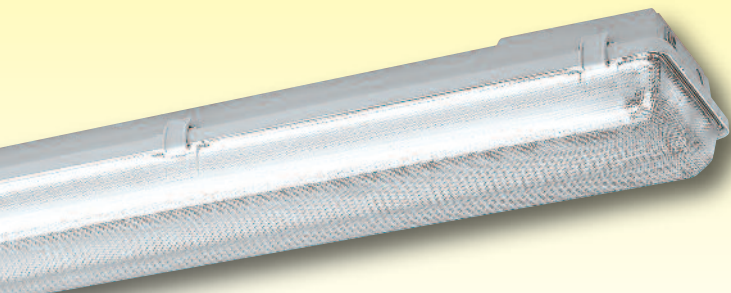


Damp Room Polyester Light Fittings with Diffusers (Insulation Class I) Series 163/164...



Application:

In humid, wet and dusty interior areas of industrial and agricultural premises, for car parks, basements, kitchens and civil defence buildings.

Aggressive atmospheres: Please consult us.

Design:

Housing: Glass fibre reinforced polyester resin, foamed polyurethane gasket.

Diffuser: Stippled clear impact resistant acrylic (PMMA) or polycarbonate (PC), hinged on both sides.

Fasteners: External plastic clips (KK).

Reflector: Removable white sheet steel, complete with electronic components.

Rotary fasteners for quick assembly.

Electrical connection: 3-pole terminal block.

Cable entries: Variable, closed knock-outs on the short and long sides, and on the top, 2 blanking plugs M20. Cable looping in/out at one end (see grey box).

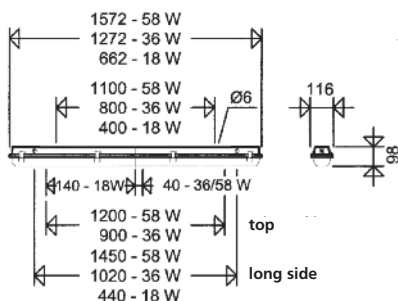
Mounting system: 2 holes for ceiling mounting. Rubber gaskets and U-washers for sealing are supplied inside the fitting.

Options:

See „Further Series/Equipment“.

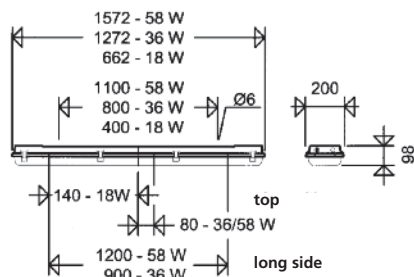
Shock resistance test: RK 1,6/16A

Series 163...

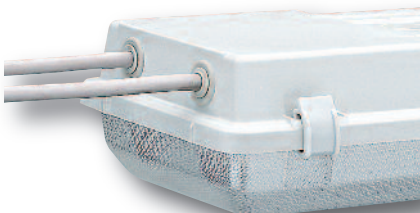


Additional entries (knock-outs)

Series 164...



Additional entries (knock-outs)



Standard design with cable entries for single-end IN-OUT wiring:

The variable cable entries make it possible to adapt for all local structural conditions and enables the use of single-end IN-OUT wiring instead of the classic through wiring. All entries are knock-out.

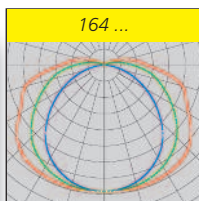
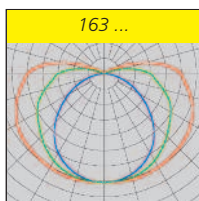
SCHUCH quality - Your advantage:

- quality damp room light fitting with higher than average mechanical strength and chemical resistance
 - robust glass fibre reinforced polyester enclosure
 - robust, modified PMMA diffuser (alternatively PC) with thicker walls also in the critical areas (corners)
 - reliable and infallible sealing, due to non-aging, weather and chemical resistant polyurethane gasket situated inside a deep groove
- easy to install and maintain
 - fast dismantling and assembly of the reflector using rotary fasteners on moulded-in studs
 - large terminal compartment for up to to 7 x 2.5mm² or 5 x 4mm² terminals
 - problem-free, single-handed installation (2-point suspension)
 - easily adaptable to all local structural conditions due to the variable cable entries on the short and long sides, as well as the top
 - quick and economic single-end IN-OUT wiring instead of the classic through wiring for strip lighting
- shock-proof and certified for installation in civil defence buildings (RK 1,6/16A)
- highly flexible and wide application potential due to large of number of variations (see „Further Series / Versions“)

163/164...



