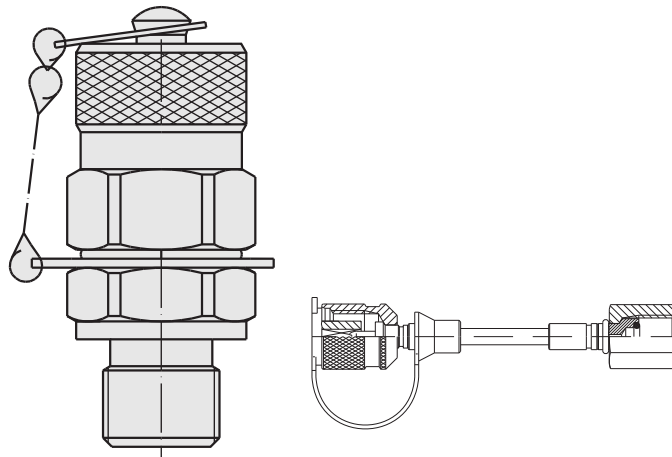
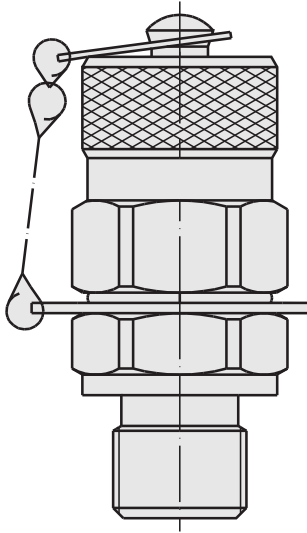


TEST POINTS (Minimess)

Product	Page
Test points technical data	426
Test points BSP, Metric, UNF	426
Test points DKO L / S	427
Test points DIN2353 L / S	428
Test points JIC swivel	428
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Test point Bulkhead Connection	429
Test points gauge connection	430
Test Hoses	431-432
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Test boxes, complete	434



TEST POINTS ((Minimess))



TECHNICAL DATA ISO 15171-2 08/2000
 Reference norm 630 bar max.
 Working pressure >2520 bar
 Burst pressure

APPLICATIONS

Pressure check in hydraulic systems
 Lubrication
 Air bleeding
 Oil samples drawing
 Microhydraulics

FLUIDS

Hydraulic oils and mineral-based oils
 Compatibility with other fluids: on request

MATERIALS

Test point's body and cap made of steel 9SMnPb28K
 Anti-vibration sealing made of BUNA N. (optional)
 Stainless steel AISI 316 - DIN 14436: on request

FINISH TREATMENT

Zinc – Nickel or SS 316

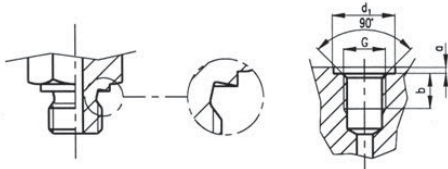
WORKING TEMPERATURE:

WITH STEEL CAP

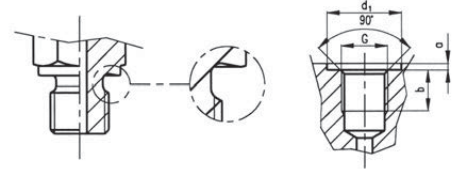
with sealing in BUNA N. -30°C up to +120°C
 with sealing in VITON -20°C up to +200°C

