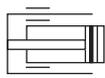


Guide cylinders



Pressure-force tables can be found on page 3



Guide cylinders for accepting lateral forces

Materials: Body and plate: Aluminium anodised, guide rods: Steel hard chrome-plated, piston rod: Steel hard chrome-plated, piston: Aluminium with magnet insertion, seal: NBR/PUR
Temperature range: -20°C to max. +80°C
Operating pressure: Max. 10 bar

Guide through self-lubricating slide bearings

Piston Ø 16 mm	Piston Ø 20 mm	Piston Ø 25 mm	Piston Ø 32 mm	Piston Ø 40 mm	Stroke
ZDFM 16/10 G	---	---	---	---	10
ZDFM 16/20 G	ZDFM 20/20 G	ZDFM 25/20 G	---	---	20
---	---	ZDFM 25/25 G	ZDFM 32/25 G	ZDFM 40/25 G	25
ZDFM 16/30 G	ZDFM 20/30 G	ZDFM 25/30 G	---	---	30
ZDFM 16/40 G	ZDFM 20/40 G	ZDFM 25/40 G	---	---	40
ZDFM 16/50 G	ZDFM 20/50 G	ZDFM 25/50 G	ZDFM 32/50 G	ZDFM 40/50 G	50
ZDFM 16/75 G	ZDFM 20/75 G	ZDFM 25/75 G	ZDFM 32/75 G	ZDFM 40/75 G	75
---	ZDFM 20/100 G	ZDFM 25/100 G	ZDFM 32/100 G	ZDFM 40/100 G	100
---	ZDFM 20/150 G	ZDFM 25/150 G	ZDFM 32/150 G	ZDFM 40/150 G	150
---	ZDFM 20/200 G	ZDFM 25/200 G	ZDFM 32/200 G	ZDFM 40/200 G	200

Piston Ø 50 mm	Piston Ø 63 mm	Piston Ø 80 mm	Piston Ø 100 mm	Stroke
ZDFM 50/25 G	ZDFM 63/25 G	ZDFM 80/25 G	ZDFM 100/25 G	25
ZDFM 50/50 G	ZDFM 63/50 G	ZDFM 80/50 G	ZDFM 100/50 G	50
ZDFM 50/75 G	ZDFM 63/75 G	ZDFM 80/75 G	ZDFM 100/75 G	75
ZDFM 50/100 G	ZDFM 63/100 G	ZDFM 80/100 G	ZDFM 100/100 G	100
ZDFM 50/150 G	ZDFM 63/150 G	ZDFM 80/150 G	ZDFM 100/150 G	150
ZDFM 50/200 G	ZDFM 63/200 G	ZDFM 80/200 G	ZDFM 100/200 G	200

Guide via ball bushings

Piston Ø 16 mm	Piston Ø 20 mm	Piston Ø 25 mm	Piston Ø 32 mm	Piston Ø 40 mm	Stroke
ZDFM 16/10 K	---	---	---	---	10
ZDFM 16/20 K	ZDFM 20/20 K	ZDFM 25/20 K	---	---	20
---	---	ZDFM 25/25 K	ZDFM 32/25 K	ZDFM 40/25 K	25
ZDFM 16/30 K	ZDFM 20/30 K	ZDFM 25/30 K	---	---	30
ZDFM 16/40 K	ZDFM 20/40 K	ZDFM 25/40 K	---	---	40
ZDFM 16/50 K	ZDFM 20/50 K	ZDFM 25/50 K	ZDFM 32/50 K	ZDFM 40/50 K	50
---	ZDFM 20/75 K	ZDFM 25/75 K	ZDFM 32/75 K	ZDFM 40/75 K	75
---	ZDFM 20/100 K	ZDFM 25/100 K	ZDFM 32/100 K	ZDFM 40/100 K	100
---	ZDFM 20/150 K	ZDFM 25/150 K	ZDFM 32/150 K	ZDFM 40/150 K	150
---	ZDFM 20/200 K	ZDFM 25/200 K	ZDFM 32/200 K	ZDFM 40/200 K	200

Piston Ø 50 mm	Piston Ø 63 mm	Piston Ø 80 mm	Piston Ø 100 mm	Stroke
ZDFM 50/25 K	ZDFM 63/25 K	ZDFM 80/25 K	ZDFM 100/25 K	25
ZDFM 50/50 K	ZDFM 63/50 K	ZDFM 80/50 K	ZDFM 100/50 K	50
ZDFM 50/75 K	ZDFM 63/75 K	ZDFM 80/75 K	ZDFM 100/75 K	75
ZDFM 50/100 K	ZDFM 63/100 K	ZDFM 80/100 K	ZDFM 100/100 K	100
ZDFM 50/150 K	ZDFM 63/150 K	ZDFM 80/150 K	ZDFM 100/150 K	150
ZDFM 50/200 K	ZDFM 63/200 K	ZDFM 80/200 K	ZDFM 100/200 K	200



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

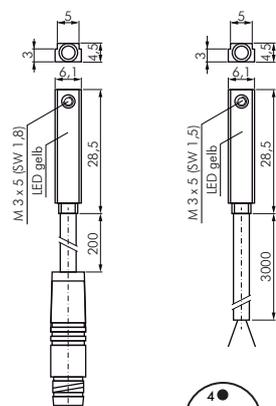
Temperature range: -20°C to max. +70°C

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.

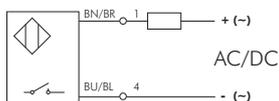
Suitable: For cylinder ISO 15552: XL/XLE, compact cylinder: NXE/NXD compact cylinder ISO 21287: NAE/NAD/SFS, rodless cylinder: LZ (Ø 18 mm only with clamp ZSAB 2), guide cylinder: ZDFM and other cylinders with **continuous** T-groove

- Advantages:**
- No mounting material required.
 - Only one switch for many cylinders

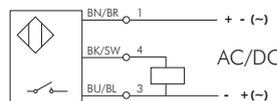
type ZSA 12



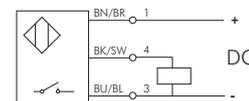
Type	Operating voltage	Switching	Max. switching current/performance	PUR connection line
2-wire reed sensor				
ZSA 12	10-230V AC 10-170V DC	NO contact	150 mA/10 W	3 m, 2 x 0.14 mm ²
ZSA 12-M8	10-60V AC 10-75V DC	NO contact	150 mA/10 W	0.2 m, 2 x 0.14 mm ² With cable plug M 8
3-wire reed sensor				
ZSA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



ZSA 12/ZSA 12-M8



ZSA 13/ZSA 13-M8



ZSA 33/ZSA 33-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.