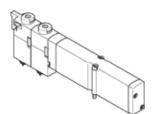
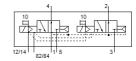
solenoid valve VMPA1-M1H-N-PI Part number: 533348

For valve terminal MPA-S.





FESTO

Data sheet

Pilot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 300 l/min Switching time off 20 ms Switching time on 10 ms Max. positive test pulse with logic 0 400 μs Max. negative test pulse with logic 1 200 μs Permissible voltage fluctuation +/- 25 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials seals NBR	Feature	Value
Valve size 10 mm Standard nominal flow rate 300 //min Operating pressure 3 10 bar Design structure Piston slide Type of reset Air spring Authorisation c UL us - Recognized (OL) Protection class IP65 Sealing principle soft Assembly position Any Manual override detenting Pushing Plotted Type of piloting Piloted Flow direction non reversible Overlap Positive overlap Signal status display Yes Plot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 300 I/min Switching time on 10 ms Max. regaritve test pulse with logic 0 400 µs Max. regaritve test pulse with logic 1 200 µs Permissible voltage fluctuation 47.25 % Operating medium Compressed air in accordance with ISO8573-1;2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible	Valve function	2x3/2 open, monostable
Standard nominal flow rate Operating pressure Operating pressure Piston slide Type of reset Air spring Authorisation CUL us - Recognized (OL) Protection class IP65 to IEC 66529 Sealing principle Soft Assembly position Ary Manual override Deviating Type of plotting Plotted Plotted Powerlap Signal status display Positive overlap Signal status display Yes Standard nominal flow rate with QS-6 Switching time off Switching time off Down Ass. regative test pulse with logic 0 Max. negative test pulse with logic 1 Poerating medium Note on operating and pilot medium Operating Note on operating and pilot medium Compressed air in accordance with FN 942017-5 and EN 600-82-27 Corrosion resistance Slotted Hennicky Switching time off Sovictes stander Shock resistance Shock resistance Shock resistance Shock resistance Shock resistance Shock test with severily level 2 in accordance with FN 942017-5 and EN 600-82-27 Corrosion resistance classification CRC Storage temperature Shock resistance Shoc	Type of actuation	electrical
Operating pressure 3 10 bar Design structure Piston silde Type of reset Air spring Authorisation c UL u.s - Recognized (01) Protection class 1P65 Sealing principle soft Assembly position Any Manual override detenting Pushing Piloted Flow direction non reversible Overlap Positive overlap Signal status display Yes Pilot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 300 I/min Switching time off 20 ms Switching time of 20 ms Max. positive test pulse with logic 0 400 μs Max. negative test pulse with logic 1 200 μs Permissible voltage fluctuation +/-25 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible fsubsequently required for further operation) Vibration resistance Shock test with severity level 2 in	Valve size	10 mm
Design structure Type of reset All spring All spring Authorisation CUL us - Recognized (OL) Protection class IP65 to IEC 60529 Sealing principle Soft Assembly position Any Manual override detenting Pushing Type of piloting Plioted Flow direction non reversible Overlap Positive overlap Signal status display Yes Pilot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 300 I/min Switching time off Switching time off Switching time on Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium operations Vibration resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Storage temperature 20 40 °C Medium temperature 40 40 °C Medium temperature 41 40 40 °C Max. positive trumility Max. 99% at 40°C Ambient temperature 45 50 °C Medium temperature 45 50 °C Max. fished in group with logic place with severity level 2 in accordance with FN 942017-5 and EN 60068-2-7 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature 40 40 °C Medium temperature 40 40 °C Max. lightening torque, valve mounting 40 50 °C Medium temperature 45 50 °C Max. tightening torque, valve mounting 40 50 MBR	Standard nominal flow rate	300 l/min
Type of reset Authorisation CUL us - Recognized (OL) Protection class IP65 to IEC 60529 Sealing principle Assembly position Any Manual override Bushing Type of piloting Ploted Pushing Ploted Pushing Ploted Plow direction Overlap Positive overlap Signal status display Yes Plot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 Switching time off 20 ms Switching time off 30 up Max. negative test pulse with logic 0 Max. positive est pulse with logic 1 Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubricated operation possible (subsequently required for further operation) Vibration resistance Shock resistance Shock resistance Shock stest with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature - 20 40 °C Medium temperature - 5 50 °C Medium temperatur	Operating pressure	3 10 bar
Authorisation culture - CUL us - Recognized (OL) Protection class IP65 IP65	Design structure	Piston slide
Protection class P65		Air spring
Protection class P65	Authorisation	c UL us - Recognized (OL)