SEALING TYPES ACCORDING TO DIN - ISO - ANSI - BS - JIS

FORM A
 Sealing by metal ring



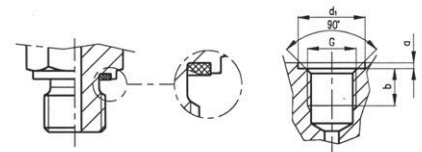
FORM B
 Mechanical sealing



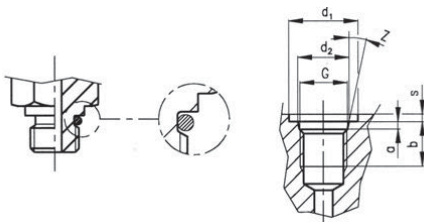
FORM C
 Sealing by thread



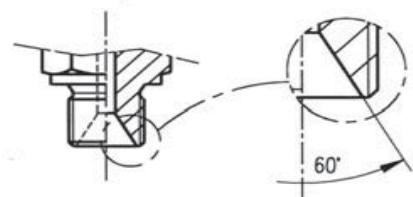
FORM E
 Sealing by ED soft seal



FORM F
 Sealing by O-ring

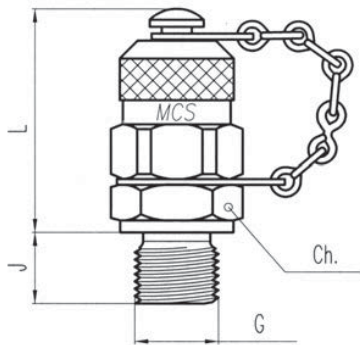


BS 5200(BSP)
 Mechanical sealing



TEST POINTS (Minimess)

TEST POINTS BSP-MM-NPT-UNF-JIS



Check-coupling with metal cap

Thread G	Sealing type	p max.	Dimensions mm			With metal cap
			L	Ch.	J±0,2	
M10 x 1	FORM A	400 bar	35	17	8	
1/4" BSP	FORM A	400 bar	35	19	12	
M12 x 1.5	FORM B	400 bar	35	17	12	
1/8" BSP	FORM B	400 bar	35	17	8	
1/4" BSP	FORM B	400 bar	35	19	12	
1/8" BSP	FORM C	400 bar	33	17	8	
1/4" BSP	FORM C	630 bar	33	17	12	
3/8" BSP	FORM C	630 bar	33	22	12	
1/8" NPT	FORM C	400 bar	33	17	9.5	
1/4" NPT	FORM C	630 bar	33	17	14	
3/8" NPT	FORM C	630 bar	33	22	14.2	
M10 x 1	FORM E	400 bar	35	17	8	
M12X1.5	FORM E	630 bar	35	17	12	
M14 x 1.5	FORM E	630 bar	35	19	12	
M16X1.5	FORM E	630 bar	35	22	12	
1/8" BSP	FORM E	400 bar	35	17	8	
1/4" BSP	FORM E	630 bar	35	19	12	
3/8" BSP	FORM E	630 bar	35	22	12	
M8X1	FORM F	250 bar	35	17	8.5	
M10X1	FORM F	630 bar	35	17	9.5	
M14X1.5	FORM F	630 bar	35	19	12	
7/16"-18 UNF	FORM F	630 bar	35	17	11	
1/2"-20 UNF	FORM F	630 bar	35	17	11	
9/16"-18 UNF	FORM F	630 bar	35	19	12	
3/4"-16 UNF	FORM F	630 bar	35	22	14	
1/4" JIS	FORM F	630 bar	35	19	12	
1/4" BSP	BS 5200	630 bar	35	19	12	

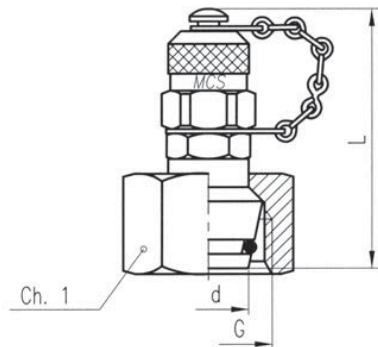
Material: Mild Steel or Stainless Steel
Part No.: Mild Steel
Stainless Steel: add -316.

TEST POINTS (Minimess)