Type	Article no.	Lamps W	Weight ca. kg ²⁾
with PMMA or PC diffuser and low loss conventual ballast			
163 118	16300 0001 ¹⁾	1 x T 26/18 W	1,6
163 136	16300 0004 ¹⁾	1 x T 26/36 W	2,6
163 158	16300 0007 ¹⁾	1 x T 26/58 W	3,3
164 218	16400 0001 ¹⁾	2 x T 26/18 W	2,4
164 236	16400 0004 ¹⁾	2 x T 26/36 W	4,3
164 258	16400 0007 ¹⁾	2 x T 26/58 W	5,8
163 118 PC	16300 0013 ¹⁾	1 x T 26/18 W	1,6
163 136 PC	16300 0016 ¹⁾	1 x T 26/36 W	2,6
163 158 PC	16300 0019 ¹⁾	1 x T 26/58 W	3,4
164 218 PC	16400 0013 ¹⁾	2 x T 26/18 W	2,4
164 236 PC	16400 0016 ¹⁾	2 x T 26/36 W	4,3
164 258 PC	16400 0019 ¹⁾	2 x T 26/58 W	5,8



with PMMA or PC diffuser and electronic ballast (EVG)

163 118 EVG	16300 0010	1 x T 26/18 W	1,3
163 136 EVG	16300 0011	1 x T 26/36 W	2,3
163 158 EVG	16300 0012	1 x T 26/58 W	2,6
164 218 EVG	16400 0010	2 x T 26/18 W	2,2
164 236 EVG	16400 0011	2 x T 26/36 W	3,2
164 258 EVG	16400 0012	2 x T 26/58 W	4,1
163 118 PC EVG	16300 0022	1 x T 26/18 W	1,4
163 136 PC EVG	16300 0023	1 x T 26/36 W	2,3
163 158 PC EVG	16300 0024	1 x T 26/58 W	2,6
164 218 PC EVG	16400 0022	2 x T 26/18 W	2,2
164 236 PC EVG	16400 0023	2 x T 26/36 W	3,2
164 258 PC EVG	16400 0024	2 x T 26/58 W	4,1

1) Uncomp.; article nos. for comp. see price list 2) Weights without packing material



NEW

163/164 ... LED

with Highpower-LED



Application:

Cold stores, low temperature stores, cooling chambers and walkable low temperature cabins in hotels and restaurants, supermarkets, climate chambers, fresh goods store and production areas in the food industry, slaughterhouses, meat cutting operations, badly accessible areas, areas with high downtime and maintenance costs when replacing

the lamps or in case of frequent switching on and off the light, wind power stations.

Design:

As standard fitting 163/164..., but:
Reflector: Aluminium painted.
 Types T40/H45 and T40/H60
Diffuser: PC

Options:

See "Further Series/Equipment"

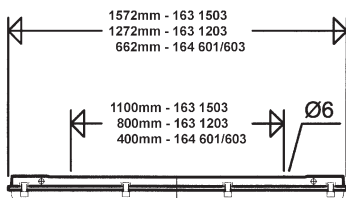
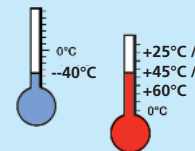
Technical data:

163 2402 LED:
ECCG: 230V 50/60Hz, 220V Dc
LED: Highpower-LED 2,5W white, 4.000K, Ra80
Ambient temperature: -40°C bis +25°C

164 601/603 LED:
ECCG: 230V, 50/60Hz.
LED: Highpower-LED white, 1W or 2,5W, 6.500K
Ambient temperature:
 -40°C up to +60°C - 164 601 LED
 -40°C up to +45°C - 164 603 LED

Advantages of the LED versions:

