

Universal Minimess® Oil Sampling Kit

- Safe & easy to use
Minimess® sampling points
- Take oil samples up to
630 bar working pressure
- Extract oil samples from low or
non pressurised vessels & tanks
- A wide range of fittings & adaptors
allow for Minimess® sampling points
to be easily installed.
- Allows for leak free sampling of
a wide oil viscosity range



The Universal Minimess® oil sampling kit contains all you need to be able to extract oil samples safely and easily from almost anywhere on your machine or plant. *The ultimate sampling kit for service Engineers!*

Plant Engineering

Industrial machinery

Automotive

Agricultural & Construction

Process machinery

3101-20-00.USK Universal Oil Sampling Kit

Kit Contents / spares list



- 1 High Pressure 630 bar Minimess® 1620 Sampling Hose 1.5m long
- 2 Vacuum Minimess® 1604 Sampling Hose 1.5m long
- 3 100ml plastic oil sampling bottle
- 4 690 bar (10,000psi) rated oil sampling tap with Minimess® 1620 hose connection
- 5 Vacuum Thief Pump for tank / gearbox oil sampling via Minimess® 1604 sampling probe & vacuum hose.
- 6 1/4", 3/8" & 1/2" bonded sealing washers
- 7
- 8
- 9 1/4" BSP male / swivel female Minimess® 1620 sampling point tee adaptor
- 10 3/8" BSP male / swivel female Minimess® 1620 sampling point adaptor
- 11 1/2" BSP male / swivel female Minimess® 1620 sampling point adaptor
- 12 3/4" BSP male / swivel female Minimess® 1620 sampling point adaptor
- 13 Minimes 1620® sampling point to 1/4" BSP male thread with captive seal.
- 14 1/4" BSP female to 3/8" BSP male thread adaptor.
- 15 1/4" BSP female to 1/2" BSP male thread adaptor.
- 16 Minimess® 1604 sampling point with 6" (150mm) long sampling probe. 1/4" BSP male screw in thread with captive seal.

Minimes Test Point Technical Data

Max. working pressure 63 Mpa (630 bar) according to ISO 15171-2

Material

Coupling body and metal cap made of steel 1.0718

NOTE: UNLESS STATED OTHERWISE, ALL PRODUCTS SHOWN IN THIS CATALOGUE ARE MADE OF FREE-CUTTING STEEL 1.0718.

Sealing

Internal primary and secondary sealing as well as sealing for screw-in threads are made of NBR (Perbunan). Option in FKM (Viton). EDM available on request

Vibration

NBR (Perbunan) and/or FKM (Viton) O-ring to prevent cap loosening due to vibration.

Screw-in thread

Large range of threads are available.

Media application

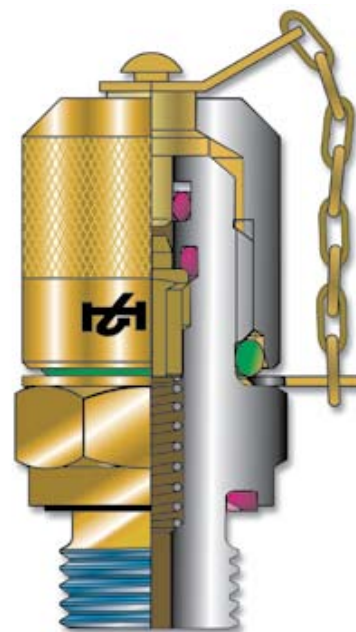
Suitable for hydraulic- and other oils of a mineral oil basis.