TEST POINTS

DKO L/S 24° SEALING CONE

According to DIN 3865
DIN 2353/ISO 8434-1



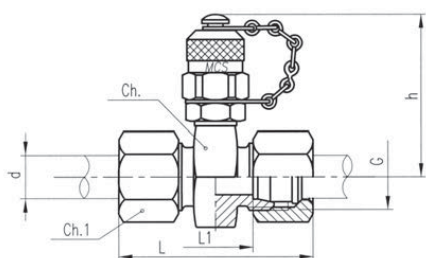
Series	Thread	p max.	Dimensions		With metal cap
			mm	mm	
d mm	G		L	Ch.1	
L 6	M 12 x 1,5	315 bar	52,5	17	
L 8	M 14 x 1,5	315 bar	52,5	17	
L 10	M 16 x 1,5	315 bar	55,5	19	
L 12	M 18 x 1,5	315 bar	55,5	22	
L 15	M 22 x 1,5	315 bar	60	27	
L 18	M 26 x 1,5	315 bar	61	32	
L 22	M 30 x 2	160 bar	59,5	36	
L 28	M 36 x 2	160 bar	66	41	
L 35	M 45 x 2	160 bar	71,5	50	
L 42	M 52 x 2	160 bar	74,5	60	
S 6	M 14 x 1,5	630 bar	52,5	17	
S 8	M 16 x 1,5	630 bar	54,5	19	
S 10	M 18 x 1,5	630 bar	55,5	22	
S 12	M 20 x 1,5	630 bar	55,5	24	
S 14	M 22 x 1,5	630 bar	58,5	27	
S 16	M 24 x 1,5	400 bar	61,5	30	
S 20	M 30 x 2	400 bar	60,5	36	
S 25	M 36 x 2	400 bar	65,5	46	
S 30	M 42 x 2	400 bar	67,5	50	
S 38	M 52 x 2	315 bar	69,5	60	

Material: Mild Steel or Stainless Steel
Part No.: Mild Steel
Stainless Steel: add -316,

TEST POINTS (Minimess)

TEST POINTS DIN 2353 L / S TUBE CONNECTION

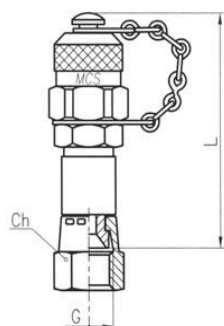
According to DIN 2353/ISO 8434-1



Series	Thread	p max.	Dimensions mm					With metal cap
			L	L1	Ch.	Ch.1	h	
L 6	M 12 x 1,5	315 bar	54	20	19	14	45,5	
L 8	M 14 x 1,5	315 bar	54	20	24	17	49	
L 10	M 16 x 1,5	315 bar	59	22	22	19	48	
L 12	M 18 x 1,5	315 bar	59	22	24	22	49	
L 15	M 22 x 1,5	315 bar	64	25	27	27	50,5	
L 18	M 26 x 1,5	315 bar	64	25	30	32	62	
L 22	M 30 x 2	160 bar	71	25	32	36	53	
L 28	M 36 x 2	160 bar	69	26	41	41	57,5	
L 35	M 45 x 2	160 bar	80	25	50	50	60	
L 42	M 52 x 2	160 bar	80	27	60	60	64,5	
S 6	M 14 x 1,5	630 bar	58	24	19	17	46,5	
S 8	M 16 x 1,5	630 bar	59	24	22	19	48	
S 10	M 18 x 1,5	630 bar	63	24	22	22	48	
S 12	M 20 x 1,5	630 bar	63	24	22	24	48	
S 14	M 22 x 1,5	630 bar	71	24	24	27	49	
S 16	M 24 x 1,5	400 bar	71	25,5	27	30	50,5	
S 20	M 30 x 2	400 bar	78	25,5	36	36	55	
S 25	M 36 x 2	400 bar	82	25,5	41	46	57,5	
S 30	M 42 x 2	400 bar	91	27	46	50	60	
S 38	M 52 x 2	315 bar	100	29	55	60	64,5	

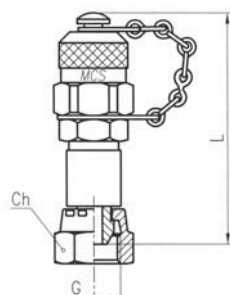
TEST POINTS SWIVEL JIC 37°

According to ISO 8434-2/SAE J514



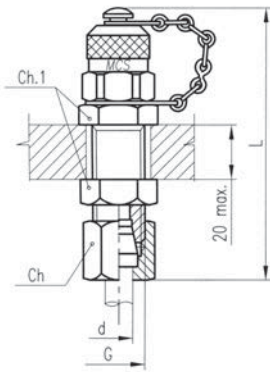
Thread	p max.	Dimensions mm		With metal cap
		L	L1	
G				
7/16"-20 UNF	450 bar	60	14	
1/2"-20 UNF	420 bar	61	17	
9/16"-18 UNF	350 bar	61	19	
3/4"-16 UNF	350 bar	54	22	

