

Technical Specification  
3DS Pilot Valve

**Pilot valve with integral silencer and dust shroud to mount directly to dust collector diaphragm valve.**



3DS-0



3DS-300 to  
3DS-306



3DS-310 to  
3DS-324

**Suitable for**

RCAC20T3, RCAC20ST3,  
RCAC20DD3, RCAC20FS3,  
RCAC25T3, RCAC25DD3,  
RCAC25FS3 dust collector valves only.

**Installation**

Ensure o-ring is in place on diaphragm valve cover. Gripping the shroud, hand tighten 3DS pilot valve onto cover of diaphragm valve. For reliable operation, ensure supply voltage is within -10% and +15% of rated solenoid voltage. Solenoid is free to rotate on pilot valve. 3DS thread will suit 1/8 BSP T, 1/8 BSP P and 1/8 NPT ports. Replace pilot components within 1 million cycles (refer to Spare Parts).

**Construction**

Body: Al 2011-T3  
Ferrule: 302 SS  
Armature: 430FR SS  
Encapsulation: PA-6  
Insulation: Class B/130°C  
Seals: Nitrile  
Shroud: PA-6

**Operation**

Recommended on time range: 50-500ms  
Recommended time between pulses: 1 minute or greater

**Approvals**

- C-Tick
- EMC (89/336/CE)

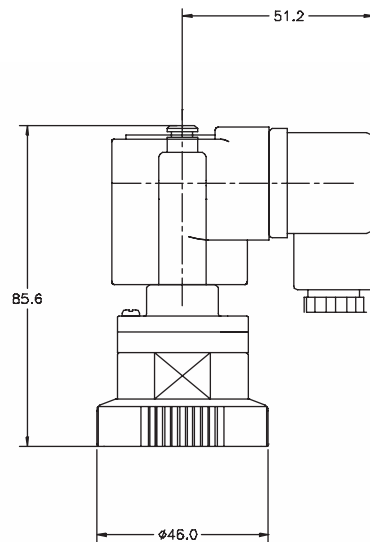
**Options**

None

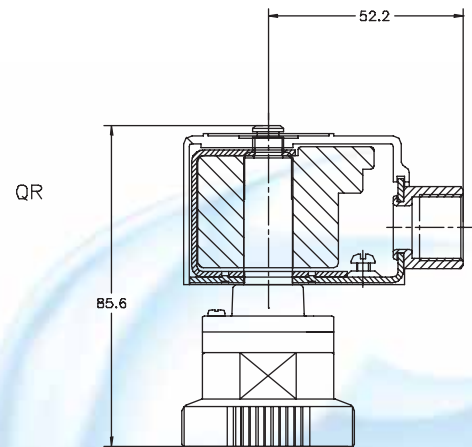
**Dimensions and Weights**

(Dimensions in mm)

Series	Weight
3DS-0	0.096 kg / 0.211 lb
3DS-300 to 3DS-306	0.246 kg / 0.542 lb
3DS-310 to 3DS-324	0.266 kg 0.586 lb



3DS-300 to 3DS-306



3DS-310 to 3DS-324

**Product Performance**

Flow	Maximum Working Pressure	Minimum Working Pressure	Temperature Min	Temperature Max	Fluid Media
0.32 Cv	860 kPa	0 kPa	-40°C	82°C	Air or inert gas
0.27 Kv	125 psi	0 psi	-40°F	180°F	

**Spare Parts**

K0380 Nitrile replacement seal, armature, spring and ferrule.  
K0384 As above in viton rubber.

Order Code and Electrical Characteristics

Model	Connection Type	Protection Class	Voltage	Power
3DS-300	DIN 43650A	IP64	200/240V 50/60Hz	23.1 VA
3DS-301	DIN 43650A	IP64	100/120V 50/60Hz	19.8 VA
3DS-302	DIN 43650A	IP64	24V 50/60 Hz	23.1 VA
3DS-303	DIN 43650A	IP64	110VDC	24 W
3DS-304	DIN 43650A	IP64	48VDC	20 W
3DS-305	DIN 43650A	IP64	24VDC	20 W
3DS-306	DIN 43650A	IP64	12VDC	20 W
3DS-310	Conduit (M20x1.5)	IP31	200/240V 50/60Hz	23.1 VA
3DS-311	Conduit (M20x1.5)	IP31	100/120V 50/60Hz	19.8 VA
3DS-312	Conduit (M20x1.5)	IP31	24V 50/60 Hz	23.1 VA
3DS-313	Conduit (M20x1.5)	IP31	24VDC	20 W
3DS-314	Conduit (M20x1.5)	IP31	12VDC	20 W
3DS-320	Conduit (1/2" NPSC)	IP31	200/240V 50/60Hz	23.1 VA
3DS-321	Conduit (1/2" NPSC)	IP31	100/120V 50/60Hz	19.8 VA
3DS-322	Conduit (1/2" NPSC)	IP31	24V 50/60 Hz	23.1 VA
3DS-323	Conduit (1/2" NPSC)	IP31	24VDC	20 W
3DS-324	Conduit (1/2" NPSC)	IP31	12VDC	20 W