

Industrial



Scanner Probes



EVIDENT

Introduction to Rotating Scanner Probes

Rotating scanning probes are used with Olympus eddy current rotating scanners to perform bolthole inspections.

- Works with scanning devices to rotate the probe automatically in fastener holes
- Uses reflection differential coils with typical operating frequencies of 200 kHz–3 MHz
- Supports reduced tolerances and are highly reliable

Rotating scanner probes are available in a variety of diameters and styles to work with our rotating scanners. The SPO-5965 and SUB series probes are equipped with a 4-pin Fischer connector, while the SPO-3564 series incorporate the 4-pin LEMO connector style and are available on request.

Our scanner probes are rugged to protect them from damage if dropped or enlarged. They have flexible plastic tips that automatically compress to their original size after expanding to fit inside larger bolt holes (see the part number tables for hole size ranges). The advantage of these flexible tips is that no additional manual adjustment to the probe is necessary after a larger diameter bolt hole has been scanned.

Advantages

- Stainless steel probe with anti-wear resistance
- Plastic probes with high-wear resistance
- Increased sensitivity to small surface cracks
- Reduced signal to noise such as lift-off and edge effect
- Available in a wide range of sizes

Typical Applications

- Ideal for detecting defects in bolt holes, such as those commonly found in aircraft fuselage and pylons

BPRA Series Specifications

- Stainless-steel probe
- Probes are a fixed diameter (non-expandable)
- Unshielded sensors
- Connector: 4-pin LEMO connector
- Frequency range: 200 kHz–3 MHz

BYU, SUB, and SPO-5965 Series Specifications

- Stainless steel backshell, rugged plastic probe tips
- Unshielded sensors
- Available in imperial and metric diameters (on request)
- Connector: 4-pin universal Fischer connector
- Frequency range: 200 kHz–3 MHz



BPRA Series Probes

4-pin LEMO Part Number (Item Number)	Hole Diameter Minimum: in. (mm)	Working Length: in. (mm)
BPRA-8-SS (U8614025)	0.125 (3.17)	1.1 (27.94)
BPRA-12-SS (U8614010)	0.187 (4.74)	1.1 (27.94)
BPRA-14-SS (U8610701)	0.218 (5.53)	1.1 (27.94)
BPRA-16-SS (U8600434)	0.25 (6.35)	1.1 (27.94)
BPRA-18-SS (U8602131)	0.281 (7.13)	2 (50.8)
BPRA-20-SS (U8614237)	0.312 (7.92)	2 (50.8)
BPRA-22-SS (U8614238)	0.343 (8.73)	2 (50.8)
BPRA-24-SS (U8602133)	0.375 (9.52)	2 (50.8)
BPRA-26-SS (U8609464)	0.406 (10.3)	2 (50.8)
BPRA-28-SS (U8614236)	0.437 (11.1)	2 (50.8)
BPRA-30-SS (U8602202)	0.468 (11.9)	2 (50.8)
BPRA-32-SS (U8614232)	0.5 (12.7)	2 (50.8)
BPRA-34-SS (U8602205)	0.531 (13.4)	2 (50.8)
BPRA-36-SS (U8602126)	0.562 (14.2)	2 (50.8)
BPRA-38-SS (U8602208)	0.593 (15.08)	2 (50.8)
BPRA-40-SS (U8614019)	0.625 (15.8)	2 (50.8)
BPRA-42-SS (U8602211)	0.656 (16.6)	2 (50.8)
BPRA-44-SS (U8602134)	0.687 (17.4)	2 (50.8)
BPRA-46-SS (U8602214)	0.718 (18.2)	2 (50.8)
BPRA-48-SS (U8602128)	0.75 (19.05)	2 (50.8)

Note: SPO-3564 probe family is available on request.

Imperial Diameter (BYU Series) Probes

4-pin Fischer Part Number (Item Number)	Hole Diameter		Working Length: in. (mm)
	Minimum: in. (mm)	Maximum: in. (mm)	
BYU-8-10 (U8610217)	0.125 (3.17)	0.156 (3.96)	1.3 (33.02)
BYU-10-12 (U8610178)	0.156 (3.96)	0.187 (4.74)	1.3 (33.02)
BYU-12-16 (U8610181)	0.187 (4.74)	0.25 (6.34)	1.8 (45.7)
BYU-16-20 (U8610186)	0.25 (6.34)	0.312 (7.92)	1.8 (45.7)
BYU-20-24 (U8610190)	0.312 (7.92)	0.375 (9.52)	2 (50.8)
BYU-24-28 (U8610194)	0.375 (9.52)	0.437 (11.09)	2 (50.8)
BYU-28-32 (U8610196)	0.437 (11.09)	0.5 (12.7)	2 (50.8)
BYU-32-40 (U8610198)	0.5 (12.7)	0.625 (15.8)	2 (50.8)
BYU-40-48 (U8610204)	0.625 (15.8)	0.75 (19.03)	2 (50.8)
BYU-48-56 (U8610206)	0.75 (19.03)	0.875 (22.2)	2 (50.8)
BYU-56-64 (U8610210)	0.875 (22.2)	1 (25.4)	2 (50.8)

Note: 4-pin LEMO version available on request.