Temperature ranges for applications with metal cap (standard)

Sealing made of NBR (Perbunan): -25°C to +100°C, for a short time, can be also used up to +120°C

Sealing made of FKM (Viton) is an option: -20°C to +200°C

Application with plastic cap (option) and for both sealing materials: -20°C to +100°C

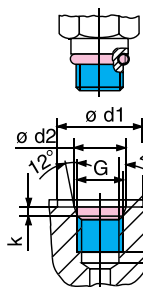


Thread form data



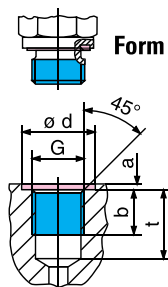
Form C

Thread port according to DIN 3852 part 1 and part 2, form Z (sealed with suitable sealant)



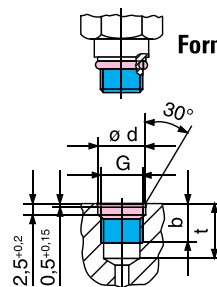
Form E

Thread port according to SAE J 514 (UNF) or according to ISO 6149-1 (sealed with O-ring)



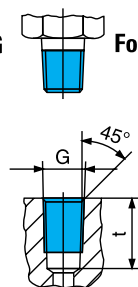
Form F

Thread Port up to Ø d according to DIN 3852 part 1 and part 2, form X (sealed with flat seal)



Form G

Thread Port according to HYDROTECHNIK standard N901-01-14 (sealed with O-ring)



Form H

Thread Port according to ANSI/ASME B 1.20.1-1983 (self sealing thread)

SAE J 514 (UNF)

G	b	t
ISO 7/1 - R1/8	5.5	9.5
ISO 7/1 - R1/4	8.5	13.5

G	d ₁	d ₂	b	k	t	a	z°
7/16-20 UNF	21.0	12.4	11.5	2.4	14.0	1.6	12.0
1/2-20 UNF	23.0	14.0	11.5	2.4	14.0	1.6	12.0
9/16-18 UNF	25.0	15.6	12.7	2.5	15.5	1.6	12.0
3/4-16 UNF	30.0	20.6	14.3	2.5	17.5	2.4	12.0

ISO 6149-1

G	d ₁	d ₂	b	k	t	a	z°
M 10 x 1	19.0	11.1	10.0	1.6	11.5	1.0	12.0
M 12 x 1.5	19.0	13.8	11.5	2.4	14.0	1.5	15.0
M 14 x 1.5	21.0	15.8	11.5	2.4	14.0	1.5	15.0
M 16 x 1.5	24.0	17.8	13.0	2.4	15.5	1.5	15.0

G	d	a	b	t
ISO 228-G 1/8	15.0	1.0	8.0	13.0
ISO 228-G 1/4	20.0	1.5	12.0	18.5
ISO 228-G 3/8	23.0	2.0	12.0	18.5
ISO 228-G 1/2	27.0	2.5	14.0	22.0
M 12 x 1.5	18.0	1.5	12.0	18.5
M 14 x 1.5	20.0	1.5	12.0	18.5
M 16 x 1.5	22.0	1.5	12.0	18.5

G	d	b	t
M 8 x 1	9.5	9.0	13.0
M 10 x 1	11.5	9.0	13.0

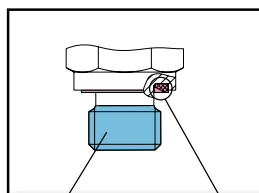
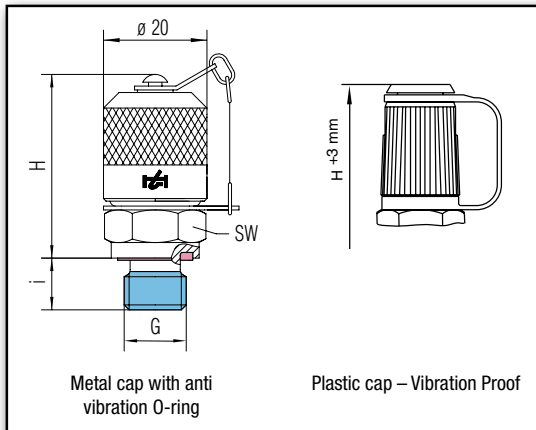
G	t
1/8 NPTF	12.0
1/4 NPTF	17.5
1/2 NPTF	22.9

Minimess® I 620 Test / Sampling Points

MINIMESS® 1620 or 'Test 20' is the most commonly used test point across all industries. The wide choice of materials and connection threads make this the most versatile range available



