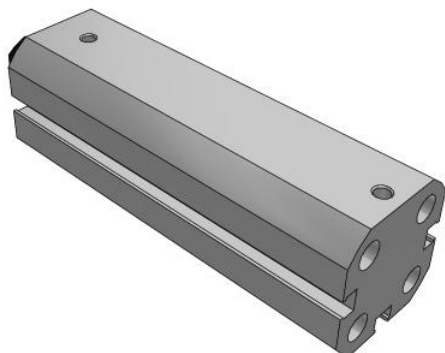
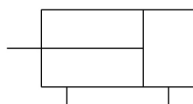




C(D)55-X1439, Compact Cylinder ISO Standard (ISO 21287), Auto Switch Mounting Groove: T-slot Type CD55B20-80M-X1439

Datasheet

European machine builders looking for a range of high performance ISO 21287 compliant compact actuators need look no further thanks to the latest development from world leaders, SMC Pneumatics, with the launch of their new generation – Series C55, double acting, single rod, air operated cylinders. Designed to meet a broad range of automation machine applications, Series C55 achieves outstanding load performance thanks to its unique rubber bumpers, piston wear ring and rod bushing which are used throughout the complete range. Therefore, European machine builders looking for an ISO compact cylinder with stroke lengths of up to 150mm including the benefits of standardised mounting dimensions, now have the perfect solution. Available in standard bore sizes of: 20, 25, 32, 40, 50, 63, 80 y 100mm, with piston speeds of between 50 – 500mm/sec, these cylinders are designed to operate using relatively low air pressure of between 0.05 – 1.0 MPa and at ambient and fluid temperatures of between minus 10°C to plus 70°C. With standardised mounting options conforming both ISO 21287 and 6431, this new cylinder range effectively complete SMC's comprehensive line up of ISO/VDMA compliant cylinders.



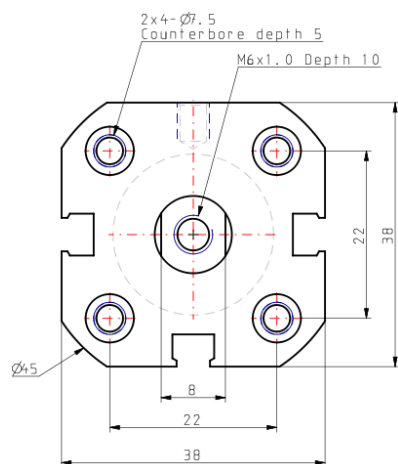
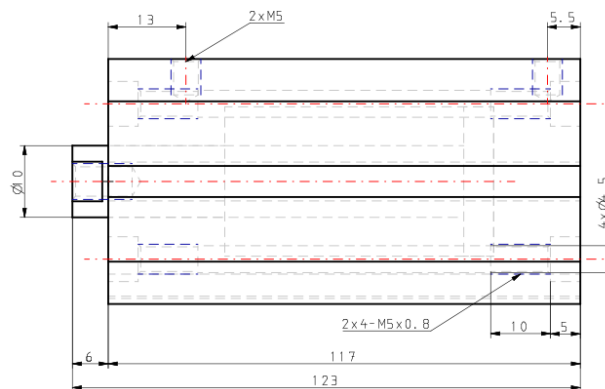
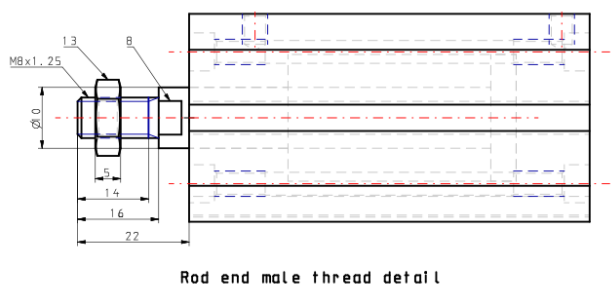
Double-acting, single-rod cylinder