TEST POINTS BSP FEMALE



Thread	p max.	Dimensions mm		With metal cap
		L	Ch.	
BSP 1/4"	630 bar	62	19	

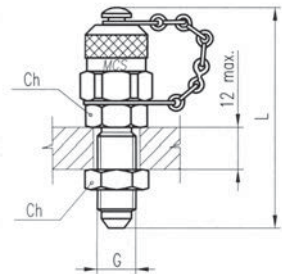
TEST POINTS (Minimess)



TEST POINTS BULKHEAD CONNECTION

According to DIN 3861/ISO 8434-1

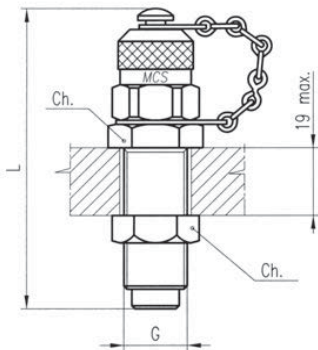
Series	Thread d mm G	p max.	Dimensions mm			With metal cap
			Ch.	Ch.1	L	
8	M 16 x 1,5	630 bar	19	22	82	
10	M 18 x 1,5	630 bar	22	24	84	



TEST POINTS BULKHEAD CONNECTION

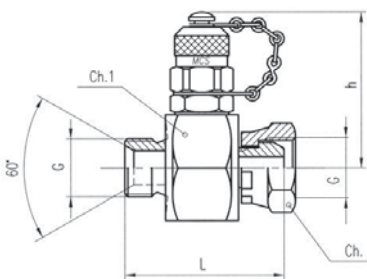
According to SAE J514/ISO 8434-2

Thread G	p max.	Dimensions mm		With metal cap
		Ch.	L	
7/16"-20 JIC37°	450 bar	17	68	



TEST POINTS BULKHEAD CONNECTION

Thread G	p max.	Dimensions mm		With metal cap
		Ch.	L	
M 16 x 2	630 bar	19	81	



TEST POINTS BSP MALE - FEMALE SWIVEL

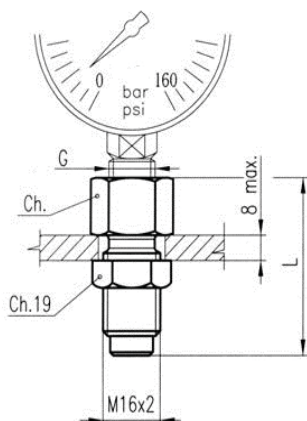
Thread G	p max.	Dimensions mm					With metal cap
		L	Ch.	Ch.1	h		
G1/4"	400 bar	53	19	18	32	27	55
G3/8"	400 bar	60	22	24	32	27	55
G1/2"	400 bar	60	27		32	27	55
G 3/4"	400 bar	68	32		32	32	55
G 1"	345 bar	74	41		41	41	59,5

According to BS 5200

Material: Mild Steel or Stainless Steel
Part No.: Mild Steel
Stainless Steel: add -316,

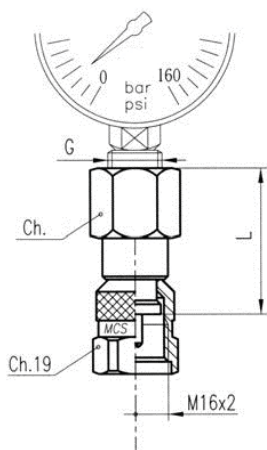
TEST POINTS (Minimess)

TEST POINTS GAUGE CONNECTION



Thread	p max.	Dimensions mm			Free flow	With pressure damper
		Ch.	L			
G						
* 1/4"	630 bar	19	50			
* 1/2"	630 bar	27	58			
1/4" NPTF	630 bar	19	50			
1/2" NPTF	630 bar	27	58			

