

PRA/802000/M, RA/802000/M, RA/8000, RA/8000/M ISOLine™ 15552 cylinder, double acting



- > ø 32 ... 320 mm
- > High performance adaptive cushioning system "ACS"
- > Low temperature version up to -40 °C
- > High temperature version up to +150 °C
- > 16 bar version available
- > Rail Cylinder Shock and vibration tested to EN 61373 Category 1; Class A + B



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated

Standard:

ISO 15552

Operation:

Double acting, adjustable cushioning

Operating pressure:

ø 32 ... 125 mm (Profile barrel)
1 ... 12 bar (14 ... 174 psi)
ø 32 ... 200 mm (Round barrel)
1 ... 16 bar (14 ... 232 psi)
ø 250 & 320 mm (Round barrel)
1 ... 10 bar (14 ... 145 psi)

Ports:

G1/8 ... 1

Cylinder diameters:

32, 40, 50, 63, 80, 100, 125, 160, 200, 250, 320 mm

Standard strokes:

25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500 mm

Non-standard strokes:

ø 32 ... 125 mm (5 ... 2800 mm)
ø 160 ... 320 mm (5 ... 2600 mm)

Operating temperature:

ø 32 ... 125 mm
"Standard version"
-20 ... +80 °C (-4 ... +176 °F)
ø 160 ... 320 mm
"Standard version"
-10 ... +80 °C (+14 ... +176 °F)
ø 32 ... 320 mm
"High temperature version" (T)
0 ... +150 °C (-17,7 ... +302 °F)
ø 32 ... 200 mm
"Low temperature version" (L)
-40 max. ... +80 °C (-40 ... +176 °F)
Air supply must be dry enough to avoid ice formation at temperatures below +2 °C (+35 °F)

Standard Materials:

Barrel: Anodised aluminium
End covers: Pressure diecast aluminium (ø 200 ... 320 mm gravity cast aluminium)
Piston rod: Stainless steel (martensitic)
Piston rod seals: PUR (ø 160 ... 320 mm NBR)
Piston seals: PUR (ø 160 ... 320 mm NBR)
'O'-rings: NBR

Technical data

Cylinder ø (mm)	32	40	50	63	80	100	125	160	200	250	320
Profile barrel	•	•	•	•	•	•	•				
Round barrel	•	•	•	•	•	•	•	•	•	•	•
Port size	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	G1/2	G3/4	G3/4	G1	G1
Piston rod ø (mm)	12	16	20	20	25	25	32	40	40	50	63
Piston rod thread	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5	M27x2	M36x2	M36x2	M42x2	M48x2
Cushion length (mm)	20	22	24	24	26	33	39	43	43	55	60
Cushioning Adaptive cushioning systems "ACS"	•	•	•	•	•	•	•				
Cushioning (adjustable cushion)								•	•	•	•
Initial cushion volume (cm3)	12,8	20,2	36	64	111	235	427	784	1273	2534	4559
Theoretical thrusts at 6 bar outstroke (N)	482	754	1178	1870	3016	4710	7363	12064	18840	29436	48228
Theoretical thrusts at 6 bar instroke (N)	414	633	990	1680	2722	4416	6882	11310	18090	28236	47292
Air consumption at 6 bar outstroke (l/cm)	0,056	0,088	0,137	0,218	0,35	0,55	0,86	1,41	2,2	3,44	5,63
Air consumption at 6 bar instroke (l/cm)	0,048	0,074	0,114	0,195	0,32	0,51	0,79	1,32	2,1	3,3	5,41

Cylinder variants
PRA/802000/L4, RA/802000/L4
PRA/802000/L4X, RA/802000/L4X
PRA/802000/L8, RA/802000/L8
PRA/802000/L8X, RA/802000/L8X

