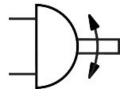
## Semi-rotary drive DRVS-16-90-P-EX4 Part number: 2536490

**FESTO** 





## **Data sheet**

Cushioning angle  O.5 deg  Swivel angle  O deg90 deg  Permissible stop radius  17 mm  Cushioning  Elastic cushioning rings/plates at both ends  Mounting position  Double-acting  Vane  Position detection  Vai proximity switch  Variants  Spigot shaft  Operating pressure  O.25 MPa0.8 MPa 2.5 bar0.8 MPa 2.5 bar	Feature	Value
Swivel angle 0 deg90 deg  Permissible stop radius 17 mm  Cushioning Elastic cushioning rings/plates at both ends  Mounting position optional Double-acting  Design Vane  Position detection Via proximity switch  Variants Spigot shaft  Operating pressure 2.5 bar8 bar  Max. swivel frequency at 0.6 MPa (6 bar, 87 ps) 3 Hz  Repetition accuracy 1 deg  Elements (see declaration of conformity) To EU Explosion Protection Directive (ATEX)  UKCA marking (see declaration outside the EU EPL Db (GB)  Explosion protection certification outside the EU EPL Db (GB)  Explosion protection  ATEX category gas II 2G  ATEX category dust II 2G  ATEX category dust II 2D  Explosion ignition protection type for dust Explosion ignition protection type for dust Explosion ambient temperature 0 °C <= Ta <= +60 °C  Operating medium Cuphralian and pilot medium Labricated operation will always be required)	Size	16
Permissible stop radius  Cushioning  Elastic cushioning rings/plates at both ends  Mounting position  Optional  Double-acting  Design  Vane  Position detection  Vai proximity switch  Variants  Operating pressure  O.25 MPaO.8 MPa 2.5 bar8 bar  Max. swivel frequency at 0.6 MPa (6 bar, 87 ps)  ARE Repetition accuracy  I deg  CE mark (see declaration of conformity)  UKCA marking (see declaration of conformity)  To EU Explosion Protection Directive (ATEX)  UKCA marking (see declaration outside the EU  EXPLOSION protection certification outside the EU  EXPLOSION protection  Zone 1 (ATEX) Zone 1 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX)  ATEX category gas  ATEX category dust  II 2D  Explosion ignition protection type for gas  Explosion ignition protection type for dust  Explosion ambient temperature  O "C < Tal < +60 °C  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Lubricated operation possible (in which case lubricated operation will always be required)	Cushioning angle	0.5 deg
Elastic cushioning Elastic cushioning rings/plates at both ends Mounting position optional  Double-acting  Double-acting  Vane  Position detection Via proximity switch  Variants Spigot shaft  Operating pressure 0.25 MPa0.8 MPa 2.5 bar8 bar  Max. swivel frequency at 0.6 MPa (6 bar, 87 psi) 3 Hz  Repetition accuracy 1 deg  EE mark (see declaration of conformity) To EU Explosion Protection Directive (ATEX)  UKCA marking (see declaration of conformity) To UK EX instructions  Explosion protection certification outside the EU EPL Db (GB)  Explosion protection  Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 2 (A	Swivel angle	0 deg90 deg
Mounting position  Mode of operation  Double-acting  Vane  Position detection  Variants  Spigot shaft  Operating pressure  0.25 MPa0.8 MPa 2.5 bar8 bar  Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)  Repetition accuracy  1 deg  CE mark (see declaration of conformity)  To EU Explosion Protection Directive (ATEX)  UKCA marking (see declaration of conformity)  To UK EX instructions  Explosion protection certification outside the EU  EPL Db (GB)  Explosion protection  Zone 1 (ATEX) Zone 1 (MEX) Zone 2 (ATEX) Zone 3 (ATEX) Z	Permissible stop radius	17 mm
