Up to two questions “Funnel the Spec” to one product type.

Start at the top, follow the path down, end on the recommendation. Designed for distributors to send a customer ahead of a quote call.

QUESTION 1

What's the motion the cylinder has to deliver, stroke, mounting, and load?

STANDARD STROKE · STANDARD LOAD · NEW BUILD

QUESTION 2A

Is dimensional interchangeability across brands a future requirement?

IF YES · OEM OR EUROPEAN-SPEC

RECOMMEND

ISO 15552 Standard Cylinder

AIGNEP for value-tier, SMC C95 for spec-tier. ISO 15552 dimensional standard means future replacement isn't locked to one supplier.

IF NO · REPLACING PARKER / BIMBA / NUMATICS

RECOMMEND

NFPA Tie-Rod Cylinder

SMC NFPA tie-rod is the drop-in for North American legacy machines. Mounting bolt pattern lines up with the existing bracket.

ENVELOPE IS THE CONSTRAINT

QUESTION 2B

Short stroke in a tight envelope, or long stroke in a short envelope?

IF SHORT STROKE · TIGHT ENVELOPE

RECOMMEND

Compact Cylinder

SMC CQ2 fits where a full-length cylinder won't. Spec for pick-and-place, indexing, end-of-arm tooling under ~100 mm stroke.

IF LONG STROKE · SHORT INSTALLED LENGTH

RECOMMEND

Rodless Cylinder

SMC MY packs 500-2,500 mm of travel into roughly half the installed length of an equivalent rod-style cylinder. Material-handling slides and gantry-style transfer.

SPECIAL LOAD CONDITION

QUESTION 2C

Side-load on the rod, or rotational restraint required?

IF SIDE-LOAD · PRESS / CLAMP / HOLD-DOWN

RECOMMEND

Heavy-Duty Cast Cylinder

SMC CA2 resists rod bending under off-axis load that would destroy a tie-rod or compact body. Press work, large clamps, hold-down jigs.

IF ROD CAN'T ROTATE UNDER LOAD

RECOMMEND

Non-Rotating Cylinder

SMC MB twin-bore design holds ±0.05° rotational tolerance through full stroke. Tool holders, fixture mounts, oriented end-effectors.

Two terminals on this page aren't on the main tree because they're attach-sales, not primary selections: **position sensor** attaches to any cylinder feeding a PLC-controlled cycle, and **rebuild kit** is the first thing to quote when a customer calls about a leaking cylinder (it's the right answer roughly 80% of the time: the other 20% is a scored bore or bent rod that needs a new cylinder). Both ride alongside every primary cylinder line item.

“Spec the motion first: stroke, mount, load, envelope, and the cylinder family picks itself. Brand is the last decision, not the first.”

SPC DISTRIBUTOR PLAYBOOK CYLINDERS · HOW TO QUOTE IN ONE CALL