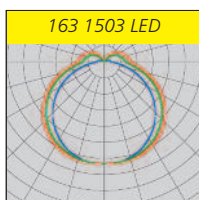
- particularly suitable for energy efficient illumination of low temperature areas
 - applicable in a wide temperature range (please contact us)
 - instant light of the maximum luminous flux (raised luminous flux at low temperatures) ideal for light control via door contact, light beam or motion sensor or for safety lighting
 - insensitive to frequent switching
 - less energy consumption by reduced connection power and switching if required only
 - less energy consumption by less cooling power due to less heat input via the illumination
 - minor investments for smaller cooling systems
 - longer LED life through reduced ageing process when operating in the low temperature range (≥ 60,000h at ≤ 30% luminous flux decline)
- lower maintenance and downtime costs due to long intervals



Type	Article-no.	Qty. LED W	Power input- approx.	comparable to fluo.lamps	Weight ca. kg ¹⁾
163 1203 LED	16302 0005	12 x 2,5W	30W	1 x 36W	2,2
163 1503 LED	16302 0006	15 x 2,5W	40W	1 x 58W	2,5
for broad temperature ranges from -40°C up to +60°C					
164 601 LED PC T40/H60 ²⁾	16402 0014	6 x 1W	8W		1,3
for broad temperature ranges from -40°C up to +45°C with raised luminous flux					
164 603 LED PC T40/H45 ²⁾	16402 0015	6 x 2,5W	16W		1,3

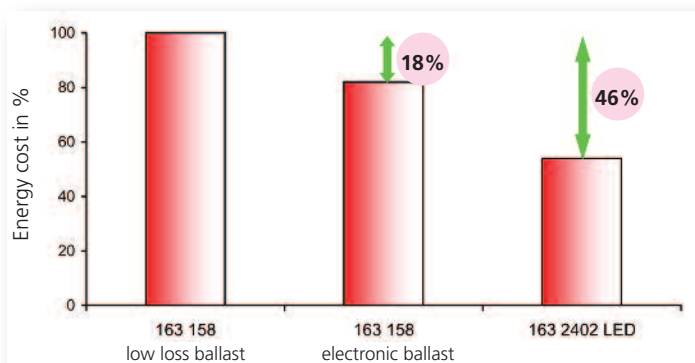
1) Weights without packing material.

2) Without -Marking



Energy cost saving

by installing type 163 1503 LED in comparison to 163 158 VVG or EVG



NEW



Note:

Application of VDE tested LED Retrofit lamps with short circuit starter only with VDE registration no. or with VDE symbol.

163/164... RLED

for LED Retrofit Lamps with short-circuit starter



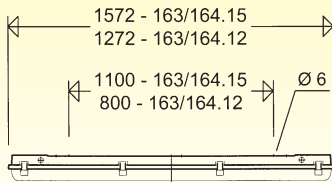
Design:

As standard version 163/164... uncompensated, but:

Starter: Delivery without jumper (part of delivery of the lamps).

Advantages of the RLED version:

- up to 15% higher luminous flux due to the application of LED retrofit lamps with clear lamp tube
- good non-glaring due to stippled diffuser
- triple safety as to applications
 - VDE certified system (short circuit starter)
 - VDE certified light fitting
 - VDE certified LED retrofit lamp



Type	Article no.	Lamps ¹⁾	Length (m)	Weight approx.kg
163 1/12 RLED	16302 0202	1 x LED-Retrofit	1,20	2,6
163 1/15 RLED	16302 0203	1 x LED-Retrofit	1,50	3,3
164 2/12 RLED	16415 0205	2 x LED-Retrofit	1,20	4,3
164 2/15 RLED	16415 0206	2 x LED-Retrofit	1,50	5,8

1) Application of LED lamps with VDE registration no. or with VDE symbol only!



163/164... S.

with mirror-type reflector for high ceilings

Application:

Industrial halls, warehouses, high-bay racking, storage areas and corridors with ceiling heights from 5 to 12m, breweries, slaughter houses (Please consult us if any chemical material may occur in the area)

Design: Narrow and wide housing with surface refined mirror-type reflectors made from purest aluminium (S). Also available with electronic ballast (EVG).