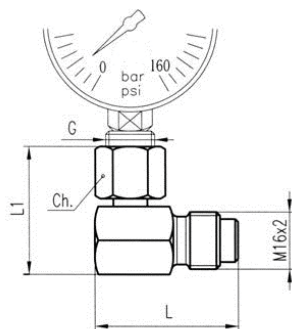
TEST POINTS GAUGE ADAPTER



Thread	p max.	Dimensions mm			Free flow	With pressure damper
		Ch.	L			
G						
* 1/4"	630 bar	19	34			
* 1/2"	630 bar	27	39			
1/4" NPTF	630 bar	19	34			

* Gauge connection acc. EN 837-1

TEST POINTS 90° GAUGE ADAPTER



Thread	p max.	Dimensions mm			Free flow	With pressure damper
		Ch.	L	L1		
G						
* 1/4"	630 bar	17	40	40		
* 1/2"	630 bar	27	40	42,7		

* Gauge connection acc. EN 837-1

Material: Mild Steel or Stainless Steel
Part No.: Mild Steel
Stainless Steel: add -316,

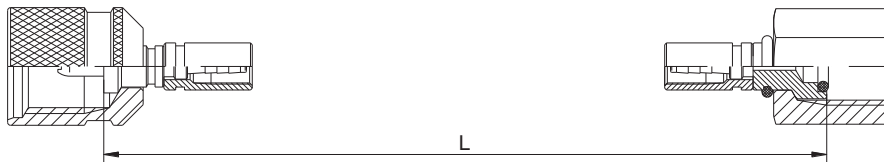
TEST POINTS (Minimes)

TEST HOSES

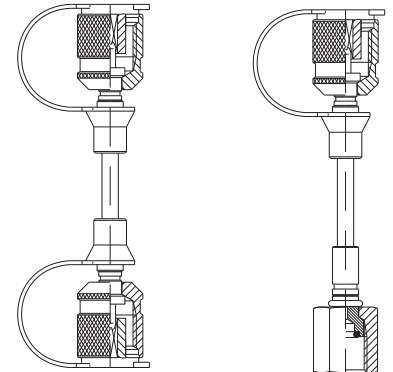
TECHNICAL DATA

inside diameter	2 mm ±0.1
outside diameter	5 mm ±0.1
minimum bend radius	20 mm
max. working pressure	630 bar
test pressure	950 bar
min. burst pressure	1900 bar
working temperature	-40°C +100°C
temperature/working pressure	-20°C +50°C : 100%;
hose	polyamide
braid	kevlar
cover	poliammide polyamide
weight per meter	18 g

TEST HOSES Assembled



Part No	Length [mm]	Maximum W.P.	Connection 1	Connection 2
Hose L=200 M16/x2	200	630	TEST M16x2.0	TEST M16x2.0
Hose L=200 M16/1/4"	200	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=400 M16/1/2"	200	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=400 M16/x2	400	630	TEST M16x2.0	TEST M16x2.0
Hose L=400 M16/1/4"	400	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=400 M16/1/2"	400	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=630 M16/x2	630	630	TEST M16x2.0	TEST M16x2.0
Hose L=630 M16/1/4"	630	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=630 M16/1/2"	630	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=800 M16/x2	800	630	TEST M16x2.0	TEST M16x2.0
Hose L=800 M16/1/4"	800	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=800 M16/1/2"	800	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=1000 M16/x2	1000	630	TEST M16x2.0	TEST M16x2.0
Hose L=1000 M16/1/4"	1000	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=1000 M16/1/2"	1000	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=1500 M16/x2	1500	630	TEST M16x2.0	TEST M16x2.0
Hose L=1500 M16/1/4"	1500	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=1500 M16/1/2"	1500	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=2000 M16/x2	2000	630	TEST M16x2.0	TEST M16x2.0
Hose L=2000 M16/1/4"	2000	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=2000 M16/1/2"	2000	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=2500 M16/x2	2500	630	TEST M16x2.0	TEST M16x2.0
Hose L=2500 M16/1/4"	2500	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=2500 M16/1/2"	2500	630	TEST M16x2.0	GAUGE 1/2" BSP
Hose L=3200 M16/x2	3200	630	TEST M16x2.0	TEST M16x2.0
Hose L=3200 M16/1/4"	3200	630	TEST M16x2.0	GAUGE 1/4" BSP
Hose L=3200 M16/1/2"	3200	630	TEST M16x2.0	GAUGE 1/2" BSP