SUB Series Probes

4-pin Fischer Part Number	Hole Diameter		Working Length: in. (mm)
	Minimum: in. (mm)	Maximum: in. (mm)	
SUB-8-10 (U8600494)	0.125 (3.17)	0.156 (3.96)	1.75 (44.4)
SUB-10-12 (U8600481)	0.156 (3.96)	0.187 (4.74)	1.75 (44.4)
SUB-12-14 (U8600482)	0.187 (4.74)	0.218 (5.53)	1.75 (44.4)
SUB-14-16 (U8600483)	0.218 (5.53)	0.25 (6.35)	2 (50.8)
SUB-16-18 (U8600484)	0.25 (6.35)	0.281 (7.13)	2 (50.8)
SUB-18-20 (U8600485)	0.281 (7.13)	0.312 (7.92)	2 (50.8)
SUB-20-24 (U8600486)	0.312 (7.92)	0.375 (9.52)	2 (50.8)
SUB-24-28 (U8600487)	0.375 (9.52)	0.437 (11.09)	2 (50.8)
SUB-28-32 (U8600488)	0.437 (11.09)	0.5 (12.7)	2 (50.8)
SUB-32-36 (U8600489)	0.5 (12.7)	0.562 (14.2)	2 (50.8)
SUB-36-40 (U8600490)	0.562 (14.7)	0.625 (15.8)	2 (50.8)
SUB-40-44 (U8600491)	0.625 (15.8)	0.687 (17.4)	2 (50.8)
SUB-44-48 (U8600492)	0.687 (17.4)	0.75 (19.05)	2 (50.8)
SUB-48-52 (U8600493)	0.75 (19.05)	0.812 (20.6)	2 (50.8)
SUB-52-56 (U8600610)	0.812 (20.6)	0.875 (22.2)	2 (50.8)
SUB-56-60 (U8600611)	0.875 (22.2)	0.937 (23.7)	2 (50.8)
SUB-60-64 (U8600612)	0.937 (23.7)	1 (25.4)	2 (50.8)

SPO-5965 Series Probes

Part Number	Hole Diameter		Working Length: in. (mm)
	Minimum: in. (mm)	Maximum: in. (mm)	
9230531 (U8610280)	0.125 (3.17)	0.156 (3.96)	1.75 (44.4)
9230061.00 (U8610267)	0.156 (3.96)	0.187 (4.74)	1.75 (44.4)
9219979.00 (U8610231)	0.187 (4.74)	0.218 (5.53)	1.75 (44.4)
9219980.00 (U8610232)	0.218 (5.53)	0.25 (6.35)	2 (50.8)
9219981.00 (U8610233)	0.25 (6.35)	0.281 (7.13)	2 (50.8)
9219982.00 (U8610234)	0.281 (7.13)	0.312 (7.92)	2 (50.8)
9219983.00 (U8610235)	0.312 (7.92)	0.375 (9.52)	2 (50.8)
9219978.00 (U8610230)	0.375 (9.52)	0.437 (11.09)	2 (50.8)
9219984.00 (U8610236)	0.437 (11.09)	0.5 (12.7)	2 (50.8)
9219985.00 (U8610237)	0.5 (12.7)	0.562 (14.2)	2 (50.8)
9230156.00 (U8610252)	0.562 (14.7)	0.625 (15.8)	2 (50.8)
9230157.00 (U8610253)	0.625 (15.8)	0.687 (17.4)	2 (50.8)
9230158.00 (U8610254)	0.687 (17.4)	0.75 (19.05)	2 (50.8)
9230159 (U8610255)	0.75(19.05)	0.812 (20.6)	2 (50.8)
9231101 (U8610298)	0.812 (20.6)	0.875 (22.2)	2 (50.8)
9231090 (U8610296)	0.875 (22.2)	0.937 (23.7)	2 (50.8)
9231421 (U8610313)	0.937 (23.7)	1 (25.4)	2 (50.8)

