



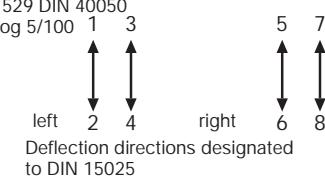
The double-handle controller D 3 is a rugged switching device according IEC 947-5-1 EN 60947 DIN VDE 0660-200 for nautical navigation applications. The modular design enables the switching device to be used universally. The D 3 is resistant to oil, maritime climate ozone and UV radiation.

**Contact complement 0,5 A 110 V AC 15 res. 1,5 A 24 V DC 13**  
**I min > 0,2 mA 2 V DC 12 Gold plated for max. load of 0,12 Watt (standard)**  
**or I max < 300 mA 0,4 V DC 12 max. capacity 0,12 Watt do not exceed!**  
**I min > 0,2 mA 2 V DC 12 max. contact reliability for very low current (special)**

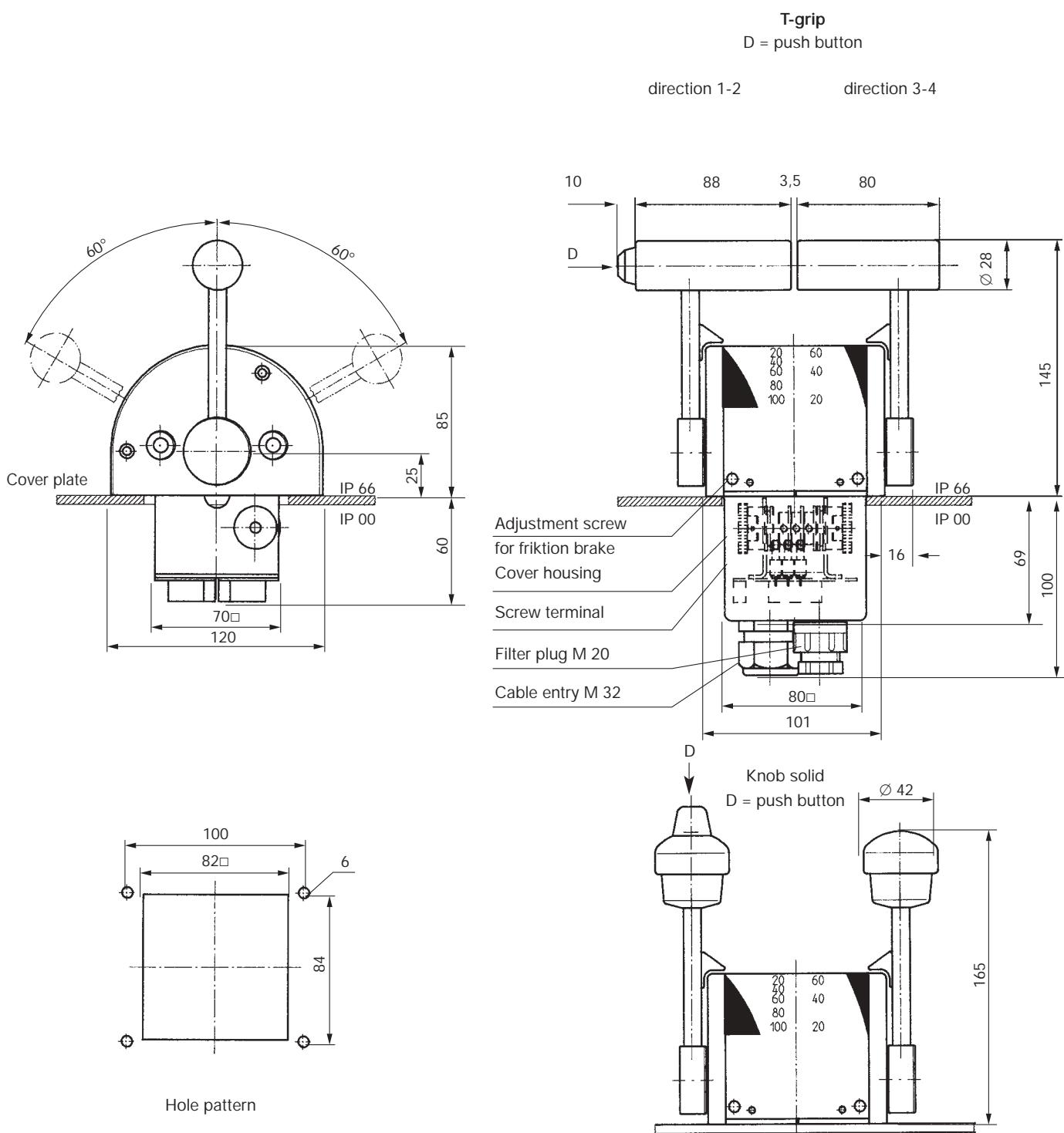
Mechanical life 10 million (operating cycles)  
 Permissible ambient temperature Operation -40° C to +60° C  
 Storage -50° C to +80° C