Lifetime leak-free guarantee



Thread G	Seal type A	Torque Nm	p max Bar	H mm	i mm	SW mm	Free cutting steel 1.0718	Free cutting steel 1.0718	Stainless steel 1.4571
							Metal cap	Plastic cap	Metal cap
							Part number with NBR – sealing	Part number with NBR – sealing	Part number with FKM – sealing
M 8 x 1*	Form G	6	250	41	8.5	17	2103-01-32.00	2103-30-32.00	on request
M 10 x 1	Form G	12	630	37.5	8.5	17	2103-01-33.00	2103-30-33.00	2703-01-33.10
M 12 x 1.5	Form F	30	630	36	10	17	2103-01-13.00	2103-30-13.00	on request
M 14 x 1.5	Form F	40	630	36	10	19	2103-01-14.00	2103-30-14.00	2703-01-14.10
M 16 x 1.5	Form F	60	630	36	10	22	2103-01-15.00	2103-30-15.00	on request
M 14 x 1.5	Form E*	45	630	35.5	11	19	2103-01-96.00	2103-30-96.00	on request
ISO 228-G 1/8	Form F	18	400	38	8	17	2103-01-17.00	2103-30-17.00	2703-01-17.10
ISO 228-G 1/4	Form F	40	630	36	10	19	2103-01-18.00	2103-30-18.00	2703-01-18.10
ISO 228-G 3/8	Form F	60	630	36	10	22	2103-01-16.00	2103-30-16.00	on request
1/8 NPTF	Form H	-	400	33	9.5	17	2103-01-46.00	2103-30-46.00	on request
1/4 NPTF	Form H	-	630	33	16.5	17	2103-01-47.00	2103-30-47.00	2703-01-47.10
7/16-20 UNF	Form E	20	630	37	9	17	2103-01-21.00	2103-30-21.00	on request
9/16-18 UNF	Form E	35	630	36	10	19	2103-01-53.00	2103-30-53.00	on request
ISO 7/I-R 1/8	Form C	-	400	33	13	17	2103-01-40.00	2103-30-40.00	on request
ISO 7/I-R 1/4	Form C	-	630	33	13	17	2103-01-41.00	2103-30-41.00	on request

Option

For sealing in FKM (Viton) Exchange end digits from 00 to 10

Other materials, designs, sealing and screw-in threads on request.
We reserve the right to carry out technical modifications.

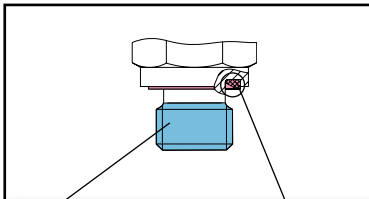
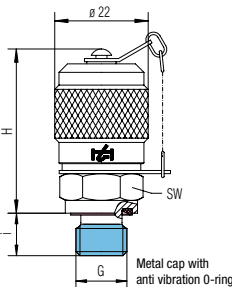

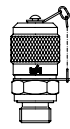
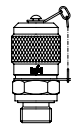
* M8x1 – Please do not use for new machinery design.

** Form E – ISO 6149-2.

Minimess® I604 Test / Sampling Points

1604 Minimess test points - 4mm nom. bore - M16 buttress thread

For use with viscous fluids e.g. gear oils or for quicker flow requirements

						Free cutting steel 1.0718  Metal cap		Stainless steel 1.4571  Metal cap	
Thread G	Type of sealing A	Torque Nm	p max Bar	H mm	i mm	SW mm	Part number with NBR sealing	Part number with NBR sealing	
M 10 x 1	Form G	12	400	43	8.5	17	2106-01-33.00	on request	
M 14 x 1.5	Form F	40	400	40	10	17	2106-01-14.00	on request	
ISO 228-G 1/4	Form F	40	400	40	10	19	2106-01-18.00	2706-01-18.10	

Option

For FKM (Viton) exchange end digits from 00 to 10

BSP Inline Test Point Tee Adaptors

BSP Parallel male x swivel female (60° cone sealing) test point adaptor c/w I 620 Minimess™ test point fitted.

