

Limit Switches, Safety Interlock Switches

Technical Data

Limit switches				AT 0...	ATR...
Contacts / switching capacity, IEC					
Rated impulse withstand voltage U_{imp}		V		6000	6000
Rated insulation voltage U_i		V		500	500
Overvoltage category / pollution degree				III/3	III/3
Rated operational current I_e					
AC-15	24 V	A		10	10
	230 V	A		6	6
	400 V	A		4	4
	500 V	A		2	2
DC-13	24 V DC	A		10	10
	110 V DC	A		1	1
	220 V DC	A		0.5	0.5
Supply frequency		Hz		≤ 400	≤ 400
Short-circuit rating in closed position (IEC/EN 60 947-5-1)		fuseless	Type	PKZM 0-10, FAZ-B6	PKZM 0-10, FAZ-B6
		maximum fuse	A gL/gG	10	10
Short-circuit rating to IEC/EN 60 947-5-1		maximum fuse	A gL/gG	6	6
Repetition accuracy of switching point		mm		± 0.02	± 0.02
Mechanical ratings					
Lifespan	standard N.O./N.C. contact	operations	$\times 10^6$	20 ²⁾	20 ²⁾
	snap-action contact	operations	$\times 10^6$	20 ²⁾	20 ²⁾
Contact temperature of roller head			°C	≤ 100	≤ 100
Mechanical shock resistance (shock duration 20 ms)	standard N.O./N.C. contact		g	25	25
	snap-action contact		g	2	2
Actuating frequency			ops./h	6000	6000
Dimensions				→ page 06/034	→ page 06/049, 054
Actuation					
Mechanical					
Actuating force at beginning/end of stroke					
	Basic units	N		1.0/8.0	1.0/8.0
	S	N		–	–
	RS	N		1.0/8.0	–
	AR (WR)	N		1.0/8.0	–
	ARG-ATR, ARK-ATR	N		1.0/8.0	1.0/8.0
	ZB/ZBZ (push in/pull out)	N		–	–
Mechanical holding force	ZBZ/G; ZBZ/W	N		–	–
	ZBZ/F; ZBZ/NW	N		–	–
	ZBZ/FG; ZBZ/NG	N		–	–
Actuating torque of rotary drives			Nm	0.2	–
Max. operating speed with DIN cams		approach angle			
	Basic units	($\alpha = 0^\circ/30^\circ$)	m/s	1/0.5	1/1
	R	($\alpha = 30^\circ$)	m/s	1.5	–
	V	($\alpha = 30^\circ, L = 125 \text{ mm}$)	m/s	1.5	–
	H	($L = 130 \text{ mm}$)	m/s	1.5	–
	AR	($\alpha = 30^\circ/45^\circ$)	m/s	1	–
	ARG-ATR	($\alpha = 30^\circ, \beta = 45^\circ$)	m/s	–	1.5/1
	ARK-ATR	($\alpha = 30^\circ$)	m/s	–	1
	WR	($\alpha = 30^\circ$)	m/s	1	–
	RS, ZRS	($\alpha = 0^\circ/30^\circ$)	m/s	1/1	–
	S, ZS	($\alpha = 0^\circ/30^\circ$)	m/s	1/0.5	–
Electromechanical					
For magnet	AC voltage (50/60 Hz)		V/VA	–	–
			V/VA	–	–
			V/W	–	–
	DC voltage		V/W	–	–
Voltage tolerance				–	–
Magnet duty factor			DF	–	–