

D Series Actuators, Pilot Lights, Contact Blocks, Switches and Accessories Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Applications

- Suitable for use with certified flameproof Ex d enclosures for control equipment.

Features

- DIN rail mounted (TS35) and panel mounted versions.
- Large range of M22 x 1.5 mm screwed actuator operators including, push buttons, rotary actuators, pilot lights, ammeters and selector switches.
- Fully supplied with actuator, shaft, contact block and yellow laminated plastic legend plate with black lettering 60 x 50 mm.

Standard Materials

- Box: gray painted marine grade aluminum alloy
- CF2B box: gray painted cast iron for CF2B

Certifications and Compliances

◆ ATEX Certification

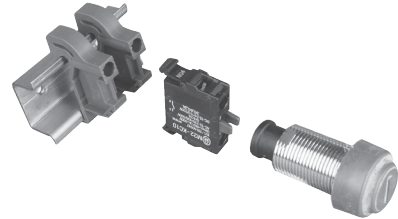
• Certification Type TCD

- Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex d IIC
- Dust, Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
- Surface Temperature: -40 °C to +60 °C
- GE Declaration of Conformity: 5C213
- ATEX Certificate: LCIE 02 ATEX 0036 U
- IECEx Certificate: IECEx LCI 10.0022U
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

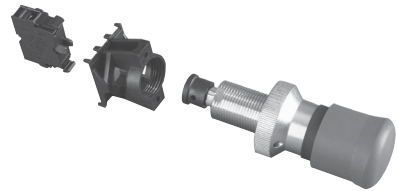
◆ EURASEC Certification

- EURASEC RU C-FR. ГБ 05.B.00909

Rail Mounted Version





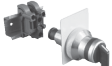

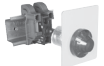


Panel Mounted Version



D Series TS35 Rail Mounted Actuators and Contact Blocks

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)








	Description/Function	Weight kg	Volume dm ³	Catalog Number ①
	Spring Return Push Button			
	Green spring return '1' push button with 1NO momentary contact	0.2	0.4	DA5GR
	Red spring return '0' push button with 1NC momentary contact	0.2	0.4	DA9RR
	Mushroom Head Push Button			
	Red mushroom head spring return with 1NC momentary contact Padlockable in both positions	0.2	0.4	DR9R
	Red mushroom head push pull with 1NC maintained contact Padlockable in both positions	0.2	0.4	DD9R
	Red mushroom head key release with 1NC maintained contact Unlocked with key (MS1)	0.2	0.4	DC9R
	Rotary Actuator			
	2 maintained positions with 1NO maintained contact	0.2	0.4	DH5R
	2 maintained positions key operated with 1NO maintained contact key removable in both positions (MS1)	0.2	0.4	DG5R
	Additional Contacts			
	1 x NO contact	0.1	0.2	DCB5R
	1 x NC contact	0.1	0.2	DCB9R
	LED Pilot Lights			
	Red 12 to 30 Vac/Vdc	0.1	0.4	DPR12R
	Green 12 to 30 Vac/Vdc	0.1	0.4	DPG12R
	White 12 to 30 Vac/Vdc	0.1	0.4	DPW12R
	Blue 12 to 30 Vac/Vdc	0.1	0.4	DPB12R
	Yellow 12 to 30 Vac/Vdc	0.1	0.4	DPY12R
	Red 48 to 60 Vac/Vdc	0.1	0.4	DPR48R
	Green 48 to 60 Vac/Vdc	0.1	0.4	DPG48R
	White 48 to 60 Vac/Vdc	0.1	0.4	DPW48R
	Blue 48 to 60 Vac/Vdc	0.1	0.4	DPB48R
	Yellow 48 to 60 Vac/Vdc	0.1	0.4	DPY48R
	Red 85 to 264 Vac	0.1	0.4	DPR85R
	Green 85 to 264 Vac	0.1	0.4	DPG85R
	White 85 to 264 Vac	0.1	0.4	DPW85R
	Blue 85 to 264 Vac	0.1	0.4	DPB85R
	Yellow 85 to 264 Vac	0.1	0.4	DPY85R
		Transfer Kit		
To be used when replacing old range of contacts 094057 and 094058 and old range of indicators 093990-093991 and 094090-094091		0.2	0.4	093958
	16 A Switches			
	1-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS116R
	2-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS216R
	3-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS316R
	4-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS416R
	2 way 1-pole selector switch with non-padlockable handle "1-2"	0.3	0.5	DS21601R
	3 way 1-pole selector switch with non-padlockable handle "1-0-2"	0.3	0.5	DS21602R

① Legend Plate Supplied.