In line SNA Minimess® pressure test point adaptors are a simple and easy method of adding test points into a system.

Suitable for OEM build or retro-fitting to existing systems, SNAs fit between hose joints or manifold and hose.

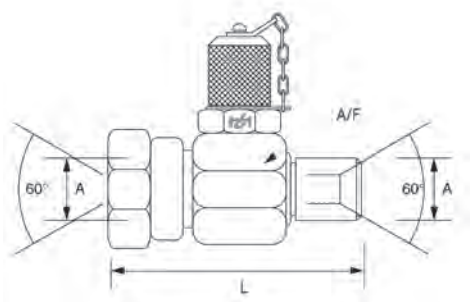
Special configurations are available for OEM applications. Call for details.

Also available in JIC, ORFS & Metric formats.



FEATURES:

- Test under pressure using Hydrotechnik leak free minimess connections up to 630 bar.
- Connect & disconnect under full system pressure.
- In-line test point tees offer excellent system access versatility.



Now available in stainless steel



BSP Format

A	L(mm)	A/F(mm)	Part number	Part number
1/4"	48	25.4	SNA01	SNA01-SS
3/8"	54	25.4	SNA02	SNA02-SS
1/2"	58	27	SNA03	SNA03-SS
3/4"	64	27	SNA04	SNA04-SS
5/8"	63	30	SNA05	on request
1"	74	41	SNA06	SNA06-SS
1 1/4"	74	50	SNA07	on request
1 1/2"	82	55	SNA08	on request

Also available with I215 & I615 test points fitted e.g for I215 series test point fitted to SNA01 - order as SNA01-I215.

Minimess® Oil Sampling Adaptors

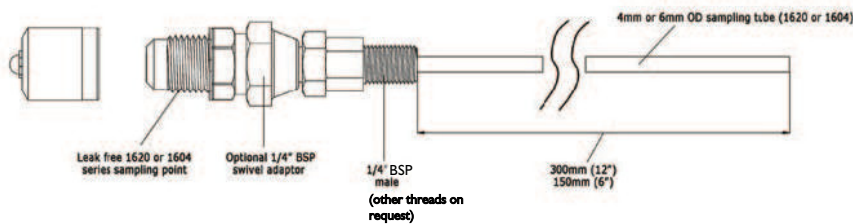
Precise sampling of Oils from low or unpressurised systems



lifetime leak
free guarantee

Features:

- Consistently sample active oil from gearboxes and reservoirs. Avoids problems caused by sedimentation or settled oil to give accurate representative oil sample.
- Uses a compact reusable thread-on probe and disposable tubing to avoid cross contamination.
- Installs easily into drain, fill or sampling pipe ports.
- Copper, Steel or Stainless Steel tubing provides full flow with less purge time for a variety of fluids.
- Swivel options (-S) available for location of bent tubes in confined locations.
- Uses Minimess® I 620 test points for leak free peace of mind with optional I 604 version (4mm nominal bore for thicker oils e.g gearbox oils)



Use caution to avoid
placing tubing in the
path of moving parts



Minimess® I 620 series
(2mm nom. bore)

Order codes:

F = G1/4" BSP fixed male
S = Swivel female adaptor (on request)

CU = Copper sampling tube
MS = Mild steel sampling tube
SS = Stainless steel sampling tube

2103 - **S** - **12** - **SS**

2103 = I 620 series (2mm nom. bore)
2106 = I 604 series (4mm nom. bore)

12 = 12" long tube
6 = 6" long tube



Minimess® I 604 series
(4mm nom. bore)
for viscous fluids e.g
gearbox oil

Accessory codes:

Part number	Description
Thief-I 620	Minimess® I 620 Vacuum sampling pump
Thief-I 604	Minimess® I 604 Vacuum sampling pump
OSB-loose	100ml clear sample bottle
OSB I	Full laboratory oil analysis report

Vacuum
sampling
pump with 8"
flexible tube
& Minimess®
connector