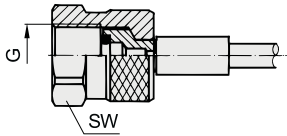
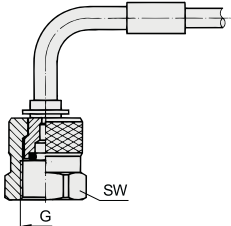
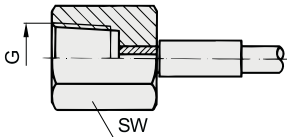
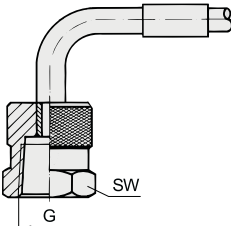
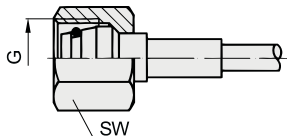
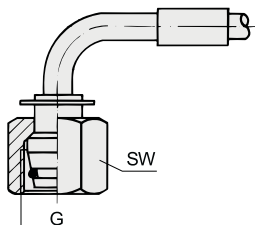


Other lengths available on request.

Material: Mild Steel or Stainless Steel
 Part No.: Mild Steel
 Stainless Steel: add -316.

TEST POINTS (Minimess)

HOSE FITTINGS

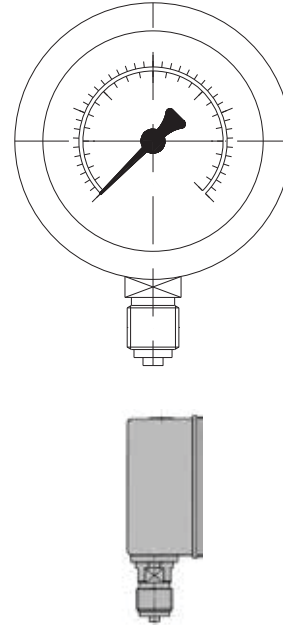
description	hose fitting	type	G			DN
			G	SW	DN	
Manometer connection Whitworth pipe thread 90° bent G3/8 and G1/2 outer line See depiction type N		M	1/4	G1/4	19	2 and 4
			1/2	G1/2	27	2
			3/8	G3/8	22	
Manometer connection Whitworth pipe thread 90° bent G3/8 and G1/2 outer line See depiction type N		W	1/4	G1/4	19	2
			1/2	G1/2	27	
Manometer connection With 1/4" NPT outer line See depiction type M		N	1/4	1/4 NPT	19	2
			1/2	1/2 NPT	27	
Manometer connection NPT 90° bent With 1/4" NPT outer line See depiction type M		A	1/4	1/4 NPT	19	2 and 4
			1/2	1/2 NPT	27	
Conical nipple with swivel nut and O-ring for 24° connectors		K	6LL	M10x1.0	12	4
			6L	M12x1.5	14	2 and 4
			8L	M14x1.5	17	2 and 4
			10L	M16x1.5	19	2 and 4
			12L	M18x1.5	22	2 and 4
			6S	M14x1.5	17	2 and 4
			8S	M16x1.5	19	2 and 4
			10S	M18x1.5	22	2 and 4
Conical nipple with swivel nut and O-Ring for 24° connectors 90° bent		L	6L	M12x1.5	14	2 and 4
			8L	M14x1.5	17	
			10L	M16x1.5	19	
			6S	M14x1.5	17	
			8S	M16x1.5	19	
			10S	M18x1.5	24	

TEST POINTS ((Minimess))