D Series Panel Mounted Actuators and Contacts Blocks

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)






	Description/Function	Weight kg	Volume dm ³	Catalog Number ①	
	Spring Return Push Button				
	Green spring return 'I' push button with 1NO momentary contact	0.2	0.4	DA5GP	
	Red spring return 'O' push button with 1NC momentary contact	0.2	0.4	DA9RP	
	Mushroom Head Push Button				
	Red mushroom head spring return with 1NC momentary contact Padlockable in both positions	0.2	0.4	DR9P	
	Red mushroom head push pull with 1NC maintained contact Padlockable in both positions	0.2	0.4	DD9P	
	Red mushroom head key release with 1NC maintained contact Unlocked with key (MS1)	0.2	0.4	DC9P	
	Rotary Actuator				
	2 maintained positions with 1NO maintained contact	0.2	0.4	DH5P	
	2 maintained positions key operated with 1NO maintained contact key removable in both positions (MS1)	0.2	0.4	DG5P	
	Additional Contacts				
	1 x NO contact	0.1	0.2	DCB5P	
	1 x NC contact	0.1	0.2	DCB9P	
	LED Pilot Lights				
	Red 12 to 30 Vac/Vdc	0.1	0.4	DPR12P	
	Green 12 to 30 Vac/Vdc	0.1	0.4	DPG12P	
	White 12 to 30 Vac/Vdc	0.1	0.4	DPW12P	
	Blue 12 to 30 Vac/Vdc	0.1	0.4	DPB12P	
	Yellow 12 to 30 Vac/Vdc	0.1	0.4	DPY12P	
	Red 48 to 60 Vac/Vdc	0.1	0.4	DPR48P	
	Green 48 to 60 Vac/Vdc	0.1	0.4	DPG48P	
	White 48 to 60 Vac/Vdc	0.1	0.4	DPW48P	
	Blue 48 to 60 Vac/Vdc	0.1	0.4	DPB48P	
	Yellow 48 to 60 Vac/Vdc	0.1	0.4	DPY48P	
	Red 85 to 264 Vac	0.1	0.4	DPR85P	
	Green 85 to 264 Vac	0.1	0.4	DPG85P	
	White 85 to 264 Vac	0.1	0.4	DPW85P	
	Blue 85 to 264 Vac	0.1	0.4	DPB85P	
	Yellow 85 to 264 Vac	0.1	0.4	DPY85P	
		Transfer Kit			
		To be used when replacing old range of contacts 094055 and 094056 and old range of indicators 093992-093993 and 094092-094093	0.2	0.4	093959
	16 A Switches				
	1-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS116P	
	2-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS216P	
	3-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS316P	
	4-pole switch with non-padlockable handle "0-1"	0.3	0.5	DS416P	
	2 way 1-pole selector switch with non-padlockable handle "1-2"	0.3	0.5	DS21601P	
	3 way 1-pole selector switch with non-padlockable handle "1-0-2"	0.3	0.5	DS21602P	
	2 way 2-pole selector switch with non-padlockable handle "1-2"	0.3	0.5	DS41601P	
	3 way 2-pole selector switch with non-padlockable handle "1-0-2"	0.3	0.5	DS41602P	

① Legend Plate Supplied.