Type	Article no.	Lamps W	Weight ca. kg ²⁾
with symmetrical narrow beam reflector			
163 136 ST	16300 0028 ¹⁾	1 x T 26/36 W	2,7
163 158 ST	16300 0031 ¹⁾	1 x T 26/58 W	3,6
164 136 ST	16400 0053 ¹⁾	1 x T 26/36 W	4,3
164 158 ST	16400 0057 ¹⁾	1 x T 26/58 W	5,9
164 236 ST	16400 0028 ¹⁾	2 x T 26/36 W	4,5
164 258 ST	16400 0031 ¹⁾	2 x T 26/58 W	6,1

with symmetrical wide beam reflector

164 136 SB	16400 0152	1 x T 26/36 W	3,9
164 158 SB	16400 0156	1 x T 26/58 W	5,9

with asymmetrical reflector

163 136 SA	16300 0113	1 x T 26/36 W	2,7
163 158 SA	16300 0117	1 x T 26/58 W	3,6

164 136 SA	16400 0164	1 x T 26/36 W	4,0
164 158 SA	16400 0168	1 x T 26/58 W	6,0

1) Uncomp.; article nos. for comp. see price list

2) Weights without packing material

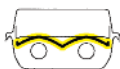
Series 163...ST narrow beam



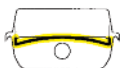
Series 1641...ST narrow beam



Series 1642...ST narrow beam



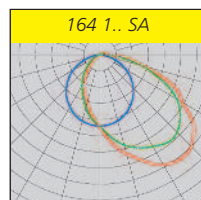
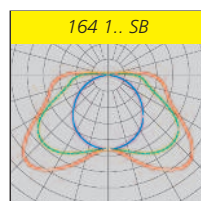
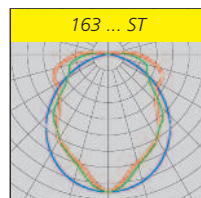
Series 1641...SB wide beam



Series 163...SA asymmetrical beam



Series 1641...SA asymmetrical beam

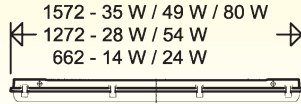


Note:

Depending on lamp length (549, 1149, 1449mm), various lamp types can be used:

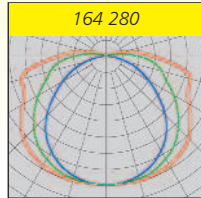
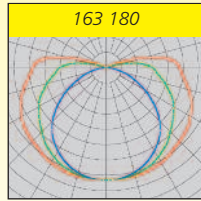
- HE for high light efficiency (14, 28, 35 W)
- HO for high light output (24, 54, 49, 80W)
- Amalgam lamps for near constant luminous flux within the temperature range 5°C bis 70°C (24, 54, 80W)

• longlife lamps with an operating life period of up to 60,000 hours (given by the manufacturer)
We recommend the use of Amalgam lamps for low temperatures and outdoor areas.



163/164... (T5)

for T5 fluorescent lamps (Ø 16mm)

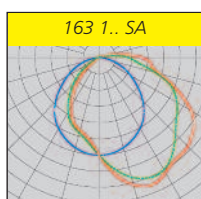
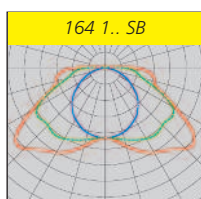
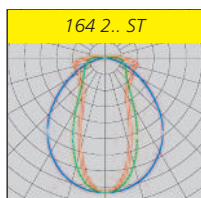
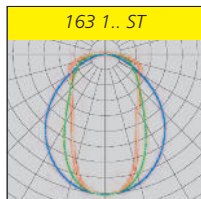


Type	Article no.	Lamps W	Weight ca. kg ³⁾
narrow housing			
163 114/24 ¹⁾	16305 0010	1 x T 16/14/24 W	1,4
163 128/54 ¹⁾	16305 0009	1 x T 16/28/54 W	2,5
163 135/49/80 ¹⁾	16305 0008	1 x T 16/35/49/80 W	2,8
wide housing			
164 214/24 ¹⁾	16405 0010	2 x T 16/14/24 W	2,7
164 228/54 ¹⁾	16405 0009	2 x T 16/28/54 W	3,9
164 235/49 ¹⁾	16405 0008	2 x T 16/35/49 W	5,7
164 280/2E ²⁾	16405 0007	2 x T 16/80 W	5,9

1) Multi-Watt ECG (individual wattage version on request) 2) with 2 single-ballast 3) Weights without packing material

163/164... S. (T5)

with mirror-type reflector for high ceilings



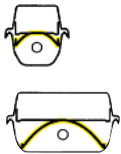
Application: Industrial halls, warehouses, high-bay racking, storage areas and corridors with ceiling heights from 5 to 12m, breweries, slaughter houses (Please consult us if any chemical material may occur in the area).