Sealing principle Assembly position Any Annual override Manual override Methoding Pushing Piloted Positive overlap Positive overlap Positive overlap Positive overlap Positive overlap Positive overlap Signal status display Pes Positive overlap Suitability for vacuum No Standard nominal flow rate with QS-6 Switching time off 20 ms Switching time off 20 ms Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Poperating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubricated operation possible (subsequently required for further operation) Vibration resistance Shock resistance Shock resistance Shock sets with severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Storage temperature Possible resistance Storage temperature Possible resistance Possible remperature Possible remperatu	Protection class	
Assembly position Manual override Menual override Menual override Menual override Menual override Menual override Menual override Pushing Pushing Piloted Rlow direction Non reversible Overlap Positive overlap Signal status display Yes Signal status display Yes Signal status display Yes Situability for vacuum No Standard nominal flow rate with QS-6 300 l/min Switching time off Switching time off Switching time off Switching time off Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Permissible voltage fluctuation April 125 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-7 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature 20 40 °C Relative air humidity Max. 90% at 40 °C Ambient temperature 5 50 °C Relative air humidity Max. 19thening torque, valve mounting Product weight Materials note Materials note Materials seals NBR		to IEC 60529
Assembly position Manual override Menual override Menual override Menual override Menual override Menual override Menual override Pushing Pushing Piloted Rlow direction Non reversible Overlap Positive overlap Signal status display Yes Signal status display Yes Signal status display Yes Situability for vacuum No Standard nominal flow rate with QS-6 300 l/min Switching time off Switching time off Switching time off Switching time off Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Permissible voltage fluctuation April 125 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-7 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature 20 40 °C Relative air humidity Max. 90% at 40 °C Ambient temperature 5 50 °C Relative air humidity Max. 19thening torque, valve mounting Product weight Materials note Materials note Materials seals NBR	Sealing principle	soft
Pushing Type of piloting Piloted Piloted Positive overlap Positive overlap Signal status display Yes Pilot pressure 38 bar Suitability for vacuum No Standard nominal flow rate with QS-6 Switching time off 20 ms Switch		Any
Type of piloting Flow direction non reversible Overlap Positive overlap Signal status display Yes Pilot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 Switching time off Switching time on Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubricated operation possible (subsequently required for further operation) Vibration resistance Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-26 Shorage temperature Apacity and Compressed air operation of the severity level 2 in accordance with FN 942017-5 and EN 60068-2-26 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature Apacity and EN 60068-2-26 Medium temperature Apacity and EN 60068-2-26 Medium temperature Apacity and EN 60068-2-26 Medium temperature Apacity and EN 60068-2-26 Max. 90% at 40°C Max. 1ghtening torque, valve mounting Apacity and EN 60068-2-6 Max. tightening torque, valve mounting Product weight Materials note Conforms to RoHS Material seals NBR	Manual override	detenting
Flow direction Positive overlap Positive overlap Signal status display Yes Pilot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 300 l/min Switching time off 20 ms Switching time on 10 ms Max. positive test pulse with logic 0 400 µs Max. negative test pulse with logic 1 200 µs Permissible voltage fluctuation 4/- 25 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Shock test with severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance Classification CRC 1-Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials seals NBR		Pushing
Flow direction Positive overlap Positive overlap Signal status display Yes Pilot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 300 l/min Switching time off 20 ms Switching time on 10 ms Max. positive test pulse with logic 0 400 µs Max. negative test pulse with logic 1 200 µs Permissible voltage fluctuation 4/- 25 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Shock test with severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance Classification CRC 1-Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials seals NBR	Type of piloting	Piloted
Fignal status display Filot pressure 3 8 bar Suitability for vacuum Suitability for vacuum Switching time off 20 ms Switching time on Max. positive test pulse with logic 0 Max. positive test pulse with logic 1 Permissible voltage fluctuation Operating medium Compressed air in accordance with IS08573-1:2010 [7:4:4] Note on operating and pilot medium Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Medium temperature -5 50 °C Max. tightening torque, valve mounting Mounting type Materials seals MBR		non reversible