D Series Accessories

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

	Description/Function	Weight kg	Volume dm ³	Catalog Number
	Spare Shrouds for Spring Return Push Buttons			
	Green shroud marked "I"	0.1	0.2	DSG
	Red shroud marked "0"	0.1	0.2	DSR
	Green shroud marked "start"	0.1	0.2	DSS
	Red shroud marked "A Réarmement"	0.1	0.2	DSA
	Black shroud (unmarked)	0.1	0.2	DSN
	Blue shroud (unmarked)	0.1	0.2	DSB
	Aluminum Guard Painted Red			
	Mushroom head actuator protection			DGD1A
	Stainless Steel Padlocking Devices			
	For spring return push button			DPLD1S
	For rotary actuator, red mushroom head spring return or push-pull			DPLD2S
	Spare Lenses for Pilot Lights			
	Red	0.1	0.2	DPRENS
	Green	0.1	0.2	DPGLENS
	White	0.1	0.2	DPWLENS
	Blue	0.1	0.2	DPBLENS
	Yellow	0.1	0.2	DPYLENS
	Spare Handle for Switches			
	Non-padlockable handle	0.2	0.2	DSNPH
	Padlockable handle — 48 mm x 48 mm	0.06	0.3	DSPH
	Laminated Plastic Legend Plate with Black Lettering			
	Large size — 60 mm x 50 mm			DLP00
	Small size — 45 mm x 31.2 mm			DLP01
	Blanking Plug			
	Used to close-up unused openings on cover M22 x 1.5 mm	0.2	0.2	747DAM2B5

D Series AC Ammeter

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

48 mm x 48 mm – Connection on Current Transformer – Deflection 90° – Class 1.5 – Round Barrel



Description/Function	Weight kg	Volume dm ³	Catalog Number
Rail Mounted			
1A C.T. 3 x F.L.C. with 0-1-3 Scale	0.1	0.4	DMA1348R
1A C.T. 5 x F.L.C. with 0-1-5 Scale	0.1	0.4	DMA1548R
1A C.T. 6 x F.L.C. with 0-1-6 Scale	0.1	0.4	DMA1648R
5A C.T. 3 x F.L.C. with 0-1-3 Scale	0.1	0.4	DMA5348R
5A C.T. 5 x F.L.C. with 0-1-5 Scale	0.1	0.4	DMA5548R
5A C.T. 6 x F.L.C. with 0-1-6 Scale	0.1	0.4	DMA5648R
Panel Mounted			
1A C.T. 3 x F.L.C. with 0-1-3 Scale	0.1	0.4	DMA1348P
1A C.T. 5 x F.L.C. with 0-1-5 Scale	0.1	0.4	DMA1548P
1A C.T. 6 x F.L.C. with 0-1-6 Scale	0.1	0.4	DMA1648P
5A C.T. 3 x F.L.C. with 0-1-3 Scale	0.1	0.4	DMA5348P
5A C.T. 5 x F.L.C. with 0-1-5 Scale	0.1	0.4	DMA5548P
5A C.T. 6 x F.L.C. with 0-1-6 Scale	0.1	0.4	DMA5648P
AC Ammeter Accessory			
Red Adjustable Index			DM48A