Design: Surface refined symmetrical (S.) or asymmetrical (SA) mirror-type pure aluminium reflector with high operating efficiency.

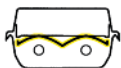
Type	Article no.	Lamps W	Weight ca. kg ³⁾
narrow beam			
163 128/54 ST	16305 0108	1 x T 16/28 bzw. 54W	2,6
163 135/49/80 ST	16305 0109	1 x T 16/35, 49 bzw. 80W	2,9
wide beam			
164 128/54 ST	16405 0117	1 x T 16/28 bzw. 54W	4,3
164 135/49/80 ST	16405 0118	1 x T 16/35, 49 bzw. 80W	6,2
164 228/54 ST	16405 0115	2 x T 16/28 bzw. 54W	4,2
164 235/49 ST	16405 0116	2 x T 16/35 bzw. 49W	5,9
164 280/2E ST ²⁾	16405 0114	2 x T 16/80W	6,1
asymmetrical beam			
164 128/54 SB	16405 0308	1 x T 16/28 bzw. 54W	4,0
164 135/49/80 SB	16405 0309	1 x T 16/35, 49 bzw. 80W	6,3
163 128/54 SA	16305 0208	1 x T 16/28 bzw. 54W	2,6
163 135/49/80 SA	16305 0209	1 x T 16/35, 49 bzw. 80W	2,9
164 128/54 SA	16405 0208	1 x T 16/28 bzw. 54W	4,1
164 135/49/80 SA	16405 0209	1 x T 16/35, 49 bzw. W	6,4

1) Multi-Watt ECG - individual wattage version available upon request 2) With 2 single EVG 3) Weights without packing material

Series 163 ... ST narrow beaming



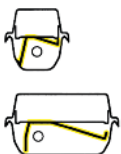
Series 164 1/2.. ST narrow beaming



Series 164 1.. SB wide beaming



Series 163/164 1.. SA asymmetrical



Dustproof/Waterproof Light Fittings



NEW

163/164... LW



Note:

For avoiding any formation of condensation water the light fittings required for wet rooms must not be installed directly to uninsulated surfaces.

ammoniakbeständig

for application in agricultural operations

Application:

Stables, humid, wet and dusty interior areas in agricultural business where light fittings with limited surface temperature are required by reason of increased fire danger due to inflammable dust ∇-symbol (past ∇) e.g. animal feed or litter in case of cattle breeding.

Design:

As standard version 163/164..., but:
Closure: Stainless steel clips (KE)
Gasket: Profile gasket with closed pore structure.
Lampholders: Specially designed lamp and starter holders with corrosion-proof metal parts.
Connection terminal: 3 poles with releasing button.

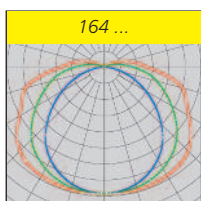
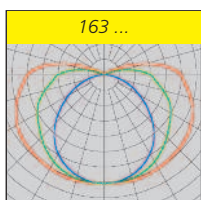
Advantages of the LW version:

- Ammonia resistant version for the tough application in stables
- robust low-loss control gear
- application of corrosion-resistant special lampholders
- corrosion-resistant stainless steel clips
- „∇“-symbol for application in rooms with inflammable dust acc. to the requirements of VDE 0100 and of the „Verband der Sachversicherer“ (VdS)



Type	Article no.	Lamps/Watt	Weight approx. kg
163 158 LW	16300 0902 ¹⁾	1 x T 26/58 W	3,4
164 258 LW	16400 0902 ¹⁾	2 x T 26/58 W	5,9

1) uncomp. Article no. for comp see price list

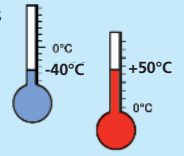




Further Series / Equipment

- stainless steel fasteners (KE)
- individual wattage ECG version for all T5 types
- EVG suitable for higher switching frequency
- PVC or silicon through wiring system up to max. 7 x 2.5mm² or 5 x 4mm²
- alternative cable entries up to M25 x 1.5
- insulation class II
- for low and high temperatures