Double-acting Design Vane Position detection Via proximity switch Variants Spigot shaft Operating pressure O.25 MPaO.8 MPa 2.5 bar8 bar Als Agree declaration of conformity) UKCA marking (see declaration of conformity) To EU Explosion Protection Directive (ATEX) UKCA marking (see declaration outside the EU Explosion protection certification outside the EU Explosion protection Cape 1 (ATEX) Cape 2 (ATEX) Cape 3 (BLEX) Cape 3 (BLEX) Cape 3 (BLEX) Cape 4 (BLEX) Cape 4 (BLEX) Cape 5 (BLEX) Cape 6 (BLEX) Cape 7 (BLEX) Cape 8 (BLEX) Cape 8 (BLEX) Cape 9 (BLEX) Cape 9 (BLEX) Cape 1 (BLEX) Cape 2 (BLEX) Cape 2 (BLEX) Cape 2 (BLEX) Cape 3 (BLEX) Cape 3 (BLEX) Cape 3 (BLEX) Cape 4 (BLEX) Cape 4 (BLEX) Cape 5 (BLEX) Cape 6 (BLEX) Cape 7 (BLEX) Cape 7 (BLEX) Cape 8 (BL	Cushioning	Elastic cushioning rings/plates at both ends
Position detection  Variants  Spigot shaft  Operating pressure  O.25 MPa0.8 MPa 2.5 bar8 bar  Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)  Repetition accuracy  1 deg  CE mark (see declaration of conformity)  UKCA marking (see declaration of conformity)  To EU Explosion Protection Directive (ATEX)  UKCA marking (see declaration outside the EU  Explosion protection certification outside the EU  Explosion protection  Zone 1 (MEX)  Zone 2 (ATEX)  Zone 2 (ATEX)  Zone 21 (MEX)  Zone 21 (MEX)  Zone 22 (ATEX)  ATEX category gas  II 2G  ATEX category dust  II 2D  Explosion ignition protection type for gas  Explosion ignition protection type for dust  Explosion protection type for dust  Explosion protection type for dust  Explosi	Mounting position	optional
Position detection  Via proximity switch  Variants  Spigot shaft  Operating pressure  Operating and pilot medium  Via proximity switch  Spigot shaft  Operating switch  Operating switch  Operating switch  Operating switch  Operating switch  Operating witch  Operating pressure  Operating and pilot medium  Via proximity switch  Operating pressure  Operating prossing  Operating prossing in the prossible (in which case lubricated operation will always be required)	Mode of operation	Double-acting
Avariants  Operating pressure  Operating and pilot medium  Operating and pilot medium  Operating pressure  Operating pressure  Operating pressure  Operating pressure  Operating pressure  Operating pressure  Operating and pilot medium  Operating and pilot medium  Operating pressure  Ope	Design	Vane
Operating pressure  Operating and pilot medium  Operating and pilot medium  Operating survey of the survey operating possible (in which case lubricated operation will always be required)	Position detection	Via proximity switch
2.5 bar8 bar  Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)  Repetition accuracy  1 deg  CE mark (see declaration of conformity)  UKCA marking (see declaration of conformity)  To UK EX instructions  Explosion protection certification outside the EU  EPL Db (GB) EPL Gb (GB) EPL Gb (GB)  EXPLOSION protection  Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX) ATEX category gas  II 2G  ATEX category dust  II 2D  Explosion ignition protection type for dust  Explosion ignition protection type for dust  Explosion ambient temperature  0 °C <= Ta <= +60 °C  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)	Variants	Spigot shaft
Repetition accuracy  CE mark (see declaration of conformity)  UKCA marking (see declaration of conformity)  To UK EX instructions  Explosion protection certification outside the EU  EPL Db (GB) EPL db (GB)  Explosion protection  Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 2 (IUKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX) ATEX category gas  II 2G  ATEX category dust  Explosion ignition protection type for gas  Explosion ignition protection type for dust  Explosion ambient temperature  O °C <= Ta <= +60 °C  Operating medium  Lubricated operation possible (in which case lubricated operation will always be required)	Operating pressure	
To EU Explosion Protection Directive (ATEX)  UKCA marking (see declaration of conformity)  To UK EX instructions  Explosion protection certification outside the EU  EPL Db (GB) EPL Gb (GB)  Explosion protection  Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)  ATEX category gas  II 2G  ATEX category dust  II 2D  Explosion ignition protection type for gas  Explosion ignition protection type for dust  Explosion ambient temperature  O °C <= Ta <= +60 °C  Operating medium  Lubricated operation possible (in which case lubricated operation will always be required)	Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)	3 Hz