Climate resistance DIN IEC 68 part 2-3  
 Damp heat constant DIN IEC 68 part 2-30  
 Damp heat cyclic IP 66 IEC 529 DIN 40050  
 Degree of protection front look catalog 5/100 1 3  
 Technical data Description data look catalog 5/002

Spindle block with schematic representation of the master controller installation and deflection directions. Version shown for Left-hand side installation (right-hand side installation is mirror image).



Pos.	D 3	Type	Weight gramm	Price EURO
1				
2				
3		D 3	4000	
4				
5				
10				
11				
12	Spring return in 0-position (only 1 direction)	Z	30	
13	Friktion brake (for each direction)	R	30	
14				
20	Control-handle with knob solid			
21				
22				
23				
24	Control-handle with push button 1 NO	D	110	
25				
26	Control-handle with T-grip	Q	40	
27	Control-handle with T-grip and push button side 1 NO	QD	60	
28				
29	Control handle long or short 180, 140 mm			
30	Masterswitch switching sequence -0-	No. of contacts 1	1	20
31		2	2	40
32	Direction 1-2 and 3-4 each 1 masterswitch	3	3	60
33	Switching program according contact-arrangement MS... look catalog 5/001			
34	or to your contact-arrangement			
35				
36	Switching sequence special			
40	Potentiometer e.t.c. each masterswitch with mounted Conductive-plastic-potentiometer T 246, with centre tap linear Life 10 <sup>7</sup> switching cycles resistance 2 x 5 kOhm, 0,5 Watt wiper current max. 1 mA	P	70	
41	Prepared for mounting potentiometer shaft 6 mm adjusting-angle 2 x 75°	(P)		
42	Prepared for mounting potentiometer e.t.c. adjusting-angle variable.	(P)		
43	more Potentiometer e.t.c. look catalog 1/240...			
50	Cover housing	B	300	
51	Filter plug M 20 for air-condition		20	
52	cable entry M 32 with anti-kink protection		30	
53				
54				
55				
56				
60	Indicating label eloxal aluminium plate silvery (include in the spindle block)			
61	Engraved each 10 characters			



Example for type-sign

Cover housing

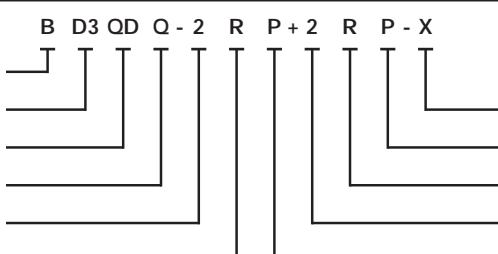
Double-handle controller

T-grip with push button direction 1-2

T-grip direction 3-4

Masterswitch direction 1-2

Friction brake direction 1-2



Special please to describe

Potentiometer e.t.c. direction 3-4

Friction brake direction 3-4

Masterswitch direction 3-4

Potentiometer e.t.c. direction 1-2