Interchangeable Dials for Above Ammeter

Scale	Number	Catalog Number	Scale	Number	Catalog Number	Scale	Number	Catalog Number
For 1 A Current Transformer 3 x F.L.C.			For 1 A Current Transformer 6 x F.L.C.			For 5 A Current Transformer 5 x F.L.C.		
0 - 5 - 15	A	DA135	0 - 5 - 30	A	DA165	0 - 5 - 25	A	DA555
0 - 10 - 30	A	DA1310	0 - 10 - 60	A	DA1610	0 - 10 - 50	A	DA5510
0 - 15 - 45	A	DA1315	0 - 15 - 90	A	DA1615	0 - 15 - 75	A	DA5515
0 - 20 - 60	A	DA1320	0 - 20 - 120	A	DA1620	0 - 20 - 100	A	DA5520
0 - 30 - 90	A	DA1330	0 - 30 - 180	A	DA1630	0 - 30 - 150	A	DA5530
0 - 40 - 120	A	DA1340	0 - 40 - 240	A	DA1640	0 - 40 - 200	A	DA5540
0 - 50 - 150	A	DA1350	0 - 50 - 300	A	DA1650	0 - 50 - 250	A	DA5550
0 - 60 - 180	A	DA1360	0 - 60 - 360	A	DA1660	0 - 60 - 300	A	DA5560
0 - 75 - 225	A	DA1375	0 - 75 - 450	A	DA1675	0 - 75 - 375	A	DA5575
0 - 100 - 300	A	DA13100	0 - 100 - 600	A	DA16100	0 - 100 - 500	A	DA55100
0 - 125 - 375	A	DA13125	0 - 125 - 750	A	DA16125	0 - 125 - 625	A	DA55125
0 - 150 - 450	A	DA13150	0 - 150 - 900	A	DA16150	0 - 150 - 750	A	DA55150
0 - 200 - 600	A	DA13200	0 - 200 - 1200	A	DA16200	0 - 200 - 1000	A	DA55200
0 - 250 - 750	A	DA13250	0 - 250 - 1500	A	DA16250	0 - 250 - 1250	A	DA55250
For 1 A Current Transformer 5 x F.L.C.			For 5 A Current Transformer 3 x F.L.C.			For 5 A Current Transformer 6 x F.L.C.		
0 - 5 - 25	A	DA155	0 - 5 - 15	A	DA535	0 - 5 - 30	A	DA565
0 - 10 - 50	A	DA1510	0 - 10 - 30	A	DA5310	0 - 10 - 60	A	DA5610
0 - 15 - 75	A	DA1515	0 - 15 - 45	A	DA5315	0 - 15 - 90	A	DA5615
0 - 20 - 100	A	DA1520	0 - 20 - 60	A	DA5320	0 - 20 - 120	A	DA5620
0 - 30 - 150	A	DA1530	0 - 30 - 90	A	DA5330	0 - 30 - 180	A	DA5630
0 - 40 - 200	A	DA1540	0 - 40 - 120	A	DA5340	0 - 40 - 240	A	DA5640
0 - 50 - 250	A	DA1550	0 - 50 - 150	A	DA5350	0 - 50 - 300	A	DA5650
0 - 60 - 300	A	DA1560	0 - 60 - 180	A	DA5360	0 - 60 - 360	A	DA5660
0 - 75 - 375	A	DA1575	0 - 75 - 225	A	DA5375	0 - 75 - 450	A	DA5675
0 - 100 - 500	A	DA15100	0 - 100 - 300	A	DA53100	0 - 100 - 600	A	DA56100
0 - 125 - 625	A	DA15125	0 - 125 - 375	A	DA53125	0 - 125 - 750	A	DA56125
0 - 150 - 750	A	DA15150	0 - 150 - 450	A	DA53150	0 - 150 - 900	A	DA56150
0 - 200 - 1000	A	DA15200	0 - 200 - 600	A	DA53200	0 - 200 - 1200	A	DA56200
0 - 250 - 1250	A	DA15250	0 - 250 - 750	A	DA53250	0 - 250 - 1500	A	DA56250

D Series Actuators, Pilot Lights, Contact Blocks, Switches and Accessories

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Technical Data

Contact Block



NO Contact Block



NC Contact Block

Insulation Voltage (Ui)	500 V
Switching Capacity	
AC 15	4 A/115 V, 4 A/230 V, 2 A/500 V
DC 13	3 A/24 V, 1.7 A/42 V, 1.2 A/60 V, 0.3 A/220 V
Terminal connections	0.75 mm ² to 2.5 mm ²
Operation life	>5,000,000 Operations

LED Pilot Light



Rated Voltage	85-264 Vac, 50/60 Hz
Rating	5-15mA
Max. Power	0.33 W
Operation life	Average 100,000 Hours at +25 °C

16 A Selector Switch

Rated insulation voltage	690 V	
Thermal rating	20 A	
AC 21	16 A	
AC 15	6 A	
AC 23	3 x 230 V	4 KW
	3 x 400 V	7.5 KW
	3 x 500 V	5.5 KW
	3 x 690 V	4 KW
AC 3	3 x 230 V	3 KW
	3 x 400 V	4 KW
	3 x 500 V	5.5 KW
	3 x 690 V	3 KW
Flexible Terminal connections	2.5 mm ²	
Solid Terminal connections	4 mm ²	