UKCA marking (see declaration of conformity)  To UK EX instructions  Explosion protection certification outside the EU  EPL Db (GB) Explosion protection  Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX) ATEX category gas  II 2G  ATEX category dust  II 2D  Explosion ignition protection type for gas  Ex h IIC T4 Gb X  Explosion ignition protection type for dust  Explosion ignition protection type for dust  Explosion ambient temperature  O °C <= Ta <= +60 °C  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)	Repetition accuracy	1 deg
Explosion protection certification outside the EU  EPL Db (GB) EPL Gb (GB)  Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX) ATEX category gas  II 2G  ATEX category dust  II 2D  Explosion ignition protection type for gas  Ex h IIC T4 Gb X  Explosion ambient temperature  O °C <= Ta <= +60 °C  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Lubricated operation possible (in which case lubricated operation will always be required)	CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
Explosion protection  Zone 1 (ATEX) Zone 2 (ATEX) Zone 2 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX) Zone 22 (ATEX)  ATEX category gas  II 2G  ATEX category dust  II 2D  Explosion ignition protection type for gas  Ex h IIC T4 Gb X  Explosion ambient temperature  O °C <= Ta <= +60 °C  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)	UKCA marking (see declaration of conformity)	To UK EX instructions
Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX) ATEX category gas  II 2G  ATEX category dust  II 2D  Explosion ignition protection type for gas  Ex h IIC T4 Gb X  Explosion ambient temperature  O °C <= Ta <= +60 °C  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)	Explosion protection certification outside the EU	
ATEX category dust    II 2D	Explosion protection	Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX)
Explosion ignition protection type for gas  Ex h IIC T4 Gb X  Explosion ignition protection type for dust  Ex h IIIC T120°C Db X  Explosion ambient temperature  0 °C <= Ta <= +60 °C  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Lubricated operation possible (in which case lubricated operation will always be required)	ATEX category gas	II 2G
Explosion ignition protection type for dust  Ex h IIIC T120°C Db X  Explosion ambient temperature  0 °C <= Ta <= +60 °C  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)	ATEX category dust	II 2D
Explosion ambient temperature  0 °C <= Ta <= +60 °C  Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Lubricated operation possible (in which case lubricated operation will always be required)	Explosion ignition protection type for gas	Ex h IIC T4 Gb X
Operating medium  Compressed air to ISO 8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)	Explosion ignition protection type for dust	Ex h IIIC T120°C Db X
Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will always be required)	Explosion ambient temperature	0 °C <= Ta <= +60 °C
always be required)	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Corrosion resistance class CRC 1 - Low corrosion stress	Note on operating and pilot medium	
	Corrosion resistance class CRC	1 - Low corrosion stress

Feature	Value
LABS (PWIS) conformity	VDMA24364-B2-L
Suitability for the production of Li-ion batteries	Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Ambient temperature	0 °C60 °C
Max. stop force	160 N
Max. axial force	25 N
Max. radial force	30 N
Theoretical torque at 0.6 MPa (6 bar, 87 psi)	2 Nm
Permissible mass moment of inertia	0.01 kgm²
Product weight	272 g
Type of mounting	Via female thread
Pneumatic connection	M5
Note on materials	RoHS-compliant
Material drive shaft	Nickel-plated steel
Material seals	TPE-U(PU)
Material housing	Painted die cast aluminium