Metric Scanner Probes

Part Number (Item Number)	Probe Diameter: mm	Working Length: mm
SEU-2.2-35 [U8250329]	2.2	35
SEU-2.3-35 [U8609313]	2.3	35
SEU-2.4-35 [U8250330]	2.4	35
SEU-2.5-35 [Q6000054]	2.5	35
SEU-2.7-35 [U8609314]	2.7	35
SEU-2.8-35 [Q6000052]	2.8	35
SEU-2.9-35 [Q6000055]	2.9	35
SEU-3.0-35 [U8602076]	3.9	35
SEU-3.1-35 [U8609315]	3.1	35
SEU-3.2-35 [Q6000004]	3.2	35
SEU-3.5-35 [U8609316]	3.5	35
SEU-3.6-35 [U8602077]	3.6	35
SEU-3.8-35 [Q6020034]	3.8	35
SEU-3.9-35 [U8609317]	3.9	35

Part Number (Item Number)	Probe Diameter: mm	Working Length: mm
SEU-5.5-35 [U8609323]	5.5	35
SEU-5.6-35 [U8602079]	5.6	35
SEU-5.9-35 [U8609325]	5.9	35
SEU-5.9-51 [U8602062]	5.9	51
SEU-6.0-35 [U8602080]	6.0	35
SEU-6.2-35 [U8609326]	6.2	35
SEU-6.3-35 [U8609327]	6.3	35
SEU-6.4-35 [U8602081]	6.4	35
SEU-6.6-35 [U8609328]	6.6	35
SEU-6.7-35 [U8609329]	6.7	35
SEU-6.7-51 [U8602063]	6.7	51
SEU-7.0-35 [U8609330]	7.0	35
SEU-7.1-35 [U8609331]	7.1	35
SEU-7.3-35 [Q6020038]	7.3	35

Metric Scanner Probes

Part Number (Item Number)	Probe Diameter: mm	Working Length: mm
SEU-9.4-35 [U8609340]	9.4	35
SEU-9.5-35 [U8609341]	9.5	35
SEU-9.8-35 [U8609342]	9.8	35
SEU-9.9-35 [U8609343]	9.9	35
SEU-10.2-35 [U8609344]	10.2	35
SEU-10.3-35 [U8609345]	10.3	35
SEU-10.6-35 [U8602083]	10.6	35
SEU-10.7-35 [U8609346]	10.7	35
SEU-11.0-35 [U8609347]	11.0	35
SEU-11.1-35 [U8609348]	11.1	35
SEU-11.4-35 [U8609350]	11.4	35
SEU-11.5-35 [U8609351]	11.5	35
SEU-11.8-35 [U8609353]	11.8	35
SEU-14.3-35 [U8609368]	14.3	35
SEU-14.4-35 [Q6020040]	14.4	35
SEU-14.5-35 [U8602088]	14.5	35
SEU-14.7-35 [U8609366]	14.7	35
SEU-15.1-35 [U8609365]	15.1	35

Part Number (Item Number)	Probe Diameter: mm	Working Length: mm
SEU-15.5-35 [U8609364]	15.5	35
SEU-15.7-35 [Q6020023]	15.7	35
SEU-15.8-35 [U8602090]	15.8	35
SEU-15.9-35 [U8609363]	15.9	35
SEU-16.2-35 [U8602091]	16.2	35
SEU-16.3-35 [U8609370]	16.3	35
SEU-16.7-35 [U8862751]	16.7	35
SEU-17.1-35 [U8609371]	17.1	35
SEU-17.5-35 [U8609372]	17.5	35
SEU-22.0-35 [Q6020043]	22.0	35
SEU-22.2-35 [U8609379]	22.2	35
SEU-22.6-35 [U8609385]	22.6	35
SEU-23.0-35 [U8609386]	23.0	35
SEU-23.4-35 [U8609387]	23.4	35
SEU-23.8-35 [U8609388]	23.8	35
SEU-24.2-35 [U8609389]	24.2	35
SEU-24.6-35 [U8609390]	24.6	35
SEU-25.0-35 [U8609391]	25.0	35
SEU-25.4-35 [U8609392]	25.4	35

Countersink Probes

Rotating 100-degree countersink scanner probes are used with mechanical devices for automatically rotating the probe to inspect the countersink. These probes have a .125-inch (3.175 mm) pilot hole (hole diameter indicates pilot hole size). They use reflection differential coils with operating frequencies of 200 kHz to 3 MHz. Example: CSU100-8-SS.

Counterbore Probes

Counterbore scanner probes are used to inspect counterbore holes. These probes use reflection differential coils with operating frequencies of 200 kHz to 3 MHz. They are ideal for flat-bottom holes and looking for cracks at the bottom surface.

Specifications

- Stainless steel backshell, plastic probe tips, or all stainless-steel versions
- Unshielded sensors
- Connector: 4-pin universal Fischer connector
- Frequency range: 200 kHz–3 MHz

Note: Specialty countersink and counterbore probes available on request.

How to Order

For pricing or for additional information, consult your Evident sales representative.