Pilot pressure 3 8 bar Suitability for vacuum No Standard nominal flow rate with QS-6 300 l/min Switching time off 20 ms Switching time on 10 ms Max. positive test pulse with logic 0 400 μs Max. negative test pulse with logic 1 200 μs Permissible voltage fluctuation +/- 25 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials seals NBR	Overlap	Positive overlap
Suitability for vacuum Standard nominal flow rate with QS-6 Switching time off 20 ms Switching time on 10 ms Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 200 µs Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubbricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock sets with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 · Low corrosion stress Storage temperature - 20 40 °C Medium temperature - 5 50 °C Medium temperature - 5 50 °C Max. tightening torque, valve mounting - 26 g Mounting type Muterial seals NBR	Signal status display	Yes
Suitability for vacuum Standard nominal flow rate with QS-6 Switching time off 20 ms Switching time on 10 ms Max. positive test pulse with logic 0 Max. negative test pulse with logic 1 200 µs Permissible voltage fluctuation Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Ubbricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock sets with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 · Low corrosion stress Storage temperature - 20 40 °C Medium temperature - 5 50 °C Medium temperature - 5 50 °C Max. tightening torque, valve mounting - 26 g Mounting type Muterial seals NBR	Pilot pressure	3 8 bar
Switching time off Switching time on 10 ms Max. positive test pulse with logic 0 400 µs Max. negative test pulse with logic 1 200 µs Permissible voltage fluctuation Voperating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1-Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight Mounting type with through hole Materials note Conforms to RoHS Makerials seals NBR	-	No
Switching time on 10 ms Max. positive test pulse with logic 0 400 μs Max. negative test pulse with logic 1 200 μs Permissible voltage fluctuation +/- 25 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Materials seals NBR	Standard nominal flow rate with QS-6	300 l/min
Switching time on 10 ms Max. positive test pulse with logic 0 400 μs Max. negative test pulse with logic 1 200 μs Permissible voltage fluctuation +/- 25 % Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Materials seals NBR	Switching time off	20 ms
Max. positive test pulse with logic 0400 μsMax. negative test pulse with logic 1200 μsPermissible voltage fluctuation+/- 25 %Operating mediumCompressed air in accordance with ISO8573-1:2010 [7:4:4]Note on operating and pilot mediumLubricated operation possible (subsequently required for further operation)Vibration resistanceTransport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6Shock resistanceShock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27Corrosion resistance classification CRC1 - Low corrosion stressStorage temperature-20 40 °CMedium temperature-5 50 °CRelative air humidityMax. 90% at 40°CAmbient temperature-5 50 °CMax. tightening torque, valve mounting0.25 NmProduct weight56 gMounting typewith through holeMaterials noteConforms to RoHSMaterials sealsNBR		10 ms
Permissible voltage fluctuation	Max. positive test pulse with logic 0	400 μs
Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR		·
Operating medium Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	Permissible voltage fluctuation	+/- 25 %
Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Vibration resistance Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting Product weight 56 g Mounting type with through hole Materials note NBR		Compressed air in accordance with ISO8573-1:2010 [7:4:4]
942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40 °C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	· -	Lubricated operation possible (subsequently required for further
60068-2-27 Corrosion resistance classification CRC 1 - Low corrosion stress Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals	Vibration resistance	, , , , ,
Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	Shock resistance	· ·
Storage temperature -20 40 °C Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	Corrosion resistance classification CRC	1 - Low corrosion stress
Medium temperature -5 50 °C Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR		
Relative air humidity Max. 90% at 40°C Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	<u> </u>	
Ambient temperature -5 50 °C Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	· · · · · · · · · · · · · · · · · · ·	
Max. tightening torque, valve mounting 0.25 Nm Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	•	
Product weight 56 g Mounting type with through hole Materials note Conforms to RoHS Material seals NBR	·	
Mounting type with through hole Materials note Conforms to RoHS Material seals NBR		
Materials note Conforms to RoHS Material seals NBR	-	
Material seals NBR		<u> </u>
MATERIAL HOUSING	Material housing	Aluminium die cast