- for broad temperature ranges from -40°C up to +50°C
- for applications in food industry areas
- as maintenance lighting in wind-power towers
- as emergency lighting (see catalogue section "Emergency Lighting")

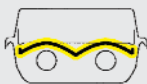


Aluminium narrow beam mirror reflector for retrofitting into standard light fitting

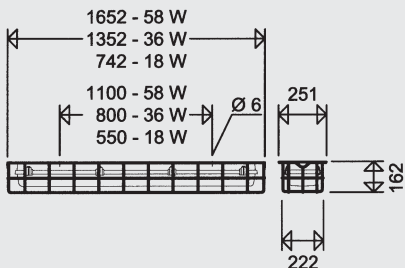
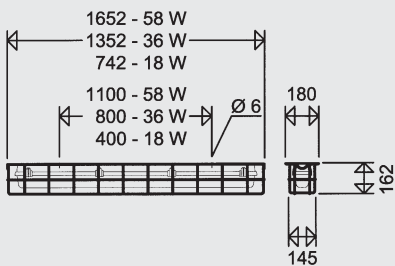
ST 163



ST 164



Protective guard



Pipe clamp R1 1/2" - Ø 48,3mm
R2" - Ø 60,3mm



Ceiling bracket 183 DS



Tip:

Light-band rails and through wiring see end of chapter "Damp room lighting"

Accessories / Spare Parts

Type	Article no.	Type	Article no.
Spare diffuser PMMA		Spare diffuser PC	
163 018	16311 9000	163018 PC	16311 9003
163 036	16311 9001	163036 PC	16311 9004
163 058	16311 9002	163058 PC	16311 9005
164 018	16411 9000	164018 PC	16411 9003
164 036	16411 9001	164036 PC	16411 9004
164 058	16411 9002	164058 PC	16411 9005
Fasteners			
163 KK	90123 9000	plastic	
163 KE	90123 9001	stainless steel	
Cable entries			
2511	90063 9000	threaded blanking plug M20	
2561	25610 9000	plastic cable gland M20 x 1,5	
2560	25600 9000	plastic cable gland M25 x 1,5	
Lamp holders			
163/1	90124 9000	without starter holder (cut-out 25.5 x 12.2)	
163/2	90125 9000	with starter holder (cut-out 25.5 x 12.2)	
164/1	90124 9001	without starter holder (cut-out 25.5 x 13.2)	
164/1/30	90124 9003	from manufacturing date 2005	
164/1/30	90124 9003	from manufacturing date 2008 (focal point 30mm)	
164/1/30	90124 9003	with starter holder (cut-out 25.5 x 13.2)	
164/2	90125 9001	from manufacturing date 2005	
164/2/30	90125 9002	from manufacturing date 2008 (focal point 30mm)	
... for T5			
163/1 T5	90124 9002		
Aluminium narrow beam mirror reflector for retrofitting into standard light fitting (not for T5)			
ST 163/36	16312 0001	for 163 136 and 163 128/54	
ST 163/58	16312 0002	for 163 158 and 163 135/49/80	
ST 164/36	16412 0001	for 164 236 and 164 228/54	
ST 164/58	16412 0002	for 164 258, 164 235/49 and 164 280/2E	
Protective guard, powder coated			
SK 120	90004 0001	for 1 x 18/20 W	
SK 140	90004 0002	for 1 x 36/40 W	
SK 165	90004 0003	for 1 x 58/65 W	
SK 220	90004 0004	for 2 x 18/20 W	
SK 240	90004 0005	for 2 x 36/40 W	
SK 265	90004 0006	for 2 x 58/65 W	
Pipe clamp			
163 RO 112A P	90245 0003	1 1/2", stainless steel, without retaining bracket (pair)	
163 RO 2A P	90245 0004	2", stainless steel, without retaining bracket (pair)	
164 RO 112A P	90245 0005	1 1/2", stainless steel, with support (pair) for 164...	
164 RO 2A P	90245 0006	2", stainless steel, with support (pair) for 164...	
Attention: Observe the fixing distance when mounting on boom with pipe clamps (boom length!)			
Accessories for ceiling mounting			
183 S	90049 0002	swing hook for chain suspension	
183 DS	90095 0001	stainless steel bracket, with screw M5	

Dustproof/Waterproof Light Fittings