16 A Selector Switch Positions — X = Contact Closed

DS116

Positions	Contacts	
	1-2	
0		
1	X	

DS216

Positions	Contacts	
	1-2	3-4
0		
1	X	X

DS316

Positions	Contacts		
	1-2	3-4	5-6
0			
1	X	X	X

DS416

Positions	Contacts			
	1-2	3-4	5-6	7-8
0				
1	X	X	X	X

DS21601

Positions	Contacts	
	1-2	3-4
1	X	
2		X

DS21602

Positions	Contacts	
	1-2	3-4
1	X	
0		
2		X

DS41601

Positions	Contacts			
	1-2	3-4	5-6	7-8
1	X		X	
2		X		X

DS41602

Positions	Contacts			
	1-2	3-4	5-6	7-8
1	X		X	
0				
2		X		X

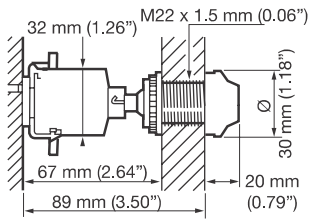
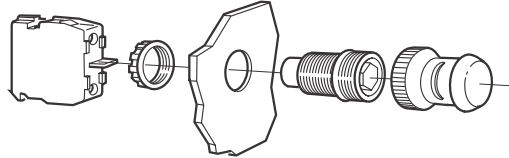
D Series Actuators, Pilot Lights, Contact Blocks, Switches and Accessories

Flameproof

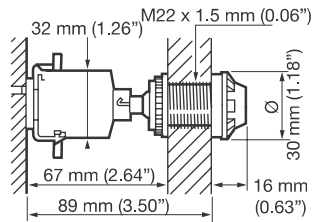
Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Dimensions in Millimeters

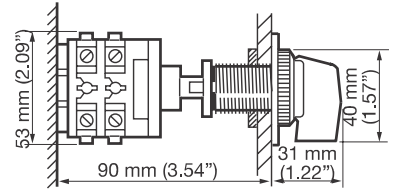
Rail Mounted



Rail Mounted Push Button

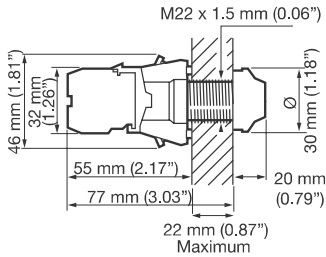
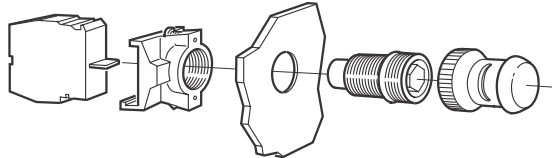


Rail Mounted Pilot Light

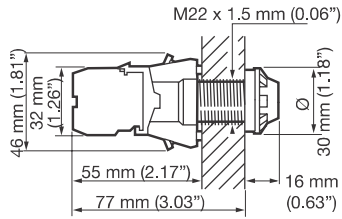


Back Mounted Switch

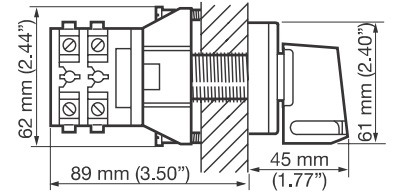
Panel Mounted



Panel Mounted Push Button

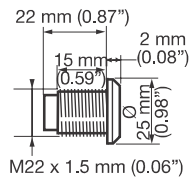


Panel Mounted Pilot Light

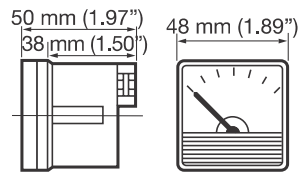


Panel Mounted Switch

Accessories



Blanking Plug



Ammeter