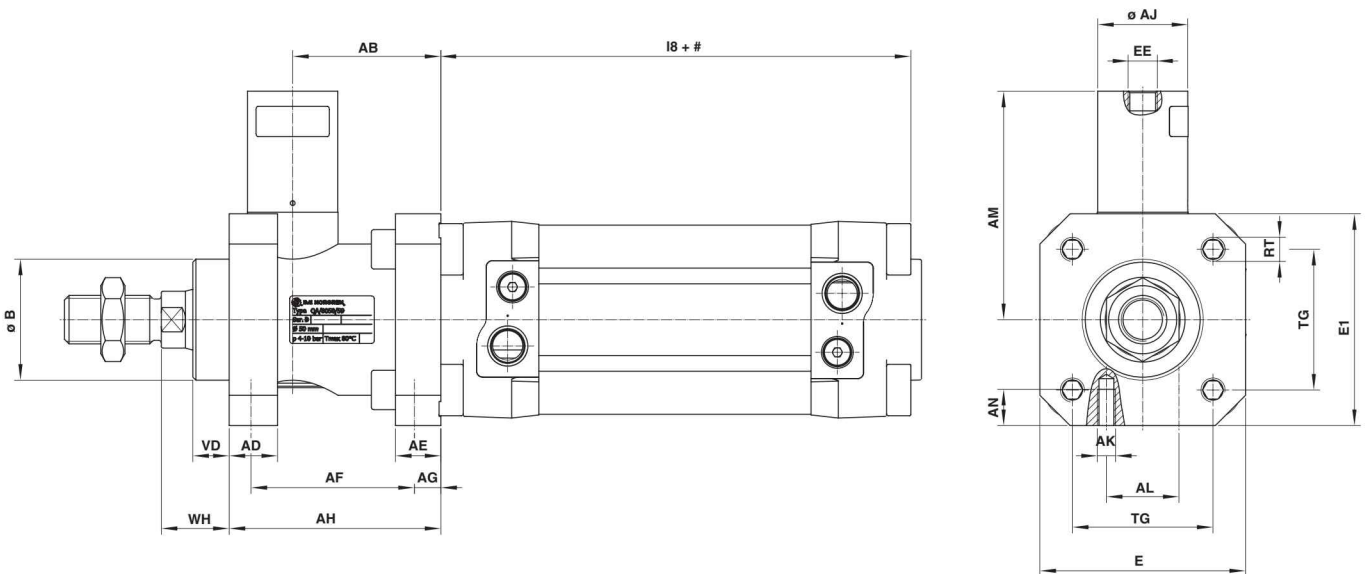
– Cylinder with Locking unit (Passive)

– Cylinder with Locking unit (Passive) and Female Piston Rod Thread

– Cylinder with Locking unit (Passive) and Special Wiper Seal

– Cylinder with Locking unit (Passive) and Special Wiper Seal and Female Piston Rod Thread

 Dimensions in mm
 Projection/First angle

Spring force on removal of the signal to the unit.
Operating pressure for locking unit: 4 ... 10 bar


Stroke

ø	AB	AD	AE	AF	AG	AH	ø A j	AK	AL	AM	AN	ø B e11	E	E1	EE
32	32	12	8	40	4,2	48	25	M5	16	59	8	30	48	50	G1/8
40	35,5	12	10	46	4,5	55	24	M5	21	61,5	10	35	56	58	G1/8
50	49	16	15	54	11,5	70	30	M6	24	75,5	12	40	68	70	G1/8
63	49	15	15	55	7,5	70	38	M8	32	86	12	45	82	85	G1/8
80	62	16	16	70	10	90	53	M8	44	118	16	45	100	105	G1/8
100	65	18	16	70	10	92	53	M8	60	118	16	55	120	130	G1/8
125	85	27	25	95	11	122	65	M10	75	140	20	60	140	150	G1/8

ø	L8	RT	TG	VD	WH	Locking force	Spare part Locking unit *1)	Spare part Cartridge	Model Profile barrel	Model Round barrel
32	94	M6	32,5	10	16	600	QA/8032/59	QA/8032/63	PRA/802032/L4/*	RA/802032/L4/*
40	105	M6	38	10	18	1000	QA/8040/59	QA/8040/63	PRA/802040/L4/*	RA/802040/L4/*
50	106	M8	46,5	12	22	1500	QA/8050/59	QA/8050/63	PRA/802050/L4/*	RA/802050/L4/*
63	121	M8	56,5	12	20	2200	QA/8063/59	QA/8063/63	PRA/802063/L4/*	RA/802063/L4/*
80	128	M10	72	20	33	5000	QA/8080/59	QA/8100/63	PRA/802080/L4/*	RA/802080/L4/*
100	138	M10	89	23	38	5000	QA/8100/59	QA/8100/63	PRA/802100/L4/*	RA/802100/L4/*
125	160	M12	110	32	65	7000	QA/8125/59	QA/8125/63	PRA/802125/L4/*	RA/802125/L4/*

* Please insert stroke length

Maximum stroke: 2600 mm

*1) with Cartridge

For missing dimensions please see page 9, 10 and 11