GAUGE

Bottom connection

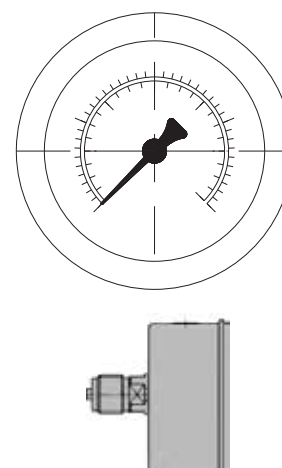
Type	Connection	Scale [bar]		Display	Dia	House
		from	to			
A	1/4" BSP	-1	0	bar/PSI	63	AISI 304
A	1/4" BSP	-1	1,5	bar/PSI	63	AISI 304
A	1/4" BSP	-1	5	bar/PSI	63	AISI 304
A	1/4" BSP	0	1	bar/PSI	63	AISI 304
A	1/4" BSP	0	1,6	bar/PSI	63	AISI 304
A	1/4" BSP	0	2,5	bar/PSI	63	AISI 304
A	1/4" BSP	0	4	bar/PSI	63	AISI 304
A	1/4" BSP	0	6	bar/PSI	63	AISI 304
A	1/4" BSP	0	10	bar/PSI	63	AISI 304
A	1/4" BSP	0	16	bar/PSI	63	AISI 304
A	1/4" BSP	0	25	bar/PSI	63	AISI 304
A	1/4" BSP	0	40	bar/PSI	63	AISI 304
A	1/4" BSP	0	60	bar/PSI	63	AISI 304
A	1/4" BSP	0	100	bar/PSI	63	AISI 304
A	1/4" BSP	0	160	bar/PSI	63	AISI 304
A	1/4" BSP	0	250	bar/PSI	63	AISI 304
A	1/4" BSP	0	300	bar/PSI	63	AISI 304
A	1/4" BSP	0	400	bar/PSI	63	AISI 304
A	1/4" BSP	0	600	bar/PSI	63	AISI 304



GAUGE

Back connection

Type	Connection	Scale [bar]		Display	Dia	House
		from	to			
B	1/4" BSP	-1	0	bar/PSI	63	AISI 304
B	1/4" BSP	-1	1,5	bar/PSI	63	AISI 304
B	1/4" BSP	-1	5	bar/PSI	63	AISI 304
B	1/4" BSP	0	1	bar/PSI	63	AISI 304
B	1/4" BSP	0	1,6	bar/PSI	63	AISI 304
B	1/4" BSP	0	2,5	bar/PSI	63	AISI 304
B	1/4" BSP	0	4	bar/PSI	63	AISI 304
B	1/4" BSP	0	6	bar/PSI	63	AISI 304
B	1/4" BSP	0	10	bar/PSI	63	AISI 304
B	1/4" BSP	0	16	bar/PSI	63	AISI 304
B	1/4" BSP	0	25	bar/PSI	63	AISI 304
B	1/4" BSP	0	40	bar/PSI	63	AISI 304
B	1/4" BSP	0	60	bar/PSI	63	AISI 304
B	1/4" BSP	0	100	bar/PSI	63	AISI 304
B	1/4" BSP	0	160	bar/PSI	63	AISI 304
B	1/4" BSP	0	250	bar/PSI	63	AISI 304
B	1/4" BSP	0	300	bar/PSI	63	AISI 304
B	1/4" BSP	0	400	bar/PSI	63	AISI 304
B	1/4" BSP	0	600	bar/PSI	63	AISI 304



Other Gauge types and sizes available on request

TEST POINTS (Minimess)

BOXES FOR PRESSURE CHECK



MODEL 750.KP1

- 1 Plastic box
 - 2 Glycerine-filled gauges
 - 1 Micro-hose 2000mm
- Dimensions 240x200x40mm



MODEL 750.KP2

- 1 Plastic box
 - 2 Glycerine-filled pressure gauges
 - 2 Test points
 - 1 Micro-hose 200mm
 - 2 Pressure gauge connections
 - 1 Pressure gauge adapter
 - 1 Reducer
 - 1 Reducer
 - 1 Test point
 - 1 Test point
- Dimensions 390 x 200 x 80 mm



MODEL 750.KP2.DG

- 1 Plastic box
 - 1(2) Pressure gauge digital
 - 1 Test point
 - 1 Test point
 - 1 Test point
 - 1 Test point
 - 1 Reducer
 - 1 Reducer
 - 1 Pressure gauge adapter
 - 1 Micro-hose 1000mm
- Dimensions 390 x 200 x 80 mm

