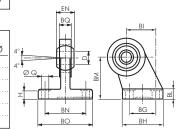
# Compact cylinders ISO 21287 - accessories

## Swivel fastening 90° spherical clips

#### for compact cylinder ISO 21287

Marning: Only use FFQ bolts to connect to TQ types!

	~ ′					. , ,								
Type steel/	Type Nox													For
GGG	AISI 316	ØQ	BG	BH	BI	BL	BM	BN	BO	EN	BQ	ØD	Н	cylinder Ø
TF 32	TF 32 ES	6.6	18	31	21	10	32	38	51	14	10.5	10	8.5	32
TF 40	TF 40 ES	6.6	22	35	24	10	36	41	54	16	12.0	12	8.5	40
TF 50	TF 50 ES	9.0	30	45	33	12	45	50	65	21	15.0	16	10.5	50
TF 63	TF 63 ES	9.0	35	50	37	12	50	52	67	21	15.0	16	10.5	63
TF 80	TF 80 ES	11.0	40	60	47	14	63	66	86	25	18.0	20	11.5	80
TF 100	TF 100 ES	11.0	50	70	55	15	71	76	96	25	18.0	20	12.5	100

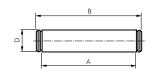


#### **Bolts for swivel fastenings**

#### for compact cylinder ISO 21287

Supply volume: Bolts complete with compression ring and cotter pins

Type zinc-	Туре				For	
plated steel	AISI 316	A	В	D	cylinder Ø	5
FF 32	FF 32 ES	46.0	53	10	32	
FF 40	FF 40 ES	53.0	60	12	40	
FF 50	FF 50 ES	61.0	68	12	50	
FF 63	FF 63 ES	71.0	78	16	63	
FF 80	FF 80 ES	91.0	98	16	80	
FF 100	FF 100 ES	111.0	118	20	100	

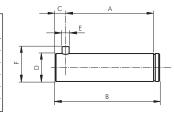


#### **Bolts for spherical clips**

### for compact cylinder ISO 21287

Supply volume: Bolts complete with compression rings

Type zinc-	Type Mor							For	
plated steel	AISI 316	А	В	С	ØD	Е	F	cylinder (	Ø
FFQ 32	FFQ 32 ES	32.5	41	4.5	10	3	14	32	
FFQ 40	FFQ 40 ES	38.0	48	6.0	12	4	16	40	
FFQ 50	FFQ 50 ES	43.0	54	6.0	16	4	20	50	
FFQ 63	FFQ 63 ES	49.0	60	6.0	16	4	20	63	
FFQ 80	FFQ 80 ES	63.0	75	6.0	20	4	24	80	
FFQ 100	FFQ 100 ES	73.0	85	6.0	20	4	24	100	



#### Cylinder switches for cylinders with continuous T-groove

Materials: Body: Plastic, threaded part: Brass, screw: Stainless steel

Connecting line: PUR cable Protection class: IP 67

Temperature range: -20°C to max. +70°C

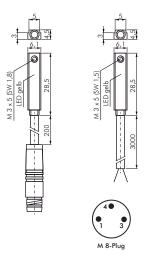
Note: The proximity switch with light emitting diode is used for the contactless position indicator of cylinders with magnetic pistons. It is mounted by pushing it in the T-groove of the cylinder and locking it using the threaded rod. **Suitable:** For cylinder ISO 15552: XL/XLE, compact cylinder: NXE/NXD compact cylinder ISO 21287: NAE/NAD/SFS, rodless cylinder: LZ (Ø 18 mm only with clamp ZSAB2 5), guide cylinder: ZDFM and other cylinders with continuous T-groove

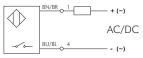


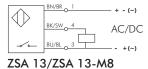
Advantages: • No mounting material required.

• Only one switch for many cylinders

	Operating		Max. switching	PUR
Туре	voltage	Switching	current/performance	connection line
2-wire reed sensor				
ZSA 12	10-230V AC	NO contact	150 mA/10 W	3 m, 2 x 0.14 mm <sup>2</sup>
	10-170V DC			
ZSA 12-M8	10-60V AC	NO contact	150 mA/10 W	0.2 m, 2 x 0.14 mm <sup>2</sup>
	10-75V DC			With cable plug M 8
3-wire reed sensor				
ZSA 13	10-30V AC/DC	NO contact (P	NP)500 mA/10 W	3 m, 3 x 0.14 mm <sup>2</sup>
ZSA 13-M8	10-30V AC/DC	NO contact (P	NP)500 mA/10 W	0.2 m, 3 x 0.14 mm <sup>2</sup>
				With cable plug M 8
fully electronic sense	or (reverse polarity prot	ection)		
ZSA 33	10-30V DC	NO contact (P	NP)130 mA/4 W	3 m, 3 x 0.14 mm <sup>2</sup>
ZSA 33-M8	10-30V DC	NO contact (P	NP)130 mA/4 W	0.2 m, 3 x 0.14 mm <sup>2</sup>
				With cable plug M 8









ZSA 33/ZSA 33-M8

ZSA 12/ZSA 12-M8

All data are considered to be unbinding reference values. We accept no liability for data selection that is not confirmed in writing. Pressure data refer, if not otherwise indicated, to liquids of Group II at +20°C.