Standard specifications

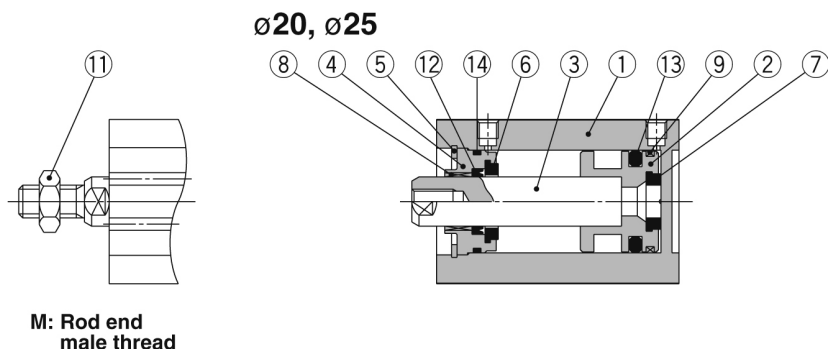
Built-in Magnet	D (With Magnet)
Mounting Style	B (Standard)
Bore Size	Ø20 mm
Stroke	80 mm
Rod End Thread	M (Rod End Male Thread)
Auto Switch	Without Autoswitch
Number	2 pcs. [Or None in the Case of No Switch]
Pressure medium	Compressed Air
Maximum temperature of pressure medium	70 °C
Maximum temperature of pressure medium with magnet	60 °C
Minimum temperature of pressure medium	-10 °C [without condensation]
Minimum temperature of pressure medium with magnet	-10 °C [without condensation]
Maximum operating pressure	1.0 MPa

Minimum operating pressure	0.05 MPa
Proof pressure	1.5 MPa
Maximum ambient temperature	70 °C
Maximum ambient temperature with magnet	60 °C
Minimum ambient temperature	-10 °C
Minimum ambient temperature with magnet	-10 °C
Conform to the European RoHS Directive	Conform
Numero of pneumatic connections	2 pcs.
Pneumatic input connection	M5
Pneumatic output connection	M5
Pneumatic exhaust connection	M5
Mode of operation of drive	Double acting
Theoretical cylinder force, advance stroke (at 0.5 MPa)	157 N
Theoretical cylinder force, return stroke (at 0.5 MPa)	118 N
Maximum piston speed	500 mm/s
Type of cushioning	Rubber bumper on both end
Piston rod end	Male Thread
Geometric form of the piston rod	Single rod
Male thread of rod end	M8
Female thread of rod end	M6
Minimum piston speed	50 mm/s
Weight	0.307 Kg

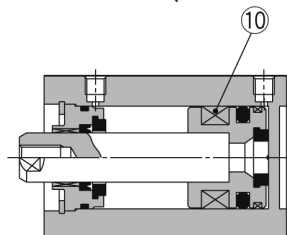
Dimensions



Constructions



With auto switch (Built-in magnet)



Component Parts

No.	Description	Material	Note
1	Cylinder tube	Aluminum alloy	Hard anodised
2	Piston	Aluminum alloy	Chromated
3	Piston rod	Stainless steel	$\varnothing 20, \varnothing 25$
		Carbon steel	$\varnothing 32$ to $\varnothing 100$ Hard chrome plated
4	Collar	Aluminum alloy	$\varnothing 20$ to $\varnothing 40$ Anodized
		Aluminum alloy casted	$\varnothing 50$ to $\varnothing 100$ Painted after chromated
5	Retaining ring	Carbon tool steel	Phosphate coated
6	Bumper A	Urethane	
7	Bumper B	Urethane	
8	Bushing	Bearing alloy	
9	Wear ring	Resin	$\varnothing 20$ to $\varnothing 63$
10	Magnet	—	
11	Rod end nut	Carbon steel	Nickel plated
12	Rod seal	NBR	
13	Piston seal	NBR	
14	Tube gasket	NBR	

Replacement Parts/Seal Kit

Bore size (mm)	Kit no.	Contents
20	CQ2B20-PS	Set of nos. at left ⑫, ⑬, ⑭
25	CQ2B25-PS	
32	CQ2B32-PS	
40	CQ2B40-PS	
50	CQ2B50-PS	
63	CQ2B63-PS	
80	CQ2B80-PS	
100	CQ2B100-PS	

* Seal kit includes ⑫, ⑬, ⑭. Order the seal kit, based on each bore size.

Additional information

Catalogue

[C55-X1439_EU.pdf](#)